

Variante S.S.1 Aurelia – Variante in Comune di Massa 1°Lotto (Canal Magro – Stazione).

PROGETTO DEFINITIVO

cod. F1397

PROGETTAZIONE: RAGGRUPPAMENTO TEMPORANEO PROGETTISTI	MANDATARIA: 	MANDANTI:  POLITECNICA BUILDING FOR HUMANS	MATILDI+PARTNERS
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05 – OPERE D'ARTE

Opere d'arte principali – OP.01 Ponte sul Canal Magro
Relazione geotecnica e di calcolo

CODICE PROGETTO		NOME FILE		PROGR. ELAB.	REV.	SCALA:
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B	REVISIONE A SEGUITO DI ISTRUTTORIA ANAS	11/2020	POLITECNICA	M.PALERMO	M.MANCONE	A.RENSO
A	EMISSIONE	06/2020	POLITECNICA	M.PALERMO	M.MANCONE	A.RENSO
REV.	DESCRIZIONE	DATA	SOCIETA'	REDATTO	VERIFICATO	APPROVATO

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1 PREMESSA

La presente relazione di calcolo ha a oggetto l'analisi strutturale del "Ponte sul Canal Magro" situato alla progressiva di progetto della variante 0+547.95 m.

Il tracciato principale su cui insiste l'opera in esame, presenta una singola carreggiata (categoria C2) di larghezza complessiva fuori tutto pari a 13.50 m.

La piattaforma stradale che insiste sull'opera d'arte è costituita da una carreggiata unica con singola corsia per senso di marcia di 3.50m più banchine laterali di 1.25 m ed in aggiunta è presente, oltre la barriera di sicurezza, un marciapiede per lato di larghezza pari a 2.0 m.

La lunghezza del manufatto è di 25.50 m misurata tra i giunti strutturali.

Si riporta un estratto delle tavole strutturali a cui si rimanda per approfondimenti.

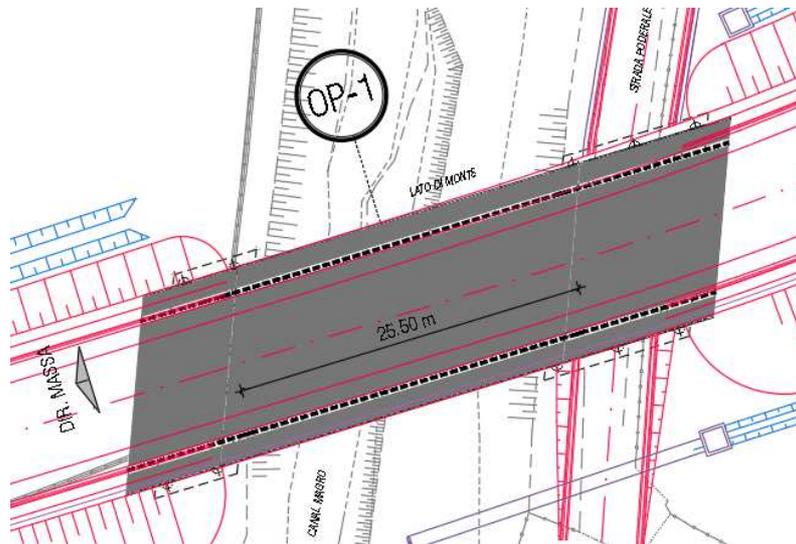


Figura 1 – Ponte sul canal magro – estratto planimetria di inquadramento

1.1 CONCEZIONE STRUTTURALE

L'idea di progetto consiste nella realizzazione di un impalcato da ponte a struttura mista, vincolato in semplice appoggio (ponte a trave isostatico) mediante dispositivi fissi ed multidirezionali nella spalla fissa (spalla 1), e con dispositivi multidirezionali ed unidirezionali nella spalla mobile (spalla2). La luce di calcolo dell'impalcato è di 24.80 m.

La disposizione dell'asse principale stradale rispetto all'asse del corso d'acqua forma un angolo acuto: questo ha prodotto l'utilizzo di spalle a paramento inclinato rispetto all'asse stradale e parallelo all'asse del corso d'acqua.

La quota appoggi, diversa sulle due spalle, è tale da posizionare l'impalcato con pendenza longitudinale adeguata a realizzare la livelletta di progetto stradale.

L'impalcato a struttura mista è costituito da 5 travi metalliche a profili saldati di altezza pari a 1300 mm ed una soletta di completamento di spessore pari a 270 mm resa solitale e collaborante con le travi tramite piolatura di connessione costituita da pioli tipo Nelson $\Phi 22$ mm.

Le 5 travi sono connesse trasversalmente da 2 traversi di testata del tipo HEB700 e 4 traversi di campata del tipo HEA500.

L'impalcato è poggato su spalle in calcestruzzo armato costituite da un muro frontale su cui sono presenti i baggioli a cui verranno ancorati i dispositivi di appoggio per le travi. I muri di spalla sono sormontati da paraghiaia di completamento.

La spalla 1 (SP1) è costituita da un muro di spessore pari a 1.40 m. La spalla 2 (SP2) è costituita non solo dal muro di spalla di spessore pari a 1.50 m, ma a tergo è posizionato in continuità di getto uno scatolare appositamente progettato (spalla passante) per l'attraversamento della strada poderale presente nel progetto. Lateralmente sono disposti dei muri d'ala di raccordo con il rilevato in terra.

A seguire si riporta la sezione trasversale dell'impalcato. Per ulteriori dettagli si rimanda alle tavole strutturali.

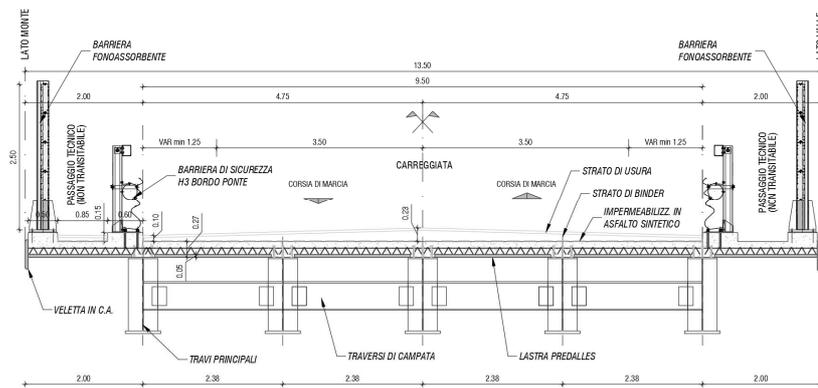


Figura 2- Sezione trasversale di impalcato.

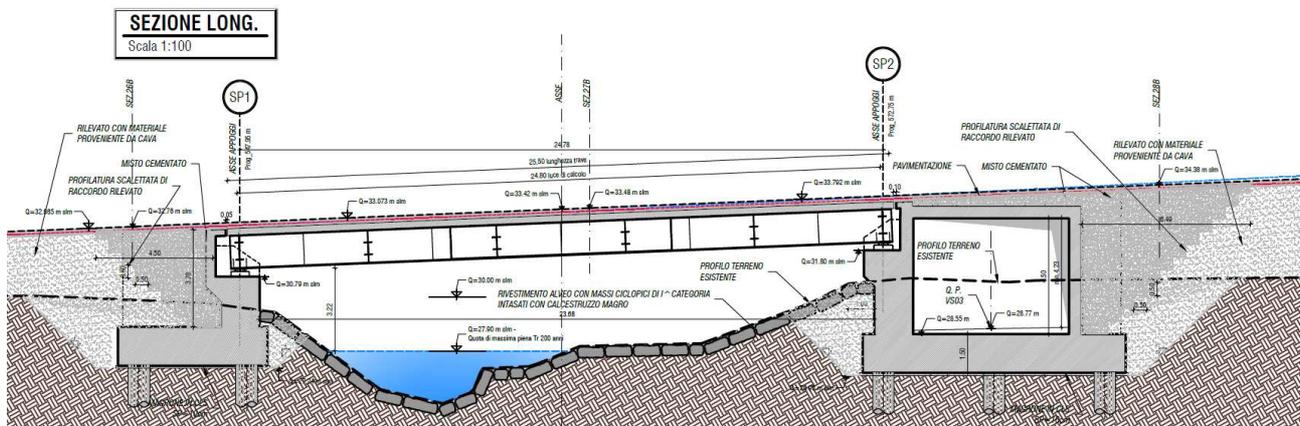


Figura 3 - Profilo longitudinale.

2 NORMATIVA E DOCUMENTI DI RIFERIMENTO

La progettazione, il dimensionamento e le verifiche delle strutture in oggetto, sono stati redatti in ottemperanza al quadro normativo tecnico vigente, con particolare riferimento di cui al D.M. 17 gennaio 2018.

Il metodo di calcolo adottato è quello semiprobabilistico agli stati limite, con applicazione di coefficienti parziali per le azioni o per l'effetto delle azioni, variabili in ragione dello stato limite indagato.

Si riporta di seguito l'elenco delle principali leggi e dei documenti a cui ci si è riferiti per la redazione della progettazione strutturale dell'opera.

2.1 NORMATIVA NAZIONALE

- Legge 5 Novembre 1971 n° 1086 «*Norma per la disciplina delle opere in conglomerato cementizio armato, precompresso e per le strutture metalliche*»;
- D.M. del 17 Gennaio 2018 «*Nuove norme tecniche per le costruzioni*» di seguito denominate NTC.
- Circolare Consiglio Sup. LL.PP. 21 Gennaio 2019 n° 7 «*Istruzioni per l'applicazione delle "Nuove norme tecniche per le costruzioni" di cui al D.M. del 17 Gennaio 2018*».

2.2 EUROCODICI

- UNI EN 1991-1-5:2004 «*Eurocodice 1: Azioni sulle strutture – Parte 1-5: Azioni in generale - Azioni termiche*»;
- UNI EN 1991-2:2005 «*Eurocodice 1: Azioni sulle strutture – Parte 2: Carichi da traffico sui ponti*»;
- UNI EN 1992-2:2006 «*Eurocodice 2: Progettazione delle strutture di calcestruzzo – Parte 2: Ponti di calcestruzzo – Progettazione e dettagli costruttivi*»;
- UNI EN 1993-2:2007 «*Eurocodice 3: Progettazione delle strutture di acciaio – Parte 2: Ponti di acciaio*»;
- UNI EN 1993-1-5:2007 «*Eurocodice 3: Progettazione delle strutture di acciaio – Parte 1-5: Elementi strutturali a lastra*»;
- UNI EN 1994-2:2006 «*Eurocodice 4: Progettazione delle strutture composte acciaio-calcestruzzo – Parte 2: Regole generali e regole per i ponti*»;
- UNI EN 1998-2:2006 «*Eurocodice 8: Progettazione delle strutture per la resistenza sismica – Parte 2: Ponti*».

2.3 SOFTWARE UTILIZZATI

I software utilizzati per i calcoli delle opere in esame sono di seguito indicati:

- Microsoft Excel (fogli di calcolo);
- Software ImpalcatoGraticcioSuite (software ausiliario per le verifiche delle sezioni in acc-cls)
- Software suite Gelfi (software per il calcolo e verifica delle sezioni in c.a. e d acciaio)
- SAP 2000 V. 21 (Software di calcolo agli elementi finiti)

3 MATERIALI

3.1 CONGLOMERATI CEMENTIZI

3.1.1 Conglomerato cementizio magro

- Classe di resistenza: C12/15 ($R_{ck} \geq 15 \text{ N/mm}^2$)

3.1.2 Conglomerato cementizio per strutture di fondazione e pali

- Classe di resistenza: C25/30 ($R_{ck} \geq 30 \text{ N/mm}^2$)
 - Resistenza caratt. a compress. cilindrica: (DM 17.01.2018 p.to 11.2.10.1) $f_{ck} = 25.0 \text{ N/mm}^2$
 - Resistenza media a trazione semplice: (DM 17.01.2018 p.to 11.2.10.2) $f_{ctm} = 2.56 \text{ N/mm}^2$
 - Modulo d'elasticità: (DM 17.01.2018 p.to 11.2.10.3) $E_{cm} = 31476 \text{ N/mm}^2$
 - Resistenza di calcolo a compressione: (DM 17.01.2018 p.to 4.1.2.1) $f_{cd} = 14.16 \text{ N/mm}^2$
 - Resistenza di calcolo a trazione: (DM 17.01.2018 p.to 4.1.2.1) $f_{ctd} = 1.19 \text{ N/mm}^2$
 - Tensione massima per cmb. rara: (DM 17.01.2018 p.to 4.1.2.2.5) $\sigma_{c,rara} = 15.0 \text{ N/mm}^2$
 - Tensione massima per cmb. quasi perm.: (DM 17.01.2018 p.to 4.1.2.2.5) $\sigma_{c,q,perm} = 12.25 \text{ N/mm}^2$
 - Classe di esposizione: XC2
 - Copriferro netto minimo (filo esterno armatura più esterna): 40 mm (fond.)/75 mm (pali)

3.1.3 Conglomerato cementizio per strutture in elevazione (Spalle)

- Classe di resistenza: C32/40 ($R_{ck} \geq 40 \text{ N/mm}^2$)
 - Resistenza caratt. a compress. cilindrica: (DM 17.01.2018 p.to 11.2.10.1) $f_{ck} = 32.0 \text{ N/mm}^2$
 - Resistenza media a trazione semplice: (DM 17.01.2018 p.to 11.2.10.2) $f_{ctm} = 3.02 \text{ N/mm}^2$
 - Modulo d'elasticità: (DM 17.01.2018 p.to 11.2.10.3) $E_{cm} = 33346 \text{ N/mm}^2$
 - Resistenza di calcolo a compressione: (DM 17.01.2018 p.to 4.1.2.1) $f_{cd} = 18.13 \text{ N/mm}^2$
 - Resistenza di calcolo a trazione: (DM 17.01.2018 p.to 4.1.2.1) $f_{ctd} = 1.41 \text{ N/mm}^2$
 - Tensione massima per cmb. rara: (DM 17.01.2018 p.to 4.1.2.2.5) $\sigma_{c,rara} = 19.2 \text{ N/mm}^2$
 - Tensione massima per cmb. quasi perm.: (DM 17.01.2018 p.to 4.1.2.2.5) $\sigma_{c,q,perm} = 14.4 \text{ N/mm}^2$
 - Classe di esposizione: XC4
 - Copriferro netto minimo (filo esterno armatura più esterna): 45 mm

3.1.4 Conglomerato cementizio per soletta di completamento impalcato e cordoli

○ Classe di resistenza:		C35/45 ($R_{ck} \geq 45 \text{ N/mm}^2$)
- Resistenza caratt. a compress. cilindrica:	(DM 17.01.2018 p.to 11.2.10.1)	$f_{ck} = 35.0 \text{ N/mm}^2$
- Resistenza media a trazione semplice:	(DM 17.01.2018 p.to 11.2.10.2)	$f_{ctm} = 3.21 \text{ N/mm}^2$
- Modulo d'elasticità:	(DM 17.01.2018 p.to 11.2.10.3)	$E_{cm} = 34077 \text{ N/mm}^2$
- Resistenza di calcolo a compressione:	(DM 17.01.2018 p.to 4.1.2.1)	$f_{cd} = 19.83 \text{ N/mm}^2$
- Resistenza di calcolo a trazione:	(DM 17.01.2018 p.to 4.1.2.1)	$f_{ctd} = 1.49 \text{ N/mm}^2$
- Tensione massima per cmb. rara:	(DM 17.01.2018 p.to 4.1.2.2.5)	$\sigma_{c,rara} = 21.0 \text{ N/mm}^2$
- Tensione massima per cmb. quasi perm.:	(DM 17.01.2018 p.to 4.1.2.2.5)	$\sigma_{c,q,perm} = 15.75 \text{ N/mm}^2$
○ Classe di esposizione:		XC4+XD3
○ Copriferro netto minimo (filo esterno armatura più esterna):		35 mm

3.2 ACCIAIO PER C.A.

3.2.1 Acciaio per calcestruzzo armato B450C

○ Resistenza caratt. di snervamento:	(DM 17.01.2018 p.to 11.3.2.1)	$f_{yk} = 450.00 \text{ N/mm}^2$
○ Resistenza caratt. di rottura:	(DM 17.01.2018 p.to 11.3.2.1)	$f_{tk} = 540.00 \text{ N/mm}^2$
○ Resistenza di calcolo:	(DM 17.01.2018 p.to 4.1.2.1)	$f_{yd} = 391.30 \text{ N/mm}^2$
○ Tensione massima per cmb. rara:	(DM 17.01.2018 p.to 4.1.2.2.5)	$\sigma_{s,rara} = 360.00 \text{ N/mm}^2$

3.3 ACCIAIO PER CARPENTERIE METALLICHE

3.3.1 Elementi saldati in acciaio

○ Elementi saldati con $sp. \leq 20 \text{ mm}$	S 355 J2
○ Elementi saldati con $20 \text{ mm} \leq sp. \leq 40 \text{ mm}$	S 355 J2+N
○ Elementi saldati con $sp. > 40 \text{ mm}$	S 355 K2+N
○ Elementi non saldati, angolari e piastre sciolte	S 355 J0

3.3.2 Bullonature secondo UNI 3740 e UNI EN 20898

○ Giunzioni a taglio (categoria A)	
○ Viti	classe 10.9 (UNI 5712)
○ Dadi	classe 10 (UNI 5713)
○ Rosette in acciaio	C50 UNI EN 10083-2 (HRC 32-40) (UNI 5714)

3.3.3 Piolature secondo UNI EN ISO 13918

- Pioli tipo Nelson Ø22
- Acciaio ex ST 37-3K (S235J2G3+C450)
- $f_y = 350 \text{ N/mm}^2$
- $f_u = 450 \text{ N/mm}^2$

3.3.4 Saldature

Secondo D.M. 2018 con procedimenti codificati secondo ISO 4063 e prescrizioni della EN 1011 e EN 29692. Controlli secondo la EN 12062.

4 ANALISI STRUTTURALE, CONDIZIONI E COMBINAZIONI DI CARICO

4.1 SOVRASTRUTTURA DI IMPALCATO

4.1.1 Analisi strutturale

Nell'analisi strutturale, le azioni agenti sono analizzate in diverse fasi, corrispondenti al grado di maturazione del getto di calcestruzzo e quindi ai diversi livelli di rigidità e caratteristiche statiche delle sezioni.

- **Fase 0** - Considera il peso proprio della struttura metallica, delle lastre prefabbricate e del getto della soletta che, in questa fase, è ancora meccanicamente non reagente. La sezione resistente corrisponde alla sola parte metallica.
- **Fase I** - Si considerano i successivi carichi permanenti non strutturali che sono applicati alla struttura (pavimentazione, cordoli, barriere, ecc.) e il ritiro. La sezione resistente per tali azioni è composta dalla parte metallica e dalla soletta in calcestruzzo (quest'ultima messa in conto mediante un coefficiente di omogeneizzazione pari al rapporto dei rispettivi moduli elastici dei materiali). Si considerano in questa fase due istanti di tempo: un istante in cui non si tengono in conto i fenomeni lenti (viscosità e ritiro), mentre il secondo istante tiene conto invece di questi ultimi fenomeni. Il tutto viene organizzato in 3 sotto fasi:
Fase IA – la sezione resistente è formata dalla trave metallica e dalla soletta al momento dell'indurimento (tempo zero): si adotta un coeff. di omogeneizzazione pari a $n_{1a} = 6.16$.
Fase IB – la sezione resistente è formata dalla trave metallica e dalla soletta in cui vengono tenuti in conto i fenomeni "lenti" dovuti alla viscosità (punto 5.4.2.2 della EN 1994-2:2005): si adotta un coeff. di omogeneizzazione pari a $n_{1b} = 17.26$.
Fase IC – la sezione resistente è formata dalla trave metallica e dalla soletta in cui vengono tenuti in conto i fenomeni "lenti" dovuti al ritiro del cls: si adotta un coeff. di omogeneizzazione pari a $n_{1c} = 16.49$.
- **Fase II** - Corrisponde all'applicazione delle azioni variabili da traffico e delle altre azioni variabili di breve durata (termica, vento, ecc.). Le sollecitazioni nella sezione resistente acciaio-calcestruzzo sono calcolate considerando un rapporto tra i moduli elastici istantanei dei due materiali. Particolare attenzione viene rivolta alla determinazione delle configurazioni di carico che massimizzano le sollecitazioni flettenti e taglianti nelle singole sezioni. In tale fase si considerano gli effettivi dovuti ad una variazione termica differenziale fra acciaio e calcestruzzo. La sezione resistente è composta dalla parte metallica e dalla soletta in calcestruzzo, messa in conto mediante un coefficiente di omogeneizzazione $n = 6.16$.

Essendo l'analisi strutturale di tipo elastico, i risultati in termini di sollecitazione e spostamento saranno determinati da una somma diretta della grandezza considerata in ogni fase. Perciò si avranno le seguenti somme globali:

Istante $t=0$ – si tengono in conto le seguenti fasi: Fase 0 + Fase 1A + Fase 2

Istante $t=inf.$ – si tengono in conto le seguenti fasi: Fase 0 + Fase 1B + Fase 1C + Fase 2

Si vuol far osservare che l'analisi all'istante $t=inf.$ è più gravosa in termini di sollecitazione e spostamento dell'analisi all'istante $t=0$.

Le successive verifiche strutturali saranno considerate solo per l'analisi all'istante $t = \text{inf}$.

Per la determinazione delle sollecitazioni di impalcato si è adottata una schematizzazione a graticcio di travi, nella quale le varie membrature sono modellate mediante elementi mono-dimensionali tipo *Beam*. Le caratteristiche statiche delle sezioni delle travi principali, dipendenti dal livello di maturazione del calcestruzzo collaborante, ovvero dalla fase di calcolo di pertinenza, sono state determinate conducendo una omogeneizzazione all'acciaio, perfezionata considerando il pertinente rapporto dei moduli elastici.

Oltre alle travi principali, nel modello sono stati inseriti anche i traversi, costituiti da profili metallici a sezione prismatica, e gli elementi di impalcato in c.a. opportunamente modellati.

Il modello di calcolo adottato è in grado di fornire le caratteristiche di sollecitazione flessionali e taglianti agenti sia sulle travi principali sia sui diaframmi, dovute, queste ultime, all'espletamento della funzione irrigidimento della sezione trasversale e redistribuzione dei carichi.

I carichi permanenti ed accidentali sono stati inseriti direttamente nei modelli di calcolo adottati, prevedendo opportunamente dei nodi in corrispondenza degli elementi beam di impalcato.

La determinazione dei dati di input da inserire nel modello, quali rigidzze delle travi e carichi, è stata svolta con l'ausilio di un foglio di calcolo.

L'analisi FEM è condotta attraverso il programma di analisi strutturale SAP2000 (v 21).

Il ponte viene modellato per ciascuna fase descritta e per ogni fase viene inserita la rigidzza flessionale relativa: nella modellazione vengono disposti 5 sotto-modelli distinti ciascuno relativo ad ogni fase. A seguire si riporta un'immagine della modellazione così compiuta. Tutti i sotto-modelli poggiano su una sottostruttura rigida che schematizza e modella il muro di spalla.

Per le travi metalliche si è modellato anche la suddivisione in conci strutturali, come previsti nel progetto strutturale relativo alle carpenterie metalliche.

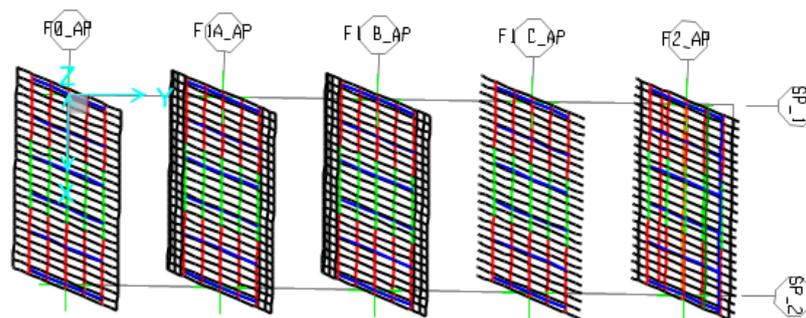


Figura 4 – Modellazione delle fasi

Per quanto concerne l'azione del vento sulla struttura, è stata analizzata assegnando alle travi di riva del modello una distribuzione di forze orizzontali eccentriche. Si sono invece trascurati gli effetti flessionali del vento nel piano forte della soletta di impalcato data la grande rigidzza flessionale in tale piano.

Per quanto riguarda l'azione sismica sia orizzontale che verticale, si sono assunte le masse poste in

corrispondenza del baricentro della in acciaio. Il modello di calcolo impiegato per la valutazione delle azioni sismiche è quello composto dai sotto-modelli relativi alla Fase 0 e Fase 1A al quale sono stati applicati i carichi sia della FASE 0 che della FASE 1A.

4.2 STRUTTURE IN ELEVAZIONE - SPALLE

4.2.1 Analisi strutturale

L'analisi strutturale della parte d'opera in oggetto ha preso in considerazione i carichi permanenti e variabili previsti dalla normativa applicata. Sono stati valutati gli stati sollecitativi di tutti gli elementi strutturali delle spalle di cui in allegato si riportano i dettagli di verifica.

Nella presente relazione, per brevità di esposizione, si riportano le risultanze delle sezioni più sollecitate quali lo spiccato delle strutture in elevazione (muro frontale, paraghiaia e muri di risvolto), nonché le azioni a quota appoggi ed a quota testa palificata per il dimensionamento degli apparecchi di appoggio e delle fondazioni profonde.

La spalla assunta sede di vincolamento longitudinale fisso dell'impalcato è la SP1, con altezza del muro frontale di circa 2.10 m; la spalla mobile SP2 invece presenta un muro frontale di altezza pari a 3.30 m .

Nella presente relazione si illustrano le calcolazioni condotte su entrambe le spalle.

Il modello strutturale che viene preso in considerazione è composto da elementi di tipo shell a cui verranno applicati i carichi per mezzo di azioni di pressioni.

4.2.2 Tipologia di analisi condotta ai fini sismici

Le sottostrutture dell'opera sono costituite unicamente dalle due spalle.

Si tratta di strutture tozze, caratterizzate da periodi di vibrazione in direzione orizzontale molto bassi e che possono essere considerate che si muovano con il suolo. In questo caso le forze di inerzia di progetto possono essere determinate per via statica considerando un'accelerazione pari ad $ag \cdot S$ (D.M. 17.01.2018 p.to 7.9.5.4.2).

L'analisi sismica della struttura verrà condotta con metodo pseudo-statico in cui le azioni sismiche sono intese come azioni statiche equivalenti.

La determinazione delle sollecitazioni e le conseguenti verifiche verranno condotte con il metodo semiprobabilistico agli stati limite.

4.3 CARICHI DI PROGETTO SU IMPALCATO

4.3.1 Criteri per la valutazione delle azioni sulla struttura

- Azioni permanenti – Le azioni permanenti sono costituiti dai pesi propri delle strutture portanti e delle sovrastrutture. Essi sono valutati sulla base di volumi e/o aree di influenza in modo da avere carichi lineari o di area da applicare al modello strutturale
- Azioni variabili da traffico – Sono definite al p.to 5.1.3.3 del D.M. 17.01.2018 e sono state posizionate in modo da produrre gli effetti più sfavorevoli ai fini del dimensionamento delle membrature dell'impalcato (travi, soletta, traversi) e delle sottostrutture (apparecchi di appoggio, elevazioni e fondazioni). Verranno considerate anche, in quanto di pertinenza, l'azione longitudinale di frenamento o di accelerazione (p.to 5.1.3.5). In prossimità di discontinuità strutturali verrà altresì considerato l'incremento dinamico addizionale (p.to 5.1.3.4).
- Azioni di neve, vento – Vengono considerate secondo quanto prescritto al p.to 5.1.3.7. del D.M. 17.01.2018. La loro valutazione avviene rispettivamente secondo quanto specificato ai p.ti 3.3 e 3.4. Secondo quanto previsto da normativa l'azione della neve per i ponti scoperti non è mai concomitante ai carichi variabili da traffico, quindi non risulta mai dimensionante
- Azioni sismiche – Vengono considerate secondo quanto prescritto al p.to 5.1.3.12. del D.M. 17.01.2018. La loro valutazione avviene secondo quanto specificato al p.to 3.2.
- Altre azioni variabili – Includono resistenze passive dei vincoli, azioni sui parapetti, urti ed azioni idrauliche (p.ti da 5.1.3.8. a 5.1.3.11. del D.M. 17.01.2018).

Tali azioni saranno combinate secondo le prescrizioni delle normative vigenti in funzione delle particolari strutture dell'opera in esame.

4.3.2 Azioni permanenti

Secondo il p.to 5.1.3.1. del D.M. 17.01.2018, comprendono

- g_1 peso proprio degli elementi strutturali e non strutturali;
- g_2 carichi permanenti portati (pavimentazione stradale, marciapiedi, sicurvia, parapetti, attrezzature stradali, rinfranchi e simili);
- g_3 altre azioni permanenti (spinta terre, spinte idrauliche, ecc...).

I pesi specifici e le caratteristiche geo-meccaniche delle terre, in quanto di pertinenza, assunti per la determinazione delle azioni permanenti risultano:

- Peso specifico acciaio 78.50 kN/m³
- Peso specifico calcestruzzo 25.00 kN/m³
- Peso specifico binder + manto di usura 24.00 kN/m³
- Peso specifico terreno 20.00 kN/m³
- Angolo di resistenza a taglio 38°

I carichi permanenti non strutturali applicati al modello di calcolo sono sinteticamente riportati nella tabella seguente:

CARICHI PERMANENTI NON STRUTTURALI	
Pavimentazione stradale	4.0 kN/m ²
Pavimentazione marciapiede	2.4 kN/m ²
Cordolo sicurvia	0.9 kN/m ²
Barriera stradale	1.5 kN/m
Barriera acustica (h=2.60m)	2.0 kN/m ²

4.3.3 Deformazioni impresse

Secondo il p.to 5.1.3.2. del D.M. 17.01.2018, comprendono

- ε_1 distorsioni e presollecitazioni di progetto;
- ε_2 ritiro e viscosità del calcestruzzo;
- ε_3 variazioni termiche;
- ε_4 cedimenti vincolari.

I fenomeni connessi a ritiro e viscosità sono stati valutati secondo quanto prescritto rispettivamente ai p.ti 11.2.10.6 e 11.2.10.7 del D.M. 17.01.2018.

Per quanto riguarda le distorsioni e presollecitazioni non vengono prese in considerazione in quanto non si tratta una struttura presollecitata.

Per quanto riguarda i cedimenti, essendo l'impalcato isostatico non producono effetti aggiuntivi dal punto di vista sollecitativo.

4.3.4 Azioni variabili da traffico

Essendo l'opera in oggetto un ponte carrabile, le azioni variabili da traffico sono rappresentate da:

q_1 carichi mobili, comprensivi degli effetti dinamici, definiti dai seguenti schemi di carico (p.to 5.1.3.3):

- schema di carico 1 (verifiche globali e locali):
 - $Q_{1.1.1}$ passaggio del carico mobile su due assi da 300 KN in tandem sulla corsia 1;
 - $q_{1.1.1}$ carico da 9,0 kN/m² uniformemente distribuito sulla corsia 1;
 - $Q_{1.1.2}$ passaggio del carico mobile su due assi da 200 KN in tandem sulla corsia 2;
 - $q_{1.1.2}$ carico da 2,5 kN/m² uniformemente distribuito sulla corsia 2;
 - $Q_{1.1.3}$ passaggio del carico mobile su due assi da 100 KN in tandem sulla corsia 3;
 - $q_{1.1.3}$ carico da 2,5 kN/m² uniformemente distribuito sulla corsia 3;
 - $q_{1.1.R}$ carico da 2,5 kN/m² uniformemente distribuito sull'area rimanente;
- schema di carico 2 (verifiche locali):
 - $Q_{1.2}$ passaggio del carico mobile su un asse da 400 kN;
- schema di carico 3 (verifiche locali):

- Q_{1.3} carico isolato da 150 kN sui marciapiedi non protetti da sicurvia;
- schema di carico 4 (verifiche locali):
- Q_{1.4} carico isolato da 10 kN sui marciapiedi su marciapiedi protetti da sicurvia;
- schema di carico 5:
- Q_{1.4.1} carico della folla compatta di 5,0 kN/m² se non combinato;
- Q_{1.4.2} carico della folla compatta di 2,5 kN/m² se combinato;

q₃ azioni longitudinali di frenamento o di accelerazione (p.to 5.1.3.5);

La disposizione e la numerazione delle corsie viene determinata in modo da indurre le più sfavorevoli condizioni di progetto. Per ogni singola verifica il numero di corsie da considerare caricate, la loro disposizione sulla carreggiata e la loro numerazione vengono scelte in modo che gli effetti della disposizione dei carichi risultino i più sfavorevoli.

La corsia che, caricata, dà l'effetto più sfavorevole è numerata come Corsia 1; la corsia che dà il successivo effetto più sfavorevole è numerata come Corsia 2, ecc.

Per quanto riguarda la disposizione trasversale dei carichi, le condizioni analizzate sono rappresentata nelle immagini seguenti:

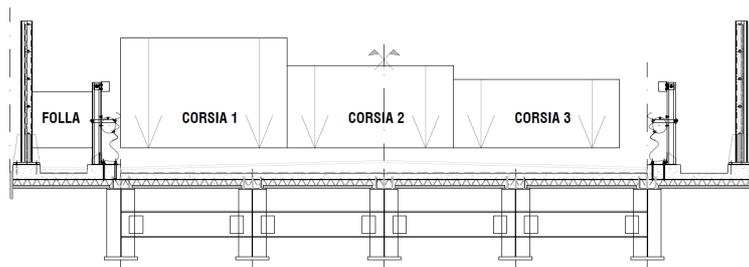


Figura 5 – Disposizione dei carichi da traffico 1: massima flessione sull'impalcato (carichi eccentrici).

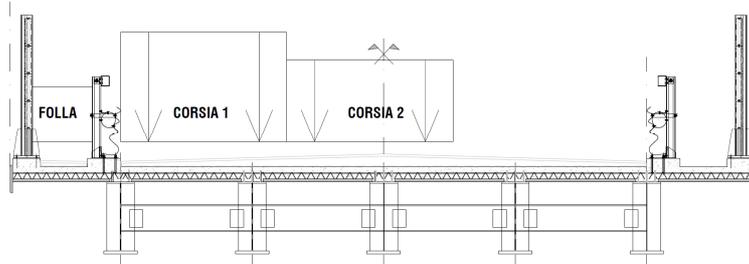


Figura 6 – Disposizione dei carichi da traffico 2: massima torsione sull'impalcato.

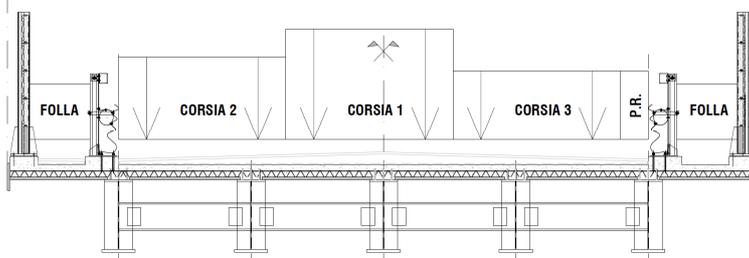


Figura 7 – Disposizione dei carichi da traffico 3: massima flessione sull'impalcato (carichi centrati).

Si dimostra di seguito la configurazione di carico più gravosa per il dimensionamento delle travi principali, sia per il momento flettente che per il taglio.

I diagrammi sottostanti riportano i valori massimi del momento in e del taglio agli per le tre configurazioni di carico di cui sopra, per le cinque travi (interasse 2.38 m) che compongono l'impalcato. Data la simmetria della sezione trasversale non sono necessari specifici riferimenti alle singole travi.

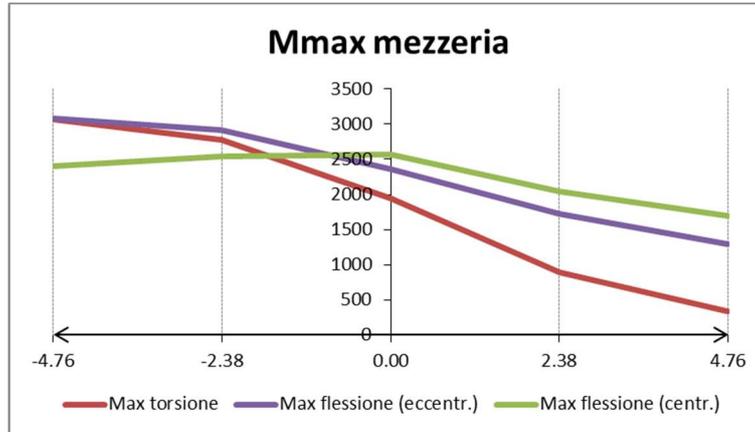


Figura 8 – Andamento del momento in mezzeria.

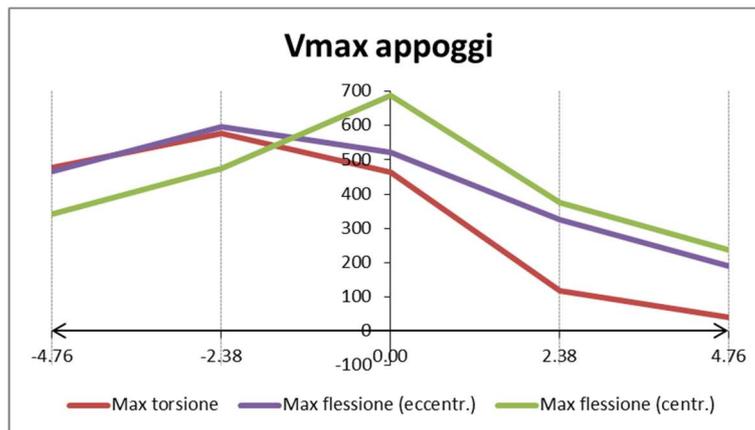


Figura 9 – Andamento del taglio agli appoggi.

Dalle figure soprariportate si evince che la configurazione che massimizza il momento flettente delle travi in mezzeria è la disposizione 1, mentre quella che massimizza il taglio nelle sezioni di appoggio è la disposizione 3.

I traversi di campata sono disposti come riportato nella figura di cui sotto. In particolare, non sono in contatto con la soletta in c.a., per cui risultano sollecitati solo in corrispondenza delle travi.

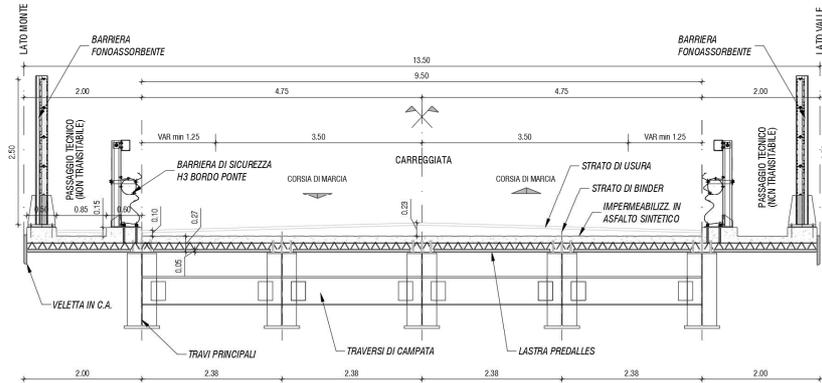


Figura 10 – Sezione trasversale su traverso di campata.

Nello studio delle sollecitazioni si schematizza il traverso come trave rigida su cinque molle elastiche, che rappresentano le cinque travi di impalcato. La schematizzazione in questione consente di utilizzare le linee di influenza per la determinazione della disposizione trasversale dei carichi viaggianti che massimizzano la sollecitazione cercata. Data l'ipotesi di trave rigida e molle elastiche di eguale rigidezza le linee di influenza per il momento e per il taglio sono ricavabili da considerazioni di equilibrio.

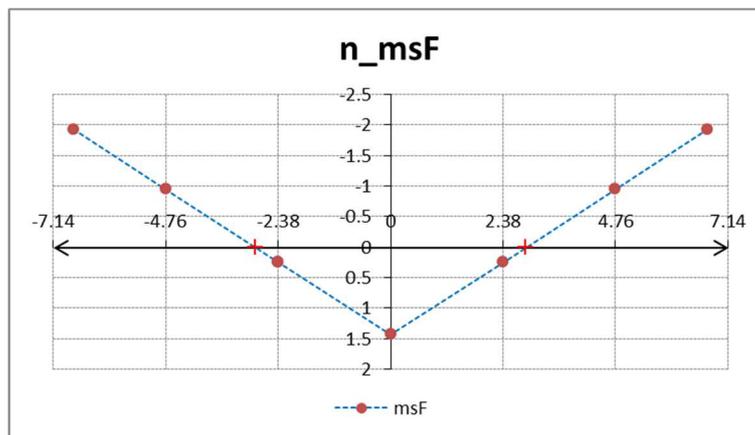


Figura 11 – Linea di influenza del momento flettente sui traversi di campata.

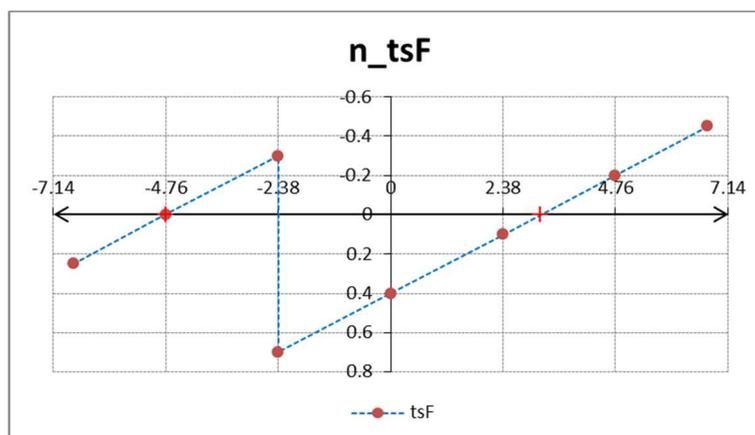


Figura 12 – Linea di influenza del taglio sui traversi di campata.

La disposizione dei carichi viaggianti che massimizza il momento flettente ed il taglio nei traversi di campata è riportata nella figura seguente.

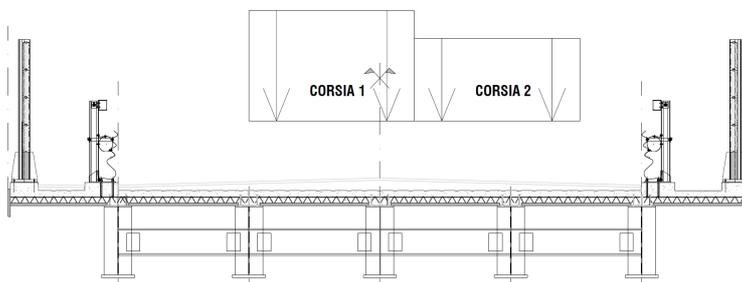


Figura 13 – Disposizione dei carichi variabili da traffico (schema 1): momento flettente e taglio massimi traversi di campata.

4.3.5 Azioni variabili da traffico per fatica

Con riferimento a quanto prescritto dalle NTC 2018, in funzione del limitato carico di traffico previsto per il ponte, si fa riferimento al modello di carico a fatica 1.

4.3.6 Azione longitudinale di frenamento o di accelerazione

Con riferimento a quanto prescritto dalle NTC 2018, la forza di frenamento o di accelerazione q_3 è calcolata come segue:

$$180 \text{ kN} \leq q_3 = 0,6 (2Q_{1k}) + 0,10q_{1k} \cdot w_1 \cdot L \leq 900 \text{ kN} \quad [5.1.4]$$

Dove:

$Q_{1k} = 300 \text{ kN}$, carico concentrato di corsia 1 (schema di carico 1);

$q_{1k} = 9 \text{ kN/m}^2$, carico distribuito di corsia 1 (schema di carico1);

$w_1 = 3.0 \text{ m}$, larghezza della corsia;

$L = 25.5 \text{ m}$, lunghezza della zona caricata.

Quindi:

$q_3 = 430 \text{ kN}$, risultante azione di frenamento o di accelerazione applicata al livello della pavimentazione.

Data la luce di calcolo di 25.50 m, il carico distribuito è pari a $q_3 = 17 \text{ kN/m}$.

Considerando uno spessore medio della pavimentazione pari a 0.23 m e noto lo spessore della soletta di 0.27 m, il braccio della forza orizzontale è pari a 0.50 m; quindi, le azioni applicate al modello di calcolo a livello dell'estradosso della piattabanda superiore delle travi principali sono:

$q_q = 17 \text{ kN/m}$, carico distribuito orizzontale;

$q_m = 8.5 \text{ kNm/m}$, momento flettente distribuito.

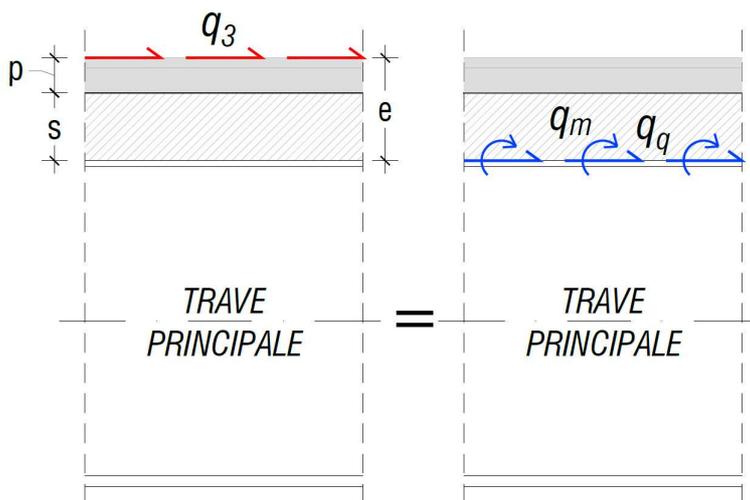


Figura 14 – Schematizzazione azione di frenamento o di accelerazione.

4.3.7 Azione di neve e di vento

Poiché non si tratta di un ponte coperto, ed in quanto non concomitante con i carichi da traffico, l'azione della neve è trascurata.

L'azione del vento, in accordo con il § 5.1.3.7 del D.M. 17.01.2018, è stata assimilata ad un sistema di carichi statici, la cui componente principale è orizzontale e diretta ortogonalmente all'asse del ponte. Tale componente si considera agente sulla proiezione nel piano verticale delle superfici investite (barriere acustiche).

Per la valutazione delle forze di progetto, in accordo con il capitolo 12 del D.M. 17.01.2018, si è fatto riferimento alla norma EN 1991-1-4:2005.

PRESSIONE DEL VENTO		NTC 2018	
CARATTERISTICHE GEOGRAFICHE			
Comune		Massa	
Altitudine (slm)	a_s	70	m
Zona		3	(Toscana)
Classe rugosità terreno		C	
Categoria di esposizione		II	
PRESSIONE DEL VENTO			
Velocità base di riferimento quota 0		27	m/s
	a_0	500	m
	k_s	0.37	1/s
	c_a	1.0	
Velocità base di riferimento	V_b	27	m/s
Periodo di ritorno	T_R	100	anni
Coefficiente di ritorno	c_r	1.04	-
Velocità di riferimento	V_r	28.1	-
Pressione cinetica di riferimento	q_r	0.49	kN/m ²
Altezza massima dal suolo	z	8.0	m

	K_r	0.19	-
	Z_0	0.05	m
	Z_{min}	4.0	m
Coefficiente di esposizione	C_e	2.2	-
Coefficiente topografico	C_t	1.0	-
Coefficiente dinamico	C_d	1.0	
Pressione cinetica di picco	$q_p(z)$	1.1	kN/m ²

FORZE DI PROGETTO	EN 1991-1-4:2005		
Forza parallela alla direzione del vento (x)	$f_{w,x} = F_{w,x} / L$	9.8	kN/m
Forza perpendicolare alla direzione del vento (z)	$f_{w,z} = F_{w,z} / L$	13.2	kN/m
Momento intorno alla linea d'asse	$m_{w,z} = M_{w,x} / L$	44.6	kNm/m
Forza in direzione x (parallela alla dir. del vento)	$F_{w,x} = q_r \cdot C_x$	249.7	kN
Forza in direzione z (verticale)	$F_{w,z} = q_r \cdot C_z$	337.3	kN
Momento torcente (attorno asse impalcato)	$M_{w,x} = F_{w,z} \cdot e$	1138.4	kNm
Eccentricità del punto di applicazione di $F_{w,z}$	$e = b/4$	3.4	m
Fattore del carico vento (parallela alla dir. del vento)	$C_x = c_{f,x} \cdot C_e$	2.9	-
Fattore del carico vento (verticale)	$C_z = c_{f,z} \cdot C_e$	2.0	-
Coefficiente di forza x (parallela alla dir. del vento – ponte normale)	$c_{f,x} = +c_{f,x,0}$	1.3	-
Coefficiente di forza z (verticale)	$\pm c_{f,z}$	0.9	-
Area di riferimento per combinazioni senza traffico (x)	$A_{ref,x} = d_{tot} \cdot L$	176.5	m ²
Area di riferimento per combinazioni senza traffico (z)	$A_{ref,z} = b \cdot L$	344.3	m ²
Luce del ponte esposta al vento	L	25.5	m
Altezza totale d'ingombro impalcato	$d_{tot} = d + 2d_1$	6.9	m
Altezza struttura (travi + soletta + cordolo)	d	1.7	m
Altezza trave principale di bordo	h_t	1.3	m
Spessore soletta	s	0.27	m
Altezza cordolo	h_c	0.15	m
Altezza barriera antirumore	d_1	2.6	m
Larghezza impalcato nella direzione del vento	b	13.5	m

Per la determinazione dell'altezza di ingombro si è fatto riferimento alla seguente tabella ed alla figura sottostante:

BS EN 1991-1-4:2005+A1:2010
EN 1991-1-4:2005+A1:2010 (E)

Table 8.1 — Depth d_{tot} to be used for $A_{ref,x}$

Road restraint system	on one side	on both sides
Open parapet or open safety barrier	$d + 0,3 \text{ m}$	$d + 0,6 \text{ m}$
Solid parapet or solid safety barrier	$d + d_1$	$d + 2d_1$
Open parapet and open safety barrier	$d + 0,6 \text{ m}$	$d + 1,2 \text{ m}$

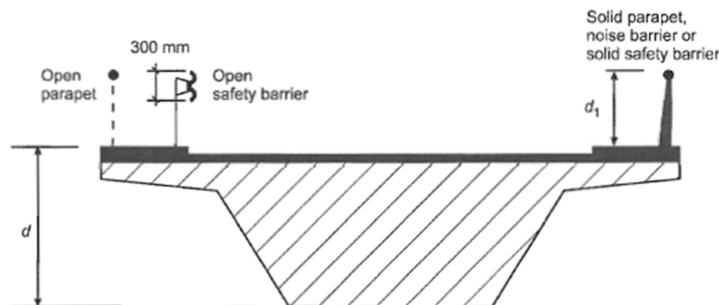


Figure 8.5 — Depth to be used for $A_{ref,x}$

La condizione di carico priva di traffico risulta la più cautelativa in quanto:

- Altezza totale ingombro impalcato (barriere antirumore su entrambe i lati):

$$d_{tot} = d + 2d_1 = 6.9 \text{ m (si veda tabella soprariportata);}$$

- Altezza totale ingombro impalcato (traffico):

$$d_{tot} = h_t + s + p + h_v = 1.3 + 0.27 + 0.23 + 3.0 = 4.8 \text{ m} < 6.9 \text{ m}$$

Con: p: spessore della pavimentazione;

h_v : altezza del veicolo.

Pertanto, quest'ultima condizione non verrà considerata per le successive valutazioni.

4.3.8 Azioni sismiche

4.3.8.1 Parametri di definizione degli spettri di risposta

L'azione sismica viene determinata in ottemperanza a quanto prescritto dal D.M. 17.01.2018, riferimento normativo cui si riferiscono tutti i richiami riportati nel seguito del presente paragrafo, salvo ove diversamente indicato.

Parametri generali

I parametri generali, caratteristici della struttura e dell'ubicazione dell'intervento, atti a definire gli spettri di progetto risultano essere i seguenti:

- | | |
|---|------------------|
| ○ Ubicazione: Lat. 44.035443 N, Long. 10.139322 E (WGS84) | |
| ○ Tipo di Terreno (p.to 3.2.2) | C |
| ○ Categoria topografica (p.to 3.2.3.2.1) | T1 ($S_T=1.0$) |
| ○ Vita nominale della costruzione V_N (p.to 2.4.1) | 50 anni |
| ○ Classe d'uso (p.to 2.4.2) | IV ($C_U=2.0$) |
| ○ Classe di duttilità (p.to 7.2.1) | Bassa |
| ○ Smorzamento Viscoso ξ (p.to 3.2.3.2.1) | 0.05 |

Fattore di comportamento

Il Fattore di comportamento da utilizzare per ciascuna direzione della azione sismica orizzontale, atto a definire gli spettri di progetto per sistemi dissipativi, come avviene per gli Stati Limite Ultimi, per i ponti viene definito al p.to 7.9.2.1.

Per il caso in esame non si considera la struttura di impalcato come dissipativa.

Nel caso in oggetto, le sottostrutture sono rappresentate da spalle connesse, mediante collegamenti flessibili, all'impalcato (p.to 7.9.2.1) e che sostengono un terreno rigido naturale per più dell'80% dell'altezza (p.to

7.9.5.6.2). Si tratta pertanto di *Strutture che si muovono col terreno* ai sensi della Tabella 7.9.I, caratterizzate da periodi di vibrazione in direzione orizzontale molto bassi e per le quali si assume un valore di $q_0=q=1.0$ (sollecitazione di compressione normalizzata $\sigma_k \leq 0.30$).

Il fattore di comportamento è pertanto pari a $q_0=q=1.0$ per entrambe le direzioni e rimane tale sia per la struttura di impalcato che per le strutture in elevazione (spalle).

Masse sismiche associate

Gli effetti dell'azione sismica sono valutati tenendo conto delle masse associate ai soli pesi propri e sovraccarichi permanenti, considerando nullo il valore quasi permanente delle masse corrispondenti ai carichi da traffico.

l'opera in oggetto non rientra fra i ponti in zona urbana di intenso traffico, quindi non si considera il contributo previsto da norma per tali strutture ai fini del calcolo delle masse sismiche, come prescritto al p.to 5.1.3.12.

Spettri di progetto

Ai sensi del p.to 7.2.2, ed in considerazione della presenza di elementi precompressi e/o di luce superiore a 20 m, viene considerata la componente verticale del sisma.

In considerazione di quanto detto, gli spettri di progetto significativi ai fini della determinazione dell'azione sismica risultano:

- Spettro di risposta di progetto in accelerazione delle componenti orizzontali e verticali allo Stato Limite di salvaguardia della Vita
- Spettro di risposta di progetto in accelerazione delle componenti orizzontali allo Stato Limite di Danno
- Spettro di risposta di progetto in accelerazione delle componenti orizzontali allo Stato Limite di Operatività

Utilizzando i parametri generali precedentemente definiti, gli spettri di risposta vengono definiti secondo quanto esposto ai p.ti 3.2.3.2.1, 3.2.3.2.2 e 3.2.3.5.

4.3.8.2 Spettri di risposta di progetto

Gli spettri di risposta sono definiti sulla base dei parametri di sismicità propri del luogo di ubicazione, delle categorie topografiche e stratigrafiche del terreno, nonché delle caratteristiche di duttilità del manufatto di progetto (da cui il Fattore di comportamento). I parametri di sismicità del luogo risultano:

STATO LIMITE	V_N [anni]	C_u	V_R [anni]	T_R [anni]	a_g [g]	F_0	T_c^*
SLO	50	2	100	60	0.062	2.503	0.257
SLD	50	2	100	101	0.075	2.504	0.27
SLV	50	2	100	949	0.175	2.375	0.299
SLC	50	2	100	1950	0.219	2.387	0.312

Da cui si ottengono gli spettri di risposta in termini di accelerazione orizzontale nelle due direzioni orizzontale e verticale.

Spettri di risposta elastici per i diversi Stati Limite

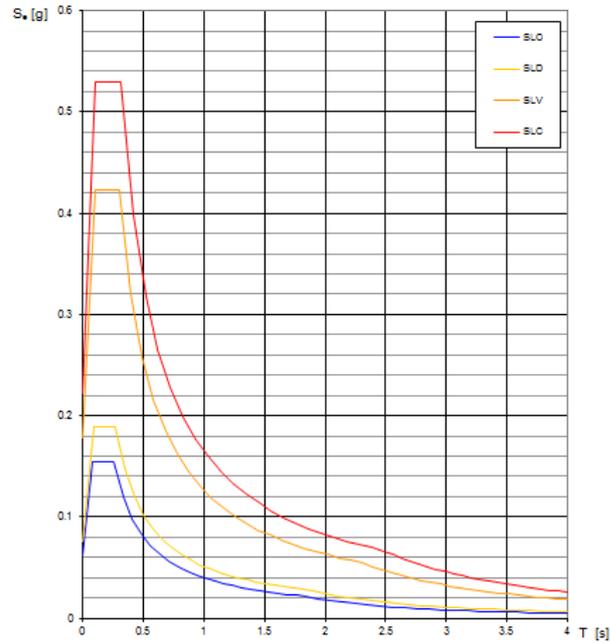


Figura 15 – Spettri sismici orizzontali per ogni stato limite

Spettri di risposta (componenti orizz. e vert.) per lo stato limite SLV

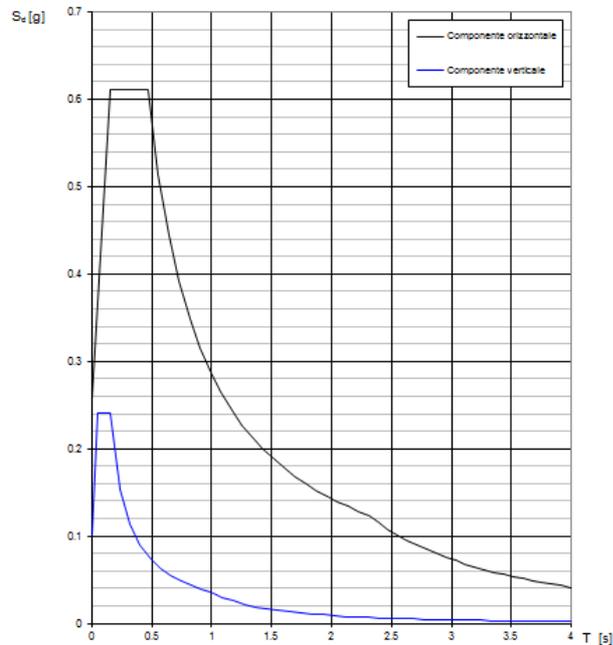


Figura 16 – Spettro sismico di progetto orizzontale e verticale

4.3.9 Azioni termiche

Le variazioni termiche sono state valutate sia in termini di gradiente termico differenziale acciaio-clc (analisi dell'impalcato) che in termini di variazioni assolute (analisi delle sottostrutture).

La variazione termica uniforme è stata calcolata facendo riferimento sia alle NTC 2018 che a Eurocodice 1991-1-5 – paragrafo 6.1.3.

Le NTC 2018, al paragrafo 3.5.2, forniscono range di temperatura funzione della zona e della quota slm:

Zona della temperatura dell'aria esterna	Zona	II		(Toscana)
Altitudine slm	a_s	70	m	(Massa)
Temperatura massima aria esterna ($T_R=50$ anni)	T_{max}	41.9	°C	[3.5.4]
Temperatura minima aria esterna ($T_R=50$ anni)	T_{min}	-8.4	°C	[3.5.3]

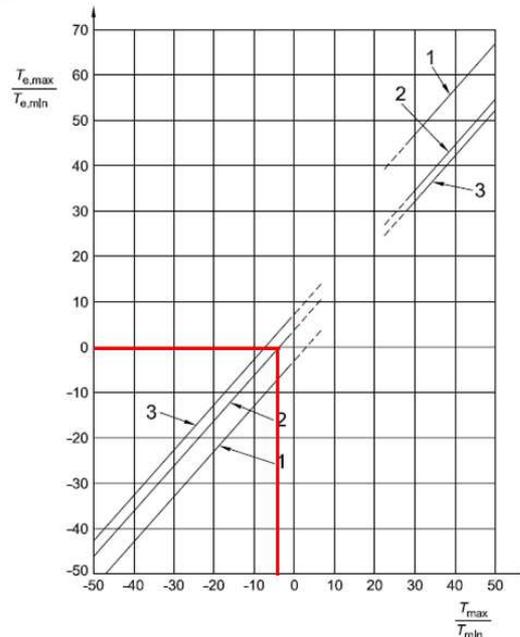
Coerentemente con l'ipotesi di tempi di ritorno pari a 100 anni per vento e sisma, si chiede anche per le variazioni termiche, l'aggiornamento dei valori di T_{min} e T_{max} (i valori di riferimento da NTC 2018 sono previsti per un tempo di ritorno pari a 50 anni). Prendendo a riferimento l'Appendice A dell'EC 1991-1-5 si ottengono i seguenti valori:

Periodo di ritorno di progetto	T_R	100	anni
Temperatura massima aria esterna (TR=50 anni)	T_{max}	41.9	°C
Temperatura minima aria esterna (TR=50 anni)	T_{min}	-8.4	°C
Temperatura massima aria esterna (TR di progetto)	$T_{max,p}$	43.5	°C
Temperatura minima aria esterna (TR di progetto)	$T_{min,p}$	-9.4	°C
Coefficiente UNI EN 1991-1-5 A.2	k_1	0.781	-
Coefficiente UNI EN 1991-1-5 A.2	k_2	0.056	-
Coefficiente UNI EN 1991-1-5 A.2	k_3	0.393	-
Coefficiente UNI EN 1991-1-5 A.2	k_4	-0.156	-
Probabilità annua di progetto	p	0.01	1/anni

Ai valori definiti secondo Eurocodice corrispondono, per ponti di gruppo 2 (tipologia impalcato a struttura composta), i seguenti valori riferiti alla struttura attraverso la correlazione tra i valori minimi e massimi dell'aria e quelli della temperatura uniforme dell'impalcato:

figura 6.1 Correlazione tra temperatura dell'aria all'ombra minima/massima (T_{min}/T_{max}) e componente di temperatura uniforme del ponte minima/massima ($T_{e,min}/T_{e,max}$)

Legenda
 1 Tipo 1
 2 Tipo 2
 3 Tipo 3



Nota 1 I valori in figura 6.1 sono basati su un'escursione di temperatura giornaliera di 10 °C. Una tale escursione può essere considerata appropriata per la maggior parte degli Stati Membri.
 Nota 2 Per travi di acciaio reticolari e a parete piena il valore massimo dato per il tipo 1 può essere ridotto di 3 °C.

Temperatura massima uniforme del ponte	$T_{e,max}$	43.5	°C
Temperatura minima uniforme del ponte	$T_{e,min}$	-9.4	°C
Valore da grafico EC1-5 (fig.6.1)		0	°C

Fissando $T_0 = 15^\circ\text{C}$, dedotto dalla normativa NTC2018 ed in linea con le temperature riscontrabili per la zona oggetto di intervento, si ottiene l'escursione termica effettiva subita dall'impalcato:

Variazione termica (massima espansione)	$\Delta T_{N,esp}$	28.5	°C
Variazione termica (massima contrazione)	$\Delta T_{N,contr}$	-24.4	°C
Intervallo complessivo temperatura uniforme	ΔT_N	52.8	°C

L'azione termica di variazione assoluta considerata vale, a favore di sicurezza, $\pm 30^\circ\text{C}$.

L'azione termica differenziale, secondo quanto previsto al prospetto 6.1 (approccio 1) della EN 1991-1-5, è assunta pari a $+15^\circ\text{C}$ e -18°C .

4.3.10 Effetti dovuti al ritiro

Determinazione dei parametri di ritiro

I parametri relativi alla deformazione assiale per ritiro del calcestruzzo, come indicato dalle D.M. 17/01/2018 al paragrafo 11.2.10.3, possono essere valutati sulla base delle seguenti indicazioni:

Area sez. soletta	Ac [mm ²]	3378000
-------------------	-----------------------	---------

Perimetro a contatto con atmosfera	u [mm]	14720
Distanza fittizia $h_0 = 2 A_c/u$	h_0 [mm]	459
Modulo elastico calcestruzzo	E_{cm} [N/mm ²]	34077
Modulo elastico acciaio	E_s [N/mm ²]	210000

Si precisa che:

- Nel computo di A_c non sono state considerate le lastre prefabbricate;
- Il perimetro u , a contatto con l'atmosfera, comprende la sola superficie superiore, essendo la parte inferiore del getto protetta dalle lastre.

Effetti reologici

Tempo e ambiente

$t_s = 1$ gg	Età del calcestruzzo in giorni, all'inizio del ritiro per essiccamento.
$t_0 = 28$ gg	Età del calcestruzzo in giorni al momento dell'applicazione dei carichi permanenti.
$t_0 = 1$ gg	Età del calcestruzzo in giorni al momento dell'applicazione del ritiro.
$t = V_N = 100$ anni = 36525 gg	Età del calcestruzzo in giorni.
RH = 70 %	Umidità ambientale relativa, in percentuale.

Modulo elastico al tempo t

Il fenomeno della viscosità ha come effetto l'aumento delle deformazioni nel tempo provocate da un carico mantenuto costante per un lungo periodo. Le deformazioni viscosi si manifestano peraltro senza modificare lo stato di sollecitazione. Il fenomeno della viscosità viene assimilato ad una diminuzione fittizia del modulo elastico del calcestruzzo nel tempo (in realtà le caratteristiche meccaniche del calcestruzzo migliorano nel tempo per cui il modulo di elasticità inteso come rapporto sollecitazione – deformazione per carico di breve durata aumenta nel tempo). Il modulo elastico passa quindi dal valore iniziale all'istante t_0 di applicazione del carico al valore finale convenzionale al tempo t .

Nell'ipotesi di viscosità lineare cioè di deformazioni viscosi (ϵ_v) proporzionali a quelle elastiche (ϵ_{el}), all'istante t si ha:

$$\epsilon_v = \varphi(t, t_0) \cdot \epsilon_{el} \quad \epsilon = \sigma/E_{cm}$$

dove $\varphi(t, t_0)$ rappresenta la funzione di viscosità o coefficiente di viscosità.

Dopo un certo numero di anni (t giorni), alla deformazione elastica ϵ_{el} (istantanea) subita dal calcestruzzo si somma quella viscosa:

$$\epsilon_{tot} = \epsilon_{el} + \epsilon_v = \epsilon_{el} \cdot [1 + \varphi(t, t_0)]$$

Le norme UNI ENV 1994-2 introducono un coefficiente moltiplicativo (ψ_L) per la funzione di viscosità φ ; detto coefficiente dipende dal tipo di carico applicato. Il modulo elastico del calcestruzzo al tempo t vale:

$$E_{cm}(t, t_0) = \frac{E_{cm}}{1 + \psi_L \cdot \varphi(t, t_0)}$$

prospetto 4.0

Valori per i moltiplicatori della deformazione viscosa (creep) Ψ_L

Carichi permanenti comprendenti la presollecitazione mediante tiranti dopo che la connessione a taglio è diventata efficace.	1,10
Effetti isostatici ed iperstatici dovuti al ritiro ed effetti iperstatici dipendenti dal tempo secondo (5).	0,55
Presollecitazione mediante deformazioni imposte (per esempio sollevamento mediante martinetti in corrispondenza degli appoggi).	1,50

Coefficiente di viscosità al tempo “t”

Il coefficiente di viscosità può essere calcolato con la relazione (UNI EN 1992-1-1 Appendice B):

Analisi viscosità:

età cls al momento considerato	t [anni]	100
età del cls al momento del carico	t_0 [gg]	28
umidità ambientale relativa	RH [%]	70
coeff. (resistenza del cls)	α_1	0.866
coeff. (resistenza del cls)	α_2	0.960
coeff. (resistenza del cls)	α_3	0.902
coeff. (RH e h_0)	β_H	1353.3
coeff.	$\beta_c(t, t_0)$	0.989
coeff.	φ_{RH}	1.323
coeff.	$\beta(f_{cm})$	2.562
coeff.	$\beta(t_0)$	0.488
coeff.	φ_0	1.662
coeff. di viscosità	$\varphi(t, t_0)$	1.643

Moduli di elasticità e coefficienti di omogenizzazione

Considerando un tempo t pari alla vita nominale della struttura ($t=V_{N.}=100$ anni) ed i valori del coefficiente di viscosità calcolati al punto precedente si ottengono i moduli di elasticità di seguito riportati. Si riportano, inoltre, i coefficienti di omogeneizzazione, definiti come rapporto tra il modulo elastico dell'acciaio (E_s) e quello del calcestruzzo della rispettiva fase.

Per azioni di breve durata si ha:

- PER CARICHI ISTANTANEI – FASI 1A e 2

coeff. di omog. per carichi istantanei	n_0	6.16
Mod. elasticità CLS	E [MPa]	34077

Per azioni di lunga durata si ha:

- PER CARICHI PERMANENTI – FASE 1B

età cls al momento considerato	t [anni]	100
età del cls al momento del carico	t_0 [gg]	28

coeff.	ψ_P	1.10
coeff. Viscosità per carichi perm. (t=inf)	$\varphi_P(t,t_0)$	1.638
coeff. di omog. per carichi perm. (t=inf)	n_P	17.26
Mod. elasticità CLS	E [MPa]	12164
<i>- PER RITIRO – FASE 1C</i>		
età cls al momento considerato	t [anni]	100
età del cls al momento del ritiro	t_0 [gg]	1
coeff.	ψ_R	0.55
coeff. Viscosità per ritiro	$\varphi_R(t,t_0)$	3.048
coeff. di omog. per ritiro	n_R	16.49
Mod. elasticità CLS	E [MPa]	12732

Calcolo della deformazione totale per ritiro

In accordo con la norma UNI EN 1992-1-1:2005 (EC2) la deformazione finale dovuta al ritiro è calcolata come segue:

età cls al momento considerato	t [anni]	100
età del cls al momento del carico	t_0 [gg]	1
coeff.	$\beta_{ds}(t,t_s)$	0.989
coeff.	β_{RH}	1.018
coeff.	α_{ds1}	4
coeff.	α_{ds2}	0.12
deform.	$\epsilon_{cd,0}$	0.00034
coeff.	k_h	0.70
def. per essiccamento	ϵ_{cd}	0.00024
coeff.	$\beta_{as}(t)$	0.181
deform.	$\epsilon_{ca}(inf)$	0.0000625
def. per ritiro autogeno	ϵ_{ca}	1.1329E-05
deformazione da ritiro	ϵ_{cs}	0.000248

L'azione di ritiro del calcestruzzo è valutata sovrapponendo gli effetti dell'azione di trazione sulla soletta che impedisce il ritiro, all'azione di compressione sulla sezione mista. A ritiro impedito si crea uno sforzo di trazione sul calcestruzzo pari a:

$$\sigma_R = \epsilon_{cs} E_s / n_R$$

Ne consegue che l'azione assiale necessaria a impedire il ritiro della soletta è data da $N_R = \sigma_R A_C$. Tale azione di compressione applicata all'estremità del ponte, in corrispondenza del baricentro della soletta di calcestruzzo, provoca sollecitazioni di pressoflessione sulla sezione mista, la cui azione assiale è N_R e il

cui momento vale $M_R = N_R(H - 0.5h_p - Z_{G,R}^*)$.

Le azioni da ritiro così calcolate sono distribuite uniformemente sulle cinque travi principali che compongono l'impalcato, applicate agli estremi delle travi e di intensità pari a $N_{R,i}$ e $M_{R,i}$ come riportato di seguito.

Calcolo forze statiche equivalenti fase di ritiro ai fini della modellazione

Tensione da ritiro	σ_R [N/mm ²]	3.151
num. Travi impalcato	n_{tr}	5
Altezza soletta	h_p [mm]	270
Altezza Sez. - concio 1 - fase 0	h [mm]	1300
Altezza tot. Sez. concio 1 - fase ritiro	H [mm]	1570
Alt. baricentro - concio 1 - fase 0	Z_G [mm]	588.13
Alt. baricentro - concio 1 - fase ritiro	$Z_{G,R}^*$ [mm]	983.40
Sforzo norm. tot. di traz.	N_R [kN]	10644.05
Sforzo norm. per ogni trave di traz.	$N_{R,i}$ [kN]	2128.81
Flettente da ritiro per ogni trave	$M_{R,i}$ [kNm]	961.38

Tali azioni sono applicate al modello di calcolo tenendo di conto delle effettive eccentricità del punto di applicazione della forza (estradosso della piattabanda superiore, come dimostrato nella figura seguente) $N_{R,i}$. Il momento applicato nel modello è pari a:

$$\Delta M_{R,i} = N_{R,i}[(H - 0.5h_p - Z_{G,R}^*) - (h - Z_G)]$$

Alle travi del modello di calcolo sono state applicate le seguenti azioni:

Sforzo norm. per ogni trave di traz.	$N_{R,i}$ [kN]	2128.81
Flettente da ritiro per ogni trave	$\Delta M_{R,i}$ [kNm]	-554.06

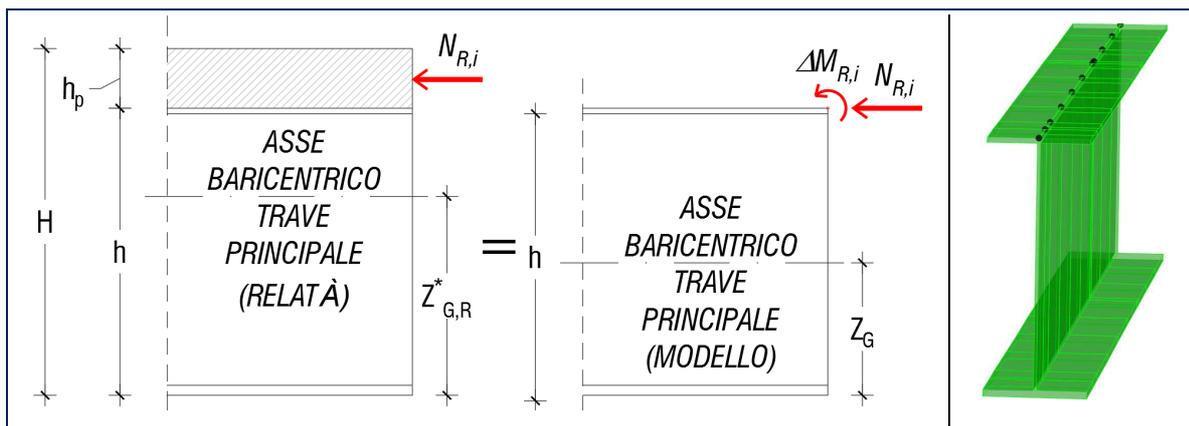


Figura 17– Applicazione delle forze equivalenti (fase di ritiro) al modello di calcolo (sinistra); vista estrusa del concio di trave (destra).

A queste azioni deve essere sommato lo stato tensionale dovuto alla deformazione impedita della soletta $\sigma_{\Delta R} = 3.151$ MPa.

4.3.11 Azione dell'urto di veicoli in svio

Come indicato § 5.1.3.10 delle NTC2018, nel progetto dell'impalcato deve essere considerata l'eventualità che si verifichino azioni eccezionali, quali l'urto contro le barriere dei veicoli in transito sul ponte. Per tener conto di ciò, si utilizza una combinazione di carico nella quale al sistema di forze orizzontali, equivalenti all'effetto dell'azione d'urto sulla barriera di sicurezza stradale, si associ un carico verticale isolato sulla sede stradale costituito dallo schema di carico 2, posizionato in aderenza alla barriera stessa e disposto nella posizione più gravosa. Nella presente relazione il carico verticale non viene considerato data la geometria della sezione trasversale.

In accordo con quanto indicato dalla normativa vigente ai § 5.1.3.10 e § 3.6.3.3, per gli elementi connessi al sicurvia si assumono quattro forze orizzontali in corrispondenza dei montanti della barriera, il cui interasse è stabilito in 1.25 m; le due forze applicate ai paletti di estremità della zona considerata sono pari a 50kN e le altre due, applicate ai montanti interni, sono pari a 100kN. Tutte le forze agiscono trasversalmente ad un'altezza di 1.00 m dal piano viabile e sono dirette verso l'esterno dell'impalcato.

Essendo un'azione eccezionale, la forza d'urto del veicolo in svio è da moltiplicare per il coefficiente parziale unitario.

4.3.12 Altre azioni variabili

Non sono state considerate le seguenti azioni variabili:

- q7: resistenze parassite dei vincoli. Lo schema di vincolo adottato non impedisce le deformazioni longitudinali e non provoca sollecitazioni nell'impalcato se non per effetto della resistenza parassita negli appoggi. Le reazioni orizzontali parassite sollecitano l'impalcato a pressoflessione o a tensoflessione, e il momento flettente è direttamente proporzionale alla differenza di quota tra baricentro dei conci di trave (sezione omogenizzata) e quota degli appoggi. Nel caso in oggetto tale distanza è modesta e le reazioni verticali negli appoggi non sono tali da provocare notevoli azioni orizzontali dovute agli attriti. Di conseguenza, tale azione non è stata considerata per la verifica dell'impalcato.
- q9: altre variabili (azioni idrauliche, urto veicolo, urto ghiacci e natanti su pile). Vengono trascurate nell'analisi longitudinale dell'impalcato.

4.4 COMBINAZIONI DI CARICO

4.4.1 Valori caratteristici delle azioni dovute al traffico

Ai fini della determinazione dei valori caratteristici delle azioni dovute al traffico, si sono considerate le combinazioni riportate nella Tabella 5.1.IV (p.to 5.1.3.14) del D.M. 17.01.2018. Ci si è limitato ai Gruppi di azioni significativi per verifiche globali di ponti carrabili.

VALORI CARATTERISTICI DELLE AZIONI DOVUTE AL TRAFFICO	q₁₊₂	q₁₊₂	q₃	q₄
	Variabili da traffico (Tandem)	Variabili da traffico (Distribuiti)	Frenam. o Acc.	Centrifuga

<i>Gruppo azioni 1</i>	1,00	1,00	0,00	0,00
<i>Gruppo azioni 2a</i>	0,75	0,40	1,00	0,00
<i>Gruppo azioni 2b</i>	0,75	0,40	0,00	1,00

Si fa notare che il ponte oggetto di studio si trova su un rettilineo, perciò l'azione centrifuga non verrà presa in considerazione perché nulla.

4.4.2 Coefficienti parziali di sicurezza per le combinazioni di carico agli SLU

I coefficienti parziali delle azioni assunti nelle analisi per la determinazione degli effetti delle azioni nelle verifiche agli Stati Limite Ultimi sono quelli riportati nella Tabella 5.1.V (p.to 5.1.3.14) del D.M. 17.01.2018.

COEFFICIENTI PARZIALI DI SICUREZZA PER COMBINAZIONI DI CARICO AGLI SLU	γ SLU A1 STR	γ SLU A2 GEO
<i>g_1 e g_3 - Peso Proprio e Spinta delle terre</i>	1,35	1,00
<i>g_2 - Pesi permanenti portati</i>	1,50	1,30
<i>e_1 - Distorsioni e Presollecitazioni</i>	1,00	1,00
<i>e_{2+3} - Ritiro e Viscosità</i>	1,20	1,00
<i>e_4 - Cedimenti vincolari</i>	1,20	1,00
<i>q_{1+2} - Azioni Variabili da traffico</i>	1,35	1,15
<i>q_3 - Azione long. di Frenam. o di Acc.</i>	1,35	1,15
<i>q_4 - Azione Centrifuga</i>	1,35	1,15
<i>q_5 - Azioni di Neve, Vento</i>	1,50	1,30
<i>q_6 - Azioni Sismiche</i>	1,00	1,00
<i>q_7 - Variazioni termiche</i>	1,50	1,30
<i>q_8 - Azioni sui parapetti. Urto veicoli in svio</i>	1,00	1,00
<i>q_9 - Resistenze passive dei vincoli</i>	1,50	1,30

4.4.3 Coefficienti parziali di sicurezza per le combinazioni di carico agli SLE

I coefficienti di combinazione delle azioni variabili assunti nelle analisi per la determinazione degli effetti delle azioni nelle verifiche agli Stati Limite di Esercizio sono quelli riportati nella Tabella 5.1.VI (p.to 5.1.3.14) del D.M. 17.01.2018.

COEFFICIENTI PER LE AZIONI VARIABILI NELLE COMBINAZIONI DI CARICO	ψ_{0i}	ψ_{1i}	ψ_{2i}
	Fond. SLU Rare SLE	Frequente	Quasi perman.

ϵ_1 - Distorsioni e Presollecitazioni	1,00	1,00	1,00
ϵ_{2+3} - Ritiro e Viscosità	1,00	1,00	1,00
ϵ_4 - Cedimenti vincolari	0,60	0,60	0,50
$q_{1+2+3+4}$ - Az. Variabili da traffico (Gr.1 tandem)	0,75	0,75	0,00
$q_{1+2+3+4}$ - Az. Variabili da traffico (Gr.1 distrib.)	0,40	0,40	0,00
$q_{1+2+3+4}$ - Az. Variabili da traffico (Gr.2a)	0,00	0,00	0,00
$q_{1+2+3+4}$ - Az. Variabili da traffico (Gr.2b)	0,00	0,00	0,00
q_5 - Az. di Neve, Vento (ponte carico)	0,60	0,00	0,00
q_5 - Az. di Neve, Vento (ponte scarico)	0,60	0,20	0,00
q_7 - Az. Termica - temperatura	0,60	0,60	0,50
q_8 - Az. sui parapetti. Urto veicoli in svio	0,00	0,00	0,00
q_9 - Resistenze passive dei vincoli	1,00	1,00	1,00

4.4.4 Combinazioni di carico statiche SLU A1 STR

Con riferimento ai coefficienti di normativa precedentemente esposti, e posizionando i carichi variabili sempre nella/e configurazione/i più sfavorevole/i per la parte d'opera da dimensionare, i coefficienti adottati per le Combinazioni di carico statiche agli Stati Limite Ultimi strutturali A1 STR risultano:

COMBINAZIONI DI CARICO SLU A1 STR	Solo Perman.	Principali				
		Variabili-gr.1	Variabili-gr.2a	Variabili-gr.2b	Vento carico	Vento scarico
CONDIZIONI ELEMENTARI						
g_1 e g_3 - Peso Proprio e Spinta delle terre	1,35	1,35	1,35	1,35	1,35	1,35
g_2 - Pesi permanenti portati	1,50	1,50	1,50	1,50	1,50	1,50
ϵ_1 - Distorsioni e Presollecitazioni	1,00	1,00	1,00	1,00	1,00	1,00
ϵ_{2+3} - Ritiro e Viscosità	1,20	1,20	1,20	1,20	1,20	1,20
ϵ_4 - Cedimenti vincolari	0,72	0,72	0,72	0,72	0,72	0,72
q_{1+2} - Az. Variabili da traffico (tandem)	-	1,35	1,01	1,01	1,01	-
q_{1+2} - Az. Variabili da traffico (distrib.)	-	1,35	0,54	0,54	0,54	-
q_3 - Azione long. di Frenam. o di Acc.	-	0,00	1,35	0,00	0,00	-
q_4 - Azione Centrifuga	-	0,00	0,00	1,35	0,00	-
q_5 - Azioni di Neve, Vento (ponte scarico)	-	-	-	-	-	1,50
q_5 - Azioni di Neve, Vento (ponte carico)	-	0,90	0,90	0,90	1,50	-
q_6 - Sisma S.L.V. (dir. Longitudinale)	-	-	-	-	-	-
q_6 - Sisma S.L.V. (dir. Trasversale)	-	-	-	-	-	-

q6 - Sisma S.L.V. (dir. Verticale)	-	-	-	-	-	-
q6 - Sisma S.L.D. (dir. Longitudinale)	-	-	-	-	-	-
q6 - Sisma S.L.D. (dir. Trasversale)	-	-	-	-	-	-
q6 - Sisma S.L.D. (dir. Verticale)	-	-	-	-	-	-
q6 - Sisma S.L.O. (dir. Longitudinale)	-	-	-	-	-	-
q6 - Sisma S.L.O. (dir. Trasversale)	-	-	-	-	-	-
q6 - Sisma S.L.O. (dir. Verticale)	-	-	-	-	-	-
q7 - Variazioni Termiche	-	0,90	0,90	0,90	0,90	0,90
q8 - Az. sui parapetti. Urto veicoli in svio	-	-	-	-	-	-
q9 - Resistenze passive dei vincoli	-	-	-	-	-	-

4.4.5 Combinazioni di carico statiche SLE rara

Con riferimento ai coefficienti di normativa precedentemente esposti, e posizionando i carichi variabili sempre nella/e configurazione/i più sfavorevole/i per la parte d'opera da dimensionare, i coefficienti adottati per le Combinazioni di carico statiche agli Stati Limite di esercizio SLE RARA risultano:

COMBINAZIONI DI CARICO SLU A2 GEO	Solo Perman.	Principali	Principali	Principali	Principali	Principali
		Variabili-gr.1	Variabili-gr.2a	Variabili-gr.2b	Vento carico	Vento scarico
CONDIZIONI ELEMENTARI						
g₁ e g₃ - Peso Proprio e Spinta delle terre	1,00	1,00	1,00	1,00	1,00	1,00
g₂ - Pesi permanenti portati	1,00	1,00	1,00	1,00	1,00	1,00
ε₁ - Distorsioni e Presollecitazioni	1,00	1,00	1,00	1,00	1,00	1,00
ε₂+3 - Ritiro e Viscosità	1,00	1,00	1,00	1,00	1,00	1,00
ε₄ - Cedimenti vincolari	0,60	0,60	0,60	0,60	0,60	0,60
q₁+2 - Az. Variabili da traffico (tandem)	-	1,00	0,75	0,75	0,40	-
q₁+2 - Az. Variabili da traffico (distrib.)	-	1,00	0,75	0,75	0,40	-
q₃ - Azione long. di Frenam. o di Acc.	-	0,00	1,00	0,00	0,00	-
q₄ - Azione Centrifuga	-	0,00	0,00	1,00	0,00	-
q₅ - Azioni di Neve, Vento (ponte scarico)	-	-	-	-	-	1,00
q₅ - Azioni di Neve, Vento (ponte carico)	-	0,60	0,60	0,60	1,00	-
q₆ - Sisma S.L.V. (dir. Longitudinale)	-	-	-	-	-	-
q₆ - Sisma S.L.V. (dir. Trasversale)	-	-	-	-	-	-
q₆ - Sisma S.L.V. (dir. Verticale)	-	-	-	-	-	-
q₆ - Sisma S.L.D. (dir. Longitudinale)	-	-	-	-	-	-
q₆ - Sisma S.L.D. (dir. Trasversale)	-	-	-	-	-	-
q₆ - Sisma S.L.D. (dir. Verticale)	-	-	-	-	-	-
q₆ - Sisma S.L.O. (dir. Longitudinale)	-	-	-	-	-	-

q6 - Sisma S.L.O. (dir. Trasversale)	-	-	-	-	-	-
q6 - Sisma S.L.O. (dir. Verticale)	-	-	-	-	-	-
q7 - Variazione termica	-	0,60	0,60	0,60	0,60	0,60
q8 - Az. sui parapetti. Urto veicoli in svio	-	-	-	-	-	-
q9 - Resistenze passive dei vincoli	-	-	-	-	-	-

4.4.6 Combinazioni di carico statiche SLE frequente

Con riferimento ai coefficienti di normativa precedentemente esposti, e posizionando i carichi variabili sempre nella/e configurazione/i più sfavorevole/i per la parte d'opera da dimensionare, i coefficienti adottati per le Combinazioni di carico statiche agli Stati Limite di esercizio SLE FREQUENTE risultano:

COMBINAZIONI DI CARICO SLE (FREQUENTI)	Solo Perman.	Principali:	Principali:	Principali:
		Variabili-gr.1	Vento carico	Vento scarico
CONDIZIONI ELEMENTARI				
g₁ e g₃ - Peso Proprio e Spinta delle terre	1,00	1,00	1,00	1,00
g₂ - Pesi permanenti portati	1,00	1,00	1,00	1,00
ε1 - Distorsioni e Presollecitazioni	1,00	1,00	1,00	1,00
ε2+3 - Ritiro e Viscosità	1,00	1,00	1,00	1,00
ε4 - Cedimenti vincolari	0,50	0,50	0,50	0,50
q1+2 - Az. Variabili da traffico (tandem)	-	0,75	0,00	-
q1+2 - Az. Variabili da traffico (distrib.)	-	0,40	0,00	-
q3 - Azione long. di Frenam. o di Acc.	-	0,00	0,00	-
q4 - Azione Centrifuga	-	0,00	0,00	-
q5 - Azioni di Neve, Vento (ponte scarico)	-	-	-	0,20
q5 - Azioni di Neve, Vento (ponte carico)	-	0,00	0,00	-
q6 - Sisma S.L.V. (dir. Longitudinale)	-	-	-	-
q6 - Sisma S.L.V. (dir. Trasversale)	-	-	-	-
q6 - Sisma S.L.V. (dir. Verticale)	-	-	-	-
q6 - Sisma S.L.D. (dir. Longitudinale)	-	-	-	-
q6 - Sisma S.L.D. (dir. Trasversale)	-	-	-	-
q6 - Sisma S.L.D. (dir. Verticale)	-	-	-	-
q6 - Sisma S.L.O. (dir. Longitudinale)	-	-	-	-
q6 - Sisma S.L.O. (dir. Trasversale)	-	-	-	-
q6 - Sisma S.L.O. (dir. Verticale)	-	-	-	-
q7 - Variazioni termiche	-	0,60	0,60	0,60
q8 - Az. sui parapetti. Urto veicoli in svio	-	-	-	-
q9 - Resistenze passive dei vincoli	-	-	-	-

4.4.7 Combinazioni di carico statiche SLE quasi permanente

Con riferimento ai coefficienti di normativa precedentemente esposti, e posizionando i carichi variabili sempre nella/e configurazione/i più sfavorevole/i per la parte d'opera da dimensionare, i coefficienti adottati per le Combinazioni di carico statiche agli Stati Limite di esercizio SLE QUASI PERMANENTE risultano:

COMBINAZIONI DI CARICO SLE (QUASI PERMAN.)	Solo Perman.	Principali:
CONDIZIONI ELEMENTARI		<i>Variabili- gr. 1</i>
g₁ e g₃ - <i>Peso Proprio e Spinta delle terre</i>	1,00	1,00
g₂ - <i>Pesi permanenti portati</i>	1,00	1,00
ε1 - <i>Distorsioni e Presollecitazioni</i>	1,00	1,00
ε2+3 - <i>Ritiro e Viscosità</i>	1,00	1,00
ε4 - <i>Cedimenti vincolari</i>	0,50	0,50
q1+2 - <i>Az. Variabili da traffico (tandem)</i>	-	0,00
q1+2 - <i>Az. Variabili da traffico (distrib.)</i>	-	0,00
q3 - <i>Azione long. di Frenam. o di Acc.</i>	-	0,00
q4 - <i>Azione Centrifuga</i>	-	0,00
q5 - <i>Azioni di Neve, Vento (ponte scarico)</i>	-	-
q5 - <i>Azioni di Neve, Vento (ponte carico)</i>	-	0,00
q6 - <i>Sisma S.L.V. (dir. Longitudinale)</i>	-	-
q6 - <i>Sisma S.L.V. (dir. Trasversale)</i>	-	-
q6 - <i>Sisma S.L.V. (dir. Verticale)</i>	-	-
q6 - <i>Sisma S.L.D. (dir. Longitudinale)</i>	-	-
q6 - <i>Sisma S.L.D. (dir. Trasversale)</i>	-	-
q6 - <i>Sisma S.L.D. (dir. Verticale)</i>	-	-
q6 - <i>Sisma S.L.O. (dir. Longitudinale)</i>	-	-
q6 - <i>Sisma S.L.O. (dir. Trasversale)</i>	-	-
q6 - <i>Sisma S.L.O. (dir. Verticale)</i>	-	-
q7 - <i>Variazione termica</i>	-	0,50
q8 - <i>Az. sui parapetti. Urto veicoli in svio</i>	-	-
q9 - <i>Resistenze passive dei vincoli</i>	-	-

4.4.8 Combinazioni di carico sismiche

Con riferimento ai coefficienti di normativa precedentemente esposti, e posizionando i carichi variabili sempre nella/e configurazione/i più sfavorevole/i per la parte d'opera da dimensionare, i coefficienti adottati per le Combinazioni di carico statiche agli Stati Limite SISMICI risultano:

Si ricorda che l'effetto del sisma viene modellato all'interno del modello strutturale tramite gli spettri di risposta di progetto.

Nelle combinazioni di carico la dicitura riferita alla direzione di azione del sisma sta ad indicare:

- L+V direzione principale longitudinale abbinata a sisma verticale.

COMBINAZIONI DI CARICO SISMICHE			
	SLV	SLD	SLO
CONDIZIONI ELEMENTARI	dir L+V	dir L+V	dir L+V
g₁e g₃ - Peso Proprio e Spinta delle terre	1,00	1,00	1,00
g₂ - Pesi permanenti portati	1,00	1,00	1,00
e₁ - Distorsioni e Presollecitazioni	1,00	1,00	1,00
e₂₊₃ - Ritiro e Viscosità	1,00	1,00	1,00
e₄ - Cedimenti vincolari	0,50	0,50	0,50
q1+2 - Az. Variabili da traffico (tandem)	0,00	0,00	0,00
q1+2 - Az. Variabili da traffico (distrib.)	0,00	0,00	0,00
q3 - Azione long. di Frenam. o di Acc.	-	-	-
q4 - Azione Centrifuga	-	-	-
q5 - Azioni di Neve, Vento (ponte scarico)	-	-	-
q5 - Azioni di Neve, Vento (ponte carico)	-	-	-
q6 - Sisma S.L.V. (dir. Longitudinale)	1,00	-	-
q6 - Sisma S.L.V. (dir. Trasversale)	0,30	-	-
q6 - Sisma S.L.V. (dir. Verticale)	0,30	-	-
q6 - Sisma S.L.D. (dir. Longitudinale)	-	1,00	-
q6 - Sisma S.L.D. (dir. Trasversale)	-	0,30	-
q6 - Sisma S.L.D. (dir. Verticale)	-	0,30	-
q6 - Sisma S.L.O. (dir. Longitudinale)	-	-	1,00
q6 - Sisma S.L.O. (dir. Trasversale)	-	-	0,30
q6 - Sisma S.L.O. (dir. Verticale)	-	-	0,30
q7 - Variazione termica	0,50	0,50	0,50
q8 - Az. sui parapetti. Urto veicoli in svio	-	-	-
q9 - Resistenze passive dei vincoli	-	-	-

5 IMPALCATO – MODELLAZIONE, RISULTATI DELL'ANALISI E VERIFICHE

5.1 MODELLAZIONE

Il ponte in esame è stato studiato modellando gli elementi strutturali (travi principali, traversi, soletta) fino a formare un graticcio di travi.

Per quanto riguarda le travi principali, trattandosi di un sistema in acciaio misto calcestruzzo, è necessario in linea di principio prendere in considerazione sia le differenti fasi di costruzione dell'opera, sia l'evoluzione nel tempo della sua rigidità a causa degli effetti reologici del calcestruzzo (viscosità).

Per tenere in conto di tutte le fasi esecutive sono stati sviluppati 5 sotto-modelli strutturali ciascuno per ogni fase analizzata, in quanto per ogni fase varia la sezione resistente dell'elemento principale e quindi le caratteristiche inerziali.

Nel progetto strutturale dell'impalcato si prevedono 5 travi in acciaio-clc a sezione aperta di altezza pari a 1300 mm suddivisi in due conci metallici. Tale suddivisione è stata anche presa in considerazione nel modello. Si riporta nell'immagine successiva la visione estrusa del modello strutturale:

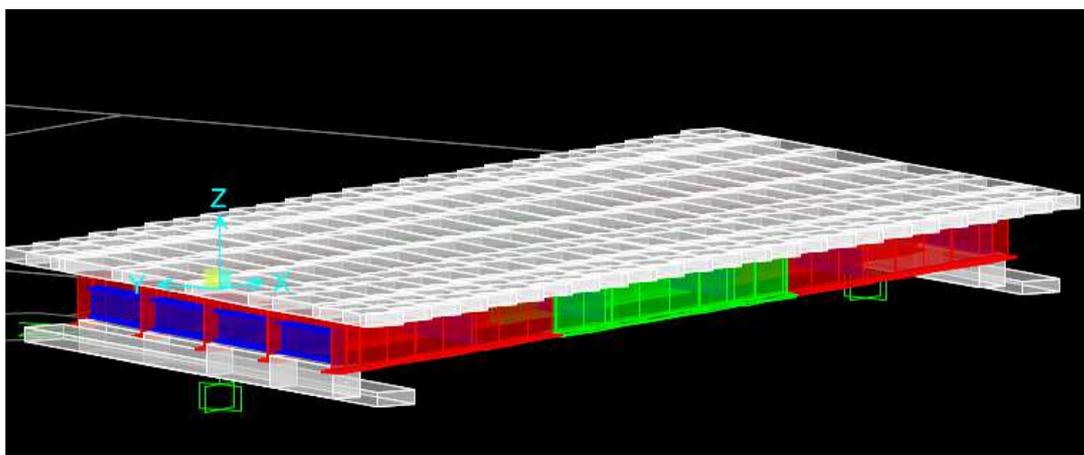


Figura 18 – Modello Strutturale – vista estrusa

Si può osservare in rosso la parte di trave principale caratterizzata dal concio 1, mentre in verde la parte di trave caratterizzata dal concio 2.

In colore blu si possono vedere i traversi che non sono collaboranti con la soletta strutturale in bianco.

L'intero modello è costituito da elementi di tipo "beam".

Al fine di modellare i vincoli imposti di progetto vengono utilizzati elementi "beam" privi di peso che connettono il punto di appoggio con il punto di inserimento della trave principale. Tali elementi vengono connessi ad un altro "beam" rigido flessionalmente che intende modellare il pulvino di spalla.

La modellazione viene affrontata modellando per ogni fase una sezione resistente partendo dalla sola sezione metallica per poi andare ad intervenire sulle caratteristiche inerziali per le sezioni relative ad ogni fase.

Calcolo della larghezza collaborante

La determinazione della larghezza di soletta collaborante con le travi principali da considerarsi nell'analisi della struttura, viene condotta secondo il punto 4.3.2.3 delle NTC 2018.

Nelle travi semplicemente appoggiate L_e è la luce della trave.

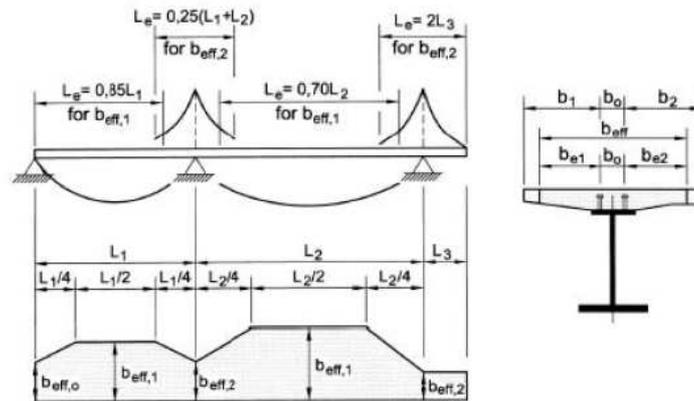
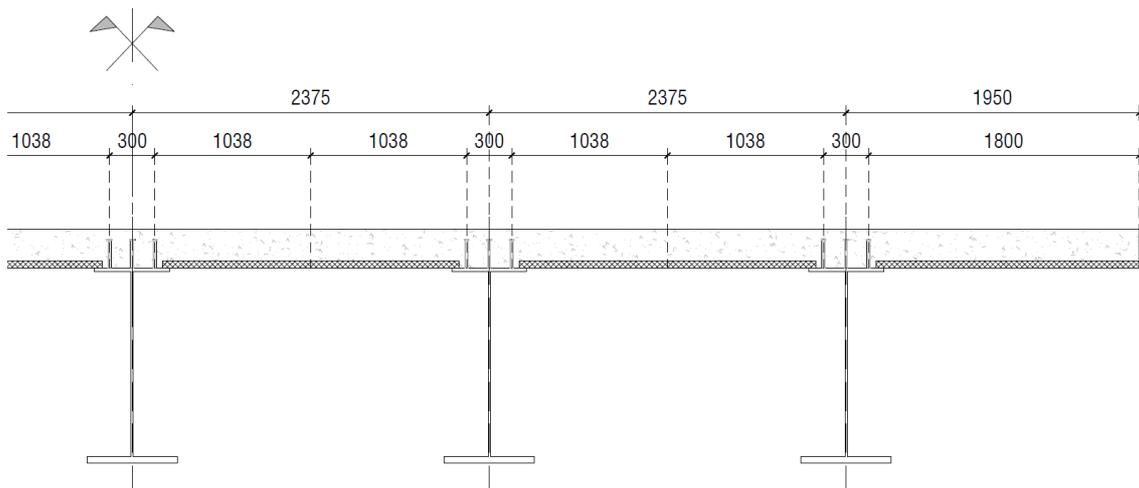


Fig. 4.3.2 - Larghezza efficace, b_{eff} , e luci equivalenti, L_e , per le travi continue

Figura 19 – Calcolo Larghezza collaborante



ANALISI LARGHEZZA EFFICACE TRAVE INTERNA		
Interasse minimo tra le travi	i_{min} [mm]	2376
Dist. assi connettori esterni	b_0 [mm]	300

Le larghezze efficaci della soletta per le travi di riva e per le travi centrali delle sezioni di campata sono calcolate come di seguito riportato:

Trave di riva	
B_{eff} [mm]	3088
L_e [mm]	24800
$L_e/8$ [mm]	3100
b_0 [mm]	300
b_1 [mm]	1750
b_2 [mm]	1038
b_{e1} [mm]	1750
b_{e2} [mm]	1038

Trave centrale	
B_{eff} [mm]	2376
L_e [mm]	24800
b_e [mm]	3100
b_0 [mm]	300
b_1 [mm]	1038
b_2 [mm]	1038
b_{e1} [mm]	1038
b_{e2} [mm]	1038

Le larghezze efficaci della soletta per le travi di riva e per le travi centrali per gli appoggi di estremità sono calcolate come di seguito riportato:

Trave riva appoggio	
B_{eff} [mm]	2921
L_e [mm]	24800
b_e [mm]	3100
b_0 [mm]	300
b_1 [mm]	1750
b_2 [mm]	1038
b_{e1} [mm]	1750
b_{e2} [mm]	1038
beta1 [-]	0.9
beta2 [-]	1.0

Trave centrale appoggio	
B_{eff} [mm]	2376
L_e [mm]	21080
b_e [mm]	3100
b_0 [mm]	300
b_1 [mm]	1038
b_2 [mm]	1038
b_{e1} [mm]	1038
b_{e2} [mm]	1038
beta1 [-]	1.0
beta2 [-]	1.0

Nella modellazione e nelle verifiche, a favore di sicurezza, si utilizza il valore di 2376 mm sia per il concio 1 che per il concio 2, sia per le travi centrali che per quelle di riva.

Nelle verifiche per la zona di appoggio presente nel primo quarto di luce, si utilizza la larghezza collaborante minore ovvero 2376 mm.

Nella direzione longitudinale (parallela all'asse del ponte), si considera un'armatura pari a 1+1 ϕ 14/20, quindi $A_r=3658 \text{ mm}^2$ per una larghezza efficace di 2376 mm.

A seguire si riportano le sezioni tipo relative ai due conci metallici di progetto.

Si fa notare la presenza dei baricentri della sezione in funzione delle fasi esecutive analizzate.

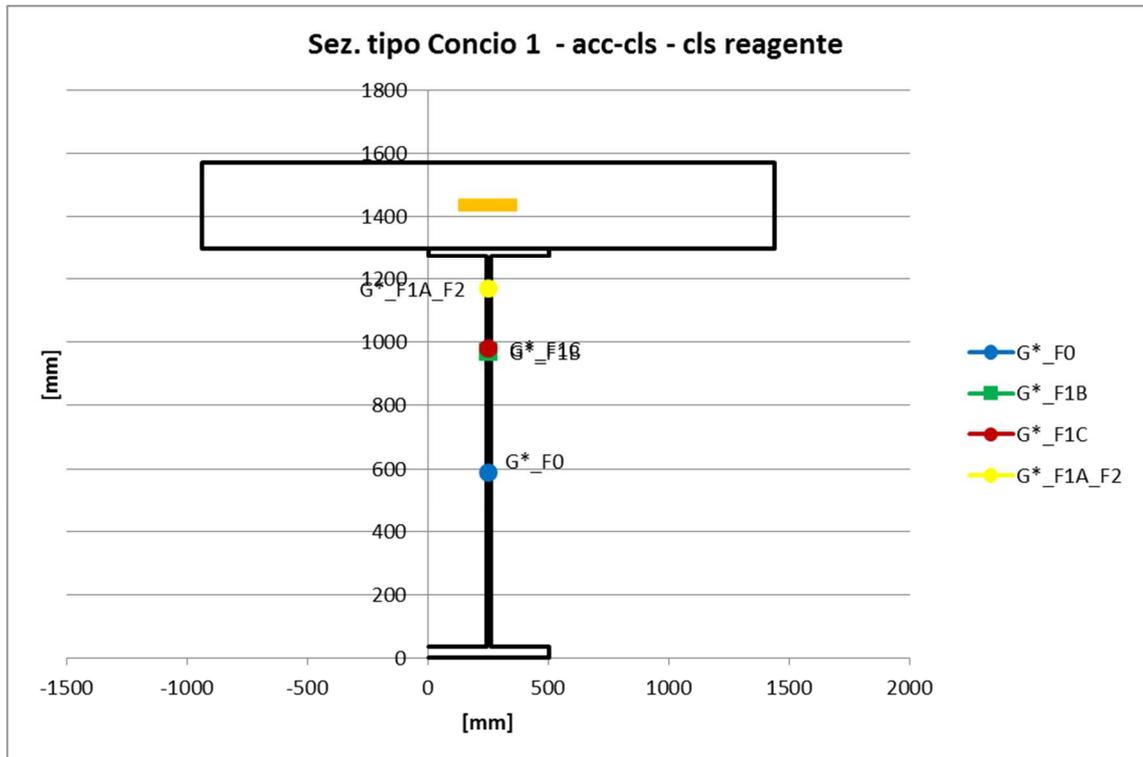


Figura 20 – Sezione trasversale concio 1.

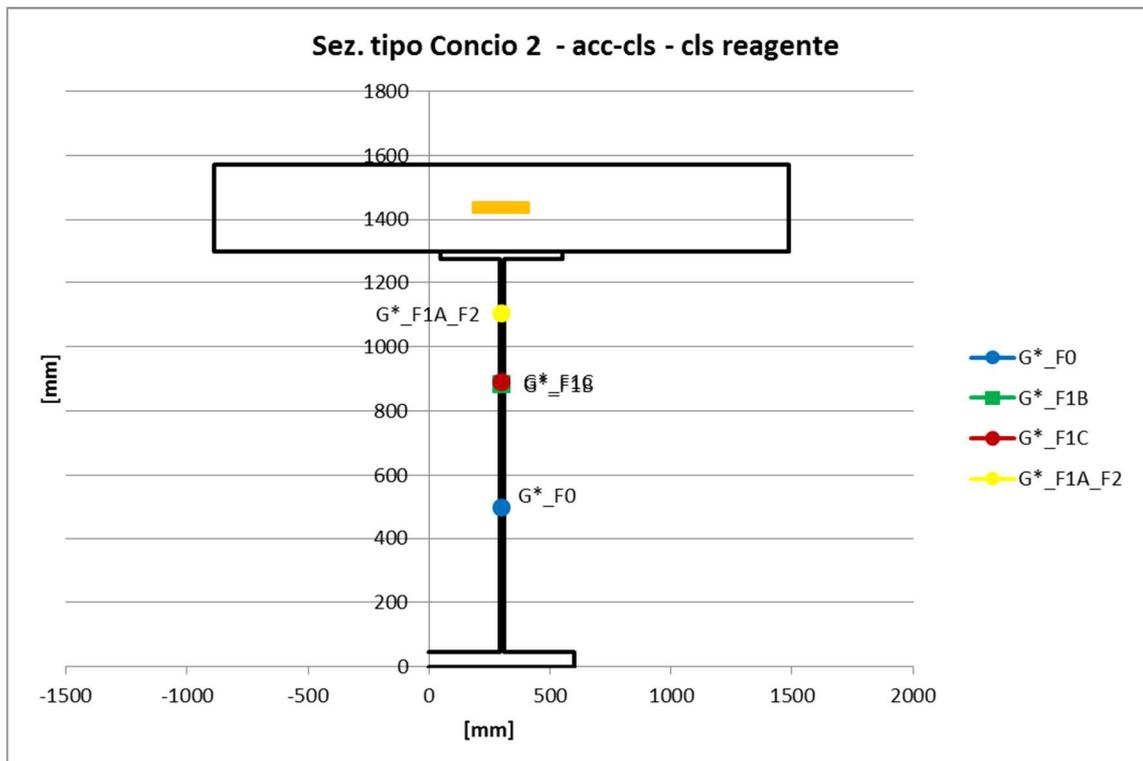


Figura 21 – Sezione trasversale concio 2.

Nella tabella successiva si riportano le caratteristiche inerziali in termini di momento d'inerzia relativi alle sezioni delle travi strutturali per ogni concio e per ogni fase.

Type section	A [mm ²]	I33 [mm ⁴]	A_mod	I3_mod
S_C1_Fase_0_Tr_H_1300	48600	14281194600	1.00	1.00
S_C1_Fase_1A - 2	155729	38887574750	3.20	2.72
S_C1_Fase_1B	89340	30400910620	1.83	2.13
S_C1_Fase_1C	91138	30785889300	1.84	2.16
S_C2_Fase_0_Tr_H1300	57950	16711571400	1.00	1.00
S_C2_Fase_1A - 2	165079	50334600300	2.84	3.01
S_C2_Fase_1B	98690	37924886550	1.69	2.26
S_C2_Fase_1C	100488	38469962200	1.72	2.29

Si fa notare che con la codifica “Ci” si indica il numero del concio. Inoltre nelle colonne individuate dagli indici “I3_mod” e “A_mod” si riportano i coefficienti moltiplicativi della sezione metallica semplice al fine di avere la sezione in acciaio- cls corrispondente alla relativa fase.

La figura di seguito mostra la disposizione dei due concio di trave principale: concio 1 (C1) e concio 2 (C2).

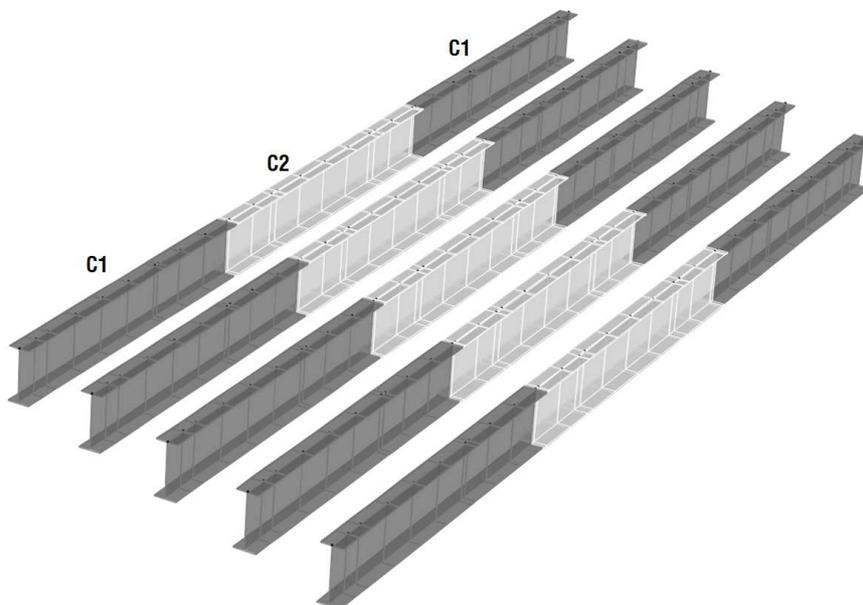


Figura 22 – Vista 3D del modello di calcolo: concio delle travi principali.

Si riportano di seguito le caratteristiche geometriche ed inerziali dei concio nella fase 0 (solo acciaio). Per le altre fasi, nelle quali è presente la sezione composta, sono riportati i moltiplicatori sopracitati, applicati agli elementi frame che compongono le travi del modello di calcolo.

Fase 0

CONCIO 1

I/Wide Flange Section

Section Name: S_C1_Fase_0_Tr_H_1300 Display Color: ■

Section Notes:

Dimensions

Outside height (t3) : 1300.

Top flange width (t2) : 500.

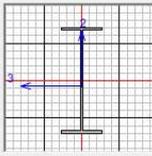
Top flange thickness (tf) : 25.

Web thickness (tw) : 15.

Bottom flange width (t2b) : 500.

Bottom flange thickness (tfb) : 35.

Section



Properties

Material: S355 Property Modifiers:

Property Data

Section Name: S_C1_Fase_0_Tr_H_1300

Properties

Cross-section (axial) area	48600.	Section modulus about 3 axis	20061452
Moment of Inertia about 3 axis	1.428E+10	Section modulus about 2 axis	2501395.
Moment of Inertia about 2 axis	6.253E+08	Plastic modulus about 3 axis	24411833.
Product of Inertia about 2-3	0.	Plastic modulus about 2 axis	3819750.
Shear area in 2 direction	19500.	Radius of Gyration about 3 axis	542.0809
Shear area in 3 direction	25000.	Radius of Gyration about 2 axis	113.4339
Torsional constant	10737206.	Shear Center Eccentricity (x3)	0.

CONCIO 2

I/Wide Flange Section

Section Name: S_C2_Fase_0_Tr_H1300 Display Color: ■

Section Notes:

Dimensions

Outside height (t3) : 1300.

Top flange width (t2) : 500.

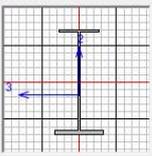
Top flange thickness (tf) : 25.

Web thickness (tw) : 15.

Bottom flange width (t2b) : 600.

Bottom flange thickness (tfb) : 45.

Section



Properties

Material: S355 Property Modifiers:

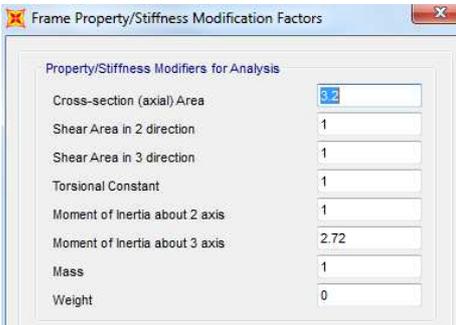
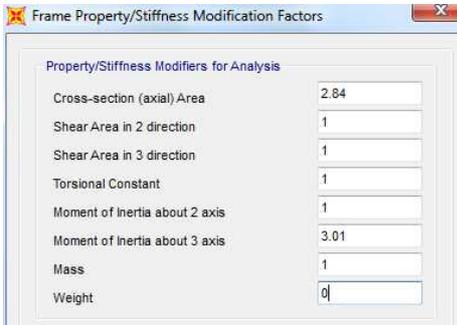
Property Data

Section Name: S_C2_Fase_0_Tr_H1300

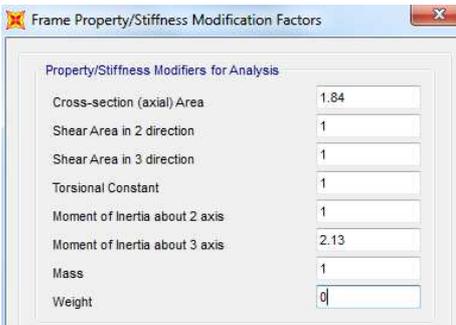
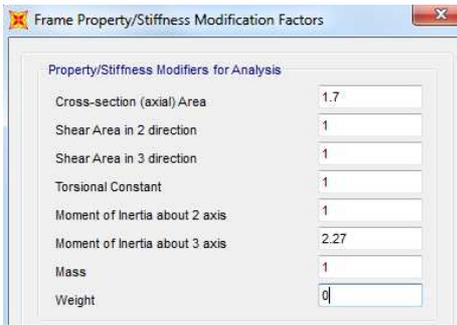
Properties

Cross-section (axial) area	57950.	Section modulus about 3 axis	20845960.
Moment of Inertia about 3 axis	1.671E+10	Section modulus about 2 axis	3569209.
Moment of Inertia about 2 axis	1.071E+09	Plastic modulus about 3 axis	27225458.
Product of Inertia about 2-3	0.	Plastic modulus about 2 axis	5681688.
Shear area in 2 direction	19500.	Radius of Gyration about 3 axis	537.0094
Shear area in 3 direction	32916.67	Radius of Gyration about 2 axis	135.9314
Torsional constant	21259123.	Shear Center Eccentricity (x3)	0.

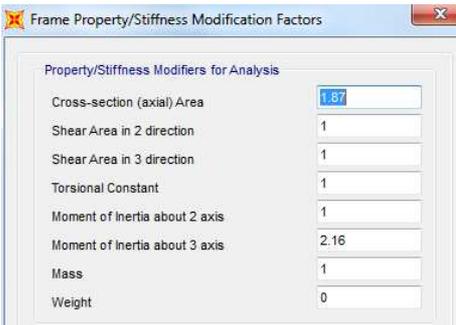
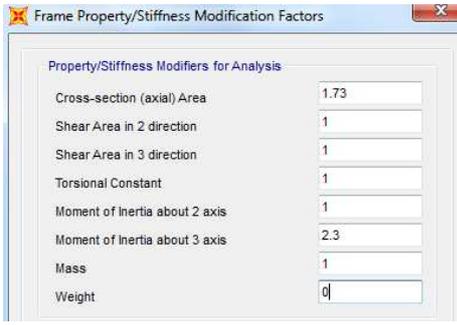
Fasi 1A e 2

CONCIO 1	CONCIO 2																																
 <table border="1"> <tr><td>Cross-section (axial) Area</td><td>3.2</td></tr> <tr><td>Shear Area in 2 direction</td><td>1</td></tr> <tr><td>Shear Area in 3 direction</td><td>1</td></tr> <tr><td>Torsional Constant</td><td>1</td></tr> <tr><td>Moment of Inertia about 2 axis</td><td>1</td></tr> <tr><td>Moment of Inertia about 3 axis</td><td>2.72</td></tr> <tr><td>Mass</td><td>1</td></tr> <tr><td>Weight</td><td>0</td></tr> </table>	Cross-section (axial) Area	3.2	Shear Area in 2 direction	1	Shear Area in 3 direction	1	Torsional Constant	1	Moment of Inertia about 2 axis	1	Moment of Inertia about 3 axis	2.72	Mass	1	Weight	0	 <table border="1"> <tr><td>Cross-section (axial) Area</td><td>2.84</td></tr> <tr><td>Shear Area in 2 direction</td><td>1</td></tr> <tr><td>Shear Area in 3 direction</td><td>1</td></tr> <tr><td>Torsional Constant</td><td>1</td></tr> <tr><td>Moment of Inertia about 2 axis</td><td>1</td></tr> <tr><td>Moment of Inertia about 3 axis</td><td>3.01</td></tr> <tr><td>Mass</td><td>1</td></tr> <tr><td>Weight</td><td>0</td></tr> </table>	Cross-section (axial) Area	2.84	Shear Area in 2 direction	1	Shear Area in 3 direction	1	Torsional Constant	1	Moment of Inertia about 2 axis	1	Moment of Inertia about 3 axis	3.01	Mass	1	Weight	0
Cross-section (axial) Area	3.2																																
Shear Area in 2 direction	1																																
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Torsional Constant	1																																
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Moment of Inertia about 3 axis	3.01																																
Mass	1																																
Weight	0																																

Fase 1B

CONCIO 1	CONCIO 2																																
 <table border="1"> <tr><td>Cross-section (axial) Area</td><td>1.84</td></tr> <tr><td>Shear Area in 2 direction</td><td>1</td></tr> <tr><td>Shear Area in 3 direction</td><td>1</td></tr> <tr><td>Torsional Constant</td><td>1</td></tr> <tr><td>Moment of Inertia about 2 axis</td><td>1</td></tr> <tr><td>Moment of Inertia about 3 axis</td><td>2.13</td></tr> <tr><td>Mass</td><td>1</td></tr> <tr><td>Weight</td><td>0</td></tr> </table>	Cross-section (axial) Area	1.84	Shear Area in 2 direction	1	Shear Area in 3 direction	1	Torsional Constant	1	Moment of Inertia about 2 axis	1	Moment of Inertia about 3 axis	2.13	Mass	1	Weight	0	 <table border="1"> <tr><td>Cross-section (axial) Area</td><td>1.7</td></tr> <tr><td>Shear Area in 2 direction</td><td>1</td></tr> <tr><td>Shear Area in 3 direction</td><td>1</td></tr> <tr><td>Torsional Constant</td><td>1</td></tr> <tr><td>Moment of Inertia about 2 axis</td><td>1</td></tr> <tr><td>Moment of Inertia about 3 axis</td><td>2.27</td></tr> <tr><td>Mass</td><td>1</td></tr> <tr><td>Weight</td><td>0</td></tr> </table>	Cross-section (axial) Area	1.7	Shear Area in 2 direction	1	Shear Area in 3 direction	1	Torsional Constant	1	Moment of Inertia about 2 axis	1	Moment of Inertia about 3 axis	2.27	Mass	1	Weight	0
Cross-section (axial) Area	1.84																																
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Mass	1																																
Weight	0																																

Fase 1C

CONCIO 1	CONCIO 2																																
 <table border="1"> <tr><td>Cross-section (axial) Area</td><td>1.67</td></tr> <tr><td>Shear Area in 2 direction</td><td>1</td></tr> <tr><td>Shear Area in 3 direction</td><td>1</td></tr> <tr><td>Torsional Constant</td><td>1</td></tr> <tr><td>Moment of Inertia about 2 axis</td><td>1</td></tr> <tr><td>Moment of Inertia about 3 axis</td><td>2.16</td></tr> <tr><td>Mass</td><td>1</td></tr> <tr><td>Weight</td><td>0</td></tr> </table>	Cross-section (axial) Area	1.67	Shear Area in 2 direction	1	Shear Area in 3 direction	1	Torsional Constant	1	Moment of Inertia about 2 axis	1	Moment of Inertia about 3 axis	2.16	Mass	1	Weight	0	 <table border="1"> <tr><td>Cross-section (axial) Area</td><td>1.73</td></tr> <tr><td>Shear Area in 2 direction</td><td>1</td></tr> <tr><td>Shear Area in 3 direction</td><td>1</td></tr> <tr><td>Torsional Constant</td><td>1</td></tr> <tr><td>Moment of Inertia about 2 axis</td><td>1</td></tr> <tr><td>Moment of Inertia about 3 axis</td><td>2.3</td></tr> <tr><td>Mass</td><td>1</td></tr> <tr><td>Weight</td><td>0</td></tr> </table>	Cross-section (axial) Area	1.73	Shear Area in 2 direction	1	Shear Area in 3 direction	1	Torsional Constant	1	Moment of Inertia about 2 axis	1	Moment of Inertia about 3 axis	2.3	Mass	1	Weight	0
Cross-section (axial) Area	1.67																																
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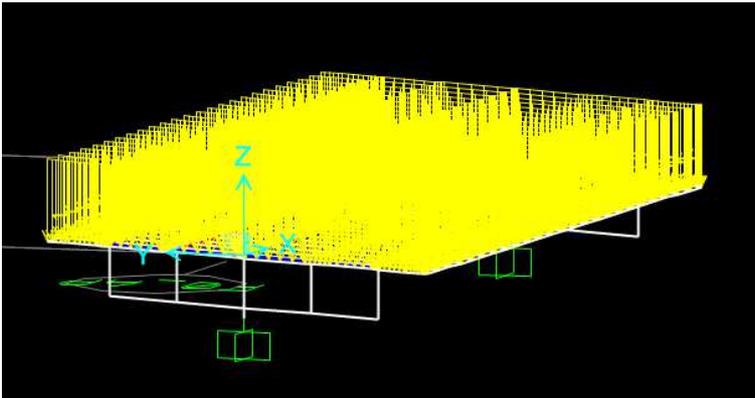
Per quanto concerne le rigidzze dei traversi, non essendo collaboranti con la soletta di impalcato la sezione resistente che viene presa in considerazione è sempre la sola sezione metallica. Si fa dunque affidamento alle rigidzze flessionali di: HEB700 per i traversi di testata e di HEA500 per i traversi di campata.

5.2 MODELLAZIONE DEI CARICHI

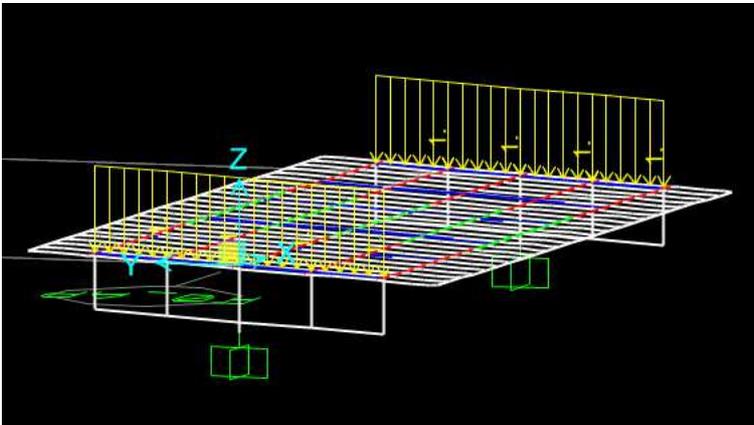
I carichi sull'impalcato vengono modellati come unitari su tutti i sotto modelli. L'entità del carico viene inserita all'interno di una combinazione specifica la quale verrà poi adoperata per la combinazione prevista dalla normativa. Di seguito si riportano le distribuzioni dei carichi per ogni fase esaminata.

FASE 0 – si considerano i seguenti carichi strutturali:

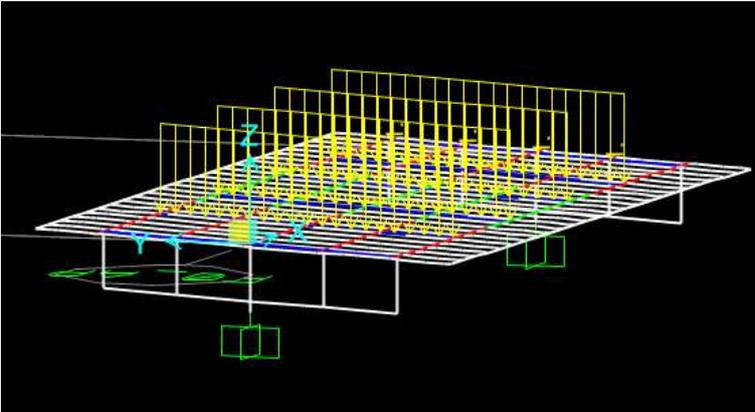
- Peso proprio delle travi – calcolato in automatico dal software (DEAD)
- Peso proprio della soletta



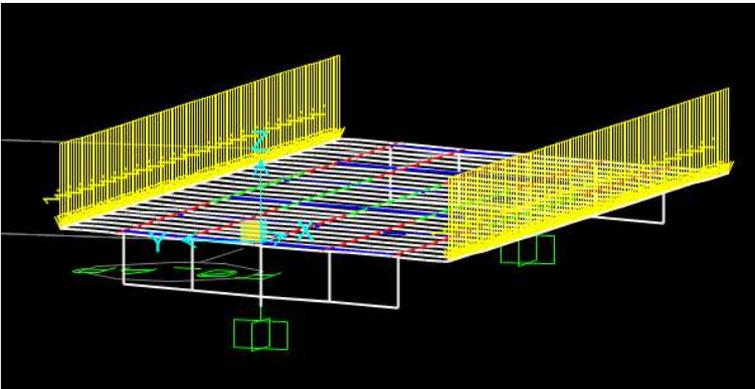
- Pesi propri trasversi di testata



- Pesi propri traversi di campata

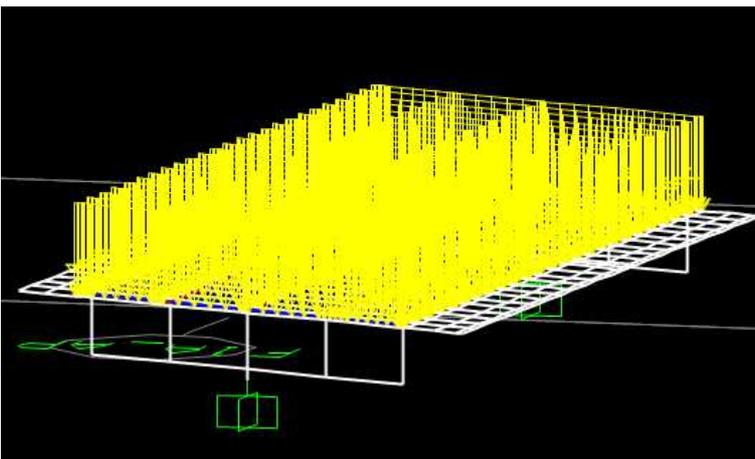


- Peso proprio veletta laterale

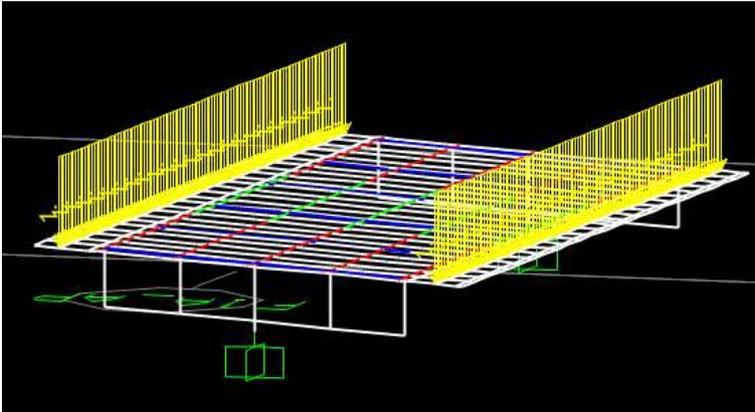


FASE 1A E FASE 1B – si considerano i seguenti carichi permanenti non strutturali:

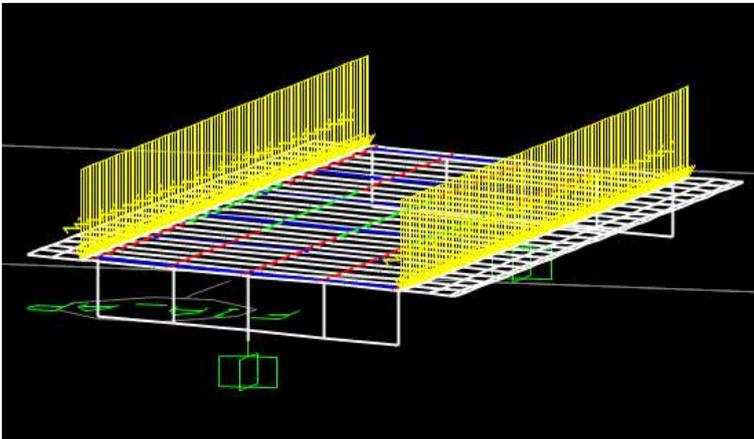
- Peso pavimentazione stradale



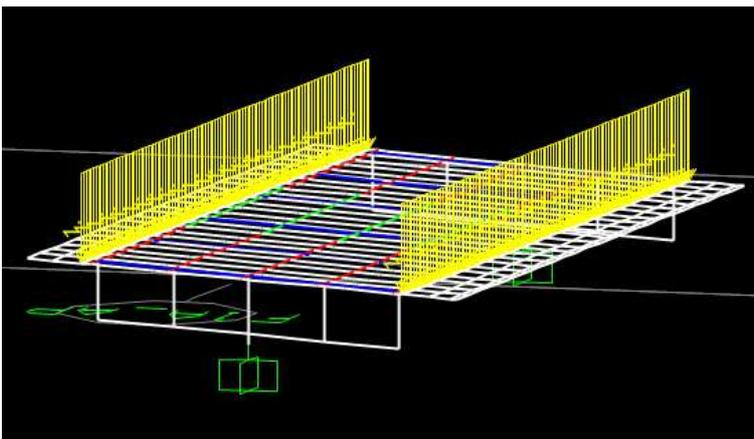
- Peso pavimentazione marciapiede



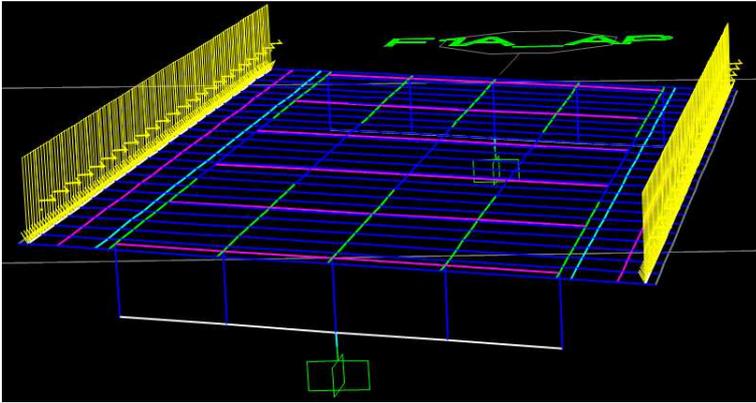
- Peso sicurvia



- Peso cordolo sicurvia

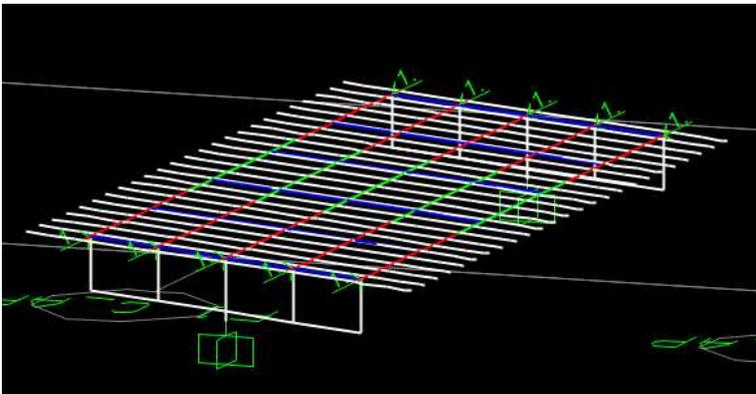


- Peso barriera fono assorbente

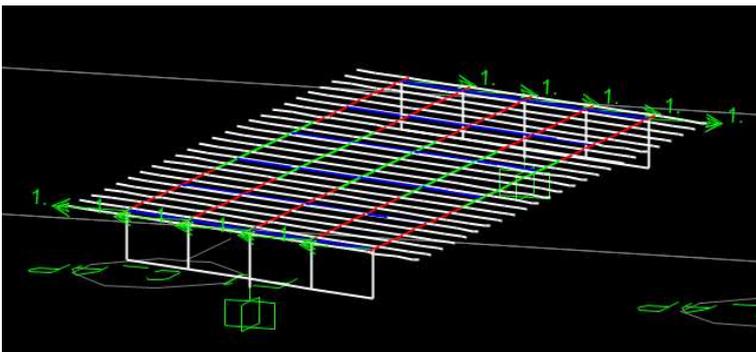


FASE 1C – si considerano le azioni da ritiro

- Azione di assiale

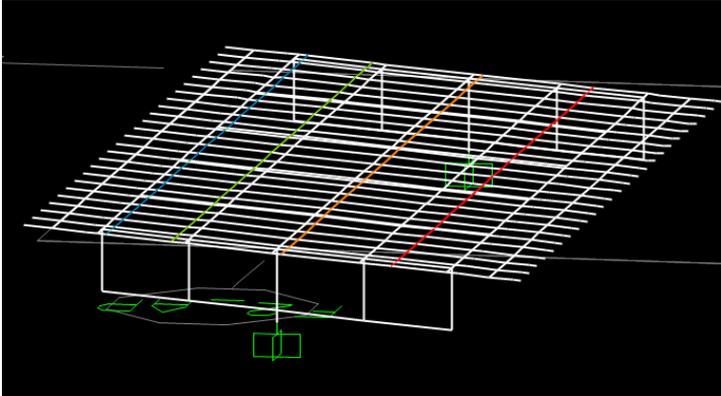


- Azione flettente



FASE 2 – si considerano le azioni variabili

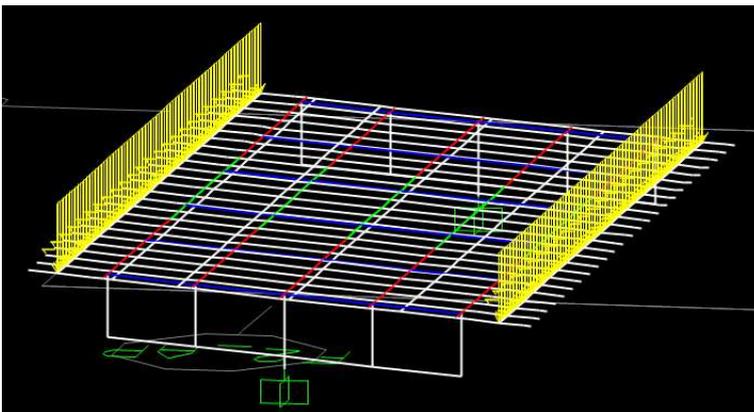
- Variabili da traffico



Si fa osservare che per i variabili da traffico si utilizzano le corsie di carico previste da norma e modellate mediante “frame” fittizi a peso nullo su cui si fanno viaggiare i carichi viaggianti.

Corsia 1 – linea rossa; corsia 2 – linea arancione; corsia 3 – linea verde; parte rimanente – linea azzurra

- Accidentali Marciapiede

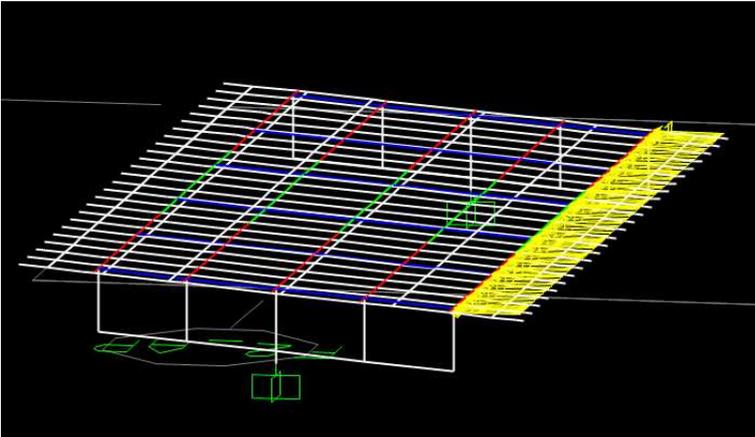


- Variazione termica

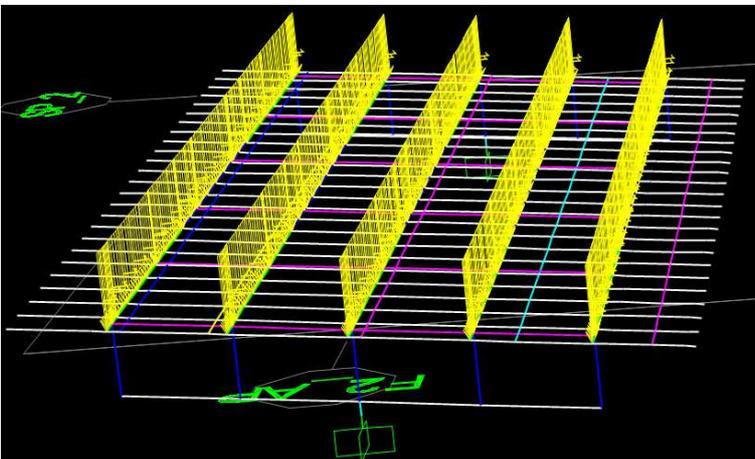
Per la variazione termica si applica un gradiente di temperatura a cui si aggiunge una variazione termica uniforme applicata direttamente sulle travi.

Per quanto riguarda la variazione termica unitaria, essa viene modellata come una variazione termica uniforme a cui si aggiunge una variazione termica variabile (a farfalla), nella maniera che la somma sia sempre unitaria sia all'intradosso trave che all'estradosso soletta.

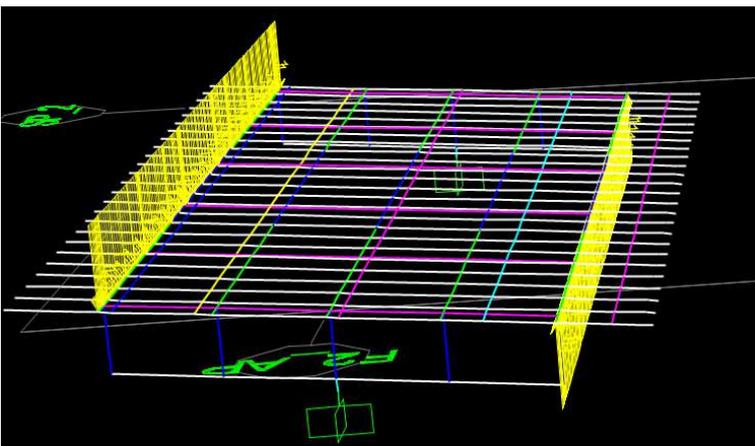
- Azione del vento – componente orizzontale



- Azione del vento – componente orizzontale



- Azione del vento – componente torcente



5.2.1 Controllo e validazione dei risultati

Il software di calcolo utilizzato è SAP2000 versione 21 prodotto dalla Computer & Structures, Inc. Gli estremi della licenza di utilizzo sono:



The screenshot shows the 'Locking Data' and 'License Server' sections of the SAP2000 software interface. The 'Locking Data' section includes: Locking Criteria: Custom, Selector: 2010, and Code: *19GRF7QLS7PWYRV. The 'License Server' section includes: Server: PC0569MO.

Nell’ambito della validazione dei calcoli effettuati in ottemperanza alla vigente normativa, sono stati operati dei controlli di tipo semplificato su differenti aspetti inerenti i carichi e le sollecitazioni valutate dal software di calcolo utilizzato. In particolare sono stati considerati:

- Validazione peso proprio impalcato (fase 0);
- Sollecitazioni trave di bordo per carichi accidentali da traffico (fase 2 – traffico) mediante il metodo di Courbon.

Validazione peso proprio impalcato

La validazione del peso proprio dell’impalcato (fase 0) è stata effettuata confrontando la somma delle reazioni verticali calcolate automaticamente dal software di calcolo con quelle calcolate “a mano”.

Si riportano di seguito i calcoli effettuati con procedura “a mano”:

Peso proprio travi principali:

Nome	G1 (kN/m)	L (m)	num.	Pp (kN)
Concio 1	3.7	8.5	5.0	159.0
Concio 2	4.5	9.0	5.0	200.6
Concio 3	3.7	8.5	5.0	159.0

Peso proprio traversi:

Nome	G1 (kN/m)	L (m)	num.	Pp (kN)
Trav. Campata	1.55	10.2	4	63.5
Trav. Testata	2.05	10.2	2	42.0

Peso proprio soletta e veletta:

Nome	G1 (kN/m)	L (m)	num.	Pp (kN)
Soletta	6.75	14.5	25.0	2455.0
Veletta	1.00	26.0	2.0	52.0

Si ottiene un valore del peso proprio pari a: 3130.9 kN.

Le reazioni vincolari verticali (F3) fornite dal software di calcolo sono le seguenti:

TABLE: Joint Reactions					
	Beam	Joint	OutputCase	CaseType	F3
FASE 0	Text	Text	Text	Text	KN
Spalla1	T1	F0-1	_G1	Combination	342.6
	T2	F0-3	_G1	Combination	263.1
	T3	F0-5	_G1	Combination	299.8
	T4	F0-7	_G1	Combination	334.6
	T5	F0-9	_G1	Combination	325.3
Spalla2	T1	F0-2	_G1	Combination	357.9
	T2	F0-4	_G1	Combination	305.4
	T3	F0-6	_G1	Combination	264.6
	T4	F0-8	_G1	Combination	290.7
	T5	F0-10	_G1	Combination	346.8

Sommando tutti i contributi si ottiene un peso proprio totale pari a: 3130.7 kN

Peso proprio impalcato (G1 – fase 0)		
Calcolo manuale	Calcolo automatico (FEM)	Scarto rispetto a calcolo automatico
3130.9 kN	3130.7 kN	0.0 %

Lo scarto ha un valore nullo, quindi accettabile.

Validazione sollecitazioni trave di bordo per carichi accidentali da traffico (fase 2 – traffico)

Per la validazione si rimanda al §5.3.4 della presente relazione tecnica.

5.3 RISULTATI DELL'ANALISI

La determinazione delle sollecitazioni agenti sulle travi principali è condotta attraverso i modelli già descritti per tener conto delle varie fasi di maturazione del getto della soletta collaborante.

Per quanto riguarda i casi di carico da coazione (come termica differenziale e ritiro) non si riportano le sollecitazioni da effetto iperstatico in quanto nulle (la struttura è isostatica); il loro effetto isostatico è tenuto in conto in sede di verifica come sovrapposizione di uno sforzo assiale sulla sola soletta (che dipende dalla deformazione nominale della coazione e dall'area di calcestruzzo effettiva) e un uguale sforzo (di segno opposto) sulla sezione mista, eccentrico rispetto al baricentro della stessa sezione mista.

5.3.1 Combinazioni utilizzate nel modello

Si riportano le combinazioni di carico presenti nel modello strutturale a cui si fa riferimento per le sollecitazioni e deformazioni.

All'interno della presente tabella sono riportati i moltiplicatori di carico per i carichi unitari modellati sull'impalcato

ComboName	ComboType	CaseName	ScaleFactor
_G1	Linear Add	0_Pesi Propri soletta	6.75
_G1		0_DEAD	1
_G1		0_Pesi traversi di campata	1.55
_G1		0_Pesi traversi di testata	2.05
_G1		0_Pesi propri veletta	1
_G2	Linear Add	1_Perm. Portati_pavim. marciapiede	2.4
_G2		1_Perm. Portati_pavim. stradale	4
_G2		1_Perm. Portati_sicurvia	0.9
_G2		1_Perm. Portati_barriera acustica	2
_G2		1_Perm. Portati_cordolo sicurvia	1.5
_Mob_AXI-1	Range Add	2_Mob_conc_1a_corsia	600
_Mob_AXI-1		2_Mob_conc_2a_corsia	400
_Mob_AXI-1		2_Mob_conc_3a_corsia	200
_Mob_DIS-1	Range Add	2_Mob_dis_1a_corsia	27
_Mob_DIS-1		2_Mob_dis_2a_corsia	7.5
_Mob_DIS-1		2_Mob_dis_3a_corsia	7.5
_Mob_DIS-1		2_Mob_dis_p.r.	0
_Mob_Fren	Linear Add	2_Fren_q	17

_Mob_Fren		2_Fren_m	8.5
_Acc. Marciapiede 1	Linear Add	2_Acc_marciapiede 1	3.5
C_Mob_gruppo_1-dominante-1	Linear Add	_Mob_AXI-1	1
C_Mob_gruppo_1-dominante-1		_Mob_DIS-1	1
C_Mob_gruppo_1-dominante-1		_Acc. Marciapiede 1	1
C_Mob_gruppo_2a	Linear Add	_Mob_AXI-1	0.75
C_Mob_gruppo_2a		_Mob_DIS-1	0.4
C_Mob_gruppo_2a		_Mob_Fren	1
C_G1+G2	Linear Add	_G1	1
C_G1+G2		_G2	1
_R	Linear Add	3_Ritiro_Nr	2130
_R		3_Ritiro_Mr	-554
_Acc. Vento	Linear Add	2_Acc_vento_verticale	1
_Acc. Vento		2_Acc_vento_orizzontale	1.4
_Acc. Vento		2_Acc_vento_coppia torcente	1
_Acc. VT-unif(+)	Linear Add	2_Acc_VT_uniforme	30
_Acc. VT-diff.(+)	Linear Add	2_Acc_VT_diff./1	15
_Acc. VT-diff.(+)		2_Acc_VT_diff./2	15
_Acc. VT-1(a)	Linear Add	_Acc. VT-unif(+)	1
_Acc. VT-1(a)		_Acc. VT-diff.(+)	1
_Acc. VT-diff. (-)	Linear Add	2_Acc_VT_diff./1	-18
_Acc. VT-diff. (-)		2_Acc_VT_diff./2	-18
_Acc. VT-1(b)	Linear Add	_Acc. VT-unif(+)	1
_Acc. VT-1(b)		_Acc. VT-diff. (-)	1
C_VT-1	Envelope	_Acc. VT-1(a)	1
C_VT-1		_Acc. VT-1(b)	1
C_SLU_gr1_1_(A1)	Linear Add	_G1	1.35
C_SLU_gr1_1_(A1)		_G2	1.5
C_SLU_gr1_1_(A1)		C_Mob_gruppo_1-dominante-1	1.35
C_SLU_gr1_1_(A1)		_R	1.2

C_SLU_gr1_1_(A1)		_Acc. Vento	0.9
C_SLU_gr1_1_(A1)		C_VT-1	0.9
C_SLU_gr2a_1_(A1)	Linear Add	_G1	1.35
C_SLU_gr2a_1_(A1)		_G2	1.5
C_SLU_gr2a_1_(A1)		C_Mob_gruppo_2a	1.35
C_SLU_gr2a_1_(A1)		_R	1.2
C_SLU_gr2a_1_(A1)		C_VT-1	0.9
C_SLU_gr2a_1_(A1)		_Acc. Vento	0.9
C_SLE_rara_gr1_1	Linear Add	_G1	1
C_SLE_rara_gr1_1		_G2	1
C_SLE_rara_gr1_1		C_Mob_gruppo_1-dominante-1	1
C_SLE_rara_gr1_1		_R	1
C_SLE_rara_gr1_1		_Acc. Vento	0.6
C_SLE_rara_gr1_1		C_VT-1	0.6
C_SL_FAT_Carico Fatica 1-1	Linear Add	_Mob_AXI-1	0.7
C_SL_FAT_Carico Fatica 1-1		_Mob_DIS-1	0.3
C_SL_FAT_Carico Fatica 2	Envelope	2_FAT_2_VEH1_1a_corsia	1
C_SL_FAT_Carico Fatica 2		2_FAT_2_VEH2_1a_corsia	1
C_SL_FAT_Carico Fatica 2		2_FAT_2_VEH3_1a_corsia	1
C_SL_FAT_Carico Fatica 2		2_FAT_2_VEH4_1a_corsia	1
C_SL_FAT_Carico Fatica 2		2_FAT_2_VEH5_1a_corsia	1
_Acc. VT-unif(-)	Linear Add	2_Acc_VT_uniforme	-30
_Acc. VT-2(a)	Linear Add	_Acc. VT-unif(-)	1
_Acc. VT-2(a)		_Acc. VT-diff.(+)	1
_Acc. VT-2(b)	Linear Add	_Acc. VT-unif(-)	1
_Acc. VT-2(b)		_Acc. VT-diff. (-)	1
C_VT-2	Envelope	_Acc. VT-2(a)	1
C_VT-2		_Acc. VT-2(b)	1
C_Mob_gruppo_1-non dom.	Linear Add	_Mob_AXI-1	0.75
C_Mob_gruppo_1-non dom.		_Mob_DIS-1	0.4

C_Mob_gruppo_1-non dom.		_Acc. Marciapiede 1	1
C_SLU_gr1_2_(A1)	Linear Add	_G1	1.35
C_SLU_gr1_2_(A1)		_G2	1.5
C_SLU_gr1_2_(A1)		C_Mob_gruppo_1-dominante-1	1.35
C_SLU_gr1_2_(A1)		_R	1.2
C_SLU_gr1_2_(A1)		_Acc. Vento	0.9
C_SLU_gr1_2_(A1)		C_VT-2	0.9
C_SLU_gr1_3_(A1)	Linear Add	_G1	1.35
C_SLU_gr1_3_(A1)		_G2	1.5
C_SLU_gr1_3_(A1)		C_Mob_gruppo_1-non dom.	1.35
C_SLU_gr1_3_(A1)		_R	1.2
C_SLU_gr1_3_(A1)		_Acc. Vento	0.9
C_SLU_gr1_3_(A1)		C_VT-1	1.5
C_SLU_gr1_4_(A1)	Linear Add	_G1	1.35
C_SLU_gr1_4_(A1)		_G2	1.5
C_SLU_gr1_4_(A1)		C_Mob_gruppo_1-non dom.	1.35
C_SLU_gr1_4_(A1)		_R	1.2
C_SLU_gr1_4_(A1)		_Acc. Vento	0.9
C_SLU_gr1_4_(A1)		C_VT-2	1.5
C_SLU_gr2a_2_(A1)	Linear Add	_G1	1.35
C_SLU_gr2a_2_(A1)		_G2	1.5
C_SLU_gr2a_2_(A1)		C_Mob_gruppo_2a	1.35
C_SLU_gr2a_2_(A1)		_R	1.2
C_SLU_gr2a_2_(A1)		C_VT-2	0.9
C_SLU_gr2a_2_(A1)		_Acc. Vento	0.9
C_SLE_rara_gr1_2	Linear Add	_G1	1
C_SLE_rara_gr1_2		_G2	1
C_SLE_rara_gr1_2		C_Mob_gruppo_1-dominante-1	1
C_SLE_rara_gr1_2		_R	1
C_SLE_rara_gr1_2		_Acc. Vento	0.6

C_SLE_rara_gr1_2		C_VT-2	0.6
C_SLE_rara_gr1_3	Linear Add	_G1	1
C_SLE_rara_gr1_3		_G2	1
C_SLE_rara_gr1_3		C_Mob_gruppo_1-non dom.	1
C_SLE_rara_gr1_3		_R	1
C_SLE_rara_gr1_3		_Acc. Vento	0.6
C_SLE_rara_gr1_3		C_VT-1	1
C_SLE_rara_gr1_4	Linear Add	_G1	1
C_SLE_rara_gr1_4		_G2	1
C_SLE_rara_gr1_4		C_Mob_gruppo_1-non dom.	1
C_SLE_rara_gr1_4		_R	1
C_SLE_rara_gr1_4		_Acc. Vento	0.6
C_SLE_rara_gr1_4		C_VT-2	1
C_SLE_rara_gr2a_1	Linear Add	_G1	1
C_SLE_rara_gr2a_1		_G2	1
C_SLE_rara_gr2a_1		C_Mob_gruppo_2a	1
C_SLE_rara_gr2a_1		_R	1
C_SLE_rara_gr2a_1		C_VT-1	0.6
C_SLE_rara_gr2a_1		_Acc. Vento	0.6
C_SLE_rara_gr2a_2	Linear Add	_G1	1
C_SLE_rara_gr2a_2		_G2	1
C_SLE_rara_gr2a_2		C_Mob_gruppo_2a	1
C_SLE_rara_gr2a_2		_R	1
C_SLE_rara_gr2a_2		C_VT-2	0.6
C_SLE_rara_gr2a_2		_Acc. Vento	0.6
_Mob_AXI-3	Range Add	2_Mob_conc_1a_corsia	400
_Mob_AXI-3		2_Mob_conc_2a_corsia	600
_Mob_AXI-3		2_Mob_conc_3a_corsia	200
_Mob_DIS-3	Range Add	2_Mob_dis_1a_corsia	7.5
_Mob_DIS-3		2_Mob_dis_2a_corsia	27

_Mob_DIS-3		2_Mob_dis_3a_corsia	7.5
_Mob_DIS-3		2_Mob_dis_p.r.	1.25
_Acc. Marciapiede 2	Linear Add	2_Acc_marciapiede 2	3.5
C_Mob_gruppo_1-dominante-3	Linear Add	_Mob_AXI-3	1
C_Mob_gruppo_1-dominante-3		_Mob_DIS-3	1
C_Mob_gruppo_1-dominante-3		_Acc. Marciapiede 1	1
C_Mob_gruppo_1-dominante-3		_Acc. Marciapiede 2	1
C_SLE_rara_gr1_5	Linear Add	_G1	1
C_SLE_rara_gr1_5		_G2	1
C_SLE_rara_gr1_5		C_Mob_gruppo_1-dominante-3	1
C_SLE_rara_gr1_5		_R	1
C_SLE_rara_gr1_5		_Acc. Vento	0.6
C_SLE_rara_gr1_5		C_VT-1	0.6
C_SLE_rara_gr1_6	Linear Add	_G1	1
C_SLE_rara_gr1_6		_G2	1
C_SLE_rara_gr1_6		C_Mob_gruppo_1-dominante-3	1
C_SLE_rara_gr1_6		_R	1
C_SLE_rara_gr1_6		_Acc. Vento	0.6
C_SLE_rara_gr1_6		C_VT-2	0.6
C_SLE_rara_ENV	Envelope	C_SLE_rara_gr1_1	1
C_SLE_rara_ENV		C_SLE_rara_gr1_2	1
C_SLE_rara_ENV		C_SLE_rara_gr1_3	1
C_SLE_rara_ENV		C_SLE_rara_gr1_4	1
C_SLE_rara_ENV		C_SLE_rara_gr2a_1	1
C_SLE_rara_ENV		C_SLE_rara_gr2a_2	1
C_SLE_rara_ENV		C_SLE_rara_gr1_5	1
C_SLE_rara_ENV		C_SLE_rara_gr1_6	1
C_SLU_gr1_5_(A1)	Linear Add	_G1	1.35
C_SLU_gr1_5_(A1)		_G2	1.5
C_SLU_gr1_5_(A1)		C_Mob_gruppo_1-dominante-3	1.35

C_SLU_gr1_5_(A1)		_R	1.2
C_SLU_gr1_5_(A1)		_Acc. Vento	0.9
C_SLU_gr1_5_(A1)		C_VT-1	0.9
C_SLU_gr1_6_(A1)	Linear Add	_G1	1.35
C_SLU_gr1_6_(A1)		_G2	1.5
C_SLU_gr1_6_(A1)		C_Mob_gruppo_1-dominante-3	1.35
C_SLU_gr1_6_(A1)		_R	1.2
C_SLU_gr1_6_(A1)		_Acc. Vento	0.9
C_SLU_gr1_6_(A1)		C_VT-2	0.9
C_SLU_STR_ENV	Envelope	C_SLU_gr1_1_(A1)	1
C_SLU_STR_ENV		C_SLU_gr1_2_(A1)	1
C_SLU_STR_ENV		C_SLU_gr1_3_(A1)	1
C_SLU_STR_ENV		C_SLU_gr1_4_(A1)	1
C_SLU_STR_ENV		C_SLU_gr2a_1_(A1)	1
C_SLU_STR_ENV		C_SLU_gr2a_2_(A1)	1
C_SLU_STR_ENV		C_SLU_gr1_5_(A1)	1
C_SLU_STR_ENV		C_SLU_gr1_6_(A1)	1
C_SLE_freq_gr1_1	Linear Add	_G1	1
C_SLE_freq_gr1_1		_G2	1
C_SLE_freq_gr1_1		C_Mob_gruppo_1-non dom.	1
C_SLE_freq_gr1_1		_R	1
C_SLE_freq_gr1_1		C_VT-1	0.5
C_SLE_freq_gr1_2	Linear Add	_G1	1
C_SLE_freq_gr1_2		_G2	1
C_SLE_freq_gr1_2		C_Mob_gruppo_1-non dom.	1
C_SLE_freq_gr1_2		_R	1
C_SLE_freq_gr1_2		C_VT-2	0.5
C_SLE_freq_gr1_3	Linear Add	_G1	1
C_SLE_freq_gr1_3		_G2	1
C_SLE_freq_gr1_3		_R	1

C_SLE_freq_gr1_3		C_VT-1	0.6
C_SLE_freq_gr1_4	Linear Add	_G1	1
C_SLE_freq_gr1_4		_G2	1
C_SLE_freq_gr1_4		_R	1
C_SLE_freq_gr1_4		C_VT-2	0.6
C_SLE_freq_ENV	Envelope	C_SLE_freq_gr1_1	1
C_SLE_freq_ENV		C_SLE_freq_gr1_2	1
C_SLE_freq_ENV		C_SLE_freq_gr1_3	1
C_SLE_freq_ENV		C_SLE_freq_gr1_4	1
C_SLE_qperm	Linear Add	_G1	1
C_SLE_qperm		_G2	1
C_SLE_qperm		_R	1
_Mob_AXI-2	Range Add	2_Mob_conc_1a_corsia	600
_Mob_AXI-2		2_Mob_conc_2a_corsia	400
_Mob_AXI-2		2_Mob_conc_3a_corsia	0
_Mob_DIS-2	Range Add	2_Mob_dis_1a_corsia	27
_Mob_DIS-2		2_Mob_dis_2a_corsia	7.5
_Mob_DIS-2		2_Mob_dis_3a_corsia	0
_Mob_DIS-2		2_Mob_dis_p.r.	0
C_Mob_gruppo_1-dominante-2	Linear Add	_Mob_AXI-2	1
C_Mob_gruppo_1-dominante-2		_Mob_DIS-2	1
C_Mob_gruppo_1-dominante-2		_Acc. Marciapiede 1	1
C_SL_FAT_Carico Fatica 1-2	Linear Add	_Mob_AXI-2	0.7
C_SL_FAT_Carico Fatica 1-2		_Mob_DIS-2	0.3
C_SL_FAT_Carico Fatica 1-3	Linear Add	_Mob_AXI-3	0.7
C_SL_FAT_Carico Fatica 1-3		_Mob_DIS-3	0.3
C_SL_FAT1_ENV	Envelope	C_SL_FAT_Carico Fatica 1-1	1
C_SL_FAT1_ENV		C_SL_FAT_Carico Fatica 1-2	1
C_SL_FAT1_ENV		C_SL_FAT_Carico Fatica 1-3	1
C_Mob_ENV	Envelope	C_Mob_gruppo_1-dominante-1	1

C_Mob_ENV		C_Mob_gruppo_1-dominante-2	1
C_Mob_ENV		C_Mob_gruppo_1-dominante-3	1
C_Mob_ENV		C_Mob_gruppo_1-non dom.	1
C_Mob_ENV		C_Mob_gruppo_2a	1
_EX	Linear Add	4_Sisma_dir_x	1
_EX		4_Sisma_dir_y	0.3
_EX		4_Sisma_dir_z	0.3
_EY	Linear Add	4_Sisma_dir_x	0.3
_EY		4_Sisma_dir_y	1
_EY		4_Sisma_dir_z	0.3
_EZ	Linear Add	4_Sisma_dir_x	0.3
_EZ		4_Sisma_dir_y	0.3
_EZ		4_Sisma_dir_z	1
C_SLV_X	Linear Add	_EX	1
C_SLV_X		_G1	1
C_SLV_X		_G2	1
C_SLV_Y	Linear Add	_EY	1
C_SLV_Y		_G1	1
C_SLV_Y		_G2	1
C_SLV_Z	Linear Add	_EZ	1
C_SLV_Z		_G1	1
C_SLV_Z		_G2	1

Si vuol far osservare che ogni sul modello sono stati inseriti solo carichi unitari (sono presenti o carichi concentrati o distribuiti lineari) attraverso i rispettivi “load cases”. L’entità del carico viene inserita per mezzo di un fattore moltiplicativo presente nelle combinazioni sopra riportate sfruttando la linearità del comportamento.

Questa forma di applicazione rende il modello strutturale più semplice da trattare ed allo stesso tempo si ha maggiore controllo in fase di analisi.

5.3.2 Sollecitazioni travi

Di seguito sono riportate in forma grafica, per caso di carico, le caratteristiche di sollecitazione significative nella verifica dell’impalcato. Si fa riferimento alla trave n. 5 di valle in quanto più sollecitata dal punto di vista flessionale rispetto alle altre travi.

Carichi permanenti strutturali – Fase 0

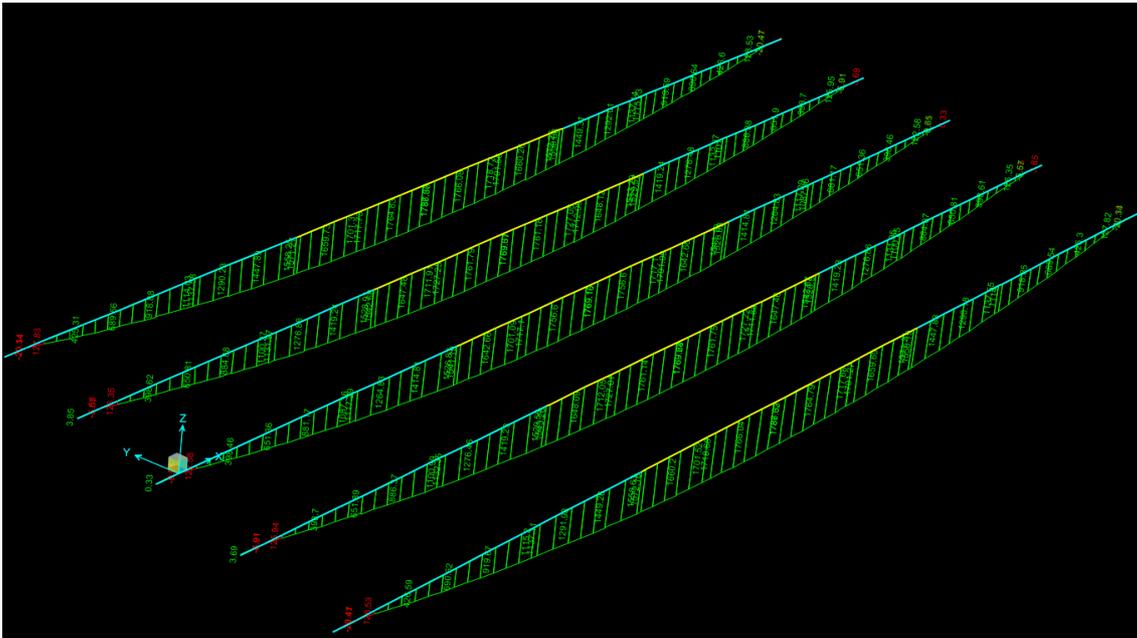


Figura 23 – Momento flettente sulle travi per peso proprio acciaio e soletta in c.a.

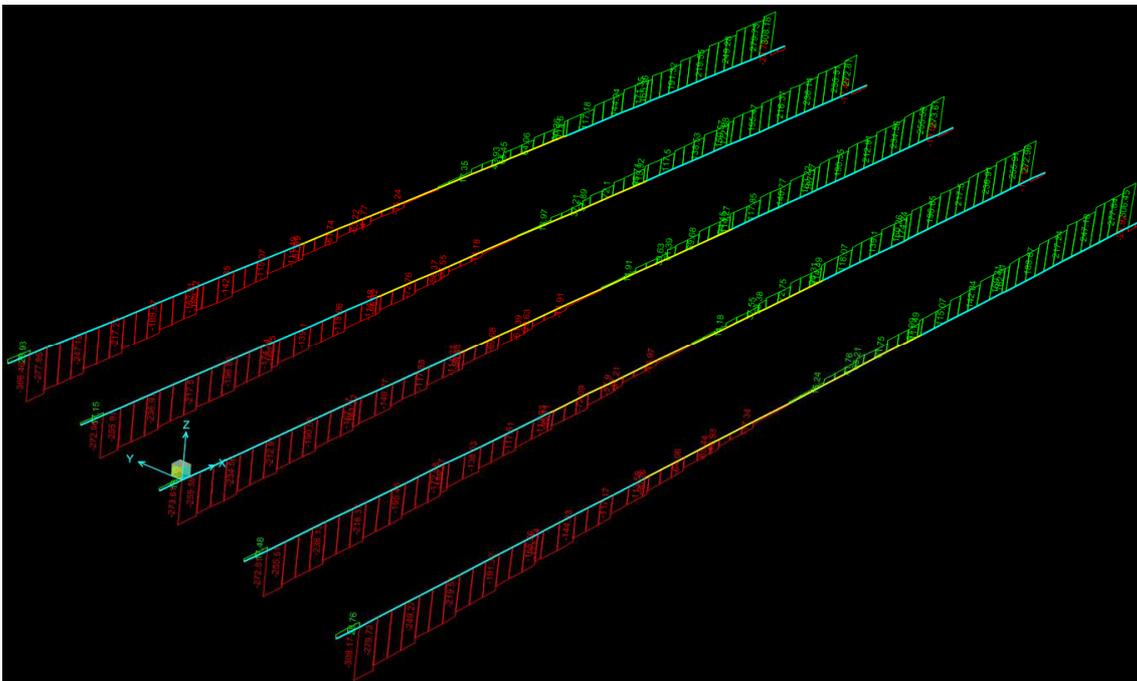


Figura 24 - Taglio sulle travi per peso proprio acciaio: travi principali.

Carichi permanenti non strutturali – Fase 1A (t=0) e fase 1B (t=inf.)

Fase 1A

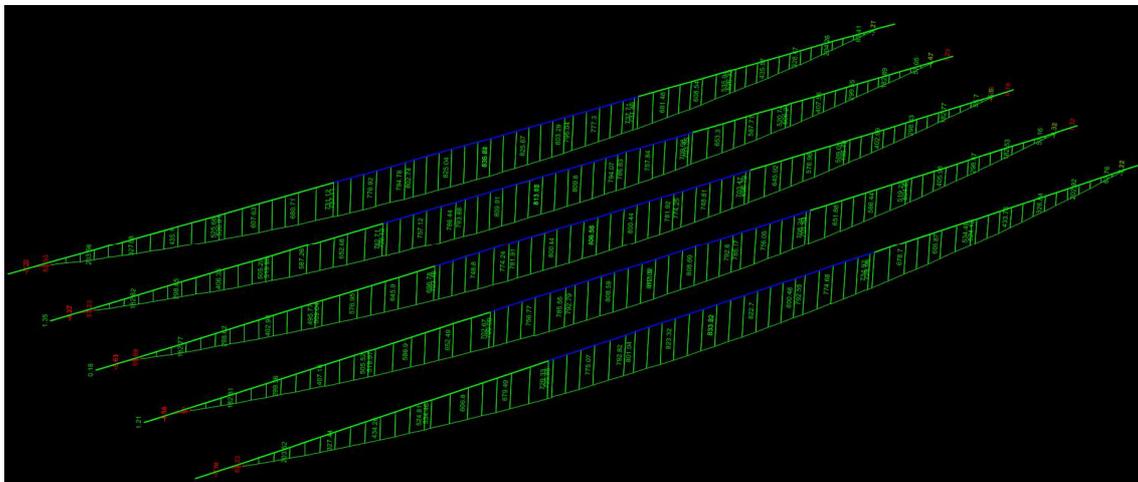


Figura 25 – Momento flettente sulle travi per carichi permanenti non strutturali – fase 1A.

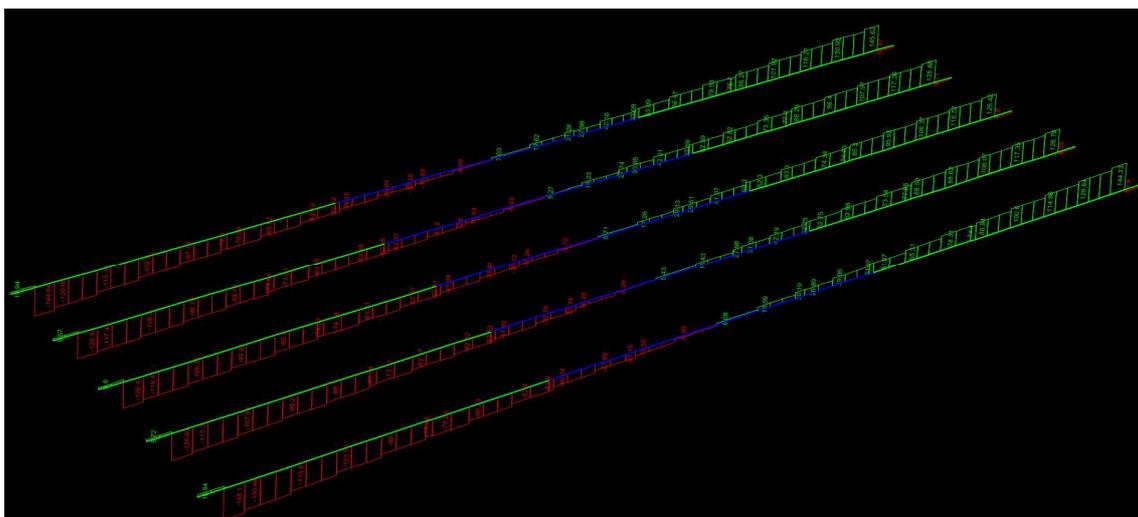


Figura 26 – Taglio sulle travi per carichi permanenti non strutturali – fase 1A.

Fase 1B

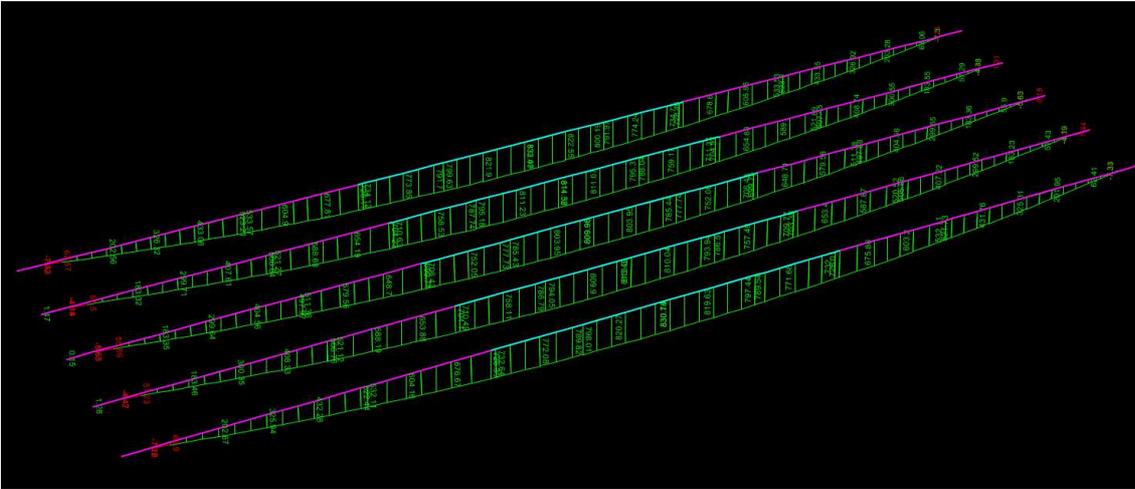


Figura 27 – Momento flettente sulle travi per carichi permanenti non strutturali – fase 1B.

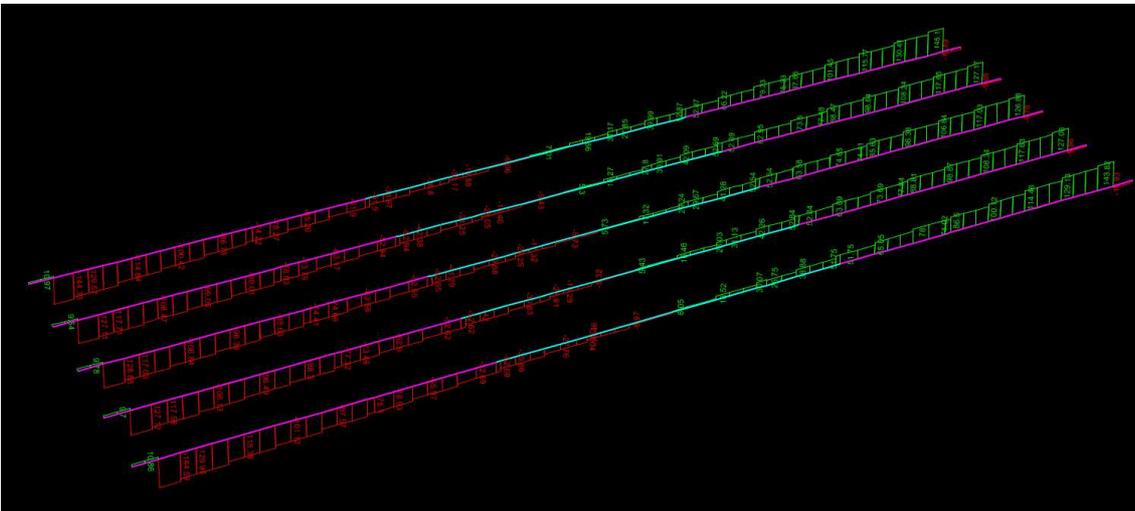


Figura 28 – Taglio sulle travi per carichi permanenti non strutturali – fase 1B.

Ritiro – Fase 1C

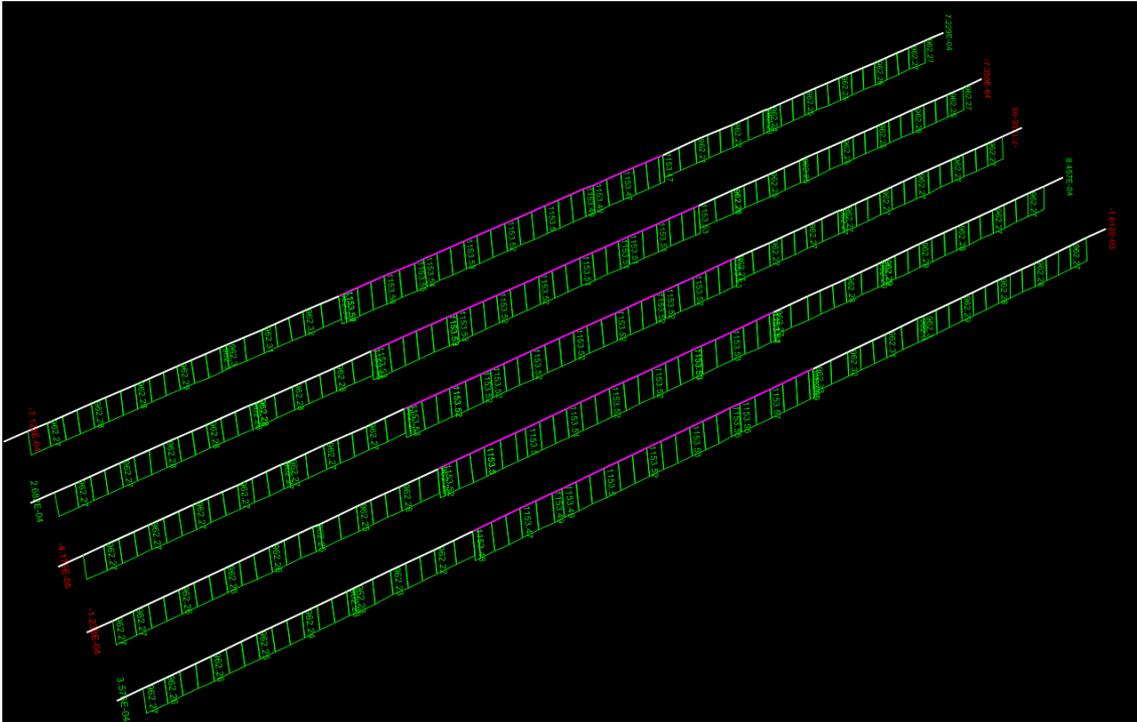


Figura 29 – Momento flettente sulle travi per azioni equivalenti al ritiro – fase 1C.

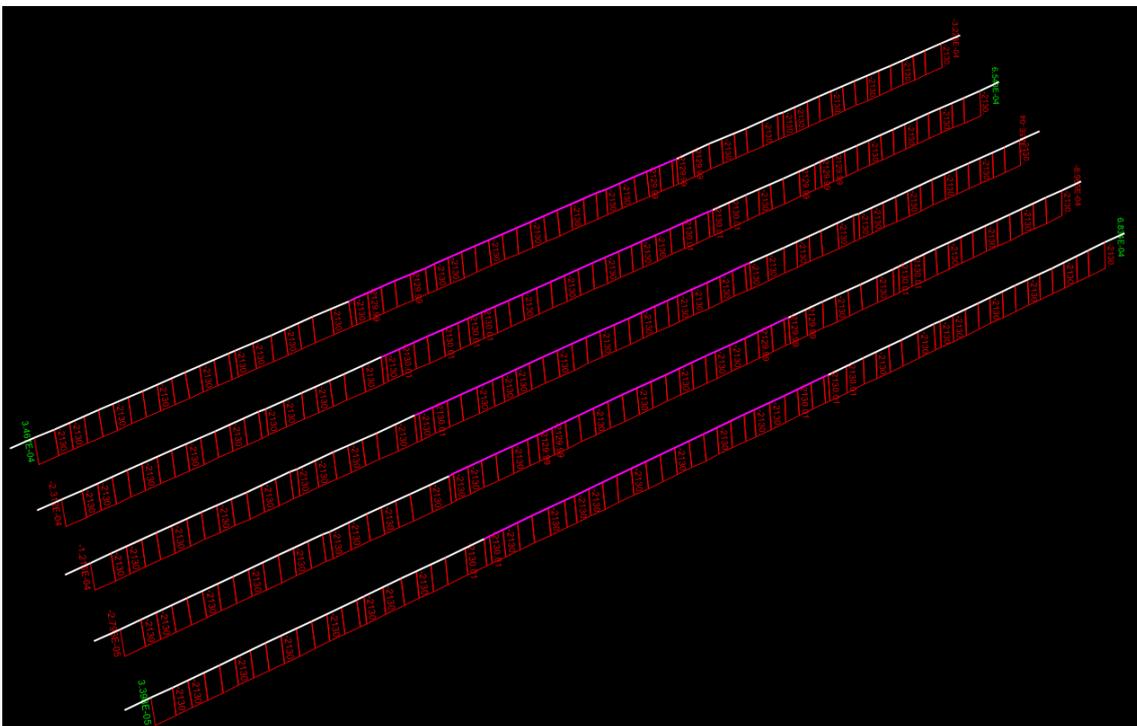


Figura 30 – Sforzo normale sulle travi per azioni equivalenti al ritiro – fase 1C.

Carichi variabili – Fase 2

Vento

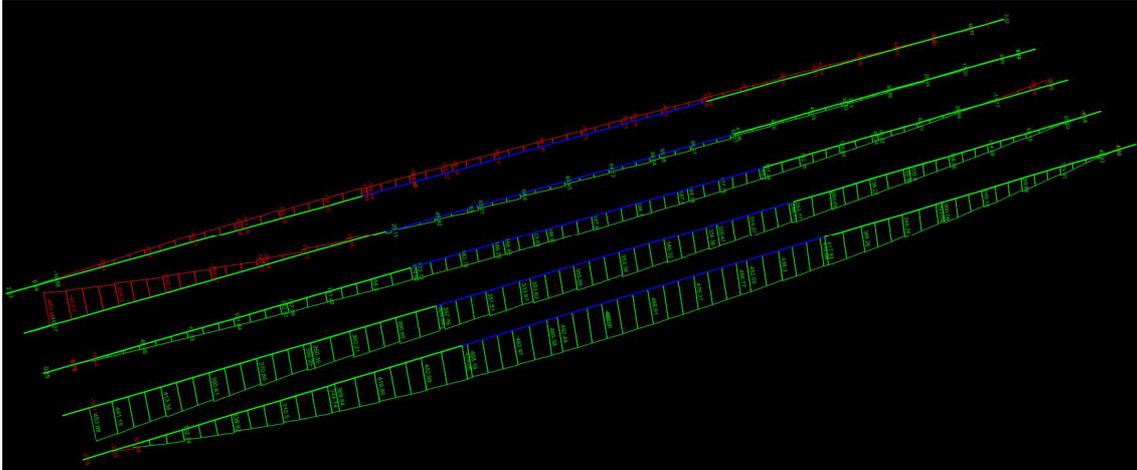


Figura 31 – Momento flettente sulle travi per carichi variabili (vento) – fase 2.

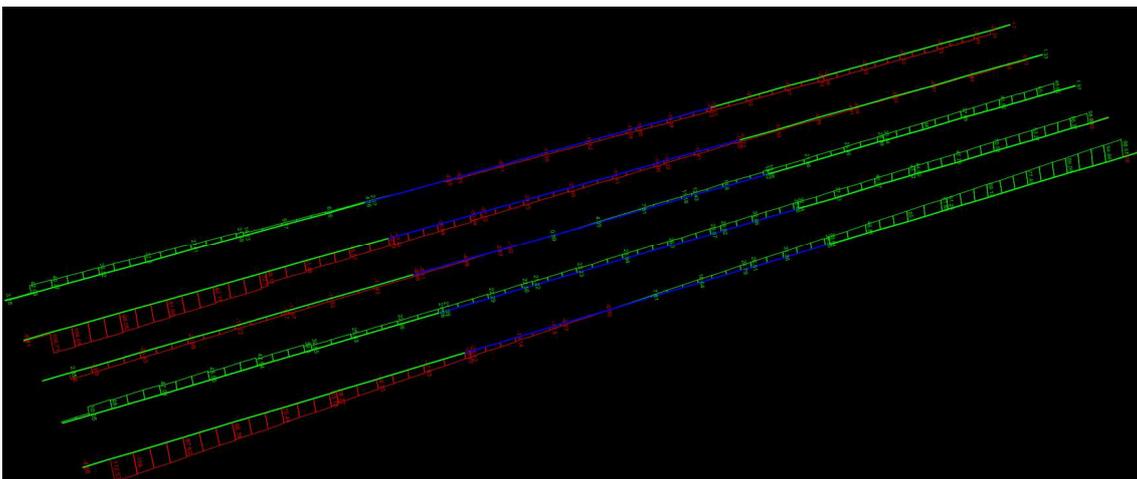


Figura 32 – Taglio sulle travi per carichi variabili (vento) – fase 2.

Variabili da traffico – gruppo 1

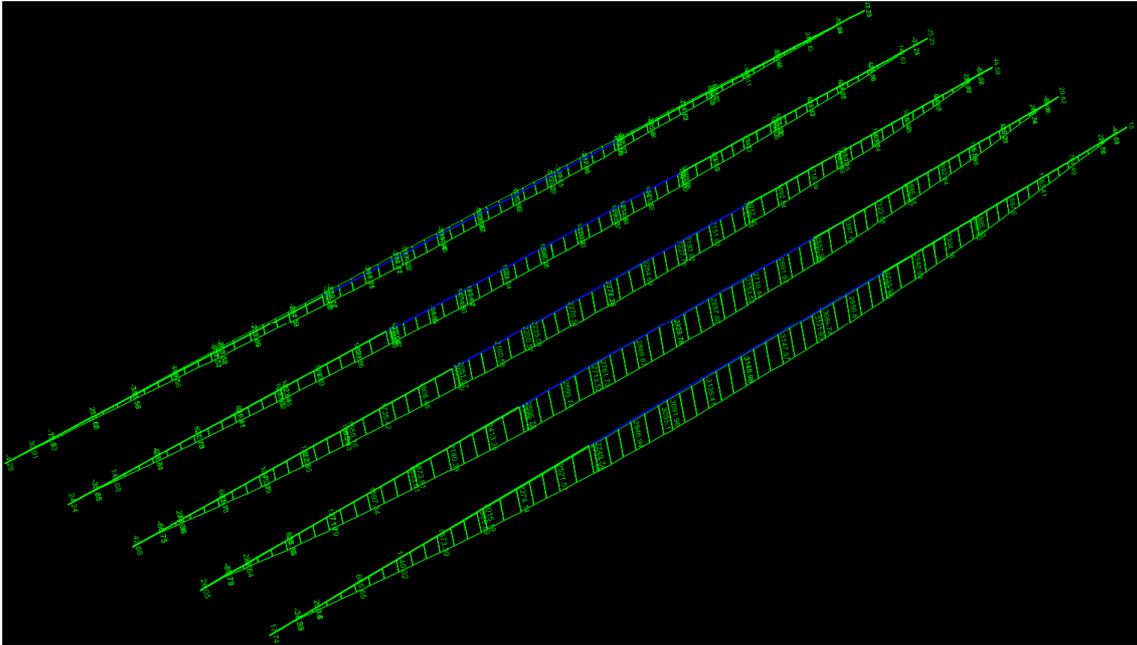


Figura 33 – Momento flettente sulle travi per carichi variabili (traffico-gruppi 1-momento max) – fase 2.

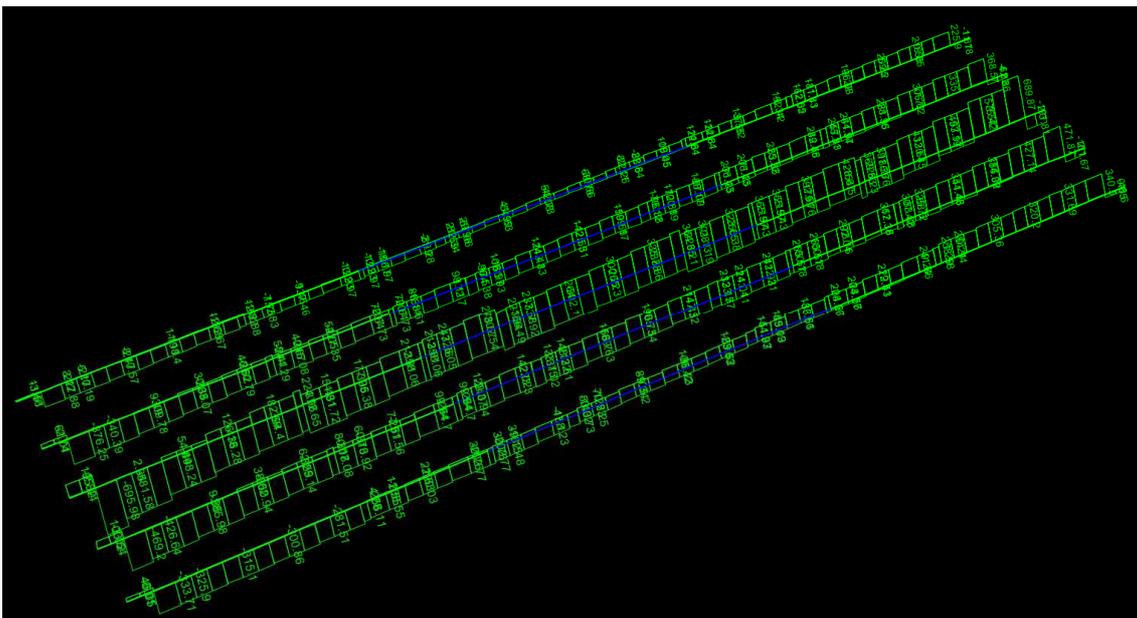
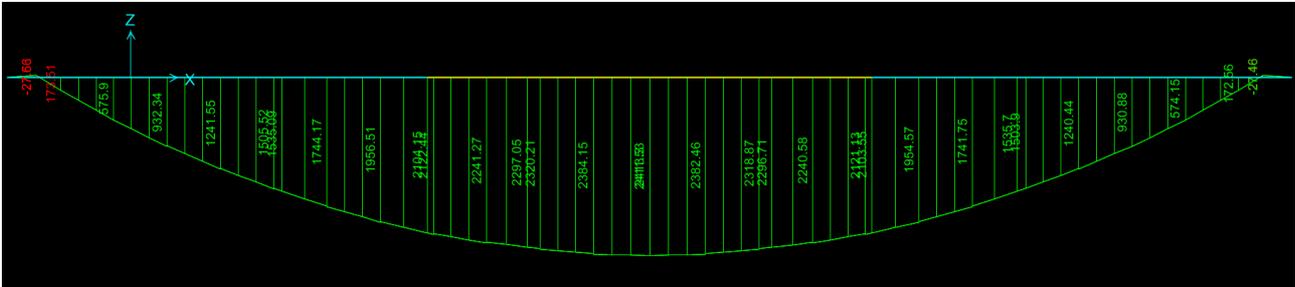


Figura 34 – Taglio sulle travi per carichi variabili (traffico-gruppi 1-taglio max) – fase 2.

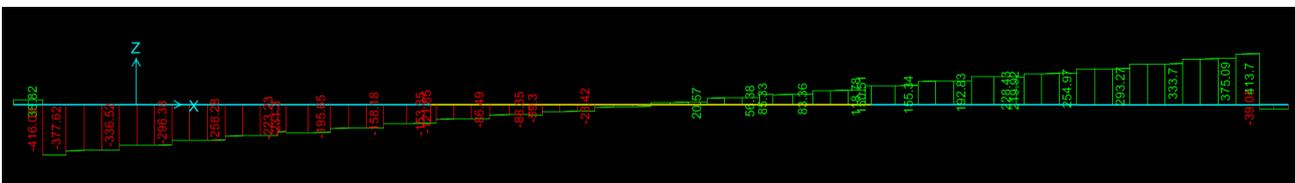
5.3.3 Sollecitazioni travi combinazione SLU

Le sollecitazioni qui esposte sono relative alla combinazione di involucro SLU_STR_ENV per la trave di riva T5.

FASE 0 (T5)



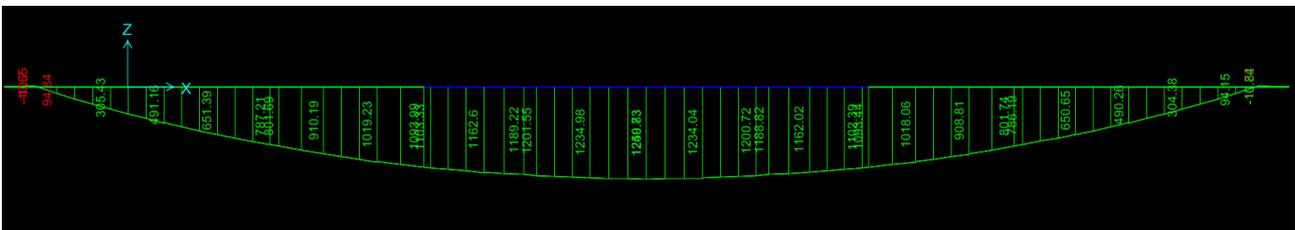
$M_{max} = 2412 \text{ kNm}$



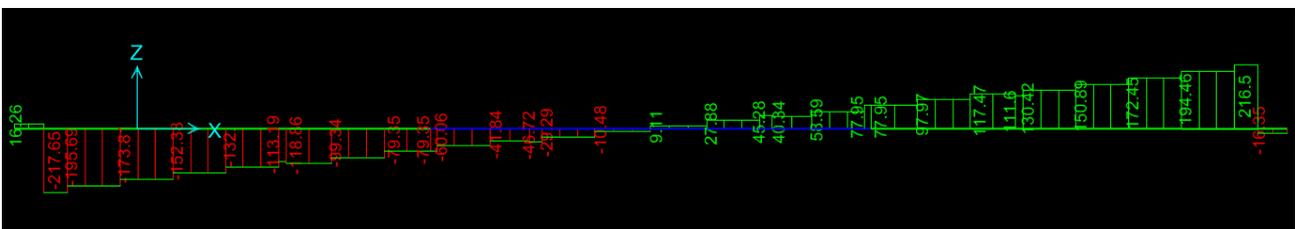
$V_{max} = 413.7 \text{ kN}$

$V_{min} = -412.0 \text{ kN}$

FASE 1A (T5)



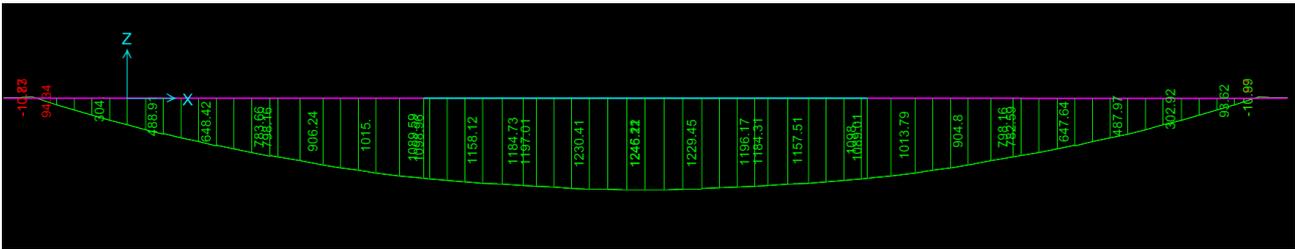
$M_{max} = 1250 \text{ kNm}$



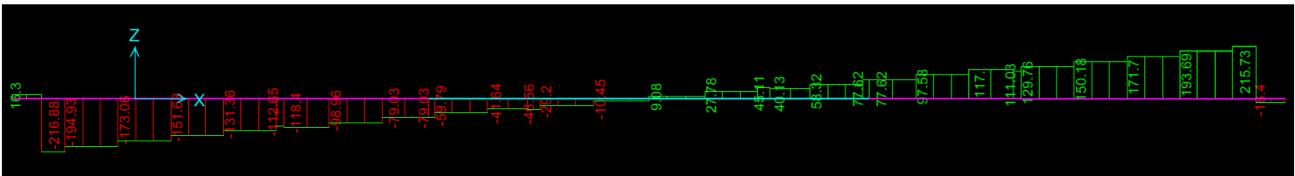
$V_{max} = 217.5 \text{ kN}$

$V_{min} = -217.7 \text{ kN}$

FASE 1B (T5)



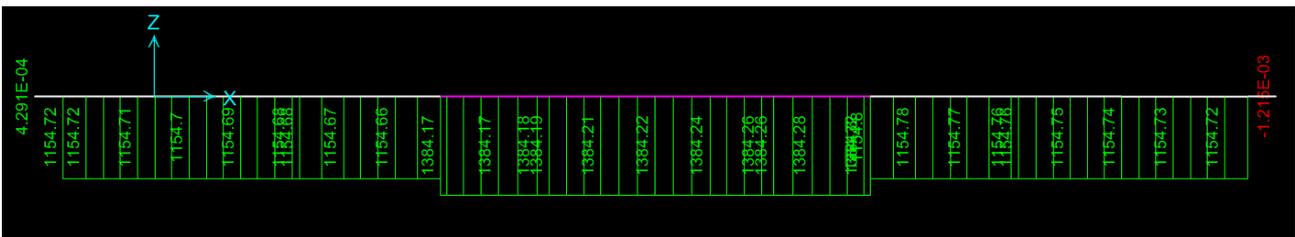
M,max = 1246 kNm



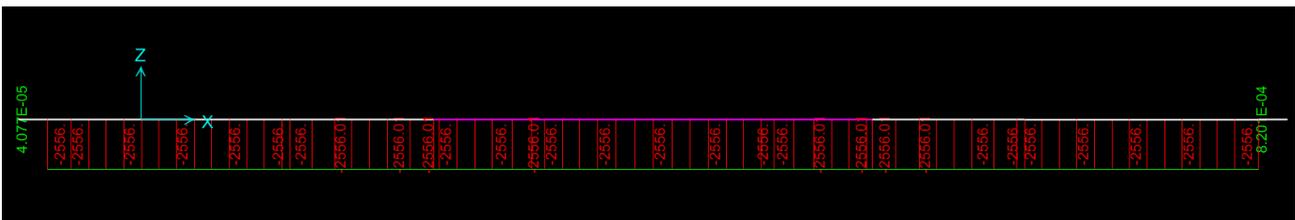
V,max = 215.7 kN

V,min = -216.9 kN

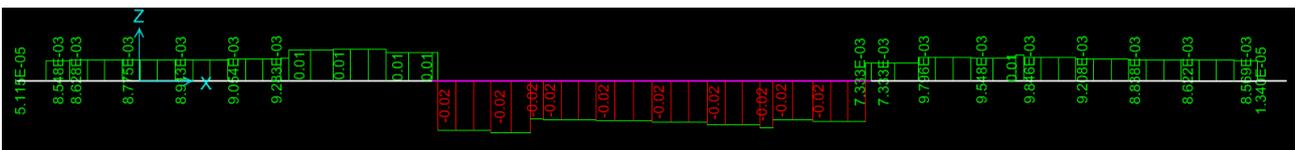
FASE 1C (T5)



M,max = 1384 kNm



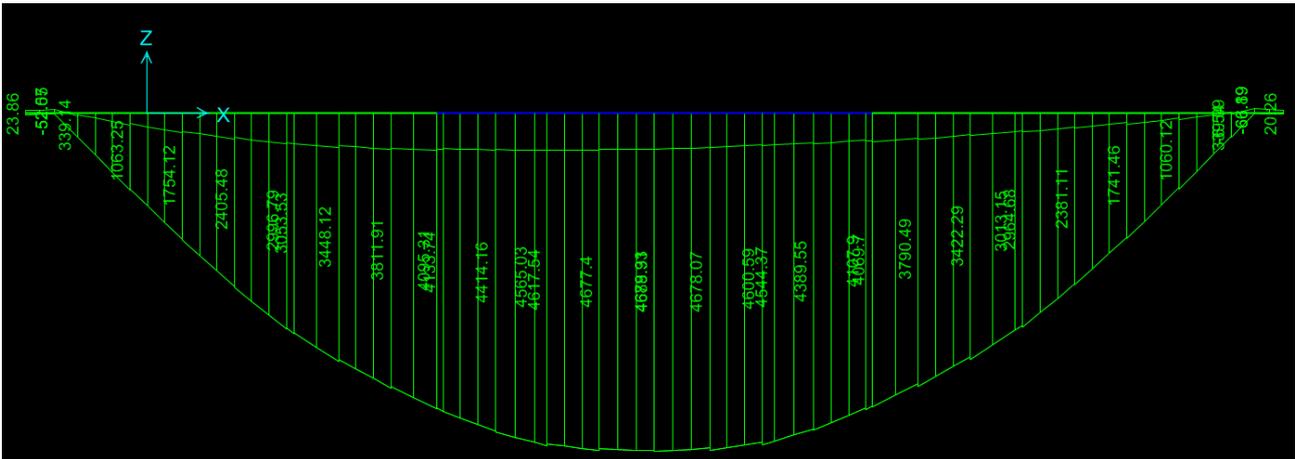
N,max = -2556 kN



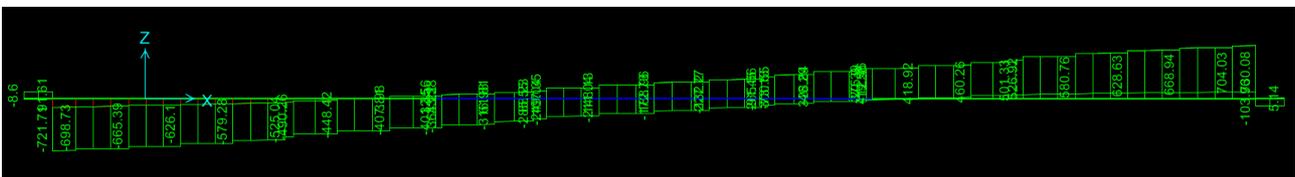
V,max = 0.013 kN

V,min = -0.02 kN

FASE 2 (T5)



M,max = 4688 kNm

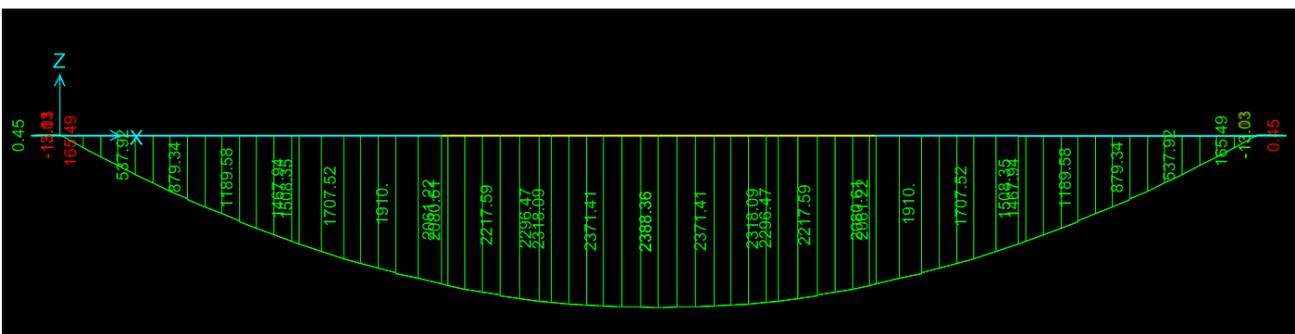


V,max = 730 kN

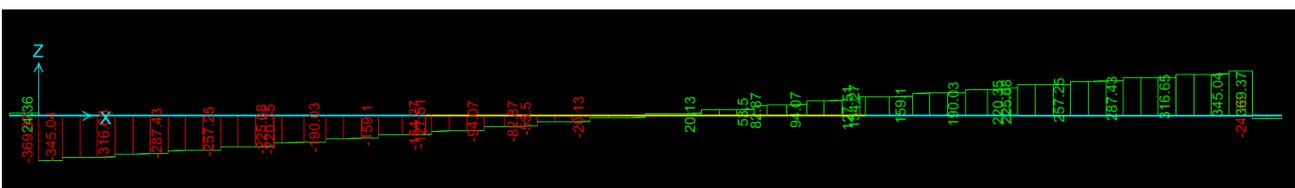
V,min = -722 kN

Le sollecitazioni qui esposte sono relative alla combinazione di involucro SLU_STR_ENV per la trave di spina T3.

FASE 0 (T3)



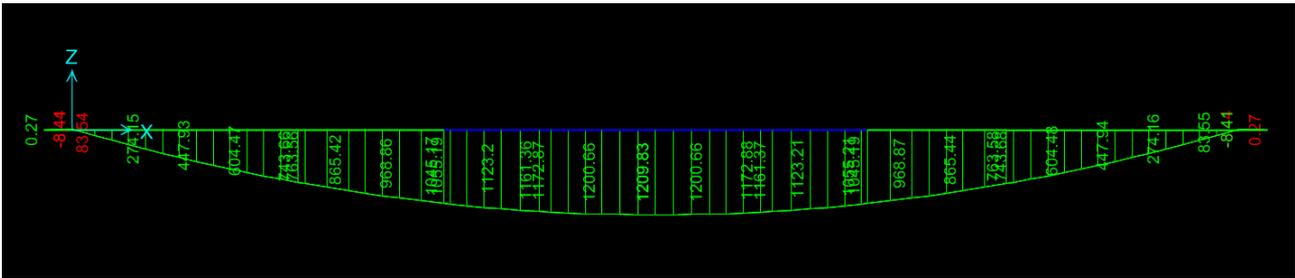
M,max = 2388 kNm



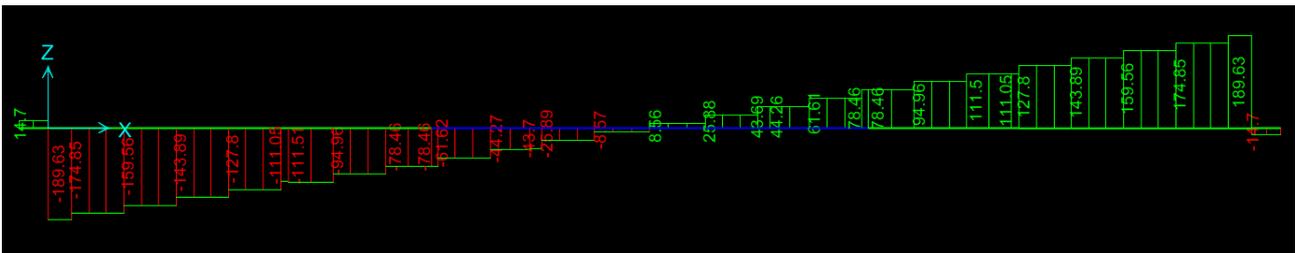
V,max = 369.4 kN

V,min = -369.4 kN

FASE 1A (T3)



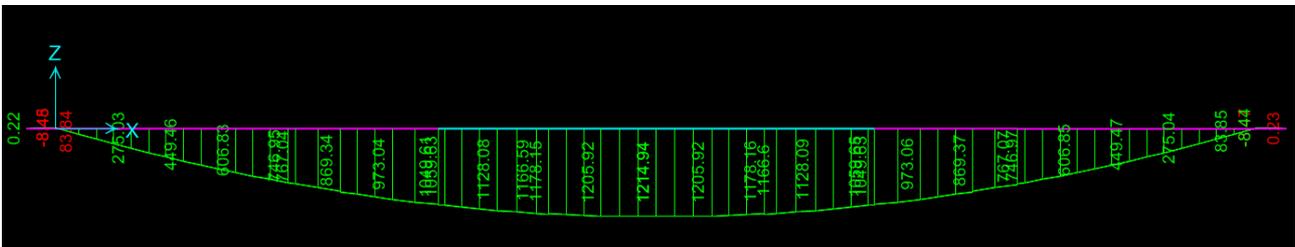
M,max = 1210 kNm



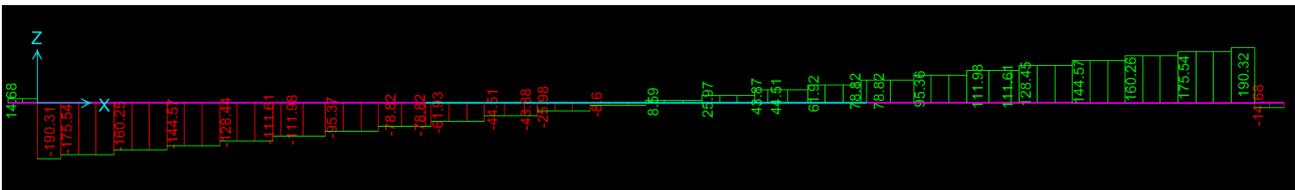
V,max = 189.6 kN

V,min = -189.6 kN

FASE 1B (T3)



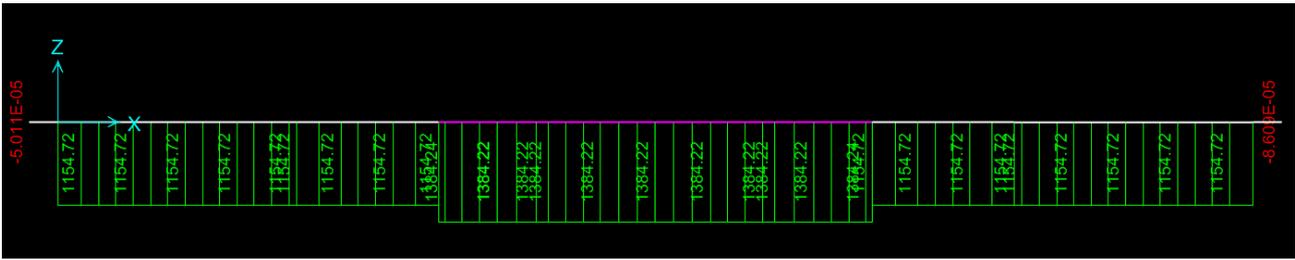
M,max = 1215 kNm



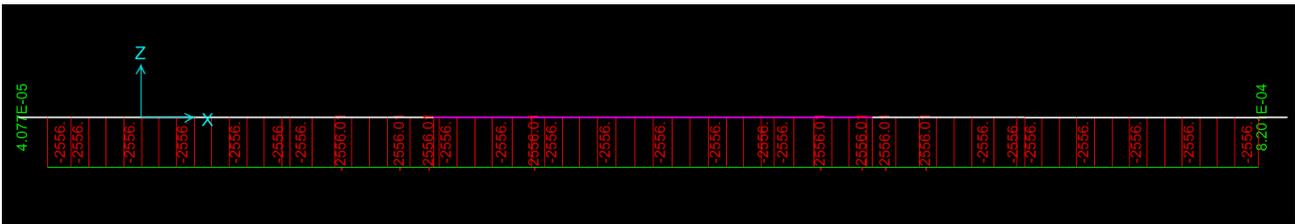
V,max = 190.3 kN

V,min = -190.3 kN

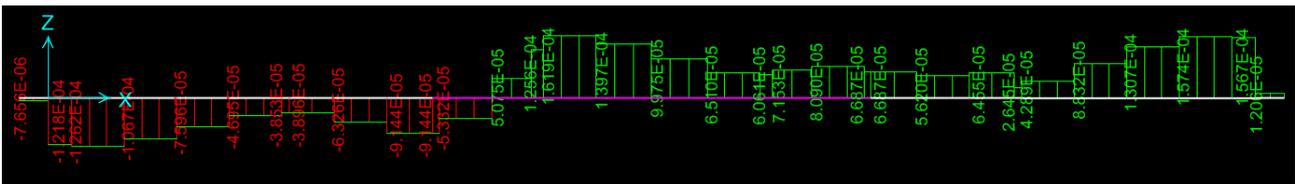
FASE 1C (T3)



M,max = 1384 kNm



N,max = 2556 kN



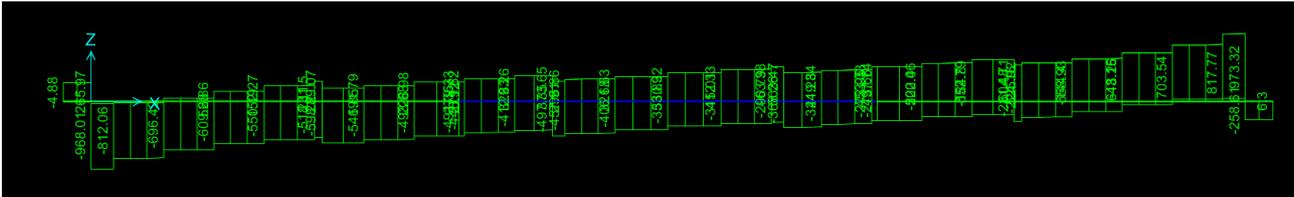
V,max = 0.00 kN

V,min = 0.00 kN

FASE 2 (T3)



M,max = 3625 kNm



$V_{max} = 973 \text{ kN}$

$V_{min} = -968 \text{ kN}$

5.3.4 Accettabilità dei risultati: validazione sollecitazioni trave di riva – carichi da traffico (fase 2)

Si riporta di seguito il confronto tra il momento flettente in mezzeria della trave di riva calcolato mediante analisi semplificata e quello determinato con modello di calcolo.

Nella risoluzione dell’impalcato la ripartizione dei carichi tra le travi è avvenuta attraverso il *metodo di Courbon*. Il grafico che segue mostra il diagramma dei coefficienti di ripartizione per le travi di riva in cui la posizione del carico variabile è variabile (linea di influenza dei coefficienti di ripartizione).

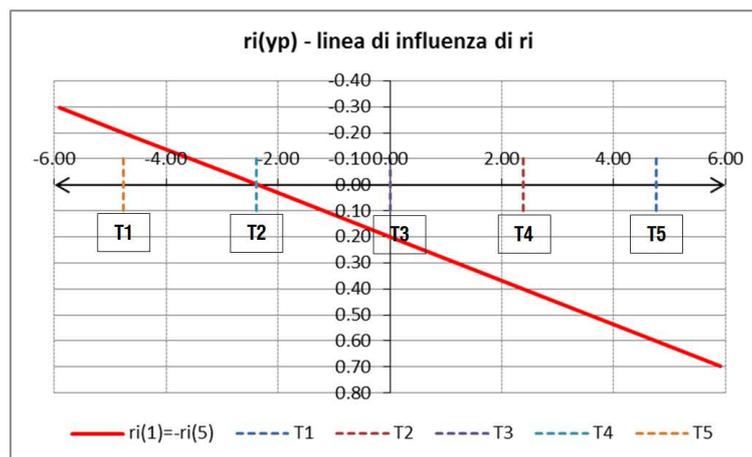


Figura 35 – Linea di influenza coefficiente di Courbon – trave di riva.

La tabella successiva mostra i valori dei coefficienti di ripartizione per le azioni del gruppo 1:

Carichi	Folla 1	Corsia 1	Corsia 2	Corsia 3	P. R.	Folla 2
x (m)	5.9	3.25	0.25	-2.75	-4.5	-5.9
r(1)=-r(5)	0.70	0.47	0.22	-0.03	-0.18	-0.30

Per la determinazione delle sollecitazioni flettenti e taglianti si ricorre al calcolo dei carichi equivalenti a flessione e taglio. Si definisce carico equivalente q_{eq} di un carico iniziale q_1 un carico distribuito costante che ha, relativamente ad una particolare grandezza in una sezione gli stessi effetti del carico q_1 considerato nella posizione peggiore.

La trave di riva ha uno schema statico appoggio-appoggio, per cui la massimizzazione del momento flettente avviene applicando i carichi distribuiti su tutta la campata ed i carichi concentrati in mezzeria (dato che si tratta di carichi tandem, i due assi saranno distanziati di $a=1.20 \text{ m}$). Stessa cosa dicasi per il taglio ma con applicazione del carico concentrato in prossimità di uno dei due appoggi.

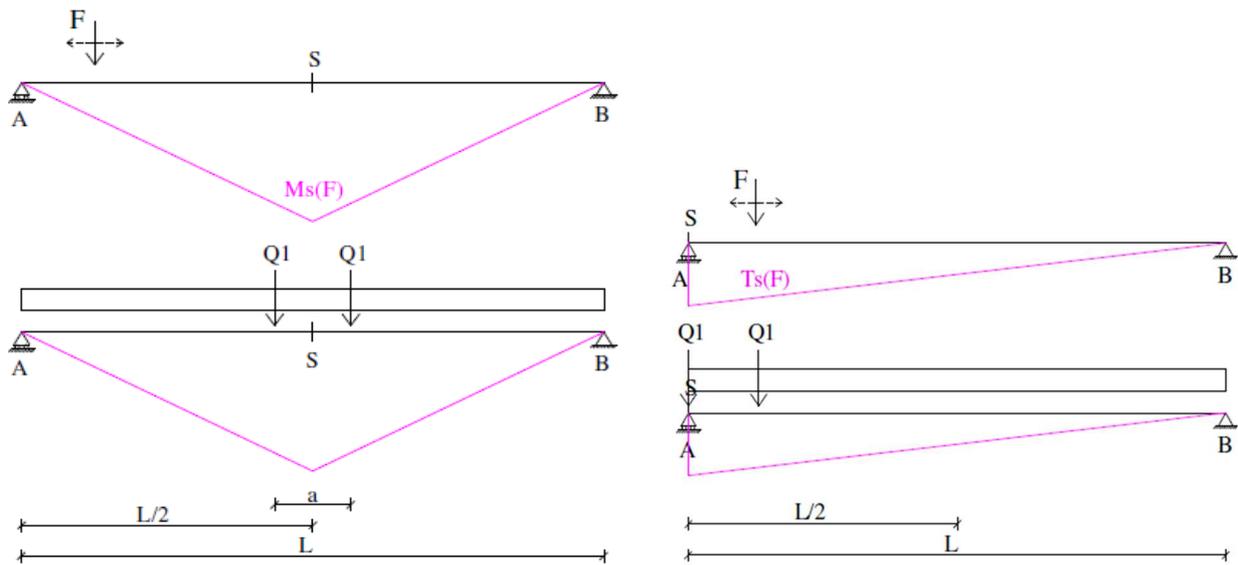


Figura 36 – Linee di influenza di momento flettente (sinistra), taglio (destra) e carichi equivalenti.

I carichi variabili da traffico considerati per la trave di riva sono riportati di seguito.

Schema 1	Carico	L corsia (m)	r1 (ypi)	Carichi equivalenti sulla trave
Folla 1	2.5	1.4	0.7	2.4 kN/m
Corsia 1 - q1	9	3	0.5	12.8 kN/m
Corsia 1 - Q1	300		0.5	142.1 kN
Corsia 2 - q2	2.5	3	0.2	1.7 kN/m
Corsia 2 - Q2	200		0.2	44.2 kN
Corsia 3 - q3	2.5	3	0.0	-0.2 kN/m
Corsia 3 - Q3	100		0.0	-3.2 kN
Corsia R - qr	0	0.5	-0.2	0.0 kN/m
Folla 2	0	1.4	-0.3	0.0 kN/m

Facendo l'equivalenza con il momento in mezzeria di una trave semplicemente appoggiata lunga L_{\perp} e sottoposta ad un carico uniforme pari a $q_{eq,m}$, si ottiene:

$$q_{eq,m} = q + \frac{8Q}{L^2} \left(\frac{L}{2} - \frac{a}{2} \right) = 46.8 \text{ kN/m}$$

Facendo l'equivalenza con il taglio di una trave semplicemente appoggiata lunga L_{\perp} e sottoposta ad un carico uniforme pari a $q_{eq,t}$, si ottiene:

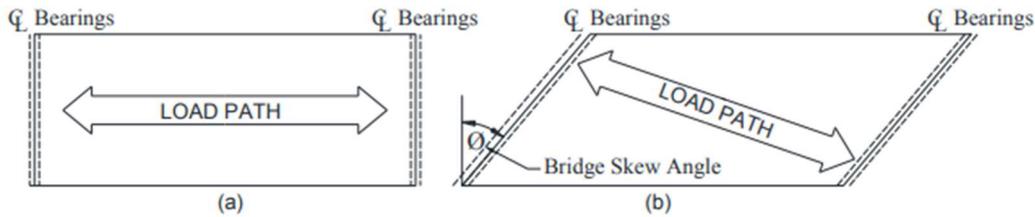
$$q_{eq,t} = q + \frac{2Q}{L} \left(2 - \frac{a}{L} \right) = 47.7 \text{ kN/m}$$

Dove:

q : carico di corsia;

Q : carico assiale (tandem);

$L_{\perp} = 23.0 m$: luce di calcolo perpendicolare ai traversi. Dato che sia trave che traversi sono dotati di una certa rigidità torsionale, la distribuzione degli sforzi nelle aste diviene alquanto diversa rispetto a quella che si avrebbe per una travata simile ma retta; tali differenze non possono essere trascurate per obliquità superiori a 20° , come nel caso oggetto di studio. Per tale motivo si considera la luce perpendicolare ai traversi di testata (si veda figura sotto).



$a = 1.20 m$: distanza assi tandem (direzione longitudinale).

Si considerano i carichi derivanti dallo Schema 1, in quanto più gravoso per il dimensionamento della trave di riva.

Il momento flettente, non fattorizzato, che si ottiene dal calcolo manuale è pari a:

$$M_{Ed,calc} = \frac{q_{eq,m} \cdot L^2}{8} = 3100 \text{ kNm}$$

Il diagramma del momento flettente, non fattorizzato, della trave di riva ottenuto attraverso il modello di calcolo descritto in precedenza, è riportato di seguito:

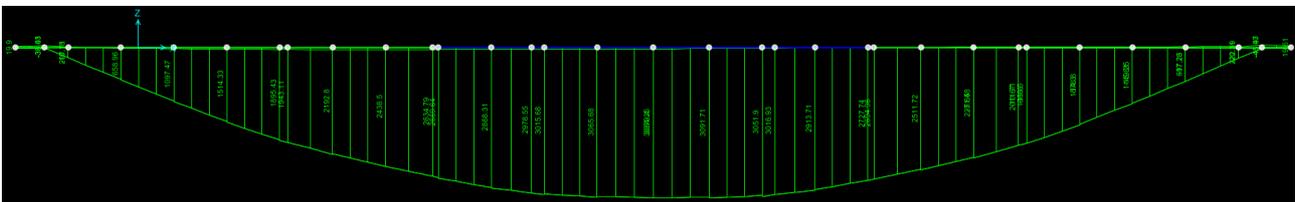


Figura 37 – Momento flettente trave di riva soggetta a carichi variabili da traffico (modello FEM).

Si evince che il massimo momento in mezzeria è pari a:

$$M_{Ed,modello} = 3092 \text{ kNm}$$

I due valori ottenuti hanno un errore relativo pari a 0.3 %.

Il taglio, non fattorizzato, che si ottiene dal calcolo manuale è pari a:

$$M_{Ed,calc} = \frac{q_{eq,t} \cdot L}{2} = 548 \text{ kNm}$$

Il diagramma del taglio, non fattorizzato, della trave di riva ottenuto attraverso il modello di calcolo descritto in precedenza, è riportato di seguito:

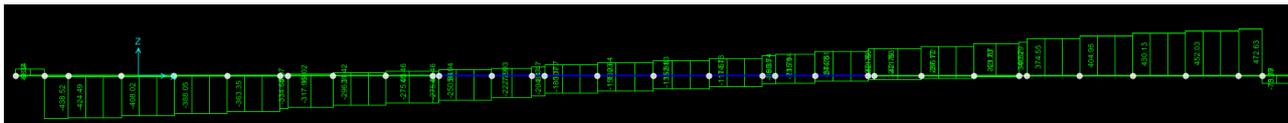


Figura 38 – Taglio trave di riva soggetta a carichi variabili da traffico (modello FEM).

Si evince che il massimo taglio agli appoggi è pari a:

$$V_{Ed,modello} = 475 \text{ kNm}$$

I due valori ottenuti hanno un errore relativo pari a 13 %.

Sulla base dei risultati ottenuti, trovando riscontro nella trattazione teorica classica fornita dal testo *Progettazione e costruzione di ponti (IV edizione) di M.P. Petrangeli*, si traggono le seguenti considerazioni in merito alla validità dei valori ricavati con il software di calcolo:

- la riduzione del momento flettente è un chiaro effetto della rimozione dell'ipotesi di presenza di infiniti traversi rigidi a flessione in quanto la ripartizione trasversale dei carichi è fortemente condizionata proprio dalla rigidità dei traversi stessi. Nel modello agli elementi finiti invece i carichi agenti si ripartiscono sulle travi in base alle effettive rigidità del graticcio con conseguente riduzione dei valori esterni della sollecitazione nella trave di bordo;
- si osserva la diminuzione delle reazioni verticali, che al limite possono divenire negative, in corrispondenza degli angoli acuti;
- si osserva l'aumento delle reazioni e del taglio in corrispondenza degli angoli ottusi;
- si osserva l'aumento considerevole degli sforzi di torsione nelle travi e nei traversi.

Si conferma pertanto l'attendibilità dei risultati ottenuti con il modello tridimensionale agli elementi finiti:

5.4 VERIFICHE DELLA TRAVE PRINCIPALE A SEZIONE MISTA

La verifica della sezione mista per la trave principale di riva viene elaborata attraverso il software di calcolo denominato ImpalcatoGraticcioSuite, che permette l’inserimento delle caratteristiche geometriche della sezione in acciaio, della soletta ed i coeff. di omogeneizzazione per tenere in conto di tutte le fasi presenti.

Il metodo che si segue è il metodo elastico per sovrapposizione di tensioni tenendo conto delle fasi di costruzione.

A seguire si riportano i risultati di verifica della trave di riva, ovvero la trave che risulta maggiormente sollecitata.

5.4.1 Caratteristiche della sezione tipo

ZONA DI APPOGGIO – primo quarto di trave – Concio 1 – luce di calcolo totale 24.80 m

Sezione di verifica SA1



DATI SEZIONE	
Sezione	SA1
Concio metallico	C1
Soletta	S1
Area barre in acciaio: Af (mm ²)	3658.0

SOLETTA A T	
Larghezza collaborante soletta in cls: B...	2376.0
Spessore soletta in cls: H (mm)	270.0
Spessore soletta in cls: h (mm)	0.0
Larghezza soletta in cls: b (mm)	0.0
Larghezza pioli: b0 (mm)	0.0

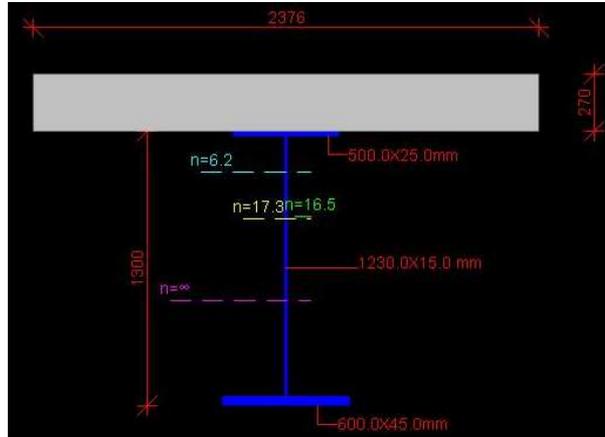
TRAVE METALLICA A DOPPIO T	
Larghezza ala superiore: bs (mm)	500.0
Spessore ala superiore: ts (mm)	25.0
Spessore anima trave: tw (mm)	15.0
Altezza totale trave: H (mm)	1300.0
Larghezza ala inferiore trave in acciaio:...	500.0
Spessore ala inferiore trave in acciaio: ...	35.0

CARATTERISTICHE SEZIONI	n0 = inf.	n1 = 6.2	n2 = 17.3	n3 = 16.5	n4 = 1.0E22
A (mm ²)	48.600	155.728,968	89.340,081	91.138	52.258
yg (mm)	711,872	129,293	325,689	316,601	652,592
J (mm ⁴)	14.281.194.609,053	38.887.604.940,139	30.401.002.343,426	30.785.977.433,211	16.721.044.867,006
Jw (mm ⁴)	11.145.000	1.268.317.258,065	461.692.283,237	483.537.000	11.145.000
A(-) (mm ²)	48.600	52.258	52.258	52.258	52.258
yg(-) (mm)	711,872	652,592	652,592	652,592	652,592
J(-) (mm ⁴)	14.281.194.609,053	16.721.044.867,006	16.721.044.867,006	16.721.044.867,006	16.721.044.867,006
Jw(-) (mm ⁴)	11.145.000	1.268.317.258,065	461.692.283,237	483.537.000	11.145.000

La sezione metallica risulta essere di classe 3

ZONA DI MEZZERIA –parte di mezzeria della trave – Concio 2– luce di calcolo totale 24.80 m

Sezione di verifica SA2



DATI SEZIONE

Sezione: SA2

Concio metallico: C2

Soletta: S2

Area barre in acciaio: Af (mm²): 3658.0

SOLETTA A T

Larghezza collaborante soletta in cls: B...	2376.0
Spessore soletta in cls: H (mm)	270.0
Spessore soletta in cls: h (mm)	0.0
Larghezza soletta in cls: b (mm)	0.0
Larghezza pioli: b0 (mm)	0.0

TRAVE METALLICA A DOPPIO T

Larghezza ala superiore: bs (mm)	500.0
Spessore ala superiore: ts (mm)	25.0
Spessore anima trave: tw (mm)	15.0
Altezza totale trave: H (mm)	1300.0
Larghezza ala inferiore trave in acciaio:...	600.0
Spessore ala inferiore trave in acciaio: ...	45.0

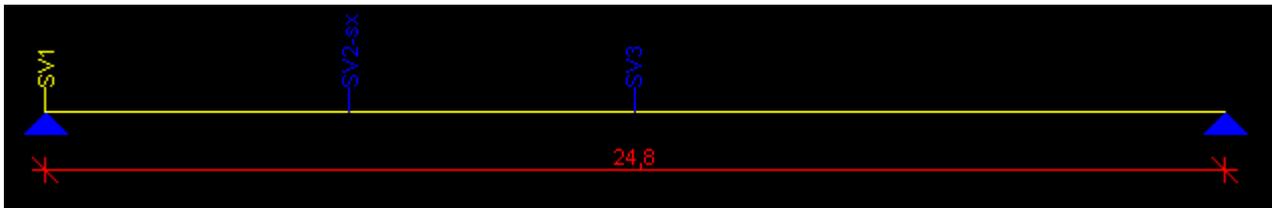
CARATTERISTICHE SEZIONI:	n0 = inf.	n1 = 6.2	n2 = 17.3	n3 = 16.5	n4 = 1.0E22
A (mm ²)	57.950	165.078,968	98.690,081	100.488	61.608
Yg (mm)	801,67	193,812	415,005	405,164	746,054
J (mm ⁴)	16.711.571,388,41	50.334.647,028,961	37.925.017,285,952	38.470.088,263,952	19.730.360,872,289
Jw (mm ⁴)	22.212.916,667	1.279.385.174,731	472.760.199,904	494.604.916,667	22.212.916,667
A(-) (mm ²)	57.950	61.608	61.608	61.608	61.608
Yg(-) (mm)	801,67	746,054	746,054	746,054	746,054
J(-) (mm ⁴)	16.711.571,388,41	19.730.360,872,289	19.730.360,872,289	19.730.360,872,289	19.730.360,872,289
Jw(-) (mm ⁴)	22.212.916,667	1.279.385.174,731	472.760.199,904	494.604.916,667	22.212.916,667

5.4.2 Verifica delle tensioni statiche e di fatica SLU

La verifica della sezione tipo viene impostata su tre punti:

- 1- SV1 – sezione di verifica 1 - Punto di appoggio – la sezione è caratterizzata dal concio 1 – sezione tipo SA1.
- 2- SV2 – sezione di verifica 2 - Punto di giunto tra concio 1 e concio 2 – la sezione di verifica che si prende in considerazione è quella del concio 1 andando a favore di sicurezza. – sezione tipo SA1.
- 3- SV3 – sezione di verifica 3 - Punto di mezzeria – la sezione è caratterizzata dal concio 2 – sezione tipo SA2.

SEZIONE DI VERIFICA SV1



DATI SEZIONE VERIFICA	
Sezione	SV1
Concio metallico	C1
Soletta in c.a.	S1
Ascissa di verifica sezione: x(m)	0.0
Area armatura: A(mm ²)	3658.0

CONDIZIONI DI CARICO						
Cond.	n	N (kN)	V (kN)	M (kNm)	σ_{cls} (kN)	Mtor(kNm)
F0	0	0	415	-30	0	0
F1B	2	0	220	-15	0	0
F1C	3	2.560	0	1.155	-3,151	0
F2	1	0	730	-55	0	0
F2_fat_1	1	0	230	-20	0	0
F1A	1	0	220	-15	0	0

Dove: F0 – fase 0; F1A – fase 1a; F1B – fase 1b; F1C – fase 1c; F2 – fase 2; F2_fat1 – fase 2 per carico fatica 1.

Si fa notare che le sollecitazioni sono riferite alle combinazioni SLU_STR_ENV (F0,F1A, F1B, F1C, F2) e SL_FAT1_ENV (F2_fat_1).

Inoltre, il significato dei simboli delle sollecitazioni e le convenzioni sui segni seguono le seguenti regole:

- La forza assiale N (kN), positiva se di compressione;
- L'azione tagliante verticale V (kN);
- Il momento flettente M (kNm), positivo se tende le fibre inferiori;
- La tensione di deformazione impedita nel calcestruzzo, σ_{cls} (MPa), positiva se di compressione, relative alle condizioni di carico autoequilibrate come ritiro;

- Il momento torcente M_{tor} (kNm), solo per sezioni scatolari chiuse.

COMBINAZIONI DI CARICO									
Condizione	SLU_t,inf	F0	F1B	F1C	F2	F2_fat_1	SLU_t,iniz.	F1A	
F0	1	1	0	0	0	0	1	0	0
F1B	1	0	1	0	0	0	0	0	0
F1C	1	0	0	1	0	0	0	0	0
F2	1	0	0	0	1	0	0	1	0
F2_fat_1	0	0	0	0	0	1	1	0	0
F1A	0	0	0	0	0	0	0	1	1

Si tengono in considerazione i due istanti di verifica: quella allo stato iniziale SLU_t,iniz. (a maturazione della soletta) e quella allo stato finale SLU_t,inf (a tempo infinito tenendo conto dei fenomeni lenti)

SLU_t,iniz. → F0 + F1A + F2

SLU_t,inf → F0 + F1B + F1C + F2

SLU_fatica 1 → F2_fat_1

Si fa notare che le oscillazioni di tensione per fatica sono prodotte solo dai carichi di fatica e non da altri carichi.

Cond.	σ_c (MPa)	σ_f (MPa)	σ_{ss} (MPa)	σ_s (MPa)	σ_i (MPa)	σ_{ii} (MPa)	t_s (MPa)	t_i (MPa)	σ_{ids} (MPa)	σ_{idi} (MPa)
F0	0.0	0.0	-1.5	-1.4	1.2	1.2	16.9	19.3	29.4	33.5
F1A	-0.1	-0.7	-0.6	-0.6	0.5	0.6	9.5	9.7	16.5	16.8
F1B	0.0	-0.7	-0.6	-0.6	0.5	0.6	9.5	9.7	16.5	16.8
F1C	-0.1	45.0	40.0	39.0	-7.5	-8.8	0.0	0.0	39.0	7.5
F2	-0.5	-2.6	-2.1	-2.1	2.0	2.1	31.7	32.1	54.9	55.6
F2_fat_1	-0.2	-0.9	-0.8	-0.8	0.7	0.8	10.0	10.1	17.3	17.5
SLU_t,iniz.	-0.6	-3.3	-4.2	-4.1	3.7	3.9	58.2	61.1	100.8	105.9
SLU_t,inf	-0.2	44.4	38.1	37.3	-4.3	-5.4	65.1	52.7	118.8	91.3

Nella tabella superiore sono riportate le tensioni presenti nella sezione di verifica soggetta alle sollecitazioni di progetto.

σ_c – tensione nel cls

σ_f – tensione nelle barre di armatura

σ_{ss} – tensione nell’estradosso della piattabanda sup. della sezione metallica

σ_s – tensione nell’intradosso della piattabanda sup. della sezione metallica

σ_i – tensione nell’estradosso della piattabanda inf. della sezione metallica

σ_{ii} – tensione nell’intradosso della piattabanda inf. della sezione metallica

t_s – tensione di taglio dell’anima nella parte di estradosso della sezione metallica

t_i – tensione di taglio dell’anima nella parte di intradosso della sezione metallica

σ_{ids} – tensione ideale (von mises) nell’estradosso della piattabanda sup. della sezione metallica

σ_{idi} – tensione ideale (von mises) nell’intradosso della piattabanda inf. della sezione metallica

Si può notare che nella colonne relative alle tensioni sopra esposte, non si oltrepassa mai le tensioni di progetto :

- Resistenza di progetto acciaio da carpenteria - tensione normale:
 - o per $t \leq 40$ mm: $f_{yd} = f_{yk} / 1.05 = 355 / 1.05 = 338$ MPa;
 - o per 40 mm $< t \leq 80$ mm: $f_{yd} = f_{yk} / 1.05 = 335 / 1.05 = 319$ MPa.
- Resistenza di progetto acciaio da carpenteria - tensione di taglio:
 - o per $t \leq 40$ mm: $\tau_{yd} = f_{yk} / ((3^{0.5}) * 1.05) = 355 / ((3^{0.5}) * 1.05) = 195.2$ MPa;
 - o per 40 mm $< t \leq 80$ mm: $\tau_{yd} = f_{yk} / ((3^{0.5}) * 1.05) = 335 / ((3^{0.5}) * 1.05) = 184.2$ MPa.
- Resistenza di progetto a compressione: $f_{cd} = 0.85 * f_{ck} / 1.50 = 0.85 * 35 / 1.05 = 19.8$ MPa.
- Resistenza di progetto armatura c.a.: $f_{yd} = f_{yk} / 1.15 = 430 / 1.15 = 373.4$ MPa.

Si può osservare anche che per ogni fase esecutiva la trave risulta essere sempre verificata.

Le verifiche a fatica sono condotte a vita illimitata adottando il modello di carico a fatica 1.

Per la verifica a fatica dei dettagli di carpenteria, si prendono in esame i dettagli elencati alla categoria/numero dettaglio dedotti dalle rispettive tabelle delle NTC2018 + Circ. 2019:

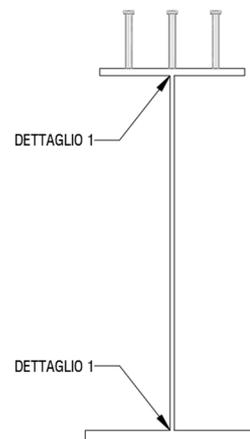
Riferimento NTC 2018 + CIRC. 2019	Classe di dettaglio	Dettaglio costruttivo	Descrizione dettaglio	ks (-)	$\Delta\tau$ (MPa)	γ_m (-)	$\Delta\tau_D$ (MPa)
tab. C4.2.XV	80	dett. 8	Saldatura longitudinale piattabande- anima concio 1, 2 e 3	1.0	80.0	1.35	43.7

DETTAGLIO 1 - saldatura longitudinale anima-piattabanda superiore

$\Delta\tau_{am,1}$ (N/mm ²) =	80.0	tab. C4.2.XV
γ_m (-) =	1.35	strutture sensibili + cons. significative
$\Delta\tau_D$ (N/mm ²) =	43.7	limite di fatica ad ampiezza costante
$\Delta\tau$ (N/mm ²) =	10.1	Verifica soddisfatta

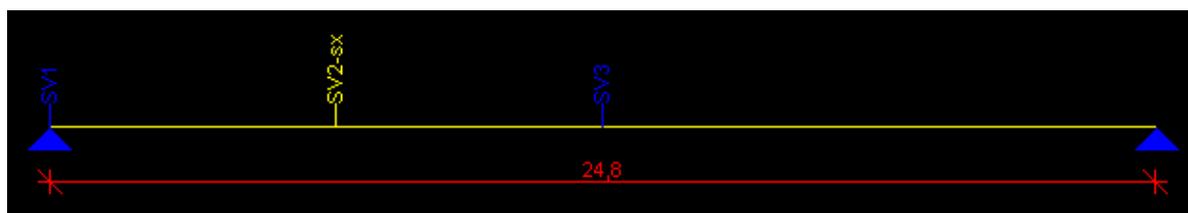
DETTAGLIO 1 - saldatura longitudinale anima-piattabanda inferiore

$\Delta\tau_{am,1}$ (N/mm ²) =	80.0	tab. C4.2.XV
γ_m (-) =	1.35	strutture sensibili + cons. significative
$\Delta\tau_D$ (N/mm ²) =	43.7	limite di fatica ad ampiezza costante
$\Delta\tau$ (N/mm ²) =	10.1	Verifica soddisfatta



Le tensioni prodotte da carichi di fatica sono inferiori a tali limiti. Pertanto la verifica a fatica si ritiene soddisfatta.

SEZIONE DI VERIFICA SV2



DATI SEZIONE VERIFICA	
Sezione	SV2-sx
Concio metallico	C2
Soletta in c.a.	S2
Ascissa di verifica sezione: x(m)	6.4
Area armatura: A(mm ²)	3658.0

CONDIZIONI DI CARICO							
Cond.	n	N (kN)	V (kN)	M (kNm)	σcls(kN)	Mtor(kNm)	
F0	0	0	0	200	1.960	0	0
F1B	2	0	0	100	1.050	0	0
F1C	3	2.560	0	0	1.155	-3,151	0
F2	1	0	0	450	3.815	0	0
F2_fat_1	1	0	0	165	1.330	0	0
F1A	1	0	0	100	1.020	0	0

Dove: F0 – fase 0; F1A – fase 1a; F1B – fase 1b; F1C – fase 1c; F2 – fase 2; F2_fat1 – fase 2 per carico fatica 1.

Si fa notare che le sollecitazioni sino riferite alla combinazione SLU_STR_ENV.

COMBINAZIONI DI CARICO								
Condizione	SLU_t,inf	F0	F1B	F1C	F2	F2_fat_1	SLU_t,iniz.	F1A
F0	1	1	0	0	0	0	0	1
F1B	1	0	1	0	0	0	0	0
F1C	1	0	0	1	0	0	0	0
F2	1	0	0	0	1	0	0	1
F2_fat_1	0	0	0	0	0	1	0	0
F1A	0	0	0	0	0	0	1	1

Si tengono in considerazione i due istanti di verifica: quella allo stato iniziale SLU_t,iniz. (a maturazione della soletta) e quella allo stato finale SLU_t,inf (a tempo infinito tenendo conto dei fenomeni lenti)

SLU_t,iniz. → F0 + F1A + F2

SLU_t,inf → F0 + F1B + F1C + F2

SLU_fatica 1 → F2_fat_1

Si fa notare che le oscillazioni di tensione per fatica sono prodotte solo dai carichi di fatica e non da altri carichi.

Cond.	σ _c (MPa)	σ _i (MPa)	σ _{ss} (MPa)	σ _s (MPa)	σ _i (MPa)	σ _{ii} (MPa)	t _s (MPa)	t _i (MPa)	σ _{ids} (MPa)	σ _{idi} (MPa)
F0	0.0	0.0	94.0	91.1	-53.2	-58.4	7.9	10.3	92.1	56.1
F1A	1.5	6.7	3.9	3.4	-21.5	-22.4	5.0	3.9	9.3	22.5
F1B	1.1	15.2	11.5	10.8	-23.3	-24.5	4.8	4.1	13.7	24.3
F1C	-0.4	41.7	37.6	36.9	0.0	-1.4	0.0	0.0	36.9	0.0
F2	5.7	24.9	14.7	12.8	-80.4	-83.8	22.3	17.4	40.8	85.9
F2 fat 1	2.0	8.7	5.1	4.5	-28.0	-29.2	8.2	6.4	14.9	30.1
SLU_t,iniz.	7.2	31.6	112.6	107.3	-155.1	-164.7	35.2	31.6	123.4	164.5
SLU_t,inf	6.4	81.8	157.8	151.6	-156.9	-168.2	35.0	31.8	163.3	166.3

Nella tabella superiore sono riportate le tensioni presenti nella sezione di verifica soggetta alle sollecitazioni di progetto.

σ_c – tensione nel cls

σ_f – tensione nelle barre di armatura

σ_{ss} – tensione nell’estradosso della piattabanda sup. della sezione metallica

σ_s – tensione nell’intradosso della piattabanda sup. della sezione metallica

σ_i – tensione nell’estradosso della piattabanda inf. della sezione metallica

σ_{ii} – tensione nell’intradosso della piattabanda inf. della sezione metallica

τ_s – tensione di taglio dell’anima nella parte di estradosso della sezione metallica

τ_i – tensione di taglio dell’anima nella parte di intradosso della sezione metallica

σ_{ids} – tensione ideale (von mises) nell’estradosso della piattabanda sup. della sezione metallica

σ_{idi} – tensione ideale (von mises) nell’intradosso della piattabanda inf. della sezione metallica

Si può notare che nella colonne relative alle tensioni sopra esposte, non si oltrepassa mai la tensione di snervamento che è pari a :

- Tensione normale:
 - o per $t \leq 40$ mm: $f_{yd} = f_{yk} / 1.05 = 355/1.05 = 338$ MPa;
 - o per 40 mm $< t \leq 80$ mm: $f_{yd} = f_{yk} / 1.05 = 335/1.05 = 319$ MPa.
- Tensione di taglio:
 - o per $t \leq 40$ mm: $\tau_{yd} = f_{yk} / ((3^{0.5}) * 1.05) = 355 / ((3^{0.5}) * 1.05) = 195.2$ MPa;
 - o per 40 mm $< t \leq 80$ mm: $\tau_{yd} = f_{yk} / ((3^{0.5}) * 1.05) = 335 / ((3^{0.5}) * 1.05) = 184.2$ MPa

Si può osservare anche che per ogni fase esecutiva la trave risulta essere sempre verificata.

Le verifiche a fatica sono condotte a vita illimitata adottando il modello di carico a fatica 1 e il modello di carico a fatica 2.

Le verifiche a fatica sono condotte a vita illimitata adottando il modello di carico a fatica 1.

Per la verifica a fatica dei dettagli di carpenteria, si prendono in esame i dettagli elencati alla categoria/numero dettaglio dedotti dalle rispettive tabelle delle NTC2018 + Circ. 2019:

Rif. NTC 2018 + CIRC. 2019	Classe di dettaglio	Dettaglio costruttivo	Descrizione dettaglio	ts (mm)	ks (-)	$\Delta\sigma$ (MPa)	γ_m (-)	$\Delta\sigma_D$ (MPa)
tab. C4.2.XIV	90	dett. 7	Saldatura trasversali piattabande inferiori concio 1- concio 2 e concio 2 concio 3	35	0.9	84.1	1.35	45.9
tab. C4.2.XIV	71	dett. 13	Saldatura trasversali piattabande superiori concio 1- concio 2 e concio 2 concio 3	25	1.0	71.0	1.35	38.8

Riferimento NTC 2018 + CIRC. 2019	Classe di dettaglio	Dettaglio costruttivo	Descrizione dettaglio	ks (-)	$\Delta\tau$ (MPa)	γ_m (-)	$\Delta\tau_D$ (MPa)
tab. C4.2.XV	80	dett. 8	Saldatura longitudinale piattabande-anima concio 1, 2 e 3	1.0	80.0	1.35	43.7

DETTAGLIO 1 - saldatura longitudinale anima-piattabanda superiore

$\Delta\tau_{am,1}$ (N/mm²) = 80.0 tab. C4.2.XV
 γ_m (-) = 1.35 strutture sensibili + cons. significative
 $\Delta\tau_D$ (N/mm²) = 43.7 limite di fatica ad ampiezza costante
 $\Delta\tau$ (N/mm²) = 8.2 Verifica soddisfatta

DETTAGLIO 1 - saldatura longitudinale anima-piattabanda inferiore

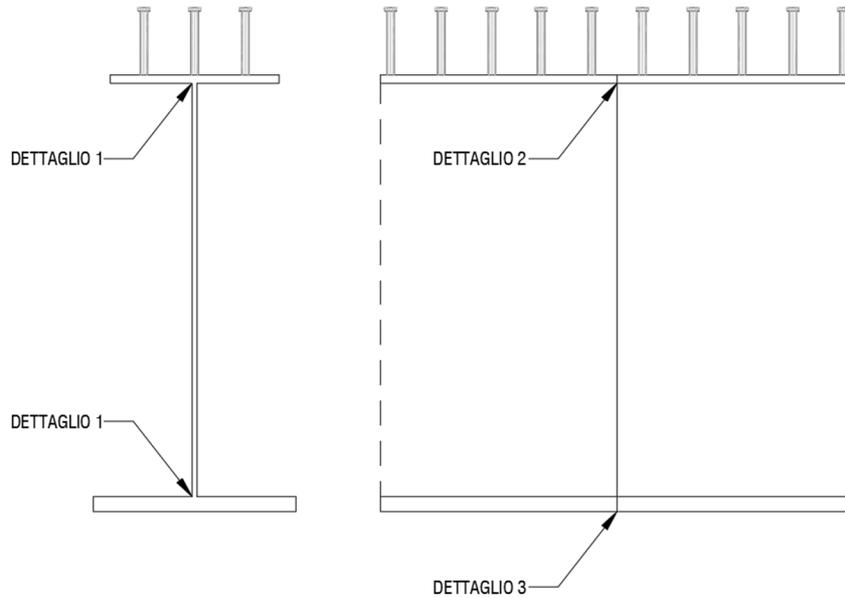
$\Delta\tau_{am,1}$ (N/mm²) = 80.0 tab. C4.2.XV
 γ_m (-) = 1.35 strutture sensibili + cons. significative
 $\Delta\tau_D$ (N/mm²) = 43.7 limite di fatica ad ampiezza costante
 $\Delta\tau$ (N/mm²) = 6.4 Verifica soddisfatta

DETTAGLIO 2 - saldatura trasversale a piena penetrazione su piattabande superiori

$\Delta\sigma_{am,3}$ (N/mm²) = 71.0 tab. C4.2.XIV
 γ_m (-) = 1.35 strutture sensibili + cons. significative
 $\Delta\sigma_D$ (N/mm²) = 38.8 limite di fatica ad ampiezza costante
 $\Delta\sigma$ (N/mm²) = 5.1 Verifica soddisfatta

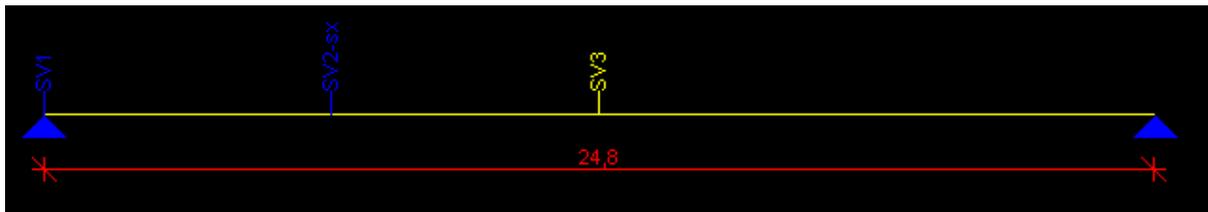
DETTAGLIO 3 - saldatura trasversale a piena penetrazione su piattabande inferiori

$\Delta\sigma_{am,3}$ (N/mm²) = 84.1 tab. C4.2.XIV
 γ_m (-) = 1.35 strutture sensibili + cons. significative
 $\Delta\sigma_D$ (N/mm²) = 45.9 limite di fatica ad ampiezza costante
 $\Delta\sigma$ (N/mm²) = 29.2 Verifica soddisfatta



Le tensioni prodotte da carichi di fatica sono inferiori a tali limiti. Pertanto la verifica a fatica si ritiene soddisfatta.

SEZIONE DI VERIFICA SV3



DATI SEZIONE VERIFICA	
Sezione	SV3
Concio metallico	C2
Soletta in c.a.	S2
Ascissa di verifica sezione: x(m)	12.4
Area armatura: A(mm²)	3658.0

CONDIZIONI DI CARICO						
Cond.	n	N (kN)	V (kN)	M (kNm)	ocls(kN)	Mtor(kNm)
F0	0	0	0	20	2.415	0
F1B	2	0	10	1.250	0	0
F1C	3	2.560	0	1.390	-3,151	0
F2	1	0	190	4.690	0	0
F2_fat_1	1	0	95	1.660	0	0
F1A	1	0	10	1.250	0	0

Dove: F0 – fase 0; F1A – fase 1a; F1B – fase 1b; F1C – fase 1c; F2 – fase 2; F2_fat1 – fase 2 per carico fatica.

COMBINAZIONI DI CARICO								
Condizione	SLU_t,inf	F0	F1B	F1C	F2	F2_fat_1	SLU_t,inz.	F1A
F0	1	1	0	0	0	0	1	0
F1B	1	0	1	0	0	0	0	0
F1C	1	0	0	1	0	0	0	0
F2	1	0	0	0	1	0	1	0
F2_fat_1	0	0	0	0	0	1	0	0
F1A	0	0	0	0	0	0	1	1

Si fa notare che le sollecitazioni sino riferite alla combinazione SLU_STR_ENV.

Si tengono in considerazione i due istanti di verifica: quella allo stato iniziale SLU_{t,iniz.} (a maturazione della soletta) e quella allo stato finale SLU_{t,inf} (a tempo infinito tenendo conto dei fenomeni lenti)

$$SLU_{t,iniz.} \rightarrow F0 + F1A + F2$$

$$SLU_{t,inf} \rightarrow F0 + F1B + F1C + F2$$

$$SLU_{fatica\ 1} \rightarrow F2_{fat_1}$$

Si fa notare che le oscillazioni di tensione per fatica sono prodotte solo dai carichi di fatica e non da altri carichi.

Cond.	σ_c (MPa)	σ_f (MPa)	σ_{ss} (MPa)	σ_s (MPa)	σ_i (MPa)	σ_{ii} (MPa)	t_s (MPa)	t_i (MPa)	σ_{ids} (MPa)	σ_{idi} (MPa)
F0	0.0	0.0	115.8	112.2	-65.5	-72.0	0.8	1.0	112.2	65.5
F1A	1.9	8.2	4.8	4.2	-26.4	-27.5	0.5	0.4	4.3	26.4
F1B	1.3	18.1	13.7	12.9	-27.7	-29.2	0.5	0.4	12.9	27.7
F1C	-0.1	45.0	40.1	39.2	-5.2	-6.9	0.0	0.0	39.2	5.2
F2	7.0	30.6	18.1	15.7	-98.9	-103.1	9.4	7.4	22.7	99.7
F2 _{fat_1}	2.5	10.8	6.4	5.6	-35.0	-36.5	4.7	3.7	9.9	35.6
SLU _{t,iniz.}	8.8	38.8	138.7	132.2	-190.7	-202.6	10.7	8.8	133.5	191.3
SLU _{t,inf}	8.1	93.8	187.7	180.0	-197.3	-211.1	10.7	8.8	181.0	197.9

Nella tabella a fianco sono riportate le tensioni presenti nella sezione di verifica soggetta alle sollecitazioni di progetto.

σ_c – tensione nel cls

σ_f – tensione nelle barre di armatura

σ_{ss} – tensione nell'estradosso della piattabanda sup. della sezione metallica

σ_s – tensione nell'intradosso della piattabanda sup. della sezione metallica

σ_i – tensione nell'estradosso della piattabanda inf. della sezione metallica

σ_{ii} – tensione nell'intradosso della piattabanda inf. della sezione metallica

t_s – tensione di taglio dell'anima nella parte di estradosso della sezione metallica

t_i – tensione di taglio dell'anima nella parte di intradosso della sezione metallica

σ_{ids} – tensione ideale (von mises) nell'estradosso della piattabanda sup. della sezione metallica

σ_{idi} – tensione ideale (von mises) nell'intradosso della piattabanda inf. della sezione metallica

Si può notare che nella colonne relative alle tensioni sopra esposte, non si oltrepassa mai la tensione di snervamento che è pari a :

- Tensione normale:
 - o per $t \leq 40$ mm: $f_{yd} = f_{yk} / 1.05 = 355/1.05 = 338$ MPa;
 - o per 40 mm $< t \leq 80$ mm: $f_{yd} = f_{yk} / 1.05 = 335/1.05 = 319$ MPa.

- Tensione di taglio:
 - o per $t \leq 40$ mm: $\tau_{yd} = f_{yk} / ((3^{0.5}) * 1.05) = 355 / ((3^{0.5}) * 1.05) = 195.2$ MPa;
 - o per $40 \text{ mm} < t \leq 80$ mm: $\tau_{yd} = f_{yk} / ((3^{0.5}) * 1.05) = 335 / ((3^{0.5}) * 1.05) = 184.2$ MPa

Si può osservare anche che per ogni fase esecutiva la trave risulta essere sempre verificata.

Le verifiche a fatica sono condotte a vita illimitata adottando il modello di carico a fatica 1.

Per la verifica a fatica dei dettagli di carpenteria, si prendono in esame i dettagli elencati alla categoria/numero dettaglio dedotti dalle rispettive tabelle delle NTC2018 + Circ. 2019:

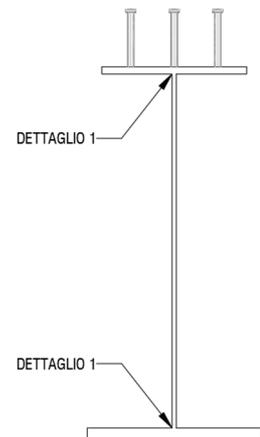
Riferimento NTC 2018 + CIRC. 2019	Classe di dettaglio	Dettaglio costruttivo	Descrizione dettaglio	ks (-)	$\Delta\tau$ (MPa)	γ_m (-)	$\Delta\tau_D$ (MPa)
tab. C4.2.XV	80	dett. 8	Saldatura longitudinale piattabande- anima concio 1, 2 e 3	1.0	80.0	1.35	43.7

DETTAGLIO 1 - saldatura longitudinale anima-piattabanda superiore

$\Delta\tau_{am,1}$ (N/mm ²) =	80.0	tab. C4.2.XV
γ_m (-) =	1.35	strutture sensibili + cons. significative
$\Delta\tau_D$ (N/mm ²) =	43.7	limite di fatica ad ampiezza costante
$\Delta\tau$ (N/mm ²) =	4.7	Verifica soddisfatta

DETTAGLIO 1 - saldatura longitudinale anima-piattabanda inferiore

$\Delta\tau_{am,1}$ (N/mm ²) =	80.0	tab. C4.2.XV
γ_m (-) =	1.35	strutture sensibili + cons. significative
$\Delta\tau_D$ (N/mm ²) =	43.7	limite di fatica ad ampiezza costante
$\Delta\tau$ (N/mm ²) =	3.7	Verifica soddisfatta



Le tensioni prodotte da carichi di fatica sono inferiori a tali limiti. Pertanto la verifica a fatica si ritiene soddisfatta.

5.4.3 Verifica di instabilità dell'anima per taglio

Le anime delle travi sono irrigidite da irrigidimenti a tutta altezza, di sezione 200 mm x 12 mm, posti a interasse di 2500 mm su entrambi i lati dell'anima.

SV1 – APPOGGI (concio 1)

Trave -T5	Sollecitazioni		
	N (kN)	V (kN)	M (kNm)
t=0	0	1365	-100
t=inf.	2560	1365	1055

Trave - T3	Sollecitazioni		
	N (kN)	V (kN)	M (kNm)
t=0	0	1535	-173
t=inf.	2560	1535	982

Si riporta di seguito la verifica dell'anima del concio C1 della trave di riva (T5):

Caratteristiche di sollecitazione

N_{Ed}	2560 kN	Sforzo normale di progetto
M_{Ed}	1055 kNm	Momento flettente di progetto
V_{Ed}	1365 kN	Taglio di progetto

Caratteristiche profilo - sezione SV1, concio C1

h_w	1240 mm	Altezza pannello d'anima
$b_{f\sup/inf}$	500 mm	Larghezza piattabanda superiore e inferiore
$t_{f\sup}$	25 mm	Spessore piattabanda superiore
$t_{f\inf}$	35 mm	Spessore piattabanda inferiore
t_w	15 mm	Spessore anima
h	1300 mm	Altezza profilo
t_f	25 mm	Spessore piattabanda
b_f	305.1 mm	Larghezza ala con limite L1
$L1 = 15 \varepsilon t_f$	305.1 mm	Limitazione larghezza ala
A_f	7627.7 mm ²	Area efficace flangia con spessore minore
h_f	1270 mm	Distanza baricentro piattabande
$\alpha = a/h_w$	2.0 -	
h_w / t_w	82.7 -	Verifica a taglio per fenomeni di instabilità locale necessaria

Caratteristiche irrigidimenti

a	2500 mm	Passo irrigidimenti trasversali
	Assenza di	Irrigidimenti longitudinali

Caratteristiche acciaio da carpenteria

f_{yk}	355 N/mm ²	Tensione di snervamento
f_{yw}	355 N/mm ²	Tensione di snervamento pannello d'anima
f_{yf}	355 N/mm ²	Tensione di snervamento pannello piattabanda

Coefficienti di normativa - NTC2018 + CRIC.2019

γ_{M0}	1.05 -	Coeff. resistenza sezioni classi 1-2-3-4
γ_{M1}	1.10 -	Coeff. resistenza instabilità ponti stradali e ferroviari
Stabilità dei pannelli soggetti a taglio		
κ_{τ}	6.32 -	Coefficiente di instabilità per taglio
k_{tl}	0.00 -	(nessun irrigidimento longitudinale)
$(72/\eta)\varepsilon$	48.82 -	
η	1.2 -	
ε	0.814 -	
λ_w	1.08 -	Parametro di snellezza
τ_{cr}	175.83 N/mm ²	Tensione tangenziale critica
σ_E	27.80 N/mm ²	Tensione tangenziale critica euleriana
χ_{w1}	0.77 -	Montanti d'appoggio rigidi
χ_{w2}	0.77 -	Altri casi
$M_{f,red}$	1649.6 kNm	Momento resistente plastico efficace delle ali
$M_{f,k}$	3275.2 kNm	Momento resistente delle ali
$V_{bw,Rd}$	2663.7 kN	Contributo resistente dell'anima
$V_{bf,Rd}$	33.7 kN	Contributo resistente delle piattabande
		Resistenza all'instabilità per taglio del pannello d'anima privo di irrigidimenti
$V_{b,Rd}$	2697.4 kN	intermedi
V_{Ed}	1365 kN	Taglio di progetto
$V_{Ed} / V_{b,Rd}$	0.51 < 1	<u>Verificato</u>

Si riporta di seguito la verifica dell'anima del concio C1 della trave di spina più sollecitata (T3):

Caratteristiche di sollecitazione

N_{Ed}	2560 kN	Sforzo normale di progetto
M_{Ed}	982 kNm	Momento flettente di progetto
V_{Ed}	1535 kN	Taglio di progetto

Caratteristiche profilo - sezione SV1, concio C1

h_w	1240 mm	Altezza pannello d'anima
$b_{f,sup/inf}$	500 mm	Larghezza piattabanda superiore e inferiore
$t_{f,sup}$	25 mm	Spessore piattabanda superiore
$t_{f,inf}$	35 mm	Spessore piattabanda inferiore
t_w	15 mm	Spessore anima
h	1300 mm	Altezza profilo
t_f	25 mm	Spessore piattabanda
b_f	305.1 mm	Larghezza ala con limite L1
$L1 = 15 \varepsilon t_f$	305.1 mm	Limitazione larghezza ala
A_f	7627.7 mm ²	Area efficace flangia con spessore minore
h_f	1270 mm	Distanza baricentro piattabande
$\alpha = a/h_w$	2.0 -	
h_w / t_w	82.7 -	Verifica a taglio per fenomeni di instabilità locale necessaria

Caratteristiche irrigidimenti

a 2500 mm Passo irrigidimenti trasversali
Assenza di Irrigidimenti longitudinali

Caratteristiche acciaio da carpenteria

f_{yk} 355 N/mm² Tensione di snervamento
 f_{yw} 355 N/mm² Tensione di snervamento pannello d'anima
 f_{yf} 355 N/mm² Tensione di snervamento pannello piattabanda

Coefficienti di normativa - NTC2018 + CRIC.2019

γ_{M0} 1.05 - Coeff. resistenza sezioni classi 1-2-3-4
 γ_{M1} 1.10 - Coeff. resistenza instabilità ponti stradali e ferroviari

Stabilità dei pannelli soggetti a taglio

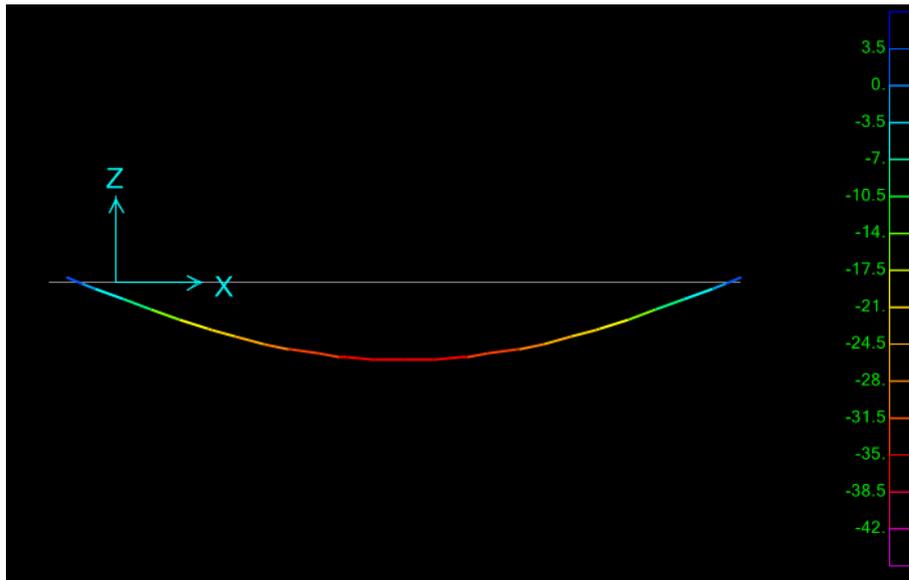
κ_{τ} 6.32 - Coefficiente di instabilità per taglio
 k_{tl} 0.00 - (nessun irrigidimento longitudinale)
 $(72/\eta)\epsilon$ 48.82 -
 η 1.2 -
 ϵ 0.814 -
 λ_w 1.08 - Parametro di snellezza
 τ_{cr} 175.83 N/mm² Tensione tangenziale critica
 σ_E 27.80 N/mm² Tensione tangenziale critica euleriana
 χ_{w1} 0.77 - Montanti d'appoggio rigidi
 χ_{w2} 0.77 - Altri casi
 $M_{f,red}$ 1649.6 kNm Momento resistente plastico efficace delle ali
 $M_{f,k}$ 3275.2 kNm Momento resistente delle ali
 $V_{bw,Rd}$ 2663.7 kN Contributo resistente dell'anima
 $V_{bf,Rd}$ 37.8 kN Contributo resistente delle piattabande
Resistenza all'instabilità per taglio del pannello d'anima privo di irrigidimenti intermedi
 $V_{b,Rd}$ 2701.5 kN
 V_{Ed} 1535 kN Taglio di progetto
 $V_{Ed} / V_{b,Rd}$ 0.57 < 1 Verificato

5.4.4 Verifica di deformabilità

La verifica di deformabilità è perfezionata in ottemperanza a quanto prescritto al p.ti 4.1.2.2.2 e 5.1.4.5 del D.M. 17.01.2018.

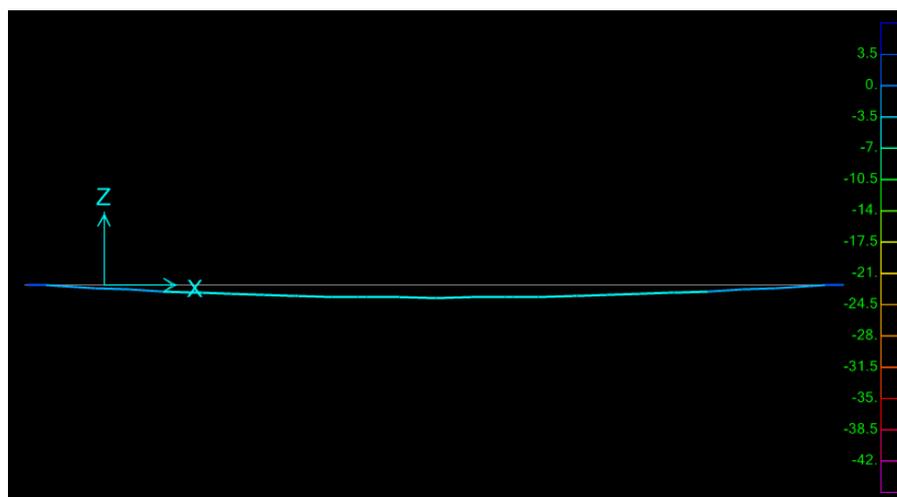
Le deformazioni qui esposte sono relative alla combinazione di involucro SLE_rara_ENV

FASE 0



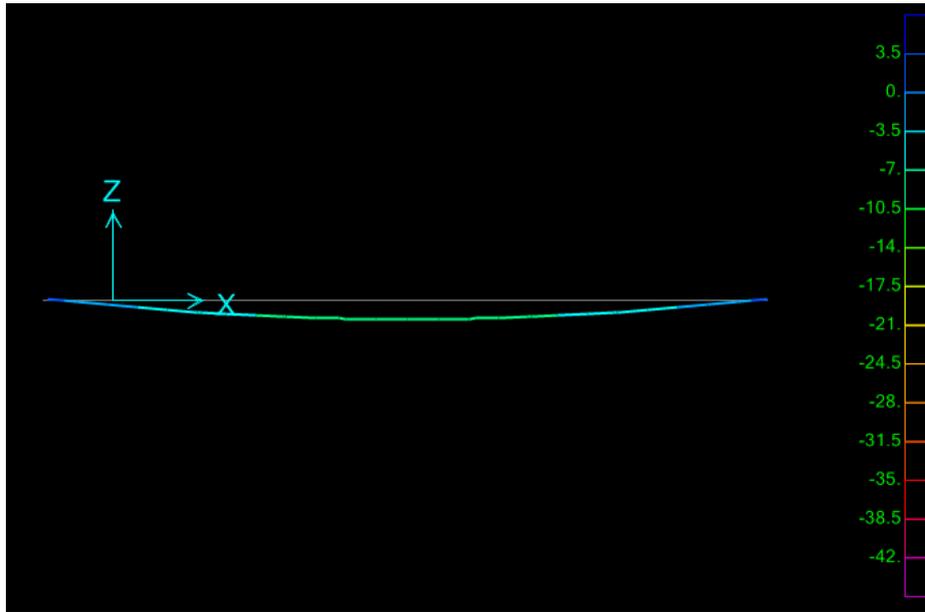
d max = 35.78 mm

FASE 1A



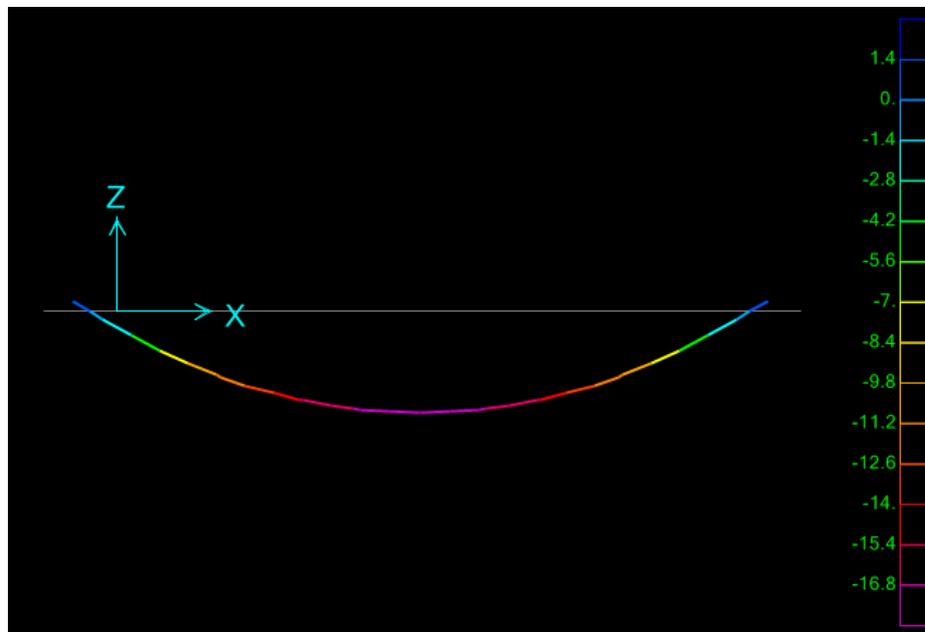
d max = 6.75 mm

FASE 1B



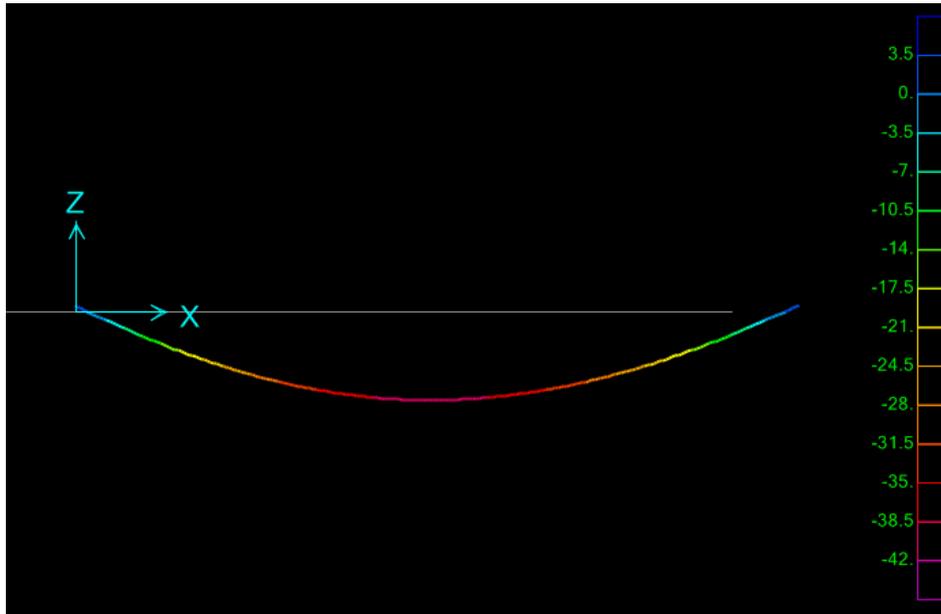
d max = 8.52 mm

FASE 1C



d max = 17.6 mm

FASE 2



$d_{max} = 39.7 \text{ mm}$

La freccia complessiva dovuta ai carichi permanenti vale quindi al tempo iniziale $t=0 \rightarrow F_0 + F_{1A} + F_2$

$$f_{per} = 35.78 + 6.75 = 42.5 \text{ mm} \rightarrow \text{pari a } L/583 < L/250$$

$$f_{var} = 39.7 \text{ mm} \rightarrow \text{pari a } L/624 < L/500$$

La freccia complessiva dovuta ai carichi permanenti vale quindi al tempo infinito $t=\infty \rightarrow F_0 + F_{1B} + F_{1C} + F_2$

$$f_{per} = 35.78 + 8.52 + 17.1 = 61.4 \text{ mm} \rightarrow \text{pari a } L/404 < L/250$$

$$f_{var} = 39.7 \text{ mm} \rightarrow \text{pari a } L/624 < L/500$$

5.4.5 Verifica a fessurazione

Per quanto riguarda la verifica SLE a fessurazione, si rileva che è omessa in quanto l'armatura in soletta è sempre in compressione.

5.4.6 Sollevamento impalcato

Il sollevamento dell'impalcato viene effettuato mediante disposizione di martinetti al di sotto delle cinque travi principali.

Lo schema di sollevamento dell'impalcato è rappresentato schematicamente nella figura seguente.

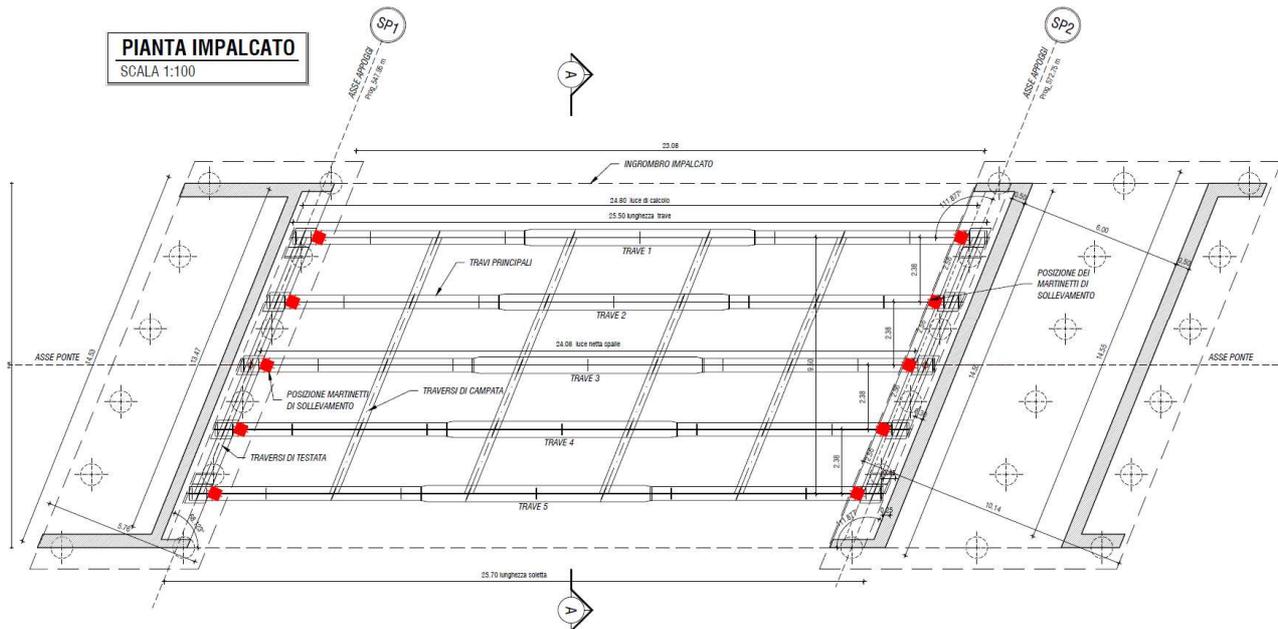


Figura 39 – Posizioni dispositivi di sollevamento (in rosso).

Le reazioni vincolari delle travi, ovvero la capacità portante dei martinetti, sono riportate nella tabella successiva:

<i>Reaz./Carico</i>	$R_{V,T1}$	$R_{V,T2}$	$R_{V,T3}$	$R_{V,T4}$	$R_{V,T5}$	Unità	Coeff. SLU
_G1 (fase 0)	338.0	297.5	295.9	297.5	336.4	kN	1.35
_G2 (fase 1)	155.6	137.0	135.9	137.0	155.4	kN	1.50
G1 + G2	493.6	434.5	431.9	434.5	491.7	kN	
SLU	689.7	607.2	603.4	607.2	687.1	kN	

I martinetti dovranno avere una capacità per carichi in condizione di esercizio almeno pari a 500 kN.

5.4.7 Verifica dei connettori di collegamento

I connettori di collegamento sono calcolati per resistere allo scorrimento all'interfaccia piattabanda superiore – soletta, valutata mediante la teoria elastica della trave.

Tali scorrimenti sono calcolati per combinazioni SLU ed è anche valutata la variazione di scorrimento indotta dai carichi di fatica e sono confrontati con quelli ammissibili per la configurazione di pioli adottata.

Le sezioni di verifica sono analoghe a quelle viste per le travi principali:

- 1- SV1 – sezione di verifica 1 - Punto di appoggio – la sezione è caratterizzata dal concio 1 – sezione tipo SA1.
- 2- SV2 – sezione di verifica 2 - Punto di giunto tra concio 1 e concio 2 – la sezione di verifica che si prende in considerazione è quella del concio 1 andando a favore di sicurezza. – sezione tipo SA1.
- 3- SV3 – sezione di verifica 3 - Punto di mezzeria – la sezione è caratterizzata dal concio 2 – sezione tipo SA2

Per semplicità di esposizione si riporta solo la verifica relativa alla sezione di verifica SV1, in quanto presenta lo sforzo di scorrimento massimo.

SEZIONE DI VERIFICA SV1

La sezione di verifica interessa in concio n. 1 e quindi la piolatura relativa → $\Phi 22/200$ mm

CONDIZIONI DI CARICO						
Cond.	n	N (kN)	V (kN)	M (kNm)	σ_{cls} (kN)	Mtor(kNm)
F0	0	0	0	415	-30	0
F1B	2	0	0	220	-15	0
F1C	3	2.560	0	0	1.155	-3,151
F2	1	0	0	730	-55	0
F2_fat_1	1	0	0	230	-20	0
F1A	1	0	0	220	-15	0

Dove: F0 – fase 0; F1A – fase 1a; F1B – fase 1b; F1C – fase 1c; F2 – fase 2; F2_fat1 – fase 2 per carico fatica 1.

Si fa notare che le sollecitazioni sono riferite alla combinazione SLU_STR_ENV.

COMBINAZIONI DI CARICO								
Condizione	SLU_t,inf	F0	F1B	F1C	F2	F2_fat_1	SLU_t,iniz.	F1A
F0	1	1	0	0	0	0	1	0
F1B	1	0	1	0	0	0	0	0
F1C	1	0	0	1	0	0	0	0
F2	1	0	0	0	1	1	0	1
F2_fat_1	0	0	0	0	0	1	0	0
F1A	0	0	0	0	0	0	1	1

Si tengono in considerazione i due istanti di verifica: quella allo stato iniziale SLU_t,iniz. (a maturazione della soletta) e quella allo stato finale SLU_t,inf (a tempo infinito tenendo conto dei fenomeni lenti)

SLU_t,iniz. → F0 + F1A + F2

SLU_t,inf → F0 + F1B + F1C + F2

SLU_fatica 1 → F2_fat_1

Si fa notare che le oscillazioni di tensione per fatica sono prodotte solo dai carichi di fatica e non da altri carichi.

Si riportano ora le azioni di scorrimento ottenute dalle sollecitazioni utilizzate per la verifica delle travi principali:

TENSIONI	
cond.	Fsc (kN/ml)
SLU_t,inf	667,32
F0	0
F1B	135,82
F1C	0
F2	531,5
F2_fat_1	167,459
SLU_t,iniz.	691,678
F1A	160,178

Per il calcolo dello sforzo di scorrimento resistente si fa riferimento al p.to 4.3.4.3.1.2 delle NTC/2018.

Diametro del piolo → $\Phi 22$ mm

Altezza tot. del piolo → h = 200 mm

ANALISI RESISTENZA DI PROGETTO PIOLATURA		
coeff. Di sicurezza	γ_v	1.25
Resist. Singolo piolo lato acc.	$P_{rd,a}$ [kN]	87.58
coeff.	α	1.00
Resist. Singolo piolo lato cls	$P_{rd,c}$ [kN]	106.80
Resist. Singolo piolo	P_{rd} [kN]	87.58
Taglio resist. Ultimo piolatura	$v_{l,rd}$ [kN/m]	1313.74

Si può osservare che lo sforzo di scorrimento resistente è maggiore di quello agente: pertanto la verifica si ritiene soddisfatta.

5.5 ANALISI E VERIFICA DELLA SOLETTA DI IMPALCATO

La soletta di impalcato è composta da lastra predalles di contenimento e getto con fondello in cls dello spessore di 50 mm. Il getto di cls di completamento ha invece uno spessore di 220 mm.

Le sollecitazioni sulla soletta vengono definite per ogni fase di esecuzione attraverso i modelli strutturali descritti. Nell'analisi della soletta le travi vengono viste come dei vincoli fissi in modo da avere lo schema statico finale che interessa solo la soletta.

Si osserva che in Fase 0 la soletta in cls non è attiva in quanto non ha subito il processo di indurimento e di aumento di resistenza. Tutto il peso del getto viene sorretto dalle lastre predalles ed a loro volta dalle travi metalliche.

La verifica viene condotta sia a tempo $t=0$ e sia a tempo $t=\text{inf}$.

SLU_{t,iniz.} → F1A + F2

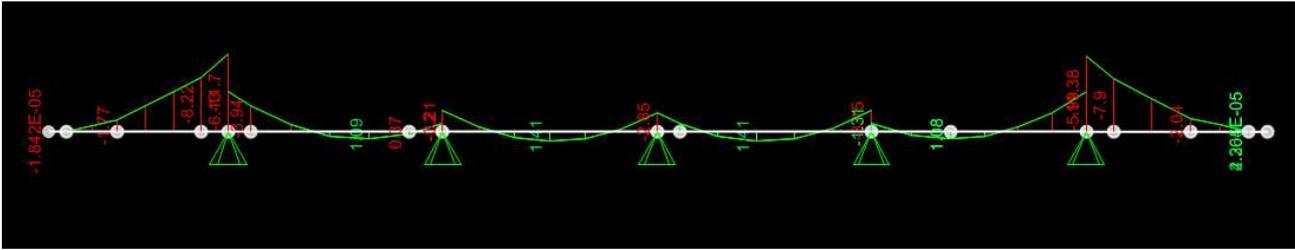
SLU_{t,inf} → F1B + F1C + F2

Per l'analisi delle sollecitazioni massime su tutto l'impalcato vengono isolate le strisce di soletta maggiormente sollecitate.

5.5.1 Sollecitazioni flettenti

Le sollecitazioni sopra esposte sono relative alla combinazione di carico SLU_STR_ENV

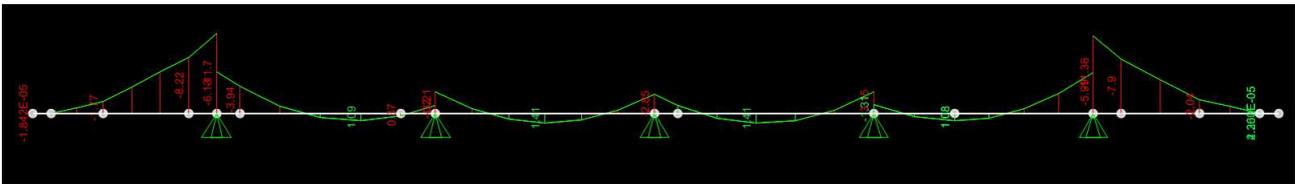
FASE 1A



M_max = 1.50 kNm

M_min = -11.50 kNm

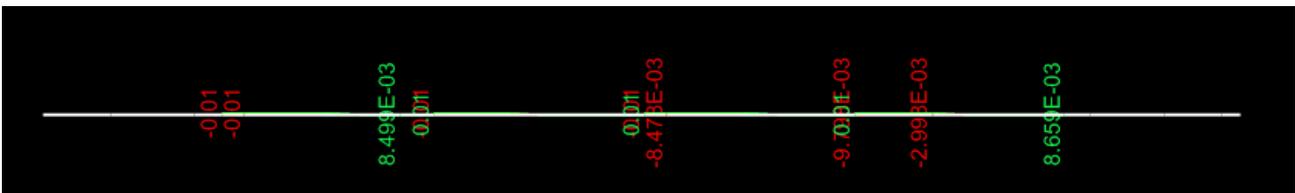
FASE 1B



M_max = 1.50 kNm

M_min = -11.70 kNm

FASE 1C



M_max = 0.05 kNm

M_min = 0.05 kNm

FASE 2

La configurazione che massimizza le sollecitazioni nella trave continua (schematizzazione per la soletta in c.a.) su cinque appoggi (schematizzazione per le travi principali in acciaio) è stata indagata mediante lo studio delle linee di influenza:

Momento flettente:

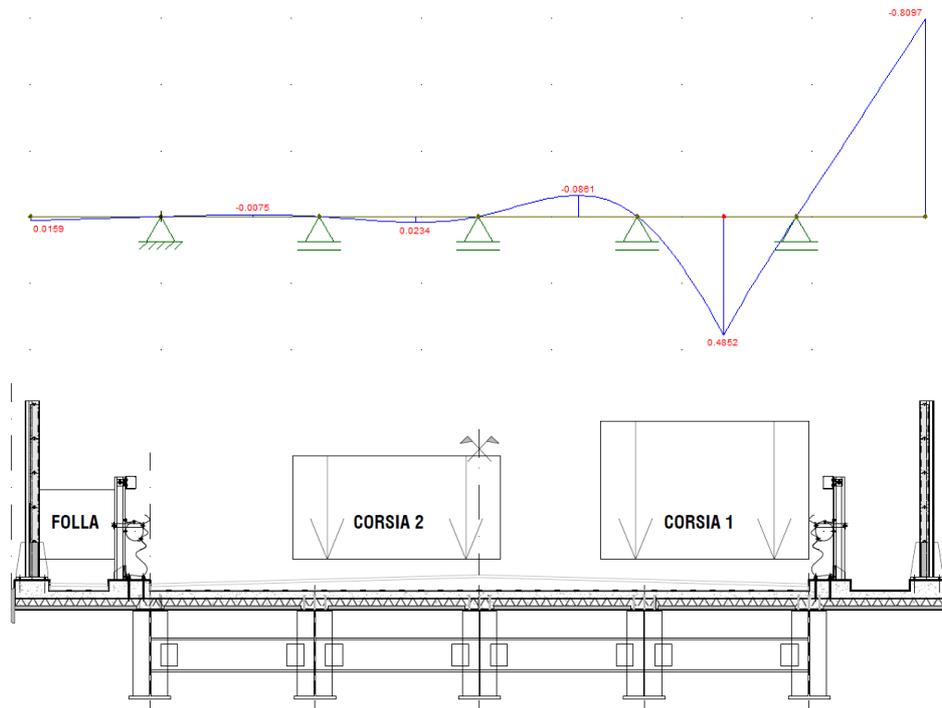
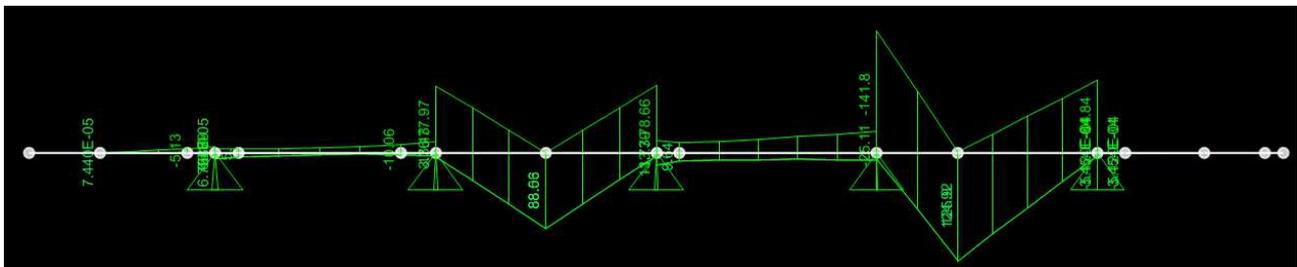


Figura 40 – Linea di influenza momento flettente soletta (sopra) e disposizione trasversale carichi viaggianti (sotto).

Si riportano di seguito le sollecitazioni massime.



$M_{max} = 127.0 \text{ kNm}$

$M_{min} = -142.0 \text{ kNm}$

5.5.1.1 Verifica a flessione SLU

La verifica a flessione si conduce a soletta finita.

Al fine di calcolare il momento resistente si utilizza il software VCA-slu.

Le sollecitazioni totali sono riferite ad una sezione ideale tipologica perché si considera che l'armatura in soletta si assuma in maniera diffusa ed ripetitiva.

SLU_{t,iniz.} → F1A + F2

$M_{max} = 130 \text{ kNm}$

$M_{min} = -154.0 \text{ kNm}$

SLU_{t,inf} → F1B + F1C + F2

$M_{max} = 130 \text{ kNm}$

$M_{min} = -154 \text{ kNm}$

Nella sezione tipo si considera un'armatura pari a: $1\phi 24 + 1\phi 16 / 250$

Per le verifiche di resistenza si considera la sezione di soletta di altezza 220 mm, ovvero lo spessore della soletta gettata in opera sopra le predalles.

Il momento resistente positivo vale $M_{rd}(+) = 167.8 \text{ kNm}$

Titolo: Soletta tipo s_22+5 cm

N° figure elementari: 1 Zoom N° strati barre: 2 Zoom

N°	b [cm]	h [cm]
1	100	22

N°	As [cm²]	d [cm]
1	26.14	4
2	26.14	18

Sollecitazioni: S.L.U. Metodo n

N_{Ed}: 0 kN
M_{xEd}: 0 kNm
M_{yEd}: 0 kNm

P.to applicazione N: Centro Baricentro cls
Coord.[cm]: xN 0, yN 0

Tipo rottura: Lato calcestruzzo - Acciaio snervato

M_{xRd}: 167.8 kNm

Materiali:

B450C		C35/45	
ϵ_{su}	67.5 ‰	ϵ_{c2}	2 ‰
f_{yd}	409.1 N/mm²	ϵ_{cu}	3.5 ‰
E_s	200,000 N/mm²	f_{cd}	23.33
E_s/E_c	15	f_{cc}/f_{cd}	0.8
ϵ_{syd}	2.046 ‰	$\sigma_{c,adm}$	13.5
$\sigma_{s,adm}$	255 N/mm²	τ_{co}	0.8
		τ_{c1}	2.257

g_c: -23.33 N/mm²
g_s: 409.1 N/mm²
ε_c: 3.5 ‰
ε_s: 10.41 ‰
d: 18 cm
x: 4.529 x/d: 0.2516
δ: 0.7545

Tipo Sezione: Rettan.re Trapezi
a T Circolare
Rettangoli Coord.

Metodo di calcolo: S.L.U.+ S.L.U.-
Metodo n

Tipo flessione: Retta Deviata

N° rett.: 100

Calcola MRd Dominio M-N

L_o: 0 cm Col. modello

Precompresso

Il momento resistente positivo vale $M_{rd}(-) = 167.8 \text{ kNm}$

Titolo : Soletta tipo s_22+5 cm

N° figure elementari Zoom N° strati barre Zoom

N°	b [cm]	h [cm]
1	100	22

N°	As [cm²]	d [cm]
1	26.14	4
2	26.14	18

Sollecitazioni
S.L.U. Metodo n

N_{Ed} kN
M_{xEd} kNm
M_{yEd} kNm

P.to applicazione N
 Centro Baricentro cls
 Coord.[cm] xN
yN

Materiali
B450C C35/45
ε_{su} ‰ ε_{c2} ‰
f_{yd} N/mm² ε_{cu} ‰
E_s N/mm² f_{cd} ‰
E_s/E_c f_{cc}/f_{cd} ?
ε_{syd} ‰ σ_{c,adm} N/mm²
σ_{s,adm} N/mm² τ_{co} N/mm²
τ_{c1} N/mm²

Metodo di calcolo
 S.L.U.+ S.L.U.-
 Metodo n

Tipo rottura
Lato calcestruzzo - Acciaio snervato

Tipo flessione
 Retta Deviata

M_{xRd} kN m

σ_c N/mm²
σ_s N/mm²
ε_c ‰
ε_s ‰
d cm
x x/d
δ

N° rett.

Calcola MRd Dominio M-N

L₀ cm Col. modello

Precompresso

Si osserva che i momenti resistenti sono maggiori di quelli resistenti. La verifica si ritiene pertanto soddisfatta.

Il tasso di sfruttamento della sezione è:

- tasso momento positivo ρ (+) = 0.77
- tasso momento positivo ρ (-) = 0.92

5.5.1.2 Verifica a flessione SLU eccezionale (per urto) a tenso-flessione

Considerando il sistema di forze riportato al § 4.3.11, la forza media applicata al singolo montante è pari a (100 + 100 + 50 + 50) kN / 5.0 m = 60 kN/m. La sezione di verifica (A-A), riportata in figura, ha dimensioni 1.00 m x 0.27 m.

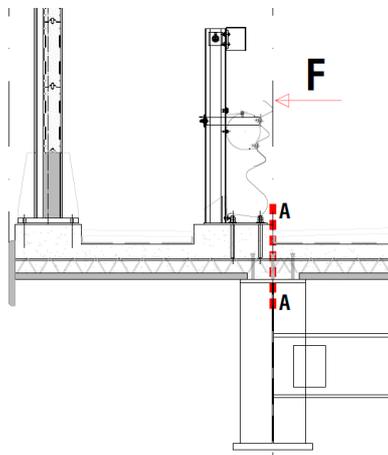


Figura 41 – Forza orizzontale (urto) e sezione di verifica.

s_c	0.15	m	Spessore cordolo
s_s	0.27	m	Spessore soletta (sezione di verifica)
L	1.00	m	Larghezza soletta (sezione di verifica)
s_p	0.10	m	Spessore pavimentazione in prossimità del cordolo
h_u	1.00	m	Altezza punto di applicazione urto dalla superficie della pavimentazione
b	1.24	m	Braccio urto rispetto al piano medio della soletta
F	60.00	kN/m	Forza orizzontale applicata a b
m - URTO	74.10	kNm/m	Momento sollecitante (sezione resistente di larghezza L) - urto
v - URTO	0.00	kN/m	Taglio sollecitante (sezione resistente di larghezza L) - urto
n - URTO	60.00	kN/m	Sforzo normale sollecitante (sezione resistente di larghezza L) - urto

m - URTO	74.10	kNm/m	Momento sollecitante per unità di lunghezza - urto
m - 0 (G1)	0.00	kNm/m	Momento sollecitante di fase 0 - soletta non attiva
m - 1 (G2)	7.67	kNm/m	Momento sollecitante di fase 1
m (TOT.)	81.77	kNm/m	Momento sollecitante totale - Combinazione eccezionale: G1 + G2 + Ad

v - URTO	0.00	kNm/m	Taglio sollecitante per unità di lunghezza - urto
v - 0 (G1)	0.00	kNm/m	Taglio sollecitante di fase 0 - soletta non attiva
v - 1 (G2)	7.73	kNm/m	Taglio sollecitante di fase 1
v (TOT.)	7.73	kNm/m	Taglio sollecitante totale - Combinazione eccezionale: G1 + G2 + Ad

n - URTO	60.00	kNm/m	Sforzo normale sollecitante per unità di lunghezza - urto
n - 0 (G1)	0.00	kNm/m	Sforzo normal sollecitante di fase 0 - soletta non attiva
n - 1 (G2)	0.00	kNm/m	Sforzo normal sollecitante di fase 1
n (TOT.)	60.00	kNm/m	Sforzo normale sollecitante totale - Combinazione eccezionale: G1 + G2 + Ad

Azioni sollecitanti per unità di lunghezza nella sezione di verifica (comb. eccezionale)

m (TOT.)	81.77	kNm/m	
v (TOT.)	7.73	kNm/m	
n (TOT.)	60.00	kNm/m	(trazione)

Si riporta di seguito la verifica a tenso-flessione della soletta.

Titolo: Soletta tipo s_22+5 cm

N° figure elementari: 1 Zoom N° strati barre: 2 Zoom

N°	b [cm]	h [cm]
1	100	27

N°	As [cm²]	d [cm]
1	26.14	4
2	26.14	18

Sollecitazioni
S.L.U. Metodo n

N_{Ed} -60 0 kN
M_{xEd} 82 0 kNm
M_{yEd} 0 0

P.to applicazione N
Centro Baricentro cls
Coord.[cm] xN 0 yN 0

Materiali
B450C C35/45
ε_{su} 67.5 ‰ ε_{c2} 2 ‰
f_{yd} 409.1 N/mm² ε_{cu} 3.5 ‰
E_s 200,000 N/mm² f_{cd} 23.33 ‰
E_s/E_c 15 f_{cc}/f_{cd} 0.8
ε_{syd} 2.046 ‰ σ_{c,adm} 13.5
σ_{s,adm} 255 N/mm² τ_{co} 0.8
τ_{c1} 2.257

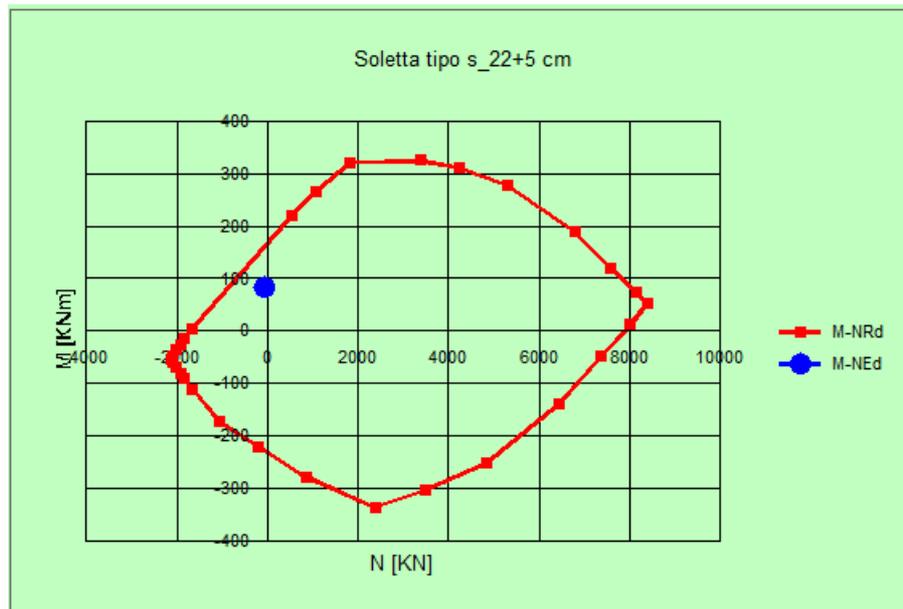
M_{xRd} -229.9 kN m
σ_c -23.33 N/mm²
σ_s 409.1 N/mm²
ε_c 3.5 ‰
ε_s 7.357 ‰
d 23 cm
x 7.415 x/d 0.3224
δ 0.843

Tipo Sezione
Rettan.re Trapezi
a T Circolare
Rettangoli Coord.

Metodo di calcolo
S.L.U.+ S.L.U.-
Metodo n

Tipo flessione
Retta Deviata

N° rett. 100
Calcola MRd Dominio M-N
L_o 0 cm Col. modello
 Precompresso



Si omette la verifica a taglio, in quanto eseguita per le combinazioni più gravose al § 5.5.2 della presente relazione.

5.5.1.3 Verifica delle tensioni SLE-rara e SLE quasi permanente

La verifica a flessione si conduce a soletta finita.

Al fine di calcolare il momento resistente si utilizza il software VCA-slu.

Le sollecitazioni totali sono riferite ad una sezione ideale tipologica perché si considera che l'armatura in soletta si assuma in maniera diffusa ed ripetitiva.

Per semplicità di esposizione si riportano solo i valori numerici.

SLE-rara_t,iniz. → F1A + F2

M_max = 100 kNm

M_min = -140 kNm

SLE-rara_t,inf → F1B + F1C + F2

M_max = 100 kNm

M_min = -140 kNm

Titolo : Soletta tipo s_22+5 cm

N° figure elementari Zoom N° strati barre Zoom

N°	b [cm]	h [cm]
1	100	22

N°	As [cm²]	d [cm]
1	26.14	4
2	26.14	18

Tipo Sezione
 Rettan.re Trapezi
 a T Circolare
 Rettangoli Coord.

Solecitazioni
 S.L.U. → Metodo n
 ← Metodo n

P.to applicazione N
 Centro Baricentro cls
 Coord.[cm] xN yN

Metodo di calcolo
 S.L.U.+ S.L.U.-
 Metodo n

Materiali

B450C		C35/45	
ϵ_{su}	67.5 ‰	ϵ_{c2}	2 ‰
f_{yd}	409.1 N/mm ²	ϵ_{cu}	3.5 ‰
E_s	200,000 N/mm ²	f_{cd}	23.33
E_s/E_c	15	f_{cc}/f_{cd}	0.8
ϵ_{syd}	2.046 ‰	$\sigma_{c,adm}$	13.5
$\sigma_{s,adm}$	255 N/mm ²	τ_{co}	0.8
		τ_{c1}	2.257

σ_c -12.01 N/mm²
 σ_s 254.7 N/mm²
 ϵ_s 1.274 ‰
 d 18 cm
 x 7.456 x/d 0.4142
 δ 0.9578

Verifica
 N° iterazioni:

Precompresso

Titolo: Soletta tipo s_22+5 cm

N° figure elementari: 1 Zoom N° strati barre: 2 Zoom

N°	b [cm]	h [cm]
1	100	22

N°	As [cm²]	d [cm]
1	26.14	4
2	26.14	18

Sollecitazioni
S.L.U. Metodo n

N _{Ed}	0	0	kN
M _{xEd}	0	-140	kNm
M _{yEd}	0	0	

P.to applicazione N
 Centro Baricentro cls
 Coord.[cm] xN: 0 yN: 0

Tipo Sezione
 Rettan.re Trapezi
 a T Circolare
 Rettangoli Coord.

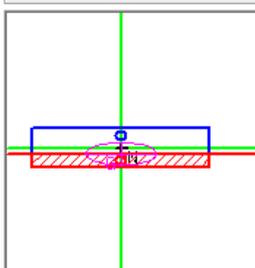
Metodo di calcolo
 S.L.U.+ S.L.U.-
 Metodo n

Materiali

B450C		C35/45	
ε _{su}	67.5 ‰	ε _{c2}	2 ‰
f _{yd}	409.1 N/mm ²	ε _{cu}	3.5 ‰
E _s	200,000 N/mm ²	f _{cd}	23.33
E _s /E _c	15	f _{cc} /f _{cd}	0.8
ε _{syd}	2.046 ‰	σ _{c,adm}	13.5
σ _{s,adm}	255 N/mm ²	τ _{co}	0.8
		τ _{c1}	2.257

σ_c: -16.81 N/mm²
σ_s: 356.6 N/mm²
ε_s: 1.783 ‰
d: 18 cm
x: 7.456 x/d: 0.4142
δ: 0.9578

Verifica
N° iterazioni: 4
 Precompresso



SLE-quasi perm_t,iniz. → F1A + F2

M_max = 10 kNm

M_min = -30 kNm

SLE-quasi per_t,inf → F1B + F1C + F2

M_max = 10 kNm

M_min = -30 kNm

Titolo: Soletta tipo s_22+5 cm

N° figure elementari: 1 Zoom N° strati barre: 2 Zoom

N°	b [cm]	h [cm]
1	100	22

N°	As [cm²]	d [cm]
1	26.14	4
2	26.14	18

Tipologia Sezione:
 Rettan.re Trapezi
 a T Circolare
 Rettangoli Coord.

Solecitazioni: S.L.U. Metodo n

N_{Ed}: 0 kN 0 kN
M_{xEd}: 0 kNm 10 kNm
M_{yEd}: 0 kNm 0 kNm

P.to applicazione N:
 Centro Baricentro cls
 Coord.[cm] xN: 0 yN: 0

Metodo di calcolo:
 S.L.U.+ S.L.U.-
 Metodo n

Materiali: B450C C35/45

ε_{su}: 67.5 ‰ ε_{c2}: 2 ‰
f_{yd}: 409.1 N/mm² ε_{cu}: 3.5 ‰
E_s: 200,000 N/mm² f_{cd}: 23.33
E_s/E_c: 15 f_{cc}/f_{cd}: 0.8
ε_{syd}: 2.046 ‰ σ_{c,adm}: 13.5
σ_{s,adm}: 255 N/mm² τ_{co}: 0.8
 τ_{c1}: 2.257

σ_c: -1.201 N/mm²
σ_s: 25.47 N/mm²

ε_s: 0.1274 ‰
d: 18 cm
x: 7.456 x/d: 0.4142
 δ: 0.9578

Verifica N° iterazioni: 4

Precompresso

Titolo: Soletta tipo s_22+5 cm

N° figure elementari: 1 Zoom N° strati barre: 2 Zoom

N°	b [cm]	h [cm]
1	100	22

N°	As [cm²]	d [cm]
1	26.14	4
2	26.14	18

Tipologia Sezione:
 Rettan.re Trapezi
 a T Circolare
 Rettangoli Coord.

Solecitazioni: S.L.U. Metodo n

N_{Ed}: 0 kN 0 kN
M_{xEd}: 0 kNm -30 kNm
M_{yEd}: 0 kNm 0 kNm

P.to applicazione N:
 Centro Baricentro cls
 Coord.[cm] xN: 0 yN: 0

Metodo di calcolo:
 S.L.U.+ S.L.U.-
 Metodo n

Materiali: B450C C35/45

ε_{su}: 67.5 ‰ ε_{c2}: 2 ‰
f_{yd}: 409.1 N/mm² ε_{cu}: 3.5 ‰
E_s: 200,000 N/mm² f_{cd}: 23.33
E_s/E_c: 15 f_{cc}/f_{cd}: 0.8
ε_{syd}: 2.046 ‰ σ_{c,adm}: 13.5
σ_{s,adm}: 255 N/mm² τ_{co}: 0.8
 τ_{c1}: 2.257

σ_c: -3.602 N/mm²
σ_s: 76.42 N/mm²

ε_s: 0.3821 ‰
d: 18 cm
x: 7.456 x/d: 0.4142
 δ: 0.9578

Verifica N° iterazioni: 4

Precompresso

I valori limite di tensione previsti da norma sono:

Lato cls

- SLE-rara $\rightarrow 0.6 f_{ck} = 0.6 \cdot 35 = 21 \text{ MPa}$
- SLE.quasi perm. $\rightarrow 0.45 f_{ck} = 0.45 \cdot 35 = 15.75$

Lato acciaio

- SLE-rara $\rightarrow 0.8 f_{yk} = 0.6 \cdot 450 = 360 \text{ MPa}$

Si può osservare dai report di verifica che le tensioni agenti sono minori dei limiti previsti da norma.

La verifica si assume come soddisfatta.

5.5.1.4 Verifica di fessurazione SLE-frequente e SLE-quasi permanente

Si procede alla verifica di fessurazione come indicato nella normativa di riferimento e limitandosi alle sole zone di estradosso tese della soletta, ovvero le zone a momento negativo, in quanto le zone a momento positivo sono caratterizzate dalla presenza del fondello della lastra predalles che limita se non annulla l'esposizione delle armature di soletta agli agenti esterni.

Per le sollecitazioni frequenti si utilizza la combinazione SLE_freq_ENV

SLE-frequente_t,iniz. $\rightarrow F1A + F2$

$M_{\min} = -110 \text{ kNm}$

SLE-frequente_t,inf $\rightarrow F1B + F1C + F2$

$M_{\min} = -110 \text{ kNm}$

Geometria della sezione		
Altezza della sezione	h	270 [mm]
Larghezza della sezione	b	1000 [mm]
Altezza utile della sezione	d	210 [mm]
Distanza tra asse armatura e lembo compresso	d'	40 [mm]
Ricoprimento dell'armatura	c	25 [mm]
Armatura tesa ordinaria		
Numero di ferri tesi presenti nella sezione	$n_{f,1}$	4 [-]
Diametro dei ferri tesi presenti nella sezione	$\phi_{f,1}$	24 [mm]
Area dei ferri tesi presenti nella sezione	$A_{sf,1}$	1810 [mm ²]
Armatura tesa di infittimento		
Numero di ferri tesi presenti nella sezione	$n_{f,2}$	4 [-]
Diametro dei ferri tesi presenti nella sezione	$\phi_{f,2}$	16 [mm]
Area dei ferri tesi presenti nella sezione	$A_{sf,2}$	804 [mm ²]

Caratteristiche dei materiali	
Resistenza caratteristica cilindrica dal calcestruzzo	f_{ck} 30 [MPa]
Resistenza a trazione media del calcestruzzo	f_{ctm} 2.9 [MPa]
Modulo di elasticità del calcestruzzo	E_{cm} 32837 [MPa]
Resistenza a snervamento dell'acciaio	f_{yk} 450 [MPa]
Modulo di elasticità dell'acciaio	E_s 200000 [MPa]
DETERMINAZIONE DELL'AMPIEZZA DELLE FESSURE	
Tensione nell'armatura tesa considerando la sezione fessurata	σ_s 218 [MPa]
Asse neutro della sezione	x 91.55 [mm]
	Lunga ▼
Tipo e durata dei carichi applicati	
Coefficiente di omogeneizzazione	α_e 6.09 [-]
Area totale delle armature presenti nella zona tesa	A_s 2614 [mm ²]
Area efficace tesa di calcestruzzo	$A_{c,eff.1}$ 150000 [mm ²]
	$A_{c,eff.2}$ 59483 [mm ²]
	$A_{c,eff.3}$ 135000 [mm ²]
	$A_{c,eff.min}$ 59483 [mm ²]
Rapporto tra l'area di acciaio teso e quella di calcestruzzo teso	$\rho_{p,eff}$ 0.04394 [-]
Resistenza efficace media del calcestruzzo	$f_{ct,eff}$ 2.9 [MPa]
Fattore di durata del carico	k_t 0.4 [-]
Differenza tra la deformazione nell'acciaio e nel cls	
	$[\epsilon_{sm} - \epsilon_{cm}]_{min}$ 0.000654 [-]
	$[\epsilon_{sm} - \epsilon_{cm}]_{calc.}$ 0.000923 [-]
	$[\epsilon_{sm} - \epsilon_{cm}]$ 0.000923 [-]
Spaziatura tra le barre (calcolata tra i baricentri dei ferri)	s 250 [mm]
Diametro equivalente delle barre	ϕ_{eq} 20.80 [mm]
Spaziatura massima di riferimento	$s_{max,rif}$ 177 [mm]
Coefficienti k per il calcolo dell'ampiezza di fessurazione	k_1 0.800 [-]
	k_2 0.500 [-]
	k_3 3.400 [-]
	k_4 0.425 [-]
Distanza massima tra le fessure	
	$s_{r,max.1}$ 165 [mm]
	$s_{r,max.2}$ 232 [mm]
	$s_{r,max}$ 232 [mm]
Ampiezza limite delle fessure per la combinazione di calcolo pertinente	$w_{k,lim}$ 0.30 [mm]
Ampiezza delle fessure (di calcolo)	w_k 0.21 [mm]

Per la combinazione SLE-frequente la verifica a fessurazione risulta essere soddisfatta.

Per le sollecitazioni frequenti si utilizza la combinazione SLE_qperm

SLE-quasi perm_t,iniz. → F1A + F2

$M_{min} = -30$ kNm

SLE-quasi per t_{inf} → F1B + F1C + F2

$M_{min} = -30$ kNm

Geometria della sezione		
Altezza della sezione	h	270 [mm]
Larghezza della sezione	b	1000 [mm]
Altezza utile della sezione	d	210 [mm]
Distanza tra asse armatura e lembo compresso	d'	40 [mm]
Ricoprimento dell'armatura	c	25 [mm]
Armatura tesa ordinaria		
Numero di ferri tesi presenti nella sezione	$n_{r,1}$	4 [-]
Diametro dei ferri tesi presenti nella sezione	$\phi_{r,1}$	24 [mm]
Area dei ferri tesi presenti nella sezione	$A_{st,1}$	1810 [mm ²]
Armatura tesa di infittimento		
Numero di ferri tesi presenti nella sezione	$n_{r,2}$	4 [-]
Diametro dei ferri tesi presenti nella sezione	$\phi_{r,2}$	16 [mm]
Area dei ferri tesi presenti nella sezione	$A_{st,2}$	804 [mm ²]

Caratteristiche dei materiali		
Resistenza caratteristica cilindrica dal calcestruzzo	f_{ck}	30 [MPa]
Resistenza a trazione media del calcestruzzo	f_{ctm}	2.9 [MPa]
Modulo di elasticità del calcestruzzo	E_{cm}	32837 [MPa]
Resistenza a snervamento dell'acciaio	f_{yk}	450 [MPa]
Modulo di elasticità dell'acciaio	E_s	200000 [MPa]

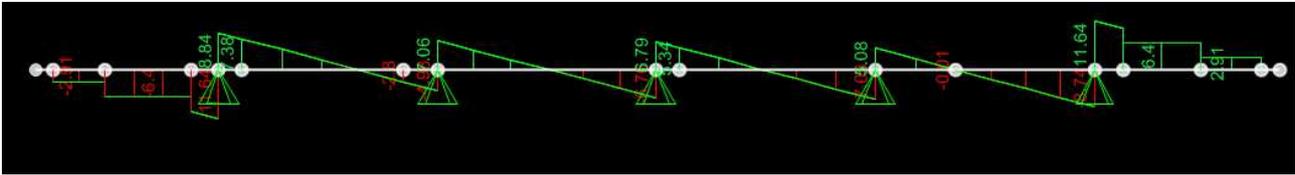
DETERMINAZIONE DELL'AMPIEZZA DELLE FESSURE		
Tensione nell'armatura tesa considerando la sezione fessurata	σ_s	59.54 [MPa]
Asse neutro della sezione	x	91.55 [mm]
Lunga ▼		
Tipo e durata dei carichi applicati	α_e	6.09 [-]
Coefficiente di omogeneizzazione	A_s	2614 [mm ²]
Area totale delle armature presenti nella zona tesa	$A_{c,eff.1}$	150000 [mm ²]
Area efficace tesa di calcestruzzo	$A_{c,eff.2}$	59483 [mm ²]
	$A_{c,eff.3}$	135000 [mm ²]
	$A_{c,eff.min}$	59483 [mm ²]

Per la combinazione SLE-quasi permanente la verifica a fessurazione risulta essere soddisfatta.

5.5.2 Sollecitazioni taglianti

Le sollecitazioni sopra esposte sono relative alla combinazione di carico SLU_STR_ENV

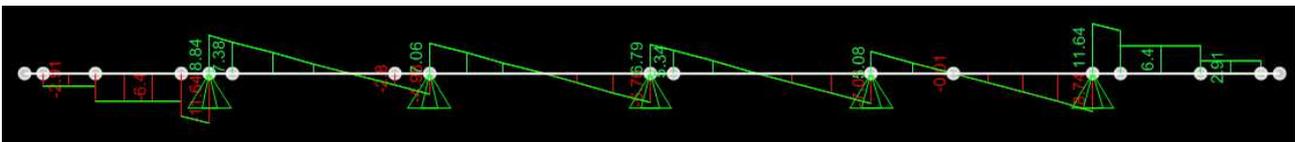
FASE 1A



$$V_{\max} = 11.6 \text{ kN}$$

$$V_{\min} = -11.6 \text{ kN}$$

FASE 1B



$$V_{\max} = 11.6 \text{ kN}$$

$$V_{\min} = -11.6 \text{ kN}$$

FASE 1C



$$V_{\max} = 0.05 \text{ kN}$$

$$V_{\min} = 0.05 \text{ kN}$$

FASE 2

La configurazione che massimizza le sollecitazioni nella trave continua (schematizzazione per la soletta in c.a.) su cinque appoggi (schematizzazione per le travi principali in acciaio) è stata indagata mediante lo studio delle linee di influenza:

Taglio:

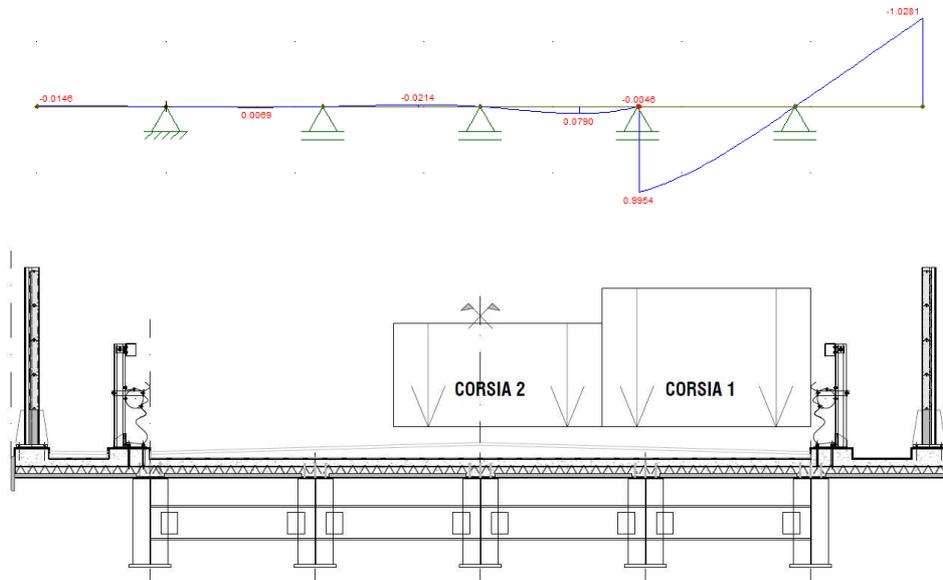
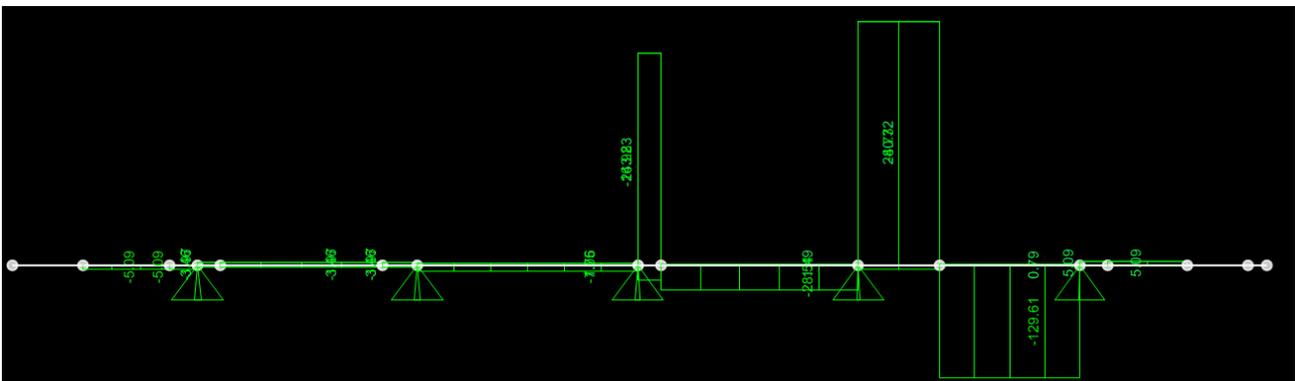


Figura 42 – Linea di influenza taglio soletta (sopra) e disposizione trasversale carichi viaggianti (sotto).

Si riportano di seguito le sollecitazioni massime.



$V_{max} = 281 \text{ kN}$

$V_{min} = -130.00 \text{ kN}$

5.5.2.1 Verifica a taglio

La verifica a taglio si conduce a soletta finita.

Le sollecitazioni totali sono riferite ad una sezione ideale tipologica perché si considera che l'armatura in soletta si assuma in maniera diffusa ed ripetitiva.

SLU_{t,iniz.} → F1A + F2

$V_{max} = 293.0 \text{ kN}$

$V_{min} = -142.0 \text{ kN}$

SLU_t,inf → F1B + F1C + F2

V_max = 293.0 kN

V_min = -142.0 kN

Per la verifica a taglio si considerano solo ferri piegati. Vengono considerati 4 ferri piegati $\Phi 16$ a metro con passo trasversale di 300 mm. Quest'armatura viene prevista su tutti i punti di appoggio della soletta ovvero su tutte e 5 le travi.

Non si considera a favore di sicurezza l'armatura long. presente in soletta già prevista per le azioni flettenti.

CLS - TIPO	C35/45	fcd [N/mm ²]	19.83
		$\gamma_{m,c}$	1.5
ACC - TIPO	B450C	fyd [N/mm ²]	391.30
		$\gamma_{m,s}$	1.15

Altezza sezione	H [mm]	270
Base sezione	B [mm]	1000
Area sez. totale	Ac [mm ²]	270000
Perimetro sez.	p [mm]	2540
Copriferro estrad. - TOP	cf_t [mm]	40
Copriferro intrad. - BOTTOM	cf_b [mm]	50

Passo di staffa di progetto	s [mm]	300	
Diam. Staffe	\varnothing_{st} [mm]	16	
	--> Ast [mm] =	201.06	
Num. di bracci	nb	4	
Arm. a taglio complessiva	Asw [mm ²]	804.25	
Tensione caratteristica CLS	C35/45	fck [N/mm ²]	35
Tensione di progetto CLS	C35/45	fcd [N/mm ²]	19.83
coeff. riduttivo resist. Cls		v	0.50
Tensione di progetto CLS ridotta		f'cd [N/mm ²]	9.92
Tensione di progetto ACC	B450C	fyd [N/mm ²]	391.30

Inclinazione Biella compressa	
cot (θ)=	2.5000

Inclinazione Biella tesa (staffe)	
α [deg]	45

Larghezza minima sezione	bw [mm]	1000.00		
Altezza utile sez.	dm,t [mm]	203.23		
Area utile sezione	Ac,t [mm ²]	203230.77		
Arm. a taglio complessiva	Asw [mm ²]	804.25		
Diametro Staffe	\varnothing_{st} [mm]	16		
Passo di staffa di progetto	s [mm]	300.00		
Rapp. geom. di arm. a taglio	pst [%]	0.268%		
Inclinaz. staffe rispetto asse trave	α [deg]	45.0000	--> sin (α)=	0.7071
			--> cot (α)=	1.0000
Inclinaz. Biella compr.	Θ [deg]	21.8014	--> cot (Θ)=	2.5000
			--> σ_{cp}/f_{cd}	
Tensione med. di compr.	σ_{cp} [N/mm ²]	0.00	=	0.0000
			--> α_c =	1.0000
Taglio resist. compressione	Vrd,c [kN]	750.55		
Taglio resist. trazione	Vrd,s [kN]	474.86		
Taglio resistente	Vrd [kN]	474.86		

Osservando il taglio resistente pari a 474.86 kN > del taglio agente massimo di 293 kN a tempo infinito, si ritiene che la verifica risulti essere soddisfatta.

5.5.3 Verifica predalles in fase di getto

Si esegue la verifica del traliccio delle predalle in fase di getto della soletta. La lastra risulta caricata dal peso proprio, dal getto della soletta non ancora maturato e da un carico variabile, dovuto ai mezzi d'opera, pari a 1.0 kN/m². Per le predalles si ipotizzano di seguenti schemi statici:

- Tipo A: le predalles che si trovano tra due travi si considerano semplicemente appoggiate sulle piattabande superiori delle travi principali stesse;
- Tipo B: predalles che si trovano tra l'ultima trave interna, la trave di riva e lo sbalzo. Per esse si considera uno schema di trave su tre appoggi con sbalzo laterale. La predalle di sbalzo è legata alla predalle della campata adiacente, mediante la continuità del traliccio.

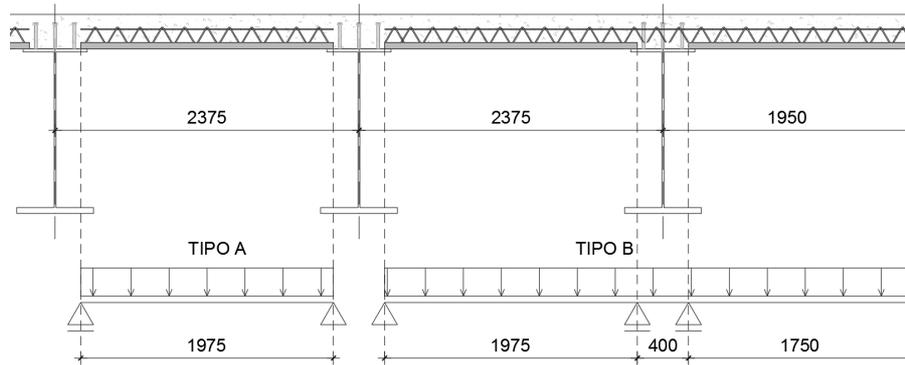


Figura 43 – Sezione trasversale tipologica: disposizione delle lastre predalles.

La soletta di completamento ha uno spessore di 270 mm comprensivo delle predalles collaboranti di spessore 50 mm. Le lastre, oltre a essere collaboranti, hanno anche funzione di cassero.

Dati della sezione della predalla e del traliccio usato:

S_{pred}	50	mm	Spessore lastra prefabbricata
L_{pred}	1200	mm	Larghezza lastra prefabbricata
$N_{T/pred}$	3	num.	Numero di tralicci per ogni predalla
h	165	mm	Altezza traliccio
b	120	mm	Distanza tra i correnti inferiori
a	200	mm	Passo diagonali traliccio
i	400	mm	Interasse tralicci
L_d	193	mm	Lunghezza diagonali
f_{yk}	50	N/mm ²	Res. car. a snervamento ACCIAIO

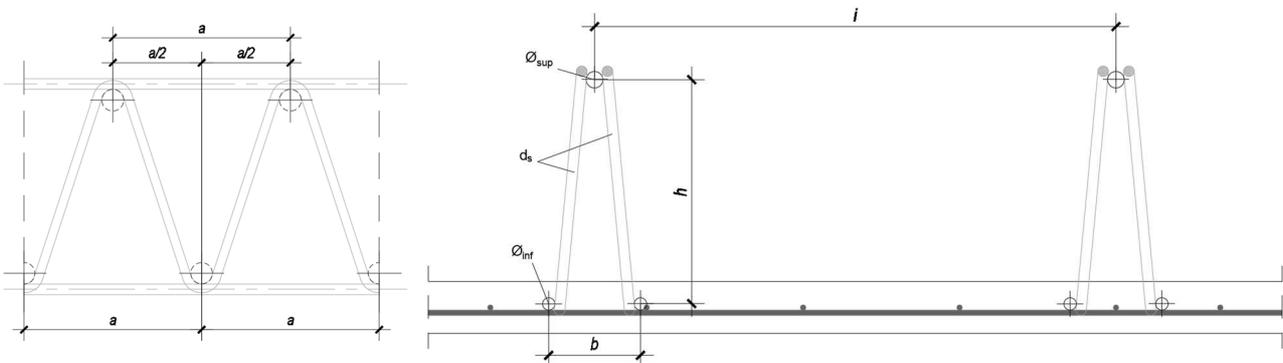


Figura 44 – Lastra prefabbricata tralicciata.

L'armatura del traliccio è costituita dalle seguenti barre di armatura:

ϕ [mm]	A [mm ²]	J [mm ⁴]	
16	201	3217	Corrente sup.
12	113	1018	Corrente Inf.
10	79	491	Diagonale

Si riporta di seguito l'analisi dei carichi delle lastre predalles in fase di getto:

Carichi agenti sulle predalles:

γ_{CLS}	25	kN/m ³	Peso specifico c.a.
$H_{soletta}$	220	mm	Spessore del getto
G_1 predalles	1.25	kN/m ²	Peso proprio lastra
G_2 soletta	5.5	kN/m ²	Peso proprio soletta
G_2 veletta (0.05x0.6)	0.75	kN/m	Peso proprio veletta
Q_{acc}	1.0	kN/m ²	Sovraccarico

Combinazione SLU (A1):

γ_{G1}	1.35	-	Coeff. G_1
γ_{G2}	1.50	-	Coeff. G_2
γ_Q	1.50	-	Coeff. Q_{acc}
Q_{SLU1}	11.4	kN/m ²	Carico distr. agente sulla lastra
$q_{SLU1} = Q_{SLU1} L_{pred}$	13.7	kN/m	Carico distr. agente sulla lastra
Q_{SLU2}	1.125	kN/m	Carico conc. agente sulla lastra (sbalzo)

Le sollecitazioni relative ai tralicci della tipologia A e B risultano:

A) Getto soletta tratto in campata:

L	1975	mm	Luce di calcolo (app.-app.)				
M_{Ed}	6.7	kNm	Momento max lastra	M_{Ed_TR}	2.2	kN/m	Momento max traliccio
V_{Ed}	13.6	kN	Taglio max lastra	V_{Ed_TR}	4.5	kN	Taglio max traliccio

B) Getto soletta tratto a sbalzo:

L	1750	mm	Luce di calcolo (sbalzo)				
M_{Ed}	23.0	kNm	Momento max lastra	M_{Ed_TR}	7.8	kNm	Momento max traliccio
V_{Ed}	26.0	kN	Taglio max lastra	V_{Ed_TR}	8.8	kN	Taglio max traliccio

Si riportano le verifiche del traliccio della tipologia A:

A) Verifica Instabilità Corrente Superiore Compresso

$N_{Ed} = M_{Ed_TR}/h$	13.5	kN	Azione assiale di compressione
M_{Ed_TR}	2.2	kNm	Momento flettente sollecitante
h	165	mm	Altezza traliccio
N_{cr}	166690	N	Carico critico euleriano
E	210000	N/mm ²	Modulo di Young acciaio
J	3217	mm ⁴	Momento d'inerzia barra
L_0	200	mm	Lunghezza libera di inflessione
λ	0.74	-	Snellezza adimensionale
A	201	mm ²	Area barra
α	0.49	-	Fattore di imperfezione (sez. piene,

			curva c)
Φ	0.90	-	
χ	0.70	-	Fattore relativo all'inflessione
γ_{M1}	1.10	-	Coeff. di sicurezza
$N_{b,Rd}$	57.7	kN	Resistenza all'instabilità a compressione
$N_{Ed}/N_{b,Rd}$	0.23	< 1	verifica soddisfatta

A) Verifica a Trazione Correnti Inferiori Tesi

$N_{Ed} = M_{Ed_TR}/h/2$	6.8	kN	Azione assiale di trazione
M_{Ed_TR}	2.2	kNm	Momento flettente
h	165	mm	Altezza traliccio
γ_{MO}	1.05	-	Coeff. di sicurezza
$N_{pl,Rd}$	48.5	kN	Resistenza a trazione
A	113	mm ²	Area barra
$N_{Ed}/N_{pl,Rd}$	0.14	< 1	verifica soddisfatta

A) Verifica Instabilità Diagonali Compresi

Ipotesi: i diagonali del traliccio si fanno carico del taglio

L_d	193	mm	Lunghezza diagonali
$N_{Ed} = V_{Ed_TR} L_d/h/2$	2.6	kN	Azione assiale di compressione
V_{Ed_TR}	4.5	kN	Taglio sollecitante
h	165	mm	Altezza traliccio
N_{cr}	27331	N	Carico critico euleriano
E	210000	N/mm ²	Modulo di Young acciaio
J	491	mm ⁴	Momento d'inerzia barra
L_0	193	mm	Lunghezza libera di inflessione
$\underline{\lambda}$	1.14	-	Snellezza adimensionale
A	79	mm ²	Area barra
α	0.49	-	Fattore di imperfezione (sez. piene, curva c)
Φ	1.38	-	
χ	0.46	-	Fattore relativo all'inflessione
γ_{M1}	1.10	-	Coeff. di sicurezza
$N_{b,Rd}$	14.9	kN	Resistenza all'instabilità a compressione
$N_{Ed}/N_{b,Rd}$	0.18	< 1	verifica soddisfatta

Si riportano le verifiche del traliccio della tipologia B:

B) Verifica Instabilità Correnti Inferiori Compresi

$N_{Ed} = M_{Ed_TR}/h/2$	23.6	kN	Azione assiale di compressione
M_{Ed_TR}	7.8	kNm	Momento flettente sollecitante
h	165	mm	Altezza traliccio

N_{cr}	52742	N	Carico critico euleriano
E	210000	N/mm ²	Modulo di Young acciaio
J	1018	mm ⁴	Momento d'inerzia barra
L_0	200	mm	Lunghezza libera di inflessione
λ	0.98	-	Snellezza adimensionale
A	113	mm ²	Area barra
α	0.49	-	Fattore di imperfezione (sez. piene, curva c)
Φ	1.17	-	
χ	0.55	-	Fattore relativo all'inflessione
γ_{M1}	1.10	-	Coeff. di sicurezza
$N_{b,Rd}$	25.5	kN	Resistenza all'instabilità a compressione
$N_{Ed}/N_{b,Rd}$	0.93	<1	verifica soddisfatta.

È opportuno prevedere armature aggiuntive nella sezione in cui il traliccio oltrepassa la trave di riva.

B) Verifica a Trazione Corrente Superiore Teso

$N_{Ed} = M_{Ed_TR}/h$	23.6	kN	Azione assiale di trazione
M_{Ed_TR}	7.8	kNm	Momento flettente
h	165	mm	Altezza traliccio
γ_{M0}	1.05	-	Coeff. di sicurezza
$N_{pl,Rd}$	86.2	kN	Resistenza a trazione
A	201	mm ²	Area barra
$N_{Ed}/N_{pl,Rd}$	0.27	<1	verifica soddisfatta

B) Verifica Instabilità Diagonali Compresi

Ipotesi: i diagonali del traliccio si fanno carico del taglio

L_d	193	mm	Lunghezza diagonali
$N_{Ed} = V_{Ed_TR} L_d/h/2$	5.1	kN	Azione assiale di compressione
V_{Ed_TR}	8.8	kN	Taglio sollecitante
h	165	mm	Altezza traliccio
N_{cr}	27331	N	Carico critico euleriano
E	210000	N/mm ²	Modulo di Young acciaio
J	491	mm ⁴	Momento d'inerzia barra
L_0	193	mm	Lunghezza libera di inflessione
λ	1.14	-	Snellezza adimensionale
A	79	mm ²	Area barra
α	0.49	-	Fattore di imperfezione (sez. piene, curva c)
Φ	1.38	-	
χ	0.46	-	Fattore relativo all'inflessione
γ_{M1}	1.10	-	Coeff. di sicurezza
$N_{b,Rd}$	14.9	kN	Resistenza all'instabilità a compressione
$N_{Ed}/N_{b,Rd}$	0.34	<1	verifica soddisfatta

5.6 VERIFICA DEI TRAVERSI

Le travi principali sono mutuamente collegate trasversalmente da traversi bullonati agli irrigidimenti verticali; tali traversi sono costituiti da profilati: HEB700 per i traversi di testata; HEA 500 per i traversi di campata.

Le caratteristiche di sollecitazione sui traversi sono ottenute dal modello a graticcio illustrato nel paragrafo sulla modellazione dell'impalcato.

5.6.1 Traversi di testata

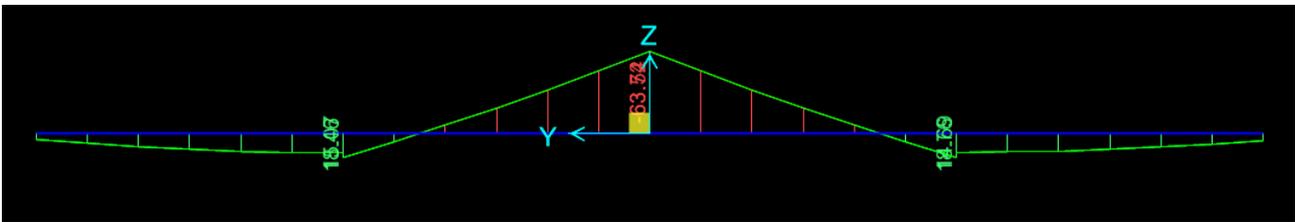
Nei traversi si registrano sforzi di compressione/trazione, sforzi flettenti e taglianti.

A seguire per semplicità di esposizione vengono riportati le sollecitazioni flettenti e taglianti. Mentre per le azioni di sforzo normale si farà riferimento solo allo sforzo di compressione massimo nei due istanti di tempo, in quanto risulta essere importante per la verifica a pressoflessione/svergolamento.

5.6.1.1 Sollecitazioni flettenti

Le sollecitazioni sopra esposte sono relative alla combinazione di carico SLU_STR_ENV

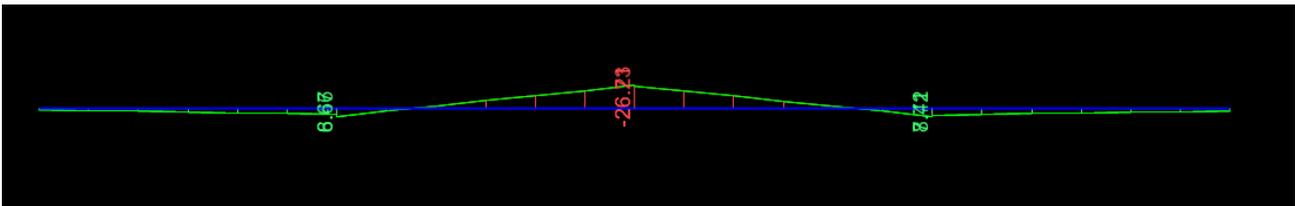
FASE 0



$$M_{\max} = 18.00 \text{ kNm}$$

$$M_{\min} = -65.00 \text{ kNm}$$

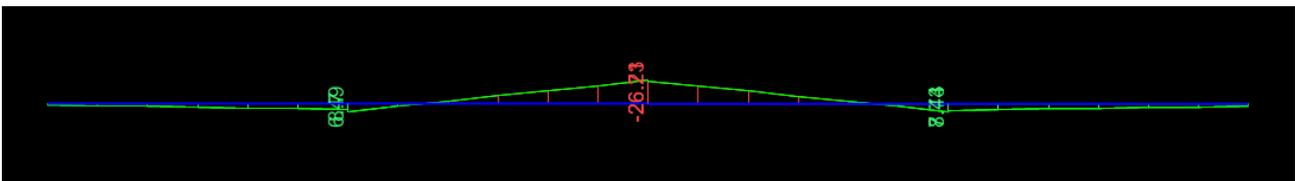
FASE 1A



$$M_{\max} = 8.50 \text{ kNm}$$

$$M_{\min} = -26.5 \text{ kNm}$$

FASE 1B



$$M_{\max} = 8.50 \text{ kNm}$$

$M_{min} = -26.5 \text{ kNm}$

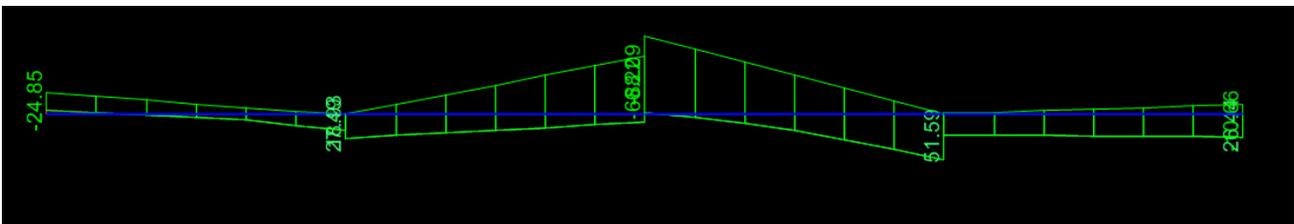
FASE 1C



$M_{max} = 0.05 \text{ kNm}$

$M_{min} = -0.05 \text{ kNm}$

FASE 2



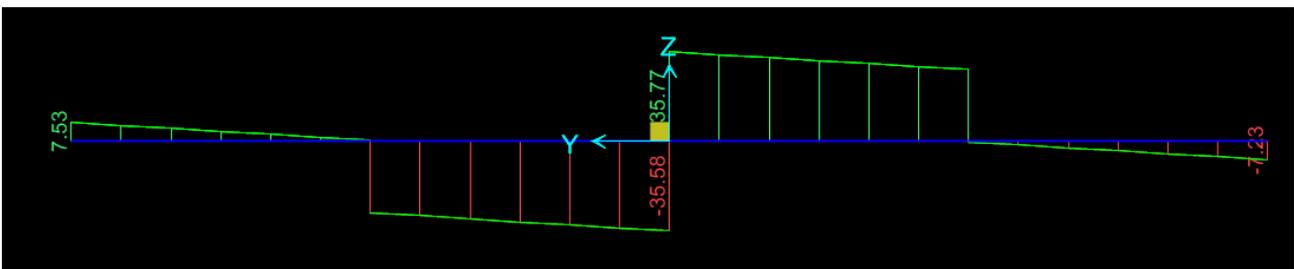
$M_{max} = 53.0 \text{ kNm}$

$M_{min} = -90.0 \text{ kNm}$

5.6.1.2 Sollecitazioni taglianti

Le sollecitazioni sopra esposte sono relative alla combinazione di carico SLU_STR_ENV

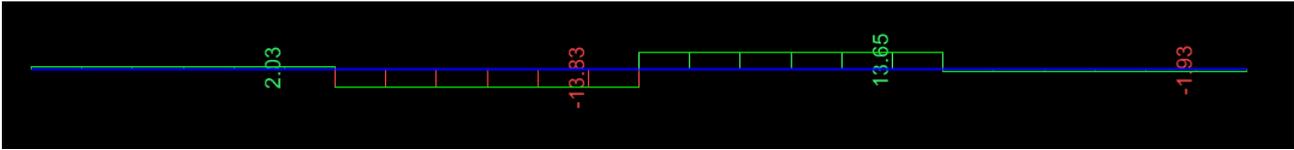
FASE 0



$V_{max} = 40.0 \text{ kN}$

$V_{min} = -40.0 \text{ kN}$

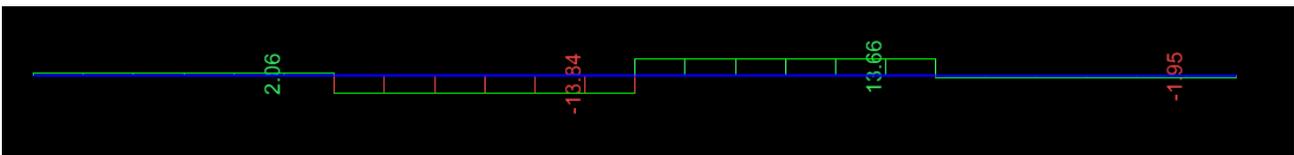
FASE 1A



$V_{max} = 15.0 \text{ kN}$

$V_{min} = -15.0 \text{ kN}$

FASE 1B



$V_{max} = 15.0 \text{ kN}$

$V_{min} = -15.0 \text{ kN}$

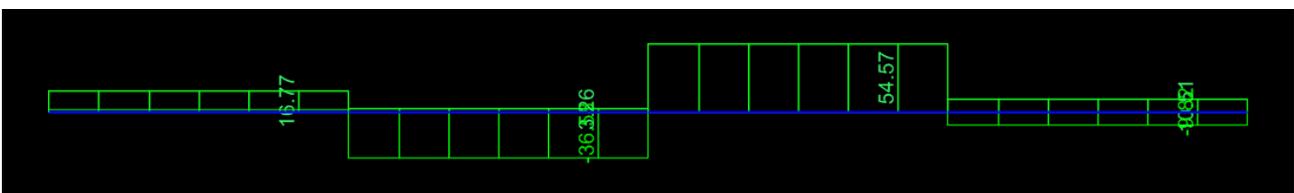
FASE 1C



$V_{max} = 0.05 \text{ kN}$

$V_{min} = 0.05 \text{ kN}$

FASE 2



$V_{max} = 55.0 \text{ kN}$

$V_{min} = -40 \text{ kN}$

5.6.1.3 Verifica traversi di Testata

Le sollecitazioni totali sono riferite ad una sezione ideale tipologica.

L'ente sollecitante è così composto:

$$\text{SLU}_{t,\text{iniz.}} \rightarrow F_0 + F_{1A} + F_2$$

$$N_{\text{max}} \text{ (di trazione)} = 225 \text{ kN}$$

$$N_{\text{min}} \text{ (di compressione)} = 310 \text{ kN}$$

$$V_{\text{max}} = 110 \text{ kN}$$

$$V_{\text{min}} = -95 \text{ kN}$$

$$M_{\text{max}} = 80 \text{ kNm}$$

$$M_{\text{min}} = -185 \text{ kNm}$$

$$\text{SLU}_{t,\text{inf}} \rightarrow F_0 + F_{1B} + F_{1C} + F_2$$

$$N_{\text{max}} \text{ (di trazione)} = 225 \text{ kN}$$

$$N_{\text{min}} \text{ (di compressione)} = 310 \text{ kN}$$

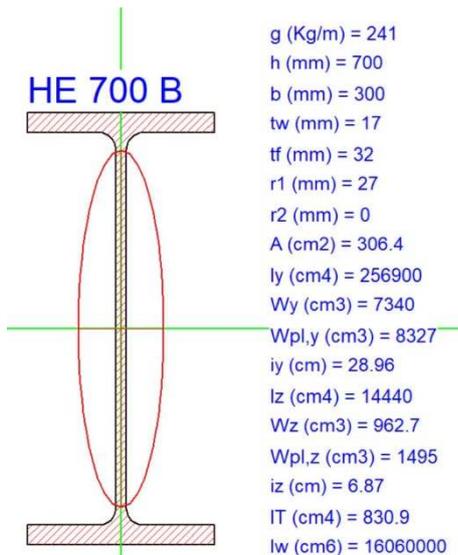
$$V_{\text{max}} = 110 \text{ kN}$$

$$V_{\text{min}} = -95 \text{ kN}$$

$$M_{\text{max}} = 80 \text{ kNm}$$

$$M_{\text{min}} = -185 \text{ kNm}$$

La verifica viene effettuata per mezzo del software Profili_suiteGelfi



HE 700 B	$N_{b,Rd}$ [kN]	10,193	$M_{cy,Rd}$ [kNm]	2,815	Classe Sezione	Compressione	4
	$N_{bz,Rd}$ [kN]	10,193	$M_{cz,Rd}$ [kNm]	505.5		Flessione My	1
	$V_{pb,Rd}$ [kN]	2,677	$V_{pb,Rd}$ [kN]	3,748		Flessione Mz	1
g (Kg/m):	241					Presso-Flessione	1
h (mm):	700	r2 (mm):	0			Verifiche	
b (mm):	300	A (cm ²):	306.4	i_y (cm):	28.96	i_z (cm):	6.87
tw (mm):	17	I_y (cm ⁴):	256,900	I_z (cm ⁴):	14,440	IT (cm ⁴):	830.9
tf (mm):	32	W_y (cm ³):	7,340	W_z (cm ³):	962.7	lw (cm ⁶):	16,060,000
r1 (mm):	27	W_{ply} (cm ³):	8,327	$W_{pl,z}$ (cm ³):	1,495	<input type="button" value="Presso Flessione"/> <input type="button" value="Svergolamento"/>	

Si possono osservare nell'immagine i valori delle resistenze del profilo metallico utilizzato.

Si fa notare che le sollecitazioni sono molto inferiori alle resistenze. Le verifiche per sollecitazioni "semplici" si ritengono soddisfatte.

A seguire si riportano le verifiche per sollecitazioni composte: verifica per pressoflessione e presso-flesso torsione.

Verifica Presso-Flessione - EC3 (edizione 1992) #5.5.4.

HE 700 B Acciaio S355 (Fe510) f_y (N/mm²) 355

N_{Sd} [kN] 310

	Inflexione attorno all'asse y - y	z - z
I_0 [m]	2.38	0
Snellezza λ	8.218	0
$N_{b,Rd}$ [kN]	10,193	10,193
$M_{1,Sd}$ [kNm]	185	0
$M_{2,Sd}$ [kNm]	80	0
M_Q [kNm]	132	0
β_M	1.449	1.449
μ	0.017	0.553
k	1.000	0.984
$M_{c,Rd}$ [kNm]	2,815	505.5
M_{Sd} [kNm]	264.5	0

Resistenza della sezione: 0.009 OK ?

Instabilità flesso-torsionale: 0.124 OK ?

Flessione e compressione assiale - Classe 1 - EC3 #5.5.4.(1)

$$\frac{N_{Sd}}{N_{b,Rd,min}} + \frac{k_y M_{y,Sd}}{M_{cy,Rd1}} + \frac{k_z M_{z,Sd}}{M_{cz,Rd1}} = 0.030 + 0.094 + 0 = 0.124$$

OK

Selezionare diagramma

Resistenza della membratura all'instabilità flessio-torsionale - EC3 (edizione 1992) #5...

HE 700 B

Acciaio S355 (Fe510)

fy (N/mm2) 355

z_a [mm] 0.0 L [m] 2.38 = l_{0z} [m]

Coefficienti C

Momenti all'estremità C₁ 2.704 Carichi trasversali C₂ 0.0 C₃ 1.73

Coefficienti di lunghezza efficace

k 1.0 k_v 1.0

Momento resistente di progetto all'instabilità flessio-torsionale (solo My) - EC3 #5.5.2.

M_{cr} [kNm] = 50,293 M_{c,Rd} [kNm] = 2,815

$\bar{\lambda}_{LT} = \sqrt{\frac{M_{c,Rd} \gamma M_0}{M_{cr}}} = 0.242$ $\chi_{LT} = 1$ M_{b,Rd} [kNm] = 2,815

Resistenza all'instabilità flessio torsionale (flessione e compressione)- Classe 1/2 - EC3 #5.5.4. (2)

N_{Sd} [kN] 310.0 M_{y,Sd} [kNm] 185 M_{z,Sd} [kNm] 80

$\frac{N_{Sd}}{N_{bz,Rd}} + \frac{k_{LT} M_{y,Sd}}{M_{b,Rd}} + \frac{k_z M_{z,Sd}}{M_{cz,Rd}} = \frac{310}{10,193} + \frac{1 \times 185}{2,815} + \frac{0.984 \times 80}{505.5}$

= 0.030 + 0.066 + 0.156 = 0.252

OK

Dai prospetti esposti si evince che il profilo tipo risulta essere verificato alle sollecitazioni composte.

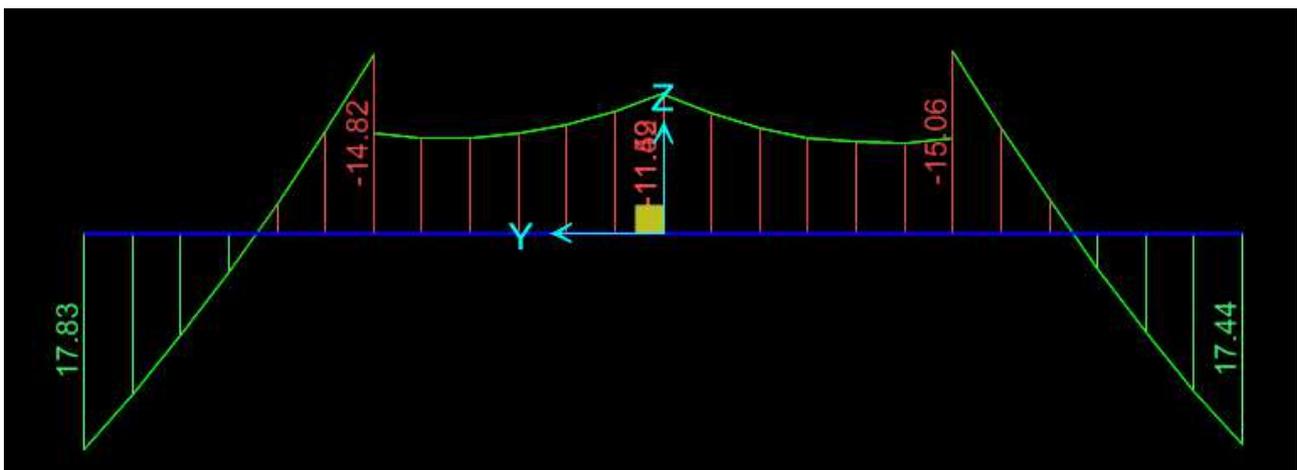
5.6.2 Traversi di campata

5.6.2.1 Sollecitazioni flettenti

Le sollecitazioni sopra esposte sono relative alla combinazione di carico SLU_STR_ENV

Si considera il traverso maggiormente sollecitato.

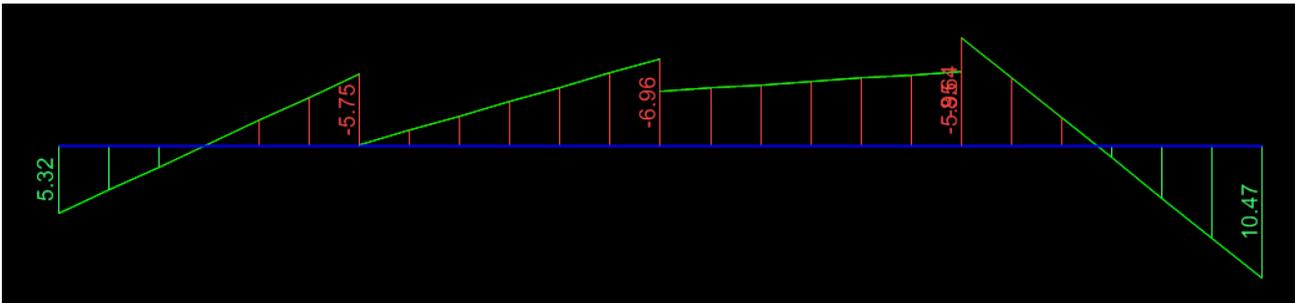
FASE 0



M_{max} = 18.00 kNm

M_{min} = -20.0 kNm

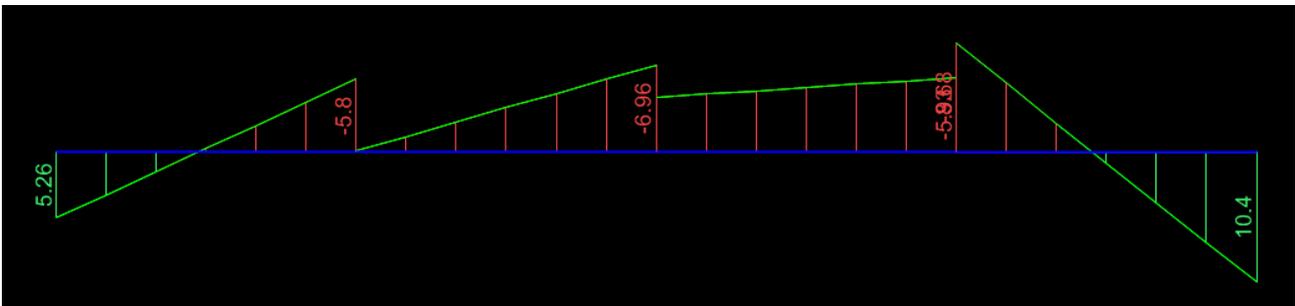
FASE 1A



$M_{max} = 15.0 \text{ kNm}$

$M_{min} = -10.0 \text{ kNm}$

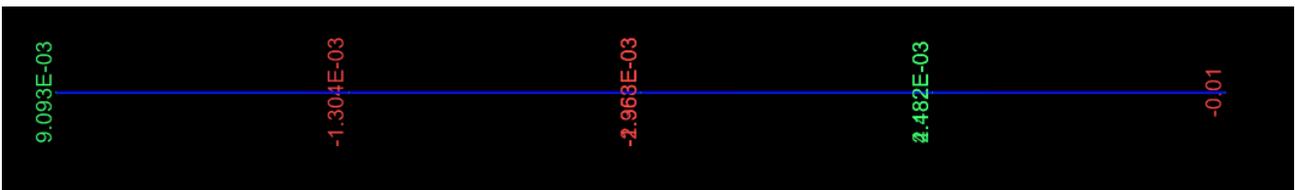
FASE 1B



$M_{max} = 15.0 \text{ kNm}$

$M_{min} = -10.0 \text{ kNm}$

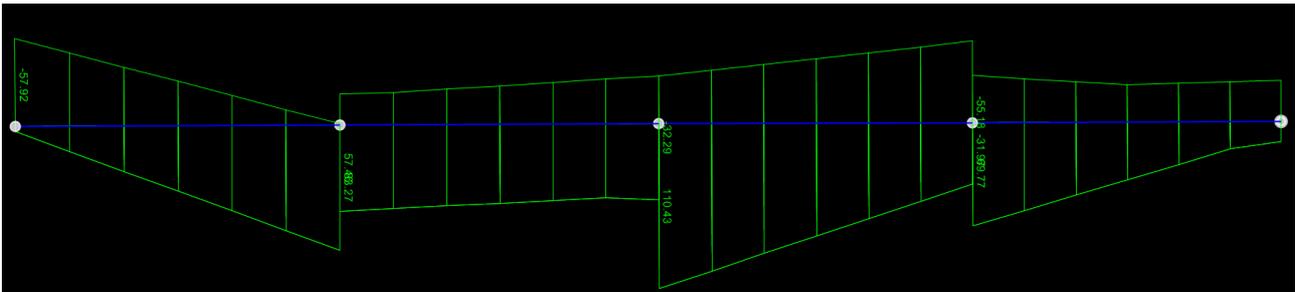
FASE 1C



$M_{max} = 0.05 \text{ kNm}$

$M_{min} = -0.05 \text{ kNm}$

FASE 2



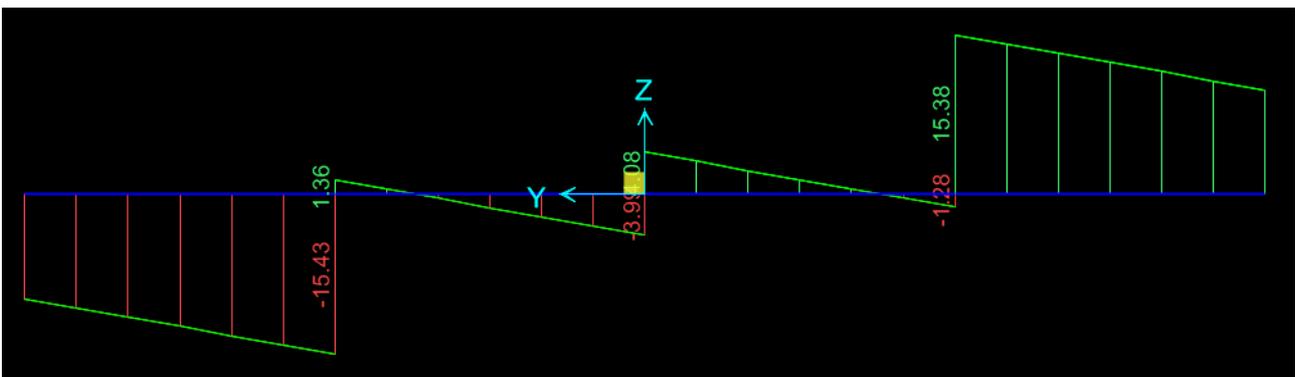
$M_{max} = 110.4 \text{ kNm}$

$M_{min} = -57.9 \text{ kNm}$

5.6.2.2 Sollecitazioni taglianti

Le sollecitazioni sopra esposte sono relative alla combinazione di carico SLU_STR_ENV

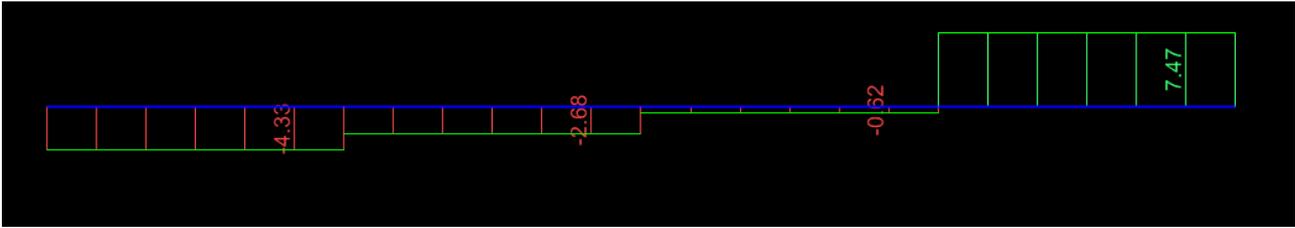
FASE 0



$V_{max} = 18.0 \text{ kN}$

$V_{min} = -18.0 \text{ kN}$

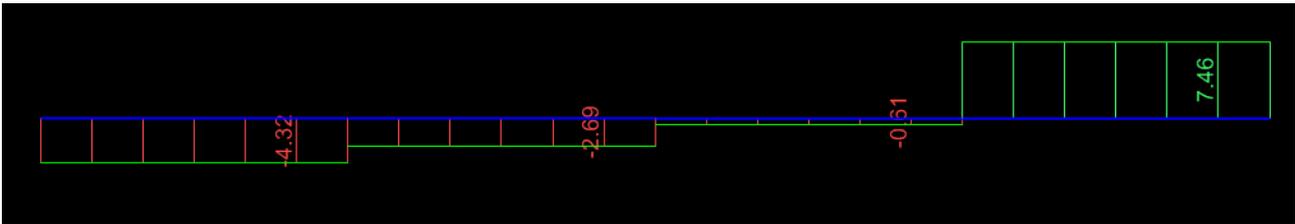
FASE 1A



$V_{max} = 10.0 \text{ kN}$

$V_{min} = -5.0 \text{ kN}$

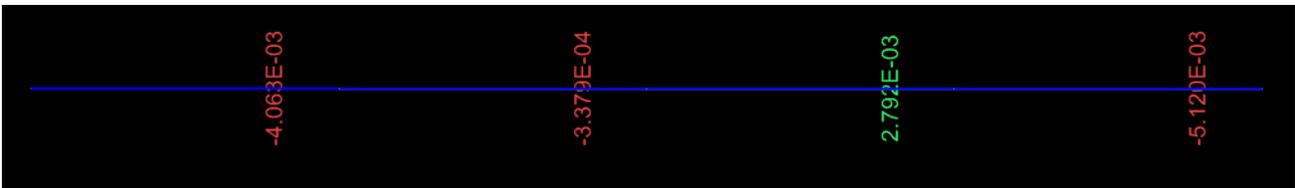
FASE 1B



$V_{max} = 10.0 \text{ kN}$

$V_{min} = -5.0 \text{ kN}$

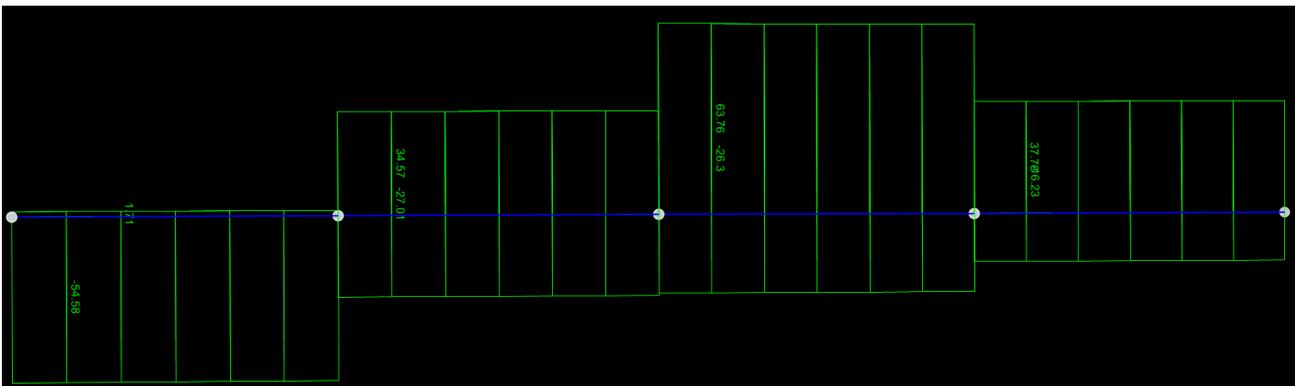
FASE 1C



$V_{max} = 0.05 \text{ kN}$

$V_{min} = 0.05 \text{ kN}$

FASE 2



$$V_{\max} = 63.7 \text{ kN}$$

$$V_{\min} = -57.9 \text{ kN}$$

5.6.2.3 Verifica traversi di Campata

Le sollecitazioni totali sono riferite ad una sezione ideale tipologica.

L'ente sollecitante è così composto:

$$\text{SLU}_{t,\text{iniz.}} \rightarrow F_0 + F_{1A} + F_2$$

$$N_{\max} \text{ (di trazione)} = 640 \text{ kN}$$

$$N_{\min} \text{ (di compressione)} = 340 \text{ kN}$$

$$V_{\max} = 92 \text{ kN}$$

$$V_{\min} = -81 \text{ kN}$$

$$M_{\max} = 143 \text{ kNm}$$

$$M_{\min} = -88 \text{ kNm}$$

$$\text{SLU}_{t,\text{inf}} \rightarrow F_0 + F_{1B} + F_{1C} + F_2$$

$$N_{\max} \text{ (di trazione)} = 640 \text{ kN}$$

$$N_{\min} \text{ (di compressione)} = 340 \text{ kN}$$

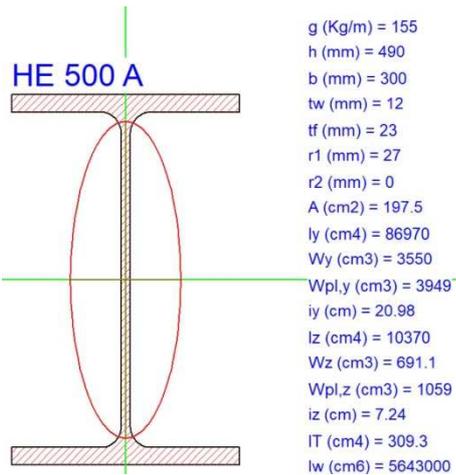
$$V_{\max} = 92 \text{ kN}$$

$$V_{\min} = -81 \text{ kN}$$

$$M_{\max} = 143 \text{ kNm}$$

$$M_{\min} = -88 \text{ kNm}$$

La verifica viene effettuata per mezzo del software Profili_suiteGelfi



HE 500 A		N _{tyPd} [kN]	6.677	M _{eyPd} [kNm]	1.335	<p>Classe Sezione</p> <p>Compressione: 3</p> <p>Flessione My: 1</p> <p>Flessione Mz: 1</p> <p>Presso-Flessione: 1</p>
		N _{tzPd} [kN]	6.677	M _{ezPd} [kNm]	358.0	
		V _{tyPd} [kN]	1.458	V _{tzPd} [kN]	2.694	
g (Kg/m):	155	r2 (mm):	0	iy (cm):	20.98	<p>Verifiche</p> <p>Presso Flessione</p> <p>Svergolamento</p>
h (mm):	490	A (cm ²):	197.5	iz (cm):	7.24	
b (mm):	300	Iy (cm ⁴):	86.970	Iz (cm ⁴):	10.370	
tw (mm):	12	Wy (cm ³):	3.550	Wz (cm ³):	691.1	
tf (mm):	23	Wply (cm ³):	3.949	Wpl,z (cm ³):	1.059	
r1 (mm):	27			IT (cm ⁴):	309.3	
				Iw (cm ⁶):	5.643.000	

Si possono osservare nell'immagine i valori delle resistenze del profilo metallico utilizzato.

Si fa notare che le sollecitazioni sono molto inferiori alle resistenze. Le verifiche per sollecitazioni "semplici" si ritengono soddisfatte.

A seguire si riportano le verifiche per sollecitazioni composte: verifica per pressoflessione e presso-flesso torsione.

Verifica Presso-Flessione - EC3 (edizione 1992) #5.5.4.

HE 500 A Acciaio S355 (Fe510) fy (N/mm2) 355

N_{Sd} [kN] 340

	Inflexione attorno all'asse y - y	z - z
I_0 [m]	2.38	0
Snellezza λ	11.34	0
$N_{b,Rd}$ [kN]	6,677	6,677
$M_{1,Sd}$ [kNm]	143	0
$M_{2,Sd}$ [kNm]	88	0
M_Q [kNm]	116	0
β_M	1.313	1.313
μ	-0.092	0.532
k	1.004	0.974
$M_{c,Rd}$ [kNm]	1,335	358.0
M_{Sd} [kNm]	143	0

Resistenza della sezione 0.011 OK ?
Instabilità flesso-torsionale 0.158 OK ?

Flessione e compressione assiale - Classe 1 - EC3 #5.5.4.(1)

$$\frac{N_{Sd}}{N_{b,Rd,min}} + \frac{k_y M_{y,Sd}}{M_{cy,Rd1}} + \frac{k_z M_{z,Sd}}{M_{cz,Rd1}} = 0.051 + 0.108 + 0 = 0.158$$

OK

Resistenza della membratura all'instabilità flesso-torsionale - EC3 (edizione 1992) #5...

HE 500 A Acciaio S355 (Fe510) fy (N/mm2) 355

z_a [mm] 0.0 L [m] 2.38 = I_{0z} [m]

Momento resistente di progetto all'instabilità flesso-torsionale (solo My) - EC3 #5.5.2.

M_{cr} [kNm] = 10,609 $M_{c,Rd}$ [kNm] = 1,335

$$\bar{\lambda}_{LT} = \sqrt{\frac{M_{c,Rd} \gamma M_0}{M_{cr}}} = 0.364 \quad \chi_{LT} = 1 \quad M_{b,Rd} [kNm] = 1,335$$

Resistenza all'instabilità flesso torsionale (flessione e compressione)- Classe 1/2 - EC3 #5.5.4. (2)

N_{Sd} [kN] 340 $M_{y,Sd}$ [kNm] 143 $M_{z,Sd}$ [kNm] 88

$$\frac{N_{Sd}}{N_{bz,Rd}} + \frac{k_{LT} M_{y,Sd}}{M_{b,Rd}} + \frac{k_z M_{z,Sd}}{M_{cz,Rd1}} = \frac{340}{6,677} + \frac{1 \times 143}{1,335} + \frac{0.974 \times 88}{358.0}$$

$$= 0.051 + 0.107 + 0.239 = 0.397$$

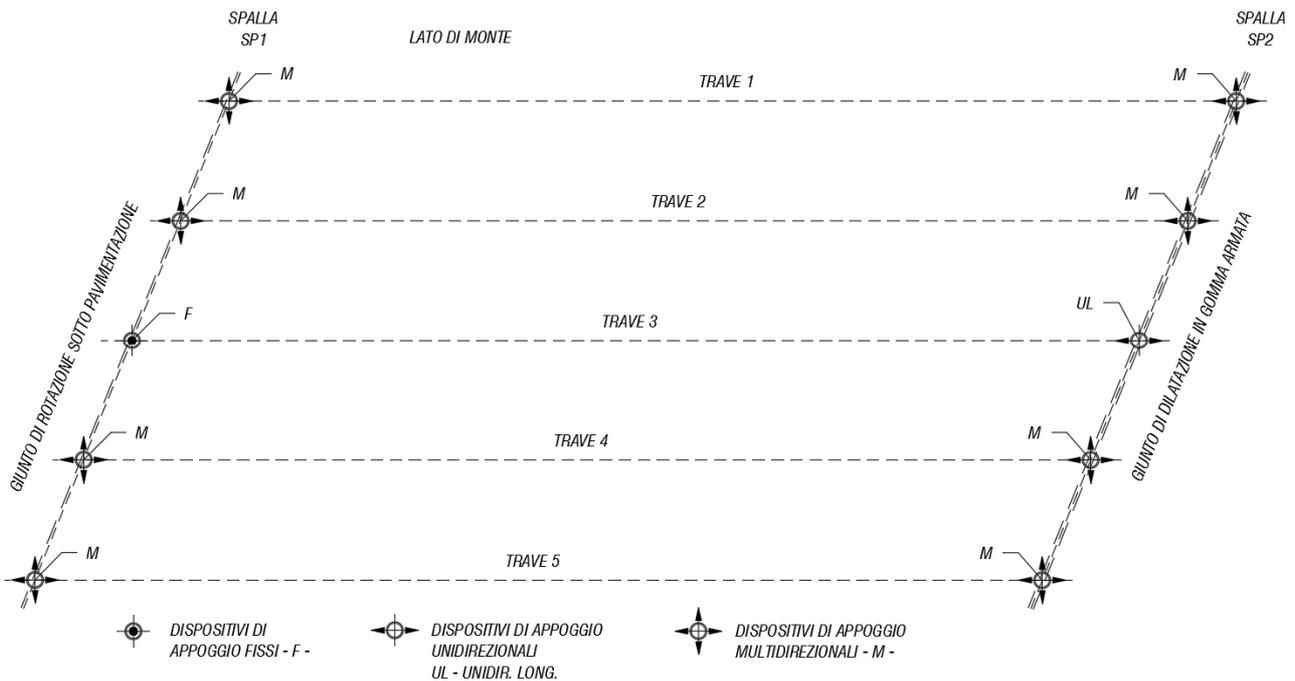
OK

Dai prospetti esposti si evince che il profilo tipo risulta essere verificato alle sollecitazioni composte.

5.7 APPOGGI E GIUNTI

Il sistema di vincolamento dell'impalcato prevede appoggi rigidi. In particolare, la spalla S1 presenta: un appoggio fisso (F) sotto le travi T3; quattro appoggi multidirezionali (M) sotto le travi T1, T2, T4 e T5. La spalla S2 presenta: un appoggio traslazionale nella direzione longitudinale (UL) sotto la trave T3; quattro appoggi multidirezionali (M) sotto le travi T1, T2, T4 e T5.

SCHEMA GIUNTI ED APPOGGI



Nelle tabelle che seguono si elencano i valori calcolati per le principali azioni che sollecitano gli appoggi.

La convenzione utilizzata per indicare le reazioni vincolari è la seguente:

- F1: forza nella direzione longitudinale del ponte (1=rosso in figura);
- F2: forza nella direzione trasversale del ponte (2=verde in figura);
- F3: forza nella direzione verticale (3=ciano in figura).

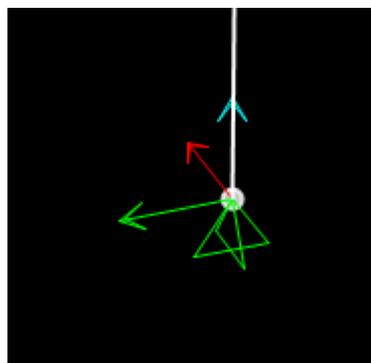


Figura 45 –Sistema di riferimento locale *Joint* nel modello di calcolo.

Lo stesso sistema di riferimento è valido per i momenti (M1, M2 e M3) che, dato lo schema statico, sono sempre nulli.

Carichi permanenti strutturali – Fase 0

FASE 0	TABLE: Joint Reactions										
	Beam	Joint	OutputCase	CaseType	StepType	F1	F2	F3	M1	M2	M3
	Text	Text	Text	Text	Text	KN	KN	KN	KN-m	KN-m	KN-m
Spalla1	T1	F0-1	_G1	Comb.		0.0	0.0	338.0	0.0	0.0	0.0
	T2	F0-3	_G1	Comb.		0.0	0.0	297.5	0.0	0.0	0.0
	T3	F0-5	_G1	Comb.		0.0	0.0	295.9	0.0	0.0	0.0
	T4	F0-7	_G1	Comb.		0.0	0.0	297.5	0.0	0.0	0.0
	T5	F0-9	_G1	Comb.		0.0	0.0	336.4	0.0	0.0	0.0
Spalla2	T1	F0-2	_G1	Comb.		0.0	0.0	336.4	0.0	0.0	0.0
	T2	F0-4	_G1	Comb.		0.0	0.0	297.5	0.0	0.0	0.0
	T3	F0-6	_G1	Comb.		0.0	0.0	295.9	0.0	0.0	0.0
	T4	F0-8	_G1	Comb.		0.0	0.0	297.5	0.0	0.0	0.0
	T5	F0-10	_G1	Comb.		0.0	0.0	338.0	0.0	0.0	0.0

Carichi permanenti non strutturali – Fase 1A (t=0) e fase 1B (t=inf.)

FASE 1A	TABLE: Joint Reactions										
	Beam	Joint	OutputCase	CaseType	StepType	F1	F2	F3	M1	M2	M3
	Text	Text	Text	Text	Text	KN	KN	KN	KN-m	KN-m	KN-m
Spalla1	T1	F1A-1	_G2	Comb.		0.0	0.0	155.6	0.0	0.0	0.0
	T2	F1A-3	_G2	Comb.		0.0	0.0	137.0	0.0	0.0	0.0
	T3	F1A-5	_G2	Comb.		0.0	0.0	135.9	0.0	0.0	0.0
	T4	F1A-7	_G2	Comb.		0.0	0.0	137.0	0.0	0.0	0.0
	T5	F1A-9	_G2	Comb.		0.0	0.0	155.4	0.0	0.0	0.0
Spalla2	T1	F1A-2	_G2	Comb.		0.0	0.0	154.8	0.0	0.0	0.0
	T2	F1A-4	_G2	Comb.		0.0	0.0	136.9	0.0	0.0	0.0
	T3	F1A-6	_G2	Comb.		0.0	0.0	135.9	0.0	0.0	0.0
	T4	F1A-8	_G2	Comb.		0.0	0.0	137.1	0.0	0.0	0.0
	T5	F1A-10	_G2	Comb.		0.0	0.0	156.1	0.0	0.0	0.0

FASE 1B	TABLE: Joint Reactions										
	Beam	Joint	OutputCase	CaseType	StepType	F1	F2	F3	M1	M2	M3
	Text	Text	Text	Text	Text	KN	KN	KN	KN-m	KN-m	KN-m
Spalla1	T1	F1B-1	_G2	Comb.		0.0	0.0	155.1	0.0	0.0	0.0
	T2	F1B-3	_G2	Comb.		0.0	0.0	137.3	0.0	0.0	0.0
	T3	F1B-5	_G2	Comb.		0.0	0.0	136.4	0.0	0.0	0.0
	T4	F1B-7	_G2	Comb.		0.0	0.0	137.3	0.0	0.0	0.0
	T5	F1B-9	_G2	Comb.		0.0	0.0	154.9	0.0	0.0	0.0
Spalla2	T1	F1B-2	_G2	Comb.		0.0	0.0	154.3	0.0	0.0	0.0
	T2	F1B-4	_G2	Comb.		0.0	0.0	137.2	0.0	0.0	0.0
	T3	F1B-6	_G2	Comb.		0.0	0.0	136.4	0.0	0.0	0.0
	T4	F1B-8	_G2	Comb.		0.0	0.0	137.4	0.0	0.0	0.0
	T5	F1B-10	_G2	Comb.		0.0	0.0	155.6	0.0	0.0	0.0

Ritiro – Fase 1C

FASE 1C	TABLE: Joint Reactions										
	Beam	Joint	OutputCase	CaseType	StepType	F1	F2	F3	M1	M2	M3
	Text	Text	Text	Text	Text	KN	KN	KN	KN-m	KN-m	KN-m
Spalla1	T1	F1C-1	_R	Comb.		0.0	0.0	0.0	0.0	0.0	0.0
	T2	F1C-3	_R	Comb.		0.0	0.0	0.0	0.0	0.0	0.0
	T3	F1C-5	_R	Comb.		0.0	0.0	0.0	0.0	0.0	0.0
	T4	F1C-7	_R	Comb.		0.0	0.0	0.0	0.0	0.0	0.0
	T5	F1C-9	_R	Comb.		0.0	0.0	0.0	0.0	0.0	0.0
Spalla2	T1	F1C-2	_R	Comb.		0.0	0.0	0.0	0.0	0.0	0.0
	T2	F1C-4	_R	Comb.		0.0	0.0	0.0	0.0	0.0	0.0
	T3	F1C-6	_R	Comb.		0.0	0.0	0.0	0.0	0.0	0.0
	T4	F1C-8	_R	Comb.		0.0	0.0	0.0	0.0	0.0	0.0
	T5	F1C-10	_R	Comb.		0.0	0.0	0.0	0.0	0.0	0.0

Carichi variabili – Fase 2

FASE 2 (TRAFFICO)	TABLE: Joint Reactions										
	Beam	Joint	OutputCase	CaseType	StepType	F1	F2	F3	M1	M2	M3
	Text	Text	Text	Text	Text	KN	KN	KN	KN-m	KN-m	KN-m
Spalla1	T1	F2-1	C_Mob_ENV	Comb.	Max	0.0	0.0	39.6	0.0	0.0	0.0
	T1	F2-1	C_Mob_ENV	Comb.	Min	0.0	0.0	7.7	0.0	0.0	0.0
	T2	F2-3	C_Mob_ENV	Comb.	Max	0.0	0.0	33.0	0.0	0.0	0.0
	T2	F2-3	C_Mob_ENV	Comb.	Min	0.0	0.0	10.6	0.0	0.0	0.0
	T3	F2-5	C_Mob_ENV	Comb.	Max	0.0	0.0	9.2	0.0	0.0	0.0
	T3	F2-5	C_Mob_ENV	Comb.	Min	-431.5	-110.8	-68.4	0.0	0.0	0.0
	T4	F2-7	C_Mob_ENV	Comb.	Max	0.0	0.0	10.5	0.0	0.0	0.0
	T4	F2-7	C_Mob_ENV	Comb.	Min	0.0	0.0	-1.3	0.0	0.0	0.0
	T5	F2-9	C_Mob_ENV	Comb.	Max	0.0	0.0	30.4	0.0	0.0	0.0
	T5	F2-9	C_Mob_ENV	Comb.	Min	0.0	0.0	-10.3	0.0	0.0	0.0
Spalla2	T1	F2-2	C_Mob_ENV	Comb.	Max	0.0	0.0	40.2	0.0	0.0	0.0
	T1	F2-2	C_Mob_ENV	Comb.	Min	0.0	0.0	2.8	0.0	0.0	0.0
	T2	F2-4	C_Mob_ENV	Comb.	Max	0.0	0.0	11.9	0.0	0.0	0.0
	T2	F2-4	C_Mob_ENV	Comb.	Min	0.0	0.0	-13.4	0.0	0.0	0.0
	T3	F2-6	C_Mob_ENV	Comb.	Max	0.0	0.0	9.2	0.0	0.0	0.0
	T3	F2-6	C_Mob_ENV	Comb.	Min	0.0	-57.9	4.3	0.0	0.0	0.0
	T4	F2-8	C_Mob_ENV	Comb.	Max	0.0	0.0	18.0	0.0	0.0	0.0
	T4	F2-8	C_Mob_ENV	Comb.	Min	0.0	0.0	-1.8	0.0	0.0	0.0
	T5	F2-10	C_Mob_ENV	Comb.	Max	0.0	0.0	31.0	0.0	0.0	0.0
	T5	F2-10	C_Mob_ENV	Comb.	Min	0.0	0.0	-9.1	0.0	0.0	0.0

FASE 2 (VENTO)	TABLE: Joint Reactions										
	Beam	Joint	OutputCase	CaseType	StepType	F1	F2	F3	M1	M2	M3
	Text	Text	Text	Text	Text	KN	KN	KN	KN-m	KN-m	KN-m
Spalla1	T1	F2-1	_Acc. Vento	Comb.		0.0	0.0	88.0	0.0	0.0	0.0
	T2	F2-3	_Acc. Vento	Comb.		0.0	0.0	74.2	0.0	0.0	0.0
	T3	F2-5	_Acc. Vento	Comb.		-39.6	98.6	26.8	0.0	0.0	0.0
	T4	F2-7	_Acc. Vento	Comb.		0.0	0.0	-4.2	0.0	0.0	0.0
	T5	F2-9	_Acc. Vento	Comb.		0.0	0.0	-12.6	0.0	0.0	0.0
Spalla2	T1	F2-2	_Acc. Vento	Comb.		0.0	0.0	90.8	0.0	0.0	0.0
	T2	F2-4	_Acc. Vento	Comb.		0.0	0.0	77.7	0.0	0.0	0.0
	T3	F2-6	_Acc. Vento	Comb.		0.0	144.8	41.6	0.0	0.0	0.0
	T4	F2-8	_Acc. Vento	Comb.		0.0	0.0	-17.5	0.0	0.0	0.0
	T5	F2-10	_Acc. Vento	Comb.		0.0	0.0	-13.9	0.0	0.0	0.0

Combinazione SLE caratteristica (rara)

FASE 0+1A+2

TABLE: Joint Reactions											
	Beam	Joint	OutputCase	CaseType	StepType	F1	F2	F3	M1	M2	M3
	Text	Text	Text	Text	Text	KN	KN	KN	KN-m	KN-m	KN-m
Spalla1	T1	MULTI	C_SLU_STR_ENV	Comb.	Max	0.0	0.0	586.0	0.0	0.0	0.0
	T1	MULTI	C_SLU_STR_ENV	Comb.	Min	0.0	0.0	554.0	0.0	0.0	0.0
	T2	MULTI	C_SLU_STR_ENV	Comb.	Max	0.0	0.0	512.1	0.0	0.0	0.0
	T2	MULTI	C_SLU_STR_ENV	Comb.	Min	0.0	0.0	489.7	0.0	0.0	0.0
	T3	FISSO	C_SLU_STR_ENV	Comb.	Max	-23.7	59.1	457.1	0.0	0.0	0.0
	T3	FISSO	C_SLU_STR_ENV	Comb.	Min	-455.3	-51.7	379.5	0.0	0.0	0.0
	T4	MULTI	C_SLU_STR_ENV	Comb.	Max	0.0	0.0	442.5	0.0	0.0	0.0
	T4	MULTI	C_SLU_STR_ENV	Comb.	Min	0.0	0.0	430.7	0.0	0.0	0.0
	T5	MULTI	C_SLU_STR_ENV	Comb.	Max	0.0	0.0	514.7	0.0	0.0	0.0
	T5	MULTI	C_SLU_STR_ENV	Comb.	Min	0.0	0.0	473.8	0.0	0.0	0.0
Spalla2	T1	MULTI	C_SLU_STR_ENV	Comb.	Max	0.0	0.0	586.0	0.0	0.0	0.0
	T1	MULTI	C_SLU_STR_ENV	Comb.	Min	0.0	0.0	548.4	0.0	0.0	0.0
	T2	MULTI	C_SLU_STR_ENV	Comb.	Max	0.0	0.0	493.0	0.0	0.0	0.0
	T2	MULTI	C_SLU_STR_ENV	Comb.	Min	0.0	0.0	467.7	0.0	0.0	0.0
	T3	UNI-LONG	C_SLU_STR_ENV	Comb.	Max	0.0	86.9	466.0	0.0	0.0	0.0
	T3	UNI-LONG	C_SLU_STR_ENV	Comb.	Min	0.0	29.0	461.1	0.0	0.0	0.0
	T4	MULTI	C_SLU_STR_ENV	Comb.	Max	0.0	0.0	442.1	0.0	0.0	0.0
	T4	MULTI	C_SLU_STR_ENV	Comb.	Min	0.0	0.0	415.5	0.0	0.0	0.0
	T5	MULTI	C_SLU_STR_ENV	Comb.	Max	0.0	0.0	516.8	0.0	0.0	0.0
	T5	MULTI	C_SLU_STR_ENV	Comb.	Min	0.0	0.0	476.6	0.0	0.0	0.0

FASE 0+1B+1C+2

TABLE: Joint Reactions											
	Beam	Joint	OutputCase	CaseType	StepType	F1	F2	F3	M1	M2	M3
F. 0+1B+1C+2	Text	Text	Text	Text	Text	KN	KN	KN	KN-m	KN-m	KN-m
Spalla1	T1	MULTI	C_SLE_rara_ENV	Comb.	Max	0.0	0.0	585.5	0.0	0.0	0.0
	T1	MULTI	C_SLE_rara_ENV	Comb.	Min	0.0	0.0	553.4	0.0	0.0	0.0
	T2	MULTI	C_SLE_rara_ENV	Comb.	Max	0.0	0.0	512.4	0.0	0.0	0.0
	T2	MULTI	C_SLE_rara_ENV	Comb.	Min	0.0	0.0	490.0	0.0	0.0	0.0
	T3	FISSO	C_SLE_rara_ENV	Comb.	Max	-23.7	59.1	457.5	0.0	0.0	0.0
	T3	FISSO	C_SLE_rara_ENV	Comb.	Min	-455.3	-51.7	379.9	0.0	0.0	0.0
	T4	MULTI	C_SLE_rara_ENV	Comb.	Max	0.0	0.0	442.8	0.0	0.0	0.0
	T4	MULTI	C_SLE_rara_ENV	Comb.	Min	0.0	0.0	430.9	0.0	0.0	0.0
	T5	MULTI	C_SLE_rara_ENV	Comb.	Max	0.0	0.0	514.2	0.0	0.0	0.0
	T5	MULTI	C_SLE_rara_ENV	Comb.	Min	0.0	0.0	473.4	0.0	0.0	0.0
Spalla2	T1	MULTI	C_SLE_rara_ENV	Comb.	Max	0.0	0.0	585.5	0.0	0.0	0.0
	T1	MULTI	C_SLE_rara_ENV	Comb.	Min	0.0	0.0	547.9	0.0	0.0	0.0
	T2	MULTI	C_SLE_rara_ENV	Comb.	Max	0.0	0.0	493.2	0.0	0.0	0.0
	T2	MULTI	C_SLE_rara_ENV	Comb.	Min	0.0	0.0	467.9	0.0	0.0	0.0
	T3	UNI-LONG	C_SLE_rara_ENV	Comb.	Max	0.0	86.9	466.4	0.0	0.0	0.0
	T3	UNI-LONG	C_SLE_rara_ENV	Comb.	Min	0.0	29.0	461.6	0.0	0.0	0.0
	T4	MULTI	C_SLE_rara_ENV	Comb.	Max	0.0	0.0	442.4	0.0	0.0	0.0
	T4	MULTI	C_SLE_rara_ENV	Comb.	Min	0.0	0.0	415.7	0.0	0.0	0.0
	T5	MULTI	C_SLE_rara_ENV	Comb.	Max	0.0	0.0	516.3	0.0	0.0	0.0
	T5	MULTI	C_SLE_rara_ENV	Comb.	Min	0.0	0.0	476.1	0.0	0.0	0.0

Combinazione SLU

FASE 0+1A+2

TABLE: Joint Reactions											
	Beam	Joint	OutputCase	CaseType	StepType	F1	F2	F3	M1	M2	M3
F. 0+1A+2	Text	Text	Text	Text	Text	KN	KN	KN	KN-m	KN-m	KN-m
Spalla1	T1	MULTI	C_SLU_STR_ENV	Comb.	Max	0.0	0.0	822.4	0.0	0.0	0.0
	T1	MULTI	C_SLU_STR_ENV	Comb.	Min	0.0	0.0	779.1	0.0	0.0	0.0
	T2	MULTI	C_SLU_STR_ENV	Comb.	Max	0.0	0.0	718.5	0.0	0.0	0.0
	T2	MULTI	C_SLU_STR_ENV	Comb.	Min	0.0	0.0	688.3	0.0	0.0	0.0
	T3	FISSO	C_SLU_STR_ENV	Comb.	Max	-35.6	88.7	639.8	0.0	0.0	0.0
	T3	FISSO	C_SLU_STR_ENV	Comb.	Min	-618.2	-60.9	535.1	0.0	0.0	0.0
	T4	MULTI	C_SLU_STR_ENV	Comb.	Max	0.0	0.0	617.6	0.0	0.0	0.0
	T4	MULTI	C_SLU_STR_ENV	Comb.	Min	0.0	0.0	601.6	0.0	0.0	0.0
	T5	MULTI	C_SLU_STR_ENV	Comb.	Max	0.0	0.0	717.0	0.0	0.0	0.0
	T5	MULTI	C_SLU_STR_ENV	Comb.	Min	0.0	0.0	661.8	0.0	0.0	0.0
Spalla2	T1	MULTI	C_SLU_STR_ENV	Comb.	Max	0.0	0.0	822.5	0.0	0.0	0.0
	T1	MULTI	C_SLU_STR_ENV	Comb.	Min	0.0	0.0	771.7	0.0	0.0	0.0
	T2	MULTI	C_SLU_STR_ENV	Comb.	Max	0.0	0.0	693.0	0.0	0.0	0.0
	T2	MULTI	C_SLU_STR_ENV	Comb.	Min	0.0	0.0	658.9	0.0	0.0	0.0
	T3	UNI-LONG	C_SLU_STR_ENV	Comb.	Max	0.0	130.3	653.2	0.0	0.0	0.0
	T3	UNI-LONG	C_SLU_STR_ENV	Comb.	Min	0.0	52.2	646.6	0.0	0.0	0.0
	T4	MULTI	C_SLU_STR_ENV	Comb.	Max	0.0	0.0	615.8	0.0	0.0	0.0
	T4	MULTI	C_SLU_STR_ENV	Comb.	Min	0.0	0.0	589.0	0.0	0.0	0.0
	T5	MULTI	C_SLU_STR_ENV	Comb.	Max	0.0	0.0	719.9	0.0	0.0	0.0
	T5	MULTI	C_SLU_STR_ENV	Comb.	Min	0.0	0.0	665.6	0.0	0.0	0.0

FASE 0+1B+1C+2

TABLE: Joint Reactions											
	Beam	Joint	OutputCase	CaseType	StepType	F1	F2	F3	M1	M2	M3
F. 0+1B+1C+2	Text	Text	Text	Text	Text	KN	KN	KN	KN-m	KN-m	KN-m
Spalla1	T1	MULTI	C_SLU_STR_ENV	Comb.	Max	0.0	0.0	821.6	0.0	0.0	0.0
	T1	MULTI	C_SLU_STR_ENV	Comb.	Min	0.0	0.0	778.3	0.0	0.0	0.0
	T2	MULTI	C_SLU_STR_ENV	Comb.	Max	0.0	0.0	719.0	0.0	0.0	0.0
	T2	MULTI	C_SLU_STR_ENV	Comb.	Min	0.0	0.0	688.7	0.0	0.0	0.0
	T3	FISSO	C_SLU_STR_ENV	Comb.	Max	-35.6	88.7	640.5	0.0	0.0	0.0
	T3	FISSO	C_SLU_STR_ENV	Comb.	Min	-618.2	-60.9	535.7	0.0	0.0	0.0
	T4	MULTI	C_SLU_STR_ENV	Comb.	Max	0.0	0.0	617.9	0.0	0.0	0.0
	T4	MULTI	C_SLU_STR_ENV	Comb.	Min	0.0	0.0	602.0	0.0	0.0	0.0
	T5	MULTI	C_SLU_STR_ENV	Comb.	Max	0.0	0.0	716.3	0.0	0.0	0.0
	T5	MULTI	C_SLU_STR_ENV	Comb.	Min	0.0	0.0	661.1	0.0	0.0	0.0
Spalla2	T1	MULTI	C_SLU_STR_ENV	Comb.	Max	0.0	0.0	821.8	0.0	0.0	0.0
	T1	MULTI	C_SLU_STR_ENV	Comb.	Min	0.0	0.0	771.0	0.0	0.0	0.0
	T2	MULTI	C_SLU_STR_ENV	Comb.	Max	0.0	0.0	693.4	0.0	0.0	0.0
	T2	MULTI	C_SLU_STR_ENV	Comb.	Min	0.0	0.0	659.3	0.0	0.0	0.0
	T3	UNI-LONG	C_SLU_STR_ENV	Comb.	Max	0.0	130.3	653.9	0.0	0.0	0.0
	T3	UNI-LONG	C_SLU_STR_ENV	Comb.	Min	0.0	52.2	647.3	0.0	0.0	0.0
	T4	MULTI	C_SLU_STR_ENV	Comb.	Max	0.0	0.0	616.3	0.0	0.0	0.0
	T4	MULTI	C_SLU_STR_ENV	Comb.	Min	0.0	0.0	589.4	0.0	0.0	0.0
	T5	MULTI	C_SLU_STR_ENV	Comb.	Max	0.0	0.0	719.1	0.0	0.0	0.0
	T5	MULTI	C_SLU_STR_ENV	Comb.	Min	0.0	0.0	664.8	0.0	0.0	0.0

Combinazione SLV

TABLE: Joint Reactions											
	Beam	Joint	OutputCase	CaseType	StepType	F1	F2	F3	M1	M2	M3
F.S.	Text	Text	Text	Text	Text	KN	KN	KN	KN-m	KN-m	KN-m
Spalla1	T1	FS-1	C_SLV_ENV	Comb.	Max	0.0	0.0	574.7	0.0	0.0	0.0
	T1	FS-1	C_SLV_ENV	Comb.	Min	0.0	0.0	401.8	0.0	0.0	0.0
	T2	FS-3	C_SLV_ENV	Comb.	Max	0.0	0.0	753.2	0.0	0.0	0.0
	T2	FS-3	C_SLV_ENV	Comb.	Min	0.0	0.0	105.5	0.0	0.0	0.0
	T3	FS-5	C_SLV_ENV	Comb.	Max	2286.2	1183.6	839.8	0.0	0.0	0.0
	T3	FS-5	C_SLV_ENV	Comb.	Min	-2286.2	-1183.6	15.2	0.0	0.0	0.0
	T4	FS-7	C_SLV_ENV	Comb.	Max	0.0	0.0	700.9	0.0	0.0	0.0
	T4	FS-7	C_SLV_ENV	Comb.	Min	0.0	0.0	166.2	0.0	0.0	0.0
	T5	FS-9	C_SLV_ENV	Comb.	Max	0.0	0.0	603.3	0.0	0.0	0.0
	T5	FS-9	C_SLV_ENV	Comb.	Min	0.0	0.0	400.7	0.0	0.0	0.0
Spalla2	T1	FS-2	C_SLV_ENV	Comb.	Max	0.0	0.0	581.4	0.0	0.0	0.0
	T1	FS-2	C_SLV_ENV	Comb.	Min	0.0	0.0	389.3	0.0	0.0	0.0
	T2	FS-4	C_SLV_ENV	Comb.	Max	0.0	0.0	700.1	0.0	0.0	0.0
	T2	FS-4	C_SLV_ENV	Comb.	Min	0.0	0.0	158.8	0.0	0.0	0.0
	T3	FS-6	C_SLV_ENV	Comb.	Max	0.0	1203.1	524.0	0.0	0.0	0.0
	T3	FS-6	C_SLV_ENV	Comb.	Min	0.0	-1203.1	331.4	0.0	0.0	0.0
	T4	FS-8	C_SLV_ENV	Comb.	Max	0.0	0.0	744.7	0.0	0.0	0.0
	T4	FS-8	C_SLV_ENV	Comb.	Min	0.0	0.0	122.9	0.0	0.0	0.0
	T5	FS-10	C_SLV_ENV	Comb.	Max	0.0	0.0	597.7	0.0	0.0	0.0
	T5	FS-10	C_SLV_ENV	Comb.	Min	0.0	0.0	410.9	0.0	0.0	0.0

Nelle tabelle che seguono si elencano i valori degli spostamenti e delle rotazioni degli appoggi.

La convenzione utilizzata per indicare le reazioni vincolari è la seguente:

- U1: spostamento nella direzione longitudinale del ponte (1=rosso in figura);
- U2: spostamento nella direzione trasversale del ponte (2=verde in figura);
- U3: spostamento nella direzione verticale (3=ciano in figura);
- R1: rotazione attorno all'asse 1;
- R2: rotazione attorno all'asse 2;
- R3: rotazione attorno all'asse 3.

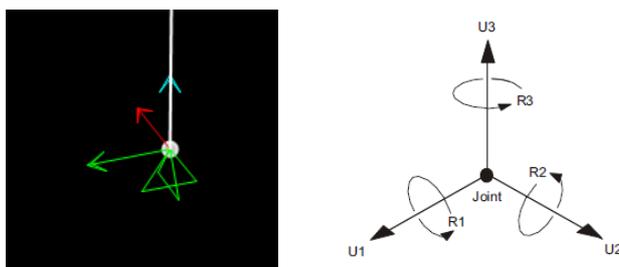


Figura 46 – Sistema di riferimento locale *Joint* nel modello di calcolo (sinistra); sei gradi di libertà *Joint* (destra).

Combinazione SLU: spostamenti e rotazioni

TABLE: Joint Displacements											
	Beam	Joint	Output Case	Case Type	StepT ype	U1	U2	U3	R1	R2	R3
	Text	Text	Text	Text	Text	mm	mm	mm	Radians	Radians	Radians
Spalla1	T1	MULTI	C_SLU_STR_ENV	Comb.	Max	2.3	0.0	0.0	3.95E-05	1.70E-02	6.48E-04
	T1	MULTI	C_SLU_STR_ENV	Comb.	Min	-1.0	-0.2	0.0	-1.72E-05	2.96E-03	2.20E-05
	T2	MULTI	C_SLU_STR_ENV	Comb.	Max	1.4	-0.1	0.0	7.96E-06	1.64E-02	6.18E-04
	T2	MULTI	C_SLU_STR_ENV	Comb.	Min	-0.6	-0.2	0.0	-3.85E-05	2.63E-03	-2.00E-05
	T3	FISSO	C_SLU_STR_ENV	Comb.	Max	0.0	0.0	0.0	1.77E-04	1.59E-02	6.05E-04
	T3	FISSO	C_SLU_STR_ENV	Comb.	Min	0.0	0.0	0.0	7.65E-05	2.48E-03	3.60E-05
	T4	MULTI	C_SLU_STR_ENV	Comb.	Max	0.6	-0.1	0.0	-2.27E-07	1.53E-02	5.92E-04
	T4	MULTI	C_SLU_STR_ENV	Comb.	Min	-0.9	-0.2	0.0	-2.21E-05	2.31E-03	2.80E-05
	T5	MULTI	C_SLU_STR_ENV	Comb.	Max	1.0	-0.1	0.0	3.54E-05	1.51E-02	5.79E-04
	T5	MULTI	C_SLU_STR_ENV	Comb.	Min	-1.8	-0.2	0.0	1.24E-05	2.16E-03	-4.49E-05
Spalla2	T1	MULTI	C_SLU_STR_ENV	Comb.	Max	31.4	-0.2	0.0	-1.10E-03	-2.75E-03	4.41E-04
	T1	MULTI	C_SLU_STR_ENV	Comb.	Min	-2.4	-1.3	0.0	-6.38E-03	-1.58E-02	-2.19E-04
	T2	MULTI	C_SLU_STR_ENV	Comb.	Max	30.0	-0.1	0.0	-9.88E-04	-2.43E-03	4.65E-04
	T2	MULTI	C_SLU_STR_ENV	Comb.	Min	-2.8	-0.7	0.0	-6.13E-03	-1.52E-02	-1.90E-04
	T3	UNI-LONG	C_SLU_STR_ENV	Comb.	Max	28.7	0.0	0.0	-7.60E-04	-2.23E-03	3.70E-04
	T3	UNI-LONG	C_SLU_STR_ENV	Comb.	Min	-3.1	0.0	0.0	-5.77E-03	-1.47E-02	-1.53E-04
	T4	MULTI	C_SLU_STR_ENV	Comb.	Max	27.4	0.4	0.0	-8.74E-04	-2.15E-03	3.70E-04
	T4	MULTI	C_SLU_STR_ENV	Comb.	Min	-3.2	-0.2	0.0	-5.73E-03	-1.42E-02	-1.37E-04
	T5	MULTI	C_SLU_STR_ENV	Comb.	Max	26.3	1.0	0.0	-7.74E-04	-2.01E-03	4.43E-04
	T5	MULTI	C_SLU_STR_ENV	Comb.	Min	-3.3	-0.2	0.0	-5.59E-03	-1.40E-02	-9.30E-05

Combinazione SLV: spostamenti e rotazioni

TABLE: Joint Displacements											
	Beam	Joint	Output Case	Case Type	Step Type	U1	U2	U3	R1	R2	R3
	Text	Text	Text	Text	Text	mm	mm	mm	Radians	Radians	Radians
Spalla1	T1	MULTI	C_SLV_ENV	Comb.	Max	3.0	1.6	0.0	1.18E-03	2.96E-03	4.21E-04
	T1	MULTI	C_SLV_ENV	Comb.	Min	-2.6	-1.7	0.0	8.08E-04	2.05E-03	-2.22E-04
	T2	MULTI	C_SLV_ENV	Comb.	Max	2.3	1.6	0.0	1.18E-03	2.86E-03	3.32E-04
	T2	MULTI	C_SLV_ENV	Comb.	Min	-2.0	-1.7	0.0	7.89E-04	2.02E-03	-2.00E-04
	T3	FISSO	C_SLV_ENV	Comb.	Max	0.0	0.0	0.0	2.46E-03	3.59E-03	3.25E-04
	T3	FISSO	C_SLV_ENV	Comb.	Min	0.0	0.0	0.0	-5.07E-04	1.28E-03	-2.11E-04
	T4	MULTI	C_SLV_ENV	Comb.	Max	1.8	1.7	0.0	1.18E-03	2.89E-03	3.54E-04
	T4	MULTI	C_SLV_ENV	Comb.	Min	-2.1	-1.6	0.0	8.06E-04	2.07E-03	-2.61E-04
	T5	MULTI	C_SLV_ENV	Comb.	Max	1.9	2.0	0.0	1.23E-03	3.01E-03	3.41E-04
	T5	MULTI	C_SLV_ENV	Comb.	Min	-2.8	-1.7	0.0	8.70E-04	2.16E-03	-3.31E-04
Spalla2	T1	MULTI	C_SLV_ENV	Comb.	Max	7.2	1.5	0.0	-8.19E-04	-2.04E-03	3.60E-04
	T1	MULTI	C_SLV_ENV	Comb.	Min	1.2	-1.7	0.0	-1.22E-03	-2.97E-03	-3.18E-04
	T2	MULTI	C_SLV_ENV	Comb.	Max	6.8	1.4	0.0	-7.84E-04	-2.01E-03	3.59E-04
	T2	MULTI	C_SLV_ENV	Comb.	Min	1.2	-1.5	0.0	-1.17E-03	-2.88E-03	-2.45E-04
	T3	UNI-LONG	C_SLV_ENV	Comb.	Max	6.5	0.0	0.0	4.11E-04	-1.97E-03	3.33E-04
	T3	UNI-LONG	C_SLV_ENV	Comb.	Min	1.2	0.0	0.0	-2.37E-03	-2.90E-03	-2.00E-04
	T4	MULTI	C_SLV_ENV	Comb.	Max	6.3	1.4	0.0	-8.06E-04	-2.06E-03	3.28E-04
	T4	MULTI	C_SLV_ENV	Comb.	Min	1.2	-1.3	0.0	-1.19E-03	-2.89E-03	-1.77E-04
	T5	MULTI	C_SLV_ENV	Comb.	Max	6.2	1.2	0.0	-8.40E-04	-2.15E-03	4.27E-04
	T5	MULTI	C_SLV_ENV	Comb.	Min	1.2	-1.2	0.0	-1.21E-03	-3.01E-03	-1.99E-04

Il giunto pari a 100 mm è in grado di garantire le deformazioni soprariportate, sia per combinazione SLU che per combinazione SLV.

In considerazione delle sollecitazioni di progetto determinate ai capitoli precedenti, le caratteristiche prestazionali richieste per gli apparecchi di appoggio e giunti risultano quelle delle tabelle seguenti.

PRESTAZIONI RICHIESTE PER I DISPOSITIVI DI APPOGGIO (VALORI DI CALCOLO)												
ASSI DI APPOGGIO	DISPOSITIVI	COMB. SLU			COMB. SISMICA SLV			COMB. SLE - rara			SPOSTAMENTI	
		R _V [kN]	V _T [kN]	V _L [kN]	R _V [kN]	V _T [kN]	V _L [kN]	R _V [kN]	V _T [kN]	V _L [kN]	Long. [mm]	Trasv. [mm]
SP1	F	700	100	650	850	1300	2300	500	90	500	0	0
	M	850	0	0	800	0	0	600	0	0	± 5	± 5
SP2	M	850	0	0	800	0	0	600	0	0	± 35	± 5
	UL	700	150	0	600	1300	0	500	90	0	± 35	0

6 SOTTOSTRUTTURE, MODELLAZIONE ANALISI E VERIFICHE

L'analisi strutturale della parte d'opera in oggetto ha preso in considerazione i carichi permanenti e variabili previsti dalla normativa applicata. Sono stati valutati gli stati sollecitativi di tutti gli elementi strutturali che compongono le opere.

Per tutti gli elementi si riportano in allegato le sollecitazioni allo SLU ed allo SLE derivanti dalle azioni statiche e sismiche combinate.

L'analisi del modello e le successive verifiche strutturali sono state eseguite con il metodo degli elementi finiti, utilizzando il software di calcolo strutturale ModeSt 8.21 (prodotto dalla Tecnisoft s.a.s. - Prato) che a sua volta si appoggia al solutore Xfinest 2016 (prodotto da Ce.A.S - Milano)

La geometria della struttura è stata definita mediante l'assegnazione delle coordinate geometriche dei nodi della struttura rispetto ad un sistema di riferimento fisso cartesiano ortogonale destrorso XYZ; tale riferimento ha gli assi X e Y orizzontali e l'asse Z verticale ascendente.

Le strutture (contenute nel piano verticale XZ) sono state poi modellate mediante elementi finiti bidimensionali (di tipo "shell")

Per ogni elemento del modello strutturale si individua, inoltre, un sistema di riferimento locale rispetto al quale sono state assegnate le proprietà geometriche ed inerziali ed i carichi sull'elemento, e rispetto al quale è fornita la risposta (in termini di spostamenti dei nodi e di caratteristiche di sollecitazione) dal codice di calcolo.

Gli assi del riferimento locale sono contrassegnati dalle lettere xyz ed il loro orientamento rispetto al riferimento globale XYZ è assegnato nel seguente modo:

- il primo asse (x) è diretto secondo l'asse dell'elemento, mentre gli altri due assi (y, z) giacciono in un piano ortogonale all'elemento e che viene definita dall'utente.

6.1 SPALLE

Si riportano, nei seguenti capitoli, i carichi, le sollecitazioni e le verifiche relative alle due spalle SP1 e Sp2.

Il calcolo è stato condotto tenendo conto delle seguenti azioni agenti sull'opera:

- peso proprio della struttura;
- peso del terreno a monte dell'opera;
- spinte del terreno a monte dell'opera;
- spinta dovuta al sovraccarico stradale;
- incremento di spinta sismica del terreno a tergo della spalla;
- forze di inerzia della struttura e del terreno solidale con l'opera.
- azione trasmesse dall'impalcato.

Le azioni suddette vengono di seguito esplicitate.

6.1.1 Azioni permanenti

6.1.1.1 Pesi propri strutturali

Il peso dei vari elementi strutturali sono stati calcolato considerando:

Peso specifico calcestruzzo $\gamma_{cls} = 25 \text{ kN/m}^3$

6.1.1.2 Carichi permanenti

I pesi specifici e le caratteristiche geo-meccaniche delle terre, in quanto di pertinenza, assunti per la determinazione delle azioni permanenti risultano:

- Peso specifico binder + manto di usura 24.00 kN/m^3
- Peso specifico terreno 20.00 kN/m^3
- Angolo di resistenza a taglio 38°

I carichi permanenti non strutturali applicati al modello di calcolo alla base del plinto di fondazione sono sinteticamente riportati nella tabella seguente:

- Peso binder + manto di usura 24.00 kN/m^3
- Peso misto cementato 20.00 kN/m^3

6.1.1.3 Analisi della spinta statica misto cementato

A tergo delle spalle si prevede un terreno in misto cementato; per le valutazioni delle spinte dovute ad esso sono state utilizzate a favore di sicurezza, le caratteristiche seguenti:

Peso dell'unità di volume $\gamma_t = 20 \text{ kN/m}^3$.

Angolo di attrito interno $\phi = 38^\circ$

Coesione efficace $c' = 0$

Angolo che la parete forma con l'orizzontale $\beta = 90^\circ$

Angolo d'attrito terreno-muro; $\delta = 0$

L'entità e la distribuzione delle spinte del terreno sulla spalla dipendono dallo spostamento relativo che lo stesso può subire; le opere in oggetto sono previste su fondazioni indirette con pali trivellati che consentono di considerare le deformazioni del terreno limitate dalla struttura; per cui la pressione esercitata è una spindist

ta a riposo espressa secondo la teoria di Coulomb dalla seguente relazione:

$$S = \frac{1}{2} \cdot \gamma \cdot H^2 \cdot K_0$$

dove:

$$K_0 = 1 - \text{sen}(\phi/g_{\phi(M1)}) = 1 - \text{sen}(38^\circ/1) = 0.384$$

6.1.2 Azioni variabili

6.1.2.1 Incremento di spinta dovuto al sovraccarico stradale

La presenza di un sovraccarico stradale uniformemente distribuito sul rilevato comporta un'ulteriore spinta sulla spalla risultante da un diagramma delle pressioni costante con la profondità.

Intendendo per q il sovraccarico per metro lineare di proiezione orizzontale del valore di 20 kN/m², la spinta in esame vale:

$$S_q = q \cdot H \cdot K_0.$$

L'entità di spinta viene inserita nel modello di calcolo come carico rettangolare di intensità costante

6.1.3 Azioni dovute al sisma

6.1.3.1 Spinta del terreno in condizioni sismiche

In condizioni sismiche l'entità e la distribuzione delle spinte del terreno sulla spalla dipendono dall'intensità del sisma, dalla risposta locale del terreno di fondazione e dalla deformabilità dell'opera.

Il D.M 17/01/2018 consente l'utilizzo di metodi pseudo-statici per il calcolo dell'incremento di spinta sull'opera dovuto al sisma. Il metodo applicato in sede di progettazione è quello di Mononobe-Okabe, basato sull'equilibrio limite globale di un cuneo di terreno soggetto alle forze indotte dal sisma, ipotizzando che l'opera possa subire movimenti tali da produrre nel terreno retrostante un regime di spinta attiva e che il terreno interno al cuneo di spinta si comporta come un corpo rigido.

Le componenti verticali ed orizzontali dell'azione sismica sono considerate costanti in tutti i punti della massa.

La spinta sismica (statica + dinamica) vale:

$$S_s = \frac{1}{2} \cdot \gamma \cdot H^2 \cdot (1 \pm k_v) \cdot K'_a$$

dove, se $\beta \leq \phi - \vartheta$:

$$K'_a = \frac{\sin^2(\beta + \phi - \vartheta)}{\cos \vartheta \cdot \sin^2 \beta \cdot \sin(\beta - \delta - \vartheta) \cdot \left[1 + \left(\frac{\sin(\phi + \delta) \cdot \sin(\phi - \varepsilon - \vartheta)}{\sin(\phi - \delta - \vartheta) \cdot \sin(\beta + \varepsilon)} \right)^{0.5} \right]^2}$$

altrimenti, se $\beta > \phi - \vartheta$:

$$K'_a = \frac{\sin^2(\beta + \phi - \vartheta)}{\cos \vartheta \cdot \sin^2 \beta \cdot \sin(\beta - \vartheta - \delta)}$$

Nelle relazioni sopra elencate, i simboli hanno i seguenti significati:

$$\vartheta = \text{angolo definito come: } \tan(\vartheta) = \frac{k_h}{(1 \pm k_v)}$$

$$k_h = \beta_m \cdot \frac{a_{max}}{g}, \text{ coefficiente di intensità sismica orizzontale}$$

$$k_v = 0.5 \cdot k_h = \text{coefficiente di intensità sismica verticale}$$

a_{max} = accelerazione orizzontale massima attesa al sito

g = accelerazione di gravità

β_m = coefficiente di riduzione dell'accelerazione massima attesa al sito.

Quest'ultimo parametro assume i valori riportati nella tabella seguente come da DM 17/01/2018.

Tab. 7.11.I – Coefficienti di riduzione dell'accelerazione massima attesa al sito

	Categoria di sottosuolo	
	A	B, C, D, E
	β_s	β_s
$0,2 < a_g (g) \leq 0,4$	0,30	0,28
$0,1 < a_g (g) \leq 0,2$	0,27	0,24
$a_g (g) \leq 0,1$	0,20	0,20

Figura 47 – Coefficiente di riduzione dell'accelerazione massima attesa al sito

Nel caso di spalle il coefficiente β_m è stato assunto pari ad 1.

La normativa prescrive di applicare separatamente la spinta statica e dinamica, quest'ultima come incremento di spinta.

Per quanto concerne l'incremento di spinta, si calcola la differenza tra la spinta sismica totale e la spinta statica attiva. Si ricava un diagramma delle pressioni del terreno costante, per cui il punto di applicazione della spinta si trova in corrispondenza di $0.5 \cdot H$ rispetto alla base della platea.

Per le analisi in condizioni sismiche della spalla in oggetto sono utilizzati i seguenti valori:

categoria di suolo	C;
massima accelerazione orizzontale al suolo (SLV):	$a_{gmax}/g = 0.253$;
coefficiente di amplificazione stratigrafica:	$SS = 1.446$;
coefficiente di amplificazione topografica:	$ST = 1.000$;
coefficiente di riduzione di a_{max} :	$\beta_m = 1$;
coefficiente di intensità sismica orizzontale	$k_h = 0.253$;
coefficiente di intensità sismica verticale	$k_v = 0.1265$.

Coefficiente di spinta sismica (-kv)	$K_{AE}^- = 0.369$
Coefficiente di spinta sismica (+kv)	$K_{AE}^+ = 0.431$

6.1.3.2 Forze di inerzia della struttura e del terreno solidale con l'opera

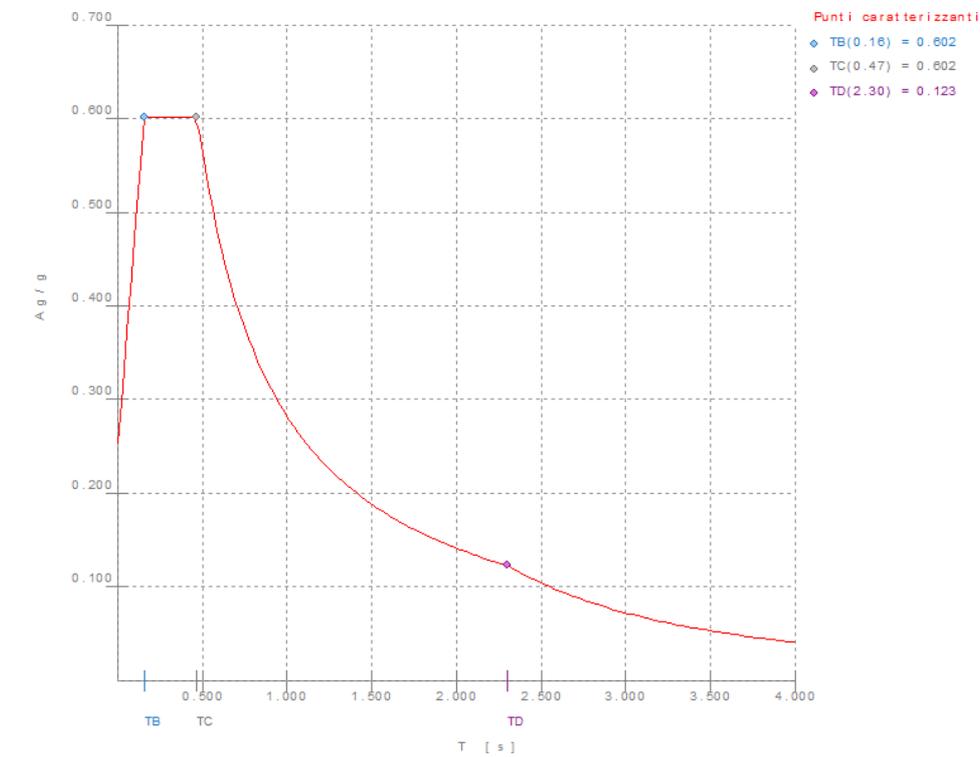
In presenza di sisma l'opera è soggetta alle forze di inerzia della parte strutturale e del terreno a monte solidale con la stessa, date dalle seguenti:

$F_{ih} = k_h \cdot W$ Forze di inerzia orizzontali

$F_{iv} = k_v \cdot W$ Forze di inerzia verticali

dove W è il peso del corpo spalla.

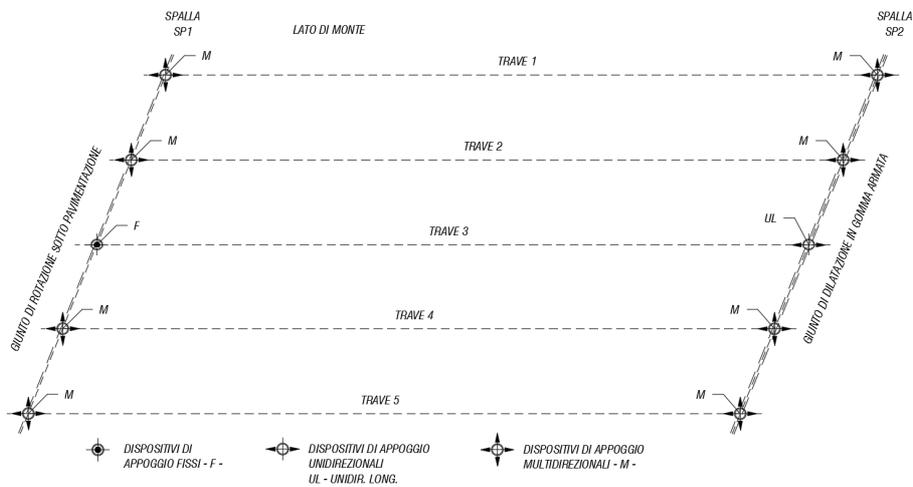
Ai fini del calcolo delle due spalle, bisogna distinguere il caso in cui tratteremo la verifica della spalla fissa da quella mobile. Per quanto riguarda la spalla fissa ai sensi del paragrafo 7.9.5.4.2 delle NTC18 le forze di inerzia agenti sulla massa della spalla del terreno agente sulla sua fondazione e dalle reazioni trasmesse dell'impalcato saranno calcolate in base all'accelerazione valutata con lo spettro di progetto in corrispondenza del periodo T_B , quindi $k_h = S_e(T_b^*)$



Nel caso di spalla mobile invece le forze di inerzia saranno valutate considerando un'accelerazione pari ad $a_g \cdot S = k_h$

6.1.4 Azioni trasmesse dall'impalcato

Le sollecitazioni elementari trasmesse dall'impalcato sulle spalle a quota piano appoggi sono riportate nelle tabelle seguenti, secondo un sistema di riferimento XYZ che presenta l'asse X tangente all'asse di tracciamento in corrispondenza del punto di intersezione con l'asse appoggi, l'asse Y ortogonale a questo e l'asse Z positivo verso l'alto, inoltre i valori vengono organizzati in funzione del numero di trave che viene fissato da monte verso valle in modo che la trave 1 sia quella a monte. Si riporta lo schema appoggi dell'impalcato per una maggiore chiarezza.



Nelle tabelle sottostanti si riportano invece le reazioni sulle spalle per le varie combinazioni di calcolo:

SLV

TABLE: Joint Reactions

	Beam	Joint	OutputCase	CaseType	StepType	StepNum	F1	F2	F3	M1	M2	M3
max	Text	Text	Text	Text	Text	Unitless	KN	KN	KN	KN-m	KN-m	KN-m
Spalla1	T5	MULTI	C_SLV_ENV				0.0	0.0	574.7	0.0	0.0	0.0
	T4	MULTI	C_SLV_ENV				0.0	0.0	753.2	0.0	0.0	0.0
	T3	FISSO	C_SLV_ENV				2651.0	1280.0	839.8	0.0	0.0	0.0
	T2	MULTI	C_SLV_ENV				0.0	0.0	700.9	0.0	0.0	0.0
	T1	MULTI	C_SLV_ENV				0.0	0.0	603.3	0.0	0.0	0.0
Spalla2	T5	MULTI	C_SLV_ENV				0.0	0.0	581.4	0.0	0.0	0.0
	T4	MULTI	C_SLV_ENV				0.0	0.0	700.1	0.0	0.0	0.0
	T3	UNI-LONG	C_SLV_ENV				0.0	1280.0	524.0	0.0	0.0	0.0
	T2	MULTI	C_SLV_ENV				0.0	0.0	744.7	0.0	0.0	0.0
	T1	MULTI	C_SLV_ENV				0.0	0.0	597.7	0.0	0.0	0.0

TABLE: Joint Reactions

	Beam	Joint	OutputCase	CaseType	StepType	StepNum	F1	F2	F3	M1	M2	M3
min	Text	Text	Text	Text	Text	Unitless	KN	KN	KN	KN-m	KN-m	KN-m
Spalla1	T5	MULTI	C_SLV_ENV				0.0	0.0	401.8	0.0	0.0	0.0
	T4	MULTI	C_SLV_ENV				0.0	0.0	105.5	0.0	0.0	0.0
	T3	FISSO	C_SLV_ENV				-2651.0	-1280.0	15.2	0.0	0.0	0.0
	T2	MULTI	C_SLV_ENV				0.0	0.0	166.2	0.0	0.0	0.0
	T1	MULTI	C_SLV_ENV				0.0	0.0	400.7	0.0	0.0	0.0
Spalla2	T5	MULTI	C_SLV_ENV				0.0	0.0	389.3	0.0	0.0	0.0
	T4	MULTI	C_SLV_ENV				0.0	0.0	158.8	0.0	0.0	0.0
	T3	UNI-LONG	C_SLV_ENV				0.0	-1280.0	331.4	0.0	0.0	0.0
	T2	MULTI	C_SLV_ENV				0.0	0.0	122.9	0.0	0.0	0.0
	T1	MULTI	C_SLV_ENV				0.0	0.0	410.9	0.0	0.0	0.0

SLU

TABLE: Joint Reactions

	Beam	Joint	OutputCase	CaseType	StepType	StepNum	F1	F2	F3	M1	M2	M3
max	Text	Text	Text	Text	Text	Unitless	KN	KN	KN	KN-m	KN-m	KN-m
Spalla1	T5	MULTI	C_SLU_STR_ENV				0.0	0.0	822.4	0.0	0.0	0.0
	T4	MULTI	C_SLU_STR_ENV				0.0	0.0	719.0	0.0	0.0	0.0
	T3	FISSO	C_SLU_STR_ENV				-35.6	88.7	640.5	0.0	0.0	0.0
	T2	MULTI	C_SLU_STR_ENV				0.0	0.0	617.9	0.0	0.0	0.0
	T1	MULTI	C_SLU_STR_ENV				0.0	0.0	717.0	0.0	0.0	0.0
Spalla2	T5	MULTI	C_SLU_STR_ENV				0.0	0.0	822.5	0.0	0.0	0.0
	T4	MULTI	C_SLU_STR_ENV				0.0	0.0	693.4	0.0	0.0	0.0
	T3	UNI-LONG	C_SLU_STR_ENV				0.0	130.3	653.9	0.0	0.0	0.0
	T2	MULTI	C_SLU_STR_ENV				0.0	0.0	616.3	0.0	0.0	0.0
	T1	MULTI	C_SLU_STR_ENV				0.0	0.0	719.9	0.0	0.0	0.0

TABLE: Joint Reactions

	Beam	Joint	OutputCase	CaseType	StepType	StepNum	F1	F2	F3	M1	M2	M3
min	Text	Text	Text	Text	Text	Unitless	KN	KN	KN	KN-m	KN-m	KN-m
Spalla1	T5	MULTI	C_SLU_STR_ENV				0.0	0.0	778.3	0.0	0.0	0.0
	T4	MULTI	C_SLU_STR_ENV				0.0	0.0	688.3	0.0	0.0	0.0
	T3	FISSO	C_SLU_STR_ENV				-618.2	-60.9	535.1	0.0	0.0	0.0
	T2	MULTI	C_SLU_STR_ENV				0.0	0.0	601.6	0.0	0.0	0.0
	T1	MULTI	C_SLU_STR_ENV				0.0	0.0	661.1	0.0	0.0	0.0
Spalla2	T5	MULTI	C_SLU_STR_ENV				0.0	0.0	771.0	0.0	0.0	0.0
	T4	MULTI	C_SLU_STR_ENV				0.0	0.0	658.9	0.0	0.0	0.0
	T3	UNI-LONG	C_SLU_STR_ENV				0.0	52.2	646.6	0.0	0.0	0.0
	T2	MULTI	C_SLU_STR_ENV				0.0	0.0	589.0	0.0	0.0	0.0
	T1	MULTI	C_SLU_STR_ENV				0.0	0.0	664.8	0.0	0.0	0.0

SLE RARA

TABLE: Joint Reactions

	Beam	Joint	OutputCase	CaseType	StepType	StepNum	F1	F2	F3	M1	M2	M3
max	Text	Text	Text	Text	Text	Unitless	KN	KN	KN	KN-m	KN-m	KN-m
Spalla1	T5	MULTI	C_SLE_rara_ENV				0.0	0.0	586.0	0.0	0.0	0.0
	T4	MULTI	C_SLE_rara_ENV				0.0	0.0	512.4	0.0	0.0	0.0
	T3	FISSO	C_SLE_rara_ENV				-23.7	59.1	457.5	0.0	0.0	0.0
	T2	MULTI	C_SLE_rara_ENV				0.0	0.0	442.8	0.0	0.0	0.0
	T1	MULTI	C_SLE_rara_ENV				0.0	0.0	514.7	0.0	0.0	0.0
Spalla2	T5	MULTI	C_SLE_rara_ENV				0.0	0.0	586.0	0.0	0.0	0.0
	T4	MULTI	C_SLE_rara_ENV				0.0	0.0	493.2	0.0	0.0	0.0
	T3	UNI-LONG	C_SLE_rara_ENV				0.0	86.9	466.4	0.0	0.0	0.0
	T2	MULTI	C_SLE_rara_ENV				0.0	0.0	442.4	0.0	0.0	0.0
	T1	MULTI	C_SLE_rara_ENV				0.0	0.0	516.8	0.0	0.0	0.0

TABLE: Joint Reactions

	Beam	Joint	OutputCase	CaseType	StepType	StepNum	F1	F2	F3	M1	M2	M3
min	Text	Text	Text	Text	Text	Unitless	KN	KN	KN	KN-m	KN-m	KN-m
Spalla1	T5	MULTI	C_SLE_rara_ENV				0.0	0.0	553.4	0.0	0.0	0.0
	T4	MULTI	C_SLE_rara_ENV				0.0	0.0	489.7	0.0	0.0	0.0
	T3	FISSO	C_SLE_rara_ENV				-455.3	-51.7	379.5	0.0	0.0	0.0
	T2	MULTI	C_SLE_rara_ENV				0.0	0.0	430.7	0.0	0.0	0.0
	T1	MULTI	C_SLE_rara_ENV				0.0	0.0	473.4	0.0	0.0	0.0
Spalla2	T5	MULTI	C_SLE_rara_ENV				0.0	0.0	547.9	0.0	0.0	0.0
	T4	MULTI	C_SLE_rara_ENV				0.0	0.0	467.7	0.0	0.0	0.0
	T3	UNI-LONG	C_SLE_rara_ENV				0.0	29.0	461.1	0.0	0.0	0.0
	T2	MULTI	C_SLE_rara_ENV				0.0	0.0	415.5	0.0	0.0	0.0
	T1	MULTI	C_SLE_rara_ENV				0.0	0.0	476.1	0.0	0.0	0.0

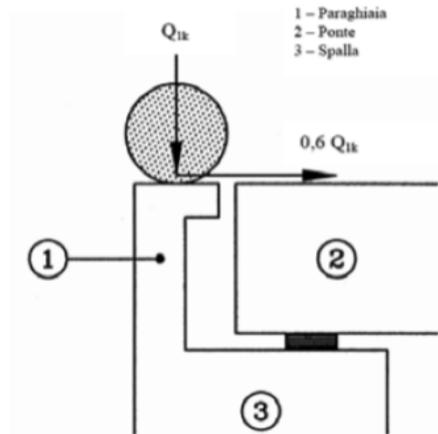
SLE QUASI PERMANENTE

TABLE: Joint Reactions

	Beam	Joint	OutputCase	CaseType	StepType	StepNum	F1	F2	F3	M1	M2	M3
max	Text	Text	Text	Text	Text	Unitless	KN	KN	KN	KN-m	KN-m	KN-m
Spalla1	T5	MULTI	C_SLU_STR_ENV				0.0	0.0	460.4	0.0	0.0	0.0
	T4	MULTI	C_SLU_STR_ENV				0.0	0.0	457.6	0.0	0.0	0.0
	T3	FISSO	C_SLU_STR_ENV				0.0	0.0	399.2	0.0	0.0	0.0
	T2	MULTI	C_SLU_STR_ENV				0.0	0.0	399.3	0.0	0.0	0.0
	T1	MULTI	C_SLU_STR_ENV				0.0	0.0	397.1	0.0	0.0	0.0
Spalla2	T5	MULTI	C_SLU_STR_ENV				0.0	0.0	397.3	0.0	0.0	0.0
	T4	MULTI	C_SLU_STR_ENV				0.0	0.0	403.4	0.0	0.0	0.0
	T3	UNI-LONG	C_SLU_STR_ENV				0.0	0.0	403.7	0.0	0.0	0.0
	T2	MULTI	C_SLU_STR_ENV				0.0	0.0	474.1	0.0	0.0	0.0
	T1	MULTI	C_SLU_STR_ENV				0.0	0.0	476.4	0.0	0.0	0.0

6.2 Progetto e verifica del paraghiaia

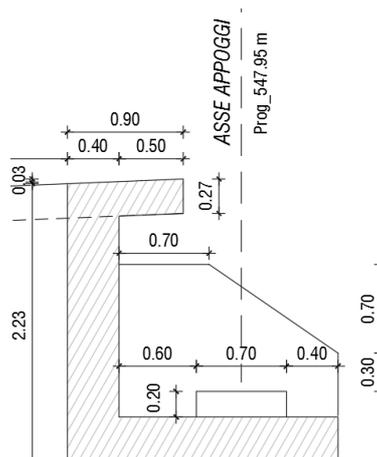
Per il solo dimensionamento del paraghiaia si considera un'azione longitudinale di frenamento di valore caratteristico pari al 60% del carico asse $Q_{1k} = 300\text{kN}$ (Circolare Consiglio Sup. LL.PP. 21 gennaio 2019 n° 7 al p.to C5.1.3.3.5.2).



Per la determinazione delle sollecitazioni di verifica per unità di lunghezza del paraghiaia, i valori di carico concentrato vengono spalmati sulla larghezza di ripartizione individuata considerando una ripartizione a 45° fino alla sezione di incastro. Sapendo che il paraghiaia è alto 1.90 m la lunghezza di ripartizione delle sollecitazioni sarà pari a $B = 2 * 1.90\text{ m} = 3.80\text{ m}$.

Si tiene conto anche della spinta del terreno a tergo del muro di spalla.

Nell'immagine successiva si riporta il paraghiaia della spalla 1 il quale risulta essere quello maggiormente sollecitato.



Lo schema strutturale che si adotta è quello di mensola incastrata sul muro di spalla di altezza pari a 2.0 m, caricata con i seguenti carichi:

- Terreno laterale – peso di volume 20 kN/mc – Spinta terreno $S=40\text{ kN/m}$ applicati a 0.6 m dalla sezione di incastro.

- Carico accidentale verticale – $Q1k = 300 \text{ kN}$ – a favore di sicurezza nello schema strutturale non viene considerato.
- Carico accidentale orizzontale – $0.6 Q1k = 180 \text{ kN}$ – applicato in testa al paraghiaia.

Le sollecitazioni, approssimate per eccesso, presenti alla sezione di incastro sono:

		SLU	SLE-rara
CARICO TERRENO	M [kNm/m]	$1.5 \cdot 40 \cdot 0.667 = 40 \text{ kNm/m}$	$40 \cdot 0.667 = 27 \text{ kNm/m}$
	T [kN/m]	$1.5 \cdot 40 = 60 \text{ kN/m}$	40 kN/m
CARICO ACCIDENTALE	M [kNm/m]	$1.35 \cdot (180 \cdot 2 / 3.80) = 128 \text{ kNm/m}$	$(180 \cdot 2 / 3.80) = 95 \text{ kNm/m}$
	T [kN/m]	$1.35 \cdot (180 / 3.80) = 65 \text{ kN/m}$	$(180 / 3.80) = 47.5 \text{ kN/m}$
CARICO TOTALE	M [kNm/m]	$40 + 128 = 168 \text{ kNm/m}$	$27 + 95 = 122 \text{ kNm/m}$
	T [kN/m]	$60 + 65 = 125 \text{ kN/m}$	$40 + 47.5 = 87.5 \text{ kN/m}$

6.2.1.1 Verifica a flessione SLU

La verifica viene eseguita considerando una sezione rettangolare di dimensione $b=100\text{cm}$ $h=40\text{cm}$, armata sia superiormente che inferiormente con $5+5 \text{ } \varnothing 24$. La verifica a taglio viene eseguita come sezione non armata a taglio. Le verifiche saranno eseguite utilizzando a favore di sicurezza un cls di C30/37.

ARATTERISTICHE DI RESISTENZA DEI MATERIALI IMPIEGATI

CALCESTRUZZO -	Classe:	C30/37	
	Resistenza compress. di progetto f_{cd} :	170.00	daN/cm ²
	Deform. unitaria max resistenza $ec2$:	0.0020	
	Deformazione unitaria ultima ecu :	0.0035	
	Diagramma tensioni-deformaz.:	Parabola-Rettangolo	
	Modulo Elastico Normale E_c :	328360	daN/cm ²
	Resis. media a trazione f_{ctm} :	29.00	daN/cm ²
	Coeff.Omogen. S.L.E.:	15.00	
	Sc limite S.L.E. comb. Rare:	180.00	daN/cm ²
ACCIAIO -	Tipo:	B450C	
	Resist. caratt. a snervamento f_{yk} :	4500.0	daN/cm ²
	Resist. caratt. a rottura f_{tk} :	4500.0	daN/cm ²
	Resist. a snerv. di progetto f_{yd} :	3913.0	daN/cm ²
	Resist. ultima di progetto f_{td} :	3913.0	daN/cm ²
	Deform. ultima di progetto E_{pu} :	0.068	
	Modulo Elastico E_f :	2000000	daN/cm ²
	Diagramma tensioni-deformaz.:	Bilineare finito	
	Coeff. Aderenza istant. $\beta_1 \cdot \beta_2$:	1.00	
	Coeff. Aderenza differito $\beta_1 \cdot \beta_2$:	0.50	
Comb.Rare - S_f Limite:	3600.0	daN/cm ²	

CARATTERISTICHE GEOMETRICHE ED ARMATURE SEZIONE

Base:	100.0	cm
Altezza:	40.0	cm
Barre inferiori:	5 \varnothing 24	(22.6 cm ²)
Barre superiori:	5 \varnothing 24	(22.6 cm ²)
Coprif.Inf.(dal baric. barre):	6.0	cm

Coprif.Sup.(dal baric. barre):	6.0	cm
Coprif.Lat. (dal baric.barre):	4.0	cm

CALCOLO DI RESISTENZA - SFORZI PER OGNI COMBINAZIONE ASSEGNATA

N	Sforzo normale [daN] applicato nel baricentro (posit. se di compress.)			
Mx	Momento flettente [daNm] intorno all'asse x baric. della sezione con verso positivo se tale da comprimere il lembo sup. della sezione			
Vy	Taglio [daN] in direzione parallela all'asse y baric. della sezione			
MT	Momento torcente [daN m]			
N°Comb.	N	Mx	Vy	MT
1	0	16800	12500	0

COMB. RARE (S.L.E.) - SFORZI PER OGNI COMBINAZIONE ASSEGNATA

N	Sforzo normale [daN] applicato nel baricentro (positivo se di compress.)	
Mx	Coppia [daNm] applicata all'asse x baricentrico (tra parentesi il Momento di fessurazione) con verso positivo se tale da comprimere il lembo superiore della sezione	
N°Comb.	N	Mx
1	0	11900

RISULTATI DEL CALCOLO

VERIFICHE DI RESISTENZA IN PRESSO-TENSO FLESSIONE ALLO STATO LIMITE ULTIMO

Ver	S = combinazione verificata / N = combin. non verificata										
N	Sforzo normale [daN] applicato nel Baricentro (positivo se di compressione)										
Mx	Momento flettente assegnato [daNm] riferito all'asse x baricentrico										
N Ult	Sforzo normale ultimo [daN] nella sezione (positivo se di compress.)										
Mx rd	Momento flettente ultimo [daNm] riferito all'asse x baricentrico										
Mis.Sic.	Misura sicurezza = rapporto vettoriale tra (N rd,Mx rd) e (N,Mx) Verifica positiva se tale rapporto risulta ≥ 1.000										
Yn	Ordinata [cm] dell'asse neutro alla massima resistenza nel sistema di rif. X,Y,O sez.										
x/d	Rapp. di duttilità (travi e solette)[§ 4.1.1.1 NTC]: deve essere < 0.45										
C.Rid.	Coeff. di riduz. momenti in travi continue [formula (4.1.1)NTC]										
As Tesa	Area armature long. trave [cm ²] in zona tesa. (tra parentesi l'area minima di normativa)										
N°Comb	Ver	N	Mx	N rd	Mx rd	Mis.Sic.	Yn	x/d	C.Rid.	As Tesa	
1	S	0	16800	-27	27690	1.688	33.9	0.18	0.70	22.6 (5.7)	

DEFORMAZIONI UNITARIE ALLO STATO LIMITE ULTIMO

ec max	Deform. unit. massima del conglomerato a compressione						
Yc max	Ordinata in cm della fibra corrisp. a ec max (sistema rif. X,Y,O sez.)						
es min	Deform. unit. minima nell'acciaio (negativa se di trazione)						
Ys min	Ordinata in cm della barra corrisp. a es min (sistema rif. X,Y,O sez.)						
es max	Deform. unit. massima nell'acciaio (positiva se di compressione)						
Ys max	Ordinata in cm della barra corrisp. a es max (sistema rif. X,Y,O sez.)						
N°Comb	ec max	Yc max	es min	Ys min	es max	Ys max	
1	0.00350	40.0	0.00009	34.0	-0.01585	6.0	

VERIFICHE A TAGLIO SENZA ARMATURE TRASVERSALI (§ 4.1.2.1.3.1 NTC)

Ver	S = comb.verificata a taglio/ N = comb. non verificata
Ved	Taglio agente [daN] uguale al taglio Vy di comb. (sollecit. retta)
Vwct	Taglio trazione resistente [daN] in assenza di staffe [formula (4.1.23)NTC]
d	Altezza utile sezione [cm]
bw	Larghezza minima sezione [cm]
Ro	Rapporto geometrico di armatura longitudinale [< 0.02]

Scp	Tensione media di compressione nella sezione [daN/cm ²]						
N°Comb	Ver	Ved	Vwct	d	bw	Ro	Scp
1	S	12500	19555	34.0	100.0	0.0067	0.0

COMBINAZIONI RARE IN ESERCIZIO - VERIFICA MASSIME TENSIONI NORMALI

Ver	S = combinazione verificata / N = combin. non verificata
Sc max	Massima tensione di compress.(+) nel conglom. in fase fessurata [(daN/cm ²]
Yc max	Ordinata in cm della fibra corrisp. a Sc max (sistema rif. X,Y,O)
Sc min	Minima tensione di compress.(+) nel conglom. in fase fessurata [(daN/cm ²]
Yc min	Ordinata in cm della fibra corrisp. a Sc min (sistema rif. X,Y,O)
Sf min	Minima tensione di trazione (-) nell'acciaio [daN/cm ²]
Ys min	Ordinata in cm della barra corrisp. a Sf min (sistema rif. X,Y,O)
Dw Eff.	Spessore di conglomerato [cm] in zona tesa considerata aderente alle barre
Ac eff.	Area di congl. [cm ²] in zona tesa aderente alle barre (verifica fess.)
As eff.	Area Barre tese di acciaio [cm ²] ricadente nell'area efficace(verifica fess.)
D barre	Distanza in cm tra le barre tese efficaci. (D barre = 0 indica spaziatura superiore a 5(c+Ø/2) e nel calcolo di fess. si usa la (C4.1.11)NTC/(7.14)EC2)

N°Comb	Ver	Sc max	Yc max	Sc min	Yc min	Sf min	Ys min	Dw Eff.	Ac Eff.	As Eff.	D barre
1	S	56.5	40.0	0.0	29.0	-1765	34.0	9.7	966	22.6	22.0

COMBINAZIONI RARE IN ESERCIZIO - VERIFICA APERTURA FESSURE (NTC/EC2)

Ver	Esito verifica
e1	Minima deformazione unitaria (trazione: segno -) nel calcestruzzo in sez. fessurata
e2	Massima deformazione unitaria (compress.: segno +) nel calcestruzzo in sez. fessurata
K2	= 0.5 per flessione; =(e1 + e2)/(2*e2) in trazione eccentrica per la (7.13)EC2 e la (C4.1.11)NTC
Kt	fattore di durata del carico di cui alla (7.9) dell'EC2
e sm	Deformazione media acciaio tra le fessure al netto di quella del cls. Tra parentesi il valore minimo = 0.6 Ss/Es
srm	Distanza massima in mm tra le fessure
wk	Apertura delle fessure in mm fornito dalla (7.8)EC2 e dalla (C4.1.7)NTC. Tra parentesi è indicato il valore limite.
M fess.	Momento di prima fessurazione [daNm]

N°Comb	Ver	e1	e2	K2	Kt	e sm	srm	wk	M Fess.
1	S	-0.00111	0.00042	0.50	0.60	0.000529 (0.000529)	337	0.179 (990.00)	9662

6.3 Progetto e verifica baggioli

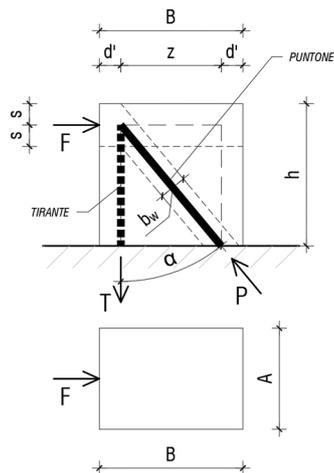
I baggioli su spalla su cui vengono disposti i dispositivi di appoggio, si analizzano e verificano come mensole tozze a cui viene applicato un taglio in testa prodotto dalle azioni provenienti dall'impalcato.

Si ipotizza un taglio di progetto allo SLU pari a 650 kN in direzione longitudinale e 100 kN in direzione trasversale (si vedano le sezioni degli appoggi al § 5.7).

Il baggiolo in pianta ha una dimensione di circa 0.75 x 0.75 m con altezza pari a 20 cm.

La verifica di tale elemento si articola con la verifica di un elemento a mensola tozza caricato con azione di taglio in testa. L'analisi si conduce tramite il metodo del tirante puntone. Nello schema successivo si può osservare lo schema descritto.

A favore di sicurezza si trascura la presenza dello sforzo normale proveniente dall'impalcato.



Come armatura del tirante si ipotizza l'inserimento di 5Ø20 in entrambe le direzioni.

Si riporta la verifica strutturale di tale elemento.

MATERIALI

CLS - TIPO	C32/40	fck [N/mm ²]	32.00
		fcd [N/mm ²]	18.13
		fbd [N/mm ²]	3.18
ACC - TIPO	B450C	fyk [N/mm ²]	450.00
		fyd [N/mm ²]	391.30

GEOMETRIA

Base sez. mensola	B [mm]	750		
Altezza sez. mensola	A [mm]	750		
Altezza mensola	h [mm]	200		
Posizione forza	s [mm]	50		
distanza	d' [mm]	45		
distanza	z [mm]	660		
Angolo incl. Biella compressa	α [rad]	1,347319726	--> [deg]	77,19573393
Spessore biella compressa	bw [mm]	97,51		

Verifica analisi mensola da EC.2

Ok analisi

ANALISI DEGLI SFORZI INTERNI E VERIFICA

Azione agente - SLU	F [kN]	650.00
Azione tirante	T [kN]	147.73
Azione puntone	P [kN]	666.58
Resistenza puntone compresso	P_{Rc} [kN]	693.86
coeff. Di riduzione	v	0.5232
	Ok Verifica	Ok Verifica
Armatatura minima tirante	Asmin [mm ²]	377.53
Armatatura di progetto	As [mm ²]	1540
Resistenza tirante	T_{Rs} [kN]	602.61
	Ok Verifica	Ok Verifica
Verifica di gerarchia	T_{Rs} < P_{Rc}	Ok Verifica

6.4 Progetto e verifica dispositivi di fine corsa

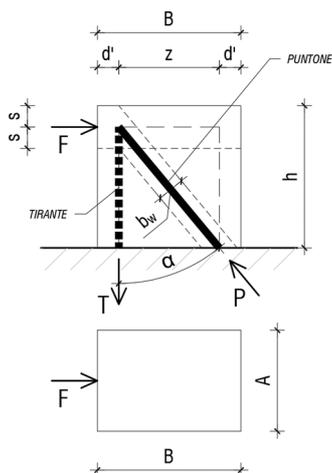
I dispositivi vi fine corsa sono ritegni trasversali in c.a. che hanno la funzione di contenere un eventuale sbandamento della trave dovuto ad un possibile urto laterale che incide sull'impalcato.

Per il caso in esame un urto laterale può essere provocato da macchine lavoratrici per la pulizia del fondo alveo.

Si ipotizza un urto totale trasversale dovuto alla rottura dei dispositivi di appoggio di 1300 kN (si vedano le sezioni degli appoggi al § 5.7) che impatta sui muri di ritegno sismico. Data la presenza di due muri di ritegno, si considera una forza orizzontale pari a 650 kN agente su ciascuno di essi. Tale urto viene a favore di sicurezza applicato direttamente al fine corsa di progetto.

La forza di urto viene considerata come azione eccezionale quindi si considera come azione allo SLU.

La verifica di tale elemento si articola con la verifica di un elemento a mensola tozza caricato con azione di taglio in testa. L'analisi si conduce tramite il metodo del tirante puntone. Nello schema successivo si può osservare lo schema descritto.



Come armatura del tirante si ipotizza l'inserimento di 6Ø20.

MATERIALI

CLS - TIPO	C32/40	fck [N/mmq]	32.00
		fcd [N/mmq]	18.13
		fbd [N/mmq]	3.18
ACC - TIPO	B450C	fyk [N/mmq]	450,00
		fyd [N/mmq]	391,30

GEOMETRIA

Base sez. mensola	B [mm]	430	
Altezza sez. mensola	A [mm]	750	
Altezza mensola	h [mm]	500	
Posizione forza	s [mm]	150	
distanza	d' [mm]	40	
distanza	z [mm]	350	
Angolo incl. Biella compressa	α [rad]	0,785398163 --> [deg]	45
Spessore biella compressa	bw [mm]	212,13	

Verifica analisi mensola da EC.2

Ok analisi

ANALISI DEGLI SFORZI INTERNI E VERIFICA

Azione agente - SLU	F [kN]	650.00
Azione tirante	T [kN]	650.00
Azione puntone	P [kN]	919.24

Resistenza puntone compresso	P_{Rc} [kN]	1509.43
coeff. Di riduzione	v	0.5232
	Ok Verifica	Ok Verifica

Armatura minima tirante	Asmin [mm ²]	1661.11
Armatura di progetto	As [mm ²]	1885
Resistenza tirante	T_{Rs} [kN]	737.61
	Ok Verifica	Ok Verifica

Verifica di gerarchia	T_{Rs} < P_{Rc}	Ok Verifica
------------------------------	---	--------------------

6.5 Muro frontale spalla 1

La geometria della struttura è stata definita mediante l'assegnazione delle coordinate geometriche dei nodi della struttura rispetto ad un sistema di riferimento fisso cartesiano ortogonale destrorso XYZ; tale riferimento ha gli assi X e Y orizzontali e l'asse Z verticale ascendente.

Le strutture sono state poi modellate mediante elementi finiti bidimensionali (di tipo "shell")

Per ogni elemento del modello strutturale si individua, inoltre, un sistema di riferimento locale rispetto al quale sono state assegnate le proprietà geometriche ed inerziali ed i carichi sull'elemento, e rispetto al quale è fornita la risposta (in termini di spostamenti dei nodi e di caratteristiche di sollecitazione) dal codice di calcolo.

Gli assi del riferimento locale sono contrassegnati dalle lettere xyz ed il loro orientamento rispetto al riferimento globale XYZ è assegnato nel seguente modo:

- il primo asse (x) è diretto secondo l'asse dell'elemento, mentre gli altri due assi (y, z) giacciono in un piano ortogonale all'elemento e che viene definita dall'utente.

Per tener conto dell'eccentricità di scarico delle travi di acciaio in corrispondenza dei punti di appoggio della spalla il carico è stato riportato sull'elemento bidimensionale per mezzo di un coppia di aste infinitamente rigide prive di peso. Per quanto riguarda i pali questi sono stati modellati come appoggi infinitamente rigidi.

Lo spessore degli elementi shell è riportato nell'immagine seguente.

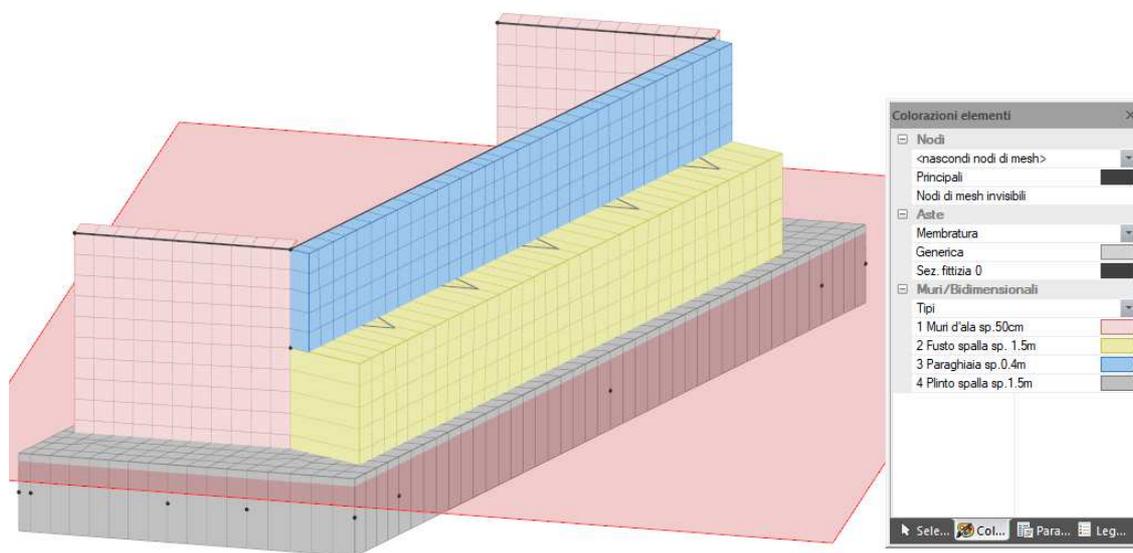


Figura 48 – Modello Fem della spalla SP1

GI

Come dicevamo I carichi sono applicati come forze concentrate sui nodi degli appoggi e collegati al fusto tramite aste ad elevata rigidezza; le spinte a tergo dei muri dovute alla presenza del terreno, del sisma e dei sovraccarichi mobili sono state applicate come pressure load di forma incrementale in base alla quota.

I principali carichi sono esplicitati nelle figure sottostanti:

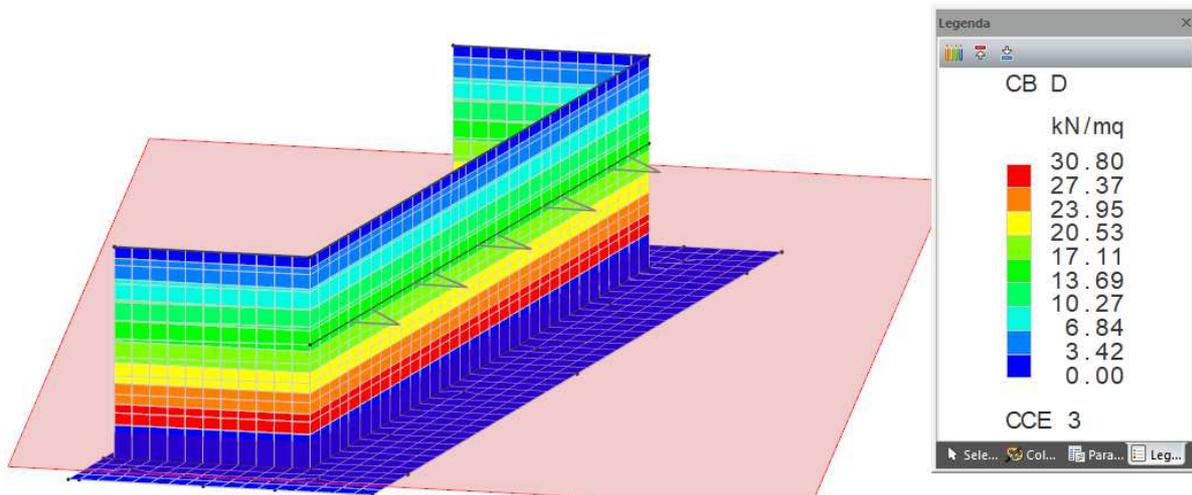


Figura 49 – Spinta statica del terreno a monte: da 0 a -0.2 $q=24*0.2*0.384=1.54\text{KNmq}$, da $z=-0.2$ a $z=-4$, $q_2=20*4*0.384=30.72$

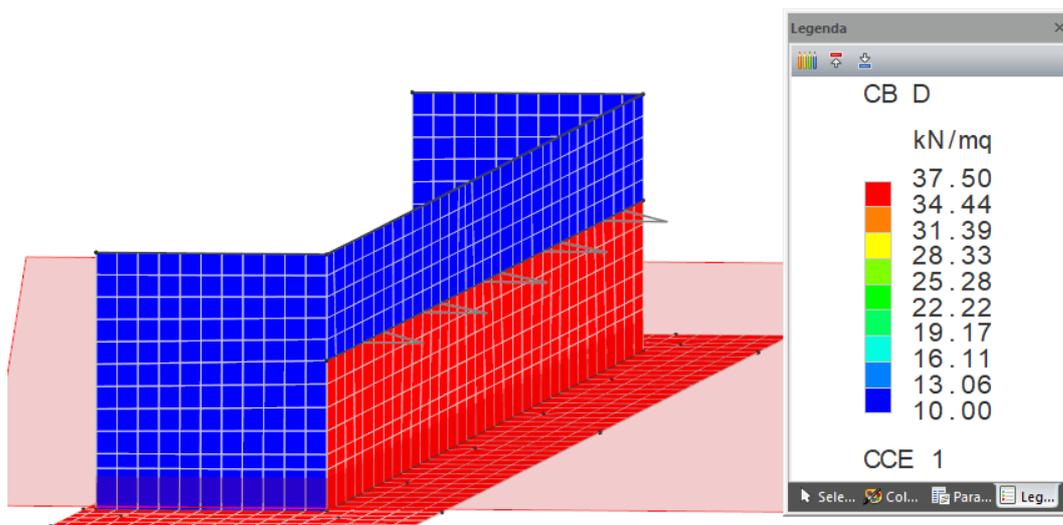


Figura 50 – Peso proprio elementi strutturali

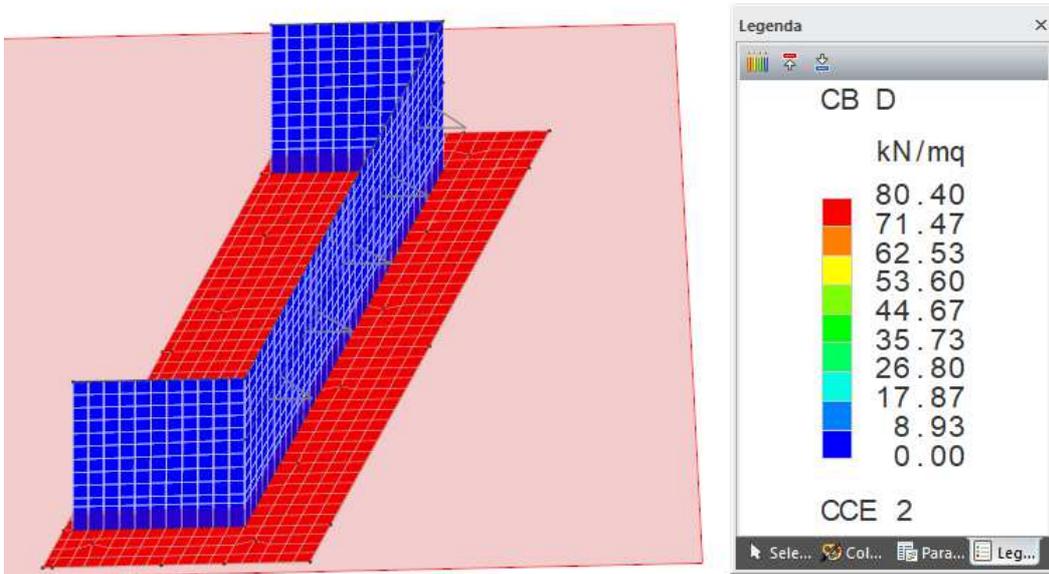


Figura 51 – Peso terreno sulla ciabatta : Peso binder + manto di usura $24.00 \times 0.2 = 4.80 \text{ kN/m}^2$ + Peso misto cementato $20.00 \times 3.78 = 75.60 \text{ kN/m}^2 = \text{tot. } 80.40 \text{ kN/m}^2$.

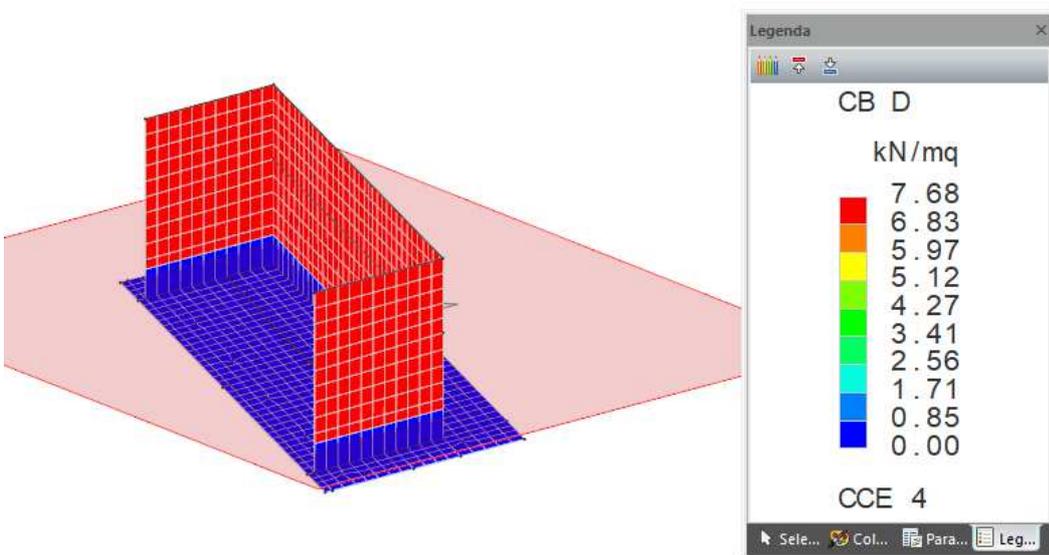


Figura 52 – Spinta sovraccarico in testa al rilevato: $20 \times 0.384 = 7.68$

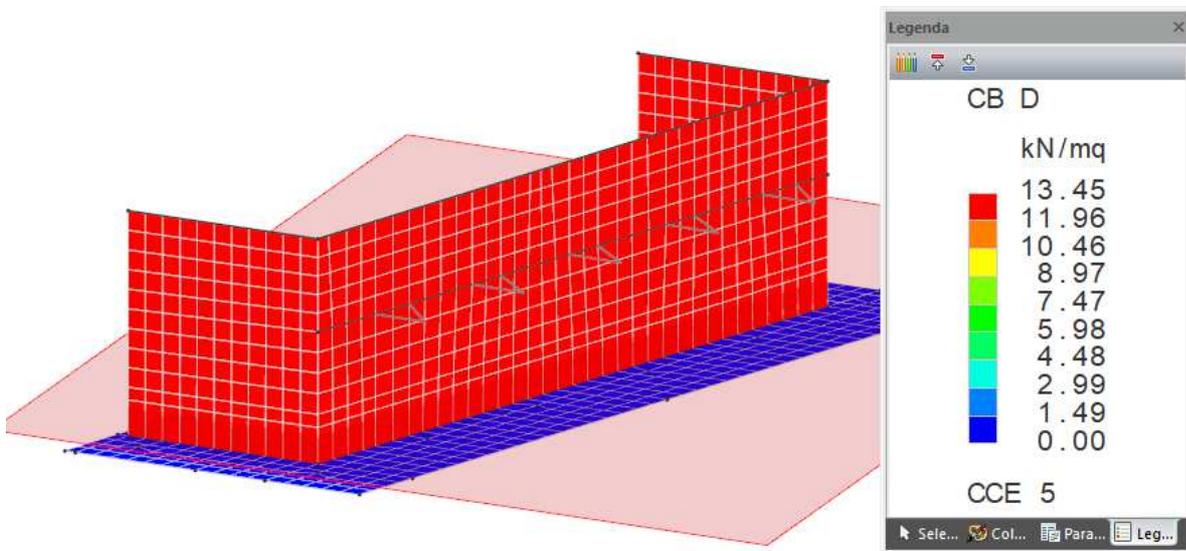


Figura 53 – Spinta sismica: la spinta sismica è applicata come carico uniformemente distribuito sul paramento della spalla e sui muri d’ala $PAE = KAE \cdot \gamma \cdot H^2 / 2 \cdot (1 - kv) = 0.431 \cdot 20 \cdot 3.782 / 2 \cdot (1 - 0.126) = 53.82 \text{ kN/m}$
La spinta sarà applicata nel modello come un carico uniformemente distribuito $q = 53.82 / 4 = 13.45 \text{ kN/m}^2$

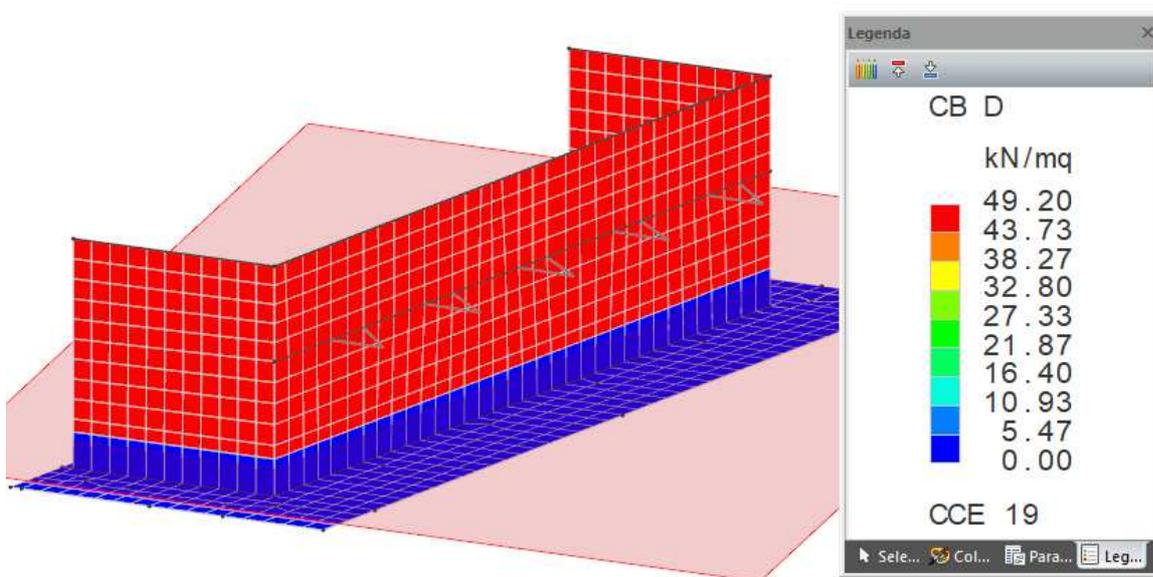


Figura 54 – Spinta inerziale del terreno: la spinta dovuta all’inerzia del terreno che insiste sulla ciabatta della spalla è calcolata facendo riferimento all’accelerazione spsttrale in corrispondenza del plateau ovvero per $T = TB^*$ con

$$Se(TB^*) = 0.6g. F = 0.6 \cdot L_{\text{ciabatta}} \cdot \gamma_{\text{terreno}} = 0.6 \cdot 4.1 \cdot 20 = 49.20$$

Le condizioni di carico elementari sono le seguenti:

Condizioni di carico elementari

Simbologia

- CCE = Numero della condizione di carico elementare
- Comm. = Commento
- Tipo CCE = Tipo di CCE per calcolo agli stati limite
- Sic. = Contributo alla sicurezza
 - F = a favore
 - S = a sfavore
 - A = ambigua
- Var. = Tipo di variabilità
 - B = di base
 - I = indipendente
 - A = ambigua
- s = Coeff. di riduzione (T.A. o S.L. D.M. 96)
- Dir. = Direzione del vento
- Tipo = Tipologia di pressione vento
 - M = Massimizzata
 - E = Esterna
 - I = Interna
- Mx = Moltiplicatore della massa in dir. X
- My = Moltiplicatore della massa in dir. Y
- Mz = Moltiplicatore della massa in dir. Z
- Jpx = Moltiplicatore del momento d'inerzia intorno all'asse X
- Jpy = Moltiplicatore del momento d'inerzia intorno all'asse Y
- Jpz = Moltiplicatore del momento d'inerzia intorno all'asse Z

CCE	Comm.	Tipo CCE	Sic.	Var.	s	Dir. <grad>	Tipo	Mx	My	Mz	Jpx	Jpy	Jpz
1	peso proprio		1S	--	1.00	--	--	1.00	1.00	0.00	0.00	0.00	1.00
2	Peso terreno e pav.		2S	--	1.00	--	--	0.00	0.00	0.00	0.00	0.00	1.00
3	spinta statica terreno		2S	--	1.00	--	--	0.00	0.00	0.00	0.00	0.00	1.00
4	spinta sovraccarico		21S	B	1.00	--	--	0.00	0.00	0.00	0.00	0.00	1.00
5	Spinta sismica		22S	B	1.00	--	--	0.00	0.00	0.00	0.00	0.00	1.00
6	SLU Env Max		23S	--	1.00	--	--	0.00	0.00	0.00	0.00	0.00	1.00
7	SLU Env Min		23S	--	1.00	--	--	0.00	0.00	0.00	0.00	0.00	1.00
8	SLE rara Env Max		23S	--	1.00	--	--	0.00	0.00	0.00	0.00	0.00	1.00
9	SLE Rara Env Min		23S	--	1.00	--	--	0.00	0.00	0.00	0.00	0.00	1.00
10	SLE q. permanente		23S	--	1.00	--	--	0.00	0.00	0.00	0.00	0.00	1.00
11	SLVX+0.3y		23S	--	1.00	--	--	0.00	0.00	0.00	0.00	0.00	0.00
12	SLVX-0.3y		23S	--	1.00	--	--	0.00	0.00	0.00	0.00	0.00	0.00
13	SLV-X-0.3y		23S	--	1.00	--	--	0.00	0.00	0.00	0.00	0.00	0.00
14	SLV-X+0.3y		23S	--	1.00	--	--	0.00	0.00	0.00	0.00	0.00	0.00
15	SLV Y+0.3X		23S	--	1.00	--	--	0.00	0.00	0.00	0.00	0.00	0.00
16	SLV Y-0.3x		23S	--	1.00	--	--	0.00	0.00	0.00	0.00	0.00	0.00
17	SLV -Y+0.3x		23S	--	1.00	--	--	0.00	0.00	0.00	0.00	0.00	0.00
18	SLV -Y-0.3x		23S	--	1.00	--	--	0.00	0.00	0.00	0.00	0.00	0.00
19	Spinta inerziale terreno		22S	B	1.00	--	--	0.00	0.00	0.00	0.00	0.00	0.00

Ai fini del calcolo sono state considerate le seguenti combinazioni:

Combinazioni delle CCE

Simbologia

- CC = Numero della combinazione delle condizioni di carico elementari
- Comm. = Commento
- TCC = Tipo di combinazione di carico
 - SLU = Stato limite ultimo
 - SLU S = Stato limite ultimo (azione sismica)
 - SLE R = Stato limite d'esercizio, combinazione rara
 - SLE F = Stato limite d'esercizio, combinazione frequente
 - SLE Q = Stato limite d'esercizio, combinazione quasi permanente
 - SLD = Stato limite di danno
 - SLV = Stato limite di salvaguardia della vita
 - SLC = Stato limite di prevenzione del collasso
 - SLO = Stato limite di operatività
 - SLU I = Stato limite di resistenza al fuoco
 - SND = Stato limite di salvaguardia della vita (non dissipativo)

An. =Tipo di analisi
L = Lineare
NL = Non lineare
Bk =Buckling
S = Sì
N = No

C	Comm.	TCC	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	S	X	S	Y
1	Amb. 1 (SLU S) S +X+0.3Y	SND	1.00	1.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	1.00	0.30	0.00	0.00
2	Amb. 1 (SLU S) S +X-0.3Y	SND	1.00	1.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	1.00	0.30	0.00	0.00
3	Amb. 1 (SLU S) S -X+0.3Y	SND	1.00	1.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	1.00	1.00	0.30	0.00	0.00
4	Amb. 1 (SLU S) S -X-0.3Y	SND	1.00	1.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	1.00	1.00	0.30	0.00	0.00
5	Amb. 1 (SLU S) S +0.3X+Y	SND	1.00	1.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.30	0.30	1.00	0.00	0.00
6	Amb. 1 (SLU S) S -0.3X+Y	SND	1.00	1.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.30	0.30	1.00	0.00	0.00
7	Amb. 1 (SLU S) S +0.3X-Y	SND	1.00	1.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.30	0.30	1.00	0.00	0.00
8	Amb. 1 (SLU S) S -0.3X-Y	SND	1.00	1.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.30	0.30	1.00	0.00	0.00
9	SLU Max	SLU	1.30	1.50	1.50	1.35	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10	SLU MIN	SLU	1.30	1.50	1.50	1.30	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11	SLE R Max	SLE R	1.00	1.00	1.00	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12	SLE R Min	SLE R	1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
13	SLE Q.Perm	SLE Q	1.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Le principali azioni in termini di mappa delle sollecitazioni sono riportate nelle immagini sottostanti

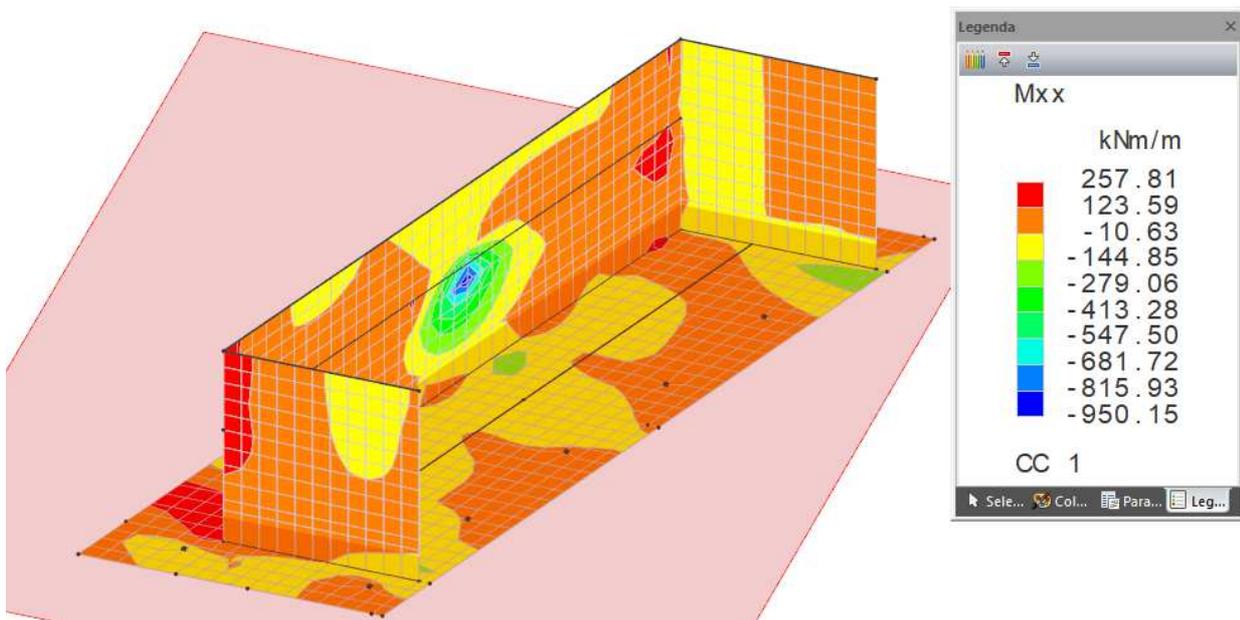


Figura 55 – Momento Mxx (CC1 SLV)

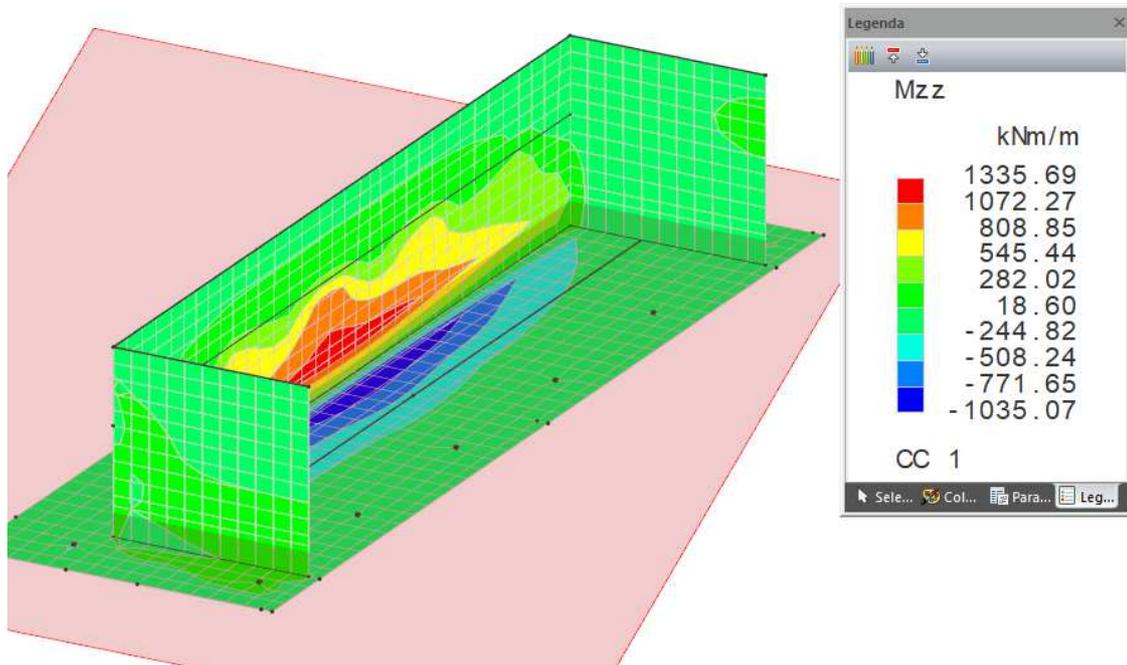
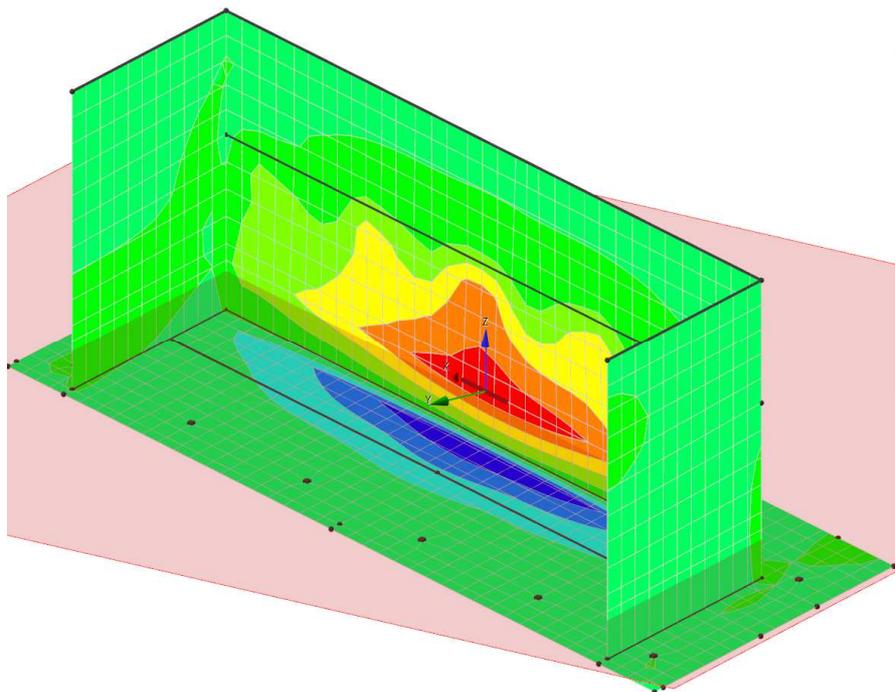


Figura 56 – Momento Mzz (CC1 SLV)

Integrando le sollecitazioni alla base del muro per un tratto unitario, avremo per ogni combinazione le seguenti sollecitazioni:



Informazioni sollecitazioni integrate da forze di equilibrio >

Esporta Stampa

CC	TCC	N <kN>	Tx <kN>	Ty <kN>	Mx <kNm>	My <kNm>	Mz <kNm>
1	SND	-353.863	-76.950	1025.200	1967.530	-53.752	40.258
2	SND	-411.269	207.350	1127.180	2204.510	-85.294	-115.056
3	SND	-632.951	-3.308	-1025.790	-1091.620	-12.249	104.939
4	SND	-690.358	280.992	-923.813	-854.639	-43.790	-50.374
5	SND	-384.570	-382.858	188.389	620.355	-2.428	244.095
6	SND	-468.296	-360.766	-426.908	-297.388	10.023	263.500
7	SND	-575.924	564.808	528.300	1410.280	-107.566	-273.616
8	SND	-659.650	586.900	-86.997	492.535	-95.115	-254.212
9	SLU	-480.467	80.386	207.542	670.131	-69.708	4.374
10	SLU	-422.646	34.673	356.532	826.727	-67.038	8.433
11	SLE R	-354.144	57.349	143.048	475.124	-49.097	1.205
12	SLE R	-310.103	25.080	254.181	590.743	-47.379	6.126
13	SLE Q	-329.823	36.663	90.555	349.249	-44.061	5.734

Figura 57 – Massime sollecitazioni alla base del fusto della spalla

6.5.1 Verifica a pressoflessione e taglio fusto Spalla

Le verifiche a pressoflessione vengono eseguite considerando una sezione di larghezza unitaria ed altezza pari al allo spesso del fusto ovvero $b \times h = 100 \times 150 \text{ cm}$. La sezione viene armata in entrambe le direzioni con ferri $\varnothing 24/10$. E' prevista inoltre un armatura integrativa a taglio costituita da degli spilli $\varnothing 12/20$. Incidenza armatura. lincidenza armatura $i = 140 \text{ kg/mc}$

CARATTERISTICHE DI RESISTENZA DEI MATERIALI IMPIEGATI

CALCESTRUZZO -	Classe:	C32/40
	Resistenza compress. di progetto f_{cd} :	181.30 daN/cm ²
	Resistenza compress. ridotta f_{cd}' :	90.65 daN/cm ²
	Deform. unitaria max resistenza ϵ_{c2} :	0.0020
	Deformazione unitaria ultima ϵ_{cu} :	0.0035
	Diagramma tensioni-deformaz.:	Parabola-Rettangolo
	Modulo Elastico Normale E_c :	333457333457 daN/cm ²
	Resis. media a trazione f_{ctm} :	30.16 daN/cm ²
	Coeff.Omogen. S.L.E.:	15.00
	Sc limite S.L.E. comb. Rare:	192.00 daN/cm ²
	Sc limite S.L.E. comb. Frequenti:	192.00 daN/cm ²
	Ap.Fessure limite S.L.E. comb. Frequenti:	0.400 mm
	Sc limite S.L.E. comb. Q.Permanenti:	144.00 daN/cm ²
Ap.Fess.limite S.L.E. comb. Q.Perm.:	0.300 mm	

ACCIAIO -	Tipo:	B450C
	Resist. caratt. a snervamento f_{yk} :	4500.0 daN/cm ²
	Resist. caratt. a rottura f_{tk} :	4500.0 daN/cm ²
	Resist. a snerv. di progetto f_{yd} :	3913.0 daN/cm ²
	Resist. ultima di progetto f_{td} :	3913.0 daN/cm ²
	Deform. ultima di progetto ϵ_{pu} :	0.068
	Modulo Elastico E_f :	2000000 daN/cm ²

Diagramma tensioni-deformaz.:	Bilineare finito
Coeff. Aderenza istant. $\beta_1 \cdot \beta_2$:	1.00
Coeff. Aderenza differito $\beta_1 \cdot \beta_2$:	0.50
Comb.Rare - Sf Limite:	3600.0 daN/cm ²

CARATTERISTICHE GEOMETRICHE ED ARMATURE SEZIONE

Base:	100.0	cm
Altezza:	150.0	cm
Barre inferiori:	10Ø24	(45.2 cm ²)
Barre superiori:	10Ø24	(45.2 cm ²)

CALCOLO DI RESISTENZA - SFORZI PER OGNI COMBINAZIONE ASSEGNATA

N	Sforzo normale [daN] applicato nel baricentro (posit. se di compress.)
Mx	Momento flettente [daNm] intorno all'asse x baric. della sezione con verso positivo se tale da comprimere il lembo sup. della sezione
Vy	Taglio [daN] in direzione parallela all'asse y baric. della sezione
MT	Momento torcente [daN m]

N°Comb.	N	Mx	Vy	MT
1	41127	220451	112718	0

COMB. RARE (S.L.E.) - SFORZI PER OGNI COMBINAZIONE ASSEGNATA

N	Sforzo normale [daN] applicato nel baricentro (positivo se di compress.)
Mx	Coppia [daNm] applicata all'asse x baricentrico (tra parentesi il Momento di fessurazione) con verso positivo se tale da comprimere il lembo superiore della sezione

N°Comb.	N	Mx
1	31010	59074

COMB. FREQUENTI (S.L.E.) - SFORZI PER OGNI COMBINAZIONE ASSEGNATA

N	Sforzo normale [daN] applicato nel baricentro (positivo se di compress.)
Mx	Coppia [daNm] applicata all'asse x baricentrico (tra parentesi il Momento di fessurazione) con verso positivo se tale da comprimere il lembo superiore della sezione

N°Comb.	N	Mx
1	32983	34925 (188166)

COMB. QUASI PERMANENTI (S.L.E.) - SFORZI PER OGNI COMBINAZIONE ASSEGNATA

N	Sforzo normale [daN] applicato nel baricentro (positivo se di compress.)
Mx	Coppia [daNm] applicata all'asse x baricentrico (tra parentesi il Momento di fessurazione) con verso positivo se tale da comprimere il lembo superiore della sezione

N°Comb.	N	Mx
1	32983	34925 (188166)

RISULTATI DEL CALCOLO

Sezione verificata per tutte le combinazioni assegnate

VERIFICHE DI RESISTENZA IN PRESSO-TENSO FLESSIONE ALLO STATO LIMITE ULTIMO

Ver	S = combinazione verificata / N = combin. non verificata
N	Sforzo normale [daN] applicato nel Baricentro (positivo se di compressione)
Mx	Momento flettente assegnato [daNm] riferito all'asse x baricentrico
N Ult	Sforzo normale ultimo [daN] nella sezione (positivo se di compress.)
Mx rd	Momento flettente ultimo [daNm] riferito all'asse x baricentrico
Mis.Sic.	Misura sicurezza = rapporto vettoriale tra (N rd, Mx rd) e (N, Mx)

Yn	Verifica positiva se tale rapporto risulta ≥ 1.000
x/d	Ordinata [cm] dell'asse neutro alla massima resistenza nel sistema di rif. X,Y,O sez.
C.Rid.	Rapp. di duttilità (travi e solette)[§ 4.1.1.1 NTC]: deve essere < 0.45
As Tesa	Coeff. di riduz. momenti in travi continue [formula (4.1.1)NTC]
	Area armature long. trave [cm ²] in zona tesa. (tra parentesi l'area minima di normativa)

N°Comb	Ver	N	Mx	N rd	Mx rd	Mis.Sic.	Yn	x/d	C.Rid.	As Tesa
1	S	41127	220451	41145	272988	1.238	140.6	0.07	0.70	45.2 (24.9)

DEFORMAZIONI UNITARIE ALLO STATO LIMITE ULTIMO

ec max	Deform. unit. massima del conglomerato a compressione
Yc max	Ordinata in cm della fibra corrisp. a ec max (sistema rif. X,Y,O sez.)
es min	Deform. unit. minima nell'acciaio (negativa se di trazione)
Ys min	Ordinata in cm della barra corrisp. a es min (sistema rif. X,Y,O sez.)
es max	Deform. unit. massima nell'acciaio (positiva se di compressione)
Ys max	Ordinata in cm della barra corrisp. a es max (sistema rif. X,Y,O sez.)

N°Comb	ec max	Yc max	es min	Ys min	es max	Ys max
1	0.00350	150.0	0.00089	143.0	-0.04984	7.0

ARMATURE A TAGLIO E/O TORSIONE DI INVILUPPO PER LE COMBINAZIONI ASSEGNATE

Diametro spilli:	12	mm
Passo spilli	20	cm

VERIFICHE A TAGLIO

Ver	S = comb.verificata a taglio-tors./ N = comb. non verificata
Ved	Taglio agente [daN] uguale al taglio Vy di comb.
Vrd	Taglio resistente [daN] in assenza di staffe [formula (4.1.23)NTC]
Vcd	Taglio compressione resistente [daN] lato conglomerato [formula (4.1.28)NTC]
Vwd	Taglio trazione resistente [daN] assorbito dalle staffe [formula (4.1.27)NTC]

N°Comb	Ver	Ved	Vrd	Vcd	Vwd
1	S	112718	56885	408383	145254

COMBINAZIONI RARE IN ESERCIZIO - VERIFICA MASSIME TENSIONI NORMALI

Ver	S = combinazione verificata / N = combin. non verificata
Sc max	Massima tensione di compress.(+) nel conglom. in fase fessurata [(daN/cm ²)]
Yc max	Ordinata in cm della fibra corrisp. a Sc max (sistema rif. X,Y,O)
Sc min	Minima tensione di compress.(+) nel conglom. in fase fessurata [(daN/cm ²)]
Yc min	Ordinata in cm della fibra corrisp. a Sc min (sistema rif. X,Y,O)
Sf min	Minima tensione di trazione (-) nell'acciaio [daN/cm ²]
Ys min	Ordinata in cm della barra corrisp. a Sf min (sistema rif. X,Y,O)
Dw Eff.	Spessore di conglomerato [cm] in zona tesa considerata aderente alle barre
Ac eff.	Area di congl. [cm ²] in zona tesa aderente alle barre (verifica fess.)
As eff.	Area Barre tese di acciaio [cm ²] ricadente nell'area efficace(verifica fess.)
D barre	Distanza in cm tra le barre tese efficaci. (D barre = 0 indica spaziatura superiore a $5(c+\varnothing/2)$ e nel calcolo di fess. si usa la (C4.1.11)NTC/(7.14)EC2)

N°Comb	Ver	Sc max	Yc max	Sc min	Yc min	Sf min	Ys min	Dw Eff.	Ac Eff.	As Eff.	D barre
1	S	21.6	150.0	0.0	104.1	-684	143.0	17.5	1750	45.2	9.6

COMBINAZIONI RARE IN ESERCIZIO - VERIFICA APERTURA FESSURE (NTC/EC2)

Ver	Esito verifica
e1	Minima deformazione unitaria (trazione: segno -) nel calcestruzzo in sez. fessurata
e2	Massima deformazione unitaria (compress.: segno +) nel calcestruzzo in sez. fessurata
e3	Deformazione unitaria al limite dell'area tesa efficace di calcestruzzo

K2 = $(e1 + e3)/(2 \cdot e3)$ secondo la (7.13) dell'EC2 e la (C4.1.19)NTC
 Kt fattore di durata del carico di cui alla (7.9) dell'EC2
 e sm Deformazione media acciaio tra le fessure al netto di quella del cls. Tra parentesi il valore minimo = 0.6 Ss/Es
 srm Distanza massima in mm tra le fessure
 wk Apertura delle fessure in mm fornito dalla (7.8)EC2 e dalla (C4.1.7)NTC. Tra parentesi è indicato il valore limite.
 M fess. Momento di prima fessurazione [daNm]

N°Comb	Ver	e1	e2	e3	K2	Kt	e sm	srm	wk	M Fess.
1	S	-0.00037	0.00016	-0.00031	0.92	0.60	0.000205 (0.000205)	486	0.100 (990.00)	162214

COMBINAZIONI FREQUENTI IN ESERCIZIO - VERIFICA MASSIME TENSIONI NORMALI

N°Comb	Ver	Sc max	Yc max	Sc min	Yc min	Sf min	Ys min	Dw Eff.	Ac Eff.	As Eff.	D barre
1	S	13.0	150.0	0.0	91.4	-280	143.0	17.5	1750	45.2	9.6

COMBINAZIONI FREQUENTI IN ESERCIZIO - VERIFICA APERTURA FESSURE (NTC/EC2)

N°Comb	Ver	e1	e2	e3	K2	Kt	e sm	srm	wk	M Fess.
1	S	-0.00015	0.00010	-0.00012	0.90	0.60	0.000084 (0.000084)	483	0.041 (0.40)	188166

COMBINAZIONI QUASI PERMANENTI IN ESERCIZIO - VERIFICA MASSIME TENSIONI NORMALI

N°Comb	Ver	Sc max	Yc max	Sc min	Yc min	Sf min	Ys min	Dw Eff.	Ac Eff.	As Eff.	D barre
1	S	13.0	150.0	0.0	91.4	-280	143.0	17.5	1750	45.2	9.6

COMBINAZIONI QUASI PERMANENTI IN ESERCIZIO - VERIFICA APERTURA FESSURE (NTC/EC2)

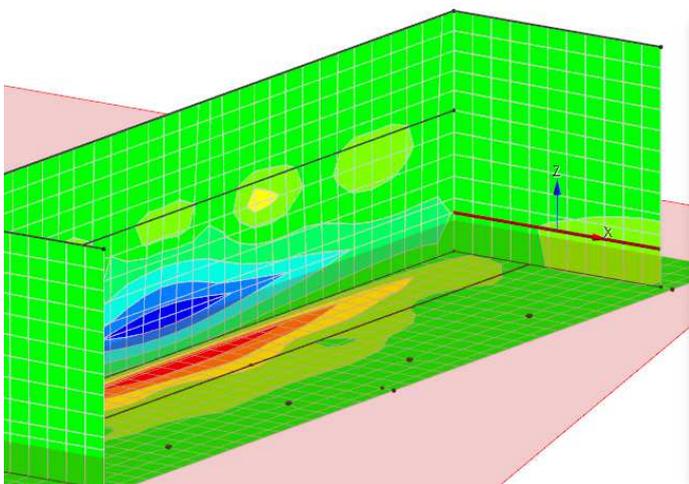
N°Comb	Ver	e1	e2	e3	K2	Kt	e sm	srm	wk	M Fess.
1	S	-0.00015	0.00010	-0.00012	0.90	0.40	0.000084 (0.000084)	483	0.041 (0.30)	188166

6.5.2 Verifica a pressoflessione e taglio muri d'ala

Le verifiche a pressoflessione vengono eseguite integrando le sollecitazioni alla base della parete. Le verifiche verranno pertanto fatte considerando una sezione di dimensioni bxh=50x400cm Per la sezione è prevista un armatura longitudinale costituita da barre ø24/10, mentre trasversalmente si prevedono delle barre di ripartizione costituita da ferri ø12/10. lincidenza armatura i=230kg/mc

DTB DTS DTT
DFB DSOL DTAM

BOX sul piano Tridimensionale
 PV PVX PVY Vedi tutto
 PGE POG PQ Allineamenti
 Assi globali
 P. riferimento
 POIM 0 a 0



Informazioni sollecitazioni integrate da forze di equilibrio

Esporta Stampa

CC	TCC	N <kN>	Tx <kN>	Ty <kN>	Mx <kNm>	My <kNm>	Mz <kNm>
1	SND	363.404	1072.930	-342.290	-316.297	-1625.080	522.837
2	SND	336.083	1089.360	-376.307	-360.936	-1774.650	576.422
3	SND	-523.741	-536.778	217.143	215.147	771.667	-363.896
4	SND	-551.061	-520.354	183.126	170.508	622.091	-310.312
5	SND	84.777	490.373	-106.802	-78.213	-611.712	149.965
6	SND	-181.366	7.459	61.028	81.220	107.311	-116.055
7	SND	-6.291	545.121	-220.192	-227.009	-1110.300	328.580
8	SND	-272.435	62.207	-52.362	-67.576	-391.275	62.560
9	SLU	-141.359	336.699	119.657	44.447	-550.211	-155.153
10	SLU	-125.149	352.668	125.628	48.465	-551.260	-158.716
11	SLE R	-114.073	238.974	74.973	25.231	-393.423	-97.564
12	SLE R	-101.266	253.201	77.598	26.560	-399.316	-97.614
13	SLE Q	-153.731	144.759	120.946	67.785	-222.104	-166.533

Opzioni Mostra elementi e sistema di riferimento OK

Figura 58 – Massime sollecitazioni alla base dei muri d'ala

CARATTERISTICHE DI RESISTENZA DEI MATERIALI IMPIEGATI

CALCESTRUZZO -	Classe:	C32/40	
	Resis. compr. di progetto fcd:	181.30	daN/cm ²
	Def.unit. max resistenza ec2:	0.0020	
	Def.unit. ultima ecu:	0.0035	
	Diagramma tensione-deformaz.:	Parabola-Rettangolo	
	Modulo Elastico Normale Ec:	333457333457	daN/cm ²
	Resis. media a trazione fctm:	30.16	daN/cm ²
	Coeff. Omogen. S.L.E.:	15.00	
	Sc limite S.L.E. comb. Rare:	192.00	daN/cm ²
	Sc limite S.L.E. comb. Frequenti:	192.00	daN/cm ²
	Ap.Fessure limite S.L.E. comb. Frequenti:	0.400	mm
	Sc limite S.L.E. comb. Q.Permanenti:	144.00	daN/cm ²
	Ap.Fess.limite S.L.E. comb. Q.Perm.:	0.300	mm
ACCIAIO -	Tipo:	B450C	
	Resist. caratt. snervam. fyk:	4500.0	daN/cm ²
	Resist. caratt. rottura ftk:	4500.0	daN/cm ²
	Resist. snerv. di progetto fyd:	3913.0	daN/cm ²
	Resist. ultima di progetto ftd:	3913.0	daN/cm ²
	Deform. ultima di progetto Epu:	0.068	
	Modulo Elastico Ef	2000000	daN/cm ²
	Diagramma tensione-deformaz.:	Bilineare finito	
	Coeff. Aderenza istantaneo $\beta_1 \cdot \beta_2$:	1.00	
	Coeff. Aderenza differito $\beta_1 \cdot \beta_2$:	0.50	
Sf limite S.L.E. Comb. Rare:	3600.0	daN/cm ²	

CARATTERISTICHE DOMINIO CONGLOMERATO

Forma del Dominio:	Poligonale
Classe Conglomerato:	C32/40
N°vertice:	X [cm] Y [cm]
1	-200.0 0.0
2	-200.0 50.0
3	200.0 50.0
4	200.0 0.0

DATI BARRE ISOLATE

N°Barra	X [cm]	Y [cm]	DiamØ[mm]
1	-193.0	7.0	24
2	-193.0	43.0	24
3	193.0	43.0	24
4	193.0	7.0	24

DATI GENERAZIONI LINEARI DI BARRE

N°Gen.	Numero assegnato alla singola generazione lineare di barre			
N°Barra Ini.	Numero della barra iniziale cui si riferisce la generazione			
N°Barra Fin.	Numero della barra finale cui si riferisce la generazione			
N°Barre	Numero di barre generate equidistanti cui si riferisce la generazione			
Ø	Diametro in mm delle barre della generazione			
N°Gen.	N°Barra Ini.	N°Barra Fin.	N°Barre	Ø
1	2	3	35	24
2	1	4	35	24

CALCOLO DI RESISTENZA - SFORZI PER OGNI COMBINAZIONE ASSEGNATA

N Sforzo normale in daN applicato nel Baric. (+ se di compressione)
Mx Momento flettente [daNm] intorno all'asse x princ. d'inerzia con verso positivo se tale da comprimere il lembo sup. della sez.
My Momento flettente [daNm] intorno all'asse y princ. d'inerzia con verso positivo se tale da comprimere il lembo destro della sez.
Vy Componente del Taglio [daN] parallela all'asse princ.d'inerzia y
Vx Componente del Taglio [daN] parallela all'asse princ.d'inerzia x

N°Comb.	N	Mx	My	Vy	Vx
1	33608	36000	117400	37600	108900

COMB. RARE (S.L.E.) - SFORZI PER OGNI COMBINAZIONE ASSEGNATA

N Sforzo normale in daN applicato nel Baricentro (+ se di compressione)
Mx Momento flettente [daNm] intorno all'asse x princ. d'inerzia (tra parentesi Mom.Fessurazione) con verso positivo se tale da comprimere il lembo superiore della sezione
My Momento flettente [daNm] intorno all'asse y princ. d'inerzia (tra parentesi Mom.Fessurazione) con verso positivo se tale da comprimere il lembo destro della sezione

N°Comb.	N	Mx	My
1	10100	2600	39931

COMB. FREQUENTI (S.L.E.) - SFORZI PER OGNI COMBINAZIONE ASSEGNATA

N Sforzo normale in daN applicato nel Baricentro (+ se di compressione)
Mx Momento flettente [daNm] intorno all'asse x princ. d'inerzia (tra parentesi Mom.Fessurazione) con verso positivo se tale da comprimere il lembo superiore della sezione
My Momento flettente [daNm] intorno all'asse y princ. d'inerzia (tra parentesi Mom.Fessurazione) con verso positivo se tale da comprimere il lembo destro della sezione

N°Comb.	N	Mx	My
1	10100	2600 (25131)	39931 (385965)

COMB. QUASI PERMANENTI (S.L.E.) - SFORZI PER OGNI COMBINAZIONE ASSEGNATA

N Sforzo normale in daN applicato nel Baricentro (+ se di compressione)
Mx Momento flettente [daNm] intorno all'asse x princ. d'inerzia (tra parentesi Mom.Fessurazione) con verso positivo se tale da comprimere il lembo superiore della sezione
My Momento flettente [daNm] intorno all'asse y princ. d'inerzia (tra parentesi Mom.Fessurazione) con verso positivo se tale da comprimere il lembo destro della sezione

N°Comb.	N	Mx	My
1	15300	6700 (55897)	22200 (185212)

RISULTATI DEL CALCOLO

Sezione verificata per tutte le combinazioni assegnate

VERIFICHE DI RESISTENZA IN PRESSO-TENSO FLESSIONE ALLO STATO LIMITE ULTIMO

Ver S = combinazione verificata / N = combin. non verificata
N Sn Sforzo normale assegnato [daN] nel baricentro sezione cls. (positivo se di compressione)
Mx Sn Componente momento assegnato [daNm] riferito all'asse x princ. d'inerzia
My Sn Componente momento assegnato [daNm] riferito all'asse y princ. d'inerzia
N Res Sforzo normale resistente [daN] baricentrico (positivo se di compress.)
Mx Res Momento flettente resistente [daNm] riferito all'asse x princ. d'inerzia
My res Momento flettente resistente [daNm] riferito all'asse y princ. d'inerzia
Mis.Sic. Misura sicurezza = rapporto vettoriale tra (N r, Mx Res, My Res) e (N, Mx, My)

As Tesa Verifica positiva se tale rapporto risulta ≥ 1.000
 Area armature trave [cm²] in zona tesa. [Tra parentesi l'area minima ex (4.1.15)NTC]

N°Comb	Ver	N	Mx	My	N Res	Mx Res	My Res	Mis.Sic.	As Tesa
1	S	33608	36000	117400	33608	247771	804687	6.86	199.1(34.9)

METODO AGLI STATI LIMITE ULTIMI - DEFORMAZIONI UNITARIE ALLO STATO ULTIMO

ec max Deform. unit. massima del conglomerato a compressione
 x/d Rapporto di duttilità [§ 4.1.2.1.2.1 NTC] deve essere < 0.45
 Xc max Ascissa in cm della fibra corrisp. a ec max (sistema rif. X,Y,O sez.)
 Yc max Ordinata in cm della fibra corrisp. a ec max (sistema rif. X,Y,O sez.)
 es min Deform. unit. minima nell'acciaio (negativa se di trazione)
 Xs min Ascissa in cm della barra corrisp. a es min (sistema rif. X,Y,O sez.)
 Ys min Ordinata in cm della barra corrisp. a es min (sistema rif. X,Y,O sez.)
 es max Deform. unit. massima nell'acciaio (positiva se di compress.)
 Xs max Ascissa in cm della barra corrisp. a es max (sistema rif. X,Y,O sez.)
 Ys max Ordinata in cm della barra corrisp. a es max (sistema rif. X,Y,O sez.)

N°Comb	ec max	x/d	Xc max	Yc max	es min	Xs min	Ys min	es max	Xs max	Ys max
1	0.00350	0.326	200.0	50.0	0.00225	193.0	43.0	-0.00725	-193.0	7.0

POSIZIONE ASSE NEUTRO PER OGNI COMB. DI RESISTENZA

a, b, c Coeff. a, b, c nell'eq. dell'asse neutro $aX+bY+c=0$ nel rif. X,Y,O gen.
 x/d Rapp. di duttilità (travi e solette)[§ 4.1.2.1.2.1 NTC]: deve essere < 0.45
 C.Rid. Coeff. di riduz. momenti per sola flessione in travi continue

N°Comb	a	b	c	x/d	C.Rid.
1	0.000008700	0.000170501	-0.006764969	0.326	0.847

METODO SLU - VERIFICHE A TAGLIO SENZA ARMATURE TRASVERSALI (§ 4.1.2.1.3.1 NTC)

Ver S = comb.verificata a taglio/ N = comb. non verificata
 Ved Taglio agente [daN] uguale al taglio Vy di comb. (sollecit. retta)
 Vwct Taglio trazione resistente [daN] in assenza di staffe [formula (4.1.23)NTC]
 d Altezza utile sezione [cm]
 bw Larghezza minima sezione [cm]
 Ro Rapporto geometrico di armatura longitudinale [< 0.02]
 Scp Tensione media di compressione nella sezione [daN/cm²]

N°Comb	Ver	Ved	Vwct	d	bw	Ro	Scp
1	S	43100	124080	43.0	398.9	0.0129	0.2

COMBINAZIONI RARE IN ESERCIZIO - MASSIME TENSIONI NORMALI ED APERTURA FESSURE (NTC/EC2)

Ver S = comb. verificata/ N = comb. non verificata
 Sc max Massima tensione (positiva se di compressione) nel conglomerato [daN/cm²]
 Xc max, Yc max Ascissa, Ordinata [cm] del punto corrisp. a Sc max (sistema rif. X,Y,O)
 Sf min Minima tensione (negativa se di trazione) nell'acciaio [daN/cm²]
 Xs min, Ys min Ascissa, Ordinata [cm] della barra corrisp. a Sf min (sistema rif. X,Y,O)
 Ac eff. Area di calcestruzzo [cm²] in zona tesa considerata aderente alle barre
 As eff. Area barre [cm²] in zona tesa considerate efficaci per l'apertura delle fessure

N°Comb	Ver	Sc max	Xc max	Yc max	Sf min	Xs min	Ys min	Ac eff.	As eff.
1	S	6.0	200.0	50.0	-115	-193.0	7.0	1670	36.2

COMBINAZIONI FREQUENTI IN ESERCIZIO - MASSIME TENSIONI NORMALI ED APERTURA FESSURE (NTC/EC2)

N°Comb	Ver	Sc max	Xc max	Yc max	Sf min	Xs min	Ys min	Ac eff.	As eff.
1	S	6.0	200.0	50.0	-115	-193.0	7.0	1670	36.2

COMBINAZIONI FREQUENTI IN ESERCIZIO - APERTURA FESSURE [§ 7.3.4 EC2]

Ver.	La sezione viene assunta sempre fessurata anche nel caso in cui la trazione minima del calcestruzzo sia inferiore a f_{ctm}
e1	Esito della verifica
e2	Massima deformazione di trazione del calcestruzzo, valutata in sezione fessurata
k1	Minima deformazione di trazione del cls. (in sezione fessurata), valutata nella fibra più interna dell'area $A_{c\text{ eff}}$
k2	= 0.8 per barre ad aderenza migliorata [eq.(7.11)EC2]
k3	= 0.4 per comb. quasi permanenti / = 0.6 per comb. frequenti [cfr. eq.(7.9)EC2]
k4	= $(e1 + e2)/(2 \cdot e1)$ [eq.(7.13)EC2]
Ø	= 3.400 Coeff. in eq.(7.11) come da annessi nazionali
Cf	= 0.425 Coeff. in eq.(7.11) come da annessi nazionali
e sm - e cm	Diametro [mm] equivalente delle barre tese comprese nell'area efficace $A_{c\text{ eff}}$ [eq.(7.11)EC2]
sr max	Copriferro [mm] netto calcolato con riferimento alla barra più tesa
wk	Differenza tra le deformazioni medie di acciaio e calcestruzzo [(7.8)EC2 e (C4.1.7)NTC]
Mx fess.	Tra parentesi: valore minimo = $0.6 S_{max} / E_s$ [(7.9)EC2 e (C4.1.8)NTC]
My fess.	Massima distanza tra le fessure [mm]
	Apertura fessure in mm calcolata = $sr \cdot max \cdot (e_{sm} - e_{cm})$ [(7.8)EC2 e (C4.1.7)NTC]. Valore limite tra parentesi
	Componente momento di prima fessurazione intorno all'asse X [daNm]
	Componente momento di prima fessurazione intorno all'asse Y [daNm]

Comb.	Ver	e1	e2	k2	Ø	Cf	e sm - e cm	sr max	wk	Mx fess	My fess
1	S	-0.00006	0	0.833	24.0	58	0.00003 (0.00003)	511	0.018 (0.40)	25131	385965

COMBINAZIONI QUASI PERMANENTI IN ESERCIZIO - MASSIME TENSIONI NORMALI ED APERTURA FESSURE (NTC/EC2)

N°Comb	Ver	Sc max	Xc max	Yc max	Sf min	Xs min	Ys min	Ac eff.	As eff.
1	S	6.8	200.0	50.0	-106	-193.0	7.0	1220	45.2

COMBINAZIONI QUASI PERMANENTI IN ESERCIZIO - APERTURA FESSURE [§ 7.3.4 EC2]

Comb.	Ver	e1	e2	k2	Ø	Cf	e sm - e cm	sr max	wk	Mx fess	My fess
1	S	-0.00006	0	0.833	24.0	58	0.00003 (0.00003)	381	0.012 (0.30)	55897	185212

6.6 Plinto di fondazione Spalla 1

Le caratteristiche di sollecitazione in corrispondenza del plinto di fondazione si ricavano considerando la spalla vincolata ai pali di fondazione, cautelativamente modellati come vincoli rigidi (appoggi), e soggetta ai carichi derivanti dalle azioni del terreno e dalle reazioni trasmesse dall'impalcato. Le principali caratteristiche di sollecitazioni sono riportati nelle immagini seguenti

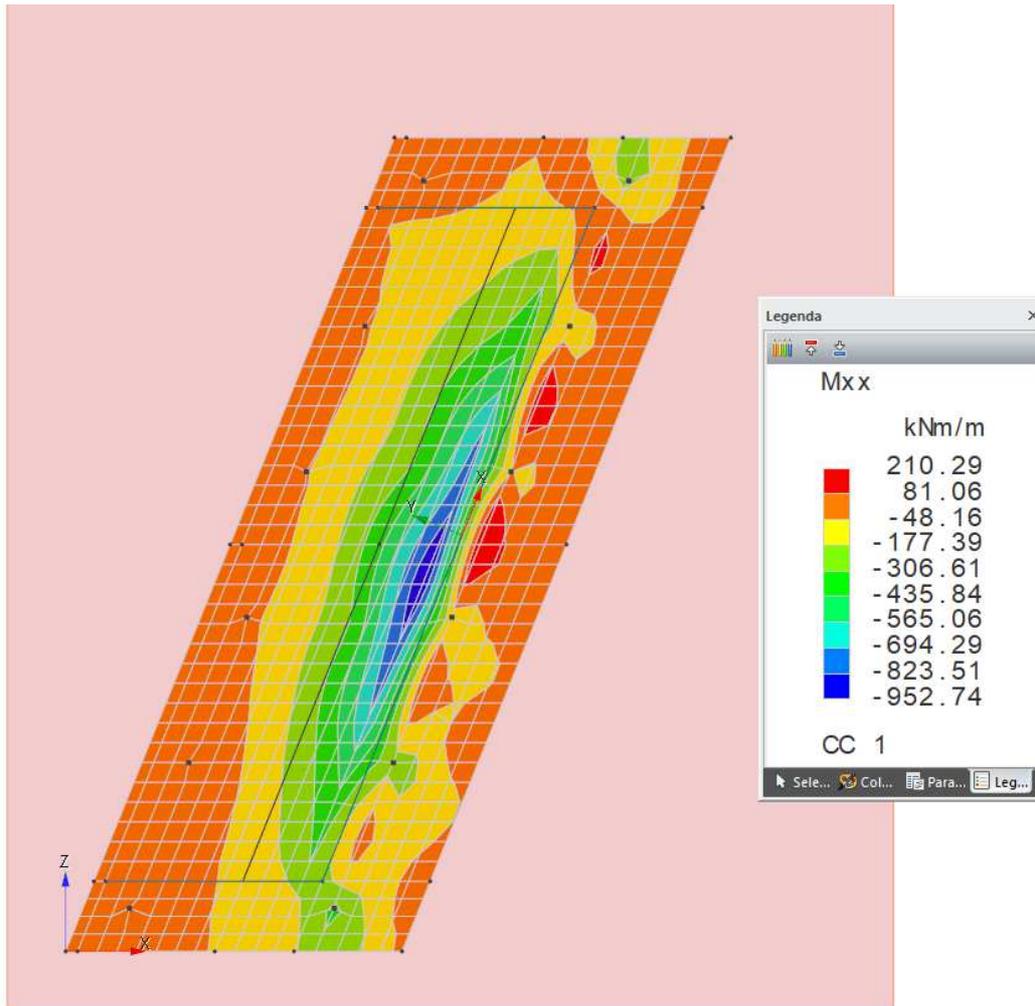


Figura 59 – Modello Fem -Mappa delle sollecitazioni plinto di fondazione Mxx

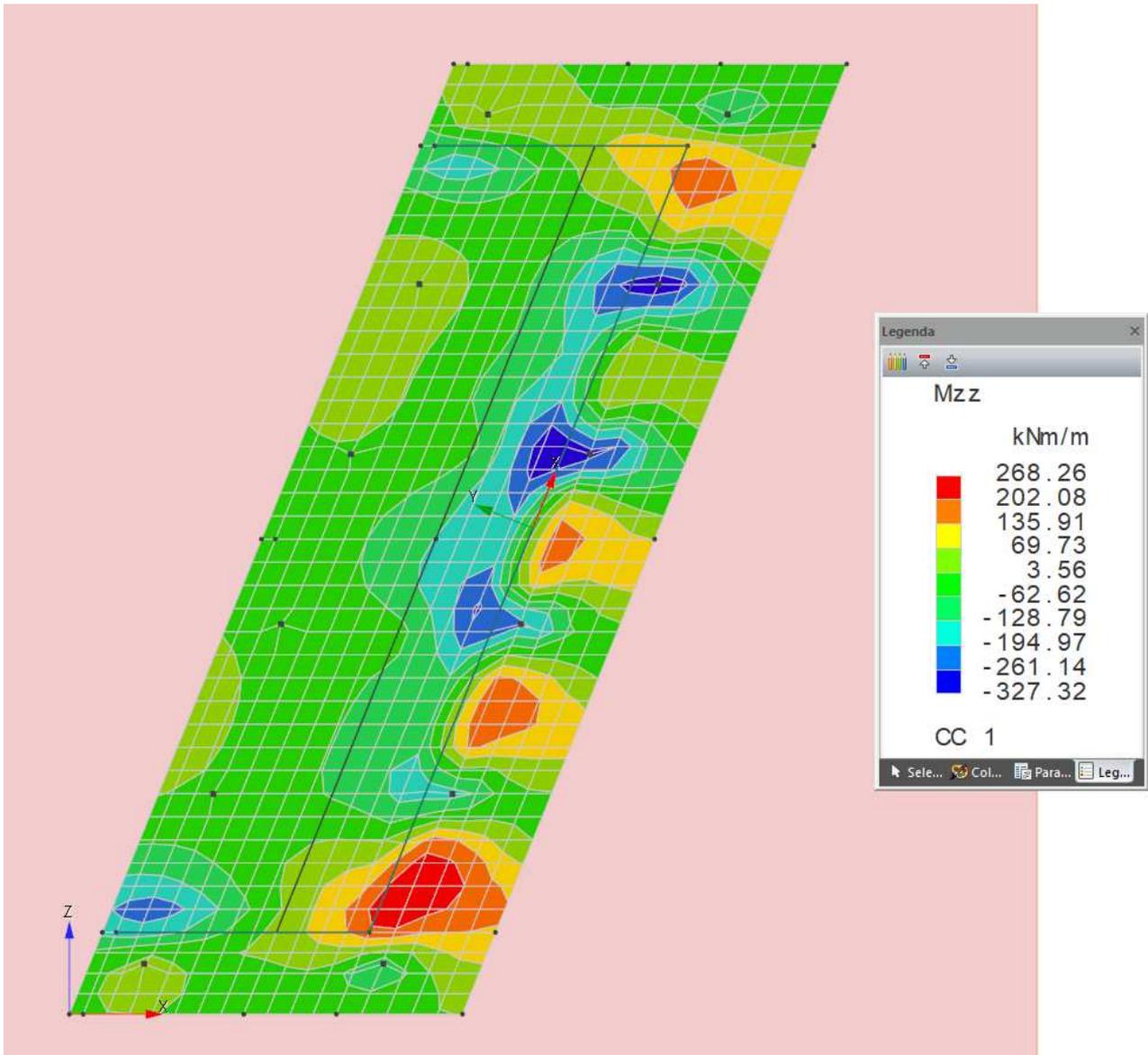


Figura 60 – Modello Fem -Mappa delle sollecitazioni plinto di fondazione Mzz

Integrando su una striscia unitaria avremo in corrispondenza della sezione maggiormente sollecitata avremo

CC	TCC	N <kN>	Tx <kN>	Ty <kN>	Mx <kNm>	My <kNm>	Mz <kNm>
1	SND	312.728	-140.831	791.583	-1064.810	-26.312	-87.329
2	SND	322.130	-99.619	852.520	-1165.060	-32.535	-100.650
3	SND	-277.076	109.636	-492.984	704.410	27.620	30.431
4	SND	-267.674	150.848	-432.047	604.161	21.396	17.110
5	SND	95.328	-101.249	270.891	-328.627	-0.175	-30.571
6	SND	-81.614	-26.109	-114.479	202.139	16.004	4.757
7	SND	126.668	36.126	474.015	-662.789	-20.920	-74.975
8	SND	-50.273	111.266	88.645	-132.023	-4.741	-39.647
9	SLU	60.738	-17.452	286.659	-347.756	-5.804	-39.898
10	SLU	106.249	-44.604	361.656	-446.678	-9.629	-47.108
11	SLE R	41.900	-11.863	198.262	-242.327	-4.025	-28.756
12	SLE R	75.838	-31.725	254.132	-315.901	-6.873	-33.652
13	SLE Q	28.163	-10.305	153.457	-177.386	-2.600	-24.824

6.6.1 Verifica sezione in c.a plinto di fondazione

La verifica viene eseguita considerando una sezione rettangolare di dimensioni bxh pari 100x150. Si considera una armatura minima di normativa sia superiormente che inferiormente pari a $A_f = A_f' = \varnothing 24/10$, in entrambi le direzioni. Si prevede anche una armatura a taglio nella misura di spilli $\varnothing 12/20$ $i = 140 \text{ kg/mc}$

CARATTERISTICHE DI RESISTENZA DEI MATERIALI IMPIEGATI

CALCESTRUZZO -	Classe:	C25/30
	Resistenza compress. di progetto fcd:	141.60 daN/cm ²
	Resistenza compress. ridotta fcd':	70.80 daN/cm ²
	Deform. unitaria max resistenza ec2:	0.0020
	Deformazione unitaria ultima ecu:	0.0035
	Diagramma tensioni-deformaz.:	Parabola-Rettangolo
	Modulo Elastico Normale Ec:	314750 daN/cm ²
	Resis. media a trazione fctm:	25.60 daN/cm ²
	Coeff.Omogen. S.L.E.:	15.00
	Sc limite S.L.E. comb. Rare:	150.00 daN/cm ²
	Sc limite S.L.E. comb. Frequenti:	150.00 daN/cm ²
	Ap.Fessure limite S.L.E. comb. Frequenti:	0.400 mm
	Sc limite S.L.E. comb. Q.Permanenti:	112.50 daN/cm ²
Ap.Fess.limite S.L.E. comb. Q.Perm.:	0.300 mm	

ACCIAIO -	Tipo:	B450C
	Resist. caratt. a snervamento fyk:	4500.0 daN/cm ²
	Resist. caratt. a rottura ftk:	4500.0 daN/cm ²
	Resist. a snerv. di progetto fyd:	3913.0 daN/cm ²
	Resist. ultima di progetto ftd:	3913.0 daN/cm ²
	Deform. ultima di progetto Epu:	0.068
	Modulo Elastico Ef:	2000000 daN/cm ²
	Diagramma tensioni-deformaz.:	Bilineare finito
	Coeff. Aderenza istant. $\beta 1 * \beta 2$:	1.00
	Coeff. Aderenza differito $\beta 1 * \beta 2$:	0.50
Comb.Rare - Sf Limite:	3600.0 daN/cm ²	

CARATTERISTICHE GEOMETRICHE ED ARMATURE SEZIONE

Base:	100.0	cm
Altezza:	150.0	cm
Barre inferiori:	10Ø24	(45.2 cm ²)
Barre superiori:	10Ø24	(45.2 cm ²)

Coprif.Inf.(dal baric. barre):	7.0	cm
Coprif.Sup.(dal baric. barre):	7.0	cm
Coprif.Lat. (dal baric.barre):	7.0	cm

CALCOLO DI RESISTENZA - SFORZI PER OGNI COMBINAZIONE ASSEGNATA

N	Sforzo normale [daN] applicato nel baricentro (posit. se di compress.)
Mx	Momento flettente [daNm] intorno all'asse x baric. della sezione con verso positivo se tale da comprimere il lembo sup. della sezione
Vy	Taglio [daN] in direzione parallela all'asse y baric. della sezione
MT	Momento torcente [daN m]

N°Comb.	N	Mx	Vy	MT
1	32213	116506	85252	0

COMB. RARE (S.L.E.) - SFORZI PER OGNI COMBINAZIONE ASSEGNATA

N	Sforzo normale [daN] applicato nel baricentro (positivo se di compress.)
Mx	Coppia [daNm] applicata all'asse x baricentrico (tra parentesi il Momento di fessurazione) con verso positivo se tale da comprimere il lembo superiore della sezione

N°Comb.	N	Mx
1	7583	31590

COMB. FREQUENTI (S.L.E.) - SFORZI PER OGNI COMBINAZIONE ASSEGNATA

N	Sforzo normale [daN] applicato nel baricentro (positivo se di compress.)
Mx	Coppia [daNm] applicata all'asse x baricentrico (tra parentesi il Momento di fessurazione) con verso positivo se tale da comprimere il lembo superiore della sezione

N°Comb.	N	Mx
1	7583	31590 (125895)

COMB. QUASI PERMANENTI (S.L.E.) - SFORZI PER OGNI COMBINAZIONE ASSEGNATA

N	Sforzo normale [daN] applicato nel baricentro (positivo se di compress.)
Mx	Coppia [daNm] applicata all'asse x baricentrico (tra parentesi il Momento di fessurazione) con verso positivo se tale da comprimere il lembo superiore della sezione

N°Comb.	N	Mx
1	2816	17738 (122891)

RISULTATI DEL CALCOLO

Sezione verificata per tutte le combinazioni assegnate

VERIFICHE DI RESISTENZA IN PRESSO-TENSO FLESSIONE ALLO STATO LIMITE ULTIMO

Ver	S = combinazione verificata / N = combin. non verificata
N	Sforzo normale [daN] applicato nel Baricentro (positivo se di compressione)
Mx	Momento flettente assegnato [daNm] riferito all'asse x baricentrico
N Ult	Sforzo normale ultimo [daN] nella sezione (positivo se di compress.)
Mx rd	Momento flettente ultimo [daNm] riferito all'asse x baricentrico
Mis.Sic.	Misura sicurezza = rapporto vettoriale tra (N rd,Mx rd) e (N,Mx) Verifica positiva se tale rapporto risulta >=1.000
Yn	Ordinata [cm] dell'asse neutro alla massima resistenza nel sistema di rif. X,Y,O sez.
x/d	Rapp. di duttilità (travi e solette)[§ 4.1.1.1 NTC]: deve essere < 0.45
C.Rid.	Coeff. di riduz. momenti in travi continue [formula (4.1.1)NTC]
As Tesa	Area armature long. trave [cm²] in zona tesa. (tra parentesi l'area minima di normativa)

N°Comb	Ver	N	Mx	N rd	Mx rd	Mis.Sic.	Yn	x/d	C.Rid.	As Tesa
1	S	32213	116506	32194	265894	2.282	140.0	0.07	0.70	45.2 (21.2)

DEFORMAZIONI UNITARIE ALLO STATO LIMITE ULTIMO

ec max	Deform. unit. massima del conglomerato a compressione
Yc max	Ordinata in cm della fibra corrisp. a ec max (sistema rif. X,Y,O sez.)
es min	Deform. unit. minima nell'acciaio (negativa se di trazione)
Ys min	Ordinata in cm della barra corrisp. a es min (sistema rif. X,Y,O sez.)
es max	Deform. unit. massima nell'acciaio (positiva se di compressione)
Ys max	Ordinata in cm della barra corrisp. a es max (sistema rif. X,Y,O sez.)

N°Comb	ec max	Yc max	es min	Ys min	es max	Ys max
1	0.00350	150.0	0.00105	143.0	-0.04662	7.0

ARMATURE A TAGLIO E/O TORSIONE DI INVILUPPO PER LE COMBINAZIONI ASSEGNATE

Diametro spilli:	12	mm
Passo spilli:	20	cm

VERIFICHE A TAGLIO

Ver	S = comb.verificata a taglio-tors./ N = comb. non verificata
Ved	Taglio agente [daN] uguale al taglio Vy di comb.
Vrd	Taglio resistente [daN] in assenza di staffe [formula (4.1.23)NTC]
Vcd	Taglio compressione resistente [daN] lato conglomerato [formula (4.1.28)NTC]
Vwd	Taglio trazione resistente [daN] assorbito dalle staffe [formula (4.1.27)NTC]

N°Comb	Ver	Ved	Vrd	Vcd	Vwd
1	S	85252	51582	318972	145254

COMBINAZIONI RARE IN ESERCIZIO - VERIFICA MASSIME TENSIONI NORMALI

Ver	S = combinazione verificata / N = combin. non verificata
Sc max	Massima tensione di compress.(+) nel conglom. in fase fessurata [(daN/cm ²)]
Yc max	Ordinata in cm della fibra corrisp. a Sc max (sistema rif. X,Y,O)
Sc min	Minima tensione di compress.(+) nel conglom. in fase fessurata [(daN/cm ²)]
Yc min	Ordinata in cm della fibra corrisp. a Sc min (sistema rif. X,Y,O)
Sf min	Minima tensione di trazione (-) nell'acciaio [daN/cm ²]
Ys min	Ordinata in cm della barra corrisp. a Sf min (sistema rif. X,Y,O)
Dw Eff.	Spessore di conglomerato [cm] in zona tesa considerata aderente alle barre
Ac eff.	Area di congl. [cm ²] in zona tesa aderente alle barre (verifica fess.)
As eff.	Area Barre tese di acciaio [cm ²] ricadente nell'area efficace(verifica fess.)
D barre	Distanza in cm tra le barre tese efficaci. (D barre = 0 indica spaziatura superiore a 5(c+Ø/2) e nel calcolo di fess. si usa la (C4.1.11)NTC/(7.14)EC2)

N°Comb	Ver	Sc max	Yc max	Sc min	Yc min	Sf min	Ys min	Dw Eff.	Ac Eff.	As Eff.	D barre
1	S	11.2	150.0	0.0	111.2	-451	143.0	17.5	1750	45.2	9.6

COMBINAZIONI RARE IN ESERCIZIO - VERIFICA APERTURA FESSURE (NTC/EC2)

Ver	Esito verifica
e1	Minima deformazione unitaria (trazione: segno -) nel calcestruzzo in sez. fessurata
e2	Massima deformazione unitaria (compress.: segno +) nel calcestruzzo in sez. fessurata
e3	Deformazione unitaria al limite dell'area tesa efficace di calcestruzzo
K2	= (e1 + e3)/(2*e3) secondo la (7.13) dell'EC2 e la (C4.1.19)NTC
Kt	fattore di durata del carico di cui alla (7.9) dell'EC2
e sm	Deformazione media acciaio tra le fessure al netto di quella del cls. Tra parentesi il valore minimo = 0.6 Ss/Es
srm	Distanza massima in mm tra le fessure
wk	Apertura delle fessure in mm fornito dalla (7.8)EC2 e dalla (C4.1.7)NTC. Tra parentesi è indicato il valore limite.
M fess.	Momento di prima fessurazione [daNm]

N°Comb	Ver	e1	e2	e3	K2	Kt	e sm	srm	wk	M Fess.
1	S	-0.00024	0.00008	-0.00020	0.92	0.60	0.000135 (0.000135)	488	0.066 (990.00)	125895

COMBINAZIONI FREQUENTI IN ESERCIZIO - VERIFICA MASSIME TENSIONI NORMALI

N°Comb	Ver	Sc max	Yc max	Sc min	Yc min	Sf min	Ys min	Dw Eff.	Ac Eff.	As Eff.	D barre
1	S	11.2	150.0	0.0	111.2	-451	143.0	17.5	1750	45.2	9.6

COMBINAZIONI FREQUENTI IN ESERCIZIO - VERIFICA APERTURA FESSURE (NTC/EC2)

N°Comb	Ver	e1	e2	e3	K2	Kt	e sm	srm	wk	M Fess.
1	S	-0.00024	0.00008	-0.00020	0.92	0.60	0.000135 (0.000135)	488	0.066 (0.40)	125895

COMBINAZIONI QUASI PERMANENTI IN ESERCIZIO - VERIFICA MASSIME TENSIONI NORMALI

N°Comb	Ver	Sc max	Yc max	Sc min	Yc min	Sf min	Ys min	Dw Eff.	Ac Eff.	As Eff.	D barre
1	S	6.2	150.0	0.0	113.0	-267	143.0	17.5	1750	45.2	9.6

COMBINAZIONI QUASI PERMANENTI IN ESERCIZIO - VERIFICA APERTURA FESSURE (NTC/EC2)

N°Comb	Ver	e1	e2	e3	K2	Kt	e sm	srm	wk	M Fess.
1	S	-0.00014	0.00005	-0.00012	0.92	0.40	0.000080 (0.000080)	488	0.039 (0.30)	122891

6.7 Muro frontale spalla 2

La spalla 2 in termini di vincoli dati all'impalcato è per definizione la spalla mobile della sovrastruttura. Presenta una geometria scatolare in quanto al suo interno è prevista un passo carrabile. La modellazione è stata effettuata anche in questo caso utilizzando elementi tipo shell per tutti gli elementi strutturali ed assegnando il relativo spessore.

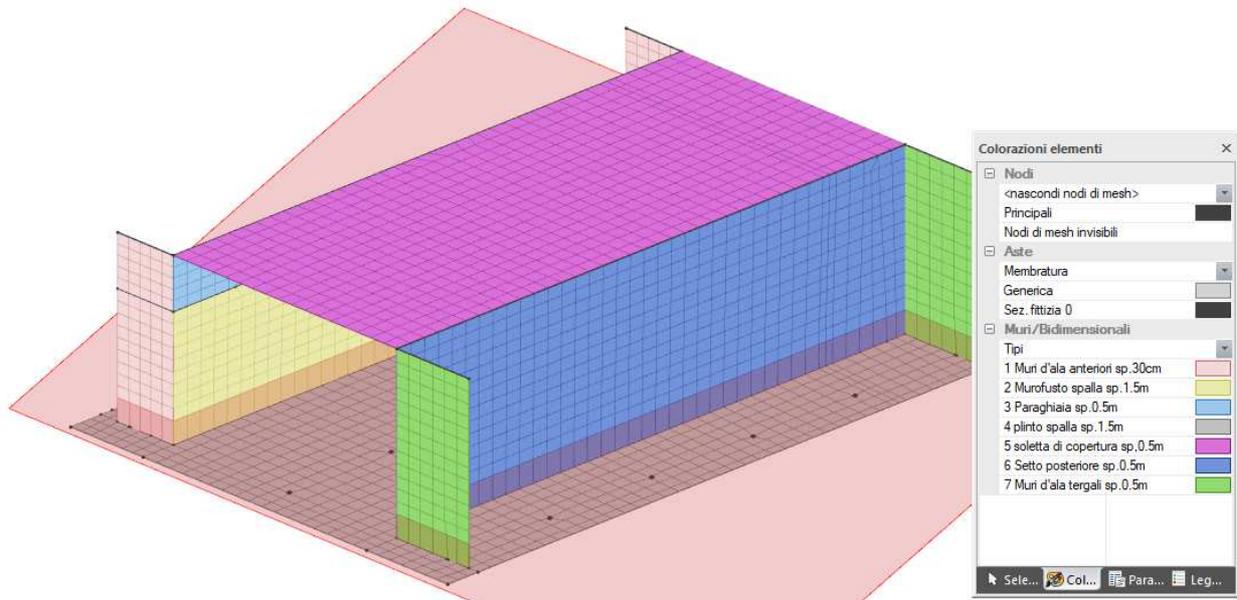


Figura 61 – Modello Fem della spalla SP2

I carichi sono applicati come forze concentrate sui nodi degli appoggi e collegati al fusto tramite aste ad elevata rigidezza; le spinte a tergo dei muri dovute alla presenza del terreno, del sisma e dei sovraccarichi mobili sono state applicate come pressure load di forma incrementale in base alla quota. I principali carichi di superficie sono visualizzate nelle immagini sottostanti:

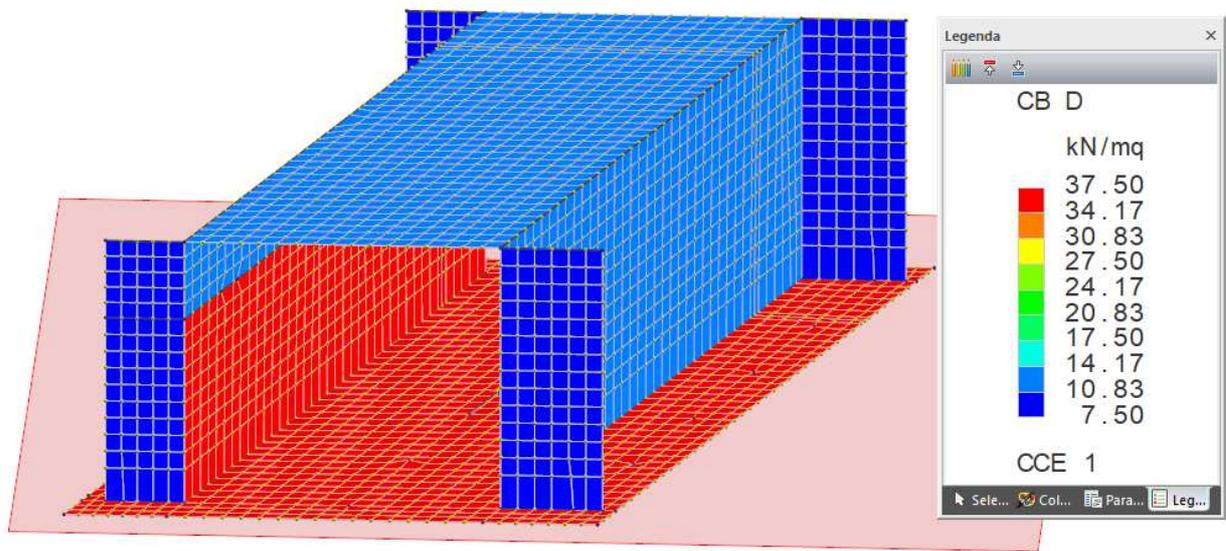


Figura 62 – Peso proprio struttura in c.a

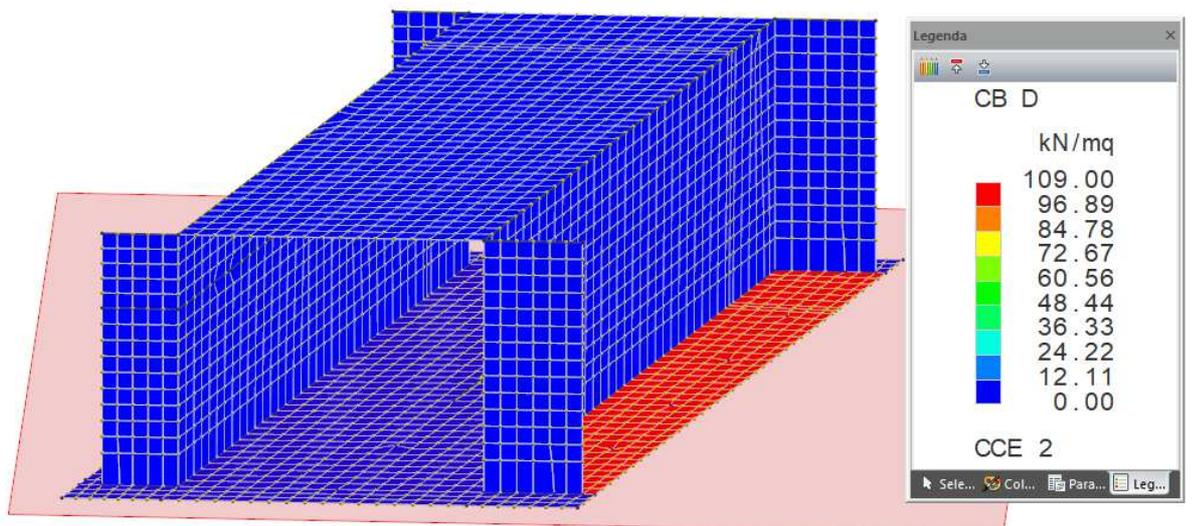


Figura 63 – Peso terreno e pavimentazione

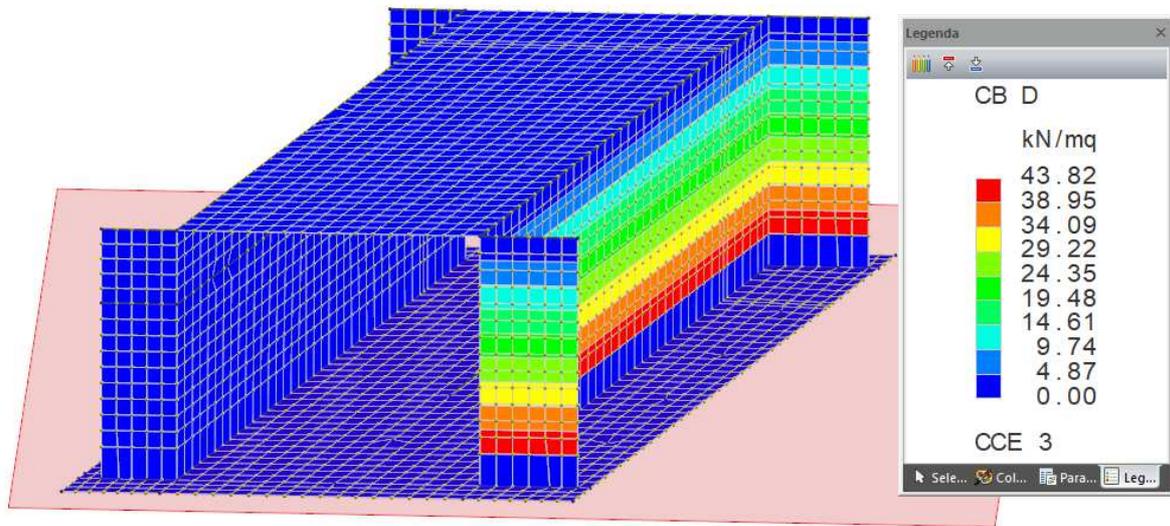


Figura 64 – Spinta statica del terreno

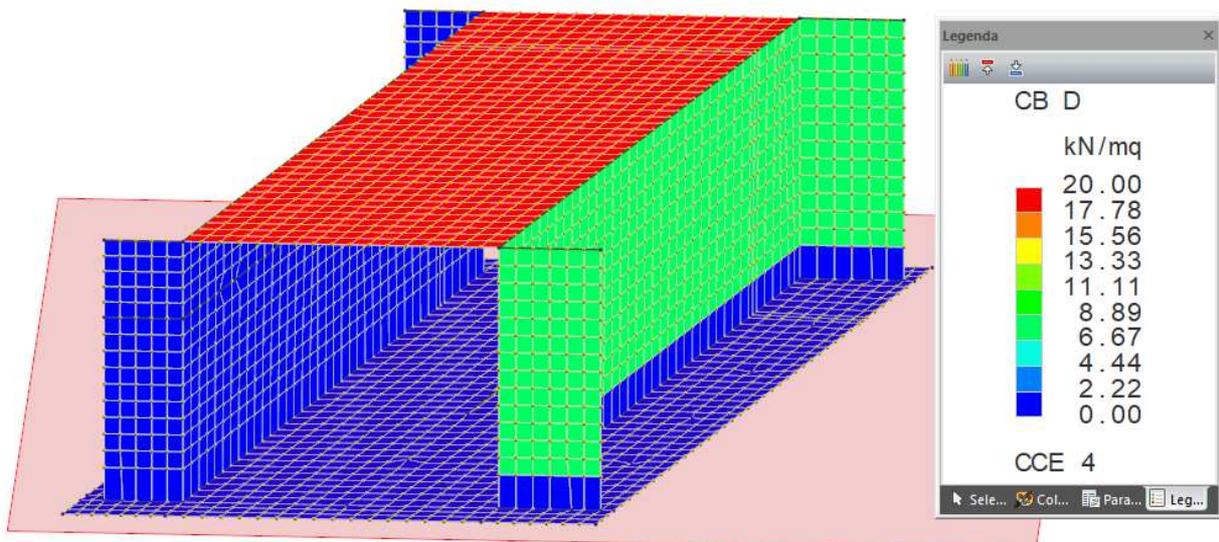


Figura 65 – Spinta sovraccarico

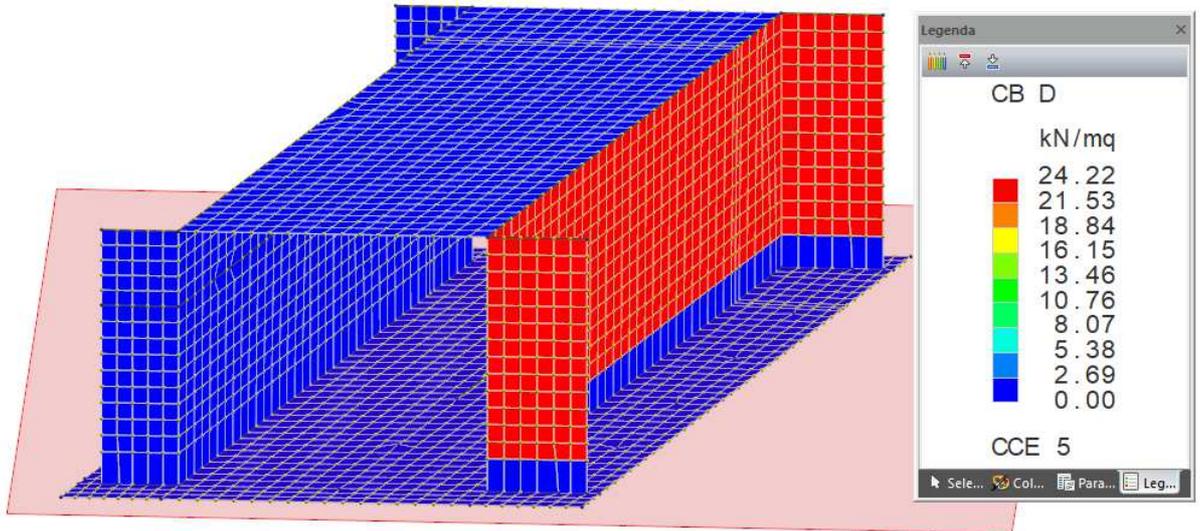


Figura 66 – Spinta Sismica del terreno

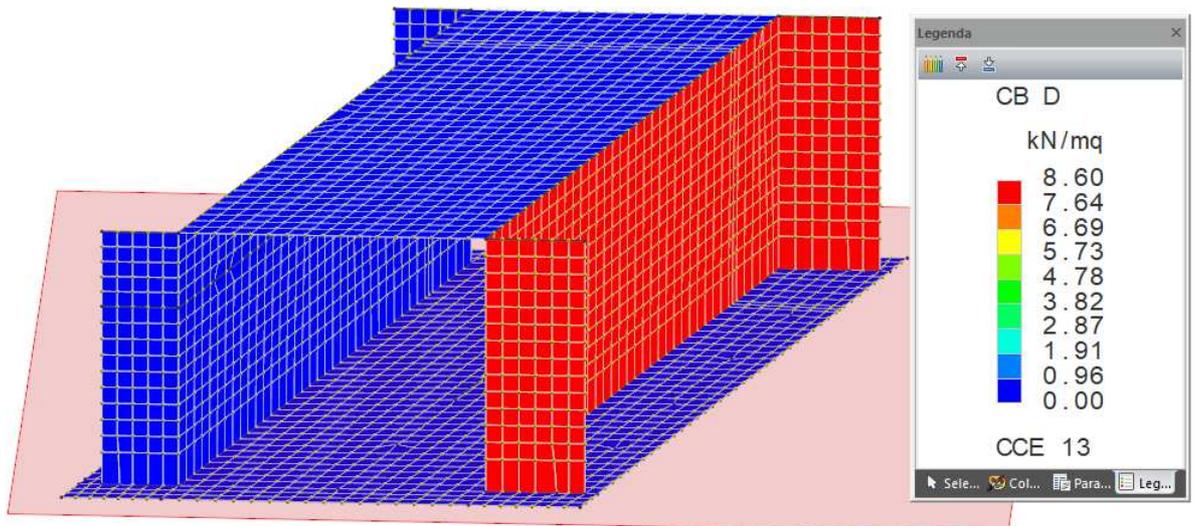


Figura 67 – Inerzia del terreno presente sulla ciabatta

Le condizioni di carico elementari sono rappresentate nella tabella sottostante

Condizioni di carico elementari

Simbologia

- CCE = Numero della condizione di carico elementare
 Comm. = Commento
 Tipo CCE = Tipo di CCE per calcolo agli stati limite
 Sic. = Contributo alla sicurezza
 F = a favore
 S = a sfavore
 A = ambigua
 Var. = Tipo di variabilità
 B = di base
 I = indipendente
 A = ambigua
 s = Coeff. di riduzione (T.A. o S.L. D.M. 96)
 Dir. = Direzione del vento
 Tipo = Tipologia di pressione vento
 M = Massimizzata
 E = Esterna
 I = Interna
 Mx = Moltiplicatore della massa in dir. X
 My = Moltiplicatore della massa in dir. Y
 Mz = Moltiplicatore della massa in dir. Z
 Jpx = Moltiplicatore del momento d'inerzia intorno all'asse X
 Jpy = Moltiplicatore del momento d'inerzia intorno all'asse Y
 Jpz = Moltiplicatore del momento d'inerzia intorno all'asse Z

CCE	Comm.	Tipo CCE	Sic.	Var.	s	Dir. <grad>	Tipo	Mx	My	Mz	Jpx	Jpy	Jpz
1	peso proprio		1S	--	1.00	--	--	1.00	1.00	0.00	0.00	0.00	1.00
2	Peso Terreno e Pav.		2S	--	1.00	--	--	0.00	0.00	0.00	0.00	0.00	1.00
3	Spinta terreno statica		2S	--	1.00	--	--	0.00	0.00	0.00	0.00	0.00	1.00
4	spinta sovraccarico		21S	B	1.00	--	--	0.00	0.00	0.00	0.00	0.00	1.00
5	Spinta sismica terreno		22S	B	1.00	--	--	0.00	0.00	0.00	0.00	0.00	1.00
6	SLU env max		23S	--	1.00	--	--	0.00	0.00	0.00	0.00	0.00	1.00
7	SLU Env Min		23S	--	1.00	--	--	0.00	0.00	0.00	0.00	0.00	1.00
8	SLE rara Max		23S	--	1.00	--	--	0.00	0.00	0.00	0.00	0.00	1.00
9	SLE Rara min		23S	--	1.00	--	--	0.00	0.00	0.00	0.00	0.00	1.00
10	SLE q. permanente		23S	--	1.00	--	--	0.00	0.00	0.00	0.00	0.00	1.00
11	SLV +Y		23S	--	1.00	--	--	0.00	0.00	0.00	0.00	0.00	0.00
12	SLV -Y		23S	--	1.00	--	--	0.00	0.00	0.00	0.00	0.00	0.00
13	Spinta inerziale terreno		22S	B	1.00	--	--	0.00	0.00	0.00	0.00	0.00	1.00

Mentre le combinazioni sono sotto riportata

Simbologia

- CC = Numero della combinazione delle condizioni di carico elementari
 Comm. = Commento
 TCC = Tipo di combinazione di carico
 SLU = Stato limite ultimo
 SLU S = Stato limite ultimo (azione sismica)
 SLE R = Stato limite d'esercizio, combinazione rara
 SLE F = Stato limite d'esercizio, combinazione frequente
 SLE Q = Stato limite d'esercizio, combinazione quasi permanente
 SLD = Stato limite di danno
 SLV = Stato limite di salvaguardia della vita
 SLC = Stato limite di prevenzione del collasso
 SLO = Stato limite di operatività
 SLU I = Stato limite di resistenza al fuoco
 SND = Stato limite di salvaguardia della vita (non dissipativo)
 An. = Tipo di analisi
 L = Lineare
 NL = Non lineare
 Bk = Buckling
 S = Sì
 N = No

C	Comm.	TCC	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	S	X	S	Y
1	Amb. 1 (SLU S) S +X+0.3Y	SND	1.00	1.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	1.00	0.30	0.00
2	Amb. 1 (SLU S) S +X-0.3Y	SND	1.00	1.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	1.00	0.30	0.00
3	Amb. 1 (SLU S) S -X+0.3Y	SND	1.00	1.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	1.00	1.00	0.30	0.00
4	Amb. 1 (SLU S) S -X-0.3Y	SND	1.00	1.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	1.00	0.30	0.00
5	Amb. 1 (SLU S) S +0.3X+Y	SND	1.00	1.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.30	0.30	1.00	0.00
6	Amb. 1 (SLU S) S -0.3X+Y	SND	1.00	1.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.30	0.30	1.00	0.00
7	Amb. 1 (SLU S) S +0.3X-Y	SND	1.00	1.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.30	0.30	1.00	0.00
8	Amb. 1 (SLU S) S -0.3X-Y	SND	1.00	1.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.30	0.30	1.00	0.00
9	SLU Max	SLU	1.30	1.50	1.50	1.35	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10	SLU MIN	SLU	1.30	1.50	1.50	1.30	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11	SLE R Max	SLE R	1.00	1.00	1.00	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12	SLE R Min	SLE R	1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
13	SLE Q.Perm	SLE Q	1.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Le principali azioni in termini di mappa delle sollecitazioni sono riportate nelle immagini sottostanti

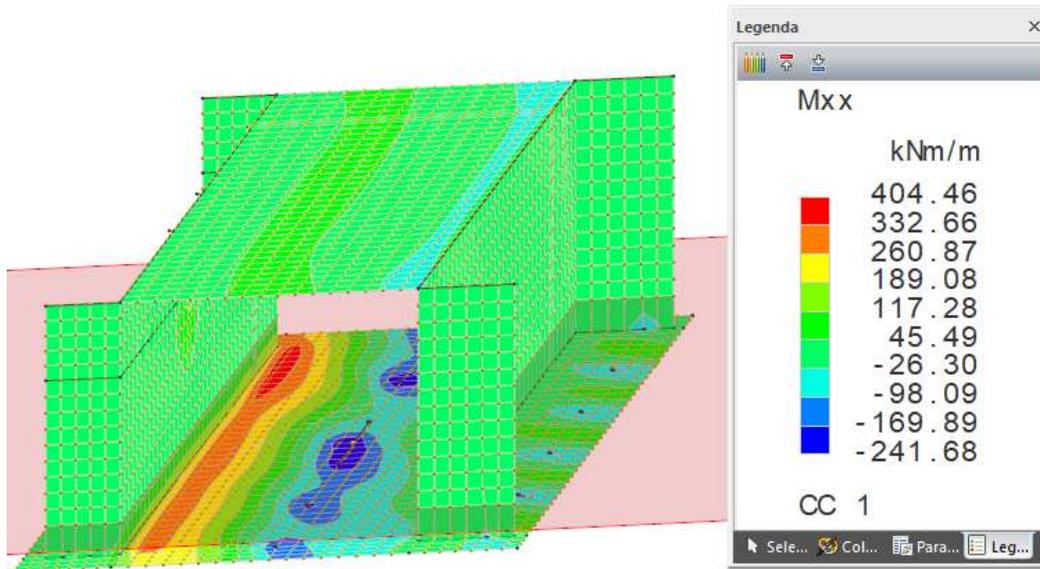


Figura 68 – Momento Mxx

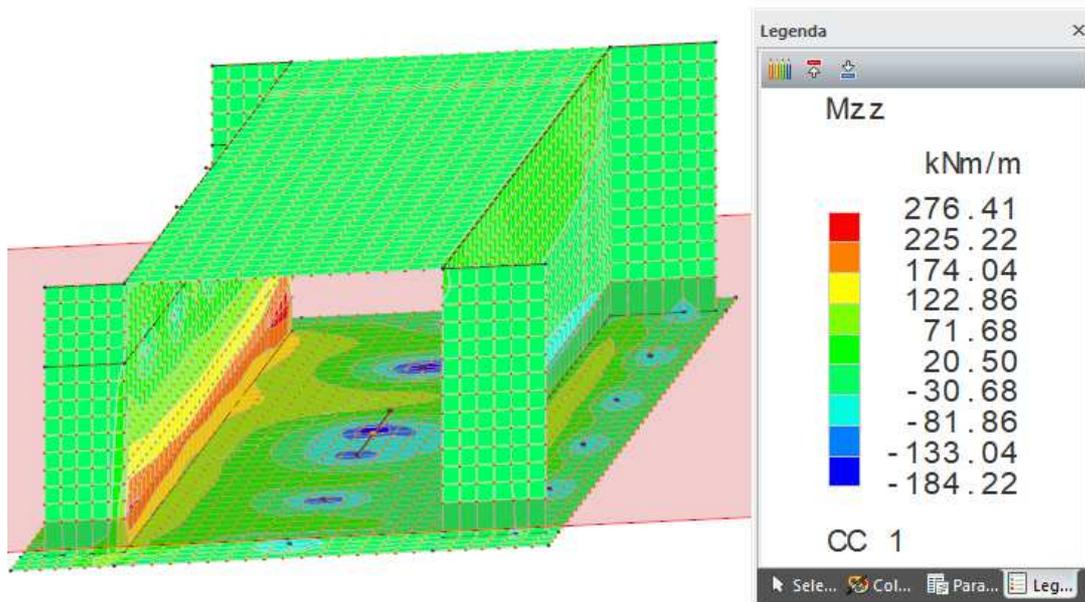
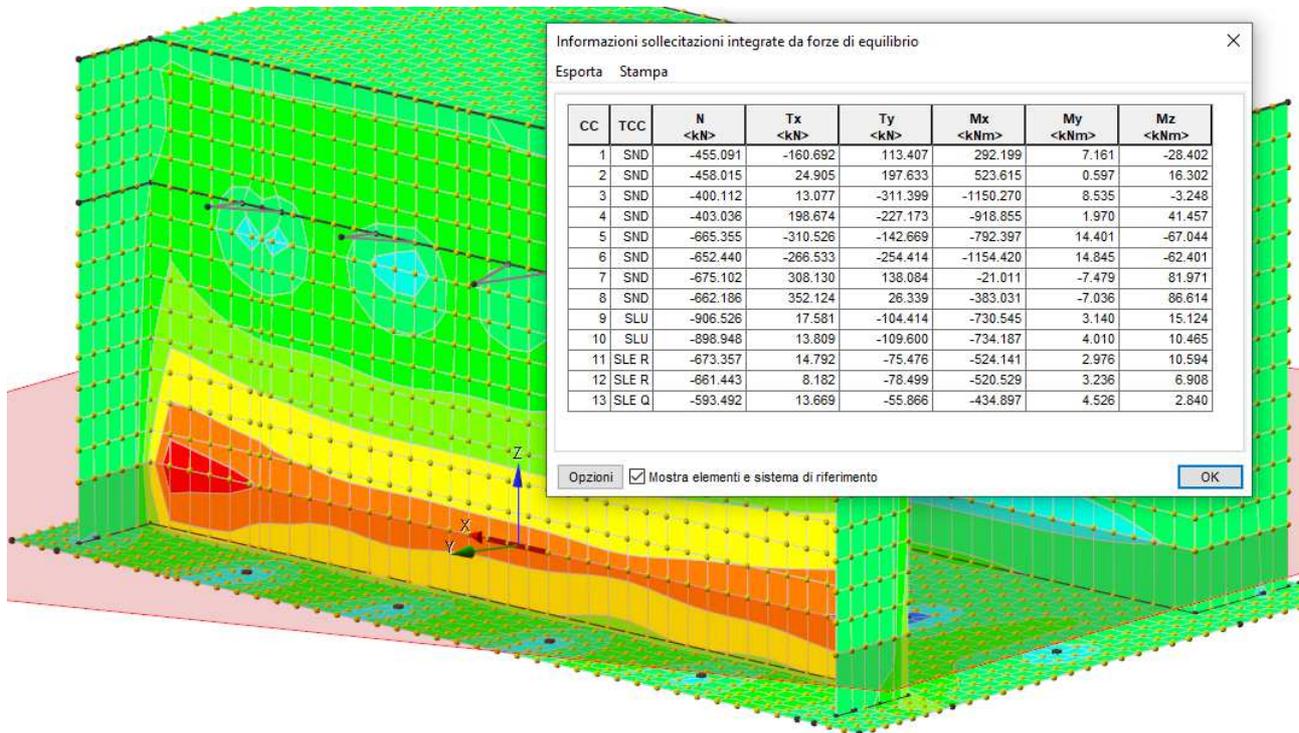


Figura 69 – Momento Mzz

6.7.1 Verifica a pressoflessione strutture in c.a

1.1.1.1. Verifica fusto spalla

Integrando le sollecitazioni alla base del muro per un tratto unitario, avremo per ogni combinazione le seguenti sollecitazioni



In modo cautelativo le verifiche a pressoflessione sono eseguite su una sezione unitaria di dimensioni b x h pari a 1.0 x 1.5m

La sezione viene armata in entrambe le direzioni con ferri fi 24/10" i=140kg/mc

CARATTERISTICHE DI RESISTENZA DEI MATERIALI IMPIEGATI

CALCESTRUZZO -	Classe:	C32/40	
	Resistenza compress. di progetto fcd:	181.30	daN/cm ²
	Deform. unitaria max resistenza ec2:	0.0020	
	Deformazione unitaria ultima ecu:	0.0035	
	Diagramma tensioni-deformaz.:	Parabola-Rettangolo	
	Modulo Elastico Normale Ec:	333457333457	daN/cm ²
	Resis. media a trazione fctm:	30.16	daN/cm ²
	Coeff.Omogen. S.L.E.:	15.00	
	Sc limite S.L.E. comb. Rare:	192.00	daN/cm ²
	Sc limite S.L.E. comb. Frequenti:	192.00	daN/cm ²
	Ap.Fessure limite S.L.E. comb. Frequenti:	0.400	mm
	Sc limite S.L.E. comb. Q.Permanenti:	144.00	daN/cm ²
	Ap.Fess.limite S.L.E. comb. Q.Perm.:	0.300	mm
ACCIAIO -	Tipo:	B450C	
	Resist. caratt. a snervamento fyk:	4500.0	daN/cm ²
	Resist. caratt. a rottura ftk:	4500.0	daN/cm ²
	Resist. a snerv. di progetto fyd:	3913.0	daN/cm ²
	Resist. ultima di progetto ftd:	3913.0	daN/cm ²
	Deform. ultima di progetto Epu:	0.068	
	Modulo Elastico Ef:	2000000	daN/cm ²
Diagramma tensioni-deformaz.:	Bilineare finito		

Coeff. Aderenza istant. $\beta_1 \cdot \beta_2$:	1.00
Coeff. Aderenza differito $\beta_1 \cdot \beta_2$:	0.50
Comb.Rare - Sf Limite:	3600.0 daN/cm ²

CARATTERISTICHE GEOMETRICHE ED ARMATURE SEZIONE

Base:	100.0	cm
Altezza:	150.0	cm
Barre inferiori:	10Ø24	(45.2 cm ²)
Barre superiori:	10Ø24	(45.2 cm ²)

CALCOLO DI RESISTENZA - SFORZI PER OGNI COMBINAZIONE ASSEGNATA

N	Sforzo normale [daN] applicato nel baricentro (posit. se di compress.)
Mx	Momento flettente [daNm] intorno all'asse x baric. della sezione con verso positivo se tale da comprimere il lembo sup. della sezione
Vy	Taglio [daN] in direzione parallela all'asse y baric. della sezione
MT	Momento torcente [daN m]

N°Comb.	N	Mx	Vy	MT
1	40012	115027	31140	0

COMB. RARE (S.L.E.) - SFORZI PER OGNI COMBINAZIONE ASSEGNATA

N	Sforzo normale [daN] applicato nel baricentro (positivo se di compress.)
Mx	Coppia [daNm] applicata all'asse x baricentrico (tra parentesi il Momento di fessurazione) con verso positivo se tale da comprimere il lembo superiore della sezione

N°Comb.	N	Mx
1	67335	52414

COMB. FREQUENTI (S.L.E.) - SFORZI PER OGNI COMBINAZIONE ASSEGNATA

N	Sforzo normale [daN] applicato nel baricentro (positivo se di compress.)
Mx	Coppia [daNm] applicata all'asse x baricentrico (tra parentesi il Momento di fessurazione) con verso positivo se tale da comprimere il lembo superiore della sezione

N°Comb.	N	Mx
1	59349	43489 (224089)

COMB. QUASI PERMANENTI (S.L.E.) - SFORZI PER OGNI COMBINAZIONE ASSEGNATA

N	Sforzo normale [daN] applicato nel baricentro (positivo se di compress.)
Mx	Coppia [daNm] applicata all'asse x baricentrico (tra parentesi il Momento di fessurazione) con verso positivo se tale da comprimere il lembo superiore della sezione

N°Comb.	N	Mx
1	2816	17738 (144781)

RISULTATI DEL CALCOLO

Sezione verificata per tutte le combinazioni assegnate

VERIFICHE DI RESISTENZA IN PRESSO-TENSO FLESSIONE ALLO STATO LIMITE ULTIMO

Ver	S = combinazione verificata / N = combin. non verificata
N	Sforzo normale [daN] applicato nel Baricentro (positivo se di compressione)
Mx	Momento flettente assegnato [daNm] riferito all'asse x baricentrico
N Ult	Sforzo normale ultimo [daN] nella sezione (positivo se di compress.)
Mx rd	Momento flettente ultimo [daNm] riferito all'asse x baricentrico
Mis.Sic.	Misura sicurezza = rapporto vettoriale tra (N rd, Mx rd) e (N, Mx) Verifica positiva se tale rapporto risulta ≥ 1.000
Yn	Ordinata [cm] dell'asse neutro alla massima resistenza nel sistema di rif. X, Y, O sez.
x/d	Rapp. di duttilità (travi e solette) § 4.1.1.1 NTC: deve essere < 0.45

C.Rid.	As Tesa	Coeff. di riduz. momenti in travi continue [formula (4.1.1)NTC] Area armature long. trave [cm ²] in zona tesa. (tra parentesi l'area minima di normativa)								
N°Comb	Ver	N	Mx	N rd	Mx rd	Mis.Sic.	Yn	x/d	C.Rid.	As Tesa
1	S	40012	115027	40021	272228	2.367	140.6	0.07	0.70	45.2 (24.9)

DEFORMAZIONI UNITARIE ALLO STATO LIMITE ULTIMO

N°Comb	ec max	Yc max	es min	Ys min	es max	Ys max
1	0.00350	150.0	0.00088	143.0	-0.05000	7.0

ec max Deform. unit. massima del conglomerato a compressione
 Yc max Ordinata in cm della fibra corrisp. a ec max (sistema rif. X,Y,O sez.)
 es min Deform. unit. minima nell'acciaio (negativa se di trazione)
 Ys min Ordinata in cm della barra corrisp. a es min (sistema rif. X,Y,O sez.)
 es max Deform. unit. massima nell'acciaio (positiva se di compressione)
 Ys max Ordinata in cm della barra corrisp. a es max (sistema rif. X,Y,O sez.)

VERIFICHE A TAGLIO SENZA ARMATURE TRASVERSALI (§ 4.1.2.1.3.1 NTC)

N°Comb	Ver	Ved	Vwct	d	bw	Ro	Scp
1	S	31140	56726	143.0	100.0	0.0032	0.3

Ver S = comb.verificata a taglio/ N = comb. non verificata
 Ved Taglio agente [daN] uguale al taglio Vy di comb. (sollecit. retta)
 Vwct Taglio trazione resistente [daN] in assenza di staffe [formula (4.1.23)NTC]
 d Altezza utile sezione [cm]
 bw Larghezza minima sezione [cm]
 Ro Rapporto geometrico di armatura longitudinale [<0.02]
 Scp Tensione media di compressione nella sezione [daN/cm²]

COMBINAZIONI RARE IN ESERCIZIO - VERIFICA MASSIME TENSIONI NORMALI

N°Comb	Ver	Sc max	Yc max	Sc min	Yc min	Sf min	Ys min	Dw Eff.	Ac Eff.	As Eff.	D barre
1	S	19.4	150.0	0.0	79.0	-294	143.0	17.5	1750	45.2	9.6

Ver S = combinazione verificata / N = combin. non verificata
 Sc max Massima tensione di compress.(+) nel conglom. in fase fessurata ([daN/cm²])
 Yc max Ordinata in cm della fibra corrisp. a Sc max (sistema rif. X,Y,O)
 Sc min Minima tensione di compress.(+) nel conglom. in fase fessurata ([daN/cm²])
 Yc min Ordinata in cm della fibra corrisp. a Sc min (sistema rif. X,Y,O)
 Sf min Minima tensione di trazione (-) nell'acciaio [daN/cm²]
 Ys min Ordinata in cm della barra corrisp. a Sf min (sistema rif. X,Y,O)
 Dw Eff. Spessore di conglomerato [cm] in zona tesa considerata aderente alle barre
 Ac eff. Area di congl. [cm²] in zona tesa aderente alle barre (verifica fess.)
 As eff. Area Barre tese di acciaio [cm²] ricadente nell'area efficace(verifica fess.)
 D barre Distanza in cm tra le barre tese efficaci.
 (D barre = 0 indica spaziatura superiore a 5(c+Ø/2) e nel calcolo di fess. si usa la (C4.1.11)NTC/(7.14)EC2)

COMBINAZIONI RARE IN ESERCIZIO - VERIFICA APERTURA FESSURE (NTC/EC2)

Ver	Esito verifica
e1	Minima deformazione unitaria (trazione: segno -) nel calcestruzzo in sez. fessurata
e2	Massima deformazione unitaria (compress.: segno +) nel calcestruzzo in sez. fessurata
e3	Deformazione unitaria al limite dell'area tesa efficace di calcestruzzo
K2	= (e1 + e3)/(2*e3) secondo la (7.13) dell'EC2 e la (C4.1.19)NTC
Kt	fattore di durata del carico di cui alla (7.9) dell'EC2
e sm	Deformazione media acciaio tra le fessure al netto di quella del cls. Tra parentesi il valore minimo = 0.6 Ss/Es
srm	Distanza massima in mm tra le fessure
wk	Apertura delle fessure in mm fornito dalla (7.8)EC2 e dalla (C4.1.7)NTC. Tra parentesi è indicato il valore limite.
M fess.	Momento di prima fessurazione [daNm]

N°Comb	Ver	e1	e2	e3	K2	Kt		e sm	srm	wk	M Fess.
1	S	-0.00016	0.00015	-0.00013	0.89	0.60		0.000088 (0.000088)	478	0.042 (990.00)	216230

COMBINAZIONI FREQUENTI IN ESERCIZIO - VERIFICA MASSIME TENSIONI NORMALI

N°Comb	Ver	Sc max	Yc max	Sc min	Yc min	Sf min	Ys min	Dw Eff.	Ac Eff.	As Eff.	D barre
1	S	16.0	150.0	0.0	75.7	-223	143.0	17.5	1750	45.2	9.6

COMBINAZIONI FREQUENTI IN ESERCIZIO - VERIFICA APERTURA FESSURE (NTC/EC2)

N°Comb	Ver	e1	e2	e3	K2	Kt		e sm	srm	wk	M Fess.
1	S	-0.00012	0.00012	-0.00009	0.88	0.60		0.000067 (0.000067)	476	0.032 (0.40)	224089

COMBINAZIONI QUASI PERMANENTI IN ESERCIZIO - VERIFICA MASSIME TENSIONI NORMALI

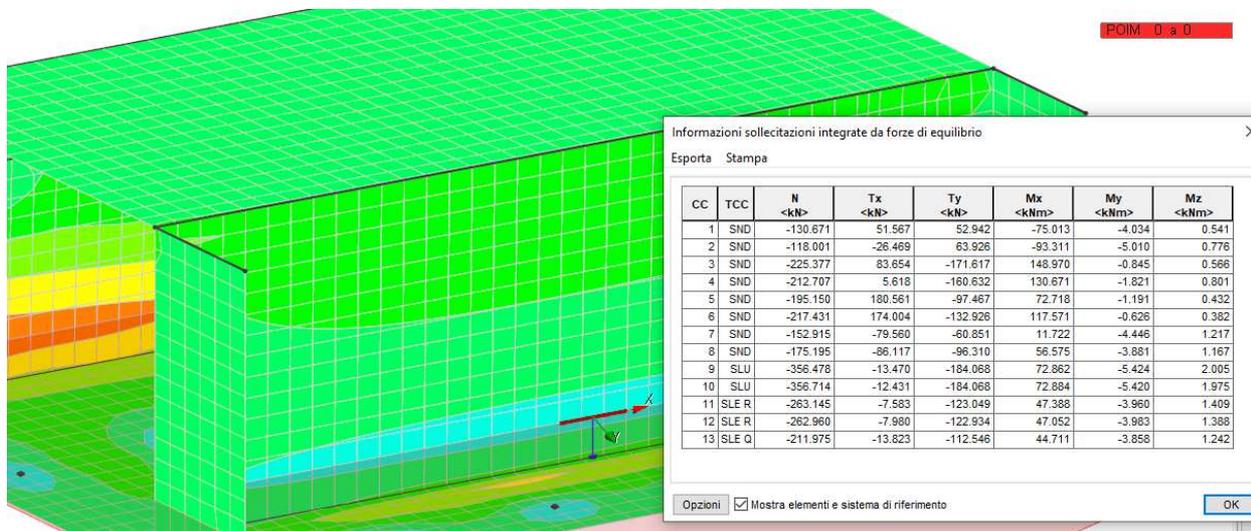
N°Comb	Ver	Sc max	Yc max	Sc min	Yc min	Sf min	Ys min	Dw Eff.	Ac Eff.	As Eff.	D barre
1	S	6.2	150.0	0.0	113.0	-267	143.0	17.5	1750	45.2	9.6

COMBINAZIONI QUASI PERMANENTI IN ESERCIZIO - VERIFICA APERTURA FESSURE (NTC/EC2)

N°Comb	Ver	e1	e2	e3	K2	Kt		e sm	srm	wk	M Fess.
1	S	-0.00014	0.00005	-0.00012	0.92	0.40		0.000080 (0.000080)	488	0.039 (0.30)	144781

1.1.1.2. Verifica parete controterra

Integrando le sollecitazioni alla base del muro per un tratto unitario, avremo per ogni combinazione le seguenti sollecitazioni



In modo cautelativo le verifiche a pressoflessione sono eseguite su una sezione unitaria di dimensioni b x h pari a 1.0x0.5m

La sezione viene armata con un armatura longitudinale costituita da barre $\varnothing 24/10''$. Per quanto riguarda l'armatura di ripartizione si prevedono delle barre $\varnothing 12/10''$. Si considera una incidenza delle armature pari a $i=230\text{kg/mc}$

CARATTERISTICHE DI RESISTENZA DEI MATERIALI IMPIEGATI

CALCESTRUZZO -	Classe:	C32/40
	Resistenza compress. di progetto fcd:	181.30 daN/cm ²
	Deform. unitaria max resistenza ec2:	0.0020
	Deformazione unitaria ultima ecu:	0.0035
	Diagramma tensioni-deformaz.:	Parabola-Rettangolo
	Modulo Elastico Normale Ec:	333457333457 daN/cm ²
	Resis. media a trazione fctm:	30.16 daN/cm ²
	Coeff.Omogen. S.L.E.:	15.00
	Sc limite S.L.E. comb. Rare:	192.00 daN/cm ²
	Sc limite S.L.E. comb. Frequenti:	192.00 daN/cm ²
	Ap.Fessure limite S.L.E. comb. Frequenti:	0.400 mm
	Sc limite S.L.E. comb. Q.Permanenti:	144.00 daN/cm ²
	Ap.Fess.limite S.L.E. comb. Q.Perm.:	0.300 mm

ACCIAIO -	Tipo:	B450C
	Resist. caratt. a snervamento fyk:	4500.0 daN/cm ²
	Resist. caratt. a rottura ftk:	4500.0 daN/cm ²
	Resist. a snerv. di progetto fyd:	3913.0 daN/cm ²
	Resist. ultima di progetto ftd:	3913.0 daN/cm ²
	Deform. ultima di progetto Epu:	0.068
	Modulo Elastico Ef:	2000000 daN/cm ²
	Diagramma tensioni-deformaz.:	Bilineare finito
	Coeff. Aderenza istant. $\beta_1 \cdot \beta_2$:	1.00
	Coeff. Aderenza differito $\beta_1 \cdot \beta_2$:	0.50
	Comb.Rare - Sf Limite:	3600.0 daN/cm ²

CARATTERISTICHE GEOMETRICHE ED ARMATURE SEZIONE

Base:	100.0	cm
Altezza:	50.0	cm

Barre inferiori:	10Ø24	(45.2 cm ²)
Barre superiori:	10Ø24	(45.2 cm ²)

CALCOLO DI RESISTENZA - SFORZI PER OGNI COMBINAZIONE ASSEGNATA

N	Sforzo normale [daN] applicato nel baricentro (posit. se di compress.)
Mx	Momento flettente [daNm] intorno all'asse x baric. della sezione con verso positivo se tale da comprimere il lembo sup. della sezione
Vy	Taglio [daN] in direzione parallela all'asse y baric. della sezione
MT	Momento torcente [daN m]

N°Comb.	N	Mx	Vy	MT
1	22537	14897	18406	0

COMB. RARE (S.L.E.) - SFORZI PER OGNI COMBINAZIONE ASSEGNATA

N	Sforzo normale [daN] applicato nel baricentro (positivo se di compress.)
Mx	Coppia [daNm] applicata all'asse x baricentrico (tra parentesi il Momento di fessurazione) con verso positivo se tale da comprimere il lembo superiore della sezione

N°Comb.	N	Mx
1	26314	4738

COMB. FREQUENTI (S.L.E.) - SFORZI PER OGNI COMBINAZIONE ASSEGNATA

N	Sforzo normale [daN] applicato nel baricentro (positivo se di compress.)
Mx	Coppia [daNm] applicata all'asse x baricentrico (tra parentesi il Momento di fessurazione) con verso positivo se tale da comprimere il lembo superiore della sezione

N°Comb.	N	Mx
1	26314	4738 (37053)

COMB. QUASI PERMANENTI (S.L.E.) - SFORZI PER OGNI COMBINAZIONE ASSEGNATA

N	Sforzo normale [daN] applicato nel baricentro (positivo se di compress.)
Mx	Coppia [daNm] applicata all'asse x baricentrico (tra parentesi il Momento di fessurazione) con verso positivo se tale da comprimere il lembo superiore della sezione

N°Comb.	N	Mx
1	21197	4471 (32023)

RISULTATI DEL CALCOLO

Sezione verificata per tutte le combinazioni assegnate

VERIFICHE DI RESISTENZA IN PRESSO-TENSO FLESSIONE ALLO STATO LIMITE ULTIMO

Ver	S = combinazione verificata / N = combin. non verificata
N	Sforzo normale [daN] applicato nel Baricentro (positivo se di compressione)
Mx	Momento flettente assegnato [daNm] riferito all'asse x baricentrico
N Ult	Sforzo normale ultimo [daN] nella sezione (positivo se di compress.)
Mx rd	Momento flettente ultimo [daNm] riferito all'asse x baricentrico
Mis.Sic.	Misura sicurezza = rapporto vettoriale tra (N rd, Mx rd) e (N, Mx) Verifica positiva se tale rapporto risulta ≥ 1.000
Yn	Ordinata [cm] dell'asse neutro alla massima resistenza nel sistema di rif. X,Y,O sez.
x/d	Rapp. di duttilità (travi e solette) [§ 4.1.1.1 NTC]: deve essere < 0.45
C.Rid.	Coeff. di riduz. momenti in travi continue [formula (4.1.1)NTC]
As Tesa	Area armature long. trave [cm ²] in zona tesa. (tra parentesi l'area minima di normativa)

N°Comb	Ver	N	Mx	N rd	Mx rd	Mis.Sic.	Yn	x/d	C.Rid.	As Tesa
1	S	22537	14897	22532	72086	4.839	41.1	0.21	0.70	45.2 (7.5)

DEFORMAZIONI UNITARIE ALLO STATO LIMITE ULTIMO

ec max	Deform. unit. massima del conglomerato a compressione
Yc max	Ordinata in cm della fibra corrisp. a ec max (sistema rif. X,Y,O sez.)
es min	Deform. unit. minima nell'acciaio (negativa se di trazione)
Ys min	Ordinata in cm della barra corrisp. a es min (sistema rif. X,Y,O sez.)
es max	Deform. unit. massima nell'acciaio (positiva se di compressione)
Ys max	Ordinata in cm della barra corrisp. a es max (sistema rif. X,Y,O sez.)

N°Comb	ec max	Yc max	es min	Ys min	es max	Ys max
1	0.00350	50.0	0.00076	43.0	-0.01335	7.0

VERIFICHE A TAGLIO SENZA ARMATURE TRASVERSALI (§ 4.1.2.1.3.1 NTC)

Ver	S = comb.verificata a taglio/ N = comb. non verificata
Ved	Taglio agente [daN] uguale al taglio Vy di comb. (sollecit. retta)
Vwct	Taglio trazione resistente [daN] in assenza di staffe [formula (4.1.23)NTC]
d	Altezza utile sezione [cm]
bw	Larghezza minima sezione [cm]
Ro	Rapporto geometrico di armatura longitudinale [<0.02]
Scp	Tensione media di compressione nella sezione [daN/cm ²]

N°Comb	Ver	Ved	Vwct	d	bw	Ro	Scp
1	S	18406	30932	43.0	100.0	0.0105	0.5

COMBINAZIONI RARE IN ESERCIZIO - VERIFICA MASSIME TENSIONI NORMALI

Ver	S = combinazione verificata / N = combin. non verificata
Sc max	Massima tensione di compress.(+) nel conglom. in fase fessurata [(daN/cm ²)]
Yc max	Ordinata in cm della fibra corrisp. a Sc max (sistema rif. X,Y,O)
Sc min	Minima tensione di compress.(+) nel conglom. in fase fessurata [(daN/cm ²)]
Yc min	Ordinata in cm della fibra corrisp. a Sc min (sistema rif. X,Y,O)
Sf min	Minima tensione di trazione (-) nell'acciaio [daN/cm ²]
Ys min	Ordinata in cm della barra corrisp. a Sf min (sistema rif. X,Y,O)
Dw Eff.	Spessore di conglomerato [cm] in zona tesa considerata aderente alle barre
Ac eff.	Area di congl. [cm ²] in zona tesa aderente alle barre (verifica fess.)
As eff.	Area Barre tese di acciaio [cm ²] ricadente nell'area efficace(verifica fess.)
D barre	Distanza in cm tra le barre tese efficaci. (D barre = 0 indica spaziatura superiore a $5(c+\varnothing/2)$ e nel calcolo di fess. si usa la $(C4.1.11)NTC/(7.14)EC2$)

N°Comb	Ver	Sc max	Yc max	Sc min	Yc min	Sf min	Ys min	Dw Eff.	Ac Eff.	As Eff.	D barre
1	S	13.0	50.0	0.0	16.5	-56	43.0	5.5	551	45.2	9.6

COMBINAZIONI RARE IN ESERCIZIO - VERIFICA APERTURA FESSURE (NTC/EC2)

Ver	Esito verifica
e1	Minima deformazione unitaria (trazione: segno -) nel calcestruzzo in sez. fessurata
e2	Massima deformazione unitaria (compress.: segno +) nel calcestruzzo in sez. fessurata
e3	Deformazione unitaria al limite dell'area tesa efficace di calcestruzzo
K2	$= (e1 + e3)/(2 \cdot e3)$ secondo la (7.13) dell'EC2 e la (C4.1.19)NTC
Kt	fattore di durata del carico di cui alla (7.9) dell'EC2
e sm	Deformazione media acciaio tra le fessure al netto di quella del cls. Tra parentesi il valore minimo = $0.6 Ss/Es$
srm	Distanza massima in mm tra le fessure
wk	Apertura delle fessure in mm fornito dalla (7.8)EC2 e dalla (C4.1.7)NTC. Tra parentesi è indicato il valore limite.
M fess.	Momento di prima fessurazione [daNm]

N°Comb	Ver	e1	e2	e3	K2	Kt	e sm	srm	wk	M Fess.
1	S	-0.00005	0.00010	-0.00003	0.83	0.60	0.000017 (0.000017)	280	0.005 (990.00)	37053

COMBINAZIONI FREQUENTI IN ESERCIZIO - VERIFICA MASSIME TENSIONI NORMALI

N°Comb	Ver	Sc max	Yc max	Sc min	Yc min	Sf min	Ys min	Dw Eff.	Ac Eff.	As Eff.	D barre
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1 S 13.0 50.0 0.0 16.5 -56 43.0 5.5 551 45.2 9.6

COMBINAZIONI FREQUENTI IN ESERCIZIO - VERIFICA APERTURA FESSURE (NTC/EC2)

N°Comb	Ver	e1	e2	e3	K2	Kt	e sm	srm	wk	M Fess.
1	S	-0.00005	0.00010	-0.00003	0.83	0.60	0.000017 (0.000017)	280	0.005 (0.40)	37053

COMBINAZIONI QUASI PERMANENTI IN ESERCIZIO - VERIFICA MASSIME TENSIONI NORMALI

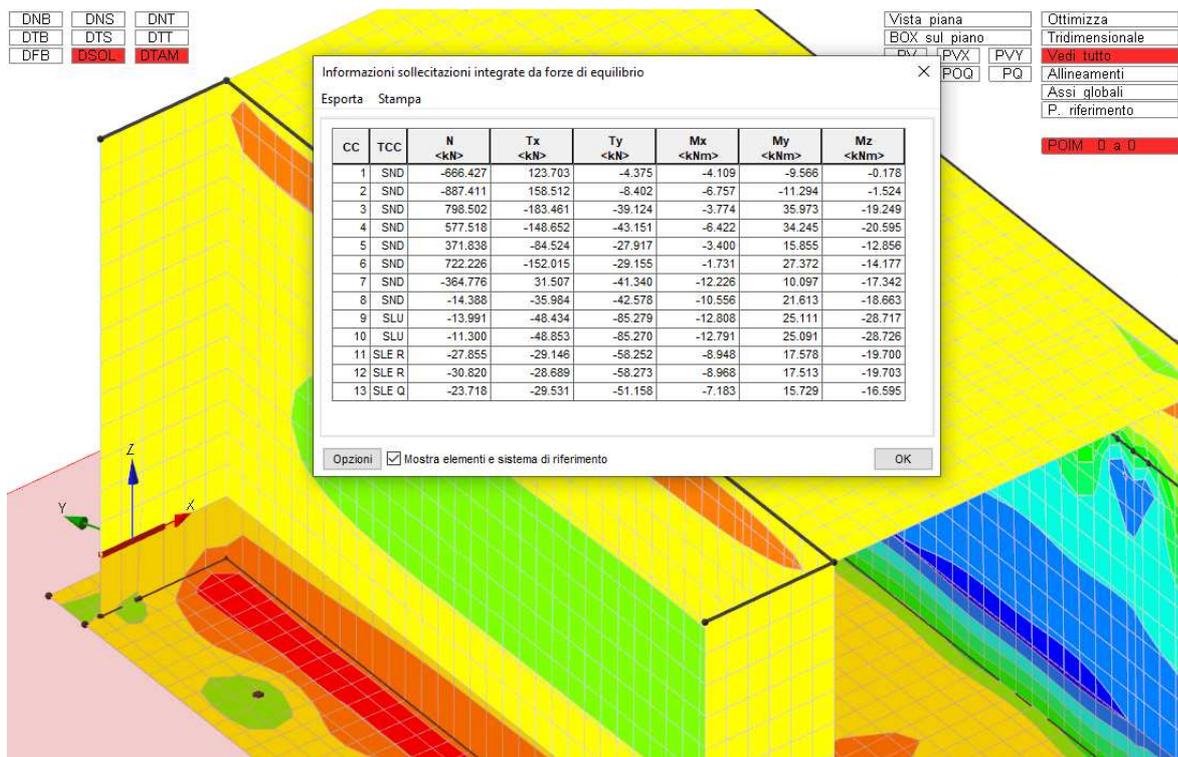
N°Comb	Ver	Sc max	Yc max	Sc min	Yc min	Sf min	Ys min	Dw Eff.	Ac Eff.	As Eff.	D barre
1	S	12.1	50.0	0.0	19.6	-75	43.0	6.5	655	45.2	9.6

COMBINAZIONI QUASI PERMANENTI IN ESERCIZIO - VERIFICA APERTURA FESSURE (NTC/EC2)

N°Comb	Ver	e1	e2	e3	K2	Kt	e sm	srm	wk	M Fess.
1	S	-0.00006	0.00009	-0.00004	0.83	0.40	0.000023 (0.000023)	296	0.007 (0.30)	32023

1.1.1.3. Verifica muri d'ala

Integrando le sollecitazioni alla base del muro per un tratto unitario, avremo per ogni combinazione le seguenti sollecitazioni



In modo cautelativo le verifiche a pressoflessione sono eseguite su una sezione unitaria di dimensioni b_{xh} pari a 1.0x0.5m

La sezione viene armata con un armatura longitudinale costituita da barre $\varnothing 24/10''$. Per quanto riguarda l'armatura di ripartizione si prevedono delle barre $\varnothing 12/10''$. Si considera una incidenza delle armature pari a $i=230\text{kg/mc}$

CARATTERISTICHE DI RESISTENZA DEI MATERIALI IMPIEGATI

CALCESTRUZZO -	Classe:	C32/40	
	Resis. compr. di progetto fcd:	181.30	daN/cm ²
	Def.unit. max resistenza ec2:	0.0020	
	Def.unit. ultima ecu:	0.0035	
	Diagramma tensione-deformaz.:	Parabola-Rettangolo	
	Modulo Elastico Normale Ec:	333457333457	daN/cm ²
	Resis. media a trazione fctm:	30.16	daN/cm ²
	Coeff. Omogen. S.L.E.:	15.00	
	Sc limite S.L.E. comb. Rare:	192.00	daN/cm ²
	Sc limite S.L.E. comb. Frequenti:	192.00	daN/cm ²
	Ap.Fessure limite S.L.E. comb. Frequenti:	0.400	mm
	Sc limite S.L.E. comb. Q.Permanenti:	144.00	daN/cm ²
	Ap.Fess.limite S.L.E. comb. Q.Perm.:	0.300	mm
	ACCIAIO -	Tipo:	B450C
Resist. caratt. snervam. fyk:		4500.0	daN/cm ²
Resist. caratt. rottura ftk:		4500.0	daN/cm ²
Resist. snerv. di progetto fyd:		3913.0	daN/cm ²
Resist. ultima di progetto ftd:		3913.0	daN/cm ²
Deform. ultima di progetto Epu:		0.068	
Modulo Elastico Ef		2000000	daN/cm ²
Diagramma tensione-deformaz.:		Bilineare finito	
Coeff. Aderenza istantaneo $\beta_1^*\beta_2$:		1.00	
Coeff. Aderenza differito $\beta_1^*\beta_2$:		0.50	
Sf limite S.L.E. Comb. Rare:		3600.0	daN/cm ²

CARATTERISTICHE DOMINIO CONGLOMERATO

Forma del Dominio:	Poligonale	
Classe Conglomerato:	C32/40	
N°vertice:	X [cm]	Y [cm]
1	-50.0	0.0
2	-50.0	50.0
3	50.0	50.0
4	50.0	0.0

DATI BARRE ISOLATE

N°Barra	X [cm]	Y [cm]	DiamØ[mm]
1	-43.0	7.0	24
2	-43.0	43.0	24
3	43.0	43.0	24
4	43.0	7.0	24

DATI GENERAZIONI LINEARI DI BARRE

N°Gen.	Numero assegnato alla singola generazione lineare di barre			
N°Barra Ini.	Numero della barra iniziale cui si riferisce la generazione			
N°Barra Fin.	Numero della barra finale cui si riferisce la generazione			
N°Barre	Numero di barre generate equidistanti cui si riferisce la generazione			
Ø	Diametro in mm delle barre della generazione			

N°Gen.	N°Barra Ini.	N°Barra Fin.	N°Barre	Ø
1	2	3	3	24
2	1	4	3	24

CALCOLO DI RESISTENZA - SFORZI PER OGNI COMBINAZIONE ASSEGNATA

N	Sforzo normale in daN applicato nel Baric. (+ se di compressione)
Mx	Momento flettente [daNm] intorno all'asse x princ. d'inerzia con verso positivo se tale da comprimere il lembo sup. della sez.
My	Momento flettente [daNm] intorno all'asse y princ. d'inerzia con verso positivo se tale da comprimere il lembo destro della sez.
Vy	Componente del Taglio [daN] parallela all'asse princ.d'inerzia y
Vx	Componente del Taglio [daN] parallela all'asse princ.d'inerzia x

N°Comb.	N	Mx	My	Vy	Vx
1	79850	377	3597	3912	18346
2	1130	1279	2509	8527	4835

COMB. RARE (S.L.E.) - SFORZI PER OGNI COMBINAZIONE ASSEGNATA

N	Sforzo normale in daN applicato nel Baricentro (+ se di compressione)
Mx	Momento flettente [daNm] intorno all'asse x princ. d'inerzia (tra parentesi Mom.Fessurazione) con verso positivo se tale da comprimere il lembo superiore della sezione
My	Momento flettente [daNm] intorno all'asse y princ. d'inerzia (tra parentesi Mom.Fessurazione) con verso positivo se tale da comprimere il lembo destro della sezione

N°Comb.	N	Mx	My
1	3082	894	1757

COMB. FREQUENTI (S.L.E.) - SFORZI PER OGNI COMBINAZIONE ASSEGNATA

N	Sforzo normale in daN applicato nel Baricentro (+ se di compressione)
Mx	Momento flettente [daNm] intorno all'asse x princ. d'inerzia (tra parentesi Mom.Fessurazione) con verso positivo se tale da comprimere il lembo superiore della sezione
My	Momento flettente [daNm] intorno all'asse y princ. d'inerzia (tra parentesi Mom.Fessurazione) con verso positivo se tale da comprimere il lembo destro della sezione

N°Comb.	N	Mx	My
1	3082	894 (8807)	1757 (17309)

COMB. QUASI PERMANENTI (S.L.E.) - SFORZI PER OGNI COMBINAZIONE ASSEGNATA

N	Sforzo normale in daN applicato nel Baricentro (+ se di compressione)
Mx	Momento flettente [daNm] intorno all'asse x princ. d'inerzia (tra parentesi Mom.Fessurazione) con verso positivo se tale da comprimere il lembo superiore della sezione
My	Momento flettente [daNm] intorno all'asse y princ. d'inerzia (tra parentesi Mom.Fessurazione) con verso positivo se tale da comprimere il lembo destro della sezione

N°Comb.	N	Mx	My
1	3082	894 (8718)	1787 (17427)

RISULTATI DEL CALCOLO

Sezione verificata per tutte le combinazioni assegnate

VERIFICHE DI RESISTENZA IN PRESSO-TENSO FLESSIONE ALLO STATO LIMITE ULTIMO

Ver	S = combinazione verificata / N = combin. non verificata
N Sn	Sforzo normale assegnato [daN] nel baricentro sezione cls. (positivo se di compressione)
Mx Sn	Componente momento assegnato [daNm] riferito all'asse x princ. d'inerzia
My Sn	Componente momento assegnato [daNm] riferito all'asse y princ. d'inerzia
N Res	Sforzo normale resistente [daN] baricentrico (positivo se di compress.)
Mx Res	Momento flettente resistente [daNm] riferito all'asse x princ. d'inerzia
My res	Momento flettente resistente [daNm] riferito all'asse y princ. d'inerzia
Mis.Sic.	Misura sicurezza = rapporto vettoriale tra (N r, Mx Res, My Res) e (N, Mx, My)

As Tesa Verifica positiva se tale rapporto risulta ≥ 1.000
 Area armature trave [cm²] in zona tesa. [Tra parentesi l'area minima ex (4.1.15)NTC]

N°Comb	Ver	N	Mx	My	N Res	Mx Res	My Res	Mis.Sic.	As Tesa
1	S	79850	377	3597	79820	10126	98847	27.47	31.7(8.7)
2	S	1130	1279	2509	1132	29449	57208	22.85	36.2(8.7)

METODO AGLI STATI LIMITE ULTIMI - DEFORMAZIONI UNITARIE ALLO STATO ULTIMO

ec max Deform. unit. massima del conglomerato a compressione
 x/d Rapporto di duttilità [§ 4.1.2.1.2.1 NTC] deve essere < 0.45
 Xc max Ascissa in cm della fibra corrisp. a ec max (sistema rif. X,Y,O sez.)
 Yc max Ordinata in cm della fibra corrisp. a ec max (sistema rif. X,Y,O sez.)
 es min Deform. unit. minima nell'acciaio (negativa se di trazione)
 Xs min Ascissa in cm della barra corrisp. a es min (sistema rif. X,Y,O sez.)
 Ys min Ordinata in cm della barra corrisp. a es min (sistema rif. X,Y,O sez.)
 es max Deform. unit. massima nell'acciaio (positiva se di compress.)
 Xs max Ascissa in cm della barra corrisp. a es max (sistema rif. X,Y,O sez.)
 Ys max Ordinata in cm della barra corrisp. a es max (sistema rif. X,Y,O sez.)

N°Comb	ec max	x/d	Xc max	Yc max	es min	Xs min	Ys min	es max	Xs max	Ys max
1	0.00350	0.309	50.0	50.0	0.00251	43.0	43.0	-0.00783	-43.0	7.0
2	0.00350	0.322	50.0	50.0	0.00226	43.0	43.0	-0.00737	-43.0	7.0

POSIZIONE ASSE NEUTRO PER OGNI COMB. DI RESISTENZA

a, b, c Coeff. a, b, c nell'eq. dell'asse neutro $aX+bY+c=0$ nel rif. X,Y,O gen.
 x/d Rapp. di duttilità (travi e solette)[§ 4.1.2.1.2.1 NTC]: deve essere < 0.45
 C.Rid. Coeff. di riduz. momenti per sola flessione in travi continue

N°Comb	a	b	c	x/d	C.Rid.
1	0.000104710	0.000037045	-0.003587767	0.309	0.826
2	0.000065336	0.000111522	-0.005342877	0.322	0.842

METODO SLU - VERIFICHE A TAGLIO SENZA ARMATURE TRASVERSALI (§ 4.1.2.1.3.1 NTC)

Ver S = comb.verificata a taglio/ N = comb. non verificata
 Ved Taglio agente [daN] uguale al taglio Vy di comb. (sollecit. retta)
 Vwct Taglio trazione resistente [daN] in assenza di staffe [formula (4.1.23)NTC]
 d Altezza utile sezione [cm]
 bw Larghezza minima sezione [cm]
 Ro Rapporto geometrico di armatura longitudinale [< 0.02]
 Scp Tensione media di compressione nella sezione [daN/cm²]

N°Comb	Ver	Ved	Vwct	d	bw	Ro	Scp
1	S	18600	29866	80.8	47.8	0.0082	1.6
2	S	9801	19709	47.9	60.7	0.0124	0.0

COMBINAZIONI RARE IN ESERCIZIO - MASSIME TENSIONI NORMALI ED APERTURA FESSURE (NTC/EC2)

Ver S = comb. verificata/ N = comb. non verificata
 Sc max Massima tensione (positiva se di compressione) nel conglomerato [daN/cm²]
 Xc max, Yc max Ascissa, Ordinata [cm] del punto corrisp. a Sc max (sistema rif. X,Y,O)
 Sf min Minima tensione (negativa se di trazione) nell'acciaio [daN/cm²]
 Xs min, Ys min Ascissa, Ordinata [cm] della barra corrisp. a Sf min (sistema rif. X,Y,O)
 Ac eff. Area di calcestruzzo [cm²] in zona tesa considerata aderente alle barre
 As eff. Area barre [cm²] in zona tesa considerate efficaci per l'apertura delle fessure

N°Comb	Ver	Sc max	Xc max	Yc max	Sf min	Xs min	Ys min	Ac eff.	As eff.
1	S	6.8	50.0	50.0	-118	-43.0	7.0	329	4.5

COMBINAZIONI FREQUENTI IN ESERCIZIO - MASSIME TENSIONI NORMALI ED APERTURA FESSURE (NTC/EC2)

N°Comb	Ver	Sc max	Xc max	Yc max	Sf min	Xs min	Ys min	Ac eff.	As eff.
1	S	6.8	50.0	50.0	-118	-43.0	7.0	329	4.5

COMBINAZIONI FREQUENTI IN ESERCIZIO - APERTURA FESSURE [§ 7.3.4 EC2]

Ver.	La sezione viene assunta sempre fessurata anche nel caso in cui la trazione minima del calcestruzzo sia inferiore a f_{ctm}
e1	Esito della verifica
e2	Massima deformazione di trazione del calcestruzzo, valutata in sezione fessurata
k1	Minima deformazione di trazione del cls. (in sezione fessurata), valutata nella fibra più interna dell'area $A_{c\text{ eff}}$
kt	= 0.8 per barre ad aderenza migliorata [eq.(7.11)EC2]
k2	= 0.4 per comb. quasi permanenti / = 0.6 per comb.frequenti [cfr. eq.(7.9)EC2]
k3	= $(e1 + e2)/(2 \cdot e1)$ [eq.(7.13)EC2]
k4	= 3.400 Coeff. in eq.(7.11) come da annessi nazionali
Ø	= 0.425 Coeff. in eq.(7.11) come da annessi nazionali
Cf	Diametro [mm] equivalente delle barre tese comprese nell'area efficace $A_{c\text{ eff}}$ [eq.(7.11)EC2]
e sm - e cm	Copriferro [mm] netto calcolato con riferimento alla barra più tesa
sr max	Differenza tra le deformazioni medie di acciaio e calcestruzzo [(7.8)EC2 e (C4.1.7)NTC]
wk	Tra parentesi: valore minimo = $0.6 \cdot S_{max} / E_s$ [(7.9)EC2 e (C4.1.8)NTC]
Mx fess.	Massima distanza tra le fessure [mm]
My fess.	Apertura fessure in mm calcolata = $sr\ max \cdot (e_{sm} - e_{cm})$ [(7.8)EC2 e (C4.1.7)NTC]. Valore limite tra parentesi
	Componente momento di prima fessurazione intorno all'asse X [daNm]
	Componente momento di prima fessurazione intorno all'asse Y [daNm]

Comb.	Ver	e1	e2	k2	Ø	Cf	e sm - e cm	sr max	wk	Mx fess	My fess
1	S	-0.00007	0	0.833	24.0	58	0.00004 (0.00004)	691	0.024 (0.40)	8807	17309

COMBINAZIONI QUASI PERMANENTI IN ESERCIZIO - MASSIME TENSIONI NORMALI ED APERTURA FESSURE (NTC/EC2)

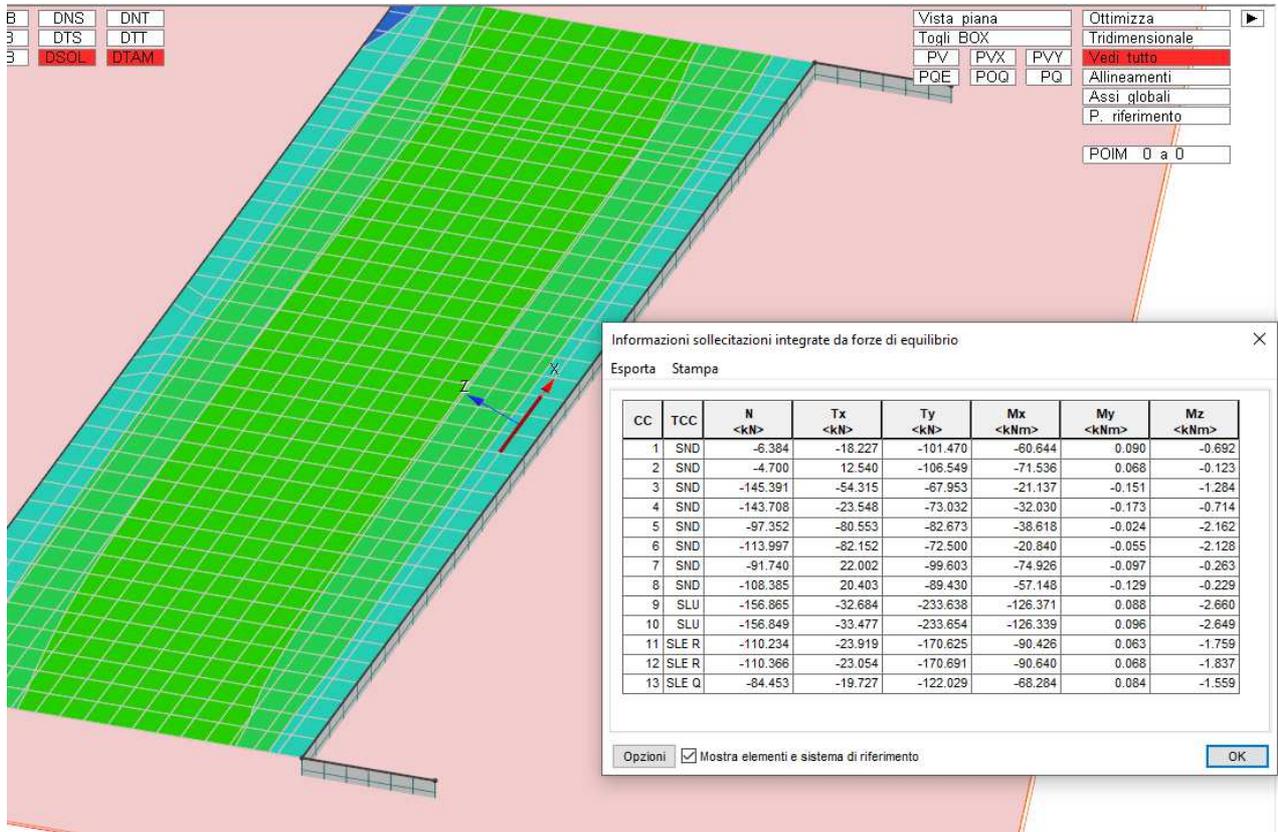
N°Comb	Ver	Sc max	Xc max	Yc max	Sf min	Xs min	Ys min	Ac eff.	As eff.
1	S	6.9	50.0	50.0	-120	-43.0	7.0	332	4.5

COMBINAZIONI QUASI PERMANENTI IN ESERCIZIO - APERTURA FESSURE [§ 7.3.4 EC2]

Comb.	Ver	e1	e2	k2	Ø	Cf	e sm - e cm	sr max	wk	Mx fess	My fess
1	S	-0.00007	0	0.833	24.0	58	0.00004 (0.00004)	696	0.025 (0.30)	8718	17427

1.1.1.4. Verifica soletta di copertura

Integrando le sollecitazioni alla base del muro per un tratto unitario, avremo per ogni combinazione le seguenti sollecitazioni



In modo cautelativo le verifiche a pressoflessione sono eseguite su una sezione unitaria di dimensioni b_{xh} pari a 1.0x0.5m

La sezione viene armata sia superiormente che inferiormente con ferri fi 24/10" ed armatura di ripartizione di 12/10 ed a i=230kg/mc

CARATTERISTICHE DI RESISTENZA DEI MATERIALI IMPIEGATI

CALCESTRUZZO -	Classe:	C32/40	
	Resis. compr. di progetto fcd:	181.30	daN/cm ²
	Def.unit. max resistenza ec2:	0.0020	
	Def.unit. ultima ecu:	0.0035	
	Diagramma tensione-deformaz.:	Parabola-Rettangolo	
	Modulo Elastico Normale Ec:	333457333457	daN/cm ²
	Resis. media a trazione fctm:	30.16	daN/cm ²
	Coeff. Omogen. S.L.E.:	15.00	
	Sc limite S.L.E. comb. Rare:	192.00	daN/cm ²
	Sc limite S.L.E. comb. Frequenti:	192.00	daN/cm ²
	Ap.Fessure limite S.L.E. comb. Frequenti:	0.400	mm
	Sc limite S.L.E. comb. Q.Permanenti:	144.00	daN/cm ²
	Ap.Fess.limite S.L.E. comb. Q.Perm.:	0.300	mm
ACCIAIO -	Tipo:	B450C	
	Resist. caratt. snervam. fyk:	4500.0	daN/cm ²
	Resist. caratt. rottura ftk:	4500.0	daN/cm ²
	Resist. snerv. di progetto fyd:	3913.0	daN/cm ²
	Resist. ultima di progetto ftd:	3913.0	daN/cm ²

Deform. ultima di progetto Epu:	0.068	
Modulo Elastico Ef	2000000	daN/cm ²
Diagramma tensione-deformaz.:	Bilineare finito	
Coeff. Aderenza istantaneo $\beta_1 \cdot \beta_2$:	1.00	
Coeff. Aderenza differito $\beta_1 \cdot \beta_2$:	0.50	
Sf limite S.L.E. Comb. Rare:	3600.0	daN/cm ²

CARATTERISTICHE DOMINIO CONGLOMERATO

Forma del Dominio: Poligonale
Classe Conglomerato: C32/40

N°vertice:	X [cm]	Y [cm]
1	-50.0	0.0
2	-50.0	50.0
3	50.0	50.0
4	50.0	0.0

DATI BARRE ISOLATE

N°Barra	X [cm]	Y [cm]	DiamØ[mm]
1	-43.0	7.0	24
2	-43.0	43.0	24
3	43.0	43.0	24
4	43.0	7.0	24

DATI GENERAZIONI LINEARI DI BARRE

N°Gen. Numero assegnato alla singola generazione lineare di barre
N°Barra Ini. Numero della barra iniziale cui si riferisce la generazione
N°Barra Fin. Numero della barra finale cui si riferisce la generazione
N°Barre Numero di barre generate equidistanti cui si riferisce la generazione
Ø Diametro in mm delle barre della generazione

N°Gen.	N°Barra Ini.	N°Barra Fin.	N°Barre	Ø
1	2	3	8	24
2	1	4	8	24

CALCOLO DI RESISTENZA - SFORZI PER OGNI COMBINAZIONE ASSEGNATA

N Sforzo normale in daN applicato nel Baric. (+ se di compressione)
Mx Momento flettente [daNm] intorno all'asse x princ. d'inerzia con verso positivo se tale da comprimere il lembo sup. della sez.
My Momento flettente [daNm] intorno all'asse y princ. d'inerzia con verso positivo se tale da comprimere il lembo destro della sez.
Vy Componente del Taglio [daN] parallela all'asse princ.d'inerzia y
Vx Componente del Taglio [daN] parallela all'asse princ.d'inerzia x

N°Comb.	N	Mx	My	Vy	Vx
1	15685	12637	0	23364	3347

COMB. RARE (S.L.E.) - SFORZI PER OGNI COMBINAZIONE ASSEGNATA

N Sforzo normale in daN applicato nel Baricentro (+ se di compressione)
Mx Momento flettente [daNm] intorno all'asse x princ. d'inerzia (tra parentesi Mom.Fessurazione) con verso positivo se tale da comprimere il lembo superiore della sezione
My Momento flettente [daNm] intorno all'asse y princ. d'inerzia (tra parentesi Mom.Fessurazione) con verso positivo se tale da comprimere il lembo destro della sezione

N°Comb.	N	Mx	My
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1 11023 9042 0

COMB. FREQUENTI (S.L.E.) - SFORZI PER OGNI COMBINAZIONE ASSEGNATA

N	Sforzo normale in daN applicato nel Baricentro (+ se di compressione)		
Mx	Momento flettente [daNm] intorno all'asse x princ. d'inerzia (tra parentesi Mom.Fessurazione) con verso positivo se tale da comprimere il lembo superiore della sezione		
My	Momento flettente [daNm] intorno all'asse y princ. d'inerzia (tra parentesi Mom.Fessurazione) con verso positivo se tale da comprimere il lembo destro della sezione		
N°Comb.	N	Mx	My
1	11023	9042 (20163)	0 (0)

COMB. QUASI PERMANENTI (S.L.E.) - SFORZI PER OGNI COMBINAZIONE ASSEGNATA

N	Sforzo normale in daN applicato nel Baricentro (+ se di compressione)		
Mx	Momento flettente [daNm] intorno all'asse x princ. d'inerzia (tra parentesi Mom.Fessurazione) con verso positivo se tale da comprimere il lembo superiore della sezione		
My	Momento flettente [daNm] intorno all'asse y princ. d'inerzia (tra parentesi Mom.Fessurazione) con verso positivo se tale da comprimere il lembo destro della sezione		
N°Comb.	N	Mx	My
1	8445	6828 (20200)	0 (0)

RISULTATI DEL CALCOLO

Sezione verificata per tutte le combinazioni assegnate

VERIFICHE DI RESISTENZA IN PRESSO-TENSO FLESSIONE ALLO STATO LIMITE ULTIMO

Ver	S = combinazione verificata / N = combin. non verificata
N Sn	Sforzo normale assegnato [daN] nel baricentro sezione cls. (positivo se di compressione)
Mx Sn	Componente momento assegnato [daNm] riferito all'asse x princ. d'inerzia
My Sn	Componente momento assegnato [daNm] riferito all'asse y princ. d'inerzia
N Res	Sforzo normale resistente [daN] baricentrico (positivo se di compress.)
Mx Res	Momento flettente resistente [daNm] riferito all'asse x princ. d'inerzia
My res	Momento flettente resistente [daNm] riferito all'asse y princ. d'inerzia
Mis.Sic.	Misura sicurezza = rapporto vettoriale tra (N r, Mx Res, My Res) e (N, Mx, My) Verifica positiva se tale rapporto risulta >=1.000
As Tesa	Area armature trave [cm²] in zona tesa. [Tra parentesi l'area minima ex (4.1.15)NTC]

N°Comb	Ver	N	Mx	My	N Res	Mx Res	My Res	Mis.Sic.	As Tesa
1	S	15685	12637	0	15683	70864	0	5.61	45.2(8.7)

METODO AGLI STATI LIMITE ULTIMI - DEFORMAZIONI UNITARIE ALLO STATO ULTIMO

ec max	Deform. unit. massima del conglomerato a compressione
x/d	Rapporto di duttilità [§ 4.1.2.1.2.1 NTC] deve essere < 0.45
Xc max	Ascissa in cm della fibra corrisp. a ec max (sistema rif. X,Y,O sez.)
Yc max	Ordinata in cm della fibra corrisp. a ec max (sistema rif. X,Y,O sez.)
es min	Deform. unit. minima nell'acciaio (negativa se di trazione)
Xs min	Ascissa in cm della barra corrisp. a es min (sistema rif. X,Y,O sez.)
Ys min	Ordinata in cm della barra corrisp. a es min (sistema rif. X,Y,O sez.)
es max	Deform. unit. massima nell'acciaio (positiva se di compress.)
Xs max	Ascissa in cm della barra corrisp. a es max (sistema rif. X,Y,O sez.)
Ys max	Ordinata in cm della barra corrisp. a es max (sistema rif. X,Y,O sez.)

N°Comb	ec max	x/d	Xc max	Yc max	es min	Xs min	Ys min	es max	Xs max	Ys max
1	0.00350	0.204	-50.0	50.0	0.00071	-43.0	43.0	-0.01365	-43.0	7.0

POSIZIONE ASSE NEUTRO PER OGNI COMB. DI RESISTENZA

N°Comb	a	b	c	x/d	C.Rid.
1	0.000000000	0.000398894	-0.016444711	0.204	0.700

METODO SLU - VERIFICHE A TAGLIO SENZA ARMATURE TRASVERSALI (§ 4.1.2.1.3.1 NTC)

N°Comb	Ver	Ved	Vwct	d	bw	Ro	Scp
1	S	23364	30048	43.0	100.0	0.0105	0.3

COMBINAZIONI RARE IN ESERCIZIO - MASSIME TENSIONI NORMALI ED APERTURA FESSURE (NTC/EC2)

N°Comb	Ver	Sc max	Xc max	Yc max	Sf min	Xs min	Ys min	Ac eff.	As eff.
1	S	22.1	-50.0	50.0	-424	-33.4	7.0	1050	45.2

COMBINAZIONI FREQUENTI IN ESERCIZIO - MASSIME TENSIONI NORMALI ED APERTURA FESSURE (NTC/EC2)

N°Comb	Ver	Sc max	Xc max	Yc max	Sf min	Xs min	Ys min	Ac eff.	As eff.
1	S	22.1	-50.0	50.0	-424	-33.4	7.0	1050	45.2

COMBINAZIONI FREQUENTI IN ESERCIZIO - APERTURA FESSURE [§ 7.3.4 EC2]

Comb.	Ver	e1	e2	k2	Ø	Cf	e sm - e cm	sr max	wk	Mx fess	My fess
1	S	-0.00027	0	0.835	24.0	58	0.00013 (0.00013)	355	0.045 (0.40)	20163	0

COMBINAZIONI QUASI PERMANENTI IN ESERCIZIO - MASSIME TENSIONI NORMALI ED APERTURA FESSURE (NTC/EC2)

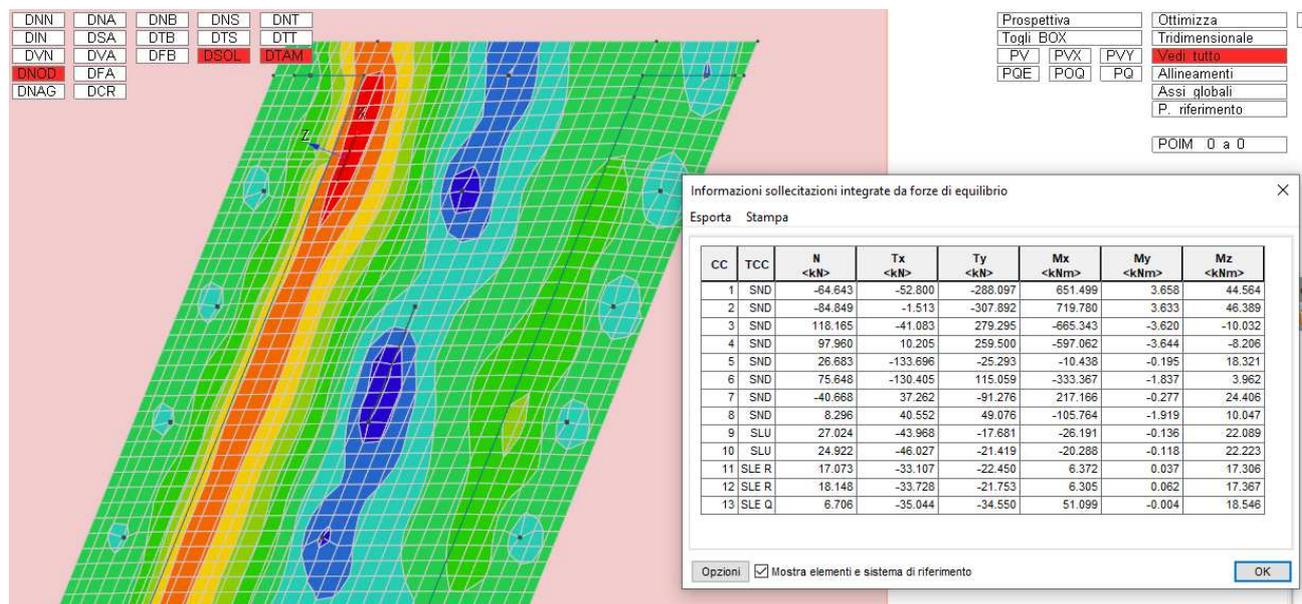
N°Comb	Ver	Sc max	Xc max	Yc max	Sf min	Xs min	Ys min	Ac eff.	As eff.
1	S	16.7	-50.0	50.0	-319	-43.0	7.0	1050	45.2

COMBINAZIONI QUASI PERMANENTI IN ESERCIZIO - APERTURA FESSURE [§ 7.3.4 EC2]

Comb.	Ver	e1	e2	k2	Ø	Cf	e sm - e cm sr max	wk	Mx fess	My fess	
1	S	-0.00021	0	0.835	24.0	58	0.00010 (0.00010)	355	0.034 (0.30)	20200	0

1.1.1.5. Verifica plinto di fondazione

Integrando le sollecitazioni alla base del muro per un tratto unitario, avremo per ogni combinazione le seguenti sollecitazioni



In modo cautelativo le verifiche a pressoflessione sono eseguite su una sezione unitaria di dimensioni b_{xh} pari a 1.0x1.5m

La sezione viene armata sia superiormente che inferiormente con ferri fi 24/10" in entrambe le direzioni

CARATTERISTICHE DI RESISTENZA DEI MATERIALI IMPIEGATI

CALCESTRUZZO -	Classe:	C25/30
	Resis. compr. di progetto fcd:	141.60 daN/cm ²
	Def.unit. max resistenza ec2:	0.0020
	Def.unit. ultima ecu:	0.0035
	Diagramma tensione-deformaz.:	Parabola-Rettangolo
	Modulo Elastico Normale Ec:	314750 daN/cm ²
	Resis. media a trazione fctm:	25.60 daN/cm ²
	Coeff. Omogen. S.L.E.:	15.00
	Sc limite S.L.E. comb. Rare:	150.00 daN/cm ²
	Sc limite S.L.E. comb. Frequenti:	150.00 daN/cm ²
	Ap.Fessure limite S.L.E. comb. Frequenti:	0.400 mm
	Sc limite S.L.E. comb. Q.Permanenti:	112.50 daN/cm ²
	Ap.Fess.limite S.L.E. comb. Q.Perm.:	0.300 mm
ACCIAIO -	Tipo:	B450C
	Resist. caratt. snervam. fyk:	4500.0 daN/cm ²
	Resist. caratt. rottura ftk:	4500.0 daN/cm ²

Resist. snerv. di progetto fyd:	3913.0	daN/cm ²
Resist. ultima di progetto ftd:	3913.0	daN/cm ²
Deform. ultima di progetto Epu:	0.068	
Modulo Elastico Ef	2000000	daN/cm ²
Diagramma tensione-deformaz.:	Bilineare finito	
Coeff. Aderenza istantaneo $\beta_1 \cdot \beta_2$:	1.00	
Coeff. Aderenza differito $\beta_1 \cdot \beta_2$:	0.50	
Sf limite S.L.E. Comb. Rare:	3600.0	daN/cm ²

CARATTERISTICHE DOMINIO CONGLOMERATO

Forma del Dominio:	Poligonale
Classe Conglomerato:	C25/30

N°vertice:	X [cm]	Y [cm]
1	-50.0	0.0
2	-50.0	150.0
3	50.0	150.0
4	50.0	0.0

DATI BARRE ISOLATE

N°Barra	X [cm]	Y [cm]	DiamØ[mm]
1	-43.0	7.0	24
2	-43.0	143.0	24
3	43.0	143.0	24
4	43.0	7.0	24

DATI GENERAZIONI LINEARI DI BARRE

N°Gen.	Numero assegnato alla singola generazione lineare di barre			
N°Barra Ini.	Numero della barra iniziale cui si riferisce la generazione			
N°Barra Fin.	Numero della barra finale cui si riferisce la generazione			
N°Barre	Numero di barre generate equidistanti cui si riferisce la generazione			
Ø	Diametro in mm delle barre della generazione			

N°Gen.	N°Barra Ini.	N°Barra Fin.	N°Barre	Ø
1	2	3	8	24
2	1	4	8	24

CALCOLO DI RESISTENZA - SFORZI PER OGNI COMBINAZIONE ASSEGNATA

N	Sforzo normale in daN applicato nel Baric. (+ se di compressione)				
Mx	Momento flettente [daNm] intorno all'asse x princ. d'inerzia con verso positivo se tale da comprimere il lembo sup. della sez.				
My	Momento flettente [daNm] intorno all'asse y princ. d'inerzia con verso positivo se tale da comprimere il lembo destro della sez.				
Vy	Componente del Taglio [daN] parallela all'asse princ.d'inerzia y				
Vx	Componente del Taglio [daN] parallela all'asse princ.d'inerzia x				

N°Comb.	N	Mx	My	Vy	Vx
1	8485	71978	0	30789	0

COMB. RARE (S.L.E.) - SFORZI PER OGNI COMBINAZIONE ASSEGNATA

N	Sforzo normale in daN applicato nel Baricentro (+ se di compressione)				
Mx	Momento flettente [daNm] intorno all'asse x princ. d'inerzia (tra parentesi Mom.Fessurazione) con verso positivo se tale da comprimere il lembo superiore della sezione				
My	Momento flettente [daNm] intorno all'asse y princ. d'inerzia (tra parentesi Mom.Fessurazione) con verso positivo se tale da comprimere il lembo destro della sezione				

N°Comb.	N	Mx	My
1	1707	637	0

COMB. FREQUENTI (S.L.E.) - SFORZI PER OGNI COMBINAZIONE ASSEGNATA

N Sforzo normale in daN applicato nel Baricentro (+ se di compressione)
Mx Momento flettente [daNm] intorno all'asse x princ. d'inerzia (tra parentesi Mom.Fessurazione) con verso positivo se tale da comprimere il lembo superiore della sezione
My Momento flettente [daNm] intorno all'asse y princ. d'inerzia (tra parentesi Mom.Fessurazione) con verso positivo se tale da comprimere il lembo destro della sezione

N°Comb.	N	Mx	My
1	1707	637 (472389)	0 (0)

COMB. QUASI PERMANENTI (S.L.E.) - SFORZI PER OGNI COMBINAZIONE ASSEGNATA

N Sforzo normale in daN applicato nel Baricentro (+ se di compressione)
Mx Momento flettente [daNm] intorno all'asse x princ. d'inerzia (tra parentesi Mom.Fessurazione) con verso positivo se tale da comprimere il lembo superiore della sezione
My Momento flettente [daNm] intorno all'asse y princ. d'inerzia (tra parentesi Mom.Fessurazione) con verso positivo se tale da comprimere il lembo destro della sezione

N°Comb.	N	Mx	My
1	1707	637 (472389)	0 (0)

RISULTATI DEL CALCOLO

Sezione verificata per tutte le combinazioni assegnate

VERIFICHE DI RESISTENZA IN PRESSO-TENSO FLESSIONE ALLO STATO LIMITE ULTIMO

Ver S = combinazione verificata / N = combin. non verificata
N Sn Sforzo normale assegnato [daN] nel baricentro sezione cls. (positivo se di compressione)
Mx Sn Componente momento assegnato [daNm] riferito all'asse x princ. d'inerzia
My Sn Componente momento assegnato [daNm] riferito all'asse y princ. d'inerzia
N Res Sforzo normale resistente [daN] baricentrico (positivo se di compress.)
Mx Res Momento flettente resistente [daNm] riferito all'asse x princ. d'inerzia
My res Momento flettente resistente [daNm] riferito all'asse y princ. d'inerzia
Mis.Sic. Misura sicurezza = rapporto vettoriale tra (N r,Mx Res,My Res) e (N,Mx,My)
As Tesa Verifica positiva se tale rapporto risulta >=1.000
Area armature trave [cm²] in zona tesa. [Tra parentesi l'area minima ex (4.1.15)NTC]

N°Comb	Ver	N	Mx	My	N Res	Mx Res	My Res	Mis.Sic.	As Tesa
1	S	8485	71978	0	8487	249854	0	3.47	45.2(22.2)

METODO AGLI STATI LIMITE ULTIMI - DEFORMAZIONI UNITARIE ALLO STATO ULTIMO

ec max Deform. unit. massima del conglomerato a compressione
x/d Rapporto di duttilità [§ 4.1.2.1.2.1 NTC] deve essere < 0.45
Xc max Ascissa in cm della fibra corrisp. a ec max (sistema rif. X,Y,O sez.)
Yc max Ordinata in cm della fibra corrisp. a ec max (sistema rif. X,Y,O sez.)
es min Deform. unit. minima nell'acciaio (negativa se di trazione)
Xs min Ascissa in cm della barra corrisp. a es min (sistema rif. X,Y,O sez.)
Ys min Ordinata in cm della barra corrisp. a es min (sistema rif. X,Y,O sez.)
es max Deform. unit. massima nell'acciaio (positiva se di compress.)
Xs max Ascissa in cm della barra corrisp. a es max (sistema rif. X,Y,O sez.)
Ys max Ordinata in cm della barra corrisp. a es max (sistema rif. X,Y,O sez.)

N°Comb	ec max	x/d	Xc max	Yc max	es min	Xs min	Ys min	es max	Xs max	Ys max
1	0.00350	0.065	-50.0	150.0	0.00087	-43.0	143.0	-0.05022	-43.0	7.0

POSIZIONE ASSE NEUTRO PER OGNI COMB. DI RESISTENZA

	a	b	c	x/d	C.Rid.
a, b, c	Coeff. a, b, c nell'eq. dell'asse neutro $aX+bY+c=0$ nel rif. X,Y,O gen.				
x/d	Rapp. di duttilità (travi e solette)[§ 4.1.2.1.2.1 NTC]: deve essere < 0.45				
C.Rid.	Coeff. di riduz. momenti per sola flessione in travi continue				
N°Comb	a	b	c	x/d	C.Rid.
1	0.000000000	0.000375670	-0.052850427	0.065	0.700

METODO SLU - VERIFICHE A TAGLIO SENZA ARMATURE TRASVERSALI (§ 4.1.2.1.3.1 NTC)

	Ver	Ved	Vwct	d	bw	Ro	Scp
Ver	S = comb.verificata a taglio/ N = comb. non verificata						
Ved	Taglio agente [daN] uguale al taglio V_y di comb. (sollecit. retta)						
Vwct	Taglio trazione resistente [daN] in assenza di staffe [formula (4.1.23)NTC]						
d	Altezza utile sezione [cm]						
bw	Larghezza minima sezione [cm]						
Ro	Rapporto geometrico di armatura longitudinale [<0.02]						
Scp	Tensione media di compressione nella sezione [daN/cm ²]						
N°Comb	Ver	Ved	Vwct	d	bw	Ro	Scp
1	S	30789	48189	143.0	100.0	0.0032	0.1

COMBINAZIONI RARE IN ESERCIZIO - MASSIME TENSIONI NORMALI ED APERTURA FESSURE (NTC/EC2)

	Ver	Sc max	Xc max, Yc max	Sf min	Xs min, Ys min	Ac eff.	As eff.
Ver	S = comb. verificata/ N = comb. non verificata						
Sc max	Massima tensione (positiva se di compressione) nel conglomerato [daN/cm ²]						
Xc max, Yc max	Ascissa, Ordinata [cm] del punto corrisp. a Sc max (sistema rif. X,Y,O)						
Sf min	Minima tensione (negativa se di trazione) nell'acciaio [daN/cm ²]						
Xs min, Ys min	Ascissa, Ordinata [cm] della barra corrisp. a Sf min (sistema rif. X,Y,O)						
Ac eff.	Area di calcestruzzo [cm ²] in zona tesa considerata aderente alle barre						
As eff.	Area barre [cm ²] in zona tesa considerate efficaci per l'apertura delle fessure						
N°Comb	Ver	Sc max	Xc max Yc max	Sf min	Xs min Ys min	Ac eff.	As eff.
1	S	0.2	-50.0 150.0	0	-43.0 7.0	750	45.2

COMBINAZIONI FREQUENTI IN ESERCIZIO - MASSIME TENSIONI NORMALI ED APERTURA FESSURE (NTC/EC2)

N°Comb	Ver	Sc max	Xc max Yc max	Sf min	Xs min Ys min	Ac eff.	As eff.
1	S	0.2	-50.0 150.0	0	-43.0 7.0	750	45.2

COMBINAZIONI FREQUENTI IN ESERCIZIO - APERTURA FESSURE [§ 7.3.4 EC2]

	Ver.	e1	e2	k1	kt	k2	k3	k4	Ø	Cf	e sm - e cm	sr max	wk	Mx fess.	My fess.
Ver.	La sezione viene assunta sempre fessurata anche nel caso in cui la trazione minima del calcestruzzo sia inferiore a f_{ctm} Esito della verifica														
e1	Massima deformazione di trazione del calcestruzzo, valutata in sezione fessurata														
e2	Minima deformazione di trazione del cls. (in sezione fessurata), valutata nella fibra più interna dell'area Ac eff														
k1	= 0.8 per barre ad aderenza migliorata [eq.(7.11)EC2]														
kt	= 0.4 per comb. quasi permanenti / = 0.6 per comb.frequenti [cfr. eq.(7.9)EC2]														
k2	= $(e1 + e2)/(2*e1)$ [eq.(7.13)EC2]														
k3	= 3.400 Coeff. in eq.(7.11) come da annessi nazionali														
k4	= 0.425 Coeff. in eq.(7.11) come da annessi nazionali														
Ø	Diametro [mm] equivalente delle barre tese comprese nell'area efficace Ac eff [eq.(7.11)EC2]														
Cf	Copriferro [mm] netto calcolato con riferimento alla barra più tesa														
e sm - e cm	Differenza tra le deformazioni medie di acciaio e calcestruzzo [(7.8)EC2 e (C4.1.7)NTC] Tra parentesi: valore minimo = 0.6 Smax / Es [(7.9)EC2 e (C4.1.8)NTC]														
sr max	Massima distanza tra le fessure [mm]														
wk	Apertura fessure in mm calcolata = $sr\ max*(e_sm - e_cm)$ [(7.8)EC2 e (C4.1.7)NTC]. Valore limite tra parentesi														
Mx fess.	Componente momento di prima fessurazione intorno all'asse X [daNm]														
My fess.	Componente momento di prima fessurazione intorno all'asse Y [daNm]														
Comb.	Ver	e1	e2	k2	Ø	Cf	e sm - e cm	sr max	wk	Mx fess	My fess				
1	S	0.00000	0	0.843	24.0	58	0.00000 (0.00000)	311	0.000 (0.40)	472389	0				

COMBINAZIONI QUASI PERMANENTI IN ESERCIZIO - MASSIME TENSIONI NORMALI ED APERTURA FESSURE (NTC/EC2)

N°Comb	Ver	Sc max	Xc max	Yc max	Sf min	Xs min	Ys min	Ac eff.	As eff.
1	S	0.2	-50.0	150.0	0	-43.0	7.0	750	45.2

COMBINAZIONI QUASI PERMANENTI IN ESERCIZIO - APERTURA FESSURE [§ 7.3.4 EC2]

Comb.	Ver	e1	e2	k2	Ø	Cf	e sm - e cm sr max	wk	Mx fess	My fess	
1	S	0.00000	0	0.843	24.0	58	0.00000 (0.00000)	311	0.000 (0.30)	472389	0

7 TIPOLOGIA FONDAZIONI PROFONDE

Le spalle del Ponte sul Canal Magro sono attestata su pali di grande diametro $D=800\text{mm}$ di lunghezza pari a 17m . In particolare la Spalla 1 è costituita da 21 la spalla 2 da 18 pali di lunghezza.

La tecnologia che verrà utilizzata per eseguire i pali di grande diametro, è quella di pali trivellati eseguiti a rotazione con impiego del tubo di rivestimento ("camicia metallica giuntata inserita a rotazione") per tutta la lunghezza del palo. Pertanto non verranno utilizzati fanghi bentonitici o polimeri per il sostegno delle pareti del foro.

Nella Figura 70 è riportata la geometria della spalla 1 e nella Figura 71 è riportata la geometria della spalla 2.

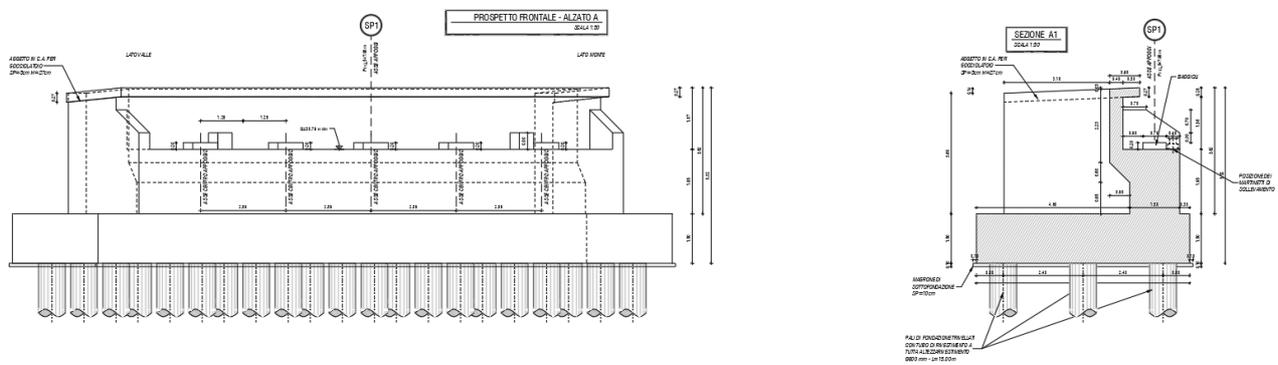


Figura 70 – geometria tipologica Spalla 1

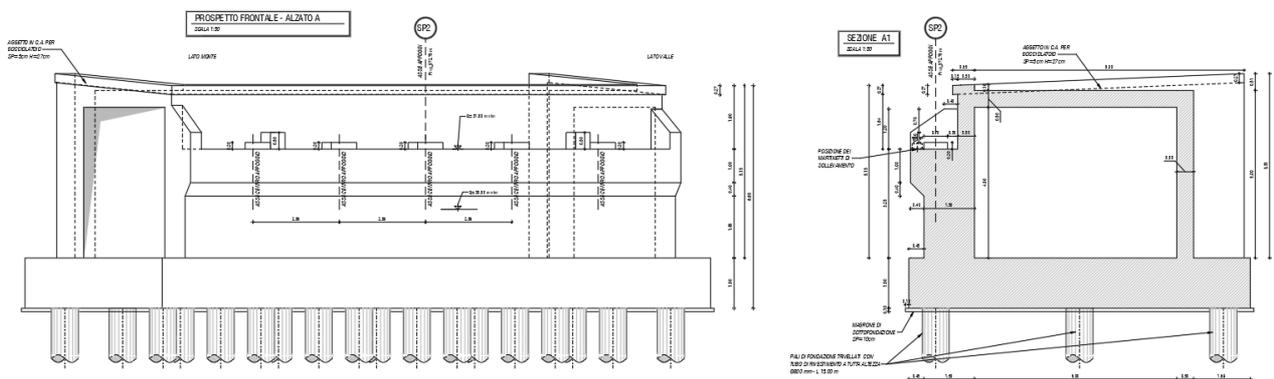


Figura 71 – geometria tipologica Spalla 2

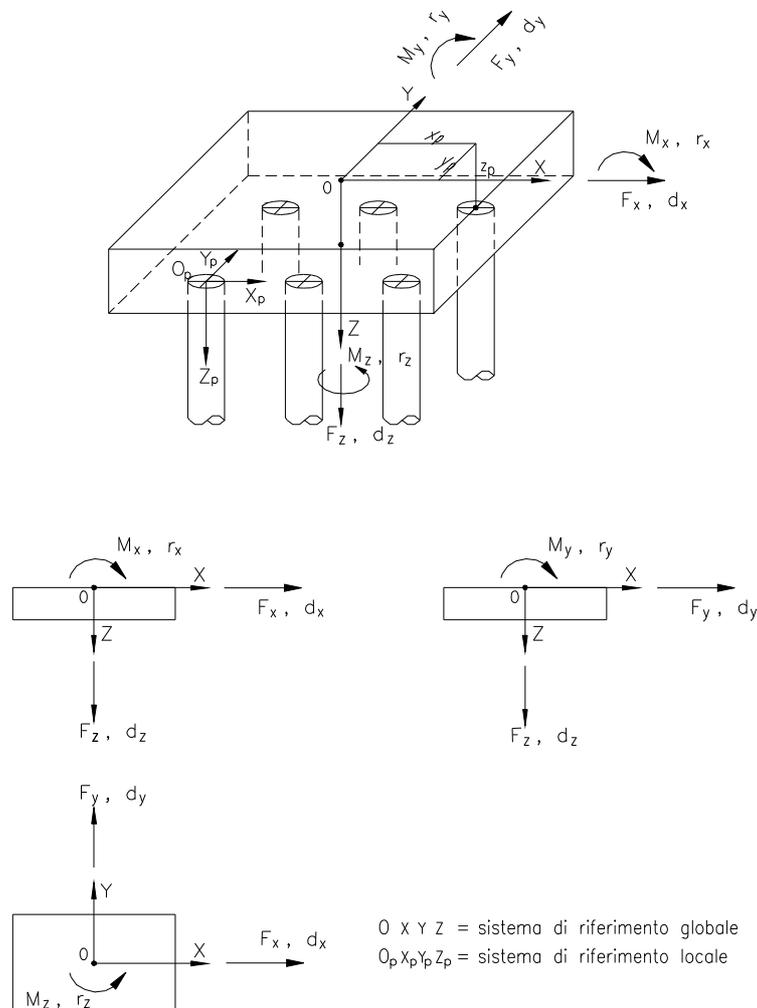
8 PALI ISOLATI SOTTOPOSTI A CARICHI VERTICALI E TRASVERSALI

8.1 METODOLOGIA DI CALCOLO

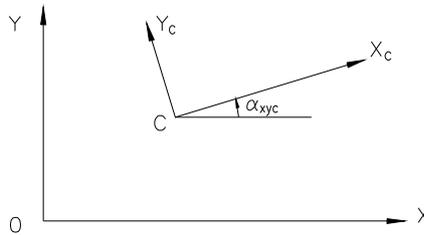
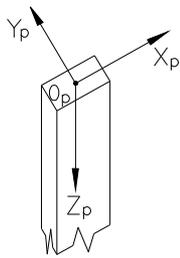
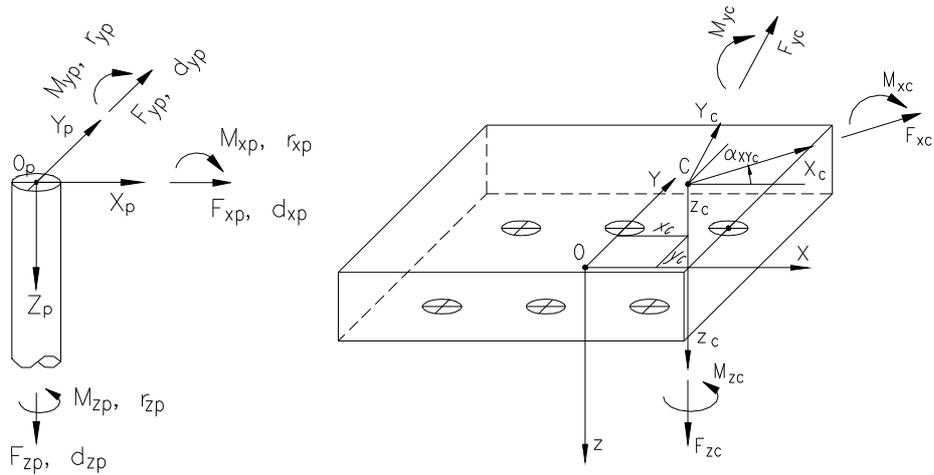
Per determinare le sollecitazioni sui pali viene eseguita un'analisi tridimensionale della palificata, condotta considerando le fondazioni come costituite da pali incastrati in testa al plinto, assimilato ad un corpo infinitamente rigido.

Il comportamento del palo isolato ai carichi assiali è definito da una caratteristica di rigidità del sistema palo-terreno, che può essere lineare o non lineare. Il comportamento del palo isolato soggetto a carico trasversale è definito da una caratteristica di rigidità variabile con la profondità.

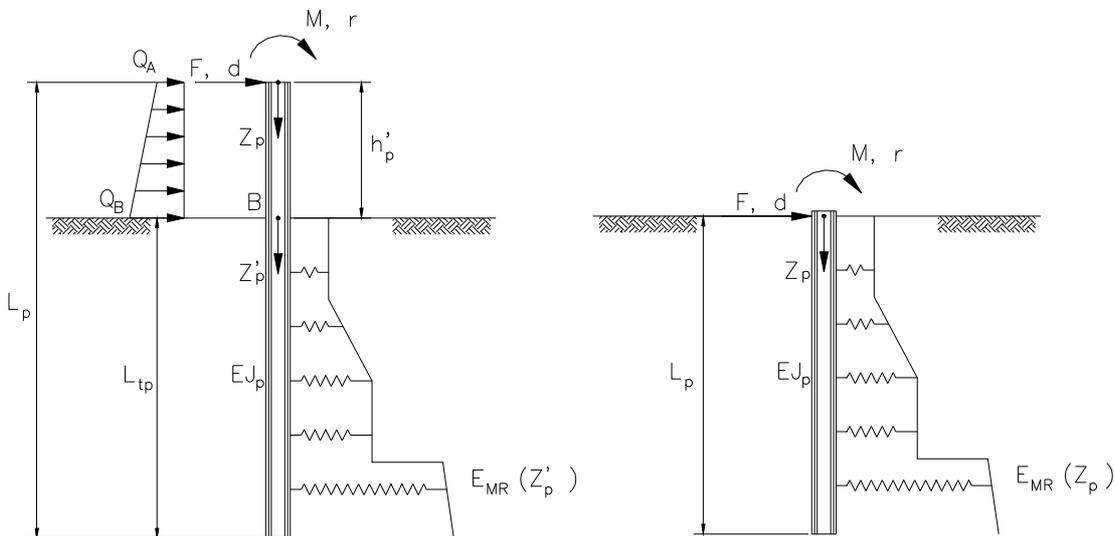
Nelle figure sottostanti sono riportati i sistemi di riferimento globale e locale con le convenzioni sui segni delle variabili adottate, le possibili caratteristiche di rigidità assiale ed orizzontale per i pali nonché le convenzioni adottate per la definizione dei centri di carico.



Definizione dei sistemi di riferimento globali adottati nelle analisi delle palificate



Definizione dei sistemi di riferimento locali e delle convenzioni sui centri di carico adottati nelle analisi delle palificate



Pali soggetti a carichi trasversali: moduli di reazione del terreno

8.2 CARATTERISTICA DELLA PALIFICATA

La struttura della palificata è stata modellata ipotizzando un plinto infinitamente rigido e schematizzando ciascun palo come una trave incastrata nel plinto, caratterizzata da una rigidezza flessionale ottenuta moltiplicando il modulo di Young $E_p = 30000$ MPa per il momento di inerzia del palo.

8.2.1 Comportamento dei pali a carichi verticali

L'interazione fra palo soggetto a carichi verticali e terreno, è stata definita dalla rigidezza $A_k = 700000$ kN/m ($D=800$ mm) considerata indipendente dal cedimento del palo (curva carico-cedimento lineare).

Tale rigidezza è calcolata per i livelli di cedimento attesi in esercizio per pali con pendenza secante della curva carico-cedimento di prove in sito disponibili in letteratura. La curva carico-cedimento del palo isolato viene assimilata ad una iperbole definita dalla pendenza iniziale (A_k), dal carico limite ultimo del singolo palo (Q_{lim}) corrispondente al collasso del sistema palo-terreno e dall'esponente (a_q) che ne influenza la forma in accordo allo schema della figura sottostante:

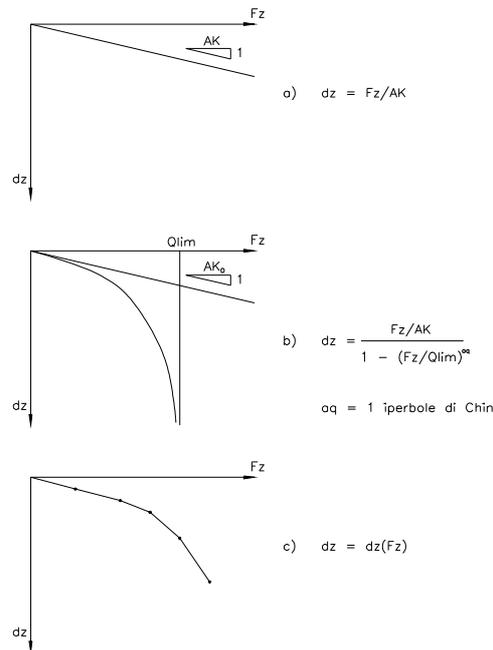
$$d_z = [F_z / A_k] / [1 - (F_z / Q_{lim})^{a_q}]$$

dove:

d_z = spostamento verticale a testa palo

F_z = carico assiale a testa palo

Tale curva permette di tenere in conto la non linearità di comportamento, rispetto ai carichi assiali, dei vari elementi della palificata.



Pali soggetti a carichi assiali: relazioni carico-cedimento

8.2.2 Comportamento dei pali a carichi trasversali

La base teorica generale che permette la soluzione del problema dei pali caricati trasversalmente è la stessa delle travi inflesse soggette a carichi non uniformi che consente di scrivere la seguente equazione differenziale della linea elastica:

$$E_p J_p \frac{d^4 x}{dz^4} + P = 0$$

dove:

P	reazione del terreno
x	spostamento orizzontale del palo
E_p	modulo elastico del palo
J_p	momento di inerzia del palo

Lo studio dell'interazione tra palo soggetto ai carichi orizzontali ed il terreno è effettuato ricorrendo alla teoria di Matlock e Reese che si basa sul noto modello di suolo alla Winkler (elastico-lineare), caratterizzato da un modulo di reazione orizzontale del terreno E_{mr} definito come il rapporto fra la reazione del terreno per unità di lunghezza del palo p ed il corrispondente spostamento orizzontale y :

$$E_{mr} = \frac{p}{y}$$

Si osservi che, definito k_w il coefficiente di sottofondo di Winkler, per un palo di diametro D si ha:

$$E_{mr} = k_w D$$

L'andamento del modulo di reazione orizzontale con la profondità è funzione principalmente del tipo di terreno. Per i terreni a prevalente comportamento incoerente si assume, in genere, una legge di variazione lineare caratterizzata dai seguenti parametri:

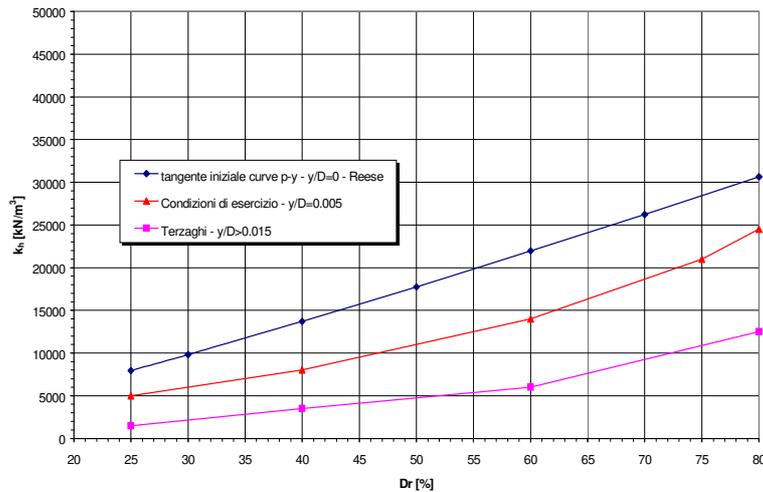
$$E_{mr} = E_{mr0} + k_h z$$

dove:

E_{mr0}	è il valore del modulo di reazione a testa palo
k_h	è il gradiente del modulo di reazione del terreno funzione principalmente della densità relativa
z	è la profondità a partire dalla sommità del palo

Nella figura seguente si riportano i valori di riferimento del gradiente k_h corrispondente a valori secanti del modulo E_{MR} per pali isolati con basse deformazioni ($y \leq 0.005 \cdot D$). Per il caso in esame si adotta la Condizione di esercizio (linea rossa).

Andamento del gradiente del modulo di reazione orizzontale - Terreni incoerenti sotto falda



Pel l'Unità GS con $\phi = 35^\circ$ si considera una $D_R = 50\%$ da cui $k_h = 10000 \text{ kN/m}^3/\text{m}$.

Pel l'Unità LSG con $\phi = 32^\circ$ si considera una $D_R = 35\%$ da cui $k_h = 7500 \text{ kN/m}^3/\text{m}$.

8.3 DETERMINAZIONE DELLE SOLLECITAZIONI SULLA PALIFICATA

I valori massimi delle sollecitazioni agenti su ciascun palo e gli spostamenti della fondazione causati dai carichi applicati sono stati determinati con il codice di calcolo MAP. Lo studio dell'interazione tra palo soggetto ai carichi orizzontali ed il terreno è effettuato ricorrendo alla teoria di Matlock e Reese che si basa sul noto modello di suolo alla Winkler (elastico-lineare) caratterizzato da un modulo di reazione orizzontale del terreno E_{mr} .

Nel caso in esame si assume un modulo di reazione orizzontale, a partire da quota intradosso plintoe variabile secondo queste legge:

SPALLA 1

Prof. da testa palo [m]	E_{mr} [MPa]	Unità	k_h [kN/m³]
0.0	25	GS	10000
3.5	60		
3.51	45	LSG	7500
10.0	94		
10.01	125	GS	10000
30.0	325		

SPALLA 2

Prof. da testa palo [m]	E_{mr} [MPa]	Unità	k_h [kN/m³]
0.0	35	GS	10000
3.0	65		
3.01	49	LSG	7500
9.5	98		
9.51	130	GS	10000
30.0	335		

8.4 SPALLA 1

8.4.1 Azioni agenti sulle palificate

Nella tabella seguente si riportano le azioni agenti. Tali carichi sono quelli di progetto ovvero riferiti a quota testa pali, intradosso fondazione. Le azioni tengono già conto del peso del plinto e del peso del terreno gravante su di esso.

Il sistema di riferimento l'asse X = L in direzione longitudinale e l'asse Y = T in direzione trasversale, mentre l'asse Z è positivo verso il basso. La convenzione di segno è schematicamente illustrata nella figura di seguito.

Azioni Combinate	N	H _t	H _l	M _t	M _l	M _z
SLU	[kN]	[kN]	[kN]	[kNm]	[kNm]	[kNm]
SND	-13290	-114	6699	615	27048	5410
SND	-13290	-2319	6699	6528	27048	1110
SND	-13290	1698	-5152	-4229	-4711	387
SND	-13290	-506	-5152	1683	-4711	-3911
SND	-13290	3092	2551	-7979	15931	8669
SND	-13290	3636	-1004	-9432	6403	7162
SND	-13290	-4257	2551	11731	15933	-5663
SND	-13290	-3713	-1004	10278	6405	-7170
SLU Max	-17030	-14	1697	1836	12264	-755
SLU Min	-16876	142	2261	945	13582	-338
SLE Rmax	-12338	-24	1168	980	9454	-467
SLE Rmin	-12147	86	1600	684	10124	-145
SLE QP	-11933	183	775	320	7404	-686

8.4.2 Risultati delle analisi

Di seguito si riportano i risultati delle massime sollecitazioni ottenute a testa palo per le varie combinazioni

sollecitazioni massime in sommita' ai pali SLU

	Fz kN	M kN*m	T kN	palo	c.d.c.
S.1	1817.7	377.1	337.6	21	2
S.2	-551.9	377.1	337.6	1	2
S.3	-551.9	377.1	337.6	1	2
S.4	-551.9	377.1	337.6	1	2
T.1	1817.7	377.1	337.6	21	2
T.2	-551.9	377.1	337.6	1	2

S.1: cond. di carico con Sforzo Normale Massimo
SP1 - SLV2

S.2: cond. di carico con Sforzo Normale Minimo
SP1 - SLV2

S.3: cond. di carico con Momento Massimo
SP1 - SLV2

S.4: cond. di carico con Taglio Massimo
SP1 - SLV2

T.1: cond. di carico con Tensione Massima (sez. interamente reagente)
SP1 - SLV2

T.2: cond. di carico con Tensione Minima (sez. interamente reagente)
SP1 - SLV2

8.5 SPALLA 2

8.5.1 Azioni agenti sulle palificate

Nella tabella seguente si riportano le azioni agenti. Tali carichi sono quelli di progetto ovvero riferiti a quota testa pali, intradosso fondazione. Le azioni tengono già conto del peso del plinto e del peso del terreno gravante su di esso.

Il sistema di riferimento l'asse X = L in direzione longitudinale e l'asse Y = T in direzione trasversale, mentre l'asse Z è positivo verso il basso. La convenzione di segno è schematicamente illustrata nella figura di seguito.

Azioni Combinate	N	H _t	H _i	M _t	M _i	M _z
SLU	[kN]	[kN]	[kN]	[kNm]	[kNm]	[kNm]
SND	-16681	1229	2895	-5312	18000	-2004
SND	-16681	-1229	2895	5171	18003	1982
SND	-16681	2161	-5196	-8249	-14444	2398
SND	-16681	-296	-5196	2233	-14441	6385
SND	-18884	4760	-767	-19823	-6209	-3525
SND	-18884	4841	-2704	-20059	-14348	-3141
SND	-18884	-3435	-767	15121	-6200	9762
SND	-18884	-3354	-2704	14886	-14339	10147
SLU Max	-27093	316	-2921	349	-8471	1556
SLU Min	-27018	394	-2921	-441	-7937	1233
SLE Rmax	-19987	229	-1999	-139	-7461	1123
SLE Rmin	-19843	286	-1999	-317	-6823	883
SLE QP	-18589	206	-1687	-1130	-4309	256

8.5.2 Risultati delle analisi

Di seguito si riportano i risultati delle massime sollecitazioni ottenute a testa palo per le varie combinazioni sollecitazioni massime in sommità ai pali SLU/SLV

	Fz kN	M kN*m	T kN	palo	c.d.c.
S.1	2042.6	384.8	307.6	1	6
S.2	65.6	386.0	308.6	18	6
S.3	1213.4	404.1	313.9	16	3
S.4	1213.4	404.1	313.9	16	3
T.1	2042.6	384.8	307.6	1	6
T.2	65.6	386.0	308.6	18	6

S.1: cond. di carico con sforzo Normale Massimo
 SP2 - SLV6

- S.2: cond. di carico con Sforzo Normale Minimo
SP2 - SLV6
- S.3: cond. di carico con Momento Massimo
SP2 - SLV3
- S.4: cond. di carico con Taglio Massimo
SP2 - SLV3
- T.1: cond. di carico con Tensione Massima (sez. interamente reagente)
SP2 - SLV6
- T.2: cond. di carico con Tensione Minima (sez. interamente reagente)
SP2 - SLV6

8.6 LUNGHEZZA PALI

Sulla base dei risultati delle analisi delle palificate e del calcolo delle curve di capacità portante dei singoli pali nelle varie combinazioni di carico, nella tabella seguente si riportano le verifiche di capacità portante dei pali di fondazione.

OPERA	PALIFICATA	L [m]	Q_d COMPRESSIONE kN	N_{MAX} COMPRESSIONE kN
SPALLA 1	N°21 pali	17.0	2169	1817
SPALLA 2	N°18 pali	17.0	2169	2042

9 VERIFICHE STRUTTURALI PALI

Di seguito si riportano le verifiche delle sezioni in c.a. dei pali di fondazione, divise per Spalle e Pile, riprendendo le sollecitazioni sopra riportate. Si considera un copriferro pari a 7.5 cm desunta dall'EC2, cap.4.4.1.3, par. (4), dove è raccomandato tale valore "per le parti di struttura contro terra". Il calcestruzzo è di tipo Rck 25/30 (UNI 11104 classe esposizione XC2) ed una armatura:

- Spalla 1: n°20 ϕ 24 e spirale ϕ 12/20
- Spalla 2: n°20 ϕ 24 e spirale ϕ 12/20

Incidenza Pali $i=140\text{kg/m}^3$

9.1 SPALLA 1

sollecitazioni massime in sommita' ai pali SLU/SLV

	Fz kN	M kN*m	T kN	palo	c.d.c.
S.1	1817.7	377.1	337.6	21	2
S.2	-551.9	377.1	337.6	1	2
S.3	-551.9	377.1	337.6	1	2
S.4	-551.9	377.1	337.6	1	2
T.1	1817.7	377.1	337.6	21	2
T.2	-551.9	377.1	337.6	1	2

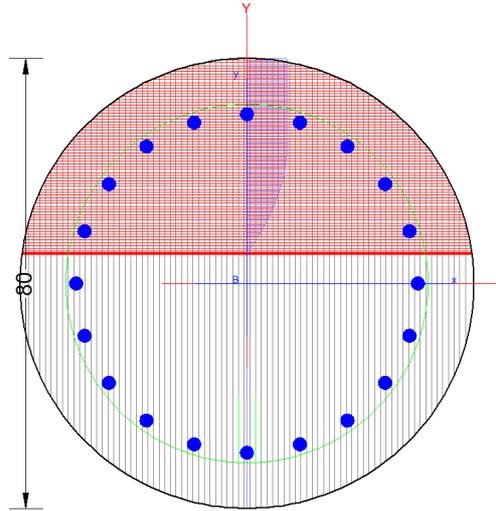
sollecitazioni massime in sommita' ai pali SLER

	Fz kN	M kN*m	T kN	palo	c.d.c.
S.1	908.0	80.2	76.3	21	2
S.2	248.8	80.2	76.3	1	2
S.3	248.8	80.2	76.3	1	2
S.4	248.8	80.2	76.3	1	2
T.1	908.0	80.2	76.3	21	2
T.2	248.8	80.2	76.3	1	2

sollecitazioni massime in sommita' ai pali SLE QP

	Fz kN	M kN*m	T kN	palo	c.d.c.
S.1	790.7	38.2	37.9	3	1
S.2	345.8	38.2	37.9	19	1
S.3	351.3	38.2	37.9	1	1

S.4	351.3	38.2	37.9	1	1
T.1	790.7	38.2	37.9	3	1
T.2	345.8	38.2	37.9	19	1



CARATTERISTICHE DI RESISTENZA DEI MATERIALI IMPIEGATI

CALCESTRUZZO -	Classe:	C25/30
	Resistenza compress. di progetto fcd:	141.60 daN/cm ²
	Resistenza compress. ridotta fcd':	70.80 daN/cm ²
	Deform. unitaria max resistenza ec2:	0.0020
	Deformazione unitaria ultima ecu:	0.0035
	Diagramma tensioni-deformaz.:	Parabola-Rettangolo
	Modulo Elastico Normale Ec:	314750 daN/cm ²
	Resis. media a trazione fctm:	25.60 daN/cm ²
	Coeff.Omogen. S.L.E.:	15.00
	Sc limite S.L.E. comb. Rare:	150.00 daN/cm ²
	Sc limite S.L.E. comb. Frequenti:	150.00 daN/cm ²
	Ap.Fessure limite S.L.E. comb. Frequenti:	0.400 mm
	Sc limite S.L.E. comb. Q.Permanenti:	112.50 daN/cm ²
	Ap.Fess.limite S.L.E. comb. Q.Perm.:	0.300 mm

ACCIAIO -	Tipo:	B450C
	Resist. caratt. a snervamento fyk:	4500.0 daN/cm ²
	Resist. caratt. a rottura ftk:	4500.0 daN/cm ²
	Resist. a snerv. di progetto fyd:	3913.0 daN/cm ²
	Resist. ultima di progetto ftd:	3913.0 daN/cm ²
	Deform. ultima di progetto Epu:	0.068
	Modulo Elastico Ef:	2000000 daN/cm ²
	Diagramma tensioni-deformaz.:	Bilineare finito
	Coeff. Aderenza istant. $\beta_1 \cdot \beta_2$:	1.00
	Coeff. Aderenza differito $\beta_1 \cdot \beta_2$:	0.50
Comb.Rare - Sf Limite:	3600.0 daN/cm ²	

CARATTERISTICHE GEOMETRICHE ED ARMATURE SEZIONE

Diametro sezione:	80.0	cm
Barre circonferenza:	20Ø24	(90.5 cm ²)
Coprif.(dal baric. barre):	9.9	cm

CALCOLO DI RESISTENZA - SFORZI PER OGNI COMBINAZIONE ASSEGNATA

N	Sforzo normale [daN] applicato nel baricentro (posit. se di compress.)
Mx	Momento flettente [daNm] intorno all'asse x baric. della sezione con verso positivo se tale da comprimere il lembo sup. della sezione
Vy	Taglio [daN] in direzione parallela all'asse y baric. della sezione
MT	Momento torcente [daN m]

N° Comb.	N	Mx	Vy	MT
1	181700	37710	33760	0
2	-55190	37710	33760	0

COMB. RARE (S.L.E.) - SFORZI PER OGNI COMBINAZIONE ASSEGNATA

N	Sforzo normale [daN] applicato nel baricentro (positivo se di compress.)
Mx	Coppia [daNm] applicata all'asse x baricentrico (tra parentesi il Momento di fessurazione) con verso positivo se tale da comprimere il lembo superiore della sezione

N° Comb.	N	Mx
1	90800	8020

COMB. FREQUENTI (S.L.E.) - SFORZI PER OGNI COMBINAZIONE ASSEGNATA

N	Sforzo normale [daN] applicato nel baricentro (positivo se di compress.)
Mx	Coppia [daNm] applicata all'asse x baricentrico (tra parentesi il Momento di fessurazione) con verso positivo se tale da comprimere il lembo superiore della sezione

N° Comb.	N	Mx
1	90800	8020 (0)

COMB. QUASI PERMANENTI (S.L.E.) - SFORZI PER OGNI COMBINAZIONE ASSEGNATA

N	Sforzo normale [daN] applicato nel baricentro (positivo se di compress.)
Mx	Coppia [daNm] applicata all'asse x baricentrico (tra parentesi il Momento di fessurazione) con verso positivo se tale da comprimere il lembo superiore della sezione

N° Comb.	N	Mx
1	79070	3820 (0)

RISULTATI DEL CALCOLO
Sezione verificata per tutte le combinazioni assegnate

Copriferro netto minimo barre longitudinali:	8.7	cm
Interferro netto minimo barre longitudinali:	7.0	cm
Interferro massimo barre longitudinali:	0.0	cm [deve essere < 0.0]
Copriferro netto minimo staffe:	7.5	cm

VERIFICHE DI RESISTENZA IN PRESSO-TENSO FLESSIONE ALLO STATO LIMITE ULTIMO

Ver	S = combinazione verificata / N = combin. non verificata
N	Sforzo normale [daN] applicato nel Baricentro (positivo se di compressione)
Mx	Momento flettente assegnato [daNm] riferito all'asse x baricentrico
N Ult	Sforzo normale ultimo [daN] nella sezione (positivo se di compress.)
Mx rd	Momento flettente ultimo [daNm] riferito all'asse x baricentrico
Mis.Sic.	Misura sicurezza = rapporto vettoriale tra (N rd, Mx rd) e (N, Mx) Verifica positiva se tale rapporto risulta >=1.000
Yn	Ordinata [cm] dell'asse neutro alla massima resistenza nel sistema di rif. X,Y,O sez.
As Tot.	Area complessiva armature long. pilastro [cm²]. (tra parentesi l'area minima di normativa)

N° Comb	Ver	N	Mx	N rd	Mx rd	Mis.Sic.	Yn	x/d	C.Rid.	As Tot.
1	S	181700	37710	181688	113000	2.997	5.3	---	---	90.5 (15.1)
2	S	-55190	37710	-55171	80333	2.130	19.0	---	---	90.5 (15.1)

DEFORMAZIONI UNITARIE ALLO STATO LIMITE ULTIMO

ec max	Deform. unit. massima del conglomerato a compressione
Yc max	Ordinata in cm della fibra corrisp. a ec max (sistema rif. X,Y,O sez.)
es min	Deform. unit. minima nell'acciaio (negativa se di trazione)
Ys min	Ordinata in cm della barra corrisp. a es min (sistema rif. X,Y,O sez.)
es max	Deform. unit. massima nell'acciaio (positiva se di compressione)
Ys max	Ordinata in cm della barra corrisp. a es max (sistema rif. X,Y,O sez.)

N°Comb	ec max	Yc max	es min	Ys min	es max	Ys max
1	0.00350	40.0	0.00250	30.1	-0.00357	-30.1
2	0.00350	40.0	0.00185	30.1	-0.00820	-30.1

ARMATURE A TAGLIO E/O TORSIONE DI INVILUPPO PER LE COMBINAZIONI ASSEGNATE

Diametro staffe:	12	mm	
Passo staffe:	20.0	cm	[Passo massimo di normativa = 25.0 cm]
N.Bracci staffe:	2		
Area staffe/m :	11.3	cm ² /m	[Area Staffe Minima NTC = 2.3 cm ² /m]

VERIFICHE A TAGLIO

Ver	S = comb.verificata a taglio-tors./ N = comb. non verificata
Ved	Taglio agente [daN] uguale al taglio Vy di comb.
Ved	Taglio agente [daN] uguale al taglio Vy di comb.
Vcd	Taglio compressione resistente [daN] lato conglomerato [formula (4.1.28)NTC]
Vwd	Taglio trazione resistente [daN] assorbito dalle staffe [formula (4.1.27)NTC]
bw z	Larghezza minima [cm] sezione misurata parallelam. all'asse neutro Braccio coppia interna
Ctg	Cotangente dell'angolo di inclinazione dei puntoni di conglomerato
Acw	Coefficiente maggiorativo della resistenza a taglio per compressione
Ast	Area staffe/metro strettamente necessaria per taglio e torsione [cm ² /m]

N°Comb	Ver	Ved	Vcd	Vwd	bw z	Ctg	Acw	Ast
1	S	33760	103634	52355	71.8 47.3	2.500	1.250	7.3
2	S	33760	89160	59524	67.9 53.8	2.500	1.000	6.4

COMBINAZIONI RARE IN ESERCIZIO - VERIFICA MASSIME TENSIONI NORMALI

Ver	S = combinazione verificata / N = combin. non verificata
Sc max	Massima tensione di compress. (+) nel conglom. in fase fessurata [(daN/cm ²)
Yc max	Ordinata in cm della fibra corrisp. a Sc max (sistema rif. X,Y,O)
Sc min	Minima tensione di compress. (+) nel conglom. in fase fessurata [(daN/cm ²)
Yc min	Ordinata in cm della fibra corrisp. a Sc min (sistema rif. X,Y,O)
Sf min	Minima tensione di trazione (-) nell'acciaio [daN/cm ²)
Ys min	Ordinata in cm della barra corrisp. a Sf min (sistema rif. X,Y,O)
Dw Eff.	Spessore di conglomerato [cm] in zona tesa considerata aderente alle barre
Ac eff.	Area di congl. [cm ²] in zona tesa aderente alle barre (verifica fess.)
As eff.	Area Barre tese di acciaio [cm ²] ricadente nell'area efficace(verifica fess.)

N°Comb	Ver	Sc max	Yc max	Sc min	Yc min	Sf min	Ys min	Dw Eff.	Ac Eff.	As Eff.	D barre
1	S	20.0	-40.0	0.0	40.0	-354	30.1	24.8	2098	40.7	----

COMBINAZIONI RARE IN ESERCIZIO - VERIFICA APERTURA FESSURE (NTC/EC2)

Ver	Esito verifica
e1	Minima deformazione unitaria (trazione: segno -) nel calcestruzzo in sez. fessurata
e2	Massima deformazione unitaria (compress.: segno +) nel calcestruzzo in sez. fessurata
K2	= 0.5 per flessione; $= (e1 + e2) / (2 * e2)$ in trazione eccentrica per la (7.13)EC2 e la (C4.1.11)NTC
Kt	fattore di durata del carico di cui alla (7.9) dell'EC2
e sm	Deformazione media acciaio tra le fessure al netto di quella del cls. Tra parentesi il valore minimo = 0.6 Ss/Es
srm	Distanza massima in mm tra le fessure
wk	Apertura delle fessure in mm fornito dalla (7.8)EC2 e dalla (C4.1.7)NTC. Tra parentesi è indicato il valore limite.
M fess.	Momento di prima fessurazione [daNm]

N°Comb	Ver	e1	e2	e3	K2	Kt	e sm	srm	wk	M Fess.
1	S	-0.00022	0.00015		0.50	0.60	0.000106 (0.000106)	506	0.054 (990.00)	19016

COMBINAZIONI FREQUENTI IN ESERCIZIO - VERIFICA MASSIME TENSIONI NORMALI

N°Comb	Ver	Sc max	Yc max	Sc min	Yc min	Sf min	Ys min	Dw Eff.	Ac Eff.	As Eff.	D barre
1	S	26.4	-40.0	2.0	40.0	75	30.1	0.0	0	0.0	---

COMBINAZIONI FREQUENTI IN ESERCIZIO - VERIFICA APERTURA FESSURE (NTC/EC2)

N°Comb	Ver	e1	e2	e3	K2	Kt	e sm	srm	wk	M Fess.
1	S	0.00002	0.00020		---	---	---	---	---	0

COMBINAZIONI QUASI PERMANENTI IN ESERCIZIO - VERIFICA MASSIME TENSIONI NORMALI

N°Comb	Ver	Sc max	Yc max	Sc min	Yc min	Sf min	Ys min	Dw Eff.	Ac Eff.	As Eff.	D barre
1	S	18.2	-40.0	6.6	40.0	120	30.1	0.0	0	0.0	---

COMBINAZIONI QUASI PERMANENTI IN ESERCIZIO - VERIFICA APERTURA FESSURE (NTC/EC2)

N°Comb	Ver	e1	e2	e3	K2	Kt	e sm	srm	wk	M Fess.
1	S	0.00005	0.00014		---	---	---	---	---	0

Per verificare il carico limite trasversale, si considerano i pali incastrati in sommità.

Considerando l'armatura suddetta, il momento di plasticizzazione risulta $M_y = 956 \text{ kNm}$

Si verifica facilmente, di seguito, che il comportamento di rottura è a "pali lunghi", cioè la rottura si verifica con la formazione di due cerniere plastiche, una in testa ed una più in profondità lungo il fusto.

Essendo il modello di verifica al carico limite orizzontale di tipo semplificato (Broms, 1964), essendo i pali di fondazione immersi in terreni incoerenti, come detto essendo il modello di rottura a "palo lungo", si eseguono le seguenti verifiche adottando, come previsto da normativa (par. 6.4.3.1.2) l'Approccio 2.

Come riportato di seguito, si ottiene una resistenza trasversale di progetto pari a:

$$H_d = 407 \text{ kN} > H_{\text{PROG.}} = 377 \text{ kN}$$

CARICO LIMITE ORIZZONTALE DI UN PALO IN TERRENI INCOERENTI
PALI CON ROTAZIONE IN TESTA IMPEDITA

OPERA:

TEORIA DI BASE:

(Broms, 1964)

H = carico limite orizzontale

L = lunghezza del palo

D = diametro del palo

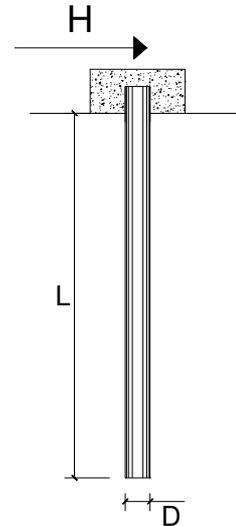
My = momento di plasticizzazione della sezione

Fs = coefficiente di sicurezza

φ' = angolo di attrito del terreno

kp = coeff. di spinta passiva ($k_p = (1 + \sin\varphi') / (1 - \sin\varphi')$)

γ = peso di unità di volume del terreno (se è presente la falda $\gamma = \gamma'$)



Palo corto:
$$H = 1.5 k_p \gamma d^3 \left(\frac{L}{d} \right)^2$$

Palo intermedio:
$$H = \frac{1}{2} k_p \gamma d^3 \left(\frac{L}{d} \right)^2 + \frac{M_y}{L}$$

Palo lungo:
$$H = k_p \gamma d^3 \sqrt[3]{\left(3.676 \frac{M_y}{k_p \gamma d^4} \right)^2}$$

DATI DI IMPUT:

L =	17.00	(m)
D =	0.80	(m)
My =	956.00	(kN m)
Fs =	2.21	(-)
φ' =	35.00	(°)
kp =	3.69	(-)
γ =	20.00	(kN/m ³)

Palo corto:

H1 = 25595.04 (kN) H1/FS = 11581.46 (kN)

Palo intermedio:

H2 = 8587.91 (kN) H2/FS = 3885.93 (kN)

Palo lungo:

H3 = 900.07 (kN) H3/FS = 407.27 (kN)

H = min(H1, H2, H3) = 900.07 (kN) palo lungo

9.2 SPALLA 2

sollecitazioni massime in sommita' ai pali SLU/SLV

	Fz kN	M kN*m	T kN	palo	c.d.c.
S.1	2042.6	384.8	307.6	1	6
S.2	65.6	386.0	308.6	18	6
S.3	1213.4	404.1	313.9	16	3
S.4	1213.4	404.1	313.9	16	3
T.1	2042.6	384.8	307.6	1	6
T.2	65.6	386.0	308.6	18	6

sollecitazioni massime in sommita' ai pali SLR Rare

	Fz kN	M kN*m	T kN	palo	c.d.c.
S.1	1319.4	143.3	111.7	1	1
S.2	902.1	144.7	112.3	18	2
S.3	1283.0	144.7	112.3	16	2
S.4	1283.0	144.7	112.3	16	2
T.1	1319.4	143.3	111.7	1	1
T.2	902.1	144.7	112.3	18	2

sollecitazioni massime in sommita' ai pali

	Fz kN	M kN*m	T kN	palo	c.d.c.
S.1	1200.4	122.9	94.3	1	1
S.2	867.7	123.1	94.5	18	1
S.3	1152.4	123.1	94.5	16	1
S.4	1152.4	123.1	94.5	16	1
T.1	1200.4	122.9	94.3	1	1
T.2	867.7	123.1	94.5	18	1

CARATTERISTICHE DI RESISTENZA DEI MATERIALI IMPIEGATI

CALCESTRUZZO -	Classe:	C25/30	
	Resistenza compress. di progetto fcd:	141.60	daN/cm ²
	Resistenza compress. ridotta fcd':	70.80	daN/cm ²
	Deform. unitaria max resistenza ec2:	0.0020	
	Deformazione unitaria ultima ecu:	0.0035	
	Diagramma tensioni-deformaz.:	Parabola-Rettangolo	
	Modulo Elastico Normale Ec:	314750	daN/cm ²
	Resis. media a trazione fctm:	25.60	daN/cm ²
	Coeff.Omogen. S.L.E.:	15.00	
	Sc limite S.L.E. comb. Rare:	150.00	daN/cm ²
	Sc limite S.L.E. comb. Frequenti:	150.00	daN/cm ²
	Ap.Fessure limite S.L.E. comb. Frequenti:	0.400	mm
	Sc limite S.L.E. comb. Q.Permanenti:	112.50	daN/cm ²
	Ap.Fess.limite S.L.E. comb. Q.Perm.:	0.300	mm
ACCIAIO -	Tipo:	B450C	
	Resist. caratt. a snervamento fyk:	4500.0	daN/cm ²
	Resist. caratt. a rottura ftk:	4500.0	daN/cm ²
	Resist. a snerv. di progetto fyd:	3913.0	daN/cm ²
	Resist. ultima di progetto ftd:	3913.0	daN/cm ²
	Deform. ultima di progetto Epu:	0.068	
	Modulo Elastico Ef:	2000000	daN/cm ²
	Diagramma tensioni-deformaz.:	Bilineare finito	
	Coeff. Aderenza istant. $\beta_1 \cdot \beta_2$:	1.00	
	Coeff. Aderenza differito $\beta_1 \cdot \beta_2$:	0.50	
	Comb.Rare - Sf Limite:	3600.0	daN/cm ²

CARATTERISTICHE GEOMETRICHE ED ARMATURE SEZIONE

Diametro sezione:	80.0	cm
Barre circonferenza:	20Ø24	(90.5 cm ²)
Coprif.(dal baric. barre):	9.9	cm

CALCOLO DI RESISTENZA - SFORZI PER OGNI COMBINAZIONE ASSEGNATA

N	Sforzo normale [daN] applicato nel baricentro (posit. se di compress.)
Mx	Momento flettente [daNm] intorno all'asse x baric. della sezione con verso positivo se tale da comprimere il lembo sup. della sezione
Vy	Taglio [daN] in direzione parallela all'asse y baric. della sezione
MT	Momento torcente [daN m]

N°Comb.	N	Mx	Vy	MT
1	204260	38480	31390	0

COMB. RARE (S.L.E.) - SFORZI PER OGNI COMBINAZIONE ASSEGNATA

N	Sforzo normale [daN] applicato nel baricentro (positivo se di compress.)
Mx	Coppia [daNm] applicata all'asse x baricentrico (tra parentesi il Momento di fessurazione) con verso positivo se tale da comprimere il lembo superiore della sezione

N°Comb.	N	Mx
1	131940	14330

COMB. FREQUENTI (S.L.E.) - SFORZI PER OGNI COMBINAZIONE ASSEGNATA

N	Sforzo normale [daN] applicato nel baricentro (positivo se di compress.)
Mx	Coppia [daNm] applicata all'asse x baricentrico (tra parentesi il Momento di fessurazione) con verso positivo se tale da comprimere il lembo superiore della sezione

N°Comb.	N	Mx

1 131940 14330 (315037)

COMB. QUASI PERMANENTI (S.L.E.) - SFORZI PER OGNI COMBINAZIONE ASSEGNATA

N Sforzo normale [daN] applicato nel baricentro (positivo se di compress.)
Mx Coppia [daNm] applicata all'asse x baricentrico (tra parentesi il Momento di fessurazione)
con verso positivo se tale da comprimere il lembo superiore della sezione

N°Comb.	N	Mx
1	120040	12290 (0)

RISULTATI DEL CALCOLO

Sezione verificata per tutte le combinazioni assegnate

Copriferro netto minimo barre longitudinali:	8.7	cm
Interferro netto minimo barre longitudinali:	7.0	cm
Interferro massimo barre longitudinali:	0.0	cm [deve essere < 0.0]
Copriferro netto minimo staffe:	7.5	cm

VERIFICHE DI RESISTENZA IN PRESSO-TENSO FLESSIONE ALLO STATO LIMITE ULTIMO

Ver S = combinazione verificata / N = combin. non verificata
N Sforzo normale [daN] applicato nel Baricentro (positivo se di compressione)
Mx Momento flettente assegnato [daNm] riferito all'asse x baricentrico
N Ult Sforzo normale ultimo [daN] nella sezione (positivo se di compress.)
Mx rd Momento flettente ultimo [daNm] riferito all'asse x baricentrico
Mis.Sic. Misura sicurezza = rapporto vettoriale tra (N rd, Mx rd) e (N, Mx)
Verifica positiva se tale rapporto risulta ≥ 1.000
Yn Ordinata [cm] dell'asse neutro alla massima resistenza nel sistema di rif. X,Y,O sez.
As Tot. Area complessiva armature long. pilastro [cm²]. (tra parentesi l'area minima di normativa)

N°Comb	Ver	N	Mx	N rd	Mx rd	Mis.Sic.	Yn	x/d	C.Rid.	As Tot.
1	S	204260	38480	204267	114560	2.977	3.9	---	---	90.5 (15.1)

DEFORMAZIONI UNITARIE ALLO STATO LIMITE ULTIMO

ec max Deform. unit. massima del conglomerato a compressione
Yc max Ordinata in cm della fibra corrisp. a ec max (sistema rif. X,Y,O sez.)
es min Deform. unit. minima nell'acciaio (negativa se di trazione)
Ys min Ordinata in cm della barra corrisp. a es min (sistema rif. X,Y,O sez.)
es max Deform. unit. massima nell'acciaio (positiva se di compressione)
Ys max Ordinata in cm della barra corrisp. a es max (sistema rif. X,Y,O sez.)

N°Comb	ec max	Yc max	es min	Ys min	es max	Ys max
1	0.00350	40.0	0.00254	30.1	-0.00330	-30.1

ARMATURE A TAGLIO E/O TORSIONE DI INVILUPPO PER LE COMBINAZIONI ASSEGNATE

Diametro staffe:	12	mm	
Passo staffe:	20.0	cm	[Passo massimo di normativa = 25.0 cm]
N.Bracci staffe:	2		
Area staffe/m :	11.3	cm ² /m	[Area Staffe Minima NTC = 2.3 cm ² /m]

VERIFICHE A TAGLIO

Ver S = comb.verificata a taglio-tors./ N = comb. non verificata
Ved Taglio agente [daN] uguale al taglio Vy di comb.
Ved Taglio agente [daN] uguale al taglio Vy di comb.
Vcd Taglio compressione resistente [daN] lato conglomerato [formula (4.1.28)NTC]
Vwd Taglio trazione resistente [daN] assorbito dalle staffe [formula (4.1.27)NTC]
bw|z Larghezza minima [cm] sezione misurata parallelam. all'asse neutro | Braccio coppia interna

Ctg Cotangente dell'angolo di inclinazione dei puntoni di conglomerato
Acw Coefficiente maggiorativo della resistenza a taglio per compressione
Ast Area staffe/metro strettamente necessaria per taglio e torsione [cm²/m]

N°Comb	Ver	Vcd	Vwd	bw z	Ctg	Acw	AST
1	S	31390	102327	51801 71.6 46.8	2.500	1.250	6.9

COMBINAZIONI RARE IN ESERCIZIO - VERIFICA MASSIME TENSIONI NORMALI

Ver S = combinazione verificata / N = combin. non verificata
Sc max Massima tensione di compress.(+) nel conglom. in fase fessurata [(daN/cm²)
Yc max Ordinata in cm della fibra corrisp. a Sc max (sistema rif. X,Y,O)
Sc min Minima tensione di compress.(+) nel conglom. in fase fessurata [(daN/cm²)
Yc min Ordinata in cm della fibra corrisp. a Sc min (sistema rif. X,Y,O)
Sf min Minima tensione di trazione (-) nell'acciaio [daN/cm²)
Ys min Ordinata in cm della barra corrisp. a Sf min (sistema rif. X,Y,O)
Dw Eff. Spessore di conglomerato [cm] in zona tesa considerata aderente alle barre
Ac eff. Area di congl. [cm²] in zona tesa aderente alle barre (verifica fess.)
As eff. Area Barre tese di acciaio [cm²] ricadente nell'area efficace(verifica fess.)

N°Comb	Ver	Sc max	Yc max	Sc min	Yc min	Sf min	Ys min	Dw Eff.	Ac Eff.	As Eff.	D barre
1	S	42.5	-40.0	0.0	40.0	63	30.1	0.0	2098	0.0	---

COMBINAZIONI RARE IN ESERCIZIO - VERIFICA APERTURA FESSURE (NTC/EC2)

Ver Esito verifica
e1 Minima deformazione unitaria (trazione: segno -) nel calcestruzzo in sez. fessurata
e2 Massima deformazione unitaria (compress.: segno +) nel calcestruzzo in sez. fessurata
K2 = 0.5 per flessione; $= (e1 + e2) / (2 * e2)$ in trazione eccentrica per la (7.13)EC2 e la (C4.1.11)NTC
Kt fattore di durata del carico di cui alla (7.9) dell'EC2
e sm Deformazione media acciaio tra le fessure al netto di quella del cls. Tra parentesi il valore minimo = 0.6 Ss/Es
srm Distanza massima in mm tra le fessure
wk Apertura delle fessure in mm fornito dalla (7.8)EC2 e dalla (C4.1.7)NTC. Tra parentesi è indicato il valore limite.
M fess. Momento di prima fessurazione [daNm]

N°Comb	Ver	e1	e2	e3	K2	Kt	e sm	srm	wk	M Fess.
1	S	0.00000	0.00000		---	---	---	---	---	315037

COMBINAZIONI FREQUENTI IN ESERCIZIO - VERIFICA MASSIME TENSIONI NORMALI

N°Comb	Ver	Sc max	Yc max	Sc min	Yc min	Sf min	Ys min	Dw Eff.	Ac Eff.	As Eff.	D barre
1	S	42.5	-40.0	0.0	40.0	63	30.1	0.0	0	0.0	---

COMBINAZIONI FREQUENTI IN ESERCIZIO - VERIFICA APERTURA FESSURE (NTC/EC2)

N°Comb	Ver	e1	e2	e3	K2	Kt	e sm	srm	wk	M Fess.
1	S	0.00000	0.00000		---	---	---	---	---	315037

COMBINAZIONI QUASI PERMANENTI IN ESERCIZIO - VERIFICA MASSIME TENSIONI NORMALI

N°Comb	Ver	Sc max	Yc max	Sc min	Yc min	Sf min	Ys min	Dw Eff.	Ac Eff.	As Eff.	D barre
1	S	37.5	-40.0	0.1	40.0	71	30.1	0.0	0	0.0	---

COMBINAZIONI QUASI PERMANENTI IN ESERCIZIO - VERIFICA APERTURA FESSURE (NTC/EC2)

N°Comb	Ver	e1	e2	e3	K2	Kt	e sm	srm	wk	M Fess.
1	S	0.00000	0.00028		---	---	---	---	---	0

Per verificare il carico limite trasversale, si considerano i pali incastrati in sommità.

Considerando l'armatura suddetta, il momento di plasticizzazione risulta $M_y = 956 \text{ kNm}$

Si verifica facilmente, di seguito, che il comportamento di rottura è a “*pali lunghi*”, cioè la rottura si verifica con la formazione di due cerniere plastiche, una in testa ed una più in profondità lungo il fusto.

Essendo il modello di verifica al carico limite orizzontale di tipo semplificato (Broms, 1964), essendo i pali di fondazione immersi in terreni incoerenti, come detto essendo il modello di rottura a “palo lungo”, si eseguono le seguenti verifiche adottando, come previsto da normativa (par. 6.4.3.1.2) l'Approccio 2.

Come riportato di seguito, si ottiene una resistenza trasversale di progetto pari a:

$$H_d = 407 \text{ kN} > H_{\text{PROG.}} = 308 \text{ kN}$$

**CARICO LIMITE ORIZZONTALE DI UN PALO IN TERRENI INCOERENTI!
PALI CON ROTAZIONE IN TESTA IMPEDITA**

OPERA:

TEORIA DI BASE:

(Broms, 1964)

H = carico limite orizzontale

L = lunghezza del palo

D = diametro del palo

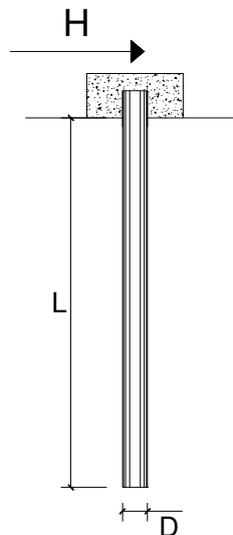
M_y = momento di plasticizzazione della sezione

F_s = coefficiente di sicurezza

ϕ' = angolo di attrito del terreno

k_p = coeff. di spinta passiva ($k_p = (1 + \sin\phi') / (1 - \sin\phi')$)

γ = peso di unità di volume del terreno (se è presente la falda $\gamma = \gamma'$)



Palo corto:
$$H = 1.5 k_p \gamma d^3 \left(\frac{L}{d} \right)^2$$

Palo intermedio:
$$H = \frac{1}{2} k_p \gamma d^3 \left(\frac{L}{d} \right)^2 + \frac{M_y}{L}$$

Palo lungo:
$$H = k_p \gamma d^3 \sqrt[3]{\left(3.676 \frac{M_y}{k_p \gamma d^4} \right)^2}$$

DATI DI IMPUT:

L =	22.00	(m)
D =	0.80	(m)
M_y =	587.00	(kN m)
F_s =	2.21	(-)
ϕ' =	35.00	(°)
k_p =	3.69	(-)
γ =	20.00	(kN/m ³)

Palo corto:

H1 =	42865.04	(kN)	H1/FS =	19395.95	(kN)
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Palo intermedio:

H2 =	14315.03	(kN)	H2/FS =	6477.39	(kN)
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Palo lungo:

H3 =	650.23	(kN)	H3/FS =	294.22	(kN)
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H = min(H1, H2, H3) = 650.23 (kN) palo lungo

10 FASCICOLO DEI CALCOLI

SOMMARIO

10	FASCICOLO DEI CALCOLI	1
10.1	Impalcato	1
10.1.1	Fase 0	1
10.1.2	Fase 1A	17
10.1.3	Fase 1B	33
10.1.4	Fase 1C	52
10.1.5	Fase 2	68
10.1.6	Fase sismica	246

10 FASCICOLO DEI CALCOLI

10.1 Impalcato

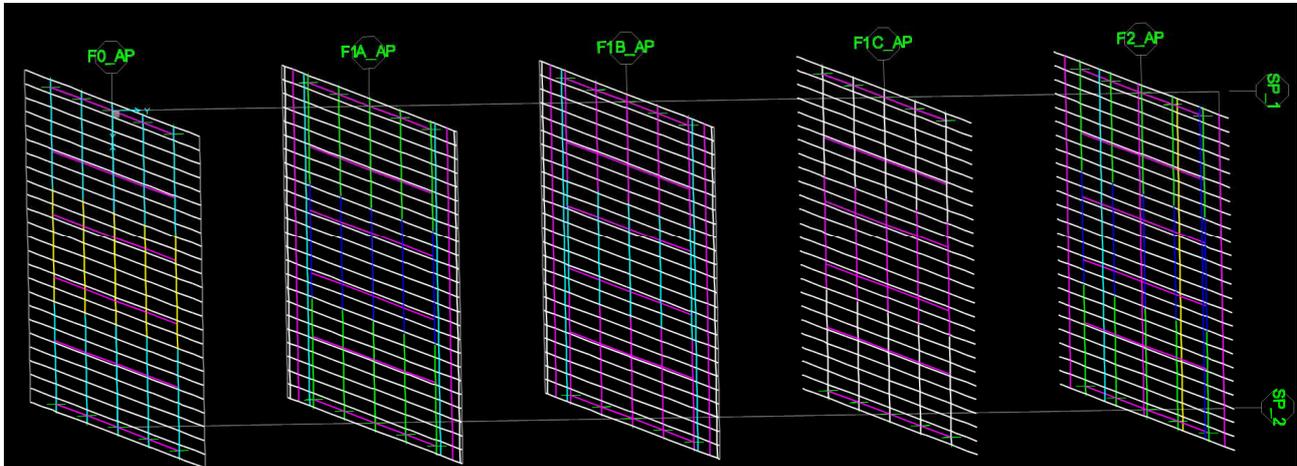


Figura 1 – Vista in pianta dei modelli FEM delle singole fasi (0, 1A, 1B, 1C, 2).

10.1.1 Fase 0

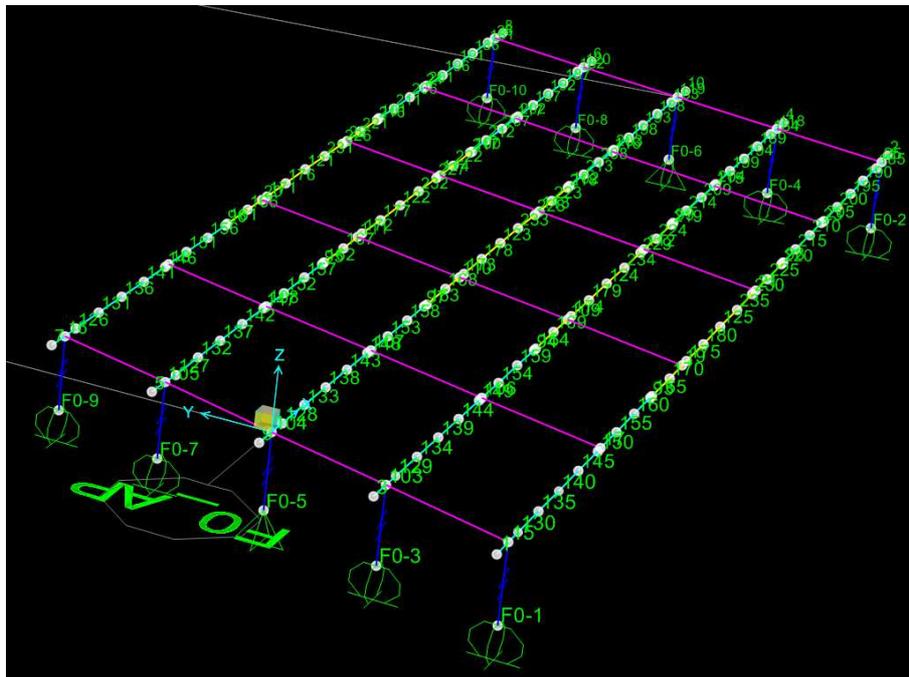


Figura 2 – Numerazione Joints modello FEM – Fase 0.

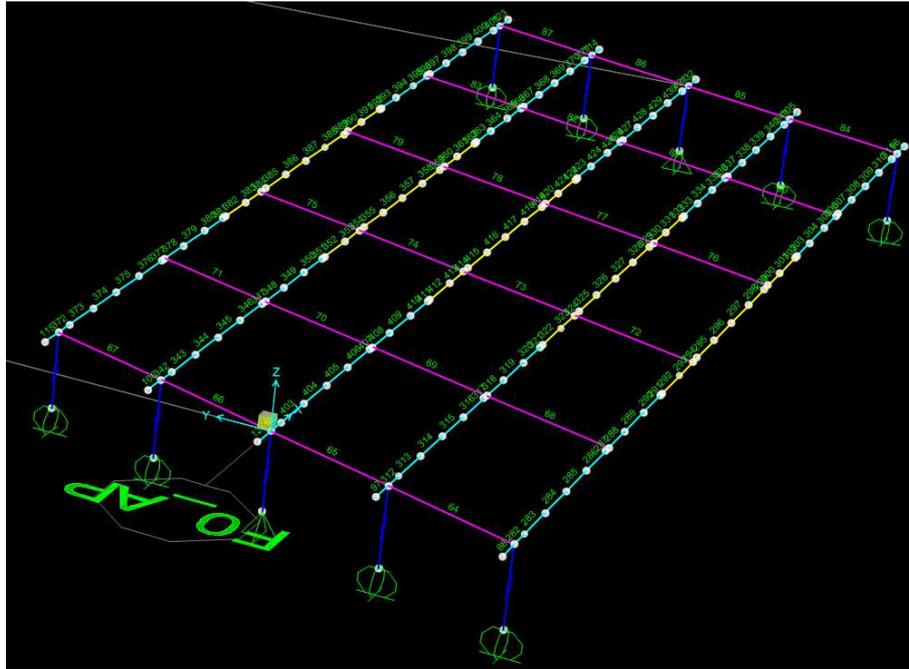


Figura 3 – Numerazione Frames modello FEM – Fase 0.

Carichi e combinazioni di carico – FASE 0

I carichi applicati alla struttura e la loro combinazione sono oggetto dei §5.2 e §5.3.

Sollecitazioni travi – FASE 0

TABLE: Element Forces - Frames									
Frame	Station	OutputCase	CaseType	P	V2	V3	T	M2	M3
Text	m	Text	Text	KN	KN	KN	KN-m	KN-m	KN-m
88	0	_G1	Combination	-1.6	26.5	9.0	-0.1	0.5	-4.0
88	0.29634	_G1	Combination	-1.6	27.6	9.0	-0.1	-2.1	-12.1
88	0.59268	_G1	Combination	-1.6	28.8	9.0	-0.1	-4.8	-20.4
96	0	_G1	Combination	6.3	-28.9	-10.4	0.1	-5.6	-20.1
96	0.29634	_G1	Combination	6.3	-27.8	-10.4	0.1	-2.5	-11.7
96	0.59269	_G1	Combination	6.3	-26.7	-10.4	0.1	0.6	-3.6
97	0	_G1	Combination	-0.8	15.3	-4.1	0.0	0.1	3.7
97	0.29634	_G1	Combination	-0.8	16.4	-4.1	0.0	1.3	-1.0
97	0.59268	_G1	Combination	-0.8	17.5	-4.1	0.0	2.5	-6.0
105	0	_G1	Combination	-5.0	-17.1	5.2	0.0	2.8	-5.7
105	0.29634	_G1	Combination	-5.0	-16.0	5.2	0.0	1.3	-0.7
105	0.59268	_G1	Combination	-5.0	-14.9	5.2	0.0	-0.3	3.9
106	0	_G1	Combination	-5.0	14.9	5.2	0.0	0.3	3.9
106	0.29634	_G1	Combination	-5.0	16.0	5.2	0.0	-1.3	-0.7

106	0.59268	_G1	Combination	-5.0	17.1	5.2	0.0	-2.8	-5.7
114	0	_G1	Combination	-0.8	-17.5	-4.1	0.0	-2.5	-6.0
114	0.29634	_G1	Combination	-0.8	-16.4	-4.1	0.0	-1.3	-1.0
114	0.59268	_G1	Combination	-0.8	-15.3	-4.1	0.0	-0.1	3.7
115	0	_G1	Combination	6.3	26.7	-10.4	0.1	-0.6	-3.7
115	0.29634	_G1	Combination	6.3	27.8	-10.4	0.1	2.5	-11.7
115	0.59268	_G1	Combination	6.3	28.9	-10.4	0.1	5.6	-20.1
123	0	_G1	Combination	-1.6	-28.8	9.0	-0.1	4.8	-20.4
123	0.29634	_G1	Combination	-1.6	-27.6	9.0	-0.1	2.1	-12.1
123	0.59269	_G1	Combination	-1.6	-26.5	9.0	-0.1	-0.5	-4.0
124	0	_G1	Combination	1.1	15.8	0.3	0.0	0.2	0.3
124	0.29634	_G1	Combination	1.1	16.9	0.3	0.0	0.1	-4.5
124	0.59268	_G1	Combination	1.1	18.0	0.3	0.0	0.0	-9.7
132	0	_G1	Combination	1.1	-18.0	0.3	0.0	0.0	-9.7
132	0.29634	_G1	Combination	1.1	-16.9	0.3	0.0	-0.1	-4.5
132	0.59268	_G1	Combination	1.1	-15.8	0.3	0.0	-0.2	0.3
282	0	_G1	Combination	9.4	-308.2	-21.7	0.1	-6.6	-20.5
282	0.48492	_G1	Combination	9.4	-306.4	-21.7	0.1	4.0	128.5
283	0	_G1	Combination	3.5	-279.7	-11.7	0.0	-5.6	127.3
283	0.3592	_G1	Combination	3.5	-278.4	-11.7	0.0	-1.4	227.6
283	0.7184	_G1	Combination	3.5	-277.0	-11.7	0.0	2.8	327.3
283	1.0776	_G1	Combination	3.5	-275.7	-11.7	0.0	7.0	426.6
284	0	_G1	Combination	-1.2	-249.3	-2.5	0.0	0.6	424.2
284	0.3592	_G1	Combination	-1.2	-247.9	-2.5	0.0	1.5	513.5
284	0.7184	_G1	Combination	-1.2	-246.6	-2.5	0.0	2.4	602.3
284	1.0776	_G1	Combination	-1.2	-245.2	-2.5	0.0	3.3	690.6
285	0	_G1	Combination	-2.4	-219.5	7.4	-0.1	5.9	685.3
285	0.3592	_G1	Combination	-2.4	-218.2	7.4	-0.1	3.2	763.9
285	0.7184	_G1	Combination	-2.4	-216.9	7.4	-0.1	0.6	842.0
285	1.0776	_G1	Combination	-2.4	-215.5	7.4	-0.1	-2.1	919.7
286	0	_G1	Combination	-0.3	-191.3	19.9	-0.1	10.1	911.2
286	0.3592	_G1	Combination	-0.3	-190.0	19.9	-0.1	2.9	979.7
286	0.7184	_G1	Combination	-0.3	-188.6	19.9	-0.1	-4.2	1047.7
286	1.0776	_G1	Combination	-0.3	-187.3	19.9	-0.1	-11.4	1115.2
287	0	_G1	Combination	-3.0	-165.4	36.2	-0.5	-5.3	1109.9
287	0.16466	_G1	Combination	-3.0	-164.7	36.2	-0.5	-11.3	1137.1

288	0	_G1	Combination	20.2	-171.3	-23.9	0.0	-12.4	1137.1
288	0.45647	_G1	Combination	20.2	-169.6	-23.9	0.0	-1.5	1214.9
288	0.91294	_G1	Combination	20.2	-167.9	-23.9	0.0	9.4	1292.0
289	0	_G1	Combination	8.0	-144.9	-9.5	-0.1	-3.3	1295.3
289	0.3592	_G1	Combination	8.0	-143.6	-9.5	-0.1	0.1	1347.1
289	0.7184	_G1	Combination	8.0	-142.2	-9.5	-0.1	3.5	1398.4
289	1.07761	_G1	Combination	8.0	-140.9	-9.5	-0.1	6.9	1449.3
290	0	_G1	Combination	1.6	-117.2	3.4	-0.2	4.1	1448.2
290	0.47839	_G1	Combination	1.6	-115.4	3.4	-0.2	2.5	1503.9
290	0.95678	_G1	Combination	1.6	-113.6	3.4	-0.2	0.9	1558.6
291	0	_G1	Combination	1.6	-113.6	3.4	0.1	0.9	1558.5
291	0.12083	_G1	Combination	1.6	-113.1	3.4	0.1	0.5	1572.2
292	0	_G1	Combination	1.7	-90.3	16.2	-0.4	10.4	1565.5
292	0.3592	_G1	Combination	1.7	-88.7	16.2	-0.4	4.6	1597.7
292	0.7184	_G1	Combination	1.7	-87.1	16.2	-0.4	-1.2	1629.2
292	1.0776	_G1	Combination	1.7	-85.5	16.2	-0.4	-7.0	1660.2
293	0	_G1	Combination	4.2	-64.1	31.9	-0.4	9.2	1650.8
293	0.40712	_G1	Combination	4.2	-62.2	31.9	-0.4	-3.8	1676.5
293	0.81425	_G1	Combination	4.2	-60.4	31.9	-0.4	-16.8	1701.5
294	0	_G1	Combination	32.6	-65.4	-39.5	-0.2	-17.1	1701.6
294	0.26335	_G1	Combination	32.6	-64.3	-39.5	-0.2	-6.7	1718.7
295	0	_G1	Combination	21.8	-43.9	-22.1	-0.3	-13.3	1721.3
295	0.3592	_G1	Combination	21.8	-42.3	-22.1	-0.3	-5.3	1736.8
295	0.7184	_G1	Combination	21.8	-40.7	-22.1	-0.3	2.6	1751.7
295	1.0776	_G1	Combination	21.8	-39.1	-22.1	-0.3	10.6	1766.0
296	0	_G1	Combination	9.3	-17.3	-7.0	-0.3	-1.0	1770.8
296	0.37968	_G1	Combination	9.3	-15.7	-7.0	-0.3	1.6	1777.0
296	0.75936	_G1	Combination	9.3	-14.0	-7.0	-0.3	4.3	1782.6
296	1.13904	_G1	Combination	9.3	-12.3	-7.0	-0.3	6.9	1787.6
297	0	_G1	Combination	3.7	10.2	7.2	-0.4	7.1	1786.3
297	0.37968	_G1	Combination	3.7	11.8	7.2	-0.4	4.4	1782.1
297	0.75936	_G1	Combination	3.7	13.5	7.2	-0.4	1.6	1777.3
297	1.13904	_G1	Combination	3.7	15.2	7.2	-0.4	-1.1	1771.9
298	0	_G1	Combination	4.1	37.0	22.6	-0.4	10.9	1764.8
298	0.3592	_G1	Combination	4.1	38.6	22.6	-0.4	2.8	1751.2
298	0.7184	_G1	Combination	4.1	40.2	22.6	-0.4	-5.3	1737.1

298	1.0776	_G1	Combination	4.1	41.8	22.6	-0.4	-13.5	1722.4
299	0	_G1	Combination	1.4	62.0	40.2	-0.5	-6.1	1717.7
299	0.26335	_G1	Combination	1.4	63.2	40.2	-0.5	-16.7	1701.2
300	0	_G1	Combination	30.0	58.1	-32.1	-0.2	-17.2	1701.3
300	0.40713	_G1	Combination	30.0	59.9	-32.1	-0.2	-4.1	1677.2
300	0.81425	_G1	Combination	30.0	61.8	-32.1	-0.2	8.9	1652.5
301	0	_G1	Combination	15.0	83.2	-16.4	-0.3	-7.1	1659.7
301	0.3592	_G1	Combination	15.0	84.8	-16.4	-0.3	-1.2	1629.5
301	0.7184	_G1	Combination	15.0	86.4	-16.4	-0.3	4.6	1598.8
301	1.07761	_G1	Combination	15.0	88.0	-16.4	-0.3	10.5	1567.5
302	0	_G1	Combination	4.6	110.9	-3.5	-0.5	0.5	1571.2
302	0.12083	_G1	Combination	4.6	111.5	-3.5	-0.5	0.9	1557.8
303	0	_G1	Combination	4.6	111.5	-3.5	-0.2	0.9	1558.2
303	0.47839	_G1	Combination	4.6	113.3	-3.5	-0.2	2.6	1504.4
303	0.95677	_G1	Combination	4.6	115.1	-3.5	-0.2	4.2	1449.8
304	0	_G1	Combination	0.6	138.8	9.8	-0.2	7.2	1447.8
304	0.3592	_G1	Combination	0.6	140.2	9.8	-0.2	3.6	1397.7
304	0.7184	_G1	Combination	0.6	141.5	9.8	-0.2	0.1	1347.1
304	1.0776	_G1	Combination	0.6	142.8	9.8	-0.2	-3.4	1296.1
305	0	_G1	Combination	1.2	165.8	25.0	-0.3	9.9	1290.2
305	0.45647	_G1	Combination	1.2	167.5	25.0	-0.3	-1.5	1214.1
305	0.91294	_G1	Combination	1.2	169.2	25.0	-0.3	-12.9	1137.3
306	0	_G1	Combination	27.0	162.3	-38.2	0.3	-12.4	1137.6
306	0.16466	_G1	Combination	27.0	162.9	-38.2	0.3	-6.1	1110.8
307	0	_G1	Combination	16.5	184.8	-21.2	-0.1	-12.2	1114.0
307	0.3592	_G1	Combination	16.5	186.2	-21.2	-0.1	-4.6	1047.4
307	0.7184	_G1	Combination	16.5	187.5	-21.2	-0.1	3.0	980.2
307	1.0776	_G1	Combination	16.5	188.9	-21.2	-0.1	10.6	912.6
308	0	_G1	Combination	3.9	213.2	-8.1	-0.1	-2.3	918.8
308	0.3592	_G1	Combination	3.9	214.6	-8.1	-0.1	0.6	842.0
308	0.7184	_G1	Combination	3.9	215.9	-8.1	-0.1	3.5	764.7
308	1.0776	_G1	Combination	3.9	217.2	-8.1	-0.1	6.4	686.9
309	0	_G1	Combination	-3.3	243.2	2.5	-0.1	3.5	689.5
309	0.3592	_G1	Combination	-3.3	244.5	2.5	-0.1	2.6	602.0
309	0.7184	_G1	Combination	-3.3	245.8	2.5	-0.1	1.7	513.9
309	1.0776	_G1	Combination	-3.3	247.2	2.5	-0.1	0.8	425.3

310	0	_G1	Combination	-6.3	273.8	12.9	-0.1	7.8	425.3
310	0.3592	_G1	Combination	-6.3	275.2	12.9	-0.1	3.2	326.7
310	0.7184	_G1	Combination	-6.3	276.5	12.9	-0.1	-1.4	227.6
310	1.0776	_G1	Combination	-6.3	277.8	12.9	-0.1	-6.0	128.1
311	0	_G1	Combination	-8.7	304.6	24.4	-0.2	4.7	127.8
311	0.48492	_G1	Combination	-8.7	306.4	24.4	-0.2	-7.1	-20.3
312	0	_G1	Combination	-3.6	-272.8	5.1	0.0	0.6	-5.9
312	0.48492	_G1	Combination	-3.6	-271.0	5.1	0.0	-1.8	125.9
313	0	_G1	Combination	0.2	-255.5	2.3	0.0	1.2	125.5
313	0.3592	_G1	Combination	0.2	-254.2	2.3	0.0	0.4	217.1
313	0.7184	_G1	Combination	0.2	-252.8	2.3	0.0	-0.5	308.1
313	1.0776	_G1	Combination	0.2	-251.5	2.3	0.0	-1.3	398.7
314	0	_G1	Combination	2.1	-236.1	1.4	-0.1	0.7	399.6
314	0.3592	_G1	Combination	2.1	-234.8	1.4	-0.1	0.2	484.2
314	0.7184	_G1	Combination	2.1	-233.4	1.4	-0.1	-0.3	568.3
314	1.0776	_G1	Combination	2.1	-232.1	1.4	-0.1	-0.8	651.9
315	0	_G1	Combination	0.0	-216.4	2.0	-0.1	1.2	655.4
315	0.3592	_G1	Combination	0.0	-215.0	2.0	-0.1	0.5	732.9
315	0.7184	_G1	Combination	0.0	-213.7	2.0	-0.1	-0.2	809.9
315	1.0776	_G1	Combination	0.0	-212.3	2.0	-0.1	-0.9	886.4
316	0	_G1	Combination	-6.7	-195.5	4.3	-0.1	2.6	892.5
316	0.3592	_G1	Combination	-6.7	-194.1	4.3	-0.1	1.1	962.5
316	0.7184	_G1	Combination	-6.7	-192.8	4.3	-0.1	-0.5	1032.0
316	1.0776	_G1	Combination	-6.7	-191.4	4.3	-0.1	-2.0	1101.0
317	0	_G1	Combination	-11.5	-172.9	9.8	0.0	0.6	1103.9
317	0.16466	_G1	Combination	-11.5	-172.3	9.8	0.0	-1.0	1132.4
318	0	_G1	Combination	-4.6	-159.6	-6.5	-0.2	-2.8	1132.3
318	0.45647	_G1	Combination	-4.6	-157.9	-6.5	-0.2	0.2	1204.8
318	0.91294	_G1	Combination	-4.6	-156.2	-6.5	-0.2	3.2	1276.5
319	0	_G1	Combination	0.0	-138.5	-2.4	-0.1	-1.1	1272.1
319	0.3592	_G1	Combination	0.0	-137.2	-2.4	-0.1	-0.2	1321.6
319	0.7184	_G1	Combination	0.0	-135.8	-2.4	-0.1	0.6	1370.7
319	1.0776	_G1	Combination	0.0	-134.5	-2.4	-0.1	1.5	1419.2
320	0	_G1	Combination	0.2	-117.5	0.9	-0.2	0.6	1418.8
320	0.47839	_G1	Combination	0.2	-115.7	0.9	-0.2	0.2	1474.6
320	0.95677	_G1	Combination	0.2	-113.9	0.9	-0.2	-0.2	1529.6

321	0	_G1	Combination	0.2	-113.9	0.9	-0.1	-0.2	1529.5
321	0.12083	_G1	Combination	0.2	-113.4	0.9	-0.1	-0.3	1543.3
322	0	_G1	Combination	-5.5	-95.7	4.6	-0.3	2.8	1547.5
322	0.3592	_G1	Combination	-5.5	-94.1	4.6	-0.3	1.2	1581.6
322	0.7184	_G1	Combination	-5.5	-92.5	4.6	-0.3	-0.5	1615.2
322	1.0776	_G1	Combination	-5.5	-90.9	4.6	-0.3	-2.1	1648.1
323	0	_G1	Combination	-14.9	-72.1	10.1	-0.3	4.6	1654.8
323	0.40712	_G1	Combination	-14.9	-70.3	10.1	-0.3	0.5	1683.8
323	0.81425	_G1	Combination	-14.9	-68.5	10.1	-0.3	-3.7	1712.1
324	0	_G1	Combination	-5.2	-57.9	-14.6	-0.6	-4.5	1711.9
324	0.26335	_G1	Combination	-5.2	-56.7	-14.6	-0.6	-0.7	1727.0
325	0	_G1	Combination	-4.3	-37.2	-7.4	-0.3	-4.0	1723.6
325	0.3592	_G1	Combination	-4.3	-35.6	-7.4	-0.3	-1.3	1736.7
325	0.7184	_G1	Combination	-4.3	-34.0	-7.4	-0.3	1.4	1749.2
325	1.0776	_G1	Combination	-4.3	-32.4	-7.4	-0.3	4.0	1761.1
326	0	_G1	Combination	-0.9	-14.0	-2.2	-0.3	-1.0	1756.3
326	0.37968	_G1	Combination	-0.9	-12.3	-2.2	-0.3	-0.2	1761.2
326	0.75936	_G1	Combination	-0.9	-10.6	-2.2	-0.3	0.7	1765.6
326	1.13904	_G1	Combination	-0.9	-8.9	-2.2	-0.3	1.5	1769.3
327	0	_G1	Combination	-2.8	9.1	2.2	-0.3	1.5	1769.6
327	0.37968	_G1	Combination	-2.8	10.8	2.2	-0.3	0.7	1765.9
327	0.75936	_G1	Combination	-2.8	12.5	2.2	-0.3	-0.2	1761.4
327	1.13904	_G1	Combination	-2.8	14.2	2.2	-0.3	-1.0	1756.4
328	0	_G1	Combination	-10.7	32.7	7.2	-0.4	4.0	1761.8
328	0.3592	_G1	Combination	-10.7	34.3	7.2	-0.4	1.4	1749.7
328	0.7184	_G1	Combination	-10.7	35.9	7.2	-0.4	-1.2	1737.1
328	1.0776	_G1	Combination	-10.7	37.6	7.2	-0.4	-3.7	1723.9
329	0	_G1	Combination	-17.2	57.2	14.3	-0.1	0.6	1727.2
329	0.26335	_G1	Combination	-17.2	58.4	14.3	-0.1	-3.2	1712.0
330	0	_G1	Combination	-7.5	69.1	-10.1	-0.4	-4.1	1711.9
330	0.40712	_G1	Combination	-7.5	70.9	-10.1	-0.4	0.0	1683.4
330	0.81425	_G1	Combination	-7.5	72.8	-10.1	-0.4	4.1	1654.1
331	0	_G1	Combination	-2.4	91.5	-4.5	-0.3	-2.1	1647.5
331	0.3592	_G1	Combination	-2.4	93.1	-4.5	-0.3	-0.5	1614.3
331	0.7184	_G1	Combination	-2.4	94.7	-4.5	-0.3	1.2	1580.6
331	1.0776	_G1	Combination	-2.4	96.3	-4.5	-0.3	2.8	1546.3

332	0	_G1	Combination	0.3	113.9	-0.7	-0.2	-0.2	1542.7
332	0.12083	_G1	Combination	0.3	114.5	-0.7	-0.2	-0.1	1528.9
333	0	_G1	Combination	0.3	114.5	-0.7	-0.2	-0.1	1528.9
333	0.47839	_G1	Combination	0.3	116.3	-0.7	-0.2	0.2	1473.7
333	0.95677	_G1	Combination	0.3	118.1	-0.7	-0.2	0.5	1417.6
334	0	_G1	Combination	-2.6	135.1	2.3	-0.2	1.4	1419.2
334	0.3592	_G1	Combination	-2.6	136.4	2.3	-0.2	0.6	1370.5
334	0.7184	_G1	Combination	-2.6	137.8	2.3	-0.2	-0.2	1321.2
334	1.0776	_G1	Combination	-2.6	139.1	2.3	-0.2	-1.0	1271.5
335	0	_G1	Combination	-10.7	156.8	5.9	-0.1	3.2	1276.9
335	0.45647	_G1	Combination	-10.7	158.5	5.9	-0.1	0.5	1204.9
335	0.91294	_G1	Combination	-10.7	160.3	5.9	-0.1	-2.2	1132.1
336	0	_G1	Combination	-5.4	173.6	-8.6	-0.3	-1.8	1132.0
336	0.16466	_G1	Combination	-5.4	174.2	-8.6	-0.3	-0.4	1103.3
337	0	_G1	Combination	-4.2	192.8	-3.5	-0.1	-1.6	1100.2
337	0.3592	_G1	Combination	-4.2	194.2	-3.5	-0.1	-0.4	1030.7
337	0.7184	_G1	Combination	-4.2	195.5	-3.5	-0.1	0.9	960.8
337	1.0776	_G1	Combination	-4.2	196.8	-3.5	-0.1	2.2	890.3
338	0	_G1	Combination	1.4	213.5	-1.4	-0.1	-0.7	884.9
338	0.3592	_G1	Combination	1.4	214.8	-1.4	-0.1	-0.2	807.9
338	0.7184	_G1	Combination	1.4	216.2	-1.4	-0.1	0.4	730.5
338	1.0776	_G1	Combination	1.4	217.5	-1.4	-0.1	0.9	652.7
339	0	_G1	Combination	3.5	232.9	-1.4	-0.1	-0.8	650.8
339	0.3592	_G1	Combination	3.5	234.2	-1.4	-0.1	-0.3	566.9
339	0.7184	_G1	Combination	3.5	235.6	-1.4	-0.1	0.2	482.5
339	1.0776	_G1	Combination	3.5	236.9	-1.4	-0.1	0.7	397.7
340	0	_G1	Combination	2.4	251.9	-3.2	0.0	-1.8	398.6
340	0.3592	_G1	Combination	2.4	253.2	-3.2	0.0	-0.6	307.9
340	0.7184	_G1	Combination	2.4	254.6	-3.2	0.0	0.5	216.7
340	1.0776	_G1	Combination	2.4	255.9	-3.2	0.0	1.7	125.0
341	0	_G1	Combination	0.9	271.1	-7.2	0.0	-2.0	126.4
341	0.48492	_G1	Combination	0.9	273.0	-7.2	0.0	1.5	-5.6
342	0	_G1	Combination	0.9	-273.0	-7.2	0.0	-1.5	-5.6
342	0.48492	_G1	Combination	0.9	-271.1	-7.2	0.0	2.0	126.4
343	0	_G1	Combination	2.4	-255.9	-3.2	0.0	-1.7	125.0
343	0.3592	_G1	Combination	2.4	-254.6	-3.2	0.0	-0.5	216.7

343	0.7184	_G1	Combination	2.4	-253.2	-3.2	0.0	0.6	307.9
343	1.0776	_G1	Combination	2.4	-251.9	-3.2	0.0	1.8	398.6
344	0	_G1	Combination	3.5	-236.9	-1.4	-0.1	-0.7	397.7
344	0.3592	_G1	Combination	3.5	-235.6	-1.4	-0.1	-0.2	482.5
344	0.7184	_G1	Combination	3.5	-234.2	-1.4	-0.1	0.3	566.9
344	1.0776	_G1	Combination	3.5	-232.9	-1.4	-0.1	0.8	650.8
345	0	_G1	Combination	1.4	-217.5	-1.4	-0.1	-0.9	652.7
345	0.3592	_G1	Combination	1.4	-216.2	-1.4	-0.1	-0.4	730.6
345	0.7184	_G1	Combination	1.4	-214.8	-1.4	-0.1	0.2	808.0
345	1.0776	_G1	Combination	1.4	-213.5	-1.4	-0.1	0.7	884.9
346	0	_G1	Combination	-4.2	-196.9	-3.5	-0.1	-2.2	890.3
346	0.3592	_G1	Combination	-4.2	-195.5	-3.5	-0.1	-0.9	960.8
346	0.7184	_G1	Combination	-4.2	-194.2	-3.5	-0.1	0.4	1030.8
346	1.0776	_G1	Combination	-4.2	-192.8	-3.5	-0.1	1.6	1100.3
347	0	_G1	Combination	-5.4	-174.2	-8.6	-0.3	0.4	1103.3
347	0.16466	_G1	Combination	-5.4	-173.6	-8.6	-0.3	1.8	1132.0
348	0	_G1	Combination	-10.7	-160.3	5.9	-0.1	2.2	1132.1
348	0.45647	_G1	Combination	-10.7	-158.5	5.9	-0.1	-0.5	1204.9
348	0.91294	_G1	Combination	-10.7	-156.8	5.9	-0.1	-3.2	1276.9
349	0	_G1	Combination	-2.6	-139.1	2.3	-0.2	1.0	1271.5
349	0.3592	_G1	Combination	-2.6	-137.8	2.3	-0.2	0.2	1321.2
349	0.7184	_G1	Combination	-2.6	-136.4	2.3	-0.2	-0.6	1370.5
349	1.0776	_G1	Combination	-2.6	-135.1	2.3	-0.2	-1.4	1419.2
350	0	_G1	Combination	0.3	-118.1	-0.7	-0.2	-0.5	1417.7
350	0.47839	_G1	Combination	0.3	-116.3	-0.7	-0.2	-0.2	1473.7
350	0.95677	_G1	Combination	0.3	-114.5	-0.7	-0.2	0.1	1528.9
351	0	_G1	Combination	0.3	-114.5	-0.7	-0.2	0.1	1528.9
351	0.12083	_G1	Combination	0.3	-113.9	-0.7	-0.2	0.2	1542.7
352	0	_G1	Combination	-2.4	-96.3	-4.5	-0.3	-2.8	1546.3
352	0.3592	_G1	Combination	-2.4	-94.7	-4.5	-0.3	-1.2	1580.6
352	0.7184	_G1	Combination	-2.4	-93.1	-4.5	-0.3	0.4	1614.3
352	1.0776	_G1	Combination	-2.4	-91.5	-4.5	-0.3	2.0	1647.5
353	0	_G1	Combination	-7.5	-72.8	-10.1	-0.4	-4.1	1654.1
353	0.40712	_G1	Combination	-7.5	-70.9	-10.1	-0.4	0.0	1683.4
353	0.81425	_G1	Combination	-7.5	-69.1	-10.1	-0.4	4.1	1711.9
354	0	_G1	Combination	-17.2	-58.4	14.3	-0.1	3.2	1712.0

354	0.26335	_G1	Combination	-17.2	-57.2	14.3	-0.1	-0.6	1727.2
355	0	_G1	Combination	-10.7	-37.5	7.2	-0.4	3.7	1723.9
355	0.3592	_G1	Combination	-10.7	-35.9	7.2	-0.4	1.2	1737.1
355	0.7184	_G1	Combination	-10.7	-34.3	7.2	-0.4	-1.4	1749.7
355	1.0776	_G1	Combination	-10.7	-32.7	7.2	-0.4	-4.0	1761.8
356	0	_G1	Combination	-2.8	-14.2	2.2	-0.3	1.0	1756.4
356	0.37968	_G1	Combination	-2.8	-12.5	2.2	-0.3	0.2	1761.5
356	0.75936	_G1	Combination	-2.8	-10.8	2.2	-0.3	-0.7	1765.9
356	1.13904	_G1	Combination	-2.8	-9.1	2.2	-0.3	-1.5	1769.7
357	0	_G1	Combination	-0.9	8.9	-2.2	-0.3	-1.5	1769.3
357	0.37968	_G1	Combination	-0.9	10.6	-2.2	-0.3	-0.7	1765.6
357	0.75936	_G1	Combination	-0.9	12.3	-2.2	-0.3	0.2	1761.3
357	1.13904	_G1	Combination	-0.9	14.0	-2.2	-0.3	1.0	1756.3
358	0	_G1	Combination	-4.3	32.4	-7.4	-0.3	-4.0	1761.2
358	0.3592	_G1	Combination	-4.3	34.0	-7.4	-0.3	-1.4	1749.2
358	0.7184	_G1	Combination	-4.3	35.6	-7.4	-0.3	1.3	1736.7
358	1.0776	_G1	Combination	-4.3	37.2	-7.4	-0.3	4.0	1723.7
359	0	_G1	Combination	-5.2	56.7	-14.6	-0.6	0.7	1727.0
359	0.26335	_G1	Combination	-5.2	57.9	-14.6	-0.6	4.5	1712.0
360	0	_G1	Combination	-14.9	68.5	10.1	-0.3	3.6	1712.1
360	0.40712	_G1	Combination	-14.9	70.3	10.1	-0.3	-0.5	1683.8
360	0.81425	_G1	Combination	-14.9	72.1	10.1	-0.3	-4.6	1654.9
361	0	_G1	Combination	-5.5	90.9	4.6	-0.3	2.1	1648.1
361	0.3592	_G1	Combination	-5.5	92.5	4.6	-0.3	0.5	1615.2
361	0.7184	_G1	Combination	-5.5	94.1	4.6	-0.3	-1.2	1581.7
361	1.0776	_G1	Combination	-5.5	95.7	4.6	-0.3	-2.8	1547.6
362	0	_G1	Combination	0.2	113.4	0.8	-0.1	0.3	1543.3
362	0.12083	_G1	Combination	0.2	113.9	0.8	-0.1	0.2	1529.6
363	0	_G1	Combination	0.2	113.9	0.8	-0.2	0.2	1529.6
363	0.47839	_G1	Combination	0.2	115.7	0.8	-0.2	-0.2	1474.6
363	0.95677	_G1	Combination	0.2	117.5	0.8	-0.2	-0.6	1418.9
364	0	_G1	Combination	0.0	134.5	-2.4	-0.1	-1.5	1419.2
364	0.3592	_G1	Combination	0.0	135.8	-2.4	-0.1	-0.6	1370.7
364	0.7184	_G1	Combination	0.0	137.2	-2.4	-0.1	0.2	1321.7
364	1.0776	_G1	Combination	0.0	138.5	-2.4	-0.1	1.1	1272.1
365	0	_G1	Combination	-4.6	156.2	-6.5	-0.2	-3.2	1276.5

365	0.45647	_G1	Combination	-4.6	157.9	-6.5	-0.2	-0.2	1204.8
365	0.91294	_G1	Combination	-4.6	159.6	-6.5	-0.2	2.8	1132.4
366	0	_G1	Combination	-11.5	172.3	9.8	0.0	1.0	1132.4
366	0.16466	_G1	Combination	-11.5	172.9	9.8	0.0	-0.6	1103.9
367	0	_G1	Combination	-6.7	191.4	4.3	-0.1	2.0	1101.0
367	0.3592	_G1	Combination	-6.7	192.8	4.3	-0.1	0.5	1032.0
367	0.7184	_G1	Combination	-6.7	194.1	4.3	-0.1	-1.1	962.5
367	1.0776	_G1	Combination	-6.7	195.5	4.3	-0.1	-2.6	892.5
368	0	_G1	Combination	0.0	212.3	2.0	-0.1	0.9	886.4
368	0.3592	_G1	Combination	0.0	213.7	2.0	-0.1	0.2	809.9
368	0.7184	_G1	Combination	0.0	215.0	2.0	-0.1	-0.5	732.9
368	1.0776	_G1	Combination	0.0	216.4	2.0	-0.1	-1.2	655.4
369	0	_G1	Combination	2.1	232.1	1.4	-0.1	0.8	651.9
369	0.3592	_G1	Combination	2.1	233.5	1.4	-0.1	0.3	568.3
369	0.7184	_G1	Combination	2.1	234.8	1.4	-0.1	-0.2	484.2
369	1.0776	_G1	Combination	2.1	236.1	1.4	-0.1	-0.7	399.6
370	0	_G1	Combination	0.2	251.5	2.3	0.0	1.3	398.7
370	0.3592	_G1	Combination	0.2	252.8	2.3	0.0	0.5	308.1
370	0.7184	_G1	Combination	0.2	254.2	2.3	0.0	-0.4	217.1
370	1.0776	_G1	Combination	0.2	255.5	2.3	0.0	-1.2	125.5
371	0	_G1	Combination	-3.6	271.0	5.1	0.0	1.8	125.9
371	0.48492	_G1	Combination	-3.6	272.8	5.1	0.0	-0.6	-5.9
372	0	_G1	Combination	-8.7	-306.5	24.4	-0.2	7.1	-20.3
372	0.48492	_G1	Combination	-8.7	-304.6	24.4	-0.2	-4.7	127.8
373	0	_G1	Combination	-6.3	-277.9	12.9	-0.1	6.0	128.1
373	0.3592	_G1	Combination	-6.3	-276.5	12.9	-0.1	1.4	227.6
373	0.7184	_G1	Combination	-6.3	-275.2	12.9	-0.1	-3.2	326.7
373	1.0776	_G1	Combination	-6.3	-273.8	12.9	-0.1	-7.8	425.3
374	0	_G1	Combination	-3.3	-247.2	2.5	-0.1	-0.8	425.4
374	0.3592	_G1	Combination	-3.3	-245.8	2.5	-0.1	-1.7	513.9
374	0.7184	_G1	Combination	-3.3	-244.5	2.5	-0.1	-2.6	602.0
374	1.0776	_G1	Combination	-3.3	-243.2	2.5	-0.1	-3.5	689.6
375	0	_G1	Combination	3.8	-217.2	-8.1	-0.1	-6.4	686.9
375	0.3592	_G1	Combination	3.8	-215.9	-8.1	-0.1	-3.5	764.7
375	0.7184	_G1	Combination	3.8	-214.6	-8.1	-0.1	-0.6	842.0
375	1.0776	_G1	Combination	3.8	-213.2	-8.1	-0.1	2.3	918.9

376	0	_G1	Combination	16.5	-188.9	-21.2	-0.1	-10.6	912.7
376	0.3592	_G1	Combination	16.5	-187.5	-21.2	-0.1	-3.0	980.3
376	0.7184	_G1	Combination	16.5	-186.2	-21.2	-0.1	4.6	1047.4
376	1.0776	_G1	Combination	16.5	-184.8	-21.2	-0.1	12.2	1114.0
377	0	_G1	Combination	27.0	-162.9	-38.2	0.3	6.1	1110.8
377	0.16466	_G1	Combination	27.0	-162.3	-38.2	0.3	12.4	1137.6
378	0	_G1	Combination	1.2	-169.2	25.0	-0.3	12.9	1137.3
378	0.45647	_G1	Combination	1.2	-167.5	25.0	-0.3	1.5	1214.2
378	0.91294	_G1	Combination	1.2	-165.8	25.0	-0.3	-9.9	1290.2
379	0	_G1	Combination	0.6	-142.8	9.8	-0.2	3.4	1296.1
379	0.3592	_G1	Combination	0.6	-141.5	9.8	-0.2	-0.1	1347.2
379	0.7184	_G1	Combination	0.6	-140.2	9.8	-0.2	-3.6	1397.8
379	1.07761	_G1	Combination	0.6	-138.8	9.8	-0.2	-7.2	1447.9
380	0	_G1	Combination	4.6	-115.1	-3.5	-0.2	-4.2	1449.9
380	0.47839	_G1	Combination	4.6	-113.3	-3.5	-0.2	-2.6	1504.5
380	0.95678	_G1	Combination	4.6	-111.5	-3.5	-0.2	-0.9	1558.2
381	0	_G1	Combination	4.6	-111.5	-3.5	-0.5	-0.9	1557.8
381	0.12083	_G1	Combination	4.6	-111.0	-3.5	-0.5	-0.5	1571.3
382	0	_G1	Combination	15.0	-88.0	-16.4	-0.3	-10.6	1567.5
382	0.3592	_G1	Combination	15.0	-86.4	-16.4	-0.3	-4.7	1598.8
382	0.7184	_G1	Combination	15.0	-84.8	-16.4	-0.3	1.2	1629.6
382	1.0776	_G1	Combination	15.0	-83.2	-16.4	-0.3	7.2	1659.7
383	0	_G1	Combination	30.0	-61.7	-32.1	-0.2	-9.0	1652.5
383	0.40712	_G1	Combination	30.0	-59.9	-32.1	-0.2	4.1	1677.3
383	0.81425	_G1	Combination	30.0	-58.1	-32.1	-0.2	17.2	1701.3
384	0	_G1	Combination	1.4	-63.2	40.2	-0.5	16.7	1701.2
384	0.26335	_G1	Combination	1.4	-62.0	40.2	-0.5	6.1	1717.7
385	0	_G1	Combination	4.1	-41.8	22.6	-0.4	13.5	1722.4
385	0.3592	_G1	Combination	4.1	-40.2	22.6	-0.4	5.3	1737.1
385	0.7184	_G1	Combination	4.1	-38.6	22.6	-0.4	-2.8	1751.3
385	1.0776	_G1	Combination	4.1	-37.0	22.6	-0.4	-10.9	1764.8
386	0	_G1	Combination	3.7	-15.2	7.2	-0.4	1.1	1771.9
386	0.37968	_G1	Combination	3.7	-13.5	7.2	-0.4	-1.6	1777.4
386	0.75936	_G1	Combination	3.7	-11.8	7.2	-0.4	-4.4	1782.2
386	1.13904	_G1	Combination	3.7	-10.2	7.2	-0.4	-7.1	1786.4
387	0	_G1	Combination	9.3	12.3	-7.0	-0.3	-6.9	1787.7

387	0.37968	_G1	Combination	9.3	14.0	-7.0	-0.3	-4.3	1782.7
387	0.75936	_G1	Combination	9.3	15.7	-7.0	-0.3	-1.6	1777.1
387	1.13904	_G1	Combination	9.3	17.3	-7.0	-0.3	1.0	1770.8
388	0	_G1	Combination	21.8	39.1	-22.1	-0.3	-10.6	1766.1
388	0.3592	_G1	Combination	21.8	40.7	-22.1	-0.3	-2.6	1751.7
388	0.7184	_G1	Combination	21.8	42.3	-22.1	-0.3	5.3	1736.8
388	1.0776	_G1	Combination	21.8	43.9	-22.1	-0.3	13.3	1721.3
389	0	_G1	Combination	32.6	64.3	-39.5	-0.2	6.7	1718.7
389	0.26336	_G1	Combination	32.6	65.4	-39.5	-0.2	17.1	1701.6
390	0	_G1	Combination	4.2	60.4	32.0	-0.4	16.8	1701.6
390	0.40713	_G1	Combination	4.2	62.2	32.0	-0.4	3.8	1676.6
390	0.81425	_G1	Combination	4.2	64.1	32.0	-0.4	-9.2	1650.9
391	0	_G1	Combination	1.7	85.4	16.2	-0.4	7.0	1660.3
391	0.3592	_G1	Combination	1.7	87.1	16.2	-0.4	1.2	1629.3
391	0.7184	_G1	Combination	1.7	88.7	16.2	-0.4	-4.6	1597.7
391	1.07761	_G1	Combination	1.7	90.3	16.2	-0.4	-10.5	1565.6
392	0	_G1	Combination	1.6	113.1	3.4	0.1	-0.5	1572.2
392	0.12083	_G1	Combination	1.6	113.6	3.4	0.1	-0.9	1558.5
393	0	_G1	Combination	1.6	113.6	3.4	-0.2	-0.9	1558.7
393	0.47839	_G1	Combination	1.6	115.4	3.4	-0.2	-2.5	1503.9
393	0.95677	_G1	Combination	1.6	117.2	3.4	-0.2	-4.1	1448.3
394	0	_G1	Combination	8.0	140.9	-9.5	-0.1	-6.9	1449.3
394	0.3592	_G1	Combination	8.0	142.3	-9.5	-0.1	-3.5	1398.5
394	0.7184	_G1	Combination	8.0	143.6	-9.5	-0.1	-0.1	1347.1
394	1.0776	_G1	Combination	8.0	144.9	-9.5	-0.1	3.3	1295.3
395	0	_G1	Combination	20.2	167.9	-23.9	0.0	-9.4	1292.0
395	0.45647	_G1	Combination	20.2	169.6	-23.9	0.0	1.5	1215.0
395	0.91294	_G1	Combination	20.2	171.3	-23.9	0.0	12.4	1137.1
396	0	_G1	Combination	-3.0	164.7	36.2	-0.5	11.3	1137.1
396	0.16466	_G1	Combination	-3.0	165.4	36.2	-0.5	5.3	1110.0
397	0	_G1	Combination	-0.3	187.3	19.9	-0.1	11.4	1115.2
397	0.3592	_G1	Combination	-0.3	188.6	19.9	-0.1	4.2	1047.7
397	0.7184	_G1	Combination	-0.3	190.0	19.9	-0.1	-2.9	979.7
397	1.0776	_G1	Combination	-0.3	191.3	19.9	-0.1	-10.1	911.2
398	0	_G1	Combination	-2.4	215.5	7.4	-0.1	2.1	919.7
398	0.3592	_G1	Combination	-2.4	216.9	7.4	-0.1	-0.6	842.0

398	0.7184	_G1	Combination	-2.4	218.2	7.4	-0.1	-3.2	763.9
398	1.0776	_G1	Combination	-2.4	219.5	7.4	-0.1	-5.9	685.3
399	0	_G1	Combination	-1.2	245.3	-2.5	0.0	-3.3	690.6
399	0.3592	_G1	Combination	-1.2	246.6	-2.5	0.0	-2.4	602.3
399	0.7184	_G1	Combination	-1.2	247.9	-2.5	0.0	-1.5	513.5
399	1.0776	_G1	Combination	-1.2	249.3	-2.5	0.0	-0.6	424.2
400	0	_G1	Combination	3.5	275.7	-11.7	0.0	-7.0	426.6
400	0.3592	_G1	Combination	3.5	277.0	-11.7	0.0	-2.8	327.3
400	0.7184	_G1	Combination	3.5	278.4	-11.7	0.0	1.4	227.6
400	1.0776	_G1	Combination	3.5	279.7	-11.7	0.0	5.6	127.3
401	0	_G1	Combination	9.4	306.4	-21.7	0.1	-4.0	128.5
401	0.48492	_G1	Combination	9.4	308.2	-21.7	0.1	6.6	-20.5
402	0	_G1	Combination	2.0	-273.6	-0.6	0.0	-0.3	-9.7
402	0.48492	_G1	Combination	2.0	-271.8	-0.6	0.0	0.0	122.6
403	0	_G1	Combination	0.2	-255.6	-0.3	0.0	-0.2	125.2
403	0.3592	_G1	Combination	0.2	-254.2	-0.3	0.0	-0.1	216.8
403	0.7184	_G1	Combination	0.2	-252.9	-0.3	0.0	0.1	307.9
403	1.0776	_G1	Combination	0.2	-251.6	-0.3	0.0	0.2	398.5
404	0	_G1	Combination	-1.2	-234.6	-0.1	-0.1	0.0	400.8
404	0.3592	_G1	Combination	-1.2	-233.2	-0.1	-0.1	0.0	484.8
404	0.7184	_G1	Combination	-1.2	-231.9	-0.1	-0.1	0.0	568.3
404	1.0776	_G1	Combination	-1.2	-230.5	-0.1	-0.1	0.0	651.4
405	0	_G1	Combination	-2.8	-212.9	0.2	-0.1	0.1	653.9
405	0.3592	_G1	Combination	-2.8	-211.6	0.2	-0.1	0.0	730.1
405	0.7184	_G1	Combination	-2.8	-210.2	0.2	-0.1	0.0	805.9
405	1.0776	_G1	Combination	-2.8	-208.9	0.2	-0.1	-0.1	881.2
406	0	_G1	Combination	-5.1	-190.6	0.5	-0.1	0.3	884.2
406	0.3592	_G1	Combination	-5.1	-189.2	0.5	-0.1	0.1	952.4
406	0.7184	_G1	Combination	-5.1	-187.9	0.5	-0.1	-0.1	1020.1
406	1.0776	_G1	Combination	-5.1	-186.5	0.5	-0.1	-0.3	1087.4
407	0	_G1	Combination	-7.0	-167.2	0.9	-0.1	0.6	1089.8
407	0.16466	_G1	Combination	-7.0	-166.6	0.9	-0.1	0.4	1117.3
408	0	_G1	Combination	-6.0	-163.2	-0.5	-0.1	-0.4	1117.4
408	0.45647	_G1	Combination	-6.0	-161.5	-0.5	-0.1	-0.1	1191.5
408	0.91294	_G1	Combination	-6.0	-159.8	-0.5	-0.1	0.1	1264.8
409	0	_G1	Combination	-5.9	-140.8	-0.2	-0.2	-0.1	1265.3

409	0.3592	_G1	Combination	-5.9	-139.4	-0.2	-0.2	0.0	1315.6
409	0.7184	_G1	Combination	-5.9	-138.1	-0.2	-0.2	0.0	1365.5
409	1.0776	_G1	Combination	-5.9	-136.7	-0.2	-0.2	0.1	1414.8
410	0	_G1	Combination	-6.6	-117.9	0.0	-0.2	0.0	1415.8
410	0.47839	_G1	Combination	-6.6	-116.1	0.0	-0.2	0.0	1471.7
410	0.95677	_G1	Combination	-6.6	-114.3	0.0	-0.2	0.0	1526.8
411	0	_G1	Combination	-6.6	-114.3	0.0	-0.2	0.0	1527.4
411	0.12083	_G1	Combination	-6.6	-113.7	0.0	-0.2	0.0	1541.2
412	0	_G1	Combination	-8.7	-94.5	0.1	-0.3	0.1	1543.5
412	0.3592	_G1	Combination	-8.7	-92.9	0.1	-0.3	0.0	1577.1
412	0.7184	_G1	Combination	-8.7	-91.2	0.1	-0.3	0.0	1610.2
412	1.0776	_G1	Combination	-8.7	-89.6	0.1	-0.3	-0.1	1642.7
413	0	_G1	Combination	-11.7	-69.7	0.2	-0.3	0.3	1645.8
413	0.40712	_G1	Combination	-11.7	-67.9	0.2	-0.3	0.2	1673.8
413	0.81425	_G1	Combination	-11.7	-66.0	0.2	-0.3	0.2	1701.1
414	0	_G1	Combination	-11.5	-61.4	-0.4	-0.3	-0.8	1701.1
414	0.26335	_G1	Combination	-11.5	-60.2	-0.4	-0.3	-0.7	1717.1
415	0	_G1	Combination	-10.7	-39.6	-0.2	-0.3	-0.2	1716.5
415	0.3592	_G1	Combination	-10.7	-38.0	-0.2	-0.3	-0.1	1730.4
415	0.7184	_G1	Combination	-10.7	-36.4	-0.2	-0.3	0.0	1743.8
415	1.0776	_G1	Combination	-10.7	-34.8	-0.2	-0.3	0.1	1756.6
416	0	_G1	Combination	-9.1	-14.9	-0.1	-0.3	-0.1	1755.1
416	0.37968	_G1	Combination	-9.1	-13.2	-0.1	-0.3	0.0	1760.4
416	0.75936	_G1	Combination	-9.1	-11.5	-0.1	-0.3	0.0	1765.1
416	1.13904	_G1	Combination	-9.1	-9.8	-0.1	-0.3	0.1	1769.2
417	0	_G1	Combination	-9.1	9.8	-0.1	-0.3	-0.1	1769.2
417	0.37968	_G1	Combination	-9.1	11.5	-0.1	-0.3	0.0	1765.1
417	0.75936	_G1	Combination	-9.1	13.2	-0.1	-0.3	0.0	1760.4
417	1.13904	_G1	Combination	-9.1	14.9	-0.1	-0.3	0.1	1755.1
418	0	_G1	Combination	-10.7	34.8	-0.2	-0.3	-0.1	1756.6
418	0.3592	_G1	Combination	-10.7	36.4	-0.2	-0.3	0.0	1743.8
418	0.7184	_G1	Combination	-10.7	38.0	-0.2	-0.3	0.1	1730.4
418	1.0776	_G1	Combination	-10.7	39.6	-0.2	-0.3	0.2	1716.5
419	0	_G1	Combination	-11.5	60.2	-0.4	-0.3	0.7	1717.1
419	0.26335	_G1	Combination	-11.5	61.4	-0.4	-0.3	0.8	1701.1
420	0	_G1	Combination	-11.7	66.0	0.2	-0.3	-0.2	1701.1

420	0.40712	_G1	Combination	-11.7	67.9	0.2	-0.3	-0.2	1673.8
420	0.81425	_G1	Combination	-11.7	69.7	0.2	-0.3	-0.3	1645.8
421	0	_G1	Combination	-8.6	89.6	0.1	-0.3	0.0	1642.7
421	0.3592	_G1	Combination	-8.6	91.2	0.1	-0.3	0.0	1610.2
421	0.7184	_G1	Combination	-8.6	92.9	0.1	-0.3	0.0	1577.1
421	1.0776	_G1	Combination	-8.6	94.5	0.1	-0.3	-0.1	1543.5
422	0	_G1	Combination	-6.6	113.7	0.0	-0.2	0.0	1541.2
422	0.12083	_G1	Combination	-6.6	114.3	0.0	-0.2	0.0	1527.4
423	0	_G1	Combination	-6.6	114.3	0.0	-0.2	0.0	1526.8
423	0.47839	_G1	Combination	-6.6	116.1	0.0	-0.2	0.0	1471.7
423	0.95677	_G1	Combination	-6.6	117.9	0.0	-0.2	0.0	1415.8
424	0	_G1	Combination	-5.9	136.7	-0.2	-0.2	-0.1	1414.8
424	0.3592	_G1	Combination	-5.9	138.1	-0.2	-0.2	0.0	1365.5
424	0.7184	_G1	Combination	-5.9	139.4	-0.2	-0.2	0.0	1315.6
424	1.0776	_G1	Combination	-5.9	140.8	-0.2	-0.2	0.1	1265.3
425	0	_G1	Combination	-6.0	159.8	-0.5	-0.1	-0.1	1264.8
425	0.45647	_G1	Combination	-6.0	161.5	-0.5	-0.1	0.1	1191.5
425	0.91294	_G1	Combination	-6.0	163.2	-0.5	-0.1	0.4	1117.4
426	0	_G1	Combination	-7.0	166.6	0.9	-0.1	-0.5	1117.3
426	0.16466	_G1	Combination	-7.0	167.2	0.9	-0.1	-0.6	1089.8
427	0	_G1	Combination	-5.1	186.5	0.5	-0.1	0.3	1087.4
427	0.3592	_G1	Combination	-5.1	187.9	0.5	-0.1	0.1	1020.1
427	0.7184	_G1	Combination	-5.1	189.2	0.5	-0.1	-0.1	952.4
427	1.0776	_G1	Combination	-5.1	190.6	0.5	-0.1	-0.3	884.2
428	0	_G1	Combination	-2.8	208.9	0.2	-0.1	0.1	881.2
428	0.3592	_G1	Combination	-2.8	210.2	0.2	-0.1	0.0	805.9
428	0.7184	_G1	Combination	-2.8	211.6	0.2	-0.1	0.0	730.1
428	1.0776	_G1	Combination	-2.8	212.9	0.2	-0.1	-0.1	653.9
429	0	_G1	Combination	-1.2	230.5	-0.1	-0.1	0.0	651.4
429	0.3592	_G1	Combination	-1.2	231.9	-0.1	-0.1	0.0	568.3
429	0.7184	_G1	Combination	-1.2	233.2	-0.1	-0.1	0.0	484.8
429	1.0776	_G1	Combination	-1.2	234.6	-0.1	-0.1	0.0	400.8
430	0	_G1	Combination	0.2	251.6	-0.3	0.0	-0.2	398.5
430	0.3592	_G1	Combination	0.2	252.9	-0.3	0.0	-0.1	307.9
430	0.7184	_G1	Combination	0.2	254.2	-0.3	0.0	0.1	216.8
430	1.0776	_G1	Combination	0.2	255.6	-0.3	0.0	0.2	125.2

431	0	_G1	Combination	2.0	271.8	-0.6	0.0	0.0	122.6
431	0.48492	_G1	Combination	2.0	273.6	-0.6	0.0	0.3	-9.7

Reazioni vincolari e spostamenti – FASE 0

Per le reazioni vincolari dei dispositivi di vincolo e i relativi spostamenti/rotazioni, si rimanda al §5.7.

10.1.2 Fase 1A

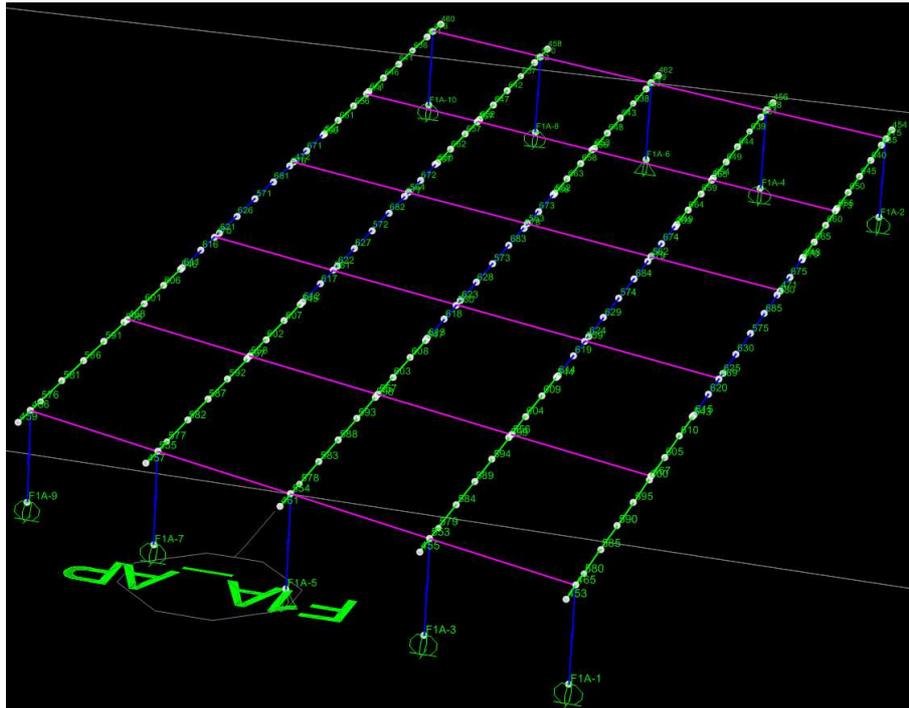


Figura 4 – Numerazione Joints modello FEM – Fase 1A.

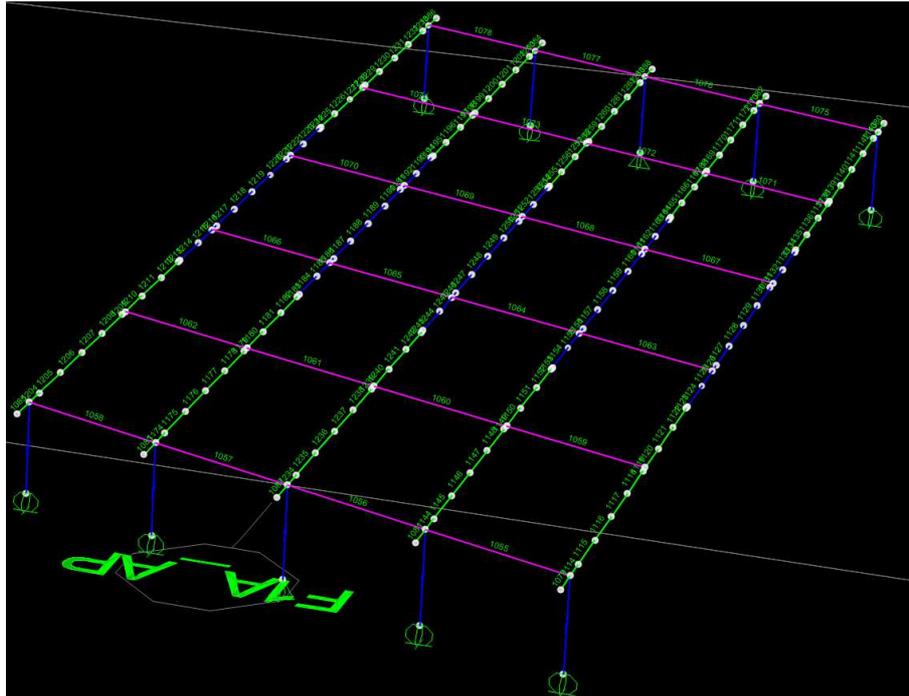


Figura 5 – Numerazione Frames modello FEM – Fase 1A.

Carichi e combinazioni di carico – FASE 1A

I carichi applicati alla struttura e la loro combinazione sono oggetto dei §5.2 e §5.3.

Sollecitazioni travi – FASE 1A

TABLE: Element Forces - Frames									
Frame	Station	OutputCase	CaseType	P	V2	V3	T	M2	M3
Text	m	Text	Text	KN	KN	KN	KN-m	KN-m	KN-m
1079	0	_G2	Combination	0.2	10.8	0.8	0.0	-0.9	-0.7
1079	0.29634	_G2	Combination	0.2	10.8	0.8	0.0	-1.2	-3.9
1079	0.59268	_G2	Combination	0.2	10.8	0.8	0.0	-1.4	-7.1
1080	0	_G2	Combination	1.1	-10.9	-1.4	0.0	-1.7	-7.1
1080	0.29634	_G2	Combination	1.1	-10.9	-1.4	0.0	-1.3	-3.9
1080	0.59269	_G2	Combination	1.1	-10.9	-1.4	0.0	-0.9	-0.7
1081	0	_G2	Combination	-0.2	9.7	-1.1	0.0	0.2	1.2
1081	0.29634	_G2	Combination	-0.2	9.7	-1.1	0.0	0.6	-1.7
1081	0.59268	_G2	Combination	-0.2	9.7	-1.1	0.0	0.9	-4.6
1082	0	_G2	Combination	-1.4	-9.6	1.6	0.0	1.1	-4.4
1082	0.29634	_G2	Combination	-1.4	-9.6	1.6	0.0	0.6	-1.5
1082	0.59268	_G2	Combination	-1.4	-9.6	1.6	0.0	0.1	1.3
1083	0	_G2	Combination	-1.5	9.6	1.7	0.0	-0.1	1.4

1083	0.29634	_G2	Combination	-1.5	9.6	1.7	0.0	-0.6	-1.5
1083	0.59268	_G2	Combination	-1.5	9.6	1.7	0.0	-1.1	-4.3
1084	0	_G2	Combination	-0.2	-9.7	-1.2	0.0	-0.9	-4.5
1084	0.29634	_G2	Combination	-0.2	-9.7	-1.2	0.0	-0.6	-1.6
1084	0.59268	_G2	Combination	-0.2	-9.7	-1.2	0.0	-0.2	1.2
1085	0	_G2	Combination	1.2	10.9	-1.5	0.0	0.9	-0.7
1085	0.29634	_G2	Combination	1.2	10.9	-1.5	0.0	1.3	-4.0
1085	0.59268	_G2	Combination	1.2	10.9	-1.5	0.0	1.8	-7.2
1086	0	_G2	Combination	0.1	-10.9	0.9	0.0	1.5	-7.2
1086	0.29634	_G2	Combination	0.1	-10.9	0.9	0.0	1.2	-4.0
1086	0.59269	_G2	Combination	0.1	-10.9	0.9	0.0	0.9	-0.7
1087	0	_G2	Combination	0.4	9.8	0.1	0.0	0.0	0.2
1087	0.29634	_G2	Combination	0.4	9.8	0.1	0.0	0.0	-2.7
1087	0.59268	_G2	Combination	0.4	9.8	0.1	0.0	-0.1	-5.6
1088	0	_G2	Combination	0.4	-9.8	0.1	0.0	0.0	-5.6
1088	0.29634	_G2	Combination	0.4	-9.8	0.1	0.0	0.0	-2.7
1088	0.59268	_G2	Combination	0.4	-9.8	0.1	0.0	0.0	0.2
1114	0	_G2	Combination	3.8	-145.1	-9.6	0.1	-2.2	-7.1
1114	0.48492	_G2	Combination	3.8	-145.1	-9.6	0.1	2.4	63.2
1115	0	_G2	Combination	0.8	-130.5	-5.0	0.0	-2.3	63.0
1115	0.3592	_G2	Combination	0.8	-130.5	-5.0	0.0	-0.5	109.9
1115	0.7184	_G2	Combination	0.8	-130.5	-5.0	0.0	1.3	156.8
1115	1.0776	_G2	Combination	0.8	-130.5	-5.0	0.0	3.1	203.6
1116	0	_G2	Combination	-1.2	-115.9	-0.8	0.0	0.3	202.6
1116	0.3592	_G2	Combination	-1.2	-115.9	-0.8	0.0	0.6	244.2
1116	0.7184	_G2	Combination	-1.2	-115.9	-0.8	0.0	0.9	285.8
1116	1.0776	_G2	Combination	-1.2	-115.9	-0.8	0.0	1.2	327.4
1117	0	_G2	Combination	-1.4	-101.6	3.6	0.0	2.7	324.8
1117	0.3592	_G2	Combination	-1.4	-101.6	3.6	0.0	1.4	361.3
1117	0.7184	_G2	Combination	-1.4	-101.6	3.6	0.0	0.1	397.8
1117	1.0776	_G2	Combination	-1.4	-101.6	3.6	0.0	-1.2	434.3
1118	0	_G2	Combination	0.0	-88.0	9.3	0.0	4.7	430.0
1118	0.3592	_G2	Combination	0.0	-88.0	9.3	0.0	1.4	461.6
1118	0.7184	_G2	Combination	0.0	-88.0	9.3	0.0	-2.0	493.2
1118	1.0776	_G2	Combination	0.0	-88.0	9.3	0.0	-5.3	524.8
1119	0	_G2	Combination	-0.7	-75.5	16.7	-0.2	-2.2	522.0

1119	0.16466	_G2	Combination	-0.7	-75.5	16.7	-0.2	-4.9	534.5
1120	0	_G2	Combination	9.7	-79.2	-10.4	0.0	-5.4	534.5
1120	0.45647	_G2	Combination	9.7	-79.2	-10.4	0.0	-0.6	570.6
1120	0.91294	_G2	Combination	9.7	-79.2	-10.4	0.0	4.1	606.8
1121	0	_G2	Combination	4.4	-66.2	-3.9	0.0	-1.3	608.1
1121	0.3592	_G2	Combination	4.4	-66.2	-3.9	0.0	0.1	631.9
1121	0.7184	_G2	Combination	4.4	-66.2	-3.9	0.0	1.5	655.7
1121	1.07761	_G2	Combination	4.4	-66.2	-3.9	0.0	2.9	679.5
1122	0	_G2	Combination	1.8	-52.9	1.9	0.0	2.0	678.7
1122	0.47839	_G2	Combination	1.8	-52.9	1.9	0.0	1.1	704.0
1122	0.95678	_G2	Combination	1.8	-52.9	1.9	0.0	0.2	729.3
1123	0	_G2	Combination	1.8	-52.9	1.9	0.1	0.2	729.2
1123	0.12083	_G2	Combination	1.8	-52.9	1.9	0.1	-0.1	735.6
1124	0	_G2	Combination	2.4	-40.0	7.8	-0.1	5.0	731.9
1124	0.3592	_G2	Combination	2.4	-40.0	7.8	-0.1	2.2	746.3
1124	0.7184	_G2	Combination	2.4	-40.0	7.8	-0.1	-0.6	760.7
1124	1.0776	_G2	Combination	2.4	-40.0	7.8	-0.1	-3.4	775.1
1125	0	_G2	Combination	4.2	-27.9	15.0	-0.1	4.5	770.1
1125	0.40712	_G2	Combination	4.2	-27.9	15.0	-0.1	-1.6	781.5
1125	0.81425	_G2	Combination	4.2	-27.9	15.0	-0.1	-7.7	792.8
1126	0	_G2	Combination	17.6	-31.1	-18.6	0.0	-7.9	792.8
1126	0.26335	_G2	Combination	17.6	-31.1	-18.6	0.0	-3.0	801.0
1127	0	_G2	Combination	12.5	-19.5	-10.6	0.0	-6.2	802.3
1127	0.3592	_G2	Combination	12.5	-19.5	-10.6	0.0	-2.4	809.3
1127	0.7184	_G2	Combination	12.5	-19.5	-10.6	0.0	1.4	816.3
1127	1.0776	_G2	Combination	12.5	-19.5	-10.6	0.0	5.2	823.3
1128	0	_G2	Combination	6.4	-7.0	-3.4	0.0	-0.5	825.9
1128	0.37968	_G2	Combination	6.4	-7.0	-3.4	0.0	0.8	828.5
1128	0.75936	_G2	Combination	6.4	-7.0	-3.4	0.0	2.1	831.2
1128	1.13904	_G2	Combination	6.4	-7.0	-3.4	0.0	3.4	833.8
1129	0	_G2	Combination	3.6	6.1	3.5	-0.1	3.4	833.2
1129	0.37968	_G2	Combination	3.6	6.1	3.5	-0.1	2.1	830.9
1129	0.75936	_G2	Combination	3.6	6.1	3.5	-0.1	0.8	828.6
1129	1.13904	_G2	Combination	3.6	6.1	3.5	-0.1	-0.5	826.3
1130	0	_G2	Combination	4.1	18.6	10.7	-0.1	5.3	822.7
1130	0.3592	_G2	Combination	4.1	18.6	10.7	-0.1	1.4	816.0

1130	0.7184	_G2	Combination	4.1	18.6	10.7	-0.1	-2.4	809.3
1130	1.0776	_G2	Combination	4.1	18.6	10.7	-0.1	-6.3	802.7
1131	0	_G2	Combination	2.8	30.2	18.9	-0.1	-2.7	800.5
1131	0.26335	_G2	Combination	2.8	30.2	18.9	-0.1	-7.7	792.5
1132	0	_G2	Combination	16.4	26.9	-15.2	0.0	-7.9	792.5
1132	0.40713	_G2	Combination	16.4	26.9	-15.2	0.0	-1.7	781.6
1132	0.81425	_G2	Combination	16.4	26.9	-15.2	0.0	4.5	770.7
1133	0	_G2	Combination	8.8	39.1	-7.9	0.0	-3.5	774.7
1133	0.3592	_G2	Combination	8.8	39.1	-7.9	0.0	-0.6	760.6
1133	0.7184	_G2	Combination	8.8	39.1	-7.9	0.0	2.2	746.6
1133	1.07761	_G2	Combination	8.8	39.1	-7.9	0.0	5.1	732.6
1134	0	_G2	Combination	3.5	52.0	-2.0	-0.2	-0.1	734.9
1134	0.12083	_G2	Combination	3.5	52.0	-2.0	-0.2	0.2	728.6
1135	0	_G2	Combination	3.5	52.0	-2.0	0.0	0.2	729.0
1135	0.47839	_G2	Combination	3.5	52.0	-2.0	0.0	1.1	704.1
1135	0.95677	_G2	Combination	3.5	52.0	-2.0	0.0	2.1	679.2
1136	0	_G2	Combination	1.3	65.3	4.0	0.0	3.0	678.7
1136	0.3592	_G2	Combination	1.3	65.3	4.0	0.0	1.5	655.2
1136	0.7184	_G2	Combination	1.3	65.3	4.0	0.0	0.1	631.8
1136	1.0776	_G2	Combination	1.3	65.3	4.0	0.0	-1.4	608.3
1137	0	_G2	Combination	1.4	78.3	10.9	-0.1	4.3	605.9
1137	0.45647	_G2	Combination	1.4	78.3	10.9	-0.1	-0.6	570.1
1137	0.91294	_G2	Combination	1.4	78.3	10.9	-0.1	-5.6	534.4
1138	0	_G2	Combination	13.0	74.4	-17.6	0.1	-5.4	534.5
1138	0.16466	_G2	Combination	13.0	74.4	-17.6	0.1	-2.5	522.2
1139	0	_G2	Combination	7.8	86.9	-9.8	0.0	-5.6	524.1
1139	0.3592	_G2	Combination	7.8	86.9	-9.8	0.0	-2.1	492.9
1139	0.7184	_G2	Combination	7.8	86.9	-9.8	0.0	1.5	461.7
1139	1.0776	_G2	Combination	7.8	86.9	-9.8	0.0	5.0	430.4
1140	0	_G2	Combination	1.5	100.6	-3.9	0.0	-1.3	433.8
1140	0.3592	_G2	Combination	1.5	100.6	-3.9	0.0	0.1	397.6
1140	0.7184	_G2	Combination	1.5	100.6	-3.9	0.0	1.5	361.5
1140	1.0776	_G2	Combination	1.5	100.6	-3.9	0.0	3.0	325.4
1141	0	_G2	Combination	-2.0	115.0	0.9	0.0	1.3	326.8
1141	0.3592	_G2	Combination	-2.0	115.0	0.9	0.0	1.0	285.5
1141	0.7184	_G2	Combination	-2.0	115.0	0.9	0.0	0.7	244.3

1141	1.0776	_G2	Combination	-2.0	115.0	0.9	0.0	0.4	203.0
1142	0	_G2	Combination	-3.5	129.6	5.5	0.0	3.4	202.9
1142	0.3592	_G2	Combination	-3.5	129.6	5.5	0.0	1.4	156.4
1142	0.7184	_G2	Combination	-3.5	129.6	5.5	0.0	-0.5	109.8
1142	1.0776	_G2	Combination	-3.5	129.6	5.5	0.0	-2.5	63.2
1143	0	_G2	Combination	-4.3	144.3	10.7	-0.1	2.7	62.8
1143	0.48492	_G2	Combination	-4.3	144.3	10.7	-0.1	-2.5	-7.2
1144	0	_G2	Combination	-1.0	-126.8	2.0	0.0	0.1	-4.5
1144	0.48492	_G2	Combination	-1.0	-126.8	2.0	0.0	-0.8	57.0
1145	0	_G2	Combination	1.0	-117.3	1.0	0.0	0.5	56.4
1145	0.3592	_G2	Combination	1.0	-117.3	1.0	0.0	0.1	98.5
1145	0.7184	_G2	Combination	1.0	-117.3	1.0	0.0	-0.2	140.7
1145	1.0776	_G2	Combination	1.0	-117.3	1.0	0.0	-0.6	182.8
1146	0	_G2	Combination	1.8	-107.9	0.8	0.0	0.4	183.1
1146	0.3592	_G2	Combination	1.8	-107.9	0.8	0.0	0.1	221.9
1146	0.7184	_G2	Combination	1.8	-107.9	0.8	0.0	-0.2	260.6
1146	1.0776	_G2	Combination	1.8	-107.9	0.8	0.0	-0.4	299.4
1147	0	_G2	Combination	0.4	-98.3	1.2	0.0	0.7	301.3
1147	0.3592	_G2	Combination	0.4	-98.3	1.2	0.0	0.2	336.6
1147	0.7184	_G2	Combination	0.4	-98.3	1.2	0.0	-0.2	371.9
1147	1.0776	_G2	Combination	0.4	-98.3	1.2	0.0	-0.6	407.2
1148	0	_G2	Combination	-3.5	-88.1	2.4	0.0	1.4	410.6
1148	0.3592	_G2	Combination	-3.5	-88.1	2.4	0.0	0.5	442.2
1148	0.7184	_G2	Combination	-3.5	-88.1	2.4	0.0	-0.3	473.9
1148	1.0776	_G2	Combination	-3.5	-88.1	2.4	0.0	-1.2	505.5
1149	0	_G2	Combination	-6.2	-77.1	5.1	0.0	0.4	507.3
1149	0.16466	_G2	Combination	-6.2	-77.1	5.1	0.0	-0.4	520.0
1150	0	_G2	Combination	-2.8	-73.3	-2.8	0.0	-1.2	520.0
1150	0.45647	_G2	Combination	-2.8	-73.3	-2.8	0.0	0.1	553.4
1150	0.91294	_G2	Combination	-2.8	-73.3	-2.8	0.0	1.4	586.9
1151	0	_G2	Combination	-0.7	-62.8	-0.8	0.0	-0.3	584.8
1151	0.3592	_G2	Combination	-0.7	-62.8	-0.8	0.0	0.0	607.4
1151	0.7184	_G2	Combination	-0.7	-62.8	-0.8	0.0	0.3	629.9
1151	1.0776	_G2	Combination	-0.7	-62.8	-0.8	0.0	0.5	652.5
1152	0	_G2	Combination	-0.9	-52.5	0.8	0.0	0.5	652.4
1152	0.47839	_G2	Combination	-0.9	-52.5	0.8	0.0	0.1	677.5

1152	0.95677	_G2	Combination	-0.9	-52.5	0.8	0.0	-0.3	702.7
1153	0	_G2	Combination	-0.9	-52.5	0.8	0.0	-0.3	702.7
1153	0.12083	_G2	Combination	-0.9	-52.5	0.8	0.0	-0.4	709.1
1154	0	_G2	Combination	-4.1	-41.9	2.8	0.0	1.7	711.6
1154	0.3592	_G2	Combination	-4.1	-41.9	2.8	0.0	0.7	726.7
1154	0.7184	_G2	Combination	-4.1	-41.9	2.8	0.0	-0.3	741.7
1154	1.0776	_G2	Combination	-4.1	-41.9	2.8	0.0	-1.3	756.8
1155	0	_G2	Combination	-9.2	-30.8	5.7	0.0	2.6	760.5
1155	0.40712	_G2	Combination	-9.2	-30.8	5.7	0.0	0.3	773.0
1155	0.81425	_G2	Combination	-9.2	-30.8	5.7	0.0	-2.0	785.6
1156	0	_G2	Combination	-3.9	-27.7	-7.6	-0.2	-2.5	785.5
1156	0.26335	_G2	Combination	-3.9	-27.7	-7.6	-0.2	-0.4	792.8
1157	0	_G2	Combination	-3.6	-16.2	-3.9	0.0	-2.0	791.1
1157	0.3592	_G2	Combination	-3.6	-16.2	-3.9	0.0	-0.6	796.9
1157	0.7184	_G2	Combination	-3.6	-16.2	-3.9	0.0	0.8	802.8
1157	1.0776	_G2	Combination	-3.6	-16.2	-3.9	0.0	2.2	808.6
1158	0	_G2	Combination	-1.7	-5.3	-1.2	-0.1	-0.5	805.9
1158	0.37968	_G2	Combination	-1.7	-5.3	-1.2	-0.1	0.0	807.9
1158	0.75936	_G2	Combination	-1.7	-5.3	-1.2	-0.1	0.4	809.9
1158	1.13904	_G2	Combination	-1.7	-5.3	-1.2	-0.1	0.8	811.9
1159	0	_G2	Combination	-2.7	5.4	1.1	-0.1	0.8	812.0
1159	0.37968	_G2	Combination	-2.7	5.4	1.1	-0.1	0.4	810.0
1159	0.75936	_G2	Combination	-2.7	5.4	1.1	-0.1	0.0	807.9
1159	1.13904	_G2	Combination	-2.7	5.4	1.1	-0.1	-0.5	805.8
1160	0	_G2	Combination	-6.8	16.4	3.8	-0.1	2.2	808.7
1160	0.3592	_G2	Combination	-6.8	16.4	3.8	-0.1	0.8	802.8
1160	0.7184	_G2	Combination	-6.8	16.4	3.8	-0.1	-0.6	796.9
1160	1.0776	_G2	Combination	-6.8	16.4	3.8	-0.1	-1.9	791.0
1161	0	_G2	Combination	-10.2	28.0	7.5	0.1	0.2	792.6
1161	0.26335	_G2	Combination	-10.2	28.0	7.5	0.1	-1.8	785.2
1162	0	_G2	Combination	-5.0	31.1	-5.6	-0.1	-2.2	785.2
1162	0.40712	_G2	Combination	-5.0	31.1	-5.6	-0.1	0.1	772.5
1162	0.81425	_G2	Combination	-5.0	31.1	-5.6	-0.1	2.4	759.9
1163	0	_G2	Combination	-2.1	42.2	-2.7	0.0	-1.2	756.1
1163	0.3592	_G2	Combination	-2.1	42.2	-2.7	0.0	-0.3	740.9
1163	0.7184	_G2	Combination	-2.1	42.2	-2.7	0.0	0.7	725.7

1163	1.0776	_G2	Combination	-2.1	42.2	-2.7	0.0	1.7	710.6
1164	0	_G2	Combination	-0.4	52.7	-0.8	-0.1	-0.3	708.2
1164	0.12083	_G2	Combination	-0.4	52.7	-0.8	-0.1	-0.2	701.9
1165	0	_G2	Combination	-0.4	52.7	-0.8	0.0	-0.2	701.8
1165	0.47839	_G2	Combination	-0.4	52.7	-0.8	0.0	0.1	676.6
1165	0.95677	_G2	Combination	-0.4	52.7	-0.8	0.0	0.5	651.4
1166	0	_G2	Combination	-1.6	63.0	0.8	0.0	0.5	651.9
1166	0.3592	_G2	Combination	-1.6	63.0	0.8	0.0	0.2	629.3
1166	0.7184	_G2	Combination	-1.6	63.0	0.8	0.0	-0.1	606.6
1166	1.0776	_G2	Combination	-1.6	63.0	0.8	0.0	-0.3	584.0
1167	0	_G2	Combination	-5.3	73.5	2.6	0.0	1.4	586.4
1167	0.45647	_G2	Combination	-5.3	73.5	2.6	0.0	0.2	552.9
1167	0.91294	_G2	Combination	-5.3	73.5	2.6	0.0	-1.0	519.3
1168	0	_G2	Combination	-2.7	77.6	-4.5	-0.1	-0.8	519.2
1168	0.16466	_G2	Combination	-2.7	77.6	-4.5	-0.1	-0.1	506.4
1169	0	_G2	Combination	-1.8	88.6	-2.0	0.0	-1.0	504.6
1169	0.3592	_G2	Combination	-1.8	88.6	-2.0	0.0	-0.3	472.8
1169	0.7184	_G2	Combination	-1.8	88.6	-2.0	0.0	0.5	441.0
1169	1.0776	_G2	Combination	-1.8	88.6	-2.0	0.0	1.2	409.1
1170	0	_G2	Combination	1.4	98.6	-1.0	0.0	-0.5	406.0
1170	0.3592	_G2	Combination	1.4	98.6	-1.0	0.0	-0.2	370.5
1170	0.7184	_G2	Combination	1.4	98.6	-1.0	0.0	0.2	335.1
1170	1.0776	_G2	Combination	1.4	98.6	-1.0	0.0	0.5	299.7
1171	0	_G2	Combination	2.7	108.1	-0.8	0.0	-0.5	298.5
1171	0.3592	_G2	Combination	2.7	108.1	-0.8	0.0	-0.2	259.7
1171	0.7184	_G2	Combination	2.7	108.1	-0.8	0.0	0.1	220.8
1171	1.0776	_G2	Combination	2.7	108.1	-0.8	0.0	0.4	182.0
1172	0	_G2	Combination	2.1	117.3	-1.4	0.0	-0.8	182.5
1172	0.3592	_G2	Combination	2.1	117.3	-1.4	0.0	-0.3	140.4
1172	0.7184	_G2	Combination	2.1	117.3	-1.4	0.0	0.2	98.2
1172	1.0776	_G2	Combination	2.1	117.3	-1.4	0.0	0.7	56.1
1173	0	_G2	Combination	0.8	126.8	-2.8	0.0	-0.9	57.2
1173	0.48492	_G2	Combination	0.8	126.8	-2.8	0.0	0.5	-4.3
1174	0	_G2	Combination	0.9	-126.8	-3.0	0.0	-0.5	-4.3
1174	0.48492	_G2	Combination	0.9	-126.8	-3.0	0.0	1.0	57.2
1175	0	_G2	Combination	2.2	-117.4	-1.5	0.0	-0.7	56.1

1175	0.3592	_G2	Combination	2.2	-117.4	-1.5	0.0	-0.2	98.3
1175	0.7184	_G2	Combination	2.2	-117.4	-1.5	0.0	0.3	140.4
1175	1.0776	_G2	Combination	2.2	-117.4	-1.5	0.0	0.9	182.6
1176	0	_G2	Combination	2.9	-108.2	-0.8	0.0	-0.4	182.1
1176	0.3592	_G2	Combination	2.9	-108.2	-0.8	0.0	-0.1	220.9
1176	0.7184	_G2	Combination	2.9	-108.2	-0.8	0.0	0.2	259.8
1176	1.0776	_G2	Combination	2.9	-108.2	-0.8	0.0	0.5	298.7
1177	0	_G2	Combination	1.5	-98.8	-0.9	0.0	-0.5	299.9
1177	0.3592	_G2	Combination	1.5	-98.8	-0.9	0.0	-0.2	335.4
1177	0.7184	_G2	Combination	1.5	-98.8	-0.9	0.0	0.1	370.9
1177	1.0776	_G2	Combination	1.5	-98.8	-0.9	0.0	0.5	406.3
1178	0	_G2	Combination	-1.9	-88.8	-1.9	0.0	-1.1	409.6
1178	0.3592	_G2	Combination	-1.9	-88.8	-1.9	0.0	-0.5	441.5
1178	0.7184	_G2	Combination	-1.9	-88.8	-1.9	0.0	0.2	473.4
1178	1.0776	_G2	Combination	-1.9	-88.8	-1.9	0.0	0.9	505.3
1179	0	_G2	Combination	-2.9	-77.8	-4.3	-0.1	0.0	507.2
1179	0.16466	_G2	Combination	-2.9	-77.8	-4.3	-0.1	0.7	520.0
1180	0	_G2	Combination	-5.4	-73.6	2.4	0.0	0.9	520.1
1180	0.45647	_G2	Combination	-5.4	-73.6	2.4	0.0	-0.2	553.7
1180	0.91294	_G2	Combination	-5.4	-73.6	2.4	0.0	-1.3	587.3
1181	0	_G2	Combination	-1.5	-63.1	0.7	0.0	0.3	584.7
1181	0.3592	_G2	Combination	-1.5	-63.1	0.7	0.0	0.0	607.4
1181	0.7184	_G2	Combination	-1.5	-63.1	0.7	0.0	-0.2	630.0
1181	1.0776	_G2	Combination	-1.5	-63.1	0.7	0.0	-0.5	652.7
1182	0	_G2	Combination	-0.3	-52.8	-0.7	0.0	-0.5	652.1
1182	0.47839	_G2	Combination	-0.3	-52.8	-0.7	0.0	-0.1	677.4
1182	0.95677	_G2	Combination	-0.3	-52.8	-0.7	0.0	0.2	702.7
1183	0	_G2	Combination	-0.3	-52.8	-0.7	-0.1	0.2	702.7
1183	0.12083	_G2	Combination	-0.3	-52.8	-0.7	-0.1	0.3	709.1
1184	0	_G2	Combination	-2.2	-42.3	-2.6	0.0	-1.6	711.5
1184	0.3592	_G2	Combination	-2.2	-42.3	-2.6	0.0	-0.7	726.7
1184	0.7184	_G2	Combination	-2.2	-42.3	-2.6	0.0	0.3	741.9
1184	1.0776	_G2	Combination	-2.2	-42.3	-2.6	0.0	1.2	757.1
1185	0	_G2	Combination	-5.2	-31.2	-5.4	-0.1	-2.3	761.0
1185	0.40712	_G2	Combination	-5.2	-31.2	-5.4	-0.1	-0.1	773.7
1185	0.81425	_G2	Combination	-5.2	-31.2	-5.4	-0.1	2.1	786.4

1186	0	_G2	Combination	-10.3	-28.0	7.3	0.1	1.7	786.5
1186	0.26335	_G2	Combination	-10.3	-28.0	7.3	0.1	-0.2	793.9
1187	0	_G2	Combination	-6.9	-16.4	3.7	-0.1	1.8	792.2
1187	0.3592	_G2	Combination	-6.9	-16.4	3.7	-0.1	0.5	798.1
1187	0.7184	_G2	Combination	-6.9	-16.4	3.7	-0.1	-0.8	804.0
1187	1.0776	_G2	Combination	-6.9	-16.4	3.7	-0.1	-2.1	809.9
1188	0	_G2	Combination	-2.7	-5.4	1.1	-0.1	0.5	807.0
1188	0.37968	_G2	Combination	-2.7	-5.4	1.1	-0.1	0.0	809.0
1188	0.75936	_G2	Combination	-2.7	-5.4	1.1	-0.1	-0.4	811.1
1188	1.13904	_G2	Combination	-2.7	-5.4	1.1	-0.1	-0.8	813.2
1189	0	_G2	Combination	-1.7	5.3	-1.1	-0.1	-0.8	813.0
1189	0.37968	_G2	Combination	-1.7	5.3	-1.1	-0.1	-0.4	811.0
1189	0.75936	_G2	Combination	-1.7	5.3	-1.1	-0.1	0.0	809.0
1189	1.13904	_G2	Combination	-1.7	5.3	-1.1	-0.1	0.5	807.0
1190	0	_G2	Combination	-3.8	16.2	-3.7	0.0	-2.1	809.8
1190	0.3592	_G2	Combination	-3.8	16.2	-3.7	0.0	-0.8	804.0
1190	0.7184	_G2	Combination	-3.8	16.2	-3.7	0.0	0.6	798.1
1190	1.0776	_G2	Combination	-3.8	16.2	-3.7	0.0	1.9	792.3
1191	0	_G2	Combination	-4.2	27.7	-7.4	-0.2	0.4	794.1
1191	0.26335	_G2	Combination	-4.2	27.7	-7.4	-0.2	2.4	786.8
1192	0	_G2	Combination	-9.3	30.9	5.5	0.0	1.9	786.8
1192	0.40712	_G2	Combination	-9.3	30.9	5.5	0.0	-0.3	774.3
1192	0.81425	_G2	Combination	-9.3	30.9	5.5	0.0	-2.6	761.7
1193	0	_G2	Combination	-4.1	42.0	2.7	0.0	1.2	757.8
1193	0.3592	_G2	Combination	-4.1	42.0	2.7	0.0	0.3	742.8
1193	0.7184	_G2	Combination	-4.1	42.0	2.7	0.0	-0.7	727.7
1193	1.0776	_G2	Combination	-4.1	42.0	2.7	0.0	-1.6	712.6
1194	0	_G2	Combination	-0.8	52.6	0.8	0.0	0.4	710.0
1194	0.12083	_G2	Combination	-0.8	52.6	0.8	0.0	0.3	703.6
1195	0	_G2	Combination	-0.8	52.6	0.8	0.0	0.3	703.6
1195	0.47839	_G2	Combination	-0.8	52.6	0.8	0.0	-0.1	678.4
1195	0.95677	_G2	Combination	-0.8	52.6	0.8	0.0	-0.5	653.2
1196	0	_G2	Combination	-0.8	62.8	-0.8	0.0	-0.5	653.3
1196	0.3592	_G2	Combination	-0.8	62.8	-0.8	0.0	-0.2	630.7
1196	0.7184	_G2	Combination	-0.8	62.8	-0.8	0.0	0.0	608.2
1196	1.0776	_G2	Combination	-0.8	62.8	-0.8	0.0	0.3	585.6

1197	0	_G2	Combination	-3.0	73.4	-2.7	0.0	-1.3	587.7
1197	0.45647	_G2	Combination	-3.0	73.4	-2.7	0.0	-0.1	554.2
1197	0.91294	_G2	Combination	-3.0	73.4	-2.7	0.0	1.2	520.7
1198	0	_G2	Combination	-6.1	77.3	4.8	0.0	0.3	520.7
1198	0.16466	_G2	Combination	-6.1	77.3	4.8	0.0	-0.5	508.0
1199	0	_G2	Combination	-3.4	88.3	2.3	0.0	1.1	506.2
1199	0.3592	_G2	Combination	-3.4	88.3	2.3	0.0	0.3	474.5
1199	0.7184	_G2	Combination	-3.4	88.3	2.3	0.0	-0.5	442.8
1199	1.0776	_G2	Combination	-3.4	88.3	2.3	0.0	-1.3	411.1
1200	0	_G2	Combination	0.5	98.4	1.1	0.0	0.6	407.6
1200	0.3592	_G2	Combination	0.5	98.4	1.1	0.0	0.2	372.2
1200	0.7184	_G2	Combination	0.5	98.4	1.1	0.0	-0.2	336.9
1200	1.0776	_G2	Combination	0.5	98.4	1.1	0.0	-0.6	301.5
1201	0	_G2	Combination	1.9	108.0	0.8	0.0	0.5	299.6
1201	0.3592	_G2	Combination	1.9	108.0	0.8	0.0	0.2	260.8
1201	0.7184	_G2	Combination	1.9	108.0	0.8	0.0	-0.1	222.0
1201	1.0776	_G2	Combination	1.9	108.0	0.8	0.0	-0.4	183.2
1202	0	_G2	Combination	1.0	117.4	1.1	0.0	0.6	182.9
1202	0.3592	_G2	Combination	1.0	117.4	1.1	0.0	0.2	140.7
1202	0.7184	_G2	Combination	1.0	117.4	1.1	0.0	-0.2	98.6
1202	1.0776	_G2	Combination	1.0	117.4	1.1	0.0	-0.6	56.4
1203	0	_G2	Combination	-1.1	126.9	2.2	0.0	0.9	57.1
1203	0.48492	_G2	Combination	-1.1	126.9	2.2	0.0	-0.2	-4.5
1204	0	_G2	Combination	-4.4	-144.8	11.1	-0.1	2.6	-7.3
1204	0.48492	_G2	Combination	-4.4	-144.8	11.1	-0.1	-2.8	62.9
1205	0	_G2	Combination	-3.6	-130.1	5.7	0.0	2.6	63.4
1205	0.3592	_G2	Combination	-3.6	-130.1	5.7	0.0	0.6	110.1
1205	0.7184	_G2	Combination	-3.6	-130.1	5.7	0.0	-1.5	156.8
1205	1.0776	_G2	Combination	-3.6	-130.1	5.7	0.0	-3.5	203.6
1206	0	_G2	Combination	-2.1	-115.3	0.9	0.0	-0.4	203.6
1206	0.3592	_G2	Combination	-2.1	-115.3	0.9	0.0	-0.7	245.0
1206	0.7184	_G2	Combination	-2.1	-115.3	0.9	0.0	-1.0	286.5
1206	1.0776	_G2	Combination	-2.1	-115.3	0.9	0.0	-1.4	327.9
1207	0	_G2	Combination	1.5	-100.9	-4.0	0.0	-3.0	326.4
1207	0.3592	_G2	Combination	1.5	-100.9	-4.0	0.0	-1.6	362.6
1207	0.7184	_G2	Combination	1.5	-100.9	-4.0	0.0	-0.1	398.9

1207	1.0776	_G2	Combination	1.5	-100.9	-4.0	0.0	1.3	435.1
1208	0	_G2	Combination	7.9	-87.2	-10.1	0.0	-5.1	431.7
1208	0.3592	_G2	Combination	7.9	-87.2	-10.1	0.0	-1.5	463.0
1208	0.7184	_G2	Combination	7.9	-87.2	-10.1	0.0	2.1	494.3
1208	1.0776	_G2	Combination	7.9	-87.2	-10.1	0.0	5.7	525.7
1209	0	_G2	Combination	13.2	-74.6	-18.0	0.1	2.5	523.7
1209	0.16466	_G2	Combination	13.2	-74.6	-18.0	0.1	5.5	536.0
1210	0	_G2	Combination	1.3	-78.6	11.1	-0.1	5.7	535.9
1210	0.45647	_G2	Combination	1.3	-78.6	11.1	-0.1	0.6	571.8
1210	0.91294	_G2	Combination	1.3	-78.6	11.1	-0.1	-4.4	607.6
1211	0	_G2	Combination	1.3	-65.5	4.1	0.0	1.4	610.1
1211	0.3592	_G2	Combination	1.3	-65.5	4.1	0.0	-0.1	633.6
1211	0.7184	_G2	Combination	1.3	-65.5	4.1	0.0	-1.6	657.2
1211	1.07761	_G2	Combination	1.3	-65.5	4.1	0.0	-3.1	680.7
1212	0	_G2	Combination	3.5	-52.1	-2.0	0.0	-2.1	681.3
1212	0.47839	_G2	Combination	3.5	-52.1	-2.0	0.0	-1.1	706.2
1212	0.95678	_G2	Combination	3.5	-52.1	-2.0	0.0	-0.2	731.1
1213	0	_G2	Combination	3.5	-52.1	-2.0	-0.2	-0.2	730.8
1213	0.12083	_G2	Combination	3.5	-52.1	-2.0	-0.2	0.1	737.1
1214	0	_G2	Combination	8.9	-39.2	-8.1	0.0	-5.2	734.7
1214	0.3592	_G2	Combination	8.9	-39.2	-8.1	0.0	-2.3	748.8
1214	0.7184	_G2	Combination	8.9	-39.2	-8.1	0.0	0.6	762.9
1214	1.0776	_G2	Combination	8.9	-39.2	-8.1	0.0	3.5	776.9
1215	0	_G2	Combination	16.6	-26.9	-15.5	0.0	-4.6	772.8
1215	0.40712	_G2	Combination	16.6	-26.9	-15.5	0.0	1.8	783.8
1215	0.81425	_G2	Combination	16.6	-26.9	-15.5	0.0	8.1	794.8
1216	0	_G2	Combination	2.8	-30.3	19.3	-0.1	7.9	794.8
1216	0.26335	_G2	Combination	2.8	-30.3	19.3	-0.1	2.8	802.7
1217	0	_G2	Combination	4.0	-18.6	10.9	-0.1	6.4	804.9
1217	0.3592	_G2	Combination	4.0	-18.6	10.9	-0.1	2.5	811.6
1217	0.7184	_G2	Combination	4.0	-18.6	10.9	-0.1	-1.5	818.3
1217	1.0776	_G2	Combination	4.0	-18.6	10.9	-0.1	-5.4	825.0
1218	0	_G2	Combination	3.6	-6.1	3.5	-0.1	0.5	828.7
1218	0.37968	_G2	Combination	3.6	-6.1	3.5	-0.1	-0.8	831.0
1218	0.75936	_G2	Combination	3.6	-6.1	3.5	-0.1	-2.1	833.3
1218	1.13904	_G2	Combination	3.6	-6.1	3.5	-0.1	-3.5	835.6

1219	0	_G2	Combination	6.4	7.0	-3.5	0.0	-3.4	836.2
1219	0.37968	_G2	Combination	6.4	7.0	-3.5	0.0	-2.1	833.6
1219	0.75936	_G2	Combination	6.4	7.0	-3.5	0.0	-0.8	830.9
1219	1.13904	_G2	Combination	6.4	7.0	-3.5	0.0	0.5	828.2
1220	0	_G2	Combination	12.6	19.6	-10.8	0.0	-5.3	825.7
1220	0.3592	_G2	Combination	12.6	19.6	-10.8	0.0	-1.4	818.6
1220	0.7184	_G2	Combination	12.6	19.6	-10.8	0.0	2.4	811.6
1220	1.0776	_G2	Combination	12.6	19.6	-10.8	0.0	6.3	804.5
1221	0	_G2	Combination	17.8	31.3	-19.0	0.0	3.0	803.3
1221	0.26336	_G2	Combination	17.8	31.3	-19.0	0.0	8.0	795.1
1222	0	_G2	Combination	4.2	28.0	15.3	-0.1	7.9	795.0
1222	0.40713	_G2	Combination	4.2	28.0	15.3	-0.1	1.6	783.6
1222	0.81425	_G2	Combination	4.2	28.0	15.3	-0.1	-4.6	772.3
1223	0	_G2	Combination	2.4	40.2	7.9	-0.1	3.5	777.3
1223	0.3592	_G2	Combination	2.4	40.2	7.9	-0.1	0.6	762.9
1223	0.7184	_G2	Combination	2.4	40.2	7.9	-0.1	-2.2	748.4
1223	1.07761	_G2	Combination	2.4	40.2	7.9	-0.1	-5.1	734.0
1224	0	_G2	Combination	1.8	53.1	1.9	0.1	0.1	737.7
1224	0.12083	_G2	Combination	1.8	53.1	1.9	0.1	-0.2	731.3
1225	0	_G2	Combination	1.8	53.1	1.9	0.0	-0.2	731.5
1225	0.47839	_G2	Combination	1.8	53.1	1.9	0.0	-1.1	706.1
1225	0.95677	_G2	Combination	1.8	53.1	1.9	0.0	-2.0	680.7
1226	0	_G2	Combination	4.5	66.5	-4.0	0.0	-3.0	681.5
1226	0.3592	_G2	Combination	4.5	66.5	-4.0	0.0	-1.5	657.6
1226	0.7184	_G2	Combination	4.5	66.5	-4.0	0.0	-0.1	633.7
1226	1.0776	_G2	Combination	4.5	66.5	-4.0	0.0	1.4	609.9
1227	0	_G2	Combination	9.9	79.5	-10.7	0.0	-4.2	608.5
1227	0.45647	_G2	Combination	9.9	79.5	-10.7	0.0	0.7	572.2
1227	0.91294	_G2	Combination	9.9	79.5	-10.7	0.0	5.5	535.9
1228	0	_G2	Combination	-0.8	75.7	17.0	-0.2	5.0	535.9
1228	0.16466	_G2	Combination	-0.8	75.7	17.0	-0.2	2.2	523.5
1229	0	_G2	Combination	0.0	88.3	9.5	0.0	5.4	526.3
1229	0.3592	_G2	Combination	0.0	88.3	9.5	0.0	2.0	494.6
1229	0.7184	_G2	Combination	0.0	88.3	9.5	0.0	-1.4	462.9
1229	1.0776	_G2	Combination	0.0	88.3	9.5	0.0	-4.8	431.2
1230	0	_G2	Combination	-1.5	101.9	3.7	0.0	1.2	435.6

1230	0.3592	_G2	Combination	-1.5	101.9	3.7	0.0	-0.1	399.0
1230	0.7184	_G2	Combination	-1.5	101.9	3.7	0.0	-1.5	362.4
1230	1.0776	_G2	Combination	-1.5	101.9	3.7	0.0	-2.8	325.7
1231	0	_G2	Combination	-1.3	116.3	-0.8	0.0	-1.3	328.5
1231	0.3592	_G2	Combination	-1.3	116.3	-0.8	0.0	-1.0	286.7
1231	0.7184	_G2	Combination	-1.3	116.3	-0.8	0.0	-0.7	244.9
1231	1.0776	_G2	Combination	-1.3	116.3	-0.8	0.0	-0.3	203.2
1232	0	_G2	Combination	0.8	130.9	-5.1	0.0	-3.2	204.3
1232	0.3592	_G2	Combination	0.8	130.9	-5.1	0.0	-1.3	157.2
1232	0.7184	_G2	Combination	0.8	130.9	-5.1	0.0	0.5	110.2
1232	1.0776	_G2	Combination	0.8	130.9	-5.1	0.0	2.4	63.2
1233	0	_G2	Combination	3.9	145.6	-9.9	0.1	-2.5	63.4
1233	0.48492	_G2	Combination	3.9	145.6	-9.9	0.1	2.3	-7.2
1234	0	_G2	Combination	0.8	-126.4	-0.4	0.0	-0.1	-5.6
1234	0.48492	_G2	Combination	0.8	-126.4	-0.4	0.0	0.0	55.7
1235	0	_G2	Combination	-0.4	-116.6	-0.2	0.0	-0.1	57.2
1235	0.3592	_G2	Combination	-0.4	-116.6	-0.2	0.0	0.0	99.0
1235	0.7184	_G2	Combination	-0.4	-116.6	-0.2	0.0	0.0	140.9
1235	1.0776	_G2	Combination	-0.4	-116.6	-0.2	0.0	0.1	182.8
1236	0	_G2	Combination	-1.3	-106.4	0.0	0.0	0.0	184.0
1236	0.3592	_G2	Combination	-1.3	-106.4	0.0	0.0	0.0	222.2
1236	0.7184	_G2	Combination	-1.3	-106.4	0.0	0.0	0.0	260.4
1236	1.0776	_G2	Combination	-1.3	-106.4	0.0	0.0	0.0	298.6
1237	0	_G2	Combination	-1.9	-95.9	0.1	0.0	0.1	299.6
1237	0.3592	_G2	Combination	-1.9	-95.9	0.1	0.0	0.0	334.1
1237	0.7184	_G2	Combination	-1.9	-95.9	0.1	0.0	0.0	368.5
1237	1.0776	_G2	Combination	-1.9	-95.9	0.1	0.0	-0.1	403.0
1238	0	_G2	Combination	-2.5	-85.2	0.3	0.0	0.1	404.0
1238	0.3592	_G2	Combination	-2.5	-85.2	0.3	0.0	0.0	434.6
1238	0.7184	_G2	Combination	-2.5	-85.2	0.3	0.0	-0.1	465.2
1238	1.0776	_G2	Combination	-2.5	-85.2	0.3	0.0	-0.2	495.8
1239	0	_G2	Combination	-3.3	-74.0	0.5	0.0	0.3	496.8
1239	0.16466	_G2	Combination	-3.3	-74.0	0.5	0.0	0.2	509.0
1240	0	_G2	Combination	-2.8	-74.3	-0.3	0.0	-0.2	509.1
1240	0.45647	_G2	Combination	-2.8	-74.3	-0.3	0.0	-0.1	543.0
1240	0.91294	_G2	Combination	-2.8	-74.3	-0.3	0.0	0.1	576.9

1241	0	_G2	Combination	-3.3	-63.3	-0.1	0.0	0.0	577.7
1241	0.3592	_G2	Combination	-3.3	-63.3	-0.1	0.0	0.0	600.4
1241	0.7184	_G2	Combination	-3.3	-63.3	-0.1	0.0	0.0	623.2
1241	1.0776	_G2	Combination	-3.3	-63.3	-0.1	0.0	0.1	645.9
1242	0	_G2	Combination	-4.0	-52.3	0.0	0.0	0.0	646.7
1242	0.47839	_G2	Combination	-4.0	-52.3	0.0	0.0	0.0	671.8
1242	0.95677	_G2	Combination	-4.0	-52.3	0.0	0.0	0.0	696.8
1243	0	_G2	Combination	-4.0	-52.3	0.0	0.0	0.0	697.1
1243	0.12083	_G2	Combination	-4.0	-52.3	0.0	0.0	0.0	703.5
1244	0	_G2	Combination	-5.0	-41.1	0.1	0.0	0.1	704.5
1244	0.3592	_G2	Combination	-5.0	-41.1	0.1	0.0	0.0	719.3
1244	0.7184	_G2	Combination	-5.0	-41.1	0.1	0.0	0.0	734.0
1244	1.0776	_G2	Combination	-5.0	-41.1	0.1	0.0	-0.1	748.8
1245	0	_G2	Combination	-6.3	-29.5	0.2	-0.1	0.2	750.2
1245	0.40712	_G2	Combination	-6.3	-29.5	0.2	-0.1	0.1	762.2
1245	0.81425	_G2	Combination	-6.3	-29.5	0.2	-0.1	0.0	774.2
1246	0	_G2	Combination	-6.1	-29.1	-0.3	-0.1	-0.5	774.2
1246	0.26335	_G2	Combination	-6.1	-29.1	-0.3	-0.1	-0.4	781.9
1247	0	_G2	Combination	-5.9	-17.3	-0.2	-0.1	-0.1	781.8
1247	0.3592	_G2	Combination	-5.9	-17.3	-0.2	-0.1	0.0	788.0
1247	0.7184	_G2	Combination	-5.9	-17.3	-0.2	-0.1	0.0	794.2
1247	1.0776	_G2	Combination	-5.9	-17.3	-0.2	-0.1	0.1	800.4
1248	0	_G2	Combination	-5.5	-5.7	-0.1	-0.1	0.0	800.0
1248	0.37968	_G2	Combination	-5.5	-5.7	-0.1	-0.1	0.0	802.2
1248	0.75936	_G2	Combination	-5.5	-5.7	-0.1	-0.1	0.0	804.4
1248	1.13904	_G2	Combination	-5.5	-5.7	-0.1	-0.1	0.0	806.6
1249	0	_G2	Combination	-5.5	5.7	0.0	-0.1	0.0	806.6
1249	0.37968	_G2	Combination	-5.5	5.7	0.0	-0.1	0.0	804.4
1249	0.75936	_G2	Combination	-5.5	5.7	0.0	-0.1	0.0	802.2
1249	1.13904	_G2	Combination	-5.5	5.7	0.0	-0.1	0.0	800.1
1250	0	_G2	Combination	-6.0	17.3	0.0	-0.1	0.0	800.4
1250	0.3592	_G2	Combination	-6.0	17.3	0.0	-0.1	0.0	794.2
1250	0.7184	_G2	Combination	-6.0	17.3	0.0	-0.1	0.0	788.0
1250	1.0776	_G2	Combination	-6.0	17.3	0.0	-0.1	0.0	781.8
1251	0	_G2	Combination	-6.2	29.1	0.0	0.0	0.4	781.9
1251	0.26335	_G2	Combination	-6.2	29.1	0.0	0.0	0.4	774.2

1252	0	_G2	Combination	-6.2	29.5	0.0	-0.1	-0.1	774.2
1252	0.40712	_G2	Combination	-6.2	29.5	0.0	-0.1	-0.1	762.2
1252	0.81425	_G2	Combination	-6.2	29.5	0.0	-0.1	-0.1	750.2
1253	0	_G2	Combination	-4.9	41.1	0.0	0.0	0.0	748.8
1253	0.3592	_G2	Combination	-4.9	41.1	0.0	0.0	0.0	734.1
1253	0.7184	_G2	Combination	-4.9	41.1	0.0	0.0	0.0	719.3
1253	1.0776	_G2	Combination	-4.9	41.1	0.0	0.0	0.0	704.5
1254	0	_G2	Combination	-4.0	52.3	0.0	0.0	0.0	703.5
1254	0.12083	_G2	Combination	-4.0	52.3	0.0	0.0	0.0	697.2
1255	0	_G2	Combination	-4.0	52.3	0.0	0.0	0.0	696.8
1255	0.47839	_G2	Combination	-4.0	52.3	0.0	0.0	0.0	671.8
1255	0.95677	_G2	Combination	-4.0	52.3	0.0	0.0	0.0	646.7
1256	0	_G2	Combination	-3.4	63.3	0.0	0.0	0.0	645.9
1256	0.3592	_G2	Combination	-3.4	63.3	0.0	0.0	0.0	623.2
1256	0.7184	_G2	Combination	-3.4	63.3	0.0	0.0	0.0	600.4
1256	1.0776	_G2	Combination	-3.4	63.3	0.0	0.0	0.0	577.7
1257	0	_G2	Combination	-2.9	74.3	-0.1	0.0	0.0	577.0
1257	0.45647	_G2	Combination	-2.9	74.3	-0.1	0.0	0.1	543.0
1257	0.91294	_G2	Combination	-2.9	74.3	-0.1	0.0	0.1	509.1
1258	0	_G2	Combination	-3.2	74.0	0.2	0.0	-0.3	509.1
1258	0.16466	_G2	Combination	-3.2	74.0	0.2	0.0	-0.3	496.9
1259	0	_G2	Combination	-2.4	85.2	0.1	0.0	0.1	495.8
1259	0.3592	_G2	Combination	-2.4	85.2	0.1	0.0	0.0	465.2
1259	0.7184	_G2	Combination	-2.4	85.2	0.1	0.0	0.0	434.6
1259	1.0776	_G2	Combination	-2.4	85.2	0.1	0.0	-0.1	404.0
1260	0	_G2	Combination	-1.8	95.9	0.1	0.0	0.0	403.0
1260	0.3592	_G2	Combination	-1.8	95.9	0.1	0.0	0.0	368.5
1260	0.7184	_G2	Combination	-1.8	95.9	0.1	0.0	0.0	334.1
1260	1.0776	_G2	Combination	-1.8	95.9	0.1	0.0	0.0	299.6
1261	0	_G2	Combination	-1.3	106.4	0.0	0.0	0.0	298.6
1261	0.3592	_G2	Combination	-1.3	106.4	0.0	0.0	0.0	260.4
1261	0.7184	_G2	Combination	-1.3	106.4	0.0	0.0	0.0	222.2
1261	1.0776	_G2	Combination	-1.3	106.4	0.0	0.0	0.0	184.0
1262	0	_G2	Combination	-0.4	116.6	-0.1	0.0	0.0	182.8
1262	0.3592	_G2	Combination	-0.4	116.6	-0.1	0.0	0.0	140.9
1262	0.7184	_G2	Combination	-0.4	116.6	-0.1	0.0	0.0	99.0

1262	1.0776	_G2	Combination	-0.4	116.6	-0.1	0.0	0.1	57.2
1263	0	_G2	Combination	0.7	126.4	-0.2	0.0	0.0	55.7
1263	0.48492	_G2	Combination	0.7	126.4	-0.2	0.0	0.1	-5.6

Reazioni vincolari e spostamenti – FASE 1A

Per le reazioni vincolari dei dispositivi di vincolo e i relativi spostamenti/rotazioni, si rimanda al §5.7.

10.1.3 Fase 1B

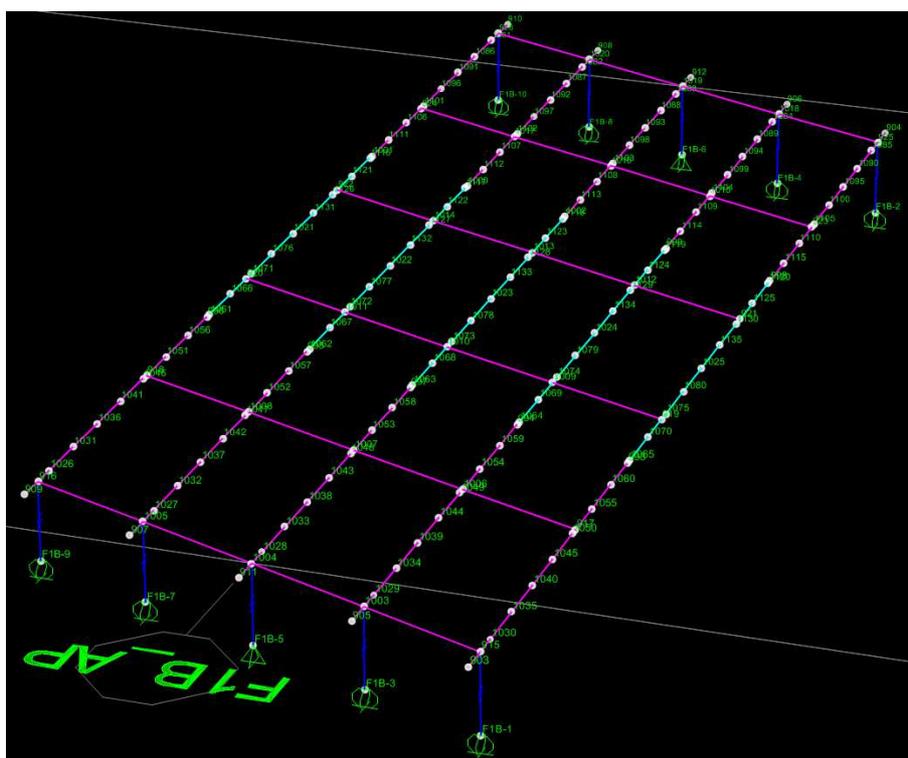


Figura 6 – Numerazione Joints modello FEM – Fase 1B.

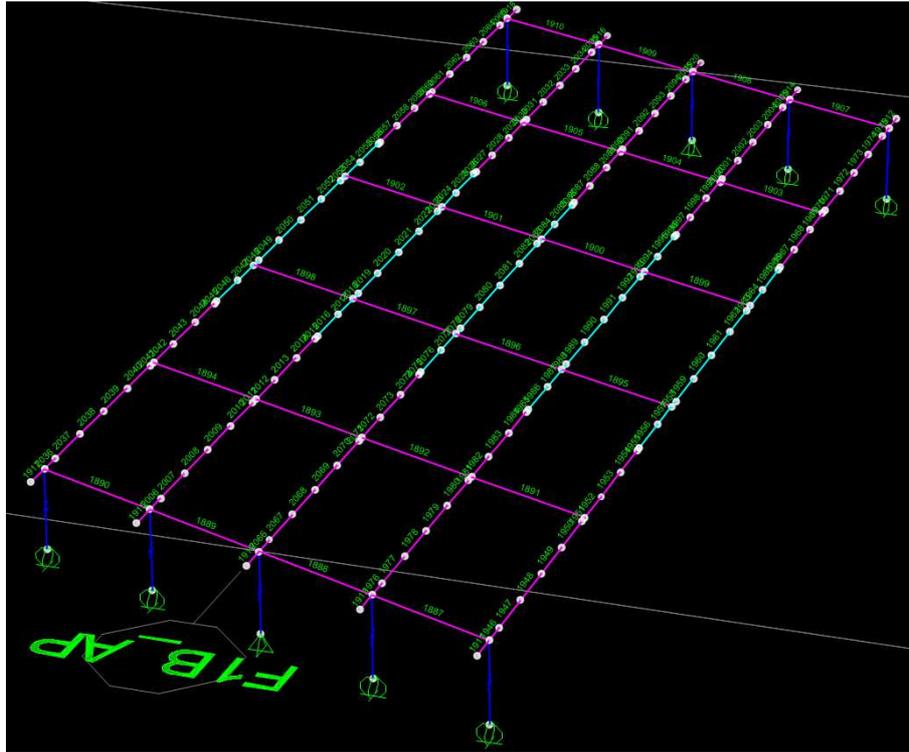


Figura 7 – Numerazione Frames modello FEM – Fase 1B.

Carichi e combinazioni di carico – FASE 1B

I carichi applicati alla struttura e la loro combinazione sono oggetto dei §5.2 e §5.3.

Sollecitazioni travi – FASE 1B

TABLE: Element Forces - Frames									
Frame	Station	OutputCase	CaseType	P	V2	V3	T	M2	M3
Text	m	Text	Text	KN	KN	KN	KN-m	KN-m	KN-m
1911	0	_G2	Combination	0.2	10.9	0.8	0.0	-0.9	-0.7
1911	0.29634	_G2	Combination	0.2	10.9	0.8	0.0	-1.2	-4.0
1911	0.59268	_G2	Combination	0.2	10.9	0.8	0.0	-1.4	-7.2
1912	0	_G2	Combination	1.1	-10.9	-1.4	0.0	-1.7	-7.2
1912	0.29634	_G2	Combination	1.1	-10.9	-1.4	0.0	-1.3	-4.0
1912	0.59269	_G2	Combination	1.1	-10.9	-1.4	0.0	-0.9	-0.8
1913	0	_G2	Combination	-0.2	9.7	-1.2	0.0	0.2	1.3
1913	0.29634	_G2	Combination	-0.2	9.7	-1.2	0.0	0.6	-1.6
1913	0.59268	_G2	Combination	-0.2	9.7	-1.2	0.0	0.9	-4.5

1914	0	_G2	Combination	-1.6	-9.6	1.7	0.0	1.1	-4.2
1914	0.29634	_G2	Combination	-1.6	-9.6	1.7	0.0	0.6	-1.4
1914	0.59268	_G2	Combination	-1.6	-9.6	1.7	0.0	0.1	1.4
1915	0	_G2	Combination	-1.6	9.5	1.7	0.0	-0.1	1.5
1915	0.29634	_G2	Combination	-1.6	9.5	1.7	0.0	-0.6	-1.4
1915	0.59268	_G2	Combination	-1.6	9.5	1.7	0.0	-1.2	-4.2
1916	0	_G2	Combination	-0.2	-9.7	-1.2	0.0	-1.0	-4.4
1916	0.29634	_G2	Combination	-0.2	-9.7	-1.2	0.0	-0.6	-1.6
1916	0.59268	_G2	Combination	-0.2	-9.7	-1.2	0.0	-0.2	1.3
1917	0	_G2	Combination	1.2	11.0	-1.5	0.0	0.9	-0.8
1917	0.29634	_G2	Combination	1.2	11.0	-1.5	0.0	1.3	-4.1
1917	0.59268	_G2	Combination	1.2	11.0	-1.5	0.0	1.8	-7.3
1918	0	_G2	Combination	0.2	-10.9	0.9	0.0	1.5	-7.3
1918	0.29634	_G2	Combination	0.2	-10.9	0.9	0.0	1.2	-4.0
1918	0.59269	_G2	Combination	0.2	-10.9	0.9	0.0	1.0	-0.8
1919	0	_G2	Combination	0.5	9.8	0.2	0.0	0.0	0.1
1919	0.29634	_G2	Combination	0.5	9.8	0.2	0.0	0.0	-2.8
1919	0.59268	_G2	Combination	0.5	9.8	0.2	0.0	-0.1	-5.7
1920	0	_G2	Combination	0.5	-9.8	0.1	0.0	0.0	-5.6
1920	0.29634	_G2	Combination	0.5	-9.8	0.1	0.0	0.0	-2.7
1920	0.59268	_G2	Combination	0.5	-9.8	0.1	0.0	-0.1	0.2
1946	0	_G2	Combination	3.8	-144.6	-9.7	0.1	-2.3	-7.2
1946	0.48492	_G2	Combination	3.8	-144.6	-9.7	0.1	2.4	62.9
1947	0	_G2	Combination	0.8	-130.0	-5.1	0.0	-2.3	62.6
1947	0.3592	_G2	Combination	0.8	-130.0	-5.1	0.0	-0.5	109.3
1947	0.7184	_G2	Combination	0.8	-130.0	-5.1	0.0	1.3	156.0
1947	1.0776	_G2	Combination	0.8	-130.0	-5.1	0.0	3.1	202.7
1948	0	_G2	Combination	-1.2	-115.4	-0.9	0.0	0.3	201.6
1948	0.3592	_G2	Combination	-1.2	-115.4	-0.9	0.0	0.6	243.1
1948	0.7184	_G2	Combination	-1.2	-115.4	-0.9	0.0	1.0	284.5

1948	1.0776	_G2	Combination	-1.2	-115.4	-0.9	0.0	1.3	325.9
1949	0	_G2	Combination	-1.5	-101.1	3.6	0.0	2.7	323.3
1949	0.3592	_G2	Combination	-1.5	-101.1	3.6	0.0	1.4	359.6
1949	0.7184	_G2	Combination	-1.5	-101.1	3.6	0.0	0.2	396.0
1949	1.0776	_G2	Combination	-1.5	-101.1	3.6	0.0	-1.1	432.3
1950	0	_G2	Combination	-0.2	-87.6	9.2	0.0	4.7	428.1
1950	0.3592	_G2	Combination	-0.2	-87.6	9.2	0.0	1.4	459.5
1950	0.7184	_G2	Combination	-0.2	-87.6	9.2	0.0	-1.9	491.0
1950	1.0776	_G2	Combination	-0.2	-87.6	9.2	0.0	-5.3	522.4
1951	0	_G2	Combination	-1.1	-75.1	16.7	-0.2	-2.2	519.7
1951	0.16466	_G2	Combination	-1.1	-75.1	16.7	-0.2	-5.0	532.1
1952	0	_G2	Combination	9.5	-78.9	-10.7	0.0	-5.5	532.1
1952	0.45647	_G2	Combination	9.5	-78.9	-10.7	0.0	-0.6	568.1
1952	0.91294	_G2	Combination	9.5	-78.9	-10.7	0.0	4.2	604.2
1953	0	_G2	Combination	4.0	-66.0	-4.1	0.0	-1.4	605.6
1953	0.3592	_G2	Combination	4.0	-66.0	-4.1	0.0	0.1	629.3
1953	0.7184	_G2	Combination	4.0	-66.0	-4.1	0.0	1.5	653.0
1953	1.07761	_G2	Combination	4.0	-66.0	-4.1	0.0	3.0	676.7
1954	0	_G2	Combination	1.3	-52.7	1.8	-0.1	2.0	676.0
1954	0.47839	_G2	Combination	1.3	-52.7	1.8	-0.1	1.1	701.2
1954	0.95678	_G2	Combination	1.3	-52.7	1.8	-0.1	0.2	726.4
1955	0	_G2	Combination	1.3	-52.7	1.8	0.1	0.2	726.3
1955	0.12083	_G2	Combination	1.3	-52.7	1.8	0.1	0.0	732.6
1956	0	_G2	Combination	1.8	-39.9	7.7	-0.1	4.9	729.1
1956	0.3592	_G2	Combination	1.8	-39.9	7.7	-0.1	2.2	743.4
1956	0.7184	_G2	Combination	1.8	-39.9	7.7	-0.1	-0.6	757.8
1956	1.0776	_G2	Combination	1.8	-39.9	7.7	-0.1	-3.4	772.1
1957	0	_G2	Combination	3.4	-27.8	15.0	-0.1	4.5	767.2
1957	0.40712	_G2	Combination	3.4	-27.8	15.0	-0.1	-1.6	778.5
1957	0.81425	_G2	Combination	3.4	-27.8	15.0	-0.1	-7.8	789.8

1958	0	_G2	Combination	16.8	-31.0	-18.8	0.0	-7.9	789.8
1958	0.26335	_G2	Combination	16.8	-31.0	-18.8	0.0	-3.0	798.0
1959	0	_G2	Combination	11.7	-19.5	-10.6	0.0	-6.3	799.3
1959	0.3592	_G2	Combination	11.7	-19.5	-10.6	0.0	-2.4	806.3
1959	0.7184	_G2	Combination	11.7	-19.5	-10.6	0.0	1.4	813.3
1959	1.0776	_G2	Combination	11.7	-19.5	-10.6	0.0	5.2	820.3
1960	0	_G2	Combination	5.6	-7.0	-3.4	-0.1	-0.5	822.8
1960	0.37968	_G2	Combination	5.6	-7.0	-3.4	-0.1	0.8	825.5
1960	0.75936	_G2	Combination	5.6	-7.0	-3.4	-0.1	2.1	828.1
1960	1.13904	_G2	Combination	5.6	-7.0	-3.4	-0.1	3.4	830.7
1961	0	_G2	Combination	2.8	6.1	3.5	-0.1	3.4	830.1
1961	0.37968	_G2	Combination	2.8	6.1	3.5	-0.1	2.1	827.8
1961	0.75936	_G2	Combination	2.8	6.1	3.5	-0.1	0.8	825.5
1961	1.13904	_G2	Combination	2.8	6.1	3.5	-0.1	-0.6	823.2
1962	0	_G2	Combination	3.2	18.5	10.8	-0.1	5.3	819.6
1962	0.3592	_G2	Combination	3.2	18.5	10.8	-0.1	1.4	813.0
1962	0.7184	_G2	Combination	3.2	18.5	10.8	-0.1	-2.4	806.3
1962	1.0776	_G2	Combination	3.2	18.5	10.8	-0.1	-6.3	799.7
1963	0	_G2	Combination	2.0	30.1	19.1	-0.1	-2.7	797.4
1963	0.26335	_G2	Combination	2.0	30.1	19.1	-0.1	-7.8	789.5
1964	0	_G2	Combination	15.6	26.8	-15.2	0.0	-8.0	789.5
1964	0.40713	_G2	Combination	15.6	26.8	-15.2	0.0	-1.8	778.6
1964	0.81425	_G2	Combination	15.6	26.8	-15.2	0.0	4.4	767.8
1965	0	_G2	Combination	8.1	38.9	-7.8	0.0	-3.4	771.7
1965	0.3592	_G2	Combination	8.1	38.9	-7.8	0.0	-0.6	757.7
1965	0.7184	_G2	Combination	8.1	38.9	-7.8	0.0	2.2	743.7
1965	1.07761	_G2	Combination	8.1	38.9	-7.8	0.0	5.0	729.8
1966	0	_G2	Combination	2.9	51.7	-1.9	-0.2	0.0	732.0
1966	0.12083	_G2	Combination	2.9	51.7	-1.9	-0.2	0.2	725.7
1967	0	_G2	Combination	2.9	51.7	-1.9	0.0	0.2	726.0

1967	0.47839	_G2	Combination	2.9	51.7	-1.9	0.0	1.1	701.3
1967	0.95677	_G2	Combination	2.9	51.7	-1.9	0.0	2.0	676.5
1968	0	_G2	Combination	0.8	65.1	4.2	0.0	3.1	675.9
1968	0.3592	_G2	Combination	0.8	65.1	4.2	0.0	1.6	652.5
1968	0.7184	_G2	Combination	0.8	65.1	4.2	0.0	0.1	629.1
1968	1.0776	_G2	Combination	0.8	65.1	4.2	0.0	-1.4	605.8
1969	0	_G2	Combination	1.0	78.0	11.1	-0.1	4.5	603.2
1969	0.45647	_G2	Combination	1.0	78.0	11.1	-0.1	-0.6	567.6
1969	0.91294	_G2	Combination	1.0	78.0	11.1	-0.1	-5.7	532.0
1970	0	_G2	Combination	12.7	74.0	-17.6	0.1	-5.5	532.1
1970	0.16466	_G2	Combination	12.7	74.0	-17.6	0.1	-2.6	519.9
1971	0	_G2	Combination	7.6	86.5	-9.8	0.0	-5.6	521.7
1971	0.3592	_G2	Combination	7.6	86.5	-9.8	0.0	-2.1	490.7
1971	0.7184	_G2	Combination	7.6	86.5	-9.8	0.0	1.4	459.6
1971	1.0776	_G2	Combination	7.6	86.5	-9.8	0.0	5.0	428.5
1972	0	_G2	Combination	1.4	100.1	-3.9	0.0	-1.2	431.8
1972	0.3592	_G2	Combination	1.4	100.1	-3.9	0.0	0.2	395.8
1972	0.7184	_G2	Combination	1.4	100.1	-3.9	0.0	1.6	359.8
1972	1.0776	_G2	Combination	1.4	100.1	-3.9	0.0	3.0	323.9
1973	0	_G2	Combination	-2.1	114.5	0.9	0.0	1.4	325.3
1973	0.3592	_G2	Combination	-2.1	114.5	0.9	0.0	1.1	284.2
1973	0.7184	_G2	Combination	-2.1	114.5	0.9	0.0	0.7	243.1
1973	1.0776	_G2	Combination	-2.1	114.5	0.9	0.0	0.4	202.0
1974	0	_G2	Combination	-3.5	129.1	5.6	0.0	3.5	201.9
1974	0.3592	_G2	Combination	-3.5	129.1	5.6	0.0	1.5	155.6
1974	0.7184	_G2	Combination	-3.5	129.1	5.6	0.0	-0.5	109.2
1974	1.0776	_G2	Combination	-3.5	129.1	5.6	0.0	-2.6	62.8
1975	0	_G2	Combination	-4.3	143.8	10.9	-0.1	2.8	62.4
1975	0.48492	_G2	Combination	-4.3	143.8	10.9	-0.1	-2.5	-7.3
1976	0	_G2	Combination	-1.0	-127.1	1.8	0.0	0.1	-4.4

1976	0.48492	_G2	Combination	-1.0	-127.1	1.8	0.0	-0.8	57.2
1977	0	_G2	Combination	0.9	-117.6	0.9	0.0	0.4	56.8
1977	0.3592	_G2	Combination	0.9	-117.6	0.9	0.0	0.1	99.0
1977	0.7184	_G2	Combination	0.9	-117.6	0.9	0.0	-0.2	141.2
1977	1.0776	_G2	Combination	0.9	-117.6	0.9	0.0	-0.5	183.5
1978	0	_G2	Combination	1.7	-108.1	0.7	0.0	0.3	183.8
1978	0.3592	_G2	Combination	1.7	-108.1	0.7	0.0	0.1	222.7
1978	0.7184	_G2	Combination	1.7	-108.1	0.7	0.0	-0.1	261.5
1978	1.0776	_G2	Combination	1.7	-108.1	0.7	0.0	-0.4	300.3
1979	0	_G2	Combination	0.4	-98.5	1.1	0.0	0.6	302.2
1979	0.3592	_G2	Combination	0.4	-98.5	1.1	0.0	0.2	337.6
1979	0.7184	_G2	Combination	0.4	-98.5	1.1	0.0	-0.2	372.9
1979	1.0776	_G2	Combination	0.4	-98.5	1.1	0.0	-0.6	408.3
1980	0	_G2	Combination	-3.3	-88.3	2.4	0.0	1.4	411.6
1980	0.3592	_G2	Combination	-3.3	-88.3	2.4	0.0	0.5	443.3
1980	0.7184	_G2	Combination	-3.3	-88.3	2.4	0.0	-0.3	475.0
1980	1.0776	_G2	Combination	-3.3	-88.3	2.4	0.0	-1.2	506.8
1981	0	_G2	Combination	-5.9	-77.3	5.2	0.0	0.3	508.4
1981	0.16466	_G2	Combination	-5.9	-77.3	5.2	0.0	-0.5	521.1
1982	0	_G2	Combination	-2.4	-73.5	-3.1	0.0	-1.3	521.1
1982	0.45647	_G2	Combination	-2.4	-73.5	-3.1	0.0	0.1	554.7
1982	0.91294	_G2	Combination	-2.4	-73.5	-3.1	0.0	1.5	588.2
1983	0	_G2	Combination	-0.3	-62.9	-1.0	0.0	-0.4	586.1
1983	0.3592	_G2	Combination	-0.3	-62.9	-1.0	0.0	-0.1	608.7
1983	0.7184	_G2	Combination	-0.3	-62.9	-1.0	0.0	0.3	631.3
1983	1.0776	_G2	Combination	-0.3	-62.9	-1.0	0.0	0.6	653.9
1984	0	_G2	Combination	-0.4	-52.6	0.7	0.0	0.5	653.8
1984	0.47839	_G2	Combination	-0.4	-52.6	0.7	0.0	0.1	678.9
1984	0.95677	_G2	Combination	-0.4	-52.6	0.7	0.0	-0.2	704.1
1985	0	_G2	Combination	-0.4	-52.6	0.7	0.0	-0.2	704.1

1985	0.12083	_G2	Combination	-0.4	-52.6	0.7	0.0	-0.3	710.5
1986	0	_G2	Combination	-3.5	-42.0	2.8	-0.1	1.7	712.8
1986	0.3592	_G2	Combination	-3.5	-42.0	2.8	-0.1	0.7	727.9
1986	0.7184	_G2	Combination	-3.5	-42.0	2.8	-0.1	-0.3	743.0
1986	1.0776	_G2	Combination	-3.5	-42.0	2.8	-0.1	-1.3	758.1
1987	0	_G2	Combination	-8.5	-30.8	5.7	0.0	2.6	761.7
1987	0.40712	_G2	Combination	-8.5	-30.8	5.7	0.0	0.3	774.2
1987	0.81425	_G2	Combination	-8.5	-30.8	5.7	0.0	-2.1	786.8
1988	0	_G2	Combination	-3.1	-27.8	-7.9	-0.2	-2.5	786.7
1988	0.26335	_G2	Combination	-3.1	-27.8	-7.9	-0.2	-0.4	794.0
1989	0	_G2	Combination	-2.8	-16.3	-4.0	-0.1	-2.1	792.3
1989	0.3592	_G2	Combination	-2.8	-16.3	-4.0	-0.1	-0.7	798.2
1989	0.7184	_G2	Combination	-2.8	-16.3	-4.0	-0.1	0.8	804.0
1989	1.0776	_G2	Combination	-2.8	-16.3	-4.0	-0.1	2.2	809.9
1990	0	_G2	Combination	-1.0	-5.3	-1.2	-0.1	-0.5	807.2
1990	0.37968	_G2	Combination	-1.0	-5.3	-1.2	-0.1	-0.1	809.3
1990	0.75936	_G2	Combination	-1.0	-5.3	-1.2	-0.1	0.4	811.3
1990	1.13904	_G2	Combination	-1.0	-5.3	-1.2	-0.1	0.9	813.3
1991	0	_G2	Combination	-2.0	5.4	1.2	-0.1	0.8	813.4
1991	0.37968	_G2	Combination	-2.0	5.4	1.2	-0.1	0.4	811.4
1991	0.75936	_G2	Combination	-2.0	5.4	1.2	-0.1	-0.1	809.3
1991	1.13904	_G2	Combination	-2.0	5.4	1.2	-0.1	-0.5	807.2
1992	0	_G2	Combination	-6.2	16.5	3.9	-0.1	2.2	810.0
1992	0.3592	_G2	Combination	-6.2	16.5	3.9	-0.1	0.8	804.1
1992	0.7184	_G2	Combination	-6.2	16.5	3.9	-0.1	-0.6	798.2
1992	1.0776	_G2	Combination	-6.2	16.5	3.9	-0.1	-2.0	792.3
1993	0	_G2	Combination	-9.6	28.0	7.7	0.0	0.2	793.9
1993	0.26335	_G2	Combination	-9.6	28.0	7.7	0.0	-1.8	786.6
1994	0	_G2	Combination	-4.3	31.1	-5.7	-0.1	-2.3	786.5
1994	0.40712	_G2	Combination	-4.3	31.1	-5.7	-0.1	0.0	773.8

1994	0.81425	_G2	Combination	-4.3	31.1	-5.7	-0.1	2.4	761.1
1995	0	_G2	Combination	-1.6	42.3	-2.7	-0.1	-1.2	757.5
1995	0.3592	_G2	Combination	-1.6	42.3	-2.7	-0.1	-0.3	742.3
1995	0.7184	_G2	Combination	-1.6	42.3	-2.7	-0.1	0.7	727.1
1995	1.0776	_G2	Combination	-1.6	42.3	-2.7	-0.1	1.6	712.0
1996	0	_G2	Combination	0.0	52.8	-0.7	-0.1	-0.3	709.8
1996	0.12083	_G2	Combination	0.0	52.8	-0.7	-0.1	-0.2	703.4
1997	0	_G2	Combination	0.0	52.8	-0.7	0.0	-0.2	703.4
1997	0.47839	_G2	Combination	0.0	52.8	-0.7	0.0	0.1	678.1
1997	0.95677	_G2	Combination	0.0	52.8	-0.7	0.0	0.4	652.8
1998	0	_G2	Combination	-1.4	63.1	0.9	0.0	0.6	653.4
1998	0.3592	_G2	Combination	-1.4	63.1	0.9	0.0	0.3	630.7
1998	0.7184	_G2	Combination	-1.4	63.1	0.9	0.0	-0.1	608.1
1998	1.0776	_G2	Combination	-1.4	63.1	0.9	0.0	-0.4	585.4
1999	0	_G2	Combination	-5.2	73.7	2.8	0.0	1.5	587.9
1999	0.45647	_G2	Combination	-5.2	73.7	2.8	0.0	0.2	554.2
1999	0.91294	_G2	Combination	-5.2	73.7	2.8	0.0	-1.1	520.6
2000	0	_G2	Combination	-2.5	77.8	-4.6	-0.1	-0.9	520.5
2000	0.16466	_G2	Combination	-2.5	77.8	-4.6	-0.1	-0.2	507.7
2001	0	_G2	Combination	-1.7	88.8	-2.0	0.0	-1.0	506.0
2001	0.3592	_G2	Combination	-1.7	88.8	-2.0	0.0	-0.3	474.1
2001	0.7184	_G2	Combination	-1.7	88.8	-2.0	0.0	0.5	442.2
2001	1.0776	_G2	Combination	-1.7	88.8	-2.0	0.0	1.2	410.3
2002	0	_G2	Combination	1.3	98.9	-0.9	0.0	-0.5	407.2
2002	0.3592	_G2	Combination	1.3	98.9	-0.9	0.0	-0.1	371.7
2002	0.7184	_G2	Combination	1.3	98.9	-0.9	0.0	0.2	336.2
2002	1.0776	_G2	Combination	1.3	98.9	-0.9	0.0	0.5	300.7
2003	0	_G2	Combination	2.5	108.3	-0.7	0.0	-0.4	299.5
2003	0.3592	_G2	Combination	2.5	108.3	-0.7	0.0	-0.2	260.6
2003	0.7184	_G2	Combination	2.5	108.3	-0.7	0.0	0.1	221.7

2003	1.0776	_G2	Combination	2.5	108.3	-0.7	0.0	0.3	182.8
2004	0	_G2	Combination	1.9	117.6	-1.3	0.0	-0.7	183.2
2004	0.3592	_G2	Combination	1.9	117.6	-1.3	0.0	-0.3	141.0
2004	0.7184	_G2	Combination	1.9	117.6	-1.3	0.0	0.2	98.7
2004	1.0776	_G2	Combination	1.9	117.6	-1.3	0.0	0.6	56.5
2005	0	_G2	Combination	0.7	127.1	-2.7	0.0	-0.8	57.4
2005	0.48492	_G2	Combination	0.7	127.1	-2.7	0.0	0.5	-4.2
2006	0	_G2	Combination	0.8	-127.1	-3.0	0.0	-0.5	-4.1
2006	0.48492	_G2	Combination	0.8	-127.1	-3.0	0.0	0.9	57.5
2007	0	_G2	Combination	2.0	-117.7	-1.4	0.0	-0.7	56.5
2007	0.3592	_G2	Combination	2.0	-117.7	-1.4	0.0	-0.2	98.8
2007	0.7184	_G2	Combination	2.0	-117.7	-1.4	0.0	0.3	141.0
2007	1.0776	_G2	Combination	2.0	-117.7	-1.4	0.0	0.8	183.3
2008	0	_G2	Combination	2.6	-108.5	-0.7	0.0	-0.3	182.8
2008	0.3592	_G2	Combination	2.6	-108.5	-0.7	0.0	-0.1	221.8
2008	0.7184	_G2	Combination	2.6	-108.5	-0.7	0.0	0.2	260.7
2008	1.0776	_G2	Combination	2.6	-108.5	-0.7	0.0	0.4	299.7
2009	0	_G2	Combination	1.3	-99.0	-0.8	0.0	-0.5	300.9
2009	0.3592	_G2	Combination	1.3	-99.0	-0.8	0.0	-0.2	336.5
2009	0.7184	_G2	Combination	1.3	-99.0	-0.8	0.0	0.1	372.0
2009	1.0776	_G2	Combination	1.3	-99.0	-0.8	0.0	0.4	407.6
2010	0	_G2	Combination	-1.8	-89.0	-1.9	0.0	-1.2	410.7
2010	0.3592	_G2	Combination	-1.8	-89.0	-1.9	0.0	-0.5	442.7
2010	0.7184	_G2	Combination	-1.8	-89.0	-1.9	0.0	0.2	474.7
2010	1.0776	_G2	Combination	-1.8	-89.0	-1.9	0.0	0.9	506.6
2011	0	_G2	Combination	-2.7	-78.0	-4.4	-0.1	0.1	508.4
2011	0.16466	_G2	Combination	-2.7	-78.0	-4.4	-0.1	0.8	521.3
2012	0	_G2	Combination	-5.2	-73.8	2.7	0.0	1.0	521.4
2012	0.45647	_G2	Combination	-5.2	-73.8	2.7	0.0	-0.2	555.0
2012	0.91294	_G2	Combination	-5.2	-73.8	2.7	0.0	-1.4	588.7

2013	0	_G2	Combination	-1.3	-63.2	0.9	0.0	0.4	586.1
2013	0.3592	_G2	Combination	-1.3	-63.2	0.9	0.0	0.1	608.8
2013	0.7184	_G2	Combination	-1.3	-63.2	0.9	0.0	-0.2	631.5
2013	1.0776	_G2	Combination	-1.3	-63.2	0.9	0.0	-0.6	654.2
2014	0	_G2	Combination	0.0	-52.9	-0.6	0.0	-0.4	653.6
2014	0.47839	_G2	Combination	0.0	-52.9	-0.6	0.0	-0.1	678.9
2014	0.95677	_G2	Combination	0.0	-52.9	-0.6	0.0	0.2	704.2
2015	0	_G2	Combination	0.0	-52.9	-0.6	-0.1	0.2	704.2
2015	0.12083	_G2	Combination	0.0	-52.9	-0.6	-0.1	0.3	710.6
2016	0	_G2	Combination	-1.7	-42.4	-2.6	-0.1	-1.6	712.9
2016	0.3592	_G2	Combination	-1.7	-42.4	-2.6	-0.1	-0.7	728.1
2016	0.7184	_G2	Combination	-1.7	-42.4	-2.6	-0.1	0.3	743.3
2016	1.0776	_G2	Combination	-1.7	-42.4	-2.6	-0.1	1.2	758.5
2017	0	_G2	Combination	-4.5	-31.2	-5.5	-0.1	-2.3	762.3
2017	0.40712	_G2	Combination	-4.5	-31.2	-5.5	-0.1	-0.1	775.0
2017	0.81425	_G2	Combination	-4.5	-31.2	-5.5	-0.1	2.1	787.7
2018	0	_G2	Combination	-9.6	-28.0	7.5	0.0	1.7	787.8
2018	0.26335	_G2	Combination	-9.6	-28.0	7.5	0.0	-0.2	795.2
2019	0	_G2	Combination	-6.2	-16.5	3.8	-0.1	1.9	793.5
2019	0.3592	_G2	Combination	-6.2	-16.5	3.8	-0.1	0.6	799.4
2019	0.7184	_G2	Combination	-6.2	-16.5	3.8	-0.1	-0.8	805.3
2019	1.0776	_G2	Combination	-6.2	-16.5	3.8	-0.1	-2.1	811.2
2020	0	_G2	Combination	-2.0	-5.4	1.1	-0.1	0.5	808.3
2020	0.37968	_G2	Combination	-2.0	-5.4	1.1	-0.1	0.0	810.4
2020	0.75936	_G2	Combination	-2.0	-5.4	1.1	-0.1	-0.4	812.5
2020	1.13904	_G2	Combination	-2.0	-5.4	1.1	-0.1	-0.8	814.5
2021	0	_G2	Combination	-1.1	5.3	-1.2	-0.1	-0.8	814.4
2021	0.37968	_G2	Combination	-1.1	5.3	-1.2	-0.1	-0.4	812.4
2021	0.75936	_G2	Combination	-1.1	5.3	-1.2	-0.1	0.0	810.4
2021	1.13904	_G2	Combination	-1.1	5.3	-1.2	-0.1	0.5	808.4

2022	0	_G2	Combination	-3.0	16.3	-3.9	-0.1	-2.1	811.1
2022	0.3592	_G2	Combination	-3.0	16.3	-3.9	-0.1	-0.8	805.2
2022	0.7184	_G2	Combination	-3.0	16.3	-3.9	-0.1	0.6	799.4
2022	1.0776	_G2	Combination	-3.0	16.3	-3.9	-0.1	2.0	793.5
2023	0	_G2	Combination	-3.4	27.8	-7.6	-0.2	0.4	795.3
2023	0.26335	_G2	Combination	-3.4	27.8	-7.6	-0.2	2.4	788.0
2024	0	_G2	Combination	-8.6	30.9	5.5	0.0	2.0	788.0
2024	0.40712	_G2	Combination	-8.6	30.9	5.5	0.0	-0.3	775.5
2024	0.81425	_G2	Combination	-8.6	30.9	5.5	0.0	-2.5	762.9
2025	0	_G2	Combination	-3.5	42.1	2.6	-0.1	1.2	759.2
2025	0.3592	_G2	Combination	-3.5	42.1	2.6	-0.1	0.3	744.0
2025	0.7184	_G2	Combination	-3.5	42.1	2.6	-0.1	-0.7	728.9
2025	1.0776	_G2	Combination	-3.5	42.1	2.6	-0.1	-1.6	713.8
2026	0	_G2	Combination	-0.4	52.7	0.7	0.0	0.3	711.4
2026	0.12083	_G2	Combination	-0.4	52.7	0.7	0.0	0.2	705.0
2027	0	_G2	Combination	-0.4	52.7	0.7	0.0	0.2	705.0
2027	0.47839	_G2	Combination	-0.4	52.7	0.7	0.0	-0.1	679.8
2027	0.95677	_G2	Combination	-0.4	52.7	0.7	0.0	-0.5	654.6
2028	0	_G2	Combination	-0.3	62.9	-0.9	0.0	-0.6	654.7
2028	0.3592	_G2	Combination	-0.3	62.9	-0.9	0.0	-0.3	632.1
2028	0.7184	_G2	Combination	-0.3	62.9	-0.9	0.0	0.1	609.5
2028	1.0776	_G2	Combination	-0.3	62.9	-0.9	0.0	0.4	586.9
2029	0	_G2	Combination	-2.6	73.5	-3.0	0.0	-1.4	589.0
2029	0.45647	_G2	Combination	-2.6	73.5	-3.0	0.0	-0.1	555.4
2029	0.91294	_G2	Combination	-2.6	73.5	-3.0	0.0	1.3	521.9
2030	0	_G2	Combination	-5.9	77.5	5.0	0.0	0.4	521.9
2030	0.16466	_G2	Combination	-5.9	77.5	5.0	0.0	-0.4	509.1
2031	0	_G2	Combination	-3.3	88.5	2.3	0.0	1.1	507.4
2031	0.3592	_G2	Combination	-3.3	88.5	2.3	0.0	0.3	475.7
2031	0.7184	_G2	Combination	-3.3	88.5	2.3	0.0	-0.5	443.9

2031	1.0776	_G2	Combination	-3.3	88.5	2.3	0.0	-1.4	412.1
2032	0	_G2	Combination	0.4	98.6	1.1	0.0	0.5	408.7
2032	0.3592	_G2	Combination	0.4	98.6	1.1	0.0	0.2	373.3
2032	0.7184	_G2	Combination	0.4	98.6	1.1	0.0	-0.2	337.9
2032	1.0776	_G2	Combination	0.4	98.6	1.1	0.0	-0.6	302.4
2033	0	_G2	Combination	1.8	108.2	0.7	0.0	0.4	300.5
2033	0.3592	_G2	Combination	1.8	108.2	0.7	0.0	0.2	261.7
2033	0.7184	_G2	Combination	1.8	108.2	0.7	0.0	-0.1	222.8
2033	1.0776	_G2	Combination	1.8	108.2	0.7	0.0	-0.4	183.9
2034	0	_G2	Combination	0.9	117.6	1.0	0.0	0.6	183.5
2034	0.3592	_G2	Combination	0.9	117.6	1.0	0.0	0.2	141.3
2034	0.7184	_G2	Combination	0.9	117.6	1.0	0.0	-0.1	99.0
2034	1.0776	_G2	Combination	0.9	117.6	1.0	0.0	-0.5	56.8
2035	0	_G2	Combination	-1.1	127.2	2.0	0.0	0.9	57.3
2035	0.48492	_G2	Combination	-1.1	127.2	2.0	0.0	-0.1	-4.4
2036	0	_G2	Combination	-4.5	-144.3	11.2	-0.1	2.6	-7.4
2036	0.48492	_G2	Combination	-4.5	-144.3	11.2	-0.1	-2.8	62.6
2037	0	_G2	Combination	-3.6	-129.6	5.8	0.0	2.6	62.9
2037	0.3592	_G2	Combination	-3.6	-129.6	5.8	0.0	0.6	109.5
2037	0.7184	_G2	Combination	-3.6	-129.6	5.8	0.0	-1.5	156.0
2037	1.0776	_G2	Combination	-3.6	-129.6	5.8	0.0	-3.6	202.6
2038	0	_G2	Combination	-2.1	-114.8	1.0	0.0	-0.4	202.6
2038	0.3592	_G2	Combination	-2.1	-114.8	1.0	0.0	-0.7	243.8
2038	0.7184	_G2	Combination	-2.1	-114.8	1.0	0.0	-1.1	285.1
2038	1.0776	_G2	Combination	-2.1	-114.8	1.0	0.0	-1.4	326.3
2039	0	_G2	Combination	1.4	-100.4	-4.0	0.0	-3.0	324.8
2039	0.3592	_G2	Combination	1.4	-100.4	-4.0	0.0	-1.6	360.9
2039	0.7184	_G2	Combination	1.4	-100.4	-4.0	0.0	-0.2	397.0
2039	1.0776	_G2	Combination	1.4	-100.4	-4.0	0.0	1.2	433.1
2040	0	_G2	Combination	7.7	-86.7	-10.1	0.0	-5.1	429.7

2040	0.3592	_G2	Combination	7.7	-86.7	-10.1	0.0	-1.5	460.9
2040	0.7184	_G2	Combination	7.7	-86.7	-10.1	0.0	2.1	492.1
2040	1.0776	_G2	Combination	7.7	-86.7	-10.1	0.0	5.8	523.2
2041	0	_G2	Combination	12.9	-74.2	-18.1	0.1	2.6	521.4
2041	0.16466	_G2	Combination	12.9	-74.2	-18.1	0.1	5.6	533.6
2042	0	_G2	Combination	0.9	-78.3	11.4	-0.1	5.9	533.4
2042	0.45647	_G2	Combination	0.9	-78.3	11.4	-0.1	0.7	569.2
2042	0.91294	_G2	Combination	0.9	-78.3	11.4	-0.1	-4.5	604.9
2043	0	_G2	Combination	0.8	-65.3	4.3	0.0	1.5	607.5
2043	0.3592	_G2	Combination	0.8	-65.3	4.3	0.0	-0.1	630.9
2043	0.7184	_G2	Combination	0.8	-65.3	4.3	0.0	-1.6	654.4
2043	1.07761	_G2	Combination	0.8	-65.3	4.3	0.0	-3.2	677.8
2044	0	_G2	Combination	2.9	-51.9	-1.9	0.0	-2.1	678.4
2044	0.47839	_G2	Combination	2.9	-51.9	-1.9	0.0	-1.2	703.3
2044	0.95678	_G2	Combination	2.9	-51.9	-1.9	0.0	-0.2	728.1
2045	0	_G2	Combination	2.9	-51.9	-1.9	-0.2	-0.2	727.8
2045	0.12083	_G2	Combination	2.9	-51.9	-1.9	-0.2	0.0	734.1
2046	0	_G2	Combination	8.2	-39.0	-8.0	0.0	-5.1	731.9
2046	0.3592	_G2	Combination	8.2	-39.0	-8.0	0.0	-2.3	745.9
2046	0.7184	_G2	Combination	8.2	-39.0	-8.0	0.0	0.6	759.9
2046	1.0776	_G2	Combination	8.2	-39.0	-8.0	0.0	3.5	773.9
2047	0	_G2	Combination	15.8	-26.8	-15.5	0.0	-4.5	769.9
2047	0.40712	_G2	Combination	15.8	-26.8	-15.5	0.0	1.8	780.8
2047	0.81425	_G2	Combination	15.8	-26.8	-15.5	0.0	8.1	791.7
2048	0	_G2	Combination	1.9	-30.2	19.5	-0.1	7.9	791.7
2048	0.26335	_G2	Combination	1.9	-30.2	19.5	-0.1	2.8	799.6
2049	0	_G2	Combination	3.2	-18.6	11.0	-0.1	6.5	801.9
2049	0.3592	_G2	Combination	3.2	-18.6	11.0	-0.1	2.5	808.6
2049	0.7184	_G2	Combination	3.2	-18.6	11.0	-0.1	-1.5	815.2
2049	1.0776	_G2	Combination	3.2	-18.6	11.0	-0.1	-5.4	821.9

2050	0	_G2	Combination	2.8	-6.1	3.6	-0.1	0.6	825.6
2050	0.37968	_G2	Combination	2.8	-6.1	3.6	-0.1	-0.8	827.9
2050	0.75936	_G2	Combination	2.8	-6.1	3.6	-0.1	-2.2	830.2
2050	1.13904	_G2	Combination	2.8	-6.1	3.6	-0.1	-3.5	832.5
2051	0	_G2	Combination	5.6	7.0	-3.5	-0.1	-3.5	833.1
2051	0.37968	_G2	Combination	5.6	7.0	-3.5	-0.1	-2.1	830.4
2051	0.75936	_G2	Combination	5.6	7.0	-3.5	-0.1	-0.8	827.8
2051	1.13904	_G2	Combination	5.6	7.0	-3.5	-0.1	0.5	825.1
2052	0	_G2	Combination	11.8	19.6	-10.8	0.0	-5.3	822.6
2052	0.3592	_G2	Combination	11.8	19.6	-10.8	0.0	-1.4	815.5
2052	0.7184	_G2	Combination	11.8	19.6	-10.8	0.0	2.5	808.5
2052	1.0776	_G2	Combination	11.8	19.6	-10.8	0.0	6.4	801.5
2053	0	_G2	Combination	17.1	31.2	-19.1	0.0	3.0	800.2
2053	0.26336	_G2	Combination	17.1	31.2	-19.1	0.0	8.1	792.0
2054	0	_G2	Combination	3.4	27.8	15.3	-0.1	7.9	792.0
2054	0.40713	_G2	Combination	3.4	27.8	15.3	-0.1	1.7	780.6
2054	0.81425	_G2	Combination	3.4	27.8	15.3	-0.1	-4.6	769.3
2055	0	_G2	Combination	1.7	40.0	7.9	-0.1	3.4	774.2
2055	0.3592	_G2	Combination	1.7	40.0	7.9	-0.1	0.6	759.9
2055	0.7184	_G2	Combination	1.7	40.0	7.9	-0.1	-2.2	745.5
2055	1.07761	_G2	Combination	1.7	40.0	7.9	-0.1	-5.1	731.1
2056	0	_G2	Combination	1.3	52.9	1.8	0.1	0.0	734.7
2056	0.12083	_G2	Combination	1.3	52.9	1.8	0.1	-0.2	728.3
2057	0	_G2	Combination	1.3	52.9	1.8	-0.1	-0.2	728.5
2057	0.47839	_G2	Combination	1.3	52.9	1.8	-0.1	-1.1	703.2
2057	0.95677	_G2	Combination	1.3	52.9	1.8	-0.1	-2.0	677.9
2058	0	_G2	Combination	4.1	66.2	-4.2	0.0	-3.1	678.6
2058	0.3592	_G2	Combination	4.1	66.2	-4.2	0.0	-1.6	654.8
2058	0.7184	_G2	Combination	4.1	66.2	-4.2	0.0	-0.1	631.0
2058	1.0776	_G2	Combination	4.1	66.2	-4.2	0.0	1.4	607.2

2059	0	_G2	Combination	9.6	79.2	-10.9	0.0	-4.3	605.8
2059	0.45647	_G2	Combination	9.6	79.2	-10.9	0.0	0.7	569.7
2059	0.91294	_G2	Combination	9.6	79.2	-10.9	0.0	5.6	533.5
2060	0	_G2	Combination	-1.2	75.3	17.1	-0.2	5.1	533.5
2060	0.16466	_G2	Combination	-1.2	75.3	17.1	-0.2	2.3	521.1
2061	0	_G2	Combination	-0.2	87.8	9.4	0.0	5.4	523.9
2061	0.3592	_G2	Combination	-0.2	87.8	9.4	0.0	2.0	492.3
2061	0.7184	_G2	Combination	-0.2	87.8	9.4	0.0	-1.4	460.8
2061	1.0776	_G2	Combination	-0.2	87.8	9.4	0.0	-4.8	429.2
2062	0	_G2	Combination	-1.6	101.5	3.6	0.0	1.1	433.5
2062	0.3592	_G2	Combination	-1.6	101.5	3.6	0.0	-0.2	397.1
2062	0.7184	_G2	Combination	-1.6	101.5	3.6	0.0	-1.5	360.7
2062	1.0776	_G2	Combination	-1.6	101.5	3.6	0.0	-2.8	324.2
2063	0	_G2	Combination	-1.3	115.8	-0.9	0.0	-1.3	326.9
2063	0.3592	_G2	Combination	-1.3	115.8	-0.9	0.0	-1.0	285.3
2063	0.7184	_G2	Combination	-1.3	115.8	-0.9	0.0	-0.7	243.8
2063	1.0776	_G2	Combination	-1.3	115.8	-0.9	0.0	-0.3	202.2
2064	0	_G2	Combination	0.9	130.4	-5.2	0.0	-3.2	203.3
2064	0.3592	_G2	Combination	0.9	130.4	-5.2	0.0	-1.4	156.4
2064	0.7184	_G2	Combination	0.9	130.4	-5.2	0.0	0.5	109.6
2064	1.0776	_G2	Combination	0.9	130.4	-5.2	0.0	2.4	62.8
2065	0	_G2	Combination	3.9	145.1	-10.0	0.1	-2.5	63.1
2065	0.48492	_G2	Combination	3.9	145.1	-10.0	0.1	2.4	-7.3
2066	0	_G2	Combination	0.9	-126.9	-0.4	0.0	-0.1	-5.6
2066	0.48492	_G2	Combination	0.9	-126.9	-0.4	0.0	0.0	55.9
2067	0	_G2	Combination	-0.1	-117.0	-0.2	0.0	-0.1	57.2
2067	0.3592	_G2	Combination	-0.1	-117.0	-0.2	0.0	0.0	99.3
2067	0.7184	_G2	Combination	-0.1	-117.0	-0.2	0.0	0.0	141.3
2067	1.0776	_G2	Combination	-0.1	-117.0	-0.2	0.0	0.1	183.4
2068	0	_G2	Combination	-0.9	-106.8	0.0	0.0	0.0	184.5

2068	0.3592	_G2	Combination	-0.9	-106.8	0.0	0.0	0.0	222.9
2068	0.7184	_G2	Combination	-0.9	-106.8	0.0	0.0	0.0	261.3
2068	1.0776	_G2	Combination	-0.9	-106.8	0.0	0.0	0.0	299.6
2069	0	_G2	Combination	-1.5	-96.4	0.1	0.0	0.1	300.7
2069	0.3592	_G2	Combination	-1.5	-96.4	0.1	0.0	0.0	335.3
2069	0.7184	_G2	Combination	-1.5	-96.4	0.1	0.0	0.0	369.9
2069	1.0776	_G2	Combination	-1.5	-96.4	0.1	0.0	-0.1	404.6
2070	0	_G2	Combination	-2.3	-85.6	0.3	0.0	0.2	405.7
2070	0.3592	_G2	Combination	-2.3	-85.6	0.3	0.0	0.0	436.5
2070	0.7184	_G2	Combination	-2.3	-85.6	0.3	0.0	-0.1	467.2
2070	1.0776	_G2	Combination	-2.3	-85.6	0.3	0.0	-0.2	498.0
2071	0	_G2	Combination	-3.2	-74.4	0.5	0.0	0.3	499.1
2071	0.16466	_G2	Combination	-3.2	-74.4	0.5	0.0	0.2	511.4
2072	0	_G2	Combination	-2.6	-74.7	-0.3	0.0	-0.2	511.4
2072	0.45647	_G2	Combination	-2.6	-74.7	-0.3	0.0	-0.1	545.5
2072	0.91294	_G2	Combination	-2.6	-74.7	-0.3	0.0	0.1	579.6
2073	0	_G2	Combination	-3.0	-63.6	-0.1	0.0	0.0	580.2
2073	0.3592	_G2	Combination	-3.0	-63.6	-0.1	0.0	0.0	603.0
2073	0.7184	_G2	Combination	-3.0	-63.6	-0.1	0.0	0.0	625.9
2073	1.0776	_G2	Combination	-3.0	-63.6	-0.1	0.0	0.1	648.7
2074	0	_G2	Combination	-3.7	-52.5	0.0	0.0	0.0	649.5
2074	0.47839	_G2	Combination	-3.7	-52.5	0.0	0.0	0.0	674.6
2074	0.95677	_G2	Combination	-3.7	-52.5	0.0	0.0	0.0	699.7
2075	0	_G2	Combination	-3.7	-52.5	0.0	0.0	0.0	700.1
2075	0.12083	_G2	Combination	-3.7	-52.5	0.0	0.0	0.0	706.4
2076	0	_G2	Combination	-4.7	-41.3	0.1	-0.1	0.1	707.6
2076	0.3592	_G2	Combination	-4.7	-41.3	0.1	-0.1	0.0	722.4
2076	0.7184	_G2	Combination	-4.7	-41.3	0.1	-0.1	0.0	737.2
2076	1.0776	_G2	Combination	-4.7	-41.3	0.1	-0.1	-0.1	752.1
2077	0	_G2	Combination	-6.1	-29.7	0.2	-0.1	0.2	753.6

2077	0.40712	_G2	Combination	-6.1	-29.7	0.2	-0.1	0.1	765.6
2077	0.81425	_G2	Combination	-6.1	-29.7	0.2	-0.1	0.0	777.7
2078	0	_G2	Combination	-5.9	-29.3	-0.3	-0.1	-0.5	777.7
2078	0.26335	_G2	Combination	-5.9	-29.3	-0.3	-0.1	-0.4	785.4
2079	0	_G2	Combination	-5.7	-17.3	-0.2	-0.1	-0.1	785.3
2079	0.3592	_G2	Combination	-5.7	-17.3	-0.2	-0.1	-0.1	791.5
2079	0.7184	_G2	Combination	-5.7	-17.3	-0.2	-0.1	0.0	797.7
2079	1.0776	_G2	Combination	-5.7	-17.3	-0.2	-0.1	0.1	803.9
2080	0	_G2	Combination	-5.2	-5.7	-0.1	-0.1	0.0	803.4
2080	0.37968	_G2	Combination	-5.2	-5.7	-0.1	-0.1	0.0	805.6
2080	0.75936	_G2	Combination	-5.2	-5.7	-0.1	-0.1	0.0	807.8
2080	1.13904	_G2	Combination	-5.2	-5.7	-0.1	-0.1	0.0	810.0
2081	0	_G2	Combination	-5.2	5.7	0.0	-0.1	0.0	810.0
2081	0.37968	_G2	Combination	-5.2	5.7	0.0	-0.1	0.0	807.8
2081	0.75936	_G2	Combination	-5.2	5.7	0.0	-0.1	0.0	805.6
2081	1.13904	_G2	Combination	-5.2	5.7	0.0	-0.1	0.0	803.4
2082	0	_G2	Combination	-5.8	17.3	0.0	-0.1	0.0	803.9
2082	0.3592	_G2	Combination	-5.8	17.3	0.0	-0.1	0.0	797.7
2082	0.7184	_G2	Combination	-5.8	17.3	0.0	-0.1	0.0	791.5
2082	1.0776	_G2	Combination	-5.8	17.3	0.0	-0.1	0.0	785.3
2083	0	_G2	Combination	-6.0	29.2	0.0	-0.1	0.4	785.4
2083	0.26335	_G2	Combination	-6.0	29.2	0.0	-0.1	0.4	777.7
2084	0	_G2	Combination	-6.1	29.7	0.0	-0.1	-0.1	777.7
2084	0.40712	_G2	Combination	-6.1	29.7	0.0	-0.1	-0.1	765.7
2084	0.81425	_G2	Combination	-6.1	29.7	0.0	-0.1	-0.1	753.6
2085	0	_G2	Combination	-4.6	41.3	0.0	-0.1	0.0	752.1
2085	0.3592	_G2	Combination	-4.6	41.3	0.0	-0.1	0.0	737.2
2085	0.7184	_G2	Combination	-4.6	41.3	0.0	-0.1	0.0	722.4
2085	1.0776	_G2	Combination	-4.6	41.3	0.0	-0.1	0.0	707.6
2086	0	_G2	Combination	-3.7	52.5	0.0	0.0	0.0	706.4

2086	0.12083	_G2	Combination	-3.7	52.5	0.0	0.0	0.0	700.1
2087	0	_G2	Combination	-3.7	52.5	0.0	0.0	0.0	699.8
2087	0.47839	_G2	Combination	-3.7	52.5	0.0	0.0	0.0	674.6
2087	0.95677	_G2	Combination	-3.7	52.5	0.0	0.0	0.0	649.5
2088	0	_G2	Combination	-3.1	63.6	0.0	0.0	0.0	648.7
2088	0.3592	_G2	Combination	-3.1	63.6	0.0	0.0	0.0	625.9
2088	0.7184	_G2	Combination	-3.1	63.6	0.0	0.0	0.0	603.0
2088	1.0776	_G2	Combination	-3.1	63.6	0.0	0.0	0.0	580.2
2089	0	_G2	Combination	-2.7	74.7	-0.1	0.0	0.0	579.6
2089	0.45647	_G2	Combination	-2.7	74.7	-0.1	0.0	0.1	545.5
2089	0.91294	_G2	Combination	-2.7	74.7	-0.1	0.0	0.1	511.4
2090	0	_G2	Combination	-3.1	74.4	0.2	0.0	-0.3	511.4
2090	0.16466	_G2	Combination	-3.1	74.4	0.2	0.0	-0.3	499.1
2091	0	_G2	Combination	-2.2	85.6	0.1	0.0	0.1	498.0
2091	0.3592	_G2	Combination	-2.2	85.6	0.1	0.0	0.0	467.2
2091	0.7184	_G2	Combination	-2.2	85.6	0.1	0.0	0.0	436.5
2091	1.0776	_G2	Combination	-2.2	85.6	0.1	0.0	-0.1	405.7
2092	0	_G2	Combination	-1.5	96.4	0.1	0.0	0.0	404.6
2092	0.3592	_G2	Combination	-1.5	96.4	0.1	0.0	0.0	369.9
2092	0.7184	_G2	Combination	-1.5	96.4	0.1	0.0	0.0	335.3
2092	1.0776	_G2	Combination	-1.5	96.4	0.1	0.0	0.0	300.7
2093	0	_G2	Combination	-0.9	106.8	0.0	0.0	0.0	299.6
2093	0.3592	_G2	Combination	-0.9	106.8	0.0	0.0	0.0	261.3
2093	0.7184	_G2	Combination	-0.9	106.8	0.0	0.0	0.0	222.9
2093	1.0776	_G2	Combination	-0.9	106.8	0.0	0.0	0.0	184.5
2094	0	_G2	Combination	-0.2	117.0	-0.1	0.0	-0.1	183.4
2094	0.3592	_G2	Combination	-0.2	117.0	-0.1	0.0	0.0	141.3
2094	0.7184	_G2	Combination	-0.2	117.0	-0.1	0.0	0.0	99.3
2094	1.0776	_G2	Combination	-0.2	117.0	-0.1	0.0	0.1	57.3
2095	0	_G2	Combination	0.8	126.9	-0.2	0.0	0.0	55.9

2095	0.48492	_G2	Combination	0.8	126.9	-0.2	0.0	0.1	-5.6
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Reazioni vincolari e spostamenti – FASE 1B

Per le reazioni vincolari dei dispositivi di vincolo e i relativi spostamenti/rotazioni, si rimanda al §5.7.

10.1.4 Fase 1C

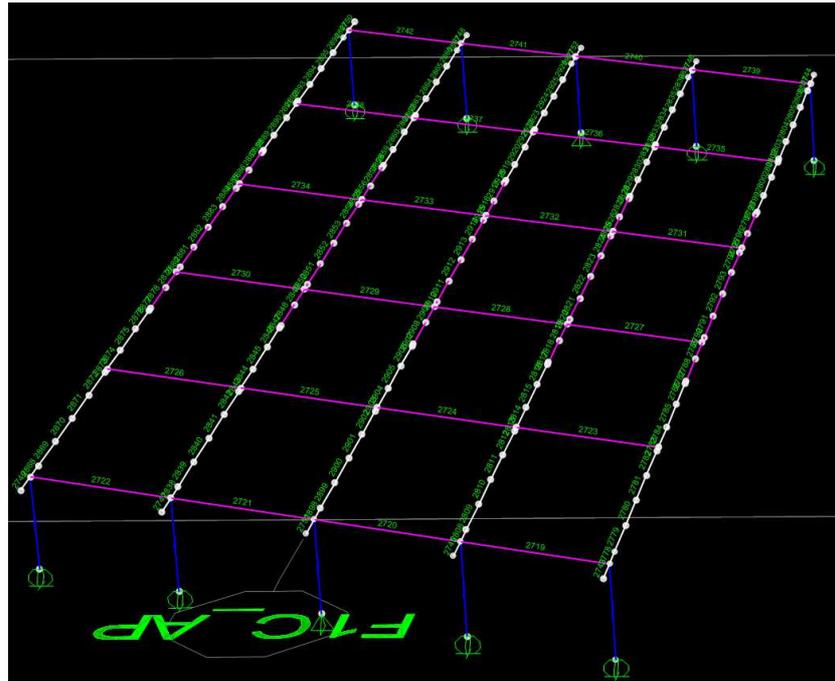


Figura 8 – Numerazione Frames modello FEM – Fase 1C.

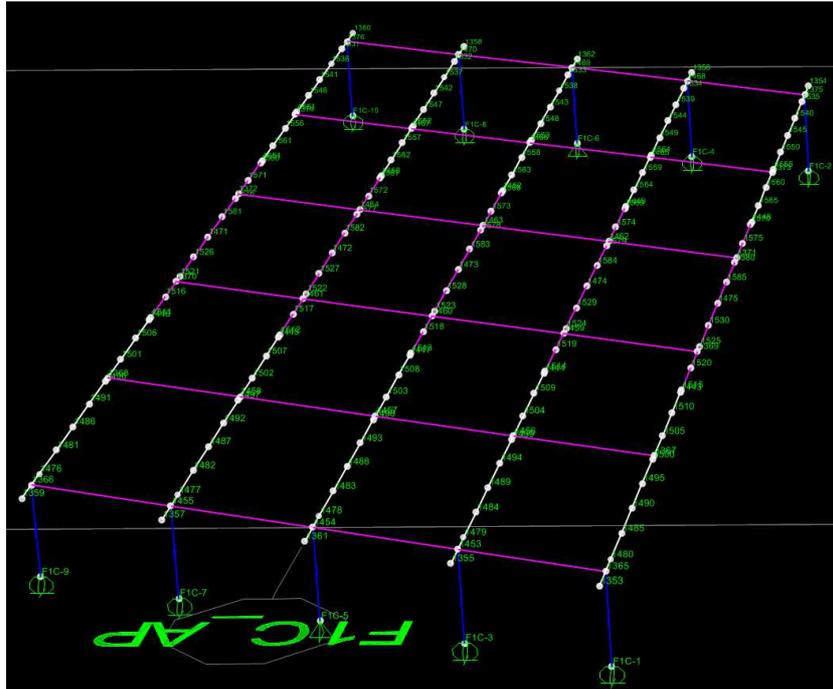


Figura 9 – Numerazione Joints modello FEM – Fase 1C.

Carichi e combinazioni di carico – FASE 1C

I carichi applicati alla struttura e la loro combinazione sono oggetto dei §5.2 e §5.3.

Sollecitazioni travi – FASE 1C

TABLE: Element Forces - Frames									
Frame	Station	OutputCase	CaseType	P	V2	V3	T	M2	M3
Text	m	Text	Text	KN	KN	KN	KN-m	KN-m	KN-m
2743	0	_R	Combination	0.0	0.0	0.0	0.0	0.0	0.0
2743	0.29634	_R	Combination	0.0	0.0	0.0	0.0	0.0	0.0
2743	0.59268	_R	Combination	0.0	0.0	0.0	0.0	0.0	0.0
2744	0	_R	Combination	0.0	0.0	0.0	0.0	0.0	0.0
2744	0.29634	_R	Combination	0.0	0.0	0.0	0.0	0.0	0.0
2744	0.59269	_R	Combination	0.0	0.0	0.0	0.0	0.0	0.0
2745	0	_R	Combination	0.0	0.0	0.0	0.0	0.0	0.0
2745	0.29634	_R	Combination	0.0	0.0	0.0	0.0	0.0	0.0
2745	0.59268	_R	Combination	0.0	0.0	0.0	0.0	0.0	0.0
2746	0	_R	Combination	0.0	0.0	0.0	0.0	0.0	0.0
2746	0.29634	_R	Combination	0.0	0.0	0.0	0.0	0.0	0.0
2746	0.59268	_R	Combination	0.0	0.0	0.0	0.0	0.0	0.0

2747	0	_R	Combination	0.0	0.0	0.0	0.0	0.0	0.0
2747	0.29634	_R	Combination	0.0	0.0	0.0	0.0	0.0	0.0
2747	0.59268	_R	Combination	0.0	0.0	0.0	0.0	0.0	0.0
2748	0	_R	Combination	0.0	0.0	0.0	0.0	0.0	0.0
2748	0.29634	_R	Combination	0.0	0.0	0.0	0.0	0.0	0.0
2748	0.59268	_R	Combination	0.0	0.0	0.0	0.0	0.0	0.0
2749	0	_R	Combination	0.0	0.0	0.0	0.0	0.0	0.0
2749	0.29634	_R	Combination	0.0	0.0	0.0	0.0	0.0	0.0
2749	0.59268	_R	Combination	0.0	0.0	0.0	0.0	0.0	0.0
2750	0	_R	Combination	0.0	0.0	0.0	0.0	0.0	0.0
2750	0.29634	_R	Combination	0.0	0.0	0.0	0.0	0.0	0.0
2750	0.59269	_R	Combination	0.0	0.0	0.0	0.0	0.0	0.0
2751	0	_R	Combination	0.0	0.0	0.0	0.0	0.0	0.0
2751	0.29634	_R	Combination	0.0	0.0	0.0	0.0	0.0	0.0
2751	0.59268	_R	Combination	0.0	0.0	0.0	0.0	0.0	0.0
2752	0	_R	Combination	0.0	0.0	0.0	0.0	0.0	0.0
2752	0.29634	_R	Combination	0.0	0.0	0.0	0.0	0.0	0.0
2752	0.59268	_R	Combination	0.0	0.0	0.0	0.0	0.0	0.0
2778	0	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2778	0.48492	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2779	0	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2779	0.3592	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2779	0.7184	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2779	1.0776	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2780	0	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2780	0.3592	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2780	0.7184	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2780	1.0776	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.2
2781	0	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.2
2781	0.3592	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.2
2781	0.7184	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.2
2781	1.0776	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.2
2782	0	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.2
2782	0.3592	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.2
2782	0.7184	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.2
2782	1.0776	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.2

2783	0	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.2
2783	0.16466	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.2
2784	0	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.2
2784	0.45647	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.2
2784	0.91294	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.2
2785	0	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.2
2785	0.3592	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.2
2785	0.7184	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.2
2785	1.07761	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.2
2786	0	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.2
2786	0.47839	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.2
2786	0.95678	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.2
2787	0	_R	Combination	-2130.0	0.0	0.0	0.0	0.0	1153.5
2787	0.12083	_R	Combination	-2130.0	0.0	0.0	0.0	0.0	1153.5
2788	0	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	1153.5
2788	0.3592	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	1153.5
2788	0.7184	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	1153.5
2788	1.0776	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	1153.5
2789	0	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	1153.5
2789	0.40712	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	1153.5
2789	0.81425	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	1153.5
2790	0	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	1153.5
2790	0.26335	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	1153.5
2791	0	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	1153.5
2791	0.3592	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	1153.5
2791	0.7184	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	1153.5
2791	1.0776	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	1153.5
2792	0	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	1153.5
2792	0.37968	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	1153.5
2792	0.75936	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	1153.5
2792	1.13904	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	1153.5
2793	0	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	1153.5
2793	0.37968	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	1153.5
2793	0.75936	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	1153.5
2793	1.13904	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	1153.5
2794	0	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	1153.5

2794	0.3592	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	1153.5
2794	0.7184	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	1153.5
2794	1.0776	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	1153.5
2795	0	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	1153.5
2795	0.26335	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	1153.6
2796	0	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	1153.6
2796	0.40713	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	1153.6
2796	0.81425	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	1153.6
2797	0	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	1153.6
2797	0.3592	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	1153.6
2797	0.7184	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	1153.6
2797	1.07761	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	1153.6
2798	0	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	1153.6
2798	0.12083	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	1153.6
2799	0	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2799	0.47839	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2799	0.95677	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2800	0	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2800	0.3592	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2800	0.7184	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2800	1.0776	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2801	0	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2801	0.45647	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2801	0.91294	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2802	0	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2802	0.16466	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2803	0	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2803	0.3592	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2803	0.7184	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2803	1.0776	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2804	0	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2804	0.3592	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2804	0.7184	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2804	1.0776	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2805	0	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2805	0.3592	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3

2805	0.7184	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2805	1.0776	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2806	0	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2806	0.3592	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2806	0.7184	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2806	1.0776	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2807	0	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2807	0.48492	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2808	0	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2808	0.48492	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2809	0	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2809	0.3592	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2809	0.7184	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2809	1.0776	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2810	0	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2810	0.3592	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2810	0.7184	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2810	1.0776	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2811	0	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2811	0.3592	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2811	0.7184	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2811	1.0776	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2812	0	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2812	0.3592	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2812	0.7184	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2812	1.0776	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2813	0	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2813	0.16466	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2814	0	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2814	0.45647	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2814	0.91294	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2815	0	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2815	0.3592	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2815	0.7184	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2815	1.0776	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2816	0	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3

2816	0.47839	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2816	0.95677	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2817	0	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	1153.5
2817	0.12083	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	1153.5
2818	0	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	1153.5
2818	0.3592	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	1153.5
2818	0.7184	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	1153.5
2818	1.0776	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	1153.5
2819	0	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	1153.5
2819	0.40712	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	1153.5
2819	0.81425	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	1153.5
2820	0	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	1153.5
2820	0.26335	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	1153.5
2821	0	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	1153.5
2821	0.3592	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	1153.5
2821	0.7184	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	1153.5
2821	1.0776	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	1153.5
2822	0	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	1153.5
2822	0.37968	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	1153.5
2822	0.75936	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	1153.5
2822	1.13904	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	1153.5
2823	0	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	1153.5
2823	0.37968	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	1153.5
2823	0.75936	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	1153.5
2823	1.13904	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	1153.5
2824	0	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	1153.5
2824	0.3592	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	1153.5
2824	0.7184	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	1153.5
2824	1.0776	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	1153.5
2825	0	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	1153.5
2825	0.26335	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	1153.5
2826	0	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	1153.5
2826	0.40712	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	1153.5
2826	0.81425	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	1153.5
2827	0	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	1153.5
2827	0.3592	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	1153.5

2827	0.7184	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	1153.5
2827	1.0776	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	1153.5
2828	0	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	1153.5
2828	0.12083	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	1153.5
2829	0	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2829	0.47839	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2829	0.95677	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2830	0	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2830	0.3592	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2830	0.7184	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2830	1.0776	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2831	0	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2831	0.45647	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2831	0.91294	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2832	0	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2832	0.16466	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2833	0	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2833	0.3592	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2833	0.7184	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2833	1.0776	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2834	0	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2834	0.3592	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2834	0.7184	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2834	1.0776	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2835	0	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2835	0.3592	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2835	0.7184	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2835	1.0776	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2836	0	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2836	0.3592	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2836	0.7184	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2836	1.0776	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2837	0	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2837	0.48492	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2838	0	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2838	0.48492	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3

2839	0	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2839	0.3592	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2839	0.7184	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2839	1.0776	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2840	0	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2840	0.3592	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2840	0.7184	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2840	1.0776	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2841	0	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2841	0.3592	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2841	0.7184	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2841	1.0776	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2842	0	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2842	0.3592	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2842	0.7184	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2842	1.0776	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2843	0	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2843	0.16466	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2844	0	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2844	0.45647	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2844	0.91294	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2845	0	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2845	0.3592	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2845	0.7184	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2845	1.0776	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2846	0	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2846	0.47839	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2846	0.95677	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2847	0	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	1153.5
2847	0.12083	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	1153.5
2848	0	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	1153.5
2848	0.3592	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	1153.5
2848	0.7184	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	1153.5
2848	1.0776	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	1153.5
2849	0	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	1153.5
2849	0.40712	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	1153.5

2849	0.81425	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	1153.5
2850	0	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	1153.5
2850	0.26335	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	1153.5
2851	0	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	1153.5
2851	0.3592	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	1153.5
2851	0.7184	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	1153.5
2851	1.0776	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	1153.5
2852	0	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	1153.5
2852	0.37968	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	1153.5
2852	0.75936	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	1153.5
2852	1.13904	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	1153.5
2853	0	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	1153.5
2853	0.37968	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	1153.5
2853	0.75936	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	1153.5
2853	1.13904	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	1153.5
2854	0	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	1153.5
2854	0.3592	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	1153.5
2854	0.7184	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	1153.5
2854	1.0776	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	1153.5
2855	0	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	1153.5
2855	0.26335	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	1153.5
2856	0	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	1153.5
2856	0.40712	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	1153.5
2856	0.81425	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	1153.5
2857	0	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	1153.5
2857	0.3592	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	1153.5
2857	0.7184	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	1153.5
2857	1.0776	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	1153.5
2858	0	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	1153.5
2858	0.12083	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	1153.5
2859	0	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2859	0.47839	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2859	0.95677	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2860	0	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2860	0.3592	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2860	0.7184	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3

2860	1.0776	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2861	0	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.2
2861	0.45647	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.2
2861	0.91294	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.2
2862	0	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.2
2862	0.16466	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.2
2863	0	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.2
2863	0.3592	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.2
2863	0.7184	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.2
2863	1.0776	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2864	0	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2864	0.3592	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2864	0.7184	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2864	1.0776	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2865	0	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2865	0.3592	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2865	0.7184	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2865	1.0776	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2866	0	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2866	0.3592	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2866	0.7184	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2866	1.0776	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2867	0	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2867	0.48492	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2868	0	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2868	0.48492	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2869	0	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2869	0.3592	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2869	0.7184	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2869	1.0776	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2870	0	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2870	0.3592	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2870	0.7184	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2870	1.0776	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2871	0	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2871	0.3592	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3

2871	0.7184	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2871	1.0776	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2872	0	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2872	0.3592	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2872	0.7184	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2872	1.0776	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2873	0	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2873	0.16466	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2874	0	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2874	0.45647	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2874	0.91294	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2875	0	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2875	0.3592	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2875	0.7184	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2875	1.07761	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2876	0	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2876	0.47839	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2876	0.95678	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2877	0	_R	Combination	-2130.0	0.0	0.0	0.0	0.0	1153.6
2877	0.12083	_R	Combination	-2130.0	0.0	0.0	0.0	0.0	1153.6
2878	0	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	1153.6
2878	0.3592	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	1153.6
2878	0.7184	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	1153.6
2878	1.0776	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	1153.6
2879	0	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	1153.6
2879	0.40712	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	1153.6
2879	0.81425	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	1153.5
2880	0	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	1153.5
2880	0.26335	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	1153.5
2881	0	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	1153.5
2881	0.3592	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	1153.5
2881	0.7184	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	1153.5
2881	1.0776	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	1153.5
2882	0	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	1153.5
2882	0.37968	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	1153.5
2882	0.75936	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	1153.5

2882	1.13904	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	1153.5
2883	0	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	1153.5
2883	0.37968	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	1153.5
2883	0.75936	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	1153.5
2883	1.13904	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	1153.5
2884	0	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	1153.5
2884	0.3592	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	1153.5
2884	0.7184	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	1153.5
2884	1.0776	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	1153.5
2885	0	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	1153.5
2885	0.26336	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	1153.5
2886	0	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	1153.5
2886	0.40713	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	1153.5
2886	0.81425	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	1153.5
2887	0	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	1153.5
2887	0.3592	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	1153.5
2887	0.7184	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	1153.5
2887	1.07761	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	1153.5
2888	0	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	1153.5
2888	0.12083	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	1153.5
2889	0	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.2
2889	0.47839	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.2
2889	0.95677	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.2
2890	0	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.2
2890	0.3592	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.2
2890	0.7184	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.2
2890	1.0776	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.2
2891	0	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.2
2891	0.45647	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.2
2891	0.91294	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.2
2892	0	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.2
2892	0.16466	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.2
2893	0	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.2
2893	0.3592	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.2
2893	0.7184	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.2
2893	1.0776	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.2

2894	0	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.2
2894	0.3592	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.2
2894	0.7184	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.2
2894	1.0776	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2895	0	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2895	0.3592	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2895	0.7184	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2895	1.0776	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2896	0	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2896	0.3592	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2896	0.7184	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2896	1.0776	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2897	0	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2897	0.48492	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2898	0	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2898	0.48492	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2899	0	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2899	0.3592	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2899	0.7184	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2899	1.0776	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2900	0	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2900	0.3592	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2900	0.7184	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2900	1.0776	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2901	0	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2901	0.3592	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2901	0.7184	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2901	1.0776	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2902	0	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2902	0.3592	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2902	0.7184	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2902	1.0776	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2903	0	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2903	0.16466	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2904	0	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2904	0.45647	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3

2904	0.91294	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2905	0	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2905	0.3592	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2905	0.7184	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2905	1.0776	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2906	0	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2906	0.47839	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2906	0.95677	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2907	0	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	1153.5
2907	0.12083	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	1153.5
2908	0	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	1153.5
2908	0.3592	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	1153.5
2908	0.7184	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	1153.5
2908	1.0776	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	1153.5
2909	0	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	1153.5
2909	0.40712	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	1153.5
2909	0.81425	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	1153.5
2910	0	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	1153.5
2910	0.26335	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	1153.5
2911	0	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	1153.5
2911	0.3592	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	1153.5
2911	0.7184	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	1153.5
2911	1.0776	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	1153.5
2912	0	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	1153.5
2912	0.37968	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	1153.5
2912	0.75936	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	1153.5
2912	1.13904	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	1153.5
2913	0	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	1153.5
2913	0.37968	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	1153.5
2913	0.75936	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	1153.5
2913	1.13904	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	1153.5
2914	0	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	1153.5
2914	0.3592	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	1153.5
2914	0.7184	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	1153.5
2914	1.0776	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	1153.5
2915	0	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	1153.5

2915	0.26335	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	1153.5
2916	0	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	1153.5
2916	0.40712	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	1153.5
2916	0.81425	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	1153.5
2917	0	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	1153.5
2917	0.3592	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	1153.5
2917	0.7184	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	1153.5
2917	1.0776	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	1153.5
2918	0	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	1153.5
2918	0.12083	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	1153.5
2919	0	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2919	0.47839	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2919	0.95677	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2920	0	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2920	0.3592	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2920	0.7184	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2920	1.0776	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2921	0	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2921	0.45647	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2921	0.91294	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2922	0	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2922	0.16466	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2923	0	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2923	0.3592	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2923	0.7184	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2923	1.0776	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2924	0	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2924	0.3592	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2924	0.7184	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2924	1.0776	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2925	0	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2925	0.3592	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2925	0.7184	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2925	1.0776	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2926	0	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2926	0.3592	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3

2926	0.7184	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2926	1.0776	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2927	0	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3
2927	0.48492	_R	Combination	-2130.0	0.0	0.0	-0.1	0.0	962.3

Reazioni vincolari e spostamenti – FASE 1C

Per le reazioni vincolari dei dispositivi di vincolo e i relativi spostamenti/rotazioni, si rimanda al §5.7.

10.1.5 Fase 2

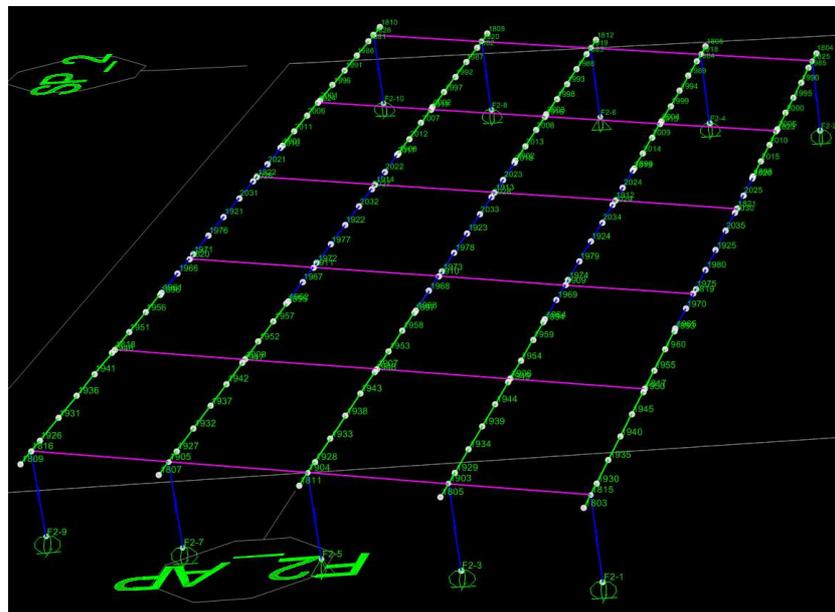


Figura 10 – Numerazione Joints modello FEM – Fase 2.

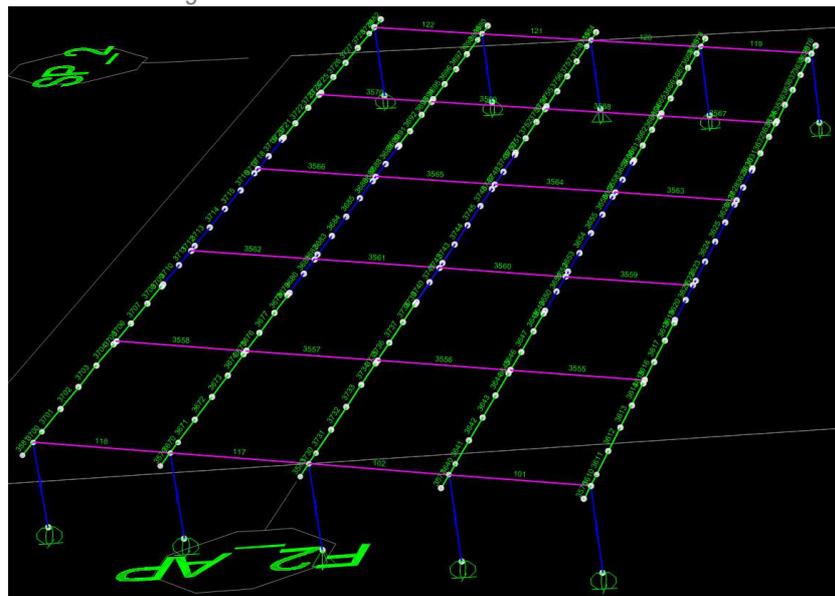


Figura 11 – Numerazione Frames modello FEM – Fase 2.

Carichi e combinazioni di carico – FASE 2

I carichi applicati alla struttura e la loro combinazione sono oggetto dei §5.2 e §5.3.

Sollecitazioni travi – FASE 2

TABLE: Element Forces - Frames										
Frame	Station	OutputCase	CaseType	StepType	P	V2	V3	T	M2	M3
Text	m	Text	Text	Text	KN	KN	KN	KN-m	KN-m	KN-m
3575	0.0	C_Mob_ENV	Combinatio n	Max	21.1	67.9	5.6	0.3	20.5	18.8
3575	0.3	C_Mob_ENV	Combinatio n	Max	21.1	67.9	5.6	0.3	23.6	14.7
3575	0.6	C_Mob_ENV	Combinatio n	Max	21.1	67.9	5.6	0.3	26.7	10.6
3575	0.0	C_Mob_ENV	Combinatio n	Min	-8.6	-1.2	-48.9	-0.1	-15.9	-20.6
3575	0.3	C_Mob_ENV	Combinatio n	Min	-8.6	-1.2	-48.9	-0.1	-9.9	-28.7
3575	0.6	C_Mob_ENV	Combinatio n	Min	-8.6	-1.2	-48.9	-0.1	-5.9	-36.9
3576	0.0	C_Mob_ENV	Combinatio n	Max	9.9	3.9	54.5	0.1	25.2	13.4
3576	0.3	C_Mob_ENV	Combinatio n	Max	9.9	3.9	54.5	0.1	23.2	16.5
3576	0.6	C_Mob_ENV	Combinatio n	Max	9.9	3.9	54.5	0.1	21.1	19.6
3576	0.0	C_Mob_ENV	Combinatio n	Min	-26.8	-73.5	-9.4	-0.3	-3.6	-44.6
3576	0.3	C_Mob_ENV	Combinatio n	Min	-26.8	-73.5	-9.4	-0.3	-10.9	-33.6
3576	0.6	C_Mob_ENV	Combinatio n	Min	-26.8	-73.5	-9.4	-0.3	-19.1	-22.7
3577	0.0	C_Mob_ENV	Combinatio n	Max	29.8	153.6	71.7	0.2	30.8	27.4
3577	0.3	C_Mob_ENV	Combinatio n	Max	29.8	153.6	71.7	0.2	22.4	23.6
3577	0.6	C_Mob_ENV	Combinatio n	Max	29.8	153.6	71.7	0.2	14.0	19.9
3577	0.0	C_Mob_ENV	Combinatio n	Min	-37.6	-3.0	-18.1	-0.3	-20.0	-25.7
3577	0.3	C_Mob_ENV	Combinatio n	Min	-37.6	-3.0	-18.1	-0.3	-24.5	-57.8

3577	0.6	C_Mob_ENV	Combinatio n	Min	-37.6	-3.0	-18.1	-0.3	-29.0	-89.8
3578	0.0	C_Mob_ENV	Combinatio n	Max	40.1	7.2	20.9	0.2	15.9	21.5
3578	0.3	C_Mob_ENV	Combinatio n	Max	40.1	7.2	20.9	0.2	22.4	26.1
3578	0.6	C_Mob_ENV	Combinatio n	Max	40.1	7.2	20.9	0.2	28.8	30.8
3578	0.0	C_Mob_ENV	Combinatio n	Min	-21.5	-146.7	-67.4	-0.2	-28.6	-83.6
3578	0.3	C_Mob_ENV	Combinatio n	Min	-21.5	-146.7	-67.4	-0.2	-24.1	-56.0
3578	0.6	C_Mob_ENV	Combinatio n	Min	-21.5	-146.7	-67.4	-0.2	-19.5	-28.3
3579	0.0	C_Mob_ENV	Combinatio n	Max	17.9	61.5	2.1	0.3	13.6	31.5
3579	0.3	C_Mob_ENV	Combinatio n	Max	17.9	61.5	2.1	0.3	16.1	27.9
3579	0.6	C_Mob_ENV	Combinatio n	Max	17.9	61.5	2.1	0.3	18.7	24.3
3579	0.0	C_Mob_ENV	Combinatio n	Min	-22.3	-3.3	-28.5	-0.1	-10.4	-15.2
3579	0.3	C_Mob_ENV	Combinatio n	Min	-22.3	-3.3	-28.5	-0.1	-7.0	-25.5
3579	0.6	C_Mob_ENV	Combinatio n	Min	-22.3	-3.3	-28.5	-0.1	-3.5	-35.8
3580	0.0	C_Mob_ENV	Combinatio n	Max	14.2	4.1	23.1	0.1	16.5	26.0
3580	0.3	C_Mob_ENV	Combinatio n	Max	14.2	4.1	23.1	0.1	15.4	28.8
3580	0.6	C_Mob_ENV	Combinatio n	Max	14.2	4.1	23.1	0.1	14.3	31.5
3580	0.0	C_Mob_ENV	Combinatio n	Min	-31.3	-62.9	-3.4	-0.3	-3.1	-37.2
3580	0.3	C_Mob_ENV	Combinatio n	Min	-31.3	-62.9	-3.4	-0.3	-6.0	-25.8
3580	0.6	C_Mob_ENV	Combinatio n	Min	-31.3	-62.9	-3.4	-0.3	-8.8	-14.4
3581	0.0	C_Mob_ENV	Combinatio n	Max	8.4	11.5	14.7	0.2	9.3	29.7
3581	0.3	C_Mob_ENV	Combinatio n	Max	8.4	11.5	14.7	0.2	6.5	30.3
3581	0.6	C_Mob_ENV	Combinatio n	Max	8.4	11.5	14.7	0.2	5.0	30.9

3581	0.0	C_Mob_ENV	Combinatio n	Min	-12.0	-6.1	-10.7	-0.1	-5.9	-7.7
3581	0.3	C_Mob_ENV	Combinatio n	Min	-12.0	-6.1	-10.7	-0.1	-4.8	-8.6
3581	0.6	C_Mob_ENV	Combinatio n	Min	-12.0	-6.1	-10.7	-0.1	-4.1	-9.6
3582	0.0	C_Mob_ENV	Combinatio n	Max	6.5	3.6	8.7	0.1	9.1	26.5
3582	0.3	C_Mob_ENV	Combinatio n	Max	6.5	3.6	8.7	0.1	8.5	26.9
3582	0.6	C_Mob_ENV	Combinatio n	Max	6.5	3.6	8.7	0.1	7.8	27.2
3582	0.0	C_Mob_ENV	Combinatio n	Min	-9.8	-11.2	-6.8	-0.3	-3.8	-8.3
3582	0.3	C_Mob_ENV	Combinatio n	Min	-9.8	-11.2	-6.8	-0.3	-4.1	-7.5
3582	0.6	C_Mob_ENV	Combinatio n	Min	-9.8	-11.2	-6.8	-0.3	-4.8	-6.7
3583	0.0	C_Mob_ENV	Combinatio n	Max	37.2	195.4	35.7	0.2	17.7	45.3
3583	0.3	C_Mob_ENV	Combinatio n	Max	37.2	195.4	35.7	0.2	14.8	34.9
3583	0.6	C_Mob_ENV	Combinatio n	Max	37.2	195.4	35.7	0.2	11.9	26.9
3583	0.0	C_Mob_ENV	Combinatio n	Min	-35.3	-3.5	-14.0	-0.2	-12.9	-41.3
3583	0.3	C_Mob_ENV	Combinatio n	Min	-35.3	-3.5	-14.0	-0.2	-14.2	-75.2
3583	0.6	C_Mob_ENV	Combinatio n	Min	-35.3	-3.5	-14.0	-0.2	-15.5	-109.1
3584	0.0	C_Mob_ENV	Combinatio n	Max	39.7	3.4	7.5	0.2	11.4	27.7
3584	0.3	C_Mob_ENV	Combinatio n	Max	39.7	3.4	7.5	0.2	14.3	36.2
3584	0.6	C_Mob_ENV	Combinatio n	Max	39.7	3.4	7.5	0.2	17.3	48.0
3584	0.0	C_Mob_ENV	Combinatio n	Min	-26.7	-191.8	-34.6	-0.2	-15.7	-105.9
3584	0.3	C_Mob_ENV	Combinatio n	Min	-26.7	-191.8	-34.6	-0.2	-13.1	-74.5
3584	0.6	C_Mob_ENV	Combinatio n	Min	-26.7	-191.8	-34.6	-0.2	-10.5	-43.0
3610	0.0	C_Mob_ENV	Combinatio n	Max	10.2	0.5	116.4	0.2	24.7	11.0

3610	0.5	C_Mob_ENV	Combinatio n	Max	10.2	0.5	116.4	0.2	7.8	216.8
3610	0.0	C_Mob_ENV	Combinatio n	Min	-51.9	-459.6	-14.7	-0.3	-5.1	-37.3
3610	0.5	C_Mob_ENV	Combinatio n	Min	-51.9	-459.6	-14.7	-0.3	-37.1	-7.5
3611	0.0	C_Mob_ENV	Combinatio n	Max	18.9	0.4	77.7	0.2	38.2	219.5
3611	0.4	C_Mob_ENV	Combinatio n	Max	18.9	0.4	77.7	0.2	27.4	374.9
3611	0.7	C_Mob_ENV	Combinatio n	Max	18.9	0.4	77.7	0.2	16.6	530.3
3611	1.1	C_Mob_ENV	Combinatio n	Max	18.9	0.4	77.7	0.2	6.7	685.7
3611	0.0	C_Mob_ENV	Combinatio n	Min	-34.9	-445.6	-14.7	-0.2	-10.7	-10.2
3611	0.4	C_Mob_ENV	Combinatio n	Min	-34.9	-445.6	-14.7	-0.2	-22.5	-9.3
3611	0.7	C_Mob_ENV	Combinatio n	Min	-34.9	-445.6	-14.7	-0.2	-34.3	-8.5
3611	1.1	C_Mob_ENV	Combinatio n	Min	-34.9	-445.6	-14.7	-0.2	-46.0	-7.6
3612	0.0	C_Mob_ENV	Combinatio n	Max	30.3	0.1	48.4	0.2	20.3	692.5
3612	0.4	C_Mob_ENV	Combinatio n	Max	30.3	0.1	48.4	0.2	17.7	841.7
3612	0.7	C_Mob_ENV	Combinatio n	Max	30.3	0.1	48.4	0.2	15.0	990.8
3612	1.1	C_Mob_ENV	Combinatio n	Max	30.3	0.1	48.4	0.2	12.4	1140.0
3612	0.0	C_Mob_ENV	Combinatio n	Min	-29.6	-427.7	-32.7	-0.1	-23.5	-7.2
3612	0.4	C_Mob_ENV	Combinatio n	Min	-29.6	-427.7	-32.7	-0.1	-26.5	-6.8
3612	0.7	C_Mob_ENV	Combinatio n	Min	-29.6	-427.7	-32.7	-0.1	-29.6	-6.4
3612	1.1	C_Mob_ENV	Combinatio n	Min	-29.6	-427.7	-32.7	-0.1	-32.6	-6.0
3613	0.0	C_Mob_ENV	Combinatio n	Max	32.6	0.1	22.0	0.2	8.2	1154.7
3613	0.4	C_Mob_ENV	Combinatio n	Max	32.6	0.1	22.0	0.2	13.7	1294.3
3613	0.7	C_Mob_ENV	Combinatio n	Max	32.6	0.1	22.0	0.2	20.6	1433.8

3613	1.1	C_Mob_ENV	Combinatio n	Max	32.6	0.1	22.0	0.2	27.5	1573.4
3613	0.0	C_Mob_ENV	Combinatio n	Min	-30.1	-405.9	-61.2	-0.1	-39.2	-5.1
3613	0.4	C_Mob_ENV	Combinatio n	Min	-30.1	-405.9	-61.2	-0.1	-31.7	-4.8
3613	0.7	C_Mob_ENV	Combinatio n	Min	-30.1	-405.9	-61.2	-0.1	-24.1	-4.4
3613	1.1	C_Mob_ENV	Combinatio n	Min	-30.1	-405.9	-61.2	-0.1	-16.6	-4.1
3614	0.0	C_Mob_ENV	Combinatio n	Max	27.4	0.4	12.9	0.3	6.2	1591.4
3614	0.4	C_Mob_ENV	Combinatio n	Max	27.4	0.4	12.9	0.3	22.8	1717.6
3614	0.7	C_Mob_ENV	Combinatio n	Max	27.4	0.4	12.9	0.3	40.4	1843.7
3614	1.1	C_Mob_ENV	Combinatio n	Max	27.4	0.4	12.9	0.3	58.1	1969.9
3614	0.0	C_Mob_ENV	Combinatio n	Min	-38.0	-378.8	-104.7	-0.1	-55.4	-2.8
3614	0.4	C_Mob_ENV	Combinatio n	Min	-38.0	-378.8	-104.7	-0.1	-38.9	-2.4
3614	0.7	C_Mob_ENV	Combinatio n	Min	-38.0	-378.8	-104.7	-0.1	-22.5	-2.0
3614	1.1	C_Mob_ENV	Combinatio n	Min	-38.0	-378.8	-104.7	-0.1	-7.8	-1.7
3615	0.0	C_Mob_ENV	Combinatio n	Max	39.1	5.3	23.3	1.0	49.1	1970.0
3615	0.2	C_Mob_ENV	Combinatio n	Max	39.1	5.3	23.3	1.0	59.5	2015.2
3615	0.0	C_Mob_ENV	Combinatio n	Min	-35.5	-346.4	-174.3	-0.8	-11.4	0.3
3615	0.2	C_Mob_ENV	Combinatio n	Min	-35.5	-346.4	-174.3	-0.8	-8.8	0.6
3616	0.0	C_Mob_ENV	Combinatio n	Max	16.3	18.5	123.0	0.1	56.1	2014.4
3616	0.5	C_Mob_ENV	Combinatio n	Max	16.3	18.5	123.0	0.1	32.3	2144.3
3616	0.9	C_Mob_ENV	Combinatio n	Max	16.3	18.5	123.0	0.1	8.6	2274.1
3616	0.0	C_Mob_ENV	Combinatio n	Min	-94.8	-324.3	-14.7	-0.3	-7.4	0.9
3616	0.5	C_Mob_ENV	Combinatio n	Min	-94.8	-324.3	-14.7	-0.3	-31.4	2.2

3616	0.9	C_Mob_ENV	Combinatio n	Min	-94.8	-324.3	-14.7	-0.3	-56.7	3.6
3617	0.0	C_Mob_ENV	Combinatio n	Max	9.7	29.8	67.8	0.1	31.8	2258.6
3617	0.4	C_Mob_ENV	Combinatio n	Max	9.7	29.8	67.8	0.1	23.2	2346.2
3617	0.7	C_Mob_ENV	Combinatio n	Max	9.7	29.8	67.8	0.1	14.6	2433.9
3617	1.1	C_Mob_ENV	Combinatio n	Max	9.7	29.8	67.8	0.1	5.9	2521.5
3617	0.0	C_Mob_ENV	Combinatio n	Min	-55.3	-299.9	-17.9	-0.2	-14.1	3.5
3617	0.4	C_Mob_ENV	Combinatio n	Min	-55.3	-299.9	-17.9	-0.2	-23.5	4.7
3617	0.7	C_Mob_ENV	Combinatio n	Min	-55.3	-299.9	-17.9	-0.2	-32.8	5.9
3617	1.1	C_Mob_ENV	Combinatio n	Min	-55.3	-299.9	-17.9	-0.2	-42.2	7.1
3618	0.0	C_Mob_ENV	Combinatio n	Max	15.5	44.6	29.3	0.4	10.8	2518.8
3618	0.5	C_Mob_ENV	Combinatio n	Max	15.5	44.6	29.3	0.4	13.3	2618.1
3618	1.0	C_Mob_ENV	Combinatio n	Max	15.5	44.6	29.3	0.4	16.3	2717.4
3618	0.0	C_Mob_ENV	Combinatio n	Min	-41.0	-276.8	-47.6	-0.2	-31.3	6.7
3618	0.5	C_Mob_ENV	Combinatio n	Min	-41.0	-276.8	-47.6	-0.2	-25.5	7.6
3618	1.0	C_Mob_ENV	Combinatio n	Min	-41.0	-276.8	-47.6	-0.2	-19.7	8.6
3619	0.0	C_Mob_ENV	Combinatio n	Max	15.5	44.6	29.3	2.5	16.3	2720.3
3619	0.1	C_Mob_ENV	Combinatio n	Max	15.5	44.6	29.3	2.5	21.8	2749.7
3619	0.0	C_Mob_ENV	Combinatio n	Min	-41.0	-276.8	-47.6	-3.9	-19.7	9.1
3619	0.1	C_Mob_ENV	Combinatio n	Min	-41.0	-276.8	-47.6	-3.9	-23.1	9.2
3620	0.0	C_Mob_ENV	Combinatio n	Max	22.1	59.1	12.6	0.3	5.8	2758.7
3620	0.4	C_Mob_ENV	Combinatio n	Max	22.1	59.1	12.6	0.3	18.1	2821.4
3620	0.7	C_Mob_ENV	Combinatio n	Max	22.1	59.1	12.6	0.3	31.0	2884.2

3620	1.1	C_Mob_ENV	Combinatio n	Max	22.1	59.1	12.6	0.3	43.8	2946.9
3620	0.0	C_Mob_ENV	Combinatio n	Min	-45.7	-251.0	-88.2	-0.2	-53.1	8.4
3620	0.4	C_Mob_ENV	Combinatio n	Min	-45.7	-251.0	-88.2	-0.2	-39.0	8.8
3620	0.7	C_Mob_ENV	Combinatio n	Min	-45.7	-251.0	-88.2	-0.2	-24.9	9.2
3620	1.1	C_Mob_ENV	Combinatio n	Min	-45.7	-251.0	-88.2	-0.2	-11.0	9.5
3621	0.0	C_Mob_ENV	Combinatio n	Max	28.5	74.0	18.9	0.3	16.5	2960.0
3621	0.4	C_Mob_ENV	Combinatio n	Max	28.5	74.0	18.9	0.3	41.1	3007.6
3621	0.8	C_Mob_ENV	Combinatio n	Max	28.5	74.0	18.9	0.3	65.6	3055.1
3621	0.0	C_Mob_ENV	Combinatio n	Min	-55.2	-222.0	-143.5	-0.5	-54.3	9.1
3621	0.4	C_Mob_ENV	Combinatio n	Min	-55.2	-222.0	-143.5	-0.5	-31.3	9.7
3621	0.8	C_Mob_ENV	Combinatio n	Min	-55.2	-222.0	-143.5	-0.5	-10.8	10.2
3622	0.0	C_Mob_ENV	Combinatio n	Max	23.4	86.6	167.7	1.0	61.4	3055.3
3622	0.3	C_Mob_ENV	Combinatio n	Max	23.4	86.6	167.7	1.0	46.9	3092.0
3622	0.0	C_Mob_ENV	Combinatio n	Min	-125.0	-203.1	-22.4	-0.3	-10.2	10.3
3622	0.3	C_Mob_ENV	Combinatio n	Min	-125.0	-203.1	-22.4	-0.3	-13.1	10.7
3623	0.0	C_Mob_ENV	Combinatio n	Max	17.3	110.8	105.4	0.1	60.6	3074.6
3623	0.4	C_Mob_ENV	Combinatio n	Max	17.3	110.8	105.4	0.1	43.7	3094.9
3623	0.7	C_Mob_ENV	Combinatio n	Max	17.3	110.8	105.4	0.1	26.7	3115.2
3623	1.1	C_Mob_ENV	Combinatio n	Max	17.3	110.8	105.4	0.1	9.7	3135.4
3623	0.0	C_Mob_ENV	Combinatio n	Min	-89.0	-177.9	-12.6	-0.5	-8.9	9.9
3623	0.4	C_Mob_ENV	Combinatio n	Min	-89.0	-177.9	-12.6	-0.5	-23.3	10.8
3623	0.7	C_Mob_ENV	Combinatio n	Min	-89.0	-177.9	-12.6	-0.5	-39.4	11.7

3623	1.1	C_Mob_ENV	Combinatio n	Min	-89.0	-177.9	-12.6	-0.5	-55.5	12.6
3624	0.0	C_Mob_ENV	Combinatio n	Max	10.6	134.9	57.0	0.1	25.8	3121.3
3624	0.4	C_Mob_ENV	Combinatio n	Max	10.6	134.9	57.0	0.1	20.0	3127.9
3624	0.8	C_Mob_ENV	Combinatio n	Max	10.6	134.9	57.0	0.1	14.2	3134.4
3624	1.1	C_Mob_ENV	Combinatio n	Max	10.6	134.9	57.0	0.1	8.3	3141.0
3624	0.0	C_Mob_ENV	Combinatio n	Min	-57.3	-155.7	-21.9	-0.4	-19.6	10.5
3624	0.4	C_Mob_ENV	Combinatio n	Min	-57.3	-155.7	-21.9	-0.4	-26.9	11.3
3624	0.8	C_Mob_ENV	Combinatio n	Min	-57.3	-155.7	-21.9	-0.4	-34.2	12.0
3624	1.1	C_Mob_ENV	Combinatio n	Min	-57.3	-155.7	-21.9	-0.4	-41.5	12.8
3625	0.0	C_Mob_ENV	Combinatio n	Max	15.0	157.6	20.7	0.1	8.4	3147.0
3625	0.4	C_Mob_ENV	Combinatio n	Max	15.0	157.6	20.7	0.1	14.2	3139.3
3625	0.8	C_Mob_ENV	Combinatio n	Max	15.0	157.6	20.7	0.1	20.0	3131.6
3625	1.1	C_Mob_ENV	Combinatio n	Max	15.0	157.6	20.7	0.1	25.8	3123.9
3625	0.0	C_Mob_ENV	Combinatio n	Min	-46.4	-133.3	-57.4	-0.3	-41.9	10.4
3625	0.4	C_Mob_ENV	Combinatio n	Min	-46.4	-133.3	-57.4	-0.3	-34.3	9.7
3625	0.8	C_Mob_ENV	Combinatio n	Min	-46.4	-133.3	-57.4	-0.3	-26.6	9.0
3625	1.1	C_Mob_ENV	Combinatio n	Min	-46.4	-133.3	-57.4	-0.3	-19.0	8.2
3626	0.0	C_Mob_ENV	Combinatio n	Max	23.9	180.2	13.5	0.2	8.9	3147.6
3626	0.4	C_Mob_ENV	Combinatio n	Max	23.9	180.2	13.5	0.2	25.7	3124.8
3626	0.7	C_Mob_ENV	Combinatio n	Max	23.9	180.2	13.5	0.2	42.5	3102.0
3626	1.1	C_Mob_ENV	Combinatio n	Max	23.9	180.2	13.5	0.2	59.3	3079.2
3626	0.0	C_Mob_ENV	Combinatio n	Min	-53.2	-109.0	-105.7	-0.3	-56.3	5.7

3626	0.4	C_Mob_ENV	Combinatio n	Min	-53.2	-109.0	-105.7	-0.3	-39.8	4.9
3626	0.7	C_Mob_ENV	Combinatio n	Min	-53.2	-109.0	-105.7	-0.3	-23.3	4.0
3626	1.1	C_Mob_ENV	Combinatio n	Min	-53.2	-109.0	-105.7	-0.3	-8.5	3.2
3627	0.0	C_Mob_ENV	Combinatio n	Max	32.6	204.9	22.8	0.3	43.8	3101.9
3627	0.3	C_Mob_ENV	Combinatio n	Max	32.6	204.9	22.8	0.3	58.0	3064.2
3627	0.0	C_Mob_ENV	Combinatio n	Min	-49.1	-84.1	-166.5	-1.4	-16.8	0.9
3627	0.3	C_Mob_ENV	Combinatio n	Min	-49.1	-84.1	-166.5	-1.4	-9.4	0.5
3628	0.0	C_Mob_ENV	Combinatio n	Max	21.7	222.7	135.5	0.3	63.0	3064.7
3628	0.4	C_Mob_ENV	Combinatio n	Max	21.7	222.7	135.5	0.3	41.4	3013.4
3628	0.8	C_Mob_ENV	Combinatio n	Max	21.7	222.7	135.5	0.3	19.9	2962.0
3628	0.0	C_Mob_ENV	Combinatio n	Min	-109.5	-71.0	-17.8	-0.5	-10.0	0.5
3628	0.4	C_Mob_ENV	Combinatio n	Min	-109.5	-71.0	-17.8	-0.5	-29.7	0.2
3628	0.8	C_Mob_ENV	Combinatio n	Min	-109.5	-71.0	-17.8	-0.5	-51.4	-0.2
3629	0.0	C_Mob_ENV	Combinatio n	Max	13.1	252.1	84.0	0.1	42.1	2958.6
3629	0.4	C_Mob_ENV	Combinatio n	Max	13.1	252.1	84.0	0.1	30.7	2893.6
3629	0.7	C_Mob_ENV	Combinatio n	Max	13.1	252.1	84.0	0.1	19.2	2828.5
3629	1.1	C_Mob_ENV	Combinatio n	Max	13.1	252.1	84.0	0.1	7.7	2763.5
3629	0.0	C_Mob_ENV	Combinatio n	Min	-71.7	-55.2	-13.6	-0.6	-12.7	-2.5
3629	0.4	C_Mob_ENV	Combinatio n	Min	-71.7	-55.2	-13.6	-0.6	-25.5	-2.6
3629	0.7	C_Mob_ENV	Combinatio n	Min	-71.7	-55.2	-13.6	-0.6	-38.3	-2.6
3629	1.1	C_Mob_ENV	Combinatio n	Min	-71.7	-55.2	-13.6	-0.6	-51.2	-2.6
3630	0.0	C_Mob_ENV	Combinatio n	Max	10.5	279.1	46.4	3.7	21.6	2767.7

3630	0.1	C_Mob_ENV	Combinatio n	Max	10.5	279.1	46.4	3.7	16.3	2737.9
3630	0.0	C_Mob_ENV	Combinatio n	Min	-47.9	-40.9	-30.9	-2.8	-23.8	-5.2
3630	0.1	C_Mob_ENV	Combinatio n	Min	-47.9	-40.9	-30.9	-2.8	-20.1	-5.2
3631	0.0	C_Mob_ENV	Combinatio n	Max	10.5	279.1	46.4	0.1	16.3	2735.9
3631	0.5	C_Mob_ENV	Combinatio n	Max	10.5	279.1	46.4	0.1	14.1	2633.3
3631	1.0	C_Mob_ENV	Combinatio n	Max	10.5	279.1	46.4	0.1	12.0	2530.8
3631	0.0	C_Mob_ENV	Combinatio n	Min	-47.9	-40.9	-30.9	-0.6	-20.1	-5.1
3631	0.5	C_Mob_ENV	Combinatio n	Min	-47.9	-40.9	-30.9	-0.6	-25.3	-5.8
3631	1.0	C_Mob_ENV	Combinatio n	Min	-47.9	-40.9	-30.9	-0.6	-30.5	-6.5
3632	0.0	C_Mob_ENV	Combinatio n	Max	17.5	304.2	18.1	0.1	7.3	2548.9
3632	0.4	C_Mob_ENV	Combinatio n	Max	17.5	304.2	18.1	0.1	14.9	2458.7
3632	0.7	C_Mob_ENV	Combinatio n	Max	17.5	304.2	18.1	0.1	22.9	2368.5
3632	1.1	C_Mob_ENV	Combinatio n	Max	17.5	304.2	18.1	0.1	30.8	2278.3
3632	0.0	C_Mob_ENV	Combinatio n	Min	-41.0	-25.8	-66.0	-0.2	-41.5	-9.0
3632	0.4	C_Mob_ENV	Combinatio n	Min	-41.0	-25.8	-66.0	-0.2	-32.0	-9.9
3632	0.7	C_Mob_ENV	Combinatio n	Min	-41.0	-25.8	-66.0	-0.2	-22.5	-10.8
3632	1.1	C_Mob_ENV	Combinatio n	Min	-41.0	-25.8	-66.0	-0.2	-13.0	-11.6
3633	0.0	C_Mob_ENV	Combinatio n	Max	21.5	330.1	14.8	0.1	8.7	2304.2
3633	0.5	C_Mob_ENV	Combinatio n	Max	21.5	330.1	14.8	0.1	30.4	2170.0
3633	0.9	C_Mob_ENV	Combinatio n	Max	21.5	330.1	14.8	0.1	52.1	2035.8
3633	0.0	C_Mob_ENV	Combinatio n	Min	-44.5	-16.3	-117.1	-0.3	-55.4	-14.5
3633	0.5	C_Mob_ENV	Combinatio n	Min	-44.5	-16.3	-117.1	-0.3	-31.4	-15.2

3633	0.9	C_Mob_ENV	Combinatio n	Min	-44.5	-16.3	-117.1	-0.3	-7.5	-15.9
3634	0.0	C_Mob_ENV	Combinatio n	Max	22.2	349.5	164.4	0.6	56.0	2036.5
3634	0.2	C_Mob_ENV	Combinatio n	Max	22.2	349.5	164.4	0.6	48.5	1990.0
3634	0.0	C_Mob_ENV	Combinatio n	Min	-112.8	-2.9	-24.6	-0.8	-8.0	-16.0
3634	0.2	C_Mob_ENV	Combinatio n	Min	-112.8	-2.9	-24.6	-0.8	-9.5	-16.1
3635	0.0	C_Mob_ENV	Combinatio n	Max	13.3	384.1	101.1	0.1	55.6	1996.0
3635	0.4	C_Mob_ENV	Combinatio n	Max	13.3	384.1	101.1	0.1	40.1	1865.2
3635	0.7	C_Mob_ENV	Combinatio n	Max	13.3	384.1	101.1	0.1	24.6	1734.5
3635	1.1	C_Mob_ENV	Combinatio n	Max	13.3	384.1	101.1	0.1	9.1	1603.8
3635	0.0	C_Mob_ENV	Combinatio n	Min	-80.4	-3.2	-14.1	-0.4	-7.4	-18.8
3635	0.4	C_Mob_ENV	Combinatio n	Min	-80.4	-3.2	-14.1	-0.4	-22.7	-18.3
3635	0.7	C_Mob_ENV	Combinatio n	Min	-80.4	-3.2	-14.1	-0.4	-38.5	-17.9
3635	1.1	C_Mob_ENV	Combinatio n	Min	-80.4	-3.2	-14.1	-0.4	-54.3	-17.4
3636	0.0	C_Mob_ENV	Combinatio n	Max	19.8	414.0	60.6	0.1	27.3	1597.6
3636	0.4	C_Mob_ENV	Combinatio n	Max	19.8	414.0	60.6	0.1	21.2	1452.9
3636	0.7	C_Mob_ENV	Combinatio n	Max	19.8	414.0	60.6	0.1	15.0	1308.1
3636	1.1	C_Mob_ENV	Combinatio n	Max	19.8	414.0	60.6	0.1	8.8	1163.4
3636	0.0	C_Mob_ENV	Combinatio n	Min	-44.2	-3.6	-23.5	-0.3	-17.4	-19.8
3636	0.4	C_Mob_ENV	Combinatio n	Min	-44.2	-3.6	-23.5	-0.3	-24.7	-19.2
3636	0.7	C_Mob_ENV	Combinatio n	Min	-44.2	-3.6	-23.5	-0.3	-31.9	-18.5
3636	1.1	C_Mob_ENV	Combinatio n	Min	-44.2	-3.6	-23.5	-0.3	-39.1	-17.8
3637	0.0	C_Mob_ENV	Combinatio n	Max	30.3	438.1	32.6	0.1	12.9	1163.4

3637	0.4	C_Mob_ENV	Combinatio n	Max	30.3	438.1	32.6	0.1	15.2	1009.0
3637	0.7	C_Mob_ENV	Combinatio n	Max	30.3	438.1	32.6	0.1	17.6	854.5
3637	1.1	C_Mob_ENV	Combinatio n	Max	30.3	438.1	32.6	0.1	19.9	700.1
3637	0.0	C_Mob_ENV	Combinatio n	Min	-25.5	-3.9	-47.2	-0.3	-32.0	-20.1
3637	0.4	C_Mob_ENV	Combinatio n	Min	-25.5	-3.9	-47.2	-0.3	-29.1	-19.4
3637	0.7	C_Mob_ENV	Combinatio n	Min	-25.5	-3.9	-47.2	-0.3	-26.2	-18.7
3637	1.1	C_Mob_ENV	Combinatio n	Min	-25.5	-3.9	-47.2	-0.3	-23.3	-17.9
3638	0.0	C_Mob_ENV	Combinatio n	Max	37.5	458.4	14.8	0.2	7.0	704.5
3638	0.4	C_Mob_ENV	Combinatio n	Max	37.5	458.4	14.8	0.2	16.7	544.0
3638	0.7	C_Mob_ENV	Combinatio n	Max	37.5	458.4	14.8	0.2	26.4	383.6
3638	1.1	C_Mob_ENV	Combinatio n	Max	37.5	458.4	14.8	0.2	36.0	223.2
3638	0.0	C_Mob_ENV	Combinatio n	Min	-17.7	-4.1	-74.4	-0.3	-44.6	-19.7
3638	0.4	C_Mob_ENV	Combinatio n	Min	-17.7	-4.1	-74.4	-0.3	-33.2	-19.6
3638	0.7	C_Mob_ENV	Combinatio n	Min	-17.7	-4.1	-74.4	-0.3	-21.7	-19.6
3638	1.1	C_Mob_ENV	Combinatio n	Min	-17.7	-4.1	-74.4	-0.3	-10.3	-19.5
3639	0.0	C_Mob_ENV	Combinatio n	Max	45.5	475.1	19.8	0.3	7.9	224.2
3639	0.5	C_Mob_ENV	Combinatio n	Max	45.5	475.1	19.8	0.3	25.4	13.9
3639	0.0	C_Mob_ENV	Combinatio n	Min	-15.5	-3.5	-113.2	-0.4	-37.0	-15.0
3639	0.5	C_Mob_ENV	Combinatio n	Min	-15.5	-3.5	-113.2	-0.4	-10.7	-45.0
3640	0.0	C_Mob_ENV	Combinatio n	Max	69.5	-9.2	49.8	0.5	13.4	19.9
3640	0.5	C_Mob_ENV	Combinatio n	Max	69.5	-9.2	49.8	0.5	44.3	282.6
3640	0.0	C_Mob_ENV	Combinatio n	Min	-38.6	-606.8	-146.6	-0.2	-36.3	-89.7

3640	0.5	C_Mob_ENV	Combinatio n	Min	-38.6	-606.8	-146.6	-0.2	-21.3	-39.8
3641	0.0	C_Mob_ENV	Combinatio n	Max	53.5	-8.1	52.7	0.4	28.8	307.5
3641	0.4	C_Mob_ENV	Combinatio n	Max	53.5	-8.1	52.7	0.4	29.8	484.4
3641	0.7	C_Mob_ENV	Combinatio n	Max	53.5	-8.1	52.7	0.4	40.9	661.4
3641	1.1	C_Mob_ENV	Combinatio n	Max	53.5	-8.1	52.7	0.4	52.0	838.4
3641	0.0	C_Mob_ENV	Combinatio n	Min	-66.3	-534.7	-91.9	-0.2	-47.6	-50.0
3641	0.4	C_Mob_ENV	Combinatio n	Min	-66.3	-534.7	-91.9	-0.2	-37.4	-43.4
3641	0.7	C_Mob_ENV	Combinatio n	Min	-66.3	-534.7	-91.9	-0.2	-27.2	-36.9
3641	1.1	C_Mob_ENV	Combinatio n	Min	-66.3	-534.7	-91.9	-0.2	-28.2	-30.3
3642	0.0	C_Mob_ENV	Combinatio n	Max	51.9	19.4	63.5	0.3	35.3	846.0
3642	0.4	C_Mob_ENV	Combinatio n	Max	51.9	19.4	63.5	0.3	32.0	987.9
3642	0.7	C_Mob_ENV	Combinatio n	Max	51.9	19.4	63.5	0.3	35.4	1129.9
3642	1.1	C_Mob_ENV	Combinatio n	Max	51.9	19.4	63.5	0.3	38.8	1271.8
3642	0.0	C_Mob_ENV	Combinatio n	Min	-85.0	-471.7	-66.0	-0.2	-33.0	-28.8
3642	0.4	C_Mob_ENV	Combinatio n	Min	-85.0	-471.7	-66.0	-0.2	-30.1	-22.4
3642	0.7	C_Mob_ENV	Combinatio n	Min	-85.0	-471.7	-66.0	-0.2	-27.2	-16.0
3642	1.1	C_Mob_ENV	Combinatio n	Min	-85.0	-471.7	-66.0	-0.2	-33.5	-9.6
3643	0.0	C_Mob_ENV	Combinatio n	Max	60.5	65.3	75.0	0.3	43.4	1260.5
3643	0.4	C_Mob_ENV	Combinatio n	Max	60.5	65.3	75.0	0.3	37.6	1372.8
3643	0.7	C_Mob_ENV	Combinatio n	Max	60.5	65.3	75.0	0.3	33.6	1485.1
3643	1.1	C_Mob_ENV	Combinatio n	Max	60.5	65.3	75.0	0.3	29.6	1597.3
3643	0.0	C_Mob_ENV	Combinatio n	Min	-78.3	-421.4	-52.0	-0.2	-29.4	-7.1

3643	0.4	C_Mob_ENV	Combinatio n	Min	-78.3	-421.4	-52.0	-0.2	-27.5	-0.9
3643	0.7	C_Mob_ENV	Combinatio n	Min	-78.3	-421.4	-52.0	-0.2	-30.2	5.3
3643	1.1	C_Mob_ENV	Combinatio n	Min	-78.3	-421.4	-52.0	-0.2	-38.5	11.5
3644	0.0	C_Mob_ENV	Combinatio n	Max	82.3	105.5	107.1	0.2	60.0	1570.8
3644	0.4	C_Mob_ENV	Combinatio n	Max	82.3	105.5	107.1	0.2	49.2	1664.9
3644	0.7	C_Mob_ENV	Combinatio n	Max	82.3	105.5	107.1	0.2	40.9	1758.9
3644	1.1	C_Mob_ENV	Combinatio n	Max	82.3	105.5	107.1	0.2	41.8	1853.0
3644	0.0	C_Mob_ENV	Combinatio n	Min	-49.7	-387.6	-78.4	-0.2	-42.9	15.0
3644	0.4	C_Mob_ENV	Combinatio n	Min	-49.7	-387.6	-78.4	-0.2	-41.1	21.0
3644	0.7	C_Mob_ENV	Combinatio n	Min	-49.7	-387.6	-78.4	-0.2	-46.1	26.3
3644	1.1	C_Mob_ENV	Combinatio n	Min	-49.7	-387.6	-78.4	-0.2	-55.8	31.2
3645	0.0	C_Mob_ENV	Combinatio n	Max	82.1	134.8	176.3	0.3	39.4	1844.4
3645	0.2	C_Mob_ENV	Combinatio n	Max	82.1	134.8	176.3	0.3	43.8	1873.8
3645	0.0	C_Mob_ENV	Combinatio n	Min	-28.5	-366.0	-148.6	-1.9	-36.2	30.2
3645	0.2	C_Mob_ENV	Combinatio n	Min	-28.5	-366.0	-148.6	-1.9	-39.0	32.0
3646	0.0	C_Mob_ENV	Combinatio n	Max	127.4	92.3	98.5	0.5	43.7	1874.2
3646	0.5	C_Mob_ENV	Combinatio n	Max	127.4	92.3	98.5	0.5	42.7	2007.3
3646	0.9	C_Mob_ENV	Combinatio n	Max	127.4	92.3	98.5	0.5	59.3	2140.4
3646	0.0	C_Mob_ENV	Combinatio n	Min	-104.1	-402.3	-119.8	-0.1	-50.8	32.3
3646	0.5	C_Mob_ENV	Combinatio n	Min	-104.1	-402.3	-119.8	-0.1	-41.6	35.0
3646	0.9	C_Mob_ENV	Combinatio n	Min	-104.1	-402.3	-119.8	-0.1	-48.8	37.7
3647	0.0	C_Mob_ENV	Combinatio n	Max	80.1	113.1	64.8	0.2	36.3	2165.3

3647	0.4	C_Mob_ENV	Combinatio n	Max	80.1	113.1	64.8	0.2	33.9	2248.0
3647	0.7	C_Mob_ENV	Combinatio n	Max	80.1	113.1	64.8	0.2	39.3	2330.7
3647	1.1	C_Mob_ENV	Combinatio n	Max	80.1	113.1	64.8	0.2	44.7	2413.4
3647	0.0	C_Mob_ENV	Combinatio n	Min	-90.3	-366.3	-71.4	-0.2	-33.1	32.5
3647	0.4	C_Mob_ENV	Combinatio n	Min	-90.3	-366.3	-71.4	-0.2	-30.2	33.9
3647	0.7	C_Mob_ENV	Combinatio n	Min	-90.3	-366.3	-71.4	-0.2	-29.5	35.3
3647	1.1	C_Mob_ENV	Combinatio n	Min	-90.3	-366.3	-71.4	-0.2	-34.1	36.8
3648	0.0	C_Mob_ENV	Combinatio n	Max	71.6	142.5	68.2	0.4	38.9	2414.2
3648	0.5	C_Mob_ENV	Combinatio n	Max	71.6	142.5	68.2	0.4	30.9	2490.5
3648	1.0	C_Mob_ENV	Combinatio n	Max	71.6	142.5	68.2	0.4	26.4	2566.7
3648	0.0	C_Mob_ENV	Combinatio n	Min	-73.4	-329.3	-50.8	-0.5	-25.4	32.3
3648	0.5	C_Mob_ENV	Combinatio n	Min	-73.4	-329.3	-50.8	-0.5	-22.7	33.4
3648	1.0	C_Mob_ENV	Combinatio n	Min	-73.4	-329.3	-50.8	-0.5	-28.0	34.6
3649	0.0	C_Mob_ENV	Combinatio n	Max	71.6	142.5	68.2	5.6	26.4	2566.5
3649	0.1	C_Mob_ENV	Combinatio n	Max	71.6	142.5	68.2	5.6	32.4	2595.8
3649	0.0	C_Mob_ENV	Combinatio n	Min	-73.4	-329.3	-50.8	-4.2	-28.0	32.1
3649	0.1	C_Mob_ENV	Combinatio n	Min	-73.4	-329.3	-50.8	-4.2	-36.1	32.4
3650	0.0	C_Mob_ENV	Combinatio n	Max	86.0	173.0	92.0	0.3	58.8	2573.1
3650	0.4	C_Mob_ENV	Combinatio n	Max	86.0	173.0	92.0	0.3	49.9	2614.0
3650	0.7	C_Mob_ENV	Combinatio n	Max	86.0	173.0	92.0	0.3	41.0	2654.9
3650	1.1	C_Mob_ENV	Combinatio n	Max	86.0	173.0	92.0	0.3	38.3	2695.7
3650	0.0	C_Mob_ENV	Combinatio n	Min	-47.1	-297.6	-74.6	-0.4	-43.6	27.4

3650	0.4	C_Mob_ENV	Combinatio n	Min	-47.1	-297.6	-74.6	-0.4	-38.7	28.0
3650	0.7	C_Mob_ENV	Combinatio n	Min	-47.1	-297.6	-74.6	-0.4	-36.7	28.5
3650	1.1	C_Mob_ENV	Combinatio n	Min	-47.1	-297.6	-74.6	-0.4	-43.4	29.1
3651	0.0	C_Mob_ENV	Combinatio n	Max	102.9	201.1	142.5	0.1	67.9	2662.4
3651	0.4	C_Mob_ENV	Combinatio n	Max	102.9	201.1	142.5	0.1	50.5	2688.0
3651	0.8	C_Mob_ENV	Combinatio n	Max	102.9	201.1	142.5	0.1	52.8	2713.5
3651	0.0	C_Mob_ENV	Combinatio n	Min	-25.0	-275.5	-125.8	-0.9	-55.9	26.1
3651	0.4	C_Mob_ENV	Combinatio n	Min	-25.0	-275.5	-125.8	-0.9	-45.2	26.5
3651	0.8	C_Mob_ENV	Combinatio n	Min	-25.0	-275.5	-125.8	-0.9	-50.0	26.8
3652	0.0	C_Mob_ENV	Combinatio n	Max	155.2	172.0	161.6	2.2	50.5	2714.5
3652	0.3	C_Mob_ENV	Combinatio n	Max	155.2	172.0	161.6	2.2	39.2	2761.7
3652	0.0	C_Mob_ENV	Combinatio n	Min	-109.8	-308.3	-169.6	-0.3	-48.9	27.0
3652	0.3	C_Mob_ENV	Combinatio n	Min	-109.8	-308.3	-169.6	-0.3	-43.2	26.7
3653	0.0	C_Mob_ENV	Combinatio n	Max	111.4	189.2	91.6	0.3	49.7	2775.6
3653	0.4	C_Mob_ENV	Combinatio n	Max	111.4	189.2	91.6	0.3	47.2	2806.9
3653	0.7	C_Mob_ENV	Combinatio n	Max	111.4	189.2	91.6	0.3	54.1	2838.3
3653	1.1	C_Mob_ENV	Combinatio n	Max	111.4	189.2	91.6	0.3	64.7	2869.7
3653	0.0	C_Mob_ENV	Combinatio n	Min	-91.1	-282.0	-109.3	-0.4	-54.0	24.8
3653	0.4	C_Mob_ENV	Combinatio n	Min	-91.1	-282.0	-109.3	-0.4	-46.1	24.3
3653	0.7	C_Mob_ENV	Combinatio n	Min	-91.1	-282.0	-109.3	-0.4	-46.0	23.7
3653	1.1	C_Mob_ENV	Combinatio n	Min	-91.1	-282.0	-109.3	-0.4	-50.4	23.2
3654	0.0	C_Mob_ENV	Combinatio n	Max	83.1	212.6	63.0	0.2	39.9	2890.0

3654	0.4	C_Mob_ENV	Combinatio n	Max	83.1	212.6	63.0	0.2	38.6	2902.3
3654	0.8	C_Mob_ENV	Combinatio n	Max	83.1	212.6	63.0	0.2	43.6	2914.5
3654	1.1	C_Mob_ENV	Combinatio n	Max	83.1	212.6	63.0	0.2	48.6	2926.8
3654	0.0	C_Mob_ENV	Combinatio n	Min	-78.2	-247.8	-65.7	-0.4	-29.5	22.4
3654	0.4	C_Mob_ENV	Combinatio n	Min	-78.2	-247.8	-65.7	-0.4	-27.6	21.6
3654	0.8	C_Mob_ENV	Combinatio n	Min	-78.2	-247.8	-65.7	-0.4	-29.4	20.8
3654	1.1	C_Mob_ENV	Combinatio n	Min	-78.2	-247.8	-65.7	-0.4	-33.3	19.9
3655	0.0	C_Mob_ENV	Combinatio n	Max	79.8	245.3	73.5	0.1	49.4	2920.8
3655	0.4	C_Mob_ENV	Combinatio n	Max	79.8	245.3	73.5	0.1	43.9	2909.8
3655	0.8	C_Mob_ENV	Combinatio n	Max	79.8	245.3	73.5	0.1	39.0	2898.8
3655	1.1	C_Mob_ENV	Combinatio n	Max	79.8	245.3	73.5	0.1	34.1	2887.8
3655	0.0	C_Mob_ENV	Combinatio n	Min	-61.6	-214.5	-53.0	-0.5	-33.5	20.2
3655	0.4	C_Mob_ENV	Combinatio n	Min	-61.6	-214.5	-53.0	-0.5	-29.6	18.6
3655	0.8	C_Mob_ENV	Combinatio n	Min	-61.6	-214.5	-53.0	-0.5	-27.4	17.1
3655	1.1	C_Mob_ENV	Combinatio n	Min	-61.6	-214.5	-53.0	-0.5	-36.2	15.5
3656	0.0	C_Mob_ENV	Combinatio n	Max	95.2	279.0	109.5	0.2	65.0	2857.9
3656	0.4	C_Mob_ENV	Combinatio n	Max	95.2	279.0	109.5	0.2	54.5	2829.5
3656	0.7	C_Mob_ENV	Combinatio n	Max	95.2	279.0	109.5	0.2	47.5	2801.1
3656	1.1	C_Mob_ENV	Combinatio n	Max	95.2	279.0	109.5	0.2	50.2	2772.7
3656	0.0	C_Mob_ENV	Combinatio n	Min	-33.0	-191.4	-92.6	-0.6	-50.9	15.8
3656	0.4	C_Mob_ENV	Combinatio n	Min	-33.0	-191.4	-92.6	-0.6	-46.4	14.3
3656	0.7	C_Mob_ENV	Combinatio n	Min	-33.0	-191.4	-92.6	-0.6	-46.3	12.7

3656	1.1	C_Mob_ENV	Combinatio n	Min	-33.0	-191.4	-92.6	-0.6	-54.2	11.2
3657	0.0	C_Mob_ENV	Combinatio n	Max	100.0	305.9	169.9	0.2	37.7	2753.5
3657	0.3	C_Mob_ENV	Combinatio n	Max	100.0	305.9	169.9	0.2	48.4	2709.5
3657	0.0	C_Mob_ENV	Combinatio n	Min	-24.9	-175.3	-161.0	-2.5	-45.3	12.0
3657	0.3	C_Mob_ENV	Combinatio n	Min	-24.9	-175.3	-161.0	-2.5	-48.6	10.8
3658	0.0	C_Mob_ENV	Combinatio n	Max	146.1	274.2	125.5	0.6	53.4	2710.4
3658	0.4	C_Mob_ENV	Combinatio n	Max	146.1	274.2	125.5	0.6	50.5	2689.1
3658	0.8	C_Mob_ENV	Combinatio n	Max	146.1	274.2	125.5	0.6	67.6	2667.8
3658	0.0	C_Mob_ENV	Combinatio n	Min	-98.0	-204.2	-140.9	-0.3	-48.7	10.9
3658	0.4	C_Mob_ENV	Combinatio n	Min	-98.0	-204.2	-140.9	-0.3	-43.9	8.8
3658	0.8	C_Mob_ENV	Combinatio n	Min	-98.0	-204.2	-140.9	-0.3	-53.8	6.7
3659	0.0	C_Mob_ENV	Combinatio n	Max	97.2	296.1	73.5	0.2	37.7	2692.0
3659	0.4	C_Mob_ENV	Combinatio n	Max	97.2	296.1	73.5	0.2	40.4	2653.9
3659	0.7	C_Mob_ENV	Combinatio n	Max	97.2	296.1	73.5	0.2	49.3	2615.9
3659	1.1	C_Mob_ENV	Combinatio n	Max	97.2	296.1	73.5	0.2	58.2	2577.9
3659	0.0	C_Mob_ENV	Combinatio n	Min	-89.0	-176.9	-91.3	-0.5	-41.6	8.4
3659	0.4	C_Mob_ENV	Combinatio n	Min	-89.0	-176.9	-91.3	-0.5	-36.6	6.4
3659	0.7	C_Mob_ENV	Combinatio n	Min	-89.0	-176.9	-91.3	-0.5	-38.4	4.4
3659	1.1	C_Mob_ENV	Combinatio n	Min	-89.0	-176.9	-91.3	-0.5	-43.2	2.5
3660	0.0	C_Mob_ENV	Combinatio n	Max	72.0	326.5	58.2	4.7	35.1	2587.6
3660	0.1	C_Mob_ENV	Combinatio n	Max	72.0	326.5	58.2	4.7	28.2	2558.9
3660	0.0	C_Mob_ENV	Combinatio n	Min	-81.0	-146.6	-58.1	-4.9	-29.5	5.3

3660	0.1	C_Mob_ENV	Combinatio n	Min	-81.0	-146.6	-58.1	-4.9	-22.6	4.6
3661	0.0	C_Mob_ENV	Combinatio n	Max	72.0	326.5	58.2	0.4	28.2	2558.0
3661	0.5	C_Mob_ENV	Combinatio n	Max	72.0	326.5	58.2	0.4	30.7	2486.0
3661	1.0	C_Mob_ENV	Combinatio n	Max	72.0	326.5	58.2	0.4	35.5	2414.0
3661	0.0	C_Mob_ENV	Combinatio n	Min	-81.0	-146.6	-58.1	-0.6	-22.6	6.9
3661	0.5	C_Mob_ENV	Combinatio n	Min	-81.0	-146.6	-58.1	-0.6	-22.6	4.1
3661	1.0	C_Mob_ENV	Combinatio n	Min	-81.0	-146.6	-58.1	-0.6	-28.2	1.3
3662	0.0	C_Mob_ENV	Combinatio n	Max	75.6	361.7	72.5	0.1	44.5	2397.1
3662	0.4	C_Mob_ENV	Combinatio n	Max	75.6	361.7	72.5	0.1	39.4	2317.9
3662	0.7	C_Mob_ENV	Combinatio n	Max	75.6	361.7	72.5	0.1	34.4	2238.7
3662	1.1	C_Mob_ENV	Combinatio n	Max	75.6	361.7	72.5	0.1	29.7	2159.4
3662	0.0	C_Mob_ENV	Combinatio n	Min	-63.9	-117.3	-58.3	-0.4	-33.8	3.4
3662	0.4	C_Mob_ENV	Combinatio n	Min	-63.9	-117.3	-58.3	-0.4	-29.9	1.2
3662	0.7	C_Mob_ENV	Combinatio n	Min	-63.9	-117.3	-58.3	-0.4	-30.1	-1.0
3662	1.1	C_Mob_ENV	Combinatio n	Min	-63.9	-117.3	-58.3	-0.4	-35.3	-3.1
3663	0.0	C_Mob_ENV	Combinatio n	Max	92.5	396.9	119.6	0.1	59.2	2123.6
3663	0.5	C_Mob_ENV	Combinatio n	Max	92.5	396.9	119.6	0.1	42.5	1996.4
3663	0.9	C_Mob_ENV	Combinatio n	Max	92.5	396.9	119.6	0.1	43.2	1869.2
3663	0.0	C_Mob_ENV	Combinatio n	Min	-43.7	-97.7	-99.0	-0.6	-50.3	-1.0
3663	0.5	C_Mob_ENV	Combinatio n	Min	-43.7	-97.7	-99.0	-0.6	-42.4	-3.9
3663	0.9	C_Mob_ENV	Combinatio n	Min	-43.7	-97.7	-99.0	-0.6	-50.8	-6.7
3664	0.0	C_Mob_ENV	Combinatio n	Max	155.9	363.4	148.0	1.7	46.3	1870.3

3664	0.2	C_Mob_ENV	Combinatio n	Max	155.9	363.4	148.0	1.7	43.0	1844.9
3664	0.0	C_Mob_ENV	Combinatio n	Min	-124.0	-141.1	-174.1	-0.3	-38.2	-6.6
3664	0.2	C_Mob_ENV	Combinatio n	Min	-124.0	-141.1	-174.1	-0.3	-36.0	-7.8
3665	0.0	C_Mob_ENV	Combinatio n	Max	108.5	384.7	77.4	0.2	41.3	1846.5
3665	0.4	C_Mob_ENV	Combinatio n	Max	108.5	384.7	77.4	0.2	40.6	1757.9
3665	0.7	C_Mob_ENV	Combinatio n	Max	108.5	384.7	77.4	0.2	48.8	1669.3
3665	1.1	C_Mob_ENV	Combinatio n	Max	108.5	384.7	77.4	0.2	59.5	1580.7
3665	0.0	C_Mob_ENV	Combinatio n	Min	-105.1	-114.8	-106.1	-0.3	-55.5	-5.7
3665	0.4	C_Mob_ENV	Combinatio n	Min	-105.1	-114.8	-106.1	-0.3	-45.8	-8.2
3665	0.7	C_Mob_ENV	Combinatio n	Min	-105.1	-114.8	-106.1	-0.3	-40.7	-10.8
3665	1.1	C_Mob_ENV	Combinatio n	Min	-105.1	-114.8	-106.1	-0.3	-42.4	-13.3
3666	0.0	C_Mob_ENV	Combinatio n	Max	63.7	416.5	56.3	0.1	32.1	1592.8
3666	0.4	C_Mob_ENV	Combinatio n	Max	63.7	416.5	56.3	0.1	33.2	1484.9
3666	0.7	C_Mob_ENV	Combinatio n	Max	63.7	416.5	56.3	0.1	37.5	1376.9
3666	1.1	C_Mob_ENV	Combinatio n	Max	63.7	416.5	56.3	0.1	41.7	1268.9
3666	0.0	C_Mob_ENV	Combinatio n	Min	-92.4	-75.6	-68.5	-0.3	-33.9	-11.4
3666	0.4	C_Mob_ENV	Combinatio n	Min	-92.4	-75.6	-68.5	-0.3	-30.7	-14.0
3666	0.7	C_Mob_ENV	Combinatio n	Min	-92.4	-75.6	-68.5	-0.3	-27.5	-16.6
3666	1.1	C_Mob_ENV	Combinatio n	Min	-92.4	-75.6	-68.5	-0.3	-28.9	-19.2
3667	0.0	C_Mob_ENV	Combinatio n	Max	45.2	463.1	67.9	0.1	38.8	1262.0
3667	0.4	C_Mob_ENV	Combinatio n	Max	45.2	463.1	67.9	0.1	35.1	1124.3
3667	0.7	C_Mob_ENV	Combinatio n	Max	45.2	463.1	67.9	0.1	32.2	986.7

3667	1.1	C_Mob_ENV	Combinatio n	Max	45.2	463.1	67.9	0.1	29.2	849.1
3667	0.0	C_Mob_ENV	Combinatio n	Min	-78.7	-27.3	-50.1	-0.4	-25.3	-17.4
3667	0.4	C_Mob_ENV	Combinatio n	Min	-78.7	-27.3	-50.1	-0.4	-27.6	-20.1
3667	0.7	C_Mob_ENV	Combinatio n	Min	-78.7	-27.3	-50.1	-0.4	-30.0	-22.8
3667	1.1	C_Mob_ENV	Combinatio n	Min	-78.7	-27.3	-50.1	-0.4	-34.8	-25.5
3668	0.0	C_Mob_ENV	Combinatio n	Max	29.2	523.5	92.2	0.2	52.3	826.2
3668	0.4	C_Mob_ENV	Combinatio n	Max	29.2	523.5	92.2	0.2	41.4	653.5
3668	0.7	C_Mob_ENV	Combinatio n	Max	29.2	523.5	92.2	0.2	30.6	480.8
3668	1.1	C_Mob_ENV	Combinatio n	Max	29.2	523.5	92.2	0.2	23.0	308.0
3668	0.0	C_Mob_ENV	Combinatio n	Min	-57.0	-0.3	-43.5	-0.4	-24.2	-26.2
3668	0.4	C_Mob_ENV	Combinatio n	Min	-57.0	-0.3	-43.5	-0.4	-28.0	-32.0
3668	0.7	C_Mob_ENV	Combinatio n	Min	-57.0	-0.3	-43.5	-0.4	-37.7	-37.9
3668	1.1	C_Mob_ENV	Combinatio n	Min	-57.0	-0.3	-43.5	-0.4	-47.4	-43.7
3669	0.0	C_Mob_ENV	Combinatio n	Max	17.0	596.5	147.9	0.2	44.5	275.3
3669	0.5	C_Mob_ENV	Combinatio n	Max	17.0	596.5	147.9	0.2	13.2	21.5
3669	0.0	C_Mob_ENV	Combinatio n	Min	-53.0	2.8	-51.7	-0.6	-21.7	-34.0
3669	0.5	C_Mob_ENV	Combinatio n	Min	-53.0	2.8	-51.7	-0.6	-36.0	-83.9
3670	0.0	C_Mob_ENV	Combinatio n	Max	6.9	3.8	51.9	0.3	10.3	24.5
3670	0.5	C_Mob_ENV	Combinatio n	Max	6.9	3.8	51.9	0.3	5.1	185.6
3670	0.0	C_Mob_ENV	Combinatio n	Min	-25.1	-376.2	-14.1	-0.2	-13.1	-35.9
3670	0.5	C_Mob_ENV	Combinatio n	Min	-25.1	-376.2	-14.1	-0.2	-24.0	-16.3
3671	0.0	C_Mob_ENV	Combinatio n	Max	18.0	6.7	29.5	0.3	15.2	201.2

3671	0.4	C_Mob_ENV	Combinatio n	Max	18.0	6.7	29.5	0.3	11.6	315.7
3671	0.7	C_Mob_ENV	Combinatio n	Max	18.0	6.7	29.5	0.3	9.3	430.1
3671	1.1	C_Mob_ENV	Combinatio n	Max	18.0	6.7	29.5	0.3	7.5	544.6
3671	0.0	C_Mob_ENV	Combinatio n	Min	-35.5	-340.4	-12.9	-0.2	-6.6	-19.7
3671	0.4	C_Mob_ENV	Combinatio n	Min	-35.5	-340.4	-12.9	-0.2	-9.1	-20.1
3671	0.7	C_Mob_ENV	Combinatio n	Min	-35.5	-340.4	-12.9	-0.2	-12.6	-20.4
3671	1.1	C_Mob_ENV	Combinatio n	Min	-35.5	-340.4	-12.9	-0.2	-16.7	-20.7
3672	0.0	C_Mob_ENV	Combinatio n	Max	29.5	22.6	20.9	0.3	12.7	553.5
3672	0.4	C_Mob_ENV	Combinatio n	Max	29.5	22.6	20.9	0.3	11.5	652.4
3672	0.7	C_Mob_ENV	Combinatio n	Max	29.5	22.6	20.9	0.3	10.3	751.3
3672	1.1	C_Mob_ENV	Combinatio n	Max	29.5	22.6	20.9	0.3	9.1	850.1
3672	0.0	C_Mob_ENV	Combinatio n	Min	-52.9	-309.8	-15.6	-0.1	-8.1	-20.3
3672	0.4	C_Mob_ENV	Combinatio n	Min	-52.9	-309.8	-15.6	-0.1	-9.2	-20.6
3672	0.7	C_Mob_ENV	Combinatio n	Min	-52.9	-309.8	-15.6	-0.1	-10.4	-20.9
3672	1.1	C_Mob_ENV	Combinatio n	Min	-52.9	-309.8	-15.6	-0.1	-11.6	-21.2
3673	0.0	C_Mob_ENV	Combinatio n	Max	41.8	44.1	29.8	0.3	18.4	854.2
3673	0.4	C_Mob_ENV	Combinatio n	Max	41.8	44.1	29.8	0.3	15.7	938.2
3673	0.7	C_Mob_ENV	Combinatio n	Max	41.8	44.1	29.8	0.3	12.9	1022.3
3673	1.1	C_Mob_ENV	Combinatio n	Max	41.8	44.1	29.8	0.3	12.0	1106.3
3673	0.0	C_Mob_ENV	Combinatio n	Min	-69.1	-283.1	-22.5	-0.1	-12.5	-20.7
3673	0.4	C_Mob_ENV	Combinatio n	Min	-69.1	-283.1	-22.5	-0.1	-12.5	-21.1
3673	0.7	C_Mob_ENV	Combinatio n	Min	-69.1	-283.1	-22.5	-0.1	-13.2	-21.4

3673	1.1	C_Mob_ENV	Combinatio n	Min	-69.1	-283.1	-22.5	-0.1	-14.0	-21.8
3674	0.0	C_Mob_ENV	Combinatio n	Max	55.1	60.4	53.1	0.3	29.5	1105.2
3674	0.4	C_Mob_ENV	Combinatio n	Max	55.1	60.4	53.1	0.3	25.7	1176.9
3674	0.7	C_Mob_ENV	Combinatio n	Max	55.1	60.4	53.1	0.3	21.9	1248.6
3674	1.1	C_Mob_ENV	Combinatio n	Max	55.1	60.4	53.1	0.3	22.6	1320.4
3674	0.0	C_Mob_ENV	Combinatio n	Min	-88.4	-260.8	-37.8	-0.2	-18.5	-21.7
3674	0.4	C_Mob_ENV	Combinatio n	Min	-88.4	-260.8	-37.8	-0.2	-20.8	-22.0
3674	0.7	C_Mob_ENV	Combinatio n	Min	-88.4	-260.8	-37.8	-0.2	-24.6	-22.3
3674	1.1	C_Mob_ENV	Combinatio n	Min	-88.4	-260.8	-37.8	-0.2	-28.4	-22.6
3675	0.0	C_Mob_ENV	Combinatio n	Max	65.8	71.2	101.2	1.3	26.8	1319.1
3675	0.2	C_Mob_ENV	Combinatio n	Max	65.8	71.2	101.2	1.3	30.0	1343.0
3675	0.0	C_Mob_ENV	Combinatio n	Min	-107.3	-244.3	-67.4	-0.3	-16.4	-22.5
3675	0.2	C_Mob_ENV	Combinatio n	Min	-107.3	-244.3	-67.4	-0.3	-28.0	-22.6
3676	0.0	C_Mob_ENV	Combinatio n	Max	64.7	49.1	42.7	0.2	18.6	1342.5
3676	0.5	C_Mob_ENV	Combinatio n	Max	64.7	49.1	42.7	0.2	23.4	1418.0
3676	0.9	C_Mob_ENV	Combinatio n	Max	64.7	49.1	42.7	0.2	31.1	1493.5
3676	0.0	C_Mob_ENV	Combinatio n	Min	-56.5	-245.1	-62.7	-0.3	-27.8	-22.6
3676	0.5	C_Mob_ENV	Combinatio n	Min	-56.5	-245.1	-62.7	-0.3	-22.9	-22.7
3676	0.9	C_Mob_ENV	Combinatio n	Min	-56.5	-245.1	-62.7	-0.3	-20.6	-22.8
3677	0.0	C_Mob_ENV	Combinatio n	Max	60.9	59.3	23.7	0.2	13.7	1497.7
3677	0.4	C_Mob_ENV	Combinatio n	Max	60.9	59.3	23.7	0.2	14.3	1549.6
3677	0.7	C_Mob_ENV	Combinatio n	Max	60.9	59.3	23.7	0.2	17.9	1601.5

3677	1.1	C_Mob_ENV	Combinatio n	Max	60.9	59.3	23.7	0.2	21.5	1653.3
3677	0.0	C_Mob_ENV	Combinatio n	Min	-52.7	-227.4	-33.6	-0.1	-15.3	-22.5
3677	0.4	C_Mob_ENV	Combinatio n	Min	-52.7	-227.4	-33.6	-0.1	-14.2	-22.6
3677	0.7	C_Mob_ENV	Combinatio n	Min	-52.7	-227.4	-33.6	-0.1	-13.1	-22.6
3677	1.1	C_Mob_ENV	Combinatio n	Min	-52.7	-227.4	-33.6	-0.1	-12.5	-22.6
3678	0.0	C_Mob_ENV	Combinatio n	Max	62.8	72.7	21.3	0.2	14.7	1655.2
3678	0.5	C_Mob_ENV	Combinatio n	Max	62.8	72.7	21.3	0.2	12.4	1712.0
3678	1.0	C_Mob_ENV	Combinatio n	Max	62.8	72.7	21.3	0.2	11.0	1768.9
3678	0.0	C_Mob_ENV	Combinatio n	Min	-59.0	-207.7	-17.4	-0.2	-8.6	-22.4
3678	0.5	C_Mob_ENV	Combinatio n	Min	-59.0	-207.7	-17.4	-0.2	-8.3	-22.4
3678	1.0	C_Mob_ENV	Combinatio n	Min	-59.0	-207.7	-17.4	-0.2	-8.1	-22.4
3679	0.0	C_Mob_ENV	Combinatio n	Max	62.8	72.7	21.3	1.8	11.0	1770.9
3679	0.1	C_Mob_ENV	Combinatio n	Max	62.8	72.7	21.3	1.8	13.0	1790.4
3679	0.0	C_Mob_ENV	Combinatio n	Min	-59.0	-207.7	-17.4	-1.4	-8.1	-22.3
3679	0.1	C_Mob_ENV	Combinatio n	Min	-59.0	-207.7	-17.4	-1.4	-10.2	-22.3
3680	0.0	C_Mob_ENV	Combinatio n	Max	70.7	86.1	45.9	0.3	29.3	1787.8
3680	0.4	C_Mob_ENV	Combinatio n	Max	70.7	86.1	45.9	0.3	24.5	1823.7
3680	0.7	C_Mob_ENV	Combinatio n	Max	70.7	86.1	45.9	0.3	19.7	1859.6
3680	1.1	C_Mob_ENV	Combinatio n	Max	70.7	86.1	45.9	0.3	19.8	1895.5
3680	0.0	C_Mob_ENV	Combinatio n	Min	-70.8	-188.6	-31.5	-0.4	-15.5	-22.0
3680	0.4	C_Mob_ENV	Combinatio n	Min	-70.8	-188.6	-31.5	-0.4	-17.6	-22.0
3680	0.7	C_Mob_ENV	Combinatio n	Min	-70.8	-188.6	-31.5	-0.4	-19.8	-22.0

3680	1.1	C_Mob_ENV	Combinatio n	Min	-70.8	-188.6	-31.5	-0.4	-21.9	-22.0
3681	0.0	C_Mob_ENV	Combinatio n	Max	81.6	99.1	83.3	0.5	36.1	1891.9
3681	0.4	C_Mob_ENV	Combinatio n	Max	81.6	99.1	83.3	0.5	27.6	1918.6
3681	0.8	C_Mob_ENV	Combinatio n	Max	81.6	99.1	83.3	0.5	26.0	1945.3
3681	0.0	C_Mob_ENV	Combinatio n	Min	-90.1	-172.7	-51.6	-0.1	-18.2	-21.8
3681	0.4	C_Mob_ENV	Combinatio n	Min	-90.1	-172.7	-51.6	-0.1	-27.0	-21.8
3681	0.8	C_Mob_ENV	Combinatio n	Min	-90.1	-172.7	-51.6	-0.1	-35.9	-21.7
3682	0.0	C_Mob_ENV	Combinatio n	Max	87.0	96.5	63.8	0.6	20.7	1944.5
3682	0.3	C_Mob_ENV	Combinatio n	Max	87.0	96.5	63.8	0.6	15.7	1966.2
3682	0.0	C_Mob_ENV	Combinatio n	Min	-45.4	-174.4	-110.1	-1.9	-34.7	-21.7
3682	0.3	C_Mob_ENV	Combinatio n	Min	-45.4	-174.4	-110.1	-1.9	-12.2	-21.5
3683	0.0	C_Mob_ENV	Combinatio n	Max	78.2	109.0	38.9	0.2	25.2	1965.0
3683	0.4	C_Mob_ENV	Combinatio n	Max	78.2	109.0	38.9	0.2	24.9	1976.2
3683	0.7	C_Mob_ENV	Combinatio n	Max	78.2	109.0	38.9	0.2	30.2	1987.5
3683	1.1	C_Mob_ENV	Combinatio n	Max	78.2	109.0	38.9	0.2	35.5	1998.8
3683	0.0	C_Mob_ENV	Combinatio n	Min	-41.3	-160.9	-62.3	-0.3	-33.2	-21.4
3683	0.4	C_Mob_ENV	Combinatio n	Min	-41.3	-160.9	-62.3	-0.3	-28.1	-21.2
3683	0.7	C_Mob_ENV	Combinatio n	Min	-41.3	-160.9	-62.3	-0.3	-22.9	-21.0
3683	1.1	C_Mob_ENV	Combinatio n	Min	-41.3	-160.9	-62.3	-0.3	-17.9	-20.8
3684	0.0	C_Mob_ENV	Combinatio n	Max	68.1	124.4	22.2	0.2	15.0	1999.9
3684	0.4	C_Mob_ENV	Combinatio n	Max	68.1	124.4	22.2	0.2	15.9	2003.9
3684	0.8	C_Mob_ENV	Combinatio n	Max	68.1	124.4	22.2	0.2	19.2	2007.9

3684	1.1	C_Mob_ENV	Combinatio n	Max	68.1	124.4	22.2	0.2	23.1	2011.9
3684	0.0	C_Mob_ENV	Combinatio n	Min	-43.2	-143.8	-29.9	-0.3	-13.3	-20.7
3684	0.4	C_Mob_ENV	Combinatio n	Min	-43.2	-143.8	-29.9	-0.3	-13.1	-20.5
3684	0.8	C_Mob_ENV	Combinatio n	Min	-43.2	-143.8	-29.9	-0.3	-12.9	-20.3
3684	1.1	C_Mob_ENV	Combinatio n	Min	-43.2	-143.8	-29.9	-0.3	-12.6	-20.1
3685	0.0	C_Mob_ENV	Combinatio n	Max	65.5	142.5	29.8	0.1	22.5	2012.5
3685	0.4	C_Mob_ENV	Combinatio n	Max	65.5	142.5	29.8	0.1	18.9	2009.0
3685	0.8	C_Mob_ENV	Combinatio n	Max	65.5	142.5	29.8	0.1	15.9	2005.5
3685	1.1	C_Mob_ENV	Combinatio n	Max	65.5	142.5	29.8	0.1	15.4	2002.0
3685	0.0	C_Mob_ENV	Combinatio n	Min	-55.7	-125.3	-22.3	-0.4	-12.3	-20.0
3685	0.4	C_Mob_ENV	Combinatio n	Min	-55.7	-125.3	-22.3	-0.4	-12.6	-20.3
3685	0.8	C_Mob_ENV	Combinatio n	Min	-55.7	-125.3	-22.3	-0.4	-12.9	-20.5
3685	1.1	C_Mob_ENV	Combinatio n	Min	-55.7	-125.3	-22.3	-0.4	-13.2	-20.8
3686	0.0	C_Mob_ENV	Combinatio n	Max	69.8	159.6	61.1	0.1	34.3	2001.7
3686	0.4	C_Mob_ENV	Combinatio n	Max	69.8	159.6	61.1	0.1	29.4	1990.2
3686	0.7	C_Mob_ENV	Combinatio n	Max	69.8	159.6	61.1	0.1	24.5	1978.8
3686	1.1	C_Mob_ENV	Combinatio n	Max	69.8	159.6	61.1	0.1	25.2	1967.3
3686	0.0	C_Mob_ENV	Combinatio n	Min	-77.6	-109.2	-38.9	-0.4	-17.7	-20.5
3686	0.4	C_Mob_ENV	Combinatio n	Min	-77.6	-109.2	-38.9	-0.4	-22.7	-20.8
3686	0.7	C_Mob_ENV	Combinatio n	Min	-77.6	-109.2	-38.9	-0.4	-27.9	-21.2
3686	1.1	C_Mob_ENV	Combinatio n	Min	-77.6	-109.2	-38.9	-0.4	-33.0	-21.5
3687	0.0	C_Mob_ENV	Combinatio n	Max	73.0	173.1	109.9	1.7	15.2	1968.8

3687	0.3	C_Mob_ENV	Combinatio n	Max	73.0	173.1	109.9	1.7	20.4	1946.8
3687	0.0	C_Mob_ENV	Combinatio n	Min	-100.4	-96.4	-63.7	-0.7	-14.6	-21.4
3687	0.3	C_Mob_ENV	Combinatio n	Min	-100.4	-96.4	-63.7	-0.7	-36.5	-21.6
3688	0.0	C_Mob_ENV	Combinatio n	Max	72.5	172.9	50.6	0.1	25.2	1945.9
3688	0.4	C_Mob_ENV	Combinatio n	Max	72.5	172.9	50.6	0.1	28.4	1918.2
3688	0.8	C_Mob_ENV	Combinatio n	Max	72.5	172.9	50.6	0.1	38.0	1890.5
3688	0.0	C_Mob_ENV	Combinatio n	Min	-48.1	-100.2	-84.7	-0.7	-35.7	-21.5
3688	0.4	C_Mob_ENV	Combinatio n	Min	-48.1	-100.2	-84.7	-0.7	-27.1	-21.8
3688	0.8	C_Mob_ENV	Combinatio n	Min	-48.1	-100.2	-84.7	-0.7	-18.4	-22.1
3689	0.0	C_Mob_ENV	Combinatio n	Max	61.2	188.2	30.9	0.2	19.1	1892.5
3689	0.4	C_Mob_ENV	Combinatio n	Max	61.2	188.2	30.9	0.2	19.8	1856.5
3689	0.7	C_Mob_ENV	Combinatio n	Max	61.2	188.2	30.9	0.2	24.9	1820.4
3689	1.1	C_Mob_ENV	Combinatio n	Max	61.2	188.2	30.9	0.2	30.0	1784.3
3689	0.0	C_Mob_ENV	Combinatio n	Min	-44.9	-87.1	-46.7	-0.4	-22.1	-22.0
3689	0.4	C_Mob_ENV	Combinatio n	Min	-44.9	-87.1	-46.7	-0.4	-19.9	-22.2
3689	0.7	C_Mob_ENV	Combinatio n	Min	-44.9	-87.1	-46.7	-0.4	-17.7	-22.4
3689	1.1	C_Mob_ENV	Combinatio n	Min	-44.9	-87.1	-46.7	-0.4	-15.6	-22.6
3690	0.0	C_Mob_ENV	Combinatio n	Max	52.9	206.4	18.6	1.5	12.6	1784.7
3690	0.1	C_Mob_ENV	Combinatio n	Max	52.9	206.4	18.6	1.5	10.6	1765.5
3690	0.0	C_Mob_ENV	Combinatio n	Min	-56.0	-72.3	-21.3	-1.9	-10.3	-22.5
3690	0.1	C_Mob_ENV	Combinatio n	Min	-56.0	-72.3	-21.3	-1.9	-8.1	-22.6
3691	0.0	C_Mob_ENV	Combinatio n	Max	52.9	206.4	18.6	0.1	10.6	1764.5

3691	0.5	C_Mob_ENV	Combinatio n	Max	52.9	206.4	18.6	0.1	12.4	1707.9
3691	1.0	C_Mob_ENV	Combinatio n	Max	52.9	206.4	18.6	0.1	15.0	1651.2
3691	0.0	C_Mob_ENV	Combinatio n	Min	-56.0	-72.3	-21.3	-0.3	-8.1	-22.8
3691	0.5	C_Mob_ENV	Combinatio n	Min	-56.0	-72.3	-21.3	-0.3	-8.4	-23.0
3691	1.0	C_Mob_ENV	Combinatio n	Min	-56.0	-72.3	-21.3	-0.3	-9.5	-23.2
3692	0.0	C_Mob_ENV	Combinatio n	Max	51.5	225.3	33.2	0.1	21.0	1648.9
3692	0.4	C_Mob_ENV	Combinatio n	Max	51.5	225.3	33.2	0.1	17.6	1597.3
3692	0.7	C_Mob_ENV	Combinatio n	Max	51.5	225.3	33.2	0.1	14.1	1545.8
3692	1.1	C_Mob_ENV	Combinatio n	Max	51.5	225.3	33.2	0.1	13.6	1494.2
3692	0.0	C_Mob_ENV	Combinatio n	Min	-72.7	-58.5	-23.4	-0.3	-12.2	-23.0
3692	0.4	C_Mob_ENV	Combinatio n	Min	-72.7	-58.5	-23.4	-0.3	-12.9	-23.1
3692	0.7	C_Mob_ENV	Combinatio n	Min	-72.7	-58.5	-23.4	-0.3	-14.1	-23.2
3692	1.1	C_Mob_ENV	Combinatio n	Min	-72.7	-58.5	-23.4	-0.3	-15.3	-23.3
3693	0.0	C_Mob_ENV	Combinatio n	Max	60.9	242.6	62.7	0.2	29.8	1491.6
3693	0.5	C_Mob_ENV	Combinatio n	Max	60.9	242.6	62.7	0.2	22.7	1415.8
3693	0.9	C_Mob_ENV	Combinatio n	Max	60.9	242.6	62.7	0.2	18.0	1340.0
3693	0.0	C_Mob_ENV	Combinatio n	Min	-97.6	-47.6	-41.5	-0.2	-20.3	-23.1
3693	0.5	C_Mob_ENV	Combinatio n	Min	-97.6	-47.6	-41.5	-0.2	-23.1	-23.2
3693	0.9	C_Mob_ENV	Combinatio n	Min	-97.6	-47.6	-41.5	-0.2	-28.6	-23.2
3694	0.0	C_Mob_ENV	Combinatio n	Max	62.4	245.3	63.0	0.3	28.4	1339.3
3694	0.2	C_Mob_ENV	Combinatio n	Max	62.4	245.3	63.0	0.3	25.9	1314.7
3694	0.0	C_Mob_ENV	Combinatio n	Min	-49.2	-69.4	-103.6	-1.4	-26.5	-23.2

3694	0.2	C_Mob_ENV	Combinatio n	Min	-49.2	-69.4	-103.6	-1.4	-14.0	-23.2
3695	0.0	C_Mob_ENV	Combinatio n	Max	56.2	261.3	35.1	0.1	20.7	1313.9
3695	0.4	C_Mob_ENV	Combinatio n	Max	56.2	261.3	35.1	0.1	21.8	1241.0
3695	0.7	C_Mob_ENV	Combinatio n	Max	56.2	261.3	35.1	0.1	26.3	1168.2
3695	1.1	C_Mob_ENV	Combinatio n	Max	56.2	261.3	35.1	0.1	30.8	1095.4
3695	0.0	C_Mob_ENV	Combinatio n	Min	-58.0	-58.0	-54.5	-0.3	-28.7	-23.3
3695	0.4	C_Mob_ENV	Combinatio n	Min	-58.0	-58.0	-54.5	-0.3	-24.8	-23.2
3695	0.7	C_Mob_ENV	Combinatio n	Min	-58.0	-58.0	-54.5	-0.3	-20.8	-23.2
3695	1.1	C_Mob_ENV	Combinatio n	Min	-58.0	-58.0	-54.5	-0.3	-17.7	-23.1
3696	0.0	C_Mob_ENV	Combinatio n	Max	45.2	282.0	22.5	0.1	11.8	1092.5
3696	0.4	C_Mob_ENV	Combinatio n	Max	45.2	282.0	22.5	0.1	12.8	1008.3
3696	0.7	C_Mob_ENV	Combinatio n	Max	45.2	282.0	22.5	0.1	15.9	924.0
3696	1.1	C_Mob_ENV	Combinatio n	Max	45.2	282.0	22.5	0.1	19.0	839.8
3696	0.0	C_Mob_ENV	Combinatio n	Min	-53.5	-41.7	-30.2	-0.3	-14.0	-23.3
3696	0.4	C_Mob_ENV	Combinatio n	Min	-53.5	-41.7	-30.2	-0.3	-13.2	-23.2
3696	0.7	C_Mob_ENV	Combinatio n	Min	-53.5	-41.7	-30.2	-0.3	-12.4	-23.1
3696	1.1	C_Mob_ENV	Combinatio n	Min	-53.5	-41.7	-30.2	-0.3	-12.7	-23.0
3697	0.0	C_Mob_ENV	Combinatio n	Max	39.1	306.6	19.2	0.1	10.2	835.1
3697	0.4	C_Mob_ENV	Combinatio n	Max	39.1	306.6	19.2	0.1	10.1	737.1
3697	0.7	C_Mob_ENV	Combinatio n	Max	39.1	306.6	19.2	0.1	11.4	639.1
3697	1.1	C_Mob_ENV	Combinatio n	Max	39.1	306.6	19.2	0.1	12.7	541.1
3697	0.0	C_Mob_ENV	Combinatio n	Min	-47.8	-20.8	-20.4	-0.3	-11.3	-23.3

3697	0.4	C_Mob_ENV	Combinatio n	Min	-47.8	-20.8	-20.4	-0.3	-10.4	-23.1
3697	0.7	C_Mob_ENV	Combinatio n	Min	-47.8	-20.8	-20.4	-0.3	-9.6	-22.9
3697	1.1	C_Mob_ENV	Combinatio n	Min	-47.8	-20.8	-20.4	-0.3	-10.7	-22.7
3698	0.0	C_Mob_ENV	Combinatio n	Max	31.4	335.0	15.1	0.1	8.0	534.6
3698	0.4	C_Mob_ENV	Combinatio n	Max	31.4	335.0	15.1	0.1	8.8	422.2
3698	0.7	C_Mob_ENV	Combinatio n	Max	31.4	335.0	15.1	0.1	11.0	309.7
3698	1.1	C_Mob_ENV	Combinatio n	Max	31.4	335.0	15.1	0.1	14.3	197.2
3698	0.0	C_Mob_ENV	Combinatio n	Min	-40.7	-5.9	-27.0	-0.3	-15.1	-23.2
3698	0.4	C_Mob_ENV	Combinatio n	Min	-40.7	-5.9	-27.0	-0.3	-11.7	-23.0
3698	0.7	C_Mob_ENV	Combinatio n	Min	-40.7	-5.9	-27.0	-0.3	-8.7	-22.8
3698	1.1	C_Mob_ENV	Combinatio n	Min	-40.7	-5.9	-27.0	-0.3	-8.4	-22.6
3699	0.0	C_Mob_ENV	Combinatio n	Max	27.0	368.6	15.5	0.1	4.4	184.9
3699	0.5	C_Mob_ENV	Combinatio n	Max	27.0	368.6	15.5	0.1	10.5	26.2
3699	0.0	C_Mob_ENV	Combinatio n	Min	-26.6	-3.9	-48.3	-0.3	-22.4	-18.7
3699	0.5	C_Mob_ENV	Combinatio n	Min	-26.6	-3.9	-48.3	-0.3	-14.7	-37.2
3700	0.0	C_Mob_ENV	Combinatio n	Max	17.5	68.0	22.5	0.4	6.3	32.1
3700	0.5	C_Mob_ENV	Combinatio n	Max	17.5	68.0	22.5	0.4	6.6	115.9
3700	0.0	C_Mob_ENV	Combinatio n	Min	-9.2	-227.9	-31.2	-0.1	-14.3	-9.8
3700	0.5	C_Mob_ENV	Combinatio n	Min	-9.2	-227.9	-31.2	-0.1	-8.4	-15.9
3701	0.0	C_Mob_ENV	Combinatio n	Max	12.4	64.4	13.4	0.3	7.1	131.3
3701	0.4	C_Mob_ENV	Combinatio n	Max	12.4	64.4	13.4	0.3	7.6	207.2
3701	0.7	C_Mob_ENV	Combinatio n	Max	12.4	64.4	13.4	0.3	9.5	283.1

3701	1.1	C_Mob_ENV	Combinatio n	Max	12.4	64.4	13.4	0.3	12.4	359.0
3701	0.0	C_Mob_ENV	Combinatio n	Min	-14.4	-220.2	-20.0	-0.1	-9.5	-6.8
3701	0.4	C_Mob_ENV	Combinatio n	Min	-14.4	-220.2	-20.0	-0.1	-7.7	-26.9
3701	0.7	C_Mob_ENV	Combinatio n	Min	-14.4	-220.2	-20.0	-0.1	-7.1	-47.0
3701	1.1	C_Mob_ENV	Combinatio n	Min	-14.4	-220.2	-20.0	-0.1	-7.5	-67.1
3702	0.0	C_Mob_ENV	Combinatio n	Max	14.4	61.4	12.2	0.3	8.6	367.2
3702	0.4	C_Mob_ENV	Combinatio n	Max	14.4	61.4	12.2	0.3	8.0	442.5
3702	0.7	C_Mob_ENV	Combinatio n	Max	14.4	61.4	12.2	0.3	8.4	517.9
3702	1.1	C_Mob_ENV	Combinatio n	Max	14.4	61.4	12.2	0.3	9.0	593.2
3702	0.0	C_Mob_ENV	Combinatio n	Min	-22.5	-210.6	-11.5	-0.1	-4.2	-53.8
3702	0.4	C_Mob_ENV	Combinatio n	Min	-22.5	-210.6	-11.5	-0.1	-4.6	-75.4
3702	0.7	C_Mob_ENV	Combinatio n	Min	-22.5	-210.6	-11.5	-0.1	-5.0	-97.0
3702	1.1	C_Mob_ENV	Combinatio n	Min	-22.5	-210.6	-11.5	-0.1	-5.5	-118.6
3703	0.0	C_Mob_ENV	Combinatio n	Max	17.5	57.6	19.7	0.3	14.1	603.8
3703	0.4	C_Mob_ENV	Combinatio n	Max	17.5	57.6	19.7	0.3	11.3	674.7
3703	0.7	C_Mob_ENV	Combinatio n	Max	17.5	57.6	19.7	0.3	8.5	745.6
3703	1.1	C_Mob_ENV	Combinatio n	Max	17.5	57.6	19.7	0.3	5.8	816.4
3703	0.0	C_Mob_ENV	Combinatio n	Min	-36.7	-198.4	-7.9	-0.1	-4.8	-106.1
3703	0.4	C_Mob_ENV	Combinatio n	Min	-36.7	-198.4	-7.9	-0.1	-5.9	-126.4
3703	0.7	C_Mob_ENV	Combinatio n	Min	-36.7	-198.4	-7.9	-0.1	-7.0	-146.7
3703	1.1	C_Mob_ENV	Combinatio n	Min	-36.7	-198.4	-7.9	-0.1	-8.0	-167.0
3704	0.0	C_Mob_ENV	Combinatio n	Max	21.2	52.7	37.6	0.2	22.2	831.4

3704	0.4	C_Mob_ENV	Combinatio n	Max	21.2	52.7	37.6	0.2	17.8	896.2
3704	0.7	C_Mob_ENV	Combinatio n	Max	21.2	52.7	37.6	0.2	13.5	961.0
3704	1.1	C_Mob_ENV	Combinatio n	Max	21.2	52.7	37.6	0.2	9.1	1025.8
3704	0.0	C_Mob_ENV	Combinatio n	Min	-60.5	-182.7	-15.3	-0.1	-7.6	-156.2
3704	0.4	C_Mob_ENV	Combinatio n	Min	-60.5	-182.7	-15.3	-0.1	-11.5	-174.6
3704	0.7	C_Mob_ENV	Combinatio n	Min	-60.5	-182.7	-15.3	-0.1	-15.4	-193.0
3704	1.1	C_Mob_ENV	Combinatio n	Min	-60.5	-182.7	-15.3	-0.1	-19.3	-211.3
3705	0.0	C_Mob_ENV	Combinatio n	Max	28.0	46.8	67.7	0.7	13.2	1034.2
3705	0.2	C_Mob_ENV	Combinatio n	Max	28.0	46.8	67.7	0.7	13.5	1059.7
3705	0.0	C_Mob_ENV	Combinatio n	Min	-81.6	-162.9	-28.4	-0.5	-10.7	-195.9
3705	0.2	C_Mob_ENV	Combinatio n	Min	-81.6	-162.9	-28.4	-0.5	-17.2	-202.6
3706	0.0	C_Mob_ENV	Combinatio n	Max	18.4	43.4	17.6	0.3	9.0	1059.5
3706	0.5	C_Mob_ENV	Combinatio n	Max	18.4	43.4	17.6	0.3	13.9	1124.6
3706	0.9	C_Mob_ENV	Combinatio n	Max	18.4	43.4	17.6	0.3	18.9	1189.6
3706	0.0	C_Mob_ENV	Combinatio n	Min	-42.3	-152.8	-41.7	-0.2	-19.7	-201.2
3706	0.5	C_Mob_ENV	Combinatio n	Min	-42.3	-152.8	-41.7	-0.2	-13.2	-218.1
3706	0.9	C_Mob_ENV	Combinatio n	Min	-42.3	-152.8	-41.7	-0.2	-7.2	-235.1
3707	0.0	C_Mob_ENV	Combinatio n	Max	16.0	39.2	8.6	0.2	6.4	1181.8
3707	0.4	C_Mob_ENV	Combinatio n	Max	16.0	39.2	8.6	0.2	9.3	1226.2
3707	0.7	C_Mob_ENV	Combinatio n	Max	16.0	39.2	8.6	0.2	12.2	1270.7
3707	1.1	C_Mob_ENV	Combinatio n	Max	16.0	39.2	8.6	0.2	15.1	1315.1
3707	0.0	C_Mob_ENV	Combinatio n	Min	-38.4	-137.5	-19.2	-0.1	-6.8	-218.0

3707	0.4	C_Mob_ENV	Combinatio n	Min	-38.4	-137.5	-19.2	-0.1	-6.3	-230.2
3707	0.7	C_Mob_ENV	Combinatio n	Min	-38.4	-137.5	-19.2	-0.1	-5.7	-242.4
3707	1.1	C_Mob_ENV	Combinatio n	Min	-38.4	-137.5	-19.2	-0.1	-5.1	-254.6
3708	0.0	C_Mob_ENV	Combinatio n	Max	17.3	37.6	13.1	0.2	12.0	1314.9
3708	0.5	C_Mob_ENV	Combinatio n	Max	17.3	37.6	13.1	0.2	10.0	1366.4
3708	1.0	C_Mob_ENV	Combinatio n	Max	17.3	37.6	13.1	0.2	8.0	1417.9
3708	0.0	C_Mob_ENV	Combinatio n	Min	-44.2	-123.0	-7.1	-0.2	-2.9	-243.2
3708	0.5	C_Mob_ENV	Combinatio n	Min	-44.2	-123.0	-7.1	-0.2	-3.2	-258.5
3708	1.0	C_Mob_ENV	Combinatio n	Min	-44.2	-123.0	-7.1	-0.2	-3.5	-273.9
3709	0.0	C_Mob_ENV	Combinatio n	Max	17.3	37.6	13.1	1.2	8.0	1421.3
3709	0.1	C_Mob_ENV	Combinatio n	Max	17.3	37.6	13.1	1.2	8.6	1434.9
3709	0.0	C_Mob_ENV	Combinatio n	Min	-44.2	-123.0	-7.1	-0.7	-3.5	-275.3
3709	0.1	C_Mob_ENV	Combinatio n	Min	-44.2	-123.0	-7.1	-0.7	-4.5	-279.2
3710	0.0	C_Mob_ENV	Combinatio n	Max	21.1	36.0	29.3	0.3	20.9	1445.5
3710	0.4	C_Mob_ENV	Combinatio n	Max	21.1	36.0	29.3	0.3	16.7	1477.8
3710	0.7	C_Mob_ENV	Combinatio n	Max	21.1	36.0	29.3	0.3	12.7	1510.0
3710	1.1	C_Mob_ENV	Combinatio n	Max	21.1	36.0	29.3	0.3	8.7	1542.3
3710	0.0	C_Mob_ENV	Combinatio n	Min	-61.5	-107.0	-11.8	-0.3	-6.1	-272.8
3710	0.4	C_Mob_ENV	Combinatio n	Min	-61.5	-107.0	-11.8	-0.3	-8.2	-282.5
3710	0.7	C_Mob_ENV	Combinatio n	Min	-61.5	-107.0	-11.8	-0.3	-10.3	-292.1
3710	1.1	C_Mob_ENV	Combinatio n	Min	-61.5	-107.0	-11.8	-0.3	-12.4	-301.8
3711	0.0	C_Mob_ENV	Combinatio n	Max	32.6	34.2	53.2	0.3	23.1	1559.6

3711	0.4	C_Mob_ENV	Combinatio n	Max	32.6	34.2	53.2	0.3	18.5	1586.1
3711	0.8	C_Mob_ENV	Combinatio n	Max	32.6	34.2	53.2	0.3	13.9	1612.7
3711	0.0	C_Mob_ENV	Combinatio n	Min	-89.0	-89.3	-22.7	-0.1	-5.6	-300.1
3711	0.4	C_Mob_ENV	Combinatio n	Min	-89.0	-89.3	-22.7	-0.1	-14.2	-307.4
3711	0.8	C_Mob_ENV	Combinatio n	Min	-89.0	-89.3	-22.7	-0.1	-22.7	-314.6
3712	0.0	C_Mob_ENV	Combinatio n	Max	18.8	35.2	30.5	0.8	12.5	1612.0
3712	0.3	C_Mob_ENV	Combinatio n	Max	18.8	35.2	30.5	0.8	8.4	1627.4
3712	0.0	C_Mob_ENV	Combinatio n	Min	-51.3	-82.3	-65.5	-1.5	-22.4	-314.0
3712	0.3	C_Mob_ENV	Combinatio n	Min	-51.3	-82.3	-65.5	-1.5	-10.8	-317.6
3713	0.0	C_Mob_ENV	Combinatio n	Max	18.2	37.8	17.3	0.2	13.1	1618.5
3713	0.4	C_Mob_ENV	Combinatio n	Max	18.2	37.8	17.3	0.2	15.8	1628.6
3713	0.7	C_Mob_ENV	Combinatio n	Max	18.2	37.8	17.3	0.2	18.8	1638.7
3713	1.1	C_Mob_ENV	Combinatio n	Max	18.2	37.8	17.3	0.2	22.2	1648.8
3713	0.0	C_Mob_ENV	Combinatio n	Min	-50.2	-67.1	-37.4	-0.2	-19.3	-308.2
3713	0.4	C_Mob_ENV	Combinatio n	Min	-50.2	-67.1	-37.4	-0.2	-15.2	-309.2
3713	0.7	C_Mob_ENV	Combinatio n	Min	-50.2	-67.1	-37.4	-0.2	-11.2	-310.2
3713	1.1	C_Mob_ENV	Combinatio n	Min	-50.2	-67.1	-37.4	-0.2	-7.2	-311.3
3714	0.0	C_Mob_ENV	Combinatio n	Max	15.6	42.5	8.3	0.2	10.7	1636.0
3714	0.4	C_Mob_ENV	Combinatio n	Max	15.6	42.5	8.3	0.2	12.4	1639.2
3714	0.8	C_Mob_ENV	Combinatio n	Max	15.6	42.5	8.3	0.2	14.2	1642.3
3714	1.1	C_Mob_ENV	Combinatio n	Max	15.6	42.5	8.3	0.2	16.0	1645.4
3714	0.0	C_Mob_ENV	Combinatio n	Min	-43.2	-54.6	-16.2	-0.2	-5.7	-304.3

3714	0.4	C_Mob_ENV	Combinatio n	Min	-43.2	-54.6	-16.2	-0.2	-5.5	-303.6
3714	0.8	C_Mob_ENV	Combinatio n	Min	-43.2	-54.6	-16.2	-0.2	-5.2	-302.8
3714	1.1	C_Mob_ENV	Combinatio n	Min	-43.2	-54.6	-16.2	-0.2	-5.0	-302.1
3715	0.0	C_Mob_ENV	Combinatio n	Max	19.7	54.1	16.7	0.1	16.5	1644.5
3715	0.4	C_Mob_ENV	Combinatio n	Max	19.7	54.1	16.7	0.1	14.4	1641.7
3715	0.8	C_Mob_ENV	Combinatio n	Max	19.7	54.1	16.7	0.1	12.3	1638.9
3715	1.1	C_Mob_ENV	Combinatio n	Max	19.7	54.1	16.7	0.1	10.3	1636.0
3715	0.0	C_Mob_ENV	Combinatio n	Min	-50.5	-45.1	-8.6	-0.3	-5.3	-302.5
3715	0.4	C_Mob_ENV	Combinatio n	Min	-50.5	-45.1	-8.6	-0.3	-5.4	-302.2
3715	0.8	C_Mob_ENV	Combinatio n	Min	-50.5	-45.1	-8.6	-0.3	-5.5	-301.8
3715	1.1	C_Mob_ENV	Combinatio n	Min	-50.5	-45.1	-8.6	-0.3	-5.5	-301.4
3716	0.0	C_Mob_ENV	Combinatio n	Max	28.3	66.8	37.8	0.1	22.4	1647.1
3716	0.4	C_Mob_ENV	Combinatio n	Max	28.3	66.8	37.8	0.1	19.0	1637.4
3716	0.7	C_Mob_ENV	Combinatio n	Max	28.3	66.8	37.8	0.1	16.3	1627.8
3716	1.1	C_Mob_ENV	Combinatio n	Max	28.3	66.8	37.8	0.1	14.0	1618.1
3716	0.0	C_Mob_ENV	Combinatio n	Min	-73.5	-40.4	-17.4	-0.3	-7.0	-308.9
3716	0.4	C_Mob_ENV	Combinatio n	Min	-73.5	-40.4	-17.4	-0.3	-11.2	-306.7
3716	0.7	C_Mob_ENV	Combinatio n	Min	-73.5	-40.4	-17.4	-0.3	-15.3	-304.5
3716	1.1	C_Mob_ENV	Combinatio n	Min	-73.5	-40.4	-17.4	-0.3	-19.5	-302.3
3717	0.0	C_Mob_ENV	Combinatio n	Max	38.1	82.1	66.3	1.2	10.4	1625.7
3717	0.3	C_Mob_ENV	Combinatio n	Max	38.1	82.1	66.3	1.2	14.6	1610.5
3717	0.0	C_Mob_ENV	Combinatio n	Min	-93.3	-37.7	-31.6	-0.7	-11.6	-312.2

3717	0.3	C_Mob_ENV	Combinatio n	Min	-93.3	-37.7	-31.6	-0.7	-22.4	-307.8
3718	0.0	C_Mob_ENV	Combinatio n	Max	16.7	88.6	25.9	0.1	17.2	1609.8
3718	0.4	C_Mob_ENV	Combinatio n	Max	16.7	88.6	25.9	0.1	18.2	1583.8
3718	0.8	C_Mob_ENV	Combinatio n	Max	16.7	88.6	25.9	0.1	21.5	1557.8
3718	0.0	C_Mob_ENV	Combinatio n	Min	-53.8	-37.8	-52.4	-0.5	-22.7	-307.8
3718	0.4	C_Mob_ENV	Combinatio n	Min	-53.8	-37.8	-52.4	-0.5	-14.6	-298.9
3718	0.8	C_Mob_ENV	Combinatio n	Min	-53.8	-37.8	-52.4	-0.5	-6.4	-290.0
3719	0.0	C_Mob_ENV	Combinatio n	Max	14.1	106.4	13.8	0.1	10.9	1539.4
3719	0.4	C_Mob_ENV	Combinatio n	Max	14.1	106.4	13.8	0.1	13.1	1507.5
3719	0.7	C_Mob_ENV	Combinatio n	Max	14.1	106.4	13.8	0.1	15.4	1475.7
3719	1.1	C_Mob_ENV	Combinatio n	Max	14.1	106.4	13.8	0.1	18.9	1443.9
3719	0.0	C_Mob_ENV	Combinatio n	Min	-44.6	-39.2	-28.5	-0.3	-12.3	-289.4
3719	0.4	C_Mob_ENV	Combinatio n	Min	-44.6	-39.2	-28.5	-0.3	-10.4	-278.7
3719	0.7	C_Mob_ENV	Combinatio n	Min	-44.6	-39.2	-28.5	-0.3	-8.6	-268.0
3719	1.1	C_Mob_ENV	Combinatio n	Min	-44.6	-39.2	-28.5	-0.3	-6.7	-257.3
3720	0.0	C_Mob_ENV	Combinatio n	Max	13.4	122.8	8.1	0.7	9.3	1430.9
3720	0.1	C_Mob_ENV	Combinatio n	Max	13.4	122.8	8.1	0.7	8.4	1417.5
3720	0.0	C_Mob_ENV	Combinatio n	Min	-40.0	-40.1	-11.6	-1.1	-4.7	-262.0
3720	0.1	C_Mob_ENV	Combinatio n	Min	-40.0	-40.1	-11.6	-1.1	-3.8	-257.9
3721	0.0	C_Mob_ENV	Combinatio n	Max	13.4	122.8	8.1	0.1	8.4	1414.2
3721	0.5	C_Mob_ENV	Combinatio n	Max	13.4	122.8	8.1	0.1	9.0	1363.2
3721	1.0	C_Mob_ENV	Combinatio n	Max	13.4	122.8	8.1	0.1	9.8	1312.2

3721	0.0	C_Mob_ENV	Combinatio n	Min	-40.0	-40.1	-11.6	-0.2	-3.8	-256.8
3721	0.5	C_Mob_ENV	Combinatio n	Min	-40.0	-40.1	-11.6	-0.2	-3.4	-240.8
3721	1.0	C_Mob_ENV	Combinatio n	Min	-40.0	-40.1	-11.6	-0.2	-3.1	-224.9
3722	0.0	C_Mob_ENV	Combinatio n	Max	17.6	137.3	18.7	0.1	13.5	1309.6
3722	0.4	C_Mob_ENV	Combinatio n	Max	17.6	137.3	18.7	0.1	11.2	1265.5
3722	0.7	C_Mob_ENV	Combinatio n	Max	17.6	137.3	18.7	0.1	9.1	1221.3
3722	1.1	C_Mob_ENV	Combinatio n	Max	17.6	137.3	18.7	0.1	7.0	1177.2
3722	0.0	C_Mob_ENV	Combinatio n	Min	-46.9	-40.2	-9.8	-0.2	-5.8	-235.9
3722	0.4	C_Mob_ENV	Combinatio n	Min	-46.9	-40.2	-9.8	-0.2	-6.3	-223.8
3722	0.7	C_Mob_ENV	Combinatio n	Min	-46.9	-40.2	-9.8	-0.2	-6.8	-211.7
3722	1.1	C_Mob_ENV	Combinatio n	Min	-46.9	-40.2	-9.8	-0.2	-7.3	-199.6
3723	0.0	C_Mob_ENV	Combinatio n	Max	30.3	152.4	38.3	0.1	18.5	1182.6
3723	0.5	C_Mob_ENV	Combinatio n	Max	30.3	152.4	38.3	0.1	14.4	1118.3
3723	0.9	C_Mob_ENV	Combinatio n	Max	30.3	152.4	38.3	0.1	11.0	1054.0
3723	0.0	C_Mob_ENV	Combinatio n	Min	-67.6	-42.1	-20.6	-0.2	-8.4	-217.7
3723	0.5	C_Mob_ENV	Combinatio n	Min	-67.6	-42.1	-20.6	-0.2	-13.1	-201.5
3723	0.9	C_Mob_ENV	Combinatio n	Min	-67.6	-42.1	-20.6	-0.2	-17.7	-185.3
3724	0.0	C_Mob_ENV	Combinatio n	Max	6.6	162.0	33.3	0.3	17.9	1053.5
3724	0.2	C_Mob_ENV	Combinatio n	Max	6.6	162.0	33.3	0.3	14.4	1028.2
3724	0.0	C_Mob_ENV	Combinatio n	Min	-40.0	-48.5	-61.1	-0.9	-16.1	-186.3
3724	0.2	C_Mob_ENV	Combinatio n	Min	-40.0	-48.5	-61.1	-0.9	-10.2	-179.4
3725	0.0	C_Mob_ENV	Combinatio n	Max	12.1	181.4	16.9	0.1	11.8	1018.6

3725	0.4	C_Mob_ENV	Combinatio n	Max	12.1	181.4	16.9	0.1	13.7	954.4
3725	0.7	C_Mob_ENV	Combinatio n	Max	12.1	181.4	16.9	0.1	16.0	890.2
3725	1.1	C_Mob_ENV	Combinatio n	Max	12.1	181.4	16.9	0.1	18.8	826.0
3725	0.0	C_Mob_ENV	Combinatio n	Min	-38.2	-52.9	-33.2	-0.3	-17.7	-192.6
3725	0.4	C_Mob_ENV	Combinatio n	Min	-38.2	-52.9	-33.2	-0.3	-14.4	-174.4
3725	0.7	C_Mob_ENV	Combinatio n	Min	-38.2	-52.9	-33.2	-0.3	-11.1	-156.1
3725	1.1	C_Mob_ENV	Combinatio n	Min	-38.2	-52.9	-33.2	-0.3	-7.8	-137.9
3726	0.0	C_Mob_ENV	Combinatio n	Max	10.0	197.0	9.2	0.1	6.5	810.6
3726	0.4	C_Mob_ENV	Combinatio n	Max	10.0	197.0	9.2	0.1	8.0	740.4
3726	0.7	C_Mob_ENV	Combinatio n	Max	10.0	197.0	9.2	0.1	9.8	670.1
3726	1.1	C_Mob_ENV	Combinatio n	Max	10.0	197.0	9.2	0.1	11.8	599.9
3726	0.0	C_Mob_ENV	Combinatio n	Min	-29.0	-55.3	-17.5	-0.3	-7.7	-145.1
3726	0.4	C_Mob_ENV	Combinatio n	Min	-29.0	-55.3	-17.5	-0.3	-6.9	-125.8
3726	0.7	C_Mob_ENV	Combinatio n	Min	-29.0	-55.3	-17.5	-0.3	-6.1	-106.4
3726	1.1	C_Mob_ENV	Combinatio n	Min	-29.0	-55.3	-17.5	-0.3	-5.3	-87.1
3727	0.0	C_Mob_ENV	Combinatio n	Max	11.8	209.2	10.7	0.1	7.5	589.0
3727	0.4	C_Mob_ENV	Combinatio n	Max	11.8	209.2	10.7	0.1	7.3	515.0
3727	0.7	C_Mob_ENV	Combinatio n	Max	11.8	209.2	10.7	0.1	7.6	441.0
3727	1.1	C_Mob_ENV	Combinatio n	Max	11.8	209.2	10.7	0.1	8.0	367.0
3727	0.0	C_Mob_ENV	Combinatio n	Min	-23.0	-56.0	-12.6	-0.3	-5.8	-98.0
3727	0.4	C_Mob_ENV	Combinatio n	Min	-23.0	-56.0	-12.6	-0.3	-5.4	-78.7
3727	0.7	C_Mob_ENV	Combinatio n	Min	-23.0	-56.0	-12.6	-0.3	-5.0	-59.4

3727	1.1	C_Mob_ENV	Combinatio n	Min	-23.0	-56.0	-12.6	-0.3	-4.6	-40.1
3728	0.0	C_Mob_ENV	Combinatio n	Max	13.1	218.9	14.9	0.1	8.8	356.3
3728	0.4	C_Mob_ENV	Combinatio n	Max	13.1	218.9	14.9	0.1	8.1	281.6
3728	0.7	C_Mob_ENV	Combinatio n	Max	13.1	218.9	14.9	0.1	8.1	206.9
3728	1.1	C_Mob_ENV	Combinatio n	Max	13.1	218.9	14.9	0.1	8.6	132.2
3728	0.0	C_Mob_ENV	Combinatio n	Min	-16.0	-55.8	-15.7	-0.3	-8.7	-53.1
3728	0.4	C_Mob_ENV	Combinatio n	Min	-16.0	-55.8	-15.7	-0.3	-7.8	-37.1
3728	0.7	C_Mob_ENV	Combinatio n	Min	-16.0	-55.8	-15.7	-0.3	-7.0	-21.2
3728	1.1	C_Mob_ENV	Combinatio n	Min	-16.0	-55.8	-15.7	-0.3	-7.3	-5.2
3729	0.0	C_Mob_ENV	Combinatio n	Max	16.7	225.9	18.5	0.1	5.6	115.0
3729	0.5	C_Mob_ENV	Combinatio n	Max	16.7	225.9	18.5	0.1	5.1	27.5
3729	0.0	C_Mob_ENV	Combinatio n	Min	-10.0	-56.4	-24.8	-0.3	-11.1	-13.2
3729	0.5	C_Mob_ENV	Combinatio n	Min	-10.0	-56.4	-24.8	-0.3	-7.5	-8.4
3730	0.0	C_Mob_ENV	Combinatio n	Max	464.2	77.4	37.2	0.4	9.5	398.7
3730	0.5	C_Mob_ENV	Combinatio n	Max	464.2	77.4	37.2	0.4	24.1	507.0
3730	0.0	C_Mob_ENV	Combinatio n	Min	-23.3	-696.0	-71.4	-0.2	-21.1	-109.2
3730	0.5	C_Mob_ENV	Combinatio n	Min	-23.3	-696.0	-71.4	-0.2	-14.7	-42.1
3731	0.0	C_Mob_ENV	Combinatio n	Max	464.0	80.0	28.6	0.3	16.2	515.3
3731	0.4	C_Mob_ENV	Combinatio n	Max	464.0	80.0	28.6	0.3	12.1	586.6
3731	0.7	C_Mob_ENV	Combinatio n	Max	464.0	80.0	28.6	0.3	18.1	677.5
3731	1.1	C_Mob_ENV	Combinatio n	Max	464.0	80.0	28.6	0.3	24.0	865.9
3731	0.0	C_Mob_ENV	Combinatio n	Min	-34.5	-581.6	-42.1	-0.1	-21.7	-50.1

3731	0.4	C_Mob_ENV	Combinatio n	Min	-34.5	-581.6	-42.1	-0.1	-16.0	-44.7
3731	0.7	C_Mob_ENV	Combinatio n	Min	-34.5	-581.6	-42.1	-0.1	-10.4	-39.3
3731	1.1	C_Mob_ENV	Combinatio n	Min	-34.5	-581.6	-42.1	-0.1	-15.1	-33.9
3732	0.0	C_Mob_ENV	Combinatio n	Max	446.3	99.9	34.3	0.3	20.1	844.0
3732	0.4	C_Mob_ENV	Combinatio n	Max	446.3	99.9	34.3	0.3	16.1	985.5
3732	0.7	C_Mob_ENV	Combinatio n	Max	446.3	99.9	34.3	0.3	17.2	1127.0
3732	1.1	C_Mob_ENV	Combinatio n	Max	446.3	99.9	34.3	0.3	18.2	1268.5
3732	0.0	C_Mob_ENV	Combinatio n	Min	-42.2	-498.2	-31.6	-0.2	-16.2	-31.6
3732	0.4	C_Mob_ENV	Combinatio n	Min	-42.2	-498.2	-31.6	-0.2	-14.4	-26.1
3732	0.7	C_Mob_ENV	Combinatio n	Min	-42.2	-498.2	-31.6	-0.2	-12.6	-20.6
3732	1.1	C_Mob_ENV	Combinatio n	Min	-42.2	-498.2	-31.6	-0.2	-17.1	-17.7
3733	0.0	C_Mob_ENV	Combinatio n	Max	424.0	127.1	41.9	0.2	24.7	1243.8
3733	0.4	C_Mob_ENV	Combinatio n	Max	424.0	127.1	41.9	0.2	19.9	1346.3
3733	0.7	C_Mob_ENV	Combinatio n	Max	424.0	127.1	41.9	0.2	16.6	1448.9
3733	1.1	C_Mob_ENV	Combinatio n	Max	424.0	127.1	41.9	0.2	13.3	1551.4
3733	0.0	C_Mob_ENV	Combinatio n	Min	-55.4	-436.3	-22.7	-0.2	-11.9	-17.4
3733	0.4	C_Mob_ENV	Combinatio n	Min	-55.4	-436.3	-22.7	-0.2	-13.9	-14.7
3733	0.7	C_Mob_ENV	Combinatio n	Min	-55.4	-436.3	-22.7	-0.2	-15.9	-12.0
3733	1.1	C_Mob_ENV	Combinatio n	Min	-55.4	-436.3	-22.7	-0.2	-20.7	-9.3
3734	0.0	C_Mob_ENV	Combinatio n	Max	403.5	182.7	60.3	0.2	34.2	1525.7
3734	0.4	C_Mob_ENV	Combinatio n	Max	403.5	182.7	60.3	0.2	26.0	1600.4
3734	0.7	C_Mob_ENV	Combinatio n	Max	403.5	182.7	60.3	0.2	17.8	1675.1

3734	1.1	C_Mob_ENV	Combinatio n	Max	403.5	182.7	60.3	0.2	10.3	1749.9
3734	0.0	C_Mob_ENV	Combinatio n	Min	-75.7	-394.4	-19.3	-0.2	-11.3	-8.7
3734	0.4	C_Mob_ENV	Combinatio n	Min	-75.7	-394.4	-19.3	-0.2	-17.9	-6.1
3734	0.7	C_Mob_ENV	Combinatio n	Min	-75.7	-394.4	-19.3	-0.2	-24.5	-3.5
3734	1.1	C_Mob_ENV	Combinatio n	Min	-75.7	-394.4	-19.3	-0.2	-31.0	-0.8
3735	0.0	C_Mob_ENV	Combinatio n	Max	378.6	225.0	101.6	0.6	21.2	1728.4
3735	0.2	C_Mob_ENV	Combinatio n	Max	378.6	225.0	101.6	0.6	18.6	1740.8
3735	0.0	C_Mob_ENV	Combinatio n	Min	-81.6	-372.7	-30.3	-1.1	-23.3	-0.4
3735	0.2	C_Mob_ENV	Combinatio n	Min	-81.6	-372.7	-30.3	-1.1	-25.5	0.7
3736	0.0	C_Mob_ENV	Combinatio n	Max	384.3	151.8	31.4	0.3	12.9	1740.9
3736	0.5	C_Mob_ENV	Combinatio n	Max	384.3	151.8	31.4	0.3	21.2	1853.4
3736	0.9	C_Mob_ENV	Combinatio n	Max	384.3	151.8	31.4	0.3	34.7	1965.8
3736	0.0	C_Mob_ENV	Combinatio n	Min	-74.0	-431.7	-67.8	-0.1	-27.7	0.8
3736	0.5	C_Mob_ENV	Combinatio n	Min	-74.0	-431.7	-67.8	-0.1	-19.1	3.7
3736	0.9	C_Mob_ENV	Combinatio n	Min	-74.0	-431.7	-67.8	-0.1	-17.0	6.6
3737	0.0	C_Mob_ENV	Combinatio n	Max	340.5	177.4	30.5	0.2	17.1	1964.3
3737	0.4	C_Mob_ENV	Combinatio n	Max	340.5	177.4	30.5	0.2	16.2	2033.6
3737	0.7	C_Mob_ENV	Combinatio n	Max	340.5	177.4	30.5	0.2	20.8	2103.0
3737	1.1	C_Mob_ENV	Combinatio n	Max	340.5	177.4	30.5	0.2	25.4	2172.4
3737	0.0	C_Mob_ENV	Combinatio n	Min	-57.5	-395.4	-40.8	-0.2	-19.0	6.4
3737	0.4	C_Mob_ENV	Combinatio n	Min	-57.5	-395.4	-40.8	-0.2	-16.2	8.5
3737	0.7	C_Mob_ENV	Combinatio n	Min	-57.5	-395.4	-40.8	-0.2	-13.3	10.6

3737	1.1	C_Mob_ENV	Combinatio n	Min	-57.5	-395.4	-40.8	-0.2	-16.5	12.7
3738	0.0	C_Mob_ENV	Combinatio n	Max	307.5	212.8	36.4	0.2	21.7	2164.6
3738	0.5	C_Mob_ENV	Combinatio n	Max	307.5	212.8	36.4	0.2	16.3	2227.9
3738	1.0	C_Mob_ENV	Combinatio n	Max	307.5	212.8	36.4	0.2	13.4	2291.1
3738	0.0	C_Mob_ENV	Combinatio n	Min	-47.4	-358.1	-23.9	-0.3	-11.1	12.8
3738	0.5	C_Mob_ENV	Combinatio n	Min	-47.4	-358.1	-23.9	-0.3	-11.4	15.4
3738	1.0	C_Mob_ENV	Combinatio n	Min	-47.4	-358.1	-23.9	-0.3	-14.3	17.9
3739	0.0	C_Mob_ENV	Combinatio n	Max	307.5	212.8	36.4	3.1	13.4	2282.0
3739	0.1	C_Mob_ENV	Combinatio n	Max	307.5	212.8	36.4	3.1	16.1	2312.1
3739	0.0	C_Mob_ENV	Combinatio n	Min	-47.4	-358.1	-23.9	-2.0	-14.3	18.5
3739	0.1	C_Mob_ENV	Combinatio n	Min	-47.4	-358.1	-23.9	-2.0	-18.5	19.1
3740	0.0	C_Mob_ENV	Combinatio n	Max	284.1	247.4	51.8	0.2	33.3	2295.7
3740	0.4	C_Mob_ENV	Combinatio n	Max	284.1	247.4	51.8	0.2	25.7	2329.2
3740	0.7	C_Mob_ENV	Combinatio n	Max	284.1	247.4	51.8	0.2	18.1	2362.7
3740	1.1	C_Mob_ENV	Combinatio n	Max	284.1	247.4	51.8	0.2	10.5	2396.2
3740	0.0	C_Mob_ENV	Combinatio n	Min	-58.3	-325.1	-18.2	-0.4	-10.2	19.5
3740	0.4	C_Mob_ENV	Combinatio n	Min	-58.3	-325.1	-18.2	-0.4	-14.4	21.2
3740	0.7	C_Mob_ENV	Combinatio n	Min	-58.3	-325.1	-18.2	-0.4	-18.7	22.9
3740	1.1	C_Mob_ENV	Combinatio n	Min	-58.3	-325.1	-18.2	-0.4	-22.9	24.6
3741	0.0	C_Mob_ENV	Combinatio n	Max	270.3	278.6	82.0	0.3	39.6	2374.1
3741	0.4	C_Mob_ENV	Combinatio n	Max	270.3	278.6	82.0	0.3	23.8	2383.5
3741	0.8	C_Mob_ENV	Combinatio n	Max	270.3	278.6	82.0	0.3	9.7	2392.9

3741	0.0	C_Mob_ENV	Combinatio n	Min	-74.8	-302.5	-22.6	-0.6	-15.0	25.3
3741	0.4	C_Mob_ENV	Combinatio n	Min	-74.8	-302.5	-22.6	-0.6	-21.8	26.9
3741	0.8	C_Mob_ENV	Combinatio n	Min	-74.8	-302.5	-22.6	-0.6	-28.5	28.1
3742	0.0	C_Mob_ENV	Combinatio n	Max	283.2	221.3	37.6	1.0	9.3	2393.4
3742	0.3	C_Mob_ENV	Combinatio n	Max	283.2	221.3	37.6	1.0	18.7	2444.7
3742	0.0	C_Mob_ENV	Combinatio n	Min	-65.0	-366.5	-99.1	-0.7	-27.0	27.9
3742	0.3	C_Mob_ENV	Combinatio n	Min	-65.0	-366.5	-99.1	-0.7	-20.0	21.9
3743	0.0	C_Mob_ENV	Combinatio n	Max	249.4	237.6	31.2	0.2	17.2	2443.7
3743	0.4	C_Mob_ENV	Combinatio n	Max	249.4	237.6	31.2	0.2	18.9	2469.9
3743	0.7	C_Mob_ENV	Combinatio n	Max	249.4	237.6	31.2	0.2	28.2	2496.1
3743	1.1	C_Mob_ENV	Combinatio n	Max	249.4	237.6	31.2	0.2	37.5	2522.4
3743	0.0	C_Mob_ENV	Combinatio n	Min	-60.6	-337.9	-62.6	-0.3	-30.3	29.0
3743	0.4	C_Mob_ENV	Combinatio n	Min	-60.6	-337.9	-62.6	-0.3	-23.6	29.9
3743	0.7	C_Mob_ENV	Combinatio n	Min	-60.6	-337.9	-62.6	-0.3	-16.8	27.1
3743	1.1	C_Mob_ENV	Combinatio n	Min	-60.6	-337.9	-62.6	-0.3	-17.1	19.8
3744	0.0	C_Mob_ENV	Combinatio n	Max	216.5	264.0	32.0	0.2	21.5	2529.1
3744	0.4	C_Mob_ENV	Combinatio n	Max	216.5	264.0	32.0	0.2	19.6	2538.4
3744	0.8	C_Mob_ENV	Combinatio n	Max	216.5	264.0	32.0	0.2	23.5	2547.6
3744	1.1	C_Mob_ENV	Combinatio n	Max	216.5	264.0	32.0	0.2	27.4	2556.9
3744	0.0	C_Mob_ENV	Combinatio n	Min	-44.1	-302.1	-37.4	-0.3	-16.9	31.0
3744	0.4	C_Mob_ENV	Combinatio n	Min	-44.1	-302.1	-37.4	-0.3	-15.0	31.4
3744	0.8	C_Mob_ENV	Combinatio n	Min	-44.1	-302.1	-37.4	-0.3	-13.2	24.3

3744	1.1	C_Mob_ENV	Combinatio n	Min	-44.1	-302.1	-37.4	-0.3	-17.8	17.3
3745	0.0	C_Mob_ENV	Combinatio n	Max	195.8	300.2	42.2	0.1	29.0	2553.6
3745	0.4	C_Mob_ENV	Combinatio n	Max	195.8	300.2	42.2	0.1	23.6	2545.3
3745	0.8	C_Mob_ENV	Combinatio n	Max	195.8	300.2	42.2	0.1	19.7	2537.0
3745	1.1	C_Mob_ENV	Combinatio n	Max	195.8	300.2	42.2	0.1	15.8	2528.8
3745	0.0	C_Mob_ENV	Combinatio n	Min	-47.9	-265.3	-22.1	-0.4	-11.7	32.4
3745	0.4	C_Mob_ENV	Combinatio n	Min	-47.9	-265.3	-22.1	-0.4	-13.5	27.0
3745	0.8	C_Mob_ENV	Combinatio n	Min	-47.9	-265.3	-22.1	-0.4	-15.3	19.9
3745	1.1	C_Mob_ENV	Combinatio n	Min	-47.9	-265.3	-22.1	-0.4	-20.3	12.8
3746	0.0	C_Mob_ENV	Combinatio n	Max	186.9	335.8	64.0	0.1	37.9	2515.8
3746	0.4	C_Mob_ENV	Combinatio n	Max	186.9	335.8	64.0	0.1	28.5	2491.5
3746	0.7	C_Mob_ENV	Combinatio n	Max	186.9	335.8	64.0	0.1	19.2	2467.2
3746	1.1	C_Mob_ENV	Combinatio n	Max	186.9	335.8	64.0	0.1	11.3	2442.8
3746	0.0	C_Mob_ENV	Combinatio n	Min	-68.1	-238.9	-19.4	-0.5	-11.2	27.8
3746	0.4	C_Mob_ENV	Combinatio n	Min	-68.1	-238.9	-19.4	-0.5	-18.0	21.4
3746	0.7	C_Mob_ENV	Combinatio n	Min	-68.1	-238.9	-19.4	-0.5	-24.7	15.0
3746	1.1	C_Mob_ENV	Combinatio n	Min	-68.1	-238.9	-19.4	-0.5	-31.5	8.6
3747	0.0	C_Mob_ENV	Combinatio n	Max	178.7	364.7	100.9	0.5	18.0	2439.8
3747	0.3	C_Mob_ENV	Combinatio n	Max	178.7	364.7	100.9	0.5	8.9	2390.3
3747	0.0	C_Mob_ENV	Combinatio n	Min	-77.1	-223.2	-28.9	-1.3	-23.2	21.8
3747	0.3	C_Mob_ENV	Combinatio n	Min	-77.1	-223.2	-28.9	-1.3	-29.2	17.4
3748	0.0	C_Mob_ENV	Combinatio n	Max	191.6	301.1	31.4	0.4	11.0	2390.5

3748	0.4	C_Mob_ENV	Combinatio n	Max	191.6	301.1	31.4	0.4	24.3	2384.2
3748	0.8	C_Mob_ENV	Combinatio n	Max	191.6	301.1	31.4	0.4	40.4	2377.9
3748	0.0	C_Mob_ENV	Combinatio n	Min	-65.0	-281.2	-80.9	-0.5	-26.9	17.3
3748	0.4	C_Mob_ENV	Combinatio n	Min	-65.0	-281.2	-80.9	-0.5	-19.6	11.1
3748	0.8	C_Mob_ENV	Combinatio n	Min	-65.0	-281.2	-80.9	-0.5	-17.2	4.8
3749	0.0	C_Mob_ENV	Combinatio n	Max	163.7	323.7	28.3	0.2	15.7	2392.9
3749	0.4	C_Mob_ENV	Combinatio n	Max	163.7	323.7	28.3	0.2	17.4	2361.7
3749	0.7	C_Mob_ENV	Combinatio n	Max	163.7	323.7	28.3	0.2	25.3	2330.6
3749	1.1	C_Mob_ENV	Combinatio n	Max	163.7	323.7	28.3	0.2	33.1	2299.4
3749	0.0	C_Mob_ENV	Combinatio n	Min	-52.4	-250.4	-51.2	-0.4	-22.5	16.8
3749	0.4	C_Mob_ENV	Combinatio n	Min	-52.4	-250.4	-51.2	-0.4	-18.1	11.6
3749	0.7	C_Mob_ENV	Combinatio n	Min	-52.4	-250.4	-51.2	-0.4	-13.7	6.4
3749	1.1	C_Mob_ENV	Combinatio n	Min	-52.4	-250.4	-51.2	-0.4	-15.8	1.3
3750	0.0	C_Mob_ENV	Combinatio n	Max	144.7	356.0	31.7	2.6	19.9	2306.5
3750	0.1	C_Mob_ENV	Combinatio n	Max	144.7	356.0	31.7	2.6	16.3	2276.9
3750	0.0	C_Mob_ENV	Combinatio n	Min	-47.8	-215.4	-30.8	-2.6	-15.2	12.7
3750	0.1	C_Mob_ENV	Combinatio n	Min	-47.8	-215.4	-30.8	-2.6	-11.7	11.1
3751	0.0	C_Mob_ENV	Combinatio n	Max	144.7	356.0	31.7	0.2	16.3	2285.6
3751	0.5	C_Mob_ENV	Combinatio n	Max	144.7	356.0	31.7	0.2	16.2	2225.5
3751	1.0	C_Mob_ENV	Combinatio n	Max	144.7	356.0	31.7	0.2	19.4	2165.3
3751	0.0	C_Mob_ENV	Combinatio n	Min	-47.8	-215.4	-30.8	-0.3	-11.7	17.2
3751	0.5	C_Mob_ENV	Combinatio n	Min	-47.8	-215.4	-30.8	-0.3	-11.2	12.2

3751	1.0	C_Mob_ENV	Combinatio n	Min	-47.8	-215.4	-30.8	-0.3	-15.3	5.9
3752	0.0	C_Mob_ENV	Combinatio n	Max	136.0	392.5	43.1	0.1	26.0	2162.9
3752	0.4	C_Mob_ENV	Combinatio n	Max	136.0	392.5	43.1	0.1	21.1	2095.8
3752	0.7	C_Mob_ENV	Combinatio n	Max	136.0	392.5	43.1	0.1	16.7	2028.7
3752	1.1	C_Mob_ENV	Combinatio n	Max	136.0	392.5	43.1	0.1	12.2	1961.6
3752	0.0	C_Mob_ENV	Combinatio n	Min	-61.6	-179.8	-20.8	-0.3	-11.0	12.0
3752	0.4	C_Mob_ENV	Combinatio n	Min	-61.6	-179.8	-20.8	-0.3	-13.7	9.8
3752	0.7	C_Mob_ENV	Combinatio n	Min	-61.6	-179.8	-20.8	-0.3	-16.5	5.9
3752	1.1	C_Mob_ENV	Combinatio n	Min	-61.6	-179.8	-20.8	-0.3	-20.8	1.4
3753	0.0	C_Mob_ENV	Combinatio n	Max	151.3	428.7	70.4	0.0	35.1	1955.2
3753	0.5	C_Mob_ENV	Combinatio n	Max	151.3	428.7	70.4	0.0	21.0	1846.8
3753	0.9	C_Mob_ENV	Combinatio n	Max	151.3	428.7	70.4	0.0	8.0	1738.4
3753	0.0	C_Mob_ENV	Combinatio n	Min	-81.7	-154.5	-19.9	-0.4	-12.3	5.7
3753	0.5	C_Mob_ENV	Combinatio n	Min	-81.7	-154.5	-19.9	-0.4	-20.8	2.8
3753	0.9	C_Mob_ENV	Combinatio n	Min	-81.7	-154.5	-19.9	-0.4	-29.7	-1.1
3754	0.0	C_Mob_ENV	Combinatio n	Max	187.9	369.5	34.6	1.0	18.6	1738.8
3754	0.2	C_Mob_ENV	Combinatio n	Max	187.9	369.5	34.6	1.0	23.6	1727.3
3754	0.0	C_Mob_ENV	Combinatio n	Min	-73.0	-228.2	-104.9	-0.7	-24.1	-1.3
3754	0.2	C_Mob_ENV	Combinatio n	Min	-73.0	-228.2	-104.9	-0.7	-20.4	-3.1
3755	0.0	C_Mob_ENV	Combinatio n	Max	159.5	391.4	28.6	0.1	15.6	1743.4
3755	0.4	C_Mob_ENV	Combinatio n	Max	159.5	391.4	28.6	0.1	17.5	1671.8
3755	0.7	C_Mob_ENV	Combinatio n	Max	159.5	391.4	28.6	0.1	26.4	1600.2

3755	1.1	C_Mob_ENV	Combinatio n	Max	159.5	391.4	28.6	0.1	35.3	1528.7
3755	0.0	C_Mob_ENV	Combinatio n	Min	-65.0	-186.8	-62.2	-0.3	-32.0	-1.5
3755	0.4	C_Mob_ENV	Combinatio n	Min	-65.0	-186.8	-62.2	-0.3	-24.3	-3.9
3755	0.7	C_Mob_ENV	Combinatio n	Min	-65.0	-186.8	-62.2	-0.3	-16.7	-6.4
3755	1.1	C_Mob_ENV	Combinatio n	Min	-65.0	-186.8	-62.2	-0.3	-15.7	-8.9
3756	0.0	C_Mob_ENV	Combinatio n	Max	120.0	432.6	29.9	0.1	16.9	1545.7
3756	0.4	C_Mob_ENV	Combinatio n	Max	120.0	432.6	29.9	0.1	16.4	1446.1
3756	0.7	C_Mob_ENV	Combinatio n	Max	120.0	432.6	29.9	0.1	20.2	1346.5
3756	1.1	C_Mob_ENV	Combinatio n	Max	120.0	432.6	29.9	0.1	24.0	1247.0
3756	0.0	C_Mob_ENV	Combinatio n	Min	-50.7	-130.3	-39.1	-0.3	-18.5	-9.2
3756	0.4	C_Mob_ENV	Combinatio n	Min	-50.7	-130.3	-39.1	-0.3	-15.9	-11.8
3756	0.7	C_Mob_ENV	Combinatio n	Min	-50.7	-130.3	-39.1	-0.3	-13.3	-14.3
3756	1.1	C_Mob_ENV	Combinatio n	Min	-50.7	-130.3	-39.1	-0.3	-15.9	-16.9
3757	0.0	C_Mob_ENV	Combinatio n	Max	85.4	493.2	35.8	0.1	19.8	1260.5
3757	0.4	C_Mob_ENV	Combinatio n	Max	85.4	493.2	35.8	0.1	17.3	1121.8
3757	0.7	C_Mob_ENV	Combinatio n	Max	85.4	493.2	35.8	0.1	16.2	983.1
3757	1.1	C_Mob_ENV	Combinatio n	Max	85.4	493.2	35.8	0.1	15.1	844.4
3757	0.0	C_Mob_ENV	Combinatio n	Min	-40.7	-58.0	-23.8	-0.3	-10.9	-17.2
3757	0.4	C_Mob_ENV	Combinatio n	Min	-40.7	-58.0	-23.8	-0.3	-12.8	-19.7
3757	0.7	C_Mob_ENV	Combinatio n	Min	-40.7	-58.0	-23.8	-0.3	-14.7	-23.4
3757	1.1	C_Mob_ENV	Combinatio n	Min	-40.7	-58.0	-23.8	-0.3	-19.0	-28.7
3758	0.0	C_Mob_ENV	Combinatio n	Max	54.9	575.4	44.8	0.1	25.6	857.4

3758	0.4	C_Mob_ENV	Combinatio n	Max	54.9	575.4	44.8	0.1	19.3	671.6
3758	0.7	C_Mob_ENV	Combinatio n	Max	54.9	575.4	44.8	0.1	13.1	485.8
3758	1.1	C_Mob_ENV	Combinatio n	Max	54.9	575.4	44.8	0.1	7.1	299.9
3758	0.0	C_Mob_ENV	Combinatio n	Min	-33.5	-4.8	-11.7	-0.4	-5.8	-31.1
3758	0.4	C_Mob_ENV	Combinatio n	Min	-33.5	-4.8	-11.7	-0.4	-11.3	-36.3
3758	0.7	C_Mob_ENV	Combinatio n	Min	-33.5	-4.8	-11.7	-0.4	-17.3	-41.4
3758	1.1	C_Mob_ENV	Combinatio n	Min	-33.5	-4.8	-11.7	-0.4	-23.4	-46.6
3759	0.0	C_Mob_ENV	Combinatio n	Max	31.8	689.9	75.2	0.1	24.4	301.7
3759	0.5	C_Mob_ENV	Combinatio n	Max	31.8	689.9	75.2	0.1	5.4	33.3
3759	0.0	C_Mob_ENV	Combinatio n	Min	-30.1	1.6	-19.0	-0.4	-14.2	-38.4
3759	0.5	C_Mob_ENV	Combinatio n	Min	-30.1	1.6	-19.0	-0.4	-20.7	-106.2

TABLE: Element Forces - Frames										
Frame	Station	OutputCase	CaseType	StepType	P	V2	V3	T	M2	M3
Text	m	Text	Text	Text	KN	KN	KN	KN-m	KN-m	KN-m
3575	0.0	_Acc. Vento	Combinatio n		2.0	-0.5	-0.3	0.1	3.1	-4.8
3575	0.3	_Acc. Vento	Combinatio n		2.0	1.7	-0.3	0.1	3.2	-5.0
3575	0.6	_Acc. Vento	Combinatio n		2.0	3.9	-0.3	0.1	3.2	-5.8
3576	0.0	_Acc. Vento	Combinatio n		1.6	-5.1	-0.8	0.0	2.8	-6.5
3576	0.3	_Acc. Vento	Combinatio n		1.6	-2.8	-0.8	0.0	3.0	-5.3
3576	0.6	_Acc. Vento	Combinatio n		1.6	-0.6	-0.8	0.0	3.3	-4.8
3577	0.0	_Acc. Vento	Combinatio n		0.6	0.7	0.7	0.0	4.2	-0.3

3577	0.3	_Acc. Vento	Combinatio n		0.6	1.5	0.7	0.0	4.0	-0.6
3577	0.6	_Acc. Vento	Combinatio n		0.6	2.3	0.7	0.0	3.8	-1.2
3578	0.0	_Acc. Vento	Combinatio n		-0.1	-2.4	2.6	0.0	5.6	-2.0
3578	0.3	_Acc. Vento	Combinatio n		-0.1	-1.6	2.6	0.0	4.8	-1.5
3578	0.6	_Acc. Vento	Combinatio n		-0.1	-0.8	2.6	0.0	4.0	-1.1
3579	0.0	_Acc. Vento	Combinatio n		-1.1	-1.2	-0.5	0.0	3.1	1.7
3579	0.3	_Acc. Vento	Combinatio n		-1.1	-0.4	-0.5	0.0	3.2	2.0
3579	0.6	_Acc. Vento	Combinatio n		-1.1	0.4	-0.5	0.0	3.3	2.0
3580	0.0	_Acc. Vento	Combinatio n		-0.5	0.0	-2.7	0.0	3.5	1.7
3580	0.3	_Acc. Vento	Combinatio n		-0.5	0.8	-2.7	0.0	4.3	1.6
3580	0.6	_Acc. Vento	Combinatio n		-0.5	1.6	-2.7	0.0	5.1	1.2
3581	0.0	_Acc. Vento	Combinatio n		-1.7	0.3	2.1	0.1	4.1	4.0
3581	0.3	_Acc. Vento	Combinatio n		-1.7	-0.3	-0.8	0.1	3.9	4.0
3581	0.6	_Acc. Vento	Combinatio n		-1.7	-0.9	-3.7	0.1	4.5	4.1
3582	0.0	_Acc. Vento	Combinatio n		-1.5	-0.5	3.8	-0.1	6.3	3.8
3582	0.3	_Acc. Vento	Combinatio n		-1.5	-1.1	0.9	-0.1	5.6	4.0
3582	0.6	_Acc. Vento	Combinatio n		-1.5	-1.7	-1.9	-0.1	5.8	4.5
3583	0.0	_Acc. Vento	Combinatio n		0.2	0.7	-2.1	0.2	3.9	-0.5
3583	0.3	_Acc. Vento	Combinatio n		0.2	1.5	-2.1	0.2	4.5	-0.8
3583	0.6	_Acc. Vento	Combinatio n		0.2	2.3	-2.1	0.2	5.1	-1.4
3584	0.0	_Acc. Vento	Combinatio n		0.6	-0.1	2.8	-0.2	6.5	0.5
3584	0.3	_Acc. Vento	Combinatio n		0.6	0.7	2.8	-0.2	5.7	0.4

3584	0.6	_Acc. Vento	Combinatio n		0.6	1.5	2.8	-0.2	4.8	0.1
3610	0.0	_Acc. Vento	Combinatio n		-5.0	-84.8	14.7	0.0	2.1	-6.0
3610	0.5	_Acc. Vento	Combinatio n		-5.0	-81.1	14.7	0.0	-5.0	34.3
3611	0.0	_Acc. Vento	Combinatio n		4.7	-81.6	14.3	0.0	8.0	23.0
3611	0.4	_Acc. Vento	Combinatio n		4.7	-78.9	14.3	0.0	2.9	51.8
3611	0.7	_Acc. Vento	Combinatio n		4.7	-76.2	14.3	0.0	-2.3	79.7
3611	1.1	_Acc. Vento	Combinatio n		4.7	-73.5	14.3	0.0	-7.4	106.6
3612	0.0	_Acc. Vento	Combinatio n		15.6	-73.8	13.6	0.0	7.4	94.3
3612	0.4	_Acc. Vento	Combinatio n		15.6	-71.1	13.6	0.0	2.6	120.3
3612	0.7	_Acc. Vento	Combinatio n		15.6	-68.4	13.6	0.0	-2.3	145.4
3612	1.1	_Acc. Vento	Combinatio n		15.6	-65.8	13.6	0.0	-7.2	169.5
3613	0.0	_Acc. Vento	Combinatio n		26.1	-66.1	12.9	0.0	7.1	157.8
3613	0.4	_Acc. Vento	Combinatio n		26.1	-63.4	12.9	0.0	2.5	181.0
3613	0.7	_Acc. Vento	Combinatio n		26.1	-60.7	12.9	0.0	-2.2	203.3
3613	1.1	_Acc. Vento	Combinatio n		26.1	-58.0	12.9	0.0	-6.8	224.6
3614	0.0	_Acc. Vento	Combinatio n		36.0	-58.4	12.3	0.0	6.7	213.5
3614	0.4	_Acc. Vento	Combinatio n		36.0	-55.7	12.3	0.0	2.3	234.0
3614	0.7	_Acc. Vento	Combinatio n		36.0	-53.0	12.3	0.0	-2.1	253.5
3614	1.1	_Acc. Vento	Combinatio n		36.0	-50.3	12.3	0.0	-6.5	272.1
3615	0.0	_Acc. Vento	Combinatio n		44.8	-50.8	12.0	0.0	5.5	262.1
3615	0.2	_Acc. Vento	Combinatio n		44.8	-49.6	12.0	0.0	3.5	270.4
3616	0.0	_Acc. Vento	Combinatio n		45.7	-50.9	7.7	0.0	2.7	270.2

3616	0.5	_Acc. Vento	Combinatio n		45.7	-47.4	7.7	0.0	-0.9	292.7
3616	0.9	_Acc. Vento	Combinatio n		45.7	-44.0	7.7	0.0	-4.4	313.5
3617	0.0	_Acc. Vento	Combinatio n		51.9	-44.4	7.3	0.0	4.3	306.1
3617	0.4	_Acc. Vento	Combinatio n		51.9	-41.7	7.3	0.0	1.6	321.6
3617	0.7	_Acc. Vento	Combinatio n		51.9	-39.1	7.3	0.0	-1.0	336.1
3617	1.1	_Acc. Vento	Combinatio n		51.9	-36.4	7.3	0.0	-3.7	349.6
3618	0.0	_Acc. Vento	Combinatio n		57.5	-36.7	7.0	0.0	4.0	343.1
3618	0.5	_Acc. Vento	Combinatio n		57.5	-33.2	7.0	0.0	0.7	359.8
3618	1.0	_Acc. Vento	Combinatio n		57.5	-29.6	7.0	0.0	-2.6	374.8
3619	0.0	_Acc. Vento	Combinatio n		57.5	-29.6	7.0	0.6	-2.6	369.6
3619	0.1	_Acc. Vento	Combinatio n		57.5	-28.7	7.0	0.6	-3.5	373.1
3620	0.0	_Acc. Vento	Combinatio n		62.9	-29.5	6.7	0.0	4.1	366.3
3620	0.4	_Acc. Vento	Combinatio n		62.9	-26.8	6.7	0.0	1.6	376.4
3620	0.7	_Acc. Vento	Combinatio n		62.9	-24.1	6.7	0.0	-0.8	385.6
3620	1.1	_Acc. Vento	Combinatio n		62.9	-21.4	6.7	0.0	-3.2	393.7
3621	0.0	_Acc. Vento	Combinatio n		67.7	-22.1	7.1	0.0	3.5	387.9
3621	0.4	_Acc. Vento	Combinatio n		67.7	-19.0	7.1	0.0	0.6	396.3
3621	0.8	_Acc. Vento	Combinatio n		67.7	-16.0	7.1	0.0	-2.3	403.4
3622	0.0	_Acc. Vento	Combinatio n		70.5	-17.3	-0.6	0.0	-2.6	403.4
3622	0.3	_Acc. Vento	Combinatio n		70.5	-15.3	-0.6	0.0	-2.4	407.7
3623	0.0	_Acc. Vento	Combinatio n		72.3	-16.1	-0.1	0.0	0.2	404.9
3623	0.4	_Acc. Vento	Combinatio n		72.3	-13.4	-0.1	0.0	0.3	410.2

3623	0.7	_Acc. Vento	Combinatio n		72.3	-10.7	-0.1	0.0	0.3	414.5
3623	1.1	_Acc. Vento	Combinatio n		72.3	-8.0	-0.1	0.0	0.3	417.9
3624	0.0	_Acc. Vento	Combinatio n		72.7	-8.5	0.3	0.0	0.9	416.8
3624	0.4	_Acc. Vento	Combinatio n		72.7	-5.7	0.3	0.0	0.8	419.5
3624	0.8	_Acc. Vento	Combinatio n		72.7	-2.8	0.3	0.0	0.7	421.1
3624	1.1	_Acc. Vento	Combinatio n		72.7	0.0	0.3	0.0	0.6	421.6
3625	0.0	_Acc. Vento	Combinatio n		73.1	-0.5	0.7	0.0	1.1	420.9
3625	0.4	_Acc. Vento	Combinatio n		73.1	2.4	0.7	0.0	0.9	420.6
3625	0.8	_Acc. Vento	Combinatio n		73.1	5.2	0.7	0.0	0.6	419.1
3625	1.1	_Acc. Vento	Combinatio n		73.1	8.1	0.7	0.0	0.4	416.6
3626	0.0	_Acc. Vento	Combinatio n		73.4	7.5	1.4	0.0	0.9	416.3
3626	0.4	_Acc. Vento	Combinatio n		73.4	10.2	1.4	0.0	0.4	413.1
3626	0.7	_Acc. Vento	Combinatio n		73.4	12.9	1.4	0.0	-0.1	409.0
3626	1.1	_Acc. Vento	Combinatio n		73.4	15.6	1.4	0.0	-0.6	403.9
3627	0.0	_Acc. Vento	Combinatio n		71.8	14.8	2.4	0.0	-2.7	405.6
3627	0.3	_Acc. Vento	Combinatio n		71.8	16.8	2.4	0.0	-3.3	401.5
3628	0.0	_Acc. Vento	Combinatio n		76.4	15.2	-8.7	0.0	-3.2	401.5
3628	0.4	_Acc. Vento	Combinatio n		76.4	18.3	-8.7	0.0	0.3	394.7
3628	0.8	_Acc. Vento	Combinatio n		76.4	21.3	-8.7	0.0	3.9	386.6
3629	0.0	_Acc. Vento	Combinatio n		71.0	20.8	-8.0	-0.1	-3.8	392.3
3629	0.4	_Acc. Vento	Combinatio n		71.0	23.5	-8.0	-0.1	-0.9	384.3
3629	0.7	_Acc. Vento	Combinatio n		71.0	26.2	-8.0	-0.1	1.9	375.4

3629	1.1	_Acc. Vento	Combinatio n		71.0	28.9	-8.0	-0.1	4.8	365.5
3630	0.0	_Acc. Vento	Combinatio n		65.3	28.3	-7.7	-0.7	-3.7	371.8
3630	0.1	_Acc. Vento	Combinatio n		65.3	29.2	-7.7	-0.7	-2.8	368.3
3631	0.0	_Acc. Vento	Combinatio n		65.3	29.2	-7.7	0.0	-2.8	374.1
3631	0.5	_Acc. Vento	Combinatio n		65.3	32.8	-7.7	0.0	0.9	359.3
3631	1.0	_Acc. Vento	Combinatio n		65.3	36.4	-7.7	0.0	4.6	342.8
3632	0.0	_Acc. Vento	Combinatio n		59.7	36.2	-7.1	0.0	-3.4	349.0
3632	0.4	_Acc. Vento	Combinatio n		59.7	38.9	-7.1	0.0	-0.8	335.5
3632	0.7	_Acc. Vento	Combinatio n		59.7	41.6	-7.1	0.0	1.7	321.0
3632	1.1	_Acc. Vento	Combinatio n		59.7	44.3	-7.1	0.0	4.3	305.6
3633	0.0	_Acc. Vento	Combinatio n		53.6	44.0	-6.2	-0.1	-3.8	312.6
3633	0.5	_Acc. Vento	Combinatio n		53.6	47.4	-6.2	-0.1	-1.0	291.7
3633	0.9	_Acc. Vento	Combinatio n		53.6	50.9	-6.2	-0.1	1.8	269.3
3634	0.0	_Acc. Vento	Combinatio n		58.5	49.0	-16.7	0.0	2.6	269.4
3634	0.2	_Acc. Vento	Combinatio n		58.5	50.2	-16.7	0.0	5.3	261.3
3635	0.0	_Acc. Vento	Combinatio n		48.6	49.8	-15.4	0.0	-8.2	271.8
3635	0.4	_Acc. Vento	Combinatio n		48.6	52.5	-15.4	0.0	-2.7	253.4
3635	0.7	_Acc. Vento	Combinatio n		48.6	55.2	-15.4	0.0	2.9	234.1
3635	1.1	_Acc. Vento	Combinatio n		48.6	57.9	-15.4	0.0	8.4	213.8
3636	0.0	_Acc. Vento	Combinatio n		37.2	58.0	-14.7	0.0	-7.5	226.0
3636	0.4	_Acc. Vento	Combinatio n		37.2	60.7	-14.7	0.0	-2.2	204.7
3636	0.7	_Acc. Vento	Combinatio n		37.2	63.4	-14.7	0.0	3.0	182.4

3636	1.1	_Acc. Vento	Combinatio n		37.2	66.1	-14.7	0.0	8.3	159.2
3637	0.0	_Acc. Vento	Combinatio n		26.0	66.4	-14.2	-0.1	-7.3	171.7
3637	0.4	_Acc. Vento	Combinatio n		26.0	69.1	-14.2	-0.1	-2.2	147.3
3637	0.7	_Acc. Vento	Combinatio n		26.0	71.8	-14.2	-0.1	2.9	122.0
3637	1.1	_Acc. Vento	Combinatio n		26.0	74.5	-14.2	-0.1	8.0	95.7
3638	0.0	_Acc. Vento	Combinatio n		14.8	75.0	-13.6	-0.1	-6.9	108.4
3638	0.4	_Acc. Vento	Combinatio n		14.8	77.7	-13.6	-0.1	-2.0	81.0
3638	0.7	_Acc. Vento	Combinatio n		14.8	80.4	-13.6	-0.1	2.9	52.6
3638	1.1	_Acc. Vento	Combinatio n		14.8	83.1	-13.6	-0.1	7.8	23.3
3639	0.0	_Acc. Vento	Combinatio n		5.2	83.5	-12.6	0.0	-4.7	34.7
3639	0.5	_Acc. Vento	Combinatio n		5.2	87.1	-12.6	0.0	1.4	-6.6
3640	0.0	_Acc. Vento	Combinatio n		-7.5	-51.8	22.4	0.1	2.1	-1.1
3640	0.5	_Acc. Vento	Combinatio n		-7.5	-50.5	22.4	0.1	-8.7	23.7
3641	0.0	_Acc. Vento	Combinatio n		-6.3	-49.3	22.0	0.0	12.0	23.3
3641	0.4	_Acc. Vento	Combinatio n		-6.3	-48.3	22.0	0.0	4.1	40.8
3641	0.7	_Acc. Vento	Combinatio n		-6.3	-47.3	22.0	0.0	-3.8	58.0
3641	1.1	_Acc. Vento	Combinatio n		-6.3	-46.4	22.0	0.0	-11.7	74.8
3642	0.0	_Acc. Vento	Combinatio n		-4.8	-45.0	21.0	0.0	11.4	74.1
3642	0.4	_Acc. Vento	Combinatio n		-4.8	-44.1	21.0	0.0	3.9	90.1
3642	0.7	_Acc. Vento	Combinatio n		-4.8	-43.1	21.0	0.0	-3.7	105.8
3642	1.1	_Acc. Vento	Combinatio n		-4.8	-42.1	21.0	0.0	-11.2	121.1
3643	0.0	_Acc. Vento	Combinatio n		-3.4	-40.7	19.8	0.0	10.9	120.4

3643	0.4	_Acc. Vento	Combinatio n		-3.4	-39.8	19.8	0.0	3.8	134.9
3643	0.7	_Acc. Vento	Combinatio n		-3.4	-38.8	19.8	0.0	-3.4	149.0
3643	1.1	_Acc. Vento	Combinatio n		-3.4	-37.8	19.8	0.0	-10.5	162.7
3644	0.0	_Acc. Vento	Combinatio n		-2.2	-36.4	18.8	0.0	10.4	162.1
3644	0.4	_Acc. Vento	Combinatio n		-2.2	-35.4	18.8	0.0	3.6	175.0
3644	0.7	_Acc. Vento	Combinatio n		-2.2	-34.4	18.8	0.0	-3.2	187.6
3644	1.1	_Acc. Vento	Combinatio n		-2.2	-33.5	18.8	0.0	-9.9	199.8
3645	0.0	_Acc. Vento	Combinatio n		-0.9	-32.0	18.1	0.0	9.0	199.0
3645	0.2	_Acc. Vento	Combinatio n		-0.9	-31.6	18.1	0.0	6.0	204.2
3646	0.0	_Acc. Vento	Combinatio n		1.6	-29.8	12.2	0.0	4.3	204.2
3646	0.5	_Acc. Vento	Combinatio n		1.6	-28.6	12.2	0.0	-1.2	217.6
3646	0.9	_Acc. Vento	Combinatio n		1.6	-27.4	12.2	0.0	-6.8	230.4
3647	0.0	_Acc. Vento	Combinatio n		3.4	-26.0	11.2	0.0	6.4	229.2
3647	0.4	_Acc. Vento	Combinatio n		3.4	-25.0	11.2	0.0	2.4	238.3
3647	0.7	_Acc. Vento	Combinatio n		3.4	-24.0	11.2	0.0	-1.6	247.2
3647	1.1	_Acc. Vento	Combinatio n		3.4	-23.1	11.2	0.0	-5.7	255.6
3648	0.0	_Acc. Vento	Combinatio n		4.7	-21.7	10.1	0.0	5.7	254.8
3648	0.5	_Acc. Vento	Combinatio n		4.7	-20.4	10.1	0.0	0.9	264.9
3648	1.0	_Acc. Vento	Combinatio n		4.7	-19.1	10.1	0.0	-4.0	274.3
3649	0.0	_Acc. Vento	Combinatio n		4.7	-19.1	10.1	0.9	-4.0	273.9
3649	0.1	_Acc. Vento	Combinatio n		4.7	-18.7	10.1	0.9	-5.2	276.2
3650	0.0	_Acc. Vento	Combinatio n		5.1	-17.3	9.3	0.0	5.6	275.7

3650	0.4	_Acc. Vento	Combinatio n		5.1	-16.3	9.3	0.0	2.3	281.8
3650	0.7	_Acc. Vento	Combinatio n		5.1	-15.4	9.3	0.0	-1.0	287.5
3650	1.1	_Acc. Vento	Combinatio n		5.1	-14.4	9.3	0.0	-4.4	292.8
3651	0.0	_Acc. Vento	Combinatio n		4.8	-12.9	9.0	0.0	5.0	293.2
3651	0.4	_Acc. Vento	Combinatio n		4.8	-11.8	9.0	0.0	1.4	298.2
3651	0.8	_Acc. Vento	Combinatio n		4.8	-10.7	9.0	0.0	-2.3	302.8
3652	0.0	_Acc. Vento	Combinatio n		8.2	-9.0	0.6	0.0	-2.9	302.8
3652	0.3	_Acc. Vento	Combinatio n		8.2	-8.3	0.6	0.0	-3.1	305.1
3653	0.0	_Acc. Vento	Combinatio n		8.7	-6.8	0.5	0.0	0.8	304.6
3653	0.4	_Acc. Vento	Combinatio n		8.7	-5.9	0.5	0.0	0.6	306.9
3653	0.7	_Acc. Vento	Combinatio n		8.7	-4.9	0.5	0.0	0.4	308.8
3653	1.1	_Acc. Vento	Combinatio n		8.7	-3.9	0.5	0.0	0.3	310.4
3654	0.0	_Acc. Vento	Combinatio n		9.2	-2.5	-0.1	0.0	0.7	310.2
3654	0.4	_Acc. Vento	Combinatio n		9.2	-1.5	-0.1	0.0	0.7	310.9
3654	0.8	_Acc. Vento	Combinatio n		9.2	-0.5	-0.1	0.0	0.8	311.3
3654	1.1	_Acc. Vento	Combinatio n		9.2	0.5	-0.1	0.0	0.8	311.3
3655	0.0	_Acc. Vento	Combinatio n		8.7	1.9	-0.8	0.0	0.3	312.0
3655	0.4	_Acc. Vento	Combinatio n		8.7	2.9	-0.8	0.0	0.6	311.0
3655	0.8	_Acc. Vento	Combinatio n		8.7	4.0	-0.8	0.0	0.9	309.7
3655	1.1	_Acc. Vento	Combinatio n		8.7	5.0	-0.8	0.0	1.2	308.0
3656	0.0	_Acc. Vento	Combinatio n		7.2	6.4	-1.3	0.0	-0.2	309.6
3656	0.4	_Acc. Vento	Combinatio n		7.2	7.4	-1.3	0.0	0.3	307.1

3656	0.7	_Acc. Vento	Combinatio n		7.2	8.3	-1.3	0.0	0.7	304.3
3656	1.1	_Acc. Vento	Combinatio n		7.2	9.3	-1.3	0.0	1.2	301.1
3657	0.0	_Acc. Vento	Combinatio n		5.9	10.7	-1.3	-0.1	-3.6	302.3
3657	0.3	_Acc. Vento	Combinatio n		5.9	11.4	-1.3	-0.1	-3.3	299.4
3658	0.0	_Acc. Vento	Combinatio n		9.8	13.1	-11.1	0.0	-3.1	299.4
3658	0.4	_Acc. Vento	Combinatio n		9.8	14.2	-11.1	0.0	1.4	293.9
3658	0.8	_Acc. Vento	Combinatio n		9.8	15.3	-11.1	0.0	5.9	287.8
3659	0.0	_Acc. Vento	Combinatio n		10.5	16.5	-11.5	-0.1	-5.6	287.4
3659	0.4	_Acc. Vento	Combinatio n		10.5	17.5	-11.5	-0.1	-1.4	281.3
3659	0.7	_Acc. Vento	Combinatio n		10.5	18.4	-11.5	-0.1	2.7	274.9
3659	1.1	_Acc. Vento	Combinatio n		10.5	19.4	-11.5	-0.1	6.8	268.1
3660	0.0	_Acc. Vento	Combinatio n		10.9	20.2	-12.1	-1.1	-6.3	267.6
3660	0.1	_Acc. Vento	Combinatio n		10.9	20.5	-12.1	-1.1	-4.9	265.1
3661	0.0	_Acc. Vento	Combinatio n		10.9	20.5	-12.1	0.0	-4.9	266.1
3661	0.5	_Acc. Vento	Combinatio n		10.9	21.8	-12.1	0.0	1.0	256.0
3661	1.0	_Acc. Vento	Combinatio n		10.9	23.1	-12.1	0.0	6.8	245.2
3662	0.0	_Acc. Vento	Combinatio n		10.5	24.0	-13.0	0.0	-6.6	245.8
3662	0.4	_Acc. Vento	Combinatio n		10.5	24.9	-13.0	0.0	-1.9	237.1
3662	0.7	_Acc. Vento	Combinatio n		10.5	25.9	-13.0	0.0	2.7	227.9
3662	1.1	_Acc. Vento	Combinatio n		10.5	26.9	-13.0	0.0	7.4	218.5
3663	0.0	_Acc. Vento	Combinatio n		9.2	27.7	-13.5	0.0	-7.5	219.7
3663	0.5	_Acc. Vento	Combinatio n		9.2	28.9	-13.5	0.0	-1.3	206.8

3663	0.9	_Acc. Vento	Combinatio n		9.2	30.2	-13.5	0.0	4.9	193.3
3664	0.0	_Acc. Vento	Combinatio n		12.2	31.9	-21.4	0.0	6.3	193.3
3664	0.2	_Acc. Vento	Combinatio n		12.2	32.3	-21.4	0.0	9.8	188.0
3665	0.0	_Acc. Vento	Combinatio n		12.7	33.2	-21.5	0.0	-11.3	187.7
3665	0.4	_Acc. Vento	Combinatio n		12.7	34.1	-21.5	0.0	-3.6	175.6
3665	0.7	_Acc. Vento	Combinatio n		12.7	35.1	-21.5	0.0	4.1	163.2
3665	1.1	_Acc. Vento	Combinatio n		12.7	36.1	-21.5	0.0	11.8	150.4
3666	0.0	_Acc. Vento	Combinatio n		14.0	36.5	-22.3	0.0	-11.8	149.6
3666	0.4	_Acc. Vento	Combinatio n		14.0	37.5	-22.3	0.0	-3.8	136.4
3666	0.7	_Acc. Vento	Combinatio n		14.0	38.5	-22.3	0.0	4.3	122.7
3666	1.1	_Acc. Vento	Combinatio n		14.0	39.4	-22.3	0.0	12.3	108.7
3667	0.0	_Acc. Vento	Combinatio n		14.5	39.7	-23.7	0.0	-12.6	108.9
3667	0.4	_Acc. Vento	Combinatio n		14.5	40.6	-23.7	0.0	-4.1	94.5
3667	0.7	_Acc. Vento	Combinatio n		14.5	41.6	-23.7	0.0	4.4	79.7
3667	1.1	_Acc. Vento	Combinatio n		14.5	42.6	-23.7	0.0	12.9	64.6
3668	0.0	_Acc. Vento	Combinatio n		13.7	42.8	-25.2	0.0	-13.3	65.9
3668	0.4	_Acc. Vento	Combinatio n		13.7	43.8	-25.2	0.0	-4.3	50.4
3668	0.7	_Acc. Vento	Combinatio n		13.7	44.8	-25.2	0.0	4.8	34.5
3668	1.1	_Acc. Vento	Combinatio n		13.7	45.7	-25.2	0.0	13.8	18.2
3669	0.0	_Acc. Vento	Combinatio n		11.8	46.3	-27.0	-0.1	-10.2	20.7
3669	0.5	_Acc. Vento	Combinatio n		11.8	47.6	-27.0	-0.1	2.9	-2.1
3670	0.0	_Acc. Vento	Combinatio n		-6.8	-14.8	14.6	0.1	0.5	2.0

3670	0.5	_Acc. Vento	Combinatio n		-6.8	-13.5	14.6	0.1	-6.5	8.9
3671	0.0	_Acc. Vento	Combinatio n		-6.1	-15.1	14.7	0.0	8.2	8.5
3671	0.4	_Acc. Vento	Combinatio n		-6.1	-14.1	14.7	0.0	2.9	13.8
3671	0.7	_Acc. Vento	Combinatio n		-6.1	-13.1	14.7	0.0	-2.4	18.6
3671	1.1	_Acc. Vento	Combinatio n		-6.1	-12.1	14.7	0.0	-7.6	23.2
3672	0.0	_Acc. Vento	Combinatio n		-5.8	-14.1	14.4	0.0	8.1	22.9
3672	0.4	_Acc. Vento	Combinatio n		-5.8	-13.2	14.4	0.0	2.9	27.8
3672	0.7	_Acc. Vento	Combinatio n		-5.8	-12.2	14.4	0.0	-2.2	32.3
3672	1.1	_Acc. Vento	Combinatio n		-5.8	-11.2	14.4	0.0	-7.4	36.5
3673	0.0	_Acc. Vento	Combinatio n		-7.4	-13.3	13.9	0.0	7.8	37.6
3673	0.4	_Acc. Vento	Combinatio n		-7.4	-12.4	13.9	0.0	2.9	42.2
3673	0.7	_Acc. Vento	Combinatio n		-7.4	-11.4	13.9	0.0	-2.1	46.5
3673	1.1	_Acc. Vento	Combinatio n		-7.4	-10.4	13.9	0.0	-7.1	50.4
3674	0.0	_Acc. Vento	Combinatio n		-11.0	-12.3	13.5	0.0	7.4	53.2
3674	0.4	_Acc. Vento	Combinatio n		-11.0	-11.3	13.5	0.0	2.6	57.4
3674	0.7	_Acc. Vento	Combinatio n		-11.0	-10.4	13.5	0.0	-2.3	61.3
3674	1.1	_Acc. Vento	Combinatio n		-11.0	-9.4	13.5	0.0	-7.1	64.9
3675	0.0	_Acc. Vento	Combinatio n		-13.2	-10.7	13.5	0.0	5.3	66.7
3675	0.2	_Acc. Vento	Combinatio n		-13.2	-10.2	13.5	0.0	3.1	68.4
3676	0.0	_Acc. Vento	Combinatio n		-9.5	-7.8	4.2	0.0	0.9	68.5
3676	0.5	_Acc. Vento	Combinatio n		-9.5	-6.5	4.2	0.0	-1.0	71.7
3676	0.9	_Acc. Vento	Combinatio n		-9.5	-5.3	4.2	0.0	-2.9	74.4

3677	0.0	_Acc. Vento	Combinatio n		-7.6	-7.2	4.0	0.0	2.6	72.6
3677	0.4	_Acc. Vento	Combinatio n		-7.6	-6.2	4.0	0.0	1.2	75.0
3677	0.7	_Acc. Vento	Combinatio n		-7.6	-5.2	4.0	0.0	-0.2	77.1
3677	1.1	_Acc. Vento	Combinatio n		-7.6	-4.3	4.0	0.0	-1.7	78.8
3678	0.0	_Acc. Vento	Combinatio n		-7.6	-6.6	3.5	0.0	2.4	78.4
3678	0.5	_Acc. Vento	Combinatio n		-7.6	-5.3	3.5	0.0	0.7	81.3
3678	1.0	_Acc. Vento	Combinatio n		-7.6	-4.0	3.5	0.0	-0.9	83.5
3679	0.0	_Acc. Vento	Combinatio n		-7.6	-4.0	3.5	0.3	-0.9	84.2
3679	0.1	_Acc. Vento	Combinatio n		-7.6	-3.7	3.5	0.3	-1.3	84.7
3680	0.0	_Acc. Vento	Combinatio n		-10.3	-5.7	2.8	0.0	2.2	86.9
3680	0.4	_Acc. Vento	Combinatio n		-10.3	-4.8	2.8	0.0	1.2	88.8
3680	0.7	_Acc. Vento	Combinatio n		-10.3	-3.8	2.8	0.0	0.2	90.3
3680	1.1	_Acc. Vento	Combinatio n		-10.3	-2.8	2.8	0.0	-0.8	91.5
3681	0.0	_Acc. Vento	Combinatio n		-14.5	-4.5	2.2	0.0	1.0	95.3
3681	0.4	_Acc. Vento	Combinatio n		-14.5	-3.4	2.2	0.0	0.1	96.9
3681	0.8	_Acc. Vento	Combinatio n		-14.5	-2.3	2.2	0.0	-0.9	98.1
3682	0.0	_Acc. Vento	Combinatio n		-10.7	-1.0	-7.4	0.1	-2.2	98.1
3682	0.3	_Acc. Vento	Combinatio n		-10.7	-0.3	-7.4	0.1	-0.2	98.3
3683	0.0	_Acc. Vento	Combinatio n		-9.5	-1.8	-7.7	0.0	-3.9	97.2
3683	0.4	_Acc. Vento	Combinatio n		-9.5	-0.8	-7.7	0.0	-1.1	97.7
3683	0.7	_Acc. Vento	Combinatio n		-9.5	0.2	-7.7	0.0	1.7	97.8
3683	1.1	_Acc. Vento	Combinatio n		-9.5	1.1	-7.7	0.0	4.4	97.5

3684	0.0	_Acc. Vento	Combinatio n		-7.0	-1.0	-8.2	0.0	-3.7	95.0
3684	0.4	_Acc. Vento	Combinatio n		-7.0	0.0	-8.2	0.0	-0.6	95.2
3684	0.8	_Acc. Vento	Combinatio n		-7.0	1.0	-8.2	0.0	2.5	95.0
3684	1.1	_Acc. Vento	Combinatio n		-7.0	2.1	-8.2	0.0	5.6	94.5
3685	0.0	_Acc. Vento	Combinatio n		-7.3	-0.4	-8.8	0.0	-4.1	94.4
3685	0.4	_Acc. Vento	Combinatio n		-7.3	0.6	-8.8	0.0	-0.7	94.4
3685	0.8	_Acc. Vento	Combinatio n		-7.3	1.6	-8.8	0.0	2.6	94.0
3685	1.1	_Acc. Vento	Combinatio n		-7.3	2.6	-8.8	0.0	6.0	93.2
3686	0.0	_Acc. Vento	Combinatio n		-10.4	0.4	-9.5	0.0	-4.7	95.8
3686	0.4	_Acc. Vento	Combinatio n		-10.4	1.4	-9.5	0.0	-1.3	95.5
3686	0.7	_Acc. Vento	Combinatio n		-10.4	2.4	-9.5	0.0	2.1	94.8
3686	1.1	_Acc. Vento	Combinatio n		-10.4	3.3	-9.5	0.0	5.6	93.8
3687	0.0	_Acc. Vento	Combinatio n		-11.8	1.7	-10.1	-0.1	-7.7	95.2
3687	0.3	_Acc. Vento	Combinatio n		-11.8	2.5	-10.1	-0.1	-5.0	94.6
3688	0.0	_Acc. Vento	Combinatio n		-8.7	3.8	-17.9	0.0	-5.5	94.7
3688	0.4	_Acc. Vento	Combinatio n		-8.7	4.9	-17.9	0.0	1.8	92.9
3688	0.8	_Acc. Vento	Combinatio n		-8.7	6.0	-17.9	0.0	9.1	90.7
3689	0.0	_Acc. Vento	Combinatio n		-4.2	4.0	-18.3	0.0	-9.2	86.3
3689	0.4	_Acc. Vento	Combinatio n		-4.2	5.0	-18.3	0.0	-2.6	84.7
3689	0.7	_Acc. Vento	Combinatio n		-4.2	6.0	-18.3	0.0	3.9	82.7
3689	1.1	_Acc. Vento	Combinatio n		-4.2	6.9	-18.3	0.0	10.5	80.4
3690	0.0	_Acc. Vento	Combinatio n		-0.9	4.4	-18.9	-1.6	-10.0	76.4

3690	0.1	_Acc. Vento	Combinatio n		-0.9	4.8	-18.9	-1.6	-7.7	75.8
3691	0.0	_Acc. Vento	Combinatio n		-0.9	4.8	-18.9	0.1	-7.7	75.7
3691	0.5	_Acc. Vento	Combinatio n		-0.9	6.0	-18.9	0.1	1.4	73.1
3691	1.0	_Acc. Vento	Combinatio n		-0.9	7.3	-18.9	0.1	10.4	69.9
3692	0.0	_Acc. Vento	Combinatio n		-0.6	4.5	-19.8	0.0	-10.2	69.1
3692	0.4	_Acc. Vento	Combinatio n		-0.6	5.4	-19.8	0.0	-3.1	67.3
3692	0.7	_Acc. Vento	Combinatio n		-0.6	6.4	-19.8	0.0	4.0	65.2
3692	1.1	_Acc. Vento	Combinatio n		-0.6	7.4	-19.8	0.0	11.1	62.7
3693	0.0	_Acc. Vento	Combinatio n		-2.4	4.9	-20.6	0.0	-11.4	63.9
3693	0.5	_Acc. Vento	Combinatio n		-2.4	6.1	-20.6	0.0	-2.0	61.4
3693	0.9	_Acc. Vento	Combinatio n		-2.4	7.4	-20.6	0.0	7.4	58.3
3694	0.0	_Acc. Vento	Combinatio n		0.4	9.7	-27.6	0.0	7.7	58.3
3694	0.2	_Acc. Vento	Combinatio n		0.4	10.1	-27.6	0.0	12.2	56.7
3695	0.0	_Acc. Vento	Combinatio n		3.8	8.2	-28.2	0.0	-15.2	53.7
3695	0.4	_Acc. Vento	Combinatio n		3.8	9.2	-28.2	0.0	-5.0	50.6
3695	0.7	_Acc. Vento	Combinatio n		3.8	10.2	-28.2	0.0	5.1	47.1
3695	1.1	_Acc. Vento	Combinatio n		3.8	11.1	-28.2	0.0	15.3	43.3
3696	0.0	_Acc. Vento	Combinatio n		9.1	8.3	-28.8	0.0	-15.2	38.3
3696	0.4	_Acc. Vento	Combinatio n		9.1	9.3	-28.8	0.0	-4.9	35.1
3696	0.7	_Acc. Vento	Combinatio n		9.1	10.3	-28.8	0.0	5.5	31.6
3696	1.1	_Acc. Vento	Combinatio n		9.1	11.2	-28.8	0.0	15.8	27.8
3697	0.0	_Acc. Vento	Combinatio n		11.8	7.9	-29.3	0.0	-15.5	24.8

3697	0.4	_Acc. Vento	Combinatio n		11.8	8.9	-29.3	0.0	-5.0	21.8
3697	0.7	_Acc. Vento	Combinatio n		11.8	9.8	-29.3	0.0	5.5	18.4
3697	1.1	_Acc. Vento	Combinatio n		11.8	10.8	-29.3	0.0	16.1	14.7
3698	0.0	_Acc. Vento	Combinatio n		11.5	7.5	-29.2	0.0	-15.4	14.2
3698	0.4	_Acc. Vento	Combinatio n		11.5	8.5	-29.2	0.0	-4.9	11.3
3698	0.7	_Acc. Vento	Combinatio n		11.5	9.4	-29.2	0.0	5.6	8.1
3698	1.1	_Acc. Vento	Combinatio n		11.5	10.4	-29.2	0.0	16.0	4.5
3699	0.0	_Acc. Vento	Combinatio n		9.4	7.7	-28.1	-0.1	-10.4	5.7
3699	0.5	_Acc. Vento	Combinatio n		9.4	9.0	-28.1	-0.1	3.2	1.6
3700	0.0	_Acc. Vento	Combinatio n		-11.4	12.0	22.8	0.0	3.5	4.2
3700	0.5	_Acc. Vento	Combinatio n		-11.4	11.0	18.2	0.0	-6.4	-1.4
3701	0.0	_Acc. Vento	Combinatio n		-21.3	11.9	21.5	0.0	9.4	9.4
3701	0.4	_Acc. Vento	Combinatio n		-21.3	11.2	18.0	0.0	2.3	5.2
3701	0.7	_Acc. Vento	Combinatio n		-21.3	10.4	14.5	0.0	-3.5	1.3
3701	1.1	_Acc. Vento	Combinatio n		-21.3	9.7	11.1	0.0	-8.1	-2.3
3702	0.0	_Acc. Vento	Combinatio n		-31.2	11.0	15.6	0.0	5.8	8.2
3702	0.4	_Acc. Vento	Combinatio n		-31.2	10.2	12.1	0.0	0.8	4.4
3702	0.7	_Acc. Vento	Combinatio n		-31.2	9.5	8.6	0.0	-2.9	0.9
3702	1.1	_Acc. Vento	Combinatio n		-31.2	8.7	5.2	0.0	-5.4	-2.4
3703	0.0	_Acc. Vento	Combinatio n		-38.6	10.2	10.0	0.0	2.9	5.9
3703	0.4	_Acc. Vento	Combinatio n		-38.6	9.4	6.5	0.0	-0.1	2.3
3703	0.7	_Acc. Vento	Combinatio n		-38.6	8.7	3.0	0.0	-1.8	-0.9

3703	1.1	_Acc. Vento	Combinatio n		-38.6	7.9	-0.4	0.0	-2.2	-3.9
3704	0.0	_Acc. Vento	Combinatio n		-43.3	9.2	3.7	0.0	0.7	1.9
3704	0.4	_Acc. Vento	Combinatio n		-43.3	8.4	0.3	0.0	0.0	-1.2
3704	0.7	_Acc. Vento	Combinatio n		-43.3	7.7	-3.2	0.0	0.5	-4.1
3704	1.1	_Acc. Vento	Combinatio n		-43.3	6.9	-6.7	0.0	2.3	-6.7
3705	0.0	_Acc. Vento	Combinatio n		-47.9	7.7	-3.6	0.3	6.7	-1.1
3705	0.2	_Acc. Vento	Combinatio n		-47.9	7.4	-5.2	0.3	7.4	-2.3
3706	0.0	_Acc. Vento	Combinatio n		-55.7	5.8	16.6	0.0	6.3	-2.2
3706	0.5	_Acc. Vento	Combinatio n		-55.7	4.8	12.2	0.0	-0.2	-4.7
3706	0.9	_Acc. Vento	Combinatio n		-55.7	3.9	7.8	0.0	-4.8	-6.6
3707	0.0	_Acc. Vento	Combinatio n		-61.5	5.1	11.5	0.0	3.9	-0.4
3707	0.4	_Acc. Vento	Combinatio n		-61.5	4.3	8.0	0.0	0.4	-2.1
3707	0.7	_Acc. Vento	Combinatio n		-61.5	3.6	4.6	0.0	-1.8	-3.5
3707	1.1	_Acc. Vento	Combinatio n		-61.5	2.8	1.1	0.0	-2.9	-4.6
3708	0.0	_Acc. Vento	Combinatio n		-64.8	4.3	5.5	0.0	0.5	-0.9
3708	0.5	_Acc. Vento	Combinatio n		-64.8	3.3	0.9	0.0	-1.0	-2.7
3708	1.0	_Acc. Vento	Combinatio n		-64.8	2.3	-3.7	0.0	-0.3	-4.1
3709	0.0	_Acc. Vento	Combinatio n		-64.8	2.3	-3.7	-0.3	-0.3	1.8
3709	0.1	_Acc. Vento	Combinatio n		-64.8	2.1	-4.9	-0.3	0.2	1.5
3710	0.0	_Acc. Vento	Combinatio n		-64.9	3.4	-1.1	0.0	-2.8	2.2
3710	0.4	_Acc. Vento	Combinatio n		-64.9	2.7	-4.6	0.0	-1.8	1.1
3710	0.7	_Acc. Vento	Combinatio n		-64.9	1.9	-8.0	0.0	0.5	0.3

3710	1.1	_Acc. Vento	Combinatio n		-64.9	1.1	-11.5	0.0	4.0	-0.2
3711	0.0	_Acc. Vento	Combinatio n		-62.4	2.1	-9.0	0.1	-2.9	-2.0
3711	0.4	_Acc. Vento	Combinatio n		-62.4	1.2	-12.9	0.1	1.6	-2.7
3711	0.8	_Acc. Vento	Combinatio n		-62.4	0.4	-16.9	0.1	7.7	-3.0
3712	0.0	_Acc. Vento	Combinatio n		-73.1	-0.8	11.5	-0.2	6.9	-3.0
3712	0.3	_Acc. Vento	Combinatio n		-73.1	-1.3	8.9	-0.2	4.2	-2.8
3713	0.0	_Acc. Vento	Combinatio n		-73.2	-0.6	11.0	0.0	4.8	-2.4
3713	0.4	_Acc. Vento	Combinatio n		-73.2	-1.3	7.5	0.0	1.5	-2.1
3713	0.7	_Acc. Vento	Combinatio n		-73.2	-2.1	4.1	0.0	-0.6	-1.5
3713	1.1	_Acc. Vento	Combinatio n		-73.2	-2.8	0.6	0.0	-1.5	-0.6
3714	0.0	_Acc. Vento	Combinatio n		-72.7	-1.6	3.4	0.0	-1.2	-1.2
3714	0.4	_Acc. Vento	Combinatio n		-72.7	-2.4	-0.2	0.0	-1.8	-0.4
3714	0.8	_Acc. Vento	Combinatio n		-72.7	-3.2	-3.9	0.0	-1.0	0.6
3714	1.1	_Acc. Vento	Combinatio n		-72.7	-4.0	-7.6	0.0	1.2	2.0
3715	0.0	_Acc. Vento	Combinatio n		-68.9	-2.5	-4.3	0.0	-5.5	-2.1
3715	0.4	_Acc. Vento	Combinatio n		-68.9	-3.3	-8.0	0.0	-3.2	-1.0
3715	0.8	_Acc. Vento	Combinatio n		-68.9	-4.1	-11.7	0.0	0.5	0.5
3715	1.1	_Acc. Vento	Combinatio n		-68.9	-4.9	-15.3	0.0	5.7	2.2
3716	0.0	_Acc. Vento	Combinatio n		-61.7	-3.7	-12.8	0.0	-7.8	-5.3
3716	0.4	_Acc. Vento	Combinatio n		-61.7	-4.5	-16.2	0.0	-2.6	-3.9
3716	0.7	_Acc. Vento	Combinatio n		-61.7	-5.2	-19.7	0.0	3.9	-2.1
3716	1.1	_Acc. Vento	Combinatio n		-61.7	-6.0	-23.2	0.0	11.6	-0.1

3717	0.0	_Acc. Vento	Combinatio n		-54.2	-5.3	-21.5	0.2	-0.8	-8.0
3717	0.3	_Acc. Vento	Combinatio n		-54.2	-5.8	-24.1	0.2	5.2	-6.5
3718	0.0	_Acc. Vento	Combinatio n		-66.5	-7.2	7.0	-0.1	4.9	-6.6
3718	0.4	_Acc. Vento	Combinatio n		-66.5	-8.0	3.1	-0.1	2.9	-3.5
3718	0.8	_Acc. Vento	Combinatio n		-66.5	-8.9	-0.9	-0.1	2.4	-0.1
3719	0.0	_Acc. Vento	Combinatio n		-62.5	-7.8	1.2	-0.1	-1.8	-5.2
3719	0.4	_Acc. Vento	Combinatio n		-62.5	-8.5	-2.3	-0.1	-1.6	-2.3
3719	0.7	_Acc. Vento	Combinatio n		-62.5	-9.3	-5.7	-0.1	-0.1	0.9
3719	1.1	_Acc. Vento	Combinatio n		-62.5	-10.0	-9.2	-0.1	2.5	4.4
3720	0.0	_Acc. Vento	Combinatio n		-56.4	-7.9	-6.2	-0.6	-6.2	-3.3
3720	0.1	_Acc. Vento	Combinatio n		-56.4	-8.2	-7.4	-0.6	-5.4	-2.3
3721	0.0	_Acc. Vento	Combinatio n		-56.4	-8.2	-7.4	0.0	-5.4	-7.4
3721	0.5	_Acc. Vento	Combinatio n		-56.4	-9.2	-12.0	0.0	-0.7	-3.2
3721	1.0	_Acc. Vento	Combinatio n		-56.4	-10.2	-16.7	0.0	6.1	1.4
3722	0.0	_Acc. Vento	Combinatio n		-47.5	-8.4	-13.1	0.0	-9.5	-8.2
3722	0.4	_Acc. Vento	Combinatio n		-47.5	-9.2	-16.5	0.0	-4.1	-5.1
3722	0.7	_Acc. Vento	Combinatio n		-47.5	-9.9	-20.0	0.0	2.4	-1.6
3722	1.1	_Acc. Vento	Combinatio n		-47.5	-10.7	-23.5	0.0	10.2	2.1
3723	0.0	_Acc. Vento	Combinatio n		-35.1	-9.3	-20.9	0.0	-11.4	-10.6
3723	0.5	_Acc. Vento	Combinatio n		-35.1	-10.3	-25.3	0.0	-0.8	-6.1
3723	0.9	_Acc. Vento	Combinatio n		-35.1	-11.2	-29.7	0.0	11.7	-1.2
3724	0.0	_Acc. Vento	Combinatio n		-46.2	-13.4	-2.3	-0.3	11.7	-1.4

3724	0.2	_Acc. Vento	Combinatio n		-46.2	-13.7	-3.9	-0.3	12.2	0.8
3725	0.0	_Acc. Vento	Combinatio n		-36.1	-12.8	-2.2	0.0	-2.5	-10.1
3725	0.4	_Acc. Vento	Combinatio n		-36.1	-13.5	-5.7	0.0	-1.1	-5.4
3725	0.7	_Acc. Vento	Combinatio n		-36.1	-14.3	-9.1	0.0	1.5	-0.4
3725	1.1	_Acc. Vento	Combinatio n		-36.1	-15.0	-12.6	0.0	5.4	4.9
3726	0.0	_Acc. Vento	Combinatio n		-26.8	-13.3	-9.6	0.0	-7.8	-5.8
3726	0.4	_Acc. Vento	Combinatio n		-26.8	-14.1	-13.0	0.0	-3.8	-0.9
3726	0.7	_Acc. Vento	Combinatio n		-26.8	-14.8	-16.5	0.0	1.6	4.3
3726	1.1	_Acc. Vento	Combinatio n		-26.8	-15.6	-20.0	0.0	8.1	9.8
3727	0.0	_Acc. Vento	Combinatio n		-14.9	-13.4	-16.0	0.0	-11.4	-3.4
3727	0.4	_Acc. Vento	Combinatio n		-14.9	-14.2	-19.5	0.0	-5.0	1.5
3727	0.7	_Acc. Vento	Combinatio n		-14.9	-14.9	-22.9	0.0	2.6	6.8
3727	1.1	_Acc. Vento	Combinatio n		-14.9	-15.7	-26.4	0.0	11.5	12.3
3728	0.0	_Acc. Vento	Combinatio n		-0.1	-13.4	-22.6	0.0	-14.1	-3.5
3728	0.4	_Acc. Vento	Combinatio n		-0.1	-14.2	-26.0	0.0	-5.4	1.5
3728	0.7	_Acc. Vento	Combinatio n		-0.1	-14.9	-29.5	0.0	4.6	6.7
3728	1.1	_Acc. Vento	Combinatio n		-0.1	-15.7	-33.0	0.0	15.8	12.2
3729	0.0	_Acc. Vento	Combinatio n		14.1	-13.7	-30.1	0.1	-9.4	-3.0
3729	0.5	_Acc. Vento	Combinatio n		14.1	-14.8	-34.8	0.1	6.3	3.9
3730	0.0	_Acc. Vento	Combinatio n		30.7	-24.7	26.0	-0.1	3.1	34.2
3730	0.5	_Acc. Vento	Combinatio n		30.7	-23.4	26.0	-0.1	-9.4	45.8
3731	0.0	_Acc. Vento	Combinatio n		29.0	-23.6	23.4	0.0	12.8	47.3

3731	0.4	_Acc. Vento	Combinatio n		29.0	-22.6	23.4	0.0	4.4	55.6
3731	0.7	_Acc. Vento	Combinatio n		29.0	-21.6	23.4	0.0	-4.0	63.5
3731	1.1	_Acc. Vento	Combinatio n		29.0	-20.7	23.4	0.0	-12.4	71.1
3732	0.0	_Acc. Vento	Combinatio n		26.2	-21.0	20.8	0.0	11.3	73.9
3732	0.4	_Acc. Vento	Combinatio n		26.2	-20.0	20.8	0.0	3.8	81.3
3732	0.7	_Acc. Vento	Combinatio n		26.2	-19.1	20.8	0.0	-3.7	88.3
3732	1.1	_Acc. Vento	Combinatio n		26.2	-18.1	20.8	0.0	-11.2	95.0
3733	0.0	_Acc. Vento	Combinatio n		23.2	-18.5	18.4	0.0	10.0	98.1
3733	0.4	_Acc. Vento	Combinatio n		23.2	-17.5	18.4	0.0	3.4	104.5
3733	0.7	_Acc. Vento	Combinatio n		23.2	-16.6	18.4	0.0	-3.2	110.7
3733	1.1	_Acc. Vento	Combinatio n		23.2	-15.6	18.4	0.0	-9.8	116.4
3734	0.0	_Acc. Vento	Combinatio n		20.4	-16.0	16.2	0.0	9.0	119.5
3734	0.4	_Acc. Vento	Combinatio n		20.4	-15.0	16.2	0.0	3.2	125.1
3734	0.7	_Acc. Vento	Combinatio n		20.4	-14.1	16.2	0.0	-2.7	130.3
3734	1.1	_Acc. Vento	Combinatio n		20.4	-13.1	16.2	0.0	-8.5	135.2
3735	0.0	_Acc. Vento	Combinatio n		17.2	-13.6	14.2	0.0	8.5	138.5
3735	0.2	_Acc. Vento	Combinatio n		17.2	-13.1	14.2	0.0	6.1	140.7
3736	0.0	_Acc. Vento	Combinatio n		17.8	-14.5	11.8	0.0	4.4	140.7
3736	0.5	_Acc. Vento	Combinatio n		17.8	-13.2	11.8	0.0	-1.0	147.0
3736	0.9	_Acc. Vento	Combinatio n		17.8	-12.0	11.8	0.0	-6.5	152.7
3737	0.0	_Acc. Vento	Combinatio n		13.7	-12.3	9.7	0.0	5.5	156.9
3737	0.4	_Acc. Vento	Combinatio n		13.7	-11.4	9.7	0.0	2.0	161.2

3737	0.7	_Acc. Vento	Combinatio n		13.7	-10.4	9.7	0.0	-1.4	165.1
3737	1.1	_Acc. Vento	Combinatio n		13.7	-9.4	9.7	0.0	-4.9	168.7
3738	0.0	_Acc. Vento	Combinatio n		10.2	-9.6	7.3	0.0	4.2	172.5
3738	0.5	_Acc. Vento	Combinatio n		10.2	-8.3	7.3	0.0	0.7	176.8
3738	1.0	_Acc. Vento	Combinatio n		10.2	-7.0	7.3	0.0	-2.9	180.5
3739	0.0	_Acc. Vento	Combinatio n		10.2	-7.0	7.3	0.6	-2.9	179.5
3739	0.1	_Acc. Vento	Combinatio n		10.2	-6.7	7.3	0.6	-3.7	180.4
3740	0.0	_Acc. Vento	Combinatio n		7.2	-6.6	5.3	0.0	3.4	183.9
3740	0.4	_Acc. Vento	Combinatio n		7.2	-5.7	5.3	0.0	1.5	186.1
3740	0.7	_Acc. Vento	Combinatio n		7.2	-4.7	5.3	0.0	-0.4	188.0
3740	1.1	_Acc. Vento	Combinatio n		7.2	-3.7	5.3	0.0	-2.3	189.5
3741	0.0	_Acc. Vento	Combinatio n		4.4	-3.7	3.3	0.0	2.5	192.9
3741	0.4	_Acc. Vento	Combinatio n		4.4	-2.6	3.3	0.0	1.2	194.2
3741	0.8	_Acc. Vento	Combinatio n		4.4	-1.5	3.3	0.0	-0.1	195.0
3742	0.0	_Acc. Vento	Combinatio n		5.2	-2.1	0.5	0.1	-1.1	195.0
3742	0.3	_Acc. Vento	Combinatio n		5.2	-1.4	0.5	0.1	-1.2	195.5
3743	0.0	_Acc. Vento	Combinatio n		1.7	-1.4	-1.5	0.0	-0.2	199.5
3743	0.4	_Acc. Vento	Combinatio n		1.7	-0.4	-1.5	0.0	0.3	199.8
3743	0.7	_Acc. Vento	Combinatio n		1.7	0.5	-1.5	0.0	0.8	199.8
3743	1.1	_Acc. Vento	Combinatio n		1.7	1.5	-1.5	0.0	1.4	199.4
3744	0.0	_Acc. Vento	Combinatio n		-2.2	1.6	-3.7	0.0	-1.5	203.9
3744	0.4	_Acc. Vento	Combinatio n		-2.2	2.6	-3.7	0.0	-0.1	203.1

3744	0.8	_Acc. Vento	Combinatio n		-2.2	3.6	-3.7	0.0	1.3	201.9
3744	1.1	_Acc. Vento	Combinatio n		-2.2	4.6	-3.7	0.0	2.7	200.3
3745	0.0	_Acc. Vento	Combinatio n		-5.6	4.8	-5.9	0.0	-2.7	204.4
3745	0.4	_Acc. Vento	Combinatio n		-5.6	5.8	-5.9	0.0	-0.5	202.4
3745	0.8	_Acc. Vento	Combinatio n		-5.6	6.9	-5.9	0.0	1.8	200.0
3745	1.1	_Acc. Vento	Combinatio n		-5.6	7.9	-5.9	0.0	4.0	197.2
3746	0.0	_Acc. Vento	Combinatio n		-8.6	8.1	-8.1	0.0	-3.7	200.8
3746	0.4	_Acc. Vento	Combinatio n		-8.6	9.1	-8.1	0.0	-0.8	197.7
3746	0.7	_Acc. Vento	Combinatio n		-8.6	10.0	-8.1	0.0	2.1	194.3
3746	1.1	_Acc. Vento	Combinatio n		-8.6	11.0	-8.1	0.0	5.0	190.5
3747	0.0	_Acc. Vento	Combinatio n		-11.7	11.3	-10.2	-0.1	-5.5	194.0
3747	0.3	_Acc. Vento	Combinatio n		-11.7	12.0	-10.2	-0.1	-2.8	191.0
3748	0.0	_Acc. Vento	Combinatio n		-11.0	11.8	-12.6	0.0	-3.0	191.0
3748	0.4	_Acc. Vento	Combinatio n		-11.0	12.9	-12.6	0.0	2.2	186.0
3748	0.8	_Acc. Vento	Combinatio n		-11.0	14.0	-12.6	0.0	7.3	180.5
3749	0.0	_Acc. Vento	Combinatio n		-14.8	14.2	-14.6	-0.1	-7.3	184.7
3749	0.4	_Acc. Vento	Combinatio n		-14.8	15.1	-14.6	-0.1	-2.1	179.5
3749	0.7	_Acc. Vento	Combinatio n		-14.8	16.1	-14.6	-0.1	3.2	173.9
3749	1.1	_Acc. Vento	Combinatio n		-14.8	17.1	-14.6	-0.1	8.4	167.9
3750	0.0	_Acc. Vento	Combinatio n		-18.7	17.3	-16.5	-1.4	-8.9	171.7
3750	0.1	_Acc. Vento	Combinatio n		-18.7	17.6	-16.5	-1.4	-6.9	169.6
3751	0.0	_Acc. Vento	Combinatio n		-18.7	17.6	-16.5	0.1	-6.9	167.9

3751	0.5	_Acc. Vento	Combinatio n		-18.7	18.9	-16.5	0.1	1.0	159.2
3751	1.0	_Acc. Vento	Combinatio n		-18.7	20.2	-16.5	0.1	8.9	149.8
3752	0.0	_Acc. Vento	Combinatio n		-22.1	20.7	-18.9	0.0	-9.9	153.4
3752	0.4	_Acc. Vento	Combinatio n		-22.1	21.6	-18.9	0.0	-3.1	145.8
3752	0.7	_Acc. Vento	Combinatio n		-22.1	22.6	-18.9	0.0	3.7	137.8
3752	1.1	_Acc. Vento	Combinatio n		-22.1	23.6	-18.9	0.0	10.5	129.5
3753	0.0	_Acc. Vento	Combinatio n		-25.3	24.1	-21.2	0.0	-11.3	132.8
3753	0.5	_Acc. Vento	Combinatio n		-25.3	25.3	-21.2	0.0	-1.6	121.6
3753	0.9	_Acc. Vento	Combinatio n		-25.3	26.6	-21.2	0.0	8.0	109.7
3754	0.0	_Acc. Vento	Combinatio n		-25.0	26.5	-23.3	0.0	8.7	109.7
3754	0.2	_Acc. Vento	Combinatio n		-25.0	27.0	-23.3	0.0	12.5	105.2
3755	0.0	_Acc. Vento	Combinatio n		-29.0	27.5	-25.4	0.0	-13.5	109.0
3755	0.4	_Acc. Vento	Combinatio n		-29.0	28.5	-25.4	0.0	-4.3	98.9
3755	0.7	_Acc. Vento	Combinatio n		-29.0	29.5	-25.4	0.0	4.8	88.5
3755	1.1	_Acc. Vento	Combinatio n		-29.0	30.4	-25.4	0.0	13.9	77.8
3756	0.0	_Acc. Vento	Combinatio n		-33.5	31.0	-27.8	0.0	-14.9	81.9
3756	0.4	_Acc. Vento	Combinatio n		-33.5	32.0	-27.8	0.0	-4.9	70.6
3756	0.7	_Acc. Vento	Combinatio n		-33.5	32.9	-27.8	0.0	5.1	58.9
3756	1.1	_Acc. Vento	Combinatio n		-33.5	33.9	-27.8	0.0	15.1	46.9
3757	0.0	_Acc. Vento	Combinatio n		-37.3	34.5	-30.5	0.0	-16.4	50.4
3757	0.4	_Acc. Vento	Combinatio n		-37.3	35.4	-30.5	0.0	-5.5	37.9
3757	0.7	_Acc. Vento	Combinatio n		-37.3	36.4	-30.5	0.0	5.5	25.0

3757	1.1	_Acc. Vento	Combinatio n		-37.3	37.4	-30.5	0.0	16.4	11.7
3758	0.0	_Acc. Vento	Combinatio n		-39.9	37.7	-33.4	0.0	-17.8	14.0
3758	0.4	_Acc. Vento	Combinatio n		-39.9	38.7	-33.4	0.0	-5.7	0.2
3758	0.7	_Acc. Vento	Combinatio n		-39.9	39.6	-33.4	0.0	6.3	-13.8
3758	1.1	_Acc. Vento	Combinatio n		-39.9	40.6	-33.4	0.0	18.3	-28.2
3759	0.0	_Acc. Vento	Combinatio n		-40.5	40.4	-36.7	0.2	-12.5	-28.0
3759	0.5	_Acc. Vento	Combinatio n		-40.5	41.7	-36.7	0.2	5.2	-47.9

TABLE: Element Forces - Frames

Frame	Station	OutputCase	CaseType	StepType	P	V2	V3	T	M2	M3
Text	m	Text	Text	Text	KN	KN	KN	KN-m	KN-m	KN-m
3575	0.0	C_SLE_rara_ENV	Combinatio n	Max	22.5	67.6	5.5	0.4	22.4	16.1
3575	0.3	C_SLE_rara_ENV	Combinatio n	Max	22.5	69.0	5.5	0.4	25.5	11.8
3575	0.6	C_SLE_rara_ENV	Combinatio n	Max	22.5	70.3	5.5	0.4	28.7	7.2
3575	0.0	C_SLE_rara_ENV	Combinatio n	Min	-7.5	-1.5	-49.1	-0.2	-14.1	-23.6
3575	0.3	C_SLE_rara_ENV	Combinatio n	Min	-7.5	-0.2	-49.1	-0.2	-8.0	-31.9
3575	0.6	C_SLE_rara_ENV	Combinatio n	Min	-7.5	1.1	-49.1	-0.2	-4.0	-40.5
3576	0.0	C_SLE_rara_ENV	Combinatio n	Max	11.0	0.9	54.0	0.1	26.9	9.7
3576	0.3	C_SLE_rara_ENV	Combinatio n	Max	11.0	2.3	54.0	0.1	25.0	13.5
3576	0.6	C_SLE_rara_ENV	Combinatio n	Max	11.0	3.6	54.0	0.1	23.1	16.9
3576	0.0	C_SLE_rara_ENV	Combinatio n	Min	-25.9	-76.6	-9.9	-0.4	-1.9	-48.6
3576	0.3	C_SLE_rara_ENV	Combinatio n	Min	-25.9	-75.3	-9.9	-0.4	-9.1	-37.0
3576	0.6	C_SLE_rara_ENV	Combinatio n	Min	-25.9	-73.9	-9.9	-0.4	-17.2	-25.7

3577	0.0	C_SLE_rara_ENV	Combinatio n	Max	30.2	154.0	72.2	0.3	33.4	27.3
3577	0.3	C_SLE_rara_ENV	Combinatio n	Max	30.2	154.5	72.2	0.3	24.8	23.3
3577	0.6	C_SLE_rara_ENV	Combinatio n	Max	30.2	155.0	72.2	0.3	16.3	19.3
3577	0.0	C_SLE_rara_ENV	Combinatio n	Min	-37.2	-2.6	-17.7	-0.3	-17.5	-26.0
3577	0.3	C_SLE_rara_ENV	Combinatio n	Min	-37.2	-2.1	-17.7	-0.3	-22.1	-58.2
3577	0.6	C_SLE_rara_ENV	Combinatio n	Min	-37.2	-1.6	-17.7	-0.3	-26.7	-90.5
3578	0.0	C_SLE_rara_ENV	Combinatio n	Max	40.1	5.8	22.5	0.3	19.3	20.3
3578	0.3	C_SLE_rara_ENV	Combinatio n	Max	40.1	6.3	22.5	0.3	25.3	25.3
3578	0.6	C_SLE_rara_ENV	Combinatio n	Max	40.1	6.8	22.5	0.3	31.2	30.2
3578	0.0	C_SLE_rara_ENV	Combinatio n	Min	-21.7	-148.1	-65.9	-0.3	-25.3	-84.9
3578	0.3	C_SLE_rara_ENV	Combinatio n	Min	-21.7	-147.7	-65.9	-0.3	-21.2	-56.9
3578	0.6	C_SLE_rara_ENV	Combinatio n	Min	-21.7	-147.2	-65.9	-0.3	-17.1	-29.1
3579	0.0	C_SLE_rara_ENV	Combinatio n	Max	17.3	60.8	1.9	0.3	15.4	32.6
3579	0.3	C_SLE_rara_ENV	Combinatio n	Max	17.3	61.3	1.9	0.3	18.1	29.1
3579	0.6	C_SLE_rara_ENV	Combinatio n	Max	17.3	61.8	1.9	0.3	20.7	25.6
3579	0.0	C_SLE_rara_ENV	Combinatio n	Min	-23.0	-4.1	-28.8	-0.2	-8.6	-14.2
3579	0.3	C_SLE_rara_ENV	Combinatio n	Min	-23.0	-3.6	-28.8	-0.2	-5.0	-24.4
3579	0.6	C_SLE_rara_ENV	Combinatio n	Min	-23.0	-3.1	-28.8	-0.2	-1.5	-34.7
3580	0.0	C_SLE_rara_ENV	Combinatio n	Max	13.9	4.2	21.5	0.2	18.6	27.1
3580	0.3	C_SLE_rara_ENV	Combinatio n	Max	13.9	4.6	21.5	0.2	18.0	29.7
3580	0.6	C_SLE_rara_ENV	Combinatio n	Max	13.9	5.1	21.5	0.2	17.3	32.3
3580	0.0	C_SLE_rara_ENV	Combinatio n	Min	-31.6	-62.8	-5.0	-0.4	-1.0	-36.3

3580	0.3	C_SLE_rara_ENV	Combinatio n	Min	-31.6	-62.4	-5.0	-0.4	-3.4	-24.9
3580	0.6	C_SLE_rara_ENV	Combinatio n	Min	-31.6	-61.9	-5.0	-0.4	-5.7	-13.7
3581	0.0	C_SLE_rara_ENV	Combinatio n	Max	7.6	11.8	16.0	0.3	11.8	32.2
3581	0.3	C_SLE_rara_ENV	Combinatio n	Max	7.6	11.4	14.3	0.3	8.9	32.8
3581	0.6	C_SLE_rara_ENV	Combinatio n	Max	7.6	11.0	12.5	0.3	7.8	33.6
3581	0.0	C_SLE_rara_ENV	Combinatio n	Min	-13.2	-5.9	-9.5	-0.1	-3.5	-5.5
3581	0.3	C_SLE_rara_ENV	Combinatio n	Min	-13.2	-6.3	-11.2	-0.1	-2.5	-6.4
3581	0.6	C_SLE_rara_ENV	Combinatio n	Min	-13.2	-6.6	-12.9	-0.1	-1.4	-7.3
3582	0.0	C_SLE_rara_ENV	Combinatio n	Max	5.7	3.4	11.0	0.1	13.0	28.9
3582	0.3	C_SLE_rara_ENV	Combinatio n	Max	5.7	3.0	9.3	0.1	11.9	29.4
3582	0.6	C_SLE_rara_ENV	Combinatio n	Max	5.7	2.6	7.6	0.1	11.3	30.1
3582	0.0	C_SLE_rara_ENV	Combinatio n	Min	-10.9	-11.5	-4.5	-0.4	0.0	-6.1
3582	0.3	C_SLE_rara_ENV	Combinatio n	Min	-10.9	-11.9	-6.3	-0.4	-0.8	-5.2
3582	0.6	C_SLE_rara_ENV	Combinatio n	Min	-10.9	-12.3	-8.0	-0.4	-1.3	-4.2
3583	0.0	C_SLE_rara_ENV	Combinatio n	Max	37.4	195.9	34.5	0.4	20.1	45.1
3583	0.3	C_SLE_rara_ENV	Combinatio n	Max	37.4	196.3	34.5	0.4	17.5	34.5
3583	0.6	C_SLE_rara_ENV	Combinatio n	Max	37.4	196.8	34.5	0.4	14.9	26.2
3583	0.0	C_SLE_rara_ENV	Combinatio n	Min	-35.2	-3.0	-15.3	-0.2	-10.6	-41.7
3583	0.3	C_SLE_rara_ENV	Combinatio n	Min	-35.2	-2.6	-15.3	-0.2	-11.5	-75.8
3583	0.6	C_SLE_rara_ENV	Combinatio n	Min	-35.2	-2.1	-15.3	-0.2	-12.5	-110.0
3584	0.0	C_SLE_rara_ENV	Combinatio n	Max	40.1	3.3	9.1	0.1	15.3	28.1
3584	0.3	C_SLE_rara_ENV	Combinatio n	Max	40.1	3.8	9.1	0.1	17.7	36.5

3584	0.6	C_SLE_rara_ENV	Combinatio n	Max	40.1	4.2	9.1	0.1	20.2	48.2
3584	0.0	C_SLE_rara_ENV	Combinatio n	Min	-26.3	-191.9	-33.0	-0.5	-11.8	-105.7
3584	0.3	C_SLE_rara_ENV	Combinatio n	Min	-26.3	-191.4	-33.0	-0.5	-9.7	-74.3
3584	0.6	C_SLE_rara_ENV	Combinatio n	Min	-26.3	-190.9	-33.0	-0.5	-7.5	-43.0
3610	0.0	C_SLE_rara_ENV	Combinatio n	Max	7.4	-50.4	125.2	0.3	25.9	7.5
3610	0.5	C_SLE_rara_ENV	Combinatio n	Max	7.4	-48.2	125.2	0.3	4.8	237.5
3610	0.0	C_SLE_rara_ENV	Combinatio n	Min	-55.0	-510.4	-5.9	-0.3	-3.9	-41.0
3610	0.5	C_SLE_rara_ENV	Combinatio n	Min	-55.0	-508.3	-5.9	-0.3	-40.1	13.0
3611	0.0	C_SLE_rara_ENV	Combinatio n	Max	21.8	-48.5	86.3	0.3	42.9	233.4
3611	0.4	C_SLE_rara_ENV	Combinatio n	Max	21.8	-46.9	86.3	0.3	29.1	406.1
3611	0.7	C_SLE_rara_ENV	Combinatio n	Max	21.8	-45.3	86.3	0.3	15.2	578.2
3611	1.1	C_SLE_rara_ENV	Combinatio n	Max	21.8	-43.7	86.3	0.3	2.3	749.7
3611	0.0	C_SLE_rara_ENV	Combinatio n	Min	-32.2	-494.5	-6.2	-0.2	-6.0	3.5
3611	0.4	C_SLE_rara_ENV	Combinatio n	Min	-32.2	-492.9	-6.2	-0.2	-20.8	21.7
3611	0.7	C_SLE_rara_ENV	Combinatio n	Min	-32.2	-491.3	-6.2	-0.2	-35.6	39.2
3611	1.1	C_SLE_rara_ENV	Combinatio n	Min	-32.2	-489.7	-6.2	-0.2	-50.5	56.2
3612	0.0	C_SLE_rara_ENV	Combinatio n	Max	39.8	-44.2	56.5	0.3	24.8	749.1
3612	0.4	C_SLE_rara_ENV	Combinatio n	Max	39.8	-42.5	56.5	0.3	19.2	914.0
3612	0.7	C_SLE_rara_ENV	Combinatio n	Max	39.8	-40.9	56.5	0.3	13.6	1078.2
3612	1.1	C_SLE_rara_ENV	Combinatio n	Max	39.8	-39.3	56.5	0.3	8.1	1241.8
3612	0.0	C_SLE_rara_ENV	Combinatio n	Min	-20.3	-472.1	-24.5	-0.2	-19.0	49.3
3612	0.4	C_SLE_rara_ENV	Combinatio n	Min	-20.3	-470.4	-24.5	-0.2	-25.0	65.3

3612	0.7	C_SLE_rara_ENV	Combinatio n	Min	-20.3	-468.8	-24.5	-0.2	-31.0	80.7
3612	1.1	C_SLE_rara_ENV	Combinatio n	Min	-20.3	-467.2	-24.5	-0.2	-36.9	95.5
3613	0.0	C_SLE_rara_ENV	Combinatio n	Max	48.4	-39.5	29.7	0.3	12.4	1249.5
3613	0.4	C_SLE_rara_ENV	Combinatio n	Max	48.4	-37.9	29.7	0.3	15.2	1403.0
3613	0.7	C_SLE_rara_ENV	Combinatio n	Max	48.4	-36.3	29.7	0.3	19.3	1555.9
3613	1.1	C_SLE_rara_ENV	Combinatio n	Max	48.4	-34.7	29.7	0.3	23.4	1708.3
3613	0.0	C_SLE_rara_ENV	Combinatio n	Min	-14.5	-445.6	-53.5	-0.2	-35.0	89.4
3613	0.4	C_SLE_rara_ENV	Combinatio n	Min	-14.5	-444.0	-53.5	-0.2	-30.2	103.7
3613	0.7	C_SLE_rara_ENV	Combinatio n	Min	-14.5	-442.4	-53.5	-0.2	-25.4	117.4
3613	1.1	C_SLE_rara_ENV	Combinatio n	Min	-14.5	-440.7	-53.5	-0.2	-20.6	130.6
3614	0.0	C_SLE_rara_ENV	Combinatio n	Max	49.1	-34.6	20.3	0.4	10.2	1719.6
3614	0.4	C_SLE_rara_ENV	Combinatio n	Max	49.1	-33.0	20.3	0.4	24.2	1858.1
3614	0.7	C_SLE_rara_ENV	Combinatio n	Max	49.1	-31.4	20.3	0.4	39.2	1996.0
3614	1.1	C_SLE_rara_ENV	Combinatio n	Max	49.1	-29.7	20.3	0.4	54.2	2133.3
3614	0.0	C_SLE_rara_ENV	Combinatio n	Min	-16.5	-413.8	-97.3	-0.2	-51.3	125.2
3614	0.4	C_SLE_rara_ENV	Combinatio n	Min	-16.5	-412.2	-97.3	-0.2	-37.5	137.9
3614	0.7	C_SLE_rara_ENV	Combinatio n	Min	-16.5	-410.6	-97.3	-0.2	-23.8	150.0
3614	1.1	C_SLE_rara_ENV	Combinatio n	Min	-16.5	-409.0	-97.3	-0.2	-11.7	161.5
3615	0.0	C_SLE_rara_ENV	Combinatio n	Max	66.1	-25.2	30.5	1.1	52.4	2127.4
3615	0.2	C_SLE_rara_ENV	Combinatio n	Max	66.1	-24.5	30.5	1.1	61.7	2177.5
3615	0.0	C_SLE_rara_ENV	Combinatio n	Min	-8.8	-376.9	-167.1	-0.8	-8.1	157.5
3615	0.2	C_SLE_rara_ENV	Combinatio n	Min	-8.8	-376.2	-167.1	-0.8	-6.7	162.7

3616	0.0	C_SLE_rara_ENV	Combinatio n	Max	43.9	-12.0	127.6	0.2	57.7	2176.6
3616	0.5	C_SLE_rara_ENV	Combinatio n	Max	43.9	-10.0	127.6	0.2	31.8	2320.0
3616	0.9	C_SLE_rara_ENV	Combinatio n	Max	43.9	-7.9	127.6	0.2	6.0	2462.4
3616	0.0	C_SLE_rara_ENV	Combinatio n	Min	-67.5	-354.8	-10.0	-0.4	-5.8	162.9
3616	0.5	C_SLE_rara_ENV	Combinatio n	Min	-67.5	-352.8	-10.0	-0.4	-31.9	177.7
3616	0.9	C_SLE_rara_ENV	Combinatio n	Min	-67.5	-350.7	-10.0	-0.4	-59.4	191.6
3617	0.0	C_SLE_rara_ENV	Combinatio n	Max	40.9	3.1	72.2	0.2	34.3	2442.4
3617	0.4	C_SLE_rara_ENV	Combinatio n	Max	40.9	4.7	72.2	0.2	24.1	2539.3
3617	0.7	C_SLE_rara_ENV	Combinatio n	Max	40.9	6.4	72.2	0.2	13.9	2635.6
3617	1.1	C_SLE_rara_ENV	Combinatio n	Max	40.9	8.0	72.2	0.2	3.8	2731.4
3617	0.0	C_SLE_rara_ENV	Combinatio n	Min	-24.3	-326.6	-13.5	-0.2	-11.5	187.0
3617	0.4	C_SLE_rara_ENV	Combinatio n	Min	-24.3	-325.0	-13.5	-0.2	-22.5	197.5
3617	0.7	C_SLE_rara_ENV	Combinatio n	Min	-24.3	-323.4	-13.5	-0.2	-33.5	207.4
3617	1.1	C_SLE_rara_ENV	Combinatio n	Min	-24.3	-321.7	-13.5	-0.2	-44.4	216.7
3618	0.0	C_SLE_rara_ENV	Combinatio n	Max	50.1	22.6	33.4	0.4	13.2	2724.8
3618	0.5	C_SLE_rara_ENV	Combinatio n	Max	50.1	24.7	33.4	0.4	13.7	2834.1
3618	1.0	C_SLE_rara_ENV	Combinatio n	Max	50.1	26.9	33.4	0.4	14.7	2942.4
3618	0.0	C_SLE_rara_ENV	Combinatio n	Min	-6.6	-298.8	-43.4	-0.3	-28.9	212.3
3618	0.5	C_SLE_rara_ENV	Combinatio n	Min	-6.6	-296.7	-43.4	-0.3	-25.1	223.3
3618	1.0	C_SLE_rara_ENV	Combinatio n	Min	-6.6	-294.5	-43.4	-0.3	-21.3	233.3
3619	0.0	C_SLE_rara_ENV	Combinatio n	Max	50.1	26.9	33.4	2.9	14.7	2942.3
3619	0.1	C_SLE_rara_ENV	Combinatio n	Max	50.1	27.4	33.4	2.9	19.7	2973.8

3619	0.0	C_SLE_rara_ENV	Combinatio n	Min	-6.6	-294.5	-43.4	-3.6	-21.3	230.7
3619	0.1	C_SLE_rara_ENV	Combinatio n	Min	-6.6	-294.0	-43.4	-3.6	-25.2	232.9
3620	0.0	C_SLE_rara_ENV	Combinatio n	Max	60.0	41.5	16.6	0.4	8.2	2978.6
3620	0.4	C_SLE_rara_ENV	Combinatio n	Max	60.0	43.1	16.6	0.4	19.1	3047.4
3620	0.7	C_SLE_rara_ENV	Combinatio n	Max	60.0	44.7	16.6	0.4	30.5	3115.7
3620	1.1	C_SLE_rara_ENV	Combinatio n	Max	60.0	46.3	16.6	0.4	41.9	3183.3
3620	0.0	C_SLE_rara_ENV	Combinatio n	Min	-8.1	-268.7	-84.2	-0.3	-50.6	228.0
3620	0.4	C_SLE_rara_ENV	Combinatio n	Min	-8.1	-267.1	-84.2	-0.3	-38.0	234.4
3620	0.7	C_SLE_rara_ENV	Combinatio n	Min	-8.1	-265.5	-84.2	-0.3	-25.4	240.3
3620	1.1	C_SLE_rara_ENV	Combinatio n	Min	-8.1	-263.9	-84.2	-0.3	-12.9	245.6
3621	0.0	C_SLE_rara_ENV	Combinatio n	Max	69.2	60.8	23.1	0.4	18.6	3192.9
3621	0.4	C_SLE_rara_ENV	Combinatio n	Max	69.2	62.6	23.1	0.4	41.4	3245.5
3621	0.8	C_SLE_rara_ENV	Combinatio n	Max	69.2	64.4	23.1	0.4	64.3	3297.3
3621	0.0	C_SLE_rara_ENV	Combinatio n	Min	-14.7	-235.3	-139.2	-0.6	-52.2	241.7
3621	0.4	C_SLE_rara_ENV	Combinatio n	Min	-14.7	-233.5	-139.2	-0.6	-31.0	247.3
3621	0.8	C_SLE_rara_ENV	Combinatio n	Min	-14.7	-231.6	-139.2	-0.6	-12.2	252.2
3622	0.0	C_SLE_rara_ENV	Combinatio n	Max	65.8	76.2	167.3	1.1	59.8	3297.4
3622	0.3	C_SLE_rara_ENV	Combinatio n	Max	65.8	77.4	167.3	1.1	45.5	3336.7
3622	0.0	C_SLE_rara_ENV	Combinatio n	Min	-82.8	-213.5	-22.8	-0.5	-11.7	252.2
3622	0.3	C_SLE_rara_ENV	Combinatio n	Min	-82.8	-212.3	-22.8	-0.5	-14.6	255.2
3623	0.0	C_SLE_rara_ENV	Combinatio n	Max	60.8	101.2	105.3	0.2	60.8	3317.7
3623	0.4	C_SLE_rara_ENV	Combinatio n	Max	60.8	102.8	105.3	0.2	43.8	3341.1

3623	0.7	C_SLE_rara_ENV	Combinatio n	Max	60.8	104.5	105.3	0.2	26.9	3364.0
3623	1.1	C_SLE_rara_ENV	Combinatio n	Max	60.8	106.1	105.3	0.2	9.9	3386.2
3623	0.0	C_SLE_rara_ENV	Combinatio n	Min	-45.8	-187.6	-12.7	-0.6	-8.8	252.7
3623	0.4	C_SLE_rara_ENV	Combinatio n	Min	-45.8	-186.0	-12.7	-0.6	-23.2	256.8
3623	0.7	C_SLE_rara_ENV	Combinatio n	Min	-45.8	-184.4	-12.7	-0.6	-39.3	260.2
3623	1.1	C_SLE_rara_ENV	Combinatio n	Min	-45.8	-182.7	-12.7	-0.6	-55.3	263.2
3624	0.0	C_SLE_rara_ENV	Combinatio n	Max	54.3	129.8	57.2	0.2	26.3	3371.5
3624	0.4	C_SLE_rara_ENV	Combinatio n	Max	54.3	131.5	57.2	0.2	20.4	3379.7
3624	0.8	C_SLE_rara_ENV	Combinatio n	Max	54.3	133.2	57.2	0.2	14.6	3387.2
3624	1.1	C_SLE_rara_ENV	Combinatio n	Max	54.3	134.9	57.2	0.2	8.7	3394.1
3624	0.0	C_SLE_rara_ENV	Combinatio n	Min	-13.7	-160.8	-21.8	-0.5	-19.1	260.5
3624	0.4	C_SLE_rara_ENV	Combinatio n	Min	-13.7	-159.1	-21.8	-0.5	-26.5	262.8
3624	0.8	C_SLE_rara_ENV	Combinatio n	Min	-13.7	-157.4	-21.8	-0.5	-33.8	264.6
3624	1.1	C_SLE_rara_ENV	Combinatio n	Min	-13.7	-155.7	-21.8	-0.5	-41.2	265.7
3625	0.0	C_SLE_rara_ENV	Combinatio n	Max	58.9	157.4	21.1	0.2	9.1	3399.6
3625	0.4	C_SLE_rara_ENV	Combinatio n	Max	58.9	159.1	21.1	0.2	14.7	3391.7
3625	0.8	C_SLE_rara_ENV	Combinatio n	Max	58.9	160.8	21.1	0.2	20.4	3383.2
3625	1.1	C_SLE_rara_ENV	Combinatio n	Max	58.9	162.5	21.1	0.2	26.0	3374.0
3625	0.0	C_SLE_rara_ENV	Combinatio n	Min	-2.6	-133.6	-57.0	-0.4	-41.2	262.9
3625	0.4	C_SLE_rara_ENV	Combinatio n	Min	-2.6	-131.9	-57.0	-0.4	-33.7	261.9
3625	0.8	C_SLE_rara_ENV	Combinatio n	Min	-2.6	-130.2	-57.0	-0.4	-26.2	260.3
3625	1.1	C_SLE_rara_ENV	Combinatio n	Min	-2.6	-128.5	-57.0	-0.4	-18.8	258.1

3626	0.0	C_SLE_rara_ENV	Combinatio n	Max	68.1	184.7	14.3	0.3	9.4	3397.4
3626	0.4	C_SLE_rara_ENV	Combinatio n	Max	68.1	186.3	14.3	0.3	25.9	3372.7
3626	0.7	C_SLE_rara_ENV	Combinatio n	Max	68.1	187.9	14.3	0.3	42.4	3347.4
3626	1.1	C_SLE_rara_ENV	Combinatio n	Max	68.1	189.5	14.3	0.3	58.9	3321.6
3626	0.0	C_SLE_rara_ENV	Combinatio n	Min	-9.2	-104.6	-104.9	-0.5	-55.8	255.4
3626	0.4	C_SLE_rara_ENV	Combinatio n	Min	-9.2	-103.0	-104.9	-0.5	-39.6	252.7
3626	0.7	C_SLE_rara_ENV	Combinatio n	Min	-9.2	-101.3	-104.9	-0.5	-23.4	249.3
3626	1.1	C_SLE_rara_ENV	Combinatio n	Min	-9.2	-99.7	-104.9	-0.5	-8.9	245.4
3627	0.0	C_SLE_rara_ENV	Combinatio n	Max	75.7	213.8	24.3	0.4	42.2	3345.4
3627	0.3	C_SLE_rara_ENV	Combinatio n	Max	75.7	215.0	24.3	0.4	56.0	3305.1
3627	0.0	C_SLE_rara_ENV	Combinatio n	Min	-6.1	-75.2	-165.0	-1.5	-18.4	244.2
3627	0.3	C_SLE_rara_ENV	Combinatio n	Min	-6.1	-74.0	-165.0	-1.5	-11.4	241.4
3628	0.0	C_SLE_rara_ENV	Combinatio n	Max	67.7	231.8	130.3	0.3	61.1	3305.7
3628	0.4	C_SLE_rara_ENV	Combinatio n	Max	67.7	233.6	130.3	0.3	41.7	3250.2
3628	0.8	C_SLE_rara_ENV	Combinatio n	Max	67.7	235.5	130.3	0.3	22.2	3194.0
3628	0.0	C_SLE_rara_ENV	Combinatio n	Min	-63.8	-61.9	-23.0	-0.7	-11.9	241.3
3628	0.4	C_SLE_rara_ENV	Combinatio n	Min	-63.8	-60.0	-23.0	-0.7	-29.5	236.9
3628	0.8	C_SLE_rara_ENV	Combinatio n	Min	-63.8	-58.2	-23.0	-0.7	-49.1	231.7
3629	0.0	C_SLE_rara_ENV	Combinatio n	Max	55.8	264.6	79.3	0.2	39.8	3194.0
3629	0.4	C_SLE_rara_ENV	Combinatio n	Max	55.8	266.2	79.3	0.2	30.1	3124.2
3629	0.7	C_SLE_rara_ENV	Combinatio n	Max	55.8	267.8	79.3	0.2	20.4	3053.8
3629	1.1	C_SLE_rara_ENV	Combinatio n	Max	55.8	269.4	79.3	0.2	10.6	2982.8

3629	0.0	C_SLE_rara_ENV	Combinatio n	Min	-29.2	-42.8	-18.4	-0.8	-14.9	232.8
3629	0.4	C_SLE_rara_ENV	Combinatio n	Min	-29.2	-41.1	-18.4	-0.8	-26.1	228.0
3629	0.7	C_SLE_rara_ENV	Combinatio n	Min	-29.2	-39.5	-18.4	-0.8	-37.2	222.6
3629	1.1	C_SLE_rara_ENV	Combinatio n	Min	-29.2	-37.9	-18.4	-0.8	-48.3	216.6
3630	0.0	C_SLE_rara_ENV	Combinatio n	Max	49.8	296.1	41.8	3.3	19.3	2990.8
3630	0.1	C_SLE_rara_ENV	Combinatio n	Max	49.8	296.6	41.8	3.3	14.6	2958.9
3630	0.0	C_SLE_rara_ENV	Combinatio n	Min	-8.9	-23.9	-35.6	-3.3	-26.0	217.8
3630	0.1	C_SLE_rara_ENV	Combinatio n	Min	-8.9	-23.4	-35.6	-3.3	-21.8	215.7
3631	0.0	C_SLE_rara_ENV	Combinatio n	Max	49.8	296.6	41.8	0.2	14.6	2960.5
3631	0.5	C_SLE_rara_ENV	Combinatio n	Max	49.8	298.8	41.8	0.2	14.7	2849.0
3631	1.0	C_SLE_rara_ENV	Combinatio n	Max	49.8	300.9	41.8	0.2	14.8	2736.5
3631	0.0	C_SLE_rara_ENV	Combinatio n	Min	-8.8	-23.4	-35.6	-0.6	-21.8	219.3
3631	0.5	C_SLE_rara_ENV	Combinatio n	Min	-8.8	-21.2	-35.6	-0.6	-24.8	209.8
3631	1.0	C_SLE_rara_ENV	Combinatio n	Min	-8.8	-19.1	-35.6	-0.6	-27.7	199.1
3632	0.0	C_SLE_rara_ENV	Combinatio n	Max	53.4	326.0	13.8	0.1	5.3	2758.3
3632	0.4	C_SLE_rara_ENV	Combinatio n	Max	53.4	327.6	13.8	0.1	14.4	2660.0
3632	0.7	C_SLE_rara_ENV	Combinatio n	Max	53.4	329.2	13.8	0.1	23.9	2561.1
3632	1.1	C_SLE_rara_ENV	Combinatio n	Max	53.4	330.8	13.8	0.1	33.4	2461.7
3632	0.0	C_SLE_rara_ENV	Combinatio n	Min	-5.3	-4.1	-70.3	-0.3	-43.5	200.3
3632	0.4	C_SLE_rara_ENV	Combinatio n	Min	-5.3	-2.5	-70.3	-0.3	-32.5	191.4
3632	0.7	C_SLE_rara_ENV	Combinatio n	Min	-5.3	-0.9	-70.3	-0.3	-21.4	181.9
3632	1.1	C_SLE_rara_ENV	Combinatio n	Min	-5.3	0.7	-70.3	-0.3	-10.4	171.7

3633	0.0	C_SLE_rara_ENV	Combinatio n	Max	53.8	356.5	11.1	0.2	6.4	2491.7
3633	0.5	C_SLE_rara_ENV	Combinatio n	Max	53.8	358.6	11.1	0.2	29.8	2345.0
3633	0.9	C_SLE_rara_ENV	Combinatio n	Max	53.8	360.6	11.1	0.2	53.1	2197.4
3633	0.0	C_SLE_rara_ENV	Combinatio n	Min	-12.4	10.1	-120.8	-0.4	-57.7	173.0
3633	0.5	C_SLE_rara_ENV	Combinatio n	Min	-12.4	12.1	-120.8	-0.4	-32.0	159.7
3633	0.9	C_SLE_rara_ENV	Combinatio n	Min	-12.4	14.2	-120.8	-0.4	-6.4	145.6
3634	0.0	C_SLE_rara_ENV	Combinatio n	Max	57.5	378.9	154.4	0.7	57.6	2198.2
3634	0.2	C_SLE_rara_ENV	Combinatio n	Max	57.5	379.6	154.4	0.7	51.7	2146.8
3634	0.0	C_SLE_rara_ENV	Combinatio n	Min	-77.8	26.4	-34.6	-0.9	-6.5	145.6
3634	0.2	C_SLE_rara_ENV	Combinatio n	Min	-77.8	27.2	-34.6	-0.9	-6.3	140.6
3635	0.0	C_SLE_rara_ENV	Combinatio n	Max	42.5	414.0	91.8	0.1	50.7	2159.1
3635	0.4	C_SLE_rara_ENV	Combinatio n	Max	42.5	415.6	91.8	0.1	38.5	2017.4
3635	0.7	C_SLE_rara_ENV	Combinatio n	Max	42.5	417.2	91.8	0.1	26.3	1875.0
3635	1.1	C_SLE_rara_ENV	Combinatio n	Max	42.5	418.8	91.8	0.1	14.1	1732.2
3635	0.0	C_SLE_rara_ENV	Combinatio n	Min	-51.4	26.7	-23.3	-0.5	-12.4	144.2
3635	0.4	C_SLE_rara_ENV	Combinatio n	Min	-51.4	28.3	-23.3	-0.5	-24.3	133.7
3635	0.7	C_SLE_rara_ENV	Combinatio n	Min	-51.4	30.0	-23.3	-0.5	-36.8	122.5
3635	1.1	C_SLE_rara_ENV	Combinatio n	Min	-51.4	31.6	-23.3	-0.5	-49.2	110.8
3636	0.0	C_SLE_rara_ENV	Combinatio n	Max	42.2	448.8	51.8	0.1	22.8	1733.3
3636	0.4	C_SLE_rara_ENV	Combinatio n	Max	42.2	450.4	51.8	0.1	19.8	1575.7
3636	0.7	C_SLE_rara_ENV	Combinatio n	Max	42.2	452.0	51.8	0.1	16.8	1417.6
3636	1.1	C_SLE_rara_ENV	Combinatio n	Max	42.2	453.6	51.8	0.1	13.8	1259.0

3636	0.0	C_SLE_rara_ENV	Combinatio n	Min	-21.9	31.2	-32.3	-0.4	-21.9	115.7
3636	0.4	C_SLE_rara_ENV	Combinatio n	Min	-21.9	32.8	-32.3	-0.4	-26.0	103.6
3636	0.7	C_SLE_rara_ENV	Combinatio n	Min	-21.9	34.4	-32.3	-0.4	-30.1	90.9
3636	1.1	C_SLE_rara_ENV	Combinatio n	Min	-21.9	36.0	-32.3	-0.4	-34.2	77.6
3637	0.0	C_SLE_rara_ENV	Combinatio n	Max	46.0	478.0	24.1	0.1	8.6	1266.5
3637	0.4	C_SLE_rara_ENV	Combinatio n	Max	46.0	479.6	24.1	0.1	13.9	1097.5
3637	0.7	C_SLE_rara_ENV	Combinatio n	Max	46.0	481.2	24.1	0.1	19.3	927.8
3637	1.1	C_SLE_rara_ENV	Combinatio n	Max	46.0	482.8	24.1	0.1	24.7	757.6
3637	0.0	C_SLE_rara_ENV	Combinatio n	Min	-10.0	36.0	-55.7	-0.4	-36.3	82.8
3637	0.4	C_SLE_rara_ENV	Combinatio n	Min	-10.0	37.6	-55.7	-0.4	-30.4	68.9
3637	0.7	C_SLE_rara_ENV	Combinatio n	Min	-10.0	39.2	-55.7	-0.4	-24.4	54.4
3637	1.1	C_SLE_rara_ENV	Combinatio n	Min	-10.0	40.8	-55.7	-0.4	-18.5	39.4
3638	0.0	C_SLE_rara_ENV	Combinatio n	Max	46.5	503.4	6.6	0.2	2.9	769.6
3638	0.4	C_SLE_rara_ENV	Combinatio n	Max	46.5	505.0	6.6	0.2	15.5	592.8
3638	0.7	C_SLE_rara_ENV	Combinatio n	Max	46.5	506.6	6.6	0.2	28.1	415.3
3638	1.1	C_SLE_rara_ENV	Combinatio n	Max	46.5	508.2	6.6	0.2	40.7	237.2
3638	0.0	C_SLE_rara_ENV	Combinatio n	Min	-8.9	40.9	-82.6	-0.4	-48.7	45.2
3638	0.4	C_SLE_rara_ENV	Combinatio n	Min	-8.9	42.5	-82.6	-0.4	-34.4	28.8
3638	0.7	C_SLE_rara_ENV	Combinatio n	Min	-8.9	44.1	-82.6	-0.4	-20.0	11.9
3638	1.1	C_SLE_rara_ENV	Combinatio n	Min	-8.9	45.7	-82.6	-0.4	-5.6	-5.7
3639	0.0	C_SLE_rara_ENV	Combinatio n	Max	48.8	525.2	12.2	0.4	5.1	245.1
3639	0.5	C_SLE_rara_ENV	Combinatio n	Max	48.8	527.4	12.2	0.4	26.2	10.0

3639	0.0	C_SLE_rara_ENV	Combinatio n	Min	-12.6	46.5	-120.7	-0.5	-39.9	5.7
3639	0.5	C_SLE_rara_ENV	Combinatio n	Min	-12.6	48.7	-120.7	-0.5	-9.9	-49.1
3640	0.0	C_SLE_rara_ENV	Combinatio n	Max	65.0	-40.3	63.2	0.6	14.7	19.3
3640	0.5	C_SLE_rara_ENV	Combinatio n	Max	65.0	-39.5	63.2	0.6	39.1	296.9
3640	0.0	C_SLE_rara_ENV	Combinatio n	Min	-43.1	-637.9	-133.2	-0.2	-35.0	-90.4
3640	0.5	C_SLE_rara_ENV	Combinatio n	Min	-43.1	-637.1	-133.2	-0.2	-26.6	-25.6
3641	0.0	C_SLE_rara_ENV	Combinatio n	Max	49.8	-37.7	65.9	0.5	36.0	321.5
3641	0.4	C_SLE_rara_ENV	Combinatio n	Max	49.8	-37.1	65.9	0.5	32.2	509.0
3641	0.7	C_SLE_rara_ENV	Combinatio n	Max	49.8	-36.5	65.9	0.5	38.6	696.2
3641	1.1	C_SLE_rara_ENV	Combinatio n	Max	49.8	-35.9	65.9	0.5	45.0	883.3
3641	0.0	C_SLE_rara_ENV	Combinatio n	Min	-70.1	-564.2	-78.7	-0.2	-40.4	-36.1
3641	0.4	C_SLE_rara_ENV	Combinatio n	Min	-70.1	-563.7	-78.7	-0.2	-34.9	-19.0
3641	0.7	C_SLE_rara_ENV	Combinatio n	Min	-70.1	-563.1	-78.7	-0.2	-29.5	-2.2
3641	1.1	C_SLE_rara_ENV	Combinatio n	Min	-70.1	-562.5	-78.7	-0.2	-35.2	14.5
3642	0.0	C_SLE_rara_ENV	Combinatio n	Max	49.1	-7.7	76.1	0.4	42.2	890.6
3642	0.4	C_SLE_rara_ENV	Combinatio n	Max	49.1	-7.1	76.1	0.4	34.3	1042.1
3642	0.7	C_SLE_rara_ENV	Combinatio n	Max	49.1	-6.5	76.1	0.4	33.2	1193.4
3642	1.1	C_SLE_rara_ENV	Combinatio n	Max	49.1	-5.9	76.1	0.4	32.1	1344.5
3642	0.0	C_SLE_rara_ENV	Combinatio n	Min	-88.0	-498.7	-53.4	-0.2	-26.1	15.7
3642	0.4	C_SLE_rara_ENV	Combinatio n	Min	-88.0	-498.1	-53.4	-0.2	-27.7	31.6
3642	0.7	C_SLE_rara_ENV	Combinatio n	Min	-88.0	-497.5	-53.4	-0.2	-29.4	47.4
3642	1.1	C_SLE_rara_ENV	Combinatio n	Min	-88.0	-497.0	-53.4	-0.2	-40.2	62.9

3643	0.0	C_SLE_rara_ENV	Combinatio n	Max	58.5	40.9	86.9	0.3	49.9	1332.8
3643	0.4	C_SLE_rara_ENV	Combinatio n	Max	58.5	41.4	86.9	0.3	39.8	1453.8
3643	0.7	C_SLE_rara_ENV	Combinatio n	Max	58.5	42.0	86.9	0.3	31.6	1574.5
3643	1.1	C_SLE_rara_ENV	Combinatio n	Max	58.5	42.6	86.9	0.3	23.3	1695.1
3643	0.0	C_SLE_rara_ENV	Combinatio n	Min	-80.4	-445.9	-40.1	-0.2	-22.9	65.0
3643	0.4	C_SLE_rara_ENV	Combinatio n	Min	-80.4	-445.3	-40.1	-0.2	-25.3	79.9
3643	0.7	C_SLE_rara_ENV	Combinatio n	Min	-80.4	-444.7	-40.1	-0.2	-32.3	94.6
3643	1.1	C_SLE_rara_ENV	Combinatio n	Min	-80.4	-444.1	-40.1	-0.2	-44.8	109.1
3644	0.0	C_SLE_rara_ENV	Combinatio n	Max	81.0	83.7	118.3	0.3	66.2	1668.1
3644	0.4	C_SLE_rara_ENV	Combinatio n	Max	81.0	84.3	118.3	0.3	51.4	1769.9
3644	0.7	C_SLE_rara_ENV	Combinatio n	Max	81.0	84.9	118.3	0.3	39.0	1871.6
3644	1.1	C_SLE_rara_ENV	Combinatio n	Max	81.0	85.4	118.3	0.3	35.8	1973.0
3644	0.0	C_SLE_rara_ENV	Combinatio n	Min	-51.0	-409.5	-67.1	-0.3	-36.7	112.2
3644	0.4	C_SLE_rara_ENV	Combinatio n	Min	-51.0	-408.9	-67.1	-0.3	-38.9	125.9
3644	0.7	C_SLE_rara_ENV	Combinatio n	Min	-51.0	-408.3	-67.1	-0.3	-48.0	138.7
3644	1.1	C_SLE_rara_ENV	Combinatio n	Min	-51.0	-407.7	-67.1	-0.3	-61.8	150.9
3645	0.0	C_SLE_rara_ENV	Combinatio n	Max	81.6	115.6	187.2	0.3	44.8	1963.8
3645	0.2	C_SLE_rara_ENV	Combinatio n	Max	81.6	115.8	187.2	0.3	47.4	1996.4
3645	0.0	C_SLE_rara_ENV	Combinatio n	Min	-29.1	-385.2	-137.7	-2.0	-30.8	149.5
3645	0.2	C_SLE_rara_ENV	Combinatio n	Min	-29.1	-384.9	-137.7	-2.0	-35.4	154.4
3646	0.0	C_SLE_rara_ENV	Combinatio n	Max	128.5	74.4	105.8	0.5	46.3	1996.8
3646	0.5	C_SLE_rara_ENV	Combinatio n	Max	128.5	75.1	105.8	0.5	42.0	2137.9

3646	0.9	C_SLE_rara_ENV	Combinatio n	Max	128.5	75.9	105.8	0.5	55.2	2278.7
3646	0.0	C_SLE_rara_ENV	Combinatio n	Min	-103.2	-420.2	-112.5	-0.2	-48.2	154.7
3646	0.5	C_SLE_rara_ENV	Combinatio n	Min	-103.2	-419.5	-112.5	-0.2	-42.3	165.4
3646	0.9	C_SLE_rara_ENV	Combinatio n	Min	-103.2	-418.7	-112.5	-0.2	-52.9	175.8
3647	0.0	C_SLE_rara_ENV	Combinatio n	Max	82.2	97.5	71.5	0.3	40.2	2302.9
3647	0.4	C_SLE_rara_ENV	Combinatio n	Max	82.2	98.1	71.5	0.3	35.3	2391.1
3647	0.7	C_SLE_rara_ENV	Combinatio n	Max	82.2	98.7	71.5	0.3	38.3	2479.1
3647	1.1	C_SLE_rara_ENV	Combinatio n	Max	82.2	99.2	71.5	0.3	41.3	2566.8
3647	0.0	C_SLE_rara_ENV	Combinatio n	Min	-88.3	-381.9	-64.7	-0.3	-29.3	169.9
3647	0.4	C_SLE_rara_ENV	Combinatio n	Min	-88.3	-381.3	-64.7	-0.3	-28.8	176.8
3647	0.7	C_SLE_rara_ENV	Combinatio n	Min	-88.3	-380.7	-64.7	-0.3	-30.5	183.5
3647	1.1	C_SLE_rara_ENV	Combinatio n	Min	-88.3	-380.1	-64.7	-0.3	-37.6	190.0
3648	0.0	C_SLE_rara_ENV	Combinatio n	Max	74.5	129.5	74.2	0.5	42.3	2567.2
3648	0.5	C_SLE_rara_ENV	Combinatio n	Max	74.5	130.3	74.2	0.5	31.4	2649.5
3648	1.0	C_SLE_rara_ENV	Combinatio n	Max	74.5	131.0	74.2	0.5	24.1	2731.4
3648	0.0	C_SLE_rara_ENV	Combinatio n	Min	-70.6	-342.3	-44.7	-0.6	-22.0	185.1
3648	0.5	C_SLE_rara_ENV	Combinatio n	Min	-70.6	-341.5	-44.7	-0.6	-22.1	192.3
3648	1.0	C_SLE_rara_ENV	Combinatio n	Min	-70.6	-340.7	-44.7	-0.6	-30.4	199.1
3649	0.0	C_SLE_rara_ENV	Combinatio n	Max	74.5	131.0	74.2	6.2	24.1	2731.0
3649	0.1	C_SLE_rara_ENV	Combinatio n	Max	74.5	131.2	74.2	6.2	29.3	2761.6
3649	0.0	C_SLE_rara_ENV	Combinatio n	Min	-70.6	-340.7	-44.7	-3.8	-30.4	196.3
3649	0.1	C_SLE_rara_ENV	Combinatio n	Min	-70.6	-340.5	-44.7	-3.8	-39.2	198.0

3650	0.0	C_SLE_rara_ENV	Combinatio n	Max	89.1	162.6	97.5	0.4	62.2	2738.7
3650	0.4	C_SLE_rara_ENV	Combinatio n	Max	89.1	163.2	97.5	0.4	51.3	2783.2
3650	0.7	C_SLE_rara_ENV	Combinatio n	Max	89.1	163.7	97.5	0.4	40.4	2827.5
3650	1.1	C_SLE_rara_ENV	Combinatio n	Max	89.1	164.3	97.5	0.4	35.7	2871.5
3650	0.0	C_SLE_rara_ENV	Combinatio n	Min	-44.1	-308.0	-69.1	-0.5	-40.3	192.7
3650	0.4	C_SLE_rara_ENV	Combinatio n	Min	-44.1	-307.4	-69.1	-0.5	-37.3	196.9
3650	0.7	C_SLE_rara_ENV	Combinatio n	Min	-44.1	-306.8	-69.1	-0.5	-37.3	200.9
3650	1.1	C_SLE_rara_ENV	Combinatio n	Min	-44.1	-306.2	-69.1	-0.5	-46.0	204.7
3651	0.0	C_SLE_rara_ENV	Combinatio n	Max	105.9	193.4	147.9	0.3	70.9	2838.4
3651	0.4	C_SLE_rara_ENV	Combinatio n	Max	105.9	194.0	147.9	0.3	51.4	2867.0
3651	0.8	C_SLE_rara_ENV	Combinatio n	Max	105.9	194.7	147.9	0.3	51.4	2895.3
3651	0.0	C_SLE_rara_ENV	Combinatio n	Min	-22.2	-283.2	-120.5	-1.0	-52.9	201.9
3651	0.4	C_SLE_rara_ENV	Combinatio n	Min	-22.2	-282.6	-120.5	-1.0	-44.4	205.2
3651	0.8	C_SLE_rara_ENV	Combinatio n	Min	-22.2	-281.9	-120.5	-1.0	-51.3	208.4
3652	0.0	C_SLE_rara_ENV	Combinatio n	Max	160.2	166.6	162.0	2.4	48.7	2896.3
3652	0.3	C_SLE_rara_ENV	Combinatio n	Max	160.2	167.0	162.0	2.4	37.3	2944.9
3652	0.0	C_SLE_rara_ENV	Combinatio n	Min	-105.0	-313.7	-169.3	-0.4	-50.6	208.5
3652	0.3	C_SLE_rara_ENV	Combinatio n	Min	-105.0	-313.3	-169.3	-0.4	-45.0	209.6
3653	0.0	C_SLE_rara_ENV	Combinatio n	Max	116.7	185.1	91.9	0.4	50.2	2958.5
3653	0.4	C_SLE_rara_ENV	Combinatio n	Max	116.7	185.7	91.9	0.4	47.5	2991.2
3653	0.7	C_SLE_rara_ENV	Combinatio n	Max	116.7	186.3	91.9	0.4	54.3	3023.7
3653	1.1	C_SLE_rara_ENV	Combinatio n	Max	116.7	186.9	91.9	0.4	64.8	3056.0

3653	0.0	C_SLE_rara_ENV	Combinatio n	Min	-85.9	-286.1	-109.0	-0.5	-53.5	207.4
3653	0.4	C_SLE_rara_ENV	Combinatio n	Min	-85.9	-285.6	-109.0	-0.5	-45.7	208.3
3653	0.7	C_SLE_rara_ENV	Combinatio n	Min	-85.9	-285.0	-109.0	-0.5	-45.8	208.9
3653	1.1	C_SLE_rara_ENV	Combinatio n	Min	-85.9	-284.4	-109.0	-0.5	-50.2	209.4
3654	0.0	C_SLE_rara_ENV	Combinatio n	Max	88.7	211.1	63.0	0.3	40.3	3076.2
3654	0.4	C_SLE_rara_ENV	Combinatio n	Max	88.7	211.7	63.0	0.3	39.1	3088.9
3654	0.8	C_SLE_rara_ENV	Combinatio n	Max	88.7	212.3	63.0	0.3	44.1	3101.4
3654	1.1	C_SLE_rara_ENV	Combinatio n	Max	88.7	213.0	63.0	0.3	49.1	3113.7
3654	0.0	C_SLE_rara_ENV	Combinatio n	Min	-72.8	-249.4	-65.8	-0.5	-29.1	208.3
3654	0.4	C_SLE_rara_ENV	Combinatio n	Min	-72.8	-248.7	-65.8	-0.5	-27.2	208.0
3654	0.8	C_SLE_rara_ENV	Combinatio n	Min	-72.8	-248.1	-65.8	-0.5	-29.0	207.4
3654	1.1	C_SLE_rara_ENV	Combinatio n	Min	-72.8	-247.5	-65.8	-0.5	-32.8	206.6
3655	0.0	C_SLE_rara_ENV	Combinatio n	Max	85.1	246.5	73.0	0.3	49.6	3108.0
3655	0.4	C_SLE_rara_ENV	Combinatio n	Max	85.1	247.1	73.0	0.3	44.3	3096.5
3655	0.8	C_SLE_rara_ENV	Combinatio n	Max	85.1	247.7	73.0	0.3	39.5	3084.7
3655	1.1	C_SLE_rara_ENV	Combinatio n	Max	85.1	248.3	73.0	0.3	34.8	3072.7
3655	0.0	C_SLE_rara_ENV	Combinatio n	Min	-56.4	-213.3	-53.5	-0.6	-33.4	207.3
3655	0.4	C_SLE_rara_ENV	Combinatio n	Min	-56.4	-212.7	-53.5	-0.6	-29.3	205.1
3655	0.8	C_SLE_rara_ENV	Combinatio n	Min	-56.4	-212.1	-53.5	-0.6	-26.8	202.8
3655	1.1	C_SLE_rara_ENV	Combinatio n	Min	-56.4	-211.5	-53.5	-0.6	-35.5	200.2
3656	0.0	C_SLE_rara_ENV	Combinatio n	Max	99.6	282.8	108.8	0.3	64.9	3043.7
3656	0.4	C_SLE_rara_ENV	Combinatio n	Max	99.6	283.4	108.8	0.3	54.7	3013.8

3656	0.7	C_SLE_rara_ENV	Combinatio n	Max	99.6	284.0	108.8	0.3	48.0	2983.8
3656	1.1	C_SLE_rara_ENV	Combinatio n	Max	99.6	284.6	108.8	0.3	50.9	2953.5
3656	0.0	C_SLE_rara_ENV	Combinatio n	Min	-28.7	-187.5	-93.4	-0.7	-51.0	201.4
3656	0.4	C_SLE_rara_ENV	Combinatio n	Min	-28.7	-186.9	-93.4	-0.7	-46.2	198.4
3656	0.7	C_SLE_rara_ENV	Combinatio n	Min	-28.7	-186.4	-93.4	-0.7	-45.9	195.2
3656	1.1	C_SLE_rara_ENV	Combinatio n	Min	-28.7	-185.8	-93.4	-0.7	-53.4	191.7
3657	0.0	C_SLE_rara_ENV	Combinatio n	Max	103.6	312.3	169.1	0.3	35.5	2935.0
3657	0.3	C_SLE_rara_ENV	Combinatio n	Max	103.6	312.7	169.1	0.3	46.4	2889.3
3657	0.0	C_SLE_rara_ENV	Combinatio n	Min	-21.4	-168.8	-161.8	-2.7	-47.5	193.3
3657	0.3	C_SLE_rara_ENV	Combinatio n	Min	-21.4	-168.4	-161.8	-2.7	-50.6	190.4
3658	0.0	C_SLE_rara_ENV	Combinatio n	Max	152.0	282.0	118.9	0.7	51.6	2890.2
3658	0.4	C_SLE_rara_ENV	Combinatio n	Max	152.0	282.7	118.9	0.7	51.4	2865.5
3658	0.8	C_SLE_rara_ENV	Combinatio n	Max	152.0	283.4	118.9	0.7	71.2	2840.6
3658	0.0	C_SLE_rara_ENV	Combinatio n	Min	-92.2	-196.3	-147.5	-0.4	-50.6	190.4
3658	0.4	C_SLE_rara_ENV	Combinatio n	Min	-92.2	-195.6	-147.5	-0.4	-43.1	185.0
3658	0.8	C_SLE_rara_ENV	Combinatio n	Min	-92.2	-195.0	-147.5	-0.4	-50.2	179.3
3659	0.0	C_SLE_rara_ENV	Combinatio n	Max	103.6	306.0	66.6	0.3	34.3	2864.5
3659	0.4	C_SLE_rara_ENV	Combinatio n	Max	103.6	306.6	66.6	0.3	39.5	2822.8
3659	0.7	C_SLE_rara_ENV	Combinatio n	Max	103.6	307.2	66.6	0.3	50.9	2780.9
3659	1.1	C_SLE_rara_ENV	Combinatio n	Max	103.6	307.8	66.6	0.3	62.3	2738.8
3659	0.0	C_SLE_rara_ENV	Combinatio n	Min	-82.7	-167.0	-98.2	-0.7	-45.0	180.7
3659	0.4	C_SLE_rara_ENV	Combinatio n	Min	-82.7	-166.5	-98.2	-0.7	-37.4	175.1

3659	0.7	C_SLE_rara_ENV	Combinatio n	Min	-82.7	-165.9	-98.2	-0.7	-36.8	169.2
3659	1.1	C_SLE_rara_ENV	Combinatio n	Min	-82.7	-165.3	-98.2	-0.7	-39.1	163.2
3660	0.0	C_SLE_rara_ENV	Combinatio n	Max	78.6	338.7	50.9	4.2	31.3	2748.3
3660	0.1	C_SLE_rara_ENV	Combinatio n	Max	78.6	338.8	50.9	4.2	25.3	2718.0
3660	0.0	C_SLE_rara_ENV	Combinatio n	Min	-74.6	-134.5	-65.3	-5.6	-33.2	165.8
3660	0.1	C_SLE_rara_ENV	Combinatio n	Min	-74.6	-134.3	-65.3	-5.6	-25.5	163.6
3661	0.0	C_SLE_rara_ENV	Combinatio n	Max	78.6	338.8	50.9	0.5	25.3	2717.7
3661	0.5	C_SLE_rara_ENV	Combinatio n	Max	78.6	339.6	50.9	0.5	31.3	2639.7
3661	1.0	C_SLE_rara_ENV	Combinatio n	Max	78.6	340.4	50.9	0.5	39.6	2561.2
3661	0.0	C_SLE_rara_ENV	Combinatio n	Min	-74.6	-134.3	-65.3	-0.6	-25.5	166.5
3661	0.5	C_SLE_rara_ENV	Combinatio n	Min	-74.6	-133.5	-65.3	-0.6	-22.0	157.6
3661	1.0	C_SLE_rara_ENV	Combinatio n	Min	-74.6	-132.7	-65.3	-0.6	-24.1	148.3
3662	0.0	C_SLE_rara_ENV	Combinatio n	Max	82.0	376.0	64.7	0.1	40.5	2544.7
3662	0.4	C_SLE_rara_ENV	Combinatio n	Max	82.0	376.6	64.7	0.1	38.3	2460.2
3662	0.7	C_SLE_rara_ENV	Combinatio n	Max	82.0	377.2	64.7	0.1	36.0	2375.5
3662	1.1	C_SLE_rara_ENV	Combinatio n	Max	82.0	377.8	64.7	0.1	34.2	2290.6
3662	0.0	C_SLE_rara_ENV	Combinatio n	Min	-57.7	-103.0	-66.1	-0.5	-37.8	150.8
3662	0.4	C_SLE_rara_ENV	Combinatio n	Min	-57.7	-102.4	-66.1	-0.5	-31.0	143.4
3662	0.7	C_SLE_rara_ENV	Combinatio n	Min	-57.7	-101.8	-66.1	-0.5	-28.5	135.7
3662	1.1	C_SLE_rara_ENV	Combinatio n	Min	-57.7	-101.2	-66.1	-0.5	-30.9	127.9
3663	0.0	C_SLE_rara_ENV	Combinatio n	Max	98.1	413.5	111.5	0.1	54.7	2255.5
3663	0.5	C_SLE_rara_ENV	Combinatio n	Max	98.1	414.2	111.5	0.1	41.8	2120.5

3663	0.9	C_SLE_rara_ENV	Combinatio n	Max	98.1	415.0	111.5	0.1	46.1	1985.2
3663	0.0	C_SLE_rara_ENV	Combinatio n	Min	-38.2	-81.1	-107.1	-0.7	-54.8	130.7
3663	0.5	C_SLE_rara_ENV	Combinatio n	Min	-38.2	-80.4	-107.1	-0.7	-43.2	120.1
3663	0.9	C_SLE_rara_ENV	Combinatio n	Min	-38.2	-79.6	-107.1	-0.7	-47.8	109.2
3664	0.0	C_SLE_rara_ENV	Combinatio n	Max	163.3	382.5	135.2	1.8	50.0	1986.3
3664	0.2	C_SLE_rara_ENV	Combinatio n	Max	163.3	382.8	135.2	1.8	48.9	1957.8
3664	0.0	C_SLE_rara_ENV	Combinatio n	Min	-116.7	-122.0	-186.9	-0.4	-34.4	109.3
3664	0.2	C_SLE_rara_ENV	Combinatio n	Min	-116.7	-121.7	-186.9	-0.4	-30.2	105.0
3665	0.0	C_SLE_rara_ENV	Combinatio n	Max	116.2	404.6	64.5	0.2	34.5	1959.2
3665	0.4	C_SLE_rara_ENV	Combinatio n	Max	116.2	405.2	64.5	0.2	38.4	1863.3
3665	0.7	C_SLE_rara_ENV	Combinatio n	Max	116.2	405.8	64.5	0.2	51.3	1767.3
3665	1.1	C_SLE_rara_ENV	Combinatio n	Max	116.2	406.4	64.5	0.2	66.6	1671.0
3665	0.0	C_SLE_rara_ENV	Combinatio n	Min	-97.5	-94.9	-119.0	-0.4	-62.2	106.9
3665	0.4	C_SLE_rara_ENV	Combinatio n	Min	-97.5	-94.3	-119.0	-0.4	-47.9	97.1
3665	0.7	C_SLE_rara_ENV	Combinatio n	Min	-97.5	-93.7	-119.0	-0.4	-38.3	87.1
3665	1.1	C_SLE_rara_ENV	Combinatio n	Min	-97.5	-93.1	-119.0	-0.4	-35.3	76.9
3666	0.0	C_SLE_rara_ENV	Combinatio n	Max	72.1	438.4	42.9	0.2	25.1	1682.7
3666	0.4	C_SLE_rara_ENV	Combinatio n	Max	72.1	439.0	42.9	0.2	31.0	1566.7
3666	0.7	C_SLE_rara_ENV	Combinatio n	Max	72.1	439.6	42.9	0.2	40.0	1450.5
3666	1.1	C_SLE_rara_ENV	Combinatio n	Max	72.1	440.2	42.9	0.2	49.1	1334.2
3666	0.0	C_SLE_rara_ENV	Combinatio n	Min	-84.0	-53.7	-81.9	-0.4	-41.0	78.4
3666	0.4	C_SLE_rara_ENV	Combinatio n	Min	-84.0	-53.1	-81.9	-0.4	-32.9	67.8

3666	0.7	C_SLE_rara_ENV	Combinatio n	Min	-84.0	-52.5	-81.9	-0.4	-24.9	57.0
3666	1.1	C_SLE_rara_ENV	Combinatio n	Min	-84.0	-51.9	-81.9	-0.4	-21.6	46.0
3667	0.0	C_SLE_rara_ENV	Combinatio n	Max	54.0	486.9	53.7	0.2	31.2	1327.4
3667	0.4	C_SLE_rara_ENV	Combinatio n	Max	54.0	487.4	53.7	0.2	32.7	1181.1
3667	0.7	C_SLE_rara_ENV	Combinatio n	Max	54.0	488.0	53.7	0.2	34.8	1034.6
3667	1.1	C_SLE_rara_ENV	Combinatio n	Max	54.0	488.6	53.7	0.2	37.0	887.9
3667	0.0	C_SLE_rara_ENV	Combinatio n	Min	-70.0	-3.5	-64.3	-0.5	-32.8	47.9
3667	0.4	C_SLE_rara_ENV	Combinatio n	Min	-70.0	-3.0	-64.3	-0.5	-30.1	36.5
3667	0.7	C_SLE_rara_ENV	Combinatio n	Min	-70.0	-2.4	-64.3	-0.5	-27.3	25.0
3667	1.1	C_SLE_rara_ENV	Combinatio n	Min	-70.0	-1.8	-64.3	-0.5	-27.0	13.2
3668	0.0	C_SLE_rara_ENV	Combinatio n	Max	37.5	549.2	77.1	0.2	44.3	865.8
3668	0.4	C_SLE_rara_ENV	Combinatio n	Max	37.5	549.8	77.1	0.2	38.9	683.8
3668	0.7	C_SLE_rara_ENV	Combinatio n	Max	37.5	550.4	77.1	0.2	33.5	501.5
3668	1.1	C_SLE_rara_ENV	Combinatio n	Max	37.5	551.0	77.1	0.2	31.3	319.0
3668	0.0	C_SLE_rara_ENV	Combinatio n	Min	-48.9	25.3	-58.7	-0.5	-32.2	13.4
3668	0.4	C_SLE_rara_ENV	Combinatio n	Min	-48.9	25.9	-58.7	-0.5	-30.5	-1.8
3668	0.7	C_SLE_rara_ENV	Combinatio n	Min	-48.9	26.5	-58.7	-0.5	-34.8	-17.2
3668	1.1	C_SLE_rara_ENV	Combinatio n	Min	-48.9	27.1	-58.7	-0.5	-39.1	-32.8
3669	0.0	C_SLE_rara_ENV	Combinatio n	Max	24.1	624.3	131.7	0.2	38.4	287.8
3669	0.5	C_SLE_rara_ENV	Combinatio n	Max	24.1	625.1	131.7	0.2	14.9	20.2
3669	0.0	C_SLE_rara_ENV	Combinatio n	Min	-45.9	30.6	-67.9	-0.7	-27.8	-21.7
3669	0.5	C_SLE_rara_ENV	Combinatio n	Min	-45.9	31.4	-67.9	-0.7	-34.2	-85.1

3670	0.0	C_SLE_rara_ENV	Combinatio n	Max	2.8	-5.1	60.7	0.4	10.6	25.8
3670	0.5	C_SLE_rara_ENV	Combinatio n	Max	2.8	-4.3	60.7	0.4	1.1	191.0
3670	0.0	C_SLE_rara_ENV	Combinatio n	Min	-29.3	-385.2	-5.4	-0.2	-12.8	-34.7
3670	0.5	C_SLE_rara_ENV	Combinatio n	Min	-29.3	-384.4	-5.4	-0.2	-28.0	-11.0
3671	0.0	C_SLE_rara_ENV	Combinatio n	Max	14.4	-2.4	38.3	0.4	20.1	206.3
3671	0.4	C_SLE_rara_ENV	Combinatio n	Max	14.4	-1.8	38.3	0.4	13.3	324.0
3671	0.7	C_SLE_rara_ENV	Combinatio n	Max	14.4	-1.2	38.3	0.4	7.9	441.4
3671	1.1	C_SLE_rara_ENV	Combinatio n	Max	14.4	-0.6	38.3	0.4	2.9	558.6
3671	0.0	C_SLE_rara_ENV	Combinatio n	Min	-39.2	-349.4	-4.1	-0.2	-1.8	-14.7
3671	0.4	C_SLE_rara_ENV	Combinatio n	Min	-39.2	-348.8	-4.1	-0.2	-7.4	-11.9
3671	0.7	C_SLE_rara_ENV	Combinatio n	Min	-39.2	-348.3	-4.1	-0.2	-14.0	-9.3
3671	1.1	C_SLE_rara_ENV	Combinatio n	Min	-39.2	-347.7	-4.1	-0.2	-21.3	-6.9
3672	0.0	C_SLE_rara_ENV	Combinatio n	Max	26.0	14.1	29.5	0.4	17.6	567.3
3672	0.4	C_SLE_rara_ENV	Combinatio n	Max	26.0	14.7	29.5	0.4	13.3	669.1
3672	0.7	C_SLE_rara_ENV	Combinatio n	Max	26.0	15.3	29.5	0.4	9.0	770.7
3672	1.1	C_SLE_rara_ENV	Combinatio n	Max	26.0	15.8	29.5	0.4	4.7	872.1
3672	0.0	C_SLE_rara_ENV	Combinatio n	Min	-56.4	-318.3	-7.0	-0.2	-3.3	-6.6
3672	0.4	C_SLE_rara_ENV	Combinatio n	Min	-56.4	-317.7	-7.0	-0.2	-7.5	-4.0
3672	0.7	C_SLE_rara_ENV	Combinatio n	Min	-56.4	-317.1	-7.0	-0.2	-11.8	-1.5
3672	1.1	C_SLE_rara_ENV	Combinatio n	Min	-56.4	-316.5	-7.0	-0.2	-16.1	0.7
3673	0.0	C_SLE_rara_ENV	Combinatio n	Max	37.5	36.1	38.1	0.3	23.2	876.8
3673	0.4	C_SLE_rara_ENV	Combinatio n	Max	37.5	36.7	38.1	0.3	17.4	963.6

3673	0.7	C_SLE_rara_ENV	Combinatio n	Max	37.5	37.2	38.1	0.3	11.6	1050.2
3673	1.1	C_SLE_rara_ENV	Combinatio n	Max	37.5	37.8	38.1	0.3	7.8	1136.6
3673	0.0	C_SLE_rara_ENV	Combinatio n	Min	-73.6	-291.1	-14.2	-0.2	-7.8	1.8
3673	0.4	C_SLE_rara_ENV	Combinatio n	Min	-73.6	-290.5	-14.2	-0.2	-10.7	4.2
3673	0.7	C_SLE_rara_ENV	Combinatio n	Min	-73.6	-289.9	-14.2	-0.2	-14.5	6.4
3673	1.1	C_SLE_rara_ENV	Combinatio n	Min	-73.6	-289.3	-14.2	-0.2	-18.3	8.4
3674	0.0	C_SLE_rara_ENV	Combinatio n	Max	48.6	53.0	61.2	0.3	34.0	1137.1
3674	0.4	C_SLE_rara_ENV	Combinatio n	Max	48.6	53.6	61.2	0.3	27.3	1211.4
3674	0.7	C_SLE_rara_ENV	Combinatio n	Max	48.6	54.1	61.2	0.3	20.5	1285.5
3674	1.1	C_SLE_rara_ENV	Combinatio n	Max	48.6	54.7	61.2	0.3	18.3	1359.4
3674	0.0	C_SLE_rara_ENV	Combinatio n	Min	-95.0	-268.2	-29.7	-0.2	-14.1	10.2
3674	0.4	C_SLE_rara_ENV	Combinatio n	Min	-95.0	-267.6	-29.7	-0.2	-19.3	12.4
3674	0.7	C_SLE_rara_ENV	Combinatio n	Min	-95.0	-267.0	-29.7	-0.2	-26.0	14.4
3674	1.1	C_SLE_rara_ENV	Combinatio n	Min	-95.0	-266.4	-29.7	-0.2	-32.6	16.2
3675	0.0	C_SLE_rara_ENV	Combinatio n	Max	57.9	64.7	109.3	1.3	30.0	1359.2
3675	0.2	C_SLE_rara_ENV	Combinatio n	Max	57.9	65.0	109.3	1.3	31.8	1384.1
3675	0.0	C_SLE_rara_ENV	Combinatio n	Min	-115.2	-250.7	-59.3	-0.4	-13.2	17.4
3675	0.2	C_SLE_rara_ENV	Combinatio n	Min	-115.2	-250.4	-59.3	-0.4	-26.2	18.3
3676	0.0	C_SLE_rara_ENV	Combinatio n	Max	59.1	44.4	45.2	0.3	19.2	1383.6
3676	0.5	C_SLE_rara_ENV	Combinatio n	Max	59.1	45.2	45.2	0.3	22.8	1461.1
3676	0.9	C_SLE_rara_ENV	Combinatio n	Max	59.1	45.9	45.2	0.3	29.3	1538.2
3676	0.0	C_SLE_rara_ENV	Combinatio n	Min	-62.3	-249.8	-60.2	-0.3	-27.3	18.4

3676	0.5	C_SLE_rara_ENV	Combinatio n	Min	-62.3	-249.0	-60.2	-0.3	-23.5	20.2
3676	0.9	C_SLE_rara_ENV	Combinatio n	Min	-62.3	-248.3	-60.2	-0.3	-22.4	21.8
3677	0.0	C_SLE_rara_ENV	Combinatio n	Max	56.5	55.0	26.1	0.3	15.3	1541.4
3677	0.4	C_SLE_rara_ENV	Combinatio n	Max	56.5	55.6	26.1	0.3	15.0	1594.7
3677	0.7	C_SLE_rara_ENV	Combinatio n	Max	56.5	56.1	26.1	0.3	17.7	1647.8
3677	1.1	C_SLE_rara_ENV	Combinatio n	Max	56.5	56.7	26.1	0.3	20.5	1700.7
3677	0.0	C_SLE_rara_ENV	Combinatio n	Min	-57.3	-231.7	-31.2	-0.2	-13.7	21.0
3677	0.4	C_SLE_rara_ENV	Combinatio n	Min	-57.3	-231.1	-31.2	-0.2	-13.5	22.4
3677	0.7	C_SLE_rara_ENV	Combinatio n	Min	-57.3	-230.5	-31.2	-0.2	-13.3	23.6
3677	1.1	C_SLE_rara_ENV	Combinatio n	Min	-57.3	-229.9	-31.2	-0.2	-13.5	24.6
3678	0.0	C_SLE_rara_ENV	Combinatio n	Max	58.3	68.7	23.3	0.3	16.1	1702.3
3678	0.5	C_SLE_rara_ENV	Combinatio n	Max	58.3	69.5	23.3	0.3	12.9	1760.9
3678	1.0	C_SLE_rara_ENV	Combinatio n	Max	58.3	70.3	23.3	0.3	10.4	1819.1
3678	0.0	C_SLE_rara_ENV	Combinatio n	Min	-63.6	-211.7	-15.4	-0.3	-7.2	24.6
3678	0.5	C_SLE_rara_ENV	Combinatio n	Min	-63.6	-210.9	-15.4	-0.3	-7.9	26.3
3678	1.0	C_SLE_rara_ENV	Combinatio n	Min	-63.6	-210.2	-15.4	-0.3	-8.6	27.6
3679	0.0	C_SLE_rara_ENV	Combinatio n	Max	58.3	70.3	23.3	2.0	10.4	1821.5
3679	0.1	C_SLE_rara_ENV	Combinatio n	Max	58.3	70.5	23.3	2.0	12.2	1841.3
3679	0.0	C_SLE_rara_ENV	Combinatio n	Min	-63.6	-210.2	-15.4	-1.3	-8.6	28.2
3679	0.1	C_SLE_rara_ENV	Combinatio n	Min	-63.6	-210.0	-15.4	-1.3	-11.0	28.4
3680	0.0	C_SLE_rara_ENV	Combinatio n	Max	64.6	82.7	47.6	0.4	30.6	1840.0
3680	0.4	C_SLE_rara_ENV	Combinatio n	Max	64.6	83.3	47.6	0.4	25.2	1877.1

3680	0.7	C_SLE_rara_ENV	Combinatio n	Max	64.6	83.9	47.6	0.4	19.8	1913.9
3680	1.1	C_SLE_rara_ENV	Combinatio n	Max	64.6	84.4	47.6	0.4	19.3	1950.5
3680	0.0	C_SLE_rara_ENV	Combinatio n	Min	-77.1	-192.0	-29.9	-0.5	-14.2	30.0
3680	0.4	C_SLE_rara_ENV	Combinatio n	Min	-77.1	-191.5	-29.9	-0.5	-16.9	31.1
3680	0.7	C_SLE_rara_ENV	Combinatio n	Min	-77.1	-190.9	-29.9	-0.5	-19.7	32.1
3680	1.1	C_SLE_rara_ENV	Combinatio n	Min	-77.1	-190.3	-29.9	-0.5	-22.5	32.8
3681	0.0	C_SLE_rara_ENV	Combinatio n	Max	73.0	96.4	84.7	0.6	36.7	1949.2
3681	0.4	C_SLE_rara_ENV	Combinatio n	Max	73.0	97.0	84.7	0.6	27.6	1976.9
3681	0.8	C_SLE_rara_ENV	Combinatio n	Max	73.0	97.7	84.7	0.6	25.5	2004.3
3681	0.0	C_SLE_rara_ENV	Combinatio n	Min	-98.9	-175.4	-50.3	-0.3	-17.6	35.2
3681	0.4	C_SLE_rara_ENV	Combinatio n	Min	-98.9	-174.8	-50.3	-0.3	-27.0	36.3
3681	0.8	C_SLE_rara_ENV	Combinatio n	Min	-98.9	-174.1	-50.3	-0.3	-36.4	37.0
3682	0.0	C_SLE_rara_ENV	Combinatio n	Max	80.6	95.9	59.3	0.8	19.4	2003.5
3682	0.3	C_SLE_rara_ENV	Combinatio n	Max	80.6	96.3	59.3	0.8	15.6	2025.3
3682	0.0	C_SLE_rara_ENV	Combinatio n	Min	-51.9	-175.0	-114.6	-2.0	-36.0	37.1
3682	0.3	C_SLE_rara_ENV	Combinatio n	Min	-51.9	-174.6	-114.6	-2.0	-12.3	37.3
3683	0.0	C_SLE_rara_ENV	Combinatio n	Max	72.6	107.9	34.3	0.3	22.8	2023.4
3683	0.4	C_SLE_rara_ENV	Combinatio n	Max	72.6	108.5	34.3	0.3	24.2	2034.9
3683	0.7	C_SLE_rara_ENV	Combinatio n	Max	72.6	109.1	34.3	0.3	31.2	2046.3
3683	1.1	C_SLE_rara_ENV	Combinatio n	Max	72.6	109.7	34.3	0.3	38.2	2057.4
3683	0.0	C_SLE_rara_ENV	Combinatio n	Min	-47.0	-162.0	-66.9	-0.4	-35.5	36.7
3683	0.4	C_SLE_rara_ENV	Combinatio n	Min	-47.0	-161.4	-66.9	-0.4	-28.7	37.2

3683	0.7	C_SLE_rara_ENV	Combinatio n	Min	-47.0	-160.8	-66.9	-0.4	-22.0	37.5
3683	1.1	C_SLE_rara_ENV	Combinatio n	Min	-47.0	-160.3	-66.9	-0.4	-15.2	37.6
3684	0.0	C_SLE_rara_ENV	Combinatio n	Max	64.0	123.8	17.3	0.3	12.8	2057.0
3684	0.4	C_SLE_rara_ENV	Combinatio n	Max	64.0	124.4	17.3	0.3	15.5	2061.2
3684	0.8	C_SLE_rara_ENV	Combinatio n	Max	64.0	125.0	17.3	0.3	20.7	2065.1
3684	1.1	C_SLE_rara_ENV	Combinatio n	Max	64.0	125.6	17.3	0.3	26.4	2068.7
3684	0.0	C_SLE_rara_ENV	Combinatio n	Min	-47.5	-144.5	-34.8	-0.4	-15.6	36.2
3684	0.4	C_SLE_rara_ENV	Combinatio n	Min	-47.5	-143.8	-34.8	-0.4	-13.5	36.5
3684	0.8	C_SLE_rara_ENV	Combinatio n	Min	-47.5	-143.2	-34.8	-0.4	-11.4	36.6
3684	1.1	C_SLE_rara_ENV	Combinatio n	Min	-47.5	-142.6	-34.8	-0.4	-9.3	36.4
3685	0.0	C_SLE_rara_ENV	Combinatio n	Max	61.2	142.3	24.5	0.3	20.1	2069.2
3685	0.4	C_SLE_rara_ENV	Combinatio n	Max	61.2	142.9	24.5	0.3	18.5	2065.8
3685	0.8	C_SLE_rara_ENV	Combinatio n	Max	61.2	143.5	24.5	0.3	17.5	2062.0
3685	1.1	C_SLE_rara_ENV	Combinatio n	Max	61.2	144.1	24.5	0.3	19.0	2058.1
3685	0.0	C_SLE_rara_ENV	Combinatio n	Min	-60.1	-125.6	-27.6	-0.5	-14.8	36.5
3685	0.4	C_SLE_rara_ENV	Combinatio n	Min	-60.1	-125.0	-27.6	-0.5	-13.1	36.2
3685	0.8	C_SLE_rara_ENV	Combinatio n	Min	-60.1	-124.3	-27.6	-0.5	-11.4	35.7
3685	1.1	C_SLE_rara_ENV	Combinatio n	Min	-60.1	-123.7	-27.6	-0.5	-9.7	34.9
3686	0.0	C_SLE_rara_ENV	Combinatio n	Max	63.7	159.8	55.4	0.3	31.5	2059.3
3686	0.4	C_SLE_rara_ENV	Combinatio n	Max	63.7	160.4	55.4	0.3	28.6	2047.7
3686	0.7	C_SLE_rara_ENV	Combinatio n	Max	63.7	161.0	55.4	0.3	25.8	2035.8
3686	1.1	C_SLE_rara_ENV	Combinatio n	Max	63.7	161.6	55.4	0.3	28.5	2023.7

3686	0.0	C_SLE_rara_ENV	Combinatio n	Min	-83.9	-108.9	-44.6	-0.6	-20.5	36.8
3686	0.4	C_SLE_rara_ENV	Combinatio n	Min	-83.9	-108.3	-44.6	-0.6	-23.5	36.3
3686	0.7	C_SLE_rara_ENV	Combinatio n	Min	-83.9	-107.8	-44.6	-0.6	-26.6	35.5
3686	1.1	C_SLE_rara_ENV	Combinatio n	Min	-83.9	-107.2	-44.6	-0.6	-29.7	34.6
3687	0.0	C_SLE_rara_ENV	Combinatio n	Max	66.0	174.2	103.8	1.7	10.6	2026.1
3687	0.3	C_SLE_rara_ENV	Combinatio n	Max	66.0	174.6	103.8	1.7	17.4	2003.7
3687	0.0	C_SLE_rara_ENV	Combinatio n	Min	-107.6	-95.3	-69.7	-0.9	-19.2	35.6
3687	0.3	C_SLE_rara_ENV	Combinatio n	Min	-107.6	-94.9	-69.7	-0.9	-39.5	35.0
3688	0.0	C_SLE_rara_ENV	Combinatio n	Max	67.3	175.2	39.9	0.2	21.9	2002.8
3688	0.4	C_SLE_rara_ENV	Combinatio n	Max	67.3	175.8	39.9	0.2	29.5	1974.1
3688	0.8	C_SLE_rara_ENV	Combinatio n	Max	67.3	176.5	39.9	0.2	43.5	1945.0
3688	0.0	C_SLE_rara_ENV	Combinatio n	Min	-53.4	-97.9	-95.4	-0.9	-39.0	35.1
3688	0.4	C_SLE_rara_ENV	Combinatio n	Min	-53.4	-97.3	-95.4	-0.9	-26.0	33.8
3688	0.8	C_SLE_rara_ENV	Combinatio n	Min	-53.4	-96.6	-95.4	-0.9	-13.0	32.2
3689	0.0	C_SLE_rara_ENV	Combinatio n	Max	58.8	190.6	20.0	0.3	13.6	1944.4
3689	0.4	C_SLE_rara_ENV	Combinatio n	Max	58.8	191.2	20.0	0.3	18.3	1907.4
3689	0.7	C_SLE_rara_ENV	Combinatio n	Max	58.8	191.7	20.0	0.3	27.3	1870.1
3689	1.1	C_SLE_rara_ENV	Combinatio n	Max	58.8	192.3	20.0	0.3	36.3	1832.7
3689	0.0	C_SLE_rara_ENV	Combinatio n	Min	-47.4	-84.7	-57.7	-0.6	-27.6	29.6
3689	0.4	C_SLE_rara_ENV	Combinatio n	Min	-47.4	-84.1	-57.7	-0.6	-21.5	28.4
3689	0.7	C_SLE_rara_ENV	Combinatio n	Min	-47.4	-83.5	-57.7	-0.6	-15.4	27.1
3689	1.1	C_SLE_rara_ENV	Combinatio n	Min	-47.4	-82.9	-57.7	-0.6	-9.3	25.5

3690	0.0	C_SLE_rara_ENV	Combinatio n	Max	52.4	209.1	7.3	0.6	6.6	1830.7
3690	0.1	C_SLE_rara_ENV	Combinatio n	Max	52.4	209.3	7.3	0.6	6.0	1811.1
3690	0.0	C_SLE_rara_ENV	Combinatio n	Min	-56.6	-69.6	-32.6	-3.0	-16.3	23.2
3690	0.1	C_SLE_rara_ENV	Combinatio n	Min	-56.6	-69.4	-32.6	-3.0	-12.8	22.8
3691	0.0	C_SLE_rara_ENV	Combinatio n	Max	52.4	209.3	7.3	0.2	6.0	1810.1
3691	0.5	C_SLE_rara_ENV	Combinatio n	Max	52.4	210.1	7.3	0.2	13.2	1751.9
3691	1.0	C_SLE_rara_ENV	Combinatio n	Max	52.4	210.8	7.3	0.2	21.3	1693.3
3691	0.0	C_SLE_rara_ENV	Combinatio n	Min	-56.6	-69.4	-32.6	-0.3	-12.8	22.6
3691	0.5	C_SLE_rara_ENV	Combinatio n	Min	-56.6	-68.6	-32.6	-0.3	-7.6	20.8
3691	1.0	C_SLE_rara_ENV	Combinatio n	Min	-56.6	-67.9	-32.6	-0.3	-3.2	18.7
3692	0.0	C_SLE_rara_ENV	Combinatio n	Max	51.3	228.0	21.3	0.1	14.8	1690.4
3692	0.4	C_SLE_rara_ENV	Combinatio n	Max	51.3	228.6	21.3	0.1	15.7	1637.8
3692	0.7	C_SLE_rara_ENV	Combinatio n	Max	51.3	229.2	21.3	0.1	16.5	1585.0
3692	1.1	C_SLE_rara_ENV	Combinatio n	Max	51.3	229.7	21.3	0.1	20.3	1531.9
3692	0.0	C_SLE_rara_ENV	Combinatio n	Min	-73.1	-55.8	-35.2	-0.3	-18.3	18.3
3692	0.4	C_SLE_rara_ENV	Combinatio n	Min	-73.1	-55.2	-35.2	-0.3	-14.8	17.2
3692	0.7	C_SLE_rara_ENV	Combinatio n	Min	-73.1	-54.6	-35.2	-0.3	-11.7	15.8
3692	1.1	C_SLE_rara_ENV	Combinatio n	Min	-73.1	-54.0	-35.2	-0.3	-8.6	14.2
3693	0.0	C_SLE_rara_ENV	Combinatio n	Max	59.5	245.5	50.3	0.2	23.0	1530.0
3693	0.5	C_SLE_rara_ENV	Combinatio n	Max	59.5	246.3	50.3	0.2	21.5	1452.7
3693	0.9	C_SLE_rara_ENV	Combinatio n	Max	59.5	247.0	50.3	0.2	22.4	1375.1
3693	0.0	C_SLE_rara_ENV	Combinatio n	Min	-99.1	-44.7	-53.9	-0.3	-27.1	15.1

3693	0.5	C_SLE_rara_ENV	Combinatio n	Min	-99.1	-44.0	-53.9	-0.3	-24.3	13.5
3693	0.9	C_SLE_rara_ENV	Combinatio n	Min	-99.1	-43.2	-53.9	-0.3	-24.2	11.6
3694	0.0	C_SLE_rara_ENV	Combinatio n	Max	62.7	251.1	46.4	0.4	33.0	1374.4
3694	0.2	C_SLE_rara_ENV	Combinatio n	Max	62.7	251.4	46.4	0.4	33.2	1348.8
3694	0.0	C_SLE_rara_ENV	Combinatio n	Min	-49.0	-63.6	-120.1	-1.4	-21.9	11.7
3694	0.2	C_SLE_rara_ENV	Combinatio n	Min	-49.0	-63.3	-120.1	-1.4	-6.7	10.7
3695	0.0	C_SLE_rara_ENV	Combinatio n	Max	58.6	266.3	18.2	0.2	11.6	1346.2
3695	0.4	C_SLE_rara_ENV	Combinatio n	Max	58.6	266.9	18.2	0.2	18.8	1271.5
3695	0.7	C_SLE_rara_ENV	Combinatio n	Max	58.6	267.4	18.2	0.2	29.4	1196.5
3695	1.1	C_SLE_rara_ENV	Combinatio n	Max	58.6	268.0	18.2	0.2	40.0	1121.4
3695	0.0	C_SLE_rara_ENV	Combinatio n	Min	-55.8	-53.1	-71.5	-0.4	-37.8	8.8
3695	0.4	C_SLE_rara_ENV	Combinatio n	Min	-55.8	-52.5	-71.5	-0.4	-27.8	7.0
3695	0.7	C_SLE_rara_ENV	Combinatio n	Min	-55.8	-51.9	-71.5	-0.4	-17.7	5.0
3695	1.1	C_SLE_rara_ENV	Combinatio n	Min	-55.8	-51.3	-71.5	-0.4	-8.6	2.7
3696	0.0	C_SLE_rara_ENV	Combinatio n	Max	50.8	286.9	5.2	0.1	2.6	1115.5
3696	0.4	C_SLE_rara_ENV	Combinatio n	Max	50.8	287.5	5.2	0.1	9.9	1029.4
3696	0.7	C_SLE_rara_ENV	Combinatio n	Max	50.8	288.1	5.2	0.1	19.2	943.1
3696	1.1	C_SLE_rara_ENV	Combinatio n	Max	50.8	288.7	5.2	0.1	28.5	856.6
3696	0.0	C_SLE_rara_ENV	Combinatio n	Min	-48.1	-36.7	-47.5	-0.4	-23.1	-0.5
3696	0.4	C_SLE_rara_ENV	Combinatio n	Min	-48.1	-36.1	-47.5	-0.4	-16.1	-2.2
3696	0.7	C_SLE_rara_ENV	Combinatio n	Min	-48.1	-35.5	-47.5	-0.4	-9.1	-4.2
3696	1.1	C_SLE_rara_ENV	Combinatio n	Min	-48.1	-34.9	-47.5	-0.4	-3.2	-6.4

3697	0.0	C_SLE_rara_ENV	Combinatio n	Max	46.3	311.4	1.6	0.1	0.9	850.0
3697	0.4	C_SLE_rara_ENV	Combinatio n	Max	46.3	311.9	1.6	0.1	7.1	750.2
3697	0.7	C_SLE_rara_ENV	Combinatio n	Max	46.3	312.5	1.6	0.1	14.8	650.3
3697	1.1	C_SLE_rara_ENV	Combinatio n	Max	46.3	313.1	1.6	0.1	22.4	550.1
3697	0.0	C_SLE_rara_ENV	Combinatio n	Min	-40.8	-16.1	-37.9	-0.4	-20.6	-8.5
3697	0.4	C_SLE_rara_ENV	Combinatio n	Min	-40.8	-15.5	-37.9	-0.4	-13.4	-10.1
3697	0.7	C_SLE_rara_ENV	Combinatio n	Min	-40.8	-14.9	-37.9	-0.4	-6.3	-11.9
3697	1.1	C_SLE_rara_ENV	Combinatio n	Min	-40.8	-14.3	-37.9	-0.4	-1.0	-13.9
3698	0.0	C_SLE_rara_ENV	Combinatio n	Max	38.4	339.5	-2.4	0.2	-1.3	543.2
3698	0.4	C_SLE_rara_ENV	Combinatio n	Max	38.4	340.1	-2.4	0.2	5.9	429.0
3698	0.7	C_SLE_rara_ENV	Combinatio n	Max	38.4	340.7	-2.4	0.2	14.4	314.6
3698	1.1	C_SLE_rara_ENV	Combinatio n	Max	38.4	341.3	-2.4	0.2	23.9	200.0
3698	0.0	C_SLE_rara_ENV	Combinatio n	Min	-33.9	-1.4	-44.6	-0.4	-24.3	-14.7
3698	0.4	C_SLE_rara_ENV	Combinatio n	Min	-33.9	-0.8	-44.6	-0.4	-14.6	-16.3
3698	0.7	C_SLE_rara_ENV	Combinatio n	Min	-33.9	-0.3	-44.6	-0.4	-5.4	-18.0
3698	1.1	C_SLE_rara_ENV	Combinatio n	Min	-33.9	0.3	-44.6	-0.4	1.3	-20.0
3699	0.0	C_SLE_rara_ENV	Combinatio n	Max	32.7	373.2	-1.4	0.2	-1.9	188.4
3699	0.5	C_SLE_rara_ENV	Combinatio n	Max	32.7	374.0	-1.4	0.2	12.4	27.2
3699	0.0	C_SLE_rara_ENV	Combinatio n	Min	-21.0	0.7	-65.1	-0.4	-28.7	-15.3
3699	0.5	C_SLE_rara_ENV	Combinatio n	Min	-21.0	1.5	-65.1	-0.4	-12.7	-36.3
3700	0.0	C_SLE_rara_ENV	Combinatio n	Max	10.9	75.3	36.2	0.5	8.4	34.8
3700	0.5	C_SLE_rara_ENV	Combinatio n	Max	10.9	74.7	33.4	0.5	2.7	115.2

3700	0.0	C_SLE_rara_ENV	Combinatio n	Min	-16.2	-220.7	-17.5	-0.2	-12.2	-7.4
3700	0.5	C_SLE_rara_ENV	Combinatio n	Min	-16.2	-221.3	-20.3	-0.2	-12.3	-16.9
3701	0.0	C_SLE_rara_ENV	Combinatio n	Max	-0.2	71.6	26.3	0.4	12.7	137.1
3701	0.4	C_SLE_rara_ENV	Combinatio n	Max	-0.2	71.2	24.3	0.4	9.0	210.5
3701	0.7	C_SLE_rara_ENV	Combinatio n	Max	-0.2	70.7	22.2	0.4	7.4	284.1
3701	1.1	C_SLE_rara_ENV	Combinatio n	Max	-0.2	70.3	20.1	0.4	7.5	357.8
3701	0.0	C_SLE_rara_ENV	Combinatio n	Min	-27.4	-213.1	-7.1	-0.2	-3.9	-1.3
3701	0.4	C_SLE_rara_ENV	Combinatio n	Min	-27.4	-213.5	-9.2	-0.2	-6.3	-23.9
3701	0.7	C_SLE_rara_ENV	Combinatio n	Min	-27.4	-214.0	-11.3	-0.2	-9.2	-46.4
3701	1.1	C_SLE_rara_ENV	Combinatio n	Min	-27.4	-214.4	-13.3	-0.2	-12.4	-68.6
3702	0.0	C_SLE_rara_ENV	Combinatio n	Max	-4.2	68.0	21.6	0.4	12.0	372.2
3702	0.4	C_SLE_rara_ENV	Combinatio n	Max	-4.2	67.6	19.5	0.4	8.5	445.3
3702	0.7	C_SLE_rara_ENV	Combinatio n	Max	-4.2	67.1	17.4	0.4	6.7	518.5
3702	1.1	C_SLE_rara_ENV	Combinatio n	Max	-4.2	66.6	15.3	0.4	5.8	591.9
3702	0.0	C_SLE_rara_ENV	Combinatio n	Min	-41.4	-204.0	-2.2	-0.2	-0.7	-49.1
3702	0.4	C_SLE_rara_ENV	Combinatio n	Min	-41.4	-204.5	-4.3	-0.2	-4.1	-72.9
3702	0.7	C_SLE_rara_ENV	Combinatio n	Min	-41.4	-204.9	-6.4	-0.2	-6.8	-96.6
3702	1.1	C_SLE_rara_ENV	Combinatio n	Min	-41.4	-205.4	-8.5	-0.2	-8.7	-120.1
3703	0.0	C_SLE_rara_ENV	Combinatio n	Max	-5.5	63.7	25.6	0.3	15.9	607.5
3703	0.4	C_SLE_rara_ENV	Combinatio n	Max	-5.5	63.2	23.6	0.3	11.2	676.2
3703	0.7	C_SLE_rara_ENV	Combinatio n	Max	-5.5	62.8	21.5	0.3	7.4	745.1
3703	1.1	C_SLE_rara_ENV	Combinatio n	Max	-5.5	62.3	19.4	0.3	4.5	814.2

3703	0.0	C_SLE_rara_ENV	Combinatio n	Min	-60.0	-192.3	-1.9	-0.1	-3.1	-102.7
3703	0.4	C_SLE_rara_ENV	Combinatio n	Min	-60.0	-192.8	-4.0	-0.1	-5.9	-125.1
3703	0.7	C_SLE_rara_ENV	Combinatio n	Min	-60.0	-193.2	-6.1	-0.1	-8.0	-147.3
3703	1.1	C_SLE_rara_ENV	Combinatio n	Min	-60.0	-193.7	-8.2	-0.1	-9.4	-169.4
3704	0.0	C_SLE_rara_ENV	Combinatio n	Max	-4.6	58.2	39.9	0.3	22.6	832.7
3704	0.4	C_SLE_rara_ENV	Combinatio n	Max	-4.6	57.8	37.8	0.3	17.8	895.6
3704	0.7	C_SLE_rara_ENV	Combinatio n	Max	-4.6	57.3	35.7	0.3	13.8	958.6
3704	1.1	C_SLE_rara_ENV	Combinatio n	Max	-4.6	56.9	33.6	0.3	10.4	1021.9
3704	0.0	C_SLE_rara_ENV	Combinatio n	Min	-86.6	-177.2	-13.1	-0.2	-7.2	-155.2
3704	0.4	C_SLE_rara_ENV	Combinatio n	Min	-86.6	-177.6	-15.2	-0.2	-11.5	-175.4
3704	0.7	C_SLE_rara_ENV	Combinatio n	Min	-86.6	-178.1	-17.3	-0.2	-15.1	-195.5
3704	1.1	C_SLE_rara_ENV	Combinatio n	Min	-86.6	-178.6	-19.3	-0.2	-18.0	-215.4
3705	0.0	C_SLE_rara_ENV	Combinatio n	Max	-0.5	51.4	65.6	0.9	17.2	1033.7
3705	0.2	C_SLE_rara_ENV	Combinatio n	Max	-0.5	51.2	64.6	0.9	18.0	1058.4
3705	0.0	C_SLE_rara_ENV	Combinatio n	Min	-110.4	-158.3	-30.5	-0.4	-6.7	-196.6
3705	0.2	C_SLE_rara_ENV	Combinatio n	Min	-110.4	-158.5	-31.5	-0.4	-12.7	-204.0
3706	0.0	C_SLE_rara_ENV	Combinatio n	Max	-14.8	46.9	27.6	0.3	12.8	1058.3
3706	0.5	C_SLE_rara_ENV	Combinatio n	Max	-14.8	46.3	24.9	0.3	13.8	1121.9
3706	0.9	C_SLE_rara_ENV	Combinatio n	Max	-14.8	45.7	22.3	0.3	16.0	1185.7
3706	0.0	C_SLE_rara_ENV	Combinatio n	Min	-75.9	-149.4	-31.8	-0.2	-16.0	-202.6
3706	0.5	C_SLE_rara_ENV	Combinatio n	Min	-75.9	-150.0	-34.4	-0.2	-13.4	-221.0
3706	0.9	C_SLE_rara_ENV	Combinatio n	Min	-75.9	-150.5	-37.1	-0.2	-10.1	-239.1

3707	0.0	C_SLE_rara_ENV	Combinatio n	Max	-20.7	42.2	15.5	0.3	8.8	1181.6
3707	0.4	C_SLE_rara_ENV	Combinatio n	Max	-20.7	41.8	13.4	0.3	9.5	1225.0
3707	0.7	C_SLE_rara_ENV	Combinatio n	Max	-20.7	41.3	11.4	0.3	11.1	1268.6
3707	1.1	C_SLE_rara_ENV	Combinatio n	Max	-20.7	40.9	9.3	0.3	13.3	1312.4
3707	0.0	C_SLE_rara_ENV	Combinatio n	Min	-75.4	-134.4	-12.3	-0.2	-4.5	-218.3
3707	0.4	C_SLE_rara_ENV	Combinatio n	Min	-75.4	-134.9	-14.3	-0.2	-6.0	-231.5
3707	0.7	C_SLE_rara_ENV	Combinatio n	Min	-75.4	-135.3	-16.4	-0.2	-6.8	-244.5
3707	1.1	C_SLE_rara_ENV	Combinatio n	Min	-75.4	-135.8	-18.5	-0.2	-6.9	-257.4
3708	0.0	C_SLE_rara_ENV	Combinatio n	Max	-21.4	40.2	16.4	0.2	12.3	1314.4
3708	0.5	C_SLE_rara_ENV	Combinatio n	Max	-21.4	39.6	13.6	0.2	9.4	1364.8
3708	1.0	C_SLE_rara_ENV	Combinatio n	Max	-21.4	39.0	10.9	0.2	7.8	1415.5
3708	0.0	C_SLE_rara_ENV	Combinatio n	Min	-83.2	-120.4	-3.8	-0.2	-2.6	-243.8
3708	0.5	C_SLE_rara_ENV	Combinatio n	Min	-83.2	-121.0	-6.6	-0.2	-3.8	-260.2
3708	1.0	C_SLE_rara_ENV	Combinatio n	Min	-83.2	-121.6	-9.4	-0.2	-3.7	-276.4
3709	0.0	C_SLE_rara_ENV	Combinatio n	Max	-21.4	39.0	10.9	1.0	7.8	1422.4
3709	0.1	C_SLE_rara_ENV	Combinatio n	Max	-21.4	38.8	10.2	1.0	8.7	1435.8
3709	0.0	C_SLE_rara_ENV	Combinatio n	Min	-83.2	-121.6	-9.4	-0.9	-3.7	-274.3
3709	0.1	C_SLE_rara_ENV	Combinatio n	Min	-83.2	-121.7	-10.1	-0.9	-4.4	-278.3
3710	0.0	C_SLE_rara_ENV	Combinatio n	Max	-17.6	38.0	28.6	0.4	19.2	1446.9
3710	0.4	C_SLE_rara_ENV	Combinatio n	Max	-17.6	37.6	26.6	0.4	15.7	1478.5
3710	0.7	C_SLE_rara_ENV	Combinatio n	Max	-17.6	37.1	24.5	0.4	13.0	1510.3
3710	1.1	C_SLE_rara_ENV	Combinatio n	Max	-17.6	36.7	22.4	0.4	11.1	1542.2

3710	0.0	C_SLE_rara_ENV	Combinatio n	Min	-100.6	-104.9	-12.5	-0.4	-7.8	-271.5
3710	0.4	C_SLE_rara_ENV	Combinatio n	Min	-100.6	-105.4	-14.6	-0.4	-9.2	-281.9
3710	0.7	C_SLE_rara_ENV	Combinatio n	Min	-100.6	-105.8	-16.7	-0.4	-10.0	-292.0
3710	1.1	C_SLE_rara_ENV	Combinatio n	Min	-100.6	-106.3	-18.8	-0.4	-10.0	-302.0
3711	0.0	C_SLE_rara_ENV	Combinatio n	Max	-4.6	35.5	47.8	0.5	21.4	1558.5
3711	0.4	C_SLE_rara_ENV	Combinatio n	Max	-4.6	35.0	45.5	0.5	19.4	1584.6
3711	0.8	C_SLE_rara_ENV	Combinatio n	Max	-4.6	34.5	43.1	0.5	18.5	1611.0
3711	0.0	C_SLE_rara_ENV	Combinatio n	Min	-126.6	-88.1	-28.1	-0.3	-7.3	-301.4
3711	0.4	C_SLE_rara_ENV	Combinatio n	Min	-126.6	-88.6	-30.5	-0.3	-13.2	-309.1
3711	0.8	C_SLE_rara_ENV	Combinatio n	Min	-126.6	-89.1	-32.8	-0.3	-18.1	-316.5
3712	0.0	C_SLE_rara_ENV	Combinatio n	Max	-24.9	34.8	37.4	0.8	16.6	1610.3
3712	0.3	C_SLE_rara_ENV	Combinatio n	Max	-24.9	34.4	35.9	0.8	11.0	1625.8
3712	0.0	C_SLE_rara_ENV	Combinatio n	Min	-95.4	-82.8	-58.6	-1.7	-18.2	-316.0
3712	0.3	C_SLE_rara_ENV	Combinatio n	Min	-95.4	-83.1	-60.1	-1.7	-8.3	-319.4
3713	0.0	C_SLE_rara_ENV	Combinatio n	Max	-25.6	37.5	23.9	0.3	16.0	1617.2
3713	0.4	C_SLE_rara_ENV	Combinatio n	Max	-25.6	37.0	21.8	0.3	16.7	1627.5
3713	0.7	C_SLE_rara_ENV	Combinatio n	Max	-25.6	36.6	19.7	0.3	18.5	1637.9
3713	1.1	C_SLE_rara_ENV	Combinatio n	Max	-25.6	36.1	17.6	0.3	21.3	1648.6
3713	0.0	C_SLE_rara_ENV	Combinatio n	Min	-94.2	-67.4	-30.8	-0.4	-16.4	-309.7
3713	0.4	C_SLE_rara_ENV	Combinatio n	Min	-94.2	-67.9	-32.9	-0.4	-14.4	-310.6
3713	0.7	C_SLE_rara_ENV	Combinatio n	Min	-94.2	-68.3	-35.0	-0.4	-11.6	-311.2
3713	1.1	C_SLE_rara_ENV	Combinatio n	Min	-94.2	-68.8	-37.0	-0.4	-8.0	-311.7

3714	0.0	C_SLE_rara_ENV	Combinatio n	Max	-27.8	41.6	10.3	0.3	10.0	1635.4
3714	0.4	C_SLE_rara_ENV	Combinatio n	Max	-27.8	41.1	8.1	0.3	11.4	1639.0
3714	0.8	C_SLE_rara_ENV	Combinatio n	Max	-27.8	40.6	5.9	0.3	13.6	1642.8
3714	1.1	C_SLE_rara_ENV	Combinatio n	Max	-27.8	40.2	3.7	0.3	16.8	1646.7
3714	0.0	C_SLE_rara_ENV	Combinatio n	Min	-87.0	-55.6	-14.2	-0.4	-6.4	-305.2
3714	0.4	C_SLE_rara_ENV	Combinatio n	Min	-87.0	-56.1	-16.4	-0.4	-6.5	-304.0
3714	0.8	C_SLE_rara_ENV	Combinatio n	Min	-87.0	-56.6	-18.6	-0.4	-5.8	-302.6
3714	1.1	C_SLE_rara_ENV	Combinatio n	Min	-87.0	-57.0	-20.8	-0.4	-4.3	-301.0
3715	0.0	C_SLE_rara_ENV	Combinatio n	Max	-21.5	52.6	14.1	0.3	13.1	1643.4
3715	0.4	C_SLE_rara_ENV	Combinatio n	Max	-21.5	52.1	11.9	0.3	12.5	1641.3
3715	0.8	C_SLE_rara_ENV	Combinatio n	Max	-21.5	51.6	9.7	0.3	12.7	1639.3
3715	1.1	C_SLE_rara_ENV	Combinatio n	Max	-21.5	51.1	7.5	0.3	13.7	1637.5
3715	0.0	C_SLE_rara_ENV	Combinatio n	Min	-92.0	-46.6	-11.2	-0.4	-8.6	-303.9
3715	0.4	C_SLE_rara_ENV	Combinatio n	Min	-92.0	-47.1	-13.4	-0.4	-7.3	-302.9
3715	0.8	C_SLE_rara_ENV	Combinatio n	Min	-92.0	-47.6	-15.6	-0.4	-5.1	-301.6
3715	1.1	C_SLE_rara_ENV	Combinatio n	Min	-92.0	-48.0	-17.8	-0.4	-2.1	-300.2
3716	0.0	C_SLE_rara_ENV	Combinatio n	Max	-8.6	64.5	30.1	0.3	17.7	1644.0
3716	0.4	C_SLE_rara_ENV	Combinatio n	Max	-8.6	64.1	28.0	0.3	17.5	1635.3
3716	0.7	C_SLE_rara_ENV	Combinatio n	Max	-8.6	63.6	26.0	0.3	18.7	1626.7
3716	1.1	C_SLE_rara_ENV	Combinatio n	Max	-8.6	63.2	23.9	0.3	21.0	1618.2
3716	0.0	C_SLE_rara_ENV	Combinatio n	Min	-110.6	-42.6	-25.1	-0.4	-11.7	-312.2
3716	0.4	C_SLE_rara_ENV	Combinatio n	Min	-110.6	-43.1	-27.2	-0.4	-12.7	-309.1

3716	0.7	C_SLE_rara_ENV	Combinatio n	Min	-110.6	-43.5	-29.3	-0.4	-13.0	-305.9
3716	1.1	C_SLE_rara_ENV	Combinatio n	Min	-110.6	-44.0	-31.3	-0.4	-12.5	-302.5
3717	0.0	C_SLE_rara_ENV	Combinatio n	Max	5.7	79.0	53.4	1.5	9.9	1621.1
3717	0.3	C_SLE_rara_ENV	Combinatio n	Max	5.7	78.6	51.9	1.5	17.7	1606.7
3717	0.0	C_SLE_rara_ENV	Combinatio n	Min	-125.9	-40.9	-44.5	-0.7	-12.1	-317.2
3717	0.3	C_SLE_rara_ENV	Combinatio n	Min	-125.9	-41.3	-46.0	-0.7	-19.3	-311.9
3718	0.0	C_SLE_rara_ENV	Combinatio n	Max	-23.0	84.3	30.1	0.2	20.2	1606.0
3718	0.4	C_SLE_rara_ENV	Combinatio n	Max	-23.0	83.8	27.8	0.2	19.9	1581.9
3718	0.8	C_SLE_rara_ENV	Combinatio n	Max	-23.0	83.3	25.4	0.2	23.0	1558.0
3718	0.0	C_SLE_rara_ENV	Combinatio n	Min	-93.8	-42.1	-48.2	-0.8	-19.8	-311.9
3718	0.4	C_SLE_rara_ENV	Combinatio n	Min	-93.8	-42.6	-50.6	-0.8	-12.8	-301.2
3718	0.8	C_SLE_rara_ENV	Combinatio n	Min	-93.8	-43.1	-52.9	-0.8	-4.9	-290.3
3719	0.0	C_SLE_rara_ENV	Combinatio n	Max	-23.2	101.8	14.5	0.2	9.8	1536.5
3719	0.4	C_SLE_rara_ENV	Combinatio n	Max	-23.2	101.4	12.5	0.2	12.1	1506.4
3719	0.7	C_SLE_rara_ENV	Combinatio n	Max	-23.2	100.9	10.4	0.2	15.3	1476.5
3719	1.1	C_SLE_rara_ENV	Combinatio n	Max	-23.2	100.5	8.3	0.2	20.5	1446.7
3719	0.0	C_SLE_rara_ENV	Combinatio n	Min	-82.3	-43.8	-27.8	-0.5	-13.3	-292.7
3719	0.4	C_SLE_rara_ENV	Combinatio n	Min	-82.3	-44.3	-29.9	-0.5	-11.4	-280.2
3719	0.7	C_SLE_rara_ENV	Combinatio n	Min	-82.3	-44.7	-32.0	-0.5	-8.7	-267.6
3719	1.1	C_SLE_rara_ENV	Combinatio n	Min	-82.3	-45.2	-34.1	-0.5	-5.2	-254.9
3720	0.0	C_SLE_rara_ENV	Combinatio n	Max	-20.3	118.1	4.3	0.4	5.5	1429.1
3720	0.1	C_SLE_rara_ENV	Combinatio n	Max	-20.3	117.9	3.6	0.4	5.1	1416.3

3720	0.0	C_SLE_rara_ENV	Combinatio n	Min	-74.0	-44.8	-15.4	-1.6	-8.5	-264.1
3720	0.1	C_SLE_rara_ENV	Combinatio n	Min	-74.0	-45.0	-16.1	-1.6	-7.0	-259.5
3721	0.0	C_SLE_rara_ENV	Combinatio n	Max	-20.3	117.9	3.6	0.1	5.1	1409.9
3721	0.5	C_SLE_rara_ENV	Combinatio n	Max	-20.3	117.3	0.9	0.1	8.6	1361.4
3721	1.0	C_SLE_rara_ENV	Combinatio n	Max	-20.3	116.7	-1.9	0.1	13.5	1313.2
3721	0.0	C_SLE_rara_ENV	Combinatio n	Min	-74.0	-45.0	-16.1	-0.2	-7.0	-261.4
3721	0.5	C_SLE_rara_ENV	Combinatio n	Min	-74.0	-45.6	-18.9	-0.2	-3.9	-242.9
3721	1.0	C_SLE_rara_ENV	Combinatio n	Min	-74.0	-46.2	-21.6	-0.2	0.6	-224.2
3722	0.0	C_SLE_rara_ENV	Combinatio n	Max	-10.8	132.3	10.9	0.1	7.8	1304.9
3722	0.4	C_SLE_rara_ENV	Combinatio n	Max	-10.8	131.8	8.8	0.1	8.7	1262.6
3722	0.7	C_SLE_rara_ENV	Combinatio n	Max	-10.8	131.4	6.7	0.1	10.6	1220.5
3722	1.1	C_SLE_rara_ENV	Combinatio n	Max	-10.8	130.9	4.6	0.1	13.1	1178.6
3722	0.0	C_SLE_rara_ENV	Combinatio n	Min	-75.6	-45.3	-17.7	-0.3	-11.5	-241.0
3722	0.4	C_SLE_rara_ENV	Combinatio n	Min	-75.6	-45.7	-19.8	-0.3	-8.8	-227.0
3722	0.7	C_SLE_rara_ENV	Combinatio n	Min	-75.6	-46.2	-21.9	-0.3	-5.3	-212.8
3722	1.1	C_SLE_rara_ENV	Combinatio n	Min	-75.6	-46.6	-23.9	-0.3	-1.1	-198.5
3723	0.0	C_SLE_rara_ENV	Combinatio n	Max	9.4	146.8	25.8	0.2	11.6	1176.4
3723	0.5	C_SLE_rara_ENV	Combinatio n	Max	9.4	146.3	23.2	0.2	13.9	1114.8
3723	0.9	C_SLE_rara_ENV	Combinatio n	Max	9.4	145.7	20.5	0.2	18.0	1053.4
3723	0.0	C_SLE_rara_ENV	Combinatio n	Min	-88.8	-47.7	-33.1	-0.2	-15.2	-224.3
3723	0.5	C_SLE_rara_ENV	Combinatio n	Min	-88.8	-48.3	-35.8	-0.2	-13.6	-205.3
3723	0.9	C_SLE_rara_ENV	Combinatio n	Min	-88.8	-48.9	-38.4	-0.2	-10.7	-186.2

3724	0.0	C_SLE_rara_ENV	Combinatio n	Max	-21.0	154.0	32.0	0.1	25.0	1052.8
3724	0.2	C_SLE_rara_ENV	Combinatio n	Max	-21.0	153.8	31.0	0.1	21.8	1028.9
3724	0.0	C_SLE_rara_ENV	Combinatio n	Min	-67.9	-56.6	-62.5	-1.2	-9.1	-187.3
3724	0.2	C_SLE_rara_ENV	Combinatio n	Min	-67.9	-56.8	-63.4	-1.2	-2.9	-179.0
3725	0.0	C_SLE_rara_ENV	Combinatio n	Max	-9.3	173.8	15.6	0.1	10.3	1012.7
3725	0.4	C_SLE_rara_ENV	Combinatio n	Max	-9.3	173.3	13.5	0.1	13.0	951.3
3725	0.7	C_SLE_rara_ENV	Combinatio n	Max	-9.3	172.9	11.5	0.1	16.9	890.1
3725	1.1	C_SLE_rara_ENV	Combinatio n	Max	-9.3	172.4	9.4	0.1	22.1	829.1
3725	0.0	C_SLE_rara_ENV	Combinatio n	Min	-60.0	-60.6	-34.5	-0.4	-19.2	-198.8
3725	0.4	C_SLE_rara_ENV	Combinatio n	Min	-60.0	-61.1	-36.6	-0.4	-15.1	-177.7
3725	0.7	C_SLE_rara_ENV	Combinatio n	Min	-60.0	-61.5	-38.7	-0.4	-10.2	-156.5
3725	1.1	C_SLE_rara_ENV	Combinatio n	Min	-60.0	-62.0	-40.8	-0.4	-4.5	-135.1
3726	0.0	C_SLE_rara_ENV	Combinatio n	Max	-5.9	189.0	3.5	0.1	1.8	807.3
3726	0.4	C_SLE_rara_ENV	Combinatio n	Max	-5.9	188.5	1.4	0.1	5.7	740.0
3726	0.7	C_SLE_rara_ENV	Combinatio n	Max	-5.9	188.1	-0.7	0.1	10.7	672.9
3726	1.1	C_SLE_rara_ENV	Combinatio n	Max	-5.9	187.6	-2.8	0.1	16.6	605.9
3726	0.0	C_SLE_rara_ENV	Combinatio n	Min	-45.2	-63.3	-23.2	-0.4	-12.3	-148.7
3726	0.4	C_SLE_rara_ENV	Combinatio n	Min	-45.2	-63.7	-25.3	-0.4	-9.1	-126.4
3726	0.7	C_SLE_rara_ENV	Combinatio n	Min	-45.2	-64.2	-27.4	-0.4	-5.1	-104.0
3726	1.1	C_SLE_rara_ENV	Combinatio n	Min	-45.2	-64.7	-29.5	-0.4	-0.4	-81.4
3727	0.0	C_SLE_rara_ENV	Combinatio n	Max	3.1	201.2	1.1	0.1	0.7	587.1
3727	0.4	C_SLE_rara_ENV	Combinatio n	Max	3.1	200.7	-1.0	0.1	4.3	516.1

3727	0.7	C_SLE_rara_ENV	Combinatio n	Max	3.1	200.3	-3.0	0.1	9.1	445.2
3727	1.1	C_SLE_rara_ENV	Combinatio n	Max	3.1	199.8	-5.1	0.1	14.9	374.5
3727	0.0	C_SLE_rara_ENV	Combinatio n	Min	-32.1	-64.1	-22.2	-0.4	-12.6	-100.2
3727	0.4	C_SLE_rara_ENV	Combinatio n	Min	-32.1	-64.6	-24.2	-0.4	-8.4	-77.9
3727	0.7	C_SLE_rara_ENV	Combinatio n	Min	-32.1	-65.0	-26.3	-0.4	-3.4	-55.5
3727	1.1	C_SLE_rara_ENV	Combinatio n	Min	-32.1	-65.5	-28.4	-0.4	2.3	-32.9
3728	0.0	C_SLE_rara_ENV	Combinatio n	Max	13.3	210.8	1.3	0.2	0.4	354.4
3728	0.4	C_SLE_rara_ENV	Combinatio n	Max	13.3	210.3	-0.8	0.2	4.8	282.6
3728	0.7	C_SLE_rara_ENV	Combinatio n	Max	13.3	209.9	-2.8	0.2	10.8	211.1
3728	1.1	C_SLE_rara_ENV	Combinatio n	Max	13.3	209.4	-4.9	0.2	18.1	139.7
3728	0.0	C_SLE_rara_ENV	Combinatio n	Min	-16.2	-63.9	-29.2	-0.4	-17.2	-55.3
3728	0.4	C_SLE_rara_ENV	Combinatio n	Min	-16.2	-64.3	-31.3	-0.4	-11.0	-36.4
3728	0.7	C_SLE_rara_ENV	Combinatio n	Min	-16.2	-64.8	-33.4	-0.4	-4.3	-17.3
3728	1.1	C_SLE_rara_ENV	Combinatio n	Min	-16.2	-65.2	-35.4	-0.4	2.2	2.0
3729	0.0	C_SLE_rara_ENV	Combinatio n	Max	25.4	217.7	0.4	0.2	-0.1	113.4
3729	0.5	C_SLE_rara_ENV	Combinatio n	Max	25.4	217.1	-2.4	0.2	8.9	30.0
3729	0.0	C_SLE_rara_ENV	Combinatio n	Min	-1.7	-64.7	-42.9	-0.3	-16.7	-15.2
3729	0.5	C_SLE_rara_ENV	Combinatio n	Min	-1.7	-65.3	-45.7	-0.3	-3.7	-6.2
3730	0.0	C_SLE_rara_ENV	Combinatio n	Max	482.7	62.6	52.8	0.4	11.4	419.2
3730	0.5	C_SLE_rara_ENV	Combinatio n	Max	482.7	63.4	52.8	0.4	18.4	534.6
3730	0.0	C_SLE_rara_ENV	Combinatio n	Min	-4.9	-710.8	-55.8	-0.3	-19.2	-88.7
3730	0.5	C_SLE_rara_ENV	Combinatio n	Min	-4.9	-710.0	-55.8	-0.3	-20.3	-14.7

3731	0.0	C_SLE_rara_ENV	Combinatio n	Max	481.4	65.8	42.7	0.4	23.8	543.7
3731	0.4	C_SLE_rara_ENV	Combinatio n	Max	481.4	66.4	42.7	0.4	14.8	620.0
3731	0.7	C_SLE_rara_ENV	Combinatio n	Max	481.4	67.0	42.7	0.4	15.6	715.7
3731	1.1	C_SLE_rara_ENV	Combinatio n	Max	481.4	67.6	42.7	0.4	16.5	908.6
3731	0.0	C_SLE_rara_ENV	Combinatio n	Min	-17.2	-595.7	-28.1	-0.2	-14.0	-21.8
3731	0.4	C_SLE_rara_ENV	Combinatio n	Min	-17.2	-595.2	-28.1	-0.2	-13.4	-11.4
3731	0.7	C_SLE_rara_ENV	Combinatio n	Min	-17.2	-594.6	-28.1	-0.2	-12.8	-1.3
3731	1.1	C_SLE_rara_ENV	Combinatio n	Min	-17.2	-594.0	-28.1	-0.2	-22.6	8.7
3732	0.0	C_SLE_rara_ENV	Combinatio n	Max	462.0	87.3	46.8	0.4	26.8	888.4
3732	0.4	C_SLE_rara_ENV	Combinatio n	Max	462.0	87.9	46.8	0.4	18.4	1034.3
3732	0.7	C_SLE_rara_ENV	Combinatio n	Max	462.0	88.5	46.8	0.4	14.9	1180.0
3732	1.1	C_SLE_rara_ENV	Combinatio n	Max	462.0	89.1	46.8	0.4	11.5	1325.5
3732	0.0	C_SLE_rara_ENV	Combinatio n	Min	-26.5	-510.8	-19.1	-0.2	-9.4	12.7
3732	0.4	C_SLE_rara_ENV	Combinatio n	Min	-26.5	-510.3	-19.1	-0.2	-12.1	22.6
3732	0.7	C_SLE_rara_ENV	Combinatio n	Min	-26.5	-509.7	-19.1	-0.2	-14.8	32.3
3732	1.1	C_SLE_rara_ENV	Combinatio n	Min	-26.5	-509.1	-19.1	-0.2	-23.9	39.2
3733	0.0	C_SLE_rara_ENV	Combinatio n	Max	438.0	116.0	52.9	0.3	30.8	1302.7
3733	0.4	C_SLE_rara_ENV	Combinatio n	Max	438.0	116.6	52.9	0.3	22.0	1409.1
3733	0.7	C_SLE_rara_ENV	Combinatio n	Max	438.0	117.1	52.9	0.3	14.7	1515.3
3733	1.1	C_SLE_rara_ENV	Combinatio n	Max	438.0	117.7	52.9	0.3	7.4	1621.3
3733	0.0	C_SLE_rara_ENV	Combinatio n	Min	-41.5	-447.4	-11.6	-0.2	-5.9	41.4
3733	0.4	C_SLE_rara_ENV	Combinatio n	Min	-41.5	-446.8	-11.6	-0.2	-11.9	48.0

3733	0.7	C_SLE_rara_ENV	Combinatio n	Min	-41.5	-446.2	-11.6	-0.2	-17.9	54.3
3733	1.1	C_SLE_rara_ENV	Combinatio n	Min	-41.5	-445.6	-11.6	-0.2	-26.6	60.5
3734	0.0	C_SLE_rara_ENV	Combinatio n	Max	415.8	173.1	70.0	0.3	39.6	1597.4
3734	0.4	C_SLE_rara_ENV	Combinatio n	Max	415.8	173.7	70.0	0.3	28.0	1675.5
3734	0.7	C_SLE_rara_ENV	Combinatio n	Max	415.8	174.2	70.0	0.3	16.3	1753.4
3734	1.1	C_SLE_rara_ENV	Combinatio n	Max	415.8	174.8	70.0	0.3	5.2	1831.1
3734	0.0	C_SLE_rara_ENV	Combinatio n	Min	-63.6	-404.0	-9.5	-0.3	-5.9	63.0
3734	0.4	C_SLE_rara_ENV	Combinatio n	Min	-63.6	-403.4	-9.5	-0.3	-16.0	68.9
3734	0.7	C_SLE_rara_ENV	Combinatio n	Min	-63.6	-402.8	-9.5	-0.3	-26.1	74.7
3734	1.1	C_SLE_rara_ENV	Combinatio n	Min	-63.6	-402.3	-9.5	-0.3	-36.1	80.2
3735	0.0	C_SLE_rara_ENV	Combinatio n	Max	389.0	216.8	110.1	0.7	26.3	1811.6
3735	0.2	C_SLE_rara_ENV	Combinatio n	Max	389.0	217.1	110.1	0.7	22.3	1825.3
3735	0.0	C_SLE_rara_ENV	Combinatio n	Min	-71.4	-380.8	-21.8	-1.2	-18.2	82.7
3735	0.2	C_SLE_rara_ENV	Combinatio n	Min	-71.4	-380.5	-21.8	-1.2	-21.8	85.1
3736	0.0	C_SLE_rara_ENV	Combinatio n	Max	395.1	143.1	38.5	0.3	15.5	1825.4
3736	0.5	C_SLE_rara_ENV	Combinatio n	Max	395.1	143.9	38.5	0.3	20.6	1941.7
3736	0.9	C_SLE_rara_ENV	Combinatio n	Max	395.1	144.6	38.5	0.3	30.8	2057.5
3736	0.0	C_SLE_rara_ENV	Combinatio n	Min	-63.4	-440.4	-60.7	-0.1	-25.0	85.1
3736	0.5	C_SLE_rara_ENV	Combinatio n	Min	-63.4	-439.7	-60.7	-0.1	-19.7	91.8
3736	0.9	C_SLE_rara_ENV	Combinatio n	Min	-63.4	-438.9	-60.7	-0.1	-20.8	98.2
3737	0.0	C_SLE_rara_ENV	Combinatio n	Max	348.8	170.0	36.3	0.3	20.4	2058.5
3737	0.4	C_SLE_rara_ENV	Combinatio n	Max	348.8	170.5	36.3	0.3	17.4	2130.4

3737	0.7	C_SLE_rara_ENV	Combinatio n	Max	348.8	171.1	36.3	0.3	20.0	2202.1
3737	1.1	C_SLE_rara_ENV	Combinatio n	Max	348.8	171.7	36.3	0.3	22.5	2273.7
3737	0.0	C_SLE_rara_ENV	Combinatio n	Min	-49.3	-402.8	-35.0	-0.2	-15.7	100.5
3737	0.4	C_SLE_rara_ENV	Combinatio n	Min	-49.3	-402.2	-35.0	-0.2	-15.0	105.2
3737	0.7	C_SLE_rara_ENV	Combinatio n	Min	-49.3	-401.6	-35.0	-0.2	-14.2	109.6
3737	1.1	C_SLE_rara_ENV	Combinatio n	Min	-49.3	-401.0	-35.0	-0.2	-19.4	113.8
3738	0.0	C_SLE_rara_ENV	Combinatio n	Max	313.7	207.0	40.8	0.2	24.2	2268.2
3738	0.5	C_SLE_rara_ENV	Combinatio n	Max	313.7	207.8	40.8	0.2	16.7	2334.0
3738	1.0	C_SLE_rara_ENV	Combinatio n	Max	313.7	208.6	40.8	0.2	11.7	2399.5
3738	0.0	C_SLE_rara_ENV	Combinatio n	Min	-41.3	-363.8	-19.5	-0.4	-8.6	116.2
3738	0.5	C_SLE_rara_ENV	Combinatio n	Min	-41.3	-363.1	-19.5	-0.4	-11.0	121.3
3738	1.0	C_SLE_rara_ENV	Combinatio n	Min	-41.3	-362.3	-19.5	-0.4	-16.1	126.1
3739	0.0	C_SLE_rara_ENV	Combinatio n	Max	313.7	208.6	40.8	3.5	11.7	2389.8
3739	0.1	C_SLE_rara_ENV	Combinatio n	Max	313.7	208.8	40.8	3.5	13.8	2420.4
3739	0.0	C_SLE_rara_ENV	Combinatio n	Min	-41.3	-362.3	-19.5	-1.7	-16.1	126.1
3739	0.1	C_SLE_rara_ENV	Combinatio n	Min	-41.3	-362.1	-19.5	-1.7	-20.7	127.2
3740	0.0	C_SLE_rara_ENV	Combinatio n	Max	288.5	243.4	54.9	0.4	35.4	2406.2
3740	0.4	C_SLE_rara_ENV	Combinatio n	Max	288.5	244.0	54.9	0.4	26.6	2441.0
3740	0.7	C_SLE_rara_ENV	Combinatio n	Max	288.5	244.6	54.9	0.4	17.9	2475.6
3740	1.1	C_SLE_rara_ENV	Combinatio n	Max	288.5	245.1	54.9	0.4	9.2	2510.0
3740	0.0	C_SLE_rara_ENV	Combinatio n	Min	-54.1	-329.0	-15.1	-0.5	-8.2	129.7
3740	0.4	C_SLE_rara_ENV	Combinatio n	Min	-54.1	-328.4	-15.1	-0.5	-13.5	132.8

3740	0.7	C_SLE_rara_ENV	Combinatio n	Min	-54.1	-327.9	-15.1	-0.5	-18.9	135.6
3740	1.1	C_SLE_rara_ENV	Combinatio n	Min	-54.1	-327.3	-15.1	-0.5	-24.3	138.2
3741	0.0	C_SLE_rara_ENV	Combinatio n	Max	273.0	276.3	83.9	0.4	41.1	2490.0
3741	0.4	C_SLE_rara_ENV	Combinatio n	Max	273.0	277.0	83.9	0.4	24.5	2500.2
3741	0.8	C_SLE_rara_ENV	Combinatio n	Max	273.0	277.7	83.9	0.4	9.7	2510.1
3741	0.0	C_SLE_rara_ENV	Combinatio n	Min	-72.2	-304.8	-20.7	-0.7	-13.5	140.9
3741	0.4	C_SLE_rara_ENV	Combinatio n	Min	-72.2	-304.1	-20.7	-0.7	-21.0	143.2
3741	0.8	C_SLE_rara_ENV	Combinatio n	Min	-72.2	-303.5	-20.7	-0.7	-28.6	144.9
3742	0.0	C_SLE_rara_ENV	Combinatio n	Max	286.4	220.1	37.9	1.1	8.6	2510.5
3742	0.3	C_SLE_rara_ENV	Combinatio n	Max	286.4	220.5	37.9	1.1	17.9	2562.1
3742	0.0	C_SLE_rara_ENV	Combinatio n	Min	-61.9	-367.8	-98.8	-0.8	-27.7	144.8
3742	0.3	C_SLE_rara_ENV	Combinatio n	Min	-61.9	-367.3	-98.8	-0.8	-20.7	139.1
3743	0.0	C_SLE_rara_ENV	Combinatio n	Max	250.4	236.7	30.3	0.3	17.1	2563.5
3743	0.4	C_SLE_rara_ENV	Combinatio n	Max	250.4	237.3	30.3	0.3	19.1	2589.9
3743	0.7	C_SLE_rara_ENV	Combinatio n	Max	250.4	237.9	30.3	0.3	28.7	2616.1
3743	1.1	C_SLE_rara_ENV	Combinatio n	Max	250.4	238.5	30.3	0.3	38.4	2642.1
3743	0.0	C_SLE_rara_ENV	Combinatio n	Min	-59.7	-338.8	-63.5	-0.5	-30.4	148.5
3743	0.4	C_SLE_rara_ENV	Combinatio n	Min	-59.7	-338.2	-63.5	-0.5	-23.4	149.6
3743	0.7	C_SLE_rara_ENV	Combinatio n	Min	-59.7	-337.6	-63.5	-0.5	-16.3	146.8
3743	1.1	C_SLE_rara_ENV	Combinatio n	Min	-59.7	-337.0	-63.5	-0.5	-16.3	139.3
3744	0.0	C_SLE_rara_ENV	Combinatio n	Max	215.3	264.9	29.8	0.3	20.6	2651.6
3744	0.4	C_SLE_rara_ENV	Combinatio n	Max	215.3	265.6	29.8	0.3	19.6	2660.3

3744	0.8	C_SLE_rara_ENV	Combinatio n	Max	215.3	266.2	29.8	0.3	24.3	2668.9
3744	1.1	C_SLE_rara_ENV	Combinatio n	Max	215.3	266.8	29.8	0.3	29.0	2677.2
3744	0.0	C_SLE_rara_ENV	Combinatio n	Min	-45.5	-301.2	-39.6	-0.5	-17.8	153.2
3744	0.4	C_SLE_rara_ENV	Combinatio n	Min	-45.5	-300.5	-39.6	-0.5	-15.1	153.1
3744	0.8	C_SLE_rara_ENV	Combinatio n	Min	-45.5	-299.9	-39.6	-0.5	-12.4	145.3
3744	1.1	C_SLE_rara_ENV	Combinatio n	Min	-45.5	-299.3	-39.6	-0.5	-16.2	137.3
3745	0.0	C_SLE_rara_ENV	Combinatio n	Max	192.5	303.1	38.6	0.3	27.4	2676.3
3745	0.4	C_SLE_rara_ENV	Combinatio n	Max	192.5	303.7	38.6	0.3	23.3	2666.8
3745	0.8	C_SLE_rara_ENV	Combinatio n	Max	192.5	304.3	38.6	0.3	20.8	2657.1
3745	1.1	C_SLE_rara_ENV	Combinatio n	Max	192.5	304.9	38.6	0.3	18.3	2647.2
3745	0.0	C_SLE_rara_ENV	Combinatio n	Min	-51.4	-262.4	-25.7	-0.5	-13.4	155.0
3745	0.4	C_SLE_rara_ENV	Combinatio n	Min	-51.4	-261.8	-25.7	-0.5	-13.8	148.3
3745	0.8	C_SLE_rara_ENV	Combinatio n	Min	-51.4	-261.2	-25.7	-0.5	-14.3	139.7
3745	1.1	C_SLE_rara_ENV	Combinatio n	Min	-51.4	-260.6	-25.7	-0.5	-17.9	130.9
3746	0.0	C_SLE_rara_ENV	Combinatio n	Max	181.8	340.6	59.1	0.3	35.7	2636.4
3746	0.4	C_SLE_rara_ENV	Combinatio n	Max	181.8	341.2	59.1	0.3	28.1	2610.2
3746	0.7	C_SLE_rara_ENV	Combinatio n	Max	181.8	341.8	59.1	0.3	20.5	2583.9
3746	1.1	C_SLE_rara_ENV	Combinatio n	Max	181.8	342.4	59.1	0.3	14.3	2557.3
3746	0.0	C_SLE_rara_ENV	Combinatio n	Min	-73.3	-234.0	-24.3	-0.6	-13.5	148.2
3746	0.4	C_SLE_rara_ENV	Combinatio n	Min	-73.3	-233.4	-24.3	-0.6	-18.5	139.9
3746	0.7	C_SLE_rara_ENV	Combinatio n	Min	-73.3	-232.8	-24.3	-0.6	-23.5	131.5
3746	1.1	C_SLE_rara_ENV	Combinatio n	Min	-73.3	-232.3	-24.3	-0.6	-28.5	122.8

3747	0.0	C_SLE_rara_ENV	Combinatio n	Max	171.8	371.4	94.7	0.6	14.8	2556.3
3747	0.3	C_SLE_rara_ENV	Combinatio n	Max	171.8	371.8	94.7	0.6	7.2	2505.0
3747	0.0	C_SLE_rara_ENV	Combinatio n	Min	-84.2	-216.5	-35.1	-1.4	-26.5	138.1
3747	0.3	C_SLE_rara_ENV	Combinatio n	Min	-84.2	-216.0	-35.1	-1.4	-30.8	131.9
3748	0.0	C_SLE_rara_ENV	Combinatio n	Max	185.1	308.2	23.9	0.5	9.2	2505.2
3748	0.4	C_SLE_rara_ENV	Combinatio n	Max	185.1	308.9	23.9	0.5	25.6	2495.9
3748	0.8	C_SLE_rara_ENV	Combinatio n	Max	185.1	309.5	23.9	0.5	44.8	2486.3
3748	0.0	C_SLE_rara_ENV	Combinatio n	Min	-71.6	-274.1	-88.4	-0.6	-28.7	131.8
3748	0.4	C_SLE_rara_ENV	Combinatio n	Min	-71.6	-273.5	-88.4	-0.6	-18.3	122.5
3748	0.8	C_SLE_rara_ENV	Combinatio n	Min	-71.6	-272.8	-88.4	-0.6	-12.8	112.9
3749	0.0	C_SLE_rara_ENV	Combinatio n	Max	154.8	332.2	19.6	0.3	11.3	2503.9
3749	0.4	C_SLE_rara_ENV	Combinatio n	Max	154.8	332.7	19.6	0.3	16.2	2469.5
3749	0.7	C_SLE_rara_ENV	Combinatio n	Max	154.8	333.3	19.6	0.3	27.2	2435.0
3749	1.1	C_SLE_rara_ENV	Combinatio n	Max	154.8	333.9	19.6	0.3	38.2	2400.3
3749	0.0	C_SLE_rara_ENV	Combinatio n	Min	-61.4	-241.9	-60.0	-0.6	-26.9	127.5
3749	0.4	C_SLE_rara_ENV	Combinatio n	Min	-61.4	-241.3	-60.0	-0.6	-19.3	119.2
3749	0.7	C_SLE_rara_ENV	Combinatio n	Min	-61.4	-240.7	-60.0	-0.6	-11.8	110.6
3749	1.1	C_SLE_rara_ENV	Combinatio n	Min	-61.4	-240.1	-60.0	-0.6	-10.7	101.9
3750	0.0	C_SLE_rara_ENV	Combinatio n	Max	133.5	366.3	21.7	1.8	14.6	2409.6
3750	0.1	C_SLE_rara_ENV	Combinatio n	Max	133.5	366.5	21.7	1.8	12.2	2378.7
3750	0.0	C_SLE_rara_ENV	Combinatio n	Min	-59.1	-205.1	-40.7	-3.6	-20.5	115.6
3750	0.1	C_SLE_rara_ENV	Combinatio n	Min	-59.1	-204.9	-40.7	-3.6	-15.8	112.8

3751	0.0	C_SLE_rara_ENV	Combinatio n	Max	133.5	366.5	21.7	0.3	12.2	2386.5
3751	0.5	C_SLE_rara_ENV	Combinatio n	Max	133.5	367.3	21.7	0.3	16.8	2321.1
3751	1.0	C_SLE_rara_ENV	Combinatio n	Max	133.5	368.1	21.7	0.3	24.8	2255.3
3751	0.0	C_SLE_rara_ENV	Combinatio n	Min	-59.1	-204.9	-40.7	-0.3	-15.8	117.8
3751	0.5	C_SLE_rara_ENV	Combinatio n	Min	-59.1	-204.1	-40.7	-0.3	-10.6	107.6
3751	1.0	C_SLE_rara_ENV	Combinatio n	Min	-59.1	-203.3	-40.7	-0.3	-10.0	95.7
3752	0.0	C_SLE_rara_ENV	Combinatio n	Max	122.8	404.9	31.8	0.1	20.1	2255.0
3752	0.4	C_SLE_rara_ENV	Combinatio n	Max	122.8	405.5	31.8	0.1	19.3	2183.4
3752	0.7	C_SLE_rara_ENV	Combinatio n	Max	122.8	406.1	31.8	0.1	18.9	2111.5
3752	1.1	C_SLE_rara_ENV	Combinatio n	Max	122.8	406.7	31.8	0.1	18.5	2039.4
3752	0.0	C_SLE_rara_ENV	Combinatio n	Min	-75.0	-167.4	-32.2	-0.4	-16.9	103.9
3752	0.4	C_SLE_rara_ENV	Combinatio n	Min	-75.0	-166.8	-32.2	-0.4	-15.6	97.2
3752	0.7	C_SLE_rara_ENV	Combinatio n	Min	-75.0	-166.2	-32.2	-0.4	-14.3	88.5
3752	1.1	C_SLE_rara_ENV	Combinatio n	Min	-75.0	-165.6	-32.2	-0.4	-14.5	79.0
3753	0.0	C_SLE_rara_ENV	Combinatio n	Max	136.1	443.1	57.7	0.1	28.3	2035.0
3753	0.5	C_SLE_rara_ENV	Combinatio n	Max	136.1	443.9	57.7	0.1	20.0	1919.8
3753	0.9	C_SLE_rara_ENV	Combinatio n	Max	136.1	444.6	57.7	0.1	12.8	1804.3
3753	0.0	C_SLE_rara_ENV	Combinatio n	Min	-96.9	-140.1	-32.7	-0.5	-19.0	85.4
3753	0.5	C_SLE_rara_ENV	Combinatio n	Min	-96.9	-139.3	-32.7	-0.5	-21.8	75.7
3753	0.9	C_SLE_rara_ENV	Combinatio n	Min	-96.9	-138.6	-32.7	-0.5	-24.9	64.6
3754	0.0	C_SLE_rara_ENV	Combinatio n	Max	173.0	385.5	20.7	1.1	23.8	1804.7
3754	0.2	C_SLE_rara_ENV	Combinatio n	Max	173.0	385.7	20.7	1.1	31.1	1790.5

3754	0.0	C_SLE_rara_ENV	Combinatio n	Min	-88.0	-212.3	-118.9	-0.8	-18.9	64.5
3754	0.2	C_SLE_rara_ENV	Combinatio n	Min	-88.0	-212.0	-118.9	-0.8	-12.9	60.0
3755	0.0	C_SLE_rara_ENV	Combinatio n	Max	142.2	407.9	13.3	0.2	7.5	1808.8
3755	0.4	C_SLE_rara_ENV	Combinatio n	Max	142.2	408.5	13.3	0.2	14.9	1731.2
3755	0.7	C_SLE_rara_ENV	Combinatio n	Max	142.2	409.0	13.3	0.2	29.3	1653.4
3755	1.1	C_SLE_rara_ENV	Combinatio n	Max	142.2	409.6	13.3	0.2	43.7	1575.4
3755	0.0	C_SLE_rara_ENV	Combinatio n	Min	-82.4	-170.3	-77.4	-0.4	-40.1	63.8
3755	0.4	C_SLE_rara_ENV	Combinatio n	Min	-82.4	-169.7	-77.4	-0.4	-26.9	55.3
3755	0.7	C_SLE_rara_ENV	Combinatio n	Min	-82.4	-169.1	-77.4	-0.4	-13.8	46.6
3755	1.1	C_SLE_rara_ENV	Combinatio n	Min	-82.4	-168.5	-77.4	-0.4	-7.3	37.7
3756	0.0	C_SLE_rara_ENV	Combinatio n	Max	100.0	451.2	13.2	0.2	8.0	1594.9
3756	0.4	C_SLE_rara_ENV	Combinatio n	Max	100.0	451.8	13.2	0.2	13.4	1488.6
3756	0.7	C_SLE_rara_ENV	Combinatio n	Max	100.0	452.4	13.2	0.2	23.3	1382.0
3756	1.1	C_SLE_rara_ENV	Combinatio n	Max	100.0	453.0	13.2	0.2	33.1	1275.2
3756	0.0	C_SLE_rara_ENV	Combinatio n	Min	-70.8	-111.7	-55.8	-0.4	-27.4	39.9
3756	0.4	C_SLE_rara_ENV	Combinatio n	Min	-70.8	-111.2	-55.8	-0.4	-18.8	30.5
3756	0.7	C_SLE_rara_ENV	Combinatio n	Min	-70.8	-110.6	-55.8	-0.4	-10.2	20.9
3756	1.1	C_SLE_rara_ENV	Combinatio n	Min	-70.8	-110.0	-55.8	-0.4	-6.9	11.2
3757	0.0	C_SLE_rara_ENV	Combinatio n	Max	63.1	513.9	17.5	0.2	9.9	1290.9
3757	0.4	C_SLE_rara_ENV	Combinatio n	Max	63.1	514.5	17.5	0.2	14.0	1144.6
3757	0.7	C_SLE_rara_ENV	Combinatio n	Max	63.1	515.0	17.5	0.2	19.5	998.1
3757	1.1	C_SLE_rara_ENV	Combinatio n	Max	63.1	515.6	17.5	0.2	24.9	851.4

3757	0.0	C_SLE_rara_ENV	Combinatio n	Min	-63.2	-37.3	-42.1	-0.4	-20.8	13.0
3757	0.4	C_SLE_rara_ENV	Combinatio n	Min	-63.2	-36.7	-42.1	-0.4	-16.1	2.9
3757	0.7	C_SLE_rara_ENV	Combinatio n	Min	-63.2	-36.1	-42.1	-0.4	-11.4	-8.5
3757	1.1	C_SLE_rara_ENV	Combinatio n	Min	-63.2	-35.5	-42.1	-0.4	-9.1	-21.7
3758	0.0	C_SLE_rara_ENV	Combinatio n	Max	31.0	598.0	24.8	0.2	14.9	865.9
3758	0.4	C_SLE_rara_ENV	Combinatio n	Max	31.0	598.6	24.8	0.2	15.9	671.8
3758	0.7	C_SLE_rara_ENV	Combinatio n	Max	31.0	599.2	24.8	0.2	16.8	477.5
3758	1.1	C_SLE_rara_ENV	Combinatio n	Max	31.0	599.8	24.8	0.2	18.0	283.0
3758	0.0	C_SLE_rara_ENV	Combinatio n	Min	-57.5	17.9	-31.7	-0.4	-16.5	-22.8
3758	0.4	C_SLE_rara_ENV	Combinatio n	Min	-57.5	18.4	-31.7	-0.4	-14.7	-36.2
3758	0.7	C_SLE_rara_ENV	Combinatio n	Min	-57.5	19.0	-31.7	-0.4	-13.6	-49.8
3758	1.1	C_SLE_rara_ENV	Combinatio n	Min	-57.5	19.6	-31.7	-0.4	-12.5	-63.6
3759	0.0	C_SLE_rara_ENV	Combinatio n	Max	7.5	714.1	53.2	0.3	16.9	284.9
3759	0.5	C_SLE_rara_ENV	Combinatio n	Max	7.5	714.9	53.2	0.3	8.6	4.6
3759	0.0	C_SLE_rara_ENV	Combinatio n	Min	-54.5	25.8	-41.0	-0.4	-21.7	-55.3
3759	0.5	C_SLE_rara_ENV	Combinatio n	Min	-54.5	26.6	-41.0	-0.4	-17.6	-135.1

TABLE: Element Forces - Frames										
Frame	Station	OutputCase	CaseType	StepType	P	V2	V3	T	M2	M3
Text	m	Text	Text	Text	KN	KN	KN	KN-m	KN-m	KN-m
3575	0.0	C_SLU_STR_ENV	Combination	Max	30.5	91.3	7.4	0.5	30.5	21.3
3575	0.3	C_SLU_STR_ENV	Combination	Max	30.5	93.3	7.4	0.5	34.8	15.6
3575	0.6	C_SLU_STR_ENV	Combination	Max	30.5	95.3	7.4	0.5	39.0	9.3
3575	0.0	C_SLU_STR_ENV	Combination	Min	-10.0	-2.1	-66.3	-0.2	-18.8	-32.3
3575	0.3	C_SLU_STR_ENV	Combination	Min	-10.0	-0.1	-66.3	-0.2	-10.6	-43.5
3575	0.6	C_SLU_STR_ENV	Combination	Min	-10.0	1.9	-66.3	-0.2	-5.0	-55.2

3576	0.0	C_SLU_STR_ENV	Combination	Max	15.0	0.8	72.8	0.2	36.6	12.5
3576	0.3	C_SLU_STR_ENV	Combination	Max	15.0	2.8	72.8	0.2	34.0	17.7
3576	0.6	C_SLU_STR_ENV	Combination	Max	15.0	4.8	72.8	0.2	31.4	22.4
3576	0.0	C_SLU_STR_ENV	Combination	Min	-34.9	-103.9	-13.5	-0.5	-2.3	-66.3
3576	0.3	C_SLU_STR_ENV	Combination	Min	-34.9	-101.9	-13.5	-0.5	-12.0	-50.4
3576	0.6	C_SLU_STR_ENV	Combination	Min	-34.9	-99.9	-13.5	-0.5	-22.9	-35.1
3577	0.0	C_SLU_STR_ENV	Combination	Max	40.8	208.0	97.5	0.4	45.5	36.8
3577	0.3	C_SLU_STR_ENV	Combination	Max	40.8	208.7	97.5	0.4	33.9	31.5
3577	0.6	C_SLU_STR_ENV	Combination	Max	40.8	209.4	97.5	0.4	22.3	25.9
3577	0.0	C_SLU_STR_ENV	Combination	Min	-50.2	-3.4	-23.8	-0.5	-23.2	-35.1
3577	0.3	C_SLU_STR_ENV	Combination	Min	-50.2	-2.7	-23.8	-0.5	-29.5	-78.6
3577	0.6	C_SLU_STR_ENV	Combination	Min	-50.2	-2.0	-23.8	-0.5	-35.8	-122.3
3578	0.0	C_SLU_STR_ENV	Combination	Max	54.1	7.6	30.6	0.4	26.6	27.2
3578	0.3	C_SLU_STR_ENV	Combination	Max	54.1	8.4	30.6	0.4	34.5	34.0
3578	0.6	C_SLU_STR_ENV	Combination	Max	54.1	9.1	30.6	0.4	42.5	40.6
3578	0.0	C_SLU_STR_ENV	Combination	Min	-29.2	-200.2	-88.7	-0.4	-33.6	-114.8
3578	0.3	C_SLU_STR_ENV	Combination	Min	-29.2	-199.5	-88.7	-0.4	-28.2	-77.0
3578	0.6	C_SLU_STR_ENV	Combination	Min	-29.2	-198.7	-88.7	-0.4	-22.8	-39.4
3579	0.0	C_SLU_STR_ENV	Combination	Max	23.3	82.0	2.5	0.5	21.1	44.2
3579	0.3	C_SLU_STR_ENV	Combination	Max	23.3	82.7	2.5	0.5	24.7	39.5
3579	0.6	C_SLU_STR_ENV	Combination	Max	23.3	83.4	2.5	0.5	28.3	34.7
3579	0.0	C_SLU_STR_ENV	Combination	Min	-31.1	-5.6	-39.0	-0.3	-11.3	-19.0
3579	0.3	C_SLU_STR_ENV	Combination	Min	-31.1	-4.9	-39.0	-0.3	-6.5	-32.7
3579	0.6	C_SLU_STR_ENV	Combination	Min	-31.1	-4.2	-39.0	-0.3	-1.8	-46.6
3580	0.0	C_SLU_STR_ENV	Combination	Max	18.7	5.6	28.8	0.2	25.4	36.7
3580	0.3	C_SLU_STR_ENV	Combination	Max	18.7	6.3	28.8	0.2	24.7	40.3
3580	0.6	C_SLU_STR_ENV	Combination	Max	18.7	7.1	28.8	0.2	23.9	43.7
3580	0.0	C_SLU_STR_ENV	Combination	Min	-42.8	-84.8	-7.0	-0.5	-1.1	-48.8
3580	0.3	C_SLU_STR_ENV	Combination	Min	-42.8	-84.1	-7.0	-0.5	-4.2	-33.5
3580	0.6	C_SLU_STR_ENV	Combination	Min	-42.8	-83.4	-7.0	-0.5	-7.3	-18.4
3581	0.0	C_SLU_STR_ENV	Combination	Max	10.1	15.9	21.8	0.4	16.2	43.8
3581	0.3	C_SLU_STR_ENV	Combination	Max	10.1	15.3	19.2	0.4	12.3	44.7
3581	0.6	C_SLU_STR_ENV	Combination	Max	10.1	14.8	16.6	0.4	10.9	45.7
3581	0.0	C_SLU_STR_ENV	Combination	Min	-18.0	-7.9	-12.6	-0.2	-4.3	-7.0
3581	0.3	C_SLU_STR_ENV	Combination	Min	-18.0	-8.5	-15.2	-0.2	-3.0	-8.3
3581	0.6	C_SLU_STR_ENV	Combination	Min	-18.0	-9.1	-17.7	-0.2	-1.4	-9.5

3582	0.0	C_SLU_STR_ENV	Combination	Max	7.6	4.5	15.2	0.1	18.1	39.3
3582	0.3	C_SLU_STR_ENV	Combination	Max	7.6	4.0	12.6	0.1	16.5	40.1
3582	0.6	C_SLU_STR_ENV	Combination	Max	7.6	3.4	10.0	0.1	15.7	41.0
3582	0.0	C_SLU_STR_ENV	Combination	Min	-14.9	-15.6	-5.8	-0.6	0.6	-8.0
3582	0.3	C_SLU_STR_ENV	Combination	Min	-14.9	-16.1	-8.4	-0.6	-0.5	-6.7
3582	0.6	C_SLU_STR_ENV	Combination	Min	-14.9	-16.7	-10.9	-0.6	-1.3	-5.2
3583	0.0	C_SLU_STR_ENV	Combination	Max	50.5	264.5	46.3	0.6	27.4	60.8
3583	0.3	C_SLU_STR_ENV	Combination	Max	50.5	265.2	46.3	0.6	24.0	46.5
3583	0.6	C_SLU_STR_ENV	Combination	Max	50.5	265.9	46.3	0.6	20.6	35.2
3583	0.0	C_SLU_STR_ENV	Combination	Min	-47.6	-4.1	-20.8	-0.3	-13.9	-56.3
3583	0.3	C_SLU_STR_ENV	Combination	Min	-47.6	-3.3	-20.8	-0.3	-15.1	-102.4
3583	0.6	C_SLU_STR_ENV	Combination	Min	-47.6	-2.6	-20.8	-0.3	-16.4	-148.6
3584	0.0	C_SLU_STR_ENV	Combination	Max	54.2	4.4	12.6	0.2	21.3	38.0
3584	0.3	C_SLU_STR_ENV	Combination	Max	54.2	5.1	12.6	0.2	24.5	49.3
3584	0.6	C_SLU_STR_ENV	Combination	Max	54.2	5.9	12.6	0.2	27.7	65.1
3584	0.0	C_SLU_STR_ENV	Combination	Min	-35.5	-259.1	-44.2	-0.6	-15.3	-142.7
3584	0.3	C_SLU_STR_ENV	Combination	Min	-35.5	-258.3	-44.2	-0.6	-12.5	-100.2
3584	0.6	C_SLU_STR_ENV	Combination	Min	-35.5	-257.6	-44.2	-0.6	-9.8	-58.0
3610	0.0	C_SLU_STR_ENV	Combination	Max	9.5	-75.7	170.3	0.4	35.2	9.6
3610	0.5	C_SLU_STR_ENV	Combination	Max	9.5	-72.4	170.3	0.4	6.0	323.7
3610	0.0	C_SLU_STR_ENV	Combination	Min	-74.8	-696.7	-6.6	-0.5	-5.0	-55.9
3610	0.5	C_SLU_STR_ENV	Combination	Min	-74.8	-693.5	-6.6	-0.5	-54.6	20.6
3611	0.0	C_SLU_STR_ENV	Combination	Max	29.9	-72.9	117.8	0.4	58.7	317.2
3611	0.4	C_SLU_STR_ENV	Combination	Max	29.9	-70.5	117.8	0.4	39.5	552.9
3611	0.7	C_SLU_STR_ENV	Combination	Max	29.9	-68.0	117.8	0.4	20.4	787.7
3611	1.1	C_SLU_STR_ENV	Combination	Max	29.9	-65.6	117.8	0.4	2.4	1021.7
3611	0.0	C_SLU_STR_ENV	Combination	Min	-43.1	-674.9	-7.1	-0.3	-7.3	6.8
3611	0.4	C_SLU_STR_ENV	Combination	Min	-43.1	-672.5	-7.1	-0.3	-27.8	33.9
3611	0.7	C_SLU_STR_ENV	Combination	Min	-43.1	-670.1	-7.1	-0.3	-48.3	60.1
3611	1.1	C_SLU_STR_ENV	Combination	Min	-43.1	-667.7	-7.1	-0.3	-68.8	85.5
3612	0.0	C_SLU_STR_ENV	Combination	Max	55.2	-66.2	77.5	0.4	34.2	1019.9
3612	0.4	C_SLU_STR_ENV	Combination	Max	55.2	-63.8	77.5	0.4	26.2	1244.7
3612	0.7	C_SLU_STR_ENV	Combination	Max	55.2	-61.4	77.5	0.4	18.2	1468.6
3612	1.1	C_SLU_STR_ENV	Combination	Max	55.2	-59.0	77.5	0.4	10.2	1691.7
3612	0.0	C_SLU_STR_ENV	Combination	Min	-26.0	-643.9	-31.9	-0.3	-25.0	75.0
3612	0.4	C_SLU_STR_ENV	Combination	Min	-26.0	-641.5	-31.9	-0.3	-33.5	99.0

3612	0.7	C_SLU_STR_ENV	Combination	Min	-26.0	-639.1	-31.9	-0.3	-42.0	122.0
3612	1.1	C_SLU_STR_ENV	Combination	Min	-26.0	-636.7	-31.9	-0.3	-50.5	144.2
3613	0.0	C_SLU_STR_ENV	Combination	Max	67.7	-59.3	41.3	0.4	17.4	1701.0
3613	0.4	C_SLU_STR_ENV	Combination	Max	67.7	-56.9	41.3	0.4	20.7	1910.3
3613	0.7	C_SLU_STR_ENV	Combination	Max	67.7	-54.4	41.3	0.4	25.8	2118.8
3613	1.1	C_SLU_STR_ENV	Combination	Max	67.7	-52.0	41.3	0.4	31.0	2326.4
3613	0.0	C_SLU_STR_ENV	Combination	Min	-17.2	-607.5	-71.0	-0.2	-46.6	134.9
3613	0.4	C_SLU_STR_ENV	Combination	Min	-17.2	-605.1	-71.0	-0.2	-40.5	156.3
3613	0.7	C_SLU_STR_ENV	Combination	Min	-17.2	-602.6	-71.0	-0.2	-34.5	176.8
3613	1.1	C_SLU_STR_ENV	Combination	Min	-17.2	-600.2	-71.0	-0.2	-28.5	196.5
3614	0.0	C_SLU_STR_ENV	Combination	Max	69.6	-52.0	28.5	0.5	14.4	2340.7
3614	0.4	C_SLU_STR_ENV	Combination	Max	69.6	-49.5	28.5	0.5	32.8	2529.5
3614	0.7	C_SLU_STR_ENV	Combination	Max	69.6	-47.1	28.5	0.5	52.7	2717.4
3614	1.1	C_SLU_STR_ENV	Combination	Max	69.6	-44.7	28.5	0.5	72.5	2904.4
3614	0.0	C_SLU_STR_ENV	Combination	Min	-19.1	-563.9	-130.2	-0.2	-68.7	188.2
3614	0.4	C_SLU_STR_ENV	Combination	Min	-19.1	-561.5	-130.2	-0.2	-50.5	207.2
3614	0.7	C_SLU_STR_ENV	Combination	Min	-19.1	-559.1	-130.2	-0.2	-32.3	225.2
3614	1.1	C_SLU_STR_ENV	Combination	Min	-19.1	-556.7	-130.2	-0.2	-16.4	242.4
3615	0.0	C_SLU_STR_ENV	Combination	Max	93.3	-38.7	42.3	1.5	71.2	2895.6
3615	0.2	C_SLU_STR_ENV	Combination	Max	93.3	-37.5	42.3	1.5	83.6	2964.0
3615	0.0	C_SLU_STR_ENV	Combination	Min	-7.8	-513.4	-224.5	-1.1	-10.5	236.2
3615	0.2	C_SLU_STR_ENV	Combination	Min	-7.8	-512.3	-224.5	-1.1	-8.7	244.0
3616	0.0	C_SLU_STR_ENV	Combination	Max	63.4	-20.8	173.0	0.3	78.1	2962.8
3616	0.5	C_SLU_STR_ENV	Combination	Max	63.4	-17.7	173.0	0.3	42.9	3158.3
3616	0.9	C_SLU_STR_ENV	Combination	Max	63.4	-14.6	173.0	0.3	7.7	3352.4
3616	0.0	C_SLU_STR_ENV	Combination	Min	-87.0	-483.6	-12.8	-0.5	-7.6	244.2
3616	0.5	C_SLU_STR_ENV	Combination	Min	-87.0	-480.5	-12.8	-0.5	-43.2	266.2
3616	0.9	C_SLU_STR_ENV	Combination	Min	-87.0	-477.4	-12.8	-0.5	-80.5	286.8
3617	0.0	C_SLU_STR_ENV	Combination	Max	59.9	0.2	98.1	0.3	46.8	3324.8
3617	0.4	C_SLU_STR_ENV	Combination	Max	59.9	2.6	98.1	0.3	32.7	3457.0
3617	0.7	C_SLU_STR_ENV	Combination	Max	59.9	5.1	98.1	0.3	18.7	3588.4
3617	1.1	C_SLU_STR_ENV	Combination	Max	59.9	7.5	98.1	0.3	4.7	3718.9
3617	0.0	C_SLU_STR_ENV	Combination	Min	-28.1	-444.9	-17.6	-0.3	-15.2	280.0
3617	0.4	C_SLU_STR_ENV	Combination	Min	-28.1	-442.5	-17.6	-0.3	-30.2	295.5
3617	0.7	C_SLU_STR_ENV	Combination	Min	-28.1	-440.1	-17.6	-0.3	-45.3	310.2
3617	1.1	C_SLU_STR_ENV	Combination	Min	-28.1	-437.6	-17.6	-0.3	-60.3	324.0

3618	0.0	C_SLU_STR_ENV	Combination	Max	72.8	27.2	45.8	0.6	18.2	3709.3
3618	0.5	C_SLU_STR_ENV	Combination	Max	72.8	30.4	45.8	0.6	18.6	3858.4
3618	1.0	C_SLU_STR_ENV	Combination	Max	72.8	33.6	45.8	0.6	19.6	4006.0
3618	0.0	C_SLU_STR_ENV	Combination	Min	-3.8	-406.7	-58.0	-0.5	-38.6	317.5
3618	0.5	C_SLU_STR_ENV	Combination	Min	-3.8	-403.5	-58.0	-0.5	-33.8	333.8
3618	1.0	C_SLU_STR_ENV	Combination	Min	-3.8	-400.3	-58.0	-0.5	-29.0	348.6
3619	0.0	C_SLU_STR_ENV	Combination	Max	72.8	33.6	45.8	4.0	19.6	4005.3
3619	0.1	C_SLU_STR_ENV	Combination	Max	72.8	34.4	45.8	4.0	26.3	4048.2
3619	0.0	C_SLU_STR_ENV	Combination	Min	-3.8	-400.3	-58.0	-4.9	-29.0	344.7
3619	0.1	C_SLU_STR_ENV	Combination	Min	-3.8	-399.5	-58.0	-4.9	-34.3	347.9
3620	0.0	C_SLU_STR_ENV	Combination	Max	86.6	53.3	23.0	0.6	11.5	4054.2
3620	0.4	C_SLU_STR_ENV	Combination	Max	86.6	55.7	23.0	0.6	26.0	4148.0
3620	0.7	C_SLU_STR_ENV	Combination	Max	86.6	58.2	23.0	0.6	41.1	4240.9
3620	1.1	C_SLU_STR_ENV	Combination	Max	86.6	60.6	23.0	0.6	56.3	4332.9
3620	0.0	C_SLU_STR_ENV	Combination	Min	-5.2	-365.4	-113.1	-0.4	-68.0	340.7
3620	0.4	C_SLU_STR_ENV	Combination	Min	-5.2	-363.0	-113.1	-0.4	-51.2	350.3
3620	0.7	C_SLU_STR_ENV	Combination	Min	-5.2	-360.6	-113.1	-0.4	-34.4	359.1
3620	1.1	C_SLU_STR_ENV	Combination	Min	-5.2	-358.2	-113.1	-0.4	-17.8	367.0
3621	0.0	C_SLU_STR_ENV	Combination	Max	99.5	80.1	31.8	0.6	25.4	4345.4
3621	0.4	C_SLU_STR_ENV	Combination	Max	99.5	82.8	31.8	0.6	56.0	4417.1
3621	0.8	C_SLU_STR_ENV	Combination	Max	99.5	85.6	31.8	0.6	86.6	4487.7
3621	0.0	C_SLU_STR_ENV	Combination	Min	-13.8	-319.6	-187.3	-0.8	-70.2	361.2
3621	0.4	C_SLU_STR_ENV	Combination	Min	-13.8	-316.9	-187.3	-0.8	-41.7	369.5
3621	0.8	C_SLU_STR_ENV	Combination	Min	-13.8	-314.1	-187.3	-0.8	-16.6	376.7
3622	0.0	C_SLU_STR_ENV	Combination	Max	95.2	101.3	225.8	1.5	80.6	4487.9
3622	0.3	C_SLU_STR_ENV	Combination	Max	95.2	103.1	225.8	1.5	61.2	4541.3
3622	0.0	C_SLU_STR_ENV	Combination	Min	-105.5	-289.8	-30.8	-0.7	-16.1	376.7
3622	0.3	C_SLU_STR_ENV	Combination	Min	-105.5	-288.0	-30.8	-0.7	-19.9	381.2
3623	0.0	C_SLU_STR_ENV	Combination	Max	88.6	135.2	142.1	0.4	82.1	4515.4
3623	0.4	C_SLU_STR_ENV	Combination	Max	88.6	137.6	142.1	0.4	59.2	4547.5
3623	0.7	C_SLU_STR_ENV	Combination	Max	88.6	140.1	142.1	0.4	36.3	4578.7
3623	1.1	C_SLU_STR_ENV	Combination	Max	88.6	142.5	142.1	0.4	13.4	4609.0
3623	0.0	C_SLU_STR_ENV	Combination	Min	-55.3	-254.7	-17.1	-0.8	-11.9	377.6
3623	0.4	C_SLU_STR_ENV	Combination	Min	-55.3	-252.3	-17.1	-0.8	-31.3	383.5
3623	0.7	C_SLU_STR_ENV	Combination	Min	-55.3	-249.8	-17.1	-0.8	-53.0	388.6
3623	1.1	C_SLU_STR_ENV	Combination	Min	-55.3	-247.4	-17.1	-0.8	-74.7	392.8

3624	0.0	C_SLU_STR_ENV	Combination	Max	79.9	174.4	77.2	0.3	35.6	4589.0
3624	0.4	C_SLU_STR_ENV	Combination	Max	79.9	177.0	77.2	0.3	27.7	4600.3
3624	0.8	C_SLU_STR_ENV	Combination	Max	79.9	179.6	77.2	0.3	19.7	4610.6
3624	1.1	C_SLU_STR_ENV	Combination	Max	79.9	182.1	77.2	0.3	11.8	4619.9
3624	0.0	C_SLU_STR_ENV	Combination	Min	-12.0	-217.9	-29.4	-0.7	-25.7	389.1
3624	0.4	C_SLU_STR_ENV	Combination	Min	-12.0	-215.3	-29.4	-0.7	-35.6	392.6
3624	0.8	C_SLU_STR_ENV	Combination	Min	-12.0	-212.7	-29.4	-0.7	-45.6	395.1
3624	1.1	C_SLU_STR_ENV	Combination	Min	-12.0	-210.2	-29.4	-0.7	-55.5	396.6
3625	0.0	C_SLU_STR_ENV	Combination	Max	86.2	212.4	28.6	0.3	12.4	4627.4
3625	0.4	C_SLU_STR_ENV	Combination	Max	86.2	214.9	28.6	0.3	20.0	4616.7
3625	0.8	C_SLU_STR_ENV	Combination	Max	86.2	217.5	28.6	0.3	27.6	4605.0
3625	1.1	C_SLU_STR_ENV	Combination	Max	86.2	220.1	28.6	0.3	35.1	4592.4
3625	0.0	C_SLU_STR_ENV	Combination	Min	3.1	-180.4	-76.8	-0.6	-55.6	392.8
3625	0.4	C_SLU_STR_ENV	Combination	Min	3.1	-177.9	-76.8	-0.6	-45.5	391.5
3625	0.8	C_SLU_STR_ENV	Combination	Min	3.1	-175.3	-76.8	-0.6	-35.4	389.2
3625	1.1	C_SLU_STR_ENV	Combination	Min	3.1	-172.7	-76.8	-0.6	-25.3	385.9
3626	0.0	C_SLU_STR_ENV	Combination	Max	98.5	250.0	19.4	0.4	12.8	4624.0
3626	0.4	C_SLU_STR_ENV	Combination	Max	98.5	252.4	19.4	0.4	35.0	4590.4
3626	0.7	C_SLU_STR_ENV	Combination	Max	98.5	254.8	19.4	0.4	57.3	4555.9
3626	1.1	C_SLU_STR_ENV	Combination	Max	98.5	257.2	19.4	0.4	79.5	4520.5
3626	0.0	C_SLU_STR_ENV	Combination	Min	-5.8	-140.5	-141.5	-0.6	-75.2	382.3
3626	0.4	C_SLU_STR_ENV	Combination	Min	-5.8	-138.1	-141.5	-0.6	-53.4	378.3
3626	0.7	C_SLU_STR_ENV	Combination	Min	-5.8	-135.7	-141.5	-0.6	-31.5	373.4
3626	1.1	C_SLU_STR_ENV	Combination	Min	-5.8	-133.2	-141.5	-0.6	-12.1	367.7
3627	0.0	C_SLU_STR_ENV	Combination	Max	108.7	290.0	33.0	0.5	56.8	4552.8
3627	0.3	C_SLU_STR_ENV	Combination	Max	108.7	291.8	33.0	0.5	75.2	4498.1
3627	0.0	C_SLU_STR_ENV	Combination	Min	-1.8	-100.2	-222.5	-2.1	-25.1	366.2
3627	0.3	C_SLU_STR_ENV	Combination	Min	-1.8	-98.4	-222.5	-2.1	-15.7	361.9
3628	0.0	C_SLU_STR_ENV	Combination	Max	98.2	314.3	175.1	0.5	82.2	4498.8
3628	0.4	C_SLU_STR_ENV	Combination	Max	98.2	317.0	175.1	0.5	56.3	4423.3
3628	0.8	C_SLU_STR_ENV	Combination	Max	98.2	319.8	175.1	0.5	30.3	4346.7
3628	0.0	C_SLU_STR_ENV	Combination	Min	-79.3	-82.2	-31.9	-0.9	-16.4	361.9
3628	0.4	C_SLU_STR_ENV	Combination	Min	-79.3	-79.4	-31.9	-0.9	-39.8	355.3
3628	0.8	C_SLU_STR_ENV	Combination	Min	-79.3	-76.7	-31.9	-0.9	-65.9	347.6
3629	0.0	C_SLU_STR_ENV	Combination	Max	81.7	359.1	106.3	0.3	53.4	4347.2
3629	0.4	C_SLU_STR_ENV	Combination	Max	81.7	361.5	106.3	0.3	40.6	4252.3

3629	0.7	C_SLU_STR_ENV	Combination	Max	81.7	363.9	106.3	0.3	27.7	4156.4
3629	1.1	C_SLU_STR_ENV	Combination	Max	81.7	366.3	106.3	0.3	14.8	4059.7
3629	0.0	C_SLU_STR_ENV	Combination	Min	-33.0	-55.9	-25.6	-1.1	-20.5	349.6
3629	0.4	C_SLU_STR_ENV	Combination	Min	-33.0	-53.4	-25.6	-1.1	-35.3	342.3
3629	0.7	C_SLU_STR_ENV	Combination	Min	-33.0	-51.0	-25.6	-1.1	-50.0	334.3
3629	1.1	C_SLU_STR_ENV	Combination	Min	-33.0	-48.6	-25.6	-1.1	-64.8	325.3
3630	0.0	C_SLU_STR_ENV	Combination	Max	73.1	402.3	55.8	4.4	25.7	4071.1
3630	0.1	C_SLU_STR_ENV	Combination	Max	73.1	403.1	55.8	4.4	19.4	4027.7
3630	0.0	C_SLU_STR_ENV	Combination	Min	-6.1	-29.8	-48.7	-4.5	-35.4	327.5
3630	0.1	C_SLU_STR_ENV	Combination	Min	-6.1	-29.0	-48.7	-4.5	-29.7	324.3
3631	0.0	C_SLU_STR_ENV	Combination	Max	73.1	403.1	55.8	0.3	19.4	4030.3
3631	0.5	C_SLU_STR_ENV	Combination	Max	73.1	406.3	55.8	0.3	19.9	3878.5
3631	1.0	C_SLU_STR_ENV	Combination	Max	73.1	409.5	55.8	0.3	20.3	3725.1
3631	0.0	C_SLU_STR_ENV	Combination	Min	-6.1	-29.0	-48.7	-0.9	-29.7	329.8
3631	0.5	C_SLU_STR_ENV	Combination	Min	-6.1	-25.7	-48.7	-0.9	-33.4	315.5
3631	1.0	C_SLU_STR_ENV	Combination	Min	-6.1	-22.5	-48.7	-0.9	-37.0	299.7
3632	0.0	C_SLU_STR_ENV	Combination	Max	77.5	443.3	18.0	0.1	6.8	3755.2
3632	0.4	C_SLU_STR_ENV	Combination	Max	77.5	445.8	18.0	0.1	19.4	3621.2
3632	0.7	C_SLU_STR_ENV	Combination	Max	77.5	448.2	18.0	0.1	32.4	3486.4
3632	1.1	C_SLU_STR_ENV	Combination	Max	77.5	450.6	18.0	0.1	45.5	3350.8
3632	0.0	C_SLU_STR_ENV	Combination	Min	-1.8	-2.3	-95.6	-0.5	-59.0	301.8
3632	0.4	C_SLU_STR_ENV	Combination	Min	-1.8	0.1	-95.6	-0.5	-43.9	288.5
3632	0.7	C_SLU_STR_ENV	Combination	Min	-1.8	2.5	-95.6	-0.5	-28.8	274.4
3632	1.1	C_SLU_STR_ENV	Combination	Min	-1.8	5.0	-95.6	-0.5	-13.7	259.4
3633	0.0	C_SLU_STR_ENV	Combination	Max	77.5	485.3	14.4	0.2	8.3	3392.0
3633	0.5	C_SLU_STR_ENV	Combination	Max	77.5	488.4	14.4	0.2	40.1	3192.0
3633	0.9	C_SLU_STR_ENV	Combination	Max	77.5	491.4	14.4	0.2	71.9	2990.7
3633	0.0	C_SLU_STR_ENV	Combination	Min	-12.0	17.5	-163.6	-0.6	-78.2	261.7
3633	0.5	C_SLU_STR_ENV	Combination	Min	-12.0	20.6	-163.6	-0.6	-43.3	241.9
3633	0.9	C_SLU_STR_ENV	Combination	Min	-12.0	23.7	-163.6	-0.6	-8.5	220.8
3634	0.0	C_SLU_STR_ENV	Combination	Max	82.9	515.9	206.9	0.9	78.0	2991.9
3634	0.2	C_SLU_STR_ENV	Combination	Max	82.9	517.0	206.9	0.9	70.2	2921.7
3634	0.0	C_SLU_STR_ENV	Combination	Min	-99.8	40.1	-48.3	-1.2	-8.5	220.8
3634	0.2	C_SLU_STR_ENV	Combination	Min	-99.8	41.2	-48.3	-1.2	-8.1	213.3
3635	0.0	C_SLU_STR_ENV	Combination	Max	61.8	563.4	122.6	0.2	67.7	2939.2
3635	0.4	C_SLU_STR_ENV	Combination	Max	61.8	565.8	122.6	0.2	51.7	2746.2

3635	0.7	C_SLU_STR_ENV	Combination	Max	61.8	568.2	122.6	0.2	35.8	2552.4
3635	1.1	C_SLU_STR_ENV	Combination	Max	61.8	570.7	122.6	0.2	19.8	2357.7
3635	0.0	C_SLU_STR_ENV	Combination	Min	-65.0	40.6	-32.9	-0.7	-17.5	219.2
3635	0.4	C_SLU_STR_ENV	Combination	Min	-65.0	43.0	-32.9	-0.7	-33.0	203.2
3635	0.7	C_SLU_STR_ENV	Combination	Min	-65.0	45.4	-32.9	-0.7	-49.4	186.5
3635	1.1	C_SLU_STR_ENV	Combination	Min	-65.0	47.8	-32.9	-0.7	-65.7	168.8
3636	0.0	C_SLU_STR_ENV	Combination	Max	60.3	611.1	68.6	0.2	30.2	2360.2
3636	0.4	C_SLU_STR_ENV	Combination	Max	60.3	613.5	68.6	0.2	26.6	2145.7
3636	0.7	C_SLU_STR_ENV	Combination	Max	60.3	615.9	68.6	0.2	23.0	1930.3
3636	1.1	C_SLU_STR_ENV	Combination	Max	60.3	618.4	68.6	0.2	19.4	1714.0
3636	0.0	C_SLU_STR_ENV	Combination	Min	-26.3	47.3	-44.9	-0.6	-30.3	176.5
3636	0.4	C_SLU_STR_ENV	Combination	Min	-26.3	49.8	-44.9	-0.6	-35.3	158.2
3636	0.7	C_SLU_STR_ENV	Combination	Min	-26.3	52.2	-44.9	-0.6	-40.3	139.1
3636	1.1	C_SLU_STR_ENV	Combination	Min	-26.3	54.6	-44.9	-0.6	-45.4	119.1
3637	0.0	C_SLU_STR_ENV	Combination	Max	64.5	651.3	31.3	0.2	10.9	1725.3
3637	0.4	C_SLU_STR_ENV	Combination	Max	64.5	653.7	31.3	0.2	18.6	1494.8
3637	0.7	C_SLU_STR_ENV	Combination	Max	64.5	656.1	31.3	0.2	26.4	1263.6
3637	1.1	C_SLU_STR_ENV	Combination	Max	64.5	658.5	31.3	0.2	34.1	1031.4
3637	0.0	C_SLU_STR_ENV	Combination	Min	-11.2	54.5	-76.4	-0.5	-49.7	127.2
3637	0.4	C_SLU_STR_ENV	Combination	Min	-11.2	57.0	-76.4	-0.5	-41.2	106.3
3637	0.7	C_SLU_STR_ENV	Combination	Min	-11.2	59.4	-76.4	-0.5	-32.7	84.5
3637	1.1	C_SLU_STR_ENV	Combination	Min	-11.2	61.8	-76.4	-0.5	-24.2	61.8
3638	0.0	C_SLU_STR_ENV	Combination	Max	64.1	686.3	7.7	0.3	3.3	1048.8
3638	0.4	C_SLU_STR_ENV	Combination	Max	64.1	688.7	7.7	0.3	20.7	807.5
3638	0.7	C_SLU_STR_ENV	Combination	Max	64.1	691.2	7.7	0.3	38.2	565.4
3638	1.1	C_SLU_STR_ENV	Combination	Max	64.1	693.6	7.7	0.3	55.6	322.4
3638	0.0	C_SLU_STR_ENV	Combination	Min	-10.7	61.9	-112.8	-0.5	-66.4	70.8
3638	0.4	C_SLU_STR_ENV	Combination	Min	-10.7	64.3	-112.8	-0.5	-46.6	46.2
3638	0.7	C_SLU_STR_ENV	Combination	Min	-10.7	66.8	-112.8	-0.5	-26.8	20.7
3638	1.1	C_SLU_STR_ENV	Combination	Min	-10.7	69.2	-112.8	-0.5	-6.9	-5.6
3639	0.0	C_SLU_STR_ENV	Combination	Max	66.3	716.5	15.4	0.5	6.5	334.1
3639	0.5	C_SLU_STR_ENV	Combination	Max	66.3	719.8	15.4	0.5	35.5	13.0
3639	0.0	C_SLU_STR_ENV	Combination	Min	-16.5	70.3	-164.1	-0.7	-54.2	10.8
3639	0.5	C_SLU_STR_ENV	Combination	Min	-16.5	73.6	-164.1	-0.7	-13.2	-66.9
3640	0.0	C_SLU_STR_ENV	Combination	Max	87.1	-59.0	87.4	0.9	20.0	25.9
3640	0.5	C_SLU_STR_ENV	Combination	Max	87.1	-57.8	87.4	0.9	52.0	403.0

3640	0.0	C_SLU_STR_ENV	Combination	Min	-58.9	-865.9	-177.8	-0.3	-47.0	-122.2
3640	0.5	C_SLU_STR_ENV	Combination	Min	-58.9	-864.7	-177.8	-0.3	-36.6	-32.4
3641	0.0	C_SLU_STR_ENV	Combination	Max	66.7	-55.3	90.9	0.6	49.7	436.1
3641	0.4	C_SLU_STR_ENV	Combination	Max	66.7	-54.4	90.9	0.6	43.9	690.8
3641	0.7	C_SLU_STR_ENV	Combination	Max	66.7	-53.5	90.9	0.6	51.8	945.2
3641	1.1	C_SLU_STR_ENV	Combination	Max	66.7	-52.7	90.9	0.6	59.7	1199.2
3641	0.0	C_SLU_STR_ENV	Combination	Min	-95.2	-766.2	-104.2	-0.3	-53.5	-46.7
3641	0.4	C_SLU_STR_ENV	Combination	Min	-95.2	-765.3	-104.2	-0.3	-46.8	-22.0
3641	0.7	C_SLU_STR_ENV	Combination	Min	-95.2	-764.4	-104.2	-0.3	-40.1	2.3
3641	1.1	C_SLU_STR_ENV	Combination	Min	-95.2	-763.5	-104.2	-0.3	-48.5	26.3
3642	0.0	C_SLU_STR_ENV	Combination	Max	65.8	-14.4	104.7	0.5	58.0	1208.9
3642	0.4	C_SLU_STR_ENV	Combination	Max	65.8	-13.5	104.7	0.5	46.7	1414.9
3642	0.7	C_SLU_STR_ENV	Combination	Max	65.8	-12.7	104.7	0.5	44.5	1620.6
3642	1.1	C_SLU_STR_ENV	Combination	Max	65.8	-11.8	104.7	0.5	42.3	1826.0
3642	0.0	C_SLU_STR_ENV	Combination	Min	-119.2	-677.3	-70.2	-0.3	-34.2	27.8
3642	0.4	C_SLU_STR_ENV	Combination	Min	-119.2	-676.4	-70.2	-0.3	-37.1	50.8
3642	0.7	C_SLU_STR_ENV	Combination	Min	-119.2	-675.6	-70.2	-0.3	-40.0	73.5
3642	1.1	C_SLU_STR_ENV	Combination	Min	-119.2	-674.7	-70.2	-0.3	-55.3	95.9
3643	0.0	C_SLU_STR_ENV	Combination	Max	78.7	51.5	119.1	0.4	68.4	1810.2
3643	0.4	C_SLU_STR_ENV	Combination	Max	78.7	52.4	119.1	0.4	54.1	1974.7
3643	0.7	C_SLU_STR_ENV	Combination	Max	78.7	53.2	119.1	0.4	42.3	2139.0
3643	1.1	C_SLU_STR_ENV	Combination	Max	78.7	54.1	119.1	0.4	30.5	2303.0
3643	0.0	C_SLU_STR_ENV	Combination	Min	-108.8	-605.6	-52.3	-0.3	-29.9	98.6
3643	0.4	C_SLU_STR_ENV	Combination	Min	-108.8	-604.7	-52.3	-0.3	-33.8	120.0
3643	0.7	C_SLU_STR_ENV	Combination	Min	-108.8	-603.9	-52.3	-0.3	-43.9	141.1
3643	1.1	C_SLU_STR_ENV	Combination	Min	-108.8	-603.0	-52.3	-0.3	-61.4	161.9
3644	0.0	C_SLU_STR_ENV	Combination	Max	109.2	109.7	161.5	0.4	90.3	2266.6
3644	0.4	C_SLU_STR_ENV	Combination	Max	109.2	110.6	161.5	0.4	69.6	2405.2
3644	0.7	C_SLU_STR_ENV	Combination	Max	109.2	111.5	161.5	0.4	52.4	2543.5
3644	1.1	C_SLU_STR_ENV	Combination	Max	109.2	112.3	161.5	0.4	47.5	2681.5
3644	0.0	C_SLU_STR_ENV	Combination	Min	-69.1	-556.1	-88.9	-0.4	-48.7	166.1
3644	0.4	C_SLU_STR_ENV	Combination	Min	-69.1	-555.2	-88.9	-0.4	-52.2	185.7
3644	0.7	C_SLU_STR_ENV	Combination	Min	-69.1	-554.3	-88.9	-0.4	-65.1	204.1
3644	1.1	C_SLU_STR_ENV	Combination	Min	-69.1	-553.4	-88.9	-0.4	-84.3	221.7
3645	0.0	C_SLU_STR_ENV	Combination	Max	110.1	153.1	254.3	0.4	61.3	2669.1
3645	0.2	C_SLU_STR_ENV	Combination	Max	110.1	153.5	254.3	0.4	64.5	2713.5

3645	0.0	C_SLU_STR_ENV	Combination	Min	-39.4	-522.9	-184.3	-2.7	-40.8	219.7
3645	0.2	C_SLU_STR_ENV	Combination	Min	-39.4	-522.5	-184.3	-2.7	-47.2	226.8
3646	0.0	C_SLU_STR_ENV	Combination	Max	173.6	97.7	143.9	0.7	63.0	2714.1
3646	0.5	C_SLU_STR_ENV	Combination	Max	173.6	98.8	143.9	0.7	56.5	2905.8
3646	0.9	C_SLU_STR_ENV	Combination	Max	173.6	99.9	143.9	0.7	74.0	3097.0
3646	0.0	C_SLU_STR_ENV	Combination	Min	-139.2	-570.0	-150.7	-0.2	-64.6	227.3
3646	0.5	C_SLU_STR_ENV	Combination	Min	-139.2	-568.8	-150.7	-0.2	-57.2	242.9
3646	0.9	C_SLU_STR_ENV	Combination	Min	-139.2	-567.7	-150.7	-0.2	-72.0	258.0
3647	0.0	C_SLU_STR_ENV	Combination	Max	111.3	129.3	97.6	0.4	54.8	3129.6
3647	0.4	C_SLU_STR_ENV	Combination	Max	111.3	130.2	97.6	0.4	47.9	3249.4
3647	0.7	C_SLU_STR_ENV	Combination	Max	111.3	131.0	97.6	0.4	51.6	3369.0
3647	1.1	C_SLU_STR_ENV	Combination	Max	111.3	131.9	97.6	0.4	55.3	3488.2
3647	0.0	C_SLU_STR_ENV	Combination	Min	-118.9	-517.9	-86.3	-0.4	-38.9	249.9
3647	0.4	C_SLU_STR_ENV	Combination	Min	-118.9	-517.0	-86.3	-0.4	-38.7	260.1
3647	0.7	C_SLU_STR_ENV	Combination	Min	-118.9	-516.1	-86.3	-0.4	-41.3	270.0
3647	1.1	C_SLU_STR_ENV	Combination	Min	-118.9	-515.3	-86.3	-0.4	-51.2	279.6
3648	0.0	C_SLU_STR_ENV	Combination	Max	101.0	172.8	101.1	0.6	57.6	3488.7
3648	0.5	C_SLU_STR_ENV	Combination	Max	101.0	174.0	101.1	0.6	42.5	3600.7
3648	1.0	C_SLU_STR_ENV	Combination	Max	101.0	175.2	101.1	0.6	32.2	3712.1
3648	0.0	C_SLU_STR_ENV	Combination	Min	-94.9	-464.0	-59.5	-0.8	-29.2	272.8
3648	0.5	C_SLU_STR_ENV	Combination	Min	-94.9	-462.8	-59.5	-0.8	-29.8	283.4
3648	1.0	C_SLU_STR_ENV	Combination	Min	-94.9	-461.7	-59.5	-0.8	-41.4	293.5
3649	0.0	C_SLU_STR_ENV	Combination	Max	101.0	175.2	101.1	8.5	32.2	3711.5
3649	0.1	C_SLU_STR_ENV	Combination	Max	101.0	175.5	101.1	8.5	39.1	3753.0
3649	0.0	C_SLU_STR_ENV	Combination	Min	-94.9	-461.7	-59.5	-5.0	-41.4	289.7
3649	0.1	C_SLU_STR_ENV	Combination	Min	-94.9	-461.4	-59.5	-5.0	-53.5	292.1
3650	0.0	C_SLU_STR_ENV	Combination	Max	120.8	217.9	132.5	0.5	84.5	3722.1
3650	0.4	C_SLU_STR_ENV	Combination	Max	120.8	218.8	132.5	0.5	69.5	3782.7
3650	0.7	C_SLU_STR_ENV	Combination	Max	120.8	219.7	132.5	0.5	54.4	3843.0
3650	1.1	C_SLU_STR_ENV	Combination	Max	120.8	220.5	132.5	0.5	47.7	3902.9
3650	0.0	C_SLU_STR_ENV	Combination	Min	-59.0	-417.3	-92.4	-0.7	-53.8	285.0
3650	0.4	C_SLU_STR_ENV	Combination	Min	-59.0	-416.4	-92.4	-0.7	-50.2	291.2
3650	0.7	C_SLU_STR_ENV	Combination	Min	-59.0	-415.6	-92.4	-0.7	-50.5	297.1
3650	1.1	C_SLU_STR_ENV	Combination	Min	-59.0	-414.7	-92.4	-0.7	-62.5	302.6
3651	0.0	C_SLU_STR_ENV	Combination	Max	143.3	259.9	200.5	0.4	96.1	3858.2
3651	0.4	C_SLU_STR_ENV	Combination	Max	143.3	260.9	200.5	0.4	69.5	3897.3

3651	0.8	C_SLU_STR_ENV	Combination	Max	143.3	261.9	200.5	0.4	69.2	3935.9
3651	0.0	C_SLU_STR_ENV	Combination	Min	-29.5	-383.5	-161.8	-1.4	-70.9	298.9
3651	0.4	C_SLU_STR_ENV	Combination	Min	-29.5	-382.5	-161.8	-1.4	-59.8	303.9
3651	0.8	C_SLU_STR_ENV	Combination	Min	-29.5	-381.5	-161.8	-1.4	-69.5	308.5
3652	0.0	C_SLU_STR_ENV	Combination	Max	217.0	224.1	218.8	3.2	65.5	3937.2
3652	0.3	C_SLU_STR_ENV	Combination	Max	217.0	224.8	218.8	3.2	50.1	4003.1
3652	0.0	C_SLU_STR_ENV	Combination	Min	-141.0	-424.3	-228.4	-0.6	-68.6	308.7
3652	0.3	C_SLU_STR_ENV	Combination	Min	-141.0	-423.7	-228.4	-0.6	-61.1	310.4
3653	0.0	C_SLU_STR_ENV	Combination	Max	158.3	249.3	124.1	0.6	67.8	4021.4
3653	0.4	C_SLU_STR_ENV	Combination	Max	158.3	250.2	124.1	0.6	64.2	4065.8
3653	0.7	C_SLU_STR_ENV	Combination	Max	158.3	251.0	124.1	0.6	73.4	4109.8
3653	1.1	C_SLU_STR_ENV	Combination	Max	158.3	251.9	124.1	0.6	87.6	4153.6
3653	0.0	C_SLU_STR_ENV	Combination	Min	-115.2	-386.9	-147.2	-0.7	-72.2	307.4
3653	0.4	C_SLU_STR_ENV	Combination	Min	-115.2	-386.0	-147.2	-0.7	-61.7	308.8
3653	0.7	C_SLU_STR_ENV	Combination	Min	-115.2	-385.2	-147.2	-0.7	-61.7	309.8
3653	1.1	C_SLU_STR_ENV	Combination	Min	-115.2	-384.3	-147.2	-0.7	-67.8	310.6
3654	0.0	C_SLU_STR_ENV	Combination	Max	120.6	284.8	85.0	0.5	54.5	4180.8
3654	0.4	C_SLU_STR_ENV	Combination	Max	120.6	285.7	85.0	0.5	52.8	4198.1
3654	0.8	C_SLU_STR_ENV	Combination	Max	120.6	286.6	85.0	0.5	59.6	4214.9
3654	1.1	C_SLU_STR_ENV	Combination	Max	120.6	287.5	85.0	0.5	66.4	4231.5
3654	0.0	C_SLU_STR_ENV	Combination	Min	-97.4	-336.9	-88.8	-0.7	-39.2	309.1
3654	0.4	C_SLU_STR_ENV	Combination	Min	-97.4	-335.9	-88.8	-0.7	-36.6	308.7
3654	0.8	C_SLU_STR_ENV	Combination	Min	-97.4	-335.0	-88.8	-0.7	-39.1	308.0
3654	1.1	C_SLU_STR_ENV	Combination	Min	-97.4	-334.1	-88.8	-0.7	-44.3	306.9
3655	0.0	C_SLU_STR_ENV	Combination	Max	115.7	332.9	98.5	0.4	66.9	4223.9
3655	0.4	C_SLU_STR_ENV	Combination	Max	115.7	333.8	98.5	0.4	59.8	4208.3
3655	0.8	C_SLU_STR_ENV	Combination	Max	115.7	334.8	98.5	0.4	53.5	4192.2
3655	1.1	C_SLU_STR_ENV	Combination	Max	115.7	335.7	98.5	0.4	47.1	4175.9
3655	0.0	C_SLU_STR_ENV	Combination	Min	-75.3	-287.8	-72.3	-0.9	-45.0	307.8
3655	0.4	C_SLU_STR_ENV	Combination	Min	-75.3	-286.9	-72.3	-0.9	-39.5	304.9
3655	0.8	C_SLU_STR_ENV	Combination	Min	-75.3	-286.0	-72.3	-0.9	-36.1	301.6
3655	1.1	C_SLU_STR_ENV	Combination	Min	-75.3	-285.1	-72.3	-0.9	-47.8	298.0
3656	0.0	C_SLU_STR_ENV	Combination	Max	135.2	382.4	146.7	0.4	87.6	4136.9
3656	0.4	C_SLU_STR_ENV	Combination	Max	135.2	383.3	146.7	0.4	73.8	4096.3
3656	0.7	C_SLU_STR_ENV	Combination	Max	135.2	384.2	146.7	0.4	64.8	4055.5
3656	1.1	C_SLU_STR_ENV	Combination	Max	135.2	385.0	146.7	0.4	68.8	4014.3

3656	0.0	C_SLU_STR_ENV	Combination	Min	-38.2	-252.6	-126.2	-1.0	-68.9	299.8
3656	0.4	C_SLU_STR_ENV	Combination	Min	-38.2	-251.7	-126.2	-1.0	-62.4	295.5
3656	0.7	C_SLU_STR_ENV	Combination	Min	-38.2	-250.8	-126.2	-1.0	-61.8	290.9
3656	1.1	C_SLU_STR_ENV	Combination	Min	-38.2	-250.0	-126.2	-1.0	-72.0	285.9
3657	0.0	C_SLU_STR_ENV	Combination	Max	140.4	422.6	228.2	0.5	47.6	3989.5
3657	0.3	C_SLU_STR_ENV	Combination	Max	140.4	423.2	228.2	0.5	62.4	3927.5
3657	0.0	C_SLU_STR_ENV	Combination	Min	-28.4	-227.0	-218.5	-3.7	-64.4	288.1
3657	0.3	C_SLU_STR_ENV	Combination	Min	-28.4	-226.3	-218.5	-3.7	-68.6	283.9
3658	0.0	C_SLU_STR_ENV	Combination	Max	206.1	381.9	159.5	0.9	69.3	3928.7
3658	0.4	C_SLU_STR_ENV	Combination	Max	206.1	382.9	159.5	0.9	69.5	3894.9
3658	0.8	C_SLU_STR_ENV	Combination	Max	206.1	383.9	159.5	0.9	96.6	3860.7
3658	0.0	C_SLU_STR_ENV	Combination	Min	-123.6	-263.8	-200.2	-0.6	-68.6	284.0
3658	0.4	C_SLU_STR_ENV	Combination	Min	-123.6	-262.8	-200.2	-0.6	-58.0	276.2
3658	0.8	C_SLU_STR_ENV	Combination	Min	-123.6	-261.8	-200.2	-0.6	-67.2	267.9
3659	0.0	C_SLU_STR_ENV	Combination	Max	140.8	414.6	88.9	0.4	45.8	3893.0
3659	0.4	C_SLU_STR_ENV	Combination	Max	140.8	415.5	88.9	0.4	53.2	3836.1
3659	0.7	C_SLU_STR_ENV	Combination	Max	140.8	416.4	88.9	0.4	69.0	3779.0
3659	1.1	C_SLU_STR_ENV	Combination	Max	140.8	417.3	88.9	0.4	84.8	3721.6
3659	0.0	C_SLU_STR_ENV	Combination	Min	-110.8	-224.0	-133.6	-1.0	-61.2	269.8
3659	0.4	C_SLU_STR_ENV	Combination	Min	-110.8	-223.1	-133.6	-1.0	-50.6	261.6
3659	0.7	C_SLU_STR_ENV	Combination	Min	-110.8	-222.3	-133.6	-1.0	-49.5	253.2
3659	1.1	C_SLU_STR_ENV	Combination	Min	-110.8	-221.4	-133.6	-1.0	-52.2	244.5
3660	0.0	C_SLU_STR_ENV	Combination	Max	107.1	459.0	67.6	5.5	41.8	3734.3
3660	0.1	C_SLU_STR_ENV	Combination	Max	107.1	459.3	67.6	5.5	33.7	3693.2
3660	0.0	C_SLU_STR_ENV	Combination	Min	-99.7	-179.7	-89.3	-7.7	-45.5	247.8
3660	0.1	C_SLU_STR_ENV	Combination	Min	-99.7	-179.4	-89.3	-7.7	-34.9	244.7
3661	0.0	C_SLU_STR_ENV	Combination	Max	107.1	459.3	67.6	0.6	33.7	3692.9
3661	0.5	C_SLU_STR_ENV	Combination	Max	107.1	460.5	67.6	0.6	42.3	3586.6
3661	1.0	C_SLU_STR_ENV	Combination	Max	107.1	461.6	67.6	0.6	54.0	3479.8
3661	0.0	C_SLU_STR_ENV	Combination	Min	-99.7	-179.4	-89.3	-0.9	-34.9	248.7
3661	0.5	C_SLU_STR_ENV	Combination	Min	-99.7	-178.2	-89.3	-0.9	-29.7	235.8
3661	1.0	C_SLU_STR_ENV	Combination	Min	-99.7	-177.1	-89.3	-0.9	-31.9	222.3
3662	0.0	C_SLU_STR_ENV	Combination	Max	111.6	509.8	86.2	0.2	54.1	3457.5
3662	0.4	C_SLU_STR_ENV	Combination	Max	111.6	510.7	86.2	0.2	51.5	3342.6
3662	0.7	C_SLU_STR_ENV	Combination	Max	111.6	511.6	86.2	0.2	48.9	3227.4
3662	1.1	C_SLU_STR_ENV	Combination	Max	111.6	512.4	86.2	0.2	46.8	3111.9

3662	0.0	C_SLU_STR_ENV	Combination	Min	-76.9	-136.9	-90.5	-0.6	-51.6	225.7
3662	0.4	C_SLU_STR_ENV	Combination	Min	-76.9	-136.0	-90.5	-0.6	-42.1	214.9
3662	0.7	C_SLU_STR_ENV	Combination	Min	-76.9	-135.1	-90.5	-0.6	-38.2	203.7
3662	1.1	C_SLU_STR_ENV	Combination	Min	-76.9	-134.2	-90.5	-0.6	-41.0	192.3
3663	0.0	C_SLU_STR_ENV	Combination	Max	133.3	560.7	149.3	0.1	73.2	3064.6
3663	0.5	C_SLU_STR_ENV	Combination	Max	133.3	561.8	149.3	0.1	56.3	2881.3
3663	0.9	C_SLU_STR_ENV	Combination	Max	133.3	562.9	149.3	0.1	62.7	2697.4
3663	0.0	C_SLU_STR_ENV	Combination	Min	-50.8	-107.0	-145.8	-1.0	-74.6	196.2
3663	0.5	C_SLU_STR_ENV	Combination	Min	-50.8	-105.9	-145.8	-1.0	-58.4	180.8
3663	0.9	C_SLU_STR_ENV	Combination	Min	-50.8	-104.8	-145.8	-1.0	-64.1	164.8
3664	0.0	C_SLU_STR_ENV	Combination	Max	221.5	519.3	180.6	2.4	68.1	2698.9
3664	0.2	C_SLU_STR_ENV	Combination	Max	221.5	519.7	180.6	2.4	66.9	2659.9
3664	0.0	C_SLU_STR_ENV	Combination	Min	-156.5	-161.8	-254.3	-0.6	-45.9	164.9
3664	0.2	C_SLU_STR_ENV	Combination	Min	-156.5	-161.4	-254.3	-0.6	-39.9	158.6
3665	0.0	C_SLU_STR_ENV	Combination	Max	158.0	549.2	85.2	0.3	45.6	2661.8
3665	0.4	C_SLU_STR_ENV	Combination	Max	158.0	550.1	85.2	0.3	51.5	2531.3
3665	0.7	C_SLU_STR_ENV	Combination	Max	158.0	551.0	85.2	0.3	69.6	2400.5
3665	1.1	C_SLU_STR_ENV	Combination	Max	158.0	551.9	85.2	0.3	91.0	2269.3
3665	0.0	C_SLU_STR_ENV	Combination	Min	-130.5	-125.1	-162.6	-0.6	-85.0	161.2
3665	0.4	C_SLU_STR_ENV	Combination	Min	-130.5	-124.2	-162.6	-0.6	-65.0	146.9
3665	0.7	C_SLU_STR_ENV	Combination	Min	-130.5	-123.4	-162.6	-0.6	-51.3	132.2
3665	1.1	C_SLU_STR_ENV	Combination	Min	-130.5	-122.5	-162.6	-0.6	-46.6	117.3
3666	0.0	C_SLU_STR_ENV	Combination	Max	98.6	595.2	55.9	0.2	32.8	2285.1
3666	0.4	C_SLU_STR_ENV	Combination	Max	98.6	596.0	55.9	0.2	41.5	2127.4
3666	0.7	C_SLU_STR_ENV	Combination	Max	98.6	596.9	55.9	0.2	54.4	1969.3
3666	1.1	C_SLU_STR_ENV	Combination	Max	98.6	597.8	55.9	0.2	67.3	1810.9
3666	0.0	C_SLU_STR_ENV	Combination	Min	-112.2	-69.2	-112.5	-0.6	-56.4	119.3
3666	0.4	C_SLU_STR_ENV	Combination	Min	-112.2	-68.3	-112.5	-0.6	-44.8	103.8
3666	0.7	C_SLU_STR_ENV	Combination	Min	-112.2	-67.4	-112.5	-0.6	-33.2	87.9
3666	1.1	C_SLU_STR_ENV	Combination	Min	-112.2	-66.6	-112.5	-0.6	-28.0	71.8
3667	0.0	C_SLU_STR_ENV	Combination	Max	74.2	660.8	70.4	0.2	41.0	1801.7
3667	0.4	C_SLU_STR_ENV	Combination	Max	74.2	661.7	70.4	0.2	43.8	1603.0
3667	0.7	C_SLU_STR_ENV	Combination	Max	74.2	662.6	70.4	0.2	47.4	1403.9
3667	1.1	C_SLU_STR_ENV	Combination	Max	74.2	663.5	70.4	0.2	51.1	1204.4
3667	0.0	C_SLU_STR_ENV	Combination	Min	-93.2	-1.2	-88.9	-0.6	-45.4	74.4
3667	0.4	C_SLU_STR_ENV	Combination	Min	-93.2	-0.3	-88.9	-0.6	-40.9	57.8

3667	0.7	C_SLU_STR_ENV	Combination	Min	-93.2	0.5	-88.9	-0.6	-36.5	40.9
3667	1.1	C_SLU_STR_ENV	Combination	Min	-93.2	1.4	-88.9	-0.6	-35.3	23.7
3668	0.0	C_SLU_STR_ENV	Combination	Max	51.8	745.3	101.8	0.3	58.6	1174.8
3668	0.4	C_SLU_STR_ENV	Combination	Max	51.8	746.2	101.8	0.3	52.1	927.6
3668	0.7	C_SLU_STR_ENV	Combination	Max	51.8	747.0	101.8	0.3	45.6	680.1
3668	1.1	C_SLU_STR_ENV	Combination	Max	51.8	747.9	101.8	0.3	43.5	432.3
3668	0.0	C_SLU_STR_ENV	Combination	Min	-64.7	38.1	-81.5	-0.7	-44.6	24.0
3668	0.4	C_SLU_STR_ENV	Combination	Min	-64.7	38.9	-81.5	-0.7	-41.6	2.0
3668	0.7	C_SLU_STR_ENV	Combination	Min	-64.7	39.8	-81.5	-0.7	-46.6	-20.2
3668	1.1	C_SLU_STR_ENV	Combination	Min	-64.7	40.7	-81.5	-0.7	-51.6	-42.7
3669	0.0	C_SLU_STR_ENV	Combination	Max	33.6	847.0	175.4	0.3	50.9	390.4
3669	0.5	C_SLU_STR_ENV	Combination	Max	33.6	848.2	175.4	0.3	20.4	27.2
3669	0.0	C_SLU_STR_ENV	Combination	Min	-60.9	45.5	-94.1	-0.9	-38.4	-27.4
3669	0.5	C_SLU_STR_ENV	Combination	Min	-60.9	46.6	-94.1	-0.9	-45.9	-115.1
3670	0.0	C_SLU_STR_ENV	Combination	Max	3.2	-8.2	83.2	0.6	14.4	35.0
3670	0.5	C_SLU_STR_ENV	Combination	Max	3.2	-7.0	83.2	0.6	1.0	258.6
3670	0.0	C_SLU_STR_ENV	Combination	Min	-40.1	-521.3	-6.0	-0.3	-17.2	-46.7
3670	0.5	C_SLU_STR_ENV	Combination	Min	-40.1	-520.1	-6.0	-0.3	-38.3	-14.1
3671	0.0	C_SLU_STR_ENV	Combination	Max	18.9	-4.6	53.0	0.5	27.8	279.3
3671	0.4	C_SLU_STR_ENV	Combination	Max	18.9	-3.7	53.0	0.5	18.3	438.6
3671	0.7	C_SLU_STR_ENV	Combination	Max	18.9	-2.8	53.0	0.5	10.4	597.5
3671	1.1	C_SLU_STR_ENV	Combination	Max	18.9	-1.9	53.0	0.5	3.2	756.2
3671	0.0	C_SLU_STR_ENV	Combination	Min	-53.4	-473.1	-4.2	-0.3	-1.6	-19.1
3671	0.4	C_SLU_STR_ENV	Combination	Min	-53.4	-472.2	-4.2	-0.3	-9.7	-14.8
3671	0.7	C_SLU_STR_ENV	Combination	Min	-53.4	-471.3	-4.2	-0.3	-19.1	-10.9
3671	1.1	C_SLU_STR_ENV	Combination	Min	-53.4	-470.5	-4.2	-0.3	-29.4	-7.2
3672	0.0	C_SLU_STR_ENV	Combination	Max	34.6	17.8	41.1	0.5	24.4	767.9
3672	0.4	C_SLU_STR_ENV	Combination	Max	34.6	18.6	41.1	0.5	18.2	905.8
3672	0.7	C_SLU_STR_ENV	Combination	Max	34.6	19.5	41.1	0.5	11.9	1043.4
3672	1.1	C_SLU_STR_ENV	Combination	Max	34.6	20.4	41.1	0.5	5.7	1180.7
3672	0.0	C_SLU_STR_ENV	Combination	Min	-76.7	-430.9	-8.1	-0.2	-3.7	-6.9
3672	0.4	C_SLU_STR_ENV	Combination	Min	-76.7	-430.0	-8.1	-0.2	-9.8	-2.9
3672	0.7	C_SLU_STR_ENV	Combination	Min	-76.7	-429.2	-8.1	-0.2	-16.1	0.8
3672	1.1	C_SLU_STR_ENV	Combination	Min	-76.7	-428.3	-8.1	-0.2	-22.4	4.2
3673	0.0	C_SLU_STR_ENV	Combination	Max	49.9	47.5	52.7	0.5	32.0	1187.1
3673	0.4	C_SLU_STR_ENV	Combination	Max	49.9	48.4	52.7	0.5	23.7	1304.7

3673	0.7	C_SLU_STR_ENV	Combination	Max	49.9	49.2	52.7	0.5	15.5	1422.0
3673	1.1	C_SLU_STR_ENV	Combination	Max	49.9	50.1	52.7	0.5	9.8	1539.0
3673	0.0	C_SLU_STR_ENV	Combination	Min	-100.0	-394.2	-17.9	-0.3	-9.9	5.8
3673	0.4	C_SLU_STR_ENV	Combination	Min	-100.0	-393.3	-17.9	-0.3	-14.2	9.4
3673	0.7	C_SLU_STR_ENV	Combination	Min	-100.0	-392.4	-17.9	-0.3	-19.8	12.8
3673	1.1	C_SLU_STR_ENV	Combination	Min	-100.0	-391.5	-17.9	-0.3	-25.3	15.8
3674	0.0	C_SLU_STR_ENV	Combination	Max	64.6	70.4	83.8	0.4	46.6	1539.9
3674	0.4	C_SLU_STR_ENV	Combination	Max	64.6	71.3	83.8	0.4	37.0	1640.6
3674	0.7	C_SLU_STR_ENV	Combination	Max	64.6	72.1	83.8	0.4	27.5	1741.0
3674	1.1	C_SLU_STR_ENV	Combination	Max	64.6	73.0	83.8	0.4	24.1	1841.0
3674	0.0	C_SLU_STR_ENV	Combination	Min	-129.3	-363.1	-38.9	-0.3	-18.3	18.5
3674	0.4	C_SLU_STR_ENV	Combination	Min	-129.3	-362.3	-38.9	-0.3	-25.8	21.9
3674	0.7	C_SLU_STR_ENV	Combination	Min	-129.3	-361.4	-38.9	-0.3	-35.3	25.0
3674	1.1	C_SLU_STR_ENV	Combination	Min	-129.3	-360.5	-38.9	-0.3	-44.7	27.7
3675	0.0	C_SLU_STR_ENV	Combination	Max	77.0	86.4	148.7	1.7	40.9	1841.0
3675	0.2	C_SLU_STR_ENV	Combination	Max	77.0	86.8	148.7	1.7	43.2	1874.8
3675	0.0	C_SLU_STR_ENV	Combination	Min	-156.8	-339.4	-78.8	-0.6	-17.3	29.5
3675	0.2	C_SLU_STR_ENV	Combination	Min	-156.8	-339.0	-78.8	-0.6	-35.1	30.9
3676	0.0	C_SLU_STR_ENV	Combination	Max	78.9	59.3	61.4	0.4	26.0	1874.1
3676	0.5	C_SLU_STR_ENV	Combination	Max	78.9	60.4	61.4	0.4	30.7	1978.9
3676	0.9	C_SLU_STR_ENV	Combination	Max	78.9	61.5	61.4	0.4	39.3	2083.3
3676	0.0	C_SLU_STR_ENV	Combination	Min	-84.9	-337.9	-80.9	-0.4	-36.8	31.0
3676	0.5	C_SLU_STR_ENV	Combination	Min	-84.9	-336.8	-80.9	-0.4	-31.8	33.8
3676	0.9	C_SLU_STR_ENV	Combination	Min	-84.9	-335.7	-80.9	-0.4	-30.5	36.1
3677	0.0	C_SLU_STR_ENV	Combination	Max	75.5	73.6	35.6	0.4	20.8	2087.4
3677	0.4	C_SLU_STR_ENV	Combination	Max	75.5	74.5	35.6	0.4	20.4	2159.6
3677	0.7	C_SLU_STR_ENV	Combination	Max	75.5	75.3	35.6	0.4	23.9	2231.5
3677	1.1	C_SLU_STR_ENV	Combination	Max	75.5	76.2	35.6	0.4	27.5	2303.0
3677	0.0	C_SLU_STR_ENV	Combination	Min	-78.1	-313.4	-41.8	-0.3	-18.2	34.8
3677	0.4	C_SLU_STR_ENV	Combination	Min	-78.1	-312.5	-41.8	-0.3	-18.1	36.9
3677	0.7	C_SLU_STR_ENV	Combination	Min	-78.1	-311.6	-41.8	-0.3	-17.9	38.7
3677	1.1	C_SLU_STR_ENV	Combination	Min	-78.1	-310.8	-41.8	-0.3	-18.4	40.2
3678	0.0	C_SLU_STR_ENV	Combination	Max	78.1	92.2	31.8	0.4	22.0	2305.2
3678	0.5	C_SLU_STR_ENV	Combination	Max	78.1	93.4	31.8	0.4	17.4	2384.5
3678	1.0	C_SLU_STR_ENV	Combination	Max	78.1	94.5	31.8	0.4	14.0	2463.3
3678	0.0	C_SLU_STR_ENV	Combination	Min	-86.6	-286.4	-20.4	-0.4	-9.5	40.2

3678	0.5	C_SLU_STR_ENV	Combination	Min	-86.6	-285.2	-20.4	-0.4	-10.6	42.8
3678	1.0	C_SLU_STR_ENV	Combination	Min	-86.6	-284.1	-20.4	-0.4	-11.7	44.8
3679	0.0	C_SLU_STR_ENV	Combination	Max	78.1	94.5	31.8	2.8	14.0	2466.6
3679	0.1	C_SLU_STR_ENV	Combination	Max	78.1	94.8	31.8	2.8	16.3	2493.4
3679	0.0	C_SLU_STR_ENV	Combination	Min	-86.6	-284.1	-20.4	-1.8	-11.7	45.6
3679	0.1	C_SLU_STR_ENV	Combination	Min	-86.6	-283.8	-20.4	-1.8	-14.9	46.0
3680	0.0	C_SLU_STR_ENV	Combination	Max	86.3	111.1	64.5	0.6	41.5	2491.8
3680	0.4	C_SLU_STR_ENV	Combination	Max	86.3	112.0	64.5	0.6	34.2	2542.0
3680	0.7	C_SLU_STR_ENV	Combination	Max	86.3	112.9	64.5	0.6	26.8	2591.9
3680	1.1	C_SLU_STR_ENV	Combination	Max	86.3	113.7	64.5	0.6	25.9	2641.5
3680	0.0	C_SLU_STR_ENV	Combination	Min	-105.0	-259.8	-40.1	-0.7	-19.0	48.3
3680	0.4	C_SLU_STR_ENV	Combination	Min	-105.0	-258.9	-40.1	-0.7	-22.7	50.0
3680	0.7	C_SLU_STR_ENV	Combination	Min	-105.0	-258.0	-40.1	-0.7	-26.5	51.4
3680	1.1	C_SLU_STR_ENV	Combination	Min	-105.0	-257.2	-40.1	-0.7	-30.4	52.5
3681	0.0	C_SLU_STR_ENV	Combination	Max	97.2	129.7	114.5	0.9	49.7	2640.0
3681	0.4	C_SLU_STR_ENV	Combination	Max	97.2	130.7	114.5	0.9	37.3	2677.5
3681	0.8	C_SLU_STR_ENV	Combination	Max	97.2	131.7	114.5	0.9	34.4	2714.6
3681	0.0	C_SLU_STR_ENV	Combination	Min	-134.8	-237.2	-67.7	-0.5	-23.7	56.1
3681	0.4	C_SLU_STR_ENV	Combination	Min	-134.8	-236.3	-67.7	-0.5	-36.4	57.7
3681	0.8	C_SLU_STR_ENV	Combination	Min	-134.8	-235.3	-67.7	-0.5	-49.2	58.8
3682	0.0	C_SLU_STR_ENV	Combination	Max	107.9	129.4	79.4	1.1	26.1	2713.6
3682	0.3	C_SLU_STR_ENV	Combination	Max	107.9	130.0	79.4	1.1	21.0	2743.0
3682	0.0	C_SLU_STR_ENV	Combination	Min	-71.1	-236.3	-155.4	-2.7	-48.8	58.9
3682	0.3	C_SLU_STR_ENV	Combination	Min	-71.1	-235.7	-155.4	-2.7	-16.6	59.2
3683	0.0	C_SLU_STR_ENV	Combination	Max	97.2	145.5	45.6	0.5	30.5	2740.3
3683	0.4	C_SLU_STR_ENV	Combination	Max	97.2	146.4	45.6	0.5	32.6	2756.0
3683	0.7	C_SLU_STR_ENV	Combination	Max	97.2	147.3	45.6	0.5	42.3	2771.3
3683	1.1	C_SLU_STR_ENV	Combination	Max	97.2	148.1	45.6	0.5	52.0	2786.3
3683	0.0	C_SLU_STR_ENV	Combination	Min	-64.3	-218.9	-91.0	-0.6	-48.3	58.3
3683	0.4	C_SLU_STR_ENV	Combination	Min	-64.3	-218.0	-91.0	-0.6	-38.9	59.0
3683	0.7	C_SLU_STR_ENV	Combination	Min	-64.3	-217.1	-91.0	-0.6	-29.5	59.5
3683	1.1	C_SLU_STR_ENV	Combination	Min	-64.3	-216.2	-91.0	-0.6	-20.1	59.5
3684	0.0	C_SLU_STR_ENV	Combination	Max	85.8	167.0	22.6	0.4	16.9	2785.5
3684	0.4	C_SLU_STR_ENV	Combination	Max	85.8	168.0	22.6	0.4	20.8	2791.2
3684	0.8	C_SLU_STR_ENV	Combination	Max	85.8	168.9	22.6	0.4	28.1	2796.4
3684	1.1	C_SLU_STR_ENV	Combination	Max	85.8	169.8	22.6	0.4	36.1	2801.3

3684	0.0	C_SLU_STR_ENV	Combination	Min	-64.7	-195.1	-47.7	-0.6	-21.4	57.4
3684	0.4	C_SLU_STR_ENV	Combination	Min	-64.7	-194.2	-47.7	-0.6	-18.3	57.8
3684	0.8	C_SLU_STR_ENV	Combination	Min	-64.7	-193.3	-47.7	-0.6	-15.1	57.9
3684	1.1	C_SLU_STR_ENV	Combination	Min	-64.7	-192.3	-47.7	-0.6	-12.0	57.7
3685	0.0	C_SLU_STR_ENV	Combination	Max	82.0	192.1	32.3	0.4	26.7	2802.0
3685	0.4	C_SLU_STR_ENV	Combination	Max	82.0	193.0	32.3	0.4	24.9	2797.3
3685	0.8	C_SLU_STR_ENV	Combination	Max	82.0	193.9	32.3	0.4	23.8	2792.2
3685	1.1	C_SLU_STR_ENV	Combination	Max	82.0	194.8	32.3	0.4	26.1	2786.8
3685	0.0	C_SLU_STR_ENV	Combination	Min	-81.9	-169.6	-38.0	-0.7	-20.3	57.8
3685	0.4	C_SLU_STR_ENV	Combination	Min	-81.9	-168.6	-38.0	-0.7	-17.7	57.4
3685	0.8	C_SLU_STR_ENV	Combination	Min	-81.9	-167.7	-38.0	-0.7	-15.1	56.6
3685	1.1	C_SLU_STR_ENV	Combination	Min	-81.9	-166.8	-38.0	-0.7	-12.5	55.5
3686	0.0	C_SLU_STR_ENV	Combination	Max	85.1	215.8	73.9	0.4	42.1	2788.7
3686	0.4	C_SLU_STR_ENV	Combination	Max	85.1	216.7	73.9	0.4	38.5	2773.0
3686	0.7	C_SLU_STR_ENV	Combination	Max	85.1	217.6	73.9	0.4	35.0	2756.9
3686	1.1	C_SLU_STR_ENV	Combination	Max	85.1	218.4	73.9	0.4	39.0	2740.5
3686	0.0	C_SLU_STR_ENV	Combination	Min	-114.3	-147.0	-61.0	-0.8	-28.1	58.3
3686	0.4	C_SLU_STR_ENV	Combination	Min	-114.3	-146.1	-61.0	-0.8	-31.9	57.6
3686	0.7	C_SLU_STR_ENV	Combination	Min	-114.3	-145.3	-61.0	-0.8	-35.7	56.5
3686	1.1	C_SLU_STR_ENV	Combination	Min	-114.3	-144.4	-61.0	-0.8	-39.6	55.1
3687	0.0	C_SLU_STR_ENV	Combination	Max	88.1	235.3	139.2	2.3	13.6	2743.8
3687	0.3	C_SLU_STR_ENV	Combination	Max	88.1	235.9	139.2	2.3	23.0	2713.5
3687	0.0	C_SLU_STR_ENV	Combination	Min	-146.4	-128.5	-95.1	-1.2	-26.6	56.6
3687	0.3	C_SLU_STR_ENV	Combination	Min	-146.4	-127.9	-95.1	-1.2	-53.8	55.8
3688	0.0	C_SLU_STR_ENV	Combination	Max	90.1	236.8	52.2	0.3	29.1	2712.4
3688	0.4	C_SLU_STR_ENV	Combination	Max	90.1	237.8	52.2	0.3	39.9	2673.4
3688	0.8	C_SLU_STR_ENV	Combination	Max	90.1	238.8	52.2	0.3	59.5	2634.0
3688	0.0	C_SLU_STR_ENV	Combination	Min	-72.9	-131.8	-130.4	-1.2	-53.2	55.9
3688	0.4	C_SLU_STR_ENV	Combination	Min	-72.9	-130.9	-130.4	-1.2	-35.0	54.0
3688	0.8	C_SLU_STR_ENV	Combination	Min	-72.9	-129.9	-130.4	-1.2	-16.8	51.6
3689	0.0	C_SLU_STR_ENV	Combination	Max	79.0	257.6	25.3	0.4	17.6	2632.8
3689	0.4	C_SLU_STR_ENV	Combination	Max	79.0	258.5	25.3	0.4	24.4	2582.6
3689	0.7	C_SLU_STR_ENV	Combination	Max	79.0	259.4	25.3	0.4	37.2	2532.1
3689	1.1	C_SLU_STR_ENV	Combination	Max	79.0	260.3	25.3	0.4	50.0	2481.4
3689	0.0	C_SLU_STR_ENV	Combination	Min	-64.4	-114.0	-79.5	-0.8	-38.1	47.7
3689	0.4	C_SLU_STR_ENV	Combination	Min	-64.4	-113.1	-79.5	-0.8	-29.3	46.0

3689	0.7	C_SLU_STR_ENV	Combination	Min	-64.4	-112.2	-79.5	-0.8	-20.4	43.9
3689	1.1	C_SLU_STR_ENV	Combination	Min	-64.4	-111.3	-79.5	-0.8	-11.6	41.6
3690	0.0	C_SLU_STR_ENV	Combination	Max	70.7	282.7	8.1	0.7	8.0	2478.3
3690	0.1	C_SLU_STR_ENV	Combination	Max	70.7	283.0	8.1	0.7	7.4	2451.8
3690	0.0	C_SLU_STR_ENV	Combination	Min	-76.5	-93.6	-45.7	-4.1	-22.9	38.1
3690	0.1	C_SLU_STR_ENV	Combination	Min	-76.5	-93.3	-45.7	-4.1	-17.9	37.6
3691	0.0	C_SLU_STR_ENV	Combination	Max	70.7	283.0	8.1	0.3	7.4	2450.4
3691	0.5	C_SLU_STR_ENV	Combination	Max	70.7	284.1	8.1	0.3	17.9	2371.6
3691	1.0	C_SLU_STR_ENV	Combination	Max	70.7	285.3	8.1	0.3	29.6	2292.2
3691	0.0	C_SLU_STR_ENV	Combination	Min	-76.5	-93.3	-45.7	-0.4	-17.9	37.2
3691	0.5	C_SLU_STR_ENV	Combination	Min	-76.5	-92.1	-45.7	-0.4	-10.2	34.6
3691	1.0	C_SLU_STR_ENV	Combination	Min	-76.5	-91.0	-45.7	-0.4	-3.4	31.5
3692	0.0	C_SLU_STR_ENV	Combination	Max	69.2	308.2	27.0	0.2	19.1	2288.3
3692	0.4	C_SLU_STR_ENV	Combination	Max	69.2	309.1	27.0	0.2	20.9	2217.1
3692	0.7	C_SLU_STR_ENV	Combination	Max	69.2	309.9	27.0	0.2	22.7	2145.6
3692	1.1	C_SLU_STR_ENV	Combination	Max	69.2	310.8	27.0	0.2	28.4	2073.8
3692	0.0	C_SLU_STR_ENV	Combination	Min	-98.7	-74.9	-49.4	-0.5	-25.6	30.9
3692	0.4	C_SLU_STR_ENV	Combination	Min	-98.7	-74.0	-49.4	-0.5	-20.3	29.2
3692	0.7	C_SLU_STR_ENV	Combination	Min	-98.7	-73.2	-49.4	-0.5	-15.5	27.1
3692	1.1	C_SLU_STR_ENV	Combination	Min	-98.7	-72.3	-49.4	-0.5	-10.6	24.8
3693	0.0	C_SLU_STR_ENV	Combination	Max	80.1	331.9	66.1	0.3	30.0	2071.3
3693	0.5	C_SLU_STR_ENV	Combination	Max	80.1	333.0	66.1	0.3	28.9	1966.7
3693	0.9	C_SLU_STR_ENV	Combination	Max	80.1	334.1	66.1	0.3	31.0	1861.6
3693	0.0	C_SLU_STR_ENV	Combination	Min	-134.0	-59.9	-74.6	-0.4	-37.6	26.1
3693	0.5	C_SLU_STR_ENV	Combination	Min	-134.0	-58.8	-74.6	-0.4	-33.0	23.8
3693	0.9	C_SLU_STR_ENV	Combination	Min	-134.0	-57.7	-74.6	-0.4	-32.0	20.9
3694	0.0	C_SLU_STR_ENV	Combination	Max	84.7	339.9	60.2	0.5	45.2	1860.7
3694	0.2	C_SLU_STR_ENV	Combination	Max	84.7	340.3	60.2	0.5	46.0	1826.0
3694	0.0	C_SLU_STR_ENV	Combination	Min	-66.1	-84.9	-164.7	-1.9	-28.9	21.0
3694	0.2	C_SLU_STR_ENV	Combination	Min	-66.1	-84.5	-164.7	-1.9	-7.9	19.5
3695	0.0	C_SLU_STR_ENV	Combination	Max	79.4	360.2	22.0	0.2	14.3	1822.2
3695	0.4	C_SLU_STR_ENV	Combination	Max	79.4	361.1	22.0	0.2	24.9	1721.1
3695	0.7	C_SLU_STR_ENV	Combination	Max	79.4	362.0	22.0	0.2	40.1	1619.6
3695	1.1	C_SLU_STR_ENV	Combination	Max	79.4	362.8	22.0	0.2	55.3	1517.8
3695	0.0	C_SLU_STR_ENV	Combination	Min	-75.0	-70.9	-99.0	-0.5	-52.4	16.7
3695	0.4	C_SLU_STR_ENV	Combination	Min	-75.0	-70.0	-99.0	-0.5	-38.0	14.0

3695	0.7	C_SLU_STR_ENV	Combination	Min	-75.0	-69.2	-99.0	-0.5	-23.5	10.9
3695	1.1	C_SLU_STR_ENV	Combination	Min	-75.0	-68.3	-99.0	-0.5	-10.2	7.6
3696	0.0	C_SLU_STR_ENV	Combination	Max	69.3	388.1	4.5	0.2	2.2	1509.4
3696	0.4	C_SLU_STR_ENV	Combination	Max	69.3	389.0	4.5	0.2	12.9	1392.9
3696	0.7	C_SLU_STR_ENV	Combination	Max	69.3	389.9	4.5	0.2	26.4	1276.1
3696	1.1	C_SLU_STR_ENV	Combination	Max	69.3	390.7	4.5	0.2	39.9	1158.9
3696	0.0	C_SLU_STR_ENV	Combination	Min	-64.1	-48.8	-66.7	-0.5	-32.6	2.8
3696	0.4	C_SLU_STR_ENV	Combination	Min	-64.1	-47.9	-66.7	-0.5	-22.2	0.1
3696	0.7	C_SLU_STR_ENV	Combination	Min	-64.1	-47.0	-66.7	-0.5	-11.8	-2.8
3696	1.1	C_SLU_STR_ENV	Combination	Min	-64.1	-46.2	-66.7	-0.5	-2.9	-6.1
3697	0.0	C_SLU_STR_ENV	Combination	Max	63.5	421.0	-0.5	0.2	-0.1	1149.8
3697	0.4	C_SLU_STR_ENV	Combination	Max	63.5	421.9	-0.5	0.2	9.2	1014.8
3697	0.7	C_SLU_STR_ENV	Combination	Max	63.5	422.8	-0.5	0.2	20.4	879.5
3697	1.1	C_SLU_STR_ENV	Combination	Max	63.5	423.7	-0.5	0.2	31.6	743.9
3697	0.0	C_SLU_STR_ENV	Combination	Min	-54.0	-21.0	-53.8	-0.6	-29.2	-9.2
3697	0.4	C_SLU_STR_ENV	Combination	Min	-54.0	-20.1	-53.8	-0.6	-18.5	-11.7
3697	0.7	C_SLU_STR_ENV	Combination	Min	-54.0	-19.3	-53.8	-0.6	-7.9	-14.4
3697	1.1	C_SLU_STR_ENV	Combination	Min	-54.0	-18.4	-53.8	-0.6	0.0	-17.5
3698	0.0	C_SLU_STR_ENV	Combination	Max	52.8	459.0	-5.9	0.2	-3.1	734.6
3698	0.4	C_SLU_STR_ENV	Combination	Max	52.8	459.9	-5.9	0.2	7.5	580.2
3698	0.7	C_SLU_STR_ENV	Combination	Max	52.8	460.8	-5.9	0.2	19.9	425.5
3698	1.1	C_SLU_STR_ENV	Combination	Max	52.8	461.6	-5.9	0.2	33.8	270.4
3698	0.0	C_SLU_STR_ENV	Combination	Min	-44.7	-1.2	-62.8	-0.6	-34.2	-18.6
3698	0.4	C_SLU_STR_ENV	Combination	Min	-44.7	-0.4	-62.8	-0.6	-20.2	-20.9
3698	0.7	C_SLU_STR_ENV	Combination	Min	-44.7	0.5	-62.8	-0.6	-6.8	-23.6
3698	1.1	C_SLU_STR_ENV	Combination	Min	-44.7	1.4	-62.8	-0.6	3.2	-26.6
3699	0.0	C_SLU_STR_ENV	Combination	Max	45.0	504.5	-4.4	0.2	-3.4	254.9
3699	0.5	C_SLU_STR_ENV	Combination	Max	45.0	505.7	-4.4	0.2	17.1	36.9
3699	0.0	C_SLU_STR_ENV	Combination	Min	-27.5	1.6	-90.5	-0.6	-39.6	-20.2
3699	0.5	C_SLU_STR_ENV	Combination	Min	-27.5	2.8	-90.5	-0.6	-16.9	-48.9
3700	0.0	C_SLU_STR_ENV	Combination	Max	13.7	102.7	51.0	0.6	11.7	47.4
3700	0.5	C_SLU_STR_ENV	Combination	Max	13.7	101.8	46.8	0.6	3.1	155.4
3700	0.0	C_SLU_STR_ENV	Combination	Min	-22.9	-296.8	-21.6	-0.3	-16.1	-9.7
3700	0.5	C_SLU_STR_ENV	Combination	Min	-22.9	-297.7	-25.8	-0.3	-17.1	-23.0
3701	0.0	C_SLU_STR_ENV	Combination	Max	-2.2	97.8	37.5	0.5	18.0	186.0
3701	0.4	C_SLU_STR_ENV	Combination	Max	-2.2	97.1	34.4	0.5	12.3	284.7

3701	0.7	C_SLU_STR_ENV	Combination	Max	-2.2	96.4	31.3	0.5	9.7	383.7
3701	1.1	C_SLU_STR_ENV	Combination	Max	-2.2	95.7	28.1	0.5	9.4	482.9
3701	0.0	C_SLU_STR_ENV	Combination	Min	-38.9	-286.6	-7.7	-0.3	-4.4	-1.0
3701	0.4	C_SLU_STR_ENV	Combination	Min	-38.9	-287.2	-10.8	-0.3	-8.2	-31.9
3701	0.7	C_SLU_STR_ENV	Combination	Min	-38.9	-287.9	-13.9	-0.3	-12.8	-62.5
3701	1.1	C_SLU_STR_ENV	Combination	Min	-38.9	-288.6	-17.0	-0.3	-17.5	-92.9
3702	0.0	C_SLU_STR_ENV	Combination	Max	-8.4	92.8	30.5	0.5	16.8	503.3
3702	0.4	C_SLU_STR_ENV	Combination	Max	-8.4	92.1	27.4	0.5	11.5	601.6
3702	0.7	C_SLU_STR_ENV	Combination	Max	-8.4	91.4	24.3	0.5	8.8	700.1
3702	1.1	C_SLU_STR_ENV	Combination	Max	-8.4	90.8	21.1	0.5	7.3	798.9
3702	0.0	C_SLU_STR_ENV	Combination	Min	-58.7	-274.4	-1.6	-0.2	-0.5	-65.5
3702	0.4	C_SLU_STR_ENV	Combination	Min	-58.7	-275.1	-4.7	-0.2	-5.5	-98.1
3702	0.7	C_SLU_STR_ENV	Combination	Min	-58.7	-275.8	-7.8	-0.2	-9.4	-130.4
3702	1.1	C_SLU_STR_ENV	Combination	Min	-58.7	-276.4	-10.9	-0.2	-12.2	-162.4
3703	0.0	C_SLU_STR_ENV	Combination	Max	-10.8	86.9	35.5	0.5	21.7	820.6
3703	0.4	C_SLU_STR_ENV	Combination	Max	-10.8	86.2	32.4	0.5	15.2	913.1
3703	0.7	C_SLU_STR_ENV	Combination	Max	-10.8	85.5	29.3	0.5	9.9	1005.8
3703	1.1	C_SLU_STR_ENV	Combination	Max	-10.8	84.8	26.1	0.5	5.8	1098.8
3703	0.0	C_SLU_STR_ENV	Combination	Min	-84.5	-258.7	-1.7	-0.2	-3.9	-138.1
3703	0.4	C_SLU_STR_ENV	Combination	Min	-84.5	-259.4	-4.9	-0.2	-8.0	-168.7
3703	0.7	C_SLU_STR_ENV	Combination	Min	-84.5	-260.1	-8.0	-0.2	-11.0	-199.0
3703	1.1	C_SLU_STR_ENV	Combination	Min	-84.5	-260.8	-11.1	-0.2	-12.8	-229.1
3704	0.0	C_SLU_STR_ENV	Combination	Max	-10.1	79.4	54.1	0.5	30.6	1124.3
3704	0.4	C_SLU_STR_ENV	Combination	Max	-10.1	78.8	51.0	0.5	24.1	1208.9
3704	0.7	C_SLU_STR_ENV	Combination	Max	-10.1	78.1	47.9	0.5	18.6	1293.8
3704	1.1	C_SLU_STR_ENV	Combination	Max	-10.1	77.4	44.8	0.5	14.3	1378.9
3704	0.0	C_SLU_STR_ENV	Combination	Min	-120.8	-238.4	-17.3	-0.2	-9.6	-209.3
3704	0.4	C_SLU_STR_ENV	Combination	Min	-120.8	-239.1	-20.5	-0.2	-15.6	-237.0
3704	0.7	C_SLU_STR_ENV	Combination	Min	-120.8	-239.7	-23.6	-0.2	-20.4	-264.3
3704	1.1	C_SLU_STR_ENV	Combination	Min	-120.8	-240.4	-26.7	-0.2	-24.1	-291.5
3705	0.0	C_SLU_STR_ENV	Combination	Max	-5.0	70.1	88.2	1.3	23.8	1395.4
3705	0.2	C_SLU_STR_ENV	Combination	Max	-5.0	69.8	86.7	1.3	24.9	1428.6
3705	0.0	C_SLU_STR_ENV	Combination	Min	-153.4	-213.0	-41.5	-0.5	-8.5	-265.5
3705	0.2	C_SLU_STR_ENV	Combination	Min	-153.4	-213.3	-43.0	-0.5	-16.5	-275.7
3706	0.0	C_SLU_STR_ENV	Combination	Max	-25.0	63.8	38.7	0.4	17.8	1428.5
3706	0.5	C_SLU_STR_ENV	Combination	Max	-25.0	62.9	34.7	0.4	18.6	1514.1

3706	0.9	C_SLU_STR_ENV	Combination	Max	-25.0	62.1	30.8	0.4	21.2	1600.1
3706	0.0	C_SLU_STR_ENV	Combination	Min	-107.5	-201.1	-41.4	-0.3	-21.0	-273.7
3706	0.5	C_SLU_STR_ENV	Combination	Min	-107.5	-202.0	-45.4	-0.3	-18.1	-298.8
3706	0.9	C_SLU_STR_ENV	Combination	Min	-107.5	-202.9	-49.4	-0.3	-14.1	-323.5
3707	0.0	C_SLU_STR_ENV	Combination	Max	-33.5	57.5	22.0	0.4	12.2	1595.1
3707	0.4	C_SLU_STR_ENV	Combination	Max	-33.5	56.8	18.9	0.4	12.9	1653.6
3707	0.7	C_SLU_STR_ENV	Combination	Max	-33.5	56.1	15.7	0.4	14.8	1712.3
3707	1.1	C_SLU_STR_ENV	Combination	Max	-33.5	55.4	12.6	0.4	17.8	1771.3
3707	0.0	C_SLU_STR_ENV	Combination	Min	-107.4	-181.0	-15.5	-0.2	-5.7	-294.7
3707	0.4	C_SLU_STR_ENV	Combination	Min	-107.4	-181.7	-18.6	-0.2	-8.1	-312.7
3707	0.7	C_SLU_STR_ENV	Combination	Min	-107.4	-182.4	-21.8	-0.2	-9.3	-330.4
3707	1.1	C_SLU_STR_ENV	Combination	Min	-107.4	-183.1	-24.9	-0.2	-9.5	-347.9
3708	0.0	C_SLU_STR_ENV	Combination	Max	-34.7	54.7	22.6	0.3	16.6	1774.4
3708	0.5	C_SLU_STR_ENV	Combination	Max	-34.7	53.8	18.5	0.3	12.5	1842.3
3708	1.0	C_SLU_STR_ENV	Combination	Max	-34.7	52.8	14.3	0.3	10.5	1910.6
3708	0.0	C_SLU_STR_ENV	Combination	Min	-118.2	-162.1	-4.7	-0.3	-3.4	-329.2
3708	0.5	C_SLU_STR_ENV	Combination	Min	-118.2	-163.0	-8.8	-0.3	-5.3	-351.5
3708	1.0	C_SLU_STR_ENV	Combination	Min	-118.2	-163.9	-13.0	-0.3	-5.1	-373.5
3709	0.0	C_SLU_STR_ENV	Combination	Max	-34.7	52.8	14.3	1.4	10.5	1920.5
3709	0.1	C_SLU_STR_ENV	Combination	Max	-34.7	52.6	13.3	1.4	11.8	1938.5
3709	0.0	C_SLU_STR_ENV	Combination	Min	-118.2	-163.9	-13.0	-1.3	-5.1	-370.1
3709	0.1	C_SLU_STR_ENV	Combination	Min	-118.2	-164.2	-14.0	-1.3	-6.0	-375.6
3710	0.0	C_SLU_STR_ENV	Combination	Max	-29.6	51.6	38.6	0.6	25.7	1953.6
3710	0.4	C_SLU_STR_ENV	Combination	Max	-29.6	51.0	35.4	0.6	21.0	1996.1
3710	0.7	C_SLU_STR_ENV	Combination	Max	-29.6	50.3	32.3	0.6	17.6	2038.9
3710	1.1	C_SLU_STR_ENV	Combination	Max	-29.6	49.6	29.2	0.6	15.3	2082.0
3710	0.0	C_SLU_STR_ENV	Combination	Min	-141.7	-141.4	-17.0	-0.5	-10.7	-366.4
3710	0.4	C_SLU_STR_ENV	Combination	Min	-141.7	-142.0	-20.1	-0.5	-12.6	-380.4
3710	0.7	C_SLU_STR_ENV	Combination	Min	-141.7	-142.7	-23.2	-0.5	-13.5	-394.2
3710	1.1	C_SLU_STR_ENV	Combination	Min	-141.7	-143.4	-26.4	-0.5	-13.2	-407.8
3711	0.0	C_SLU_STR_ENV	Combination	Max	-11.8	48.1	63.8	0.7	28.6	2103.8
3711	0.4	C_SLU_STR_ENV	Combination	Max	-11.8	47.3	60.2	0.7	26.4	2139.0
3711	0.8	C_SLU_STR_ENV	Combination	Max	-11.8	46.6	56.7	0.7	25.6	2174.6
3711	0.0	C_SLU_STR_ENV	Combination	Min	-176.5	-118.7	-38.8	-0.4	-10.2	-407.1
3711	0.4	C_SLU_STR_ENV	Combination	Min	-176.5	-119.5	-42.3	-0.4	-17.7	-417.5
3711	0.8	C_SLU_STR_ENV	Combination	Min	-176.5	-120.2	-45.8	-0.4	-23.7	-427.6

3712	0.0	C_SLU_STR_ENV	Combination	Max	-40.2	46.9	51.5	1.1	23.0	2173.6
3712	0.3	C_SLU_STR_ENV	Combination	Max	-40.2	46.4	49.2	1.1	15.2	2194.6
3712	0.0	C_SLU_STR_ENV	Combination	Min	-135.4	-111.9	-78.1	-2.4	-24.0	-426.9
3712	0.3	C_SLU_STR_ENV	Combination	Min	-135.4	-112.4	-80.4	-2.4	-10.8	-431.5
3713	0.0	C_SLU_STR_ENV	Combination	Max	-41.1	50.6	33.2	0.5	22.0	2183.0
3713	0.4	C_SLU_STR_ENV	Combination	Max	-41.1	49.9	30.1	0.5	22.6	2196.9
3713	0.7	C_SLU_STR_ENV	Combination	Max	-41.1	49.2	27.0	0.5	24.9	2211.1
3713	1.1	C_SLU_STR_ENV	Combination	Max	-41.1	48.5	23.8	0.5	28.7	2225.5
3713	0.0	C_SLU_STR_ENV	Combination	Min	-133.8	-91.1	-40.6	-0.5	-21.7	-418.4
3713	0.4	C_SLU_STR_ENV	Combination	Min	-133.8	-91.8	-43.7	-0.5	-19.3	-419.5
3713	0.7	C_SLU_STR_ENV	Combination	Min	-133.8	-92.4	-46.8	-0.5	-15.7	-420.3
3713	1.1	C_SLU_STR_ENV	Combination	Min	-133.8	-93.1	-49.9	-0.5	-11.0	-420.9
3714	0.0	C_SLU_STR_ENV	Combination	Max	-44.1	56.0	14.2	0.4	13.3	2207.8
3714	0.4	C_SLU_STR_ENV	Combination	Max	-44.1	55.3	10.9	0.4	15.2	2212.7
3714	0.8	C_SLU_STR_ENV	Combination	Max	-44.1	54.6	7.6	0.4	18.3	2217.9
3714	1.1	C_SLU_STR_ENV	Combination	Max	-44.1	53.9	4.3	0.4	22.7	2223.3
3714	0.0	C_SLU_STR_ENV	Combination	Min	-124.0	-75.2	-18.8	-0.5	-8.8	-412.1
3714	0.4	C_SLU_STR_ENV	Combination	Min	-124.0	-75.9	-22.1	-0.5	-9.0	-410.4
3714	0.8	C_SLU_STR_ENV	Combination	Min	-124.0	-76.7	-25.4	-0.5	-8.0	-408.4
3714	1.1	C_SLU_STR_ENV	Combination	Min	-124.0	-77.4	-28.7	-0.5	-5.7	-406.2
3715	0.0	C_SLU_STR_ENV	Combination	Max	-35.2	70.8	18.7	0.4	17.2	2218.4
3715	0.4	C_SLU_STR_ENV	Combination	Max	-35.2	70.0	15.4	0.4	16.6	2215.6
3715	0.8	C_SLU_STR_ENV	Combination	Max	-35.2	69.3	12.1	0.4	17.1	2213.1
3715	1.1	C_SLU_STR_ENV	Combination	Max	-35.2	68.6	8.8	0.4	19.0	2210.8
3715	0.0	C_SLU_STR_ENV	Combination	Min	-130.4	-63.2	-15.5	-0.6	-12.1	-410.5
3715	0.4	C_SLU_STR_ENV	Combination	Min	-130.4	-63.9	-18.8	-0.6	-10.1	-409.0
3715	0.8	C_SLU_STR_ENV	Combination	Min	-130.4	-64.6	-22.1	-0.6	-6.9	-407.2
3715	1.1	C_SLU_STR_ENV	Combination	Min	-130.4	-65.3	-25.4	-0.6	-2.4	-405.1
3716	0.0	C_SLU_STR_ENV	Combination	Max	-17.1	86.8	39.5	0.4	23.2	2219.0
3716	0.4	C_SLU_STR_ENV	Combination	Max	-17.1	86.1	36.4	0.4	23.4	2207.3
3716	0.7	C_SLU_STR_ENV	Combination	Max	-17.1	85.4	33.3	0.4	25.6	2195.8
3716	1.1	C_SLU_STR_ENV	Combination	Max	-17.1	84.8	30.2	0.4	29.3	2184.6
3716	0.0	C_SLU_STR_ENV	Combination	Min	-154.9	-57.9	-35.0	-0.6	-16.5	-422.0
3716	0.4	C_SLU_STR_ENV	Combination	Min	-154.9	-58.5	-38.2	-0.6	-17.4	-417.7
3716	0.7	C_SLU_STR_ENV	Combination	Min	-154.9	-59.2	-41.3	-0.6	-17.2	-413.2
3716	1.1	C_SLU_STR_ENV	Combination	Min	-154.9	-59.9	-44.4	-0.6	-15.9	-408.4

3717	0.0	C_SLU_STR_ENV	Combination	Max	2.8	106.1	70.2	2.0	13.4	2187.8
3717	0.3	C_SLU_STR_ENV	Combination	Max	2.8	105.6	67.9	2.0	24.3	2168.5
3717	0.0	C_SLU_STR_ENV	Combination	Min	-174.9	-55.7	-62.0	-1.0	-16.4	-428.9
3717	0.3	C_SLU_STR_ENV	Combination	Min	-174.9	-56.2	-64.3	-1.0	-25.6	-421.6
3718	0.0	C_SLU_STR_ENV	Combination	Max	-37.1	113.2	41.3	0.2	27.7	2167.5
3718	0.4	C_SLU_STR_ENV	Combination	Max	-37.1	112.4	37.8	0.2	27.2	2135.2
3718	0.8	C_SLU_STR_ENV	Combination	Max	-37.1	111.7	34.2	0.2	31.2	2103.3
3718	0.0	C_SLU_STR_ENV	Combination	Min	-132.7	-57.4	-64.5	-1.1	-26.3	-421.7
3718	0.4	C_SLU_STR_ENV	Combination	Min	-132.7	-58.2	-68.0	-1.1	-17.0	-407.0
3718	0.8	C_SLU_STR_ENV	Combination	Min	-132.7	-59.0	-71.5	-1.1	-6.4	-391.9
3719	0.0	C_SLU_STR_ENV	Combination	Max	-36.9	136.7	19.7	0.3	13.1	2073.8
3719	0.4	C_SLU_STR_ENV	Combination	Max	-36.9	136.1	16.6	0.3	16.2	2033.4
3719	0.7	C_SLU_STR_ENV	Combination	Max	-36.9	135.4	13.5	0.3	20.6	1993.3
3719	1.1	C_SLU_STR_ENV	Combination	Max	-36.9	134.7	10.4	0.3	27.9	1953.5
3719	0.0	C_SLU_STR_ENV	Combination	Min	-116.7	-59.9	-37.4	-0.7	-18.2	-395.6
3719	0.4	C_SLU_STR_ENV	Combination	Min	-116.7	-60.6	-40.6	-0.7	-15.5	-378.6
3719	0.7	C_SLU_STR_ENV	Combination	Min	-116.7	-61.2	-43.7	-0.7	-11.7	-361.3
3719	1.1	C_SLU_STR_ENV	Combination	Min	-116.7	-61.9	-46.8	-0.7	-6.8	-343.7
3720	0.0	C_SLU_STR_ENV	Combination	Max	-32.4	158.7	5.3	0.4	6.9	1929.1
3720	0.1	C_SLU_STR_ENV	Combination	Max	-32.4	158.5	4.3	0.4	6.4	1911.9
3720	0.0	C_SLU_STR_ENV	Combination	Min	-104.9	-61.2	-21.3	-2.2	-12.0	-356.9
3720	0.1	C_SLU_STR_ENV	Combination	Min	-104.9	-61.5	-22.4	-2.2	-9.9	-350.5
3721	0.0	C_SLU_STR_ENV	Combination	Max	-32.4	158.5	4.3	0.2	6.4	1902.8
3721	0.5	C_SLU_STR_ENV	Combination	Max	-32.4	157.6	0.1	0.2	11.6	1837.7
3721	1.0	C_SLU_STR_ENV	Combination	Max	-32.4	156.6	-4.1	0.2	18.8	1773.0
3721	0.0	C_SLU_STR_ENV	Combination	Min	-104.9	-61.5	-22.4	-0.3	-9.9	-353.6
3721	0.5	C_SLU_STR_ENV	Combination	Min	-104.9	-62.4	-26.6	-0.3	-5.3	-328.3
3721	1.0	C_SLU_STR_ENV	Combination	Min	-104.9	-63.3	-30.7	-0.3	1.4	-302.6
3722	0.0	C_SLU_STR_ENV	Combination	Max	-18.8	177.8	13.5	0.2	9.7	1760.8
3722	0.4	C_SLU_STR_ENV	Combination	Max	-18.8	177.1	10.4	0.2	11.4	1704.1
3722	0.7	C_SLU_STR_ENV	Combination	Max	-18.8	176.5	7.3	0.2	14.5	1647.6
3722	1.1	C_SLU_STR_ENV	Combination	Max	-18.8	175.8	4.1	0.2	18.7	1591.3
3722	0.0	C_SLU_STR_ENV	Combination	Min	-106.3	-61.9	-25.1	-0.4	-16.3	-326.2
3722	0.4	C_SLU_STR_ENV	Combination	Min	-106.3	-62.6	-28.2	-0.4	-12.2	-307.0
3722	0.7	C_SLU_STR_ENV	Combination	Min	-106.3	-63.2	-31.3	-0.4	-7.0	-287.5
3722	1.1	C_SLU_STR_ENV	Combination	Min	-106.3	-63.9	-34.4	-0.4	-0.6	-267.8

3723	0.0	C_SLU_STR_ENV	Combination	Max	9.5	197.4	33.0	0.2	14.7	1587.2
3723	0.5	C_SLU_STR_ENV	Combination	Max	9.5	196.5	29.0	0.2	18.7	1504.4
3723	0.9	C_SLU_STR_ENV	Combination	Max	9.5	195.7	25.0	0.2	25.3	1422.0
3723	0.0	C_SLU_STR_ENV	Combination	Min	-123.1	-65.3	-46.6	-0.3	-21.6	-303.7
3723	0.5	C_SLU_STR_ENV	Combination	Min	-123.1	-66.1	-50.6	-0.3	-18.4	-277.8
3723	0.9	C_SLU_STR_ENV	Combination	Min	-123.1	-67.0	-54.5	-0.3	-13.4	-251.4
3724	0.0	C_SLU_STR_ENV	Combination	Max	-32.5	206.7	42.9	0.2	34.7	1421.1
3724	0.2	C_SLU_STR_ENV	Combination	Max	-32.5	206.4	41.5	0.2	30.5	1389.1
3724	0.0	C_SLU_STR_ENV	Combination	Min	-95.8	-77.6	-84.5	-1.7	-11.2	-253.0
3724	0.2	C_SLU_STR_ENV	Combination	Min	-95.8	-77.9	-86.0	-1.7	-2.8	-241.6
3725	0.0	C_SLU_STR_ENV	Combination	Max	-15.8	233.4	20.9	0.1	13.6	1366.2
3725	0.4	C_SLU_STR_ENV	Combination	Max	-15.8	232.7	17.8	0.1	17.4	1283.8
3725	0.7	C_SLU_STR_ENV	Combination	Max	-15.8	232.1	14.7	0.1	22.9	1201.7
3725	1.1	C_SLU_STR_ENV	Combination	Max	-15.8	231.4	11.5	0.1	30.3	1119.8
3725	0.0	C_SLU_STR_ENV	Combination	Min	-84.3	-83.0	-46.8	-0.5	-26.1	-269.3
3725	0.4	C_SLU_STR_ENV	Combination	Min	-84.3	-83.7	-49.9	-0.5	-20.4	-240.4
3725	0.7	C_SLU_STR_ENV	Combination	Min	-84.3	-84.3	-53.1	-0.5	-13.6	-211.3
3725	1.1	C_SLU_STR_ENV	Combination	Min	-84.3	-85.0	-56.2	-0.5	-5.6	-181.9
3726	0.0	C_SLU_STR_ENV	Combination	Max	-10.4	254.0	3.8	0.1	1.8	1089.3
3726	0.4	C_SLU_STR_ENV	Combination	Max	-10.4	253.3	0.7	0.1	7.4	998.9
3726	0.7	C_SLU_STR_ENV	Combination	Max	-10.4	252.6	-2.4	0.1	14.6	908.8
3726	1.1	C_SLU_STR_ENV	Combination	Max	-10.4	251.9	-5.5	0.1	23.2	818.9
3726	0.0	C_SLU_STR_ENV	Combination	Min	-63.5	-86.6	-32.2	-0.5	-17.4	-201.3
3726	0.4	C_SLU_STR_ENV	Combination	Min	-63.5	-87.3	-35.4	-0.5	-12.6	-170.8
3726	0.7	C_SLU_STR_ENV	Combination	Min	-63.5	-88.0	-38.5	-0.5	-6.8	-140.0
3726	1.1	C_SLU_STR_ENV	Combination	Min	-63.5	-88.7	-41.6	-0.5	0.2	-109.0
3727	0.0	C_SLU_STR_ENV	Combination	Max	2.8	270.4	0.1	0.2	-0.1	792.3
3727	0.4	C_SLU_STR_ENV	Combination	Max	2.8	269.7	-3.0	0.2	5.3	696.9
3727	0.7	C_SLU_STR_ENV	Combination	Max	2.8	269.0	-6.2	0.2	12.6	601.7
3727	1.1	C_SLU_STR_ENV	Combination	Max	2.8	268.3	-9.3	0.2	21.2	506.7
3727	0.0	C_SLU_STR_ENV	Combination	Min	-44.6	-87.7	-31.4	-0.5	-18.1	-135.6
3727	0.4	C_SLU_STR_ENV	Combination	Min	-44.6	-88.4	-34.5	-0.5	-11.8	-105.1
3727	0.7	C_SLU_STR_ENV	Combination	Min	-44.6	-89.1	-37.6	-0.5	-4.4	-74.3
3727	1.1	C_SLU_STR_ENV	Combination	Min	-44.6	-89.8	-40.7	-0.5	4.1	-43.3
3728	0.0	C_SLU_STR_ENV	Combination	Max	17.9	283.4	-0.2	0.2	-0.7	478.1
3728	0.4	C_SLU_STR_ENV	Combination	Max	17.9	282.7	-3.4	0.2	6.1	381.7

3728	0.7	C_SLU_STR_ENV	Combination	Max	17.9	282.0	-6.5	0.2	15.1	285.6
3728	1.1	C_SLU_STR_ENV	Combination	Max	17.9	281.3	-9.6	0.2	25.9	189.7
3728	0.0	C_SLU_STR_ENV	Combination	Min	-21.9	-87.5	-41.4	-0.5	-24.4	-75.1
3728	0.4	C_SLU_STR_ENV	Combination	Min	-21.9	-88.1	-44.6	-0.5	-15.3	-49.0
3728	0.7	C_SLU_STR_ENV	Combination	Min	-21.9	-88.8	-47.7	-0.5	-5.4	-22.8
3728	1.1	C_SLU_STR_ENV	Combination	Min	-21.9	-89.5	-50.8	-0.5	4.4	3.7
3729	0.0	C_SLU_STR_ENV	Combination	Max	35.5	292.6	-2.1	0.3	-1.0	152.8
3729	0.5	C_SLU_STR_ENV	Combination	Max	35.5	291.7	-6.3	0.3	12.5	40.8
3729	0.0	C_SLU_STR_ENV	Combination	Min	-1.0	-88.6	-60.6	-0.4	-23.4	-20.8
3729	0.5	C_SLU_STR_ENV	Combination	Min	-1.0	-89.5	-64.8	-0.4	-4.4	-8.0
3730	0.0	C_SLU_STR_ENV	Combination	Max	654.4	82.3	73.6	0.5	15.7	569.0
3730	0.5	C_SLU_STR_ENV	Combination	Max	654.4	83.5	73.6	0.5	24.0	725.8
3730	0.0	C_SLU_STR_ENV	Combination	Min	-3.8	-961.8	-73.0	-0.5	-25.6	-116.7
3730	0.5	C_SLU_STR_ENV	Combination	Min	-3.8	-960.6	-73.0	-0.5	-28.3	-15.7
3731	0.0	C_SLU_STR_ENV	Combination	Max	652.5	86.8	59.7	0.6	33.3	738.3
3731	0.4	C_SLU_STR_ENV	Combination	Max	652.5	87.6	59.7	0.6	20.3	842.0
3731	0.7	C_SLU_STR_ENV	Combination	Max	652.5	88.5	59.7	0.6	20.7	971.9
3731	1.1	C_SLU_STR_ENV	Combination	Max	652.5	89.4	59.7	0.6	21.2	1233.1
3731	0.0	C_SLU_STR_ENV	Combination	Min	-20.6	-806.4	-35.8	-0.3	-17.7	-25.2
3731	0.4	C_SLU_STR_ENV	Combination	Min	-20.6	-805.5	-35.8	-0.3	-17.7	-10.4
3731	0.7	C_SLU_STR_ENV	Combination	Min	-20.6	-804.6	-35.8	-0.3	-17.7	4.0
3731	1.1	C_SLU_STR_ENV	Combination	Min	-20.6	-803.7	-35.8	-0.3	-31.6	18.1
3732	0.0	C_SLU_STR_ENV	Combination	Max	626.1	116.0	65.0	0.5	37.2	1205.9
3732	0.4	C_SLU_STR_ENV	Combination	Max	626.1	116.9	65.0	0.5	25.2	1403.6
3732	0.7	C_SLU_STR_ENV	Combination	Max	626.1	117.7	65.0	0.5	19.8	1601.0
3732	1.1	C_SLU_STR_ENV	Combination	Max	626.1	118.6	65.0	0.5	14.5	1798.0
3732	0.0	C_SLU_STR_ENV	Combination	Min	-33.5	-691.5	-23.9	-0.3	-11.7	23.8
3732	0.4	C_SLU_STR_ENV	Combination	Min	-33.5	-690.7	-23.9	-0.3	-16.0	37.8
3732	0.7	C_SLU_STR_ENV	Combination	Min	-33.5	-689.8	-23.9	-0.3	-20.3	51.5
3732	1.1	C_SLU_STR_ENV	Combination	Min	-33.5	-688.9	-23.9	-0.3	-33.2	61.4
3733	0.0	C_SLU_STR_ENV	Combination	Max	593.4	154.9	73.1	0.4	42.4	1767.5
3733	0.4	C_SLU_STR_ENV	Combination	Max	593.4	155.8	73.1	0.4	30.0	1911.8
3733	0.7	C_SLU_STR_ENV	Combination	Max	593.4	156.6	73.1	0.4	19.6	2055.7
3733	1.1	C_SLU_STR_ENV	Combination	Max	593.4	157.5	73.1	0.4	9.2	2199.3
3733	0.0	C_SLU_STR_ENV	Combination	Min	-53.9	-605.6	-14.0	-0.3	-7.0	64.7
3733	0.4	C_SLU_STR_ENV	Combination	Min	-53.9	-604.8	-14.0	-0.3	-15.7	74.2

3733	0.7	C_SLU_STR_ENV	Combination	Min	-53.9	-603.9	-14.0	-0.3	-24.4	83.3
3733	1.1	C_SLU_STR_ENV	Combination	Min	-53.9	-603.0	-14.0	-0.3	-36.8	92.1
3734	0.0	C_SLU_STR_ENV	Combination	Max	563.1	232.2	95.9	0.4	54.3	2167.3
3734	0.4	C_SLU_STR_ENV	Combination	Max	563.1	233.1	95.9	0.4	38.0	2273.2
3734	0.7	C_SLU_STR_ENV	Combination	Max	563.1	234.0	95.9	0.4	21.7	2378.8
3734	1.1	C_SLU_STR_ENV	Combination	Max	563.1	234.8	95.9	0.4	6.3	2484.1
3734	0.0	C_SLU_STR_ENV	Combination	Min	-84.0	-546.8	-11.4	-0.4	-7.2	95.7
3734	0.4	C_SLU_STR_ENV	Combination	Min	-84.0	-546.0	-11.4	-0.4	-21.3	104.3
3734	0.7	C_SLU_STR_ENV	Combination	Min	-84.0	-545.1	-11.4	-0.4	-35.4	112.5
3734	1.1	C_SLU_STR_ENV	Combination	Min	-84.0	-544.2	-11.4	-0.4	-49.5	120.4
3735	0.0	C_SLU_STR_ENV	Combination	Max	526.7	291.5	150.0	0.9	36.2	2458.2
3735	0.2	C_SLU_STR_ENV	Combination	Max	526.7	291.9	150.0	0.9	30.7	2476.9
3735	0.0	C_SLU_STR_ENV	Combination	Min	-94.8	-515.3	-28.2	-1.6	-23.8	124.1
3735	0.2	C_SLU_STR_ENV	Combination	Min	-94.8	-514.9	-28.2	-1.6	-28.9	127.5
3736	0.0	C_SLU_STR_ENV	Combination	Max	535.0	191.9	53.1	0.5	21.3	2477.0
3736	0.5	C_SLU_STR_ENV	Combination	Max	535.0	193.0	53.1	0.5	27.7	2634.5
3736	0.9	C_SLU_STR_ENV	Combination	Max	535.0	194.2	53.1	0.5	41.0	2791.4
3736	0.0	C_SLU_STR_ENV	Combination	Min	-84.0	-595.8	-80.9	-0.2	-33.4	127.5
3736	0.5	C_SLU_STR_ENV	Combination	Min	-84.0	-594.7	-80.9	-0.2	-26.7	137.2
3736	0.9	C_SLU_STR_ENV	Combination	Min	-84.0	-593.6	-80.9	-0.2	-28.7	146.3
3737	0.0	C_SLU_STR_ENV	Combination	Max	472.2	228.3	49.8	0.4	28.0	2793.1
3737	0.4	C_SLU_STR_ENV	Combination	Max	472.2	229.2	49.8	0.4	23.7	2890.6
3737	0.7	C_SLU_STR_ENV	Combination	Max	472.2	230.1	49.8	0.4	26.8	2987.8
3737	1.1	C_SLU_STR_ENV	Combination	Max	472.2	231.0	49.8	0.4	29.9	3084.6
3737	0.0	C_SLU_STR_ENV	Combination	Min	-65.4	-544.9	-46.4	-0.3	-20.7	149.8
3737	0.4	C_SLU_STR_ENV	Combination	Min	-65.4	-544.0	-46.4	-0.3	-20.0	156.5
3737	0.7	C_SLU_STR_ENV	Combination	Min	-65.4	-543.1	-46.4	-0.3	-19.3	162.8
3737	1.1	C_SLU_STR_ENV	Combination	Min	-65.4	-542.2	-46.4	-0.3	-26.6	168.8
3738	0.0	C_SLU_STR_ENV	Combination	Max	424.4	278.7	55.8	0.3	33.1	3077.6
3738	0.5	C_SLU_STR_ENV	Combination	Max	424.4	279.8	55.8	0.3	22.6	3166.8
3738	1.0	C_SLU_STR_ENV	Combination	Max	424.4	281.0	55.8	0.3	15.5	3255.6
3738	0.0	C_SLU_STR_ENV	Combination	Min	-54.8	-492.0	-25.7	-0.6	-11.3	172.4
3738	0.5	C_SLU_STR_ENV	Combination	Min	-54.8	-490.9	-25.7	-0.6	-14.8	179.7
3738	1.0	C_SLU_STR_ENV	Combination	Min	-54.8	-489.7	-25.7	-0.6	-21.9	186.5
3739	0.0	C_SLU_STR_ENV	Combination	Max	424.4	281.0	55.8	4.8	15.5	3242.4
3739	0.1	C_SLU_STR_ENV	Combination	Max	424.4	281.3	55.8	4.8	18.3	3283.8

3739	0.0	C_SLU_STR_ENV	Combination	Min	-54.8	-489.7	-25.7	-2.3	-21.9	186.4
3739	0.1	C_SLU_STR_ENV	Combination	Min	-54.8	-489.4	-25.7	-2.3	-28.3	188.0
3740	0.0	C_SLU_STR_ENV	Combination	Max	390.1	328.0	74.6	0.5	48.1	3264.9
3740	0.4	C_SLU_STR_ENV	Combination	Max	390.1	328.8	74.6	0.5	36.1	3312.1
3740	0.7	C_SLU_STR_ENV	Combination	Max	390.1	329.7	74.6	0.5	24.1	3359.0
3740	1.1	C_SLU_STR_ENV	Combination	Max	390.1	330.6	74.6	0.5	12.2	3405.6
3740	0.0	C_SLU_STR_ENV	Combination	Min	-72.3	-444.8	-19.9	-0.7	-10.7	191.7
3740	0.4	C_SLU_STR_ENV	Combination	Min	-72.3	-443.9	-19.9	-0.7	-18.1	196.0
3740	0.7	C_SLU_STR_ENV	Combination	Min	-72.3	-443.0	-19.9	-0.7	-25.5	199.9
3740	1.1	C_SLU_STR_ENV	Combination	Min	-72.3	-442.2	-19.9	-0.7	-33.0	203.6
3741	0.0	C_SLU_STR_ENV	Combination	Max	368.9	372.7	113.6	0.5	55.7	3378.9
3741	0.4	C_SLU_STR_ENV	Combination	Max	368.9	373.7	113.6	0.5	33.2	3392.7
3741	0.8	C_SLU_STR_ENV	Combination	Max	368.9	374.7	113.6	0.5	13.1	3406.1
3741	0.0	C_SLU_STR_ENV	Combination	Min	-97.1	-411.8	-27.7	-1.0	-18.0	207.5
3741	0.4	C_SLU_STR_ENV	Combination	Min	-97.1	-410.8	-27.7	-1.0	-28.3	210.8
3741	0.8	C_SLU_STR_ENV	Combination	Min	-97.1	-409.8	-27.7	-1.0	-38.6	213.2
3742	0.0	C_SLU_STR_ENV	Combination	Max	387.1	296.9	51.2	1.6	11.6	3406.7
3742	0.3	C_SLU_STR_ENV	Combination	Max	387.1	297.6	51.2	1.6	24.1	3476.5
3742	0.0	C_SLU_STR_ENV	Combination	Min	-83.1	-496.7	-133.4	-1.1	-37.4	213.0
3742	0.3	C_SLU_STR_ENV	Combination	Min	-83.1	-496.0	-133.4	-1.1	-28.1	205.4
3743	0.0	C_SLU_STR_ENV	Combination	Max	338.2	319.5	40.8	0.5	23.0	3478.7
3743	0.4	C_SLU_STR_ENV	Combination	Max	338.2	320.4	40.8	0.5	25.7	3514.4
3743	0.7	C_SLU_STR_ENV	Combination	Max	338.2	321.2	40.8	0.5	38.8	3549.8
3743	1.1	C_SLU_STR_ENV	Combination	Max	338.2	322.1	40.8	0.5	51.9	3584.9
3743	0.0	C_SLU_STR_ENV	Combination	Min	-80.4	-457.4	-85.8	-0.6	-41.1	218.5
3743	0.4	C_SLU_STR_ENV	Combination	Min	-80.4	-456.6	-85.8	-0.6	-31.5	219.9
3743	0.7	C_SLU_STR_ENV	Combination	Min	-80.4	-455.7	-85.8	-0.6	-21.9	216.2
3743	1.1	C_SLU_STR_ENV	Combination	Min	-80.4	-454.8	-85.8	-0.6	-21.9	206.0
3744	0.0	C_SLU_STR_ENV	Combination	Max	290.4	357.8	39.9	0.4	27.6	3598.0
3744	0.4	C_SLU_STR_ENV	Combination	Max	290.4	358.7	39.9	0.4	26.4	3609.8
3744	0.8	C_SLU_STR_ENV	Combination	Max	290.4	359.7	39.9	0.4	32.9	3621.2
3744	1.1	C_SLU_STR_ENV	Combination	Max	290.4	360.6	39.9	0.4	39.4	3632.3
3744	0.0	C_SLU_STR_ENV	Combination	Min	-61.6	-406.4	-53.7	-0.7	-24.1	225.1
3744	0.4	C_SLU_STR_ENV	Combination	Min	-61.6	-405.5	-53.7	-0.7	-20.4	224.9
3744	0.8	C_SLU_STR_ENV	Combination	Min	-61.6	-404.6	-53.7	-0.7	-16.6	214.4
3744	1.1	C_SLU_STR_ENV	Combination	Min	-61.6	-403.7	-53.7	-0.7	-21.6	203.4

3745	0.0	C_SLU_STR_ENV	Combination	Max	259.4	409.6	51.6	0.4	36.7	3631.4
3745	0.4	C_SLU_STR_ENV	Combination	Max	259.4	410.5	51.6	0.4	31.4	3618.5
3745	0.8	C_SLU_STR_ENV	Combination	Max	259.4	411.5	51.6	0.4	28.2	3605.1
3745	1.1	C_SLU_STR_ENV	Combination	Max	259.4	412.4	51.6	0.4	25.0	3591.5
3745	0.0	C_SLU_STR_ENV	Combination	Min	-69.8	-353.8	-35.2	-0.8	-18.3	227.6
3745	0.4	C_SLU_STR_ENV	Combination	Min	-69.8	-352.9	-35.2	-0.8	-18.7	218.4
3745	0.8	C_SLU_STR_ENV	Combination	Min	-69.8	-352.0	-35.2	-0.8	-19.1	206.6
3745	1.1	C_SLU_STR_ENV	Combination	Min	-69.8	-351.1	-35.2	-0.8	-23.8	194.5
3746	0.0	C_SLU_STR_ENV	Combination	Max	244.7	460.6	79.0	0.4	47.8	3577.2
3746	0.4	C_SLU_STR_ENV	Combination	Max	244.7	461.5	79.0	0.4	37.8	3541.6
3746	0.7	C_SLU_STR_ENV	Combination	Max	244.7	462.3	79.0	0.4	27.9	3505.7
3746	1.1	C_SLU_STR_ENV	Combination	Max	244.7	463.2	79.0	0.4	19.8	3469.5
3746	0.0	C_SLU_STR_ENV	Combination	Min	-99.7	-315.2	-33.5	-0.8	-18.5	218.1
3746	0.4	C_SLU_STR_ENV	Combination	Min	-99.7	-314.3	-33.5	-0.8	-25.0	206.7
3746	0.7	C_SLU_STR_ENV	Combination	Min	-99.7	-313.4	-33.5	-0.8	-31.5	195.0
3746	1.1	C_SLU_STR_ENV	Combination	Min	-99.7	-312.6	-33.5	-0.8	-38.0	182.9
3747	0.0	C_SLU_STR_ENV	Combination	Max	230.9	502.4	127.0	0.8	19.4	3468.5
3747	0.3	C_SLU_STR_ENV	Combination	Max	230.9	503.0	127.0	0.8	9.5	3398.9
3747	0.0	C_SLU_STR_ENV	Combination	Min	-114.7	-291.2	-48.3	-2.0	-36.3	203.9
3747	0.3	C_SLU_STR_ENV	Combination	Min	-114.7	-290.6	-48.3	-2.0	-41.9	195.2
3748	0.0	C_SLU_STR_ENV	Combination	Max	248.9	417.1	31.1	0.6	12.2	3399.2
3748	0.4	C_SLU_STR_ENV	Combination	Max	248.9	418.1	31.1	0.6	34.8	3386.2
3748	0.8	C_SLU_STR_ENV	Combination	Max	248.9	419.1	31.1	0.6	61.1	3372.8
3748	0.0	C_SLU_STR_ENV	Combination	Min	-97.7	-369.0	-120.5	-0.8	-38.9	195.1
3748	0.4	C_SLU_STR_ENV	Combination	Min	-97.7	-368.0	-120.5	-0.8	-24.5	182.1
3748	0.8	C_SLU_STR_ENV	Combination	Min	-97.7	-367.0	-120.5	-0.8	-16.7	168.7
3749	0.0	C_SLU_STR_ENV	Combination	Max	207.7	449.7	25.2	0.4	14.6	3396.8
3749	0.4	C_SLU_STR_ENV	Combination	Max	207.7	450.6	25.2	0.4	21.7	3350.1
3749	0.7	C_SLU_STR_ENV	Combination	Max	207.7	451.4	25.2	0.4	37.0	3302.9
3749	1.1	C_SLU_STR_ENV	Combination	Max	207.7	452.3	25.2	0.4	52.3	3255.5
3749	0.0	C_SLU_STR_ENV	Combination	Min	-84.2	-325.3	-82.3	-0.9	-37.0	188.7
3749	0.4	C_SLU_STR_ENV	Combination	Min	-84.2	-324.4	-82.3	-0.9	-26.3	177.0
3749	0.7	C_SLU_STR_ENV	Combination	Min	-84.2	-323.5	-82.3	-0.9	-15.6	165.0
3749	1.1	C_SLU_STR_ENV	Combination	Min	-84.2	-322.6	-82.3	-0.9	-13.7	152.7
3750	0.0	C_SLU_STR_ENV	Combination	Max	178.5	496.1	27.9	2.3	18.9	3268.4
3750	0.1	C_SLU_STR_ENV	Combination	Max	178.5	496.4	27.9	2.3	15.8	3226.6

3750	0.0	C_SLU_STR_ENV	Combination	Min	-81.4	-275.3	-56.4	-5.0	-28.5	171.5
3750	0.1	C_SLU_STR_ENV	Combination	Min	-81.4	-275.0	-56.4	-5.0	-22.0	167.5
3751	0.0	C_SLU_STR_ENV	Combination	Max	178.5	496.4	27.9	0.4	15.8	3236.9
3751	0.5	C_SLU_STR_ENV	Combination	Max	178.5	497.6	27.9	0.4	22.8	3147.8
3751	1.0	C_SLU_STR_ENV	Combination	Max	178.5	498.7	27.9	0.4	34.3	3058.1
3751	0.0	C_SLU_STR_ENV	Combination	Min	-81.4	-275.0	-56.4	-0.5	-22.0	174.2
3751	0.5	C_SLU_STR_ENV	Combination	Min	-81.4	-273.8	-56.4	-0.5	-14.3	159.6
3751	1.0	C_SLU_STR_ENV	Combination	Min	-81.4	-272.7	-56.4	-0.5	-12.6	142.7
3752	0.0	C_SLU_STR_ENV	Combination	Max	163.8	548.5	41.2	0.2	26.2	3058.1
3752	0.4	C_SLU_STR_ENV	Combination	Max	163.8	549.4	41.2	0.2	25.7	2960.7
3752	0.7	C_SLU_STR_ENV	Combination	Max	163.8	550.2	41.2	0.2	25.8	2862.9
3752	1.1	C_SLU_STR_ENV	Combination	Max	163.8	551.1	41.2	0.2	25.9	2764.8
3752	0.0	C_SLU_STR_ENV	Combination	Min	-103.2	-224.1	-45.2	-0.6	-23.7	154.1
3752	0.4	C_SLU_STR_ENV	Combination	Min	-103.2	-223.2	-45.2	-0.6	-21.3	144.3
3752	0.7	C_SLU_STR_ENV	Combination	Min	-103.2	-222.3	-45.2	-0.6	-19.0	131.8
3752	1.1	C_SLU_STR_ENV	Combination	Min	-103.2	-221.5	-45.2	-0.6	-18.6	118.3
3753	0.0	C_SLU_STR_ENV	Combination	Max	181.5	600.4	76.0	0.1	37.2	2759.2
3753	0.5	C_SLU_STR_ENV	Combination	Max	181.5	601.5	76.0	0.1	26.9	2602.7
3753	0.9	C_SLU_STR_ENV	Combination	Max	181.5	602.6	76.0	0.1	18.1	2445.7
3753	0.0	C_SLU_STR_ENV	Combination	Min	-133.1	-186.9	-46.0	-0.6	-26.7	127.2
3753	0.5	C_SLU_STR_ENV	Combination	Min	-133.1	-185.8	-46.0	-0.6	-29.5	113.1
3753	0.9	C_SLU_STR_ENV	Combination	Min	-133.1	-184.7	-46.0	-0.6	-32.8	97.1
3754	0.0	C_SLU_STR_ENV	Combination	Max	231.3	522.8	25.8	1.5	32.9	2446.2
3754	0.2	C_SLU_STR_ENV	Combination	Max	231.3	523.2	25.8	1.5	43.2	2426.7
3754	0.0	C_SLU_STR_ENV	Combination	Min	-121.1	-284.2	-162.6	-1.0	-24.7	96.9
3754	0.2	C_SLU_STR_ENV	Combination	Min	-121.1	-283.8	-162.6	-1.0	-16.3	90.5
3755	0.0	C_SLU_STR_ENV	Combination	Max	189.3	553.1	15.7	0.2	9.0	2451.7
3755	0.4	C_SLU_STR_ENV	Combination	Max	189.3	554.0	15.7	0.2	19.7	2346.1
3755	0.7	C_SLU_STR_ENV	Combination	Max	189.3	554.8	15.7	0.2	40.0	2240.1
3755	1.1	C_SLU_STR_ENV	Combination	Max	189.3	555.7	15.7	0.2	60.2	2133.8
3755	0.0	C_SLU_STR_ENV	Combination	Min	-113.9	-227.4	-106.8	-0.5	-55.3	96.0
3755	0.4	C_SLU_STR_ENV	Combination	Min	-113.9	-226.5	-106.8	-0.5	-36.8	83.6
3755	0.7	C_SLU_STR_ENV	Combination	Min	-113.9	-225.6	-106.8	-0.5	-18.3	70.9
3755	1.1	C_SLU_STR_ENV	Combination	Min	-113.9	-224.8	-106.8	-0.5	-8.6	57.8
3756	0.0	C_SLU_STR_ENV	Combination	Max	131.9	612.0	15.3	0.2	9.5	2160.5
3756	0.4	C_SLU_STR_ENV	Combination	Max	131.9	612.8	15.3	0.2	17.7	2015.9

3756	0.7	C_SLU_STR_ENV	Combination	Max	131.9	613.7	15.3	0.2	31.9	1871.0
3756	1.1	C_SLU_STR_ENV	Combination	Max	131.9	614.6	15.3	0.2	46.0	1725.7
3756	0.0	C_SLU_STR_ENV	Combination	Min	-98.6	-148.1	-77.8	-0.6	-38.4	61.2
3756	0.4	C_SLU_STR_ENV	Combination	Min	-98.6	-147.2	-77.8	-0.6	-25.9	47.5
3756	0.7	C_SLU_STR_ENV	Combination	Min	-98.6	-146.3	-77.8	-0.6	-13.4	33.6
3756	1.1	C_SLU_STR_ENV	Combination	Min	-98.6	-145.4	-77.8	-0.6	-7.9	19.3
3757	0.0	C_SLU_STR_ENV	Combination	Max	81.8	696.8	20.9	0.2	11.9	1747.2
3757	0.4	C_SLU_STR_ENV	Combination	Max	81.8	697.7	20.9	0.2	18.5	1548.6
3757	0.7	C_SLU_STR_ENV	Combination	Max	81.8	698.6	20.9	0.2	26.8	1349.7
3757	1.1	C_SLU_STR_ENV	Combination	Max	81.8	699.5	20.9	0.2	35.1	1150.5
3757	0.0	C_SLU_STR_ENV	Combination	Min	-88.6	-47.2	-59.6	-0.6	-29.5	22.1
3757	0.4	C_SLU_STR_ENV	Combination	Min	-88.6	-46.4	-59.6	-0.6	-22.2	7.3
3757	0.7	C_SLU_STR_ENV	Combination	Min	-88.6	-45.5	-59.6	-0.6	-14.9	-9.3
3757	1.1	C_SLU_STR_ENV	Combination	Min	-88.6	-44.6	-59.6	-0.6	-10.9	-28.3
3758	0.0	C_SLU_STR_ENV	Combination	Max	38.3	810.8	30.5	0.2	18.5	1170.2
3758	0.4	C_SLU_STR_ENV	Combination	Max	38.3	811.6	30.5	0.2	20.9	907.0
3758	0.7	C_SLU_STR_ENV	Combination	Max	38.3	812.5	30.5	0.2	23.3	643.4
3758	1.1	C_SLU_STR_ENV	Combination	Max	38.3	813.4	30.5	0.2	26.0	379.6
3758	0.0	C_SLU_STR_ENV	Combination	Min	-81.3	27.5	-45.8	-0.6	-23.9	-29.6
3758	0.4	C_SLU_STR_ENV	Combination	Min	-81.3	28.4	-45.8	-0.6	-20.4	-48.9
3758	0.7	C_SLU_STR_ENV	Combination	Min	-81.3	29.2	-45.8	-0.6	-17.8	-68.5
3758	1.1	C_SLU_STR_ENV	Combination	Min	-81.3	30.1	-45.8	-0.6	-15.2	-88.4
3759	0.0	C_SLU_STR_ENV	Combination	Max	6.5	967.7	68.5	0.4	21.7	382.1
3759	0.5	C_SLU_STR_ENV	Combination	Max	6.5	968.9	68.5	0.4	12.1	1.9
3759	0.0	C_SLU_STR_ENV	Combination	Min	-77.2	38.5	-58.7	-0.5	-30.4	-77.1
3759	0.5	C_SLU_STR_ENV	Combination	Min	-77.2	39.6	-58.7	-0.5	-23.3	-186.7

TABLE: Element Forces - Frames										
Frame	Station	OutputCase	CaseType	StepType	P	V2	V3	T	M2	M3
Text	m	Text	Text	Text	KN	KN	KN	KN-m	KN-m	KN-m
3575	0.0	C_SL_FAT1_ENV	Combination	Max	13.5	44.0	2.6	0.1	12.7	12.9
3575	0.3	C_SL_FAT1_ENV	Combination	Max	13.5	44.0	2.6	0.1	14.7	9.7
3575	0.6	C_SL_FAT1_ENV	Combination	Max	13.5	44.0	2.6	0.1	16.7	7.5
3575	0.0	C_SL_FAT1_ENV	Combination	Min	-5.2	-2.0	-33.0	-0.1	-10.6	-9.9
3575	0.3	C_SL_FAT1_ENV	Combination	Min	-5.2	-2.0	-33.0	-0.1	-6.3	-14.8
3575	0.6	C_SL_FAT1_ENV	Combination	Min	-5.2	-2.0	-33.0	-0.1	-2.6	-19.8

3576	0.0	C_SL_FAT1_ENV	Combination	Max	4.9	1.7	37.9	0.0	16.8	9.2
3576	0.3	C_SL_FAT1_ENV	Combination	Max	4.9	1.7	37.9	0.0	14.9	10.8
3576	0.6	C_SL_FAT1_ENV	Combination	Max	4.9	1.7	37.9	0.0	12.9	13.1
3576	0.0	C_SL_FAT1_ENV	Combination	Min	-18.7	-47.4	-4.1	-0.2	-1.2	-24.3
3576	0.3	C_SL_FAT1_ENV	Combination	Min	-18.7	-47.4	-4.1	-0.2	-6.8	-17.7
3576	0.6	C_SL_FAT1_ENV	Combination	Min	-18.7	-47.4	-4.1	-0.2	-12.7	-11.0
3577	0.0	C_SL_FAT1_ENV	Combination	Max	19.1	102.9	48.5	0.1	18.8	17.0
3577	0.3	C_SL_FAT1_ENV	Combination	Max	19.1	102.9	48.5	0.1	13.1	14.3
3577	0.6	C_SL_FAT1_ENV	Combination	Max	19.1	102.9	48.5	0.1	7.4	11.6
3577	0.0	C_SL_FAT1_ENV	Combination	Min	-24.8	-1.5	-11.4	-0.2	-13.7	-16.3
3577	0.3	C_SL_FAT1_ENV	Combination	Min	-24.8	-1.5	-11.4	-0.2	-16.8	-37.5
3577	0.6	C_SL_FAT1_ENV	Combination	Min	-24.8	-1.5	-11.4	-0.2	-19.8	-58.8
3578	0.0	C_SL_FAT1_ENV	Combination	Max	26.4	1.0	13.1	0.2	8.3	12.6
3578	0.3	C_SL_FAT1_ENV	Combination	Max	26.4	1.0	13.1	0.2	12.9	15.9
3578	0.6	C_SL_FAT1_ENV	Combination	Max	26.4	1.0	13.1	0.2	17.6	19.3
3578	0.0	C_SL_FAT1_ENV	Combination	Min	-12.8	-98.8	-46.1	-0.1	-19.7	-55.3
3578	0.3	C_SL_FAT1_ENV	Combination	Min	-12.8	-98.8	-46.1	-0.1	-16.5	-36.8
3578	0.6	C_SL_FAT1_ENV	Combination	Min	-12.8	-98.8	-46.1	-0.1	-13.3	-18.4
3579	0.0	C_SL_FAT1_ENV	Combination	Max	11.2	41.5	0.4	0.2	7.2	19.4
3579	0.3	C_SL_FAT1_ENV	Combination	Max	11.2	41.5	0.4	0.2	8.8	16.9
3579	0.6	C_SL_FAT1_ENV	Combination	Max	11.2	41.5	0.4	0.2	10.3	14.3
3579	0.0	C_SL_FAT1_ENV	Combination	Min	-13.2	-1.3	-18.8	-0.1	-6.6	-9.7
3579	0.3	C_SL_FAT1_ENV	Combination	Min	-13.2	-1.3	-18.8	-0.1	-4.0	-16.6
3579	0.6	C_SL_FAT1_ENV	Combination	Min	-13.2	-1.3	-18.8	-0.1	-1.4	-23.5
3580	0.0	C_SL_FAT1_ENV	Combination	Max	9.0	2.2	16.0	0.1	9.2	15.4
3580	0.3	C_SL_FAT1_ENV	Combination	Max	9.0	2.2	16.0	0.1	8.4	17.4
3580	0.6	C_SL_FAT1_ENV	Combination	Max	9.0	2.2	16.0	0.1	7.6	19.4
3580	0.0	C_SL_FAT1_ENV	Combination	Min	-19.7	-42.6	-1.5	-0.2	-1.3	-24.8
3580	0.3	C_SL_FAT1_ENV	Combination	Min	-19.7	-42.6	-1.5	-0.2	-3.3	-17.1
3580	0.6	C_SL_FAT1_ENV	Combination	Min	-19.7	-42.6	-1.5	-0.2	-5.4	-9.3
3581	0.0	C_SL_FAT1_ENV	Combination	Max	4.4	5.7	8.8	0.1	5.1	15.8
3581	0.3	C_SL_FAT1_ENV	Combination	Max	4.4	5.7	8.8	0.1	3.5	16.1
3581	0.6	C_SL_FAT1_ENV	Combination	Max	4.4	5.7	8.8	0.1	2.1	16.5
3581	0.0	C_SL_FAT1_ENV	Combination	Min	-6.9	-4.0	-5.7	-0.1	-3.9	-3.7
3581	0.3	C_SL_FAT1_ENV	Combination	Min	-6.9	-4.0	-5.7	-0.1	-3.4	-3.8
3581	0.6	C_SL_FAT1_ENV	Combination	Min	-6.9	-4.0	-5.7	-0.1	-2.8	-3.8

3582	0.0	C_SL_FAT1_ENV	Combination	Max	4.1	2.9	4.5	0.1	4.7	14.1
3582	0.3	C_SL_FAT1_ENV	Combination	Max	4.1	2.9	4.5	0.1	4.5	14.3
3582	0.6	C_SL_FAT1_ENV	Combination	Max	4.1	2.9	4.5	0.1	4.2	14.4
3582	0.0	C_SL_FAT1_ENV	Combination	Min	-5.8	-5.7	-4.7	-0.2	-2.8	-3.0
3582	0.3	C_SL_FAT1_ENV	Combination	Min	-5.8	-5.7	-4.7	-0.2	-3.0	-3.1
3582	0.6	C_SL_FAT1_ENV	Combination	Min	-5.8	-5.7	-4.7	-0.2	-3.2	-3.1
3583	0.0	C_SL_FAT1_ENV	Combination	Max	22.7	131.0	23.8	0.1	10.6	29.8
3583	0.3	C_SL_FAT1_ENV	Combination	Max	22.7	131.0	23.8	0.1	7.9	22.2
3583	0.6	C_SL_FAT1_ENV	Combination	Max	22.7	131.0	23.8	0.1	5.7	16.6
3583	0.0	C_SL_FAT1_ENV	Combination	Min	-23.3	-2.1	-9.0	-0.2	-8.2	-25.3
3583	0.3	C_SL_FAT1_ENV	Combination	Min	-23.3	-2.1	-9.0	-0.2	-9.0	-47.7
3583	0.6	C_SL_FAT1_ENV	Combination	Min	-23.3	-2.1	-9.0	-0.2	-9.8	-70.1
3584	0.0	C_SL_FAT1_ENV	Combination	Max	24.1	1.8	4.3	0.1	5.4	17.3
3584	0.3	C_SL_FAT1_ENV	Combination	Max	24.1	1.8	4.3	0.1	7.6	23.3
3584	0.6	C_SL_FAT1_ENV	Combination	Max	24.1	1.8	4.3	0.1	10.1	31.7
3584	0.0	C_SL_FAT1_ENV	Combination	Min	-16.8	-128.6	-22.9	-0.1	-9.8	-67.9
3584	0.3	C_SL_FAT1_ENV	Combination	Min	-16.8	-128.6	-22.9	-0.1	-8.2	-47.1
3584	0.6	C_SL_FAT1_ENV	Combination	Min	-16.8	-128.6	-22.9	-0.1	-6.5	-26.3
3610	0.0	C_SL_FAT1_ENV	Combination	Max	4.3	6.3	77.9	0.1	17.2	7.6
3610	0.5	C_SL_FAT1_ENV	Combination	Max	4.3	6.3	77.9	0.1	4.0	113.1
3610	0.0	C_SL_FAT1_ENV	Combination	Min	-33.4	-231.1	-4.2	-0.2	-1.8	-19.9
3610	0.5	C_SL_FAT1_ENV	Combination	Min	-33.4	-231.1	-4.2	-0.2	-23.7	-11.2
3611	0.0	C_SL_FAT1_ENV	Combination	Max	11.6	6.6	52.2	0.1	25.5	118.8
3611	0.4	C_SL_FAT1_ENV	Combination	Max	11.6	6.6	52.2	0.1	17.9	197.7
3611	0.7	C_SL_FAT1_ENV	Combination	Max	11.6	6.6	52.2	0.1	10.2	276.6
3611	1.1	C_SL_FAT1_ENV	Combination	Max	11.6	6.6	52.2	0.1	2.6	355.6
3611	0.0	C_SL_FAT1_ENV	Combination	Min	-22.6	-228.1	-7.6	-0.1	-6.1	-13.9
3611	0.4	C_SL_FAT1_ENV	Combination	Min	-22.6	-228.1	-7.6	-0.1	-14.4	-15.2
3611	0.7	C_SL_FAT1_ENV	Combination	Min	-22.6	-228.1	-7.6	-0.1	-22.7	-16.5
3611	1.1	C_SL_FAT1_ENV	Combination	Min	-22.6	-228.1	-7.6	-0.1	-30.9	-17.8
3612	0.0	C_SL_FAT1_ENV	Combination	Max	20.2	6.5	32.2	0.1	13.2	363.6
3612	0.4	C_SL_FAT1_ENV	Combination	Max	20.2	6.5	32.2	0.1	11.3	440.7
3612	0.7	C_SL_FAT1_ENV	Combination	Max	20.2	6.5	32.2	0.1	9.4	517.7
3612	1.1	C_SL_FAT1_ENV	Combination	Max	20.2	6.5	32.2	0.1	7.5	594.8
3612	0.0	C_SL_FAT1_ENV	Combination	Min	-18.6	-222.8	-21.2	-0.1	-15.7	-16.7
3612	0.4	C_SL_FAT1_ENV	Combination	Min	-18.6	-222.8	-21.2	-0.1	-17.8	-18.5

3612	0.7	C_SL_FAT1_ENV	Combination	Min	-18.6	-222.8	-21.2	-0.1	-19.9	-20.3
3612	1.1	C_SL_FAT1_ENV	Combination	Min	-18.6	-222.8	-21.2	-0.1	-22.1	-22.1
3613	0.0	C_SL_FAT1_ENV	Combination	Max	21.6	6.4	12.3	0.1	3.3	608.0
3613	0.4	C_SL_FAT1_ENV	Combination	Max	21.6	6.4	12.3	0.1	8.2	680.9
3613	0.7	C_SL_FAT1_ENV	Combination	Max	21.6	6.4	12.3	0.1	13.1	753.8
3613	1.1	C_SL_FAT1_ENV	Combination	Max	21.6	6.4	12.3	0.1	18.0	826.8
3613	0.0	C_SL_FAT1_ENV	Combination	Min	-18.8	-214.8	-41.0	-0.1	-26.7	-21.1
3613	0.4	C_SL_FAT1_ENV	Combination	Min	-18.8	-214.8	-41.0	-0.1	-21.3	-22.9
3613	0.7	C_SL_FAT1_ENV	Combination	Min	-18.8	-214.8	-41.0	-0.1	-16.0	-24.7
3613	1.1	C_SL_FAT1_ENV	Combination	Min	-18.8	-214.8	-41.0	-0.1	-10.6	-26.5
3614	0.0	C_SL_FAT1_ENV	Combination	Max	17.4	6.1	3.1	0.2	1.4	842.0
3614	0.4	C_SL_FAT1_ENV	Combination	Max	17.4	6.1	3.1	0.2	13.6	908.2
3614	0.7	C_SL_FAT1_ENV	Combination	Max	17.4	6.1	3.1	0.2	25.9	974.4
3614	1.1	C_SL_FAT1_ENV	Combination	Max	17.4	6.1	3.1	0.2	38.2	1040.6
3614	0.0	C_SL_FAT1_ENV	Combination	Min	-23.5	-203.3	-70.1	-0.1	-37.7	-25.8
3614	0.4	C_SL_FAT1_ENV	Combination	Min	-23.5	-203.3	-70.1	-0.1	-25.8	-27.4
3614	0.7	C_SL_FAT1_ENV	Combination	Min	-23.5	-203.3	-70.1	-0.1	-13.8	-29.0
3614	1.1	C_SL_FAT1_ENV	Combination	Min	-23.5	-203.3	-70.1	-0.1	-1.9	-30.6
3615	0.0	C_SL_FAT1_ENV	Combination	Max	24.7	9.1	5.6	0.7	31.3	1044.4
3615	0.2	C_SL_FAT1_ENV	Combination	Max	24.7	9.1	5.6	0.7	37.9	1067.1
3615	0.0	C_SL_FAT1_ENV	Combination	Min	-21.0	-187.9	-116.5	-0.4	-6.9	-29.2
3615	0.2	C_SL_FAT1_ENV	Combination	Min	-21.0	-187.9	-116.5	-0.4	-2.6	-29.6
3616	0.0	C_SL_FAT1_ENV	Combination	Max	4.6	21.1	82.8	0.1	37.3	1066.8
3616	0.5	C_SL_FAT1_ENV	Combination	Max	4.6	21.1	82.8	0.1	20.6	1133.8
3616	0.9	C_SL_FAT1_ENV	Combination	Max	4.6	21.1	82.8	0.1	3.8	1200.7
3616	0.0	C_SL_FAT1_ENV	Combination	Min	-62.3	-172.7	-3.6	-0.2	-1.7	-29.5
3616	0.5	C_SL_FAT1_ENV	Combination	Min	-62.3	-172.7	-3.6	-0.2	-20.1	-30.1
3616	0.9	C_SL_FAT1_ENV	Combination	Min	-62.3	-172.7	-3.6	-0.2	-38.5	-30.7
3617	0.0	C_SL_FAT1_ENV	Combination	Max	3.5	29.0	45.8	0.1	20.9	1192.9
3617	0.4	C_SL_FAT1_ENV	Combination	Max	3.5	29.0	45.8	0.1	14.7	1238.1
3617	0.7	C_SL_FAT1_ENV	Combination	Max	3.5	29.0	45.8	0.1	8.6	1283.3
3617	1.1	C_SL_FAT1_ENV	Combination	Max	3.5	29.0	45.8	0.1	2.4	1328.6
3617	0.0	C_SL_FAT1_ENV	Combination	Min	-35.9	-162.4	-10.1	-0.1	-8.8	-29.0
3617	0.4	C_SL_FAT1_ENV	Combination	Min	-35.9	-162.4	-10.1	-0.1	-15.6	-29.1
3617	0.7	C_SL_FAT1_ENV	Combination	Min	-35.9	-162.4	-10.1	-0.1	-22.3	-29.1
3617	1.1	C_SL_FAT1_ENV	Combination	Min	-35.9	-162.4	-10.1	-0.1	-29.1	-29.2

3618	0.0	C_SL_FAT1_ENV	Combination	Max	9.0	35.7	18.6	0.2	5.7	1328.9
3618	0.5	C_SL_FAT1_ENV	Combination	Max	9.0	35.7	18.6	0.2	7.9	1380.6
3618	1.0	C_SL_FAT1_ENV	Combination	Max	9.0	35.7	18.6	0.2	10.0	1432.3
3618	0.0	C_SL_FAT1_ENV	Combination	Min	-25.8	-152.7	-31.7	-0.2	-21.6	-28.2
3618	0.5	C_SL_FAT1_ENV	Combination	Min	-25.8	-152.7	-31.7	-0.2	-17.5	-28.6
3618	1.0	C_SL_FAT1_ENV	Combination	Min	-25.8	-152.7	-31.7	-0.2	-13.3	-29.1
3619	0.0	C_SL_FAT1_ENV	Combination	Max	9.0	35.7	18.6	1.6	10.0	1434.2
3619	0.1	C_SL_FAT1_ENV	Combination	Max	9.0	35.7	18.6	1.6	13.8	1450.3
3619	0.0	C_SL_FAT1_ENV	Combination	Min	-25.8	-152.7	-31.7	-2.6	-13.3	-29.2
3619	0.1	C_SL_FAT1_ENV	Combination	Min	-25.8	-152.7	-31.7	-2.6	-15.5	-29.5
3620	0.0	C_SL_FAT1_ENV	Combination	Max	13.2	42.1	4.1	0.2	1.1	1458.1
3620	0.4	C_SL_FAT1_ENV	Combination	Max	13.2	42.1	4.1	0.2	10.3	1491.5
3620	0.7	C_SL_FAT1_ENV	Combination	Max	13.2	42.1	4.1	0.2	19.4	1524.8
3620	1.1	C_SL_FAT1_ENV	Combination	Max	13.2	42.1	4.1	0.2	28.5	1558.2
3620	0.0	C_SL_FAT1_ENV	Combination	Min	-28.4	-141.1	-59.6	-0.1	-36.8	-28.8
3620	0.4	C_SL_FAT1_ENV	Combination	Min	-28.4	-141.1	-59.6	-0.1	-26.5	-29.6
3620	0.7	C_SL_FAT1_ENV	Combination	Min	-28.4	-141.1	-59.6	-0.1	-16.2	-30.4
3620	1.1	C_SL_FAT1_ENV	Combination	Min	-28.4	-141.1	-59.6	-0.1	-6.0	-31.3
3621	0.0	C_SL_FAT1_ENV	Combination	Max	16.8	48.9	3.6	0.2	8.4	1568.5
3621	0.4	C_SL_FAT1_ENV	Combination	Max	16.8	48.9	3.6	0.2	25.5	1593.0
3621	0.8	C_SL_FAT1_ENV	Combination	Max	16.8	48.9	3.6	0.2	42.6	1617.5
3621	0.0	C_SL_FAT1_ENV	Combination	Min	-33.8	-127.1	-96.7	-0.2	-37.4	-31.1
3621	0.4	C_SL_FAT1_ENV	Combination	Min	-33.8	-127.1	-96.7	-0.2	-19.8	-31.6
3621	0.8	C_SL_FAT1_ENV	Combination	Min	-33.8	-127.1	-96.7	-0.2	-2.4	-32.1
3622	0.0	C_SL_FAT1_ENV	Combination	Max	4.2	58.3	113.6	0.6	40.3	1617.7
3622	0.3	C_SL_FAT1_ENV	Combination	Max	4.2	58.3	113.6	0.6	30.9	1638.0
3622	0.0	C_SL_FAT1_ENV	Combination	Min	-83.2	-113.9	-4.0	-0.2	-2.0	-32.1
3622	0.3	C_SL_FAT1_ENV	Combination	Min	-83.2	-113.9	-4.0	-0.2	-7.5	-32.3
3623	0.0	C_SL_FAT1_ENV	Combination	Max	3.3	71.1	71.8	0.0	40.0	1627.2
3623	0.4	C_SL_FAT1_ENV	Combination	Max	3.3	71.1	71.8	0.0	27.9	1636.9
3623	0.7	C_SL_FAT1_ENV	Combination	Max	3.3	71.1	71.8	0.0	15.7	1646.5
3623	1.1	C_SL_FAT1_ENV	Combination	Max	3.3	71.1	71.8	0.0	3.6	1656.2
3623	0.0	C_SL_FAT1_ENV	Combination	Min	-58.8	-101.8	-2.3	-0.3	-2.2	-31.3
3623	0.4	C_SL_FAT1_ENV	Combination	Min	-58.8	-101.8	-2.3	-0.3	-14.3	-31.0
3623	0.7	C_SL_FAT1_ENV	Combination	Min	-58.8	-101.8	-2.3	-0.3	-26.4	-30.7
3623	1.1	C_SL_FAT1_ENV	Combination	Min	-58.8	-101.8	-2.3	-0.3	-38.5	-30.4

3624	0.0	C_SL_FAT1_ENV	Combination	Max	2.6	83.0	38.5	0.0	16.2	1646.9
3624	0.4	C_SL_FAT1_ENV	Combination	Max	2.6	83.0	38.5	0.0	11.9	1649.8
3624	0.8	C_SL_FAT1_ENV	Combination	Max	2.6	83.0	38.5	0.0	7.6	1652.7
3624	1.1	C_SL_FAT1_ENV	Combination	Max	2.6	83.0	38.5	0.0	3.4	1655.6
3624	0.0	C_SL_FAT1_ENV	Combination	Min	-36.8	-91.6	-12.9	-0.2	-13.0	-29.7
3624	0.4	C_SL_FAT1_ENV	Combination	Min	-36.8	-91.6	-12.9	-0.2	-18.3	-29.3
3624	0.8	C_SL_FAT1_ENV	Combination	Min	-36.8	-91.6	-12.9	-0.2	-23.6	-28.8
3624	1.1	C_SL_FAT1_ENV	Combination	Min	-36.8	-91.6	-12.9	-0.2	-29.0	-28.4
3625	0.0	C_SL_FAT1_ENV	Combination	Max	8.2	93.5	11.9	0.1	3.5	1659.7
3625	0.4	C_SL_FAT1_ENV	Combination	Max	8.2	93.5	11.9	0.1	7.7	1655.8
3625	0.8	C_SL_FAT1_ENV	Combination	Max	8.2	93.5	11.9	0.1	11.9	1651.9
3625	1.1	C_SL_FAT1_ENV	Combination	Max	8.2	93.5	11.9	0.1	16.1	1648.0
3625	0.0	C_SL_FAT1_ENV	Combination	Min	-28.9	-81.3	-38.7	-0.1	-29.2	-28.3
3625	0.4	C_SL_FAT1_ENV	Combination	Min	-28.9	-81.3	-38.7	-0.1	-23.7	-28.9
3625	0.8	C_SL_FAT1_ENV	Combination	Min	-28.9	-81.3	-38.7	-0.1	-18.1	-29.5
3625	1.1	C_SL_FAT1_ENV	Combination	Min	-28.9	-81.3	-38.7	-0.1	-12.6	-30.1
3626	0.0	C_SL_FAT1_ENV	Combination	Max	14.1	103.9	3.1	0.1	3.0	1664.0
3626	0.4	C_SL_FAT1_ENV	Combination	Max	14.1	103.9	3.1	0.1	15.1	1652.4
3626	0.7	C_SL_FAT1_ENV	Combination	Max	14.1	103.9	3.1	0.1	27.2	1640.8
3626	1.1	C_SL_FAT1_ENV	Combination	Max	14.1	103.9	3.1	0.1	39.3	1629.2
3626	0.0	C_SL_FAT1_ENV	Combination	Min	-32.8	-69.3	-72.0	-0.1	-39.1	-30.7
3626	0.4	C_SL_FAT1_ENV	Combination	Min	-32.8	-69.3	-72.0	-0.1	-26.7	-31.2
3626	0.7	C_SL_FAT1_ENV	Combination	Min	-32.8	-69.3	-72.0	-0.1	-14.3	-31.7
3626	1.1	C_SL_FAT1_ENV	Combination	Min	-32.8	-69.3	-72.0	-0.1	-1.9	-32.2
3627	0.0	C_SL_FAT1_ENV	Combination	Max	20.4	115.8	4.3	0.2	29.2	1643.7
3627	0.3	C_SL_FAT1_ENV	Combination	Max	20.4	115.8	4.3	0.2	38.7	1622.6
3627	0.0	C_SL_FAT1_ENV	Combination	Min	-29.2	-56.1	-113.4	-0.8	-9.9	-33.1
3627	0.3	C_SL_FAT1_ENV	Combination	Min	-29.2	-56.1	-113.4	-0.8	-1.8	-33.1
3628	0.0	C_SL_FAT1_ENV	Combination	Max	4.3	128.4	93.0	0.1	41.7	1622.9
3628	0.4	C_SL_FAT1_ENV	Combination	Max	4.3	128.4	93.0	0.1	25.9	1595.4
3628	0.8	C_SL_FAT1_ENV	Combination	Max	4.3	128.4	93.0	0.1	10.1	1568.0
3628	0.0	C_SL_FAT1_ENV	Combination	Min	-73.7	-46.3	-3.3	-0.3	-1.9	-33.2
3628	0.4	C_SL_FAT1_ENV	Combination	Min	-73.7	-46.3	-3.3	-0.3	-18.7	-32.9
3628	0.8	C_SL_FAT1_ENV	Combination	Min	-73.7	-46.3	-3.3	-0.3	-35.6	-32.7
3629	0.0	C_SL_FAT1_ENV	Combination	Max	3.0	142.6	57.8	0.1	27.8	1563.9
3629	0.4	C_SL_FAT1_ENV	Combination	Max	3.0	142.6	57.8	0.1	19.3	1528.7

3629	0.7	C_SL_FAT1_ENV	Combination	Max	3.0	142.6	57.8	0.1	10.7	1493.6
3629	1.1	C_SL_FAT1_ENV	Combination	Max	3.0	142.6	57.8	0.1	2.2	1458.5
3629	0.0	C_SL_FAT1_ENV	Combination	Min	-47.3	-39.0	-5.4	-0.4	-7.0	-33.1
3629	0.4	C_SL_FAT1_ENV	Combination	Min	-47.3	-39.0	-5.4	-0.4	-16.6	-32.5
3629	0.7	C_SL_FAT1_ENV	Combination	Min	-47.3	-39.0	-5.4	-0.4	-26.2	-31.8
3629	1.1	C_SL_FAT1_ENV	Combination	Min	-47.3	-39.0	-5.4	-0.4	-35.8	-31.2
3630	0.0	C_SL_FAT1_ENV	Combination	Max	4.7	154.9	31.3	2.5	13.6	1459.2
3630	0.1	C_SL_FAT1_ENV	Combination	Max	4.7	154.9	31.3	2.5	10.1	1442.8
3630	0.0	C_SL_FAT1_ENV	Combination	Min	-30.7	-32.8	-19.6	-1.7	-15.9	-32.1
3630	0.1	C_SL_FAT1_ENV	Combination	Min	-30.7	-32.8	-19.6	-1.7	-13.6	-31.8
3631	0.0	C_SL_FAT1_ENV	Combination	Max	4.7	154.9	31.3	0.1	10.1	1441.7
3631	0.5	C_SL_FAT1_ENV	Combination	Max	4.7	154.9	31.3	0.1	8.3	1387.6
3631	1.0	C_SL_FAT1_ENV	Combination	Max	4.7	154.9	31.3	0.1	6.5	1333.5
3631	0.0	C_SL_FAT1_ENV	Combination	Min	-30.7	-32.8	-19.6	-0.3	-13.6	-31.8
3631	0.5	C_SL_FAT1_ENV	Combination	Min	-30.7	-32.8	-19.6	-0.3	-17.4	-31.3
3631	1.0	C_SL_FAT1_ENV	Combination	Min	-30.7	-32.8	-19.6	-0.3	-21.2	-30.9
3632	0.0	C_SL_FAT1_ENV	Combination	Max	10.8	165.6	9.4	0.1	2.7	1343.6
3632	0.4	C_SL_FAT1_ENV	Combination	Max	10.8	165.6	9.4	0.1	8.6	1296.7
3632	0.7	C_SL_FAT1_ENV	Combination	Max	10.8	165.6	9.4	0.1	14.5	1249.7
3632	1.1	C_SL_FAT1_ENV	Combination	Max	10.8	165.6	9.4	0.1	20.4	1202.8
3632	0.0	C_SL_FAT1_ENV	Combination	Min	-25.6	-26.0	-45.0	-0.1	-28.7	-32.1
3632	0.4	C_SL_FAT1_ENV	Combination	Min	-25.6	-26.0	-45.0	-0.1	-21.8	-32.0
3632	0.7	C_SL_FAT1_ENV	Combination	Min	-25.6	-26.0	-45.0	-0.1	-15.0	-31.9
3632	1.1	C_SL_FAT1_ENV	Combination	Min	-25.6	-26.0	-45.0	-0.1	-8.1	-31.9
3633	0.0	C_SL_FAT1_ENV	Combination	Max	13.6	176.7	4.2	0.1	3.5	1217.9
3633	0.5	C_SL_FAT1_ENV	Combination	Max	13.6	176.7	4.2	0.1	19.5	1148.2
3633	0.9	C_SL_FAT1_ENV	Combination	Max	13.6	176.7	4.2	0.1	35.5	1078.5
3633	0.0	C_SL_FAT1_ENV	Combination	Min	-27.5	-17.7	-80.4	-0.2	-38.1	-33.5
3633	0.5	C_SL_FAT1_ENV	Combination	Min	-27.5	-17.7	-80.4	-0.2	-20.1	-33.0
3633	0.9	C_SL_FAT1_ENV	Combination	Min	-27.5	-17.7	-80.4	-0.2	-2.1	-32.4
3634	0.0	C_SL_FAT1_ENV	Combination	Max	7.7	190.6	113.2	0.3	36.6	1078.7
3634	0.2	C_SL_FAT1_ENV	Combination	Max	7.7	190.6	113.2	0.3	31.3	1055.0
3634	0.0	C_SL_FAT1_ENV	Combination	Min	-76.4	-5.5	-7.2	-0.6	-2.0	-32.6
3634	0.2	C_SL_FAT1_ENV	Combination	Min	-76.4	-5.5	-7.2	-0.6	-5.4	-32.2
3635	0.0	C_SL_FAT1_ENV	Combination	Max	4.2	207.0	69.7	0.1	37.9	1054.9
3635	0.4	C_SL_FAT1_ENV	Combination	Max	4.2	207.0	69.7	0.1	26.3	985.6

3635	0.7	C_SL_FAT1_ENV	Combination	Max	4.2	207.0	69.7	0.1	14.6	916.3
3635	1.1	C_SL_FAT1_ENV	Combination	Max	4.2	207.0	69.7	0.1	3.0	846.9
3635	0.0	C_SL_FAT1_ENV	Combination	Min	-53.3	-6.2	-4.3	-0.2	-1.9	-33.9
3635	0.4	C_SL_FAT1_ENV	Combination	Min	-53.3	-6.2	-4.3	-0.2	-13.8	-32.5
3635	0.7	C_SL_FAT1_ENV	Combination	Min	-53.3	-6.2	-4.3	-0.2	-25.7	-31.0
3635	1.1	C_SL_FAT1_ENV	Combination	Min	-53.3	-6.2	-4.3	-0.2	-37.7	-29.6
3636	0.0	C_SL_FAT1_ENV	Combination	Max	11.3	219.8	41.3	0.1	18.1	838.9
3636	0.4	C_SL_FAT1_ENV	Combination	Max	11.3	219.8	41.3	0.1	13.5	762.6
3636	0.7	C_SL_FAT1_ENV	Combination	Max	11.3	219.8	41.3	0.1	8.8	686.3
3636	1.1	C_SL_FAT1_ENV	Combination	Max	11.3	219.8	41.3	0.1	4.1	610.1
3636	0.0	C_SL_FAT1_ENV	Combination	Min	-28.0	-6.8	-13.7	-0.2	-11.1	-30.7
3636	0.4	C_SL_FAT1_ENV	Combination	Min	-28.0	-6.8	-13.7	-0.2	-16.4	-29.0
3636	0.7	C_SL_FAT1_ENV	Combination	Min	-28.0	-6.8	-13.7	-0.2	-21.7	-27.3
3636	1.1	C_SL_FAT1_ENV	Combination	Min	-28.0	-6.8	-13.7	-0.2	-27.1	-25.6
3637	0.0	C_SL_FAT1_ENV	Combination	Max	20.4	228.7	20.8	0.1	7.4	606.5
3637	0.4	C_SL_FAT1_ENV	Combination	Max	20.4	228.7	20.8	0.1	9.3	526.2
3637	0.7	C_SL_FAT1_ENV	Combination	Max	20.4	228.7	20.8	0.1	11.1	446.0
3637	1.1	C_SL_FAT1_ENV	Combination	Max	20.4	228.7	20.8	0.1	12.9	365.8
3637	0.0	C_SL_FAT1_ENV	Combination	Min	-14.7	-7.4	-31.7	-0.1	-21.9	-26.7
3637	0.4	C_SL_FAT1_ENV	Combination	Min	-14.7	-7.4	-31.7	-0.1	-19.8	-24.9
3637	0.7	C_SL_FAT1_ENV	Combination	Min	-14.7	-7.4	-31.7	-0.1	-17.7	-23.1
3637	1.1	C_SL_FAT1_ENV	Combination	Min	-14.7	-7.4	-31.7	-0.1	-15.6	-21.2
3638	0.0	C_SL_FAT1_ENV	Combination	Max	26.4	235.0	6.3	0.1	2.5	365.5
3638	0.4	C_SL_FAT1_ENV	Combination	Max	26.4	235.0	6.3	0.1	10.0	283.8
3638	0.7	C_SL_FAT1_ENV	Combination	Max	26.4	235.0	6.3	0.1	17.4	202.1
3638	1.1	C_SL_FAT1_ENV	Combination	Max	26.4	235.0	6.3	0.1	24.9	120.3
3638	0.0	C_SL_FAT1_ENV	Combination	Min	-9.3	-8.0	-51.5	-0.1	-30.9	-22.1
3638	0.4	C_SL_FAT1_ENV	Combination	Min	-9.3	-8.0	-51.5	-0.1	-22.3	-20.8
3638	0.7	C_SL_FAT1_ENV	Combination	Min	-9.3	-8.0	-51.5	-0.1	-13.8	-19.4
3638	1.1	C_SL_FAT1_ENV	Combination	Min	-9.3	-8.0	-51.5	-0.1	-5.2	-18.1
3639	0.0	C_SL_FAT1_ENV	Combination	Max	32.0	239.1	6.6	0.3	4.2	117.6
3639	0.5	C_SL_FAT1_ENV	Combination	Max	32.0	239.1	6.6	0.3	18.0	9.4
3639	0.0	C_SL_FAT1_ENV	Combination	Min	-6.9	-7.7	-78.7	-0.2	-24.6	-14.5
3639	0.5	C_SL_FAT1_ENV	Combination	Min	-6.9	-7.7	-78.7	-0.2	-4.4	-24.3
3640	0.0	C_SL_FAT1_ENV	Combination	Max	44.9	1.1	30.2	0.3	7.9	11.5
3640	0.5	C_SL_FAT1_ENV	Combination	Max	44.9	1.1	30.2	0.3	30.1	164.2

3640	0.0	C_SL_FAT1_ENV	Combination	Min	-23.7	-350.7	-96.7	-0.1	-21.5	-58.8
3640	0.5	C_SL_FAT1_ENV	Combination	Min	-23.7	-350.7	-96.7	-0.1	-11.7	-31.6
3641	0.0	C_SL_FAT1_ENV	Combination	Max	33.6	2.8	26.8	0.2	14.3	182.2
3641	0.4	C_SL_FAT1_ENV	Combination	Max	33.6	2.8	26.8	0.2	19.6	282.4
3641	0.7	C_SL_FAT1_ENV	Combination	Max	33.6	2.8	26.8	0.2	27.1	382.6
3641	1.1	C_SL_FAT1_ENV	Combination	Max	33.6	2.8	26.8	0.2	34.6	482.7
3641	0.0	C_SL_FAT1_ENV	Combination	Min	-42.6	-308.0	-61.0	-0.1	-31.6	-38.3
3641	0.4	C_SL_FAT1_ENV	Combination	Min	-42.6	-308.0	-61.0	-0.1	-24.7	-37.0
3641	0.7	C_SL_FAT1_ENV	Combination	Min	-42.6	-308.0	-61.0	-0.1	-17.8	-35.7
3641	1.1	C_SL_FAT1_ENV	Combination	Min	-42.6	-308.0	-61.0	-0.1	-14.8	-34.4
3642	0.0	C_SL_FAT1_ENV	Combination	Max	31.9	21.7	32.0	0.2	18.7	489.2
3642	0.4	C_SL_FAT1_ENV	Combination	Max	31.9	21.7	32.0	0.2	21.0	567.6
3642	0.7	C_SL_FAT1_ENV	Combination	Max	31.9	21.7	32.0	0.2	23.4	646.0
3642	1.1	C_SL_FAT1_ENV	Combination	Max	31.9	21.7	32.0	0.2	25.8	724.4
3642	0.0	C_SL_FAT1_ENV	Combination	Min	-55.1	-270.6	-44.1	-0.1	-22.0	-33.5
3642	0.4	C_SL_FAT1_ENV	Combination	Min	-55.1	-270.6	-44.1	-0.1	-20.1	-32.4
3642	0.7	C_SL_FAT1_ENV	Combination	Min	-55.1	-270.6	-44.1	-0.1	-18.1	-31.3
3642	1.1	C_SL_FAT1_ENV	Combination	Min	-55.1	-270.6	-44.1	-0.1	-16.1	-30.2
3643	0.0	C_SL_FAT1_ENV	Combination	Max	37.6	52.1	44.4	0.1	27.0	718.1
3643	0.4	C_SL_FAT1_ENV	Combination	Max	37.6	52.1	44.4	0.1	24.5	778.4
3643	0.7	C_SL_FAT1_ENV	Combination	Max	37.6	52.1	44.4	0.1	22.0	838.7
3643	1.1	C_SL_FAT1_ENV	Combination	Max	37.6	52.1	44.4	0.1	19.5	899.0
3643	0.0	C_SL_FAT1_ENV	Combination	Min	-49.7	-241.0	-33.8	-0.1	-18.9	-29.5
3643	0.4	C_SL_FAT1_ENV	Combination	Min	-49.7	-241.0	-33.8	-0.1	-18.3	-28.5
3643	0.7	C_SL_FAT1_ENV	Combination	Min	-49.7	-241.0	-33.8	-0.1	-20.0	-27.5
3643	1.1	C_SL_FAT1_ENV	Combination	Min	-49.7	-241.0	-33.8	-0.1	-21.8	-26.6
3644	0.0	C_SL_FAT1_ENV	Combination	Max	52.6	77.7	69.5	0.1	38.6	882.3
3644	0.4	C_SL_FAT1_ENV	Combination	Max	52.6	77.7	69.5	0.1	31.7	932.3
3644	0.7	C_SL_FAT1_ENV	Combination	Max	52.6	77.7	69.5	0.1	25.7	982.4
3644	1.1	C_SL_FAT1_ENV	Combination	Max	52.6	77.7	69.5	0.1	25.9	1032.5
3644	0.0	C_SL_FAT1_ENV	Combination	Min	-28.8	-222.1	-48.8	-0.2	-26.9	-25.9
3644	0.4	C_SL_FAT1_ENV	Combination	Min	-28.8	-222.1	-48.8	-0.2	-26.0	-25.1
3644	0.7	C_SL_FAT1_ENV	Combination	Min	-28.8	-222.1	-48.8	-0.2	-30.2	-24.2
3644	1.1	C_SL_FAT1_ENV	Combination	Min	-28.8	-222.1	-48.8	-0.2	-36.5	-23.3
3645	0.0	C_SL_FAT1_ENV	Combination	Max	52.9	95.2	113.4	0.1	23.2	1027.5
3645	0.2	C_SL_FAT1_ENV	Combination	Max	52.9	95.2	113.4	0.1	27.0	1042.0

3645	0.0	C_SL_FAT1_ENV	Combination	Min	-13.9	-211.4	-92.4	-1.2	-24.8	-22.9
3645	0.2	C_SL_FAT1_ENV	Combination	Min	-13.9	-211.4	-92.4	-1.2	-26.2	-22.5
3646	0.0	C_SL_FAT1_ENV	Combination	Max	79.4	65.8	61.7	0.3	27.1	1042.2
3646	0.5	C_SL_FAT1_ENV	Combination	Max	79.4	65.8	61.7	0.3	27.9	1117.1
3646	0.9	C_SL_FAT1_ENV	Combination	Max	79.4	65.8	61.7	0.3	38.8	1191.9
3646	0.0	C_SL_FAT1_ENV	Combination	Min	-62.4	-236.6	-77.8	-0.1	-32.5	-22.5
3646	0.5	C_SL_FAT1_ENV	Combination	Min	-62.4	-236.6	-77.8	-0.1	-26.8	-21.7
3646	0.9	C_SL_FAT1_ENV	Combination	Min	-62.4	-236.6	-77.8	-0.1	-30.9	-20.8
3647	0.0	C_SL_FAT1_ENV	Combination	Max	48.5	78.4	36.8	0.1	18.9	1209.1
3647	0.4	C_SL_FAT1_ENV	Combination	Max	48.5	78.4	36.8	0.1	22.0	1254.9
3647	0.7	C_SL_FAT1_ENV	Combination	Max	48.5	78.4	36.8	0.1	25.5	1300.8
3647	1.1	C_SL_FAT1_ENV	Combination	Max	48.5	78.4	36.8	0.1	29.1	1346.6
3647	0.0	C_SL_FAT1_ENV	Combination	Min	-55.2	-216.6	-47.0	-0.1	-22.0	-20.7
3647	0.4	C_SL_FAT1_ENV	Combination	Min	-55.2	-216.6	-47.0	-0.1	-20.1	-20.0
3647	0.7	C_SL_FAT1_ENV	Combination	Min	-55.2	-216.6	-47.0	-0.1	-19.1	-19.4
3647	1.1	C_SL_FAT1_ENV	Combination	Min	-55.2	-216.6	-47.0	-0.1	-21.2	-18.8
3648	0.0	C_SL_FAT1_ENV	Combination	Max	40.2	96.6	37.6	0.3	22.8	1347.5
3648	0.5	C_SL_FAT1_ENV	Combination	Max	40.2	96.6	37.6	0.3	20.0	1388.1
3648	1.0	C_SL_FAT1_ENV	Combination	Max	40.2	96.6	37.6	0.3	17.2	1428.6
3648	0.0	C_SL_FAT1_ENV	Combination	Min	-44.9	-195.3	-33.7	-0.3	-16.6	-18.7
3648	0.5	C_SL_FAT1_ENV	Combination	Min	-44.9	-195.3	-33.7	-0.3	-15.2	-18.0
3648	1.0	C_SL_FAT1_ENV	Combination	Min	-44.9	-195.3	-33.7	-0.3	-14.7	-17.2
3649	0.0	C_SL_FAT1_ENV	Combination	Max	40.2	96.6	37.6	3.1	17.2	1428.8
3649	0.1	C_SL_FAT1_ENV	Combination	Max	40.2	96.6	37.6	3.1	21.2	1446.0
3649	0.0	C_SL_FAT1_ENV	Combination	Min	-44.9	-195.3	-33.7	-2.8	-14.7	-17.3
3649	0.1	C_SL_FAT1_ENV	Combination	Min	-44.9	-195.3	-33.7	-2.8	-19.1	-17.1
3650	0.0	C_SL_FAT1_ENV	Combination	Max	49.1	115.1	59.7	0.2	37.5	1431.1
3650	0.4	C_SL_FAT1_ENV	Combination	Max	49.1	115.1	59.7	0.2	31.9	1452.5
3650	0.7	C_SL_FAT1_ENV	Combination	Max	49.1	115.1	59.7	0.2	26.3	1473.8
3650	1.1	C_SL_FAT1_ENV	Combination	Max	49.1	115.1	59.7	0.2	24.3	1495.1
3650	0.0	C_SL_FAT1_ENV	Combination	Min	-26.9	-177.3	-47.0	-0.3	-27.3	-16.9
3650	0.4	C_SL_FAT1_ENV	Combination	Min	-26.9	-177.3	-47.0	-0.3	-24.4	-16.5
3650	0.7	C_SL_FAT1_ENV	Combination	Min	-26.9	-177.3	-47.0	-0.3	-24.3	-16.0
3650	1.1	C_SL_FAT1_ENV	Combination	Min	-26.9	-177.3	-47.0	-0.3	-27.5	-15.5
3651	0.0	C_SL_FAT1_ENV	Combination	Max	61.4	131.4	91.4	0.1	42.8	1473.0
3651	0.4	C_SL_FAT1_ENV	Combination	Max	61.4	131.4	91.4	0.1	31.8	1485.3

3651	0.8	C_SL_FAT1_ENV	Combination	Max	61.4	131.4	91.4	0.1	32.1	1497.5
3651	0.0	C_SL_FAT1_ENV	Combination	Min	-9.6	-165.7	-77.8	-0.6	-35.3	-15.3
3651	0.4	C_SL_FAT1_ENV	Combination	Min	-9.6	-165.7	-77.8	-0.6	-28.4	-14.8
3651	0.8	C_SL_FAT1_ENV	Combination	Min	-9.6	-165.7	-77.8	-0.6	-32.2	-14.2
3652	0.0	C_SL_FAT1_ENV	Combination	Max	97.1	111.2	99.9	1.5	30.6	1498.2
3652	0.3	C_SL_FAT1_ENV	Combination	Max	97.1	111.2	99.9	1.5	25.7	1526.9
3652	0.0	C_SL_FAT1_ENV	Combination	Min	-65.1	-188.2	-108.0	-0.1	-30.6	-14.2
3652	0.3	C_SL_FAT1_ENV	Combination	Min	-65.1	-188.2	-108.0	-0.1	-28.1	-13.9
3653	0.0	C_SL_FAT1_ENV	Combination	Max	68.6	120.3	56.9	0.2	30.7	1536.4
3653	0.4	C_SL_FAT1_ENV	Combination	Max	68.6	120.3	56.9	0.2	29.4	1554.7
3653	0.7	C_SL_FAT1_ENV	Combination	Max	68.6	120.3	56.9	0.2	34.5	1573.1
3653	1.1	C_SL_FAT1_ENV	Combination	Max	68.6	120.3	56.9	0.2	41.2	1591.4
3653	0.0	C_SL_FAT1_ENV	Combination	Min	-54.4	-174.3	-70.5	-0.2	-35.2	-13.9
3653	0.4	C_SL_FAT1_ENV	Combination	Min	-54.4	-174.3	-70.5	-0.2	-30.1	-13.5
3653	0.7	C_SL_FAT1_ENV	Combination	Min	-54.4	-174.3	-70.5	-0.2	-28.9	-13.1
3653	1.1	C_SL_FAT1_ENV	Combination	Min	-54.4	-174.3	-70.5	-0.2	-31.5	-12.8
3654	0.0	C_SL_FAT1_ENV	Combination	Max	43.8	133.6	33.6	0.1	21.6	1605.1
3654	0.4	C_SL_FAT1_ENV	Combination	Max	43.8	133.6	33.6	0.1	24.8	1612.4
3654	0.8	C_SL_FAT1_ENV	Combination	Max	43.8	133.6	33.6	0.1	28.0	1619.6
3654	1.1	C_SL_FAT1_ENV	Combination	Max	43.8	133.6	33.6	0.1	31.2	1626.9
3654	0.0	C_SL_FAT1_ENV	Combination	Min	-47.7	-154.7	-43.1	-0.2	-19.8	-12.8
3654	0.4	C_SL_FAT1_ENV	Combination	Min	-47.7	-154.7	-43.1	-0.2	-18.5	-12.5
3654	0.8	C_SL_FAT1_ENV	Combination	Min	-47.7	-154.7	-43.1	-0.2	-18.8	-12.3
3654	1.1	C_SL_FAT1_ENV	Combination	Min	-47.7	-154.7	-43.1	-0.2	-20.9	-12.0
3655	0.0	C_SL_FAT1_ENV	Combination	Max	41.7	152.8	42.9	0.1	31.2	1622.9
3655	0.4	C_SL_FAT1_ENV	Combination	Max	41.7	152.8	42.9	0.1	28.1	1616.4
3655	0.8	C_SL_FAT1_ENV	Combination	Max	41.7	152.8	42.9	0.1	25.0	1610.0
3655	1.1	C_SL_FAT1_ENV	Combination	Max	41.7	152.8	42.9	0.1	22.0	1603.6
3655	0.0	C_SL_FAT1_ENV	Combination	Min	-36.8	-135.0	-34.4	-0.3	-21.3	-11.8
3655	0.4	C_SL_FAT1_ENV	Combination	Min	-36.8	-135.0	-34.4	-0.3	-18.9	-12.2
3655	0.8	C_SL_FAT1_ENV	Combination	Min	-36.8	-135.0	-34.4	-0.3	-18.3	-12.5
3655	1.1	C_SL_FAT1_ENV	Combination	Min	-36.8	-135.0	-34.4	-0.3	-19.3	-12.9
3656	0.0	C_SL_FAT1_ENV	Combination	Max	57.1	172.1	70.7	0.1	41.4	1583.4
3656	0.4	C_SL_FAT1_ENV	Combination	Max	57.1	172.1	70.7	0.1	34.7	1567.1
3656	0.7	C_SL_FAT1_ENV	Combination	Max	57.1	172.1	70.7	0.1	29.6	1550.8
3656	1.1	C_SL_FAT1_ENV	Combination	Max	57.1	172.1	70.7	0.1	31.0	1534.5

3656	0.0	C_SL_FAT1_ENV	Combination	Min	-16.3	-121.9	-57.6	-0.3	-31.8	-12.9
3656	0.4	C_SL_FAT1_ENV	Combination	Min	-16.3	-121.9	-57.6	-0.3	-29.1	-13.3
3656	0.7	C_SL_FAT1_ENV	Combination	Min	-16.3	-121.9	-57.6	-0.3	-30.3	-13.6
3656	1.1	C_SL_FAT1_ENV	Combination	Min	-16.3	-121.9	-57.6	-0.3	-35.3	-14.0
3657	0.0	C_SL_FAT1_ENV	Combination	Max	63.1	186.4	108.3	0.1	23.5	1521.6
3657	0.3	C_SL_FAT1_ENV	Combination	Max	63.1	186.4	108.3	0.1	29.2	1495.1
3657	0.0	C_SL_FAT1_ENV	Combination	Min	-9.6	-113.5	-99.4	-1.6	-29.9	-14.1
3657	0.3	C_SL_FAT1_ENV	Combination	Min	-9.6	-113.5	-99.4	-1.6	-30.6	-14.4
3658	0.0	C_SL_FAT1_ENV	Combination	Max	91.7	164.5	77.7	0.4	32.6	1495.6
3658	0.4	C_SL_FAT1_ENV	Combination	Max	91.7	164.5	77.7	0.4	31.9	1486.4
3658	0.8	C_SL_FAT1_ENV	Combination	Max	91.7	164.5	77.7	0.4	42.8	1477.1
3658	0.0	C_SL_FAT1_ENV	Combination	Min	-57.5	-133.7	-90.5	-0.1	-31.4	-14.4
3658	0.4	C_SL_FAT1_ENV	Combination	Min	-57.5	-133.7	-90.5	-0.1	-27.4	-14.8
3658	0.8	C_SL_FAT1_ENV	Combination	Min	-57.5	-133.7	-90.5	-0.1	-33.9	-15.3
3659	0.0	C_SL_FAT1_ENV	Combination	Max	59.4	176.0	46.3	0.2	23.9	1493.6
3659	0.4	C_SL_FAT1_ENV	Combination	Max	59.4	176.0	46.3	0.2	25.9	1474.3
3659	0.7	C_SL_FAT1_ENV	Combination	Max	59.4	176.0	46.3	0.2	31.5	1454.9
3659	1.1	C_SL_FAT1_ENV	Combination	Max	59.4	176.0	46.3	0.2	37.2	1435.6
3659	0.0	C_SL_FAT1_ENV	Combination	Min	-53.7	-117.9	-59.5	-0.3	-27.6	-15.5
3659	0.4	C_SL_FAT1_ENV	Combination	Min	-53.7	-117.9	-59.5	-0.3	-24.2	-15.9
3659	0.7	C_SL_FAT1_ENV	Combination	Min	-53.7	-117.9	-59.5	-0.3	-24.2	-16.3
3659	1.1	C_SL_FAT1_ENV	Combination	Min	-53.7	-117.9	-59.5	-0.3	-27.0	-16.7
3660	0.0	C_SL_FAT1_ENV	Combination	Max	43.0	193.2	32.7	2.6	20.6	1442.3
3660	0.1	C_SL_FAT1_ENV	Combination	Max	43.0	193.2	32.7	2.6	16.7	1425.3
3660	0.0	C_SL_FAT1_ENV	Combination	Min	-49.7	-99.4	-38.4	-3.2	-19.7	-17.0
3660	0.1	C_SL_FAT1_ENV	Combination	Min	-49.7	-99.4	-38.4	-3.2	-15.2	-17.2
3661	0.0	C_SL_FAT1_ENV	Combination	Max	43.0	193.2	32.7	0.3	16.7	1424.3
3661	0.5	C_SL_FAT1_ENV	Combination	Max	43.0	193.2	32.7	0.3	19.9	1386.7
3661	1.0	C_SL_FAT1_ENV	Combination	Max	43.0	193.2	32.7	0.3	23.0	1349.0
3661	0.0	C_SL_FAT1_ENV	Combination	Min	-49.7	-99.4	-38.4	-0.4	-15.2	-17.0
3661	0.5	C_SL_FAT1_ENV	Combination	Min	-49.7	-99.4	-38.4	-0.4	-15.1	-17.6
3661	1.0	C_SL_FAT1_ENV	Combination	Min	-49.7	-99.4	-38.4	-0.4	-16.1	-18.2
3662	0.0	C_SL_FAT1_ENV	Combination	Max	46.4	213.4	46.5	0.1	28.9	1337.4
3662	0.4	C_SL_FAT1_ENV	Combination	Max	46.4	213.4	46.5	0.1	25.6	1293.8
3662	0.7	C_SL_FAT1_ENV	Combination	Max	46.4	213.4	46.5	0.1	22.4	1250.2
3662	1.1	C_SL_FAT1_ENV	Combination	Max	46.4	213.4	46.5	0.1	19.4	1206.6

3662	0.0	C_SL_FAT1_ENV	Combination	Min	-38.4	-81.2	-37.7	-0.2	-21.6	-18.5
3662	0.4	C_SL_FAT1_ENV	Combination	Min	-38.4	-81.2	-37.7	-0.2	-19.3	-18.9
3662	0.7	C_SL_FAT1_ENV	Combination	Min	-38.4	-81.2	-37.7	-0.2	-20.0	-19.4
3662	1.1	C_SL_FAT1_ENV	Combination	Min	-38.4	-81.2	-37.7	-0.2	-21.6	-19.8
3663	0.0	C_SL_FAT1_ENV	Combination	Max	59.3	233.1	77.9	0.0	38.7	1181.8
3663	0.5	C_SL_FAT1_ENV	Combination	Max	59.3	233.1	77.9	0.0	27.7	1110.8
3663	0.9	C_SL_FAT1_ENV	Combination	Max	59.3	233.1	77.9	0.0	26.7	1039.7
3663	0.0	C_SL_FAT1_ENV	Combination	Min	-24.0	-69.4	-61.9	-0.4	-31.9	-20.2
3663	0.5	C_SL_FAT1_ENV	Combination	Min	-24.0	-69.4	-61.9	-0.4	-27.5	-20.8
3663	0.9	C_SL_FAT1_ENV	Combination	Min	-24.0	-69.4	-61.9	-0.4	-32.7	-21.4
3664	0.0	C_SL_FAT1_ENV	Combination	Max	98.3	209.0	91.9	1.2	28.6	1040.5
3664	0.2	C_SL_FAT1_ENV	Combination	Max	98.3	209.0	91.9	1.2	25.8	1028.9
3664	0.0	C_SL_FAT1_ENV	Combination	Min	-74.8	-99.7	-112.7	-0.2	-25.6	-21.4
3664	0.2	C_SL_FAT1_ENV	Combination	Min	-74.8	-99.7	-112.7	-0.2	-23.7	-21.7
3665	0.0	C_SL_FAT1_ENV	Combination	Max	67.3	219.7	48.1	0.1	25.5	1029.6
3665	0.4	C_SL_FAT1_ENV	Combination	Max	67.3	219.7	48.1	0.1	25.5	983.4
3665	0.7	C_SL_FAT1_ENV	Combination	Max	67.3	219.7	48.1	0.1	31.5	937.1
3665	1.1	C_SL_FAT1_ENV	Combination	Max	67.3	219.7	48.1	0.1	38.6	890.9
3665	0.0	C_SL_FAT1_ENV	Combination	Min	-64.1	-84.2	-69.5	-0.2	-36.5	-22.2
3665	0.4	C_SL_FAT1_ENV	Combination	Min	-64.1	-84.2	-69.5	-0.2	-30.1	-22.8
3665	0.7	C_SL_FAT1_ENV	Combination	Min	-64.1	-84.2	-69.5	-0.2	-25.8	-23.4
3665	1.1	C_SL_FAT1_ENV	Combination	Min	-64.1	-84.2	-69.5	-0.2	-26.5	-24.0
3666	0.0	C_SL_FAT1_ENV	Combination	Max	38.0	237.6	33.0	0.1	19.0	898.8
3666	0.4	C_SL_FAT1_ENV	Combination	Max	38.0	237.6	33.0	0.1	21.8	841.3
3666	0.7	C_SL_FAT1_ENV	Combination	Max	38.0	237.6	33.0	0.1	24.5	783.9
3666	1.1	C_SL_FAT1_ENV	Combination	Max	38.0	237.6	33.0	0.1	27.3	726.4
3666	0.0	C_SL_FAT1_ENV	Combination	Min	-58.2	-59.2	-45.2	-0.2	-22.5	-24.8
3666	0.4	C_SL_FAT1_ENV	Combination	Min	-58.2	-59.2	-45.2	-0.2	-20.4	-25.5
3666	0.7	C_SL_FAT1_ENV	Combination	Min	-58.2	-59.2	-45.2	-0.2	-18.2	-26.1
3666	1.1	C_SL_FAT1_ENV	Combination	Min	-58.2	-59.2	-45.2	-0.2	-18.5	-26.8
3667	0.0	C_SL_FAT1_ENV	Combination	Max	26.7	265.4	43.2	0.1	25.3	720.9
3667	0.4	C_SL_FAT1_ENV	Combination	Max	26.7	265.4	43.2	0.1	23.3	645.2
3667	0.7	C_SL_FAT1_ENV	Combination	Max	26.7	265.4	43.2	0.1	21.2	569.4
3667	1.1	C_SL_FAT1_ENV	Combination	Max	26.7	265.4	43.2	0.1	19.2	493.7
3667	0.0	C_SL_FAT1_ENV	Combination	Min	-50.9	-27.0	-33.0	-0.2	-16.7	-27.7
3667	0.4	C_SL_FAT1_ENV	Combination	Min	-50.9	-27.0	-33.0	-0.2	-18.3	-28.5

3667	0.7	C_SL_FAT1_ENV	Combination	Min	-50.9	-27.0	-33.0	-0.2	-20.0	-29.2
3667	1.1	C_SL_FAT1_ENV	Combination	Min	-50.9	-27.0	-33.0	-0.2	-21.6	-30.0
3668	0.0	C_SL_FAT1_ENV	Combination	Max	17.1	301.8	61.5	0.1	34.9	476.7
3668	0.4	C_SL_FAT1_ENV	Combination	Max	17.1	301.8	61.5	0.1	27.5	378.9
3668	0.7	C_SL_FAT1_ENV	Combination	Max	17.1	301.8	61.5	0.1	20.1	281.2
3668	1.1	C_SL_FAT1_ENV	Combination	Max	17.1	301.8	61.5	0.1	14.7	183.4
3668	0.0	C_SL_FAT1_ENV	Combination	Min	-37.6	-4.8	-27.8	-0.2	-15.3	-31.0
3668	0.4	C_SL_FAT1_ENV	Combination	Min	-37.6	-4.8	-27.8	-0.2	-18.2	-31.9
3668	0.7	C_SL_FAT1_ENV	Combination	Min	-37.6	-4.8	-27.8	-0.2	-24.9	-32.8
3668	1.1	C_SL_FAT1_ENV	Combination	Min	-37.6	-4.8	-27.8	-0.2	-31.7	-33.8
3669	0.0	C_SL_FAT1_ENV	Combination	Max	10.8	345.5	98.4	0.1	30.2	159.5
3669	0.5	C_SL_FAT1_ENV	Combination	Max	10.8	345.5	98.4	0.1	7.6	12.6
3669	0.0	C_SL_FAT1_ENV	Combination	Min	-35.5	-1.1	-31.6	-0.3	-12.6	-27.9
3669	0.5	C_SL_FAT1_ENV	Combination	Min	-35.5	-1.1	-31.6	-0.3	-21.7	-55.4
3670	0.0	C_SL_FAT1_ENV	Combination	Max	3.9	1.8	32.6	0.2	6.6	14.4
3670	0.5	C_SL_FAT1_ENV	Combination	Max	3.9	1.8	32.6	0.2	2.5	104.4
3670	0.0	C_SL_FAT1_ENV	Combination	Min	-16.3	-213.1	-7.3	-0.1	-7.0	-23.5
3670	0.5	C_SL_FAT1_ENV	Combination	Min	-16.3	-213.1	-7.3	-0.1	-13.3	-11.2
3671	0.0	C_SL_FAT1_ENV	Combination	Max	10.1	3.8	18.7	0.2	9.6	115.4
3671	0.4	C_SL_FAT1_ENV	Combination	Max	10.1	3.8	18.7	0.2	7.5	178.4
3671	0.7	C_SL_FAT1_ENV	Combination	Max	10.1	3.8	18.7	0.2	5.8	241.5
3671	1.1	C_SL_FAT1_ENV	Combination	Max	10.1	3.8	18.7	0.2	4.3	304.6
3671	0.0	C_SL_FAT1_ENV	Combination	Min	-23.1	-190.6	-7.5	-0.1	-3.9	-14.3
3671	0.4	C_SL_FAT1_ENV	Combination	Min	-23.1	-190.6	-7.5	-0.1	-5.8	-14.3
3671	0.7	C_SL_FAT1_ENV	Combination	Min	-23.1	-190.6	-7.5	-0.1	-8.1	-14.3
3671	1.1	C_SL_FAT1_ENV	Combination	Min	-23.1	-190.6	-7.5	-0.1	-10.6	-14.3
3672	0.0	C_SL_FAT1_ENV	Combination	Max	16.7	14.4	13.8	0.2	8.4	310.8
3672	0.4	C_SL_FAT1_ENV	Combination	Max	16.7	14.4	13.8	0.2	7.5	364.1
3672	0.7	C_SL_FAT1_ENV	Combination	Max	16.7	14.4	13.8	0.2	6.6	417.3
3672	1.1	C_SL_FAT1_ENV	Combination	Max	16.7	14.4	13.8	0.2	5.8	470.5
3672	0.0	C_SL_FAT1_ENV	Combination	Min	-33.9	-171.7	-9.9	-0.1	-5.4	-14.5
3672	0.4	C_SL_FAT1_ENV	Combination	Min	-33.9	-171.7	-9.9	-0.1	-6.1	-14.5
3672	0.7	C_SL_FAT1_ENV	Combination	Min	-33.9	-171.7	-9.9	-0.1	-6.9	-14.4
3672	1.1	C_SL_FAT1_ENV	Combination	Min	-33.9	-171.7	-9.9	-0.1	-7.7	-14.3
3673	0.0	C_SL_FAT1_ENV	Combination	Max	24.9	28.6	18.8	0.1	11.6	472.9
3673	0.4	C_SL_FAT1_ENV	Combination	Max	24.9	28.6	18.8	0.1	9.8	516.8

3673	0.7	C_SL_FAT1_ENV	Combination	Max	24.9	28.6	18.8	0.1	8.1	560.8
3673	1.1	C_SL_FAT1_ENV	Combination	Max	24.9	28.6	18.8	0.1	7.3	604.8
3673	0.0	C_SL_FAT1_ENV	Combination	Min	-42.9	-155.4	-14.1	-0.1	-8.0	-14.3
3673	0.4	C_SL_FAT1_ENV	Combination	Min	-42.9	-155.4	-14.1	-0.1	-7.9	-14.2
3673	0.7	C_SL_FAT1_ENV	Combination	Min	-42.9	-155.4	-14.1	-0.1	-8.4	-14.1
3673	1.1	C_SL_FAT1_ENV	Combination	Min	-42.9	-155.4	-14.1	-0.1	-8.9	-14.1
3674	0.0	C_SL_FAT1_ENV	Combination	Max	34.6	39.1	32.4	0.1	18.2	602.9
3674	0.4	C_SL_FAT1_ENV	Combination	Max	34.6	39.1	32.4	0.1	15.8	639.5
3674	0.7	C_SL_FAT1_ENV	Combination	Max	34.6	39.1	32.4	0.1	13.5	676.2
3674	1.1	C_SL_FAT1_ENV	Combination	Max	34.6	39.1	32.4	0.1	13.1	712.8
3674	0.0	C_SL_FAT1_ENV	Combination	Min	-52.6	-142.5	-22.7	-0.1	-11.4	-14.0
3674	0.4	C_SL_FAT1_ENV	Combination	Min	-52.6	-142.5	-22.7	-0.1	-12.7	-13.8
3674	0.7	C_SL_FAT1_ENV	Combination	Min	-52.6	-142.5	-22.7	-0.1	-14.9	-13.7
3674	1.1	C_SL_FAT1_ENV	Combination	Min	-52.6	-142.5	-22.7	-0.1	-17.2	-13.6
3675	0.0	C_SL_FAT1_ENV	Combination	Max	41.8	45.9	61.7	0.8	14.4	711.4
3675	0.2	C_SL_FAT1_ENV	Combination	Max	41.8	45.9	61.7	0.8	15.7	722.5
3675	0.0	C_SL_FAT1_ENV	Combination	Min	-63.2	-134.0	-39.8	-0.2	-9.9	-13.5
3675	0.2	C_SL_FAT1_ENV	Combination	Min	-63.2	-134.0	-39.8	-0.2	-16.9	-13.4
3676	0.0	C_SL_FAT1_ENV	Combination	Max	39.2	31.9	25.6	0.1	11.1	722.2
3676	0.5	C_SL_FAT1_ENV	Combination	Max	39.2	31.9	25.6	0.1	14.3	761.5
3676	0.9	C_SL_FAT1_ENV	Combination	Max	39.2	31.9	25.6	0.1	19.2	800.8
3676	0.0	C_SL_FAT1_ENV	Combination	Min	-31.5	-139.8	-38.1	-0.2	-16.7	-13.4
3676	0.5	C_SL_FAT1_ENV	Combination	Min	-31.5	-139.8	-38.1	-0.2	-13.8	-13.2
3676	0.9	C_SL_FAT1_ENV	Combination	Min	-31.5	-139.8	-38.1	-0.2	-12.4	-13.0
3677	0.0	C_SL_FAT1_ENV	Combination	Max	30.4	40.1	14.8	0.1	8.2	805.0
3677	0.4	C_SL_FAT1_ENV	Combination	Max	30.4	40.1	14.8	0.1	9.0	832.0
3677	0.7	C_SL_FAT1_ENV	Combination	Max	30.4	40.1	14.8	0.1	11.2	859.0
3677	1.1	C_SL_FAT1_ENV	Combination	Max	30.4	40.1	14.8	0.1	13.4	886.0
3677	0.0	C_SL_FAT1_ENV	Combination	Min	-30.5	-130.3	-21.1	-0.1	-9.6	-12.9
3677	0.4	C_SL_FAT1_ENV	Combination	Min	-30.5	-130.3	-21.1	-0.1	-8.9	-12.7
3677	0.7	C_SL_FAT1_ENV	Combination	Min	-30.5	-130.3	-21.1	-0.1	-8.2	-12.5
3677	1.1	C_SL_FAT1_ENV	Combination	Min	-30.5	-130.3	-21.1	-0.1	-8.0	-12.3
3678	0.0	C_SL_FAT1_ENV	Combination	Max	28.3	50.4	13.7	0.1	9.3	888.0
3678	0.5	C_SL_FAT1_ENV	Combination	Max	28.3	50.4	13.7	0.1	7.9	917.2
3678	1.0	C_SL_FAT1_ENV	Combination	Max	28.3	50.4	13.7	0.1	6.7	946.4
3678	0.0	C_SL_FAT1_ENV	Combination	Min	-34.7	-119.2	-11.1	-0.1	-5.5	-12.2

3678	0.5	C_SL_FAT1_ENV	Combination	Min	-34.7	-119.2	-11.1	-0.1	-5.2	-11.9
3678	1.0	C_SL_FAT1_ENV	Combination	Min	-34.7	-119.2	-11.1	-0.1	-5.2	-11.6
3679	0.0	C_SL_FAT1_ENV	Combination	Max	28.3	50.4	13.7	1.2	6.7	947.6
3679	0.1	C_SL_FAT1_ENV	Combination	Max	28.3	50.4	13.7	1.2	7.9	958.6
3679	0.0	C_SL_FAT1_ENV	Combination	Min	-34.7	-119.2	-11.1	-0.9	-5.2	-11.6
3679	0.1	C_SL_FAT1_ENV	Combination	Min	-34.7	-119.2	-11.1	-0.9	-6.5	-11.5
3680	0.0	C_SL_FAT1_ENV	Combination	Max	32.8	59.7	28.1	0.2	17.9	956.6
3680	0.4	C_SL_FAT1_ENV	Combination	Max	32.8	59.7	28.1	0.2	14.9	975.2
3680	0.7	C_SL_FAT1_ENV	Combination	Max	32.8	59.7	28.1	0.2	12.0	993.7
3680	1.1	C_SL_FAT1_ENV	Combination	Max	32.8	59.7	28.1	0.2	11.3	1012.3
3680	0.0	C_SL_FAT1_ENV	Combination	Min	-41.0	-108.5	-19.0	-0.2	-9.5	-11.4
3680	0.4	C_SL_FAT1_ENV	Combination	Min	-41.0	-108.5	-19.0	-0.2	-10.4	-11.2
3680	0.7	C_SL_FAT1_ENV	Combination	Min	-41.0	-108.5	-19.0	-0.2	-11.9	-10.9
3680	1.1	C_SL_FAT1_ENV	Combination	Min	-41.0	-108.5	-19.0	-0.2	-13.4	-10.7
3681	0.0	C_SL_FAT1_ENV	Combination	Max	41.0	67.0	50.2	0.3	22.2	1008.9
3681	0.4	C_SL_FAT1_ENV	Combination	Max	41.0	67.0	50.2	0.3	16.5	1021.8
3681	0.8	C_SL_FAT1_ENV	Combination	Max	41.0	67.0	50.2	0.3	14.1	1034.6
3681	0.0	C_SL_FAT1_ENV	Combination	Min	-51.3	-100.2	-30.0	-0.1	-10.9	-10.6
3681	0.4	C_SL_FAT1_ENV	Combination	Min	-51.3	-100.2	-30.0	-0.1	-15.8	-10.3
3681	0.8	C_SL_FAT1_ENV	Combination	Min	-51.3	-100.2	-30.0	-0.1	-21.3	-10.1
3682	0.0	C_SL_FAT1_ENV	Combination	Max	47.7	62.6	36.7	0.3	11.6	1034.1
3682	0.3	C_SL_FAT1_ENV	Combination	Max	47.7	62.6	36.7	0.3	9.9	1046.6
3682	0.0	C_SL_FAT1_ENV	Combination	Min	-24.0	-105.0	-66.4	-1.2	-20.6	-10.1
3682	0.3	C_SL_FAT1_ENV	Combination	Min	-24.0	-105.0	-66.4	-1.2	-7.4	-9.9
3683	0.0	C_SL_FAT1_ENV	Combination	Max	37.1	69.0	23.0	0.1	14.2	1046.5
3683	0.4	C_SL_FAT1_ENV	Combination	Max	37.1	69.0	23.0	0.1	14.9	1052.2
3683	0.7	C_SL_FAT1_ENV	Combination	Max	37.1	69.0	23.0	0.1	18.4	1057.9
3683	1.1	C_SL_FAT1_ENV	Combination	Max	37.1	69.0	23.0	0.1	21.8	1063.5
3683	0.0	C_SL_FAT1_ENV	Combination	Min	-22.5	-98.2	-37.8	-0.2	-19.9	-9.9
3683	0.4	C_SL_FAT1_ENV	Combination	Min	-22.5	-98.2	-37.8	-0.2	-16.7	-9.6
3683	0.7	C_SL_FAT1_ENV	Combination	Min	-22.5	-98.2	-37.8	-0.2	-13.4	-9.3
3683	1.1	C_SL_FAT1_ENV	Combination	Min	-22.5	-98.2	-37.8	-0.2	-10.9	-9.1
3684	0.0	C_SL_FAT1_ENV	Combination	Max	28.4	77.6	13.9	0.1	8.8	1065.5
3684	0.4	C_SL_FAT1_ENV	Combination	Max	28.4	77.6	13.9	0.1	9.6	1067.5
3684	0.8	C_SL_FAT1_ENV	Combination	Max	28.4	77.6	13.9	0.1	11.9	1069.5
3684	1.1	C_SL_FAT1_ENV	Combination	Max	28.4	77.6	13.9	0.1	14.3	1071.4

3684	0.0	C_SL_FAT1_ENV	Combination	Min	-24.4	-88.7	-18.8	-0.2	-8.4	-9.1
3684	0.4	C_SL_FAT1_ENV	Combination	Min	-24.4	-88.7	-18.8	-0.2	-8.2	-8.9
3684	0.8	C_SL_FAT1_ENV	Combination	Min	-24.4	-88.7	-18.8	-0.2	-7.9	-8.7
3684	1.1	C_SL_FAT1_ENV	Combination	Min	-24.4	-88.7	-18.8	-0.2	-7.7	-8.4
3685	0.0	C_SL_FAT1_ENV	Combination	Max	28.2	88.1	18.8	0.1	14.0	1072.1
3685	0.4	C_SL_FAT1_ENV	Combination	Max	28.2	88.1	18.8	0.1	11.8	1070.4
3685	0.8	C_SL_FAT1_ENV	Combination	Max	28.2	88.1	18.8	0.1	9.6	1068.6
3685	1.1	C_SL_FAT1_ENV	Combination	Max	28.2	88.1	18.8	0.1	9.0	1066.9
3685	0.0	C_SL_FAT1_ENV	Combination	Min	-32.4	-78.0	-13.9	-0.2	-7.5	-8.5
3685	0.4	C_SL_FAT1_ENV	Combination	Min	-32.4	-78.0	-13.9	-0.2	-7.7	-8.7
3685	0.8	C_SL_FAT1_ENV	Combination	Min	-32.4	-78.0	-13.9	-0.2	-8.1	-8.9
3685	1.1	C_SL_FAT1_ENV	Combination	Min	-32.4	-78.0	-13.9	-0.2	-8.4	-9.1
3686	0.0	C_SL_FAT1_ENV	Combination	Max	34.8	97.6	37.1	0.1	21.0	1065.9
3686	0.4	C_SL_FAT1_ENV	Combination	Max	34.8	97.6	37.1	0.1	17.8	1060.0
3686	0.7	C_SL_FAT1_ENV	Combination	Max	34.8	97.6	37.1	0.1	14.6	1054.0
3686	1.1	C_SL_FAT1_ENV	Combination	Max	34.8	97.6	37.1	0.1	14.2	1048.1
3686	0.0	C_SL_FAT1_ENV	Combination	Min	-44.7	-68.9	-22.9	-0.3	-10.8	-9.1
3686	0.4	C_SL_FAT1_ENV	Combination	Min	-44.7	-68.9	-22.9	-0.3	-13.3	-9.3
3686	0.7	C_SL_FAT1_ENV	Combination	Min	-44.7	-68.9	-22.9	-0.3	-16.6	-9.6
3686	1.1	C_SL_FAT1_ENV	Combination	Min	-44.7	-68.9	-22.9	-0.3	-19.9	-9.8
3687	0.0	C_SL_FAT1_ENV	Combination	Max	40.2	104.4	66.3	1.0	9.5	1048.5
3687	0.3	C_SL_FAT1_ENV	Combination	Max	40.2	104.4	66.3	1.0	11.4	1035.7
3687	0.0	C_SL_FAT1_ENV	Combination	Min	-57.9	-62.3	-36.7	-0.4	-9.0	-9.8
3687	0.3	C_SL_FAT1_ENV	Combination	Min	-57.9	-62.3	-36.7	-0.4	-21.8	-10.0
3688	0.0	C_SL_FAT1_ENV	Combination	Max	43.6	100.6	29.5	0.0	13.7	1035.1
3688	0.4	C_SL_FAT1_ENV	Combination	Max	43.6	100.6	29.5	0.0	17.0	1021.4
3688	0.8	C_SL_FAT1_ENV	Combination	Max	43.6	100.6	29.5	0.0	23.5	1007.8
3688	0.0	C_SL_FAT1_ENV	Combination	Min	-26.2	-67.5	-51.0	-0.5	-21.2	-10.0
3688	0.4	C_SL_FAT1_ENV	Combination	Min	-26.2	-67.5	-51.0	-0.5	-15.7	-10.3
3688	0.8	C_SL_FAT1_ENV	Combination	Min	-26.2	-67.5	-51.0	-0.5	-10.9	-10.6
3689	0.0	C_SL_FAT1_ENV	Combination	Max	35.0	108.5	18.7	0.1	11.0	1010.4
3689	0.4	C_SL_FAT1_ENV	Combination	Max	35.0	108.5	18.7	0.1	12.0	991.7
3689	0.7	C_SL_FAT1_ENV	Combination	Max	35.0	108.5	18.7	0.1	15.2	972.9
3689	1.1	C_SL_FAT1_ENV	Combination	Max	35.0	108.5	18.7	0.1	18.4	954.1
3689	0.0	C_SL_FAT1_ENV	Combination	Min	-24.7	-60.2	-28.6	-0.2	-13.5	-10.6
3689	0.4	C_SL_FAT1_ENV	Combination	Min	-24.7	-60.2	-28.6	-0.2	-12.0	-10.9

3689	0.7	C_SL_FAT1_ENV	Combination	Min	-24.7	-60.2	-28.6	-0.2	-10.5	-11.2
3689	1.1	C_SL_FAT1_ENV	Combination	Min	-24.7	-60.2	-28.6	-0.2	-9.6	-11.4
3690	0.0	C_SL_FAT1_ENV	Combination	Max	29.9	118.7	11.1	0.9	7.7	955.2
3690	0.1	C_SL_FAT1_ENV	Combination	Max	29.9	118.7	11.1	0.9	6.4	944.4
3690	0.0	C_SL_FAT1_ENV	Combination	Min	-32.8	-50.7	-13.7	-1.2	-6.7	-11.5
3690	0.1	C_SL_FAT1_ENV	Combination	Min	-32.8	-50.7	-13.7	-1.2	-5.3	-11.6
3691	0.0	C_SL_FAT1_ENV	Combination	Max	29.9	118.7	11.1	0.1	6.4	943.9
3691	0.5	C_SL_FAT1_ENV	Combination	Max	29.9	118.7	11.1	0.1	7.9	914.6
3691	1.0	C_SL_FAT1_ENV	Combination	Max	29.9	118.7	11.1	0.1	9.5	885.4
3691	0.0	C_SL_FAT1_ENV	Combination	Min	-32.8	-50.7	-13.7	-0.2	-5.3	-11.6
3691	0.5	C_SL_FAT1_ENV	Combination	Min	-32.8	-50.7	-13.7	-0.2	-5.3	-11.9
3691	1.0	C_SL_FAT1_ENV	Combination	Min	-32.8	-50.7	-13.7	-0.2	-5.6	-12.3
3692	0.0	C_SL_FAT1_ENV	Combination	Max	31.1	129.3	20.8	0.0	13.1	883.7
3692	0.4	C_SL_FAT1_ENV	Combination	Max	31.1	129.3	20.8	0.0	11.0	856.8
3692	0.7	C_SL_FAT1_ENV	Combination	Max	31.1	129.3	20.8	0.0	8.9	829.8
3692	1.1	C_SL_FAT1_ENV	Combination	Max	31.1	129.3	20.8	0.0	8.2	802.9
3692	0.0	C_SL_FAT1_ENV	Combination	Min	-43.0	-39.9	-14.6	-0.1	-7.7	-12.3
3692	0.4	C_SL_FAT1_ENV	Combination	Min	-43.0	-39.9	-14.6	-0.1	-8.1	-12.5
3692	0.7	C_SL_FAT1_ENV	Combination	Min	-43.0	-39.9	-14.6	-0.1	-8.9	-12.8
3692	1.1	C_SL_FAT1_ENV	Combination	Min	-43.0	-39.9	-14.6	-0.1	-9.6	-13.1
3693	0.0	C_SL_FAT1_ENV	Combination	Max	38.7	138.6	38.1	0.1	18.3	800.2
3693	0.5	C_SL_FAT1_ENV	Combination	Max	38.7	138.6	38.1	0.1	13.8	760.5
3693	0.9	C_SL_FAT1_ENV	Combination	Max	38.7	138.6	38.1	0.1	10.7	720.8
3693	0.0	C_SL_FAT1_ENV	Combination	Min	-57.4	-31.1	-25.0	-0.1	-12.2	-13.1
3693	0.5	C_SL_FAT1_ENV	Combination	Min	-57.4	-31.1	-25.0	-0.1	-14.0	-13.4
3693	0.9	C_SL_FAT1_ENV	Combination	Min	-57.4	-31.1	-25.0	-0.1	-17.3	-13.7
3694	0.0	C_SL_FAT1_ENV	Combination	Max	41.0	135.1	37.5	0.2	14.9	720.4
3694	0.2	C_SL_FAT1_ENV	Combination	Max	41.0	135.1	37.5	0.2	14.1	708.7
3694	0.0	C_SL_FAT1_ENV	Combination	Min	-28.0	-45.1	-63.4	-0.9	-15.8	-13.7
3694	0.2	C_SL_FAT1_ENV	Combination	Min	-28.0	-45.1	-63.4	-0.9	-8.2	-13.8
3695	0.0	C_SL_FAT1_ENV	Combination	Max	36.1	143.2	21.3	0.1	12.2	708.9
3695	0.4	C_SL_FAT1_ENV	Combination	Max	36.1	143.2	21.3	0.1	13.3	671.4
3695	0.7	C_SL_FAT1_ENV	Combination	Max	36.1	143.2	21.3	0.1	16.2	633.9
3695	1.1	C_SL_FAT1_ENV	Combination	Max	36.1	143.2	21.3	0.1	19.1	596.4
3695	0.0	C_SL_FAT1_ENV	Combination	Min	-33.6	-37.8	-33.5	-0.2	-17.5	-13.8
3695	0.4	C_SL_FAT1_ENV	Combination	Min	-33.6	-37.8	-33.5	-0.2	-15.0	-14.1

3695	0.7	C_SL_FAT1_ENV	Combination	Min	-33.6	-37.8	-33.5	-0.2	-12.5	-14.3
3695	1.1	C_SL_FAT1_ENV	Combination	Min	-33.6	-37.8	-33.5	-0.2	-11.0	-14.5
3696	0.0	C_SL_FAT1_ENV	Combination	Max	27.7	155.1	13.5	0.1	6.9	596.0
3696	0.4	C_SL_FAT1_ENV	Combination	Max	27.7	155.1	13.5	0.1	8.0	551.8
3696	0.7	C_SL_FAT1_ENV	Combination	Max	27.7	155.1	13.5	0.1	10.0	507.6
3696	1.1	C_SL_FAT1_ENV	Combination	Max	27.7	155.1	13.5	0.1	11.9	463.4
3696	0.0	C_SL_FAT1_ENV	Combination	Min	-32.9	-27.1	-19.1	-0.2	-8.9	-14.6
3696	0.4	C_SL_FAT1_ENV	Combination	Min	-32.9	-27.1	-19.1	-0.2	-8.3	-14.8
3696	0.7	C_SL_FAT1_ENV	Combination	Min	-32.9	-27.1	-19.1	-0.2	-7.8	-15.0
3696	1.1	C_SL_FAT1_ENV	Combination	Min	-32.9	-27.1	-19.1	-0.2	-7.8	-15.2
3697	0.0	C_SL_FAT1_ENV	Combination	Max	23.7	170.0	10.2	0.1	5.6	461.1
3697	0.4	C_SL_FAT1_ENV	Combination	Max	23.7	170.0	10.2	0.1	6.5	408.3
3697	0.7	C_SL_FAT1_ENV	Combination	Max	23.7	170.0	10.2	0.1	7.4	355.6
3697	1.1	C_SL_FAT1_ENV	Combination	Max	23.7	170.0	10.2	0.1	8.4	302.8
3697	0.0	C_SL_FAT1_ENV	Combination	Min	-30.4	-13.1	-13.5	-0.2	-7.5	-15.2
3697	0.4	C_SL_FAT1_ENV	Combination	Min	-30.4	-13.1	-13.5	-0.2	-6.9	-15.4
3697	0.7	C_SL_FAT1_ENV	Combination	Min	-30.4	-13.1	-13.5	-0.2	-6.3	-15.6
3697	1.1	C_SL_FAT1_ENV	Combination	Min	-30.4	-13.1	-13.5	-0.2	-5.8	-15.8
3698	0.0	C_SL_FAT1_ENV	Combination	Max	19.9	187.5	7.3	0.1	4.1	298.5
3698	0.4	C_SL_FAT1_ENV	Combination	Max	19.9	187.5	7.3	0.1	5.6	236.6
3698	0.7	C_SL_FAT1_ENV	Combination	Max	19.9	187.5	7.3	0.1	7.2	174.8
3698	1.1	C_SL_FAT1_ENV	Combination	Max	19.9	187.5	7.3	0.1	9.2	112.9
3698	0.0	C_SL_FAT1_ENV	Combination	Min	-25.9	-3.0	-17.4	-0.2	-9.7	-15.7
3698	0.4	C_SL_FAT1_ENV	Combination	Min	-25.9	-3.0	-17.4	-0.2	-7.6	-15.9
3698	0.7	C_SL_FAT1_ENV	Combination	Min	-25.9	-3.0	-17.4	-0.2	-5.6	-16.2
3698	1.1	C_SL_FAT1_ENV	Combination	Min	-25.9	-3.0	-17.4	-0.2	-3.9	-16.4
3699	0.0	C_SL_FAT1_ENV	Combination	Max	17.2	208.4	7.7	0.1	1.9	104.1
3699	0.5	C_SL_FAT1_ENV	Combination	Max	17.2	208.4	7.7	0.1	6.5	15.5
3699	0.0	C_SL_FAT1_ENV	Combination	Min	-16.1	-1.5	-31.1	-0.2	-12.5	-12.9
3699	0.5	C_SL_FAT1_ENV	Combination	Min	-16.1	-1.5	-31.1	-0.2	-7.8	-24.8
3700	0.0	C_SL_FAT1_ENV	Combination	Max	10.1	31.4	8.9	0.2	2.5	17.1
3700	0.5	C_SL_FAT1_ENV	Combination	Max	10.1	31.4	8.9	0.2	4.5	56.8
3700	0.0	C_SL_FAT1_ENV	Combination	Min	-3.5	-106.7	-19.2	0.0	-7.9	-3.8
3700	0.5	C_SL_FAT1_ENV	Combination	Min	-3.5	-106.7	-19.2	0.0	-3.9	-7.9
3701	0.0	C_SL_FAT1_ENV	Combination	Max	7.0	29.5	5.7	0.2	3.1	66.4
3701	0.4	C_SL_FAT1_ENV	Combination	Max	7.0	29.5	5.7	0.2	4.5	102.2

3701	0.7	C_SL_FAT1_ENV	Combination	Max	7.0	29.5	5.7	0.2	6.0	138.0
3701	1.1	C_SL_FAT1_ENV	Combination	Max	7.0	29.5	5.7	0.2	7.7	173.9
3701	0.0	C_SL_FAT1_ENV	Combination	Min	-7.2	-105.4	-12.4	-0.1	-5.9	-3.7
3701	0.4	C_SL_FAT1_ENV	Combination	Min	-7.2	-105.4	-12.4	-0.1	-4.8	-13.0
3701	0.7	C_SL_FAT1_ENV	Combination	Min	-7.2	-105.4	-12.4	-0.1	-3.8	-22.2
3701	1.1	C_SL_FAT1_ENV	Combination	Min	-7.2	-105.4	-12.4	-0.1	-3.0	-31.5
3702	0.0	C_SL_FAT1_ENV	Combination	Max	8.4	28.2	7.1	0.1	5.5	179.0
3702	0.4	C_SL_FAT1_ENV	Combination	Max	8.4	28.2	7.1	0.1	5.4	215.7
3702	0.7	C_SL_FAT1_ENV	Combination	Max	8.4	28.2	7.1	0.1	5.3	252.5
3702	1.1	C_SL_FAT1_ENV	Combination	Max	8.4	28.2	7.1	0.1	5.5	289.3
3702	0.0	C_SL_FAT1_ENV	Combination	Min	-12.6	-102.8	-7.2	-0.1	-2.6	-25.6
3702	0.4	C_SL_FAT1_ENV	Combination	Min	-12.6	-102.8	-7.2	-0.1	-2.5	-35.4
3702	0.7	C_SL_FAT1_ENV	Combination	Min	-12.6	-102.8	-7.2	-0.1	-2.6	-45.1
3702	1.1	C_SL_FAT1_ENV	Combination	Min	-12.6	-102.8	-7.2	-0.1	-2.6	-54.9
3703	0.0	C_SL_FAT1_ENV	Combination	Max	10.0	26.4	13.9	0.1	10.2	296.5
3703	0.4	C_SL_FAT1_ENV	Combination	Max	10.0	26.4	13.9	0.1	7.7	331.7
3703	0.7	C_SL_FAT1_ENV	Combination	Max	10.0	26.4	13.9	0.1	5.3	366.9
3703	1.1	C_SL_FAT1_ENV	Combination	Max	10.0	26.4	13.9	0.1	3.4	402.1
3703	0.0	C_SL_FAT1_ENV	Combination	Min	-22.8	-98.7	-3.6	-0.1	-1.7	-49.3
3703	0.4	C_SL_FAT1_ENV	Combination	Min	-22.8	-98.7	-3.6	-0.1	-2.7	-58.5
3703	0.7	C_SL_FAT1_ENV	Combination	Min	-22.8	-98.7	-3.6	-0.1	-4.1	-67.7
3703	1.1	C_SL_FAT1_ENV	Combination	Min	-22.8	-98.7	-3.6	-0.1	-5.4	-76.9
3704	0.0	C_SL_FAT1_ENV	Combination	Max	11.4	24.1	27.8	0.1	16.2	412.6
3704	0.4	C_SL_FAT1_ENV	Combination	Max	11.4	24.1	27.8	0.1	11.7	445.2
3704	0.7	C_SL_FAT1_ENV	Combination	Max	11.4	24.1	27.8	0.1	7.3	477.8
3704	1.1	C_SL_FAT1_ENV	Combination	Max	11.4	24.1	27.8	0.1	3.9	510.5
3704	0.0	C_SL_FAT1_ENV	Combination	Min	-39.8	-92.2	-5.9	-0.1	-2.5	-72.0
3704	0.4	C_SL_FAT1_ENV	Combination	Min	-39.8	-92.2	-5.9	-0.1	-6.2	-80.2
3704	0.7	C_SL_FAT1_ENV	Combination	Min	-39.8	-92.2	-5.9	-0.1	-10.3	-88.5
3704	1.1	C_SL_FAT1_ENV	Combination	Min	-39.8	-92.2	-5.9	-0.1	-14.5	-96.8
3705	0.0	C_SL_FAT1_ENV	Combination	Max	13.4	21.5	49.9	0.4	7.0	516.5
3705	0.2	C_SL_FAT1_ENV	Combination	Max	13.4	21.5	49.9	0.4	7.0	529.2
3705	0.0	C_SL_FAT1_ENV	Combination	Min	-54.6	-83.0	-11.8	-0.3	-7.8	-89.6
3705	0.2	C_SL_FAT1_ENV	Combination	Min	-54.6	-83.0	-11.8	-0.3	-13.1	-92.4
3706	0.0	C_SL_FAT1_ENV	Combination	Max	9.5	20.1	7.5	0.1	3.9	529.2
3706	0.5	C_SL_FAT1_ENV	Combination	Max	9.5	20.1	7.5	0.1	8.3	560.5

3706	0.9	C_SL_FAT1_ENV	Combination	Max	9.5	20.1	7.5	0.1	13.9	591.8
3706	0.0	C_SL_FAT1_ENV	Combination	Min	-25.4	-75.4	-30.9	-0.1	-14.5	-91.8
3706	0.5	C_SL_FAT1_ENV	Combination	Min	-25.4	-75.4	-30.9	-0.1	-8.4	-99.0
3706	0.9	C_SL_FAT1_ENV	Combination	Min	-25.4	-75.4	-30.9	-0.1	-3.0	-106.2
3707	0.0	C_SL_FAT1_ENV	Combination	Max	8.3	18.5	4.3	0.1	3.7	586.2
3707	0.4	C_SL_FAT1_ENV	Combination	Max	8.3	18.5	4.3	0.1	5.6	607.8
3707	0.7	C_SL_FAT1_ENV	Combination	Max	8.3	18.5	4.3	0.1	7.8	629.4
3707	1.1	C_SL_FAT1_ENV	Combination	Max	8.3	18.5	4.3	0.1	10.3	651.0
3707	0.0	C_SL_FAT1_ENV	Combination	Min	-23.0	-69.2	-13.8	-0.1	-5.0	-97.7
3707	0.4	C_SL_FAT1_ENV	Combination	Min	-23.0	-69.2	-13.8	-0.1	-3.8	-103.0
3707	0.7	C_SL_FAT1_ENV	Combination	Min	-23.0	-69.2	-13.8	-0.1	-2.7	-108.4
3707	1.1	C_SL_FAT1_ENV	Combination	Min	-23.0	-69.2	-13.8	-0.1	-1.7	-113.7
3708	0.0	C_SL_FAT1_ENV	Combination	Max	9.0	18.4	9.0	0.1	7.9	650.6
3708	0.5	C_SL_FAT1_ENV	Combination	Max	9.0	18.4	9.0	0.1	6.1	676.2
3708	1.0	C_SL_FAT1_ENV	Combination	Max	9.0	18.4	9.0	0.1	4.7	701.8
3708	0.0	C_SL_FAT1_ENV	Combination	Min	-27.2	-63.5	-3.7	-0.1	-0.6	-108.0
3708	0.5	C_SL_FAT1_ENV	Combination	Min	-27.2	-63.5	-3.7	-0.1	-1.3	-115.1
3708	1.0	C_SL_FAT1_ENV	Combination	Min	-27.2	-63.5	-3.7	-0.1	-2.0	-122.2
3709	0.0	C_SL_FAT1_ENV	Combination	Max	9.0	18.4	9.0	0.8	4.7	703.9
3709	0.1	C_SL_FAT1_ENV	Combination	Max	9.0	18.4	9.0	0.8	5.1	710.8
3709	0.0	C_SL_FAT1_ENV	Combination	Min	-27.2	-63.5	-3.7	-0.3	-2.0	-122.8
3709	0.1	C_SL_FAT1_ENV	Combination	Min	-27.2	-63.5	-3.7	-0.3	-2.7	-124.7
3710	0.0	C_SL_FAT1_ENV	Combination	Max	10.5	18.3	21.4	0.2	15.1	717.9
3710	0.4	C_SL_FAT1_ENV	Combination	Max	10.5	18.3	21.4	0.2	11.0	734.4
3710	0.7	C_SL_FAT1_ENV	Combination	Max	10.5	18.3	21.4	0.2	7.3	750.8
3710	1.1	C_SL_FAT1_ENV	Combination	Max	10.5	18.3	21.4	0.2	4.5	767.3
3710	0.0	C_SL_FAT1_ENV	Combination	Min	-39.3	-56.7	-4.6	-0.2	-1.1	-121.3
3710	0.4	C_SL_FAT1_ENV	Combination	Min	-39.3	-56.7	-4.6	-0.2	-3.6	-125.8
3710	0.7	C_SL_FAT1_ENV	Combination	Min	-39.3	-56.7	-4.6	-0.2	-6.3	-130.3
3710	1.1	C_SL_FAT1_ENV	Combination	Min	-39.3	-56.7	-4.6	-0.2	-9.0	-134.8
3711	0.0	C_SL_FAT1_ENV	Combination	Max	15.3	18.3	39.0	0.2	16.3	779.0
3711	0.4	C_SL_FAT1_ENV	Combination	Max	15.3	18.3	39.0	0.2	10.5	792.7
3711	0.8	C_SL_FAT1_ENV	Combination	Max	15.3	18.3	39.0	0.2	7.0	806.3
3711	0.0	C_SL_FAT1_ENV	Combination	Min	-58.3	-48.8	-8.9	-0.1	-1.0	-133.8
3711	0.4	C_SL_FAT1_ENV	Combination	Min	-58.3	-48.8	-8.9	-0.1	-8.9	-137.0
3711	0.8	C_SL_FAT1_ENV	Combination	Min	-58.3	-48.8	-8.9	-0.1	-16.9	-140.1

3712	0.0	C_SL_FAT1_ENV	Combination	Max	9.3	19.5	13.5	0.4	5.7	805.9
3712	0.3	C_SL_FAT1_ENV	Combination	Max	9.3	19.5	13.5	0.4	4.6	813.4
3712	0.0	C_SL_FAT1_ENV	Combination	Min	-30.4	-43.2	-47.8	-0.8	-16.7	-139.8
3712	0.3	C_SL_FAT1_ENV	Combination	Min	-30.4	-43.2	-47.8	-0.8	-8.0	-141.3
3713	0.0	C_SL_FAT1_ENV	Combination	Max	9.2	22.0	7.7	0.1	6.7	807.4
3713	0.4	C_SL_FAT1_ENV	Combination	Max	9.2	22.0	7.7	0.1	9.0	811.8
3713	0.7	C_SL_FAT1_ENV	Combination	Max	9.2	22.0	7.7	0.1	12.1	816.2
3713	1.1	C_SL_FAT1_ENV	Combination	Max	9.2	22.0	7.7	0.1	16.1	820.7
3713	0.0	C_SL_FAT1_ENV	Combination	Min	-30.1	-36.6	-27.5	-0.1	-14.3	-136.7
3713	0.4	C_SL_FAT1_ENV	Combination	Min	-30.1	-36.6	-27.5	-0.1	-10.0	-136.7
3713	0.7	C_SL_FAT1_ENV	Combination	Min	-30.1	-36.6	-27.5	-0.1	-5.8	-136.8
3713	1.1	C_SL_FAT1_ENV	Combination	Min	-30.1	-36.6	-27.5	-0.1	-2.0	-136.9
3714	0.0	C_SL_FAT1_ENV	Combination	Max	7.9	25.6	4.4	0.1	6.0	811.8
3714	0.4	C_SL_FAT1_ENV	Combination	Max	7.9	25.6	4.4	0.1	7.3	813.1
3714	0.8	C_SL_FAT1_ENV	Combination	Max	7.9	25.6	4.4	0.1	8.9	814.4
3714	1.1	C_SL_FAT1_ENV	Combination	Max	7.9	25.6	4.4	0.1	11.0	815.7
3714	0.0	C_SL_FAT1_ENV	Combination	Min	-25.8	-31.5	-11.6	-0.1	-3.7	-133.6
3714	0.4	C_SL_FAT1_ENV	Combination	Min	-25.8	-31.5	-11.6	-0.1	-2.9	-132.9
3714	0.8	C_SL_FAT1_ENV	Combination	Min	-25.8	-31.5	-11.6	-0.1	-2.1	-132.2
3714	1.1	C_SL_FAT1_ENV	Combination	Min	-25.8	-31.5	-11.6	-0.1	-1.3	-131.6
3715	0.0	C_SL_FAT1_ENV	Combination	Max	10.0	30.7	12.0	0.1	11.3	814.9
3715	0.4	C_SL_FAT1_ENV	Combination	Max	10.0	30.7	12.0	0.1	9.1	813.9
3715	0.8	C_SL_FAT1_ENV	Combination	Max	10.0	30.7	12.0	0.1	7.3	813.0
3715	1.1	C_SL_FAT1_ENV	Combination	Max	10.0	30.7	12.0	0.1	5.8	812.1
3715	0.0	C_SL_FAT1_ENV	Combination	Min	-31.3	-26.9	-4.4	-0.2	-1.4	-131.9
3715	0.4	C_SL_FAT1_ENV	Combination	Min	-31.3	-26.9	-4.4	-0.2	-2.1	-132.0
3715	0.8	C_SL_FAT1_ENV	Combination	Min	-31.3	-26.9	-4.4	-0.2	-2.9	-132.1
3715	1.1	C_SL_FAT1_ENV	Combination	Min	-31.3	-26.9	-4.4	-0.2	-3.6	-132.2
3716	0.0	C_SL_FAT1_ENV	Combination	Max	14.0	35.9	27.8	0.1	16.2	819.4
3716	0.4	C_SL_FAT1_ENV	Combination	Max	14.0	35.9	27.8	0.1	12.3	815.5
3716	0.7	C_SL_FAT1_ENV	Combination	Max	14.0	35.9	27.8	0.1	9.3	811.5
3716	1.1	C_SL_FAT1_ENV	Combination	Max	14.0	35.9	27.8	0.1	7.1	807.6
3716	0.0	C_SL_FAT1_ENV	Combination	Min	-47.4	-23.3	-8.1	-0.2	-2.0	-135.8
3716	0.4	C_SL_FAT1_ENV	Combination	Min	-47.4	-23.3	-8.1	-0.2	-5.9	-135.1
3716	0.7	C_SL_FAT1_ENV	Combination	Min	-47.4	-23.3	-8.1	-0.2	-10.1	-134.5
3716	1.1	C_SL_FAT1_ENV	Combination	Min	-47.4	-23.3	-8.1	-0.2	-14.4	-133.8

3717	0.0	C_SL_FAT1_ENV	Combination	Max	18.9	42.6	48.4	0.7	5.7	812.5
3717	0.3	C_SL_FAT1_ENV	Combination	Max	18.9	42.6	48.4	0.7	7.3	805.2
3717	0.0	C_SL_FAT1_ENV	Combination	Min	-61.4	-20.7	-15.0	-0.4	-8.5	-138.9
3717	0.3	C_SL_FAT1_ENV	Combination	Min	-61.4	-20.7	-15.0	-0.4	-16.7	-136.9
3718	0.0	C_SL_FAT1_ENV	Combination	Max	8.4	47.9	12.7	0.1	8.5	804.8
3718	0.4	C_SL_FAT1_ENV	Combination	Max	8.4	47.9	12.7	0.1	10.5	791.7
3718	0.8	C_SL_FAT1_ENV	Combination	Max	8.4	47.9	12.7	0.1	15.3	778.7
3718	0.0	C_SL_FAT1_ENV	Combination	Min	-32.3	-20.0	-38.3	-0.3	-16.9	-136.8
3718	0.4	C_SL_FAT1_ENV	Combination	Min	-32.3	-20.0	-38.3	-0.3	-9.2	-132.9
3718	0.8	C_SL_FAT1_ENV	Combination	Min	-32.3	-20.0	-38.3	-0.3	-2.0	-128.9
3719	0.0	C_SL_FAT1_ENV	Combination	Max	7.5	55.9	7.0	0.1	5.4	765.9
3719	0.4	C_SL_FAT1_ENV	Combination	Max	7.5	55.9	7.0	0.1	7.4	749.9
3719	0.7	C_SL_FAT1_ENV	Combination	Max	7.5	55.9	7.0	0.1	10.4	733.9
3719	1.1	C_SL_FAT1_ENV	Combination	Max	7.5	55.9	7.0	0.1	13.9	717.9
3719	0.0	C_SL_FAT1_ENV	Combination	Min	-26.8	-19.9	-20.8	-0.2	-8.8	-128.8
3719	0.4	C_SL_FAT1_ENV	Combination	Min	-26.8	-19.9	-20.8	-0.2	-6.4	-123.8
3719	0.7	C_SL_FAT1_ENV	Combination	Min	-26.8	-19.9	-20.8	-0.2	-3.9	-118.8
3719	1.1	C_SL_FAT1_ENV	Combination	Min	-26.8	-19.9	-20.8	-0.2	-2.1	-113.8
3720	0.0	C_SL_FAT1_ENV	Combination	Max	7.2	63.0	4.7	0.4	5.5	708.7
3720	0.1	C_SL_FAT1_ENV	Combination	Max	7.2	63.0	4.7	0.4	4.9	702.0
3720	0.0	C_SL_FAT1_ENV	Combination	Min	-24.2	-19.7	-8.0	-0.8	-2.8	-116.4
3720	0.1	C_SL_FAT1_ENV	Combination	Min	-24.2	-19.7	-8.0	-0.8	-2.1	-114.5
3721	0.0	C_SL_FAT1_ENV	Combination	Max	7.2	63.0	4.7	0.0	4.9	700.0
3721	0.5	C_SL_FAT1_ENV	Combination	Max	7.2	63.0	4.7	0.0	5.8	674.9
3721	1.0	C_SL_FAT1_ENV	Combination	Max	7.2	63.0	4.7	0.0	7.1	649.9
3721	0.0	C_SL_FAT1_ENV	Combination	Min	-24.2	-19.7	-8.0	-0.1	-2.1	-113.9
3721	0.5	C_SL_FAT1_ENV	Combination	Min	-24.2	-19.7	-8.0	-0.1	-1.5	-106.6
3721	1.0	C_SL_FAT1_ENV	Combination	Min	-24.2	-19.7	-8.0	-0.1	-0.9	-99.3
3722	0.0	C_SL_FAT1_ENV	Combination	Max	9.3	68.7	13.8	0.0	10.0	647.8
3722	0.4	C_SL_FAT1_ENV	Combination	Max	9.3	68.7	13.8	0.0	7.6	626.5
3722	0.7	C_SL_FAT1_ENV	Combination	Max	9.3	68.7	13.8	0.0	5.5	605.3
3722	1.1	C_SL_FAT1_ENV	Combination	Max	9.3	68.7	13.8	0.0	3.9	584.0
3722	0.0	C_SL_FAT1_ENV	Combination	Min	-29.8	-19.1	-5.3	-0.1	-2.3	-104.7
3722	0.4	C_SL_FAT1_ENV	Combination	Min	-29.8	-19.1	-5.3	-0.1	-3.1	-99.4
3722	0.7	C_SL_FAT1_ENV	Combination	Min	-29.8	-19.1	-5.3	-0.1	-4.2	-94.2
3722	1.1	C_SL_FAT1_ENV	Combination	Min	-29.8	-19.1	-5.3	-0.1	-5.3	-88.9

3723	0.0	C_SL_FAT1_ENV	Combination	Max	16.0	74.8	28.8	0.0	13.6	587.5
3723	0.5	C_SL_FAT1_ENV	Combination	Max	16.0	74.8	28.8	0.0	8.7	556.8
3723	0.9	C_SL_FAT1_ENV	Combination	Max	16.0	74.8	28.8	0.0	5.8	526.2
3723	0.0	C_SL_FAT1_ENV	Combination	Min	-44.8	-19.5	-11.0	-0.1	-4.3	-97.8
3723	0.5	C_SL_FAT1_ENV	Combination	Min	-44.8	-19.5	-11.0	-0.1	-8.3	-91.0
3723	0.9	C_SL_FAT1_ENV	Combination	Min	-44.8	-19.5	-11.0	-0.1	-13.5	-84.2
3724	0.0	C_SL_FAT1_ENV	Combination	Max	4.0	82.0	17.1	0.2	9.0	525.9
3724	0.2	C_SL_FAT1_ENV	Combination	Max	4.0	82.0	17.1	0.2	7.5	513.3
3724	0.0	C_SL_FAT1_ENV	Combination	Min	-23.4	-22.4	-45.4	-0.5	-12.1	-84.6
3724	0.2	C_SL_FAT1_ENV	Combination	Min	-23.4	-22.4	-45.4	-0.5	-7.4	-81.7
3725	0.0	C_SL_FAT1_ENV	Combination	Max	7.1	91.0	8.4	0.0	5.7	506.2
3725	0.4	C_SL_FAT1_ENV	Combination	Max	7.1	91.0	8.4	0.0	7.7	474.1
3725	0.7	C_SL_FAT1_ENV	Combination	Max	7.1	91.0	8.4	0.0	10.4	442.0
3725	1.1	C_SL_FAT1_ENV	Combination	Max	7.1	91.0	8.4	0.0	13.9	410.0
3725	0.0	C_SL_FAT1_ENV	Combination	Min	-23.0	-24.2	-24.7	-0.1	-13.2	-87.8
3725	0.4	C_SL_FAT1_ENV	Combination	Min	-23.0	-24.2	-24.7	-0.1	-9.6	-79.6
3725	0.7	C_SL_FAT1_ENV	Combination	Min	-23.0	-24.2	-24.7	-0.1	-6.1	-71.5
3725	1.1	C_SL_FAT1_ENV	Combination	Min	-23.0	-24.2	-24.7	-0.1	-3.5	-63.3
3726	0.0	C_SL_FAT1_ENV	Combination	Max	6.4	97.4	4.8	0.0	3.6	398.8
3726	0.4	C_SL_FAT1_ENV	Combination	Max	6.4	97.4	4.8	0.0	4.9	364.1
3726	0.7	C_SL_FAT1_ENV	Combination	Max	6.4	97.4	4.8	0.0	6.8	329.4
3726	1.1	C_SL_FAT1_ENV	Combination	Max	6.4	97.4	4.8	0.0	8.6	294.7
3726	0.0	C_SL_FAT1_ENV	Combination	Min	-17.1	-25.3	-12.4	-0.1	-5.1	-66.4
3726	0.4	C_SL_FAT1_ENV	Combination	Min	-17.1	-25.3	-12.4	-0.1	-4.0	-57.7
3726	0.7	C_SL_FAT1_ENV	Combination	Min	-17.1	-25.3	-12.4	-0.1	-3.0	-49.0
3726	1.1	C_SL_FAT1_ENV	Combination	Min	-17.1	-25.3	-12.4	-0.1	-2.4	-40.3
3727	0.0	C_SL_FAT1_ENV	Combination	Max	7.9	101.7	7.1	0.1	5.0	286.8
3727	0.4	C_SL_FAT1_ENV	Combination	Max	7.9	101.7	7.1	0.1	5.0	251.0
3727	0.7	C_SL_FAT1_ENV	Combination	Max	7.9	101.7	7.1	0.1	5.1	215.2
3727	1.1	C_SL_FAT1_ENV	Combination	Max	7.9	101.7	7.1	0.1	5.1	179.4
3727	0.0	C_SL_FAT1_ENV	Combination	Min	-13.8	-25.6	-7.3	-0.1	-2.9	-45.1
3727	0.4	C_SL_FAT1_ENV	Combination	Min	-13.8	-25.6	-7.3	-0.1	-2.9	-36.4
3727	0.7	C_SL_FAT1_ENV	Combination	Min	-13.8	-25.6	-7.3	-0.1	-2.8	-27.6
3727	1.1	C_SL_FAT1_ENV	Combination	Min	-13.8	-25.6	-7.3	-0.1	-2.8	-18.9
3728	0.0	C_SL_FAT1_ENV	Combination	Max	7.8	104.3	10.2	0.1	6.1	172.1
3728	0.4	C_SL_FAT1_ENV	Combination	Max	7.8	104.3	10.2	0.1	5.4	137.1

3728	0.7	C_SL_FAT1_ENV	Combination	Max	7.8	104.3	10.2	0.1	4.8	102.1
3728	1.1	C_SL_FAT1_ENV	Combination	Max	7.8	104.3	10.2	0.1	4.1	67.1
3728	0.0	C_SL_FAT1_ENV	Combination	Min	-10.5	-25.4	-7.0	-0.1	-3.8	-24.6
3728	0.4	C_SL_FAT1_ENV	Combination	Min	-10.5	-25.4	-7.0	-0.1	-4.2	-17.4
3728	0.7	C_SL_FAT1_ENV	Combination	Min	-10.5	-25.4	-7.0	-0.1	-4.6	-10.2
3728	1.1	C_SL_FAT1_ENV	Combination	Min	-10.5	-25.4	-7.0	-0.1	-5.0	-3.0
3729	0.0	C_SL_FAT1_ENV	Combination	Max	8.7	105.2	12.9	0.0	4.1	56.2
3729	0.5	C_SL_FAT1_ENV	Combination	Max	8.7	105.2	12.9	0.0	2.0	14.7
3729	0.0	C_SL_FAT1_ENV	Combination	Min	-6.9	-25.8	-10.3	-0.2	-5.7	-6.4
3729	0.5	C_SL_FAT1_ENV	Combination	Min	-6.9	-25.8	-10.3	-0.2	-4.5	-3.0
3730	0.0	C_SL_FAT1_ENV	Combination	Max	31.2	2.3	10.5	0.2	3.7	16.8
3730	0.5	C_SL_FAT1_ENV	Combination	Max	31.2	2.3	10.5	0.2	15.4	184.7
3730	0.0	C_SL_FAT1_ENV	Combination	Min	-14.2	-416.7	-46.5	0.0	-12.7	-70.1
3730	0.5	C_SL_FAT1_ENV	Combination	Min	-14.2	-416.7	-46.5	0.0	-6.7	-32.0
3731	0.0	C_SL_FAT1_ENV	Combination	Max	49.5	8.4	6.4	0.2	4.1	182.6
3731	0.4	C_SL_FAT1_ENV	Combination	Max	49.5	8.4	6.4	0.2	8.0	292.9
3731	0.7	C_SL_FAT1_ENV	Combination	Max	49.5	8.4	6.4	0.2	11.8	403.3
3731	1.1	C_SL_FAT1_ENV	Combination	Max	49.5	8.4	6.4	0.2	15.7	513.6
3731	0.0	C_SL_FAT1_ENV	Combination	Min	-21.7	-346.6	-27.6	-0.1	-14.2	-38.2
3731	0.4	C_SL_FAT1_ENV	Combination	Min	-21.7	-346.6	-27.6	-0.1	-10.5	-37.0
3731	0.7	C_SL_FAT1_ENV	Combination	Min	-21.7	-346.6	-27.6	-0.1	-6.8	-35.8
3731	1.1	C_SL_FAT1_ENV	Combination	Min	-21.7	-346.6	-27.6	-0.1	-3.1	-34.6
3732	0.0	C_SL_FAT1_ENV	Combination	Max	62.3	43.3	15.7	0.1	10.0	500.7
3732	0.4	C_SL_FAT1_ENV	Combination	Max	62.3	43.3	15.7	0.1	10.7	581.5
3732	0.7	C_SL_FAT1_ENV	Combination	Max	62.3	43.3	15.7	0.1	11.4	662.3
3732	1.1	C_SL_FAT1_ENV	Combination	Max	62.3	43.3	15.7	0.1	12.1	743.1
3732	0.0	C_SL_FAT1_ENV	Combination	Min	-26.4	-295.6	-20.9	-0.1	-10.6	-33.9
3732	0.4	C_SL_FAT1_ENV	Combination	Min	-26.4	-295.6	-20.9	-0.1	-9.5	-32.6
3732	0.7	C_SL_FAT1_ENV	Combination	Min	-26.4	-295.6	-20.9	-0.1	-8.3	-31.4
3732	1.1	C_SL_FAT1_ENV	Combination	Min	-26.4	-295.6	-20.9	-0.1	-7.1	-30.2
3733	0.0	C_SL_FAT1_ENV	Combination	Max	72.9	90.1	24.8	0.1	15.2	728.4
3733	0.4	C_SL_FAT1_ENV	Combination	Max	72.9	90.1	24.8	0.1	13.1	784.9
3733	0.7	C_SL_FAT1_ENV	Combination	Max	72.9	90.1	24.8	0.1	11.0	841.4
3733	1.1	C_SL_FAT1_ENV	Combination	Max	72.9	90.1	24.8	0.1	8.8	897.9
3733	0.0	C_SL_FAT1_ENV	Combination	Min	-34.2	-257.6	-14.9	-0.1	-7.8	-29.8
3733	0.4	C_SL_FAT1_ENV	Combination	Min	-34.2	-257.6	-14.9	-0.1	-9.1	-28.6

3733	0.7	C_SL_FAT1_ENV	Combination	Min	-34.2	-257.6	-14.9	-0.1	-10.5	-27.4
3733	1.1	C_SL_FAT1_ENV	Combination	Min	-34.2	-257.6	-14.9	-0.1	-11.8	-26.1
3734	0.0	C_SL_FAT1_ENV	Combination	Max	86.5	125.9	39.1	0.1	22.2	882.7
3734	0.4	C_SL_FAT1_ENV	Combination	Max	86.5	125.9	39.1	0.1	16.9	922.5
3734	0.7	C_SL_FAT1_ENV	Combination	Max	86.5	125.9	39.1	0.1	11.5	962.2
3734	1.1	C_SL_FAT1_ENV	Combination	Max	86.5	125.9	39.1	0.1	6.2	1002.0
3734	0.0	C_SL_FAT1_ENV	Combination	Min	-46.1	-232.5	-12.0	-0.1	-7.2	-26.0
3734	0.4	C_SL_FAT1_ENV	Combination	Min	-46.1	-232.5	-12.0	-0.1	-11.5	-24.9
3734	0.7	C_SL_FAT1_ENV	Combination	Min	-46.1	-232.5	-12.0	-0.1	-15.8	-23.7
3734	1.1	C_SL_FAT1_ENV	Combination	Min	-46.1	-232.5	-12.0	-0.1	-20.1	-22.5
3735	0.0	C_SL_FAT1_ENV	Combination	Max	93.2	151.5	65.5	0.4	11.1	988.7
3735	0.2	C_SL_FAT1_ENV	Combination	Max	93.2	151.5	65.5	0.4	9.3	992.7
3735	0.0	C_SL_FAT1_ENV	Combination	Min	-49.0	-220.7	-16.6	-0.7	-15.0	-22.6
3735	0.2	C_SL_FAT1_ENV	Combination	Min	-49.0	-220.7	-16.6	-0.7	-16.1	-22.1
3736	0.0	C_SL_FAT1_ENV	Combination	Max	106.8	104.2	11.1	0.2	4.8	992.8
3736	0.5	C_SL_FAT1_ENV	Combination	Max	106.8	104.2	11.1	0.2	13.7	1055.6
3736	0.9	C_SL_FAT1_ENV	Combination	Max	106.8	104.2	11.1	0.2	22.6	1118.3
3736	0.0	C_SL_FAT1_ENV	Combination	Min	-43.8	-259.3	-43.9	-0.1	-17.7	-22.1
3736	0.5	C_SL_FAT1_ENV	Combination	Min	-43.8	-259.3	-43.9	-0.1	-12.1	-20.9
3736	0.9	C_SL_FAT1_ENV	Combination	Min	-43.8	-259.3	-43.9	-0.1	-6.5	-19.7
3737	0.0	C_SL_FAT1_ENV	Combination	Max	88.5	119.4	12.8	0.1	7.6	1116.5
3737	0.4	C_SL_FAT1_ENV	Combination	Max	88.5	119.4	12.8	0.1	10.6	1155.0
3737	0.7	C_SL_FAT1_ENV	Combination	Max	88.5	119.4	12.8	0.1	13.6	1193.4
3737	1.1	C_SL_FAT1_ENV	Combination	Max	88.5	119.4	12.8	0.1	16.6	1231.8
3737	0.0	C_SL_FAT1_ENV	Combination	Min	-33.8	-238.5	-26.8	-0.1	-12.5	-20.2
3737	0.4	C_SL_FAT1_ENV	Combination	Min	-33.8	-238.5	-26.8	-0.1	-10.5	-19.3
3737	0.7	C_SL_FAT1_ENV	Combination	Min	-33.8	-238.5	-26.8	-0.1	-8.6	-18.4
3737	1.1	C_SL_FAT1_ENV	Combination	Min	-33.8	-238.5	-26.8	-0.1	-6.7	-17.5
3738	0.0	C_SL_FAT1_ENV	Combination	Max	81.6	141.0	20.3	0.1	12.6	1226.6
3738	0.5	C_SL_FAT1_ENV	Combination	Max	81.6	141.0	20.3	0.1	10.7	1260.6
3738	1.0	C_SL_FAT1_ENV	Combination	Max	81.6	141.0	20.3	0.1	8.9	1294.7
3738	0.0	C_SL_FAT1_ENV	Combination	Min	-27.2	-216.6	-15.8	-0.2	-7.2	-18.0
3738	0.5	C_SL_FAT1_ENV	Combination	Min	-27.2	-216.6	-15.8	-0.2	-7.4	-16.9
3738	1.0	C_SL_FAT1_ENV	Combination	Min	-27.2	-216.6	-15.8	-0.2	-7.6	-15.8
3739	0.0	C_SL_FAT1_ENV	Combination	Max	81.6	141.0	20.3	1.6	8.9	1289.1
3739	0.1	C_SL_FAT1_ENV	Combination	Max	81.6	141.0	20.3	1.6	10.7	1307.6

3739	0.0	C_SL_FAT1_ENV	Combination	Min	-27.2	-216.6	-15.8	-1.3	-7.6	-15.4
3739	0.1	C_SL_FAT1_ENV	Combination	Min	-27.2	-216.6	-15.8	-1.3	-9.9	-15.1
3740	0.0	C_SL_FAT1_ENV	Combination	Max	85.6	161.7	33.6	0.1	21.6	1297.6
3740	0.4	C_SL_FAT1_ENV	Combination	Max	85.6	161.7	33.6	0.1	16.7	1315.7
3740	0.7	C_SL_FAT1_ENV	Combination	Max	85.6	161.7	33.6	0.1	11.8	1333.8
3740	1.1	C_SL_FAT1_ENV	Combination	Max	85.6	161.7	33.6	0.1	6.9	1351.9
3740	0.0	C_SL_FAT1_ENV	Combination	Min	-33.9	-197.2	-11.6	-0.2	-6.3	-15.6
3740	0.4	C_SL_FAT1_ENV	Combination	Min	-33.9	-197.2	-11.6	-0.2	-9.2	-14.8
3740	0.7	C_SL_FAT1_ENV	Combination	Min	-33.9	-197.2	-11.6	-0.2	-12.0	-14.1
3740	1.1	C_SL_FAT1_ENV	Combination	Min	-33.9	-197.2	-11.6	-0.2	-14.9	-13.3
3741	0.0	C_SL_FAT1_ENV	Combination	Max	98.7	179.8	52.6	0.2	25.4	1338.7
3741	0.4	C_SL_FAT1_ENV	Combination	Max	98.7	179.8	52.6	0.2	14.9	1341.7
3741	0.8	C_SL_FAT1_ENV	Combination	Max	98.7	179.8	52.6	0.2	4.5	1344.7
3741	0.0	C_SL_FAT1_ENV	Combination	Min	-43.4	-184.8	-11.9	-0.4	-9.3	-13.7
3741	0.4	C_SL_FAT1_ENV	Combination	Min	-43.4	-184.8	-11.9	-0.4	-13.7	-12.9
3741	0.8	C_SL_FAT1_ENV	Combination	Min	-43.4	-184.8	-11.9	-0.4	-18.0	-12.1
3742	0.0	C_SL_FAT1_ENV	Combination	Max	119.7	143.1	16.2	0.6	4.9	1345.0
3742	0.3	C_SL_FAT1_ENV	Combination	Max	119.7	143.1	16.2	0.6	12.4	1376.7
3742	0.0	C_SL_FAT1_ENV	Combination	Min	-36.4	-226.2	-63.3	-0.5	-16.9	-12.1
3742	0.3	C_SL_FAT1_ENV	Combination	Min	-36.4	-226.2	-63.3	-0.5	-12.8	-11.7
3743	0.0	C_SL_FAT1_ENV	Combination	Max	103.0	151.6	10.5	0.1	5.9	1375.1
3743	0.4	C_SL_FAT1_ENV	Combination	Max	103.0	151.6	10.5	0.1	12.0	1389.8
3743	0.7	C_SL_FAT1_ENV	Combination	Max	103.0	151.6	10.5	0.1	18.1	1404.6
3743	1.1	C_SL_FAT1_ENV	Combination	Max	103.0	151.6	10.5	0.1	24.3	1419.3
3743	0.0	C_SL_FAT1_ENV	Combination	Min	-34.8	-210.4	-40.3	-0.2	-19.4	-12.2
3743	0.4	C_SL_FAT1_ENV	Combination	Min	-34.8	-210.4	-40.3	-0.2	-15.0	-11.6
3743	0.7	C_SL_FAT1_ENV	Combination	Min	-34.8	-210.4	-40.3	-0.2	-10.5	-11.1
3743	1.1	C_SL_FAT1_ENV	Combination	Min	-34.8	-210.4	-40.3	-0.2	-6.1	-10.5
3744	0.0	C_SL_FAT1_ENV	Combination	Max	85.1	166.9	13.8	0.1	10.3	1422.6
3744	0.4	C_SL_FAT1_ENV	Combination	Max	85.1	166.9	13.8	0.1	12.8	1427.7
3744	0.8	C_SL_FAT1_ENV	Combination	Max	85.1	166.9	13.8	0.1	15.3	1432.8
3744	1.1	C_SL_FAT1_ENV	Combination	Max	85.1	166.9	13.8	0.1	17.8	1438.0
3744	0.0	C_SL_FAT1_ENV	Combination	Min	-25.0	-189.5	-24.4	-0.2	-10.9	-11.1
3744	0.4	C_SL_FAT1_ENV	Combination	Min	-25.0	-189.5	-24.4	-0.2	-9.7	-10.7
3744	0.8	C_SL_FAT1_ENV	Combination	Min	-25.0	-189.5	-24.4	-0.2	-8.4	-10.3
3744	1.1	C_SL_FAT1_ENV	Combination	Min	-25.0	-189.5	-24.4	-0.2	-7.1	-10.0

3745	0.0	C_SL_FAT1_ENV	Combination	Max	80.9	188.4	24.6	0.1	17.9	1435.8
3745	0.4	C_SL_FAT1_ENV	Combination	Max	80.9	188.4	24.6	0.1	15.4	1431.3
3745	0.8	C_SL_FAT1_ENV	Combination	Max	80.9	188.4	24.6	0.1	12.9	1426.8
3745	1.1	C_SL_FAT1_ENV	Combination	Max	80.9	188.4	24.6	0.1	10.4	1422.3
3745	0.0	C_SL_FAT1_ENV	Combination	Min	-27.7	-167.7	-14.4	-0.3	-7.4	-10.0
3745	0.4	C_SL_FAT1_ENV	Combination	Min	-27.7	-167.7	-14.4	-0.3	-8.7	-10.3
3745	0.8	C_SL_FAT1_ENV	Combination	Min	-27.7	-167.7	-14.4	-0.3	-9.9	-10.7
3745	1.1	C_SL_FAT1_ENV	Combination	Min	-27.7	-167.7	-14.4	-0.3	-11.1	-11.1
3746	0.0	C_SL_FAT1_ENV	Combination	Max	90.8	209.0	41.3	0.1	24.5	1415.0
3746	0.4	C_SL_FAT1_ENV	Combination	Max	90.8	209.0	41.3	0.1	18.4	1401.5
3746	0.7	C_SL_FAT1_ENV	Combination	Max	90.8	209.0	41.3	0.1	12.3	1387.9
3746	1.1	C_SL_FAT1_ENV	Combination	Max	90.8	209.0	41.3	0.1	6.2	1374.4
3746	0.0	C_SL_FAT1_ENV	Combination	Min	-40.1	-152.3	-11.1	-0.3	-6.9	-10.6
3746	0.4	C_SL_FAT1_ENV	Combination	Min	-40.1	-152.3	-11.1	-0.3	-11.3	-11.1
3746	0.7	C_SL_FAT1_ENV	Combination	Min	-40.1	-152.3	-11.1	-0.3	-15.8	-11.7
3746	1.1	C_SL_FAT1_ENV	Combination	Min	-40.1	-152.3	-11.1	-0.3	-20.2	-12.2
3747	0.0	C_SL_FAT1_ENV	Combination	Max	98.7	225.1	64.5	0.4	9.4	1373.5
3747	0.3	C_SL_FAT1_ENV	Combination	Max	98.7	225.1	64.5	0.4	4.2	1342.9
3747	0.0	C_SL_FAT1_ENV	Combination	Min	-45.1	-144.3	-14.6	-0.8	-15.2	-11.7
3747	0.3	C_SL_FAT1_ENV	Combination	Min	-45.1	-144.3	-14.6	-0.8	-18.3	-12.1
3748	0.0	C_SL_FAT1_ENV	Combination	Max	116.8	184.0	11.6	0.2	4.9	1343.0
3748	0.4	C_SL_FAT1_ENV	Combination	Max	116.8	184.0	11.6	0.2	15.4	1342.1
3748	0.8	C_SL_FAT1_ENV	Combination	Max	116.8	184.0	11.6	0.2	26.1	1341.1
3748	0.0	C_SL_FAT1_ENV	Combination	Min	-36.6	-181.5	-51.9	-0.3	-16.9	-12.1
3748	0.4	C_SL_FAT1_ENV	Combination	Min	-36.6	-181.5	-51.9	-0.3	-12.2	-12.9
3748	0.8	C_SL_FAT1_ENV	Combination	Min	-36.6	-181.5	-51.9	-0.3	-7.4	-13.6
3749	0.0	C_SL_FAT1_ENV	Combination	Max	95.2	196.3	10.5	0.1	6.2	1349.6
3749	0.4	C_SL_FAT1_ENV	Combination	Max	95.2	196.3	10.5	0.1	11.3	1333.1
3749	0.7	C_SL_FAT1_ENV	Combination	Max	95.2	196.3	10.5	0.1	16.4	1316.5
3749	1.1	C_SL_FAT1_ENV	Combination	Max	95.2	196.3	10.5	0.1	21.5	1300.0
3749	0.0	C_SL_FAT1_ENV	Combination	Min	-29.7	-163.6	-33.3	-0.3	-14.6	-13.3
3749	0.4	C_SL_FAT1_ENV	Combination	Min	-29.7	-163.6	-33.3	-0.3	-11.6	-14.0
3749	0.7	C_SL_FAT1_ENV	Combination	Min	-29.7	-163.6	-33.3	-0.3	-8.6	-14.7
3749	1.1	C_SL_FAT1_ENV	Combination	Min	-29.7	-163.6	-33.3	-0.3	-5.6	-15.4
3750	0.0	C_SL_FAT1_ENV	Combination	Max	83.6	215.2	15.4	1.2	10.3	1303.9
3750	0.1	C_SL_FAT1_ENV	Combination	Max	83.6	215.2	15.4	1.2	8.6	1285.7

3750	0.0	C_SL_FAT1_ENV	Combination	Min	-27.4	-142.7	-20.2	-1.7	-10.0	-15.0
3750	0.1	C_SL_FAT1_ENV	Combination	Min	-27.4	-142.7	-20.2	-1.7	-7.7	-15.2
3751	0.0	C_SL_FAT1_ENV	Combination	Max	83.6	215.2	15.4	0.1	8.6	1291.0
3751	0.5	C_SL_FAT1_ENV	Combination	Max	83.6	215.2	15.4	0.1	10.7	1259.0
3751	1.0	C_SL_FAT1_ENV	Combination	Max	83.6	215.2	15.4	0.1	12.7	1227.0
3751	0.0	C_SL_FAT1_ENV	Combination	Min	-27.4	-142.7	-20.2	-0.2	-7.7	-15.6
3751	0.5	C_SL_FAT1_ENV	Combination	Min	-27.4	-142.7	-20.2	-0.2	-7.3	-16.7
3751	1.0	C_SL_FAT1_ENV	Combination	Min	-27.4	-142.7	-20.2	-0.2	-7.0	-17.7
3752	0.0	C_SL_FAT1_ENV	Combination	Max	82.7	236.6	27.0	0.1	16.7	1225.5
3752	0.4	C_SL_FAT1_ENV	Combination	Max	82.7	236.6	27.0	0.1	13.8	1188.5
3752	0.7	C_SL_FAT1_ENV	Combination	Max	82.7	236.6	27.0	0.1	10.9	1151.6
3752	1.1	C_SL_FAT1_ENV	Combination	Max	82.7	236.6	27.0	0.1	8.0	1114.6
3752	0.0	C_SL_FAT1_ENV	Combination	Min	-36.9	-120.9	-13.6	-0.2	-7.0	-17.2
3752	0.4	C_SL_FAT1_ENV	Combination	Min	-36.9	-120.9	-13.6	-0.2	-8.9	-18.0
3752	0.7	C_SL_FAT1_ENV	Combination	Min	-36.9	-120.9	-13.6	-0.2	-10.7	-18.8
3752	1.1	C_SL_FAT1_ENV	Combination	Min	-36.9	-120.9	-13.6	-0.2	-12.6	-19.7
3753	0.0	C_SL_FAT1_ENV	Combination	Max	92.0	257.3	45.5	0.0	22.8	1111.2
3753	0.5	C_SL_FAT1_ENV	Combination	Max	92.0	257.3	45.5	0.0	13.4	1051.2
3753	0.9	C_SL_FAT1_ENV	Combination	Max	92.0	257.3	45.5	0.0	4.1	991.1
3753	0.0	C_SL_FAT1_ENV	Combination	Min	-49.6	-105.9	-11.0	-0.2	-7.5	-19.2
3753	0.5	C_SL_FAT1_ENV	Combination	Min	-49.6	-105.9	-11.0	-0.2	-13.2	-20.3
3753	0.9	C_SL_FAT1_ENV	Combination	Min	-49.6	-105.9	-11.0	-0.2	-19.0	-21.4
3754	0.0	C_SL_FAT1_ENV	Combination	Max	114.6	218.7	14.9	0.7	9.3	991.4
3754	0.2	C_SL_FAT1_ENV	Combination	Max	114.6	218.7	14.9	0.7	12.9	987.9
3754	0.0	C_SL_FAT1_ENV	Combination	Min	-43.0	-153.6	-67.4	-0.4	-15.2	-21.4
3754	0.2	C_SL_FAT1_ENV	Combination	Min	-43.0	-153.6	-67.4	-0.4	-12.8	-21.9
3755	0.0	C_SL_FAT1_ENV	Combination	Max	97.3	230.5	9.9	0.1	5.4	997.6
3755	0.4	C_SL_FAT1_ENV	Combination	Max	97.3	230.5	9.9	0.1	11.2	960.0
3755	0.7	C_SL_FAT1_ENV	Combination	Max	97.3	230.5	9.9	0.1	17.1	922.3
3755	1.1	C_SL_FAT1_ENV	Combination	Max	97.3	230.5	9.9	0.1	22.9	884.7
3755	0.0	C_SL_FAT1_ENV	Combination	Min	-38.7	-128.6	-40.3	-0.2	-20.7	-21.8
3755	0.4	C_SL_FAT1_ENV	Combination	Min	-38.7	-128.6	-40.3	-0.2	-15.6	-22.8
3755	0.7	C_SL_FAT1_ENV	Combination	Min	-38.7	-128.6	-40.3	-0.2	-10.6	-23.9
3755	1.1	C_SL_FAT1_ENV	Combination	Min	-38.7	-128.6	-40.3	-0.2	-5.6	-24.9
3756	0.0	C_SL_FAT1_ENV	Combination	Max	73.7	255.3	13.7	0.1	8.2	894.1
3756	0.4	C_SL_FAT1_ENV	Combination	Max	73.7	255.3	13.7	0.1	10.8	839.6

3756	0.7	C_SL_FAT1_ENV	Combination	Max	73.7	255.3	13.7	0.1	13.3	785.0
3756	1.1	C_SL_FAT1_ENV	Combination	Max	73.7	255.3	13.7	0.1	15.8	730.4
3756	0.0	C_SL_FAT1_ENV	Combination	Min	-31.0	-92.9	-25.7	-0.2	-12.2	-25.0
3756	0.4	C_SL_FAT1_ENV	Combination	Min	-31.0	-92.9	-25.7	-0.2	-10.4	-26.1
3756	0.7	C_SL_FAT1_ENV	Combination	Min	-31.0	-92.9	-25.7	-0.2	-8.7	-27.2
3756	1.1	C_SL_FAT1_ENV	Combination	Min	-31.0	-92.9	-25.7	-0.2	-6.9	-28.3
3757	0.0	C_SL_FAT1_ENV	Combination	Max	52.6	292.3	21.2	0.1	12.2	737.9
3757	0.4	C_SL_FAT1_ENV	Combination	Max	52.6	292.3	21.2	0.1	11.4	658.9
3757	0.7	C_SL_FAT1_ENV	Combination	Max	52.6	292.3	21.2	0.1	10.7	579.9
3757	1.1	C_SL_FAT1_ENV	Combination	Max	52.6	292.3	21.2	0.1	10.0	501.0
3757	0.0	C_SL_FAT1_ENV	Combination	Min	-25.6	-45.3	-15.8	-0.2	-7.3	-28.7
3757	0.4	C_SL_FAT1_ENV	Combination	Min	-25.6	-45.3	-15.8	-0.2	-8.5	-29.8
3757	0.7	C_SL_FAT1_ENV	Combination	Min	-25.6	-45.3	-15.8	-0.2	-9.7	-30.9
3757	1.1	C_SL_FAT1_ENV	Combination	Min	-25.6	-45.3	-15.8	-0.2	-10.9	-31.9
3758	0.0	C_SL_FAT1_ENV	Combination	Max	33.5	342.6	29.2	0.1	16.7	508.1
3758	0.4	C_SL_FAT1_ENV	Combination	Max	33.5	342.6	29.2	0.1	12.6	399.4
3758	0.7	C_SL_FAT1_ENV	Combination	Max	33.5	342.6	29.2	0.1	8.6	290.8
3758	1.1	C_SL_FAT1_ENV	Combination	Max	33.5	342.6	29.2	0.1	4.5	182.2
3758	0.0	C_SL_FAT1_ENV	Combination	Min	-21.6	-9.2	-7.2	-0.2	-3.4	-32.8
3758	0.4	C_SL_FAT1_ENV	Combination	Min	-21.6	-9.2	-7.2	-0.2	-7.3	-33.8
3758	0.7	C_SL_FAT1_ENV	Combination	Min	-21.6	-9.2	-7.2	-0.2	-11.3	-34.9
3758	1.1	C_SL_FAT1_ENV	Combination	Min	-21.6	-9.2	-7.2	-0.2	-15.3	-35.9
3759	0.0	C_SL_FAT1_ENV	Combination	Max	12.6	412.8	48.5	0.0	15.5	181.3
3759	0.5	C_SL_FAT1_ENV	Combination	Max	12.6	412.8	48.5	0.0	3.6	17.5
3759	0.0	C_SL_FAT1_ENV	Combination	Min	-20.0	-2.1	-11.1	-0.2	-6.9	-29.4
3759	0.5	C_SL_FAT1_ENV	Combination	Min	-20.0	-2.1	-11.1	-0.2	-13.0	-68.1

Reazioni vincolari e spostamenti – FASE 2

Per le reazioni vincolari dei dispositivi di vincolo e i relativi spostamenti/rotazioni, si rimanda al §5.7.

10.1.6 Fase sismica

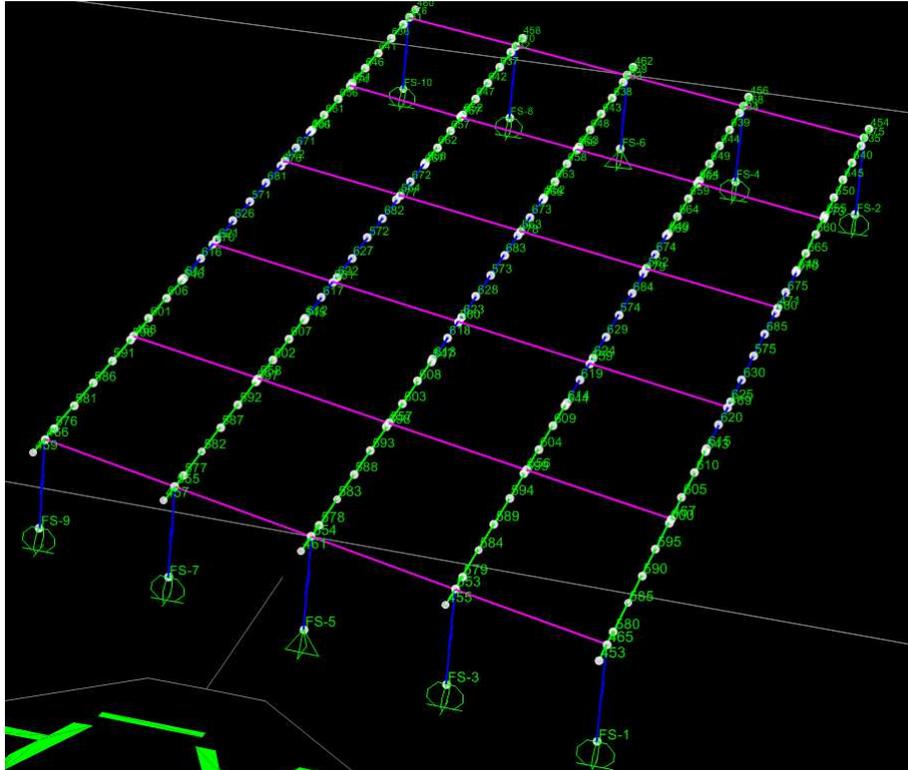


Figura 12 – Numerazione Joints modello FEM – Fase sismica.

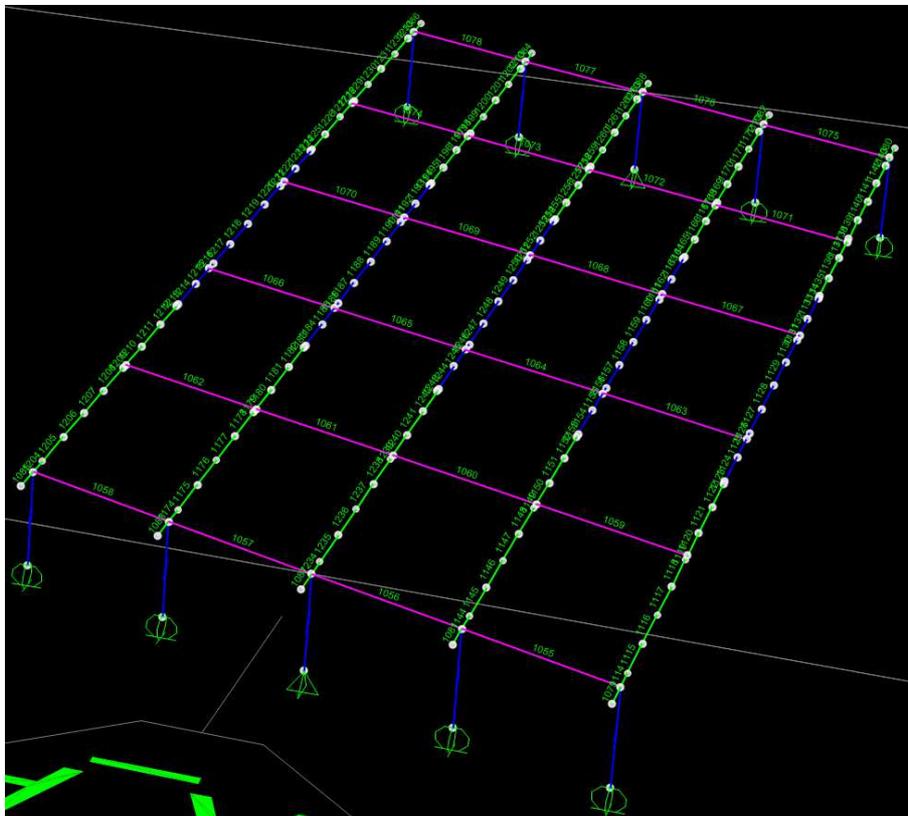


Figura 13 – Numerazione Frames modello FEM – Fase sismica.

Carichi e combinazioni di carico – FASE sismica

I carichi applicati alla struttura e la loro combinazione sono oggetto dei §5.2 e §5.3.

Sollecitazioni travi – FASE sismica

TABLE: Element Forces - Frames										
Frame	Station	OutputCase	CaseType	StepType	P	V2	V3	T	M2	M3
Text	mm	Text	Text	Text	KN	KN	KN	KN-m	KN-m	KN-m
1079	0.0	C_SLV_ENV	Combination	Max	30.9	47.7	26.8	0.2	31.0	19.2
1079	296.3	C_SLV_ENV	Combination	Max	30.9	48.8	26.8	0.2	24.2	11.9
1079	592.7	C_SLV_ENV	Combination	Max	30.9	49.8	26.8	0.2	17.6	4.3
1079	0.0	C_SLV_ENV	Combination	Min	-34.7	23.5	-6.4	-0.3	-32.2	-26.5
1079	296.3	C_SLV_ENV	Combination	Min	-34.7	24.5	-6.4	-0.3	-31.4	-40.5
1079	592.7	C_SLV_ENV	Combination	Min	-34.7	25.5	-6.4	-0.3	-30.9	-54.9
1080	0.0	C_SLV_ENV	Combination	Max	25.9	-33.4	-7.1	0.2	14.4	-8.4
1080	296.3	C_SLV_ENV	Combination	Max	25.9	-32.4	-7.1	0.2	17.7	1.8
1080	592.7	C_SLV_ENV	Combination	Max	25.9	-31.4	-7.1	0.2	21.0	11.7
1080	0.0	C_SLV_ENV	Combination	Min	-11.9	-42.1	-16.4	0.0	-29.4	-41.5
1080	296.3	C_SLV_ENV	Combination	Min	-11.9	-41.1	-16.4	0.0	-25.7	-29.6
1080	592.7	C_SLV_ENV	Combination	Min	-11.9	-40.1	-16.4	0.0	-22.1	-18.1
1081	0.0	C_SLV_ENV	Combination	Max	47.8	35.3	57.7	0.1	43.8	38.6
1081	296.3	C_SLV_ENV	Combination	Max	47.8	36.3	57.7	0.1	34.4	30.8
1081	592.7	C_SLV_ENV	Combination	Max	47.8	37.3	57.7	0.1	30.2	22.8
1081	0.0	C_SLV_ENV	Combination	Min	-49.6	9.6	-68.6	-0.2	-44.3	-29.3
1081	296.3	C_SLV_ENV	Combination	Min	-49.6	10.6	-68.6	-0.2	-31.7	-35.0
1081	592.7	C_SLV_ENV	Combination	Min	-49.6	11.6	-68.6	-0.2	-24.3	-41.2
1082	0.0	C_SLV_ENV	Combination	Max	8.0	-14.3	23.4	0.2	36.0	12.4
1082	296.3	C_SLV_ENV	Combination	Max	8.0	-13.2	23.4	0.2	29.7	17.0
1082	592.7	C_SLV_ENV	Combination	Max	8.0	-12.2	23.4	0.2	23.7	21.5
1082	0.0	C_SLV_ENV	Combination	Min	-20.6	-33.9	-10.1	-0.2	-29.4	-29.9
1082	296.3	C_SLV_ENV	Combination	Min	-20.6	-32.9	-10.1	-0.2	-27.1	-20.6
1082	592.7	C_SLV_ENV	Combination	Min	-20.6	-31.9	-10.1	-0.2	-25.0	-11.7

1083	0.0	C_SLV_ENV	Combination	Max	80.6	36.4	62.6	0.3	34.9	36.9
1083	296.3	C_SLV_ENV	Combination	Max	80.6	37.4	62.6	0.3	25.7	28.1
1083	592.7	C_SLV_ENV	Combination	Max	80.6	38.4	62.6	0.3	27.6	19.2
1083	0.0	C_SLV_ENV	Combination	Min	-94.5	7.3	-47.6	-0.3	-34.9	-26.3
1083	296.3	C_SLV_ENV	Combination	Min	-94.5	8.3	-47.6	-0.3	-30.1	-30.7
1083	592.7	C_SLV_ENV	Combination	Min	-94.5	9.3	-47.6	-0.3	-36.4	-35.7
1084	0.0	C_SLV_ENV	Combination	Max	34.8	-20.4	4.5	0.1	24.4	19.0
1084	296.3	C_SLV_ENV	Combination	Max	34.8	-19.4	4.5	0.1	28.2	25.1
1084	592.7	C_SLV_ENV	Combination	Max	34.8	-18.4	4.5	0.1	32.1	30.9
1084	0.0	C_SLV_ENV	Combination	Min	-36.7	-28.3	-16.2	-0.2	-32.2	-36.9
1084	296.3	C_SLV_ENV	Combination	Min	-36.7	-27.3	-16.2	-0.2	-32.5	-28.8
1084	592.7	C_SLV_ENV	Combination	Min	-36.7	-26.3	-16.2	-0.2	-33.0	-21.0
1085	0.0	C_SLV_ENV	Combination	Max	25.1	53.5	8.6	0.3	25.2	14.8
1085	296.3	C_SLV_ENV	Combination	Max	25.1	54.5	8.6	0.3	25.6	8.7
1085	592.7	C_SLV_ENV	Combination	Max	25.1	55.5	8.6	0.3	29.2	2.2
1085	0.0	C_SLV_ENV	Combination	Min	-9.2	19.9	-34.3	-0.2	-24.4	-24.4
1085	296.3	C_SLV_ENV	Combination	Min	-9.2	20.9	-34.3	-0.2	-17.2	-40.2
1085	592.7	C_SLV_ENV	Combination	Min	-9.2	21.9	-34.3	-0.2	-13.2	-56.4
1086	0.0	C_SLV_ENV	Combination	Max	17.8	-33.7	17.5	0.1	29.9	-12.9
1086	296.3	C_SLV_ENV	Combination	Max	17.8	-32.6	17.5	0.1	28.4	-2.5
1086	592.7	C_SLV_ENV	Combination	Max	17.8	-31.6	17.5	0.1	27.0	7.6
1086	0.0	C_SLV_ENV	Combination	Min	-21.3	-43.1	3.8	-0.2	-16.3	-41.7
1086	296.3	C_SLV_ENV	Combination	Min	-21.3	-42.1	3.8	-0.2	-21.1	-29.6
1086	592.7	C_SLV_ENV	Combination	Min	-21.3	-41.1	3.8	-0.2	-26.0	-17.9
1087	0.0	C_SLV_ENV	Combination	Max	151.6	72.4	38.2	1.5	30.7	70.8
1087	296.3	C_SLV_ENV	Combination	Max	151.6	73.4	38.2	1.5	38.6	49.2
1087	592.7	C_SLV_ENV	Combination	Max	151.6	74.4	38.2	1.5	48.4	27.3
1087	0.0	C_SLV_ENV	Combination	Min	-147.8	-26.7	-37.0	-1.6	-31.0	-70.9
1087	296.3	C_SLV_ENV	Combination	Min	-147.8	-25.6	-37.0	-1.6	-39.2	-63.1
1087	592.7	C_SLV_ENV	Combination	Min	-147.8	-24.6	-37.0	-1.6	-49.4	-55.7

1088	0.0	C_SLV_ENV	Combination	Max	30.0	-15.2	26.0	1.6	45.4	0.3
1088	296.3	C_SLV_ENV	Combination	Max	30.0	-14.2	26.0	1.6	38.0	8.2
1088	592.7	C_SLV_ENV	Combination	Max	30.0	-13.2	26.0	1.6	30.8	17.5
1088	0.0	C_SLV_ENV	Combination	Min	-26.1	-34.7	-25.6	-1.6	-46.1	-28.5
1088	296.3	C_SLV_ENV	Combination	Min	-26.1	-33.7	-25.6	-1.6	-38.9	-22.0
1088	592.7	C_SLV_ENV	Combination	Min	-26.1	-32.6	-25.6	-1.6	-31.8	-17.3
1114	0.0	C_SLV_ENV	Combination	Max	85.2	-322.9	135.8	0.5	25.9	8.2
1114	484.9	C_SLV_ENV	Combination	Max	85.2	-321.2	135.8	0.5	54.1	238.8
1114	0.0	C_SLV_ENV	Combination	Min	-57.6	-521.2	-201.3	-0.1	-43.6	-58.9
1114	484.9	C_SLV_ENV	Combination	Min	-57.6	-519.6	-201.3	-0.1	-40.0	119.0
1115	0.0	C_SLV_ENV	Combination	Max	64.9	-278.2	158.2	0.1	90.6	234.4
1115	359.2	C_SLV_ENV	Combination	Max	64.9	-277.0	158.2	0.1	33.8	380.9
1115	718.4	C_SLV_ENV	Combination	Max	64.9	-275.7	158.2	0.1	31.5	541.6
1115	1077.6	C_SLV_ENV	Combination	Max	64.9	-274.5	158.2	0.1	101.1	705.5
1115	0.0	C_SLV_ENV	Combination	Min	-58.0	-484.2	-193.8	0.0	-107.8	124.6
1115	359.2	C_SLV_ENV	Combination	Min	-58.0	-482.9	-193.8	0.0	-38.1	251.5
1115	718.4	C_SLV_ENV	Combination	Min	-58.0	-481.7	-193.8	0.0	-23.0	363.3
1115	1077.6	C_SLV_ENV	Combination	Min	-58.0	-480.4	-193.8	0.0	-79.8	471.0
1116	0.0	C_SLV_ENV	Combination	Max	143.1	-236.4	170.8	0.0	94.3	695.4
1116	359.2	C_SLV_ENV	Combination	Max	143.1	-235.2	170.8	0.0	33.0	832.8
1116	718.4	C_SLV_ENV	Combination	Max	143.1	-234.0	170.8	0.0	35.0	977.3
1116	1077.6	C_SLV_ENV	Combination	Max	143.1	-232.7	170.8	0.0	99.2	1125.8
1116	0.0	C_SLV_ENV	Combination	Min	-151.8	-440.8	-178.9	0.0	-93.6	477.6
1116	359.2	C_SLV_ENV	Combination	Min	-151.8	-439.5	-178.9	0.0	-29.3	583.0
1116	718.4	C_SLV_ENV	Combination	Min	-151.8	-438.3	-178.9	0.0	-28.4	680.4
1116	1077.6	C_SLV_ENV	Combination	Min	-151.8	-437.0	-178.9	0.0	-89.8	772.9
1117	0.0	C_SLV_ENV	Combination	Max	250.4	-199.4	178.5	0.0	97.0	1115.5
1117	359.2	C_SLV_ENV	Combination	Max	250.4	-198.2	178.5	0.0	32.9	1237.2
1117	718.4	C_SLV_ENV	Combination	Max	250.4	-196.9	178.5	0.0	32.6	1363.3
1117	1077.6	C_SLV_ENV	Combination	Max	250.4	-195.7	178.5	0.0	89.0	1493.8

1117	0.0	C_SLV_ENV	Combination	Min	-263.2	-394.8	-157.2	-0.1	-80.4	769.2
1117	359.2	C_SLV_ENV	Combination	Min	-263.2	-393.5	-157.2	-0.1	-24.0	860.6
1117	718.4	C_SLV_ENV	Combination	Min	-263.2	-392.3	-157.2	-0.1	-31.3	946.5
1117	1077.6	C_SLV_ENV	Combination	Min	-263.2	-391.1	-157.2	-0.1	-95.4	1027.3
1118	0.0	C_SLV_ENV	Combination	Max	357.9	-167.5	185.7	-0.1	95.8	1480.5
1118	359.2	C_SLV_ENV	Combination	Max	357.9	-166.3	185.7	-0.1	29.2	1586.9
1118	718.4	C_SLV_ENV	Combination	Max	357.9	-165.0	185.7	-0.1	25.0	1696.2
1118	1077.6	C_SLV_ENV	Combination	Max	357.9	-163.8	185.7	-0.1	70.7	1809.2
1118	0.0	C_SLV_ENV	Combination	Min	-363.9	-348.2	-127.2	-0.1	-66.4	1015.9
1118	359.2	C_SLV_ENV	Combination	Min	-363.9	-347.0	-127.2	-0.1	-20.7	1094.3
1118	718.4	C_SLV_ENV	Combination	Min	-363.9	-345.7	-127.2	-0.1	-37.6	1168.9
1118	1077.6	C_SLV_ENV	Combination	Min	-363.9	-344.5	-127.2	-0.1	-104.3	1238.9
1119	0.0	C_SLV_ENV	Combination	Max	445.3	-140.8	195.1	-0.1	61.0	1802.5
1119	164.7	C_SLV_ENV	Combination	Max	445.3	-140.3	195.1	-0.1	30.0	1844.7
1119	0.0	C_SLV_ENV	Combination	Min	-459.1	-303.1	-88.5	-0.9	-76.9	1230.7
1119	164.7	C_SLV_ENV	Combination	Min	-459.1	-302.5	-88.5	-0.9	-63.4	1261.5
1120	0.0	C_SLV_ENV	Combination	Max	486.1	-151.4	119.6	0.1	39.5	1844.5
1120	456.5	C_SLV_ENV	Combination	Max	486.1	-149.8	119.6	0.1	11.3	1969.1
1120	912.9	C_SLV_ENV	Combination	Max	486.1	-148.2	119.6	0.1	97.6	2097.8
1120	0.0	C_SLV_ENV	Combination	Min	-431.2	-312.1	-189.8	0.0	-75.8	1261.7
1120	456.5	C_SLV_ENV	Combination	Min	-431.2	-310.5	-189.8	0.0	-15.5	1348.0
1120	912.9	C_SLV_ENV	Combination	Min	-431.2	-309.0	-189.8	0.0	-69.9	1428.7
1121	0.0	C_SLV_ENV	Combination	Max	555.6	-124.7	122.8	0.0	64.5	2107.4
1121	359.2	C_SLV_ENV	Combination	Max	555.6	-123.5	122.8	0.0	20.4	2188.9
1121	718.4	C_SLV_ENV	Combination	Max	555.6	-122.2	122.8	0.0	33.6	2271.5
1121	1077.6	C_SLV_ENV	Combination	Max	555.6	-121.0	122.8	0.0	87.6	2355.7
1121	0.0	C_SLV_ENV	Combination	Min	-537.1	-265.2	-150.3	-0.1	-74.4	1430.2
1121	359.2	C_SLV_ENV	Combination	Min	-537.1	-263.9	-150.3	-0.1	-20.5	1488.3
1121	718.4	C_SLV_ENV	Combination	Min	-537.1	-262.7	-150.3	-0.1	-23.8	1544.4
1121	1077.6	C_SLV_ENV	Combination	Min	-537.1	-261.5	-150.3	-0.1	-67.9	1598.0

1122	0.0	C_SLV_ENV	Combination	Max	622.6	-96.8	124.2	0.5	62.7	2359.8
1122	478.4	C_SLV_ENV	Combination	Max	622.6	-95.2	124.2	0.5	5.3	2447.4
1122	956.8	C_SLV_ENV	Combination	Max	622.6	-93.5	124.2	0.5	57.8	2535.9
1122	0.0	C_SLV_ENV	Combination	Min	-622.6	-216.3	-113.2	-0.8	-50.5	1590.9
1122	478.4	C_SLV_ENV	Combination	Min	-622.6	-214.7	-113.2	-0.8	1.6	1652.4
1122	956.8	C_SLV_ENV	Combination	Min	-622.6	-213.0	-113.2	-0.8	-56.2	1711.3
1123	0.0	C_SLV_ENV	Combination	Max	622.6	-93.7	123.1	10.2	57.8	2546.0
1123	120.8	C_SLV_ENV	Combination	Max	622.6	-93.2	123.1	10.2	71.4	2567.5
1123	0.0	C_SLV_ENV	Combination	Min	-622.6	-212.9	-112.1	-9.4	-56.2	1701.2
1123	120.8	C_SLV_ENV	Combination	Min	-622.6	-212.3	-112.1	-9.4	-71.0	1716.6
1124	0.0	C_SLV_ENV	Combination	Max	689.5	-66.9	121.9	-0.1	60.1	2569.0
1124	359.2	C_SLV_ENV	Combination	Max	689.5	-65.4	121.9	-0.1	16.5	2618.0
1124	718.4	C_SLV_ENV	Combination	Max	689.5	-63.9	121.9	-0.1	23.6	2666.6
1124	1077.6	C_SLV_ENV	Combination	Max	689.5	-62.4	121.9	-0.1	49.6	2715.0
1124	0.0	C_SLV_ENV	Combination	Min	-687.4	-172.4	-72.6	-0.4	-28.8	1693.7
1124	359.2	C_SLV_ENV	Combination	Min	-687.4	-170.9	-72.6	-0.4	-2.9	1730.1
1124	718.4	C_SLV_ENV	Combination	Min	-687.4	-169.4	-72.6	-0.4	-27.6	1765.8
1124	1077.6	C_SLV_ENV	Combination	Min	-687.4	-167.9	-72.6	-0.4	-71.3	1800.7
1125	0.0	C_SLV_ENV	Combination	Max	744.0	-44.5	128.3	0.0	48.4	2706.5
1125	407.1	C_SLV_ENV	Combination	Max	744.0	-42.8	128.3	0.0	3.9	2745.8
1125	814.3	C_SLV_ENV	Combination	Max	744.0	-41.1	128.3	0.0	8.1	2784.6
1125	0.0	C_SLV_ENV	Combination	Min	-732.0	-124.1	-31.8	-0.5	-20.0	1778.5
1125	407.1	C_SLV_ENV	Combination	Min	-732.0	-122.4	-31.8	-0.5	-14.7	1807.2
1125	814.3	C_SLV_ENV	Combination	Min	-732.0	-120.7	-31.8	-0.5	-58.2	1835.0
1126	0.0	C_SLV_ENV	Combination	Max	791.0	-49.8	38.9	0.6	3.7	2784.0
1126	263.4	C_SLV_ENV	Combination	Max	791.0	-48.7	38.9	0.6	38.8	2811.4
1126	0.0	C_SLV_ENV	Combination	Min	-693.0	-128.1	-158.3	-0.7	-54.5	1835.6
1126	263.4	C_SLV_ENV	Combination	Min	-693.0	-127.0	-158.3	-0.7	-58.3	1854.8
1127	0.0	C_SLV_ENV	Combination	Max	809.0	-27.2	42.0	0.0	18.0	2824.6
1127	359.2	C_SLV_ENV	Combination	Max	809.0	-25.7	42.0	0.0	5.8	2849.2

1127	718.4	C_SLV_ENV	Combination	Max	809.0	-24.2	42.0	0.0	24.3	2873.4
1127	1077.6	C_SLV_ENV	Combination	Max	809.0	-22.7	42.0	0.0	63.2	2897.1
1127	0.0	C_SLV_ENV	Combination	Min	-744.2	-90.1	-109.1	-0.1	-58.0	1850.4
1127	359.2	C_SLV_ENV	Combination	Min	-744.2	-88.6	-109.1	-0.1	-21.7	1867.4
1127	718.4	C_SLV_ENV	Combination	Min	-744.2	-87.1	-109.1	-0.1	-16.1	1883.7
1127	1077.6	C_SLV_ENV	Combination	Min	-744.2	-85.6	-109.1	-0.1	-30.9	1899.4
1128	0.0	C_SLV_ENV	Combination	Max	813.0	-1.1	42.4	-0.1	25.0	2912.6
1128	379.7	C_SLV_ENV	Combination	Max	813.0	0.5	42.4	-0.1	10.9	2922.7
1128	759.4	C_SLV_ENV	Combination	Max	813.0	2.1	42.4	-0.1	24.6	2932.2
1128	1139.0	C_SLV_ENV	Combination	Max	813.0	3.6	42.4	-0.1	48.6	2941.2
1128	0.0	C_SLV_ENV	Combination	Min	-787.2	-44.0	-63.7	-0.2	-28.6	1900.1
1128	379.7	C_SLV_ENV	Combination	Min	-787.2	-42.4	-63.7	-0.2	-6.4	1906.5
1128	759.4	C_SLV_ENV	Combination	Min	-787.2	-40.8	-63.7	-0.2	-12.0	1912.3
1128	1139.0	C_SLV_ENV	Combination	Min	-787.2	-39.2	-63.7	-0.2	-27.9	1917.4
1129	0.0	C_SLV_ENV	Combination	Max	814.2	31.8	47.0	-0.1	29.9	2941.0
1129	379.7	C_SLV_ENV	Combination	Max	814.2	33.4	47.0	-0.1	14.5	2934.2
1129	759.4	C_SLV_ENV	Combination	Max	814.2	35.0	47.0	-0.1	16.8	2926.9
1129	1139.0	C_SLV_ENV	Combination	Max	814.2	36.6	47.0	-0.1	24.7	2919.0
1129	0.0	C_SLV_ENV	Combination	Min	-805.6	-1.9	-25.1	-0.3	-8.7	1913.9
1129	379.7	C_SLV_ENV	Combination	Min	-805.6	-0.4	-25.1	-0.3	-1.7	1908.7
1129	759.4	C_SLV_ENV	Combination	Min	-805.6	1.2	-25.1	-0.3	-12.3	1902.9
1129	1139.0	C_SLV_ENV	Combination	Min	-805.6	2.8	-25.1	-0.3	-28.6	1896.4
1130	0.0	C_SLV_ENV	Combination	Max	810.4	75.1	60.3	-0.1	33.8	2903.0
1130	359.2	C_SLV_ENV	Combination	Max	810.4	76.6	60.3	-0.1	14.5	2881.2
1130	718.4	C_SLV_ENV	Combination	Max	810.4	78.1	60.3	-0.1	3.2	2858.9
1130	1077.6	C_SLV_ENV	Combination	Max	810.4	79.6	60.3	-0.1	-4.0	2836.9
1130	0.0	C_SLV_ENV	Combination	Min	-799.4	27.3	8.0	-0.3	-0.6	1889.6
1130	359.2	C_SLV_ENV	Combination	Min	-799.4	28.8	8.0	-0.3	-5.9	1874.1
1130	718.4	C_SLV_ENV	Combination	Min	-799.4	30.3	8.0	-0.3	-19.1	1858.0
1130	1077.6	C_SLV_ENV	Combination	Min	-799.4	31.8	8.0	-0.3	-36.5	1840.5

1131	0.0	C_SLV_ENV	Combination	Max	787.1	120.1	87.3	0.3	19.9	2823.5
1131	263.4	C_SLV_ENV	Combination	Max	787.1	121.2	87.3	0.3	2.4	2797.7
1131	0.0	C_SLV_ENV	Combination	Min	-783.8	49.5	34.0	-0.9	-37.7	1839.3
1131	263.4	C_SLV_ENV	Combination	Min	-783.8	50.6	34.0	-0.9	-52.2	1820.2
1132	0.0	C_SLV_ENV	Combination	Max	832.3	115.2	15.7	0.2	4.1	2796.3
1132	407.1	C_SLV_ENV	Combination	Max	832.3	116.9	15.7	0.2	2.6	2760.2
1132	814.3	C_SLV_ENV	Combination	Max	832.3	118.6	15.7	0.2	37.5	2723.6
1132	0.0	C_SLV_ENV	Combination	Min	-742.6	40.3	-112.5	-0.3	-55.3	1821.7
1132	407.1	C_SLV_ENV	Combination	Min	-742.6	42.0	-112.5	-0.3	-14.4	1793.7
1132	814.3	C_SLV_ENV	Combination	Min	-742.6	43.7	-112.5	-0.3	-9.9	1765.0
1133	0.0	C_SLV_ENV	Combination	Max	770.2	162.3	34.3	0.0	25.1	2733.9
1133	359.2	C_SLV_ENV	Combination	Max	770.2	163.8	34.3	0.0	15.5	2687.4
1133	718.4	C_SLV_ENV	Combination	Max	770.2	165.3	34.3	0.0	14.7	2640.5
1133	1077.6	C_SLV_ENV	Combination	Max	770.2	166.8	34.3	0.0	43.7	2593.3
1133	0.0	C_SLV_ENV	Combination	Min	-727.8	61.9	-84.0	-0.1	-47.2	1779.2
1133	359.2	C_SLV_ENV	Combination	Min	-727.8	63.4	-84.0	-0.1	-19.7	1744.7
1133	718.4	C_SLV_ENV	Combination	Min	-727.8	64.9	-84.0	-0.1	-1.1	1709.4
1133	1077.6	C_SLV_ENV	Combination	Min	-727.8	66.4	-84.0	-0.1	-12.3	1673.4
1134	0.0	C_SLV_ENV	Combination	Max	702.6	208.4	59.7	4.4	42.1	2593.8
1134	120.8	C_SLV_ENV	Combination	Max	702.6	208.9	59.7	4.4	34.9	2572.8
1134	0.0	C_SLV_ENV	Combination	Min	-693.1	91.3	-70.9	-5.6	-41.8	1686.0
1134	120.8	C_SLV_ENV	Combination	Min	-693.1	91.8	-70.9	-5.6	-33.3	1670.8
1135	0.0	C_SLV_ENV	Combination	Max	702.4	209.0	60.9	0.3	34.9	2561.4
1135	478.4	C_SLV_ENV	Combination	Max	702.4	210.7	60.9	0.3	7.1	2475.9
1135	956.8	C_SLV_ENV	Combination	Max	702.4	212.3	60.9	0.3	36.0	2390.6
1135	0.0	C_SLV_ENV	Combination	Min	-692.9	91.6	-72.1	-0.4	-33.3	1683.1
1135	478.4	C_SLV_ENV	Combination	Min	-692.9	93.3	-72.1	-0.4	-0.1	1623.9
1135	956.8	C_SLV_ENV	Combination	Min	-692.9	94.9	-72.1	-0.4	-23.6	1563.1
1136	0.0	C_SLV_ENV	Combination	Max	633.3	256.7	92.7	-0.1	56.6	2381.0
1136	359.2	C_SLV_ENV	Combination	Max	633.3	257.9	92.7	-0.1	23.4	2299.5

1136	718.4	C_SLV_ENV	Combination	Max	633.3	259.2	92.7	-0.1	10.2	2218.5
1136	1077.6	C_SLV_ENV	Combination	Max	633.3	260.4	92.7	-0.1	33.2	2137.6
1136	0.0	C_SLV_ENV	Combination	Min	-636.3	119.8	-64.5	-0.2	-36.3	1567.2
1136	359.2	C_SLV_ENV	Combination	Min	-636.3	121.1	-64.5	-0.2	-13.2	1513.0
1136	718.4	C_SLV_ENV	Combination	Min	-636.3	122.3	-64.5	-0.2	-10.1	1457.4
1136	1077.6	C_SLV_ENV	Combination	Min	-636.3	123.6	-64.5	-0.2	-43.3	1400.8
1137	0.0	C_SLV_ENV	Combination	Max	561.3	303.0	127.0	-0.1	66.0	2118.3
1137	456.5	C_SLV_ENV	Combination	Max	561.3	304.5	127.0	-0.1	8.3	1993.9
1137	912.9	C_SLV_ENV	Combination	Max	561.3	306.1	127.0	-0.1	12.7	1870.7
1137	0.0	C_SLV_ENV	Combination	Min	-562.3	148.1	-54.2	-0.3	-36.9	1401.8
1137	456.5	C_SLV_ENV	Combination	Min	-562.3	149.7	-54.2	-0.3	-12.3	1319.6
1137	912.9	C_SLV_ENV	Combination	Min	-562.3	151.3	-54.2	-0.3	-50.0	1234.8
1138	0.0	C_SLV_ENV	Combination	Max	595.0	295.8	50.9	0.8	5.9	1869.8
1138	164.7	C_SLV_ENV	Combination	Max	595.0	296.4	50.9	0.8	31.3	1827.8
1138	0.0	C_SLV_ENV	Combination	Min	-521.3	140.2	-162.0	0.1	-42.2	1236.3
1138	164.7	C_SLV_ENV	Combination	Min	-521.3	140.8	-162.0	0.1	-49.3	1206.5
1139	0.0	C_SLV_ENV	Combination	Max	496.3	335.6	83.1	0.0	47.3	1826.9
1139	359.2	C_SLV_ENV	Combination	Max	496.3	336.9	83.1	0.0	17.5	1718.4
1139	718.4	C_SLV_ENV	Combination	Max	496.3	338.1	83.1	0.0	21.0	1611.4
1139	1077.6	C_SLV_ENV	Combination	Max	496.3	339.4	83.1	0.0	72.8	1505.0
1139	0.0	C_SLV_ENV	Combination	Min	-453.8	165.8	-144.3	0.0	-82.7	1216.6
1139	359.2	C_SLV_ENV	Combination	Min	-453.8	167.0	-144.3	0.0	-30.9	1144.5
1139	718.4	C_SLV_ENV	Combination	Min	-453.8	168.3	-144.3	0.0	-12.4	1070.1
1139	1077.6	C_SLV_ENV	Combination	Min	-453.8	169.5	-144.3	0.0	-42.2	994.1
1140	0.0	C_SLV_ENV	Combination	Max	379.8	382.5	110.5	0.0	64.3	1511.2
1140	359.2	C_SLV_ENV	Combination	Max	379.8	383.8	110.5	0.0	24.7	1384.7
1140	718.4	C_SLV_ENV	Combination	Max	379.8	385.0	110.5	0.0	24.7	1260.9
1140	1077.6	C_SLV_ENV	Combination	Max	379.8	386.3	110.5	0.0	72.5	1138.4
1140	0.0	C_SLV_ENV	Combination	Min	-374.9	197.6	-133.3	-0.1	-71.3	1006.1
1140	359.2	C_SLV_ENV	Combination	Min	-374.9	198.9	-133.3	-0.1	-23.4	923.8

1140	718.4	C_SLV_ENV	Combination	Min	-374.9	200.1	-133.3	-0.1	-15.3	837.8
1140	1077.6	C_SLV_ENV	Combination	Min	-374.9	201.4	-133.3	-0.1	-54.9	749.7
1141	0.0	C_SLV_ENV	Combination	Max	265.2	430.8	133.8	0.0	75.9	1139.7
1141	359.2	C_SLV_ENV	Combination	Max	265.2	432.1	133.8	0.0	27.8	993.6
1141	718.4	C_SLV_ENV	Combination	Max	265.2	433.3	133.8	0.0	24.5	852.2
1141	1077.6	C_SLV_ENV	Combination	Max	265.2	434.5	133.8	0.0	69.5	713.4
1141	0.0	C_SLV_ENV	Combination	Min	-280.6	232.7	-125.7	-0.1	-65.9	754.5
1141	359.2	C_SLV_ENV	Combination	Min	-280.6	234.0	-125.7	-0.1	-20.8	661.9
1141	718.4	C_SLV_ENV	Combination	Min	-280.6	235.2	-125.7	-0.1	-20.4	563.5
1141	1077.6	C_SLV_ENV	Combination	Min	-280.6	236.5	-125.7	-0.1	-68.4	461.7
1142	0.0	C_SLV_ENV	Combination	Max	153.3	477.9	154.2	0.0	81.4	712.8
1142	359.2	C_SLV_ENV	Combination	Max	153.3	479.1	154.2	0.0	26.0	546.4
1142	718.4	C_SLV_ENV	Combination	Max	153.3	480.4	154.2	0.0	25.1	387.9
1142	1077.6	C_SLV_ENV	Combination	Max	153.3	481.6	154.2	0.0	66.8	246.9
1142	0.0	C_SLV_ENV	Combination	Min	-175.8	271.1	-116.2	-0.1	-58.4	458.9
1142	359.2	C_SLV_ENV	Combination	Min	-175.8	272.4	-116.2	-0.1	-16.7	355.9
1142	718.4	C_SLV_ENV	Combination	Min	-175.8	273.6	-116.2	-0.1	-29.4	243.9
1142	1077.6	C_SLV_ENV	Combination	Min	-175.8	274.8	-116.2	-0.1	-84.8	113.6
1143	0.0	C_SLV_ENV	Combination	Max	61.3	521.3	170.6	0.0	44.9	229.7
1143	484.9	C_SLV_ENV	Combination	Max	61.3	523.0	170.6	0.0	19.2	-6.7
1143	0.0	C_SLV_ENV	Combination	Min	-87.8	313.7	-99.4	-0.3	-29.0	125.7
1143	484.9	C_SLV_ENV	Combination	Min	-87.8	315.4	-99.4	-0.3	-37.9	-43.7
1144	0.0	C_SLV_ENV	Combination	Max	63.2	-245.0	324.3	0.2	61.6	18.9
1144	484.9	C_SLV_ENV	Combination	Max	63.2	-243.3	324.3	0.2	92.0	216.7
1144	0.0	C_SLV_ENV	Combination	Min	-71.6	-489.3	-312.5	-0.2	-59.5	-37.1
1144	484.9	C_SLV_ENV	Combination	Min	-71.6	-487.6	-312.5	-0.2	-95.6	120.3
1145	0.0	C_SLV_ENV	Combination	Max	87.2	-232.2	316.6	0.0	173.4	212.6
1145	359.2	C_SLV_ENV	Combination	Max	87.2	-230.9	316.6	0.0	59.7	353.8
1145	718.4	C_SLV_ENV	Combination	Max	87.2	-229.7	316.6	0.0	53.0	509.4
1145	1077.6	C_SLV_ENV	Combination	Max	87.2	-228.4	316.6	0.0	165.1	670.1

1145	0.0	C_SLV_ENV	Combination	Min	-82.0	-453.9	-312.2	-0.1	-171.3	120.2
1145	359.2	C_SLV_ENV	Combination	Min	-82.0	-452.7	-312.2	-0.1	-59.2	225.0
1145	718.4	C_SLV_ENV	Combination	Min	-82.0	-451.5	-312.2	-0.1	-54.0	314.5
1145	1077.6	C_SLV_ENV	Combination	Min	-82.0	-450.2	-312.2	-0.1	-167.8	398.0
1146	0.0	C_SLV_ENV	Combination	Max	156.7	-222.9	298.0	0.0	159.3	647.5
1146	359.2	C_SLV_ENV	Combination	Max	156.7	-221.7	298.0	0.0	52.2	790.4
1146	718.4	C_SLV_ENV	Combination	Max	156.7	-220.4	298.0	0.0	54.0	936.1
1146	1077.6	C_SLV_ENV	Combination	Max	156.7	-219.2	298.0	0.0	160.1	1082.0
1146	0.0	C_SLV_ENV	Combination	Min	-144.6	-411.3	-295.4	-0.1	-158.2	421.2
1146	359.2	C_SLV_ENV	Combination	Min	-144.6	-410.1	-295.4	-0.1	-52.1	505.7
1146	718.4	C_SLV_ENV	Combination	Min	-144.6	-408.8	-295.4	-0.1	-54.8	586.5
1146	1077.6	C_SLV_ENV	Combination	Min	-144.6	-407.6	-295.4	-0.1	-161.9	666.2
1147	0.0	C_SLV_ENV	Combination	Max	215.7	-213.6	273.0	0.0	145.2	1065.0
1147	359.2	C_SLV_ENV	Combination	Max	215.7	-212.3	273.0	0.0	47.2	1195.5
1147	718.4	C_SLV_ENV	Combination	Max	215.7	-211.1	273.0	0.0	50.0	1326.2
1147	1077.6	C_SLV_ENV	Combination	Max	215.7	-209.8	273.0	0.0	146.1	1456.7
1147	0.0	C_SLV_ENV	Combination	Min	-210.7	-367.6	-267.6	-0.1	-142.3	693.6
1147	359.2	C_SLV_ENV	Combination	Min	-210.7	-366.4	-267.6	-0.1	-46.2	771.5
1147	718.4	C_SLV_ENV	Combination	Min	-210.7	-365.2	-267.6	-0.1	-50.9	848.2
1147	1077.6	C_SLV_ENV	Combination	Min	-210.7	-363.9	-267.6	-0.1	-148.9	924.3
1148	0.0	C_SLV_ENV	Combination	Max	260.5	-199.9	244.6	0.0	129.8	1448.9
1148	359.2	C_SLV_ENV	Combination	Max	260.5	-198.6	244.6	0.0	41.9	1564.4
1148	718.4	C_SLV_ENV	Combination	Max	260.5	-197.4	244.6	0.0	44.1	1679.8
1148	1077.6	C_SLV_ENV	Combination	Max	260.5	-196.2	244.6	0.0	127.0	1795.0
1148	0.0	C_SLV_ENV	Combination	Min	-277.8	-324.9	-230.9	-0.1	-121.9	952.0
1148	359.2	C_SLV_ENV	Combination	Min	-277.8	-323.6	-230.9	-0.1	-38.9	1024.5
1148	718.4	C_SLV_ENV	Combination	Min	-277.8	-322.4	-230.9	-0.1	-46.0	1096.2
1148	1077.6	C_SLV_ENV	Combination	Min	-277.8	-321.1	-230.9	-0.1	-133.8	1167.4
1149	0.0	C_SLV_ENV	Combination	Max	301.2	-179.6	218.9	1.0	105.0	1786.5
1149	164.7	C_SLV_ENV	Combination	Max	301.2	-179.0	218.9	1.0	70.8	1832.7

1149	0.0	C_SLV_ENV	Combination	Min	-334.1	-283.9	-187.6	-0.7	-104.5	1185.4
1149	164.7	C_SLV_ENV	Combination	Min	-334.1	-283.4	-187.6	-0.7	-75.4	1215.5
1150	0.0	C_SLV_ENV	Combination	Max	271.2	-169.8	237.0	0.0	92.9	1835.8
1150	456.5	C_SLV_ENV	Combination	Max	271.2	-168.2	237.0	0.0	16.5	1947.7
1150	912.9	C_SLV_ENV	Combination	Max	271.2	-166.6	237.0	0.0	133.9	2059.6
1150	0.0	C_SLV_ENV	Combination	Min	-282.0	-260.1	-258.1	-0.2	-101.9	1212.4
1150	456.5	C_SLV_ENV	Combination	Min	-282.0	-258.5	-258.1	-0.2	-15.9	1295.9
1150	912.9	C_SLV_ENV	Combination	Min	-282.0	-257.0	-258.1	-0.2	-123.6	1378.1
1151	0.0	C_SLV_ENV	Combination	Max	307.6	-141.5	202.9	0.0	106.8	2046.4
1151	359.2	C_SLV_ENV	Combination	Max	307.6	-140.3	202.9	0.0	33.9	2121.4
1151	718.4	C_SLV_ENV	Combination	Max	307.6	-139.1	202.9	0.0	40.8	2196.5
1151	1077.6	C_SLV_ENV	Combination	Max	307.6	-137.8	202.9	0.0	116.4	2274.2
1151	0.0	C_SLV_ENV	Combination	Min	-304.6	-230.7	-210.5	-0.1	-110.4	1377.5
1151	359.2	C_SLV_ENV	Combination	Min	-304.6	-229.4	-210.5	-0.1	-34.8	1435.7
1151	718.4	C_SLV_ENV	Combination	Min	-304.6	-228.2	-210.5	-0.1	-39.0	1493.0
1151	1077.6	C_SLV_ENV	Combination	Min	-304.6	-227.0	-210.5	-0.1	-111.9	1546.8
1152	0.0	C_SLV_ENV	Combination	Max	332.0	-110.8	170.8	0.8	85.3	2271.7
1152	478.4	C_SLV_ENV	Combination	Max	332.0	-109.2	170.8	0.8	3.8	2359.5
1152	956.8	C_SLV_ENV	Combination	Max	332.0	-107.5	170.8	0.8	76.9	2446.9
1152	0.0	C_SLV_ENV	Combination	Min	-329.2	-204.3	-167.1	-1.0	-83.1	1548.1
1152	478.4	C_SLV_ENV	Combination	Min	-329.2	-202.6	-167.1	-1.0	-3.2	1610.3
1152	956.8	C_SLV_ENV	Combination	Min	-329.2	-201.0	-167.1	-1.0	-78.0	1671.3
1153	0.0	C_SLV_ENV	Combination	Max	331.5	-107.8	169.7	14.4	76.9	2443.8
1153	120.8	C_SLV_ENV	Combination	Max	331.5	-107.3	169.7	14.4	96.9	2466.0
1153	0.0	C_SLV_ENV	Combination	Min	-328.7	-200.8	-166.1	-14.3	-78.0	1674.2
1153	120.8	C_SLV_ENV	Combination	Min	-328.7	-200.3	-166.1	-14.3	-98.6	1689.2
1154	0.0	C_SLV_ENV	Combination	Max	342.9	-78.9	143.3	0.0	72.3	2477.0
1154	359.2	C_SLV_ENV	Combination	Max	342.9	-77.4	143.3	0.0	20.9	2531.8
1154	718.4	C_SLV_ENV	Combination	Max	342.9	-75.9	143.3	0.0	28.7	2586.3
1154	1077.6	C_SLV_ENV	Combination	Max	342.9	-74.4	143.3	0.0	74.1	2640.6

1154	0.0	C_SLV_ENV	Combination	Min	-359.7	-176.8	-126.6	-0.3	-62.4	1693.0
1154	359.2	C_SLV_ENV	Combination	Min	-359.7	-175.3	-126.6	-0.3	-17.0	1729.5
1154	718.4	C_SLV_ENV	Combination	Min	-359.7	-173.8	-126.6	-0.3	-30.8	1765.2
1154	1077.6	C_SLV_ENV	Combination	Min	-359.7	-172.3	-126.6	-0.3	-82.2	1800.0
1155	0.0	C_SLV_ENV	Combination	Max	342.9	-48.1	118.4	0.2	56.2	2655.3
1155	407.1	C_SLV_ENV	Combination	Max	342.9	-46.4	118.4	0.2	9.4	2702.9
1155	814.3	C_SLV_ENV	Combination	Max	342.9	-44.7	118.4	0.2	28.1	2750.2
1155	0.0	C_SLV_ENV	Combination	Min	-390.9	-143.3	-82.6	-0.3	-40.4	1808.0
1155	407.1	C_SLV_ENV	Combination	Min	-390.9	-141.6	-82.6	-0.3	-8.2	1837.6
1155	814.3	C_SLV_ENV	Combination	Min	-390.9	-139.9	-82.6	-0.3	-41.5	1866.2
1156	0.0	C_SLV_ENV	Combination	Max	338.1	-28.6	110.7	0.5	19.1	2749.2
1156	263.4	C_SLV_ENV	Combination	Max	338.1	-27.5	110.7	0.5	55.8	2775.2
1156	0.0	C_SLV_ENV	Combination	Min	-352.0	-129.8	-161.0	-1.5	-34.9	1866.7
1156	263.4	C_SLV_ENV	Combination	Min	-352.0	-128.7	-161.0	-1.5	-58.3	1882.1
1157	0.0	C_SLV_ENV	Combination	Max	346.2	-2.2	83.3	-0.1	41.5	2767.9
1157	359.2	C_SLV_ENV	Combination	Max	346.2	-0.7	83.3	-0.1	13.4	2790.6
1157	718.4	C_SLV_ENV	Combination	Max	346.2	0.8	83.3	-0.1	23.3	2812.9
1157	1077.6	C_SLV_ENV	Combination	Max	346.2	2.3	83.3	-0.1	62.4	2835.0
1157	0.0	C_SLV_ENV	Combination	Min	-358.2	-96.6	-109.2	-0.2	-55.5	1878.5
1157	359.2	C_SLV_ENV	Combination	Min	-358.2	-95.1	-109.2	-0.2	-18.0	1890.8
1157	718.4	C_SLV_ENV	Combination	Min	-358.2	-93.6	-109.2	-0.2	-18.6	1902.4
1157	1077.6	C_SLV_ENV	Combination	Min	-358.2	-92.1	-109.2	-0.2	-48.4	1913.1
1158	0.0	C_SLV_ENV	Combination	Max	349.8	25.9	54.5	-0.1	29.0	2822.0
1158	379.7	C_SLV_ENV	Combination	Max	349.8	27.5	54.5	-0.1	9.9	2832.0
1158	759.4	C_SLV_ENV	Combination	Max	349.8	29.1	54.5	-0.1	17.5	2841.7
1158	1139.0	C_SLV_ENV	Combination	Max	349.8	30.6	54.5	-0.1	41.1	2851.0
1158	0.0	C_SLV_ENV	Combination	Min	-351.0	-61.5	-62.4	-0.2	-32.7	1909.4
1158	379.7	C_SLV_ENV	Combination	Min	-351.0	-59.9	-62.4	-0.2	-10.6	1912.2
1158	759.4	C_SLV_ENV	Combination	Min	-351.0	-58.3	-62.4	-0.2	-15.2	1914.3
1158	1139.0	C_SLV_ENV	Combination	Min	-351.0	-56.7	-62.4	-0.2	-35.8	1915.5

1159	0.0	C_SLV_ENV	Combination	Max	338.7	55.1	41.8	-0.1	24.6	2847.1
1159	379.7	C_SLV_ENV	Combination	Max	338.7	56.7	41.8	-0.1	10.2	2843.3
1159	759.4	C_SLV_ENV	Combination	Max	338.7	58.3	41.8	-0.1	9.5	2839.2
1159	1139.0	C_SLV_ENV	Combination	Max	338.7	59.8	41.8	-0.1	20.1	2834.6
1159	0.0	C_SLV_ENV	Combination	Min	-346.5	-28.4	-34.2	-0.2	-19.5	1920.1
1159	379.7	C_SLV_ENV	Combination	Min	-346.5	-26.8	-34.2	-0.2	-8.0	1913.1
1159	759.4	C_SLV_ENV	Combination	Min	-346.5	-25.2	-34.2	-0.2	-10.2	1905.3
1159	1139.0	C_SLV_ENV	Combination	Min	-346.5	-23.6	-34.2	-0.2	-23.7	1896.7
1160	0.0	C_SLV_ENV	Combination	Max	314.1	85.5	48.8	-0.1	30.1	2839.9
1160	359.2	C_SLV_ENV	Combination	Max	314.1	87.0	48.8	-0.1	13.9	2822.9
1160	718.4	C_SLV_ENV	Combination	Max	314.1	88.5	48.8	-0.1	2.2	2807.2
1160	1077.6	C_SLV_ENV	Combination	Max	314.1	90.0	48.8	-0.1	9.4	2792.4
1160	0.0	C_SLV_ENV	Combination	Min	-347.9	5.3	-23.6	-0.2	-16.3	1908.8
1160	359.2	C_SLV_ENV	Combination	Min	-347.9	6.8	-23.6	-0.2	-9.1	1892.7
1160	718.4	C_SLV_ENV	Combination	Min	-347.9	8.3	-23.6	-0.2	-6.5	1874.2
1160	1077.6	C_SLV_ENV	Combination	Min	-347.9	9.8	-23.6	-0.2	-22.7	1853.7
1161	0.0	C_SLV_ENV	Combination	Max	290.1	117.1	81.7	0.9	37.8	2789.5
1161	263.4	C_SLV_ENV	Combination	Max	290.1	118.2	81.7	0.9	17.0	2768.6
1161	0.0	C_SLV_ENV	Combination	Min	-344.9	40.4	-32.4	-0.5	-36.4	1866.5
1161	263.4	C_SLV_ENV	Combination	Min	-344.9	41.5	-32.4	-0.5	-28.7	1845.7
1162	0.0	C_SLV_ENV	Combination	Max	298.4	132.4	56.0	0.0	21.1	2766.1
1162	407.1	C_SLV_ENV	Combination	Max	298.4	134.1	56.0	0.0	2.5	2726.1
1162	814.3	C_SLV_ENV	Combination	Max	298.4	135.8	56.0	0.0	39.2	2685.7
1162	0.0	C_SLV_ENV	Combination	Min	-319.5	53.9	-91.5	-0.5	-35.7	1847.8
1162	407.1	C_SLV_ENV	Combination	Min	-319.5	55.6	-91.5	-0.5	-2.7	1811.3
1162	814.3	C_SLV_ENV	Combination	Min	-319.5	57.3	-91.5	-0.5	-25.0	1773.7
1163	0.0	C_SLV_ENV	Combination	Max	289.1	163.8	89.8	0.0	54.7	2659.0
1163	359.2	C_SLV_ENV	Combination	Max	289.1	165.3	89.8	0.0	22.5	2609.7
1163	718.4	C_SLV_ENV	Combination	Max	289.1	166.8	89.8	0.0	13.7	2560.2
1163	1077.6	C_SLV_ENV	Combination	Max	289.1	168.3	89.8	0.0	51.8	2510.4

1163	0.0	C_SLV_ENV	Combination	Min	-293.7	84.4	-106.2	-0.2	-62.6	1777.3
1163	359.2	C_SLV_ENV	Combination	Min	-293.7	85.9	-106.2	-0.2	-24.5	1736.8
1163	718.4	C_SLV_ENV	Combination	Min	-293.7	87.4	-106.2	-0.2	-9.9	1695.6
1163	1077.6	C_SLV_ENV	Combination	Min	-293.7	88.9	-106.2	-0.2	-42.1	1653.5
1164	0.0	C_SLV_ENV	Combination	Max	273.2	195.2	119.3	9.8	70.9	2489.8
1164	120.8	C_SLV_ENV	Combination	Max	273.2	195.7	119.3	9.8	56.5	2468.8
1164	0.0	C_SLV_ENV	Combination	Min	-268.6	113.6	-122.7	-10.3	-72.5	1660.7
1164	120.8	C_SLV_ENV	Combination	Min	-268.6	114.2	-122.7	-10.3	-57.6	1644.3
1165	0.0	C_SLV_ENV	Combination	Max	272.6	195.9	120.5	0.6	56.5	2458.6
1165	478.4	C_SLV_ENV	Combination	Max	272.6	197.5	120.5	0.6	1.7	2374.5
1165	956.8	C_SLV_ENV	Combination	Max	272.6	199.2	120.5	0.6	60.8	2289.9
1165	0.0	C_SLV_ENV	Combination	Min	-268.1	114.0	-123.8	-0.7	-57.6	1654.9
1165	478.4	C_SLV_ENV	Combination	Min	-268.1	115.6	-123.8	-0.7	-1.3	1590.0
1165	956.8	C_SLV_ENV	Combination	Min	-268.1	117.3	-123.8	-0.7	-58.8	1524.0
1166	0.0	C_SLV_ENV	Combination	Max	247.0	227.4	147.8	-0.1	82.7	2282.1
1166	359.2	C_SLV_ENV	Combination	Max	247.0	228.6	147.8	-0.1	29.7	2206.8
1166	718.4	C_SLV_ENV	Combination	Max	247.0	229.9	147.8	-0.1	22.6	2131.3
1166	1077.6	C_SLV_ENV	Combination	Max	247.0	231.1	147.8	-0.1	73.1	2055.6
1166	0.0	C_SLV_ENV	Combination	Min	-251.5	138.7	-140.6	-0.1	-78.5	1535.8
1166	359.2	C_SLV_ENV	Combination	Min	-251.5	139.9	-140.6	-0.1	-28.0	1479.2
1166	718.4	C_SLV_ENV	Combination	Min	-251.5	141.1	-140.6	-0.1	-23.4	1421.9
1166	1077.6	C_SLV_ENV	Combination	Min	-251.5	142.4	-140.6	-0.1	-76.5	1363.9
1167	0.0	C_SLV_ENV	Combination	Max	212.0	260.6	172.6	0.0	93.6	2055.1
1167	456.5	C_SLV_ENV	Combination	Max	212.0	262.2	172.6	0.0	14.8	1943.5
1167	912.9	C_SLV_ENV	Combination	Max	212.0	263.7	172.6	0.0	56.7	1831.5
1167	0.0	C_SLV_ENV	Combination	Min	-241.5	164.5	-153.2	-0.1	-83.2	1380.5
1167	456.5	C_SLV_ENV	Combination	Min	-241.5	166.1	-153.2	-0.1	-13.3	1297.4
1167	912.9	C_SLV_ENV	Combination	Min	-241.5	167.7	-153.2	-0.1	-64.1	1213.1
1168	0.0	C_SLV_ENV	Combination	Max	219.2	282.8	170.0	0.0	41.6	1828.9
1168	164.7	C_SLV_ENV	Combination	Max	219.2	283.4	170.0	0.0	74.0	1784.7

1168	0.0	C_SLV_ENV	Combination	Min	-231.1	182.6	-198.1	-0.5	-48.8	1215.2
1168	164.7	C_SLV_ENV	Combination	Min	-231.1	183.2	-198.1	-0.5	-76.7	1182.7
1169	0.0	C_SLV_ENV	Combination	Max	198.2	313.5	191.6	0.0	106.5	1767.7
1169	359.2	C_SLV_ENV	Combination	Max	198.2	314.8	191.6	0.0	37.6	1658.9
1169	718.4	C_SLV_ENV	Combination	Max	198.2	316.0	191.6	0.0	33.8	1549.9
1169	1077.6	C_SLV_ENV	Combination	Max	198.2	317.3	191.6	0.0	106.7	1440.5
1169	0.0	C_SLV_ENV	Combination	Min	-206.4	206.8	-203.2	-0.1	-112.2	1189.4
1169	359.2	C_SLV_ENV	Combination	Min	-206.4	208.1	-203.2	-0.1	-39.2	1110.8
1169	718.4	C_SLV_ENV	Combination	Min	-206.4	209.3	-203.2	-0.1	-31.2	1031.6
1169	1077.6	C_SLV_ENV	Combination	Min	-206.4	210.6	-203.2	-0.1	-100.0	951.7
1170	0.0	C_SLV_ENV	Combination	Max	182.9	343.7	209.2	0.0	114.3	1417.7
1170	359.2	C_SLV_ENV	Combination	Max	182.9	345.0	209.2	0.0	39.2	1297.3
1170	718.4	C_SLV_ENV	Combination	Max	182.9	346.2	209.2	0.0	36.7	1176.7
1170	1077.6	C_SLV_ENV	Combination	Max	182.9	347.5	209.2	0.0	113.3	1055.9
1170	0.0	C_SLV_ENV	Combination	Min	-173.6	232.4	-213.3	-0.1	-116.5	956.7
1170	359.2	C_SLV_ENV	Combination	Min	-173.6	233.7	-213.3	-0.1	-39.9	869.7
1170	718.4	C_SLV_ENV	Combination	Min	-173.6	234.9	-213.3	-0.1	-36.0	782.0
1170	1077.6	C_SLV_ENV	Combination	Min	-173.6	236.2	-213.3	-0.1	-111.1	693.6
1171	0.0	C_SLV_ENV	Combination	Max	161.8	371.4	221.9	0.0	120.3	1040.0
1171	359.2	C_SLV_ENV	Combination	Max	161.8	372.6	221.9	0.0	40.6	909.2
1171	718.4	C_SLV_ENV	Combination	Max	161.8	373.9	221.9	0.0	39.1	778.3
1171	1077.6	C_SLV_ENV	Combination	Max	161.8	375.1	221.9	0.0	119.8	647.3
1171	0.0	C_SLV_ENV	Combination	Min	-146.7	257.0	-224.5	-0.1	-122.2	703.8
1171	359.2	C_SLV_ENV	Combination	Min	-146.7	258.2	-224.5	-0.1	-41.5	608.4
1171	718.4	C_SLV_ENV	Combination	Min	-146.7	259.5	-224.5	-0.1	-39.1	512.3
1171	1077.6	C_SLV_ENV	Combination	Min	-146.7	260.7	-224.5	-0.1	-118.8	415.4
1172	0.0	C_SLV_ENV	Combination	Max	133.5	398.3	229.7	0.0	122.0	636.4
1172	359.2	C_SLV_ENV	Combination	Max	133.5	399.5	229.7	0.0	39.5	496.1
1172	718.4	C_SLV_ENV	Combination	Max	133.5	400.8	229.7	0.0	43.9	356.0
1172	1077.6	C_SLV_ENV	Combination	Max	133.5	402.0	229.7	0.0	128.7	221.4

1172	0.0	C_SLV_ENV	Combination	Min	-123.9	281.1	-236.1	0.0	-125.7	431.0
1172	359.2	C_SLV_ENV	Combination	Min	-123.9	282.4	-236.1	0.0	-40.9	326.8
1172	718.4	C_SLV_ENV	Combination	Min	-123.9	283.6	-236.1	0.0	-43.0	221.5
1172	1077.6	C_SLV_ENV	Combination	Min	-123.9	284.9	-236.1	0.0	-125.5	109.8
1173	0.0	C_SLV_ENV	Combination	Max	106.2	426.3	233.3	0.2	72.9	205.7
1173	484.9	C_SLV_ENV	Combination	Max	106.2	427.9	233.3	0.2	44.4	16.1
1173	0.0	C_SLV_ENV	Combination	Min	-104.3	305.0	-249.7	-0.3	-76.7	132.4
1173	484.9	C_SLV_ENV	Combination	Min	-104.3	306.7	-249.7	-0.3	-40.3	-33.5
1174	0.0	C_SLV_ENV	Combination	Max	160.0	-258.6	228.7	0.3	40.4	15.0
1174	484.9	C_SLV_ENV	Combination	Max	160.0	-256.9	228.7	0.3	77.2	213.7
1174	0.0	C_SLV_ENV	Combination	Min	-156.5	-484.1	-250.3	-0.4	-44.3	-31.2
1174	484.9	C_SLV_ENV	Combination	Min	-156.5	-482.5	-250.3	-0.4	-70.6	129.4
1175	0.0	C_SLV_ENV	Combination	Max	213.0	-244.4	227.2	0.0	124.3	212.0
1175	359.2	C_SLV_ENV	Combination	Max	213.0	-243.2	227.2	0.0	42.7	360.6
1175	718.4	C_SLV_ENV	Combination	Max	213.0	-242.0	227.2	0.0	40.9	519.2
1175	1077.6	C_SLV_ENV	Combination	Max	213.0	-240.7	227.2	0.0	125.7	678.5
1175	0.0	C_SLV_ENV	Combination	Min	-201.0	-451.2	-236.2	-0.1	-128.8	122.8
1175	359.2	C_SLV_ENV	Combination	Min	-201.0	-449.9	-236.2	-0.1	-43.9	223.7
1175	718.4	C_SLV_ENV	Combination	Min	-201.0	-448.7	-236.2	-0.1	-38.9	313.6
1175	1077.6	C_SLV_ENV	Combination	Min	-201.0	-447.5	-236.2	-0.1	-120.6	402.0
1176	0.0	C_SLV_ENV	Combination	Max	256.7	-235.0	220.1	0.0	117.8	661.6
1176	359.2	C_SLV_ENV	Combination	Max	256.7	-233.7	220.1	0.0	38.8	806.7
1176	718.4	C_SLV_ENV	Combination	Max	256.7	-232.5	220.1	0.0	41.3	951.8
1176	1077.6	C_SLV_ENV	Combination	Max	256.7	-231.3	220.1	0.0	121.5	1096.8
1176	0.0	C_SLV_ENV	Combination	Min	-239.0	-410.4	-223.3	-0.1	-119.1	413.2
1176	359.2	C_SLV_ENV	Combination	Min	-239.0	-409.1	-223.3	-0.1	-38.9	499.4
1176	718.4	C_SLV_ENV	Combination	Min	-239.0	-407.9	-223.3	-0.1	-40.3	584.8
1176	1077.6	C_SLV_ENV	Combination	Min	-239.0	-406.6	-223.3	-0.1	-119.3	669.4
1177	0.0	C_SLV_ENV	Combination	Max	289.5	-225.1	207.5	0.0	110.1	1081.9
1177	359.2	C_SLV_ENV	Combination	Max	289.5	-223.9	207.5	0.0	35.6	1212.1

1177	718.4	C_SLV_ENV	Combination	Max	289.5	-222.7	207.5	0.0	39.3	1342.0
1177	1077.6	C_SLV_ENV	Combination	Max	289.5	-221.4	207.5	0.0	114.9	1471.7
1177	0.0	C_SLV_ENV	Combination	Min	-279.0	-368.6	-210.4	-0.1	-111.8	690.2
1177	359.2	C_SLV_ENV	Combination	Min	-279.0	-367.4	-210.4	-0.1	-36.2	772.9
1177	718.4	C_SLV_ENV	Combination	Min	-279.0	-366.2	-210.4	-0.1	-38.9	854.9
1177	1077.6	C_SLV_ENV	Combination	Min	-279.0	-364.9	-210.4	-0.1	-113.4	936.3
1178	0.0	C_SLV_ENV	Combination	Max	308.9	-209.8	189.4	0.0	98.8	1465.9
1178	359.2	C_SLV_ENV	Combination	Max	308.9	-208.5	189.4	0.0	30.8	1580.9
1178	718.4	C_SLV_ENV	Combination	Max	308.9	-207.3	189.4	0.0	37.9	1695.7
1178	1077.6	C_SLV_ENV	Combination	Max	308.9	-206.1	189.4	0.0	109.1	1810.1
1178	0.0	C_SLV_ENV	Combination	Min	-319.2	-328.3	-198.0	-0.1	-104.4	961.9
1178	359.2	C_SLV_ENV	Combination	Min	-319.2	-327.1	-198.0	-0.1	-33.2	1039.7
1178	718.4	C_SLV_ENV	Combination	Min	-319.2	-325.8	-198.0	-0.1	-37.3	1116.9
1178	1077.6	C_SLV_ENV	Combination	Min	-319.2	-324.6	-198.0	-0.1	-105.4	1193.5
1179	0.0	C_SLV_ENV	Combination	Max	323.2	-187.2	167.5	0.4	76.4	1806.2
1179	164.7	C_SLV_ENV	Combination	Max	323.2	-186.7	167.5	0.4	59.1	1852.2
1179	0.0	C_SLV_ENV	Combination	Min	-339.3	-288.9	-190.5	-1.0	-76.4	1208.8
1179	164.7	C_SLV_ENV	Combination	Min	-339.3	-288.3	-190.5	-1.0	-55.4	1241.1
1180	0.0	C_SLV_ENV	Combination	Max	351.6	-171.7	190.6	0.1	76.8	1854.9
1180	456.5	C_SLV_ENV	Combination	Max	351.6	-170.1	190.6	0.1	13.1	1965.8
1180	912.9	C_SLV_ENV	Combination	Max	351.6	-168.6	190.6	0.1	88.3	2076.7
1180	0.0	C_SLV_ENV	Combination	Min	-381.8	-265.9	-174.4	-0.2	-71.0	1238.9
1180	456.5	C_SLV_ENV	Combination	Min	-381.8	-264.3	-174.4	-0.2	-14.6	1327.0
1180	912.9	C_SLV_ENV	Combination	Min	-381.8	-262.7	-174.4	-0.2	-97.3	1413.7
1181	0.0	C_SLV_ENV	Combination	Max	370.1	-144.1	150.2	-0.1	78.5	2064.7
1181	359.2	C_SLV_ENV	Combination	Max	370.1	-142.8	150.2	-0.1	24.9	2139.3
1181	718.4	C_SLV_ENV	Combination	Max	370.1	-141.6	150.2	-0.1	28.4	2214.0
1181	1077.6	C_SLV_ENV	Combination	Max	370.1	-140.4	150.2	-0.1	80.2	2291.2
1181	0.0	C_SLV_ENV	Combination	Min	-373.6	-235.2	-144.3	-0.1	-75.9	1407.2
1181	359.2	C_SLV_ENV	Combination	Min	-373.6	-234.0	-144.3	-0.1	-24.5	1468.4

1181	718.4	C_SLV_ENV	Combination	Min	-373.6	-232.8	-144.3	-0.1	-30.1	1528.6
1181	1077.6	C_SLV_ENV	Combination	Min	-373.6	-231.5	-144.3	-0.1	-84.1	1585.5
1182	0.0	C_SLV_ENV	Combination	Max	378.1	-114.5	121.9	0.6	59.5	2290.0
1182	478.4	C_SLV_ENV	Combination	Max	378.1	-112.8	121.9	0.6	2.5	2377.7
1182	956.8	C_SLV_ENV	Combination	Max	378.1	-111.2	121.9	0.6	57.8	2465.7
1182	0.0	C_SLV_ENV	Combination	Min	-372.7	-207.8	-124.7	-0.7	-61.5	1581.6
1182	478.4	C_SLV_ENV	Combination	Min	-372.7	-206.1	-124.7	-0.7	-3.1	1647.3
1182	956.8	C_SLV_ENV	Combination	Min	-372.7	-204.5	-124.7	-0.7	-57.2	1711.1
1183	0.0	C_SLV_ENV	Combination	Max	377.4	-111.4	120.8	10.0	57.8	2464.1
1183	120.8	C_SLV_ENV	Combination	Max	377.4	-110.9	120.8	10.0	72.8	2486.3
1183	0.0	C_SLV_ENV	Combination	Min	-371.9	-204.2	-123.6	-10.4	-57.2	1712.2
1183	120.8	C_SLV_ENV	Combination	Min	-371.9	-203.7	-123.6	-10.4	-71.8	1728.1
1184	0.0	C_SLV_ENV	Combination	Max	374.9	-83.3	90.3	0.0	42.2	2497.4
1184	359.2	C_SLV_ENV	Combination	Max	374.9	-81.8	90.3	0.0	10.8	2551.3
1184	718.4	C_SLV_ENV	Combination	Max	374.9	-80.3	90.3	0.0	23.9	2605.4
1184	1077.6	C_SLV_ENV	Combination	Max	374.9	-78.8	90.3	0.0	61.4	2659.8
1184	0.0	C_SLV_ENV	Combination	Min	-380.8	-179.5	-104.5	-0.3	-51.3	1731.6
1184	359.2	C_SLV_ENV	Combination	Min	-380.8	-178.0	-104.5	-0.3	-14.7	1771.6
1184	718.4	C_SLV_ENV	Combination	Min	-380.8	-176.5	-104.5	-0.3	-22.7	1810.2
1184	1077.6	C_SLV_ENV	Combination	Min	-380.8	-175.0	-104.5	-0.3	-55.1	1847.5
1185	0.0	C_SLV_ENV	Combination	Max	363.5	-52.8	51.9	0.0	23.5	2676.7
1185	407.1	C_SLV_ENV	Combination	Max	363.5	-51.1	51.9	0.0	9.3	2723.8
1185	814.3	C_SLV_ENV	Combination	Max	363.5	-49.4	51.9	0.0	32.8	2771.4
1185	0.0	C_SLV_ENV	Combination	Min	-389.5	-145.2	-83.4	-0.5	-37.2	1856.1
1185	407.1	C_SLV_ENV	Combination	Min	-389.5	-143.5	-83.4	-0.5	-10.2	1888.9
1185	814.3	C_SLV_ENV	Combination	Min	-389.5	-141.8	-83.4	-0.5	-20.9	1919.8
1186	0.0	C_SLV_ENV	Combination	Max	372.2	-32.3	139.9	1.0	26.5	2771.6
1186	263.4	C_SLV_ENV	Combination	Max	372.2	-31.2	139.9	1.0	37.5	2797.5
1186	0.0	C_SLV_ENV	Combination	Min	-428.4	-129.7	-95.4	-0.7	-16.9	1920.0
1186	263.4	C_SLV_ENV	Combination	Min	-428.4	-128.6	-95.4	-0.7	-39.7	1936.5

1187	0.0	C_SLV_ENV	Combination	Max	368.5	-6.1	94.7	-0.1	51.3	2790.4
1187	359.2	C_SLV_ENV	Combination	Max	368.5	-4.6	94.7	-0.1	18.2	2811.7
1187	718.4	C_SLV_ENV	Combination	Max	368.5	-3.1	94.7	-0.1	13.0	2833.3
1187	1077.6	C_SLV_ENV	Combination	Max	368.5	-1.6	94.7	-0.1	38.6	2855.0
1187	0.0	C_SLV_ENV	Combination	Min	-403.1	-94.9	-72.3	-0.2	-40.2	1932.2
1187	359.2	C_SLV_ENV	Combination	Min	-403.1	-93.4	-72.3	-0.2	-15.2	1946.6
1187	718.4	C_SLV_ENV	Combination	Min	-403.1	-91.9	-72.3	-0.2	-18.1	1959.7
1187	1077.6	C_SLV_ENV	Combination	Min	-403.1	-90.4	-72.3	-0.2	-51.8	1971.6
1188	0.0	C_SLV_ENV	Combination	Max	362.3	21.5	63.3	-0.1	36.1	2841.2
1188	379.7	C_SLV_ENV	Combination	Max	362.3	23.1	63.3	-0.1	12.3	2850.0
1188	759.4	C_SLV_ENV	Combination	Max	362.3	24.7	63.3	-0.1	11.2	2858.8
1188	1139.0	C_SLV_ENV	Combination	Max	362.3	26.2	63.3	-0.1	31.5	2867.5
1188	0.0	C_SLV_ENV	Combination	Min	-369.6	-58.3	-56.6	-0.2	-33.4	1965.6
1188	379.7	C_SLV_ENV	Combination	Min	-369.6	-56.7	-56.6	-0.2	-12.2	1970.2
1188	759.4	C_SLV_ENV	Combination	Min	-369.6	-55.1	-56.6	-0.2	-13.7	1973.6
1188	1139.0	C_SLV_ENV	Combination	Min	-369.6	-53.5	-56.6	-0.2	-36.6	1975.8
1189	0.0	C_SLV_ENV	Combination	Max	345.3	50.1	51.8	-0.1	34.3	2864.5
1189	379.7	C_SLV_ENV	Combination	Max	345.3	51.6	51.8	-0.1	14.8	2859.7
1189	759.4	C_SLV_ENV	Combination	Max	345.3	53.2	51.8	-0.1	8.6	2854.6
1189	1139.0	C_SLV_ENV	Combination	Max	345.3	54.8	51.8	-0.1	28.0	2849.2
1189	0.0	C_SLV_ENV	Combination	Min	-346.6	-24.1	-58.7	-0.2	-39.5	1977.7
1189	379.7	C_SLV_ENV	Combination	Min	-346.6	-22.5	-58.7	-0.2	-17.3	1972.1
1189	759.4	C_SLV_ENV	Combination	Min	-346.6	-20.9	-58.7	-0.2	-8.5	1965.5
1189	1139.0	C_SLV_ENV	Combination	Min	-346.6	-19.3	-58.7	-0.2	-25.3	1958.1
1190	0.0	C_SLV_ENV	Combination	Max	318.1	80.0	67.8	-0.1	41.5	2858.4
1190	359.2	C_SLV_ENV	Combination	Max	318.1	81.5	67.8	-0.1	17.2	2840.2
1190	718.4	C_SLV_ENV	Combination	Max	318.1	83.0	67.8	-0.1	10.8	2823.5
1190	1077.6	C_SLV_ENV	Combination	Max	318.1	84.5	67.8	-0.1	43.4	2807.7
1190	0.0	C_SLV_ENV	Combination	Min	-332.9	10.4	-91.0	-0.2	-54.7	1967.2
1190	359.2	C_SLV_ENV	Combination	Min	-332.9	11.9	-91.0	-0.2	-22.1	1952.4

1190	718.4	C_SLV_ENV	Combination	Min	-332.9	13.4	-91.0	-0.2	-7.3	1935.0
1190	1077.6	C_SLV_ENV	Combination	Min	-332.9	14.9	-91.0	-0.2	-31.6	1915.7
1191	0.0	C_SLV_ENV	Combination	Max	292.4	111.4	84.8	0.3	57.9	2809.9
1191	263.4	C_SLV_ENV	Combination	Max	292.4	112.5	84.8	0.3	37.2	2788.0
1191	0.0	C_SLV_ENV	Combination	Min	-311.3	46.4	-130.5	-1.2	-55.9	1925.6
1191	263.4	C_SLV_ENV	Combination	Min	-311.3	47.5	-130.5	-1.2	-23.2	1905.6
1192	0.0	C_SLV_ENV	Combination	Max	287.6	127.6	124.8	0.2	43.5	2786.5
1192	407.1	C_SLV_ENV	Combination	Max	287.6	129.3	124.8	0.2	5.1	2744.6
1192	814.3	C_SLV_ENV	Combination	Max	287.6	131.0	124.8	0.2	42.8	2702.4
1192	0.0	C_SLV_ENV	Combination	Min	-337.3	60.9	-92.9	-0.3	-32.9	1907.5
1192	407.1	C_SLV_ENV	Combination	Min	-337.3	62.6	-92.9	-0.3	-7.4	1871.9
1192	814.3	C_SLV_ENV	Combination	Min	-337.3	64.3	-92.9	-0.3	-58.2	1835.3
1193	0.0	C_SLV_ENV	Combination	Max	272.7	158.9	140.7	0.0	80.9	2678.9
1193	359.2	C_SLV_ENV	Combination	Max	272.7	160.4	140.7	0.0	30.4	2627.9
1193	718.4	C_SLV_ENV	Combination	Max	272.7	161.9	140.7	0.0	16.2	2576.6
1193	1077.6	C_SLV_ENV	Combination	Max	272.7	163.4	140.7	0.0	61.4	2524.9
1193	0.0	C_SLV_ENV	Combination	Min	-289.3	92.6	-126.0	-0.3	-74.4	1833.6
1193	359.2	C_SLV_ENV	Combination	Min	-289.3	94.1	-126.0	-0.3	-29.2	1793.7
1193	718.4	C_SLV_ENV	Combination	Min	-289.3	95.6	-126.0	-0.3	-20.3	1753.1
1193	1077.6	C_SLV_ENV	Combination	Min	-289.3	97.1	-126.0	-0.3	-70.8	1711.7
1194	0.0	C_SLV_ENV	Combination	Max	252.3	191.0	160.4	13.5	93.5	2508.0
1194	120.8	C_SLV_ENV	Combination	Max	252.3	191.5	160.4	13.5	74.1	2486.4
1194	0.0	C_SLV_ENV	Combination	Min	-248.5	121.7	-157.2	-13.4	-92.3	1712.2
1194	120.8	C_SLV_ENV	Combination	Min	-248.5	122.2	-157.2	-13.4	-73.3	1696.0
1195	0.0	C_SLV_ENV	Combination	Max	251.5	191.7	161.5	0.8	74.1	2481.2
1195	478.4	C_SLV_ENV	Combination	Max	251.5	193.3	161.5	0.8	2.5	2394.4
1195	956.8	C_SLV_ENV	Combination	Max	251.5	195.0	161.5	0.8	78.1	2307.2
1195	0.0	C_SLV_ENV	Combination	Min	-247.7	122.0	-158.3	-1.0	-73.3	1701.5
1195	478.4	C_SLV_ENV	Combination	Min	-247.7	123.7	-158.3	-1.0	-3.3	1637.4
1195	956.8	C_SLV_ENV	Combination	Min	-247.7	125.3	-158.3	-1.0	-80.4	1572.2

1196	0.0	C_SLV_ENV	Combination	Max	220.7	224.5	185.3	0.0	102.6	2303.0
1196	359.2	C_SLV_ENV	Combination	Max	220.7	225.7	185.3	0.0	36.0	2225.5
1196	718.4	C_SLV_ENV	Combination	Max	220.7	226.9	185.3	0.0	31.0	2147.8
1196	1077.6	C_SLV_ENV	Combination	Max	220.7	228.2	185.3	0.0	99.9	2069.9
1196	0.0	C_SLV_ENV	Combination	Min	-217.8	145.7	-191.7	-0.1	-106.7	1577.6
1196	359.2	C_SLV_ENV	Combination	Min	-217.8	146.9	-191.7	-0.1	-37.9	1521.6
1196	718.4	C_SLV_ENV	Combination	Min	-217.8	148.2	-191.7	-0.1	-30.6	1465.1
1196	1077.6	C_SLV_ENV	Combination	Min	-217.8	149.4	-191.7	-0.1	-97.1	1407.8
1197	0.0	C_SLV_ENV	Combination	Max	180.8	259.6	207.7	0.0	110.6	2074.8
1197	456.5	C_SLV_ENV	Combination	Max	180.8	261.1	207.7	0.0	15.8	1960.1
1197	912.9	C_SLV_ENV	Combination	Max	180.8	262.7	207.7	0.0	86.8	1845.1
1197	0.0	C_SLV_ENV	Combination	Min	-194.4	169.8	-225.9	-0.2	-119.5	1418.2
1197	456.5	C_SLV_ENV	Combination	Min	-194.4	171.4	-225.9	-0.2	-16.4	1336.1
1197	912.9	C_SLV_ENV	Combination	Min	-194.4	173.0	-225.9	-0.2	-79.0	1252.9
1198	0.0	C_SLV_ENV	Combination	Max	175.9	285.4	217.8	0.6	63.0	1843.0
1198	164.7	C_SLV_ENV	Combination	Max	175.9	286.0	217.8	0.6	94.2	1797.7
1198	0.0	C_SLV_ENV	Combination	Min	-208.8	185.5	-190.8	-0.3	-61.8	1255.0
1198	164.7	C_SLV_ENV	Combination	Min	-208.8	186.1	-190.8	-0.3	-97.5	1222.7
1199	0.0	C_SLV_ENV	Combination	Max	146.5	318.7	235.2	0.0	129.1	1786.8
1199	359.2	C_SLV_ENV	Combination	Max	146.5	319.9	235.2	0.0	44.6	1675.0
1199	718.4	C_SLV_ENV	Combination	Max	146.5	321.2	235.2	0.0	36.9	1563.1
1199	1077.6	C_SLV_ENV	Combination	Max	146.5	322.4	235.2	0.0	117.4	1451.1
1199	0.0	C_SLV_ENV	Combination	Min	-163.7	208.1	-224.0	-0.1	-124.0	1223.1
1199	359.2	C_SLV_ENV	Combination	Min	-163.7	209.3	-224.0	-0.1	-43.5	1145.2
1199	718.4	C_SLV_ENV	Combination	Min	-163.7	210.6	-224.0	-0.1	-39.9	1066.6
1199	1077.6	C_SLV_ENV	Combination	Min	-163.7	211.8	-224.0	-0.1	-124.4	987.1
1200	0.0	C_SLV_ENV	Combination	Max	117.2	351.9	254.0	0.0	138.7	1432.8
1200	359.2	C_SLV_ENV	Combination	Max	117.2	353.1	254.0	0.0	47.5	1309.1
1200	718.4	C_SLV_ENV	Combination	Max	117.2	354.4	254.0	0.0	42.8	1185.4
1200	1077.6	C_SLV_ENV	Combination	Max	117.2	355.6	254.0	0.0	132.4	1062.0

1200	0.0	C_SLV_ENV	Combination	Min	-110.8	231.5	-249.5	0.0	-136.4	983.4
1200	359.2	C_SLV_ENV	Combination	Min	-110.8	232.7	-249.5	0.0	-46.8	897.1
1200	718.4	C_SLV_ENV	Combination	Min	-110.8	234.0	-249.5	0.0	-43.8	809.9
1200	1077.6	C_SLV_ENV	Combination	Min	-110.8	235.2	-249.5	0.0	-135.0	721.5
1201	0.0	C_SLV_ENV	Combination	Max	79.5	383.0	270.9	0.0	147.4	1049.8
1201	359.2	C_SLV_ENV	Combination	Max	79.5	384.2	270.9	0.0	50.1	915.3
1201	718.4	C_SLV_ENV	Combination	Max	79.5	385.4	270.9	0.0	47.0	781.4
1201	1077.6	C_SLV_ENV	Combination	Max	79.5	386.7	270.9	0.0	143.2	649.2
1201	0.0	C_SLV_ENV	Combination	Min	-65.9	253.2	-267.7	0.0	-145.3	722.3
1201	359.2	C_SLV_ENV	Combination	Min	-65.9	254.4	-267.7	0.0	-49.2	627.8
1201	718.4	C_SLV_ENV	Combination	Min	-65.9	255.7	-267.7	0.0	-47.3	531.9
1201	1077.6	C_SLV_ENV	Combination	Min	-65.9	256.9	-267.7	0.0	-144.6	433.3
1202	0.0	C_SLV_ENV	Combination	Max	45.9	418.2	284.6	0.0	151.3	641.0
1202	359.2	C_SLV_ENV	Combination	Max	45.9	419.5	284.6	0.0	49.0	496.7
1202	718.4	C_SLV_ENV	Combination	Max	45.9	420.7	284.6	0.0	52.4	356.6
1202	1077.6	C_SLV_ENV	Combination	Max	45.9	421.9	284.6	0.0	152.3	224.7
1202	0.0	C_SLV_ENV	Combination	Min	-40.4	269.4	-278.1	0.0	-147.4	441.0
1202	359.2	C_SLV_ENV	Combination	Min	-40.4	270.7	-278.1	0.0	-47.5	337.8
1202	718.4	C_SLV_ENV	Combination	Min	-40.4	271.9	-278.1	0.0	-53.2	229.6
1202	1077.6	C_SLV_ENV	Combination	Min	-40.4	273.1	-278.1	0.0	-155.5	112.2
1203	0.0	C_SLV_ENV	Combination	Max	68.5	455.6	294.9	0.3	88.2	205.6
1203	484.9	C_SLV_ENV	Combination	Max	68.5	457.3	294.9	0.3	53.5	18.3
1203	0.0	C_SLV_ENV	Combination	Min	-78.5	284.1	-279.4	-0.2	-82.0	136.4
1203	484.9	C_SLV_ENV	Combination	Min	-78.5	285.8	-279.4	-0.2	-54.9	-35.8
1204	0.0	C_SLV_ENV	Combination	Max	56.7	-328.0	171.6	0.0	38.6	5.1
1204	484.9	C_SLV_ENV	Combination	Max	56.7	-326.3	171.6	0.0	27.7	233.9
1204	0.0	C_SLV_ENV	Combination	Min	-86.7	-541.9	-92.7	-0.5	-17.2	-59.9
1204	484.9	C_SLV_ENV	Combination	Min	-86.7	-540.2	-92.7	-0.5	-44.7	132.2
1205	0.0	C_SLV_ENV	Combination	Max	146.8	-286.2	154.1	0.0	84.7	244.8
1205	359.2	C_SLV_ENV	Combination	Max	146.8	-284.9	154.1	0.0	29.3	383.7

1205	718.4	C_SLV_ENV	Combination	Max	146.8	-283.7	154.1	0.0	15.7	543.2
1205	1077.6	C_SLV_ENV	Combination	Max	146.8	-282.4	154.1	0.0	55.9	710.7
1205	0.0	C_SLV_ENV	Combination	Min	-171.7	-498.3	-111.9	-0.2	-64.7	124.3
1205	359.2	C_SLV_ENV	Combination	Min	-171.7	-497.0	-111.9	-0.2	-24.5	266.7
1205	718.4	C_SLV_ENV	Combination	Min	-171.7	-495.8	-111.9	-0.2	-26.1	387.6
1205	1077.6	C_SLV_ENV	Combination	Min	-171.7	-494.5	-111.9	-0.2	-81.4	499.6
1206	0.0	C_SLV_ENV	Combination	Max	256.8	-246.0	132.6	0.0	67.5	710.1
1206	359.2	C_SLV_ENV	Combination	Max	256.8	-244.8	132.6	0.0	19.9	848.5
1206	718.4	C_SLV_ENV	Combination	Max	256.8	-243.5	132.6	0.0	20.0	993.2
1206	1077.6	C_SLV_ENV	Combination	Max	256.8	-242.3	132.6	0.0	64.2	1142.6
1206	0.0	C_SLV_ENV	Combination	Min	-273.9	-449.4	-123.4	-0.1	-68.8	501.9
1206	359.2	C_SLV_ENV	Combination	Min	-273.9	-448.1	-123.4	-0.1	-24.5	612.8
1206	718.4	C_SLV_ENV	Combination	Min	-273.9	-446.9	-123.4	-0.1	-27.9	716.6
1206	1077.6	C_SLV_ENV	Combination	Min	-273.9	-445.6	-123.4	-0.1	-75.4	814.8
1207	0.0	C_SLV_ENV	Combination	Max	370.4	-209.1	107.7	0.0	53.0	1137.3
1207	359.2	C_SLV_ENV	Combination	Max	370.4	-207.9	107.7	0.0	14.4	1260.4
1207	718.4	C_SLV_ENV	Combination	Max	370.4	-206.6	107.7	0.0	22.8	1388.0
1207	1077.6	C_SLV_ENV	Combination	Max	370.4	-205.4	107.7	0.0	70.3	1519.2
1207	0.0	C_SLV_ENV	Combination	Min	-365.5	-399.5	-132.4	-0.1	-72.4	811.6
1207	359.2	C_SLV_ENV	Combination	Min	-365.5	-398.2	-132.4	-0.1	-24.9	906.6
1207	718.4	C_SLV_ENV	Combination	Min	-365.5	-397.0	-132.4	-0.1	-24.5	996.3
1207	1077.6	C_SLV_ENV	Combination	Min	-365.5	-395.7	-132.4	-0.1	-63.1	1081.5
1208	0.0	C_SLV_ENV	Combination	Max	486.6	-175.6	77.4	0.0	39.4	1507.2
1208	359.2	C_SLV_ENV	Combination	Max	486.6	-174.4	77.4	0.0	11.6	1615.1
1208	718.4	C_SLV_ENV	Combination	Max	486.6	-173.1	77.4	0.0	30.5	1726.0
1208	1077.6	C_SLV_ENV	Combination	Max	486.6	-171.9	77.4	0.0	82.3	1839.8
1208	0.0	C_SLV_ENV	Combination	Min	-441.4	-351.0	-144.0	-0.1	-73.0	1072.3
1208	359.2	C_SLV_ENV	Combination	Min	-441.4	-349.8	-144.0	-0.1	-21.3	1153.1
1208	718.4	C_SLV_ENV	Combination	Min	-441.4	-348.5	-144.0	-0.1	-16.3	1230.0
1208	1077.6	C_SLV_ENV	Combination	Min	-441.4	-347.3	-144.0	-0.1	-44.1	1303.2

1209	0.0	C_SLV_ENV	Combination	Max	585.7	-145.5	40.8	0.8	57.7	1832.6
1209	164.7	C_SLV_ENV	Combination	Max	585.7	-144.9	40.8	0.8	55.2	1875.5
1209	0.0	C_SLV_ENV	Combination	Min	-506.3	-306.7	-161.6	0.1	-39.3	1298.2
1209	164.7	C_SLV_ENV	Combination	Min	-506.3	-306.2	-161.6	0.1	-17.0	1329.7
1210	0.0	C_SLV_ENV	Combination	Max	548.8	-156.6	152.1	-0.2	63.7	1875.3
1210	456.5	C_SLV_ENV	Combination	Max	548.8	-155.0	152.1	-0.2	12.2	2002.6
1210	912.9	C_SLV_ENV	Combination	Max	548.8	-153.4	152.1	-0.2	43.6	2133.4
1210	0.0	C_SLV_ENV	Combination	Min	-551.2	-317.6	-73.3	-0.3	-23.4	1329.0
1210	456.5	C_SLV_ENV	Combination	Min	-551.2	-316.0	-73.3	-0.3	-7.8	1417.4
1210	912.9	C_SLV_ENV	Combination	Min	-551.2	-314.4	-73.3	-0.3	-75.2	1501.0
1211	0.0	C_SLV_ENV	Combination	Max	620.9	-127.3	109.1	-0.1	53.1	2142.0
1211	359.2	C_SLV_ENV	Combination	Max	620.9	-126.1	109.1	-0.1	14.0	2226.2
1211	718.4	C_SLV_ENV	Combination	Max	620.9	-124.8	109.1	-0.1	14.0	2312.1
1211	1077.6	C_SLV_ENV	Combination	Max	620.9	-123.6	109.1	-0.1	42.2	2399.1
1211	0.0	C_SLV_ENV	Combination	Min	-624.9	-270.5	-78.6	-0.2	-42.5	1510.1
1211	359.2	C_SLV_ENV	Combination	Min	-624.9	-269.2	-78.6	-0.2	-14.4	1568.2
1211	718.4	C_SLV_ENV	Combination	Min	-624.9	-268.0	-78.6	-0.2	-25.4	1623.9
1211	1077.6	C_SLV_ENV	Combination	Min	-624.9	-266.7	-78.6	-0.2	-64.6	1677.6
1212	0.0	C_SLV_ENV	Combination	Max	690.7	-97.7	70.0	0.4	29.2	2399.5
1212	478.4	C_SLV_ENV	Combination	Max	690.7	-96.0	70.0	0.4	-0.7	2490.9
1212	956.8	C_SLV_ENV	Combination	Max	690.7	-94.4	70.0	0.4	35.6	2583.7
1212	0.0	C_SLV_ENV	Combination	Min	-681.1	-220.3	-82.1	-0.5	-43.0	1682.0
1212	478.4	C_SLV_ENV	Combination	Min	-681.1	-218.7	-82.1	-0.5	-7.3	1741.9
1212	956.8	C_SLV_ENV	Combination	Min	-681.1	-217.0	-82.1	-0.5	-37.9	1798.8
1213	0.0	C_SLV_ENV	Combination	Max	690.8	-94.6	69.5	5.8	35.6	2583.9
1213	120.8	C_SLV_ENV	Combination	Max	690.8	-94.1	69.5	5.8	45.5	2606.0
1213	0.0	C_SLV_ENV	Combination	Min	-681.2	-216.8	-81.6	-7.1	-37.9	1797.8
1213	120.8	C_SLV_ENV	Combination	Min	-681.2	-216.3	-81.6	-7.1	-46.3	1813.2
1214	0.0	C_SLV_ENV	Combination	Max	759.8	-68.7	29.9	0.0	8.7	2605.1
1214	359.2	C_SLV_ENV	Combination	Max	759.8	-67.2	29.9	0.0	-0.8	2654.4

1214	718.4	C_SLV_ENV	Combination	Max	759.8	-65.7	29.9	0.0	19.2	2703.6
1214	1077.6	C_SLV_ENV	Combination	Max	759.8	-64.2	29.9	0.0	46.9	2753.1
1214	0.0	C_SLV_ENV	Combination	Min	-715.3	-172.2	-83.4	-0.2	-43.3	1799.3
1214	359.2	C_SLV_ENV	Combination	Min	-715.3	-170.7	-83.4	-0.2	-14.5	1836.1
1214	718.4	C_SLV_ENV	Combination	Min	-715.3	-169.2	-83.4	-0.2	-15.3	1871.7
1214	1077.6	C_SLV_ENV	Combination	Min	-715.3	-167.7	-83.4	-0.2	-23.7	1906.1
1215	0.0	C_SLV_ENV	Combination	Max	823.7	-45.8	-12.7	0.2	5.7	2743.1
1215	407.1	C_SLV_ENV	Combination	Max	823.7	-44.1	-12.7	0.2	17.8	2782.3
1215	814.3	C_SLV_ENV	Combination	Max	823.7	-42.4	-12.7	0.2	49.0	2821.1
1215	0.0	C_SLV_ENV	Combination	Min	-729.1	-121.6	-91.5	-0.3	-36.0	1889.7
1215	407.1	C_SLV_ENV	Combination	Min	-729.1	-119.9	-91.5	-0.3	-5.8	1918.0
1215	814.3	C_SLV_ENV	Combination	Min	-729.1	-118.2	-91.5	-0.3	5.5	1945.2
1216	0.0	C_SLV_ENV	Combination	Max	775.7	-52.1	154.2	0.3	46.3	2821.3
1216	263.4	C_SLV_ENV	Combination	Max	775.7	-51.0	154.2	0.3	38.1	2849.0
1216	0.0	C_SLV_ENV	Combination	Min	-774.2	-126.1	-24.2	-1.0	7.0	1944.9
1216	263.4	C_SLV_ENV	Combination	Min	-774.2	-125.0	-24.2	-1.0	-19.1	1963.8
1217	0.0	C_SLV_ENV	Combination	Max	801.2	-32.3	105.6	-0.2	61.0	2861.6
1217	359.2	C_SLV_ENV	Combination	Max	801.2	-30.8	105.6	-0.2	24.1	2885.7
1217	718.4	C_SLV_ENV	Combination	Max	801.2	-29.3	105.6	-0.2	8.6	2909.5
1217	1077.6	C_SLV_ENV	Combination	Max	801.2	-27.8	105.6	-0.2	18.1	2932.9
1217	0.0	C_SLV_ENV	Combination	Min	-790.8	-83.0	-32.4	-0.3	-18.3	1965.7
1217	359.2	C_SLV_ENV	Combination	Min	-790.8	-81.5	-32.4	-0.3	-7.7	1982.4
1217	718.4	C_SLV_ENV	Combination	Min	-790.8	-80.0	-32.4	-0.3	-18.5	1998.5
1217	1077.6	C_SLV_ENV	Combination	Min	-790.8	-78.5	-32.4	-0.3	-54.2	2013.8
1218	0.0	C_SLV_ENV	Combination	Max	807.4	-5.9	65.1	-0.2	32.8	2949.7
1218	379.7	C_SLV_ENV	Combination	Max	807.4	-4.3	65.1	-0.2	12.6	2958.7
1218	759.4	C_SLV_ENV	Combination	Max	807.4	-2.8	65.1	-0.2	5.7	2967.1
1218	1139.0	C_SLV_ENV	Combination	Max	807.4	-1.2	65.1	-0.2	19.7	2975.0
1218	0.0	C_SLV_ENV	Combination	Min	-799.0	-34.5	-41.7	-0.3	-29.5	2020.7
1218	379.7	C_SLV_ENV	Combination	Min	-799.0	-32.9	-41.7	-0.3	-18.2	2026.5

1218	759.4	C_SLV_ENV	Combination	Min	-799.0	-31.3	-41.7	-0.3	-20.1	2031.6
1218	1139.0	C_SLV_ENV	Combination	Min	-799.0	-29.7	-41.7	-0.3	-43.1	2036.1
1219	0.0	C_SLV_ENV	Combination	Max	809.0	32.1	38.8	-0.1	24.4	2978.0
1219	379.7	C_SLV_ENV	Combination	Max	809.0	33.7	38.8	-0.1	10.0	2969.2
1219	759.4	C_SLV_ENV	Combination	Max	809.0	35.3	38.8	-0.1	6.7	2960.5
1219	1139.0	C_SLV_ENV	Combination	Max	809.0	36.9	38.8	-0.1	26.3	2951.5
1219	0.0	C_SLV_ENV	Combination	Min	-782.3	5.4	-61.7	-0.2	-47.3	2037.3
1219	379.7	C_SLV_ENV	Combination	Min	-782.3	7.0	-61.7	-0.2	-24.3	2031.2
1219	759.4	C_SLV_ENV	Combination	Min	-782.3	8.6	-61.7	-0.2	-12.2	2023.8
1219	1139.0	C_SLV_ENV	Combination	Min	-782.3	10.2	-61.7	-0.2	-23.1	2015.6
1220	0.0	C_SLV_ENV	Combination	Max	808.0	81.3	25.2	0.0	23.4	2940.6
1220	359.2	C_SLV_ENV	Combination	Max	808.0	82.8	25.2	0.0	14.5	2917.1
1220	718.4	C_SLV_ENV	Combination	Max	808.0	84.3	25.2	0.0	13.6	2893.3
1220	1077.6	C_SLV_ENV	Combination	Max	808.0	85.8	25.2	0.0	46.2	2869.1
1220	0.0	C_SLV_ENV	Combination	Min	-740.2	31.8	-97.0	-0.1	-58.6	2010.1
1220	359.2	C_SLV_ENV	Combination	Min	-740.2	33.3	-97.0	-0.1	-23.9	1992.4
1220	718.4	C_SLV_ENV	Combination	Min	-740.2	34.8	-97.0	-0.1	2.8	1974.0
1220	1077.6	C_SLV_ENV	Combination	Min	-740.2	36.3	-97.0	-0.1	-3.9	1954.9
1221	0.0	C_SLV_ENV	Combination	Max	792.3	129.5	11.3	0.6	59.8	2860.6
1221	263.4	C_SLV_ENV	Combination	Max	792.3	130.6	11.3	0.6	60.6	2832.8
1221	0.0	C_SLV_ENV	Combination	Min	-689.6	53.4	-138.8	-0.6	-39.4	1955.1
1221	263.4	C_SLV_ENV	Combination	Min	-689.6	54.5	-138.8	-0.6	-6.6	1934.5
1222	0.0	C_SLV_ENV	Combination	Max	743.2	124.2	142.6	-0.1	64.1	2832.1
1222	407.1	C_SLV_ENV	Combination	Max	743.2	125.9	142.6	-0.1	8.9	2793.7
1222	814.3	C_SLV_ENV	Combination	Max	743.2	127.6	142.6	-0.1	21.4	2755.4
1222	0.0	C_SLV_ENV	Combination	Min	-731.7	43.7	-40.0	-0.5	-11.4	1935.1
1222	407.1	C_SLV_ENV	Combination	Min	-731.7	45.4	-40.0	-0.5	2.1	1904.3
1222	814.3	C_SLV_ENV	Combination	Min	-731.7	47.1	-40.0	-0.5	-52.2	1872.2
1223	0.0	C_SLV_ENV	Combination	Max	690.1	173.4	124.5	-0.1	71.9	2772.0
1223	359.2	C_SLV_ENV	Combination	Max	690.1	174.9	124.5	-0.1	27.5	2722.9

1223	718.4	C_SLV_ENV	Combination	Max	690.1	176.4	124.5	-0.1	2.9	2674.4
1223	1077.6	C_SLV_ENV	Combination	Max	690.1	177.9	124.5	-0.1	28.5	2626.3
1223	0.0	C_SLV_ENV	Combination	Min	-688.5	65.6	-72.1	-0.3	-49.5	1888.5
1223	359.2	C_SLV_ENV	Combination	Min	-688.5	67.1	-72.1	-0.3	-23.9	1851.1
1223	718.4	C_SLV_ENV	Combination	Min	-688.5	68.6	-72.1	-0.3	-18.1	1812.2
1223	1077.6	C_SLV_ENV	Combination	Min	-688.5	70.1	-72.1	-0.3	-62.5	1771.7
1224	0.0	C_SLV_ENV	Combination	Max	624.9	220.1	117.0	9.6	67.1	2633.6
1224	120.8	C_SLV_ENV	Combination	Max	624.9	220.6	117.0	9.6	53.0	2611.3
1224	0.0	C_SLV_ENV	Combination	Min	-625.2	97.0	-105.4	-8.8	-68.0	1788.2
1224	120.8	C_SLV_ENV	Combination	Min	-625.2	97.5	-105.4	-8.8	-55.3	1772.1
1225	0.0	C_SLV_ENV	Combination	Max	624.8	220.9	118.1	0.5	53.0	2606.0
1225	478.4	C_SLV_ENV	Combination	Max	624.8	222.5	118.1	0.5	-0.8	2513.9
1225	956.8	C_SLV_ENV	Combination	Max	624.8	224.2	118.1	0.5	46.8	2422.7
1225	0.0	C_SLV_ENV	Combination	Min	-625.1	97.3	-106.5	-0.7	-55.3	1777.4
1225	478.4	C_SLV_ENV	Combination	Min	-625.1	99.0	-106.5	-0.7	-7.0	1716.5
1225	956.8	C_SLV_ENV	Combination	Min	-625.1	100.6	-106.5	-0.7	-60.2	1653.1
1226	0.0	C_SLV_ENV	Combination	Max	559.6	271.8	109.9	0.0	60.7	2426.9
1226	359.2	C_SLV_ENV	Combination	Max	559.6	273.1	109.9	0.0	21.3	2339.9
1226	718.4	C_SLV_ENV	Combination	Max	559.6	274.3	109.9	0.0	18.1	2253.4
1226	1077.6	C_SLV_ENV	Combination	Max	559.6	275.6	109.9	0.0	68.0	2167.9
1226	0.0	C_SLV_ENV	Combination	Min	-540.2	125.1	-139.2	-0.1	-82.1	1653.6
1226	359.2	C_SLV_ENV	Combination	Min	-540.2	126.4	-139.2	-0.1	-32.1	1597.6
1226	718.4	C_SLV_ENV	Combination	Min	-540.2	127.6	-139.2	-0.1	-18.4	1540.2
1226	1077.6	C_SLV_ENV	Combination	Min	-540.2	128.8	-139.2	-0.1	-57.8	1480.9
1227	0.0	C_SLV_ENV	Combination	Max	491.7	321.6	99.9	0.2	60.6	2161.6
1227	456.5	C_SLV_ENV	Combination	Max	491.7	323.2	99.9	0.2	15.3	2029.3
1227	912.9	C_SLV_ENV	Combination	Max	491.7	324.8	99.9	0.2	69.3	1898.7
1227	0.0	C_SLV_ENV	Combination	Min	-434.1	152.8	-174.7	0.0	-90.2	1477.7
1227	456.5	C_SLV_ENV	Combination	Min	-434.1	154.4	-174.7	0.0	-10.7	1392.7
1227	912.9	C_SLV_ENV	Combination	Min	-434.1	156.0	-174.7	0.0	-30.6	1304.6

1228	0.0	C_SLV_ENV	Combination	Max	449.4	314.0	197.4	-0.3	57.4	1897.8
1228	164.7	C_SLV_ENV	Combination	Max	449.4	314.6	197.4	-0.3	70.0	1853.9
1228	0.0	C_SLV_ENV	Combination	Min	-464.1	144.7	-84.0	-0.9	-22.8	1305.6
1228	164.7	C_SLV_ENV	Combination	Min	-464.1	145.3	-84.0	-0.9	-54.1	1273.8
1229	0.0	C_SLV_ENV	Combination	Max	362.2	357.2	179.2	-0.1	101.0	1864.6
1229	359.2	C_SLV_ENV	Combination	Max	362.2	358.4	179.2	-0.1	36.7	1750.0
1229	718.4	C_SLV_ENV	Combination	Max	362.2	359.6	179.2	-0.1	18.5	1637.0
1229	1077.6	C_SLV_ENV	Combination	Max	362.2	360.9	179.2	-0.1	60.5	1527.0
1229	0.0	C_SLV_ENV	Combination	Min	-369.0	169.6	-117.1	-0.1	-65.7	1281.2
1229	359.2	C_SLV_ENV	Combination	Min	-369.0	170.9	-117.1	-0.1	-23.6	1206.1
1229	718.4	C_SLV_ENV	Combination	Min	-369.0	172.1	-117.1	-0.1	-27.7	1128.6
1229	1077.6	C_SLV_ENV	Combination	Min	-369.0	173.3	-117.1	-0.1	-92.1	1047.1
1230	0.0	C_SLV_ENV	Combination	Max	254.6	405.5	166.2	0.0	88.6	1542.2
1230	359.2	C_SLV_ENV	Combination	Max	254.6	406.7	166.2	0.0	29.0	1410.6
1230	718.4	C_SLV_ENV	Combination	Max	254.6	407.9	166.2	0.0	21.2	1280.9
1230	1077.6	C_SLV_ENV	Combination	Max	254.6	409.2	166.2	0.0	72.8	1155.9
1230	0.0	C_SLV_ENV	Combination	Min	-268.0	202.7	-143.7	-0.1	-82.2	1060.0
1230	359.2	C_SLV_ENV	Combination	Min	-268.0	203.9	-143.7	-0.1	-30.6	972.6
1230	718.4	C_SLV_ENV	Combination	Min	-268.0	205.1	-143.7	-0.1	-30.9	882.5
1230	1077.6	C_SLV_ENV	Combination	Min	-268.0	206.4	-143.7	-0.1	-90.5	786.9
1231	0.0	C_SLV_ENV	Combination	Max	145.8	453.6	155.1	0.0	81.4	1162.4
1231	359.2	C_SLV_ENV	Combination	Max	145.8	454.8	155.1	0.0	25.7	1013.0
1231	718.4	C_SLV_ENV	Combination	Max	145.8	456.0	155.1	0.0	26.1	865.8
1231	1077.6	C_SLV_ENV	Combination	Max	145.8	457.3	155.1	0.0	85.0	725.8
1231	0.0	C_SLV_ENV	Combination	Min	-154.8	240.7	-164.0	0.0	-91.7	797.5
1231	359.2	C_SLV_ENV	Combination	Min	-154.8	241.9	-164.0	0.0	-32.9	697.1
1231	718.4	C_SLV_ENV	Combination	Min	-154.8	243.1	-164.0	0.0	-30.2	593.6
1231	1077.6	C_SLV_ENV	Combination	Min	-154.8	244.4	-164.0	0.0	-85.8	482.0
1232	0.0	C_SLV_ENV	Combination	Max	60.2	499.1	140.8	0.1	70.9	724.5
1232	359.2	C_SLV_ENV	Combination	Max	60.2	500.4	140.8	0.1	20.4	557.5

1232	718.4	C_SLV_ENV	Combination	Max	60.2	501.6	140.8	0.1	34.8	392.9
1232	1077.6	C_SLV_ENV	Combination	Max	60.2	502.8	140.8	0.1	99.1	241.1
1232	0.0	C_SLV_ENV	Combination	Min	-52.6	283.4	-179.0	0.0	-93.8	489.7
1232	359.2	C_SLV_ENV	Combination	Min	-52.6	284.6	-179.0	0.0	-29.5	375.1
1232	718.4	C_SLV_ENV	Combination	Min	-52.6	285.9	-179.0	0.0	-30.2	257.3
1232	1077.6	C_SLV_ENV	Combination	Min	-52.6	287.1	-179.0	0.0	-80.8	125.8
1233	0.0	C_SLV_ENV	Combination	Max	73.0	540.4	118.2	0.5	34.9	241.4
1233	484.9	C_SLV_ENV	Combination	Max	73.0	542.1	118.2	0.5	42.0	-10.1
1233	0.0	C_SLV_ENV	Combination	Min	-44.1	331.0	-188.6	-0.1	-49.5	127.3
1233	484.9	C_SLV_ENV	Combination	Min	-44.1	332.7	-188.6	-0.1	-22.5	-44.6
1234	0.0	C_SLV_ENV	Combination	Max	2124.5	89.8	353.7	1.9	69.7	2014.0
1234	484.9	C_SLV_ENV	Combination	Max	2124.5	91.4	353.7	1.9	103.4	1975.5
1234	0.0	C_SLV_ENV	Combination	Min	-2117.2	-826.1	-357.4	-1.9	-70.2	-2042.3
1234	484.9	C_SLV_ENV	Combination	Min	-2117.2	-824.4	-357.4	-1.9	-102.1	-1647.5
1235	0.0	C_SLV_ENV	Combination	Max	1916.4	104.8	317.8	0.1	173.3	2105.4
1235	359.2	C_SLV_ENV	Combination	Max	1916.4	106.0	317.8	0.1	59.2	2072.1
1235	718.4	C_SLV_ENV	Combination	Max	1916.4	107.3	317.8	0.1	55.3	2038.9
1235	1077.6	C_SLV_ENV	Combination	Max	1916.4	108.5	317.8	0.1	170.2	2005.8
1235	0.0	C_SLV_ENV	Combination	Min	-1915.6	-791.0	-319.7	-0.1	-174.4	-1769.1
1235	359.2	C_SLV_ENV	Combination	Min	-1915.6	-789.8	-319.7	-0.1	-59.5	-1489.8
1235	718.4	C_SLV_ENV	Combination	Min	-1915.6	-788.5	-319.7	-0.1	-54.9	-1211.4
1235	1077.6	C_SLV_ENV	Combination	Min	-1915.6	-787.3	-319.7	-0.1	-169.1	-934.1
1236	0.0	C_SLV_ENV	Combination	Max	1694.9	105.9	289.8	0.0	154.1	2160.3
1236	359.2	C_SLV_ENV	Combination	Max	1694.9	107.2	289.8	0.0	50.0	2128.2
1236	718.4	C_SLV_ENV	Combination	Max	1694.9	108.4	289.8	0.0	54.2	2096.2
1236	1077.6	C_SLV_ENV	Combination	Max	1694.9	109.7	289.8	0.0	158.5	2064.5
1236	0.0	C_SLV_ENV	Combination	Min	-1698.7	-735.6	-290.3	-0.1	-154.3	-1081.7
1236	359.2	C_SLV_ENV	Combination	Min	-1698.7	-734.3	-290.3	-0.1	-50.1	-823.8
1236	718.4	C_SLV_ENV	Combination	Min	-1698.7	-733.1	-290.3	-0.1	-54.1	-567.0
1236	1077.6	C_SLV_ENV	Combination	Min	-1698.7	-731.9	-290.3	-0.1	-158.2	-311.3

1237	0.0	C_SLV_ENV	Combination	Max	1490.8	101.2	266.0	0.0	141.0	2214.0
1237	359.2	C_SLV_ENV	Combination	Max	1490.8	102.4	266.0	0.0	45.5	2185.1
1237	718.4	C_SLV_ENV	Combination	Max	1490.8	103.7	266.0	0.0	49.8	2156.7
1237	1077.6	C_SLV_ENV	Combination	Max	1490.8	104.9	266.0	0.0	144.9	2129.0
1237	0.0	C_SLV_ENV	Combination	Min	-1498.0	-672.3	-264.9	-0.1	-140.5	-455.0
1237	359.2	C_SLV_ENV	Combination	Min	-1498.0	-671.1	-264.9	-0.1	-45.4	-221.4
1237	718.4	C_SLV_ENV	Combination	Min	-1498.0	-669.9	-264.9	-0.1	-50.0	10.8
1237	1077.6	C_SLV_ENV	Combination	Min	-1498.0	-668.6	-264.9	-0.1	-145.6	241.4
1238	0.0	C_SLV_ENV	Combination	Max	1313.7	95.1	242.8	0.0	127.7	2262.0
1238	359.2	C_SLV_ENV	Combination	Max	1313.7	96.3	242.8	0.0	40.5	2237.4
1238	718.4	C_SLV_ENV	Combination	Max	1313.7	97.5	242.8	0.0	46.0	2213.8
1238	1077.6	C_SLV_ENV	Combination	Max	1313.7	98.8	242.8	0.0	132.1	2192.1
1238	0.0	C_SLV_ENV	Combination	Min	-1324.9	-605.7	-239.8	-0.1	-126.2	114.5
1238	359.2	C_SLV_ENV	Combination	Min	-1324.9	-604.5	-239.8	-0.1	-40.1	322.1
1238	718.4	C_SLV_ENV	Combination	Min	-1324.9	-603.3	-239.8	-0.1	-46.8	527.7
1238	1077.6	C_SLV_ENV	Combination	Min	-1324.9	-602.0	-239.8	-0.1	-134.0	730.7
1239	0.0	C_SLV_ENV	Combination	Max	1158.6	88.9	219.7	0.3	97.6	2309.1
1239	164.7	C_SLV_ENV	Combination	Max	1158.6	89.5	219.7	0.3	61.5	2300.1
1239	0.0	C_SLV_ENV	Combination	Min	-1174.9	-536.1	-213.9	-0.5	-97.2	619.8
1239	164.7	C_SLV_ENV	Combination	Min	-1174.9	-535.5	-213.9	-0.5	-62.0	702.4
1240	0.0	C_SLV_ENV	Combination	Max	1138.3	37.0	212.9	0.0	80.5	2300.5
1240	456.5	C_SLV_ENV	Combination	Max	1138.3	38.6	212.9	0.0	16.3	2300.3
1240	912.9	C_SLV_ENV	Combination	Max	1138.3	40.2	212.9	0.0	115.2	2303.7
1240	0.0	C_SLV_ENV	Combination	Min	-1149.4	-477.4	-216.6	-0.2	-82.6	702.2
1240	456.5	C_SLV_ENV	Combination	Min	-1149.4	-475.8	-216.6	-0.2	-16.7	902.7
1240	912.9	C_SLV_ENV	Combination	Min	-1149.4	-474.3	-216.6	-0.2	-113.9	1098.2
1241	0.0	C_SLV_ENV	Combination	Max	984.9	35.6	186.2	-0.1	97.7	2417.6
1241	359.2	C_SLV_ENV	Combination	Max	984.9	36.8	186.2	-0.1	30.8	2419.5
1241	718.4	C_SLV_ENV	Combination	Max	984.9	38.1	186.2	-0.1	36.3	2424.0
1241	1077.6	C_SLV_ENV	Combination	Max	984.9	39.3	186.2	-0.1	103.7	2432.1

1241	0.0	C_SLV_ENV	Combination	Min	-998.3	-414.6	-187.6	-0.1	-98.5	987.7
1241	359.2	C_SLV_ENV	Combination	Min	-998.3	-413.3	-187.6	-0.1	-31.1	1121.4
1241	718.4	C_SLV_ENV	Combination	Min	-998.3	-412.1	-187.6	-0.1	-36.1	1251.8
1241	1077.6	C_SLV_ENV	Combination	Min	-998.3	-410.9	-187.6	-0.1	-103.0	1377.5
1242	0.0	C_SLV_ENV	Combination	Max	859.0	40.2	157.1	0.8	78.3	2520.3
1242	478.4	C_SLV_ENV	Combination	Max	859.0	41.9	157.1	0.8	3.2	2526.4
1242	956.8	C_SLV_ENV	Combination	Max	859.0	43.5	157.1	0.8	71.8	2539.8
1242	0.0	C_SLV_ENV	Combination	Min	-876.1	-356.9	-156.8	-1.0	-78.2	1293.6
1242	478.4	C_SLV_ENV	Combination	Min	-876.1	-355.3	-156.8	-1.0	-3.3	1438.2
1242	956.8	C_SLV_ENV	Combination	Min	-876.1	-353.6	-156.8	-1.0	-72.0	1574.0
1243	0.0	C_SLV_ENV	Combination	Max	858.2	43.6	156.0	13.1	71.8	2487.1
1243	120.8	C_SLV_ENV	Combination	Max	858.2	44.2	156.0	13.1	90.6	2495.1
1243	0.0	C_SLV_ENV	Combination	Min	-875.3	-353.7	-155.7	-13.3	-72.0	1628.2
1243	120.8	C_SLV_ENV	Combination	Min	-875.3	-353.2	-155.7	-13.3	-90.8	1657.7
1244	0.0	C_SLV_ENV	Combination	Max	754.8	52.3	127.9	0.0	63.7	2558.1
1244	359.2	C_SLV_ENV	Combination	Max	754.8	53.8	127.9	0.0	17.8	2569.0
1244	718.4	C_SLV_ENV	Combination	Max	754.8	55.3	127.9	0.0	27.7	2586.7
1244	1077.6	C_SLV_ENV	Combination	Max	754.8	56.8	127.9	0.0	73.0	2624.1
1244	0.0	C_SLV_ENV	Combination	Min	-778.1	-305.1	-126.1	-0.3	-63.0	1601.3
1244	359.2	C_SLV_ENV	Combination	Min	-778.1	-303.6	-126.1	-0.3	-17.7	1680.7
1244	718.4	C_SLV_ENV	Combination	Min	-778.1	-302.1	-126.1	-0.3	-28.2	1752.1
1244	1077.6	C_SLV_ENV	Combination	Min	-778.1	-300.6	-126.1	-0.3	-74.1	1802.8
1245	0.0	C_SLV_ENV	Combination	Max	668.6	65.8	95.7	0.1	44.1	2651.4
1245	407.1	C_SLV_ENV	Combination	Max	668.6	67.5	95.7	0.1	5.2	2678.1
1245	814.3	C_SLV_ENV	Combination	Max	668.6	69.2	95.7	0.1	32.8	2713.1
1245	0.0	C_SLV_ENV	Combination	Min	-700.9	-251.1	-92.3	-0.4	-42.4	1784.5
1245	407.1	C_SLV_ENV	Combination	Min	-700.9	-249.4	-92.3	-0.4	-4.9	1832.6
1245	814.3	C_SLV_ENV	Combination	Min	-700.9	-247.7	-92.3	-0.4	-33.9	1870.9
1246	0.0	C_SLV_ENV	Combination	Max	661.5	52.0	88.9	0.6	23.9	2713.4
1246	263.4	C_SLV_ENV	Combination	Max	661.5	53.1	88.9	0.6	48.5	2739.5

1246	0.0	C_SLV_ENV	Combination	Min	-690.4	-220.5	-93.8	-1.0	-27.9	1870.6
1246	263.4	C_SLV_ENV	Combination	Min	-690.4	-219.4	-93.8	-1.0	-51.2	1888.7
1247	0.0	C_SLV_ENV	Combination	Max	578.6	63.2	55.8	-0.1	24.9	2745.9
1247	359.2	C_SLV_ENV	Combination	Max	578.6	64.7	55.8	-0.1	4.9	2761.7
1247	718.4	C_SLV_ENV	Combination	Max	578.6	66.2	55.8	-0.1	15.2	2783.0
1247	1077.6	C_SLV_ENV	Combination	Max	578.6	67.7	55.8	-0.1	36.2	2808.4
1247	0.0	C_SLV_ENV	Combination	Min	-606.6	-169.1	-58.5	-0.2	-26.9	1881.2
1247	359.2	C_SLV_ENV	Combination	Min	-606.6	-167.6	-58.5	-0.2	-5.9	1902.9
1247	718.4	C_SLV_ENV	Combination	Min	-606.6	-166.1	-58.5	-0.2	-15.2	1918.0
1247	1077.6	C_SLV_ENV	Combination	Min	-606.6	-164.6	-58.5	-0.2	-35.2	1927.9
1248	0.0	C_SLV_ENV	Combination	Max	500.9	80.6	19.7	-0.1	5.9	2802.2
1248	379.7	C_SLV_ENV	Combination	Max	500.9	82.2	19.7	-0.1	1.8	2810.4
1248	759.4	C_SLV_ENV	Combination	Max	500.9	83.8	19.7	-0.1	9.1	2822.2
1248	1139.0	C_SLV_ENV	Combination	Max	500.9	85.3	19.7	-0.1	16.9	2835.3
1248	0.0	C_SLV_ENV	Combination	Min	-526.0	-119.1	-20.6	-0.2	-6.7	1930.9
1248	379.7	C_SLV_ENV	Combination	Min	-526.0	-117.5	-20.6	-0.2	-2.2	1936.7
1248	759.4	C_SLV_ENV	Combination	Min	-526.0	-115.9	-20.6	-0.2	-9.1	1937.7
1248	1139.0	C_SLV_ENV	Combination	Min	-526.0	-114.3	-20.6	-0.2	-16.6	1936.2
1249	0.0	C_SLV_ENV	Combination	Max	434.5	101.8	19.5	-0.1	16.2	2825.3
1249	379.7	C_SLV_ENV	Combination	Max	434.5	103.4	19.5	-0.1	8.9	2822.6
1249	759.4	C_SLV_ENV	Combination	Max	434.5	104.9	19.5	-0.1	1.9	2820.7
1249	1139.0	C_SLV_ENV	Combination	Max	434.5	106.5	19.5	-0.1	5.6	2819.2
1249	0.0	C_SLV_ENV	Combination	Min	-460.1	-73.1	-19.1	-0.2	-16.3	1946.1
1249	379.7	C_SLV_ENV	Combination	Min	-460.1	-71.6	-19.1	-0.2	-9.1	1937.3
1249	759.4	C_SLV_ENV	Combination	Min	-460.1	-70.0	-19.1	-0.2	-2.2	1926.5
1249	1139.0	C_SLV_ENV	Combination	Min	-460.1	-68.4	-19.1	-0.2	-6.1	1914.2
1250	0.0	C_SLV_ENV	Combination	Max	378.7	125.7	57.1	-0.1	35.6	2809.7
1250	359.2	C_SLV_ENV	Combination	Max	378.7	127.2	57.1	-0.1	15.1	2793.8
1250	718.4	C_SLV_ENV	Combination	Max	378.7	128.7	57.1	-0.1	5.0	2778.0
1250	1077.6	C_SLV_ENV	Combination	Max	378.7	130.2	57.1	-0.1	25.0	2766.1

1250	0.0	C_SLV_ENV	Combination	Min	-408.4	-29.2	-55.6	-0.2	-35.0	1926.8
1250	359.2	C_SLV_ENV	Combination	Min	-408.4	-27.7	-55.6	-0.2	-15.0	1907.5
1250	718.4	C_SLV_ENV	Combination	Min	-408.4	-26.2	-55.6	-0.2	-5.5	1887.0
1250	1077.6	C_SLV_ENV	Combination	Min	-408.4	-24.7	-55.6	-0.2	-26.0	1861.6
1251	0.0	C_SLV_ENV	Combination	Max	332.5	151.5	92.2	0.6	50.7	2751.3
1251	263.4	C_SLV_ENV	Combination	Max	332.5	152.6	92.2	0.6	26.5	2729.0
1251	0.0	C_SLV_ENV	Combination	Min	-364.5	14.5	-89.5	-0.9	-48.7	1877.3
1251	263.4	C_SLV_ENV	Combination	Min	-364.5	15.6	-89.5	-0.9	-25.2	1855.6
1252	0.0	C_SLV_ENV	Combination	Max	327.5	154.1	92.7	0.1	32.2	2727.9
1252	407.1	C_SLV_ENV	Combination	Max	327.5	155.8	92.7	0.1	4.3	2693.0
1252	814.3	C_SLV_ENV	Combination	Max	327.5	157.5	92.7	0.1	42.9	2660.4
1252	0.0	C_SLV_ENV	Combination	Min	-357.5	24.2	-95.1	-0.4	-34.5	1856.6
1252	407.1	C_SLV_ENV	Combination	Min	-357.5	25.9	-95.1	-0.4	-5.6	1818.3
1252	814.3	C_SLV_ENV	Combination	Min	-357.5	27.6	-95.1	-0.4	-43.3	1776.2
1253	0.0	C_SLV_ENV	Combination	Max	287.2	184.8	126.8	0.0	73.3	2634.2
1253	359.2	C_SLV_ENV	Combination	Max	287.2	186.3	126.8	0.0	27.8	2588.9
1253	718.4	C_SLV_ENV	Combination	Max	287.2	187.8	126.8	0.0	17.7	2544.8
1253	1077.6	C_SLV_ENV	Combination	Max	287.2	189.3	126.8	0.0	63.6	2500.7
1253	0.0	C_SLV_ENV	Combination	Min	-309.5	58.7	-127.8	-0.3	-74.2	1793.3
1253	359.2	C_SLV_ENV	Combination	Min	-309.5	60.2	-127.8	-0.3	-28.2	1750.5
1253	718.4	C_SLV_ENV	Combination	Min	-309.5	61.7	-127.8	-0.3	-17.8	1705.6
1253	1077.6	C_SLV_ENV	Combination	Min	-309.5	63.2	-127.8	-0.3	-63.3	1659.5
1254	0.0	C_SLV_ENV	Combination	Max	256.2	216.7	156.5	13.2	91.0	2477.0
1254	120.8	C_SLV_ENV	Combination	Max	256.2	217.2	156.5	13.2	72.1	2457.3
1254	0.0	C_SLV_ENV	Combination	Min	-273.2	92.1	-156.7	-13.4	-91.3	1676.4
1254	120.8	C_SLV_ENV	Combination	Min	-273.2	92.6	-156.7	-13.4	-72.4	1658.7
1255	0.0	C_SLV_ENV	Combination	Max	255.2	217.2	157.6	0.8	72.1	2452.2
1255	478.4	C_SLV_ENV	Combination	Max	255.2	218.9	157.6	0.8	3.1	2369.9
1255	956.8	C_SLV_ENV	Combination	Max	255.2	220.5	157.6	0.8	78.6	2290.9
1255	0.0	C_SLV_ENV	Combination	Min	-272.3	92.6	-157.8	-1.0	-72.4	1662.2

1255	478.4	C_SLV_ENV	Combination	Min	-272.3	94.3	-157.8	-1.0	-3.3	1595.5
1255	956.8	C_SLV_ENV	Combination	Min	-272.3	95.9	-157.8	-1.0	-78.7	1523.9
1256	0.0	C_SLV_ENV	Combination	Max	232.9	250.7	188.4	-0.1	104.1	2273.8
1256	359.2	C_SLV_ENV	Combination	Max	232.9	252.0	188.4	-0.1	36.4	2199.9
1256	718.4	C_SLV_ENV	Combination	Max	232.9	253.2	188.4	-0.1	31.0	2127.3
1256	1077.6	C_SLV_ENV	Combination	Max	232.9	254.5	188.4	-0.1	98.5	2054.7
1256	0.0	C_SLV_ENV	Combination	Min	-247.3	120.6	-188.0	-0.1	-104.0	1536.7
1256	359.2	C_SLV_ENV	Combination	Min	-247.3	121.8	-188.0	-0.1	-36.5	1476.7
1256	718.4	C_SLV_ENV	Combination	Min	-247.3	123.1	-188.0	-0.1	-31.3	1414.6
1256	1077.6	C_SLV_ENV	Combination	Min	-247.3	124.3	-188.0	-0.1	-98.9	1351.5
1257	0.0	C_SLV_ENV	Combination	Max	218.5	286.8	216.8	0.0	115.9	2036.8
1257	456.5	C_SLV_ENV	Combination	Max	218.5	288.4	216.8	0.0	16.9	1928.3
1257	912.9	C_SLV_ENV	Combination	Max	218.5	289.9	216.8	0.0	82.1	1819.7
1257	0.0	C_SLV_ENV	Combination	Min	-231.7	147.2	-215.9	-0.1	-115.0	1366.1
1257	456.5	C_SLV_ENV	Combination	Min	-231.7	148.7	-215.9	-0.1	-16.5	1275.8
1257	912.9	C_SLV_ENV	Combination	Min	-231.7	150.3	-215.9	-0.1	-82.0	1184.2
1258	0.0	C_SLV_ENV	Combination	Max	215.3	301.8	218.6	0.3	60.4	1817.8
1258	164.7	C_SLV_ENV	Combination	Max	215.3	302.4	218.6	0.3	96.5	1778.0
1258	0.0	C_SLV_ENV	Combination	Min	-229.1	144.3	-219.8	-0.5	-63.9	1185.8
1258	164.7	C_SLV_ENV	Combination	Min	-229.1	144.8	-219.8	-0.5	-99.8	1152.1
1259	0.0	C_SLV_ENV	Combination	Max	205.1	337.2	243.7	0.0	134.3	1758.3
1259	359.2	C_SLV_ENV	Combination	Max	205.1	338.4	243.7	0.0	46.7	1659.2
1259	718.4	C_SLV_ENV	Combination	Max	205.1	339.6	243.7	0.0	40.7	1575.7
1259	1077.6	C_SLV_ENV	Combination	Max	205.1	340.9	243.7	0.0	128.4	1499.3
1259	0.0	C_SLV_ENV	Combination	Min	-215.1	166.2	-244.2	-0.1	-134.7	1165.5
1259	359.2	C_SLV_ENV	Combination	Min	-215.1	167.4	-244.2	-0.1	-47.0	1083.3
1259	718.4	C_SLV_ENV	Combination	Min	-215.1	168.7	-244.2	-0.1	-40.8	984.7
1259	1077.6	C_SLV_ENV	Combination	Min	-215.1	169.9	-244.2	-0.1	-128.3	878.0
1260	0.0	C_SLV_ENV	Combination	Max	200.3	374.2	267.9	0.0	146.5	1461.9
1260	359.2	C_SLV_ENV	Combination	Max	200.3	375.5	267.9	0.0	50.3	1376.8

1260	718.4	C_SLV_ENV	Combination	Max	200.3	376.7	267.9	0.0	45.9	1291.7
1260	1077.6	C_SLV_ENV	Combination	Max	200.3	378.0	267.9	0.0	142.2	1206.6
1260	0.0	C_SLV_ENV	Combination	Min	-207.1	189.6	-268.0	-0.1	-146.6	909.2
1260	359.2	C_SLV_ENV	Combination	Min	-207.1	190.8	-268.0	-0.1	-50.3	791.3
1260	718.4	C_SLV_ENV	Combination	Min	-207.1	192.1	-268.0	-0.1	-45.9	672.6
1260	1077.6	C_SLV_ENV	Combination	Min	-207.1	193.3	-268.0	-0.1	-142.2	552.9
1261	0.0	C_SLV_ENV	Combination	Max	233.5	409.9	291.6	0.0	159.1	1169.2
1261	359.2	C_SLV_ENV	Combination	Max	233.5	411.2	291.6	0.0	54.3	1076.4
1261	718.4	C_SLV_ENV	Combination	Max	233.5	412.4	291.6	0.0	50.4	983.9
1261	1077.6	C_SLV_ENV	Combination	Max	233.5	413.7	291.6	0.0	155.1	891.9
1261	0.0	C_SLV_ENV	Combination	Min	-237.6	212.4	-291.6	-0.1	-159.1	584.4
1261	359.2	C_SLV_ENV	Combination	Min	-237.6	213.6	-291.6	-0.1	-54.3	453.2
1261	718.4	C_SLV_ENV	Combination	Min	-237.6	214.8	-291.6	-0.1	-50.4	320.8
1261	1077.6	C_SLV_ENV	Combination	Min	-237.6	216.1	-291.6	-0.1	-155.2	187.1
1262	0.0	C_SLV_ENV	Combination	Max	269.4	443.2	317.7	0.0	169.0	856.5
1262	359.2	C_SLV_ENV	Combination	Max	269.4	444.5	317.7	0.0	54.9	757.6
1262	718.4	C_SLV_ENV	Combination	Max	269.4	445.7	317.7	0.0	59.2	659.3
1262	1077.6	C_SLV_ENV	Combination	Max	269.4	447.0	317.7	0.0	173.2	561.4
1262	0.0	C_SLV_ENV	Combination	Min	-269.5	235.7	-317.5	-0.1	-168.9	215.6
1262	359.2	C_SLV_ENV	Combination	Min	-269.5	237.0	-317.5	-0.1	-54.9	70.2
1262	718.4	C_SLV_ENV	Combination	Min	-269.5	238.2	-317.5	-0.1	-59.2	-76.6
1262	1077.6	C_SLV_ENV	Combination	Min	-269.5	239.4	-317.5	-0.1	-173.3	-224.9
1263	0.0	C_SLV_ENV	Combination	Max	300.9	471.9	348.5	1.9	102.4	534.0
1263	484.9	C_SLV_ENV	Combination	Max	300.9	473.6	348.5	1.9	67.7	393.0
1263	0.0	C_SLV_ENV	Combination	Min	-295.4	261.3	-348.3	-1.9	-101.2	-205.7
1263	484.9	C_SLV_ENV	Combination	Min	-295.4	263.0	-348.3	-1.9	-66.6	-421.1

Reazioni vincolari e spostamenti – FASE sismica

Per le reazioni vincolari dei dispositivi di vincolo e i relativi spostamenti/rotazioni, si rimanda al §5.7.

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Geometria

Elenco vincoli nodi

Simbologia

- Vn = Numero del vincolo nodo
- Comm. = Commento
- Sx = Spostamento in dir. X (L=libero, B=bloccato, E=elastico)
- Sy = Spostamento in dir. Y (L=libero, B=bloccato, E=elastico)
- Sz = Spostamento in dir. Z (L=libero, B=bloccato, E=elastico)
- Rx = Rotazione intorno all'asse X (L=libera, B=bloccata, E=elastica)
- Ry = Rotazione intorno all'asse Y (L=libera, B=bloccata, E=elastica)
- Rz = Rotazione intorno all'asse Z (L=libera, B=bloccata, E=elastica)
- RL = Rotazione libera
- Ly = Lunghezza (dir. Y locale)
- Lz = Larghezza (dir. Z locale)
- Kt = Coeff. di sottofondo su suolo elastico alla Winkler

Vn	Comm.	Sx	Sy	Sz	Rx	Ry	Rz	RL	Ly	Lz	Kt	Vn	Comm.	Sx	Sy	Sz	Rx	Ry	Rz	RL	Ly	Lz	Kt
									<m>	<m>	<daN/cm<										<m>	<m>	<daN/cm<
1	Libero	L	L	L	L	L	L					6	appoggio	B	B	B	L	L	B				

Elenco nodi

Simbologia

- Nodo = Numero del nodo
- X = Coordinata X del nodo
- Y = Coordinata Y del nodo
- Z = Coordinata Z del nodo
- Imp. = Numero dell'impalcato
- Vn = Numero del vincolo nodo

Nodo	X	Y	Z	Imp.	Vn	Nodo	X	Y	Z	Imp.	Vn	Nodo	X	Y	Z	Imp.	Vn
	<m>	<m>	<m>				<m>	<m>	<m>				<m>	<m>	<m>		
-1698	5.76	13.80	0.15	0	1	-1697	6.12	13.80	0.15	0	1	-1696	6.48	13.80	0.16	0	1
-1695	6.84	13.80	0.16	0	1	-1694	7.21	13.80	0.16	0	1	-1693	7.57	13.80	0.16	0	1
-1692	7.93	13.80	0.16	0	1	-1691	8.29	13.80	0.16	0	1	-1690	8.66	13.80	0.16	0	1
-1689	9.02	13.80	0.16	0	1	-1688	9.39	13.80	0.16	0	1	-1687	9.75	13.80	0.16	0	1
-1686	9.60	13.43	0.16	0	1	-1685	9.45	13.06	0.16	0	1	-1684	9.30	12.69	0.16	0	1
-1683	9.15	12.32	0.16	0	1	-1682	9.01	11.95	0.15	0	1	-1681	8.86	11.59	0.15	0	1
-1680	8.72	11.22	0.15	0	1	-1679	8.57	10.86	0.15	0	1	-1678	8.42	10.50	0.15	0	1
-1677	8.28	10.13	0.15	0	1	-1676	8.13	9.76	0.15	0	1	-1675	7.98	9.39	0.15	0	1
-1674	7.83	9.02	0.15	0	1	-1673	7.68	8.65	0.15	0	1	-1672	7.53	8.27	0.15	0	1
-1671	7.38	7.91	0.15	0	1	-1670	7.24	7.54	0.15	0	1	-1669	7.09	7.18	0.15	0	1
-1668	6.94	6.81	0.15	0	1	-1667	6.80	6.45	0.15	0	1	-1666	6.65	6.08	0.15	0	1
-1665	6.50	5.72	0.15	0	1	-1664	6.36	5.35	0.15	0	1	-1663	6.21	4.99	0.15	0	1
-1662	6.06	4.62	0.15	0	1	-1661	5.91	4.25	0.15	0	1	-1660	5.77	3.88	0.15	0	1
-1659	5.63	3.54	0.15	0	1	-1658	5.47	3.14	0.15	0	1	-1657	5.30	2.71	0.15	0	1
-1656	5.17	2.40	0.15	0	1	-1655	5.02	2.03	0.15	0	1	-1654	4.88	1.67	0.15	0	1
-1653	4.73	1.30	0.15	0	1	-1652	4.36	1.30	0.15	0	1	-1651	4.00	1.30	0.15	0	1
-1650	3.63	1.30	0.15	0	1	-1649	3.27	1.30	0.15	0	1	-1648	2.91	1.30	0.15	0	1
-1647	2.55	1.30	0.14	0	1	-1646	2.18	1.30	0.14	0	1	-1645	1.82	1.30	0.14	0	1
-1644	1.46	1.30	0.14	0	1	-1643	1.10	1.30	0.14	0	1	-1642	0.74	1.30	0.14	0	1
-1641	0.13	0.33	-0.60	0	1	-1640	0.26	0.65	-0.60	0	1	-1639	0.39	0.97	-0.60	0	1
-1638	2.44	6.08	-0.60	0	1	-1637	6.11	11.96	-0.60	0	1	-1636	9.60	13.43	3.62	0	1
-1635	9.60	13.43	3.24	0	1	-1634	9.60	13.43	2.86	0	1	-1633	9.60	13.43	2.48	0	1
-1628	9.44	13.02	3.62	0	1	-1627	9.44	13.02	3.24	0	1	-1626	9.44	13.02	2.86	0	1
-1625	9.44	13.02	2.48	0	1	-1620	9.28	12.63	3.62	0	1	-1619	9.28	12.63	3.24	0	1
-1618	9.28	12.63	2.86	0	1	-1617	9.28	12.63	2.48	0	1	-1612	9.11	12.21	3.62	0	1
-1611	9.11	12.21	3.24	0	1	-1610	9.11	12.21	2.86	0	1	-1609	9.11	12.21	2.48	0	1
-1608	8.98	11.87	3.62	0	1	-1607	8.98	11.87	3.24	0	1	-1606	8.98	11.87	2.86	0	1
-1605	8.98	11.87	2.48	0	1	-1604	8.84	11.54	3.62	0	1	-1603	8.84	11.54	3.24	0	1
-1602	8.84	11.54	2.86	0	1	-1601	8.84	11.54	2.48	0	1	-1600	8.71	11.20	3.62	0	1
-1599	8.71	11.20	3.24	0	1	-1598	8.71	11.20	2.86	0	1	-1597	8.71	11.20	2.48	0	1
-1596	8.57	10.87	3.62	0	1	-1595	8.57	10.87	3.24	0	1	-1594	8.57	10.87	2.86	0	1
-1593	8.57	10.87	2.48	0	1	-1592	8.44	10.53	3.62	0	1	-1591	8.44	10.53	3.24	0	1
-1590	8.44	10.53	2.86	0	1	-1589	8.44	10.53	2.48	0	1	-1588	8.29	10.16	3.62	0	1
-1587	8.29	10.17	3.24	0	1	-1586	8.29	10.17	2.86	0	1	-1585	8.29	10.18	2.48	0	1
-1584	8.16	9.83	3.62	0	1	-1583	8.16	9.83	3.24	0	1	-1582	8.16	9.83	2.86	0	1
-1581	8.16	9.83	2.48	0	1	-1576	7.98	9.38	3.62	0	1	-1575	7.98	9.39	3.24	0	1
-1574	7.98	9.40	2.86	0	1	-1573	7.99	9.41	2.48	0	1	-1568	7.82	9.00	3.62	0	1
-1567	7.82	9.00	3.24	0	1	-1566	7.82	9.00	2.86	0	1	-1565	7.82	9.00	2.48	0	1
-1560	7.68	8.64	3.62	0	1	-1559	7.68	8.64	3.24	0	1	-1558	7.68	8.64	2.86	0	1
-1557	7.68	8.64	2.48	0	1	-1552	7.48	8.16	3.62	0	1	-1551	7.48	8.16	3.24	0	1
-1550	7.48	8.16	2.86	0	1	-1549	7.48	8.16	2.48	0	1	-1548	7.34	7.81	3.62	0	1
-1547	7.34	7.81	3.24	0	1	-1546	7.34	7.81	2.86	0	1	-1545	7.34	7.81	2.48	0	1
-1544	7.20	7.46	3.62	0	1	-1543	7.20	7.46	3.24	0	1	-1542	7.20	7.46	2.86	0	1
-1541	7.20	7.46	2.48	0	1	-1540	7.04	7.05	3.62	0	1	-1539	7.05	7.07	3.24	0	1

Relazione di calcolo

-57	8.79	6.45	-0.60	0	1	-56	6.65	6.08	-0.60	0	1	-55	8.64	6.08	-0.60	0	1
-54	6.50	5.71	-0.60	0	1	-53	8.49	5.71	-0.60	0	1	-52	6.35	5.34	-0.60	0	1
-51	8.34	5.34	-0.60	0	1	-50	6.21	4.98	-0.60	0	1	-49	8.20	4.98	-0.60	0	1
-48	6.06	4.61	-0.60	0	1	-47	8.05	4.61	-0.60	0	1	-46	5.91	4.24	-0.60	0	1
-45	7.90	4.24	-0.60	0	1	-44	5.76	3.87	-0.60	0	1	-43	7.75	3.87	-0.60	0	1
-42	5.63	3.54	-0.60	0	1	-41	7.61	3.51	-0.60	0	1	-40	5.47	3.14	-0.60	0	1
-39	7.46	3.14	-0.60	0	1	-38	5.30	2.71	-0.60	0	1	-37	7.31	2.77	-0.60	0	1
-36	5.17	2.40	-0.60	0	1	-35	7.16	2.40	-0.60	0	1	-34	5.03	2.04	-0.60	0	1
-33	7.02	2.04	-0.60	0	1	-32	4.88	1.67	-0.60	0	1	-31	6.87	1.67	-0.60	0	1
-30	7.24	7.55	-0.60	0	1	-29	8.29	13.80	-0.60	0	1	-28	3.27	1.30	-0.60	0	1
-24	5.76	13.80	2.00	0	1	-20	0.74	1.30	2.00	0	1	-17	10.23	12.17	2.10	0	1
-16	9.28	12.63	2.10	0	1	-15	9.27	9.79	2.10	0	1	-14	9.44	13.02	2.10	0	1
-13	8.32	7.42	2.10	0	1	-12	7.34	7.81	2.10	0	1	-11	7.36	5.04	2.10	0	1
-10	6.34	2.70	2.10	0	1	-9	6.53	5.78	2.10	0	1	-8	5.63	3.54	2.10	0	1
-7	7.20	7.46	2.10	0	1	-6	5.30	2.71	2.10	0	1	-5	8.16	9.83	2.10	0	1
-4	9.11	12.21	2.10	0	1	-3	8.44	10.53	2.10	0	1	-2	6.25	5.08	2.10	0	1
-1	7.48	8.16	2.10	0	1	1	4.73	1.30	-0.60	0	1	2	9.75	13.80	-0.60	0	1
3	5.76	13.80	-0.60	0	1	4	0.74	1.30	-0.60	0	1	5	4.73	1.30	2.10	0	1
6	9.75	13.80	2.10	0	1	7	4.73	1.30	4.00	0	1	8	9.75	13.80	4.00	0	1
9	0.74	1.30	4.00	0	1	10	5.76	13.80	4.00	0	1	11	6.06	15.10	-0.60	0	1
12	0.00	0.00	-0.60	0	1	13	6.20	0.00	-0.60	0	1	19	0.52	1.30	-0.60	0	1
20	0.22	0.00	-0.60	0	1	21	2.75	0.00	-0.60	0	1	22	4.21	0.00	-0.60	0	1
23	6.72	1.30	-0.60	0	1	24	11.74	13.80	-0.60	0	1	25	12.26	15.10	-0.60	0	1
26	10.27	15.10	-0.60	0	1	27	6.28	15.10	-0.60	0	1	28	5.54	13.80	-0.60	0	1
29	3.03	7.55	-0.60	0	1	30	3.25	7.55	-0.60	0	1	31	5.78	7.55	-0.60	0	1
32	9.23	7.55	-0.60	0	1	33	8.81	15.10	-0.60	0	1	34	4.44	8.90	-0.60	0	6
35	3.34	6.20	-0.60	0	6	36	5.52	11.60	-0.60	0	6	37	6.60	14.30	-0.60	0	6
38	10.38	14.30	-0.60	0	6	39	1.18	0.80	-0.60	0	6	40	4.95	0.80	-0.60	0	6
41	6.04	3.50	-0.60	0	6	42	7.12	6.20	-0.60	0	6	43	8.21	8.90	-0.60	0	6
44	2.27	3.50	-0.60	0	6	45	9.29	11.60	-0.60	0	6						

Carichi

Elenco tipi CCE

Simbologia

Tipo CCE = Tipo condizione di carico elementare

Comm. = Commento

Tipo = Tipologia

G = Permanente

Qv = Variabile vento

Q = Variabile

I = Da ignorare

A = Azione eccezionale

P = Precompressione

Durata = Durata del carico

N = Non definita

P = Permanente

L = Lunga

M = Media

B = Breve

I = Istantanea

$\gamma_{min.}$ = Coeff. $\gamma_{min.}$

γ_{max} = Coeff. γ_{max}

ψ_0 = Coeff. ψ_0

ψ_1 = Coeff. ψ_1

ψ_2 = Coeff. ψ_2

$\psi_{0,s}$ = Coeff. ψ_0 sismico (D.M. 96)

Tipo CCE	Comm.	Tipo	Durata	$\gamma_{min.}$	γ_{max}	ψ_0	ψ_1	ψ_2	$\psi_{0,s}$
23	Reazioni vincolari	G	N	1.00	1.00				
1	D.M. 18 Permanenti strutturali	G	P	1.00	1.30				
2	D.M. 18 Permanenti non strutturali	G	L	0.80	1.50				
21	Tandem distribuito	Q	N	1.35	1.35	0.75	0.40	0.00	0.00
22	Incremento sismico terreno	Q	N	1.00	1.00	0.00	0.00	1.00	0.00

Condizioni di carico elementari

Simbologia

CCE = Numero della condizione di carico elementare

Comm. = Commento

Tipo CCE = Tipo di CCE per calcolo agli stati limite

Sic. = Contributo alla sicurezza

F = a favore

S = a sfavore

A = ambigua

Var. = Tipo di variabilità

Relazione di calcolo

B = di base
 I = indipendente
 A = ambigua
 s =Coeff. di riduzione (T.A. o S.L. D.M. 96)
 Dir. =Direzione del vento
 Tipo =Tipologia di pressione vento
 M = Massimizzata
 E = Esterna
 I = Interna
 Mx =Moltiplicatore della massa in dir. X
 My =Moltiplicatore della massa in dir. Y
 Mz =Moltiplicatore della massa in dir. Z
 Jpx =Moltiplicatore del momento d'inerzia intorno all'asse X
 Jpy =Moltiplicatore del momento d'inerzia intorno all'asse Y
 Jpz =Moltiplicatore del momento d'inerzia intorno all'asse Z

CCE	Comm.	Tipo CCE	Sic.	Var.	s	Dir. <grad>	Tipo	Mx	My	Mz	Jpx	Jpy	Jpz
1	peso proprio	1S	--	--	1.00	--	--	1.00	1.00	0.00	0.00	0.00	1.00
2	Peso terreno e pav.	2S	--	--	1.00	--	--	0.00	0.00	0.00	0.00	0.00	1.00
3	spinta statica terreno	2S	--	--	1.00	--	--	0.00	0.00	0.00	0.00	0.00	1.00
4	spinta sovraccarico	21S	B	--	1.00	--	--	0.00	0.00	0.00	0.00	0.00	1.00
5	Spinta sismica	22S	B	--	1.00	--	--	0.00	0.00	0.00	0.00	0.00	1.00
6	SLU Env Max	23S	--	--	1.00	--	--	0.00	0.00	0.00	0.00	0.00	1.00
7	SLU Env Min	23S	--	--	1.00	--	--	0.00	0.00	0.00	0.00	0.00	1.00
8	SLE rara Env Max	23S	--	--	1.00	--	--	0.00	0.00	0.00	0.00	0.00	1.00
9	SLE Rara Env Min	23S	--	--	1.00	--	--	0.00	0.00	0.00	0.00	0.00	1.00
10	SLE q. permanente	23S	--	--	1.00	--	--	0.00	0.00	0.00	0.00	0.00	1.00
11	SLVX+0.3y	23S	--	--	1.00	--	--	0.00	0.00	0.00	0.00	0.00	0.00
12	SLVX-0.3y	23S	--	--	1.00	--	--	0.00	0.00	0.00	0.00	0.00	0.00
13	SLV-X-0.3y	23S	--	--	1.00	--	--	0.00	0.00	0.00	0.00	0.00	0.00
14	SLV-X+0.3y	23S	--	--	1.00	--	--	0.00	0.00	0.00	0.00	0.00	0.00
15	SLV Y+0.3X	23S	--	--	1.00	--	--	0.00	0.00	0.00	0.00	0.00	0.00
16	SLV Y-0.3x	23S	--	--	1.00	--	--	0.00	0.00	0.00	0.00	0.00	0.00
17	SLV -Y+0.3x	23S	--	--	1.00	--	--	0.00	0.00	0.00	0.00	0.00	0.00
18	SLV -Y-0.3x	23S	--	--	1.00	--	--	0.00	0.00	0.00	0.00	0.00	0.00
19	Spinta inerziale terreno	22S	B	--	1.00	--	--	0.00	0.00	0.00	0.00	0.00	0.00

Elenco carichi nodi Condizione di carico n. 6: SLU Env Max

Carichi concentrati

Simbologia

Nodo = Numero del nodo
 Fx = Componente X della forza applicata
 Fy = Componente Y della forza applicata
 Fz = Componente Z della forza applicata
 Mx = Momento intorno all'asse X
 My = Momento intorno all'asse Y
 Mz = Momento intorno all'asse Z

Nodo	Fx <daN>	Fy <daN>	Fz <daN>	Mx <daNm>	My <daNm>	Mz <daNm>
-17	0.00	0.00	61790.00	0.00	0.00	0.00
-13	-3560.00	8870.00	64050.00	0.00	0.00	0.00
-10	0.00	0.00	82200.00	0.00	0.00	0.00

Nodo	Fx <daN>	Fy <daN>	Fz <daN>	Mx <daNm>	My <daNm>	Mz <daNm>
-15	0.00	0.00	61790.00	0.00	0.00	0.00
-11	0.00	0.00	71900.00	0.00	0.00	0.00

Condizione di carico n. 7: SLU Env Min

Carichi concentrati

Nodo	Fx <daN>	Fy <daN>	Fz <daN>	Mx <daNm>	My <daNm>	Mz <daNm>
-17	0.00	0.00	66110.00	0.00	0.00	0.00
-13	-61820.00	-6090.00	53510.00	0.00	0.00	0.00
-10	0.00	0.00	77800.00	0.00	0.00	0.00

Nodo	Fx <daN>	Fy <daN>	Fz <daN>	Mx <daNm>	My <daNm>	Mz <daNm>
-15	0.00	0.00	60160.00	0.00	0.00	0.00
-11	0.00	0.00	68830.00	0.00	0.00	0.00

Condizione di carico n. 8: SLE rara Env Max

Carichi concentrati

Nodo	Fx <daN>	Fy <daN>	Fz <daN>	Mx <daNm>	My <daNm>	Mz <daNm>
-17	0.00	0.00	51470.00	0.00	0.00	0.00
-13	-2370.00	5910.00	45750.00	0.00	0.00	0.00
-10	0.00	0.00	58600.00	0.00	0.00	0.00

Nodo	Fx <daN>	Fy <daN>	Fz <daN>	Mx <daNm>	My <daNm>	Mz <daNm>
-15	0.00	0.00	44770.00	0.00	0.00	0.00
-11	0.00	0.00	51240.00	0.00	0.00	0.00

Condizione di carico n. 9: SLE Rara Env Min

Carichi concentrati

Nodo	Fx <daN>	Fy <daN>	Fz <daN>	Mx <daNm>	My <daNm>	Mz <daNm>
-17	0.00	0.00	47340.00	0.00	0.00	0.00

Nodo	Fx <daN>	Fy <daN>	Fz <daN>	Mx <daNm>	My <daNm>	Mz <daNm>
-15	0.00	0.00	43074.00	0.00	0.00	0.00

Relazione di calcolo

-17	0.00	0.00	60330.00	0.00	0.00	0.00	-15	0.00	0.00	70000.00	0.00	0.00	0.00
-13	76800.00	256000.00	83900.00	0.00	0.00	0.00	-11	0.00	0.00	75320.00	0.00	0.00	0.00
-10	0.00	0.00	57470.00	0.00	0.00	0.00							

Elenco carichi aste Condizione di carico n. 1: peso proprio

Elenco peso proprio aste

Simbologia

Sez. = Numero della sezione
 Comm. = Commento
 A = Area
 Mat. = Materiale
 P = Peso specifico
 PL = Peso specifico a metro lineare

Sez.	Comm.	A <cmq>	Mat.	P <daN/mc>	PL <daN/m>
6	baggioli	5000.000000	Baggioli	0.00	0.00

Elenco carichi elementi bidimensionali Elenco peso proprio elementi bidimensionali

Simbologia

Tb = Numero del tipo muro/elemento bidimensionale
 Comm. = Commento
 Spess. = Spessore
 Mat. = Materiale
 P = Peso specifico
 PQ = Peso specifico per unità di superficie

Tb	Comm.	Spess. <cm>	Mat.	P <daN/mc>	PQ <daN/mq>
1	Muri d'ala sp.50cm	50.00	Calcestruzzo classe C28/35	2500.00	1250.00
2	Fusto spalla sp. 1.5m	150.00	Calcestruzzo classe C30/37	2500.00	3750.00
3	Paraghiaia sp.0.4m	40.00	Calcestruzzo classe C28/35	2500.00	1000.00
4	Plinto spalla sp.1.5m	150.00	Calcestruzzo classe C25/30	2500.00	3750.00

Condizione di carico n. 2: Peso terreno e pav.

Carichi uniformi

Simbologia

Bid. = Numero del muro/elemento bidimensionale
 N1 = Nodo1
 N2 = Nodo2
 N3 = Nodo3
 N4 = Nodo4
 T = Tipo di carico
 PP = Peso proprio
 VE = Vento
 M = Manuale
 DC = Direzione del carico
 G = secondo gli assi globali
 L = secondo gli assi locali
 Qx = Carico in dir. X
 Qy = Carico in dir. Y
 Qz = Carico in dir. Z

Bid.	N1	N2	N3	N4	TDC	Qx <daN/mq>	Qy <daN/mq>	Qz <daN/mq>
0	21	-279	-288	-285	MG	0.00	0.00	8040.00
0	23	-31	-71	-64	MG	0.00	0.00	8040.00
0	19	-1639	-311	4	MG	0.00	0.00	8040.00
0	22	-257	-267	-262	MG	0.00	0.00	8040.00
0	20	-297	-312	-309	MG	0.00	0.00	8040.00
0	24	-235	-245	-167	MG	0.00	0.00	8040.00
0	26	-1380	-1383	-240	MG	0.00	0.00	8040.00
0	3	-1190	-1210	28	MG	0.00	0.00	8040.00
0	29	-912	-778	30	MG	0.00	0.00	8040.00
0	30	-778	-816	-810	MG	0.00	0.00	8040.00
0	28	-1062	-928	3	MG	0.00	0.00	8040.00
0	3	-928	-966	-960	MG	0.00	0.00	8040.00
0	31	-779	-1081	-1078	MG	0.00	0.00	8040.00
0	-29	-929	-1132	-1129	MG	0.00	0.00	8040.00
0	32	-135	-171	-63	MG	0.00	0.00	8040.00
0	-64	-71	-72	-66	MG	0.00	0.00	8040.00
0	-66	-72	-73	-68	MG	0.00	0.00	8040.00
0	-68	-73	-74	-70	MG	0.00	0.00	8040.00
0	-70	-74	-32	1	MG	0.00	0.00	8040.00
0	-31	-33	-75	-71	MG	0.00	0.00	8040.00

Relazione di calcolo

0	-71	-75	-76	-72	MG	0.00	0.00	8040.00
0	-72	-76	-77	-73	MG	0.00	0.00	8040.00
0	-73	-77	-78	-74	MG	0.00	0.00	8040.00
0	-74	-78	-34	-32	MG	0.00	0.00	8040.00
0	-33	-35	-79	-75	MG	0.00	0.00	8040.00
0	-75	-79	-80	-76	MG	0.00	0.00	8040.00
0	-76	-80	-81	-77	MG	0.00	0.00	8040.00
0	-77	-81	-82	-78	MG	0.00	0.00	8040.00
0	-78	-82	-36	-34	MG	0.00	0.00	8040.00
0	-35	-37	-83	-79	MG	0.00	0.00	8040.00
0	-79	-83	-84	-80	MG	0.00	0.00	8040.00
0	-80	-84	-85	-81	MG	0.00	0.00	8040.00
0	-81	-85	-86	-82	MG	0.00	0.00	8040.00
0	-82	-86	-38	-36	MG	0.00	0.00	8040.00
0	-37	-39	-87	-83	MG	0.00	0.00	8040.00
0	-83	-87	-88	-84	MG	0.00	0.00	8040.00
0	-84	-88	-89	-85	MG	0.00	0.00	8040.00
0	-85	-89	-90	-86	MG	0.00	0.00	8040.00
0	-86	-90	-40	-38	MG	0.00	0.00	8040.00
0	-39	-41	-91	-87	MG	0.00	0.00	8040.00
0	-87	-91	-92	-88	MG	0.00	0.00	8040.00
0	-88	-92	-93	-89	MG	0.00	0.00	8040.00
0	41	-98	-44	-42	MG	0.00	0.00	8040.00
0	-93	-97	-98	41	MG	0.00	0.00	8040.00
0	-41	-43	-95	-91	MG	0.00	0.00	8040.00
0	-91	-95	-96	-92	MG	0.00	0.00	8040.00
0	-92	-96	-97	-93	MG	0.00	0.00	8040.00
0	-90	41	-42	-40	MG	0.00	0.00	8040.00
0	-89	-93	41	-90	MG	0.00	0.00	8040.00
0	-43	-45	-99	-95	MG	0.00	0.00	8040.00
0	-95	-99	-100	-96	MG	0.00	0.00	8040.00
0	-96	-100	-101	-97	MG	0.00	0.00	8040.00
0	-97	-101	-102	-98	MG	0.00	0.00	8040.00
0	-98	-102	-46	-44	MG	0.00	0.00	8040.00
0	-45	-47	-103	-99	MG	0.00	0.00	8040.00
0	-99	-103	-104	-100	MG	0.00	0.00	8040.00
0	-100	-104	-105	-101	MG	0.00	0.00	8040.00
0	-101	-105	-106	-102	MG	0.00	0.00	8040.00
0	-102	-106	-48	-46	MG	0.00	0.00	8040.00
0	-47	-49	-107	-103	MG	0.00	0.00	8040.00
0	-103	-107	-108	-104	MG	0.00	0.00	8040.00
0	-104	-108	-109	-105	MG	0.00	0.00	8040.00
0	-105	-109	-110	-106	MG	0.00	0.00	8040.00
0	-106	-110	-50	-48	MG	0.00	0.00	8040.00
0	-49	-51	-111	-107	MG	0.00	0.00	8040.00
0	-107	-111	-112	-108	MG	0.00	0.00	8040.00
0	-108	-112	-113	-109	MG	0.00	0.00	8040.00
0	-109	-113	-114	-110	MG	0.00	0.00	8040.00
0	-110	-114	-52	-50	MG	0.00	0.00	8040.00
0	-51	-53	-115	-111	MG	0.00	0.00	8040.00
0	-111	-115	-116	-112	MG	0.00	0.00	8040.00
0	-112	-116	-117	-113	MG	0.00	0.00	8040.00
0	-113	-117	-118	-114	MG	0.00	0.00	8040.00
0	-114	-118	-54	-52	MG	0.00	0.00	8040.00
0	-53	-55	-119	-115	MG	0.00	0.00	8040.00
0	-115	-119	-120	-116	MG	0.00	0.00	8040.00
0	-116	-120	-121	-117	MG	0.00	0.00	8040.00
0	42	-126	-58	-56	MG	0.00	0.00	8040.00
0	-121	-125	-126	42	MG	0.00	0.00	8040.00
0	-55	-57	-123	-119	MG	0.00	0.00	8040.00
0	-119	-123	-124	-120	MG	0.00	0.00	8040.00
0	-120	-124	-125	-121	MG	0.00	0.00	8040.00
0	-118	42	-56	-54	MG	0.00	0.00	8040.00
0	-117	-121	42	-118	MG	0.00	0.00	8040.00
0	-57	-59	-127	-123	MG	0.00	0.00	8040.00
0	-123	-127	-128	-124	MG	0.00	0.00	8040.00
0	-124	-128	-129	-125	MG	0.00	0.00	8040.00
0	-125	-129	-130	-126	MG	0.00	0.00	8040.00
0	-126	-130	-60	-58	MG	0.00	0.00	8040.00
0	-59	-61	-131	-127	MG	0.00	0.00	8040.00
0	-127	-131	-132	-128	MG	0.00	0.00	8040.00
0	-128	-132	-133	-129	MG	0.00	0.00	8040.00
0	-129	-133	-134	-130	MG	0.00	0.00	8040.00
0	-130	-134	-62	-60	MG	0.00	0.00	8040.00
0	-61	32	-63	-131	MG	0.00	0.00	8040.00
0	-131	-63	-65	-132	MG	0.00	0.00	8040.00
0	-132	-65	-67	-133	MG	0.00	0.00	8040.00
0	-133	-67	-69	-134	MG	0.00	0.00	8040.00
0	-134	-69	-30	-62	MG	0.00	0.00	8040.00

Relazione di calcolo

0	-63	-171	-172	-65	MG	0.00	0.00	8040.00
0	-65	-172	-173	-67	MG	0.00	0.00	8040.00
0	-67	-173	-174	-69	MG	0.00	0.00	8040.00
0	-69	-174	-136	-30	MG	0.00	0.00	8040.00
0	-135	-137	-175	-171	MG	0.00	0.00	8040.00
0	-171	-175	-176	-172	MG	0.00	0.00	8040.00
0	-172	-176	-177	-173	MG	0.00	0.00	8040.00
0	-173	-177	-178	-174	MG	0.00	0.00	8040.00
0	-174	-178	-138	-136	MG	0.00	0.00	8040.00
0	-137	-139	-179	-175	MG	0.00	0.00	8040.00
0	-175	-179	-180	-176	MG	0.00	0.00	8040.00
0	-176	-180	-181	-177	MG	0.00	0.00	8040.00
0	-177	-181	-182	-178	MG	0.00	0.00	8040.00
0	-178	-182	-140	-138	MG	0.00	0.00	8040.00
0	-139	-141	-183	-179	MG	0.00	0.00	8040.00
0	-179	-183	-184	-180	MG	0.00	0.00	8040.00
0	-180	-184	-185	-181	MG	0.00	0.00	8040.00
0	43	-190	-144	-142	MG	0.00	0.00	8040.00
0	-185	-189	-190	43	MG	0.00	0.00	8040.00
0	-141	-143	-187	-183	MG	0.00	0.00	8040.00
0	-183	-187	-188	-184	MG	0.00	0.00	8040.00
0	-184	-188	-189	-185	MG	0.00	0.00	8040.00
0	-182	43	-142	-140	MG	0.00	0.00	8040.00
0	-181	-185	43	-182	MG	0.00	0.00	8040.00
0	-143	-145	-191	-187	MG	0.00	0.00	8040.00
0	-187	-191	-192	-188	MG	0.00	0.00	8040.00
0	-188	-192	-193	-189	MG	0.00	0.00	8040.00
0	-189	-193	-194	-190	MG	0.00	0.00	8040.00
0	-190	-194	-146	-144	MG	0.00	0.00	8040.00
0	-145	-147	-195	-191	MG	0.00	0.00	8040.00
0	-191	-195	-196	-192	MG	0.00	0.00	8040.00
0	-192	-196	-197	-193	MG	0.00	0.00	8040.00
0	-193	-197	-198	-194	MG	0.00	0.00	8040.00
0	-194	-198	-148	-146	MG	0.00	0.00	8040.00
0	-147	-149	-199	-195	MG	0.00	0.00	8040.00
0	-195	-199	-200	-196	MG	0.00	0.00	8040.00
0	-196	-200	-201	-197	MG	0.00	0.00	8040.00
0	-197	-201	-202	-198	MG	0.00	0.00	8040.00
0	-198	-202	-150	-148	MG	0.00	0.00	8040.00
0	-149	-151	-203	-199	MG	0.00	0.00	8040.00
0	-199	-203	-204	-200	MG	0.00	0.00	8040.00
0	-200	-204	-205	-201	MG	0.00	0.00	8040.00
0	-201	-205	-206	-202	MG	0.00	0.00	8040.00
0	-202	-206	-152	-150	MG	0.00	0.00	8040.00
0	-151	-153	-207	-203	MG	0.00	0.00	8040.00
0	-203	-207	-208	-204	MG	0.00	0.00	8040.00
0	-204	-208	-209	-205	MG	0.00	0.00	8040.00
0	-205	-209	-210	-206	MG	0.00	0.00	8040.00
0	-206	-210	-154	-152	MG	0.00	0.00	8040.00
0	-153	-155	-211	-207	MG	0.00	0.00	8040.00
0	-207	-211	-212	-208	MG	0.00	0.00	8040.00
0	-208	-212	-213	-209	MG	0.00	0.00	8040.00
0	45	-218	-158	-156	MG	0.00	0.00	8040.00
0	-213	-217	-218	45	MG	0.00	0.00	8040.00
0	-155	-157	-215	-211	MG	0.00	0.00	8040.00
0	-211	-215	-216	-212	MG	0.00	0.00	8040.00
0	-212	-216	-217	-213	MG	0.00	0.00	8040.00
0	-210	45	-156	-154	MG	0.00	0.00	8040.00
0	-209	-213	45	-210	MG	0.00	0.00	8040.00
0	-157	-159	-219	-215	MG	0.00	0.00	8040.00
0	-215	-219	-220	-216	MG	0.00	0.00	8040.00
0	-216	-220	-221	-217	MG	0.00	0.00	8040.00
0	-217	-221	-222	-218	MG	0.00	0.00	8040.00
0	-218	-222	-160	-158	MG	0.00	0.00	8040.00
0	-159	-161	-223	-219	MG	0.00	0.00	8040.00
0	-219	-223	-224	-220	MG	0.00	0.00	8040.00
0	-220	-224	-225	-221	MG	0.00	0.00	8040.00
0	-221	-225	-226	-222	MG	0.00	0.00	8040.00
0	-222	-226	-162	-160	MG	0.00	0.00	8040.00
0	-161	-163	-227	-223	MG	0.00	0.00	8040.00
0	-223	-227	-228	-224	MG	0.00	0.00	8040.00
0	-224	-228	-229	-225	MG	0.00	0.00	8040.00
0	-225	-229	-230	-226	MG	0.00	0.00	8040.00
0	-226	-230	-164	-162	MG	0.00	0.00	8040.00
0	-163	-165	-231	-227	MG	0.00	0.00	8040.00
0	-227	-231	-232	-228	MG	0.00	0.00	8040.00
0	-228	-232	-233	-229	MG	0.00	0.00	8040.00
0	-229	-233	-234	-230	MG	0.00	0.00	8040.00
0	-230	-234	-166	-164	MG	0.00	0.00	8040.00

Relazione di calcolo

0	-165	24	-167	-231	MG	0.00	0.00	8040.00
0	-231	-167	-168	-232	MG	0.00	0.00	8040.00
0	-232	-168	-169	-233	MG	0.00	0.00	8040.00
0	-233	-169	-170	-234	MG	0.00	0.00	8040.00
0	-234	-170	2	-166	MG	0.00	0.00	8040.00
0	-167	-245	-246	-168	MG	0.00	0.00	8040.00
0	-168	-246	-247	-169	MG	0.00	0.00	8040.00
0	-169	-247	-248	-170	MG	0.00	0.00	8040.00
0	-170	-248	-236	2	MG	0.00	0.00	8040.00
0	-235	-237	-249	-245	MG	0.00	0.00	8040.00
0	-245	-249	-250	-246	MG	0.00	0.00	8040.00
0	-246	-250	-251	-247	MG	0.00	0.00	8040.00
0	38	-256	-240	-238	MG	0.00	0.00	8040.00
0	-251	-255	-256	38	MG	0.00	0.00	8040.00
0	-237	-239	-253	-249	MG	0.00	0.00	8040.00
0	-249	-253	-254	-250	MG	0.00	0.00	8040.00
0	-250	-254	-255	-251	MG	0.00	0.00	8040.00
0	-248	38	-238	-236	MG	0.00	0.00	8040.00
0	-247	-251	38	-248	MG	0.00	0.00	8040.00
0	-239	25	-241	-253	MG	0.00	0.00	8040.00
0	-253	-241	-242	-254	MG	0.00	0.00	8040.00
0	-254	-242	-243	-255	MG	0.00	0.00	8040.00
0	-255	-243	-244	-256	MG	0.00	0.00	8040.00
0	-256	-244	26	-240	MG	0.00	0.00	8040.00
0	40	-271	-272	-269	MG	0.00	0.00	8040.00
0	-267	-270	-271	40	MG	0.00	0.00	8040.00
0	-266	-269	-70	1	MG	0.00	0.00	8040.00
0	-257	-258	-270	-267	MG	0.00	0.00	8040.00
0	-264	40	-269	-266	MG	0.00	0.00	8040.00
0	-262	-267	40	-264	MG	0.00	0.00	8040.00
0	-269	-272	-68	-70	MG	0.00	0.00	8040.00
0	-258	-259	-273	-270	MG	0.00	0.00	8040.00
0	-270	-273	-274	-271	MG	0.00	0.00	8040.00
0	-271	-274	-275	-272	MG	0.00	0.00	8040.00
0	-272	-275	-66	-68	MG	0.00	0.00	8040.00
0	-259	-260	-276	-273	MG	0.00	0.00	8040.00
0	-273	-276	-277	-274	MG	0.00	0.00	8040.00
0	-274	-277	-278	-275	MG	0.00	0.00	8040.00
0	-275	-278	-64	-66	MG	0.00	0.00	8040.00
0	-260	13	-261	-276	MG	0.00	0.00	8040.00
0	-276	-261	-263	-277	MG	0.00	0.00	8040.00
0	-277	-263	-265	-278	MG	0.00	0.00	8040.00
0	-278	-265	23	-64	MG	0.00	0.00	8040.00
0	-285	-288	-289	-286	MG	0.00	0.00	8040.00
0	-286	-289	-290	-287	MG	0.00	0.00	8040.00
0	-287	-290	-280	-28	MG	0.00	0.00	8040.00
0	-279	-281	-291	-288	MG	0.00	0.00	8040.00
0	-288	-291	-292	-289	MG	0.00	0.00	8040.00
0	-289	-292	-293	-290	MG	0.00	0.00	8040.00
0	-290	-293	-282	-280	MG	0.00	0.00	8040.00
0	-281	-283	-294	-291	MG	0.00	0.00	8040.00
0	-291	-294	-295	-292	MG	0.00	0.00	8040.00
0	-292	-295	-296	-293	MG	0.00	0.00	8040.00
0	-293	-296	-284	-282	MG	0.00	0.00	8040.00
0	-283	22	-262	-294	MG	0.00	0.00	8040.00
0	-294	-262	-264	-295	MG	0.00	0.00	8040.00
0	-295	-264	-266	-296	MG	0.00	0.00	8040.00
0	-296	-266	1	-284	MG	0.00	0.00	8040.00
0	-309	-312	-313	-310	MG	0.00	0.00	8040.00
0	-310	-313	-314	-311	MG	0.00	0.00	8040.00
0	-311	-314	-298	4	MG	0.00	0.00	8040.00
0	-297	-299	-315	-312	MG	0.00	0.00	8040.00
0	39	-319	-320	-317	MG	0.00	0.00	8040.00
0	-315	-318	-319	39	MG	0.00	0.00	8040.00
0	-314	-317	-300	-298	MG	0.00	0.00	8040.00
0	-299	-301	-318	-315	MG	0.00	0.00	8040.00
0	-313	39	-317	-314	MG	0.00	0.00	8040.00
0	-312	-315	39	-313	MG	0.00	0.00	8040.00
0	-317	-320	-302	-300	MG	0.00	0.00	8040.00
0	-301	-303	-321	-318	MG	0.00	0.00	8040.00
0	-318	-321	-322	-319	MG	0.00	0.00	8040.00
0	-319	-322	-323	-320	MG	0.00	0.00	8040.00
0	-320	-323	-304	-302	MG	0.00	0.00	8040.00
0	-303	-305	-324	-321	MG	0.00	0.00	8040.00
0	-321	-324	-325	-322	MG	0.00	0.00	8040.00
0	-322	-325	-326	-323	MG	0.00	0.00	8040.00
0	-323	-326	-306	-304	MG	0.00	0.00	8040.00
0	-305	-307	-327	-324	MG	0.00	0.00	8040.00
0	-324	-327	-328	-325	MG	0.00	0.00	8040.00

Relazione di calcolo

0	-325	-328	-329	-326	MG	0.00	0.00	8040.00
0	-326	-329	-308	-306	MG	0.00	0.00	8040.00
0	-307	21	-285	-327	MG	0.00	0.00	8040.00
0	-327	-285	-286	-328	MG	0.00	0.00	8040.00
0	-328	-286	-287	-329	MG	0.00	0.00	8040.00
0	-329	-287	-28	-308	MG	0.00	0.00	8040.00
0	33	-1180	-1192	-1187	MG	0.00	0.00	8040.00
0	-810	-816	-817	-811	MG	0.00	0.00	8040.00
0	-811	-817	-818	-812	MG	0.00	0.00	8040.00
0	-812	-818	-819	-813	MG	0.00	0.00	8040.00
0	-813	-819	-820	-814	MG	0.00	0.00	8040.00
0	-814	-820	-821	-815	MG	0.00	0.00	8040.00
0	-815	-821	-779	31	MG	0.00	0.00	8040.00
0	-778	-780	-822	-816	MG	0.00	0.00	8040.00
0	-816	-822	-823	-817	MG	0.00	0.00	8040.00
0	-817	-823	-824	-818	MG	0.00	0.00	8040.00
0	-818	-824	-825	-819	MG	0.00	0.00	8040.00
0	-819	-825	-826	-820	MG	0.00	0.00	8040.00
0	-820	-826	-827	-821	MG	0.00	0.00	8040.00
0	-821	-827	-781	-779	MG	0.00	0.00	8040.00
0	-780	-782	-828	-822	MG	0.00	0.00	8040.00
0	-822	-828	-829	-823	MG	0.00	0.00	8040.00
0	-823	-829	-830	-824	MG	0.00	0.00	8040.00
0	-824	-830	-831	-825	MG	0.00	0.00	8040.00
0	-825	-831	-832	-826	MG	0.00	0.00	8040.00
0	-826	-832	-833	-827	MG	0.00	0.00	8040.00
0	-827	-833	-783	-781	MG	0.00	0.00	8040.00
0	-782	-784	-834	-828	MG	0.00	0.00	8040.00
0	35	-841	-842	-836	MG	0.00	0.00	8040.00
0	-834	-840	-841	35	MG	0.00	0.00	8040.00
0	-830	-836	-837	-831	MG	0.00	0.00	8040.00
0	-831	-837	-838	-832	MG	0.00	0.00	8040.00
0	-832	-838	-839	-833	MG	0.00	0.00	8040.00
0	-833	-839	-785	-783	MG	0.00	0.00	8040.00
0	-784	-786	-840	-834	MG	0.00	0.00	8040.00
0	-829	35	-836	-830	MG	0.00	0.00	8040.00
0	-828	-834	35	-829	MG	0.00	0.00	8040.00
0	-836	-842	-843	-837	MG	0.00	0.00	8040.00
0	-837	-843	-844	-838	MG	0.00	0.00	8040.00
0	-838	-844	-845	-839	MG	0.00	0.00	8040.00
0	-839	-845	-787	-785	MG	0.00	0.00	8040.00
0	-786	-788	-846	-840	MG	0.00	0.00	8040.00
0	-840	-846	-847	-841	MG	0.00	0.00	8040.00
0	-841	-847	-848	-842	MG	0.00	0.00	8040.00
0	-842	-848	-849	-843	MG	0.00	0.00	8040.00
0	-843	-849	-850	-844	MG	0.00	0.00	8040.00
0	-844	-850	-851	-845	MG	0.00	0.00	8040.00
0	-845	-851	-789	-787	MG	0.00	0.00	8040.00
0	-788	-790	-852	-846	MG	0.00	0.00	8040.00
0	-846	-852	-853	-847	MG	0.00	0.00	8040.00
0	-847	-853	-854	-848	MG	0.00	0.00	8040.00
0	-848	-854	-855	-849	MG	0.00	0.00	8040.00
0	-849	-855	-856	-850	MG	0.00	0.00	8040.00
0	-850	-856	-857	-851	MG	0.00	0.00	8040.00
0	-851	-857	-791	-789	MG	0.00	0.00	8040.00
0	-790	-792	-858	-852	MG	0.00	0.00	8040.00
0	-852	-858	-859	-853	MG	0.00	0.00	8040.00
0	-853	-859	-860	-854	MG	0.00	0.00	8040.00
0	-854	-860	-861	-855	MG	0.00	0.00	8040.00
0	-855	-861	-862	-856	MG	0.00	0.00	8040.00
0	-856	-862	-863	-857	MG	0.00	0.00	8040.00
0	-857	-863	-793	-791	MG	0.00	0.00	8040.00
0	-792	-794	-864	-858	MG	0.00	0.00	8040.00
0	-858	-864	-865	-859	MG	0.00	0.00	8040.00
0	-859	-865	-866	-860	MG	0.00	0.00	8040.00
0	-860	-866	-867	-861	MG	0.00	0.00	8040.00
0	-861	-867	-868	-862	MG	0.00	0.00	8040.00
0	-862	-868	-869	-863	MG	0.00	0.00	8040.00
0	-863	-869	-795	-793	MG	0.00	0.00	8040.00
0	-794	-796	-870	-864	MG	0.00	0.00	8040.00
0	-864	-870	-871	-865	MG	0.00	0.00	8040.00
0	-865	-871	-872	-866	MG	0.00	0.00	8040.00
0	-866	-872	-873	-867	MG	0.00	0.00	8040.00
0	-867	-873	-874	-868	MG	0.00	0.00	8040.00
0	-868	-874	-875	-869	MG	0.00	0.00	8040.00
0	-869	-875	-797	-795	MG	0.00	0.00	8040.00
0	-796	-798	-876	-870	MG	0.00	0.00	8040.00
0	44	-883	-884	-878	MG	0.00	0.00	8040.00
0	-876	-882	-883	44	MG	0.00	0.00	8040.00

Relazione di calcolo

0	-872	-878	-879	-873	MG	0.00	0.00	8040.00
0	-873	-879	-880	-874	MG	0.00	0.00	8040.00
0	-874	-880	-881	-875	MG	0.00	0.00	8040.00
0	-875	-881	-799	-797	MG	0.00	0.00	8040.00
0	-798	-800	-882	-876	MG	0.00	0.00	8040.00
0	-871	44	-878	-872	MG	0.00	0.00	8040.00
0	-870	-876	44	-871	MG	0.00	0.00	8040.00
0	-878	-884	-885	-879	MG	0.00	0.00	8040.00
0	-879	-885	-886	-880	MG	0.00	0.00	8040.00
0	-880	-886	-887	-881	MG	0.00	0.00	8040.00
0	-881	-887	-801	-799	MG	0.00	0.00	8040.00
0	-800	-802	-888	-882	MG	0.00	0.00	8040.00
0	-882	-888	-889	-883	MG	0.00	0.00	8040.00
0	-883	-889	-890	-884	MG	0.00	0.00	8040.00
0	-884	-890	-891	-885	MG	0.00	0.00	8040.00
0	-885	-891	-892	-886	MG	0.00	0.00	8040.00
0	-886	-892	-893	-887	MG	0.00	0.00	8040.00
0	-887	-893	-803	-801	MG	0.00	0.00	8040.00
0	-802	-804	-894	-888	MG	0.00	0.00	8040.00
0	-888	-894	-895	-889	MG	0.00	0.00	8040.00
0	-889	-895	-896	-890	MG	0.00	0.00	8040.00
0	-890	-896	-897	-891	MG	0.00	0.00	8040.00
0	-891	-897	-898	-892	MG	0.00	0.00	8040.00
0	-892	-898	-899	-893	MG	0.00	0.00	8040.00
0	-893	-899	-805	-803	MG	0.00	0.00	8040.00
0	-804	-806	-900	-894	MG	0.00	0.00	8040.00
0	-894	-900	-901	-895	MG	0.00	0.00	8040.00
0	-895	-901	-902	-896	MG	0.00	0.00	8040.00
0	-896	-902	-903	-897	MG	0.00	0.00	8040.00
0	-897	-903	-904	-898	MG	0.00	0.00	8040.00
0	-898	-904	-905	-899	MG	0.00	0.00	8040.00
0	-899	-905	-807	-805	MG	0.00	0.00	8040.00
0	-806	-808	-906	-900	MG	0.00	0.00	8040.00
0	-900	-906	-907	-901	MG	0.00	0.00	8040.00
0	-901	-907	-908	-902	MG	0.00	0.00	8040.00
0	-902	-908	-909	-903	MG	0.00	0.00	8040.00
0	-903	-909	-910	-904	MG	0.00	0.00	8040.00
0	-904	-910	-911	-905	MG	0.00	0.00	8040.00
0	-905	-911	-809	-807	MG	0.00	0.00	8040.00
0	-808	4	-298	-906	MG	0.00	0.00	8040.00
0	-906	-298	-300	-907	MG	0.00	0.00	8040.00
0	-907	-300	-302	-908	MG	0.00	0.00	8040.00
0	-908	-302	-304	-909	MG	0.00	0.00	8040.00
0	-909	-304	-306	-910	MG	0.00	0.00	8040.00
0	-910	-306	-308	-911	MG	0.00	0.00	8040.00
0	-911	-308	-28	-809	MG	0.00	0.00	8040.00
0	-912	-913	-780	-778	MG	0.00	0.00	8040.00
0	-913	-914	-782	-780	MG	0.00	0.00	8040.00
0	-914	-1638	-784	-782	MG	0.00	0.00	8040.00
0	-1638	-916	-786	-784	MG	0.00	0.00	8040.00
0	-916	-917	-788	-786	MG	0.00	0.00	8040.00
0	-917	-918	-790	-788	MG	0.00	0.00	8040.00
0	-918	-919	-792	-790	MG	0.00	0.00	8040.00
0	-919	-920	-794	-792	MG	0.00	0.00	8040.00
0	-920	-921	-796	-794	MG	0.00	0.00	8040.00
0	-921	-922	-798	-796	MG	0.00	0.00	8040.00
0	-922	-923	-800	-798	MG	0.00	0.00	8040.00
0	-923	-924	-802	-800	MG	0.00	0.00	8040.00
0	-924	-925	-804	-802	MG	0.00	0.00	8040.00
0	-925	-926	-806	-804	MG	0.00	0.00	8040.00
0	-926	-927	-808	-806	MG	0.00	0.00	8040.00
0	-927	19	4	-808	MG	0.00	0.00	8040.00
0	-960	-966	-967	-961	MG	0.00	0.00	8040.00
0	-961	-967	-968	-962	MG	0.00	0.00	8040.00
0	-962	-968	-969	-963	MG	0.00	0.00	8040.00
0	-963	-969	-970	-964	MG	0.00	0.00	8040.00
0	-964	-970	-971	-965	MG	0.00	0.00	8040.00
0	-965	-971	-929	-29	MG	0.00	0.00	8040.00
0	-928	-930	-972	-966	MG	0.00	0.00	8040.00
0	-966	-972	-973	-967	MG	0.00	0.00	8040.00
0	-967	-973	-974	-968	MG	0.00	0.00	8040.00
0	-968	-974	-975	-969	MG	0.00	0.00	8040.00
0	-969	-975	-976	-970	MG	0.00	0.00	8040.00
0	-970	-976	-977	-971	MG	0.00	0.00	8040.00
0	-971	-977	-931	-929	MG	0.00	0.00	8040.00
0	-930	-932	-978	-972	MG	0.00	0.00	8040.00
0	-972	-978	-979	-973	MG	0.00	0.00	8040.00
0	-973	-979	-980	-974	MG	0.00	0.00	8040.00
0	-974	-980	-981	-975	MG	0.00	0.00	8040.00

Relazione di calcolo

0	-975	-981	-982	-976	MG	0.00	0.00	8040.00
0	-976	-982	-983	-977	MG	0.00	0.00	8040.00
0	-977	-983	-933	-931	MG	0.00	0.00	8040.00
0	-932	-934	-984	-978	MG	0.00	0.00	8040.00
0	-978	-984	-985	-979	MG	0.00	0.00	8040.00
0	-979	-985	-986	-980	MG	0.00	0.00	8040.00
0	-980	-986	-987	-981	MG	0.00	0.00	8040.00
0	-981	-987	-988	-982	MG	0.00	0.00	8040.00
0	-982	-988	-989	-983	MG	0.00	0.00	8040.00
0	-983	-989	-935	-933	MG	0.00	0.00	8040.00
0	-934	-936	-990	-984	MG	0.00	0.00	8040.00
0	-984	-990	-991	-985	MG	0.00	0.00	8040.00
0	-986	-985	-991	-1637	MG	0.00	0.00	8040.00
0	36	-1003	-1004	-998	MG	0.00	0.00	8040.00
0	-987	-993	-994	-988	MG	0.00	0.00	8040.00
0	-988	-994	-995	-989	MG	0.00	0.00	8040.00
0	-989	-995	-937	-935	MG	0.00	0.00	8040.00
0	-936	-938	-996	-990	MG	0.00	0.00	8040.00
0	-996	-1002	-1003	36	MG	0.00	0.00	8040.00
0	-993	-1637	-998	-999	MG	0.00	0.00	8040.00
0	-987	-986	-1637	-993	MG	0.00	0.00	8040.00
0	-993	-999	-1000	-994	MG	0.00	0.00	8040.00
0	-994	-1000	-1001	-995	MG	0.00	0.00	8040.00
0	-995	-1001	-939	-937	MG	0.00	0.00	8040.00
0	-938	-940	-1002	-996	MG	0.00	0.00	8040.00
0	-990	-996	36	-991	MG	0.00	0.00	8040.00
0	-1637	-991	36	-998	MG	0.00	0.00	8040.00
0	-998	-1004	-1005	-999	MG	0.00	0.00	8040.00
0	-999	-1005	-1006	-1000	MG	0.00	0.00	8040.00
0	-1000	-1006	-1007	-1001	MG	0.00	0.00	8040.00
0	-1001	-1007	-941	-939	MG	0.00	0.00	8040.00
0	-940	-942	-1008	-1002	MG	0.00	0.00	8040.00
0	-1002	-1008	-1009	-1003	MG	0.00	0.00	8040.00
0	-1003	-1009	-1010	-1004	MG	0.00	0.00	8040.00
0	-1004	-1010	-1011	-1005	MG	0.00	0.00	8040.00
0	-1005	-1011	-1012	-1006	MG	0.00	0.00	8040.00
0	-1006	-1012	-1013	-1007	MG	0.00	0.00	8040.00
0	-1007	-1013	-943	-941	MG	0.00	0.00	8040.00
0	-942	-944	-1014	-1008	MG	0.00	0.00	8040.00
0	-1008	-1014	-1015	-1009	MG	0.00	0.00	8040.00
0	-1009	-1015	-1016	-1010	MG	0.00	0.00	8040.00
0	-1010	-1016	-1017	-1011	MG	0.00	0.00	8040.00
0	-1011	-1017	-1018	-1012	MG	0.00	0.00	8040.00
0	-1012	-1018	-1019	-1013	MG	0.00	0.00	8040.00
0	-1013	-1019	-945	-943	MG	0.00	0.00	8040.00
0	-944	-946	-1020	-1014	MG	0.00	0.00	8040.00
0	-1014	-1020	-1021	-1015	MG	0.00	0.00	8040.00
0	-1015	-1021	-1022	-1016	MG	0.00	0.00	8040.00
0	-1016	-1022	-1023	-1017	MG	0.00	0.00	8040.00
0	-1017	-1023	-1024	-1018	MG	0.00	0.00	8040.00
0	-1018	-1024	-1025	-1019	MG	0.00	0.00	8040.00
0	-1019	-1025	-947	-945	MG	0.00	0.00	8040.00
0	-946	-948	-1026	-1020	MG	0.00	0.00	8040.00
0	-1020	-1026	-1027	-1021	MG	0.00	0.00	8040.00
0	-1021	-1027	-1028	-1022	MG	0.00	0.00	8040.00
0	-1022	-1028	-1029	-1023	MG	0.00	0.00	8040.00
0	-1023	-1029	-1030	-1024	MG	0.00	0.00	8040.00
0	-1024	-1030	-1031	-1025	MG	0.00	0.00	8040.00
0	-1025	-1031	-949	-947	MG	0.00	0.00	8040.00
0	-948	-950	-1032	-1026	MG	0.00	0.00	8040.00
0	-1026	-1032	-1033	-1027	MG	0.00	0.00	8040.00
0	-1027	-1033	-1034	-1028	MG	0.00	0.00	8040.00
0	-1028	-1034	-1035	-1029	MG	0.00	0.00	8040.00
0	-1029	-1035	-1036	-1030	MG	0.00	0.00	8040.00
0	-1030	-1036	-1037	-1031	MG	0.00	0.00	8040.00
0	-1031	-1037	-951	-949	MG	0.00	0.00	8040.00
0	-950	-952	-1038	-1032	MG	0.00	0.00	8040.00
0	34	-1045	-1046	-1040	MG	0.00	0.00	8040.00
0	-1038	-1044	-1045	34	MG	0.00	0.00	8040.00
0	-1034	-1040	-1041	-1035	MG	0.00	0.00	8040.00
0	-1035	-1041	-1042	-1036	MG	0.00	0.00	8040.00
0	-1036	-1042	-1043	-1037	MG	0.00	0.00	8040.00
0	-1037	-1043	-953	-951	MG	0.00	0.00	8040.00
0	-952	-954	-1044	-1038	MG	0.00	0.00	8040.00
0	-1033	34	-1040	-1034	MG	0.00	0.00	8040.00
0	-1032	-1038	34	-1033	MG	0.00	0.00	8040.00
0	-1040	-1046	-1047	-1041	MG	0.00	0.00	8040.00
0	-1041	-1047	-1048	-1042	MG	0.00	0.00	8040.00
0	-1042	-1048	-1049	-1043	MG	0.00	0.00	8040.00

Relazione di calcolo

0	-1043	-1049	-955	-953	MG	0.00	0.00	8040.00
0	-954	-956	-1050	-1044	MG	0.00	0.00	8040.00
0	-1044	-1050	-1051	-1045	MG	0.00	0.00	8040.00
0	-1045	-1051	-1052	-1046	MG	0.00	0.00	8040.00
0	-1046	-1052	-1053	-1047	MG	0.00	0.00	8040.00
0	-1047	-1053	-1054	-1048	MG	0.00	0.00	8040.00
0	-1048	-1054	-1055	-1049	MG	0.00	0.00	8040.00
0	-1049	-1055	-957	-955	MG	0.00	0.00	8040.00
0	-956	-958	-1056	-1050	MG	0.00	0.00	8040.00
0	-1050	-1056	-1057	-1051	MG	0.00	0.00	8040.00
0	-1051	-1057	-1058	-1052	MG	0.00	0.00	8040.00
0	-1052	-1058	-1059	-1053	MG	0.00	0.00	8040.00
0	-1053	-1059	-1060	-1054	MG	0.00	0.00	8040.00
0	-1054	-1060	-1061	-1055	MG	0.00	0.00	8040.00
0	-1055	-1061	-959	-957	MG	0.00	0.00	8040.00
0	-958	30	-810	-1056	MG	0.00	0.00	8040.00
0	-1056	-810	-811	-1057	MG	0.00	0.00	8040.00
0	-1057	-811	-812	-1058	MG	0.00	0.00	8040.00
0	-1058	-812	-813	-1059	MG	0.00	0.00	8040.00
0	-1059	-813	-814	-1060	MG	0.00	0.00	8040.00
0	-1060	-814	-815	-1061	MG	0.00	0.00	8040.00
0	-1061	-815	31	-959	MG	0.00	0.00	8040.00
0	-1062	-1063	-930	-928	MG	0.00	0.00	8040.00
0	-1063	-1064	-932	-930	MG	0.00	0.00	8040.00
0	-1064	-1065	-934	-932	MG	0.00	0.00	8040.00
0	-1065	-1066	-936	-934	MG	0.00	0.00	8040.00
0	-1066	-1067	-938	-936	MG	0.00	0.00	8040.00
0	-1067	-1068	-940	-938	MG	0.00	0.00	8040.00
0	-1068	-1069	-942	-940	MG	0.00	0.00	8040.00
0	-1069	-1070	-944	-942	MG	0.00	0.00	8040.00
0	-1070	-1071	-946	-944	MG	0.00	0.00	8040.00
0	-1071	-1072	-948	-946	MG	0.00	0.00	8040.00
0	-1072	-1073	-950	-948	MG	0.00	0.00	8040.00
0	-1073	-1074	-952	-950	MG	0.00	0.00	8040.00
0	-1074	-1075	-954	-952	MG	0.00	0.00	8040.00
0	-1075	-1076	-956	-954	MG	0.00	0.00	8040.00
0	-1076	-1077	-958	-956	MG	0.00	0.00	8040.00
0	-1077	29	30	-958	MG	0.00	0.00	8040.00
0	-1078	-1081	-1082	-1079	MG	0.00	0.00	8040.00
0	-1079	-1082	-1083	-1080	MG	0.00	0.00	8040.00
0	-1080	-1083	-62	-30	MG	0.00	0.00	8040.00
0	-779	-781	-1084	-1081	MG	0.00	0.00	8040.00
0	-1081	-1084	-1085	-1082	MG	0.00	0.00	8040.00
0	-1082	-1085	-1086	-1083	MG	0.00	0.00	8040.00
0	-1083	-1086	-60	-62	MG	0.00	0.00	8040.00
0	-781	-783	-1087	-1084	MG	0.00	0.00	8040.00
0	-1084	-1087	-1088	-1085	MG	0.00	0.00	8040.00
0	-1085	-1088	-1089	-1086	MG	0.00	0.00	8040.00
0	-1086	-1089	-58	-60	MG	0.00	0.00	8040.00
0	-783	-785	-1090	-1087	MG	0.00	0.00	8040.00
0	-1087	-1090	-1091	-1088	MG	0.00	0.00	8040.00
0	-1088	-1091	-1092	-1089	MG	0.00	0.00	8040.00
0	-1089	-1092	-56	-58	MG	0.00	0.00	8040.00
0	-785	-787	-1093	-1090	MG	0.00	0.00	8040.00
0	-1090	-1093	-1094	-1091	MG	0.00	0.00	8040.00
0	-1091	-1094	-1095	-1092	MG	0.00	0.00	8040.00
0	-1092	-1095	-54	-56	MG	0.00	0.00	8040.00
0	-787	-789	-1096	-1093	MG	0.00	0.00	8040.00
0	-1093	-1096	-1097	-1094	MG	0.00	0.00	8040.00
0	-1094	-1097	-1098	-1095	MG	0.00	0.00	8040.00
0	-1095	-1098	-52	-54	MG	0.00	0.00	8040.00
0	-789	-791	-1099	-1096	MG	0.00	0.00	8040.00
0	-1096	-1099	-1100	-1097	MG	0.00	0.00	8040.00
0	-1097	-1100	-1101	-1098	MG	0.00	0.00	8040.00
0	-1098	-1101	-50	-52	MG	0.00	0.00	8040.00
0	-791	-793	-1102	-1099	MG	0.00	0.00	8040.00
0	-1099	-1102	-1103	-1100	MG	0.00	0.00	8040.00
0	-1100	-1103	-1104	-1101	MG	0.00	0.00	8040.00
0	-1101	-1104	-48	-50	MG	0.00	0.00	8040.00
0	-793	-795	-1105	-1102	MG	0.00	0.00	8040.00
0	-1102	-1105	-1106	-1103	MG	0.00	0.00	8040.00
0	-1103	-1106	-1107	-1104	MG	0.00	0.00	8040.00
0	-1104	-1107	-46	-48	MG	0.00	0.00	8040.00
0	-795	-797	-1108	-1105	MG	0.00	0.00	8040.00
0	-1105	-1108	-1109	-1106	MG	0.00	0.00	8040.00
0	-1106	-1109	-1110	-1107	MG	0.00	0.00	8040.00
0	-1107	-1110	-44	-46	MG	0.00	0.00	8040.00
0	-797	-799	-1111	-1108	MG	0.00	0.00	8040.00
0	-1108	-1111	-1112	-1109	MG	0.00	0.00	8040.00

Relazione di calcolo

0	-1109	-1112	-1113	-1110	MG	0.00	0.00	8040.00
0	-1110	-1113	-42	-44	MG	0.00	0.00	8040.00
0	-799	-801	-1114	-1111	MG	0.00	0.00	8040.00
0	-1111	-1114	-1115	-1112	MG	0.00	0.00	8040.00
0	-1112	-1115	-1116	-1113	MG	0.00	0.00	8040.00
0	-1113	-1116	-40	-42	MG	0.00	0.00	8040.00
0	-801	-803	-1117	-1114	MG	0.00	0.00	8040.00
0	-1114	-1117	-1118	-1115	MG	0.00	0.00	8040.00
0	-1115	-1118	-1119	-1116	MG	0.00	0.00	8040.00
0	-1116	-1119	-38	-40	MG	0.00	0.00	8040.00
0	-803	-805	-1120	-1117	MG	0.00	0.00	8040.00
0	-1117	-1120	-1121	-1118	MG	0.00	0.00	8040.00
0	-1118	-1121	-1122	-1119	MG	0.00	0.00	8040.00
0	-1119	-1122	-36	-38	MG	0.00	0.00	8040.00
0	-805	-807	-1123	-1120	MG	0.00	0.00	8040.00
0	-1120	-1123	-1124	-1121	MG	0.00	0.00	8040.00
0	-1121	-1124	-1125	-1122	MG	0.00	0.00	8040.00
0	-1122	-1125	-34	-36	MG	0.00	0.00	8040.00
0	-807	-809	-1126	-1123	MG	0.00	0.00	8040.00
0	-1123	-1126	-1127	-1124	MG	0.00	0.00	8040.00
0	-1124	-1127	-1128	-1125	MG	0.00	0.00	8040.00
0	-1125	-1128	-32	-34	MG	0.00	0.00	8040.00
0	-809	-28	-280	-1126	MG	0.00	0.00	8040.00
0	-1126	-280	-282	-1127	MG	0.00	0.00	8040.00
0	-1127	-282	-284	-1128	MG	0.00	0.00	8040.00
0	-1128	-284	1	-32	MG	0.00	0.00	8040.00
0	-1129	-1132	-1133	-1130	MG	0.00	0.00	8040.00
0	-1130	-1133	-1134	-1131	MG	0.00	0.00	8040.00
0	-1131	-1134	-166	2	MG	0.00	0.00	8040.00
0	-929	-931	-1135	-1132	MG	0.00	0.00	8040.00
0	-1132	-1135	-1136	-1133	MG	0.00	0.00	8040.00
0	-1133	-1136	-1137	-1134	MG	0.00	0.00	8040.00
0	-1134	-1137	-164	-166	MG	0.00	0.00	8040.00
0	-931	-933	-1138	-1135	MG	0.00	0.00	8040.00
0	-1135	-1138	-1139	-1136	MG	0.00	0.00	8040.00
0	-1136	-1139	-1140	-1137	MG	0.00	0.00	8040.00
0	-1137	-1140	-162	-164	MG	0.00	0.00	8040.00
0	-933	-935	-1141	-1138	MG	0.00	0.00	8040.00
0	-1138	-1141	-1142	-1139	MG	0.00	0.00	8040.00
0	-1139	-1142	-1143	-1140	MG	0.00	0.00	8040.00
0	-1140	-1143	-160	-162	MG	0.00	0.00	8040.00
0	-935	-937	-1144	-1141	MG	0.00	0.00	8040.00
0	-1141	-1144	-1145	-1142	MG	0.00	0.00	8040.00
0	-1142	-1145	-1146	-1143	MG	0.00	0.00	8040.00
0	-1143	-1146	-158	-160	MG	0.00	0.00	8040.00
0	-937	-939	-1147	-1144	MG	0.00	0.00	8040.00
0	-1144	-1147	-1148	-1145	MG	0.00	0.00	8040.00
0	-1145	-1148	-1149	-1146	MG	0.00	0.00	8040.00
0	-1146	-1149	-156	-158	MG	0.00	0.00	8040.00
0	-939	-941	-1150	-1147	MG	0.00	0.00	8040.00
0	-1147	-1150	-1151	-1148	MG	0.00	0.00	8040.00
0	-1148	-1151	-1152	-1149	MG	0.00	0.00	8040.00
0	-1149	-1152	-154	-156	MG	0.00	0.00	8040.00
0	-941	-943	-1153	-1150	MG	0.00	0.00	8040.00
0	-1150	-1153	-1154	-1151	MG	0.00	0.00	8040.00
0	-1151	-1154	-1155	-1152	MG	0.00	0.00	8040.00
0	-1152	-1155	-152	-154	MG	0.00	0.00	8040.00
0	-943	-945	-1156	-1153	MG	0.00	0.00	8040.00
0	-1153	-1156	-1157	-1154	MG	0.00	0.00	8040.00
0	-1154	-1157	-1158	-1155	MG	0.00	0.00	8040.00
0	-1155	-1158	-150	-152	MG	0.00	0.00	8040.00
0	-945	-947	-1159	-1156	MG	0.00	0.00	8040.00
0	-1156	-1159	-1160	-1157	MG	0.00	0.00	8040.00
0	-1157	-1160	-1161	-1158	MG	0.00	0.00	8040.00
0	-1158	-1161	-148	-150	MG	0.00	0.00	8040.00
0	-947	-949	-1162	-1159	MG	0.00	0.00	8040.00
0	-1159	-1162	-1163	-1160	MG	0.00	0.00	8040.00
0	-1160	-1163	-1164	-1161	MG	0.00	0.00	8040.00
0	-1161	-1164	-146	-148	MG	0.00	0.00	8040.00
0	-949	-951	-1165	-1162	MG	0.00	0.00	8040.00
0	-1162	-1165	-1166	-1163	MG	0.00	0.00	8040.00
0	-1163	-1166	-1167	-1164	MG	0.00	0.00	8040.00
0	-1164	-1167	-144	-146	MG	0.00	0.00	8040.00
0	-951	-953	-1168	-1165	MG	0.00	0.00	8040.00
0	-1165	-1168	-1169	-1166	MG	0.00	0.00	8040.00
0	-1166	-1169	-1170	-1167	MG	0.00	0.00	8040.00
0	-1167	-1170	-142	-144	MG	0.00	0.00	8040.00
0	-953	-955	-1171	-1168	MG	0.00	0.00	8040.00
0	-1168	-1171	-1172	-1169	MG	0.00	0.00	8040.00

Relazione di calcolo

0	-1169	-1172	-1173	-1170	MG	0.00	0.00	8040.00
0	-1170	-1173	-140	-142	MG	0.00	0.00	8040.00
0	-955	-957	-1174	-1171	MG	0.00	0.00	8040.00
0	-1171	-1174	-1175	-1172	MG	0.00	0.00	8040.00
0	-1172	-1175	-1176	-1173	MG	0.00	0.00	8040.00
0	-1173	-1176	-138	-140	MG	0.00	0.00	8040.00
0	-957	-959	-1177	-1174	MG	0.00	0.00	8040.00
0	-1174	-1177	-1178	-1175	MG	0.00	0.00	8040.00
0	-1175	-1178	-1179	-1176	MG	0.00	0.00	8040.00
0	-1176	-1179	-136	-138	MG	0.00	0.00	8040.00
0	-959	31	-1078	-1177	MG	0.00	0.00	8040.00
0	-1177	-1078	-1079	-1178	MG	0.00	0.00	8040.00
0	-1178	-1079	-1080	-1179	MG	0.00	0.00	8040.00
0	-1179	-1080	-30	-136	MG	0.00	0.00	8040.00
0	-1187	-1192	-1193	-1189	MG	0.00	0.00	8040.00
0	-1189	-1193	-1194	-1191	MG	0.00	0.00	8040.00
0	-1191	-1194	-965	-29	MG	0.00	0.00	8040.00
0	-1180	-1181	-1195	-1192	MG	0.00	0.00	8040.00
0	-1192	-1195	-1196	-1193	MG	0.00	0.00	8040.00
0	-1193	-1196	-1197	-1194	MG	0.00	0.00	8040.00
0	-1194	-1197	-964	-965	MG	0.00	0.00	8040.00
0	-1181	-1182	-1198	-1195	MG	0.00	0.00	8040.00
0	-1195	-1198	-1199	-1196	MG	0.00	0.00	8040.00
0	-1196	-1199	-1200	-1197	MG	0.00	0.00	8040.00
0	-1197	-1200	-963	-964	MG	0.00	0.00	8040.00
0	-1182	-1183	-1201	-1198	MG	0.00	0.00	8040.00
0	-1198	-1201	-1202	-1199	MG	0.00	0.00	8040.00
0	-1199	-1202	-1203	-1200	MG	0.00	0.00	8040.00
0	-1200	-1203	-962	-963	MG	0.00	0.00	8040.00
0	-1183	-1184	-1204	-1201	MG	0.00	0.00	8040.00
0	37	-1208	-1209	-1206	MG	0.00	0.00	8040.00
0	-1204	-1207	-1208	37	MG	0.00	0.00	8040.00
0	-1203	-1206	-961	-962	MG	0.00	0.00	8040.00
0	-1184	-1185	-1207	-1204	MG	0.00	0.00	8040.00
0	-1202	37	-1206	-1203	MG	0.00	0.00	8040.00
0	-1201	-1204	37	-1202	MG	0.00	0.00	8040.00
0	-1206	-1209	-960	-961	MG	0.00	0.00	8040.00
0	-1185	27	-1186	-1207	MG	0.00	0.00	8040.00
0	-1207	-1186	-1188	-1208	MG	0.00	0.00	8040.00
0	-1208	-1188	-1190	-1209	MG	0.00	0.00	8040.00
0	-1209	-1190	3	-960	MG	0.00	0.00	8040.00
0	-1190	-1188	-1211	-1210	MG	0.00	0.00	8040.00
0	-1188	-1186	-1212	-1211	MG	0.00	0.00	8040.00
0	-1186	27	11	-1212	MG	0.00	0.00	8040.00
0	-1641	12	20	-309	MG	0.00	0.00	8040.00
0	-1640	-1641	-309	-310	MG	0.00	0.00	8040.00
0	-1639	-1640	-310	-311	MG	0.00	0.00	8040.00
0	-240	-1383	-1384	-238	MG	0.00	0.00	8040.00
0	-238	-1384	-1385	-236	MG	0.00	0.00	8040.00
0	-236	-1385	-1131	2	MG	0.00	0.00	8040.00
0	-1380	-1381	-1386	-1383	MG	0.00	0.00	8040.00
0	-1383	-1386	-1387	-1384	MG	0.00	0.00	8040.00
0	-1384	-1387	-1388	-1385	MG	0.00	0.00	8040.00
0	-1385	-1388	-1130	-1131	MG	0.00	0.00	8040.00
0	-1381	-1382	-1389	-1386	MG	0.00	0.00	8040.00
0	-1386	-1389	-1390	-1387	MG	0.00	0.00	8040.00
0	-1387	-1390	-1391	-1388	MG	0.00	0.00	8040.00
0	-1388	-1391	-1129	-1130	MG	0.00	0.00	8040.00
0	-1382	33	-1187	-1389	MG	0.00	0.00	8040.00
0	-1389	-1187	-1189	-1390	MG	0.00	0.00	8040.00
0	-1390	-1189	-1191	-1391	MG	0.00	0.00	8040.00
0	-1391	-1191	-29	-1129	MG	0.00	0.00	8040.00

Condizione di carico n. 3: spinta statica terreno
Carichi idrostatici

Simbologia

Bid. = Numero del muro/elemento bidimensionale

N1 = Nodo1

N2 = Nodo2

N3 = Nodo3

N4 = Nodo4

Zi = Coordinata Z globale d'inizio carico

QYi = Componente iniziale del carico in direzione Y locale dell'elemento bidimensionale

Zf = Coordinata Z globale di fine carico

QYf = Componente finale del carico in direzione Y locale dell'elemento bidimensionale

Bid.	N1	N2	N3	N4	Zi	QYi	Zf	QYf	Bid.	N1	N2	N3	N4	Zi	QYi	Zf	QYf
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Relazione di calcolo

Carichi uniformi

Bid.	N1	N2	N3	N4	TDC	Qx	Qy	Qz
						<daN/mq>	<daN/mq>	<daN/mq>
0	5	-446	-1453	-399	ML	0.00	768.00	0.00
0	5	-330	-406	-399	ML	0.00	-768.00	0.00
0	-1693	-1694	-1287	-1278	ML	0.00	768.00	0.00
0	6	-1213	-1340	-1333	ML	0.00	768.00	0.00
0	-341	-348	-349	-343	ML	0.00	-768.00	0.00
0	-343	-349	-350	-345	ML	0.00	-768.00	0.00
0	-345	-350	-351	-347	ML	0.00	-768.00	0.00
0	-347	-351	-330	5	ML	0.00	-768.00	0.00
0	-348	-352	-353	-349	ML	0.00	-768.00	0.00
0	-349	-353	-354	-350	ML	0.00	-768.00	0.00
0	-350	-354	-355	-351	ML	0.00	-768.00	0.00
0	-351	-355	-331	-330	ML	0.00	-768.00	0.00
0	-352	-356	-357	-353	ML	0.00	-768.00	0.00
0	-353	-357	-358	-354	ML	0.00	-768.00	0.00
0	-354	-358	-359	-355	ML	0.00	-768.00	0.00
0	-355	-359	-332	-331	ML	0.00	-768.00	0.00
0	-356	-360	-361	-357	ML	0.00	-768.00	0.00
0	-357	-361	-362	-358	ML	0.00	-768.00	0.00
0	-358	-362	-363	-359	ML	0.00	-768.00	0.00
0	-359	-363	-333	-332	ML	0.00	-768.00	0.00
0	-360	-364	-365	-361	ML	0.00	-768.00	0.00
0	-361	-365	-366	-362	ML	0.00	-768.00	0.00
0	-362	-366	-367	-363	ML	0.00	-768.00	0.00
0	-363	-367	-334	-333	ML	0.00	-768.00	0.00
0	-364	-368	-369	-365	ML	0.00	-768.00	0.00
0	-365	-369	-370	-366	ML	0.00	-768.00	0.00
0	-366	-370	-371	-367	ML	0.00	-768.00	0.00
0	-367	-371	-335	-334	ML	0.00	-768.00	0.00
0	-368	-372	-373	-369	ML	0.00	-768.00	0.00
0	-369	-373	-374	-370	ML	0.00	-768.00	0.00
0	-370	-374	-375	-371	ML	0.00	-768.00	0.00
0	-371	-375	-336	-335	ML	0.00	-768.00	0.00
0	-372	-376	-377	-373	ML	0.00	-768.00	0.00
0	-373	-377	-378	-374	ML	0.00	-768.00	0.00
0	-374	-378	-379	-375	ML	0.00	-768.00	0.00
0	-375	-379	-337	-336	ML	0.00	-768.00	0.00
0	-376	-380	-381	-377	ML	0.00	-768.00	0.00
0	-377	-381	-382	-378	ML	0.00	-768.00	0.00
0	-378	-382	-383	-379	ML	0.00	-768.00	0.00
0	-379	-383	-338	-337	ML	0.00	-768.00	0.00
0	-380	-384	-385	-381	ML	0.00	-768.00	0.00
0	-381	-385	-386	-382	ML	0.00	-768.00	0.00
0	-382	-386	-387	-383	ML	0.00	-768.00	0.00
0	-383	-387	-339	-338	ML	0.00	-768.00	0.00
0	-384	-340	-342	-385	ML	0.00	-768.00	0.00
0	-385	-342	-344	-386	ML	0.00	-768.00	0.00
0	-386	-344	-346	-387	ML	0.00	-768.00	0.00
0	-387	-346	-20	-339	ML	0.00	-768.00	0.00
0	-399	-406	-407	-401	ML	0.00	-768.00	0.00
0	-401	-407	-408	-403	ML	0.00	-768.00	0.00
0	-403	-408	-409	-405	ML	0.00	-768.00	0.00
0	-405	-409	-388	7	ML	0.00	-768.00	0.00
0	-330	-331	-410	-406	ML	0.00	-768.00	0.00
0	-406	-410	-411	-407	ML	0.00	-768.00	0.00
0	-407	-411	-412	-408	ML	0.00	-768.00	0.00
0	-408	-412	-413	-409	ML	0.00	-768.00	0.00
0	-409	-413	-389	-388	ML	0.00	-768.00	0.00
0	-331	-332	-414	-410	ML	0.00	-768.00	0.00
0	-410	-414	-415	-411	ML	0.00	-768.00	0.00
0	-411	-415	-416	-412	ML	0.00	-768.00	0.00
0	-412	-416	-417	-413	ML	0.00	-768.00	0.00
0	-413	-417	-390	-389	ML	0.00	-768.00	0.00
0	-332	-333	-418	-414	ML	0.00	-768.00	0.00
0	-414	-418	-419	-415	ML	0.00	-768.00	0.00
0	-415	-419	-420	-416	ML	0.00	-768.00	0.00
0	-416	-420	-421	-417	ML	0.00	-768.00	0.00
0	-417	-421	-391	-390	ML	0.00	-768.00	0.00
0	-333	-334	-422	-418	ML	0.00	-768.00	0.00
0	-418	-422	-423	-419	ML	0.00	-768.00	0.00
0	-419	-423	-424	-420	ML	0.00	-768.00	0.00
0	-420	-424	-425	-421	ML	0.00	-768.00	0.00
0	-421	-425	-392	-391	ML	0.00	-768.00	0.00
0	-334	-335	-426	-422	ML	0.00	-768.00	0.00
0	-422	-426	-427	-423	ML	0.00	-768.00	0.00
0	-423	-427	-428	-424	ML	0.00	-768.00	0.00
0	-424	-428	-429	-425	ML	0.00	-768.00	0.00

Relazione di calcolo

0	-425	-429	-393	-392	ML	0.00	-768.00	0.00
0	-335	-336	-430	-426	ML	0.00	-768.00	0.00
0	-426	-430	-431	-427	ML	0.00	-768.00	0.00
0	-427	-431	-432	-428	ML	0.00	-768.00	0.00
0	-428	-432	-433	-429	ML	0.00	-768.00	0.00
0	-429	-433	-394	-393	ML	0.00	-768.00	0.00
0	-336	-337	-434	-430	ML	0.00	-768.00	0.00
0	-430	-434	-435	-431	ML	0.00	-768.00	0.00
0	-431	-435	-436	-432	ML	0.00	-768.00	0.00
0	-432	-436	-437	-433	ML	0.00	-768.00	0.00
0	-433	-437	-395	-394	ML	0.00	-768.00	0.00
0	-337	-338	-438	-434	ML	0.00	-768.00	0.00
0	-434	-438	-439	-435	ML	0.00	-768.00	0.00
0	-435	-439	-440	-436	ML	0.00	-768.00	0.00
0	-436	-440	-441	-437	ML	0.00	-768.00	0.00
0	-437	-441	-396	-395	ML	0.00	-768.00	0.00
0	-338	-339	-442	-438	ML	0.00	-768.00	0.00
0	-438	-442	-443	-439	ML	0.00	-768.00	0.00
0	-439	-443	-444	-440	ML	0.00	-768.00	0.00
0	-440	-444	-445	-441	ML	0.00	-768.00	0.00
0	-441	-445	-397	-396	ML	0.00	-768.00	0.00
0	-339	-20	-398	-442	ML	0.00	-768.00	0.00
0	-442	-398	-400	-443	ML	0.00	-768.00	0.00
0	-443	-400	-402	-444	ML	0.00	-768.00	0.00
0	-444	-402	-404	-445	ML	0.00	-768.00	0.00
0	-445	-404	9	-397	ML	0.00	-768.00	0.00
0	-341	-482	-484	-343	ML	0.00	768.00	0.00
0	-343	-484	-486	-345	ML	0.00	768.00	0.00
0	-345	-486	-488	-347	ML	0.00	768.00	0.00
0	-347	-488	-446	5	ML	0.00	768.00	0.00
0	-482	-491	-493	-484	ML	0.00	768.00	0.00
0	-484	-493	-495	-486	ML	0.00	768.00	0.00
0	-486	-495	-497	-488	ML	0.00	768.00	0.00
0	-488	-497	-447	-446	ML	0.00	768.00	0.00
0	-491	-500	-502	-493	ML	0.00	768.00	0.00
0	-493	-502	-504	-495	ML	0.00	768.00	0.00
0	-495	-504	-506	-497	ML	0.00	768.00	0.00
0	-497	-506	-448	-447	ML	0.00	768.00	0.00
0	-500	-509	-511	-502	ML	0.00	768.00	0.00
0	-502	-511	-513	-504	ML	0.00	768.00	0.00
0	-504	-513	-515	-506	ML	0.00	768.00	0.00
0	-506	-515	-6	-448	ML	0.00	768.00	0.00
0	-509	-518	-520	-511	ML	0.00	768.00	0.00
0	-511	-520	-522	-513	ML	0.00	768.00	0.00
0	-513	-522	-524	-515	ML	0.00	768.00	0.00
0	-515	-524	-449	-6	ML	0.00	768.00	0.00
0	-518	-527	-529	-520	ML	0.00	768.00	0.00
0	-520	-529	-531	-522	ML	0.00	768.00	0.00
0	-522	-531	-533	-524	ML	0.00	768.00	0.00
0	-524	-533	-8	-449	ML	0.00	768.00	0.00
0	-527	-536	-538	-529	ML	0.00	768.00	0.00
0	-529	-538	-540	-531	ML	0.00	768.00	0.00
0	-531	-540	-542	-533	ML	0.00	768.00	0.00
0	-533	-542	-450	-8	ML	0.00	768.00	0.00
0	-536	-545	-547	-538	ML	0.00	768.00	0.00
0	-538	-547	-549	-540	ML	0.00	768.00	0.00
0	-540	-549	-551	-542	ML	0.00	768.00	0.00
0	-542	-551	-451	-450	ML	0.00	768.00	0.00
0	-545	-554	-556	-547	ML	0.00	768.00	0.00
0	-547	-556	-558	-549	ML	0.00	768.00	0.00
0	-549	-558	-560	-551	ML	0.00	768.00	0.00
0	-551	-560	-452	-451	ML	0.00	768.00	0.00
0	-554	-563	-565	-556	ML	0.00	768.00	0.00
0	-556	-565	-567	-558	ML	0.00	768.00	0.00
0	-558	-567	-569	-560	ML	0.00	768.00	0.00
0	-560	-569	-2	-452	ML	0.00	768.00	0.00
0	-563	-572	-574	-565	ML	0.00	768.00	0.00
0	-565	-574	-576	-567	ML	0.00	768.00	0.00
0	-567	-576	-578	-569	ML	0.00	768.00	0.00
0	-569	-578	-453	-2	ML	0.00	768.00	0.00
0	-572	-581	-583	-574	ML	0.00	768.00	0.00
0	-574	-583	-585	-576	ML	0.00	768.00	0.00
0	-576	-585	-587	-578	ML	0.00	768.00	0.00
0	-578	-587	-9	-453	ML	0.00	768.00	0.00
0	-581	-590	-592	-583	ML	0.00	768.00	0.00
0	-583	-592	-594	-585	ML	0.00	768.00	0.00
0	-585	-594	-596	-587	ML	0.00	768.00	0.00
0	-587	-596	-454	-9	ML	0.00	768.00	0.00
0	-590	-599	-601	-592	ML	0.00	768.00	0.00

Relazione di calcolo

0	-592	-601	-603	-594	ML	0.00	768.00	0.00
0	-594	-603	-605	-596	ML	0.00	768.00	0.00
0	-596	-605	-455	-454	ML	0.00	768.00	0.00
0	-599	-608	-610	-601	ML	0.00	768.00	0.00
0	-601	-610	-612	-603	ML	0.00	768.00	0.00
0	-603	-612	-614	-605	ML	0.00	768.00	0.00
0	-605	-614	-456	-455	ML	0.00	768.00	0.00
0	-608	-617	-619	-610	ML	0.00	768.00	0.00
0	-610	-619	-621	-612	ML	0.00	768.00	0.00
0	-612	-621	-623	-614	ML	0.00	768.00	0.00
0	-614	-623	-457	-456	ML	0.00	768.00	0.00
0	-617	-626	-628	-619	ML	0.00	768.00	0.00
0	-619	-628	-630	-621	ML	0.00	768.00	0.00
0	-621	-630	-632	-623	ML	0.00	768.00	0.00
0	-623	-632	-7	-457	ML	0.00	768.00	0.00
0	-626	-635	-637	-628	ML	0.00	768.00	0.00
0	-628	-637	-639	-630	ML	0.00	768.00	0.00
0	-630	-639	-641	-632	ML	0.00	768.00	0.00
0	-632	-641	-12	-7	ML	0.00	768.00	0.00
0	-635	-644	-646	-637	ML	0.00	768.00	0.00
0	-637	-646	-648	-639	ML	0.00	768.00	0.00
0	-639	-648	-650	-641	ML	0.00	768.00	0.00
0	-641	-650	-1	-12	ML	0.00	768.00	0.00
0	-644	-653	-655	-646	ML	0.00	768.00	0.00
0	-646	-655	-657	-648	ML	0.00	768.00	0.00
0	-648	-657	-659	-650	ML	0.00	768.00	0.00
0	-650	-659	-458	-1	ML	0.00	768.00	0.00
0	-653	-662	-664	-655	ML	0.00	768.00	0.00
0	-655	-664	-666	-657	ML	0.00	768.00	0.00
0	-657	-666	-668	-659	ML	0.00	768.00	0.00
0	-659	-668	-459	-458	ML	0.00	768.00	0.00
0	-662	-671	-673	-664	ML	0.00	768.00	0.00
0	-664	-673	-675	-666	ML	0.00	768.00	0.00
0	-666	-675	-677	-668	ML	0.00	768.00	0.00
0	-668	-677	-460	-459	ML	0.00	768.00	0.00
0	-671	-680	-682	-673	ML	0.00	768.00	0.00
0	-673	-682	-684	-675	ML	0.00	768.00	0.00
0	-675	-684	-686	-677	ML	0.00	768.00	0.00
0	-677	-686	-5	-460	ML	0.00	768.00	0.00
0	-680	-689	-691	-682	ML	0.00	768.00	0.00
0	-682	-691	-693	-684	ML	0.00	768.00	0.00
0	-684	-693	-695	-686	ML	0.00	768.00	0.00
0	-686	-695	-461	-5	ML	0.00	768.00	0.00
0	-689	-698	-700	-691	ML	0.00	768.00	0.00
0	-691	-700	-702	-693	ML	0.00	768.00	0.00
0	-693	-702	-704	-695	ML	0.00	768.00	0.00
0	-695	-704	-3	-461	ML	0.00	768.00	0.00
0	-1697	-1698	-1224	-1314	ML	0.00	768.00	0.00
0	-698	-707	-709	-700	ML	0.00	768.00	0.00
0	-700	-709	-711	-702	ML	0.00	768.00	0.00
0	-702	-711	-713	-704	ML	0.00	768.00	0.00
0	-704	-713	-462	-3	ML	0.00	768.00	0.00
0	-1696	-1697	-1314	-1305	ML	0.00	768.00	0.00
0	-707	-716	-718	-709	ML	0.00	768.00	0.00
0	-709	-718	-720	-711	ML	0.00	768.00	0.00
0	-711	-720	-722	-713	ML	0.00	768.00	0.00
0	-713	-722	-463	-462	ML	0.00	768.00	0.00
0	-1695	-1696	-1305	-1296	ML	0.00	768.00	0.00
0	-716	-725	-727	-718	ML	0.00	768.00	0.00
0	-718	-727	-729	-720	ML	0.00	768.00	0.00
0	-720	-729	-731	-722	ML	0.00	768.00	0.00
0	-722	-731	-464	-463	ML	0.00	768.00	0.00
0	-1694	-1695	-1296	-1287	ML	0.00	768.00	0.00
0	-725	-734	-736	-727	ML	0.00	768.00	0.00
0	-727	-736	-738	-729	ML	0.00	768.00	0.00
0	-729	-738	-740	-731	ML	0.00	768.00	0.00
0	-731	-740	-465	-464	ML	0.00	768.00	0.00
0	-734	-743	-745	-736	ML	0.00	768.00	0.00
0	-736	-745	-747	-738	ML	0.00	768.00	0.00
0	-738	-747	-749	-740	ML	0.00	768.00	0.00
0	-740	-749	-4	-465	ML	0.00	768.00	0.00
0	-743	-752	-754	-745	ML	0.00	768.00	0.00
0	-745	-754	-756	-747	ML	0.00	768.00	0.00
0	-747	-756	-758	-749	ML	0.00	768.00	0.00
0	-749	-758	-16	-4	ML	0.00	768.00	0.00
0	-752	-761	-763	-754	ML	0.00	768.00	0.00
0	-754	-763	-765	-756	ML	0.00	768.00	0.00
0	-756	-765	-767	-758	ML	0.00	768.00	0.00
0	-758	-767	-14	-16	ML	0.00	768.00	0.00

Relazione di calcolo

0	-1682	-1683	-743	-734	ML	0.00	768.00	0.00
0	-761	-770	-772	-763	ML	0.00	768.00	0.00
0	-1671	-1672	-644	-635	ML	0.00	768.00	0.00
0	-763	-772	-774	-765	ML	0.00	768.00	0.00
0	-1660	-1661	-545	-536	ML	0.00	768.00	0.00
0	-765	-774	-776	-767	ML	0.00	768.00	0.00
0	-1650	-1649	-360	-356	ML	0.00	-768.00	0.00
0	-767	-776	-466	-14	ML	0.00	768.00	0.00
0	-1692	-1693	-1278	-1269	ML	0.00	768.00	0.00
0	-1681	-1682	-734	-725	ML	0.00	768.00	0.00
0	-770	-469	-472	-772	ML	0.00	768.00	0.00
0	-1670	-1671	-635	-626	ML	0.00	768.00	0.00
0	-772	-472	-475	-774	ML	0.00	768.00	0.00
0	-1659	-1660	-536	-527	ML	0.00	768.00	0.00
0	-774	-475	-478	-776	ML	0.00	768.00	0.00
0	-1649	-1648	-364	-360	ML	0.00	-768.00	0.00
0	-776	-478	6	-466	ML	0.00	768.00	0.00
0	-1691	-1692	-1269	-1260	ML	0.00	768.00	0.00
0	-1680	-1681	-725	-716	ML	0.00	768.00	0.00
0	-469	-1233	-1235	-472	ML	0.00	768.00	0.00
0	-1669	-1670	-626	-617	ML	0.00	768.00	0.00
0	-472	-1235	-1237	-475	ML	0.00	768.00	0.00
0	-1658	-1659	-527	-518	ML	0.00	768.00	0.00
0	-475	-1237	-1239	-478	ML	0.00	768.00	0.00
0	-1648	-1647	-368	-364	ML	0.00	-768.00	0.00
0	-478	-1239	-1213	6	ML	0.00	768.00	0.00
0	-1690	-1691	-1260	-1251	ML	0.00	768.00	0.00
0	-1679	-1680	-716	-707	ML	0.00	768.00	0.00
0	-1233	-1242	-1244	-1235	ML	0.00	768.00	0.00
0	-1668	-1669	-617	-608	ML	0.00	768.00	0.00
0	-1235	-1244	-1246	-1237	ML	0.00	768.00	0.00
0	-1657	-1658	-518	-509	ML	0.00	768.00	0.00
0	-1237	-1246	-1248	-1239	ML	0.00	768.00	0.00
0	-1647	-1646	-372	-368	ML	0.00	-768.00	0.00
0	-1239	-1248	-1214	-1213	ML	0.00	768.00	0.00
0	-1689	-1690	-1251	-1242	ML	0.00	768.00	0.00
0	-1678	-1679	-707	-698	ML	0.00	768.00	0.00
0	-1242	-1251	-1253	-1244	ML	0.00	768.00	0.00
0	-1667	-1668	-608	-599	ML	0.00	768.00	0.00
0	-1244	-1253	-1255	-1246	ML	0.00	768.00	0.00
0	-1656	-1657	-509	-500	ML	0.00	768.00	0.00
0	-1246	-1255	-1257	-1248	ML	0.00	768.00	0.00
0	-1646	-1645	-376	-372	ML	0.00	-768.00	0.00
0	-1248	-1257	-1215	-1214	ML	0.00	768.00	0.00
0	-1688	-1689	-1242	-1233	ML	0.00	768.00	0.00
0	-1677	-1678	-698	-689	ML	0.00	768.00	0.00
0	-1251	-1260	-1262	-1253	ML	0.00	768.00	0.00
0	-1666	-1667	-599	-590	ML	0.00	768.00	0.00
0	-1253	-1262	-1264	-1255	ML	0.00	768.00	0.00
0	-1655	-1656	-500	-491	ML	0.00	768.00	0.00
0	-1255	-1264	-1266	-1257	ML	0.00	768.00	0.00
0	-1645	-1644	-380	-376	ML	0.00	-768.00	0.00
0	-1257	-1266	-1216	-1215	ML	0.00	768.00	0.00
0	-1687	-1688	-1233	-469	ML	0.00	768.00	0.00
0	-1676	-1677	-689	-680	ML	0.00	768.00	0.00
0	-1260	-1269	-1271	-1262	ML	0.00	768.00	0.00
0	-1665	-1666	-590	-581	ML	0.00	768.00	0.00
0	-1262	-1271	-1273	-1264	ML	0.00	768.00	0.00
0	-1654	-1655	-491	-482	ML	0.00	768.00	0.00
0	-1264	-1273	-1275	-1266	ML	0.00	768.00	0.00
0	-1644	-1643	-384	-380	ML	0.00	-768.00	0.00
0	-1266	-1275	-1217	-1216	ML	0.00	768.00	0.00
0	-1686	-1687	-469	-770	ML	0.00	768.00	0.00
0	-1675	-1676	-680	-671	ML	0.00	768.00	0.00
0	-1269	-1278	-1280	-1271	ML	0.00	768.00	0.00
0	-1664	-1665	-581	-572	ML	0.00	768.00	0.00
0	-1271	-1280	-1282	-1273	ML	0.00	768.00	0.00
0	-1653	-1654	-482	-341	ML	0.00	768.00	0.00
0	-1273	-1282	-1284	-1275	ML	0.00	768.00	0.00
0	-1643	-1642	-340	-384	ML	0.00	-768.00	0.00
0	-1275	-1284	-1218	-1217	ML	0.00	768.00	0.00
0	-1685	-1686	-770	-761	ML	0.00	768.00	0.00
0	-1674	-1675	-671	-662	ML	0.00	768.00	0.00
0	-1278	-1287	-1289	-1280	ML	0.00	768.00	0.00
0	-1663	-1664	-572	-563	ML	0.00	768.00	0.00
0	-1280	-1289	-1291	-1282	ML	0.00	768.00	0.00
0	-1653	-1652	-348	-341	ML	0.00	-768.00	0.00
0	-1282	-1291	-1293	-1284	ML	0.00	768.00	0.00
0	-1284	-1293	-1219	-1218	ML	0.00	768.00	0.00

Relazione di calcolo

0	-1684	-1685	-761	-752	ML	0.00	768.00	0.00
0	-1673	-1674	-662	-653	ML	0.00	768.00	0.00
0	-1287	-1296	-1298	-1289	ML	0.00	768.00	0.00
0	-1662	-1663	-563	-554	ML	0.00	768.00	0.00
0	-1289	-1298	-1300	-1291	ML	0.00	768.00	0.00
0	-1652	-1651	-352	-348	ML	0.00	-768.00	0.00
0	-1291	-1300	-1302	-1293	ML	0.00	768.00	0.00
0	-1293	-1302	-1220	-1219	ML	0.00	768.00	0.00
0	-1683	-1684	-752	-743	ML	0.00	768.00	0.00
0	-1672	-1673	-653	-644	ML	0.00	768.00	0.00
0	-1296	-1305	-1307	-1298	ML	0.00	768.00	0.00
0	-1661	-1662	-554	-545	ML	0.00	768.00	0.00
0	-1298	-1307	-1309	-1300	ML	0.00	768.00	0.00
0	-1651	-1650	-356	-352	ML	0.00	-768.00	0.00
0	-1300	-1309	-1311	-1302	ML	0.00	768.00	0.00
0	-1302	-1311	-1221	-1220	ML	0.00	768.00	0.00
0	-1314	-1224	-1226	-1316	ML	0.00	768.00	0.00
0	-1305	-1314	-1316	-1307	ML	0.00	768.00	0.00
0	-1316	-1226	-1228	-1318	ML	0.00	768.00	0.00
0	-1307	-1316	-1318	-1309	ML	0.00	768.00	0.00
0	-1318	-1228	-1230	-1320	ML	0.00	768.00	0.00
0	-1309	-1318	-1320	-1311	ML	0.00	768.00	0.00
0	-1320	-1230	-24	-1222	ML	0.00	768.00	0.00
0	-1311	-1320	-1222	-1221	ML	0.00	768.00	0.00
0	-1333	-1340	-1341	-1335	ML	0.00	768.00	0.00
0	-1335	-1341	-1342	-1337	ML	0.00	768.00	0.00
0	-1337	-1342	-1343	-1339	ML	0.00	768.00	0.00
0	-1339	-1343	-1322	8	ML	0.00	768.00	0.00
0	-1213	-1214	-1344	-1340	ML	0.00	768.00	0.00
0	-1340	-1344	-1345	-1341	ML	0.00	768.00	0.00
0	-1341	-1345	-1346	-1342	ML	0.00	768.00	0.00
0	-1342	-1346	-1347	-1343	ML	0.00	768.00	0.00
0	-1343	-1347	-1323	-1322	ML	0.00	768.00	0.00
0	-1214	-1215	-1348	-1344	ML	0.00	768.00	0.00
0	-1344	-1348	-1349	-1345	ML	0.00	768.00	0.00
0	-1345	-1349	-1350	-1346	ML	0.00	768.00	0.00
0	-1346	-1350	-1351	-1347	ML	0.00	768.00	0.00
0	-1347	-1351	-1324	-1323	ML	0.00	768.00	0.00
0	-1215	-1216	-1352	-1348	ML	0.00	768.00	0.00
0	-1348	-1352	-1353	-1349	ML	0.00	768.00	0.00
0	-1349	-1353	-1354	-1350	ML	0.00	768.00	0.00
0	-1350	-1354	-1355	-1351	ML	0.00	768.00	0.00
0	-1351	-1355	-1325	-1324	ML	0.00	768.00	0.00
0	-1216	-1217	-1356	-1352	ML	0.00	768.00	0.00
0	-1352	-1356	-1357	-1353	ML	0.00	768.00	0.00
0	-1353	-1357	-1358	-1354	ML	0.00	768.00	0.00
0	-1354	-1358	-1359	-1355	ML	0.00	768.00	0.00
0	-1355	-1359	-1326	-1325	ML	0.00	768.00	0.00
0	-1217	-1218	-1360	-1356	ML	0.00	768.00	0.00
0	-1356	-1360	-1361	-1357	ML	0.00	768.00	0.00
0	-1357	-1361	-1362	-1358	ML	0.00	768.00	0.00
0	-1358	-1362	-1363	-1359	ML	0.00	768.00	0.00
0	-1359	-1363	-1327	-1326	ML	0.00	768.00	0.00
0	-1218	-1219	-1364	-1360	ML	0.00	768.00	0.00
0	-1360	-1364	-1365	-1361	ML	0.00	768.00	0.00
0	-1361	-1365	-1366	-1362	ML	0.00	768.00	0.00
0	-1362	-1366	-1367	-1363	ML	0.00	768.00	0.00
0	-1363	-1367	-1328	-1327	ML	0.00	768.00	0.00
0	-1219	-1220	-1368	-1364	ML	0.00	768.00	0.00
0	-1364	-1368	-1369	-1365	ML	0.00	768.00	0.00
0	-1365	-1369	-1370	-1366	ML	0.00	768.00	0.00
0	-1366	-1370	-1371	-1367	ML	0.00	768.00	0.00
0	-1367	-1371	-1329	-1328	ML	0.00	768.00	0.00
0	-1220	-1221	-1372	-1368	ML	0.00	768.00	0.00
0	-1368	-1372	-1373	-1369	ML	0.00	768.00	0.00
0	-1369	-1373	-1374	-1370	ML	0.00	768.00	0.00
0	-1370	-1374	-1375	-1371	ML	0.00	768.00	0.00
0	-1371	-1375	-1330	-1329	ML	0.00	768.00	0.00
0	-1221	-1222	-1376	-1372	ML	0.00	768.00	0.00
0	-1372	-1376	-1377	-1373	ML	0.00	768.00	0.00
0	-1373	-1377	-1378	-1374	ML	0.00	768.00	0.00
0	-1374	-1378	-1379	-1375	ML	0.00	768.00	0.00
0	-1375	-1379	-1331	-1330	ML	0.00	768.00	0.00
0	-1222	-24	-1332	-1376	ML	0.00	768.00	0.00
0	-1376	-1332	-1334	-1377	ML	0.00	768.00	0.00
0	-1377	-1334	-1336	-1378	ML	0.00	768.00	0.00
0	-1378	-1336	-1338	-1379	ML	0.00	768.00	0.00
0	-1379	-1338	10	-1331	ML	0.00	768.00	0.00
0	-399	-1453	-1454	-401	ML	0.00	768.00	0.00

Relazione di calcolo

0	-401	-1454	-1455	-403	ML	0.00	768.00	0.00
0	-403	-1455	-1456	-405	ML	0.00	768.00	0.00
0	-405	-1456	-1392	7	ML	0.00	768.00	0.00
0	-446	-447	-1457	-1453	ML	0.00	768.00	0.00
0	-1453	-1457	-1458	-1454	ML	0.00	768.00	0.00
0	-1454	-1458	-1459	-1455	ML	0.00	768.00	0.00
0	-1455	-1459	-1460	-1456	ML	0.00	768.00	0.00
0	-1456	-1460	-1393	-1392	ML	0.00	768.00	0.00
0	-447	-448	-1461	-1457	ML	0.00	768.00	0.00
0	-1457	-1461	-1462	-1458	ML	0.00	768.00	0.00
0	-1458	-1462	-1463	-1459	ML	0.00	768.00	0.00
0	-1459	-1463	-1464	-1460	ML	0.00	768.00	0.00
0	-1460	-1464	-1394	-1393	ML	0.00	768.00	0.00
0	-448	-6	-1465	-1461	ML	0.00	768.00	0.00
0	-1461	-1465	-1466	-1462	ML	0.00	768.00	0.00
0	-1462	-1466	-1467	-1463	ML	0.00	768.00	0.00
0	-1463	-1467	-1468	-1464	ML	0.00	768.00	0.00
0	-1464	-1468	-1395	-1394	ML	0.00	768.00	0.00
0	-1468	-1476	-1398	-1395	ML	0.00	768.00	0.00
0	-6	-449	-1473	-1465	ML	0.00	768.00	0.00
0	-1465	-1473	-1474	-1466	ML	0.00	768.00	0.00
0	-1466	-1474	-1475	-1467	ML	0.00	768.00	0.00
0	-1467	-1475	-1476	-1468	ML	0.00	768.00	0.00
0	-449	-8	-1481	-1473	ML	0.00	768.00	0.00
0	-1473	-1481	-1482	-1474	ML	0.00	768.00	0.00
0	-1474	-1482	-1483	-1475	ML	0.00	768.00	0.00
0	-1475	-1483	-1484	-1476	ML	0.00	768.00	0.00
0	-1476	-1484	-1401	-1398	ML	0.00	768.00	0.00
0	-1484	-1492	-1404	-1401	ML	0.00	768.00	0.00
0	-8	-450	-1489	-1481	ML	0.00	768.00	0.00
0	-1481	-1489	-1490	-1482	ML	0.00	768.00	0.00
0	-1482	-1490	-1491	-1483	ML	0.00	768.00	0.00
0	-1483	-1491	-1492	-1484	ML	0.00	768.00	0.00
0	-450	-451	-1497	-1489	ML	0.00	768.00	0.00
0	-1489	-1497	-1498	-1490	ML	0.00	768.00	0.00
0	-1490	-1498	-1499	-1491	ML	0.00	768.00	0.00
0	-1491	-1499	-1500	-1492	ML	0.00	768.00	0.00
0	-1492	-1500	-1407	-1404	ML	0.00	768.00	0.00
0	-451	-452	-1505	-1497	ML	0.00	768.00	0.00
0	-1497	-1505	-1506	-1498	ML	0.00	768.00	0.00
0	-1498	-1506	-1507	-1499	ML	0.00	768.00	0.00
0	-1499	-1507	-1508	-1500	ML	0.00	768.00	0.00
0	-1500	-1508	-1410	-1407	ML	0.00	768.00	0.00
0	-452	-2	-1513	-1505	ML	0.00	768.00	0.00
0	-1505	-1513	-1514	-1506	ML	0.00	768.00	0.00
0	-1506	-1514	-1515	-1507	ML	0.00	768.00	0.00
0	-1507	-1515	-1516	-1508	ML	0.00	768.00	0.00
0	-1508	-1516	-1413	-1410	ML	0.00	768.00	0.00
0	-2	-453	-1517	-1513	ML	0.00	768.00	0.00
0	-1513	-1517	-1518	-1514	ML	0.00	768.00	0.00
0	-1514	-1518	-1519	-1515	ML	0.00	768.00	0.00
0	-1515	-1519	-1520	-1516	ML	0.00	768.00	0.00
0	-1516	-1520	-1414	-1413	ML	0.00	768.00	0.00
0	-453	-9	-1521	-1517	ML	0.00	768.00	0.00
0	-1517	-1521	-1522	-1518	ML	0.00	768.00	0.00
0	-1518	-1522	-1523	-1519	ML	0.00	768.00	0.00
0	-1519	-1523	-1524	-1520	ML	0.00	768.00	0.00
0	-1520	-1524	-1415	-1414	ML	0.00	768.00	0.00
0	-9	-454	-1525	-1521	ML	0.00	768.00	0.00
0	-1521	-1525	-1526	-1522	ML	0.00	768.00	0.00
0	-1522	-1526	-1527	-1523	ML	0.00	768.00	0.00
0	-1523	-1527	-1528	-1524	ML	0.00	768.00	0.00
0	-1524	-1528	-1416	-1415	ML	0.00	768.00	0.00
0	-454	-455	-1529	-1525	ML	0.00	768.00	0.00
0	-1525	-1529	-1530	-1526	ML	0.00	768.00	0.00
0	-1526	-1530	-1531	-1527	ML	0.00	768.00	0.00
0	-1527	-1531	-1532	-1528	ML	0.00	768.00	0.00
0	-1528	-1532	-1417	-1416	ML	0.00	768.00	0.00
0	-455	-456	-1533	-1529	ML	0.00	768.00	0.00
0	-1529	-1533	-1534	-1530	ML	0.00	768.00	0.00
0	-1530	-1534	-1535	-1531	ML	0.00	768.00	0.00
0	-1531	-1535	-1536	-1532	ML	0.00	768.00	0.00
0	-1532	-1536	-1418	-1417	ML	0.00	768.00	0.00
0	-456	-457	-1537	-1533	ML	0.00	768.00	0.00
0	-1533	-1537	-1538	-1534	ML	0.00	768.00	0.00
0	-1534	-1538	-1539	-1535	ML	0.00	768.00	0.00
0	-1535	-1539	-1540	-1536	ML	0.00	768.00	0.00
0	-1536	-1540	-1419	-1418	ML	0.00	768.00	0.00
0	-457	-7	-1541	-1537	ML	0.00	768.00	0.00

Relazione di calcolo

0	-1537	-1541	-1542	-1538	ML	0.00	768.00	0.00
0	-1538	-1542	-1543	-1539	ML	0.00	768.00	0.00
0	-1539	-1543	-1544	-1540	ML	0.00	768.00	0.00
0	-1540	-1544	-1420	-1419	ML	0.00	768.00	0.00
0	-7	-12	-1545	-1541	ML	0.00	768.00	0.00
0	-1541	-1545	-1546	-1542	ML	0.00	768.00	0.00
0	-1542	-1546	-1547	-1543	ML	0.00	768.00	0.00
0	-1543	-1547	-1548	-1544	ML	0.00	768.00	0.00
0	-1544	-1548	-1421	-1420	ML	0.00	768.00	0.00
0	-12	-1	-1549	-1545	ML	0.00	768.00	0.00
0	-1545	-1549	-1550	-1546	ML	0.00	768.00	0.00
0	-1546	-1550	-1551	-1547	ML	0.00	768.00	0.00
0	-1547	-1551	-1552	-1548	ML	0.00	768.00	0.00
0	-1548	-1552	-1422	-1421	ML	0.00	768.00	0.00
0	-1	-458	-1557	-1549	ML	0.00	768.00	0.00
0	-1549	-1557	-1558	-1550	ML	0.00	768.00	0.00
0	-1550	-1558	-1559	-1551	ML	0.00	768.00	0.00
0	-1551	-1559	-1560	-1552	ML	0.00	768.00	0.00
0	-1552	-1560	-1425	-1422	ML	0.00	768.00	0.00
0	-458	-459	-1565	-1557	ML	0.00	768.00	0.00
0	-1557	-1565	-1566	-1558	ML	0.00	768.00	0.00
0	-1558	-1566	-1567	-1559	ML	0.00	768.00	0.00
0	-1559	-1567	-1568	-1560	ML	0.00	768.00	0.00
0	-1560	-1568	-1428	-1425	ML	0.00	768.00	0.00
0	-459	-460	-1573	-1565	ML	0.00	768.00	0.00
0	-1565	-1573	-1574	-1566	ML	0.00	768.00	0.00
0	-1566	-1574	-1575	-1567	ML	0.00	768.00	0.00
0	-1567	-1575	-1576	-1568	ML	0.00	768.00	0.00
0	-1568	-1576	-1431	-1428	ML	0.00	768.00	0.00
0	-1576	-1584	-1434	-1431	ML	0.00	768.00	0.00
0	-460	-5	-1581	-1573	ML	0.00	768.00	0.00
0	-1573	-1581	-1582	-1574	ML	0.00	768.00	0.00
0	-1574	-1582	-1583	-1575	ML	0.00	768.00	0.00
0	-1575	-1583	-1584	-1576	ML	0.00	768.00	0.00
0	-5	-461	-1585	-1581	ML	0.00	768.00	0.00
0	-1581	-1585	-1586	-1582	ML	0.00	768.00	0.00
0	-1582	-1586	-1587	-1583	ML	0.00	768.00	0.00
0	-1583	-1587	-1588	-1584	ML	0.00	768.00	0.00
0	-1584	-1588	-1435	-1434	ML	0.00	768.00	0.00
0	-461	-3	-1589	-1585	ML	0.00	768.00	0.00
0	-1585	-1589	-1590	-1586	ML	0.00	768.00	0.00
0	-1586	-1590	-1591	-1587	ML	0.00	768.00	0.00
0	-1587	-1591	-1592	-1588	ML	0.00	768.00	0.00
0	-1588	-1592	-1436	-1435	ML	0.00	768.00	0.00
0	-3	-462	-1593	-1589	ML	0.00	768.00	0.00
0	-1589	-1593	-1594	-1590	ML	0.00	768.00	0.00
0	-1590	-1594	-1595	-1591	ML	0.00	768.00	0.00
0	-1591	-1595	-1596	-1592	ML	0.00	768.00	0.00
0	-1592	-1596	-1437	-1436	ML	0.00	768.00	0.00
0	-462	-463	-1597	-1593	ML	0.00	768.00	0.00
0	-1593	-1597	-1598	-1594	ML	0.00	768.00	0.00
0	-1594	-1598	-1599	-1595	ML	0.00	768.00	0.00
0	-1595	-1599	-1600	-1596	ML	0.00	768.00	0.00
0	-1596	-1600	-1438	-1437	ML	0.00	768.00	0.00
0	-463	-464	-1601	-1597	ML	0.00	768.00	0.00
0	-1597	-1601	-1602	-1598	ML	0.00	768.00	0.00
0	-1598	-1602	-1603	-1599	ML	0.00	768.00	0.00
0	-1599	-1603	-1604	-1600	ML	0.00	768.00	0.00
0	-1600	-1604	-1439	-1438	ML	0.00	768.00	0.00
0	-464	-465	-1605	-1601	ML	0.00	768.00	0.00
0	-1601	-1605	-1606	-1602	ML	0.00	768.00	0.00
0	-1602	-1606	-1607	-1603	ML	0.00	768.00	0.00
0	-1603	-1607	-1608	-1604	ML	0.00	768.00	0.00
0	-1604	-1608	-1440	-1439	ML	0.00	768.00	0.00
0	-465	-4	-1609	-1605	ML	0.00	768.00	0.00
0	-1605	-1609	-1610	-1606	ML	0.00	768.00	0.00
0	-1606	-1610	-1611	-1607	ML	0.00	768.00	0.00
0	-1607	-1611	-1612	-1608	ML	0.00	768.00	0.00
0	-1608	-1612	-1441	-1440	ML	0.00	768.00	0.00
0	-4	-16	-1617	-1609	ML	0.00	768.00	0.00
0	-1609	-1617	-1618	-1610	ML	0.00	768.00	0.00
0	-1610	-1618	-1619	-1611	ML	0.00	768.00	0.00
0	-1611	-1619	-1620	-1612	ML	0.00	768.00	0.00
0	-1612	-1620	-1444	-1441	ML	0.00	768.00	0.00
0	-16	-14	-1625	-1617	ML	0.00	768.00	0.00
0	-1617	-1625	-1626	-1618	ML	0.00	768.00	0.00
0	-1618	-1626	-1627	-1619	ML	0.00	768.00	0.00
0	-1619	-1627	-1628	-1620	ML	0.00	768.00	0.00
0	-1620	-1628	-1447	-1444	ML	0.00	768.00	0.00

Relazione di calcolo

0	-14	-466	-1633	-1625	ML	0.00	768.00	0.00
0	-1625	-1633	-1634	-1626	ML	0.00	768.00	0.00
0	-1626	-1634	-1635	-1627	ML	0.00	768.00	0.00
0	-1627	-1635	-1636	-1628	ML	0.00	768.00	0.00
0	-1628	-1636	-1450	-1447	ML	0.00	768.00	0.00
0	-1636	-1339	8	-1450	ML	0.00	768.00	0.00
0	-466	6	-1333	-1633	ML	0.00	768.00	0.00
0	-1633	-1333	-1335	-1634	ML	0.00	768.00	0.00
0	-1634	-1335	-1337	-1635	ML	0.00	768.00	0.00
0	-1635	-1337	-1339	-1636	ML	0.00	768.00	0.00

Condizione di carico n. 5: Spinta sismica

Carichi uniformi

Bid.	N1	N2	N3	N4	TDC	Qx <daN/mq>	Qy <daN/mq>	Qz <daN/mq>
0	5	-446	-1453	-399	ML	0.00	1345.00	0.00
0	5	-330	-406	-399	ML	0.00	-1345.00	0.00
0	1	-284	-1652	-1653	ML	0.00	-1345.00	0.00
0	-1693	-1694	-1287	-1278	ML	0.00	1345.00	0.00
0	6	-1213	-1340	-1333	ML	0.00	1345.00	0.00
0	-341	-348	-349	-343	ML	0.00	-1345.00	0.00
0	-343	-349	-350	-345	ML	0.00	-1345.00	0.00
0	-345	-350	-351	-347	ML	0.00	-1345.00	0.00
0	-347	-351	-330	5	ML	0.00	-1345.00	0.00
0	-284	-282	-1651	-1652	ML	0.00	-1345.00	0.00
0	-348	-352	-353	-349	ML	0.00	-1345.00	0.00
0	-349	-353	-354	-350	ML	0.00	-1345.00	0.00
0	-350	-354	-355	-351	ML	0.00	-1345.00	0.00
0	-351	-355	-331	-330	ML	0.00	-1345.00	0.00
0	-282	-280	-1650	-1651	ML	0.00	-1345.00	0.00
0	-352	-356	-357	-353	ML	0.00	-1345.00	0.00
0	-353	-357	-358	-354	ML	0.00	-1345.00	0.00
0	-354	-358	-359	-355	ML	0.00	-1345.00	0.00
0	-355	-359	-332	-331	ML	0.00	-1345.00	0.00
0	-280	-28	-1649	-1650	ML	0.00	-1345.00	0.00
0	-356	-360	-361	-357	ML	0.00	-1345.00	0.00
0	-357	-361	-362	-358	ML	0.00	-1345.00	0.00
0	-358	-362	-363	-359	ML	0.00	-1345.00	0.00
0	-359	-363	-333	-332	ML	0.00	-1345.00	0.00
0	-28	-308	-1648	-1649	ML	0.00	-1345.00	0.00
0	-360	-364	-365	-361	ML	0.00	-1345.00	0.00
0	-361	-365	-366	-362	ML	0.00	-1345.00	0.00
0	-362	-366	-367	-363	ML	0.00	-1345.00	0.00
0	-363	-367	-334	-333	ML	0.00	-1345.00	0.00
0	-308	-306	-1647	-1648	ML	0.00	-1345.00	0.00
0	-364	-368	-369	-365	ML	0.00	-1345.00	0.00
0	-365	-369	-370	-366	ML	0.00	-1345.00	0.00
0	-366	-370	-371	-367	ML	0.00	-1345.00	0.00
0	-367	-371	-335	-334	ML	0.00	-1345.00	0.00
0	-306	-304	-1646	-1647	ML	0.00	-1345.00	0.00
0	-368	-372	-373	-369	ML	0.00	-1345.00	0.00
0	-369	-373	-374	-370	ML	0.00	-1345.00	0.00
0	-370	-374	-375	-371	ML	0.00	-1345.00	0.00
0	-371	-375	-336	-335	ML	0.00	-1345.00	0.00
0	-304	-302	-1645	-1646	ML	0.00	-1345.00	0.00
0	-372	-376	-377	-373	ML	0.00	-1345.00	0.00
0	-373	-377	-378	-374	ML	0.00	-1345.00	0.00
0	-374	-378	-379	-375	ML	0.00	-1345.00	0.00
0	-375	-379	-337	-336	ML	0.00	-1345.00	0.00
0	-302	-300	-1644	-1645	ML	0.00	-1345.00	0.00
0	-376	-380	-381	-377	ML	0.00	-1345.00	0.00
0	-377	-381	-382	-378	ML	0.00	-1345.00	0.00
0	-378	-382	-383	-379	ML	0.00	-1345.00	0.00
0	-379	-383	-338	-337	ML	0.00	-1345.00	0.00
0	-300	-298	-1643	-1644	ML	0.00	-1345.00	0.00
0	-380	-384	-385	-381	ML	0.00	-1345.00	0.00
0	-381	-385	-386	-382	ML	0.00	-1345.00	0.00
0	-382	-386	-387	-383	ML	0.00	-1345.00	0.00
0	-383	-387	-339	-338	ML	0.00	-1345.00	0.00
0	-298	4	-1642	-1643	ML	0.00	-1345.00	0.00
0	-384	-340	-342	-385	ML	0.00	-1345.00	0.00
0	-385	-342	-344	-386	ML	0.00	-1345.00	0.00
0	-386	-344	-346	-387	ML	0.00	-1345.00	0.00
0	-387	-346	-20	-339	ML	0.00	-1345.00	0.00
0	-399	-406	-407	-401	ML	0.00	-1345.00	0.00
0	-401	-407	-408	-403	ML	0.00	-1345.00	0.00
0	-403	-408	-409	-405	ML	0.00	-1345.00	0.00
0	-405	-409	-388	7	ML	0.00	-1345.00	0.00

Relazione di calcolo

0	-330	-331	-410	-406	ML	0.00	-1345.00	0.00
0	-406	-410	-411	-407	ML	0.00	-1345.00	0.00
0	-407	-411	-412	-408	ML	0.00	-1345.00	0.00
0	-408	-412	-413	-409	ML	0.00	-1345.00	0.00
0	-409	-413	-389	-388	ML	0.00	-1345.00	0.00
0	-331	-332	-414	-410	ML	0.00	-1345.00	0.00
0	-410	-414	-415	-411	ML	0.00	-1345.00	0.00
0	-411	-415	-416	-412	ML	0.00	-1345.00	0.00
0	-412	-416	-417	-413	ML	0.00	-1345.00	0.00
0	-413	-417	-390	-389	ML	0.00	-1345.00	0.00
0	-332	-333	-418	-414	ML	0.00	-1345.00	0.00
0	-414	-418	-419	-415	ML	0.00	-1345.00	0.00
0	-415	-419	-420	-416	ML	0.00	-1345.00	0.00
0	-416	-420	-421	-417	ML	0.00	-1345.00	0.00
0	-417	-421	-391	-390	ML	0.00	-1345.00	0.00
0	-333	-334	-422	-418	ML	0.00	-1345.00	0.00
0	-418	-422	-423	-419	ML	0.00	-1345.00	0.00
0	-419	-423	-424	-420	ML	0.00	-1345.00	0.00
0	-420	-424	-425	-421	ML	0.00	-1345.00	0.00
0	-421	-425	-392	-391	ML	0.00	-1345.00	0.00
0	-334	-335	-426	-422	ML	0.00	-1345.00	0.00
0	-422	-426	-427	-423	ML	0.00	-1345.00	0.00
0	-423	-427	-428	-424	ML	0.00	-1345.00	0.00
0	-424	-428	-429	-425	ML	0.00	-1345.00	0.00
0	-425	-429	-393	-392	ML	0.00	-1345.00	0.00
0	-335	-336	-430	-426	ML	0.00	-1345.00	0.00
0	-426	-430	-431	-427	ML	0.00	-1345.00	0.00
0	-427	-431	-432	-428	ML	0.00	-1345.00	0.00
0	-428	-432	-433	-429	ML	0.00	-1345.00	0.00
0	-429	-433	-394	-393	ML	0.00	-1345.00	0.00
0	-336	-337	-434	-430	ML	0.00	-1345.00	0.00
0	-430	-434	-435	-431	ML	0.00	-1345.00	0.00
0	-431	-435	-436	-432	ML	0.00	-1345.00	0.00
0	-432	-436	-437	-433	ML	0.00	-1345.00	0.00
0	-433	-437	-395	-394	ML	0.00	-1345.00	0.00
0	-337	-338	-438	-434	ML	0.00	-1345.00	0.00
0	-434	-438	-439	-435	ML	0.00	-1345.00	0.00
0	-435	-439	-440	-436	ML	0.00	-1345.00	0.00
0	-436	-440	-441	-437	ML	0.00	-1345.00	0.00
0	-437	-441	-396	-395	ML	0.00	-1345.00	0.00
0	-338	-339	-442	-438	ML	0.00	-1345.00	0.00
0	-438	-442	-443	-439	ML	0.00	-1345.00	0.00
0	-439	-443	-444	-440	ML	0.00	-1345.00	0.00
0	-440	-444	-445	-441	ML	0.00	-1345.00	0.00
0	-441	-445	-397	-396	ML	0.00	-1345.00	0.00
0	-339	-20	-398	-442	ML	0.00	-1345.00	0.00
0	-442	-398	-400	-443	ML	0.00	-1345.00	0.00
0	-443	-400	-402	-444	ML	0.00	-1345.00	0.00
0	-444	-402	-404	-445	ML	0.00	-1345.00	0.00
0	-445	-404	9	-397	ML	0.00	-1345.00	0.00
0	1	-32	-1654	-1653	ML	0.00	1345.00	0.00
0	-341	-482	-484	-343	ML	0.00	1345.00	0.00
0	-343	-484	-486	-345	ML	0.00	1345.00	0.00
0	-345	-486	-488	-347	ML	0.00	1345.00	0.00
0	-347	-488	-446	5	ML	0.00	1345.00	0.00
0	-32	-34	-1655	-1654	ML	0.00	1345.00	0.00
0	-482	-491	-493	-484	ML	0.00	1345.00	0.00
0	-484	-493	-495	-486	ML	0.00	1345.00	0.00
0	-486	-495	-497	-488	ML	0.00	1345.00	0.00
0	-488	-497	-447	-446	ML	0.00	1345.00	0.00
0	-34	-36	-1656	-1655	ML	0.00	1345.00	0.00
0	-491	-500	-502	-493	ML	0.00	1345.00	0.00
0	-493	-502	-504	-495	ML	0.00	1345.00	0.00
0	-495	-504	-506	-497	ML	0.00	1345.00	0.00
0	-497	-506	-448	-447	ML	0.00	1345.00	0.00
0	-36	-38	-1657	-1656	ML	0.00	1345.00	0.00
0	-500	-509	-511	-502	ML	0.00	1345.00	0.00
0	-502	-511	-513	-504	ML	0.00	1345.00	0.00
0	-504	-513	-515	-506	ML	0.00	1345.00	0.00
0	-506	-515	-6	-448	ML	0.00	1345.00	0.00
0	-38	-40	-1658	-1657	ML	0.00	1345.00	0.00
0	-509	-518	-520	-511	ML	0.00	1345.00	0.00
0	-511	-520	-522	-513	ML	0.00	1345.00	0.00
0	-513	-522	-524	-515	ML	0.00	1345.00	0.00
0	-515	-524	-449	-6	ML	0.00	1345.00	0.00
0	-40	-42	-1659	-1658	ML	0.00	1345.00	0.00
0	-518	-527	-529	-520	ML	0.00	1345.00	0.00
0	-520	-529	-531	-522	ML	0.00	1345.00	0.00
0	-522	-531	-533	-524	ML	0.00	1345.00	0.00

Relazione di calcolo

0	-524	-533	-8	-449	ML	0.00	1345.00	0.00
0	-42	-44	-1660	-1659	ML	0.00	1345.00	0.00
0	-527	-536	-538	-529	ML	0.00	1345.00	0.00
0	-529	-538	-540	-531	ML	0.00	1345.00	0.00
0	-531	-540	-542	-533	ML	0.00	1345.00	0.00
0	-533	-542	-450	-8	ML	0.00	1345.00	0.00
0	-44	-46	-1661	-1660	ML	0.00	1345.00	0.00
0	-536	-545	-547	-538	ML	0.00	1345.00	0.00
0	-538	-547	-549	-540	ML	0.00	1345.00	0.00
0	-540	-549	-551	-542	ML	0.00	1345.00	0.00
0	-542	-551	-451	-450	ML	0.00	1345.00	0.00
0	-46	-48	-1662	-1661	ML	0.00	1345.00	0.00
0	-545	-554	-556	-547	ML	0.00	1345.00	0.00
0	-547	-556	-558	-549	ML	0.00	1345.00	0.00
0	-549	-558	-560	-551	ML	0.00	1345.00	0.00
0	-551	-560	-452	-451	ML	0.00	1345.00	0.00
0	-48	-50	-1663	-1662	ML	0.00	1345.00	0.00
0	-554	-563	-565	-556	ML	0.00	1345.00	0.00
0	-556	-565	-567	-558	ML	0.00	1345.00	0.00
0	-558	-567	-569	-560	ML	0.00	1345.00	0.00
0	-560	-569	-2	-452	ML	0.00	1345.00	0.00
0	-50	-52	-1664	-1663	ML	0.00	1345.00	0.00
0	-563	-572	-574	-565	ML	0.00	1345.00	0.00
0	-565	-574	-576	-567	ML	0.00	1345.00	0.00
0	-567	-576	-578	-569	ML	0.00	1345.00	0.00
0	-569	-578	-453	-2	ML	0.00	1345.00	0.00
0	-52	-54	-1665	-1664	ML	0.00	1345.00	0.00
0	-572	-581	-583	-574	ML	0.00	1345.00	0.00
0	-574	-583	-585	-576	ML	0.00	1345.00	0.00
0	-576	-585	-587	-578	ML	0.00	1345.00	0.00
0	-578	-587	-9	-453	ML	0.00	1345.00	0.00
0	-54	-56	-1666	-1665	ML	0.00	1345.00	0.00
0	-581	-590	-592	-583	ML	0.00	1345.00	0.00
0	-583	-592	-594	-585	ML	0.00	1345.00	0.00
0	-585	-594	-596	-587	ML	0.00	1345.00	0.00
0	-587	-596	-454	-9	ML	0.00	1345.00	0.00
0	-56	-58	-1667	-1666	ML	0.00	1345.00	0.00
0	-590	-599	-601	-592	ML	0.00	1345.00	0.00
0	-592	-601	-603	-594	ML	0.00	1345.00	0.00
0	-594	-603	-605	-596	ML	0.00	1345.00	0.00
0	-596	-605	-455	-454	ML	0.00	1345.00	0.00
0	-58	-60	-1668	-1667	ML	0.00	1345.00	0.00
0	-599	-608	-610	-601	ML	0.00	1345.00	0.00
0	-601	-610	-612	-603	ML	0.00	1345.00	0.00
0	-603	-612	-614	-605	ML	0.00	1345.00	0.00
0	-605	-614	-456	-455	ML	0.00	1345.00	0.00
0	-60	-62	-1669	-1668	ML	0.00	1345.00	0.00
0	-608	-617	-619	-610	ML	0.00	1345.00	0.00
0	-610	-619	-621	-612	ML	0.00	1345.00	0.00
0	-612	-621	-623	-614	ML	0.00	1345.00	0.00
0	-614	-623	-457	-456	ML	0.00	1345.00	0.00
0	-62	-30	-1670	-1669	ML	0.00	1345.00	0.00
0	-617	-626	-628	-619	ML	0.00	1345.00	0.00
0	-619	-628	-630	-621	ML	0.00	1345.00	0.00
0	-621	-630	-632	-623	ML	0.00	1345.00	0.00
0	-623	-632	-7	-457	ML	0.00	1345.00	0.00
0	-30	-136	-1671	-1670	ML	0.00	1345.00	0.00
0	-626	-635	-637	-628	ML	0.00	1345.00	0.00
0	-628	-637	-639	-630	ML	0.00	1345.00	0.00
0	-630	-639	-641	-632	ML	0.00	1345.00	0.00
0	-632	-641	-12	-7	ML	0.00	1345.00	0.00
0	-136	-138	-1672	-1671	ML	0.00	1345.00	0.00
0	-635	-644	-646	-637	ML	0.00	1345.00	0.00
0	-637	-646	-648	-639	ML	0.00	1345.00	0.00
0	-639	-648	-650	-641	ML	0.00	1345.00	0.00
0	-641	-650	-1	-12	ML	0.00	1345.00	0.00
0	-138	-140	-1673	-1672	ML	0.00	1345.00	0.00
0	-644	-653	-655	-646	ML	0.00	1345.00	0.00
0	-646	-655	-657	-648	ML	0.00	1345.00	0.00
0	-648	-657	-659	-650	ML	0.00	1345.00	0.00
0	-650	-659	-458	-1	ML	0.00	1345.00	0.00
0	-140	-142	-1674	-1673	ML	0.00	1345.00	0.00
0	-653	-662	-664	-655	ML	0.00	1345.00	0.00
0	-655	-664	-666	-657	ML	0.00	1345.00	0.00
0	-657	-666	-668	-659	ML	0.00	1345.00	0.00
0	-659	-668	-459	-458	ML	0.00	1345.00	0.00
0	-142	-144	-1675	-1674	ML	0.00	1345.00	0.00
0	-662	-671	-673	-664	ML	0.00	1345.00	0.00
0	-664	-673	-675	-666	ML	0.00	1345.00	0.00

Relazione di calcolo

0	-666	-675	-677	-668	ML	0.00	1345.00	0.00
0	-668	-677	-460	-459	ML	0.00	1345.00	0.00
0	-144	-146	-1676	-1675	ML	0.00	1345.00	0.00
0	-671	-680	-682	-673	ML	0.00	1345.00	0.00
0	-673	-682	-684	-675	ML	0.00	1345.00	0.00
0	-675	-684	-686	-677	ML	0.00	1345.00	0.00
0	-677	-686	-5	-460	ML	0.00	1345.00	0.00
0	-146	-148	-1677	-1676	ML	0.00	1345.00	0.00
0	-680	-689	-691	-682	ML	0.00	1345.00	0.00
0	-682	-691	-693	-684	ML	0.00	1345.00	0.00
0	-684	-693	-695	-686	ML	0.00	1345.00	0.00
0	-686	-695	-461	-5	ML	0.00	1345.00	0.00
0	-148	-150	-1678	-1677	ML	0.00	1345.00	0.00
0	-689	-698	-700	-691	ML	0.00	1345.00	0.00
0	-691	-700	-702	-693	ML	0.00	1345.00	0.00
0	-693	-702	-704	-695	ML	0.00	1345.00	0.00
0	-695	-704	-3	-461	ML	0.00	1345.00	0.00
0	-1697	-1698	-1224	-1314	ML	0.00	1345.00	0.00
0	-150	-152	-1679	-1678	ML	0.00	1345.00	0.00
0	-698	-707	-709	-700	ML	0.00	1345.00	0.00
0	-700	-709	-711	-702	ML	0.00	1345.00	0.00
0	-702	-711	-713	-704	ML	0.00	1345.00	0.00
0	-704	-713	-462	-3	ML	0.00	1345.00	0.00
0	-1696	-1697	-1314	-1305	ML	0.00	1345.00	0.00
0	-152	-154	-1680	-1679	ML	0.00	1345.00	0.00
0	-707	-716	-718	-709	ML	0.00	1345.00	0.00
0	-709	-718	-720	-711	ML	0.00	1345.00	0.00
0	-711	-720	-722	-713	ML	0.00	1345.00	0.00
0	-713	-722	-463	-462	ML	0.00	1345.00	0.00
0	-1695	-1696	-1305	-1296	ML	0.00	1345.00	0.00
0	-154	-156	-1681	-1680	ML	0.00	1345.00	0.00
0	-716	-725	-727	-718	ML	0.00	1345.00	0.00
0	-718	-727	-729	-720	ML	0.00	1345.00	0.00
0	-720	-729	-731	-722	ML	0.00	1345.00	0.00
0	-722	-731	-464	-463	ML	0.00	1345.00	0.00
0	-1694	-1695	-1296	-1287	ML	0.00	1345.00	0.00
0	-156	-158	-1682	-1681	ML	0.00	1345.00	0.00
0	-725	-734	-736	-727	ML	0.00	1345.00	0.00
0	-727	-736	-738	-729	ML	0.00	1345.00	0.00
0	-729	-738	-740	-731	ML	0.00	1345.00	0.00
0	-731	-740	-465	-464	ML	0.00	1345.00	0.00
0	-162	-164	-1685	-1684	ML	0.00	1345.00	0.00
0	-734	-743	-745	-736	ML	0.00	1345.00	0.00
0	-736	-745	-747	-738	ML	0.00	1345.00	0.00
0	-738	-747	-749	-740	ML	0.00	1345.00	0.00
0	-740	-749	-4	-465	ML	0.00	1345.00	0.00
0	-164	-166	-1686	-1685	ML	0.00	1345.00	0.00
0	-743	-752	-754	-745	ML	0.00	1345.00	0.00
0	-745	-754	-756	-747	ML	0.00	1345.00	0.00
0	-747	-756	-758	-749	ML	0.00	1345.00	0.00
0	-749	-758	-16	-4	ML	0.00	1345.00	0.00
0	-166	2	-1687	-1686	ML	0.00	1345.00	0.00
0	-752	-761	-763	-754	ML	0.00	1345.00	0.00
0	-754	-763	-765	-756	ML	0.00	1345.00	0.00
0	-756	-765	-767	-758	ML	0.00	1345.00	0.00
0	-758	-767	-14	-16	ML	0.00	1345.00	0.00
0	-160	-162	-1684	-1683	ML	0.00	1345.00	0.00
0	-158	-160	-1683	-1682	ML	0.00	1345.00	0.00
0	-1682	-1683	-743	-734	ML	0.00	1345.00	0.00
0	-761	-770	-772	-763	ML	0.00	1345.00	0.00
0	-1671	-1672	-644	-635	ML	0.00	1345.00	0.00
0	-763	-772	-774	-765	ML	0.00	1345.00	0.00
0	-1660	-1661	-545	-536	ML	0.00	1345.00	0.00
0	-765	-774	-776	-767	ML	0.00	1345.00	0.00
0	-1650	-1649	-360	-356	ML	0.00	-1345.00	0.00
0	-767	-776	-466	-14	ML	0.00	1345.00	0.00
0	-1692	-1693	-1278	-1269	ML	0.00	1345.00	0.00
0	-1681	-1682	-734	-725	ML	0.00	1345.00	0.00
0	-770	-469	-472	-772	ML	0.00	1345.00	0.00
0	-1670	-1671	-635	-626	ML	0.00	1345.00	0.00
0	-772	-472	-475	-774	ML	0.00	1345.00	0.00
0	-1659	-1660	-536	-527	ML	0.00	1345.00	0.00
0	-774	-475	-478	-776	ML	0.00	1345.00	0.00
0	-1649	-1648	-364	-360	ML	0.00	-1345.00	0.00
0	-776	-478	6	-466	ML	0.00	1345.00	0.00
0	-1691	-1692	-1269	-1260	ML	0.00	1345.00	0.00
0	2	-1131	-1688	-1687	ML	0.00	1345.00	0.00
0	-1680	-1681	-725	-716	ML	0.00	1345.00	0.00
0	-469	-1233	-1235	-472	ML	0.00	1345.00	0.00

Relazione di calcolo

0	-1669	-1670	-626	-617	ML	0.00	1345.00	0.00
0	-472	-1235	-1237	-475	ML	0.00	1345.00	0.00
0	-1658	-1659	-527	-518	ML	0.00	1345.00	0.00
0	-475	-1237	-1239	-478	ML	0.00	1345.00	0.00
0	-1648	-1647	-368	-364	ML	0.00	-1345.00	0.00
0	-478	-1239	-1213	6	ML	0.00	1345.00	0.00
0	-1690	-1691	-1260	-1251	ML	0.00	1345.00	0.00
0	-1131	-1130	-1689	-1688	ML	0.00	1345.00	0.00
0	-1679	-1680	-716	-707	ML	0.00	1345.00	0.00
0	-1233	-1242	-1244	-1235	ML	0.00	1345.00	0.00
0	-1668	-1669	-617	-608	ML	0.00	1345.00	0.00
0	-1235	-1244	-1246	-1237	ML	0.00	1345.00	0.00
0	-1657	-1658	-518	-509	ML	0.00	1345.00	0.00
0	-1237	-1246	-1248	-1239	ML	0.00	1345.00	0.00
0	-1647	-1646	-372	-368	ML	0.00	-1345.00	0.00
0	-1239	-1248	-1214	-1213	ML	0.00	1345.00	0.00
0	-1689	-1690	-1251	-1242	ML	0.00	1345.00	0.00
0	-1130	-1129	-1690	-1689	ML	0.00	1345.00	0.00
0	-1678	-1679	-707	-698	ML	0.00	1345.00	0.00
0	-1242	-1251	-1253	-1244	ML	0.00	1345.00	0.00
0	-1667	-1668	-608	-599	ML	0.00	1345.00	0.00
0	-1244	-1253	-1255	-1246	ML	0.00	1345.00	0.00
0	-1656	-1657	-509	-500	ML	0.00	1345.00	0.00
0	-1246	-1255	-1257	-1248	ML	0.00	1345.00	0.00
0	-1646	-1645	-376	-372	ML	0.00	-1345.00	0.00
0	-1248	-1257	-1215	-1214	ML	0.00	1345.00	0.00
0	-1688	-1689	-1242	-1233	ML	0.00	1345.00	0.00
0	-1129	-29	-1691	-1690	ML	0.00	1345.00	0.00
0	-1677	-1678	-698	-689	ML	0.00	1345.00	0.00
0	-1251	-1260	-1262	-1253	ML	0.00	1345.00	0.00
0	-1666	-1667	-599	-590	ML	0.00	1345.00	0.00
0	-1253	-1262	-1264	-1255	ML	0.00	1345.00	0.00
0	-1655	-1656	-500	-491	ML	0.00	1345.00	0.00
0	-1255	-1264	-1266	-1257	ML	0.00	1345.00	0.00
0	-1645	-1644	-380	-376	ML	0.00	-1345.00	0.00
0	-1257	-1266	-1216	-1215	ML	0.00	1345.00	0.00
0	-1687	-1688	-1233	-469	ML	0.00	1345.00	0.00
0	-29	-965	-1692	-1691	ML	0.00	1345.00	0.00
0	-1676	-1677	-689	-680	ML	0.00	1345.00	0.00
0	-1260	-1269	-1271	-1262	ML	0.00	1345.00	0.00
0	-1665	-1666	-590	-581	ML	0.00	1345.00	0.00
0	-1262	-1271	-1273	-1264	ML	0.00	1345.00	0.00
0	-1654	-1655	-491	-482	ML	0.00	1345.00	0.00
0	-1264	-1273	-1275	-1266	ML	0.00	1345.00	0.00
0	-1644	-1643	-384	-380	ML	0.00	-1345.00	0.00
0	-1266	-1275	-1217	-1216	ML	0.00	1345.00	0.00
0	-1686	-1687	-469	-770	ML	0.00	1345.00	0.00
0	-965	-964	-1693	-1692	ML	0.00	1345.00	0.00
0	-1675	-1676	-680	-671	ML	0.00	1345.00	0.00
0	-1269	-1278	-1280	-1271	ML	0.00	1345.00	0.00
0	-1664	-1665	-581	-572	ML	0.00	1345.00	0.00
0	-1271	-1280	-1282	-1273	ML	0.00	1345.00	0.00
0	-1653	-1654	-482	-341	ML	0.00	1345.00	0.00
0	-1273	-1282	-1284	-1275	ML	0.00	1345.00	0.00
0	-1643	-1642	-340	-384	ML	0.00	-1345.00	0.00
0	-1275	-1284	-1218	-1217	ML	0.00	1345.00	0.00
0	-1685	-1686	-770	-761	ML	0.00	1345.00	0.00
0	-964	-963	-1694	-1693	ML	0.00	1345.00	0.00
0	-1674	-1675	-671	-662	ML	0.00	1345.00	0.00
0	-1278	-1287	-1289	-1280	ML	0.00	1345.00	0.00
0	-1663	-1664	-572	-563	ML	0.00	1345.00	0.00
0	-1280	-1289	-1291	-1282	ML	0.00	1345.00	0.00
0	-1653	-1652	-348	-341	ML	0.00	-1345.00	0.00
0	-1282	-1291	-1293	-1284	ML	0.00	1345.00	0.00
0	-1284	-1293	-1219	-1218	ML	0.00	1345.00	0.00
0	-1684	-1685	-761	-752	ML	0.00	1345.00	0.00
0	-963	-962	-1695	-1694	ML	0.00	1345.00	0.00
0	-1673	-1674	-662	-653	ML	0.00	1345.00	0.00
0	-1287	-1296	-1298	-1289	ML	0.00	1345.00	0.00
0	-1662	-1663	-563	-554	ML	0.00	1345.00	0.00
0	-1289	-1298	-1300	-1291	ML	0.00	1345.00	0.00
0	-1652	-1651	-352	-348	ML	0.00	-1345.00	0.00
0	-1291	-1300	-1302	-1293	ML	0.00	1345.00	0.00
0	-1293	-1302	-1220	-1219	ML	0.00	1345.00	0.00
0	-1683	-1684	-752	-743	ML	0.00	1345.00	0.00
0	-962	-961	-1696	-1695	ML	0.00	1345.00	0.00
0	-1672	-1673	-653	-644	ML	0.00	1345.00	0.00
0	-1296	-1305	-1307	-1298	ML	0.00	1345.00	0.00
0	-1661	-1662	-554	-545	ML	0.00	1345.00	0.00

Relazione di calcolo

0	-1298	-1307	-1309	-1300	ML	0.00	1345.00	0.00
0	-1651	-1650	-356	-352	ML	0.00	-1345.00	0.00
0	-1300	-1309	-1311	-1302	ML	0.00	1345.00	0.00
0	-1302	-1311	-1221	-1220	ML	0.00	1345.00	0.00
0	-960	3	-1698	-1697	ML	0.00	1345.00	0.00
0	-961	-960	-1697	-1696	ML	0.00	1345.00	0.00
0	-1314	-1224	-1226	-1316	ML	0.00	1345.00	0.00
0	-1305	-1314	-1316	-1307	ML	0.00	1345.00	0.00
0	-1316	-1226	-1228	-1318	ML	0.00	1345.00	0.00
0	-1307	-1316	-1318	-1309	ML	0.00	1345.00	0.00
0	-1318	-1228	-1230	-1320	ML	0.00	1345.00	0.00
0	-1309	-1318	-1320	-1311	ML	0.00	1345.00	0.00
0	-1320	-1230	-24	-1222	ML	0.00	1345.00	0.00
0	-1311	-1320	-1222	-1221	ML	0.00	1345.00	0.00
0	-1333	-1340	-1341	-1335	ML	0.00	1345.00	0.00
0	-1335	-1341	-1342	-1337	ML	0.00	1345.00	0.00
0	-1337	-1342	-1343	-1339	ML	0.00	1345.00	0.00
0	-1339	-1343	-1322	8	ML	0.00	1345.00	0.00
0	-1213	-1214	-1344	-1340	ML	0.00	1345.00	0.00
0	-1340	-1344	-1345	-1341	ML	0.00	1345.00	0.00
0	-1341	-1345	-1346	-1342	ML	0.00	1345.00	0.00
0	-1342	-1346	-1347	-1343	ML	0.00	1345.00	0.00
0	-1343	-1347	-1323	-1322	ML	0.00	1345.00	0.00
0	-1214	-1215	-1348	-1344	ML	0.00	1345.00	0.00
0	-1344	-1348	-1349	-1345	ML	0.00	1345.00	0.00
0	-1345	-1349	-1350	-1346	ML	0.00	1345.00	0.00
0	-1346	-1350	-1351	-1347	ML	0.00	1345.00	0.00
0	-1347	-1351	-1324	-1323	ML	0.00	1345.00	0.00
0	-1215	-1216	-1352	-1348	ML	0.00	1345.00	0.00
0	-1348	-1352	-1353	-1349	ML	0.00	1345.00	0.00
0	-1349	-1353	-1354	-1350	ML	0.00	1345.00	0.00
0	-1350	-1354	-1355	-1351	ML	0.00	1345.00	0.00
0	-1351	-1355	-1325	-1324	ML	0.00	1345.00	0.00
0	-1216	-1217	-1356	-1352	ML	0.00	1345.00	0.00
0	-1352	-1356	-1357	-1353	ML	0.00	1345.00	0.00
0	-1353	-1357	-1358	-1354	ML	0.00	1345.00	0.00
0	-1354	-1358	-1359	-1355	ML	0.00	1345.00	0.00
0	-1355	-1359	-1326	-1325	ML	0.00	1345.00	0.00
0	-1217	-1218	-1360	-1356	ML	0.00	1345.00	0.00
0	-1356	-1360	-1361	-1357	ML	0.00	1345.00	0.00
0	-1357	-1361	-1362	-1358	ML	0.00	1345.00	0.00
0	-1358	-1362	-1363	-1359	ML	0.00	1345.00	0.00
0	-1359	-1363	-1327	-1326	ML	0.00	1345.00	0.00
0	-1218	-1219	-1364	-1360	ML	0.00	1345.00	0.00
0	-1360	-1364	-1365	-1361	ML	0.00	1345.00	0.00
0	-1361	-1365	-1366	-1362	ML	0.00	1345.00	0.00
0	-1362	-1366	-1367	-1363	ML	0.00	1345.00	0.00
0	-1363	-1367	-1328	-1327	ML	0.00	1345.00	0.00
0	-1219	-1220	-1368	-1364	ML	0.00	1345.00	0.00
0	-1364	-1368	-1369	-1365	ML	0.00	1345.00	0.00
0	-1365	-1369	-1370	-1366	ML	0.00	1345.00	0.00
0	-1366	-1370	-1371	-1367	ML	0.00	1345.00	0.00
0	-1367	-1371	-1329	-1328	ML	0.00	1345.00	0.00
0	-1220	-1221	-1372	-1368	ML	0.00	1345.00	0.00
0	-1368	-1372	-1373	-1369	ML	0.00	1345.00	0.00
0	-1369	-1373	-1374	-1370	ML	0.00	1345.00	0.00
0	-1370	-1374	-1375	-1371	ML	0.00	1345.00	0.00
0	-1371	-1375	-1330	-1329	ML	0.00	1345.00	0.00
0	-1221	-1222	-1376	-1372	ML	0.00	1345.00	0.00
0	-1372	-1376	-1377	-1373	ML	0.00	1345.00	0.00
0	-1373	-1377	-1378	-1374	ML	0.00	1345.00	0.00
0	-1374	-1378	-1379	-1375	ML	0.00	1345.00	0.00
0	-1375	-1379	-1331	-1330	ML	0.00	1345.00	0.00
0	-1222	-24	-1332	-1376	ML	0.00	1345.00	0.00
0	-1376	-1332	-1334	-1377	ML	0.00	1345.00	0.00
0	-1377	-1334	-1336	-1378	ML	0.00	1345.00	0.00
0	-1378	-1336	-1338	-1379	ML	0.00	1345.00	0.00
0	-1379	-1338	10	-1331	ML	0.00	1345.00	0.00
0	-399	-1453	-1454	-401	ML	0.00	1345.00	0.00
0	-401	-1454	-1455	-403	ML	0.00	1345.00	0.00
0	-403	-1455	-1456	-405	ML	0.00	1345.00	0.00
0	-405	-1456	-1392	7	ML	0.00	1345.00	0.00
0	-446	-447	-1457	-1453	ML	0.00	1345.00	0.00
0	-1453	-1457	-1458	-1454	ML	0.00	1345.00	0.00
0	-1454	-1458	-1459	-1455	ML	0.00	1345.00	0.00
0	-1455	-1459	-1460	-1456	ML	0.00	1345.00	0.00
0	-1456	-1460	-1393	-1392	ML	0.00	1345.00	0.00
0	-447	-448	-1461	-1457	ML	0.00	1345.00	0.00
0	-1457	-1461	-1462	-1458	ML	0.00	1345.00	0.00

Relazione di calcolo

0	-1458	-1462	-1463	-1459	ML	0.00	1345.00	0.00
0	-1459	-1463	-1464	-1460	ML	0.00	1345.00	0.00
0	-1460	-1464	-1394	-1393	ML	0.00	1345.00	0.00
0	-448	-6	-1465	-1461	ML	0.00	1345.00	0.00
0	-1461	-1465	-1466	-1462	ML	0.00	1345.00	0.00
0	-1462	-1466	-1467	-1463	ML	0.00	1345.00	0.00
0	-1463	-1467	-1468	-1464	ML	0.00	1345.00	0.00
0	-1464	-1468	-1395	-1394	ML	0.00	1345.00	0.00
0	-1468	-1476	-1398	-1395	ML	0.00	1345.00	0.00
0	-6	-449	-1473	-1465	ML	0.00	1345.00	0.00
0	-1465	-1473	-1474	-1466	ML	0.00	1345.00	0.00
0	-1466	-1474	-1475	-1467	ML	0.00	1345.00	0.00
0	-1467	-1475	-1476	-1468	ML	0.00	1345.00	0.00
0	-449	-8	-1481	-1473	ML	0.00	1345.00	0.00
0	-1473	-1481	-1482	-1474	ML	0.00	1345.00	0.00
0	-1474	-1482	-1483	-1475	ML	0.00	1345.00	0.00
0	-1475	-1483	-1484	-1476	ML	0.00	1345.00	0.00
0	-1476	-1484	-1401	-1398	ML	0.00	1345.00	0.00
0	-1484	-1492	-1404	-1401	ML	0.00	1345.00	0.00
0	-8	-450	-1489	-1481	ML	0.00	1345.00	0.00
0	-1481	-1489	-1490	-1482	ML	0.00	1345.00	0.00
0	-1482	-1490	-1491	-1483	ML	0.00	1345.00	0.00
0	-1483	-1491	-1492	-1484	ML	0.00	1345.00	0.00
0	-450	-451	-1497	-1489	ML	0.00	1345.00	0.00
0	-1489	-1497	-1498	-1490	ML	0.00	1345.00	0.00
0	-1490	-1498	-1499	-1491	ML	0.00	1345.00	0.00
0	-1491	-1499	-1500	-1492	ML	0.00	1345.00	0.00
0	-1492	-1500	-1407	-1404	ML	0.00	1345.00	0.00
0	-451	-452	-1505	-1497	ML	0.00	1345.00	0.00
0	-1497	-1505	-1506	-1498	ML	0.00	1345.00	0.00
0	-1498	-1506	-1507	-1499	ML	0.00	1345.00	0.00
0	-1499	-1507	-1508	-1500	ML	0.00	1345.00	0.00
0	-1500	-1508	-1410	-1407	ML	0.00	1345.00	0.00
0	-452	-2	-1513	-1505	ML	0.00	1345.00	0.00
0	-1505	-1513	-1514	-1506	ML	0.00	1345.00	0.00
0	-1506	-1514	-1515	-1507	ML	0.00	1345.00	0.00
0	-1507	-1515	-1516	-1508	ML	0.00	1345.00	0.00
0	-1508	-1516	-1413	-1410	ML	0.00	1345.00	0.00
0	-2	-453	-1517	-1513	ML	0.00	1345.00	0.00
0	-1513	-1517	-1518	-1514	ML	0.00	1345.00	0.00
0	-1514	-1518	-1519	-1515	ML	0.00	1345.00	0.00
0	-1515	-1519	-1520	-1516	ML	0.00	1345.00	0.00
0	-1516	-1520	-1414	-1413	ML	0.00	1345.00	0.00
0	-453	-9	-1521	-1517	ML	0.00	1345.00	0.00
0	-1517	-1521	-1522	-1518	ML	0.00	1345.00	0.00
0	-1518	-1522	-1523	-1519	ML	0.00	1345.00	0.00
0	-1519	-1523	-1524	-1520	ML	0.00	1345.00	0.00
0	-1520	-1524	-1415	-1414	ML	0.00	1345.00	0.00
0	-9	-454	-1525	-1521	ML	0.00	1345.00	0.00
0	-1521	-1525	-1526	-1522	ML	0.00	1345.00	0.00
0	-1522	-1526	-1527	-1523	ML	0.00	1345.00	0.00
0	-1523	-1527	-1528	-1524	ML	0.00	1345.00	0.00
0	-1524	-1528	-1416	-1415	ML	0.00	1345.00	0.00
0	-454	-455	-1529	-1525	ML	0.00	1345.00	0.00
0	-1525	-1529	-1530	-1526	ML	0.00	1345.00	0.00
0	-1526	-1530	-1531	-1527	ML	0.00	1345.00	0.00
0	-1527	-1531	-1532	-1528	ML	0.00	1345.00	0.00
0	-1528	-1532	-1417	-1416	ML	0.00	1345.00	0.00
0	-455	-456	-1533	-1529	ML	0.00	1345.00	0.00
0	-1529	-1533	-1534	-1530	ML	0.00	1345.00	0.00
0	-1530	-1534	-1535	-1531	ML	0.00	1345.00	0.00
0	-1531	-1535	-1536	-1532	ML	0.00	1345.00	0.00
0	-1532	-1536	-1418	-1417	ML	0.00	1345.00	0.00
0	-456	-457	-1537	-1533	ML	0.00	1345.00	0.00
0	-1533	-1537	-1538	-1534	ML	0.00	1345.00	0.00
0	-1534	-1538	-1539	-1535	ML	0.00	1345.00	0.00
0	-1535	-1539	-1540	-1536	ML	0.00	1345.00	0.00
0	-1536	-1540	-1419	-1418	ML	0.00	1345.00	0.00
0	-457	-7	-1541	-1537	ML	0.00	1345.00	0.00
0	-1537	-1541	-1542	-1538	ML	0.00	1345.00	0.00
0	-1538	-1542	-1543	-1539	ML	0.00	1345.00	0.00
0	-1539	-1543	-1544	-1540	ML	0.00	1345.00	0.00
0	-1540	-1544	-1420	-1419	ML	0.00	1345.00	0.00
0	-7	-12	-1545	-1541	ML	0.00	1345.00	0.00
0	-1541	-1545	-1546	-1542	ML	0.00	1345.00	0.00
0	-1542	-1546	-1547	-1543	ML	0.00	1345.00	0.00
0	-1543	-1547	-1548	-1544	ML	0.00	1345.00	0.00
0	-1544	-1548	-1421	-1420	ML	0.00	1345.00	0.00
0	-12	-1	-1549	-1545	ML	0.00	1345.00	0.00

Relazione di calcolo

0	-1545	-1549	-1550	-1546	ML	0.00	1345.00	0.00
0	-1546	-1550	-1551	-1547	ML	0.00	1345.00	0.00
0	-1547	-1551	-1552	-1548	ML	0.00	1345.00	0.00
0	-1548	-1552	-1422	-1421	ML	0.00	1345.00	0.00
0	-1	-458	-1557	-1549	ML	0.00	1345.00	0.00
0	-1549	-1557	-1558	-1550	ML	0.00	1345.00	0.00
0	-1550	-1558	-1559	-1551	ML	0.00	1345.00	0.00
0	-1551	-1559	-1560	-1552	ML	0.00	1345.00	0.00
0	-1552	-1560	-1425	-1422	ML	0.00	1345.00	0.00
0	-458	-459	-1565	-1557	ML	0.00	1345.00	0.00
0	-1557	-1565	-1566	-1558	ML	0.00	1345.00	0.00
0	-1558	-1566	-1567	-1559	ML	0.00	1345.00	0.00
0	-1559	-1567	-1568	-1560	ML	0.00	1345.00	0.00
0	-1560	-1568	-1428	-1425	ML	0.00	1345.00	0.00
0	-459	-460	-1573	-1565	ML	0.00	1345.00	0.00
0	-1565	-1573	-1574	-1566	ML	0.00	1345.00	0.00
0	-1566	-1574	-1575	-1567	ML	0.00	1345.00	0.00
0	-1567	-1575	-1576	-1568	ML	0.00	1345.00	0.00
0	-1568	-1576	-1431	-1428	ML	0.00	1345.00	0.00
0	-1576	-1584	-1434	-1431	ML	0.00	1345.00	0.00
0	-460	-5	-1581	-1573	ML	0.00	1345.00	0.00
0	-1573	-1581	-1582	-1574	ML	0.00	1345.00	0.00
0	-1574	-1582	-1583	-1575	ML	0.00	1345.00	0.00
0	-1575	-1583	-1584	-1576	ML	0.00	1345.00	0.00
0	-5	-461	-1585	-1581	ML	0.00	1345.00	0.00
0	-1581	-1585	-1586	-1582	ML	0.00	1345.00	0.00
0	-1582	-1586	-1587	-1583	ML	0.00	1345.00	0.00
0	-1583	-1587	-1588	-1584	ML	0.00	1345.00	0.00
0	-1584	-1588	-1435	-1434	ML	0.00	1345.00	0.00
0	-461	-3	-1589	-1585	ML	0.00	1345.00	0.00
0	-1585	-1589	-1590	-1586	ML	0.00	1345.00	0.00
0	-1586	-1590	-1591	-1587	ML	0.00	1345.00	0.00
0	-1587	-1591	-1592	-1588	ML	0.00	1345.00	0.00
0	-1588	-1592	-1436	-1435	ML	0.00	1345.00	0.00
0	-3	-462	-1593	-1589	ML	0.00	1345.00	0.00
0	-1589	-1593	-1594	-1590	ML	0.00	1345.00	0.00
0	-1590	-1594	-1595	-1591	ML	0.00	1345.00	0.00
0	-1591	-1595	-1596	-1592	ML	0.00	1345.00	0.00
0	-1592	-1596	-1437	-1436	ML	0.00	1345.00	0.00
0	-462	-463	-1597	-1593	ML	0.00	1345.00	0.00
0	-1593	-1597	-1598	-1594	ML	0.00	1345.00	0.00
0	-1594	-1598	-1599	-1595	ML	0.00	1345.00	0.00
0	-1595	-1599	-1600	-1596	ML	0.00	1345.00	0.00
0	-1596	-1600	-1438	-1437	ML	0.00	1345.00	0.00
0	-463	-464	-1601	-1597	ML	0.00	1345.00	0.00
0	-1597	-1601	-1602	-1598	ML	0.00	1345.00	0.00
0	-1598	-1602	-1603	-1599	ML	0.00	1345.00	0.00
0	-1599	-1603	-1604	-1600	ML	0.00	1345.00	0.00
0	-1600	-1604	-1439	-1438	ML	0.00	1345.00	0.00
0	-464	-465	-1605	-1601	ML	0.00	1345.00	0.00
0	-1601	-1605	-1606	-1602	ML	0.00	1345.00	0.00
0	-1602	-1606	-1607	-1603	ML	0.00	1345.00	0.00
0	-1603	-1607	-1608	-1604	ML	0.00	1345.00	0.00
0	-1604	-1608	-1440	-1439	ML	0.00	1345.00	0.00
0	-465	-4	-1609	-1605	ML	0.00	1345.00	0.00
0	-1605	-1609	-1610	-1606	ML	0.00	1345.00	0.00
0	-1606	-1610	-1611	-1607	ML	0.00	1345.00	0.00
0	-1607	-1611	-1612	-1608	ML	0.00	1345.00	0.00
0	-1608	-1612	-1441	-1440	ML	0.00	1345.00	0.00
0	-4	-16	-1617	-1609	ML	0.00	1345.00	0.00
0	-1609	-1617	-1618	-1610	ML	0.00	1345.00	0.00
0	-1610	-1618	-1619	-1611	ML	0.00	1345.00	0.00
0	-1611	-1619	-1620	-1612	ML	0.00	1345.00	0.00
0	-1612	-1620	-1444	-1441	ML	0.00	1345.00	0.00
0	-16	-14	-1625	-1617	ML	0.00	1345.00	0.00
0	-1617	-1625	-1626	-1618	ML	0.00	1345.00	0.00
0	-1618	-1626	-1627	-1619	ML	0.00	1345.00	0.00
0	-1619	-1627	-1628	-1620	ML	0.00	1345.00	0.00
0	-1620	-1628	-1447	-1444	ML	0.00	1345.00	0.00
0	-14	-466	-1633	-1625	ML	0.00	1345.00	0.00
0	-1625	-1633	-1634	-1626	ML	0.00	1345.00	0.00
0	-1626	-1634	-1635	-1627	ML	0.00	1345.00	0.00
0	-1627	-1635	-1636	-1628	ML	0.00	1345.00	0.00
0	-1628	-1636	-1450	-1447	ML	0.00	1345.00	0.00
0	-1636	-1339	8	-1450	ML	0.00	1345.00	0.00
0	-466	6	-1333	-1633	ML	0.00	1345.00	0.00
0	-1633	-1333	-1335	-1634	ML	0.00	1345.00	0.00
0	-1634	-1335	-1337	-1635	ML	0.00	1345.00	0.00
0	-1635	-1337	-1339	-1636	ML	0.00	1345.00	0.00

Condizione di carico n. 19: Spinta inerziale terreno

Carichi uniformi

Bid.	N1	N2	N3	N4	TDC	Qx	Qy	Qz
						<daN/mq>	<daN/mq>	<daN/mq>
0	5	-446	-1453	-399	ML	0.00	4920.00	0.00
0	5	-330	-406	-399	ML	0.00	-4920.00	0.00
0	-1693	-1694	-1287	-1278	ML	0.00	4920.00	0.00
0	6	-1213	-1340	-1333	ML	0.00	4920.00	0.00
0	-341	-348	-349	-343	ML	0.00	-4920.00	0.00
0	-343	-349	-350	-345	ML	0.00	-4920.00	0.00
0	-345	-350	-351	-347	ML	0.00	-4920.00	0.00
0	-347	-351	-330		5ML	0.00	-4920.00	0.00
0	-348	-352	-353	-349	ML	0.00	-4920.00	0.00
0	-349	-353	-354	-350	ML	0.00	-4920.00	0.00
0	-350	-354	-355	-351	ML	0.00	-4920.00	0.00
0	-351	-355	-331	-330	ML	0.00	-4920.00	0.00
0	-352	-356	-357	-353	ML	0.00	-4920.00	0.00
0	-353	-357	-358	-354	ML	0.00	-4920.00	0.00
0	-354	-358	-359	-355	ML	0.00	-4920.00	0.00
0	-355	-359	-332	-331	ML	0.00	-4920.00	0.00
0	-356	-360	-361	-357	ML	0.00	-4920.00	0.00
0	-357	-361	-362	-358	ML	0.00	-4920.00	0.00
0	-358	-362	-363	-359	ML	0.00	-4920.00	0.00
0	-359	-363	-333	-332	ML	0.00	-4920.00	0.00
0	-360	-364	-365	-361	ML	0.00	-4920.00	0.00
0	-361	-365	-366	-362	ML	0.00	-4920.00	0.00
0	-362	-366	-367	-363	ML	0.00	-4920.00	0.00
0	-363	-367	-334	-333	ML	0.00	-4920.00	0.00
0	-364	-368	-369	-365	ML	0.00	-4920.00	0.00
0	-365	-369	-370	-366	ML	0.00	-4920.00	0.00
0	-366	-370	-371	-367	ML	0.00	-4920.00	0.00
0	-367	-371	-335	-334	ML	0.00	-4920.00	0.00
0	-368	-372	-373	-369	ML	0.00	-4920.00	0.00
0	-369	-373	-374	-370	ML	0.00	-4920.00	0.00
0	-370	-374	-375	-371	ML	0.00	-4920.00	0.00
0	-371	-375	-336	-335	ML	0.00	-4920.00	0.00
0	-372	-376	-377	-373	ML	0.00	-4920.00	0.00
0	-373	-377	-378	-374	ML	0.00	-4920.00	0.00
0	-374	-378	-379	-375	ML	0.00	-4920.00	0.00
0	-375	-379	-337	-336	ML	0.00	-4920.00	0.00
0	-376	-380	-381	-377	ML	0.00	-4920.00	0.00
0	-377	-381	-382	-378	ML	0.00	-4920.00	0.00
0	-378	-382	-383	-379	ML	0.00	-4920.00	0.00
0	-379	-383	-338	-337	ML	0.00	-4920.00	0.00
0	-380	-384	-385	-381	ML	0.00	-4920.00	0.00
0	-381	-385	-386	-382	ML	0.00	-4920.00	0.00
0	-382	-386	-387	-383	ML	0.00	-4920.00	0.00
0	-383	-387	-339	-338	ML	0.00	-4920.00	0.00
0	-384	-340	-342	-385	ML	0.00	-4920.00	0.00
0	-385	-342	-344	-386	ML	0.00	-4920.00	0.00
0	-386	-344	-346	-387	ML	0.00	-4920.00	0.00
0	-387	-346	-20	-339	ML	0.00	-4920.00	0.00
0	-399	-406	-407	-401	ML	0.00	-4920.00	0.00
0	-401	-407	-408	-403	ML	0.00	-4920.00	0.00
0	-403	-408	-409	-405	ML	0.00	-4920.00	0.00
0	-405	-409	-388	7	ML	0.00	-4920.00	0.00
0	-330	-331	-410	-406	ML	0.00	-4920.00	0.00
0	-406	-410	-411	-407	ML	0.00	-4920.00	0.00
0	-407	-411	-412	-408	ML	0.00	-4920.00	0.00
0	-408	-412	-413	-409	ML	0.00	-4920.00	0.00
0	-409	-413	-389	-388	ML	0.00	-4920.00	0.00
0	-331	-332	-414	-410	ML	0.00	-4920.00	0.00
0	-410	-414	-415	-411	ML	0.00	-4920.00	0.00
0	-411	-415	-416	-412	ML	0.00	-4920.00	0.00
0	-412	-416	-417	-413	ML	0.00	-4920.00	0.00
0	-413	-417	-390	-389	ML	0.00	-4920.00	0.00
0	-332	-333	-418	-414	ML	0.00	-4920.00	0.00
0	-414	-418	-419	-415	ML	0.00	-4920.00	0.00
0	-415	-419	-420	-416	ML	0.00	-4920.00	0.00
0	-416	-420	-421	-417	ML	0.00	-4920.00	0.00
0	-417	-421	-391	-390	ML	0.00	-4920.00	0.00
0	-333	-334	-422	-418	ML	0.00	-4920.00	0.00
0	-418	-422	-423	-419	ML	0.00	-4920.00	0.00
0	-419	-423	-424	-420	ML	0.00	-4920.00	0.00
0	-420	-424	-425	-421	ML	0.00	-4920.00	0.00
0	-421	-425	-392	-391	ML	0.00	-4920.00	0.00
0	-334	-335	-426	-422	ML	0.00	-4920.00	0.00
0	-422	-426	-427	-423	ML	0.00	-4920.00	0.00

Relazione di calcolo

0	-423	-427	-428	-424	ML	0.00	-4920.00	0.00
0	-424	-428	-429	-425	ML	0.00	-4920.00	0.00
0	-425	-429	-393	-392	ML	0.00	-4920.00	0.00
0	-335	-336	-430	-426	ML	0.00	-4920.00	0.00
0	-426	-430	-431	-427	ML	0.00	-4920.00	0.00
0	-427	-431	-432	-428	ML	0.00	-4920.00	0.00
0	-428	-432	-433	-429	ML	0.00	-4920.00	0.00
0	-429	-433	-394	-393	ML	0.00	-4920.00	0.00
0	-336	-337	-434	-430	ML	0.00	-4920.00	0.00
0	-430	-434	-435	-431	ML	0.00	-4920.00	0.00
0	-431	-435	-436	-432	ML	0.00	-4920.00	0.00
0	-432	-436	-437	-433	ML	0.00	-4920.00	0.00
0	-433	-437	-395	-394	ML	0.00	-4920.00	0.00
0	-337	-338	-438	-434	ML	0.00	-4920.00	0.00
0	-434	-438	-439	-435	ML	0.00	-4920.00	0.00
0	-435	-439	-440	-436	ML	0.00	-4920.00	0.00
0	-436	-440	-441	-437	ML	0.00	-4920.00	0.00
0	-437	-441	-396	-395	ML	0.00	-4920.00	0.00
0	-338	-339	-442	-438	ML	0.00	-4920.00	0.00
0	-438	-442	-443	-439	ML	0.00	-4920.00	0.00
0	-439	-443	-444	-440	ML	0.00	-4920.00	0.00
0	-440	-444	-445	-441	ML	0.00	-4920.00	0.00
0	-441	-445	-397	-396	ML	0.00	-4920.00	0.00
0	-339	-20	-398	-442	ML	0.00	-4920.00	0.00
0	-442	-398	-400	-443	ML	0.00	-4920.00	0.00
0	-443	-400	-402	-444	ML	0.00	-4920.00	0.00
0	-444	-402	-404	-445	ML	0.00	-4920.00	0.00
0	-445	-404	9	-397	ML	0.00	-4920.00	0.00
0	-341	-482	-484	-343	ML	0.00	4920.00	0.00
0	-343	-484	-486	-345	ML	0.00	4920.00	0.00
0	-345	-486	-488	-347	ML	0.00	4920.00	0.00
0	-347	-488	-446	5	ML	0.00	4920.00	0.00
0	-482	-491	-493	-484	ML	0.00	4920.00	0.00
0	-484	-493	-495	-486	ML	0.00	4920.00	0.00
0	-486	-495	-497	-488	ML	0.00	4920.00	0.00
0	-488	-497	-447	-446	ML	0.00	4920.00	0.00
0	-491	-500	-502	-493	ML	0.00	4920.00	0.00
0	-493	-502	-504	-495	ML	0.00	4920.00	0.00
0	-495	-504	-506	-497	ML	0.00	4920.00	0.00
0	-497	-506	-448	-447	ML	0.00	4920.00	0.00
0	-500	-509	-511	-502	ML	0.00	4920.00	0.00
0	-502	-511	-513	-504	ML	0.00	4920.00	0.00
0	-504	-513	-515	-506	ML	0.00	4920.00	0.00
0	-506	-515	-6	-448	ML	0.00	4920.00	0.00
0	-509	-518	-520	-511	ML	0.00	4920.00	0.00
0	-511	-520	-522	-513	ML	0.00	4920.00	0.00
0	-513	-522	-524	-515	ML	0.00	4920.00	0.00
0	-515	-524	-449	-6	ML	0.00	4920.00	0.00
0	-518	-527	-529	-520	ML	0.00	4920.00	0.00
0	-520	-529	-531	-522	ML	0.00	4920.00	0.00
0	-522	-531	-533	-524	ML	0.00	4920.00	0.00
0	-524	-533	-8	-449	ML	0.00	4920.00	0.00
0	-527	-536	-538	-529	ML	0.00	4920.00	0.00
0	-529	-538	-540	-531	ML	0.00	4920.00	0.00
0	-531	-540	-542	-533	ML	0.00	4920.00	0.00
0	-533	-542	-450	-8	ML	0.00	4920.00	0.00
0	-536	-545	-547	-538	ML	0.00	4920.00	0.00
0	-538	-547	-549	-540	ML	0.00	4920.00	0.00
0	-540	-549	-551	-542	ML	0.00	4920.00	0.00
0	-542	-551	-451	-450	ML	0.00	4920.00	0.00
0	-545	-554	-556	-547	ML	0.00	4920.00	0.00
0	-547	-556	-558	-549	ML	0.00	4920.00	0.00
0	-549	-558	-560	-551	ML	0.00	4920.00	0.00
0	-551	-560	-452	-451	ML	0.00	4920.00	0.00
0	-554	-563	-565	-556	ML	0.00	4920.00	0.00
0	-556	-565	-567	-558	ML	0.00	4920.00	0.00
0	-558	-567	-569	-560	ML	0.00	4920.00	0.00
0	-560	-569	-2	-452	ML	0.00	4920.00	0.00
0	-563	-572	-574	-565	ML	0.00	4920.00	0.00
0	-565	-574	-576	-567	ML	0.00	4920.00	0.00
0	-567	-576	-578	-569	ML	0.00	4920.00	0.00
0	-569	-578	-453	-2	ML	0.00	4920.00	0.00
0	-572	-581	-583	-574	ML	0.00	4920.00	0.00
0	-574	-583	-585	-576	ML	0.00	4920.00	0.00
0	-576	-585	-587	-578	ML	0.00	4920.00	0.00
0	-578	-587	-9	-453	ML	0.00	4920.00	0.00
0	-581	-590	-592	-583	ML	0.00	4920.00	0.00
0	-583	-592	-594	-585	ML	0.00	4920.00	0.00
0	-585	-594	-596	-587	ML	0.00	4920.00	0.00

Relazione di calcolo

0	-587	-596	-454	-9	ML	0.00	4920.00	0.00
0	-590	-599	-601	-592	ML	0.00	4920.00	0.00
0	-592	-601	-603	-594	ML	0.00	4920.00	0.00
0	-594	-603	-605	-596	ML	0.00	4920.00	0.00
0	-596	-605	-455	-454	ML	0.00	4920.00	0.00
0	-599	-608	-610	-601	ML	0.00	4920.00	0.00
0	-601	-610	-612	-603	ML	0.00	4920.00	0.00
0	-603	-612	-614	-605	ML	0.00	4920.00	0.00
0	-605	-614	-456	-455	ML	0.00	4920.00	0.00
0	-608	-617	-619	-610	ML	0.00	4920.00	0.00
0	-610	-619	-621	-612	ML	0.00	4920.00	0.00
0	-612	-621	-623	-614	ML	0.00	4920.00	0.00
0	-614	-623	-457	-456	ML	0.00	4920.00	0.00
0	-617	-626	-628	-619	ML	0.00	4920.00	0.00
0	-619	-628	-630	-621	ML	0.00	4920.00	0.00
0	-621	-630	-632	-623	ML	0.00	4920.00	0.00
0	-623	-632	-7	-457	ML	0.00	4920.00	0.00
0	-626	-635	-637	-628	ML	0.00	4920.00	0.00
0	-628	-637	-639	-630	ML	0.00	4920.00	0.00
0	-630	-639	-641	-632	ML	0.00	4920.00	0.00
0	-632	-641	-12	-7	ML	0.00	4920.00	0.00
0	-635	-644	-646	-637	ML	0.00	4920.00	0.00
0	-637	-646	-648	-639	ML	0.00	4920.00	0.00
0	-639	-648	-650	-641	ML	0.00	4920.00	0.00
0	-641	-650	-1	-12	ML	0.00	4920.00	0.00
0	-644	-653	-655	-646	ML	0.00	4920.00	0.00
0	-646	-655	-657	-648	ML	0.00	4920.00	0.00
0	-648	-657	-659	-650	ML	0.00	4920.00	0.00
0	-650	-659	-458	-1	ML	0.00	4920.00	0.00
0	-653	-662	-664	-655	ML	0.00	4920.00	0.00
0	-655	-664	-666	-657	ML	0.00	4920.00	0.00
0	-657	-666	-668	-659	ML	0.00	4920.00	0.00
0	-659	-668	-459	-458	ML	0.00	4920.00	0.00
0	-662	-671	-673	-664	ML	0.00	4920.00	0.00
0	-664	-673	-675	-666	ML	0.00	4920.00	0.00
0	-666	-675	-677	-668	ML	0.00	4920.00	0.00
0	-668	-677	-460	-459	ML	0.00	4920.00	0.00
0	-671	-680	-682	-673	ML	0.00	4920.00	0.00
0	-673	-682	-684	-675	ML	0.00	4920.00	0.00
0	-675	-684	-686	-677	ML	0.00	4920.00	0.00
0	-677	-686	-5	-460	ML	0.00	4920.00	0.00
0	-680	-689	-691	-682	ML	0.00	4920.00	0.00
0	-682	-691	-693	-684	ML	0.00	4920.00	0.00
0	-684	-693	-695	-686	ML	0.00	4920.00	0.00
0	-686	-695	-461	-5	ML	0.00	4920.00	0.00
0	-689	-698	-700	-691	ML	0.00	4920.00	0.00
0	-691	-700	-702	-693	ML	0.00	4920.00	0.00
0	-693	-702	-704	-695	ML	0.00	4920.00	0.00
0	-695	-704	-3	-461	ML	0.00	4920.00	0.00
0	-1697	-1698	-1224	-1314	ML	0.00	4920.00	0.00
0	-698	-707	-709	-700	ML	0.00	4920.00	0.00
0	-700	-709	-711	-702	ML	0.00	4920.00	0.00
0	-702	-711	-713	-704	ML	0.00	4920.00	0.00
0	-704	-713	-462	-3	ML	0.00	4920.00	0.00
0	-1696	-1697	-1314	-1305	ML	0.00	4920.00	0.00
0	-707	-716	-718	-709	ML	0.00	4920.00	0.00
0	-709	-718	-720	-711	ML	0.00	4920.00	0.00
0	-711	-720	-722	-713	ML	0.00	4920.00	0.00
0	-713	-722	-463	-462	ML	0.00	4920.00	0.00
0	-1695	-1696	-1305	-1296	ML	0.00	4920.00	0.00
0	-716	-725	-727	-718	ML	0.00	4920.00	0.00
0	-718	-727	-729	-720	ML	0.00	4920.00	0.00
0	-720	-729	-731	-722	ML	0.00	4920.00	0.00
0	-722	-731	-464	-463	ML	0.00	4920.00	0.00
0	-1694	-1695	-1296	-1287	ML	0.00	4920.00	0.00
0	-725	-734	-736	-727	ML	0.00	4920.00	0.00
0	-727	-736	-738	-729	ML	0.00	4920.00	0.00
0	-729	-738	-740	-731	ML	0.00	4920.00	0.00
0	-731	-740	-465	-464	ML	0.00	4920.00	0.00
0	-734	-743	-745	-736	ML	0.00	4920.00	0.00
0	-736	-745	-747	-738	ML	0.00	4920.00	0.00
0	-738	-747	-749	-740	ML	0.00	4920.00	0.00
0	-740	-749	-4	-465	ML	0.00	4920.00	0.00
0	-743	-752	-754	-745	ML	0.00	4920.00	0.00
0	-745	-754	-756	-747	ML	0.00	4920.00	0.00
0	-747	-756	-758	-749	ML	0.00	4920.00	0.00
0	-749	-758	-16	-4	ML	0.00	4920.00	0.00
0	-752	-761	-763	-754	ML	0.00	4920.00	0.00
0	-754	-763	-765	-756	ML	0.00	4920.00	0.00

Relazione di calcolo

0	-756	-765	-767	-758	ML	0.00	4920.00	0.00
0	-758	-767	-14	-16	ML	0.00	4920.00	0.00
0	-1682	-1683	-743	-734	ML	0.00	4920.00	0.00
0	-761	-770	-772	-763	ML	0.00	4920.00	0.00
0	-1671	-1672	-644	-635	ML	0.00	4920.00	0.00
0	-763	-772	-774	-765	ML	0.00	4920.00	0.00
0	-1660	-1661	-545	-536	ML	0.00	4920.00	0.00
0	-765	-774	-776	-767	ML	0.00	4920.00	0.00
0	-1650	-1649	-360	-356	ML	0.00	-4920.00	0.00
0	-767	-776	-466	-14	ML	0.00	4920.00	0.00
0	-1692	-1693	-1278	-1269	ML	0.00	4920.00	0.00
0	-1681	-1682	-734	-725	ML	0.00	4920.00	0.00
0	-770	-469	-472	-772	ML	0.00	4920.00	0.00
0	-1670	-1671	-635	-626	ML	0.00	4920.00	0.00
0	-772	-472	-475	-774	ML	0.00	4920.00	0.00
0	-1659	-1660	-536	-527	ML	0.00	4920.00	0.00
0	-774	-475	-478	-776	ML	0.00	4920.00	0.00
0	-1649	-1648	-364	-360	ML	0.00	-4920.00	0.00
0	-776	-478	6	-466	ML	0.00	4920.00	0.00
0	-1691	-1692	-1269	-1260	ML	0.00	4920.00	0.00
0	-1680	-1681	-725	-716	ML	0.00	4920.00	0.00
0	-469	-1233	-1235	-472	ML	0.00	4920.00	0.00
0	-1669	-1670	-626	-617	ML	0.00	4920.00	0.00
0	-472	-1235	-1237	-475	ML	0.00	4920.00	0.00
0	-1658	-1659	-527	-518	ML	0.00	4920.00	0.00
0	-475	-1237	-1239	-478	ML	0.00	4920.00	0.00
0	-1648	-1647	-368	-364	ML	0.00	-4920.00	0.00
0	-478	-1239	-1213	6	ML	0.00	4920.00	0.00
0	-1690	-1691	-1260	-1251	ML	0.00	4920.00	0.00
0	-1679	-1680	-716	-707	ML	0.00	4920.00	0.00
0	-1233	-1242	-1244	-1235	ML	0.00	4920.00	0.00
0	-1668	-1669	-617	-608	ML	0.00	4920.00	0.00
0	-1235	-1244	-1246	-1237	ML	0.00	4920.00	0.00
0	-1657	-1658	-518	-509	ML	0.00	4920.00	0.00
0	-1237	-1246	-1248	-1239	ML	0.00	4920.00	0.00
0	-1647	-1646	-372	-368	ML	0.00	-4920.00	0.00
0	-1239	-1248	-1214	-1213	ML	0.00	4920.00	0.00
0	-1689	-1690	-1251	-1242	ML	0.00	4920.00	0.00
0	-1678	-1679	-707	-698	ML	0.00	4920.00	0.00
0	-1242	-1251	-1253	-1244	ML	0.00	4920.00	0.00
0	-1667	-1668	-608	-599	ML	0.00	4920.00	0.00
0	-1244	-1253	-1255	-1246	ML	0.00	4920.00	0.00
0	-1656	-1657	-509	-500	ML	0.00	4920.00	0.00
0	-1246	-1255	-1257	-1248	ML	0.00	4920.00	0.00
0	-1646	-1645	-376	-372	ML	0.00	-4920.00	0.00
0	-1248	-1257	-1215	-1214	ML	0.00	4920.00	0.00
0	-1688	-1689	-1242	-1233	ML	0.00	4920.00	0.00
0	-1677	-1678	-698	-689	ML	0.00	4920.00	0.00
0	-1251	-1260	-1262	-1253	ML	0.00	4920.00	0.00
0	-1666	-1667	-599	-590	ML	0.00	4920.00	0.00
0	-1253	-1262	-1264	-1255	ML	0.00	4920.00	0.00
0	-1655	-1656	-500	-491	ML	0.00	4920.00	0.00
0	-1255	-1264	-1266	-1257	ML	0.00	4920.00	0.00
0	-1645	-1644	-380	-376	ML	0.00	-4920.00	0.00
0	-1257	-1266	-1216	-1215	ML	0.00	4920.00	0.00
0	-1687	-1688	-1233	-469	ML	0.00	4920.00	0.00
0	-1676	-1677	-689	-680	ML	0.00	4920.00	0.00
0	-1260	-1269	-1271	-1262	ML	0.00	4920.00	0.00
0	-1665	-1666	-590	-581	ML	0.00	4920.00	0.00
0	-1262	-1271	-1273	-1264	ML	0.00	4920.00	0.00
0	-1654	-1655	-491	-482	ML	0.00	4920.00	0.00
0	-1264	-1273	-1275	-1266	ML	0.00	4920.00	0.00
0	-1644	-1643	-384	-380	ML	0.00	-4920.00	0.00
0	-1266	-1275	-1217	-1216	ML	0.00	4920.00	0.00
0	-1686	-1687	-469	-770	ML	0.00	4920.00	0.00
0	-1675	-1676	-680	-671	ML	0.00	4920.00	0.00
0	-1269	-1278	-1280	-1271	ML	0.00	4920.00	0.00
0	-1664	-1665	-581	-572	ML	0.00	4920.00	0.00
0	-1271	-1280	-1282	-1273	ML	0.00	4920.00	0.00
0	-1653	-1654	-482	-341	ML	0.00	4920.00	0.00
0	-1273	-1282	-1284	-1275	ML	0.00	4920.00	0.00
0	-1643	-1642	-340	-384	ML	0.00	-4920.00	0.00
0	-1275	-1284	-1218	-1217	ML	0.00	4920.00	0.00
0	-1685	-1686	-770	-761	ML	0.00	4920.00	0.00
0	-1674	-1675	-671	-662	ML	0.00	4920.00	0.00
0	-1278	-1287	-1289	-1280	ML	0.00	4920.00	0.00
0	-1663	-1664	-572	-563	ML	0.00	4920.00	0.00
0	-1280	-1289	-1291	-1282	ML	0.00	4920.00	0.00
0	-1653	-1652	-348	-341	ML	0.00	-4920.00	0.00

Relazione di calcolo

0	-1282	-1291	-1293	-1284	ML	0.00	4920.00	0.00
0	-1284	-1293	-1219	-1218	ML	0.00	4920.00	0.00
0	-1684	-1685	-761	-752	ML	0.00	4920.00	0.00
0	-1673	-1674	-662	-653	ML	0.00	4920.00	0.00
0	-1287	-1296	-1298	-1289	ML	0.00	4920.00	0.00
0	-1662	-1663	-563	-554	ML	0.00	4920.00	0.00
0	-1289	-1298	-1300	-1291	ML	0.00	4920.00	0.00
0	-1652	-1651	-352	-348	ML	0.00	-4920.00	0.00
0	-1291	-1300	-1302	-1293	ML	0.00	4920.00	0.00
0	-1293	-1302	-1220	-1219	ML	0.00	4920.00	0.00
0	-1683	-1684	-752	-743	ML	0.00	4920.00	0.00
0	-1672	-1673	-653	-644	ML	0.00	4920.00	0.00
0	-1296	-1305	-1307	-1298	ML	0.00	4920.00	0.00
0	-1661	-1662	-554	-545	ML	0.00	4920.00	0.00
0	-1298	-1307	-1309	-1300	ML	0.00	4920.00	0.00
0	-1651	-1650	-356	-352	ML	0.00	-4920.00	0.00
0	-1300	-1309	-1311	-1302	ML	0.00	4920.00	0.00
0	-1302	-1311	-1221	-1220	ML	0.00	4920.00	0.00
0	-1314	-1224	-1226	-1316	ML	0.00	4920.00	0.00
0	-1305	-1314	-1316	-1307	ML	0.00	4920.00	0.00
0	-1316	-1226	-1228	-1318	ML	0.00	4920.00	0.00
0	-1307	-1316	-1318	-1309	ML	0.00	4920.00	0.00
0	-1318	-1228	-1230	-1320	ML	0.00	4920.00	0.00
0	-1309	-1318	-1320	-1311	ML	0.00	4920.00	0.00
0	-1320	-1230	-24	-1222	ML	0.00	4920.00	0.00
0	-1311	-1320	-1222	-1221	ML	0.00	4920.00	0.00
0	-1333	-1340	-1341	-1335	ML	0.00	4920.00	0.00
0	-1335	-1341	-1342	-1337	ML	0.00	4920.00	0.00
0	-1337	-1342	-1343	-1339	ML	0.00	4920.00	0.00
0	-1339	-1343	-1322	8	ML	0.00	4920.00	0.00
0	-1213	-1214	-1344	-1340	ML	0.00	4920.00	0.00
0	-1340	-1344	-1345	-1341	ML	0.00	4920.00	0.00
0	-1341	-1345	-1346	-1342	ML	0.00	4920.00	0.00
0	-1342	-1346	-1347	-1343	ML	0.00	4920.00	0.00
0	-1343	-1347	-1323	-1322	ML	0.00	4920.00	0.00
0	-1214	-1215	-1348	-1344	ML	0.00	4920.00	0.00
0	-1344	-1348	-1349	-1345	ML	0.00	4920.00	0.00
0	-1345	-1349	-1350	-1346	ML	0.00	4920.00	0.00
0	-1346	-1350	-1351	-1347	ML	0.00	4920.00	0.00
0	-1347	-1351	-1324	-1323	ML	0.00	4920.00	0.00
0	-1215	-1216	-1352	-1348	ML	0.00	4920.00	0.00
0	-1348	-1352	-1353	-1349	ML	0.00	4920.00	0.00
0	-1349	-1353	-1354	-1350	ML	0.00	4920.00	0.00
0	-1350	-1354	-1355	-1351	ML	0.00	4920.00	0.00
0	-1351	-1355	-1325	-1324	ML	0.00	4920.00	0.00
0	-1216	-1217	-1356	-1352	ML	0.00	4920.00	0.00
0	-1352	-1356	-1357	-1353	ML	0.00	4920.00	0.00
0	-1353	-1357	-1358	-1354	ML	0.00	4920.00	0.00
0	-1354	-1358	-1359	-1355	ML	0.00	4920.00	0.00
0	-1355	-1359	-1326	-1325	ML	0.00	4920.00	0.00
0	-1217	-1218	-1360	-1356	ML	0.00	4920.00	0.00
0	-1356	-1360	-1361	-1357	ML	0.00	4920.00	0.00
0	-1357	-1361	-1362	-1358	ML	0.00	4920.00	0.00
0	-1358	-1362	-1363	-1359	ML	0.00	4920.00	0.00
0	-1359	-1363	-1327	-1326	ML	0.00	4920.00	0.00
0	-1218	-1219	-1364	-1360	ML	0.00	4920.00	0.00
0	-1360	-1364	-1365	-1361	ML	0.00	4920.00	0.00
0	-1361	-1365	-1366	-1362	ML	0.00	4920.00	0.00
0	-1362	-1366	-1367	-1363	ML	0.00	4920.00	0.00
0	-1363	-1367	-1328	-1327	ML	0.00	4920.00	0.00
0	-1219	-1220	-1368	-1364	ML	0.00	4920.00	0.00
0	-1364	-1368	-1369	-1365	ML	0.00	4920.00	0.00
0	-1365	-1369	-1370	-1366	ML	0.00	4920.00	0.00
0	-1366	-1370	-1371	-1367	ML	0.00	4920.00	0.00
0	-1367	-1371	-1329	-1328	ML	0.00	4920.00	0.00
0	-1220	-1221	-1372	-1368	ML	0.00	4920.00	0.00
0	-1368	-1372	-1373	-1369	ML	0.00	4920.00	0.00
0	-1369	-1373	-1374	-1370	ML	0.00	4920.00	0.00
0	-1370	-1374	-1375	-1371	ML	0.00	4920.00	0.00
0	-1371	-1375	-1330	-1329	ML	0.00	4920.00	0.00
0	-1221	-1222	-1376	-1372	ML	0.00	4920.00	0.00
0	-1372	-1376	-1377	-1373	ML	0.00	4920.00	0.00
0	-1373	-1377	-1378	-1374	ML	0.00	4920.00	0.00
0	-1374	-1378	-1379	-1375	ML	0.00	4920.00	0.00
0	-1375	-1379	-1331	-1330	ML	0.00	4920.00	0.00
0	-1222	-24	-1332	-1376	ML	0.00	4920.00	0.00
0	-1376	-1332	-1334	-1377	ML	0.00	4920.00	0.00
0	-1377	-1334	-1336	-1378	ML	0.00	4920.00	0.00
0	-1378	-1336	-1338	-1379	ML	0.00	4920.00	0.00

Relazione di calcolo

0	-1379	-1338	10	-1331	ML	0.00	4920.00	0.00
0	-399	-1453	-1454	-401	ML	0.00	4920.00	0.00
0	-401	-1454	-1455	-403	ML	0.00	4920.00	0.00
0	-403	-1455	-1456	-405	ML	0.00	4920.00	0.00
0	-405	-1456	-1392	7	ML	0.00	4920.00	0.00
0	-446	-447	-1457	-1453	ML	0.00	4920.00	0.00
0	-1453	-1457	-1458	-1454	ML	0.00	4920.00	0.00
0	-1454	-1458	-1459	-1455	ML	0.00	4920.00	0.00
0	-1455	-1459	-1460	-1456	ML	0.00	4920.00	0.00
0	-1456	-1460	-1393	-1392	ML	0.00	4920.00	0.00
0	-447	-448	-1461	-1457	ML	0.00	4920.00	0.00
0	-1457	-1461	-1462	-1458	ML	0.00	4920.00	0.00
0	-1458	-1462	-1463	-1459	ML	0.00	4920.00	0.00
0	-1459	-1463	-1464	-1460	ML	0.00	4920.00	0.00
0	-1460	-1464	-1394	-1393	ML	0.00	4920.00	0.00
0	-448	-6	-1465	-1461	ML	0.00	4920.00	0.00
0	-1461	-1465	-1466	-1462	ML	0.00	4920.00	0.00
0	-1462	-1466	-1467	-1463	ML	0.00	4920.00	0.00
0	-1463	-1467	-1468	-1464	ML	0.00	4920.00	0.00
0	-1464	-1468	-1395	-1394	ML	0.00	4920.00	0.00
0	-1468	-1476	-1398	-1395	ML	0.00	4920.00	0.00
0	-6	-449	-1473	-1465	ML	0.00	4920.00	0.00
0	-1465	-1473	-1474	-1466	ML	0.00	4920.00	0.00
0	-1466	-1474	-1475	-1467	ML	0.00	4920.00	0.00
0	-1467	-1475	-1476	-1468	ML	0.00	4920.00	0.00
0	-449	-8	-1481	-1473	ML	0.00	4920.00	0.00
0	-1473	-1481	-1482	-1474	ML	0.00	4920.00	0.00
0	-1474	-1482	-1483	-1475	ML	0.00	4920.00	0.00
0	-1475	-1483	-1484	-1476	ML	0.00	4920.00	0.00
0	-1476	-1484	-1401	-1398	ML	0.00	4920.00	0.00
0	-1484	-1492	-1404	-1401	ML	0.00	4920.00	0.00
0	-8	-450	-1489	-1481	ML	0.00	4920.00	0.00
0	-1481	-1489	-1490	-1482	ML	0.00	4920.00	0.00
0	-1482	-1490	-1491	-1483	ML	0.00	4920.00	0.00
0	-1483	-1491	-1492	-1484	ML	0.00	4920.00	0.00
0	-450	-451	-1497	-1489	ML	0.00	4920.00	0.00
0	-1489	-1497	-1498	-1490	ML	0.00	4920.00	0.00
0	-1490	-1498	-1499	-1491	ML	0.00	4920.00	0.00
0	-1491	-1499	-1500	-1492	ML	0.00	4920.00	0.00
0	-1492	-1500	-1407	-1404	ML	0.00	4920.00	0.00
0	-451	-452	-1505	-1497	ML	0.00	4920.00	0.00
0	-1497	-1505	-1506	-1498	ML	0.00	4920.00	0.00
0	-1498	-1506	-1507	-1499	ML	0.00	4920.00	0.00
0	-1499	-1507	-1508	-1500	ML	0.00	4920.00	0.00
0	-1500	-1508	-1410	-1407	ML	0.00	4920.00	0.00
0	-452	-2	-1513	-1505	ML	0.00	4920.00	0.00
0	-1505	-1513	-1514	-1506	ML	0.00	4920.00	0.00
0	-1506	-1514	-1515	-1507	ML	0.00	4920.00	0.00
0	-1507	-1515	-1516	-1508	ML	0.00	4920.00	0.00
0	-1508	-1516	-1413	-1410	ML	0.00	4920.00	0.00
0	-2	-453	-1517	-1513	ML	0.00	4920.00	0.00
0	-1513	-1517	-1518	-1514	ML	0.00	4920.00	0.00
0	-1514	-1518	-1519	-1515	ML	0.00	4920.00	0.00
0	-1515	-1519	-1520	-1516	ML	0.00	4920.00	0.00
0	-1516	-1520	-1414	-1413	ML	0.00	4920.00	0.00
0	-453	-9	-1521	-1517	ML	0.00	4920.00	0.00
0	-1517	-1521	-1522	-1518	ML	0.00	4920.00	0.00
0	-1518	-1522	-1523	-1519	ML	0.00	4920.00	0.00
0	-1519	-1523	-1524	-1520	ML	0.00	4920.00	0.00
0	-1520	-1524	-1415	-1414	ML	0.00	4920.00	0.00
0	-9	-454	-1525	-1521	ML	0.00	4920.00	0.00
0	-1521	-1525	-1526	-1522	ML	0.00	4920.00	0.00
0	-1522	-1526	-1527	-1523	ML	0.00	4920.00	0.00
0	-1523	-1527	-1528	-1524	ML	0.00	4920.00	0.00
0	-1524	-1528	-1416	-1415	ML	0.00	4920.00	0.00
0	-454	-455	-1529	-1525	ML	0.00	4920.00	0.00
0	-1525	-1529	-1530	-1526	ML	0.00	4920.00	0.00
0	-1526	-1530	-1531	-1527	ML	0.00	4920.00	0.00
0	-1527	-1531	-1532	-1528	ML	0.00	4920.00	0.00
0	-1528	-1532	-1417	-1416	ML	0.00	4920.00	0.00
0	-455	-456	-1533	-1529	ML	0.00	4920.00	0.00
0	-1529	-1533	-1534	-1530	ML	0.00	4920.00	0.00
0	-1530	-1534	-1535	-1531	ML	0.00	4920.00	0.00
0	-1531	-1535	-1536	-1532	ML	0.00	4920.00	0.00
0	-1532	-1536	-1418	-1417	ML	0.00	4920.00	0.00
0	-456	-457	-1537	-1533	ML	0.00	4920.00	0.00
0	-1533	-1537	-1538	-1534	ML	0.00	4920.00	0.00
0	-1534	-1538	-1539	-1535	ML	0.00	4920.00	0.00
0	-1535	-1539	-1540	-1536	ML	0.00	4920.00	0.00

Relazione di calcolo

0	-1536	-1540	-1419	-1418	ML	0.00	4920.00	0.00
0	-457	-7	-1541	-1537	ML	0.00	4920.00	0.00
0	-1537	-1541	-1542	-1538	ML	0.00	4920.00	0.00
0	-1538	-1542	-1543	-1539	ML	0.00	4920.00	0.00
0	-1539	-1543	-1544	-1540	ML	0.00	4920.00	0.00
0	-1540	-1544	-1420	-1419	ML	0.00	4920.00	0.00
0	-7	-12	-1545	-1541	ML	0.00	4920.00	0.00
0	-1541	-1545	-1546	-1542	ML	0.00	4920.00	0.00
0	-1542	-1546	-1547	-1543	ML	0.00	4920.00	0.00
0	-1543	-1547	-1548	-1544	ML	0.00	4920.00	0.00
0	-1544	-1548	-1421	-1420	ML	0.00	4920.00	0.00
0	-12	-1	-1549	-1545	ML	0.00	4920.00	0.00
0	-1545	-1549	-1550	-1546	ML	0.00	4920.00	0.00
0	-1546	-1550	-1551	-1547	ML	0.00	4920.00	0.00
0	-1547	-1551	-1552	-1548	ML	0.00	4920.00	0.00
0	-1548	-1552	-1422	-1421	ML	0.00	4920.00	0.00
0	-1	-458	-1557	-1549	ML	0.00	4920.00	0.00
0	-1549	-1557	-1558	-1550	ML	0.00	4920.00	0.00
0	-1550	-1558	-1559	-1551	ML	0.00	4920.00	0.00
0	-1551	-1559	-1560	-1552	ML	0.00	4920.00	0.00
0	-1552	-1560	-1425	-1422	ML	0.00	4920.00	0.00
0	-458	-459	-1565	-1557	ML	0.00	4920.00	0.00
0	-1557	-1565	-1566	-1558	ML	0.00	4920.00	0.00
0	-1558	-1566	-1567	-1559	ML	0.00	4920.00	0.00
0	-1559	-1567	-1568	-1560	ML	0.00	4920.00	0.00
0	-1560	-1568	-1428	-1425	ML	0.00	4920.00	0.00
0	-459	-460	-1573	-1565	ML	0.00	4920.00	0.00
0	-1565	-1573	-1574	-1566	ML	0.00	4920.00	0.00
0	-1566	-1574	-1575	-1567	ML	0.00	4920.00	0.00
0	-1567	-1575	-1576	-1568	ML	0.00	4920.00	0.00
0	-1568	-1576	-1431	-1428	ML	0.00	4920.00	0.00
0	-1576	-1584	-1434	-1431	ML	0.00	4920.00	0.00
0	-460	-5	-1581	-1573	ML	0.00	4920.00	0.00
0	-1573	-1581	-1582	-1574	ML	0.00	4920.00	0.00
0	-1574	-1582	-1583	-1575	ML	0.00	4920.00	0.00
0	-1575	-1583	-1584	-1576	ML	0.00	4920.00	0.00
0	-5	-461	-1585	-1581	ML	0.00	4920.00	0.00
0	-1581	-1585	-1586	-1582	ML	0.00	4920.00	0.00
0	-1582	-1586	-1587	-1583	ML	0.00	4920.00	0.00
0	-1583	-1587	-1588	-1584	ML	0.00	4920.00	0.00
0	-1584	-1588	-1435	-1434	ML	0.00	4920.00	0.00
0	-461	-3	-1589	-1585	ML	0.00	4920.00	0.00
0	-1585	-1589	-1590	-1586	ML	0.00	4920.00	0.00
0	-1586	-1590	-1591	-1587	ML	0.00	4920.00	0.00
0	-1587	-1591	-1592	-1588	ML	0.00	4920.00	0.00
0	-1588	-1592	-1436	-1435	ML	0.00	4920.00	0.00
0	-3	-462	-1593	-1589	ML	0.00	4920.00	0.00
0	-1589	-1593	-1594	-1590	ML	0.00	4920.00	0.00
0	-1590	-1594	-1595	-1591	ML	0.00	4920.00	0.00
0	-1591	-1595	-1596	-1592	ML	0.00	4920.00	0.00
0	-1592	-1596	-1437	-1436	ML	0.00	4920.00	0.00
0	-462	-463	-1597	-1593	ML	0.00	4920.00	0.00
0	-1593	-1597	-1598	-1594	ML	0.00	4920.00	0.00
0	-1594	-1598	-1599	-1595	ML	0.00	4920.00	0.00
0	-1595	-1599	-1600	-1596	ML	0.00	4920.00	0.00
0	-1596	-1600	-1438	-1437	ML	0.00	4920.00	0.00
0	-463	-464	-1601	-1597	ML	0.00	4920.00	0.00
0	-1597	-1601	-1602	-1598	ML	0.00	4920.00	0.00
0	-1598	-1602	-1603	-1599	ML	0.00	4920.00	0.00
0	-1599	-1603	-1604	-1600	ML	0.00	4920.00	0.00
0	-1600	-1604	-1439	-1438	ML	0.00	4920.00	0.00
0	-464	-465	-1605	-1601	ML	0.00	4920.00	0.00
0	-1601	-1605	-1606	-1602	ML	0.00	4920.00	0.00
0	-1602	-1606	-1607	-1603	ML	0.00	4920.00	0.00
0	-1603	-1607	-1608	-1604	ML	0.00	4920.00	0.00
0	-1604	-1608	-1440	-1439	ML	0.00	4920.00	0.00
0	-465	-4	-1609	-1605	ML	0.00	4920.00	0.00
0	-1605	-1609	-1610	-1606	ML	0.00	4920.00	0.00
0	-1606	-1610	-1611	-1607	ML	0.00	4920.00	0.00
0	-1607	-1611	-1612	-1608	ML	0.00	4920.00	0.00
0	-1608	-1612	-1441	-1440	ML	0.00	4920.00	0.00
0	-4	-16	-1617	-1609	ML	0.00	4920.00	0.00
0	-1609	-1617	-1618	-1610	ML	0.00	4920.00	0.00
0	-1610	-1618	-1619	-1611	ML	0.00	4920.00	0.00
0	-1611	-1619	-1620	-1612	ML	0.00	4920.00	0.00
0	-1612	-1620	-1444	-1441	ML	0.00	4920.00	0.00
0	-16	-14	-1625	-1617	ML	0.00	4920.00	0.00
0	-1617	-1625	-1626	-1618	ML	0.00	4920.00	0.00
0	-1618	-1626	-1627	-1619	ML	0.00	4920.00	0.00

Relazione di calcolo

0	-1619	-1627	-1628	-1620	ML	0.00	4920.00	0.00
0	-1620	-1628	-1447	-1444	ML	0.00	4920.00	0.00
0	-14	-466	-1633	-1625	ML	0.00	4920.00	0.00
0	-1625	-1633	-1634	-1626	ML	0.00	4920.00	0.00
0	-1626	-1634	-1635	-1627	ML	0.00	4920.00	0.00
0	-1627	-1635	-1636	-1628	ML	0.00	4920.00	0.00
0	-1628	-1636	-1450	-1447	ML	0.00	4920.00	0.00
0	-1636	-1339	8	-1450	ML	0.00	4920.00	0.00
0	-466	6	-1333	-1633	ML	0.00	4920.00	0.00
0	-1633	-1333	-1335	-1634	ML	0.00	4920.00	0.00
0	-1634	-1335	-1337	-1635	ML	0.00	4920.00	0.00
0	-1635	-1337	-1339	-1636	ML	0.00	4920.00	0.00

Risultati del calcolo

Parametri di calcolo

La modellazione della struttura e la rielaborazione dei risultati del calcolo sono stati effettuati con:
ModeSt ver. 8.21, prodotto da Tecnisoft s.a.s. - Prato

La struttura è stata calcolata utilizzando come solutore agli elementi finiti:
Xfinest ver. 2019, prodotto da Ce.A.S. S.r.l. - Milano

Tipo di normativa: stati limite D.M. 18

Tipo di calcolo: analisi sismica statica

Vincoli esterni: Considera sempre vincoli assegnati in modellazione

Schematizzazione piani rigidi: nessun impalcato rigido

Modalità di recupero masse secondarie: mantenere sul nodo masse e forze relative

Generazione combinazioni

- Lineari: Sì
- Valuta spostamenti e non sollecitazioni: No
- Buckling: No

Opzioni di calcolo

- Sono state considerate infinitamente rigide le zone di connessione fra travi, pilastri ed elementi bidimensionali con una riduzione del 20%
- Calcolo con offset rigidi dai nodi: No
- Uniformare i carichi variabili: No
- Massimizzare i carichi variabili: No
- Recupero carichi zone rigide: taglio e momento flettente
- Modalità di combinazione momento torcente: disaccoppiare le azioni

Opzioni del solutore

- Tipo di elemento bidimensionale: QF46
- Calcolo sforzo nei nodi: No
- Analisi dinamica con metodo di Lanczos: No
- Trascura deformabilità a taglio delle aste: Sì
- Check sequenza di Sturm: Sì
- Analisi non lineare con Newton modificato: No
- Usa formulazione secante per buckling: No
- Trascura buckling torsionale: No

Dati struttura

- Sito di costruzione: LON. 10.13932 LAT. 44.03544
Contenuto tra ID reticolo: 18711 18710 18933 18932

Simbologia

TCC=Tipo di combinazione di carico

SLU = Stato limite ultimo

SLU S = Stato limite ultimo (azione sismica)

SLE R = Stato limite d'esercizio, combinazione rara

SLE F = Stato limite d'esercizio, combinazione frequente

SLE Q = Stato limite d'esercizio, combinazione quasi permanente

SLD = Stato limite di danno

SLV = Stato limite di salvaguardia della vita

SLC = Stato limite di prevenzione del collasso

SLO = Stato limite di operatività

SLU I = Stato limite di resistenza al fuoco

SND = Stato limite di salvaguardia della vita (non dissipativo)

T_R =Periodo di ritorno <anni>

Ag =Accelerazione orizzontale massima al sito

Fo =Valore massimo del fattore di amplificazione dello spettro in accelerazione orizzontale

Tc* =Periodo di inizio del tratto a velocità costante dello spettro in accelerazione orizzontale <sec>

S_s =Coefficiente di amplificazione stratigrafica

C_c =Coefficiente funzione della categoria del suolo

Relazione di calcolo

TCC	T _R	Ag <g>	Fo	Tc*	S _s	C _c
SLV	949	0.1749	2.37	0.30	1.45	1.56

- Edificio esistente: No
- Tipo di opera: Opera ordinaria
- Vita nominale V_N: 50.00
- Classe d'uso: Classe IV
- SL Esercizio: SLOPvr No, SLDPvr No
- SL Ultimi: SLVPvr 10.00, SLCPvr No
- Struttura dissipativa: No
- Quota di riferimento: -0.60 <m>
- Altezza della struttura: 4.60 <m>
- Numero piani edificio: 0
- Coefficiente θ : 0.00
- Edificio regolare in altezza: No
- Edificio regolare in pianta: No
- Forze orizzontali convenzionali per stati limite non sismici: No
- Genera stati limite per verifiche di resistenza al fuoco: No

Dati di calcolo

- Categoria del suolo di fondazione: C
- Tipologia strutturale: c.a. o prefabbricata a telaio a più piani e più campate

Periodo T ₁	0.25826
Coeff. λ SLV	1.00
Rapporto di sovraresistenza (α_0/α_1)	1.15
Valore di riferimento del fattore di comportamento (q ₀)	3.45
Fattore riduttivo (K _w)	1.00
Fattore riduttivo regolarità in altezza (KR)	0.80
Fattore di comportamento dissipativo (q)	2.76
Fattore di comportamento non dissipativo (q _{ND})	1.00
Fattore di comportamento per SLD (q _D)	1.00

- Categoria topografica: T1 - Superficie pianeggiante, pendii e rilievi isolati con inclinazione media $i \leq 15^\circ$
- Coeff. amplificazione topografica S_T: 1.00
- Accelerazione di picco del terreno AgS: 0.2538 <g>
- Fattore di comportamento per sisma verticale (qv): 1.50
- Smorzamento spettro: 5.00%

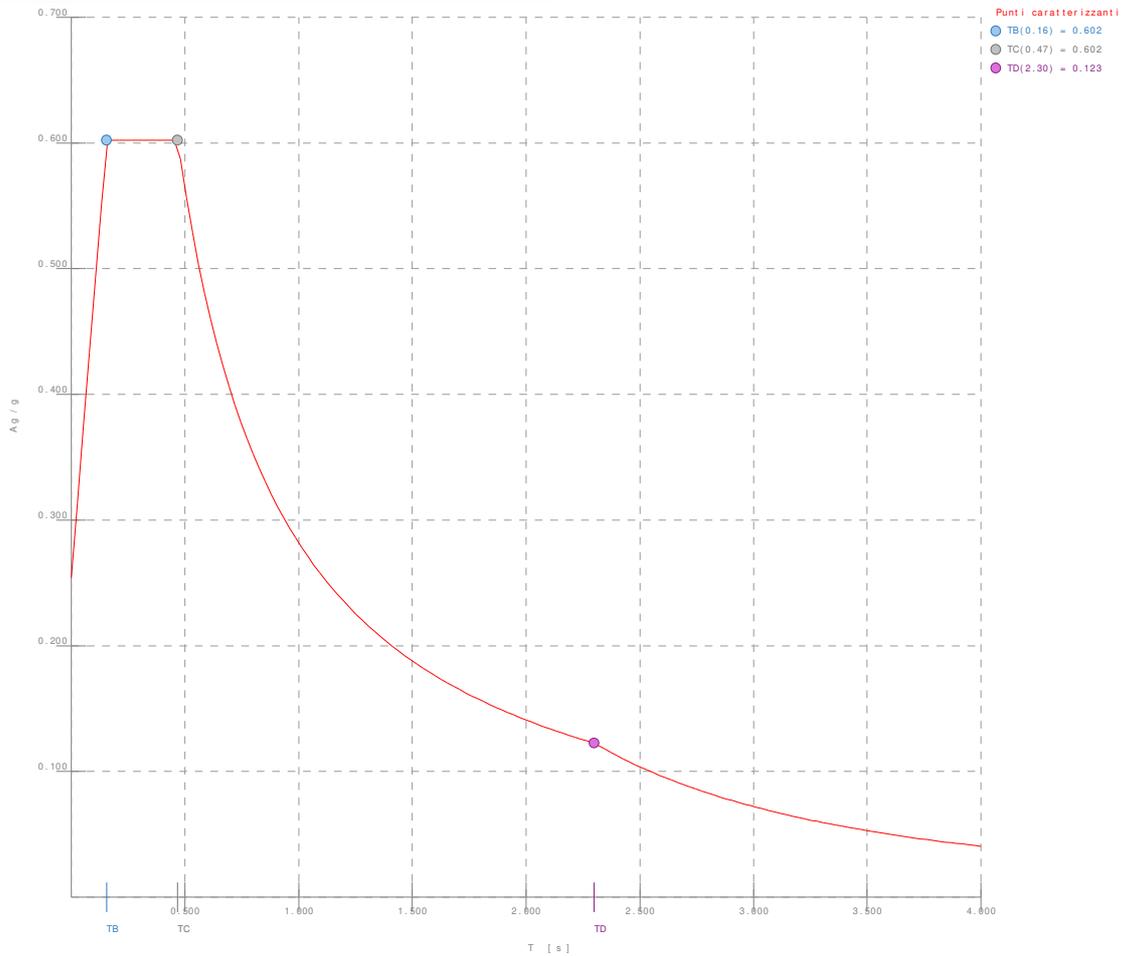


Figura numero 1: Spettro SND

- Angolo di ingresso del sisma: 0.00 <grad>
 - Tipo di combinazione sismica: 30% esteso

Ambienti di carico

Simbologia

- N = Numero
- Comm. = Commento
- 1=peso proprio
- 2=Peso terreno e pav.
- 3=spinta statica terreno
- 4=spinta sovraccarico
- 5=Spinta sismica
- 6=SLU Env Max
- 7=SLU Env Min
- 8=SLE rara Env Max
- 9=SLE Rara Env Min
- 10=SLE q. permanente
- 11=SLVX+0.3y
- 12=SLVX-0.3y
- 13=SLV-X-0.3y
- 14=SLV-X+0.3y
- 15=SLV Y+0.3X
- 16=SLV Y-0.3x
- 17=SLV -Y+0.3x
- 18=SLV -Y-0.3x
- 19=Spinta inerziale terreno
- F =azioni orizzontali convenzionali
- SLU =Stato limite ultimo
- SLR =Stato limite per combinazioni rare
- SLF =Stato limite per combinazioni frequenti
- SLQ/D=Stato limite per combinazioni quasi permanenti o di danno
- S = Sì
- N = No

N	Comm.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	S	SLU	SLR	SLF	SLQ
1	Calcolo sismico	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	N	N	N	
2	Calcolo statico	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	N	S	S	S	S	

Relazione di calcolo

Elenco combinazioni di carico simboliche

Simbologia

CC = Numero della combinazione delle condizioni di carico elementari
 Comm. = Commento
 TCC = Tipo di combinazione di carico
 SLU = Stato limite ultimo
 SLU S = Stato limite ultimo (azione sismica)
 SLE R = Stato limite d'esercizio, combinazione rara
 SLE F = Stato limite d'esercizio, combinazione frequente
 SLE Q = Stato limite d'esercizio, combinazione quasi permanente
 SLD = Stato limite di danno
 SLV = Stato limite di salvaguardia della vita
 SLC = Stato limite di prevenzione del collasso
 SLO = Stato limite di operatività
 SLU I = Stato limite di resistenza al fuoco
 SND = Stato limite di salvaguardia della vita (non dissipativo)

CC	Comm.	TCC	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	S
1	Amb. 1 (Sisma)	SLU S	1	1	1	Ψ_2	Ψ_2	1	1	1	1	1	1	1	1	1	1	1	1	1	Ψ_2	1
2	Amb. 2 (SLU)	SLU	γ max	-----																		
3	Amb. 2 (SLE R)	SLE R	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	-----
4	Amb. 2 (SLE F)	SLE F	1	1	1	Ψ_1	Ψ_1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	-----
5	Amb. 2 (SLE Q)	SLE Q	1	1	1	Ψ_2	Ψ_2	1	1	1	1	1	1	1	1	1	1	1	1	1	Ψ_2	-----

Genera le combinazioni con un solo carico di tipo variabile come di base: No

Considera sollecitazioni dinamiche con segno dei modi principali: No

Combinazioni delle CCE

Simbologia

CC = Numero della combinazione delle condizioni di carico elementari
 Comm. = Commento
 TCC = Tipo di combinazione di carico
 SLU = Stato limite ultimo
 SLU S = Stato limite ultimo (azione sismica)
 SLE R = Stato limite d'esercizio, combinazione rara
 SLE F = Stato limite d'esercizio, combinazione frequente
 SLE Q = Stato limite d'esercizio, combinazione quasi permanente
 SLD = Stato limite di danno
 SLV = Stato limite di salvaguardia della vita
 SLC = Stato limite di prevenzione del collasso
 SLO = Stato limite di operatività
 SLU I = Stato limite di resistenza al fuoco
 SND = Stato limite di salvaguardia della vita (non dissipativo)

An. = Tipo di analisi
 L = Lineare
 NL = Non lineare
 Bk = Buckling
 S = Si
 N = No

CC	Comm.	TCC	An.	Bk	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	S X	S Y
1	Amb. 1 (SLU S) S +X+0.3Y	SND	L	N	1.00	1.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	1.00	0.30
2	Amb. 1 (SLU S) S +X-0.3Y	SND	L	N	1.00	1.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	1.00	-0.30
3	Amb. 1 (SLU S) S -X+0.3Y	SND	L	N	1.00	1.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-1.00	-1.00	0.30
4	Amb. 1 (SLU S) S -X-0.3Y	SND	L	N	1.00	1.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-1.00	-1.00	-0.30
5	Amb. 1 (SLU S) S +0.3X+Y	SND	L	N	1.00	1.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.30	0.30	1.00
6	Amb. 1 (SLU S) S -0.3X+Y	SND	L	N	1.00	1.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-0.30	-0.30	1.00
7	Amb. 1 (SLU S) S +0.3X-Y	SND	L	N	1.00	1.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.30	0.30	-1.00
8	Amb. 1 (SLU S) S -0.3X-Y	SND	L	N	1.00	1.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-0.30	-0.30	-1.00
9	SLU Max	SLU	L	N	1.30	1.50	1.50	1.35	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10	SLU Min	SLU	L	N	1.30	1.50	1.50	1.30	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11	SLE R Max	SLE R	L	N	1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12	SLE R Min	SLE R	L	N	1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
13	SLE Q.Perm	SLE Q	L	N	1.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Elenco masse nodi

Simbologia

Nodo = Numero del nodo
 Mo = Massa orizzontale

Nodo	Mo <kg>																
-1698	115.20	-1697	230.68	-1696	231.09	-1695	231.51	-1694	231.93	-1693	232.34	-1692	232.76	-1691	234.34	-1683	774.17
-1690	235.93	-1689	236.36	-1688	236.78	-1687	506.54	-1686	776.41	-1685	776.61	-1684	778.78	-1683	774.17	-1675	781.36
-1682	766.92	-1681	766.72	-1680	766.72	-1679	766.72	-1678	767.97	-1677	769.22	-1676	775.29	-1675	781.36	-1667	766.72
-1674	781.36	-1673	781.36	-1672	775.29	-1671	769.22	-1670	767.97	-1669	766.72	-1668	766.72	-1667	766.72	-1659	776.96
-1666	766.72	-1665	767.97	-1664	769.22	-1663	772.38	-1662	775.54	-1661	775.54	-1660	742.95	-1659	776.96	-1651	236.82
-1658	872.94	-1657	776.49	-1656	710.15	-1655	769.64	-1654	769.64	-1653	503.59	-1652	237.25	-1651	236.82	-1643	230.41
-1650	236.40	-1649	234.44	-1648	232.50	-1647	232.08	-1646	231.66	-1645	231.25	-1644	230.83	-1643	230.41	-1626	167.38
-1642	115.07	-1636	163.06	-1635	163.06	-1634	163.06	-1633	163.06	-1628	167.38	-1627	167.38	-1626	167.38		

Relazione di calcolo

SLU S = Stato limite ultimo (azione sismica)
 SLE R = Stato limite d'esercizio, combinazione rara
 SLE F = Stato limite d'esercizio, combinazione frequente
 SLE Q = Stato limite d'esercizio, combinazione quasi permanente
 SLD = Stato limite di danno
 SLV = Stato limite di salvaguardia della vita
 SLC = Stato limite di prevenzione del collasso
 SLO = Stato limite di operatività
 SLU I = Stato limite di resistenza al fuoco
 SND = Stato limite di salvaguardia della vita (non dissipativo)
 σ_{zz} = Tensione normale sulle facce perp. all'asse Z
 τ_{xz} = Tensione in dir. Z sulle facce perp. all'asse X
 Mxx = Momento che provoca variazione di tensione sulle facce perp. all'asse X
 Mzz = Momento che provoca variazione di tensione sulle facce perp. all'asse Z
 Mxz = Momento che provoca variazione di tensione tangenziale sulle facce perp. all'asse X
 τ_{zy} = Tensione in dir. Y sulle facce perp. all'asse Z
 τ_{xy} = Tensione in dir. Y sulle facce perp. all'asse X

Bid. 0

	CC	TCC	Nodo	Min.	CC	TCC	Nodo	Max		CC	TCC	Nodo	Min.	CC	TCC	Nodo	Max
σ_{xx} <daN/mq>	8	SND	-7	-128704	2	SND	7	130725	σ_{zz} <daN/mq>	2	SND	1	-126174	2	SND	-1643	195928
τ_{xz} <daN/mq>	8	SND	-650	-83238	5	SND	-7	82911	Mxx <daNm/m>	1	SND	-623	-166846	4	SND	-623	172790
Mzz <daNm/m>	2	SND	-1176	-130341	2	SND	-1670	165681	Mxz <daNm/m>	5	SND	-641	-120201	8	SND	-1	120018
τ_{zy} <daN/mq>	2	SND	-182	-140030	2	SND	-56	237211	τ_{xy} <daN/mq>	1	SND	-7	-145723	7	SND	-458	133757

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Introduzione

Sistemi di riferimento

Le coordinate, i carichi concentrati, i cedimenti, le reazioni vincolari e gli spostamenti dei NODI sono riferiti ad una terna destra cartesiana globale con l'asse Z verticale rivolto verso l'alto.

I carichi in coordinate locali e le sollecitazioni delle ASTE sono riferite ad una terna destra cartesiana locale così definita:

- origine nel nodo iniziale dell'asta;
- asse X coincidente con l'asse dell'asta e con verso dal nodo iniziale al nodo finale;
- immaginando la trave a sezione rettangolare l'asse Y è parallelo alla base e l'asse Z è parallelo all'altezza. La rotazione dell'asta comporta quindi una rotazione di tutta la terna locale.

Si può immaginare la terna locale di un'asta comunque disposta nello spazio come derivante da quella globale dopo una serie di trasformazioni:

- una rotazione intorno all'asse Z che porti l'asse X a coincidere con la proiezione dell'asse dell'asta sul piano orizzontale;
- una traslazione lungo il nuovo asse X così definito in modo da portare l'origine a coincidere con la proiezione del nodo iniziale dell'asta sul piano orizzontale;
- una traslazione lungo l'asse Z che porti l'origine a coincidere con il nodo iniziale dell'asta;
- una rotazione intorno all'asse Y così definito che porti l'asse X a coincidere con l'asse dell'asta;
- una rotazione intorno all'asse X così definito pari alla rotazione dell'asta.

In pratica le travi prive di rotazione avranno sempre l'asse Z rivolto verso l'alto e l'asse Y nel piano del solaio, mentre i pilastri privi di rotazione avranno l'asse Y parallelo all'asse Y globale e l'asse Z parallelo ma controverso all'asse X globale. Da notare quindi che per i pilastri la "base" è il lato parallelo a Y.

Le sollecitazioni ed i carichi in coordinate locali negli ELEMENTI BIDIMENSIONALI e nei MURI sono riferiti ad una terna destra cartesiana locale così definita:

- origine nel primo nodo dell'elemento;
- asse X coincidente con la congiungente il primo ed il secondo nodo dell'elemento;
- asse Y definito come prodotto vettoriale fra il versore dell'asse X e il versore della congiungente il primo e il quarto nodo. Asse Z a formare con gli altri due una terna destrorsa.

Praticamente un elemento verticale con l'asse X locale coincidente con l'asse X globale ha anche gli altri assi locali coincidenti con quelli globali.

Rotazioni e momenti

Seguendo il principio adottato per tutti i carichi che sono positivi se CONTROVERSI agli assi, anche i momenti concentrati e le rotazioni impresse in coordinate globali risultano positivi se CONTROVERSI al segno positivo delle rotazioni. Il segno positivo dei momenti e delle rotazioni è quello orario per l'osservatore posto nell'origine: X ruota su Y, Y ruota su Z, Z ruota su X. In pratica è sufficiente adottare la regola della mano destra: col pollice rivolto nella direzione dell'asse, la rotazione che porta a chiudere il palmo della mano corrisponde al segno positivo.

Normativa di riferimento

La normativa di riferimento è la seguente:

- Legge n. 64 del 2/2/1974 - Provvedimenti per le costruzioni con particolari prescrizioni per le zone sismiche.
- D.M. del 24/1/1986 - Norme tecniche relative alle costruzioni sismiche.
- Legge n. 1086 del 5/11/1971 - Norme per la disciplina delle opere di conglomerato cementizio armato, normale e precompresso ed a struttura metallica.
- D.M. del 14/2/1992 - Norme tecniche per l'esecuzione delle opere in c.a. normale e precompresso e per le strutture metalliche.
- D.M. del 9/1/1996 - Norme tecniche per l'esecuzione delle opere in c.a. normale e precompresso e per le strutture metalliche.
- D.M. del 16/1/1996 - Norme tecniche per le costruzioni in zone sismiche.
- Circolare n. 21745 del 30/7/1981 - Legge n. 219 del 14/5/1981 - Art. 10 - Istruzioni relative al rafforzamento degli edifici in muratura danneggiati dal sisma.
- Regione Autonoma Friuli Venezia Giulia - Legge Regionale n. 30 del 20/6/1977 - Documentazione tecnica per la progettazione e direzione delle opere di riparazione degli edifici - Documento Tecnico n. 2 - Raccomandazioni per la riparazione strutturale degli edifici in muratura.
- D.M. del 20/11/1987 - Norme Tecniche per la progettazione, esecuzione e collaudo degli edifici in muratura e per il loro consolidamento.
- Norme Tecniche C.N.R. n. 10011-85 del 18/4/1985 - Costruzioni di acciaio - Istruzioni per il calcolo, l'esecuzione, il collaudo e la manutenzione.
- Norme Tecniche C.N.R. n. 10025-84 del 14/12/1984 - Istruzioni per il progetto, l'esecuzione ed il controllo delle strutture prefabbricate in conglomerato cementizio e per le strutture costruite con sistemi industrializzati di acciaio

Relazione di calcolo

- Istruzioni per il calcolo, l'esecuzione, il collaudo e la manutenzione.
- Circolare n. 65 del 10/4/1997 - Istruzioni per l'applicazione delle "Norme tecniche per le costruzioni in zone sismiche" di cui al D.M. del 16/1/1996.
- Eurocodice 5 - Progettazione delle strutture di legno.
- DIN 1052 - Metodi di verifica per il legno.
- D.M. del 17/1/2018 - Norme tecniche per le costruzioni.
- Circolare n. 7 del 21/1/2019 - Istruzioni per l'applicazione dell'«Aggiornamento delle "Norme tecniche per le costruzioni"» di cui al decreto ministeriale 17 gennaio 2018.
- Documento Tecnico CNR-DT 200 R1/2012 - Istruzioni per la Progettazione, l'Esecuzione ed il Controllo di Interventi di Consolidamento Statico mediante l'utilizzo di Compositi Fibrorinforzati.
- Eurocodice 3 - Progettazione delle strutture in acciaio.

Unità di misura

Le unità di misura adottate sono le seguenti:

- lunghezze : m
- forze : daN
- masse : kg
- temperature : gradi centigradi
- angoli : gradi sessadecimali o radianti

Geometria

Elenco vincoli nodi

Simbologia

- Vn = Numero del vincolo nodo
 Comm. = Commento
 Sx = Spostamento in dir. X (L=libero, B=bloccato, E=elastico)
 Sy = Spostamento in dir. Y (L=libero, B=bloccato, E=elastico)
 Sz = Spostamento in dir. Z (L=libero, B=bloccato, E=elastico)
 Rx = Rotazione intorno all'asse X (L=libera, B=bloccata, E=elastica)
 Ry = Rotazione intorno all'asse Y (L=libera, B=bloccata, E=elastica)
 Rz = Rotazione intorno all'asse Z (L=libera, B=bloccata, E=elastica)
 RL = Rotazione libera
 Ly = Lunghezza (dir. Y locale)
 Lz = Larghezza (dir. Z locale)
 Kt = Coeff. di sottofondo su suolo elastico alla Winkler

Vn	Comm.	Sx	Sy	Sz	Rx	Ry	Rz	RL	Ly	Lz	Kt
		<m>	<m>	<m>	<m>	<m>	<m>		<m>	<m>	<daN/cmc>
1	Libero	L	L	L	L	L	L				
6	appoggio	B	B	B	L	L	B				
2	Incastro	B	B	B	B	B	B				

Elenco nodi

Simbologia

- Nodo = Numero del nodo
 X = Coordinata X del nodo
 Y = Coordinata Y del nodo
 Z = Coordinata Z del nodo
 Imp. = Numero dell'impalcato
 Vn = Numero del vincolo nodo

Nodo	X	Y	Z	Imp.	Vn
	<m>	<m>	<m>		
-3524	16.45	14.30	-0.00	0	1
-3521	15.38	14.30	-0.00	0	1
-3518	14.31	14.30	-0.00	0	1
-3515	13.96	13.44	-0.00	0	1
-3512	13.53	12.36	-0.00	0	1
-3509	13.24	11.64	-0.00	0	1
-3506	12.81	10.55	-0.00	0	1
-3503	12.37	9.47	-0.00	0	1
-3500	11.94	8.39	-0.00	0	1
-3497	11.50	7.30	-0.00	0	1
-3494	11.07	6.22	-0.00	0	1
-3491	10.63	5.14	-0.00	0	1
-3488	10.20	4.05	-0.00	0	1
-3485	9.76	2.97	-0.00	0	1
-3482	9.33	1.88	-0.00	0	1
-3479	8.89	0.80	-0.00	0	1
-3476	9.94	0.80	-0.00	0	1
-3523	16.09	14.30	-0.00	0	1
-3520	15.02	14.30	-0.00	0	1
-3517	14.21	14.05	-0.00	0	1
-3514	13.82	13.08	-0.00	0	1
-3511	13.46	12.18	-0.00	0	1
-3508	13.10	11.28	-0.00	0	1
-3505	12.66	10.19	-0.00	0	1
-3502	12.23	9.11	-0.00	0	1
-3499	11.79	8.03	-0.00	0	1
-3496	11.36	6.94	-0.00	0	1
-3493	10.92	5.86	-0.00	0	1
-3490	10.49	4.77	-0.00	0	1
-3487	10.05	3.69	-0.00	0	1
-3484	9.62	2.61	-0.00	0	1
-3481	9.18	1.52	-0.00	0	1
-3478	9.24	0.80	-0.00	0	1
-3475	10.33	0.80	-0.00	0	1
-3522	15.77	14.30	-0.00	0	1
-3519	14.67	14.30	-0.00	0	1
-3516	14.11	13.79	-0.00	0	1
-3513	13.68	12.72	-0.00	0	1
-3510	13.39	12.00	-0.00	0	1
-3507	12.95	10.92	-0.00	0	1
-3504	12.52	9.83	-0.00	0	1
-3501	12.08	8.75	-0.00	0	1
-3498	11.65	7.66	-0.00	0	1
-3495	11.21	6.58	-0.00	0	1
-3492	10.78	5.50	-0.00	0	1
-3489	10.34	4.41	-0.00	0	1
-3486	9.91	3.33	-0.00	0	1
-3483	9.47	2.25	-0.00	0	1
-3480	9.04	1.16	-0.00	0	1
-3477	9.59	0.80	-0.00	0	1
-3474	10.63	0.80	-0.00	0	1

Relazione di calcolo

4	Calcestruzzo classe C20/25	2500	302005.00	137275.00	0.1	1.000000E-05
7	Calcestruzzo classe C30/37	2500	330194.00	150088.00	0.1	1.000000E-05
8	Calcestruzzo classe C32/40	2500	336428.00	152922.00	0.1	1.000000E-05
22	Baggioli	0.000000E+00	325881.00	148128.00	0.1	1.000000E-05

Elenco aste

Simbologia

Asta = Numero dell'asta
 N1 = Nodo iniziale
 N2 = Nodo finale
 Sez. = Numero della sezione
 Va = Numero del vincolo asta
 Par. = Numero dei parametri aggiuntivi
 Rot. = Rotazione
 FF = Filo fisso
 Dy1 = Scost. filo fisso Y1
 Dy2 = Scost. filo fisso Y2
 Dz1 = Scost. filo fisso Z1
 Dz2 = Scost. filo fisso Z2
 Kt = Coeff. di sottofondo su suolo elastico alla Winkler

Asta	N1	N2	Sez.	Va	Par.	Rot. <grad>	FF	Dy1 <cm>	Dy2 <cm>	Dz1 <cm>	Dz2 <cm>	Kt <daN/cm>
0	269	19		1		0.00	11	0.00	0.00	0.00	0.00	
0	8	-1048		1		0.00	11	0.00	0.00	0.00	0.00	
0	-1051	8		1		0.00	11	0.00	0.00	0.00	0.00	
0	6	-1051		1		0.00	11	0.00	0.00	0.00	0.00	
0	6	-35		1		0.00	11	0.00	0.00	0.00	0.00	
0	-35	-37		1		0.00	11	0.00	0.00	0.00	0.00	
0	-37	-39		1		0.00	11	0.00	0.00	0.00	0.00	
0	-39	-41		1		0.00	11	0.00	0.00	0.00	0.00	
0	-41	-43		1		0.00	11	0.00	0.00	0.00	0.00	
0	-43	-45		1		0.00	11	0.00	0.00	0.00	0.00	
0	-45	-47		1		0.00	11	0.00	0.00	0.00	0.00	
0	-47	-49		1		0.00	11	0.00	0.00	0.00	0.00	
0	-49	-51		1		0.00	11	0.00	0.00	0.00	0.00	
0	-51	-53		1		0.00	11	0.00	0.00	0.00	0.00	
0	-53	-55		1		0.00	11	0.00	0.00	0.00	0.00	
0	-1594	119		1		0.00	11	0.00	0.00	0.00	0.00	
0	-1592	-1594		1		0.00	11	0.00	0.00	0.00	0.00	
0	-1590	-1592		1		0.00	11	0.00	0.00	0.00	0.00	
0	-1588	-1590		1		0.00	11	0.00	0.00	0.00	0.00	
0	105	-1588		1		0.00	11	0.00	0.00	0.00	0.00	
0	-55	-57		1		0.00	11	0.00	0.00	0.00	0.00	
0	105	-2437		1		0.00	11	0.00	0.00	0.00	0.00	
0	-57	-59		1		0.00	11	0.00	0.00	0.00	0.00	
0	-2437	-2438		1		0.00	11	0.00	0.00	0.00	0.00	
0	-59	-61		1		0.00	11	0.00	0.00	0.00	0.00	
0	-2438	-2439		1		0.00	11	0.00	0.00	0.00	0.00	
0	-61	-63		1		0.00	11	0.00	0.00	0.00	0.00	
0	-63	-65		1		0.00	11	0.00	0.00	0.00	0.00	
0	-1595	219		1		0.00	11	0.00	0.00	0.00	0.00	
0	-2439	-2440		1		0.00	11	0.00	0.00	0.00	0.00	
0	-1593	-1595		1		0.00	11	0.00	0.00	0.00	0.00	
0	-2440	263		1		0.00	11	0.00	0.00	0.00	0.00	
0	-1591	-1593		1		0.00	11	0.00	0.00	0.00	0.00	
0	-1589	-1591		1		0.00	11	0.00	0.00	0.00	0.00	
0	205	-1589		1		0.00	11	0.00	0.00	0.00	0.00	
0	-65	-67		1		0.00	11	0.00	0.00	0.00	0.00	
0	263	264	6	1		0.00	11	0.00	0.00	0.00	0.00	
0	205	-1790		1		0.00	11	0.00	0.00	0.00	0.00	
0	262	264	6	1		0.00	11	0.00	0.00	0.00	0.00	
0	263	-2442		1		0.00	11	0.00	0.00	0.00	0.00	
0	-1790	-1792		1		0.00	11	0.00	0.00	0.00	0.00	
0	-2442	262		1		0.00	11	0.00	0.00	0.00	0.00	
0	-1792	-1794		1		0.00	11	0.00	0.00	0.00	0.00	
0	262	-2444		1		0.00	11	0.00	0.00	0.00	0.00	
0	-1794	-1796		1		0.00	11	0.00	0.00	0.00	0.00	
0	-2444	-2445		1		0.00	11	0.00	0.00	0.00	0.00	
0	-73	-75		1		0.00	11	0.00	0.00	0.00	0.00	
0	-1796	-1798		1		0.00	11	0.00	0.00	0.00	0.00	
0	-2445	-2446		1		0.00	11	0.00	0.00	0.00	0.00	
0	-75	-77		1		0.00	11	0.00	0.00	0.00	0.00	
0	-1798	-1800		1		0.00	11	0.00	0.00	0.00	0.00	
0	-2446	-2447		1		0.00	11	0.00	0.00	0.00	0.00	
0	-1800	-1802		1		0.00	11	0.00	0.00	0.00	0.00	
0	-2447	260	6	1		0.00	11	0.00	0.00	0.00	0.00	
0	261	260	6	1		0.00	11	0.00	0.00	0.00	0.00	
0	-2447	-2448		1		0.00	11	0.00	0.00	0.00	0.00	

Relazione di calcolo

0	14	-1668		1		0.00	11	0.00	0.00	0.00	0.00	
0	-67	-69		1		0.00	11	0.00	0.00	0.00	0.00	
0	-2448	261		1		0.00	11	0.00	0.00	0.00	0.00	
0	4	-745		1		0.00	11	0.00	0.00	0.00	0.00	
0	-34	4		1		0.00	11	0.00	0.00	0.00	0.00	
0	-745	-743		1		0.00	11	0.00	0.00	0.00	0.00	
0	49	-1		1		0.00	11	0.00	0.00	0.00	0.00	
0	261	-2450		1		0.00	11	0.00	0.00	0.00	0.00	
0	-36	-34		1		0.00	11	0.00	0.00	0.00	0.00	
0	-743	-741		1		0.00	11	0.00	0.00	0.00	0.00	
0	-38	-36		1		0.00	11	0.00	0.00	0.00	0.00	
0	-40	-38		1		0.00	11	0.00	0.00	0.00	0.00	
0	-69	-71		1		0.00	11	0.00	0.00	0.00	0.00	
0	-71	-73		1		0.00	11	0.00	0.00	0.00	0.00	
0	-1802	-1804		1		0.00	11	0.00	0.00	0.00	0.00	
0	-1804	-1806		1		0.00	11	0.00	0.00	0.00	0.00	
0	-1806	-1808		1		0.00	11	0.00	0.00	0.00	0.00	
0	-1808	-1810		1		0.00	11	0.00	0.00	0.00	0.00	
0	-741	279		1		0.00	11	0.00	0.00	0.00	0.00	
0	-737	18		1		0.00	11	0.00	0.00	0.00	0.00	
0	-42	-40		1		0.00	11	0.00	0.00	0.00	0.00	
0	-46	-44		1		0.00	11	0.00	0.00	0.00	0.00	
0	-1810	-1812		1		0.00	11	0.00	0.00	0.00	0.00	
0	-1789	14		1		0.00	11	0.00	0.00	0.00	0.00	
0	-1669	-1670		1		0.00	11	0.00	0.00	0.00	0.00	
0	-79	-81		1		0.00	11	0.00	0.00	0.00	0.00	
0	-83	-85		1		0.00	11	0.00	0.00	0.00	0.00	
0	-1812	-1814		1		0.00	11	0.00	0.00	0.00	0.00	
0	-1668	-1669		1		0.00	11	0.00	0.00	0.00	0.00	
0	-1791	-1789		1		0.00	11	0.00	0.00	0.00	0.00	
0	-2450	-2451		1		0.00	11	0.00	0.00	0.00	0.00	
0	-44	-42		1		0.00	11	0.00	0.00	0.00	0.00	
0	-1670	-1671		1		0.00	11	0.00	0.00	0.00	0.00	
0	-1671	-1672		1		0.00	11	0.00	0.00	0.00	0.00	
0	-77	-79		1		0.00	11	0.00	0.00	0.00	0.00	
0	-2451	-2452		1		0.00	11	0.00	0.00	0.00	0.00	
0	-48	-46		1		0.00	11	0.00	0.00	0.00	0.00	
0	-87	-89		1		0.00	11	0.00	0.00	0.00	0.00	
0	-2452	-2453		1		0.00	11	0.00	0.00	0.00	0.00	
0	252	254	6	1		0.00	11	0.00	0.00	0.00	0.00	
0	252	-2455		1		0.00	11	0.00	0.00	0.00	0.00	
0	-50	-48		1		0.00	11	0.00	0.00	0.00	0.00	
0	-1	50		1		0.00	11	0.00	0.00	0.00	0.00	
0	-2453	252		1		0.00	11	0.00	0.00	0.00	0.00	
0	-1814	-1816		1		0.00	11	0.00	0.00	0.00	0.00	
0	-2455	251		1		0.00	11	0.00	0.00	0.00	0.00	
0	-52	-50		1		0.00	11	0.00	0.00	0.00	0.00	
0	-1816	-1818		1		0.00	11	0.00	0.00	0.00	0.00	
0	-58	-56		1		0.00	11	0.00	0.00	0.00	0.00	
0	-1793	-1791		1		0.00	11	0.00	0.00	0.00	0.00	
0	-1795	-1793		1		0.00	11	0.00	0.00	0.00	0.00	
0	-93	-95		1		0.00	11	0.00	0.00	0.00	0.00	
0	251	-2456		1		0.00	11	0.00	0.00	0.00	0.00	
0	-54	-52		1		0.00	11	0.00	0.00	0.00	0.00	
0	-89	-91		1		0.00	11	0.00	0.00	0.00	0.00	
0	251	254	6	1		0.00	11	0.00	0.00	0.00	0.00	
0	-95	-97		1		0.00	11	0.00	0.00	0.00	0.00	
0	-1818	-1820		1		0.00	11	0.00	0.00	0.00	0.00	
0	-2457	-2458		1		0.00	11	0.00	0.00	0.00	0.00	
0	-3360	223	6	1		0.00	11	0.00	0.00	0.00	0.00	
0	-56	-54		1		0.00	11	0.00	0.00	0.00	0.00	
0	-60	-58		1		0.00	11	0.00	0.00	0.00	0.00	
0	-62	-60		1		0.00	11	0.00	0.00	0.00	0.00	
0	-1672	118		1		0.00	11	0.00	0.00	0.00	0.00	
0	-91	-93		1		0.00	11	0.00	0.00	0.00	0.00	
0	-97	-3378		1		0.00	11	0.00	0.00	0.00	0.00	
0	-3378	-99		1		0.00	11	0.00	0.00	0.00	0.00	
0	-2456	-2457		1		0.00	11	0.00	0.00	0.00	0.00	
0	-1820	-1822		1		0.00	11	0.00	0.00	0.00	0.00	
0	-1822	-1824		1		0.00	11	0.00	0.00	0.00	0.00	
0	-2458	-2459		1		0.00	11	0.00	0.00	0.00	0.00	
0	-1824	-1826		1		0.00	11	0.00	0.00	0.00	0.00	
0	-1826	-1828		1		0.00	11	0.00	0.00	0.00	0.00	
0	-64	-62		1		0.00	11	0.00	0.00	0.00	0.00	
0	-1828	-1830		1		0.00	11	0.00	0.00	0.00	0.00	
0	-66	-64		1		0.00	11	0.00	0.00	0.00	0.00	
0	-1830	-1832		1		0.00	11	0.00	0.00	0.00	0.00	
0	247	-2463		1		0.00	11	0.00	0.00	0.00	0.00	
0	-68	-66		1		0.00	11	0.00	0.00	0.00	0.00	

Relazione di calcolo

0	-1797	-1795		1		0.00	11	0.00	0.00	0.00	0.00	0.00
0	-1799	-1797		1		0.00	11	0.00	0.00	0.00	0.00	0.00
0	-99	-101		1		0.00	11	0.00	0.00	0.00	0.00	0.00
0	-2459	-3360		1		0.00	11	0.00	0.00	0.00	0.00	0.00
0	246	245		1		0.00	11	0.00	0.00	0.00	0.00	0.00
0	-72	-70		1		0.00	11	0.00	0.00	0.00	0.00	0.00
0	-1801	-1799		1		0.00	11	0.00	0.00	0.00	0.00	0.00
0	-1803	-1801		1		0.00	11	0.00	0.00	0.00	0.00	0.00
0	-1807	-1805		1		0.00	11	0.00	0.00	0.00	0.00	0.00
0	-101	-103		1		0.00	11	0.00	0.00	0.00	0.00	0.00
0	-106	12		1		0.00	11	0.00	0.00	0.00	0.00	0.00
0	247	223	6	1		0.00	11	0.00	0.00	0.00	0.00	0.00
0	-2464	-2465		1		0.00	11	0.00	0.00	0.00	0.00	0.00
0	-1836	-1838		1		0.00	11	0.00	0.00	0.00	0.00	0.00
0	246	222	6	1		0.00	11	0.00	0.00	0.00	0.00	0.00
0	244	-2469		1		0.00	11	0.00	0.00	0.00	0.00	0.00
0	-74	-72		1		0.00	11	0.00	0.00	0.00	0.00	0.00
0	-78	-76		1		0.00	11	0.00	0.00	0.00	0.00	0.00
0	-1809	-1807		1		0.00	11	0.00	0.00	0.00	0.00	0.00
0	-2461	247		1		0.00	11	0.00	0.00	0.00	0.00	0.00
0	-70	-68		1		0.00	11	0.00	0.00	0.00	0.00	0.00
0	-76	-74		1		0.00	11	0.00	0.00	0.00	0.00	0.00
0	-1065	-1066		1		0.00	11	0.00	0.00	0.00	0.00	0.00
0	-104	-106		1		0.00	11	0.00	0.00	0.00	0.00	0.00
0	-3360	-2461		1		0.00	11	0.00	0.00	0.00	0.00	0.00
0	1	21		1		0.00	11	0.00	0.00	0.00	0.00	0.00
0	-1832	-1834		1		0.00	11	0.00	0.00	0.00	0.00	0.00
0	-80	-78		1		0.00	11	0.00	0.00	0.00	0.00	0.00
0	-1805	-1803		1		0.00	11	0.00	0.00	0.00	0.00	0.00
0	-1813	-1811		1		0.00	11	0.00	0.00	0.00	0.00	0.00
0	-103	-104		1		0.00	11	0.00	0.00	0.00	0.00	0.00
0	-1834	-1836		1		0.00	11	0.00	0.00	0.00	0.00	0.00
0	-1838	-1840		1		0.00	11	0.00	0.00	0.00	0.00	0.00
0	-82	-80		1		0.00	11	0.00	0.00	0.00	0.00	0.00
0	-1817	-1815		1		0.00	11	0.00	0.00	0.00	0.00	0.00
0	-1064	-1065		1		0.00	11	0.00	0.00	0.00	0.00	0.00
0	-2466	246		1		0.00	11	0.00	0.00	0.00	0.00	0.00
0	-1840	-1842		1		0.00	11	0.00	0.00	0.00	0.00	0.00
0	-84	-82		1		0.00	11	0.00	0.00	0.00	0.00	0.00
0	-1811	-1809		1		0.00	11	0.00	0.00	0.00	0.00	0.00
0	-1815	-1813		1		0.00	11	0.00	0.00	0.00	0.00	0.00
0	12	-1064		1		0.00	11	0.00	0.00	0.00	0.00	0.00
0	-2463	-2464		1		0.00	11	0.00	0.00	0.00	0.00	0.00
0	-2465	-2466		1		0.00	11	0.00	0.00	0.00	0.00	0.00
0	-1842	-1844		1		0.00	11	0.00	0.00	0.00	0.00	0.00
0	244	222	6	1		0.00	11	0.00	0.00	0.00	0.00	0.00
0	-90	-88		1		0.00	11	0.00	0.00	0.00	0.00	0.00
0	-1819	-1817		1		0.00	11	0.00	0.00	0.00	0.00	0.00
0	245	244		1		0.00	11	0.00	0.00	0.00	0.00	0.00
0	-1844	-1846		1		0.00	11	0.00	0.00	0.00	0.00	0.00
0	-2469	-2470		1		0.00	11	0.00	0.00	0.00	0.00	0.00
0	-1846	-1848		1		0.00	11	0.00	0.00	0.00	0.00	0.00
0	-1848	-1850		1		0.00	11	0.00	0.00	0.00	0.00	0.00
0	-1423	-1425		1		0.00	11	0.00	0.00	0.00	0.00	0.00
0	-2471	-2472		1		0.00	11	0.00	0.00	0.00	0.00	0.00
0	-86	-84		1		0.00	11	0.00	0.00	0.00	0.00	0.00
0	-1850	-3370		1		0.00	11	0.00	0.00	0.00	0.00	0.00
0	-88	-86		1		0.00	11	0.00	0.00	0.00	0.00	0.00
0	-94	-92		1		0.00	11	0.00	0.00	0.00	0.00	0.00
0	-1821	-1819		1		0.00	11	0.00	0.00	0.00	0.00	0.00
0	-1823	-1821		1		0.00	11	0.00	0.00	0.00	0.00	0.00
0	-1825	-1823		1		0.00	11	0.00	0.00	0.00	0.00	0.00
0	-3370	-1852		1		0.00	11	0.00	0.00	0.00	0.00	0.00
0	-1425	121		1		0.00	11	0.00	0.00	0.00	0.00	0.00
0	-1421	-1423		1		0.00	11	0.00	0.00	0.00	0.00	0.00
0	-92	-90		1		0.00	11	0.00	0.00	0.00	0.00	0.00
0	-1827	-1825		1		0.00	11	0.00	0.00	0.00	0.00	0.00
0	-1831	-1829		1		0.00	11	0.00	0.00	0.00	0.00	0.00
0	-2470	-2471		1		0.00	11	0.00	0.00	0.00	0.00	0.00
0	-1419	-1421		1		0.00	11	0.00	0.00	0.00	0.00	0.00
0	-2472	117		1		0.00	11	0.00	0.00	0.00	0.00	0.00
0	117	-1419		1		0.00	11	0.00	0.00	0.00	0.00	0.00
0	-1852	-1854		1		0.00	11	0.00	0.00	0.00	0.00	0.00
0	-1829	-1827		1		0.00	11	0.00	0.00	0.00	0.00	0.00
0	-1854	-1856		1		0.00	11	0.00	0.00	0.00	0.00	0.00
0	-1426	221		1		0.00	11	0.00	0.00	0.00	0.00	0.00
0	-1856	-1858		1		0.00	11	0.00	0.00	0.00	0.00	0.00
0	-1424	-1426		1		0.00	11	0.00	0.00	0.00	0.00	0.00
0	-1422	-1424		1		0.00	11	0.00	0.00	0.00	0.00	0.00

Relazione di calcolo

0	-1858	-1860		1		0.00	11	0.00	0.00	0.00	0.00	0.00
0	-1420	-1422		1		0.00	11	0.00	0.00	0.00	0.00	0.00
0	-3415	-94		1		0.00	11	0.00	0.00	0.00	0.00	0.00
0	-1860	217		1		0.00	11	0.00	0.00	0.00	0.00	0.00
0	217	-1420		1		0.00	11	0.00	0.00	0.00	0.00	0.00
0	-96	-3415		1		0.00	11	0.00	0.00	0.00	0.00	0.00
0	-98	-96		1		0.00	11	0.00	0.00	0.00	0.00	0.00
0	-100	-98		1		0.00	11	0.00	0.00	0.00	0.00	0.00
0	-102	-100		1		0.00	11	0.00	0.00	0.00	0.00	0.00
0	2	-102		1		0.00	11	0.00	0.00	0.00	0.00	0.00
0	-105	2		1		0.00	11	0.00	0.00	0.00	0.00	0.00
0	3	-105		1		0.00	11	0.00	0.00	0.00	0.00	0.00
0	3	-744		1		0.00	11	0.00	0.00	0.00	0.00	0.00
0	-744	-742		1		0.00	11	0.00	0.00	0.00	0.00	0.00
0	-742	-740		1		0.00	11	0.00	0.00	0.00	0.00	0.00
0	-740	274		1		0.00	11	0.00	0.00	0.00	0.00	0.00
0	-736	20		1		0.00	11	0.00	0.00	0.00	0.00	0.00
0	-1833	-1831		1		0.00	11	0.00	0.00	0.00	0.00	0.00
0	-1835	-1833		1		0.00	11	0.00	0.00	0.00	0.00	0.00
0	-1837	-1835		1		0.00	11	0.00	0.00	0.00	0.00	0.00
0	-1839	-1837		1		0.00	11	0.00	0.00	0.00	0.00	0.00
0	-1841	-1839		1		0.00	11	0.00	0.00	0.00	0.00	0.00
0	-1843	-1841		1		0.00	11	0.00	0.00	0.00	0.00	0.00
0	-1845	-1843		1		0.00	11	0.00	0.00	0.00	0.00	0.00
0	-1847	-1845		1		0.00	11	0.00	0.00	0.00	0.00	0.00
0	-1849	-1847		1		0.00	11	0.00	0.00	0.00	0.00	0.00
0	-3402	-1849		1		0.00	11	0.00	0.00	0.00	0.00	0.00
0	-1851	-3402		1		0.00	11	0.00	0.00	0.00	0.00	0.00
0	-1853	-1851		1		0.00	11	0.00	0.00	0.00	0.00	0.00
0	-1855	-1853		1		0.00	11	0.00	0.00	0.00	0.00	0.00
0	-1857	-1855		1		0.00	11	0.00	0.00	0.00	0.00	0.00
0	-1859	-1857		1		0.00	11	0.00	0.00	0.00	0.00	0.00
0	103	-1859		1		0.00	11	0.00	0.00	0.00	0.00	0.00
0	103	-1499		1		0.00	11	0.00	0.00	0.00	0.00	0.00
0	-1499	-1500		1		0.00	11	0.00	0.00	0.00	0.00	0.00
0	-1500	-1501		1		0.00	11	0.00	0.00	0.00	0.00	0.00
0	-1501	-1502		1		0.00	11	0.00	0.00	0.00	0.00	0.00
0	-1502	-1503		1		0.00	11	0.00	0.00	0.00	0.00	0.00
0	-1503	120		1		0.00	11	0.00	0.00	0.00	0.00	0.00

Elenco tipi elementi bidimensionali

Simbologia

- Tb = Numero del tipo muro/elemento bidimensionale
 Comm. = Commento
 Tipo = Tipologia
 F = Membranale e Flessionale
 M = Membranale
 W-RC = Winkler resistente solo a compressione
 W-RTC = Winkler resistente a trazione e a compressione
 Uso = Utilizzo
 G = Generico
 P = Parete
 S = Soletta/Platea
 N = Nucleo
 M = Muratura ordinaria
 L = Pilastro
 MA = Muratura armata
 X = Pannello X-LAM
 Spess. = Spessore
 Kt = Coeff. di sottofondo su suolo elastico alla Winkler
 DP = Drucker-Prager
 Ang. att. = Angolo di attrito
 Coes. = Coesione
 Crit. = Numero del criterio di progetto
 Mat. = Numero del materiale

Tb	Comm.	Tipo	Uso	Spess. <cm>	Kt <daN/cm>	DP	Ang. att. <grad>	Coes. <daN/mq>	Crit.	Mat.
1	Muri d'ala anteriori sp.30cm	F	P	30.00		N	0.00	0.00	1	8
2	Murofusto spalla sp.1.5m	F	P	150.00		N	0.00	0.00	1	7
3	Paraghiaia sp.0.5m	F	P	50.00		N	0.00	0.00	1	8
4	plinto spalla sp.1.5m	F	S	150.00		N	0.00	0.00	1	4
5	soletta di copertura sp,0.5m	F	S	50.00		N	0.00	0.00	1	8
6	Setto posteriore sp.0.5m	F	P	50.00		N	0.00	0.00	1	8
7	Muri d'ala tergalii sp.0.5m	F	P	50.00		N	0.00	0.00	1	8

Elenco elementi bidimensionali

Simbologia

Relazione di calcolo

404	5	11	0.00	0.00		-1882	-1918	-1919	-1883
404	5	11	0.00	0.00		-1884	-1920	-1921	-1885
404	5	11	0.00	0.00		-1886	-1922	-1923	-1887
404	5	11	0.00	0.00		-1888	-1924	-1925	-1889
404	5	11	0.00	0.00		-1890	-1926	-1927	-1891
404	5	11	0.00	0.00		-1892	-1928	-1929	-1893
404	5	11	0.00	0.00		-1894	-1930	-1931	-1895
404	5	11	0.00	0.00		-1896	-1932	-1760	-1758

404	5	11	0.00	0.00		-1883	-1919	-1920	-1884
404	5	11	0.00	0.00		-1885	-1921	-1922	-1886
404	5	11	0.00	0.00		-1887	-1923	-1924	-1888
404	5	11	0.00	0.00		-1889	-1925	-1926	-1890
404	5	11	0.00	0.00		-1891	-1927	-3387	-3386
404	5	11	0.00	0.00		-1893	-1929	-1930	-1894
404	5	11	0.00	0.00		-1895	-1931	-1932	-1896

Carichi

Elenco tipi CCE

Simbologia

Tipo CCE = Tipo condizione di carico elementare

Comm. = Commento

Tipo = Tipologia

G = Permanente

Qv = Variabile vento

Q = Variabile

I = Da ignorare

A = Azione eccezionale

P = Precompressione

Durata = Durata del carico

N = Non definita

P = Permanente

L = Lunga

M = Media

B = Breve

I = Istantanea

$\gamma_{min.}$ = Coeff. $\gamma_{min.}$

γ_{max} = Coeff. γ_{max}

Ψ_0 = Coeff. Ψ_0

Ψ_1 = Coeff. Ψ_1

Ψ_2 = Coeff. Ψ_2

$\Psi_{0,s}$ = Coeff. Ψ_0 sismico (D.M. 96)

Tipo CCE	Comm.	Tipo	Durata	$\gamma_{min.}$	γ_{max}	Ψ_0	Ψ_1	Ψ_2	$\Psi_{0,s}$
23	Reazioni vincolari	G	N	1.00	1.00				
1	D.M. 18 Permanenti strutturali	G	P	1.00	1.30				
2	D.M. 18 Permanenti non strutturali	G	L	0.80	1.50				
21	Tandem distribuito	Q	N	1.35	1.35	0.75	0.40	0.00	0.00
22	Incremento sismico terreno	Q	N	1.00	1.00	0.00	0.00	0.00	0.00

Condizioni di carico elementari

Simbologia

CCE = Numero della condizione di carico elementare

Comm. = Commento

Tipo CCE = Tipo di CCE per calcolo agli stati limite

Sic. = Contributo alla sicurezza

F = a favore

S = a sfavore

A = ambigua

Var. = Tipo di variabilità

B = di base

I = indipendente

A = ambigua

s = Coeff. di riduzione (T.A. o S.L. D.M. 96)

Dir. = Direzione del vento

Tipo = Tipologia di pressione vento

M = Massimizzata

E = Esterna

I = Interna

Mx = Moltiplicatore della massa in dir. X

My = Moltiplicatore della massa in dir. Y

Mz = Moltiplicatore della massa in dir. Z

Jpx = Moltiplicatore del momento d'inerzia intorno all'asse X

Jpy = Moltiplicatore del momento d'inerzia intorno all'asse Y

Jpz = Moltiplicatore del momento d'inerzia intorno all'asse Z

CCE	Comm.	Tipo CCE	Sic.	Var.	s	Dir. <grad>	Tipo	Mx	My	Mz	Jpx	Jpy	Jpz
1	peso proprio		1	S	--	1.00	--	1.00	1.00	0.00	0.00	0.00	1.00
2	Peso Terreno e Pav.		2	S	--	1.00	--	0.00	0.00	0.00	0.00	0.00	1.00
3	Spinta terreno statica		2	S	--	1.00	--	0.00	0.00	0.00	0.00	0.00	1.00
4	spinta sovraccarico		2	1	S	B	1.00	--	0.00	0.00	0.00	0.00	1.00

Relazione di calcolo

5	Spinta sismica terreno	22	S	B	1.00	--	--	0.00	0.00	0.00	0.00	0.00	1.00
6	SLU env max	23	S	--	1.00	--	--	0.00	0.00	0.00	0.00	0.00	1.00
7	SLU Env Min	23	S	--	1.00	--	--	0.00	0.00	0.00	0.00	0.00	1.00
8	SLE rara Max	23	S	--	1.00	--	--	0.00	0.00	0.00	0.00	0.00	1.00
9	SLE Rara min	23	S	--	1.00	--	--	0.00	0.00	0.00	0.00	0.00	1.00
10	SLE q. permanente	23	S	--	1.00	--	--	0.00	0.00	0.00	0.00	0.00	1.00
11	SLV +Y	23	S	--	1.00	--	--	0.00	0.00	0.00	0.00	0.00	0.00
12	SLV -Y	23	S	--	1.00	--	--	0.00	0.00	0.00	0.00	0.00	0.00
13	Spinta inerziale terreno	22	S	B	1.00	--	--	0.00	0.00	0.00	0.00	0.00	1.00

Elenco carichi nodi Condizione di carico n. 6: SLU env max

Carichi concentrati

Simbologia

Nodo = Numero del nodo
 Fx = Componente X della forza applicata
 Fy = Componente Y della forza applicata
 Fz = Componente Z della forza applicata
 Mx = Momento intorno all'asse X
 My = Momento intorno all'asse Y
 Mz = Momento intorno all'asse Z

Nodo	Fx <daN>	Fy <daN>	Fz <daN>	Mx <daNm>	My <daNm>	Mz <daNm>	Nodo	Fx <daN>	Fy <daN>	Fz <daN>	Mx <daNm>	My <daNm>	Mz <daNm>
222	0.00	0.00	61900.00	0.00	0.00	0.00	223	0.00	0.00	61600.00	0.00	0.00	0.00
254	0.00	13000.00	65300.00	0.00	0.00	0.00	260	0.00	0.00	69300.00	0.00	0.00	0.00
264	0.00	0.00	82200.00	0.00	0.00	0.00							

Condizione di carico n. 7: SLU Env Min

Carichi concentrati

Nodo	Fx <daN>	Fy <daN>	Fz <daN>	Mx <daNm>	My <daNm>	Mz <daNm>	Nodo	Fx <daN>	Fy <daN>	Fz <daN>	Mx <daNm>	My <daNm>	Mz <daNm>
222	0.00	0.00	66400.00	0.00	0.00	0.00	223	0.00	0.00	58900.00	0.00	0.00	0.00
254	0.00	5200.00	64600.00	0.00	0.00	0.00	260	0.00	0.00	65800.00	0.00	0.00	0.00
264	0.00	0.00	77100.00	0.00	0.00	0.00							

Condizione di carico n. 8: SLE rara Max

Carichi concentrati

Nodo	Fx <daN>	Fy <daN>	Fz <daN>	Mx <daNm>	My <daNm>	Mz <daNm>	Nodo	Fx <daN>	Fy <daN>	Fz <daN>	Mx <daNm>	My <daNm>	Mz <daNm>
222	0.00	0.00	51600.00	0.00	0.00	0.00	223	0.00	0.00	44200.00	0.00	0.00	0.00
254	0.00	8690.00	46600.00	0.00	0.00	0.00	260	0.00	0.00	49300.00	0.00	0.00	0.00
264	0.00	0.00	58600.00	0.00	0.00	0.00							

Condizione di carico n. 9: SLE Rara min

Carichi concentrati

Nodo	Fx <daN>	Fy <daN>	Fz <daN>	Mx <daNm>	My <daNm>	Mz <daNm>	Nodo	Fx <daN>	Fy <daN>	Fz <daN>	Mx <daNm>	My <daNm>	Mz <daNm>
222	0.00	0.00	46700.00	0.00	0.00	0.00	223	0.00	0.00	41500.00	0.00	0.00	0.00
254	0.00	2900.00	46100.00	0.00	0.00	0.00	260	0.00	0.00	46800.00	0.00	0.00	0.00
264	0.00	0.00	54800.00	0.00	0.00	0.00							

Condizione di carico n. 10: SLE q. permanente

Carichi concentrati

Nodo	Fx <daN>	Fy <daN>	Fz <daN>	Mx <daNm>	My <daNm>	Mz <daNm>	Nodo	Fx <daN>	Fy <daN>	Fz <daN>	Mx <daNm>	My <daNm>	Mz <daNm>
222	0.00	0.00	47600.00	0.00	0.00	0.00	223	0.00	0.00	47400.00	0.00	0.00	0.00
254	0.00	0.00	40300.00	0.00	0.00	0.00	260	0.00	0.00	40300.00	0.00	0.00	0.00
264	0.00	0.00	39700.00	0.00	0.00	0.00							

Condizione di carico n. 11: SLV +Y

Carichi concentrati

Nodo	Fx <daN>	Fy <daN>	Fz <daN>	Mx <daNm>	My <daNm>	Mz <daNm>	Nodo	Fx <daN>	Fy <daN>	Fz <daN>	Mx <daNm>	My <daNm>	Mz <daNm>
222	0.00	0.00	59700.00	0.00	0.00	0.00	223	0.00	0.00	74400.00	0.00	0.00	0.00
254	0.00	-120300.00	52400.00	0.00	0.00	0.00	260	0.00	0.00	70000.00	0.00	0.00	0.00
264	0.00	0.00	58100.00	0.00	0.00	0.00							

Condizione di carico n. 12: SLV -Y

Carichi concentrati

Nodo	Fx <daN>	Fy <daN>	Fz <daN>	Mx <daNm>	My <daNm>	Mz <daNm>	Nodo	Fx <daN>	Fy <daN>	Fz <daN>	Mx <daNm>	My <daNm>	Mz <daNm>
222	0.00	0.00	59700.00	0.00	0.00	0.00	223	0.00	0.00	74400.00	0.00	0.00	0.00
254	0.00	120300.00	52400.00	0.00	0.00	0.00	260	0.00	0.00	70000.00	0.00	0.00	0.00

Relazione di calcolo

264	0.00	0.00	58100.00	0.00	0.00	0.00
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Elenco carichi aste Condizione di carico n. 1: peso proprio
Elenco peso proprio aste

Simbologia

Sez. = Numero della sezione
 Comm. = Commento
 A = Area
 Mat. = Materiale
 P = Peso specifico
 PL = Peso specifico a metro lineare

Sez.	Comm.	A <cmq>	Mat.	P <daN/mc>	PL <daN/m>
6	baggioli	5000.000000	Baggioli	0.00	0.00

Elenco carichi elementi bidimensionali Elenco peso proprio elementi bidimensionali

Simbologia

Tb = Numero del tipo muro/elemento bidimensionale
 Comm. = Commento
 Spess. = Spessore
 Mat. = Materiale
 P = Peso specifico
 PQ = Peso specifico per unità di superficie

Tb	Comm.	Spess. <cm>	Mat.	P <daN/mc>	PQ <daN/mq>
1	Muri d'ala anteriori sp.30cm	30.00	Calcestruzzo classe C32/40	2500.00	750.00
2	Murofusto spalla sp.1.5m	150.00	Calcestruzzo classe C30/37	2500.00	3750.00
3	Paraghiaia sp.0.5m	50.00	Calcestruzzo classe C32/40	2500.00	1250.00
4	plinto spalla sp.1.5m	150.00	Calcestruzzo classe C20/25	2500.00	3750.00
5	soletta di copertura sp,0.5m	50.00	Calcestruzzo classe C32/40	2500.00	1250.00
6	Setto posteriore sp.0.5m	50.00	Calcestruzzo classe C32/40	2500.00	1250.00
7	Muri d'ala tergalì sp.0.5m	50.00	Calcestruzzo classe C32/40	2500.00	1250.00

Condizione di carico n. 2: Peso Terreno e Pav.
Carichi uniformi

Simbologia

Bid. = Numero del muro/elemento bidimensionale
 N1 = Nodo1
 N2 = Nodo2
 N3 = Nodo3
 N4 = Nodo4
 T = Tipo di carico
 PP = Peso proprio
 VE = Vento
 M = Manuale
 DC = Direzione del carico
 G = secondo gli assi globali
 L = secondo gli assi locali
 Qx = Carico in dir. X
 Qy = Carico in dir. Y
 Qz = Carico in dir. Z

Bid.	N1	N2	N3	N4	T	DC	Qx <daN/mq>	Qy <daN/mq>	Qz <daN/mq>
110	-1446	-1450	-1426	-1424	M	G	0.00	0.00	900.00
110	-1438	-1442	-1422	-1420	M	G	0.00	0.00	900.00
110	-1434	-1438	-1420	217	M	G	0.00	0.00	900.00
110	-1442	-1446	-1424	-1422	M	G	0.00	0.00	900.00
110	-1450	-1433	221	-1426	M	G	0.00	0.00	900.00
112	-1563	-1575	-1502	-1501	M	G	0.00	0.00	900.00
112	-1575	-1587	-1503	-1502	M	G	0.00	0.00	900.00
112	-1539	-1551	-1500	-1499	M	G	0.00	0.00	900.00
112	-1527	-1539	-1499	103	M	G	0.00	0.00	900.00
112	-1587	-1526	120	-1503	M	G	0.00	0.00	900.00
112	-1551	-1563	-1501	-1500	M	G	0.00	0.00	900.00
114	-1615	-1619	-1595	-1593	M	G	0.00	0.00	900.00
114	-1607	-1611	-1591	-1589	M	G	0.00	0.00	900.00
114	-1611	-1615	-1593	-1591	M	G	0.00	0.00	900.00
114	-1619	-1602	219	-1595	M	G	0.00	0.00	900.00
114	-1603	-1607	-1589	205	M	G	0.00	0.00	900.00
115	-1756	-1695	118	-1672	M	G	0.00	0.00	900.00
115	-1720	-1732	-1670	-1669	M	G	0.00	0.00	900.00
115	-1696	-1708	-1668	14	M	G	0.00	0.00	900.00

Relazione di calcolo

115	-1708	-1720	-1669	-1668	MG	0.00	0.00	900.00
115	-1732	-1744	-1671	-1670	MG	0.00	0.00	900.00
115	-1744	-1756	-1672	-1671	MG	0.00	0.00	900.00
117	-2532	-2536	-1820	-1818	MG	0.00	0.00	900.00
117	-2548	-3364	-1828	-1826	MG	0.00	0.00	900.00
117	-2488	-2492	-1798	-1796	MG	0.00	0.00	900.00
117	-2612	-2616	-1860	-1858	MG	0.00	0.00	900.00
117	-2556	-2560	-1832	-1830	MG	0.00	0.00	900.00
117	-2596	-3369	-3370	-1850	MG	0.00	0.00	900.00
117	-2564	-2568	-1836	-1834	MG	0.00	0.00	900.00
117	-2476	-2480	-1792	-1790	MG	0.00	0.00	900.00
117	-2524	-2528	-1816	-1814	MG	0.00	0.00	900.00
117	-2484	-2488	-1796	-1794	MG	0.00	0.00	900.00
117	-2576	-2580	-1842	-1840	MG	0.00	0.00	900.00
117	-2580	-2584	-1844	-1842	MG	0.00	0.00	900.00
117	-2496	-2500	-1802	-1800	MG	0.00	0.00	900.00
117	-2544	-2548	-1826	-1824	MG	0.00	0.00	900.00
117	-2552	-2556	-1830	-1828	MG	0.00	0.00	900.00
117	-3369	-2600	-1852	-3370	MG	0.00	0.00	900.00
117	-2504	-2508	-1806	-1804	MG	0.00	0.00	900.00
117	-2592	-2596	-1850	-1848	MG	0.00	0.00	900.00
117	-2608	-2612	-1858	-1856	MG	0.00	0.00	900.00
117	-2568	-2572	-1838	-1836	MG	0.00	0.00	900.00
117	-3364	-2552	-1828	-1828	MG	0.00	0.00	900.00
117	-2560	-2564	-1834	-1832	MG	0.00	0.00	900.00
117	-2572	-2576	-1840	-1838	MG	0.00	0.00	900.00
117	-2520	-2524	-1814	-1812	MG	0.00	0.00	900.00
117	-2540	-2544	-1824	-1822	MG	0.00	0.00	900.00
117	-2508	-2512	-1808	-1806	MG	0.00	0.00	900.00
117	-2588	-2592	-1848	-1846	MG	0.00	0.00	900.00
117	-2500	-2504	-1804	-1802	MG	0.00	0.00	900.00
117	-2480	-2484	-1794	-1792	MG	0.00	0.00	900.00
117	-2512	-2516	-1810	-1808	MG	0.00	0.00	900.00
117	-2528	-2532	-1818	-1816	MG	0.00	0.00	900.00
117	-2616	-1434	217	-1860	MG	0.00	0.00	900.00
117	-2604	-2608	-1856	-1854	MG	0.00	0.00	900.00
117	-1603	-2476	-1790	205	MG	0.00	0.00	900.00
117	-2492	-2496	-1800	-1798	MG	0.00	0.00	900.00
117	-2536	-2540	-1822	-1820	MG	0.00	0.00	900.00
117	-2584	-2588	-1846	-1844	MG	0.00	0.00	900.00
117	-2516	-2520	-1812	-1810	MG	0.00	0.00	900.00
117	-2600	-2604	-1854	-1852	MG	0.00	0.00	900.00
118	-3094	-3106	-1831	-1833	MG	0.00	0.00	900.00
118	-3082	-3094	-1833	-1835	MG	0.00	0.00	900.00
118	-3130	-3142	-1825	-1827	MG	0.00	0.00	900.00
118	-3142	-3154	-1823	-1825	MG	0.00	0.00	900.00
118	-2938	-2950	-1857	-1857	MG	0.00	0.00	900.00
118	-3118	-3130	-1827	-1829	MG	0.00	0.00	900.00
118	-2962	-2974	-1853	-1855	MG	0.00	0.00	900.00
118	-2986	-3403	-3402	-1851	MG	0.00	0.00	900.00
118	-3010	-3022	-1845	-1847	MG	0.00	0.00	900.00
118	-1527	-2926	-1859	103	MG	0.00	0.00	900.00
118	-2950	-2962	-1855	-1857	MG	0.00	0.00	900.00
118	-3070	-3082	-1835	-1837	MG	0.00	0.00	900.00
118	-2974	-2986	-1851	-1853	MG	0.00	0.00	900.00
118	-3034	-3046	-1841	-1843	MG	0.00	0.00	900.00
118	-3106	-3118	-1829	-1831	MG	0.00	0.00	900.00
118	-3046	-3058	-1839	-1841	MG	0.00	0.00	900.00
118	-2926	-2938	-1857	-1859	MG	0.00	0.00	900.00
118	-3058	-3070	-1837	-1839	MG	0.00	0.00	900.00
118	-3022	-3034	-1843	-1845	MG	0.00	0.00	900.00
118	-2998	-3010	-1847	-1849	MG	0.00	0.00	900.00
118	-3403	-2998	-1849	-3402	MG	0.00	0.00	900.00
119	-3322	-3334	-1793	-1795	MG	0.00	0.00	900.00
119	-3310	-3322	-1795	-1797	MG	0.00	0.00	900.00
119	-3262	-3274	-1803	-1805	MG	0.00	0.00	900.00
119	-3214	-3226	-1811	-1813	MG	0.00	0.00	900.00
119	-3190	-3202	-1815	-1817	MG	0.00	0.00	900.00
119	-3154	-3166	-1821	-1823	MG	0.00	0.00	900.00
119	-3346	-3358	-1789	-1791	MG	0.00	0.00	900.00
119	-3166	-3178	-1819	-1821	MG	0.00	0.00	900.00
119	-3250	-3262	-1805	-1807	MG	0.00	0.00	900.00
119	-3202	-3214	-1813	-1815	MG	0.00	0.00	900.00
119	-3358	-1696	14	-1789	MG	0.00	0.00	900.00
119	-3286	-3298	-1799	-1801	MG	0.00	0.00	900.00
119	-3334	-3346	-1791	-1793	MG	0.00	0.00	900.00
119	-3238	-3250	-1807	-1809	MG	0.00	0.00	900.00
119	-3178	-3190	-1817	-1819	MG	0.00	0.00	900.00
119	-3226	-3238	-1809	-1811	MG	0.00	0.00	900.00

Relazione di calcolo

119	-3274	-3286	-1801	-1803	MG	0.00	0.00	900.00
119	-3298	-3310	-1797	-1799	MG	0.00	0.00	900.00
403	-910	-916	-917	-911	MG	0.00	0.00	10900.00
403	-871	-877	-76	-74	MG	0.00	0.00	10900.00
403	-882	-888	-889	-883	MG	0.00	0.00	10900.00
403	-914	-920	-921	-915	MG	0.00	0.00	10900.00
403	-919	-925	-92	-90	MG	0.00	0.00	10900.00
403	-887	-893	-894	-888	MG	0.00	0.00	10900.00
403	-886	-892	-893	-887	MG	0.00	0.00	10900.00
403	-720	-721	-878	-872	MG	0.00	0.00	10900.00
403	-883	-889	-80	-78	MG	0.00	0.00	10900.00
403	-881	-887	-888	-882	MG	0.00	0.00	10900.00
403	276	-886	-887	-881	MG	0.00	0.00	10900.00
403	-728	-729	-926	-920	MG	0.00	0.00	10900.00
403	-872	-878	-879	-873	MG	0.00	0.00	10900.00
403	-918	-924	-925	-919	MG	0.00	0.00	10900.00
403	275	-928	-929	-923	MG	0.00	0.00	10900.00
403	-911	-917	-918	-912	MG	0.00	0.00	10900.00
403	-909	-915	-916	-910	MG	0.00	0.00	10900.00
403	-885	-891	-892	-886	MG	0.00	0.00	10900.00
403	-906	-912	-913	-907	MG	0.00	0.00	10900.00
403	-905	-911	-912	-906	MG	0.00	0.00	10900.00
403	-902	-908	-909	-903	MG	0.00	0.00	10900.00
403	-727	-728	-920	-914	MG	0.00	0.00	10900.00
403	-920	-926	-927	-921	MG	0.00	0.00	10900.00
403	-895	-901	-84	-82	MG	0.00	0.00	10900.00
403	-890	-896	-897	-891	MG	0.00	0.00	10900.00
403	-878	-884	-885	-879	MG	0.00	0.00	10900.00
403	-721	-722	-884	-878	MG	0.00	0.00	10900.00
403	-877	-883	-78	-76	MG	0.00	0.00	10900.00
403	-876	-882	-883	-877	MG	0.00	0.00	10900.00
403	-875	-881	-882	-876	MG	0.00	0.00	10900.00
403	-879	-885	-886	276	MG	0.00	0.00	10900.00
403	-870	-876	-877	-871	MG	0.00	0.00	10900.00
403	-869	-875	-876	-870	MG	0.00	0.00	10900.00
403	-954	-960	-961	-955	MG	0.00	0.00	10900.00
403	-953	-959	-960	-954	MG	0.00	0.00	10900.00
403	-952	-958	-959	-953	MG	0.00	0.00	10900.00
403	-951	-957	-958	-952	MG	0.00	0.00	10900.00
403	-950	-956	-957	-951	MG	0.00	0.00	10900.00
403	-949	-955	-102	-100	MG	0.00	0.00	10900.00
403	-948	-954	-955	-949	MG	0.00	0.00	10900.00
403	-947	-953	-954	-948	MG	0.00	0.00	10900.00
403	-946	-952	-953	-947	MG	0.00	0.00	10900.00
403	-945	-951	-952	-946	MG	0.00	0.00	10900.00
403	-944	-950	-951	-945	MG	0.00	0.00	10900.00
403	-732	-733	-950	-944	MG	0.00	0.00	10900.00
403	-943	-949	-100	-98	MG	0.00	0.00	10900.00
403	-942	-948	-949	-943	MG	0.00	0.00	10900.00
403	-724	-725	-902	-896	MG	0.00	0.00	10900.00
403	-894	-900	-901	-895	MG	0.00	0.00	10900.00
403	-940	-946	-947	-941	MG	0.00	0.00	10900.00
403	-939	-945	-946	-940	MG	0.00	0.00	10900.00
403	-938	-944	-945	-939	MG	0.00	0.00	10900.00
403	-891	-897	-898	-892	MG	0.00	0.00	10900.00
403	-731	-732	-944	-938	MG	0.00	0.00	10900.00
403	-723	-724	-896	-890	MG	0.00	0.00	10900.00
403	-936	-942	-943	-937	MG	0.00	0.00	10900.00
403	-935	-941	-942	-936	MG	0.00	0.00	10900.00
403	-934	-940	-941	-935	MG	0.00	0.00	10900.00
403	-933	-939	-940	-934	MG	0.00	0.00	10900.00
403	-932	-938	-939	-933	MG	0.00	0.00	10900.00
403	-730	-731	-938	-932	MG	0.00	0.00	10900.00
403	-931	-3416	-3415	-94	MG	0.00	0.00	10900.00
403	-930	-3417	-3416	-931	MG	0.00	0.00	10900.00
403	-929	-3418	-3417	-930	MG	0.00	0.00	10900.00
403	-928	-3419	-3418	-929	MG	0.00	0.00	10900.00
403	-927	-3420	-3419	-928	MG	0.00	0.00	10900.00
403	-926	-3421	-3420	-927	MG	0.00	0.00	10900.00
403	-729	-3422	-3421	-926	MG	0.00	0.00	10900.00
403	-925	-931	-94	-92	MG	0.00	0.00	10900.00
403	-924	-930	-931	-925	MG	0.00	0.00	10900.00
403	-923	-929	-930	-924	MG	0.00	0.00	10900.00
403	-915	-921	275	-916	MG	0.00	0.00	10900.00
403	-916	275	-923	-917	MG	0.00	0.00	10900.00
403	-917	-923	-924	-918	MG	0.00	0.00	10900.00
403	-921	-927	-928	275	MG	0.00	0.00	10900.00
403	-913	-919	-90	-88	MG	0.00	0.00	10900.00
403	-912	-918	-919	-913	MG	0.00	0.00	10900.00

Relazione di calcolo

403	-908	-914	-915	-909	MG	0.00	0.00	10900.00
403	-726	-727	-914	-908	MG	0.00	0.00	10900.00
403	-907	-913	-88	-86	MG	0.00	0.00	10900.00
403	-904	-910	-911	-905	MG	0.00	0.00	10900.00
403	-903	-909	-910	-904	MG	0.00	0.00	10900.00
403	-900	-906	-907	-901	MG	0.00	0.00	10900.00
403	-899	-905	-906	-900	MG	0.00	0.00	10900.00
403	-898	-904	-905	-899	MG	0.00	0.00	10900.00
403	-733	-734	-956	-950	MG	0.00	0.00	10900.00
403	-941	-947	-948	-942	MG	0.00	0.00	10900.00
403	-937	-943	-98	-96	MG	0.00	0.00	10900.00
403	-964	274	-740	-965	MG	0.00	0.00	10900.00
403	-967	-744	3	-105	MG	0.00	0.00	10900.00
403	-966	-742	-744	-967	MG	0.00	0.00	10900.00
403	-965	-740	-742	-966	MG	0.00	0.00	10900.00
403	-962	20	-736	-963	MG	0.00	0.00	10900.00
403	-735	40	20	-962	MG	0.00	0.00	10900.00
403	-961	-967	-105	2	MG	0.00	0.00	10900.00
403	-960	-966	-967	-961	MG	0.00	0.00	10900.00
403	-959	-965	-966	-960	MG	0.00	0.00	10900.00
403	-958	-964	-965	-959	MG	0.00	0.00	10900.00
403	-957	-963	-964	-958	MG	0.00	0.00	10900.00
403	-956	-962	-963	-957	MG	0.00	0.00	10900.00
403	-734	-735	-962	-956	MG	0.00	0.00	10900.00
403	-955	-961	2	-102	MG	0.00	0.00	10900.00
403	-725	-726	-908	-902	MG	0.00	0.00	10900.00
403	-901	-907	-86	-84	MG	0.00	0.00	10900.00
403	-897	-903	-904	-898	MG	0.00	0.00	10900.00
403	-896	-902	-903	-897	MG	0.00	0.00	10900.00
403	-893	-899	-900	-894	MG	0.00	0.00	10900.00
403	-892	-898	-899	-893	MG	0.00	0.00	10900.00
403	-889	-895	-82	-80	MG	0.00	0.00	10900.00
403	-888	-894	-895	-889	MG	0.00	0.00	10900.00
403	-884	-890	-891	-885	MG	0.00	0.00	10900.00
403	-722	-723	-890	-884	MG	0.00	0.00	10900.00
403	-873	-879	276	-874	MG	0.00	0.00	10900.00
403	-874	276	-881	-875	MG	0.00	0.00	10900.00
403	-868	-874	-875	-869	MG	0.00	0.00	10900.00
403	-867	-873	-874	-868	MG	0.00	0.00	10900.00
403	-866	-872	-873	-867	MG	0.00	0.00	10900.00
403	-719	-720	-872	-866	MG	0.00	0.00	10900.00
403	-865	-871	-74	-72	MG	0.00	0.00	10900.00
403	-864	-870	-871	-865	MG	0.00	0.00	10900.00
403	-863	-869	-870	-864	MG	0.00	0.00	10900.00
403	-862	-868	-869	-863	MG	0.00	0.00	10900.00
403	-861	-867	-868	-862	MG	0.00	0.00	10900.00
403	-860	-866	-867	-861	MG	0.00	0.00	10900.00
403	-718	-719	-866	-860	MG	0.00	0.00	10900.00
403	-859	-865	-72	-70	MG	0.00	0.00	10900.00
403	-858	-864	-865	-859	MG	0.00	0.00	10900.00
403	-854	-860	-861	-855	MG	0.00	0.00	10900.00
403	-717	-718	-860	-854	MG	0.00	0.00	10900.00
403	-850	-856	-857	-851	MG	0.00	0.00	10900.00
403	-849	-855	-856	-850	MG	0.00	0.00	10900.00
403	-846	-852	-853	-847	MG	0.00	0.00	10900.00
403	-845	-851	-852	-846	MG	0.00	0.00	10900.00
403	-715	-716	-848	-842	MG	0.00	0.00	10900.00
403	-841	-847	-66	-64	MG	0.00	0.00	10900.00
403	-840	-846	-847	-841	MG	0.00	0.00	10900.00
403	-839	-845	-846	-840	MG	0.00	0.00	10900.00
403	-838	-844	-845	-839	MG	0.00	0.00	10900.00
403	-837	-843	-844	-838	MG	0.00	0.00	10900.00
403	-836	-842	-843	-837	MG	0.00	0.00	10900.00
403	-714	-715	-842	-836	MG	0.00	0.00	10900.00
403	-835	-841	-64	-62	MG	0.00	0.00	10900.00
403	-834	-840	-841	-835	MG	0.00	0.00	10900.00
403	-833	-839	-840	-834	MG	0.00	0.00	10900.00
403	-825	-831	277	-826	MG	0.00	0.00	10900.00
403	-826	277	-833	-827	MG	0.00	0.00	10900.00
403	-830	-836	-837	-831	MG	0.00	0.00	10900.00
403	-713	-714	-836	-830	MG	0.00	0.00	10900.00
403	-829	-835	-62	-60	MG	0.00	0.00	10900.00
403	-828	-834	-835	-829	MG	0.00	0.00	10900.00
403	-827	-833	-834	-828	MG	0.00	0.00	10900.00
403	-831	-837	-838	277	MG	0.00	0.00	10900.00
403	277	-838	-839	-833	MG	0.00	0.00	10900.00
403	-823	-829	-60	-58	MG	0.00	0.00	10900.00
403	-822	-828	-829	-823	MG	0.00	0.00	10900.00
403	-821	-827	-828	-822	MG	0.00	0.00	10900.00

Relazione di calcolo

403	-818	-824	-825	-819	MG	0.00	0.00	10900.00
403	-711	-712	-824	-818	MG	0.00	0.00	10900.00
403	-817	-823	-58	-56	MG	0.00	0.00	10900.00
403	-806	-812	-813	-807	MG	0.00	0.00	10900.00
403	-791	-797	-798	-792	MG	0.00	0.00	10900.00
403	-783	-789	278	-784	MG	0.00	0.00	10900.00
403	-784	278	-791	-785	MG	0.00	0.00	10900.00
403	-788	-794	-795	-789	MG	0.00	0.00	10900.00
403	-706	-707	-794	-788	MG	0.00	0.00	10900.00
403	-787	-793	-48	-46	MG	0.00	0.00	10900.00
403	-786	-792	-793	-787	MG	0.00	0.00	10900.00
403	-785	-791	-792	-786	MG	0.00	0.00	10900.00
403	-789	-795	-796	278	MG	0.00	0.00	10900.00
403	278	-796	-797	-791	MG	0.00	0.00	10900.00
403	-782	-788	-789	-783	MG	0.00	0.00	10900.00
403	-705	-706	-788	-782	MG	0.00	0.00	10900.00
403	-781	-787	-46	-44	MG	0.00	0.00	10900.00
403	-780	-786	-787	-781	MG	0.00	0.00	10900.00
403	-779	-785	-786	-780	MG	0.00	0.00	10900.00
403	-778	-784	-785	-779	MG	0.00	0.00	10900.00
403	-777	-783	-784	-778	MG	0.00	0.00	10900.00
403	-776	-782	-783	-777	MG	0.00	0.00	10900.00
403	-704	-705	-782	-776	MG	0.00	0.00	10900.00
403	-775	-781	-44	-42	MG	0.00	0.00	10900.00
403	-774	-780	-781	-775	MG	0.00	0.00	10900.00
403	-773	-779	-780	-774	MG	0.00	0.00	10900.00
403	-772	-778	-779	-773	MG	0.00	0.00	10900.00
403	-771	-777	-778	-772	MG	0.00	0.00	10900.00
403	-702	-703	-770	-764	MG	0.00	0.00	10900.00
403	-759	-765	-766	-760	MG	0.00	0.00	10900.00
403	-758	-764	-765	-759	MG	0.00	0.00	10900.00
403	-701	-702	-764	-758	MG	0.00	0.00	10900.00
403	-757	-763	-38	-36	MG	0.00	0.00	10900.00
403	-756	-762	-763	-757	MG	0.00	0.00	10900.00
403	-755	-761	-762	-756	MG	0.00	0.00	10900.00
403	-754	-760	-761	-755	MG	0.00	0.00	10900.00
403	-752	-758	-759	-753	MG	0.00	0.00	10900.00
403	-824	-830	-831	-825	MG	0.00	0.00	10900.00
403	-712	-713	-830	-824	MG	0.00	0.00	10900.00
403	48	-699	-746	18	MG	0.00	0.00	10900.00
403	-820	-826	-827	-821	MG	0.00	0.00	10900.00
403	-819	-825	-826	-820	MG	0.00	0.00	10900.00
403	-816	-822	-823	-817	MG	0.00	0.00	10900.00
403	-815	-821	-822	-816	MG	0.00	0.00	10900.00
403	-814	-820	-821	-815	MG	0.00	0.00	10900.00
403	-813	-819	-820	-814	MG	0.00	0.00	10900.00
403	-812	-818	-819	-813	MG	0.00	0.00	10900.00
403	-710	-711	-818	-812	MG	0.00	0.00	10900.00
403	-811	-817	-56	-54	MG	0.00	0.00	10900.00
403	-810	-816	-817	-811	MG	0.00	0.00	10900.00
403	-856	-862	-863	-857	MG	0.00	0.00	10900.00
403	-809	-815	-816	-810	MG	0.00	0.00	10900.00
403	-808	-814	-815	-809	MG	0.00	0.00	10900.00
403	-807	-813	-814	-808	MG	0.00	0.00	10900.00
403	-709	-710	-812	-806	MG	0.00	0.00	10900.00
403	-805	-811	-54	-52	MG	0.00	0.00	10900.00
403	-804	-810	-811	-805	MG	0.00	0.00	10900.00
403	-803	-809	-810	-804	MG	0.00	0.00	10900.00
403	-963	-736	274	-964	MG	0.00	0.00	10900.00
403	-802	-808	-809	-803	MG	0.00	0.00	10900.00
403	-801	-807	-808	-802	MG	0.00	0.00	10900.00
403	-800	-806	-807	-801	MG	0.00	0.00	10900.00
403	-708	-709	-806	-800	MG	0.00	0.00	10900.00
403	-799	-805	-52	-50	MG	0.00	0.00	10900.00
403	-798	-804	-805	-799	MG	0.00	0.00	10900.00
403	-797	-803	-804	-798	MG	0.00	0.00	10900.00
403	-796	-802	-803	-797	MG	0.00	0.00	10900.00
403	-795	-801	-802	-796	MG	0.00	0.00	10900.00
403	-794	-800	-801	-795	MG	0.00	0.00	10900.00
403	-707	-708	-800	-794	MG	0.00	0.00	10900.00
403	-793	-799	-50	-48	MG	0.00	0.00	10900.00
403	-792	-798	-799	-793	MG	0.00	0.00	10900.00
403	-770	-776	-777	-771	MG	0.00	0.00	10900.00
403	-703	-704	-776	-770	MG	0.00	0.00	10900.00
403	-769	-775	-42	-40	MG	0.00	0.00	10900.00
403	-768	-774	-775	-769	MG	0.00	0.00	10900.00
403	-767	-773	-774	-768	MG	0.00	0.00	10900.00
403	-766	-772	-773	-767	MG	0.00	0.00	10900.00
403	-765	-771	-772	-766	MG	0.00	0.00	10900.00

Relazione di calcolo

403	-764	-770	-771	-765	MG	0.00	0.00	10900.00
403	-763	-769	-40	-38	MG	0.00	0.00	10900.00
403	-762	-768	-769	-763	MG	0.00	0.00	10900.00
403	-761	-767	-768	-762	MG	0.00	0.00	10900.00
403	-760	-766	-767	-761	MG	0.00	0.00	10900.00
403	-3416	-937	-96	-3415	MG	0.00	0.00	10900.00
403	-3417	-936	-937	-3416	MG	0.00	0.00	10900.00
403	-3418	-935	-936	-3417	MG	0.00	0.00	10900.00
403	-3419	-934	-935	-3418	MG	0.00	0.00	10900.00
403	-3420	-933	-934	-3419	MG	0.00	0.00	10900.00
403	-3421	-932	-933	-3420	MG	0.00	0.00	10900.00
403	-3422	-730	-932	-3421	MG	0.00	0.00	10900.00
403	-753	-759	-760	-754	MG	0.00	0.00	10900.00
403	-700	-701	-758	-752	MG	0.00	0.00	10900.00
403	-751	-757	-36	-34	MG	0.00	0.00	10900.00
403	-857	-863	-864	-858	MG	0.00	0.00	10900.00
403	-855	-861	-862	-856	MG	0.00	0.00	10900.00
403	-853	-859	-70	-68	MG	0.00	0.00	10900.00
403	-852	-858	-859	-853	MG	0.00	0.00	10900.00
403	-851	-857	-858	-852	MG	0.00	0.00	10900.00
403	-848	-854	-855	-849	MG	0.00	0.00	10900.00
403	-716	-717	-854	-848	MG	0.00	0.00	10900.00
403	-847	-853	-68	-66	MG	0.00	0.00	10900.00
403	-749	-755	-756	-750	MG	0.00	0.00	10900.00
403	-844	-850	-851	-845	MG	0.00	0.00	10900.00
403	-843	-849	-850	-844	MG	0.00	0.00	10900.00
403	-842	-848	-849	-843	MG	0.00	0.00	10900.00
403	-750	-756	-757	-751	MG	0.00	0.00	10900.00
403	-741	-749	-750	-743	MG	0.00	0.00	10900.00
403	-737	-747	-748	279	MG	0.00	0.00	10900.00
403	279	-748	-749	-741	MG	0.00	0.00	10900.00
403	18	-746	-747	-737	MG	0.00	0.00	10900.00
403	-699	-700	-752	-746	MG	0.00	0.00	10900.00
403	-745	-751	-34	4	MG	0.00	0.00	10900.00
403	-743	-750	-751	-745	MG	0.00	0.00	10900.00
403	-748	-754	-755	-749	MG	0.00	0.00	10900.00
403	-747	-753	-754	-748	MG	0.00	0.00	10900.00
403	-746	-752	-753	-747	MG	0.00	0.00	10900.00
404	-1937	-1973	-1974	-1938	MG	0.00	0.00	900.00
404	-1759	-1761	-1933	-1897	MG	0.00	0.00	900.00
404	-1897	-1933	-1934	-1898	MG	0.00	0.00	900.00
404	-1985	-2021	-2022	-1986	MG	0.00	0.00	900.00
404	-1986	-2022	-2023	-1987	MG	0.00	0.00	900.00
404	-1987	-2023	-2024	-1988	MG	0.00	0.00	900.00
404	-1988	-2024	-2025	-1989	MG	0.00	0.00	900.00
404	-1908	-1944	-1945	-1909	MG	0.00	0.00	900.00
404	-1989	-2025	-2026	-1990	MG	0.00	0.00	900.00
404	-1990	-2026	-2027	-1991	MG	0.00	0.00	900.00
404	-1898	-1934	-1935	-1899	MG	0.00	0.00	900.00
404	-1899	-1935	-1936	-1900	MG	0.00	0.00	900.00
404	-1900	-1936	-1937	-1901	MG	0.00	0.00	900.00
404	-1901	-1937	-1938	-1902	MG	0.00	0.00	900.00
404	-1902	-1938	-1939	-1903	MG	0.00	0.00	900.00
404	-1903	-1939	-1940	-1904	MG	0.00	0.00	900.00
404	-1904	-1940	-1941	-1905	MG	0.00	0.00	900.00
404	-1905	-1941	-1942	-1906	MG	0.00	0.00	900.00
404	-1906	-1942	-1943	-1907	MG	0.00	0.00	900.00
404	-1907	-1943	-1944	-1908	MG	0.00	0.00	900.00
404	-1974	-2010	-2011	-1975	MG	0.00	0.00	900.00
404	-1975	-2011	-2012	-1976	MG	0.00	0.00	900.00
404	-1976	-2012	-2013	-1977	MG	0.00	0.00	900.00
404	-1977	-2013	-2014	-1978	MG	0.00	0.00	900.00
404	-1978	-2014	-2015	-1979	MG	0.00	0.00	900.00
404	-1979	-2015	-2016	-1980	MG	0.00	0.00	900.00
404	-1980	-2016	-2017	-1981	MG	0.00	0.00	900.00
404	-1981	-2017	-2018	-1982	MG	0.00	0.00	900.00
404	-1982	-2018	-2019	-1983	MG	0.00	0.00	900.00
404	-1983	-2019	-2020	-1984	MG	0.00	0.00	900.00
404	-1984	-2020	-2021	-1985	MG	0.00	0.00	900.00
404	-1932	-1968	-1762	-1760	MG	0.00	0.00	900.00
404	-1761	-1763	-1969	-1933	MG	0.00	0.00	900.00
404	-1933	-1969	-1970	-1934	MG	0.00	0.00	900.00
404	-1934	-1970	-1971	-1935	MG	0.00	0.00	900.00
404	-1935	-1971	-1972	-1936	MG	0.00	0.00	900.00
404	-1936	-1972	-1973	-1937	MG	0.00	0.00	900.00
404	-1773	-1775	-2185	-2149	MG	0.00	0.00	900.00
404	-1938	-1974	-1975	-1939	MG	0.00	0.00	900.00
404	-1939	-1975	-1976	-1940	MG	0.00	0.00	900.00
404	-1940	-1976	-1977	-1941	MG	0.00	0.00	900.00

Relazione di calcolo

404	-1941	-1977	-1978	-1942	MG	0.00	0.00	900.00
404	-1942	-1978	-1979	-1943	MG	0.00	0.00	900.00
404	-1943	-1979	-1980	-1944	MG	0.00	0.00	900.00
404	-1944	-1980	-1981	-1945	MG	0.00	0.00	900.00
404	-1945	-1981	-1982	-1946	MG	0.00	0.00	900.00
404	-1946	-1982	-1983	-1947	MG	0.00	0.00	900.00
404	-1947	-1983	-1984	-1948	MG	0.00	0.00	900.00
404	-1948	-1984	-1985	-1949	MG	0.00	0.00	900.00
404	-1949	-1985	-1986	-1950	MG	0.00	0.00	900.00
404	-1950	-1986	-1987	-1951	MG	0.00	0.00	900.00
404	-1951	-1987	-1988	-1952	MG	0.00	0.00	900.00
404	-1952	-1988	-1989	-1953	MG	0.00	0.00	900.00
404	-1953	-1989	-1990	-1954	MG	0.00	0.00	900.00
404	-1954	-1990	-1991	-1955	MG	0.00	0.00	900.00
404	-1955	-1991	-1992	-1956	MG	0.00	0.00	900.00
404	-1956	-1992	-1993	-1957	MG	0.00	0.00	900.00
404	-1957	-1993	-1994	-1958	MG	0.00	0.00	900.00
404	-1958	-1994	-1995	-1959	MG	0.00	0.00	900.00
404	-1959	-1995	-1996	-1960	MG	0.00	0.00	900.00
404	-1960	-1996	-1997	-1961	MG	0.00	0.00	900.00
404	-1961	-1997	-1998	-1962	MG	0.00	0.00	900.00
404	-1962	-1998	-1999	-1963	MG	0.00	0.00	900.00
404	-1963	-1999	-3389	-3388	MG	0.00	0.00	900.00
404	-1964	-2000	-2001	-1965	MG	0.00	0.00	900.00
404	-1965	-2001	-2002	-1966	MG	0.00	0.00	900.00
404	-1966	-2002	-2003	-1967	MG	0.00	0.00	900.00
404	-1967	-2003	-2004	-1968	MG	0.00	0.00	900.00
404	-1968	-2004	-1764	-1762	MG	0.00	0.00	900.00
404	-1763	-1765	-2005	-1969	MG	0.00	0.00	900.00
404	-1969	-2005	-2006	-1970	MG	0.00	0.00	900.00
404	-1970	-2006	-2007	-1971	MG	0.00	0.00	900.00
404	-1971	-2007	-2008	-1972	MG	0.00	0.00	900.00
404	-1972	-2008	-2009	-1973	MG	0.00	0.00	900.00
404	-1973	-2009	-2010	-1974	MG	0.00	0.00	900.00
404	-2185	-2221	-2222	-2186	MG	0.00	0.00	900.00
404	-2186	-2222	-2223	-2187	MG	0.00	0.00	900.00
404	-2187	-2223	-2224	-2188	MG	0.00	0.00	900.00
404	-2188	-2224	-2225	-2189	MG	0.00	0.00	900.00
404	-2189	-2225	-2226	-2190	MG	0.00	0.00	900.00
404	-2190	-2226	-2227	-2191	MG	0.00	0.00	900.00
404	-2191	-2227	-2228	-2192	MG	0.00	0.00	900.00
404	-2192	-2228	-2229	-2193	MG	0.00	0.00	900.00
404	-2193	-2229	-2230	-2194	MG	0.00	0.00	900.00
404	-2194	-2230	-2231	-2195	MG	0.00	0.00	900.00
404	-2195	-2231	-2232	-2196	MG	0.00	0.00	900.00
404	-2196	-2232	-2233	-2197	MG	0.00	0.00	900.00
404	-2197	-2233	-2234	-2198	MG	0.00	0.00	900.00
404	-2198	-2234	-2235	-2199	MG	0.00	0.00	900.00
404	-2199	-2235	-2236	-2200	MG	0.00	0.00	900.00
404	-2200	-2236	-2237	-2201	MG	0.00	0.00	900.00
404	-2201	-2237	-2238	-2202	MG	0.00	0.00	900.00
404	-1991	-2027	-2028	-1992	MG	0.00	0.00	900.00
404	-1992	-2028	-2029	-1993	MG	0.00	0.00	900.00
404	-1993	-2029	-2030	-1994	MG	0.00	0.00	900.00
404	-1994	-2030	-2031	-1995	MG	0.00	0.00	900.00
404	-1995	-2031	-2032	-1996	MG	0.00	0.00	900.00
404	-1996	-2032	-2033	-1997	MG	0.00	0.00	900.00
404	-1997	-2033	-2034	-1998	MG	0.00	0.00	900.00
404	-1998	-2034	-2035	-1999	MG	0.00	0.00	900.00
404	-1999	-2035	-3390	-3389	MG	0.00	0.00	900.00
404	-2000	-2036	-2037	-2001	MG	0.00	0.00	900.00
404	-2001	-2037	-2038	-2002	MG	0.00	0.00	900.00
404	-2002	-2038	-2039	-2003	MG	0.00	0.00	900.00
404	-2003	-2039	-2040	-2004	MG	0.00	0.00	900.00
404	-2004	-2040	-1766	-1764	MG	0.00	0.00	900.00
404	-1765	-1767	-2041	-2005	MG	0.00	0.00	900.00
404	-2005	-2041	-2042	-2006	MG	0.00	0.00	900.00
404	-2006	-2042	-2043	-2007	MG	0.00	0.00	900.00
404	-2007	-2043	-2044	-2008	MG	0.00	0.00	900.00
404	-2008	-2044	-2045	-2009	MG	0.00	0.00	900.00
404	-2009	-2045	-2046	-2010	MG	0.00	0.00	900.00
404	-2010	-2046	-2047	-2011	MG	0.00	0.00	900.00
404	-2011	-2047	-2048	-2012	MG	0.00	0.00	900.00
404	-2012	-2048	-2049	-2013	MG	0.00	0.00	900.00
404	-2013	-2049	-2050	-2014	MG	0.00	0.00	900.00
404	-1909	-1945	-1946	-1910	MG	0.00	0.00	900.00
404	-1910	-1946	-1947	-1911	MG	0.00	0.00	900.00
404	-1911	-1947	-1948	-1912	MG	0.00	0.00	900.00
404	-1912	-1948	-1949	-1913	MG	0.00	0.00	900.00

Relazione di calcolo

404	-2383	-2419	-2420	-2384	MG	0.00	0.00	900.00
404	-2384	-2420	-2421	-2385	MG	0.00	0.00	900.00
404	-2385	-2421	-2422	-2386	MG	0.00	0.00	900.00
404	-2386	-2422	-2423	-2387	MG	0.00	0.00	900.00
404	-2387	-2423	-2424	-2388	MG	0.00	0.00	900.00
404	-2388	-2424	-2425	-2389	MG	0.00	0.00	900.00
404	-2389	-2425	-2426	-2390	MG	0.00	0.00	900.00
404	-2390	-2426	-2427	-2391	MG	0.00	0.00	900.00
404	-2391	-2427	-2428	-2392	MG	0.00	0.00	900.00
404	-2392	-2428	-2429	-2393	MG	0.00	0.00	900.00
404	-2393	-2429	-2430	-2394	MG	0.00	0.00	900.00
404	-2394	-2430	-2431	-2395	MG	0.00	0.00	900.00
404	-2395	-2431	-3401	-3400	MG	0.00	0.00	900.00
404	-2396	-2432	-2433	-2397	MG	0.00	0.00	900.00
404	-2397	-2433	-2434	-2398	MG	0.00	0.00	900.00
404	-2398	-2434	-2435	-2399	MG	0.00	0.00	900.00
404	-2399	-2435	-2436	-2400	MG	0.00	0.00	900.00
404	-2400	-2436	-1788	-1786	MG	0.00	0.00	900.00
404	-1787	14	-1789	-2401	MG	0.00	0.00	900.00
404	-2401	-1789	-1791	-2402	MG	0.00	0.00	900.00
404	-2402	-1791	-1793	-2403	MG	0.00	0.00	900.00
404	-2403	-1793	-1795	-2404	MG	0.00	0.00	900.00
404	-2404	-1795	-1797	-2405	MG	0.00	0.00	900.00
404	-2405	-1797	-1799	-2406	MG	0.00	0.00	900.00
404	-2406	-1799	-1801	-2407	MG	0.00	0.00	900.00
404	-2407	-1801	-1803	-2408	MG	0.00	0.00	900.00
404	-2408	-1803	-1805	-2409	MG	0.00	0.00	900.00
404	-2409	-1805	-1807	-2410	MG	0.00	0.00	900.00
404	-2410	-1807	-1809	-2411	MG	0.00	0.00	900.00
404	-2411	-1809	-1811	-2412	MG	0.00	0.00	900.00
404	-2412	-1811	-1813	-2413	MG	0.00	0.00	900.00
404	-2413	-1813	-1815	-2414	MG	0.00	0.00	900.00
404	-2414	-1815	-1817	-2415	MG	0.00	0.00	900.00
404	-2415	-1817	-1819	-2416	MG	0.00	0.00	900.00
404	-2416	-1819	-1821	-2417	MG	0.00	0.00	900.00
404	-2417	-1821	-1823	-2418	MG	0.00	0.00	900.00
404	-2418	-1823	-1825	-2419	MG	0.00	0.00	900.00
404	-2419	-1825	-1827	-2420	MG	0.00	0.00	900.00
404	-2420	-1827	-1829	-2421	MG	0.00	0.00	900.00
404	-2421	-1829	-1831	-2422	MG	0.00	0.00	900.00
404	-2422	-1831	-1833	-2423	MG	0.00	0.00	900.00
404	-2423	-1833	-1835	-2424	MG	0.00	0.00	900.00
404	-2424	-1835	-1837	-2425	MG	0.00	0.00	900.00
404	-2425	-1837	-1839	-2426	MG	0.00	0.00	900.00
404	-2426	-1839	-1841	-2427	MG	0.00	0.00	900.00
404	-2427	-1841	-1843	-2428	MG	0.00	0.00	900.00
404	-2428	-1843	-1845	-2429	MG	0.00	0.00	900.00
404	-2429	-1845	-1847	-2430	MG	0.00	0.00	900.00
404	-2430	-1847	-1849	-2431	MG	0.00	0.00	900.00
404	-2431	-1849	-3402	-3401	MG	0.00	0.00	900.00
404	-2432	-1851	-1853	-2433	MG	0.00	0.00	900.00
404	-2433	-1853	-1855	-2434	MG	0.00	0.00	900.00
404	-2434	-1855	-1857	-2435	MG	0.00	0.00	900.00
404	-2435	-1857	-1859	-2436	MG	0.00	0.00	900.00
404	-2436	-1859	103	-1788	MG	0.00	0.00	900.00
404	-2014	-2050	-2051	-2015	MG	0.00	0.00	900.00
404	-2015	-2051	-2052	-2016	MG	0.00	0.00	900.00
404	-2016	-2052	-2053	-2017	MG	0.00	0.00	900.00
404	-2017	-2053	-2054	-2018	MG	0.00	0.00	900.00
404	-2018	-2054	-2055	-2019	MG	0.00	0.00	900.00
404	-2019	-2055	-2056	-2020	MG	0.00	0.00	900.00
404	-2020	-2056	-2057	-2021	MG	0.00	0.00	900.00
404	-2021	-2057	-2058	-2022	MG	0.00	0.00	900.00
404	-2022	-2058	-2059	-2023	MG	0.00	0.00	900.00
404	-2023	-2059	-2060	-2024	MG	0.00	0.00	900.00
404	-2024	-2060	-2061	-2025	MG	0.00	0.00	900.00
404	-2025	-2061	-2062	-2026	MG	0.00	0.00	900.00
404	-2026	-2062	-2063	-2027	MG	0.00	0.00	900.00
404	-2027	-2063	-2064	-2028	MG	0.00	0.00	900.00
404	-2028	-2064	-2065	-2029	MG	0.00	0.00	900.00
404	-2029	-2065	-2066	-2030	MG	0.00	0.00	900.00
404	-2030	-2066	-2067	-2031	MG	0.00	0.00	900.00
404	-2031	-2067	-2068	-2032	MG	0.00	0.00	900.00
404	-2032	-2068	-2069	-2033	MG	0.00	0.00	900.00
404	-2033	-2069	-2070	-2034	MG	0.00	0.00	900.00
404	-2034	-2070	-2071	-2035	MG	0.00	0.00	900.00
404	-2035	-2071	-3391	-3390	MG	0.00	0.00	900.00
404	-2036	-2072	-2073	-2037	MG	0.00	0.00	900.00
404	-2037	-2073	-2074	-2038	MG	0.00	0.00	900.00

Relazione di calcolo

404	-2038	-2074	-2075	-2039	MG	0.00	0.00	900.00
404	-2039	-2075	-2076	-2040	MG	0.00	0.00	900.00
404	-2040	-2076	-1768	-1766	MG	0.00	0.00	900.00
404	-1767	-1769	-2077	-2041	MG	0.00	0.00	900.00
404	-2041	-2077	-2078	-2042	MG	0.00	0.00	900.00
404	-2042	-2078	-2079	-2043	MG	0.00	0.00	900.00
404	-2043	-2079	-2080	-2044	MG	0.00	0.00	900.00
404	-2044	-2080	-2081	-2045	MG	0.00	0.00	900.00
404	-2045	-2081	-2082	-2046	MG	0.00	0.00	900.00
404	-2046	-2082	-2083	-2047	MG	0.00	0.00	900.00
404	-2047	-2083	-2084	-2048	MG	0.00	0.00	900.00
404	-2048	-2084	-2085	-2049	MG	0.00	0.00	900.00
404	-2049	-2085	-2086	-2050	MG	0.00	0.00	900.00
404	-2050	-2086	-2087	-2051	MG	0.00	0.00	900.00
404	-2051	-2087	-2088	-2052	MG	0.00	0.00	900.00
404	-2052	-2088	-2089	-2053	MG	0.00	0.00	900.00
404	-2053	-2089	-2090	-2054	MG	0.00	0.00	900.00
404	-2054	-2090	-2091	-2055	MG	0.00	0.00	900.00
404	-2055	-2091	-2092	-2056	MG	0.00	0.00	900.00
404	-2056	-2092	-2093	-2057	MG	0.00	0.00	900.00
404	-2057	-2093	-2094	-2058	MG	0.00	0.00	900.00
404	-2058	-2094	-2095	-2059	MG	0.00	0.00	900.00
404	-2059	-2095	-2096	-2060	MG	0.00	0.00	900.00
404	-2060	-2096	-2097	-2061	MG	0.00	0.00	900.00
404	-2061	-2097	-2098	-2062	MG	0.00	0.00	900.00
404	-2062	-2098	-2099	-2063	MG	0.00	0.00	900.00
404	-2063	-2099	-2100	-2064	MG	0.00	0.00	900.00
404	-2064	-2100	-2101	-2065	MG	0.00	0.00	900.00
404	-2065	-2101	-2102	-2066	MG	0.00	0.00	900.00
404	-2066	-2102	-2103	-2067	MG	0.00	0.00	900.00
404	-2067	-2103	-2104	-2068	MG	0.00	0.00	900.00
404	-2068	-2104	-2105	-2069	MG	0.00	0.00	900.00
404	-2069	-2105	-2106	-2070	MG	0.00	0.00	900.00
404	-2070	-2106	-2107	-2071	MG	0.00	0.00	900.00
404	-2071	-2107	-3392	-3391	MG	0.00	0.00	900.00
404	-2072	-2108	-2109	-2073	MG	0.00	0.00	900.00
404	-2073	-2109	-2110	-2074	MG	0.00	0.00	900.00
404	-2074	-2110	-2111	-2075	MG	0.00	0.00	900.00
404	-2075	-2111	-2112	-2076	MG	0.00	0.00	900.00
404	-2076	-2112	-1770	-1768	MG	0.00	0.00	900.00
404	-1769	-1771	-2113	-2077	MG	0.00	0.00	900.00
404	-2077	-2113	-2114	-2078	MG	0.00	0.00	900.00
404	-2078	-2114	-2115	-2079	MG	0.00	0.00	900.00
404	-2079	-2115	-2116	-2080	MG	0.00	0.00	900.00
404	-2080	-2116	-2117	-2081	MG	0.00	0.00	900.00
404	-2081	-2117	-2118	-2082	MG	0.00	0.00	900.00
404	-2082	-2118	-2119	-2083	MG	0.00	0.00	900.00
404	-2083	-2119	-2120	-2084	MG	0.00	0.00	900.00
404	-2084	-2120	-2121	-2085	MG	0.00	0.00	900.00
404	-2085	-2121	-2122	-2086	MG	0.00	0.00	900.00
404	-2086	-2122	-2123	-2087	MG	0.00	0.00	900.00
404	-2087	-2123	-2124	-2088	MG	0.00	0.00	900.00
404	-2088	-2124	-2125	-2089	MG	0.00	0.00	900.00
404	-2089	-2125	-2126	-2090	MG	0.00	0.00	900.00
404	-2090	-2126	-2127	-2091	MG	0.00	0.00	900.00
404	-2091	-2127	-2128	-2092	MG	0.00	0.00	900.00
404	-2092	-2128	-2129	-2093	MG	0.00	0.00	900.00
404	-2093	-2129	-2130	-2094	MG	0.00	0.00	900.00
404	-2094	-2130	-2131	-2095	MG	0.00	0.00	900.00
404	-2095	-2131	-2132	-2096	MG	0.00	0.00	900.00
404	-2096	-2132	-2133	-2097	MG	0.00	0.00	900.00
404	-2097	-2133	-2134	-2098	MG	0.00	0.00	900.00
404	-2098	-2134	-2135	-2099	MG	0.00	0.00	900.00
404	-2099	-2135	-2136	-2100	MG	0.00	0.00	900.00
404	-2100	-2136	-2137	-2101	MG	0.00	0.00	900.00
404	-2101	-2137	-2138	-2102	MG	0.00	0.00	900.00
404	-2102	-2138	-2139	-2103	MG	0.00	0.00	900.00
404	-2103	-2139	-2140	-2104	MG	0.00	0.00	900.00
404	-2104	-2140	-2141	-2105	MG	0.00	0.00	900.00
404	-2105	-2141	-2142	-2106	MG	0.00	0.00	900.00
404	-2106	-2142	-2143	-2107	MG	0.00	0.00	900.00
404	-2107	-2143	-3393	-3392	MG	0.00	0.00	900.00
404	-2108	-2144	-2145	-2109	MG	0.00	0.00	900.00
404	-2109	-2145	-2146	-2110	MG	0.00	0.00	900.00
404	-2110	-2146	-2147	-2111	MG	0.00	0.00	900.00
404	-2111	-2147	-2148	-2112	MG	0.00	0.00	900.00
404	-2112	-2148	-1772	-1770	MG	0.00	0.00	900.00
404	-1771	-1773	-2149	-2113	MG	0.00	0.00	900.00
404	-2113	-2149	-2150	-2114	MG	0.00	0.00	900.00

Relazione di calcolo

404	-2114	-2150	-2151	-2115	MG	0.00	0.00	900.00
404	-2115	-2151	-2152	-2116	MG	0.00	0.00	900.00
404	-2116	-2152	-2153	-2117	MG	0.00	0.00	900.00
404	-2117	-2153	-2154	-2118	MG	0.00	0.00	900.00
404	-2118	-2154	-2155	-2119	MG	0.00	0.00	900.00
404	-2119	-2155	-2156	-2120	MG	0.00	0.00	900.00
404	-2120	-2156	-2157	-2121	MG	0.00	0.00	900.00
404	-2121	-2157	-2158	-2122	MG	0.00	0.00	900.00
404	-2122	-2158	-2159	-2123	MG	0.00	0.00	900.00
404	-2123	-2159	-2160	-2124	MG	0.00	0.00	900.00
404	-2124	-2160	-2161	-2125	MG	0.00	0.00	900.00
404	-2125	-2161	-2162	-2126	MG	0.00	0.00	900.00
404	-2126	-2162	-2163	-2127	MG	0.00	0.00	900.00
404	-2127	-2163	-2164	-2128	MG	0.00	0.00	900.00
404	-2128	-2164	-2165	-2129	MG	0.00	0.00	900.00
404	-2129	-2165	-2166	-2130	MG	0.00	0.00	900.00
404	-2130	-2166	-2167	-2131	MG	0.00	0.00	900.00
404	-2131	-2167	-2168	-2132	MG	0.00	0.00	900.00
404	-2132	-2168	-2169	-2133	MG	0.00	0.00	900.00
404	-2133	-2169	-2170	-2134	MG	0.00	0.00	900.00
404	-2134	-2170	-2171	-2135	MG	0.00	0.00	900.00
404	-2135	-2171	-2172	-2136	MG	0.00	0.00	900.00
404	-2136	-2172	-2173	-2137	MG	0.00	0.00	900.00
404	-2137	-2173	-2174	-2138	MG	0.00	0.00	900.00
404	-2138	-2174	-2175	-2139	MG	0.00	0.00	900.00
404	-2139	-2175	-2176	-2140	MG	0.00	0.00	900.00
404	-2140	-2176	-2177	-2141	MG	0.00	0.00	900.00
404	-2141	-2177	-2178	-2142	MG	0.00	0.00	900.00
404	-2142	-2178	-2179	-2143	MG	0.00	0.00	900.00
404	-2143	-2179	-3394	-3393	MG	0.00	0.00	900.00
404	-2144	-2180	-2181	-2145	MG	0.00	0.00	900.00
404	-2145	-2181	-2182	-2146	MG	0.00	0.00	900.00
404	-2146	-2182	-2183	-2147	MG	0.00	0.00	900.00
404	-2147	-2183	-2184	-2148	MG	0.00	0.00	900.00
404	-2148	-2184	-1774	-1772	MG	0.00	0.00	900.00
404	205	-1757	-1861	-1790	MG	0.00	0.00	900.00
404	-2149	-2185	-2186	-2150	MG	0.00	0.00	900.00
404	-2150	-2186	-2187	-2151	MG	0.00	0.00	900.00
404	-2151	-2187	-2188	-2152	MG	0.00	0.00	900.00
404	-2152	-2188	-2189	-2153	MG	0.00	0.00	900.00
404	-2153	-2189	-2190	-2154	MG	0.00	0.00	900.00
404	-2154	-2190	-2191	-2155	MG	0.00	0.00	900.00
404	-2155	-2191	-2192	-2156	MG	0.00	0.00	900.00
404	-2156	-2192	-2193	-2157	MG	0.00	0.00	900.00
404	-2157	-2193	-2194	-2158	MG	0.00	0.00	900.00
404	-2158	-2194	-2195	-2159	MG	0.00	0.00	900.00
404	-2159	-2195	-2196	-2160	MG	0.00	0.00	900.00
404	-2160	-2196	-2197	-2161	MG	0.00	0.00	900.00
404	-2161	-2197	-2198	-2162	MG	0.00	0.00	900.00
404	-2162	-2198	-2199	-2163	MG	0.00	0.00	900.00
404	-2163	-2199	-2200	-2164	MG	0.00	0.00	900.00
404	-2164	-2200	-2201	-2165	MG	0.00	0.00	900.00
404	-2165	-2201	-2202	-2166	MG	0.00	0.00	900.00
404	-2166	-2202	-2203	-2167	MG	0.00	0.00	900.00
404	-2167	-2203	-2204	-2168	MG	0.00	0.00	900.00
404	-2168	-2204	-2205	-2169	MG	0.00	0.00	900.00
404	-2169	-2205	-2206	-2170	MG	0.00	0.00	900.00
404	-2170	-2206	-2207	-2171	MG	0.00	0.00	900.00
404	-2171	-2207	-2208	-2172	MG	0.00	0.00	900.00
404	-2172	-2208	-2209	-2173	MG	0.00	0.00	900.00
404	-2173	-2209	-2210	-2174	MG	0.00	0.00	900.00
404	-2174	-2210	-2211	-2175	MG	0.00	0.00	900.00
404	-2175	-2211	-2212	-2176	MG	0.00	0.00	900.00
404	-2176	-2212	-2213	-2177	MG	0.00	0.00	900.00
404	-2177	-2213	-2214	-2178	MG	0.00	0.00	900.00
404	-2178	-2214	-2215	-2179	MG	0.00	0.00	900.00
404	-2179	-2215	-3395	-3394	MG	0.00	0.00	900.00
404	-2180	-2216	-2217	-2181	MG	0.00	0.00	900.00
404	-2181	-2217	-2218	-2182	MG	0.00	0.00	900.00
404	-2182	-2218	-2219	-2183	MG	0.00	0.00	900.00
404	-2183	-2219	-2220	-2184	MG	0.00	0.00	900.00
404	-2184	-2220	-1776	-1774	MG	0.00	0.00	900.00
404	-1775	-1777	-2221	-2185	MG	0.00	0.00	900.00
404	-3370	-3386	-1892	-1852	MG	0.00	0.00	900.00
404	-3386	-3387	-1928	-1892	MG	0.00	0.00	900.00
404	-3387	-3388	-1964	-1928	MG	0.00	0.00	900.00
404	-3388	-3389	-2000	-1964	MG	0.00	0.00	900.00
404	-3389	-3390	-2036	-2000	MG	0.00	0.00	900.00
404	-3390	-3391	-2072	-2036	MG	0.00	0.00	900.00

Relazione di calcolo

404	-3391	-3392	-2108	-2072	MG	0.00	0.00	900.00
404	-3392	-3393	-2144	-2108	MG	0.00	0.00	900.00
404	-3393	-3394	-2180	-2144	MG	0.00	0.00	900.00
404	-3394	-3395	-2216	-2180	MG	0.00	0.00	900.00
404	-3395	-3396	-2252	-2216	MG	0.00	0.00	900.00
404	-3396	-3397	-2288	-2252	MG	0.00	0.00	900.00
404	-3397	-3398	-2324	-2288	MG	0.00	0.00	900.00
404	-3398	-3399	-2360	-2324	MG	0.00	0.00	900.00
404	-3399	-3400	-2396	-2360	MG	0.00	0.00	900.00
404	-3400	-3401	-2432	-2396	MG	0.00	0.00	900.00
404	-3401	-3402	-1851	-2432	MG	0.00	0.00	900.00
404	-2202	-2238	-2239	-2203	MG	0.00	0.00	900.00
404	-2203	-2239	-2240	-2204	MG	0.00	0.00	900.00
404	-2204	-2240	-2241	-2205	MG	0.00	0.00	900.00
404	-2205	-2241	-2242	-2206	MG	0.00	0.00	900.00
404	-2206	-2242	-2243	-2207	MG	0.00	0.00	900.00
404	-2207	-2243	-2244	-2208	MG	0.00	0.00	900.00
404	-2208	-2244	-2245	-2209	MG	0.00	0.00	900.00
404	-2209	-2245	-2246	-2210	MG	0.00	0.00	900.00
404	-2210	-2246	-2247	-2211	MG	0.00	0.00	900.00
404	-2211	-2247	-2248	-2212	MG	0.00	0.00	900.00
404	-2212	-2248	-2249	-2213	MG	0.00	0.00	900.00
404	-2213	-2249	-2250	-2214	MG	0.00	0.00	900.00
404	-2214	-2250	-2251	-2215	MG	0.00	0.00	900.00
404	-2215	-2251	-3396	-3395	MG	0.00	0.00	900.00
404	-2216	-2252	-2253	-2217	MG	0.00	0.00	900.00
404	-2217	-2253	-2254	-2218	MG	0.00	0.00	900.00
404	-2218	-2254	-2255	-2219	MG	0.00	0.00	900.00
404	-2219	-2255	-2256	-2220	MG	0.00	0.00	900.00
404	-2220	-2256	-1778	-1776	MG	0.00	0.00	900.00
404	-1777	-1779	-2257	-2221	MG	0.00	0.00	900.00
404	-2221	-2257	-2258	-2222	MG	0.00	0.00	900.00
404	-2222	-2258	-2259	-2223	MG	0.00	0.00	900.00
404	-2223	-2259	-2260	-2224	MG	0.00	0.00	900.00
404	-2224	-2260	-2261	-2225	MG	0.00	0.00	900.00
404	-2225	-2261	-2262	-2226	MG	0.00	0.00	900.00
404	-2226	-2262	-2263	-2227	MG	0.00	0.00	900.00
404	-2227	-2263	-2264	-2228	MG	0.00	0.00	900.00
404	-2228	-2264	-2265	-2229	MG	0.00	0.00	900.00
404	-2229	-2265	-2266	-2230	MG	0.00	0.00	900.00
404	-2230	-2266	-2267	-2231	MG	0.00	0.00	900.00
404	-2231	-2267	-2268	-2232	MG	0.00	0.00	900.00
404	-2232	-2268	-2269	-2233	MG	0.00	0.00	900.00
404	-2233	-2269	-2270	-2234	MG	0.00	0.00	900.00
404	-2234	-2270	-2271	-2235	MG	0.00	0.00	900.00
404	-2235	-2271	-2272	-2236	MG	0.00	0.00	900.00
404	-2236	-2272	-2273	-2237	MG	0.00	0.00	900.00
404	-2237	-2273	-2274	-2238	MG	0.00	0.00	900.00
404	-2238	-2274	-2275	-2239	MG	0.00	0.00	900.00
404	-2239	-2275	-2276	-2240	MG	0.00	0.00	900.00
404	-2240	-2276	-2277	-2241	MG	0.00	0.00	900.00
404	-2241	-2277	-2278	-2242	MG	0.00	0.00	900.00
404	-2242	-2278	-2279	-2243	MG	0.00	0.00	900.00
404	-2243	-2279	-2280	-2244	MG	0.00	0.00	900.00
404	-2244	-2280	-2281	-2245	MG	0.00	0.00	900.00
404	-2245	-2281	-2282	-2246	MG	0.00	0.00	900.00
404	-2246	-2282	-2283	-2247	MG	0.00	0.00	900.00
404	-2247	-2283	-2284	-2248	MG	0.00	0.00	900.00
404	-1790	-1861	-1862	-1792	MG	0.00	0.00	900.00
404	-1792	-1862	-1863	-1794	MG	0.00	0.00	900.00
404	-1794	-1863	-1864	-1796	MG	0.00	0.00	900.00
404	-1796	-1864	-1865	-1798	MG	0.00	0.00	900.00
404	-1798	-1865	-1866	-1800	MG	0.00	0.00	900.00
404	-1800	-1866	-1867	-1802	MG	0.00	0.00	900.00
404	-1802	-1867	-1868	-1804	MG	0.00	0.00	900.00
404	-1804	-1868	-1869	-1806	MG	0.00	0.00	900.00
404	-1806	-1869	-1870	-1808	MG	0.00	0.00	900.00
404	-1808	-1870	-1871	-1810	MG	0.00	0.00	900.00
404	-1810	-1871	-1872	-1812	MG	0.00	0.00	900.00
404	-1812	-1872	-1873	-1814	MG	0.00	0.00	900.00
404	-1814	-1873	-1874	-1816	MG	0.00	0.00	900.00
404	-1816	-1874	-1875	-1818	MG	0.00	0.00	900.00
404	-1818	-1875	-1876	-1820	MG	0.00	0.00	900.00
404	-1820	-1876	-1877	-1822	MG	0.00	0.00	900.00
404	-1822	-1877	-1878	-1824	MG	0.00	0.00	900.00
404	-1824	-1878	-1879	-1826	MG	0.00	0.00	900.00
404	-1826	-1879	-1880	-1828	MG	0.00	0.00	900.00
404	-1828	-1880	-1881	-1830	MG	0.00	0.00	900.00
404	-1830	-1881	-1882	-1832	MG	0.00	0.00	900.00

Relazione di calcolo

404	-1832	-1882	-1883	-1834	MG	0.00	0.00	900.00
404	-1834	-1883	-1884	-1836	MG	0.00	0.00	900.00
404	-1836	-1884	-1885	-1838	MG	0.00	0.00	900.00
404	-1838	-1885	-1886	-1840	MG	0.00	0.00	900.00
404	-1840	-1886	-1887	-1842	MG	0.00	0.00	900.00
404	-1842	-1887	-1888	-1844	MG	0.00	0.00	900.00
404	-1844	-1888	-1889	-1846	MG	0.00	0.00	900.00
404	-1846	-1889	-1890	-1848	MG	0.00	0.00	900.00
404	-1848	-1890	-1891	-1850	MG	0.00	0.00	900.00
404	-1850	-1891	-3386	-3370	MG	0.00	0.00	900.00
404	-1852	-1892	-1893	-1854	MG	0.00	0.00	900.00
404	-1854	-1893	-1894	-1856	MG	0.00	0.00	900.00
404	-1856	-1894	-1895	-1858	MG	0.00	0.00	900.00
404	-1858	-1895	-1896	-1860	MG	0.00	0.00	900.00
404	-1860	-1896	-1758	217	MG	0.00	0.00	900.00
404	-1757	-1759	-1897	-1861	MG	0.00	0.00	900.00
404	-1861	-1897	-1898	-1862	MG	0.00	0.00	900.00
404	-1862	-1898	-1899	-1863	MG	0.00	0.00	900.00
404	-1863	-1899	-1900	-1864	MG	0.00	0.00	900.00
404	-1864	-1900	-1901	-1865	MG	0.00	0.00	900.00
404	-1865	-1901	-1902	-1866	MG	0.00	0.00	900.00
404	-1866	-1902	-1903	-1867	MG	0.00	0.00	900.00
404	-1867	-1903	-1904	-1868	MG	0.00	0.00	900.00
404	-1868	-1904	-1905	-1869	MG	0.00	0.00	900.00
404	-1869	-1905	-1906	-1870	MG	0.00	0.00	900.00
404	-1870	-1906	-1907	-1871	MG	0.00	0.00	900.00
404	-1871	-1907	-1908	-1872	MG	0.00	0.00	900.00
404	-1872	-1908	-1909	-1873	MG	0.00	0.00	900.00
404	-1873	-1909	-1910	-1874	MG	0.00	0.00	900.00
404	-1874	-1910	-1911	-1875	MG	0.00	0.00	900.00
404	-1875	-1911	-1912	-1876	MG	0.00	0.00	900.00
404	-1876	-1912	-1913	-1877	MG	0.00	0.00	900.00
404	-1877	-1913	-1914	-1878	MG	0.00	0.00	900.00
404	-1878	-1914	-1915	-1879	MG	0.00	0.00	900.00
404	-1879	-1915	-1916	-1880	MG	0.00	0.00	900.00
404	-1880	-1916	-1917	-1881	MG	0.00	0.00	900.00
404	-1881	-1917	-1918	-1882	MG	0.00	0.00	900.00
404	-1882	-1918	-1919	-1883	MG	0.00	0.00	900.00
404	-1883	-1919	-1920	-1884	MG	0.00	0.00	900.00
404	-1884	-1920	-1921	-1885	MG	0.00	0.00	900.00
404	-1885	-1921	-1922	-1886	MG	0.00	0.00	900.00
404	-1886	-1922	-1923	-1887	MG	0.00	0.00	900.00
404	-1887	-1923	-1924	-1888	MG	0.00	0.00	900.00
404	-1888	-1924	-1925	-1889	MG	0.00	0.00	900.00
404	-1889	-1925	-1926	-1890	MG	0.00	0.00	900.00
404	-1890	-1926	-1927	-1891	MG	0.00	0.00	900.00
404	-1891	-1927	-3387	-3386	MG	0.00	0.00	900.00
404	-1892	-1928	-1929	-1893	MG	0.00	0.00	900.00
404	-1893	-1929	-1930	-1894	MG	0.00	0.00	900.00
404	-1894	-1930	-1931	-1895	MG	0.00	0.00	900.00
404	-1895	-1931	-1932	-1896	MG	0.00	0.00	900.00
404	-1896	-1932	-1760	-1758	MG	0.00	0.00	900.00

Condizione di carico n. 3: Spinta terreno statica

Carichi idrostatici

Simbologia

Bid. = Numero del muro/elemento bidimensionale

N1 = Nodo1

N2 = Nodo2

N3 = Nodo3

N4 = Nodo4

Zi = Coordinata Z globale d'inizio carico

QYi = Componente iniziale del carico in direzione Y locale dell'elemento bidimensionale

Zf = Coordinata Z globale di fine carico

QYf = Componente finale del carico in direzione Y locale dell'elemento bidimensionale

Bid.	N1	N2	N3	N4	Zi <m>	QYi <daN/m>	Zf <m>	QYf <daN/m>	Bid.	N1	N2	N3	N4	Zi <m>	QYi <daN/m>	Zf <m>	QYf <daN/m>
112	-1565	-1577	-1578	-1566	0.00	4380.00	5.00	0.00	112	-1584	-1520	-1522	-1585	0.00	4380.00	5.00	0.00
112	-742	-740	-3521	-3520	0.00	4380.00	5.00	0.00	112	-1533	-1545	-1546	-1534	0.00	4380.00	5.00	0.00
112	-740	274	-3522	-3521	0.00	4380.00	5.00	0.00	112	-1544	-1556	-1557	-1545	0.00	4380.00	5.00	0.00
112	-1585	-1522	-1524	-1586	0.00	4380.00	5.00	0.00	112	-1579	-1510	-1512	-1580	0.00	4380.00	5.00	0.00
112	-1563	-1575	-1502	-1501	0.00	-4380.00	-5.00	0.00	112	-1558	-1570	-1571	-1559	0.00	4380.00	5.00	0.00
112	-1562	-1574	-1575	-1563	0.00	4380.00	5.00	0.00	112	-1570	-1582	-1583	-1571	0.00	4380.00	5.00	0.00
112	-1546	-1558	-1559	-1547	0.00	4380.00	5.00	0.00	112	-1575	-1587	-1503	-1502	0.00	-4380.00	-5.00	0.00
112	-1557	-1569	-1570	-1558	0.00	4380.00	5.00	0.00	112	-1543	-1555	-1556	-1544	0.00	4380.00	5.00	0.00
112	-1535	-1547	-1548	-1536	0.00	4380.00	5.00	0.00	112	-1564	-1576	-1577	-1565	0.00	4380.00	5.00	0.00

Relazione di calcolo

115	-1725	-1737	-1738	-1726	ML	0.00	770.00	0.00
115	-1678	-1699	-1700	-1680	ML	0.00	770.00	0.00
115	-1700	-1712	-1713	-1701	ML	0.00	770.00	0.00
115	-1739	-1751	-1752	-1740	ML	0.00	770.00	0.00
115	-1729	-1741	-1742	-1730	ML	0.00	770.00	0.00
115	-1742	-1754	-1755	-1743	ML	0.00	770.00	0.00
115	-1731	-1743	-1744	-1732	ML	0.00	770.00	0.00
115	-1730	-1742	-1743	-1731	ML	0.00	770.00	0.00
115	-1708	-1720	-1669	-1668	ML	0.00	770.00	0.00
115	-1732	-1744	-1671	-1670	ML	0.00	770.00	0.00
115	-1726	-1738	-1739	-1727	ML	0.00	770.00	0.00
115	-1698	-1710	-1711	-1699	ML	0.00	770.00	0.00
115	-1699	-1711	-1712	-1700	ML	0.00	770.00	0.00
115	-1749	-1681	-1683	-1750	ML	0.00	770.00	0.00
115	-1724	-1736	-1737	-1725	ML	0.00	770.00	0.00
115	-1711	-1723	-1724	-1712	ML	0.00	770.00	0.00
115	-3479	-3478	-1697	-1674	ML	0.00	770.00	0.00
115	-1702	-1714	-1715	-1703	ML	0.00	770.00	0.00
115	-1703	-1715	-1716	-1704	ML	0.00	770.00	0.00
115	-1741	-1753	-1754	-1742	ML	0.00	770.00	0.00
115	-1744	-1756	-1672	-1671	ML	0.00	770.00	0.00
115	-1690	-1705	-1706	-1692	ML	0.00	770.00	0.00
115	-3477	-3476	-1721	-1709	ML	0.00	770.00	0.00
115	-1674	-1697	-1698	-1676	ML	0.00	770.00	0.00
115	-1750	-1683	-1685	-1751	ML	0.00	770.00	0.00
115	-1709	-1721	-1722	-1710	ML	0.00	770.00	0.00
115	-1722	-1734	-1735	-1723	ML	0.00	770.00	0.00
115	-1748	-1679	-1681	-1749	ML	0.00	770.00	0.00
115	-1733	-1745	-1746	-1734	ML	0.00	770.00	0.00
115	-1743	-1755	-1756	-1744	ML	0.00	770.00	0.00
115	-3474	-3473	-1673	-1745	ML	0.00	770.00	0.00
115	-1728	-1740	-1741	-1729	ML	0.00	770.00	0.00
115	-1734	-1746	-1747	-1735	ML	0.00	770.00	0.00
115	-1723	-1735	-1736	-1724	ML	0.00	770.00	0.00
118	-2985	-3404	-3403	-2986	ML	0.00	770.00	0.00
118	-3109	-3121	-3122	-3110	ML	0.00	770.00	0.00
118	-2993	-3005	-3006	-2994	ML	0.00	770.00	0.00
118	-3121	-3133	-3134	-3122	ML	0.00	770.00	0.00
118	-2982	-3407	-3406	-2983	ML	0.00	770.00	0.00
118	-3094	-3106	-1831	-1833	ML	0.00	770.00	0.00
118	-2984	-3405	-3404	-2985	ML	0.00	770.00	0.00
118	-3511	-3510	-2987	-3414	ML	0.00	770.00	0.00
118	-3084	-3096	-3097	-3085	ML	0.00	770.00	0.00
118	-2930	-2942	-2943	-2931	ML	0.00	770.00	0.00
118	-3508	-3507	-3023	-3011	ML	0.00	770.00	0.00
118	-1507	-2916	-2917	-1509	ML	0.00	770.00	0.00
118	-3095	-3107	-3108	-3096	ML	0.00	770.00	0.00
118	-3082	-3094	-1833	-1835	ML	0.00	770.00	0.00
118	-3108	-3120	-3121	-3109	ML	0.00	770.00	0.00
118	-2955	-2967	-2968	-2956	ML	0.00	770.00	0.00
118	-1505	-2915	-2916	-1507	ML	0.00	770.00	0.00
118	-3140	-3152	-3153	-3141	ML	0.00	770.00	0.00
118	-3006	-3018	-3019	-3007	ML	0.00	770.00	0.00
118	-3088	-3100	-3101	-3089	ML	0.00	770.00	0.00
118	-3083	-3095	-3096	-3084	ML	0.00	770.00	0.00
118	-2980	-3409	-3408	-2981	ML	0.00	770.00	0.00
118	-3091	-3103	-3104	-3092	ML	0.00	770.00	0.00
118	-3093	-3105	-3106	-3094	ML	0.00	770.00	0.00
118	-2918	-2930	-2931	-2919	ML	0.00	770.00	0.00
118	-2920	-2932	-2933	-2921	ML	0.00	770.00	0.00
118	-3120	-3132	-3133	-3121	ML	0.00	770.00	0.00
118	-2921	-2933	-2934	-2922	ML	0.00	770.00	0.00
118	-1521	-2923	-2924	-1523	ML	0.00	770.00	0.00
118	-1523	-2924	-2925	-1525	ML	0.00	770.00	0.00
118	-3114	-3126	-3127	-3115	ML	0.00	770.00	0.00
118	-3000	-3012	-3013	-3001	ML	0.00	770.00	0.00
118	-3001	-3013	-3014	-3002	ML	0.00	770.00	0.00
118	-3004	-3016	-3017	-3005	ML	0.00	770.00	0.00
118	-2991	-3003	-3004	-2992	ML	0.00	770.00	0.00
118	-3003	-3015	-3016	-3004	ML	0.00	770.00	0.00
118	-2929	-2941	-2942	-2930	ML	0.00	770.00	0.00
118	-3130	-3142	-1825	-1827	ML	0.00	770.00	0.00
118	-2931	-2943	-2944	-2932	ML	0.00	770.00	0.00
118	-3132	-3144	-3145	-3133	ML	0.00	770.00	0.00
118	-2983	-3406	-3405	-2984	ML	0.00	770.00	0.00
118	-3134	-3146	-3147	-3135	ML	0.00	770.00	0.00
118	-3112	-3124	-3125	-3113	ML	0.00	770.00	0.00
118	-3011	-3023	-3024	-3012	ML	0.00	770.00	0.00
118	-1525	-2925	-2926	-1527	ML	0.00	770.00	0.00

Relazione di calcolo

118	-3013	-3025	-3026	-3014	ML	0.00	770.00	0.00
118	-3128	-3140	-3141	-3129	ML	0.00	770.00	0.00
118	-2953	-2965	-2966	-2954	ML	0.00	770.00	0.00
118	-3116	-3128	-3129	-3117	ML	0.00	770.00	0.00
118	-3142	-3154	-1823	-1825	ML	0.00	770.00	0.00
118	-2992	-3004	-3005	-2993	ML	0.00	770.00	0.00
118	-3143	-3155	-3156	-3144	ML	0.00	770.00	0.00
118	-2943	-2955	-2956	-2944	ML	0.00	770.00	0.00
118	-3145	-3157	-3158	-3146	ML	0.00	770.00	0.00
118	-3146	-3158	-3159	-3147	ML	0.00	770.00	0.00
118	-3137	-3149	-3150	-3138	ML	0.00	770.00	0.00
118	-2937	-2949	-2950	-2938	ML	0.00	770.00	0.00
118	-3086	-3098	-3099	-3087	ML	0.00	770.00	0.00
118	-3100	-3112	-3113	-3101	ML	0.00	770.00	0.00
118	-3002	-3014	-3015	-3003	ML	0.00	770.00	0.00
118	-3052	-3064	-3065	-3053	ML	0.00	770.00	0.00
118	-3053	-3065	-3066	-3054	ML	0.00	770.00	0.00
118	-2954	-2966	-2967	-2955	ML	0.00	770.00	0.00
118	-3056	-3068	-3069	-3057	ML	0.00	770.00	0.00
118	-1511	-2918	-2919	-1513	ML	0.00	770.00	0.00
118	-3008	-3020	-3021	-3009	ML	0.00	770.00	0.00
118	-1517	-2921	-2922	-1519	ML	0.00	770.00	0.00
118	-3110	-3122	-3123	-3111	ML	0.00	770.00	0.00
118	-3111	-3123	-3124	-3112	ML	0.00	770.00	0.00
118	-3139	-3151	-3152	-3140	ML	0.00	770.00	0.00
118	-2938	-2950	-1857	-1857	ML	0.00	770.00	0.00
118	-3113	-3125	-3126	-3114	ML	0.00	770.00	0.00
118	-2939	-2951	-2952	-2940	ML	0.00	770.00	0.00
118	-3015	-3027	-3028	-3016	ML	0.00	770.00	0.00
118	-2915	-2927	-2928	-2916	ML	0.00	770.00	0.00
118	-2941	-2953	-2954	-2942	ML	0.00	770.00	0.00
118	-3118	-3130	-1827	-1829	ML	0.00	770.00	0.00
118	-3119	-3131	-3132	-3120	ML	0.00	770.00	0.00
118	-2919	-2931	-2932	-2920	ML	0.00	770.00	0.00
118	-2971	-2983	-2984	-2972	ML	0.00	770.00	0.00
118	-2922	-2934	-2935	-2923	ML	0.00	770.00	0.00
118	-2948	-2960	-2961	-2949	ML	0.00	770.00	0.00
118	-2962	-2974	-1853	-1855	ML	0.00	770.00	0.00
118	-3061	-3073	-3074	-3062	ML	0.00	770.00	0.00
118	-2975	-3414	-3413	-2976	ML	0.00	770.00	0.00
118	-3077	-3089	-3090	-3078	ML	0.00	770.00	0.00
118	-3129	-3141	-3142	-3130	ML	0.00	770.00	0.00
118	-2978	-3411	-3410	-2979	ML	0.00	770.00	0.00
118	-3079	-3091	-3092	-3080	ML	0.00	770.00	0.00
118	-3080	-3092	-3093	-3081	ML	0.00	770.00	0.00
118	-2981	-3408	-3407	-2982	ML	0.00	770.00	0.00
118	-2932	-2944	-2945	-2933	ML	0.00	770.00	0.00
118	-3498	-3497	-3143	-3131	ML	0.00	770.00	0.00
118	-3499	-3498	-3131	-3119	ML	0.00	770.00	0.00
118	-2986	-3403	-3402	-1851	ML	0.00	770.00	0.00
118	-2987	-2999	-3000	-2988	ML	0.00	770.00	0.00
118	-2989	-3001	-3002	-2990	ML	0.00	770.00	0.00
118	-3089	-3101	-3102	-3090	ML	0.00	770.00	0.00
118	-2990	-3002	-3003	-2991	ML	0.00	770.00	0.00
118	-3506	-3505	-3047	-3035	ML	0.00	770.00	0.00
118	-3092	-3104	-3105	-3093	ML	0.00	770.00	0.00
118	-3507	-3506	-3035	-3023	ML	0.00	770.00	0.00
118	-2995	-3007	-3008	-2996	ML	0.00	770.00	0.00
118	-3147	-3159	-3160	-3148	ML	0.00	770.00	0.00
118	-2997	-3009	-3010	-2998	ML	0.00	770.00	0.00
118	-3404	-2997	-2998	-3403	ML	0.00	770.00	0.00
118	-2999	-3011	-3012	-3000	ML	0.00	770.00	0.00
118	-3406	-2995	-2996	-3405	ML	0.00	770.00	0.00
118	-3407	-2994	-2995	-3406	ML	0.00	770.00	0.00
118	-3408	-2993	-2994	-3407	ML	0.00	770.00	0.00
118	-3409	-2992	-2993	-3408	ML	0.00	770.00	0.00
118	-3410	-2991	-2992	-3409	ML	0.00	770.00	0.00
118	-3005	-3017	-3018	-3006	ML	0.00	770.00	0.00
118	-3412	-2989	-2990	-3411	ML	0.00	770.00	0.00
118	-1513	-2919	-2920	-1515	ML	0.00	770.00	0.00
118	-1515	-2920	-2921	-1517	ML	0.00	770.00	0.00
118	-3010	-3022	-1845	-1847	ML	0.00	770.00	0.00
118	-2960	-2972	-2973	-2961	ML	0.00	770.00	0.00
118	-3060	-3072	-3073	-3061	ML	0.00	770.00	0.00
118	-3012	-3024	-3025	-3013	ML	0.00	770.00	0.00
118	-1527	-2926	-1859	103	ML	0.00	770.00	0.00
118	-3115	-3127	-3128	-3116	ML	0.00	770.00	0.00
118	-3017	-3029	-3030	-3018	ML	0.00	770.00	0.00
118	-2917	-2929	-2930	-2918	ML	0.00	770.00	0.00

Relazione di calcolo

118	-3019	-3031	-3032	-3020	ML	0.00	770.00	0.00
118	-2969	-2981	-2982	-2970	ML	0.00	770.00	0.00
118	-3020	-3032	-3033	-3021	ML	0.00	770.00	0.00
118	-3123	-3135	-3136	-3124	ML	0.00	770.00	0.00
118	-2973	-2985	-2986	-2974	ML	0.00	770.00	0.00
118	-3124	-3136	-3137	-3125	ML	0.00	770.00	0.00
118	-3125	-3137	-3138	-3126	ML	0.00	770.00	0.00
118	-3126	-3138	-3139	-3127	ML	0.00	770.00	0.00
118	-2927	-2939	-2940	-2928	ML	0.00	770.00	0.00
118	-2928	-2940	-2941	-2929	ML	0.00	770.00	0.00
118	-3029	-3041	-3042	-3030	ML	0.00	770.00	0.00
118	-2979	-3410	-3409	-2980	ML	0.00	770.00	0.00
118	-3131	-3143	-3144	-3132	ML	0.00	770.00	0.00
118	-3031	-3043	-3044	-3032	ML	0.00	770.00	0.00
118	-3133	-3145	-3146	-3134	ML	0.00	770.00	0.00
118	-2934	-2946	-2947	-2935	ML	0.00	770.00	0.00
118	-3135	-3147	-3148	-3136	ML	0.00	770.00	0.00
118	-3136	-3148	-3149	-3137	ML	0.00	770.00	0.00
118	-2936	-2948	-2949	-2937	ML	0.00	770.00	0.00
118	-3138	-3150	-3151	-3139	ML	0.00	770.00	0.00
118	-2950	-2962	-1855	-1857	ML	0.00	770.00	0.00
118	-3038	-3050	-3051	-3039	ML	0.00	770.00	0.00
118	-3141	-3153	-3154	-3142	ML	0.00	770.00	0.00
118	-3041	-3053	-3054	-3042	ML	0.00	770.00	0.00
118	-3043	-3055	-3056	-3044	ML	0.00	770.00	0.00
118	-3144	-3156	-3157	-3145	ML	0.00	770.00	0.00
118	-2945	-2957	-2958	-2946	ML	0.00	770.00	0.00
118	-2946	-2958	-2959	-2947	ML	0.00	770.00	0.00
118	-2947	-2959	-2960	-2948	ML	0.00	770.00	0.00
118	-3148	-3160	-3161	-3149	ML	0.00	770.00	0.00
118	-3149	-3161	-3162	-3150	ML	0.00	770.00	0.00
118	-3049	-3061	-3062	-3050	ML	0.00	770.00	0.00
118	-3050	-3062	-3063	-3051	ML	0.00	770.00	0.00
118	-2952	-2964	-2965	-2953	ML	0.00	770.00	0.00
118	-2951	-2963	-2964	-2952	ML	0.00	770.00	0.00
118	-3103	-3115	-3116	-3104	ML	0.00	770.00	0.00
118	-3054	-3066	-3067	-3055	ML	0.00	770.00	0.00
118	-3105	-3117	-3118	-3106	ML	0.00	770.00	0.00
118	-2956	-2968	-2969	-2957	ML	0.00	770.00	0.00
118	-3007	-3019	-3020	-3008	ML	0.00	770.00	0.00
118	-3414	-2987	-2988	-3413	ML	0.00	770.00	0.00
118	-3009	-3021	-3022	-3010	ML	0.00	770.00	0.00
118	-1519	-2922	-2923	-1521	ML	0.00	770.00	0.00
118	-3059	-3071	-3072	-3060	ML	0.00	770.00	0.00
118	-3501	-3500	-3107	-3095	ML	0.00	770.00	0.00
118	-2963	-2975	-2976	-2964	ML	0.00	770.00	0.00
118	-2964	-2976	-2977	-2965	ML	0.00	770.00	0.00
118	-2965	-2977	-2978	-2966	ML	0.00	770.00	0.00
118	-3117	-3129	-3130	-3118	ML	0.00	770.00	0.00
118	-3068	-3080	-3081	-3069	ML	0.00	770.00	0.00
118	-2967	-2979	-2980	-2968	ML	0.00	770.00	0.00
118	-3070	-3082	-1835	-1837	ML	0.00	770.00	0.00
118	-2968	-2980	-2981	-2969	ML	0.00	770.00	0.00
118	-3122	-3134	-3135	-3123	ML	0.00	770.00	0.00
118	-3072	-3084	-3085	-3073	ML	0.00	770.00	0.00
118	-2974	-2986	-1851	-1853	ML	0.00	770.00	0.00
118	-3074	-3086	-3087	-3075	ML	0.00	770.00	0.00
118	-3075	-3087	-3088	-3076	ML	0.00	770.00	0.00
118	-2976	-3413	-3412	-2977	ML	0.00	770.00	0.00
118	-3076	-3088	-3089	-3077	ML	0.00	770.00	0.00
118	-3078	-3090	-3091	-3079	ML	0.00	770.00	0.00
118	-3027	-3039	-3040	-3028	ML	0.00	770.00	0.00
118	-2916	-2928	-2929	-2917	ML	0.00	770.00	0.00
118	-3081	-3093	-3094	-3082	ML	0.00	770.00	0.00
118	-3032	-3044	-3045	-3033	ML	0.00	770.00	0.00
118	-3497	-3496	-3155	-3143	ML	0.00	770.00	0.00
118	-3034	-3046	-1841	-1843	ML	0.00	770.00	0.00
118	-3085	-3097	-3098	-3086	ML	0.00	770.00	0.00
118	-3035	-3047	-3048	-3036	ML	0.00	770.00	0.00
118	-3087	-3099	-3100	-3088	ML	0.00	770.00	0.00
118	-3503	-3502	-3083	-3071	ML	0.00	770.00	0.00
118	-2988	-3000	-3001	-2989	ML	0.00	770.00	0.00
118	-3090	-3102	-3103	-3091	ML	0.00	770.00	0.00
118	-3505	-3504	-3059	-3047	ML	0.00	770.00	0.00
118	-3104	-3116	-3117	-3105	ML	0.00	770.00	0.00
118	-2942	-2954	-2955	-2943	ML	0.00	770.00	0.00
118	-3509	-3508	-3011	-2999	ML	0.00	770.00	0.00
118	-2994	-3006	-3007	-2995	ML	0.00	770.00	0.00
118	-3510	-3509	-2999	-2987	ML	0.00	770.00	0.00

Relazione di calcolo

118	-3096	-3108	-3109	-3097	ML	0.00	770.00	0.00
118	-3097	-3109	-3110	-3098	ML	0.00	770.00	0.00
118	-3098	-3110	-3111	-3099	ML	0.00	770.00	0.00
118	-3099	-3111	-3112	-3100	ML	0.00	770.00	0.00
118	-3516	-3515	-2939	-2927	ML	0.00	770.00	0.00
118	-3101	-3113	-3114	-3102	ML	0.00	770.00	0.00
118	-3102	-3114	-3115	-3103	ML	0.00	770.00	0.00
118	-3518	-3517	-2915	-1505	ML	0.00	770.00	0.00
118	-3064	-3076	-3077	-3065	ML	0.00	770.00	0.00
118	-2966	-2978	-2979	-2967	ML	0.00	770.00	0.00
118	-1509	-2917	-2918	-1511	ML	0.00	770.00	0.00
118	-3055	-3067	-3068	-3056	ML	0.00	770.00	0.00
118	-3107	-3119	-3120	-3108	ML	0.00	770.00	0.00
118	-3057	-3069	-3070	-3058	ML	0.00	770.00	0.00
118	-2959	-2971	-2972	-2960	ML	0.00	770.00	0.00
118	-3500	-3499	-3119	-3107	ML	0.00	770.00	0.00
118	-2961	-2973	-2974	-2962	ML	0.00	770.00	0.00
118	-3036	-3048	-3049	-3037	ML	0.00	770.00	0.00
118	-3063	-3075	-3076	-3064	ML	0.00	770.00	0.00
118	-3014	-3026	-3027	-3015	ML	0.00	770.00	0.00
118	-3028	-3040	-3041	-3029	ML	0.00	770.00	0.00
118	-2940	-2952	-2953	-2941	ML	0.00	770.00	0.00
118	-3067	-3079	-3080	-3068	ML	0.00	770.00	0.00
118	-3018	-3030	-3031	-3019	ML	0.00	770.00	0.00
118	-2944	-2956	-2957	-2945	ML	0.00	770.00	0.00
118	-3045	-3057	-3058	-3046	ML	0.00	770.00	0.00
118	-3021	-3033	-3034	-3022	ML	0.00	770.00	0.00
118	-2923	-2935	-2936	-2924	ML	0.00	770.00	0.00
118	-2924	-2936	-2937	-2925	ML	0.00	770.00	0.00
118	-2925	-2937	-2938	-2926	ML	0.00	770.00	0.00
118	-3127	-3139	-3140	-3128	ML	0.00	770.00	0.00
118	-3026	-3038	-3039	-3027	ML	0.00	770.00	0.00
118	-3039	-3051	-3052	-3040	ML	0.00	770.00	0.00
118	-2977	-3412	-3411	-2978	ML	0.00	770.00	0.00
118	-3016	-3028	-3029	-3017	ML	0.00	770.00	0.00
118	-3030	-3042	-3043	-3031	ML	0.00	770.00	0.00
118	-3106	-3118	-1829	-1831	ML	0.00	770.00	0.00
118	-2958	-2970	-2971	-2959	ML	0.00	770.00	0.00
118	-2933	-2945	-2946	-2934	ML	0.00	770.00	0.00
118	-2935	-2947	-2948	-2936	ML	0.00	770.00	0.00
118	-3037	-3049	-3050	-3038	ML	0.00	770.00	0.00
118	-3502	-3501	-3095	-3083	ML	0.00	770.00	0.00
118	-3062	-3074	-3075	-3063	ML	0.00	770.00	0.00
118	-3051	-3063	-3064	-3052	ML	0.00	770.00	0.00
118	-3065	-3077	-3078	-3066	ML	0.00	770.00	0.00
118	-3040	-3052	-3053	-3041	ML	0.00	770.00	0.00
118	-3042	-3054	-3055	-3043	ML	0.00	770.00	0.00
118	-3069	-3081	-3082	-3070	ML	0.00	770.00	0.00
118	-3044	-3056	-3057	-3045	ML	0.00	770.00	0.00
118	-3413	-2988	-2989	-3412	ML	0.00	770.00	0.00
118	-3046	-3058	-1839	-1841	ML	0.00	770.00	0.00
118	-3047	-3059	-3060	-3048	ML	0.00	770.00	0.00
118	-2949	-2961	-2962	-2950	ML	0.00	770.00	0.00
118	-2926	-2938	-1857	-1859	ML	0.00	770.00	0.00
118	-3405	-2996	-2997	-3404	ML	0.00	770.00	0.00
118	-3025	-3037	-3038	-3026	ML	0.00	770.00	0.00
118	-3504	-3503	-3071	-3059	ML	0.00	770.00	0.00
118	-3066	-3078	-3079	-3067	ML	0.00	770.00	0.00
118	-3411	-2990	-2991	-3410	ML	0.00	770.00	0.00
118	-3073	-3085	-3086	-3074	ML	0.00	770.00	0.00
118	-3024	-3036	-3037	-3025	ML	0.00	770.00	0.00
118	-3033	-3045	-3046	-3034	ML	0.00	770.00	0.00
118	-3058	-3070	-1837	-1839	ML	0.00	770.00	0.00
118	-2972	-2984	-2985	-2973	ML	0.00	770.00	0.00
118	-3022	-3034	-1843	-1845	ML	0.00	770.00	0.00
118	-3512	-3511	-3414	-2975	ML	0.00	770.00	0.00
118	-2998	-3010	-1847	-1849	ML	0.00	770.00	0.00
118	-3023	-3035	-3036	-3024	ML	0.00	770.00	0.00
118	-3515	-3514	-2951	-2939	ML	0.00	770.00	0.00
118	-3517	-3516	-2927	-2915	ML	0.00	770.00	0.00
118	-2996	-3008	-3009	-2997	ML	0.00	770.00	0.00
118	-2957	-2969	-2970	-2958	ML	0.00	770.00	0.00
118	-3071	-3083	-3084	-3072	ML	0.00	770.00	0.00
118	-3514	-3513	-2963	-2951	ML	0.00	770.00	0.00
118	-3513	-3512	-2975	-2963	ML	0.00	770.00	0.00
118	-3048	-3060	-3061	-3049	ML	0.00	770.00	0.00
118	-3403	-2998	-1849	-3402	ML	0.00	770.00	0.00
118	-2970	-2982	-2983	-2971	ML	0.00	770.00	0.00
119	-3182	-3194	-3195	-3183	ML	0.00	770.00	0.00

Relazione di calcolo

119	-3322	-3334	-1793	-1795	ML	0.00	770.00	0.00
119	-3319	-3331	-3332	-3320	ML	0.00	770.00	0.00
119	-3344	-3356	-3357	-3345	ML	0.00	770.00	0.00
119	-3493	-3492	-3203	-3191	ML	0.00	770.00	0.00
119	-3321	-3333	-3334	-3322	ML	0.00	770.00	0.00
119	-3331	-3343	-3344	-3332	ML	0.00	770.00	0.00
119	-3171	-3183	-3184	-3172	ML	0.00	770.00	0.00
119	-3310	-3322	-1795	-1797	ML	0.00	770.00	0.00
119	-3311	-3323	-3324	-3312	ML	0.00	770.00	0.00
119	-3312	-3324	-3325	-3313	ML	0.00	770.00	0.00
119	-3280	-3292	-3293	-3281	ML	0.00	770.00	0.00
119	-3282	-3294	-3295	-3283	ML	0.00	770.00	0.00
119	-3340	-3352	-3353	-3341	ML	0.00	770.00	0.00
119	-3155	-3167	-3168	-3156	ML	0.00	770.00	0.00
119	-3330	-3342	-3343	-3331	ML	0.00	770.00	0.00
119	-3316	-3328	-3329	-3317	ML	0.00	770.00	0.00
119	-3192	-3204	-3205	-3193	ML	0.00	770.00	0.00
119	-3193	-3205	-3206	-3194	ML	0.00	770.00	0.00
119	-3292	-3304	-3305	-3293	ML	0.00	770.00	0.00
119	-3320	-3332	-3333	-3321	ML	0.00	770.00	0.00
119	-3296	-3308	-3309	-3297	ML	0.00	770.00	0.00
119	-3185	-3197	-3198	-3186	ML	0.00	770.00	0.00
119	-3285	-3297	-3298	-3286	ML	0.00	770.00	0.00
119	-3262	-3274	-1803	-1805	ML	0.00	770.00	0.00
119	-3214	-3226	-1811	-1813	ML	0.00	770.00	0.00
119	-3151	-3163	-3164	-3152	ML	0.00	770.00	0.00
119	-3180	-3192	-3193	-3181	ML	0.00	770.00	0.00
119	-3354	-1688	-1690	-3355	ML	0.00	770.00	0.00
119	-3353	-1686	-1688	-3354	ML	0.00	770.00	0.00
119	-3203	-3215	-3216	-3204	ML	0.00	770.00	0.00
119	-3204	-3216	-3217	-3205	ML	0.00	770.00	0.00
119	-3256	-3268	-3269	-3257	ML	0.00	770.00	0.00
119	-3181	-3193	-3194	-3182	ML	0.00	770.00	0.00
119	-3183	-3195	-3196	-3184	ML	0.00	770.00	0.00
119	-3309	-3321	-3322	-3310	ML	0.00	770.00	0.00
119	-3284	-3296	-3297	-3285	ML	0.00	770.00	0.00
119	-3212	-3224	-3225	-3213	ML	0.00	770.00	0.00
119	-3187	-3199	-3200	-3188	ML	0.00	770.00	0.00
119	-3313	-3325	-3326	-3314	ML	0.00	770.00	0.00
119	-3190	-3202	-1815	-1817	ML	0.00	770.00	0.00
119	-3154	-3166	-1821	-1823	ML	0.00	770.00	0.00
119	-3215	-3227	-3228	-3216	ML	0.00	770.00	0.00
119	-3315	-3327	-3328	-3316	ML	0.00	770.00	0.00
119	-3342	-3354	-3355	-3343	ML	0.00	770.00	0.00
119	-3217	-3229	-3230	-3218	ML	0.00	770.00	0.00
119	-3318	-3330	-3331	-3319	ML	0.00	770.00	0.00
119	-3219	-3231	-3232	-3220	ML	0.00	770.00	0.00
119	-3483	-3482	-3323	-3311	ML	0.00	770.00	0.00
119	-3220	-3232	-3233	-3221	ML	0.00	770.00	0.00
119	-3211	-3223	-3224	-3212	ML	0.00	770.00	0.00
119	-3162	-3174	-3175	-3163	ML	0.00	770.00	0.00
119	-3261	-3273	-3274	-3262	ML	0.00	770.00	0.00
119	-3201	-3213	-3214	-3202	ML	0.00	770.00	0.00
119	-3314	-3326	-3327	-3315	ML	0.00	770.00	0.00
119	-3277	-3289	-3290	-3278	ML	0.00	770.00	0.00
119	-3327	-3339	-3340	-3328	ML	0.00	770.00	0.00
119	-3329	-3341	-3342	-3330	ML	0.00	770.00	0.00
119	-3229	-3241	-3242	-3230	ML	0.00	770.00	0.00
119	-3179	-3191	-3192	-3180	ML	0.00	770.00	0.00
119	-3332	-3344	-3345	-3333	ML	0.00	770.00	0.00
119	-3496	-3495	-3167	-3155	ML	0.00	770.00	0.00
119	-3184	-3196	-3197	-3185	ML	0.00	770.00	0.00
119	-3337	-3349	-3350	-3338	ML	0.00	770.00	0.00
119	-3160	-3172	-3173	-3161	ML	0.00	770.00	0.00
119	-3213	-3225	-3226	-3214	ML	0.00	770.00	0.00
119	-3176	-3188	-3189	-3177	ML	0.00	770.00	0.00
119	-3338	-3350	-3351	-3339	ML	0.00	770.00	0.00
119	-3191	-3203	-3204	-3192	ML	0.00	770.00	0.00
119	-3291	-3303	-3304	-3292	ML	0.00	770.00	0.00
119	-3293	-3305	-3306	-3294	ML	0.00	770.00	0.00
119	-3243	-3255	-3256	-3244	ML	0.00	770.00	0.00
119	-3195	-3207	-3208	-3196	ML	0.00	770.00	0.00
119	-3346	-3358	-1789	-1791	ML	0.00	770.00	0.00
119	-3347	-1674	-1676	-3348	ML	0.00	770.00	0.00
119	-3173	-3185	-3186	-3174	ML	0.00	770.00	0.00
119	-3336	-3348	-3349	-3337	ML	0.00	770.00	0.00
119	-3339	-3351	-3352	-3340	ML	0.00	770.00	0.00
119	-3153	-3165	-3166	-3154	ML	0.00	770.00	0.00
119	-3252	-3264	-3265	-3253	ML	0.00	770.00	0.00

Relazione di calcolo

119	-3253	-3265	-3266	-3254	ML	0.00	770.00	0.00
119	-3254	-3266	-3267	-3255	ML	0.00	770.00	0.00
119	-3356	-1692	-1694	-3357	ML	0.00	770.00	0.00
119	-3156	-3168	-3169	-3157	ML	0.00	770.00	0.00
119	-3333	-3345	-3346	-3334	ML	0.00	770.00	0.00
119	-3208	-3220	-3221	-3209	ML	0.00	770.00	0.00
119	-3210	-3222	-3223	-3211	ML	0.00	770.00	0.00
119	-3260	-3272	-3273	-3261	ML	0.00	770.00	0.00
119	-3175	-3187	-3188	-3176	ML	0.00	770.00	0.00
119	-3163	-3175	-3176	-3164	ML	0.00	770.00	0.00
119	-3164	-3176	-3177	-3165	ML	0.00	770.00	0.00
119	-3165	-3177	-3178	-3166	ML	0.00	770.00	0.00
119	-3166	-3178	-1819	-1821	ML	0.00	770.00	0.00
119	-3241	-3253	-3254	-3242	ML	0.00	770.00	0.00
119	-3268	-3280	-3281	-3269	ML	0.00	770.00	0.00
119	-3481	-3480	-3347	-3335	ML	0.00	770.00	0.00
119	-3270	-3282	-3283	-3271	ML	0.00	770.00	0.00
119	-3169	-3181	-3182	-3170	ML	0.00	770.00	0.00
119	-3271	-3283	-3284	-3272	ML	0.00	770.00	0.00
119	-3485	-3484	-3299	-3287	ML	0.00	770.00	0.00
119	-3489	-3488	-3251	-3239	ML	0.00	770.00	0.00
119	-3177	-3189	-3190	-3178	ML	0.00	770.00	0.00
119	-3491	-3490	-3227	-3215	ML	0.00	770.00	0.00
119	-3278	-3290	-3291	-3279	ML	0.00	770.00	0.00
119	-3492	-3491	-3215	-3203	ML	0.00	770.00	0.00
119	-3279	-3291	-3292	-3280	ML	0.00	770.00	0.00
119	-3495	-3494	-3179	-3167	ML	0.00	770.00	0.00
119	-3281	-3293	-3294	-3282	ML	0.00	770.00	0.00
119	-3232	-3244	-3245	-3233	ML	0.00	770.00	0.00
119	-3283	-3295	-3296	-3284	ML	0.00	770.00	0.00
119	-3234	-3246	-3247	-3235	ML	0.00	770.00	0.00
119	-3186	-3198	-3199	-3187	ML	0.00	770.00	0.00
119	-3236	-3248	-3249	-3237	ML	0.00	770.00	0.00
119	-3188	-3200	-3201	-3189	ML	0.00	770.00	0.00
119	-3288	-3300	-3301	-3289	ML	0.00	770.00	0.00
119	-3189	-3201	-3202	-3190	ML	0.00	770.00	0.00
119	-3290	-3302	-3303	-3291	ML	0.00	770.00	0.00
119	-3317	-3329	-3330	-3318	ML	0.00	770.00	0.00
119	-3343	-3355	-3356	-3344	ML	0.00	770.00	0.00
119	-3294	-3306	-3307	-3295	ML	0.00	770.00	0.00
119	-3194	-3206	-3207	-3195	ML	0.00	770.00	0.00
119	-3295	-3307	-3308	-3296	ML	0.00	770.00	0.00
119	-3197	-3209	-3210	-3198	ML	0.00	770.00	0.00
119	-3348	-1676	-1678	-3349	ML	0.00	770.00	0.00
119	-3174	-3186	-3187	-3175	ML	0.00	770.00	0.00
119	-3250	-3262	-1805	-1807	ML	0.00	770.00	0.00
119	-3300	-3312	-3313	-3301	ML	0.00	770.00	0.00
119	-3202	-3214	-1813	-1815	ML	0.00	770.00	0.00
119	-3303	-3315	-3316	-3304	ML	0.00	770.00	0.00
119	-3304	-3316	-3317	-3305	ML	0.00	770.00	0.00
119	-3305	-3317	-3318	-3306	ML	0.00	770.00	0.00
119	-3206	-3218	-3219	-3207	ML	0.00	770.00	0.00
119	-3307	-3319	-3320	-3308	ML	0.00	770.00	0.00
119	-3308	-3320	-3321	-3309	ML	0.00	770.00	0.00
119	-3358	-1696	14	-1789	ML	0.00	770.00	0.00
119	-3209	-3221	-3222	-3210	ML	0.00	770.00	0.00
119	-3159	-3171	-3172	-3160	ML	0.00	770.00	0.00
119	-3286	-3298	-1799	-1801	ML	0.00	770.00	0.00
119	-3161	-3173	-3174	-3162	ML	0.00	770.00	0.00
119	-3237	-3249	-3250	-3238	ML	0.00	770.00	0.00
119	-3263	-3275	-3276	-3264	ML	0.00	770.00	0.00
119	-3264	-3276	-3277	-3265	ML	0.00	770.00	0.00
119	-3167	-3179	-3180	-3168	ML	0.00	770.00	0.00
119	-3218	-3230	-3231	-3219	ML	0.00	770.00	0.00
119	-3482	-3481	-3335	-3323	ML	0.00	770.00	0.00
119	-3245	-3257	-3258	-3246	ML	0.00	770.00	0.00
119	-3221	-3233	-3234	-3222	ML	0.00	770.00	0.00
119	-3323	-3335	-3336	-3324	ML	0.00	770.00	0.00
119	-3223	-3235	-3236	-3224	ML	0.00	770.00	0.00
119	-3324	-3336	-3337	-3325	ML	0.00	770.00	0.00
119	-3325	-3337	-3338	-3326	ML	0.00	770.00	0.00
119	-3328	-3340	-3341	-3329	ML	0.00	770.00	0.00
119	-3228	-3240	-3241	-3229	ML	0.00	770.00	0.00
119	-3227	-3239	-3240	-3228	ML	0.00	770.00	0.00
119	-3355	-1690	-1692	-3356	ML	0.00	770.00	0.00
119	-3230	-3242	-3243	-3231	ML	0.00	770.00	0.00
119	-3231	-3243	-3244	-3232	ML	0.00	770.00	0.00
119	-3158	-3170	-3171	-3159	ML	0.00	770.00	0.00
119	-3334	-3346	-1791	-1793	ML	0.00	770.00	0.00

Relazione di calcolo

119	-3259	-3271	-3272	-3260	ML	0.00	770.00	0.00
119	-3335	-3347	-3348	-3336	ML	0.00	770.00	0.00
119	-3235	-3247	-3248	-3236	ML	0.00	770.00	0.00
119	-3238	-3250	-1807	-1809	ML	0.00	770.00	0.00
119	-3287	-3299	-3300	-3288	ML	0.00	770.00	0.00
119	-3239	-3251	-3252	-3240	ML	0.00	770.00	0.00
119	-3341	-3353	-3354	-3342	ML	0.00	770.00	0.00
119	-3216	-3228	-3229	-3217	ML	0.00	770.00	0.00
119	-3242	-3254	-3255	-3243	ML	0.00	770.00	0.00
119	-3269	-3281	-3282	-3270	ML	0.00	770.00	0.00
119	-3345	-3357	-3358	-3346	ML	0.00	770.00	0.00
119	-3207	-3219	-3220	-3208	ML	0.00	770.00	0.00
119	-3246	-3258	-3259	-3247	ML	0.00	770.00	0.00
119	-3247	-3259	-3260	-3248	ML	0.00	770.00	0.00
119	-3248	-3260	-3261	-3249	ML	0.00	770.00	0.00
119	-3349	-1678	-1680	-3350	ML	0.00	770.00	0.00
119	-3150	-3162	-3163	-3151	ML	0.00	770.00	0.00
119	-3351	-1682	-1684	-3352	ML	0.00	770.00	0.00
119	-3152	-3164	-3165	-3153	ML	0.00	770.00	0.00
119	-3352	-1684	-1686	-3353	ML	0.00	770.00	0.00
119	-3240	-3252	-3253	-3241	ML	0.00	770.00	0.00
119	-3266	-3278	-3279	-3267	ML	0.00	770.00	0.00
119	-3205	-3217	-3218	-3206	ML	0.00	770.00	0.00
119	-3357	-1694	-1696	-3358	ML	0.00	770.00	0.00
119	-3168	-3180	-3181	-3169	ML	0.00	770.00	0.00
119	-3257	-3269	-3270	-3258	ML	0.00	770.00	0.00
119	-3258	-3270	-3271	-3259	ML	0.00	770.00	0.00
119	-3172	-3184	-3185	-3173	ML	0.00	770.00	0.00
119	-3273	-3285	-3286	-3274	ML	0.00	770.00	0.00
119	-3487	-3486	-3275	-3263	ML	0.00	770.00	0.00
119	-3488	-3487	-3263	-3251	ML	0.00	770.00	0.00
119	-3275	-3287	-3288	-3276	ML	0.00	770.00	0.00
119	-3265	-3277	-3278	-3266	ML	0.00	770.00	0.00
119	-3178	-3190	-1817	-1819	ML	0.00	770.00	0.00
119	-3302	-3314	-3315	-3303	ML	0.00	770.00	0.00
119	-3267	-3279	-3280	-3268	ML	0.00	770.00	0.00
119	-3480	-3479	-1674	-3347	ML	0.00	770.00	0.00
119	-3306	-3318	-3319	-3307	ML	0.00	770.00	0.00
119	-3157	-3169	-3170	-3158	ML	0.00	770.00	0.00
119	-3486	-3485	-3287	-3275	ML	0.00	770.00	0.00
119	-3196	-3208	-3209	-3197	ML	0.00	770.00	0.00
119	-3297	-3309	-3310	-3298	ML	0.00	770.00	0.00
119	-3199	-3211	-3212	-3200	ML	0.00	770.00	0.00
119	-3200	-3212	-3213	-3201	ML	0.00	770.00	0.00
119	-3276	-3288	-3289	-3277	ML	0.00	770.00	0.00
119	-3289	-3301	-3302	-3290	ML	0.00	770.00	0.00
119	-3226	-3238	-1809	-1811	ML	0.00	770.00	0.00
119	-3490	-3489	-3239	-3227	ML	0.00	770.00	0.00
119	-3494	-3493	-3191	-3179	ML	0.00	770.00	0.00
119	-3222	-3234	-3235	-3223	ML	0.00	770.00	0.00
119	-3244	-3256	-3257	-3245	ML	0.00	770.00	0.00
119	-3233	-3245	-3246	-3234	ML	0.00	770.00	0.00
119	-3301	-3313	-3314	-3302	ML	0.00	770.00	0.00
119	-3484	-3483	-3311	-3299	ML	0.00	770.00	0.00
119	-3272	-3284	-3285	-3273	ML	0.00	770.00	0.00
119	-3198	-3210	-3211	-3199	ML	0.00	770.00	0.00
119	-3224	-3236	-3237	-3225	ML	0.00	770.00	0.00
119	-3350	-1680	-1682	-3351	ML	0.00	770.00	0.00
119	-3225	-3237	-3238	-3226	ML	0.00	770.00	0.00
119	-3274	-3286	-1801	-1803	ML	0.00	770.00	0.00
119	-3251	-3263	-3264	-3252	ML	0.00	770.00	0.00
119	-3170	-3182	-3183	-3171	ML	0.00	770.00	0.00
119	-3255	-3267	-3268	-3256	ML	0.00	770.00	0.00
119	-3326	-3338	-3339	-3327	ML	0.00	770.00	0.00
119	-3299	-3311	-3312	-3300	ML	0.00	770.00	0.00
119	-3249	-3261	-3262	-3250	ML	0.00	770.00	0.00
119	-3298	-3310	-1797	-1799	ML	0.00	770.00	0.00
404	-1937	-1973	-1974	-1938	ML	0.00	-2000.00	0.00
404	-1759	-1761	-1933	-1897	ML	0.00	-2000.00	0.00
404	-1897	-1933	-1934	-1898	ML	0.00	-2000.00	0.00
404	-1985	-2021	-2022	-1986	ML	0.00	-2000.00	0.00
404	-1986	-2022	-2023	-1987	ML	0.00	-2000.00	0.00
404	-1987	-2023	-2024	-1988	ML	0.00	-2000.00	0.00
404	-1988	-2024	-2025	-1989	ML	0.00	-2000.00	0.00
404	-1908	-1944	-1945	-1909	ML	0.00	-2000.00	0.00
404	-1989	-2025	-2026	-1990	ML	0.00	-2000.00	0.00
404	-1990	-2026	-2027	-1991	ML	0.00	-2000.00	0.00
404	-1898	-1934	-1935	-1899	ML	0.00	-2000.00	0.00
404	-1899	-1935	-1936	-1900	ML	0.00	-2000.00	0.00

Relazione di calcolo

404	-1900	-1936	-1937	-1901	ML	0.00	-2000.00	0.00
404	-1901	-1937	-1938	-1902	ML	0.00	-2000.00	0.00
404	-1902	-1938	-1939	-1903	ML	0.00	-2000.00	0.00
404	-1903	-1939	-1940	-1904	ML	0.00	-2000.00	0.00
404	-1904	-1940	-1941	-1905	ML	0.00	-2000.00	0.00
404	-1905	-1941	-1942	-1906	ML	0.00	-2000.00	0.00
404	-1906	-1942	-1943	-1907	ML	0.00	-2000.00	0.00
404	-1907	-1943	-1944	-1908	ML	0.00	-2000.00	0.00
404	-1974	-2010	-2011	-1975	ML	0.00	-2000.00	0.00
404	-1975	-2011	-2012	-1976	ML	0.00	-2000.00	0.00
404	-1976	-2012	-2013	-1977	ML	0.00	-2000.00	0.00
404	-1977	-2013	-2014	-1978	ML	0.00	-2000.00	0.00
404	-1978	-2014	-2015	-1979	ML	0.00	-2000.00	0.00
404	-1979	-2015	-2016	-1980	ML	0.00	-2000.00	0.00
404	-1980	-2016	-2017	-1981	ML	0.00	-2000.00	0.00
404	-1981	-2017	-2018	-1982	ML	0.00	-2000.00	0.00
404	-1982	-2018	-2019	-1983	ML	0.00	-2000.00	0.00
404	-1983	-2019	-2020	-1984	ML	0.00	-2000.00	0.00
404	-1984	-2020	-2021	-1985	ML	0.00	-2000.00	0.00
404	-1932	-1968	-1762	-1760	ML	0.00	-2000.00	0.00
404	-1761	-1763	-1969	-1933	ML	0.00	-2000.00	0.00
404	-1933	-1969	-1970	-1934	ML	0.00	-2000.00	0.00
404	-1934	-1970	-1971	-1935	ML	0.00	-2000.00	0.00
404	-1935	-1971	-1972	-1936	ML	0.00	-2000.00	0.00
404	-1936	-1972	-1973	-1937	ML	0.00	-2000.00	0.00
404	-1773	-1775	-2185	-2149	ML	0.00	-2000.00	0.00
404	-1938	-1974	-1975	-1939	ML	0.00	-2000.00	0.00
404	-1939	-1975	-1976	-1940	ML	0.00	-2000.00	0.00
404	-1940	-1976	-1977	-1941	ML	0.00	-2000.00	0.00
404	-1941	-1977	-1978	-1942	ML	0.00	-2000.00	0.00
404	-1942	-1978	-1979	-1943	ML	0.00	-2000.00	0.00
404	-1943	-1979	-1980	-1944	ML	0.00	-2000.00	0.00
404	-1944	-1980	-1981	-1945	ML	0.00	-2000.00	0.00
404	-1945	-1981	-1982	-1946	ML	0.00	-2000.00	0.00
404	-1946	-1982	-1983	-1947	ML	0.00	-2000.00	0.00
404	-1947	-1983	-1984	-1948	ML	0.00	-2000.00	0.00
404	-1948	-1984	-1985	-1949	ML	0.00	-2000.00	0.00
404	-1949	-1985	-1986	-1950	ML	0.00	-2000.00	0.00
404	-1950	-1986	-1987	-1951	ML	0.00	-2000.00	0.00
404	-1951	-1987	-1988	-1952	ML	0.00	-2000.00	0.00
404	-1952	-1988	-1989	-1953	ML	0.00	-2000.00	0.00
404	-1953	-1989	-1990	-1954	ML	0.00	-2000.00	0.00
404	-1954	-1990	-1991	-1955	ML	0.00	-2000.00	0.00
404	-1955	-1991	-1992	-1956	ML	0.00	-2000.00	0.00
404	-1956	-1992	-1993	-1957	ML	0.00	-2000.00	0.00
404	-1957	-1993	-1994	-1958	ML	0.00	-2000.00	0.00
404	-1958	-1994	-1995	-1959	ML	0.00	-2000.00	0.00
404	-1959	-1995	-1996	-1960	ML	0.00	-2000.00	0.00
404	-1960	-1996	-1997	-1961	ML	0.00	-2000.00	0.00
404	-1961	-1997	-1998	-1962	ML	0.00	-2000.00	0.00
404	-1962	-1998	-1999	-1963	ML	0.00	-2000.00	0.00
404	-1963	-1999	-3389	-3388	ML	0.00	-2000.00	0.00
404	-1964	-2000	-2001	-1965	ML	0.00	-2000.00	0.00
404	-1965	-2001	-2002	-1966	ML	0.00	-2000.00	0.00
404	-1966	-2002	-2003	-1967	ML	0.00	-2000.00	0.00
404	-1967	-2003	-2004	-1968	ML	0.00	-2000.00	0.00
404	-1968	-2004	-1764	-1762	ML	0.00	-2000.00	0.00
404	-1763	-1765	-2005	-1969	ML	0.00	-2000.00	0.00
404	-1969	-2005	-2006	-1970	ML	0.00	-2000.00	0.00
404	-1970	-2006	-2007	-1971	ML	0.00	-2000.00	0.00
404	-1971	-2007	-2008	-1972	ML	0.00	-2000.00	0.00
404	-1972	-2008	-2009	-1973	ML	0.00	-2000.00	0.00
404	-1973	-2009	-2010	-1974	ML	0.00	-2000.00	0.00
404	-2185	-2221	-2222	-2186	ML	0.00	-2000.00	0.00
404	-2186	-2222	-2223	-2187	ML	0.00	-2000.00	0.00
404	-2187	-2223	-2224	-2188	ML	0.00	-2000.00	0.00
404	-2188	-2224	-2225	-2189	ML	0.00	-2000.00	0.00
404	-2189	-2225	-2226	-2190	ML	0.00	-2000.00	0.00
404	-2190	-2226	-2227	-2191	ML	0.00	-2000.00	0.00
404	-2191	-2227	-2228	-2192	ML	0.00	-2000.00	0.00
404	-2192	-2228	-2229	-2193	ML	0.00	-2000.00	0.00
404	-2193	-2229	-2230	-2194	ML	0.00	-2000.00	0.00
404	-2194	-2230	-2231	-2195	ML	0.00	-2000.00	0.00
404	-2195	-2231	-2232	-2196	ML	0.00	-2000.00	0.00
404	-2196	-2232	-2233	-2197	ML	0.00	-2000.00	0.00
404	-2197	-2233	-2234	-2198	ML	0.00	-2000.00	0.00
404	-2198	-2234	-2235	-2199	ML	0.00	-2000.00	0.00
404	-2199	-2235	-2236	-2200	ML	0.00	-2000.00	0.00
404	-2200	-2236	-2237	-2201	ML	0.00	-2000.00	0.00

Relazione di calcolo

404	-2201	-2237	-2238	-2202	ML	0.00	-2000.00	0.00
404	-1991	-2027	-2028	-1992	ML	0.00	-2000.00	0.00
404	-1992	-2028	-2029	-1993	ML	0.00	-2000.00	0.00
404	-1993	-2029	-2030	-1994	ML	0.00	-2000.00	0.00
404	-1994	-2030	-2031	-1995	ML	0.00	-2000.00	0.00
404	-1995	-2031	-2032	-1996	ML	0.00	-2000.00	0.00
404	-1996	-2032	-2033	-1997	ML	0.00	-2000.00	0.00
404	-1997	-2033	-2034	-1998	ML	0.00	-2000.00	0.00
404	-1998	-2034	-2035	-1999	ML	0.00	-2000.00	0.00
404	-1999	-2035	-3390	-3389	ML	0.00	-2000.00	0.00
404	-2000	-2036	-2037	-2001	ML	0.00	-2000.00	0.00
404	-2001	-2037	-2038	-2002	ML	0.00	-2000.00	0.00
404	-2002	-2038	-2039	-2003	ML	0.00	-2000.00	0.00
404	-2003	-2039	-2040	-2004	ML	0.00	-2000.00	0.00
404	-2004	-2040	-1766	-1764	ML	0.00	-2000.00	0.00
404	-1765	-1767	-2041	-2005	ML	0.00	-2000.00	0.00
404	-2005	-2041	-2042	-2006	ML	0.00	-2000.00	0.00
404	-2006	-2042	-2043	-2007	ML	0.00	-2000.00	0.00
404	-2007	-2043	-2044	-2008	ML	0.00	-2000.00	0.00
404	-2008	-2044	-2045	-2009	ML	0.00	-2000.00	0.00
404	-2009	-2045	-2046	-2010	ML	0.00	-2000.00	0.00
404	-2010	-2046	-2047	-2011	ML	0.00	-2000.00	0.00
404	-2011	-2047	-2048	-2012	ML	0.00	-2000.00	0.00
404	-2012	-2048	-2049	-2013	ML	0.00	-2000.00	0.00
404	-2013	-2049	-2050	-2014	ML	0.00	-2000.00	0.00
404	-1909	-1945	-1946	-1910	ML	0.00	-2000.00	0.00
404	-1910	-1946	-1947	-1911	ML	0.00	-2000.00	0.00
404	-1911	-1947	-1948	-1912	ML	0.00	-2000.00	0.00
404	-1912	-1948	-1949	-1913	ML	0.00	-2000.00	0.00
404	-1913	-1949	-1950	-1914	ML	0.00	-2000.00	0.00
404	-1914	-1950	-1951	-1915	ML	0.00	-2000.00	0.00
404	-1915	-1951	-1952	-1916	ML	0.00	-2000.00	0.00
404	-1916	-1952	-1953	-1917	ML	0.00	-2000.00	0.00
404	-1917	-1953	-1954	-1918	ML	0.00	-2000.00	0.00
404	-1918	-1954	-1955	-1919	ML	0.00	-2000.00	0.00
404	-1919	-1955	-1956	-1920	ML	0.00	-2000.00	0.00
404	-1920	-1956	-1957	-1921	ML	0.00	-2000.00	0.00
404	-1921	-1957	-1958	-1922	ML	0.00	-2000.00	0.00
404	-1922	-1958	-1959	-1923	ML	0.00	-2000.00	0.00
404	-1923	-1959	-1960	-1924	ML	0.00	-2000.00	0.00
404	-1924	-1960	-1961	-1925	ML	0.00	-2000.00	0.00
404	-1925	-1961	-1962	-1926	ML	0.00	-2000.00	0.00
404	-1926	-1962	-1963	-1927	ML	0.00	-2000.00	0.00
404	-1927	-1963	-3388	-3387	ML	0.00	-2000.00	0.00
404	-1928	-1964	-1965	-1929	ML	0.00	-2000.00	0.00
404	-1929	-1965	-1966	-1930	ML	0.00	-2000.00	0.00
404	-1930	-1966	-1967	-1931	ML	0.00	-2000.00	0.00
404	-1931	-1967	-1968	-1932	ML	0.00	-2000.00	0.00
404	-2248	-2284	-2285	-2249	ML	0.00	-2000.00	0.00
404	-2249	-2285	-2286	-2250	ML	0.00	-2000.00	0.00
404	-2250	-2286	-2287	-2251	ML	0.00	-2000.00	0.00
404	-2251	-2287	-3397	-3396	ML	0.00	-2000.00	0.00
404	-2252	-2288	-2289	-2253	ML	0.00	-2000.00	0.00
404	-2253	-2289	-2290	-2254	ML	0.00	-2000.00	0.00
404	-2254	-2290	-2291	-2255	ML	0.00	-2000.00	0.00
404	-2255	-2291	-2292	-2256	ML	0.00	-2000.00	0.00
404	-2256	-2292	-1780	-1778	ML	0.00	-2000.00	0.00
404	-1779	-1781	-2293	-2257	ML	0.00	-2000.00	0.00
404	-2257	-2293	-2294	-2258	ML	0.00	-2000.00	0.00
404	-2258	-2294	-2295	-2259	ML	0.00	-2000.00	0.00
404	-2259	-2295	-2296	-2260	ML	0.00	-2000.00	0.00
404	-2260	-2296	-2297	-2261	ML	0.00	-2000.00	0.00
404	-2261	-2297	-2298	-2262	ML	0.00	-2000.00	0.00
404	-2262	-2298	-2299	-2263	ML	0.00	-2000.00	0.00
404	-2263	-2299	-2300	-2264	ML	0.00	-2000.00	0.00
404	-2264	-2300	-2301	-2265	ML	0.00	-2000.00	0.00
404	-2265	-2301	-2302	-2266	ML	0.00	-2000.00	0.00
404	-2266	-2302	-2303	-2267	ML	0.00	-2000.00	0.00
404	-2267	-2303	-2304	-2268	ML	0.00	-2000.00	0.00
404	-2268	-2304	-2305	-2269	ML	0.00	-2000.00	0.00
404	-2269	-2305	-2306	-2270	ML	0.00	-2000.00	0.00
404	-2270	-2306	-2307	-2271	ML	0.00	-2000.00	0.00
404	-2271	-2307	-2308	-2272	ML	0.00	-2000.00	0.00
404	-2272	-2308	-2309	-2273	ML	0.00	-2000.00	0.00
404	-2273	-2309	-2310	-2274	ML	0.00	-2000.00	0.00
404	-2274	-2310	-2311	-2275	ML	0.00	-2000.00	0.00
404	-2275	-2311	-2312	-2276	ML	0.00	-2000.00	0.00
404	-2276	-2312	-2313	-2277	ML	0.00	-2000.00	0.00
404	-2277	-2313	-2314	-2278	ML	0.00	-2000.00	0.00

Relazione di calcolo

404	-2278	-2314	-2315	-2279	ML	0.00	-2000.00	0.00
404	-2279	-2315	-2316	-2280	ML	0.00	-2000.00	0.00
404	-2280	-2316	-2317	-2281	ML	0.00	-2000.00	0.00
404	-2281	-2317	-2318	-2282	ML	0.00	-2000.00	0.00
404	-2282	-2318	-2319	-2283	ML	0.00	-2000.00	0.00
404	-2283	-2319	-2320	-2284	ML	0.00	-2000.00	0.00
404	-2284	-2320	-2321	-2285	ML	0.00	-2000.00	0.00
404	-2285	-2321	-2322	-2286	ML	0.00	-2000.00	0.00
404	-2286	-2322	-2323	-2287	ML	0.00	-2000.00	0.00
404	-2287	-2323	-3398	-3397	ML	0.00	-2000.00	0.00
404	-2288	-2324	-2325	-2289	ML	0.00	-2000.00	0.00
404	-2289	-2325	-2326	-2290	ML	0.00	-2000.00	0.00
404	-2290	-2326	-2327	-2291	ML	0.00	-2000.00	0.00
404	-2291	-2327	-2328	-2292	ML	0.00	-2000.00	0.00
404	-2292	-2328	-1782	-1780	ML	0.00	-2000.00	0.00
404	-1781	-1783	-2329	-2293	ML	0.00	-2000.00	0.00
404	-2293	-2329	-2330	-2294	ML	0.00	-2000.00	0.00
404	-2294	-2330	-2331	-2295	ML	0.00	-2000.00	0.00
404	-2295	-2331	-2332	-2296	ML	0.00	-2000.00	0.00
404	-2296	-2332	-2333	-2297	ML	0.00	-2000.00	0.00
404	-2297	-2333	-2334	-2298	ML	0.00	-2000.00	0.00
404	-2298	-2334	-2335	-2299	ML	0.00	-2000.00	0.00
404	-2299	-2335	-2336	-2300	ML	0.00	-2000.00	0.00
404	-2300	-2336	-2337	-2301	ML	0.00	-2000.00	0.00
404	-2301	-2337	-2338	-2302	ML	0.00	-2000.00	0.00
404	-2302	-2338	-2339	-2303	ML	0.00	-2000.00	0.00
404	-2303	-2339	-2340	-2304	ML	0.00	-2000.00	0.00
404	-2304	-2340	-2341	-2305	ML	0.00	-2000.00	0.00
404	-2305	-2341	-2342	-2306	ML	0.00	-2000.00	0.00
404	-2306	-2342	-2343	-2307	ML	0.00	-2000.00	0.00
404	-2307	-2343	-2344	-2308	ML	0.00	-2000.00	0.00
404	-2308	-2344	-2345	-2309	ML	0.00	-2000.00	0.00
404	-2309	-2345	-2346	-2310	ML	0.00	-2000.00	0.00
404	-2310	-2346	-2347	-2311	ML	0.00	-2000.00	0.00
404	-2311	-2347	-2348	-2312	ML	0.00	-2000.00	0.00
404	-2312	-2348	-2349	-2313	ML	0.00	-2000.00	0.00
404	-2313	-2349	-2350	-2314	ML	0.00	-2000.00	0.00
404	-2314	-2350	-2351	-2315	ML	0.00	-2000.00	0.00
404	-2315	-2351	-2352	-2316	ML	0.00	-2000.00	0.00
404	-2316	-2352	-2353	-2317	ML	0.00	-2000.00	0.00
404	-2317	-2353	-2354	-2318	ML	0.00	-2000.00	0.00
404	-2318	-2354	-2355	-2319	ML	0.00	-2000.00	0.00
404	-2319	-2355	-2356	-2320	ML	0.00	-2000.00	0.00
404	-2320	-2356	-2357	-2321	ML	0.00	-2000.00	0.00
404	-2321	-2357	-2358	-2322	ML	0.00	-2000.00	0.00
404	-2322	-2358	-2359	-2323	ML	0.00	-2000.00	0.00
404	-2323	-2359	-3399	-3398	ML	0.00	-2000.00	0.00
404	-2324	-2360	-2361	-2325	ML	0.00	-2000.00	0.00
404	-2325	-2361	-2362	-2326	ML	0.00	-2000.00	0.00
404	-2326	-2362	-2363	-2327	ML	0.00	-2000.00	0.00
404	-2327	-2363	-2364	-2328	ML	0.00	-2000.00	0.00
404	-2328	-2364	-1784	-1782	ML	0.00	-2000.00	0.00
404	-1783	-1785	-2365	-2329	ML	0.00	-2000.00	0.00
404	-2329	-2365	-2366	-2330	ML	0.00	-2000.00	0.00
404	-2330	-2366	-2367	-2331	ML	0.00	-2000.00	0.00
404	-2331	-2367	-2368	-2332	ML	0.00	-2000.00	0.00
404	-2332	-2368	-2369	-2333	ML	0.00	-2000.00	0.00
404	-2333	-2369	-2370	-2334	ML	0.00	-2000.00	0.00
404	-2334	-2370	-2371	-2335	ML	0.00	-2000.00	0.00
404	-2335	-2371	-2372	-2336	ML	0.00	-2000.00	0.00
404	-2336	-2372	-2373	-2337	ML	0.00	-2000.00	0.00
404	-2337	-2373	-2374	-2338	ML	0.00	-2000.00	0.00
404	-2338	-2374	-2375	-2339	ML	0.00	-2000.00	0.00
404	-2339	-2375	-2376	-2340	ML	0.00	-2000.00	0.00
404	-2340	-2376	-2377	-2341	ML	0.00	-2000.00	0.00
404	-2341	-2377	-2378	-2342	ML	0.00	-2000.00	0.00
404	-2342	-2378	-2379	-2343	ML	0.00	-2000.00	0.00
404	-2343	-2379	-2380	-2344	ML	0.00	-2000.00	0.00
404	-2344	-2380	-2381	-2345	ML	0.00	-2000.00	0.00
404	-2345	-2381	-2382	-2346	ML	0.00	-2000.00	0.00
404	-2346	-2382	-2383	-2347	ML	0.00	-2000.00	0.00
404	-2347	-2383	-2384	-2348	ML	0.00	-2000.00	0.00
404	-2348	-2384	-2385	-2349	ML	0.00	-2000.00	0.00
404	-2349	-2385	-2386	-2350	ML	0.00	-2000.00	0.00
404	-2350	-2386	-2387	-2351	ML	0.00	-2000.00	0.00
404	-2351	-2387	-2388	-2352	ML	0.00	-2000.00	0.00
404	-2352	-2388	-2389	-2353	ML	0.00	-2000.00	0.00
404	-2353	-2389	-2390	-2354	ML	0.00	-2000.00	0.00
404	-2354	-2390	-2391	-2355	ML	0.00	-2000.00	0.00

Relazione di calcolo

404	-2355	-2391	-2392	-2356	ML	0.00	-2000.00	0.00
404	-2356	-2392	-2393	-2357	ML	0.00	-2000.00	0.00
404	-2357	-2393	-2394	-2358	ML	0.00	-2000.00	0.00
404	-2358	-2394	-2395	-2359	ML	0.00	-2000.00	0.00
404	-2359	-2395	-3400	-3399	ML	0.00	-2000.00	0.00
404	-2360	-2396	-2397	-2361	ML	0.00	-2000.00	0.00
404	-2361	-2397	-2398	-2362	ML	0.00	-2000.00	0.00
404	-2362	-2398	-2399	-2363	ML	0.00	-2000.00	0.00
404	-2363	-2399	-2400	-2364	ML	0.00	-2000.00	0.00
404	-2364	-2400	-1786	-1784	ML	0.00	-2000.00	0.00
404	-1785	-1787	-2401	-2365	ML	0.00	-2000.00	0.00
404	-2365	-2401	-2402	-2366	ML	0.00	-2000.00	0.00
404	-2366	-2402	-2403	-2367	ML	0.00	-2000.00	0.00
404	-2367	-2403	-2404	-2368	ML	0.00	-2000.00	0.00
404	-2368	-2404	-2405	-2369	ML	0.00	-2000.00	0.00
404	-2369	-2405	-2406	-2370	ML	0.00	-2000.00	0.00
404	-2370	-2406	-2407	-2371	ML	0.00	-2000.00	0.00
404	-2371	-2407	-2408	-2372	ML	0.00	-2000.00	0.00
404	-2372	-2408	-2409	-2373	ML	0.00	-2000.00	0.00
404	-2373	-2409	-2410	-2374	ML	0.00	-2000.00	0.00
404	-2374	-2410	-2411	-2375	ML	0.00	-2000.00	0.00
404	-2375	-2411	-2412	-2376	ML	0.00	-2000.00	0.00
404	-2376	-2412	-2413	-2377	ML	0.00	-2000.00	0.00
404	-2377	-2413	-2414	-2378	ML	0.00	-2000.00	0.00
404	-2378	-2414	-2415	-2379	ML	0.00	-2000.00	0.00
404	-2379	-2415	-2416	-2380	ML	0.00	-2000.00	0.00
404	-2380	-2416	-2417	-2381	ML	0.00	-2000.00	0.00
404	-2381	-2417	-2418	-2382	ML	0.00	-2000.00	0.00
404	-2382	-2418	-2419	-2383	ML	0.00	-2000.00	0.00
404	-2383	-2419	-2420	-2384	ML	0.00	-2000.00	0.00
404	-2384	-2420	-2421	-2385	ML	0.00	-2000.00	0.00
404	-2385	-2421	-2422	-2386	ML	0.00	-2000.00	0.00
404	-2386	-2422	-2423	-2387	ML	0.00	-2000.00	0.00
404	-2387	-2423	-2424	-2388	ML	0.00	-2000.00	0.00
404	-2388	-2424	-2425	-2389	ML	0.00	-2000.00	0.00
404	-2389	-2425	-2426	-2390	ML	0.00	-2000.00	0.00
404	-2390	-2426	-2427	-2391	ML	0.00	-2000.00	0.00
404	-2391	-2427	-2428	-2392	ML	0.00	-2000.00	0.00
404	-2392	-2428	-2429	-2393	ML	0.00	-2000.00	0.00
404	-2393	-2429	-2430	-2394	ML	0.00	-2000.00	0.00
404	-2394	-2430	-2431	-2395	ML	0.00	-2000.00	0.00
404	-2395	-2431	-3401	-3400	ML	0.00	-2000.00	0.00
404	-2396	-2432	-2433	-2397	ML	0.00	-2000.00	0.00
404	-2397	-2433	-2434	-2398	ML	0.00	-2000.00	0.00
404	-2398	-2434	-2435	-2399	ML	0.00	-2000.00	0.00
404	-2399	-2435	-2436	-2400	ML	0.00	-2000.00	0.00
404	-2400	-2436	-1788	-1786	ML	0.00	-2000.00	0.00
404	-1787	14	-1789	-2401	ML	0.00	-2000.00	0.00
404	-2401	-1789	-1791	-2402	ML	0.00	-2000.00	0.00
404	-2402	-1791	-1793	-2403	ML	0.00	-2000.00	0.00
404	-2403	-1793	-1795	-2404	ML	0.00	-2000.00	0.00
404	-2404	-1795	-1797	-2405	ML	0.00	-2000.00	0.00
404	-2405	-1797	-1799	-2406	ML	0.00	-2000.00	0.00
404	-2406	-1799	-1801	-2407	ML	0.00	-2000.00	0.00
404	-2407	-1801	-1803	-2408	ML	0.00	-2000.00	0.00
404	-2408	-1803	-1805	-2409	ML	0.00	-2000.00	0.00
404	-2409	-1805	-1807	-2410	ML	0.00	-2000.00	0.00
404	-2410	-1807	-1809	-2411	ML	0.00	-2000.00	0.00
404	-2411	-1809	-1811	-2412	ML	0.00	-2000.00	0.00
404	-2412	-1811	-1813	-2413	ML	0.00	-2000.00	0.00
404	-2413	-1813	-1815	-2414	ML	0.00	-2000.00	0.00
404	-2414	-1815	-1817	-2415	ML	0.00	-2000.00	0.00
404	-2415	-1817	-1819	-2416	ML	0.00	-2000.00	0.00
404	-2416	-1819	-1821	-2417	ML	0.00	-2000.00	0.00
404	-2417	-1821	-1823	-2418	ML	0.00	-2000.00	0.00
404	-2418	-1823	-1825	-2419	ML	0.00	-2000.00	0.00
404	-2419	-1825	-1827	-2420	ML	0.00	-2000.00	0.00
404	-2420	-1827	-1829	-2421	ML	0.00	-2000.00	0.00
404	-2421	-1829	-1831	-2422	ML	0.00	-2000.00	0.00
404	-2422	-1831	-1833	-2423	ML	0.00	-2000.00	0.00
404	-2423	-1833	-1835	-2424	ML	0.00	-2000.00	0.00
404	-2424	-1835	-1837	-2425	ML	0.00	-2000.00	0.00
404	-2425	-1837	-1839	-2426	ML	0.00	-2000.00	0.00
404	-2426	-1839	-1841	-2427	ML	0.00	-2000.00	0.00
404	-2427	-1841	-1843	-2428	ML	0.00	-2000.00	0.00
404	-2428	-1843	-1845	-2429	ML	0.00	-2000.00	0.00
404	-2429	-1845	-1847	-2430	ML	0.00	-2000.00	0.00
404	-2430	-1847	-1849	-2431	ML	0.00	-2000.00	0.00
404	-2431	-1849	-3402	-3401	ML	0.00	-2000.00	0.00

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404	-2432	-1851	-1853	-2433	ML	0.00	-2000.00	0.00
404	-2433	-1853	-1855	-2434	ML	0.00	-2000.00	0.00
404	-2434	-1855	-1857	-2435	ML	0.00	-2000.00	0.00
404	-2435	-1857	-1859	-2436	ML	0.00	-2000.00	0.00
404	-2436	-1859	103	-1788	ML	0.00	-2000.00	0.00
404	-2014	-2050	-2051	-2015	ML	0.00	-2000.00	0.00
404	-2015	-2051	-2052	-2016	ML	0.00	-2000.00	0.00
404	-2016	-2052	-2053	-2017	ML	0.00	-2000.00	0.00
404	-2017	-2053	-2054	-2018	ML	0.00	-2000.00	0.00
404	-2018	-2054	-2055	-2019	ML	0.00	-2000.00	0.00
404	-2019	-2055	-2056	-2020	ML	0.00	-2000.00	0.00
404	-2020	-2056	-2057	-2021	ML	0.00	-2000.00	0.00
404	-2021	-2057	-2058	-2022	ML	0.00	-2000.00	0.00
404	-2022	-2058	-2059	-2023	ML	0.00	-2000.00	0.00
404	-2023	-2059	-2060	-2024	ML	0.00	-2000.00	0.00
404	-2024	-2060	-2061	-2025	ML	0.00	-2000.00	0.00
404	-2025	-2061	-2062	-2026	ML	0.00	-2000.00	0.00
404	-2026	-2062	-2063	-2027	ML	0.00	-2000.00	0.00
404	-2027	-2063	-2064	-2028	ML	0.00	-2000.00	0.00
404	-2028	-2064	-2065	-2029	ML	0.00	-2000.00	0.00
404	-2029	-2065	-2066	-2030	ML	0.00	-2000.00	0.00
404	-2030	-2066	-2067	-2031	ML	0.00	-2000.00	0.00
404	-2031	-2067	-2068	-2032	ML	0.00	-2000.00	0.00
404	-2032	-2068	-2069	-2033	ML	0.00	-2000.00	0.00
404	-2033	-2069	-2070	-2034	ML	0.00	-2000.00	0.00
404	-2034	-2070	-2071	-2035	ML	0.00	-2000.00	0.00
404	-2035	-2071	-3391	-3390	ML	0.00	-2000.00	0.00
404	-2036	-2072	-2073	-2037	ML	0.00	-2000.00	0.00
404	-2037	-2073	-2074	-2038	ML	0.00	-2000.00	0.00
404	-2038	-2074	-2075	-2039	ML	0.00	-2000.00	0.00
404	-2039	-2075	-2076	-2040	ML	0.00	-2000.00	0.00
404	-2040	-2076	-1768	-1766	ML	0.00	-2000.00	0.00
404	-1767	-1769	-2077	-2041	ML	0.00	-2000.00	0.00
404	-2041	-2077	-2078	-2042	ML	0.00	-2000.00	0.00
404	-2042	-2078	-2079	-2043	ML	0.00	-2000.00	0.00
404	-2043	-2079	-2080	-2044	ML	0.00	-2000.00	0.00
404	-2044	-2080	-2081	-2045	ML	0.00	-2000.00	0.00
404	-2045	-2081	-2082	-2046	ML	0.00	-2000.00	0.00
404	-2046	-2082	-2083	-2047	ML	0.00	-2000.00	0.00
404	-2047	-2083	-2084	-2048	ML	0.00	-2000.00	0.00
404	-2048	-2084	-2085	-2049	ML	0.00	-2000.00	0.00
404	-2049	-2085	-2086	-2050	ML	0.00	-2000.00	0.00
404	-2050	-2086	-2087	-2051	ML	0.00	-2000.00	0.00
404	-2051	-2087	-2088	-2052	ML	0.00	-2000.00	0.00
404	-2052	-2088	-2089	-2053	ML	0.00	-2000.00	0.00
404	-2053	-2089	-2090	-2054	ML	0.00	-2000.00	0.00
404	-2054	-2090	-2091	-2055	ML	0.00	-2000.00	0.00
404	-2055	-2091	-2092	-2056	ML	0.00	-2000.00	0.00
404	-2056	-2092	-2093	-2057	ML	0.00	-2000.00	0.00
404	-2057	-2093	-2094	-2058	ML	0.00	-2000.00	0.00
404	-2058	-2094	-2095	-2059	ML	0.00	-2000.00	0.00
404	-2059	-2095	-2096	-2060	ML	0.00	-2000.00	0.00
404	-2060	-2096	-2097	-2061	ML	0.00	-2000.00	0.00
404	-2061	-2097	-2098	-2062	ML	0.00	-2000.00	0.00
404	-2062	-2098	-2099	-2063	ML	0.00	-2000.00	0.00
404	-2063	-2099	-2100	-2064	ML	0.00	-2000.00	0.00
404	-2064	-2100	-2101	-2065	ML	0.00	-2000.00	0.00
404	-2065	-2101	-2102	-2066	ML	0.00	-2000.00	0.00
404	-2066	-2102	-2103	-2067	ML	0.00	-2000.00	0.00
404	-2067	-2103	-2104	-2068	ML	0.00	-2000.00	0.00
404	-2068	-2104	-2105	-2069	ML	0.00	-2000.00	0.00
404	-2069	-2105	-2106	-2070	ML	0.00	-2000.00	0.00
404	-2070	-2106	-2107	-2071	ML	0.00	-2000.00	0.00
404	-2071	-2107	-3392	-3391	ML	0.00	-2000.00	0.00
404	-2072	-2108	-2109	-2073	ML	0.00	-2000.00	0.00
404	-2073	-2109	-2110	-2074	ML	0.00	-2000.00	0.00
404	-2074	-2110	-2111	-2075	ML	0.00	-2000.00	0.00
404	-2075	-2111	-2112	-2076	ML	0.00	-2000.00	0.00
404	-2076	-2112	-1770	-1768	ML	0.00	-2000.00	0.00
404	-1769	-1771	-2113	-2077	ML	0.00	-2000.00	0.00
404	-2077	-2113	-2114	-2078	ML	0.00	-2000.00	0.00
404	-2078	-2114	-2115	-2079	ML	0.00	-2000.00	0.00
404	-2079	-2115	-2116	-2080	ML	0.00	-2000.00	0.00
404	-2080	-2116	-2117	-2081	ML	0.00	-2000.00	0.00
404	-2081	-2117	-2118	-2082	ML	0.00	-2000.00	0.00
404	-2082	-2118	-2119	-2083	ML	0.00	-2000.00	0.00
404	-2083	-2119	-2120	-2084	ML	0.00	-2000.00	0.00
404	-2084	-2120	-2121	-2085	ML	0.00	-2000.00	0.00
404	-2085	-2121	-2122	-2086	ML	0.00	-2000.00	0.00

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404	-2086	-2122	-2123	-2087	ML	0.00	-2000.00	0.00
404	-2087	-2123	-2124	-2088	ML	0.00	-2000.00	0.00
404	-2088	-2124	-2125	-2089	ML	0.00	-2000.00	0.00
404	-2089	-2125	-2126	-2090	ML	0.00	-2000.00	0.00
404	-2090	-2126	-2127	-2091	ML	0.00	-2000.00	0.00
404	-2091	-2127	-2128	-2092	ML	0.00	-2000.00	0.00
404	-2092	-2128	-2129	-2093	ML	0.00	-2000.00	0.00
404	-2093	-2129	-2130	-2094	ML	0.00	-2000.00	0.00
404	-2094	-2130	-2131	-2095	ML	0.00	-2000.00	0.00
404	-2095	-2131	-2132	-2096	ML	0.00	-2000.00	0.00
404	-2096	-2132	-2133	-2097	ML	0.00	-2000.00	0.00
404	-2097	-2133	-2134	-2098	ML	0.00	-2000.00	0.00
404	-2098	-2134	-2135	-2099	ML	0.00	-2000.00	0.00
404	-2099	-2135	-2136	-2100	ML	0.00	-2000.00	0.00
404	-2100	-2136	-2137	-2101	ML	0.00	-2000.00	0.00
404	-2101	-2137	-2138	-2102	ML	0.00	-2000.00	0.00
404	-2102	-2138	-2139	-2103	ML	0.00	-2000.00	0.00
404	-2103	-2139	-2140	-2104	ML	0.00	-2000.00	0.00
404	-2104	-2140	-2141	-2105	ML	0.00	-2000.00	0.00
404	-2105	-2141	-2142	-2106	ML	0.00	-2000.00	0.00
404	-2106	-2142	-2143	-2107	ML	0.00	-2000.00	0.00
404	-2107	-2143	-3393	-3392	ML	0.00	-2000.00	0.00
404	-2108	-2144	-2145	-2109	ML	0.00	-2000.00	0.00
404	-2109	-2145	-2146	-2110	ML	0.00	-2000.00	0.00
404	-2110	-2146	-2147	-2111	ML	0.00	-2000.00	0.00
404	-2111	-2147	-2148	-2112	ML	0.00	-2000.00	0.00
404	-2112	-2148	-1772	-1770	ML	0.00	-2000.00	0.00
404	-1771	-1773	-2149	-2113	ML	0.00	-2000.00	0.00
404	-2113	-2149	-2150	-2114	ML	0.00	-2000.00	0.00
404	-2114	-2150	-2151	-2115	ML	0.00	-2000.00	0.00
404	-2115	-2151	-2152	-2116	ML	0.00	-2000.00	0.00
404	-2116	-2152	-2153	-2117	ML	0.00	-2000.00	0.00
404	-2117	-2153	-2154	-2118	ML	0.00	-2000.00	0.00
404	-2118	-2154	-2155	-2119	ML	0.00	-2000.00	0.00
404	-2119	-2155	-2156	-2120	ML	0.00	-2000.00	0.00
404	-2120	-2156	-2157	-2121	ML	0.00	-2000.00	0.00
404	-2121	-2157	-2158	-2122	ML	0.00	-2000.00	0.00
404	-2122	-2158	-2159	-2123	ML	0.00	-2000.00	0.00
404	-2123	-2159	-2160	-2124	ML	0.00	-2000.00	0.00
404	-2124	-2160	-2161	-2125	ML	0.00	-2000.00	0.00
404	-2125	-2161	-2162	-2126	ML	0.00	-2000.00	0.00
404	-2126	-2162	-2163	-2127	ML	0.00	-2000.00	0.00
404	-2127	-2163	-2164	-2128	ML	0.00	-2000.00	0.00
404	-2128	-2164	-2165	-2129	ML	0.00	-2000.00	0.00
404	-2129	-2165	-2166	-2130	ML	0.00	-2000.00	0.00
404	-2130	-2166	-2167	-2131	ML	0.00	-2000.00	0.00
404	-2131	-2167	-2168	-2132	ML	0.00	-2000.00	0.00
404	-2132	-2168	-2169	-2133	ML	0.00	-2000.00	0.00
404	-2133	-2169	-2170	-2134	ML	0.00	-2000.00	0.00
404	-2134	-2170	-2171	-2135	ML	0.00	-2000.00	0.00
404	-2135	-2171	-2172	-2136	ML	0.00	-2000.00	0.00
404	-2136	-2172	-2173	-2137	ML	0.00	-2000.00	0.00
404	-2137	-2173	-2174	-2138	ML	0.00	-2000.00	0.00
404	-2138	-2174	-2175	-2139	ML	0.00	-2000.00	0.00
404	-2139	-2175	-2176	-2140	ML	0.00	-2000.00	0.00
404	-2140	-2176	-2177	-2141	ML	0.00	-2000.00	0.00
404	-2141	-2177	-2178	-2142	ML	0.00	-2000.00	0.00
404	-2142	-2178	-2179	-2143	ML	0.00	-2000.00	0.00
404	-2143	-2179	-3394	-3393	ML	0.00	-2000.00	0.00
404	-2144	-2180	-2181	-2145	ML	0.00	-2000.00	0.00
404	-2145	-2181	-2182	-2146	ML	0.00	-2000.00	0.00
404	-2146	-2182	-2183	-2147	ML	0.00	-2000.00	0.00
404	-2147	-2183	-2184	-2148	ML	0.00	-2000.00	0.00
404	-2148	-2184	-1774	-1772	ML	0.00	-2000.00	0.00
404	205	-1757	-1861	-1790	ML	0.00	-2000.00	0.00
404	-2149	-2185	-2186	-2150	ML	0.00	-2000.00	0.00
404	-2150	-2186	-2187	-2151	ML	0.00	-2000.00	0.00
404	-2151	-2187	-2188	-2152	ML	0.00	-2000.00	0.00
404	-2152	-2188	-2189	-2153	ML	0.00	-2000.00	0.00
404	-2153	-2189	-2190	-2154	ML	0.00	-2000.00	0.00
404	-2154	-2190	-2191	-2155	ML	0.00	-2000.00	0.00
404	-2155	-2191	-2192	-2156	ML	0.00	-2000.00	0.00
404	-2156	-2192	-2193	-2157	ML	0.00	-2000.00	0.00
404	-2157	-2193	-2194	-2158	ML	0.00	-2000.00	0.00
404	-2158	-2194	-2195	-2159	ML	0.00	-2000.00	0.00
404	-2159	-2195	-2196	-2160	ML	0.00	-2000.00	0.00
404	-2160	-2196	-2197	-2161	ML	0.00	-2000.00	0.00
404	-2161	-2197	-2198	-2162	ML	0.00	-2000.00	0.00
404	-2162	-2198	-2199	-2163	ML	0.00	-2000.00	0.00

Relazione di calcolo

404	-2163	-2199	-2200	-2164	ML	0.00	-2000.00	0.00
404	-2164	-2200	-2201	-2165	ML	0.00	-2000.00	0.00
404	-2165	-2201	-2202	-2166	ML	0.00	-2000.00	0.00
404	-2166	-2202	-2203	-2167	ML	0.00	-2000.00	0.00
404	-2167	-2203	-2204	-2168	ML	0.00	-2000.00	0.00
404	-2168	-2204	-2205	-2169	ML	0.00	-2000.00	0.00
404	-2169	-2205	-2206	-2170	ML	0.00	-2000.00	0.00
404	-2170	-2206	-2207	-2171	ML	0.00	-2000.00	0.00
404	-2171	-2207	-2208	-2172	ML	0.00	-2000.00	0.00
404	-2172	-2208	-2209	-2173	ML	0.00	-2000.00	0.00
404	-2173	-2209	-2210	-2174	ML	0.00	-2000.00	0.00
404	-2174	-2210	-2211	-2175	ML	0.00	-2000.00	0.00
404	-2175	-2211	-2212	-2176	ML	0.00	-2000.00	0.00
404	-2176	-2212	-2213	-2177	ML	0.00	-2000.00	0.00
404	-2177	-2213	-2214	-2178	ML	0.00	-2000.00	0.00
404	-2178	-2214	-2215	-2179	ML	0.00	-2000.00	0.00
404	-2179	-2215	-3395	-3394	ML	0.00	-2000.00	0.00
404	-2180	-2216	-2217	-2181	ML	0.00	-2000.00	0.00
404	-2181	-2217	-2218	-2182	ML	0.00	-2000.00	0.00
404	-2182	-2218	-2219	-2183	ML	0.00	-2000.00	0.00
404	-2183	-2219	-2220	-2184	ML	0.00	-2000.00	0.00
404	-2184	-2220	-1776	-1774	ML	0.00	-2000.00	0.00
404	-1775	-1777	-2221	-2185	ML	0.00	-2000.00	0.00
404	-3370	-3386	-1892	-1852	ML	0.00	-2000.00	0.00
404	-3386	-3387	-1928	-1892	ML	0.00	-2000.00	0.00
404	-3387	-3388	-1964	-1928	ML	0.00	-2000.00	0.00
404	-3388	-3389	-2000	-1964	ML	0.00	-2000.00	0.00
404	-3389	-3390	-2036	-2000	ML	0.00	-2000.00	0.00
404	-3390	-3391	-2072	-2036	ML	0.00	-2000.00	0.00
404	-3391	-3392	-2108	-2072	ML	0.00	-2000.00	0.00
404	-3392	-3393	-2144	-2108	ML	0.00	-2000.00	0.00
404	-3393	-3394	-2180	-2144	ML	0.00	-2000.00	0.00
404	-3394	-3395	-2216	-2180	ML	0.00	-2000.00	0.00
404	-3395	-3396	-2252	-2216	ML	0.00	-2000.00	0.00
404	-3396	-3397	-2288	-2252	ML	0.00	-2000.00	0.00
404	-3397	-3398	-2324	-2288	ML	0.00	-2000.00	0.00
404	-3398	-3399	-2360	-2324	ML	0.00	-2000.00	0.00
404	-3399	-3400	-2396	-2360	ML	0.00	-2000.00	0.00
404	-3400	-3401	-2432	-2396	ML	0.00	-2000.00	0.00
404	-3401	-3402	-1851	-2432	ML	0.00	-2000.00	0.00
404	-2202	-2238	-2239	-2203	ML	0.00	-2000.00	0.00
404	-2203	-2239	-2240	-2204	ML	0.00	-2000.00	0.00
404	-2204	-2240	-2241	-2205	ML	0.00	-2000.00	0.00
404	-2205	-2241	-2242	-2206	ML	0.00	-2000.00	0.00
404	-2206	-2242	-2243	-2207	ML	0.00	-2000.00	0.00
404	-2207	-2243	-2244	-2208	ML	0.00	-2000.00	0.00
404	-2208	-2244	-2245	-2209	ML	0.00	-2000.00	0.00
404	-2209	-2245	-2246	-2210	ML	0.00	-2000.00	0.00
404	-2210	-2246	-2247	-2211	ML	0.00	-2000.00	0.00
404	-2211	-2247	-2248	-2212	ML	0.00	-2000.00	0.00
404	-2212	-2248	-2249	-2213	ML	0.00	-2000.00	0.00
404	-2213	-2249	-2250	-2214	ML	0.00	-2000.00	0.00
404	-2214	-2250	-2251	-2215	ML	0.00	-2000.00	0.00
404	-2215	-2251	-3396	-3395	ML	0.00	-2000.00	0.00
404	-2216	-2252	-2253	-2217	ML	0.00	-2000.00	0.00
404	-2217	-2253	-2254	-2218	ML	0.00	-2000.00	0.00
404	-2218	-2254	-2255	-2219	ML	0.00	-2000.00	0.00
404	-2219	-2255	-2256	-2220	ML	0.00	-2000.00	0.00
404	-2220	-2256	-1778	-1776	ML	0.00	-2000.00	0.00
404	-1777	-1779	-2257	-2221	ML	0.00	-2000.00	0.00
404	-2221	-2257	-2258	-2222	ML	0.00	-2000.00	0.00
404	-2222	-2258	-2259	-2223	ML	0.00	-2000.00	0.00
404	-2223	-2259	-2260	-2224	ML	0.00	-2000.00	0.00
404	-2224	-2260	-2261	-2225	ML	0.00	-2000.00	0.00
404	-2225	-2261	-2262	-2226	ML	0.00	-2000.00	0.00
404	-2226	-2262	-2263	-2227	ML	0.00	-2000.00	0.00
404	-2227	-2263	-2264	-2228	ML	0.00	-2000.00	0.00
404	-2228	-2264	-2265	-2229	ML	0.00	-2000.00	0.00
404	-2229	-2265	-2266	-2230	ML	0.00	-2000.00	0.00
404	-2230	-2266	-2267	-2231	ML	0.00	-2000.00	0.00
404	-2231	-2267	-2268	-2232	ML	0.00	-2000.00	0.00
404	-2232	-2268	-2269	-2233	ML	0.00	-2000.00	0.00
404	-2233	-2269	-2270	-2234	ML	0.00	-2000.00	0.00
404	-2234	-2270	-2271	-2235	ML	0.00	-2000.00	0.00
404	-2235	-2271	-2272	-2236	ML	0.00	-2000.00	0.00
404	-2236	-2272	-2273	-2237	ML	0.00	-2000.00	0.00
404	-2237	-2273	-2274	-2238	ML	0.00	-2000.00	0.00
404	-2238	-2274	-2275	-2239	ML	0.00	-2000.00	0.00
404	-2239	-2275	-2276	-2240	ML	0.00	-2000.00	0.00

Relazione di calcolo

404	-2240	-2276	-2277	-2241	ML	0.00	-2000.00	0.00
404	-2241	-2277	-2278	-2242	ML	0.00	-2000.00	0.00
404	-2242	-2278	-2279	-2243	ML	0.00	-2000.00	0.00
404	-2243	-2279	-2280	-2244	ML	0.00	-2000.00	0.00
404	-2244	-2280	-2281	-2245	ML	0.00	-2000.00	0.00
404	-2245	-2281	-2282	-2246	ML	0.00	-2000.00	0.00
404	-2246	-2282	-2283	-2247	ML	0.00	-2000.00	0.00
404	-2247	-2283	-2284	-2248	ML	0.00	-2000.00	0.00
404	-1790	-1861	-1862	-1792	ML	0.00	-2000.00	0.00
404	-1792	-1862	-1863	-1794	ML	0.00	-2000.00	0.00
404	-1794	-1863	-1864	-1796	ML	0.00	-2000.00	0.00
404	-1796	-1864	-1865	-1798	ML	0.00	-2000.00	0.00
404	-1798	-1865	-1866	-1800	ML	0.00	-2000.00	0.00
404	-1800	-1866	-1867	-1802	ML	0.00	-2000.00	0.00
404	-1802	-1867	-1868	-1804	ML	0.00	-2000.00	0.00
404	-1804	-1868	-1869	-1806	ML	0.00	-2000.00	0.00
404	-1806	-1869	-1870	-1808	ML	0.00	-2000.00	0.00
404	-1808	-1870	-1871	-1810	ML	0.00	-2000.00	0.00
404	-1810	-1871	-1872	-1812	ML	0.00	-2000.00	0.00
404	-1812	-1872	-1873	-1814	ML	0.00	-2000.00	0.00
404	-1814	-1873	-1874	-1816	ML	0.00	-2000.00	0.00
404	-1816	-1874	-1875	-1818	ML	0.00	-2000.00	0.00
404	-1818	-1875	-1876	-1820	ML	0.00	-2000.00	0.00
404	-1820	-1876	-1877	-1822	ML	0.00	-2000.00	0.00
404	-1822	-1877	-1878	-1824	ML	0.00	-2000.00	0.00
404	-1824	-1878	-1879	-1826	ML	0.00	-2000.00	0.00
404	-1826	-1879	-1880	-1828	ML	0.00	-2000.00	0.00
404	-1828	-1880	-1881	-1830	ML	0.00	-2000.00	0.00
404	-1830	-1881	-1882	-1832	ML	0.00	-2000.00	0.00
404	-1832	-1882	-1883	-1834	ML	0.00	-2000.00	0.00
404	-1834	-1883	-1884	-1836	ML	0.00	-2000.00	0.00
404	-1836	-1884	-1885	-1838	ML	0.00	-2000.00	0.00
404	-1838	-1885	-1886	-1840	ML	0.00	-2000.00	0.00
404	-1840	-1886	-1887	-1842	ML	0.00	-2000.00	0.00
404	-1842	-1887	-1888	-1844	ML	0.00	-2000.00	0.00
404	-1844	-1888	-1889	-1846	ML	0.00	-2000.00	0.00
404	-1846	-1889	-1890	-1848	ML	0.00	-2000.00	0.00
404	-1848	-1890	-1891	-1850	ML	0.00	-2000.00	0.00
404	-1850	-1891	-3386	-3370	ML	0.00	-2000.00	0.00
404	-1852	-1892	-1893	-1854	ML	0.00	-2000.00	0.00
404	-1854	-1893	-1894	-1856	ML	0.00	-2000.00	0.00
404	-1856	-1894	-1895	-1858	ML	0.00	-2000.00	0.00
404	-1858	-1895	-1896	-1860	ML	0.00	-2000.00	0.00
404	-1860	-1896	-1758	217	ML	0.00	-2000.00	0.00
404	-1757	-1759	-1897	-1861	ML	0.00	-2000.00	0.00
404	-1861	-1897	-1898	-1862	ML	0.00	-2000.00	0.00
404	-1862	-1898	-1899	-1863	ML	0.00	-2000.00	0.00
404	-1863	-1899	-1900	-1864	ML	0.00	-2000.00	0.00
404	-1864	-1900	-1901	-1865	ML	0.00	-2000.00	0.00
404	-1865	-1901	-1902	-1866	ML	0.00	-2000.00	0.00
404	-1866	-1902	-1903	-1867	ML	0.00	-2000.00	0.00
404	-1867	-1903	-1904	-1868	ML	0.00	-2000.00	0.00
404	-1868	-1904	-1905	-1869	ML	0.00	-2000.00	0.00
404	-1869	-1905	-1906	-1870	ML	0.00	-2000.00	0.00
404	-1870	-1906	-1907	-1871	ML	0.00	-2000.00	0.00
404	-1871	-1907	-1908	-1872	ML	0.00	-2000.00	0.00
404	-1872	-1908	-1909	-1873	ML	0.00	-2000.00	0.00
404	-1873	-1909	-1910	-1874	ML	0.00	-2000.00	0.00
404	-1874	-1910	-1911	-1875	ML	0.00	-2000.00	0.00
404	-1875	-1911	-1912	-1876	ML	0.00	-2000.00	0.00
404	-1876	-1912	-1913	-1877	ML	0.00	-2000.00	0.00
404	-1877	-1913	-1914	-1878	ML	0.00	-2000.00	0.00
404	-1878	-1914	-1915	-1879	ML	0.00	-2000.00	0.00
404	-1879	-1915	-1916	-1880	ML	0.00	-2000.00	0.00
404	-1880	-1916	-1917	-1881	ML	0.00	-2000.00	0.00
404	-1881	-1917	-1918	-1882	ML	0.00	-2000.00	0.00
404	-1882	-1918	-1919	-1883	ML	0.00	-2000.00	0.00
404	-1883	-1919	-1920	-1884	ML	0.00	-2000.00	0.00
404	-1884	-1920	-1921	-1885	ML	0.00	-2000.00	0.00
404	-1885	-1921	-1922	-1886	ML	0.00	-2000.00	0.00
404	-1886	-1922	-1923	-1887	ML	0.00	-2000.00	0.00
404	-1887	-1923	-1924	-1888	ML	0.00	-2000.00	0.00
404	-1888	-1924	-1925	-1889	ML	0.00	-2000.00	0.00
404	-1889	-1925	-1926	-1890	ML	0.00	-2000.00	0.00
404	-1890	-1926	-1927	-1891	ML	0.00	-2000.00	0.00
404	-1891	-1927	-3387	-3386	ML	0.00	-2000.00	0.00
404	-1892	-1928	-1929	-1893	ML	0.00	-2000.00	0.00
404	-1893	-1929	-1930	-1894	ML	0.00	-2000.00	0.00
404	-1894	-1930	-1931	-1895	ML	0.00	-2000.00	0.00

Relazione di calcolo

404	-1895	-1931	-1932	-1896	ML	0.00	-2000.00	0.00
404	-1896	-1932	-1760	-1758	ML	0.00	-2000.00	0.00

Condizione di carico n. 5: Spinta sismica terreno

Carichi uniformi

Bid.	N1	N2	N3	N4	TDC	Qx <daN/mq>	Qy <daN/mq>	Qz <daN/mq>
112	-1565	-1577	-1578	-1566	ML	0.00	-2422.00	0.00
112	-1584	-1520	-1522	-1585	ML	0.00	-2422.00	0.00
112	-1533	-1545	-1546	-1534	ML	0.00	-2422.00	0.00
112	-1544	-1556	-1557	-1545	ML	0.00	-2422.00	0.00
112	-1585	-1522	-1524	-1586	ML	0.00	-2422.00	0.00
112	-1579	-1510	-1512	-1580	ML	0.00	-2422.00	0.00
112	-1563	-1575	-1502	-1501	ML	0.00	-2422.00	0.00
112	-1558	-1570	-1571	-1559	ML	0.00	-2422.00	0.00
112	-1562	-1574	-1575	-1563	ML	0.00	-2422.00	0.00
112	-1570	-1582	-1583	-1571	ML	0.00	-2422.00	0.00
112	-1546	-1558	-1559	-1547	ML	0.00	-2422.00	0.00
112	-1575	-1587	-1503	-1502	ML	0.00	-2422.00	0.00
112	-1557	-1569	-1570	-1558	ML	0.00	-2422.00	0.00
112	-1543	-1555	-1556	-1544	ML	0.00	-2422.00	0.00
112	-1535	-1547	-1548	-1536	ML	0.00	-2422.00	0.00
112	-1564	-1576	-1577	-1565	ML	0.00	-2422.00	0.00
112	-1538	-1550	-1551	-1539	ML	0.00	-2422.00	0.00
112	-1559	-1571	-1572	-1560	ML	0.00	-2422.00	0.00
112	-1547	-1559	-1560	-1548	ML	0.00	-2422.00	0.00
112	-1574	-1586	-1587	-1575	ML	0.00	-2422.00	0.00
112	-1532	-1544	-1545	-1533	ML	0.00	-2422.00	0.00
112	-1542	-1554	-1555	-1543	ML	0.00	-2422.00	0.00
112	-1534	-1546	-1547	-1535	ML	0.00	-2422.00	0.00
112	-1536	-1548	-1549	-1537	ML	0.00	-2422.00	0.00
112	-1586	-1524	-1526	-1587	ML	0.00	-2422.00	0.00
112	-1561	-1573	-1574	-1562	ML	0.00	-2422.00	0.00
112	-1505	-1528	-1529	-1507	ML	0.00	-2422.00	0.00
112	-1577	-1506	-1508	-1578	ML	0.00	-2422.00	0.00
112	-1540	-1552	-1553	-1541	ML	0.00	-2422.00	0.00
112	-1548	-1560	-1561	-1549	ML	0.00	-2422.00	0.00
112	-1531	-1543	-1544	-1532	ML	0.00	-2422.00	0.00
112	-1545	-1557	-1558	-1546	ML	0.00	-2422.00	0.00
112	-3520	-3521	-1552	-1540	ML	0.00	-2422.00	0.00
112	-1528	-1540	-1541	-1529	ML	0.00	-2422.00	0.00
112	-3523	-3524	-1504	-1576	ML	0.00	-2422.00	0.00
112	-1571	-1583	-1584	-1572	ML	0.00	-2422.00	0.00
112	-1550	-1562	-1563	-1551	ML	0.00	-2422.00	0.00
112	-1568	-1580	-1581	-1569	ML	0.00	-2422.00	0.00
112	-1519	-1535	-1536	-1521	ML	0.00	-2422.00	0.00
112	-1566	-1578	-1579	-1567	ML	0.00	-2422.00	0.00
112	-1530	-1542	-1543	-1531	ML	0.00	-2422.00	0.00
112	-1537	-1549	-1550	-1538	ML	0.00	-2422.00	0.00
112	-1576	-1504	-1506	-1577	ML	0.00	-2422.00	0.00
112	-1583	-1518	-1520	-1584	ML	0.00	-2422.00	0.00
112	-1582	-1516	-1518	-1583	ML	0.00	-2422.00	0.00
112	-1541	-1553	-1554	-1542	ML	0.00	-2422.00	0.00
112	-1580	-1512	-1514	-1581	ML	0.00	-2422.00	0.00
112	-1539	-1551	-1500	-1499	ML	0.00	-2422.00	0.00
112	-1560	-1572	-1573	-1561	ML	0.00	-2422.00	0.00
112	-1525	-1538	-1539	-1527	ML	0.00	-2422.00	0.00
112	-1529	-1541	-1542	-1530	ML	0.00	-2422.00	0.00
112	-1511	-1531	-1532	-1513	ML	0.00	-2422.00	0.00
112	-1527	-1539	-1499	103	ML	0.00	-2422.00	0.00
112	-1578	-1508	-1510	-1579	ML	0.00	-2422.00	0.00
112	-1554	-1566	-1567	-1555	ML	0.00	-2422.00	0.00
112	-1513	-1532	-1533	-1515	ML	0.00	-2422.00	0.00
112	-1555	-1567	-1568	-1556	ML	0.00	-2422.00	0.00
112	-1515	-1533	-1534	-1517	ML	0.00	-2422.00	0.00
112	-3519	-3520	-1540	-1528	ML	0.00	-2422.00	0.00
112	-1552	-1564	-1565	-1553	ML	0.00	-2422.00	0.00
112	-1509	-1530	-1531	-1511	ML	0.00	-2422.00	0.00
112	-1572	-1584	-1585	-1573	ML	0.00	-2422.00	0.00
112	-1569	-1581	-1582	-1570	ML	0.00	-2422.00	0.00
112	-1587	-1526	120	-1503	ML	0.00	-2422.00	0.00
112	-1567	-1579	-1580	-1568	ML	0.00	-2422.00	0.00
112	-1523	-1537	-1538	-1525	ML	0.00	-2422.00	0.00
112	-1551	-1563	-1501	-1500	ML	0.00	-2422.00	0.00
112	-1556	-1568	-1569	-1557	ML	0.00	-2422.00	0.00
112	-1521	-1536	-1537	-1523	ML	0.00	-2422.00	0.00
112	-3518	-3519	-1528	-1505	ML	0.00	-2422.00	0.00
112	-1553	-1565	-1566	-1554	ML	0.00	-2422.00	0.00

Relazione di calcolo

112	-1581	-1514	-1516	-1582	ML	0.00	-2422.00	0.00
112	-1517	-1534	-1535	-1519	ML	0.00	-2422.00	0.00
112	-3521	-3522	-1564	-1552	ML	0.00	-2422.00	0.00
112	-3522	-3523	-1576	-1564	ML	0.00	-2422.00	0.00
112	-1573	-1585	-1586	-1574	ML	0.00	-2422.00	0.00
112	-1549	-1561	-1562	-1550	ML	0.00	-2422.00	0.00
112	-1507	-1529	-1530	-1509	ML	0.00	-2422.00	0.00
115	-1707	-1719	-1720	-1708	ML	0.00	2422.00	0.00
115	-1705	-1717	-1718	-1706	ML	0.00	2422.00	0.00
115	-1755	-1693	-1695	-1756	ML	0.00	2422.00	0.00
115	-1735	-1747	-1748	-1736	ML	0.00	2422.00	0.00
115	-1697	-1709	-1710	-1698	ML	0.00	2422.00	0.00
115	-1718	-1730	-1731	-1719	ML	0.00	2422.00	0.00
115	-1756	-1695	118	-1672	ML	0.00	2422.00	0.00
115	-1720	-1732	-1670	-1669	ML	0.00	2422.00	0.00
115	-1736	-1748	-1749	-1737	ML	0.00	2422.00	0.00
115	-1716	-1728	-1729	-1717	ML	0.00	2422.00	0.00
115	-1740	-1752	-1753	-1741	ML	0.00	2422.00	0.00
115	-1715	-1727	-1728	-1716	ML	0.00	2422.00	0.00
115	-3476	-3475	-1733	-1721	ML	0.00	2422.00	0.00
115	-1688	-1704	-1705	-1690	ML	0.00	2422.00	0.00
115	-1706	-1718	-1719	-1707	ML	0.00	2422.00	0.00
115	-1746	-1675	-1677	-1747	ML	0.00	2422.00	0.00
115	-1694	-1707	-1708	-1696	ML	0.00	2422.00	0.00
115	-1710	-1722	-1723	-1711	ML	0.00	2422.00	0.00
115	-1738	-1750	-1751	-1739	ML	0.00	2422.00	0.00
115	-1727	-1739	-1740	-1728	ML	0.00	2422.00	0.00
115	-1713	-1725	-1726	-1714	ML	0.00	2422.00	0.00
115	-1682	-1701	-1702	-1684	ML	0.00	2422.00	0.00
115	-1714	-1726	-1727	-1715	ML	0.00	2422.00	0.00
115	-1753	-1689	-1691	-1754	ML	0.00	2422.00	0.00
115	-1754	-1691	-1693	-1755	ML	0.00	2422.00	0.00
115	-3475	-3474	-1745	-1733	ML	0.00	2422.00	0.00
115	-1704	-1716	-1717	-1705	ML	0.00	2422.00	0.00
115	-1692	-1706	-1707	-1694	ML	0.00	2422.00	0.00
115	-1745	-1673	-1675	-1746	ML	0.00	2422.00	0.00
115	-1747	-1677	-1679	-1748	ML	0.00	2422.00	0.00
115	-1676	-1698	-1699	-1678	ML	0.00	2422.00	0.00
115	-1680	-1700	-1701	-1682	ML	0.00	2422.00	0.00
115	-1701	-1713	-1714	-1702	ML	0.00	2422.00	0.00
115	-1712	-1724	-1725	-1713	ML	0.00	2422.00	0.00
115	-1751	-1685	-1687	-1752	ML	0.00	2422.00	0.00
115	-1684	-1702	-1703	-1686	ML	0.00	2422.00	0.00
115	-1752	-1687	-1689	-1753	ML	0.00	2422.00	0.00
115	-1717	-1729	-1730	-1718	ML	0.00	2422.00	0.00
115	-1686	-1703	-1704	-1688	ML	0.00	2422.00	0.00
115	-3478	-3477	-1709	-1697	ML	0.00	2422.00	0.00
115	-1719	-1731	-1732	-1720	ML	0.00	2422.00	0.00
115	-1696	-1708	-1668	14	ML	0.00	2422.00	0.00
115	-1721	-1733	-1734	-1722	ML	0.00	2422.00	0.00
115	-1737	-1749	-1750	-1738	ML	0.00	2422.00	0.00
115	-1725	-1737	-1738	-1726	ML	0.00	2422.00	0.00
115	-1678	-1699	-1700	-1680	ML	0.00	2422.00	0.00
115	-1700	-1712	-1713	-1701	ML	0.00	2422.00	0.00
115	-1739	-1751	-1752	-1740	ML	0.00	2422.00	0.00
115	-1729	-1741	-1742	-1730	ML	0.00	2422.00	0.00
115	-1742	-1754	-1755	-1743	ML	0.00	2422.00	0.00
115	-1731	-1743	-1744	-1732	ML	0.00	2422.00	0.00
115	-1730	-1742	-1743	-1731	ML	0.00	2422.00	0.00
115	-1708	-1720	-1669	-1668	ML	0.00	2422.00	0.00
115	-1732	-1744	-1671	-1670	ML	0.00	2422.00	0.00
115	-1726	-1738	-1739	-1727	ML	0.00	2422.00	0.00
115	-1698	-1710	-1711	-1699	ML	0.00	2422.00	0.00
115	-1699	-1711	-1712	-1700	ML	0.00	2422.00	0.00
115	-1749	-1681	-1683	-1750	ML	0.00	2422.00	0.00
115	-1724	-1736	-1737	-1725	ML	0.00	2422.00	0.00
115	-1711	-1723	-1724	-1712	ML	0.00	2422.00	0.00
115	-3479	-3478	-1697	-1674	ML	0.00	2422.00	0.00
115	-1702	-1714	-1715	-1703	ML	0.00	2422.00	0.00
115	-1703	-1715	-1716	-1704	ML	0.00	2422.00	0.00
115	-1741	-1753	-1754	-1742	ML	0.00	2422.00	0.00
115	-1744	-1756	-1672	-1671	ML	0.00	2422.00	0.00
115	-1690	-1705	-1706	-1692	ML	0.00	2422.00	0.00
115	-3477	-3476	-1721	-1709	ML	0.00	2422.00	0.00
115	-1674	-1697	-1698	-1676	ML	0.00	2422.00	0.00
115	-1750	-1683	-1685	-1751	ML	0.00	2422.00	0.00
115	-1709	-1721	-1722	-1710	ML	0.00	2422.00	0.00
115	-1722	-1734	-1735	-1723	ML	0.00	2422.00	0.00
115	-1748	-1679	-1681	-1749	ML	0.00	2422.00	0.00

Relazione di calcolo

115	-1733	-1745	-1746	-1734	ML	0.00	2422.00	0.00
115	-1743	-1755	-1756	-1744	ML	0.00	2422.00	0.00
115	-3474	-3473	-1673	-1745	ML	0.00	2422.00	0.00
115	-1728	-1740	-1741	-1729	ML	0.00	2422.00	0.00
115	-1734	-1746	-1747	-1735	ML	0.00	2422.00	0.00
115	-1723	-1735	-1736	-1724	ML	0.00	2422.00	0.00
118	-2985	-3404	-3403	-2986	ML	0.00	2422.00	0.00
118	-3109	-3121	-3122	-3110	ML	0.00	2422.00	0.00
118	-2993	-3005	-3006	-2994	ML	0.00	2422.00	0.00
118	-3121	-3133	-3134	-3122	ML	0.00	2422.00	0.00
118	-2982	-3407	-3406	-2983	ML	0.00	2422.00	0.00
118	-3094	-3106	-1831	-1833	ML	0.00	2422.00	0.00
118	-2984	-3405	-3404	-2985	ML	0.00	2422.00	0.00
118	-3511	-3510	-2987	-3414	ML	0.00	2422.00	0.00
118	-3084	-3096	-3097	-3085	ML	0.00	2422.00	0.00
118	-2930	-2942	-2943	-2931	ML	0.00	2422.00	0.00
118	-3508	-3507	-3023	-3011	ML	0.00	2422.00	0.00
118	-1507	-2916	-2917	-1509	ML	0.00	2422.00	0.00
118	-3095	-3107	-3108	-3096	ML	0.00	2422.00	0.00
118	-3082	-3094	-1833	-1835	ML	0.00	2422.00	0.00
118	-3108	-3120	-3121	-3109	ML	0.00	2422.00	0.00
118	-2955	-2967	-2968	-2956	ML	0.00	2422.00	0.00
118	-1505	-2915	-2916	-1507	ML	0.00	2422.00	0.00
118	-3140	-3152	-3153	-3141	ML	0.00	2422.00	0.00
118	-3006	-3018	-3019	-3007	ML	0.00	2422.00	0.00
118	-3088	-3100	-3101	-3089	ML	0.00	2422.00	0.00
118	-3083	-3095	-3096	-3084	ML	0.00	2422.00	0.00
118	-2980	-3409	-3408	-2981	ML	0.00	2422.00	0.00
118	-3091	-3103	-3104	-3092	ML	0.00	2422.00	0.00
118	-3093	-3105	-3106	-3094	ML	0.00	2422.00	0.00
118	-2918	-2930	-2931	-2919	ML	0.00	2422.00	0.00
118	-2920	-2932	-2933	-2921	ML	0.00	2422.00	0.00
118	-3120	-3132	-3133	-3121	ML	0.00	2422.00	0.00
118	-2921	-2933	-2934	-2922	ML	0.00	2422.00	0.00
118	-1521	-2923	-2924	-1523	ML	0.00	2422.00	0.00
118	-1523	-2924	-2925	-1525	ML	0.00	2422.00	0.00
118	-3114	-3126	-3127	-3115	ML	0.00	2422.00	0.00
118	-3000	-3012	-3013	-3001	ML	0.00	2422.00	0.00
118	-3001	-3013	-3014	-3002	ML	0.00	2422.00	0.00
118	-3004	-3016	-3017	-3005	ML	0.00	2422.00	0.00
118	-2991	-3003	-3004	-2992	ML	0.00	2422.00	0.00
118	-3003	-3015	-3016	-3004	ML	0.00	2422.00	0.00
118	-2929	-2941	-2942	-2930	ML	0.00	2422.00	0.00
118	-3130	-3142	-1825	-1827	ML	0.00	2422.00	0.00
118	-2931	-2943	-2944	-2932	ML	0.00	2422.00	0.00
118	-3132	-3144	-3145	-3133	ML	0.00	2422.00	0.00
118	-2983	-3406	-3405	-2984	ML	0.00	2422.00	0.00
118	-3134	-3146	-3147	-3135	ML	0.00	2422.00	0.00
118	-3112	-3124	-3125	-3113	ML	0.00	2422.00	0.00
118	-3011	-3023	-3024	-3012	ML	0.00	2422.00	0.00
118	-1525	-2925	-2926	-1527	ML	0.00	2422.00	0.00
118	-3013	-3025	-3026	-3014	ML	0.00	2422.00	0.00
118	-3128	-3140	-3141	-3129	ML	0.00	2422.00	0.00
118	-2953	-2965	-2966	-2954	ML	0.00	2422.00	0.00
118	-3116	-3128	-3129	-3117	ML	0.00	2422.00	0.00
118	-3142	-3154	-1823	-1825	ML	0.00	2422.00	0.00
118	-2992	-3004	-3005	-2993	ML	0.00	2422.00	0.00
118	-3143	-3155	-3156	-3144	ML	0.00	2422.00	0.00
118	-2943	-2955	-2956	-2944	ML	0.00	2422.00	0.00
118	-3145	-3157	-3158	-3146	ML	0.00	2422.00	0.00
118	-3146	-3158	-3159	-3147	ML	0.00	2422.00	0.00
118	-3137	-3149	-3150	-3138	ML	0.00	2422.00	0.00
118	-2937	-2949	-2950	-2938	ML	0.00	2422.00	0.00
118	-3086	-3098	-3099	-3087	ML	0.00	2422.00	0.00
118	-3100	-3112	-3113	-3101	ML	0.00	2422.00	0.00
118	-3002	-3014	-3015	-3003	ML	0.00	2422.00	0.00
118	-3052	-3064	-3065	-3053	ML	0.00	2422.00	0.00
118	-3053	-3065	-3066	-3054	ML	0.00	2422.00	0.00
118	-2954	-2966	-2967	-2955	ML	0.00	2422.00	0.00
118	-3056	-3068	-3069	-3057	ML	0.00	2422.00	0.00
118	-1511	-2918	-2919	-1513	ML	0.00	2422.00	0.00
118	-3008	-3020	-3021	-3009	ML	0.00	2422.00	0.00
118	-1517	-2921	-2922	-1519	ML	0.00	2422.00	0.00
118	-3110	-3122	-3123	-3111	ML	0.00	2422.00	0.00
118	-3111	-3123	-3124	-3112	ML	0.00	2422.00	0.00
118	-3139	-3151	-3152	-3140	ML	0.00	2422.00	0.00
118	-2938	-2950	-1857	-1857	ML	0.00	2422.00	0.00
118	-3113	-3125	-3126	-3114	ML	0.00	2422.00	0.00
118	-2939	-2951	-2952	-2940	ML	0.00	2422.00	0.00

Relazione di calcolo

118	-3015	-3027	-3028	-3016	ML	0.00	2422.00	0.00
118	-2915	-2927	-2928	-2916	ML	0.00	2422.00	0.00
118	-2941	-2953	-2954	-2942	ML	0.00	2422.00	0.00
118	-3118	-3130	-1827	-1829	ML	0.00	2422.00	0.00
118	-3119	-3131	-3132	-3120	ML	0.00	2422.00	0.00
118	-2919	-2931	-2932	-2920	ML	0.00	2422.00	0.00
118	-2971	-2983	-2984	-2972	ML	0.00	2422.00	0.00
118	-2922	-2934	-2935	-2923	ML	0.00	2422.00	0.00
118	-2948	-2960	-2961	-2949	ML	0.00	2422.00	0.00
118	-2962	-2974	-1853	-1855	ML	0.00	2422.00	0.00
118	-3061	-3073	-3074	-3062	ML	0.00	2422.00	0.00
118	-2975	-3414	-3413	-2976	ML	0.00	2422.00	0.00
118	-3077	-3089	-3090	-3078	ML	0.00	2422.00	0.00
118	-3129	-3141	-3142	-3130	ML	0.00	2422.00	0.00
118	-2978	-3411	-3410	-2979	ML	0.00	2422.00	0.00
118	-3079	-3091	-3092	-3080	ML	0.00	2422.00	0.00
118	-3080	-3092	-3093	-3081	ML	0.00	2422.00	0.00
118	-2981	-3408	-3407	-2982	ML	0.00	2422.00	0.00
118	-2932	-2944	-2945	-2933	ML	0.00	2422.00	0.00
118	-3498	-3497	-3143	-3131	ML	0.00	2422.00	0.00
118	-3499	-3498	-3131	-3119	ML	0.00	2422.00	0.00
118	-2986	-3403	-3402	-1851	ML	0.00	2422.00	0.00
118	-2987	-2999	-3000	-2988	ML	0.00	2422.00	0.00
118	-2989	-3001	-3002	-2990	ML	0.00	2422.00	0.00
118	-3089	-3101	-3102	-3090	ML	0.00	2422.00	0.00
118	-2990	-3002	-3003	-2991	ML	0.00	2422.00	0.00
118	-3506	-3505	-3047	-3035	ML	0.00	2422.00	0.00
118	-3092	-3104	-3105	-3093	ML	0.00	2422.00	0.00
118	-3507	-3506	-3035	-3023	ML	0.00	2422.00	0.00
118	-2995	-3007	-3008	-2996	ML	0.00	2422.00	0.00
118	-3147	-3159	-3160	-3148	ML	0.00	2422.00	0.00
118	-2997	-3009	-3010	-2998	ML	0.00	2422.00	0.00
118	-3404	-2997	-2998	-3403	ML	0.00	2422.00	0.00
118	-2999	-3011	-3012	-3000	ML	0.00	2422.00	0.00
118	-3406	-2995	-2996	-3405	ML	0.00	2422.00	0.00
118	-3407	-2994	-2995	-3406	ML	0.00	2422.00	0.00
118	-3408	-2993	-2994	-3407	ML	0.00	2422.00	0.00
118	-3409	-2992	-2993	-3408	ML	0.00	2422.00	0.00
118	-3410	-2991	-2992	-3409	ML	0.00	2422.00	0.00
118	-3005	-3017	-3018	-3006	ML	0.00	2422.00	0.00
118	-3412	-2989	-2990	-3411	ML	0.00	2422.00	0.00
118	-1513	-2919	-2920	-1515	ML	0.00	2422.00	0.00
118	-1515	-2920	-2921	-1517	ML	0.00	2422.00	0.00
118	-3010	-3022	-1845	-1847	ML	0.00	2422.00	0.00
118	-2960	-2972	-2973	-2961	ML	0.00	2422.00	0.00
118	-3060	-3072	-3073	-3061	ML	0.00	2422.00	0.00
118	-3012	-3024	-3025	-3013	ML	0.00	2422.00	0.00
118	-1527	-2926	-1859	103	ML	0.00	2422.00	0.00
118	-3115	-3127	-3128	-3116	ML	0.00	2422.00	0.00
118	-3017	-3029	-3030	-3018	ML	0.00	2422.00	0.00
118	-2917	-2929	-2930	-2918	ML	0.00	2422.00	0.00
118	-3019	-3031	-3032	-3020	ML	0.00	2422.00	0.00
118	-2969	-2981	-2982	-2970	ML	0.00	2422.00	0.00
118	-3020	-3032	-3033	-3021	ML	0.00	2422.00	0.00
118	-3123	-3135	-3136	-3124	ML	0.00	2422.00	0.00
118	-2973	-2985	-2986	-2974	ML	0.00	2422.00	0.00
118	-3124	-3136	-3137	-3125	ML	0.00	2422.00	0.00
118	-3125	-3137	-3138	-3126	ML	0.00	2422.00	0.00
118	-3126	-3138	-3139	-3127	ML	0.00	2422.00	0.00
118	-2927	-2939	-2940	-2928	ML	0.00	2422.00	0.00
118	-2928	-2940	-2941	-2929	ML	0.00	2422.00	0.00
118	-3029	-3041	-3042	-3030	ML	0.00	2422.00	0.00
118	-2979	-3410	-3409	-2980	ML	0.00	2422.00	0.00
118	-3131	-3143	-3144	-3132	ML	0.00	2422.00	0.00
118	-3031	-3043	-3044	-3032	ML	0.00	2422.00	0.00
118	-3133	-3145	-3146	-3134	ML	0.00	2422.00	0.00
118	-2934	-2946	-2947	-2935	ML	0.00	2422.00	0.00
118	-3135	-3147	-3148	-3136	ML	0.00	2422.00	0.00
118	-3136	-3148	-3149	-3137	ML	0.00	2422.00	0.00
118	-2936	-2948	-2949	-2937	ML	0.00	2422.00	0.00
118	-3138	-3150	-3151	-3139	ML	0.00	2422.00	0.00
118	-2950	-2962	-1855	-1857	ML	0.00	2422.00	0.00
118	-3038	-3050	-3051	-3039	ML	0.00	2422.00	0.00
118	-3141	-3153	-3154	-3142	ML	0.00	2422.00	0.00
118	-3041	-3053	-3054	-3042	ML	0.00	2422.00	0.00
118	-3043	-3055	-3056	-3044	ML	0.00	2422.00	0.00
118	-3144	-3156	-3157	-3145	ML	0.00	2422.00	0.00
118	-2945	-2957	-2958	-2946	ML	0.00	2422.00	0.00
118	-2946	-2958	-2959	-2947	ML	0.00	2422.00	0.00

Relazione di calcolo

118	-2947	-2959	-2960	-2948	ML	0.00	2422.00	0.00
118	-3148	-3160	-3161	-3149	ML	0.00	2422.00	0.00
118	-3149	-3161	-3162	-3150	ML	0.00	2422.00	0.00
118	-3049	-3061	-3062	-3050	ML	0.00	2422.00	0.00
118	-3050	-3062	-3063	-3051	ML	0.00	2422.00	0.00
118	-2952	-2964	-2965	-2953	ML	0.00	2422.00	0.00
118	-2951	-2963	-2964	-2952	ML	0.00	2422.00	0.00
118	-3103	-3115	-3116	-3104	ML	0.00	2422.00	0.00
118	-3054	-3066	-3067	-3055	ML	0.00	2422.00	0.00
118	-3105	-3117	-3118	-3106	ML	0.00	2422.00	0.00
118	-2956	-2968	-2969	-2957	ML	0.00	2422.00	0.00
118	-3007	-3019	-3020	-3008	ML	0.00	2422.00	0.00
118	-3414	-2987	-2988	-3413	ML	0.00	2422.00	0.00
118	-3009	-3021	-3022	-3010	ML	0.00	2422.00	0.00
118	-1519	-2922	-2923	-1521	ML	0.00	2422.00	0.00
118	-3059	-3071	-3072	-3060	ML	0.00	2422.00	0.00
118	-3501	-3500	-3107	-3095	ML	0.00	2422.00	0.00
118	-2963	-2975	-2976	-2964	ML	0.00	2422.00	0.00
118	-2964	-2976	-2977	-2965	ML	0.00	2422.00	0.00
118	-2965	-2977	-2978	-2966	ML	0.00	2422.00	0.00
118	-3117	-3129	-3130	-3118	ML	0.00	2422.00	0.00
118	-3068	-3080	-3081	-3069	ML	0.00	2422.00	0.00
118	-2967	-2979	-2980	-2968	ML	0.00	2422.00	0.00
118	-3070	-3082	-1835	-1837	ML	0.00	2422.00	0.00
118	-2968	-2980	-2981	-2969	ML	0.00	2422.00	0.00
118	-3122	-3134	-3135	-3123	ML	0.00	2422.00	0.00
118	-3072	-3084	-3085	-3073	ML	0.00	2422.00	0.00
118	-2974	-2986	-1851	-1853	ML	0.00	2422.00	0.00
118	-3074	-3086	-3087	-3075	ML	0.00	2422.00	0.00
118	-3075	-3087	-3088	-3076	ML	0.00	2422.00	0.00
118	-2976	-3413	-3412	-2977	ML	0.00	2422.00	0.00
118	-3076	-3088	-3089	-3077	ML	0.00	2422.00	0.00
118	-3078	-3090	-3091	-3079	ML	0.00	2422.00	0.00
118	-3027	-3039	-3040	-3028	ML	0.00	2422.00	0.00
118	-2916	-2928	-2929	-2917	ML	0.00	2422.00	0.00
118	-3081	-3093	-3094	-3082	ML	0.00	2422.00	0.00
118	-3032	-3044	-3045	-3033	ML	0.00	2422.00	0.00
118	-3497	-3496	-3155	-3143	ML	0.00	2422.00	0.00
118	-3034	-3046	-1841	-1843	ML	0.00	2422.00	0.00
118	-3085	-3097	-3098	-3086	ML	0.00	2422.00	0.00
118	-3035	-3047	-3048	-3036	ML	0.00	2422.00	0.00
118	-3087	-3099	-3100	-3088	ML	0.00	2422.00	0.00
118	-3503	-3502	-3083	-3071	ML	0.00	2422.00	0.00
118	-2988	-3000	-3001	-2989	ML	0.00	2422.00	0.00
118	-3090	-3102	-3103	-3091	ML	0.00	2422.00	0.00
118	-3505	-3504	-3059	-3047	ML	0.00	2422.00	0.00
118	-3104	-3116	-3117	-3105	ML	0.00	2422.00	0.00
118	-2942	-2954	-2955	-2943	ML	0.00	2422.00	0.00
118	-3509	-3508	-3011	-2999	ML	0.00	2422.00	0.00
118	-2994	-3006	-3007	-2995	ML	0.00	2422.00	0.00
118	-3510	-3509	-2999	-2987	ML	0.00	2422.00	0.00
118	-3096	-3108	-3109	-3097	ML	0.00	2422.00	0.00
118	-3097	-3109	-3110	-3098	ML	0.00	2422.00	0.00
118	-3098	-3110	-3111	-3099	ML	0.00	2422.00	0.00
118	-3099	-3111	-3112	-3100	ML	0.00	2422.00	0.00
118	-3516	-3515	-2939	-2927	ML	0.00	2422.00	0.00
118	-3101	-3113	-3114	-3102	ML	0.00	2422.00	0.00
118	-3102	-3114	-3115	-3103	ML	0.00	2422.00	0.00
118	-3518	-3517	-2915	-1505	ML	0.00	2422.00	0.00
118	-3064	-3076	-3077	-3065	ML	0.00	2422.00	0.00
118	-2966	-2978	-2979	-2967	ML	0.00	2422.00	0.00
118	-1509	-2917	-2918	-1511	ML	0.00	2422.00	0.00
118	-3055	-3067	-3068	-3056	ML	0.00	2422.00	0.00
118	-3107	-3119	-3120	-3108	ML	0.00	2422.00	0.00
118	-3057	-3069	-3070	-3058	ML	0.00	2422.00	0.00
118	-2959	-2971	-2972	-2960	ML	0.00	2422.00	0.00
118	-3500	-3499	-3119	-3107	ML	0.00	2422.00	0.00
118	-2961	-2973	-2974	-2962	ML	0.00	2422.00	0.00
118	-3036	-3048	-3049	-3037	ML	0.00	2422.00	0.00
118	-3063	-3075	-3076	-3064	ML	0.00	2422.00	0.00
118	-3014	-3026	-3027	-3015	ML	0.00	2422.00	0.00
118	-3028	-3040	-3041	-3029	ML	0.00	2422.00	0.00
118	-2940	-2952	-2953	-2941	ML	0.00	2422.00	0.00
118	-3067	-3079	-3080	-3068	ML	0.00	2422.00	0.00
118	-3018	-3030	-3031	-3019	ML	0.00	2422.00	0.00
118	-2944	-2956	-2957	-2945	ML	0.00	2422.00	0.00
118	-3045	-3057	-3058	-3046	ML	0.00	2422.00	0.00
118	-3021	-3033	-3034	-3022	ML	0.00	2422.00	0.00
118	-2923	-2935	-2936	-2924	ML	0.00	2422.00	0.00

Relazione di calcolo

118	-2924	-2936	-2937	-2925	ML	0.00	2422.00	0.00
118	-2925	-2937	-2938	-2926	ML	0.00	2422.00	0.00
118	-3127	-3139	-3140	-3128	ML	0.00	2422.00	0.00
118	-3026	-3038	-3039	-3027	ML	0.00	2422.00	0.00
118	-3039	-3051	-3052	-3040	ML	0.00	2422.00	0.00
118	-2977	-3412	-3411	-2978	ML	0.00	2422.00	0.00
118	-3016	-3028	-3029	-3017	ML	0.00	2422.00	0.00
118	-3030	-3042	-3043	-3031	ML	0.00	2422.00	0.00
118	-3106	-3118	-1829	-1831	ML	0.00	2422.00	0.00
118	-2958	-2970	-2971	-2959	ML	0.00	2422.00	0.00
118	-2933	-2945	-2946	-2934	ML	0.00	2422.00	0.00
118	-2935	-2947	-2948	-2936	ML	0.00	2422.00	0.00
118	-3037	-3049	-3050	-3038	ML	0.00	2422.00	0.00
118	-3502	-3501	-3095	-3083	ML	0.00	2422.00	0.00
118	-3062	-3074	-3075	-3063	ML	0.00	2422.00	0.00
118	-3051	-3063	-3064	-3052	ML	0.00	2422.00	0.00
118	-3065	-3077	-3078	-3066	ML	0.00	2422.00	0.00
118	-3040	-3052	-3053	-3041	ML	0.00	2422.00	0.00
118	-3042	-3054	-3055	-3043	ML	0.00	2422.00	0.00
118	-3069	-3081	-3082	-3070	ML	0.00	2422.00	0.00
118	-3044	-3056	-3057	-3045	ML	0.00	2422.00	0.00
118	-3413	-2988	-2989	-3412	ML	0.00	2422.00	0.00
118	-3046	-3058	-1839	-1841	ML	0.00	2422.00	0.00
118	-3047	-3059	-3060	-3048	ML	0.00	2422.00	0.00
118	-2949	-2961	-2962	-2950	ML	0.00	2422.00	0.00
118	-2926	-2938	-1857	-1859	ML	0.00	2422.00	0.00
118	-3405	-2996	-2997	-3404	ML	0.00	2422.00	0.00
118	-3025	-3037	-3038	-3026	ML	0.00	2422.00	0.00
118	-3504	-3503	-3071	-3059	ML	0.00	2422.00	0.00
118	-3066	-3078	-3079	-3067	ML	0.00	2422.00	0.00
118	-3411	-2990	-2991	-3410	ML	0.00	2422.00	0.00
118	-3073	-3085	-3086	-3074	ML	0.00	2422.00	0.00
118	-3024	-3036	-3037	-3025	ML	0.00	2422.00	0.00
118	-3033	-3045	-3046	-3034	ML	0.00	2422.00	0.00
118	-3058	-3070	-1837	-1839	ML	0.00	2422.00	0.00
118	-2972	-2984	-2985	-2973	ML	0.00	2422.00	0.00
118	-3022	-3034	-1843	-1845	ML	0.00	2422.00	0.00
118	-3512	-3511	-3414	-2975	ML	0.00	2422.00	0.00
118	-2998	-3010	-1847	-1849	ML	0.00	2422.00	0.00
118	-3023	-3035	-3036	-3024	ML	0.00	2422.00	0.00
118	-3515	-3514	-2951	-2939	ML	0.00	2422.00	0.00
118	-3517	-3516	-2927	-2915	ML	0.00	2422.00	0.00
118	-2996	-3008	-3009	-2997	ML	0.00	2422.00	0.00
118	-2957	-2969	-2970	-2958	ML	0.00	2422.00	0.00
118	-3071	-3083	-3084	-3072	ML	0.00	2422.00	0.00
118	-3514	-3513	-2963	-2951	ML	0.00	2422.00	0.00
118	-3513	-3512	-2975	-2963	ML	0.00	2422.00	0.00
118	-3048	-3060	-3061	-3049	ML	0.00	2422.00	0.00
118	-3403	-2998	-1849	-3402	ML	0.00	2422.00	0.00
118	-2970	-2982	-2983	-2971	ML	0.00	2422.00	0.00
119	-3182	-3194	-3195	-3183	ML	0.00	2422.00	0.00
119	-3322	-3334	-1793	-1795	ML	0.00	2422.00	0.00
119	-3319	-3331	-3332	-3320	ML	0.00	2422.00	0.00
119	-3344	-3356	-3357	-3345	ML	0.00	2422.00	0.00
119	-3493	-3492	-3203	-3191	ML	0.00	2422.00	0.00
119	-3321	-3333	-3334	-3322	ML	0.00	2422.00	0.00
119	-3331	-3343	-3344	-3332	ML	0.00	2422.00	0.00
119	-3171	-3183	-3184	-3172	ML	0.00	2422.00	0.00
119	-3310	-3322	-1795	-1797	ML	0.00	2422.00	0.00
119	-3311	-3323	-3324	-3312	ML	0.00	2422.00	0.00
119	-3312	-3324	-3325	-3313	ML	0.00	2422.00	0.00
119	-3280	-3292	-3293	-3281	ML	0.00	2422.00	0.00
119	-3282	-3294	-3295	-3283	ML	0.00	2422.00	0.00
119	-3340	-3352	-3353	-3341	ML	0.00	2422.00	0.00
119	-3155	-3167	-3168	-3156	ML	0.00	2422.00	0.00
119	-3330	-3342	-3343	-3331	ML	0.00	2422.00	0.00
119	-3316	-3328	-3329	-3317	ML	0.00	2422.00	0.00
119	-3192	-3204	-3205	-3193	ML	0.00	2422.00	0.00
119	-3193	-3205	-3206	-3194	ML	0.00	2422.00	0.00
119	-3292	-3304	-3305	-3293	ML	0.00	2422.00	0.00
119	-3320	-3332	-3333	-3321	ML	0.00	2422.00	0.00
119	-3296	-3308	-3309	-3297	ML	0.00	2422.00	0.00
119	-3185	-3197	-3198	-3186	ML	0.00	2422.00	0.00
119	-3285	-3297	-3298	-3286	ML	0.00	2422.00	0.00
119	-3262	-3274	-1803	-1805	ML	0.00	2422.00	0.00
119	-3214	-3226	-1811	-1813	ML	0.00	2422.00	0.00
119	-3151	-3163	-3164	-3152	ML	0.00	2422.00	0.00
119	-3180	-3192	-3193	-3181	ML	0.00	2422.00	0.00
119	-3354	-1688	-1690	-3355	ML	0.00	2422.00	0.00

Relazione di calcolo

119	-3353	-1686	-1688	-3354	ML	0.00	2422.00	0.00
119	-3203	-3215	-3216	-3204	ML	0.00	2422.00	0.00
119	-3204	-3216	-3217	-3205	ML	0.00	2422.00	0.00
119	-3256	-3268	-3269	-3257	ML	0.00	2422.00	0.00
119	-3181	-3193	-3194	-3182	ML	0.00	2422.00	0.00
119	-3183	-3195	-3196	-3184	ML	0.00	2422.00	0.00
119	-3309	-3321	-3322	-3310	ML	0.00	2422.00	0.00
119	-3284	-3296	-3297	-3285	ML	0.00	2422.00	0.00
119	-3212	-3224	-3225	-3213	ML	0.00	2422.00	0.00
119	-3187	-3199	-3200	-3188	ML	0.00	2422.00	0.00
119	-3313	-3325	-3326	-3314	ML	0.00	2422.00	0.00
119	-3190	-3202	-1815	-1817	ML	0.00	2422.00	0.00
119	-3154	-3166	-1821	-1823	ML	0.00	2422.00	0.00
119	-3215	-3227	-3228	-3216	ML	0.00	2422.00	0.00
119	-3315	-3327	-3328	-3316	ML	0.00	2422.00	0.00
119	-3342	-3354	-3355	-3343	ML	0.00	2422.00	0.00
119	-3217	-3229	-3230	-3218	ML	0.00	2422.00	0.00
119	-3318	-3330	-3331	-3319	ML	0.00	2422.00	0.00
119	-3219	-3231	-3232	-3220	ML	0.00	2422.00	0.00
119	-3483	-3482	-3323	-3311	ML	0.00	2422.00	0.00
119	-3220	-3232	-3233	-3221	ML	0.00	2422.00	0.00
119	-3211	-3223	-3224	-3212	ML	0.00	2422.00	0.00
119	-3162	-3174	-3175	-3163	ML	0.00	2422.00	0.00
119	-3261	-3273	-3274	-3262	ML	0.00	2422.00	0.00
119	-3201	-3213	-3214	-3202	ML	0.00	2422.00	0.00
119	-3314	-3326	-3327	-3315	ML	0.00	2422.00	0.00
119	-3277	-3289	-3290	-3278	ML	0.00	2422.00	0.00
119	-3327	-3339	-3340	-3328	ML	0.00	2422.00	0.00
119	-3329	-3341	-3342	-3330	ML	0.00	2422.00	0.00
119	-3229	-3241	-3242	-3230	ML	0.00	2422.00	0.00
119	-3179	-3191	-3192	-3180	ML	0.00	2422.00	0.00
119	-3332	-3344	-3345	-3333	ML	0.00	2422.00	0.00
119	-3496	-3495	-3167	-3155	ML	0.00	2422.00	0.00
119	-3184	-3196	-3197	-3185	ML	0.00	2422.00	0.00
119	-3337	-3349	-3350	-3338	ML	0.00	2422.00	0.00
119	-3160	-3172	-3173	-3161	ML	0.00	2422.00	0.00
119	-3213	-3225	-3226	-3214	ML	0.00	2422.00	0.00
119	-3176	-3188	-3189	-3177	ML	0.00	2422.00	0.00
119	-3338	-3350	-3351	-3339	ML	0.00	2422.00	0.00
119	-3191	-3203	-3204	-3192	ML	0.00	2422.00	0.00
119	-3291	-3303	-3304	-3292	ML	0.00	2422.00	0.00
119	-3293	-3305	-3306	-3294	ML	0.00	2422.00	0.00
119	-3243	-3255	-3256	-3244	ML	0.00	2422.00	0.00
119	-3195	-3207	-3208	-3196	ML	0.00	2422.00	0.00
119	-3346	-3358	-1789	-1791	ML	0.00	2422.00	0.00
119	-3347	-1674	-1676	-3348	ML	0.00	2422.00	0.00
119	-3173	-3185	-3186	-3174	ML	0.00	2422.00	0.00
119	-3336	-3348	-3349	-3337	ML	0.00	2422.00	0.00
119	-3339	-3351	-3352	-3340	ML	0.00	2422.00	0.00
119	-3153	-3165	-3166	-3154	ML	0.00	2422.00	0.00
119	-3252	-3264	-3265	-3253	ML	0.00	2422.00	0.00
119	-3253	-3265	-3266	-3254	ML	0.00	2422.00	0.00
119	-3254	-3266	-3267	-3255	ML	0.00	2422.00	0.00
119	-3356	-1692	-1694	-3357	ML	0.00	2422.00	0.00
119	-3156	-3168	-3169	-3157	ML	0.00	2422.00	0.00
119	-3333	-3345	-3346	-3334	ML	0.00	2422.00	0.00
119	-3208	-3220	-3221	-3209	ML	0.00	2422.00	0.00
119	-3210	-3222	-3223	-3211	ML	0.00	2422.00	0.00
119	-3260	-3272	-3273	-3261	ML	0.00	2422.00	0.00
119	-3175	-3187	-3188	-3176	ML	0.00	2422.00	0.00
119	-3163	-3175	-3176	-3164	ML	0.00	2422.00	0.00
119	-3164	-3176	-3177	-3165	ML	0.00	2422.00	0.00
119	-3165	-3177	-3178	-3166	ML	0.00	2422.00	0.00
119	-3166	-3178	-1819	-1821	ML	0.00	2422.00	0.00
119	-3241	-3253	-3254	-3242	ML	0.00	2422.00	0.00
119	-3268	-3280	-3281	-3269	ML	0.00	2422.00	0.00
119	-3481	-3480	-3347	-3335	ML	0.00	2422.00	0.00
119	-3270	-3282	-3283	-3271	ML	0.00	2422.00	0.00
119	-3169	-3181	-3182	-3170	ML	0.00	2422.00	0.00
119	-3271	-3283	-3284	-3272	ML	0.00	2422.00	0.00
119	-3485	-3484	-3299	-3287	ML	0.00	2422.00	0.00
119	-3489	-3488	-3251	-3239	ML	0.00	2422.00	0.00
119	-3177	-3189	-3190	-3178	ML	0.00	2422.00	0.00
119	-3491	-3490	-3227	-3215	ML	0.00	2422.00	0.00
119	-3278	-3290	-3291	-3279	ML	0.00	2422.00	0.00
119	-3492	-3491	-3215	-3203	ML	0.00	2422.00	0.00
119	-3279	-3291	-3292	-3280	ML	0.00	2422.00	0.00
119	-3495	-3494	-3179	-3167	ML	0.00	2422.00	0.00
119	-3281	-3293	-3294	-3282	ML	0.00	2422.00	0.00

Relazione di calcolo

119	-3232	-3244	-3245	-3233	ML	0.00	2422.00	0.00
119	-3283	-3295	-3296	-3284	ML	0.00	2422.00	0.00
119	-3234	-3246	-3247	-3235	ML	0.00	2422.00	0.00
119	-3186	-3198	-3199	-3187	ML	0.00	2422.00	0.00
119	-3236	-3248	-3249	-3237	ML	0.00	2422.00	0.00
119	-3188	-3200	-3201	-3189	ML	0.00	2422.00	0.00
119	-3288	-3300	-3301	-3289	ML	0.00	2422.00	0.00
119	-3189	-3201	-3202	-3190	ML	0.00	2422.00	0.00
119	-3290	-3302	-3303	-3291	ML	0.00	2422.00	0.00
119	-3317	-3329	-3330	-3318	ML	0.00	2422.00	0.00
119	-3343	-3355	-3356	-3344	ML	0.00	2422.00	0.00
119	-3294	-3306	-3307	-3295	ML	0.00	2422.00	0.00
119	-3194	-3206	-3207	-3195	ML	0.00	2422.00	0.00
119	-3295	-3307	-3308	-3296	ML	0.00	2422.00	0.00
119	-3197	-3209	-3210	-3198	ML	0.00	2422.00	0.00
119	-3348	-1676	-1678	-3349	ML	0.00	2422.00	0.00
119	-3174	-3186	-3187	-3175	ML	0.00	2422.00	0.00
119	-3250	-3262	-1805	-1807	ML	0.00	2422.00	0.00
119	-3300	-3312	-3313	-3301	ML	0.00	2422.00	0.00
119	-3202	-3214	-1813	-1815	ML	0.00	2422.00	0.00
119	-3303	-3315	-3316	-3304	ML	0.00	2422.00	0.00
119	-3304	-3316	-3317	-3305	ML	0.00	2422.00	0.00
119	-3305	-3317	-3318	-3306	ML	0.00	2422.00	0.00
119	-3206	-3218	-3219	-3207	ML	0.00	2422.00	0.00
119	-3307	-3319	-3320	-3308	ML	0.00	2422.00	0.00
119	-3308	-3320	-3321	-3309	ML	0.00	2422.00	0.00
119	-3358	-1696	14	-1789	ML	0.00	2422.00	0.00
119	-3209	-3221	-3222	-3210	ML	0.00	2422.00	0.00
119	-3159	-3171	-3172	-3160	ML	0.00	2422.00	0.00
119	-3286	-3298	-1799	-1801	ML	0.00	2422.00	0.00
119	-3161	-3173	-3174	-3162	ML	0.00	2422.00	0.00
119	-3237	-3249	-3250	-3238	ML	0.00	2422.00	0.00
119	-3263	-3275	-3276	-3264	ML	0.00	2422.00	0.00
119	-3264	-3276	-3277	-3265	ML	0.00	2422.00	0.00
119	-3167	-3179	-3180	-3168	ML	0.00	2422.00	0.00
119	-3218	-3230	-3231	-3219	ML	0.00	2422.00	0.00
119	-3482	-3481	-3335	-3323	ML	0.00	2422.00	0.00
119	-3245	-3257	-3258	-3246	ML	0.00	2422.00	0.00
119	-3221	-3233	-3234	-3222	ML	0.00	2422.00	0.00
119	-3323	-3335	-3336	-3324	ML	0.00	2422.00	0.00
119	-3223	-3235	-3236	-3224	ML	0.00	2422.00	0.00
119	-3324	-3336	-3337	-3325	ML	0.00	2422.00	0.00
119	-3325	-3337	-3338	-3326	ML	0.00	2422.00	0.00
119	-3328	-3340	-3341	-3329	ML	0.00	2422.00	0.00
119	-3228	-3240	-3241	-3229	ML	0.00	2422.00	0.00
119	-3227	-3239	-3240	-3228	ML	0.00	2422.00	0.00
119	-3355	-1690	-1692	-3356	ML	0.00	2422.00	0.00
119	-3230	-3242	-3243	-3231	ML	0.00	2422.00	0.00
119	-3231	-3243	-3244	-3232	ML	0.00	2422.00	0.00
119	-3158	-3170	-3171	-3159	ML	0.00	2422.00	0.00
119	-3334	-3346	-1791	-1793	ML	0.00	2422.00	0.00
119	-3259	-3271	-3272	-3260	ML	0.00	2422.00	0.00
119	-3335	-3347	-3348	-3336	ML	0.00	2422.00	0.00
119	-3235	-3247	-3248	-3236	ML	0.00	2422.00	0.00
119	-3238	-3250	-1807	-1809	ML	0.00	2422.00	0.00
119	-3287	-3299	-3300	-3288	ML	0.00	2422.00	0.00
119	-3239	-3251	-3252	-3240	ML	0.00	2422.00	0.00
119	-3341	-3353	-3354	-3342	ML	0.00	2422.00	0.00
119	-3216	-3228	-3229	-3217	ML	0.00	2422.00	0.00
119	-3242	-3254	-3255	-3243	ML	0.00	2422.00	0.00
119	-3269	-3281	-3282	-3270	ML	0.00	2422.00	0.00
119	-3345	-3357	-3358	-3346	ML	0.00	2422.00	0.00
119	-3207	-3219	-3220	-3208	ML	0.00	2422.00	0.00
119	-3246	-3258	-3259	-3247	ML	0.00	2422.00	0.00
119	-3247	-3259	-3260	-3248	ML	0.00	2422.00	0.00
119	-3248	-3260	-3261	-3249	ML	0.00	2422.00	0.00
119	-3349	-1678	-1680	-3350	ML	0.00	2422.00	0.00
119	-3150	-3162	-3163	-3151	ML	0.00	2422.00	0.00
119	-3351	-1682	-1684	-3352	ML	0.00	2422.00	0.00
119	-3152	-3164	-3165	-3153	ML	0.00	2422.00	0.00
119	-3352	-1684	-1686	-3353	ML	0.00	2422.00	0.00
119	-3240	-3252	-3253	-3241	ML	0.00	2422.00	0.00
119	-3266	-3278	-3279	-3267	ML	0.00	2422.00	0.00
119	-3205	-3217	-3218	-3206	ML	0.00	2422.00	0.00
119	-3357	-1694	-1696	-3358	ML	0.00	2422.00	0.00
119	-3168	-3180	-3181	-3169	ML	0.00	2422.00	0.00
119	-3257	-3269	-3270	-3258	ML	0.00	2422.00	0.00
119	-3258	-3270	-3271	-3259	ML	0.00	2422.00	0.00
119	-3172	-3184	-3185	-3173	ML	0.00	2422.00	0.00

Relazione di calcolo

119	-3273	-3285	-3286	-3274	ML	0.00	2422.00	0.00
119	-3487	-3486	-3275	-3263	ML	0.00	2422.00	0.00
119	-3488	-3487	-3263	-3251	ML	0.00	2422.00	0.00
119	-3275	-3287	-3288	-3276	ML	0.00	2422.00	0.00
119	-3265	-3277	-3278	-3266	ML	0.00	2422.00	0.00
119	-3178	-3190	-1817	-1819	ML	0.00	2422.00	0.00
119	-3302	-3314	-3315	-3303	ML	0.00	2422.00	0.00
119	-3267	-3279	-3280	-3268	ML	0.00	2422.00	0.00
119	-3480	-3479	-1674	-3347	ML	0.00	2422.00	0.00
119	-3306	-3318	-3319	-3307	ML	0.00	2422.00	0.00
119	-3157	-3169	-3170	-3158	ML	0.00	2422.00	0.00
119	-3486	-3485	-3287	-3275	ML	0.00	2422.00	0.00
119	-3196	-3208	-3209	-3197	ML	0.00	2422.00	0.00
119	-3297	-3309	-3310	-3298	ML	0.00	2422.00	0.00
119	-3199	-3211	-3212	-3200	ML	0.00	2422.00	0.00
119	-3200	-3212	-3213	-3201	ML	0.00	2422.00	0.00
119	-3276	-3288	-3289	-3277	ML	0.00	2422.00	0.00
119	-3289	-3301	-3302	-3290	ML	0.00	2422.00	0.00
119	-3226	-3238	-1809	-1811	ML	0.00	2422.00	0.00
119	-3490	-3489	-3239	-3227	ML	0.00	2422.00	0.00
119	-3494	-3493	-3191	-3179	ML	0.00	2422.00	0.00
119	-3222	-3234	-3235	-3223	ML	0.00	2422.00	0.00
119	-3244	-3256	-3257	-3245	ML	0.00	2422.00	0.00
119	-3233	-3245	-3246	-3234	ML	0.00	2422.00	0.00
119	-3301	-3313	-3314	-3302	ML	0.00	2422.00	0.00
119	-3484	-3483	-3311	-3299	ML	0.00	2422.00	0.00
119	-3272	-3284	-3285	-3273	ML	0.00	2422.00	0.00
119	-3198	-3210	-3211	-3199	ML	0.00	2422.00	0.00
119	-3224	-3236	-3237	-3225	ML	0.00	2422.00	0.00
119	-3350	-1680	-1682	-3351	ML	0.00	2422.00	0.00
119	-3225	-3237	-3238	-3226	ML	0.00	2422.00	0.00
119	-3274	-3286	-1801	-1803	ML	0.00	2422.00	0.00
119	-3251	-3263	-3264	-3252	ML	0.00	2422.00	0.00
119	-3170	-3182	-3183	-3171	ML	0.00	2422.00	0.00
119	-3255	-3267	-3268	-3256	ML	0.00	2422.00	0.00
119	-3326	-3338	-3339	-3327	ML	0.00	2422.00	0.00
119	-3299	-3311	-3312	-3300	ML	0.00	2422.00	0.00
119	-3249	-3261	-3262	-3250	ML	0.00	2422.00	0.00
119	-3298	-3310	-1797	-1799	ML	0.00	2422.00	0.00

Condizione di carico n. 13: Spinta inerziale terreno

Carichi uniformi

Bid.	N1	N2	N3	N4	TDC	Qx	Qy	Qz
						<daN/mq>	<daN/mq>	<daN/mq>
112	-1565	-1577	-1578	-1566	ML	0.00	-860.00	0.00
112	-1584	-1520	-1522	-1585	ML	0.00	-860.00	0.00
112	-742	-740	-3521	-3520	ML	0.00	-860.00	0.00
112	-1533	-1545	-1546	-1534	ML	0.00	-860.00	0.00
112	-740	274	-3522	-3521	ML	0.00	-860.00	0.00
112	-1544	-1556	-1557	-1545	ML	0.00	-860.00	0.00
112	-1585	-1522	-1524	-1586	ML	0.00	-860.00	0.00
112	-1579	-1510	-1512	-1580	ML	0.00	-860.00	0.00
112	-1563	-1575	-1502	-1501	ML	0.00	-860.00	0.00
112	-1558	-1570	-1571	-1559	ML	0.00	-860.00	0.00
112	-1562	-1574	-1575	-1563	ML	0.00	-860.00	0.00
112	-1570	-1582	-1583	-1571	ML	0.00	-860.00	0.00
112	-1546	-1558	-1559	-1547	ML	0.00	-860.00	0.00
112	-1575	-1587	-1503	-1502	ML	0.00	-860.00	0.00
112	-1557	-1569	-1570	-1558	ML	0.00	-860.00	0.00
112	-1543	-1555	-1556	-1544	ML	0.00	-860.00	0.00
112	-1535	-1547	-1548	-1536	ML	0.00	-860.00	0.00
112	-1564	-1576	-1577	-1565	ML	0.00	-860.00	0.00
112	3	-744	-3519	-3518	ML	0.00	-860.00	0.00
112	-744	-742	-3520	-3519	ML	0.00	-860.00	0.00
112	-1538	-1550	-1551	-1539	ML	0.00	-860.00	0.00
112	-1559	-1571	-1572	-1560	ML	0.00	-860.00	0.00
112	-1547	-1559	-1560	-1548	ML	0.00	-860.00	0.00
112	-1574	-1586	-1587	-1575	ML	0.00	-860.00	0.00
112	-1532	-1544	-1545	-1533	ML	0.00	-860.00	0.00
112	-1542	-1554	-1555	-1543	ML	0.00	-860.00	0.00
112	-1534	-1546	-1547	-1535	ML	0.00	-860.00	0.00
112	-1536	-1548	-1549	-1537	ML	0.00	-860.00	0.00
112	-1586	-1524	-1526	-1587	ML	0.00	-860.00	0.00
112	-1561	-1573	-1574	-1562	ML	0.00	-860.00	0.00
112	-1505	-1528	-1529	-1507	ML	0.00	-860.00	0.00
112	-1577	-1506	-1508	-1578	ML	0.00	-860.00	0.00
112	-1540	-1552	-1553	-1541	ML	0.00	-860.00	0.00
112	-1548	-1560	-1561	-1549	ML	0.00	-860.00	0.00

Relazione di calcolo

112	-1531	-1543	-1544	-1532	ML	0.00	-860.00	0.00
112	-1545	-1557	-1558	-1546	ML	0.00	-860.00	0.00
112	-3520	-3521	-1552	-1540	ML	0.00	-860.00	0.00
112	-1528	-1540	-1541	-1529	ML	0.00	-860.00	0.00
112	-3523	-3524	-1504	-1576	ML	0.00	-860.00	0.00
112	-1571	-1583	-1584	-1572	ML	0.00	-860.00	0.00
112	-1550	-1562	-1563	-1551	ML	0.00	-860.00	0.00
112	-1568	-1580	-1581	-1569	ML	0.00	-860.00	0.00
112	-1519	-1535	-1536	-1521	ML	0.00	-860.00	0.00
112	-1566	-1578	-1579	-1567	ML	0.00	-860.00	0.00
112	-1530	-1542	-1543	-1531	ML	0.00	-860.00	0.00
112	-1537	-1549	-1550	-1538	ML	0.00	-860.00	0.00
112	-1576	-1504	-1506	-1577	ML	0.00	-860.00	0.00
112	-1583	-1518	-1520	-1584	ML	0.00	-860.00	0.00
112	-1582	-1516	-1518	-1583	ML	0.00	-860.00	0.00
112	-1541	-1553	-1554	-1542	ML	0.00	-860.00	0.00
112	-1580	-1512	-1514	-1581	ML	0.00	-860.00	0.00
112	-1539	-1551	-1500	-1499	ML	0.00	-860.00	0.00
112	-1560	-1572	-1573	-1561	ML	0.00	-860.00	0.00
112	-1525	-1538	-1539	-1527	ML	0.00	-860.00	0.00
112	-1529	-1541	-1542	-1530	ML	0.00	-860.00	0.00
112	-1511	-1531	-1532	-1513	ML	0.00	-860.00	0.00
112	-1527	-1539	-1499	103	ML	0.00	-860.00	0.00
112	-1578	-1508	-1510	-1579	ML	0.00	-860.00	0.00
112	-1554	-1566	-1567	-1555	ML	0.00	-860.00	0.00
112	-1513	-1532	-1533	-1515	ML	0.00	-860.00	0.00
112	-736	20	-3524	-3523	ML	0.00	-860.00	0.00
112	-1555	-1567	-1568	-1556	ML	0.00	-860.00	0.00
112	-1515	-1533	-1534	-1517	ML	0.00	-860.00	0.00
112	-3519	-3520	-1540	-1528	ML	0.00	-860.00	0.00
112	-1552	-1564	-1565	-1553	ML	0.00	-860.00	0.00
112	-1509	-1530	-1531	-1511	ML	0.00	-860.00	0.00
112	-1572	-1584	-1585	-1573	ML	0.00	-860.00	0.00
112	-1569	-1581	-1582	-1570	ML	0.00	-860.00	0.00
112	-1587	-1526	120	-1503	ML	0.00	-860.00	0.00
112	-1567	-1579	-1580	-1568	ML	0.00	-860.00	0.00
112	-1523	-1537	-1538	-1525	ML	0.00	-860.00	0.00
112	-1551	-1563	-1501	-1500	ML	0.00	-860.00	0.00
112	-1556	-1568	-1569	-1557	ML	0.00	-860.00	0.00
112	-1521	-1536	-1537	-1523	ML	0.00	-860.00	0.00
112	274	-736	-3523	-3522	ML	0.00	-860.00	0.00
112	-3518	-3519	-1528	-1505	ML	0.00	-860.00	0.00
112	-1553	-1565	-1566	-1554	ML	0.00	-860.00	0.00
112	-1581	-1514	-1516	-1582	ML	0.00	-860.00	0.00
112	-1517	-1534	-1535	-1519	ML	0.00	-860.00	0.00
112	-3521	-3522	-1564	-1552	ML	0.00	-860.00	0.00
112	-3522	-3523	-1576	-1564	ML	0.00	-860.00	0.00
112	-1573	-1585	-1586	-1574	ML	0.00	-860.00	0.00
112	-1549	-1561	-1562	-1550	ML	0.00	-860.00	0.00
112	-1507	-1529	-1530	-1509	ML	0.00	-860.00	0.00
115	-737	18	-3473	-3474	ML	0.00	860.00	0.00
115	-1707	-1719	-1720	-1708	ML	0.00	860.00	0.00
115	-1705	-1717	-1718	-1706	ML	0.00	860.00	0.00
115	-1755	-1693	-1695	-1756	ML	0.00	860.00	0.00
115	-1735	-1747	-1748	-1736	ML	0.00	860.00	0.00
115	-1697	-1709	-1710	-1698	ML	0.00	860.00	0.00
115	-1718	-1730	-1731	-1719	ML	0.00	860.00	0.00
115	-1756	-1695	118	-1672	ML	0.00	860.00	0.00
115	-1720	-1732	-1670	-1669	ML	0.00	860.00	0.00
115	-1736	-1748	-1749	-1737	ML	0.00	860.00	0.00
115	-1716	-1728	-1729	-1717	ML	0.00	860.00	0.00
115	-1740	-1752	-1753	-1741	ML	0.00	860.00	0.00
115	-1715	-1727	-1728	-1716	ML	0.00	860.00	0.00
115	-3476	-3475	-1733	-1721	ML	0.00	860.00	0.00
115	-1688	-1704	-1705	-1690	ML	0.00	860.00	0.00
115	-1706	-1718	-1719	-1707	ML	0.00	860.00	0.00
115	-1746	-1675	-1677	-1747	ML	0.00	860.00	0.00
115	-743	-741	-3476	-3477	ML	0.00	860.00	0.00
115	-1694	-1707	-1708	-1696	ML	0.00	860.00	0.00
115	-1710	-1722	-1723	-1711	ML	0.00	860.00	0.00
115	-1738	-1750	-1751	-1739	ML	0.00	860.00	0.00
115	-1727	-1739	-1740	-1728	ML	0.00	860.00	0.00
115	-1713	-1725	-1726	-1714	ML	0.00	860.00	0.00
115	-1682	-1701	-1702	-1684	ML	0.00	860.00	0.00
115	-1714	-1726	-1727	-1715	ML	0.00	860.00	0.00
115	-1753	-1689	-1691	-1754	ML	0.00	860.00	0.00
115	-1754	-1691	-1693	-1755	ML	0.00	860.00	0.00
115	-3475	-3474	-1745	-1733	ML	0.00	860.00	0.00
115	-1704	-1716	-1717	-1705	ML	0.00	860.00	0.00

Relazione di calcolo

115	-1692	-1706	-1707	-1694	ML	0.00	860.00	0.00
115	-1745	-1673	-1675	-1746	ML	0.00	860.00	0.00
115	-741	279	-3475	-3476	ML	0.00	860.00	0.00
115	-1747	-1677	-1679	-1748	ML	0.00	860.00	0.00
115	-1676	-1698	-1699	-1678	ML	0.00	860.00	0.00
115	-1680	-1700	-1701	-1682	ML	0.00	860.00	0.00
115	-1701	-1713	-1714	-1702	ML	0.00	860.00	0.00
115	-1712	-1724	-1725	-1713	ML	0.00	860.00	0.00
115	-1751	-1685	-1687	-1752	ML	0.00	860.00	0.00
115	-1684	-1702	-1703	-1686	ML	0.00	860.00	0.00
115	-1752	-1687	-1689	-1753	ML	0.00	860.00	0.00
115	-1717	-1729	-1730	-1718	ML	0.00	860.00	0.00
115	-1686	-1703	-1704	-1688	ML	0.00	860.00	0.00
115	-3478	-3477	-1709	-1697	ML	0.00	860.00	0.00
115	-1719	-1731	-1732	-1720	ML	0.00	860.00	0.00
115	-1696	-1708	-1668	14	ML	0.00	860.00	0.00
115	-1721	-1733	-1734	-1722	ML	0.00	860.00	0.00
115	-745	-743	-3477	-3478	ML	0.00	860.00	0.00
115	4	-745	-3478	-3479	ML	0.00	860.00	0.00
115	-1737	-1749	-1750	-1738	ML	0.00	860.00	0.00
115	-1725	-1737	-1738	-1726	ML	0.00	860.00	0.00
115	-1678	-1699	-1700	-1680	ML	0.00	860.00	0.00
115	-1700	-1712	-1713	-1701	ML	0.00	860.00	0.00
115	-1739	-1751	-1752	-1740	ML	0.00	860.00	0.00
115	-1729	-1741	-1742	-1730	ML	0.00	860.00	0.00
115	-1742	-1754	-1755	-1743	ML	0.00	860.00	0.00
115	-1731	-1743	-1744	-1732	ML	0.00	860.00	0.00
115	-1730	-1742	-1743	-1731	ML	0.00	860.00	0.00
115	-1708	-1720	-1669	-1668	ML	0.00	860.00	0.00
115	-1732	-1744	-1671	-1670	ML	0.00	860.00	0.00
115	-1726	-1738	-1739	-1727	ML	0.00	860.00	0.00
115	-1698	-1710	-1711	-1699	ML	0.00	860.00	0.00
115	-1699	-1711	-1712	-1700	ML	0.00	860.00	0.00
115	-1749	-1681	-1683	-1750	ML	0.00	860.00	0.00
115	-1724	-1736	-1737	-1725	ML	0.00	860.00	0.00
115	-1711	-1723	-1724	-1712	ML	0.00	860.00	0.00
115	-3479	-3478	-1697	-1674	ML	0.00	860.00	0.00
115	-1702	-1714	-1715	-1703	ML	0.00	860.00	0.00
115	-1703	-1715	-1716	-1704	ML	0.00	860.00	0.00
115	-1741	-1753	-1754	-1742	ML	0.00	860.00	0.00
115	-1744	-1756	-1672	-1671	ML	0.00	860.00	0.00
115	-1690	-1705	-1706	-1692	ML	0.00	860.00	0.00
115	-3477	-3476	-1721	-1709	ML	0.00	860.00	0.00
115	-1674	-1697	-1698	-1676	ML	0.00	860.00	0.00
115	-1750	-1683	-1685	-1751	ML	0.00	860.00	0.00
115	-1709	-1721	-1722	-1710	ML	0.00	860.00	0.00
115	-1722	-1734	-1735	-1723	ML	0.00	860.00	0.00
115	-1748	-1679	-1681	-1749	ML	0.00	860.00	0.00
115	-1733	-1745	-1746	-1734	ML	0.00	860.00	0.00
115	-1743	-1755	-1756	-1744	ML	0.00	860.00	0.00
115	279	-737	-3474	-3475	ML	0.00	860.00	0.00
115	-3474	-3473	-1673	-1745	ML	0.00	860.00	0.00
115	-1728	-1740	-1741	-1729	ML	0.00	860.00	0.00
115	-1734	-1746	-1747	-1735	ML	0.00	860.00	0.00
115	-1723	-1735	-1736	-1724	ML	0.00	860.00	0.00
118	-2985	-3404	-3403	-2986	ML	0.00	860.00	0.00
118	-3109	-3121	-3122	-3110	ML	0.00	860.00	0.00
118	-2993	-3005	-3006	-2994	ML	0.00	860.00	0.00
118	-3121	-3133	-3134	-3122	ML	0.00	860.00	0.00
118	-2982	-3407	-3406	-2983	ML	0.00	860.00	0.00
118	-3094	-3106	-1831	-1833	ML	0.00	860.00	0.00
118	-2984	-3405	-3404	-2985	ML	0.00	860.00	0.00
118	-3511	-3510	-2987	-3414	ML	0.00	860.00	0.00
118	-3084	-3096	-3097	-3085	ML	0.00	860.00	0.00
118	-2930	-2942	-2943	-2931	ML	0.00	860.00	0.00
118	-3508	-3507	-3023	-3011	ML	0.00	860.00	0.00
118	-1507	-2916	-2917	-1509	ML	0.00	860.00	0.00
118	-3095	-3107	-3108	-3096	ML	0.00	860.00	0.00
118	-3082	-3094	-1833	-1835	ML	0.00	860.00	0.00
118	-3108	-3120	-3121	-3109	ML	0.00	860.00	0.00
118	-2955	-2967	-2968	-2956	ML	0.00	860.00	0.00
118	-1505	-2915	-2916	-1507	ML	0.00	860.00	0.00
118	-3140	-3152	-3153	-3141	ML	0.00	860.00	0.00
118	-3006	-3018	-3019	-3007	ML	0.00	860.00	0.00
118	-3088	-3100	-3101	-3089	ML	0.00	860.00	0.00
118	-70	-68	-3497	-3498	ML	0.00	860.00	0.00
118	-3083	-3095	-3096	-3084	ML	0.00	860.00	0.00
118	-2980	-3409	-3408	-2981	ML	0.00	860.00	0.00
118	-3091	-3103	-3104	-3092	ML	0.00	860.00	0.00

Relazione di calcolo

118	-3093	-3105	-3106	-3094	ML	0.00	860.00	0.00
118	-2918	-2930	-2931	-2919	ML	0.00	860.00	0.00
118	-2920	-2932	-2933	-2921	ML	0.00	860.00	0.00
118	-3120	-3132	-3133	-3121	ML	0.00	860.00	0.00
118	-2921	-2933	-2934	-2922	ML	0.00	860.00	0.00
118	-1521	-2923	-2924	-1523	ML	0.00	860.00	0.00
118	-1523	-2924	-2925	-1525	ML	0.00	860.00	0.00
118	-3114	-3126	-3127	-3115	ML	0.00	860.00	0.00
118	-3000	-3012	-3013	-3001	ML	0.00	860.00	0.00
118	-3001	-3013	-3014	-3002	ML	0.00	860.00	0.00
118	-3004	-3016	-3017	-3005	ML	0.00	860.00	0.00
118	-2991	-3003	-3004	-2992	ML	0.00	860.00	0.00
118	-3003	-3015	-3016	-3004	ML	0.00	860.00	0.00
118	-2929	-2941	-2942	-2930	ML	0.00	860.00	0.00
118	-3130	-3142	-1825	-1827	ML	0.00	860.00	0.00
118	-2931	-2943	-2944	-2932	ML	0.00	860.00	0.00
118	-3132	-3144	-3145	-3133	ML	0.00	860.00	0.00
118	-2983	-3406	-3405	-2984	ML	0.00	860.00	0.00
118	-3134	-3146	-3147	-3135	ML	0.00	860.00	0.00
118	-3112	-3124	-3125	-3113	ML	0.00	860.00	0.00
118	-3011	-3023	-3024	-3012	ML	0.00	860.00	0.00
118	-1525	-2925	-2926	-1527	ML	0.00	860.00	0.00
118	-3013	-3025	-3026	-3014	ML	0.00	860.00	0.00
118	-3128	-3140	-3141	-3129	ML	0.00	860.00	0.00
118	-2953	-2965	-2966	-2954	ML	0.00	860.00	0.00
118	-3116	-3128	-3129	-3117	ML	0.00	860.00	0.00
118	-3142	-3154	-1823	-1825	ML	0.00	860.00	0.00
118	-2992	-3004	-3005	-2993	ML	0.00	860.00	0.00
118	-3143	-3155	-3156	-3144	ML	0.00	860.00	0.00
118	-2943	-2955	-2956	-2944	ML	0.00	860.00	0.00
118	-3145	-3157	-3158	-3146	ML	0.00	860.00	0.00
118	-3146	-3158	-3159	-3147	ML	0.00	860.00	0.00
118	-3137	-3149	-3150	-3138	ML	0.00	860.00	0.00
118	-2937	-2949	-2950	-2938	ML	0.00	860.00	0.00
118	-3086	-3098	-3099	-3087	ML	0.00	860.00	0.00
118	-3100	-3112	-3113	-3101	ML	0.00	860.00	0.00
118	-102	-100	-3514	-3515	ML	0.00	860.00	0.00
118	-100	-98	-3513	-3514	ML	0.00	860.00	0.00
118	-3002	-3014	-3015	-3003	ML	0.00	860.00	0.00
118	-3052	-3064	-3065	-3053	ML	0.00	860.00	0.00
118	-3053	-3065	-3066	-3054	ML	0.00	860.00	0.00
118	-2954	-2966	-2967	-2955	ML	0.00	860.00	0.00
118	-3056	-3068	-3069	-3057	ML	0.00	860.00	0.00
118	-1511	-2918	-2919	-1513	ML	0.00	860.00	0.00
118	-3008	-3020	-3021	-3009	ML	0.00	860.00	0.00
118	-1517	-2921	-2922	-1519	ML	0.00	860.00	0.00
118	-3110	-3122	-3123	-3111	ML	0.00	860.00	0.00
118	-3111	-3123	-3124	-3112	ML	0.00	860.00	0.00
118	-3139	-3151	-3152	-3140	ML	0.00	860.00	0.00
118	-2938	-2950	-1857	-1857	ML	0.00	860.00	0.00
118	-3113	-3125	-3126	-3114	ML	0.00	860.00	0.00
118	-2939	-2951	-2952	-2940	ML	0.00	860.00	0.00
118	-3015	-3027	-3028	-3016	ML	0.00	860.00	0.00
118	-2915	-2927	-2928	-2916	ML	0.00	860.00	0.00
118	-2941	-2953	-2954	-2942	ML	0.00	860.00	0.00
118	-3118	-3130	-1827	-1829	ML	0.00	860.00	0.00
118	-3119	-3131	-3132	-3120	ML	0.00	860.00	0.00
118	-2919	-2931	-2932	-2920	ML	0.00	860.00	0.00
118	-2971	-2983	-2984	-2972	ML	0.00	860.00	0.00
118	-2922	-2934	-2935	-2923	ML	0.00	860.00	0.00
118	-2948	-2960	-2961	-2949	ML	0.00	860.00	0.00
118	-2962	-2974	-1853	-1855	ML	0.00	860.00	0.00
118	-3061	-3073	-3074	-3062	ML	0.00	860.00	0.00
118	-96	-3415	-3511	-3512	ML	0.00	860.00	0.00
118	-2975	-3414	-3413	-2976	ML	0.00	860.00	0.00
118	-3077	-3089	-3090	-3078	ML	0.00	860.00	0.00
118	-3129	-3141	-3142	-3130	ML	0.00	860.00	0.00
118	-2978	-3411	-3410	-2979	ML	0.00	860.00	0.00
118	-3079	-3091	-3092	-3080	ML	0.00	860.00	0.00
118	-3080	-3092	-3093	-3081	ML	0.00	860.00	0.00
118	-2981	-3408	-3407	-2982	ML	0.00	860.00	0.00
118	-2932	-2944	-2945	-2933	ML	0.00	860.00	0.00
118	-78	-76	-3501	-3502	ML	0.00	860.00	0.00
118	-3498	-3497	-3143	-3131	ML	0.00	860.00	0.00
118	-3499	-3498	-3131	-3119	ML	0.00	860.00	0.00
118	-2986	-3403	-3402	-1851	ML	0.00	860.00	0.00
118	-94	-92	-3509	-3510	ML	0.00	860.00	0.00
118	-2987	-2999	-3000	-2988	ML	0.00	860.00	0.00
118	-2989	-3001	-3002	-2990	ML	0.00	860.00	0.00

Relazione di calcolo

118	-3089	-3101	-3102	-3090	ML	0.00	860.00	0.00
118	-2990	-3002	-3003	-2991	ML	0.00	860.00	0.00
118	-3506	-3505	-3047	-3035	ML	0.00	860.00	0.00
118	-3092	-3104	-3105	-3093	ML	0.00	860.00	0.00
118	-3507	-3506	-3035	-3023	ML	0.00	860.00	0.00
118	-2995	-3007	-3008	-2996	ML	0.00	860.00	0.00
118	-76	-74	-3500	-3501	ML	0.00	860.00	0.00
118	-3147	-3159	-3160	-3148	ML	0.00	860.00	0.00
118	-2997	-3009	-3010	-2998	ML	0.00	860.00	0.00
118	-92	-90	-3508	-3509	ML	0.00	860.00	0.00
118	-3404	-2997	-2998	-3403	ML	0.00	860.00	0.00
118	-2999	-3011	-3012	-3000	ML	0.00	860.00	0.00
118	-3406	-2995	-2996	-3405	ML	0.00	860.00	0.00
118	-3407	-2994	-2995	-3406	ML	0.00	860.00	0.00
118	-3408	-2993	-2994	-3407	ML	0.00	860.00	0.00
118	-3409	-2992	-2993	-3408	ML	0.00	860.00	0.00
118	-3410	-2991	-2992	-3409	ML	0.00	860.00	0.00
118	-3005	-3017	-3018	-3006	ML	0.00	860.00	0.00
118	-3412	-2989	-2990	-3411	ML	0.00	860.00	0.00
118	-1513	-2919	-2920	-1515	ML	0.00	860.00	0.00
118	-1515	-2920	-2921	-1517	ML	0.00	860.00	0.00
118	-3010	-3022	-1845	-1847	ML	0.00	860.00	0.00
118	-90	-88	-3507	-3508	ML	0.00	860.00	0.00
118	-2960	-2972	-2973	-2961	ML	0.00	860.00	0.00
118	-3060	-3072	-3073	-3061	ML	0.00	860.00	0.00
118	-3012	-3024	-3025	-3013	ML	0.00	860.00	0.00
118	-1527	-2926	-1859	103	ML	0.00	860.00	0.00
118	-3115	-3127	-3128	-3116	ML	0.00	860.00	0.00
118	-105	2	-3516	-3517	ML	0.00	860.00	0.00
118	-72	-70	-3498	-3499	ML	0.00	860.00	0.00
118	-3017	-3029	-3030	-3018	ML	0.00	860.00	0.00
118	-2917	-2929	-2930	-2918	ML	0.00	860.00	0.00
118	-3019	-3031	-3032	-3020	ML	0.00	860.00	0.00
118	-2969	-2981	-2982	-2970	ML	0.00	860.00	0.00
118	-3020	-3032	-3033	-3021	ML	0.00	860.00	0.00
118	-3123	-3135	-3136	-3124	ML	0.00	860.00	0.00
118	-2973	-2985	-2986	-2974	ML	0.00	860.00	0.00
118	-3124	-3136	-3137	-3125	ML	0.00	860.00	0.00
118	-3125	-3137	-3138	-3126	ML	0.00	860.00	0.00
118	-3126	-3138	-3139	-3127	ML	0.00	860.00	0.00
118	-2927	-2939	-2940	-2928	ML	0.00	860.00	0.00
118	2	-102	-3515	-3516	ML	0.00	860.00	0.00
118	-2928	-2940	-2941	-2929	ML	0.00	860.00	0.00
118	-3029	-3041	-3042	-3030	ML	0.00	860.00	0.00
118	-2979	-3410	-3409	-2980	ML	0.00	860.00	0.00
118	-3131	-3143	-3144	-3132	ML	0.00	860.00	0.00
118	-3031	-3043	-3044	-3032	ML	0.00	860.00	0.00
118	-3133	-3145	-3146	-3134	ML	0.00	860.00	0.00
118	-2934	-2946	-2947	-2935	ML	0.00	860.00	0.00
118	-3135	-3147	-3148	-3136	ML	0.00	860.00	0.00
118	-3136	-3148	-3149	-3137	ML	0.00	860.00	0.00
118	-2936	-2948	-2949	-2937	ML	0.00	860.00	0.00
118	-3138	-3150	-3151	-3139	ML	0.00	860.00	0.00
118	-2950	-2962	-1855	-1857	ML	0.00	860.00	0.00
118	-3038	-3050	-3051	-3039	ML	0.00	860.00	0.00
118	-3141	-3153	-3154	-3142	ML	0.00	860.00	0.00
118	-3041	-3053	-3054	-3042	ML	0.00	860.00	0.00
118	-68	-66	-3496	-3497	ML	0.00	860.00	0.00
118	-3043	-3055	-3056	-3044	ML	0.00	860.00	0.00
118	-3144	-3156	-3157	-3145	ML	0.00	860.00	0.00
118	-2945	-2957	-2958	-2946	ML	0.00	860.00	0.00
118	-2946	-2958	-2959	-2947	ML	0.00	860.00	0.00
118	-2947	-2959	-2960	-2948	ML	0.00	860.00	0.00
118	-3148	-3160	-3161	-3149	ML	0.00	860.00	0.00
118	-3149	-3161	-3162	-3150	ML	0.00	860.00	0.00
118	-3049	-3061	-3062	-3050	ML	0.00	860.00	0.00
118	-3050	-3062	-3063	-3051	ML	0.00	860.00	0.00
118	-2952	-2964	-2965	-2953	ML	0.00	860.00	0.00
118	-2951	-2963	-2964	-2952	ML	0.00	860.00	0.00
118	-3103	-3115	-3116	-3104	ML	0.00	860.00	0.00
118	-3054	-3066	-3067	-3055	ML	0.00	860.00	0.00
118	-3105	-3117	-3118	-3106	ML	0.00	860.00	0.00
118	-2956	-2968	-2969	-2957	ML	0.00	860.00	0.00
118	-3007	-3019	-3020	-3008	ML	0.00	860.00	0.00
118	-3414	-2987	-2988	-3413	ML	0.00	860.00	0.00
118	-3009	-3021	-3022	-3010	ML	0.00	860.00	0.00
118	-1519	-2922	-2923	-1521	ML	0.00	860.00	0.00
118	-3059	-3071	-3072	-3060	ML	0.00	860.00	0.00
118	-3501	-3500	-3107	-3095	ML	0.00	860.00	0.00

Relazione di calcolo

118	-98	-96	-3512	-3513	ML	0.00	860.00	0.00
118	-2963	-2975	-2976	-2964	ML	0.00	860.00	0.00
118	-2964	-2976	-2977	-2965	ML	0.00	860.00	0.00
118	-2965	-2977	-2978	-2966	ML	0.00	860.00	0.00
118	-3117	-3129	-3130	-3118	ML	0.00	860.00	0.00
118	-3068	-3080	-3081	-3069	ML	0.00	860.00	0.00
118	-2967	-2979	-2980	-2968	ML	0.00	860.00	0.00
118	-3070	-3082	-1835	-1837	ML	0.00	860.00	0.00
118	-2968	-2980	-2981	-2969	ML	0.00	860.00	0.00
118	-80	-78	-3502	-3503	ML	0.00	860.00	0.00
118	-3122	-3134	-3135	-3123	ML	0.00	860.00	0.00
118	-3072	-3084	-3085	-3073	ML	0.00	860.00	0.00
118	-2974	-2986	-1851	-1853	ML	0.00	860.00	0.00
118	-3074	-3086	-3087	-3075	ML	0.00	860.00	0.00
118	-3075	-3087	-3088	-3076	ML	0.00	860.00	0.00
118	-2976	-3413	-3412	-2977	ML	0.00	860.00	0.00
118	-3076	-3088	-3089	-3077	ML	0.00	860.00	0.00
118	-3078	-3090	-3091	-3079	ML	0.00	860.00	0.00
118	-3027	-3039	-3040	-3028	ML	0.00	860.00	0.00
118	-2916	-2928	-2929	-2917	ML	0.00	860.00	0.00
118	-3081	-3093	-3094	-3082	ML	0.00	860.00	0.00
118	-74	-72	-3499	-3500	ML	0.00	860.00	0.00
118	-3032	-3044	-3045	-3033	ML	0.00	860.00	0.00
118	-3497	-3496	-3155	-3143	ML	0.00	860.00	0.00
118	-3034	-3046	-1841	-1843	ML	0.00	860.00	0.00
118	-3085	-3097	-3098	-3086	ML	0.00	860.00	0.00
118	-3035	-3047	-3048	-3036	ML	0.00	860.00	0.00
118	-3087	-3099	-3100	-3088	ML	0.00	860.00	0.00
118	-3503	-3502	-3083	-3071	ML	0.00	860.00	0.00
118	-2988	-3000	-3001	-2989	ML	0.00	860.00	0.00
118	-3090	-3102	-3103	-3091	ML	0.00	860.00	0.00
118	-3505	-3504	-3059	-3047	ML	0.00	860.00	0.00
118	-3104	-3116	-3117	-3105	ML	0.00	860.00	0.00
118	-2942	-2954	-2955	-2943	ML	0.00	860.00	0.00
118	-3509	-3508	-3011	-2999	ML	0.00	860.00	0.00
118	-2994	-3006	-3007	-2995	ML	0.00	860.00	0.00
118	-3510	-3509	-2999	-2987	ML	0.00	860.00	0.00
118	-3096	-3108	-3109	-3097	ML	0.00	860.00	0.00
118	-3097	-3109	-3110	-3098	ML	0.00	860.00	0.00
118	-3098	-3110	-3111	-3099	ML	0.00	860.00	0.00
118	-3099	-3111	-3112	-3100	ML	0.00	860.00	0.00
118	-3516	-3515	-2939	-2927	ML	0.00	860.00	0.00
118	-3101	-3113	-3114	-3102	ML	0.00	860.00	0.00
118	-3102	-3114	-3115	-3103	ML	0.00	860.00	0.00
118	-3518	-3517	-2915	-1505	ML	0.00	860.00	0.00
118	-3064	-3076	-3077	-3065	ML	0.00	860.00	0.00
118	-2966	-2978	-2979	-2967	ML	0.00	860.00	0.00
118	-1509	-2917	-2918	-1511	ML	0.00	-860.00	0.00
118	-3055	-3067	-3068	-3056	ML	0.00	860.00	0.00
118	-3107	-3119	-3120	-3108	ML	0.00	860.00	0.00
118	-3057	-3069	-3070	-3058	ML	0.00	860.00	0.00
118	-3415	-94	-3510	-3511	ML	0.00	860.00	0.00
118	-2959	-2971	-2972	-2960	ML	0.00	860.00	0.00
118	-3500	-3499	-3119	-3107	ML	0.00	860.00	0.00
118	-2961	-2973	-2974	-2962	ML	0.00	860.00	0.00
118	-3036	-3048	-3049	-3037	ML	0.00	860.00	0.00
118	-3063	-3075	-3076	-3064	ML	0.00	860.00	0.00
118	-3014	-3026	-3027	-3015	ML	0.00	860.00	0.00
118	-3028	-3040	-3041	-3029	ML	0.00	860.00	0.00
118	-2940	-2952	-2953	-2941	ML	0.00	860.00	0.00
118	-3067	-3079	-3080	-3068	ML	0.00	860.00	0.00
118	-3018	-3030	-3031	-3019	ML	0.00	860.00	0.00
118	-2944	-2956	-2957	-2945	ML	0.00	860.00	0.00
118	-3045	-3057	-3058	-3046	ML	0.00	860.00	0.00
118	-3021	-3033	-3034	-3022	ML	0.00	860.00	0.00
118	-2923	-2935	-2936	-2924	ML	0.00	860.00	0.00
118	-88	-86	-3506	-3507	ML	0.00	860.00	0.00
118	-2924	-2936	-2937	-2925	ML	0.00	860.00	0.00
118	-2925	-2937	-2938	-2926	ML	0.00	860.00	0.00
118	-3127	-3139	-3140	-3128	ML	0.00	860.00	0.00
118	-3026	-3038	-3039	-3027	ML	0.00	860.00	0.00
118	-3039	-3051	-3052	-3040	ML	0.00	860.00	0.00
118	-2977	-3412	-3411	-2978	ML	0.00	860.00	0.00
118	-3016	-3028	-3029	-3017	ML	0.00	860.00	0.00
118	-3030	-3042	-3043	-3031	ML	0.00	860.00	0.00
118	-3106	-3118	-1829	-1831	ML	0.00	860.00	0.00
118	-2958	-2970	-2971	-2959	ML	0.00	860.00	0.00
118	-2933	-2945	-2946	-2934	ML	0.00	860.00	0.00
118	-82	-80	-3503	-3504	ML	0.00	860.00	0.00

Relazione di calcolo

118	-2935	-2947	-2948	-2936	ML	0.00	860.00	0.00
118	-86	-84	-3505	-3506	ML	0.00	860.00	0.00
118	-3037	-3049	-3050	-3038	ML	0.00	860.00	0.00
118	-3502	-3501	-3095	-3083	ML	0.00	860.00	0.00
118	-3062	-3074	-3075	-3063	ML	0.00	860.00	0.00
118	-3051	-3063	-3064	-3052	ML	0.00	860.00	0.00
118	-3065	-3077	-3078	-3066	ML	0.00	860.00	0.00
118	-3040	-3052	-3053	-3041	ML	0.00	860.00	0.00
118	-3042	-3054	-3055	-3043	ML	0.00	860.00	0.00
118	-3069	-3081	-3082	-3070	ML	0.00	860.00	0.00
118	-3044	-3056	-3057	-3045	ML	0.00	860.00	0.00
118	-3413	-2988	-2989	-3412	ML	0.00	860.00	0.00
118	-3046	-3058	-1839	-1841	ML	0.00	860.00	0.00
118	-84	-82	-3504	-3505	ML	0.00	860.00	0.00
118	-3047	-3059	-3060	-3048	ML	0.00	860.00	0.00
118	-2949	-2961	-2962	-2950	ML	0.00	860.00	0.00
118	3	-105	-3517	-3518	ML	0.00	860.00	0.00
118	-2926	-2938	-1857	-1859	ML	0.00	860.00	0.00
118	-3405	-2996	-2997	-3404	ML	0.00	860.00	0.00
118	-3025	-3037	-3038	-3026	ML	0.00	860.00	0.00
118	-3504	-3503	-3071	-3059	ML	0.00	860.00	0.00
118	-3066	-3078	-3079	-3067	ML	0.00	860.00	0.00
118	-3411	-2990	-2991	-3410	ML	0.00	860.00	0.00
118	-3073	-3085	-3086	-3074	ML	0.00	860.00	0.00
118	-3024	-3036	-3037	-3025	ML	0.00	860.00	0.00
118	-3033	-3045	-3046	-3034	ML	0.00	860.00	0.00
118	-3058	-3070	-1837	-1839	ML	0.00	860.00	0.00
118	-2972	-2984	-2985	-2973	ML	0.00	860.00	0.00
118	-3022	-3034	-1843	-1845	ML	0.00	860.00	0.00
118	-3512	-3511	-3414	-2975	ML	0.00	860.00	0.00
118	-2998	-3010	-1847	-1849	ML	0.00	860.00	0.00
118	-3023	-3035	-3036	-3024	ML	0.00	860.00	0.00
118	-3515	-3514	-2951	-2939	ML	0.00	860.00	0.00
118	-3517	-3516	-2927	-2915	ML	0.00	860.00	0.00
118	-2996	-3008	-3009	-2997	ML	0.00	860.00	0.00
118	-2957	-2969	-2970	-2958	ML	0.00	860.00	0.00
118	-3071	-3083	-3084	-3072	ML	0.00	860.00	0.00
118	-3514	-3513	-2963	-2951	ML	0.00	860.00	0.00
118	-3513	-3512	-2975	-2963	ML	0.00	860.00	0.00
118	-3048	-3060	-3061	-3049	ML	0.00	860.00	0.00
118	-3403	-2998	-1849	-3402	ML	0.00	860.00	0.00
118	-2970	-2982	-2983	-2971	ML	0.00	860.00	0.00
119	-3182	-3194	-3195	-3183	ML	0.00	860.00	0.00
119	-3322	-3334	-1793	-1795	ML	0.00	860.00	0.00
119	-3319	-3331	-3332	-3320	ML	0.00	860.00	0.00
119	-3344	-3356	-3357	-3345	ML	0.00	860.00	0.00
119	-66	-64	-3495	-3496	ML	0.00	860.00	0.00
119	-62	-60	-3493	-3494	ML	0.00	860.00	0.00
119	-3493	-3492	-3203	-3191	ML	0.00	860.00	0.00
119	-3321	-3333	-3334	-3322	ML	0.00	860.00	0.00
119	-3331	-3343	-3344	-3332	ML	0.00	860.00	0.00
119	-3171	-3183	-3184	-3172	ML	0.00	860.00	0.00
119	-3310	-3322	-1795	-1797	ML	0.00	860.00	0.00
119	-3311	-3323	-3324	-3312	ML	0.00	860.00	0.00
119	-3312	-3324	-3325	-3313	ML	0.00	860.00	0.00
119	-3280	-3292	-3293	-3281	ML	0.00	860.00	0.00
119	-3282	-3294	-3295	-3283	ML	0.00	860.00	0.00
119	-3340	-3352	-3353	-3341	ML	0.00	860.00	0.00
119	-3155	-3167	-3168	-3156	ML	0.00	860.00	0.00
119	-3330	-3342	-3343	-3331	ML	0.00	860.00	0.00
119	-3316	-3328	-3329	-3317	ML	0.00	860.00	0.00
119	-3192	-3204	-3205	-3193	ML	0.00	860.00	0.00
119	-3193	-3205	-3206	-3194	ML	0.00	860.00	0.00
119	-3292	-3304	-3305	-3293	ML	0.00	860.00	0.00
119	-3320	-3332	-3333	-3321	ML	0.00	860.00	0.00
119	-3296	-3308	-3309	-3297	ML	0.00	860.00	0.00
119	-3185	-3197	-3198	-3186	ML	0.00	860.00	0.00
119	-3285	-3297	-3298	-3286	ML	0.00	860.00	0.00
119	-3262	-3274	-1803	-1805	ML	0.00	860.00	0.00
119	-3214	-3226	-1811	-1813	ML	0.00	860.00	0.00
119	-3151	-3163	-3164	-3152	ML	0.00	860.00	0.00
119	-3180	-3192	-3193	-3181	ML	0.00	860.00	0.00
119	-3354	-1688	-1690	-3355	ML	0.00	860.00	0.00
119	-3353	-1686	-1688	-3354	ML	0.00	860.00	0.00
119	-3203	-3215	-3216	-3204	ML	0.00	860.00	0.00
119	-3204	-3216	-3217	-3205	ML	0.00	860.00	0.00
119	-3256	-3268	-3269	-3257	ML	0.00	860.00	0.00
119	-3181	-3193	-3194	-3182	ML	0.00	860.00	0.00
119	-3183	-3195	-3196	-3184	ML	0.00	860.00	0.00

Relazione di calcolo

119	-3309	-3321	-3322	-3310	ML	0.00	860.00	0.00
119	-3284	-3296	-3297	-3285	ML	0.00	860.00	0.00
119	-3212	-3224	-3225	-3213	ML	0.00	860.00	0.00
119	-3187	-3199	-3200	-3188	ML	0.00	860.00	0.00
119	-3313	-3325	-3326	-3314	ML	0.00	860.00	0.00
119	-3190	-3202	-1815	-1817	ML	0.00	860.00	0.00
119	-3154	-3166	-1821	-1823	ML	0.00	860.00	0.00
119	-3215	-3227	-3228	-3216	ML	0.00	860.00	0.00
119	-3315	-3327	-3328	-3316	ML	0.00	860.00	0.00
119	-3342	-3354	-3355	-3343	ML	0.00	860.00	0.00
119	-3217	-3229	-3230	-3218	ML	0.00	860.00	0.00
119	-3318	-3330	-3331	-3319	ML	0.00	860.00	0.00
119	-3219	-3231	-3232	-3220	ML	0.00	860.00	0.00
119	-3483	-3482	-3323	-3311	ML	0.00	860.00	0.00
119	-3220	-3232	-3233	-3221	ML	0.00	860.00	0.00
119	-3211	-3223	-3224	-3212	ML	0.00	860.00	0.00
119	-3162	-3174	-3175	-3163	ML	0.00	860.00	0.00
119	-3261	-3273	-3274	-3262	ML	0.00	860.00	0.00
119	-3201	-3213	-3214	-3202	ML	0.00	860.00	0.00
119	-3314	-3326	-3327	-3315	ML	0.00	860.00	0.00
119	-3277	-3289	-3290	-3278	ML	0.00	860.00	0.00
119	-3327	-3339	-3340	-3328	ML	0.00	860.00	0.00
119	-3329	-3341	-3342	-3330	ML	0.00	860.00	0.00
119	-3229	-3241	-3242	-3230	ML	0.00	860.00	0.00
119	-3179	-3191	-3192	-3180	ML	0.00	860.00	0.00
119	-3332	-3344	-3345	-3333	ML	0.00	860.00	0.00
119	-3496	-3495	-3167	-3155	ML	0.00	860.00	0.00
119	-3184	-3196	-3197	-3185	ML	0.00	860.00	0.00
119	-36	-34	-3480	-3481	ML	0.00	860.00	0.00
119	-3337	-3349	-3350	-3338	ML	0.00	860.00	0.00
119	-3160	-3172	-3173	-3161	ML	0.00	860.00	0.00
119	-3213	-3225	-3226	-3214	ML	0.00	860.00	0.00
119	-3176	-3188	-3189	-3177	ML	0.00	860.00	0.00
119	-3338	-3350	-3351	-3339	ML	0.00	860.00	0.00
119	-52	-50	-3488	-3489	ML	0.00	860.00	0.00
119	-3191	-3203	-3204	-3192	ML	0.00	860.00	0.00
119	-3291	-3303	-3304	-3292	ML	0.00	860.00	0.00
119	-3293	-3305	-3306	-3294	ML	0.00	860.00	0.00
119	-3243	-3255	-3256	-3244	ML	0.00	860.00	0.00
119	-3195	-3207	-3208	-3196	ML	0.00	860.00	0.00
119	-3346	-3358	-1789	-1791	ML	0.00	860.00	0.00
119	-34	4	-3479	-3480	ML	0.00	860.00	0.00
119	-3347	-1674	-1676	-3348	ML	0.00	860.00	0.00
119	-3173	-3185	-3186	-3174	ML	0.00	860.00	0.00
119	-3336	-3348	-3349	-3337	ML	0.00	860.00	0.00
119	-3339	-3351	-3352	-3340	ML	0.00	860.00	0.00
119	-50	-48	-3487	-3488	ML	0.00	860.00	0.00
119	-3153	-3165	-3166	-3154	ML	0.00	860.00	0.00
119	-3252	-3264	-3265	-3253	ML	0.00	860.00	0.00
119	-3253	-3265	-3266	-3254	ML	0.00	860.00	0.00
119	-3254	-3266	-3267	-3255	ML	0.00	860.00	0.00
119	-3356	-1692	-1694	-3357	ML	0.00	860.00	0.00
119	-3156	-3168	-3169	-3157	ML	0.00	860.00	0.00
119	-3333	-3345	-3346	-3334	ML	0.00	860.00	0.00
119	-3208	-3220	-3221	-3209	ML	0.00	860.00	0.00
119	-3210	-3222	-3223	-3211	ML	0.00	860.00	0.00
119	-40	-38	-3482	-3483	ML	0.00	860.00	0.00
119	-3260	-3272	-3273	-3261	ML	0.00	860.00	0.00
119	-3175	-3187	-3188	-3176	ML	0.00	860.00	0.00
119	-3163	-3175	-3176	-3164	ML	0.00	860.00	0.00
119	-3164	-3176	-3177	-3165	ML	0.00	860.00	0.00
119	-3165	-3177	-3178	-3166	ML	0.00	860.00	0.00
119	-3166	-3178	-1819	-1821	ML	0.00	860.00	0.00
119	-3241	-3253	-3254	-3242	ML	0.00	860.00	0.00
119	-3268	-3280	-3281	-3269	ML	0.00	860.00	0.00
119	-3481	-3480	-3347	-3335	ML	0.00	860.00	0.00
119	-3270	-3282	-3283	-3271	ML	0.00	860.00	0.00
119	-3169	-3181	-3182	-3170	ML	0.00	860.00	0.00
119	-3271	-3283	-3284	-3272	ML	0.00	860.00	0.00
119	-38	-36	-3481	-3482	ML	0.00	860.00	0.00
119	-3485	-3484	-3299	-3287	ML	0.00	860.00	0.00
119	-44	-42	-3484	-3485	ML	0.00	860.00	0.00
119	-46	-44	-3485	-3486	ML	0.00	860.00	0.00
119	-3489	-3488	-3251	-3239	ML	0.00	860.00	0.00
119	-3177	-3189	-3190	-3178	ML	0.00	860.00	0.00
119	-3491	-3490	-3227	-3215	ML	0.00	860.00	0.00
119	-3278	-3290	-3291	-3279	ML	0.00	860.00	0.00
119	-3492	-3491	-3215	-3203	ML	0.00	860.00	0.00
119	-3279	-3291	-3292	-3280	ML	0.00	860.00	0.00

Relazione di calcolo

119	-3495	-3494	-3179	-3167	ML	0.00	860.00	0.00
119	-3281	-3293	-3294	-3282	ML	0.00	860.00	0.00
119	-3232	-3244	-3245	-3233	ML	0.00	860.00	0.00
119	-3283	-3295	-3296	-3284	ML	0.00	860.00	0.00
119	-3234	-3246	-3247	-3235	ML	0.00	860.00	0.00
119	-3186	-3198	-3199	-3187	ML	0.00	860.00	0.00
119	-3236	-3248	-3249	-3237	ML	0.00	860.00	0.00
119	-3188	-3200	-3201	-3189	ML	0.00	860.00	0.00
119	-3288	-3300	-3301	-3289	ML	0.00	860.00	0.00
119	-3189	-3201	-3202	-3190	ML	0.00	860.00	0.00
119	-60	-58	-3492	-3493	ML	0.00	860.00	0.00
119	-3290	-3302	-3303	-3291	ML	0.00	860.00	0.00
119	-3317	-3329	-3330	-3318	ML	0.00	860.00	0.00
119	-3343	-3355	-3356	-3344	ML	0.00	860.00	0.00
119	-3294	-3306	-3307	-3295	ML	0.00	860.00	0.00
119	-3194	-3206	-3207	-3195	ML	0.00	860.00	0.00
119	-3295	-3307	-3308	-3296	ML	0.00	860.00	0.00
119	-3197	-3209	-3210	-3198	ML	0.00	860.00	0.00
119	-3348	-1676	-1678	-3349	ML	0.00	860.00	0.00
119	-3174	-3186	-3187	-3175	ML	0.00	860.00	0.00
119	-3250	-3262	-1805	-1807	ML	0.00	860.00	0.00
119	-3300	-3312	-3313	-3301	ML	0.00	860.00	0.00
119	-3202	-3214	-1813	-1815	ML	0.00	860.00	0.00
119	-58	-56	-3491	-3492	ML	0.00	860.00	0.00
119	-3303	-3315	-3316	-3304	ML	0.00	860.00	0.00
119	-3304	-3316	-3317	-3305	ML	0.00	860.00	0.00
119	-3305	-3317	-3318	-3306	ML	0.00	860.00	0.00
119	-3206	-3218	-3219	-3207	ML	0.00	860.00	0.00
119	-3307	-3319	-3320	-3308	ML	0.00	860.00	0.00
119	-3308	-3320	-3321	-3309	ML	0.00	860.00	0.00
119	-3358	-1696	14	-1789	ML	0.00	860.00	0.00
119	-3209	-3221	-3222	-3210	ML	0.00	860.00	0.00
119	-3159	-3171	-3172	-3160	ML	0.00	860.00	0.00
119	-3286	-3298	-1799	-1801	ML	0.00	860.00	0.00
119	-3161	-3173	-3174	-3162	ML	0.00	860.00	0.00
119	-3237	-3249	-3250	-3238	ML	0.00	860.00	0.00
119	-3263	-3275	-3276	-3264	ML	0.00	860.00	0.00
119	-56	-54	-3490	-3491	ML	0.00	860.00	0.00
119	-3264	-3276	-3277	-3265	ML	0.00	860.00	0.00
119	-64	-62	-3494	-3495	ML	0.00	860.00	0.00
119	-3167	-3179	-3180	-3168	ML	0.00	860.00	0.00
119	-3218	-3230	-3231	-3219	ML	0.00	860.00	0.00
119	-3482	-3481	-3335	-3323	ML	0.00	860.00	0.00
119	-3245	-3257	-3258	-3246	ML	0.00	860.00	0.00
119	-3221	-3233	-3234	-3222	ML	0.00	860.00	0.00
119	-3323	-3335	-3336	-3324	ML	0.00	860.00	0.00
119	-3223	-3235	-3236	-3224	ML	0.00	860.00	0.00
119	-3324	-3336	-3337	-3325	ML	0.00	860.00	0.00
119	-3325	-3337	-3338	-3326	ML	0.00	860.00	0.00
119	-3328	-3340	-3341	-3329	ML	0.00	860.00	0.00
119	-54	-52	-3489	-3490	ML	0.00	860.00	0.00
119	-3228	-3240	-3241	-3229	ML	0.00	860.00	0.00
119	-3227	-3239	-3240	-3228	ML	0.00	860.00	0.00
119	-3355	-1690	-1692	-3356	ML	0.00	860.00	0.00
119	-3230	-3242	-3243	-3231	ML	0.00	860.00	0.00
119	-3231	-3243	-3244	-3232	ML	0.00	860.00	0.00
119	-3158	-3170	-3171	-3159	ML	0.00	860.00	0.00
119	-3334	-3346	-1791	-1793	ML	0.00	860.00	0.00
119	-3259	-3271	-3272	-3260	ML	0.00	860.00	0.00
119	-3335	-3347	-3348	-3336	ML	0.00	860.00	0.00
119	-3235	-3247	-3248	-3236	ML	0.00	860.00	0.00
119	-3238	-3250	-1807	-1809	ML	0.00	860.00	0.00
119	-3287	-3299	-3300	-3288	ML	0.00	860.00	0.00
119	-48	-46	-3486	-3487	ML	0.00	860.00	0.00
119	-3239	-3251	-3252	-3240	ML	0.00	860.00	0.00
119	-3341	-3353	-3354	-3342	ML	0.00	860.00	0.00
119	-3216	-3228	-3229	-3217	ML	0.00	860.00	0.00
119	-3242	-3254	-3255	-3243	ML	0.00	860.00	0.00
119	-3269	-3281	-3282	-3270	ML	0.00	860.00	0.00
119	-3345	-3357	-3358	-3346	ML	0.00	860.00	0.00
119	-3207	-3219	-3220	-3208	ML	0.00	860.00	0.00
119	-3246	-3258	-3259	-3247	ML	0.00	860.00	0.00
119	-3247	-3259	-3260	-3248	ML	0.00	860.00	0.00
119	-3248	-3260	-3261	-3249	ML	0.00	860.00	0.00
119	-3349	-1678	-1680	-3350	ML	0.00	860.00	0.00
119	-3150	-3162	-3163	-3151	ML	0.00	860.00	0.00
119	-3351	-1682	-1684	-3352	ML	0.00	860.00	0.00
119	-3152	-3164	-3165	-3153	ML	0.00	860.00	0.00
119	-3352	-1684	-1686	-3353	ML	0.00	860.00	0.00

Relazione di calcolo

119	-3240	-3252	-3253	-3241	ML	0.00	860.00	0.00
119	-3266	-3278	-3279	-3267	ML	0.00	860.00	0.00
119	-3205	-3217	-3218	-3206	ML	0.00	860.00	0.00
119	-3357	-1694	-1696	-3358	ML	0.00	860.00	0.00
119	-3168	-3180	-3181	-3169	ML	0.00	860.00	0.00
119	-3257	-3269	-3270	-3258	ML	0.00	860.00	0.00
119	-3258	-3270	-3271	-3259	ML	0.00	860.00	0.00
119	-3172	-3184	-3185	-3173	ML	0.00	860.00	0.00
119	-3273	-3285	-3286	-3274	ML	0.00	860.00	0.00
119	-3487	-3486	-3275	-3263	ML	0.00	860.00	0.00
119	-3488	-3487	-3263	-3251	ML	0.00	860.00	0.00
119	-3275	-3287	-3288	-3276	ML	0.00	860.00	0.00
119	-3265	-3277	-3278	-3266	ML	0.00	860.00	0.00
119	-3178	-3190	-1817	-1819	ML	0.00	860.00	0.00
119	-3302	-3314	-3315	-3303	ML	0.00	860.00	0.00
119	-3267	-3279	-3280	-3268	ML	0.00	860.00	0.00
119	-3480	-3479	-1674	-3347	ML	0.00	860.00	0.00
119	-3306	-3318	-3319	-3307	ML	0.00	860.00	0.00
119	-3157	-3169	-3170	-3158	ML	0.00	860.00	0.00
119	-3486	-3485	-3287	-3275	ML	0.00	860.00	0.00
119	-3196	-3208	-3209	-3197	ML	0.00	860.00	0.00
119	-3297	-3309	-3310	-3298	ML	0.00	860.00	0.00
119	-3199	-3211	-3212	-3200	ML	0.00	860.00	0.00
119	-42	-40	-3483	-3484	ML	0.00	860.00	0.00
119	-3200	-3212	-3213	-3201	ML	0.00	860.00	0.00
119	-3276	-3288	-3289	-3277	ML	0.00	860.00	0.00
119	-3289	-3301	-3302	-3290	ML	0.00	860.00	0.00
119	-3226	-3238	-1809	-1811	ML	0.00	860.00	0.00
119	-3490	-3489	-3239	-3227	ML	0.00	860.00	0.00
119	-3494	-3493	-3191	-3179	ML	0.00	860.00	0.00
119	-3222	-3234	-3235	-3223	ML	0.00	860.00	0.00
119	-3244	-3256	-3257	-3245	ML	0.00	860.00	0.00
119	-3233	-3245	-3246	-3234	ML	0.00	860.00	0.00
119	-3301	-3313	-3314	-3302	ML	0.00	860.00	0.00
119	-3484	-3483	-3311	-3299	ML	0.00	860.00	0.00
119	-3272	-3284	-3285	-3273	ML	0.00	860.00	0.00
119	-3198	-3210	-3211	-3199	ML	0.00	860.00	0.00
119	-3224	-3236	-3237	-3225	ML	0.00	860.00	0.00
119	-3350	-1680	-1682	-3351	ML	0.00	860.00	0.00
119	-3225	-3237	-3238	-3226	ML	0.00	860.00	0.00
119	-3274	-3286	-1801	-1803	ML	0.00	860.00	0.00
119	-3251	-3263	-3264	-3252	ML	0.00	860.00	0.00
119	-3170	-3182	-3183	-3171	ML	0.00	860.00	0.00
119	-3255	-3267	-3268	-3256	ML	0.00	860.00	0.00
119	-3326	-3338	-3339	-3327	ML	0.00	860.00	0.00
119	-3299	-3311	-3312	-3300	ML	0.00	860.00	0.00
119	-3249	-3261	-3262	-3250	ML	0.00	860.00	0.00
119	-3298	-3310	-1797	-1799	ML	0.00	860.00	0.00

Risultati del calcolo

Parametri di calcolo

La modellazione della struttura e la rielaborazione dei risultati del calcolo sono stati effettuati con:
 ModeSt ver. 8.21, prodotto da Tecnisoft s.a.s. - Prato

La struttura è stata calcolata utilizzando come solutore agli elementi finiti:
 Xfinest ver. 2019, prodotto da Ce.A.S. S.r.l. - Milano

Tipo di normativa: stati limite D.M. 18
 Tipo di calcolo: analisi sismica statica
 Vincoli esterni: Considera sempre vincoli assegnati in modellazione
 Schematizzazione piani rigidi: nessun impalcato rigido
 Modalità di recupero masse secondarie: mantenere sul nodo masse e forze relative

Generazione combinazioni

- Lineari: Sì
 - Valuta spostamenti e non sollecitazioni: No
 - Buckling: No

Opzioni di calcolo

- Sono state considerate infinitamente rigide le zone di connessione fra travi, pilastri ed elementi bidimensionali con una riduzione del 20%
 - Calcolo con offset rigidi dai nodi: No
 - Uniformare i carichi variabili: No
 - Massimizzare i carichi variabili: No
 - Recupero carichi zone rigide: taglio e momento flettente
 - Modalità di combinazione momento torcente: disaccoppiare le azioni

Opzioni del solutore

- Tipo di elemento bidimensionale: QF46
- Calcolo sforzo nei nodi: No
- Analisi dinamica con metodo di Lanczos: No
- Trascura deformabilità a taglio delle aste: Sì
- Check sequenza di Sturm: Sì
- Analisi non lineare con Newton modificato: No
- Usa formulazione secante per buckling: No
- Trascura buckling torsionale: No

Dati struttura

- Sito di costruzione: LON. 10.14033 LAT. 44.02090
- Contenuto tra ID reticolo: 18711 18933 18710 18932

Simbologia

- TCC = Tipo di combinazione di carico
 SLU = Stato limite ultimo
 SLU S = Stato limite ultimo (azione sismica)
 SLE R = Stato limite d'esercizio, combinazione rara
 SLE F = Stato limite d'esercizio, combinazione frequente
 SLE Q = Stato limite d'esercizio, combinazione quasi permanente
 SLD = Stato limite di danno
 SLV = Stato limite di salvaguardia della vita
 SLC = Stato limite di prevenzione del collasso
 SLO = Stato limite di operatività
 SLU I = Stato limite di resistenza al fuoco
 SND = Stato limite di salvaguardia della vita (non dissipativo)
 T_R = Periodo di ritorno <anni>
 A_g = Accelerazione orizzontale massima al sito
 F_o = Valore massimo del fattore di amplificazione dello spettro in accelerazione orizzontale
 T_{c^*} = Periodo di inizio del tratto a velocità costante dello spettro in accelerazione orizzontale <sec>
 S_s = Coefficiente di amplificazione stratigrafica
 C_c = Coefficiente funzione della categoria del suolo

TCC	T_R	A_g <g>	F_o	T_{c^*}	S_s	C_c
SLV	949	0.1715	2.37	0.30	1.46	1.56

- Edificio esistente: No
- Tipo di opera: Opera ordinaria
- Vita nominale V_N : 50.00
- Classe d'uso: Classe IV
- SL Esercizio: SLOPvr No, SLDPvr No
- SL Ultimi: SLVPvr 10.00, SLCPvr No
- Struttura dissipativa: No
- Quota di riferimento: -0.75 <m>
- Altezza della struttura: 5.75 <m>
- Numero piani edificio: 0
- Coefficiente θ : 0.00
- Edificio regolare in altezza: No
- Edificio regolare in pianta: No
- Forze orizzontali convenzionali per stati limite non sismici: No
- Genera stati limite per verifiche di resistenza al fuoco: No

Dati di calcolo

- Categoria del suolo di fondazione: C
- Tipologia strutturale: c.a. o prefabbricata a telaio a più piani e più campate

Periodo T_1	0.30531
Coeff. λ SLV	1.00
Rapporto di sovraresistenza (α_0/α_1)	1.15
Valore di riferimento del fattore di comportamento (q_0)	3.45
Fattore riduttivo (K_w)	1.00
Fattore riduttivo regolarità in altezza (KR)	0.80
Fattore di comportamento dissipativo (q)	2.76
Fattore di comportamento non dissipativo (qND)	1.00
Fattore di comportamento per SLD (qD)	1.00

- Categoria topografica: T1 - Superficie pianeggiante, pendii e rilievi isolati con inclinazione media $i \leq 15^\circ$
- Coeff. amplificazione topografica S_T : 1.00
- Accelerazione di picco del terreno A_gS : 0.2496 <g>
- Fattore di comportamento per sisma verticale (qv): 1.50
- Smorzamento spettro: 5.00%

Relazione di calcolo

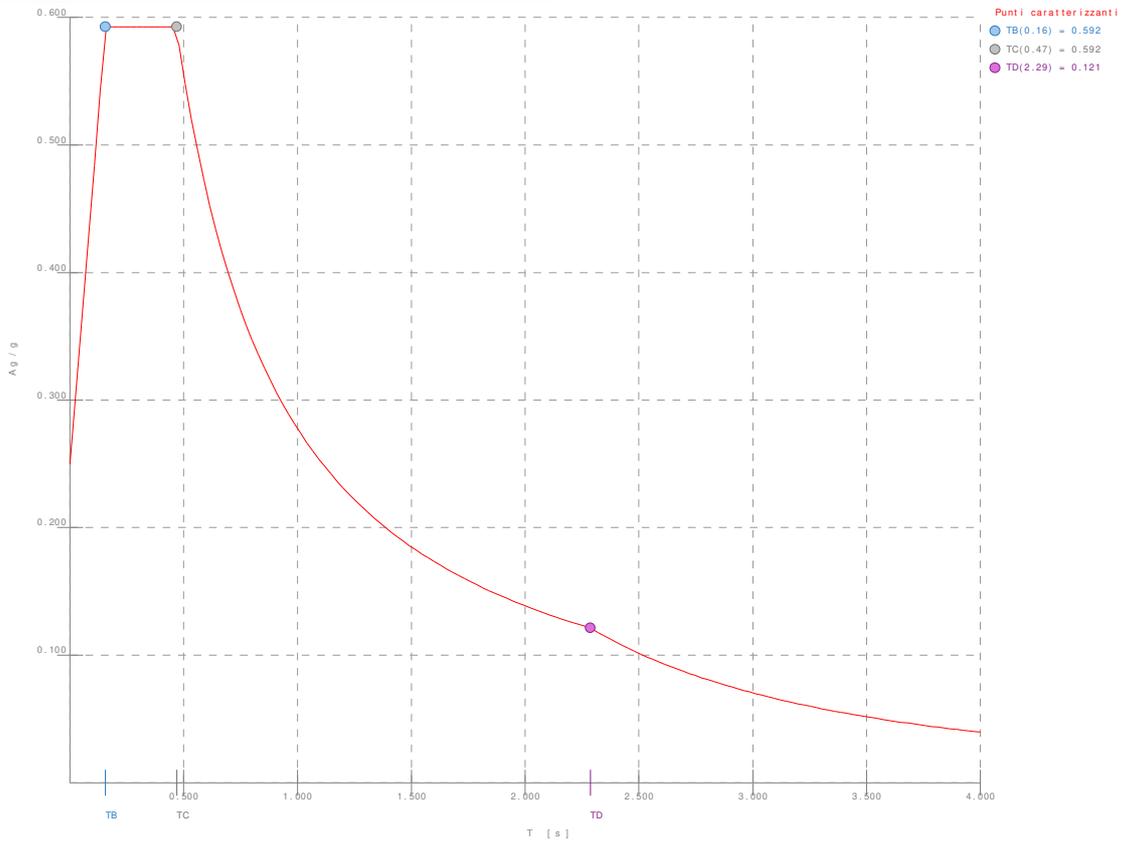


Figura numero 1: Spettro SND

- Angolo di ingresso del sisma: 0.00 <grad>
- Tipo di combinazione sismica: 30% esteso

Ambienti di carico

Simbologia

- N = Numero
- Comm. = Commento
- 1= peso proprio
- 2= Peso Terreno e Pav.
- 3= Spinta terreno statica
- 4= spinta sovraccarico
- 5= Spinta sismica terreno
- 6= SLU env max
- 7= SLU Env Min
- 8= SLE rara Max
- 9= SLE Rara min
- 10= SLE q. permanente
- 11= SLV +Y
- 12= SLV -Y
- 13= Spinta inerziale terreno
- F = azioni orizzontali convenzionali
- SLU = Stato limite ultimo
- SLR = Stato limite per combinazioni rare
- SLF = Stato limite per combinazioni frequenti
- SLQ/D = Stato limite per combinazioni quasi permanenti o di danno
- S = Si
- N = No

N	Comm.	1	2	3	4	5	6	7	8	9	10	11	12	13	S	SLU	SLR	SLF	SLQ
1	Calcolo sismico	S	S	S	S	S	S	S	S	S	S	S	S	S	S	N	N	N	N
2	Calcolo statico	S	S	S	S	S	S	S	S	S	S	S	S	S	N	S	S	S	S

Elenco combinazioni di carico simboliche

Simbologia

- CC = Numero della combinazione delle condizioni di carico elementari
- Comm. = Commento
- TCC = Tipo di combinazione di carico
- SLU = Stato limite ultimo
- SLU S = Stato limite ultimo (azione sismica)
- SLE R = Stato limite d'esercizio, combinazione rara
- SLE F = Stato limite d'esercizio, combinazione frequente

Relazione di calcolo

SLE Q = Stato limite d'esercizio, combinazione quasi permanente
 SLD = Stato limite di danno
 SLV = Stato limite di salvaguardia della vita
 SLC = Stato limite di prevenzione del collasso
 SLO = Stato limite di operatività
 SLU I = Stato limite di resistenza al fuoco
 SND = Stato limite di salvaguardia della vita (non dissipativo)

CC	Comm.	TCC	1	2	3	4	5	6	7	8	9	10	11	12	13	S
1	Amb. 1 (Sisma)	SLU S	1	1	1	Ψ_2	Ψ_2	1	1	1	1	1	1	1	Ψ_2	1
2	Amb. 2 (SLU)	SLU	γ_{max}	-----												
3	Amb. 2 (SLE R)	SLE R	1	1	1	1	1	1	1	1	1	1	1	1	1	-----
4	Amb. 2 (SLE F)	SLE F	1	1	1	Ψ_1	Ψ_1	1	1	1	1	1	1	1	Ψ_1	-----
5	Amb. 2 (SLE Q)	SLE Q	1	1	1	Ψ_2	Ψ_2	1	1	1	1	1	1	1	Ψ_2	-----

Genera le combinazioni con un solo carico di tipo variabile come di base: No

Considera sollecitazioni dinamiche con segno dei modi principali: No

Combinazioni delle CCE

Simbologia

CC = Numero della combinazione delle condizioni di carico elementari
 Comm. = Commento
 TCC = Tipo di combinazione di carico
 SLU = Stato limite ultimo
 SLU S = Stato limite ultimo (azione sismica)
 SLE R = Stato limite d'esercizio, combinazione rara
 SLE F = Stato limite d'esercizio, combinazione frequente
 SLE Q = Stato limite d'esercizio, combinazione quasi permanente
 SLD = Stato limite di danno
 SLV = Stato limite di salvaguardia della vita
 SLC = Stato limite di prevenzione del collasso
 SLO = Stato limite di operatività
 SLU I = Stato limite di resistenza al fuoco
 SND = Stato limite di salvaguardia della vita (non dissipativo)
 An. = Tipo di analisi
 L = Lineare
 NL = Non lineare
 Bk = Buckling
 S = Sì
 N = No

CC	Comm.	TCC	An.	Bk	1	2	3	4	5	6	7	8	9	10	11	12	13	S X	S Y
1	Amb. 1 (SLU S) S +X+0.3Y	SND	L	N	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.30	0.00	0.00	1.00	0.30
2	Amb. 1 (SLU S) S +X-0.3Y	SND	L	N	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.30	0.00	1.00	-0.30
3	Amb. 1 (SLU S) S -X+0.3Y	SND	L	N	1.00	1.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.30	0.00	1.00	-1.00	0.30
4	Amb. 1 (SLU S) S -X-0.3Y	SND	L	N	1.00	1.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.30	1.00	-1.00	-0.30
5	Amb. 1 (SLU S) S +0.3X+Y	SND	L	N	1.00	1.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.30	1.00
6	Amb. 1 (SLU S) S -0.3X+Y	SND	L	N	1.00	1.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.30	-0.30	1.00
7	Amb. 1 (SLU S) S +0.3X-Y	SND	L	N	1.00	1.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.30	-1.00
8	Amb. 1 (SLU S) S -0.3X-Y	SND	L	N	1.00	1.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.30	-0.30	-1.00
9	SLU Env max	SLU	L	N	1.30	1.50	1.50	1.35	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10	SLU Env min	SLU	L	N	1.30	1.50	1.50	1.35	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11	SLE Rara max	SLE R	L	N	1.00	1.00	1.00	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12	SLE Rara min	SLE R	L	N	1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00
13	SLE Q.Permanente	SLE Q	L	N	1.00	1.00	1.00	0.40	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00

Elenco masse nodi

Simbologia

Nodo = Numero del nodo
 Mo = Massa orizzontale

Nodo	Mo <kg>																
-3524	128.91	-3523	245.17	-3522	257.82	-3521	270.48	-3520	257.82	-3519	257.82	-3518	227.78	-3517	197.74	-3516	237.12
-3516	237.12	-3515	276.50	-3514	278.95	-3513	281.39	-3512	211.04	-3511	140.70	-3510	211.04	-3509	281.39	-3508	281.39
-3508	281.39	-3507	281.39	-3506	281.39	-3505	281.39	-3504	281.39	-3503	281.39	-3502	281.39	-3501	281.39	-3500	281.39
-3500	281.39	-3499	281.39	-3498	281.39	-3497	281.39	-3496	281.39	-3495	281.39	-3494	281.39	-3493	281.39	-3492	281.39
-3492	281.39	-3491	281.39	-3490	281.39	-3489	281.39	-3488	281.39	-3487	281.39	-3486	281.39	-3485	281.39	-3484	281.39
-3484	281.39	-3483	281.39	-3482	281.39	-3481	281.39	-3480	281.39	-3479	266.60	-3478	251.80	-3477	251.80	-3476	271.12
-3476	271.12	-3475	251.80	-3474	232.48	-3473	125.90	-3472	74.51	-3471	137.99	-3470	132.47	-3469	137.31	-3468	136.64
-3468	136.64	-3467	477.40	-3466	818.16	-3465	818.16	-3464	818.16	-3463	818.16	-3462	818.16	-3461	818.16	-3460	818.16
-3460	818.16	-3459	818.16	-3458	818.16	-3457	818.16	-3456	818.16	-3455	818.16	-3454	818.16	-3453	818.16	-3452	818.16
-3452	818.16	-3451	808.85	-3450	811.10	-3449	817.07	-3448	814.82	-3447	817.07	-3446	816.52	-3445	808.85	-3444	809.40
-3444	809.40	-3443	818.16	-3442	818.16	-3441	818.16	-3440	818.16	-3439	818.16	-3438	818.16	-3437	818.16	-3436	818.16
-3436	818.16	-3435	613.62	-3434	409.08	-3433	613.62	-3432	818.16	-3431	818.16	-3430	818.16	-3429	818.16	-3428	477.80
-3428	477.80	-3427	137.45	-3426	137.45	-3425	131.78	-3424	137.45	-3423	74.40	-3422	95.77	-3421	95.77	-3420	95.77

Relazione di calcolo

-3412	95.58	-3411	95.66	-3410	95.73	-3409	95.81	-3408	95.89	-3407	95.96	-3406	96.04	-3405	96.11
-3404	96.19	-3403	96.27	-3402	92.39	-3401	88.47	-3400	88.47	-3399	88.47	-3398	88.47	-3397	88.47
-3396	88.47	-3395	88.47	-3394	88.47	-3393	88.47	-3392	88.47	-3391	88.47	-3390	88.47	-3389	88.47
-3388	88.47	-3387	88.47	-3386	88.47	-3377	273.44	-3376	269.90	-3375	270.71	-3374	271.51	-3373	272.32
-3372	273.12	-3371	273.93	-3370	86.82	-3369	85.17	-3368	85.17	-3367	85.17	-3366	316.88	-3365	98.19
-3364	165.85	-3363	165.85	-3362	165.85	-3361	165.85	-3360	360.44	-3358	192.53	-3357	192.38	-3356	192.23
-3355	192.08	-3354	191.93	-3353	191.77	-3352	191.62	-3351	191.47	-3350	191.31	-3349	191.16	-3348	191.01
-3347	191.54	-3346	192.53	-3345	192.38	-3344	192.23	-3343	192.08	-3342	191.93	-3341	191.77	-3340	191.62
-3339	191.47	-3338	191.31	-3337	191.16	-3336	191.01	-3335	191.54	-3334	192.53	-3333	192.38	-3332	192.23
-3331	192.08	-3330	191.93	-3329	191.77	-3328	191.62	-3327	191.47	-3326	191.31	-3325	191.16	-3324	191.01
-3323	191.54	-3322	192.53	-3321	192.38	-3320	192.23	-3319	192.08	-3318	191.93	-3317	191.77	-3316	191.62
-3315	191.47	-3314	191.31	-3313	191.16	-3312	191.01	-3311	191.54	-3310	192.53	-3309	192.38	-3308	192.23
-3307	192.08	-3306	191.93	-3305	191.77	-3304	191.62	-3303	191.47	-3302	191.31	-3301	191.16	-3300	191.01
-3299	191.54	-3298	192.53	-3297	192.38	-3296	192.23	-3295	192.08	-3294	191.93	-3293	191.77	-3292	191.62
-3291	191.47	-3290	191.31	-3289	191.16	-3288	191.01	-3287	191.54	-3286	192.53	-3285	192.38	-3284	192.23
-3283	192.08	-3282	191.93	-3281	191.77	-3280	191.62	-3279	191.47	-3278	191.31	-3277	191.16	-3276	191.01
-3275	191.54	-3274	192.53	-3273	192.38	-3272	192.23	-3271	192.08	-3270	191.93	-3269	191.77	-3268	191.62
-3267	191.47	-3266	191.31	-3265	191.16	-3264	191.01	-3263	191.54	-3262	192.53	-3261	192.38	-3260	192.23
-3259	192.08	-3258	191.93	-3257	191.77	-3256	191.62	-3255	191.47	-3254	191.31	-3253	191.16	-3252	191.01
-3251	191.54	-3250	192.53	-3249	192.38	-3248	192.23	-3247	192.08	-3246	191.93	-3245	191.77	-3244	191.62
-3243	191.47	-3242	191.31	-3241	191.16	-3240	191.01	-3239	191.54	-3238	192.53	-3237	192.38	-3236	192.23
-3235	192.08	-3234	191.93	-3233	191.77	-3232	191.62	-3231	191.47	-3230	191.31	-3229	191.16	-3228	191.01
-3227	191.54	-3226	192.53	-3225	192.38	-3224	192.23	-3223	192.08	-3222	191.93	-3221	191.77	-3220	191.62
-3219	191.47	-3218	191.31	-3217	191.16	-3216	191.01	-3215	191.54	-3214	192.53	-3213	192.38	-3212	192.23
-3211	192.08	-3210	191.93	-3209	191.77	-3208	191.62	-3207	191.47	-3206	191.31	-3205	191.16	-3204	191.01
-3203	191.54	-3202	192.53	-3201	192.38	-3200	192.23	-3199	192.08	-3198	191.93	-3197	191.77	-3196	191.62
-3195	191.47	-3194	191.31	-3193	191.16	-3192	191.01	-3191	191.54	-3190	192.53	-3189	192.38	-3188	192.23
-3187	192.08	-3186	191.93	-3185	191.77	-3184	191.62	-3183	191.47	-3182	191.31	-3181	191.16	-3180	191.01
-3179	191.54	-3178	192.53	-3177	192.38	-3176	192.23	-3175	192.08	-3174	191.92	-3173	191.77	-3172	191.62
-3171	191.47	-3170	191.31	-3169	191.16	-3168	191.01	-3167	191.54	-3166	192.53	-3165	192.38	-3164	192.23
-3163	192.08	-3162	191.93	-3161	191.77	-3160	191.62	-3159	191.47	-3158	191.31	-3157	191.16	-3156	191.01
-3155	191.54	-3154	192.53	-3153	192.38	-3152	192.23	-3151	192.08	-3150	191.93	-3149	191.77	-3148	191.62
-3147	191.47	-3146	191.31	-3145	191.16	-3144	191.01	-3143	191.54	-3142	192.53	-3141	192.38	-3140	192.23
-3139	192.08	-3138	191.93	-3137	191.77	-3136	191.62	-3135	191.47	-3134	191.31	-3133	191.16	-3132	191.01
-3131	191.54	-3130	192.53	-3129	192.38	-3128	192.23	-3127	192.08	-3126	191.93	-3125	191.77	-3124	191.62
-3123	191.47	-3122	191.31	-3121	191.16	-3120	191.01	-3119	191.54	-3118	192.53	-3117	192.38	-3116	192.23
-3115	192.08	-3114	191.93	-3113	191.77	-3112	191.62	-3111	191.47	-3110	191.31	-3109	191.16	-3108	191.01
-3107	191.54	-3106	192.53	-3105	192.38	-3104	192.23	-3103	192.08	-3102	191.93	-3101	191.77	-3100	191.62
-3099	191.47	-3098	191.31	-3097	191.16	-3096	191.01	-3095	191.54	-3094	192.53	-3093	192.38	-3092	192.23
-3091	192.08	-3090	191.93	-3089	191.77	-3088	191.62	-3087	191.47	-3086	191.31	-3085	191.16	-3084	191.01
-3083	191.54	-3082	192.53	-3081	192.38	-3080	192.23	-3079	192.08	-3078	191.92	-3077	191.77	-3076	191.62
-3075	191.47	-3074	191.31	-3073	191.16	-3072	191.01	-3071	191.54	-3070	192.53	-3069	192.38	-3068	192.23
-3067	192.08	-3066	191.93	-3065	191.77	-3064	191.62	-3063	191.47	-3062	191.31	-3061	191.16	-3060	191.01
-3059	191.54	-3058	192.53	-3057	192.38	-3056	192.23	-3055	192.08	-3054	191.93	-3053	191.77	-3052	191.62
-3051	191.47	-3050	191.31	-3049	191.16	-3048	191.01	-3047	191.54	-3046	192.53	-3045	192.38	-3044	192.23
-3043	192.08	-3042	191.93	-3041	191.77	-3040	191.62	-3039	191.47	-3038	191.31	-3037	191.16	-3036	191.01
-3035	191.54	-3034	192.53	-3033	192.38	-3032	192.23	-3031	192.08	-3030	191.93	-3029	191.77	-3028	191.62
-3027	191.47	-3026	191.31	-3025	191.16	-3024	191.01	-3023	191.54	-3022	192.53	-3021	192.38	-3020	192.23
-3019	192.08	-3018	191.93	-3017	191.77	-3016	191.62	-3015	191.47	-3014	191.31	-3013	191.16	-3012	191.01
-3011	191.54	-3010	192.53	-3009	192.38	-3008	192.23	-3007	192.08	-3006	191.93	-3005	191.77	-3004	191.62
-3003	191.47	-3002	191.31	-3001	191.16	-3000	191.01	-2999	191.54	-2998	144.40	-2997	144.29	-2996	144.17
-2995	144.06	-2994	143.94	-2993	143.83	-2992	143.72	-2991	143.60	-2990	143.49	-2989	143.37	-2988	143.26
-2987	143.65	-2986	144.40	-2985	144.29	-2984	144.17	-2983	144.06	-2982	143.94	-2981	143.83	-2980	143.72
-2979	143.60	-2978	143.49	-2977	143.37	-2976	143.26	-2975	143.65	-2974	192.53	-2973	192.38	-2972	192.23
-2971	192.08	-2970	191.93	-2969	191.77	-2968	191.62	-2967	191.47	-2966	191.31	-2965	191.16	-2964	191.01
-2963	191.54	-2962	156.10	-2961	151.62	-2960	155.17	-2959	158.73	-2958	162.28	-2957	165.83	-2956	169.39
-2955	172.94	-2954	176.49	-2953	180.05	-2952	183.60	-2951	187.51	-2950	103.60	-2949	110.86	-2948	118.12
-2947	125.38	-2946	132.64	-2945	139.90	-2944	147.15	-2943	154.41	-2942	161.67	-2941	168.93	-2940	176.19
-2939	183.49	-2938	137.78	-2937	147.10	-2936	148.40	-2935	149.69	-2934	150.99	-2933	152.28	-2932	153.58
-2931	154.87	-2930	156.17	-2929	157.46	-2928	158.76	-2927	160.50	-2926	188.02	-2925	183.35	-2924	178.68
-2923	174.01	-2922	169.34	-2921	164.67	-2920	160.00	-2919	155.34	-2918	150.67	-2917	146.00	-2916	141.33
-2915	137.52	-2913	549.47	-2912	547.86	-2911	546.25	-2910	544.64	-2909	543.03	-2908	541.41	-2907	539.80
-2906	546.88	-2905	549.47	-2904	547.86	-2903	546.25	-2902	544.64	-2901	543.03	-2900	541.41	-2899	539.80
-2898	546.88	-2897	549.47	-2896	547.86	-2895	546.25	-2894	544.64	-2893	543.03	-2892	541.41	-2891	539.80
-2890	546.88	-2889	527.42	-2888	547.86	-2887	546.25	-2886	544.64	-2885	543.03	-2884	541.41	-2883	539.80
-2882	546.88	-2881	411.13	-2880	410.89	-2879	409.69	-2878	408.48	-2877	407.27	-2876	406.06	-2875	404.85
-2874	410.16	-2873	413.09	-2872	410.89	-2871	409.69	-2870	408.48	-2869	407.27	-2868	406.06	-2867	404.85
-2866	410.16	-2865	529.38	-2864	547.86	-2863	546.25	-2862	544.64	-2861	543.03	-2860	541.41	-2859	539.80
-2858	546.88	-2857	549.47	-2856	547.86	-2855	546.25	-2854	544.64	-2853	543.03	-2852	541.41	-2851	539.80
-2850	546.88	-2849	549.47	-2848	547.86	-2847	546.25	-2846	544.64	-2845	543.03	-2844	541.41	-2843	539.80
-2842	546.88	-2841	551.19	-2840	547.86	-2839	546.25	-2838	544.64	-2837	543.03	-2836	541.41	-2835	539.80
-2834	546.88	-2833	549.48	-2832	547.86	-2831	546.25	-2830	544.64	-2829	543.03	-2828	541.41	-2827	539.80
-2826	546.88	-2825	546.12	-2824	547.86	-2823	546.25	-2822	544.64	-2821	543.03	-2820	541.41	-2819	539.80
-2818	546.88	-2817	549.47	-2816	547.86	-2815	546.25	-2814	544.64	-2813	543.03	-2812	541.41	-2811	539.80
-2810	546.88	-2809	551.10	-2808	547.86	-2807	546.25	-2806	544.64	-2805	543.02	-2804			

Relazione di calcolo

-2770	545.12	-2769	537.02	-2768	538.11	-2767	537.30	-2766	536.50	-2765	535.69	-2764	534.89	-2763	534.08
-2762	542.18	-2761	536.58	-2760	536.58	-2759	536.58	-2758	536.58	-2757	536.58	-2756	536.58	-2755	536.58
-2754	545.12	-2753	437.56	-2752	450.46	-2751	463.35	-2750	476.24	-2749	489.13	-2748	502.02	-2747	514.91
-2746	534.80	-2745	439.90	-2744	451.99	-2743	464.07	-2742	476.15	-2741	488.24	-2740	500.32	-2739	512.41
-2738	531.87	-2737	549.47	-2736	547.86	-2735	546.25	-2734	544.64	-2733	543.03	-2732	541.41	-2731	539.80
-2730	546.88	-2729	552.17	-2728	547.86	-2727	546.25	-2726	544.64	-2725	543.02	-2724	541.41	-2723	539.80
-2722	546.88	-2721	549.48	-2720	547.86	-2719	546.25	-2718	544.64	-2717	543.03	-2716	541.41	-2715	539.80
-2714	546.88	-2713	546.76	-2712	547.86	-2711	546.25	-2710	544.64	-2709	543.03	-2708	541.41	-2707	539.80
-2706	546.88	-2705	549.47	-2704	547.86	-2703	546.25	-2702	544.64	-2701	543.03	-2700	541.41	-2699	539.80
-2698	546.88	-2697	549.47	-2696	547.86	-2695	546.25	-2694	544.64	-2693	543.02	-2692	541.41	-2691	539.80
-2690	546.88	-2689	549.47	-2688	547.86	-2687	546.25	-2686	544.64	-2685	543.03	-2684	541.41	-2683	539.80
-2682	546.88	-2681	574.86	-2680	547.86	-2679	546.25	-2678	544.64	-2677	543.03	-2676	541.41	-2675	539.80
-2674	546.88	-2673	549.47	-2672	547.86	-2671	546.25	-2670	544.64	-2669	543.03	-2668	541.41	-2667	539.80
-2666	546.88	-2665	546.12	-2664	547.86	-2663	546.25	-2662	544.64	-2661	543.03	-2660	541.41	-2659	539.80
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-2473	170.34	-2472	360.44	-2471	360.44	-2470	360.44	-2469	302.71	-2468	307.84	-2467	360.44	-2466	360.44
-2463	364.95	-2461	351.66	-2459	364.69	-2458	286.65	-2457	282.04	-2456	352.15	-2455	347.60	-2453	280.12
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Relazione di calcolo

-2129	176.94	-2128	176.94	-2127	176.94	-2126	176.94	-2125	176.94	-2124	176.94	-2123	176.94	-2122	176.94
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-1633	319.00	-1632	45.17	-1631	318.16	-1630	45.19	-1629	317.33	-1628	45.22	-1627	316.49	-1626	45.24
-1625	315.65	-1624	45.26	-1623	314.82	-1622	45.28	-1621	319.04	-1620	46.58	-1619	83.70	-1618	83.70
-1617	83.70	-1616	83.70	-1615	83.70	-1614	83.70	-1613	83.70	-1612	83.70	-1611	83.70	-1610	83.70
-1609	83.70	-1608	83.70	-1607	83.70	-1606	83.70	-1605	83.70	-1604	83.70	-1603	127.02	-1602	41.85
-1601	127.02	-1600	41.85	-1599	127.02	-1598	41.85	-1597	127.02	-1596	41.85	-1595	41.85	-1594	86.99
-1593	41.85	-1592	86.99	-1591	41.85	-1590	86.98	-1589	41.85	-1588	86.97	-1587	174.79	-1586	174.79
-1585	174.79	-1584	174.79	-1583	174.79	-1582	174.79	-1581	174.79	-1580	174.79	-1579	174.79	-1578	174.79
-1577	174.79	-1576	174.10	-1575	174.79	-1574	174.79	-1573	174.79	-1572	174.79	-1571	174.79	-1570	174.79
-1569	174.79	-1568	174.79	-1567	174.79	-1566	174.79	-1565	174.79	-1564	175.41	-1563	174.79	-1562	174.79
-1561	174.79	-1560	174.79	-1559	174.79	-1558	174.79	-1557	174.79	-1556	174.79	-1555	174.79	-1554	174.79
-1553	174.79	-1552	176.71	-1551	174.79	-1550	174.79	-1549	174.79	-1548	174.79	-1547	174.79	-1546	174.79
-1545	174.79	-1544	174.79	-1543	174.79	-1542	174.79	-1541	174.79	-1540	175.41	-1539	174.80	-1538	174.80
-1537	174.80	-1536	174.80	-1535	174.80	-1534	174.80	-1533	174.80	-1532	174.80	-1531	174.80	-1530	174.80
-1529	174.80	-1528	175.41	-1527											

Relazione di calcolo

-1497	90.27	-1496	90.27	-1495	90.27	-1494	90.27	-1493	90.27	-1492	90.27	-1491	91.70	-1490	90.27
-1489	90.27	-1488	90.27	-1487	90.27	-1486	90.27	-1485	90.27	-1484	90.27	-1483	91.12	-1482	90.27
-1481	90.27	-1480	90.27	-1479	90.27	-1478	90.27	-1477	90.27	-1476	90.27	-1475	91.70	-1474	90.27
-1473	90.27	-1472	90.27	-1471	90.27	-1470	90.27	-1469	90.27	-1468	90.27	-1467	91.70	-1466	319.87
-1465	45.13	-1464	319.06	-1463	45.13	-1462	318.26	-1461	45.13	-1460	317.45	-1459	45.13	-1458	316.64
-1457	45.13	-1456	315.84	-1455	45.13	-1454	315.03	-1453	45.13	-1452	319.29	-1451	46.43	-1450	83.70
-1449	83.70	-1448	83.70	-1447	83.70	-1446	83.70	-1445	83.70	-1444	83.70	-1443	83.70	-1442	83.70
-1441	83.70	-1440	83.70	-1439	83.70	-1438	83.70	-1437	83.70	-1436	83.70	-1435	83.70	-1434	127.02
-1433	41.85	-1432	127.02	-1431	41.85	-1430	127.02	-1429	41.85	-1428	127.02	-1427	41.85	-1426	41.85
-1425	86.98	-1424	41.85	-1423	86.98	-1422	41.85	-1421	86.98	-1420	41.85	-1419	86.98	14	135.07
103	135.72	105	223.71	117	223.71	118	42.68	119	43.49	120	43.70	121	43.49	205	107.74
217	107.74	219	20.93	221	20.93	244	267.77	245	290.55	246	272.90	247	360.46	251	351.22
252	351.22	261	360.45	262	360.44	263	360.44								

Totali masse nodi

Mo
<kg>
489384.00

Elenco forze sismiche nodali allo SND

Simbologia

Nodo = Numero del nodo
 cx = Coeff. c in dir. X
 cy = Coeff. c in dir. Y
 Fx = Forza in dir. X
 Fy = Forza in dir. Y

Nodo	cx	cy	Fx <daN>	Fy <daN>	Nodo	cx	cy	Fx <daN>	Fy <daN>	Nodo	cx	cy	Fx <daN>	Fy <daN>
-3524	0.00	0.00	16.24	16.24	-3523	0.00	0.00	30.89	30.89	-3522	0.00	0.00	32.49	32.49
-3521	0.00	0.00	34.08	34.08	-3520	0.00	0.00	32.49	32.49	-3519	0.00	0.00	32.49	32.49
-3518	0.00	0.00	28.70	28.70	-3517	0.00	0.00	24.92	24.92	-3516	0.00	0.00	29.88	29.88
-3515	0.00	0.00	34.84	34.84	-3514	0.00	0.00	35.15	35.15	-3513	0.00	0.00	35.46	35.46
-3512	0.00	0.00	26.59	26.59	-3511	0.00	0.00	17.73	17.73	-3510	0.00	0.00	26.59	26.59
-3509	0.00	0.00	35.46	35.46	-3508	0.00	0.00	35.46	35.46	-3507	0.00	0.00	35.46	35.46
-3506	0.00	0.00	35.46	35.46	-3505	0.00	0.00	35.46	35.46	-3504	0.00	0.00	35.46	35.46
-3503	0.00	0.00	35.46	35.46	-3502	0.00	0.00	35.46	35.46	-3501	0.00	0.00	35.46	35.46
-3500	0.00	0.00	35.46	35.46	-3499	0.00	0.00	35.46	35.46	-3498	0.00	0.00	35.46	35.46
-3497	0.00	0.00	35.46	35.46	-3496	0.00	0.00	35.46	35.46	-3495	0.00	0.00	35.46	35.46
-3494	0.00	0.00	35.46	35.46	-3493	0.00	0.00	35.46	35.46	-3492	0.00	0.00	35.46	35.46
-3491	0.00	0.00	35.46	35.46	-3490	0.00	0.00	35.46	35.46	-3489	0.00	0.00	35.46	35.46
-3488	0.00	0.00	35.46	35.46	-3487	0.00	0.00	35.46	35.46	-3486	0.00	0.00	35.46	35.46
-3485	0.00	0.00	35.46	35.46	-3484	0.00	0.00	35.46	35.46	-3483	0.00	0.00	35.46	35.46
-3482	0.00	0.00	35.46	35.46	-3481	0.00	0.00	35.46	35.46	-3480	0.00	0.00	35.46	35.46
-3479	0.00	0.00	33.59	33.59	-3478	0.00	0.00	31.73	31.73	-3477	0.00	0.00	31.73	31.73
-3476	0.00	0.00	34.16	34.16	-3475	0.00	0.00	31.73	31.73	-3474	0.00	0.00	29.29	29.29
-3473	0.00	0.00	15.86	15.86	-3472	0.00	0.00	9.28	9.28	-3471	0.00	0.00	17.18	17.18
-3470	0.00	0.00	16.49	16.49	-3469	0.00	0.00	17.09	17.09	-3468	0.00	0.00	17.01	17.01
-3467	0.00	0.00	59.43	59.43	-3466	0.00	0.00	101.85	101.85	-3465	0.00	0.00	101.85	101.85
-3464	0.00	0.00	101.85	101.85	-3463	0.00	0.00	101.85	101.85	-3462	0.00	0.00	101.85	101.85
-3461	0.00	0.00	101.85	101.85	-3460	0.00	0.00	101.85	101.85	-3459	0.00	0.00	101.85	101.85
-3458	0.00	0.00	101.85	101.85	-3457	0.00	0.00	101.85	101.85	-3456	0.00	0.00	101.85	101.85
-3455	0.00	0.00	101.85	101.85	-3454	0.00	0.00	101.85	101.85	-3453	0.00	0.00	101.85	101.85
-3452	0.00	0.00	101.85	101.85	-3451	0.00	0.00	100.69	100.69	-3450	0.00	0.00	100.97	100.97
-3449	0.00	0.00	101.72	101.72	-3448	0.00	0.00	101.44	101.44	-3447	0.00	0.00	101.72	101.72
-3446	0.00	0.00	101.65	101.65	-3445	0.00	0.00	100.69	100.69	-3444	0.00	0.00	100.76	100.76
-3443	0.00	0.00	101.85	101.85	-3442	0.00	0.00	101.85	101.85	-3441	0.00	0.00	101.85	101.85
-3440	0.00	0.00	101.85	101.85	-3439	0.00	0.00	101.85	101.85	-3438	0.00	0.00	101.85	101.85
-3437	0.00	0.00	101.85	101.85	-3436	0.00	0.00	101.85	101.85	-3435	0.00	0.00	76.39	76.39
-3434	0.00	0.00	50.93	50.93	-3433	0.00	0.00	76.39	76.39	-3432	0.00	0.00	101.85	101.85
-3431	0.00	0.00	101.85	101.85	-3430	0.00	0.00	101.85	101.85	-3429	0.00	0.00	101.85	101.85
-3428	0.00	0.00	59.48	59.48	-3427	0.00	0.00	17.11	17.11	-3426	0.00	0.00	17.11	17.11
-3425	0.00	0.00	16.40	16.40	-3424	0.00	0.00	17.11	17.11	-3423	0.00	0.00	9.26	9.26
-3414	0.00	0.00	18.32	18.32	-3413	0.00	0.00	24.46	24.46	-3412	0.00	0.00	30.68	30.68
-3411	0.00	0.00	36.91	36.91	-3410	0.00	0.00	43.15	43.15	-3409	0.00	0.00	49.40	49.40
-3408	0.00	0.00	55.65	55.65	-3407	0.00	0.00	61.92	61.92	-3406	0.00	0.00	68.20	68.20
-3405	0.00	0.00	74.48	74.48	-3404	0.00	0.00	80.78	80.78	-3403	0.00	0.00	87.09	87.09
-3402	0.00	0.00	89.58	89.58	-3401	0.00	0.00	85.77	85.77	-3400	0.00	0.00	85.77	85.77
-3399	0.00	0.00	85.77	85.77	-3398	0.00	0.00	85.77	85.77	-3397	0.00	0.00	85.77	85.77
-3396	0.00	0.00	85.77	85.77	-3395	0.00	0.00	85.77	85.77	-3394	0.00	0.00	85.77	85.77
-3393	0.00	0.00	85.77	85.77	-3392	0.00	0.00	85.77	85.77	-3391	0.00	0.00	85.77	85.77
-3390	0.00	0.00	85.77	85.77	-3389	0.00	0.00	85.77	85.77	-3388	0.00	0.00	85.77	85.77
-3387	0.00	0.00	85.77	85.77	-3386	0.00	0.00	85.77	85.77	-3377	0.00	0.00	51.48	51.48
-3376	0.00	0.00	67.50	67.50	-3375	0.00	0.00	84.44	84.44	-3374	0.00	0.00	101.48	101.48
-3373	0.00	0.00	118.62	118.62	-3372	0.00	0.00	135.85	135.85	-3371	0.00	0.00	153.19	153.19
-3370	0.00	0.00	84.17	84.17	-3369	0.00	0.00	77.69	77.69	-3368	0.00	0.00	72.81	72.81
-3367	0.00	0.00	67.92	67.92	-3366	0.00	0.00	196.80	196.80	-3365	0.00	0.00	72.68	72.68
-3364	0.00	0.00	151.29	151.29	-3363	0.00	0.00	141.78	141.78	-3362	0.00	0.00	132.27	132.27

Relazione di calcolo

-3123	0.00	0.00	86.30	86.30	-3122	0.00	0.00	73.82	73.82	-3121	0.00	0.00	61.36	61.36
-3120	0.00	0.00	48.93	48.93	-3119	0.00	0.00	36.64	36.64	-3118	0.00	0.00	174.18	174.18
-3117	0.00	0.00	161.56	161.56	-3116	0.00	0.00	148.97	148.97	-3115	0.00	0.00	136.40	136.40
-3114	0.00	0.00	123.84	123.84	-3113	0.00	0.00	111.31	111.31	-3112	0.00	0.00	98.79	98.79
-3111	0.00	0.00	86.30	86.30	-3110	0.00	0.00	73.82	73.82	-3109	0.00	0.00	61.36	61.36
-3108	0.00	0.00	48.93	48.93	-3107	0.00	0.00	36.64	36.64	-3106	0.00	0.00	174.18	174.18
-3105	0.00	0.00	161.56	161.56	-3104	0.00	0.00	148.97	148.97	-3103	0.00	0.00	136.40	136.40
-3102	0.00	0.00	123.84	123.84	-3101	0.00	0.00	111.31	111.31	-3100	0.00	0.00	98.79	98.79
-3099	0.00	0.00	86.30	86.30	-3098	0.00	0.00	73.82	73.82	-3097	0.00	0.00	61.36	61.36
-3096	0.00	0.00	48.93	48.93	-3095	0.00	0.00	36.64	36.64	-3094	0.00	0.00	174.18	174.18
-3093	0.00	0.00	161.56	161.56	-3092	0.00	0.00	148.97	148.97	-3091	0.00	0.00	136.40	136.40
-3090	0.00	0.00	123.84	123.84	-3089	0.00	0.00	111.31	111.31	-3088	0.00	0.00	98.79	98.79
-3087	0.00	0.00	86.30	86.30	-3086	0.00	0.00	73.82	73.82	-3085	0.00	0.00	61.36	61.36
-3084	0.00	0.00	48.93	48.93	-3083	0.00	0.00	36.64	36.64	-3082	0.00	0.00	174.18	174.18
-3081	0.00	0.00	161.56	161.56	-3080	0.00	0.00	148.97	148.97	-3079	0.00	0.00	136.40	136.40
-3078	0.00	0.00	123.84	123.84	-3077	0.00	0.00	111.31	111.31	-3076	0.00	0.00	98.79	98.79
-3075	0.00	0.00	86.30	86.30	-3074	0.00	0.00	73.82	73.82	-3073	0.00	0.00	61.36	61.36
-3072	0.00	0.00	48.93	48.93	-3071	0.00	0.00	36.64	36.64	-3070	0.00	0.00	174.18	174.18
-3069	0.00	0.00	161.56	161.56	-3068	0.00	0.00	148.97	148.97	-3067	0.00	0.00	136.40	136.40
-3066	0.00	0.00	123.84	123.84	-3065	0.00	0.00	111.31	111.31	-3064	0.00	0.00	98.79	98.79
-3063	0.00	0.00	86.30	86.30	-3062	0.00	0.00	73.82	73.82	-3061	0.00	0.00	61.36	61.36
-3060	0.00	0.00	48.93	48.93	-3059	0.00	0.00	36.64	36.64	-3058	0.00	0.00	174.18	174.18
-3057	0.00	0.00	161.56	161.56	-3056	0.00	0.00	148.97	148.97	-3055	0.00	0.00	136.40	136.40
-3054	0.00	0.00	123.84	123.84	-3053	0.00	0.00	111.31	111.31	-3052	0.00	0.00	98.79	98.79
-3051	0.00	0.00	86.30	86.30	-3050	0.00	0.00	73.82	73.82	-3049	0.00	0.00	61.36	61.36
-3048	0.00	0.00	48.93	48.93	-3047	0.00	0.00	36.64	36.64	-3046	0.00	0.00	174.18	174.18
-3045	0.00	0.00	161.56	161.56	-3044	0.00	0.00	148.97	148.97	-3043	0.00	0.00	136.40	136.40
-3042	0.00	0.00	123.84	123.84	-3041	0.00	0.00	111.31	111.31	-3040	0.00	0.00	98.79	98.79
-3039	0.00	0.00	86.30	86.30	-3038	0.00	0.00	73.82	73.82	-3037	0.00	0.00	61.36	61.36
-3036	0.00	0.00	48.93	48.93	-3035	0.00	0.00	36.64	36.64	-3034	0.00	0.00	174.18	174.18
-3033	0.00	0.00	161.56	161.56	-3032	0.00	0.00	148.97	148.97	-3031	0.00	0.00	136.40	136.40
-3030	0.00	0.00	123.84	123.84	-3029	0.00	0.00	111.31	111.31	-3028	0.00	0.00	98.79	98.79
-3027	0.00	0.00	86.30	86.30	-3026	0.00	0.00	73.82	73.82	-3025	0.00	0.00	61.36	61.36
-3024	0.00	0.00	48.93	48.93	-3023	0.00	0.00	36.64	36.64	-3022	0.00	0.00	174.18	174.18
-3021	0.00	0.00	161.56	161.56	-3020	0.00	0.00	148.97	148.97	-3019	0.00	0.00	136.40	136.40
-3018	0.00	0.00	123.84	123.84	-3017	0.00	0.00	111.31	111.31	-3016	0.00	0.00	98.79	98.79
-3015	0.00	0.00	86.30	86.30	-3014	0.00	0.00	73.82	73.82	-3013	0.00	0.00	61.36	61.36
-3012	0.00	0.00	48.93	48.93	-3011	0.00	0.00	36.64	36.64	-3010	0.00	0.00	174.18	174.18
-3009	0.00	0.00	161.56	161.56	-3008	0.00	0.00	148.97	148.97	-3007	0.00	0.00	136.40	136.40
-3006	0.00	0.00	123.84	123.84	-3005	0.00	0.00	111.31	111.31	-3004	0.00	0.00	98.79	98.79
-3003	0.00	0.00	86.30	86.30	-3002	0.00	0.00	73.82	73.82	-3001	0.00	0.00	61.36	61.36
-3000	0.00	0.00	48.93	48.93	-2999	0.00	0.00	36.64	36.64	-2998	0.00	0.00	130.63	130.63
-2997	0.00	0.00	121.17	121.17	-2996	0.00	0.00	111.73	111.73	-2995	0.00	0.00	102.30	102.30
-2994	0.00	0.00	92.88	92.88	-2993	0.00	0.00	83.48	83.48	-2992	0.00	0.00	74.09	74.09
-2991	0.00	0.00	64.72	64.72	-2990	0.00	0.00	55.37	55.37	-2989	0.00	0.00	46.02	46.02
-2988	0.00	0.00	36.70	36.70	-2987	0.00	0.00	27.48	27.48	-2986	0.00	0.00	130.63	130.63
-2985	0.00	0.00	121.17	121.17	-2984	0.00	0.00	111.73	111.73	-2983	0.00	0.00	102.30	102.30
-2982	0.00	0.00	92.88	92.88	-2981	0.00	0.00	83.48	83.48	-2980	0.00	0.00	74.09	74.09
-2979	0.00	0.00	64.72	64.72	-2978	0.00	0.00	55.37	55.37	-2977	0.00	0.00	46.02	46.02
-2976	0.00	0.00	36.70	36.70	-2975	0.00	0.00	27.48	27.48	-2974	0.00	0.00	174.18	174.18
-2973	0.00	0.00	161.56	161.56	-2972	0.00	0.00	148.97	148.97	-2971	0.00	0.00	136.40	136.40
-2970	0.00	0.00	123.84	123.84	-2969	0.00	0.00	111.31	111.31	-2968	0.00	0.00	98.79	98.79
-2967	0.00	0.00	86.30	86.30	-2966	0.00	0.00	73.82	73.82	-2965	0.00	0.00	61.36	61.36
-2964	0.00	0.00	48.93	48.93	-2963	0.00	0.00	36.64	36.64	-2962	0.00	0.00	141.21	141.21
-2961	0.00	0.00	127.33	127.33	-2960	0.00	0.00	120.25	120.25	-2959	0.00	0.00	112.71	112.71
-2958	0.00	0.00	104.71	104.71	-2957	0.00	0.00	96.25	96.25	-2956	0.00	0.00	87.33	87.33
-2955	0.00	0.00	77.95	77.95	-2954	0.00	0.00	68.10	68.10	-2953	0.00	0.00	57.80	57.80
-2952	0.00	0.00	47.03	47.03	-2951	0.00	0.00	35.87	35.87	-2950	0.00	0.00	93.72	93.72
-2949	0.00	0.00	93.10	93.10	-2948	0.00	0.00	91.54	91.54	-2947	0.00	0.00	89.03	89.03
-2946	0.00	0.00	85.59	85.59	-2945	0.00	0.00	81.20	81.20	-2944	0.00	0.00	75.87	75.87
-2943	0.00	0.00	69.59	69.59	-2942	0.00	0.00	62.38	62.38	-2941	0.00	0.00	54.23	54.23
-2940	0.00	0.00	45.13	45.13	-2939	0.00	0.00	35.10	35.10	-2938	0.00	0.00	124.64	124.64
-2937	0.00	0.00	123.54	123.54	-2936	0.00	0.00	115.00	115.00	-2935	0.00	0.00	106.30	106.30
-2934	0.00	0.00	97.43	97.43	-2933	0.00	0.00	88.39	88.39	-2932	0.00	0.00	79.18	79.18
-2931	0.00	0.00	69.80	69.80	-2930	0.00	0.00	60.26	60.26	-2929	0.00	0.00	50.55	50.55
-2928	0.00	0.00	40.67	40.67	-2927	0.00	0.00	30.71	30.71	-2926	0.00	0.00	170.09	170.09
-2925	0.00	0.00	153.98	153.98	-2924	0.00	0.00	138.47	138.47	-2923	0.00	0.00	123.57	123.57
-2922	0.00	0.00	109.27	109.27	-2921	0.00	0.00	95.58	95.58	-2920	0.00	0.00	82.49	82.49
-2919	0.00	0.00	70.01	70.01	-2918	0.00	0.00	58.14	58.14	-2917	0.00	0.00	46.87	46.87
-2916	0.00	0.00	36.20	36.20	-2915	0.00	0.00	26.31	26.31	-2913	0.00	0.00	341.25	341.25
-2912	0.00	0.00	306.38	306.38	-2911	0.00	0.00	271.70	271.70	-2910	0.00	0.00	237.23	237.23
-2909	0.00	0.00	202.96	202.96	-2908	0.00	0.00	168.88	168.88	-2907	0.00	0.00	135.01	135.01
-2906	0.00	0.00	102.97	102.97	-2905	0.00	0.00	341.25	341.25	-2904	0.00	0.00	306.38	306.38
-2903	0.00	0.00	271.70	271.70	-2902	0.00	0.00	237.23	237.23	-2901	0.00	0.00	202.96	202.96
-2900	0.00	0.00	168.88	168.88	-2899	0.00	0.00	135.01	135.01	-2898	0.00	0.00	102.97	102.97
-2897	0.00	0.00	341.25	341.25	-2896	0.00	0.00	306.38	306.38	-2895	0.00	0.00	271.70	271.70
-2894	0.00	0.00	237.23	237.23	-2893	0.00	0.00	202.96	202.96	-2892	0.00	0.00	168.88	168.88
-2891	0.00	0.00	135.01	135.01	-2890	0.00	0.00	102.97	102.97	-2889	0.00	0.00	327.56	327.56
-2888	0.00	0.00	306.38	306.38	-2887	0.00	0.00	271.70	271.70	-2886	0.00	0.00	237.23	237.23

Relazione di calcolo

-2885	0.00	0.00	202.96	202.96	-2884	0.00	0.00	168.88	168.88	-2883	0.00	0.00	135.01	135.01
-2882	0.00	0.00	102.97	102.97	-2881	0.00	0.00	255.33	255.33	-2880	0.00	0.00	229.78	229.78
-2879	0.00	0.00	203.78	203.78	-2878	0.00	0.00	177.92	177.92	-2877	0.00	0.00	152.22	152.22
-2876	0.00	0.00	126.66	126.66	-2875	0.00	0.00	101.26	101.26	-2874	0.00	0.00	77.23	77.23
-2873	0.00	0.00	256.55	256.55	-2872	0.00	0.00	229.78	229.78	-2871	0.00	0.00	203.78	203.78
-2870	0.00	0.00	177.92	177.92	-2869	0.00	0.00	152.22	152.22	-2868	0.00	0.00	126.66	126.66
-2867	0.00	0.00	101.26	101.26	-2866	0.00	0.00	77.23	77.23	-2865	0.00	0.00	328.77	328.77
-2864	0.00	0.00	306.38	306.38	-2863	0.00	0.00	271.70	271.70	-2862	0.00	0.00	237.23	237.23
-2861	0.00	0.00	202.96	202.96	-2860	0.00	0.00	168.88	168.88	-2859	0.00	0.00	135.01	135.01
-2858	0.00	0.00	102.97	102.97	-2857	0.00	0.00	341.25	341.25	-2856	0.00	0.00	306.38	306.38
-2855	0.00	0.00	271.70	271.70	-2854	0.00	0.00	237.23	237.23	-2853	0.00	0.00	202.96	202.96
-2852	0.00	0.00	168.88	168.88	-2851	0.00	0.00	135.01	135.01	-2850	0.00	0.00	102.97	102.97
-2849	0.00	0.00	341.25	341.25	-2848	0.00	0.00	306.38	306.38	-2847	0.00	0.00	271.70	271.70
-2846	0.00	0.00	237.23	237.23	-2845	0.00	0.00	202.96	202.96	-2844	0.00	0.00	168.88	168.88
-2843	0.00	0.00	135.01	135.01	-2842	0.00	0.00	102.97	102.97	-2841	0.00	0.00	342.31	342.31
-2840	0.00	0.00	306.38	306.38	-2839	0.00	0.00	271.70	271.70	-2838	0.00	0.00	237.23	237.23
-2837	0.00	0.00	202.96	202.96	-2836	0.00	0.00	168.88	168.88	-2835	0.00	0.00	135.01	135.01
-2834	0.00	0.00	102.97	102.97	-2833	0.00	0.00	341.25	341.25	-2832	0.00	0.00	306.38	306.38
-2831	0.00	0.00	271.70	271.70	-2830	0.00	0.00	237.23	237.23	-2829	0.00	0.00	202.96	202.96
-2828	0.00	0.00	168.88	168.88	-2827	0.00	0.00	135.01	135.01	-2826	0.00	0.00	102.97	102.97
-2825	0.00	0.00	339.17	339.17	-2824	0.00	0.00	306.38	306.38	-2823	0.00	0.00	271.70	271.70
-2822	0.00	0.00	237.23	237.23	-2821	0.00	0.00	202.96	202.96	-2820	0.00	0.00	168.88	168.88
-2819	0.00	0.00	135.01	135.01	-2818	0.00	0.00	102.97	102.97	-2817	0.00	0.00	341.25	341.25
-2816	0.00	0.00	306.38	306.38	-2815	0.00	0.00	271.70	271.70	-2814	0.00	0.00	237.23	237.23
-2813	0.00	0.00	202.96	202.96	-2812	0.00	0.00	168.88	168.88	-2811	0.00	0.00	135.01	135.01
-2810	0.00	0.00	102.97	102.97	-2809	0.00	0.00	342.26	342.26	-2808	0.00	0.00	306.38	306.38
-2807	0.00	0.00	271.70	271.70	-2806	0.00	0.00	237.23	237.23	-2805	0.00	0.00	202.96	202.96
-2804	0.00	0.00	168.88	168.88	-2803	0.00	0.00	135.01	135.01	-2802	0.00	0.00	102.97	102.97
-2801	0.00	0.00	277.20	277.20	-2800	0.00	0.00	255.91	255.91	-2799	0.00	0.00	233.23	233.23
-2798	0.00	0.00	209.16	209.16	-2797	0.00	0.00	183.69	183.69	-2796	0.00	0.00	156.82	156.82
-2795	0.00	0.00	128.56	128.56	-2794	0.00	0.00	100.31	100.31	-2793	0.00	0.00	273.20	273.20
-2792	0.00	0.00	252.76	252.76	-2791	0.00	0.00	230.83	230.83	-2790	0.00	0.00	207.40	207.40
-2789	0.00	0.00	182.48	182.48	-2788	0.00	0.00	156.07	156.07	-2787	0.00	0.00	128.16	128.16
-2786	0.00	0.00	100.14	100.14	-2785	0.00	0.00	330.42	330.42	-2784	0.00	0.00	296.92	296.92
-2783	0.00	0.00	264.49	264.49	-2782	0.00	0.00	231.97	231.97	-2781	0.00	0.00	199.34	199.34
-2780	0.00	0.00	166.62	166.62	-2779	0.00	0.00	133.80	133.80	-2778	0.00	0.00	102.47	102.47
-2777	0.00	0.00	333.24	333.24	-2776	0.00	0.00	300.07	300.07	-2775	0.00	0.00	266.89	266.89
-2774	0.00	0.00	233.72	233.72	-2773	0.00	0.00	200.55	200.55	-2772	0.00	0.00	167.38	167.38
-2771	0.00	0.00	134.20	134.20	-2770	0.00	0.00	102.64	102.64	-2769	0.00	0.00	333.52	333.52
-2768	0.00	0.00	300.93	300.93	-2767	0.00	0.00	267.26	267.26	-2766	0.00	0.00	233.69	233.69
-2765	0.00	0.00	200.22	200.22	-2764	0.00	0.00	166.85	166.85	-2763	0.00	0.00	133.58	133.58
-2762	0.00	0.00	102.08	102.08	-2761	0.00	0.00	333.24	333.24	-2760	0.00	0.00	300.07	300.07
-2759	0.00	0.00	266.90	266.90	-2758	0.00	0.00	233.72	233.72	-2757	0.00	0.00	200.55	200.55
-2756	0.00	0.00	167.38	167.38	-2755	0.00	0.00	134.20	134.20	-2754	0.00	0.00	102.64	102.64
-2753	0.00	0.00	271.75	271.75	-2752	0.00	0.00	251.91	251.91	-2751	0.00	0.00	230.47	230.47
-2750	0.00	0.00	207.44	207.44	-2749	0.00	0.00	182.81	182.81	-2748	0.00	0.00	156.59	156.59
-2747	0.00	0.00	128.78	128.78	-2746	0.00	0.00	100.69	100.69	-2745	0.00	0.00	273.20	273.20
-2744	0.00	0.00	252.76	252.76	-2743	0.00	0.00	230.83	230.83	-2742	0.00	0.00	207.40	207.40
-2741	0.00	0.00	182.48	182.48	-2740	0.00	0.00	156.07	156.07	-2739	0.00	0.00	128.16	128.16
-2738	0.00	0.00	100.14	100.14	-2737	0.00	0.00	341.25	341.25	-2736	0.00	0.00	306.38	306.38
-2735	0.00	0.00	271.70	271.70	-2734	0.00	0.00	237.23	237.23	-2733	0.00	0.00	202.96	202.96
-2732	0.00	0.00	168.88	168.88	-2731	0.00	0.00	135.01	135.01	-2730	0.00	0.00	102.97	102.97
-2729	0.00	0.00	342.93	342.93	-2728	0.00	0.00	306.38	306.38	-2727	0.00	0.00	271.70	271.70
-2726	0.00	0.00	237.23	237.23	-2725	0.00	0.00	202.96	202.96	-2724	0.00	0.00	168.88	168.88
-2723	0.00	0.00	135.01	135.01	-2722	0.00	0.00	102.97	102.97	-2721	0.00	0.00	341.25	341.25
-2720	0.00	0.00	306.38	306.38	-2719	0.00	0.00	271.70	271.70	-2718	0.00	0.00	237.23	237.23
-2717	0.00	0.00	202.96	202.96	-2716	0.00	0.00	168.88	168.88	-2715	0.00	0.00	135.01	135.01
-2714	0.00	0.00	102.97	102.97	-2713	0.00	0.00	339.57	339.57	-2712	0.00	0.00	306.38	306.38
-2711	0.00	0.00	271.70	271.70	-2710	0.00	0.00	237.23	237.23	-2709	0.00	0.00	202.96	202.96
-2708	0.00	0.00	168.88	168.88	-2707	0.00	0.00	135.01	135.01	-2706	0.00	0.00	102.97	102.97
-2705	0.00	0.00	341.25	341.25	-2704	0.00	0.00	306.38	306.38	-2703	0.00	0.00	271.70	271.70
-2702	0.00	0.00	237.23	237.23	-2701	0.00	0.00	202.96	202.96	-2700	0.00	0.00	168.88	168.88
-2699	0.00	0.00	135.01	135.01	-2698	0.00	0.00	102.97	102.97	-2697	0.00	0.00	341.25	341.25
-2696	0.00	0.00	306.38	306.38	-2695	0.00	0.00	271.70	271.70	-2694	0.00	0.00	237.23	237.23
-2693	0.00	0.00	202.96	202.96	-2692	0.00	0.00	168.88	168.88	-2691	0.00	0.00	135.01	135.01
-2690	0.00	0.00	102.97	102.97	-2689	0.00	0.00	341.25	341.25	-2688	0.00	0.00	306.38	306.38
-2687	0.00	0.00	271.70	271.70	-2686	0.00	0.00	237.23	237.23	-2685	0.00	0.00	202.96	202.96
-2684	0.00	0.00	168.88	168.88	-2683	0.00	0.00	135.01	135.01	-2682	0.00	0.00	102.97	102.97
-2681	0.00	0.00	357.02	357.02	-2680	0.00	0.00	306.38	306.38	-2679	0.00	0.00	271.70	271.70
-2678	0.00	0.00	237.23	237.23	-2677	0.00	0.00	202.96	202.96	-2676	0.00	0.00	168.88	168.88
-2675	0.00	0.00	135.01	135.01	-2674	0.00	0.00	102.97	102.97	-2673	0.00	0.00	341.25	341.25
-2672	0.00	0.00	306.38	306.38	-2671	0.00	0.00	271.70	271.70	-2670	0.00	0.00	237.23	237.23
-2669	0.00	0.00	202.96	202.96	-2668	0.00	0.00	168.88	168.88	-2667	0.00	0.00	135.01	135.01
-2666	0.00	0.00	102.97	102.97	-2665	0.00	0.00	339.17	339.17	-2664	0.00	0.00	306.38	306.38
-2663	0.00	0.00	271.70	271.70	-2662	0.00	0.00	237.23	237.23	-2661	0.00	0.00	202.96	202.96
-2660	0.00	0.00	168.88	168.88	-2659	0.00	0.00	135.01	135.01	-2658	0.00	0.00	102.97	102.97
-2657	0.00	0.00	341.25	341.25	-2656	0.00	0.00	306.38	306.38	-2655	0.00	0.00	271.70	271.70
-2654	0.00	0.00	237.23	237.23	-2653	0.00	0.00	202.96	202.96	-2652	0.00	0.00	168.88	168.88
-2651	0.00	0.00	135.01	135.01	-2650	0.00	0.00	102.97	102.97	-2649	0.00	0.00	327.56	327.56

Relazione di calcolo

-2648	0.00	0.00	306.38	306.38	-2647	0.00	0.00	271.70	271.70	-2646	0.00	0.00	237.23	237.23
-2645	0.00	0.00	202.96	202.96	-2644	0.00	0.00	168.88	168.88	-2643	0.00	0.00	135.01	135.01
-2642	0.00	0.00	102.97	102.97	-2641	0.00	0.00	341.25	341.25	-2640	0.00	0.00	306.38	306.38
-2639	0.00	0.00	271.70	271.70	-2638	0.00	0.00	237.23	237.23	-2637	0.00	0.00	202.96	202.96
-2636	0.00	0.00	168.88	168.88	-2635	0.00	0.00	135.01	135.01	-2634	0.00	0.00	102.97	102.97
-2633	0.00	0.00	341.25	341.25	-2632	0.00	0.00	306.38	306.38	-2631	0.00	0.00	271.70	271.70
-2630	0.00	0.00	237.23	237.23	-2629	0.00	0.00	202.96	202.96	-2628	0.00	0.00	168.88	168.88
-2627	0.00	0.00	135.01	135.01	-2626	0.00	0.00	102.97	102.97	-2625	0.00	0.00	341.25	341.25
-2624	0.00	0.00	306.38	306.38	-2623	0.00	0.00	271.70	271.70	-2622	0.00	0.00	237.23	237.23
-2621	0.00	0.00	202.96	202.96	-2620	0.00	0.00	168.88	168.88	-2619	0.00	0.00	135.01	135.01
-2618	0.00	0.00	102.97	102.97	-2616	0.00	0.00	155.38	155.38	-2615	0.00	0.00	145.61	145.61
-2614	0.00	0.00	135.85	135.85	-2613	0.00	0.00	126.08	126.08	-2612	0.00	0.00	155.38	155.38
-2611	0.00	0.00	145.61	145.61	-2610	0.00	0.00	135.85	135.85	-2609	0.00	0.00	126.08	126.08
-2608	0.00	0.00	155.38	155.38	-2607	0.00	0.00	145.61	145.61	-2606	0.00	0.00	135.85	135.85
-2605	0.00	0.00	126.08	126.08	-2604	0.00	0.00	155.38	155.38	-2603	0.00	0.00	145.61	145.61
-2602	0.00	0.00	135.85	135.85	-2601	0.00	0.00	121.03	121.03	-2600	0.00	0.00	116.53	116.53
-2599	0.00	0.00	109.21	109.21	-2598	0.00	0.00	101.89	101.89	-2597	0.00	0.00	94.34	94.34
-2596	0.00	0.00	116.53	116.53	-2595	0.00	0.00	109.21	109.21	-2594	0.00	0.00	101.89	101.89
-2593	0.00	0.00	94.78	94.78	-2592	0.00	0.00	155.38	155.38	-2591	0.00	0.00	145.61	145.61
-2590	0.00	0.00	135.85	135.85	-2589	0.00	0.00	121.48	121.48	-2588	0.00	0.00	155.38	155.38
-2587	0.00	0.00	145.61	145.61	-2586	0.00	0.00	135.85	135.85	-2585	0.00	0.00	126.08	126.08
-2584	0.00	0.00	155.38	155.38	-2583	0.00	0.00	145.61	145.61	-2582	0.00	0.00	135.85	135.85
-2581	0.00	0.00	126.08	126.08	-2580	0.00	0.00	155.38	155.38	-2579	0.00	0.00	145.61	145.61
-2578	0.00	0.00	135.85	135.85	-2577	0.00	0.00	126.47	126.47	-2576	0.00	0.00	155.38	155.38
-2575	0.00	0.00	145.61	145.61	-2574	0.00	0.00	135.85	135.85	-2573	0.00	0.00	126.08	126.08
-2572	0.00	0.00	155.38	155.38	-2571	0.00	0.00	145.61	145.61	-2570	0.00	0.00	135.85	135.85
-2569	0.00	0.00	125.31	125.31	-2568	0.00	0.00	155.38	155.38	-2567	0.00	0.00	145.61	145.61
-2566	0.00	0.00	135.85	135.85	-2565	0.00	0.00	126.08	126.08	-2564	0.00	0.00	155.38	155.38
-2563	0.00	0.00	145.61	145.61	-2562	0.00	0.00	135.85	135.85	-2561	0.00	0.00	126.45	126.45
-2560	0.00	0.00	122.67	122.67	-2559	0.00	0.00	114.96	114.96	-2558	0.00	0.00	107.25	107.25
-2557	0.00	0.00	99.54	99.54	-2556	0.00	0.00	120.62	120.62	-2555	0.00	0.00	113.04	113.04
-2554	0.00	0.00	105.46	105.46	-2553	0.00	0.00	97.88	97.88	-2552	0.00	0.00	139.65	139.65
-2551	0.00	0.00	142.87	142.87	-2550	0.00	0.00	133.28	133.28	-2549	0.00	0.00	123.70	123.70
-2548	0.00	0.00	161.77	161.77	-2547	0.00	0.00	139.61	139.61	-2546	0.00	0.00	130.25	130.25
-2545	0.00	0.00	120.88	120.88	-2544	0.00	0.00	151.29	151.29	-2543	0.00	0.00	141.78	141.78
-2542	0.00	0.00	132.27	132.27	-2541	0.00	0.00	122.76	122.76	-2540	0.00	0.00	119.74	119.74
-2539	0.00	0.00	112.21	112.21	-2538	0.00	0.00	104.69	104.69	-2537	0.00	0.00	97.16	97.16
-2536	0.00	0.00	120.62	120.62	-2535	0.00	0.00	113.04	113.04	-2534	0.00	0.00	105.46	105.46
-2533	0.00	0.00	97.88	97.88	-2532	0.00	0.00	155.38	155.38	-2531	0.00	0.00	145.61	145.61
-2530	0.00	0.00	135.85	135.85	-2529	0.00	0.00	126.08	126.08	-2528	0.00	0.00	155.38	155.38
-2527	0.00	0.00	145.61	145.61	-2526	0.00	0.00	135.85	135.85	-2525	0.00	0.00	126.70	126.70
-2524	0.00	0.00	155.38	155.38	-2523	0.00	0.00	145.61	145.61	-2522	0.00	0.00	135.85	135.85
-2521	0.00	0.00	126.08	126.08	-2520	0.00	0.00	155.38	155.38	-2519	0.00	0.00	145.61	145.61
-2518	0.00	0.00	135.85	135.85	-2517	0.00	0.00	125.46	125.46	-2516	0.00	0.00	155.38	155.38
-2515	0.00	0.00	145.61	145.61	-2514	0.00	0.00	135.85	135.85	-2513	0.00	0.00	126.08	126.08
-2512	0.00	0.00	155.38	155.38	-2511	0.00	0.00	145.61	145.61	-2510	0.00	0.00	135.85	135.85
-2509	0.00	0.00	126.08	126.08	-2508	0.00	0.00	155.38	155.38	-2507	0.00	0.00	145.61	145.61
-2506	0.00	0.00	135.85	135.85	-2505	0.00	0.00	126.08	126.08	-2504	0.00	0.00	155.38	155.38
-2503	0.00	0.00	145.61	145.61	-2502	0.00	0.00	135.85	135.85	-2501	0.00	0.00	131.89	131.89
-2500	0.00	0.00	155.38	155.38	-2499	0.00	0.00	145.61	145.61	-2498	0.00	0.00	135.85	135.85
-2497	0.00	0.00	126.07	126.07	-2496	0.00	0.00	155.38	155.38	-2495	0.00	0.00	145.61	145.61
-2494	0.00	0.00	135.85	135.85	-2493	0.00	0.00	125.31	125.31	-2492	0.00	0.00	155.38	155.38
-2491	0.00	0.00	145.61	145.61	-2490	0.00	0.00	135.85	135.85	-2489	0.00	0.00	126.08	126.08
-2488	0.00	0.00	155.38	155.38	-2487	0.00	0.00	145.61	145.61	-2486	0.00	0.00	135.85	135.85
-2485	0.00	0.00	121.04	121.04	-2484	0.00	0.00	155.38	155.38	-2483	0.00	0.00	145.61	145.61
-2482	0.00	0.00	135.85	135.85	-2481	0.00	0.00	126.08	126.08	-2480	0.00	0.00	155.38	155.38
-2479	0.00	0.00	145.61	145.61	-2478	0.00	0.00	135.85	135.85	-2477	0.00	0.00	126.08	126.08
-2476	0.00	0.00	155.38	155.38	-2475	0.00	0.00	145.61	145.61	-2474	0.00	0.00	135.85	135.85
-2473	0.00	0.00	126.08	126.08	-2472	0.00	0.00	246.13	246.13	-2471	0.00	0.00	246.13	246.13
-2470	0.00	0.00	246.13	246.13	-2469	0.00	0.00	206.72	206.72	-2466	0.00	0.00	210.22	210.22
-2465	0.00	0.00	246.13	246.13	-2464	0.00	0.00	246.13	246.13	-2463	0.00	0.00	249.22	249.22
-2461	0.00	0.00	240.14	240.14	-2459	0.00	0.00	249.04	249.04	-2458	0.00	0.00	195.75	195.75
-2457	0.00	0.00	192.60	192.60	-2456	0.00	0.00	240.47	240.47	-2455	0.00	0.00	237.36	237.36
-2453	0.00	0.00	191.28	191.28	-2452	0.00	0.00	192.60	192.60	-2451	0.00	0.00	246.13	246.13
-2450	0.00	0.00	250.97	250.97	-2448	0.00	0.00	241.29	241.29	-2447	0.00	0.00	246.13	246.13
-2446	0.00	0.00	246.13	246.13	-2445	0.00	0.00	246.13	246.13	-2444	0.00	0.00	291.54	291.54
-2442	0.00	0.00	240.14	240.14	-2440	0.00	0.00	206.72	206.72	-2439	0.00	0.00	246.13	246.13
-2438	0.00	0.00	246.13	246.13	-2437	0.00	0.00	246.13	246.13	-2436	0.00	0.00	171.55	171.55
-2435	0.00	0.00	171.55	171.55	-2434	0.00	0.00	171.55	171.55	-2433	0.00	0.00	171.55	171.55
-2432	0.00	0.00	128.66	128.66	-2431	0.00	0.00	128.66	128.66	-2430	0.00	0.00	171.55	171.55
-2429	0.00	0.00	171.55	171.55	-2428	0.00	0.00	171.55	171.55	-2427	0.00	0.00	171.55	171.55
-2426	0.00	0.00	171.55	171.55	-2425	0.00	0.00	171.55	171.55	-2424	0.00	0.00	171.55	171.55
-2423	0.00	0.00	171.55	171.55	-2422	0.00	0.00	171.55	171.55	-2421	0.00	0.00	171.55	171.55
-2420	0.00	0.00	171.55	171.55	-2419	0.00	0.00	171.55	171.55	-2418	0.00	0.00	171.55	171.55
-2417	0.00	0.00	171.55	171.55	-2416	0.00	0.00	171.55	171.55	-2415	0.00	0.00	171.55	171.55
-2414	0.00	0.00	171.55	171.55	-2413	0.00	0.00	171.55	171.55	-2412	0.00	0.00	171.55	171.55
-2411	0.00	0.00	171.55	171.55	-2410	0.00	0.00	171.55	171.55	-2409	0.00	0.00	171.55	171.55
-2408	0.00	0.00	171.55	171.55	-2407	0.00	0.00	171.55	171.55	-2406	0.00	0.00	171.55	171.55
-2405	0.00	0.00	171.55	171.55	-2404	0.00	0.00	171.55	171.55	-2403	0.00	0.00	171.55	171.55

Relazione di calcolo

-1928	0.00	0.00	128.66	128.66	-1927	0.00	0.00	128.66	128.66	-1926	0.00	0.00	171.55	171.55
-1925	0.00	0.00	171.55	171.55	-1924	0.00	0.00	171.55	171.55	-1923	0.00	0.00	171.55	171.55
-1922	0.00	0.00	171.55	171.55	-1921	0.00	0.00	171.55	171.55	-1920	0.00	0.00	171.55	171.55
-1919	0.00	0.00	171.55	171.55	-1918	0.00	0.00	171.55	171.55	-1917	0.00	0.00	170.31	170.31
-1916	0.00	0.00	171.55	171.55	-1915	0.00	0.00	172.79	172.79	-1914	0.00	0.00	171.55	171.55
-1913	0.00	0.00	171.55	171.55	-1912	0.00	0.00	171.55	171.55	-1911	0.00	0.00	171.55	171.55
-1910	0.00	0.00	171.55	171.55	-1909	0.00	0.00	171.55	171.55	-1908	0.00	0.00	171.55	171.55
-1907	0.00	0.00	171.55	171.55	-1906	0.00	0.00	171.55	171.55	-1905	0.00	0.00	171.55	171.55
-1904	0.00	0.00	171.55	171.55	-1903	0.00	0.00	171.55	171.55	-1902	0.00	0.00	171.55	171.55
-1901	0.00	0.00	171.55	171.55	-1900	0.00	0.00	171.55	171.55	-1899	0.00	0.00	171.55	171.55
-1898	0.00	0.00	171.55	171.55	-1897	0.00	0.00	171.55	171.55	-1896	0.00	0.00	171.55	171.55
-1895	0.00	0.00	171.54	171.54	-1894	0.00	0.00	171.55	171.55	-1893	0.00	0.00	171.55	171.55
-1892	0.00	0.00	128.66	128.66	-1891	0.00	0.00	128.66	128.66	-1890	0.00	0.00	171.55	171.55
-1889	0.00	0.00	171.55	171.55	-1888	0.00	0.00	171.55	171.55	-1887	0.00	0.00	171.55	171.55
-1886	0.00	0.00	171.55	171.55	-1885	0.00	0.00	171.55	171.55	-1884	0.00	0.00	171.55	171.55
-1883	0.00	0.00	171.55	171.55	-1882	0.00	0.00	165.53	165.53	-1881	0.00	0.00	160.19	160.19
-1880	0.00	0.00	184.71	184.71	-1879	0.00	0.00	189.46	189.46	-1878	0.00	0.00	170.72	170.72
-1877	0.00	0.00	164.95	164.95	-1876	0.00	0.00	165.15	165.15	-1875	0.00	0.00	171.55	171.55
-1874	0.00	0.00	171.55	171.55	-1873	0.00	0.00	171.55	171.55	-1872	0.00	0.00	171.55	171.55
-1871	0.00	0.00	171.55	171.55	-1870	0.00	0.00	171.55	171.55	-1869	0.00	0.00	171.55	171.55
-1868	0.00	0.00	171.55	171.55	-1867	0.00	0.00	171.55	171.55	-1866	0.00	0.00	171.55	171.55
-1865	0.00	0.00	171.55	171.55	-1864	0.00	0.00	171.55	171.55	-1863	0.00	0.00	171.55	171.55
-1862	0.00	0.00	171.55	171.55	-1861	0.00	0.00	171.55	171.55	-1860	0.00	0.00	168.34	168.34
-1859	0.00	0.00	178.43	178.43	-1858	0.00	0.00	168.34	168.34	-1857	0.00	0.00	188.34	188.34
-1856	0.00	0.00	168.34	168.34	-1855	0.00	0.00	171.97	171.97	-1854	0.00	0.00	168.34	168.34
-1853	0.00	0.00	179.15	179.15	-1852	0.00	0.00	126.26	126.26	-1851	0.00	0.00	134.37	134.37
-1850	0.00	0.00	126.26	126.26	-1849	0.00	0.00	134.37	134.37	-1848	0.00	0.00	168.34	168.34
-1847	0.00	0.00	179.15	179.15	-1846	0.00	0.00	168.34	168.34	-1845	0.00	0.00	179.15	179.15
-1844	0.00	0.00	168.34	168.34	-1843	0.00	0.00	179.15	179.15	-1842	0.00	0.00	168.34	168.34
-1841	0.00	0.00	179.15	179.15	-1840	0.00	0.00	168.34	168.34	-1839	0.00	0.00	179.15	179.15
-1838	0.00	0.00	168.34	168.34	-1837	0.00	0.00	179.15	179.15	-1836	0.00	0.00	168.34	168.34
-1835	0.00	0.00	179.15	179.15	-1834	0.00	0.00	168.34	168.34	-1833	0.00	0.00	179.15	179.15
-1832	0.00	0.00	138.92	138.92	-1831	0.00	0.00	179.15	179.15	-1830	0.00	0.00	135.84	135.84
-1829	0.00	0.00	179.15	179.15	-1828	0.00	0.00	246.31	246.31	-1827	0.00	0.00	179.15	179.15
-1826	0.00	0.00	219.31	219.31	-1825	0.00	0.00	179.15	179.15	-1824	0.00	0.00	164.59	164.59
-1823	0.00	0.00	179.15	179.15	-1822	0.00	0.00	136.24	136.24	-1821	0.00	0.00	179.15	179.15
-1820	0.00	0.00	137.08	137.08	-1819	0.00	0.00	179.15	179.15	-1818	0.00	0.00	168.34	168.34
-1817	0.00	0.00	179.15	179.15	-1816	0.00	0.00	168.34	168.34	-1815	0.00	0.00	179.15	179.15
-1814	0.00	0.00	168.34	168.34	-1813	0.00	0.00	179.15	179.15	-1812	0.00	0.00	168.34	168.34
-1811	0.00	0.00	179.15	179.15	-1810	0.00	0.00	168.34	168.34	-1809	0.00	0.00	179.15	179.15
-1808	0.00	0.00	168.34	168.34	-1807	0.00	0.00	179.15	179.15	-1806	0.00	0.00	168.34	168.34
-1805	0.00	0.00	179.15	179.15	-1804	0.00	0.00	168.34	168.34	-1803	0.00	0.00	179.15	179.15
-1802	0.00	0.00	168.34	168.34	-1801	0.00	0.00	179.15	179.15	-1800	0.00	0.00	168.34	168.34
-1799	0.00	0.00	179.15	179.15	-1798	0.00	0.00	168.34	168.34	-1797	0.00	0.00	179.15	179.15
-1796	0.00	0.00	168.34	168.34	-1795	0.00	0.00	179.15	179.15	-1794	0.00	0.00	168.34	168.34
-1793	0.00	0.00	179.15	179.15	-1792	0.00	0.00	168.34	168.34	-1791	0.00	0.00	179.15	179.15
-1790	0.00	0.00	168.34	168.34	-1789	0.00	0.00	179.15	179.15	-1788	0.00	0.00	85.77	85.77
-1787	0.00	0.00	85.77	85.77	-1786	0.00	0.00	85.77	85.77	-1785	0.00	0.00	85.77	85.77
-1784	0.00	0.00	85.77	85.77	-1783	0.00	0.00	85.77	85.77	-1782	0.00	0.00	85.77	85.77
-1781	0.00	0.00	85.77	85.77	-1780	0.00	0.00	85.77	85.77	-1779	0.00	0.00	85.77	85.77
-1778	0.00	0.00	85.77	85.77	-1777	0.00	0.00	85.77	85.77	-1776	0.00	0.00	85.77	85.77
-1775	0.00	0.00	85.77	85.77	-1774	0.00	0.00	85.77	85.77	-1773	0.00	0.00	85.77	85.77
-1772	0.00	0.00	85.77	85.77	-1771	0.00	0.00	85.77	85.77	-1770	0.00	0.00	85.77	85.77
-1769	0.00	0.00	85.77	85.77	-1768	0.00	0.00	85.77	85.77	-1767	0.00	0.00	85.77	85.77
-1766	0.00	0.00	85.77	85.77	-1765	0.00	0.00	85.77	85.77	-1764	0.00	0.00	85.77	85.77
-1763	0.00	0.00	85.77	85.77	-1762	0.00	0.00	85.77	85.77	-1761	0.00	0.00	85.77	85.77
-1760	0.00	0.00	85.77	85.77	-1759	0.00	0.00	85.77	85.77	-1758	0.00	0.00	85.77	85.77
-1757	0.00	0.00	85.77	85.77	-1756	0.00	0.00	154.44	154.44	-1755	0.00	0.00	143.37	143.37
-1754	0.00	0.00	132.29	132.29	-1753	0.00	0.00	121.22	121.22	-1752	0.00	0.00	110.15	110.15
-1751	0.00	0.00	99.08	99.08	-1750	0.00	0.00	88.01	88.01	-1749	0.00	0.00	76.94	76.94
-1748	0.00	0.00	65.87	65.87	-1747	0.00	0.00	54.80	54.80	-1746	0.00	0.00	43.73	43.73
-1745	0.00	0.00	32.39	32.39	-1744	0.00	0.00	154.44	154.44	-1743	0.00	0.00	143.37	143.37
-1742	0.00	0.00	132.29	132.29	-1741	0.00	0.00	121.22	121.22	-1740	0.00	0.00	110.15	110.15
-1739	0.00	0.00	99.08	99.08	-1738	0.00	0.00	88.01	88.01	-1737	0.00	0.00	76.94	76.94
-1736	0.00	0.00	65.87	65.87	-1735	0.00	0.00	54.80	54.80	-1734	0.00	0.00	43.73	43.73
-1733	0.00	0.00	32.77	32.77	-1732	0.00	0.00	154.44	154.44	-1731	0.00	0.00	143.37	143.37
-1730	0.00	0.00	132.29	132.29	-1729	0.00	0.00	121.22	121.22	-1728	0.00	0.00	110.15	110.15
-1727	0.00	0.00	99.08	99.08	-1726	0.00	0.00	88.01	88.01	-1725	0.00	0.00	76.94	76.94
-1724	0.00	0.00	65.87	65.87	-1723	0.00	0.00	54.80	54.80	-1722	0.00	0.00	43.73	43.73
-1721	0.00	0.00	33.15	33.15	-1720	0.00	0.00	154.44	154.44	-1719	0.00	0.00	143.37	143.37
-1718	0.00	0.00	132.29	132.29	-1717	0.00	0.00	121.22	121.22	-1716	0.00	0.00	110.15	110.15
-1715	0.00	0.00	99.08	99.08	-1714	0.00	0.00	88.01	88.01	-1713	0.00	0.00	76.94	76.94
-1712	0.00	0.00	65.87	65.87	-1711	0.00	0.00	54.80	54.80	-1710	0.00	0.00	43.73	43.73
-1709	0.00	0.00	32.77	32.77	-1708	0.00	0.00	154.44	154.44	-1707	0.00	0.00	143.37	143.37
-1706	0.00	0.00	132.29	132.29	-1705	0.00	0.00	121.22	121.22	-1704	0.00	0.00	110.15	110.15
-1703	0.00	0.00	99.08	99.08	-1702	0.00	0.00	88.01	88.01	-1701	0.00	0.00	76.94	76.94
-1700	0.00	0.00	65.87	65.87	-1699	0.00	0.00	54.80	54.80	-1698	0.00	0.00	43.73	43.73
-1697	0.00	0.00	32.77	32.77	-1696	0.00	0.00	164.31	164.31	-1695	0.00	0.00	77.22	77.22
-1694	0.00	0.00	152.47	152.47	-1693	0.00	0.00	71.68	71.68	-1692	0.00	0.00	140.63	140.63

Relazione di calcolo

-1691	0.00	0.00	66.15	66.15	-1690	0.00	0.00	128.81	128.81	-1689	0.00	0.00	60.61	60.61
-1688	0.00	0.00	117.00	117.00	-1687	0.00	0.00	55.08	55.08	-1686	0.00	0.00	105.19	105.19
-1685	0.00	0.00	49.54	49.54	-1684	0.00	0.00	93.40	93.40	-1683	0.00	0.00	44.01	44.01
-1682	0.00	0.00	81.62	81.62	-1681	0.00	0.00	38.47	38.47	-1680	0.00	0.00	69.85	69.85
-1679	0.00	0.00	32.94	32.94	-1678	0.00	0.00	58.08	58.08	-1677	0.00	0.00	27.40	27.40
-1676	0.00	0.00	46.33	46.33	-1675	0.00	0.00	21.86	21.86	-1674	0.00	0.00	34.71	34.71
-1673	0.00	0.00	16.39	16.39	-1672	0.00	0.00	82.75	82.75	-1671	0.00	0.00	82.75	82.75
-1670	0.00	0.00	82.75	82.75	-1669	0.00	0.00	82.75	82.75	-1668	0.00	0.00	82.75	82.75
-1667	0.00	0.00	56.08	56.08	-1666	0.00	0.00	50.52	50.52	-1665	0.00	0.00	44.96	44.96
-1664	0.00	0.00	39.39	39.39	-1663	0.00	0.00	33.81	33.81	-1662	0.00	0.00	28.23	28.23
-1661	0.00	0.00	22.65	22.65	-1660	0.00	0.00	17.33	17.33	-1659	0.00	0.00	56.08	56.08
-1658	0.00	0.00	50.52	50.52	-1657	0.00	0.00	44.96	44.96	-1656	0.00	0.00	39.39	39.39
-1655	0.00	0.00	33.81	33.81	-1654	0.00	0.00	28.23	28.23	-1653	0.00	0.00	22.65	22.65
-1652	0.00	0.00	17.22	17.22	-1651	0.00	0.00	56.05	56.05	-1650	0.00	0.00	50.47	50.47
-1649	0.00	0.00	44.88	44.88	-1648	0.00	0.00	39.30	39.30	-1647	0.00	0.00	33.72	33.72
-1646	0.00	0.00	28.14	28.14	-1645	0.00	0.00	22.56	22.56	-1644	0.00	0.00	17.25	17.25
-1643	0.00	0.00	56.02	56.02	-1642	0.00	0.00	50.41	50.41	-1641	0.00	0.00	44.80	44.80
-1640	0.00	0.00	39.21	39.21	-1639	0.00	0.00	33.62	33.62	-1638	0.00	0.00	28.04	28.04
-1637	0.00	0.00	22.47	22.47	-1636	0.00	0.00	17.17	17.17	-1635	0.00	0.00	198.63	198.63
-1634	0.00	0.00	28.04	28.04	-1633	0.00	0.00	178.39	178.39	-1632	0.00	0.00	25.26	25.26
-1631	0.00	0.00	158.25	158.25	-1630	0.00	0.00	22.48	22.48	-1629	0.00	0.00	138.22	138.22
-1628	0.00	0.00	19.69	19.69	-1627	0.00	0.00	118.29	118.29	-1626	0.00	0.00	16.91	16.91
-1625	0.00	0.00	98.46	98.46	-1624	0.00	0.00	14.12	14.12	-1623	0.00	0.00	78.74	78.74
-1622	0.00	0.00	11.32	11.32	-1621	0.00	0.00	60.07	60.07	-1620	0.00	0.00	8.77	8.77
-1619	0.00	0.00	76.35	76.35	-1618	0.00	0.00	71.55	71.55	-1617	0.00	0.00	66.75	66.75
-1616	0.00	0.00	61.95	61.95	-1615	0.00	0.00	76.35	76.35	-1614	0.00	0.00	71.55	71.55
-1613	0.00	0.00	66.75	66.75	-1612	0.00	0.00	61.95	61.95	-1611	0.00	0.00	76.35	76.35
-1610	0.00	0.00	71.55	71.55	-1609	0.00	0.00	66.75	66.75	-1608	0.00	0.00	61.95	61.95
-1607	0.00	0.00	76.35	76.35	-1606	0.00	0.00	71.55	71.55	-1605	0.00	0.00	66.75	66.75
-1604	0.00	0.00	61.95	61.95	-1603	0.00	0.00	115.86	115.86	-1602	0.00	0.00	38.17	38.17
-1601	0.00	0.00	108.58	108.58	-1600	0.00	0.00	35.78	35.78	-1599	0.00	0.00	101.30	101.30
-1598	0.00	0.00	33.38	33.38	-1597	0.00	0.00	94.02	94.02	-1596	0.00	0.00	30.98	30.98
-1595	0.00	0.00	40.57	40.57	-1594	0.00	0.00	59.40	59.40	-1593	0.00	0.00	40.57	40.57
-1592	0.00	0.00	59.40	59.40	-1591	0.00	0.00	40.57	40.57	-1590	0.00	0.00	59.40	59.40
-1589	0.00	0.00	40.57	40.57	-1588	0.00	0.00	59.39	59.39	-1587	0.00	0.00	158.13	158.13
-1586	0.00	0.00	146.79	146.79	-1585	0.00	0.00	135.46	135.46	-1584	0.00	0.00	124.12	124.12
-1583	0.00	0.00	112.79	112.79	-1582	0.00	0.00	101.45	101.45	-1581	0.00	0.00	90.12	90.12
-1580	0.00	0.00	78.78	78.78	-1579	0.00	0.00	67.45	67.45	-1578	0.00	0.00	56.11	56.11
-1577	0.00	0.00	44.78	44.78	-1576	0.00	0.00	33.31	33.31	-1575	0.00	0.00	158.13	158.13
-1574	0.00	0.00	146.79	146.79	-1573	0.00	0.00	135.46	135.46	-1572	0.00	0.00	124.12	124.12
-1571	0.00	0.00	112.79	112.79	-1570	0.00	0.00	101.45	101.45	-1569	0.00	0.00	90.12	90.12
-1568	0.00	0.00	78.78	78.78	-1567	0.00	0.00	67.45	67.45	-1566	0.00	0.00	56.11	56.11
-1565	0.00	0.00	44.78	44.78	-1564	0.00	0.00	33.56	33.56	-1563	0.00	0.00	158.13	158.13
-1562	0.00	0.00	146.79	146.79	-1561	0.00	0.00	135.46	135.46	-1560	0.00	0.00	124.12	124.12
-1559	0.00	0.00	112.79	112.79	-1558	0.00	0.00	101.45	101.45	-1557	0.00	0.00	90.12	90.12
-1556	0.00	0.00	78.78	78.78	-1555	0.00	0.00	67.45	67.45	-1554	0.00	0.00	56.11	56.11
-1553	0.00	0.00	44.78	44.78	-1552	0.00	0.00	33.81	33.81	-1551	0.00	0.00	158.13	158.13
-1550	0.00	0.00	146.79	146.79	-1549	0.00	0.00	135.46	135.46	-1548	0.00	0.00	124.12	124.12
-1547	0.00	0.00	112.79	112.79	-1546	0.00	0.00	101.45	101.45	-1545	0.00	0.00	90.12	90.12
-1544	0.00	0.00	78.78	78.78	-1543	0.00	0.00	67.45	67.45	-1542	0.00	0.00	56.11	56.11
-1541	0.00	0.00	44.78	44.78	-1540	0.00	0.00	33.56	33.56	-1539	0.00	0.00	158.13	158.13
-1538	0.00	0.00	146.79	146.79	-1537	0.00	0.00	135.46	135.46	-1536	0.00	0.00	124.12	124.12
-1535	0.00	0.00	112.79	112.79	-1534	0.00	0.00	101.45	101.45	-1533	0.00	0.00	90.12	90.12
-1532	0.00	0.00	78.78	78.78	-1531	0.00	0.00	67.45	67.45	-1530	0.00	0.00	56.11	56.11
-1529	0.00	0.00	44.78	44.78	-1528	0.00	0.00	33.56	33.56	-1527	0.00	0.00	164.11	164.11
-1526	0.00	0.00	79.07	79.07	-1525	0.00	0.00	150.39	150.39	-1524	0.00	0.00	73.40	73.40
-1523	0.00	0.00	136.97	136.97	-1522	0.00	0.00	67.73	67.73	-1521	0.00	0.00	123.85	123.85
-1520	0.00	0.00	62.06	62.06	-1519	0.00	0.00	111.03	111.03	-1518	0.00	0.00	56.39	56.39
-1517	0.00	0.00	98.52	98.52	-1516	0.00	0.00	50.73	50.73	-1515	0.00	0.00	86.30	86.30
-1514	0.00	0.00	45.06	45.06	-1513	0.00	0.00	74.40	74.40	-1512	0.00	0.00	39.39	39.39
-1511	0.00	0.00	62.79	62.79	-1510	0.00	0.00	33.72	33.72	-1509	0.00	0.00	51.49	51.49
-1508	0.00	0.00	28.06	28.06	-1507	0.00	0.00	40.49	40.49	-1506	0.00	0.00	22.39	22.39
-1505	0.00	0.00	29.93	29.93	-1504	0.00	0.00	16.78	16.78	-1503	0.00	0.00	84.73	84.73
-1502	0.00	0.00	84.73	84.73	-1501	0.00	0.00	84.73	84.73	-1500	0.00	0.00	84.73	84.73
-1499	0.00	0.00	84.73	84.73	-1498	0.00	0.00	56.06	56.06	-1497	0.00	0.00	50.48	50.48
-1496	0.00	0.00	44.90	44.90	-1495	0.00	0.00	39.32	39.32	-1494	0.00	0.00	33.74	33.74
-1493	0.00	0.00	28.16	28.16	-1492	0.00	0.00	22.58	22.58	-1491	0.00	0.00	17.27	17.27
-1490	0.00	0.00	56.06	56.06	-1489	0.00	0.00	50.48	50.48	-1488	0.00	0.00	44.90	44.90
-1487	0.00	0.00	39.32	39.32	-1486	0.00	0.00	33.74	33.74	-1485	0.00	0.00	28.16	28.16
-1484	0.00	0.00	22.58	22.58	-1483	0.00	0.00	17.16	17.16	-1482	0.00	0.00	56.06	56.06
-1481	0.00	0.00	50.48	50.48	-1480	0.00	0.00	44.90	44.90	-1479	0.00	0.00	39.32	39.32
-1478	0.00	0.00	33.74	33.74	-1477	0.00	0.00	28.16	28.16	-1476	0.00	0.00	22.58	22.58
-1475	0.00	0.00	17.27	17.27	-1474	0.00	0.00	56.06	56.06	-1473	0.00	0.00	50.48	50.48
-1472	0.00	0.00	44.90	44.90	-1471	0.00	0.00	39.32	39.32	-1470	0.00	0.00	33.74	33.74
-1469	0.00	0.00	28.16	28.16	-1468	0.00	0.00	22.58	22.58	-1467	0.00	0.00	17.27	17.27
-1466	0.00	0.00	198.65	198.65	-1465	0.00	0.00	28.03	28.03	-1464	0.00	0.00	178.43	178.43
-1463	0.00	0.00	25.24	25.24	-1462	0.00	0.00	158.30	158.30	-1461	0.00	0.00	22.45	22.45
-1460	0.00	0.00	138.28	138.28	-1459	0.00	0.00	19.66	19.66	-1458	0.00	0.00	118.35	118.35
-1457	0.00	0.00	16.87	16.87	-1456	0.00	0.00	98.52	98.52	-1455	0.00	0.00	14.08	14.08

Relazione di calcolo

-1454	0.00	0.00	78.79	78.79	-1453	0.00	0.00	11.29	11.29	-1452	0.00	0.00	60.12	60.12
-1451	0.00	0.00	8.74	8.74	-1450	0.00	0.00	76.35	76.35	-1449	0.00	0.00	71.55	71.55
-1448	0.00	0.00	66.75	66.75	-1447	0.00	0.00	61.95	61.95	-1446	0.00	0.00	76.35	76.35
-1445	0.00	0.00	71.55	71.55	-1444	0.00	0.00	66.75	66.75	-1443	0.00	0.00	61.95	61.95
-1442	0.00	0.00	76.35	76.35	-1441	0.00	0.00	71.55	71.55	-1440	0.00	0.00	66.75	66.75
-1439	0.00	0.00	61.95	61.95	-1438	0.00	0.00	76.35	76.35	-1437	0.00	0.00	71.55	71.55
-1436	0.00	0.00	66.75	66.75	-1435	0.00	0.00	61.95	61.95	-1434	0.00	0.00	115.86	115.86
-1433	0.00	0.00	38.17	38.17	-1432	0.00	0.00	108.58	108.58	-1431	0.00	0.00	35.78	35.78
-1430	0.00	0.00	101.30	101.30	-1429	0.00	0.00	33.38	33.38	-1428	0.00	0.00	94.02	94.02
-1427	0.00	0.00	30.98	30.98	-1426	0.00	0.00	40.57	40.57	-1425	0.00	0.00	59.40	59.40
-1424	0.00	0.00	40.57	40.57	-1423	0.00	0.00	59.40	59.40	-1422	0.00	0.00	40.57	40.57
-1421	0.00	0.00	59.40	59.40	-1420	0.00	0.00	40.57	40.57	-1419	0.00	0.00	59.40	59.40
14	0.00	0.00	130.95	130.95	103	0.00	0.00	131.58	131.58	105	0.00	0.00	152.76	152.76
117	0.00	0.00	152.77	152.77	118	0.00	0.00	41.38	41.38	119	0.00	0.00	29.70	29.70
120	0.00	0.00	42.37	42.37	121	0.00	0.00	29.70	29.70	205	0.00	0.00	104.46	104.46
217	0.00	0.00	104.46	104.46	219	0.00	0.00	20.29	20.29	221	0.00	0.00	20.29	20.29
244	0.00	0.00	182.85	182.85	245	0.00	0.00	198.41	198.41	246	0.00	0.00	186.36	186.36
247	0.00	0.00	246.15	246.15	251	0.00	0.00	239.84	239.84	252	0.00	0.00	239.84	239.84
261	0.00	0.00	246.14	246.14	262	0.00	0.00	246.14	246.14	263	0.00	0.00	246.13	246.13

Totali forze sismiche

F_x	F_y
<daN>	<daN>
284387.00	284387.00

Domanda in duttilità di curvatura

Direzione X $\mu_{Edx}=10.46$

Direzione Y $\mu_{Edy}=10.46$

Sollecitazioni elementi bidimensionali

Simbologia

Bid. = Numero del muro/elemento bidimensionale

Nodo = Numero del nodo

σ_{xx} = Tensione normale sulle facce perp. all'asse X

CC = Numero della combinazione delle condizioni di carico elementari

TCC = Tipo di combinazione di carico

SLU = Stato limite ultimo

SLU S = Stato limite ultimo (azione sismica)

SLE R = Stato limite d'esercizio, combinazione rara

SLE F = Stato limite d'esercizio, combinazione frequente

SLE Q = Stato limite d'esercizio, combinazione quasi permanente

SLD = Stato limite di danno

SLV = Stato limite di salvaguardia della vita

SLC = Stato limite di prevenzione del collasso

SLO = Stato limite di operatività

SLU I = Stato limite di resistenza al fuoco

SND = Stato limite di salvaguardia della vita (non dissipativo)

σ_{zz} = Tensione normale sulle facce perp. all'asse Z

τ_{xz} = Tensione in dir. Z sulle facce perp. all'asse X

M_{xx} = Momento che provoca variazione di tensione sulle facce perp. all'asse X

M_{zz} = Momento che provoca variazione di tensione sulle facce perp. all'asse Z

M_{xz} = Momento che provoca variazione di tensione tangenziale sulle facce perp. all'asse X

τ_{zy} = Tensione in dir. Y sulle facce perp. all'asse Z

τ_{xy} = Tensione in dir. Y sulle facce perp. all'asse X

Bid. 110

	CC	TCC	Nodo	Min.	CC	TCC	Nodo	Max		CC	TCC	Nodo	Min.	CC	TCC	Nodo	Max
σ_{xx} <daN/mq>	3	SND	217	-121853	2	SND	-1420	110889	σ_{zz} <daN/mq>	3	SND	-1448	-78189	2	SND	-1429	49400
τ_{xz} <daN/mq>	2	SND	-1442	-41799	3	SND	-1435	75000	M _{xx} <daNm/m>	8	SND	-1430	-771	5	SND	-1438	602
M _{zz} <daNm/m>	10	SLU	217	-697	6	SND	-1428	233	M _{xz} <daNm/m>	2	SND	-1437	-82	10	SLU	-1438	239
τ_{zy} <daN/mq>	6	SND	-1420	-9431	10	SLU	-1442	4890	τ_{xy} <daN/mq>	10	SLU	-1420	-7745	10	SLU	-1432	7248

Bid. 111

	CC	TCC	Nodo	Min.	CC	TCC	Nodo	Max		CC	TCC	Nodo	Min.	CC	TCC	Nodo	Max
σ_{xx} <daN/mq>	3	SND	-3425	-34274	3	SND	117	28146	σ_{zz} <daN/mq>	6	SND	1	-451196	2	SND	1	99725
τ_{xz} <daN/mq>	5	SND	1	-21710	6	SND	-3424	122834	M _{xx} <daNm/m>	7	SND	-1466	-535	6	SND	-1466	766
M _{zz} <daNm/m>	7	SND	-1474	-184	6	SND	1	788	M _{xz} <daNm/m>	6	SND	1	-90	6	SND	-1474	229
τ_{zy} <daN/mq>	6	SND	-1064	-7898	7	SND	-1064	2153	τ_{xy} <daN/mq>	6	SND	-1466	-5852	6	SND	-3424	8830

Bid. 112

	CC	TCC	Nodo	Min.	CC	TCC	Nodo	Max		CC	TCC	Nodo	Min.	CC	TCC	Nodo	Max
σ_{xx} <daN/mq>	2	SND	-1539	-56606	9	SLU	-1539	40668	σ_{zz} <daN/mq>	2	SND	-3522	-231018	3	SND	-3524	278274

Relazione di calcolo

τ_{xz} <daN/mq>	3	SND	-1529	-70765	2	SND	-740	74083	M_{xx} <daNm/m>	3	SND	-1535	-5791	9	SLU	-1527	2618
M_{zz} <daNm/m>	6	SND	20	-6606	10	SLU	20	3886	M_{xz} <daNm/m>	5	SND	-1554	-1839	10	SLU	-1528	2403
τ_{zy} <daN/mq>	10	SLU	20	-24775	5	SND	20	17590	τ_{xy} <daN/mq>	10	SLU	-1529	-7724	6	SND	103	17394

Bid. 113

	CC	TCC	Nodo	Min.	CC	TCC	Nodo	Max		CC	TCC	Nodo	Min.	CC	TCC	Nodo	Max
σ_{xx} <daN/mq>	4	SND	-3470	-37302	3	SND	-1643	12573	σ_{zz} <daN/mq>	3	SND	-3471	-384257	2	SND	-3471	75991
τ_{xz} <daN/mq>	2	SND	-1643	-10728	4	SND	-1048	103742	M_{xx} <daNm/m>	8	SND	-1643	-714	5	SND	-1642	454
M_{zz} <daNm/m>	7	SND	19	-421	9	SLU	-1642	338	M_{xz} <daNm/m>	8	SND	-3468	-190	6	SND	-1643	78
τ_{zy} <daN/mq>	9	SLU	-1643	-8327	8	SND	-3467	9200	τ_{xy} <daN/mq>	8	SND	-3467	-8399	8	SND	-1588	5756

Bid. 114

	CC	TCC	Nodo	Min.	CC	TCC	Nodo	Max		CC	TCC	Nodo	Min.	CC	TCC	Nodo	Max
σ_{xx} <daN/mq>	3	SND	-1607	-104435	2	SND	-1603	90449	σ_{zz} <daN/mq>	3	SND	-1596	-62158	2	SND	-1616	40752
τ_{xz} <daN/mq>	2	SND	-1607	-35183	3	SND	-1604	55780	M_{xx} <daNm/m>	7	SND	205	-604	6	SND	-1607	753
M_{zz} <daNm/m>	2	SND	-1589	-164	6	SND	-1597	226	M_{xz} <daNm/m>	4	SND	-1606	-214	1	SND	205	201
τ_{zy} <daN/mq>	9	SLU	-1599	-1432	10	SLU	205	5625	τ_{xy} <daN/mq>	6	SND	-1605	-3744	8	SND	205	4091

Bid. 115

	CC	TCC	Nodo	Min.	CC	TCC	Nodo	Max		CC	TCC	Nodo	Min.	CC	TCC	Nodo	Max
σ_{xx} <daN/mq>	2	SND	14	-49383	6	SND	14	93183	σ_{zz} <daN/mq>	2	SND	279	-263403	3	SND	-3473	292169
τ_{xz} <daN/mq>	3	SND	-1698	-64898	2	SND	-741	75124	M_{xx} <daNm/m>	1	SND	-1706	-1958	8	SND	-1668	6226
M_{zz} <daNm/m>	6	SND	-3478	-2069	9	SLU	-737	5434	M_{xz} <daNm/m>	9	SLU	-1694	-333	10	SLU	-1722	2301
τ_{zy} <daN/mq>	10	SLU	18	-28026	6	SND	4	9849	τ_{xy} <daN/mq>	7	SND	-1668	-19043	1	SND	-1707	4948

Bid. 116

	CC	TCC	Nodo	Min.	CC	TCC	Nodo	Max		CC	TCC	Nodo	Min.	CC	TCC	Nodo	Max
σ_{xx} <daN/mq>	8	SND	-2453	-61529	7	SND	-2777	46104	σ_{zz} <daN/mq>	9	SLU	-2657	-90195	4	SND	-3429	20819
τ_{xz} <daN/mq>	8	SND	252	-52322	5	SND	-2455	52544	M_{xx} <daNm/m>	8	SND	252	-117720	5	SND	252	102719
M_{zz} <daNm/m>	3	SND	-3429	-90300	2	SND	-3429	44703	M_{xz} <daNm/m>	8	SND	-2777	-66799	5	SND	-2769	76364
τ_{zy} <daN/mq>	7	SND	-2753	-46831	6	SND	-2753	40969	τ_{xy} <daN/mq>	7	SND	-2753	-58911	6	SND	-2753	67603

Bid. 117

	CC	TCC	Nodo	Min.	CC	TCC	Nodo	Max		CC	TCC	Nodo	Min.	CC	TCC	Nodo	Max
σ_{xx} <daN/mq>	6	SND	-2565	-32037	6	SND	217	16372	σ_{zz} <daN/mq>	10	SLU	-1434	-78727	5	SND	-2570	5902
τ_{xz} <daN/mq>	9	SLU	-2482	-34704	6	SND	-3365	37078	M_{xx} <daNm/m>	8	SND	-2538	-1750	3	SND	-1860	2895
M_{zz} <daNm/m>	3	SND	-2605	-2857	9	SLU	-1860	20698	M_{xz} <daNm/m>	10	SLU	-2616	-1441	9	SLU	205	1849
τ_{zy} <daN/mq>	2	SND	-2565	-11035	9	SLU	-2616	83046	τ_{xy} <daN/mq>	3	SND	-1432	-22672	3	SND	-2475	19011

Bid. 118

	CC	TCC	Nodo	Min.	CC	TCC	Nodo	Max		CC	TCC	Nodo	Min.	CC	TCC	Nodo	Max
σ_{xx} <daN/mq>	2	SND	-1839	-21316	3	SND	-3010	31951	σ_{zz} <daN/mq>	3	SND	-3517	-176651	2	SND	3	60985
τ_{xz} <daN/mq>	2	SND	-1511	-39981	3	SND	-1509	40508	M_{xx} <daNm/m>	9	SLU	-2925	-2440	3	SND	-1521	5620
M_{zz} <daNm/m>	2	SND	-68	-7243	3	SND	-3498	13558	M_{xz} <daNm/m>	3	SND	-2950	-2223	10	SLU	-2915	2372
τ_{zy} <daN/mq>	3	SND	-3517	-33304	2	SND	-1859	43118	τ_{xy} <daN/mq>	3	SND	-2923	-17626	2	SND	-2925	23381

Bid. 119

	CC	TCC	Nodo	Min.	CC	TCC	Nodo	Max		CC	TCC	Nodo	Min.	CC	TCC	Nodo	Max
σ_{xx} <daN/mq>	2	SND	-3166	-17370	7	SND	-1696	23564	σ_{zz} <daN/mq>	3	SND	4	-125066	2	SND	4	49476
τ_{xz} <daN/mq>	3	SND	-1678	-45488	2	SND	-1678	45978	M_{xx} <daNm/m>	3	SND	-3270	-1683	7	SND	-3358	6033
M_{zz} <daNm/m>	2	SND	-3496	-7215	9	SLU	-1789	14754	M_{xz} <daNm/m>	2	SND	-3346	-2459	3	SND	-3321	2261
τ_{zy} <daN/mq>	3	SND	-1789	-29753	2	SND	-1789	77056	τ_{xy} <daN/mq>	2	SND	-1696	-24714	3	SND	-1696	23299

Bid. 204

	CC	TCC	Nodo	Min.	CC	TCC	Nodo	Max		CC	TCC	Nodo	Min.	CC	TCC	Nodo	Max
σ_{xx} <daN/mq>	2	SND	-1419	-37466	3	SND	117	39702	σ_{zz} <daN/mq>	3	SND	121	-112364	2	SND	-1427	63345
τ_{xz} <daN/mq>	2	SND	-1419	-26514	3	SND	117	67143	M_{xx} <daNm/m>	7	SND	-1419	-644	6	SND	117	717
M_{zz} <daNm/m>	2	SND	-1419	-324	3	SND	117	423	M_{xz} <daNm/m>	7	SND	-1443	-80	6	SND	117	213
τ_{zy} <daN/mq>	6	SND	-1419	-5661	2	SND	117	777	τ_{xy} <daN/mq>	6	SND	-1419	-6581	7	SND	117	3200

Bid. 206

	CC	TCC	Nodo	Min.	CC	TCC	Nodo	Max		CC	TCC	Nodo	Min.	CC	TCC	Nodo	Max
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Relazione di calcolo

σ_{xx} <daN/mq>	2	SND	-1597	-32053	3	SND	-1604	21938	σ_{zz} <daN/mq>	3	SND	-1596	-88311	2	SND	-1616	52686
τ_{xz} <daN/mq>	2	SND	105	-23624	3	SND	-1604	53854	M_{xx} <daNm/m>	8	SND	105	-644	5	SND	-1604	490
M_{zz} <daNm/m>	9	SLU	105	-283	3	SND	-1604	96	M_{xz} <daNm/m>	9	SLU	105	-157	1	SND	-1604	30
τ_{zy} <daN/mq>	5	SND	119	-445	9	SLU	-1604	1604	τ_{xy} <daN/mq>	5	SND	-1588	-1966	8	SND	-1604	4404

Bid. 208

	CC	TCC	Nodo	Min.	CC	TCC	Nodo	Max		CC	TCC	Nodo	Min.	CC	TCC	Nodo	Max
σ_{xx} <daN/mq>	8	SND	-2537	-73591	7	SND	-3361	51834	σ_{zz} <daN/mq>	9	SLU	-2497	-60968	6	SND	-2593	43925
τ_{xz} <daN/mq>	8	SND	-2561	-58428	6	SND	246	60564	M_{xx} <daNm/m>	8	SND	252	-5099	5	SND	252	5113
M_{zz} <daNm/m>	3	SND	-2609	-7979	1	SND	-2453	7532	M_{xz} <daNm/m>	6	SND	-2453	-3899	7	SND	252	3518
τ_{zy} <daN/mq>	5	SND	252	-22282	3	SND	-2471	32177	τ_{xy} <daN/mq>	7	SND	-2541	-47130	6	SND	-2541	68010

Bid. 403

	CC	TCC	Nodo	Min.	CC	TCC	Nodo	Max		CC	TCC	Nodo	Min.	CC	TCC	Nodo	Max
σ_{xx} <daN/mq>	4	SND	-1186	-31337	4	SND	-1366	22247	σ_{zz} <daN/mq>	6	SND	-1193	-38620	7	SND	268	42753
τ_{xz} <daN/mq>	8	SND	-1237	-24525	5	SND	-1185	24464	M_{xx} <daNm/m>	3	SND	-142	-44311	3	SND	-105	57459
M_{zz} <daNm/m>	9	SLU	-373	-28791	3	SND	3	45161	M_{xz} <daNm/m>	10	SLU	-1121	-21299	10	SLU	-383	17067
τ_{zy} <daN/mq>	10	SLU	-783	-79218	9	SLU	268	124491	τ_{xy} <daN/mq>	10	SLU	265	-113390	9	SLU	275	78664

Bid. 404

	CC	TCC	Nodo	Min.	CC	TCC	Nodo	Max		CC	TCC	Nodo	Min.	CC	TCC	Nodo	Max
σ_{xx} <daN/mq>	2	SND	-2436	-115138	6	SND	14	64676	σ_{zz} <daN/mq>	2	SND	-2402	-25249	6	SND	-2401	24620
τ_{xz} <daN/mq>	6	SND	-1789	-43428	2	SND	-2401	40875	M_{xx} <daNm/m>	9	SLU	217	-18188	9	SLU	-1777	11536
M_{zz} <daNm/m>	9	SLU	-1878	-6240	9	SLU	-2131	2571	M_{xz} <daNm/m>	9	SLU	-2139	-3623	9	SLU	-1826	5791
τ_{zy} <daN/mq>	9	SLU	217	-29084	9	SLU	-1787	28659	τ_{xy} <daN/mq>	9	SLU	-2401	-57039	10	SLU	-1758	58345