CONCEDENTE

CONCESSIONI AUTOSTRADALI LOMBARDE

CONCESSIONARIA

SOCIETÀ DI PROGETTO BREBEMI SPA

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COLLEGAMENTO AUTOSTRADALE DI CONNESSIONE TRA LE CITTA' DI BRESCIA E MILANO

PROCEDURA AUTORIZZATIVA D. LGS 163/2006
DELIBERA C.I.P.E. DI APPROVAZIONE DEL PROGETTO DEFINITIVO N° 42/2009

INTERCONNESSIONE A35-A4
PROGETTO DEFINITIVO

INTERCONNESSIONE A35-A4

INTERCONNESSIONE A35-A4 DA PROG. 5+060

SOAX2 - SOTTOPASSO PODERALE

RELAZIONE TECNICA E DI CALCOLO

PROGETTAZIONE:

CONSORZIO BBM BRESCIA | BERGAMO | MILANO

CONSORZIO B.B.M.

PER IL CONSORZIO
IL PROGETTISTA RESPONSABILE INTEGRAZIONE PRESTAZIONI SPECIALISTICHE
IMPRESA PIZZAROTTI E C. S.P.A.
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IL DIRETTORE TECNICO
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ELABORAZIONE PROGETTUALE

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IL CONCEDENTE

CONCESSIONI AUTOSTRADALI LOMBARDE

IL CONCESSIONARIO

SOCIETÀ DI PROGETTO BREBEMI SPA

Società di Progetto Brebemi SpA

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1 INTRODUZIONE

La presente relazione riguarda il sottovia scatolare stradale, i muri a U e muri a L sulla rampa di svincolo alla progressiva chilometrica 0+655,63, di dimensioni in retto di 5,00x5,90m. L'opera è un sottovia poderale previsto nell'ambito del Progetto Definitivo dell'interconnessione A35-A4.
Longitudinalmente, la struttura scatolare si sviluppa per una lunghezza di **18.79m**. Le azioni considerate nel calcolo sono quelle tipiche di una struttura interrata con le aggiunte delle azioni di tipo stradale, con applicazione della Normativa sui ponti stradali D. M. Min. II. TT. del 14 gennaio 2008 – Norme tecniche per le costruzioni.
L'opera ricade in zona sismica, pertanto, saranno applicate le azioni di rito previste dalla norma cosi come riportato nei capitoli successivi. Il dimensionamento è il risultato dello studio effettuato su una struttura piana che descrive una striscia larga 1,00m.

2 NORMATIVA E RIFERIMENTI

I calcoli e le disposizioni esecutive sono conformi alle norme attualmente in vigore.

- D. M. Min. II. TT. del 14 gennaio 2008 – Norme tecniche per le costruzioni
- CIRCOLARE 2 febbraio 2009, n.617 "Istruzione per l'applicazione delle «Nuove norme tecniche per le costruzioni» di cui al decreto ministeriale 14 gennaio 2008
- UNI EN 1991-1-5:2004 Parte 1-5: Azioni sulle strutture - Azioni in generale - Azioni termiche
- UNI EN 1991-2:2005 Parte 2: Azioni sulle strutture - Carichi da traffico sui ponti
- UNI EN 1992-1-1:2005 Parte 1-1: Progettazione delle strutture in calcestruzzo - Regole generali e regole per gli edifici
- UNI EN 1992-2:2006 Parte 2: Progettazione delle strutture in calcestruzzo- Ponti di calcestruzzo, Progettazione e dettagli costruttivi
- UNI EN 1997-1:2005 Parte 1: Progettazione geotecnica - Regole generali
- UNI EN 1998-1:2005 Parte 1: Progettazione delle strutture per la resistenza sismica - Regole generali, azioni sismiche e regole per gli edifici
- UNI EN 1998-2:2009 Parte 2: Progettazione delle strutture per la resistenza sismica - Ponti
- UNI EN 1998-5:2005 Parte 5: Progettazione delle strutture per la resistenza sismica - Fondazioni, strutture di contenimento ed aspetti geotecnici
- UNI EN 197-1 giugno 2001 – "Cemento: composizione, specificazioni e criteri di conformità per cementi comuni
- UNI EN 11104 marzo 2004 – "Calcestruzzo: specificazione, prestazione, produzione e conformità", Istruzioni complementari per l'applicazione delle EN 206-1
- UNI EN 206-1 ottobre 2006 – "Calcestruzzo: specificazione, prestazione, produzione e conformità"
- Linee guida sul calcestruzzo strutturale - Presidenza del Consiglio Superiore dei Lavori Pubblici - Servizio Tecnico Centrale

3 CRITERI DI CALCOLO

In ottemperanza al D.M. del 14.01.2008 (Norme tecniche per le costruzioni), i calcoli sono condotti con il metodo semiprobabilistico agli stati limite.

3.1 Criteri e definizione dell'azione sismica

L'effetto dell'azione sismica di progetto sull'opera nel suo complesso, includendo il volume significativo di terreno, la struttura di fondazione, gli elementi strutturali e non, nonché gli impianti, deve rispettare gli stati limite ultimi e di esercizio definiti al § 3.2.1, i cui requisiti di sicurezza sono indicati nel § 7.1 della norma.
Il rispetto degli stati limite si considera conseguito quando:

- nei confronti degli stati limite di esercizio siano rispettate le verifiche relative al solo Stato Limite di Danno;
- nei confronti degli stati limite ultimi siano rispettate le indicazioni progettuali e costruttive riportate nel § 7 e siano soddisfatte le verifiche relative al solo Stato Limite di salvaguardia della Vita.

Per Stato Limite di Danno (SLD) s'intende che l'opera, nel suo complesso, a seguito del terremoto, includendo gli elementi strutturali, quelli non strutturali, le apparecchiature rilevanti alla sua funzione, subisce danni tali da non provocare rischi agli utenti e non compromette significativamente la capacità di resistenza e di rigidezza nei confronti delle azioni verticali e orizzontali. Lo stato limite di esercizio comporta la verifica delle tensioni di lavoro, in conformità al § 4.1.2.2.5 (NT).

Per Stato Limite di salvaguardia della Vita (SLV) si intende che l'opera a seguito del terremoto subisce rotture e crolli dei componenti non strutturali e impiantistici e significativi danni di componenti strutturali, cui si associa una perdita significativa di rigidezza nei confronti delle azioni orizzontali (creazione di cerniere plastiche secondo il criterio della gerarchia delle resistenze), mantenendo ancora un margine di sicurezza (resistenza e rigidezza) nei confronti delle azioni verticali.

Gli stati limite, sia di esercizio sia ultimi, sono individuati riferendosi alle prestazioni che l'opera a realizzarsi deve assolvere durante un evento sismico; per la funzione che l'opera deve espletare nella sua vita utile, è significativo calcolare lo Stato Limite di Danno (SLD) per l'esercizio e lo Stato Limite di Salvaguardia della Vita (SLV) per lo stato limite ultimo.

In merito alle opere scatolari di cui trattasi, nel rispetto del punto § 7.9.2., assimilando l'opera scatolare alla categoria delle spalle da ponte, rientrando tra le opere che si muovono con il terreno (§ 7.9.2.1), si può ritenere che la struttura debba mantenere sotto l'azione sismica un comportamento elastico; queste categorie di opere che si muovono con il terreno non subiscono le amplificazioni dell'accelerazione del suolo.
A riguardo del calcolo allo SLV, dovendo la struttura mantenere durante l'evento sismico un comportamento elastico, vengono eseguite le verifiche alle tensioni di esercizio (§ 4.1.2.2.5), assumendo come limite delle tensioni di esercizio quelle adottate per la combinazione caratteristica (rara) (EC2 § 7.2). Tale combinazione, in accordo al punto § 7.10.6.1. (NTC) e alla Circ. 617 § 7.10.6.1. (nella quale si afferma che il sostanziale mantenimento in campo elastico della struttura nelle verifiche allo SLU fornisce ampie garanzie rispetto alla sicurezza nei confronti dello SLD), consente di ritenere soddisfatte anche le verifiche nei confronti dello SLD.

Per la definizione dell'azione sismica, occorre definire il periodo di riferimento P_{VR} in funzione dello stato limite considerato.

La vita nominale (V_N) dell'opera è stata assunta pari a 50 anni.
La classe d'uso assunta è la IV .

Il periodo di riferimento (V_R) per l'azione sismica, data la vita nominale e la classe d'uso vale:
$V_R = V_N \cdot C_u = 100$anni

Coordinate geografiche	Latitudine [DEG sessadecimale]		N	45.5437
	Longitudine [DEG sessadecimale]		E	10.1266
Suolo e topografia	Cat. suolo di fondazione (A,...E)		C	
	Categoria topografica (T1,...T4)		T1	
	Coeff. di amplificazione topografica	S_T		1.0
Varie	Vita nominale dell'opera (10, 50, 100)	V_N [anni]		50
	Classe d'uso (I, II, III, IV)		IV	
	Coefficiente d'uso	C_U		2.0
	Periodo di riferimento	V_R [anni]		100
Struttura	Descrizione	Ponte integrale		
	Massimo fattore di struttura	q_0		1
	Coefficiente riduttivo per regolarità	K_R		1
	Fattore di struttura	q		1.0
	Coeff. di smorz. viscoso equivalente	ξ		5%
	Fattore di smorzamento viscoso	η		1.00
	Inverso fattore di struttura	1/q		1.00

Descrizione suolo di fondazione	Depositi di terreni a grana grossa mediamente addensati o terreni a grana fina mediamente consistenti con spessori superiori a 30 m, caratterizzati da un graduale miglioramento delle proprietà meccaniche con la profondità e da valori di Vs,30 compresi tra 180 m/s e 360 m/s (ovvero 15 < NSPT,30 < 50 nei terreni a grana grossa e 70 < cu,30 < 250 kPa nei terreni a grana fina).

DATI SPETTRALI		Stati limite d'esercizio		Stati limite ultimi	
		SLO	SLD	SLV	SLC
Probabilità di superamento	P_{Vr}	81%	63%	10%	5%
Periodo di ritorno	T_R [anni]	60	101	949	1950
Accelerazione	a_g [m/s^2]	0.579	0.747	1.808	2.288
	a_g/g	0.059	0.076	0.184	0.233
Fattore di amplificazione	F_0	2.419	2.414	2.454	2.462
Periodo in. velocità costante	T_C^* [s]	0.239	0.252	0.289	0.297
Coefficiente di sottosuolo	C_C	1.68	1.65	1.58	1.57
Coeff. di amplif. stratigrafica	S_S	1.50	1.50	1.43	1.36
Coefficiente di sito	S	1.50	1.50	1.43	1.36
Periodi	T_B [s]	0.134	0.139	0.152	0.155
	T_C [s]	0.402	0.417	0.457	0.466
	T_D [s]	1.836	1.905	2.337	2.533

Il calcolo viene eseguito con il metodo <u>pseudostatico</u> (NT par. 7.11.6). In queste condizioni l'azione sismica è rappresentata da una forza statica equivalente pari al prodotto delle forze di gravità per un opportuno coefficiente sismico.
Nelle verifiche allo Stato Limite Ultimo i valori dei coefficienti sismici orizzontali k_h e verticale k_v possono essere valutati mediante le espressioni:

$$k_h = \beta_m \cdot \frac{a\max}{g} \qquad k_v = \pm\, 0.5^* \, k_h$$

dove
a_{max} = accelerazione orizzontale massima attesa al sito;
g= accelerazione di gravità;
◎'accelerazione massima è valutata con la relazione
$a_{max}(SLV) = S \cdot a_g = 1{,}43 \cdot 0{,}184g = 0{,}263$ g
Essendo lo scatolare una struttura che non ammette spostamenti relativi rispetto al terreno, il coefficiente β_m, assume il valore:
$\beta_m = 1{,}00$
Pertanto, i due coefficienti sismici valgono:

$$(SLV) \qquad k_h = \beta_m \cdot \frac{a\max}{g} = 0{,}263 \qquad k_v = \pm\, 0{,}5^* \, k_h = 0{,}125$$

Le spinte delle terre, considerando lo scatolare una struttura rigida e priva di spostamenti (NT par. 7.11.6.2.1 e EC8-5 par.7.3.2.1), sono calcolate in regime di spinta a riposo, condizione che comporta il calcolo delle spinte in condizione sismica non con la formula di cui sopra (k_h; k_v), ma con l'incremento dinamico di spinta del terreno calcolato secondo la formula di wood:
$\Delta P_d = S \cdot a_g/g \cdot \gamma \cdot h_{tot}^2$

Il punto di applicazione della spinta che interessa lo scatolare è posto $h_{scat}/2$, con "h_{tot}" altezza dal piano campagna alla fondazione dello scatolare e h_{scat} l'altezza dello scatolare.
Essendo "ΔP_d" la risultante globale, ed il diagramma di spinta di tipo rettangolare, è immediato ricavare la quota parte della spinta che agisce sul piedritto dello scatolare.
L'azione sismica è rappresentata da un insieme di forze statiche orizzontali e verticali, date dal prodotto delle forze di gravità per i coefficienti sismici in precedenza definiti, dove la componente verticale è considerata agente verso l'alto o verso il basso, in modo da produrre gli effetti più sfavorevoli.

3.2 Combinazioni di carico

Le combinazioni di carico, considerate ai fini delle verifiche, sono stabilite in modo da garantire la sicurezza in conformità a quanto prescritto al cap. 2 delle NT.

Combinazioni per la verifica allo SLU

Gli stati limite ultimi delle opere interrate si riferiscono allo sviluppo di meccanismi di collasso, determinati dalla mobilitazione della resistenza del terreno, e al raggiungimento della resistenza degli elementi strutturali che compongono l'opera.
Le verifiche agli stati limite ultimi sono eseguiti in riferimento ai seguenti stati limite:
-SLU di tipo geotecnico (GEO) e di equilibrio di corpo rigido (EQU)

- collasso per carico limite dell'insieme fondazione-terreno;

-SLU di tipo strutturale (STR)

- raggiungimento della resistenza negli elementi strutturali.

Trattandosi di opere interrate, le verifiche saranno condotte secondo l'approccio progettuale "Approccio 1", utilizzando i coefficienti parziali riportati nelle Tabelle 6.2.I e 5.1.V per i parametri geotecnici e le azioni.

1. combinazione 1 → (A1+M1+R1) → STR
2. combinazione 2 → (A2+M2+R2) → GEO (carico limite)

Tabella 6.2.II - Coefficienti parziali per i parametri del terreno

PARAMETRO	GRANDEZZA ALLA QUALE APPLICARE IL COEFF. PARZIALE	COEFFICIENTE PARZIALE γ_M	M_1	M_2
Tangente dell'angolo di resistenza al taglio	$\tan \varphi'_k$	$\gamma_{\varphi'}$	1	1,25
Coesione efficace	c'_k	$\gamma_{c'}$	1	1,25
Resistenza non drenata	c'_{uk}	γ_{cu}	1	1,4
Peso dell'unità di volume	γ	γ_γ	1	1

Tabella 6.2.I/5.1.V - Coefficienti parziali per le azioni o per l'effetto delle azioni

CARICHI	EFFETTO	SIMBOLO γ_F	EQU	(A1) STR	(A2) GEO
Permanente	favorevole	γ_{G1}	0,9	1,0	1,0
	sfavorevole		1,1	1,35	1,0
Permanente	favorevole	γ_{G2}	0,0(0,9)	0,0	0,0

non strutturali	sfavorevole		1,5 (1,1)	1,35	1,0
Variabili da traffico	favorevole	γ_Q	0,0	0,0	0,0
	sfavorevole		1,35	1,35	1,15
Variabili	favorevole	γ_{Qi}	0,0	0,0	0,0
	sfavorevole		1,5	1,5	1,30

Tabella 6.5.I - Coefficienti parziali γ_R per la resistenza del sistema

VERIFICA	COEFF. PARZIALE (R1)	COEFF. PARZIALE (R2)
Capacità portante della fondazione	$\gamma_R=1$	$\gamma_R=1,8$
Scorrimento	$\gamma_R=1$	$\gamma_R=1,1$

Ai fini delle verifiche degli <u>stati limite ultimi</u> si definiscono le seguenti combinazioni:

STR) $\Rightarrow$ $\gamma_{G1}\cdot G_1+\gamma_{G2}\cdot G_2+\gamma_{Q1}\cdot Q_{k1}+\sum_i\psi_{0i}\cdot Q_{ki}$ $\Rightarrow (\Phi_d'=\Phi_k')$

GEO) $\Rightarrow$ $\gamma_{G1}\cdot G_1+\gamma_{G2}\cdot G_2+\gamma_{Q1}\cdot Q_{k1}+\sum_i\psi_{0i}\cdot Q_{ki}$ $\Rightarrow$(spinte $\Phi_d'=\tan^{-1}(\tan\Phi_k'/\gamma_\Phi)$)

<u>Combinazioni per la verifica allo SLE</u>

Ai fini delle verifiche degli <u>stati limite di esercizio</u> (fessurazione/ stato tensionale) si definiscono le seguenti combinazioni:

Frequente) $\Rightarrow$ $G_1+G_2+\psi_{11}\cdot Q_{k1}+\sum_i\psi_{2i}\cdot Q_{ki}$ $\Rightarrow (\Phi_d'=\Phi_k')$

Quasi permanente) $\Rightarrow$ $G_1+G_2+\psi_{21}\cdot Q_{k1}+\sum_i\psi_{2i}\cdot Q_{ki}$ $\Rightarrow (\Phi_d'=\Phi_k')$

Rara) $\Rightarrow$ $G_1+G_2+Q_{k1}+\sum_i\psi_{0i}\cdot Q_{ki}$ $\Rightarrow (\Phi_d'=\Phi_k')$

<u>Combinazioni per la condizione sismica</u>

Per la <u>condizione sismica,</u> le combinazioni per gli stati limite ultimi da prendere in considerazione sono le seguenti (approccio 1):

STR) $\Rightarrow$ $E+G_1+G_2+\sum_i\psi_{2i}\cdot Q_{ki}$ $\Rightarrow (\Phi_d'=\Phi_k')$

GEO) $\Rightarrow$ $E+G_1+G_2+\sum_i\psi_{2i}\cdot Q_{ki}$ $\Rightarrow$ (spinte $\Phi_d'=\tan^{-1}(\tan\Phi_k'/\gamma_\Phi)$)

Le verifiche agli stati limite ultimi § 7.11.1(NTC) devono essere effettuate ponendo pari all'unità i coefficienti parziali sulle azioni e impiegando i parametri geotecnici e le resistenze di progetto, con i valori dei coefficienti parziali indicati nel Cap. 6.

Gli effetti dell'azione sismica saranno valutati tenendo conto delle masse associate ai seguenti carichi gravitazionali:

$$G_1+G_2+\sum_i \psi_{2i} \cdot Q_{ki}$$

I valori del coefficiente ψ_{2i} sono quelli riportati nella tabella 5.1.VI e § 2.5.I della norma; la stessa propone nel caso di ponti, e più in generale per opere stradali, di assumere per i carichi dovuti al transito dei mezzi ψ_{2i}= 0÷0.2 (condizione cautelativa).
Data la natura dell'opera in progetto, cosi come previsto dalla norma, si può assumere $_i\psi_{2i}$=0.

4 CARATTERISTICHE DEI MATERIALI

Per la realizzazione dell'opera è previsto l'impiego dei sottoelencati materiali.

4.1 Calcestruzzo per magrone

Per il magrone di sottofondazione si prevede l'utilizzo di calcestruzzo di classe Rck 15.

4.2 Calcestruzzo

1) Per la realizzazione della fondazione dello scatolare, si prevede l'utilizzo di calcestruzzo in classe Rck ≥35 N/mm² che presenta le seguenti caratteristiche:

Resistenza a compressione (cilindrica)	→	f_{ck} = 28.00 N/mm²	
Resistenza di calcolo a compressione	→	$f_{cd} = \alpha_{cc} * f_{ck}/\gamma_c = 0.85 * f_{ck}/1.5$= 15.87 N/mm²	
Resistenza di calcolo a compressione elastica	→	$\sigma_c = 0.60 * f_{ck}$	=16.80 N/mm²
Resistenza a trazione media	→	$f_{ctm} = 0.30 * f_{ck}^{2/3}$	= 2.77 N/mm²
Resistenza a trazione	→	$f_{ctk} = 0.7 * f_{ctm}$	= 1.936 N/mm²
Resistenza a trazione di calcolo	→	$f_{ctd} = f_{ctk} / \gamma_c$	= 1.291 N/mm²
Resistenza a compressione (comb. Rara)	→	$\sigma_c = 0.60 * f_{ck}$	=16.80 N/mm²
Resistenza a compressione (comb. Quasi permanente)	→	$\sigma_c = 0.45 * f_{ck}$	=12.60 N/mm²

2) Per la realizzazione dei piedritti e della soletta di copertura, si prevede l'utilizzo di calcestruzzo in classe Rck ≥40 N/mm² che presenta le seguenti caratteristiche:

Resistenza a compressione (cilindrica)	→	f_{ck} = 32.00 N/mm²	
Resistenza di calcolo a compressione	→	$f_{cd} = \alpha_{cc} * f_{ck}/\gamma_c = 0.85 * f_{ck}/1.5$= 18.13 N/mm²	
Resistenza di calcolo a compressione elastica	→	$\sigma_c = 0.60 * f_{ck}$	=19.20 N/mm²
Resistenza a trazione media	→	$f_{ctm} = 0.30 * f_{ck}^{2/3}$	= 3.02 N/mm²
Resistenza a trazione	→	$f_{ctk} = 0.7 * f_{ctm}$	= 2.12 N/mm²
Resistenza a trazione di calcolo	→	$f_{ctd} = f_{ctk} / \gamma_c$	= 1.41 N/mm²
Resistenza a compressione (comb. Rara)	→	$\sigma_c = 0.60 * f_{ck}$	=19.20 N/mm²
Resistenza a compressione (comb. Quasi permanente)	→	$\sigma_c = 0.45 * f_{ck}$	=14.40 N/mm²

4.3 Acciaio per cemento armato

Per le armature metalliche si adottano tondini in acciaio del tipo B450C controllato in stabilimento che presentano le seguenti caratteristiche:

Proprietà	Requisito
Limite di snervamento f_y	≥450 MPa
Limite di rottura f_t	≥540 MPa

Allungamento totale al carico massimo A_{gt}	≥7.5%
Rapporto f_t/f_y	$1,15 \leq R_m/R_e \leq 1,35$
Rapporto $f_{y\ misurato}/ f_{y\ nom}$	≤ 1,25

Tensione di snervamento caratteristica	→	f_{yk}	≥	450	N/mm²
Tensione caratteristica a rottura	→	f_{tk}	≥	540	N/mm²
Tensione in condizione di esercizio (comb. Rara)	→	σ_c =		0,80* f_{yk}=360,00 N/mm²	
Fattore di sicurezza acciaio	→	γ_s =		1,15	
Resistenza a trazione di calcolo	→	$f_{yd} = f_{yk} / \gamma_s$		= 391,30 N/mm²	

4.4 Durabilità e prescrizioni sui materiali

Per garantire la durabilità delle strutture in calcestruzzo armato ordinario, esposte all'azione dell'ambiente, si devono adottare i provvedimenti atti a limitare gli effetti di degrado indotti dall'attacco chimico, fisico e derivante dalla corrosione delle armature e dai cicli di gelo e disgelo.
Al fine di ottenere la prestazione richiesta in funzione delle condizioni ambientali, nonché per la definizione della relativa classe, si fa riferimento alle indicazioni contenute nelle Linee Guida sul calcestruzzo strutturale edite dal Servizio Tecnico Centrale del Consiglio Superiore dei Lavori Pubblici ovvero alle norme UNI EN 206-1:2006 ed UNI 11104:2004.
Per le opere della presente relazione si adotta quanto segue:

Fondazione CLASSE DI ESPOSIZIONE XC2
Elevazione CLASSE DI ESPOSIZIONE XC4-XD1-XF1

Condizioni ambientali	Classe di esposizione
Ordinarie	X0, XC1, XC2, XC3, XF1
Aggressive	XC4, XD1, XS1, XA1, XA2, XF2, XF3
Molto aggressive	XD2, XD3, XS2, XS3, XA3, XF4

Tabella 4.1.III: Descrizione delle condizioni ambientali

Le fondazioni dei muri si trovano in condzioni ambientali *Ordinarie*, le elevazioni in condozioni *Aggressive*.

Nella tabella 4.1.IV sono indicati i criteri di scelta dello stato limite di fessurazione con riferimento alle condizioni ambientale e al tipo di armatura.

Gruppi di esigenze	Condizioni ambientali	Combinazione di azioni	Armatura			
			Sensibile		Poco sensibile	
			Stato limite	w_d	Stato limite	w_d
a	Ordinarie	frequente	ap. fessure	≤ w_2	ap. fessure	≤ w_3
		quasi permanente	ap. fessure	≤ w_2	ap. fessure	≤ w_2
b	Aggressive	frequente	ap. fessure	≤ w_2	ap. fessure	≤ w_2
		quasi permanente	decompressione	-	ap. fessure	≤ w_1
c	Molto aggressive	frequente	formazione fessure	-	ap. fessure	≤ w_1
		quasi permanente	decompressione	-	ap. fessure	≤ w_1

Tabella 4.1.IV: Criteri di scelta dello stato limite di fessurazione

In grigio chiaro sono indicate gli stati limite di fessurazione da utilizzare per le verifiche delle fondazioni in grigio scuro sono indicati quelli per le elevazioni.

4.5 Copriferro minimo e copriferro nominale

Ai fini di preservare le armature dai fenomeni di aggressione ambientale, dovrà essere previsto un idoneo copriferro; il suo valore, misurato tra la parete interna del cassero e la generatrice dell'armatura metallica più vicina, individua il cosiddetto "copriferro nominale".

Il copriferro nominale c_{nom} è somma di due contributi, il copriferro minimo c_{min} e la tolleranza di posizionamento h. Vale pertanto: $c_{nom} = c_{min} + h$.

La tolleranza di posizionamento delle armature h, per le strutture gettate in opera, può essere assunta pari ad almeno 5 mm. Considerata la Classe di esposizione ambientale dell'opera, si adotta un copriferro minimo pari a 35mm, pertanto c_{nom}=40 mm, valore valido per tutte le parti di struttura.

5 PARAMETRI GEOTECNICI PER IL CALCOLO DELLE STRUTTURE

I parametri necessari a definire le caratteristiche del terreno ai fini del calcolo delle strutture sono ricavati dalla Relazione Geotecnica Generale, rif. 00429-00010-A-00 e dalle tavole del profilo geotecnico longitudinale.

- I parametri geotecnici necessari al calcolo sono::

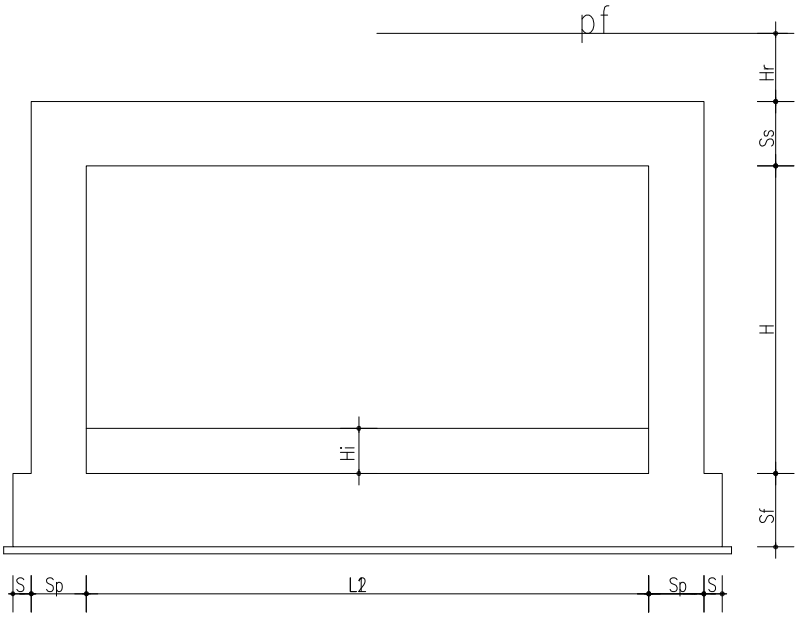
Carratterizzazione materiali da rilevato/reinterri																
Parametri in condizioni drenate					Spinta a riposo			Spinta attiva			Spinta Passiva			Peso di volume		Permeabilità
ϕ'_k	ϕ'_{dM1}	ϕ'_{dM2}	E'_{25}	E_{UR}	K_{0k}	K_{0M1}	K_{0M2}	K_{Ak}	K_{AM1}	K_{AM2}	K_{Pk}	K_{PM1}	K_{PM2}	naturale γ_n	sommerso γ'	k
(°)	(°)	(°)	(Mpa)	(Mpa)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(kN/m^3)	(kN/m^3)	(m/s)
38	38	32	40	120	0.380	0.380	0.470	0.238	0.238	0.307	4.200	4.200	3.250	20	11	$1\times E^{-3} \div E^{-5}$

I coefficienti di spinta sono calcolati secondo la teoria di Caquot - Kerisel ipotizzando angolo d'attrito tra terreno e struttura di sostegno δ = 0 ed ipotizzando che il terreno a monte/valle del sostegno (rispettivamente per il calcolo di K_A e K_P) sia orizzontale (β = 0°). Nel caso in cui tali ipotesi iniziali non s iano rappresentative del problema in oggetto, i valori delle spinte dovranno essere calcolati nuovamente utilizzando la stessa teoria.

LEGENDA PARAMETRI	
ϕ'_k	Angolo di resistenza al taglio caratteristico;
ϕ'_{dM1}	Angolo di resistenza al taglio di progetto secondo coefficienti parziali M1 come da NTC2008;
ϕ'_{dM2}	Angolo di resistenza al taglio di progetto secondo coefficienti parziali M2 come da NTC2008;
E'_{25}	Modulo elastico secante corrispondente alla mobilizzazione del 25% della resistenza del terreno;
E_{UR}	Modulo elastico secante in ricarico;
K_{0k}	Valore caratteristico del coefficiente di spinta a riposo;
K_{0M1}	Valore di progetto del coefficiente di spinta a riposo secondo coefficienti parziali M1 come da NTC2008;
K_{0M2}	Valore di progetto del coefficiente di spinta a riposo secondo coefficienti parziali M2 come da NTC2008;
K_{Ak}	Valore caratteristico del coefficiente di spinta attiva;
K_{AM1}	Valore di progetto del coefficiente di spinta attiva secondo coefficienti parziali M1 come da NTC2008;
K_{AM2}	Valore di progetto del coefficiente di spinta attiva secondo coefficienti parziali M2 come da NTC2008;
K_{Pk}	Valore caratteristico del coefficiente di spinta passiva;
K_{PM1}	Valore di progetto del coefficiente di spinta passiva secondo coefficienti parziali M1 come da NTC2008;
K_{PM2}	Valore di progetto del coefficiente di spinta passiva secondo coefficienti parziali M2 come da NTC2008;
γ_n	Peso di volume naturale;
γ'	Peso di volume sommerso;
k	Permeabilità;

6 GEOMETRIA DELLA STRUTTURA

La geometria è quella riportata nella Fig. 1



Sezione trasversale scatolare

L = 5,00 m	S_s = 0,65 m (compreso spessore della predalles)	S_f = 0,70 m
S_p = 0,60 m	S = 0,20 m	
H = 5,90 m	H_r = 0.40 m	H_i = 0,64 m

Per il getto della soletta di copertura vengono utilizzate, come cassaforme a perdere, delle predalles. Nelle verifiche non si considera il contributo delle predalles stesse.

7 PROGRAMMI DI CALCOLO UTILIZZATI

7.1 Pro_Sap - Scatolari

Il calcolo dello scatolare viene condotto con il programma PRO_SAP (prodotto dalla 2S.I. Software e Servizi per l'Ingegneria S.r.l. P.tta Schiatti 8/b 44100 Ferrara) Ver. 6.0.0.
Licenza d'uso n. dsi3476

Gli elementi utilizzati per la modellazione dello schema statico della struttura sono i seguenti:
- Elemento tipo BEAM (trave)
- Elemento tipo BOUNDARY (molla)
- Elemento tipo STIFFNESS (matrice di rigidezza)

Il codice di calcolo adottato è ALGOR SUPERSAP prodotto dalla ALGOR INTERACTIVE SYSTEMS, Inc. Pittsburgh, PA, USA.
Il programma SUPERSAP applica il metodo degli elementi finiti a strutture di forma qualunque, diversamente caricate e vincolate, nell' ambito del comportamento lineare delle stesse.
Si sottolinea che il solutore ALGOR SUPERSAP e' stato sottoposto, con esito positivo e relativa certificazione, ai test NAFEMS (test di confronto della National Agency for Finite Element Methods and Standards in Inghilterra).
Inoltre, il solutore ALGOR SUPERSAP e' soggetto ad attivita' di controllo ai sensi della QA (quality assurance), condizione essenziale per l' utilizzo dei codici di calcolo nell' ambito della progettazione nucleare ed off-shore.

7.2 SCAT – muri ad U

Per i muri ad U viene utilizzato il programma SCAT 10.0 – Strutture Scatolari della Aztec Informatica di Maurizio Martucci - Corso Umberto, 43 – 87050 Casole Bruzio (CS).
Il programma SCAT è dedicato all'analisi ed al calcolo di strutture scatolari sia completamente sia parzialmente interrate. Le diverse tipologie di scatolari che è possibile analizzare con SCAT sono:
rettangolare, rettangolare con angoli smussati, rettangolare con setto intermedio, circolare, ellittico, con sezione tipo vasca, con sezione tipo galleria (dotata cioè di piedritti, calotta ed arco rovescio).
E' possibile analizzare scatolari in calcestruzzo o materiale generico, definendo quindi le caratteristiche delle sezioni (area, spessore, inerzia, modulo di resistenza) di ogni elemento presente.
La caratterizzazione del terreno in cui la struttura è immersa è suddiviso nei tre strati: ricoprimento, rinfianco e di fondazione. Per ogni strato occorre fornire i valori dei parametri fisici e meccanici più comuni (peso di volume, angolo di attrito, attrito terreno - struttura, coesione, adesione, costante di Winkler, etc.).
Il terreno sia di fondazione che di rinfianco è schematizzato secondo il modello di Winkler modificato (vengono eliminate, durante l'analisi al passo, le molle in trazione). Può essere messa in conto la falda.
SCAT consente di inserire carichi sia sul terreno di ricoprimento sia sulla struttura.
L'operazione di inserimento, spostamento, modifica e cancellazione dei carichi è resa agevola da procedure grafiche o numeriche presenti nel programma.
I carichi sono gestiti tramite condizioni di carico, che l'Utente può definire come accidentali o permanenti.
Le condizioni di carico possono essere combinate con coefficienti di partecipazione definibili dall'Utente.
Illimitato è il numero sia di condizioni che di combinazioni di carico definibili. E' in più presente nel programma una procedura ottimizzata per la generazione automatica delle combinazioni.
Sullo scatolare si possono inserire vincoli sia fissi che elastici. Inoltre è possibile considerare il traverso poggiato sui piedritti o i piedritti incernierati sulla fondazione.

L'analisi può essere eseguita sia in condizioni statiche che sismiche. Il progetto e la verifica delle sezioni può essere eseguito secondo il metodo delle Tensioni Ammissibili o secondo la teoria degli Stati Limite.
Al termine dell'analisi, è possibile visualizzare tutti i risultati in finestre numeriche e grafiche.
Le verifiche degli elementi costituenti la struttura scatolare (fondazione, traverso e piedritti) vengono eseguite, in relazione alle diverse sollecitazioni derivanti dalle specifiche combinazioni, coerentemente con i corrispondenti criteri di progetto adottati.

7.3 MAX – Muri ad L

Per i muri di contenimento viene utilizzato il programma di calcolo MAX 10.0 – Analisi e calcolo muri di sostegno della Aztec Informatica di Maurizio Martucci - Corso Umberto, 43 – 87050 Casole Bruzio (CS).
Il programma MAX è dedicato all'analisi e al calcolo dei muri di sostegno.
I tipi di muri che è possibile analizzare con il programma MAX sono: muri a gravità, a semigravità o muri in calcestruzzo armato. Possono essere inoltre considerati, in funzione del tipo di muro e del materiale che lo costituisce, muri con: contrafforti, mensole di contrappeso e di marciapiede, pali di fondazione e tiranti di ancoraggio. MAX consente, inoltre, l'analisi di muri di cantina.
Il programma consente di stratificare il terreno sia in elevazione sia in fondazione, e di inserire carichi (concentrati e distribuiti) sul profilo e in qualsiasi posizione del muro.
La filosofia di base che permea tutto il programma è quella di avere un software di semplice utilizzo, veloce nelle elaborazioni e nello stesso tempo completo ed efficiente.
La possibilità di visualizzare graficamente in modo immediato qualsiasi variazione apportata ai dati fa del MAX un programma piacevole da utilizzare.
MAX è stato realizzato a stretto contatto con tecnici che operano da molti anni nel campo della geotecnica; grazie a questa fruttuosa interazione sono stati sviluppati alcuni aspetti del programma che consentono di renderlo quanto più vicino possibile alle esigenze dei tecnici che operano nel settore.
Per quanto riguarda le scelte progettuali, MAX mette a disposizione diverse opzioni di analisi che verranno sicuramente apprezzate dal progettista poiché, per quest'ultimo, è sempre possibile effettuare una scelta della soluzione che ritiene più idonea.
Infine, la possibilità di controllare tutti i risultati a video prima di effettuare le stampe, il potente editino delle armature del muro, dei pali di fondazione e dei tiranti, la chiarezza stessa degli elaborati, una completa relazione di calcolo ed il computo metrico economico dell'opera fanno di MAX il programma più idoneo, potente e versatile per il calcolo dei muri di sostegno.
Le verifiche degli elementi costituenti il muro di contenimento (fondazione e paramento) vengono eseguite, in relazione alle diverse sollecitazioni derivanti dalle specifiche combinazioni, coerentemente con i corrispondenti criteri di progetto adottati.

7.4 Modellazione adottata per lo scatolare

La struttura viene schematizzata attraverso un modello analitico agli elementi finiti. Si è assunto lo schema statico di telaio chiuso. La mesh è composta da 16 beam elements e da 16 nodi (figure 2a e 2b); l'output di calcolo viene raccolto nell'allegato.
L'analisi strutturale e' condotta con il metodo degli spostamenti per la valutazione dello stato tenso-deformativo indotto da carichi statici.
Il suolo viene modellato facendo ricorso all'usuale artificio delle molle elastiche alla Winkler.
La caratteristica elastica della generica molla viene calcolata nel seguente modo:
- Ws = Ks/(bt x bl) = caratteristica elastica della generica molla

dove:
- Ks = costante di sottofondo [F/L³]
- bt = interasse trasversale di competenza della generica molla

- bl = interasse longitudinale di competenza della generica molla (= 1,00 m)

La costante di sottofondo del terreno di fondazione, come determinata dai dati riportati nella Relazione Geotecnica al rif. 1342-LE-292/GR, è pari a:

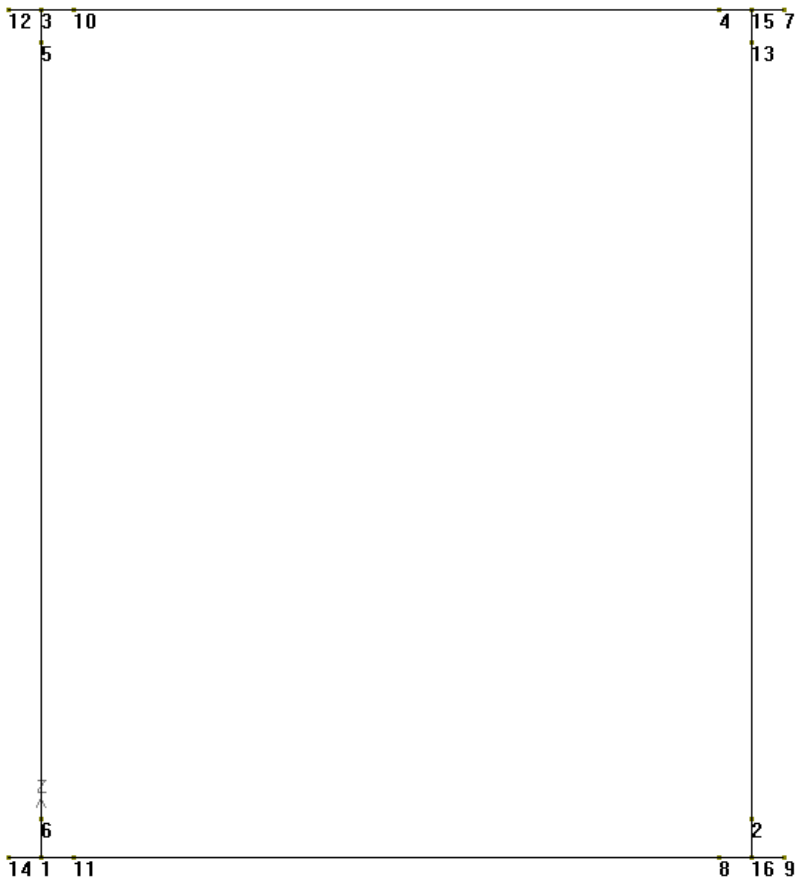
$$Ks = 3.400\ kN/m^3$$

I dati di input sono rappresentati da l'interpolazione dei dati alla progressiva di progetto, considerando la larghezza della fondazione B=6,20 m, pressione massima totale scaricata dall'opera alla quota di imposta pari a 200 kPa, ad una quota di imposta della fondazione a -6,55 m dal p.c..

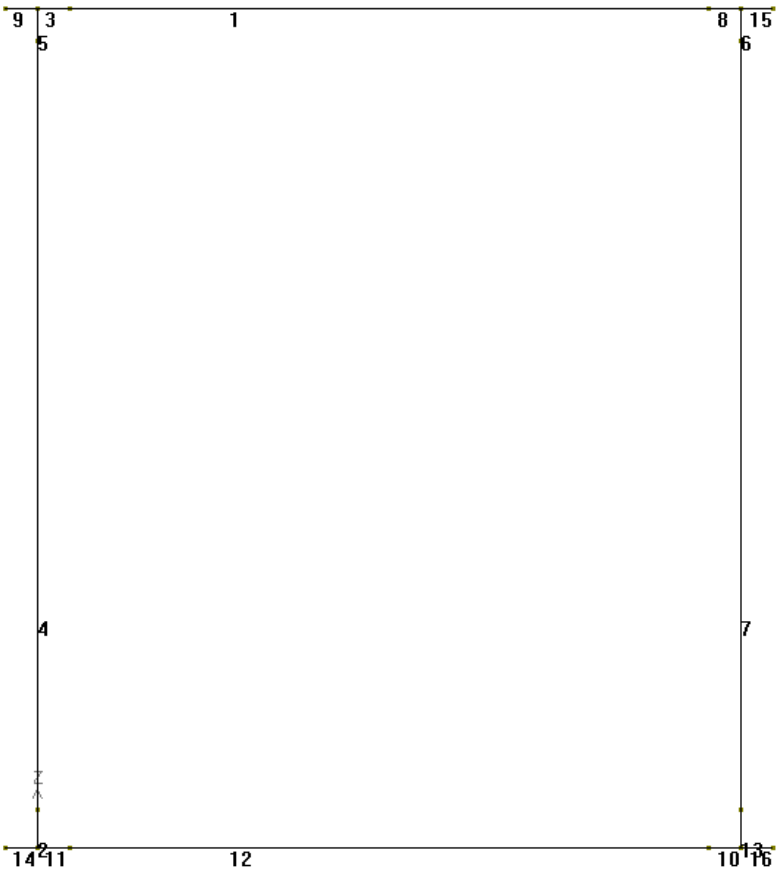
Le aste 10-11-12-14-16 rappresentano il solettone di fondo, le aste 1-3-8-9-15 la soletta superiore, le aste 2-4-5-6-7-13 i piedritti.
Per le caratteristiche geometriche delle varie aste si è quindi assunto:
-una sezione rettangolare b x h = 100 x S_s cm per la soletta superiore (compreso lo spessore della predalles)
-una sezione rettangolare b x h = 100 x S_f cm per la soletta di fondazione
-una sezione rettangolare b x h = 100 x S_p cm per i piedritti

Per le aste del reticolo si è assunto:
Ec = 32.308 / 33.345N/mm² ; modulo elastico del calcestruzzo (Rck = 35 / 40 N/mm²)

Lo schema statico della struttura e la relativa numerazione dei nodi e delle aste sono riportati nelle figure 2a, 2b.



Numerazione dei nodi



Numerazione delle aste

8 ANALISI DEI CARICHI

Nel seguente paragrafo si descrivono i carichi elementari da assumere per le verifiche di resistenza in esercizio ed in presenza dell'evento sismico.
Vengono prese in considerazione n. 22 Condizionii Elementari di carico (CDC1÷ CDC 22), di seguito determinate.

Tali Combinazioni Elementari saranno opportunamente combinate secondo quanto previsto dalla normativa vigente.

Per i materiali si assumono i seguenti pesi specifici:

- calcestruzzo armato:	25 kN/m³
- rilevato	20 kN/m³
- sovrastruttura stradale	20 kN/m³

8.1 Peso proprio e carichi permanenti portati

Soletta superiore

- peso proprio	0,65 * 25 (compresa predalles)	16,25 kN/m²
- peso sovrastruttura stradale	0.4 * 20	8,00 kN/m²
		---
	totale	**24,25** kN/m²

Soletta inferiore

- peso proprio	0,70 * 25	17,50 kN/m²
- peso sovrastruttura stradale	0,64 * 20	12,80 kN/m²
		---
	totale	**30,30** kN/m²

Piedritti

- peso proprio	0,60 *25	**15,00** kN/m²

Tali carichi vengono considerati nelle Condizioni Elementari CDC 1-2: in cui nella CDC1 sono presenti i pesi propri della struttura mentre nella CDC2 i pesi permanenti portati.

8.2 Spinta del terreno

Il reinterro a ridosso dello scatolare verrà realizzato tramite materiale arido di buone caratteristiche meccaniche.
Secondo quanto riportato al cap. 5, si assumono, per la tratta di interesse, i seguenti parametri :
γ_t = 20 kN/m³
k_0 = 0,380
ka = 0,238

Vengono presi in considerazione i due coefficienti di spinta: il primo massimizza nelle varie combinazioni di carico il momento in mezzeria, mentre il secondo all'incastro.

Si applicano, di conseguenza, i valori delle spinte secondo la profondità con

$$p_h = \lambda_a \gamma_t z$$

e con il consueto diagramma trapezoidale delle pressioni orizzontali.

8.3 In assenza di falda esterna allo scatolare

Le pressioni del terreno relative alla spinta a riposo, in corrispondenza dei nodi caratteristici dei piedritti, risultano essere le seguenti:

P_2 = [20 * 1,89 +20 * (0,65-0,05) / 2] *0,380 = **16,64** kN/m²

$p_{12} = P_2$ + [20 * (0,65-0,05) / 2] * 0,380 = **18,92** kN/m²

$p_{11} = P_{12}$ + [20 * (5,90+0,05)] * 0,380 = **64,52** kN/m²

$p_1 = P_{11}$ + [20 * 0,70 / 2] * 0,380 = **66,80** kN/m²

Tali spinte vengono considerate nella Condizione Elementare (CDC 3) su entrambi i piedritti.

Le pressioni del terreno relative alla spinta attiva, in corrispondenza dei nodi caratteristici dei piedritti, risultano essere le seguenti:

P_2 = [20 * 1,89 +20 * (0,65-0,05) / 2] * 0,238 = **10,42** kN/m²

$p_{12} = P_2$ + [20 * (0,65-0,05) / 2] * 0,238 = **11,85** kN/m²

$p_{11} = P_{12}$ + [20 * (5,90+0,05)] * 0,238 = **40,41** kN/m²

$p_1 = P_{11}$ + [20 * 0,70 / 2] * 0,238 = **41,84** kN/m²

Tali spinte vengono considerate nelle seguenti Condizioni Elementari:
a) agenti sul piedritto sinistro (spinta a riposo) e sul piedritto destro (spinta attiva) (CDC 4)
b) agenti su entrambi i piedritti (spinta attiva) (CDC 5)
La condizione di carico CDC4, serve a mettere in conto possibili situazioni (anche temporanee) di disomoggeneità nei costipamenti o altre condizioni che possano generare situazioni di spinte asimmetriche sull'opera.
Naturalmente queste spinte saranno opportunamente combinate, utilizzando i valori dei coefficienti parziali delle azioni da assumere nell'analisi per la determinazione degli effetti delle azioni nelle verifiche agli stati limite ultimi.

8.4 Spinta falda interna allo scatolare

Assente.
(Condizione Elementare CDC 6)

8.5 Carichi mobili verticali sulla soletta superiore

Come azioni variabili da traffico gravante sulla soletta superiore si assume lo schema di carico 1. Lo schema 1 prevede:

- ✓ il carico $Q_{1.k}$ costituito da un mezzo convenzionale da 600kN a due assi da 300 kN ognuno (carico tandem) posti ad un interasse di 1,20m lungo il senso di marcia e caratterizzati da una larghezza di 2,40m (comprese le dimensioni delle impronte)

- ✓ il carico ripartito $q_{1,k}$ da 9kN/m²

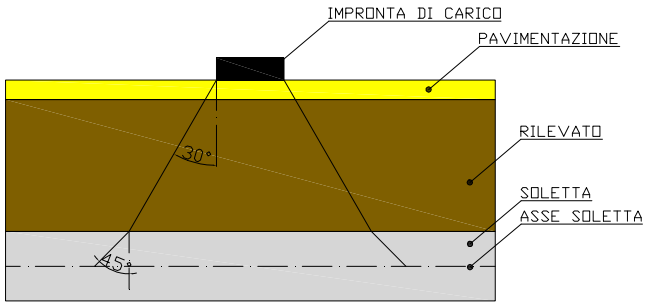
Tale carico viene posizionato ortogonalmente all'asse del sottopasso e considerato ripartito sia in direzione longitudinale che trasversale.
Le larghezze su cui si considera agente il carico sono:

in direzione longitudinale alla strada:
Detta L_{dl} la *larghezza di diffusione del carico longitudinale* dal piano stradale alla quota del piano medio della soletta superiore, assumendo che detta diffusione avvenga con angolo di diffusione di 30° attraverso il rilevato stradale e di 45° sino al piano medio della soletta superiore

$$L_{dl} = 1{,}60+2 * (0.4*tg30° + 0{,}65/2) = 2.71 \text{ m}$$

in direzione trasversale alla strada:

Detta L_{dt} la *larghezza di diffusione del carico trasversale* dal piano stradale alla quota del piano medio della soletta superiore, assumendo che detta diffusione avvenga con angolo di diffusione di 30° attraverso il rilevato stradale e di 45° sino al piano medio della soletta superiore

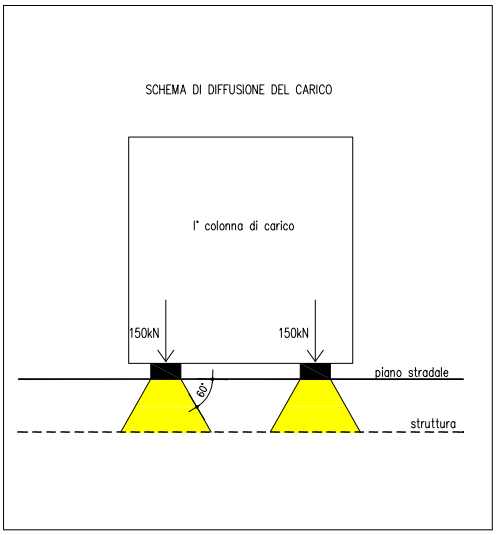


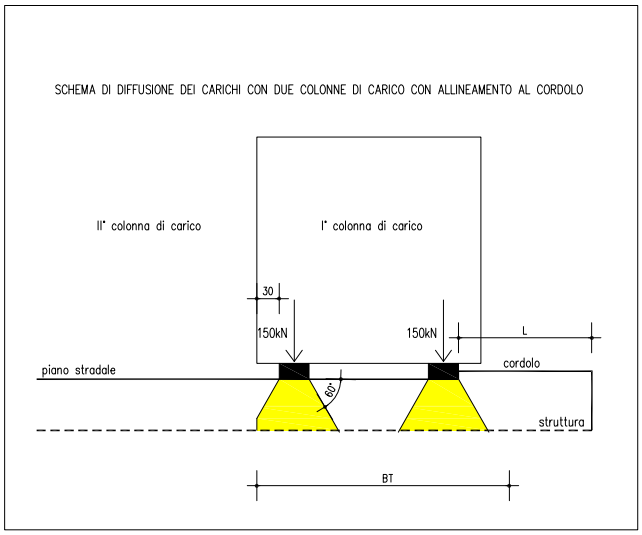
Risulta:

$$L_{dt} = 2{,}40+ 2 * (0.4*tg30° + 0{,}65/2)= 3.52 \text{ m}$$

Il valore di L_{dt} viene poi limitato in base alle seguenti circostanze:

- ✓ presenza della della seconda colonna di carico: il carico della 1° colonna, in corrispondenza dell'adiacenza alla 2° colonna, può essere diffuso al massimo fino a 0,30m all'esterno dell'impronta del carico;
- ✓ posizionando il carico in adiacenza al cordolo (tenendo presente la larghezza del cordolo di 1,40m) , ne consegue che la massima diffusione lato cordolo è pari a 0,84m;





pertanto la larghezza di diffusione trasversale non può risultare superiore al valore di:
$L_{dt,max}$ = 3,54 m

La pressione dovuta al Q_{1k} risulta pertanto:

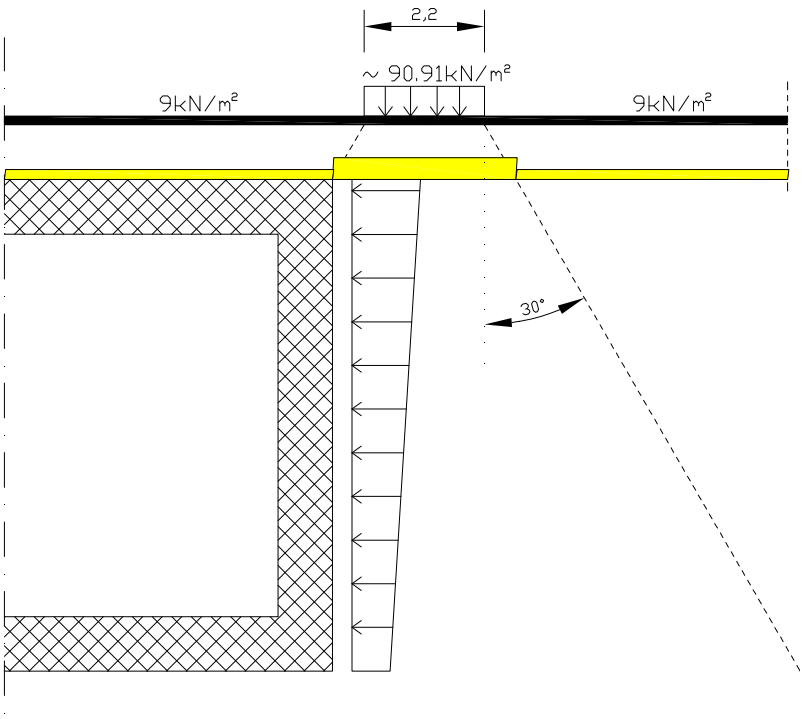
$Q_{1k.dis}$ = 600/(2.71 x 3.52) = **62.90** kN/m²

$q_{1k,dis}$ = **9** kN/m²

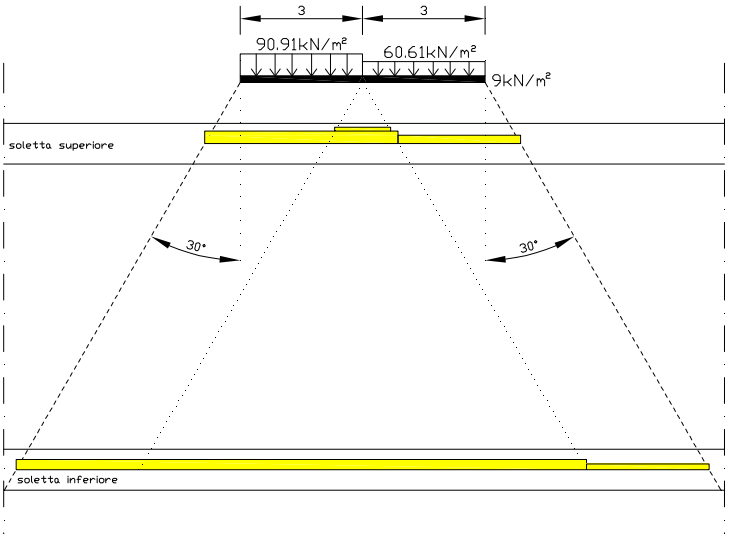
(Condizione Elementare CDC 7-8)
Come carico accidentale gravante sulla soletta superiore, si ipotizza anche il caso in cui l'intera soletta sia gravata da un carico distribuito di intensità pari a 20 kN/m².
(Condizione Elementare CDC 9)

8.6 Spinta del sovraccarico sul rilevato

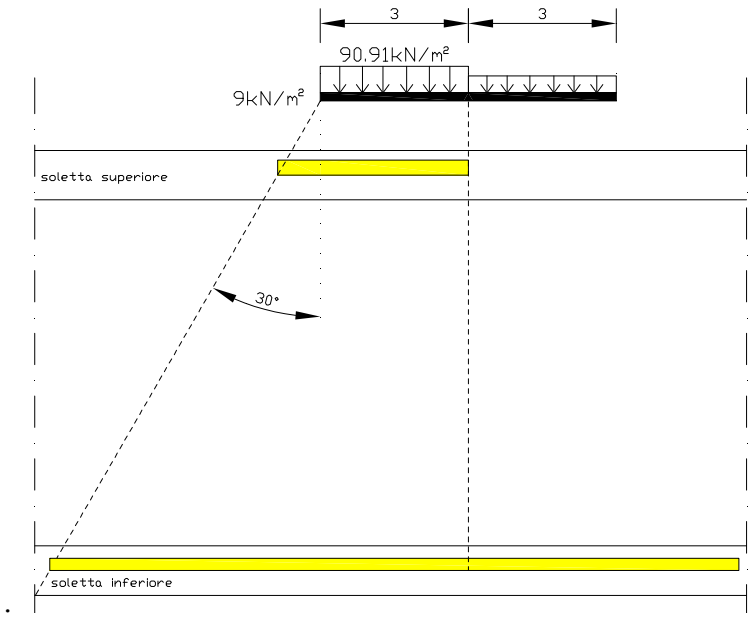
In accordo con quanto riportato nella circolare n 617 al §5.1.3.3.7.1, il sovraccarico da considerare sul terrapieno adiacente la parete dello scatolare, è quello generato dallo schema di carico 1, dove il carico tandem è sostituito da un carico uniformemente distribuito.
Il carico tandem trasformato in carico uniformemente distribuito assume il valore 600/(3*2,2)=90,91kN/m².
Il carico uniformemente distribuito sulla corsia di carico q_{ik}=9 kN/m², viene sommato al carico tandem uniformemente distribuito.
Mettendo in conto il ricoprimento della struttura con il rilevato stradale, il quale contribuisce a diffondere il carico fino al piano di estradosso soletta, il carico distribuito da utilizzare per il calcolo delle spinte agenti sulle pareti dello scatolare risulta 600/((3+0.4*tg30°)*(2,2+2*0.4*tg30°)) = 69,76 kN/m²
Schema di carico utilizzato a ridosso del rilevato (direzione lungo asse corsia)



Utilizzando due colonne di carico, e la ripartizione trasversale del carico di superficie distribuito, si ottiene quanto riportato nell'immagine seguente:



Per il calcolo delle azioni agenti sulle pareti dello scatolare, si considera il carico distribuito dovuto alla colonna di carico 1, limitando la diffusione del carico sul lato della seconda colonna di carico come schema seguente:



Tale distribuzione di carico fornisce alle pareti una spinta variabile lungo l'altezza, con intensità nei nodi superiore e inferiore pari a (asse solette):

$q'_{acc,sup}$= 600/[(3+(0.4+0,65/2)*tg30°)*(2,2+2*(0.4+0,65/2)*tg30°)] + 9
= 66.79 * 0,380 = 25.37 kN/m² [coeff. di spinta a riposo]
$q'_{acc,inf}$= 600/[(3+(1,89+0,65+5,90+0,7/2)*tg30°)*(2,2+2*(1,89+0,65+5,90+0,7/2)*tg30°)] + 9
= 15,02 * 0,380 = 5,71 kN/m² [coeff. di spinta a riposo]

Tali spinte vengono considerate nelle seguenti Condizioni Elementari:
a) agenti sul piedritto sinistro (CDC 10)
b) agenti sul piedritto destro (CDC 11)
c) agenti su ambo i piedritti (CDC 12)

8.7 Frenatura

Il carico frenante di normativa (q_3) è funzione del carico verticale totale agente sulla corsia convenzionale n.1, il quale viene ripartito sulla larghezza collaborante (L) e sulla larghezza dello scatolare (CDC 13-14):

Carico frenante q_3= 0,60*(2*300+0,10*q_{1k}*wl* L) = 381,60 kN

L'azione di cui sopra, viene distribuita sulla soletta superiore dello scatolare; il valore della frenatura equivalente da applicare alla soletta, si ottiene distribuendo il valore del carico frenante, alla lunghezza della soletta e alla larghezza di diffusione del carico (L_{dt}).

8.8 Sovraccarichi accidentali sulla soletta di fondazione

Sulla soletta di fondazione si applica il carico $Q_{1.k}$, ripartito su una larghezza pari all'ingombro della colonna di carico convenzionale (3m), e una lunghezza ottenuta dalla ripartizione del carico fino al piano medio della soletta attraverso il ricoprimenmto, assumendo che detta diffusione avvenga con angolo di diffusione di 30° attraverso il rilevato stradale e di 45° sino al piano medio della soletta:
q'_{acc}= 600/3,00/[1,6+2*(0,64*tg30°+0,70/2)] = 65,81 kN/m²
(Condizioni Elementari CDC 15÷17)

8.9 Azione sismica

(Condizione Elementare CDC 18-19 – in orizzontale e in verticale)

Stato limite di salvaguardia della vita (SLV)

La risultante delle forze inerziali orizzontali indotte dal sisma viene valutata con la seguente espressione:

$F_h = P^* k_h$

$k_h = \beta_m \cdot \frac{a\,\max}{g}$

(SLV) $k_h = \beta_m \cdot \frac{a\,\max}{g} = 0{,}263$ $k_v = \pm\, 0{,}5^* k_h = 0{,}125$

P = peso proprio;

k = coefficienti sismici;

Nel caso di sisma orizzontale si considera la spinta derivante dall'oscillazione del cuneo di terreno spingente con l'applicazione del diagramma triangolare di pressioni, tipico dei muri di sostegno, avente la risultante a 1/3 dell'altezza. Per tener conto dell'incremento di spinta del terreno dovuta al sisma si fa riferimento all'EC8, in cui l'incremento di spinta sismica ΔP per la condizione a riposo viene valutato:

$\Delta P_d = S \cdot a_g / g \cdot \gamma \cdot h_{tot}^2$

La risultante di tale incremento di spinta viene applicata ad h/2 del piedritto.

1 - Ai fini delle azioni verticali sulla soletta superiore, non considerando i carichi permanenti si ha:

Permanente	8.00	kN/m²
Soletta	16,25	kN/m²
Inerzia soletta+permanente (P^*k_v)	12.13	kN/m²

2 - Ai fini delle azioni orizzontali, sui piedritti si considera il contributo della sovraspinta sismica dovuto al sisma oscillatorio e le spinte inerziali agenti sui piedritti, mentre sulla soletta superiore si considera l'inerzia della stessa nonchè i permanenti portati.

Spinta inerziale sulla soletta superiore:

$P^* k_h = 0{,}65 * 25 * 0{,}249 + 0.4 * 20 * 0{,}249 = 6$ kN/m

Spinta inerziale sui piedritti:

$P^* k_h = 0{,}60 * 25 * 0{,}249 = 3{,}74$ kN/m

Sovraspinta sismica:

$S \cdot a_g / g \cdot \gamma \cdot h_{tot} = 1{,}19 * 0{,}209 * 20 * (0{,}65 + 5{,}95 + 0{,}60 + 1{,}89) = 45{,}22$ kN/m

Per quanto riguarda le azioni sismiche, si implementa un'apposita condizione di carico; tale condizione di carico che mette in conto i pesi permanenti, l'inerzia della soletta superiore ed i gravanti su di essa, l'inerzia dei piedritti ed infine la sovraspinta sismica.

8.10 Azioni termiche

Sono stati considerati gli effetti dovuti alle variazioni termiche. In particolare, è stata considerata una variazione termica uniforme di ±10°C sulla soletta superiore (CDC 20) ed un salto termico di 5°C, analizzando i due casi di intradosso più caldo dell'estradosso e viceversa, con andamento lineare nello spessore della soletta superiore (CDC 21).

Per il coefficiente di dilatazione termica si assume:
$\alpha = 10 * 10^{-6} = 0{,}00001\ °C^{-1}$

8.11 Ritiro

Si considera soggetta a fenomeni di ritiro la sola soletta superiore.
La deformazione totale da ritiro si può esprimere come:
$\varepsilon_{cs} = \varepsilon_{cd} + \varepsilon_{ca}$
dove:
ε_{cs} è la deformazione totale per ritiro
ε_{cd} è la deformazione per ritiro da essiccamento
ε_{ca} è la deformazione per ritiro autogeno.
Il valore medio a tempo infinito della deformazione per ritiro da essiccamento:
$\varepsilon_{cd,\infty} = k_h * \varepsilon_{c0}$
può essere valutato mediante i valori delle seguenti Tab. 11.2.Va-b (NTC) in funzione della resistenza caratteristica a compressione, dell'umidità relativa e del parametro h_0:

Tabella 11.2.Va – *Valori di* e_{c0}

f_{ck}	Deformazione da ritiro per essiccamento (in ‰)					
	Umidità relativa (in %)					
	20	**40**	**60**	**80**	**90**	**100**
20	-0,62	-0,58	-0,49	-0,30	-0,17	+0,00
40	-0,48	-0,46	-0,38	-0,24	-0,13	+0,00
60	-0,38	-0,36	-0,30	-0,19	-0,10	+0,00
80	-0,30	-0,28	-0,24	-0,15	-0,07	+0,00

Tabella 11.2.Vb – *Valori di* k_h

h_0 (mm)	k_h
100	1,0
200	0,85
300	0,75
≥500	0,70

I valori intermedi dei parametri indicati in tabella si ottengono per l'interpolazione lineare.

Il valore medio a tempo infinito della deformazione per ritiro autogeno $\varepsilon_{ca,\infty}$ può essere valutato mediante l'espressione:
$\varepsilon_{ca,\infty} = -2{,}5*(f_{ck}-10)*10^{-6}$ (con f_{ck} in N/mm2)
Assumendo come umidità relativa
Ur=70%
Si ha il seguente valore del ritiro:
$\varepsilon_{cs} = -0{,}000296$

Trattandosi di un fenomeno lento si utilizza un modulo di elasticità pari a 1/3 Ec.

9 CALCOLO DELLE SOLLECITAZIONI

Ai fini della determinazione dei valori caratteristici delle azioni dovute al traffico, si dovranno considerare, generalmente, i valori dei coefficienti riportati in Tab. 5.1. IV (NTC).

	Q_{ik}	q_{ik}	frenatura	
	600kN	9kN/m²		
Gruppo 1	1	1	0.00	rara
Gruppo 2a	0.75	0.40	1	frequente
Gruppo 2b	0.75	0.40	0.00	frequente

Per le verifiche agli stati limite ultimi si adottano i valori dei coefficienti parziali di sicurezza delle azioni riportati in Tab. 5.1.V e i coefficienti di combinazione Ψ in Tab. 5.1.VI (NTC).

Per le verifiche agli stati limite d'esercizio si adottano i valori dei coefficienti parziali in Tab. 5.1.VI (NTC).

	Q_{ik}	q_{ik}	frenatura	temperatura
	600kN	9kN/m²		
Frequente	0.75	0.40	0.75	0.60
Quasi permanente	0.00	0.00	0.00	0.50
Rara	1.00-0.75	1.00-0.40	1.00-0.75	0.60

9.1 Condizioni e combinazioni di carico adottate

Le condizioni elementari di carico considerate sono di seguito riassunte:

CDC	Tipo	Sigla Id
1	Ggk	CDC=Ggk (peso proprio della struttura)
2	Gk	CDC=Gk (permanente)
3	Gk	CDC=Gk (spinta terre a riposo)
4	Gk	CDC=Gk (spinta terre riposo-attiva)
5	Gk	CDC=Gk (spinta terre attiva)
6	Qk	CDC=Qk (spinta idraulica interna)
7	Qk	CDC=Qk (Q1k centrato)
8	Qk	CDC=Qk (Q1k filo piedritto)
9	Qk	CDC=Qk (Accidentale 20kN/m²)
10	Qk	CDC=Qk (spinta piedritto sx)
11	Qk	CDC=Qk (spinta piedritto dx)
12	Qk	CDC=Qk (spinta su ambi i piedritti)
13	Qk	CDC=Qk (frenatura dx)
14	Qk	CDC=Qk (frenatura sx)
15	Qk	CDC=Qk (acc sol inf colonna dx)

CDC	Tipo	Sigla Id
16	Qk	CDC=Qk (acc sol inf colonna sx)
17	Qk	CDC=Qk (acc sol inf colonna dx-sx)
18	Qk	CDC=Qk (sisma orizzontale)
19	Qk	CDC=Qk (sisma verticale)
20	Qk	CDC=Qk (At uniforme)
21	Qk	CDC=Qk (At farfalla)
22	Qk	CDC=Qk (ritiro soletta)

I carichi caratteristici sopra elencati (CDC), al fine di ottenere le sollecitazioni di progetto per effettuare le successive verifiche, sono opportunamente combinati fra loro.
Al programma di calcolo devono essere definite le condizioni e le combinazioni elementari di calcolo; per quanto riguarda le condizioni sono quelle sopra esposte, mentre per le combinazioni (CMB) sono quelle riportate nella tabella seguente.

Cmb	Sigla Id	Peso	CDC
1	Permanenti	1.00	CDC=Ggk (peso proprio della struttura)
		1.00	CDC=Gk (permanente)
2	Spinta terre a riposo	1.00	CDC=Gk (spinta terre a riposo)
3	Spinta terre riposo-attiva	1.00	CDC=Gk (spinta terre riposo-attiva)
4	Spinta terre attiva	1.00	CDC=Gk (spinta terre attiva)
5	Spinta idraulica interna	1.00	CDC=Qk (spinta idraulica interna)
6	Q1k centrato	1.00	CDC=Qk (Q1k centrato)
7	Q1k filo piedritto dx	1.00	CDC=Qk (Q1k filo piedritto)
8	Accidentale 20kN/mq	1.00	CDC=Qk (Accidentale 20kN/m^2)
9	Spinta piedritto sx	1.00	CDC=Qk (spinta piedritto sx)
10	Spinta piedritto dx	1.00	CDC=Qk (spinta piedritto dx)
11	Spinta su ambo i piedritti	1.00	CDC=Qk (spinta su ambi i piedritti)
12	frenatura dx	1.00	CDC=Qk (frenatura dx)
13	frenatura sx	1.00	CDC=Qk (frenatura sx)
14	Acc. sol. inf. colonna dx	1.00	CDC=Qk (acc sol inf colonna dx)
15	Acc. sol. inf. colonna sx	1.00	CDC=Qk (acc sol inf colonna sx)
16	Acc. sol. inf. due colonne	1.00	CDC=Qk (acc sol inf colonna dx-sx)
17	Sisma orizzontale	1.00	CDC=Qk (sisma)
18	Sisma verticale	1.00	CDC=Qk (sisma)
19	At uniforme	1.00	CDC=Qk (At uniforme)
20	At farfalla	1.00	CDC=Qk (At farfalla)
21	Ritiro	1.00	CDC=Qk (ritiro soletta)

Al fine di determinare le combinazioni come da norma (§3.2), si definisce la classificazione delle azioni e le combinazioni allo SLU e SLE.

Classificazione delle azioni agenti sulla struttura.

a	PERMANENTI + PORTATI
b	SPINTE
c	ACCIDENTALI VERTICALI SU OPERA
d	ACCIDENTALI VERT. SU TERRAPIENO
e	FRENATURA
f	FORZA CENTRIFUGA
g	VENTO
h	ACCIDENTALI SU SOLETTA INFERIORE
i	ACCIDENTALI DIVERSI
j	AZIONI SISMICHE ORIZZONTALI
k	AZIONI SISMICHE VERTICALI
l	VARIAZIONI TERMICHE/ RITIRO: (num. variabile; viene considerata solo la peggiore col suo segno più gravoso)

Le precedenti combinazioni elementari di calcolo (CMB) sono combinate tra loro in modo da generare le massime sollecitazioni per lo SLU e SLE (combinazione 1 (A1+M1+R1)), come da seguente prospetto.

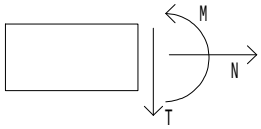
stradali		PERMANENTI +PORTATI + BALLAST CON COEFF.: 1,5:	SPINTE	ACCIDENTALI VERTICALI SU OPERA:	ACCIDENTALI VERT. SU TERRAPIENO:	FRENATURA:	FORZA CENTRIFUGA:	VENTO:	ACCIDENTALI SU SOLETTA INFERIORE:	ACCIDENTALI DIVERSI:	AZIONI SISMICHE ORIZZONTALI	AZIONI SISMICHE VERTICALI	VARIAZIONI TERMICHE/ RITIRO	RITIRO
		a	**b**	**c**	**d**	**e**	**f**	**g**	**h**	**i**	**j**	**k**	**l**	**l**
gruppo 1	**SLU.1**	1 - 1.35	1 - 1.35	0.000	0.000	0.000	0.000	0.900	0.000	0.000	0.000	0.000	1.200	0 - 1.20
	SLU.2	1 - 1.35	1 - 1.35	1.350	1.350	0.000	0.000	1.500	1.125	1.125	0.000	0.000	0.720	0 - 1.20
	SLU.3	1 - 1.35	1 - 1.35	1.013	1.013	0.000	0.000	0.900	1.013	1.500	0.000	0.000	0.720	0 - 1.20
gruppo 2a	**SLU.4**	1 - 1.35	1 - 1.35	1.013	1.013	1.350	0.000	0.900	1.125	1.125	0.000	0.000	0.720	0 - 1.20
gruppo 2b	**SLU.5**	1 - 1.35	1 - 1.35	1.013	1.013	0.000	1.350	0.900	1.125	1.125	0.000	0.000	0.720	0 - 1.20
sisma	**SISMA**	1.000	1.000	0.000	0.000	0.000	0.000	0,000	0,000	0,000	1.000	1.000	0,000	0 - 1.00
SLE	**FR1**	1.000	1.000	0.750	0,000	0,000	0,000	0,000	0,000	0,000	0.000	0.000	0.600	0 - 1.00
	FR2	1.000	1.000	0.750	0.750	0.750	0.750	0,000	0,000	0,000	0.000	0.000	0.600	0 - 1.00
	QP	1.000	1.000	0.000	0,000	0,000	0,000	0,000	0,000	0,000	0.000	0.000	0,500	0 - 1.00
	RAR	1.000	1.000	1.000	1.000	0.750	0.750	0.600	0.750	0,000	0.000	0.000	0.600	0 - 1.00

I valori numerici riportati nelle colonne della tabella precedente indicano il coefficiente moltiplicativo con il quale la Combinazione Elementare è considerata. Tali valori sono il risultato dei prodotti tra coefficienti parziali operanti sulle azioni, cosi come precedentemente esposto e riassunto nella seguente tabella:

stradali		PERMANENTI +PORTATI + BALLAST CON COEFF.: 1,5:	SPINTE	ACCIDENTALI VERTICALI SU OPERA:	ACCIDENTALI VERT. SU TERRAPIENO:	FRENATURA:	FORZA CENTRIFUGA:	VENTO:	ACCIDENTALI SU SOLETTA INFERIORE:	ACCIDENTALI DIVERSI:	AZIONI SISMICHE ORIZZONTALI	AZIONI SISMICHE VERTICALI	VARIAZIONI TERMICHE	RITIRO
		a	**b**	**c**	**d**	**e**	**f**	**g**	**h**	**i**	**j**	**k**	**l**	**l**
gruppo 1	**SLU.1**	1 - 1.35	1 - 1.35	0.000	0.000	0.000	0.000	1.5*0.6	0.000	0.000	0.000	0.000	1.200	0 - 1.20
	SLU.2	1 - 1.35	1 - 1.35	1*1.35	1*1.35	0.000	0.000	1.500	1.5*0.75	1.5*0.75	0.000	0.000	1.2*0.6	0 - 1.20
	SLU.3	1 - 1.35	1 - 1.35	0.75*1.35	0.75*1.35	0.000	0.000	1.5*0.6	1.35*0.75	1.500	0.000	0.000	1.2*0.6	0 - 1.20
gruppo 2a	**SLU.4**	1 - 1.35	1 - 1.35	0.75*1.35	0.75*1.35	1.350	0.000	1.5*0.6	1.5*0.75	1.5*0.75	0.000	0.000	1.2*0.6	0 - 1.20
gruppo 2b	**SLU.5**	1 - 1.35	1 - 1.35	0.75*1.35	0.75*1.35	0.000	1.350	1.5*0.6	1.5*0.75	1.5*0.75	0.000	0.000	1.2*0.6	0 - 1.20
sisma	**SISMA**	1.000	1.000	0.2*0	0.2*0	0.000	0.000	0,000	0,000	0,000	1.000	1.000	0,000	0 - 1.00
SLE	**FR1**	1.000	1.000	0.750	0,000	0,000	0,000	0,000	0,000	0,000	0.000	0.000	0.600	0 - 1.00
	FR2	1.000	1.000	0.750	0.750	0.750	0.750	0,000	0,000	0,000	0.000	0.000	0.600	0 - 1.00
	QP	1.000	1.000	0.000	0,000	0,000	0,000	0,000	0,000	0,000	0.000	0.000	0,500	0 - 1.00
	RAR	1.000	1.000	1.000	1.000	0.750	0.750	0.600	0.750	0,000	0.000	0.000	0.600	0 - 1.00

Per un esame più dettagliato dei risultati del calcolo elettronico si rimanda agli output allegati.

Le convenzioni adottate per le sollecitazioni di segno positivo sono le seguenti.



Per determinare le sollecitazioni più gravose nelle varie sezioni dello scatolare, sono stati elaborati i risultati ottenuti nel calcolo agli elementi finiti secondo gli schemi di combinazione allo SLU o SLE (di cui alla tabella precedente), prendendo tutti i contributi (CMB) che creano le condizioni più sfavorevoli per la verifica in itinere.

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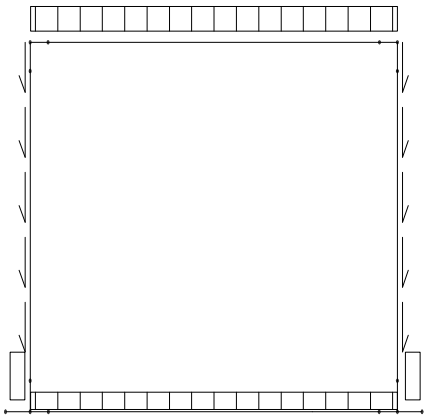
Tipo di inviluppo	**Configurazione che lo determina e relative Combinazioni**	**Sforzo Normale**	**Taglio**	**Momento Flettente**
Mmax	elencazione relativa	N	T	Mmax
Mmin	elencazione relativa	N	T	Mmin
Tmax	elencazione relativa	N	Tmax	M
Tmin	elencazione relativa	N	Tmin	M
Nmax	elencazione relativa	Nmax	T	M
Nmin	elencazione relativa	Nmin	T	M

Le tabelle sono riportate per esteso in allegato.

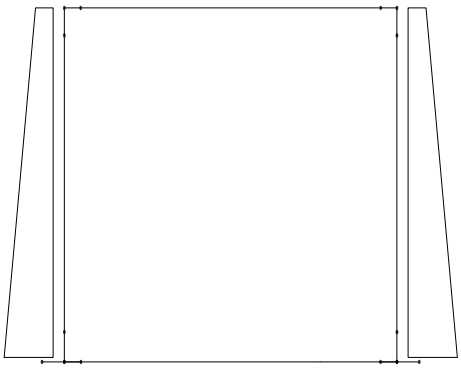
Nelle pagine seguenti sono riportati gli schemi di carico delle Combinazioni Elementari (CMB).

Schema della combinazione di carico cmb1-cmb2



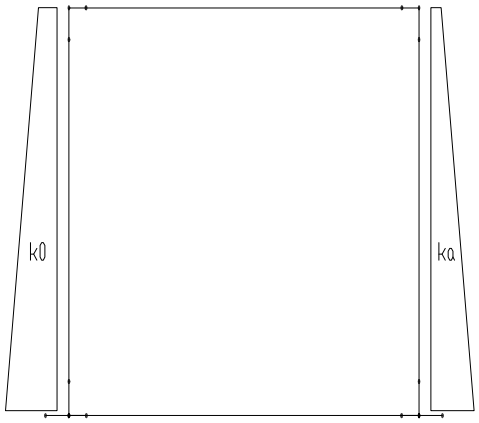
peso proprio della struttura e carichi permanenti portati

Schema della combinazione di carico cmb3



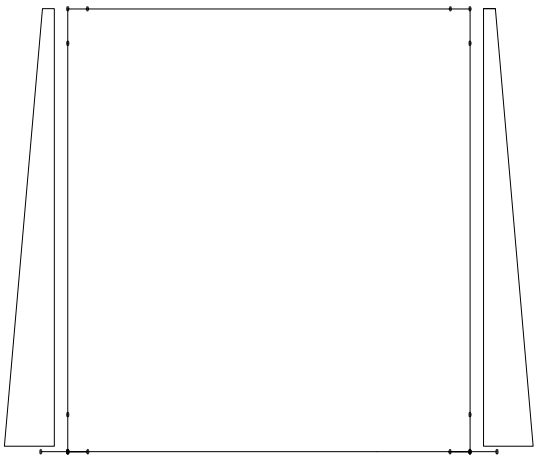
spinta delle terre in assenza di falda: spinta a riposo

Schema della combinazione di carico cmb4



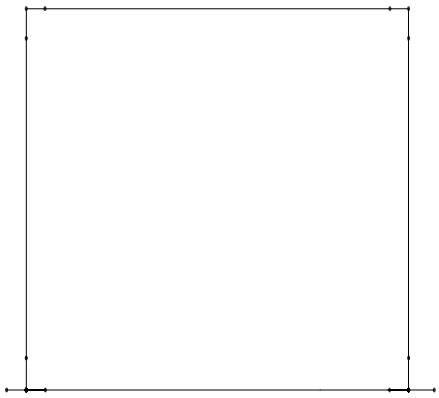
spinta delle terre in assenza di falda: spinta a riposo-spinta attiva

Schema della combinazione di carico cmb5



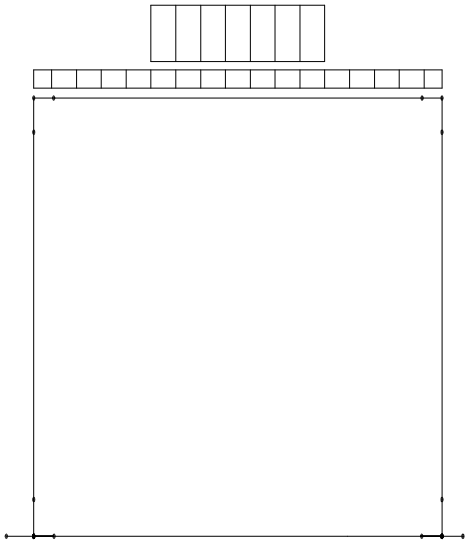
spinta delle terre in assenza di falda: spinta attiva

Schema della combinazione di carico cmb6



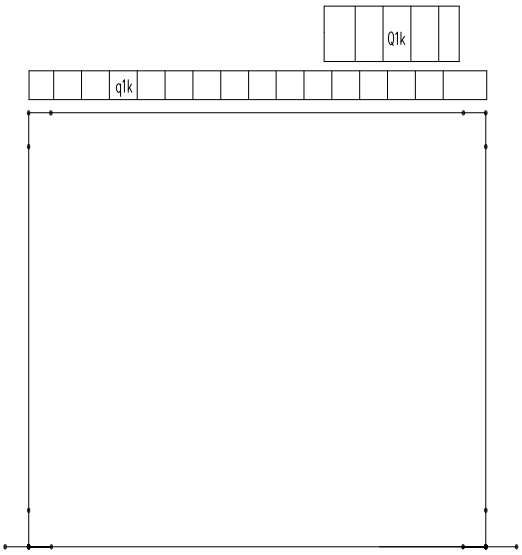
presenza dell'acqua interna

Schema della combinazione di carico cmb7



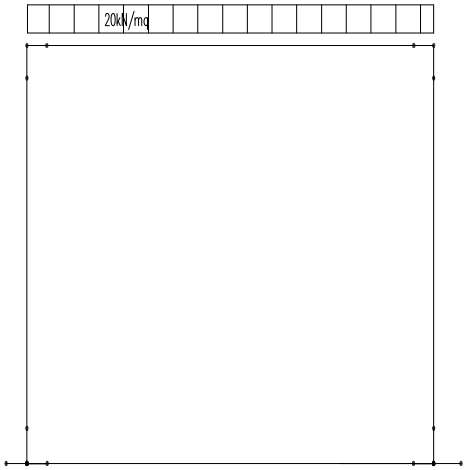
Q1k centrato

Schema della combinazione di carico cmb8



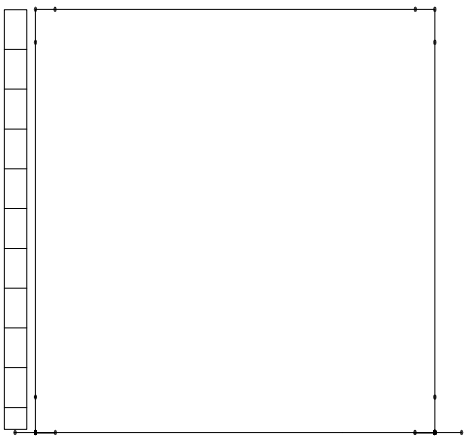
Q1k a filo piedritto

Schema della combinazione di carico cmb9



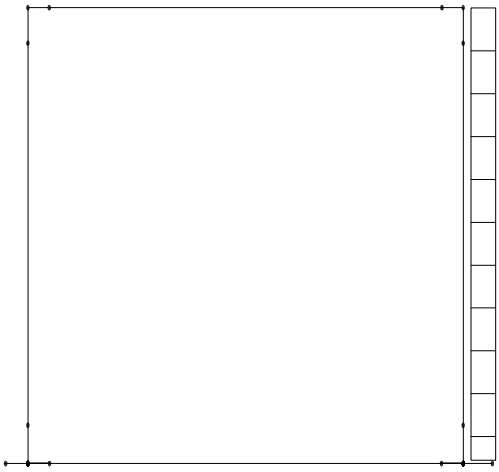
accidentale 20 kN/m²

Schema della combinazione di carico cmb10



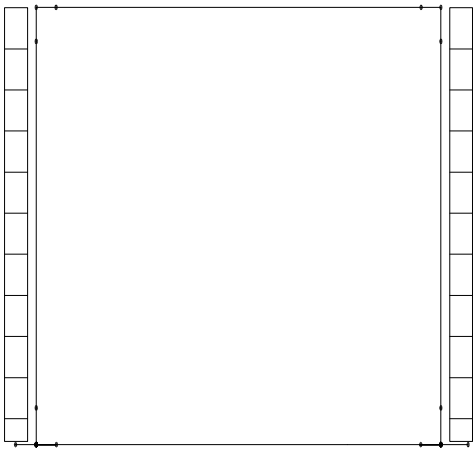
spinta sovraccarico accidentale sul piedritto sinistro

Schema della combinazione di carico cmb11



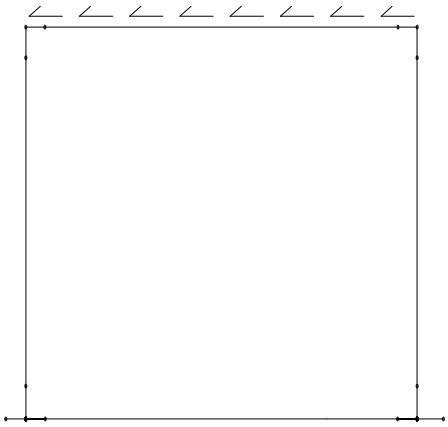
spinta sovraccarico accidentale sul piedritto destro

Schema della combinazione di carico cmb12



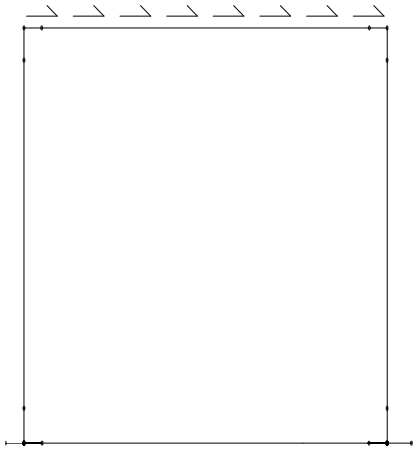
spinta sovraccarico accidentale su ambo i piedritti

Schema della combinazione di carico cmb13



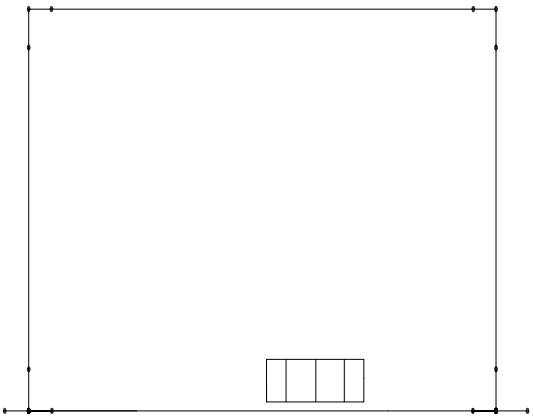
frenatura sinistra

Schema della combinazione di carico cmb14



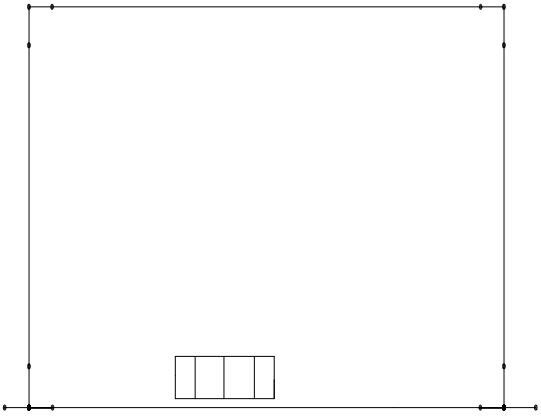
Frenatura destra

schema della combinazione di carico cmb15



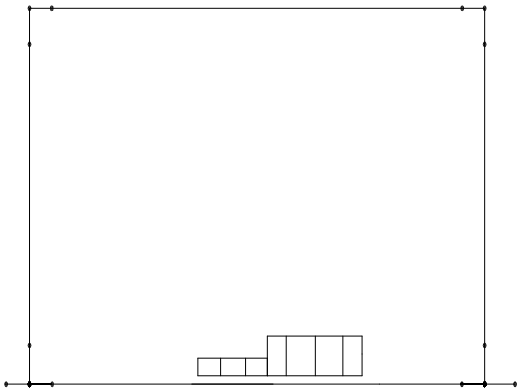
accidentale sulla soletta inferiore: colonna destra

Schema della combinazione di carico cmb16



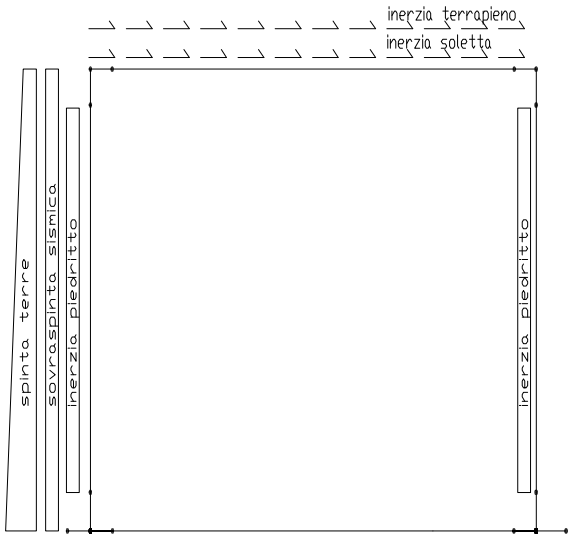
Accidentale sulla soletta inferiore: colonna sinistra

schema della combinazione di carico cmb17



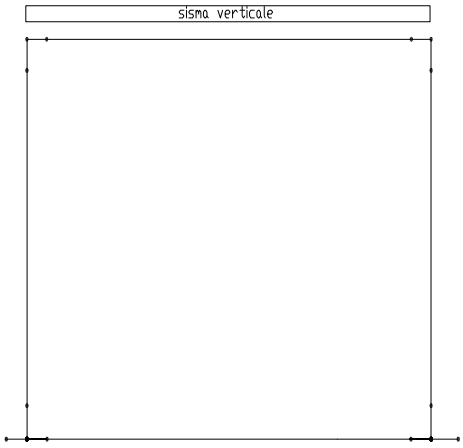
accidentale sulla soletta inferiore: due colonne di carico

Schema della combinazione di carico cmb18



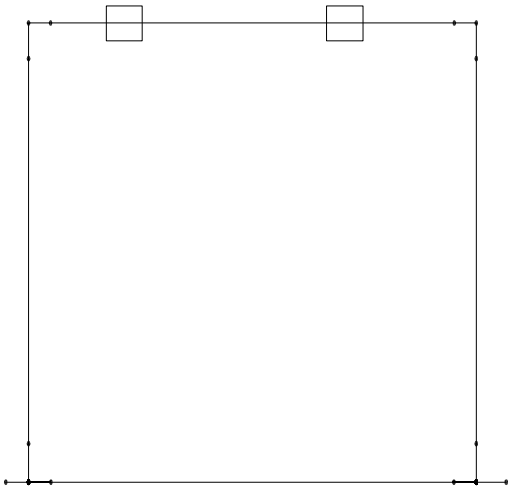
condizione di carico sismico

Schema della combinazione di carico cmb19



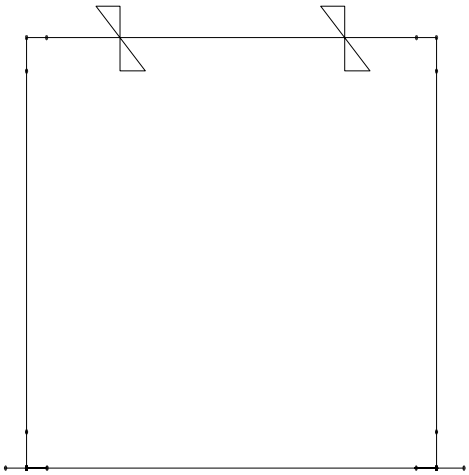
condizione di carico sismico

Schema della combinazione di carico cmb20



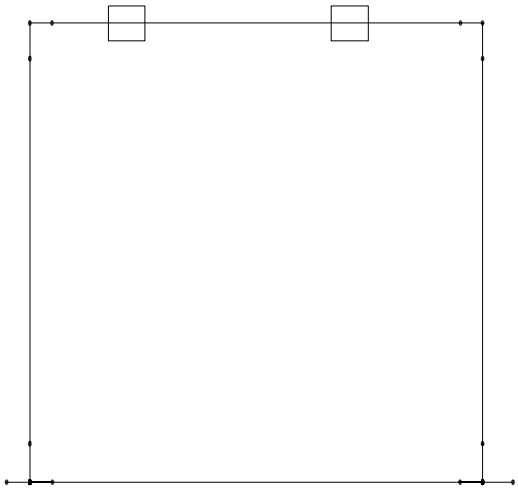
variazione termica uniforme

Schema della combinazione di carico cmb21



salto termico a farfalla

Schema della combinazione di carico cmb22

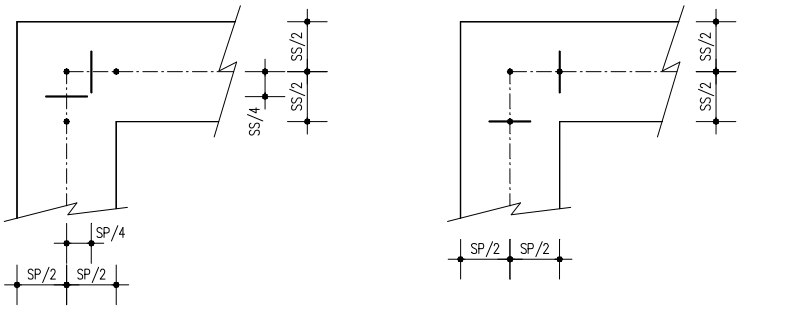


ritiro soletta

10 VERIFICHE DI RESISTENZA ED A FESSURAZIONE

Di seguito si riportano le verifiche delle sezioni per le aste più significative e per le Combinazioni di carico risultate più critiche.
Le verifiche a flessione sono effettuate rispettivamente:
- nella sezione ubicata a metà fra asse piedritto e sezione d'attacco piedritto-soletta nel caso delle verifiche della soletta;
- nella sezione ubicata a metà fra asse soletta e sezione d'attacco del piedritto nel caso delle verifiche del piedritto.

Le verifiche a fessurazione ed a taglio sono eseguite nelle sezioni di attacco soletta-piedritto.



VERIFICHE A FLESSIONE VERIFICHE A FESSURAZIONE E TAGLIO

I calcoli di verifica sono effettuati con il metodo degli Stati Limite, applicando il combinato D. M.14.01.2008 con l'UNI EN 1992 (Eurocodice 2).
Le verifiche a fessurazione sono state condotte considerando:
Verifica di formazione delle fessure: la verifica si esegue per la sezione interamente reagente e per le sollecitazioni di esercizio si determina la massima trazione nel calcestruzzo σ_{ct}, confrontandola con la resistenza caratteristica a trazione per flessione f_{cfk}: se risulta $\sigma_{cf}<f_{cfk}$ la verifica è soddisfatta, altrimenti si procede alla verifica di apertura delle fessure.
Verifica di apertura delle fessure: l'apertura convenzionale delle fessure è calcolata con le modalità indicate nell'EC2, come richiesto dal D. M. Min. II. TT. del 14 gennaio 2008, e valutata con le sollecitazioni relative alle Combinazioni FR o QP della normativa vigente sui ponti stradali". La massima apertura ammissibile risulta rispettivamente per le strutture in ambiente aggressivo (elevazioni) ed armature poco sensibili:

b.1) combinazione di carico Frequante:
$w_k \leq w_3 = 0.30$mm
b.2) combinazione di carico quasi permanente:
$w_k \leq w_2 = 0.20$mm
mentre per le strutture in ambiente orinario (fondazione) si ha:
b.1) combinazione di carico Frequante:
$w_k \leq w_3 = 0.40$mm
b.2) combinazione di carico quasi permanente:
$w_k \leq w_2 = 0.30$mm

Verifica delle tensioni di esercizio: si eseguono per la condizione di carico Quasi Permanente e Rara, verificando rispettivamente che le tensioni di lavoro siano inferiori ai seguenti limiti:

- per la condizione QP si verifica che le massime tensioni presenti nel calcestruzzo siano inferiori a $\sigma_c < 0.45\ f_{ck}$;

- per la condizione rara si verifica che le massime tensioni presenti nel calcestruzzo siano inferiori a $\sigma_c < 0.60\ f_{ck}$, mentre quelle dell'acciaio $\sigma_s < 0.80\ f_{yk}$

10.1 Riepilogo sollecitazioni SLU

	Spessore sezione (cm)		Md (kNm)	Vd (kN)	N (kN)	Ac (cm^2)	At (cm^2)	Ast (cm^2)
Traverso	65	Campata	431,83	-	62,14	ϕ20/15	ϕ22/15	-
		Incastro	-655,28	397,86	133,48	ϕ22/15	ϕ20/15 + ϕ18/15	ϕ12/25
Fondazione	70	Campata	-671,85	-	175,47	ϕ22/15	ϕ20/15 + ϕ20/15	-
		Incastro	929,32	385,99	487,39	ϕ20/15	ϕ22/15 + ϕ24/15	-
Piedritti	60	Attacco fondazione	896,40	506,00	79,02	ϕ16/15	ϕ22/15 + ϕ24/15	ϕ12/20
		Attacco traverso	685,34	243,96	392,32	ϕ16/15	ϕ20/15 + ϕ18/15	-

Alle pagine successive si riportano le verifiche dei singoli elementi, considerando la sezione larga 90 cm anziché 1,00 m, in modo da tener conto del passo delle armature adottato pari a 15 cm. Le sollecitazioni, pertanto, saranno coerentemente ridotte del 10%. Nelle verifiche non si tiene conto della presenza delle predalles dello spessore di 5 cm.

10.2 Riepilogo sollecitazioni SLE

		Mfr (kNm)	Mqp (kNm)	Mrara (kNm)	Ac (cm^2)	At (cm^2)
Traverso	Campata	211,04	116,79	233,36	ϕ20/15	ϕ22/15
	Incastro	-274,98	-119,00	-295,90	ϕ22/15	ϕ20/15 + ϕ18/15
Fondazione	Campata	-293,12	-156,61	-303,73	ϕ22/15	ϕ20/15 + ϕ20/15
	Incastro	385,27	205,58	402,81	ϕ20/15	ϕ22/15 + ϕ24/15
Piedritti	Attacco fondazione	-394,41	-213,79	-409,31	ϕ16/15	ϕ22/15 + ϕ24/15
	Attacco traverso	321,50	149,15	348,86	ϕ16/15	ϕ20/15 + ϕ18/15

Alle pagine successive si riportano le verifiche dei singoli elementi, considerando la sezione larga 90 cm anziché 1,00 m, in modo da tener conto del passo delle armature adottato pari a 15 cm. Le sollecitazioni, pertanto, saranno coerentemente ridotte del 10%. Nelle verifiche non si tiene conto della presenza delle predalles dello spessore di 5 cm.

10.3 Verifiche soletta superiore

SEZIONE ALL'INCASTRO

Dati

Nome sezione: sezione

Tipo sezione	Rettangolare	
Base	90.0	[cm]
Altezza	65.0	[cm]

Caratteristiche geometriche

Area sezione	5400.00	[cmq]
Inerzia in direzione X	3645000.0	[cm^4]
Inerzia in direzione Y	1620000.0	[cm^4]
Inerzia in direzione XY	0.0	[cm^4]
Ascissa baricentro sezione	X_G = 45.00	[cm]
Ordinata baricentro sezione	Y_G = 30.00	[cm]

Elenco ferri

Simbologia adottata

Posizione riferita all'origine

N° numero d'ordine
X Ascissa posizione ferro espresso in [cm]
Y Ordinata posizione ferro espresso in [cm]
d Diametro ferro espresso in [mm]
ω Area del ferro espresso in [cmq]

N°	X	Y	d	ω
1	4.10	6.60	22	3.80
2	20.46	6.60	22	3.80
3	36.82	6.60	22	3.80
4	53.18	6.60	22	3.80
5	69.54	6.60	22	3.80
6	85.90	6.60	22	3.80
7	86.10	53.60	18	2.54
8	78.63	53.60	20	3.14
9	71.15	53.60	18	2.54
10	63.68	53.60	20	3.14
11	56.21	53.60	18	2.54
12	48.74	53.60	20	3.14
13	41.26	53.60	18	2.54
14	33.79	53.60	20	3.14
15	26.32	53.60	18	2.54
16	18.85	53.60	20	3.14
17	11.37	53.60	18	2.54

18	3.90	53.60	20	3.14

Materiale impiegato : Calcestruzzo armato

Caratteristiche calcestruzzo

Resistenza caratteristica calcestruzzo	407.88	[kg/cmq]
Coeff. omogeneizzazione acciaio/calcestruzzo	15.00	
Coeff. omogeneizzazione calcestruzzo teso/compresso	1.00	

Forma diagramma tensione-deformazione - PARABOLA-RETTANGOLO

Caratteristiche acciaio per calcestruzzo

Tensione ammissibile acciaio	4588.65	[kg/cmq]
Tensione snervamento acciaio	4588.65	[kg/cmq]
Modulo elastico E	2100000.00	[kg/cmq]
Fattore di incrudimento acciaio	1.00	

Combinazioni

Simbologia adottata

N° numero d'ordine della combinazione
N sforzo normale espresso in[kg]
M_Y momento lungo Y espresso in [kgm]
M_X momento lungo X espresso in [kgm]
M_t momento torcente espresso in [kgm]
T_Y taglio lungo Y espresso in [kg]
T_X taglio lungo X espresso in [kg]
VD verifica di dominio
VT verifica tensionale (SLER - Combinazione rara, SLEF - Combinazione frequente, SLEQP - Combinazione quasi permanente, TAMM - Verifica a tensioni ammissibili)

N°	N	M_Y	M_X	M_t	T_Y	T_X	VD	VT
1	12013.00	-58975.00	0.00	0.00	35807.00	0.00	SI	NO
2	0.00	-24748.00	0.00	0.00	0.00	0.00	NO	SLEF
3	0.00	-10710.00	0.00	0.00	0.00	0.00	NO	SLEQP
4	0.00	-26631.00	0.00	0.00	0.00	0.00	NO	SLER

Risultati taglio

Simbologia adottata

V_{Rd} Resistenza di calcolo dell'elemento privo di armatura trasversali a taglio, espresso in [kg]
V_{Rcd} Resistenza di calcolo a "taglio compressione", espresso in [kg]
V_{Rsd} resistenza di calcolo a "taglio trazione", espresso in [kg]

T	V_{Rd}	V_{Rcd}	V_{Rsd}
35807.00	29082.64	147706.27	44269.89

Diametro e passo staffe ϕ12.00 - 25.00 [cm]

Sollecitazioni ultime

Simbologia adottata

N_u Sforzo normale ultimo, espresso in [kg]
M_{Xu} Momento ultimo in direzione X, espresso in [kgm]
M_{Yu} Momento ultimo in direzione Y, espresso in [kgm]
FS Fattore di sicurezza

N_u	M_{Xu}	M_{Yu}	FS
14409.69	0.00	-70740.97	1.20
948011.59	0.00	-58975.00	78.92
12013.00	0.00	-70180.60	1.19

Diagramma Mx-My

N = 12013.00 [kg] Sforzo normale della combinazione di carico

Simbologia adottata
N° numero d'ordine
M_X momento di calcolo lungo X espresso in [kgm]
M_Y momento di calcolo lungo Y espresso in [kgm]

N°	M_X	M_Y
1	98662.32	-7776.30
2	91161.96	17653.64
3	75200.81	39266.34
4	54222.12	51418.23
5	-142.77	56182.38
6	-54123.77	51486.43
7	-74794.84	39531.72
8	-90546.39	18095.27
9	-98022.18	-7280.29
10	-91392.85	-31158.43
11	-76068.21	-53510.42
12	-50586.91	-70717.95
13	533.94	-77479.91
14	51654.78	-70717.93
15	76866.23	-53856.67

Diagramma M-N

M_R = 58975.00 [kgm] Momento risultante della combinazione di carico

Simbologia adottata
N° numero d'ordine
N sforzo normale di calcolo espresso in [kg]
M momento di calcolo espresso in [kgm]

N°	N	M
1	1055887.70	-57049.57
2	1024255.23	-63612.60
3	992622.57	-70100.12
4	960989.91	-76339.61
5	929357.52	-82174.87
6	897724.85	-87619.97

7	866092.28	-92689.67
8	834459.71	-97401.64
9	802827.08	-101773.84
10	771194.57	-105825.13
11	739562.02	-109576.90
12	707929.50	-113051.20
13	676296.94	-116270.93
14	644664.26	-119260.75
15	613031.73	-122046.64
16	581399.21	-124655.17
17	549766.58	-127111.86
18	518133.97	-128501.96
19	486501.46	-127628.82
20	454868.98	-126159.26
21	423236.40	-124095.58
22	391603.75	-121437.69
23	359971.28	-118184.20
24	328338.66	-114338.10
25	296706.11	-109895.37
26	265073.63	-104859.37
27	233440.99	-99060.61
28	201808.48	-92249.85
29	170175.82	-85314.81
30	138543.28	-78244.17
31	106910.61	-71035.22
32	75278.17	-63679.80
33	43645.53	-56169.87
34	12013.05	-48506.59
35	0.02	-45559.93
36	-32448.76	-37511.23
37	-64897.44	-29344.30
38	-97346.08	-21092.78
39	-129794.72	-12803.20
40	-162243.44	-4597.78
41	-194692.04	3169.64
42	-194692.04	18437.16
43	-162243.44	26641.19
44	-129794.72	35035.64
45	-97346.08	43349.14
46	-64897.44	51520.30
47	-32448.76	59514.37
48	0.02	67299.92
49	12013.05	70123.40
50	43645.53	77409.29
51	75278.17	84488.29
52	106910.61	91371.42
53	138543.28	98065.23
54	170175.82	104078.77

55	201808.48	109199.12
56	233440.99	113724.94
57	265073.63	117656.07
58	296706.11	120993.16
59	328338.66	123735.42
60	359971.28	125882.98
61	391603.75	127436.31
62	423236.40	128394.85
63	454868.98	127258.86
64	486501.46	124127.00
65	518133.97	120915.11
66	549766.58	117604.00
67	581399.21	114174.10
68	613031.73	110604.29
69	644664.26	106873.59
70	676296.94	102961.38
71	707929.50	98846.97
72	739562.02	94510.00
73	771194.57	89930.60
74	802827.08	85089.49
75	834459.71	79967.87
76	866092.28	74535.10
77	897724.85	68786.05
78	929357.52	62707.35
79	960989.91	56286.80
80	992622.57	49697.66
81	1024255.23	43040.07
82	1055887.70	36304.07

Combinazione n° 2

<u>Risultati tensioni ammissibili</u>

Caratteristiche asse neutro sezione :

Distanza asse neutro dal lembo più compresso 18.084 [cm]
Punti di intersezione con perimetro sezione (4275.97 ; 0.00) (-9911.12 ; 60.00)
Inclinazione asse neutro rispetto all'orizzontale -0.242 [°]

Tensioni :

Tensione massima nel calcestruzzo	51.56	[kg/cmq]
Tensione minima nel calcestruzzo	0.00	[kg/cmq]
Tensione tangenziale nel calcestruzzo	0.00	[kg/cmq]
Tensione massima nel ferro	490.42	[kg/cmq]
Tensione minima nel ferro	-1534.58	[kg/cmq]

<u>Risultati fessurazione</u>

Momento di prima fessurazione M_X = 0.00 [kgm] M_Y = -15872.81 [kgm]

Tensione nell'acciaio	σ = -984.24	[kg/cmq]
Tensione nel calcestruzzo	σ_{ct} = -77.35	[kg/cmq]
Area efficace a trazione	A_{eff} = 1858.66	[cmq]
Deformazione media acciaio teso	ε = 0.0580	
Distanza media tra le fessure	S_{rm} = 163.5661	[mm]
Ampiezza delle fessure	w = 0.1614	[mm]

Diagramma M-N

M_R = 24748.00 [kgm] Momento risultante della combinazione di carico

Simbologia adottata

N° numero d'ordine
N sforzo normale di calcolo espresso in [kg]
M momento di calcolo espresso in [kgm]

N°	N	M
1	1055887.70	-57049.57
2	1024255.23	-63612.60
3	992622.57	-70100.12
4	960989.91	-76339.61
5	929357.52	-82174.87
6	897724.85	-87619.97
7	866092.28	-92689.67
8	834459.71	-97401.64
9	802827.08	-101773.84
10	771194.57	-105825.13
11	739562.02	-109576.90
12	707929.50	-113051.20
13	676296.94	-116270.93
14	644664.26	-119260.75
15	613031.73	-122046.64
16	581399.21	-124655.17
17	549766.58	-127111.86
18	518133.97	-128501.96
19	486501.46	-127628.82
20	454868.98	-126159.26
21	423236.40	-124095.58
22	391603.75	-121437.69
23	359971.28	-118184.20
24	328338.66	-114338.10
25	296706.11	-109895.37
26	265073.63	-104859.37
27	233440.99	-99060.61
28	201808.48	-92249.85
29	170175.82	-85314.81
30	138543.28	-78244.17
31	106910.61	-71035.22
32	75278.17	-63679.80

33	43645.53	-56169.87
34	12013.05	-48506.59
35	0.02	-45559.93
36	-32448.76	-37511.23
37	-64897.44	-29344.30
38	-97346.08	-21092.78
39	-129794.72	-12803.20
40	-162243.44	-4597.78
41	-194692.04	3169.64
42	-194692.04	18437.16
43	-162243.44	26641.19
44	-129794.72	35035.64
45	-97346.08	43349.14
46	-64897.44	51520.30
47	-32448.76	59514.37
48	0.02	67299.92
49	12013.05	70123.40
50	43645.53	77409.29
51	75278.17	84488.29
52	106910.61	91371.42
53	138543.28	98065.23
54	170175.82	104078.77
55	201808.48	109199.12
56	233440.99	113724.94
57	265073.63	117656.07
58	296706.11	120993.16
59	328338.66	123735.42
60	359971.28	125882.98
61	391603.75	127436.31
62	423236.40	128394.85
63	454868.98	127258.86
64	486501.46	124127.00
65	518133.97	120915.11
66	549766.58	117604.00
67	581399.21	114174.10
68	613031.73	110604.29
69	644664.26	106873.59
70	676296.94	102961.38
71	707929.50	98846.97
72	739562.02	94510.00
73	771194.57	89930.60
74	802827.08	85089.49
75	834459.71	79967.87
76	866092.28	74535.10
77	897724.85	68786.05
78	929357.52	62707.35
79	960989.91	56286.80
80	992622.57	49697.66

81	1024255.23	43040.07
82	1055887.70	36304.07

Combinazione n° 3

Risultati tensioni ammissibili

Caratteristiche asse neutro sezione :

Distanza asse neutro dal lembo più compresso	18.084	[cm]
Punti di intersezione con perimetro sezione (4275.97 ; 0.00) (-9911.12 ; 60.00)		
Inclinazione asse neutro rispetto all'orizzontale	-0.242	[°]

Tensioni :

Tensione massima nel calcestruzzo	22.31	[kg/cmq]
Tensione minima nel calcestruzzo	0.00	[kg/cmq]
Tensione tangenziale nel calcestruzzo	0.00	[kg/cmq]
Tensione massima nel ferro	212.24	[kg/cmq]
Tensione minima nel ferro	-664.11	[kg/cmq]

Risultati fessurazione

Momento di prima fessurazione	$M_X = 0.00$	[kgm]	$M_Y = -15872.81$	[kgm]
Tensione nell'acciaio	$\sigma = -984.24$	[kg/cmq]		
Tensione nel calcestruzzo	$\sigma_{ct} = -77.35$	[kg/cmq]		
Area efficace a trazione	$A_{eff} = 1858.66$	[cmq]		
Deformazione media acciaio teso	$\varepsilon = 0.0000$			
Distanza media tra le fessure	$S_{rm} = 0.0000$	[mm]		
Ampiezza delle fessure	$w = 0.0000$	[mm]		

Diagramma M-N

M_R = 10710.00 [kgm] Momento risultante della combinazione di carico

Simbologia adottata

N° numero d'ordine
N sforzo normale di calcolo espresso in [kg]
M momento di calcolo espresso in [kgm]

N°	N	M
1	1055887.70	-57049.57
2	1024255.23	-63612.60
3	992622.57	-70100.12
4	960989.91	-76339.61
5	929357.52	-82174.87
6	897724.85	-87619.97
7	866092.28	-92689.67
8	834459.71	-97401.64
9	802827.08	-101773.84
10	771194.57	-105825.13

11	739562.02	-109576.90
12	707929.50	-113051.20
13	676296.94	-116270.93
14	644664.26	-119260.75
15	613031.73	-122046.64
16	581399.21	-124655.17
17	549766.58	-127111.86
18	518133.97	-128501.96
19	486501.46	-127628.82
20	454868.98	-126159.26
21	423236.40	-124095.58
22	391603.75	-121437.69
23	359971.28	-118184.20
24	328338.66	-114338.10
25	296706.11	-109895.37
26	265073.63	-104859.37
27	233440.99	-99060.61
28	201808.48	-92249.85
29	170175.82	-85314.81
30	138543.28	-78244.17
31	106910.61	-71035.22
32	75278.17	-63679.80
33	43645.53	-56169.87
34	12013.05	-48506.59
35	0.02	-45559.93
36	-32448.76	-37511.23
37	-64897.44	-29344.30
38	-97346.08	-21092.78
39	-129794.72	-12803.20
40	-162243.44	-4597.78
41	-194692.04	3169.64
42	-194692.04	18437.16
43	-162243.44	26641.19
44	-129794.72	35035.64
45	-97346.08	43349.14
46	-64897.44	51520.30
47	-32448.76	59514.37
48	0.02	67299.92
49	12013.05	70123.40
50	43645.53	77409.29
51	75278.17	84488.29
52	106910.61	91371.42
53	138543.28	98065.23
54	170175.82	104078.77
55	201808.48	109199.12
56	233440.99	113724.94
57	265073.63	117656.07
58	296706.11	120993.16

59	328338.66	123735.42
60	359971.28	125882.98
61	391603.75	127436.31
62	423236.40	128394.85
63	454868.98	127258.86
64	486501.46	124127.00
65	518133.97	120915.11
66	549766.58	117604.00
67	581399.21	114174.10
68	613031.73	110604.29
69	644664.26	106873.59
70	676296.94	102961.38
71	707929.50	98846.97
72	739562.02	94510.00
73	771194.57	89930.60
74	802827.08	85089.49
75	834459.71	79967.87
76	866092.28	74535.10
77	897724.85	68786.05
78	929357.52	62707.35
79	960989.91	56286.80
80	992622.57	49697.66
81	1024255.23	43040.07
82	1055887.70	36304.07

Combinazione n° 4

Risultati tensioni ammissibili

Caratteristiche asse neutro sezione :

Distanza asse neutro dal lembo più compresso	18.084	[cm]
Punti di intersezione con perimetro sezione (4275.97 ; 0.00) (-9911.12 ; 60.00)		
Inclinazione asse neutro rispetto all'orizzontale	-0.242	[°]

Tensioni :

Tensione massima nel calcestruzzo	55.49	[kg/cmq]
Tensione minima nel calcestruzzo	0.00	[kg/cmq]
Tensione tangenziale nel calcestruzzo	0.00	[kg/cmq]
Tensione massima nel ferro	527.73	[kg/cmq]
Tensione minima nel ferro	-1651.34	[kg/cmq]

Diagramma M-N

M_R = 26631.00 [kgm] Momento risultante della combinazione di carico

Simbologia adottata

N° numero d'ordine
N sforzo normale di calcolo espresso in [kg]
M momento di calcolo espresso in [kgm]

N°	N	M
1	1055887.70	-57049.57
2	1024255.23	-63612.60
3	992622.57	-70100.12
4	960989.91	-76339.61
5	929357.52	-82174.87
6	897724.85	-87619.97
7	866092.28	-92689.67
8	834459.71	-97401.64
9	802827.08	-101773.84
10	771194.57	-105825.13
11	739562.02	-109576.90
12	707929.50	-113051.20
13	676296.94	-116270.93
14	644664.26	-119260.75
15	613031.73	-122046.64
16	581399.21	-124655.17
17	549766.58	-127111.86
18	518133.97	-128501.96
19	486501.46	-127628.82
20	454868.98	-126159.26
21	423236.40	-124095.58
22	391603.75	-121437.69
23	359971.28	-118184.20
24	328338.66	-114338.10
25	296706.11	-109895.37
26	265073.63	-104859.37
27	233440.99	-99060.61
28	201808.48	-92249.85
29	170175.82	-85314.81
30	138543.28	-78244.17
31	106910.61	-71035.22
32	75278.17	-63679.80
33	43645.53	-56169.87
34	12013.05	-48506.59
35	0.02	-45559.93
36	-32448.76	-37511.23
37	-64897.44	-29344.30
38	-97346.08	-21092.78
39	-129794.72	-12803.20
40	-162243.44	-4597.78
41	-194692.04	3169.64
42	-194692.04	18437.16
43	-162243.44	26641.19
44	-129794.72	35035.64
45	-97346.08	43349.14
46	-64897.44	51520.30

47	-32448.76	59514.37
48	0.02	67299.92
49	12013.05	70123.40
50	43645.53	77409.29
51	75278.17	84488.29
52	106910.61	91371.42
53	138543.28	98065.23
54	170175.82	104078.77
55	201808.48	109199.12
56	233440.99	113724.94
57	265073.63	117656.07
58	296706.11	120993.16
59	328338.66	123735.42
60	359971.28	125882.98
61	391603.75	127436.31
62	423236.40	128394.85
63	454868.98	127258.86
64	486501.46	124127.00
65	518133.97	120915.11
66	549766.58	117604.00
67	581399.21	114174.10
68	613031.73	110604.29
69	644664.26	106873.59
70	676296.94	102961.38
71	707929.50	98846.97
72	739562.02	94510.00
73	771194.57	89930.60
74	802827.08	85089.49
75	834459.71	79967.87
76	866092.28	74535.10
77	897724.85	68786.05
78	929357.52	62707.35
79	960989.91	56286.80
80	992622.57	49697.66
81	1024255.23	43040.07
82	1055887.70	36304.07

SEZIONE IN CAMPATA

Dati

Nome sezione: sezione

Tipo sezione	Rettangolare	
Base	90.0	[cm]
Altezza	65.0	[cm]

Caratteristiche geometriche

Area sezione	5400.00	[cmq]
Inerzia in direzione X	3645000.0	[cm^4]
Inerzia in direzione Y	1620000.0	[cm^4]
Inerzia in direzione XY	0.0	[cm^4]
Ascissa baricentro sezione	X_G = 45.00	[cm]
Ordinata baricentro sezione	Y_G = 30.00	[cm]

Elenco ferri

Simbologia adottata

Posizione riferita all'origine

N°	numero d'ordine
X	Ascissa posizione ferro espresso in [cm]
Y	Ordinata posizione ferro espresso in [cm]
d	Diametro ferro espresso in [mm]
ω	Area del ferro espresso in [cmq]

N°	X	Y	d	ω
1	4.00	6.50	20	3.14
2	20.40	6.50	20	3.14
3	36.80	6.50	20	3.14
4	53.20	6.50	20	3.14
5	69.60	6.50	20	3.14
6	86.00	6.50	20	3.14
7	85.90	53.40	22	3.80
8	69.54	53.40	22	3.80
9	53.18	53.40	22	3.80
10	36.82	53.40	22	3.80
11	20.46	53.40	22	3.80
12	4.10	53.40	22	3.80

Materiale impiegato : Calcestruzzo armato

Caratteristiche calcestruzzo

Resistenza caratteristica calcestruzzo	407.88	[kg/cmq]
Coeff. omogeneizzazione acciaio/calcestruzzo	15.00	
Coeff. omogeneizzazione calcestruzzo teso/compresso	1.00	

Forma diagramma tensione-deformazione - PARABOLA-RETTANGOLO

Caratteristiche acciaio per calcestruzzo

Tensione ammissibile acciaio	4588.65	[kg/cmq]
Tensione snervamento acciaio	4588.65	[kg/cmq]
Modulo elastico E	2100000.00	[kg/cmq]
Fattore di incrudimento acciaio	1.00	

Combinazioni

Simbologia adottata

N° numero d'ordine della combinazione
N sforzo normale espresso in[kg]
M_Y momento lungo Y espresso in [kgm]
M_X momento lungo X espresso in [kgm]
M_t momento torcente espresso in [kgm]
T_Y taglio lungo Y espresso in [kg]
T_X taglio lungo X espresso in [kg]
VD verifica di dominio
VT verifica tensionale (SLER - Combinazione rara, SLEF - Combinazione frequente, SLEQP - Combinazione quasi permanente, TAMM - Verifica a tensioni ammissibili)

N°	N	M_Y	M_X	M_t	T_Y	T_X	VD	VT
1	5593.00	-38865.00	0.00	0.00	0.00	0.00	SI	NO
2	0.00	-18994.00	0.00	0.00	0.00	0.00	NO	SLEF
3	0.00	-10511.00	0.00	0.00	0.00	0.00	NO	SLEQP
4	0.00	-21002.00	0.00	0.00	0.00	0.00	NO	SLER

Sollecitazioni ultime

Simbologia adottata
N_u Sforzo normale ultimo, espresso in [kg]
M_{Xu} Momento ultimo in direzione X, espresso in [kgm]
M_{Yu} Momento ultimo in direzione Y, espresso in [kgm]
FS Fattore di sicurezza

N_u	M_{Xu}	M_{Yu}	FS
6810.71	0.00	-47326.71	1.22
1013170.77	0.00	-38865.00	181.15
5593.00	0.00	-47027.55	1.21

Diagramma Mx-My

N = 5593.00 [kg] Sforzo normale della combinazione di carico

Simbologia adottata
N° numero d'ordine
M_X momento di calcolo lungo X espresso in [kgm]
M_Y momento di calcolo lungo Y espresso in [kgm]

N°	M_X	M_Y
1	76270.41	-2119.81
2	71466.76	19069.03
3	60861.98	34179.32
4	47070.81	42368.62
5	0.00	46417.38
6	-47070.81	42368.61
7	-60861.97	34179.31
8	-71466.79	19069.04
9	-76270.42	-2119.81
10	-71548.85	-23387.82
11	-60730.19	-39436.96
12	-45638.51	-49147.52
13	0.00	-53883.75
14	45638.51	-49147.53

15	60730.18	-39436.96

Diagramma M-N

M_R = 38865.00 [kgm] Momento risultante della combinazione di carico

Simbologia adottata

N° numero d'ordine
N sforzo normale di calcolo espresso in [kg]
M momento di calcolo espresso in [kgm]

N°	N	M
1	994965.84	-49703.24
2	966698.10	-55537.75
3	938430.28	-61305.94
4	910162.36	-66813.40
5	881894.64	-71977.26
6	853626.78	-76807.40
7	825359.14	-81314.52
8	797091.33	-85510.12
9	768823.43	-89406.61
10	740555.60	-93017.36
11	712287.97	-96356.70
12	684020.18	-99440.02
13	655752.24	-102283.74
14	627484.41	-104905.30
15	599216.71	-107323.20
16	570948.92	-109556.97
17	542681.11	-111627.03
18	514413.34	-113554.73
19	486145.49	-114235.40
20	457877.72	-113431.18
21	429609.90	-112151.33
22	401342.18	-110395.86
23	373074.39	-108164.77
24	344806.64	-105458.06
25	316538.73	-102275.72
26	288270.94	-98617.76
27	260003.18	-94484.19
28	231735.36	-89875.00
29	203467.55	-84573.14
30	175199.73	-78598.88
31	146931.94	-72481.98
32	118664.18	-66213.90
33	90396.36	-59785.92
34	62128.58	-53189.35
35	33860.71	-46417.38
36	5592.95	-39482.86
37	0.02	-38093.54

38	-27703.17	-31136.17
39	-55406.29	-24067.22
40	-83109.54	-16913.60
41	-110812.57	-9737.18
42	-138515.73	-2861.84
43	-166218.93	3620.71
44	-138515.73	10132.04
45	-110812.57	17233.04
46	-83109.54	24486.20
47	-55406.29	31666.24
48	-27703.17	38728.49
49	0.02	45649.35
50	5592.95	47027.55
51	33860.71	53883.75
52	62128.58	60541.36
53	90396.36	67003.24
54	118664.18	73278.96
55	146931.94	79378.17
56	175199.73	85310.55
57	203467.55	90441.20
58	231735.36	94994.53
59	260003.18	99072.21
60	288270.94	102674.28
61	316538.73	105800.74
62	344806.64	108451.57
63	373074.39	110626.78
64	401342.18	112326.36
65	429609.90	113550.33
66	457877.72	114298.67
67	486145.49	113092.67
68	514413.34	110902.87
69	542681.11	108598.32
70	570948.92	106159.25
71	599216.71	103566.36
72	627484.41	100800.88
73	655752.24	97844.72
74	684020.18	94680.50
75	712287.97	91291.67
76	740555.60	87662.41
77	768823.43	83777.82
78	797091.33	79623.73
79	825359.14	75186.95
80	853626.78	70454.95
81	881894.64	65416.05
82	910162.36	60059.36
83	938430.28	54381.37
84	966698.10	48563.77
85	994965.84	42686.09

Combinazione n° 2

Risultati tensioni ammissibili

Caratteristiche asse neutro sezione :

Distanza asse neutro dal lembo più compresso	15.306	[cm]
Punti di intersezione con perimetro sezione	(90.00 ; 15.31) (0.00 ; 15.31)	
Inclinazione asse neutro rispetto all'orizzontale	0.000	[°]

Tensioni :

Tensione massima nel calcestruzzo	46.44	[kg/cmq]
Tensione minima nel calcestruzzo	0.00	[kg/cmq]
Tensione tangenziale nel calcestruzzo	0.00	[kg/cmq]
Tensione massima nel ferro	400.82	[kg/cmq]
Tensione minima nel ferro	-1733.84	[kg/cmq]

Risultati fessurazione

Momento di prima fessurazione	$M_X = 0.00$	[kgm]	$M_Y = -14723.13$	[kgm]
Tensione nell'acciaio	$\sigma = -1343.98$	[kg/cmq]		
Tensione nel calcestruzzo	$\sigma_{ct} = -105.12$	[kg/cmq]		
Area efficace a trazione	$A_{eff} = 2011.22$	[cmq]		
Deformazione media acciaio teso	$\varepsilon = 0.0578$			
Distanza media tra le fessure	$S_{rm} = 218.6519$	[mm]		
Ampiezza delle fessure	$w = 0.2147$	[mm]		

Diagramma M-N

M_R = 18994.00 [kgm] Momento risultante della combinazione di carico

Simbologia adottata

N° numero d'ordine
N sforzo normale di calcolo espresso in [kg]
M momento di calcolo espresso in [kgm]

N°	N	M
1	994965.84	-49703.24
2	966698.10	-55537.75
3	938430.28	-61305.94
4	910162.36	-66813.40
5	881894.64	-71977.26
6	853626.78	-76807.40
7	825359.14	-81314.52
8	797091.33	-85510.12
9	768823.43	-89406.61
10	740555.60	-93017.36
11	712287.97	-96356.70
12	684020.18	-99440.02

13	655752.24	-102283.74
14	627484.41	-104905.30
15	599216.71	-107323.20
16	570948.92	-109556.97
17	542681.11	-111627.03
18	514413.34	-113554.73
19	486145.49	-114235.40
20	457877.72	-113431.18
21	429609.90	-112151.33
22	401342.18	-110395.86
23	373074.39	-108164.77
24	344806.64	-105458.06
25	316538.73	-102275.72
26	288270.94	-98617.76
27	260003.18	-94484.19
28	231735.36	-89875.00
29	203467.55	-84573.14
30	175199.73	-78598.88
31	146931.94	-72481.98
32	118664.18	-66213.90
33	90396.36	-59785.92
34	62128.58	-53189.35
35	33860.71	-46417.38
36	5592.95	-39482.86
37	0.02	-38093.54
38	-27703.17	-31136.17
39	-55406.29	-24067.22
40	-83109.54	-16913.60
41	-110812.57	-9737.18
42	-138515.73	-2861.84
43	-166218.93	3620.71
44	-138515.73	10132.04
45	-110812.57	17233.04
46	-83109.54	24486.20
47	-55406.29	31666.24
48	-27703.17	38728.49
49	0.02	45649.35
50	5592.95	47027.55
51	33860.71	53883.75
52	62128.58	60541.36
53	90396.36	67003.24
54	118664.18	73278.96
55	146931.94	79378.17
56	175199.73	85310.55
57	203467.55	90441.20
58	231735.36	94994.53
59	260003.18	99072.21
60	288270.94	102674.28

61	316538.73	105800.74
62	344806.64	108451.57
63	373074.39	110626.78
64	401342.18	112326.36
65	429609.90	113550.33
66	457877.72	114298.67
67	486145.49	113092.67
68	514413.34	110902.87
69	542681.11	108598.32
70	570948.92	106159.25
71	599216.71	103566.36
72	627484.41	100800.88
73	655752.24	97844.72
74	684020.18	94680.50
75	712287.97	91291.67
76	740555.60	87662.41
77	768823.43	83777.82
78	797091.33	79623.73
79	825359.14	75186.95
80	853626.78	70454.95
81	881894.64	65416.05
82	910162.36	60059.36
83	938430.28	54381.37
84	966698.10	48563.77
85	994965.84	42686.09

Combinazione n° 3

Risultati tensioni ammissibili

Caratteristiche asse neutro sezione :

Distanza asse neutro dal lembo più compresso	15.306	[cm]
Punti di intersezione con perimetro sezione	(90.00 ; 15.31) (0.00 ; 15.31)	
Inclinazione asse neutro rispetto all'orizzontale	0.000	[°]

Tensioni :

Tensione massima nel calcestruzzo	25.70	[kg/cmq]
Tensione minima nel calcestruzzo	0.00	[kg/cmq]
Tensione tangenziale nel calcestruzzo	0.00	[kg/cmq]
Tensione massima nel ferro	221.81	[kg/cmq]
Tensione minima nel ferro	-959.48	[kg/cmq]

Risultati fessurazione

Momento di prima fessurazione	$M_X = 0.00$	[kgm]	$M_Y = -14723.13$	[kgm]
Tensione nell'acciaio	$\sigma = -1343.98$	[kg/cmq]		
Tensione nel calcestruzzo	$\sigma_{ct} = -105.12$	[kg/cmq]		
Area efficace a trazione	$A_{eff} = 2011.22$	[cmq]		

Deformazione media acciaio teso	$\varepsilon = 0.0000$	
Distanza media tra le fessure	$S_{rm} = 0.0000$	[mm]
Ampiezza delle fessure	$w = 0.0000$	[mm]

Diagramma M-N

M_R = 10511.00 [kgm] Momento risultante della combinazione di carico

Simbologia adottata

N° numero d'ordine
N sforzo normale di calcolo espresso in [kg]
M momento di calcolo espresso in [kgm]

N°	N	M
1	994965.84	-49703.24
2	966698.10	-55537.75
3	938430.28	-61305.94
4	910162.36	-66813.40
5	881894.64	-71977.26
6	853626.78	-76807.40
7	825359.14	-81314.52
8	797091.33	-85510.12
9	768823.43	-89406.61
10	740555.60	-93017.36
11	712287.97	-96356.70
12	684020.18	-99440.02
13	655752.24	-102283.74
14	627484.41	-104905.30
15	599216.71	-107323.20
16	570948.92	-109556.97
17	542681.11	-111627.03
18	514413.34	-113554.73
19	486145.49	-114235.40
20	457877.72	-113431.18
21	429609.90	-112151.33
22	401342.18	-110395.86
23	373074.39	-108164.77
24	344806.64	-105458.06
25	316538.73	-102275.72
26	288270.94	-98617.76
27	260003.18	-94484.19
28	231735.36	-89875.00
29	203467.55	-84573.14
30	175199.73	-78598.88
31	146931.94	-72481.98
32	118664.18	-66213.90
33	90396.36	-59785.92
34	62128.58	-53189.35
35	33860.71	-46417.38

36	5592.95	-39482.86
37	0.02	-38093.54
38	-27703.17	-31136.17
39	-55406.29	-24067.22
40	-83109.54	-16913.60
41	-110812.57	-9737.18
42	-138515.73	-2861.84
43	-166218.93	3620.71
44	-138515.73	10132.04
45	-110812.57	17233.04
46	-83109.54	24486.20
47	-55406.29	31666.24
48	-27703.17	38728.49
49	0.02	45649.35
50	5592.95	47027.55
51	33860.71	53883.75
52	62128.58	60541.36
53	90396.36	67003.24
54	118664.18	73278.96
55	146931.94	79378.17
56	175199.73	85310.55
57	203467.55	90441.20
58	231735.36	94994.53
59	260003.18	99072.21
60	288270.94	102674.28
61	316538.73	105800.74
62	344806.64	108451.57
63	373074.39	110626.78
64	401342.18	112326.36
65	429609.90	113550.33
66	457877.72	114298.67
67	486145.49	113092.67
68	514413.34	110902.87
69	542681.11	108598.32
70	570948.92	106159.25
71	599216.71	103566.36
72	627484.41	100800.88
73	655752.24	97844.72
74	684020.18	94680.50
75	712287.97	91291.67
76	740555.60	87662.41
77	768823.43	83777.82
78	797091.33	79623.73
79	825359.14	75186.95
80	853626.78	70454.95
81	881894.64	65416.05
82	910162.36	60059.36
83	938430.28	54381.37

84	966698.10	48563.77
85	994965.84	42686.09

Combinazione n° 4

Risultati tensioni ammissibili

Caratteristiche asse neutro sezione :

Distanza asse neutro dal lembo più compresso	15.306	[cm]
Punti di intersezione con perimetro sezione	(90.00 ; 15.31) (0.00 ; 15.31)	
Inclinazione asse neutro rispetto all'orizzontale	0.000	[°]

Tensioni :

Tensione massima nel calcestruzzo	51.35	[kg/cmq]
Tensione minima nel calcestruzzo	0.00	[kg/cmq]
Tensione tangenziale nel calcestruzzo	0.00	[kg/cmq]
Tensione massima nel ferro	443.19	[kg/cmq]
Tensione minima nel ferro	-1917.14	[kg/cmq]

Diagramma M-N

M_R = 21002.00 [kgm] Momento risultante della combinazione di carico

Simbologia adottata

N° numero d'ordine
N sforzo normale di calcolo espresso in [kg]
M momento di calcolo espresso in [kgm]

N°	N	M
1	994965.84	-49703.24
2	966698.10	-55537.75
3	938430.28	-61305.94
4	910162.36	-66813.40
5	881894.64	-71977.26
6	853626.78	-76807.40
7	825359.14	-81314.52
8	797091.33	-85510.12
9	768823.43	-89406.61
10	740555.60	-93017.36
11	712287.97	-96356.70
12	684020.18	-99440.02
13	655752.24	-102283.74
14	627484.41	-104905.30
15	599216.71	-107323.20
16	570948.92	-109556.97
17	542681.11	-111627.03
18	514413.34	-113554.73
19	486145.49	-114235.40
20	457877.72	-113431.18

21	429609.90	-112151.33
22	401342.18	-110395.86
23	373074.39	-108164.77
24	344806.64	-105458.06
25	316538.73	-102275.72
26	288270.94	-98617.76
27	260003.18	-94484.19
28	231735.36	-89875.00
29	203467.55	-84573.14
30	175199.73	-78598.88
31	146931.94	-72481.98
32	118664.18	-66213.90
33	90396.36	-59785.92
34	62128.58	-53189.35
35	33860.71	-46417.38
36	5592.95	-39482.86
37	0.02	-38093.54
38	-27703.17	-31136.17
39	-55406.29	-24067.22
40	-83109.54	-16913.60
41	-110812.57	-9737.18
42	-138515.73	-2861.84
43	-166218.93	3620.71
44	-138515.73	10132.04
45	-110812.57	17233.04
46	-83109.54	24486.20
47	-55406.29	31666.24
48	-27703.17	38728.49
49	0.02	45649.35
50	5592.95	47027.55
51	33860.71	53883.75
52	62128.58	60541.36
53	90396.36	67003.24
54	118664.18	73278.96
55	146931.94	79378.17
56	175199.73	85310.55
57	203467.55	90441.20
58	231735.36	94994.53
59	260003.18	99072.21
60	288270.94	102674.28
61	316538.73	105800.74
62	344806.64	108451.57
63	373074.39	110626.78
64	401342.18	112326.36
65	429609.90	113550.33
66	457877.72	114298.67
67	486145.49	113092.67
68	514413.34	110902.87

69	542681.11	108598.32
70	570948.92	106159.25
71	599216.71	103566.36
72	627484.41	100800.88
73	655752.24	97844.72
74	684020.18	94680.50
75	712287.97	91291.67
76	740555.60	87662.41
77	768823.43	83777.82
78	797091.33	79623.73
79	825359.14	75186.95
80	853626.78	70454.95
81	881894.64	65416.05
82	910162.36	60059.36
83	938430.28	54381.37
84	966698.10	48563.77
85	994965.84	42686.09

10.4 Verifiche Piedritto

SEZIONE ATTACCO FONDAZIONE

Dati

Nome sezione: sezione

Tipo sezione	Rettangolare	
Base	90.0	[cm]
Altezza	60.0	[cm]

Caratteristiche geometriche

Area sezione	5400.00	[cmq]
Inerzia in direzione X	3645000.0	[cm^4]
Inerzia in direzione Y	1620000.0	[cm^4]
Inerzia in direzione XY	0.0	[cm^4]
Ascissa baricentro sezione	X_G = 45.00	[cm]
Ordinata baricentro sezione	Y_G = 30.00	[cm]

Elenco ferri

Simbologia adottata

Posizione riferita all'origine

N°	numero d'ordine
X	Ascissa posizione ferro espresso in [cm]
Y	Ordinata posizione ferro espresso in [cm]
d	Diametro ferro espresso in [mm]
ω	Area del ferro espresso in [cmq]

N°	X	Y	d	ω
1	3.80	6.30	16	2.01
2	20.28	6.30	16	2.01
3	36.76	6.30	16	2.01
4	53.24	6.30	16	2.01
5	69.72	6.30	16	2.01
6	86.20	6.30	16	2.01
7	85.90	53.40	22	3.80
8	78.46	53.40	24	4.52
9	71.03	53.40	22	3.80
10	63.59	53.40	24	4.52
11	56.15	53.40	22	3.80
12	48.72	53.40	24	4.52
13	41.28	53.40	22	3.80
14	33.85	53.40	24	4.52
15	26.41	53.40	22	3.80
16	18.97	53.40	24	4.52
17	11.54	53.40	22	3.80
18	4.10	53.40	24	4.52

Materiale impiegato : Calcestruzzo armato

Caratteristiche calcestruzzo

Resistenza caratteristica calcestruzzo	407.88	[kg/cmq]
Coeff. omogeneizzazione acciaio/calcestruzzo	15.00	
Coeff. omogeneizzazione calcestruzzo teso/compresso	1.00	

Forma diagramma tensione-deformazione - PARABOLA-RETTANGOLO

Caratteristiche acciaio per calcestruzzo

Tensione ammissibile acciaio	4588.65	[kg/cmq]
Tensione snervamento acciaio	4588.65	[kg/cmq]
Modulo elastico E	2100000.00	[kg/cmq]
Fattore di incrudimento acciaio	1.00	

Combinazioni

Simbologia adottata

N° numero d'ordine della combinazione
N sforzo normale espresso in[kg]
M_Y momento lungo Y espresso in [kgm]
M_X momento lungo X espresso in [kgm]
M_t momento torcente espresso in [kgm]
T_Y taglio lungo Y espresso in [kg]
T_X taglio lungo X espresso in [kg]
VD verifica di dominio
VT verifica tensionale (SLER - Combinazione rara, SLEF - Combinazione frequente, SLEQP - Combinazione quasi permanente, TAMM - Verifica a tensioni ammissibili)

N°	N	M_Y	M_X	M_t	T_Y	T_X	VD	VT
1	7112.00	-80676.00	0.00	0.00	45540.00	0.00	SI	NO
2	0.00	-35497.00	0.00	0.00	0.00	0.00	NO	SLEF

3	0.00	-19241.00	0.00	0.00	0.00	0.00	NO	SLEQP
4	0.00	-36838.00	0.00	0.00	0.00	0.00	NO	SLER

Risultati taglio

Simbologia adottata

V_{Rd} Resistenza di calcolo dell'elemento privo di armatura trasversali a taglio, espresso in [kg]
V_{Rcd} Resistenza di calcolo a "taglio compressione", espresso in [kg]
V_{Rsd} resistenza di calcolo a "taglio trazione", espresso in [kg]

T	V_{Rd}	V_{Rcd}	V_{Rsd}
45540.00	32133.93	147015.48	46114.47

Diametro e passo staffe ϕ12.00 - 24.00 [cm]

Sollecitazioni ultime

Simbologia adottata

N_u Sforzo normale ultimo, espresso in [kg]
M_{Xu} Momento ultimo in direzione X, espresso in [kgm]
M_{Yu} Momento ultimo in direzione Y, espresso in [kgm]
FS Fattore di sicurezza

N_u	M_{Xu}	M_{Yu}	FS
8635.84	0.00	-97961.89	1.21
727501.04	0.00	-80676.00	102.29
7112.00	0.00	-97638.04	1.21

Diagramma Mx-My

N = 7112.00 [kg] Sforzo normale della combinazione di carico

Simbologia adottata

N° numero d'ordine
M_X momento di calcolo lungo X espresso in [kgm]
M_Y momento di calcolo lungo Y espresso in [kgm]

N°	M_X	M_Y
1	103200.19	-20919.45
2	95074.76	4647.23
3	79910.27	23401.70
4	63270.82	31541.02
5	-48.63	34793.71
6	-63061.22	31584.21
7	-79391.77	23632.67
8	-94325.38	5080.00
9	-102443.19	-20414.07
10	-96226.84	-43428.83
11	-80208.49	-67124.17
12	-48150.83	-93543.84
13	643.20	-104387.96
14	49345.02	-93640.66

15	81128.10	-67465.44

Diagramma M-N

M_R = 80676.00 [kgm] Momento risultante della combinazione di carico

Simbologia adottata

N° numero d'ordine
N sforzo normale di calcolo espresso in [kg]
M momento di calcolo espresso in [kgm]

N°	N	M
1	1076195.04	-80695.23
2	1043798.64	-87265.08
3	1011402.06	-93497.27
4	979005.67	-99230.50
5	946609.14	-104475.04
6	914212.73	-109243.84
7	881816.20	-113552.61
8	849419.84	-117417.08
9	817023.35	-120856.35
10	784626.91	-123891.78
11	752230.50	-126546.13
12	719833.98	-128845.31
13	687437.56	-130818.91
14	655041.04	-132498.77
15	622644.59	-133069.59
16	590248.27	-132136.10
17	557851.77	-130579.99
18	525455.31	-128398.99
19	493058.88	-125595.10
20	460662.37	-122167.15
21	428265.81	-118116.49
22	395869.47	-113442.69
23	363473.01	-108144.71
24	331076.49	-101713.36
25	298680.09	-94662.67
26	266283.69	-87525.69
27	233887.14	-80298.07
28	201490.75	-72974.74
29	169094.31	-65552.27
30	136697.81	-58025.15
31	104301.26	-50387.90
32	71904.81	-42639.64
33	39508.54	-34791.21
34	7112.06	-26853.94
35	0.00	-25100.23
36	-30930.94	-17436.26
37	-61862.03	-9724.12

38	-92793.07	-1985.89
39	-123724.02	5741.07
40	-154655.07	13380.51
41	-185586.10	20749.04
42	-216516.99	27991.48
43	-216516.99	42852.93
44	-185586.10	51100.08
45	-154655.07	59219.14
46	-123724.02	67130.51
47	-92793.07	74795.11
48	-61862.03	82168.99
49	-30930.94	89235.89
50	0.00	96008.09
51	7112.06	97525.01
52	39508.54	104245.01
53	71904.81	109992.61
54	104301.26	115071.65
55	136697.81	119527.41
56	169094.31	123360.31
57	201490.75	126570.71
58	233887.14	129158.38
59	266283.69	131122.82
60	298680.09	132463.93
61	331076.49	133181.89
62	363473.01	129514.69
63	395869.47	125620.05
64	428265.81	121681.16
65	460662.37	117685.97
66	493058.88	113621.49
67	525455.31	109472.68
68	557851.77	105223.29
69	590248.27	100856.90
70	622644.59	96356.51
71	655041.04	91704.83
72	687437.56	86884.31
73	719833.98	81877.32
74	752230.50	76666.17
75	784626.91	71233.31
76	817023.35	65549.87
77	849419.84	59607.01
78	881816.20	53393.34
79	914212.73	46892.48
80	946609.14	40135.01
81	979005.67	33298.99
82	1011402.06	26398.52
83	1043798.64	19425.89
84	1076195.04	12373.48

Combinazione n° 2

Risultati tensioni ammissibili

Caratteristiche asse neutro sezione :

Distanza asse neutro dal lembo più compresso	21.799	[cm]
Punti di intersezione con perimetro sezione (5533.66 ; 0.00) (-9697.53 ; 60.00)		
Inclinazione asse neutro rispetto all'orizzontale	-0.226	[°]

Tensioni :

Tensione massima nel calcestruzzo	70.19	[kg/cmq]
Tensione minima nel calcestruzzo	0.00	[kg/cmq]
Tensione tangenziale nel calcestruzzo	0.00	[kg/cmq]
Tensione massima nel ferro	747.89	[kg/cmq]
Tensione minima nel ferro	-1542.74	[kg/cmq]

Risultati fessurazione

Momento di prima fessurazione	$M_X = 0.00$	[kgm]	$M_Y = -16803.48$	[kgm]
Tensione nell'acciaio	$\sigma = -730.30$	[kg/cmq]		
Tensione nel calcestruzzo	$\sigma_{ct} = -58.77$	[kg/cmq]		
Area efficace a trazione	$A_{eff} = 1719.06$	[cmq]		
Deformazione media acciaio teso	$\varepsilon = 0.0652$			
Distanza media tra le fessure	$S_{rm} = 150.5163$	[mm]		
Ampiezza delle fessure	$w = 0.1669$	[mm]		

Diagramma M-N

M_R = 35497.00 [kgm] Momento risultante della combinazione di carico

Simbologia adottata

N° numero d'ordine
N sforzo normale di calcolo espresso in [kg]
M momento di calcolo espresso in [kgm]

N°	N	M
1	1076195.04	-80695.23
2	1043798.64	-87265.08
3	1011402.06	-93497.27
4	979005.67	-99230.50
5	946609.14	-104475.04
6	914212.73	-109243.84
7	881816.20	-113552.61
8	849419.84	-117417.08
9	817023.35	-120856.35
10	784626.91	-123891.78
11	752230.50	-126546.13
12	719833.98	-128845.31
13	687437.56	-130818.91

14	655041.04	-132498.77
15	622644.59	-133069.59
16	590248.27	-132136.10
17	557851.77	-130579.99
18	525455.31	-128398.99
19	493058.88	-125595.10
20	460662.37	-122167.15
21	428265.81	-118116.49
22	395869.47	-113442.69
23	363473.01	-108144.71
24	331076.49	-101713.36
25	298680.09	-94662.67
26	266283.69	-87525.69
27	233887.14	-80298.07
28	201490.75	-72974.74
29	169094.31	-65552.27
30	136697.81	-58025.15
31	104301.26	-50387.90
32	71904.81	-42639.64
33	39508.54	-34791.21
34	7112.06	-26853.94
35	0.00	-25100.23
36	-30930.94	-17436.26
37	-61862.03	-9724.12
38	-92793.07	-1985.89
39	-123724.02	5741.07
40	-154655.07	13380.51
41	-185586.10	20749.04
42	-216516.99	27991.48
43	-216516.99	42852.93
44	-185586.10	51100.08
45	-154655.07	59219.14
46	-123724.02	67130.51
47	-92793.07	74795.11
48	-61862.03	82168.99
49	-30930.94	89235.89
50	0.00	96008.09
51	7112.06	97525.01
52	39508.54	104245.01
53	71904.81	109992.61
54	104301.26	115071.65
55	136697.81	119527.41
56	169094.31	123360.31
57	201490.75	126570.71
58	233887.14	129158.38
59	266283.69	131122.82
60	298680.09	132463.93
61	331076.49	133181.89

62	363473.01	129514.69
63	395869.47	125620.05
64	428265.81	121681.16
65	460662.37	117685.97
66	493058.88	113621.49
67	525455.31	109472.68
68	557851.77	105223.29
69	590248.27	100856.90
70	622644.59	96356.51
71	655041.04	91704.83
72	687437.56	86884.31
73	719833.98	81877.32
74	752230.50	76666.17
75	784626.91	71233.31
76	817023.35	65549.87
77	849419.84	59607.01
78	881816.20	53393.34
79	914212.73	46892.48
80	946609.14	40135.01
81	979005.67	33298.99
82	1011402.06	26398.52
83	1043798.64	19425.89
84	1076195.04	12373.48

Combinazione n° 3

Risultati tensioni ammissibili

Caratteristiche asse neutro sezione :

Distanza asse neutro dal lembo più compresso	21.799	[cm]
Punti di intersezione con perimetro sezione (5533.66 ; 0.00) (-9697.53 ; 60.00)		
Inclinazione asse neutro rispetto all'orizzontale	-0.226	[°]

Tensioni :

Tensione massima nel calcestruzzo	38.05	[kg/cmq]
Tensione minima nel calcestruzzo	0.00	[kg/cmq]
Tensione tangenziale nel calcestruzzo	0.00	[kg/cmq]
Tensione massima nel ferro	405.39	[kg/cmq]
Tensione minima nel ferro	-836.24	[kg/cmq]

Risultati fessurazione

Momento di prima fessurazione	$M_X = 0.00$	[kgm]	$M_Y = -16803.48$	[kgm]
Tensione nell'acciaio	$\sigma = -730.30$	[kg/cmq]		
Tensione nel calcestruzzo	$\sigma_{ct} = -58.77$	[kg/cmq]		
Area efficace a trazione	$A_{eff} = 1719.06$	[cmq]		
Deformazione media acciaio teso	$\varepsilon = 0.0246$			
Distanza media tra le fessure	$S_{rm} = 150.5163$	[mm]		

Ampiezza delle fessure w = 0.0630 [mm]

Diagramma M-N

M_R = 19241.00 [kgm] Momento risultante della combinazione di carico

Simbologia adottata

N° numero d'ordine
N sforzo normale di calcolo espresso in [kg]
M momento di calcolo espresso in [kgm]

N°	N	M
1	1076195.04	-80695.23
2	1043798.64	-87265.08
3	1011402.06	-93497.27
4	979005.67	-99230.50
5	946609.14	-104475.04
6	914212.73	-109243.84
7	881816.20	-113552.61
8	849419.84	-117417.08
9	817023.35	-120856.35
10	784626.91	-123891.78
11	752230.50	-126546.13
12	719833.98	-128845.31
13	687437.56	-130818.91
14	655041.04	-132498.77
15	622644.59	-133069.59
16	590248.27	-132136.10
17	557851.77	-130579.99
18	525455.31	-128398.99
19	493058.88	-125595.10
20	460662.37	-122167.15
21	428265.81	-118116.49
22	395869.47	-113442.69
23	363473.01	-108144.71
24	331076.49	-101713.36
25	298680.09	-94662.67
26	266283.69	-87525.69
27	233887.14	-80298.07
28	201490.75	-72974.74
29	169094.31	-65552.27
30	136697.81	-58025.15
31	104301.26	-50387.90
32	71904.81	-42639.64
33	39508.54	-34791.21
34	7112.06	-26853.94
35	0.00	-25100.23
36	-30930.94	-17436.26
37	-61862.03	-9724.12

38	-92793.07	-1985.89
39	-123724.02	5741.07
40	-154655.07	13380.51
41	-185586.10	20749.04
42	-216516.99	27991.48
43	-216516.99	42852.93
44	-185586.10	51100.08
45	-154655.07	59219.14
46	-123724.02	67130.51
47	-92793.07	74795.11
48	-61862.03	82168.99
49	-30930.94	89235.89
50	0.00	96008.09
51	7112.06	97525.01
52	39508.54	104245.01
53	71904.81	109992.61
54	104301.26	115071.65
55	136697.81	119527.41
56	169094.31	123360.31
57	201490.75	126570.71
58	233887.14	129158.38
59	266283.69	131122.82
60	298680.09	132463.93
61	331076.49	133181.89
62	363473.01	129514.69
63	395869.47	125620.05
64	428265.81	121681.16
65	460662.37	117685.97
66	493058.88	113621.49
67	525455.31	109472.68
68	557851.77	105223.29
69	590248.27	100856.90
70	622644.59	96356.51
71	655041.04	91704.83
72	687437.56	86884.31
73	719833.98	81877.32
74	752230.50	76666.17
75	784626.91	71233.31
76	817023.35	65549.87
77	849419.84	59607.01
78	881816.20	53393.34
79	914212.73	46892.48
80	946609.14	40135.01
81	979005.67	33298.99
82	1011402.06	26398.52
83	1043798.64	19425.89
84	1076195.04	12373.48

Combinazione n° 4

Risultati tensioni ammissibili

Caratteristiche asse neutro sezione :

Distanza asse neutro dal lembo più compresso 21.799 [cm]
Punti di intersezione con perimetro sezione (5533.66 ; 0.00) (-9697.53 ; 60.00)
Inclinazione asse neutro rispetto all'orizzontale -0.226 [°]

Tensioni :

Tensione massima nel calcestruzzo	72.85	[kg/cmq]
Tensione minima nel calcestruzzo	0.00	[kg/cmq]
Tensione tangenziale nel calcestruzzo	0.00	[kg/cmq]
Tensione massima nel ferro	776.14	[kg/cmq]
Tensione minima nel ferro	-1601.03	[kg/cmq]

Diagramma M-N

M_R = 36838.00 [kgm] Momento risultante della combinazione di carico

Simbologia adottata

N° numero d'ordine
N sforzo normale di calcolo espresso in [kg]
M momento di calcolo espresso in [kgm]

N°	N	M
1	1076195.04	-80695.23
2	1043798.64	-87265.08
3	1011402.06	-93497.27
4	979005.67	-99230.50
5	946609.14	-104475.04
6	914212.73	-109243.84
7	881816.20	-113552.61
8	849419.84	-117417.08
9	817023.35	-120856.35
10	784626.91	-123891.78
11	752230.50	-126546.13
12	719833.98	-128845.31
13	687437.56	-130818.91
14	655041.04	-132498.77
15	622644.59	-133069.59
16	590248.27	-132136.10
17	557851.77	-130579.99
18	525455.31	-128398.99
19	493058.88	-125595.10
20	460662.37	-122167.15
21	428265.81	-118116.49
22	395869.47	-113442.69
23	363473.01	-108144.71

24	331076.49	-101713.36
25	298680.09	-94662.67
26	266283.69	-87525.69
27	233887.14	-80298.07
28	201490.75	-72974.74
29	169094.31	-65552.27
30	136697.81	-58025.15
31	104301.26	-50387.90
32	71904.81	-42639.64
33	39508.54	-34791.21
34	7112.06	-26853.94
35	0.00	-25100.23
36	-30930.94	-17436.26
37	-61862.03	-9724.12
38	-92793.07	-1985.89
39	-123724.02	5741.07
40	-154655.07	13380.51
41	-185586.10	20749.04
42	-216516.99	27991.48
43	-216516.99	42852.93
44	-185586.10	51100.08
45	-154655.07	59219.14
46	-123724.02	67130.51
47	-92793.07	74795.11
48	-61862.03	82168.99
49	-30930.94	89235.89
50	0.00	96008.09
51	7112.06	97525.01
52	39508.54	104245.01
53	71904.81	109992.61
54	104301.26	115071.65
55	136697.81	119527.41
56	169094.31	123360.31
57	201490.75	126570.71
58	233887.14	129158.38
59	266283.69	131122.82
60	298680.09	132463.93
61	331076.49	133181.89
62	363473.01	129514.69
63	395869.47	125620.05
64	428265.81	121681.16
65	460662.37	117685.97
66	493058.88	113621.49
67	525455.31	109472.68
68	557851.77	105223.29
69	590248.27	100856.90
70	622644.59	96356.51
71	655041.04	91704.83

72	687437.56	86884.31
73	719833.98	81877.32
74	752230.50	76666.17
75	784626.91	71233.31
76	817023.35	65549.87
77	849419.84	59607.01
78	881816.20	53393.34
79	914212.73	46892.48
80	946609.14	40135.01
81	979005.67	33298.99
82	1011402.06	26398.52
83	1043798.64	19425.89
84	1076195.04	12373.48

SEZIONE ATTACCO TRAVERSO

Dati

Nome sezione: sezione

Tipo sezione	Rettangolare	
Base	90.0	[cm]
Altezza	60.0	[cm]

Caratteristiche geometriche

Area sezione	5400.00	[cmq]
Inerzia in direzione X	3645000.0	[cm^4]
Inerzia in direzione Y	1620000.0	[cm^4]
Inerzia in direzione XY	0.0	[cm^4]
Ascissa baricentro sezione	X_G = 45.00	[cm]
Ordinata baricentro sezione	Y_G = 30.00	[cm]

Elenco ferri

Simbologia adottata

Posizione riferita all'origine

N° numero d'ordine
X Ascissa posizione ferro espresso in [cm]
Y Ordinata posizione ferro espresso in [cm]
d Diametro ferro espresso in [mm]
ω Area del ferro espresso in [cmq]

N°	X	Y	d	ω
1	3.80	6.30	16	2.01
2	20.28	6.30	16	2.01
3	36.76	6.30	16	2.01
4	53.24	6.30	16	2.01
5	69.72	6.30	16	2.01

6	86.20	6.30	16	2.01
7	86.10	53.60	18	2.54
8	78.63	53.60	20	3.14
9	71.15	53.60	18	2.54
10	63.68	53.60	20	3.14
11	56.21	53.60	18	2.54
12	48.74	53.60	20	3.14
13	41.26	53.60	18	2.54
14	33.79	53.60	20	3.14
15	26.32	53.60	18	2.54
16	18.85	53.60	20	3.14
17	11.37	53.60	18	2.54
18	3.90	53.60	20	3.14

Materiale impiegato : Calcestruzzo armato

Caratteristiche calcestruzzo

Resistenza caratteristica calcestruzzo	407.88	[kg/cmq]
Coeff. omogeneizzazione acciaio/calcestruzzo	15.00	
Coeff. omogeneizzazione calcestruzzo teso/compresso	1.00	

Forma diagramma tensione-deformazione - PARABOLA-RETTANGOLO

Caratteristiche acciaio per calcestruzzo

Tensione ammissibile acciaio	4588.65	[kg/cmq]
Tensione snervamento acciaio	4588.65	[kg/cmq]
Modulo elastico E	2100000.00	[kg/cmq]
Fattore di incrudimento acciaio	1.00	

Combinazioni

Simbologia adottata

N° numero d'ordine della combinazione
N sforzo normale espresso in[kg]
M_Y momento lungo Y espresso in [kgm]
M_X momento lungo X espresso in [kgm]
M_t momento torcente espresso in [kgm]
T_Y taglio lungo Y espresso in [kg]
T_X taglio lungo X espresso in [kg]
VD verifica di dominio
VT verifica tensionale (SLER - Combinazione rara, SLEF - Combinazione frequente, SLEQP - Combinazione quasi permanente, TAMM - Verifica a tensioni ammissibili)

N°	N	M_Y	M_X	M_t	T_Y	T_X	VD	VT
1	35309.00	-61681.00	0.00	0.00	21956.00	0.00	SI	NO
2	0.00	-28935.00	0.00	0.00	0.00	0.00	NO	SLEF
3	0.00	-13424.00	0.00	0.00	0.00	0.00	NO	SLEQP
4	0.00	-31397.00	0.00	0.00	0.00	0.00	NO	SLER

Risultati taglio

Simbologia adottata

V_{Rd} Resistenza di calcolo dell'elemento privo di armatura trasversali a taglio, espresso in [kg]
V_{Rcd} Resistenza di calcolo a "taglio compressione", espresso in [kg]
V_{Rsd} resistenza di calcolo a "taglio trazione", espresso in [kg]

T	V_{Rd}	V_{Rcd}	V_{Rsd}
21956.00	32256.72	0.00	0.00

Diametro e passo staffe ϕ12.00 - 25.00 [cm]

Sollecitazioni ultime

Simbologia adottata
N_u Sforzo normale ultimo, espresso in [kg]
M_{Xu} Momento ultimo in direzione X, espresso in [kgm]
M_{Yu} Momento ultimo in direzione Y, espresso in [kgm]
FS Fattore di sicurezza

N_u	M_{Xu}	M_{Yu}	FS
44370.50	0.00	-77510.47	1.26
839802.46	0.00	-61681.00	23.78
35309.00	0.00	-75501.02	1.22

Diagramma Mx-My

N = 35309.00 [kg] Sforzo normale della combinazione di carico

Simbologia adottata
N° numero d'ordine
M_X momento di calcolo lungo X espresso in [kgm]
M_Y momento di calcolo lungo Y espresso in [kgm]

N°	M_X	M_Y
1	91039.09	-12934.34
2	84176.82	10201.29
3	70407.82	28002.79
4	53217.15	37022.43
5	-102.77	41072.43
6	-53084.24	37078.57
7	-69976.42	28231.51
8	-83540.18	10611.24
9	-90393.57	-12456.58
10	-84867.85	-33872.44
11	-71034.13	-54621.33
12	-45756.20	-73688.98
13	533.94	-81983.33
14	46824.08	-73688.99
15	71830.49	-54950.63

Diagramma M-N

M_R = 61681.00 [kgm] Momento risultante della combinazione di carico

Simbologia adottata

N° numero d'ordine
N sforzo normale di calcolo espresso in [kg]
M momento di calcolo espresso in [kgm]

N°	N	M
1	1013016.70	-66206.34
2	983389.30	-72223.00
3	953761.82	-77985.39
4	924134.25	-83328.02
5	894506.82	-88259.57
6	864879.24	-92788.66
7	835251.63	-96927.18
8	805624.27	-100687.13
9	775996.64	-104081.30
10	746369.28	-107125.26
11	716741.61	-109835.56
12	687114.17	-112230.13
13	657486.65	-114329.06
14	627859.06	-116154.90
15	598231.65	-117731.87
16	568604.16	-118762.81
17	538976.64	-118093.52
18	509349.09	-116903.37
19	479721.62	-115190.26
20	450094.13	-112955.90
21	420466.58	-110199.57
22	390839.10	-106921.59
23	361211.51	-103123.04
24	331584.02	-98801.18
25	301956.48	-93959.02
26	272329.05	-88310.54
27	242701.61	-81922.54
28	213074.07	-75424.26
29	183446.55	-68808.22
30	153819.02	-62070.45
31	124191.43	-55204.35
32	94563.96	-48203.18
33	64936.53	-41064.62
34	35308.98	-33802.25
35	-0.05	-25005.25
36	-30711.65	-17248.07
37	-61423.35	-9423.48
38	-92134.87	-1578.94
39	-122846.53	6154.33
40	-153558.25	13467.46
41	-153558.25	28279.03
42	-122846.53	36472.57
43	-92134.87	44540.35

44	-61423.35	52403.56
45	-30711.65	60024.76
46	-0.05	67361.06
47	35308.98	75421.04
48	64936.53	81887.66
49	94563.96	88094.88
50	124191.43	93664.25
51	153819.02	98533.02
52	183446.55	102879.47
53	213074.07	106704.53
54	242701.61	110007.83
55	272329.05	112789.59
56	301956.48	115049.43
57	331584.02	116788.03
58	361211.51	118005.31
59	390839.10	118701.00
60	420466.58	116546.96
61	450094.13	113597.19
62	479721.62	110573.61
63	509349.09	107460.35
64	538976.64	104241.48
65	568604.16	100899.68
66	598231.65	97417.83
67	627859.06	93778.86
68	657486.65	89965.69
69	687114.17	85961.59
70	716741.61	81750.13
71	746369.28	77315.22
72	775996.64	72641.35
73	805624.27	67709.28
74	835251.63	62499.28
75	864879.24	57008.90
76	894506.82	51224.90
77	924134.25	45151.75
78	953761.82	38970.55
79	983389.30	32728.29
80	1013016.70	26416.67

Combinazione n° 2

<u>Risultati tensioni ammissibili</u>

Caratteristiche asse neutro sezione :

Distanza asse neutro dal lembo più compresso 18.844 [cm]

Punti di intersezione con perimetro sezione (4343.03 ; 0.00) (-9485.06 ; 60.00)

Inclinazione asse neutro rispetto all'orizzontale -0.249 [°]

Tensioni :

Tensione massima nel calcestruzzo	64.35	[kg/cmq]
Tensione minima nel calcestruzzo	0.00	[kg/cmq]
Tensione tangenziale nel calcestruzzo	0.00	[kg/cmq]
Tensione massima nel ferro	641.74	[kg/cmq]
Tensione minima nel ferro	-1799.48	[kg/cmq]

Risultati fessurazione

Momento di prima fessurazione	$M_X = 0.00$	[kgm]	$M_Y = -15497.07$	[kgm]
Tensione nell'acciaio	$\sigma = -963.77$	[kg/cmq]		
Tensione nel calcestruzzo	$\sigma_{ct} = -75.99$	[kg/cmq]		
Area efficace a trazione	$A_{eff} = 1852.00$	[cmq]		
Deformazione media acciaio teso	$\varepsilon = 0.0734$			
Distanza media tra le fessure	$S_{rm} = 163.3807$	[mm]		
Ampiezza delle fessure	$w = 0.2039$	[mm]		

Diagramma M-N

M_R = 28935.00 [kgm] Momento risultante della combinazione di carico

Simbologia adottata

N° numero d'ordine
N sforzo normale di calcolo espresso in [kg]
M momento di calcolo espresso in [kgm]

N°	N	M
1	1013016.70	-66206.34
2	983389.30	-72223.00
3	953761.82	-77985.39
4	924134.25	-83328.02
5	894506.82	-88259.57
6	864879.24	-92788.66
7	835251.63	-96927.18
8	805624.27	-100687.13
9	775996.64	-104081.30
10	746369.28	-107125.26
11	716741.61	-109835.56
12	687114.17	-112230.13
13	657486.65	-114329.06
14	627859.06	-116154.90
15	598231.65	-117731.87
16	568604.16	-118762.81
17	538976.64	-118093.52
18	509349.09	-116903.37
19	479721.62	-115190.26
20	450094.13	-112955.90
21	420466.58	-110199.57
22	390839.10	-106921.59
23	361211.51	-103123.04

24	331584.02	-98801.18
25	301956.48	-93959.02
26	272329.05	-88310.54
27	242701.61	-81922.54
28	213074.07	-75424.26
29	183446.55	-68808.22
30	153819.02	-62070.45
31	124191.43	-55204.35
32	94563.96	-48203.18
33	64936.53	-41064.62
34	35308.98	-33802.25
35	-0.05	-25005.25
36	-30711.65	-17248.07
37	-61423.35	-9423.48
38	-92134.87	-1578.94
39	-122846.53	6154.33
40	-153558.25	13467.46
41	-153558.25	28279.03
42	-122846.53	36472.57
43	-92134.87	44540.35
44	-61423.35	52403.56
45	-30711.65	60024.76
46	-0.05	67361.06
47	35308.98	75421.04
48	64936.53	81887.66
49	94563.96	88094.88
50	124191.43	93664.25
51	153819.02	98533.02
52	183446.55	102879.47
53	213074.07	106704.53
54	242701.61	110007.83
55	272329.05	112789.59
56	301956.48	115049.43
57	331584.02	116788.03
58	361211.51	118005.31
59	390839.10	118701.00
60	420466.58	116546.96
61	450094.13	113597.19
62	479721.62	110573.61
63	509349.09	107460.35
64	538976.64	104241.48
65	568604.16	100899.68
66	598231.65	97417.83
67	627859.06	93778.86
68	657486.65	89965.69
69	687114.17	85961.59
70	716741.61	81750.13
71	746369.28	77315.22

72	775996.64	72641.35
73	805624.27	67709.28
74	835251.63	62499.28
75	864879.24	57008.90
76	894506.82	51224.90
77	924134.25	45151.75
78	953761.82	38970.55
79	983389.30	32728.29
80	1013016.70	26416.67

Combinazione n° 3

Risultati tensioni ammissibili

Caratteristiche asse neutro sezione :

Distanza asse neutro dal lembo più compresso 18.844 [cm]
Punti di intersezione con perimetro sezione (4343.03 ; 0.00) (-9485.06 ; 60.00)
Inclinazione asse neutro rispetto all'orizzontale -0.249 [°]

Tensioni :

Tensione massima nel calcestruzzo	29.86	[kg/cmq]
Tensione minima nel calcestruzzo	0.00	[kg/cmq]
Tensione tangenziale nel calcestruzzo	0.00	[kg/cmq]
Tensione massima nel ferro	297.72	[kg/cmq]
Tensione minima nel ferro	-834.84	[kg/cmq]

Risultati fessurazione

Momento di prima fessurazione	$M_X = 0.00$	[kgm]	$M_Y = -15497.07$	[kgm]
Tensione nell'acciaio	$\sigma = -963.77$	[kg/cmq]		
Tensione nel calcestruzzo	$\sigma_{ct} = -75.99$	[kg/cmq]		
Area efficace a trazione	$A_{eff} = 1852.00$	[cmq]		
Deformazione media acciaio teso	$\varepsilon = 0.0000$			
Distanza media tra le fessure	$S_{rm} = 0.0000$	[mm]		
Ampiezza delle fessure	$w = 0.0000$	[mm]		

Diagramma M-N

M_R = 13424.00 [kgm] Momento risultante della combinazione di carico

Simbologia adottata

N° numero d'ordine
N sforzo normale di calcolo espresso in [kg]
M momento di calcolo espresso in [kgm]

N°	N	M
1	1013016.70	-66206.34
2	983389.30	-72223.00
3	953761.82	-77985.39

4	924134.25	-83328.02
5	894506.82	-88259.57
6	864879.24	-92788.66
7	835251.63	-96927.18
8	805624.27	-100687.13
9	775996.64	-104081.30
10	746369.28	-107125.26
11	716741.61	-109835.56
12	687114.17	-112230.13
13	657486.65	-114329.06
14	627859.06	-116154.90
15	598231.65	-117731.87
16	568604.16	-118762.81
17	538976.64	-118093.52
18	509349.09	-116903.37
19	479721.62	-115190.26
20	450094.13	-112955.90
21	420466.58	-110199.57
22	390839.10	-106921.59
23	361211.51	-103123.04
24	331584.02	-98801.18
25	301956.48	-93959.02
26	272329.05	-88310.54
27	242701.61	-81922.54
28	213074.07	-75424.26
29	183446.55	-68808.22
30	153819.02	-62070.45
31	124191.43	-55204.35
32	94563.96	-48203.18
33	64936.53	-41064.62
34	35308.98	-33802.25
35	-0.05	-25005.25
36	-30711.65	-17248.07
37	-61423.35	-9423.48
38	-92134.87	-1578.94
39	-122846.53	6154.33
40	-153558.25	13467.46
41	-153558.25	28279.03
42	-122846.53	36472.57
43	-92134.87	44540.35
44	-61423.35	52403.56
45	-30711.65	60024.76
46	-0.05	67361.06
47	35308.98	75421.04
48	64936.53	81887.66
49	94563.96	88094.88
50	124191.43	93664.25
51	153819.02	98533.02

52	183446.55	102879.47
53	213074.07	106704.53
54	242701.61	110007.83
55	272329.05	112789.59
56	301956.48	115049.43
57	331584.02	116788.03
58	361211.51	118005.31
59	390839.10	118701.00
60	420466.58	116546.96
61	450094.13	113597.19
62	479721.62	110573.61
63	509349.09	107460.35
64	538976.64	104241.48
65	568604.16	100899.68
66	598231.65	97417.83
67	627859.06	93778.86
68	657486.65	89965.69
69	687114.17	85961.59
70	716741.61	81750.13
71	746369.28	77315.22
72	775996.64	72641.35
73	805624.27	67709.28
74	835251.63	62499.28
75	864879.24	57008.90
76	894506.82	51224.90
77	924134.25	45151.75
78	953761.82	38970.55
79	983389.30	32728.29
80	1013016.70	26416.67

Combinazione n° 4

Risultati tensioni ammissibili

Caratteristiche asse neutro sezione :

Distanza asse neutro dal lembo più compresso 18.844 [cm]
Punti di intersezione con perimetro sezione (4343.03 ; 0.00) (-9485.06 ; 60.00)
Inclinazione asse neutro rispetto all'orizzontale -0.249 [°]

Tensioni :

Tensione massima nel calcestruzzo	69.83	[kg/cmq]
Tensione minima nel calcestruzzo	0.00	[kg/cmq]
Tensione tangenziale nel calcestruzzo	0.00	[kg/cmq]
Tensione massima nel ferro	696.34	[kg/cmq]
Tensione minima nel ferro	-1952.59	[kg/cmq]

Diagramma M-N

M_R = 31397.00 [kgm] Momento risultante della combinazione di carico

Simbologia adottata

N° numero d'ordine
N sforzo normale di calcolo espresso in [kg]
M momento di calcolo espresso in [kgm]

N°	N	M
1	1013016.70	-66206.34
2	983389.30	-72223.00
3	953761.82	-77985.39
4	924134.25	-83328.02
5	894506.82	-88259.57
6	864879.24	-92788.66
7	835251.63	-96927.18
8	805624.27	-100687.13
9	775996.64	-104081.30
10	746369.28	-107125.26
11	716741.61	-109835.56
12	687114.17	-112230.13
13	657486.65	-114329.06
14	627859.06	-116154.90
15	598231.65	-117731.87
16	568604.16	-118762.81
17	538976.64	-118093.52
18	509349.09	-116903.37
19	479721.62	-115190.26
20	450094.13	-112955.90
21	420466.58	-110199.57
22	390839.10	-106921.59
23	361211.51	-103123.04
24	331584.02	-98801.18
25	301956.48	-93959.02
26	272329.05	-88310.54
27	242701.61	-81922.54
28	213074.07	-75424.26
29	183446.55	-68808.22
30	153819.02	-62070.45
31	124191.43	-55204.35
32	94563.96	-48203.18
33	64936.53	-41064.62
34	35308.98	-33802.25
35	-0.05	-25005.25
36	-30711.65	-17248.07
37	-61423.35	-9423.48
38	-92134.87	-1578.94
39	-122846.53	6154.33
40	-153558.25	13467.46
41	-153558.25	28279.03

42	-122846.53	36472.57
43	-92134.87	44540.35
44	-61423.35	52403.56
45	-30711.65	60024.76
46	-0.05	67361.06
47	35308.98	75421.04
48	64936.53	81887.66
49	94563.96	88094.88
50	124191.43	93664.25
51	153819.02	98533.02
52	183446.55	102879.47
53	213074.07	106704.53
54	242701.61	110007.83
55	272329.05	112789.59
56	301956.48	115049.43
57	331584.02	116788.03
58	361211.51	118005.31
59	390839.10	118701.00
60	420466.58	116546.96
61	450094.13	113597.19
62	479721.62	110573.61
63	509349.09	107460.35
64	538976.64	104241.48
65	568604.16	100899.68
66	598231.65	97417.83
67	627859.06	93778.86
68	657486.65	89965.69
69	687114.17	85961.59
70	716741.61	81750.13
71	746369.28	77315.22
72	775996.64	72641.35
73	805624.27	67709.28
74	835251.63	62499.28
75	864879.24	57008.90
76	894506.82	51224.90
77	924134.25	45151.75
78	953761.82	38970.55
79	983389.30	32728.29
80	1013016.70	26416.67

10.5 Verifiche Fondazione

SEZIONE ALL'INCASTRO

Dati

Nome sezione: sezione

Tipo sezione	Rettangolare	
Base	90.0	[cm]
Altezza	70.0	[cm]

Caratteristiche geometriche

Area sezione	5400.00	[cmq]
Inerzia in direzione X	3645000.0	[cm^4]
Inerzia in direzione Y	1620000.0	[cm^4]
Inerzia in direzione XY	0.0	[cm^4]
Ascissa baricentro sezione	X_G = 45.00	[cm]
Ordinata baricentro sezione	Y_G = 30.00	[cm]

Elenco ferri

Simbologia adottata

Posizione riferita all'origine

N°	numero d'ordine
X	Ascissa posizione ferro espresso in [cm]
Y	Ordinata posizione ferro espresso in [cm]
d	Diametro ferro espresso in [mm]
ω	Area del ferro espresso in [cmq]

N°	X	Y	d	ω
1	4.00	6.50	20	3.14
2	20.40	6.50	20	3.14
3	36.80	6.50	20	3.14
4	53.20	6.50	20	3.14
5	69.60	6.50	20	3.14
6	86.00	6.50	20	3.14
7	85.80	53.30	22	3.80
8	78.38	53.30	24	4.52
9	70.96	53.30	22	3.80
10	63.55	53.30	24	4.52
11	56.13	53.30	22	3.80
12	48.71	53.30	24	4.52
13	41.29	53.30	22	3.80
14	33.87	53.30	24	4.52
15	26.45	53.30	22	3.80
16	19.04	53.30	24	4.52
17	11.62	53.30	22	3.80
18	4.20	53.30	24	4.52

Materiale impiegato : Calcestruzzo armato

Caratteristiche calcestruzzo

Resistenza caratteristica calcestruzzo	356.89	[kg/cmq]
Coeff. omogeneizzazione acciaio/calcestruzzo	15.00	
Coeff. omogeneizzazione calcestruzzo teso/compresso	1.00	

Forma diagramma tensione-deformazione - PARABOLA-RETTANGOLO

Caratteristiche acciaio per calcestruzzo

Tensione ammissibile acciaio	4588.65	[kg/cmq]
Tensione snervamento acciaio	4588.65	[kg/cmq]
Modulo elastico E	2100000.00	[kg/cmq]
Fattore di incrudimento acciaio	1.00	

Combinazioni

Simbologia adottata

N° numero d'ordine della combinazione
N sforzo normale espresso in[kg]
M_Y momento lungo Y espresso in [kgm]
M_X momento lungo X espresso in [kgm]
M_t momento torcente espresso in [kgm]
T_Y taglio lungo Y espresso in [kg]
T_X taglio lungo X espresso in [kg]
VD verifica di dominio
VT verifica tensionale (SLER - Combinazione rara, SLEF - Combinazione frequente, SLEQP - Combinazione quasi permanente, TAMM - Verifica a tensioni ammissibili)

N°	N	M_Y	M_X	M_t	T_Y	T_X	VD	VT
1	43865.00	-83639.00	0.00	0.00	34739.00	0.00	SI	NO
2	0.00	-34674.00	0.00	0.00	0.00	0.00	NO	SLEF
3	0.00	-18502.00	0.00	0.00	0.00	0.00	NO	SLEQP
4	0.00	-36253.00	0.00	0.00	0.00	0.00	NO	SLER

Risultati taglio

Simbologia adottata

V_{Rd} Resistenza di calcolo dell'elemento privo di armatura trasversali a taglio, espresso in [kg]
V_{Rcd} Resistenza di calcolo a "taglio compressione", espresso in [kg]
V_{Rsd} resistenza di calcolo a "taglio trazione", espresso in [kg]

T	V_{Rd}	V_{Rcd}	V_{Rsd}
34739.00	35784.78	0.00	0.00

Diametro e passo staffe ϕ12.00 - 20.00 [cm]

Sollecitazioni ultime

Simbologia adottata

N_u Sforzo normale ultimo, espresso in [kg]
M_{Xu} Momento ultimo in direzione X, espresso in [kgm]
M_{Yu} Momento ultimo in direzione Y, espresso in [kgm]
FS Fattore di sicurezza

N_u	M_{Xu}	M_{Yu}	FS
56180.03	0.00	-107120.52	1.28
636944.53	0.00	-83639.00	14.52
43865.00	0.00	-104795.29	1.25

Diagramma Mx-My

N = 43865.00 [kg] Sforzo normale della combinazione di carico

Simbologia adottata

N° numero d'ordine
M_X momento di calcolo lungo X espresso in [kgm]
M_Y momento di calcolo lungo Y espresso in [kgm]

N°	M_X	M_Y
1	117693.33	-13770.43
2	107921.48	11486.33
3	87394.32	36150.30
4	60572.57	50920.46
5	-183.41	55641.24
6	-60640.73	50987.67
7	-86978.43	36519.00
8	-107257.17	11995.58
9	-117018.99	-13274.79
10	-108489.22	-37320.00
11	-89015.27	-63644.32
12	-49724.49	-95644.21
13	641.63	-110311.99
14	50811.45	-95800.29
15	89798.88	-64072.78

Diagramma M-N

M_R = 83639.00 [kgm] Momento risultante della combinazione di carico

Simbologia adottata

N° numero d'ordine
N sforzo normale di calcolo espresso in [kg]
M momento di calcolo espresso in [kgm]

N°	N	M
1	999678.01	-69154.60
2	968845.34	-75531.05
3	938012.61	-81805.48
4	907179.92	-87711.38
5	876347.29	-93178.68
6	845514.68	-98222.54
7	814681.94	-102864.19
8	783849.26	-107124.71
9	753016.52	-111026.14
10	722183.85	-114594.76
11	691351.26	-117857.46
12	660518.54	-120841.66
13	629685.85	-123579.30
14	598853.17	-126102.62
15	568020.51	-128444.76

16	537187.81	-129704.90
17	506355.13	-128805.78
18	475522.55	-127261.34
19	444689.75	-125070.40
20	413857.17	-122236.01
21	383024.45	-118754.52
22	352191.75	-114630.15
23	321359.11	-109859.25
24	290526.33	-104147.30
25	259693.74	-97511.07
26	228861.03	-90741.15
27	198028.40	-83893.38
28	167195.74	-76960.58
29	136363.08	-69941.46
30	105530.37	-62831.90
31	74697.61	-55626.99
32	43865.08	-48322.47
33	0.07	-37771.88
34	-30502.71	-30339.37
35	-61005.38	-22841.74
36	-91508.20	-15297.60
37	-122010.95	-7728.49
38	-152513.51	-170.03
39	-183016.27	7308.11
40	-213519.05	14544.83
41	-244021.80	21656.28
42	-244021.80	35969.05
43	-213519.05	43792.98
44	-183016.27	51698.05
45	-152513.51	59489.09
46	-122010.95	67112.44
47	-91508.20	74533.02
48	-61005.38	81716.35
49	-30502.71	88663.51
50	0.07	95387.59
51	43865.08	104671.97
52	74697.61	110125.13
53	105530.37	114853.43
54	136363.08	118937.76
55	167195.74	122377.79
56	198028.40	125173.59
57	228861.03	127323.86
58	259693.74	128829.93
59	290526.33	129691.49
60	321359.11	126906.66
61	352191.75	122992.98
62	383024.45	119047.15
63	413857.17	115058.58

64	444689.75	111014.89
65	475522.55	106902.64
66	506355.13	102706.26
67	537187.81	98409.56
68	568020.51	93996.06
69	598853.17	89448.51
70	629685.85	84749.24
71	660518.54	79880.25
72	691351.26	74823.32
73	722183.85	69560.16
74	753016.52	64058.22
75	783849.26	58313.20
76	814681.94	52310.13
77	845514.68	46031.44
78	876347.29	39549.57
79	907179.92	33007.04
80	938012.61	26400.08
81	968845.34	19721.16
82	999678.01	12963.04

Combinazione n° 2

Risultati tensioni ammissibili

Caratteristiche asse neutro sezione :

Distanza asse neutro dal lembo più compresso 21.262 [cm]
Punti di intersezione con perimetro sezione (5457.18 ; 0.00) (-9942.22 ; 60.00)
Inclinazione asse neutro rispetto all'orizzontale -0.223 [°]

Tensioni :

Tensione massima nel calcestruzzo	65.89	[kg/cmq]
Tensione minima nel calcestruzzo	0.00	[kg/cmq]
Tensione tangenziale nel calcestruzzo	0.00	[kg/cmq]
Tensione massima nel ferro	685.48	[kg/cmq]
Tensione minima nel ferro	-1504.73	[kg/cmq]

Risultati fessurazione

Momento di prima fessurazione	$M_X = 0.00$	[kgm]	$M_Y = -15585.58$	[kgm]
Tensione nell'acciaio	$\sigma = -676.36$	[kg/cmq]		
Tensione nel calcestruzzo	$\sigma_{ct} = -54.45$	[kg/cmq]		
Area efficace a trazione	$A_{eff} = 1743.18$	[cmq]		
Deformazione media acciaio teso	$\varepsilon = 0.0644$			
Distanza media tra le fessure	$S_{rm} = 153.0353$	[mm]		
Ampiezza delle fessure	$w = 0.1676$	[mm]		

Diagramma M-N

M_R = 34674.00 [kgm] Momento risultante della combinazione di carico

Simbologia adottata

N° numero d'ordine
N sforzo normale di calcolo espresso in [kg]
M momento di calcolo espresso in [kgm]

N°	N	M
1	999678.01	-69154.60
2	968845.34	-75531.05
3	938012.61	-81805.48
4	907179.92	-87711.38
5	876347.29	-93178.68
6	845514.68	-98222.54
7	814681.94	-102864.19
8	783849.26	-107124.71
9	753016.52	-111026.14
10	722183.85	-114594.76
11	691351.26	-117857.46
12	660518.54	-120841.66
13	629685.85	-123579.30
14	598853.17	-126102.62
15	568020.51	-128444.76
16	537187.81	-129704.90
17	506355.13	-128805.78
18	475522.55	-127261.34
19	444689.75	-125070.40
20	413857.17	-122236.01
21	383024.45	-118754.52
22	352191.75	-114630.15
23	321359.11	-109859.25
24	290526.33	-104147.30
25	259693.74	-97511.07
26	228861.03	-90741.15
27	198028.40	-83893.38
28	167195.74	-76960.58
29	136363.08	-69941.46
30	105530.37	-62831.90
31	74697.61	-55626.99
32	43865.08	-48322.47
33	0.07	-37771.88
34	-30502.71	-30339.37
35	-61005.38	-22841.74
36	-91508.20	-15297.60
37	-122010.95	-7728.49
38	-152513.51	-170.03
39	-183016.27	7308.11
40	-213519.05	14544.83
41	-244021.80	21656.28

42	-244021.80	35969.05
43	-213519.05	43792.98
44	-183016.27	51698.05
45	-152513.51	59489.09
46	-122010.95	67112.44
47	-91508.20	74533.02
48	-61005.38	81716.35
49	-30502.71	88663.51
50	0.07	95387.59
51	43865.08	104671.97
52	74697.61	110125.13
53	105530.37	114853.43
54	136363.08	118937.76
55	167195.74	122377.79
56	198028.40	125173.59
57	228861.03	127323.86
58	259693.74	128829.93
59	290526.33	129691.49
60	321359.11	126906.66
61	352191.75	122992.98
62	383024.45	119047.15
63	413857.17	115058.58
64	444689.75	111014.89
65	475522.55	106902.64
66	506355.13	102706.26
67	537187.81	98409.56
68	568020.51	93996.06
69	598853.17	89448.51
70	629685.85	84749.24
71	660518.54	79880.25
72	691351.26	74823.32
73	722183.85	69560.16
74	753016.52	64058.22
75	783849.26	58313.20
76	814681.94	52310.13
77	845514.68	46031.44
78	876347.29	39549.57
79	907179.92	33007.04
80	938012.61	26400.08
81	968845.34	19721.16
82	999678.01	12963.04

Combinazione n° 3

<u>Risultati tensioni ammissibili</u>

Caratteristiche asse neutro sezione :

Distanza asse neutro dal lembo più compresso 21.262 [cm]

Punti di intersezione con perimetro sezione (5457.18 ; 0.00) (-9942.22 ; 60.00)
Inclinazione asse neutro rispetto all'orizzontale -0.223 [°]

Tensioni :

Tensione massima nel calcestruzzo	35.16	[kg/cmq]
Tensione minima nel calcestruzzo	0.00	[kg/cmq]
Tensione tangenziale nel calcestruzzo	0.00	[kg/cmq]
Tensione massima nel ferro	365.77	[kg/cmq]
Tensione minima nel ferro	-802.92	[kg/cmq]

Risultati fessurazione

Momento di prima fessurazione	$M_X = 0.00$	[kgm]	$M_Y = -15585.58$	[kgm]
Tensione nell'acciaio	$\sigma = -676.36$	[kg/cmq]		
Tensione nel calcestruzzo	$\sigma_{ct} = -54.45$	[kg/cmq]		
Area efficace a trazione	$A_{eff} = 1743.18$	[cmq]		
Deformazione media acciaio teso	$\varepsilon = 0.0247$			
Distanza media tra le fessure	$S_{rm} = 153.0353$	[mm]		
Ampiezza delle fessure	$w = 0.0642$	[mm]		

Diagramma M-N

M_R = 18502.00 [kgm] Momento risultante della combinazione di carico

Simbologia adottata

N° numero d'ordine
N sforzo normale di calcolo espresso in [kg]
M momento di calcolo espresso in [kgm]

N°	N	M
1	999678.01	-69154.60
2	968845.34	-75531.05
3	938012.61	-81805.48
4	907179.92	-87711.38
5	876347.29	-93178.68
6	845514.68	-98222.54
7	814681.94	-102864.19
8	783849.26	-107124.71
9	753016.52	-111026.14
10	722183.85	-114594.76
11	691351.26	-117857.46
12	660518.54	-120841.66
13	629685.85	-123579.30
14	598853.17	-126102.62
15	568020.51	-128444.76
16	537187.81	-129704.90
17	506355.13	-128805.78
18	475522.55	-127261.34
19	444689.75	-125070.40

20	413857.17	-122236.01
21	383024.45	-118754.52
22	352191.75	-114630.15
23	321359.11	-109859.25
24	290526.33	-104147.30
25	259693.74	-97511.07
26	228861.03	-90741.15
27	198028.40	-83893.38
28	167195.74	-76960.58
29	136363.08	-69941.46
30	105530.37	-62831.90
31	74697.61	-55626.99
32	43865.08	-48322.47
33	0.07	-37771.88
34	-30502.71	-30339.37
35	-61005.38	-22841.74
36	-91508.20	-15297.60
37	-122010.95	-7728.49
38	-152513.51	-170.03
39	-183016.27	7308.11
40	-213519.05	14544.83
41	-244021.80	21656.28
42	-244021.80	35969.05
43	-213519.05	43792.98
44	-183016.27	51698.05
45	-152513.51	59489.09
46	-122010.95	67112.44
47	-91508.20	74533.02
48	-61005.38	81716.35
49	-30502.71	88663.51
50	0.07	95387.59
51	43865.08	104671.97
52	74697.61	110125.13
53	105530.37	114853.43
54	136363.08	118937.76
55	167195.74	122377.79
56	198028.40	125173.59
57	228861.03	127323.86
58	259693.74	128829.93
59	290526.33	129691.49
60	321359.11	126906.66
61	352191.75	122992.98
62	383024.45	119047.15
63	413857.17	115058.58
64	444689.75	111014.89
65	475522.55	106902.64
66	506355.13	102706.26
67	537187.81	98409.56

68	568020.51	93996.06
69	598853.17	89448.51
70	629685.85	84749.24
71	660518.54	79880.25
72	691351.26	74823.32
73	722183.85	69560.16
74	753016.52	64058.22
75	783849.26	58313.20
76	814681.94	52310.13
77	845514.68	46031.44
78	876347.29	39549.57
79	907179.92	33007.04
80	938012.61	26400.08
81	968845.34	19721.16
82	999678.01	12963.04

Combinazione n° 4

Risultati tensioni ammissibili

Caratteristiche asse neutro sezione :

Distanza asse neutro dal lembo più compresso 21.262 [cm]
Punti di intersezione con perimetro sezione (5457.18 ; 0.00) (-9942.22 ; 60.00)
Inclinazione asse neutro rispetto all'orizzontale -0.223 [°]

Tensioni :

Tensione massima nel calcestruzzo	68.89	[kg/cmq]
Tensione minima nel calcestruzzo	0.00	[kg/cmq]
Tensione tangenziale nel calcestruzzo	0.00	[kg/cmq]
Tensione massima nel ferro	716.70	[kg/cmq]
Tensione minima nel ferro	-1573.25	[kg/cmq]

Diagramma M-N

M_R = 36253.00 [kgm] Momento risultante della combinazione di carico

Simbologia adottata

N° numero d'ordine
N sforzo normale di calcolo espresso in [kg]
M momento di calcolo espresso in [kgm]

N°	N	M
1	999678.01	-69154.60
2	968845.34	-75531.05
3	938012.61	-81805.48
4	907179.92	-87711.38
5	876347.29	-93178.68
6	845514.68	-98222.54
7	814681.94	-102864.19

8	783849.26	-107124.71
9	753016.52	-111026.14
10	722183.85	-114594.76
11	691351.26	-117857.46
12	660518.54	-120841.66
13	629685.85	-123579.30
14	598853.17	-126102.62
15	568020.51	-128444.76
16	537187.81	-129704.90
17	506355.13	-128805.78
18	475522.55	-127261.34
19	444689.75	-125070.40
20	413857.17	-122236.01
21	383024.45	-118754.52
22	352191.75	-114630.15
23	321359.11	-109859.25
24	290526.33	-104147.30
25	259693.74	-97511.07
26	228861.03	-90741.15
27	198028.40	-83893.38
28	167195.74	-76960.58
29	136363.08	-69941.46
30	105530.37	-62831.90
31	74697.61	-55626.99
32	43865.08	-48322.47
33	0.07	-37771.88
34	-30502.71	-30339.37
35	-61005.38	-22841.74
36	-91508.20	-15297.60
37	-122010.95	-7728.49
38	-152513.51	-170.03
39	-183016.27	7308.11
40	-213519.05	14544.83
41	-244021.80	21656.28
42	-244021.80	35969.05
43	-213519.05	43792.98
44	-183016.27	51698.05
45	-152513.51	59489.09
46	-122010.95	67112.44
47	-91508.20	74533.02
48	-61005.38	81716.35
49	-30502.71	88663.51
50	0.07	95387.59
51	43865.08	104671.97
52	74697.61	110125.13
53	105530.37	114853.43
54	136363.08	118937.76
55	167195.74	122377.79

56	198028.40	125173.59
57	228861.03	127323.86
58	259693.74	128829.93
59	290526.33	129691.49
60	321359.11	126906.66
61	352191.75	122992.98
62	383024.45	119047.15
63	413857.17	115058.58
64	444689.75	111014.89
65	475522.55	106902.64
66	506355.13	102706.26
67	537187.81	98409.56
68	568020.51	93996.06
69	598853.17	89448.51
70	629685.85	84749.24
71	660518.54	79880.25
72	691351.26	74823.32
73	722183.85	69560.16
74	753016.52	64058.22
75	783849.26	58313.20
76	814681.94	52310.13
77	845514.68	46031.44
78	876347.29	39549.57
79	907179.92	33007.04
80	938012.61	26400.08
81	968845.34	19721.16
82	999678.01	12963.04

SEZIONE IN CAMPATA

Dati

Nome sezione: sezione

Tipo sezione	Rettangolare	
Base	90.0	[cm]
Altezza	70.0	[cm]

Caratteristiche geometriche

Area sezione	5400.00	[cmq]
Inerzia in direzione X	3645000.0	[cm^4]
Inerzia in direzione Y	1620000.0	[cm^4]
Inerzia in direzione XY	0.0	[cm^4]
Ascissa baricentro sezione	X_G = 45.00	[cm]
Ordinata baricentro sezione	Y_G = 30.00	[cm]

Elenco ferri

Simbologia adottata

Posizione riferita all'origine

N° numero d'ordine
X Ascissa posizione ferro espresso in [cm]
Y Ordinata posizione ferro espresso in [cm]
d Diametro ferro espresso in [mm]
ω Area del ferro espresso in [cmq]

N°	X	Y	d	ω
1	86.00	53.50	20	3.14
2	78.55	53.50	20	3.14
3	71.09	53.50	20	3.14
4	63.64	53.50	20	3.14
5	56.18	53.50	20	3.14
6	48.73	53.50	20	3.14
7	41.27	53.50	20	3.14
8	33.82	53.50	20	3.14
9	26.36	53.50	20	3.14
10	18.91	53.50	20	3.14
11	11.45	53.50	20	3.14
12	4.00	53.50	20	3.14
13	4.10	6.60	22	3.80
14	20.46	6.60	22	3.80
15	36.82	6.60	22	3.80
16	53.18	6.60	22	3.80
17	69.54	6.60	22	3.80
18	85.90	6.60	22	3.80

Materiale impiegato : Calcestruzzo armato

Caratteristiche calcestruzzo

Resistenza caratteristica calcestruzzo	356.89	[kg/cmq]
Coeff. omogeneizzazione acciaio/calcestruzzo	15.00	
Coeff. omogeneizzazione calcestruzzo teso/compresso	1.00	

Forma diagramma tensione-deformazione - PARABOLA-RETTANGOLO

Caratteristiche acciaio per calcestruzzo

Tensione ammissibile acciaio	4588.65	[kg/cmq]
Tensione snervamento acciaio	4588.65	[kg/cmq]
Modulo elastico E	2100000.00	[kg/cmq]
Fattore di incrudimento acciaio	1.00	

Combinazioni

Simbologia adottata

N° numero d'ordine della combinazione
N sforzo normale espresso in[kg]
M_Y momento lungo Y espresso in [kgm]
M_X momento lungo X espresso in [kgm]
M_t momento torcente espresso in [kgm]

T_Y taglio lungo Y espresso in [kg]
T_X taglio lungo X espresso in [kg]
VD verifica di dominio
VT verifica tensionale (SLER - Combinazione rara, SLEF - Combinazione frequente, SLEQP - Combinazione quasi permanente, TAMM - Verifica a tensioni ammissibili)

N°	N	M_Y	M_X	M_t	T_Y	T_X	VD	VT
1	15792.00	-60467.00	0.00	0.00	0.00	0.00	SI	NO
2	0.00	-26381.00	0.00	0.00	0.00	0.00	NO	SLEF
3	0.00	-14095.00	0.00	0.00	0.00	0.00	NO	SLEQP
4	0.00	-27336.00	0.00	0.00	0.00	0.00	NO	SLER

Sollecitazioni ultime

Simbologia adottata
N_u Sforzo normale ultimo, espresso in [kg]
M_{Xu} Momento ultimo in direzione X, espresso in [kgm]
M_{Yu} Momento ultimo in direzione Y, espresso in [kgm]
FS Fattore di sicurezza

N_u	M_{Xu}	M_{Yu}	FS
20408.58	0.00	-78143.74	1.29
808656.86	0.00	-60467.00	51.21
15792.00	0.00	-77097.74	1.28

Diagramma Mx-My

N = 15792.00 [kg] Sforzo normale della combinazione di carico

Simbologia adottata
N° numero d'ordine
M_X momento di calcolo lungo X espresso in [kgm]
M_Y momento di calcolo lungo Y espresso in [kgm]

N°	M_X	M_Y
1	101317.44	-8516.87
2	93076.60	15771.11
3	75759.77	38323.31
4	52799.71	51662.81
5	0.00	56221.92
6	-52799.71	51662.80
7	-75759.78	38323.32
8	-93076.63	15771.11
9	-101317.45	-8516.87
10	-94359.28	-31247.99
11	-77102.47	-54868.18
12	-47698.24	-76314.25
13	0.00	-83754.01
14	47698.24	-76314.26
15	77102.49	-54868.18

Diagramma M-N

M_R = 60467.00 [kgm] Momento risultante della combinazione di carico

Simbologia adottata

N° numero d'ordine
N sforzo normale di calcolo espresso in [kg]
M momento di calcolo espresso in [kgm]

N°	N	M
1	966584.67	-54759.37
2	936872.45	-60970.72
3	907160.21	-67107.03
4	877447.92	-73056.01
5	847735.51	-78617.02
6	818023.32	-83802.57
7	788311.12	-88630.27
8	758598.85	-93119.00
9	728886.47	-97289.00
10	699174.31	-101161.71
11	669462.01	-104759.96
12	639749.60	-108107.65
13	610037.43	-111229.91
14	580325.14	-114152.81
15	550612.85	-116903.25
16	520900.56	-119508.69
17	491188.35	-121996.97
18	461475.98	-122281.13
19	431763.82	-121193.51
20	402051.48	-119505.36
21	372339.15	-117216.67
22	342627.04	-114327.44
23	312914.75	-110837.67
24	283202.41	-106747.37
25	253490.26	-102056.51
26	223777.85	-96553.29
27	194065.59	-90079.52
28	164353.26	-83515.65
29	134641.05	-76855.03
30	104928.84	-70090.69
31	75216.58	-63215.45
32	45504.25	-56221.92
33	15792.02	-49105.12
34	0.00	-45275.57
35	-30178.92	-37876.50
36	-60357.73	-30384.81
37	-90536.74	-22819.23
38	-120715.58	-15207.56
39	-150894.46	-7602.87
40	-181073.37	-148.59

41	-211252.22	6962.12
42	-241431.12	14054.15
43	-211252.22	21116.01
44	-181073.37	28651.68
45	-150894.46	36424.23
46	-120715.58	44139.17
47	-90536.74	51733.44
48	-60357.73	59174.34
49	-30178.92	66432.31
50	0.00	73485.83
51	15792.02	77097.72
52	45504.25	83754.01
53	75216.58	90238.26
54	104928.84	96562.35
55	134641.05	102054.20
56	164353.26	106745.31
57	194065.59	110835.91
58	223777.85	114325.96
59	253490.26	117215.46
60	283202.41	119504.44
61	312914.75	121192.87
62	342627.04	122280.76
63	372339.15	121836.59
64	402051.48	118480.51
65	431763.82	115082.80
66	461475.98	111626.25
67	491188.35	108092.85
68	520900.56	104464.01
69	550612.85	100720.58
70	580325.14	96843.09
71	610037.43	92811.88
72	639749.60	88607.20
73	669462.01	84209.41
74	699174.31	79599.00
75	728886.47	74756.85
76	758598.85	69664.14
77	788311.12	64302.59
78	818023.32	58654.53
79	847735.51	52702.86
80	877447.92	46509.40
81	907160.21	40246.80
82	936872.45	33915.17
83	966584.67	27505.44

Combinazione n° 2

<u>Risultati tensioni ammissibili</u>

Caratteristiche asse neutro sezione :

Distanza asse neutro dal lembo più compresso	18.624	[cm]
Punti di intersezione con perimetro sezione	(90.00 ; 18.62) (0.00 ; 18.62)	
Inclinazione asse neutro rispetto all'orizzontale	0.000	[°]

Tensioni :

Tensione massima nel calcestruzzo	52.77	[kg/cmq]
Tensione minima nel calcestruzzo	0.00	[kg/cmq]
Tensione tangenziale nel calcestruzzo	0.00	[kg/cmq]
Tensione massima nel ferro	511.03	[kg/cmq]
Tensione minima nel ferro	-1482.26	[kg/cmq]

Risultati fessurazione

Momento di prima fessurazione	$M_X = 0.00$	[kgm]	$M_Y = -14816.55$	[kgm]
Tensione nell'acciaio	$\sigma = -832.49$	[kg/cmq]		
Tensione nel calcestruzzo	$\sigma_{ct} = -65.84$	[kg/cmq]		
Area efficace a trazione	$A_{eff} = 1861.92$	[cmq]		
Deformazione media acciaio teso	$\varepsilon = 0.0595$			
Distanza media tra le fessure	$S_{rm} = 161.9648$	[mm]		
Ampiezza delle fessure	$w = 0.1637$	[mm]		

Diagramma M-N

M_R = 26381.00 [kgm] Momento risultante della combinazione di carico

Simbologia adottata

N° numero d'ordine
N sforzo normale di calcolo espresso in [kg]
M momento di calcolo espresso in [kgm]

N°	N	M
1	966584.67	-54759.37
2	936872.45	-60970.72
3	907160.21	-67107.03
4	877447.92	-73056.01
5	847735.51	-78617.02
6	818023.32	-83802.57
7	788311.12	-88630.27
8	758598.85	-93119.00
9	728886.47	-97289.00
10	699174.31	-101161.71
11	669462.01	-104759.96
12	639749.60	-108107.65
13	610037.43	-111229.91
14	580325.14	-114152.81
15	550612.85	-116903.25
16	520900.56	-119508.69
17	491188.35	-121996.97

18	461475.98	-122281.13
19	431763.82	-121193.51
20	402051.48	-119505.36
21	372339.15	-117216.67
22	342627.04	-114327.44
23	312914.75	-110837.67
24	283202.41	-106747.37
25	253490.26	-102056.51
26	223777.85	-96553.29
27	194065.59	-90079.52
28	164353.26	-83515.65
29	134641.05	-76855.03
30	104928.84	-70090.69
31	75216.58	-63215.45
32	45504.25	-56221.92
33	15792.02	-49105.12
34	0.00	-45275.57
35	-30178.92	-37876.50
36	-60357.73	-30384.81
37	-90536.74	-22819.23
38	-120715.58	-15207.56
39	-150894.46	-7602.87
40	-181073.37	-148.59
41	-211252.22	6962.12
42	-241431.12	14054.15
43	-211252.22	21116.01
44	-181073.37	28651.68
45	-150894.46	36424.23
46	-120715.58	44139.17
47	-90536.74	51733.44
48	-60357.73	59174.34
49	-30178.92	66432.31
50	0.00	73485.83
51	15792.02	77097.72
52	45504.25	83754.01
53	75216.58	90238.26
54	104928.84	96562.35
55	134641.05	102054.20
56	164353.26	106745.31
57	194065.59	110835.91
58	223777.85	114325.96
59	253490.26	117215.46
60	283202.41	119504.44
61	312914.75	121192.87
62	342627.04	122280.76
63	372339.15	121836.59
64	402051.48	118480.51
65	431763.82	115082.80

66	461475.98	111626.25
67	491188.35	108092.85
68	520900.56	104464.01
69	550612.85	100720.58
70	580325.14	96843.09
71	610037.43	92811.88
72	639749.60	88607.20
73	669462.01	84209.41
74	699174.31	79599.00
75	728886.47	74756.85
76	758598.85	69664.14
77	788311.12	64302.59
78	818023.32	58654.53
79	847735.51	52702.86
80	877447.92	46509.40
81	907160.21	40246.80
82	936872.45	33915.17
83	966584.67	27505.44

Combinazione n° 3

Risultati tensioni ammissibili

Caratteristiche asse neutro sezione :

Distanza asse neutro dal lembo più compresso	18.624	[cm]
Punti di intersezione con perimetro sezione	(90.00 ; 18.62) (0.00 ; 18.62)	
Inclinazione asse neutro rispetto all'orizzontale	0.000	[°]

Tensioni :

Tensione massima nel calcestruzzo	28.19	[kg/cmq]
Tensione minima nel calcestruzzo	0.00	[kg/cmq]
Tensione tangenziale nel calcestruzzo	0.00	[kg/cmq]
Tensione massima nel ferro	273.03	[kg/cmq]
Tensione minima nel ferro	-791.95	[kg/cmq]

Risultati fessurazione

Momento di prima fessurazione	$M_X = 0.00$	[kgm]	$M_Y = -14816.55$	[kgm]
Tensione nell'acciaio	$\sigma = -832.49$	[kg/cmq]		
Tensione nel calcestruzzo	$\sigma_{ct} = -65.84$	[kg/cmq]		
Area efficace a trazione	$A_{eff} = 1861.92$	[cmq]		
Deformazione media acciaio teso	$\varepsilon = 0.0000$			
Distanza media tra le fessure	$S_{rm} = 0.0000$	[mm]		
Ampiezza delle fessure	$w = 0.0000$	[mm]		

Diagramma M-N

M_R = 14095.00 [kgm] Momento risultante della combinazione di carico

Simbologia adottata

N° numero d'ordine
N sforzo normale di calcolo espresso in [kg]
M momento di calcolo espresso in [kgm]

N°	N	M
1	966584.67	-54759.37
2	936872.45	-60970.72
3	907160.21	-67107.03
4	877447.92	-73056.01
5	847735.51	-78617.02
6	818023.32	-83802.57
7	788311.12	-88630.27
8	758598.85	-93119.00
9	728886.47	-97289.00
10	699174.31	-101161.71
11	669462.01	-104759.96
12	639749.60	-108107.65
13	610037.43	-111229.91
14	580325.14	-114152.81
15	550612.85	-116903.25
16	520900.56	-119508.69
17	491188.35	-121996.97
18	461475.98	-122281.13
19	431763.82	-121193.51
20	402051.48	-119505.36
21	372339.15	-117216.67
22	342627.04	-114327.44
23	312914.75	-110837.67
24	283202.41	-106747.37
25	253490.26	-102056.51
26	223777.85	-96553.29
27	194065.59	-90079.52
28	164353.26	-83515.65
29	134641.05	-76855.03
30	104928.84	-70090.69
31	75216.58	-63215.45
32	45504.25	-56221.92
33	15792.02	-49105.12
34	0.00	-45275.57
35	-30178.92	-37876.50
36	-60357.73	-30384.81
37	-90536.74	-22819.23
38	-120715.58	-15207.56
39	-150894.46	-7602.87
40	-181073.37	-148.59
41	-211252.22	6962.12
42	-241431.12	14054.15

43	-211252.22	21116.01
44	-181073.37	28651.68
45	-150894.46	36424.23
46	-120715.58	44139.17
47	-90536.74	51733.44
48	-60357.73	59174.34
49	-30178.92	66432.31
50	0.00	73485.83
51	15792.02	77097.72
52	45504.25	83754.01
53	75216.58	90238.26
54	104928.84	96562.35
55	134641.05	102054.20
56	164353.26	106745.31
57	194065.59	110835.91
58	223777.85	114325.96
59	253490.26	117215.46
60	283202.41	119504.44
61	312914.75	121192.87
62	342627.04	122280.76
63	372339.15	121836.59
64	402051.48	118480.51
65	431763.82	115082.80
66	461475.98	111626.25
67	491188.35	108092.85
68	520900.56	104464.01
69	550612.85	100720.58
70	580325.14	96843.09
71	610037.43	92811.88
72	639749.60	88607.20
73	669462.01	84209.41
74	699174.31	79599.00
75	728886.47	74756.85
76	758598.85	69664.14
77	788311.12	64302.59
78	818023.32	58654.53
79	847735.51	52702.86
80	877447.92	46509.40
81	907160.21	40246.80
82	936872.45	33915.17
83	966584.67	27505.44

Combinazione n° 4

Risultati tensioni ammissibili

Caratteristiche asse neutro sezione :

Distanza asse neutro dal lembo più compresso 18.624 [cm]

Punti di intersezione con perimetro sezione (90.00 ; 18.62) (0.00 ; 18.62)
Inclinazione asse neutro rispetto all'orizzontale 0.000 [°]

Tensioni :

Tensione massima nel calcestruzzo	54.68	[kg/cmq]
Tensione minima nel calcestruzzo	0.00	[kg/cmq]
Tensione tangenziale nel calcestruzzo	0.00	[kg/cmq]
Tensione massima nel ferro	529.53	[kg/cmq]
Tensione minima nel ferro	-1535.92	[kg/cmq]

Diagramma M-N

M_R = 27336.00 [kgm] Momento risultante della combinazione di carico

Simbologia adottata

N° numero d'ordine
N sforzo normale di calcolo espresso in [kg]
M momento di calcolo espresso in [kgm]

N°	N	M
1	966584.67	-54759.37
2	936872.45	-60970.72
3	907160.21	-67107.03
4	877447.92	-73056.01
5	847735.51	-78617.02
6	818023.32	-83802.57
7	788311.12	-88630.27
8	758598.85	-93119.00
9	728886.47	-97289.00
10	699174.31	-101161.71
11	669462.01	-104759.96
12	639749.60	-108107.65
13	610037.43	-111229.91
14	580325.14	-114152.81
15	550612.85	-116903.25
16	520900.56	-119508.69
17	491188.35	-121996.97
18	461475.98	-122281.13
19	431763.82	-121193.51
20	402051.48	-119505.36
21	372339.15	-117216.67
22	342627.04	-114327.44
23	312914.75	-110837.67
24	283202.41	-106747.37
25	253490.26	-102056.51
26	223777.85	-96553.29
27	194065.59	-90079.52
28	164353.26	-83515.65
29	134641.05	-76855.03

30	104928.84	-70090.69
31	75216.58	-63215.45
32	45504.25	-56221.92
33	15792.02	-49105.12
34	0.00	-45275.57
35	-30178.92	-37876.50
36	-60357.73	-30384.81
37	-90536.74	-22819.23
38	-120715.58	-15207.56
39	-150894.46	-7602.87
40	-181073.37	-148.59
41	-211252.22	6962.12
42	-241431.12	14054.15
43	-211252.22	21116.01
44	-181073.37	28651.68
45	-150894.46	36424.23
46	-120715.58	44139.17
47	-90536.74	51733.44
48	-60357.73	59174.34
49	-30178.92	66432.31
50	0.00	73485.83
51	15792.02	77097.72
52	45504.25	83754.01
53	75216.58	90238.26
54	104928.84	96562.35
55	134641.05	102054.20
56	164353.26	106745.31
57	194065.59	110835.91
58	223777.85	114325.96
59	253490.26	117215.46
60	283202.41	119504.44
61	312914.75	121192.87
62	342627.04	122280.76
63	372339.15	121836.59
64	402051.48	118480.51
65	431763.82	115082.80
66	461475.98	111626.25
67	491188.35	108092.85
68	520900.56	104464.01
69	550612.85	100720.58
70	580325.14	96843.09
71	610037.43	92811.88
72	639749.60	88607.20
73	669462.01	84209.41
74	699174.31	79599.00
75	728886.47	74756.85
76	758598.85	69664.14
77	788311.12	64302.59

78	818023.32	58654.53
79	847735.51	52702.86
80	877447.92	46509.40
81	907160.21	40246.80
82	936872.45	33915.17
83	966584.67	27505.44

10.6 Armatura di ripartizione dello scatolare

L'armatura di ripartizione nelle solette e nelle pareti dello scatolare (direzione y) viene posta in misura non inferiore al 20% dell'armatura principale (direzione x) (EC2 § 9.3).
L'armatura di ripartizione viene disposta non uniformemente, ma leggermente maggiorata nei punti in cui è maggiore anche l'armatura principale, punti in cui, peraltro, risultano maggiori le sollecitazioni trasversali alla luce di calcolo dello scatolare. Ad esempio, l'armatura di ripartizione viene posta in quantità maggiore all'intradosso della sezione di mezzeria della soletta superiore che è il punto dove si hanno i maggiori momenti secondari dovuti ai carichi mobili stradali ed alla sovrastruttura stradale (gli unici carichi non uniformemente distribuiti sulla larghezza dello scatolare e quindi gli unici carichi che danno azioni flessionali trasversali). Essendo tali carichi ubicati al centro dello scatolare, essi generano azioni flessionali che tendono le fibre poste all'intradosso, dove viene appunto incrementata l'armatura di ripartizione.
Semplici valutazioni consentono di provare che l'armatura di ripartizione pari al 20% della principale è sicuramente sufficiente per assorbire le azioni flessionali trasversali secondarie, ovvero nella direzione ortogonale a quella di massima inflessione della soletta.
Come già osservato la massima azione flessionale secondaria si ha nella soletta superiore, perché solo qui sono applicate azioni non uniformemente distribuite su un intero elemento strutturale; tali azioni localizzate sono i carichi mobili stradali ed il peso della sovrastruttura.
Schematizzando, la soletta superiore come una lastra infinitamente lunga in direzione y, appoggiata sui bordi distanti l_x= (0,60/2+5,00+ 0,60/2)m =5,60m, si valuta con l'ausilio di risultati tabellati (formule di BITTNER, vedi Allegato C) il massimo momento flettente in direzione y sotto l'effetto di una fascia caricata di larghezza t_y=15,41m (larghezza carreggiata) con pressione pari a:
p= (62.9+9)+20*0.4 = 79.9 kN/m²
p_{SLU}=(62.9+9)*1,35+20*0.4*1.35 = 107,87 kN/m²

P = p* t_y*l_x = 79.9 *15,41 * 5,60 = 6895,28 kN
P_{SLU} = p_{SLU}* t_y*l_x = 115,39 *15,41 * 5,60 = 9957,70 kN

$l_y = \infty$ t_y/l_x = 2,75 ⇒1.0 t_x/l_x = 1.00

Il comportamento non è a piastra e quindi non sarebbe necessaria la verifica longitudinale. Si esegue cautelativamente comunque, con il valore corrispondente a t_y/l_x = 1,00
α_{ym} = 0,0210

Il massimo momento trasversale risulta:
$M_{ym;SLE}$ = α_{ym} * P *0,9 = 130,31 kNm/m
$M_{ym,SLU}$ = α_{ym} * P_{SLU} *0,9 = 188,20 kNm/m

VERIFICHE

Dati

Nome sezione:	sezione	
Tipo sezione	Rettangolare	
Base	90.0	[cm]
Altezza	60.0	[cm]

Caratteristiche geometriche

Area sezione	5400.00	[cmq]
Inerzia in direzione X	3645000.0	[cm^4]
Inerzia in direzione Y	1620000.0	[cm^4]
Inerzia in direzione XY	0.0	[cm^4]
Ascissa baricentro sezione	X_G = 45.00	[cm]
Ordinata baricentro sezione	Y_G = 30.00	[cm]

Elenco ferri

Simbologia adottata

Posizione riferita all'origine

N° numero d'ordine
X Ascissa posizione ferro espresso in [cm]
Y Ordinata posizione ferro espresso in [cm]
d Diametro ferro espresso in [mm]
ω Area del ferro espresso in [cmq]

N°	X	Y	d	ω
1	86.30	55.30	14	1.54
2	69.78	55.30	14	1.54
3	53.26	55.30	14	1.54
4	36.74	55.30	14	1.54
5	20.22	55.30	14	1.54
6	3.70	55.30	14	1.54
7	3.70	4.70	14	1.54
8	20.22	4.70	14	1.54
9	36.74	4.70	14	1.54
10	53.26	4.70	14	1.54
11	69.78	4.70	14	1.54
12	86.30	4.70	14	1.54

Materiale impiegato : Calcestruzzo armato

Caratteristiche calcestruzzo

Resistenza caratteristica calcestruzzo	407.88	[kg/cmq]
Coeff. omogeneizzazione acciaio/calcestruzzo	15.00	
Coeff. omogeneizzazione calcestruzzo teso/compresso	1.00	

Forma diagramma tensione-deformazione - PARABOLA-RETTANGOLO

Caratteristiche acciaio per calcestruzzo

Tensione ammissibile acciaio	4588.65	[kg/cmq]
Tensione snervamento acciaio	4588.65	[kg/cmq]
Modulo elastico E	2100000.00	[kg/cmq]
Fattore di incrudimento acciaio	1.00	

Combinazioni

Simbologia adottata

N° numero d'ordine della combinazione
N sforzo normale espresso in[kg]
M_Y momento lungo Y espresso in [kgm]
M_X momento lungo X espresso in [kgm]
M_t momento torcente espresso in [kgm]
T_Y taglio lungo Y espresso in [kg]
T_X taglio lungo X espresso in [kg]
VD verifica di dominio
VT verifica tensionale (SLER - Combinazione rara, SLEF - Combinazione frequente, SLEQP - Combinazione quasi permanente, TAMM - Verifica a tensioni ammissibili)

N°	N	M_Y	M_X	M_t	T_Y	T_X	VD	VT
1	0.00	14412.00	0.00	0.00	0.00	0.00	SI	NO
2	0.00	10675.00	0.00	0.00	0.00	0.00	NO	SLEQP

Sollecitazioni ultime

Simbologia adottata

N_u Sforzo normale ultimo, espresso in [kg]
M_{Xu} Momento ultimo in direzione X, espresso in [kgm]
M_{Yu} Momento ultimo in direzione Y, espresso in [kgm]
FS Fattore di sicurezza

N_u	M_{Xu}	M_{Yu}	FS
0.00	0.00	19702.82	1.37

Diagramma Mx-My

N = 0.00 [kg] Sforzo normale della combinazione di carico

Simbologia adottata

N° numero d'ordine
M_X momento di calcolo lungo X espresso in [kgm]
M_Y momento di calcolo lungo Y espresso in [kgm]

N°	M_X	M_Y
1	39429.00	0.00
2	37358.68	14454.37
3	33414.84	21241.25
4	27797.60	24042.35
5	0.00	26168.52
6	-27797.60	24042.34
7	-33414.80	21241.23
8	-37358.64	14454.36
9	-39429.01	0.00
10	-37358.65	-14454.36
11	-33414.83	-21241.24
12	-27797.60	-24042.34
13	0.00	-26168.52
14	27797.61	-24042.35
15	33414.82	-21241.23

Diagramma M-N

M_R = 14412.00 [kgm] Momento risultante della combinazione di carico

Simbologia adottata

N° numero d'ordine
N sforzo normale di calcolo espresso in [kg]
M momento di calcolo espresso in [kgm]

N°	N	M
1	902454.80	-45846.75
2	878064.11	-50811.76
3	853673.41	-55576.75
4	829282.83	-60044.16
5	804892.20	-64218.33
6	780501.51	-68104.04
7	756110.81	-71706.60
8	731720.16	-75031.72
9	707329.41	-78085.76
10	682938.73	-80875.63
11	658548.19	-83408.98
12	634157.44	-85694.21
13	609766.81	-87740.51
14	585376.20	-89558.03
15	560985.39	-91157.85
16	536594.79	-92552.14
17	512204.03	-93754.23
18	487813.33	-94172.22
19	463422.74	-93759.96
20	439032.09	-92993.60
21	414641.39	-91873.14
22	390250.68	-90398.59
23	365859.97	-88569.92
24	341469.42	-86387.17
25	317078.67	-83850.31
26	292688.06	-80959.35
27	268297.40	-77714.31
28	243906.74	-74115.13
29	219516.10	-70161.89
30	195125.46	-65833.34
31	170734.73	-61067.86
32	146344.10	-55761.65
33	121953.35	-50252.78
34	97562.67	-44534.61
35	73172.02	-38602.41
36	48781.31	-32472.84
37	24390.65	-26168.52
38	-0.04	-19702.82
39	-24569.33	-13037.34
40	-49138.71	-6271.26

41	-73707.94	0.00
42	-49138.71	6271.29
43	-24569.33	13037.34
44	-0.04	19702.82
45	24390.65	26168.52
46	48781.31	32472.84
47	73172.02	38602.41
48	97562.67	44534.61
49	121953.35	50252.78
50	146344.10	55761.65
51	170734.73	61067.86
52	195125.46	65833.34
53	219516.10	70161.89
54	243906.74	74115.13
55	268297.40	77714.31
56	292688.06	80959.35
57	317078.67	83850.31
58	341469.42	86387.17
59	365859.97	88569.92
60	390250.68	90398.59
61	414641.39	91873.14
62	439032.09	92993.60
63	463422.74	93759.96
64	487813.33	94172.22
65	512204.03	93754.23
66	536594.79	92552.14
67	560985.39	91157.85
68	585376.20	89558.03
69	609766.81	87740.51
70	634157.44	85694.21
71	658548.19	83408.98
72	682938.73	80875.63
73	707329.41	78085.76
74	731720.16	75031.72
75	756110.81	71706.60
76	780501.51	68104.04
77	804892.20	64218.33
78	829282.83	60044.16
79	853673.41	55576.75
80	878064.11	50811.76
81	902454.80	45846.75

Combinazione n° 2

<u>Risultati tensioni ammissibili</u>

Caratteristiche asse neutro sezione :

Distanza asse neutro dal lembo più compresso 10.857 [cm]

Punti di intersezione con perimetro sezione (0.00 ; 49.14) (90.00 ; 49.14)
Inclinazione asse neutro rispetto all'orizzontale 0.000 [°]

Tensioni :

Tensione massima nel calcestruzzo	36.53	[kg/cmq]
Tensione minima nel calcestruzzo	0.00	[kg/cmq]
Tensione tangenziale nel calcestruzzo	0.00	[kg/cmq]
Tensione massima nel ferro	310.72	[kg/cmq]
Tensione minima nel ferro	-2242.85	[kg/cmq]

Risultati fessurazione

Momento di prima fessurazione	$M_X = 0.00$	[kgm]	$M_Y = 13378.12$	[kgm]
Tensione nell'acciaio	$\sigma = -2810.78$	[kg/cmq]		
Tensione nel calcestruzzo	$\sigma_{ct} = -207.20$	[kg/cmq]		
Area efficace a trazione	$A_{eff} = 1368.00$	[cmq]		
Deformazione media acciaio teso	$\varepsilon = 0.0000$			
Distanza media tra le fessure	$S_{rm} = 0.0000$	[mm]		
Ampiezza delle fessure	$w = 0.0000$	[mm]		

Diagramma M-N

M_R = 10675.00 [kgm] Momento risultante della combinazione di carico

Simbologia adottata

N° numero d'ordine
N sforzo normale di calcolo espresso in [kg]
M momento di calcolo espresso in [kgm]

N°	N	M
1	902454.80	-45846.75
2	878064.11	-50811.76
3	853673.41	-55576.75
4	829282.83	-60044.16
5	804892.20	-64218.33
6	780501.51	-68104.04
7	756110.81	-71706.60
8	731720.16	-75031.72
9	707329.41	-78085.76
10	682938.73	-80875.63
11	658548.19	-83408.98
12	634157.44	-85694.21
13	609766.81	-87740.51
14	585376.20	-89558.03
15	560985.39	-91157.85
16	536594.79	-92552.14
17	512204.03	-93754.23
18	487813.33	-94172.22
19	463422.74	-93759.96

20	439032.09	-92993.60
21	414641.39	-91873.14
22	390250.68	-90398.59
23	365859.97	-88569.92
24	341469.42	-86387.17
25	317078.67	-83850.31
26	292688.06	-80959.35
27	268297.40	-77714.31
28	243906.74	-74115.13
29	219516.10	-70161.89
30	195125.46	-65833.34
31	170734.73	-61067.86
32	146344.10	-55761.65
33	121953.35	-50252.78
34	97562.67	-44534.61
35	73172.02	-38602.41
36	48781.31	-32472.84
37	24390.65	-26168.52
38	-0.04	-19702.82
39	-24569.33	-13037.34
40	-49138.71	-6271.26
41	-73707.94	0.00
42	-49138.71	6271.29
43	-24569.33	13037.34
44	-0.04	19702.82
45	24390.65	26168.52
46	48781.31	32472.84
47	73172.02	38602.41
48	97562.67	44534.61
49	121953.35	50252.78
50	146344.10	55761.65
51	170734.73	61067.86
52	195125.46	65833.34
53	219516.10	70161.89
54	243906.74	74115.13
55	268297.40	77714.31
56	292688.06	80959.35
57	317078.67	83850.31
58	341469.42	86387.17
59	365859.97	88569.92
60	390250.68	90398.59
61	414641.39	91873.14
62	439032.09	92993.60
63	463422.74	93759.96
64	487813.33	94172.22
65	512204.03	93754.23
66	536594.79	92552.14
67	560985.39	91157.85

68	585376.20	89558.03
69	609766.81	87740.51
70	634157.44	85694.21
71	658548.19	83408.98
72	682938.73	80875.63
73	707329.41	78085.76
74	731720.16	75031.72
75	756110.81	71706.60
76	780501.51	68104.04
77	804892.20	64218.33
78	829282.83	60044.16
79	853673.41	55576.75
80	878064.11	50811.76
81	902454.80	45846.75

In Allegato C si riporta un prospetto illustrativo con i risultati tabellati per la determinazione delle sollecitazioni trasversali nelle piastre rettangolari appoggiate sui quattro lati caricate uniformemente su una zona rettangolare centrale (formule di BITTNER).

11 VERIFICHE GEOTECNICHE

11.1 Verifiche geotecniche scatolare principale

La verifica di capacità portante viene effettuata secondo l'Approccio I con riferimento a entrambe le combinazioni di carico (a favore di sicurezza):

combinazione 1→ (A1+M1+R1) → STR (carico limite)
combinazione 2 → (A2+M2+R2) → GEO (carico limite)

In accordo con quanto previsto dal progetto definitivo, *"ai fini della verifica della portanza del terreno stesso, non si ritengono significativi gli squilibri dovuti a spinte orizzontali non simmetriche o ad azioni orizzontali applicate alla sommità dello scatolare quali frenatura o sisma"*.

Infatti essendo lo scatolare una struttura rigida, eventuali azioni orizzontali comportano dal lato sfavorevole una rapida diminuzione di spinta (da regime di K0 a regime di Ka) che avviene per piccoli spostamenti, mentre dal lato resistente la spinta aumenta tendendo a Kp per cui, in definitiva, la struttura risulta autoequilibrata in direzione orizzontale. Ciò è particolarmente significativo nel caso in esame, considerando che per il terreno di reinterro il rapporto tra Kp e Ka è molto elevato (circa 20).

Ne consegue che per le verifiche di capacità portante si possono ritenere trascurabili le azioni orizzontali e i conseguenti momenti ribaltanti e considerare unicamente la massima azione verticale:

Combinazione 1: Nmax= 1.246 kN (STRU)
Combinazione 2: Nmax= 1.053 kN (GEO)

Per il dimensionamento geotecnico si fa riferimento alla seguente geometria:

WBS	SO005
Progressiva	KM 16+059
Profondità di posa	Q.F.=113,37 mt
Quota piano campagna	Q=119,60 mt
Quota falda di progetto	Q=112,49 mt
Larghezza fondazione	B=6,20 mt

Larghezza alla base del rilevato autostradale in prossimità dello scatolare Bril: 46,00 mt
Altezza del rilevato autostradale in prossimità dello scatolare Hril: 2,50 mt (media)

11.2 Verifica a galleggiamento

La falda è a quota al di sotto dell'intradosso della fondazione, per cui non interferisce con la presente opera.

12 VERIFICA DEI MURI AD U

12.1 MURO AD U 7,00<h≤8,00 M – L=7,60 m

Geometria scatolare

Descrizione: Scatolare tipo vasca

Altezza esterna	9.10	[m]
Larghezza esterna	6.40	[m]
Lunghezza mensola di fondazione sinistra	0.20	[m]
Lunghezza mensola di fondazione destra	0.20	[m]
Spessore piedritto sinistro	1.10	[m]
Spessore piedritto destro	1.10	[m]
Spessore fondazione	1.10	[m]

Caratteristiche strati terreno

Strato di rinfianco

Descrizione	Terreno di rinfianco	
Peso di volume	2000.00	[kg/mc]
Peso di volume saturo	2000.00	[kg/mc]
Angolo di attrito	38.00	[°]
Angolo di attrito terreno struttura	23.00	[°]
Coesione	0.00	[kg/cmq]
Costante di Winkler	0.00	[kg/cmq/cm]

Strato di base

Descrizione	Terreno di base	
Peso di volume	2000.00	[kg/mc]
Peso di volume saturo	2000.00	[kg/mc]
Angolo di attrito	30.00	[°]
Angolo di attrito terreno struttura	20.00	[°]
Coesione	0.00	[kg/cmq]
Costante di Winkler	3.50	[kg/cmq/cm]

Condizioni di carico

Convenzioni adottate

Origine in corrispondenza dello spigolo inferiore sinistro della struttura
Carichi verticali positivi se diretti verso il basso
Carichi orizzontali positivi se diretti verso destra
Coppie concentrate positive se antiorarie
Ascisse X (espresse in m) positive verso destra
Ordinate Y (espresse in m) positive verso l'alto
Carichi concentrati espressi in kg
Coppie concentrate espressi in kgm
Carichi distribuiti espressi in kg/m

Simbologia adottata e unità di misura

Forze concentrate

X ascissa del punto di applicazione dei carichi verticali concentrati
Y ordinata del punto di applicazione dei carichi orizzontali concentrati
F_y componente Y del carico concentrato
F_x componente X del carico concentrato
M momento

Forze distribuite

X_i, X_f ascisse del punto iniziale e finale per carichi distribuiti verticali
Y_i, Y_f ordinate del punto iniziale e finale per carichi distribuiti orizzontali
V_{ni} componente normale del carico distribuito nel punto iniziale
V_{nf} componente normale del carico distribuito nel punto finale
V_{ti} componente tangenziale del carico distribuito nel punto iniziale
V_{tf} componente tangenziale del carico distribuito nel punto finale
D_{te} variazione termica lembo esterno espressa in gradi centigradi
D_{ti} variazione termica lembo interno espressa in gradi centigradi

Condizione di carico n°1 (Peso Proprio)

Condizione di carico n°2 (Spinta terreno sinistra)

Condizione di carico n°3 (Spinta terreno destra)

Condizione di carico n°4 (Sisma da sinistra)

Condizione di carico n°5 (Sisma da destra)

Condizione di carico n° 7 (Sovraccarico accidentale)

Distr	Terreno	X_i= -1.80	X_f= 0.20	V_{ni}= 2000	V_{nf}= 2000
Distr	Terreno	X_i= 6.60	X_f= 8.60	V_{ni}= 2000	V_{nf}= 2000

Condizione di carico n° 8 (Sovraccarico accidentale base)

Distr	Fondaz.	X_i= 1.30	X_f= 6.30	V_{ni}= 2000	V_{nf}= 2000	V_{ti}= 0	V_{tf}= 0

Impostazioni di progetto

Verifica materiali:

Stato Limite Ultimo

Coefficiente di sicurezza calcestruzzo γ_c	1.60
Fattore riduzione da resistenza cubica a cilindrica	0.83
Fattore di riduzione per carichi di lungo periodo	0.85
Coefficiente di sicurezza acciaio	1.15
Coefficiente di sicurezza per la sezione	1.00

Verifica Taglio - Metodo dell'inclinazione variabile del traliccio

$V_{Rd}=[0.18*k*(100.0*\rho_l*fck)^{1/3}/\gamma_c+0.15*\sigma_{cp}]*bw*d>(vmin+0.15*\sigma_{cp})*b_w*d$
$V_{Rsd}=0.9*d*A_{sw}/s*fyd*(ctg\alpha+ctg\theta)*sin\alpha$
$V_{Rcd}=0.9*d*b_w*\alpha_c*fcd'*(ctg(\theta)+ctg(\alpha)/(1.0+ctg\theta^2)$
con:

d	altezza utile sezione [mm]
b_w	larghezza minima sezione [mm]
σ_{cp}	tensione media di compressione [N/mmq]
ρ_l	rapporto geometrico di armatura
A_{sw}	area armatuta trasversale [mmq]
s	interasse tra due armature trasversali consecutive [mm]
α_c	coefficiente maggiorativo, funzione di fcd e σ_{cp}

$fcd'=0.5*fcd$
$k=1+(200/d)^{1/2}$
$vmin=0.035*k^{3/2}*fck^{1/2}$

Stato Limite di Esercizio

Criteri di scelta per verifiche tensioni di esercizio:
Ambiente poco aggressivo

Limite tensioni di compressione nel calcestruzzo (comb. rare)	0.60 f_{ck}
Limite tensioni di compressione nel calcestruzzo (comb. quasi perm.)	0.45 f_{ck}
Limite tensioni di trazione nell'acciaio (comb. rare)	0.80 f_{yk}

Criteri verifiche a fessurazione:
Armatura sensibile
Apertura limite fessure espresse in [mm]
Apertura limite fessure w1=0.20 w2=0.30 w3=0.40

Verifiche secondo :
Norme Tecniche 2008 - Approccio 1

Copriferro sezioni 6.00 [cm]

Descrizione combinazioni di carico

Simbologia adottata

γ	Coefficiente di partecipazione della condizione
Ψ	Coefficiente di combinazione della condizione
C	Coefficiente totale di partecipazione della condizione

Norme Tecniche 2008

Simbologia adottata

γ_{G1sfav}	Coefficiente parziale sfavorevole sulle azioni permanenti
γ_{G1fav}	Coefficiente parziale favorevole sulle azioni permanenti
γ_{G2sfav}	Coefficiente parziale sfavorevole sulle azioni permanenti non strutturali
γ_{G2fav}	Coefficiente parziale favorevole sulle azioni permanenti non strutturali
γ_Q	Coefficiente parziale sulle azioni variabili
$\gamma_{tan\phi'}$	Coefficiente parziale di riduzione dell'angolo di attrito drenato
$\gamma_{c'}$	Coefficiente parziale di riduzione della coesione drenata
γ_{cu}	Coefficiente parziale di riduzione della coesione non drenata
γ_{qu}	Coefficiente parziale di riduzione del carico ultimo

Coefficienti di partecipazione combinazioni statiche

Coefficienti parziali per le azioni o per l'effetto delle azioni:

Carichi	*Effetto*		*A1*	*A2*
Permanenti	Favorevole	γ_{G1fav}	1.00	1.00
Permanenti	Sfavorevole	γ_{G1sfav}	1.35	1.00
Permanenti non strutturali	Favorevole	γ_{G2fav}	0.00	0.00
Permanenti non strutturali	Sfavorevole	γ_{G2sfav}	1.35	1.00
Variabili	Favorevole	γ_{Qfav}	0.00	0.00
Variabili	Sfavorevole	γ_{Qsfav}	1.50	1.30

Coefficienti parziali per i parametri geotecnici del terreno:

Parametri		*M1*	*M2*
Tangente dell'angolo di attrito	$\gamma_{tan\phi'}$	1.00	1.25
Coesione efficace	$\gamma_{c'}$	1.00	1.25
Resistenza non drenata	γ_{cu}	1.00	1.40
Resistenza a compressione uniassiale	γ_{qu}	1.00	1.60
Peso dell'unità di volume	γ_{γ}	1.00	1.00

Coefficienti di partecipazione combinazioni sismiche

Coefficienti parziali per le azioni o per l'effetto delle azioni:

Carichi	*Effetto*		*A1*	*A2*
Permanenti	Favorevole	γ_{G1fav}	1.00	1.00
Permanenti	Sfavorevole	γ_{G1sfav}	1.00	1.00
Permanenti	Favorevole	γ_{G2fav}	0.00	0.00
Permanenti	Sfavorevole	γ_{G2sfav}	1.00	1.00
Variabili	Favorevole	γ_{Qfav}	0.00	0.00
Variabili	Sfavorevole	γ_{Qsfav}	1.00	1.00

Coefficienti parziali per i parametri geotecnici del terreno:

Parametri		*M1*	*M2*
Tangente dell'angolo di attrito	$\gamma_{tan\phi'}$	1.00	1.25
Coesione efficace	$\gamma_{c'}$	1.00	1.25
Resistenza non drenata	γ_{cu}	1.00	1.40
Resistenza a compressione uniassiale	γ_{qu}	1.00	1.60
Peso dell'unità di volume	γ_{γ}	1.00	1.00

Coefficienti di partecipazione combinazioni statiche

Coefficienti parziali per le azioni o per l'effetto delle azioni:

Carichi	*Effetto*		*A1*	*A2*
Permanenti	Favorevole	γ_{G1fav}	1.00	1.00
Permanenti	Sfavorevole	γ_{G1sfav}	1.35	1.00
Permanenti non strutturali	Favorevole	γ_{G2fav}	0.00	0.00
Permanenti non strutturali	Sfavorevole	γ_{G2sfav}	1.35	1.00
Variabili	Favorevole	γ_{Qfav}	0.00	0.00
Variabili	Sfavorevole	γ_{Qsfav}	1.50	1.30

Coefficienti parziali per i parametri geotecnici del terreno:

Parametri		*M1*	*M2*
Tangente dell'angolo di attrito	$\gamma_{tan\phi'}$	1.00	1.25
Coesione efficace	$\gamma_{c'}$	1.00	1.25
Resistenza non drenata	γ_{cu}	1.00	1.40
Resistenza a compressione uniassiale	γ_{qu}	1.00	1.60
Peso dell'unità di volume	γ_{γ}	1.00	1.00

Coefficienti di partecipazione combinazioni sismiche

Coefficienti parziali per le azioni o per l'effetto delle azioni:

Carichi	*Effetto*		*A1*	*A2*
Permanenti	Favorevole	γ_{G1fav}	1.00	1.00
Permanenti	Sfavorevole	γ_{G1sfav}	1.00	1.00
Permanenti	Favorevole	γ_{G2fav}	0.00	0.00
Permanenti	Sfavorevole	γ_{G2sfav}	1.00	1.00
Variabili	Favorevole	γ_{Qfav}	0.00	0.00
Variabili	Sfavorevole	γ_{Qsfav}	1.00	1.00

Coefficienti parziali per i parametri geotecnici del terreno:

Parametri		*M1*	*M2*
Tangente dell'angolo di attrito	$\gamma_{tan\phi'}$	1.00	1.25
Coesione efficace	$\gamma_{c'}$	1.00	1.25
Resistenza non drenata	γ_{cu}	1.00	1.40
Resistenza a compressione uniassiale	γ_{qu}	1.00	1.60
Peso dell'unità di volume	γ_{γ}	1.00	1.00

Coeff. di combinazione Ψ_0= 0.70 Ψ_1= 0.50 Ψ_2= 0.20

Combinazione n° 1 SLU (Caso A1-M1)

	γ	**Ψ**	**C**
Peso Proprio	1.35	1.00	1.35
Spinta terreno sinistra	1.35	1.00	1.35
Spinta terreno destra	1.35	1.00	1.35
Sovraccarico accidentale	1.50	1.00	1.50

Combinazione n° 2 SLU (Caso A2-M2)

	γ	**Ψ**	**C**
Peso Proprio	1.00	1.00	1.00
Spinta terreno sinistra	1.00	1.00	1.00
Spinta terreno destra	1.00	1.00	1.00
Sovraccarico accidentale	1.30	1.00	1.30

Combinazione n° 3 SLU (Caso A1-M1)

	γ	**Ψ**	**C**
Peso Proprio	1.35	1.00	1.35
Spinta terreno sinistra	1.35	1.00	1.35
Spinta terreno destra	1.35	1.00	1.35

Sovraccarico accidentale base	1.50	1.00	1.50

Combinazione n° 4 SLU (Caso A2-M2)

	γ	Ψ	C
Peso Proprio	1.00	1.00	1.00
Spinta terreno sinistra	1.00	1.00	1.00
Spinta terreno destra	1.00	1.00	1.00
Sovraccarico accidentale base	1.30	1.00	1.30

Combinazione n° 5 SLU (Caso A1-M1)

	γ	Ψ	C
Sovraccarico accidentale base	1.50	1.00	1.50
Sovraccarico accidentale	1.50	1.00	1.50
Peso Proprio	1.35	1.00	1.35
Spinta terreno sinistra	1.35	1.00	1.35
Spinta terreno destra	1.35	1.00	1.35

Combinazione n° 6 SLU (Caso A2-M2)

	γ	Ψ	C
Sovraccarico accidentale base	1.30	1.00	1.30
Sovraccarico accidentale	1.30	1.00	1.30
Peso Proprio	1.00	1.00	1.00
Spinta terreno sinistra	1.00	1.00	1.00
Spinta terreno destra	1.00	1.00	1.00

Combinazione n° 7 SLU (Caso A1-M1) - Sisma Vert. negativo

	γ	Ψ	C
Peso Proprio	1.00	1.00	1.00
Spinta terreno sinistra	1.00	1.00	1.00
Spinta terreno destra	1.00	1.00	1.00
Sisma da sinistra	1.00	1.00	1.00
Sovraccarico accidentale	1.00	0.50	0.50

Combinazione n° 8 SLU (Caso A1-M1) - Sisma Vert. positivo

	γ	Ψ	C
Peso Proprio	1.00	1.00	1.00
Spinta terreno sinistra	1.00	1.00	1.00
Spinta terreno destra	1.00	1.00	1.00
Sisma da sinistra	1.00	1.00	1.00
Sovraccarico accidentale	1.00	0.50	0.50

Combinazione n° 9 SLU (Caso A2-M2) - Sisma Vert. positivo

	γ	Ψ	C
Peso Proprio	1.00	1.00	1.00
Spinta terreno sinistra	1.00	1.00	1.00
Spinta terreno destra	1.00	1.00	1.00
Sisma da sinistra	1.00	1.00	1.00
Sovraccarico accidentale	1.00	0.50	0.50

Combinazione n° 10 SLU (Caso A2-M2) - Sisma Vert. negativo

	γ	Ψ	C
Peso Proprio	1.00	1.00	1.00
Spinta terreno sinistra	1.00	1.00	1.00
Spinta terreno destra	1.00	1.00	1.00
Sisma da sinistra	1.00	1.00	1.00
Sovraccarico accidentale	1.00	0.50	0.50

Combinazione n° 11 SLU (Caso A1-M1) - Sisma Vert. negativo

	γ	Ψ	C
Peso Proprio	1.00	1.00	1.00
Spinta terreno sinistra	1.00	1.00	1.00
Spinta terreno destra	1.00	1.00	1.00
Sisma da sinistra	1.00	1.00	1.00
Sovraccarico accidentale base	1.00	0.50	0.50

Combinazione n° 12 SLU (Caso A1-M1) - Sisma Vert. positivo

	γ	Ψ	C
Peso Proprio	1.00	1.00	1.00
Spinta terreno sinistra	1.00	1.00	1.00
Spinta terreno destra	1.00	1.00	1.00
Sisma da sinistra	1.00	1.00	1.00
Sovraccarico accidentale base	1.00	0.50	0.50

Combinazione n° 13 SLU (Caso A2-M2) - Sisma Vert. positivo

	γ	Ψ	C
Peso Proprio	1.00	1.00	1.00
Spinta terreno sinistra	1.00	1.00	1.00
Spinta terreno destra	1.00	1.00	1.00
Sisma da sinistra	1.00	1.00	1.00
Sovraccarico accidentale base	1.00	0.50	0.50

Combinazione n° 14 SLU (Caso A2-M2) - Sisma Vert. negativo

	γ	Ψ	C
Peso Proprio	1.00	1.00	1.00
Spinta terreno sinistra	1.00	1.00	1.00
Spinta terreno destra	1.00	1.00	1.00
Sisma da sinistra	1.00	1.00	1.00
Sovraccarico accidentale base	1.00	0.50	0.50

Combinazione n° 15 SLU (Caso A1-M1) - Sisma Vert. negativo

	γ	Ψ	C
Peso Proprio	1.00	1.00	1.00
Spinta terreno sinistra	1.00	1.00	1.00
Spinta terreno destra	1.00	1.00	1.00
Sisma da sinistra	1.00	1.00	1.00
Sovraccarico accidentale	1.00	0.50	0.50

Sovraccarico accidentale base	1.00	0.50	0.50

Combinazione n° 16 SLU (Caso A1-M1) - Sisma Vert. positivo

	γ	Ψ	C
Peso Proprio	1.00	1.00	1.00
Spinta terreno sinistra	1.00	1.00	1.00
Spinta terreno destra	1.00	1.00	1.00
Sisma da sinistra	1.00	1.00	1.00
Sovraccarico accidentale	1.00	0.50	0.50
Sovraccarico accidentale base	1.00	0.50	0.50

Combinazione n° 17 SLU (Caso A2-M2) - Sisma Vert. positivo

	γ	Ψ	C
Peso Proprio	1.00	1.00	1.00
Spinta terreno sinistra	1.00	1.00	1.00
Spinta terreno destra	1.00	1.00	1.00
Sisma da sinistra	1.00	1.00	1.00
Sovraccarico accidentale	1.00	0.50	0.50
Sovraccarico accidentale base	1.00	0.50	0.50

Combinazione n° 18 SLU (Caso A2-M2) - Sisma Vert. negativo

	γ	Ψ	C
Peso Proprio	1.00	1.00	1.00
Spinta terreno sinistra	1.00	1.00	1.00
Spinta terreno destra	1.00	1.00	1.00
Sisma da sinistra	1.00	1.00	1.00
Sovraccarico accidentale	1.00	0.50	0.50
Sovraccarico accidentale base	1.00	0.50	0.50

Combinazione n° 19 SLE (Quasi Permanente)

	γ	Ψ	C
Peso Proprio	1.00	1.00	1.00
Spinta terreno sinistra	1.00	1.00	1.00
Spinta terreno destra	1.00	1.00	1.00
Sovraccarico accidentale	1.00	0.20	0.20
Sovraccarico accidentale base	1.00	0.20	0.20

Combinazione n° 20 SLE (Frequente)

	γ	Ψ	C
Peso Proprio	1.00	1.00	1.00
Spinta terreno sinistra	1.00	1.00	1.00
Spinta terreno destra	1.00	1.00	1.00
Sovraccarico accidentale	1.00	0.50	0.50
Sovraccarico accidentale base	1.00	0.20	0.20

Combinazione n° 21 SLE (Frequente)

	γ	Ψ	C
Peso Proprio	1.00	1.00	1.00

Spinta terreno sinistra	1.00	1.00	1.00
Spinta terreno destra	1.00	1.00	1.00
Sovraccarico accidentale base	1.00	0.50	0.50
Sovraccarico accidentale	1.00	0.20	0.20

Combinazione n° 22 SLE (Rara)

	γ	Ψ	C
Peso Proprio	1.00	1.00	1.00
Spinta terreno sinistra	1.00	1.00	1.00
Spinta terreno destra	1.00	1.00	1.00
Sovraccarico accidentale	1.00	1.00	1.00
Sovraccarico accidentale base	1.00	0.70	0.70

Combinazione n° 23 SLE (Rara)

	γ	Ψ	C
Peso Proprio	1.00	1.00	1.00
Spinta terreno sinistra	1.00	1.00	1.00
Spinta terreno destra	1.00	1.00	1.00
Sovraccarico accidentale base	1.00	1.00	1.00
Sovraccarico accidentale	1.00	0.70	0.70

Analisi della spinta e verifiche

Simbologia adottata ed unità di misura
Origine in corrispondenza dello spigolo inferiore sinistro della struttura
Le forze orizzontali sono considerate positive se agenti verso destra
Le forze verticali sono considerate positive se agenti verso il basso

X	ascisse (espresse in m) positive verso destra
Y	ordinate (espresse in m) positive verso l'alto
M	momento espresso in kgm
V	taglio espresso in kg
SN	sforzo normale espresso in kg
ux	spostamento direzione X espresso in cm
uy	spostamento direzione Y espresso in cm
σ_t	pressione sul terreno espressa in kg/cmq

Tipo di analisi

Pressione in calotta
Spinta sui piedritti

Pressione geostatica
a Riposo [combinazione 1]
a Riposo [combinazione 2]
a Riposo [combinazione 3]
a Riposo [combinazione 4]
a Riposo [combinazione 5]
a Riposo [combinazione 6]
Attiva [combinazione 7]
Attiva [combinazione 8]
Attiva [combinazione 9]
Attiva [combinazione 10]
Attiva [combinazione 11]
Attiva [combinazione 12]

Attiva	[combinazione 13]
Attiva	[combinazione 14]
Attiva	[combinazione 15]
Attiva	[combinazione 16]
Attiva	[combinazione 17]
Attiva	[combinazione 18]
a Riposo	[combinazione 19]
a Riposo	[combinazione 20]
a Riposo	[combinazione 21]
a Riposo	[combinazione 22]
a Riposo	[combinazione 23]

Sisma

Combinazioni SLU

Accelerazione al suolo a_g =	2.21 [m/s^2]
Coefficiente di amplificazione per tipo di sottosuolo (S)	1.18
Coefficiente di amplificazione topografica (St)	1.00
Coefficiente riduzione (β_m)	0.31
Rapporto intensità sismica verticale/orizzontale	0.50
Coefficiente di intensità sismica orizzontale (percento)	$k_h=(a_g/g*\beta_m*St*Ss)$ = 8.21
Coefficiente di intensità sismica verticale (percento)	$k_v=0.50 * k_h$ = 4.10

Combinazioni SLE

Accelerazione al suolo a_g =	2.21 [m/s^2]
Coefficiente di amplificazione per tipo di sottosuolo (S)	1.18
Coefficiente di amplificazione topografica (St)	1.00
Coefficiente riduzione (β_m)	0.31
Rapporto intensità sismica verticale/orizzontale	0.50
Coefficiente di intensità sismica orizzontale (percento)	$k_h=(a_g/g*\beta_m*St*Ss)$ = 8.21
Coefficiente di intensità sismica verticale (percento)	$k_v=0.50 * k_h$ = 4.10
Forma diagramma incremento sismico	Rettangolare

Spinta sismica	Wood
Pressione in calotta(solo peso terreno)	0.00
Angolo diffusione sovraccarico	30.00 [°]

Coefficienti di spinta

N°combinazione	Statico	Sismico
1	0.384	0.000
2	0.470	0.000
3	0.384	0.000
4	0.470	0.000
5	0.384	0.000
6	0.470	0.000
7	0.217	0.381
8	0.217	0.381

9	0.276	0.440
10	0.276	0.440
11	0.217	0.381
12	0.217	0.381
13	0.276	0.440
14	0.276	0.440
15	0.217	0.381
16	0.217	0.381
17	0.276	0.440
18	0.276	0.440
19	0.384	0.000
20	0.384	0.000
21	0.384	0.000
22	0.384	0.000
23	0.384	0.000

Discretizzazione strutturale

Numero elementi fondazione	72
Numero elementi piedritto sinistro	86
Numero elementi piedritto destro	86
Numero molle piedritto sinistro	87
Numero molle piedritto destro	87

Inviluppo spostamenti nodali

Inviluppo spostamenti fondazione

X [m]	u_{Xmin} [cm]	u_{Xmax} [cm]	u_{Ymin} [cm]	u_{Ymax} [cm]
0.00	0.0021	0.3050	-0.0590	0.2363
1.68	0.0014	0.3045	0.1190	0.3388
3.40	0.0000	0.3032	0.2289	0.3837
5.10	-0.0020	0.3020	0.2278	0.3553
6.73	-0.0032	0.3011	0.1210	0.3805

Inviluppo spostamenti piedritto sinistro

Y [m]	u_{Xmin} [cm]	u_{Xmax} [cm]	u_{Ymin} [cm]	u_{Ymax} [cm]
0.55	0.0021	0.3052	0.0262	0.2847
4.83	0.3281	1.0026	0.0283	0.2876
9.10	0.7343	1.8517	0.0289	0.2885

Inviluppo spostamenti piedritto destro

Y [m]	u_{Xmin} [cm]	u_{Xmax} [cm]	u_{Ymin} [cm]	u_{Ymax} [cm]
0.55	-0.0032	0.3012	0.1743	0.3609
4.83	-0.5213	0.3512	0.1764	0.3631
9.10	-1.1739	0.3894	0.1771	0.3638

Inviluppo sollecitazioni nodali

Inviluppo sollecitazioni fondazione

X [m]	M_{min} [kgm]	M_{max} [kgm]	V_{min} [kg]	V_{max} [kg]	N_{min} [kg]	N_{max} [kg]
0.00	0	0	0	591	-9145	-64
1.68	-105534	-64832	-27442	-13999	20021	42888
3.40	-88083	-36142	-15055	846	20409	42888
5.10	-105125	-26122	3395	22213	20792	42888
6.80	0	0	-634	-202	-95	9027

Inviluppo sollecitazioni piedritto sinistro

Y [m]	M_{min} [kgm]	M_{max} [kgm]	V_{min} [kg]	V_{max} [kg]	N_{min} [kg]	N_{max} [kg]
0.55	-129716	-82965	28263	42983	22547	31742
4.83	-23755	-10734	7362	12706	11274	15871
9.10	0	0	0	0	0	0

Inviluppo sollecitazioni piedritto destro

Y [m]	M_{min} [kgm]	M_{max} [kgm]	V_{min} [kg]	V_{max} [kg]	N_{min} [kg]	N_{max} [kg]
0.55	-129716	-33291	-42983	-12644	22547	31742
4.83	-18919	-3132	-12011	-2679	11274	15871
9.10	0	0	0	0	0	0

Inviluppo pressioni terreno

Inviluppo pressioni sul terreno di fondazione

X [m]	σ_{tmin} [kg/cmq]	σ_{tmax} [kg/cmq]
0.00	0.00	1.18
1.68	0.60	1.69
3.40	1.14	1.92
5.10	1.14	1.78
6.80	0.60	1.90

Inviluppo verifiche stato limite ultimo (SLU)

Verifica sezioni fondazione (Inviluppo)

Base sezione B = 100 cm
Altezza sezione H = 110.00 cm

X	A_{fi}	A_{fs}	CS
0.00	45.24	31.42	18.44
1.68	45.24	31.42	1.60

3.40	45.24	31.42	2.40
5.10	45.24	31.42	1.61
6.80	45.24	31.42	90.00

X	V_{Rd}	V_{Rsd}	V_{Rcd}	A_{sw}
0.00	35411	0	0	0.00
1.68	46085	0	0	0.00
3.40	46085	0	0	0.00
5.10	46085	0	0	0.00
6.80	35411	0	0	0.00

Verifica sezioni piedritto sinistro (Inviluppo)

Base sezione B = 100 cm
Altezza sezione H = 110.00 cm

Y	A_{fi}	A_{fs}	CS
0.55	15.71	45.24	1.46
4.83	15.71	22.62	2.84
9.10	15.71	22.62	1000.00

Y	V_{Rd}	V_{Rsd}	V_{Rcd}	A_{sw}
0.55	44504	0	0	0.00
4.83	36791	0	0	0.00
9.10	34540	0	0	0.00

Verifica sezioni piedritto destro (Inviluppo)

Base sezione B = 100 cm
Altezza sezione H = 110.00 cm

Y	A_{fi}	A_{fs}	CS
0.55	15.71	45.24	1.46
4.83	15.71	22.62	3.74
9.10	15.71	22.62	1000.00

Y	V_{Rd}	V_{Rsd}	V_{Rcd}	A_{sw}
0.55	44504	0	0	0.00
4.83	36791	0	0	0.00
9.10	34540	0	0	0.00

Inviluppo verifiche stato limite esercizio (SLE)

Verifica sezioni fondazione (Inviluppo)

Base sezione B = 100 cm
Altezza sezione H = 110.00 cm

X	A_{fi}	A_{fs}	σ_c	σ_{fi}	σ_{fs}
0.00	45.24	31.42	0.03	0.24	3.19
1.68	45.24	31.42	47.03	1465.45	580.18
3.40	45.24	31.42	39.02	1152.98	485.00
5.10	45.24	31.42	46.85	1458.59	578.10
6.80	45.24	31.42	0.00	0.20	1.99

X	τ_c	A_{sw}
0.00	-0.2	0.00
1.68	-1.7	0.00
3.40	0.1	0.00
5.10	1.8	0.00
6.80	0.1	0.00

Verifica sezioni piedritto sinistro (Inviluppo)

Base sezione B = 100 cm
Altezza sezione H = 110.00 cm

Y	A_{fi}	A_{fs}	σ_c	σ_{fi}	σ_{fs}
0.55	15.71	45.24	61.52	754.96	1985.77
4.83	15.71	22.62	11.57	140.82	392.70
9.10	15.71	22.62	0.00	0.00	0.00

Y	τ_c	A_{sw}
0.55	3.6	0.00
4.83	1.0	0.00
9.10	0.0	0.00

Verifica sezioni piedritto destro (Inviluppo)

Base sezione B = 100 cm
Altezza sezione H = 110.00 cm

Y	A_{fi}	A_{fs}	σ_c	σ_{fi}	σ_{fs}
0.55	15.71	45.24	61.52	754.96	1985.77
4.83	15.71	22.62	11.57	140.82	392.70
9.10	15.71	22.62	0.00	0.00	0.00

Y	τ_c	A_{sw}
0.55	-3.6	0.00
4.83	-1.0	0.00
9.10	0.0	0.00

12.2 MURO AD U 6,00<h≤7,00 M – L=7,40 m

Geometria scatolare

Descrizione: Scatolare tipo vasca

Altezza esterna	8.00	[m]
Larghezza esterna	7.00	[m]
Lunghezza mensola di fondazione sinistra	0.20	[m]
Lunghezza mensola di fondazione destra	0.20	[m]
Spessore piedritto sinistro	1.00	[m]
Spessore piedritto destro	1.00	[m]
Spessore fondazione	1.00	[m]

Caratteristiche strati terreno

Strato di rinfianco

Descrizione	Terreno di rinfianco	
Peso di volume	2000.00	[kg/mc]
Peso di volume saturo	2000.00	[kg/mc]
Angolo di attrito	38.00	[°]
Angolo di attrito terreno struttura	23.00	[°]
Coesione	0.00	[kg/cmq]
Costante di Winkler	0.00	[kg/cmq/cm]

Strato di base

Descrizione	Terreno di base	
Peso di volume	2000.00	[kg/mc]
Peso di volume saturo	2000.00	[kg/mc]
Angolo di attrito	30.00	[°]
Angolo di attrito terreno struttura	20.00	[°]
Coesione	0.00	[kg/cmq]
Costante di Winkler	3.50	[kg/cmq/cm]

Condizioni di carico

Convenzioni adottate

Origine in corrispondenza dello spigolo inferiore sinistro della struttura
Carichi verticali positivi se diretti verso il basso
Carichi orizzontali positivi se diretti verso destra
Coppie concentrate positive se antiorarie
Ascisse X (espresse in m) positive verso destra
Ordinate Y (espresse in m) positive verso l'alto
Carichi concentrati espressi in kg
Coppie concentrate espressi in kgm
Carichi distribuiti espressi in kg/m

Simbologia adottata e unità di misura

Forze concentrate

X ascissa del punto di applicazione dei carichi verticali concentrati
Y ordinata del punto di applicazione dei carichi orizzontali concentrati
F_y componente Y del carico concentrato
F_x componente X del carico concentrato
M momento

Forze distribuite

X_i, X_f ascisse del punto iniziale e finale per carichi distribuiti verticali
Y_i, Y_f ordinate del punto iniziale e finale per carichi distribuiti orizzontali
V_{ni} componente normale del carico distribuito nel punto iniziale
V_{nf} componente normale del carico distribuito nel punto finale
V_{ti} componente tangenziale del carico distribuito nel punto iniziale
V_{tf} componente tangenziale del carico distribuito nel punto finale
D_{te} variazione termica lembo esterno espressa in gradi centigradi
D_{ti} variazione termica lembo interno espressa in gradi centigradi

Condizione di carico n°1 (Peso Proprio)

Condizione di carico n°2 (Spinta terreno sinistra)

Condizione di carico n°3 (Spinta terreno destra)

Condizione di carico n°4 (Sisma da sinistra)

Condizione di carico n°5 (Sisma da destra)

Condizione di carico n° 7 (Sovraccarico accidentale)

Distr	Terreno	X_i= -1.80	X_f= 0.20	V_{ni}= 2000	V_{nf}= 2000
Distr	Terreno	X_i= 7.20	X_f= 9.20	V_{ni}= 2000	V_{nf}= 2000

Condizione di carico n° 8 (Sovraccarico accidentale base)

Distr	Fondaz.	X_i= 1.20	X_f= 6.20	V_{ni}= 2000	V_{nf}= 2000	V_{ti}= 0	V_{tf}= 0

Impostazioni di progetto

Verifica materiali:

Stato Limite Ultimo

Coefficiente di sicurezza calcestruzzo γ_c	1.60
Fattore riduzione da resistenza cubica a cilindrica	0.83
Fattore di riduzione per carichi di lungo periodo	0.85
Coefficiente di sicurezza acciaio	1.15
Coefficiente di sicurezza per la sezione	1.00

Verifica Taglio - Metodo dell'inclinazione variabile del traliccio

$V_{Rd}=[0.18*k*(100.0*\rho_l*fck)^{1/3}/\gamma_c+0.15*\sigma_{cp}]*bw*d>(vmin+0.15*\sigma_{cp})*b_w*d$

$V_{Rsd}=0.9*d*A_{sw}/s*fyd*(ctg\alpha+ctg\theta)*sin\alpha$

$V_{Rcd}=0.9*d*b_w*\alpha_c*fcd'*(ctg(\theta)+ctg(\alpha)/(1.0+ctg\theta^2)$

con:

d	altezza utile sezione [mm]
b_w	larghezza minima sezione [mm]
σ_{cp}	tensione media di compressione [N/mmq]
ρ_l	rapporto geometrico di armatura
A_{sw}	area armatuta trasversale [mmq]
s	interasse tra due armature trasversali consecutive [mm]
α_c	coefficiente maggiorativo, funzione di fcd e σ_{cp}

$fcd'=0.5*fcd$

$k=1+(200/d)^{1/2}$

$vmin=0.035*k^{3/2}*fck^{1/2}$

Stato Limite di Esercizio

Criteri di scelta per verifiche tensioni di esercizio:

Ambiente poco aggressivo

Limite tensioni di compressione nel calcestruzzo (comb. rare)	0.60 f_{ck}
Limite tensioni di compressione nel calcestruzzo (comb. quasi perm.)	0.45 f_{ck}
Limite tensioni di trazione nell'acciaio (comb. rare)	0.80 f_{yk}

Criteri verifiche a fessurazione:

Armatura sensibile

Apertura limite fessure espresse in [mm]

Apertura limite fessure w1=0.20 w2=0.30 w3=0.40

Verifiche secondo :

Norme Tecniche 2008 - Approccio 1

Copriferro sezioni 6.00 [cm]

Descrizione combinazioni di carico

Simbologia adottata

γ	Coefficiente di partecipazione della condizione
Ψ	Coefficiente di combinazione della condizione
C	Coefficiente totale di partecipazione della condizione

Norme Tecniche 2008

Simbologia adottata

γ_{G1sfav}	Coefficiente parziale sfavorevole sulle azioni permanenti
γ_{G1fav}	Coefficiente parziale favorevole sulle azioni permanenti
γ_{G2sfav}	Coefficiente parziale sfavorevole sulle azioni permanenti non strutturali
γ_{G2fav}	Coefficiente parziale favorevole sulle azioni permanenti non strutturali
γ_Q	Coefficiente parziale sulle azioni variabili
$\gamma_{tan\phi'}$	Coefficiente parziale di riduzione dell'angolo di attrito drenato
$\gamma_{c'}$	Coefficiente parziale di riduzione della coesione drenata
γ_{cu}	Coefficiente parziale di riduzione della coesione non drenata
γ_{qu}	Coefficiente parziale di riduzione del carico ultimo

Coefficienti di partecipazione combinazioni statiche

Coefficienti parziali per le azioni o per l'effetto delle azioni:

Carichi	*Effetto*		*A1*	*A2*
Permanenti	Favorevole	γ_{G1fav}	1.00	1.00
Permanenti	Sfavorevole	γ_{G1sfav}	1.35	1.00
Permanenti non strutturali	Favorevole	γ_{G2fav}	0.00	0.00
Permanenti non strutturali	Sfavorevole	γ_{G2sfav}	1.35	1.00
Variabili	Favorevole	γ_{Qfav}	0.00	0.00
Variabili	Sfavorevole	γ_{Qsfav}	1.50	1.30

Coefficienti parziali per i parametri geotecnici del terreno:

Parametri		*M1*	*M2*
Tangente dell'angolo di attrito	$\gamma_{tan\phi'}$	1.00	1.25
Coesione efficace	$\gamma_{c'}$	1.00	1.25
Resistenza non drenata	γ_{cu}	1.00	1.40
Resistenza a compressione uniassiale	γ_{qu}	1.00	1.60
Peso dell'unità di volume	γ_{γ}	1.00	1.00

Coefficienti di partecipazione combinazioni sismiche

Coefficienti parziali per le azioni o per l'effetto delle azioni:

Carichi	*Effetto*		*A1*	*A2*
Permanenti	Favorevole	γ_{G1fav}	1.00	1.00
Permanenti	Sfavorevole	γ_{G1sfav}	1.00	1.00
Permanenti	Favorevole	γ_{G2fav}	0.00	0.00
Permanenti	Sfavorevole	γ_{G2sfav}	1.00	1.00
Variabili	Favorevole	γ_{Qfav}	0.00	0.00
Variabili	Sfavorevole	γ_{Qsfav}	1.00	1.00

Coefficienti parziali per i parametri geotecnici del terreno:

Parametri		*M1*	*M2*
Tangente dell'angolo di attrito	$\gamma_{tan\phi'}$	1.00	1.25
Coesione efficace	$\gamma_{c'}$	1.00	1.25
Resistenza non drenata	γ_{cu}	1.00	1.40
Resistenza a compressione uniassiale	γ_{qu}	1.00	1.60
Peso dell'unità di volume	γ_{γ}	1.00	1.00

Coefficienti di partecipazione combinazioni statiche

Coefficienti parziali per le azioni o per l'effetto delle azioni:

Carichi	*Effetto*		*A1*	*A2*
Permanenti	Favorevole	γ_{G1fav}	1.00	1.00
Permanenti	Sfavorevole	γ_{G1sfav}	1.35	1.00
Permanenti non strutturali	Favorevole	γ_{G2fav}	0.00	0.00
Permanenti non strutturali	Sfavorevole	γ_{G2sfav}	1.35	1.00
Variabili	Favorevole	γ_{Qfav}	0.00	0.00

Variabili	Sfavorevole	γ_{Qsfav}	1.50	1.30

Coefficienti parziali per i parametri geotecnici del terreno:

Parametri		*M1*	*M2*
Tangente dell'angolo di attrito	$\gamma_{tan\phi'}$	1.00	1.25
Coesione efficace	$\gamma_{c'}$	1.00	1.25
Resistenza non drenata	γ_{cu}	1.00	1.40
Resistenza a compressione uniassiale	γ_{qu}	1.00	1.60
Peso dell'unità di volume	γ_{γ}	1.00	1.00

Coefficienti di partecipazione combinazioni sismiche

Coefficienti parziali per le azioni o per l'effetto delle azioni:

Carichi	*Effetto*		*A1*	*A2*
Permanenti	Favorevole	γ_{G1fav}	1.00	1.00
Permanenti	Sfavorevole	γ_{G1sfav}	1.00	1.00
Permanenti	Favorevole	γ_{G2fav}	0.00	0.00
Permanenti	Sfavorevole	γ_{G2sfav}	1.00	1.00
Variabili	Favorevole	γ_{Qfav}	0.00	0.00
Variabili	Sfavorevole	γ_{Qsfav}	1.00	1.00

Coefficienti parziali per i parametri geotecnici del terreno:

Parametri		*M1*	*M2*
Tangente dell'angolo di attrito	$\gamma_{tan\phi'}$	1.00	1.25
Coesione efficace	$\gamma_{c'}$	1.00	1.25
Resistenza non drenata	γ_{cu}	1.00	1.40
Resistenza a compressione uniassiale	γ_{qu}	1.00	1.60
Peso dell'unità di volume	γ_{γ}	1.00	1.00

Coeff. di combinazione Ψ_0= 0.70 Ψ_1= 0.50 Ψ_2= 0.20

Combinazione n° 1 SLU (Caso A1-M1)

	γ	**Ψ**	**C**
Peso Proprio	1.35	1.00	1.35
Spinta terreno sinistra	1.35	1.00	1.35
Spinta terreno destra	1.35	1.00	1.35
Sovraccarico accidentale	1.50	1.00	1.50

Combinazione n° 2 SLU (Caso A2-M2)

	γ	**Ψ**	**C**
Peso Proprio	1.00	1.00	1.00
Spinta terreno sinistra	1.00	1.00	1.00
Spinta terreno destra	1.00	1.00	1.00
Sovraccarico accidentale	1.30	1.00	1.30

Combinazione n° 3 SLU (Caso A1-M1)

	γ	**Ψ**	**C**
Peso Proprio	1.35	1.00	1.35

Spinta terreno sinistra	1.35	1.00	1.35
Spinta terreno destra	1.35	1.00	1.35
Sovraccarico accidentale base	1.50	1.00	1.50

Combinazione n° 4 SLU (Caso A2-M2)

	γ	Ψ	C
Peso Proprio	1.00	1.00	1.00
Spinta terreno sinistra	1.00	1.00	1.00
Spinta terreno destra	1.00	1.00	1.00
Sovraccarico accidentale base	1.30	1.00	1.30

Combinazione n° 5 SLU (Caso A1-M1)

	γ	Ψ	C
Sovraccarico accidentale base	1.50	1.00	1.50
Sovraccarico accidentale	1.50	1.00	1.50
Peso Proprio	1.35	1.00	1.35
Spinta terreno sinistra	1.35	1.00	1.35
Spinta terreno destra	1.35	1.00	1.35

Combinazione n° 6 SLU (Caso A2-M2)

	γ	Ψ	C
Sovraccarico accidentale base	1.30	1.00	1.30
Sovraccarico accidentale	1.30	1.00	1.30
Peso Proprio	1.00	1.00	1.00
Spinta terreno sinistra	1.00	1.00	1.00
Spinta terreno destra	1.00	1.00	1.00

Combinazione n° 7 SLU (Caso A1-M1) - Sisma Vert. negativo

	γ	Ψ	C
Peso Proprio	1.00	1.00	1.00
Spinta terreno sinistra	1.00	1.00	1.00
Spinta terreno destra	1.00	1.00	1.00
Sisma da sinistra	1.00	1.00	1.00
Sovraccarico accidentale	1.00	0.50	0.50

Combinazione n° 8 SLU (Caso A1-M1) - Sisma Vert. positivo

	γ	Ψ	C
Peso Proprio	1.00	1.00	1.00
Spinta terreno sinistra	1.00	1.00	1.00
Spinta terreno destra	1.00	1.00	1.00
Sisma da sinistra	1.00	1.00	1.00
Sovraccarico accidentale	1.00	0.50	0.50

Combinazione n° 9 SLU (Caso A2-M2) - Sisma Vert. positivo

	γ	Ψ	C
Peso Proprio	1.00	1.00	1.00
Spinta terreno sinistra	1.00	1.00	1.00
Spinta terreno destra	1.00	1.00	1.00

Sisma da sinistra	1.00	1.00	1.00
Sovraccarico accidentale	1.00	0.50	0.50

Combinazione n° 10 SLU (Caso A2-M2) - Sisma Vert. negativo

	γ	Ψ	C
Peso Proprio	1.00	1.00	1.00
Spinta terreno sinistra	1.00	1.00	1.00
Spinta terreno destra	1.00	1.00	1.00
Sisma da sinistra	1.00	1.00	1.00
Sovraccarico accidentale	1.00	0.50	0.50

Combinazione n° 11 SLU (Caso A1-M1) - Sisma Vert. negativo

	γ	Ψ	C
Peso Proprio	1.00	1.00	1.00
Spinta terreno sinistra	1.00	1.00	1.00
Spinta terreno destra	1.00	1.00	1.00
Sisma da sinistra	1.00	1.00	1.00
Sovraccarico accidentale base	1.00	0.50	0.50

Combinazione n° 12 SLU (Caso A1-M1) - Sisma Vert. positivo

	γ	Ψ	C
Peso Proprio	1.00	1.00	1.00
Spinta terreno sinistra	1.00	1.00	1.00
Spinta terreno destra	1.00	1.00	1.00
Sisma da sinistra	1.00	1.00	1.00
Sovraccarico accidentale base	1.00	0.50	0.50

Combinazione n° 13 SLU (Caso A2-M2) - Sisma Vert. positivo

	γ	Ψ	C
Peso Proprio	1.00	1.00	1.00
Spinta terreno sinistra	1.00	1.00	1.00
Spinta terreno destra	1.00	1.00	1.00
Sisma da sinistra	1.00	1.00	1.00
Sovraccarico accidentale base	1.00	0.50	0.50

Combinazione n° 14 SLU (Caso A2-M2) - Sisma Vert. negativo

	γ	Ψ	C
Peso Proprio	1.00	1.00	1.00
Spinta terreno sinistra	1.00	1.00	1.00
Spinta terreno destra	1.00	1.00	1.00
Sisma da sinistra	1.00	1.00	1.00
Sovraccarico accidentale base	1.00	0.50	0.50

Combinazione n° 15 SLU (Caso A1-M1) - Sisma Vert. negativo

	γ	Ψ	C
Peso Proprio	1.00	1.00	1.00
Spinta terreno sinistra	1.00	1.00	1.00
Spinta terreno destra	1.00	1.00	1.00

Sisma da sinistra	1.00	1.00	1.00
Sovraccarico accidentale	1.00	0.50	0.50
Sovraccarico accidentale base	1.00	0.50	0.50

Combinazione n° 16 SLU (Caso A1-M1) - Sisma Vert. positivo

	γ	Ψ	C
Peso Proprio	1.00	1.00	1.00
Spinta terreno sinistra	1.00	1.00	1.00
Spinta terreno destra	1.00	1.00	1.00
Sisma da sinistra	1.00	1.00	1.00
Sovraccarico accidentale	1.00	0.50	0.50
Sovraccarico accidentale base	1.00	0.50	0.50

Combinazione n° 17 SLU (Caso A2-M2) - Sisma Vert. positivo

	γ	Ψ	C
Peso Proprio	1.00	1.00	1.00
Spinta terreno sinistra	1.00	1.00	1.00
Spinta terreno destra	1.00	1.00	1.00
Sisma da sinistra	1.00	1.00	1.00
Sovraccarico accidentale	1.00	0.50	0.50
Sovraccarico accidentale base	1.00	0.50	0.50

Combinazione n° 18 SLU (Caso A2-M2) - Sisma Vert. negativo

	γ	Ψ	C
Peso Proprio	1.00	1.00	1.00
Spinta terreno sinistra	1.00	1.00	1.00
Spinta terreno destra	1.00	1.00	1.00
Sisma da sinistra	1.00	1.00	1.00
Sovraccarico accidentale	1.00	0.50	0.50
Sovraccarico accidentale base	1.00	0.50	0.50

Combinazione n° 19 SLE (Quasi Permanente)

	γ	Ψ	C
Peso Proprio	1.00	1.00	1.00
Spinta terreno sinistra	1.00	1.00	1.00
Spinta terreno destra	1.00	1.00	1.00
Sovraccarico accidentale	1.00	0.20	0.20
Sovraccarico accidentale base	1.00	0.20	0.20

Combinazione n° 20 SLE (Frequente)

	γ	Ψ	C
Peso Proprio	1.00	1.00	1.00
Spinta terreno sinistra	1.00	1.00	1.00
Spinta terreno destra	1.00	1.00	1.00
Sovraccarico accidentale	1.00	0.50	0.50
Sovraccarico accidentale base	1.00	0.20	0.20

Combinazione n° 21 SLE (Frequente)

	γ	Ψ	C
Peso Proprio	1.00	1.00	1.00
Spinta terreno sinistra	1.00	1.00	1.00
Spinta terreno destra	1.00	1.00	1.00
Sovraccarico accidentale base	1.00	0.50	0.50
Sovraccarico accidentale	1.00	0.20	0.20

Combinazione n° 22 SLE (Rara)

	γ	Ψ	C
Peso Proprio	1.00	1.00	1.00
Spinta terreno sinistra	1.00	1.00	1.00
Spinta terreno destra	1.00	1.00	1.00
Sovraccarico accidentale	1.00	1.00	1.00
Sovraccarico accidentale base	1.00	0.70	0.70

Combinazione n° 23 SLE (Rara)

	γ	Ψ	C
Peso Proprio	1.00	1.00	1.00
Spinta terreno sinistra	1.00	1.00	1.00
Spinta terreno destra	1.00	1.00	1.00
Sovraccarico accidentale base	1.00	1.00	1.00
Sovraccarico accidentale	1.00	0.70	0.70

Analisi della spinta e verifiche

Simbologia adottata ed unità di misura
Origine in corrispondenza dello spigolo inferiore sinistro della struttura
Le forze orizzontali sono considerate positive se agenti verso destra
Le forze verticali sono considerate positive se agenti verso il basso

X	ascisse (espresse in m) positive verso destra
Y	ordinate (espresse in m) positive verso l'alto
M	momento espresso in kgm
V	taglio espresso in kg
SN	sforzo normale espresso in kg
ux	spostamento direzione X espresso in cm
uy	spostamento direzione Y espresso in cm
σ_t	pressione sul terreno espressa in kg/cmq

Tipo di analisi

Pressione in calotta
Spinta sui piedritti

Pressione geostatica
a Riposo [combinazione 1]
a Riposo [combinazione 2]
a Riposo [combinazione 3]
a Riposo [combinazione 4]
a Riposo [combinazione 5]
a Riposo [combinazione 6]
Attiva [combinazione 7]
Attiva [combinazione 8]
Attiva [combinazione 9]
Attiva [combinazione 10]

Attiva	[combinazione 11]
Attiva	[combinazione 12]
Attiva	[combinazione 13]
Attiva	[combinazione 14]
Attiva	[combinazione 15]
Attiva	[combinazione 16]
Attiva	[combinazione 17]
Attiva	[combinazione 18]
a Riposo	[combinazione 19]
a Riposo	[combinazione 20]
a Riposo	[combinazione 21]
a Riposo	[combinazione 22]
a Riposo	[combinazione 23]

Sisma

Combinazioni SLU

Accelerazione al suolo a_g =	2.21 [m/s^2]
Coefficiente di amplificazione per tipo di sottosuolo (S)	1.18
Coefficiente di amplificazione topografica (St)	1.00
Coefficiente riduzione (β_m)	0.31
Rapporto intensità sismica verticale/orizzontale	0.50
Coefficiente di intensità sismica orizzontale (percento)	$k_h=(a_g/g*\beta_m*St*Ss)$ = 8.21
Coefficiente di intensità sismica verticale (percento)	$k_v=0.50 * k_h$ = 4.10

Combinazioni SLE

Accelerazione al suolo a_g =	2.21 [m/s^2]
Coefficiente di amplificazione per tipo di sottosuolo (S)	1.18
Coefficiente di amplificazione topografica (St)	1.00
Coefficiente riduzione (β_m)	0.31
Rapporto intensità sismica verticale/orizzontale	0.50
Coefficiente di intensità sismica orizzontale (percento)	$k_h=(a_g/g*\beta_m*St*Ss)$ = 8.21
Coefficiente di intensità sismica verticale (percento)	$k_v=0.50 * k_h$ = 4.10
Forma diagramma incremento sismico	Rettangolare

Spinta sismica	Wood
Pressione in calotta(solo peso terreno)	0.00
Angolo diffusione sovraccarico	30.00 [°]

Coefficienti di spinta

N°combinazione	Statico	Sismico
1	0.384	0.000
2	0.470	0.000
3	0.384	0.000
4	0.470	0.000
5	0.384	0.000
6	0.470	0.000

7	0.217	0.381
8	0.217	0.381
9	0.276	0.440
10	0.276	0.440
11	0.217	0.381
12	0.217	0.381
13	0.276	0.440
14	0.276	0.440
15	0.217	0.381
16	0.217	0.381
17	0.276	0.440
18	0.276	0.440
19	0.384	0.000
20	0.384	0.000
21	0.384	0.000
22	0.384	0.000
23	0.384	0.000

Discretizzazione strutturale

Numero elementi fondazione	82
Numero elementi piedritto sinistro	76
Numero elementi piedritto destro	76
Numero molle piedritto sinistro	77
Numero molle piedritto destro	77

Inviluppo sollecitazioni nodali

Inviluppo sollecitazioni fondazione

X [m]	M_{min} [kgm]	M_{max} [kgm]	V_{min} [kg]	V_{max} [kg]	N_{min} [kg]	N_{max} [kg]
0.00	0	0	0	322	-7357	-56
1.87	-66602	-37485	-20280	-11047	15334	34166
3.70	-54173	-16114	-9263	760	15709	34166
5.53	-66602	-11649	4432	18428	16084	34166
7.40	0	0	-429	-123	-86	7251

Inviluppo sollecitazioni piedritto sinistro

Y [m]	M_{min} [kgm]	M_{max} [kgm]	V_{min} [kg]	V_{max} [kg]	N_{min} [kg]	N_{max} [kg]
0.50	-91972	-56589	21822	34253	17980	25313
4.25	-16503	-7393	5743	10026	8990	12656
8.00	0	0	0	0	0	0

Inviluppo sollecitazioni piedritto destro

Y [m]	M_{min} [kgm]	M_{max} [kgm]	V_{min} [kg]	V_{max} [kg]	N_{min} [kg]	N_{max} [kg]
0.50	-91972	-22268	-34253	-9676	17980	25313

4.25	-13874	-2063	-9830	-2034	8990	12656
8.00	0	0	0	0	0	0

Inviluppo pressioni terreno

Inviluppo pressioni sul terreno di fondazione

X [m]	σ_{tmin} [kg/cmq]	σ_{tmax} [kg/cmq]
0.00	0.00	0.96
1.87	0.60	1.42
3.70	0.91	1.58
5.53	0.90	1.42
7.40	0.37	1.29

Inviluppo verifiche stato limite ultimo (SLU)

Verifica sezioni fondazione (Inviluppo)

Base sezione B = 100 cm
Altezza sezione H = 100.00 cm

X	A_{fi}	A_{fs}	CS
0.00	38.01	15.71	12.60
1.87	38.01	15.71	1.94
3.70	38.01	15.71	3.05
5.53	38.01	15.71	1.91
7.40	38.01	15.71	41.32

X	V_{Rd}	V_{Rsd}	V_{Rcd}	A_{sw}
0.00	31950	0	0	0.00
1.87	40663	0	0	0.00
3.70	40663	0	0	0.00
5.53	40663	0	0	0.00
7.40	31950	0	0	0.00

Verifica sezioni piedritto sinistro (Inviluppo)

Base sezione B = 100 cm
Altezza sezione H = 100.00 cm

Y	A_{fi}	A_{fs}	CS
0.50	12.72	38.01	1.57
4.25	12.72	15.71	2.57
8.00	12.72	15.71	1000.00

Y	V_{Rd}	V_{Rsd}	V_{Rcd}	A_{sw}

0.50	39415	0	0	0.00
4.25	33747	0	0	0.00
8.00	31962	0	0	0.00

Verifica sezioni piedritto destro (Inviluppo)

Base sezione B = 100 cm
Altezza sezione H = 100.00 cm

Y	A_{fi}	A_{fs}	CS
0.50	12.72	38.01	1.57
4.25	12.72	15.71	3.17
8.00	12.72	15.71	1000.00

Y	V_{Rd}	V_{Rsd}	V_{Rcd}	A_{sw}
0.50	39415	0	0	0.00
4.25	33747	0	0	0.00
8.00	31962	0	0	0.00

Inviluppo verifiche stato limite esercizio (SLE)

Verifica sezioni fondazione (Inviluppo)

Base sezione B = 100 cm
Altezza sezione H = 100.00 cm

X	A_{fi}	A_{fs}	σ_c	σ_{fi}	σ_{fs}
0.00	38.01	15.71	0.01	0.09	4.02
1.87	38.01	15.71	39.34	1171.31	477.73
3.70	38.01	15.71	30.04	817.20	369.73
5.53	38.01	15.71	39.34	1171.31	477.73
7.40	38.01	15.71	0.01	0.09	4.02

X	τ_c	A_{sw}
0.00	-0.1	0.00
1.87	-1.5	0.00
3.70	0.1	0.00
5.53	1.6	0.00
7.40	0.1	0.00

Verifica sezioni piedritto sinistro (Inviluppo)

Base sezione B = 100 cm
Altezza sezione H = 100.00 cm

Y	A_{fi}	A_{fs}	σ_c	σ_{fi}	σ_{fs}
0.50	12.72	38.01	55.05	655.80	1837.05

4.25	12.72	15.71	11.37	131.09	447.80
8.00	12.72	15.71	0.00	0.00	0.00

Y	τ_c	A_{sw}
0.50	3.1	0.00
4.25	0.9	0.00
8.00	0.0	0.00

Verifica sezioni piedritto destro (Inviluppo)

Base sezione B = 100 cm
Altezza sezione H = 100.00 cm

Y	A_{fi}	A_{fs}	σ_c	σ_{fi}	σ_{fs}
0.50	12.72	38.01	55.05	655.80	1837.05
4.25	12.72	15.71	11.37	131.09	447.80
8.00	12.72	15.71	0.00	0.00	0.00

Y	τ_c	A_{sw}
0.50	-3.1	0.00
4.25	-0.9	0.00
8.00	0.0	0.00

12.3 MURO AD U 5,00<h≤6,00 M – L=7,20 m

Geometria scatolare

Descrizione: Scatolare tipo vasca

Altezza esterna	6.90	[m]
Larghezza esterna	6.80	[m]
Lunghezza mensola di fondazione sinistra	0.20	[m]
Lunghezza mensola di fondazione destra	0.20	[m]
Spessore piedritto sinistro	0.90	[m]
Spessore piedritto destro	0.90	[m]
Spessore fondazione	0.90	[m]

Caratteristiche strati terreno

Strato di rinfianco

Descrizione	Terreno di rinfianco	
Peso di volume	2000.00	[kg/mc]
Peso di volume saturo	2000.00	[kg/mc]
Angolo di attrito	38.00	[°]
Angolo di attrito terreno struttura	23.00	[°]
Coesione	0.00	[kg/cmq]
Costante di Winkler	0.00	[kg/cmq/cm]

Strato di base

Descrizione	Terreno di base	
Peso di volume	2000.00	[kg/mc]
Peso di volume saturo	2000.00	[kg/mc]
Angolo di attrito	30.00	[°]
Angolo di attrito terreno struttura	20.00	[°]
Coesione	0.00	[kg/cmq]
Costante di Winkler	3.50	[kg/cmq/cm]

Condizioni di carico

Convenzioni adottate

Origine in corrispondenza dello spigolo inferiore sinistro della struttura
Carichi verticali positivi se diretti verso il basso
Carichi orizzontali positivi se diretti verso destra
Coppie concentrate positive se antiorarie
Ascisse X (espresse in m) positive verso destra
Ordinate Y (espresse in m) positive verso l'alto
Carichi concentrati espressi in kg
Coppie concentrate espressi in kgm
Carichi distribuiti espressi in kg/m

Simbologia adottata e unità di misura

Forze concentrate

X ascissa del punto di applicazione dei carichi verticali concentrati
Y ordinata del punto di applicazione dei carichi orizzontali concentrati
F_y componente Y del carico concentrato
F_x componente X del carico concentrato
M momento

Forze distribuite

X_i, X_f ascisse del punto iniziale e finale per carichi distribuiti verticali
Y_i, Y_f ordinate del punto iniziale e finale per carichi distribuiti orizzontali
V_{ni} componente normale del carico distribuito nel punto iniziale
V_{nf} componente normale del carico distribuito nel punto finale
V_{ti} componente tangenziale del carico distribuito nel punto iniziale
V_{tf} componente tangenziale del carico distribuito nel punto finale
D_{te} variazione termica lembo esterno espressa in gradi centigradi
D_{ti} variazione termica lembo interno espressa in gradi centigradi

Condizione di carico n°1 (Peso Proprio)

Condizione di carico n°2 (Spinta terreno sinistra)

Condizione di carico n°3 (Spinta terreno destra)

Condizione di carico n°4 (Sisma da sinistra)

Condizione di carico n°5 (Sisma da destra)

Condizione di carico n° 7 (Sovraccarico accidentale)

Distr	Terreno	X_i= -1.80	X_f= 0.20	V_{ni}= 2000	V_{nf}= 2000
Distr	Terreno	X_i= 7.00	X_f= 9.00	V_{ni}= 2000	V_{nf}= 2000

Condizione di carico n° 8 (Sovraccarico accidentale base)

Distr	Fondaz.	X_i= 1.10	X_f= 6.10	V_{ni}= 2000	V_{nf}= 2000	V_{ti}= 0	V_{tf}= 0

Impostazioni di progetto

Verifica materiali:

Stato Limite Ultimo

Coefficiente di sicurezza calcestruzzo γ_c	1.60
Fattore riduzione da resistenza cubica a cilindrica	0.83
Fattore di riduzione per carichi di lungo periodo	0.85
Coefficiente di sicurezza acciaio	1.15
Coefficiente di sicurezza per la sezione	1.00

Verifica Taglio - Metodo dell'inclinazione variabile del traliccio

$V_{Rd}=[0.18*k*(100.0*\rho_l*fck)^{1/3}/\gamma_c+0.15*\sigma_{cp}]*bw*d>(vmin+0.15*\sigma_{cp})*b_w*d$

$V_{Rsd}=0.9*d*A_{sw}/s*fyd*(ctg\alpha+ctg\theta)*sin\alpha$

$V_{Rcd}=0.9*d*b_w*\alpha_c*fcd'*(ctg(\theta)+ctg(\alpha)/(1.0+ctg\theta^2)$

con:

d altezza utile sezione [mm]

b_w	larghezza minima sezione [mm]
σ_{cp}	tensione media di compressione [N/mmq]
ρ_l	rapporto geometrico di armatura
A_{sw}	area armatuta trasversale [mmq]
s	interasse tra due armature trasversali consecutive [mm]
α_c	coefficiente maggiorativo, funzione di fcd e σ_{cp}

fcd'=0.5*fcd
$k=1+(200/d)^{1/2}$
$vmin=0.035*k^{3/2}*fck^{1/2}$

Stato Limite di Esercizio

Criteri di scelta per verifiche tensioni di esercizio:
Ambiente poco aggressivo

Limite tensioni di compressione nel calcestruzzo (comb. rare)	0.60 f_{ck}
Limite tensioni di compressione nel calcestruzzo (comb. quasi perm.)	0.45 f_{ck}
Limite tensioni di trazione nell'acciaio (comb. rare)	0.80 f_{yk}

Criteri verifiche a fessurazione:
Armatura sensibile
Apertura limite fessure espresse in [mm]
Apertura limite fessure w1=0.20 w2=0.30 w3=0.40

Verifiche secondo :
Norme Tecniche 2008 - Approccio 1

Copriferro sezioni 6.00 [cm]

Descrizione combinazioni di carico

Simbologia adottata

γ	Coefficiente di partecipazione della condizione
Ψ	Coefficiente di combinazione della condizione
C	Coefficiente totale di partecipazione della condizione

Norme Tecniche 2008

Simbologia adottata

γ_{G1sfav}	Coefficiente parziale sfavorevole sulle azioni permanenti
γ_{G1fav}	Coefficiente parziale favorevole sulle azioni permanenti
γ_{G2sfav}	Coefficiente parziale sfavorevole sulle azioni permanenti non strutturali
γ_{G2fav}	Coefficiente parziale favorevole sulle azioni permanenti non strutturali
γ_Q	Coefficiente parziale sulle azioni variabili
$\gamma_{tan\phi'}$	Coefficiente parziale di riduzione dell'angolo di attrito drenato
$\gamma_{c'}$	Coefficiente parziale di riduzione della coesione drenata
γ_{cu}	Coefficiente parziale di riduzione della coesione non drenata
γ_{qu}	Coefficiente parziale di riduzione del carico ultimo

Coefficienti di partecipazione combinazioni statiche

Coefficienti parziali per le azioni o per l'effetto delle azioni:

Carichi	*Effetto*		*A1*	*A2*
Permanenti	Favorevole	γ_{G1fav}	1.00	1.00
Permanenti	Sfavorevole	γ_{G1sfav}	1.35	1.00
Permanenti non strutturali	Favorevole	γ_{G2fav}	0.00	0.00
Permanenti non strutturali	Sfavorevole	γ_{G2sfav}	1.35	1.00
Variabili	Favorevole	γ_{Qfav}	0.00	0.00
Variabili	Sfavorevole	γ_{Qsfav}	1.50	1.30

Coefficienti parziali per i parametri geotecnici del terreno:

Parametri		*M1*	*M2*
Tangente dell'angolo di attrito	$\gamma_{tan\phi'}$	1.00	1.25
Coesione efficace	$\gamma_{c'}$	1.00	1.25
Resistenza non drenata	γ_{cu}	1.00	1.40
Resistenza a compressione uniassiale	γ_{qu}	1.00	1.60
Peso dell'unità di volume	γ_{γ}	1.00	1.00

Coefficienti di partecipazione combinazioni sismiche

Coefficienti parziali per le azioni o per l'effetto delle azioni:

Carichi	*Effetto*		*A1*	*A2*
Permanenti	Favorevole	γ_{G1fav}	1.00	1.00
Permanenti	Sfavorevole	γ_{G1sfav}	1.00	1.00
Permanenti	Favorevole	γ_{G2fav}	0.00	0.00
Permanenti	Sfavorevole	γ_{G2sfav}	1.00	1.00
Variabili	Favorevole	γ_{Qfav}	0.00	0.00
Variabili	Sfavorevole	γ_{Qsfav}	1.00	1.00

Coefficienti parziali per i parametri geotecnici del terreno:

Parametri		*M1*	*M2*
Tangente dell'angolo di attrito	$\gamma_{tan\phi'}$	1.00	1.25
Coesione efficace	$\gamma_{c'}$	1.00	1.25
Resistenza non drenata	γ_{cu}	1.00	1.40
Resistenza a compressione uniassiale	γ_{qu}	1.00	1.60
Peso dell'unità di volume	γ_{γ}	1.00	1.00

Coefficienti di partecipazione combinazioni statiche

Coefficienti parziali per le azioni o per l'effetto delle azioni:

Carichi	*Effetto*		*A1*	*A2*
Permanenti	Favorevole	γ_{G1fav}	1.00	1.00
Permanenti	Sfavorevole	γ_{G1sfav}	1.35	1.00
Permanenti non strutturali	Favorevole	γ_{G2fav}	0.00	0.00
Permanenti non strutturali	Sfavorevole	γ_{G2sfav}	1.35	1.00
Variabili	Favorevole	γ_{Qfav}	0.00	0.00
Variabili	Sfavorevole	γ_{Qsfav}	1.50	1.30

Coefficienti parziali per i parametri geotecnici del terreno:

Parametri		*M1*	*M2*
Tangente dell'angolo di attrito	$\gamma_{tan\phi'}$	1.00	1.25
Coesione efficace	$\gamma_{c'}$	1.00	1.25
Resistenza non drenata	γ_{cu}	1.00	1.40
Resistenza a compressione uniassiale	γ_{qu}	1.00	1.60
Peso dell'unità di volume	γ_{γ}	1.00	1.00

Coefficienti di partecipazione combinazioni sismiche

Coefficienti parziali per le azioni o per l'effetto delle azioni:

Carichi	*Effetto*		*A1*	*A2*
Permanenti	Favorevole	γ_{G1fav}	1.00	1.00
Permanenti	Sfavorevole	γ_{G1sfav}	1.00	1.00
Permanenti	Favorevole	γ_{G2fav}	0.00	0.00
Permanenti	Sfavorevole	γ_{G2sfav}	1.00	1.00
Variabili	Favorevole	γ_{Qfav}	0.00	0.00
Variabili	Sfavorevole	γ_{Qsfav}	1.00	1.00

Coefficienti parziali per i parametri geotecnici del terreno:

Parametri		*M1*	*M2*
Tangente dell'angolo di attrito	$\gamma_{tan\phi'}$	1.00	1.25
Coesione efficace	$\gamma_{c'}$	1.00	1.25
Resistenza non drenata	γ_{cu}	1.00	1.40
Resistenza a compressione uniassiale	γ_{qu}	1.00	1.60
Peso dell'unità di volume	γ_{γ}	1.00	1.00

Coeff. di combinazione Ψ_0= 0.70 Ψ_1= 0.50 Ψ_2= 0.20

Combinazione n° 1 SLU (Caso A1-M1)

	γ	**Ψ**	**C**
Peso Proprio	1.35	1.00	1.35
Spinta terreno sinistra	1.35	1.00	1.35
Spinta terreno destra	1.35	1.00	1.35
Sovraccarico accidentale	1.50	1.00	1.50

Combinazione n° 2 SLU (Caso A2-M2)

	γ	**Ψ**	**C**
Peso Proprio	1.00	1.00	1.00
Spinta terreno sinistra	1.00	1.00	1.00
Spinta terreno destra	1.00	1.00	1.00
Sovraccarico accidentale	1.30	1.00	1.30

Combinazione n° 3 SLU (Caso A1-M1)

	γ	**Ψ**	**C**
Peso Proprio	1.35	1.00	1.35
Spinta terreno sinistra	1.35	1.00	1.35
Spinta terreno destra	1.35	1.00	1.35
Sovraccarico accidentale base	1.50	1.00	1.50

Combinazione n° 4 SLU (Caso A2-M2)

	γ	Ψ	C
Peso Proprio	1.00	1.00	1.00
Spinta terreno sinistra	1.00	1.00	1.00
Spinta terreno destra	1.00	1.00	1.00
Sovraccarico accidentale base	1.30	1.00	1.30

Combinazione n° 5 SLU (Caso A1-M1)

	γ	Ψ	C
Peso Proprio	1.35	1.00	1.35
Spinta terreno sinistra	1.35	1.00	1.35
Spinta terreno destra	1.35	1.00	1.35
Sovraccarico accidentale	1.50	1.00	1.50
Sovraccarico accidentale base	1.50	1.00	1.50

Combinazione n° 6 SLU (Caso A2-M2)

	γ	Ψ	C
Peso Proprio	1.00	1.00	1.00
Spinta terreno sinistra	1.00	1.00	1.00
Spinta terreno destra	1.00	1.00	1.00
Sovraccarico accidentale	1.30	1.00	1.30
Sovraccarico accidentale base	1.30	1.00	1.30

Combinazione n° 7 SLU (Caso A1-M1) - Sisma Vert. negativo

	γ	Ψ	C
Peso Proprio	1.00	1.00	1.00
Spinta terreno sinistra	1.00	1.00	1.00
Spinta terreno destra	1.00	1.00	1.00
Sisma da sinistra	1.00	1.00	1.00

Combinazione n° 8 SLU (Caso A1-M1) - Sisma Vert. positivo

	γ	Ψ	C
Peso Proprio	1.00	1.00	1.00
Spinta terreno sinistra	1.00	1.00	1.00
Spinta terreno destra	1.00	1.00	1.00
Sisma da sinistra	1.00	1.00	1.00

Combinazione n° 9 SLU (Caso A2-M2) - Sisma Vert. positivo

	γ	Ψ	C
Peso Proprio	1.00	1.00	1.00
Spinta terreno sinistra	1.00	1.00	1.00
Spinta terreno destra	1.00	1.00	1.00
Sisma da sinistra	1.00	1.00	1.00

Combinazione n° 10 SLU (Caso A2-M2) - Sisma Vert. negativo

	γ	Ψ	C
Peso Proprio	1.00	1.00	1.00

Spinta terreno sinistra	1.00	1.00	1.00
Spinta terreno destra	1.00	1.00	1.00
Sisma da sinistra	1.00	1.00	1.00

Combinazione n° 11 SLU (Caso A1-M1) - Sisma Vert. negativo

	γ	Ψ	C
Peso Proprio	1.00	1.00	1.00
Spinta terreno sinistra	1.00	1.00	1.00
Spinta terreno destra	1.00	1.00	1.00
Sisma da sinistra	1.00	1.00	1.00
Sovraccarico accidentale	1.00	0.50	0.50

Combinazione n° 12 SLU (Caso A1-M1) - Sisma Vert. positivo

	γ	Ψ	C
Peso Proprio	1.00	1.00	1.00
Spinta terreno sinistra	1.00	1.00	1.00
Spinta terreno destra	1.00	1.00	1.00
Sisma da sinistra	1.00	1.00	1.00
Sovraccarico accidentale	1.00	0.50	0.50

Combinazione n° 13 SLU (Caso A2-M2) - Sisma Vert. positivo

	γ	Ψ	C
Peso Proprio	1.00	1.00	1.00
Spinta terreno sinistra	1.00	1.00	1.00
Spinta terreno destra	1.00	1.00	1.00
Sisma da sinistra	1.00	1.00	1.00
Sovraccarico accidentale	1.00	0.50	0.50

Combinazione n° 14 SLU (Caso A2-M2) - Sisma Vert. negativo

	γ	Ψ	C
Peso Proprio	1.00	1.00	1.00
Spinta terreno sinistra	1.00	1.00	1.00
Spinta terreno destra	1.00	1.00	1.00
Sisma da sinistra	1.00	1.00	1.00
Sovraccarico accidentale	1.00	0.50	0.50

Combinazione n° 15 SLU (Caso A1-M1) - Sisma Vert. negativo

	γ	Ψ	C
Peso Proprio	1.00	1.00	1.00
Spinta terreno sinistra	1.00	1.00	1.00
Spinta terreno destra	1.00	1.00	1.00
Sisma da sinistra	1.00	1.00	1.00
Sovraccarico accidentale base	1.00	0.50	0.50

Combinazione n° 16 SLU (Caso A1-M1) - Sisma Vert. positivo

	γ	Ψ	C
Peso Proprio	1.00	1.00	1.00
Spinta terreno sinistra	1.00	1.00	1.00

Spinta terreno destra	1.00	1.00	1.00
Sisma da sinistra	1.00	1.00	1.00
Sovraccarico accidentale base	1.00	0.50	0.50

Combinazione n° 17 SLU (Caso A2-M2) - Sisma Vert. positivo

	γ	Ψ	C
Peso Proprio	1.00	1.00	1.00
Spinta terreno sinistra	1.00	1.00	1.00
Spinta terreno destra	1.00	1.00	1.00
Sisma da sinistra	1.00	1.00	1.00
Sovraccarico accidentale base	1.00	0.50	0.50

Combinazione n° 18 SLU (Caso A2-M2) - Sisma Vert. negativo

	γ	Ψ	C
Peso Proprio	1.00	1.00	1.00
Spinta terreno sinistra	1.00	1.00	1.00
Spinta terreno destra	1.00	1.00	1.00
Sisma da sinistra	1.00	1.00	1.00
Sovraccarico accidentale base	1.00	0.50	0.50

Combinazione n° 19 SLU (Caso A1-M1) - Sisma Vert. positivo

	γ	Ψ	C
Peso Proprio	1.00	1.00	1.00
Spinta terreno sinistra	1.00	1.00	1.00
Spinta terreno destra	1.00	1.00	1.00
Sisma da sinistra	1.00	1.00	1.00
Sovraccarico accidentale	1.00	0.50	0.50
Sovraccarico accidentale base	1.00	0.50	0.50

Combinazione n° 20 SLU (Caso A1-M1) - Sisma Vert. negativo

	γ	Ψ	C
Peso Proprio	1.00	1.00	1.00
Spinta terreno sinistra	1.00	1.00	1.00
Spinta terreno destra	1.00	1.00	1.00
Sisma da sinistra	1.00	1.00	1.00
Sovraccarico accidentale	1.00	0.50	0.50
Sovraccarico accidentale base	1.00	0.50	0.50

Combinazione n° 21 SLU (Caso A2-M2) - Sisma Vert. positivo

	γ	Ψ	C
Peso Proprio	1.00	1.00	1.00
Spinta terreno sinistra	1.00	1.00	1.00
Spinta terreno destra	1.00	1.00	1.00
Sisma da sinistra	1.00	1.00	1.00
Sovraccarico accidentale	1.00	0.50	0.50
Sovraccarico accidentale base	1.00	0.50	0.50

Combinazione n° 22 SLU (Caso A2-M2) - Sisma Vert. negativo

	γ	Ψ	C
Peso Proprio	1.00	1.00	1.00
Spinta terreno sinistra	1.00	1.00	1.00
Spinta terreno destra	1.00	1.00	1.00
Sisma da sinistra	1.00	1.00	1.00
Sovraccarico accidentale	1.00	0.50	0.50
Sovraccarico accidentale base	1.00	0.50	0.50

Combinazione n° 23 SLE (Quasi Permanente)

	γ	Ψ	C
Peso Proprio	1.00	1.00	1.00
Spinta terreno sinistra	1.00	1.00	1.00
Spinta terreno destra	1.00	1.00	1.00
Sovraccarico accidentale	1.00	0.20	0.20
Sovraccarico accidentale base	1.00	0.20	0.20

Combinazione n° 24 SLE (Frequente)

	γ	Ψ	C
Peso Proprio	1.00	1.00	1.00
Spinta terreno sinistra	1.00	1.00	1.00
Spinta terreno destra	1.00	1.00	1.00
Sovraccarico accidentale	1.00	0.50	0.50
Sovraccarico accidentale base	1.00	0.20	0.20

Combinazione n° 25 SLE (Frequente)

	γ	Ψ	C
Peso Proprio	1.00	1.00	1.00
Spinta terreno sinistra	1.00	1.00	1.00
Spinta terreno destra	1.00	1.00	1.00
Sovraccarico accidentale base	1.00	0.50	0.50
Sovraccarico accidentale	1.00	0.20	0.20

Combinazione n° 26 SLE (Rara)

	γ	Ψ	C
Peso Proprio	1.00	1.00	1.00
Spinta terreno sinistra	1.00	1.00	1.00
Spinta terreno destra	1.00	1.00	1.00
Sovraccarico accidentale	1.00	1.00	1.00
Sovraccarico accidentale base	1.00	0.70	0.70

Combinazione n° 27 SLE (Rara)

	γ	Ψ	C
Peso Proprio	1.00	1.00	1.00
Spinta terreno sinistra	1.00	1.00	1.00
Spinta terreno destra	1.00	1.00	1.00
Sovraccarico accidentale base	1.00	1.00	1.00
Sovraccarico accidentale	1.00	0.70	0.70

Analisi della spinta e verifiche

Simbologia adottata ed unità di misura
Origine in corrispondenza dello spigolo inferiore sinistro della struttura
Le forze orizzontali sono considerate positive se agenti verso destra
Le forze verticali sono considerate positive se agenti verso il basso

X	ascisse (espresse in m) positive verso destra
Y	ordinate (espresse in m) positive verso l'alto
M	momento espresso in kgm
V	taglio espresso in kg
SN	sforzo normale espresso in kg
ux	spostamento direzione X espresso in cm
uy	spostamento direzione Y espresso in cm
σ_n	pressione sul terreno espressa in kg/cmq

Tipo di analisi

Pressione in calotta
Spinta sui piedritti

Pressione geostatica
a Riposo [combinazione 1]
a Riposo [combinazione 2]
a Riposo [combinazione 3]
a Riposo [combinazione 4]
a Riposo [combinazione 5]
a Riposo [combinazione 6]
Attiva [combinazione 7]
Attiva [combinazione 8]
Attiva [combinazione 9]
Attiva [combinazione 10]
Attiva [combinazione 11]
Attiva [combinazione 12]
Attiva [combinazione 13]
Attiva [combinazione 14]
Attiva [combinazione 15]
Attiva [combinazione 16]
Attiva [combinazione 17]
Attiva [combinazione 18]
Attiva [combinazione 19]
Attiva [combinazione 20]
Attiva [combinazione 21]
Attiva [combinazione 22]
a Riposo [combinazione 23]
a Riposo [combinazione 24]
a Riposo [combinazione 25]
a Riposo [combinazione 26]
a Riposo [combinazione 27]

Sisma

Combinazioni SLU

Accelerazione al suolo a_g = 2.21 [m/s^2]
Coefficiente di amplificazione per tipo di sottosuolo (S) 1.18

Coefficiente di amplificazione topografica (St)	1.00
Coefficiente riduzione (β_m)	0.31
Rapporto intensità sismica verticale/orizzontale	0.50
Coefficiente di intensità sismica orizzontale (percento)	$k_h=(a_g/g*\beta_m*St*Ss) = 8.21$
Coefficiente di intensità sismica verticale (percento)	$k_v=0.50 * k_h = 4.10$

Combinazioni SLE

Accelerazione al suolo a_g =	2.21 [m/s^2]
Coefficiente di amplificazione per tipo di sottosuolo (S)	1.18
Coefficiente di amplificazione topografica (St)	1.00
Coefficiente riduzione (β_m)	0.31
Rapporto intensità sismica verticale/orizzontale	0.50
Coefficiente di intensità sismica orizzontale (percento)	$k_h=(a_g/g*\beta_m*St*Ss) = 8.21$
Coefficiente di intensità sismica verticale (percento)	$k_v=0.50 * k_h = 4.10$
Forma diagramma incremento sismico	Rettangolare
Spinta sismica	Wood
Pressione in calotta(solo peso terreno)	0.00
Angolo diffusione sovraccarico	30.00 [°]

Coefficienti di spinta

N°combinazione	Statico	Sismico
1	0.384	0.000
2	0.470	0.000
3	0.384	0.000
4	0.470	0.000
5	0.384	0.000
6	0.470	0.000
7	0.217	0.381
8	0.217	0.381
9	0.276	0.440
10	0.276	0.440
11	0.217	0.381
12	0.217	0.381
13	0.276	0.440
14	0.276	0.440
15	0.217	0.381
16	0.217	0.381
17	0.276	0.440
18	0.276	0.440
19	0.217	0.381
20	0.217	0.381
21	0.276	0.440
22	0.276	0.440
23	0.384	0.000
24	0.384	0.000
25	0.384	0.000

26	0.384	0.000
27	0.384	0.000

Discretizzazione strutturale

Numero elementi fondazione	78
Numero elementi piedritto sinistro	66
Numero elementi piedritto destro	66
Numero molle piedritto sinistro	67
Numero molle piedritto destro	67

Inviluppo spostamenti nodali

Inviluppo spostamenti fondazione

X [m]	u_{Xmin} [cm]	u_{Xmax} [cm]	u_{Ymin} [cm]	u_{Ymax} [cm]
0.00	0.0017	0.2284	0.0081	0.1761
1.77	0.0010	0.2280	0.1063	0.2434
3.60	0.0000	0.2270	0.1445	0.2716
5.43	-0.0017	0.2260	0.1505	0.2434
7.13	-0.0027	0.2253	0.0617	0.2072

Inviluppo spostamenti piedritto sinistro

Y [m]	u_{Xmin} [cm]	u_{Xmax} [cm]	u_{Ymin} [cm]	u_{Ymax} [cm]
0.45	0.0017	0.2286	0.0499	0.2028
3.68	0.1615	0.5377	0.0510	0.2045
6.90	0.3585	0.9191	0.0514	0.2050

Inviluppo spostamenti piedritto destro

Y [m]	u_{Xmin} [cm]	u_{Xmax} [cm]	u_{Ymin} [cm]	u_{Ymax} [cm]
0.45	-0.0027	0.2254	0.1010	0.2049
3.68	-0.3087	0.2107	0.1022	0.2062
6.90	-0.6855	0.2016	0.1026	0.2066

Inviluppo sollecitazioni nodali

Inviluppo sollecitazioni fondazione

X [m]	M_{min} [kgm]	M_{max} [kgm]	V_{min} [kg]	V_{max} [kg]	N_{min} [kg]	N_{max} [kg]
0.00	0	0	14	293	-5698	-42
1.77	-44266	-22149	-15111	-8490	11291	26603
3.60	-34470	-5505	-6132	653	11629	26603
5.43	-44266	-4309	4428	14875	11966	26603
7.20	0	0	-345	-103	-67	5619

Inviluppo sollecitazioni piedritto sinistro

Y [m]	M_{min} [kgm]	M_{max} [kgm]	V_{min} [kg]	V_{max} [kg]	N_{min} [kg]	N_{max} [kg]
0.45	-62814	-36572	16213	26670	13917	19592
3.68	-10947	-4847	4337	7939	6958	9796
6.90	0	0	0	0	0	0

Inviluppo sollecitazioni piedritto destro

Y [m]	M_{min} [kgm]	M_{max} [kgm]	V_{min} [kg]	V_{max} [kg]	N_{min} [kg]	N_{max} [kg]
0.45	-62814	-13995	-26670	-7103	13917	19592
3.68	-9904	-1270	-7939	-1478	6958	9796
6.90	0	0	0	0	0	0

Inviluppo pressioni terreno

Inviluppo pressioni sul terreno di fondazione

X [m]	σ_{tmin} [kg/cmq]	σ_{tmax} [kg/cmq]
0.00	0.04	0.88
1.77	0.53	1.22
3.60	0.72	1.36
5.43	0.75	1.22
7.20	0.31	1.04

Inviluppo verifiche stato limite ultimo (SLU)

Verifica sezioni fondazione (Inviluppo)

Base sezione B = 100 cm
Altezza sezione H = 90.00 cm

X	A_{fi}	A_{fs}	CS
0.00	31.42	15.71	15.87
1.77	31.42	15.71	2.20
3.60	31.42	15.71	3.67
5.43	31.42	15.71	2.16
7.20	31.42	15.71	46.63

X	V_{Rd}	V_{Rsd}	V_{Rcd}	A_{sw}
0.00	29339	0	0	0.00
1.77	35503	0	0	0.00
3.60	35503	0	0	0.00
5.43	35503	0	0	0.00
7.20	29339	0	0	0.00

Verifica sezioni piedritto sinistro (Inviluppo)

Base sezione B = 100 cm
Altezza sezione H = 90.00 cm

Y	A_{fi}	A_{fs}	CS
0.45	10.05	20.11	1.11
3.68	10.05	10.05	2.22
6.90	10.05	10.05	1000.00

Y	V_{Rd}	V_{Rsd}	V_{Rcd}	A_{sw}
0.45	32091	0	0	0.00
3.68	30719	0	0	0.00
6.90	29348	0	0	0.00

Verifica sezioni piedritto destro (Inviluppo)

Base sezione B = 100 cm
Altezza sezione H = 90.00 cm

Y	A_{fi}	A_{fs}	CS
0.45	10.05	20.11	1.11
3.68	10.05	10.05	2.50
6.90	10.05	10.05	1000.00

Y	V_{Rd}	V_{Rsd}	V_{Rcd}	A_{sw}
0.45	32091	0	0	0.00
3.68	30719	0	0	0.00
6.90	29348	0	0	0.00

Inviluppo verifiche stato limite esercizio (SLE)

Verifica sezioni fondazione (Inviluppo)

Base sezione B = 100 cm
Altezza sezione H = 90.00 cm

X	A_{fi}	A_{fs}	σ_c	σ_{fi}	σ_{fs}
0.00	31.42	15.71	0.02	0.02	3.53
1.77	31.42	15.71	32.45	997.68	380.74
3.60	31.42	15.71	22.89	616.66	274.80
5.43	31.42	15.71	32.45	997.68	380.74
7.20	31.42	15.71	0.02	0.02	3.53

X	τ_c	A_{sw}
0.00	-0.1	0.00
1.77	-1.3	0.00
3.60	0.1	0.00
5.43	1.4	0.00
7.20	0.1	0.00

Verifica sezioni piedritto sinistro (Inviluppo)

Base sezione B = 100 cm
Altezza sezione H = 90.00 cm

Y	A_{fi}	A_{fs}	σ_c	σ_{fi}	σ_{fs}
0.45	10.05	20.11	57.09	611.77	2566.92
3.68	10.05	10.05	11.47	120.72	546.35
6.90	10.05	10.05	0.00	0.00	0.00

Y	τ_c	A_{sw}
0.45	2.7	0.00
3.68	0.8	0.00
6.90	0.0	0.00

Verifica sezioni piedritto destro (Inviluppo)

Base sezione B = 100 cm
Altezza sezione H = 90.00 cm

Y	A_{fi}	A_{fs}	σ_c	σ_{fi}	σ_{fs}
0.45	10.05	20.11	57.09	611.77	2566.92
3.68	10.05	10.05	11.47	120.72	546.35
6.90	10.05	10.05	0.00	0.00	0.00

Y	τ_c	A_{sw}
0.45	-2.7	0.00
3.68	-0.8	0.00
6.90	0.0	0.00

12.4 MURO AD U 4,00<h≤5,00 M – L=7,00 m

Geometria scatolare

Descrizione: Scatolare tipo vasca

Altezza esterna	5.80	[m]
Larghezza esterna	6.60	[m]
Lunghezza mensola di fondazione sinistra	0.20	[m]
Lunghezza mensola di fondazione destra	0.20	[m]
Spessore piedritto sinistro	0.80	[m]
Spessore piedritto destro	0.80	[m]
Spessore fondazione	0.80	[m]

Caratteristiche strati terreno

Strato di rinfianco

Descrizione	Terreno di rinfianco	
Peso di volume	2000.00	[kg/mc]
Peso di volume saturo	2000.00	[kg/mc]
Angolo di attrito	38.00	[°]
Angolo di attrito terreno struttura	23.00	[°]
Coesione	0.00	[kg/cmq]
Costante di Winkler	0.00	[kg/cmq/cm]

Strato di base

Descrizione	Terreno di base	
Peso di volume	2000.00	[kg/mc]
Peso di volume saturo	2000.00	[kg/mc]
Angolo di attrito	30.00	[°]
Angolo di attrito terreno struttura	20.00	[°]
Coesione	0.00	[kg/cmq]
Costante di Winkler	3.50	[kg/cmq/cm]

Condizioni di carico

Convenzioni adottate

Origine in corrispondenza dello spigolo inferiore sinistro della struttura
Carichi verticali positivi se diretti verso il basso
Carichi orizzontali positivi se diretti verso destra
Coppie concentrate positive se antiorarie
Ascisse X (espresse in m) positive verso destra
Ordinate Y (espresse in m) positive verso l'alto
Carichi concentrati espressi in kg
Coppie concentrate espressi in kgm
Carichi distribuiti espressi in kg/m

Simbologia adottata e unità di misura

Forze concentrate

X ascissa del punto di applicazione dei carichi verticali concentrati
Y ordinata del punto di applicazione dei carichi orizzontali concentrati
F_y componente Y del carico concentrato
F_x componente X del carico concentrato
M momento

Forze distribuite

X_i, X_f ascisse del punto iniziale e finale per carichi distribuiti verticali
Y_i, Y_f ordinate del punto iniziale e finale per carichi distribuiti orizzontali
V_{ni} componente normale del carico distribuito nel punto iniziale
V_{nf} componente normale del carico distribuito nel punto finale
V_{ti} componente tangenziale del carico distribuito nel punto iniziale
V_{tf} componente tangenziale del carico distribuito nel punto finale
D_{te} variazione termica lembo esterno espressa in gradi centigradi
D_{ti} variazione termica lembo interno espressa in gradi centigradi

Condizione di carico n°1 (Peso Proprio)

Condizione di carico n°2 (Spinta terreno sinistra)

Condizione di carico n°3 (Spinta terreno destra)

Condizione di carico n°4 (Sisma da sinistra)

Condizione di carico n°5 (Sisma da destra)

Condizione di carico n° 7 (Sovraccarico accidentale)

Distr	Terreno	X_i= -1.80	X_f= 0.20	V_{ni}= 2000	V_{nf}= 2000
Distr	Terreno	X_i= 6.80	X_f= 8.80	V_{ni}= 2000	V_{nf}= 2000

Condizione di carico n° 8 (Sovraccarico accidentale base)

Distr	Fondaz.	X_i= 1.00	X_f= 6.00	V_{ni}= 2000	V_{nf}= 2000	V_{ti}= 0	V_{tf}= 0

Impostazioni di progetto

Verifica materiali:

Stato Limite Ultimo

Coefficiente di sicurezza calcestruzzo γ_c	1.60
Fattore riduzione da resistenza cubica a cilindrica	0.83
Fattore di riduzione per carichi di lungo periodo	0.85
Coefficiente di sicurezza acciaio	1.15
Coefficiente di sicurezza per la sezione	1.00

Verifica Taglio - Metodo dell'inclinazione variabile del traliccio

$V_{Rd}=[0.18*k*(100.0*\rho_l*fck)^{1/3}/\gamma_c+0.15*\sigma_{cp}]*bw*d>(vmin+0.15*\sigma_{cp})*b_w*d$

$V_{Rsd}=0.9*d*A_{sw}/s*fyd*(ctg\alpha+ctg\theta)*sin\alpha$

$V_{Rcd}=0.9*d*b_w*\alpha_c*fcd'*(ctg(\theta)+ctg(\alpha)/(1.0+ctg\theta^2)$

con:

d altezza utile sezione [mm]

b_w	larghezza minima sezione [mm]
σ_{cp}	tensione media di compressione [N/mmq]
ρ_l	rapporto geometrico di armatura
A_{sw}	area armatuta trasversale [mmq]
s	interasse tra due armature trasversali consecutive [mm]
α_c	coefficiente maggiorativo, funzione di fcd e σ_{cp}

fcd'=0.5*fcd
$k=1+(200/d)^{1/2}$
$vmin=0.035*k^{3/2}*fck^{1/2}$

Stato Limite di Esercizio

Criteri di scelta per verifiche tensioni di esercizio:
Ambiente poco aggressivo

Limite tensioni di compressione nel calcestruzzo (comb. rare)	0.60 f_{ck}
Limite tensioni di compressione nel calcestruzzo (comb. quasi perm.)	0.45 f_{ck}
Limite tensioni di trazione nell'acciaio (comb. rare)	0.80 f_{yk}

Criteri verifiche a fessurazione:
Armatura sensibile
Apertura limite fessure espresse in [mm]
Apertura limite fessure w1=0.20 w2=0.30 w3=0.40

Verifiche secondo :
Norme Tecniche 2008 - Approccio 1

Copriferro sezioni 6.00 [cm]

Descrizione combinazioni di carico

Simbologia adottata

γ	Coefficiente di partecipazione della condizione
Ψ	Coefficiente di combinazione della condizione
C	Coefficiente totale di partecipazione della condizione

Norme Tecniche 2008

Simbologia adottata

γ_{G1sfav}	Coefficiente parziale sfavorevole sulle azioni permanenti
γ_{G1fav}	Coefficiente parziale favorevole sulle azioni permanenti
γ_{G2sfav}	Coefficiente parziale sfavorevole sulle azioni permanenti non strutturali
γ_{G2fav}	Coefficiente parziale favorevole sulle azioni permanenti non strutturali
γ_Q	Coefficiente parziale sulle azioni variabili
$\gamma_{tan\phi'}$	Coefficiente parziale di riduzione dell'angolo di attrito drenato
$\gamma_{c'}$	Coefficiente parziale di riduzione della coesione drenata
γ_{cu}	Coefficiente parziale di riduzione della coesione non drenata
γ_{qu}	Coefficiente parziale di riduzione del carico ultimo

Coefficienti di partecipazione combinazioni statiche

Coefficienti parziali per le azioni o per l'effetto delle azioni:

Carichi	*Effetto*		*A1*	*A2*
Permanenti	Favorevole	γ_{G1fav}	1.00	1.00
Permanenti	Sfavorevole	γ_{G1sfav}	1.35	1.00
Permanenti non strutturali	Favorevole	γ_{G2fav}	0.00	0.00
Permanenti non strutturali	Sfavorevole	γ_{G2sfav}	1.35	1.00
Variabili	Favorevole	γ_{Qfav}	0.00	0.00
Variabili	Sfavorevole	γ_{Qsfav}	1.50	1.30

Coefficienti parziali per i parametri geotecnici del terreno:

Parametri		*M1*	*M2*
Tangente dell'angolo di attrito	$\gamma_{tan\phi'}$	1.00	1.25
Coesione efficace	$\gamma_{c'}$	1.00	1.25
Resistenza non drenata	γ_{cu}	1.00	1.40
Resistenza a compressione uniassiale	γ_{qu}	1.00	1.60
Peso dell'unità di volume	γ_{γ}	1.00	1.00

Coefficienti di partecipazione combinazioni sismiche

Coefficienti parziali per le azioni o per l'effetto delle azioni:

Carichi	*Effetto*		*A1*	*A2*
Permanenti	Favorevole	γ_{G1fav}	1.00	1.00
Permanenti	Sfavorevole	γ_{G1sfav}	1.00	1.00
Permanenti	Favorevole	γ_{G2fav}	0.00	0.00
Permanenti	Sfavorevole	γ_{G2sfav}	1.00	1.00
Variabili	Favorevole	γ_{Qfav}	0.00	0.00
Variabili	Sfavorevole	γ_{Qsfav}	1.00	1.00

Coefficienti parziali per i parametri geotecnici del terreno:

Parametri		*M1*	*M2*
Tangente dell'angolo di attrito	$\gamma_{tan\phi'}$	1.00	1.25
Coesione efficace	$\gamma_{c'}$	1.00	1.25
Resistenza non drenata	γ_{cu}	1.00	1.40
Resistenza a compressione uniassiale	γ_{qu}	1.00	1.60
Peso dell'unità di volume	γ_{γ}	1.00	1.00

Coefficienti di partecipazione combinazioni statiche

Coefficienti parziali per le azioni o per l'effetto delle azioni:

Carichi	*Effetto*		*A1*	*A2*
Permanenti	Favorevole	γ_{G1fav}	1.00	1.00
Permanenti	Sfavorevole	γ_{G1sfav}	1.35	1.00
Permanenti non strutturali	Favorevole	γ_{G2fav}	0.00	0.00
Permanenti non strutturali	Sfavorevole	γ_{G2sfav}	1.35	1.00
Variabili	Favorevole	γ_{Qfav}	0.00	0.00
Variabili	Sfavorevole	γ_{Qsfav}	1.50	1.30

Coefficienti parziali per i parametri geotecnici del terreno:

Parametri		*M1*	*M2*
Tangente dell'angolo di attrito	$\gamma_{tan\phi'}$	1.00	1.25
Coesione efficace	$\gamma_{c'}$	1.00	1.25
Resistenza non drenata	γ_{cu}	1.00	1.40
Resistenza a compressione uniassiale	γ_{qu}	1.00	1.60
Peso dell'unità di volume	γ_{γ}	1.00	1.00

Coefficienti di partecipazione combinazioni sismiche

Coefficienti parziali per le azioni o per l'effetto delle azioni:

Carichi	*Effetto*		*A1*	*A2*
Permanenti	Favorevole	γ_{G1fav}	1.00	1.00
Permanenti	Sfavorevole	γ_{G1sfav}	1.00	1.00
Permanenti	Favorevole	γ_{G2fav}	0.00	0.00
Permanenti	Sfavorevole	γ_{G2sfav}	1.00	1.00
Variabili	Favorevole	γ_{Qfav}	0.00	0.00
Variabili	Sfavorevole	γ_{Qsfav}	1.00	1.00

Coefficienti parziali per i parametri geotecnici del terreno:

Parametri		*M1*	*M2*
Tangente dell'angolo di attrito	$\gamma_{tan\phi'}$	1.00	1.25
Coesione efficace	$\gamma_{c'}$	1.00	1.25
Resistenza non drenata	γ_{cu}	1.00	1.40
Resistenza a compressione uniassiale	γ_{qu}	1.00	1.60
Peso dell'unità di volume	γ_{γ}	1.00	1.00

Coeff. di combinazione Ψ_0= 0.70 Ψ_1= 0.50 Ψ_2= 0.20

Combinazione n° 1 SLU (Caso A1-M1)

	γ	**Ψ**	**C**
Peso Proprio	1.35	1.00	1.35
Spinta terreno sinistra	1.35	1.00	1.35
Spinta terreno destra	1.35	1.00	1.35
Sovraccarico accidentale	1.50	1.00	1.50

Combinazione n° 2 SLU (Caso A2-M2)

	γ	**Ψ**	**C**
Peso Proprio	1.00	1.00	1.00
Spinta terreno sinistra	1.00	1.00	1.00
Spinta terreno destra	1.00	1.00	1.00
Sovraccarico accidentale	1.30	1.00	1.30

Combinazione n° 3 SLU (Caso A1-M1)

	γ	**Ψ**	**C**
Peso Proprio	1.35	1.00	1.35
Spinta terreno sinistra	1.35	1.00	1.35
Spinta terreno destra	1.35	1.00	1.35
Sovraccarico accidentale base	1.50	1.00	1.50

Combinazione n° 4 SLU (Caso A2-M2)

	γ	Ψ	C
Peso Proprio	1.00	1.00	1.00
Spinta terreno sinistra	1.00	1.00	1.00
Spinta terreno destra	1.00	1.00	1.00
Sovraccarico accidentale base	1.30	1.00	1.30

Combinazione n° 5 SLU (Caso A1-M1)

	γ	Ψ	C
Peso Proprio	1.35	1.00	1.35
Spinta terreno sinistra	1.35	1.00	1.35
Spinta terreno destra	1.35	1.00	1.35
Sovraccarico accidentale	1.50	1.00	1.50
Sovraccarico accidentale base	1.50	1.00	1.50

Combinazione n° 6 SLU (Caso A2-M2)

	γ	Ψ	C
Peso Proprio	1.00	1.00	1.00
Spinta terreno sinistra	1.00	1.00	1.00
Spinta terreno destra	1.00	1.00	1.00
Sovraccarico accidentale	1.30	1.00	1.30
Sovraccarico accidentale base	1.30	1.00	1.30

Combinazione n° 7 SLU (Caso A1-M1) - Sisma Vert. negativo

	γ	Ψ	C
Peso Proprio	1.00	1.00	1.00
Spinta terreno sinistra	1.00	1.00	1.00
Spinta terreno destra	1.00	1.00	1.00
Sisma da sinistra	1.00	1.00	1.00

Combinazione n° 8 SLU (Caso A1-M1) - Sisma Vert. positivo

	γ	Ψ	C
Peso Proprio	1.00	1.00	1.00
Spinta terreno sinistra	1.00	1.00	1.00
Spinta terreno destra	1.00	1.00	1.00
Sisma da sinistra	1.00	1.00	1.00

Combinazione n° 9 SLU (Caso A2-M2) - Sisma Vert. positivo

	γ	Ψ	C
Peso Proprio	1.00	1.00	1.00
Spinta terreno sinistra	1.00	1.00	1.00
Spinta terreno destra	1.00	1.00	1.00
Sisma da sinistra	1.00	1.00	1.00

Combinazione n° 10 SLU (Caso A2-M2) - Sisma Vert. negativo

	γ	Ψ	C
Peso Proprio	1.00	1.00	1.00

Spinta terreno sinistra	1.00	1.00	1.00
Spinta terreno destra	1.00	1.00	1.00
Sisma da sinistra	1.00	1.00	1.00

Combinazione n° 11 SLU (Caso A1-M1) - Sisma Vert. negativo

	γ	Ψ	C
Peso Proprio	1.00	1.00	1.00
Spinta terreno sinistra	1.00	1.00	1.00
Spinta terreno destra	1.00	1.00	1.00
Sisma da sinistra	1.00	1.00	1.00
Sovraccarico accidentale	1.00	0.50	0.50

Combinazione n° 12 SLU (Caso A1-M1) - Sisma Vert. positivo

	γ	Ψ	C
Peso Proprio	1.00	1.00	1.00
Spinta terreno sinistra	1.00	1.00	1.00
Spinta terreno destra	1.00	1.00	1.00
Sisma da sinistra	1.00	1.00	1.00
Sovraccarico accidentale	1.00	0.50	0.50

Combinazione n° 13 SLU (Caso A2-M2) - Sisma Vert. positivo

	γ	Ψ	C
Peso Proprio	1.00	1.00	1.00
Spinta terreno sinistra	1.00	1.00	1.00
Spinta terreno destra	1.00	1.00	1.00
Sisma da sinistra	1.00	1.00	1.00
Sovraccarico accidentale	1.00	0.50	0.50

Combinazione n° 14 SLU (Caso A2-M2) - Sisma Vert. negativo

	γ	Ψ	C
Peso Proprio	1.00	1.00	1.00
Spinta terreno sinistra	1.00	1.00	1.00
Spinta terreno destra	1.00	1.00	1.00
Sisma da sinistra	1.00	1.00	1.00
Sovraccarico accidentale	1.00	0.50	0.50

Combinazione n° 15 SLU (Caso A1-M1) - Sisma Vert. negativo

	γ	Ψ	C
Peso Proprio	1.00	1.00	1.00
Spinta terreno sinistra	1.00	1.00	1.00
Spinta terreno destra	1.00	1.00	1.00
Sisma da sinistra	1.00	1.00	1.00
Sovraccarico accidentale base	1.00	0.50	0.50

Combinazione n° 16 SLU (Caso A1-M1) - Sisma Vert. positivo

	γ	Ψ	C
Peso Proprio	1.00	1.00	1.00
Spinta terreno sinistra	1.00	1.00	1.00

Spinta terreno destra	1.00	1.00	1.00
Sisma da sinistra	1.00	1.00	1.00
Sovraccarico accidentale base	1.00	0.50	0.50

Combinazione n° 17 SLU (Caso A2-M2) - Sisma Vert. positivo

	γ	Ψ	C
Peso Proprio	1.00	1.00	1.00
Spinta terreno sinistra	1.00	1.00	1.00
Spinta terreno destra	1.00	1.00	1.00
Sisma da sinistra	1.00	1.00	1.00
Sovraccarico accidentale base	1.00	0.50	0.50

Combinazione n° 18 SLU (Caso A2-M2) - Sisma Vert. negativo

	γ	Ψ	C
Peso Proprio	1.00	1.00	1.00
Spinta terreno sinistra	1.00	1.00	1.00
Spinta terreno destra	1.00	1.00	1.00
Sisma da sinistra	1.00	1.00	1.00
Sovraccarico accidentale base	1.00	0.50	0.50

Combinazione n° 19 SLU (Caso A1-M1) - Sisma Vert. positivo

	γ	Ψ	C
Peso Proprio	1.00	1.00	1.00
Spinta terreno sinistra	1.00	1.00	1.00
Spinta terreno destra	1.00	1.00	1.00
Sisma da sinistra	1.00	1.00	1.00
Sovraccarico accidentale	1.00	0.50	0.50
Sovraccarico accidentale base	1.00	0.50	0.50

Combinazione n° 20 SLU (Caso A1-M1) - Sisma Vert. negativo

	γ	Ψ	C
Peso Proprio	1.00	1.00	1.00
Spinta terreno sinistra	1.00	1.00	1.00
Spinta terreno destra	1.00	1.00	1.00
Sisma da sinistra	1.00	1.00	1.00
Sovraccarico accidentale	1.00	0.50	0.50
Sovraccarico accidentale base	1.00	0.50	0.50

Combinazione n° 21 SLU (Caso A2-M2) - Sisma Vert. positivo

	γ	Ψ	C
Peso Proprio	1.00	1.00	1.00
Spinta terreno sinistra	1.00	1.00	1.00
Spinta terreno destra	1.00	1.00	1.00
Sisma da sinistra	1.00	1.00	1.00
Sovraccarico accidentale	1.00	0.50	0.50
Sovraccarico accidentale base	1.00	0.50	0.50

Combinazione n° 22 SLU (Caso A2-M2) - Sisma Vert. negativo

	γ	Ψ	C
Peso Proprio	1.00	1.00	1.00
Spinta terreno sinistra	1.00	1.00	1.00
Spinta terreno destra	1.00	1.00	1.00
Sisma da sinistra	1.00	1.00	1.00
Sovraccarico accidentale	1.00	0.50	0.50
Sovraccarico accidentale base	1.00	0.50	0.50

Combinazione n° 23 SLE (Quasi Permanente)

	γ	Ψ	C
Peso Proprio	1.00	1.00	1.00
Spinta terreno sinistra	1.00	1.00	1.00
Spinta terreno destra	1.00	1.00	1.00
Sovraccarico accidentale	1.00	0.20	0.20
Sovraccarico accidentale base	1.00	0.20	0.20

Combinazione n° 24 SLE (Frequente)

	γ	Ψ	C
Peso Proprio	1.00	1.00	1.00
Spinta terreno sinistra	1.00	1.00	1.00
Spinta terreno destra	1.00	1.00	1.00
Sovraccarico accidentale	1.00	0.50	0.50
Sovraccarico accidentale base	1.00	0.20	0.20

Combinazione n° 25 SLE (Frequente)

	γ	Ψ	C
Peso Proprio	1.00	1.00	1.00
Spinta terreno sinistra	1.00	1.00	1.00
Spinta terreno destra	1.00	1.00	1.00
Sovraccarico accidentale base	1.00	0.50	0.50
Sovraccarico accidentale	1.00	0.20	0.20

Combinazione n° 26 SLE (Rara)

	γ	Ψ	C
Peso Proprio	1.00	1.00	1.00
Spinta terreno sinistra	1.00	1.00	1.00
Spinta terreno destra	1.00	1.00	1.00
Sovraccarico accidentale	1.00	1.00	1.00
Sovraccarico accidentale base	1.00	0.70	0.70

Combinazione n° 27 SLE (Rara)

	γ	Ψ	C
Peso Proprio	1.00	1.00	1.00
Spinta terreno sinistra	1.00	1.00	1.00
Spinta terreno destra	1.00	1.00	1.00
Sovraccarico accidentale base	1.00	1.00	1.00
Sovraccarico accidentale	1.00	0.70	0.70

Analisi della spinta e verifiche

Simbologia adottata ed unità di misura
Origine in corrispondenza dello spigolo inferiore sinistro della struttura
Le forze orizzontali sono considerate positive se agenti verso destra
Le forze verticali sono considerate positive se agenti verso il basso

X	ascisse (espresse in m) positive verso destra
Y	ordinate (espresse in m) positive verso l'alto
M	momento espresso in kgm
V	taglio espresso in kg
SN	sforzo normale espresso in kg
ux	spostamento direzione X espresso in cm
uy	spostamento direzione Y espresso in cm
σ_n	pressione sul terreno espressa in kg/cmq

Tipo di analisi

Pressione in calotta
Spinta sui piedritti

Pressione geostatica
a Riposo [combinazione 1]
a Riposo [combinazione 2]
a Riposo [combinazione 3]
a Riposo [combinazione 4]
a Riposo [combinazione 5]
a Riposo [combinazione 6]
Attiva [combinazione 7]
Attiva [combinazione 8]
Attiva [combinazione 9]
Attiva [combinazione 10]
Attiva [combinazione 11]
Attiva [combinazione 12]
Attiva [combinazione 13]
Attiva [combinazione 14]
Attiva [combinazione 15]
Attiva [combinazione 16]
Attiva [combinazione 17]
Attiva [combinazione 18]
Attiva [combinazione 19]
Attiva [combinazione 20]
Attiva [combinazione 21]
Attiva [combinazione 22]
a Riposo [combinazione 23]
a Riposo [combinazione 24]
a Riposo [combinazione 25]
a Riposo [combinazione 26]
a Riposo [combinazione 27]

Sisma

Combinazioni SLU

Accelerazione al suolo a_g = 2.21 [m/s^2]
Coefficiente di amplificazione per tipo di sottosuolo (S) 1.18

Coefficiente di amplificazione topografica (St)	1.00
Coefficiente riduzione (β_m)	0.31
Rapporto intensità sismica verticale/orizzontale	0.50
Coefficiente di intensità sismica orizzontale (percento)	$k_h=(a_g/g*\beta_m*St*Ss) = 8.21$
Coefficiente di intensità sismica verticale (percento)	$k_v=0.50 * k_h = 4.10$

Combinazioni SLE

Accelerazione al suolo a_g =	2.21 [m/s^2]
Coefficiente di amplificazione per tipo di sottosuolo (S)	1.18
Coefficiente di amplificazione topografica (St)	1.00
Coefficiente riduzione (β_m)	0.31
Rapporto intensità sismica verticale/orizzontale	0.50
Coefficiente di intensità sismica orizzontale (percento)	$k_h=(a_g/g*\beta_m*St*Ss) = 8.21$
Coefficiente di intensità sismica verticale (percento)	$k_v=0.50 * k_h = 4.10$
Forma diagramma incremento sismico	Rettangolare
Spinta sismica	Wood
Pressione in calotta(solo peso terreno)	0.00
Angolo diffusione sovraccarico	30.00 [°]

Coefficienti di spinta

N°combinazione	Statico	Sismico
1	0.384	0.000
2	0.470	0.000
3	0.384	0.000
4	0.470	0.000
5	0.384	0.000
6	0.470	0.000
7	0.217	0.381
8	0.217	0.381
9	0.276	0.440
10	0.276	0.440
11	0.217	0.381
12	0.217	0.381
13	0.276	0.440
14	0.276	0.440
15	0.217	0.381
16	0.217	0.381
17	0.276	0.440
18	0.276	0.440
19	0.217	0.381
20	0.217	0.381
21	0.276	0.440
22	0.276	0.440
23	0.384	0.000
24	0.384	0.000
25	0.384	0.000

26	0.384	0.000
27	0.384	0.000

Discretizzazione strutturale

Numero elementi fondazione	77
Numero elementi piedritto sinistro	56
Numero elementi piedritto destro	56
Numero molle piedritto sinistro	57
Numero molle piedritto destro	57

Inviluppo spostamenti nodali

Inviluppo spostamenti fondazione

X [m]	u_{Xmin} [cm]	u_{Xmax} [cm]	u_{Ymin} [cm]	u_{Ymax} [cm]
0.00	0.0013	0.1905	0.0243	0.1608
1.77	0.0008	0.1901	0.0931	0.2091
3.50	0.0000	0.1893	0.1134	0.2297
5.23	-0.0013	0.1886	0.1236	0.2091
6.93	-0.0022	0.1879	0.0507	0.1662

Inviluppo spostamenti piedritto sinistro

Y [m]	u_{Xmin} [cm]	u_{Xmax} [cm]	u_{Ymin} [cm]	u_{Ymax} [cm]
0.40	0.0013	0.1906	0.0528	0.1782
3.10	0.0963	0.3833	0.0536	0.1793
5.80	0.2139	0.6209	0.0538	0.1797

Inviluppo spostamenti piedritto destro

Y [m]	u_{Xmin} [cm]	u_{Xmax} [cm]	u_{Ymin} [cm]	u_{Ymax} [cm]
0.40	-0.0022	0.1880	0.0818	0.1782
3.10	-0.2199	0.1793	0.0826	0.1793
5.80	-0.4843	0.1807	0.0829	0.1797

Inviluppo sollecitazioni nodali

Inviluppo sollecitazioni fondazione

X [m]	M_{min} [kgm]	M_{max} [kgm]	V_{min} [kg]	V_{max} [kg]	N_{min} [kg]	N_{max} [kg]
0.00	0	0	41	268	-4269	-30
1.77	-27435	-10942	-10492	-5828	7877	20188
3.50	-20581	47	-3780	552	8161	20188
5.23	-27435	-22	3517	11063	8445	20188
7.00	0	0	-277	-84	-50	4212

Inviluppo sollecitazioni piedritto sinistro

Y [m]	M_{min} [kgm]	M_{max} [kgm]	V_{min} [kg]	V_{max} [kg]	N_{min} [kg]	N_{max} [kg]
0.40	-41032	-22020	11435	20238	10357	14580
3.10	-6855	-2984	3143	6337	5178	7290
5.80	0	0	0	0	0	0

Inviluppo sollecitazioni piedritto destro

Y [m]	M_{min} [kgm]	M_{max} [kgm]	V_{min} [kg]	V_{max} [kg]	N_{min} [kg]	N_{max} [kg]
0.40	-41032	-8075	-20238	-4928	10357	14580
3.10	-6855	-711	-6337	-1010	5178	7290
5.80	0	0	0	0	0	0

Inviluppo pressioni terreno

Inviluppo pressioni sul terreno di fondazione

X [m]	σ_{tmin} [kg/cmq]	σ_{tmax} [kg/cmq]
0.00	0.12	0.80
1.77	0.47	1.05
3.50	0.57	1.15
5.23	0.62	1.05
7.00	0.25	0.83

Inviluppo verifiche stato limite ultimo (SLU)

Verifica sezioni fondazione (Inviluppo)

Base sezione B = 100 cm
Altezza sezione H = 80.00 cm

X	A_{fi}	A_{fs}	CS
0.00	20.11	10.05	13.31
1.77	20.11	10.05	2.08
3.50	20.11	10.05	3.68
5.23	20.11	10.05	2.04
7.00	20.11	10.05	34.70

X	V_{Rd}	V_{Rsd}	V_{Rcd}	A_{sw}
0.00	26684	0	0	0.00
1.77	29492	0	0	0.00
3.50	29492	0	0	0.00
5.23	29492	0	0	0.00
7.00	26684	0	0	0.00

Verifica sezioni piedritto sinistro (Inviluppo)

Base sezione B = 100 cm
Altezza sezione H = 80.00 cm

Y	A_{fi}	A_{fs}	CS
0.40	7.70	20.11	1.49
3.10	7.70	10.05	3.06
5.80	7.70	10.05	1000.00

Y	V_{Rd}	V_{Rsd}	V_{Rcd}	A_{sw}
0.40	28714	0	0	0.00
3.10	27702	0	0	0.00
5.80	26691	0	0	0.00

Verifica sezioni piedritto destro (Inviluppo)

Base sezione B = 100 cm
Altezza sezione H = 80.00 cm

Y	A_{fi}	A_{fs}	CS
0.40	7.70	20.11	1.49
3.10	7.70	10.05	3.06
5.80	7.70	10.05	1000.00

Y	V_{Rd}	V_{Rsd}	V_{Rcd}	A_{sw}
0.40	28714	0	0	0.00
3.10	27702	0	0	0.00
5.80	26691	0	0	0.00

Inviluppo verifiche stato limite esercizio (SLE)

Verifica sezioni fondazione (Inviluppo)

Base sezione B = 100 cm
Altezza sezione H = 80.00 cm

X	A_{fi}	A_{fs}	σ_c	σ_{fi}	σ_{fs}
0.00	20.11	10.05	0.03	0.06	4.83
1.77	20.11	10.05	27.99	976.59	306.57
3.50	20.11	10.05	18.00	516.13	206.30
5.23	20.11	10.05	27.99	976.61	306.58
7.00	20.11	10.05	0.03	0.06	4.83

X	τ_c	A_{sw}
0.00	-0.1	0.00
1.77	-1.1	0.00
3.50	0.1	0.00
5.23	1.2	0.00
7.00	0.1	0.00

Verifica sezioni piedritto sinistro (Inviluppo)

Base sezione B = 100 cm
Altezza sezione H = 80.00 cm

Y	A_{fi}	A_{fs}	σ_c	σ_{fi}	σ_{fs}
0.40	7.70	20.11	45.95	479.45	1898.66
3.10	7.70	10.05	9.77	99.13	439.20
5.80	7.70	10.05	0.00	0.00	0.00

Y	τ_c	A_{sw}
0.40	2.3	0.00
3.10	0.7	0.00
5.80	0.0	0.00

Verifica sezioni piedritto destro (Inviluppo)

Base sezione B = 100 cm
Altezza sezione H = 80.00 cm

Y	A_{fi}	A_{fs}	σ_c	σ_{fi}	σ_{fs}
0.40	7.70	20.11	45.95	479.45	1898.66
3.10	7.70	10.05	9.77	99.13	439.20
5.80	7.70	10.05	0.00	0.00	0.00

Y	τ_c	A_{sw}
0.40	-2.3	0.00
3.10	-0.7	0.00
5.80	0.0	0.00

12.5 MURO AD U 3,00<h≤4,00 M – L=6,80 m

Geometria scatolare

Descrizione: Scatolare tipo vasca

Altezza esterna	4.70	[m]
Larghezza esterna	6.40	[m]
Lunghezza mensola di fondazione sinistra	0.20	[m]
Lunghezza mensola di fondazione destra	0.20	[m]
Spessore piedritto sinistro	0.70	[m]
Spessore piedritto destro	0.70	[m]
Spessore fondazione	0.70	[m]

Caratteristiche strati terreno

Strato di rinfianco

Descrizione	Terreno di rinfianco	
Peso di volume	2000.00	[kg/mc]
Peso di volume saturo	2000.00	[kg/mc]
Angolo di attrito	38.00	[°]
Angolo di attrito terreno struttura	23.00	[°]
Coesione	0.00	[kg/cmq]
Costante di Winkler	0.00	[kg/cmq/cm]

Strato di base

Descrizione	Terreno di base	
Peso di volume	2000.00	[kg/mc]
Peso di volume saturo	2000.00	[kg/mc]
Angolo di attrito	30.00	[°]
Angolo di attrito terreno struttura	20.00	[°]
Coesione	0.00	[kg/cmq]
Costante di Winkler	3.50	[kg/cmq/cm]

Condizioni di carico

Convenzioni adottate

Origine in corrispondenza dello spigolo inferiore sinistro della struttura
Carichi verticali positivi se diretti verso il basso
Carichi orizzontali positivi se diretti verso destra
Coppie concentrate positive se antiorarie
Ascisse X (espresse in m) positive verso destra
Ordinate Y (espresse in m) positive verso l'alto
Carichi concentrati espressi in kg
Coppie concentrate espressi in kgm
Carichi distribuiti espressi in kg/m

Simbologia adottata e unità di misura

Forze concentrate

X ascissa del punto di applicazione dei carichi verticali concentrati
Y ordinata del punto di applicazione dei carichi orizzontali concentrati
F_y componente Y del carico concentrato
F_x componente X del carico concentrato
M momento

Forze distribuite

X_i, X_f ascisse del punto iniziale e finale per carichi distribuiti verticali
Y_i, Y_f ordinate del punto iniziale e finale per carichi distribuiti orizzontali
V_{ni} componente normale del carico distribuito nel punto iniziale
V_{nf} componente normale del carico distribuito nel punto finale
V_{ti} componente tangenziale del carico distribuito nel punto iniziale
V_{tf} componente tangenziale del carico distribuito nel punto finale
D_{te} variazione termica lembo esterno espressa in gradi centigradi
D_{ti} variazione termica lembo interno espressa in gradi centigradi

Condizione di carico n°1 (Peso Proprio)

Condizione di carico n°2 (Spinta terreno sinistra)

Condizione di carico n°3 (Spinta terreno destra)

Condizione di carico n°4 (Sisma da sinistra)

Condizione di carico n°5 (Sisma da destra)

Condizione di carico n° 7 (Sovraccarico stradale)

Distr	Terreno	X_i= -1.80	X_f= 0.20	V_{ni}= 2000	V_{nf}= 2000
Distr	Terreno	X_i= 6.60	X_f= 8.60	V_{ni}= 2000	V_{nf}= 2000

Condizione di carico n° 8 (Sovraccarico accidentale base)

Distr	Fondaz.	X_i= 0.90	X_f= 5.80	V_{ni}= 2000	V_{nf}= 2000	V_{ti}= 0	V_{tf}= 0

Impostazioni di progetto

Verifica materiali:

Stato Limite Ultimo

Coefficiente di sicurezza calcestruzzo γ_c	1.60
Fattore riduzione da resistenza cubica a cilindrica	0.83
Fattore di riduzione per carichi di lungo periodo	0.85
Coefficiente di sicurezza acciaio	1.15
Coefficiente di sicurezza per la sezione	1.00

Verifica Taglio - Metodo dell'inclinazione variabile del traliccio

$V_{Rd}=[0.18*k*(100.0*\rho_l*fck)^{1/3}/\gamma_c+0.15*\sigma_{cp}]*bw*d>(vmin+0.15*\sigma_{cp})*b_w*d$

$V_{Rsd}=0.9*d*A_{sw}/s*fyd*(ctg\alpha+ctg\theta)*sin\alpha$

$V_{Rcd}=0.9*d*b_w*\alpha_c*fcd'*(ctg(\theta)+ctg(\alpha)/(1.0+ctg\theta^2)$

con:

d	altezza utile sezione [mm]
b_w	larghezza minima sezione [mm]
σ_{cp}	tensione media di compressione [N/mmq]
ρ_l	rapporto geometrico di armatura
A_{sw}	area armatuta trasversale [mmq]
s	interasse tra due armature trasversali consecutive [mm]
α_c	coefficiente maggiorativo, funzione di fcd e σ_{cp}

$fcd'=0.5*fcd$
$k=1+(200/d)^{1/2}$
$vmin=0.035*k^{3/2}*fck^{1/2}$

Stato Limite di Esercizio

Criteri di scelta per verifiche tensioni di esercizio:
Ambiente poco aggressivo

Limite tensioni di compressione nel calcestruzzo (comb. rare)	0.60 f_{ck}
Limite tensioni di compressione nel calcestruzzo (comb. quasi perm.)	0.45 f_{ck}
Limite tensioni di trazione nell'acciaio (comb. rare)	0.80 f_{yk}

Criteri verifiche a fessurazione:
Armatura sensibile
Apertura limite fessure espresse in [mm]
Apertura limite fessure w1=0.20 w2=0.30 w3=0.40

Verifiche secondo :
Norme Tecniche 2008 - Approccio 1

Copriferro sezioni 6.00 [cm]

Descrizione combinazioni di carico

Simbologia adottata

γ	Coefficiente di partecipazione della condizione
Ψ	Coefficiente di combinazione della condizione
C	Coefficiente totale di partecipazione della condizione

Norme Tecniche 2008

Simbologia adottata

γ_{G1sfav}	Coefficiente parziale sfavorevole sulle azioni permanenti
γ_{G1fav}	Coefficiente parziale favorevole sulle azioni permanenti
γ_{G2sfav}	Coefficiente parziale sfavorevole sulle azioni permanenti non strutturali
γ_{G2fav}	Coefficiente parziale favorevole sulle azioni permanenti non strutturali
γ_Q	Coefficiente parziale sulle azioni variabili
$\gamma_{tan\phi'}$	Coefficiente parziale di riduzione dell'angolo di attrito drenato
$\gamma_{c'}$	Coefficiente parziale di riduzione della coesione drenata
γ_{cu}	Coefficiente parziale di riduzione della coesione non drenata
γ_{qu}	Coefficiente parziale di riduzione del carico ultimo

Coefficienti di partecipazione combinazioni statiche

Coefficienti parziali per le azioni o per l'effetto delle azioni:

Carichi	*Effetto*		*A1*	*A2*
Permanenti	Favorevole	γ_{G1fav}	1.00	1.00
Permanenti	Sfavorevole	γ_{G1sfav}	1.35	1.00
Permanenti non strutturali	Favorevole	γ_{G2fav}	0.00	0.00
Permanenti non strutturali	Sfavorevole	γ_{G2sfav}	1.35	1.00
Variabili	Favorevole	γ_{Qfav}	0.00	0.00
Variabili	Sfavorevole	γ_{Qsfav}	1.50	1.30

Coefficienti parziali per i parametri geotecnici del terreno:

Parametri		*M1*	*M2*
Tangente dell'angolo di attrito	$\gamma_{tan\phi'}$	1.00	1.25
Coesione efficace	$\gamma_{c'}$	1.00	1.25
Resistenza non drenata	γ_{cu}	1.00	1.40
Resistenza a compressione uniassiale	γ_{qu}	1.00	1.60
Peso dell'unità di volume	γ_{γ}	1.00	1.00

Coefficienti di partecipazione combinazioni sismiche

Coefficienti parziali per le azioni o per l'effetto delle azioni:

Carichi	*Effetto*		*A1*	*A2*
Permanenti	Favorevole	γ_{G1fav}	1.00	1.00
Permanenti	Sfavorevole	γ_{G1sfav}	1.00	1.00
Permanenti	Favorevole	γ_{G2fav}	0.00	0.00
Permanenti	Sfavorevole	γ_{G2sfav}	1.00	1.00
Variabili	Favorevole	γ_{Qfav}	0.00	0.00
Variabili	Sfavorevole	γ_{Qsfav}	1.00	1.00

Coefficienti parziali per i parametri geotecnici del terreno:

Parametri		*M1*	*M2*
Tangente dell'angolo di attrito	$\gamma_{tan\phi'}$	1.00	1.25
Coesione efficace	$\gamma_{c'}$	1.00	1.25
Resistenza non drenata	γ_{cu}	1.00	1.40
Resistenza a compressione uniassiale	γ_{qu}	1.00	1.60
Peso dell'unità di volume	γ_{γ}	1.00	1.00

Coefficienti di partecipazione combinazioni statiche

Coefficienti parziali per le azioni o per l'effetto delle azioni:

Carichi	*Effetto*		*A1*	*A2*
Permanenti	Favorevole	γ_{G1fav}	1.00	1.00
Permanenti	Sfavorevole	γ_{G1sfav}	1.35	1.00
Permanenti non strutturali	Favorevole	γ_{G2fav}	0.00	0.00
Permanenti non strutturali	Sfavorevole	γ_{G2sfav}	1.35	1.00
Variabili	Favorevole	γ_{Qfav}	0.00	0.00
Variabili	Sfavorevole	γ_{Qsfav}	1.50	1.30

Coefficienti parziali per i parametri geotecnici del terreno:

Parametri		*M1*	*M2*
Tangente dell'angolo di attrito	$\gamma_{tan\phi'}$	1.00	1.25
Coesione efficace	$\gamma_{c'}$	1.00	1.25
Resistenza non drenata	γ_{cu}	1.00	1.40
Resistenza a compressione uniassiale	γ_{qu}	1.00	1.60
Peso dell'unità di volume	γ_{γ}	1.00	1.00

Coefficienti di partecipazione combinazioni sismiche

Coefficienti parziali per le azioni o per l'effetto delle azioni:

Carichi	*Effetto*		*A1*	*A2*
Permanenti	Favorevole	γ_{G1fav}	1.00	1.00
Permanenti	Sfavorevole	γ_{G1sfav}	1.00	1.00
Permanenti	Favorevole	γ_{G2fav}	0.00	0.00
Permanenti	Sfavorevole	γ_{G2sfav}	1.00	1.00
Variabili	Favorevole	γ_{Qfav}	0.00	0.00
Variabili	Sfavorevole	γ_{Qsfav}	1.00	1.00

Coefficienti parziali per i parametri geotecnici del terreno:

Parametri		*M1*	*M2*
Tangente dell'angolo di attrito	$\gamma_{tan\phi'}$	1.00	1.25
Coesione efficace	$\gamma_{c'}$	1.00	1.25
Resistenza non drenata	γ_{cu}	1.00	1.40
Resistenza a compressione uniassiale	γ_{qu}	1.00	1.60
Peso dell'unità di volume	γ_{γ}	1.00	1.00

Coeff. di combinazione Ψ_0= 0.70 Ψ_1= 0.50 Ψ_2= 0.20

Combinazione n° 1 SLU (Caso A1-M1)

	γ	**Ψ**	**C**
Peso Proprio	1.35	1.00	1.35
Spinta terreno sinistra	1.35	1.00	1.35
Spinta terreno destra	1.35	1.00	1.35
Sovraccarico stradale	1.50	1.00	1.50
Sovraccarico accidentale base	1.50	1.00	1.50

Combinazione n° 2 SLU (Caso A2-M2)

	γ	**Ψ**	**C**
Peso Proprio	1.00	1.00	1.00
Spinta terreno sinistra	1.00	1.00	1.00
Spinta terreno destra	1.00	1.00	1.00
Sovraccarico stradale	1.30	1.00	1.30
Sovraccarico accidentale base	1.30	1.00	1.30

Combinazione n° 3 SLU (Caso A1-M1)

	γ	**Ψ**	**C**
Peso Proprio	1.35	1.00	1.35

Spinta terreno sinistra	1.35	1.00	1.35
Spinta terreno destra	1.35	1.00	1.35
Sovraccarico stradale	1.50	1.00	1.50

Combinazione n° 4 SLU (Caso A2-M2)

	γ	Ψ	C
Peso Proprio	1.00	1.00	1.00
Spinta terreno sinistra	1.00	1.00	1.00
Spinta terreno destra	1.00	1.00	1.00
Sovraccarico stradale	1.30	1.00	1.30

Combinazione n° 5 SLU (Caso A1-M1)

	γ	Ψ	C
Peso Proprio	1.35	1.00	1.35
Spinta terreno sinistra	1.35	1.00	1.35
Spinta terreno destra	1.35	1.00	1.35
Sovraccarico accidentale base	1.50	1.00	1.50

Combinazione n° 6 SLU (Caso A2-M2)

	γ	Ψ	C
Peso Proprio	1.00	1.00	1.00
Spinta terreno sinistra	1.00	1.00	1.00
Spinta terreno destra	1.00	1.00	1.00
Sovraccarico accidentale base	1.30	1.00	1.30

Combinazione n° 7 SLU (Caso A1-M1) - Sisma Vert. negativo

	γ	Ψ	C
Peso Proprio	1.00	1.00	1.00
Spinta terreno sinistra	1.00	1.00	1.00
Spinta terreno destra	1.00	1.00	1.00
Sisma da sinistra	1.00	1.00	1.00

Combinazione n° 8 SLU (Caso A1-M1) - Sisma Vert. positivo

	γ	Ψ	C
Peso Proprio	1.00	1.00	1.00
Spinta terreno sinistra	1.00	1.00	1.00
Spinta terreno destra	1.00	1.00	1.00
Sisma da sinistra	1.00	1.00	1.00

Combinazione n° 9 SLU (Caso A2-M2) - Sisma Vert. positivo

	γ	Ψ	C
Peso Proprio	1.00	1.00	1.00
Spinta terreno sinistra	1.00	1.00	1.00
Spinta terreno destra	1.00	1.00	1.00
Sisma da sinistra	1.00	1.00	1.00

Combinazione n° 10 SLU (Caso A2-M2) - Sisma Vert. negativo

γ	Ψ	C

Peso Proprio	1.00	1.00	1.00
Spinta terreno sinistra	1.00	1.00	1.00
Spinta terreno destra	1.00	1.00	1.00
Sisma da sinistra	1.00	1.00	1.00

Combinazione n° 11 SLU (Caso A1-M1) - Sisma Vert. negativo

	γ	Ψ	C
Peso Proprio	1.00	1.00	1.00
Spinta terreno sinistra	1.00	1.00	1.00
Spinta terreno destra	1.00	1.00	1.00
Sisma da sinistra	1.00	1.00	1.00
Sovraccarico stradale	1.00	0.50	0.50

Combinazione n° 12 SLU (Caso A1-M1) - Sisma Vert. positivo

	γ	Ψ	C
Peso Proprio	1.00	1.00	1.00
Spinta terreno sinistra	1.00	1.00	1.00
Spinta terreno destra	1.00	1.00	1.00
Sisma da sinistra	1.00	1.00	1.00
Sovraccarico stradale	1.00	0.50	0.50

Combinazione n° 13 SLU (Caso A2-M2) - Sisma Vert. positivo

	γ	Ψ	C
Peso Proprio	1.00	1.00	1.00
Spinta terreno sinistra	1.00	1.00	1.00
Spinta terreno destra	1.00	1.00	1.00
Sisma da sinistra	1.00	1.00	1.00
Sovraccarico stradale	1.00	0.50	0.50

Combinazione n° 14 SLU (Caso A2-M2) - Sisma Vert. negativo

	γ	Ψ	C
Peso Proprio	1.00	1.00	1.00
Spinta terreno sinistra	1.00	1.00	1.00
Spinta terreno destra	1.00	1.00	1.00
Sisma da sinistra	1.00	1.00	1.00
Sovraccarico stradale	1.00	0.50	0.50

Combinazione n° 15 SLU (Caso A1-M1) - Sisma Vert. negativo

	γ	Ψ	C
Peso Proprio	1.00	1.00	1.00
Spinta terreno sinistra	1.00	1.00	1.00
Spinta terreno destra	1.00	1.00	1.00
Sisma da sinistra	1.00	1.00	1.00
Sovraccarico accidentale base	1.00	0.50	0.50
Sovraccarico stradale	1.00	0.50	0.50

Combinazione n° 16 SLU (Caso A1-M1) - Sisma Vert. positivo

	γ	Ψ	C

Peso Proprio	1.00	1.00	1.00
Spinta terreno sinistra	1.00	1.00	1.00
Spinta terreno destra	1.00	1.00	1.00
Sisma da sinistra	1.00	1.00	1.00
Sovraccarico accidentale base	1.00	0.50	0.50
Sovraccarico stradale	1.00	0.50	0.50

Combinazione n° 17 SLU (Caso A2-M2) - Sisma Vert. positivo

	γ	Ψ	C
Peso Proprio	1.00	1.00	1.00
Spinta terreno sinistra	1.00	1.00	1.00
Spinta terreno destra	1.00	1.00	1.00
Sisma da sinistra	1.00	1.00	1.00
Sovraccarico accidentale base	1.00	0.50	0.50
Sovraccarico stradale	1.00	0.50	0.50

Combinazione n° 18 SLU (Caso A2-M2) - Sisma Vert. negativo

	γ	Ψ	C
Peso Proprio	1.00	1.00	1.00
Spinta terreno sinistra	1.00	1.00	1.00
Spinta terreno destra	1.00	1.00	1.00
Sisma da sinistra	1.00	1.00	1.00
Sovraccarico accidentale base	1.00	0.50	0.50
Sovraccarico stradale	1.00	0.50	0.50

Combinazione n° 19 SLE (Quasi Permanente)

	γ	Ψ	C
Peso Proprio	1.00	1.00	1.00
Spinta terreno sinistra	1.00	1.00	1.00
Spinta terreno destra	1.00	1.00	1.00
Sovraccarico stradale	1.00	0.20	0.20
Sovraccarico accidentale base	1.00	0.20	0.20

Combinazione n° 20 SLE (Frequente)

	γ	Ψ	C
Peso Proprio	1.00	1.00	1.00
Spinta terreno sinistra	1.00	1.00	1.00
Spinta terreno destra	1.00	1.00	1.00
Sovraccarico stradale	1.00	0.50	0.50
Sovraccarico accidentale base	1.00	0.20	0.20

Combinazione n° 21 SLE (Frequente)

	γ	Ψ	C
Peso Proprio	1.00	1.00	1.00
Spinta terreno sinistra	1.00	1.00	1.00
Spinta terreno destra	1.00	1.00	1.00
Sovraccarico accidentale base	1.00	0.50	0.50
Sovraccarico stradale	1.00	0.20	0.20

Combinazione n° 22 SLE (Rara)

	γ	Ψ	C
Peso Proprio	1.00	1.00	1.00
Spinta terreno sinistra	1.00	1.00	1.00
Spinta terreno destra	1.00	1.00	1.00
Sovraccarico stradale	1.00	1.00	1.00
Sovraccarico accidentale base	1.00	0.70	0.70

Combinazione n° 23 SLE (Rara)

	γ	Ψ	C
Peso Proprio	1.00	1.00	1.00
Spinta terreno sinistra	1.00	1.00	1.00
Spinta terreno destra	1.00	1.00	1.00
Sovraccarico accidentale base	1.00	1.00	1.00
Sovraccarico stradale	1.00	0.70	0.70

Analisi della spinta e verifiche

Simbologia adottata ed unità di misura
Origine in corrispondenza dello spigolo inferiore sinistro della struttura
Le forze orizzontali sono considerate positive se agenti verso destra
Le forze verticali sono considerate positive se agenti verso il basso

X	ascisse (espresse in m) positive verso destra
Y	ordinate (espresse in m) positive verso l'alto
M	momento espresso in kgm
V	taglio espresso in kg
SN	sforzo normale espresso in kg
ux	spostamento direzione X espresso in cm
uy	spostamento direzione Y espresso in cm
σ_n	pressione sul terreno espressa in kg/cmq

Tipo di analisi

Pressione in calotta
Spinta sui piedritti

Pressione geostatica
a Riposo [combinazione 1]
a Riposo [combinazione 2]
a Riposo [combinazione 3]
a Riposo [combinazione 4]
a Riposo [combinazione 5]
a Riposo [combinazione 6]
Attiva [combinazione 7]
Attiva [combinazione 8]
Attiva [combinazione 9]
Attiva [combinazione 10]
Attiva [combinazione 11]
Attiva [combinazione 12]
Attiva [combinazione 13]
Attiva [combinazione 14]
Attiva [combinazione 15]
Attiva [combinazione 16]

Attiva	[combinazione 17]
Attiva	[combinazione 18]
a Riposo	[combinazione 19]
a Riposo	[combinazione 20]
a Riposo	[combinazione 21]
a Riposo	[combinazione 22]
a Riposo	[combinazione 23]

Sisma

Combinazioni SLU

Accelerazione al suolo a_g =	2.21 [m/s^2]
Coefficiente di amplificazione per tipo di sottosuolo (S)	1.18
Coefficiente di amplificazione topografica (St)	1.00
Coefficiente riduzione (β_m)	0.31
Rapporto intensità sismica verticale/orizzontale	0.50
Coefficiente di intensità sismica orizzontale (percento)	$k_h=(a_g/g*\beta_m*St*Ss)$ = 8.21
Coefficiente di intensità sismica verticale (percento)	$k_v=0.50 * k_h$ = 4.10

Combinazioni SLE

Accelerazione al suolo a_g =	2.21 [m/s^2]
Coefficiente di amplificazione per tipo di sottosuolo (S)	1.18
Coefficiente di amplificazione topografica (St)	1.00
Coefficiente riduzione (β_m)	0.31
Rapporto intensità sismica verticale/orizzontale	0.50
Coefficiente di intensità sismica orizzontale (percento)	$k_h=(a_g/g*\beta_m*St*Ss)$ = 8.21
Coefficiente di intensità sismica verticale (percento)	$k_v=0.50 * k_h$ = 4.10
Forma diagramma incremento sismico	Rettangolare
Spinta sismica	Wood
Pressione in calotta(solo peso terreno)	0.00
Angolo diffusione sovraccarico	30.00 [°]

Coefficienti di spinta

N°combinazione	Statico	Sismico
1	0.384	0.000
2	0.470	0.000
3	0.384	0.000
4	0.470	0.000
5	0.384	0.000
6	0.470	0.000
7	0.217	0.381
8	0.217	0.381
9	0.276	0.440
10	0.276	0.440
11	0.217	0.381
12	0.217	0.381

13	0.276	0.440
14	0.276	0.440
15	0.217	0.381
16	0.217	0.381
17	0.276	0.440
18	0.276	0.440
19	0.384	0.000
20	0.384	0.000
21	0.384	0.000
22	0.384	0.000
23	0.384	0.000

Discretizzazione strutturale

Numero elementi fondazione	72
Numero elementi piedritto sinistro	44
Numero elementi piedritto destro	44
Numero molle piedritto sinistro	45
Numero molle piedritto destro	45

Inviluppo spostamenti nodali

Inviluppo spostamenti fondazione

X [m]	u_{Xmin} [cm]	u_{Xmax} [cm]	u_{Ymin} [cm]	u_{Ymax} [cm]
0.00	0.0010	0.1533	0.0354	0.1474
1.67	0.0006	0.1529	0.0766	0.1752
3.40	0.0000	0.1524	0.0846	0.1901
5.10	-0.0011	0.1517	0.0970	0.1739
6.73	-0.0018	0.1513	0.0415	0.1437

Inviluppo spostamenti piedritto sinistro

Y [m]	u_{Xmin} [cm]	u_{Xmax} [cm]	u_{Ymin} [cm]	u_{Ymax} [cm]
0.35	0.0010	0.1533	0.0528	0.1565
2.52	0.0472	0.2594	0.0533	0.1572
4.70	0.1056	0.3904	0.0535	0.1575

Inviluppo spostamenti piedritto destro

Y [m]	u_{Xmin} [cm]	u_{Xmax} [cm]	u_{Ymin} [cm]	u_{Ymax} [cm]
0.35	-0.0018	0.1513	0.0650	0.1533
2.52	-0.1478	0.1509	0.0655	0.1540
4.70	-0.3233	0.1586	0.0657	0.1543

Inviluppo sollecitazioni nodali

Inviluppo sollecitazioni fondazione

X [m]	M_{min} [kgm]	M_{max} [kgm]	V_{min} [kg]	V_{max} [kg]	N_{min} [kg]	N_{max} [kg]
0.00	0	0	88	369	-3061	-20
1.67	-16261	-4522	-7558	-3783	5056	14797
3.40	-11264	2653	-2089	488	5305	14797
5.10	-16089	1872	2845	8070	5549	14797
6.80	0	0	-239	-69	-37	3021

Inviluppo sollecitazioni piedritto sinistro

Y [m]	M_{min} [kgm]	M_{max} [kgm]	V_{min} [kg]	V_{max} [kg]	N_{min} [kg]	N_{max} [kg]
0.35	-25152	-12005	7488	14834	7300	10277
2.52	-4510	-1615	2154	4964	3650	5138
4.70	0	0	0	0	0	0

Inviluppo sollecitazioni piedritto destro

Y [m]	M_{min} [kgm]	M_{max} [kgm]	V_{min} [kg]	V_{max} [kg]	N_{min} [kg]	N_{max} [kg]
0.35	-25152	-4114	-14834	-3148	7300	10277
2.52	-4510	-345	-4964	-631	3650	5138
4.70	0	0	0	0	0	0

Inviluppo pressioni terreno

Inviluppo pressioni sul terreno di fondazione

X [m]	σ_{tmin} [kg/cmq]	σ_{tmax} [kg/cmq]
0.00	0.18	0.74
1.67	0.38	0.88
3.40	0.42	0.95
5.10	0.48	0.87
6.80	0.21	0.72

Inviluppo verifiche stato limite ultimo (SLU)

Verifica sezioni fondazione (Inviluppo)

Base sezione B = 100 cm
Altezza sezione H = 70.00 cm

X	A_{fi}	A_{fs}	CS
0.00	15.71	12.72	19.44
1.67	15.71	12.72	2.42
3.40	15.71	12.72	4.93
5.10	15.71	12.72	2.39
6.80	15.71	12.72	51.52

X	V_{Rd}	V_{Rsd}	V_{Rcd}	A_{sw}
0.00	23976	0	0	0.00
1.67	26011	0	0	0.00
3.40	26011	0	0	0.00
5.10	26011	0	0	0.00
6.80	23976	0	0	0.00

Verifica sezioni piedritto sinistro (Inviluppo)

Base sezione B = 100 cm
Altezza sezione H = 70.00 cm

Y	A_{fi}	A_{fs}	CS
0.35	7.70	15.71	1.65
2.52	7.70	10.05	3.84
4.70	7.70	10.05	1000.00

Y	V_{Rd}	V_{Rsd}	V_{Rcd}	A_{sw}
0.35	25391	0	0	0.00
2.52	24686	0	0	0.00
4.70	23981	0	0	0.00

Verifica sezioni piedritto destro (Inviluppo)

Base sezione B = 100 cm
Altezza sezione H = 70.00 cm

Y	A_{fi}	A_{fs}	CS
0.35	7.70	15.71	1.65
2.52	7.70	10.05	3.84
4.70	7.70	10.05	1000.00

Y	V_{Rd}	V_{Rsd}	V_{Rcd}	A_{sw}
0.35	25391	0	0	0.00
2.52	24686	0	0	0.00
4.70	23981	0	0	0.00

Inviluppo verifiche stato limite esercizio (SLE)

Verifica sezioni fondazione (Inviluppo)

Base sezione B = 100 cm
Altezza sezione H = 70.00 cm

X	A_{fi}	A_{fs}	σ_c	σ_{fi}	σ_{fs}
0.00	15.71	12.72	0.08	0.54	6.17
1.67	15.71	12.72	20.92	752.82	213.81
3.40	15.71	12.72	10.96	270.18	123.62

5.10	15.71	12.72	20.58	735.70	210.78
6.80	15.71	12.72	0.03	0.14	3.35

X	τ_c	A_{sw}
0.00	-0.2	0.00
1.67	-0.9	0.00
3.40	0.1	0.00
5.10	1.0	0.00
6.80	0.1	0.00

Verifica sezioni piedritto sinistro (Inviluppo)

Base sezione B = 100 cm
Altezza sezione H = 70.00 cm

Y	A_{fi}	A_{fs}	σ_c	σ_{fi}	σ_{fs}
0.35	7.70	15.71	38.57	365.45	1694.36
2.52	7.70	10.05	8.03	76.94	343.68
4.70	7.70	10.05	0.00	0.00	0.00

Y	τ_c	A_{sw}
0.35	2.0	0.00
2.52	0.6	0.00
4.70	0.0	0.00

Verifica sezioni piedritto destro (Inviluppo)

Base sezione B = 100 cm
Altezza sezione H = 70.00 cm

Y	A_{fi}	A_{fs}	σ_c	σ_{fi}	σ_{fs}
0.35	7.70	15.71	38.57	365.45	1694.36
2.52	7.70	10.05	8.03	76.94	343.68
4.70	7.70	10.05	0.00	0.00	0.00

Y	τ_c	A_{sw}
0.35	-2.0	0.00
2.52	-0.6	0.00
4.70	0.0	0.00

12.6 MURO AD U 2,00<h≤3,00 M – L=6,60 m

Geometria scatolare

Descrizione: Scatolare tipo vasca

Altezza esterna 3.60 [m]

Larghezza esterna	6.20	[m]
Lunghezza mensola di fondazione sinistra	0.20	[m]
Lunghezza mensola di fondazione destra	0.20	[m]
Spessore piedritto sinistro	0.60	[m]
Spessore piedritto destro	0.60	[m]
Spessore fondazione	0.60	[m]

Caratteristiche strati terreno

Strato di rinfianco

Descrizione	Terreno di rinfianco	
Peso di volume	2000.00	[kg/mc]
Peso di volume saturo	2000.00	[kg/mc]
Angolo di attrito	38.00	[°]
Angolo di attrito terreno struttura	23.00	[°]
Coesione	0.00	[kg/cmq]
Costante di Winkler	0.00	[kg/cmq/cm]

Strato di base

Descrizione	Terreno di base	
Peso di volume	2000.00	[kg/mc]
Peso di volume saturo	2000.00	[kg/mc]
Angolo di attrito	30.00	[°]
Angolo di attrito terreno struttura	20.00	[°]
Coesione	0.00	[kg/cmq]
Costante di Winkler	3.50	[kg/cmq/cm]

Condizioni di carico

Convenzioni adottate

Origine in corrispondenza dello spigolo inferiore sinistro della struttura
Carichi verticali positivi se diretti verso il basso
Carichi orizzontali positivi se diretti verso destra
Coppie concentrate positive se antiorarie
Ascisse X (espresse in m) positive verso destra
Ordinate Y (espresse in m) positive verso l'alto
Carichi concentrati espressi in kg
Coppie concentrate espressi in kgm
Carichi distribuiti espressi in kg/m

Simbologia adottata e unità di misura

Forze concentrate

X	ascissa del punto di applicazione dei carichi verticali concentrati
Y	ordinata del punto di applicazione dei carichi orizzontali concentrati
F_y	componente Y del carico concentrato
F_x	componente X del carico concentrato
M	momento

Forze distribuite

X_i, X_f	ascisse del punto iniziale e finale per carichi distribuiti verticali
Y_i, Y_f	ordinate del punto iniziale e finale per carichi distribuiti orizzontali
V_{ni}	componente normale del carico distribuito nel punto iniziale
V_{nf}	componente normale del carico distribuito nel punto finale
V_{ti}	componente tangenziale del carico distribuito nel punto iniziale

V_{tf} componente tangenziale del carico distribuito nel punto finale
D_{te} variazione termica lembo esterno espressa in gradi centigradi
D_{ti} variazione termica lembo interno espressa in gradi centigradi

Condizione di carico n°1 (Peso Proprio)

Condizione di carico n°2 (Spinta terreno sinistra)

Condizione di carico n°3 (Spinta terreno destra)

Condizione di carico n°4 (Sisma da sinistra)

Condizione di carico n°5 (Sisma da destra)

Condizione di carico n° 7 (Sovraccarico accidentale)

Distr	Terreno	X_i= -1.80	X_f= 0.20	V_{ni}= 2000	V_{nf}= 2000
Distr	Terreno	X_i= 6.40	X_f= 8.40	V_{ni}= 2000	V_{nf}= 2000

Condizione di carico n° 8 (Sovraccarico accidentale base)

Distr	Fondaz.	X_i= 0.90	X_f= 5.90	V_{ni}= 2000	V_{nf}= 2000	V_{ti}= 0	V_{tf}= 0

Impostazioni di progetto

Verifica materiali:
Stato Limite Ultimo

Coefficiente di sicurezza calcestruzzo γ_c	1.60
Fattore riduzione da resistenza cubica a cilindrica	0.83
Fattore di riduzione per carichi di lungo periodo	0.85
Coefficiente di sicurezza acciaio	1.15
Coefficiente di sicurezza per la sezione	1.00

Verifica Taglio - Metodo dell'inclinazione variabile del traliccio

$V_{Rd}=[0.18*k*(100.0*\rho_l*fck)^{1/3}/\gamma_c+0.15*\sigma_{cp}]*bw*d>(vmin+0.15*\sigma_{cp})*b_w*d$
$V_{Rsd}=0.9*d*A_{sw}/s*fyd*(ctg\alpha+ctg\theta)*sin\alpha$
$V_{Rcd}=0.9*d*b_w*\alpha_c*fcd'*(ctg(\theta)+ctg(\alpha)/(1.0+ctg\theta^2)$
con:

d	altezza utile sezione [mm]
b_w	larghezza minima sezione [mm]
σ_{cp}	tensione media di compressione [N/mmq]
ρ_l	rapporto geometrico di armatura
A_{sw}	area armatuta trasversale [mmq]
s	interasse tra due armature trasversali consecutive [mm]
α_c	coefficiente maggiorativo, funzione di fcd e σ_{cp}

$fcd'=0.5*fcd$

$k=1+(200/d)^{1/2}$
$vmin=0.035*k^{3/2}*fck^{1/2}$

Stato Limite di Esercizio

Criteri di scelta per verifiche tensioni di esercizio:
Ambiente poco aggressivo
Limite tensioni di compressione nel calcestruzzo (comb. rare) 0.60 f_{ck}
Limite tensioni di compressione nel calcestruzzo (comb. quasi perm.) 0.45 f_{ck}
Limite tensioni di trazione nell'acciaio (comb. rare) 0.80 f_{yk}

Criteri verifiche a fessurazione:
Armatura sensibile
Apertura limite fessure espresse in [mm]
Apertura limite fessure w1=0.20 w2=0.30 w3=0.40

Verifiche secondo :
Norme Tecniche 2008 - Approccio 1

Copriferro sezioni 6.00 [cm]

Descrizione combinazioni di carico

Simbologia adottata

γ	Coefficiente di partecipazione della condizione
Ψ	Coefficiente di combinazione della condizione
C	Coefficiente totale di partecipazione della condizione

Norme Tecniche 2008

Simbologia adottata

γ_{G1sfav}	Coefficiente parziale sfavorevole sulle azioni permanenti
γ_{G1fav}	Coefficiente parziale favorevole sulle azioni permanenti
γ_{G2sfav}	Coefficiente parziale sfavorevole sulle azioni permanenti non strutturali
γ_{G2fav}	Coefficiente parziale favorevole sulle azioni permanenti non strutturali
γ_{Q}	Coefficiente parziale sulle azioni variabili
$\gamma_{tan\phi'}$	Coefficiente parziale di riduzione dell'angolo di attrito drenato
$\gamma_{c'}$	Coefficiente parziale di riduzione della coesione drenata
γ_{cu}	Coefficiente parziale di riduzione della coesione non drenata
γ_{qu}	Coefficiente parziale di riduzione del carico ultimo

Coefficienti di partecipazione combinazioni statiche

Coefficienti parziali per le azioni o per l'effetto delle azioni:

Carichi	*Effetto*		*A1*	*A2*
Permanenti	Favorevole	γ_{G1fav}	1.00	1.00
Permanenti	Sfavorevole	γ_{G1sfav}	1.35	1.00
Permanenti non strutturali	Favorevole	γ_{G2fav}	0.00	0.00
Permanenti non strutturali	Sfavorevole	γ_{G2sfav}	1.35	1.00
Variabili	Favorevole	γ_{Qfav}	0.00	0.00
Variabili	Sfavorevole	γ_{Qsfav}	1.50	1.30

Coefficienti parziali per i parametri geotecnici del terreno:

Parametri		*M1*	*M2*
Tangente dell'angolo di attrito	$\gamma_{tan\phi'}$	1.00	1.25
Coesione efficace	$\gamma_{c'}$	1.00	1.25
Resistenza non drenata	γ_{cu}	1.00	1.40
Resistenza a compressione uniassiale	γ_{qu}	1.00	1.60
Peso dell'unità di volume	γ_{γ}	1.00	1.00

Coefficienti di partecipazione combinazioni sismiche

Coefficienti parziali per le azioni o per l'effetto delle azioni:

Carichi	*Effetto*		*A1*	*A2*
Permanenti	Favorevole	γ_{G1fav}	1.00	1.00
Permanenti	Sfavorevole	γ_{G1sfav}	1.00	1.00
Permanenti	Favorevole	γ_{G2fav}	0.00	0.00
Permanenti	Sfavorevole	γ_{G2sfav}	1.00	1.00
Variabili	Favorevole	γ_{Qfav}	0.00	0.00
Variabili	Sfavorevole	γ_{Qsfav}	1.00	1.00

Coefficienti parziali per i parametri geotecnici del terreno:

Parametri		*M1*	*M2*
Tangente dell'angolo di attrito	$\gamma_{tan\phi'}$	1.00	1.25
Coesione efficace	$\gamma_{c'}$	1.00	1.25
Resistenza non drenata	γ_{cu}	1.00	1.40
Resistenza a compressione uniassiale	γ_{qu}	1.00	1.60
Peso dell'unità di volume	γ_{γ}	1.00	1.00

Coefficienti di partecipazione combinazioni statiche

Coefficienti parziali per le azioni o per l'effetto delle azioni:

Carichi	*Effetto*		*A1*	*A2*
Permanenti	Favorevole	γ_{G1fav}	1.00	1.00
Permanenti	Sfavorevole	γ_{G1sfav}	1.35	1.00
Permanenti non strutturali	Favorevole	γ_{G2fav}	0.00	0.00
Permanenti non strutturali	Sfavorevole	γ_{G2sfav}	1.35	1.00
Variabili	Favorevole	γ_{Qfav}	0.00	0.00
Variabili	Sfavorevole	γ_{Qsfav}	1.50	1.30

Coefficienti parziali per i parametri geotecnici del terreno:

Parametri		*M1*	*M2*
Tangente dell'angolo di attrito	$\gamma_{tan\phi'}$	1.00	1.25
Coesione efficace	$\gamma_{c'}$	1.00	1.25
Resistenza non drenata	γ_{cu}	1.00	1.40
Resistenza a compressione uniassiale	γ_{qu}	1.00	1.60
Peso dell'unità di volume	γ_{γ}	1.00	1.00

Coefficienti di partecipazione combinazioni sismiche

Coefficienti parziali per le azioni o per l'effetto delle azioni:

Carichi	*Effetto*		*A1*	*A2*
Permanenti	Favorevole	γ_{G1fav}	1.00	1.00
Permanenti	Sfavorevole	γ_{G1sfav}	1.00	1.00
Permanenti	Favorevole	γ_{G2fav}	0.00	0.00
Permanenti	Sfavorevole	γ_{G2sfav}	1.00	1.00
Variabili	Favorevole	γ_{Qfav}	0.00	0.00
Variabili	Sfavorevole	γ_{Qsfav}	1.00	1.00

Coefficienti parziali per i parametri geotecnici del terreno:

Parametri		*M1*	*M2*
Tangente dell'angolo di attrito	$\gamma_{tan\phi'}$	1.00	1.25
Coesione efficace	$\gamma_{c'}$	1.00	1.25
Resistenza non drenata	γ_{cu}	1.00	1.40
Resistenza a compressione uniassiale	γ_{qu}	1.00	1.60
Peso dell'unità di volume	γ_{γ}	1.00	1.00

Coeff. di combinazione Ψ_0= 0.70 Ψ_1= 0.50 Ψ_2= 0.20

Combinazione n° 1 SLU (Caso A1-M1)

	γ	**Ψ**	**C**
Peso Proprio	1.35	1.00	1.35
Spinta terreno sinistra	1.35	1.00	1.35
Spinta terreno destra	1.35	1.00	1.35
Sovraccarico accidentale	1.50	1.00	1.50

Combinazione n° 2 SLU (Caso A2-M2)

	γ	**Ψ**	**C**
Peso Proprio	1.00	1.00	1.00
Spinta terreno sinistra	1.00	1.00	1.00
Spinta terreno destra	1.00	1.00	1.00
Sovraccarico accidentale	1.30	1.00	1.30

Combinazione n° 3 SLU (Caso A1-M1)

	γ	**Ψ**	**C**
Peso Proprio	1.35	1.00	1.35
Spinta terreno sinistra	1.35	1.00	1.35
Spinta terreno destra	1.35	1.00	1.35
Sovraccarico accidentale base	1.50	1.00	1.50

Combinazione n° 4 SLU (Caso A2-M2)

	γ	**Ψ**	**C**
Peso Proprio	1.00	1.00	1.00
Spinta terreno sinistra	1.00	1.00	1.00
Spinta terreno destra	1.00	1.00	1.00
Sovraccarico accidentale base	1.30	1.00	1.30

Combinazione n° 5 SLU (Caso A1-M1)

	γ	Ψ	C
Peso Proprio	1.35	1.00	1.35
Spinta terreno sinistra	1.35	1.00	1.35
Spinta terreno destra	1.35	1.00	1.35
Sovraccarico accidentale	1.50	1.00	1.50
Sovraccarico accidentale base	1.50	1.00	1.50

Combinazione n° 6 SLU (Caso A2-M2)

	γ	Ψ	C
Peso Proprio	1.00	1.00	1.00
Spinta terreno sinistra	1.00	1.00	1.00
Spinta terreno destra	1.00	1.00	1.00
Sovraccarico accidentale	1.30	1.00	1.30
Sovraccarico accidentale base	1.30	1.00	1.30

Combinazione n° 7 SLU (Caso A1-M1) - Sisma Vert. negativo

	γ	Ψ	C
Peso Proprio	1.00	1.00	1.00
Spinta terreno sinistra	1.00	1.00	1.00
Spinta terreno destra	1.00	1.00	1.00
Sisma da sinistra	1.00	1.00	1.00
Sovraccarico accidentale	1.00	0.50	0.50

Combinazione n° 8 SLU (Caso A1-M1) - Sisma Vert. positivo

	γ	Ψ	C
Peso Proprio	1.00	1.00	1.00
Spinta terreno sinistra	1.00	1.00	1.00
Spinta terreno destra	1.00	1.00	1.00
Sisma da sinistra	1.00	1.00	1.00
Sovraccarico accidentale	1.00	0.50	0.50

Combinazione n° 9 SLU (Caso A2-M2) - Sisma Vert. positivo

	γ	Ψ	C
Peso Proprio	1.00	1.00	1.00
Spinta terreno sinistra	1.00	1.00	1.00
Spinta terreno destra	1.00	1.00	1.00
Sisma da sinistra	1.00	1.00	1.00
Sovraccarico accidentale	1.00	0.50	0.50

Combinazione n° 10 SLU (Caso A2-M2) - Sisma Vert. negativo

	γ	Ψ	C
Peso Proprio	1.00	1.00	1.00
Spinta terreno sinistra	1.00	1.00	1.00
Spinta terreno destra	1.00	1.00	1.00
Sisma da sinistra	1.00	1.00	1.00
Sovraccarico accidentale	1.00	0.50	0.50

Combinazione n° 11 SLU (Caso A1-M1) - Sisma Vert. negativo

	γ	Ψ	C
Peso Proprio	1.00	1.00	1.00
Spinta terreno sinistra	1.00	1.00	1.00
Spinta terreno destra	1.00	1.00	1.00
Sisma da sinistra	1.00	1.00	1.00
Sovraccarico accidentale base	1.00	0.50	0.50

Combinazione n° 12 SLU (Caso A1-M1) - Sisma Vert. positivo

	γ	Ψ	C
Peso Proprio	1.00	1.00	1.00
Spinta terreno sinistra	1.00	1.00	1.00
Spinta terreno destra	1.00	1.00	1.00
Sisma da sinistra	1.00	1.00	1.00
Sovraccarico accidentale base	1.00	0.50	0.50

Combinazione n° 13 SLU (Caso A2-M2) - Sisma Vert. positivo

	γ	Ψ	C
Peso Proprio	1.00	1.00	1.00
Spinta terreno sinistra	1.00	1.00	1.00
Spinta terreno destra	1.00	1.00	1.00
Sisma da sinistra	1.00	1.00	1.00
Sovraccarico accidentale base	1.00	0.50	0.50

Combinazione n° 14 SLU (Caso A2-M2) - Sisma Vert. negativo

	γ	Ψ	C
Peso Proprio	1.00	1.00	1.00
Spinta terreno sinistra	1.00	1.00	1.00
Spinta terreno destra	1.00	1.00	1.00
Sisma da sinistra	1.00	1.00	1.00
Sovraccarico accidentale base	1.00	0.50	0.50

Combinazione n° 15 SLE (Quasi Permanente)

	γ	Ψ	C
Peso Proprio	1.00	1.00	1.00
Spinta terreno sinistra	1.00	1.00	1.00
Spinta terreno destra	1.00	1.00	1.00
Sovraccarico accidentale	1.00	0.20	0.20
Sovraccarico accidentale base	1.00	0.20	0.20

Combinazione n° 16 SLE (Frequente)

	γ	Ψ	C
Peso Proprio	1.00	1.00	1.00
Spinta terreno sinistra	1.00	1.00	1.00
Spinta terreno destra	1.00	1.00	1.00
Sovraccarico accidentale	1.00	0.50	0.50
Sovraccarico accidentale base	1.00	0.20	0.20

Combinazione n° 17 SLE (Frequente)

	γ	Ψ	C
Peso Proprio	1.00	1.00	1.00
Spinta terreno sinistra	1.00	1.00	1.00
Spinta terreno destra	1.00	1.00	1.00
Sovraccarico accidentale base	1.00	0.50	0.50
Sovraccarico accidentale	1.00	0.20	0.20

Combinazione n° 18 SLE (Rara)

	γ	Ψ	C
Peso Proprio	1.00	1.00	1.00
Spinta terreno sinistra	1.00	1.00	1.00
Spinta terreno destra	1.00	1.00	1.00
Sovraccarico accidentale	1.00	1.00	1.00
Sovraccarico accidentale base	1.00	0.70	0.70

Combinazione n° 19 SLE (Rara)

	γ	Ψ	C
Peso Proprio	1.00	1.00	1.00
Spinta terreno sinistra	1.00	1.00	1.00
Spinta terreno destra	1.00	1.00	1.00
Sovraccarico accidentale base	1.00	1.00	1.00
Sovraccarico accidentale	1.00	0.70	0.70

Analisi della spinta e verifiche

Simbologia adottata ed unità di misura
Origine in corrispondenza dello spigolo inferiore sinistro della struttura
Le forze orizzontali sono considerate positive se agenti verso destra
Le forze verticali sono considerate positive se agenti verso il basso

X	ascisse (espresse in m) positive verso destra
Y	ordinate (espresse in m) positive verso l'alto
M	momento espresso in kgm
V	taglio espresso in kg
SN	sforzo normale espresso in kg
ux	spostamento direzione X espresso in cm
uy	spostamento direzione Y espresso in cm
σ	pressione sul terreno espressa in kg/cmq

Tipo di analisi

Pressione in calotta
Spinta sui piedritti

Pressione geostatica
a Riposo [combinazione 1]
a Riposo [combinazione 2]
a Riposo [combinazione 3]
a Riposo [combinazione 4]
a Riposo [combinazione 5]
a Riposo [combinazione 6]
Attiva [combinazione 7]
Attiva [combinazione 8]
Attiva [combinazione 9]

Attiva	[combinazione 10]
Attiva	[combinazione 11]
Attiva	[combinazione 12]
Attiva	[combinazione 13]
Attiva	[combinazione 14]
a Riposo	[combinazione 15]
a Riposo	[combinazione 16]
a Riposo	[combinazione 17]
a Riposo	[combinazione 18]
a Riposo	[combinazione 19]

Sisma

Combinazioni SLU

Accelerazione al suolo a_g =	2.21 [m/s^2]
Coefficiente di amplificazione per tipo di sottosuolo (S)	1.18
Coefficiente di amplificazione topografica (St)	1.00
Coefficiente riduzione (β_m)	0.31
Rapporto intensità sismica verticale/orizzontale	0.50
Coefficiente di intensità sismica orizzontale (percento)	$k_h=(a_g/g*\beta_m*St*Ss)$ = 8.21
Coefficiente di intensità sismica verticale (percento)	$k_v=0.50 * k_h$ = 4.10

Combinazioni SLE

Accelerazione al suolo a_g =	2.21 [m/s^2]
Coefficiente di amplificazione per tipo di sottosuolo (S)	1.18
Coefficiente di amplificazione topografica (St)	1.00
Coefficiente riduzione (β_m)	0.31
Rapporto intensità sismica verticale/orizzontale	0.50
Coefficiente di intensità sismica orizzontale (percento)	$k_h=(a_g/g*\beta_m*St*Ss)$ = 8.21
Coefficiente di intensità sismica verticale (percento)	$k_v=0.50 * k_h$ = 4.10
Forma diagramma incremento sismico	Rettangolare

Spinta sismica	Wood
Pressione in calotta(solo peso terreno)	0.00
Angolo diffusione sovraccarico	30.00 [°]

Coefficienti di spinta

N°combinazione	Statico	Sismico
1	0.384	0.000
2	0.470	0.000
3	0.384	0.000
4	0.470	0.000
5	0.384	0.000
6	0.470	0.000
7	0.217	0.381
8	0.217	0.381
9	0.276	0.440

10	0.276	0.440
11	0.217	0.381
12	0.217	0.381
13	0.276	0.440
14	0.276	0.440
15	0.384	0.000
16	0.384	0.000
17	0.384	0.000
18	0.384	0.000
19	0.384	0.000

Discretizzazione strutturale

Numero elementi fondazione	74
Numero elementi piedritto sinistro	34
Numero elementi piedritto destro	34
Numero molle piedritto sinistro	35
Numero molle piedritto destro	35

Inviluppo spostamenti nodali

Inviluppo spostamenti fondazione

X [m]	u_{Xmin} [cm]	u_{Xmax} [cm]	u_{Ymin} [cm]	u_{Ymax} [cm]
0.00	0.0007	0.1150	0.0424	0.1281
1.67	0.0004	0.1148	0.0612	0.1428
3.30	0.0000	0.1144	0.0628	0.1519
4.93	-0.0008	0.1140	0.0717	0.1468
6.53	-0.0014	0.1136	0.0424	0.1363

Inviluppo spostamenti piedritto sinistro

Y [m]	u_{Xmin} [cm]	u_{Xmax} [cm]	u_{Ymin} [cm]	u_{Ymax} [cm]
0.30	0.0007	0.1151	0.0518	0.1317
1.95	0.0136	0.1544	0.0521	0.1321
3.60	0.0317	0.2046	0.0522	0.1323

Inviluppo spostamenti piedritto destro

Y [m]	u_{Xmin} [cm]	u_{Xmax} [cm]	u_{Ymin} [cm]	u_{Ymax} [cm]
0.30	-0.0014	0.1137	0.0555	0.1387
1.95	-0.0724	0.1218	0.0558	0.1392
3.60	-0.1574	0.1291	0.0559	0.1393

Inviluppo sollecitazioni nodali

Inviluppo sollecitazioni fondazione

X [m]	M_{min} [kgm]	M_{max} [kgm]	V_{min} [kg]	V_{max} [kg]	N_{min} [kg]	N_{max} [kg]
0.00	0	0	71	213	-2005	-12
1.67	-6999	-625	-4608	-1928	2860	9432
3.30	-4154	2368	-947	325	3061	9432
4.93	-6972	1799	1810	5086	3262	9432
6.60	0	0	-227	-71	-24	1980

Inviluppo sollecitazioni piedritto sinistro

Y [m]	M_{min} [kgm]	M_{max} [kgm]	V_{min} [kg]	V_{max} [kg]	N_{min} [kg]	N_{max} [kg]
0.30	-12497	-5443	4373	9455	4747	6683
1.95	-2369	-705	1280	3315	2373	3341
3.60	0	0	0	0	0	0

Inviluppo sollecitazioni piedritto destro

Y [m]	M_{min} [kgm]	M_{max} [kgm]	V_{min} [kg]	V_{max} [kg]	N_{min} [kg]	N_{max} [kg]
0.30	-12497	-1719	-9455	-1765	4747	6682
1.95	-2369	-132	-3315	-340	2373	3341
3.60	0	0	0	0	0	0

Inviluppo pressioni terreno

Inviluppo pressioni sul terreno di fondazione

X [m]	σ_{tmin} [kg/cmq]	σ_{tmax} [kg/cmq]
0.00	0.21	0.64
1.67	0.31	0.71
3.30	0.31	0.76
4.93	0.36	0.73
6.60	0.21	0.68

Inviluppo verifiche stato limite ultimo (SLU)

Verifica sezioni fondazione (Inviluppo)

Base sezione B = 100 cm
Altezza sezione H = 60.00 cm

X	A_{fi}	A_{fs}	CS
0.00	12.72	10.05	26.17
1.67	12.72	10.05	4.02
3.30	12.72	10.05	10.55
4.93	12.72	10.05	3.85
6.60	12.72	10.05	51.34

X	V_{Rd}	V_{Rsd}	V_{Rcd}	A_{sw}

0.00	21204	0	0	0.00
1.67	22480	0	0	0.00
3.30	22480	0	0	0.00
4.93	22480	0	0	0.00
6.60	21204	0	0	0.00

Verifica sezioni piedritto sinistro (Inviluppo)

Base sezione B = 100 cm
Altezza sezione H = 60.00 cm

Y	A_{fi}	A_{fs}	CS
0.30	7.70	12.72	2.27
1.95	7.70	12.72	7.46
3.60	7.70	12.72	1000.00

Y	V_{Rd}	V_{Rsd}	V_{Rcd}	A_{sw}
0.30	22109	0	0	0.00
1.95	21658	0	0	0.00
3.60	21207	0	0	0.00

Verifica sezioni piedritto destro (Inviluppo)

Base sezione B = 100 cm
Altezza sezione H = 60.00 cm

Y	A_{fi}	A_{fs}	CS
0.30	7.70	12.72	2.27
1.95	7.70	12.72	7.46
3.60	7.70	12.72	1000.00

Y	V_{Rd}	V_{Rsd}	V_{Rcd}	A_{sw}
0.30	22109	0	0	0.00
1.95	21658	0	0	0.00
3.60	21207	0	0	0.00

Inviluppo verifiche stato limite esercizio (SLE)

Verifica sezioni fondazione (Inviluppo)

Base sezione B = 100 cm
Altezza sezione H = 60.00 cm

X	A_{fi}	A_{fs}	σ_c	σ_{fi}	σ_{fs}
0.00	12.72	10.05	0.04	0.15	3.45
1.67	12.72	10.05	10.88	327.12	108.69
3.30	12.72	10.05	4.99	53.30	119.07
4.93	12.72	10.05	10.84	325.41	108.41

6.60	12.72	10.05	0.04	0.14	3.36

X	τ_c	A_{sw}
0.00	-0.1	0.00
1.67	-0.6	0.00
3.30	0.0	0.00
4.93	0.7	0.00
6.60	0.1	0.00

Verifica sezioni piedritto sinistro (Inviluppo)

Base sezione B = 100 cm
Altezza sezione H = 60.00 cm

Y	A_{fi}	A_{fs}	σ_c	σ_{fi}	σ_{fs}
0.30	7.70	12.72	27.08	227.64	1201.13
1.95	7.70	12.72	5.01	48.32	165.80
3.60	7.70	12.72	0.00	0.00	0.00

Y	τ_c	A_{sw}
0.30	1.5	0.00
1.95	0.5	0.00
3.60	0.0	0.00

Verifica sezioni piedritto destro (Inviluppo)

Base sezione B = 100 cm
Altezza sezione H = 60.00 cm

Y	A_{fi}	A_{fs}	σ_c	σ_{fi}	σ_{fs}
0.30	7.70	12.72	27.08	227.64	1201.13
1.95	7.70	12.72	5.01	48.32	165.80
3.60	7.70	12.72	0.00	0.00	0.00

Y	τ_c	A_{sw}
0.30	-1.5	0.00
1.95	-0.5	0.00
3.60	0.0	0.00

13 VERIFICA DEI MURI AD L

13.1 Muro ad L H ≤ 3,00 m

Geometria muro e fondazione

Descrizione	**Muro a mensola in c.a.**
Altezza del paramento	3.00 [m]
Spessore in sommità	0.30 [m]
Spessore all'attacco con la fondazione	0.60 [m]
Inclinazione paramento esterno	0.00 [°]
Inclinazione paramento interno	0.00 [°]

Fondazione

Lunghezza mensola fondazione di valle	0.40 [m]
Lunghezza mensola fondazione di monte	2.00 [m]
Lunghezza totale fondazione	3.00 [m]
Inclinazione piano di posa della fondazione	0.00 [°]
Spessore fondazione	0.60 [m]
Spessore magrone	0.10 [m]

Geometria profilo terreno a monte del muro

Simbologia adottata e sistema di riferimento
(Sistema di riferimento con origine in testa al muro, ascissa X positiva verso monte, ordinata Y positiva verso l'alto)

N numero ordine del punto
X ascissa del punto espressa in [m]
Y ordinata del punto espressa in [m]
A inclinazione del tratto espressa in [°]

N	X	Y	A
1	35.00	0.00	0.00

Terreno a valle del muro

Inclinazione terreno a valle del muro rispetto all'orizzontale	0.00	[°]
Altezza del rinterro rispetto all'attacco fondaz.valle-paramento	0.00	[m]

Descrizione terreni

Simbologia adottata
Nr. Indice del terreno
Descrizione Descrizione terreno

γ	Peso di volume del terreno espresso in [kg/mc]
γ_s	Peso di volume saturo del terreno espresso in [kg/mc]
ϕ	Angolo d'attrito interno espresso in [°]
δ	Angolo d'attrito terra-muro espresso in [°]
c	Coesione espressa in [kg/cmq]
c_a	Adesione terra-muro espressa in [kg/cmq]

Descrizione	γ	γ_s	ϕ	δ	c	c_a
Terreno 1	1800	2000	38.00	25.33	0.000	0.000
Terreno 2	1800	2000	30.00	20.00	0.000	0.000

Stratigrafia

Simbologia adottata

N	Indice dello strato
H	Spessore dello strato espresso in [m]
a	Inclinazione espressa in [°]
Kw	Costante di Winkler orizzontale espressa in Kg/cm²/cm
Ks	Coefficiente di spinta
Terreno	Terreno dello strato

Nr.	H	a	Kw	Ks	Terreno
1	2.00	0.00	0.00	0.00	Terreno 1
2	20.00	0.00	2.15	0.00	Terreno 2

Normativa

N.T.C. 2008

Simbologia adottata

γ_{Gsfav}	Coefficiente parziale sfavorevole sulle azioni permanenti
γ_{Gfav}	Coefficiente parziale favorevole sulle azioni permanenti
γ_{Qsfav}	Coefficiente parziale sfavorevole sulle azioni variabili
γ_{Qfav}	Coefficiente parziale favorevole sulle azioni variabili
$\gamma_{tan\phi'}$	Coefficiente parziale di riduzione dell'angolo di attrito drenato
$\gamma_{c'}$	Coefficiente parziale di riduzione della coesione drenata
γ_{cu}	Coefficiente parziale di riduzione della coesione non drenata
γ_{qu}	Coefficiente parziale di riduzione del carico ultimo
γ_{γ}	Coefficiente parziale di riduzione della resistenza a compressione uniassiale delle rocce

Coefficienti di partecipazione combinazioni statiche

Coefficienti parziali per le azioni o per l'effetto delle azioni:

Carichi	*Effetto*		*EQU*	*A1*	*A2*
Permanenti	Favorevole	γ_{Gfav}	0.90	1.00	1.00
Permanenti	Sfavorevole	γ_{Gsfav}	1.10	1.30	1.00
Variabili	Favorevole	γ_{Qfav}	0.00	0.00	0.00
Variabili	Sfavorevole	γ_{Qsfav}	1.50	1.50	1.30

Coefficienti parziali per i parametri geotecnici del terreno:

Parametri	*M1*	*M2*

Tangente dell'angolo di attrito	$\gamma_{tan\phi'}$	1.00	1.25
Coesione efficace	$\gamma_{c'}$	1.00	1.25
Resistenza non drenata	γ_{cu}	1.00	1.40
Resistenza a compressione uniassiale	γ_{qu}	1.00	1.60
Peso dell'unità di volume	γ_{γ}	1.00	1.00

Coefficienti di partecipazione combinazioni sismiche

Coefficienti parziali per le azioni o per l'effetto delle azioni:

Carichi	*Effetto*		*EQU*	*A1*	*A2*
Permanenti	Favorevole	γ_{Gfav}	1.00	1.00	1.00
Permanenti	Sfavorevole	γ_{Gsfav}	1.00	1.00	1.00
Variabili	Favorevole	γ_{Qfav}	0.00	0.00	0.00
Variabili	Sfavorevole	γ_{Qsfav}	1.00	1.00	1.00

Coefficienti parziali per i parametri geotecnici del terreno:

Parametri		*M1*	*M2*
Tangente dell'angolo di attrito	$\gamma_{tan\phi'}$	1.00	1.25
Coesione efficace	$\gamma_{c'}$	1.00	1.25
Resistenza non drenata	γ_{cu}	1.00	1.40
Resistenza a compressione uniassiale	γ_{qu}	1.00	1.60
Peso dell'unità di volume	γ_{γ}	1.00	1.00

FONDAZIONE SUPERFICIALE

Coefficienti parziali γ_R per le verifiche agli stati limite ultimi STR e GEO

Verifica	*Coefficienti parziali*		
	R1	R2	R3
Capacità portante della fondazione	1.00	1.00	1.40
Scorrimento	1.00	1.00	1.10
Resistenza del terreno a valle	1.00	1.00	1.40
Stabilità globale		1.10	

Coeff. di combinazione Ψ_0= 0.70 Ψ_1= 0.50 Ψ_2= 0.20

Condizioni di carico

Simbologia e convenzioni di segno adottate

Carichi verticali positivi verso il basso.
Carichi orizzontali positivi verso sinistra.
Momento positivo senso antiorario.

X	Ascissa del punto di applicazione del carico concentrato espressa in [m]
F_x	Componente orizzontale del carico concentrato espressa in [kg]
F_y	Componente verticale del carico concentrato espressa in [kg]
M	Momento espresso in [kgm]
X_i	Ascissa del punto iniziale del carico ripartito espressa in [m]
X_f	Ascissa del punto finale del carico ripartito espressa in [m]
Q_i	Intensità del carico per $x=X_i$ espressa in [kg/m]
Q_f	Intensità del carico per $x=X_f$ espressa in [kg/m]
D / C	Tipo carico : D=distribuito C=concentrato

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Condizione n° 1 (Sovraccarico stradale a monte)

D Profilo X_i=0.30 X_f=2.50 Q_i=2000.00 Q_f=2000.00

Descrizione combinazioni di carico

Simbologia adottata

γ Coefficiente di partecipazione della condizione
Ψ Coefficiente di combinazione della condizione
C Coefficiente totale di partecipazione della condizione

Combinazione n° 1 SLU (Caso A1-M1)

	γ	Ψ	C
Peso proprio	1.30	1.00	1.30
Spinta terreno	1.30	1.00	1.30
Sovraccarico stradale a monte	1.50	1.00	1.50

Combinazione n° 2 SLU (Caso A2-M2)

	γ	Ψ	C
Peso proprio	1.00	1.00	1.00
Spinta terreno	1.00	1.00	1.00
Sovraccarico stradale a monte	1.30	1.00	1.30

Combinazione n° 3 EQU

	γ	Ψ	C
Peso proprio	1.10	1.00	1.10
Spinta terreno	1.10	1.00	1.10
Sovraccarico stradale a monte	1.50	1.00	1.50

Combinazione n° 4 STAB

	γ	Ψ	C
Peso proprio	1.00	1.00	1.00
Spinta terreno	1.00	1.00	1.00
Sovraccarico stradale a monte	1.30	1.00	1.30

Combinazione n° 5 SLU (Caso A1-M1) - Sisma Vert. negativo

	γ	Ψ	C
Peso proprio	1.00	1.00	1.00
Spinta terreno	1.00	1.00	1.00
Sovraccarico stradale a monte	1.00	0.50	0.50

Combinazione n° 6 SLU (Caso A1-M1) - Sisma Vert. positivo

	γ	Ψ	C
Peso proprio	1.00	1.00	1.00
Spinta terreno	1.00	1.00	1.00
Sovraccarico stradale a monte	1.00	0.50	0.50

Combinazione n° 7 SLU (Caso A2-M2) - Sisma Vert. positivo

	γ	Ψ	C

Peso proprio	1.00	1.00	1.00
Spinta terreno	1.00	1.00	1.00
Sovraccarico stradale a monte	1.00	0.50	0.50

Combinazione n° 8 SLU (Caso A2-M2) - Sisma Vert. negativo

	γ	Ψ	C
Peso proprio	1.00	1.00	1.00
Spinta terreno	1.00	1.00	1.00
Sovraccarico stradale a monte	1.00	0.50	0.50

Combinazione n° 9 EQU - Sisma Vert. negativo

	γ	Ψ	C
Peso proprio	1.00	1.00	1.00
Spinta terreno	1.00	1.00	1.00
Sovraccarico stradale a monte	1.00	0.50	0.50

Combinazione n° 10 EQU - Sisma Vert. positivo

	γ	Ψ	C
Peso proprio	1.00	1.00	1.00
Spinta terreno	1.00	1.00	1.00
Sovraccarico stradale a monte	1.00	0.50	0.50

Combinazione n° 11 STAB - Sisma Vert. positivo

	γ	Ψ	C
Peso proprio	1.00	1.00	1.00
Spinta terreno	1.00	1.00	1.00
Sovraccarico stradale a monte	1.00	0.50	0.50

Combinazione n° 12 STAB - Sisma Vert. negativo

	γ	Ψ	C
Peso proprio	1.00	1.00	1.00
Spinta terreno	1.00	1.00	1.00
Sovraccarico stradale a monte	1.00	0.50	0.50

Combinazione n° 13 SLE (Quasi Permanente)

	γ	Ψ	C
Peso proprio	1.00	1.00	1.00
Spinta terreno	1.00	1.00	1.00
Sovraccarico stradale a monte	1.00	0.20	0.20

Combinazione n° 14 SLE (Frequente)

	γ	Ψ	C
Peso proprio	1.00	1.00	1.00
Spinta terreno	1.00	1.00	1.00
Sovraccarico stradale a monte	1.00	0.50	0.50

Combinazione n° 15 SLE (Rara)

	γ	Ψ	C

Peso proprio	1.00	1.00	1.00
Spinta terreno	1.00	1.00	1.00
Sovraccarico stradale a monte	1.00	1.00	1.00

Impostazioni di analisi

Metodo verifica sezioni **Stato limite**

Impostazioni verifiche SLU

Coefficienti parziali per resistenze di calcolo dei materiali

Coefficiente di sicurezza calcestruzzo a compressione	1.60
Coefficiente di sicurezza calcestruzzo a trazione	1.60
Coefficiente di sicurezza acciaio	1.15
Fattore riduzione da resistenza cubica a cilindrica	0.83
Fattore di riduzione per carichi di lungo periodo	0.85
Coefficiente di sicurezza per la sezione	1.00

Impostazioni verifiche SLE

Condizioni ambientali	Ordinarie
Armatura ad aderenza migliorata	
Verifica fessurazione	
Sensibilità delle armature	Sensibile
Valori limite delle aperture delle fessure	$w_1 = 0.20$
	$w_2 = 0.30$
	$w_3 = 0.40$
Metodo di calcolo aperture delle fessure	Circ. Min. 252 (15/10/1996)
Verifica delle tensioni	
Combinazione di carico	Rara $\sigma_c < 0.60\ f_{ck}$ - $\sigma_f < 0.80\ f_{yk}$
	Quasi permanente $\sigma_c < 0.45\ f_{ck}$

Impostazioni avanzate

Diagramma correttivo per eccentricità negativa con aliquota di parzializzazione pari a 0.00

Quadro riassuntivo coeff. di sicurezza calcolati

Simbologia adottata

C	Identificativo della combinazione
Tipo	Tipo combinazione
Sisma	Combinazione sismica
CS_{SCO}	Coeff. di sicurezza allo scorrimento
CS_{RIB}	Coeff. di sicurezza al ribaltamento
CS_{QLIM}	Coeff. di sicurezza a carico limite
CS_{STAB}	Coeff. di sicurezza a stabilità globale

C	Tipo	Sisma	CS_{sco}	CS_{rib}	CS_{qlim}	CS_{stab}

1	A1-M1 - [1]	--	2.36	--	4.16	--
2	A2-M2 - [1]	--	1.62	--	2.12	--
3	EQU - [1]	--	--	6.54	--	--
4	STAB - [1]	--	--	--	--	1.23
5	A1-M1 - [2]	Orizzontale + Verticale negativo	1.59	--	4.76	--
6	A1-M1 - [2]	Orizzontale + Verticale positivo	1.64	--	4.55	--
7	A2-M2 - [2]	Orizzontale + Verticale positivo	1.13	--	1.74	--
8	A2-M2 - [2]	Orizzontale + Verticale negativo	1.10	--	1.82	--
9	EQU - [2]	Orizzontale + Verticale negativo	--	4.36	--	--
10	EQU - [2]	Orizzontale + Verticale positivo	--	5.17	--	--
11	STAB - [2]	Orizzontale + Verticale positivo	--	--	--	1.23
12	STAB - [2]	Orizzontale + Verticale negativo	--	--	--	1.22
13	SLEQ - [1]	--	2.98	--	7.01	--
14	SLEF - [1]	--	2.84	--	6.40	--
15	SLER - [1]	--	2.62	--	5.53	--

Analisi della spinta e verifiche

Sistema di riferimento adottato per le coordinate :
Origine in testa al muro (spigolo di monte)
Ascisse X (espresse in [m]) positive verso monte
Ordinate Y (espresse in [m]) positive verso l'alto
Le forze orizzontali sono considerate positive se agenti da monte verso valle
Le forze verticali sono considerate positive se agenti dall'alto verso il basso

Calcolo riferito ad 1 metro di muro

Tipo di analisi

Calcolo della spinta	metodo di Culmann
Calcolo del carico limite	metodo di Meyerhof
Calcolo della stabilità globale	metodo di Fellenius
Calcolo della spinta in condizioni di	Spinta attiva

Sisma

Combinazioni SLU

Accelerazione al suolo a_g	2.21 [m/s^2]
Coefficiente di amplificazione per tipo di sottosuolo (S)	1.18
Coefficiente di amplificazione topografica (St)	1.00
Coefficiente riduzione (β_m)	0.31
Rapporto intensità sismica verticale/orizzontale	0.50
Coefficiente di intensità sismica orizzontale (percento)	$k_h=(a_g/g*\beta_m*St*S) = 8.21$
Coefficiente di intensità sismica verticale (percento)	$k_v=0.50 * k_h = 4.10$

Combinazioni SLE

Accelerazione al suolo a_g	2.21 [m/s^2]
Coefficiente di amplificazione per tipo di sottosuolo (S)	1.18
Coefficiente di amplificazione topografica (St)	1.00
Coefficiente riduzione (β_m)	0.31

Rapporto intensità sismica verticale/orizzontale	0.50
Coefficiente di intensità sismica orizzontale (percento)	$k_h=(a_g/g*\beta_m*St*S) = 8.21$
Coefficiente di intensità sismica verticale (percento)	$k_v=0.50 * k_h = 4.10$
Forma diagramma incremento sismico	Stessa forma diagramma statico
Partecipazione spinta passiva (percento)	0.0
Lunghezza del muro	10.00 [m]
Peso muro	5100.00 [kg]
Baricentro del muro	X=0.31 Y=-1.92

<u>Superficie di spinta</u>

Punto inferiore superficie di spinta	X = 1.70	Y = -2.60
Punto superiore superficie di spinta	X = 1.70	Y = 0.00
Altezza della superficie di spinta	2.60 [m]	
Inclinazione superficie di spinta(rispetto alla verticale)	0.00 [°]	

Inviluppo Sollecitazioni paramento

L'ordinata Y(espressa in [m]) è considerata positiva verso il basso con origine in testa al muro
Momento positivo se tende le fibre contro terra (a monte), espresso in [kgm]
Sforzo normale positivo di compressione, espresso in [kg]
Taglio positivo se diretto da monte verso valle, espresso in [kg]

Nr.	Y	Nmin	Nmax	Mmin	Mmax	Tmin	Tmax
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	0.10	75.00	97.50	0.06	0.47	1.76	10.25
3	0.20	150.00	195.00	0.47	2.20	7.05	24.98
4	0.30	225.00	292.50	1.59	5.63	15.87	48.47
5	0.40	300.00	390.00	3.78	12.28	28.82	102.52
6	0.50	375.00	487.50	7.56	24.24	48.09	180.85
7	0.60	450.00	585.00	13.60	46.74	73.51	270.74
8	0.70	525.00	682.50	22.40	78.69	103.23	369.70
9	0.80	600.00	780.00	34.37	120.94	136.78	476.40
10	0.90	675.00	877.50	49.89	174.20	174.06	590.01
11	1.00	750.00	975.00	69.31	239.15	214.99	710.03
12	1.10	825.00	1072.50	93.00	316.41	259.54	836.12
13	1.20	900.00	1170.00	121.33	406.57	307.68	968.06
14	1.30	975.00	1267.50	154.66	510.21	359.40	1105.69
15	1.40	1050.00	1365.00	193.33	627.90	414.69	1248.87
16	1.50	1125.00	1462.50	237.71	760.17	473.53	1397.53
17	1.60	1200.00	1560.00	288.16	907.58	535.92	1551.59
18	1.70	1275.00	1657.50	345.02	1070.67	601.85	1711.00
19	1.80	1350.00	1755.00	408.65	1249.96	671.33	1875.73
20	1.90	1425.00	1852.50	479.40	1445.99	744.34	2045.73
21	2.00	1500.00	1950.00	557.62	1659.26	820.33	2220.14

Inviluppo Sollecitazioni fondazione di valle

L'ascissa X(espressa in m) è considerata positiva verso monte con origine in corrispondenza dell'estremo libero della fondazione di valle
Momento positivo se tende le fibre inferiori, espresso in [kgm]
Taglio positivo se diretto verso l'alto, espresso in [kg]

Nr.	X	Mmin	Mmax	Tmin	Tmax
1	0.00	0.00	0.00	0.00	0.00
2	0.04	2.26	4.30	113.15	214.77
3	0.08	9.07	17.16	227.45	428.15
4	0.12	20.47	38.53	342.91	640.14
5	0.16	36.52	68.36	459.52	850.74
6	0.20	57.25	106.57	577.28	1059.95
7	0.24	82.71	153.13	696.19	1267.77
8	0.28	112.96	207.98	816.25	1474.20
9	0.32	148.03	271.05	937.47	1686.52
10	0.36	187.97	342.30	1059.84	1900.00
11	0.40	232.83	421.66	1183.36	2114.07

Inviluppo Sollecitazioni fondazione di monte

L'ascissa X(espressa in m) è considerata positiva verso valle con origine in corrispondenza dell'estremo libero della fondazione di monte
Momento positivo se tende le fibre inferiori, espresso in [kgm]
Taglio positivo se diretto verso l'alto, espresso in [kg]

Nr.	X	Mmin	Mmax	Tmin	Tmax
1	0.00	0.00	0.00	0.00	0.00
2	0.17	-25.17	7.25	-291.81	81.84
3	0.34	-97.74	26.65	-557.59	142.88
4	0.51	-213.28	54.65	-797.34	183.10
5	0.68	-367.36	87.72	-1011.05	202.51
6	0.85	-555.56	122.32	-1198.73	201.11
7	1.02	-773.45	154.92	-1360.38	178.90
8	1.19	-1016.61	181.97	-1496.00	135.87
9	1.36	-1280.62	199.94	-1605.58	72.04
10	1.53	-1552.59	208.66	-1559.14	39.39
11	1.70	-1808.45	212.47	-1446.66	1.93

Inviluppo armature e tensioni nei materiali del muro

L'ordinata Y(espressa in [m]) è considerata positiva verso il basso con origine in testa al muro

B	base della sezione espressa in [cm]
H	altezza della sezione espressa in [cm]
A_{fs}	area di armatura in corrispondenza del lembo di monte in [cmq]
A_{fi}	area di armatura in corrispondenza del lembo di valle in [cmq]
σ_c	tensione nel calcestruzzo espressa in [kg/cmq]
τ_c	tensione tangenziale nel calcestruzzo espressa in [kg/cmq]
σ_{fs}	tensione nell'armatura disposta sul lembo di monte in [kg/cmq]
σ_{fi}	tensione nell'armatura disposta sul lembo di valle in [kg/cmq]

N_u sforzo normale ultimo espresso in [kg]
M_u momento ultimo espresso in [kgm]
CS coefficiente sicurezza sezione
Vcd Aliquota di taglio assorbito dal cls
Vwd Aliquota di taglio assorbito dall'armatura

Inviluppo SLU

Nr.	Y	B	H	A_{fs}	A_{fi}	N_u	M_u	CS	Vcd	Vwd
1	0.00	100.00	30.00	7.70	7.70	0	0	1000.00	18147	0
2	0.10	100.00	30.00	7.70	7.70	416193	-330	4273.56	18147	0
3	0.20	100.00	30.00	7.70	7.70	408924	-1311	2106.64	18147	0
4	0.30	100.00	30.00	7.70	7.70	399190	-3009	1380.20	18147	0
5	0.40	100.00	30.00	7.70	7.70	363139	-6356	1013.07	18147	0
6	0.50	100.00	30.00	7.70	7.70	294482	-12042	732.71	18147	0
7	0.60	100.00	30.00	7.70	7.70	226849	-17005	504.11	18147	0
8	0.70	100.00	30.00	7.70	7.70	146962	-19384	279.93	18147	0
9	0.80	100.00	30.00	7.70	7.70	83145	-14748	138.57	18147	0
10	0.90	100.00	30.00	7.70	7.70	52389	-11900	77.61	18147	0
11	1.00	100.00	30.00	7.70	7.70	36486	-10243	48.65	18147	0
12	1.10	100.00	30.00	7.70	7.70	27576	-9314	33.43	18147	0
13	1.20	100.00	30.00	7.70	7.70	21923	-8725	24.36	18147	0
14	1.30	100.00	30.00	7.70	7.70	18041	-8321	18.50	18147	0
15	1.40	100.00	30.00	7.70	7.70	15225	-8027	14.50	18147	0
16	1.50	100.00	30.00	7.70	7.70	13097	-7805	11.64	18147	0
17	1.60	100.00	30.00	7.70	7.70	11437	-7632	9.53	18147	0
18	1.70	100.00	30.00	7.70	7.70	10111	-7494	7.93	18147	0
19	1.80	100.00	30.00	7.70	7.70	9028	-7381	6.69	18147	0
20	1.90	100.00	30.00	7.70	7.70	8131	-7288	5.71	18147	0
21	2.00	100.00	30.00	7.70	7.70	7375	-7209	4.92	18147	0

Inviluppo SLE

Nr.	Y	B	H	A_{fs}	A_{fi}	σ_c	τ_c	σ_{fs}	σ_{fi}
1	0.00	100.00	30.00	7.70	7.70	0.00	0.00	0.00	0.00
2	0.10	100.00	30.00	7.70	7.70	0.02	0.00	-0.34	-0.35
3	0.20	100.00	30.00	7.70	7.70	0.05	0.00	-0.67	-0.72
4	0.30	100.00	30.00	7.70	7.70	0.08	0.01	-0.96	-1.13
5	0.40	100.00	30.00	7.70	7.70	0.12	0.02	-1.18	-1.64
6	0.50	100.00	30.00	7.70	7.70	0.18	0.04	-1.32	-2.34
7	0.60	100.00	30.00	7.70	7.70	0.27	0.06	-1.34	-3.28
8	0.70	100.00	30.00	7.70	7.70	0.41	0.09	-1.20	-4.59
9	0.80	100.00	30.00	7.70	7.70	0.65	0.12	3.41	-6.45
10	0.90	100.00	30.00	7.70	7.70	1.03	0.15	11.71	-8.61
11	1.00	100.00	30.00	7.70	7.70	1.52	0.19	25.44	-10.75
12	1.10	100.00	30.00	7.70	7.70	2.12	0.22	44.21	-12.83
13	1.20	100.00	30.00	7.70	7.70	2.83	0.26	67.85	-14.89
14	1.30	100.00	30.00	7.70	7.70	3.65	0.30	96.43	-16.96
15	1.40	100.00	30.00	7.70	7.70	4.59	0.34	130.08	-19.08
16	1.50	100.00	30.00	7.70	7.70	5.65	0.39	169.00	-21.27

17	1.60	100.00	30.00	7.70	7.70	6.83	0.43	213.37	-23.54
18	1.70	100.00	30.00	7.70	7.70	8.15	0.48	263.40	-25.89
19	1.80	100.00	30.00	7.70	7.70	9.61	0.53	319.31	-28.33
20	1.90	100.00	30.00	7.70	7.70	11.22	0.58	381.29	-30.88
21	2.00	100.00	30.00	7.70	7.70	12.97	0.63	449.56	-33.54

Inviluppo armature e tensioni nei materiali della fondazione

Simbologia adottata

B	base della sezione espressa in [cm]
H	altezza della sezione espressa in [cm]
A_{fi}	area di armatura in corrispondenza del lembo inferiore in [cmq]
A_{fs}	area di armatura in corrispondenza del lembo superiore in [cmq]
σ_c	tensione nel calcestruzzo espressa in [kg/cmq]
τ_c	tensione tangenziale nel calcestruzzo espressa in [kg/cmq]
σ_{fi}	tensione nell'armatura disposta in corrispondenza del lembo inferiore in [kg/cmq]
σ_{fs}	tensione nell'armatura disposta in corrispondenza del lembo superiore in [kg/cmq]
N_u	sforzo normale ultimo espresso in [kg]
M_u	momento ultimo espresso in [kgm]
CS	coefficiente sicurezza sezione
Vcd	Aliquota di taglio assorbito dal cls
Vwd	Aliquota di taglio assorbito dall'armatura

Fondazione di valle

(L'ascissa X, espressa in [m], è positiva verso monte con origine in corrispondenza dell'estremo libero della fondazione di valle)

Inviluppo SLU

Nr.	X	B	H	A_{fs}	A_{fi}	N_u	M_u	CS	Vcd	Vwd
1	0.00	100.00	60.00	7.70	7.70	0	0	1000.00	40832	0
2	0.04	100.00	60.00	7.70	7.70	0	13492	3137.75	40832	0
3	0.08	100.00	60.00	7.70	7.70	0	13492	786.13	40832	0
4	0.12	100.00	60.00	7.70	7.70	0	13492	350.15	40832	0
5	0.16	100.00	60.00	7.70	7.70	0	13492	197.38	40832	0
6	0.20	100.00	60.00	7.70	7.70	0	13492	126.60	40832	0
7	0.24	100.00	60.00	7.70	7.70	0	13492	88.11	40832	0
8	0.28	100.00	60.00	7.70	7.70	0	13492	64.87	40832	0
9	0.32	100.00	60.00	7.70	7.70	0	13492	49.78	40832	0
10	0.36	100.00	60.00	7.70	7.70	0	13492	39.42	40832	0
11	0.40	100.00	60.00	7.70	7.70	0	13492	32.00	40832	0

Inviluppo SLE

Nr.	X	B	H	A_{fs}	A_{fi}	σ_c	τ_c	σ_{fi}	σ_{fs}
12	0.00	100.00	60.00	7.70	7.70	0.00	0.00	0.00	0.00
13	0.04	100.00	60.00	7.70	7.70	0.01	0.03	0.76	-0.06
14	0.08	100.00	60.00	7.70	7.70	0.04	0.07	3.07	-0.26
15	0.12	100.00	60.00	7.70	7.70	0.10	0.10	6.92	-0.58
16	0.16	100.00	60.00	7.70	7.70	0.18	0.13	12.34	-1.03
17	0.20	100.00	60.00	7.70	7.70	0.28	0.17	19.34	-1.61
18	0.24	100.00	60.00	7.70	7.70	0.41	0.20	27.93	-2.32

19	0.28	100.00	60.00	7.70	7.70	0.56	0.23	38.13	-3.17
20	0.32	100.00	60.00	7.70	7.70	0.73	0.27	49.96	-4.16
21	0.36	100.00	60.00	7.70	7.70	0.92	0.30	63.42	-5.27
22	0.40	100.00	60.00	7.70	7.70	1.14	0.34	78.52	-6.53

Fondazione di monte

(L'ascissa X, espressa in [m], è positiva verso valle con origine in corrispondenza dell'estremo libero della fondazione di monte)

Inviluppo SLU

Nr.	X	B	H	A_{fs}	A_{fi}	N_u	M_u	CS	Vcd	Vwd
1	0.00	100.00	60.00	7.70	7.70	0	0	1000.00	40832	0
2	0.17	100.00	60.00	7.70	7.70	0	13492	535.99	40832	0
3	0.34	100.00	60.00	7.70	7.70	0	13492	138.04	40832	0
4	0.51	100.00	60.00	7.70	7.70	0	-13492	63.26	40832	0
5	0.68	100.00	60.00	7.70	7.70	0	-13492	36.73	40832	0
6	0.85	100.00	60.00	7.70	7.70	0	-13492	24.29	40832	0
7	1.02	100.00	60.00	7.70	7.70	0	-13492	17.44	40832	0
8	1.19	100.00	60.00	7.70	7.70	0	-13492	13.27	40832	0
9	1.36	100.00	60.00	7.70	7.70	0	-13492	10.54	40832	0
10	1.53	100.00	60.00	7.70	7.70	0	-13492	8.69	40832	0
11	1.70	100.00	60.00	7.70	7.70	0	-13492	7.46	40832	0

Inviluppo SLE

Nr.	X	B	H	A_{fs}	A_{fi}	σ_c	τ_c	σ_{fi}	σ_{fs}
12	0.00	100.00	60.00	7.70	7.70	0.00	0.00	0.00	0.00
13	0.17	100.00	60.00	7.70	7.70	0.03	0.02	1.86	-0.16
14	0.34	100.00	60.00	7.70	7.70	0.10	0.03	6.85	-0.57
15	0.51	100.00	60.00	7.70	7.70	0.20	0.04	14.05	-1.17
16	0.68	100.00	60.00	7.70	7.70	0.33	0.04	22.55	3.17
17	0.85	100.00	60.00	7.70	7.70	0.46	0.04	31.45	9.41
18	1.02	100.00	60.00	7.70	7.70	0.58	-0.07	39.82	19.97
19	1.19	100.00	60.00	7.70	7.70	0.68	-0.09	46.78	35.92
20	1.36	100.00	60.00	7.70	7.70	0.85	-0.13	51.40	58.33
21	1.53	100.00	60.00	7.70	7.70	1.22	-0.11	53.64	83.93
22	1.70	100.00	60.00	7.70	7.70	1.51	-0.08	54.62	103.68

14 ALLEGATI

14.1 ALLEGATO A. – Scatolare stradale - Tabulati di input

TABELLA DATI MATERIALI

Id	Tipo / Note		Young	Poisson	G	Gamma	Alfa
		kg/cm2	kg/cm2		kg/cm2	kg/cm3	
4	Calcestruzzo Classe C28/35		3.372e+05	0.12	1.505e+05	2.50e-03	1.00e-05
	Rck	350.0					
	fctm	28.3					
5	Calcestruzzo Classe C32/40		3.605e+05	0.12	1.609e+05	2.50e-03	1.00e-05
	Rck	400.0					
	fctm	31.0					

MODELLAZIONE DELLE SEZIONI

Id	Tipo	Area	A V2	A V3	Jt	J 2-2	J 3-3	W 2-2	W 3-3	Wp 2-2	Wp 3-3
		cm2	cm2	cm2	cm4	cm4	cm4	cm3	cm3	cm3	cm3
12	Rettangolare: b=100.00 h=60.00	6000.00	0.0	0.0	4.478e+06	5.000e+06	1.800e+06	1.000e+05	6.000e+04	1.500e+05	9.000e+04
13	Rettangolare: b=100.00 h=65.00	6000.00	0.0	0.0	4.478e+06	5.000e+06	1.800e+06	1.000e+05	6.000e+04	1.500e+05	9.000e+04
14	Rettangolare: b=100.00 h=70.00	6500.00	0.0	0.0	5.406e+06	5.417e+06	2.289e+06	1.083e+05	7.042e+04	1.625e+05	1.056e+05

MODELLAZIONE STRUTTURA: NODI
LEGENDA TABELLA DATI NODI

Il programma utilizza per la modellazione nodi strutturali.
Ogni nodo è individuato dalle coordinate cartesiane nel sistema di riferimento globale (X Y Z).
Ad ogni nodo è eventualmente associato un codice di vincolamento rigido, un codice di fondazione speciale, ed un set di sei molle (tre per le traslazioni, tre per le rotazioni). Le tabelle sottoriportate riflettono le succitate possibilità. In particolare per ogni nodo viene indicato in tabella:

Nodo	numero del nodo.
X	valore della coordinata X
Y	valore della coordinata Y
Z	valore della coordinata Z

Per i nodi ai quali sia associato un codice di vincolamento rigido, un codice di fondazione speciale o un set di molle viene indicato in tabella:

Nodo	numero del nodo.
X	valore della coordinata X
Y	valore della coordinata Y
Z	valore della coordinata Z
Note	eventuale codice di vincolo (es. v=110010 sei valori relativi ai sei gradi di libertà previsti per il nodo TxTyTzRxRyRz, il valore 1 indica che lo spostamento o rotazione relativo è impedito, il valore 0 indica che lo spostamento o rotazione relativo è libero).
Note	(FS = 1, 2,…) eventuale codice del tipo di fondazione speciale (1, 2,… fanno riferimento alle tipologie: plinto, palo, plinto su pali,…) che è collegato al nodo. (ISO = "id SIGLA") indice e sigla identificativa dell' eventuale isolatore sismico assegnato al nodo
Rig. TX	valore della rigidezza dei vincoli elastici eventualmente applicati al nodo, nello specifico TX (idem per TY, TZ, RX, RY, RZ).

MODELLAZIONE STRUTTURA: ELEMENTI TRAVE
TABELLA DATI TRAVI

Il programma utilizza per la modellazione elementi a due nodi denominati in generale travi.
Ogni elemento trave è individuato dal nodo iniziale e dal nodo finale.
Ogni elemento è caratterizzato da un insieme di proprietà riportate in tabella che ne completano la modellazione.
In particolare per ogni elemento viene indicato in tabella:

Elem.	numero dell'elemento
Note	codice di comportamento: trave, trave di fondazione, pilastro, asta, asta tesa, asta compressa
Nodo I (J)	numero del nodo iniziale (finale)
Mat.	codice del materiale assegnato all'elemento
Sez.	codice della sezione assegnata all'elemento
Rotaz.	valore della rotazione dell'elemento, attorno al proprio asse, nel caso in cui l'orientamento di default non sia adottabile; l'orientamento di default prevede per gli elementi non verticali l'asse 2 contenuto nel piano verticale e l'asse 3 orizzontale, per gli elementi verticali l'asse 2 diretto secondo X negativo e l'asse 3 diretto secondo Y negativo
Svincolo I (J)	codici di svincolo per le azioni interne; i primi sei codici si riferiscono al nodo iniziale, i restanti sei al nodo finale (il valore 1 indica che la relativa azione interna non è attiva)
Wink V	costante di sottofondo (coefficiente di Winkler) per la modellazione della trave su suolo elastico
Wink O	costante di sottofondo (coefficiente di Winkler) per la modellazione del suolo elastico orizzontale

Elem.	Note	Nodo I	Nodo J	Mat.	Sez.	Rotaz.	Svincolo I	Svincolo J	Wink V	Wink O
						gradi			daN/cm3	daN/cm3
1	Trave	10	4	5	14					
2	Pilas.	1	6	5	13					
3	Trave	3	10	5	14					
4	Pilas.	6	5	5	13					
5	Pilas.	5	3	5	13					
6	Pilas.	13	15	5	13					
7	Pilas.	2	13	5	13					
8	Trave	4	15	5	14					
9	Trave	12	3	5	14					
10	Trave f.	8	16	4	12				0.34	0.17
11	Trave f.	1	11	4	12				0.34	0.17
12	Trave f.	11	8	4	12				0.34	0.17
13	Pilas.	16	2	5	13					
14	Trave f.	14	1	4	12				0.34	0.17
15	Trave	15	7	5	14					
16	Trave f.	16	9	4	12				0.34	0.17

SCHEMATIZZAZIONE DEI CASI DI CARICO
LEGENDA TABELLA CASI DI CARICO
Il programma consente l'applicazione di diverse tipologie di casi di carico.
Sono previsti i seguenti 11 tipi di casi di carico:

	Sigla	***Tipo***	***Descrizione***
1	**Ggk**	A	caso di carico comprensivo del peso proprio struttura
2	**Gk**	NA	caso di carico con azioni permanenti
3	**Qk**	NA	caso di carico con azioni variabili
4	**Gsk**	A	caso di carico comprensivo dei carichi permanenti sui solai e sulle coperture
5	**Qsk**	A	caso di carico comprensivo dei carichi variabili sui solai
6	**Qnk**	A	caso di carico comprensivo dei carichi di neve sulle coperture
7	**Qtk**	SA	caso di carico comprensivo di una variazione termica agente sulla struttura
8	**Qvk**	NA	caso di carico comprensivo di azioni da vento sulla struttura
9	**Esk**	SA	caso di carico sismico con analisi statica
10	**Edk**	SA	caso di carico sismico con analisi dinamica
11	**Pk**	NA	caso di carico comprensivo di azioni derivanti da coazioni, cedimenti e precompressioni

Sono di tipo automatico A (ossia non prevedono introduzione dati da parte dell'utente) i seguenti casi di carico: 1-Ggk; 4-Gsk; 5-Qsk; 6-Qnk.

Sono di tipo semi-automatico SA (ossia prevedono una minima introduzione dati da parte dell'utente) i seguenti casi di carico:
7-Qtk, in quanto richiede solo il valore della variazione termica;
9-Esk e 10-Edk, in quanto richiedono il valore dell'angolo di ingresso del sisma e l'individuazione dei casi di carico partecipanti alla definizione delle masse.

Sono di tipo non automatico NA ossia prevedono la diretta applicazione di carichi generici agli elementi strutturali (si veda il precedente punto Modellazione delle Azioni) i restanti casi di carico.

Nella tabella successiva vengono riportati i casi di carico agenti sulla struttura, con l'indicazione dei dati relativi al caso di carico stesso:
Numero Tipo e *Sigla identificativa*, *Valore di riferimento* del caso di carico (se previsto).

In successione, per i casi di carico non automatici, viene riportato l'elenco di nodi ed elementi direttamente caricati con la sigla identificativa del carico.

Per i casi di carico di tipo sismico (9-Esk e 10-Edk), viene riportata la tabella di definizione delle masse: per ogni caso di carico partecipante alla definizione delle masse viene indicata la relativa aliquota (partecipazione) considerata. Si precisa che per i caso di carico 5-Qsk e 6-Qnk la partecipazione è prevista localmente per ogni elemento solaio o copertura presente nel modello (si confronti il valore Sksol nel capitolo relativo agli elementi solaio) e pertanto la loro partecipazione è di norma pari a uno.

CDC	Tipo	Sigla Id	Note
1	Ggk	CDC=Ggk (peso proprio della struttura)	
2	Gk	CDC=Gk (permanente)	D2 : 1 Azione : DG:Fzi=-37.80 Fzf=-37.80
			D2 : 3 Azione : DG:Fzi=-37.80 Fzf=-37.80
			D2 : 8 Azione : DG:Fzi=-37.80 Fzf=-37.80
			D2 : 9 Azione : DG:Fzi=-37.80 Fzf=-37.80
			D2 : 12 Azione : DG:Fzi=-12.40 Fzf=-12.40
			D2 : 15 Azione : DG:Fzi=-37.80 Fzf=-37.80
3	Gk	CDC=Gk (spinta terre100%-100%)	D2 : 2 Azione : DG:Fxi=66.80 Fxf=64.52
			D2 : 4 Azione : DG:Fxi=64.52 Fxf=18.92
			D2 : 5 Azione : DG:Fxi=18.92 Fxf=16.64
			D2 : 6 Azione : DG:Fxi=-18.92 Fxf=-16.64
			D2 : 7 Azione : DG:Fxi=-64.52 Fxf=-18.92
			D2 : 13 Azione : DG:Fxi=-66.80 Fxf=-64.52
4	Gk	CDC=Gk (spinta terre passiva sx e attiva dx)	D2 : 2 Azione : DG:Fxi=66.80 Fxf=64.52
			D2 : 4 Azione : DG:Fxi=64.52 Fxf=18.92
			D2 : 5 Azione : DG:Fxi=18.92 Fxf=16.64
			D2 : 6 Azione : DG:Fxi=-11.85 Fxf=-10.42
			D2 : 7 Azione : DG:Fxi=-40.41 Fxf=-11.85
			D2 : 13 Azione : DG:Fxi=-41.84 Fxf=-40.41
5	Gk	CDC=Gk (spinta terre attiva)	D2 : 2 Azione : DG:Fxi=41.84 Fxf=40.41
			D2 : 4 Azione : DG:Fxi=40.41 Fxf=11.85
			D2 : 5 Azione : DG:Fxi=11.85 Fxf=10.42
			D2 : 6 Azione : DG:Fxi=-11.85 Fxf=-10.42
			D2 : 7 Azione : DG:Fxi=-40.41 Fxf=-11.85
			D2 : 13 Azione : DG:Fxi=-41.84 Fxf=-40.41
7	Qk	CDC=Qk (Q1k centrato)	D2 : 1 Azione : DG:Fzi=-38.68 Fzf=-38.68
			D2 : 3 Azione : DG:Fzi=-38.68 Fzf=-38.68
			D2 : 8 Azione : DG:Fzi=-38.68 Fzf=-38.68
			D2 : 9 Azione : DG:Fzi=-38.68 Fzf=-38.68
			D2 : 15 Azione : DG:Fzi=-38.68 Fzf=-38.68
8	Qk	CDC=Qk (Q1k filo piedritto)	D2 : 1 Azione : DG:Fzi=-38.68 Fzf=-38.68
			D2 : 3 Azione : DG:Fzi=-38.68 Fzf=-38.68
			D2 : 8 Azione : DG:Fzi=-38.68 Fzf=-38.68
			D2 : 9 Azione : DG:Fzi=-38.68 Fzf=-38.68
			D2 : 15 Azione : DG:Fzi=-38.68 Fzf=-38.68
9	Qk	CDC=Qk (Accidentale 20kN/mq)	D2 : 1 Azione : DG:Fzi=-20.00 Fzf=-20.00
			D2 : 3 Azione : DG:Fzi=-20.00 Fzf=-20.00
			D2 : 8 Azione : DG:Fzi=-20.00 Fzf=-20.00
			D2 : 9 Azione : DG:Fzi=-20.00 Fzf=-20.00
			D2 : 15 Azione : DG:Fzi=-20.00 Fzf=-20.00
10	Qk	CDC=Qk (spinta piedritto sinistro)	D2 : 2 Azione : DG:Fxi=5.71 Fxf=5.71
			D2 : 4 Azione : DG:Fxi=5.71 Fxf=14.62
			D2 : 5 Azione : DG:Fxi=14.62 Fxf=14.62
11	Qk	CDC=Qk (spinta piedritto dx)	D2 : 6 Azione : DG:Fxi=-14.62 Fxf=-14.62
			D2 : 7 Azione : DG:Fxi=-5.71 Fxf=-14.62
			D2 : 13 Azione : DG:Fxi=-5.71 Fxf=-5.71
12	Qk	CDC=Qk (spinta su ambi i piedritti)	D2 : 2 Azione : DG:Fxi=5.71 Fxf=5.71
			D2 : 4 Azione : DG:Fxi=5.71 Fxf=14.62
			D2 : 5 Azione : DG:Fxi=14.62 Fxf=14.62
			D2 : 6 Azione : DG:Fxi=-14.62 Fxf=-14.62
			D2 : 7 Azione : DG:Fxi=-5.71 Fxf=-14.62
			D2 : 13 Azione : DG:Fxi=-5.71 Fxf=-5.71
13	Qk	CDC=Qk (frenatura dx)	D2 : 1 Azione : DG:Fxi=-14.04 Fxf=-14.04
			D2 : 3 Azione : DG:Fxi=-14.04 Fxf=-14.04
			D2 : 8 Azione : DG:Fxi=-14.04 Fxf=-14.04

CDC	Tipo	Sigla Id	Note
			D2 : 9 Azione : DG:Fxi=-14.04 Fxf=-14.04
			D2 : 15 Azione : DG:Fxi=-14.04 Fxf=-14.04
14	Qk	CDC=Qk (frenatura sx)	D2 : 1 Azione : DG:Fxi=14.04 Fxf=14.04
			D2 : 3 Azione : DG:Fxi=14.04 Fxf=14.04
			D2 : 8 Azione : DG:Fxi=14.04 Fxf=14.04
			D2 : 9 Azione : DG:Fxi=14.04 Fxf=14.04
			D2 : 15 Azione : DG:Fxi=14.04 Fxf=14.04
15	Qk	CDC=Qk (acc sol inf colonna dx)	D2 : 12 Azione : DG:xi=250.00 xf=500.00 Fzi=-68.59 Fzf=-68.59
16	Qk	CDC=Qk (acc sol inf colonna sx)	D2 : 12 Azione : DG:xi=0.0 xf=250.00 Fzi=-68.59 Fzf=-68.59
17	Qk	CDC=Qk (acc sol inf colonna dx-sx)	D2 : 12 Azione : DG:xi=250.00 xf=500.00 Fzi=-68.59 Fzf=-68.59
			D2 : 12 Azione : DG:xi=0.0 xf=250.00 Fzi=-68.59 Fzf=-68.59
18	Qk	CDC=Qk (sisma orizzontale)	D2 : 1 Azione : DG:Fxi=13.46 Fxf=13.46
			D2 : 2 Azione : DG:Fxi=3.74 Fxf=3.74
			D2 : 2 Azione : DG:Fxi=45.22 Fxf=45.22
			D2 : 3 Azione : DG:Fxi=13.46 Fxf=13.46
			D2 : 4 Azione : DG:Fxi=3.74 Fxf=3.74
			D2 : 4 Azione : DG:Fxi=45.22 Fxf=45.22
			D2 : 5 Azione : DG:Fxi=3.74 Fxf=3.74
			D2 : 5 Azione : DG:Fxi=45.22 Fxf=45.22
			D2 : 6 Azione : DG:Fxi=3.74 Fxf=3.74
			D2 : 6 Azione : DG:Fxi=45.22 Fxf=45.22
			D2 : 7 Azione : DG:Fxi=3.74 Fxf=3.74
			D2 : 7 Azione : DG:Fxi=45.22 Fxf=45.22
			D2 : 8 Azione : DG:Fxi=13.46 Fxf=13.46
			D2 : 9 Azione : DG:Fxi=13.46 Fxf=13.46
			D2 : 13 Azione : DG:Fxi=3.74 Fxf=3.74
			D2 : 13 Azione : DG:Fxi=45.22 Fxf=45.22
			D2 : 15 Azione : DG:Fxi=13.46 Fxf=13.46
19	Qk	CDC=Qk (sisma verticale)	D2 : 1 Azione : DG:Fzi=-6.73 Fzf=-6.73
			D2 : 3 Azione : DG:Fzi=-6.73 Fzf=-6.73
			D2 : 8 Azione : DG:Fzi=-6.73 Fzf=-6.73
			D2 : 9 Azione : DG:Fzi=-6.73 Fzf=-6.73
			D2 : 15 Azione : DG:Fzi=-6.73 Fzf=-6.73
20	Qk	CDC=Qk (At uniforme)	D2 : 1 Azione : T2:DT=-10.00
			D2 : 3 Azione : T2:DT=-10.00
			D2 : 8 Azione : T2:DT=-10.00
			D2 : 9 Azione : T2:DT=-10.00
			D2 : 15 Azione : T2:DT=-10.00
21	Qk	CDC=Qk (At farfalla)	D2 : 1 Azione : T2:DT2i=5.00 DT2f=-5.00
			D2 : 3 Azione : T2:DT2i=5.00 DT2f=-5.00
			D2 : 8 Azione : T2:DT2i=5.00 DT2f=-5.00
22	Qk	CDC=Qk (Ritiro)	Nodo: 4 Azione : MN:Tx=-4.900e-03
			Nodo: 10 Azione : MN:Tx=4.900e-03

DEFINIZIONE DELLE COMBINAZIONI
LEGENDA TABELLA COMBINAZIONI DI CARICO

Il programma combina i diversi tipi di casi di carico (CDC) secondo le regole previste dalla normativa vigente.
Le combinazioni previste sono destinate al controllo di sicurezza della struttura ed alla verifica degli spostamenti e delle sollecitazioni.
La prima tabella delle combinazioni riportata di seguito comprende, per ogni combinazione, le seguenti informazioni: *Numero*, *Tipo*, *Sigla identificativa*. La seconda tabella riporta il *peso nella combinazione*, assunto per ogni caso di carico.

Cmb	Tipo	Sigla Id
1	SLU	SLU1
2	SLU	SLU2
3	SLU	SLU3
4	SLU	SLU4
5	SLU	SLU5
6	SLU	SLU6
7	SLU	SLU7
8	SLU	SLU8
9	SLU	SLU9
10	SLU	SLU10
11	SLU	SLU11
12	SLU	SLU12
13	SLU	SLU13
14	SLU	SLU14
15	SLU	SLU15
16	SLU	SLU16
17	SLU	SLU17
18	SLU	SLU18

Cmb	Tipo	Sigla Id
19	SLU	SLU19
20	SLU	SLU20
21	SLU	SLU21
22	SLU	SLU22
23	SLU	SLU23
24	SLU	SLU24
25	SLU	SLU25
26	SLU	SLU26
27	SLU	SLU27
28	SLU	SLU28
29	SLU	SLU29
30	SLU	SLU30
31	SLU	SLU31
32	SLU	SLU32
33	SLU	SLU33
34	SLU	SLU34
35	SLU	SLU35
36	SLU	SLU36
37	SLU	SLU37
38	SLU	SLU38
39	SLU	SLU39
40	SLU	SLU40
41	SLU	SLU41
42	SLU	SLU42
43	SLU	SLU43
44	SLU	SLU44
45	SLU	SLU45
46	SLU	SLU46
47	SLU	SLU47
48	SLU	SLU48
49	SLU	SLU49
50	SLU	SLU50
51	SLU	SLU51
52	SLU	SLU52
53	SLU	SLU53
54	SLU	SLU54
55	SLU	SLU55
56	SLU	SLU56
57	SLU	SLU57
58	SLU	SLU58
59	SLU	SLU59
60	SLU	SLU60
61	SLU	SLU61
62	SLU	SLU62
63	SLU	SLU63
64	SLU	SLU64
65	SLU	SLU65
66	SLU	SLU66
67	SLU	SLU67
68	SLU	SLU68
69	SLU	SLU69
70	SLU	SLU70
71	SLU	SLU71
72	SLU	SLU72
73	SLU	SLU73
74	SLU	SLU74
75	SLU	SLU75
76	SLU	SLU76
77	SLU	SLU77
78	SLU	SLU78
79	SLU	SLU79
80	SLU	SLU80
81	SLU	SLU81
82	SLU	SLU82
83	SLU	SLU83
84	SLU	SLU84
85	SLU	SLU85
86	SLU	SLU86
87	SLU	SLU87
88	SLU	SLU88
89	SLU	SLU89
90	SLU	SLU90
91	SLU	SLU91
92	SLU	SLU92
93	SLU	SLU93

Cmb	Tipo	Sigla Id
94	SLU	SLU94
95	SLU	SLU95
96	SLU	SLU96
97	SLU	SLU97
98	SLU	SLU98
99	SLU	SLU99
100	SLU	SLU100
101	SLU	SLU101
102	SLU	SLU102
103	SLU	SLU103
104	SLU	SLU104
105	SLU	SLU105
106	SLU	SLU106
107	SLU	SLU107
108	SLU	SLU108
109	SLD(sis)	SLU109-sismica
110	SLE(r)	SLE1 (FR)
111	SLE(r)	SLE2 (FR)
112	SLE(r)	SLE3 (FR)
113	SLE(r)	SLE4 (FR)
114	SLE(r)	SLE5 (FR)
115	SLE(r)	SLE6 (FR)
116	SLE(r)	SLE7 (FR)
117	SLE(r)	SLE8 (FR)
118	SLE(r)	SLE9 (FR)
119	SLE(r)	SLE10 (FR)
120	SLE(r)	SLE11 (FR)
121	SLE(r)	SLE12 (FR)
122	SLE(r)	SLE13 (FR)
123	SLE(r)	SLE14 (FR)
124	SLE(r)	SLE15 (FR)
125	SLE(r)	SLE16 (FR)
126	SLE(r)	SLE17 (FR)
127	SLE(r)	SLE18 (FR)
128	SLE(r)	SLE19 (FR)
129	SLE(r)	SLE20 (FR)
130	SLE(r)	SLE21 (FR)
131	SLE(r)	SLE22 (FR)
132	SLE(r)	SLE23 (FR)
133	SLE(r)	SLE24 (FR)
134	SLE(r)	SLE25 (FR)
135	SLE(r)	SLE26 (FR)
136	SLE(r)	SLE27 (FR)
137	SLE(r)	SLE28 (FR)
138	SLE(r)	SLE29 (FR)
139	SLE(r)	SLE30 (FR)
140	SLE(r)	SLE31 (FR)
141	SLE(r)	SLE32 (FR)
142	SLE(r)	SLE33 (FR)
143	SLE(r)	SLE34 (FR)
144	SLE(r)	SLE35 (FR)
145	SLE(r)	SLE36 (FR)
146	SLE(p)	SLE37 (QP)
147	SLE(p)	SLE38 (QP)
148	SLE(p)	SLE39 (QP)
149	SLE(p)	SLE40 (QP)
150	SLE(p)	SLE41 (QP)
151	SLE(p)	SLE42 (QP)
152	SLE(p)	SLE43 (QP)
153	SLE(p)	SLE44 (QP)
154	SLE(p)	SLE45 (QP)
155	SLE(p)	SLE46 (QP)
156	SLE(p)	SLE47 (QP)
157	SLE(p)	SLE48 (QP)
158	SLE(r)	SLE49 (RAR)
159	SLE(r)	SLE50 (RAR)
160	SLE(r)	SLE51 (RAR)
161	SLE(r)	SLE52 (RAR)
162	SLE(r)	SLE53 (RAR)
163	SLE(r)	SLE54 (RAR)
164	SLE(r)	SLE55 (RAR)
165	SLE(r)	SLE56 (RAR)
166	SLE(r)	SLE57 (RAR)
167	SLE(r)	SLE58 (RAR)
168	SLE(r)	SLE59 (RAR)

Cmb	Tipo	Sigla Id
169	SLE(r)	SLE60 (RAR)
170	SLE(r)	SLE61 (RAR)
171	SLE(r)	SLE62 (RAR)
172	SLE(r)	SLE63 (RAR)
173	SLE(r)	SLE64 (RAR)
174	SLE(r)	SLE65 (RAR)
175	SLE(r)	SLE66 (RAR)
176	SLE(r)	SLE67 (RAR)
177	SLE(r)	SLE68 (RAR)
178	SLE(r)	SLE69 (RAR)
179	SLE(r)	SLE70 (RAR)
180	SLE(r)	SLE71 (RAR)
181	SLE(r)	SLE72 (RAR)

Cmb	CDC 1/15...	CDC 2/16...	CDC 3/17...	CDC 4/18...	CDC 5/19...	CDC 6/20...	CDC 7/21...	CDC 8/22...	CDC 9/23...	CDC 10/24...	CDC 11/25...	CDC 12/26...	CDC 13/27...	CDC 14/28...
1	1.35	1.35	1.35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	1.20	1.20						
2	1.35	1.35	1.35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	-1.20	1.20						
3	1.35	1.35	1.35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	1.20	0.0	1.20						
4	1.35	1.35	1.35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	-1.20	0.0	1.20						
5	1.35	1.35	0.0	1.35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	1.20	1.20						
6	1.35	1.35	0.0	1.35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	-1.20	1.20						
7	1.35	1.35	0.0	1.35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	1.20	0.0	1.20						
8	1.35	1.35	0.0	1.35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	-1.20	0.0	1.20						
9	1.35	1.35	0.0	0.0	1.35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	1.20	1.20						
10	1.35	1.35	0.0	0.0	1.35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	-1.20	1.20						
11	1.35	1.35	0.0	0.0	1.35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	1.20	0.0	1.20						
12	1.35	1.35	0.0	0.0	1.35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	-1.20	0.0	1.20						
13	1.35	1.35	1.35	0.0	0.0	0.0	0.0	1.35	0.0	1.35	0.0	0.0	0.0	0.0
	0.0	0.0	1.13	0.0	0.0	0.0	0.72	1.20						
14	1.35	1.35	1.35	0.0	0.0	0.0	0.0	1.35	0.0	1.35	0.0	0.0	0.0	0.0
	0.0	0.0	1.13	0.0	0.0	0.0	-0.72	1.20						
15	1.35	1.35	1.35	0.0	0.0	0.0	0.0	1.35	0.0	1.35	0.0	0.0	0.0	0.0
	0.0	0.0	1.13	0.0	0.0	0.72	0.0	1.20						
16	1.35	1.35	1.35	0.0	0.0	0.0	0.0	1.35	0.0	1.35	0.0	0.0	0.0	0.0
	0.0	0.0	1.13	0.0	0.0	-0.72	0.0	1.20						
17	1.35	1.35	0.0	1.35	0.0	0.0	0.0	1.35	0.0	1.35	0.0	0.0	0.0	0.0
	0.0	0.0	1.13	0.0	0.0	0.0	0.72	1.20						
18	1.35	1.35	0.0	1.35	0.0	0.0	0.0	1.35	0.0	1.35	0.0	0.0	0.0	0.0
	0.0	0.0	1.13	0.0	0.0	0.0	-0.72	1.20						
19	1.35	1.35	0.0	1.35	0.0	0.0	0.0	1.35	0.0	1.35	0.0	0.0	0.0	0.0
	0.0	0.0	1.13	0.0	0.0	0.72	0.0	1.20						
20	1.35	1.35	0.0	1.35	0.0	0.0	0.0	1.35	0.0	1.35	0.0	0.0	0.0	0.0
	0.0	0.0	1.13	0.0	0.0	-0.72	0.0	1.20						
21	1.35	1.35	0.0	0.0	1.35	0.0	0.0	1.35	0.0	1.35	0.0	0.0	0.0	0.0
	0.0	0.0	1.13	0.0	0.0	0.0	0.72	1.20						
22	1.35	1.35	0.0	0.0	1.35	0.0	0.0	1.35	0.0	1.35	0.0	0.0	0.0	0.0
	0.0	0.0	1.13	0.0	0.0	0.0	-0.72	1.20						
23	1.35	1.35	0.0	0.0	1.35	0.0	0.0	1.35	0.0	1.35	0.0	0.0	0.0	0.0
	0.0	0.0	1.13	0.0	0.0	0.72	0.0	1.20						
24	1.35	1.35	0.0	0.0	1.35	0.0	0.0	1.35	0.0	1.35	0.0	0.0	0.0	0.0
	0.0	0.0	1.13	0.0	0.0	-0.72	0.0	1.20						
25	1.35	1.35	1.35	0.0	0.0	0.0	0.0	1.35	0.0	0.0	0.0	1.35	0.0	0.0
	0.0	0.0	1.13	0.0	0.0	0.0	0.72	1.20						
26	1.35	1.35	1.35	0.0	0.0	0.0	0.0	1.35	0.0	0.0	0.0	1.35	0.0	0.0
	0.0	0.0	1.13	0.0	0.0	0.0	-0.72	1.20						
27	1.35	1.35	1.35	0.0	0.0	0.0	0.0	1.35	0.0	0.0	0.0	1.35	0.0	0.0
	0.0	0.0	1.13	0.0	0.0	0.72	0.0	1.20						
28	1.35	1.35	1.35	0.0	0.0	0.0	0.0	1.35	0.0	0.0	0.0	1.35	0.0	0.0
	0.0	0.0	1.13	0.0	0.0	-0.72	0.0	1.20						
29	1.35	1.35	0.0	1.35	0.0	0.0	0.0	1.35	0.0	0.0	0.0	1.35	0.0	0.0

Cmb	CDC 1/15...	CDC 2/16...	CDC 3/17...	CDC 4/18...	CDC 5/19...	CDC 6/20...	CDC 7/21...	CDC 8/22...	CDC 9/23...	CDC 10/24...	CDC 11/25...	CDC 12/26...	CDC 13/27...	CDC 14/28...
	0.0	0.0	1.13	0.0	0.0	0.0	0.72	1.20						
30	1.35	1.35	0.0	1.35	0.0	0.0	0.0	1.35	0.0	0.0	0.0	1.35	0.0	0.0
	0.0	0.0	1.13	0.0	0.0	0.0	-0.72	1.20						
31	1.35	1.35	0.0	1.35	0.0	0.0	0.0	1.35	0.0	0.0	0.0	1.35	0.0	0.0
	0.0	0.0	1.13	0.0	0.0	0.72	0.0	1.20						
32	1.35	1.35	0.0	1.35	0.0	0.0	0.0	1.35	0.0	0.0	0.0	1.35	0.0	0.0
	0.0	0.0	1.13	0.0	0.0	-0.72	0.0	1.20						
33	1.35	1.35	0.0	0.0	1.35	0.0	0.0	1.35	0.0	0.0	0.0	1.35	0.0	0.0
	0.0	0.0	1.13	0.0	0.0	0.0	0.72	1.20						
34	1.35	1.35	0.0	0.0	1.35	0.0	0.0	1.35	0.0	0.0	0.0	1.35	0.0	0.0
	0.0	0.0	1.13	0.0	0.0	0.0	-0.72	1.20						
35	1.35	1.35	0.0	0.0	1.35	0.0	0.0	1.35	0.0	0.0	0.0	1.35	0.0	0.0
	0.0	0.0	1.13	0.0	0.0	0.72	0.0	1.20						
36	1.35	1.35	0.0	0.0	1.35	0.0	0.0	1.35	0.0	0.0	0.0	1.35	0.0	0.0
	0.0	0.0	1.13	0.0	0.0	-0.72	0.0	1.20						
37	1.35	1.35	1.35	0.0	0.0	0.0	0.0	1.01	0.0	1.01	0.0	0.0	0.0	0.0
	0.0	0.0	1.01	0.0	0.0	0.0	0.72	1.20						
38	1.35	1.35	1.35	0.0	0.0	0.0	0.0	1.01	0.0	1.01	0.0	0.0	0.0	0.0
	0.0	0.0	1.01	0.0	0.0	0.0	-0.72	1.20						
39	1.35	1.35	1.35	0.0	0.0	0.0	0.0	1.01	0.0	1.01	0.0	0.0	0.0	0.0
	0.0	0.0	1.01	0.0	0.0	0.72	0.0	1.20						
40	1.35	1.35	1.35	0.0	0.0	0.0	0.0	1.01	0.0	1.01	0.0	0.0	0.0	0.0
	0.0	0.0	1.01	0.0	0.0	-0.72	0.0	1.20						
41	1.35	1.35	0.0	1.35	0.0	0.0	0.0	1.01	0.0	1.01	0.0	0.0	0.0	0.0
	0.0	0.0	1.01	0.0	0.0	0.0	0.72	1.20						
42	1.35	1.35	0.0	1.35	0.0	0.0	0.0	1.01	0.0	1.01	0.0	0.0	0.0	0.0
	0.0	0.0	1.01	0.0	0.0	0.0	-0.72	1.20						
43	1.35	1.35	0.0	1.35	0.0	0.0	0.0	1.01	0.0	1.01	0.0	0.0	0.0	0.0
	0.0	0.0	1.01	0.0	0.0	0.72	0.0	1.20						
44	1.35	1.35	0.0	1.35	0.0	0.0	0.0	1.01	0.0	1.01	0.0	0.0	0.0	0.0
	0.0	0.0	1.01	0.0	0.0	-0.72	0.0	1.20						
45	1.35	1.35	0.0	0.0	1.35	0.0	0.0	1.01	0.0	1.01	0.0	0.0	0.0	0.0
	0.0	0.0	1.01	0.0	0.0	0.0	0.72	1.20						
46	1.35	1.35	0.0	0.0	1.35	0.0	0.0	1.01	0.0	1.01	0.0	0.0	0.0	0.0
	0.0	0.0	1.01	0.0	0.0	0.0	-0.72	1.20						
47	1.35	1.35	0.0	0.0	1.35	0.0	0.0	1.01	0.0	1.01	0.0	0.0	0.0	0.0
	0.0	0.0	1.01	0.0	0.0	0.72	0.0	1.20						
48	1.35	1.35	0.0	0.0	1.35	0.0	0.0	1.01	0.0	1.01	0.0	0.0	0.0	0.0
	0.0	0.0	1.01	0.0	0.0	-0.72	0.0	1.20						
49	1.35	1.35	1.35	0.0	0.0	0.0	0.0	1.01	0.0	0.0	0.0	1.01	0.0	0.0
	0.0	0.0	1.01	0.0	0.0	0.0	0.72	1.20						
50	1.35	1.35	1.35	0.0	0.0	0.0	0.0	1.01	0.0	0.0	0.0	1.01	0.0	0.0
	0.0	0.0	1.01	0.0	0.0	0.0	-0.72	1.20						
51	1.35	1.35	1.35	0.0	0.0	0.0	0.0	1.01	0.0	0.0	0.0	1.01	0.0	0.0
	0.0	0.0	1.01	0.0	0.0	0.72	0.0	1.20						
52	1.35	1.35	1.35	0.0	0.0	0.0	0.0	1.01	0.0	0.0	0.0	1.01	0.0	0.0
	0.0	0.0	1.01	0.0	0.0	-0.72	0.0	1.20						
53	1.35	1.35	0.0	1.35	0.0	0.0	0.0	1.01	0.0	0.0	0.0	1.01	0.0	0.0
	0.0	0.0	1.01	0.0	0.0	0.0	0.72	1.20						
54	1.35	1.35	0.0	1.35	0.0	0.0	0.0	1.01	0.0	0.0	0.0	1.01	0.0	0.0
	0.0	0.0	1.01	0.0	0.0	0.0	-0.72	1.20						
55	1.35	1.35	0.0	1.35	0.0	0.0	0.0	1.01	0.0	0.0	0.0	1.01	0.0	0.0
	0.0	0.0	1.01	0.0	0.0	0.72	0.0	1.20						
56	1.35	1.35	0.0	1.35	0.0	0.0	0.0	1.01	0.0	0.0	0.0	1.01	0.0	0.0
	0.0	0.0	1.01	0.0	0.0	-0.72	0.0	1.20						
57	1.35	1.35	0.0	0.0	1.35	0.0	0.0	1.01	0.0	0.0	0.0	1.01	0.0	0.0
	0.0	0.0	1.01	0.0	0.0	0.0	0.72	1.20						
58	1.35	1.35	0.0	0.0	1.35	0.0	0.0	1.01	0.0	0.0	0.0	1.01	0.0	0.0
	0.0	0.0	1.01	0.0	0.0	0.0	-0.72	1.20						
59	1.35	1.35	0.0	0.0	1.35	0.0	0.0	1.01	0.0	0.0	0.0	1.01	0.0	0.0
	0.0	0.0	1.01	0.0	0.0	0.72	0.0	1.20						
60	1.35	1.35	0.0	0.0	1.35	0.0	0.0	1.01	0.0	0.0	0.0	1.01	0.0	0.0
	0.0	0.0	1.01	0.0	0.0	-0.72	0.0	1.20						
61	1.35	1.35	1.35	0.0	0.0	0.0	0.0	1.01	0.0	1.01	0.0	0.0	0.0	1.35
	0.0	0.0	1.13	0.0	0.0	0.0	0.72	1.20						
62	1.35	1.35	1.35	0.0	0.0	0.0	0.0	1.01	0.0	1.01	0.0	0.0	0.0	1.35
	0.0	0.0	1.13	0.0	0.0	0.0	-0.72	1.20						
63	1.35	1.35	1.35	0.0	0.0	0.0	0.0	1.01	0.0	1.01	0.0	0.0	0.0	1.35
	0.0	0.0	1.13	0.0	0.0	0.72	0.0	1.20						
64	1.35	1.35	1.35	0.0	0.0	0.0	0.0	1.01	0.0	1.01	0.0	0.0	0.0	1.35
	0.0	0.0	1.13	0.0	0.0	-0.72	0.0	1.20						
65	1.35	1.35	0.0	1.35	0.0	0.0	0.0	1.01	0.0	1.01	0.0	0.0	0.0	1.35
	0.0	0.0	1.13	0.0	0.0	0.0	0.72	1.20						
66	1.35	1.35	0.0	1.35	0.0	0.0	0.0	1.01	0.0	1.01	0.0	0.0	0.0	1.35

Cmb	CDC 1/15...	CDC 2/16...	CDC 3/17...	CDC 4/18...	CDC 5/19...	CDC 6/20...	CDC 7/21...	CDC 8/22...	CDC 9/23...	CDC 10/24...	CDC 11/25...	CDC 12/26...	CDC 13/27...	CDC 14/28...
	0.0	0.0	1.13	0.0	0.0	0.0	-0.72	1.20						
67	1.35	1.35	0.0	1.35	0.0	0.0	0.0	1.01	0.0	1.01	0.0	0.0	0.0	1.35
	0.0	0.0	1.13	0.0	0.0	0.72	0.0	1.20						
68	1.35	1.35	0.0	1.35	0.0	0.0	0.0	1.01	0.0	1.01	0.0	0.0	0.0	1.35
	0.0	0.0	1.13	0.0	0.0	-0.72	0.0	1.20						
69	1.35	1.35	0.0	0.0	1.35	0.0	0.0	1.01	0.0	1.01	0.0	0.0	0.0	1.35
	0.0	0.0	1.13	0.0	0.0	0.0	0.72	1.20						
70	1.35	1.35	0.0	0.0	1.35	0.0	0.0	1.01	0.0	1.01	0.0	0.0	0.0	1.35
	0.0	0.0	1.13	0.0	0.0	0.0	-0.72	1.20						
71	1.35	1.35	0.0	0.0	1.35	0.0	0.0	1.01	0.0	1.01	0.0	0.0	0.0	1.35
	0.0	0.0	1.13	0.0	0.0	0.72	0.0	1.20						
72	1.35	1.35	0.0	0.0	1.35	0.0	0.0	1.01	0.0	1.01	0.0	0.0	0.0	1.35
	0.0	0.0	1.13	0.0	0.0	-0.72	0.0	1.20						
73	1.35	1.35	1.35	0.0	0.0	0.0	0.0	1.01	0.0	0.0	0.0	1.01	0.0	1.35
	0.0	0.0	1.13	0.0	0.0	0.0	0.72	1.20						
74	1.35	1.35	1.35	0.0	0.0	0.0	0.0	1.01	0.0	0.0	0.0	1.01	0.0	1.35
	0.0	0.0	1.13	0.0	0.0	0.0	-0.72	1.20						
75	1.35	1.35	1.35	0.0	0.0	0.0	0.0	1.01	0.0	0.0	0.0	1.01	0.0	1.35
	0.0	0.0	1.13	0.0	0.0	0.72	0.0	1.20						
76	1.35	1.35	1.35	0.0	0.0	0.0	0.0	1.01	0.0	0.0	0.0	1.01	0.0	1.35
	0.0	0.0	1.13	0.0	0.0	-0.72	0.0	1.20						
77	1.35	1.35	0.0	1.35	0.0	0.0	0.0	1.01	0.0	0.0	0.0	1.01	0.0	1.35
	0.0	0.0	1.13	0.0	0.0	0.0	0.72	1.20						
78	1.35	1.35	0.0	1.35	0.0	0.0	0.0	1.01	0.0	0.0	0.0	1.01	0.0	1.35
	0.0	0.0	1.13	0.0	0.0	0.0	-0.72	1.20						
79	1.35	1.35	0.0	1.35	0.0	0.0	0.0	1.01	0.0	0.0	0.0	1.01	0.0	1.35
	0.0	0.0	1.13	0.0	0.0	0.72	0.0	1.20						
80	1.35	1.35	0.0	1.35	0.0	0.0	0.0	1.01	0.0	0.0	0.0	1.01	0.0	1.35
	0.0	0.0	1.13	0.0	0.0	-0.72	0.0	1.20						
81	1.35	1.35	0.0	0.0	1.35	0.0	0.0	1.01	0.0	0.0	0.0	1.01	0.0	1.35
	0.0	0.0	1.13	0.0	0.0	0.0	0.72	1.20						
82	1.35	1.35	0.0	0.0	1.35	0.0	0.0	1.01	0.0	0.0	0.0	1.01	0.0	1.35
	0.0	0.0	1.13	0.0	0.0	0.0	-0.72	1.20						
83	1.35	1.35	0.0	0.0	1.35	0.0	0.0	1.01	0.0	0.0	0.0	1.01	0.0	1.35
	0.0	0.0	1.13	0.0	0.0	0.72	0.0	1.20						
84	1.35	1.35	0.0	0.0	1.35	0.0	0.0	1.01	0.0	0.0	0.0	1.01	0.0	1.35
	0.0	0.0	1.13	0.0	0.0	-0.72	0.0	1.20						
85	1.35	1.35	1.35	0.0	0.0	0.0	0.0	1.01	0.0	1.01	0.0	0.0	0.0	0.0
	0.0	0.0	1.13	0.0	0.0	0.0	0.72	1.20						
86	1.35	1.35	1.35	0.0	0.0	0.0	0.0	1.01	0.0	1.01	0.0	0.0	0.0	0.0
	0.0	0.0	1.13	0.0	0.0	0.0	-0.72	1.20						
87	1.35	1.35	1.35	0.0	0.0	0.0	0.0	1.01	0.0	1.01	0.0	0.0	0.0	0.0
	0.0	0.0	1.13	0.0	0.0	0.72	0.0	1.20						
88	1.35	1.35	1.35	0.0	0.0	0.0	0.0	1.01	0.0	1.01	0.0	0.0	0.0	0.0
	0.0	0.0	1.13	0.0	0.0	-0.72	0.0	1.20						
89	1.35	1.35	0.0	1.35	0.0	0.0	0.0	1.01	0.0	1.01	0.0	0.0	0.0	0.0
	0.0	0.0	1.13	0.0	0.0	0.0	0.72	1.20						
90	1.35	1.35	0.0	1.35	0.0	0.0	0.0	1.01	0.0	1.01	0.0	0.0	0.0	0.0
	0.0	0.0	1.13	0.0	0.0	0.0	-0.72	1.20						
91	1.35	1.35	0.0	1.35	0.0	0.0	0.0	1.01	0.0	1.01	0.0	0.0	0.0	0.0
	0.0	0.0	1.13	0.0	0.0	0.72	0.0	1.20						
92	1.35	1.35	0.0	1.35	0.0	0.0	0.0	1.01	0.0	1.01	0.0	0.0	0.0	0.0
	0.0	0.0	1.13	0.0	0.0	-0.72	0.0	1.20						
93	1.35	1.35	0.0	0.0	1.35	0.0	0.0	1.01	0.0	1.01	0.0	0.0	0.0	0.0
	0.0	0.0	1.13	0.0	0.0	0.0	0.72	1.20						
94	1.35	1.35	0.0	0.0	1.35	0.0	0.0	1.01	0.0	1.01	0.0	0.0	0.0	0.0
	0.0	0.0	1.13	0.0	0.0	0.0	-0.72	1.20						
95	1.35	1.35	0.0	0.0	1.35	0.0	0.0	1.01	0.0	1.01	0.0	0.0	0.0	0.0
	0.0	0.0	1.13	0.0	0.0	0.72	0.0	1.20						
96	1.35	1.35	0.0	0.0	1.35	0.0	0.0	1.01	0.0	1.01	0.0	0.0	0.0	0.0
	0.0	0.0	1.13	0.0	0.0	-0.72	0.0	1.20						
97	1.35	1.35	1.35	0.0	0.0	0.0	0.0	1.01	0.0	0.0	0.0	1.01	0.0	0.0
	0.0	0.0	1.13	0.0	0.0	0.0	0.72	1.20						
98	1.35	1.35	1.35	0.0	0.0	0.0	0.0	1.01	0.0	0.0	0.0	1.01	0.0	0.0
	0.0	0.0	1.13	0.0	0.0	0.0	-0.72	1.20						
99	1.35	1.35	1.35	0.0	0.0	0.0	0.0	1.01	0.0	0.0	0.0	1.01	0.0	0.0
	0.0	0.0	1.13	0.0	0.0	0.72	0.0	1.20						
100	1.35	1.35	1.35	0.0	0.0	0.0	0.0	1.01	0.0	0.0	0.0	1.01	0.0	0.0
	0.0	0.0	1.13	0.0	0.0	-0.72	0.0	1.20						
101	1.35	1.35	0.0	1.35	0.0	0.0	0.0	1.01	0.0	0.0	0.0	1.01	0.0	0.0
	0.0	0.0	1.13	0.0	0.0	0.0	0.72	1.20						
102	1.35	1.35	0.0	1.35	0.0	0.0	0.0	1.01	0.0	0.0	0.0	1.01	0.0	0.0
	0.0	0.0	1.13	0.0	0.0	0.0	-0.72	1.20						
103	1.35	1.35	0.0	1.35	0.0	0.0	0.0	1.01	0.0	0.0	0.0	1.01	0.0	0.0

Cmb	CDC 1/15...	CDC 2/16...	CDC 3/17...	CDC 4/18...	CDC 5/19...	CDC 6/20...	CDC 7/21...	CDC 8/22...	CDC 9/23...	CDC 10/24...	CDC 11/25...	CDC 12/26...	CDC 13/27...	CDC 14/28...
	0.0	0.0	1.13	0.0	0.0	0.72	0.0	1.20						
104	1.35	1.35	0.0	1.35	0.0	0.0	0.0	1.01	0.0	0.0	0.0	1.01	0.0	0.0
	0.0	0.0	1.13	0.0	0.0	-0.72	0.0	1.20						
105	1.35	1.35	0.0	0.0	1.35	0.0	0.0	1.01	0.0	0.0	0.0	1.01	0.0	0.0
	0.0	0.0	1.13	0.0	0.0	0.0	0.72	1.20						
106	1.35	1.35	0.0	0.0	1.35	0.0	0.0	1.01	0.0	0.0	0.0	1.01	0.0	0.0
	0.0	0.0	1.13	0.0	0.0	0.0	-0.72	1.20						
107	1.35	1.35	0.0	0.0	1.35	0.0	0.0	1.01	0.0	0.0	0.0	1.01	0.0	0.0
	0.0	0.0	1.13	0.0	0.0	0.72	0.0	1.20						
108	1.35	1.35	0.0	0.0	1.35	0.0	0.0	1.01	0.0	0.0	0.0	1.01	0.0	0.0
	0.0	0.0	1.13	0.0	0.0	-0.72	0.0	1.20						
109	1.00	1.00	1.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	1.00	1.00	0.0	0.0	1.00						
110	1.00	1.00	1.00	0.0	0.0	0.0	0.0	0.75	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.60	1.00						
111	1.00	1.00	1.00	0.0	0.0	0.0	0.0	0.75	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	-0.60	1.00						
112	1.00	1.00	1.00	0.0	0.0	0.0	0.0	0.75	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.60	0.0	1.00						
113	1.00	1.00	1.00	0.0	0.0	0.0	0.0	0.75	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	-0.60	0.0	1.00						
114	1.00	1.00	0.0	1.00	0.0	0.0	0.0	0.75	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.60	1.00						
115	1.00	1.00	0.0	1.00	0.0	0.0	0.0	0.75	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	-0.60	1.00						
116	1.00	1.00	0.0	1.00	0.0	0.0	0.0	0.75	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.60	0.0	1.00						
117	1.00	1.00	0.0	1.00	0.0	0.0	0.0	0.75	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	-0.60	0.0	1.00						
118	1.00	1.00	0.0	0.0	1.00	0.0	0.0	0.75	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.60	1.00						
119	1.00	1.00	0.0	0.0	1.00	0.0	0.0	0.75	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	-0.60	1.00						
120	1.00	1.00	0.0	0.0	1.00	0.0	0.0	0.75	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.60	0.0	1.00						
121	1.00	1.00	0.0	0.0	1.00	0.0	0.0	0.75	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	-0.60	0.0	1.00						
122	1.00	1.00	1.00	0.0	0.0	0.0	0.0	0.75	0.0	0.75	0.0	0.0	0.0	0.75
	0.0	0.0	0.0	0.0	0.0	0.0	0.60	1.00						
123	1.00	1.00	1.00	0.0	0.0	0.0	0.0	0.75	0.0	0.75	0.0	0.0	0.0	0.75
	0.0	0.0	0.0	0.0	0.0	0.0	-0.60	1.00						
124	1.00	1.00	1.00	0.0	0.0	0.0	0.0	0.75	0.0	0.75	0.0	0.0	0.0	0.75
	0.0	0.0	0.0	0.0	0.0	0.60	0.0	1.00						
125	1.00	1.00	1.00	0.0	0.0	0.0	0.0	0.75	0.0	0.75	0.0	0.0	0.0	0.75
	0.0	0.0	0.0	0.0	0.0	-0.60	0.0	1.00						
126	1.00	1.00	0.0	1.00	0.0	0.0	0.0	0.75	0.0	0.75	0.0	0.0	0.0	0.75
	0.0	0.0	0.0	0.0	0.0	0.0	0.60	1.00						
127	1.00	1.00	0.0	1.00	0.0	0.0	0.0	0.75	0.0	0.75	0.0	0.0	0.0	0.75
	0.0	0.0	0.0	0.0	0.0	0.0	-0.60	1.00						
128	1.00	1.00	0.0	1.00	0.0	0.0	0.0	0.75	0.0	0.75	0.0	0.0	0.0	0.75
	0.0	0.0	0.0	0.0	0.0	0.60	0.0	1.00						
129	1.00	1.00	0.0	1.00	0.0	0.0	0.0	0.75	0.0	0.75	0.0	0.0	0.0	0.75
	0.0	0.0	0.0	0.0	0.0	-0.60	0.0	1.00						
130	1.00	1.00	0.0	0.0	1.00	0.0	0.0	0.75	0.0	0.75	0.0	0.0	0.0	0.75
	0.0	0.0	0.0	0.0	0.0	0.0	0.60	1.00						
131	1.00	1.00	0.0	0.0	1.00	0.0	0.0	0.75	0.0	0.75	0.0	0.0	0.0	0.75
	0.0	0.0	0.0	0.0	0.0	0.0	-0.60	1.00						
132	1.00	1.00	0.0	0.0	1.00	0.0	0.0	0.75	0.0	0.75	0.0	0.0	0.0	0.75
	0.0	0.0	0.0	0.0	0.0	0.60	0.0	1.00						
133	1.00	1.00	0.0	0.0	1.00	0.0	0.0	0.75	0.0	0.75	0.0	0.0	0.0	0.75
	0.0	0.0	0.0	0.0	0.0	-0.60	0.0	1.00						
134	1.00	1.00	1.00	0.0	0.0	0.0	0.0	0.75	0.0	0.0	0.0	0.75	0.0	0.75
	0.0	0.0	0.0	0.0	0.0	0.0	0.60	1.00						
135	1.00	1.00	1.00	0.0	0.0	0.0	0.0	0.75	0.0	0.0	0.0	0.75	0.0	0.75
	0.0	0.0	0.0	0.0	0.0	0.0	-0.60	1.00						
136	1.00	1.00	1.00	0.0	0.0	0.0	0.0	0.75	0.0	0.0	0.0	0.75	0.0	0.75
	0.0	0.0	0.0	0.0	0.0	0.60	0.0	1.00						
137	1.00	1.00	1.00	0.0	0.0	0.0	0.0	0.75	0.0	0.0	0.0	0.75	0.0	0.75
	0.0	0.0	0.0	0.0	0.0	-0.60	0.0	1.00						
138	1.00	1.00	0.0	1.00	0.0	0.0	0.0	0.75	0.0	0.0	0.0	0.75	0.0	0.75
	0.0	0.0	0.0	0.0	0.0	0.0	0.60	1.00						
139	1.00	1.00	0.0	1.00	0.0	0.0	0.0	0.75	0.0	0.0	0.0	0.75	0.0	0.75
	0.0	0.0	0.0	0.0	0.0	0.0	-0.60	1.00						
140	1.00	1.00	0.0	1.00	0.0	0.0	0.0	0.75	0.0	0.0	0.0	0.75	0.0	0.75

Cmb	CDC 1/15...	CDC 2/16...	CDC 3/17...	CDC 4/18...	CDC 5/19...	CDC 6/20...	CDC 7/21...	CDC 8/22...	CDC 9/23...	CDC 10/24...	CDC 11/25...	CDC 12/26...	CDC 13/27...	CDC 14/28...
	0.0	0.0	0.0	0.0	0.0	0.60	0.0	1.00						
141	1.00	1.00	0.0	1.00	0.0	0.0	0.0	0.75	0.0	0.0	0.0	0.75	0.0	0.75
	0.0	0.0	0.0	0.0	0.0	-0.60	0.0	1.00						
142	1.00	1.00	0.0	0.0	1.00	0.0	0.0	0.75	0.0	0.0	0.0	0.75	0.0	0.75
	0.0	0.0	0.0	0.0	0.0	0.0	0.60	1.00						
143	1.00	1.00	0.0	0.0	1.00	0.0	0.0	0.75	0.0	0.0	0.0	0.75	0.0	0.75
	0.0	0.0	0.0	0.0	0.0	0.0	-0.60	1.00						
144	1.00	1.00	0.0	0.0	1.00	0.0	0.0	0.75	0.0	0.0	0.0	0.75	0.0	0.75
	0.0	0.0	0.0	0.0	0.0	0.60	0.0	1.00						
145	1.00	1.00	0.0	0.0	1.00	0.0	0.0	0.75	0.0	0.0	0.0	0.75	0.0	0.75
	0.0	0.0	0.0	0.0	0.0	-0.60	0.0	1.00						
146	1.00	1.00	1.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.50	1.00						
147	1.00	1.00	1.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	-0.50	1.00						
148	1.00	1.00	1.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.50	0.0	1.00						
149	1.00	1.00	1.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	-0.50	0.0	1.00						
150	1.00	1.00	0.0	1.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.50	1.00						
151	1.00	1.00	0.0	1.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	-0.50	1.00						
152	1.00	1.00	0.0	1.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.50	0.0	1.00						
153	1.00	1.00	0.0	1.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.50	0.0	1.00						
154	1.00	1.00	0.0	0.0	1.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.50	1.00						
155	1.00	1.00	0.0	0.0	1.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	-0.50	1.00						
156	1.00	1.00	0.0	0.0	1.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.50	0.0	1.00						
157	1.00	1.00	0.0	0.0	1.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.50	0.0	1.00						
158	1.00	1.00	1.00	0.0	0.0	0.0	0.0	1.00	0.0	1.00	0.0	0.0	0.0	0.75
	0.0	0.0	0.75	0.0	0.0	0.0	0.60	1.00						
159	1.00	1.00	1.00	0.0	0.0	0.0	0.0	1.00	0.0	1.00	0.0	0.0	0.0	0.75
	0.0	0.0	0.75	0.0	0.0	0.0	-0.60	1.00						
160	1.00	1.00	1.00	0.0	0.0	0.0	0.0	1.00	0.0	1.00	0.0	0.0	0.0	0.75
	0.0	0.0	0.75	0.0	0.0	0.60	0.0	1.00						
161	1.00	1.00	1.00	0.0	0.0	0.0	0.0	1.00	0.0	1.00	0.0	0.0	0.0	0.75
	0.0	0.0	0.75	0.0	0.0	-0.60	0.0	1.00						
162	1.00	1.00	0.0	1.00	0.0	0.0	0.0	1.00	0.0	1.00	0.0	0.0	0.0	0.75
	0.0	0.0	0.75	0.0	0.0	0.0	0.60	1.00						
163	1.00	1.00	0.0	1.00	0.0	0.0	0.0	1.00	0.0	1.00	0.0	0.0	0.0	0.75
	0.0	0.0	0.75	0.0	0.0	0.0	-0.60	1.00						
164	1.00	1.00	0.0	1.00	0.0	0.0	0.0	1.00	0.0	1.00	0.0	0.0	0.0	0.75
	0.0	0.0	0.75	0.0	0.0	0.60	0.0	1.00						
165	1.00	1.00	0.0	1.00	0.0	0.0	0.0	1.00	0.0	1.00	0.0	0.0	0.0	0.75
	0.0	0.0	0.75	0.0	0.0	-0.60	0.0	1.00						
166	1.00	1.00	0.0	0.0	1.00	0.0	0.0	1.00	0.0	1.00	0.0	0.0	0.0	0.75
	0.0	0.0	0.75	0.0	0.0	0.0	0.60	1.00						
167	1.00	1.00	0.0	0.0	1.00	0.0	0.0	1.00	0.0	1.00	0.0	0.0	0.0	0.75
	0.0	0.0	0.75	0.0	0.0	0.0	-0.60	1.00						
168	1.00	1.00	0.0	0.0	1.00	0.0	0.0	1.00	0.0	1.00	0.0	0.0	0.0	0.75
	0.0	0.0	0.75	0.0	0.0	0.60	0.0	1.00						
169	1.00	1.00	0.0	0.0	1.00	0.0	0.0	1.00	0.0	1.00	0.0	0.0	0.0	0.75
	0.0	0.0	0.75	0.0	0.0	-0.60	0.0	1.00						
170	1.00	1.00	1.00	0.0	0.0	0.0	0.0	1.00	0.0	0.0	0.0	1.00	0.0	0.75
	0.0	0.0	0.75	0.0	0.0	0.0	0.60	1.00						
171	1.00	1.00	1.00	0.0	0.0	0.0	0.0	1.00	0.0	0.0	0.0	1.00	0.0	0.75
	0.0	0.0	0.75	0.0	0.0	0.0	-0.60	1.00						
172	1.00	1.00	1.00	0.0	0.0	0.0	0.0	1.00	0.0	0.0	0.0	1.00	0.0	0.75
	0.0	0.0	0.75	0.0	0.0	0.60	0.0	1.00						
173	1.00	1.00	1.00	0.0	0.0	0.0	0.0	1.00	0.0	0.0	0.0	1.00	0.0	0.75
	0.0	0.0	0.75	0.0	0.0	-0.60	0.0	1.00						
174	1.00	1.00	0.0	1.00	0.0	0.0	0.0	1.00	0.0	0.0	0.0	1.00	0.0	0.75
	0.0	0.0	0.75	0.0	0.0	0.0	0.60	1.00						
175	1.00	1.00	0.0	1.00	0.0	0.0	0.0	1.00	0.0	0.0	0.0	1.00	0.0	0.75
	0.0	0.0	0.75	0.0	0.0	0.0	-0.60	1.00						
176	1.00	1.00	0.0	1.00	0.0	0.0	0.0	1.00	0.0	0.0	0.0	1.00	0.0	0.75
	0.0	0.0	0.75	0.0	0.0	0.60	0.0	1.00						
177	1.00	1.00	0.0	1.00	0.0	0.0	0.0	1.00	0.0	0.0	0.0	1.00	0.0	0.75

Cmb	CDC 1/15...	CDC 2/16...	CDC 3/17...	CDC 4/18...	CDC 5/19...	CDC 6/20...	CDC 7/21...	CDC 8/22...	CDC 9/23...	CDC 10/24...	CDC 11/25...	CDC 12/26...	CDC 13/27...	CDC 14/28...
	0.0	0.0	0.75	0.0	0.0	-0.60	0.0	1.00						
178	1.00	1.00	0.0	0.0	1.00	0.0	0.0	1.00	0.0	0.0	0.0	1.00	0.0	0.75
	0.0	0.0	0.75	0.0	0.0	0.0	0.60	1.00						
179	1.00	1.00	0.0	0.0	1.00	0.0	0.0	1.00	0.0	0.0	0.0	1.00	0.0	0.75
	0.0	0.0	0.75	0.0	0.0	0.0	-0.60	1.00						
180	1.00	1.00	0.0	0.0	1.00	0.0	0.0	1.00	0.0	0.0	0.0	1.00	0.0	0.75
	0.0	0.0	0.75	0.0	0.0	0.60	0.0	1.00						
181	1.00	1.00	0.0	0.0	1.00	0.0	0.0	1.00	0.0	0.0	0.0	1.00	0.0	0.75
	0.0	0.0	0.75	0.0	0.0	-0.60	0.0	1.00						

14.2 ALLEGATO B – Scatolare stradale – Dati di output

RISULTATI NODALI

Il controllo dei risultati delle analisi condotte, per quanto concerne i nodi strutturali, è possibile in relazione alle tabelle sottoriportate.
Una prima tabella riporta infatti per ogni nodo e per ogni combinazione (o caso di carico) gli spostamenti nodali.
Una seconda tabella riporta per ogni nodo a cui sia associato un vincolo rigido e/o elastico o una fondazione speciale e per ogni combinazione (o caso di carico) i valori delle azioni esercitate dalla struttura sui vincoli (reazioni vincolari cambiate di segno).
Una terza tabella, infine riassume per ogni nodo le sei combinazioni in cui si attingono i valori minimi e massimi della reazione Fz, della reazione Mx e della reazione My.

Nodo	Cmb	Traslazione X	Traslazione Y	Traslazione Z	Rotazione X	Rotazione Y	Rotazione Z
		cm	cm	cm			
1	1	3.27e-03	0.0	-4.44	0.0	-1.23e-04	0.0
1	2	3.27e-03	0.0	-4.44	0.0	-1.04e-04	0.0
1	3	3.31e-03	0.0	-4.44	0.0	-7.49e-05	0.0
1	4	3.24e-03	0.0	-4.44	0.0	-1.52e-04	0.0
1	5	1.32	0.0	-2.92	0.0	5.46e-03	0.0
1	6	1.32	0.0	-2.92	0.0	5.48e-03	0.0
1	7	1.32	0.0	-2.91	0.0	5.51e-03	0.0
1	8	1.32	0.0	-2.92	0.0	5.43e-03	0.0
1	9	2.13e-03	0.0	-4.45	0.0	-3.10e-04	0.0
1	10	2.13e-03	0.0	-4.45	0.0	-2.92e-04	0.0
1	11	2.16e-03	0.0	-4.45	0.0	-2.63e-04	0.0
1	12	2.09e-03	0.0	-4.46	0.0	-3.40e-04	0.0
1	13	0.86	0.0	-6.39	0.0	5.04e-03	0.0
1	14	0.86	0.0	-6.39	0.0	5.05e-03	0.0
1	15	0.86	0.0	-6.39	0.0	5.07e-03	0.0
1	16	0.86	0.0	-6.39	0.0	5.03e-03	0.0
1	17	2.18	0.0	-4.87	0.0	0.01	0.0
1	18	2.18	0.0	-4.87	0.0	0.01	0.0
1	19	2.18	0.0	-4.87	0.0	0.01	0.0
1	20	2.18	0.0	-4.87	0.0	0.01	0.0
1	21	0.86	0.0	-6.41	0.0	4.86e-03	0.0
1	22	0.86	0.0	-6.41	0.0	4.87e-03	0.0
1	23	0.86	0.0	-6.41	0.0	4.88e-03	0.0
1	24	0.86	0.0	-6.41	0.0	4.84e-03	0.0
1	25	3.75e-03	0.0	-7.83	0.0	-2.50e-04	0.0
1	26	3.75e-03	0.0	-7.83	0.0	-2.38e-04	0.0
1	27	3.78e-03	0.0	-7.83	0.0	-2.21e-04	0.0
1	28	3.73e-03	0.0	-7.83	0.0	-2.67e-04	0.0
1	29	1.32	0.0	-6.31	0.0	5.33e-03	0.0
1	30	1.32	0.0	-6.31	0.0	5.34e-03	0.0
1	31	1.32	0.0	-6.31	0.0	5.36e-03	0.0
1	32	1.32	0.0	-6.31	0.0	5.32e-03	0.0
1	33	2.61e-03	0.0	-7.85	0.0	-4.37e-04	0.0
1	34	2.61e-03	0.0	-7.85	0.0	-4.26e-04	0.0
1	35	2.63e-03	0.0	-7.85	0.0	-4.09e-04	0.0
1	36	2.58e-03	0.0	-7.85	0.0	-4.55e-04	0.0
1	37	0.65	0.0	-6.17	0.0	3.75e-03	0.0
1	38	0.65	0.0	-6.17	0.0	3.76e-03	0.0
1	39	0.65	0.0	-6.16	0.0	3.78e-03	0.0
1	40	0.65	0.0	-6.17	0.0	3.74e-03	0.0
1	41	1.96	0.0	-4.65	0.0	9.34e-03	0.0
1	42	1.96	0.0	-4.65	0.0	9.35e-03	0.0
1	43	1.96	0.0	-4.64	0.0	9.36e-03	0.0
1	44	1.96	0.0	-4.65	0.0	9.32e-03	0.0

Nodo	Cmb	Traslazione X	Traslazione Y	Traslazione Z	Rotazione X	Rotazione Y	Rotazione Z
1	45	0.65	0.0	-6.18	0.0	3.57e-03	0.0
1	46	0.65	0.0	-6.18	0.0	3.58e-03	0.0
1	47	0.65	0.0	-6.18	0.0	3.59e-03	0.0
1	48	0.65	0.0	-6.18	0.0	3.55e-03	0.0
1	49	3.62e-03	0.0	-7.24	0.0	-2.06e-04	0.0
1	50	3.62e-03	0.0	-7.24	0.0	-1.95e-04	0.0
1	51	3.65e-03	0.0	-7.24	0.0	-1.78e-04	0.0
1	52	3.60e-03	0.0	-7.25	0.0	-2.24e-04	0.0
1	53	1.32	0.0	-5.72	0.0	5.38e-03	0.0
1	54	1.32	0.0	-5.72	0.0	5.39e-03	0.0
1	55	1.32	0.0	-5.72	0.0	5.40e-03	0.0
1	56	1.32	0.0	-5.72	0.0	5.36e-03	0.0
1	57	2.48e-03	0.0	-7.26	0.0	-3.94e-04	0.0
1	58	2.48e-03	0.0	-7.26	0.0	-3.83e-04	0.0
1	59	2.50e-03	0.0	-7.26	0.0	-3.66e-04	0.0
1	60	2.45e-03	0.0	-7.26	0.0	-4.12e-04	0.0
1	61	1.76	0.0	-3.13	0.0	0.02	0.0
1	62	1.76	0.0	-3.13	0.0	0.02	0.0
1	63	1.76	0.0	-3.13	0.0	0.02	0.0
1	64	1.76	0.0	-3.13	0.0	0.02	0.0
1	65	3.08	0.0	-1.61	0.0	0.02	0.0
1	66	3.08	0.0	-1.61	0.0	0.02	0.0
1	67	3.08	0.0	-1.61	0.0	0.02	0.0
1	68	3.08	0.0	-1.61	0.0	0.02	0.0
1	69	1.76	0.0	-3.15	0.0	0.02	0.0
1	70	1.76	0.0	-3.15	0.0	0.02	0.0
1	71	1.76	0.0	-3.14	0.0	0.02	0.0
1	72	1.76	0.0	-3.15	0.0	0.02	0.0
1	73	1.12	0.0	-4.21	0.0	0.01	0.0
1	74	1.12	0.0	-4.21	0.0	0.01	0.0
1	75	1.12	0.0	-4.20	0.0	0.01	0.0
1	76	1.12	0.0	-4.21	0.0	0.01	0.0
1	77	2.44	0.0	-2.69	0.0	0.02	0.0
1	78	2.44	0.0	-2.69	0.0	0.02	0.0
1	79	2.44	0.0	-2.68	0.0	0.02	0.0
1	80	2.44	0.0	-2.69	0.0	0.02	0.0
1	81	1.12	0.0	-4.22	0.0	0.01	0.0
1	82	1.12	0.0	-4.22	0.0	0.01	0.0
1	83	1.12	0.0	-4.22	0.0	0.01	0.0
1	84	1.12	0.0	-4.22	0.0	0.01	0.0
1	85	0.65	0.0	-6.36	0.0	3.76e-03	0.0
1	86	0.65	0.0	-6.36	0.0	3.77e-03	0.0
1	87	0.65	0.0	-6.36	0.0	3.79e-03	0.0
1	88	0.65	0.0	-6.36	0.0	3.74e-03	0.0
1	89	1.96	0.0	-4.84	0.0	9.34e-03	0.0
1	90	1.96	0.0	-4.84	0.0	9.35e-03	0.0
1	91	1.96	0.0	-4.84	0.0	9.37e-03	0.0
1	92	1.96	0.0	-4.84	0.0	9.33e-03	0.0
1	93	0.65	0.0	-6.38	0.0	3.57e-03	0.0
1	94	0.65	0.0	-6.38	0.0	3.58e-03	0.0
1	95	0.65	0.0	-6.37	0.0	3.60e-03	0.0
1	96	0.65	0.0	-6.38	0.0	3.56e-03	0.0
1	97	3.62e-03	0.0	-7.44	0.0	-1.99e-04	0.0
1	98	3.62e-03	0.0	-7.44	0.0	-1.88e-04	0.0
1	99	3.64e-03	0.0	-7.44	0.0	-1.70e-04	0.0
1	100	3.59e-03	0.0	-7.44	0.0	-2.17e-04	0.0
1	101	1.32	0.0	-5.92	0.0	5.38e-03	0.0
1	102	1.32	0.0	-5.92	0.0	5.39e-03	0.0
1	103	1.32	0.0	-5.92	0.0	5.41e-03	0.0
1	104	1.32	0.0	-5.92	0.0	5.37e-03	0.0
1	105	2.47e-03	0.0	-7.45	0.0	-3.87e-04	0.0
1	106	2.47e-03	0.0	-7.45	0.0	-3.76e-04	0.0
1	107	2.49e-03	0.0	-7.45	0.0	-3.58e-04	0.0
1	108	2.45e-03	0.0	-7.46	0.0	-4.04e-04	0.0
1	109	6.93	0.0	7.70	0.0	0.04	0.0
1	110	2.44e-03	0.0	-4.16	0.0	-2.60e-04	0.0
1	111	2.44e-03	0.0	-4.16	0.0	-2.51e-04	0.0
1	112	2.46e-03	0.0	-4.16	0.0	-2.36e-04	0.0
1	113	2.42e-03	0.0	-4.16	0.0	-2.75e-04	0.0
1	114	0.98	0.0	-3.03	0.0	3.87e-03	0.0
1	115	0.98	0.0	-3.03	0.0	3.88e-03	0.0
1	116	0.98	0.0	-3.03	0.0	3.90e-03	0.0
1	117	0.98	0.0	-3.04	0.0	3.86e-03	0.0
1	118	1.59e-03	0.0	-4.17	0.0	-3.99e-04	0.0
1	119	1.59e-03	0.0	-4.17	0.0	-3.90e-04	0.0

Nodo	Cmb	Traslazione X	Traslazione Y	Traslazione Z	Rotazione X	Rotazione Y	Rotazione Z
1	120	1.61e-03	0.0	-4.17	0.0	-3.76e-04	0.0
1	121	1.57e-03	0.0	-4.17	0.0	-4.14e-04	0.0
1	122	1.10	0.0	-1.56	0.0	9.35e-03	0.0
1	123	1.10	0.0	-1.56	0.0	9.36e-03	0.0
1	124	1.10	0.0	-1.56	0.0	9.38e-03	0.0
1	125	1.10	0.0	-1.56	0.0	9.34e-03	0.0
1	126	2.08	0.0	-0.44	0.0	0.01	0.0
1	127	2.08	0.0	-0.43	0.0	0.01	0.0
1	128	2.08	0.0	-0.43	0.0	0.01	0.0
1	129	2.08	0.0	-0.44	0.0	0.01	0.0
1	130	1.10	0.0	-1.57	0.0	9.21e-03	0.0
1	131	1.10	0.0	-1.57	0.0	9.22e-03	0.0
1	132	1.10	0.0	-1.57	0.0	9.24e-03	0.0
1	133	1.10	0.0	-1.57	0.0	9.20e-03	0.0
1	134	0.62	0.0	-2.36	0.0	6.41e-03	0.0
1	135	0.62	0.0	-2.36	0.0	6.42e-03	0.0
1	136	0.62	0.0	-2.36	0.0	6.43e-03	0.0
1	137	0.62	0.0	-2.36	0.0	6.40e-03	0.0
1	138	1.60	0.0	-1.23	0.0	0.01	0.0
1	139	1.60	0.0	-1.23	0.0	0.01	0.0
1	140	1.60	0.0	-1.23	0.0	0.01	0.0
1	141	1.60	0.0	-1.24	0.0	0.01	0.0
1	142	0.62	0.0	-2.37	0.0	6.27e-03	0.0
1	143	0.62	0.0	-2.37	0.0	6.28e-03	0.0
1	144	0.62	0.0	-2.37	0.0	6.30e-03	0.0
1	145	0.62	0.0	-2.37	0.0	6.26e-03	0.0
1	146	2.42e-03	0.0	-3.29	0.0	-8.78e-05	0.0
1	147	2.42e-03	0.0	-3.29	0.0	-8.00e-05	0.0
1	148	2.44e-03	0.0	-3.29	0.0	-6.79e-05	0.0
1	149	2.41e-03	0.0	-3.29	0.0	-1.00e-04	0.0
1	150	0.98	0.0	-2.16	0.0	4.05e-03	0.0
1	151	0.98	0.0	-2.16	0.0	4.05e-03	0.0
1	152	0.98	0.0	-2.16	0.0	4.07e-03	0.0
1	153	0.98	0.0	-2.16	0.0	4.07e-03	0.0
1	154	1.58e-03	0.0	-3.30	0.0	-2.27e-04	0.0
1	155	1.58e-03	0.0	-3.30	0.0	-2.19e-04	0.0
1	156	1.59e-03	0.0	-3.30	0.0	-2.07e-04	0.0
1	157	1.59e-03	0.0	-3.30	0.0	-2.07e-04	0.0
1	158	1.26	0.0	-2.80	0.0	0.01	0.0
1	159	1.26	0.0	-2.80	0.0	0.01	0.0
1	160	1.26	0.0	-2.80	0.0	0.01	0.0
1	161	1.26	0.0	-2.80	0.0	0.01	0.0
1	162	2.23	0.0	-1.67	0.0	0.01	0.0
1	163	2.23	0.0	-1.67	0.0	0.01	0.0
1	164	2.23	0.0	-1.67	0.0	0.01	0.0
1	165	2.23	0.0	-1.67	0.0	0.01	0.0
1	166	1.26	0.0	-2.81	0.0	0.01	0.0
1	167	1.26	0.0	-2.81	0.0	0.01	0.0
1	168	1.26	0.0	-2.81	0.0	0.01	0.0
1	169	1.26	0.0	-2.81	0.0	0.01	0.0
1	170	0.62	0.0	-3.87	0.0	6.42e-03	0.0
1	171	0.62	0.0	-3.87	0.0	6.43e-03	0.0
1	172	0.62	0.0	-3.86	0.0	6.44e-03	0.0
1	173	0.62	0.0	-3.87	0.0	6.41e-03	0.0
1	174	1.60	0.0	-2.74	0.0	0.01	0.0
1	175	1.60	0.0	-2.74	0.0	0.01	0.0
1	176	1.60	0.0	-2.74	0.0	0.01	0.0
1	177	1.60	0.0	-2.74	0.0	0.01	0.0
1	178	0.62	0.0	-3.88	0.0	6.28e-03	0.0
1	179	0.62	0.0	-3.88	0.0	6.29e-03	0.0
1	180	0.62	0.0	-3.88	0.0	6.30e-03	0.0
1	181	0.62	0.0	-3.88	0.0	6.27e-03	0.0
2	1	-1.86e-03	0.0	-4.44	0.0	-4.79e-06	0.0
2	2	-1.23e-03	0.0	-4.44	0.0	1.89e-05	0.0
2	3	-2.79e-03	0.0	-4.44	0.0	-3.51e-05	0.0
2	4	-2.97e-04	0.0	-4.44	0.0	4.92e-05	0.0
2	5	1.49	0.0	-5.98	0.0	5.82e-03	0.0
2	6	1.49	0.0	-5.98	0.0	5.84e-03	0.0
2	7	1.49	0.0	-5.97	0.0	5.79e-03	0.0
2	8	1.49	0.0	-5.98	0.0	5.87e-03	0.0
2	9	5.15e-03	0.0	-4.45	0.0	1.96e-04	0.0
2	10	5.78e-03	0.0	-4.46	0.0	2.20e-04	0.0
2	11	4.22e-03	0.0	-4.45	0.0	1.66e-04	0.0
2	12	6.71e-03	0.0	-4.46	0.0	2.50e-04	0.0
2	13	1.02	0.0	-9.28	0.0	5.55e-03	0.0

Nodo	Cmb	Traslazione X	Traslazione Y	Traslazione Z	Rotazione X	Rotazione Y	Rotazione Z
2	14	1.02	0.0	-9.28	0.0	5.57e-03	0.0
2	15	1.02	0.0	-9.28	0.0	5.53e-03	0.0
2	16	1.02	0.0	-9.28	0.0	5.58e-03	0.0
2	17	2.52	0.0	-10.82	0.0	0.01	0.0
2	18	2.52	0.0	-10.82	0.0	0.01	0.0
2	19	2.52	0.0	-10.82	0.0	0.01	0.0
2	20	2.52	0.0	-10.82	0.0	0.01	0.0
2	21	1.03	0.0	-9.30	0.0	5.75e-03	0.0
2	22	1.03	0.0	-9.30	0.0	5.77e-03	0.0
2	23	1.03	0.0	-9.29	0.0	5.74e-03	0.0
2	24	1.03	0.0	-9.30	0.0	5.79e-03	0.0
2	25	1.26e-03	0.0	-7.83	0.0	1.02e-04	0.0
2	26	1.65e-03	0.0	-7.83	0.0	1.16e-04	0.0
2	27	7.07e-04	0.0	-7.83	0.0	8.40e-05	0.0
2	28	2.20e-03	0.0	-7.83	0.0	1.35e-04	0.0
2	29	1.49	0.0	-9.37	0.0	5.93e-03	0.0
2	30	1.49	0.0	-9.37	0.0	5.94e-03	0.0
2	31	1.49	0.0	-9.37	0.0	5.91e-03	0.0
2	32	1.49	0.0	-9.37	0.0	5.96e-03	0.0
2	33	8.27e-03	0.0	-7.85	0.0	3.03e-04	0.0
2	34	8.65e-03	0.0	-7.85	0.0	3.18e-04	0.0
2	35	7.72e-03	0.0	-7.85	0.0	2.85e-04	0.0
2	36	9.21e-03	0.0	-7.85	0.0	3.36e-04	0.0
2	37	0.77	0.0	-8.33	0.0	4.15e-03	0.0
2	38	0.77	0.0	-8.33	0.0	4.16e-03	0.0
2	39	0.76	0.0	-8.33	0.0	4.13e-03	0.0
2	40	0.77	0.0	-8.33	0.0	4.18e-03	0.0
2	41	2.26	0.0	-9.86	0.0	9.97e-03	0.0
2	42	2.26	0.0	-9.86	0.0	9.98e-03	0.0
2	43	2.26	0.0	-9.86	0.0	9.95e-03	0.0
2	44	2.26	0.0	-9.87	0.0	0.01	0.0
2	45	0.77	0.0	-8.34	0.0	4.35e-03	0.0
2	46	0.77	0.0	-8.34	0.0	4.36e-03	0.0
2	47	0.77	0.0	-8.34	0.0	4.33e-03	0.0
2	48	0.77	0.0	-8.35	0.0	4.38e-03	0.0
2	49	2.38e-04	0.0	-7.24	0.0	6.78e-05	0.0
2	50	6.19e-04	0.0	-7.24	0.0	8.20e-05	0.0
2	51	-3.20e-04	0.0	-7.24	0.0	4.96e-05	0.0
2	52	1.18e-03	0.0	-7.25	0.0	1.00e-04	0.0
2	53	1.49	0.0	-8.78	0.0	5.89e-03	0.0
2	54	1.49	0.0	-8.78	0.0	5.91e-03	0.0
2	55	1.49	0.0	-8.78	0.0	5.88e-03	0.0
2	56	1.49	0.0	-8.78	0.0	5.93e-03	0.0
2	57	7.25e-03	0.0	-7.26	0.0	2.69e-04	0.0
2	58	7.63e-03	0.0	-7.26	0.0	2.83e-04	0.0
2	59	6.69e-03	0.0	-7.26	0.0	2.51e-04	0.0
2	60	8.19e-03	0.0	-7.26	0.0	3.02e-04	0.0
2	61	2.24	0.0	-11.75	0.0	0.02	0.0
2	62	2.24	0.0	-11.75	0.0	0.02	0.0
2	63	2.24	0.0	-11.75	0.0	0.02	0.0
2	64	2.24	0.0	-11.76	0.0	0.02	0.0
2	65	3.73	0.0	-13.29	0.0	0.02	0.0
2	66	3.73	0.0	-13.29	0.0	0.02	0.0
2	67	3.73	0.0	-13.29	0.0	0.02	0.0
2	68	3.73	0.0	-13.29	0.0	0.02	0.0
2	69	2.25	0.0	-11.77	0.0	0.02	0.0
2	70	2.25	0.0	-11.77	0.0	0.02	0.0
2	71	2.24	0.0	-11.77	0.0	0.02	0.0
2	72	2.25	0.0	-11.77	0.0	0.02	0.0
2	73	1.47	0.0	-10.67	0.0	0.01	0.0
2	74	1.47	0.0	-10.67	0.0	0.01	0.0
2	75	1.47	0.0	-10.67	0.0	0.01	0.0
2	76	1.47	0.0	-10.67	0.0	0.01	0.0
2	77	2.97	0.0	-12.21	0.0	0.02	0.0
2	78	2.97	0.0	-12.21	0.0	0.02	0.0
2	79	2.97	0.0	-12.20	0.0	0.02	0.0
2	80	2.97	0.0	-12.21	0.0	0.02	0.0
2	81	1.48	0.0	-10.69	0.0	0.01	0.0
2	82	1.48	0.0	-10.69	0.0	0.01	0.0
2	83	1.48	0.0	-10.68	0.0	0.01	0.0
2	84	1.48	0.0	-10.69	0.0	0.01	0.0
2	85	0.77	0.0	-8.52	0.0	4.14e-03	0.0
2	86	0.77	0.0	-8.52	0.0	4.15e-03	0.0
2	87	0.76	0.0	-8.52	0.0	4.12e-03	0.0
2	88	0.77	0.0	-8.52	0.0	4.17e-03	0.0

Nodo	Cmb	Traslazione X	Traslazione Y	Traslazione Z	Rotazione X	Rotazione Y	Rotazione Z
2	89	2.26	0.0	-10.06	0.0	9.96e-03	0.0
2	90	2.26	0.0	-10.06	0.0	9.98e-03	0.0
2	91	2.26	0.0	-10.06	0.0	9.95e-03	0.0
2	92	2.26	0.0	-10.06	0.0	1.00e-02	0.0
2	93	0.77	0.0	-8.54	0.0	4.34e-03	0.0
2	94	0.77	0.0	-8.54	0.0	4.35e-03	0.0
2	95	0.77	0.0	-8.54	0.0	4.32e-03	0.0
2	96	0.77	0.0	-8.54	0.0	4.37e-03	0.0
2	97	3.96e-05	0.0	-7.44	0.0	6.16e-05	0.0
2	98	4.21e-04	0.0	-7.44	0.0	7.58e-05	0.0
2	99	-5.19e-04	0.0	-7.44	0.0	4.34e-05	0.0
2	100	9.79e-04	0.0	-7.44	0.0	9.40e-05	0.0
2	101	1.49	0.0	-8.97	0.0	5.89e-03	0.0
2	102	1.49	0.0	-8.98	0.0	5.90e-03	0.0
2	103	1.49	0.0	-8.97	0.0	5.87e-03	0.0
2	104	1.49	0.0	-8.98	0.0	5.92e-03	0.0
2	105	7.05e-03	0.0	-7.45	0.0	2.63e-04	0.0
2	106	7.43e-03	0.0	-7.45	0.0	2.77e-04	0.0
2	107	6.49e-03	0.0	-7.45	0.0	2.45e-04	0.0
2	108	7.99e-03	0.0	-7.46	0.0	2.95e-04	0.0
2	109	8.17	0.0	-14.68	0.0	0.04	0.0
2	110	3.58e-03	0.0	-4.16	0.0	1.54e-04	0.0
2	111	3.90e-03	0.0	-4.16	0.0	1.66e-04	0.0
2	112	3.11e-03	0.0	-4.16	0.0	1.39e-04	0.0
2	113	4.36e-03	0.0	-4.16	0.0	1.81e-04	0.0
2	114	1.11	0.0	-5.30	0.0	4.47e-03	0.0
2	115	1.11	0.0	-5.30	0.0	4.48e-03	0.0
2	116	1.11	0.0	-5.30	0.0	4.45e-03	0.0
2	117	1.11	0.0	-5.30	0.0	4.50e-03	0.0
2	118	8.77e-03	0.0	-4.17	0.0	3.03e-04	0.0
2	119	9.09e-03	0.0	-4.17	0.0	3.15e-04	0.0
2	120	8.31e-03	0.0	-4.17	0.0	2.88e-04	0.0
2	121	9.55e-03	0.0	-4.18	0.0	3.30e-04	0.0
2	122	1.39	0.0	-6.76	0.0	9.77e-03	0.0
2	123	1.39	0.0	-6.76	0.0	9.78e-03	0.0
2	124	1.39	0.0	-6.76	0.0	9.76e-03	0.0
2	125	1.39	0.0	-6.76	0.0	9.80e-03	0.0
2	126	2.49	0.0	-7.89	0.0	0.01	0.0
2	127	2.49	0.0	-7.89	0.0	0.01	0.0
2	128	2.49	0.0	-7.89	0.0	0.01	0.0
2	129	2.49	0.0	-7.90	0.0	0.01	0.0
2	130	1.39	0.0	-6.77	0.0	9.92e-03	0.0
2	131	1.39	0.0	-6.77	0.0	9.93e-03	0.0
2	132	1.39	0.0	-6.77	0.0	9.91e-03	0.0
2	133	1.39	0.0	-6.77	0.0	9.95e-03	0.0
2	134	0.82	0.0	-5.95	0.0	6.74e-03	0.0
2	135	0.82	0.0	-5.95	0.0	6.76e-03	0.0
2	136	0.82	0.0	-5.95	0.0	6.73e-03	0.0
2	137	0.82	0.0	-5.95	0.0	6.77e-03	0.0
2	138	1.93	0.0	-7.09	0.0	0.01	0.0
2	139	1.93	0.0	-7.09	0.0	0.01	0.0
2	140	1.93	0.0	-7.09	0.0	0.01	0.0
2	141	1.93	0.0	-7.09	0.0	0.01	0.0
2	142	0.83	0.0	-5.96	0.0	6.89e-03	0.0
2	143	0.83	0.0	-5.96	0.0	6.90e-03	0.0
2	144	0.82	0.0	-5.96	0.0	6.88e-03	0.0
2	145	0.83	0.0	-5.97	0.0	6.92e-03	0.0
2	146	-1.28e-03	0.0	-3.29	0.0	0.0	0.0
2	147	-1.01e-03	0.0	-3.29	0.0	1.02e-05	0.0
2	148	-1.66e-03	0.0	-3.29	0.0	-1.23e-05	0.0
2	149	-6.24e-04	0.0	-3.29	0.0	2.28e-05	0.0
2	150	1.10	0.0	-4.43	0.0	4.32e-03	0.0
2	151	1.10	0.0	-4.43	0.0	4.33e-03	0.0
2	152	1.10	0.0	-4.43	0.0	4.30e-03	0.0
2	153	1.10	0.0	-4.43	0.0	4.30e-03	0.0
2	154	3.91e-03	0.0	-3.30	0.0	1.49e-04	0.0
2	155	4.18e-03	0.0	-3.30	0.0	1.59e-04	0.0
2	156	3.53e-03	0.0	-3.30	0.0	1.37e-04	0.0
2	157	3.53e-03	0.0	-3.30	0.0	1.37e-04	0.0
2	158	1.58	0.0	-8.53	0.0	0.01	0.0
2	159	1.58	0.0	-8.53	0.0	0.01	0.0
2	160	1.58	0.0	-8.53	0.0	0.01	0.0
2	161	1.58	0.0	-8.53	0.0	0.01	0.0
2	162	2.68	0.0	-9.67	0.0	0.02	0.0
2	163	2.68	0.0	-9.67	0.0	0.02	0.0

Nodo	Cmb	Traslazione X	Traslazione Y	Traslazione Z	Rotazione X	Rotazione Y	Rotazione Z
2	164	2.68	0.0	-9.67	0.0	0.02	0.0
2	165	2.68	0.0	-9.67	0.0	0.02	0.0
2	166	1.58	0.0	-8.54	0.0	0.01	0.0
2	167	1.58	0.0	-8.54	0.0	0.01	0.0
2	168	1.58	0.0	-8.54	0.0	0.01	0.0
2	169	1.58	0.0	-8.54	0.0	0.01	0.0
2	170	0.82	0.0	-7.46	0.0	6.73e-03	0.0
2	171	0.82	0.0	-7.46	0.0	6.75e-03	0.0
2	172	0.82	0.0	-7.45	0.0	6.72e-03	0.0
2	173	0.82	0.0	-7.46	0.0	6.76e-03	0.0
2	174	1.93	0.0	-8.59	0.0	0.01	0.0
2	175	1.93	0.0	-8.59	0.0	0.01	0.0
2	176	1.92	0.0	-8.59	0.0	0.01	0.0
2	177	1.93	0.0	-8.60	0.0	0.01	0.0
2	178	0.82	0.0	-7.47	0.0	6.88e-03	0.0
2	179	0.83	0.0	-7.47	0.0	6.90e-03	0.0
2	180	0.82	0.0	-7.47	0.0	6.87e-03	0.0
2	181	0.83	0.0	-7.47	0.0	6.91e-03	0.0
3	1	-0.02	0.0	-4.45	0.0	-2.28e-05	0.0
3	2	0.03	0.0	-4.45	0.0	1.05e-04	0.0
3	3	0.04	0.0	-4.44	0.0	7.38e-05	0.0
3	4	-0.03	0.0	-4.45	0.0	8.62e-06	0.0
3	5	5.09	0.0	-2.93	0.0	5.59e-03	0.0
3	6	5.14	0.0	-2.93	0.0	5.72e-03	0.0
3	7	5.15	0.0	-2.92	0.0	5.69e-03	0.0
3	8	5.08	0.0	-2.93	0.0	5.62e-03	0.0
3	9	-0.02	0.0	-4.46	0.0	1.29e-04	0.0
3	10	0.03	0.0	-4.46	0.0	2.57e-04	0.0
3	11	0.03	0.0	-4.46	0.0	2.26e-04	0.0
3	12	-0.03	0.0	-4.47	0.0	1.61e-04	0.0
3	13	4.44	0.0	-6.41	0.0	5.45e-03	0.0
3	14	4.47	0.0	-6.41	0.0	5.53e-03	0.0
3	15	4.48	0.0	-6.40	0.0	5.51e-03	0.0
3	16	4.44	0.0	-6.41	0.0	5.47e-03	0.0
3	17	9.56	0.0	-4.88	0.0	0.01	0.0
3	18	9.59	0.0	-4.88	0.0	0.01	0.0
3	19	9.59	0.0	-4.88	0.0	0.01	0.0
3	20	9.55	0.0	-4.89	0.0	0.01	0.0
3	21	4.44	0.0	-6.42	0.0	5.60e-03	0.0
3	22	4.47	0.0	-6.42	0.0	5.68e-03	0.0
3	23	4.47	0.0	-6.42	0.0	5.66e-03	0.0
3	24	4.43	0.0	-6.42	0.0	5.62e-03	0.0
3	25	-0.01	0.0	-7.85	0.0	1.56e-04	0.0
3	26	0.02	0.0	-7.85	0.0	2.33e-04	0.0
3	27	0.02	0.0	-7.84	0.0	2.14e-04	0.0
3	28	-0.02	0.0	-7.85	0.0	1.75e-04	0.0
3	29	5.10	0.0	-6.32	0.0	5.77e-03	0.0
3	30	5.13	0.0	-6.32	0.0	5.85e-03	0.0
3	31	5.14	0.0	-6.32	0.0	5.83e-03	0.0
3	32	5.10	0.0	-6.33	0.0	5.79e-03	0.0
3	33	-0.01	0.0	-7.86	0.0	3.08e-04	0.0
3	34	0.02	0.0	-7.86	0.0	3.85e-04	0.0
3	35	0.02	0.0	-7.86	0.0	3.66e-04	0.0
3	36	-0.02	0.0	-7.86	0.0	3.27e-04	0.0
3	37	3.32	0.0	-6.18	0.0	4.08e-03	0.0
3	38	3.35	0.0	-6.18	0.0	4.15e-03	0.0
3	39	3.35	0.0	-6.18	0.0	4.13e-03	0.0
3	40	3.31	0.0	-6.18	0.0	4.10e-03	0.0
3	41	8.43	0.0	-4.66	0.0	9.69e-03	0.0
3	42	8.46	0.0	-4.66	0.0	9.77e-03	0.0
3	43	8.47	0.0	-4.66	0.0	9.75e-03	0.0
3	44	8.43	0.0	-4.66	0.0	9.71e-03	0.0
3	45	3.32	0.0	-6.19	0.0	4.23e-03	0.0
3	46	3.35	0.0	-6.19	0.0	4.31e-03	0.0
3	47	3.35	0.0	-6.19	0.0	4.29e-03	0.0
3	48	3.31	0.0	-6.20	0.0	4.25e-03	0.0
3	49	-0.01	0.0	-7.26	0.0	1.14e-04	0.0
3	50	0.02	0.0	-7.26	0.0	1.91e-04	0.0
3	51	0.02	0.0	-7.25	0.0	1.72e-04	0.0
3	52	-0.02	0.0	-7.26	0.0	1.33e-04	0.0
3	53	5.10	0.0	-5.73	0.0	5.73e-03	0.0
3	54	5.13	0.0	-5.73	0.0	5.81e-03	0.0
3	55	5.14	0.0	-5.73	0.0	5.79e-03	0.0
3	56	5.10	0.0	-5.74	0.0	5.75e-03	0.0
3	57	-0.01	0.0	-7.27	0.0	2.66e-04	0.0

Nodo	Cmb	Traslazione X	Traslazione Y	Traslazione Z	Rotazione X	Rotazione Y	Rotazione Z
3	58	0.02	0.0	-7.27	0.0	3.43e-04	0.0
3	59	0.02	0.0	-7.27	0.0	3.24e-04	0.0
3	60	-0.02	0.0	-7.27	0.0	2.85e-04	0.0
3	61	12.47	0.0	-3.14	0.0	0.02	0.0
3	62	12.49	0.0	-3.14	0.0	0.02	0.0
3	63	12.50	0.0	-3.14	0.0	0.02	0.0
3	64	12.46	0.0	-3.14	0.0	0.02	0.0
3	65	17.58	0.0	-1.62	0.0	0.02	0.0
3	66	17.61	0.0	-1.62	0.0	0.02	0.0
3	67	17.62	0.0	-1.62	0.0	0.02	0.0
3	68	17.58	0.0	-1.62	0.0	0.02	0.0
3	69	12.46	0.0	-3.16	0.0	0.02	0.0
3	70	12.49	0.0	-3.16	0.0	0.02	0.0
3	71	12.50	0.0	-3.15	0.0	0.02	0.0
3	72	12.46	0.0	-3.16	0.0	0.02	0.0
3	73	9.13	0.0	-4.22	0.0	0.01	0.0
3	74	9.16	0.0	-4.22	0.0	0.01	0.0
3	75	9.17	0.0	-4.22	0.0	0.01	0.0
3	76	9.13	0.0	-4.22	0.0	0.01	0.0
3	77	14.25	0.0	-2.70	0.0	0.02	0.0
3	78	14.28	0.0	-2.70	0.0	0.02	0.0
3	79	14.28	0.0	-2.69	0.0	0.02	0.0
3	80	14.24	0.0	-2.70	0.0	0.02	0.0
3	81	9.13	0.0	-4.23	0.0	0.01	0.0
3	82	9.16	0.0	-4.23	0.0	0.01	0.0
3	83	9.17	0.0	-4.23	0.0	0.01	0.0
3	84	9.13	0.0	-4.23	0.0	0.01	0.0
3	85	3.32	0.0	-6.37	0.0	4.07e-03	0.0
3	86	3.35	0.0	-6.37	0.0	4.15e-03	0.0
3	87	3.35	0.0	-6.37	0.0	4.13e-03	0.0
3	88	3.31	0.0	-6.38	0.0	4.09e-03	0.0
3	89	8.43	0.0	-4.85	0.0	9.69e-03	0.0
3	90	8.46	0.0	-4.85	0.0	9.77e-03	0.0
3	91	8.47	0.0	-4.85	0.0	9.75e-03	0.0
3	92	8.43	0.0	-4.85	0.0	9.71e-03	0.0
3	93	3.32	0.0	-6.39	0.0	4.23e-03	0.0
3	94	3.35	0.0	-6.39	0.0	4.30e-03	0.0
3	95	3.35	0.0	-6.39	0.0	4.28e-03	0.0
3	96	3.31	0.0	-6.39	0.0	4.25e-03	0.0
3	97	-0.01	0.0	-7.45	0.0	1.12e-04	0.0
3	98	0.02	0.0	-7.45	0.0	1.89e-04	0.0
3	99	0.02	0.0	-7.45	0.0	1.70e-04	0.0
3	100	-0.02	0.0	-7.45	0.0	1.31e-04	0.0
3	101	5.10	0.0	-5.93	0.0	5.73e-03	0.0
3	102	5.13	0.0	-5.93	0.0	5.80e-03	0.0
3	103	5.14	0.0	-5.93	0.0	5.78e-03	0.0
3	104	5.10	0.0	-5.93	0.0	5.75e-03	0.0
3	105	-0.01	0.0	-7.47	0.0	2.64e-04	0.0
3	106	0.02	0.0	-7.47	0.0	3.41e-04	0.0
3	107	0.02	0.0	-7.46	0.0	3.22e-04	0.0
3	108	-0.02	0.0	-7.47	0.0	2.83e-04	0.0
3	109	34.75	0.0	7.70	0.0	0.04	0.0
3	110	-0.01	0.0	-4.17	0.0	1.56e-04	0.0
3	111	0.01	0.0	-4.17	0.0	2.20e-04	0.0
3	112	0.02	0.0	-4.17	0.0	2.04e-04	0.0
3	113	-0.02	0.0	-4.17	0.0	1.72e-04	0.0
3	114	3.78	0.0	-3.04	0.0	4.31e-03	0.0
3	115	3.80	0.0	-3.04	0.0	4.38e-03	0.0
3	116	3.81	0.0	-3.04	0.0	4.36e-03	0.0
3	117	3.77	0.0	-3.05	0.0	4.33e-03	0.0
3	118	-0.01	0.0	-4.18	0.0	2.68e-04	0.0
3	119	0.01	0.0	-4.18	0.0	3.32e-04	0.0
3	120	0.02	0.0	-4.18	0.0	3.17e-04	0.0
3	121	-0.02	0.0	-4.18	0.0	2.84e-04	0.0
3	122	7.54	0.0	-1.57	0.0	9.58e-03	0.0
3	123	7.57	0.0	-1.57	0.0	9.65e-03	0.0
3	124	7.57	0.0	-1.57	0.0	9.63e-03	0.0
3	125	7.54	0.0	-1.57	0.0	9.60e-03	0.0
3	126	11.33	0.0	-0.44	0.0	0.01	0.0
3	127	11.36	0.0	-0.44	0.0	0.01	0.0
3	128	11.36	0.0	-0.44	0.0	0.01	0.0
3	129	11.33	0.0	-0.44	0.0	0.01	0.0
3	130	7.54	0.0	-1.58	0.0	9.69e-03	0.0
3	131	7.57	0.0	-1.58	0.0	9.76e-03	0.0
3	132	7.57	0.0	-1.58	0.0	9.74e-03	0.0

Nodo	Cmb	Traslazione X	Traslazione Y	Traslazione Z	Rotazione X	Rotazione Y	Rotazione Z
3	133	7.54	0.0	-1.58	0.0	9.71e-03	0.0
3	134	5.07	0.0	-2.37	0.0	6.64e-03	0.0
3	135	5.09	0.0	-2.37	0.0	6.70e-03	0.0
3	136	5.10	0.0	-2.37	0.0	6.69e-03	0.0
3	137	5.07	0.0	-2.37	0.0	6.65e-03	0.0
3	138	8.86	0.0	-1.24	0.0	0.01	0.0
3	139	8.88	0.0	-1.24	0.0	0.01	0.0
3	140	8.89	0.0	-1.24	0.0	0.01	0.0
3	141	8.86	0.0	-1.24	0.0	0.01	0.0
3	142	5.07	0.0	-2.38	0.0	6.75e-03	0.0
3	143	5.09	0.0	-2.38	0.0	6.82e-03	0.0
3	144	5.10	0.0	-2.38	0.0	6.80e-03	0.0
3	145	5.07	0.0	-2.38	0.0	6.77e-03	0.0
3	146	-8.89e-03	0.0	-3.29	0.0	3.85e-06	0.0
3	147	0.01	0.0	-3.29	0.0	5.72e-05	0.0
3	148	0.02	0.0	-3.29	0.0	4.41e-05	0.0
3	149	-0.01	0.0	-3.30	0.0	1.69e-05	0.0
3	150	3.78	0.0	-2.17	0.0	4.16e-03	0.0
3	151	3.80	0.0	-2.17	0.0	4.22e-03	0.0
3	152	3.80	0.0	-2.17	0.0	4.20e-03	0.0
3	153	3.80	0.0	-2.17	0.0	4.20e-03	0.0
3	154	-9.38e-03	0.0	-3.31	0.0	1.16e-04	0.0
3	155	0.01	0.0	-3.31	0.0	1.70e-04	0.0
3	156	0.01	0.0	-3.30	0.0	1.57e-04	0.0
3	157	0.01	0.0	-3.30	0.0	1.57e-04	0.0
3	158	8.37	0.0	-2.81	0.0	0.01	0.0
3	159	8.39	0.0	-2.81	0.0	0.01	0.0
3	160	8.40	0.0	-2.81	0.0	0.01	0.0
3	161	8.36	0.0	-2.81	0.0	0.01	0.0
3	162	12.16	0.0	-1.68	0.0	0.01	0.0
3	163	12.18	0.0	-1.68	0.0	0.01	0.0
3	164	12.19	0.0	-1.68	0.0	0.01	0.0
3	165	12.15	0.0	-1.68	0.0	0.01	0.0
3	166	8.37	0.0	-2.82	0.0	0.01	0.0
3	167	8.39	0.0	-2.82	0.0	0.01	0.0
3	168	8.40	0.0	-2.82	0.0	0.01	0.0
3	169	8.36	0.0	-2.82	0.0	0.01	0.0
3	170	5.07	0.0	-3.87	0.0	6.66e-03	0.0
3	171	5.09	0.0	-3.87	0.0	6.72e-03	0.0
3	172	5.10	0.0	-3.87	0.0	6.71e-03	0.0
3	173	5.07	0.0	-3.88	0.0	6.67e-03	0.0
3	174	8.86	0.0	-2.75	0.0	0.01	0.0
3	175	8.88	0.0	-2.75	0.0	0.01	0.0
3	176	8.89	0.0	-2.75	0.0	0.01	0.0
3	177	8.86	0.0	-2.75	0.0	0.01	0.0
3	178	5.07	0.0	-3.89	0.0	6.77e-03	0.0
3	179	5.09	0.0	-3.89	0.0	6.83e-03	0.0
3	180	5.10	0.0	-3.88	0.0	6.82e-03	0.0
3	181	5.07	0.0	-3.89	0.0	6.79e-03	0.0
4	1	-0.03	0.0	-4.45	0.0	-1.61e-04	0.0
4	2	0.02	0.0	-4.45	0.0	-2.95e-05	0.0
4	3	-0.03	0.0	-4.45	0.0	-1.24e-04	0.0
4	4	0.03	0.0	-4.45	0.0	-6.63e-05	0.0
4	5	5.09	0.0	-5.83	0.0	5.29e-03	0.0
4	6	5.14	0.0	-5.82	0.0	5.42e-03	0.0
4	7	5.09	0.0	-5.82	0.0	5.32e-03	0.0
4	8	5.14	0.0	-5.83	0.0	5.38e-03	0.0
4	9	-0.03	0.0	-4.47	0.0	-2.97e-04	0.0
4	10	0.02	0.0	-4.47	0.0	-1.65e-04	0.0
4	11	-0.03	0.0	-4.47	0.0	-2.60e-04	0.0
4	12	0.03	0.0	-4.47	0.0	-2.02e-04	0.0
4	13	4.44	0.0	-9.15	0.0	4.85e-03	0.0
4	14	4.47	0.0	-9.15	0.0	4.93e-03	0.0
4	15	4.43	0.0	-9.15	0.0	4.88e-03	0.0
4	16	4.47	0.0	-9.15	0.0	4.91e-03	0.0
4	17	9.55	0.0	-10.52	0.0	0.01	0.0
4	18	9.58	0.0	-10.52	0.0	0.01	0.0
4	19	9.55	0.0	-10.52	0.0	0.01	0.0
4	20	9.59	0.0	-10.52	0.0	0.01	0.0
4	21	4.44	0.0	-9.17	0.0	4.72e-03	0.0
4	22	4.47	0.0	-9.17	0.0	4.80e-03	0.0
4	23	4.43	0.0	-9.16	0.0	4.74e-03	0.0
4	24	4.47	0.0	-9.17	0.0	4.77e-03	0.0
4	25	-0.02	0.0	-7.85	0.0	-3.14e-04	0.0
4	26	0.01	0.0	-7.85	0.0	-2.35e-04	0.0

Nodo	Cmb	Traslazione X	Traslazione Y	Traslazione Z	Rotazione X	Rotazione Y	Rotazione Z
4	27	-0.02	0.0	-7.85	0.0	-2.91e-04	0.0
4	28	0.02	0.0	-7.85	0.0	-2.57e-04	0.0
4	29	5.10	0.0	-9.23	0.0	5.13e-03	0.0
4	30	5.13	0.0	-9.23	0.0	5.21e-03	0.0
4	31	5.10	0.0	-9.22	0.0	5.16e-03	0.0
4	32	5.13	0.0	-9.23	0.0	5.19e-03	0.0
4	33	-0.02	0.0	-7.87	0.0	-4.49e-04	0.0
4	34	0.01	0.0	-7.87	0.0	-3.70e-04	0.0
4	35	-0.02	0.0	-7.87	0.0	-4.27e-04	0.0
4	36	0.02	0.0	-7.87	0.0	-3.92e-04	0.0
4	37	3.32	0.0	-8.23	0.0	3.60e-03	0.0
4	38	3.34	0.0	-8.23	0.0	3.68e-03	0.0
4	39	3.31	0.0	-8.23	0.0	3.62e-03	0.0
4	40	3.35	0.0	-8.23	0.0	3.66e-03	0.0
4	41	8.43	0.0	-9.60	0.0	9.05e-03	0.0
4	42	8.46	0.0	-9.60	0.0	9.13e-03	0.0
4	43	8.43	0.0	-9.60	0.0	9.07e-03	0.0
4	44	8.46	0.0	-9.60	0.0	9.10e-03	0.0
4	45	3.32	0.0	-8.25	0.0	3.46e-03	0.0
4	46	3.35	0.0	-8.25	0.0	3.54e-03	0.0
4	47	3.31	0.0	-8.25	0.0	3.49e-03	0.0
4	48	3.35	0.0	-8.25	0.0	3.52e-03	0.0
4	49	-0.02	0.0	-7.26	0.0	-2.66e-04	0.0
4	50	0.01	0.0	-7.26	0.0	-1.87e-04	0.0
4	51	-0.02	0.0	-7.26	0.0	-2.44e-04	0.0
4	52	0.02	0.0	-7.26	0.0	-2.09e-04	0.0
4	53	5.10	0.0	-8.64	0.0	5.18e-03	0.0
4	54	5.13	0.0	-8.63	0.0	5.26e-03	0.0
4	55	5.10	0.0	-8.63	0.0	5.20e-03	0.0
4	56	5.13	0.0	-8.64	0.0	5.24e-03	0.0
4	57	-0.02	0.0	-7.28	0.0	-4.02e-04	0.0
4	58	0.01	0.0	-7.28	0.0	-3.23e-04	0.0
4	59	-0.02	0.0	-7.28	0.0	-3.80e-04	0.0
4	60	0.02	0.0	-7.28	0.0	-3.45e-04	0.0
4	61	12.46	0.0	-11.31	0.0	0.02	0.0
4	62	12.49	0.0	-11.30	0.0	0.02	0.0
4	63	12.46	0.0	-11.30	0.0	0.02	0.0
4	64	12.49	0.0	-11.31	0.0	0.02	0.0
4	65	17.58	0.0	-12.68	0.0	0.02	0.0
4	66	17.61	0.0	-12.68	0.0	0.02	0.0
4	67	17.57	0.0	-12.68	0.0	0.02	0.0
4	68	17.61	0.0	-12.68	0.0	0.02	0.0
4	69	12.46	0.0	-11.33	0.0	0.02	0.0
4	70	12.49	0.0	-11.32	0.0	0.02	0.0
4	71	12.46	0.0	-11.32	0.0	0.02	0.0
4	72	12.49	0.0	-11.33	0.0	0.02	0.0
4	73	9.13	0.0	-10.34	0.0	0.01	0.0
4	74	9.16	0.0	-10.34	0.0	0.01	0.0
4	75	9.13	0.0	-10.34	0.0	0.01	0.0
4	76	9.16	0.0	-10.34	0.0	0.01	0.0
4	77	14.25	0.0	-11.71	0.0	0.02	0.0
4	78	14.28	0.0	-11.71	0.0	0.02	0.0
4	79	14.24	0.0	-11.71	0.0	0.02	0.0
4	80	14.28	0.0	-11.71	0.0	0.02	0.0
4	81	9.13	0.0	-10.36	0.0	0.01	0.0
4	82	9.16	0.0	-10.36	0.0	0.01	0.0
4	83	9.13	0.0	-10.36	0.0	0.01	0.0
4	84	9.16	0.0	-10.36	0.0	0.01	0.0
4	85	3.32	0.0	-8.43	0.0	3.60e-03	0.0
4	86	3.34	0.0	-8.42	0.0	3.68e-03	0.0
4	87	3.31	0.0	-8.42	0.0	3.62e-03	0.0
4	88	3.35	0.0	-8.43	0.0	3.66e-03	0.0
4	89	8.43	0.0	-9.80	0.0	9.05e-03	0.0
4	90	8.46	0.0	-9.80	0.0	9.13e-03	0.0
4	91	8.43	0.0	-9.80	0.0	9.07e-03	0.0
4	92	8.46	0.0	-9.80	0.0	9.11e-03	0.0
4	93	3.32	0.0	-8.45	0.0	3.47e-03	0.0
4	94	3.35	0.0	-8.44	0.0	3.54e-03	0.0
4	95	3.31	0.0	-8.44	0.0	3.49e-03	0.0
4	96	3.35	0.0	-8.45	0.0	3.52e-03	0.0
4	97	-0.02	0.0	-7.46	0.0	-2.64e-04	0.0
4	98	0.01	0.0	-7.46	0.0	-1.85e-04	0.0
4	99	-0.02	0.0	-7.45	0.0	-2.42e-04	0.0
4	100	0.02	0.0	-7.46	0.0	-2.07e-04	0.0
4	101	5.10	0.0	-8.83	0.0	5.18e-03	0.0

Nodo	Cmb	Traslazione X	Traslazione Y	Traslazione Z	Rotazione X	Rotazione Y	Rotazione Z
4	102	5.13	0.0	-8.83	0.0	5.26e-03	0.0
4	103	5.10	0.0	-8.83	0.0	5.21e-03	0.0
4	104	5.13	0.0	-8.83	0.0	5.24e-03	0.0
4	105	-0.02	0.0	-7.48	0.0	-4.00e-04	0.0
4	106	0.01	0.0	-7.48	0.0	-3.21e-04	0.0
4	107	-0.02	0.0	-7.47	0.0	-3.78e-04	0.0
4	108	0.02	0.0	-7.48	0.0	-3.43e-04	0.0
4	109	34.75	0.0	-13.48	0.0	0.04	0.0
4	110	-0.01	0.0	-4.18	0.0	-2.67e-04	0.0
4	111	0.01	0.0	-4.18	0.0	-2.02e-04	0.0
4	112	-0.02	0.0	-4.18	0.0	-2.49e-04	0.0
4	113	0.01	0.0	-4.18	0.0	-2.20e-04	0.0
4	114	3.78	0.0	-5.20	0.0	3.77e-03	0.0
4	115	3.80	0.0	-5.19	0.0	3.83e-03	0.0
4	116	3.77	0.0	-5.19	0.0	3.79e-03	0.0
4	117	3.80	0.0	-5.20	0.0	3.82e-03	0.0
4	118	-0.01	0.0	-4.19	0.0	-3.68e-04	0.0
4	119	0.01	0.0	-4.19	0.0	-3.02e-04	0.0
4	120	-0.02	0.0	-4.19	0.0	-3.50e-04	0.0
4	121	0.01	0.0	-4.19	0.0	-3.20e-04	0.0
4	122	7.54	0.0	-6.49	0.0	9.16e-03	0.0
4	123	7.57	0.0	-6.49	0.0	9.23e-03	0.0
4	124	7.54	0.0	-6.49	0.0	9.18e-03	0.0
4	125	7.57	0.0	-6.49	0.0	9.21e-03	0.0
4	126	11.33	0.0	-7.51	0.0	0.01	0.0
4	127	11.36	0.0	-7.51	0.0	0.01	0.0
4	128	11.33	0.0	-7.51	0.0	0.01	0.0
4	129	11.36	0.0	-7.51	0.0	0.01	0.0
4	130	7.54	0.0	-6.51	0.0	9.06e-03	0.0
4	131	7.57	0.0	-6.50	0.0	9.13e-03	0.0
4	132	7.54	0.0	-6.50	0.0	9.08e-03	0.0
4	133	7.57	0.0	-6.51	0.0	9.11e-03	0.0
4	134	5.07	0.0	-5.77	0.0	6.29e-03	0.0
4	135	5.09	0.0	-5.77	0.0	6.36e-03	0.0
4	136	5.06	0.0	-5.77	0.0	6.31e-03	0.0
4	137	5.09	0.0	-5.77	0.0	6.34e-03	0.0
4	138	8.86	0.0	-6.79	0.0	0.01	0.0
4	139	8.88	0.0	-6.79	0.0	0.01	0.0
4	140	8.85	0.0	-6.79	0.0	0.01	0.0
4	141	8.88	0.0	-6.79	0.0	0.01	0.0
4	142	5.07	0.0	-5.79	0.0	6.19e-03	0.0
4	143	5.09	0.0	-5.78	0.0	6.26e-03	0.0
4	144	5.07	0.0	-5.78	0.0	6.21e-03	0.0
4	145	5.10	0.0	-5.79	0.0	6.24e-03	0.0
4	146	-0.01	0.0	-3.30	0.0	-9.81e-05	0.0
4	147	9.02e-03	0.0	-3.30	0.0	-4.32e-05	0.0
4	148	-0.01	0.0	-3.30	0.0	-8.28e-05	0.0
4	149	0.01	0.0	-3.30	0.0	-5.85e-05	0.0
4	150	3.78	0.0	-4.31	0.0	3.94e-03	0.0
4	151	3.80	0.0	-4.31	0.0	3.99e-03	0.0
4	152	3.78	0.0	-4.31	0.0	3.95e-03	0.0
4	153	3.78	0.0	-4.31	0.0	3.95e-03	0.0
4	154	-0.01	0.0	-3.31	0.0	-1.99e-04	0.0
4	155	9.46e-03	0.0	-3.31	0.0	-1.44e-04	0.0
4	156	-0.01	0.0	-3.31	0.0	-1.83e-04	0.0
4	157	-0.01	0.0	-3.31	0.0	-1.83e-04	0.0
4	158	8.37	0.0	-8.24	0.0	0.01	0.0
4	159	8.39	0.0	-8.23	0.0	0.01	0.0
4	160	8.36	0.0	-8.23	0.0	0.01	0.0
4	161	8.39	0.0	-8.24	0.0	0.01	0.0
4	162	12.16	0.0	-9.25	0.0	0.01	0.0
4	163	12.18	0.0	-9.25	0.0	0.01	0.0
4	164	12.15	0.0	-9.25	0.0	0.01	0.0
4	165	12.18	0.0	-9.25	0.0	0.01	0.0
4	166	8.37	0.0	-8.25	0.0	9.99e-03	0.0
4	167	8.39	0.0	-8.25	0.0	0.01	0.0
4	168	8.36	0.0	-8.25	0.0	0.01	0.0
4	169	8.39	0.0	-8.25	0.0	0.01	0.0
4	170	5.07	0.0	-7.28	0.0	6.27e-03	0.0
4	171	5.09	0.0	-7.28	0.0	6.33e-03	0.0
4	172	5.06	0.0	-7.28	0.0	6.29e-03	0.0
4	173	5.09	0.0	-7.28	0.0	6.32e-03	0.0
4	174	8.86	0.0	-8.29	0.0	0.01	0.0
4	175	8.88	0.0	-8.29	0.0	0.01	0.0
4	176	8.85	0.0	-8.29	0.0	0.01	0.0

Nodo	Cmb	Traslazione X	Traslazione Y	Traslazione Z	Rotazione X	Rotazione Y	Rotazione Z
4	177	8.88	0.0	-8.29	0.0	0.01	0.0
4	178	5.07	0.0	-7.29	0.0	6.17e-03	0.0
4	179	5.09	0.0	-7.29	0.0	6.23e-03	0.0
4	180	5.07	0.0	-7.29	0.0	6.19e-03	0.0
4	181	5.10	0.0	-7.29	0.0	6.21e-03	0.0
5	1	-0.02	0.0	-4.45	0.0	-9.21e-05	0.0
5	2	0.02	0.0	-4.45	0.0	3.09e-05	0.0
5	3	0.03	0.0	-4.44	0.0	6.20e-06	0.0
5	4	-0.03	0.0	-4.45	0.0	-6.74e-05	0.0
5	5	4.93	0.0	-2.93	0.0	5.56e-03	0.0
5	6	4.97	0.0	-2.93	0.0	5.68e-03	0.0
5	7	4.98	0.0	-2.92	0.0	5.66e-03	0.0
5	8	4.92	0.0	-2.93	0.0	5.59e-03	0.0
5	9	-0.03	0.0	-4.46	0.0	7.67e-05	0.0
5	10	0.02	0.0	-4.46	0.0	2.00e-04	0.0
5	11	0.03	0.0	-4.46	0.0	1.75e-04	0.0
5	12	-0.04	0.0	-4.47	0.0	1.01e-04	0.0
5	13	4.28	0.0	-6.40	0.0	5.38e-03	0.0
5	14	4.31	0.0	-6.40	0.0	5.46e-03	0.0
5	15	4.31	0.0	-6.40	0.0	5.44e-03	0.0
5	16	4.27	0.0	-6.41	0.0	5.40e-03	0.0
5	17	9.23	0.0	-4.88	0.0	0.01	0.0
5	18	9.25	0.0	-4.88	0.0	0.01	0.0
5	19	9.26	0.0	-4.88	0.0	0.01	0.0
5	20	9.22	0.0	-4.89	0.0	0.01	0.0
5	21	4.27	0.0	-6.42	0.0	5.55e-03	0.0
5	22	4.30	0.0	-6.42	0.0	5.63e-03	0.0
5	23	4.31	0.0	-6.42	0.0	5.61e-03	0.0
5	24	4.27	0.0	-6.42	0.0	5.57e-03	0.0
5	25	-0.02	0.0	-7.85	0.0	4.82e-05	0.0
5	26	0.01	0.0	-7.84	0.0	1.22e-04	0.0
5	27	0.02	0.0	-7.84	0.0	1.07e-04	0.0
5	28	-0.02	0.0	-7.85	0.0	6.30e-05	0.0
5	29	4.93	0.0	-6.32	0.0	5.70e-03	0.0
5	30	4.96	0.0	-6.32	0.0	5.78e-03	0.0
5	31	4.96	0.0	-6.32	0.0	5.76e-03	0.0
5	32	4.93	0.0	-6.33	0.0	5.72e-03	0.0
5	33	-0.02	0.0	-7.86	0.0	2.17e-04	0.0
5	34	6.05e-03	0.0	-7.86	0.0	2.91e-04	0.0
5	35	0.01	0.0	-7.86	0.0	2.76e-04	0.0
5	36	-0.03	0.0	-7.86	0.0	2.32e-04	0.0
5	37	3.20	0.0	-6.18	0.0	4.01e-03	0.0
5	38	3.22	0.0	-6.18	0.0	4.08e-03	0.0
5	39	3.23	0.0	-6.18	0.0	4.07e-03	0.0
5	40	3.19	0.0	-6.18	0.0	4.02e-03	0.0
5	41	8.14	0.0	-4.66	0.0	9.66e-03	0.0
5	42	8.17	0.0	-4.66	0.0	9.73e-03	0.0
5	43	8.18	0.0	-4.65	0.0	9.72e-03	0.0
5	44	8.14	0.0	-4.66	0.0	9.68e-03	0.0
5	45	3.19	0.0	-6.19	0.0	4.18e-03	0.0
5	46	3.22	0.0	-6.19	0.0	4.25e-03	0.0
5	47	3.23	0.0	-6.19	0.0	4.24e-03	0.0
5	48	3.19	0.0	-6.20	0.0	4.19e-03	0.0
5	49	-0.01	0.0	-7.26	0.0	1.58e-05	0.0
5	50	0.01	0.0	-7.26	0.0	8.97e-05	0.0
5	51	0.02	0.0	-7.25	0.0	7.48e-05	0.0
5	52	-0.02	0.0	-7.26	0.0	3.07e-05	0.0
5	53	4.93	0.0	-5.73	0.0	5.67e-03	0.0
5	54	4.96	0.0	-5.73	0.0	5.74e-03	0.0
5	55	4.97	0.0	-5.73	0.0	5.73e-03	0.0
5	56	4.93	0.0	-5.74	0.0	5.68e-03	0.0
5	57	-0.02	0.0	-7.27	0.0	1.85e-04	0.0
5	58	6.99e-03	0.0	-7.27	0.0	2.59e-04	0.0
5	59	0.01	0.0	-7.27	0.0	2.44e-04	0.0
5	60	-0.03	0.0	-7.27	0.0	2.00e-04	0.0
5	61	11.99	0.0	-3.14	0.0	0.02	0.0
5	62	12.02	0.0	-3.14	0.0	0.02	0.0
5	63	12.02	0.0	-3.14	0.0	0.02	0.0
5	64	11.98	0.0	-3.14	0.0	0.02	0.0
5	65	16.94	0.0	-1.62	0.0	0.02	0.0
5	66	16.96	0.0	-1.62	0.0	0.02	0.0
5	67	16.97	0.0	-1.62	0.0	0.02	0.0
5	68	16.93	0.0	-1.62	0.0	0.02	0.0
5	69	11.98	0.0	-3.16	0.0	0.02	0.0
5	70	12.01	0.0	-3.15	0.0	0.02	0.0

Nodo	Cmb	Traslazione X	Traslazione Y	Traslazione Z	Rotazione X	Rotazione Y	Rotazione Z
5	71	12.02	0.0	-3.15	0.0	0.02	0.0
5	72	11.98	0.0	-3.16	0.0	0.02	0.0
5	73	8.78	0.0	-4.22	0.0	0.01	0.0
5	74	8.80	0.0	-4.22	0.0	0.01	0.0
5	75	8.81	0.0	-4.21	0.0	0.01	0.0
5	76	8.77	0.0	-4.22	0.0	0.01	0.0
5	77	13.72	0.0	-2.70	0.0	0.02	0.0
5	78	13.75	0.0	-2.70	0.0	0.02	0.0
5	79	13.76	0.0	-2.69	0.0	0.02	0.0
5	80	13.72	0.0	-2.70	0.0	0.02	0.0
5	81	8.77	0.0	-4.23	0.0	0.01	0.0
5	82	8.80	0.0	-4.23	0.0	0.01	0.0
5	83	8.80	0.0	-4.23	0.0	0.01	0.0
5	84	8.77	0.0	-4.23	0.0	0.01	0.0
5	85	3.20	0.0	-6.37	0.0	4.01e-03	0.0
5	86	3.22	0.0	-6.37	0.0	4.08e-03	0.0
5	87	3.23	0.0	-6.37	0.0	4.06e-03	0.0
5	88	3.19	0.0	-6.37	0.0	4.02e-03	0.0
5	89	8.14	0.0	-4.85	0.0	9.66e-03	0.0
5	90	8.17	0.0	-4.85	0.0	9.73e-03	0.0
5	91	8.18	0.0	-4.85	0.0	9.72e-03	0.0
5	92	8.14	0.0	-4.85	0.0	9.67e-03	0.0
5	93	3.19	0.0	-6.39	0.0	4.17e-03	0.0
5	94	3.22	0.0	-6.39	0.0	4.25e-03	0.0
5	95	3.23	0.0	-6.39	0.0	4.23e-03	0.0
5	96	3.19	0.0	-6.39	0.0	4.19e-03	0.0
5	97	-0.01	0.0	-7.45	0.0	1.35e-05	0.0
5	98	0.01	0.0	-7.45	0.0	8.73e-05	0.0
5	99	0.02	0.0	-7.45	0.0	7.25e-05	0.0
5	100	-0.02	0.0	-7.45	0.0	2.83e-05	0.0
5	101	4.93	0.0	-5.93	0.0	5.67e-03	0.0
5	102	4.96	0.0	-5.93	0.0	5.74e-03	0.0
5	103	4.97	0.0	-5.93	0.0	5.73e-03	0.0
5	104	4.93	0.0	-5.93	0.0	5.68e-03	0.0
5	105	-0.02	0.0	-7.47	0.0	1.82e-04	0.0
5	106	7.06e-03	0.0	-7.47	0.0	2.56e-04	0.0
5	107	0.01	0.0	-7.46	0.0	2.41e-04	0.0
5	108	-0.03	0.0	-7.47	0.0	1.97e-04	0.0
5	109	33.52	0.0	7.70	0.0	0.04	0.0
5	110	-0.01	0.0	-4.17	0.0	9.08e-05	0.0
5	111	7.73e-03	0.0	-4.17	0.0	1.52e-04	0.0
5	112	0.01	0.0	-4.17	0.0	1.40e-04	0.0
5	113	-0.02	0.0	-4.17	0.0	1.03e-04	0.0
5	114	3.65	0.0	-3.04	0.0	4.28e-03	0.0
5	115	3.67	0.0	-3.04	0.0	4.34e-03	0.0
5	116	3.68	0.0	-3.04	0.0	4.33e-03	0.0
5	117	3.64	0.0	-3.04	0.0	4.29e-03	0.0
5	118	-0.02	0.0	-4.18	0.0	2.16e-04	0.0
5	119	3.66e-03	0.0	-4.18	0.0	2.77e-04	0.0
5	120	8.76e-03	0.0	-4.18	0.0	2.65e-04	0.0
5	121	-0.02	0.0	-4.18	0.0	2.28e-04	0.0
5	122	7.26	0.0	-1.57	0.0	9.58e-03	0.0
5	123	7.28	0.0	-1.57	0.0	9.64e-03	0.0
5	124	7.28	0.0	-1.57	0.0	9.63e-03	0.0
5	125	7.25	0.0	-1.57	0.0	9.59e-03	0.0
5	126	10.92	0.0	-0.44	0.0	0.01	0.0
5	127	10.94	0.0	-0.44	0.0	0.01	0.0
5	128	10.95	0.0	-0.44	0.0	0.01	0.0
5	129	10.92	0.0	-0.44	0.0	0.01	0.0
5	130	7.25	0.0	-1.58	0.0	9.71e-03	0.0
5	131	7.28	0.0	-1.58	0.0	9.77e-03	0.0
5	132	7.28	0.0	-1.58	0.0	9.76e-03	0.0
5	133	7.25	0.0	-1.58	0.0	9.72e-03	0.0
5	134	4.87	0.0	-2.37	0.0	6.62e-03	0.0
5	135	4.89	0.0	-2.37	0.0	6.68e-03	0.0
5	136	4.90	0.0	-2.37	0.0	6.67e-03	0.0
5	137	4.87	0.0	-2.37	0.0	6.63e-03	0.0
5	138	8.54	0.0	-1.24	0.0	0.01	0.0
5	139	8.56	0.0	-1.24	0.0	0.01	0.0
5	140	8.56	0.0	-1.24	0.0	0.01	0.0
5	141	8.53	0.0	-1.24	0.0	0.01	0.0
5	142	4.87	0.0	-2.38	0.0	6.74e-03	0.0
5	143	4.89	0.0	-2.38	0.0	6.80e-03	0.0
5	144	4.90	0.0	-2.38	0.0	6.79e-03	0.0
5	145	4.86	0.0	-2.38	0.0	6.76e-03	0.0

Nodo	Cmb	Traslazione X	Traslazione Y	Traslazione Z	Rotazione X	Rotazione Y	Rotazione Z
5	146	-8.19e-03	0.0	-3.29	0.0	-4.83e-05	0.0
5	147	0.01	0.0	-3.29	0.0	2.95e-06	0.0
5	148	0.01	0.0	-3.29	0.0	-7.34e-06	0.0
5	149	-0.01	0.0	-3.30	0.0	-3.80e-05	0.0
5	150	3.66	0.0	-2.17	0.0	4.14e-03	0.0
5	151	3.67	0.0	-2.17	0.0	4.19e-03	0.0
5	152	3.68	0.0	-2.17	0.0	4.18e-03	0.0
5	153	3.68	0.0	-2.17	0.0	4.18e-03	0.0
5	154	-0.01	0.0	-3.31	0.0	7.68e-05	0.0
5	155	6.34e-03	0.0	-3.31	0.0	1.28e-04	0.0
5	156	0.01	0.0	-3.30	0.0	1.18e-04	0.0
5	157	0.01	0.0	-3.30	0.0	1.18e-04	0.0
5	158	8.05	0.0	-2.81	0.0	0.01	0.0
5	159	8.07	0.0	-2.81	0.0	0.01	0.0
5	160	8.08	0.0	-2.81	0.0	0.01	0.0
5	161	8.05	0.0	-2.81	0.0	0.01	0.0
5	162	11.72	0.0	-1.68	0.0	0.01	0.0
5	163	11.74	0.0	-1.68	0.0	0.01	0.0
5	164	11.74	0.0	-1.68	0.0	0.01	0.0
5	165	11.71	0.0	-1.68	0.0	0.01	0.0
5	166	8.05	0.0	-2.82	0.0	0.01	0.0
5	167	8.07	0.0	-2.82	0.0	0.01	0.0
5	168	8.08	0.0	-2.82	0.0	0.01	0.0
5	169	8.04	0.0	-2.82	0.0	0.01	0.0
5	170	4.87	0.0	-3.87	0.0	6.63e-03	0.0
5	171	4.89	0.0	-3.87	0.0	6.69e-03	0.0
5	172	4.90	0.0	-3.87	0.0	6.68e-03	0.0
5	173	4.87	0.0	-3.88	0.0	6.64e-03	0.0
5	174	8.54	0.0	-2.75	0.0	0.01	0.0
5	175	8.56	0.0	-2.75	0.0	0.01	0.0
5	176	8.56	0.0	-2.75	0.0	0.01	0.0
5	177	8.53	0.0	-2.75	0.0	0.01	0.0
5	178	4.87	0.0	-3.89	0.0	6.75e-03	0.0
5	179	4.89	0.0	-3.89	0.0	6.82e-03	0.0
5	180	4.89	0.0	-3.88	0.0	6.80e-03	0.0
5	181	4.86	0.0	-3.89	0.0	6.77e-03	0.0
6	1	1.23e-03	0.0	-4.44	0.0	-1.89e-05	0.0
6	2	1.86e-03	0.0	-4.44	0.0	4.79e-06	0.0
6	3	2.79e-03	0.0	-4.44	0.0	3.51e-05	0.0
6	4	2.97e-04	0.0	-4.44	0.0	-4.92e-05	0.0
6	5	1.49	0.0	-2.92	0.0	5.61e-03	0.0
6	6	1.49	0.0	-2.92	0.0	5.63e-03	0.0
6	7	1.49	0.0	-2.92	0.0	5.66e-03	0.0
6	8	1.49	0.0	-2.92	0.0	5.58e-03	0.0
6	9	-5.78e-03	0.0	-4.46	0.0	-2.20e-04	0.0
6	10	-5.15e-03	0.0	-4.45	0.0	-1.96e-04	0.0
6	11	-4.22e-03	0.0	-4.45	0.0	-1.66e-04	0.0
6	12	-6.71e-03	0.0	-4.46	0.0	-2.50e-04	0.0
6	13	1.02	0.0	-6.39	0.0	5.22e-03	0.0
6	14	1.02	0.0	-6.39	0.0	5.23e-03	0.0
6	15	1.02	0.0	-6.39	0.0	5.25e-03	0.0
6	16	1.02	0.0	-6.39	0.0	5.20e-03	0.0
6	17	2.50	0.0	-4.87	0.0	0.01	0.0
6	18	2.50	0.0	-4.87	0.0	0.01	0.0
6	19	2.50	0.0	-4.87	0.0	0.01	0.0
6	20	2.50	0.0	-4.87	0.0	0.01	0.0
6	21	1.01	0.0	-6.41	0.0	5.01e-03	0.0
6	22	1.01	0.0	-6.41	0.0	5.03e-03	0.0
6	23	1.01	0.0	-6.41	0.0	5.05e-03	0.0
6	24	1.01	0.0	-6.41	0.0	5.00e-03	0.0
6	25	-1.65e-03	0.0	-7.83	0.0	-1.16e-04	0.0
6	26	-1.26e-03	0.0	-7.83	0.0	-1.02e-04	0.0
6	27	-7.07e-04	0.0	-7.83	0.0	-8.40e-05	0.0
6	28	-2.20e-03	0.0	-7.83	0.0	-1.35e-04	0.0
6	29	1.48	0.0	-6.31	0.0	5.51e-03	0.0
6	30	1.48	0.0	-6.31	0.0	5.52e-03	0.0
6	31	1.48	0.0	-6.31	0.0	5.54e-03	0.0
6	32	1.48	0.0	-6.31	0.0	5.49e-03	0.0
6	33	-8.65e-03	0.0	-7.85	0.0	-3.18e-04	0.0
6	34	-8.27e-03	0.0	-7.85	0.0	-3.03e-04	0.0
6	35	-7.72e-03	0.0	-7.85	0.0	-2.85e-04	0.0
6	36	-9.21e-03	0.0	-7.85	0.0	-3.36e-04	0.0
6	37	0.76	0.0	-6.17	0.0	3.91e-03	0.0
6	38	0.76	0.0	-6.17	0.0	3.92e-03	0.0
6	39	0.76	0.0	-6.17	0.0	3.94e-03	0.0

Nodo	Cmb	Traslazione X	Traslazione Y	Traslazione Z	Rotazione X	Rotazione Y	Rotazione Z
6	40	0.76	0.0	-6.17	0.0	3.89e-03	0.0
6	41	2.25	0.0	-4.65	0.0	9.53e-03	0.0
6	42	2.25	0.0	-4.65	0.0	9.55e-03	0.0
6	43	2.25	0.0	-4.64	0.0	9.56e-03	0.0
6	44	2.25	0.0	-4.65	0.0	9.51e-03	0.0
6	45	0.75	0.0	-6.18	0.0	3.71e-03	0.0
6	46	0.75	0.0	-6.18	0.0	3.72e-03	0.0
6	47	0.76	0.0	-6.18	0.0	3.74e-03	0.0
6	48	0.75	0.0	-6.18	0.0	3.69e-03	0.0
6	49	-6.19e-04	0.0	-7.24	0.0	-8.20e-05	0.0
6	50	-2.38e-04	0.0	-7.24	0.0	-6.78e-05	0.0
6	51	3.20e-04	0.0	-7.24	0.0	-4.96e-05	0.0
6	52	-1.18e-03	0.0	-7.25	0.0	-1.00e-04	0.0
6	53	1.49	0.0	-5.72	0.0	5.54e-03	0.0
6	54	1.49	0.0	-5.72	0.0	5.56e-03	0.0
6	55	1.49	0.0	-5.72	0.0	5.57e-03	0.0
6	56	1.48	0.0	-5.73	0.0	5.52e-03	0.0
6	57	-7.63e-03	0.0	-7.26	0.0	-2.83e-04	0.0
6	58	-7.25e-03	0.0	-7.26	0.0	-2.69e-04	0.0
6	59	-6.69e-03	0.0	-7.26	0.0	-2.51e-04	0.0
6	60	-8.19e-03	0.0	-7.26	0.0	-3.02e-04	0.0
6	61	2.23	0.0	-3.13	0.0	0.02	0.0
6	62	2.24	0.0	-3.13	0.0	0.02	0.0
6	63	2.24	0.0	-3.13	0.0	0.02	0.0
6	64	2.23	0.0	-3.13	0.0	0.02	0.0
6	65	3.72	0.0	-1.61	0.0	0.02	0.0
6	66	3.72	0.0	-1.61	0.0	0.02	0.0
6	67	3.72	0.0	-1.61	0.0	0.02	0.0
6	68	3.72	0.0	-1.61	0.0	0.02	0.0
6	69	2.23	0.0	-3.15	0.0	0.02	0.0
6	70	2.23	0.0	-3.15	0.0	0.02	0.0
6	71	2.23	0.0	-3.14	0.0	0.02	0.0
6	72	2.23	0.0	-3.15	0.0	0.02	0.0
6	73	1.47	0.0	-4.21	0.0	0.01	0.0
6	74	1.47	0.0	-4.21	0.0	0.01	0.0
6	75	1.47	0.0	-4.21	0.0	0.01	0.0
6	76	1.47	0.0	-4.21	0.0	0.01	0.0
6	77	2.96	0.0	-2.69	0.0	0.02	0.0
6	78	2.96	0.0	-2.69	0.0	0.02	0.0
6	79	2.96	0.0	-2.68	0.0	0.02	0.0
6	80	2.96	0.0	-2.69	0.0	0.02	0.0
6	81	1.47	0.0	-4.22	0.0	0.01	0.0
6	82	1.47	0.0	-4.22	0.0	0.01	0.0
6	83	1.47	0.0	-4.22	0.0	0.01	0.0
6	84	1.47	0.0	-4.22	0.0	0.01	0.0
6	85	0.76	0.0	-6.36	0.0	3.91e-03	0.0
6	86	0.76	0.0	-6.36	0.0	3.93e-03	0.0
6	87	0.76	0.0	-6.36	0.0	3.95e-03	0.0
6	88	0.76	0.0	-6.36	0.0	3.90e-03	0.0
6	89	2.25	0.0	-4.84	0.0	9.54e-03	0.0
6	90	2.25	0.0	-4.84	0.0	9.55e-03	0.0
6	91	2.25	0.0	-4.84	0.0	9.57e-03	0.0
6	92	2.25	0.0	-4.84	0.0	9.52e-03	0.0
6	93	0.75	0.0	-6.38	0.0	3.71e-03	0.0
6	94	0.76	0.0	-6.38	0.0	3.73e-03	0.0
6	95	0.76	0.0	-6.38	0.0	3.74e-03	0.0
6	96	0.75	0.0	-6.38	0.0	3.69e-03	0.0
6	97	-4.21e-04	0.0	-7.44	0.0	-7.58e-05	0.0
6	98	-3.96e-05	0.0	-7.44	0.0	-6.16e-05	0.0
6	99	5.19e-04	0.0	-7.44	0.0	-4.34e-05	0.0
6	100	-9.79e-04	0.0	-7.44	0.0	-9.40e-05	0.0
6	101	1.49	0.0	-5.92	0.0	5.55e-03	0.0
6	102	1.49	0.0	-5.92	0.0	5.56e-03	0.0
6	103	1.49	0.0	-5.92	0.0	5.58e-03	0.0
6	104	1.48	0.0	-5.92	0.0	5.53e-03	0.0
6	105	-7.43e-03	0.0	-7.45	0.0	-2.77e-04	0.0
6	106	-7.05e-03	0.0	-7.45	0.0	-2.63e-04	0.0
6	107	-6.49e-03	0.0	-7.45	0.0	-2.45e-04	0.0
6	108	-7.99e-03	0.0	-7.46	0.0	-2.95e-04	0.0
6	109	8.17	0.0	7.70	0.0	0.04	0.0
6	110	-3.90e-03	0.0	-4.16	0.0	-1.66e-04	0.0
6	111	-3.58e-03	0.0	-4.16	0.0	-1.54e-04	0.0
6	112	-3.11e-03	0.0	-4.16	0.0	-1.39e-04	0.0
6	113	-4.36e-03	0.0	-4.16	0.0	-1.81e-04	0.0
6	114	1.10	0.0	-3.04	0.0	4.00e-03	0.0

Nodo	Cmb	Traslazione X	Traslazione Y	Traslazione Z	Rotazione X	Rotazione Y	Rotazione Z
6	115	1.10	0.0	-3.04	0.0	4.01e-03	0.0
6	116	1.10	0.0	-3.03	0.0	4.03e-03	0.0
6	117	1.10	0.0	-3.04	0.0	3.98e-03	0.0
6	118	-9.09e-03	0.0	-4.17	0.0	-3.15e-04	0.0
6	119	-8.77e-03	0.0	-4.17	0.0	-3.03e-04	0.0
6	120	-8.31e-03	0.0	-4.17	0.0	-2.88e-04	0.0
6	121	-9.55e-03	0.0	-4.18	0.0	-3.30e-04	0.0
6	122	1.38	0.0	-1.56	0.0	9.52e-03	0.0
6	123	1.38	0.0	-1.56	0.0	9.53e-03	0.0
6	124	1.38	0.0	-1.56	0.0	9.54e-03	0.0
6	125	1.38	0.0	-1.56	0.0	9.50e-03	0.0
6	126	2.48	0.0	-0.44	0.0	0.01	0.0
6	127	2.48	0.0	-0.44	0.0	0.01	0.0
6	128	2.48	0.0	-0.43	0.0	0.01	0.0
6	129	2.48	0.0	-0.44	0.0	0.01	0.0
6	130	1.38	0.0	-1.57	0.0	9.37e-03	0.0
6	131	1.38	0.0	-1.57	0.0	9.38e-03	0.0
6	132	1.38	0.0	-1.57	0.0	9.39e-03	0.0
6	133	1.38	0.0	-1.58	0.0	9.35e-03	0.0
6	134	0.82	0.0	-2.36	0.0	6.55e-03	0.0
6	135	0.82	0.0	-2.36	0.0	6.57e-03	0.0
6	136	0.82	0.0	-2.36	0.0	6.58e-03	0.0
6	137	0.82	0.0	-2.36	0.0	6.54e-03	0.0
6	138	1.92	0.0	-1.24	0.0	0.01	0.0
6	139	1.92	0.0	-1.24	0.0	0.01	0.0
6	140	1.92	0.0	-1.23	0.0	0.01	0.0
6	141	1.92	0.0	-1.24	0.0	0.01	0.0
6	142	0.81	0.0	-2.37	0.0	6.41e-03	0.0
6	143	0.81	0.0	-2.37	0.0	6.42e-03	0.0
6	144	0.81	0.0	-2.37	0.0	6.43e-03	0.0
6	145	0.81	0.0	-2.37	0.0	6.39e-03	0.0
6	146	1.01e-03	0.0	-3.29	0.0	-1.02e-05	0.0
6	147	1.28e-03	0.0	-3.29	0.0	0.0	0.0
6	148	1.66e-03	0.0	-3.29	0.0	1.23e-05	0.0
6	149	6.24e-04	0.0	-3.29	0.0	-2.28e-05	0.0
6	150	1.10	0.0	-2.16	0.0	4.16e-03	0.0
6	151	1.10	0.0	-2.16	0.0	4.17e-03	0.0
6	152	1.10	0.0	-2.16	0.0	4.18e-03	0.0
6	153	1.10	0.0	-2.16	0.0	4.18e-03	0.0
6	154	-4.18e-03	0.0	-3.30	0.0	-1.59e-04	0.0
6	155	-3.91e-03	0.0	-3.30	0.0	-1.49e-04	0.0
6	156	-3.53e-03	0.0	-3.30	0.0	-1.37e-04	0.0
6	157	-3.53e-03	0.0	-3.30	0.0	-1.37e-04	0.0
6	158	1.57	0.0	-2.80	0.0	0.01	0.0
6	159	1.57	0.0	-2.80	0.0	0.01	0.0
6	160	1.57	0.0	-2.80	0.0	0.01	0.0
6	161	1.57	0.0	-2.80	0.0	0.01	0.0
6	162	2.67	0.0	-1.67	0.0	0.01	0.0
6	163	2.67	0.0	-1.67	0.0	0.01	0.0
6	164	2.67	0.0	-1.67	0.0	0.01	0.0
6	165	2.67	0.0	-1.67	0.0	0.01	0.0
6	166	1.57	0.0	-2.81	0.0	0.01	0.0
6	167	1.57	0.0	-2.81	0.0	0.01	0.0
6	168	1.57	0.0	-2.81	0.0	0.01	0.0
6	169	1.57	0.0	-2.81	0.0	0.01	0.0
6	170	0.82	0.0	-3.87	0.0	6.56e-03	0.0
6	171	0.82	0.0	-3.87	0.0	6.58e-03	0.0
6	172	0.82	0.0	-3.86	0.0	6.59e-03	0.0
6	173	0.82	0.0	-3.87	0.0	6.55e-03	0.0
6	174	1.92	0.0	-2.74	0.0	0.01	0.0
6	175	1.92	0.0	-2.74	0.0	0.01	0.0
6	176	1.92	0.0	-2.74	0.0	0.01	0.0
6	177	1.92	0.0	-2.74	0.0	0.01	0.0
6	178	0.81	0.0	-3.88	0.0	6.41e-03	0.0
6	179	0.81	0.0	-3.88	0.0	6.43e-03	0.0
6	180	0.81	0.0	-3.88	0.0	6.44e-03	0.0
6	181	0.81	0.0	-3.88	0.0	6.40e-03	0.0
7	1	-0.03	0.0	-4.44	0.0	-1.05e-04	0.0
7	2	0.02	0.0	-4.45	0.0	2.32e-05	0.0
7	3	-0.04	0.0	-4.44	0.0	-7.34e-05	0.0
7	4	0.04	0.0	-4.45	0.0	-8.22e-06	0.0
7	5	5.09	0.0	-6.15	0.0	5.36e-03	0.0
7	6	5.14	0.0	-6.15	0.0	5.49e-03	0.0
7	7	5.08	0.0	-6.14	0.0	5.39e-03	0.0
7	8	5.15	0.0	-6.15	0.0	5.45e-03	0.0

Nodo	Cmb	Traslazione X	Traslazione Y	Traslazione Z	Rotazione X	Rotazione Y	Rotazione Z
7	9	-0.03	0.0	-4.46	0.0	-2.57e-04	0.0
7	10	0.02	0.0	-4.46	0.0	-1.29e-04	0.0
7	11	-0.04	0.0	-4.45	0.0	-2.25e-04	0.0
7	12	0.04	0.0	-4.46	0.0	-1.60e-04	0.0
7	13	4.44	0.0	-9.44	0.0	4.95e-03	0.0
7	14	4.47	0.0	-9.45	0.0	5.03e-03	0.0
7	15	4.43	0.0	-9.44	0.0	4.97e-03	0.0
7	16	4.47	0.0	-9.45	0.0	5.01e-03	0.0
7	17	9.55	0.0	-11.14	0.0	0.01	0.0
7	18	9.58	0.0	-11.15	0.0	0.01	0.0
7	19	9.55	0.0	-11.14	0.0	0.01	0.0
7	20	9.59	0.0	-11.15	0.0	0.01	0.0
7	21	4.44	0.0	-9.45	0.0	4.80e-03	0.0
7	22	4.47	0.0	-9.46	0.0	4.88e-03	0.0
7	23	4.43	0.0	-9.45	0.0	4.82e-03	0.0
7	24	4.47	0.0	-9.46	0.0	4.86e-03	0.0
7	25	-0.02	0.0	-7.84	0.0	-2.32e-04	0.0
7	26	0.01	0.0	-7.84	0.0	-1.55e-04	0.0
7	27	-0.02	0.0	-7.84	0.0	-2.13e-04	0.0
7	28	0.02	0.0	-7.84	0.0	-1.74e-04	0.0
7	29	5.10	0.0	-9.54	0.0	5.23e-03	0.0
7	30	5.13	0.0	-9.54	0.0	5.31e-03	0.0
7	31	5.09	0.0	-9.54	0.0	5.25e-03	0.0
7	32	5.14	0.0	-9.54	0.0	5.29e-03	0.0
7	33	-0.02	0.0	-7.85	0.0	-3.84e-04	0.0
7	34	0.01	0.0	-7.85	0.0	-3.07e-04	0.0
7	35	-0.02	0.0	-7.85	0.0	-3.65e-04	0.0
7	36	0.02	0.0	-7.85	0.0	-3.26e-04	0.0
7	37	3.32	0.0	-8.45	0.0	3.69e-03	0.0
7	38	3.34	0.0	-8.45	0.0	3.77e-03	0.0
7	39	3.31	0.0	-8.45	0.0	3.71e-03	0.0
7	40	3.35	0.0	-8.45	0.0	3.75e-03	0.0
7	41	8.43	0.0	-10.15	0.0	9.15e-03	0.0
7	42	8.46	0.0	-10.15	0.0	9.23e-03	0.0
7	43	8.42	0.0	-10.15	0.0	9.17e-03	0.0
7	44	8.47	0.0	-10.16	0.0	9.21e-03	0.0
7	45	3.32	0.0	-8.46	0.0	3.54e-03	0.0
7	46	3.35	0.0	-8.46	0.0	3.61e-03	0.0
7	47	3.31	0.0	-8.46	0.0	3.56e-03	0.0
7	48	3.35	0.0	-8.47	0.0	3.60e-03	0.0
7	49	-0.02	0.0	-7.25	0.0	-1.91e-04	0.0
7	50	0.01	0.0	-7.25	0.0	-1.14e-04	0.0
7	51	-0.02	0.0	-7.25	0.0	-1.72e-04	0.0
7	52	0.02	0.0	-7.25	0.0	-1.33e-04	0.0
7	53	5.10	0.0	-8.95	0.0	5.27e-03	0.0
7	54	5.13	0.0	-8.95	0.0	5.35e-03	0.0
7	55	5.09	0.0	-8.95	0.0	5.29e-03	0.0
7	56	5.14	0.0	-8.96	0.0	5.33e-03	0.0
7	57	-0.02	0.0	-7.26	0.0	-3.43e-04	0.0
7	58	0.01	0.0	-7.26	0.0	-2.66e-04	0.0
7	59	-0.02	0.0	-7.26	0.0	-3.24e-04	0.0
7	60	0.02	0.0	-7.27	0.0	-2.85e-04	0.0
7	61	12.46	0.0	-12.23	0.0	0.02	0.0
7	62	12.49	0.0	-12.23	0.0	0.02	0.0
7	63	12.45	0.0	-12.23	0.0	0.02	0.0
7	64	12.50	0.0	-12.24	0.0	0.02	0.0
7	65	17.58	0.0	-13.93	0.0	0.02	0.0
7	66	17.61	0.0	-13.94	0.0	0.02	0.0
7	67	17.57	0.0	-13.93	0.0	0.02	0.0
7	68	17.61	0.0	-13.94	0.0	0.02	0.0
7	69	12.46	0.0	-12.24	0.0	0.02	0.0
7	70	12.49	0.0	-12.25	0.0	0.02	0.0
7	71	12.45	0.0	-12.24	0.0	0.02	0.0
7	72	12.50	0.0	-12.25	0.0	0.02	0.0
7	73	9.13	0.0	-11.03	0.0	0.01	0.0
7	74	9.16	0.0	-11.03	0.0	0.01	0.0
7	75	9.12	0.0	-11.03	0.0	0.01	0.0
7	76	9.17	0.0	-11.04	0.0	0.01	0.0
7	77	14.25	0.0	-12.73	0.0	0.02	0.0
7	78	14.28	0.0	-12.74	0.0	0.02	0.0
7	79	14.24	0.0	-12.73	0.0	0.02	0.0
7	80	14.28	0.0	-12.74	0.0	0.02	0.0
7	81	9.13	0.0	-11.04	0.0	0.01	0.0
7	82	9.16	0.0	-11.05	0.0	0.01	0.0
7	83	9.12	0.0	-11.04	0.0	0.01	0.0

Nodo	Cmb	Traslazione X	Traslazione Y	Traslazione Z	Rotazione X	Rotazione Y	Rotazione Z
7	84	9.17	0.0	-11.05	0.0	0.01	0.0
7	85	3.32	0.0	-8.65	0.0	3.69e-03	0.0
7	86	3.34	0.0	-8.65	0.0	3.77e-03	0.0
7	87	3.31	0.0	-8.64	0.0	3.71e-03	0.0
7	88	3.35	0.0	-8.65	0.0	3.75e-03	0.0
7	89	8.43	0.0	-10.35	0.0	9.15e-03	0.0
7	90	8.46	0.0	-10.35	0.0	9.23e-03	0.0
7	91	8.42	0.0	-10.35	0.0	9.17e-03	0.0
7	92	8.47	0.0	-10.35	0.0	9.21e-03	0.0
7	93	3.32	0.0	-8.66	0.0	3.54e-03	0.0
7	94	3.35	0.0	-8.66	0.0	3.62e-03	0.0
7	95	3.31	0.0	-8.66	0.0	3.56e-03	0.0
7	96	3.35	0.0	-8.66	0.0	3.60e-03	0.0
7	97	-0.02	0.0	-7.44	0.0	-1.89e-04	0.0
7	98	0.01	0.0	-7.45	0.0	-1.12e-04	0.0
7	99	-0.02	0.0	-7.44	0.0	-1.70e-04	0.0
7	100	0.02	0.0	-7.45	0.0	-1.31e-04	0.0
7	101	5.10	0.0	-9.15	0.0	5.27e-03	0.0
7	102	5.13	0.0	-9.15	0.0	5.35e-03	0.0
7	103	5.09	0.0	-9.14	0.0	5.29e-03	0.0
7	104	5.14	0.0	-9.15	0.0	5.33e-03	0.0
7	105	-0.02	0.0	-7.46	0.0	-3.41e-04	0.0
7	106	0.01	0.0	-7.46	0.0	-2.64e-04	0.0
7	107	-0.02	0.0	-7.45	0.0	-3.22e-04	0.0
7	108	0.02	0.0	-7.46	0.0	-2.83e-04	0.0
7	109	34.75	0.0	-15.91	0.0	0.04	0.0
7	110	-0.01	0.0	-4.16	0.0	-2.19e-04	0.0
7	111	0.01	0.0	-4.17	0.0	-1.55e-04	0.0
7	112	-0.02	0.0	-4.16	0.0	-2.04e-04	0.0
7	113	0.02	0.0	-4.17	0.0	-1.71e-04	0.0
7	114	3.78	0.0	-5.42	0.0	3.83e-03	0.0
7	115	3.80	0.0	-5.43	0.0	3.89e-03	0.0
7	116	3.77	0.0	-5.42	0.0	3.84e-03	0.0
7	117	3.81	0.0	-5.43	0.0	3.87e-03	0.0
7	118	-0.01	0.0	-4.17	0.0	-3.32e-04	0.0
7	119	0.01	0.0	-4.17	0.0	-2.68e-04	0.0
7	120	-0.02	0.0	-4.17	0.0	-3.16e-04	0.0
7	121	0.02	0.0	-4.18	0.0	-2.84e-04	0.0
7	122	7.54	0.0	-7.05	0.0	9.27e-03	0.0
7	123	7.57	0.0	-7.05	0.0	9.33e-03	0.0
7	124	7.54	0.0	-7.04	0.0	9.28e-03	0.0
7	125	7.57	0.0	-7.05	0.0	9.32e-03	0.0
7	126	11.33	0.0	-8.31	0.0	0.01	0.0
7	127	11.36	0.0	-8.31	0.0	0.01	0.0
7	128	11.33	0.0	-8.30	0.0	0.01	0.0
7	129	11.36	0.0	-8.31	0.0	0.01	0.0
7	130	7.54	0.0	-7.05	0.0	9.15e-03	0.0
7	131	7.57	0.0	-7.06	0.0	9.22e-03	0.0
7	132	7.54	0.0	-7.05	0.0	9.17e-03	0.0
7	133	7.57	0.0	-7.06	0.0	9.20e-03	0.0
7	134	5.07	0.0	-6.15	0.0	6.39e-03	0.0
7	135	5.09	0.0	-6.16	0.0	6.45e-03	0.0
7	136	5.06	0.0	-6.15	0.0	6.40e-03	0.0
7	137	5.10	0.0	-6.16	0.0	6.43e-03	0.0
7	138	8.86	0.0	-7.41	0.0	0.01	0.0
7	139	8.88	0.0	-7.42	0.0	0.01	0.0
7	140	8.85	0.0	-7.41	0.0	0.01	0.0
7	141	8.89	0.0	-7.42	0.0	0.01	0.0
7	142	5.07	0.0	-6.16	0.0	6.27e-03	0.0
7	143	5.09	0.0	-6.16	0.0	6.34e-03	0.0
7	144	5.06	0.0	-6.16	0.0	6.29e-03	0.0
7	145	5.10	0.0	-6.16	0.0	6.32e-03	0.0
7	146	-0.01	0.0	-3.29	0.0	-5.69e-05	0.0
7	147	8.89e-03	0.0	-3.29	0.0	-3.56e-06	0.0
7	148	-0.02	0.0	-3.29	0.0	-4.38e-05	0.0
7	149	0.01	0.0	-3.30	0.0	-1.66e-05	0.0
7	150	3.78	0.0	-4.55	0.0	3.99e-03	0.0
7	151	3.80	0.0	-4.55	0.0	4.04e-03	0.0
7	152	3.77	0.0	-4.55	0.0	4.00e-03	0.0
7	153	3.77	0.0	-4.55	0.0	4.00e-03	0.0
7	154	-0.01	0.0	-3.30	0.0	-1.69e-04	0.0
7	155	9.38e-03	0.0	-3.30	0.0	-1.16e-04	0.0
7	156	-0.02	0.0	-3.30	0.0	-1.56e-04	0.0
7	157	-0.02	0.0	-3.30	0.0	-1.56e-04	0.0
7	158	8.37	0.0	-8.85	0.0	0.01	0.0

Nodo	Cmb	Traslazione X	Traslazione Y	Traslazione Z	Rotazione X	Rotazione Y	Rotazione Z
7	159	8.39	0.0	-8.85	0.0	0.01	0.0
7	160	8.36	0.0	-8.85	0.0	0.01	0.0
7	161	8.40	0.0	-8.85	0.0	0.01	0.0
7	162	12.16	0.0	-10.11	0.0	0.01	0.0
7	163	12.18	0.0	-10.11	0.0	0.01	0.0
7	164	12.15	0.0	-10.11	0.0	0.01	0.0
7	165	12.19	0.0	-10.11	0.0	0.01	0.0
7	166	8.37	0.0	-8.85	0.0	0.01	0.0
7	167	8.39	0.0	-8.86	0.0	0.01	0.0
7	168	8.36	0.0	-8.85	0.0	0.01	0.0
7	169	8.40	0.0	-8.86	0.0	0.01	0.0
7	170	5.07	0.0	-7.66	0.0	6.37e-03	0.0
7	171	5.09	0.0	-7.66	0.0	6.43e-03	0.0
7	172	5.06	0.0	-7.66	0.0	6.38e-03	0.0
7	173	5.10	0.0	-7.66	0.0	6.42e-03	0.0
7	174	8.86	0.0	-8.92	0.0	0.01	0.0
7	175	8.88	0.0	-8.92	0.0	0.01	0.0
7	176	8.85	0.0	-8.92	0.0	0.01	0.0
7	177	8.89	0.0	-8.92	0.0	0.01	0.0
7	178	5.07	0.0	-7.67	0.0	6.25e-03	0.0
7	179	5.09	0.0	-7.67	0.0	6.32e-03	0.0
7	180	5.06	0.0	-7.66	0.0	6.27e-03	0.0
7	181	5.10	0.0	-7.67	0.0	6.30e-03	0.0
8	1	-2.92e-03	0.0	-4.43	0.0	2.17e-04	0.0
8	2	-2.92e-03	0.0	-4.43	0.0	2.31e-04	0.0
8	3	-2.96e-03	0.0	-4.43	0.0	1.90e-04	0.0
8	4	-2.89e-03	0.0	-4.44	0.0	2.58e-04	0.0
8	5	1.32	0.0	-5.80	0.0	5.92e-03	0.0
8	6	1.32	0.0	-5.80	0.0	5.93e-03	0.0
8	7	1.32	0.0	-5.80	0.0	5.89e-03	0.0
8	8	1.32	0.0	-5.80	0.0	5.96e-03	0.0
8	9	-1.90e-03	0.0	-4.44	0.0	3.84e-04	0.0
8	10	-1.90e-03	0.0	-4.44	0.0	3.98e-04	0.0
8	11	-1.93e-03	0.0	-4.44	0.0	3.57e-04	0.0
8	12	-1.87e-03	0.0	-4.45	0.0	4.26e-04	0.0
8	13	0.86	0.0	-9.11	0.0	5.72e-03	0.0
8	14	0.86	0.0	-9.11	0.0	5.73e-03	0.0
8	15	0.86	0.0	-9.11	0.0	5.71e-03	0.0
8	16	0.86	0.0	-9.11	0.0	5.75e-03	0.0
8	17	2.17	0.0	-10.47	0.0	0.01	0.0
8	18	2.17	0.0	-10.47	0.0	0.01	0.0
8	19	2.17	0.0	-10.47	0.0	0.01	0.0
8	20	2.17	0.0	-10.47	0.0	0.01	0.0
8	21	0.86	0.0	-9.12	0.0	5.89e-03	0.0
8	22	0.86	0.0	-9.12	0.0	5.90e-03	0.0
8	23	0.86	0.0	-9.12	0.0	5.88e-03	0.0
8	24	0.86	0.0	-9.12	0.0	5.92e-03	0.0
8	25	-3.35e-03	0.0	-7.82	0.0	3.77e-04	0.0
8	26	-3.35e-03	0.0	-7.82	0.0	3.85e-04	0.0
8	27	-3.37e-03	0.0	-7.82	0.0	3.61e-04	0.0
8	28	-3.33e-03	0.0	-7.82	0.0	4.02e-04	0.0
8	29	1.32	0.0	-9.19	0.0	6.08e-03	0.0
8	30	1.32	0.0	-9.19	0.0	6.09e-03	0.0
8	31	1.32	0.0	-9.19	0.0	6.06e-03	0.0
8	32	1.32	0.0	-9.19	0.0	6.11e-03	0.0
8	33	-2.33e-03	0.0	-7.83	0.0	5.45e-04	0.0
8	34	-2.33e-03	0.0	-7.83	0.0	5.53e-04	0.0
8	35	-2.35e-03	0.0	-7.83	0.0	5.28e-04	0.0
8	36	-2.31e-03	0.0	-7.83	0.0	5.69e-04	0.0
8	37	0.64	0.0	-8.20	0.0	4.33e-03	0.0
8	38	0.64	0.0	-8.20	0.0	4.33e-03	0.0
8	39	0.64	0.0	-8.20	0.0	4.31e-03	0.0
8	40	0.64	0.0	-8.20	0.0	4.35e-03	0.0
8	41	1.96	0.0	-9.56	0.0	0.01	0.0
8	42	1.96	0.0	-9.56	0.0	0.01	0.0
8	43	1.96	0.0	-9.56	0.0	0.01	0.0
8	44	1.96	0.0	-9.56	0.0	0.01	0.0
8	45	0.64	0.0	-8.21	0.0	4.49e-03	0.0
8	46	0.64	0.0	-8.21	0.0	4.50e-03	0.0
8	47	0.64	0.0	-8.21	0.0	4.48e-03	0.0
8	48	0.64	0.0	-8.21	0.0	4.52e-03	0.0
8	49	-3.23e-03	0.0	-7.24	0.0	3.26e-04	0.0
8	50	-3.23e-03	0.0	-7.24	0.0	3.34e-04	0.0
8	51	-3.25e-03	0.0	-7.23	0.0	3.10e-04	0.0
8	52	-3.21e-03	0.0	-7.24	0.0	3.51e-04	0.0

Nodo	Cmb	Traslazione X	Traslazione Y	Traslazione Z	Rotazione X	Rotazione Y	Rotazione Z
8	53	1.32	0.0	-8.60	0.0	6.03e-03	0.0
8	54	1.32	0.0	-8.60	0.0	6.04e-03	0.0
8	55	1.32	0.0	-8.60	0.0	6.01e-03	0.0
8	56	1.32	0.0	-8.60	0.0	6.05e-03	0.0
8	57	-2.21e-03	0.0	-7.25	0.0	4.94e-04	0.0
8	58	-2.21e-03	0.0	-7.25	0.0	5.02e-04	0.0
8	59	-2.23e-03	0.0	-7.24	0.0	4.77e-04	0.0
8	60	-2.19e-03	0.0	-7.25	0.0	5.18e-04	0.0
8	61	1.75	0.0	-11.27	0.0	0.02	0.0
8	62	1.75	0.0	-11.27	0.0	0.02	0.0
8	63	1.75	0.0	-11.27	0.0	0.02	0.0
8	64	1.76	0.0	-11.27	0.0	0.02	0.0
8	65	3.07	0.0	-12.63	0.0	0.02	0.0
8	66	3.07	0.0	-12.63	0.0	0.02	0.0
8	67	3.07	0.0	-12.63	0.0	0.02	0.0
8	68	3.07	0.0	-12.63	0.0	0.02	0.0
8	69	1.76	0.0	-11.28	0.0	0.02	0.0
8	70	1.76	0.0	-11.28	0.0	0.02	0.0
8	71	1.76	0.0	-11.28	0.0	0.02	0.0
8	72	1.76	0.0	-11.28	0.0	0.02	0.0
8	73	1.11	0.0	-10.31	0.0	0.01	0.0
8	74	1.11	0.0	-10.31	0.0	0.01	0.0
8	75	1.11	0.0	-10.30	0.0	0.01	0.0
8	76	1.11	0.0	-10.31	0.0	0.01	0.0
8	77	2.43	0.0	-11.67	0.0	0.02	0.0
8	78	2.43	0.0	-11.67	0.0	0.02	0.0
8	79	2.43	0.0	-11.67	0.0	0.02	0.0
8	80	2.43	0.0	-11.67	0.0	0.02	0.0
8	81	1.11	0.0	-10.32	0.0	0.01	0.0
8	82	1.11	0.0	-10.32	0.0	0.01	0.0
8	83	1.11	0.0	-10.31	0.0	0.01	0.0
8	84	1.11	0.0	-10.32	0.0	0.01	0.0
8	85	0.64	0.0	-8.39	0.0	4.32e-03	0.0
8	86	0.64	0.0	-8.39	0.0	4.33e-03	0.0
8	87	0.64	0.0	-8.39	0.0	4.30e-03	0.0
8	88	0.64	0.0	-8.39	0.0	4.34e-03	0.0
8	89	1.96	0.0	-9.76	0.0	0.01	0.0
8	90	1.96	0.0	-9.76	0.0	0.01	0.0
8	91	1.96	0.0	-9.76	0.0	0.01	0.0
8	92	1.96	0.0	-9.76	0.0	0.01	0.0
8	93	0.64	0.0	-8.40	0.0	4.49e-03	0.0
8	94	0.64	0.0	-8.40	0.0	4.49e-03	0.0
8	95	0.64	0.0	-8.40	0.0	4.47e-03	0.0
8	96	0.64	0.0	-8.40	0.0	4.51e-03	0.0
8	97	-3.23e-03	0.0	-7.43	0.0	3.18e-04	0.0
8	98	-3.23e-03	0.0	-7.43	0.0	3.26e-04	0.0
8	99	-3.25e-03	0.0	-7.43	0.0	3.01e-04	0.0
8	100	-3.21e-03	0.0	-7.43	0.0	3.43e-04	0.0
8	101	1.32	0.0	-8.79	0.0	6.02e-03	0.0
8	102	1.32	0.0	-8.79	0.0	6.03e-03	0.0
8	103	1.32	0.0	-8.79	0.0	6.00e-03	0.0
8	104	1.32	0.0	-8.80	0.0	6.05e-03	0.0
8	105	-2.21e-03	0.0	-7.44	0.0	4.85e-04	0.0
8	106	-2.21e-03	0.0	-7.44	0.0	4.94e-04	0.0
8	107	-2.23e-03	0.0	-7.44	0.0	4.69e-04	0.0
8	108	-2.19e-03	0.0	-7.44	0.0	5.10e-04	0.0
8	109	6.92	0.0	-13.44	0.0	0.04	0.0
8	110	-2.18e-03	0.0	-4.15	0.0	3.47e-04	0.0
8	111	-2.18e-03	0.0	-4.15	0.0	3.54e-04	0.0
8	112	-2.20e-03	0.0	-4.15	0.0	3.33e-04	0.0
8	113	-2.16e-03	0.0	-4.15	0.0	3.68e-04	0.0
8	114	0.97	0.0	-5.16	0.0	4.57e-03	0.0
8	115	0.97	0.0	-5.16	0.0	4.58e-03	0.0
8	116	0.97	0.0	-5.16	0.0	4.56e-03	0.0
8	117	0.97	0.0	-5.16	0.0	4.59e-03	0.0
8	118	-1.42e-03	0.0	-4.16	0.0	4.71e-04	0.0
8	119	-1.42e-03	0.0	-4.16	0.0	4.78e-04	0.0
8	120	-1.44e-03	0.0	-4.16	0.0	4.57e-04	0.0
8	121	-1.41e-03	0.0	-4.16	0.0	4.92e-04	0.0
8	122	1.09	0.0	-6.46	0.0	9.82e-03	0.0
8	123	1.09	0.0	-6.46	0.0	9.83e-03	0.0
8	124	1.09	0.0	-6.46	0.0	9.81e-03	0.0
8	125	1.09	0.0	-6.46	0.0	9.85e-03	0.0
8	126	2.07	0.0	-7.47	0.0	0.01	0.0
8	127	2.07	0.0	-7.47	0.0	0.01	0.0

Nodo	Cmb	Traslazione X	Traslazione Y	Traslazione Z	Rotazione X	Rotazione Y	Rotazione Z
8	128	2.07	0.0	-7.47	0.0	0.01	0.0
8	129	2.07	0.0	-7.47	0.0	0.01	0.0
8	130	1.10	0.0	-6.47	0.0	9.95e-03	0.0
8	131	1.10	0.0	-6.47	0.0	9.96e-03	0.0
8	132	1.10	0.0	-6.47	0.0	9.93e-03	0.0
8	133	1.10	0.0	-6.47	0.0	9.97e-03	0.0
8	134	0.62	0.0	-5.75	0.0	6.85e-03	0.0
8	135	0.62	0.0	-5.75	0.0	6.86e-03	0.0
8	136	0.62	0.0	-5.75	0.0	6.84e-03	0.0
8	137	0.62	0.0	-5.75	0.0	6.87e-03	0.0
8	138	1.59	0.0	-6.76	0.0	0.01	0.0
8	139	1.59	0.0	-6.76	0.0	0.01	0.0
8	140	1.59	0.0	-6.76	0.0	0.01	0.0
8	141	1.59	0.0	-6.76	0.0	0.01	0.0
8	142	0.62	0.0	-5.75	0.0	6.98e-03	0.0
8	143	0.62	0.0	-5.75	0.0	6.98e-03	0.0
8	144	0.62	0.0	-5.75	0.0	6.96e-03	0.0
8	145	0.62	0.0	-5.75	0.0	7.00e-03	0.0
8	146	-2.16e-03	0.0	-3.28	0.0	1.63e-04	0.0
8	147	-2.16e-03	0.0	-3.28	0.0	1.69e-04	0.0
8	148	-2.18e-03	0.0	-3.28	0.0	1.52e-04	0.0
8	149	-2.15e-03	0.0	-3.29	0.0	1.80e-04	0.0
8	150	0.97	0.0	-4.29	0.0	4.39e-03	0.0
8	151	0.97	0.0	-4.29	0.0	4.39e-03	0.0
8	152	0.97	0.0	-4.29	0.0	4.38e-03	0.0
8	153	0.97	0.0	-4.29	0.0	4.38e-03	0.0
8	154	-1.41e-03	0.0	-3.29	0.0	2.87e-04	0.0
8	155	-1.41e-03	0.0	-3.29	0.0	2.93e-04	0.0
8	156	-1.42e-03	0.0	-3.29	0.0	2.76e-04	0.0
8	157	-1.42e-03	0.0	-3.29	0.0	2.76e-04	0.0
8	158	1.25	0.0	-8.20	0.0	0.01	0.0
8	159	1.25	0.0	-8.20	0.0	0.01	0.0
8	160	1.25	0.0	-8.20	0.0	0.01	0.0
8	161	1.25	0.0	-8.20	0.0	0.01	0.0
8	162	2.23	0.0	-9.21	0.0	0.02	0.0
8	163	2.23	0.0	-9.21	0.0	0.02	0.0
8	164	2.23	0.0	-9.21	0.0	0.02	0.0
8	165	2.23	0.0	-9.22	0.0	0.02	0.0
8	166	1.25	0.0	-8.21	0.0	0.01	0.0
8	167	1.25	0.0	-8.21	0.0	0.01	0.0
8	168	1.25	0.0	-8.21	0.0	0.01	0.0
8	169	1.25	0.0	-8.21	0.0	0.01	0.0
8	170	0.62	0.0	-7.25	0.0	6.85e-03	0.0
8	171	0.62	0.0	-7.25	0.0	6.85e-03	0.0
8	172	0.62	0.0	-7.25	0.0	6.83e-03	0.0
8	173	0.62	0.0	-7.25	0.0	6.87e-03	0.0
8	174	1.59	0.0	-8.26	0.0	0.01	0.0
8	175	1.59	0.0	-8.26	0.0	0.01	0.0
8	176	1.59	0.0	-8.26	0.0	0.01	0.0
8	177	1.59	0.0	-8.26	0.0	0.01	0.0
8	178	0.62	0.0	-7.26	0.0	6.97e-03	0.0
8	179	0.62	0.0	-7.26	0.0	6.98e-03	0.0
8	180	0.62	0.0	-7.26	0.0	6.96e-03	0.0
8	181	0.62	0.0	-7.26	0.0	6.99e-03	0.0
9	1	-3.27e-03	0.0	-4.44	0.0	1.03e-04	0.0
9	2	-3.27e-03	0.0	-4.44	0.0	1.22e-04	0.0
9	3	-3.31e-03	0.0	-4.44	0.0	7.39e-05	0.0
9	4	-3.23e-03	0.0	-4.45	0.0	1.51e-04	0.0
9	5	1.32	0.0	-6.15	0.0	5.87e-03	0.0
9	6	1.32	0.0	-6.15	0.0	5.89e-03	0.0
9	7	1.32	0.0	-6.15	0.0	5.84e-03	0.0
9	8	1.32	0.0	-6.16	0.0	5.92e-03	0.0
9	9	-2.13e-03	0.0	-4.46	0.0	2.91e-04	0.0
9	10	-2.13e-03	0.0	-4.46	0.0	3.09e-04	0.0
9	11	-2.16e-03	0.0	-4.46	0.0	2.62e-04	0.0
9	12	-2.09e-03	0.0	-4.47	0.0	3.39e-04	0.0
9	13	0.86	0.0	-9.45	0.0	5.64e-03	0.0
9	14	0.86	0.0	-9.45	0.0	5.65e-03	0.0
9	15	0.86	0.0	-9.45	0.0	5.62e-03	0.0
9	16	0.86	0.0	-9.45	0.0	5.67e-03	0.0
9	17	2.17	0.0	-11.16	0.0	0.01	0.0
9	18	2.17	0.0	-11.16	0.0	0.01	0.0
9	19	2.17	0.0	-11.16	0.0	0.01	0.0
9	20	2.17	0.0	-11.16	0.0	0.01	0.0
9	21	0.86	0.0	-9.47	0.0	5.83e-03	0.0

Nodo	Cmb	Traslazione X	Traslazione Y	Traslazione Z	Rotazione X	Rotazione Y	Rotazione Z
9	22	0.86	0.0	-9.47	0.0	5.84e-03	0.0
9	23	0.86	0.0	-9.47	0.0	5.81e-03	0.0
9	24	0.86	0.0	-9.47	0.0	5.85e-03	0.0
9	25	-3.75e-03	0.0	-7.84	0.0	2.36e-04	0.0
9	26	-3.75e-03	0.0	-7.84	0.0	2.48e-04	0.0
9	27	-3.78e-03	0.0	-7.84	0.0	2.19e-04	0.0
9	28	-3.73e-03	0.0	-7.84	0.0	2.65e-04	0.0
9	29	1.31	0.0	-9.55	0.0	6.01e-03	0.0
9	30	1.31	0.0	-9.55	0.0	6.02e-03	0.0
9	31	1.31	0.0	-9.55	0.0	5.99e-03	0.0
9	32	1.32	0.0	-9.55	0.0	6.03e-03	0.0
9	33	-2.61e-03	0.0	-7.86	0.0	4.24e-04	0.0
9	34	-2.61e-03	0.0	-7.86	0.0	4.35e-04	0.0
9	35	-2.63e-03	0.0	-7.86	0.0	4.07e-04	0.0
9	36	-2.58e-03	0.0	-7.86	0.0	4.53e-04	0.0
9	37	0.64	0.0	-8.45	0.0	4.23e-03	0.0
9	38	0.64	0.0	-8.45	0.0	4.25e-03	0.0
9	39	0.64	0.0	-8.45	0.0	4.22e-03	0.0
9	40	0.64	0.0	-8.46	0.0	4.26e-03	0.0
9	41	1.96	0.0	-10.16	0.0	0.01	0.0
9	42	1.96	0.0	-10.16	0.0	0.01	0.0
9	43	1.96	0.0	-10.16	0.0	9.99e-03	0.0
9	44	1.96	0.0	-10.17	0.0	0.01	0.0
9	45	0.64	0.0	-8.48	0.0	4.42e-03	0.0
9	46	0.64	0.0	-8.48	0.0	4.43e-03	0.0
9	47	0.64	0.0	-8.47	0.0	4.41e-03	0.0
9	48	0.64	0.0	-8.48	0.0	4.45e-03	0.0
9	49	-3.62e-03	0.0	-7.25	0.0	1.94e-04	0.0
9	50	-3.62e-03	0.0	-7.25	0.0	2.05e-04	0.0
9	51	-3.65e-03	0.0	-7.25	0.0	1.76e-04	0.0
9	52	-3.60e-03	0.0	-7.25	0.0	2.22e-04	0.0
9	53	1.32	0.0	-8.96	0.0	5.96e-03	0.0
9	54	1.32	0.0	-8.96	0.0	5.97e-03	0.0
9	55	1.32	0.0	-8.96	0.0	5.95e-03	0.0
9	56	1.32	0.0	-8.96	0.0	5.99e-03	0.0
9	57	-2.48e-03	0.0	-7.27	0.0	3.81e-04	0.0
9	58	-2.48e-03	0.0	-7.27	0.0	3.93e-04	0.0
9	59	-2.50e-03	0.0	-7.27	0.0	3.64e-04	0.0
9	60	-2.45e-03	0.0	-7.27	0.0	4.10e-04	0.0
9	61	1.75	0.0	-12.24	0.0	0.02	0.0
9	62	1.75	0.0	-12.24	0.0	0.02	0.0
9	63	1.75	0.0	-12.23	0.0	0.02	0.0
9	64	1.75	0.0	-12.24	0.0	0.02	0.0
9	65	3.07	0.0	-13.95	0.0	0.02	0.0
9	66	3.07	0.0	-13.95	0.0	0.02	0.0
9	67	3.07	0.0	-13.94	0.0	0.02	0.0
9	68	3.07	0.0	-13.95	0.0	0.02	0.0
9	69	1.76	0.0	-12.26	0.0	0.02	0.0
9	70	1.76	0.0	-12.26	0.0	0.02	0.0
9	71	1.76	0.0	-12.26	0.0	0.02	0.0
9	72	1.76	0.0	-12.26	0.0	0.02	0.0
9	73	1.11	0.0	-11.03	0.0	0.01	0.0
9	74	1.11	0.0	-11.03	0.0	0.01	0.0
9	75	1.11	0.0	-11.03	0.0	0.01	0.0
9	76	1.11	0.0	-11.03	0.0	0.01	0.0
9	77	2.43	0.0	-12.74	0.0	0.02	0.0
9	78	2.43	0.0	-12.74	0.0	0.02	0.0
9	79	2.43	0.0	-12.74	0.0	0.02	0.0
9	80	2.43	0.0	-12.74	0.0	0.02	0.0
9	81	1.11	0.0	-11.05	0.0	0.01	0.0
9	82	1.11	0.0	-11.05	0.0	0.01	0.0
9	83	1.11	0.0	-11.05	0.0	0.01	0.0
9	84	1.11	0.0	-11.06	0.0	0.01	0.0
9	85	0.64	0.0	-8.65	0.0	4.23e-03	0.0
9	86	0.64	0.0	-8.65	0.0	4.24e-03	0.0
9	87	0.64	0.0	-8.65	0.0	4.21e-03	0.0
9	88	0.64	0.0	-8.65	0.0	4.26e-03	0.0
9	89	1.96	0.0	-10.36	0.0	1.00e-02	0.0
9	90	1.96	0.0	-10.36	0.0	0.01	0.0
9	91	1.96	0.0	-10.36	0.0	9.98e-03	0.0
9	92	1.96	0.0	-10.36	0.0	0.01	0.0
9	93	0.64	0.0	-8.67	0.0	4.42e-03	0.0
9	94	0.64	0.0	-8.67	0.0	4.43e-03	0.0
9	95	0.64	0.0	-8.67	0.0	4.40e-03	0.0
9	96	0.64	0.0	-8.67	0.0	4.44e-03	0.0

Nodo	Cmb	Traslazione X	Traslazione Y	Traslazione Z	Rotazione X	Rotazione Y	Rotazione Z
9	97	-3.62e-03	0.0	-7.44	0.0	1.86e-04	0.0
9	98	-3.62e-03	0.0	-7.44	0.0	1.97e-04	0.0
9	99	-3.64e-03	0.0	-7.44	0.0	1.69e-04	0.0
9	100	-3.59e-03	0.0	-7.45	0.0	2.15e-04	0.0
9	101	1.32	0.0	-9.15	0.0	5.96e-03	0.0
9	102	1.32	0.0	-9.15	0.0	5.97e-03	0.0
9	103	1.32	0.0	-9.15	0.0	5.94e-03	0.0
9	104	1.32	0.0	-9.16	0.0	5.98e-03	0.0
9	105	-2.47e-03	0.0	-7.46	0.0	3.74e-04	0.0
9	106	-2.47e-03	0.0	-7.47	0.0	3.85e-04	0.0
9	107	-2.49e-03	0.0	-7.46	0.0	3.56e-04	0.0
9	108	-2.45e-03	0.0	-7.47	0.0	4.03e-04	0.0
9	109	6.92	0.0	-15.92	0.0	0.04	0.0
9	110	-2.44e-03	0.0	-4.17	0.0	2.50e-04	0.0
9	111	-2.44e-03	0.0	-4.17	0.0	2.59e-04	0.0
9	112	-2.46e-03	0.0	-4.17	0.0	2.36e-04	0.0
9	113	-2.42e-03	0.0	-4.17	0.0	2.74e-04	0.0
9	114	0.97	0.0	-5.44	0.0	4.52e-03	0.0
9	115	0.97	0.0	-5.44	0.0	4.53e-03	0.0
9	116	0.97	0.0	-5.43	0.0	4.51e-03	0.0
9	117	0.97	0.0	-5.44	0.0	4.55e-03	0.0
9	118	-1.59e-03	0.0	-4.18	0.0	3.89e-04	0.0
9	119	-1.59e-03	0.0	-4.19	0.0	3.99e-04	0.0
9	120	-1.61e-03	0.0	-4.18	0.0	3.75e-04	0.0
9	121	-1.57e-03	0.0	-4.19	0.0	4.13e-04	0.0
9	122	1.09	0.0	-7.05	0.0	9.80e-03	0.0
9	123	1.09	0.0	-7.05	0.0	9.81e-03	0.0
9	124	1.09	0.0	-7.05	0.0	9.79e-03	0.0
9	125	1.09	0.0	-7.05	0.0	9.82e-03	0.0
9	126	2.07	0.0	-8.32	0.0	0.01	0.0
9	127	2.07	0.0	-8.32	0.0	0.01	0.0
9	128	2.07	0.0	-8.31	0.0	0.01	0.0
9	129	2.07	0.0	-8.32	0.0	0.01	0.0
9	130	1.10	0.0	-7.07	0.0	9.94e-03	0.0
9	131	1.10	0.0	-7.07	0.0	9.95e-03	0.0
9	132	1.10	0.0	-7.06	0.0	9.92e-03	0.0
9	133	1.10	0.0	-7.07	0.0	9.96e-03	0.0
9	134	0.62	0.0	-6.16	0.0	6.80e-03	0.0
9	135	0.62	0.0	-6.16	0.0	6.81e-03	0.0
9	136	0.62	0.0	-6.15	0.0	6.78e-03	0.0
9	137	0.62	0.0	-6.16	0.0	6.82e-03	0.0
9	138	1.59	0.0	-7.42	0.0	0.01	0.0
9	139	1.59	0.0	-7.42	0.0	0.01	0.0
9	140	1.59	0.0	-7.42	0.0	0.01	0.0
9	141	1.59	0.0	-7.42	0.0	0.01	0.0
9	142	0.62	0.0	-6.17	0.0	6.94e-03	0.0
9	143	0.62	0.0	-6.17	0.0	6.95e-03	0.0
9	144	0.62	0.0	-6.17	0.0	6.92e-03	0.0
9	145	0.62	0.0	-6.17	0.0	6.96e-03	0.0
9	146	-2.42e-03	0.0	-3.29	0.0	7.93e-05	0.0
9	147	-2.42e-03	0.0	-3.29	0.0	8.71e-05	0.0
9	148	-2.44e-03	0.0	-3.29	0.0	6.72e-05	0.0
9	149	-2.41e-03	0.0	-3.29	0.0	9.92e-05	0.0
9	150	0.97	0.0	-4.56	0.0	4.35e-03	0.0
9	151	0.97	0.0	-4.56	0.0	4.36e-03	0.0
9	152	0.97	0.0	-4.56	0.0	4.34e-03	0.0
9	153	0.97	0.0	-4.56	0.0	4.34e-03	0.0
9	154	-1.58e-03	0.0	-3.31	0.0	2.18e-04	0.0
9	155	-1.58e-03	0.0	-3.31	0.0	2.26e-04	0.0
9	156	-1.59e-03	0.0	-3.30	0.0	2.06e-04	0.0
9	157	-1.59e-03	0.0	-3.30	0.0	2.06e-04	0.0
9	158	1.25	0.0	-8.85	0.0	0.01	0.0
9	159	1.25	0.0	-8.85	0.0	0.01	0.0
9	160	1.25	0.0	-8.85	0.0	0.01	0.0
9	161	1.25	0.0	-8.85	0.0	0.01	0.0
9	162	2.23	0.0	-10.12	0.0	0.02	0.0
9	163	2.23	0.0	-10.12	0.0	0.02	0.0
9	164	2.23	0.0	-10.12	0.0	0.02	0.0
9	165	2.23	0.0	-10.12	0.0	0.02	0.0
9	166	1.25	0.0	-8.87	0.0	0.01	0.0
9	167	1.25	0.0	-8.87	0.0	0.01	0.0
9	168	1.25	0.0	-8.87	0.0	0.01	0.0
9	169	1.25	0.0	-8.87	0.0	0.01	0.0
9	170	0.62	0.0	-7.66	0.0	6.79e-03	0.0
9	171	0.62	0.0	-7.66	0.0	6.80e-03	0.0

Nodo	Cmb	Traslazione X	Traslazione Y	Traslazione Z	Rotazione X	Rotazione Y	Rotazione Z
9	172	0.62	0.0	-7.66	0.0	6.78e-03	0.0
9	173	0.62	0.0	-7.66	0.0	6.81e-03	0.0
9	174	1.59	0.0	-8.93	0.0	0.01	0.0
9	175	1.59	0.0	-8.93	0.0	0.01	0.0
9	176	1.59	0.0	-8.92	0.0	0.01	0.0
9	177	1.59	0.0	-8.93	0.0	0.01	0.0
9	178	0.62	0.0	-7.67	0.0	6.93e-03	0.0
9	179	0.62	0.0	-7.68	0.0	6.94e-03	0.0
9	180	0.62	0.0	-7.67	0.0	6.91e-03	0.0
9	181	0.62	0.0	-7.68	0.0	6.95e-03	0.0
10	1	-0.02	0.0	-4.45	0.0	2.95e-05	0.0
10	2	0.03	0.0	-4.45	0.0	1.61e-04	0.0
10	3	0.03	0.0	-4.45	0.0	1.24e-04	0.0
10	4	-0.03	0.0	-4.45	0.0	6.63e-05	0.0
10	5	5.09	0.0	-3.09	0.0	5.61e-03	0.0
10	6	5.14	0.0	-3.10	0.0	5.74e-03	0.0
10	7	5.15	0.0	-3.09	0.0	5.71e-03	0.0
10	8	5.09	0.0	-3.10	0.0	5.65e-03	0.0
10	9	-0.02	0.0	-4.47	0.0	1.65e-04	0.0
10	10	0.03	0.0	-4.47	0.0	2.97e-04	0.0
10	11	0.03	0.0	-4.47	0.0	2.60e-04	0.0
10	12	-0.03	0.0	-4.47	0.0	2.02e-04	0.0
10	13	4.44	0.0	-6.57	0.0	5.50e-03	0.0
10	14	4.47	0.0	-6.57	0.0	5.58e-03	0.0
10	15	4.47	0.0	-6.57	0.0	5.56e-03	0.0
10	16	4.44	0.0	-6.57	0.0	5.52e-03	0.0
10	17	9.56	0.0	-5.22	0.0	0.01	0.0
10	18	9.59	0.0	-5.22	0.0	0.01	0.0
10	19	9.59	0.0	-5.22	0.0	0.01	0.0
10	20	9.55	0.0	-5.22	0.0	0.01	0.0
10	21	4.44	0.0	-6.59	0.0	5.64e-03	0.0
10	22	4.47	0.0	-6.59	0.0	5.71e-03	0.0
10	23	4.47	0.0	-6.59	0.0	5.69e-03	0.0
10	24	4.44	0.0	-6.59	0.0	5.66e-03	0.0
10	25	-0.01	0.0	-7.85	0.0	2.35e-04	0.0
10	26	0.02	0.0	-7.85	0.0	3.14e-04	0.0
10	27	0.02	0.0	-7.85	0.0	2.91e-04	0.0
10	28	-0.02	0.0	-7.85	0.0	2.57e-04	0.0
10	29	5.10	0.0	-6.50	0.0	5.82e-03	0.0
10	30	5.13	0.0	-6.50	0.0	5.90e-03	0.0
10	31	5.14	0.0	-6.50	0.0	5.87e-03	0.0
10	32	5.10	0.0	-6.50	0.0	5.84e-03	0.0
10	33	-0.01	0.0	-7.87	0.0	3.70e-04	0.0
10	34	0.02	0.0	-7.87	0.0	4.49e-04	0.0
10	35	0.02	0.0	-7.87	0.0	4.27e-04	0.0
10	36	-0.02	0.0	-7.87	0.0	3.92e-04	0.0
10	37	3.32	0.0	-6.30	0.0	4.13e-03	0.0
10	38	3.35	0.0	-6.30	0.0	4.21e-03	0.0
10	39	3.35	0.0	-6.30	0.0	4.18e-03	0.0
10	40	3.32	0.0	-6.30	0.0	4.15e-03	0.0
10	41	8.43	0.0	-4.95	0.0	9.71e-03	0.0
10	42	8.46	0.0	-4.95	0.0	9.79e-03	0.0
10	43	8.47	0.0	-4.95	0.0	9.77e-03	0.0
10	44	8.43	0.0	-4.95	0.0	9.73e-03	0.0
10	45	3.32	0.0	-6.32	0.0	4.26e-03	0.0
10	46	3.35	0.0	-6.32	0.0	4.34e-03	0.0
10	47	3.35	0.0	-6.32	0.0	4.32e-03	0.0
10	48	3.31	0.0	-6.32	0.0	4.28e-03	0.0
10	49	-0.01	0.0	-7.26	0.0	1.87e-04	0.0
10	50	0.02	0.0	-7.26	0.0	2.66e-04	0.0
10	51	0.02	0.0	-7.26	0.0	2.44e-04	0.0
10	52	-0.02	0.0	-7.26	0.0	2.09e-04	0.0
10	53	5.10	0.0	-5.91	0.0	5.77e-03	0.0
10	54	5.13	0.0	-5.91	0.0	5.85e-03	0.0
10	55	5.14	0.0	-5.91	0.0	5.83e-03	0.0
10	56	5.10	0.0	-5.91	0.0	5.79e-03	0.0
10	57	-0.01	0.0	-7.28	0.0	3.23e-04	0.0
10	58	0.02	0.0	-7.28	0.0	4.02e-04	0.0
10	59	0.02	0.0	-7.28	0.0	3.80e-04	0.0
10	60	-0.02	0.0	-7.28	0.0	3.45e-04	0.0
10	61	12.47	0.0	-3.62	0.0	0.02	0.0
10	62	12.49	0.0	-3.62	0.0	0.02	0.0
10	63	12.50	0.0	-3.62	0.0	0.02	0.0
10	64	12.46	0.0	-3.62	0.0	0.02	0.0
10	65	17.58	0.0	-2.26	0.0	0.02	0.0

Nodo	Cmb	Traslazione X	Traslazione Y	Traslazione Z	Rotazione X	Rotazione Y	Rotazione Z
10	66	17.61	0.0	-2.26	0.0	0.02	0.0
10	67	17.61	0.0	-2.26	0.0	0.02	0.0
10	68	17.58	0.0	-2.26	0.0	0.02	0.0
10	69	12.46	0.0	-3.64	0.0	0.02	0.0
10	70	12.49	0.0	-3.64	0.0	0.02	0.0
10	71	12.50	0.0	-3.63	0.0	0.02	0.0
10	72	12.46	0.0	-3.64	0.0	0.02	0.0
10	73	9.13	0.0	-4.57	0.0	0.01	0.0
10	74	9.16	0.0	-4.58	0.0	0.01	0.0
10	75	9.17	0.0	-4.57	0.0	0.01	0.0
10	76	9.13	0.0	-4.58	0.0	0.01	0.0
10	77	14.25	0.0	-3.22	0.0	0.02	0.0
10	78	14.28	0.0	-3.22	0.0	0.02	0.0
10	79	14.28	0.0	-3.22	0.0	0.02	0.0
10	80	14.25	0.0	-3.22	0.0	0.02	0.0
10	81	9.13	0.0	-4.59	0.0	0.01	0.0
10	82	9.16	0.0	-4.60	0.0	0.01	0.0
10	83	9.17	0.0	-4.59	0.0	0.01	0.0
10	84	9.13	0.0	-4.60	0.0	0.01	0.0
10	85	3.32	0.0	-6.50	0.0	4.12e-03	0.0
10	86	3.35	0.0	-6.50	0.0	4.20e-03	0.0
10	87	3.35	0.0	-6.50	0.0	4.18e-03	0.0
10	88	3.32	0.0	-6.50	0.0	4.15e-03	0.0
10	89	8.43	0.0	-5.14	0.0	9.71e-03	0.0
10	90	8.46	0.0	-5.14	0.0	9.79e-03	0.0
10	91	8.47	0.0	-5.14	0.0	9.76e-03	0.0
10	92	8.43	0.0	-5.14	0.0	9.73e-03	0.0
10	93	3.32	0.0	-6.52	0.0	4.26e-03	0.0
10	94	3.35	0.0	-6.52	0.0	4.34e-03	0.0
10	95	3.35	0.0	-6.52	0.0	4.32e-03	0.0
10	96	3.31	0.0	-6.52	0.0	4.28e-03	0.0
10	97	-0.01	0.0	-7.46	0.0	1.85e-04	0.0
10	98	0.02	0.0	-7.46	0.0	2.64e-04	0.0
10	99	0.02	0.0	-7.45	0.0	2.42e-04	0.0
10	100	-0.02	0.0	-7.46	0.0	2.07e-04	0.0
10	101	5.10	0.0	-6.10	0.0	5.77e-03	0.0
10	102	5.13	0.0	-6.10	0.0	5.85e-03	0.0
10	103	5.14	0.0	-6.10	0.0	5.82e-03	0.0
10	104	5.10	0.0	-6.10	0.0	5.79e-03	0.0
10	105	-0.01	0.0	-7.48	0.0	3.21e-04	0.0
10	106	0.02	0.0	-7.48	0.0	4.00e-04	0.0
10	107	0.02	0.0	-7.47	0.0	3.78e-04	0.0
10	108	-0.02	0.0	-7.48	0.0	3.43e-04	0.0
10	109	34.75	0.0	6.48	0.0	0.04	0.0
10	110	-0.01	0.0	-4.18	0.0	2.02e-04	0.0
10	111	0.01	0.0	-4.18	0.0	2.67e-04	0.0
10	112	0.02	0.0	-4.18	0.0	2.49e-04	0.0
10	113	-0.01	0.0	-4.18	0.0	2.20e-04	0.0
10	114	3.78	0.0	-3.17	0.0	4.34e-03	0.0
10	115	3.80	0.0	-3.18	0.0	4.40e-03	0.0
10	116	3.81	0.0	-3.17	0.0	4.38e-03	0.0
10	117	3.78	0.0	-3.18	0.0	4.36e-03	0.0
10	118	-0.01	0.0	-4.19	0.0	3.02e-04	0.0
10	119	0.01	0.0	-4.19	0.0	3.68e-04	0.0
10	120	0.02	0.0	-4.19	0.0	3.50e-04	0.0
10	121	-0.01	0.0	-4.19	0.0	3.20e-04	0.0
10	122	7.54	0.0	-1.86	0.0	9.58e-03	0.0
10	123	7.57	0.0	-1.86	0.0	9.64e-03	0.0
10	124	7.57	0.0	-1.86	0.0	9.62e-03	0.0
10	125	7.54	0.0	-1.86	0.0	9.60e-03	0.0
10	126	11.33	0.0	-0.85	0.0	0.01	0.0
10	127	11.36	0.0	-0.86	0.0	0.01	0.0
10	128	11.36	0.0	-0.85	0.0	0.01	0.0
10	129	11.33	0.0	-0.86	0.0	0.01	0.0
10	130	7.54	0.0	-1.87	0.0	9.68e-03	0.0
10	131	7.57	0.0	-1.87	0.0	9.74e-03	0.0
10	132	7.57	0.0	-1.87	0.0	9.73e-03	0.0
10	133	7.54	0.0	-1.87	0.0	9.70e-03	0.0
10	134	5.07	0.0	-2.57	0.0	6.65e-03	0.0
10	135	5.09	0.0	-2.57	0.0	6.72e-03	0.0
10	136	5.10	0.0	-2.57	0.0	6.70e-03	0.0
10	137	5.07	0.0	-2.57	0.0	6.67e-03	0.0
10	138	8.86	0.0	-1.57	0.0	0.01	0.0
10	139	8.88	0.0	-1.57	0.0	0.01	0.0
10	140	8.89	0.0	-1.57	0.0	0.01	0.0

Nodo	Cmb	Traslazione X	Traslazione Y	Traslazione Z	Rotazione X	Rotazione Y	Rotazione Z
10	141	8.86	0.0	-1.57	0.0	0.01	0.0
10	142	5.07	0.0	-2.58	0.0	6.75e-03	0.0
10	143	5.09	0.0	-2.59	0.0	6.82e-03	0.0
10	144	5.10	0.0	-2.58	0.0	6.80e-03	0.0
10	145	5.07	0.0	-2.59	0.0	6.77e-03	0.0
10	146	-9.02e-03	0.0	-3.30	0.0	4.32e-05	0.0
10	147	0.01	0.0	-3.30	0.0	9.81e-05	0.0
10	148	0.01	0.0	-3.30	0.0	8.28e-05	0.0
10	149	-0.01	0.0	-3.30	0.0	5.85e-05	0.0
10	150	3.78	0.0	-2.29	0.0	4.18e-03	0.0
10	151	3.80	0.0	-2.29	0.0	4.23e-03	0.0
10	152	3.80	0.0	-2.29	0.0	4.22e-03	0.0
10	153	3.80	0.0	-2.29	0.0	4.22e-03	0.0
10	154	-9.46e-03	0.0	-3.31	0.0	1.44e-04	0.0
10	155	0.01	0.0	-3.31	0.0	1.99e-04	0.0
10	156	0.01	0.0	-3.31	0.0	1.83e-04	0.0
10	157	0.01	0.0	-3.31	0.0	1.83e-04	0.0
10	158	8.37	0.0	-3.13	0.0	0.01	0.0
10	159	8.39	0.0	-3.13	0.0	0.01	0.0
10	160	8.40	0.0	-3.12	0.0	0.01	0.0
10	161	8.37	0.0	-3.13	0.0	0.01	0.0
10	162	12.16	0.0	-2.12	0.0	0.01	0.0
10	163	12.18	0.0	-2.12	0.0	0.01	0.0
10	164	12.19	0.0	-2.12	0.0	0.01	0.0
10	165	12.16	0.0	-2.12	0.0	0.01	0.0
10	166	8.37	0.0	-3.14	0.0	0.01	0.0
10	167	8.39	0.0	-3.14	0.0	0.01	0.0
10	168	8.40	0.0	-3.14	0.0	0.01	0.0
10	169	8.37	0.0	-3.14	0.0	0.01	0.0
10	170	5.07	0.0	-4.07	0.0	6.68e-03	0.0
10	171	5.09	0.0	-4.08	0.0	6.74e-03	0.0
10	172	5.10	0.0	-4.07	0.0	6.72e-03	0.0
10	173	5.07	0.0	-4.08	0.0	6.69e-03	0.0
10	174	8.86	0.0	-3.07	0.0	0.01	0.0
10	175	8.88	0.0	-3.07	0.0	0.01	0.0
10	176	8.89	0.0	-3.07	0.0	0.01	0.0
10	177	8.86	0.0	-3.07	0.0	0.01	0.0
10	178	5.07	0.0	-4.09	0.0	6.78e-03	0.0
10	179	5.09	0.0	-4.09	0.0	6.84e-03	0.0
10	180	5.10	0.0	-4.09	0.0	6.82e-03	0.0
10	181	5.07	0.0	-4.09	0.0	6.80e-03	0.0
11	1	2.92e-03	0.0	-4.43	0.0	-2.31e-04	0.0
11	2	2.92e-03	0.0	-4.43	0.0	-2.17e-04	0.0
11	3	2.96e-03	0.0	-4.43	0.0	-1.90e-04	0.0
11	4	2.89e-03	0.0	-4.44	0.0	-2.58e-04	0.0
11	5	1.32	0.0	-3.08	0.0	5.30e-03	0.0
11	6	1.32	0.0	-3.08	0.0	5.32e-03	0.0
11	7	1.32	0.0	-3.08	0.0	5.35e-03	0.0
11	8	1.32	0.0	-3.08	0.0	5.28e-03	0.0
11	9	1.90e-03	0.0	-4.44	0.0	-3.98e-04	0.0
11	10	1.90e-03	0.0	-4.44	0.0	-3.84e-04	0.0
11	11	1.93e-03	0.0	-4.44	0.0	-3.57e-04	0.0
11	12	1.87e-03	0.0	-4.45	0.0	-4.26e-04	0.0
11	13	0.86	0.0	-6.54	0.0	4.86e-03	0.0
11	14	0.86	0.0	-6.54	0.0	4.87e-03	0.0
11	15	0.86	0.0	-6.54	0.0	4.89e-03	0.0
11	16	0.86	0.0	-6.54	0.0	4.85e-03	0.0
11	17	2.18	0.0	-5.19	0.0	0.01	0.0
11	18	2.18	0.0	-5.19	0.0	0.01	0.0
11	19	2.18	0.0	-5.19	0.0	0.01	0.0
11	20	2.18	0.0	-5.19	0.0	0.01	0.0
11	21	0.86	0.0	-6.55	0.0	4.70e-03	0.0
11	22	0.86	0.0	-6.55	0.0	4.71e-03	0.0
11	23	0.86	0.0	-6.55	0.0	4.72e-03	0.0
11	24	0.86	0.0	-6.55	0.0	4.68e-03	0.0
11	25	3.35e-03	0.0	-7.82	0.0	-3.85e-04	0.0
11	26	3.35e-03	0.0	-7.82	0.0	-3.77e-04	0.0
11	27	3.37e-03	0.0	-7.82	0.0	-3.61e-04	0.0
11	28	3.33e-03	0.0	-7.82	0.0	-4.02e-04	0.0
11	29	1.32	0.0	-6.47	0.0	5.15e-03	0.0
11	30	1.32	0.0	-6.47	0.0	5.16e-03	0.0
11	31	1.32	0.0	-6.47	0.0	5.17e-03	0.0
11	32	1.32	0.0	-6.47	0.0	5.13e-03	0.0
11	33	2.33e-03	0.0	-7.83	0.0	-5.53e-04	0.0
11	34	2.33e-03	0.0	-7.83	0.0	-5.45e-04	0.0

Nodo	Cmb	Traslazione X	Traslazione Y	Traslazione Z	Rotazione X	Rotazione Y	Rotazione Z
11	35	2.35e-03	0.0	-7.83	0.0	-5.28e-04	0.0
11	36	2.31e-03	0.0	-7.83	0.0	-5.69e-04	0.0
11	37	0.65	0.0	-6.28	0.0	3.59e-03	0.0
11	38	0.65	0.0	-6.28	0.0	3.60e-03	0.0
11	39	0.65	0.0	-6.28	0.0	3.62e-03	0.0
11	40	0.65	0.0	-6.28	0.0	3.58e-03	0.0
11	41	1.96	0.0	-4.92	0.0	9.13e-03	0.0
11	42	1.96	0.0	-4.92	0.0	9.14e-03	0.0
11	43	1.96	0.0	-4.92	0.0	9.15e-03	0.0
11	44	1.96	0.0	-4.92	0.0	9.11e-03	0.0
11	45	0.65	0.0	-6.29	0.0	3.43e-03	0.0
11	46	0.65	0.0	-6.29	0.0	3.43e-03	0.0
11	47	0.65	0.0	-6.29	0.0	3.45e-03	0.0
11	48	0.64	0.0	-6.29	0.0	3.41e-03	0.0
11	49	3.23e-03	0.0	-7.24	0.0	-3.34e-04	0.0
11	50	3.23e-03	0.0	-7.24	0.0	-3.26e-04	0.0
11	51	3.25e-03	0.0	-7.23	0.0	-3.10e-04	0.0
11	52	3.21e-03	0.0	-7.24	0.0	-3.51e-04	0.0
11	53	1.32	0.0	-5.88	0.0	5.20e-03	0.0
11	54	1.32	0.0	-5.88	0.0	5.21e-03	0.0
11	55	1.32	0.0	-5.88	0.0	5.23e-03	0.0
11	56	1.32	0.0	-5.88	0.0	5.18e-03	0.0
11	57	2.21e-03	0.0	-7.25	0.0	-5.02e-04	0.0
11	58	2.21e-03	0.0	-7.25	0.0	-4.94e-04	0.0
11	59	2.23e-03	0.0	-7.24	0.0	-4.77e-04	0.0
11	60	2.19e-03	0.0	-7.25	0.0	-5.18e-04	0.0
11	61	1.76	0.0	-3.60	0.0	0.02	0.0
11	62	1.76	0.0	-3.60	0.0	0.02	0.0
11	63	1.76	0.0	-3.59	0.0	0.02	0.0
11	64	1.76	0.0	-3.60	0.0	0.02	0.0
11	65	3.08	0.0	-2.24	0.0	0.02	0.0
11	66	3.08	0.0	-2.24	0.0	0.02	0.0
11	67	3.08	0.0	-2.24	0.0	0.02	0.0
11	68	3.08	0.0	-2.24	0.0	0.02	0.0
11	69	1.76	0.0	-3.61	0.0	0.02	0.0
11	70	1.76	0.0	-3.61	0.0	0.02	0.0
11	71	1.76	0.0	-3.61	0.0	0.02	0.0
11	72	1.76	0.0	-3.61	0.0	0.02	0.0
11	73	1.12	0.0	-4.55	0.0	0.01	0.0
11	74	1.12	0.0	-4.55	0.0	0.01	0.0
11	75	1.12	0.0	-4.55	0.0	0.01	0.0
11	76	1.12	0.0	-4.56	0.0	0.01	0.0
11	77	2.44	0.0	-3.20	0.0	0.02	0.0
11	78	2.44	0.0	-3.20	0.0	0.02	0.0
11	79	2.44	0.0	-3.20	0.0	0.02	0.0
11	80	2.44	0.0	-3.20	0.0	0.02	0.0
11	81	1.12	0.0	-4.56	0.0	0.01	0.0
11	82	1.12	0.0	-4.56	0.0	0.01	0.0
11	83	1.12	0.0	-4.56	0.0	0.01	0.0
11	84	1.12	0.0	-4.57	0.0	0.01	0.0
11	85	0.65	0.0	-6.47	0.0	3.60e-03	0.0
11	86	0.65	0.0	-6.47	0.0	3.61e-03	0.0
11	87	0.65	0.0	-6.47	0.0	3.63e-03	0.0
11	88	0.65	0.0	-6.47	0.0	3.58e-03	0.0
11	89	1.96	0.0	-5.12	0.0	9.14e-03	0.0
11	90	1.96	0.0	-5.12	0.0	9.15e-03	0.0
11	91	1.96	0.0	-5.12	0.0	9.16e-03	0.0
11	92	1.96	0.0	-5.12	0.0	9.12e-03	0.0
11	93	0.65	0.0	-6.48	0.0	3.43e-03	0.0
11	94	0.65	0.0	-6.48	0.0	3.44e-03	0.0
11	95	0.65	0.0	-6.48	0.0	3.46e-03	0.0
11	96	0.64	0.0	-6.48	0.0	3.42e-03	0.0
11	97	3.23e-03	0.0	-7.43	0.0	-3.26e-04	0.0
11	98	3.23e-03	0.0	-7.43	0.0	-3.18e-04	0.0
11	99	3.25e-03	0.0	-7.43	0.0	-3.01e-04	0.0
11	100	3.21e-03	0.0	-7.43	0.0	-3.43e-04	0.0
11	101	1.32	0.0	-6.08	0.0	5.21e-03	0.0
11	102	1.32	0.0	-6.08	0.0	5.22e-03	0.0
11	103	1.32	0.0	-6.07	0.0	5.23e-03	0.0
11	104	1.32	0.0	-6.08	0.0	5.19e-03	0.0
11	105	2.21e-03	0.0	-7.44	0.0	-4.94e-04	0.0
11	106	2.21e-03	0.0	-7.44	0.0	-4.85e-04	0.0
11	107	2.23e-03	0.0	-7.44	0.0	-4.69e-04	0.0
11	108	2.19e-03	0.0	-7.44	0.0	-5.10e-04	0.0
11	109	6.93	0.0	6.46	0.0	0.04	0.0

Nodo	Cmb	Traslazione X	Traslazione Y	Traslazione Z	Rotazione X	Rotazione Y	Rotazione Z
11	110	2.18e-03	0.0	-4.15	0.0	-3.54e-04	0.0
11	111	2.18e-03	0.0	-4.15	0.0	-3.47e-04	0.0
11	112	2.20e-03	0.0	-4.15	0.0	-3.33e-04	0.0
11	113	2.16e-03	0.0	-4.15	0.0	-3.68e-04	0.0
11	114	0.98	0.0	-3.15	0.0	3.75e-03	0.0
11	115	0.98	0.0	-3.15	0.0	3.75e-03	0.0
11	116	0.98	0.0	-3.15	0.0	3.77e-03	0.0
11	117	0.98	0.0	-3.15	0.0	3.73e-03	0.0
11	118	1.42e-03	0.0	-4.16	0.0	-4.78e-04	0.0
11	119	1.42e-03	0.0	-4.16	0.0	-4.71e-04	0.0
11	120	1.44e-03	0.0	-4.16	0.0	-4.57e-04	0.0
11	121	1.41e-03	0.0	-4.16	0.0	-4.92e-04	0.0
11	122	1.10	0.0	-1.84	0.0	9.18e-03	0.0
11	123	1.10	0.0	-1.84	0.0	9.18e-03	0.0
11	124	1.10	0.0	-1.84	0.0	9.20e-03	0.0
11	125	1.10	0.0	-1.84	0.0	9.16e-03	0.0
11	126	2.08	0.0	-0.84	0.0	0.01	0.0
11	127	2.08	0.0	-0.84	0.0	0.01	0.0
11	128	2.08	0.0	-0.84	0.0	0.01	0.0
11	129	2.08	0.0	-0.84	0.0	0.01	0.0
11	130	1.10	0.0	-1.85	0.0	9.05e-03	0.0
11	131	1.10	0.0	-1.85	0.0	9.06e-03	0.0
11	132	1.10	0.0	-1.85	0.0	9.07e-03	0.0
11	133	1.10	0.0	-1.85	0.0	9.04e-03	0.0
11	134	0.62	0.0	-2.55	0.0	6.26e-03	0.0
11	135	0.62	0.0	-2.55	0.0	6.27e-03	0.0
11	136	0.62	0.0	-2.55	0.0	6.28e-03	0.0
11	137	0.62	0.0	-2.55	0.0	6.25e-03	0.0
11	138	1.60	0.0	-1.55	0.0	0.01	0.0
11	139	1.60	0.0	-1.55	0.0	0.01	0.0
11	140	1.60	0.0	-1.55	0.0	0.01	0.0
11	141	1.60	0.0	-1.55	0.0	0.01	0.0
11	142	0.62	0.0	-2.56	0.0	6.14e-03	0.0
11	143	0.62	0.0	-2.56	0.0	6.14e-03	0.0
11	144	0.62	0.0	-2.56	0.0	6.16e-03	0.0
11	145	0.62	0.0	-2.56	0.0	6.12e-03	0.0
11	146	2.16e-03	0.0	-3.28	0.0	-1.69e-04	0.0
11	147	2.16e-03	0.0	-3.28	0.0	-1.63e-04	0.0
11	148	2.18e-03	0.0	-3.28	0.0	-1.52e-04	0.0
11	149	2.15e-03	0.0	-3.29	0.0	-1.80e-04	0.0
11	150	0.98	0.0	-2.28	0.0	3.93e-03	0.0
11	151	0.98	0.0	-2.28	0.0	3.94e-03	0.0
11	152	0.98	0.0	-2.28	0.0	3.95e-03	0.0
11	153	0.98	0.0	-2.28	0.0	3.95e-03	0.0
11	154	1.41e-03	0.0	-3.29	0.0	-2.93e-04	0.0
11	155	1.41e-03	0.0	-3.29	0.0	-2.87e-04	0.0
11	156	1.42e-03	0.0	-3.29	0.0	-2.76e-04	0.0
11	157	1.42e-03	0.0	-3.29	0.0	-2.76e-04	0.0
11	158	1.26	0.0	-3.11	0.0	0.01	0.0
11	159	1.26	0.0	-3.11	0.0	0.01	0.0
11	160	1.26	0.0	-3.11	0.0	0.01	0.0
11	161	1.26	0.0	-3.11	0.0	0.01	0.0
11	162	2.23	0.0	-2.10	0.0	0.01	0.0
11	163	2.23	0.0	-2.10	0.0	0.01	0.0
11	164	2.23	0.0	-2.10	0.0	0.01	0.0
11	165	2.23	0.0	-2.10	0.0	0.01	0.0
11	166	1.26	0.0	-3.11	0.0	0.01	0.0
11	167	1.26	0.0	-3.11	0.0	0.01	0.0
11	168	1.26	0.0	-3.11	0.0	0.01	0.0
11	169	1.26	0.0	-3.12	0.0	0.01	0.0
11	170	0.62	0.0	-4.06	0.0	6.27e-03	0.0
11	171	0.62	0.0	-4.06	0.0	6.28e-03	0.0
11	172	0.62	0.0	-4.05	0.0	6.29e-03	0.0
11	173	0.62	0.0	-4.06	0.0	6.26e-03	0.0
11	174	1.60	0.0	-3.05	0.0	0.01	0.0
11	175	1.60	0.0	-3.05	0.0	0.01	0.0
11	176	1.60	0.0	-3.05	0.0	0.01	0.0
11	177	1.60	0.0	-3.05	0.0	0.01	0.0
11	178	0.62	0.0	-4.06	0.0	6.14e-03	0.0
11	179	0.62	0.0	-4.06	0.0	6.15e-03	0.0
11	180	0.62	0.0	-4.06	0.0	6.17e-03	0.0
11	181	0.62	0.0	-4.06	0.0	6.13e-03	0.0
12	1	-0.02	0.0	-4.45	0.0	-2.32e-05	0.0
12	2	0.03	0.0	-4.44	0.0	1.05e-04	0.0
12	3	0.04	0.0	-4.44	0.0	7.34e-05	0.0

Nodo	Cmb	Traslazione X	Traslazione Y	Traslazione Z	Rotazione X	Rotazione Y	Rotazione Z
12	4	-0.04	0.0	-4.45	0.0	8.22e-06	0.0
12	5	5.09	0.0	-2.76	0.0	5.59e-03	0.0
12	6	5.14	0.0	-2.75	0.0	5.72e-03	0.0
12	7	5.15	0.0	-2.75	0.0	5.69e-03	0.0
12	8	5.08	0.0	-2.76	0.0	5.62e-03	0.0
12	9	-0.02	0.0	-4.46	0.0	1.29e-04	0.0
12	10	0.03	0.0	-4.46	0.0	2.57e-04	0.0
12	11	0.04	0.0	-4.45	0.0	2.25e-04	0.0
12	12	-0.04	0.0	-4.46	0.0	1.60e-04	0.0
12	13	4.44	0.0	-6.24	0.0	5.45e-03	0.0
12	14	4.47	0.0	-6.24	0.0	5.53e-03	0.0
12	15	4.48	0.0	-6.24	0.0	5.51e-03	0.0
12	16	4.43	0.0	-6.24	0.0	5.47e-03	0.0
12	17	9.56	0.0	-4.55	0.0	0.01	0.0
12	18	9.59	0.0	-4.55	0.0	0.01	0.0
12	19	9.59	0.0	-4.55	0.0	0.01	0.0
12	20	9.55	0.0	-4.55	0.0	0.01	0.0
12	21	4.44	0.0	-6.25	0.0	5.60e-03	0.0
12	22	4.47	0.0	-6.25	0.0	5.68e-03	0.0
12	23	4.48	0.0	-6.25	0.0	5.66e-03	0.0
12	24	4.43	0.0	-6.25	0.0	5.62e-03	0.0
12	25	-0.01	0.0	-7.84	0.0	1.55e-04	0.0
12	26	0.02	0.0	-7.84	0.0	2.32e-04	0.0
12	27	0.02	0.0	-7.84	0.0	2.13e-04	0.0
12	28	-0.02	0.0	-7.84	0.0	1.74e-04	0.0
12	29	5.10	0.0	-6.15	0.0	5.77e-03	0.0
12	30	5.13	0.0	-6.15	0.0	5.85e-03	0.0
12	31	5.14	0.0	-6.15	0.0	5.83e-03	0.0
12	32	5.10	0.0	-6.15	0.0	5.79e-03	0.0
12	33	-0.01	0.0	-7.85	0.0	3.07e-04	0.0
12	34	0.02	0.0	-7.85	0.0	3.84e-04	0.0
12	35	0.02	0.0	-7.85	0.0	3.65e-04	0.0
12	36	-0.02	0.0	-7.85	0.0	3.26e-04	0.0
12	37	3.32	0.0	-6.06	0.0	4.08e-03	0.0
12	38	3.35	0.0	-6.05	0.0	4.15e-03	0.0
12	39	3.36	0.0	-6.05	0.0	4.13e-03	0.0
12	40	3.31	0.0	-6.06	0.0	4.10e-03	0.0
12	41	8.43	0.0	-4.37	0.0	9.69e-03	0.0
12	42	8.46	0.0	-4.36	0.0	9.77e-03	0.0
12	43	8.47	0.0	-4.36	0.0	9.75e-03	0.0
12	44	8.43	0.0	-4.37	0.0	9.71e-03	0.0
12	45	3.32	0.0	-6.07	0.0	4.23e-03	0.0
12	46	3.35	0.0	-6.06	0.0	4.31e-03	0.0
12	47	3.36	0.0	-6.06	0.0	4.29e-03	0.0
12	48	3.31	0.0	-6.07	0.0	4.25e-03	0.0
12	49	-0.01	0.0	-7.25	0.0	1.14e-04	0.0
12	50	0.02	0.0	-7.25	0.0	1.91e-04	0.0
12	51	0.02	0.0	-7.25	0.0	1.72e-04	0.0
12	52	-0.02	0.0	-7.25	0.0	1.33e-04	0.0
12	53	5.10	0.0	-5.56	0.0	5.73e-03	0.0
12	54	5.13	0.0	-5.56	0.0	5.80e-03	0.0
12	55	5.14	0.0	-5.56	0.0	5.79e-03	0.0
12	56	5.10	0.0	-5.56	0.0	5.75e-03	0.0
12	57	-0.01	0.0	-7.26	0.0	2.66e-04	0.0
12	58	0.02	0.0	-7.26	0.0	3.43e-04	0.0
12	59	0.02	0.0	-7.26	0.0	3.24e-04	0.0
12	60	-0.02	0.0	-7.27	0.0	2.85e-04	0.0
12	61	12.47	0.0	-2.66	0.0	0.02	0.0
12	62	12.49	0.0	-2.66	0.0	0.02	0.0
12	63	12.50	0.0	-2.66	0.0	0.02	0.0
12	64	12.46	0.0	-2.67	0.0	0.02	0.0
12	65	17.58	0.0	-0.97	0.0	0.02	0.0
12	66	17.61	0.0	-0.97	0.0	0.02	0.0
12	67	17.62	0.0	-0.97	0.0	0.02	0.0
12	68	17.57	0.0	-0.98	0.0	0.02	0.0
12	69	12.46	0.0	-2.68	0.0	0.02	0.0
12	70	12.49	0.0	-2.67	0.0	0.02	0.0
12	71	12.50	0.0	-2.67	0.0	0.02	0.0
12	72	12.46	0.0	-2.68	0.0	0.02	0.0
12	73	9.13	0.0	-3.86	0.0	0.01	0.0
12	74	9.16	0.0	-3.86	0.0	0.01	0.0
12	75	9.17	0.0	-3.86	0.0	0.01	0.0
12	76	9.13	0.0	-3.86	0.0	0.01	0.0
12	77	14.25	0.0	-2.17	0.0	0.02	0.0
12	78	14.28	0.0	-2.17	0.0	0.02	0.0

Nodo	Cmb	Traslazione X	Traslazione Y	Traslazione Z	Rotazione X	Rotazione Y	Rotazione Z
12	79	14.29	0.0	-2.17	0.0	0.02	0.0
12	80	14.24	0.0	-2.17	0.0	0.02	0.0
12	81	9.13	0.0	-3.87	0.0	0.01	0.0
12	82	9.16	0.0	-3.87	0.0	0.01	0.0
12	83	9.17	0.0	-3.87	0.0	0.01	0.0
12	84	9.13	0.0	-3.87	0.0	0.01	0.0
12	85	3.32	0.0	-6.25	0.0	4.07e-03	0.0
12	86	3.35	0.0	-6.25	0.0	4.15e-03	0.0
12	87	3.36	0.0	-6.25	0.0	4.13e-03	0.0
12	88	3.31	0.0	-6.25	0.0	4.09e-03	0.0
12	89	8.43	0.0	-4.56	0.0	9.69e-03	0.0
12	90	8.46	0.0	-4.56	0.0	9.77e-03	0.0
12	91	8.47	0.0	-4.56	0.0	9.75e-03	0.0
12	92	8.43	0.0	-4.56	0.0	9.71e-03	0.0
12	93	3.32	0.0	-6.26	0.0	4.23e-03	0.0
12	94	3.35	0.0	-6.26	0.0	4.30e-03	0.0
12	95	3.36	0.0	-6.26	0.0	4.28e-03	0.0
12	96	3.31	0.0	-6.26	0.0	4.25e-03	0.0
12	97	-0.01	0.0	-7.45	0.0	1.12e-04	0.0
12	98	0.02	0.0	-7.44	0.0	1.89e-04	0.0
12	99	0.02	0.0	-7.44	0.0	1.70e-04	0.0
12	100	-0.02	0.0	-7.45	0.0	1.31e-04	0.0
12	101	5.10	0.0	-5.76	0.0	5.73e-03	0.0
12	102	5.13	0.0	-5.75	0.0	5.80e-03	0.0
12	103	5.14	0.0	-5.75	0.0	5.78e-03	0.0
12	104	5.10	0.0	-5.76	0.0	5.74e-03	0.0
12	105	-0.01	0.0	-7.46	0.0	2.64e-04	0.0
12	106	0.02	0.0	-7.46	0.0	3.41e-04	0.0
12	107	0.02	0.0	-7.45	0.0	3.22e-04	0.0
12	108	-0.02	0.0	-7.46	0.0	2.83e-04	0.0
12	109	34.75	0.0	8.92	0.0	0.04	0.0
12	110	-0.01	0.0	-4.17	0.0	1.55e-04	0.0
12	111	0.01	0.0	-4.16	0.0	2.19e-04	0.0
12	112	0.02	0.0	-4.16	0.0	2.04e-04	0.0
12	113	-0.02	0.0	-4.17	0.0	1.71e-04	0.0
12	114	3.78	0.0	-2.91	0.0	4.31e-03	0.0
12	115	3.80	0.0	-2.91	0.0	4.38e-03	0.0
12	116	3.81	0.0	-2.91	0.0	4.36e-03	0.0
12	117	3.77	0.0	-2.92	0.0	4.33e-03	0.0
12	118	-0.01	0.0	-4.17	0.0	2.68e-04	0.0
12	119	0.01	0.0	-4.17	0.0	3.32e-04	0.0
12	120	0.02	0.0	-4.17	0.0	3.16e-04	0.0
12	121	-0.02	0.0	-4.18	0.0	2.84e-04	0.0
12	122	7.54	0.0	-1.28	0.0	9.58e-03	0.0
12	123	7.57	0.0	-1.28	0.0	9.65e-03	0.0
12	124	7.58	0.0	-1.28	0.0	9.63e-03	0.0
12	125	7.54	0.0	-1.28	0.0	9.60e-03	0.0
12	126	11.33	0.0	-0.03	0.0	0.01	0.0
12	127	11.36	0.0	-0.03	0.0	0.01	0.0
12	128	11.36	0.0	-0.03	0.0	0.01	0.0
12	129	11.33	0.0	-0.03	0.0	0.01	0.0
12	130	7.54	0.0	-1.29	0.0	9.69e-03	0.0
12	131	7.57	0.0	-1.29	0.0	9.76e-03	0.0
12	132	7.57	0.0	-1.29	0.0	9.74e-03	0.0
12	133	7.54	0.0	-1.29	0.0	9.71e-03	0.0
12	134	5.07	0.0	-2.17	0.0	6.64e-03	0.0
12	135	5.09	0.0	-2.17	0.0	6.70e-03	0.0
12	136	5.10	0.0	-2.17	0.0	6.69e-03	0.0
12	137	5.06	0.0	-2.17	0.0	6.65e-03	0.0
12	138	8.86	0.0	-0.92	0.0	0.01	0.0
12	139	8.88	0.0	-0.92	0.0	0.01	0.0
12	140	8.89	0.0	-0.92	0.0	0.01	0.0
12	141	8.85	0.0	-0.92	0.0	0.01	0.0
12	142	5.07	0.0	-2.18	0.0	6.75e-03	0.0
12	143	5.09	0.0	-2.18	0.0	6.82e-03	0.0
12	144	5.10	0.0	-2.18	0.0	6.80e-03	0.0
12	145	5.06	0.0	-2.18	0.0	6.77e-03	0.0
12	146	-8.89e-03	0.0	-3.29	0.0	3.56e-06	0.0
12	147	0.01	0.0	-3.29	0.0	5.69e-05	0.0
12	148	0.02	0.0	-3.29	0.0	4.38e-05	0.0
12	149	-0.01	0.0	-3.30	0.0	1.66e-05	0.0
12	150	3.78	0.0	-2.04	0.0	4.16e-03	0.0
12	151	3.80	0.0	-2.04	0.0	4.22e-03	0.0
12	152	3.81	0.0	-2.04	0.0	4.20e-03	0.0
12	153	3.81	0.0	-2.04	0.0	4.20e-03	0.0

Nodo	Cmb	Traslazione X	Traslazione Y	Traslazione Z	Rotazione X	Rotazione Y	Rotazione Z
12	154	-9.38e-03	0.0	-3.30	0.0	1.16e-04	0.0
12	155	0.01	0.0	-3.30	0.0	1.69e-04	0.0
12	156	0.02	0.0	-3.30	0.0	1.56e-04	0.0
12	157	0.02	0.0	-3.30	0.0	1.56e-04	0.0
12	158	8.37	0.0	-2.49	0.0	0.01	0.0
12	159	8.39	0.0	-2.49	0.0	0.01	0.0
12	160	8.40	0.0	-2.49	0.0	0.01	0.0
12	161	8.36	0.0	-2.49	0.0	0.01	0.0
12	162	12.16	0.0	-1.24	0.0	0.01	0.0
12	163	12.18	0.0	-1.24	0.0	0.01	0.0
12	164	12.19	0.0	-1.24	0.0	0.01	0.0
12	165	12.15	0.0	-1.24	0.0	0.01	0.0
12	166	8.37	0.0	-2.50	0.0	0.01	0.0
12	167	8.39	0.0	-2.50	0.0	0.01	0.0
12	168	8.40	0.0	-2.50	0.0	0.01	0.0
12	169	8.36	0.0	-2.50	0.0	0.01	0.0
12	170	5.07	0.0	-3.67	0.0	6.66e-03	0.0
12	171	5.09	0.0	-3.67	0.0	6.72e-03	0.0
12	172	5.10	0.0	-3.67	0.0	6.71e-03	0.0
12	173	5.06	0.0	-3.68	0.0	6.67e-03	0.0
12	174	8.86	0.0	-2.42	0.0	0.01	0.0
12	175	8.88	0.0	-2.42	0.0	0.01	0.0
12	176	8.89	0.0	-2.42	0.0	0.01	0.0
12	177	8.85	0.0	-2.42	0.0	0.01	0.0
12	178	5.07	0.0	-3.68	0.0	6.77e-03	0.0
12	179	5.09	0.0	-3.68	0.0	6.83e-03	0.0
12	180	5.10	0.0	-3.68	0.0	6.82e-03	0.0
12	181	5.06	0.0	-3.68	0.0	6.79e-03	0.0
13	1	-0.02	0.0	-4.45	0.0	-3.09e-05	0.0
13	2	0.02	0.0	-4.45	0.0	9.21e-05	0.0
13	3	-0.03	0.0	-4.44	0.0	-6.20e-06	0.0
13	4	0.03	0.0	-4.45	0.0	6.74e-05	0.0
13	5	4.93	0.0	-5.98	0.0	5.45e-03	0.0
13	6	4.97	0.0	-5.99	0.0	5.58e-03	0.0
13	7	4.92	0.0	-5.98	0.0	5.48e-03	0.0
13	8	4.98	0.0	-5.99	0.0	5.55e-03	0.0
13	9	-0.02	0.0	-4.46	0.0	-2.00e-04	0.0
13	10	0.03	0.0	-4.46	0.0	-7.67e-05	0.0
13	11	-0.03	0.0	-4.46	0.0	-1.75e-04	0.0
13	12	0.04	0.0	-4.47	0.0	-1.01e-04	0.0
13	13	4.29	0.0	-9.29	0.0	5.09e-03	0.0
13	14	4.31	0.0	-9.29	0.0	5.17e-03	0.0
13	15	4.28	0.0	-9.29	0.0	5.11e-03	0.0
13	16	4.32	0.0	-9.30	0.0	5.15e-03	0.0
13	17	9.24	0.0	-10.83	0.0	0.01	0.0
13	18	9.27	0.0	-10.83	0.0	0.01	0.0
13	19	9.23	0.0	-10.83	0.0	0.01	0.0
13	20	9.27	0.0	-10.83	0.0	0.01	0.0
13	21	4.29	0.0	-9.31	0.0	4.92e-03	0.0
13	22	4.32	0.0	-9.31	0.0	5.00e-03	0.0
13	23	4.29	0.0	-9.31	0.0	4.94e-03	0.0
13	24	4.32	0.0	-9.31	0.0	4.98e-03	0.0
13	25	-0.01	0.0	-7.84	0.0	-1.22e-04	0.0
13	26	0.02	0.0	-7.85	0.0	-4.82e-05	0.0
13	27	-0.02	0.0	-7.84	0.0	-1.07e-04	0.0
13	28	0.02	0.0	-7.85	0.0	-6.30e-05	0.0
13	29	4.94	0.0	-9.38	0.0	5.36e-03	0.0
13	30	4.97	0.0	-9.38	0.0	5.44e-03	0.0
13	31	4.93	0.0	-9.38	0.0	5.38e-03	0.0
13	32	4.97	0.0	-9.38	0.0	5.42e-03	0.0
13	33	-6.05e-03	0.0	-7.86	0.0	-2.91e-04	0.0
13	34	0.02	0.0	-7.86	0.0	-2.17e-04	0.0
13	35	-0.01	0.0	-7.86	0.0	-2.76e-04	0.0
13	36	0.03	0.0	-7.86	0.0	-2.32e-04	0.0
13	37	3.20	0.0	-8.34	0.0	3.81e-03	0.0
13	38	3.23	0.0	-8.34	0.0	3.88e-03	0.0
13	39	3.20	0.0	-8.34	0.0	3.83e-03	0.0
13	40	3.24	0.0	-8.34	0.0	3.87e-03	0.0
13	41	8.16	0.0	-9.88	0.0	9.30e-03	0.0
13	42	8.18	0.0	-9.88	0.0	9.37e-03	0.0
13	43	8.15	0.0	-9.88	0.0	9.31e-03	0.0
13	44	8.19	0.0	-9.88	0.0	9.35e-03	0.0
13	45	3.21	0.0	-8.36	0.0	3.64e-03	0.0
13	46	3.24	0.0	-8.36	0.0	3.72e-03	0.0
13	47	3.20	0.0	-8.35	0.0	3.66e-03	0.0

Nodo	Cmb	Traslazione X	Traslazione Y	Traslazione Z	Rotazione X	Rotazione Y	Rotazione Z
13	48	3.24	0.0	-8.36	0.0	3.70e-03	0.0
13	49	-0.01	0.0	-7.26	0.0	-8.97e-05	0.0
13	50	0.01	0.0	-7.26	0.0	-1.58e-05	0.0
13	51	-0.02	0.0	-7.25	0.0	-7.48e-05	0.0
13	52	0.02	0.0	-7.26	0.0	-3.07e-05	0.0
13	53	4.94	0.0	-8.79	0.0	5.39e-03	0.0
13	54	4.97	0.0	-8.79	0.0	5.47e-03	0.0
13	55	4.93	0.0	-8.79	0.0	5.41e-03	0.0
13	56	4.97	0.0	-8.79	0.0	5.45e-03	0.0
13	57	-6.99e-03	0.0	-7.27	0.0	-2.59e-04	0.0
13	58	0.02	0.0	-7.27	0.0	-1.85e-04	0.0
13	59	-0.01	0.0	-7.27	0.0	-2.44e-04	0.0
13	60	0.03	0.0	-7.27	0.0	-2.00e-04	0.0
13	61	11.99	0.0	-11.77	0.0	0.02	0.0
13	62	12.02	0.0	-11.77	0.0	0.02	0.0
13	63	11.99	0.0	-11.77	0.0	0.02	0.0
13	64	12.03	0.0	-11.77	0.0	0.02	0.0
13	65	16.95	0.0	-13.30	0.0	0.02	0.0
13	66	16.97	0.0	-13.30	0.0	0.02	0.0
13	67	16.94	0.0	-13.30	0.0	0.02	0.0
13	68	16.98	0.0	-13.31	0.0	0.02	0.0
13	69	12.00	0.0	-11.78	0.0	0.02	0.0
13	70	12.03	0.0	-11.78	0.0	0.02	0.0
13	71	11.99	0.0	-11.78	0.0	0.02	0.0
13	72	12.03	0.0	-11.78	0.0	0.02	0.0
13	73	8.78	0.0	-10.68	0.0	0.01	0.0
13	74	8.81	0.0	-10.68	0.0	0.01	0.0
13	75	8.77	0.0	-10.68	0.0	0.01	0.0
13	76	8.81	0.0	-10.69	0.0	0.01	0.0
13	77	13.73	0.0	-12.22	0.0	0.02	0.0
13	78	13.76	0.0	-12.22	0.0	0.02	0.0
13	79	13.72	0.0	-12.22	0.0	0.02	0.0
13	80	13.76	0.0	-12.22	0.0	0.02	0.0
13	81	8.78	0.0	-10.70	0.0	0.01	0.0
13	82	8.81	0.0	-10.70	0.0	0.01	0.0
13	83	8.78	0.0	-10.70	0.0	0.01	0.0
13	84	8.82	0.0	-10.70	0.0	0.01	0.0
13	85	3.20	0.0	-8.53	0.0	3.81e-03	0.0
13	86	3.23	0.0	-8.53	0.0	3.89e-03	0.0
13	87	3.20	0.0	-8.53	0.0	3.83e-03	0.0
13	88	3.24	0.0	-8.54	0.0	3.87e-03	0.0
13	89	8.16	0.0	-10.07	0.0	9.30e-03	0.0
13	90	8.18	0.0	-10.07	0.0	9.37e-03	0.0
13	91	8.15	0.0	-10.07	0.0	9.31e-03	0.0
13	92	8.19	0.0	-10.07	0.0	9.36e-03	0.0
13	93	3.21	0.0	-8.55	0.0	3.64e-03	0.0
13	94	3.24	0.0	-8.55	0.0	3.72e-03	0.0
13	95	3.20	0.0	-8.55	0.0	3.66e-03	0.0
13	96	3.24	0.0	-8.55	0.0	3.70e-03	0.0
13	97	-0.01	0.0	-7.45	0.0	-8.73e-05	0.0
13	98	0.01	0.0	-7.45	0.0	-1.35e-05	0.0
13	99	-0.02	0.0	-7.45	0.0	-7.25e-05	0.0
13	100	0.02	0.0	-7.45	0.0	-2.83e-05	0.0
13	101	4.94	0.0	-8.99	0.0	5.40e-03	0.0
13	102	4.97	0.0	-8.99	0.0	5.47e-03	0.0
13	103	4.93	0.0	-8.99	0.0	5.41e-03	0.0
13	104	4.97	0.0	-8.99	0.0	5.46e-03	0.0
13	105	-7.06e-03	0.0	-7.47	0.0	-2.56e-04	0.0
13	106	0.02	0.0	-7.47	0.0	-1.82e-04	0.0
13	107	-0.01	0.0	-7.46	0.0	-2.41e-04	0.0
13	108	0.03	0.0	-7.47	0.0	-1.97e-04	0.0
13	109	33.52	0.0	-14.69	0.0	0.04	0.0
13	110	-7.73e-03	0.0	-4.17	0.0	-1.52e-04	0.0
13	111	0.01	0.0	-4.17	0.0	-9.08e-05	0.0
13	112	-0.01	0.0	-4.17	0.0	-1.40e-04	0.0
13	113	0.02	0.0	-4.17	0.0	-1.03e-04	0.0
13	114	3.66	0.0	-5.31	0.0	3.91e-03	0.0
13	115	3.68	0.0	-5.31	0.0	3.97e-03	0.0
13	116	3.66	0.0	-5.31	0.0	3.92e-03	0.0
13	117	3.69	0.0	-5.31	0.0	3.96e-03	0.0
13	118	-3.66e-03	0.0	-4.18	0.0	-2.77e-04	0.0
13	119	0.02	0.0	-4.18	0.0	-2.16e-04	0.0
13	120	-8.76e-03	0.0	-4.18	0.0	-2.65e-04	0.0
13	121	0.02	0.0	-4.18	0.0	-2.28e-04	0.0
13	122	7.26	0.0	-6.77	0.0	9.41e-03	0.0

Nodo	Cmb	Traslazione X	Traslazione Y	Traslazione Z	Rotazione X	Rotazione Y	Rotazione Z
13	123	7.28	0.0	-6.77	0.0	9.47e-03	0.0
13	124	7.26	0.0	-6.77	0.0	9.42e-03	0.0
13	125	7.29	0.0	-6.77	0.0	9.46e-03	0.0
13	126	10.93	0.0	-7.91	0.0	0.01	0.0
13	127	10.95	0.0	-7.91	0.0	0.01	0.0
13	128	10.92	0.0	-7.90	0.0	0.01	0.0
13	129	10.96	0.0	-7.91	0.0	0.01	0.0
13	130	7.27	0.0	-6.78	0.0	9.28e-03	0.0
13	131	7.29	0.0	-6.78	0.0	9.34e-03	0.0
13	132	7.26	0.0	-6.78	0.0	9.29e-03	0.0
13	133	7.29	0.0	-6.78	0.0	9.33e-03	0.0
13	134	4.87	0.0	-5.96	0.0	6.51e-03	0.0
13	135	4.90	0.0	-5.96	0.0	6.57e-03	0.0
13	136	4.87	0.0	-5.96	0.0	6.52e-03	0.0
13	137	4.90	0.0	-5.96	0.0	6.56e-03	0.0
13	138	8.54	0.0	-7.10	0.0	0.01	0.0
13	139	8.56	0.0	-7.10	0.0	0.01	0.0
13	140	8.54	0.0	-7.10	0.0	0.01	0.0
13	141	8.57	0.0	-7.10	0.0	0.01	0.0
13	142	4.88	0.0	-5.97	0.0	6.39e-03	0.0
13	143	4.90	0.0	-5.97	0.0	6.45e-03	0.0
13	144	4.87	0.0	-5.97	0.0	6.40e-03	0.0
13	145	4.91	0.0	-5.97	0.0	6.43e-03	0.0
13	146	-0.01	0.0	-3.29	0.0	-2.95e-06	0.0
13	147	8.19e-03	0.0	-3.29	0.0	4.83e-05	0.0
13	148	-0.01	0.0	-3.29	0.0	7.34e-06	0.0
13	149	0.01	0.0	-3.30	0.0	3.80e-05	0.0
13	150	3.66	0.0	-4.43	0.0	4.06e-03	0.0
13	151	3.68	0.0	-4.43	0.0	4.11e-03	0.0
13	152	3.65	0.0	-4.43	0.0	4.07e-03	0.0
13	153	3.65	0.0	-4.43	0.0	4.07e-03	0.0
13	154	-6.34e-03	0.0	-3.31	0.0	-1.28e-04	0.0
13	155	0.01	0.0	-3.31	0.0	-7.68e-05	0.0
13	156	-0.01	0.0	-3.30	0.0	-1.18e-04	0.0
13	157	-0.01	0.0	-3.30	0.0	-1.18e-04	0.0
13	158	8.06	0.0	-8.54	0.0	0.01	0.0
13	159	8.08	0.0	-8.54	0.0	0.01	0.0
13	160	8.05	0.0	-8.54	0.0	0.01	0.0
13	161	8.09	0.0	-8.54	0.0	0.01	0.0
13	162	11.73	0.0	-9.68	0.0	0.01	0.0
13	163	11.75	0.0	-9.68	0.0	0.01	0.0
13	164	11.72	0.0	-9.68	0.0	0.01	0.0
13	165	11.75	0.0	-9.68	0.0	0.01	0.0
13	166	8.06	0.0	-8.55	0.0	0.01	0.0
13	167	8.08	0.0	-8.55	0.0	0.01	0.0
13	168	8.06	0.0	-8.55	0.0	0.01	0.0
13	169	8.09	0.0	-8.55	0.0	0.01	0.0
13	170	4.87	0.0	-7.47	0.0	6.50e-03	0.0
13	171	4.90	0.0	-7.47	0.0	6.56e-03	0.0
13	172	4.87	0.0	-7.46	0.0	6.51e-03	0.0
13	173	4.90	0.0	-7.47	0.0	6.55e-03	0.0
13	174	8.54	0.0	-8.60	0.0	0.01	0.0
13	175	8.57	0.0	-8.61	0.0	0.01	0.0
13	176	8.54	0.0	-8.60	0.0	0.01	0.0
13	177	8.57	0.0	-8.61	0.0	0.01	0.0
13	178	4.88	0.0	-7.48	0.0	6.37e-03	0.0
13	179	4.90	0.0	-7.48	0.0	6.44e-03	0.0
13	180	4.87	0.0	-7.48	0.0	6.39e-03	0.0
13	181	4.91	0.0	-7.48	0.0	6.42e-03	0.0
14	1	3.27e-03	0.0	-4.44	0.0	-1.22e-04	0.0
14	2	3.27e-03	0.0	-4.44	0.0	-1.03e-04	0.0
14	3	3.31e-03	0.0	-4.44	0.0	-7.39e-05	0.0
14	4	3.23e-03	0.0	-4.45	0.0	-1.51e-04	0.0
14	5	1.32	0.0	-2.75	0.0	5.46e-03	0.0
14	6	1.32	0.0	-2.75	0.0	5.48e-03	0.0
14	7	1.32	0.0	-2.75	0.0	5.51e-03	0.0
14	8	1.32	0.0	-2.76	0.0	5.43e-03	0.0
14	9	2.13e-03	0.0	-4.46	0.0	-3.09e-04	0.0
14	10	2.13e-03	0.0	-4.46	0.0	-2.91e-04	0.0
14	11	2.16e-03	0.0	-4.46	0.0	-2.62e-04	0.0
14	12	2.09e-03	0.0	-4.47	0.0	-3.39e-04	0.0
14	13	0.86	0.0	-6.24	0.0	5.04e-03	0.0
14	14	0.86	0.0	-6.24	0.0	5.06e-03	0.0
14	15	0.86	0.0	-6.24	0.0	5.07e-03	0.0
14	16	0.86	0.0	-6.24	0.0	5.03e-03	0.0

Nodo	Cmb	Traslazione X	Traslazione Y	Traslazione Z	Rotazione X	Rotazione Y	Rotazione Z
14	17	2.18	0.0	-4.55	0.0	0.01	0.0
14	18	2.18	0.0	-4.55	0.0	0.01	0.0
14	19	2.18	0.0	-4.55	0.0	0.01	0.0
14	20	2.18	0.0	-4.55	0.0	0.01	0.0
14	21	0.86	0.0	-6.26	0.0	4.86e-03	0.0
14	22	0.86	0.0	-6.26	0.0	4.87e-03	0.0
14	23	0.86	0.0	-6.26	0.0	4.89e-03	0.0
14	24	0.86	0.0	-6.26	0.0	4.84e-03	0.0
14	25	3.75e-03	0.0	-7.84	0.0	-2.48e-04	0.0
14	26	3.75e-03	0.0	-7.84	0.0	-2.36e-04	0.0
14	27	3.78e-03	0.0	-7.84	0.0	-2.19e-04	0.0
14	28	3.73e-03	0.0	-7.84	0.0	-2.65e-04	0.0
14	29	1.32	0.0	-6.15	0.0	5.33e-03	0.0
14	30	1.32	0.0	-6.15	0.0	5.35e-03	0.0
14	31	1.32	0.0	-6.15	0.0	5.36e-03	0.0
14	32	1.32	0.0	-6.15	0.0	5.32e-03	0.0
14	33	2.61e-03	0.0	-7.86	0.0	-4.35e-04	0.0
14	34	2.61e-03	0.0	-7.86	0.0	-4.24e-04	0.0
14	35	2.63e-03	0.0	-7.86	0.0	-4.07e-04	0.0
14	36	2.58e-03	0.0	-7.86	0.0	-4.53e-04	0.0
14	37	0.65	0.0	-6.05	0.0	3.75e-03	0.0
14	38	0.65	0.0	-6.05	0.0	3.77e-03	0.0
14	39	0.65	0.0	-6.05	0.0	3.78e-03	0.0
14	40	0.65	0.0	-6.06	0.0	3.74e-03	0.0
14	41	1.96	0.0	-4.37	0.0	9.34e-03	0.0
14	42	1.96	0.0	-4.37	0.0	9.35e-03	0.0
14	43	1.96	0.0	-4.36	0.0	9.37e-03	0.0
14	44	1.96	0.0	-4.37	0.0	9.32e-03	0.0
14	45	0.65	0.0	-6.08	0.0	3.57e-03	0.0
14	46	0.65	0.0	-6.07	0.0	3.58e-03	0.0
14	47	0.65	0.0	-6.07	0.0	3.60e-03	0.0
14	48	0.65	0.0	-6.08	0.0	3.55e-03	0.0
14	49	3.62e-03	0.0	-7.25	0.0	-2.05e-04	0.0
14	50	3.62e-03	0.0	-7.25	0.0	-1.94e-04	0.0
14	51	3.65e-03	0.0	-7.25	0.0	-1.76e-04	0.0
14	52	3.60e-03	0.0	-7.25	0.0	-2.22e-04	0.0
14	53	1.32	0.0	-5.56	0.0	5.38e-03	0.0
14	54	1.32	0.0	-5.56	0.0	5.39e-03	0.0
14	55	1.32	0.0	-5.56	0.0	5.41e-03	0.0
14	56	1.32	0.0	-5.56	0.0	5.36e-03	0.0
14	57	2.48e-03	0.0	-7.27	0.0	-3.93e-04	0.0
14	58	2.48e-03	0.0	-7.27	0.0	-3.81e-04	0.0
14	59	2.50e-03	0.0	-7.27	0.0	-3.64e-04	0.0
14	60	2.45e-03	0.0	-7.27	0.0	-4.10e-04	0.0
14	61	1.76	0.0	-2.66	0.0	0.02	0.0
14	62	1.76	0.0	-2.66	0.0	0.02	0.0
14	63	1.76	0.0	-2.66	0.0	0.02	0.0
14	64	1.76	0.0	-2.66	0.0	0.02	0.0
14	65	3.08	0.0	-0.97	0.0	0.02	0.0
14	66	3.08	0.0	-0.97	0.0	0.02	0.0
14	67	3.08	0.0	-0.97	0.0	0.02	0.0
14	68	3.08	0.0	-0.97	0.0	0.02	0.0
14	69	1.76	0.0	-2.68	0.0	0.02	0.0
14	70	1.76	0.0	-2.68	0.0	0.02	0.0
14	71	1.76	0.0	-2.68	0.0	0.02	0.0
14	72	1.76	0.0	-2.68	0.0	0.02	0.0
14	73	1.12	0.0	-3.86	0.0	0.01	0.0
14	74	1.12	0.0	-3.86	0.0	0.01	0.0
14	75	1.12	0.0	-3.85	0.0	0.01	0.0
14	76	1.12	0.0	-3.86	0.0	0.01	0.0
14	77	2.44	0.0	-2.17	0.0	0.02	0.0
14	78	2.44	0.0	-2.17	0.0	0.02	0.0
14	79	2.44	0.0	-2.16	0.0	0.02	0.0
14	80	2.44	0.0	-2.17	0.0	0.02	0.0
14	81	1.12	0.0	-3.88	0.0	0.01	0.0
14	82	1.12	0.0	-3.88	0.0	0.01	0.0
14	83	1.12	0.0	-3.87	0.0	0.01	0.0
14	84	1.12	0.0	-3.88	0.0	0.01	0.0
14	85	0.65	0.0	-6.25	0.0	3.76e-03	0.0
14	86	0.65	0.0	-6.25	0.0	3.77e-03	0.0
14	87	0.65	0.0	-6.25	0.0	3.79e-03	0.0
14	88	0.65	0.0	-6.25	0.0	3.74e-03	0.0
14	89	1.96	0.0	-4.56	0.0	9.34e-03	0.0
14	90	1.96	0.0	-4.56	0.0	9.36e-03	0.0
14	91	1.96	0.0	-4.56	0.0	9.37e-03	0.0

Nodo	Cmb	Traslazione X	Traslazione Y	Traslazione Z	Rotazione X	Rotazione Y	Rotazione Z
14	92	1.96	0.0	-4.56	0.0	9.33e-03	0.0
14	93	0.65	0.0	-6.27	0.0	3.57e-03	0.0
14	94	0.65	0.0	-6.27	0.0	3.59e-03	0.0
14	95	0.65	0.0	-6.27	0.0	3.60e-03	0.0
14	96	0.65	0.0	-6.27	0.0	3.56e-03	0.0
14	97	3.62e-03	0.0	-7.44	0.0	-1.97e-04	0.0
14	98	3.62e-03	0.0	-7.44	0.0	-1.86e-04	0.0
14	99	3.64e-03	0.0	-7.44	0.0	-1.69e-04	0.0
14	100	3.59e-03	0.0	-7.45	0.0	-2.15e-04	0.0
14	101	1.32	0.0	-5.76	0.0	5.38e-03	0.0
14	102	1.32	0.0	-5.75	0.0	5.40e-03	0.0
14	103	1.32	0.0	-5.75	0.0	5.41e-03	0.0
14	104	1.32	0.0	-5.76	0.0	5.37e-03	0.0
14	105	2.47e-03	0.0	-7.47	0.0	-3.85e-04	0.0
14	106	2.47e-03	0.0	-7.46	0.0	-3.74e-04	0.0
14	107	2.49e-03	0.0	-7.46	0.0	-3.56e-04	0.0
14	108	2.45e-03	0.0	-7.47	0.0	-4.03e-04	0.0
14	109	6.93	0.0	8.94	0.0	0.04	0.0
14	110	2.44e-03	0.0	-4.17	0.0	-2.59e-04	0.0
14	111	2.44e-03	0.0	-4.17	0.0	-2.50e-04	0.0
14	112	2.46e-03	0.0	-4.17	0.0	-2.36e-04	0.0
14	113	2.42e-03	0.0	-4.17	0.0	-2.74e-04	0.0
14	114	0.98	0.0	-2.92	0.0	3.88e-03	0.0
14	115	0.98	0.0	-2.92	0.0	3.88e-03	0.0
14	116	0.98	0.0	-2.92	0.0	3.90e-03	0.0
14	117	0.98	0.0	-2.92	0.0	3.86e-03	0.0
14	118	1.59e-03	0.0	-4.19	0.0	-3.99e-04	0.0
14	119	1.59e-03	0.0	-4.18	0.0	-3.89e-04	0.0
14	120	1.61e-03	0.0	-4.18	0.0	-3.75e-04	0.0
14	121	1.57e-03	0.0	-4.19	0.0	-4.13e-04	0.0
14	122	1.10	0.0	-1.28	0.0	9.35e-03	0.0
14	123	1.10	0.0	-1.28	0.0	9.36e-03	0.0
14	124	1.10	0.0	-1.28	0.0	9.38e-03	0.0
14	125	1.10	0.0	-1.28	0.0	9.34e-03	0.0
14	126	2.08	0.0	-0.03	0.0	0.01	0.0
14	127	2.08	0.0	-0.03	0.0	0.01	0.0
14	128	2.08	0.0	-0.03	0.0	0.01	0.0
14	129	2.08	0.0	-0.03	0.0	0.01	0.0
14	130	1.10	0.0	-1.30	0.0	9.21e-03	0.0
14	131	1.10	0.0	-1.30	0.0	9.22e-03	0.0
14	132	1.10	0.0	-1.29	0.0	9.24e-03	0.0
14	133	1.10	0.0	-1.30	0.0	9.20e-03	0.0
14	134	0.62	0.0	-2.17	0.0	6.41e-03	0.0
14	135	0.62	0.0	-2.17	0.0	6.42e-03	0.0
14	136	0.62	0.0	-2.17	0.0	6.44e-03	0.0
14	137	0.62	0.0	-2.17	0.0	6.40e-03	0.0
14	138	1.60	0.0	-0.92	0.0	0.01	0.0
14	139	1.60	0.0	-0.92	0.0	0.01	0.0
14	140	1.60	0.0	-0.92	0.0	0.01	0.0
14	141	1.60	0.0	-0.92	0.0	0.01	0.0
14	142	0.62	0.0	-2.18	0.0	6.27e-03	0.0
14	143	0.62	0.0	-2.18	0.0	6.28e-03	0.0
14	144	0.62	0.0	-2.18	0.0	6.30e-03	0.0
14	145	0.62	0.0	-2.19	0.0	6.26e-03	0.0
14	146	2.42e-03	0.0	-3.29	0.0	-8.71e-05	0.0
14	147	2.42e-03	0.0	-3.29	0.0	-7.93e-05	0.0
14	148	2.44e-03	0.0	-3.29	0.0	-6.72e-05	0.0
14	149	2.41e-03	0.0	-3.29	0.0	-9.92e-05	0.0
14	150	0.98	0.0	-2.04	0.0	4.05e-03	0.0
14	151	0.98	0.0	-2.04	0.0	4.06e-03	0.0
14	152	0.98	0.0	-2.04	0.0	4.07e-03	0.0
14	153	0.98	0.0	-2.04	0.0	4.07e-03	0.0
14	154	1.58e-03	0.0	-3.31	0.0	-2.26e-04	0.0
14	155	1.58e-03	0.0	-3.31	0.0	-2.18e-04	0.0
14	156	1.59e-03	0.0	-3.30	0.0	-2.06e-04	0.0
14	157	1.59e-03	0.0	-3.30	0.0	-2.06e-04	0.0
14	158	1.26	0.0	-2.49	0.0	0.01	0.0
14	159	1.26	0.0	-2.49	0.0	0.01	0.0
14	160	1.26	0.0	-2.49	0.0	0.01	0.0
14	161	1.26	0.0	-2.49	0.0	0.01	0.0
14	162	2.23	0.0	-1.24	0.0	0.01	0.0
14	163	2.23	0.0	-1.24	0.0	0.01	0.0
14	164	2.23	0.0	-1.24	0.0	0.01	0.0
14	165	2.23	0.0	-1.24	0.0	0.01	0.0
14	166	1.26	0.0	-2.50	0.0	0.01	0.0

Nodo	Cmb	Traslazione X	Traslazione Y	Traslazione Z	Rotazione X	Rotazione Y	Rotazione Z
14	167	1.26	0.0	-2.50	0.0	0.01	0.0
14	168	1.26	0.0	-2.50	0.0	0.01	0.0
14	169	1.26	0.0	-2.51	0.0	0.01	0.0
14	170	0.62	0.0	-3.67	0.0	6.42e-03	0.0
14	171	0.62	0.0	-3.67	0.0	6.43e-03	0.0
14	172	0.62	0.0	-3.67	0.0	6.44e-03	0.0
14	173	0.62	0.0	-3.67	0.0	6.41e-03	0.0
14	174	1.60	0.0	-2.42	0.0	0.01	0.0
14	175	1.60	0.0	-2.42	0.0	0.01	0.0
14	176	1.60	0.0	-2.42	0.0	0.01	0.0
14	177	1.60	0.0	-2.42	0.0	0.01	0.0
14	178	0.62	0.0	-3.69	0.0	6.28e-03	0.0
14	179	0.62	0.0	-3.69	0.0	6.29e-03	0.0
14	180	0.62	0.0	-3.69	0.0	6.31e-03	0.0
14	181	0.62	0.0	-3.69	0.0	6.27e-03	0.0
15	1	-0.03	0.0	-4.45	0.0	-1.05e-04	0.0
15	2	0.02	0.0	-4.45	0.0	2.28e-05	0.0
15	3	-0.04	0.0	-4.44	0.0	-7.38e-05	0.0
15	4	0.03	0.0	-4.45	0.0	-8.62e-06	0.0
15	5	5.09	0.0	-5.98	0.0	5.36e-03	0.0
15	6	5.14	0.0	-5.99	0.0	5.48e-03	0.0
15	7	5.08	0.0	-5.98	0.0	5.39e-03	0.0
15	8	5.15	0.0	-5.99	0.0	5.45e-03	0.0
15	9	-0.03	0.0	-4.46	0.0	-2.57e-04	0.0
15	10	0.02	0.0	-4.46	0.0	-1.29e-04	0.0
15	11	-0.03	0.0	-4.46	0.0	-2.26e-04	0.0
15	12	0.03	0.0	-4.47	0.0	-1.61e-04	0.0
15	13	4.44	0.0	-9.29	0.0	4.95e-03	0.0
15	14	4.47	0.0	-9.29	0.0	5.03e-03	0.0
15	15	4.43	0.0	-9.29	0.0	4.97e-03	0.0
15	16	4.47	0.0	-9.30	0.0	5.01e-03	0.0
15	17	9.55	0.0	-10.83	0.0	0.01	0.0
15	18	9.58	0.0	-10.83	0.0	0.01	0.0
15	19	9.55	0.0	-10.83	0.0	0.01	0.0
15	20	9.59	0.0	-10.83	0.0	0.01	0.0
15	21	4.44	0.0	-9.31	0.0	4.80e-03	0.0
15	22	4.47	0.0	-9.31	0.0	4.88e-03	0.0
15	23	4.43	0.0	-9.31	0.0	4.82e-03	0.0
15	24	4.47	0.0	-9.31	0.0	4.86e-03	0.0
15	25	-0.02	0.0	-7.85	0.0	-2.33e-04	0.0
15	26	0.01	0.0	-7.85	0.0	-1.56e-04	0.0
15	27	-0.02	0.0	-7.84	0.0	-2.14e-04	0.0
15	28	0.02	0.0	-7.85	0.0	-1.75e-04	0.0
15	29	5.10	0.0	-9.38	0.0	5.23e-03	0.0
15	30	5.13	0.0	-9.38	0.0	5.31e-03	0.0
15	31	5.09	0.0	-9.38	0.0	5.25e-03	0.0
15	32	5.13	0.0	-9.38	0.0	5.29e-03	0.0
15	33	-0.02	0.0	-7.86	0.0	-3.85e-04	0.0
15	34	0.01	0.0	-7.86	0.0	-3.08e-04	0.0
15	35	-0.02	0.0	-7.86	0.0	-3.66e-04	0.0
15	36	0.02	0.0	-7.86	0.0	-3.27e-04	0.0
15	37	3.32	0.0	-8.34	0.0	3.69e-03	0.0
15	38	3.34	0.0	-8.34	0.0	3.77e-03	0.0
15	39	3.31	0.0	-8.34	0.0	3.71e-03	0.0
15	40	3.35	0.0	-8.34	0.0	3.75e-03	0.0
15	41	8.43	0.0	-9.88	0.0	9.15e-03	0.0
15	42	8.46	0.0	-9.88	0.0	9.23e-03	0.0
15	43	8.43	0.0	-9.88	0.0	9.17e-03	0.0
15	44	8.47	0.0	-9.88	0.0	9.21e-03	0.0
15	45	3.32	0.0	-8.36	0.0	3.54e-03	0.0
15	46	3.35	0.0	-8.36	0.0	3.61e-03	0.0
15	47	3.31	0.0	-8.35	0.0	3.56e-03	0.0
15	48	3.35	0.0	-8.36	0.0	3.59e-03	0.0
15	49	-0.02	0.0	-7.26	0.0	-1.91e-04	0.0
15	50	0.01	0.0	-7.26	0.0	-1.14e-04	0.0
15	51	-0.02	0.0	-7.25	0.0	-1.72e-04	0.0
15	52	0.02	0.0	-7.26	0.0	-1.33e-04	0.0
15	53	5.10	0.0	-8.79	0.0	5.27e-03	0.0
15	54	5.13	0.0	-8.79	0.0	5.35e-03	0.0
15	55	5.09	0.0	-8.79	0.0	5.29e-03	0.0
15	56	5.13	0.0	-8.80	0.0	5.33e-03	0.0
15	57	-0.02	0.0	-7.27	0.0	-3.43e-04	0.0
15	58	0.01	0.0	-7.27	0.0	-2.66e-04	0.0
15	59	-0.02	0.0	-7.27	0.0	-3.24e-04	0.0
15	60	0.02	0.0	-7.27	0.0	-2.85e-04	0.0

Nodo	Cmb	Traslazione X	Traslazione Y	Traslazione Z	Rotazione X	Rotazione Y	Rotazione Z
15	61	12.46	0.0	-11.77	0.0	0.02	0.0
15	62	12.49	0.0	-11.77	0.0	0.02	0.0
15	63	12.46	0.0	-11.77	0.0	0.02	0.0
15	64	12.50	0.0	-11.77	0.0	0.02	0.0
15	65	17.58	0.0	-13.31	0.0	0.02	0.0
15	66	17.61	0.0	-13.31	0.0	0.02	0.0
15	67	17.57	0.0	-13.30	0.0	0.02	0.0
15	68	17.61	0.0	-13.31	0.0	0.02	0.0
15	69	12.46	0.0	-11.78	0.0	0.02	0.0
15	70	12.49	0.0	-11.78	0.0	0.02	0.0
15	71	12.46	0.0	-11.78	0.0	0.02	0.0
15	72	12.50	0.0	-11.79	0.0	0.02	0.0
15	73	9.13	0.0	-10.68	0.0	0.01	0.0
15	74	9.16	0.0	-10.68	0.0	0.01	0.0
15	75	9.12	0.0	-10.68	0.0	0.01	0.0
15	76	9.16	0.0	-10.69	0.0	0.01	0.0
15	77	14.25	0.0	-12.22	0.0	0.02	0.0
15	78	14.28	0.0	-12.22	0.0	0.02	0.0
15	79	14.24	0.0	-12.22	0.0	0.02	0.0
15	80	14.28	0.0	-12.22	0.0	0.02	0.0
15	81	9.13	0.0	-10.70	0.0	0.01	0.0
15	82	9.16	0.0	-10.70	0.0	0.01	0.0
15	83	9.12	0.0	-10.70	0.0	0.01	0.0
15	84	9.16	0.0	-10.70	0.0	0.01	0.0
15	85	3.32	0.0	-8.53	0.0	3.69e-03	0.0
15	86	3.34	0.0	-8.53	0.0	3.77e-03	0.0
15	87	3.31	0.0	-8.53	0.0	3.71e-03	0.0
15	88	3.35	0.0	-8.54	0.0	3.75e-03	0.0
15	89	8.43	0.0	-10.07	0.0	9.15e-03	0.0
15	90	8.46	0.0	-10.07	0.0	9.23e-03	0.0
15	91	8.43	0.0	-10.07	0.0	9.17e-03	0.0
15	92	8.47	0.0	-10.07	0.0	9.21e-03	0.0
15	93	3.32	0.0	-8.55	0.0	3.54e-03	0.0
15	94	3.35	0.0	-8.55	0.0	3.62e-03	0.0
15	95	3.31	0.0	-8.55	0.0	3.56e-03	0.0
15	96	3.35	0.0	-8.55	0.0	3.60e-03	0.0
15	97	-0.02	0.0	-7.45	0.0	-1.89e-04	0.0
15	98	0.01	0.0	-7.45	0.0	-1.12e-04	0.0
15	99	-0.02	0.0	-7.45	0.0	-1.70e-04	0.0
15	100	0.02	0.0	-7.45	0.0	-1.31e-04	0.0
15	101	5.10	0.0	-8.99	0.0	5.27e-03	0.0
15	102	5.13	0.0	-8.99	0.0	5.35e-03	0.0
15	103	5.09	0.0	-8.99	0.0	5.29e-03	0.0
15	104	5.13	0.0	-8.99	0.0	5.33e-03	0.0
15	105	-0.02	0.0	-7.47	0.0	-3.41e-04	0.0
15	106	0.01	0.0	-7.47	0.0	-2.64e-04	0.0
15	107	-0.02	0.0	-7.46	0.0	-3.22e-04	0.0
15	108	0.02	0.0	-7.47	0.0	-2.83e-04	0.0
15	109	34.75	0.0	-14.69	0.0	0.04	0.0
15	110	-0.01	0.0	-4.17	0.0	-2.20e-04	0.0
15	111	0.01	0.0	-4.17	0.0	-1.56e-04	0.0
15	112	-0.02	0.0	-4.17	0.0	-2.04e-04	0.0
15	113	0.02	0.0	-4.17	0.0	-1.72e-04	0.0
15	114	3.78	0.0	-5.31	0.0	3.83e-03	0.0
15	115	3.80	0.0	-5.31	0.0	3.89e-03	0.0
15	116	3.77	0.0	-5.31	0.0	3.84e-03	0.0
15	117	3.81	0.0	-5.31	0.0	3.87e-03	0.0
15	118	-0.01	0.0	-4.18	0.0	-3.32e-04	0.0
15	119	0.01	0.0	-4.18	0.0	-2.68e-04	0.0
15	120	-0.02	0.0	-4.18	0.0	-3.17e-04	0.0
15	121	0.02	0.0	-4.18	0.0	-2.84e-04	0.0
15	122	7.54	0.0	-6.77	0.0	9.27e-03	0.0
15	123	7.57	0.0	-6.77	0.0	9.33e-03	0.0
15	124	7.54	0.0	-6.77	0.0	9.28e-03	0.0
15	125	7.57	0.0	-6.77	0.0	9.32e-03	0.0
15	126	11.33	0.0	-7.91	0.0	0.01	0.0
15	127	11.36	0.0	-7.91	0.0	0.01	0.0
15	128	11.33	0.0	-7.90	0.0	0.01	0.0
15	129	11.36	0.0	-7.91	0.0	0.01	0.0
15	130	7.54	0.0	-6.78	0.0	9.15e-03	0.0
15	131	7.57	0.0	-6.78	0.0	9.22e-03	0.0
15	132	7.54	0.0	-6.78	0.0	9.17e-03	0.0
15	133	7.57	0.0	-6.78	0.0	9.20e-03	0.0
15	134	5.07	0.0	-5.96	0.0	6.39e-03	0.0
15	135	5.09	0.0	-5.96	0.0	6.45e-03	0.0

Nodo	Cmb	Traslazione X	Traslazione Y	Traslazione Z	Rotazione X	Rotazione Y	Rotazione Z
15	136	5.06	0.0	-5.96	0.0	6.40e-03	0.0
15	137	5.10	0.0	-5.96	0.0	6.43e-03	0.0
15	138	8.86	0.0	-7.10	0.0	0.01	0.0
15	139	8.88	0.0	-7.10	0.0	0.01	0.0
15	140	8.85	0.0	-7.10	0.0	0.01	0.0
15	141	8.89	0.0	-7.10	0.0	0.01	0.0
15	142	5.07	0.0	-5.97	0.0	6.27e-03	0.0
15	143	5.09	0.0	-5.97	0.0	6.34e-03	0.0
15	144	5.06	0.0	-5.97	0.0	6.29e-03	0.0
15	145	5.10	0.0	-5.98	0.0	6.32e-03	0.0
15	146	-0.01	0.0	-3.29	0.0	-5.72e-05	0.0
15	147	8.89e-03	0.0	-3.29	0.0	-3.85e-06	0.0
15	148	-0.02	0.0	-3.29	0.0	-4.41e-05	0.0
15	149	0.01	0.0	-3.30	0.0	-1.69e-05	0.0
15	150	3.78	0.0	-4.43	0.0	3.99e-03	0.0
15	151	3.80	0.0	-4.43	0.0	4.04e-03	0.0
15	152	3.77	0.0	-4.43	0.0	4.00e-03	0.0
15	153	3.77	0.0	-4.43	0.0	4.00e-03	0.0
15	154	-0.01	0.0	-3.31	0.0	-1.70e-04	0.0
15	155	9.38e-03	0.0	-3.31	0.0	-1.16e-04	0.0
15	156	-0.01	0.0	-3.30	0.0	-1.57e-04	0.0
15	157	-0.01	0.0	-3.30	0.0	-1.57e-04	0.0
15	158	8.37	0.0	-8.54	0.0	0.01	0.0
15	159	8.39	0.0	-8.54	0.0	0.01	0.0
15	160	8.36	0.0	-8.54	0.0	0.01	0.0
15	161	8.40	0.0	-8.54	0.0	0.01	0.0
15	162	12.16	0.0	-9.68	0.0	0.01	0.0
15	163	12.18	0.0	-9.68	0.0	0.01	0.0
15	164	12.15	0.0	-9.68	0.0	0.01	0.0
15	165	12.19	0.0	-9.68	0.0	0.01	0.0
15	166	8.37	0.0	-8.55	0.0	0.01	0.0
15	167	8.39	0.0	-8.55	0.0	0.01	0.0
15	168	8.36	0.0	-8.55	0.0	0.01	0.0
15	169	8.40	0.0	-8.55	0.0	0.01	0.0
15	170	5.07	0.0	-7.47	0.0	6.37e-03	0.0
15	171	5.09	0.0	-7.47	0.0	6.43e-03	0.0
15	172	5.06	0.0	-7.47	0.0	6.38e-03	0.0
15	173	5.10	0.0	-7.47	0.0	6.42e-03	0.0
15	174	8.86	0.0	-8.61	0.0	0.01	0.0
15	175	8.88	0.0	-8.61	0.0	0.01	0.0
15	176	8.85	0.0	-8.60	0.0	0.01	0.0
15	177	8.89	0.0	-8.61	0.0	0.01	0.0
15	178	5.07	0.0	-7.48	0.0	6.25e-03	0.0
15	179	5.09	0.0	-7.48	0.0	6.32e-03	0.0
15	180	5.06	0.0	-7.48	0.0	6.27e-03	0.0
15	181	5.10	0.0	-7.48	0.0	6.30e-03	0.0
16	1	-3.27e-03	0.0	-4.44	0.0	1.04e-04	0.0
16	2	-3.27e-03	0.0	-4.44	0.0	1.23e-04	0.0
16	3	-3.31e-03	0.0	-4.44	0.0	7.49e-05	0.0
16	4	-3.24e-03	0.0	-4.44	0.0	1.52e-04	0.0
16	5	1.32	0.0	-5.98	0.0	5.87e-03	0.0
16	6	1.32	0.0	-5.98	0.0	5.89e-03	0.0
16	7	1.32	0.0	-5.97	0.0	5.84e-03	0.0
16	8	1.32	0.0	-5.98	0.0	5.92e-03	0.0
16	9	-2.13e-03	0.0	-4.45	0.0	2.92e-04	0.0
16	10	-2.13e-03	0.0	-4.45	0.0	3.10e-04	0.0
16	11	-2.16e-03	0.0	-4.45	0.0	2.63e-04	0.0
16	12	-2.09e-03	0.0	-4.46	0.0	3.40e-04	0.0
16	13	0.86	0.0	-9.28	0.0	5.64e-03	0.0
16	14	0.86	0.0	-9.28	0.0	5.65e-03	0.0
16	15	0.86	0.0	-9.28	0.0	5.62e-03	0.0
16	16	0.86	0.0	-9.28	0.0	5.67e-03	0.0
16	17	2.17	0.0	-10.82	0.0	0.01	0.0
16	18	2.17	0.0	-10.82	0.0	0.01	0.0
16	19	2.17	0.0	-10.81	0.0	0.01	0.0
16	20	2.17	0.0	-10.82	0.0	0.01	0.0
16	21	0.86	0.0	-9.30	0.0	5.83e-03	0.0
16	22	0.86	0.0	-9.30	0.0	5.84e-03	0.0
16	23	0.86	0.0	-9.29	0.0	5.81e-03	0.0
16	24	0.86	0.0	-9.30	0.0	5.86e-03	0.0
16	25	-3.75e-03	0.0	-7.83	0.0	2.38e-04	0.0
16	26	-3.75e-03	0.0	-7.83	0.0	2.50e-04	0.0
16	27	-3.78e-03	0.0	-7.83	0.0	2.21e-04	0.0
16	28	-3.73e-03	0.0	-7.83	0.0	2.67e-04	0.0
16	29	1.31	0.0	-9.37	0.0	6.01e-03	0.0

Nodo	Cmb	Traslazione X	Traslazione Y	Traslazione Z	Rotazione X	Rotazione Y	Rotazione Z
16	30	1.31	0.0	-9.37	0.0	6.02e-03	0.0
16	31	1.31	0.0	-9.37	0.0	5.99e-03	0.0
16	32	1.32	0.0	-9.37	0.0	6.04e-03	0.0
16	33	-2.61e-03	0.0	-7.85	0.0	4.26e-04	0.0
16	34	-2.61e-03	0.0	-7.85	0.0	4.37e-04	0.0
16	35	-2.63e-03	0.0	-7.85	0.0	4.09e-04	0.0
16	36	-2.58e-03	0.0	-7.85	0.0	4.55e-04	0.0
16	37	0.64	0.0	-8.33	0.0	4.24e-03	0.0
16	38	0.64	0.0	-8.33	0.0	4.25e-03	0.0
16	39	0.64	0.0	-8.33	0.0	4.22e-03	0.0
16	40	0.64	0.0	-8.33	0.0	4.27e-03	0.0
16	41	1.96	0.0	-9.86	0.0	0.01	0.0
16	42	1.96	0.0	-9.86	0.0	0.01	0.0
16	43	1.96	0.0	-9.86	0.0	9.99e-03	0.0
16	44	1.96	0.0	-9.87	0.0	0.01	0.0
16	45	0.64	0.0	-8.34	0.0	4.42e-03	0.0
16	46	0.64	0.0	-8.34	0.0	4.44e-03	0.0
16	47	0.64	0.0	-8.34	0.0	4.41e-03	0.0
16	48	0.64	0.0	-8.34	0.0	4.45e-03	0.0
16	49	-3.62e-03	0.0	-7.24	0.0	1.95e-04	0.0
16	50	-3.62e-03	0.0	-7.24	0.0	2.06e-04	0.0
16	51	-3.65e-03	0.0	-7.24	0.0	1.78e-04	0.0
16	52	-3.60e-03	0.0	-7.25	0.0	2.24e-04	0.0
16	53	1.32	0.0	-8.78	0.0	5.96e-03	0.0
16	54	1.32	0.0	-8.78	0.0	5.98e-03	0.0
16	55	1.32	0.0	-8.78	0.0	5.95e-03	0.0
16	56	1.32	0.0	-8.78	0.0	5.99e-03	0.0
16	57	-2.48e-03	0.0	-7.26	0.0	3.83e-04	0.0
16	58	-2.48e-03	0.0	-7.26	0.0	3.94e-04	0.0
16	59	-2.50e-03	0.0	-7.26	0.0	3.66e-04	0.0
16	60	-2.45e-03	0.0	-7.26	0.0	4.12e-04	0.0
16	61	1.75	0.0	-11.75	0.0	0.02	0.0
16	62	1.75	0.0	-11.75	0.0	0.02	0.0
16	63	1.75	0.0	-11.75	0.0	0.02	0.0
16	64	1.75	0.0	-11.75	0.0	0.02	0.0
16	65	3.07	0.0	-13.29	0.0	0.02	0.0
16	66	3.07	0.0	-13.29	0.0	0.02	0.0
16	67	3.07	0.0	-13.29	0.0	0.02	0.0
16	68	3.07	0.0	-13.29	0.0	0.02	0.0
16	69	1.76	0.0	-11.77	0.0	0.02	0.0
16	70	1.76	0.0	-11.77	0.0	0.02	0.0
16	71	1.76	0.0	-11.77	0.0	0.02	0.0
16	72	1.76	0.0	-11.77	0.0	0.02	0.0
16	73	1.11	0.0	-10.67	0.0	0.01	0.0
16	74	1.11	0.0	-10.67	0.0	0.01	0.0
16	75	1.11	0.0	-10.67	0.0	0.01	0.0
16	76	1.11	0.0	-10.67	0.0	0.01	0.0
16	77	2.43	0.0	-12.21	0.0	0.02	0.0
16	78	2.43	0.0	-12.21	0.0	0.02	0.0
16	79	2.43	0.0	-12.20	0.0	0.02	0.0
16	80	2.43	0.0	-12.21	0.0	0.02	0.0
16	81	1.11	0.0	-10.68	0.0	0.01	0.0
16	82	1.11	0.0	-10.68	0.0	0.01	0.0
16	83	1.11	0.0	-10.68	0.0	0.01	0.0
16	84	1.11	0.0	-10.69	0.0	0.01	0.0
16	85	0.64	0.0	-8.52	0.0	4.23e-03	0.0
16	86	0.64	0.0	-8.52	0.0	4.24e-03	0.0
16	87	0.64	0.0	-8.52	0.0	4.21e-03	0.0
16	88	0.64	0.0	-8.52	0.0	4.26e-03	0.0
16	89	1.96	0.0	-10.06	0.0	1.00e-02	0.0
16	90	1.96	0.0	-10.06	0.0	0.01	0.0
16	91	1.96	0.0	-10.06	0.0	9.98e-03	0.0
16	92	1.96	0.0	-10.06	0.0	0.01	0.0
16	93	0.64	0.0	-8.54	0.0	4.42e-03	0.0
16	94	0.64	0.0	-8.54	0.0	4.43e-03	0.0
16	95	0.64	0.0	-8.54	0.0	4.40e-03	0.0
16	96	0.64	0.0	-8.54	0.0	4.45e-03	0.0
16	97	-3.62e-03	0.0	-7.44	0.0	1.88e-04	0.0
16	98	-3.62e-03	0.0	-7.44	0.0	1.99e-04	0.0
16	99	-3.64e-03	0.0	-7.44	0.0	1.70e-04	0.0
16	100	-3.59e-03	0.0	-7.44	0.0	2.17e-04	0.0
16	101	1.32	0.0	-8.97	0.0	5.96e-03	0.0
16	102	1.32	0.0	-8.97	0.0	5.97e-03	0.0
16	103	1.32	0.0	-8.97	0.0	5.94e-03	0.0
16	104	1.32	0.0	-8.98	0.0	5.99e-03	0.0

Nodo	Cmb	Traslazione X	Traslazione Y	Traslazione Z	Rotazione X	Rotazione Y	Rotazione Z
16	105	-2.47e-03	0.0	-7.45	0.0	3.76e-04	0.0
16	106	-2.47e-03	0.0	-7.45	0.0	3.87e-04	0.0
16	107	-2.49e-03	0.0	-7.45	0.0	3.58e-04	0.0
16	108	-2.45e-03	0.0	-7.46	0.0	4.04e-04	0.0
16	109	6.92	0.0	-14.68	0.0	0.04	0.0
16	110	-2.44e-03	0.0	-4.16	0.0	2.51e-04	0.0
16	111	-2.44e-03	0.0	-4.16	0.0	2.60e-04	0.0
16	112	-2.46e-03	0.0	-4.16	0.0	2.36e-04	0.0
16	113	-2.42e-03	0.0	-4.16	0.0	2.75e-04	0.0
16	114	0.97	0.0	-5.30	0.0	4.52e-03	0.0
16	115	0.97	0.0	-5.30	0.0	4.53e-03	0.0
16	116	0.97	0.0	-5.30	0.0	4.51e-03	0.0
16	117	0.97	0.0	-5.30	0.0	4.55e-03	0.0
16	118	-1.59e-03	0.0	-4.17	0.0	3.90e-04	0.0
16	119	-1.59e-03	0.0	-4.17	0.0	3.99e-04	0.0
16	120	-1.61e-03	0.0	-4.17	0.0	3.76e-04	0.0
16	121	-1.57e-03	0.0	-4.17	0.0	4.14e-04	0.0
16	122	1.09	0.0	-6.76	0.0	9.80e-03	0.0
16	123	1.09	0.0	-6.76	0.0	9.81e-03	0.0
16	124	1.09	0.0	-6.75	0.0	9.79e-03	0.0
16	125	1.09	0.0	-6.76	0.0	9.83e-03	0.0
16	126	2.07	0.0	-7.89	0.0	0.01	0.0
16	127	2.07	0.0	-7.89	0.0	0.01	0.0
16	128	2.07	0.0	-7.89	0.0	0.01	0.0
16	129	2.07	0.0	-7.90	0.0	0.01	0.0
16	130	1.10	0.0	-6.77	0.0	9.94e-03	0.0
16	131	1.10	0.0	-6.77	0.0	9.95e-03	0.0
16	132	1.10	0.0	-6.77	0.0	9.93e-03	0.0
16	133	1.10	0.0	-6.77	0.0	9.97e-03	0.0
16	134	0.62	0.0	-5.95	0.0	6.80e-03	0.0
16	135	0.62	0.0	-5.95	0.0	6.81e-03	0.0
16	136	0.62	0.0	-5.95	0.0	6.79e-03	0.0
16	137	0.62	0.0	-5.95	0.0	6.82e-03	0.0
16	138	1.59	0.0	-7.09	0.0	0.01	0.0
16	139	1.59	0.0	-7.09	0.0	0.01	0.0
16	140	1.59	0.0	-7.09	0.0	0.01	0.0
16	141	1.59	0.0	-7.09	0.0	0.01	0.0
16	142	0.62	0.0	-5.96	0.0	6.94e-03	0.0
16	143	0.62	0.0	-5.96	0.0	6.95e-03	0.0
16	144	0.62	0.0	-5.96	0.0	6.93e-03	0.0
16	145	0.62	0.0	-5.96	0.0	6.96e-03	0.0
16	146	-2.42e-03	0.0	-3.29	0.0	8.00e-05	0.0
16	147	-2.42e-03	0.0	-3.29	0.0	8.78e-05	0.0
16	148	-2.44e-03	0.0	-3.29	0.0	6.79e-05	0.0
16	149	-2.41e-03	0.0	-3.29	0.0	1.00e-04	0.0
16	150	0.97	0.0	-4.43	0.0	4.35e-03	0.0
16	151	0.97	0.0	-4.43	0.0	4.36e-03	0.0
16	152	0.97	0.0	-4.42	0.0	4.34e-03	0.0
16	153	0.97	0.0	-4.42	0.0	4.34e-03	0.0
16	154	-1.58e-03	0.0	-3.30	0.0	2.19e-04	0.0
16	155	-1.58e-03	0.0	-3.30	0.0	2.27e-04	0.0
16	156	-1.59e-03	0.0	-3.30	0.0	2.07e-04	0.0
16	157	-1.59e-03	0.0	-3.30	0.0	2.07e-04	0.0
16	158	1.25	0.0	-8.53	0.0	0.01	0.0
16	159	1.25	0.0	-8.53	0.0	0.01	0.0
16	160	1.25	0.0	-8.53	0.0	0.01	0.0
16	161	1.25	0.0	-8.53	0.0	0.01	0.0
16	162	2.23	0.0	-9.67	0.0	0.02	0.0
16	163	2.23	0.0	-9.67	0.0	0.02	0.0
16	164	2.23	0.0	-9.66	0.0	0.02	0.0
16	165	2.23	0.0	-9.67	0.0	0.02	0.0
16	166	1.25	0.0	-8.54	0.0	0.01	0.0
16	167	1.25	0.0	-8.54	0.0	0.01	0.0
16	168	1.25	0.0	-8.54	0.0	0.01	0.0
16	169	1.25	0.0	-8.54	0.0	0.01	0.0
16	170	0.62	0.0	-7.46	0.0	6.79e-03	0.0
16	171	0.62	0.0	-7.46	0.0	6.80e-03	0.0
16	172	0.62	0.0	-7.45	0.0	6.78e-03	0.0
16	173	0.62	0.0	-7.46	0.0	6.82e-03	0.0
16	174	1.59	0.0	-8.59	0.0	0.01	0.0
16	175	1.59	0.0	-8.59	0.0	0.01	0.0
16	176	1.59	0.0	-8.59	0.0	0.01	0.0
16	177	1.59	0.0	-8.59	0.0	0.01	0.0
16	178	0.62	0.0	-7.47	0.0	6.93e-03	0.0
16	179	0.62	0.0	-7.47	0.0	6.94e-03	0.0

Nodo	Cmb	Traslazione X	Traslazione Y	Traslazione Z	Rotazione X	Rotazione Y	Rotazione Z
16	180	0.62	0.0	-7.47	0.0	6.92e-03	0.0
16	181	0.62	0.0	-7.47	0.0	6.95e-03	0.0
Nodo		**Traslazione X**	**Traslazione Y**	**Traslazione Z**	**Rotazione X**	**Rotazione Y**	**Rotazione Z**
		-0.04	0.0	-15.92	0.0	-5.69e-04	0.0
		34.75	0.0	8.94	0.0	0.04	0.0

RISULTATI ELEMENTI TIPO TRAVE

Il controllo dei risultati delle analisi condotte, per quanto concerne gli elementi tipo trave, è possibile in relazione alle tabelle sottoriportate.

Gli elementi vengono suddivisi, in relazione alle proprietà in elementi:

- tipo **pilastro**
- tipo **trave in elevazione**
- tipo **trave in fondazione**

Per ogni elemento, e per ogni combinazione (o caso di carico) vengono riportati i risultati più significativi.

Per gli elementi tipo *pilastro* sono riportati in tabella i seguenti valori:

Pilas.	numero dell'elemento pilastro
Cmb	combinazione in cui si verificano i valori riportati
M3 mx/mn	momento flettente in campata M3 max (prima riga) / min (seconda riga)
M2 mx/mn	momento flettente in campata M2 max (prima riga) / min (seconda riga)
D2/D3	freccia massima in direzione 2 (prima riga) / direzione 3 (seconda riga)
Q2/Q3	carico totale in direzione 2 (prima riga) / direzione 3 (seconda riga)
Pos.	ascissa del punto iniziale e finale dell'elemento
N, V2, ecc..	sei componenti di sollecitazione al piede ed in sommità dell'elemento

Per gli elementi tipo *trave in elevazione* sono riportati, oltre al numero dell'elemento, i medesimi risultati visti per i pilastri.

Per gli elementi tipo *trave in fondazione* (trave f.) sono riportati, oltre al numero dell'elemento, i medesimi risultati visti per i pilastri e la massima pressione sul terreno.

Pilas.	Cmb	M3 mx/mn	M2 mx/mn	D 2 / D 3	Q 2 / Q 3	Pos.	N	V 2	V 3	T	M 2	M 3
		kN m	kN m	m	kN	cm	kN	kN	kN	kN m	kN m	kN m
2	1	-191.69	0.0	-2.05e-05	-26.59	0.0	-357.93	236.55	0.0	0.0	0.0	-258.64
		-258.64	0.0	0.0	0.0	30.0	-351.86	209.96	0.0	0.0	0.0	-191.69
2	2	-202.43	0.0	-1.41e-05	-26.59	0.0	-361.77	236.55	0.0	0.0	0.0	-269.39
		-269.39	0.0	0.0	0.0	30.0	-355.69	209.96	0.0	0.0	0.0	-202.43
2	3	-204.68	0.0	-5.18e-06	-26.59	0.0	-359.85	239.29	0.0	0.0	0.0	-272.46
		-272.46	0.0	0.0	0.0	30.0	-353.77	212.69	0.0	0.0	0.0	-204.68
2	4	-189.44	0.0	-2.94e-05	-26.59	0.0	-359.85	233.82	0.0	0.0	0.0	-255.57
		-255.57	0.0	0.0	0.0	30.0	-353.77	207.23	0.0	0.0	0.0	-189.44
2	5	-278.96	0.0	-1.66e-03	-26.59	0.0	-334.01	264.59	0.0	0.0	0.0	-354.32
		-354.32	0.0	0.0	0.0	30.0	-327.93	238.00	0.0	0.0	0.0	-278.96
2	6	-289.70	0.0	-1.67e-03	-26.59	0.0	-337.84	264.59	0.0	0.0	0.0	-365.07
		-365.07	0.0	0.0	0.0	30.0	-331.77	238.00	0.0	0.0	0.0	-289.70
2	7	-291.95	0.0	-1.68e-03	-26.59	0.0	-335.93	267.32	0.0	0.0	0.0	-368.13
		-368.13	0.0	0.0	0.0	30.0	-329.85	240.73	0.0	0.0	0.0	-291.95
2	8	-276.71	0.0	-1.65e-03	-26.59	0.0	-335.93	261.86	0.0	0.0	0.0	-351.25
		-351.25	0.0	0.0	0.0	30.0	-329.85	235.27	0.0	0.0	0.0	-276.71
2	9	-173.83	0.0	7.91e-05	-16.66	0.0	-357.93	153.72	0.0	0.0	0.0	-217.43
		-217.43	0.0	0.0	0.0	30.0	-351.86	137.07	0.0	0.0	0.0	-173.83
2	10	-184.57	0.0	7.27e-05	-16.66	0.0	-361.77	153.72	0.0	0.0	0.0	-228.18
		-228.18	0.0	0.0	0.0	30.0	-355.69	137.07	0.0	0.0	0.0	-184.57
2	11	-186.82	0.0	6.38e-05	-16.66	0.0	-359.85	156.46	0.0	0.0	0.0	-231.24
		-231.24	0.0	0.0	0.0	30.0	-353.77	139.80	0.0	0.0	0.0	-186.82
2	12	-171.58	0.0	8.80e-05	-16.66	0.0	-359.85	150.99	0.0	0.0	0.0	-214.36
		-214.36	0.0	0.0	0.0	30.0	-353.77	134.34	0.0	0.0	0.0	-171.58
2	13	-331.20	0.0	-1.54e-03	-28.90	0.0	-494.81	298.12	0.0	0.0	0.0	-416.28
		-416.28	0.0	0.0	0.0	30.0	-488.74	269.21	0.0	0.0	0.0	-331.20
2	14	-337.65	0.0	-1.54e-03	-28.90	0.0	-497.12	298.12	0.0	0.0	0.0	-422.73
		-422.73	0.0	0.0	0.0	30.0	-491.04	269.21	0.0	0.0	0.0	-337.65
2	15	-339.00	0.0	-1.55e-03	-28.90	0.0	-495.96	299.76	0.0	0.0	0.0	-424.57
		-424.57	0.0	0.0	0.0	30.0	-489.89	270.85	0.0	0.0	0.0	-339.00
2	16	-329.85	0.0	-1.53e-03	-28.90	0.0	-495.96	296.48	0.0	0.0	0.0	-414.44
		-414.44	0.0	0.0	0.0	30.0	-489.89	267.57	0.0	0.0	0.0	-329.85
2	17	-418.47	0.0	-3.22e-03	-28.90	0.0	-470.89	326.16	0.0	0.0	0.0	-511.96
		-511.96	0.0	0.0	0.0	30.0	-464.82	297.25	0.0	0.0	0.0	-418.47
2	18	-424.92	0.0	-3.22e-03	-28.90	0.0	-473.19	326.16	0.0	0.0	0.0	-518.41
		-518.41	0.0	0.0	0.0	30.0	-467.12	297.25	0.0	0.0	0.0	-424.92
2	19	-426.27	0.0	-3.23e-03	-28.90	0.0	-472.04	327.80	0.0	0.0	0.0	-520.25
		-520.25	0.0	0.0	0.0	30.0	-465.97	298.89	0.0	0.0	0.0	-426.27
2	20	-417.12	0.0	-3.22e-03	-28.90	0.0	-472.04	324.52	0.0	0.0	0.0	-510.12
		-510.12	0.0	0.0	0.0	30.0	-465.97	295.61	0.0	0.0	0.0	-417.12
2	21	-313.34	0.0	-1.48e-03	-18.97	0.0	-494.81	215.29	0.0	0.0	0.0	-375.07
		-375.07	0.0	0.0	0.0	30.0	-488.74	196.32	0.0	0.0	0.0	-313.34
2	22	-319.79	0.0	-1.49e-03	-18.97	0.0	-497.12	215.29	0.0	0.0	0.0	-381.52
		-381.52	0.0	0.0	0.0	30.0	-491.04	196.32	0.0	0.0	0.0	-319.79

Pilas.	Cmb	M3 mx/mn	M2 mx/mn	D 2 / D 3	Q 2 / Q 3	Pos.	N	V 2	V 3	T	M 2	M 3
2	23	-321.14	0.0	-1.49e-03	-18.97	0.0	-495.96	216.93	0.0	0.0	0.0	-383.36
		-383.36	0.0	0.0	0.0	30.0	-489.89	197.96	0.0	0.0	0.0	-321.14
2	24	-311.99	0.0	-1.48e-03	-18.97	0.0	-495.96	213.65	0.0	0.0	0.0	-373.23
		-373.23	0.0	0.0	0.0	30.0	-489.89	194.68	0.0	0.0	0.0	-311.99
2	25	-250.20	0.0	-5.40e-05	-28.90	0.0	-520.57	271.23	0.0	0.0	0.0	-327.21
		-327.21	0.0	0.0	0.0	30.0	-514.50	242.32	0.0	0.0	0.0	-250.20
2	26	-256.65	0.0	-5.02e-05	-28.90	0.0	-522.88	271.23	0.0	0.0	0.0	-333.66
		-333.66	0.0	0.0	0.0	30.0	-516.80	242.32	0.0	0.0	0.0	-256.65
2	27	-258.00	0.0	-4.48e-05	-28.90	0.0	-521.73	272.87	0.0	0.0	0.0	-335.50
		-335.50	0.0	0.0	0.0	30.0	-515.65	243.96	0.0	0.0	0.0	-258.00
2	28	-248.86	0.0	-5.93e-05	-28.90	0.0	-521.73	269.59	0.0	0.0	0.0	-325.37
		-325.37	0.0	0.0	0.0	30.0	-515.65	240.68	0.0	0.0	0.0	-248.86
2	29	-337.47	0.0	-1.63e-03	-28.90	0.0	-496.65	299.27	0.0	0.0	0.0	-422.89
		-422.89	0.0	0.0	0.0	30.0	-490.58	270.36	0.0	0.0	0.0	-337.47
2	30	-343.92	0.0	-1.63e-03	-28.90	0.0	-498.95	299.27	0.0	0.0	0.0	-429.34
		-429.34	0.0	0.0	0.0	30.0	-492.88	270.36	0.0	0.0	0.0	-343.92
2	31	-345.27	0.0	-1.64e-03	-28.90	0.0	-497.80	300.91	0.0	0.0	0.0	-431.18
		-431.18	0.0	0.0	0.0	30.0	-491.73	272.00	0.0	0.0	0.0	-345.27
2	32	-336.12	0.0	-1.62e-03	-28.90	0.0	-497.80	297.63	0.0	0.0	0.0	-421.05
		-421.05	0.0	0.0	0.0	30.0	-491.73	268.72	0.0	0.0	0.0	-336.12
2	33	-232.34	0.0	1.13e-04	-18.97	0.0	-520.57	188.40	0.0	0.0	0.0	-286.00
		-286.00	0.0	0.0	0.0	30.0	-514.50	169.43	0.0	0.0	0.0	-232.34
2	34	-238.79	0.0	1.09e-04	-18.97	0.0	-522.88	188.40	0.0	0.0	0.0	-292.45
		-292.45	0.0	0.0	0.0	30.0	-516.80	169.43	0.0	0.0	0.0	-238.79
2	35	-240.14	0.0	1.03e-04	-18.97	0.0	-521.73	190.04	0.0	0.0	0.0	-294.29
		-294.29	0.0	0.0	0.0	30.0	-515.65	171.07	0.0	0.0	0.0	-240.14
2	36	-230.99	0.0	1.18e-04	-18.97	0.0	-521.73	186.76	0.0	0.0	0.0	-284.16
		-284.16	0.0	0.0	0.0	30.0	-515.65	167.79	0.0	0.0	0.0	-230.99
2	37	-293.40	0.0	-1.15e-03	-28.32	0.0	-460.53	281.97	0.0	0.0	0.0	-373.72
		-373.72	0.0	0.0	0.0	30.0	-454.46	253.65	0.0	0.0	0.0	-293.40
2	38	-299.85	0.0	-1.15e-03	-28.32	0.0	-462.83	281.97	0.0	0.0	0.0	-380.16
		-380.16	0.0	0.0	0.0	30.0	-456.76	253.65	0.0	0.0	0.0	-299.85
2	39	-301.20	0.0	-1.16e-03	-28.32	0.0	-461.68	283.61	0.0	0.0	0.0	-382.01
		-382.01	0.0	0.0	0.0	30.0	-455.61	255.29	0.0	0.0	0.0	-301.20
2	40	-292.05	0.0	-1.14e-03	-28.32	0.0	-461.68	280.33	0.0	0.0	0.0	-371.88
		-371.88	0.0	0.0	0.0	30.0	-455.61	252.01	0.0	0.0	0.0	-292.05
2	41	-380.67	0.0	-2.83e-03	-28.32	0.0	-436.61	310.01	0.0	0.0	0.0	-469.40
		-469.40	0.0	0.0	0.0	30.0	-430.53	281.68	0.0	0.0	0.0	-380.67
2	42	-387.11	0.0	-2.83e-03	-28.32	0.0	-438.91	310.01	0.0	0.0	0.0	-475.84
		-475.84	0.0	0.0	0.0	30.0	-432.84	281.68	0.0	0.0	0.0	-387.11
2	43	-388.46	0.0	-2.84e-03	-28.32	0.0	-437.76	311.65	0.0	0.0	0.0	-477.68
		-477.68	0.0	0.0	0.0	30.0	-431.69	283.32	0.0	0.0	0.0	-388.46
2	44	-379.32	0.0	-2.83e-03	-28.32	0.0	-437.76	308.37	0.0	0.0	0.0	-467.56
		-467.56	0.0	0.0	0.0	30.0	-431.69	280.04	0.0	0.0	0.0	-379.32
2	45	-275.54	0.0	-1.09e-03	-18.39	0.0	-460.53	199.14	0.0	0.0	0.0	-332.51
		-332.51	0.0	0.0	0.0	30.0	-454.46	180.75	0.0	0.0	0.0	-275.54
2	46	-281.98	0.0	-1.10e-03	-18.39	0.0	-462.83	199.14	0.0	0.0	0.0	-338.95
		-338.95	0.0	0.0	0.0	30.0	-456.76	180.75	0.0	0.0	0.0	-281.98
2	47	-283.33	0.0	-1.10e-03	-18.39	0.0	-461.68	200.78	0.0	0.0	0.0	-340.79
		-340.79	0.0	0.0	0.0	30.0	-455.61	182.39	0.0	0.0	0.0	-283.33
2	48	-274.19	0.0	-1.09e-03	-18.39	0.0	-461.68	197.50	0.0	0.0	0.0	-330.67
		-330.67	0.0	0.0	0.0	30.0	-455.61	179.11	0.0	0.0	0.0	-274.19
2	49	-232.80	0.0	-4.24e-05	-28.32	0.0	-479.81	261.85	0.0	0.0	0.0	-307.08
		-307.08	0.0	0.0	0.0	30.0	-473.73	233.53	0.0	0.0	0.0	-232.80
2	50	-239.25	0.0	-3.86e-05	-28.32	0.0	-482.11	261.85	0.0	0.0	0.0	-313.53
		-313.53	0.0	0.0	0.0	30.0	-476.03	233.53	0.0	0.0	0.0	-239.25
2	51	-240.60	0.0	-3.33e-05	-28.32	0.0	-480.96	263.49	0.0	0.0	0.0	-315.37
		-315.37	0.0	0.0	0.0	30.0	-474.88	235.17	0.0	0.0	0.0	-240.60
2	52	-231.45	0.0	-4.78e-05	-28.32	0.0	-480.96	260.21	0.0	0.0	0.0	-305.24
		-305.24	0.0	0.0	0.0	30.0	-474.88	231.89	0.0	0.0	0.0	-231.45
2	53	-320.07	0.0	-1.64e-03	-28.32	0.0	-455.88	289.89	0.0	0.0	0.0	-402.76
		-402.76	0.0	0.0	0.0	30.0	-449.81	261.57	0.0	0.0	0.0	-320.07
2	54	-326.51	0.0	-1.64e-03	-28.32	0.0	-458.18	289.89	0.0	0.0	0.0	-409.21
		-409.21	0.0	0.0	0.0	30.0	-452.11	261.57	0.0	0.0	0.0	-326.51
2	55	-327.86	0.0	-1.65e-03	-28.32	0.0	-457.03	291.53	0.0	0.0	0.0	-411.05
		-411.05	0.0	0.0	0.0	30.0	-450.96	263.21	0.0	0.0	0.0	-327.86
2	56	-318.72	0.0	-1.63e-03	-28.32	0.0	-457.03	288.25	0.0	0.0	0.0	-400.92
		-400.92	0.0	0.0	0.0	30.0	-450.96	259.93	0.0	0.0	0.0	-318.72
2	57	-214.94	0.0	1.01e-04	-18.39	0.0	-479.81	179.02	0.0	0.0	0.0	-265.87
		-265.87	0.0	0.0	0.0	30.0	-473.73	160.64	0.0	0.0	0.0	-214.94
2	58	-221.38	0.0	9.72e-05	-18.39	0.0	-482.11	179.02	0.0	0.0	0.0	-272.32
		-272.32	0.0	0.0	0.0	30.0	-476.03	160.64	0.0	0.0	0.0	-221.38
2	59	-222.73	0.0	9.19e-05	-18.39	0.0	-480.96	180.66	0.0	0.0	0.0	-274.16
		-274.16	0.0	0.0	0.0	30.0	-474.88	162.28	0.0	0.0	0.0	-222.73
2	60	-213.59	0.0	1.06e-04	-18.39	0.0	-480.96	177.38	0.0	0.0	0.0	-264.03

Pilas.	Cmb	M3 mx/mn	M2 mx/mn	D 2 / D 3	Q 2 / Q 3	Pos.	N	V 2	V 3	T	M 2	M 3
		-264.03	0.0	0.0	0.0	30.0	-474.88	159.00	0.0	0.0	0.0	-213.59
2	61	-455.65	0.0	-4.73e-03	-28.32	0.0	-387.11	340.26	0.0	0.0	0.0	-553.45
		-553.45	0.0	0.0	0.0	30.0	-381.03	311.93	0.0	0.0	0.0	-455.65
2	62	-462.09	0.0	-4.74e-03	-28.32	0.0	-389.41	340.26	0.0	0.0	0.0	-559.90
		-559.90	0.0	0.0	0.0	30.0	-383.34	311.93	0.0	0.0	0.0	-462.09
2	63	-463.44	0.0	-4.74e-03	-28.32	0.0	-388.26	341.90	0.0	0.0	0.0	-561.74
		-561.74	0.0	0.0	0.0	30.0	-382.19	313.57	0.0	0.0	0.0	-463.44
2	64	-454.30	0.0	-4.73e-03	-28.32	0.0	-388.26	338.62	0.0	0.0	0.0	-551.61
		-551.61	0.0	0.0	0.0	30.0	-382.19	310.29	0.0	0.0	0.0	-454.30
2	65	-542.91	0.0	-6.42e-03	-28.32	0.0	-363.19	368.29	0.0	0.0	0.0	-649.13
		-649.13	0.0	0.0	0.0	30.0	-357.11	339.97	0.0	0.0	0.0	-542.91
2	66	-549.36	0.0	-6.42e-03	-28.32	0.0	-365.49	368.29	0.0	0.0	0.0	-655.58
		-655.58	0.0	0.0	0.0	30.0	-359.41	339.97	0.0	0.0	0.0	-549.36
2	67	-550.71	0.0	-6.42e-03	-28.32	0.0	-364.34	369.93	0.0	0.0	0.0	-657.42
		-657.42	0.0	0.0	0.0	30.0	-358.26	341.61	0.0	0.0	0.0	-550.71
2	68	-541.56	0.0	-6.41e-03	-28.32	0.0	-364.34	366.65	0.0	0.0	0.0	-647.29
		-647.29	0.0	0.0	0.0	30.0	-358.26	338.33	0.0	0.0	0.0	-541.56
2	69	-437.78	0.0	-4.68e-03	-18.39	0.0	-387.11	257.43	0.0	0.0	0.0	-512.24
		-512.24	0.0	0.0	0.0	30.0	-381.03	239.04	0.0	0.0	0.0	-437.78
2	70	-444.23	0.0	-4.68e-03	-18.39	0.0	-389.41	257.43	0.0	0.0	0.0	-518.69
		-518.69	0.0	0.0	0.0	30.0	-383.34	239.04	0.0	0.0	0.0	-444.23
2	71	-445.58	0.0	-4.68e-03	-18.39	0.0	-388.26	259.07	0.0	0.0	0.0	-520.53
		-520.53	0.0	0.0	0.0	30.0	-382.19	240.68	0.0	0.0	0.0	-445.58
2	72	-436.43	0.0	-4.67e-03	-18.39	0.0	-388.26	255.79	0.0	0.0	0.0	-510.40
		-510.40	0.0	0.0	0.0	30.0	-382.19	237.40	0.0	0.0	0.0	-436.43
2	73	-395.05	0.0	-3.54e-03	-28.32	0.0	-406.38	320.14	0.0	0.0	0.0	-486.82
		-486.82	0.0	0.0	0.0	30.0	-400.31	291.82	0.0	0.0	0.0	-395.05
2	74	-401.49	0.0	-3.55e-03	-28.32	0.0	-408.68	320.14	0.0	0.0	0.0	-493.26
		-493.26	0.0	0.0	0.0	30.0	-402.61	291.82	0.0	0.0	0.0	-401.49
2	75	-402.84	0.0	-3.55e-03	-28.32	0.0	-407.53	321.78	0.0	0.0	0.0	-495.10
		-495.10	0.0	0.0	0.0	30.0	-401.46	293.46	0.0	0.0	0.0	-402.84
2	76	-393.70	0.0	-3.54e-03	-28.32	0.0	-407.53	318.50	0.0	0.0	0.0	-484.98
		-484.98	0.0	0.0	0.0	30.0	-401.46	290.18	0.0	0.0	0.0	-393.70
2	77	-482.31	0.0	-5.22e-03	-28.32	0.0	-382.46	348.18	0.0	0.0	0.0	-582.50
		-582.50	0.0	0.0	0.0	30.0	-376.38	319.86	0.0	0.0	0.0	-482.31
2	78	-488.76	0.0	-5.23e-03	-28.32	0.0	-384.76	348.18	0.0	0.0	0.0	-588.94
		-588.94	0.0	0.0	0.0	30.0	-378.69	319.86	0.0	0.0	0.0	-488.76
2	79	-490.11	0.0	-5.23e-03	-28.32	0.0	-383.61	349.82	0.0	0.0	0.0	-590.78
		-590.78	0.0	0.0	0.0	30.0	-377.53	321.50	0.0	0.0	0.0	-490.11
2	80	-480.96	0.0	-5.22e-03	-28.32	0.0	-383.61	346.54	0.0	0.0	0.0	-580.65
		-580.65	0.0	0.0	0.0	30.0	-377.53	318.22	0.0	0.0	0.0	-480.96
2	81	-377.18	0.0	-3.48e-03	-18.39	0.0	-406.38	237.31	0.0	0.0	0.0	-445.61
		-445.61	0.0	0.0	0.0	30.0	-400.31	218.93	0.0	0.0	0.0	-377.18
2	82	-383.63	0.0	-3.49e-03	-18.39	0.0	-408.68	237.31	0.0	0.0	0.0	-452.05
		-452.05	0.0	0.0	0.0	30.0	-402.61	218.93	0.0	0.0	0.0	-383.63
2	83	-384.98	0.0	-3.49e-03	-18.39	0.0	-407.53	238.95	0.0	0.0	0.0	-453.89
		-453.89	0.0	0.0	0.0	30.0	-401.46	220.57	0.0	0.0	0.0	-384.98
2	84	-375.83	0.0	-3.48e-03	-18.39	0.0	-407.53	235.67	0.0	0.0	0.0	-443.76
		-443.76	0.0	0.0	0.0	30.0	-401.46	217.29	0.0	0.0	0.0	-375.83
2	85	-291.06	0.0	-1.15e-03	-28.32	0.0	-460.53	281.50	0.0	0.0	0.0	-371.24
		-371.24	0.0	0.0	0.0	30.0	-454.46	253.18	0.0	0.0	0.0	-291.06
2	86	-297.51	0.0	-1.16e-03	-28.32	0.0	-462.83	281.50	0.0	0.0	0.0	-377.68
		-377.68	0.0	0.0	0.0	30.0	-456.76	253.18	0.0	0.0	0.0	-297.51
2	87	-298.86	0.0	-1.16e-03	-28.32	0.0	-461.68	283.14	0.0	0.0	0.0	-379.53
		-379.53	0.0	0.0	0.0	30.0	-455.61	254.82	0.0	0.0	0.0	-298.86
2	88	-289.71	0.0	-1.15e-03	-28.32	0.0	-461.68	279.86	0.0	0.0	0.0	-369.40
		-369.40	0.0	0.0	0.0	30.0	-455.61	251.54	0.0	0.0	0.0	-289.71
2	89	-378.33	0.0	-2.83e-03	-28.32	0.0	-436.61	309.54	0.0	0.0	0.0	-466.92
		-466.92	0.0	0.0	0.0	30.0	-430.53	281.22	0.0	0.0	0.0	-378.33
2	90	-384.77	0.0	-2.84e-03	-28.32	0.0	-438.91	309.54	0.0	0.0	0.0	-473.36
		-473.36	0.0	0.0	0.0	30.0	-432.84	281.22	0.0	0.0	0.0	-384.77
2	91	-386.12	0.0	-2.84e-03	-28.32	0.0	-437.76	311.18	0.0	0.0	0.0	-475.20
		-475.20	0.0	0.0	0.0	30.0	-431.69	282.85	0.0	0.0	0.0	-386.12
2	92	-376.98	0.0	-2.83e-03	-28.32	0.0	-437.76	307.90	0.0	0.0	0.0	-465.08
		-465.08	0.0	0.0	0.0	30.0	-431.69	279.58	0.0	0.0	0.0	-376.98
2	93	-273.20	0.0	-1.09e-03	-18.39	0.0	-460.53	198.67	0.0	0.0	0.0	-330.03
		-330.03	0.0	0.0	0.0	30.0	-454.46	180.28	0.0	0.0	0.0	-273.20
2	94	-279.64	0.0	-1.10e-03	-18.39	0.0	-462.83	198.67	0.0	0.0	0.0	-336.47
		-336.47	0.0	0.0	0.0	30.0	-456.76	180.28	0.0	0.0	0.0	-279.64
2	95	-280.99	0.0	-1.10e-03	-18.39	0.0	-461.68	200.31	0.0	0.0	0.0	-338.31
		-338.31	0.0	0.0	0.0	30.0	-455.61	181.92	0.0	0.0	0.0	-280.99
2	96	-271.85	0.0	-1.09e-03	-18.39	0.0	-461.68	197.03	0.0	0.0	0.0	-328.19
		-328.19	0.0	0.0	0.0	30.0	-455.61	178.64	0.0	0.0	0.0	-271.85
2	97	-230.46	0.0	-4.04e-05	-28.32	0.0	-479.81	261.38	0.0	0.0	0.0	-304.60
		-304.60	0.0	0.0	0.0	30.0	-473.73	233.06	0.0	0.0	0.0	-230.46

Pilas.	Cmb	M3 mx/mn	M2 mx/mn	D 2 / D 3	Q 2 / Q 3	Pos.	N	V 2	V 3	T	M 2	M 3
2	98	-236.91	0.0	-3.66e-05	-28.32	0.0	-482.11	261.38	0.0	0.0	0.0	-311.05
		-311.05	0.0	0.0	0.0	30.0	-476.03	233.06	0.0	0.0	0.0	-236.91
2	99	-238.26	0.0	-3.12e-05	-28.32	0.0	-480.96	263.02	0.0	0.0	0.0	-312.89
		-312.89	0.0	0.0	0.0	30.0	-474.88	234.70	0.0	0.0	0.0	-238.26
2	100	-229.11	0.0	-4.57e-05	-28.32	0.0	-480.96	259.74	0.0	0.0	0.0	-302.76
		-302.76	0.0	0.0	0.0	30.0	-474.88	231.42	0.0	0.0	0.0	-229.11
2	101	-317.73	0.0	-1.64e-03	-28.32	0.0	-455.88	289.42	0.0	0.0	0.0	-400.28
		-400.28	0.0	0.0	0.0	30.0	-449.81	261.10	0.0	0.0	0.0	-317.73
2	102	-324.17	0.0	-1.64e-03	-28.32	0.0	-458.18	289.42	0.0	0.0	0.0	-406.73
		-406.73	0.0	0.0	0.0	30.0	-452.11	261.10	0.0	0.0	0.0	-324.17
2	103	-325.52	0.0	-1.65e-03	-28.32	0.0	-457.03	291.06	0.0	0.0	0.0	-408.57
		-408.57	0.0	0.0	0.0	30.0	-450.96	262.74	0.0	0.0	0.0	-325.52
2	104	-316.38	0.0	-1.64e-03	-28.32	0.0	-457.03	287.78	0.0	0.0	0.0	-398.44
		-398.44	0.0	0.0	0.0	30.0	-450.96	259.46	0.0	0.0	0.0	-316.38
2	105	-212.60	0.0	9.90e-05	-18.39	0.0	-479.81	178.55	0.0	0.0	0.0	-263.39
		-263.39	0.0	0.0	0.0	30.0	-473.73	160.17	0.0	0.0	0.0	-212.60
2	106	-219.05	0.0	9.52e-05	-18.39	0.0	-482.11	178.55	0.0	0.0	0.0	-269.84
		-269.84	0.0	0.0	0.0	30.0	-476.03	160.17	0.0	0.0	0.0	-219.05
2	107	-220.39	0.0	8.98e-05	-18.39	0.0	-480.96	180.19	0.0	0.0	0.0	-271.68
		-271.68	0.0	0.0	0.0	30.0	-474.88	161.81	0.0	0.0	0.0	-220.39
2	108	-211.25	0.0	1.04e-04	-18.39	0.0	-480.96	176.91	0.0	0.0	0.0	-261.55
		-261.55	0.0	0.0	0.0	30.0	-474.88	158.53	0.0	0.0	0.0	-211.25
2	109	-817.93	0.0	-0.01	-34.39	0.0	-83.52	540.38	0.0	0.0	0.0	-974.87
		-974.87	0.0	0.0	0.0	30.0	-79.02	506.00	0.0	0.0	0.0	-817.93
2	110	-179.48	0.0	6.34e-05	-19.70	0.0	-355.53	176.50	0.0	0.0	0.0	-229.46
		-229.46	0.0	0.0	0.0	30.0	-351.03	156.80	0.0	0.0	0.0	-179.48
2	111	-184.85	0.0	6.02e-05	-19.70	0.0	-357.45	176.50	0.0	0.0	0.0	-234.83
		-234.83	0.0	0.0	0.0	30.0	-352.95	156.80	0.0	0.0	0.0	-184.85
2	112	-185.97	0.0	5.57e-05	-19.70	0.0	-356.49	177.87	0.0	0.0	0.0	-236.36
		-236.36	0.0	0.0	0.0	30.0	-351.99	158.17	0.0	0.0	0.0	-185.97
2	113	-178.35	0.0	6.79e-05	-19.70	0.0	-356.49	175.14	0.0	0.0	0.0	-227.92
		-227.92	0.0	0.0	0.0	30.0	-351.99	155.44	0.0	0.0	0.0	-178.35
2	114	-244.12	0.0	-1.18e-03	-19.70	0.0	-337.81	197.27	0.0	0.0	0.0	-300.33
		-300.33	0.0	0.0	0.0	30.0	-333.31	177.57	0.0	0.0	0.0	-244.12
2	115	-249.49	0.0	-1.18e-03	-19.70	0.0	-339.72	197.27	0.0	0.0	0.0	-305.70
		-305.70	0.0	0.0	0.0	30.0	-335.22	177.57	0.0	0.0	0.0	-249.49
2	116	-250.62	0.0	-1.19e-03	-19.70	0.0	-338.76	198.64	0.0	0.0	0.0	-307.24
		-307.24	0.0	0.0	0.0	30.0	-334.26	178.94	0.0	0.0	0.0	-250.62
2	117	-242.99	0.0	-1.18e-03	-19.70	0.0	-338.76	195.91	0.0	0.0	0.0	-298.79
		-298.79	0.0	0.0	0.0	30.0	-334.26	176.21	0.0	0.0	0.0	-242.99
2	118	-166.25	0.0	1.07e-04	-12.34	0.0	-355.53	115.15	0.0	0.0	0.0	-198.93
		-198.93	0.0	0.0	0.0	30.0	-351.03	102.81	0.0	0.0	0.0	-166.25
2	119	-171.62	0.0	1.04e-04	-12.34	0.0	-357.45	115.15	0.0	0.0	0.0	-204.30
		-204.30	0.0	0.0	0.0	30.0	-352.95	102.81	0.0	0.0	0.0	-171.62
2	120	-172.74	0.0	9.92e-05	-12.34	0.0	-356.49	116.51	0.0	0.0	0.0	-205.84
		-205.84	0.0	0.0	0.0	30.0	-351.99	104.18	0.0	0.0	0.0	-172.74
2	121	-165.12	0.0	1.11e-04	-12.34	0.0	-356.49	113.78	0.0	0.0	0.0	-197.39
		-197.39	0.0	0.0	0.0	30.0	-351.99	101.44	0.0	0.0	0.0	-165.12
2	122	-323.28	0.0	-2.83e-03	-20.98	0.0	-300.42	244.52	0.0	0.0	0.0	-393.47
		-393.47	0.0	0.0	0.0	30.0	-295.92	223.54	0.0	0.0	0.0	-323.28
2	123	-328.65	0.0	-2.83e-03	-20.98	0.0	-302.34	244.52	0.0	0.0	0.0	-398.84
		-398.84	0.0	0.0	0.0	30.0	-297.84	223.54	0.0	0.0	0.0	-328.65
2	124	-329.77	0.0	-2.84e-03	-20.98	0.0	-301.38	245.89	0.0	0.0	0.0	-400.38
		-400.38	0.0	0.0	0.0	30.0	-296.88	224.91	0.0	0.0	0.0	-329.77
2	125	-322.15	0.0	-2.83e-03	-20.98	0.0	-301.38	243.16	0.0	0.0	0.0	-391.93
		-391.93	0.0	0.0	0.0	30.0	-296.88	222.18	0.0	0.0	0.0	-322.15
2	126	-387.92	0.0	-4.08e-03	-20.98	0.0	-282.70	265.29	0.0	0.0	0.0	-464.34
		-464.34	0.0	0.0	0.0	30.0	-278.20	244.31	0.0	0.0	0.0	-387.92
2	127	-393.29	0.0	-4.08e-03	-20.98	0.0	-284.62	265.29	0.0	0.0	0.0	-469.71
		-469.71	0.0	0.0	0.0	30.0	-280.12	244.31	0.0	0.0	0.0	-393.29
2	128	-394.41	0.0	-4.08e-03	-20.98	0.0	-283.66	266.66	0.0	0.0	0.0	-471.25
		-471.25	0.0	0.0	0.0	30.0	-279.16	245.68	0.0	0.0	0.0	-394.41
2	129	-386.79	0.0	-4.07e-03	-20.98	0.0	-283.66	263.93	0.0	0.0	0.0	-462.81
		-462.81	0.0	0.0	0.0	30.0	-279.16	242.94	0.0	0.0	0.0	-386.79
2	130	-310.05	0.0	-2.79e-03	-13.62	0.0	-300.42	183.17	0.0	0.0	0.0	-362.94
		-362.94	0.0	0.0	0.0	30.0	-295.92	169.55	0.0	0.0	0.0	-310.05
2	131	-315.42	0.0	-2.79e-03	-13.62	0.0	-302.34	183.17	0.0	0.0	0.0	-368.31
		-368.31	0.0	0.0	0.0	30.0	-297.84	169.55	0.0	0.0	0.0	-315.42
2	132	-316.54	0.0	-2.80e-03	-13.62	0.0	-301.38	184.54	0.0	0.0	0.0	-369.85
		-369.85	0.0	0.0	0.0	30.0	-296.88	170.91	0.0	0.0	0.0	-316.54
2	133	-308.92	0.0	-2.78e-03	-13.62	0.0	-301.38	181.80	0.0	0.0	0.0	-361.41
		-361.41	0.0	0.0	0.0	30.0	-296.88	168.18	0.0	0.0	0.0	-308.92
2	134	-278.28	0.0	-1.95e-03	-20.98	0.0	-314.74	229.59	0.0	0.0	0.0	-343.99
		-343.99	0.0	0.0	0.0	30.0	-310.24	208.60	0.0	0.0	0.0	-278.28
2	135	-283.65	0.0	-1.95e-03	-20.98	0.0	-316.65	229.59	0.0	0.0	0.0	-349.36

Pilas.	Cmb	M3 mx/mn	M2 mx/mn	D 2 / D 3	Q 2 / Q 3	Pos.	N	V 2	V 3	T	M 2	M 3
		-349.36	0.0	0.0	0.0	30.0	-312.15	208.60	0.0	0.0	0.0	-283.65
2	136	-284.77	0.0	-1.95e-03	-20.98	0.0	-315.70	230.95	0.0	0.0	0.0	-350.89
		-350.89	0.0	0.0	0.0	30.0	-311.20	209.97	0.0	0.0	0.0	-284.77
2	137	-277.15	0.0	-1.94e-03	-20.98	0.0	-315.70	228.22	0.0	0.0	0.0	-342.45
		-342.45	0.0	0.0	0.0	30.0	-311.20	207.24	0.0	0.0	0.0	-277.15
2	138	-342.92	0.0	-3.19e-03	-20.98	0.0	-297.01	250.36	0.0	0.0	0.0	-414.86
		-414.86	0.0	0.0	0.0	30.0	-292.51	229.37	0.0	0.0	0.0	-342.92
2	139	-348.29	0.0	-3.19e-03	-20.98	0.0	-298.93	250.36	0.0	0.0	0.0	-420.23
		-420.23	0.0	0.0	0.0	30.0	-294.43	229.37	0.0	0.0	0.0	-348.29
2	140	-349.42	0.0	-3.20e-03	-20.98	0.0	-297.97	251.72	0.0	0.0	0.0	-421.77
		-421.77	0.0	0.0	0.0	30.0	-293.47	230.74	0.0	0.0	0.0	-349.42
2	141	-341.79	0.0	-3.19e-03	-20.98	0.0	-297.97	248.99	0.0	0.0	0.0	-413.33
		-413.33	0.0	0.0	0.0	30.0	-293.47	228.01	0.0	0.0	0.0	-341.79
2	142	-265.05	0.0	-1.90e-03	-13.62	0.0	-314.74	168.23	0.0	0.0	0.0	-313.46
		-313.46	0.0	0.0	0.0	30.0	-310.24	154.61	0.0	0.0	0.0	-265.05
2	143	-270.42	0.0	-1.91e-03	-13.62	0.0	-316.65	168.23	0.0	0.0	0.0	-318.83
		-318.83	0.0	0.0	0.0	30.0	-312.15	154.61	0.0	0.0	0.0	-270.42
2	144	-271.54	0.0	-1.91e-03	-13.62	0.0	-315.70	169.60	0.0	0.0	0.0	-320.37
		-320.37	0.0	0.0	0.0	30.0	-311.20	155.98	0.0	0.0	0.0	-271.54
2	145	-263.92	0.0	-1.90e-03	-13.62	0.0	-315.70	166.87	0.0	0.0	0.0	-311.93
		-311.93	0.0	0.0	0.0	30.0	-311.20	153.24	0.0	0.0	0.0	-263.92
2	146	-143.73	0.0	-1.41e-05	-19.70	0.0	-265.76	175.22	0.0	0.0	0.0	-193.33
		-193.33	0.0	0.0	0.0	30.0	-261.26	155.53	0.0	0.0	0.0	-143.73
2	147	-148.21	0.0	-1.15e-05	-19.70	0.0	-267.35	175.22	0.0	0.0	0.0	-197.80
		-197.80	0.0	0.0	0.0	30.0	-262.85	155.53	0.0	0.0	0.0	-148.21
2	148	-149.15	0.0	-7.76e-06	-19.70	0.0	-266.56	176.36	0.0	0.0	0.0	-199.08
		-199.08	0.0	0.0	0.0	30.0	-262.06	156.67	0.0	0.0	0.0	-149.15
2	149	-142.80	0.0	-1.78e-05	-19.70	0.0	-266.56	174.09	0.0	0.0	0.0	-192.05
		-192.05	0.0	0.0	0.0	30.0	-262.06	154.39	0.0	0.0	0.0	-142.80
2	150	-208.38	0.0	-1.23e-03	-19.70	0.0	-248.03	195.99	0.0	0.0	0.0	-264.20
		-264.20	0.0	0.0	0.0	30.0	-243.53	176.30	0.0	0.0	0.0	-208.38
2	151	-212.85	0.0	-1.23e-03	-19.70	0.0	-249.63	195.99	0.0	0.0	0.0	-268.68
		-268.68	0.0	0.0	0.0	30.0	-245.13	176.30	0.0	0.0	0.0	-212.85
2	152	-213.79	0.0	-1.24e-03	-19.70	0.0	-248.83	197.13	0.0	0.0	0.0	-269.96
		-269.96	0.0	0.0	0.0	30.0	-244.33	177.43	0.0	0.0	0.0	-213.79
2	153	-213.79	0.0	-1.24e-03	-19.70	0.0	-248.83	197.13	0.0	0.0	0.0	-269.96
		-269.96	0.0	0.0	0.0	30.0	-244.33	177.43	0.0	0.0	0.0	-213.79
2	154	-130.50	0.0	5.76e-05	-12.34	0.0	-265.76	113.87	0.0	0.0	0.0	-162.80
		-162.80	0.0	0.0	0.0	30.0	-261.26	101.53	0.0	0.0	0.0	-130.50
2	155	-134.98	0.0	5.49e-05	-12.34	0.0	-267.35	113.87	0.0	0.0	0.0	-167.28
		-167.28	0.0	0.0	0.0	30.0	-262.85	101.53	0.0	0.0	0.0	-134.98
2	156	-135.92	0.0	5.12e-05	-12.34	0.0	-266.56	115.01	0.0	0.0	0.0	-168.56
		-168.56	0.0	0.0	0.0	30.0	-262.06	102.67	0.0	0.0	0.0	-135.92
2	157	-135.92	0.0	5.12e-05	-12.34	0.0	-266.56	115.01	0.0	0.0	0.0	-168.56
		-168.56	0.0	0.0	0.0	30.0	-262.06	102.67	0.0	0.0	0.0	-135.92
2	158	-338.17	0.0	-3.13e-03	-21.41	0.0	-325.63	253.81	0.0	0.0	0.0	-411.09
		-411.09	0.0	0.0	0.0	30.0	-321.13	232.40	0.0	0.0	0.0	-338.17
2	159	-343.54	0.0	-3.13e-03	-21.41	0.0	-327.55	253.81	0.0	0.0	0.0	-416.46
		-416.46	0.0	0.0	0.0	30.0	-323.05	232.40	0.0	0.0	0.0	-343.54
2	160	-344.67	0.0	-3.14e-03	-21.41	0.0	-326.59	255.18	0.0	0.0	0.0	-417.99
		-417.99	0.0	0.0	0.0	30.0	-322.09	233.77	0.0	0.0	0.0	-344.67
2	161	-337.05	0.0	-3.12e-03	-21.41	0.0	-326.59	252.44	0.0	0.0	0.0	-409.55
		-409.55	0.0	0.0	0.0	30.0	-322.09	231.03	0.0	0.0	0.0	-337.05
2	162	-402.81	0.0	-4.37e-03	-21.41	0.0	-307.91	274.58	0.0	0.0	0.0	-481.96
		-481.96	0.0	0.0	0.0	30.0	-303.41	253.17	0.0	0.0	0.0	-402.81
2	163	-408.19	0.0	-4.38e-03	-21.41	0.0	-309.83	274.58	0.0	0.0	0.0	-487.33
		-487.33	0.0	0.0	0.0	30.0	-305.33	253.17	0.0	0.0	0.0	-408.19
2	164	-409.31	0.0	-4.38e-03	-21.41	0.0	-308.87	275.95	0.0	0.0	0.0	-488.87
		-488.87	0.0	0.0	0.0	30.0	-304.37	254.54	0.0	0.0	0.0	-409.31
2	165	-401.69	0.0	-4.37e-03	-21.41	0.0	-308.87	273.21	0.0	0.0	0.0	-480.42
		-480.42	0.0	0.0	0.0	30.0	-304.37	251.80	0.0	0.0	0.0	-401.69
2	166	-324.94	0.0	-3.09e-03	-14.05	0.0	-325.63	192.46	0.0	0.0	0.0	-380.56
		-380.56	0.0	0.0	0.0	30.0	-321.13	178.40	0.0	0.0	0.0	-324.94
2	167	-330.31	0.0	-3.09e-03	-14.05	0.0	-327.55	192.46	0.0	0.0	0.0	-385.93
		-385.93	0.0	0.0	0.0	30.0	-323.05	178.40	0.0	0.0	0.0	-330.31
2	168	-331.44	0.0	-3.09e-03	-14.05	0.0	-326.59	193.82	0.0	0.0	0.0	-387.47
		-387.47	0.0	0.0	0.0	30.0	-322.09	179.77	0.0	0.0	0.0	-331.44
2	169	-323.82	0.0	-3.08e-03	-14.05	0.0	-326.59	191.09	0.0	0.0	0.0	-379.02
		-379.02	0.0	0.0	0.0	30.0	-322.09	177.04	0.0	0.0	0.0	-323.82
2	170	-278.17	0.0	-1.95e-03	-21.41	0.0	-344.71	233.89	0.0	0.0	0.0	-345.11
		-345.11	0.0	0.0	0.0	30.0	-340.21	212.48	0.0	0.0	0.0	-278.17
2	171	-283.54	0.0	-1.95e-03	-21.41	0.0	-346.63	233.89	0.0	0.0	0.0	-350.48
		-350.48	0.0	0.0	0.0	30.0	-342.13	212.48	0.0	0.0	0.0	-283.54
2	172	-284.67	0.0	-1.96e-03	-21.41	0.0	-345.67	235.26	0.0	0.0	0.0	-352.02
		-352.02	0.0	0.0	0.0	30.0	-341.17	213.85	0.0	0.0	0.0	-284.67

Pilas.	Cmb	M3 mx/mn	M2 mx/mn	D 2 / D 3	Q 2 / Q 3	Pos.	N	V 2	V 3	T	M 2	M 3
2	173	-277.05	0.0	-1.94e-03	-21.41	0.0	-345.67	232.53	0.0	0.0	0.0	-343.58
		-343.58	0.0	0.0	0.0	30.0	-341.17	211.12	0.0	0.0	0.0	-277.05
2	174	-342.81	0.0	-3.19e-03	-21.41	0.0	-326.99	254.66	0.0	0.0	0.0	-415.98
		-415.98	0.0	0.0	0.0	30.0	-322.49	233.25	0.0	0.0	0.0	-342.81
2	175	-348.19	0.0	-3.20e-03	-21.41	0.0	-328.91	254.66	0.0	0.0	0.0	-421.36
		-421.36	0.0	0.0	0.0	30.0	-324.41	233.25	0.0	0.0	0.0	-348.19
2	176	-349.31	0.0	-3.20e-03	-21.41	0.0	-327.95	256.03	0.0	0.0	0.0	-422.89
		-422.89	0.0	0.0	0.0	30.0	-323.45	234.62	0.0	0.0	0.0	-349.31
2	177	-341.69	0.0	-3.19e-03	-21.41	0.0	-327.95	253.30	0.0	0.0	0.0	-414.45
		-414.45	0.0	0.0	0.0	30.0	-323.45	231.89	0.0	0.0	0.0	-341.69
2	178	-264.94	0.0	-1.90e-03	-14.05	0.0	-344.71	172.54	0.0	0.0	0.0	-314.58
		-314.58	0.0	0.0	0.0	30.0	-340.21	158.49	0.0	0.0	0.0	-264.94
2	179	-270.31	0.0	-1.91e-03	-14.05	0.0	-346.63	172.54	0.0	0.0	0.0	-319.96
		-319.96	0.0	0.0	0.0	30.0	-342.13	158.49	0.0	0.0	0.0	-270.31
2	180	-271.44	0.0	-1.91e-03	-14.05	0.0	-345.67	173.91	0.0	0.0	0.0	-321.49
		-321.49	0.0	0.0	0.0	30.0	-341.17	159.85	0.0	0.0	0.0	-271.44
2	181	-263.82	0.0	-1.90e-03	-14.05	0.0	-345.67	171.17	0.0	0.0	0.0	-313.05
		-313.05	0.0	0.0	0.0	30.0	-341.17	157.12	0.0	0.0	0.0	-263.82
4	1	92.40	0.0	2.20e-04	-337.93	0.0	-351.86	209.96	0.0	0.0	0.0	-191.69
		-191.69	0.0	0.0	0.0	600.0	-230.36	-127.97	0.0	0.0	0.0	-130.40
4	2	81.66	0.0	-3.47e-04	-337.93	0.0	-355.69	209.96	0.0	0.0	0.0	-202.43
		-202.43	0.0	0.0	0.0	600.0	-234.19	-127.97	0.0	0.0	0.0	-141.14
4	3	87.61	0.0	-4.44e-04	-337.93	0.0	-353.77	212.69	0.0	0.0	0.0	-204.68
		-204.68	0.0	0.0	0.0	600.0	-232.27	-125.24	0.0	0.0	0.0	-126.99
4	4	86.45	0.0	3.13e-04	-337.93	0.0	-353.77	207.23	0.0	0.0	0.0	-189.44
		-189.44	0.0	0.0	0.0	600.0	-232.27	-130.70	0.0	0.0	0.0	-144.55
4	5	91.28	0.0	-0.03	-337.93	0.0	-327.93	238.00	0.0	0.0	0.0	-278.96
		-278.96	0.0	0.0	0.0	600.0	-206.43	-99.93	0.0	0.0	0.0	-49.43
4	6	80.54	0.0	-0.03	-337.93	0.0	-331.77	238.00	0.0	0.0	0.0	-289.70
		-289.70	0.0	0.0	0.0	600.0	-210.27	-99.93	0.0	0.0	0.0	-60.18
4	7	88.54	0.0	-0.03	-337.93	0.0	-329.85	240.73	0.0	0.0	0.0	-291.95
		-291.95	0.0	0.0	0.0	600.0	-208.35	-97.20	0.0	0.0	0.0	-46.03
4	8	83.30	0.0	-0.03	-337.93	0.0	-329.85	235.27	0.0	0.0	0.0	-276.71
		-276.71	0.0	0.0	0.0	600.0	-208.35	-102.67	0.0	0.0	0.0	-63.58
4	9	20.80	0.0	2.35e-04	-211.65	0.0	-351.86	137.07	0.0	0.0	0.0	-173.83
		-173.83	0.0	0.0	0.0	600.0	-230.36	-74.58	0.0	0.0	0.0	-102.05
4	10	10.06	0.0	-2.35e-04	-211.65	0.0	-355.69	137.07	0.0	0.0	0.0	-184.57
		-184.57	0.0	0.0	0.0	600.0	-234.19	-74.58	0.0	0.0	0.0	-112.79
4	11	16.01	0.0	-3.27e-04	-211.65	0.0	-353.77	139.80	0.0	0.0	0.0	-186.82
		-186.82	0.0	0.0	0.0	600.0	-232.27	-71.85	0.0	0.0	0.0	-98.64
4	12	14.85	0.0	3.41e-04	-211.65	0.0	-353.77	134.34	0.0	0.0	0.0	-171.58
		-171.58	0.0	0.0	0.0	600.0	-232.27	-77.32	0.0	0.0	0.0	-116.19
4	13	86.93	0.0	-0.03	-420.27	0.0	-488.74	269.21	0.0	0.0	0.0	-331.20
		-331.20	0.0	0.0	0.0	600.0	-367.24	-151.06	0.0	0.0	0.0	-125.33
4	14	80.49	0.0	-0.03	-420.27	0.0	-491.04	269.21	0.0	0.0	0.0	-337.65
		-337.65	0.0	0.0	0.0	600.0	-369.54	-151.06	0.0	0.0	0.0	-131.78
4	15	84.06	0.0	-0.03	-420.27	0.0	-489.89	270.85	0.0	0.0	0.0	-339.00
		-339.00	0.0	0.0	0.0	600.0	-368.39	-149.42	0.0	0.0	0.0	-123.29
4	16	83.36	0.0	-0.03	-420.27	0.0	-489.89	267.57	0.0	0.0	0.0	-329.85
		-329.85	0.0	0.0	0.0	600.0	-368.39	-152.70	0.0	0.0	0.0	-133.82
4	17	102.14	0.0	-0.07	-420.27	0.0	-464.82	297.25	0.0	0.0	0.0	-418.47
		-418.47	0.0	0.0	0.0	600.0	-343.32	-123.02	0.0	0.0	0.0	-44.37
4	18	95.69	0.0	-0.07	-420.27	0.0	-467.12	297.25	0.0	0.0	0.0	-424.92
		-424.92	0.0	0.0	0.0	600.0	-345.62	-123.02	0.0	0.0	0.0	-50.81
4	19	100.49	0.0	-0.07	-420.27	0.0	-465.97	298.89	0.0	0.0	0.0	-426.27
		-426.27	0.0	0.0	0.0	600.0	-344.47	-121.38	0.0	0.0	0.0	-42.33
4	20	97.34	0.0	-0.07	-420.27	0.0	-465.97	295.61	0.0	0.0	0.0	-417.12
		-417.12	0.0	0.0	0.0	600.0	-344.47	-124.66	0.0	0.0	0.0	-52.86
4	21	23.93	0.0	-0.03	-293.99	0.0	-488.74	196.32	0.0	0.0	0.0	-313.34
		-313.34	0.0	0.0	0.0	600.0	-367.24	-97.67	0.0	0.0	0.0	-96.98
4	22	17.49	0.0	-0.03	-293.99	0.0	-491.04	196.32	0.0	0.0	0.0	-319.79
		-319.79	0.0	0.0	0.0	600.0	-369.54	-97.67	0.0	0.0	0.0	-103.43
4	23	22.29	0.0	-0.03	-293.99	0.0	-489.89	197.96	0.0	0.0	0.0	-321.14
		-321.14	0.0	0.0	0.0	600.0	-368.39	-96.03	0.0	0.0	0.0	-94.94
4	24	19.13	0.0	-0.03	-293.99	0.0	-489.89	194.68	0.0	0.0	0.0	-311.99
		-311.99	0.0	0.0	0.0	600.0	-368.39	-99.31	0.0	0.0	0.0	-105.47
4	25	87.27	0.0	1.36e-04	-420.27	0.0	-514.50	242.32	0.0	0.0	0.0	-250.20
		-250.20	0.0	0.0	0.0	600.0	-393.00	-177.94	0.0	0.0	0.0	-205.66
4	26	80.82	0.0	-2.15e-04	-420.27	0.0	-516.80	242.32	0.0	0.0	0.0	-256.65
		-256.65	0.0	0.0	0.0	600.0	-395.30	-177.94	0.0	0.0	0.0	-212.11
4	27	84.39	0.0	-2.67e-04	-420.27	0.0	-515.65	243.96	0.0	0.0	0.0	-258.00
		-258.00	0.0	0.0	0.0	600.0	-394.15	-176.30	0.0	0.0	0.0	-203.62
4	28	83.70	0.0	1.92e-04	-420.27	0.0	-515.65	240.68	0.0	0.0	0.0	-248.86
		-248.86	0.0	0.0	0.0	600.0	-394.15	-179.58	0.0	0.0	0.0	-214.15
4	29	84.12	0.0	-0.03	-420.27	0.0	-490.58	270.36	0.0	0.0	0.0	-337.47

Pilas.	Cmb	M3 mx/mn	M2 mx/mn	D 2 / D 3	Q 2 / Q 3	Pos.	N	V 2	V 3	T	M 2	M 3
		-337.47	0.0	0.0	0.0	600.0	-369.08	-149.91	0.0	0.0	0.0	-124.69
4	30	77.67	0.0	-0.03	-420.27	0.0	-492.88	270.36	0.0	0.0	0.0	-343.92
		-343.92	0.0	0.0	0.0	600.0	-371.38	-149.91	0.0	0.0	0.0	-131.14
4	31	81.24	0.0	-0.03	-420.27	0.0	-491.73	272.00	0.0	0.0	0.0	-345.27
		-345.27	0.0	0.0	0.0	600.0	-370.23	-148.27	0.0	0.0	0.0	-122.65
4	32	80.55	0.0	-0.03	-420.27	0.0	-491.73	268.72	0.0	0.0	0.0	-336.12
		-336.12	0.0	0.0	0.0	600.0	-370.23	-151.55	0.0	0.0	0.0	-133.18
4	33	15.67	0.0	2.58e-04	-293.99	0.0	-514.50	169.43	0.0	0.0	0.0	-232.34
		-232.34	0.0	0.0	0.0	600.0	-393.00	-124.56	0.0	0.0	0.0	-177.30
4	34	9.22	0.0	3.36e-04	-293.99	0.0	-516.80	169.43	0.0	0.0	0.0	-238.79
		-238.79	0.0	0.0	0.0	600.0	-395.30	-124.56	0.0	0.0	0.0	-183.75
4	35	12.79	0.0	-1.99e-04	-293.99	0.0	-515.65	171.07	0.0	0.0	0.0	-240.14
		-240.14	0.0	0.0	0.0	600.0	-394.15	-122.92	0.0	0.0	0.0	-175.26
4	36	12.10	0.0	3.22e-04	-293.99	0.0	-515.65	167.79	0.0	0.0	0.0	-230.99
		-230.99	0.0	0.0	0.0	600.0	-394.15	-126.20	0.0	0.0	0.0	-185.79
4	37	89.05	0.0	-0.02	-399.53	0.0	-454.46	253.65	0.0	0.0	0.0	-293.40
		-293.40	0.0	0.0	0.0	600.0	-332.96	-145.89	0.0	0.0	0.0	-127.80
4	38	82.60	0.0	-0.02	-399.53	0.0	-456.76	253.65	0.0	0.0	0.0	-299.85
		-299.85	0.0	0.0	0.0	600.0	-335.26	-145.89	0.0	0.0	0.0	-134.25
4	39	86.17	0.0	-0.02	-399.53	0.0	-455.61	255.29	0.0	0.0	0.0	-301.20
		-301.20	0.0	0.0	0.0	600.0	-334.11	-144.25	0.0	0.0	0.0	-125.76
4	40	85.48	0.0	-0.02	-399.53	0.0	-455.61	252.01	0.0	0.0	0.0	-292.05
		-292.05	0.0	0.0	0.0	600.0	-334.11	-147.53	0.0	0.0	0.0	-136.29
4	41	99.66	0.0	-0.06	-399.53	0.0	-430.53	281.68	0.0	0.0	0.0	-380.67
		-380.67	0.0	0.0	0.0	600.0	-309.03	-117.85	0.0	0.0	0.0	-46.84
4	42	93.21	0.0	-0.06	-399.53	0.0	-432.84	281.68	0.0	0.0	0.0	-387.11
		-387.11	0.0	0.0	0.0	600.0	-311.34	-117.85	0.0	0.0	0.0	-53.29
4	43	98.01	0.0	-0.06	-399.53	0.0	-431.69	283.32	0.0	0.0	0.0	-388.46
		-388.46	0.0	0.0	0.0	600.0	-310.19	-116.21	0.0	0.0	0.0	-44.80
4	44	94.86	0.0	-0.06	-399.53	0.0	-431.69	280.04	0.0	0.0	0.0	-379.32
		-379.32	0.0	0.0	0.0	600.0	-310.19	-119.49	0.0	0.0	0.0	-55.33
4	45	21.45	0.0	-0.02	-273.25	0.0	-454.46	180.75	0.0	0.0	0.0	-275.54
		-275.54	0.0	0.0	0.0	600.0	-332.96	-92.50	0.0	0.0	0.0	-99.45
4	46	15.01	0.0	-0.02	-273.25	0.0	-456.76	180.75	0.0	0.0	0.0	-281.98
		-281.98	0.0	0.0	0.0	600.0	-335.26	-92.50	0.0	0.0	0.0	-105.90
4	47	19.81	0.0	-0.02	-273.25	0.0	-455.61	182.39	0.0	0.0	0.0	-283.33
		-283.33	0.0	0.0	0.0	600.0	-334.11	-90.86	0.0	0.0	0.0	-97.41
4	48	16.65	0.0	-0.02	-273.25	0.0	-455.61	179.11	0.0	0.0	0.0	-274.19
		-274.19	0.0	0.0	0.0	600.0	-334.11	-94.14	0.0	0.0	0.0	-107.94
4	49	89.30	0.0	-1.61e-04	-399.53	0.0	-473.73	233.53	0.0	0.0	0.0	-232.80
		-232.80	0.0	0.0	0.0	600.0	-352.23	-166.00	0.0	0.0	0.0	-187.90
4	50	82.85	0.0	-2.49e-04	-399.53	0.0	-476.03	233.53	0.0	0.0	0.0	-239.25
		-239.25	0.0	0.0	0.0	600.0	-354.53	-166.00	0.0	0.0	0.0	-194.35
4	51	86.42	0.0	-3.01e-04	-399.53	0.0	-474.88	235.17	0.0	0.0	0.0	-240.60
		-240.60	0.0	0.0	0.0	600.0	-353.38	-164.36	0.0	0.0	0.0	-185.86
4	52	85.73	0.0	1.92e-04	-399.53	0.0	-474.88	231.89	0.0	0.0	0.0	-231.45
		-231.45	0.0	0.0	0.0	600.0	-353.38	-167.64	0.0	0.0	0.0	-196.39
4	53	86.15	0.0	-0.03	-399.53	0.0	-449.81	261.57	0.0	0.0	0.0	-320.07
		-320.07	0.0	0.0	0.0	600.0	-328.31	-137.96	0.0	0.0	0.0	-106.93
4	54	79.70	0.0	-0.03	-399.53	0.0	-452.11	261.57	0.0	0.0	0.0	-326.51
		-326.51	0.0	0.0	0.0	600.0	-330.61	-137.96	0.0	0.0	0.0	-113.38
4	55	83.27	0.0	-0.03	-399.53	0.0	-450.96	263.21	0.0	0.0	0.0	-327.86
		-327.86	0.0	0.0	0.0	600.0	-329.46	-136.32	0.0	0.0	0.0	-104.89
4	56	82.58	0.0	-0.03	-399.53	0.0	-450.96	259.93	0.0	0.0	0.0	-318.72
		-318.72	0.0	0.0	0.0	600.0	-329.46	-139.60	0.0	0.0	0.0	-115.42
4	57	17.70	0.0	2.30e-04	-273.25	0.0	-473.73	160.64	0.0	0.0	0.0	-214.94
		-214.94	0.0	0.0	0.0	600.0	-352.23	-112.62	0.0	0.0	0.0	-159.55
4	58	11.25	0.0	3.06e-04	-273.25	0.0	-476.03	160.64	0.0	0.0	0.0	-221.38
		-221.38	0.0	0.0	0.0	600.0	-354.53	-112.62	0.0	0.0	0.0	-165.99
4	59	14.82	0.0	-1.98e-04	-273.25	0.0	-474.88	162.28	0.0	0.0	0.0	-222.73
		-222.73	0.0	0.0	0.0	600.0	-353.38	-110.98	0.0	0.0	0.0	-157.50
4	60	14.13	0.0	2.95e-04	-273.25	0.0	-474.88	159.00	0.0	0.0	0.0	-213.59
		-213.59	0.0	0.0	0.0	600.0	-353.38	-114.26	0.0	0.0	0.0	-168.03
4	61	140.80	0.0	-0.10	-399.53	0.0	-381.03	311.93	0.0	0.0	0.0	-455.65
		-455.65	0.0	0.0	0.0	600.0	-259.53	-87.60	0.0	0.0	0.0	59.68
4	62	134.35	0.0	-0.10	-399.53	0.0	-383.34	311.93	0.0	0.0	0.0	-462.09
		-462.09	0.0	0.0	0.0	600.0	-261.84	-87.60	0.0	0.0	0.0	53.23
4	63	140.38	0.0	-0.10	-399.53	0.0	-382.19	313.57	0.0	0.0	0.0	-463.44
		-463.44	0.0	0.0	0.0	600.0	-260.69	-85.96	0.0	0.0	0.0	61.72
4	64	134.77	0.0	-0.10	-399.53	0.0	-382.19	310.29	0.0	0.0	0.0	-454.30
		-454.30	0.0	0.0	0.0	600.0	-260.69	-89.24	0.0	0.0	0.0	51.19
4	65	179.71	0.0	-0.13	-399.53	0.0	-357.11	339.97	0.0	0.0	0.0	-542.91
		-542.91	0.0	0.0	0.0	600.0	-235.61	-59.56	0.0	0.0	0.0	140.64
4	66	173.26	0.0	-0.13	-399.53	0.0	-359.41	339.97	0.0	0.0	0.0	-549.36
		-549.36	0.0	0.0	0.0	600.0	-237.91	-59.56	0.0	0.0	0.0	134.20

Pilas.	Cmb	M3 mx/mn	M2 mx/mn	D 2 / D 3	Q 2 / Q 3	Pos.	N	V 2	V 3	T	M 2	M 3
4	67	179.29	0.0	-0.13	-399.53	0.0	-358.26	341.61	0.0	0.0	0.0	-550.71
		-550.71	0.0	0.0	0.0	600.0	-236.76	-57.92	0.0	0.0	0.0	142.69
4	68	173.68	0.0	-0.13	-399.53	0.0	-358.26	338.33	0.0	0.0	0.0	-541.56
		-541.56	0.0	0.0	0.0	600.0	-236.76	-61.20	0.0	0.0	0.0	132.15
4	69	104.69	0.0	-0.10	-273.25	0.0	-381.03	239.04	0.0	0.0	0.0	-437.78
		-437.78	0.0	0.0	0.0	600.0	-259.53	-34.21	0.0	0.0	0.0	88.03
4	70	98.25	0.0	-0.10	-273.25	0.0	-383.34	239.04	0.0	0.0	0.0	-444.23
		-444.23	0.0	0.0	0.0	600.0	-261.84	-34.21	0.0	0.0	0.0	81.59
4	71	105.51	0.0	-0.10	-273.25	0.0	-382.19	240.68	0.0	0.0	0.0	-445.58
		-445.58	0.0	0.0	0.0	600.0	-260.69	-32.57	0.0	0.0	0.0	90.08
4	72	97.43	0.0	-0.10	-273.25	0.0	-382.19	237.40	0.0	0.0	0.0	-436.43
		-436.43	0.0	0.0	0.0	600.0	-260.69	-35.85	0.0	0.0	0.0	79.54
4	73	123.28	0.0	-0.07	-399.53	0.0	-400.31	291.82	0.0	0.0	0.0	-395.05
		-395.05	0.0	0.0	0.0	600.0	-278.81	-107.71	0.0	0.0	0.0	-0.42
4	74	116.83	0.0	-0.07	-399.53	0.0	-402.61	291.82	0.0	0.0	0.0	-401.49
		-401.49	0.0	0.0	0.0	600.0	-281.11	-107.71	0.0	0.0	0.0	-6.86
4	75	121.63	0.0	-0.07	-399.53	0.0	-401.46	293.46	0.0	0.0	0.0	-402.84
		-402.84	0.0	0.0	0.0	600.0	-279.96	-106.07	0.0	0.0	0.0	1.63
4	76	118.48	0.0	-0.07	-399.53	0.0	-401.46	290.18	0.0	0.0	0.0	-393.70
		-393.70	0.0	0.0	0.0	600.0	-279.96	-109.35	0.0	0.0	0.0	-8.91
4	77	149.79	0.0	-0.11	-399.53	0.0	-376.38	319.86	0.0	0.0	0.0	-482.31
		-482.31	0.0	0.0	0.0	600.0	-254.88	-79.68	0.0	0.0	0.0	80.55
4	78	143.34	0.0	-0.11	-399.53	0.0	-378.69	319.86	0.0	0.0	0.0	-488.76
		-488.76	0.0	0.0	0.0	600.0	-257.19	-79.68	0.0	0.0	0.0	74.10
4	79	149.37	0.0	-0.11	-399.53	0.0	-377.53	321.50	0.0	0.0	0.0	-490.11
		-490.11	0.0	0.0	0.0	600.0	-256.03	-78.04	0.0	0.0	0.0	82.59
4	80	143.76	0.0	-0.11	-399.53	0.0	-377.53	318.22	0.0	0.0	0.0	-480.96
		-480.96	0.0	0.0	0.0	600.0	-256.03	-81.32	0.0	0.0	0.0	72.06
4	81	72.05	0.0	-0.07	-273.25	0.0	-400.31	218.93	0.0	0.0	0.0	-377.18
		-377.18	0.0	0.0	0.0	600.0	-278.81	-54.33	0.0	0.0	0.0	27.94
4	82	65.60	0.0	-0.07	-273.25	0.0	-402.61	218.93	0.0	0.0	0.0	-383.63
		-383.63	0.0	0.0	0.0	600.0	-281.11	-54.33	0.0	0.0	0.0	21.49
4	83	71.63	0.0	-0.07	-273.25	0.0	-401.46	220.57	0.0	0.0	0.0	-384.98
		-384.98	0.0	0.0	0.0	600.0	-279.96	-52.69	0.0	0.0	0.0	29.98
4	84	66.02	0.0	-0.07	-273.25	0.0	-401.46	217.29	0.0	0.0	0.0	-375.83
		-375.83	0.0	0.0	0.0	600.0	-279.96	-55.97	0.0	0.0	0.0	19.45
4	85	89.98	0.0	-0.02	-399.53	0.0	-454.46	253.18	0.0	0.0	0.0	-291.06
		-291.06	0.0	0.0	0.0	600.0	-332.96	-146.36	0.0	0.0	0.0	-128.28
4	86	83.53	0.0	-0.02	-399.53	0.0	-456.76	253.18	0.0	0.0	0.0	-297.51
		-297.51	0.0	0.0	0.0	600.0	-335.26	-146.36	0.0	0.0	0.0	-134.73
4	87	87.10	0.0	-0.02	-399.53	0.0	-455.61	254.82	0.0	0.0	0.0	-298.86
		-298.86	0.0	0.0	0.0	600.0	-334.11	-144.72	0.0	0.0	0.0	-126.24
4	88	86.41	0.0	-0.02	-399.53	0.0	-455.61	251.54	0.0	0.0	0.0	-289.71
		-289.71	0.0	0.0	0.0	600.0	-334.11	-148.00	0.0	0.0	0.0	-136.77
4	89	100.24	0.0	-0.06	-399.53	0.0	-430.53	281.22	0.0	0.0	0.0	-378.33
		-378.33	0.0	0.0	0.0	600.0	-309.03	-118.32	0.0	0.0	0.0	-47.32
4	90	93.79	0.0	-0.06	-399.53	0.0	-432.84	281.22	0.0	0.0	0.0	-384.77
		-384.77	0.0	0.0	0.0	600.0	-311.34	-118.32	0.0	0.0	0.0	-53.76
4	91	98.59	0.0	-0.06	-399.53	0.0	-431.69	282.85	0.0	0.0	0.0	-386.12
		-386.12	0.0	0.0	0.0	600.0	-310.19	-116.68	0.0	0.0	0.0	-45.27
4	92	95.44	0.0	-0.06	-399.53	0.0	-431.69	279.58	0.0	0.0	0.0	-376.98
		-376.98	0.0	0.0	0.0	600.0	-310.19	-119.96	0.0	0.0	0.0	-55.80
4	93	22.03	0.0	-0.02	-273.25	0.0	-454.46	180.28	0.0	0.0	0.0	-273.20
		-273.20	0.0	0.0	0.0	600.0	-332.96	-92.97	0.0	0.0	0.0	-99.93
4	94	15.59	0.0	-0.02	-273.25	0.0	-456.76	180.28	0.0	0.0	0.0	-279.64
		-279.64	0.0	0.0	0.0	600.0	-335.26	-92.97	0.0	0.0	0.0	-106.37
4	95	20.39	0.0	-0.02	-273.25	0.0	-455.61	181.92	0.0	0.0	0.0	-280.99
		-280.99	0.0	0.0	0.0	600.0	-334.11	-91.33	0.0	0.0	0.0	-97.88
4	96	17.23	0.0	-0.02	-273.25	0.0	-455.61	178.64	0.0	0.0	0.0	-271.85
		-271.85	0.0	0.0	0.0	600.0	-334.11	-94.61	0.0	0.0	0.0	-108.42
4	97	90.23	0.0	-1.67e-04	-399.53	0.0	-473.73	233.06	0.0	0.0	0.0	-230.46
		-230.46	0.0	0.0	0.0	600.0	-352.23	-166.47	0.0	0.0	0.0	-188.38
4	98	83.78	0.0	-2.54e-04	-399.53	0.0	-476.03	233.06	0.0	0.0	0.0	-236.91
		-236.91	0.0	0.0	0.0	600.0	-354.53	-166.47	0.0	0.0	0.0	-194.82
4	99	87.35	0.0	-3.07e-04	-399.53	0.0	-474.88	234.70	0.0	0.0	0.0	-238.26
		-238.26	0.0	0.0	0.0	600.0	-353.38	-164.83	0.0	0.0	0.0	-186.33
4	100	86.66	0.0	1.94e-04	-399.53	0.0	-474.88	231.42	0.0	0.0	0.0	-229.11
		-229.11	0.0	0.0	0.0	600.0	-353.38	-168.11	0.0	0.0	0.0	-196.87
4	101	87.08	0.0	-0.03	-399.53	0.0	-449.81	261.10	0.0	0.0	0.0	-317.73
		-317.73	0.0	0.0	0.0	600.0	-328.31	-138.43	0.0	0.0	0.0	-107.41
4	102	80.63	0.0	-0.03	-399.53	0.0	-452.11	261.10	0.0	0.0	0.0	-324.17
		-324.17	0.0	0.0	0.0	600.0	-330.61	-138.43	0.0	0.0	0.0	-113.86
4	103	84.20	0.0	-0.03	-399.53	0.0	-450.96	262.74	0.0	0.0	0.0	-325.52
		-325.52	0.0	0.0	0.0	600.0	-329.46	-136.79	0.0	0.0	0.0	-105.37
4	104	83.51	0.0	-0.03	-399.53	0.0	-450.96	259.46	0.0	0.0	0.0	-316.38

Pilas.	Cmb	M3 mx/mn	M2 mx/mn	D 2 / D 3	Q 2 / Q 3	Pos.	N	V 2	V 3	T	M 2	M 3
		-316.38	0.0	0.0	0.0	600.0	-329.46	-140.07	0.0	0.0	0.0	-115.90
4	105	18.63	0.0	2.28e-04	-273.25	0.0	-473.73	160.17	0.0	0.0	0.0	-212.60
		-212.60	0.0	0.0	0.0	600.0	-352.23	-113.09	0.0	0.0	0.0	-160.02
4	106	12.18	0.0	1.58e-04	-273.25	0.0	-476.03	160.17	0.0	0.0	0.0	-219.05
		-219.05	0.0	0.0	0.0	600.0	-354.53	-113.09	0.0	0.0	0.0	-166.47
4	107	15.75	0.0	-1.97e-04	-273.25	0.0	-474.88	161.81	0.0	0.0	0.0	-220.39
		-220.39	0.0	0.0	0.0	600.0	-353.38	-111.45	0.0	0.0	0.0	-157.98
4	108	15.06	0.0	2.92e-04	-273.25	0.0	-474.88	158.53	0.0	0.0	0.0	-211.25
		-211.25	0.0	0.0	0.0	600.0	-353.38	-114.72	0.0	0.0	0.0	-168.51
4	109	457.95	0.0	-0.25	-544.08	0.0	-79.02	506.00	0.0	0.0	0.0	-817.93
		-817.93	0.0	0.0	0.0	600.0	10.98	-38.08	0.0	0.0	0.0	449.02
4	110	34.80	0.0	1.40e-04	-250.32	0.0	-351.03	156.80	0.0	0.0	0.0	-179.48
		-179.48	0.0	0.0	0.0	600.0	-261.03	-93.52	0.0	0.0	0.0	-126.41
4	111	29.42	0.0	-1.13e-04	-250.32	0.0	-352.95	156.80	0.0	0.0	0.0	-184.85
		-184.85	0.0	0.0	0.0	600.0	-262.95	-93.52	0.0	0.0	0.0	-131.78
4	112	32.40	0.0	-1.59e-04	-250.32	0.0	-351.99	158.17	0.0	0.0	0.0	-185.97
		-185.97	0.0	0.0	0.0	600.0	-261.99	-92.15	0.0	0.0	0.0	-124.71
4	113	31.82	0.0	1.93e-04	-250.32	0.0	-351.99	155.44	0.0	0.0	0.0	-178.35
		-178.35	0.0	0.0	0.0	600.0	-261.99	-94.88	0.0	0.0	0.0	-133.49
4	114	34.92	0.0	-0.03	-250.32	0.0	-333.31	177.57	0.0	0.0	0.0	-244.12
		-244.12	0.0	0.0	0.0	600.0	-243.31	-72.75	0.0	0.0	0.0	-66.44
4	115	29.55	0.0	-0.03	-250.32	0.0	-335.22	177.57	0.0	0.0	0.0	-249.49
		-249.49	0.0	0.0	0.0	600.0	-245.22	-72.75	0.0	0.0	0.0	-71.81
4	116	33.55	0.0	-0.03	-250.32	0.0	-334.26	178.94	0.0	0.0	0.0	-250.62
		-250.62	0.0	0.0	0.0	600.0	-244.26	-71.38	0.0	0.0	0.0	-64.73
4	117	30.92	0.0	-0.03	-250.32	0.0	-334.26	176.21	0.0	0.0	0.0	-242.99
		-242.99	0.0	0.0	0.0	600.0	-244.26	-74.11	0.0	0.0	0.0	-73.51
4	118	-18.24	0.0	3.27e-04	-156.78	0.0	-351.03	102.81	0.0	0.0	0.0	-166.25
		-166.25	0.0	0.0	0.0	600.0	-261.03	-53.97	0.0	0.0	0.0	-105.41
4	119	-23.61	0.0	3.92e-04	-156.78	0.0	-352.95	102.81	0.0	0.0	0.0	-171.62
		-171.62	0.0	0.0	0.0	600.0	-262.95	-53.97	0.0	0.0	0.0	-110.78
4	120	-20.64	0.0	2.33e-04	-156.78	0.0	-351.99	104.18	0.0	0.0	0.0	-172.74
		-172.74	0.0	0.0	0.0	600.0	-261.99	-52.60	0.0	0.0	0.0	-103.70
4	121	-21.22	0.0	3.71e-04	-156.78	0.0	-351.99	101.44	0.0	0.0	0.0	-165.12
		-165.12	0.0	0.0	0.0	600.0	-261.99	-55.34	0.0	0.0	0.0	-112.48
4	122	88.25	0.0	-0.06	-296.06	0.0	-295.92	223.54	0.0	0.0	0.0	-323.28
		-323.28	0.0	0.0	0.0	600.0	-205.92	-72.52	0.0	0.0	0.0	13.04
4	123	82.87	0.0	-0.06	-296.06	0.0	-297.84	223.54	0.0	0.0	0.0	-328.65
		-328.65	0.0	0.0	0.0	600.0	-207.84	-72.52	0.0	0.0	0.0	7.66
4	124	86.87	0.0	-0.06	-296.06	0.0	-296.88	224.91	0.0	0.0	0.0	-329.77
		-329.77	0.0	0.0	0.0	600.0	-206.88	-71.15	0.0	0.0	0.0	14.74
4	125	84.25	0.0	-0.06	-296.06	0.0	-296.88	222.18	0.0	0.0	0.0	-322.15
		-322.15	0.0	0.0	0.0	600.0	-206.88	-73.89	0.0	0.0	0.0	5.96
4	126	113.37	0.0	-0.08	-296.06	0.0	-278.20	244.31	0.0	0.0	0.0	-387.92
		-387.92	0.0	0.0	0.0	600.0	-188.20	-51.75	0.0	0.0	0.0	73.01
4	127	108.00	0.0	-0.08	-296.06	0.0	-280.12	244.31	0.0	0.0	0.0	-393.29
		-393.29	0.0	0.0	0.0	600.0	-190.12	-51.75	0.0	0.0	0.0	67.64
4	128	113.02	0.0	-0.08	-296.06	0.0	-279.16	245.68	0.0	0.0	0.0	-394.41
		-394.41	0.0	0.0	0.0	600.0	-189.16	-50.38	0.0	0.0	0.0	74.71
4	129	108.34	0.0	-0.08	-296.06	0.0	-279.16	242.94	0.0	0.0	0.0	-386.79
		-386.79	0.0	0.0	0.0	600.0	-189.16	-53.12	0.0	0.0	0.0	65.94
4	130	55.78	0.0	-0.06	-202.52	0.0	-295.92	169.55	0.0	0.0	0.0	-310.05
		-310.05	0.0	0.0	0.0	600.0	-205.92	-32.98	0.0	0.0	0.0	34.04
4	131	50.41	0.0	-0.06	-202.52	0.0	-297.84	169.55	0.0	0.0	0.0	-315.42
		-315.42	0.0	0.0	0.0	600.0	-207.84	-32.98	0.0	0.0	0.0	28.67
4	132	55.44	0.0	-0.06	-202.52	0.0	-296.88	170.91	0.0	0.0	0.0	-316.54
		-316.54	0.0	0.0	0.0	600.0	-206.88	-31.61	0.0	0.0	0.0	35.74
4	133	50.76	0.0	-0.06	-202.52	0.0	-296.88	168.18	0.0	0.0	0.0	-308.92
		-308.92	0.0	0.0	0.0	600.0	-206.88	-34.34	0.0	0.0	0.0	26.96
4	134	77.23	0.0	-0.04	-296.06	0.0	-310.24	208.60	0.0	0.0	0.0	-278.28
		-278.28	0.0	0.0	0.0	600.0	-220.24	-87.46	0.0	0.0	0.0	-31.59
4	135	71.86	0.0	-0.04	-296.06	0.0	-312.15	208.60	0.0	0.0	0.0	-283.65
		-283.65	0.0	0.0	0.0	600.0	-222.15	-87.46	0.0	0.0	0.0	-36.96
4	136	75.86	0.0	-0.04	-296.06	0.0	-311.20	209.97	0.0	0.0	0.0	-284.77
		-284.77	0.0	0.0	0.0	600.0	-221.20	-86.09	0.0	0.0	0.0	-29.89
4	137	73.23	0.0	-0.04	-296.06	0.0	-311.20	207.24	0.0	0.0	0.0	-277.15
		-277.15	0.0	0.0	0.0	600.0	-221.20	-88.82	0.0	0.0	0.0	-38.66
4	138	91.15	0.0	-0.07	-296.06	0.0	-292.51	229.37	0.0	0.0	0.0	-342.92
		-342.92	0.0	0.0	0.0	600.0	-202.51	-66.69	0.0	0.0	0.0	28.38
4	139	85.78	0.0	-0.07	-296.06	0.0	-294.43	229.37	0.0	0.0	0.0	-348.29
		-348.29	0.0	0.0	0.0	600.0	-204.43	-66.69	0.0	0.0	0.0	23.01
4	140	90.80	0.0	-0.07	-296.06	0.0	-293.47	230.74	0.0	0.0	0.0	-349.42
		-349.42	0.0	0.0	0.0	600.0	-203.47	-65.32	0.0	0.0	0.0	30.09
4	141	86.47	0.0	-0.07	-296.06	0.0	-293.47	228.01	0.0	0.0	0.0	-341.79
		-341.79	0.0	0.0	0.0	600.0	-203.47	-68.06	0.0	0.0	0.0	21.31

Pilas.	Cmb	M3 mx/mn	M2 mx/mn	D 2 / D 3	Q 2 / Q 3	Pos.	N	V 2	V 3	T	M 2	M 3
4	142	33.56	0.0	-0.04	-202.52	0.0	-310.24	154.61	0.0	0.0	0.0	-265.05
		-265.05	0.0	0.0	0.0	600.0	-220.24	-47.91	0.0	0.0	0.0	-10.59
4	143	28.19	0.0	-0.04	-202.52	0.0	-312.15	154.61	0.0	0.0	0.0	-270.42
		-270.42	0.0	0.0	0.0	600.0	-222.15	-47.91	0.0	0.0	0.0	-15.96
4	144	33.22	0.0	-0.04	-202.52	0.0	-311.20	155.98	0.0	0.0	0.0	-271.54
		-271.54	0.0	0.0	0.0	600.0	-221.20	-46.55	0.0	0.0	0.0	-8.88
4	145	28.54	0.0	-0.04	-202.52	0.0	-311.20	153.24	0.0	0.0	0.0	-263.92
		-263.92	0.0	0.0	0.0	600.0	-221.20	-49.28	0.0	0.0	0.0	-17.66
4	146	66.71	0.0	-1.72e-04	-250.32	0.0	-261.26	155.53	0.0	0.0	0.0	-143.73
		-143.73	0.0	0.0	0.0	600.0	-171.26	-94.79	0.0	0.0	0.0	-98.33
4	147	62.23	0.0	-2.33e-04	-250.32	0.0	-262.85	155.53	0.0	0.0	0.0	-148.21
		-148.21	0.0	0.0	0.0	600.0	-172.85	-94.79	0.0	0.0	0.0	-102.81
4	148	64.71	0.0	-2.70e-04	-250.32	0.0	-262.06	156.67	0.0	0.0	0.0	-149.15
		-149.15	0.0	0.0	0.0	600.0	-172.06	-93.65	0.0	0.0	0.0	-96.91
4	149	64.23	0.0	-1.36e-04	-250.32	0.0	-262.06	154.39	0.0	0.0	0.0	-142.80
		-142.80	0.0	0.0	0.0	600.0	-172.06	-95.93	0.0	0.0	0.0	-104.23
4	150	65.88	0.0	-0.03	-250.32	0.0	-243.53	176.30	0.0	0.0	0.0	-208.38
		-208.38	0.0	0.0	0.0	600.0	-153.53	-74.02	0.0	0.0	0.0	-38.36
4	151	61.40	0.0	-0.03	-250.32	0.0	-245.13	176.30	0.0	0.0	0.0	-212.85
		-212.85	0.0	0.0	0.0	600.0	-155.13	-74.02	0.0	0.0	0.0	-42.84
4	152	64.73	0.0	-0.03	-250.32	0.0	-244.33	177.43	0.0	0.0	0.0	-213.79
		-213.79	0.0	0.0	0.0	600.0	-154.33	-72.89	0.0	0.0	0.0	-36.94
4	153	64.73	0.0	-0.03	-250.32	0.0	-244.33	177.43	0.0	0.0	0.0	-213.79
		-213.79	0.0	0.0	0.0	600.0	-154.33	-72.89	0.0	0.0	0.0	-36.94
4	154	13.67	0.0	1.17e-04	-156.78	0.0	-261.26	101.53	0.0	0.0	0.0	-130.50
		-130.50	0.0	0.0	0.0	600.0	-171.26	-55.25	0.0	0.0	0.0	-77.33
4	155	9.19	0.0	-1.03e-04	-156.78	0.0	-262.85	101.53	0.0	0.0	0.0	-134.98
		-134.98	0.0	0.0	0.0	600.0	-172.85	-55.25	0.0	0.0	0.0	-81.81
4	156	11.67	0.0	-1.41e-04	-156.78	0.0	-262.06	102.67	0.0	0.0	0.0	-135.92
		-135.92	0.0	0.0	0.0	600.0	-172.06	-54.11	0.0	0.0	0.0	-75.91
4	157	11.67	0.0	-1.41e-04	-156.78	0.0	-262.06	102.67	0.0	0.0	0.0	-135.92
		-135.92	0.0	0.0	0.0	600.0	-172.06	-54.11	0.0	0.0	0.0	-75.91
4	158	93.27	0.0	-0.06	-311.31	0.0	-321.13	232.40	0.0	0.0	0.0	-338.17
		-338.17	0.0	0.0	0.0	600.0	-231.13	-78.91	0.0	0.0	0.0	12.23
4	159	87.89	0.0	-0.07	-311.31	0.0	-323.05	232.40	0.0	0.0	0.0	-343.54
		-343.54	0.0	0.0	0.0	600.0	-233.05	-78.91	0.0	0.0	0.0	6.85
4	160	91.89	0.0	-0.07	-311.31	0.0	-322.09	233.77	0.0	0.0	0.0	-344.67
		-344.67	0.0	0.0	0.0	600.0	-232.09	-77.54	0.0	0.0	0.0	13.93
4	161	89.27	0.0	-0.06	-311.31	0.0	-322.09	231.03	0.0	0.0	0.0	-337.05
		-337.05	0.0	0.0	0.0	600.0	-232.09	-80.28	0.0	0.0	0.0	5.15
4	162	118.24	0.0	-0.09	-311.31	0.0	-303.41	253.17	0.0	0.0	0.0	-402.81
		-402.81	0.0	0.0	0.0	600.0	-213.41	-58.14	0.0	0.0	0.0	72.20
4	163	112.87	0.0	-0.09	-311.31	0.0	-305.33	253.17	0.0	0.0	0.0	-408.19
		-408.19	0.0	0.0	0.0	600.0	-215.33	-58.14	0.0	0.0	0.0	66.83
4	164	117.89	0.0	-0.09	-311.31	0.0	-304.37	254.54	0.0	0.0	0.0	-409.31
		-409.31	0.0	0.0	0.0	600.0	-214.37	-56.77	0.0	0.0	0.0	73.90
4	165	113.21	0.0	-0.09	-311.31	0.0	-304.37	251.80	0.0	0.0	0.0	-401.69
		-401.69	0.0	0.0	0.0	600.0	-214.37	-59.51	0.0	0.0	0.0	65.13
4	166	60.66	0.0	-0.06	-217.77	0.0	-321.13	178.40	0.0	0.0	0.0	-324.94
		-324.94	0.0	0.0	0.0	600.0	-231.13	-39.37	0.0	0.0	0.0	33.23
4	167	55.28	0.0	-0.07	-217.77	0.0	-323.05	178.40	0.0	0.0	0.0	-330.31
		-330.31	0.0	0.0	0.0	600.0	-233.05	-39.37	0.0	0.0	0.0	27.86
4	168	60.31	0.0	-0.07	-217.77	0.0	-322.09	179.77	0.0	0.0	0.0	-331.44
		-331.44	0.0	0.0	0.0	600.0	-232.09	-38.00	0.0	0.0	0.0	34.93
4	169	55.63	0.0	-0.06	-217.77	0.0	-322.09	177.04	0.0	0.0	0.0	-323.82
		-323.82	0.0	0.0	0.0	600.0	-232.09	-40.73	0.0	0.0	0.0	26.15
4	170	78.58	0.0	-0.04	-311.31	0.0	-340.21	212.48	0.0	0.0	0.0	-278.17
		-278.17	0.0	0.0	0.0	600.0	-250.21	-98.83	0.0	0.0	0.0	-47.28
4	171	73.21	0.0	-0.04	-311.31	0.0	-342.13	212.48	0.0	0.0	0.0	-283.54
		-283.54	0.0	0.0	0.0	600.0	-252.13	-98.83	0.0	0.0	0.0	-52.65
4	172	77.21	0.0	-0.04	-311.31	0.0	-341.17	213.85	0.0	0.0	0.0	-284.67
		-284.67	0.0	0.0	0.0	600.0	-251.17	-97.46	0.0	0.0	0.0	-45.57
4	173	74.58	0.0	-0.04	-311.31	0.0	-341.17	211.12	0.0	0.0	0.0	-277.05
		-277.05	0.0	0.0	0.0	600.0	-251.17	-100.19	0.0	0.0	0.0	-54.35
4	174	91.82	0.0	-0.07	-311.31	0.0	-322.49	233.25	0.0	0.0	0.0	-342.81
		-342.81	0.0	0.0	0.0	600.0	-232.49	-78.06	0.0	0.0	0.0	12.70
4	175	86.45	0.0	-0.07	-311.31	0.0	-324.41	233.25	0.0	0.0	0.0	-348.19
		-348.19	0.0	0.0	0.0	600.0	-234.41	-78.06	0.0	0.0	0.0	7.33
4	176	90.45	0.0	-0.07	-311.31	0.0	-323.45	234.62	0.0	0.0	0.0	-349.31
		-349.31	0.0	0.0	0.0	600.0	-233.45	-76.69	0.0	0.0	0.0	14.40
4	177	87.82	0.0	-0.07	-311.31	0.0	-323.45	231.89	0.0	0.0	0.0	-341.69
		-341.69	0.0	0.0	0.0	600.0	-233.45	-79.42	0.0	0.0	0.0	5.62
4	178	33.89	0.0	-0.04	-217.77	0.0	-340.21	158.49	0.0	0.0	0.0	-264.94
		-264.94	0.0	0.0	0.0	600.0	-250.21	-59.28	0.0	0.0	0.0	-26.27
4	179	28.52	0.0	-0.04	-217.77	0.0	-342.13	158.49	0.0	0.0	0.0	-270.31

Pilas.	Cmb	M3 mx/mn	M2 mx/mn	D 2 / D 3	Q 2 / Q 3	Pos.	N	V 2	V 3	T	M 2	M 3
		-270.31	0.0	0.0	0.0	600.0	-252.13	-59.28	0.0	0.0	0.0	-31.64
4	180	32.52	0.0	-0.04	-217.77	0.0	-341.17	159.85	0.0	0.0	0.0	-271.44
		-271.44	0.0	0.0	0.0	600.0	-251.17	-57.92	0.0	0.0	0.0	-24.57
4	181	29.89	0.0	-0.04	-217.77	0.0	-341.17	157.12	0.0	0.0	0.0	-263.82
		-263.82	0.0	0.0	0.0	600.0	-251.17	-60.65	0.0	0.0	0.0	-33.35
5	1	-130.40	0.0	1.77e-05	-7.20	0.0	-230.36	-127.97	0.0	0.0	0.0	-130.40
		-169.89	0.0	0.0	0.0	30.0	-224.28	-135.17	0.0	0.0	0.0	-169.89
5	2	-141.14	0.0	-2.00e-05	-7.20	0.0	-234.19	-127.97	0.0	0.0	0.0	-141.14
		-180.64	0.0	0.0	0.0	30.0	-228.12	-135.17	0.0	0.0	0.0	-180.64
5	3	-126.99	0.0	-1.15e-05	-7.20	0.0	-232.27	-125.24	0.0	0.0	0.0	-126.99
		-165.67	0.0	0.0	0.0	30.0	-226.20	-132.44	0.0	0.0	0.0	-165.67
5	4	-144.55	0.0	9.41e-06	-7.20	0.0	-232.27	-130.70	0.0	0.0	0.0	-144.55
		-184.86	0.0	0.0	0.0	30.0	-226.20	-137.91	0.0	0.0	0.0	-184.86
5	5	-49.43	0.0	-1.67e-03	-7.20	0.0	-206.43	-99.93	0.0	0.0	0.0	-49.43
		-80.52	0.0	0.0	0.0	30.0	-200.36	-107.13	0.0	0.0	0.0	-80.52
5	6	-60.18	0.0	-1.71e-03	-7.20	0.0	-210.27	-99.93	0.0	0.0	0.0	-60.18
		-91.26	0.0	0.0	0.0	30.0	-204.19	-107.13	0.0	0.0	0.0	-91.26
5	7	-46.03	0.0	-1.70e-03	-7.20	0.0	-208.35	-97.20	0.0	0.0	0.0	-46.03
		-76.29	0.0	0.0	0.0	30.0	-202.28	-104.40	0.0	0.0	0.0	-76.29
5	8	-63.58	0.0	-1.68e-03	-7.20	0.0	-208.35	-102.67	0.0	0.0	0.0	-63.58
		-95.49	0.0	0.0	0.0	30.0	-202.28	-109.87	0.0	0.0	0.0	-95.49
5	9	-102.05	0.0	3.06e-05	-4.51	0.0	-230.36	-74.58	0.0	0.0	0.0	-102.05
		-125.11	0.0	0.0	0.0	30.0	-224.28	-79.09	0.0	0.0	0.0	-125.11
5	10	-112.79	0.0	-6.83e-05	-4.51	0.0	-234.19	-74.58	0.0	0.0	0.0	-112.79
		-135.86	0.0	0.0	0.0	30.0	-228.12	-79.09	0.0	0.0	0.0	-135.86
5	11	-98.64	0.0	-5.99e-05	-4.51	0.0	-232.27	-71.85	0.0	0.0	0.0	-98.64
		-120.89	0.0	0.0	0.0	30.0	-226.20	-76.36	0.0	0.0	0.0	-120.89
5	12	-116.19	0.0	3.90e-05	-4.51	0.0	-232.27	-77.32	0.0	0.0	0.0	-116.19
		-140.08	0.0	0.0	0.0	30.0	-226.20	-81.83	0.0	0.0	0.0	-140.08
5	13	-125.33	0.0	-1.62e-03	-13.12	0.0	-367.24	-151.06	0.0	0.0	0.0	-125.33
		-172.64	0.0	0.0	0.0	30.0	-361.16	-164.18	0.0	0.0	0.0	-172.64
5	14	-131.78	0.0	-1.65e-03	-13.12	0.0	-369.54	-151.06	0.0	0.0	0.0	-131.78
		-179.09	0.0	0.0	0.0	30.0	-363.47	-164.18	0.0	0.0	0.0	-179.09
5	15	-123.29	0.0	-1.64e-03	-13.12	0.0	-368.39	-149.42	0.0	0.0	0.0	-123.29
		-170.11	0.0	0.0	0.0	30.0	-362.31	-162.54	0.0	0.0	0.0	-170.11
5	16	-133.82	0.0	-1.63e-03	-13.12	0.0	-368.39	-152.70	0.0	0.0	0.0	-133.82
		-181.62	0.0	0.0	0.0	30.0	-362.31	-165.82	0.0	0.0	0.0	-181.62
5	17	-44.37	0.0	-3.32e-03	-13.12	0.0	-343.32	-123.02	0.0	0.0	0.0	-44.37
		-83.27	0.0	0.0	0.0	30.0	-337.24	-136.14	0.0	0.0	0.0	-83.27
5	18	-50.81	0.0	-3.34e-03	-13.12	0.0	-345.62	-123.02	0.0	0.0	0.0	-50.81
		-89.71	0.0	0.0	0.0	30.0	-339.54	-136.14	0.0	0.0	0.0	-89.71
5	19	-42.33	0.0	-3.33e-03	-13.12	0.0	-344.47	-121.38	0.0	0.0	0.0	-42.33
		-80.73	0.0	0.0	0.0	30.0	-338.39	-134.50	0.0	0.0	0.0	-80.73
5	20	-52.86	0.0	-3.32e-03	-13.12	0.0	-344.47	-124.66	0.0	0.0	0.0	-52.86
		-92.25	0.0	0.0	0.0	30.0	-338.39	-137.78	0.0	0.0	0.0	-92.25
5	21	-96.98	0.0	-1.67e-03	-10.43	0.0	-367.24	-97.67	0.0	0.0	0.0	-96.98
		-127.86	0.0	0.0	0.0	30.0	-361.16	-108.10	0.0	0.0	0.0	-127.86
5	22	-103.43	0.0	-1.70e-03	-10.43	0.0	-369.54	-97.67	0.0	0.0	0.0	-103.43
		-134.31	0.0	0.0	0.0	30.0	-363.47	-108.10	0.0	0.0	0.0	-134.31
5	23	-94.94	0.0	-1.69e-03	-10.43	0.0	-368.39	-96.03	0.0	0.0	0.0	-94.94
		-125.32	0.0	0.0	0.0	30.0	-362.31	-106.46	0.0	0.0	0.0	-125.32
5	24	-105.47	0.0	-1.68e-03	-10.43	0.0	-368.39	-99.31	0.0	0.0	0.0	-105.47
		-136.84	0.0	0.0	0.0	30.0	-362.31	-109.74	0.0	0.0	0.0	-136.84
5	25	-205.66	0.0	3.00e-05	-13.12	0.0	-393.00	-177.94	0.0	0.0	0.0	-205.66
		-261.03	0.0	0.0	0.0	30.0	-386.92	-191.07	0.0	0.0	0.0	-261.03
5	26	-212.11	0.0	-5.26e-05	-13.12	0.0	-395.30	-177.94	0.0	0.0	0.0	-212.11
		-267.48	0.0	0.0	0.0	30.0	-389.23	-191.07	0.0	0.0	0.0	-267.48
5	27	-203.62	0.0	-4.75e-05	-13.12	0.0	-394.15	-176.30	0.0	0.0	0.0	-203.62
		-258.50	0.0	0.0	0.0	30.0	-388.08	-189.43	0.0	0.0	0.0	-258.50
5	28	-214.15	0.0	3.50e-05	-13.12	0.0	-394.15	-179.58	0.0	0.0	0.0	-214.15
		-270.02	0.0	0.0	0.0	30.0	-388.08	-192.71	0.0	0.0	0.0	-270.02
5	29	-124.69	0.0	-1.72e-03	-13.12	0.0	-369.08	-149.91	0.0	0.0	0.0	-124.69
		-171.66	0.0	0.0	0.0	30.0	-363.00	-163.03	0.0	0.0	0.0	-171.66
5	30	-131.14	0.0	-1.74e-03	-13.12	0.0	-371.38	-149.91	0.0	0.0	0.0	-131.14
		-178.10	0.0	0.0	0.0	30.0	-365.30	-163.03	0.0	0.0	0.0	-178.10
5	31	-122.65	0.0	-1.74e-03	-13.12	0.0	-370.23	-148.27	0.0	0.0	0.0	-122.65
		-169.12	0.0	0.0	0.0	30.0	-364.15	-161.39	0.0	0.0	0.0	-169.12
5	32	-133.18	0.0	-1.73e-03	-13.12	0.0	-370.23	-151.55	0.0	0.0	0.0	-133.18
		-180.64	0.0	0.0	0.0	30.0	-364.15	-164.67	0.0	0.0	0.0	-180.64
5	33	-177.30	0.0	7.83e-05	-10.43	0.0	-393.00	-124.56	0.0	0.0	0.0	-177.30
		-216.25	0.0	0.0	0.0	30.0	-386.92	-134.99	0.0	0.0	0.0	-216.25
5	34	-183.75	0.0	-1.01e-04	-10.43	0.0	-395.30	-124.56	0.0	0.0	0.0	-183.75
		-222.70	0.0	0.0	0.0	30.0	-389.23	-134.99	0.0	0.0	0.0	-222.70
5	35	-175.26	0.0	-9.58e-05	-10.43	0.0	-394.15	-122.92	0.0	0.0	0.0	-175.26
		-213.72	0.0	0.0	0.0	30.0	-388.08	-133.35	0.0	0.0	0.0	-213.72

Pilas.	Cmb	M3 mx/mn	M2 mx/mn	D 2 / D 3	Q 2 / Q 3	Pos.	N	V 2	V 3	T	M 2	M 3
5	36	-185.79	0.0	8.33e-05	-10.43	0.0	-394.15	-126.20	0.0	0.0	0.0	-185.79
		-225.23	0.0	0.0	0.0	30.0	-388.08	-136.63	0.0	0.0	0.0	-225.23
5	37	-127.80	0.0	-1.21e-03	-11.63	0.0	-332.96	-145.89	0.0	0.0	0.0	-127.80
		-173.34	0.0	0.0	0.0	30.0	-326.88	-157.52	0.0	0.0	0.0	-173.34
5	38	-134.25	0.0	-1.23e-03	-11.63	0.0	-335.26	-145.89	0.0	0.0	0.0	-134.25
		-179.78	0.0	0.0	0.0	30.0	-329.18	-157.52	0.0	0.0	0.0	-179.78
5	39	-125.76	0.0	-1.23e-03	-11.63	0.0	-334.11	-144.25	0.0	0.0	0.0	-125.76
		-170.80	0.0	0.0	0.0	30.0	-328.03	-155.88	0.0	0.0	0.0	-170.80
5	40	-136.29	0.0	-1.22e-03	-11.63	0.0	-334.11	-147.53	0.0	0.0	0.0	-136.29
		-182.32	0.0	0.0	0.0	30.0	-328.03	-159.16	0.0	0.0	0.0	-182.32
5	41	-46.84	0.0	-2.90e-03	-11.63	0.0	-309.03	-117.85	0.0	0.0	0.0	-46.84
		-83.96	0.0	0.0	0.0	30.0	-302.96	-129.48	0.0	0.0	0.0	-83.96
5	42	-53.29	0.0	-2.92e-03	-11.63	0.0	-311.34	-117.85	0.0	0.0	0.0	-53.29
		-90.41	0.0	0.0	0.0	30.0	-305.26	-129.48	0.0	0.0	0.0	-90.41
5	43	-44.80	0.0	-2.92e-03	-11.63	0.0	-310.19	-116.21	0.0	0.0	0.0	-44.80
		-81.43	0.0	0.0	0.0	30.0	-304.11	-127.84	0.0	0.0	0.0	-81.43
5	44	-55.33	0.0	-2.91e-03	-11.63	0.0	-310.19	-119.49	0.0	0.0	0.0	-55.33
		-92.94	0.0	0.0	0.0	30.0	-304.11	-131.12	0.0	0.0	0.0	-92.94
5	45	-99.45	0.0	-1.26e-03	-8.94	0.0	-332.96	-92.50	0.0	0.0	0.0	-99.45
		-128.55	0.0	0.0	0.0	30.0	-326.88	-101.44	0.0	0.0	0.0	-128.55
5	46	-105.90	0.0	-1.28e-03	-8.94	0.0	-335.26	-92.50	0.0	0.0	0.0	-105.90
		-135.00	0.0	0.0	0.0	30.0	-329.18	-101.44	0.0	0.0	0.0	-135.00
5	47	-97.41	0.0	-1.28e-03	-8.94	0.0	-334.11	-90.86	0.0	0.0	0.0	-97.41
		-126.02	0.0	0.0	0.0	30.0	-328.03	-99.80	0.0	0.0	0.0	-126.02
5	48	-107.94	0.0	-1.27e-03	-8.94	0.0	-334.11	-94.14	0.0	0.0	0.0	-107.94
		-137.54	0.0	0.0	0.0	30.0	-328.03	-103.08	0.0	0.0	0.0	-137.54
5	49	-187.90	0.0	1.90e-05	-11.63	0.0	-352.23	-166.00	0.0	0.0	0.0	-187.90
		-239.47	0.0	0.0	0.0	30.0	-346.16	-177.63	0.0	0.0	0.0	-239.47
5	50	-194.35	0.0	-4.15e-05	-11.63	0.0	-354.53	-166.00	0.0	0.0	0.0	-194.35
		-245.91	0.0	0.0	0.0	30.0	-348.46	-177.63	0.0	0.0	0.0	-245.91
5	51	-185.86	0.0	-3.65e-05	-11.63	0.0	-353.38	-164.36	0.0	0.0	0.0	-185.86
		-236.93	0.0	0.0	0.0	30.0	-347.31	-175.99	0.0	0.0	0.0	-236.93
5	52	-196.39	0.0	2.40e-05	-11.63	0.0	-353.38	-167.64	0.0	0.0	0.0	-196.39
		-248.45	0.0	0.0	0.0	30.0	-347.31	-179.27	0.0	0.0	0.0	-248.45
5	53	-106.93	0.0	-1.71e-03	-11.63	0.0	-328.31	-137.96	0.0	0.0	0.0	-106.93
		-150.09	0.0	0.0	0.0	30.0	-322.23	-149.59	0.0	0.0	0.0	-150.09
5	54	-113.38	0.0	-1.73e-03	-11.63	0.0	-330.61	-137.96	0.0	0.0	0.0	-113.38
		-156.54	0.0	0.0	0.0	30.0	-324.53	-149.59	0.0	0.0	0.0	-156.54
5	55	-104.89	0.0	-1.73e-03	-11.63	0.0	-329.46	-136.32	0.0	0.0	0.0	-104.89
		-147.56	0.0	0.0	0.0	30.0	-323.38	-147.95	0.0	0.0	0.0	-147.56
5	56	-115.42	0.0	-1.71e-03	-11.63	0.0	-329.46	-139.60	0.0	0.0	0.0	-115.42
		-159.07	0.0	0.0	0.0	30.0	-323.38	-151.23	0.0	0.0	0.0	-159.07
5	57	-159.55	0.0	6.73e-05	-8.94	0.0	-352.23	-112.62	0.0	0.0	0.0	-159.55
		-194.69	0.0	0.0	0.0	30.0	-346.16	-121.56	0.0	0.0	0.0	-194.69
5	58	-165.99	0.0	-8.99e-05	-8.94	0.0	-354.53	-112.62	0.0	0.0	0.0	-165.99
		-201.13	0.0	0.0	0.0	30.0	-348.46	-121.56	0.0	0.0	0.0	-201.13
5	59	-157.50	0.0	-8.48e-05	-8.94	0.0	-353.38	-110.98	0.0	0.0	0.0	-157.50
		-192.15	0.0	0.0	0.0	30.0	-347.31	-119.92	0.0	0.0	0.0	-192.15
5	60	-168.03	0.0	7.23e-05	-8.94	0.0	-353.38	-114.26	0.0	0.0	0.0	-168.03
		-203.67	0.0	0.0	0.0	30.0	-347.31	-123.20	0.0	0.0	0.0	-203.67
5	61	59.68	0.0	-4.76e-03	-11.63	0.0	-259.53	-87.60	0.0	0.0	0.0	59.68
		31.63	0.0	0.0	0.0	30.0	-253.46	-99.23	0.0	0.0	0.0	31.63
5	62	53.23	0.0	-4.78e-03	-11.63	0.0	-261.84	-87.60	0.0	0.0	0.0	53.23
		25.18	0.0	0.0	0.0	30.0	-255.76	-99.23	0.0	0.0	0.0	25.18
5	63	61.72	0.0	-4.78e-03	-11.63	0.0	-260.69	-85.96	0.0	0.0	0.0	61.72
		34.17	0.0	0.0	0.0	30.0	-254.61	-97.59	0.0	0.0	0.0	34.17
5	64	51.19	0.0	-4.76e-03	-11.63	0.0	-260.69	-89.24	0.0	0.0	0.0	51.19
		22.65	0.0	0.0	0.0	30.0	-254.61	-100.87	0.0	0.0	0.0	22.65
5	65	140.64	0.0	-6.45e-03	-11.63	0.0	-235.61	-59.56	0.0	0.0	0.0	140.64
		121.01	0.0	0.0	0.0	30.0	-229.54	-71.19	0.0	0.0	0.0	121.01
5	66	134.20	0.0	-6.47e-03	-11.63	0.0	-237.91	-59.56	0.0	0.0	0.0	134.20
		114.56	0.0	0.0	0.0	30.0	-231.84	-71.19	0.0	0.0	0.0	114.56
5	67	142.69	0.0	-6.47e-03	-11.63	0.0	-236.76	-57.92	0.0	0.0	0.0	142.69
		123.54	0.0	0.0	0.0	30.0	-230.69	-69.55	0.0	0.0	0.0	123.54
5	68	132.15	0.0	-6.45e-03	-11.63	0.0	-236.76	-61.20	0.0	0.0	0.0	132.15
		112.03	0.0	0.0	0.0	30.0	-230.69	-72.83	0.0	0.0	0.0	112.03
5	69	88.03	0.0	-4.81e-03	-8.94	0.0	-259.53	-34.21	0.0	0.0	0.0	88.03
		76.41	0.0	0.0	0.0	30.0	-253.46	-43.15	0.0	0.0	0.0	76.41
5	70	81.59	0.0	-4.83e-03	-8.94	0.0	-261.84	-34.21	0.0	0.0	0.0	81.59
		69.97	0.0	0.0	0.0	30.0	-255.76	-43.15	0.0	0.0	0.0	69.97
5	71	90.08	0.0	-4.83e-03	-8.94	0.0	-260.69	-32.57	0.0	0.0	0.0	90.08
		78.95	0.0	0.0	0.0	30.0	-254.61	-41.51	0.0	0.0	0.0	78.95
5	72	79.54	0.0	-4.81e-03	-8.94	0.0	-260.69	-35.85	0.0	0.0	0.0	79.54
		67.43	0.0	0.0	0.0	30.0	-254.61	-44.79	0.0	0.0	0.0	67.43
5	73	-0.42	0.0	-3.57e-03	-11.63	0.0	-278.81	-107.71	0.0	0.0	0.0	-0.42

Pilas.	Cmb	M3 mx/mn	M2 mx/mn	D 2 / D 3	Q 2 / Q 3	Pos.	N	V 2	V 3	T	M 2	M 3
		-34.50	0.0	0.0	0.0	30.0	-272.73	-119.34	0.0	0.0	0.0	-34.50
5	74	-6.86	0.0	-3.59e-03	-11.63	0.0	-281.11	-107.71	0.0	0.0	0.0	-6.86
		-40.95	0.0	0.0	0.0	30.0	-275.03	-119.34	0.0	0.0	0.0	-40.95
5	75	1.63	0.0	-3.58e-03	-11.63	0.0	-279.96	-106.07	0.0	0.0	0.0	1.63
		-31.96	0.0	0.0	0.0	30.0	-273.88	-117.71	0.0	0.0	0.0	-31.96
5	76	-8.91	0.0	-3.57e-03	-11.63	0.0	-279.96	-109.35	0.0	0.0	0.0	-8.91
		-43.48	0.0	0.0	0.0	30.0	-273.88	-120.98	0.0	0.0	0.0	-43.48
5	77	80.55	0.0	-5.26e-03	-11.63	0.0	-254.88	-79.68	0.0	0.0	0.0	80.55
		54.88	0.0	0.0	0.0	30.0	-248.81	-91.31	0.0	0.0	0.0	54.88
5	78	74.10	0.0	-5.28e-03	-11.63	0.0	-257.19	-79.68	0.0	0.0	0.0	74.10
		48.43	0.0	0.0	0.0	30.0	-251.11	-91.31	0.0	0.0	0.0	48.43
5	79	82.59	0.0	-5.27e-03	-11.63	0.0	-256.03	-78.04	0.0	0.0	0.0	82.59
		57.41	0.0	0.0	0.0	30.0	-249.96	-89.67	0.0	0.0	0.0	57.41
5	80	72.06	0.0	-5.26e-03	-11.63	0.0	-256.03	-81.32	0.0	0.0	0.0	72.06
		45.90	0.0	0.0	0.0	30.0	-249.96	-92.95	0.0	0.0	0.0	45.90
5	81	27.94	0.0	-3.61e-03	-8.94	0.0	-278.81	-54.33	0.0	0.0	0.0	27.94
		10.28	0.0	0.0	0.0	30.0	-272.73	-63.27	0.0	0.0	0.0	10.28
5	82	21.49	0.0	-3.64e-03	-8.94	0.0	-281.11	-54.33	0.0	0.0	0.0	21.49
		3.84	0.0	0.0	0.0	30.0	-275.03	-63.27	0.0	0.0	0.0	3.84
5	83	29.98	0.0	-3.63e-03	-8.94	0.0	-279.96	-52.69	0.0	0.0	0.0	29.98
		12.82	0.0	0.0	0.0	30.0	-273.88	-61.63	0.0	0.0	0.0	12.82
5	84	19.45	0.0	-3.62e-03	-8.94	0.0	-279.96	-55.97	0.0	0.0	0.0	19.45
		1.30	0.0	0.0	0.0	30.0	-273.88	-64.91	0.0	0.0	0.0	1.30
5	85	-128.28	0.0	-1.21e-03	-11.63	0.0	-332.96	-146.36	0.0	0.0	0.0	-128.28
		-173.96	0.0	0.0	0.0	30.0	-326.88	-157.99	0.0	0.0	0.0	-173.96
5	86	-134.73	0.0	-1.23e-03	-11.63	0.0	-335.26	-146.36	0.0	0.0	0.0	-134.73
		-180.40	0.0	0.0	0.0	30.0	-329.18	-157.99	0.0	0.0	0.0	-180.40
5	87	-126.24	0.0	-1.23e-03	-11.63	0.0	-334.11	-144.72	0.0	0.0	0.0	-126.24
		-171.42	0.0	0.0	0.0	30.0	-328.03	-156.35	0.0	0.0	0.0	-171.42
5	88	-136.77	0.0	-1.22e-03	-11.63	0.0	-334.11	-148.00	0.0	0.0	0.0	-136.77
		-182.94	0.0	0.0	0.0	30.0	-328.03	-159.63	0.0	0.0	0.0	-182.94
5	89	-47.32	0.0	-2.90e-03	-11.63	0.0	-309.03	-118.32	0.0	0.0	0.0	-47.32
		-84.58	0.0	0.0	0.0	30.0	-302.96	-129.95	0.0	0.0	0.0	-84.58
5	90	-53.76	0.0	-2.92e-03	-11.63	0.0	-311.34	-118.32	0.0	0.0	0.0	-53.76
		-91.02	0.0	0.0	0.0	30.0	-305.26	-129.95	0.0	0.0	0.0	-91.02
5	91	-45.27	0.0	-2.92e-03	-11.63	0.0	-310.19	-116.68	0.0	0.0	0.0	-45.27
		-82.04	0.0	0.0	0.0	30.0	-304.11	-128.31	0.0	0.0	0.0	-82.04
5	92	-55.80	0.0	-2.91e-03	-11.63	0.0	-310.19	-119.96	0.0	0.0	0.0	-55.80
		-93.56	0.0	0.0	0.0	30.0	-304.11	-131.59	0.0	0.0	0.0	-93.56
5	93	-99.93	0.0	-1.26e-03	-8.94	0.0	-332.96	-92.97	0.0	0.0	0.0	-99.93
		-129.17	0.0	0.0	0.0	30.0	-326.88	-101.91	0.0	0.0	0.0	-129.17
5	94	-106.37	0.0	-1.28e-03	-8.94	0.0	-335.26	-92.97	0.0	0.0	0.0	-106.37
		-135.62	0.0	0.0	0.0	30.0	-329.18	-101.91	0.0	0.0	0.0	-135.62
5	95	-97.88	0.0	-1.28e-03	-8.94	0.0	-334.11	-91.33	0.0	0.0	0.0	-97.88
		-126.64	0.0	0.0	0.0	30.0	-328.03	-100.27	0.0	0.0	0.0	-126.64
5	96	-108.42	0.0	-1.26e-03	-8.94	0.0	-334.11	-94.61	0.0	0.0	0.0	-108.42
		-138.15	0.0	0.0	0.0	30.0	-328.03	-103.55	0.0	0.0	0.0	-138.15
5	97	-188.38	0.0	1.83e-05	-11.63	0.0	-352.23	-166.47	0.0	0.0	0.0	-188.38
		-240.09	0.0	0.0	0.0	30.0	-346.16	-178.10	0.0	0.0	0.0	-240.09
5	98	-194.82	0.0	-4.09e-05	-11.63	0.0	-354.53	-166.47	0.0	0.0	0.0	-194.82
		-246.53	0.0	0.0	0.0	30.0	-348.46	-178.10	0.0	0.0	0.0	-246.53
5	99	-186.33	0.0	-3.58e-05	-11.63	0.0	-353.38	-164.83	0.0	0.0	0.0	-186.33
		-237.55	0.0	0.0	0.0	30.0	-347.31	-176.46	0.0	0.0	0.0	-237.55
5	100	-196.87	0.0	2.33e-05	-11.63	0.0	-353.38	-168.11	0.0	0.0	0.0	-196.87
		-249.07	0.0	0.0	0.0	30.0	-347.31	-179.74	0.0	0.0	0.0	-249.07
5	101	-107.41	0.0	-1.71e-03	-11.63	0.0	-328.31	-138.43	0.0	0.0	0.0	-107.41
		-150.71	0.0	0.0	0.0	30.0	-322.23	-150.06	0.0	0.0	0.0	-150.71
5	102	-113.86	0.0	-1.73e-03	-11.63	0.0	-330.61	-138.43	0.0	0.0	0.0	-113.86
		-157.15	0.0	0.0	0.0	30.0	-324.53	-150.06	0.0	0.0	0.0	-157.15
5	103	-105.37	0.0	-1.73e-03	-11.63	0.0	-329.46	-136.79	0.0	0.0	0.0	-105.37
		-148.17	0.0	0.0	0.0	30.0	-323.38	-148.42	0.0	0.0	0.0	-148.17
5	104	-115.90	0.0	-1.71e-03	-11.63	0.0	-329.46	-140.07	0.0	0.0	0.0	-115.90
		-159.69	0.0	0.0	0.0	30.0	-323.38	-151.70	0.0	0.0	0.0	-159.69
5	105	-160.02	0.0	6.66e-05	-8.94	0.0	-352.23	-113.09	0.0	0.0	0.0	-160.02
		-195.30	0.0	0.0	0.0	30.0	-346.16	-122.02	0.0	0.0	0.0	-195.30
5	106	-166.47	0.0	-8.92e-05	-8.94	0.0	-354.53	-113.09	0.0	0.0	0.0	-166.47
		-201.75	0.0	0.0	0.0	30.0	-348.46	-122.02	0.0	0.0	0.0	-201.75
5	107	-157.98	0.0	-8.42e-05	-8.94	0.0	-353.38	-111.45	0.0	0.0	0.0	-157.98
		-192.77	0.0	0.0	0.0	30.0	-347.31	-120.38	0.0	0.0	0.0	-192.77
5	108	-168.51	0.0	7.16e-05	-8.94	0.0	-353.38	-114.72	0.0	0.0	0.0	-168.51
		-204.28	0.0	0.0	0.0	30.0	-347.31	-123.66	0.0	0.0	0.0	-204.28
5	109	449.02	0.0	-0.01	-20.02	0.0	10.98	-38.08	0.0	0.0	0.0	449.02
		434.57	0.0	0.0	0.0	30.0	15.48	-58.11	0.0	0.0	0.0	434.57
5	110	-126.41	0.0	3.67e-05	-5.33	0.0	-261.03	-93.52	0.0	0.0	0.0	-126.41
		-155.28	0.0	0.0	0.0	30.0	-256.53	-98.85	0.0	0.0	0.0	-155.28

Pilas.	Cmb	M3 mx/mn	M2 mx/mn	D 2 / D 3	Q 2 / Q 3	Pos.	N	V 2	V 3	T	M 2	M 3
5	111	-131.78	0.0	-5.55e-05	-5.33	0.0	-262.95	-93.52	0.0	0.0	0.0	-131.78
		-160.65	0.0	0.0	0.0	30.0	-258.45	-98.85	0.0	0.0	0.0	-160.65
5	112	-124.71	0.0	-5.13e-05	-5.33	0.0	-261.99	-92.15	0.0	0.0	0.0	-124.71
		-153.17	0.0	0.0	0.0	30.0	-257.49	-97.48	0.0	0.0	0.0	-153.17
5	113	-133.49	0.0	4.09e-05	-5.33	0.0	-261.99	-94.88	0.0	0.0	0.0	-133.49
		-162.77	0.0	0.0	0.0	30.0	-257.49	-100.22	0.0	0.0	0.0	-162.77
5	114	-66.44	0.0	-1.29e-03	-5.33	0.0	-243.31	-72.75	0.0	0.0	0.0	-66.44
		-89.08	0.0	0.0	0.0	30.0	-238.81	-78.08	0.0	0.0	0.0	-89.08
5	115	-71.81	0.0	-1.31e-03	-5.33	0.0	-245.22	-72.75	0.0	0.0	0.0	-71.81
		-94.45	0.0	0.0	0.0	30.0	-240.72	-78.08	0.0	0.0	0.0	-94.45
5	116	-64.73	0.0	-1.30e-03	-5.33	0.0	-244.26	-71.38	0.0	0.0	0.0	-64.73
		-86.96	0.0	0.0	0.0	30.0	-239.76	-76.71	0.0	0.0	0.0	-86.96
5	117	-73.51	0.0	-1.29e-03	-5.33	0.0	-244.26	-74.11	0.0	0.0	0.0	-73.51
		-96.56	0.0	0.0	0.0	30.0	-239.76	-79.45	0.0	0.0	0.0	-96.56
5	118	-105.41	0.0	7.25e-05	-3.34	0.0	-261.03	-53.97	0.0	0.0	0.0	-105.41
		-122.11	0.0	0.0	0.0	30.0	-256.53	-57.31	0.0	0.0	0.0	-122.11
5	119	-110.78	0.0	-9.13e-05	-3.34	0.0	-262.95	-53.97	0.0	0.0	0.0	-110.78
		-127.48	0.0	0.0	0.0	30.0	-258.45	-57.31	0.0	0.0	0.0	-127.48
5	120	-103.70	0.0	-8.71e-05	-3.34	0.0	-261.99	-52.60	0.0	0.0	0.0	-103.70
		-120.00	0.0	0.0	0.0	30.0	-257.49	-55.94	0.0	0.0	0.0	-120.00
5	121	-112.48	0.0	7.67e-05	-3.34	0.0	-261.99	-55.34	0.0	0.0	0.0	-112.48
		-129.59	0.0	0.0	0.0	30.0	-257.49	-58.68	0.0	0.0	0.0	-129.59
5	122	13.04	0.0	-2.87e-03	-8.62	0.0	-205.92	-72.52	0.0	0.0	0.0	13.04
		-10.03	0.0	0.0	0.0	30.0	-201.42	-81.14	0.0	0.0	0.0	-10.03
5	123	7.66	0.0	-2.89e-03	-8.62	0.0	-207.84	-72.52	0.0	0.0	0.0	7.66
		-15.40	0.0	0.0	0.0	30.0	-203.34	-81.14	0.0	0.0	0.0	-15.40
5	124	14.74	0.0	-2.89e-03	-8.62	0.0	-206.88	-71.15	0.0	0.0	0.0	14.74
		-7.92	0.0	0.0	0.0	30.0	-202.38	-79.78	0.0	0.0	0.0	-7.92
5	125	5.96	0.0	-2.88e-03	-8.62	0.0	-206.88	-73.89	0.0	0.0	0.0	5.96
		-17.52	0.0	0.0	0.0	30.0	-202.38	-82.51	0.0	0.0	0.0	-17.52
5	126	73.01	0.0	-4.13e-03	-8.62	0.0	-188.20	-51.75	0.0	0.0	0.0	73.01
		56.17	0.0	0.0	0.0	30.0	-183.70	-60.37	0.0	0.0	0.0	56.17
5	127	67.64	0.0	-4.15e-03	-8.62	0.0	-190.12	-51.75	0.0	0.0	0.0	67.64
		50.80	0.0	0.0	0.0	30.0	-185.62	-60.37	0.0	0.0	0.0	50.80
5	128	74.71	0.0	-4.14e-03	-8.62	0.0	-189.16	-50.38	0.0	0.0	0.0	74.71
		58.29	0.0	0.0	0.0	30.0	-184.66	-59.01	0.0	0.0	0.0	58.29
5	129	65.94	0.0	-4.13e-03	-8.62	0.0	-189.16	-53.12	0.0	0.0	0.0	65.94
		48.69	0.0	0.0	0.0	30.0	-184.66	-61.74	0.0	0.0	0.0	48.69
5	130	34.04	0.0	-2.91e-03	-6.63	0.0	-205.92	-32.98	0.0	0.0	0.0	34.04
		23.14	0.0	0.0	0.0	30.0	-201.42	-39.61	0.0	0.0	0.0	23.14
5	131	28.67	0.0	-2.93e-03	-6.63	0.0	-207.84	-32.98	0.0	0.0	0.0	28.67
		17.77	0.0	0.0	0.0	30.0	-203.34	-39.61	0.0	0.0	0.0	17.77
5	132	35.74	0.0	-2.92e-03	-6.63	0.0	-206.88	-31.61	0.0	0.0	0.0	35.74
		25.25	0.0	0.0	0.0	30.0	-202.38	-38.24	0.0	0.0	0.0	25.25
5	133	26.96	0.0	-2.91e-03	-6.63	0.0	-206.88	-34.34	0.0	0.0	0.0	26.96
		15.66	0.0	0.0	0.0	30.0	-202.38	-40.97	0.0	0.0	0.0	15.66
5	134	-31.59	0.0	-1.99e-03	-8.62	0.0	-220.24	-87.46	0.0	0.0	0.0	-31.59
		-59.14	0.0	0.0	0.0	30.0	-215.74	-96.08	0.0	0.0	0.0	-59.14
5	135	-36.96	0.0	-2.01e-03	-8.62	0.0	-222.15	-87.46	0.0	0.0	0.0	-36.96
		-64.51	0.0	0.0	0.0	30.0	-217.65	-96.08	0.0	0.0	0.0	-64.51
5	136	-29.89	0.0	-2.00e-03	-8.62	0.0	-221.20	-86.09	0.0	0.0	0.0	-29.89
		-57.03	0.0	0.0	0.0	30.0	-216.70	-94.72	0.0	0.0	0.0	-57.03
5	137	-38.66	0.0	-1.99e-03	-8.62	0.0	-221.20	-88.82	0.0	0.0	0.0	-38.66
		-66.62	0.0	0.0	0.0	30.0	-216.70	-97.45	0.0	0.0	0.0	-66.62
5	138	28.38	0.0	-3.24e-03	-8.62	0.0	-202.51	-66.69	0.0	0.0	0.0	28.38
		7.07	0.0	0.0	0.0	30.0	-198.01	-75.31	0.0	0.0	0.0	7.07
5	139	23.01	0.0	-3.26e-03	-8.62	0.0	-204.43	-66.69	0.0	0.0	0.0	23.01
		1.70	0.0	0.0	0.0	30.0	-199.93	-75.31	0.0	0.0	0.0	1.70
5	140	30.09	0.0	-3.25e-03	-8.62	0.0	-203.47	-65.32	0.0	0.0	0.0	30.09
		9.18	0.0	0.0	0.0	30.0	-198.97	-73.95	0.0	0.0	0.0	9.18
5	141	21.31	0.0	-3.24e-03	-8.62	0.0	-203.47	-68.06	0.0	0.0	0.0	21.31
		-0.42	0.0	0.0	0.0	30.0	-198.97	-76.68	0.0	0.0	0.0	-0.42
5	142	-10.59	0.0	-2.02e-03	-6.63	0.0	-220.24	-47.91	0.0	0.0	0.0	-10.59
		-25.97	0.0	0.0	0.0	30.0	-215.74	-54.54	0.0	0.0	0.0	-25.97
5	143	-15.96	0.0	-2.04e-03	-6.63	0.0	-222.15	-47.91	0.0	0.0	0.0	-15.96
		-31.34	0.0	0.0	0.0	30.0	-217.65	-54.54	0.0	0.0	0.0	-31.34
5	144	-8.88	0.0	-2.04e-03	-6.63	0.0	-221.20	-46.55	0.0	0.0	0.0	-8.88
		-23.85	0.0	0.0	0.0	30.0	-216.70	-53.18	0.0	0.0	0.0	-23.85
5	145	-17.66	0.0	-2.03e-03	-6.63	0.0	-221.20	-49.28	0.0	0.0	0.0	-17.66
		-33.45	0.0	0.0	0.0	30.0	-216.70	-55.91	0.0	0.0	0.0	-33.45
5	146	-98.33	0.0	7.01e-06	-5.33	0.0	-171.26	-94.79	0.0	0.0	0.0	-98.33
		-127.59	0.0	0.0	0.0	30.0	-166.76	-100.13	0.0	0.0	0.0	-127.59
5	147	-102.81	0.0	-8.68e-06	-5.33	0.0	-172.85	-94.79	0.0	0.0	0.0	-102.81
		-132.07	0.0	0.0	0.0	30.0	-168.35	-100.13	0.0	0.0	0.0	-132.07
5	148	-96.91	0.0	-5.18e-06	-5.33	0.0	-172.06	-93.65	0.0	0.0	0.0	-96.91

Pilas.	Cmb	M3 mx/mn	M2 mx/mn	D 2 / D 3	Q 2 / Q 3	Pos.	N	V 2	V 3	T	M 2	M 3
		-125.83	0.0	0.0	0.0	30.0	-167.56	-98.99	0.0	0.0	0.0	-125.83
5	149	-104.23	0.0	4.21e-06	-5.33	0.0	-172.06	-95.93	0.0	0.0	0.0	-104.23
		-133.83	0.0	0.0	0.0	30.0	-167.56	-101.27	0.0	0.0	0.0	-133.83
5	150	-38.36	0.0	-1.25e-03	-5.33	0.0	-153.53	-74.02	0.0	0.0	0.0	-38.36
		-61.38	0.0	0.0	0.0	30.0	-149.03	-79.36	0.0	0.0	0.0	-61.38
5	151	-42.84	0.0	-1.26e-03	-5.33	0.0	-155.13	-74.02	0.0	0.0	0.0	-42.84
		-65.86	0.0	0.0	0.0	30.0	-150.63	-79.36	0.0	0.0	0.0	-65.86
5	152	-36.94	0.0	-1.26e-03	-5.33	0.0	-154.33	-72.89	0.0	0.0	0.0	-36.94
		-59.62	0.0	0.0	0.0	30.0	-149.83	-78.22	0.0	0.0	0.0	-59.62
5	153	-36.94	0.0	-1.26e-03	-5.33	0.0	-154.33	-72.89	0.0	0.0	0.0	-36.94
		-59.62	0.0	0.0	0.0	30.0	-149.83	-78.22	0.0	0.0	0.0	-59.62
5	154	-77.33	0.0	2.88e-05	-3.34	0.0	-171.26	-55.25	0.0	0.0	0.0	-77.33
		-94.42	0.0	0.0	0.0	30.0	-166.76	-58.59	0.0	0.0	0.0	-94.42
5	155	-81.81	0.0	-4.45e-05	-3.34	0.0	-172.85	-55.25	0.0	0.0	0.0	-81.81
		-98.89	0.0	0.0	0.0	30.0	-168.35	-58.59	0.0	0.0	0.0	-98.89
5	156	-75.91	0.0	-4.10e-05	-3.34	0.0	-172.06	-54.11	0.0	0.0	0.0	-75.91
		-92.66	0.0	0.0	0.0	30.0	-167.56	-57.45	0.0	0.0	0.0	-92.66
5	157	-75.91	0.0	-4.10e-05	-3.34	0.0	-172.06	-54.11	0.0	0.0	0.0	-75.91
		-92.66	0.0	0.0	0.0	30.0	-167.56	-57.45	0.0	0.0	0.0	-92.66
5	158	12.23	0.0	-3.17e-03	-9.72	0.0	-231.13	-78.91	0.0	0.0	0.0	12.23
		-12.92	0.0	0.0	0.0	30.0	-226.63	-88.63	0.0	0.0	0.0	-12.92
5	159	6.85	0.0	-3.19e-03	-9.72	0.0	-233.05	-78.91	0.0	0.0	0.0	6.85
		-18.30	0.0	0.0	0.0	30.0	-228.55	-88.63	0.0	0.0	0.0	-18.30
5	160	13.93	0.0	-3.19e-03	-9.72	0.0	-232.09	-77.54	0.0	0.0	0.0	13.93
		-10.81	0.0	0.0	0.0	30.0	-227.59	-87.26	0.0	0.0	0.0	-10.81
5	161	5.15	0.0	-3.18e-03	-9.72	0.0	-232.09	-80.28	0.0	0.0	0.0	5.15
		-20.41	0.0	0.0	0.0	30.0	-227.59	-90.00	0.0	0.0	0.0	-20.41
5	162	72.20	0.0	-4.43e-03	-9.72	0.0	-213.41	-58.14	0.0	0.0	0.0	72.20
		53.28	0.0	0.0	0.0	30.0	-208.91	-67.86	0.0	0.0	0.0	53.28
5	163	66.83	0.0	-4.44e-03	-9.72	0.0	-215.33	-58.14	0.0	0.0	0.0	66.83
		47.91	0.0	0.0	0.0	30.0	-210.83	-67.86	0.0	0.0	0.0	47.91
5	164	73.90	0.0	-4.44e-03	-9.72	0.0	-214.37	-56.77	0.0	0.0	0.0	73.90
		55.40	0.0	0.0	0.0	30.0	-209.87	-66.49	0.0	0.0	0.0	55.40
5	165	65.13	0.0	-4.43e-03	-9.72	0.0	-214.37	-59.51	0.0	0.0	0.0	65.13
		45.80	0.0	0.0	0.0	30.0	-209.87	-69.23	0.0	0.0	0.0	45.80
5	166	33.23	0.0	-3.21e-03	-7.73	0.0	-231.13	-39.37	0.0	0.0	0.0	33.23
		20.25	0.0	0.0	0.0	30.0	-226.63	-47.09	0.0	0.0	0.0	20.25
5	167	27.86	0.0	-3.23e-03	-7.73	0.0	-233.05	-39.37	0.0	0.0	0.0	27.86
		14.88	0.0	0.0	0.0	30.0	-228.55	-47.09	0.0	0.0	0.0	14.88
5	168	34.93	0.0	-3.22e-03	-7.73	0.0	-232.09	-38.00	0.0	0.0	0.0	34.93
		22.36	0.0	0.0	0.0	30.0	-227.59	-45.73	0.0	0.0	0.0	22.36
5	169	26.15	0.0	-3.21e-03	-7.73	0.0	-232.09	-40.73	0.0	0.0	0.0	26.15
		12.76	0.0	0.0	0.0	30.0	-227.59	-48.46	0.0	0.0	0.0	12.76
5	170	-47.28	0.0	-1.99e-03	-9.72	0.0	-250.21	-98.83	0.0	0.0	0.0	-47.28
		-78.40	0.0	0.0	0.0	30.0	-245.71	-108.55	0.0	0.0	0.0	-78.40
5	171	-52.65	0.0	-2.01e-03	-9.72	0.0	-252.13	-98.83	0.0	0.0	0.0	-52.65
		-83.77	0.0	0.0	0.0	30.0	-247.63	-108.55	0.0	0.0	0.0	-83.77
5	172	-45.57	0.0	-2.01e-03	-9.72	0.0	-251.17	-97.46	0.0	0.0	0.0	-45.57
		-76.29	0.0	0.0	0.0	30.0	-246.67	-107.18	0.0	0.0	0.0	-76.29
5	173	-54.35	0.0	-2.00e-03	-9.72	0.0	-251.17	-100.19	0.0	0.0	0.0	-54.35
		-85.88	0.0	0.0	0.0	30.0	-246.67	-109.91	0.0	0.0	0.0	-85.88
5	174	12.70	0.0	-3.24e-03	-9.72	0.0	-232.49	-78.06	0.0	0.0	0.0	12.70
		-12.19	0.0	0.0	0.0	30.0	-227.99	-87.78	0.0	0.0	0.0	-12.19
5	175	7.33	0.0	-3.26e-03	-9.72	0.0	-234.41	-78.06	0.0	0.0	0.0	7.33
		-17.57	0.0	0.0	0.0	30.0	-229.91	-87.78	0.0	0.0	0.0	-17.57
5	176	14.40	0.0	-3.26e-03	-9.72	0.0	-233.45	-76.69	0.0	0.0	0.0	14.40
		-10.08	0.0	0.0	0.0	30.0	-228.95	-86.41	0.0	0.0	0.0	-10.08
5	177	5.62	0.0	-3.25e-03	-9.72	0.0	-233.45	-79.42	0.0	0.0	0.0	5.62
		-19.68	0.0	0.0	0.0	30.0	-228.95	-89.14	0.0	0.0	0.0	-19.68
5	178	-26.27	0.0	-2.03e-03	-7.73	0.0	-250.21	-59.28	0.0	0.0	0.0	-26.27
		-45.23	0.0	0.0	0.0	30.0	-245.71	-67.01	0.0	0.0	0.0	-45.23
5	179	-31.64	0.0	-2.05e-03	-7.73	0.0	-252.13	-59.28	0.0	0.0	0.0	-31.64
		-50.60	0.0	0.0	0.0	30.0	-247.63	-67.01	0.0	0.0	0.0	-50.60
5	180	-24.57	0.0	-2.04e-03	-7.73	0.0	-251.17	-57.92	0.0	0.0	0.0	-24.57
		-43.11	0.0	0.0	0.0	30.0	-246.67	-65.64	0.0	0.0	0.0	-43.11
5	181	-33.35	0.0	-2.03e-03	-7.73	0.0	-251.17	-60.65	0.0	0.0	0.0	-33.35
		-52.71	0.0	0.0	0.0	30.0	-246.67	-68.37	0.0	0.0	0.0	-52.71
6	1	180.64	0.0	2.00e-05	7.20	0.0	-234.19	127.97	0.0	0.0	0.0	141.14
		141.14	0.0	0.0	0.0	30.0	-228.12	135.17	0.0	0.0	0.0	180.64
6	2	169.89	0.0	-1.77e-05	7.20	0.0	-230.36	127.97	0.0	0.0	0.0	130.40
		130.40	0.0	0.0	0.0	30.0	-224.28	135.17	0.0	0.0	0.0	169.89
6	3	165.67	0.0	1.15e-05	7.20	0.0	-232.27	125.24	0.0	0.0	0.0	126.99
		126.99	0.0	0.0	0.0	30.0	-226.20	132.44	0.0	0.0	0.0	165.67
6	4	184.86	0.0	-9.41e-06	7.20	0.0	-232.27	130.70	0.0	0.0	0.0	144.55
		144.55	0.0	0.0	0.0	30.0	-226.20	137.91	0.0	0.0	0.0	184.86

Pilas.	Cmb	M3 mx/mn	M2 mx/mn	D 2 / D 3	Q 2 / Q 3	Pos.	N	V 2	V 3	T	M 2	M 3
6	5	225.23	0.0	-1.62e-03	4.51	0.0	-258.12	102.62	0.0	0.0	0.0	193.76
		193.76	0.0	0.0	0.0	30.0	-252.04	107.13	0.0	0.0	0.0	225.23
6	6	214.49	0.0	-1.66e-03	4.51	0.0	-254.28	102.62	0.0	0.0	0.0	183.01
		183.01	0.0	0.0	0.0	30.0	-248.20	107.13	0.0	0.0	0.0	214.49
6	7	210.26	0.0	-1.63e-03	4.51	0.0	-256.20	99.89	0.0	0.0	0.0	179.61
		179.61	0.0	0.0	0.0	30.0	-250.12	104.40	0.0	0.0	0.0	210.26
6	8	229.46	0.0	-1.65e-03	4.51	0.0	-256.20	105.36	0.0	0.0	0.0	197.16
		197.16	0.0	0.0	0.0	30.0	-250.12	109.87	0.0	0.0	0.0	229.46
6	9	135.86	0.0	6.83e-05	4.51	0.0	-234.19	74.58	0.0	0.0	0.0	112.79
		112.79	0.0	0.0	0.0	30.0	-228.12	79.09	0.0	0.0	0.0	135.86
6	10	125.11	0.0	-3.06e-05	4.51	0.0	-230.36	74.58	0.0	0.0	0.0	102.05
		102.05	0.0	0.0	0.0	30.0	-224.28	79.09	0.0	0.0	0.0	125.11
6	11	120.89	0.0	5.99e-05	4.51	0.0	-232.27	71.85	0.0	0.0	0.0	98.64
		98.64	0.0	0.0	0.0	30.0	-226.20	76.36	0.0	0.0	0.0	120.89
6	12	140.08	0.0	-3.90e-05	4.51	0.0	-232.27	77.32	0.0	0.0	0.0	116.19
		116.19	0.0	0.0	0.0	30.0	-226.20	81.83	0.0	0.0	0.0	140.08
6	13	323.35	0.0	-1.51e-03	7.20	0.0	-421.06	156.98	0.0	0.0	0.0	275.15
		275.15	0.0	0.0	0.0	30.0	-414.99	164.18	0.0	0.0	0.0	323.35
6	14	316.90	0.0	-1.53e-03	7.20	0.0	-418.76	156.98	0.0	0.0	0.0	268.70
		268.70	0.0	0.0	0.0	30.0	-412.68	164.18	0.0	0.0	0.0	316.90
6	15	314.37	0.0	-1.51e-03	7.20	0.0	-419.91	155.34	0.0	0.0	0.0	266.66
		266.66	0.0	0.0	0.0	30.0	-413.84	162.54	0.0	0.0	0.0	314.37
6	16	325.88	0.0	-1.52e-03	7.20	0.0	-419.91	158.62	0.0	0.0	0.0	277.19
		277.19	0.0	0.0	0.0	30.0	-413.84	165.82	0.0	0.0	0.0	325.88
6	17	367.94	0.0	-3.15e-03	4.51	0.0	-444.99	131.63	0.0	0.0	0.0	327.76
		327.76	0.0	0.0	0.0	30.0	-438.91	136.14	0.0	0.0	0.0	367.94
6	18	361.49	0.0	-3.17e-03	4.51	0.0	-442.68	131.63	0.0	0.0	0.0	321.31
		321.31	0.0	0.0	0.0	30.0	-436.61	136.14	0.0	0.0	0.0	361.49
6	19	358.96	0.0	-3.15e-03	4.51	0.0	-443.83	129.99	0.0	0.0	0.0	319.27
		319.27	0.0	0.0	0.0	30.0	-437.76	134.50	0.0	0.0	0.0	358.96
6	20	370.48	0.0	-3.17e-03	4.51	0.0	-443.83	133.27	0.0	0.0	0.0	329.80
		329.80	0.0	0.0	0.0	30.0	-437.76	137.78	0.0	0.0	0.0	370.48
6	21	278.56	0.0	-1.46e-03	4.51	0.0	-421.06	103.59	0.0	0.0	0.0	246.80
		246.80	0.0	0.0	0.0	30.0	-414.99	108.10	0.0	0.0	0.0	278.56
6	22	272.12	0.0	-1.48e-03	4.51	0.0	-418.76	103.59	0.0	0.0	0.0	240.35
		240.35	0.0	0.0	0.0	30.0	-412.68	108.10	0.0	0.0	0.0	272.12
6	23	269.58	0.0	-1.46e-03	4.51	0.0	-419.91	101.95	0.0	0.0	0.0	238.31
		238.31	0.0	0.0	0.0	30.0	-413.84	106.46	0.0	0.0	0.0	269.58
6	24	281.10	0.0	-1.48e-03	4.51	0.0	-419.91	105.23	0.0	0.0	0.0	248.84
		248.84	0.0	0.0	0.0	30.0	-413.84	109.74	0.0	0.0	0.0	281.10
6	25	267.48	0.0	5.26e-05	13.12	0.0	-395.30	177.94	0.0	0.0	0.0	212.11
		212.11	0.0	0.0	0.0	30.0	-389.23	191.07	0.0	0.0	0.0	267.48
6	26	261.03	0.0	-3.00e-05	13.12	0.0	-393.00	177.94	0.0	0.0	0.0	205.66
		205.66	0.0	0.0	0.0	30.0	-386.92	191.07	0.0	0.0	0.0	261.03
6	27	258.50	0.0	4.75e-05	13.12	0.0	-394.15	176.30	0.0	0.0	0.0	203.62
		203.62	0.0	0.0	0.0	30.0	-388.08	189.43	0.0	0.0	0.0	258.50
6	28	270.02	0.0	-3.50e-05	13.12	0.0	-394.15	179.58	0.0	0.0	0.0	214.15
		214.15	0.0	0.0	0.0	30.0	-388.08	192.71	0.0	0.0	0.0	270.02
6	29	312.08	0.0	-1.59e-03	10.43	0.0	-419.22	152.60	0.0	0.0	0.0	264.72
		264.72	0.0	0.0	0.0	30.0	-413.15	163.03	0.0	0.0	0.0	312.08
6	30	305.63	0.0	-1.61e-03	10.43	0.0	-416.92	152.60	0.0	0.0	0.0	258.27
		258.27	0.0	0.0	0.0	30.0	-410.85	163.03	0.0	0.0	0.0	305.63
6	31	303.09	0.0	-1.59e-03	10.43	0.0	-418.07	150.96	0.0	0.0	0.0	256.23
		256.23	0.0	0.0	0.0	30.0	-412.00	161.39	0.0	0.0	0.0	303.09
6	32	314.61	0.0	-1.61e-03	10.43	0.0	-418.07	154.24	0.0	0.0	0.0	266.76
		266.76	0.0	0.0	0.0	30.0	-412.00	164.67	0.0	0.0	0.0	314.61
6	33	222.70	0.0	1.01e-04	10.43	0.0	-395.30	124.56	0.0	0.0	0.0	183.75
		183.75	0.0	0.0	0.0	30.0	-389.23	134.99	0.0	0.0	0.0	222.70
6	34	216.25	0.0	-7.83e-05	10.43	0.0	-393.00	124.56	0.0	0.0	0.0	177.30
		177.30	0.0	0.0	0.0	30.0	-386.92	134.99	0.0	0.0	0.0	216.25
6	35	213.72	0.0	9.58e-05	10.43	0.0	-394.15	122.92	0.0	0.0	0.0	175.26
		175.26	0.0	0.0	0.0	30.0	-388.08	133.35	0.0	0.0	0.0	213.72
6	36	225.23	0.0	-8.33e-05	10.43	0.0	-394.15	126.20	0.0	0.0	0.0	185.79
		185.79	0.0	0.0	0.0	30.0	-388.08	136.63	0.0	0.0	0.0	225.23
6	37	287.71	0.0	-1.13e-03	7.20	0.0	-373.81	150.32	0.0	0.0	0.0	241.51
		241.51	0.0	0.0	0.0	30.0	-367.73	157.52	0.0	0.0	0.0	287.71
6	38	281.26	0.0	-1.15e-03	7.20	0.0	-371.50	150.32	0.0	0.0	0.0	235.07
		235.07	0.0	0.0	0.0	30.0	-365.43	157.52	0.0	0.0	0.0	281.26
6	39	278.73	0.0	-1.13e-03	7.20	0.0	-372.65	148.68	0.0	0.0	0.0	233.02
		233.02	0.0	0.0	0.0	30.0	-366.58	155.88	0.0	0.0	0.0	278.73
6	40	290.25	0.0	-1.14e-03	7.20	0.0	-372.65	151.96	0.0	0.0	0.0	243.56
		243.56	0.0	0.0	0.0	30.0	-366.58	159.16	0.0	0.0	0.0	290.25
6	41	332.31	0.0	-2.77e-03	4.51	0.0	-397.73	124.97	0.0	0.0	0.0	294.12
		294.12	0.0	0.0	0.0	30.0	-391.65	129.48	0.0	0.0	0.0	332.31
6	42	325.86	0.0	-2.79e-03	4.51	0.0	-395.43	124.97	0.0	0.0	0.0	287.68

Pilas.	Cmb	M3 mx/mn	M2 mx/mn	D 2 / D 3	Q 2 / Q 3	Pos.	N	V 2	V 3	T	M 2	M 3
		287.68	0.0	0.0	0.0	30.0	-389.35	129.48	0.0	0.0	0.0	325.86
6	43	323.32	0.0	-2.77e-03	4.51	0.0	-396.58	123.33	0.0	0.0	0.0	285.63
		285.63	0.0	0.0	0.0	30.0	-390.50	127.84	0.0	0.0	0.0	323.32
6	44	334.84	0.0	-2.78e-03	4.51	0.0	-396.58	126.61	0.0	0.0	0.0	296.17
		296.17	0.0	0.0	0.0	30.0	-390.50	131.12	0.0	0.0	0.0	334.84
6	45	242.93	0.0	-1.08e-03	4.51	0.0	-373.81	96.93	0.0	0.0	0.0	213.16
		213.16	0.0	0.0	0.0	30.0	-367.73	101.44	0.0	0.0	0.0	242.93
6	46	236.48	0.0	-1.10e-03	4.51	0.0	-371.50	96.93	0.0	0.0	0.0	206.71
		206.71	0.0	0.0	0.0	30.0	-365.43	101.44	0.0	0.0	0.0	236.48
6	47	233.95	0.0	-1.08e-03	4.51	0.0	-372.65	95.29	0.0	0.0	0.0	204.67
		204.67	0.0	0.0	0.0	30.0	-366.58	99.80	0.0	0.0	0.0	233.95
6	48	245.46	0.0	-1.09e-03	4.51	0.0	-372.65	98.57	0.0	0.0	0.0	215.20
		215.20	0.0	0.0	0.0	30.0	-366.58	103.08	0.0	0.0	0.0	245.46
6	49	245.91	0.0	4.15e-05	11.63	0.0	-354.53	166.00	0.0	0.0	0.0	194.35
		194.35	0.0	0.0	0.0	30.0	-348.46	177.63	0.0	0.0	0.0	245.91
6	50	239.47	0.0	-1.90e-05	11.63	0.0	-352.23	166.00	0.0	0.0	0.0	187.90
		187.90	0.0	0.0	0.0	30.0	-346.16	177.63	0.0	0.0	0.0	239.47
6	51	236.93	0.0	3.65e-05	11.63	0.0	-353.38	164.36	0.0	0.0	0.0	185.86
		185.86	0.0	0.0	0.0	30.0	-347.31	175.99	0.0	0.0	0.0	236.93
6	52	248.45	0.0	-2.40e-05	11.63	0.0	-353.38	167.64	0.0	0.0	0.0	196.39
		196.39	0.0	0.0	0.0	30.0	-347.31	179.27	0.0	0.0	0.0	248.45
6	53	290.51	0.0	-1.60e-03	8.94	0.0	-378.46	140.65	0.0	0.0	0.0	246.96
		246.96	0.0	0.0	0.0	30.0	-372.38	149.59	0.0	0.0	0.0	290.51
6	54	284.06	0.0	-1.62e-03	8.94	0.0	-376.15	140.65	0.0	0.0	0.0	240.51
		240.51	0.0	0.0	0.0	30.0	-370.08	149.59	0.0	0.0	0.0	284.06
6	55	281.53	0.0	-1.61e-03	8.94	0.0	-377.30	139.01	0.0	0.0	0.0	238.47
		238.47	0.0	0.0	0.0	30.0	-371.23	147.95	0.0	0.0	0.0	281.53
6	56	293.04	0.0	-1.62e-03	8.94	0.0	-377.30	142.29	0.0	0.0	0.0	249.00
		249.00	0.0	0.0	0.0	30.0	-371.23	151.23	0.0	0.0	0.0	293.04
6	57	201.13	0.0	8.99e-05	8.94	0.0	-354.53	112.62	0.0	0.0	0.0	165.99
		165.99	0.0	0.0	0.0	30.0	-348.46	121.56	0.0	0.0	0.0	201.13
6	58	194.69	0.0	-6.73e-05	8.94	0.0	-352.23	112.62	0.0	0.0	0.0	159.55
		159.55	0.0	0.0	0.0	30.0	-346.16	121.56	0.0	0.0	0.0	194.69
6	59	192.15	0.0	8.48e-05	8.94	0.0	-353.38	110.98	0.0	0.0	0.0	157.50
		157.50	0.0	0.0	0.0	30.0	-347.31	119.92	0.0	0.0	0.0	192.15
6	60	203.67	0.0	-7.23e-05	8.94	0.0	-353.38	114.26	0.0	0.0	0.0	168.03
		168.03	0.0	0.0	0.0	30.0	-347.31	123.20	0.0	0.0	0.0	203.67
6	61	493.91	0.0	-4.67e-03	7.20	0.0	-447.23	209.54	0.0	0.0	0.0	429.95
		429.95	0.0	0.0	0.0	30.0	-441.15	216.74	0.0	0.0	0.0	493.91
6	62	487.47	0.0	-4.70e-03	7.20	0.0	-444.93	209.54	0.0	0.0	0.0	423.50
		423.50	0.0	0.0	0.0	30.0	-438.85	216.74	0.0	0.0	0.0	487.47
6	63	484.93	0.0	-4.68e-03	7.20	0.0	-446.08	207.90	0.0	0.0	0.0	421.46
		421.46	0.0	0.0	0.0	30.0	-440.00	215.10	0.0	0.0	0.0	484.93
6	64	496.45	0.0	-4.69e-03	7.20	0.0	-446.08	211.18	0.0	0.0	0.0	431.99
		431.99	0.0	0.0	0.0	30.0	-440.00	218.38	0.0	0.0	0.0	496.45
6	65	538.51	0.0	-6.32e-03	4.51	0.0	-471.15	184.20	0.0	0.0	0.0	482.56
		482.56	0.0	0.0	0.0	30.0	-465.08	188.71	0.0	0.0	0.0	538.51
6	66	532.06	0.0	-6.34e-03	4.51	0.0	-468.85	184.20	0.0	0.0	0.0	476.11
		476.11	0.0	0.0	0.0	30.0	-462.77	188.71	0.0	0.0	0.0	532.06
6	67	529.53	0.0	-6.32e-03	4.51	0.0	-470.00	182.56	0.0	0.0	0.0	474.07
		474.07	0.0	0.0	0.0	30.0	-463.93	187.07	0.0	0.0	0.0	529.53
6	68	541.04	0.0	-6.33e-03	4.51	0.0	-470.00	185.84	0.0	0.0	0.0	484.60
		484.60	0.0	0.0	0.0	30.0	-463.93	190.34	0.0	0.0	0.0	541.04
6	69	449.13	0.0	-4.63e-03	4.51	0.0	-447.23	156.16	0.0	0.0	0.0	401.59
		401.59	0.0	0.0	0.0	30.0	-441.15	160.67	0.0	0.0	0.0	449.13
6	70	442.68	0.0	-4.65e-03	4.51	0.0	-444.93	156.16	0.0	0.0	0.0	395.15
		395.15	0.0	0.0	0.0	30.0	-438.85	160.67	0.0	0.0	0.0	442.68
6	71	440.15	0.0	-4.63e-03	4.51	0.0	-446.08	154.52	0.0	0.0	0.0	393.10
		393.10	0.0	0.0	0.0	30.0	-440.00	159.03	0.0	0.0	0.0	440.15
6	72	451.67	0.0	-4.64e-03	4.51	0.0	-446.08	157.80	0.0	0.0	0.0	403.64
		403.64	0.0	0.0	0.0	30.0	-440.00	162.31	0.0	0.0	0.0	451.67
6	73	452.12	0.0	-3.51e-03	11.63	0.0	-427.96	225.23	0.0	0.0	0.0	382.78
		382.78	0.0	0.0	0.0	30.0	-421.88	236.86	0.0	0.0	0.0	452.12
6	74	445.67	0.0	-3.53e-03	11.63	0.0	-425.65	225.23	0.0	0.0	0.0	376.33
		376.33	0.0	0.0	0.0	30.0	-419.58	236.86	0.0	0.0	0.0	445.67
6	75	443.14	0.0	-3.51e-03	11.63	0.0	-426.80	223.59	0.0	0.0	0.0	374.29
		374.29	0.0	0.0	0.0	30.0	-420.73	235.22	0.0	0.0	0.0	443.14
6	76	454.65	0.0	-3.52e-03	11.63	0.0	-426.80	226.87	0.0	0.0	0.0	384.82
		384.82	0.0	0.0	0.0	30.0	-420.73	238.50	0.0	0.0	0.0	454.65
6	77	496.71	0.0	-5.15e-03	8.94	0.0	-451.88	199.88	0.0	0.0	0.0	435.39
		435.39	0.0	0.0	0.0	30.0	-445.80	208.82	0.0	0.0	0.0	496.71
6	78	490.27	0.0	-5.17e-03	8.94	0.0	-449.58	199.88	0.0	0.0	0.0	428.95
		428.95	0.0	0.0	0.0	30.0	-443.50	208.82	0.0	0.0	0.0	490.27
6	79	487.73	0.0	-5.15e-03	8.94	0.0	-450.73	198.24	0.0	0.0	0.0	426.90
		426.90	0.0	0.0	0.0	30.0	-444.65	207.18	0.0	0.0	0.0	487.73

Pilas.	Cmb	M3 mx/mn	M2 mx/mn	D 2 / D 3	Q 2 / Q 3	Pos.	N	V 2	V 3	T	M 2	M 3
6	80	499.25	0.0	-5.17e-03	8.94	0.0	-450.73	201.52	0.0	0.0	0.0	437.44
		437.44	0.0	0.0	0.0	30.0	-444.65	210.46	0.0	0.0	0.0	499.25
6	81	407.33	0.0	-3.46e-03	8.94	0.0	-427.96	171.84	0.0	0.0	0.0	354.43
		354.43	0.0	0.0	0.0	30.0	-421.88	180.78	0.0	0.0	0.0	407.33
6	82	400.89	0.0	-3.48e-03	8.94	0.0	-425.65	171.84	0.0	0.0	0.0	347.98
		347.98	0.0	0.0	0.0	30.0	-419.58	180.78	0.0	0.0	0.0	400.89
6	83	398.35	0.0	-3.46e-03	8.94	0.0	-426.80	170.20	0.0	0.0	0.0	345.94
		345.94	0.0	0.0	0.0	30.0	-420.73	179.14	0.0	0.0	0.0	398.35
6	84	409.87	0.0	-3.48e-03	8.94	0.0	-426.80	173.48	0.0	0.0	0.0	356.47
		356.47	0.0	0.0	0.0	30.0	-420.73	182.42	0.0	0.0	0.0	409.87
6	85	288.33	0.0	-1.13e-03	7.20	0.0	-373.81	150.79	0.0	0.0	0.0	241.99
		241.99	0.0	0.0	0.0	30.0	-367.73	157.99	0.0	0.0	0.0	288.33
6	86	281.88	0.0	-1.15e-03	7.20	0.0	-371.50	150.79	0.0	0.0	0.0	235.54
		235.54	0.0	0.0	0.0	30.0	-365.43	157.99	0.0	0.0	0.0	281.88
6	87	279.35	0.0	-1.13e-03	7.20	0.0	-372.65	149.15	0.0	0.0	0.0	233.50
		233.50	0.0	0.0	0.0	30.0	-366.58	156.35	0.0	0.0	0.0	279.35
6	88	290.86	0.0	-1.14e-03	7.20	0.0	-372.65	152.43	0.0	0.0	0.0	244.03
		244.03	0.0	0.0	0.0	30.0	-366.58	159.63	0.0	0.0	0.0	290.86
6	89	332.92	0.0	-2.77e-03	4.51	0.0	-397.73	125.44	0.0	0.0	0.0	294.60
		294.60	0.0	0.0	0.0	30.0	-391.65	129.95	0.0	0.0	0.0	332.92
6	90	326.48	0.0	-2.79e-03	4.51	0.0	-395.43	125.44	0.0	0.0	0.0	288.15
		288.15	0.0	0.0	0.0	30.0	-389.35	129.95	0.0	0.0	0.0	326.48
6	91	323.94	0.0	-2.77e-03	4.51	0.0	-396.58	123.80	0.0	0.0	0.0	286.11
		286.11	0.0	0.0	0.0	30.0	-390.50	128.31	0.0	0.0	0.0	323.94
6	92	335.46	0.0	-2.79e-03	4.51	0.0	-396.58	127.08	0.0	0.0	0.0	296.64
		296.64	0.0	0.0	0.0	30.0	-390.50	131.59	0.0	0.0	0.0	335.46
6	93	243.54	0.0	-1.08e-03	4.51	0.0	-373.81	97.40	0.0	0.0	0.0	213.63
		213.63	0.0	0.0	0.0	30.0	-367.73	101.91	0.0	0.0	0.0	243.54
6	94	237.10	0.0	-1.10e-03	4.51	0.0	-371.50	97.40	0.0	0.0	0.0	207.19
		207.19	0.0	0.0	0.0	30.0	-365.43	101.91	0.0	0.0	0.0	237.10
6	95	234.56	0.0	-1.08e-03	4.51	0.0	-372.65	95.76	0.0	0.0	0.0	205.14
		205.14	0.0	0.0	0.0	30.0	-366.58	100.27	0.0	0.0	0.0	234.56
6	96	246.08	0.0	-1.10e-03	4.51	0.0	-372.65	99.04	0.0	0.0	0.0	215.68
		215.68	0.0	0.0	0.0	30.0	-366.58	103.55	0.0	0.0	0.0	246.08
6	97	246.53	0.0	4.09e-05	11.63	0.0	-354.53	166.47	0.0	0.0	0.0	194.82
		194.82	0.0	0.0	0.0	30.0	-348.46	178.10	0.0	0.0	0.0	246.53
6	98	240.09	0.0	-1.83e-05	11.63	0.0	-352.23	166.47	0.0	0.0	0.0	188.38
		188.38	0.0	0.0	0.0	30.0	-346.16	178.10	0.0	0.0	0.0	240.09
6	99	237.55	0.0	3.58e-05	11.63	0.0	-353.38	164.83	0.0	0.0	0.0	186.33
		186.33	0.0	0.0	0.0	30.0	-347.31	176.46	0.0	0.0	0.0	237.55
6	100	249.07	0.0	-2.33e-05	11.63	0.0	-353.38	168.11	0.0	0.0	0.0	196.87
		196.87	0.0	0.0	0.0	30.0	-347.31	179.74	0.0	0.0	0.0	249.07
6	101	291.13	0.0	-1.60e-03	8.94	0.0	-378.46	141.12	0.0	0.0	0.0	247.43
		247.43	0.0	0.0	0.0	30.0	-372.38	150.06	0.0	0.0	0.0	291.13
6	102	284.68	0.0	-1.62e-03	8.94	0.0	-376.15	141.12	0.0	0.0	0.0	240.99
		240.99	0.0	0.0	0.0	30.0	-370.08	150.06	0.0	0.0	0.0	284.68
6	103	282.14	0.0	-1.61e-03	8.94	0.0	-377.30	139.48	0.0	0.0	0.0	238.94
		238.94	0.0	0.0	0.0	30.0	-371.23	148.42	0.0	0.0	0.0	282.14
6	104	293.66	0.0	-1.62e-03	8.94	0.0	-377.30	142.76	0.0	0.0	0.0	249.48
		249.48	0.0	0.0	0.0	30.0	-371.23	151.70	0.0	0.0	0.0	293.66
6	105	201.75	0.0	8.92e-05	8.94	0.0	-354.53	113.09	0.0	0.0	0.0	166.47
		166.47	0.0	0.0	0.0	30.0	-348.46	122.02	0.0	0.0	0.0	201.75
6	106	195.30	0.0	-6.66e-05	8.94	0.0	-352.23	113.09	0.0	0.0	0.0	160.02
		160.02	0.0	0.0	0.0	30.0	-346.16	122.02	0.0	0.0	0.0	195.30
6	107	192.77	0.0	8.42e-05	8.94	0.0	-353.38	111.45	0.0	0.0	0.0	157.98
		157.98	0.0	0.0	0.0	30.0	-347.31	120.38	0.0	0.0	0.0	192.77
6	108	204.28	0.0	-7.16e-05	8.94	0.0	-353.38	114.72	0.0	0.0	0.0	168.51
		168.51	0.0	0.0	0.0	30.0	-347.31	123.66	0.0	0.0	0.0	204.28
6	109	707.28	0.0	-0.01	-9.35	0.0	-396.82	150.91	0.0	0.0	0.0	663.39
		663.39	0.0	0.0	0.0	30.0	-392.32	141.56	0.0	0.0	0.0	707.28
6	110	160.65	0.0	5.55e-05	5.33	0.0	-262.95	93.52	0.0	0.0	0.0	131.78
		131.78	0.0	0.0	0.0	30.0	-258.45	98.85	0.0	0.0	0.0	160.65
6	111	155.28	0.0	-3.67e-05	5.33	0.0	-261.03	93.52	0.0	0.0	0.0	126.41
		126.41	0.0	0.0	0.0	30.0	-256.53	98.85	0.0	0.0	0.0	155.28
6	112	153.17	0.0	5.13e-05	5.33	0.0	-261.99	92.15	0.0	0.0	0.0	124.71
		124.71	0.0	0.0	0.0	30.0	-257.49	97.48	0.0	0.0	0.0	153.17
6	113	162.77	0.0	-4.09e-05	5.33	0.0	-261.99	94.88	0.0	0.0	0.0	133.49
		133.49	0.0	0.0	0.0	30.0	-257.49	100.22	0.0	0.0	0.0	162.77
6	114	193.69	0.0	-1.16e-03	3.34	0.0	-280.67	74.74	0.0	0.0	0.0	170.75
		170.75	0.0	0.0	0.0	30.0	-276.17	78.08	0.0	0.0	0.0	193.69
6	115	188.32	0.0	-1.18e-03	3.34	0.0	-278.75	74.74	0.0	0.0	0.0	165.38
		165.38	0.0	0.0	0.0	30.0	-274.25	78.08	0.0	0.0	0.0	188.32
6	116	186.20	0.0	-1.16e-03	3.34	0.0	-279.71	73.37	0.0	0.0	0.0	163.68
		163.68	0.0	0.0	0.0	30.0	-275.21	76.71	0.0	0.0	0.0	186.20
6	117	195.80	0.0	-1.18e-03	3.34	0.0	-279.71	76.11	0.0	0.0	0.0	172.46

Pilas.	Cmb	M3 mx/mn	M2 mx/mn	D 2 / D 3	Q 2 / Q 3	Pos.	N	V 2	V 3	T	M 2	M 3
		172.46	0.0	0.0	0.0	30.0	-275.21	79.45	0.0	0.0	0.0	195.80
6	118	127.48	0.0	9.13e-05	3.34	0.0	-262.95	53.97	0.0	0.0	0.0	110.78
		110.78	0.0	0.0	0.0	30.0	-258.45	57.31	0.0	0.0	0.0	127.48
6	119	122.11	0.0	-7.25e-05	3.34	0.0	-261.03	53.97	0.0	0.0	0.0	105.41
		105.41	0.0	0.0	0.0	30.0	-256.53	57.31	0.0	0.0	0.0	122.11
6	120	120.00	0.0	8.71e-05	3.34	0.0	-261.99	52.60	0.0	0.0	0.0	103.70
		103.70	0.0	0.0	0.0	30.0	-257.49	55.94	0.0	0.0	0.0	120.00
6	121	129.59	0.0	-7.67e-05	3.34	0.0	-261.99	55.34	0.0	0.0	0.0	112.48
		112.48	0.0	0.0	0.0	30.0	-257.49	58.68	0.0	0.0	0.0	129.59
6	122	323.98	0.0	-2.80e-03	5.33	0.0	-318.05	141.10	0.0	0.0	0.0	280.83
		280.83	0.0	0.0	0.0	30.0	-313.55	146.43	0.0	0.0	0.0	323.98
6	123	318.60	0.0	-2.82e-03	5.33	0.0	-316.13	141.10	0.0	0.0	0.0	275.46
		275.46	0.0	0.0	0.0	30.0	-311.63	146.43	0.0	0.0	0.0	318.60
6	124	316.49	0.0	-2.81e-03	5.33	0.0	-317.09	139.73	0.0	0.0	0.0	273.75
		273.75	0.0	0.0	0.0	30.0	-312.59	145.06	0.0	0.0	0.0	316.49
6	125	326.09	0.0	-2.82e-03	5.33	0.0	-317.09	142.46	0.0	0.0	0.0	282.53
		282.53	0.0	0.0	0.0	30.0	-312.59	147.80	0.0	0.0	0.0	326.09
6	126	357.01	0.0	-4.02e-03	3.34	0.0	-335.77	122.32	0.0	0.0	0.0	319.80
		319.80	0.0	0.0	0.0	30.0	-331.27	125.66	0.0	0.0	0.0	357.01
6	127	351.64	0.0	-4.04e-03	3.34	0.0	-333.85	122.32	0.0	0.0	0.0	314.43
		314.43	0.0	0.0	0.0	30.0	-329.35	125.66	0.0	0.0	0.0	351.64
6	128	349.52	0.0	-4.02e-03	3.34	0.0	-334.81	120.95	0.0	0.0	0.0	312.73
		312.73	0.0	0.0	0.0	30.0	-330.31	124.29	0.0	0.0	0.0	349.52
6	129	359.12	0.0	-4.03e-03	3.34	0.0	-334.81	123.69	0.0	0.0	0.0	321.50
		321.50	0.0	0.0	0.0	30.0	-330.31	127.03	0.0	0.0	0.0	359.12
6	130	290.80	0.0	-2.77e-03	3.34	0.0	-318.05	101.55	0.0	0.0	0.0	259.83
		259.83	0.0	0.0	0.0	30.0	-313.55	104.89	0.0	0.0	0.0	290.80
6	131	285.43	0.0	-2.78e-03	3.34	0.0	-316.13	101.55	0.0	0.0	0.0	254.45
		254.45	0.0	0.0	0.0	30.0	-311.63	104.89	0.0	0.0	0.0	285.43
6	132	283.32	0.0	-2.77e-03	3.34	0.0	-317.09	100.18	0.0	0.0	0.0	252.75
		252.75	0.0	0.0	0.0	30.0	-312.59	103.52	0.0	0.0	0.0	283.32
6	133	292.92	0.0	-2.78e-03	3.34	0.0	-317.09	102.92	0.0	0.0	0.0	261.53
		261.53	0.0	0.0	0.0	30.0	-312.59	106.26	0.0	0.0	0.0	292.92
6	134	292.94	0.0	-1.93e-03	8.62	0.0	-303.74	152.74	0.0	0.0	0.0	245.81
		245.81	0.0	0.0	0.0	30.0	-299.24	161.37	0.0	0.0	0.0	292.94
6	135	287.57	0.0	-1.95e-03	8.62	0.0	-301.82	152.74	0.0	0.0	0.0	240.43
		240.43	0.0	0.0	0.0	30.0	-297.32	161.37	0.0	0.0	0.0	287.57
6	136	285.45	0.0	-1.94e-03	8.62	0.0	-302.78	151.38	0.0	0.0	0.0	238.73
		238.73	0.0	0.0	0.0	30.0	-298.28	160.00	0.0	0.0	0.0	285.45
6	137	295.05	0.0	-1.95e-03	8.62	0.0	-302.78	154.11	0.0	0.0	0.0	247.51
		247.51	0.0	0.0	0.0	30.0	-298.28	162.73	0.0	0.0	0.0	295.05
6	138	325.97	0.0	-3.15e-03	6.63	0.0	-321.46	133.97	0.0	0.0	0.0	284.78
		284.78	0.0	0.0	0.0	30.0	-316.96	140.60	0.0	0.0	0.0	325.97
6	139	320.60	0.0	-3.17e-03	6.63	0.0	-319.54	133.97	0.0	0.0	0.0	279.40
		279.40	0.0	0.0	0.0	30.0	-315.04	140.60	0.0	0.0	0.0	320.60
6	140	318.49	0.0	-3.16e-03	6.63	0.0	-320.50	132.60	0.0	0.0	0.0	277.70
		277.70	0.0	0.0	0.0	30.0	-316.00	139.23	0.0	0.0	0.0	318.49
6	141	328.08	0.0	-3.17e-03	6.63	0.0	-320.50	135.33	0.0	0.0	0.0	286.48
		286.48	0.0	0.0	0.0	30.0	-316.00	141.96	0.0	0.0	0.0	328.08
6	142	259.77	0.0	-1.90e-03	6.63	0.0	-303.74	113.20	0.0	0.0	0.0	224.80
		224.80	0.0	0.0	0.0	30.0	-299.24	119.83	0.0	0.0	0.0	259.77
6	143	254.39	0.0	-1.92e-03	6.63	0.0	-301.82	113.20	0.0	0.0	0.0	219.43
		219.43	0.0	0.0	0.0	30.0	-297.32	119.83	0.0	0.0	0.0	254.39
6	144	252.28	0.0	-1.90e-03	6.63	0.0	-302.78	111.83	0.0	0.0	0.0	217.73
		217.73	0.0	0.0	0.0	30.0	-298.28	118.46	0.0	0.0	0.0	252.28
6	145	261.88	0.0	-1.91e-03	6.63	0.0	-302.78	114.57	0.0	0.0	0.0	226.50
		226.50	0.0	0.0	0.0	30.0	-298.28	121.20	0.0	0.0	0.0	261.88
6	146	132.07	0.0	8.68e-06	5.33	0.0	-172.85	94.79	0.0	0.0	0.0	102.81
		102.81	0.0	0.0	0.0	30.0	-168.35	100.13	0.0	0.0	0.0	132.07
6	147	127.59	0.0	-7.01e-06	5.33	0.0	-171.26	94.79	0.0	0.0	0.0	98.33
		98.33	0.0	0.0	0.0	30.0	-166.76	100.13	0.0	0.0	0.0	127.59
6	148	125.83	0.0	5.18e-06	5.33	0.0	-172.05	93.65	0.0	0.0	0.0	96.91
		96.91	0.0	0.0	0.0	30.0	-167.55	98.99	0.0	0.0	0.0	125.83
6	149	133.83	0.0	-4.21e-06	5.33	0.0	-172.05	95.93	0.0	0.0	0.0	104.23
		104.23	0.0	0.0	0.0	30.0	-167.55	101.27	0.0	0.0	0.0	133.83
6	150	165.10	0.0	-1.21e-03	3.34	0.0	-190.58	76.02	0.0	0.0	0.0	141.78
		141.78	0.0	0.0	0.0	30.0	-186.08	79.36	0.0	0.0	0.0	165.10
6	151	160.62	0.0	-1.22e-03	3.34	0.0	-188.98	76.02	0.0	0.0	0.0	137.30
		137.30	0.0	0.0	0.0	30.0	-184.48	79.36	0.0	0.0	0.0	160.62
6	152	158.86	0.0	-1.21e-03	3.34	0.0	-189.78	74.88	0.0	0.0	0.0	135.89
		135.89	0.0	0.0	0.0	30.0	-185.28	78.22	0.0	0.0	0.0	158.86
6	153	158.86	0.0	-1.21e-03	3.34	0.0	-189.78	74.88	0.0	0.0	0.0	135.89
		135.89	0.0	0.0	0.0	30.0	-185.28	78.22	0.0	0.0	0.0	158.86
6	154	98.89	0.0	4.45e-05	3.34	0.0	-172.85	55.25	0.0	0.0	0.0	81.81
		81.81	0.0	0.0	0.0	30.0	-168.35	58.59	0.0	0.0	0.0	98.89

Pilas.	Cmb	M3 mx/mn	M2 mx/mn	D 2 / D 3	Q 2 / Q 3	Pos.	N	V 2	V 3	T	M 2	M 3
6	155	94.42	0.0	-2.88e-05	3.34	0.0	-171.26	55.25	0.0	0.0	0.0	77.33
		77.33	0.0	0.0	0.0	30.0	-166.76	58.59	0.0	0.0	0.0	94.42
6	156	92.66	0.0	4.10e-05	3.34	0.0	-172.05	54.11	0.0	0.0	0.0	75.91
		75.91	0.0	0.0	0.0	30.0	-167.55	57.45	0.0	0.0	0.0	92.66
6	157	92.66	0.0	4.10e-05	3.34	0.0	-172.05	54.11	0.0	0.0	0.0	75.91
		75.91	0.0	0.0	0.0	30.0	-167.55	57.45	0.0	0.0	0.0	92.66
6	158	353.58	0.0	-3.09e-03	5.33	0.0	-352.79	148.58	0.0	0.0	0.0	308.19
		308.19	0.0	0.0	0.0	30.0	-348.29	153.92	0.0	0.0	0.0	353.58
6	159	348.21	0.0	-3.10e-03	5.33	0.0	-350.88	148.58	0.0	0.0	0.0	302.82
		302.82	0.0	0.0	0.0	30.0	-346.38	153.92	0.0	0.0	0.0	348.21
6	160	346.10	0.0	-3.09e-03	5.33	0.0	-351.84	147.22	0.0	0.0	0.0	301.11
		301.11	0.0	0.0	0.0	30.0	-347.34	152.55	0.0	0.0	0.0	346.10
6	161	355.69	0.0	-3.10e-03	5.33	0.0	-351.84	149.95	0.0	0.0	0.0	309.89
		309.89	0.0	0.0	0.0	30.0	-347.34	155.28	0.0	0.0	0.0	355.69
6	162	386.61	0.0	-4.30e-03	3.34	0.0	-370.52	129.81	0.0	0.0	0.0	347.16
		347.16	0.0	0.0	0.0	30.0	-366.02	133.15	0.0	0.0	0.0	386.61
6	163	381.24	0.0	-4.32e-03	3.34	0.0	-368.60	129.81	0.0	0.0	0.0	341.79
		341.79	0.0	0.0	0.0	30.0	-364.10	133.15	0.0	0.0	0.0	381.24
6	164	379.13	0.0	-4.31e-03	3.34	0.0	-369.56	128.44	0.0	0.0	0.0	340.09
		340.09	0.0	0.0	0.0	30.0	-365.06	131.78	0.0	0.0	0.0	379.13
6	165	388.73	0.0	-4.32e-03	3.34	0.0	-369.56	131.17	0.0	0.0	0.0	348.86
		348.86	0.0	0.0	0.0	30.0	-365.06	134.51	0.0	0.0	0.0	388.73
6	166	320.41	0.0	-3.05e-03	3.34	0.0	-352.79	109.04	0.0	0.0	0.0	287.19
		287.19	0.0	0.0	0.0	30.0	-348.29	112.38	0.0	0.0	0.0	320.41
6	167	315.04	0.0	-3.07e-03	3.34	0.0	-350.88	109.04	0.0	0.0	0.0	281.81
		281.81	0.0	0.0	0.0	30.0	-346.38	112.38	0.0	0.0	0.0	315.04
6	168	312.92	0.0	-3.05e-03	3.34	0.0	-351.84	107.67	0.0	0.0	0.0	280.11
		280.11	0.0	0.0	0.0	30.0	-347.34	111.01	0.0	0.0	0.0	312.92
6	169	322.52	0.0	-3.06e-03	3.34	0.0	-351.84	110.40	0.0	0.0	0.0	288.89
		288.89	0.0	0.0	0.0	30.0	-347.34	113.74	0.0	0.0	0.0	322.52
6	170	312.20	0.0	-1.93e-03	9.72	0.0	-333.71	164.11	0.0	0.0	0.0	261.49
		261.49	0.0	0.0	0.0	30.0	-329.21	173.83	0.0	0.0	0.0	312.20
6	171	306.83	0.0	-1.95e-03	9.72	0.0	-331.79	164.11	0.0	0.0	0.0	256.12
		256.12	0.0	0.0	0.0	30.0	-327.29	173.83	0.0	0.0	0.0	306.83
6	172	304.71	0.0	-1.93e-03	9.72	0.0	-332.75	162.75	0.0	0.0	0.0	254.42
		254.42	0.0	0.0	0.0	30.0	-328.25	172.47	0.0	0.0	0.0	304.71
6	173	314.31	0.0	-1.95e-03	9.72	0.0	-332.75	165.48	0.0	0.0	0.0	263.19
		263.19	0.0	0.0	0.0	30.0	-328.25	175.20	0.0	0.0	0.0	314.31
6	174	345.23	0.0	-3.15e-03	7.73	0.0	-351.43	145.34	0.0	0.0	0.0	300.46
		300.46	0.0	0.0	0.0	30.0	-346.93	153.06	0.0	0.0	0.0	345.23
6	175	339.86	0.0	-3.17e-03	7.73	0.0	-349.52	145.34	0.0	0.0	0.0	295.09
		295.09	0.0	0.0	0.0	30.0	-345.02	153.06	0.0	0.0	0.0	339.86
6	176	337.75	0.0	-3.15e-03	7.73	0.0	-350.47	143.97	0.0	0.0	0.0	293.39
		293.39	0.0	0.0	0.0	30.0	-345.97	151.70	0.0	0.0	0.0	337.75
6	177	347.34	0.0	-3.16e-03	7.73	0.0	-350.47	146.70	0.0	0.0	0.0	302.16
		302.16	0.0	0.0	0.0	30.0	-345.97	154.43	0.0	0.0	0.0	347.34
6	178	279.03	0.0	-1.89e-03	7.73	0.0	-333.71	124.57	0.0	0.0	0.0	240.49
		240.49	0.0	0.0	0.0	30.0	-329.21	132.29	0.0	0.0	0.0	279.03
6	179	273.65	0.0	-1.91e-03	7.73	0.0	-331.79	124.57	0.0	0.0	0.0	235.11
		235.11	0.0	0.0	0.0	30.0	-327.29	132.29	0.0	0.0	0.0	273.65
6	180	271.54	0.0	-1.90e-03	7.73	0.0	-332.75	123.20	0.0	0.0	0.0	233.41
		233.41	0.0	0.0	0.0	30.0	-328.25	130.93	0.0	0.0	0.0	271.54
6	181	281.14	0.0	-1.91e-03	7.73	0.0	-332.75	125.93	0.0	0.0	0.0	242.19
		242.19	0.0	0.0	0.0	30.0	-328.25	133.66	0.0	0.0	0.0	281.14
7	1	202.43	0.0	3.47e-04	337.93	0.0	-355.69	-209.96	0.0	0.0	0.0	202.43
		-81.66	0.0	0.0	0.0	600.0	-234.19	127.97	0.0	0.0	0.0	141.14
7	2	191.69	0.0	-2.20e-04	337.93	0.0	-351.86	-209.96	0.0	0.0	0.0	191.69
		-92.40	0.0	0.0	0.0	600.0	-230.36	127.97	0.0	0.0	0.0	130.40
7	3	204.68	0.0	4.44e-04	337.93	0.0	-353.77	-212.69	0.0	0.0	0.0	204.68
		-87.61	0.0	0.0	0.0	600.0	-232.27	125.24	0.0	0.0	0.0	126.99
7	4	189.44	0.0	-3.13e-04	337.93	0.0	-353.77	-207.23	0.0	0.0	0.0	189.44
		-86.45	0.0	0.0	0.0	600.0	-232.27	130.70	0.0	0.0	0.0	144.55
7	5	193.76	0.0	-0.03	211.65	0.0	-379.62	-109.03	0.0	0.0	0.0	97.30
		-22.12	0.0	0.0	0.0	600.0	-258.12	102.62	0.0	0.0	0.0	193.76
7	6	183.01	0.0	-0.03	211.65	0.0	-375.78	-109.03	0.0	0.0	0.0	86.56
		-32.87	0.0	0.0	0.0	600.0	-254.28	102.62	0.0	0.0	0.0	183.01
7	7	179.61	0.0	-0.03	211.65	0.0	-377.70	-111.76	0.0	0.0	0.0	99.55
		-26.02	0.0	0.0	0.0	600.0	-256.20	99.89	0.0	0.0	0.0	179.61
7	8	197.16	0.0	-0.03	211.65	0.0	-377.70	-106.30	0.0	0.0	0.0	84.31
		-28.97	0.0	0.0	0.0	600.0	-256.20	105.36	0.0	0.0	0.0	197.16
7	9	184.57	0.0	2.35e-04	211.65	0.0	-355.69	-137.07	0.0	0.0	0.0	184.57
		-10.06	0.0	0.0	0.0	600.0	-234.19	74.58	0.0	0.0	0.0	112.79
7	10	173.83	0.0	-2.35e-04	211.65	0.0	-351.86	-137.07	0.0	0.0	0.0	173.83
		-20.80	0.0	0.0	0.0	600.0	-230.36	74.58	0.0	0.0	0.0	102.05
7	11	186.82	0.0	3.27e-04	211.65	0.0	-353.77	-139.80	0.0	0.0	0.0	186.82

Pilas.	Cmb	M3 mx/mn	M2 mx/mn	D 2 / D 3	Q 2 / Q 3	Pos.	N	V 2	V 3	T	M 2	M 3
		-16.01	0.0	0.0	0.0	600.0	-232.27	71.85	0.0	0.0	0.0	98.64
7	12	171.58	0.0	-3.41e-04	211.65	0.0	-353.77	-134.34	0.0	0.0	0.0	171.58
		-14.85	0.0	0.0	0.0	600.0	-232.27	77.32	0.0	0.0	0.0	116.19
7	13	275.15	0.0	-0.03	337.93	0.0	-542.56	-180.95	0.0	0.0	0.0	162.40
		-43.75	0.0	0.0	0.0	600.0	-421.06	156.98	0.0	0.0	0.0	275.15
7	14	268.70	0.0	-0.03	337.93	0.0	-540.26	-180.95	0.0	0.0	0.0	155.95
		-50.20	0.0	0.0	0.0	600.0	-418.76	156.98	0.0	0.0	0.0	268.70
7	15	266.66	0.0	-0.03	337.93	0.0	-541.41	-182.59	0.0	0.0	0.0	163.75
		-46.09	0.0	0.0	0.0	600.0	-419.91	155.34	0.0	0.0	0.0	266.66
7	16	277.19	0.0	-0.03	337.93	0.0	-541.41	-179.31	0.0	0.0	0.0	154.60
		-47.86	0.0	0.0	0.0	600.0	-419.91	158.62	0.0	0.0	0.0	277.19
7	17	327.76	0.0	-0.07	211.65	0.0	-566.49	-80.02	0.0	0.0	0.0	57.27
		-5.01	0.0	0.0	0.0	600.0	-444.99	131.63	0.0	0.0	0.0	327.76
7	18	321.31	0.0	-0.07	211.65	0.0	-564.18	-80.02	0.0	0.0	0.0	50.82
		-11.45	0.0	0.0	0.0	600.0	-442.68	131.63	0.0	0.0	0.0	321.31
7	19	319.27	0.0	-0.07	211.65	0.0	-565.33	-81.66	0.0	0.0	0.0	58.62
		-6.12	0.0	0.0	0.0	600.0	-443.83	129.99	0.0	0.0	0.0	319.27
7	20	329.80	0.0	-0.07	211.65	0.0	-565.33	-78.38	0.0	0.0	0.0	49.47
		-10.34	0.0	0.0	0.0	600.0	-443.83	133.27	0.0	0.0	0.0	329.80
7	21	246.80	0.0	-0.03	211.65	0.0	-542.56	-108.06	0.0	0.0	0.0	144.54
		27.29	0.0	0.0	0.0	600.0	-421.06	103.59	0.0	0.0	0.0	246.80
7	22	240.35	0.0	-0.03	211.65	0.0	-540.26	-108.06	0.0	0.0	0.0	138.09
		20.84	0.0	0.0	0.0	600.0	-418.76	103.59	0.0	0.0	0.0	240.35
7	23	238.31	0.0	-0.03	211.65	0.0	-541.41	-109.70	0.0	0.0	0.0	145.89
		24.95	0.0	0.0	0.0	600.0	-419.91	101.95	0.0	0.0	0.0	238.31
7	24	248.84	0.0	-0.03	211.65	0.0	-541.41	-106.42	0.0	0.0	0.0	136.74
		23.18	0.0	0.0	0.0	600.0	-419.91	105.23	0.0	0.0	0.0	248.84
7	25	256.65	0.0	2.15e-04	420.27	0.0	-516.80	-242.32	0.0	0.0	0.0	256.65
		-80.82	0.0	0.0	0.0	600.0	-395.30	177.94	0.0	0.0	0.0	212.11
7	26	250.20	0.0	-1.36e-04	420.27	0.0	-514.50	-242.32	0.0	0.0	0.0	250.20
		-87.27	0.0	0.0	0.0	600.0	-393.00	177.94	0.0	0.0	0.0	205.66
7	27	258.00	0.0	2.67e-04	420.27	0.0	-515.65	-243.96	0.0	0.0	0.0	258.00
		-84.39	0.0	0.0	0.0	600.0	-394.15	176.30	0.0	0.0	0.0	203.62
7	28	248.86	0.0	-1.92e-04	420.27	0.0	-515.65	-240.68	0.0	0.0	0.0	248.86
		-83.70	0.0	0.0	0.0	600.0	-394.15	179.58	0.0	0.0	0.0	214.15
7	29	264.72	0.0	-0.03	293.99	0.0	-540.72	-141.39	0.0	0.0	0.0	151.52
		-17.40	0.0	0.0	0.0	600.0	-419.22	152.60	0.0	0.0	0.0	264.72
7	30	258.27	0.0	-0.03	293.99	0.0	-538.42	-141.39	0.0	0.0	0.0	145.08
		-23.85	0.0	0.0	0.0	600.0	-416.92	152.60	0.0	0.0	0.0	258.27
7	31	256.23	0.0	-0.03	293.99	0.0	-539.57	-143.03	0.0	0.0	0.0	152.87
		-19.74	0.0	0.0	0.0	600.0	-418.07	150.96	0.0	0.0	0.0	256.23
7	32	266.76	0.0	-0.03	293.99	0.0	-539.57	-139.75	0.0	0.0	0.0	143.73
		-21.51	0.0	0.0	0.0	600.0	-418.07	154.24	0.0	0.0	0.0	266.76
7	33	238.79	0.0	-3.36e-04	293.99	0.0	-516.80	-169.43	0.0	0.0	0.0	238.79
		-9.22	0.0	0.0	0.0	600.0	-395.30	124.56	0.0	0.0	0.0	183.75
7	34	232.34	0.0	-2.58e-04	293.99	0.0	-514.50	-169.43	0.0	0.0	0.0	232.34
		-15.67	0.0	0.0	0.0	600.0	-393.00	124.56	0.0	0.0	0.0	177.30
7	35	240.14	0.0	1.99e-04	293.99	0.0	-515.65	-171.07	0.0	0.0	0.0	240.14
		-12.79	0.0	0.0	0.0	600.0	-394.15	122.92	0.0	0.0	0.0	175.26
7	36	230.99	0.0	-3.22e-04	293.99	0.0	-515.65	-167.79	0.0	0.0	0.0	230.99
		-12.10	0.0	0.0	0.0	600.0	-394.15	126.20	0.0	0.0	0.0	185.79
7	37	241.51	0.0	-0.02	337.93	0.0	-495.31	-187.62	0.0	0.0	0.0	168.73
		-52.41	0.0	0.0	0.0	600.0	-373.81	150.32	0.0	0.0	0.0	241.51
7	38	235.07	0.0	-0.02	337.93	0.0	-493.00	-187.62	0.0	0.0	0.0	162.28
		-58.85	0.0	0.0	0.0	600.0	-371.50	150.32	0.0	0.0	0.0	235.07
7	39	233.02	0.0	-0.02	337.93	0.0	-494.15	-189.26	0.0	0.0	0.0	170.08
		-54.75	0.0	0.0	0.0	600.0	-372.65	148.68	0.0	0.0	0.0	233.02
7	40	243.56	0.0	-0.02	337.93	0.0	-494.15	-185.98	0.0	0.0	0.0	160.94
		-56.51	0.0	0.0	0.0	600.0	-372.65	151.96	0.0	0.0	0.0	243.56
7	41	294.12	0.0	-0.06	211.65	0.0	-519.23	-86.68	0.0	0.0	0.0	63.60
		-8.67	0.0	0.0	0.0	600.0	-397.73	124.97	0.0	0.0	0.0	294.12
7	42	287.68	0.0	-0.06	211.65	0.0	-516.93	-86.68	0.0	0.0	0.0	57.16
		-15.11	0.0	0.0	0.0	600.0	-395.43	124.97	0.0	0.0	0.0	287.68
7	43	285.63	0.0	-0.06	211.65	0.0	-518.08	-88.32	0.0	0.0	0.0	64.95
		-9.78	0.0	0.0	0.0	600.0	-396.58	123.33	0.0	0.0	0.0	285.63
7	44	296.17	0.0	-0.06	211.65	0.0	-518.08	-85.04	0.0	0.0	0.0	55.81
		-14.00	0.0	0.0	0.0	600.0	-396.58	126.61	0.0	0.0	0.0	296.17
7	45	213.16	0.0	-0.02	211.65	0.0	-495.31	-114.72	0.0	0.0	0.0	150.87
		18.63	0.0	0.0	0.0	600.0	-373.81	96.93	0.0	0.0	0.0	213.16
7	46	206.71	0.0	-0.02	211.65	0.0	-493.00	-114.72	0.0	0.0	0.0	144.42
		12.19	0.0	0.0	0.0	600.0	-371.50	96.93	0.0	0.0	0.0	206.71
7	47	204.67	0.0	-0.02	211.65	0.0	-494.15	-116.36	0.0	0.0	0.0	152.22
		16.29	0.0	0.0	0.0	600.0	-372.65	95.29	0.0	0.0	0.0	204.67
7	48	215.20	0.0	-0.02	211.65	0.0	-494.15	-113.08	0.0	0.0	0.0	143.07
		14.53	0.0	0.0	0.0	600.0	-372.65	98.57	0.0	0.0	0.0	215.20

Pilas.	Cmb	M3 mx/mn	M2 mx/mn	D 2 / D 3	Q 2 / Q 3	Pos.	N	V 2	V 3	T	M 2	M 3
7	49	239.25	0.0	2.49e-04	399.53	0.0	-476.03	-233.53	0.0	0.0	0.0	239.25
		-82.85	0.0	0.0	0.0	600.0	-354.53	166.00	0.0	0.0	0.0	194.35
7	50	232.80	0.0	1.61e-04	399.53	0.0	-473.73	-233.53	0.0	0.0	0.0	232.80
		-89.30	0.0	0.0	0.0	600.0	-352.23	166.00	0.0	0.0	0.0	187.90
7	51	240.60	0.0	3.01e-04	399.53	0.0	-474.88	-235.17	0.0	0.0	0.0	240.60
		-86.42	0.0	0.0	0.0	600.0	-353.38	164.36	0.0	0.0	0.0	185.86
7	52	231.45	0.0	-1.92e-04	399.53	0.0	-474.88	-231.89	0.0	0.0	0.0	231.45
		-85.73	0.0	0.0	0.0	600.0	-353.38	167.64	0.0	0.0	0.0	196.39
7	53	246.96	0.0	-0.03	273.25	0.0	-499.96	-132.60	0.0	0.0	0.0	134.12
		-20.89	0.0	0.0	0.0	600.0	-378.46	140.65	0.0	0.0	0.0	246.96
7	54	240.51	0.0	-0.03	273.25	0.0	-497.65	-132.60	0.0	0.0	0.0	127.67
		-27.34	0.0	0.0	0.0	600.0	-376.15	140.65	0.0	0.0	0.0	240.51
7	55	238.47	0.0	-0.03	273.25	0.0	-498.80	-134.24	0.0	0.0	0.0	135.47
		-23.23	0.0	0.0	0.0	600.0	-377.30	139.01	0.0	0.0	0.0	238.47
7	56	249.00	0.0	-0.03	273.25	0.0	-498.80	-130.96	0.0	0.0	0.0	126.32
		-25.00	0.0	0.0	0.0	600.0	-377.30	142.29	0.0	0.0	0.0	249.00
7	57	221.38	0.0	-3.06e-04	273.25	0.0	-476.03	-160.64	0.0	0.0	0.0	221.38
		-11.25	0.0	0.0	0.0	600.0	-354.53	112.62	0.0	0.0	0.0	165.99
7	58	214.94	0.0	-2.30e-04	273.25	0.0	-473.73	-160.64	0.0	0.0	0.0	214.94
		-17.70	0.0	0.0	0.0	600.0	-352.23	112.62	0.0	0.0	0.0	159.55
7	59	222.73	0.0	1.98e-04	273.25	0.0	-474.88	-162.28	0.0	0.0	0.0	222.73
		-14.82	0.0	0.0	0.0	600.0	-353.38	110.98	0.0	0.0	0.0	157.50
7	60	213.59	0.0	-2.95e-04	273.25	0.0	-474.88	-159.00	0.0	0.0	0.0	213.59
		-14.13	0.0	0.0	0.0	600.0	-353.38	114.26	0.0	0.0	0.0	168.03
7	61	429.95	0.0	-0.10	337.93	0.0	-568.73	-128.39	0.0	0.0	0.0	1.81
		-98.56	0.0	0.0	0.0	600.0	-447.23	209.54	0.0	0.0	0.0	429.95
7	62	423.50	0.0	-0.10	337.93	0.0	-566.43	-128.39	0.0	0.0	0.0	-4.64
		-105.01	0.0	0.0	0.0	600.0	-444.93	209.54	0.0	0.0	0.0	423.50
7	63	421.46	0.0	-0.10	337.93	0.0	-567.58	-130.03	0.0	0.0	0.0	3.16
		-99.67	0.0	0.0	0.0	600.0	-446.08	207.90	0.0	0.0	0.0	421.46
7	64	431.99	0.0	-0.10	337.93	0.0	-567.58	-126.75	0.0	0.0	0.0	-5.99
		-103.90	0.0	0.0	0.0	600.0	-446.08	211.18	0.0	0.0	0.0	431.99
7	65	482.56	0.0	-0.13	211.65	0.0	-592.65	-27.46	0.0	0.0	0.0	-103.32
		-109.02	0.0	0.0	0.0	600.0	-471.15	184.20	0.0	0.0	0.0	482.56
7	66	476.11	0.0	-0.13	211.65	0.0	-590.35	-27.46	0.0	0.0	0.0	-109.77
		-115.47	0.0	0.0	0.0	600.0	-468.85	184.20	0.0	0.0	0.0	476.11
7	67	474.07	0.0	-0.13	211.65	0.0	-591.50	-29.10	0.0	0.0	0.0	-101.97
		-108.91	0.0	0.0	0.0	600.0	-470.00	182.56	0.0	0.0	0.0	474.07
7	68	484.60	0.0	-0.13	211.65	0.0	-591.50	-25.82	0.0	0.0	0.0	-111.12
		-115.59	0.0	0.0	0.0	600.0	-470.00	185.84	0.0	0.0	0.0	484.60
7	69	401.59	0.0	-0.10	211.65	0.0	-568.73	-55.50	0.0	0.0	0.0	-16.06
		-42.79	0.0	0.0	0.0	600.0	-447.23	156.16	0.0	0.0	0.0	401.59
7	70	395.15	0.0	-0.10	211.65	0.0	-566.43	-55.50	0.0	0.0	0.0	-22.50
		-49.23	0.0	0.0	0.0	600.0	-444.93	156.16	0.0	0.0	0.0	395.15
7	71	393.10	0.0	-0.10	211.65	0.0	-567.58	-57.14	0.0	0.0	0.0	-14.71
		-42.67	0.0	0.0	0.0	600.0	-446.08	154.52	0.0	0.0	0.0	393.10
7	72	403.64	0.0	-0.10	211.65	0.0	-567.58	-53.86	0.0	0.0	0.0	-23.85
		-49.35	0.0	0.0	0.0	600.0	-446.08	157.80	0.0	0.0	0.0	403.64
7	73	382.78	0.0	-0.07	399.53	0.0	-549.46	-174.30	0.0	0.0	0.0	72.32
		-101.42	0.0	0.0	0.0	600.0	-427.96	225.23	0.0	0.0	0.0	382.78
7	74	376.33	0.0	-0.07	399.53	0.0	-547.15	-174.30	0.0	0.0	0.0	65.87
		-107.86	0.0	0.0	0.0	600.0	-425.65	225.23	0.0	0.0	0.0	376.33
7	75	374.29	0.0	-0.07	399.53	0.0	-548.30	-175.94	0.0	0.0	0.0	73.67
		-103.76	0.0	0.0	0.0	600.0	-426.80	223.59	0.0	0.0	0.0	374.29
7	76	384.82	0.0	-0.07	399.53	0.0	-548.30	-172.66	0.0	0.0	0.0	64.53
		-105.52	0.0	0.0	0.0	600.0	-426.80	226.87	0.0	0.0	0.0	384.82
7	77	435.39	0.0	-0.11	273.25	0.0	-573.38	-73.37	0.0	0.0	0.0	-32.81
		-77.78	0.0	0.0	0.0	600.0	-451.88	199.88	0.0	0.0	0.0	435.39
7	78	428.95	0.0	-0.11	273.25	0.0	-571.08	-73.37	0.0	0.0	0.0	-39.25
		-84.22	0.0	0.0	0.0	600.0	-449.58	199.88	0.0	0.0	0.0	428.95
7	79	426.90	0.0	-0.11	273.25	0.0	-572.23	-75.01	0.0	0.0	0.0	-31.46
		-78.89	0.0	0.0	0.0	600.0	-450.73	198.24	0.0	0.0	0.0	426.90
7	80	437.44	0.0	-0.11	273.25	0.0	-572.23	-71.73	0.0	0.0	0.0	-40.60
		-83.11	0.0	0.0	0.0	600.0	-450.73	201.52	0.0	0.0	0.0	437.44
7	81	354.43	0.0	-0.07	273.25	0.0	-549.46	-101.41	0.0	0.0	0.0	54.46
		-32.57	0.0	0.0	0.0	600.0	-427.96	171.84	0.0	0.0	0.0	354.43
7	82	347.98	0.0	-0.07	273.25	0.0	-547.15	-101.41	0.0	0.0	0.0	48.01
		-39.01	0.0	0.0	0.0	600.0	-425.65	171.84	0.0	0.0	0.0	347.98
7	83	345.94	0.0	-0.07	273.25	0.0	-548.30	-103.05	0.0	0.0	0.0	55.81
		-33.68	0.0	0.0	0.0	600.0	-426.80	170.20	0.0	0.0	0.0	345.94
7	84	356.47	0.0	-0.07	273.25	0.0	-548.30	-99.77	0.0	0.0	0.0	46.66
		-37.90	0.0	0.0	0.0	600.0	-426.80	173.48	0.0	0.0	0.0	356.47
7	85	241.99	0.0	-0.02	337.93	0.0	-495.31	-187.15	0.0	0.0	0.0	166.39
		-53.69	0.0	0.0	0.0	600.0	-373.81	150.79	0.0	0.0	0.0	241.99
7	86	235.54	0.0	-0.02	337.93	0.0	-493.00	-187.15	0.0	0.0	0.0	159.95

Pilas.	Cmb	M3 mx/mn	M2 mx/mn	D 2 / D 3	Q 2 / Q 3	Pos.	N	V 2	V 3	T	M 2	M 3
		-60.14	0.0	0.0	0.0	600.0	-371.50	150.79	0.0	0.0	0.0	235.54
7	87	233.50	0.0	-0.02	337.93	0.0	-494.15	-188.79	0.0	0.0	0.0	167.74
		-56.03	0.0	0.0	0.0	600.0	-372.65	149.15	0.0	0.0	0.0	233.50
7	88	244.03	0.0	-0.02	337.93	0.0	-494.15	-185.51	0.0	0.0	0.0	158.60
		-57.79	0.0	0.0	0.0	600.0	-372.65	152.43	0.0	0.0	0.0	244.03
7	89	294.60	0.0	-0.06	211.65	0.0	-519.23	-86.22	0.0	0.0	0.0	61.26
		-10.30	0.0	0.0	0.0	600.0	-397.73	125.44	0.0	0.0	0.0	294.60
7	90	288.15	0.0	-0.06	211.65	0.0	-516.93	-86.22	0.0	0.0	0.0	54.82
		-16.75	0.0	0.0	0.0	600.0	-395.43	125.44	0.0	0.0	0.0	288.15
7	91	286.11	0.0	-0.06	211.65	0.0	-518.08	-87.85	0.0	0.0	0.0	62.61
		-11.41	0.0	0.0	0.0	600.0	-396.58	123.80	0.0	0.0	0.0	286.11
7	92	296.64	0.0	-0.06	211.65	0.0	-518.08	-84.58	0.0	0.0	0.0	53.47
		-15.64	0.0	0.0	0.0	600.0	-396.58	127.08	0.0	0.0	0.0	296.64
7	93	213.63	0.0	-0.02	211.65	0.0	-495.31	-114.25	0.0	0.0	0.0	148.53
		17.35	0.0	0.0	0.0	600.0	-373.81	97.40	0.0	0.0	0.0	213.63
7	94	207.19	0.0	-0.02	211.65	0.0	-493.00	-114.25	0.0	0.0	0.0	142.08
		10.90	0.0	0.0	0.0	600.0	-371.50	97.40	0.0	0.0	0.0	207.19
7	95	205.14	0.0	-0.02	211.65	0.0	-494.15	-115.89	0.0	0.0	0.0	149.88
		15.01	0.0	0.0	0.0	600.0	-372.65	95.76	0.0	0.0	0.0	205.14
7	96	215.68	0.0	-0.02	211.65	0.0	-494.15	-112.61	0.0	0.0	0.0	140.73
		13.24	0.0	0.0	0.0	600.0	-372.65	99.04	0.0	0.0	0.0	215.68
7	97	236.91	0.0	2.54e-04	399.53	0.0	-476.03	-233.06	0.0	0.0	0.0	236.91
		-83.78	0.0	0.0	0.0	600.0	-354.53	166.47	0.0	0.0	0.0	194.82
7	98	230.46	0.0	1.67e-04	399.53	0.0	-473.73	-233.06	0.0	0.0	0.0	230.46
		-90.23	0.0	0.0	0.0	600.0	-352.23	166.47	0.0	0.0	0.0	188.38
7	99	238.26	0.0	3.07e-04	399.53	0.0	-474.88	-234.70	0.0	0.0	0.0	238.26
		-87.35	0.0	0.0	0.0	600.0	-353.38	164.83	0.0	0.0	0.0	186.33
7	100	229.11	0.0	-1.94e-04	399.53	0.0	-474.88	-231.42	0.0	0.0	0.0	229.11
		-86.66	0.0	0.0	0.0	600.0	-353.38	168.11	0.0	0.0	0.0	196.87
7	101	247.43	0.0	-0.03	273.25	0.0	-499.96	-132.13	0.0	0.0	0.0	131.78
		-22.18	0.0	0.0	0.0	600.0	-378.46	141.12	0.0	0.0	0.0	247.43
7	102	240.99	0.0	-0.03	273.25	0.0	-497.65	-132.13	0.0	0.0	0.0	125.33
		-28.62	0.0	0.0	0.0	600.0	-376.15	141.12	0.0	0.0	0.0	240.99
7	103	238.94	0.0	-0.03	273.25	0.0	-498.80	-133.77	0.0	0.0	0.0	133.13
		-24.52	0.0	0.0	0.0	600.0	-377.30	139.48	0.0	0.0	0.0	238.94
7	104	249.48	0.0	-0.03	273.25	0.0	-498.80	-130.49	0.0	0.0	0.0	123.98
		-26.28	0.0	0.0	0.0	600.0	-377.30	142.76	0.0	0.0	0.0	249.48
7	105	219.05	0.0	-1.58e-04	273.25	0.0	-476.03	-160.17	0.0	0.0	0.0	219.05
		-12.18	0.0	0.0	0.0	600.0	-354.53	113.09	0.0	0.0	0.0	166.47
7	106	212.60	0.0	-2.28e-04	273.25	0.0	-473.73	-160.17	0.0	0.0	0.0	212.60
		-18.63	0.0	0.0	0.0	600.0	-352.23	113.09	0.0	0.0	0.0	160.02
7	107	220.39	0.0	1.97e-04	273.25	0.0	-474.88	-161.81	0.0	0.0	0.0	220.39
		-15.75	0.0	0.0	0.0	600.0	-353.38	111.45	0.0	0.0	0.0	157.98
7	108	211.25	0.0	-2.92e-04	273.25	0.0	-474.88	-158.53	0.0	0.0	0.0	211.25
		-15.06	0.0	0.0	0.0	600.0	-353.38	114.72	0.0	0.0	0.0	168.51
7	109	663.39	0.0	-0.25	-43.44	0.0	-486.82	194.35	0.0	0.0	0.0	-509.19
		-509.19	0.0	0.0	0.0	600.0	-396.82	150.91	0.0	0.0	0.0	663.39
7	110	184.85	0.0	1.13e-04	250.32	0.0	-352.95	-156.80	0.0	0.0	0.0	184.85
		-29.42	0.0	0.0	0.0	600.0	-262.95	93.52	0.0	0.0	0.0	131.78
7	111	179.48	0.0	-1.40e-04	250.32	0.0	-351.03	-156.80	0.0	0.0	0.0	179.48
		-34.80	0.0	0.0	0.0	600.0	-261.03	93.52	0.0	0.0	0.0	126.41
7	112	185.97	0.0	1.59e-04	250.32	0.0	-351.99	-158.17	0.0	0.0	0.0	185.97
		-32.40	0.0	0.0	0.0	600.0	-261.99	92.15	0.0	0.0	0.0	124.71
7	113	178.35	0.0	-1.93e-04	250.32	0.0	-351.99	-155.44	0.0	0.0	0.0	178.35
		-31.82	0.0	0.0	0.0	600.0	-261.99	94.88	0.0	0.0	0.0	133.49
7	114	170.75	0.0	-0.03	156.78	0.0	-370.67	-82.04	0.0	0.0	0.0	106.98
		15.64	0.0	0.0	0.0	600.0	-280.67	74.74	0.0	0.0	0.0	170.75
7	115	165.38	0.0	-0.03	156.78	0.0	-368.75	-82.04	0.0	0.0	0.0	101.60
		10.26	0.0	0.0	0.0	600.0	-278.75	74.74	0.0	0.0	0.0	165.38
7	116	163.68	0.0	-0.03	156.78	0.0	-369.71	-83.41	0.0	0.0	0.0	108.10
		13.69	0.0	0.0	0.0	600.0	-279.71	73.37	0.0	0.0	0.0	163.68
7	117	172.46	0.0	-0.03	156.78	0.0	-369.71	-80.67	0.0	0.0	0.0	100.48
		12.21	0.0	0.0	0.0	600.0	-279.71	76.11	0.0	0.0	0.0	172.46
7	118	171.62	0.0	-3.92e-04	156.78	0.0	-352.95	-102.81	0.0	0.0	0.0	171.62
		23.61	0.0	0.0	0.0	600.0	-262.95	53.97	0.0	0.0	0.0	110.78
7	119	166.25	0.0	-3.27e-04	156.78	0.0	-351.03	-102.81	0.0	0.0	0.0	166.25
		18.24	0.0	0.0	0.0	600.0	-261.03	53.97	0.0	0.0	0.0	105.41
7	120	172.74	0.0	-2.33e-04	156.78	0.0	-351.99	-104.18	0.0	0.0	0.0	172.74
		20.64	0.0	0.0	0.0	600.0	-261.99	52.60	0.0	0.0	0.0	103.70
7	121	165.12	0.0	-3.71e-04	156.78	0.0	-351.99	-101.44	0.0	0.0	0.0	165.12
		21.22	0.0	0.0	0.0	600.0	-261.99	55.34	0.0	0.0	0.0	112.48
7	122	280.83	0.0	-0.06	250.32	0.0	-408.05	-109.22	0.0	0.0	0.0	48.41
		-48.45	0.0	0.0	0.0	600.0	-318.05	141.10	0.0	0.0	0.0	280.83
7	123	275.46	0.0	-0.06	250.32	0.0	-406.13	-109.22	0.0	0.0	0.0	43.04
		-53.82	0.0	0.0	0.0	600.0	-316.13	141.10	0.0	0.0	0.0	275.46

Pilas.	Cmb	M3 mx/mn	M2 mx/mn	D 2 / D 3	Q 2 / Q 3	Pos.	N	V 2	V 3	T	M 2	M 3
7	124	273.75	0.0	-0.06	250.32	0.0	-407.09	-110.59	0.0	0.0	0.0	49.54
		-50.40	0.0	0.0	0.0	600.0	-317.09	139.73	0.0	0.0	0.0	273.75
7	125	282.53	0.0	-0.06	250.32	0.0	-407.09	-107.86	0.0	0.0	0.0	41.92
		-51.87	0.0	0.0	0.0	600.0	-317.09	142.46	0.0	0.0	0.0	282.53
7	126	319.80	0.0	-0.08	156.78	0.0	-425.77	-34.46	0.0	0.0	0.0	-29.46
		-44.27	0.0	0.0	0.0	600.0	-335.77	122.32	0.0	0.0	0.0	319.80
7	127	314.43	0.0	-0.08	156.78	0.0	-423.85	-34.46	0.0	0.0	0.0	-34.83
		-49.65	0.0	0.0	0.0	600.0	-333.85	122.32	0.0	0.0	0.0	314.43
7	128	312.73	0.0	-0.08	156.78	0.0	-424.81	-35.83	0.0	0.0	0.0	-28.34
		-44.18	0.0	0.0	0.0	600.0	-334.81	120.95	0.0	0.0	0.0	312.73
7	129	321.50	0.0	-0.08	156.78	0.0	-424.81	-33.09	0.0	0.0	0.0	-35.96
		-49.75	0.0	0.0	0.0	600.0	-334.81	123.69	0.0	0.0	0.0	321.50
7	130	259.83	0.0	-0.06	156.78	0.0	-408.05	-55.23	0.0	0.0	0.0	35.18
		-4.88	0.0	0.0	0.0	600.0	-318.05	101.55	0.0	0.0	0.0	259.83
7	131	254.45	0.0	-0.06	156.78	0.0	-406.13	-55.23	0.0	0.0	0.0	29.81
		-10.25	0.0	0.0	0.0	600.0	-316.13	101.55	0.0	0.0	0.0	254.45
7	132	252.75	0.0	-0.06	156.78	0.0	-407.09	-56.60	0.0	0.0	0.0	36.31
		-5.80	0.0	0.0	0.0	600.0	-317.09	100.18	0.0	0.0	0.0	252.75
7	133	261.53	0.0	-0.06	156.78	0.0	-407.09	-53.86	0.0	0.0	0.0	28.69
		-9.32	0.0	0.0	0.0	600.0	-317.09	102.92	0.0	0.0	0.0	261.53
7	134	245.81	0.0	-0.04	296.06	0.0	-393.74	-143.32	0.0	0.0	0.0	100.78
		-59.85	0.0	0.0	0.0	600.0	-303.74	152.74	0.0	0.0	0.0	245.81
7	135	240.43	0.0	-0.04	296.06	0.0	-391.82	-143.32	0.0	0.0	0.0	95.40
		-65.22	0.0	0.0	0.0	600.0	-301.82	152.74	0.0	0.0	0.0	240.43
7	136	238.73	0.0	-0.04	296.06	0.0	-392.78	-144.68	0.0	0.0	0.0	101.90
		-61.80	0.0	0.0	0.0	600.0	-302.78	151.38	0.0	0.0	0.0	238.73
7	137	247.51	0.0	-0.04	296.06	0.0	-392.78	-141.95	0.0	0.0	0.0	94.28
		-63.27	0.0	0.0	0.0	600.0	-302.78	154.11	0.0	0.0	0.0	247.51
7	138	284.78	0.0	-0.07	202.52	0.0	-411.46	-68.55	0.0	0.0	0.0	22.90
		-31.70	0.0	0.0	0.0	600.0	-321.46	133.97	0.0	0.0	0.0	284.78
7	139	279.40	0.0	-0.07	202.52	0.0	-409.54	-68.55	0.0	0.0	0.0	17.53
		-37.07	0.0	0.0	0.0	600.0	-319.54	133.97	0.0	0.0	0.0	279.40
7	140	277.70	0.0	-0.07	202.52	0.0	-410.50	-69.92	0.0	0.0	0.0	24.03
		-32.63	0.0	0.0	0.0	600.0	-320.50	132.60	0.0	0.0	0.0	277.70
7	141	286.48	0.0	-0.07	202.52	0.0	-410.50	-67.19	0.0	0.0	0.0	16.41
		-36.15	0.0	0.0	0.0	600.0	-320.50	135.33	0.0	0.0	0.0	286.48
7	142	224.80	0.0	-0.04	202.52	0.0	-393.74	-89.32	0.0	0.0	0.0	87.54
		-7.23	0.0	0.0	0.0	600.0	-303.74	113.20	0.0	0.0	0.0	224.80
7	143	219.43	0.0	-0.04	202.52	0.0	-391.82	-89.32	0.0	0.0	0.0	82.17
		-12.60	0.0	0.0	0.0	600.0	-301.82	113.20	0.0	0.0	0.0	219.43
7	144	217.73	0.0	-0.04	202.52	0.0	-392.78	-90.69	0.0	0.0	0.0	88.67
		-9.18	0.0	0.0	0.0	600.0	-302.78	111.83	0.0	0.0	0.0	217.73
7	145	226.50	0.0	-0.04	202.52	0.0	-392.78	-87.96	0.0	0.0	0.0	81.05
		-10.65	0.0	0.0	0.0	600.0	-302.78	114.57	0.0	0.0	0.0	226.50
7	146	148.21	0.0	2.33e-04	250.32	0.0	-262.85	-155.53	0.0	0.0	0.0	148.21
		-62.23	0.0	0.0	0.0	600.0	-172.85	94.79	0.0	0.0	0.0	102.81
7	147	143.73	0.0	1.72e-04	250.32	0.0	-261.26	-155.53	0.0	0.0	0.0	143.73
		-66.71	0.0	0.0	0.0	600.0	-171.26	94.79	0.0	0.0	0.0	98.33
7	148	149.15	0.0	2.70e-04	250.32	0.0	-262.05	-156.67	0.0	0.0	0.0	149.15
		-64.71	0.0	0.0	0.0	600.0	-172.05	93.65	0.0	0.0	0.0	96.91
7	149	142.80	0.0	1.36e-04	250.32	0.0	-262.05	-154.39	0.0	0.0	0.0	142.80
		-64.23	0.0	0.0	0.0	600.0	-172.05	95.93	0.0	0.0	0.0	104.23
7	150	141.78	0.0	-0.03	156.78	0.0	-280.58	-80.76	0.0	0.0	0.0	70.34
		-18.13	0.0	0.0	0.0	600.0	-190.58	76.02	0.0	0.0	0.0	141.78
7	151	137.30	0.0	-0.03	156.78	0.0	-278.98	-80.76	0.0	0.0	0.0	65.86
		-22.60	0.0	0.0	0.0	600.0	-188.98	76.02	0.0	0.0	0.0	137.30
7	152	135.89	0.0	-0.03	156.78	0.0	-279.78	-81.90	0.0	0.0	0.0	71.27
		-19.75	0.0	0.0	0.0	600.0	-189.78	74.88	0.0	0.0	0.0	135.89
7	153	135.89	0.0	-0.03	156.78	0.0	-279.78	-81.90	0.0	0.0	0.0	71.27
		-19.75	0.0	0.0	0.0	600.0	-189.78	74.88	0.0	0.0	0.0	135.89
7	154	134.98	0.0	1.03e-04	156.78	0.0	-262.85	-101.53	0.0	0.0	0.0	134.98
		-9.19	0.0	0.0	0.0	600.0	-172.85	55.25	0.0	0.0	0.0	81.81
7	155	130.50	0.0	-1.17e-04	156.78	0.0	-261.26	-101.53	0.0	0.0	0.0	130.50
		-13.67	0.0	0.0	0.0	600.0	-171.26	55.25	0.0	0.0	0.0	77.33
7	156	135.92	0.0	1.41e-04	156.78	0.0	-262.05	-102.67	0.0	0.0	0.0	135.92
		-11.67	0.0	0.0	0.0	600.0	-172.05	54.11	0.0	0.0	0.0	75.91
7	157	135.92	0.0	1.41e-04	156.78	0.0	-262.05	-102.67	0.0	0.0	0.0	135.92
		-11.67	0.0	0.0	0.0	600.0	-172.05	54.11	0.0	0.0	0.0	75.91
7	158	308.19	0.0	-0.06	250.32	0.0	-442.79	-101.74	0.0	0.0	0.0	30.85
		-53.44	0.0	0.0	0.0	600.0	-352.79	148.58	0.0	0.0	0.0	308.19
7	159	302.82	0.0	-0.07	250.32	0.0	-440.88	-101.74	0.0	0.0	0.0	25.48
		-58.81	0.0	0.0	0.0	600.0	-350.88	148.58	0.0	0.0	0.0	302.82
7	160	301.11	0.0	-0.06	250.32	0.0	-441.84	-103.10	0.0	0.0	0.0	31.98
		-54.37	0.0	0.0	0.0	600.0	-351.84	147.22	0.0	0.0	0.0	301.11
7	161	309.89	0.0	-0.07	250.32	0.0	-441.84	-100.37	0.0	0.0	0.0	24.36

Pilas.	Cmb	M3 mx/mn	M2 mx/mn	D 2 / D 3	Q 2 / Q 3	Pos.	N	V 2	V 3	T	M 2	M 3
		-57.89	0.0	0.0	0.0	600.0	-351.84	149.95	0.0	0.0	0.0	309.89
7	162	347.16	0.0	-0.09	156.78	0.0	-460.52	-26.97	0.0	0.0	0.0	-47.02
		-56.22	0.0	0.0	0.0	600.0	-370.52	129.81	0.0	0.0	0.0	347.16
7	163	341.79	0.0	-0.09	156.78	0.0	-458.60	-26.97	0.0	0.0	0.0	-52.39
		-61.59	0.0	0.0	0.0	600.0	-368.60	129.81	0.0	0.0	0.0	341.79
7	164	340.09	0.0	-0.09	156.78	0.0	-459.56	-28.34	0.0	0.0	0.0	-45.89
		-56.12	0.0	0.0	0.0	600.0	-369.56	128.44	0.0	0.0	0.0	340.09
7	165	348.86	0.0	-0.09	156.78	0.0	-459.56	-25.61	0.0	0.0	0.0	-53.52
		-61.69	0.0	0.0	0.0	600.0	-369.56	131.17	0.0	0.0	0.0	348.86
7	166	287.19	0.0	-0.06	156.78	0.0	-442.79	-47.74	0.0	0.0	0.0	17.62
		-11.21	0.0	0.0	0.0	600.0	-352.79	109.04	0.0	0.0	0.0	287.19
7	167	281.81	0.0	-0.07	156.78	0.0	-440.88	-47.74	0.0	0.0	0.0	12.25
		-16.58	0.0	0.0	0.0	600.0	-350.88	109.04	0.0	0.0	0.0	281.81
7	168	280.11	0.0	-0.06	156.78	0.0	-441.84	-49.11	0.0	0.0	0.0	18.75
		-12.13	0.0	0.0	0.0	600.0	-351.84	107.67	0.0	0.0	0.0	280.11
7	169	288.89	0.0	-0.07	156.78	0.0	-441.84	-46.38	0.0	0.0	0.0	11.13
		-15.65	0.0	0.0	0.0	600.0	-351.84	110.40	0.0	0.0	0.0	288.89
7	170	261.49	0.0	-0.04	311.31	0.0	-423.71	-147.20	0.0	0.0	0.0	100.67
		-64.36	0.0	0.0	0.0	600.0	-333.71	164.11	0.0	0.0	0.0	261.49
7	171	256.12	0.0	-0.04	311.31	0.0	-421.79	-147.20	0.0	0.0	0.0	95.30
		-69.73	0.0	0.0	0.0	600.0	-331.79	164.11	0.0	0.0	0.0	256.12
7	172	254.42	0.0	-0.04	311.31	0.0	-422.75	-148.56	0.0	0.0	0.0	101.80
		-66.31	0.0	0.0	0.0	600.0	-332.75	162.75	0.0	0.0	0.0	254.42
7	173	263.19	0.0	-0.04	311.31	0.0	-422.75	-145.83	0.0	0.0	0.0	94.17
		-67.78	0.0	0.0	0.0	600.0	-332.75	165.48	0.0	0.0	0.0	263.19
7	174	300.46	0.0	-0.07	217.77	0.0	-441.43	-72.43	0.0	0.0	0.0	22.80
		-35.81	0.0	0.0	0.0	600.0	-351.43	145.34	0.0	0.0	0.0	300.46
7	175	295.09	0.0	-0.07	217.77	0.0	-439.52	-72.43	0.0	0.0	0.0	17.43
		-41.18	0.0	0.0	0.0	600.0	-349.52	145.34	0.0	0.0	0.0	295.09
7	176	293.39	0.0	-0.07	217.77	0.0	-440.47	-73.80	0.0	0.0	0.0	23.92
		-36.73	0.0	0.0	0.0	600.0	-350.47	143.97	0.0	0.0	0.0	293.39
7	177	302.16	0.0	-0.07	217.77	0.0	-440.47	-71.07	0.0	0.0	0.0	16.30
		-40.26	0.0	0.0	0.0	600.0	-350.47	146.70	0.0	0.0	0.0	302.16
7	178	240.49	0.0	-0.04	217.77	0.0	-423.71	-93.20	0.0	0.0	0.0	87.44
		-11.74	0.0	0.0	0.0	600.0	-333.71	124.57	0.0	0.0	0.0	240.49
7	179	235.11	0.0	-0.04	217.77	0.0	-421.79	-93.20	0.0	0.0	0.0	82.07
		-17.11	0.0	0.0	0.0	600.0	-331.79	124.57	0.0	0.0	0.0	235.11
7	180	233.41	0.0	-0.04	217.77	0.0	-422.75	-94.57	0.0	0.0	0.0	88.56
		-13.69	0.0	0.0	0.0	600.0	-332.75	123.20	0.0	0.0	0.0	233.41
7	181	242.19	0.0	-0.04	217.77	0.0	-422.75	-91.84	0.0	0.0	0.0	80.94
		-15.16	0.0	0.0	0.0	600.0	-332.75	125.93	0.0	0.0	0.0	242.19
13	1	269.39	0.0	1.41e-05	26.59	0.0	-361.77	-236.55	0.0	0.0	0.0	269.39
		202.43	0.0	0.0	0.0	30.0	-355.69	-209.96	0.0	0.0	0.0	202.43
13	2	258.64	0.0	2.05e-05	26.59	0.0	-357.93	-236.55	0.0	0.0	0.0	258.64
		191.69	0.0	0.0	0.0	30.0	-351.86	-209.96	0.0	0.0	0.0	191.69
13	3	272.46	0.0	5.18e-06	26.59	0.0	-359.85	-239.29	0.0	0.0	0.0	272.46
		204.68	0.0	0.0	0.0	30.0	-353.77	-212.69	0.0	0.0	0.0	204.68
13	4	255.57	0.0	2.94e-05	26.59	0.0	-359.85	-233.82	0.0	0.0	0.0	255.57
		189.44	0.0	0.0	0.0	30.0	-353.77	-207.23	0.0	0.0	0.0	189.44
13	5	132.50	0.0	-1.75e-03	16.66	0.0	-385.69	-125.68	0.0	0.0	0.0	132.50
		97.30	0.0	0.0	0.0	30.0	-379.62	-109.03	0.0	0.0	0.0	97.30
13	6	121.75	0.0	-1.76e-03	16.66	0.0	-381.85	-125.68	0.0	0.0	0.0	121.75
		86.56	0.0	0.0	0.0	30.0	-375.78	-109.03	0.0	0.0	0.0	86.56
13	7	135.57	0.0	-1.74e-03	16.66	0.0	-383.77	-128.42	0.0	0.0	0.0	135.57
		99.55	0.0	0.0	0.0	30.0	-377.70	-111.76	0.0	0.0	0.0	99.55
13	8	118.68	0.0	-1.77e-03	16.66	0.0	-383.77	-122.95	0.0	0.0	0.0	118.68
		84.31	0.0	0.0	0.0	30.0	-377.70	-106.30	0.0	0.0	0.0	84.31
13	9	228.18	0.0	-7.27e-05	16.66	0.0	-361.77	-153.72	0.0	0.0	0.0	228.18
		184.57	0.0	0.0	0.0	30.0	-355.69	-137.07	0.0	0.0	0.0	184.57
13	10	217.43	0.0	-7.91e-05	16.66	0.0	-357.93	-153.72	0.0	0.0	0.0	217.43
		173.83	0.0	0.0	0.0	30.0	-351.86	-137.07	0.0	0.0	0.0	173.83
13	11	231.24	0.0	-6.38e-05	16.66	0.0	-359.85	-156.46	0.0	0.0	0.0	231.24
		186.82	0.0	0.0	0.0	30.0	-353.77	-139.80	0.0	0.0	0.0	186.82
13	12	214.36	0.0	-8.80e-05	16.66	0.0	-359.85	-150.99	0.0	0.0	0.0	214.36
		171.58	0.0	0.0	0.0	30.0	-353.77	-134.34	0.0	0.0	0.0	171.58
13	13	220.65	0.0	-1.68e-03	26.59	0.0	-548.64	-207.55	0.0	0.0	0.0	220.65
		162.40	0.0	0.0	0.0	30.0	-542.56	-180.95	0.0	0.0	0.0	162.40
13	14	214.20	0.0	-1.68e-03	26.59	0.0	-546.33	-207.55	0.0	0.0	0.0	214.20
		155.95	0.0	0.0	0.0	30.0	-540.26	-180.95	0.0	0.0	0.0	155.95
13	15	222.49	0.0	-1.67e-03	26.59	0.0	-547.49	-209.19	0.0	0.0	0.0	222.49
		163.75	0.0	0.0	0.0	30.0	-541.41	-182.59	0.0	0.0	0.0	163.75
13	16	212.36	0.0	-1.69e-03	26.59	0.0	-547.49	-205.91	0.0	0.0	0.0	212.36
		154.60	0.0	0.0	0.0	30.0	-541.41	-179.31	0.0	0.0	0.0	154.60
13	17	83.76	0.0	-3.42e-03	16.66	0.0	-572.56	-96.68	0.0	0.0	0.0	83.76
		57.27	0.0	0.0	0.0	30.0	-566.49	-80.02	0.0	0.0	0.0	57.27

Pilas.	Cmb	M3 mx/mn	M2 mx/mn	D 2 / D 3	Q 2 / Q 3	Pos.	N	V 2	V 3	T	M 2	M 3
13	18	77.31	0.0	-3.42e-03	16.66	0.0	-570.26	-96.68	0.0	0.0	0.0	77.31
		50.82	0.0	0.0	0.0	30.0	-564.18	-80.02	0.0	0.0	0.0	50.82
13	19	85.60	0.0	-3.41e-03	16.66	0.0	-571.41	-98.32	0.0	0.0	0.0	85.60
		58.62	0.0	0.0	0.0	30.0	-565.33	-81.66	0.0	0.0	0.0	58.62
13	20	75.47	0.0	-3.43e-03	16.66	0.0	-571.41	-95.04	0.0	0.0	0.0	75.47
		49.47	0.0	0.0	0.0	30.0	-565.33	-78.38	0.0	0.0	0.0	49.47
13	21	179.44	0.0	-1.74e-03	16.66	0.0	-548.64	-124.72	0.0	0.0	0.0	179.44
		144.54	0.0	0.0	0.0	30.0	-542.56	-108.06	0.0	0.0	0.0	144.54
13	22	172.99	0.0	-1.74e-03	16.66	0.0	-546.33	-124.72	0.0	0.0	0.0	172.99
		138.09	0.0	0.0	0.0	30.0	-540.26	-108.06	0.0	0.0	0.0	138.09
13	23	181.28	0.0	-1.73e-03	16.66	0.0	-547.49	-126.36	0.0	0.0	0.0	181.28
		145.89	0.0	0.0	0.0	30.0	-541.41	-109.70	0.0	0.0	0.0	145.89
13	24	171.15	0.0	-1.75e-03	16.66	0.0	-547.49	-123.08	0.0	0.0	0.0	171.15
		136.74	0.0	0.0	0.0	30.0	-541.41	-106.42	0.0	0.0	0.0	136.74
13	25	333.66	0.0	5.02e-05	28.90	0.0	-522.88	-271.23	0.0	0.0	0.0	333.66
		256.65	0.0	0.0	0.0	30.0	-516.80	-242.32	0.0	0.0	0.0	256.65
13	26	327.21	0.0	5.40e-05	28.90	0.0	-520.57	-271.23	0.0	0.0	0.0	327.21
		250.20	0.0	0.0	0.0	30.0	-514.50	-242.32	0.0	0.0	0.0	250.20
13	27	335.50	0.0	4.48e-05	28.90	0.0	-521.73	-272.87	0.0	0.0	0.0	335.50
		258.00	0.0	0.0	0.0	30.0	-515.65	-243.96	0.0	0.0	0.0	258.00
13	28	325.37	0.0	5.93e-05	28.90	0.0	-521.73	-269.59	0.0	0.0	0.0	325.37
		248.86	0.0	0.0	0.0	30.0	-515.65	-240.68	0.0	0.0	0.0	248.86
13	29	196.77	0.0	-1.79e-03	18.97	0.0	-546.80	-160.36	0.0	0.0	0.0	196.77
		151.52	0.0	0.0	0.0	30.0	-540.72	-141.39	0.0	0.0	0.0	151.52
13	30	190.32	0.0	-1.79e-03	18.97	0.0	-544.50	-160.36	0.0	0.0	0.0	190.32
		145.08	0.0	0.0	0.0	30.0	-538.42	-141.39	0.0	0.0	0.0	145.08
13	31	198.61	0.0	-1.78e-03	18.97	0.0	-545.65	-162.00	0.0	0.0	0.0	198.61
		152.87	0.0	0.0	0.0	30.0	-539.57	-143.03	0.0	0.0	0.0	152.87
13	32	188.48	0.0	-1.80e-03	18.97	0.0	-545.65	-158.72	0.0	0.0	0.0	188.48
		143.73	0.0	0.0	0.0	30.0	-539.57	-139.75	0.0	0.0	0.0	143.73
13	33	292.45	0.0	-1.09e-04	18.97	0.0	-522.88	-188.40	0.0	0.0	0.0	292.45
		238.79	0.0	0.0	0.0	30.0	-516.80	-169.43	0.0	0.0	0.0	238.79
13	34	286.00	0.0	-1.13e-04	18.97	0.0	-520.57	-188.40	0.0	0.0	0.0	286.00
		232.34	0.0	0.0	0.0	30.0	-514.50	-169.43	0.0	0.0	0.0	232.34
13	35	294.29	0.0	-1.03e-04	18.97	0.0	-521.73	-190.04	0.0	0.0	0.0	294.29
		240.14	0.0	0.0	0.0	30.0	-515.65	-171.07	0.0	0.0	0.0	240.14
13	36	284.16	0.0	-1.18e-04	18.97	0.0	-521.73	-186.76	0.0	0.0	0.0	284.16
		230.99	0.0	0.0	0.0	30.0	-515.65	-167.79	0.0	0.0	0.0	230.99
13	37	228.98	0.0	-1.26e-03	26.59	0.0	-501.38	-214.21	0.0	0.0	0.0	228.98
		168.73	0.0	0.0	0.0	30.0	-495.31	-187.62	0.0	0.0	0.0	168.73
13	38	222.54	0.0	-1.26e-03	26.59	0.0	-499.08	-214.21	0.0	0.0	0.0	222.54
		162.28	0.0	0.0	0.0	30.0	-493.00	-187.62	0.0	0.0	0.0	162.28
13	39	230.82	0.0	-1.25e-03	26.59	0.0	-500.23	-215.85	0.0	0.0	0.0	230.82
		170.08	0.0	0.0	0.0	30.0	-494.15	-189.26	0.0	0.0	0.0	170.08
13	40	220.69	0.0	-1.27e-03	26.59	0.0	-500.23	-212.57	0.0	0.0	0.0	220.69
		160.94	0.0	0.0	0.0	30.0	-494.15	-185.98	0.0	0.0	0.0	160.94
13	41	92.09	0.0	-3.00e-03	16.66	0.0	-525.30	-103.34	0.0	0.0	0.0	92.09
		63.60	0.0	0.0	0.0	30.0	-519.23	-86.68	0.0	0.0	0.0	63.60
13	42	85.65	0.0	-3.00e-03	16.66	0.0	-523.00	-103.34	0.0	0.0	0.0	85.65
		57.16	0.0	0.0	0.0	30.0	-516.93	-86.68	0.0	0.0	0.0	57.16
13	43	93.93	0.0	-2.99e-03	16.66	0.0	-524.15	-104.98	0.0	0.0	0.0	93.93
		64.95	0.0	0.0	0.0	30.0	-518.08	-88.32	0.0	0.0	0.0	64.95
13	44	83.80	0.0	-3.01e-03	16.66	0.0	-524.15	-101.70	0.0	0.0	0.0	83.80
		55.81	0.0	0.0	0.0	30.0	-518.08	-85.04	0.0	0.0	0.0	55.81
13	45	187.77	0.0	-1.32e-03	16.66	0.0	-501.38	-131.38	0.0	0.0	0.0	187.77
		150.87	0.0	0.0	0.0	30.0	-495.31	-114.72	0.0	0.0	0.0	150.87
13	46	181.32	0.0	-1.32e-03	16.66	0.0	-499.08	-131.38	0.0	0.0	0.0	181.32
		144.42	0.0	0.0	0.0	30.0	-493.00	-114.72	0.0	0.0	0.0	144.42
13	47	189.61	0.0	-1.31e-03	16.66	0.0	-500.23	-133.02	0.0	0.0	0.0	189.61
		152.22	0.0	0.0	0.0	30.0	-494.15	-116.36	0.0	0.0	0.0	152.22
13	48	179.48	0.0	-1.32e-03	16.66	0.0	-500.23	-129.74	0.0	0.0	0.0	179.48
		143.07	0.0	0.0	0.0	30.0	-494.15	-113.08	0.0	0.0	0.0	143.07
13	49	313.53	0.0	3.86e-05	28.32	0.0	-482.11	-261.85	0.0	0.0	0.0	313.53
		239.25	0.0	0.0	0.0	30.0	-476.03	-233.53	0.0	0.0	0.0	239.25
13	50	307.08	0.0	4.24e-05	28.32	0.0	-479.81	-261.85	0.0	0.0	0.0	307.08
		232.80	0.0	0.0	0.0	30.0	-473.73	-233.53	0.0	0.0	0.0	232.80
13	51	315.37	0.0	3.33e-05	28.32	0.0	-480.96	-263.49	0.0	0.0	0.0	315.37
		240.60	0.0	0.0	0.0	30.0	-474.88	-235.17	0.0	0.0	0.0	240.60
13	52	305.24	0.0	4.78e-05	28.32	0.0	-480.96	-260.21	0.0	0.0	0.0	305.24
		231.45	0.0	0.0	0.0	30.0	-474.88	-231.89	0.0	0.0	0.0	231.45
13	53	176.64	0.0	-1.78e-03	18.39	0.0	-506.03	-150.98	0.0	0.0	0.0	176.64
		134.12	0.0	0.0	0.0	30.0	-499.96	-132.60	0.0	0.0	0.0	134.12
13	54	170.19	0.0	-1.78e-03	18.39	0.0	-503.73	-150.98	0.0	0.0	0.0	170.19
		127.67	0.0	0.0	0.0	30.0	-497.65	-132.60	0.0	0.0	0.0	127.67
13	55	178.48	0.0	-1.77e-03	18.39	0.0	-504.88	-152.62	0.0	0.0	0.0	178.48

Pilas.	Cmb	M3 mx/mn	M2 mx/mn	D 2 / D 3	Q 2 / Q 3	Pos.	N	V 2	V 3	T	M 2	M 3
		135.47	0.0	0.0	0.0	30.0	-498.80	-134.24	0.0	0.0	0.0	135.47
13	56	168.35	0.0	-1.79e-03	18.39	0.0	-504.88	-149.34	0.0	0.0	0.0	168.35
		126.32	0.0	0.0	0.0	30.0	-498.80	-130.96	0.0	0.0	0.0	126.32
13	57	272.32	0.0	-9.72e-05	18.39	0.0	-482.11	-179.02	0.0	0.0	0.0	272.32
		221.38	0.0	0.0	0.0	30.0	-476.03	-160.64	0.0	0.0	0.0	221.38
13	58	265.87	0.0	-1.01e-04	18.39	0.0	-479.81	-179.02	0.0	0.0	0.0	265.87
		214.94	0.0	0.0	0.0	30.0	-473.73	-160.64	0.0	0.0	0.0	214.94
13	59	274.16	0.0	-9.19e-05	18.39	0.0	-480.96	-180.66	0.0	0.0	0.0	274.16
		222.73	0.0	0.0	0.0	30.0	-474.88	-162.28	0.0	0.0	0.0	222.73
13	60	264.03	0.0	-1.06e-04	18.39	0.0	-480.96	-177.38	0.0	0.0	0.0	264.03
		213.59	0.0	0.0	0.0	30.0	-474.88	-159.00	0.0	0.0	0.0	213.59
13	61	44.29	0.0	-4.84e-03	26.59	0.0	-574.80	-154.98	0.0	0.0	0.0	44.29
		1.81	0.0	0.0	0.0	30.0	-568.73	-128.39	0.0	0.0	0.0	1.81
13	62	37.84	0.0	-4.84e-03	26.59	0.0	-572.50	-154.98	0.0	0.0	0.0	37.84
		-4.64	0.0	0.0	0.0	30.0	-566.43	-128.39	0.0	0.0	0.0	-4.64
13	63	46.13	0.0	-4.83e-03	26.59	0.0	-573.65	-156.62	0.0	0.0	0.0	46.13
		3.16	0.0	0.0	0.0	30.0	-567.58	-130.03	0.0	0.0	0.0	3.16
13	64	36.00	0.0	-4.85e-03	26.59	0.0	-573.65	-153.34	0.0	0.0	0.0	36.00
		-5.99	0.0	0.0	0.0	30.0	-567.58	-126.75	0.0	0.0	0.0	-5.99
13	65	-92.60	0.0	-6.58e-03	16.66	0.0	-598.73	-44.11	0.0	0.0	0.0	-92.60
		-103.32	0.0	0.0	0.0	30.0	-592.65	-27.46	0.0	0.0	0.0	-103.32
13	66	-99.05	0.0	-6.58e-03	16.66	0.0	-596.42	-44.11	0.0	0.0	0.0	-99.05
		-109.77	0.0	0.0	0.0	30.0	-590.35	-27.46	0.0	0.0	0.0	-109.77
13	67	-90.76	0.0	-6.57e-03	16.66	0.0	-597.58	-45.75	0.0	0.0	0.0	-90.76
		-101.97	0.0	0.0	0.0	30.0	-591.50	-29.10	0.0	0.0	0.0	-101.97
13	68	-100.89	0.0	-6.59e-03	16.66	0.0	-597.58	-42.47	0.0	0.0	0.0	-100.89
		-111.12	0.0	0.0	0.0	30.0	-591.50	-25.82	0.0	0.0	0.0	-111.12
13	69	3.08	0.0	-4.90e-03	16.66	0.0	-574.80	-72.15	0.0	0.0	0.0	3.08
		-16.06	0.0	0.0	0.0	30.0	-568.73	-55.50	0.0	0.0	0.0	-16.06
13	70	-3.37	0.0	-4.90e-03	16.66	0.0	-572.50	-72.15	0.0	0.0	0.0	-3.37
		-22.50	0.0	0.0	0.0	30.0	-566.43	-55.50	0.0	0.0	0.0	-22.50
13	71	4.92	0.0	-4.89e-03	16.66	0.0	-573.65	-73.79	0.0	0.0	0.0	4.92
		-14.71	0.0	0.0	0.0	30.0	-567.58	-57.14	0.0	0.0	0.0	-14.71
13	72	-5.21	0.0	-4.90e-03	16.66	0.0	-573.65	-70.51	0.0	0.0	0.0	-5.21
		-23.85	0.0	0.0	0.0	30.0	-567.58	-53.86	0.0	0.0	0.0	-23.85
13	73	128.84	0.0	-3.62e-03	28.32	0.0	-555.53	-202.63	0.0	0.0	0.0	128.84
		72.32	0.0	0.0	0.0	30.0	-549.46	-174.30	0.0	0.0	0.0	72.32
13	74	122.39	0.0	-3.62e-03	28.32	0.0	-553.23	-202.63	0.0	0.0	0.0	122.39
		65.87	0.0	0.0	0.0	30.0	-547.15	-174.30	0.0	0.0	0.0	65.87
13	75	130.68	0.0	-3.61e-03	28.32	0.0	-554.38	-204.27	0.0	0.0	0.0	130.68
		73.67	0.0	0.0	0.0	30.0	-548.30	-175.94	0.0	0.0	0.0	73.67
13	76	120.55	0.0	-3.63e-03	28.32	0.0	-554.38	-200.99	0.0	0.0	0.0	120.55
		64.53	0.0	0.0	0.0	30.0	-548.30	-172.66	0.0	0.0	0.0	64.53
13	77	-8.05	0.0	-5.36e-03	18.39	0.0	-579.45	-91.76	0.0	0.0	0.0	-8.05
		-32.81	0.0	0.0	0.0	30.0	-573.38	-73.37	0.0	0.0	0.0	-32.81
13	78	-14.50	0.0	-5.36e-03	18.39	0.0	-577.15	-91.76	0.0	0.0	0.0	-14.50
		-39.25	0.0	0.0	0.0	30.0	-571.08	-73.37	0.0	0.0	0.0	-39.25
13	79	-6.21	0.0	-5.35e-03	18.39	0.0	-578.30	-93.40	0.0	0.0	0.0	-6.21
		-31.46	0.0	0.0	0.0	30.0	-572.23	-75.01	0.0	0.0	0.0	-31.46
13	80	-16.34	0.0	-5.37e-03	18.39	0.0	-578.30	-90.12	0.0	0.0	0.0	-16.34
		-40.60	0.0	0.0	0.0	30.0	-572.23	-71.73	0.0	0.0	0.0	-40.60
13	81	87.63	0.0	-3.68e-03	18.39	0.0	-555.53	-119.80	0.0	0.0	0.0	87.63
		54.46	0.0	0.0	0.0	30.0	-549.46	-101.41	0.0	0.0	0.0	54.46
13	82	81.18	0.0	-3.68e-03	18.39	0.0	-553.23	-119.80	0.0	0.0	0.0	81.18
		48.01	0.0	0.0	0.0	30.0	-547.15	-101.41	0.0	0.0	0.0	48.01
13	83	89.47	0.0	-3.67e-03	18.39	0.0	-554.38	-121.44	0.0	0.0	0.0	89.47
		55.81	0.0	0.0	0.0	30.0	-548.30	-103.05	0.0	0.0	0.0	55.81
13	84	79.34	0.0	-3.69e-03	18.39	0.0	-554.38	-118.16	0.0	0.0	0.0	79.34
		46.66	0.0	0.0	0.0	30.0	-548.30	-99.77	0.0	0.0	0.0	46.66
13	85	226.50	0.0	-1.25e-03	26.59	0.0	-501.38	-213.74	0.0	0.0	0.0	226.50
		166.39	0.0	0.0	0.0	30.0	-495.31	-187.15	0.0	0.0	0.0	166.39
13	86	220.05	0.0	-1.26e-03	26.59	0.0	-499.08	-213.74	0.0	0.0	0.0	220.05
		159.95	0.0	0.0	0.0	30.0	-493.00	-187.15	0.0	0.0	0.0	159.95
13	87	228.34	0.0	-1.25e-03	26.59	0.0	-500.23	-215.38	0.0	0.0	0.0	228.34
		167.74	0.0	0.0	0.0	30.0	-494.15	-188.79	0.0	0.0	0.0	167.74
13	88	218.21	0.0	-1.26e-03	26.59	0.0	-500.23	-212.10	0.0	0.0	0.0	218.21
		158.60	0.0	0.0	0.0	30.0	-494.15	-185.51	0.0	0.0	0.0	158.60
13	89	89.61	0.0	-2.99e-03	16.66	0.0	-525.30	-102.87	0.0	0.0	0.0	89.61
		61.26	0.0	0.0	0.0	30.0	-519.23	-86.22	0.0	0.0	0.0	61.26
13	90	83.16	0.0	-3.00e-03	16.66	0.0	-523.00	-102.87	0.0	0.0	0.0	83.16
		54.82	0.0	0.0	0.0	30.0	-516.93	-86.22	0.0	0.0	0.0	54.82
13	91	91.45	0.0	-2.99e-03	16.66	0.0	-524.15	-104.51	0.0	0.0	0.0	91.45
		62.61	0.0	0.0	0.0	30.0	-518.08	-87.85	0.0	0.0	0.0	62.61
13	92	81.32	0.0	-3.00e-03	16.66	0.0	-524.15	-101.23	0.0	0.0	0.0	81.32
		53.47	0.0	0.0	0.0	30.0	-518.08	-84.58	0.0	0.0	0.0	53.47

Pilas.	Cmb	M3 mx/mn	M2 mx/mn	D 2 / D 3	Q 2 / Q 3	Pos.	N	V 2	V 3	T	M 2	M 3
13	93	185.29	0.0	-1.31e-03	16.66	0.0	-501.38	-130.91	0.0	0.0	0.0	185.29
		148.53	0.0	0.0	0.0	30.0	-495.31	-114.25	0.0	0.0	0.0	148.53
13	94	178.84	0.0	-1.32e-03	16.66	0.0	-499.08	-130.91	0.0	0.0	0.0	178.84
		142.08	0.0	0.0	0.0	30.0	-493.00	-114.25	0.0	0.0	0.0	142.08
13	95	187.13	0.0	-1.31e-03	16.66	0.0	-500.23	-132.55	0.0	0.0	0.0	187.13
		149.88	0.0	0.0	0.0	30.0	-494.15	-115.89	0.0	0.0	0.0	149.88
13	96	177.00	0.0	-1.32e-03	16.66	0.0	-500.23	-129.27	0.0	0.0	0.0	177.00
		140.73	0.0	0.0	0.0	30.0	-494.15	-112.61	0.0	0.0	0.0	140.73
13	97	311.05	0.0	3.66e-05	28.32	0.0	-482.11	-261.38	0.0	0.0	0.0	311.05
		236.91	0.0	0.0	0.0	30.0	-476.03	-233.06	0.0	0.0	0.0	236.91
13	98	304.60	0.0	4.04e-05	28.32	0.0	-479.81	-261.38	0.0	0.0	0.0	304.60
		230.46	0.0	0.0	0.0	30.0	-473.73	-233.06	0.0	0.0	0.0	230.46
13	99	312.89	0.0	3.12e-05	28.32	0.0	-480.96	-263.02	0.0	0.0	0.0	312.89
		238.26	0.0	0.0	0.0	30.0	-474.88	-234.70	0.0	0.0	0.0	238.26
13	100	302.76	0.0	4.57e-05	28.32	0.0	-480.96	-259.74	0.0	0.0	0.0	302.76
		229.11	0.0	0.0	0.0	30.0	-474.88	-231.42	0.0	0.0	0.0	229.11
13	101	174.16	0.0	-1.78e-03	18.39	0.0	-506.03	-150.51	0.0	0.0	0.0	174.16
		131.78	0.0	0.0	0.0	30.0	-499.96	-132.13	0.0	0.0	0.0	131.78
13	102	167.71	0.0	-1.78e-03	18.39	0.0	-503.73	-150.51	0.0	0.0	0.0	167.71
		125.33	0.0	0.0	0.0	30.0	-497.65	-132.13	0.0	0.0	0.0	125.33
13	103	176.00	0.0	-1.77e-03	18.39	0.0	-504.88	-152.15	0.0	0.0	0.0	176.00
		133.13	0.0	0.0	0.0	30.0	-498.80	-133.77	0.0	0.0	0.0	133.13
13	104	165.87	0.0	-1.79e-03	18.39	0.0	-504.88	-148.87	0.0	0.0	0.0	165.87
		123.98	0.0	0.0	0.0	30.0	-498.80	-130.49	0.0	0.0	0.0	123.98
13	105	269.84	0.0	-9.52e-05	18.39	0.0	-482.11	-178.55	0.0	0.0	0.0	269.84
		219.05	0.0	0.0	0.0	30.0	-476.03	-160.17	0.0	0.0	0.0	219.05
13	106	263.39	0.0	-9.90e-05	18.39	0.0	-479.81	-178.55	0.0	0.0	0.0	263.39
		212.60	0.0	0.0	0.0	30.0	-473.73	-160.17	0.0	0.0	0.0	212.60
13	107	271.68	0.0	-8.98e-05	18.39	0.0	-480.96	-180.19	0.0	0.0	0.0	271.68
		220.39	0.0	0.0	0.0	30.0	-474.88	-161.81	0.0	0.0	0.0	220.39
13	108	261.55	0.0	-1.04e-04	18.39	0.0	-480.96	-176.91	0.0	0.0	0.0	261.55
		211.25	0.0	0.0	0.0	30.0	-474.88	-158.53	0.0	0.0	0.0	211.25
13	109	-509.19	0.0	-0.01	5.01	0.0	-491.32	189.34	0.0	0.0	0.0	-566.76
		-566.76	0.0	0.0	0.0	30.0	-486.82	194.35	0.0	0.0	0.0	-509.19
13	110	234.83	0.0	-6.02e-05	19.70	0.0	-357.45	-176.50	0.0	0.0	0.0	234.83
		184.85	0.0	0.0	0.0	30.0	-352.95	-156.80	0.0	0.0	0.0	184.85
13	111	229.46	0.0	-6.34e-05	19.70	0.0	-355.53	-176.50	0.0	0.0	0.0	229.46
		179.48	0.0	0.0	0.0	30.0	-351.03	-156.80	0.0	0.0	0.0	179.48
13	112	236.36	0.0	-5.57e-05	19.70	0.0	-356.49	-177.87	0.0	0.0	0.0	236.36
		185.97	0.0	0.0	0.0	30.0	-351.99	-158.17	0.0	0.0	0.0	185.97
13	113	227.92	0.0	-6.79e-05	19.70	0.0	-356.49	-175.14	0.0	0.0	0.0	227.92
		178.35	0.0	0.0	0.0	30.0	-351.99	-155.44	0.0	0.0	0.0	178.35
13	114	133.43	0.0	-1.35e-03	12.34	0.0	-375.17	-94.38	0.0	0.0	0.0	133.43
		106.98	0.0	0.0	0.0	30.0	-370.67	-82.04	0.0	0.0	0.0	106.98
13	115	128.06	0.0	-1.35e-03	12.34	0.0	-373.25	-94.38	0.0	0.0	0.0	128.06
		101.60	0.0	0.0	0.0	30.0	-368.75	-82.04	0.0	0.0	0.0	101.60
13	116	134.96	0.0	-1.34e-03	12.34	0.0	-374.21	-95.74	0.0	0.0	0.0	134.96
		108.10	0.0	0.0	0.0	30.0	-369.71	-83.41	0.0	0.0	0.0	108.10
13	117	126.52	0.0	-1.36e-03	12.34	0.0	-374.21	-93.01	0.0	0.0	0.0	126.52
		100.48	0.0	0.0	0.0	30.0	-369.71	-80.67	0.0	0.0	0.0	100.48
13	118	204.30	0.0	-1.04e-04	12.34	0.0	-357.45	-115.15	0.0	0.0	0.0	204.30
		171.62	0.0	0.0	0.0	30.0	-352.95	-102.81	0.0	0.0	0.0	171.62
13	119	198.93	0.0	-1.07e-04	12.34	0.0	-355.53	-115.15	0.0	0.0	0.0	198.93
		166.25	0.0	0.0	0.0	30.0	-351.03	-102.81	0.0	0.0	0.0	166.25
13	120	205.84	0.0	-9.92e-05	12.34	0.0	-356.49	-116.51	0.0	0.0	0.0	205.84
		172.74	0.0	0.0	0.0	30.0	-351.99	-104.18	0.0	0.0	0.0	172.74
13	121	197.39	0.0	-1.11e-04	12.34	0.0	-356.49	-113.78	0.0	0.0	0.0	197.39
		165.12	0.0	0.0	0.0	30.0	-351.99	-101.44	0.0	0.0	0.0	165.12
13	122	84.12	0.0	-2.94e-03	19.70	0.0	-412.55	-128.92	0.0	0.0	0.0	84.12
		48.41	0.0	0.0	0.0	30.0	-408.05	-109.22	0.0	0.0	0.0	48.41
13	123	78.75	0.0	-2.94e-03	19.70	0.0	-410.63	-128.92	0.0	0.0	0.0	78.75
		43.04	0.0	0.0	0.0	30.0	-406.13	-109.22	0.0	0.0	0.0	43.04
13	124	85.65	0.0	-2.93e-03	19.70	0.0	-411.59	-130.29	0.0	0.0	0.0	85.65
		49.54	0.0	0.0	0.0	30.0	-407.09	-110.59	0.0	0.0	0.0	49.54
13	125	77.21	0.0	-2.94e-03	19.70	0.0	-411.59	-127.56	0.0	0.0	0.0	77.21
		41.92	0.0	0.0	0.0	30.0	-407.09	-107.86	0.0	0.0	0.0	41.92
13	126	-17.28	0.0	-4.22e-03	12.34	0.0	-430.27	-46.80	0.0	0.0	0.0	-17.28
		-29.46	0.0	0.0	0.0	30.0	-425.77	-34.46	0.0	0.0	0.0	-29.46
13	127	-22.65	0.0	-4.23e-03	12.34	0.0	-428.35	-46.80	0.0	0.0	0.0	-22.65
		-34.83	0.0	0.0	0.0	30.0	-423.85	-34.46	0.0	0.0	0.0	-34.83
13	128	-15.75	0.0	-4.22e-03	12.34	0.0	-429.31	-48.16	0.0	0.0	0.0	-15.75
		-28.34	0.0	0.0	0.0	30.0	-424.81	-35.83	0.0	0.0	0.0	-28.34
13	129	-24.19	0.0	-4.23e-03	12.34	0.0	-429.31	-45.43	0.0	0.0	0.0	-24.19
		-35.96	0.0	0.0	0.0	30.0	-424.81	-33.09	0.0	0.0	0.0	-35.96
13	130	53.59	0.0	-2.98e-03	12.34	0.0	-412.55	-67.57	0.0	0.0	0.0	53.59

Pilas.	Cmb	M3 mx/mn	M2 mx/mn	D 2 / D 3	Q 2 / Q 3	Pos.	N	V 2	V 3	T	M 2	M 3
		35.18	0.0	0.0	0.0	30.0	-408.05	-55.23	0.0	0.0	0.0	35.18
13	131	48.22	0.0	-2.98e-03	12.34	0.0	-410.63	-67.57	0.0	0.0	0.0	48.22
		29.81	0.0	0.0	0.0	30.0	-406.13	-55.23	0.0	0.0	0.0	29.81
13	132	55.13	0.0	-2.97e-03	12.34	0.0	-411.59	-68.93	0.0	0.0	0.0	55.13
		36.31	0.0	0.0	0.0	30.0	-407.09	-56.60	0.0	0.0	0.0	36.31
13	133	46.68	0.0	-2.99e-03	12.34	0.0	-411.59	-66.20	0.0	0.0	0.0	46.68
		28.69	0.0	0.0	0.0	30.0	-407.09	-53.86	0.0	0.0	0.0	28.69
13	134	146.90	0.0	-2.03e-03	20.98	0.0	-398.24	-164.30	0.0	0.0	0.0	146.90
		100.78	0.0	0.0	0.0	30.0	-393.74	-143.32	0.0	0.0	0.0	100.78
13	135	141.53	0.0	-2.03e-03	20.98	0.0	-396.32	-164.30	0.0	0.0	0.0	141.53
		95.40	0.0	0.0	0.0	30.0	-391.82	-143.32	0.0	0.0	0.0	95.40
13	136	148.44	0.0	-2.03e-03	20.98	0.0	-397.28	-165.67	0.0	0.0	0.0	148.44
		101.90	0.0	0.0	0.0	30.0	-392.78	-144.68	0.0	0.0	0.0	101.90
13	137	139.99	0.0	-2.04e-03	20.98	0.0	-397.28	-162.93	0.0	0.0	0.0	139.99
		94.28	0.0	0.0	0.0	30.0	-392.78	-141.95	0.0	0.0	0.0	94.28
13	138	45.50	0.0	-3.32e-03	13.62	0.0	-415.96	-82.18	0.0	0.0	0.0	45.50
		22.90	0.0	0.0	0.0	30.0	-411.46	-68.55	0.0	0.0	0.0	22.90
13	139	40.13	0.0	-3.32e-03	13.62	0.0	-414.04	-82.18	0.0	0.0	0.0	40.13
		17.53	0.0	0.0	0.0	30.0	-409.54	-68.55	0.0	0.0	0.0	17.53
13	140	47.04	0.0	-3.32e-03	13.62	0.0	-415.00	-83.54	0.0	0.0	0.0	47.04
		24.03	0.0	0.0	0.0	30.0	-410.50	-69.92	0.0	0.0	0.0	24.03
13	141	38.59	0.0	-3.33e-03	13.62	0.0	-415.00	-80.81	0.0	0.0	0.0	38.59
		16.41	0.0	0.0	0.0	30.0	-410.50	-67.19	0.0	0.0	0.0	16.41
13	142	116.37	0.0	-2.07e-03	13.62	0.0	-398.24	-102.95	0.0	0.0	0.0	116.37
		87.54	0.0	0.0	0.0	30.0	-393.74	-89.32	0.0	0.0	0.0	87.54
13	143	111.00	0.0	-2.08e-03	13.62	0.0	-396.32	-102.95	0.0	0.0	0.0	111.00
		82.17	0.0	0.0	0.0	30.0	-391.82	-89.32	0.0	0.0	0.0	82.17
13	144	117.91	0.0	-2.07e-03	13.62	0.0	-397.28	-104.31	0.0	0.0	0.0	117.91
		88.67	0.0	0.0	0.0	30.0	-392.78	-90.69	0.0	0.0	0.0	88.67
13	145	109.47	0.0	-2.08e-03	13.62	0.0	-397.28	-101.58	0.0	0.0	0.0	109.47
		81.05	0.0	0.0	0.0	30.0	-392.78	-87.96	0.0	0.0	0.0	81.05
13	146	197.80	0.0	1.15e-05	19.70	0.0	-267.35	-175.22	0.0	0.0	0.0	197.80
		148.21	0.0	0.0	0.0	30.0	-262.85	-155.53	0.0	0.0	0.0	148.21
13	147	193.33	0.0	1.41e-05	19.70	0.0	-265.76	-175.22	0.0	0.0	0.0	193.33
		143.73	0.0	0.0	0.0	30.0	-261.26	-155.53	0.0	0.0	0.0	143.73
13	148	199.08	0.0	7.76e-06	19.70	0.0	-266.55	-176.36	0.0	0.0	0.0	199.08
		149.15	0.0	0.0	0.0	30.0	-262.05	-156.67	0.0	0.0	0.0	149.15
13	149	192.05	0.0	1.78e-05	19.70	0.0	-266.55	-174.09	0.0	0.0	0.0	192.05
		142.80	0.0	0.0	0.0	30.0	-262.05	-154.39	0.0	0.0	0.0	142.80
13	150	96.40	0.0	-1.30e-03	12.34	0.0	-285.08	-93.10	0.0	0.0	0.0	96.40
		70.34	0.0	0.0	0.0	30.0	-280.58	-80.76	0.0	0.0	0.0	70.34
13	151	91.93	0.0	-1.30e-03	12.34	0.0	-283.48	-93.10	0.0	0.0	0.0	91.93
		65.86	0.0	0.0	0.0	30.0	-278.98	-80.76	0.0	0.0	0.0	65.86
13	152	97.68	0.0	-1.30e-03	12.34	0.0	-284.28	-94.24	0.0	0.0	0.0	97.68
		71.27	0.0	0.0	0.0	30.0	-279.78	-81.90	0.0	0.0	0.0	71.27
13	153	97.68	0.0	-1.30e-03	12.34	0.0	-284.28	-94.24	0.0	0.0	0.0	97.68
		71.27	0.0	0.0	0.0	30.0	-279.78	-81.90	0.0	0.0	0.0	71.27
13	154	167.28	0.0	-5.49e-05	12.34	0.0	-267.35	-113.87	0.0	0.0	0.0	167.28
		134.98	0.0	0.0	0.0	30.0	-262.85	-101.53	0.0	0.0	0.0	134.98
13	155	162.80	0.0	-5.76e-05	12.34	0.0	-265.76	-113.87	0.0	0.0	0.0	162.80
		130.50	0.0	0.0	0.0	30.0	-261.26	-101.53	0.0	0.0	0.0	130.50
13	156	168.56	0.0	-5.12e-05	12.34	0.0	-266.55	-115.01	0.0	0.0	0.0	168.56
		135.92	0.0	0.0	0.0	30.0	-262.05	-102.67	0.0	0.0	0.0	135.92
13	157	168.56	0.0	-5.12e-05	12.34	0.0	-266.55	-115.01	0.0	0.0	0.0	168.56
		135.92	0.0	0.0	0.0	30.0	-262.05	-102.67	0.0	0.0	0.0	135.92
13	158	64.31	0.0	-3.23e-03	19.70	0.0	-447.29	-121.44	0.0	0.0	0.0	64.31
		30.85	0.0	0.0	0.0	30.0	-442.79	-101.74	0.0	0.0	0.0	30.85
13	159	58.94	0.0	-3.24e-03	19.70	0.0	-445.38	-121.44	0.0	0.0	0.0	58.94
		25.48	0.0	0.0	0.0	30.0	-440.88	-101.74	0.0	0.0	0.0	25.48
13	160	65.85	0.0	-3.23e-03	19.70	0.0	-446.34	-122.80	0.0	0.0	0.0	65.85
		31.98	0.0	0.0	0.0	30.0	-441.84	-103.10	0.0	0.0	0.0	31.98
13	161	57.41	0.0	-3.24e-03	19.70	0.0	-446.34	-120.07	0.0	0.0	0.0	57.41
		24.36	0.0	0.0	0.0	30.0	-441.84	-100.37	0.0	0.0	0.0	24.36
13	162	-37.09	0.0	-4.52e-03	12.34	0.0	-465.02	-39.31	0.0	0.0	0.0	-37.09
		-47.02	0.0	0.0	0.0	30.0	-460.52	-26.97	0.0	0.0	0.0	-47.02
13	163	-42.46	0.0	-4.53e-03	12.34	0.0	-463.10	-39.31	0.0	0.0	0.0	-42.46
		-52.39	0.0	0.0	0.0	30.0	-458.60	-26.97	0.0	0.0	0.0	-52.39
13	164	-35.55	0.0	-4.52e-03	12.34	0.0	-464.06	-40.68	0.0	0.0	0.0	-35.55
		-45.89	0.0	0.0	0.0	30.0	-459.56	-28.34	0.0	0.0	0.0	-45.89
13	165	-43.99	0.0	-4.53e-03	12.34	0.0	-464.06	-37.94	0.0	0.0	0.0	-43.99
		-53.52	0.0	0.0	0.0	30.0	-459.56	-25.61	0.0	0.0	0.0	-53.52
13	166	33.79	0.0	-3.28e-03	12.34	0.0	-447.29	-60.08	0.0	0.0	0.0	33.79
		17.62	0.0	0.0	0.0	30.0	-442.79	-47.74	0.0	0.0	0.0	17.62
13	167	28.41	0.0	-3.28e-03	12.34	0.0	-445.38	-60.08	0.0	0.0	0.0	28.41
		12.25	0.0	0.0	0.0	30.0	-440.88	-47.74	0.0	0.0	0.0	12.25

Pilas.	Cmb	M3 mx/mn	M2 mx/mn	D 2 / D 3	Q 2 / Q 3	Pos.	N	V 2	V 3	T	M 2	M 3
13	168	35.32	0.0	-3.27e-03	12.34	0.0	-446.34	-61.45	0.0	0.0	0.0	35.32
		18.75	0.0	0.0	0.0	30.0	-441.84	-49.11	0.0	0.0	0.0	18.75
13	169	26.88	0.0	-3.29e-03	12.34	0.0	-446.34	-58.71	0.0	0.0	0.0	26.88
		11.13	0.0	0.0	0.0	30.0	-441.84	-46.38	0.0	0.0	0.0	11.13
13	170	148.02	0.0	-2.03e-03	21.41	0.0	-428.21	-168.61	0.0	0.0	0.0	148.02
		100.67	0.0	0.0	0.0	30.0	-423.71	-147.20	0.0	0.0	0.0	100.67
13	171	142.65	0.0	-2.03e-03	21.41	0.0	-426.29	-168.61	0.0	0.0	0.0	142.65
		95.30	0.0	0.0	0.0	30.0	-421.79	-147.20	0.0	0.0	0.0	95.30
13	172	149.56	0.0	-2.02e-03	21.41	0.0	-427.25	-169.97	0.0	0.0	0.0	149.56
		101.80	0.0	0.0	0.0	30.0	-422.75	-148.56	0.0	0.0	0.0	101.80
13	173	141.12	0.0	-2.04e-03	21.41	0.0	-427.25	-167.24	0.0	0.0	0.0	141.12
		94.17	0.0	0.0	0.0	30.0	-422.75	-145.83	0.0	0.0	0.0	94.17
13	174	46.62	0.0	-3.32e-03	14.05	0.0	-445.93	-86.48	0.0	0.0	0.0	46.62
		22.80	0.0	0.0	0.0	30.0	-441.43	-72.43	0.0	0.0	0.0	22.80
13	175	41.25	0.0	-3.32e-03	14.05	0.0	-444.02	-86.48	0.0	0.0	0.0	41.25
		17.43	0.0	0.0	0.0	30.0	-439.52	-72.43	0.0	0.0	0.0	17.43
13	176	48.16	0.0	-3.31e-03	14.05	0.0	-444.97	-87.85	0.0	0.0	0.0	48.16
		23.92	0.0	0.0	0.0	30.0	-440.47	-73.80	0.0	0.0	0.0	23.92
13	177	39.72	0.0	-3.32e-03	14.05	0.0	-444.97	-85.12	0.0	0.0	0.0	39.72
		16.30	0.0	0.0	0.0	30.0	-440.47	-71.07	0.0	0.0	0.0	16.30
13	178	117.50	0.0	-2.07e-03	14.05	0.0	-428.21	-107.25	0.0	0.0	0.0	117.50
		87.44	0.0	0.0	0.0	30.0	-423.71	-93.20	0.0	0.0	0.0	87.44
13	179	112.13	0.0	-2.08e-03	14.05	0.0	-426.29	-107.25	0.0	0.0	0.0	112.13
		82.07	0.0	0.0	0.0	30.0	-421.79	-93.20	0.0	0.0	0.0	82.07
13	180	119.03	0.0	-2.07e-03	14.05	0.0	-427.25	-108.62	0.0	0.0	0.0	119.03
		88.56	0.0	0.0	0.0	30.0	-422.75	-94.57	0.0	0.0	0.0	88.56
13	181	110.59	0.0	-2.08e-03	14.05	0.0	-427.25	-105.89	0.0	0.0	0.0	110.59
		80.94	0.0	0.0	0.0	30.0	-422.75	-91.84	0.0	0.0	0.0	80.94
Pilas.		**M3 mx/mn**	**M2 mx/mn**	**D 2 / D 3**	**Q 2 / Q 3**		**N**	**V 2**	**V 3**	**T**		
		-974.87	0.0	-0.25	-544.08		-598.73	-272.87	0.0	0.0		
		707.28	0.0	4.44e-04	420.27		15.48	540.38	0.0	0.0		

Trave	Cmb	M3 mx/mn	M2 mx/mn	D 2 / D 3	Q 2 / Q 3	Pos.	N	V 2	V 3	T	M 2	M 3
		kN m	kN m	m	kN	cm	kN	kN	kN	kN m	kN m	kN m
1	1	107.48	0.0	-2.81e-04	-364.84	0.0	-135.17	180.50	0.0	0.0	0.0	-115.74
		-125.34	0.0	0.0	0.0	500.0	-135.17	-184.34	0.0	0.0	0.0	-125.34
1	2	107.48	0.0	-2.81e-04	-364.84	0.0	-135.17	184.34	0.0	0.0	0.0	-125.34
		-125.34	0.0	0.0	0.0	500.0	-135.17	-180.50	0.0	0.0	0.0	-115.74
1	3	117.08	0.0	-2.95e-04	-364.84	0.0	-132.44	182.42	0.0	0.0	0.0	-110.94
		-110.94	0.0	0.0	0.0	500.0	-132.44	-182.42	0.0	0.0	0.0	-110.94
1	4	97.88	0.0	-2.22e-04	-364.84	0.0	-137.91	182.42	0.0	0.0	0.0	-130.14
		-130.14	0.0	0.0	0.0	500.0	-137.91	-182.42	0.0	0.0	0.0	-130.14
1	5	134.39	0.0	-0.03	-364.84	0.0	-107.13	156.58	0.0	0.0	0.0	-33.54
		-162.75	0.0	0.0	0.0	500.0	-107.13	-208.26	0.0	0.0	0.0	-162.75
1	6	133.19	0.0	-0.03	-364.84	0.0	-107.13	160.41	0.0	0.0	0.0	-43.14
		-153.16	0.0	0.0	0.0	500.0	-107.13	-204.42	0.0	0.0	0.0	-153.16
1	7	143.38	0.0	-0.03	-364.84	0.0	-104.40	158.50	0.0	0.0	0.0	-28.74
		-148.36	0.0	0.0	0.0	500.0	-104.40	-206.34	0.0	0.0	0.0	-148.36
1	8	124.19	0.0	-0.03	-364.84	0.0	-109.87	158.50	0.0	0.0	0.0	-47.94
		-167.56	0.0	0.0	0.0	500.0	-109.87	-206.34	0.0	0.0	0.0	-167.56
1	9	152.27	0.0	-4.48e-04	-364.84	0.0	-79.09	180.50	0.0	0.0	0.0	-70.96
		-80.55	0.0	0.0	0.0	500.0	-79.09	-184.34	0.0	0.0	0.0	-80.55
1	10	152.27	0.0	-4.48e-04	-364.84	0.0	-79.09	184.34	0.0	0.0	0.0	-80.55
		-80.55	0.0	0.0	0.0	500.0	-79.09	-180.50	0.0	0.0	0.0	-70.96
1	11	161.86	0.0	-4.65e-04	-364.84	0.0	-76.36	182.42	0.0	0.0	0.0	-66.16
		-66.16	0.0	0.0	0.0	500.0	-76.36	-182.42	0.0	0.0	0.0	-66.16
1	12	142.67	0.0	-3.92e-04	-364.84	0.0	-81.83	182.42	0.0	0.0	0.0	-85.36
		-85.36	0.0	0.0	0.0	500.0	-81.83	-182.42	0.0	0.0	0.0	-85.36
1	13	239.40	0.0	-0.03	-625.93	0.0	-164.18	286.05	0.0	0.0	0.0	-86.83
		-221.38	0.0	0.0	0.0	500.0	-164.18	-339.88	0.0	0.0	0.0	-221.38
1	14	238.68	0.0	-0.03	-625.93	0.0	-164.18	288.35	0.0	0.0	0.0	-92.58
		-215.63	0.0	0.0	0.0	500.0	-164.18	-337.57	0.0	0.0	0.0	-215.63
1	15	244.80	0.0	-0.03	-625.93	0.0	-162.54	287.20	0.0	0.0	0.0	-83.95
		-212.75	0.0	0.0	0.0	500.0	-162.54	-338.72	0.0	0.0	0.0	-212.75
1	16	233.28	0.0	-0.03	-625.93	0.0	-165.82	287.20	0.0	0.0	0.0	-95.46
		-224.27	0.0	0.0	0.0	500.0	-165.82	-338.72	0.0	0.0	0.0	-224.27
1	17	269.26	0.0	-0.05	-625.93	0.0	-136.14	262.13	0.0	0.0	0.0	-4.63
		-258.80	0.0	0.0	0.0	500.0	-136.14	-363.80	0.0	0.0	0.0	-258.80
1	18	268.54	0.0	-0.05	-625.93	0.0	-136.14	264.43	0.0	0.0	0.0	-10.38
		-253.05	0.0	0.0	0.0	500.0	-136.14	-361.50	0.0	0.0	0.0	-253.05
1	19	274.66	0.0	-0.05	-625.93	0.0	-134.50	263.28	0.0	0.0	0.0	-1.75
		-250.17	0.0	0.0	0.0	500.0	-134.50	-362.65	0.0	0.0	0.0	-250.17

Trave	Cmb	M3 mx/mn	M2 mx/mn	D 2 / D 3	Q 2 / Q 3	Pos.	N	V 2	V 3	T	M 2	M 3
1	20	263.15	0.0	-0.05	-625.93	0.0	-137.78	263.28	0.0	0.0	0.0	-13.26
		-261.68	0.0	0.0	0.0	500.0	-137.78	-362.65	0.0	0.0	0.0	-261.68
1	21	284.18	0.0	-0.03	-625.93	0.0	-108.10	286.05	0.0	0.0	0.0	-42.04
		-176.60	0.0	0.0	0.0	500.0	-108.10	-339.88	0.0	0.0	0.0	-176.60
1	22	283.46	0.0	-0.03	-625.93	0.0	-108.10	288.35	0.0	0.0	0.0	-47.80
		-170.85	0.0	0.0	0.0	500.0	-108.10	-337.57	0.0	0.0	0.0	-170.85
1	23	289.58	0.0	-0.03	-625.93	0.0	-106.46	287.20	0.0	0.0	0.0	-39.16
		-167.96	0.0	0.0	0.0	500.0	-106.46	-338.72	0.0	0.0	0.0	-167.96
1	24	278.06	0.0	-0.03	-625.93	0.0	-109.74	287.20	0.0	0.0	0.0	-50.68
		-179.48	0.0	0.0	0.0	500.0	-109.74	-338.72	0.0	0.0	0.0	-179.48
1	25	220.84	0.0	-5.91e-04	-625.93	0.0	-191.07	311.81	0.0	0.0	0.0	-167.49
		-173.25	0.0	0.0	0.0	500.0	-191.07	-314.11	0.0	0.0	0.0	-173.25
1	26	220.84	0.0	-5.91e-04	-625.93	0.0	-191.07	314.11	0.0	0.0	0.0	-173.25
		-173.25	0.0	0.0	0.0	500.0	-191.07	-311.81	0.0	0.0	0.0	-167.49
1	27	226.59	0.0	-6.04e-04	-625.93	0.0	-189.43	312.96	0.0	0.0	0.0	-164.61
		-164.61	0.0	0.0	0.0	500.0	-189.43	-312.96	0.0	0.0	0.0	-164.61
1	28	215.08	0.0	-5.60e-04	-625.93	0.0	-192.71	312.96	0.0	0.0	0.0	-176.13
		-176.13	0.0	0.0	0.0	500.0	-192.71	-312.96	0.0	0.0	0.0	-176.13
1	29	244.95	0.0	-0.03	-625.93	0.0	-163.03	287.89	0.0	0.0	0.0	-85.29
		-210.66	0.0	0.0	0.0	500.0	-163.03	-338.04	0.0	0.0	0.0	-210.66
1	30	244.23	0.0	-0.03	-625.93	0.0	-163.03	290.19	0.0	0.0	0.0	-91.05
		-204.91	0.0	0.0	0.0	500.0	-163.03	-335.74	0.0	0.0	0.0	-204.91
1	31	250.35	0.0	-0.03	-625.93	0.0	-161.39	289.04	0.0	0.0	0.0	-82.41
		-202.03	0.0	0.0	0.0	500.0	-161.39	-336.89	0.0	0.0	0.0	-202.03
1	32	238.83	0.0	-0.03	-625.93	0.0	-164.67	289.04	0.0	0.0	0.0	-93.93
		-213.54	0.0	0.0	0.0	500.0	-164.67	-336.89	0.0	0.0	0.0	-213.54
1	33	265.62	0.0	-7.61e-04	-625.93	0.0	-134.99	311.81	0.0	0.0	0.0	-122.71
		-128.46	0.0	0.0	0.0	500.0	-134.99	-314.11	0.0	0.0	0.0	-128.46
1	34	265.62	0.0	-7.61e-04	-625.93	0.0	-134.99	314.11	0.0	0.0	0.0	-128.46
		-128.46	0.0	0.0	0.0	500.0	-134.99	-311.81	0.0	0.0	0.0	-122.71
1	35	271.38	0.0	-7.73e-04	-625.93	0.0	-133.35	312.96	0.0	0.0	0.0	-119.83
		-119.83	0.0	0.0	0.0	500.0	-133.35	-312.96	0.0	0.0	0.0	-119.83
1	36	259.86	0.0	-7.30e-04	-625.93	0.0	-136.63	312.96	0.0	0.0	0.0	-131.34
		-131.34	0.0	0.0	0.0	500.0	-136.63	-312.96	0.0	0.0	0.0	-131.34
1	37	204.52	0.0	-0.02	-560.17	0.0	-157.52	259.66	0.0	0.0	0.0	-95.44
		-197.56	0.0	0.0	0.0	500.0	-157.52	-300.51	0.0	0.0	0.0	-197.56
1	38	203.80	0.0	-0.02	-560.17	0.0	-157.52	261.96	0.0	0.0	0.0	-101.20
		-191.80	0.0	0.0	0.0	500.0	-157.52	-298.21	0.0	0.0	0.0	-191.80
1	39	209.92	0.0	-0.02	-560.17	0.0	-155.88	260.81	0.0	0.0	0.0	-92.56
		-188.92	0.0	0.0	0.0	500.0	-155.88	-299.36	0.0	0.0	0.0	-188.92
1	40	198.40	0.0	-0.02	-560.17	0.0	-159.16	260.81	0.0	0.0	0.0	-104.08
		-200.44	0.0	0.0	0.0	500.0	-159.16	-299.36	0.0	0.0	0.0	-200.44
1	41	234.39	0.0	-0.05	-560.17	0.0	-129.48	235.74	0.0	0.0	0.0	-13.24
		-234.98	0.0	0.0	0.0	500.0	-129.48	-324.43	0.0	0.0	0.0	-234.98
1	42	233.67	0.0	-0.05	-560.17	0.0	-129.48	238.04	0.0	0.0	0.0	-19.00
		-229.22	0.0	0.0	0.0	500.0	-129.48	-322.13	0.0	0.0	0.0	-229.22
1	43	239.79	0.0	-0.05	-560.17	0.0	-127.84	236.89	0.0	0.0	0.0	-10.36
		-226.34	0.0	0.0	0.0	500.0	-127.84	-323.28	0.0	0.0	0.0	-226.34
1	44	228.27	0.0	-0.05	-560.17	0.0	-131.12	236.89	0.0	0.0	0.0	-21.88
		-237.86	0.0	0.0	0.0	500.0	-131.12	-323.28	0.0	0.0	0.0	-237.86
1	45	249.30	0.0	-0.02	-560.17	0.0	-101.44	259.66	0.0	0.0	0.0	-50.66
		-152.77	0.0	0.0	0.0	500.0	-101.44	-300.51	0.0	0.0	0.0	-152.77
1	46	248.58	0.0	-0.02	-560.17	0.0	-101.44	261.96	0.0	0.0	0.0	-56.41
		-147.02	0.0	0.0	0.0	500.0	-101.44	-298.21	0.0	0.0	0.0	-147.02
1	47	254.70	0.0	-0.02	-560.17	0.0	-99.80	260.81	0.0	0.0	0.0	-47.78
		-144.14	0.0	0.0	0.0	500.0	-99.80	-299.36	0.0	0.0	0.0	-144.14
1	48	243.19	0.0	-0.02	-560.17	0.0	-103.08	260.81	0.0	0.0	0.0	-59.29
		-155.66	0.0	0.0	0.0	500.0	-103.08	-299.36	0.0	0.0	0.0	-155.66
1	49	191.44	0.0	-5.07e-04	-560.17	0.0	-177.63	278.93	0.0	0.0	0.0	-155.79
		-161.54	0.0	0.0	0.0	500.0	-177.63	-281.24	0.0	0.0	0.0	-161.54
1	50	191.44	0.0	-5.07e-04	-560.17	0.0	-177.63	281.24	0.0	0.0	0.0	-161.54
		-161.54	0.0	0.0	0.0	500.0	-177.63	-278.93	0.0	0.0	0.0	-155.79
1	51	197.20	0.0	-5.19e-04	-560.17	0.0	-175.99	280.09	0.0	0.0	0.0	-152.91
		-152.91	0.0	0.0	0.0	500.0	-175.99	-280.09	0.0	0.0	0.0	-152.91
1	52	185.68	0.0	-4.75e-04	-560.17	0.0	-179.27	280.09	0.0	0.0	0.0	-164.42
		-164.42	0.0	0.0	0.0	500.0	-179.27	-280.09	0.0	0.0	0.0	-164.42
1	53	216.20	0.0	-0.03	-560.17	0.0	-149.59	255.01	0.0	0.0	0.0	-73.59
		-198.96	0.0	0.0	0.0	500.0	-149.59	-305.16	0.0	0.0	0.0	-198.96
1	54	215.48	0.0	-0.03	-560.17	0.0	-149.59	257.31	0.0	0.0	0.0	-79.34
		-193.21	0.0	0.0	0.0	500.0	-149.59	-302.86	0.0	0.0	0.0	-193.21
1	55	221.60	0.0	-0.03	-560.17	0.0	-147.95	256.16	0.0	0.0	0.0	-70.71
		-190.32	0.0	0.0	0.0	500.0	-147.95	-304.01	0.0	0.0	0.0	-190.32
1	56	210.08	0.0	-0.03	-560.17	0.0	-151.23	256.16	0.0	0.0	0.0	-82.22
		-201.84	0.0	0.0	0.0	500.0	-151.23	-304.01	0.0	0.0	0.0	-201.84
1	57	236.22	0.0	-6.76e-04	-560.17	0.0	-121.56	278.93	0.0	0.0	0.0	-111.00

Trave	Cmb	M3 mx/mn	M2 mx/mn	D 2 / D 3	Q 2 / Q 3	Pos.	N	V 2	V 3	T	M 2	M 3
		-116.76	0.0	0.0	0.0	500.0	-121.56	-281.24	0.0	0.0	0.0	-116.76
1	58	236.22	0.0	-6.76e-04	-560.17	0.0	-121.56	281.24	0.0	0.0	0.0	-116.76
		-116.76	0.0	0.0	0.0	500.0	-121.56	-278.93	0.0	0.0	0.0	-111.00
1	59	241.98	0.0	-6.89e-04	-560.17	0.0	-119.92	280.09	0.0	0.0	0.0	-108.12
		-108.12	0.0	0.0	0.0	500.0	-119.92	-280.09	0.0	0.0	0.0	-108.12
1	60	230.47	0.0	-6.45e-04	-560.17	0.0	-123.20	280.09	0.0	0.0	0.0	-119.64
		-119.64	0.0	0.0	0.0	500.0	-123.20	-280.09	0.0	0.0	0.0	-119.64
1	61	241.74	0.0	-0.08	-560.17	0.0	-110.60	186.24	0.0	0.0	0.0	87.50
		-381.73	0.0	0.0	0.0	500.0	-205.37	-373.93	0.0	0.0	0.0	-381.73
1	62	239.58	0.0	-0.08	-560.17	0.0	-110.60	188.54	0.0	0.0	0.0	81.75
		-375.98	0.0	0.0	0.0	500.0	-205.37	-371.63	0.0	0.0	0.0	-375.98
1	63	246.42	0.0	-0.08	-560.17	0.0	-108.96	187.39	0.0	0.0	0.0	90.38
		-373.10	0.0	0.0	0.0	500.0	-203.73	-372.78	0.0	0.0	0.0	-373.10
1	64	234.90	0.0	-0.08	-560.17	0.0	-112.24	187.39	0.0	0.0	0.0	78.87
		-384.61	0.0	0.0	0.0	500.0	-207.01	-372.78	0.0	0.0	0.0	-384.61
1	65	286.56	0.0	-0.10	-560.17	0.0	-82.56	162.32	0.0	0.0	0.0	169.70
		-419.15	0.0	0.0	0.0	500.0	-177.33	-397.86	0.0	0.0	0.0	-419.15
1	66	284.40	0.0	-0.10	-560.17	0.0	-82.56	164.62	0.0	0.0	0.0	163.95
		-413.40	0.0	0.0	0.0	500.0	-177.33	-395.55	0.0	0.0	0.0	-413.40
1	67	291.24	0.0	-0.10	-560.17	0.0	-80.92	163.47	0.0	0.0	0.0	172.58
		-410.51	0.0	0.0	0.0	500.0	-175.69	-396.71	0.0	0.0	0.0	-410.51
1	68	279.72	0.0	-0.10	-560.17	0.0	-84.20	163.47	0.0	0.0	0.0	161.07
		-422.03	0.0	0.0	0.0	500.0	-178.97	-396.71	0.0	0.0	0.0	-422.03
1	69	286.52	0.0	-0.08	-560.17	0.0	-54.52	186.24	0.0	0.0	0.0	132.29
		-336.95	0.0	0.0	0.0	500.0	-149.29	-373.93	0.0	0.0	0.0	-336.95
1	70	284.36	0.0	-0.08	-560.17	0.0	-54.52	188.54	0.0	0.0	0.0	126.53
		-331.20	0.0	0.0	0.0	500.0	-149.29	-371.63	0.0	0.0	0.0	-331.20
1	71	291.20	0.0	-0.08	-560.17	0.0	-52.88	187.39	0.0	0.0	0.0	135.17
		-328.31	0.0	0.0	0.0	500.0	-147.65	-372.78	0.0	0.0	0.0	-328.31
1	72	279.68	0.0	-0.08	-560.17	0.0	-56.16	187.39	0.0	0.0	0.0	123.65
		-339.83	0.0	0.0	0.0	500.0	-150.93	-372.78	0.0	0.0	0.0	-339.83
1	73	215.55	0.0	-0.06	-560.17	0.0	-130.72	205.51	0.0	0.0	0.0	27.15
		-345.72	0.0	0.0	0.0	500.0	-225.49	-354.66	0.0	0.0	0.0	-345.72
1	74	214.11	0.0	-0.06	-560.17	0.0	-130.72	207.81	0.0	0.0	0.0	21.40
		-339.96	0.0	0.0	0.0	500.0	-225.49	-352.36	0.0	0.0	0.0	-339.96
1	75	220.59	0.0	-0.06	-560.17	0.0	-129.08	206.66	0.0	0.0	0.0	30.03
		-337.08	0.0	0.0	0.0	500.0	-223.85	-353.51	0.0	0.0	0.0	-337.08
1	76	209.07	0.0	-0.06	-560.17	0.0	-132.36	206.66	0.0	0.0	0.0	18.52
		-348.60	0.0	0.0	0.0	500.0	-227.13	-353.51	0.0	0.0	0.0	-348.60
1	77	256.32	0.0	-0.08	-560.17	0.0	-102.68	181.59	0.0	0.0	0.0	109.35
		-383.14	0.0	0.0	0.0	500.0	-197.45	-378.58	0.0	0.0	0.0	-383.14
1	78	254.17	0.0	-0.08	-560.17	0.0	-102.68	183.89	0.0	0.0	0.0	103.60
		-377.38	0.0	0.0	0.0	500.0	-197.45	-376.28	0.0	0.0	0.0	-377.38
1	79	261.00	0.0	-0.08	-560.17	0.0	-101.04	182.74	0.0	0.0	0.0	112.23
		-374.50	0.0	0.0	0.0	500.0	-195.81	-377.43	0.0	0.0	0.0	-374.50
1	80	249.49	0.0	-0.08	-560.17	0.0	-104.32	182.74	0.0	0.0	0.0	100.72
		-386.02	0.0	0.0	0.0	500.0	-199.09	-377.43	0.0	0.0	0.0	-386.02
1	81	260.33	0.0	-0.06	-560.17	0.0	-74.64	205.51	0.0	0.0	0.0	71.94
		-300.94	0.0	0.0	0.0	500.0	-169.41	-354.66	0.0	0.0	0.0	-300.94
1	82	258.90	0.0	-0.06	-560.17	0.0	-74.64	207.81	0.0	0.0	0.0	66.18
		-295.18	0.0	0.0	0.0	500.0	-169.41	-352.36	0.0	0.0	0.0	-295.18
1	83	265.37	0.0	-0.06	-560.17	0.0	-73.00	206.66	0.0	0.0	0.0	74.82
		-292.30	0.0	0.0	0.0	500.0	-167.77	-353.51	0.0	0.0	0.0	-292.30
1	84	253.86	0.0	-0.06	-560.17	0.0	-76.28	206.66	0.0	0.0	0.0	63.30
		-303.82	0.0	0.0	0.0	500.0	-171.05	-353.51	0.0	0.0	0.0	-303.82
1	85	203.90	0.0	-0.02	-560.17	0.0	-157.99	259.66	0.0	0.0	0.0	-96.06
		-198.18	0.0	0.0	0.0	500.0	-157.99	-300.51	0.0	0.0	0.0	-198.18
1	86	203.18	0.0	-0.02	-560.17	0.0	-157.99	261.96	0.0	0.0	0.0	-101.81
		-192.42	0.0	0.0	0.0	500.0	-157.99	-298.21	0.0	0.0	0.0	-192.42
1	87	209.30	0.0	-0.02	-560.17	0.0	-156.35	260.81	0.0	0.0	0.0	-93.18
		-189.54	0.0	0.0	0.0	500.0	-156.35	-299.36	0.0	0.0	0.0	-189.54
1	88	197.79	0.0	-0.02	-560.17	0.0	-159.63	260.81	0.0	0.0	0.0	-104.69
		-201.06	0.0	0.0	0.0	500.0	-159.63	-299.36	0.0	0.0	0.0	-201.06
1	89	233.77	0.0	-0.05	-560.17	0.0	-129.95	235.74	0.0	0.0	0.0	-13.86
		-235.59	0.0	0.0	0.0	500.0	-129.95	-324.43	0.0	0.0	0.0	-235.59
1	90	233.05	0.0	-0.05	-560.17	0.0	-129.95	238.04	0.0	0.0	0.0	-19.61
		-229.84	0.0	0.0	0.0	500.0	-129.95	-322.13	0.0	0.0	0.0	-229.84
1	91	239.17	0.0	-0.05	-560.17	0.0	-128.31	236.89	0.0	0.0	0.0	-10.98
		-226.96	0.0	0.0	0.0	500.0	-128.31	-323.28	0.0	0.0	0.0	-226.96
1	92	227.65	0.0	-0.05	-560.17	0.0	-131.59	236.89	0.0	0.0	0.0	-22.49
		-238.47	0.0	0.0	0.0	500.0	-131.59	-323.28	0.0	0.0	0.0	-238.47
1	93	248.69	0.0	-0.02	-560.17	0.0	-101.91	259.66	0.0	0.0	0.0	-51.27
		-153.39	0.0	0.0	0.0	500.0	-101.91	-300.51	0.0	0.0	0.0	-153.39
1	94	247.97	0.0	-0.02	-560.17	0.0	-101.91	261.96	0.0	0.0	0.0	-57.03
		-147.64	0.0	0.0	0.0	500.0	-101.91	-298.21	0.0	0.0	0.0	-147.64

Trave	Cmb	M3 mx/mn	M2 mx/mn	D 2 / D 3	Q 2 / Q 3	Pos.	N	V 2	V 3	T	M 2	M 3
1	95	254.09	0.0	-0.02	-560.17	0.0	-100.27	260.81	0.0	0.0	0.0	-48.39
		-144.76	0.0	0.0	0.0	500.0	-100.27	-299.36	0.0	0.0	0.0	-144.76
1	96	242.57	0.0	-0.02	-560.17	0.0	-103.55	260.81	0.0	0.0	0.0	-59.91
		-156.27	0.0	0.0	0.0	500.0	-103.55	-299.36	0.0	0.0	0.0	-156.27
1	97	190.82	0.0	-5.04e-04	-560.17	0.0	-178.10	278.93	0.0	0.0	0.0	-156.41
		-162.16	0.0	0.0	0.0	500.0	-178.10	-281.24	0.0	0.0	0.0	-162.16
1	98	190.82	0.0	-5.04e-04	-560.17	0.0	-178.10	281.24	0.0	0.0	0.0	-162.16
		-162.16	0.0	0.0	0.0	500.0	-178.10	-278.93	0.0	0.0	0.0	-156.41
1	99	196.58	0.0	-5.17e-04	-560.17	0.0	-176.46	280.09	0.0	0.0	0.0	-153.52
		-153.52	0.0	0.0	0.0	500.0	-176.46	-280.09	0.0	0.0	0.0	-153.52
1	100	185.07	0.0	-4.73e-04	-560.17	0.0	-179.74	280.09	0.0	0.0	0.0	-165.04
		-165.04	0.0	0.0	0.0	500.0	-179.74	-280.09	0.0	0.0	0.0	-165.04
1	101	215.58	0.0	-0.03	-560.17	0.0	-150.06	255.01	0.0	0.0	0.0	-74.20
		-199.58	0.0	0.0	0.0	500.0	-150.06	-305.16	0.0	0.0	0.0	-199.58
1	102	214.86	0.0	-0.03	-560.17	0.0	-150.06	257.31	0.0	0.0	0.0	-79.96
		-193.82	0.0	0.0	0.0	500.0	-150.06	-302.86	0.0	0.0	0.0	-193.82
1	103	220.98	0.0	-0.03	-560.17	0.0	-148.42	256.16	0.0	0.0	0.0	-71.32
		-190.94	0.0	0.0	0.0	500.0	-148.42	-304.01	0.0	0.0	0.0	-190.94
1	104	209.46	0.0	-0.03	-560.17	0.0	-151.70	256.16	0.0	0.0	0.0	-82.84
		-202.46	0.0	0.0	0.0	500.0	-151.70	-304.01	0.0	0.0	0.0	-202.46
1	105	235.61	0.0	-6.74e-04	-560.17	0.0	-122.02	278.93	0.0	0.0	0.0	-111.62
		-117.38	0.0	0.0	0.0	500.0	-122.02	-281.24	0.0	0.0	0.0	-117.38
1	106	235.61	0.0	-6.74e-04	-560.17	0.0	-122.02	281.24	0.0	0.0	0.0	-117.38
		-117.38	0.0	0.0	0.0	500.0	-122.02	-278.93	0.0	0.0	0.0	-111.62
1	107	241.37	0.0	-6.86e-04	-560.17	0.0	-120.38	280.09	0.0	0.0	0.0	-108.74
		-108.74	0.0	0.0	0.0	500.0	-120.38	-280.09	0.0	0.0	0.0	-108.74
1	108	229.85	0.0	-6.43e-04	-560.17	0.0	-123.66	280.09	0.0	0.0	0.0	-120.26
		-120.26	0.0	0.0	0.0	500.0	-123.66	-280.09	0.0	0.0	0.0	-120.26
1	109	418.98	0.0	-0.20	-303.90	0.0	-66.18	-51.95	0.0	0.0	0.0	418.98
		-600.53	0.0	0.0	0.0	500.0	-133.48	-355.85	0.0	0.0	0.0	-600.53
1	110	163.89	0.0	-4.60e-04	-415.30	0.0	-98.85	206.69	0.0	0.0	0.0	-93.28
		-98.07	0.0	0.0	0.0	500.0	-98.85	-208.61	0.0	0.0	0.0	-98.07
1	111	163.89	0.0	-4.60e-04	-415.30	0.0	-98.85	208.61	0.0	0.0	0.0	-98.07
		-98.07	0.0	0.0	0.0	500.0	-98.85	-206.69	0.0	0.0	0.0	-93.28
1	112	168.69	0.0	-4.70e-04	-415.30	0.0	-97.48	207.65	0.0	0.0	0.0	-90.87
		-90.87	0.0	0.0	0.0	500.0	-97.48	-207.65	0.0	0.0	0.0	-90.87
1	113	159.09	0.0	-4.34e-04	-415.30	0.0	-100.22	207.65	0.0	0.0	0.0	-100.47
		-100.47	0.0	0.0	0.0	500.0	-100.22	-207.65	0.0	0.0	0.0	-100.47
1	114	182.26	0.0	-0.02	-415.30	0.0	-78.08	188.97	0.0	0.0	0.0	-32.39
		-125.79	0.0	0.0	0.0	500.0	-78.08	-226.33	0.0	0.0	0.0	-125.79
1	115	181.66	0.0	-0.02	-415.30	0.0	-78.08	190.89	0.0	0.0	0.0	-37.18
		-120.99	0.0	0.0	0.0	500.0	-78.08	-224.41	0.0	0.0	0.0	-120.99
1	116	186.76	0.0	-0.02	-415.30	0.0	-76.71	189.93	0.0	0.0	0.0	-29.99
		-118.59	0.0	0.0	0.0	500.0	-76.71	-225.37	0.0	0.0	0.0	-118.59
1	117	177.16	0.0	-0.02	-415.30	0.0	-79.45	189.93	0.0	0.0	0.0	-39.58
		-128.19	0.0	0.0	0.0	500.0	-79.45	-225.37	0.0	0.0	0.0	-128.19
1	118	197.06	0.0	-5.85e-04	-415.30	0.0	-57.31	206.69	0.0	0.0	0.0	-60.10
		-64.90	0.0	0.0	0.0	500.0	-57.31	-208.61	0.0	0.0	0.0	-64.90
1	119	197.06	0.0	-5.85e-04	-415.30	0.0	-57.31	208.61	0.0	0.0	0.0	-64.90
		-64.90	0.0	0.0	0.0	500.0	-57.31	-206.69	0.0	0.0	0.0	-60.10
1	120	201.86	0.0	-5.96e-04	-415.30	0.0	-55.94	207.65	0.0	0.0	0.0	-57.70
		-57.70	0.0	0.0	0.0	500.0	-55.94	-207.65	0.0	0.0	0.0	-57.70
1	121	192.26	0.0	-5.59e-04	-415.30	0.0	-58.68	207.65	0.0	0.0	0.0	-67.30
		-67.30	0.0	0.0	0.0	500.0	-58.68	-207.65	0.0	0.0	0.0	-67.30
1	122	173.67	0.0	-0.05	-415.30	0.0	-87.46	151.59	0.0	0.0	0.0	35.45
		-244.86	0.0	0.0	0.0	500.0	-140.11	-263.71	0.0	0.0	0.0	-244.86
1	123	172.47	0.0	-0.05	-415.30	0.0	-87.46	153.51	0.0	0.0	0.0	30.65
		-240.07	0.0	0.0	0.0	500.0	-140.11	-261.79	0.0	0.0	0.0	-240.07
1	124	177.87	0.0	-0.05	-415.30	0.0	-86.10	152.55	0.0	0.0	0.0	37.85
		-237.67	0.0	0.0	0.0	500.0	-138.75	-262.75	0.0	0.0	0.0	-237.67
1	125	168.27	0.0	-0.05	-415.30	0.0	-88.83	152.55	0.0	0.0	0.0	28.25
		-247.26	0.0	0.0	0.0	500.0	-141.48	-262.75	0.0	0.0	0.0	-247.26
1	126	204.11	0.0	-0.07	-415.30	0.0	-66.69	133.87	0.0	0.0	0.0	96.33
		-272.58	0.0	0.0	0.0	500.0	-119.34	-281.43	0.0	0.0	0.0	-272.58
1	127	202.31	0.0	-0.07	-415.30	0.0	-66.69	135.79	0.0	0.0	0.0	91.54
		-267.78	0.0	0.0	0.0	500.0	-119.34	-279.51	0.0	0.0	0.0	-267.78
1	128	208.01	0.0	-0.07	-415.30	0.0	-65.33	134.83	0.0	0.0	0.0	98.73
		-265.38	0.0	0.0	0.0	500.0	-117.98	-280.47	0.0	0.0	0.0	-265.38
1	129	198.41	0.0	-0.07	-415.30	0.0	-68.06	134.83	0.0	0.0	0.0	89.14
		-274.98	0.0	0.0	0.0	500.0	-120.71	-280.47	0.0	0.0	0.0	-274.98
1	130	206.84	0.0	-0.05	-415.30	0.0	-45.92	151.59	0.0	0.0	0.0	68.62
		-211.69	0.0	0.0	0.0	500.0	-98.57	-263.71	0.0	0.0	0.0	-211.69
1	131	205.64	0.0	-0.05	-415.30	0.0	-45.92	153.51	0.0	0.0	0.0	63.82
		-206.89	0.0	0.0	0.0	500.0	-98.57	-261.79	0.0	0.0	0.0	-206.89
1	132	211.04	0.0	-0.05	-415.30	0.0	-44.56	152.55	0.0	0.0	0.0	71.02

Trave	Cmb	M3 mx/mn	M2 mx/mn	D 2 / D 3	Q 2 / Q 3	Pos.	N	V 2	V 3	T	M 2	M 3
		-204.49	0.0	0.0	0.0	500.0	-97.21	-262.75	0.0	0.0	0.0	-204.49
1	133	201.44	0.0	-0.05	-415.30	0.0	-47.29	152.55	0.0	0.0	0.0	61.42
		-214.09	0.0	0.0	0.0	500.0	-99.94	-262.75	0.0	0.0	0.0	-214.09
1	134	155.69	0.0	-0.03	-415.30	0.0	-102.40	165.90	0.0	0.0	0.0	-9.37
		-218.12	0.0	0.0	0.0	500.0	-155.05	-249.40	0.0	0.0	0.0	-218.12
1	135	154.49	0.0	-0.03	-415.30	0.0	-102.40	167.82	0.0	0.0	0.0	-14.16
		-213.32	0.0	0.0	0.0	500.0	-155.05	-247.48	0.0	0.0	0.0	-213.32
1	136	159.89	0.0	-0.03	-415.30	0.0	-101.03	166.86	0.0	0.0	0.0	-6.97
		-210.92	0.0	0.0	0.0	500.0	-153.68	-248.44	0.0	0.0	0.0	-210.92
1	137	150.29	0.0	-0.03	-415.30	0.0	-103.77	166.86	0.0	0.0	0.0	-16.57
		-220.52	0.0	0.0	0.0	500.0	-156.42	-248.44	0.0	0.0	0.0	-220.52
1	138	183.35	0.0	-0.05	-415.30	0.0	-81.63	148.18	0.0	0.0	0.0	51.52
		-245.84	0.0	0.0	0.0	500.0	-134.28	-267.12	0.0	0.0	0.0	-245.84
1	139	182.15	0.0	-0.05	-415.30	0.0	-81.63	150.10	0.0	0.0	0.0	46.72
		-241.04	0.0	0.0	0.0	500.0	-134.28	-265.20	0.0	0.0	0.0	-241.04
1	140	187.55	0.0	-0.05	-415.30	0.0	-80.26	149.14	0.0	0.0	0.0	53.92
		-238.64	0.0	0.0	0.0	500.0	-132.91	-266.16	0.0	0.0	0.0	-238.64
1	141	177.95	0.0	-0.05	-415.30	0.0	-83.00	149.14	0.0	0.0	0.0	44.32
		-248.24	0.0	0.0	0.0	500.0	-135.65	-266.16	0.0	0.0	0.0	-248.24
1	142	188.86	0.0	-0.03	-415.30	0.0	-60.86	165.90	0.0	0.0	0.0	23.80
		-184.95	0.0	0.0	0.0	500.0	-113.51	-249.40	0.0	0.0	0.0	-184.95
1	143	187.66	0.0	-0.03	-415.30	0.0	-60.86	167.82	0.0	0.0	0.0	19.01
		-180.15	0.0	0.0	0.0	500.0	-113.51	-247.48	0.0	0.0	0.0	-180.15
1	144	193.06	0.0	-0.03	-415.30	0.0	-59.49	166.86	0.0	0.0	0.0	26.21
		-177.75	0.0	0.0	0.0	500.0	-112.14	-248.44	0.0	0.0	0.0	-177.75
1	145	183.46	0.0	-0.03	-415.30	0.0	-62.23	166.86	0.0	0.0	0.0	16.61
		-187.35	0.0	0.0	0.0	500.0	-114.88	-248.44	0.0	0.0	0.0	-187.35
1	146	79.62	0.0	-1.99e-04	-270.25	0.0	-100.13	134.33	0.0	0.0	0.0	-87.29
		-91.29	0.0	0.0	0.0	500.0	-100.13	-135.92	0.0	0.0	0.0	-91.29
1	147	79.62	0.0	-1.99e-04	-270.25	0.0	-100.13	135.92	0.0	0.0	0.0	-91.29
		-91.29	0.0	0.0	0.0	500.0	-100.13	-134.33	0.0	0.0	0.0	-87.29
1	148	83.62	0.0	-2.07e-04	-270.25	0.0	-98.99	135.13	0.0	0.0	0.0	-85.29
		-85.29	0.0	0.0	0.0	500.0	-98.99	-135.12	0.0	0.0	0.0	-85.29
1	149	75.62	0.0	-1.76e-04	-270.25	0.0	-101.27	135.13	0.0	0.0	0.0	-93.29
		-93.29	0.0	0.0	0.0	500.0	-101.27	-135.12	0.0	0.0	0.0	-93.29
1	150	99.35	0.0	-0.02	-270.25	0.0	-79.36	116.60	0.0	0.0	0.0	-26.40
		-119.00	0.0	0.0	0.0	500.0	-79.36	-153.65	0.0	0.0	0.0	-119.00
1	151	98.85	0.0	-0.02	-270.25	0.0	-79.36	118.20	0.0	0.0	0.0	-30.40
		-115.01	0.0	0.0	0.0	500.0	-79.36	-152.05	0.0	0.0	0.0	-115.01
1	152	103.10	0.0	-0.02	-270.25	0.0	-78.22	117.40	0.0	0.0	0.0	-24.40
		-113.01	0.0	0.0	0.0	500.0	-78.22	-152.85	0.0	0.0	0.0	-113.01
1	153	103.10	0.0	-0.02	-270.25	0.0	-78.22	117.40	0.0	0.0	0.0	-24.40
		-113.01	0.0	0.0	0.0	500.0	-78.22	-152.85	0.0	0.0	0.0	-113.01
1	154	112.79	0.0	-3.24e-04	-270.25	0.0	-58.59	134.33	0.0	0.0	0.0	-54.12
		-58.12	0.0	0.0	0.0	500.0	-58.59	-135.92	0.0	0.0	0.0	-58.12
1	155	112.79	0.0	-3.24e-04	-270.25	0.0	-58.59	135.92	0.0	0.0	0.0	-58.12
		-58.12	0.0	0.0	0.0	500.0	-58.59	-134.33	0.0	0.0	0.0	-54.12
1	156	116.79	0.0	-3.32e-04	-270.25	0.0	-57.45	135.13	0.0	0.0	0.0	-52.12
		-52.12	0.0	0.0	0.0	500.0	-57.45	-135.12	0.0	0.0	0.0	-52.12
1	157	116.79	0.0	-3.32e-04	-270.25	0.0	-57.45	135.13	0.0	0.0	0.0	-52.12
		-52.12	0.0	0.0	0.0	500.0	-57.45	-135.12	0.0	0.0	0.0	-52.12
1	158	195.99	0.0	-0.05	-463.65	0.0	-94.95	170.99	0.0	0.0	0.0	38.37
		-265.78	0.0	0.0	0.0	500.0	-147.60	-292.66	0.0	0.0	0.0	-265.78
1	159	194.79	0.0	-0.05	-463.65	0.0	-94.95	172.91	0.0	0.0	0.0	33.58
		-260.99	0.0	0.0	0.0	500.0	-147.60	-290.74	0.0	0.0	0.0	-260.99
1	160	200.18	0.0	-0.05	-463.65	0.0	-93.58	171.95	0.0	0.0	0.0	40.78
		-258.59	0.0	0.0	0.0	500.0	-146.23	-291.70	0.0	0.0	0.0	-258.59
1	161	190.59	0.0	-0.05	-463.65	0.0	-96.32	171.95	0.0	0.0	0.0	31.18
		-268.18	0.0	0.0	0.0	500.0	-148.97	-291.70	0.0	0.0	0.0	-268.18
1	162	225.56	0.0	-0.07	-463.65	0.0	-74.18	153.27	0.0	0.0	0.0	99.26
		-293.50	0.0	0.0	0.0	500.0	-126.83	-310.38	0.0	0.0	0.0	-293.50
1	163	223.76	0.0	-0.07	-463.65	0.0	-74.18	155.19	0.0	0.0	0.0	94.47
		-288.70	0.0	0.0	0.0	500.0	-126.83	-308.46	0.0	0.0	0.0	-288.70
1	164	229.46	0.0	-0.07	-463.65	0.0	-72.81	154.23	0.0	0.0	0.0	101.66
		-286.30	0.0	0.0	0.0	500.0	-125.46	-309.42	0.0	0.0	0.0	-286.30
1	165	219.86	0.0	-0.07	-463.65	0.0	-75.55	154.23	0.0	0.0	0.0	92.07
		-295.90	0.0	0.0	0.0	500.0	-128.20	-309.42	0.0	0.0	0.0	-295.90
1	166	229.16	0.0	-0.05	-463.65	0.0	-53.41	170.99	0.0	0.0	0.0	71.55
		-232.61	0.0	0.0	0.0	500.0	-106.06	-292.66	0.0	0.0	0.0	-232.61
1	167	227.96	0.0	-0.05	-463.65	0.0	-53.41	172.91	0.0	0.0	0.0	66.75
		-227.82	0.0	0.0	0.0	500.0	-106.06	-290.74	0.0	0.0	0.0	-227.82
1	168	233.36	0.0	-0.05	-463.65	0.0	-52.04	171.95	0.0	0.0	0.0	73.95
		-225.41	0.0	0.0	0.0	500.0	-104.69	-291.70	0.0	0.0	0.0	-225.41
1	169	223.76	0.0	-0.05	-463.65	0.0	-54.78	171.95	0.0	0.0	0.0	64.35
		-235.01	0.0	0.0	0.0	500.0	-107.43	-291.70	0.0	0.0	0.0	-235.01

Trave	Cmb	M3 mx/mn	M2 mx/mn	D 2 / D 3	Q 2 / Q 3	Pos.	N	V 2	V 3	T	M 2	M 3
1	170	172.55	0.0	-0.03	-463.65	0.0	-114.87	190.07	0.0	0.0	0.0	-21.38
		-230.13	0.0	0.0	0.0	500.0	-167.52	-273.58	0.0	0.0	0.0	-230.13
1	171	171.95	0.0	-0.03	-463.65	0.0	-114.87	191.99	0.0	0.0	0.0	-26.17
		-225.33	0.0	0.0	0.0	500.0	-167.52	-271.66	0.0	0.0	0.0	-225.33
1	172	177.05	0.0	-0.03	-463.65	0.0	-113.50	191.03	0.0	0.0	0.0	-18.98
		-222.93	0.0	0.0	0.0	500.0	-166.15	-272.62	0.0	0.0	0.0	-222.93
1	173	167.45	0.0	-0.03	-463.65	0.0	-116.23	191.03	0.0	0.0	0.0	-28.57
		-232.53	0.0	0.0	0.0	500.0	-168.88	-272.62	0.0	0.0	0.0	-232.53
1	174	199.67	0.0	-0.05	-463.65	0.0	-94.10	172.35	0.0	0.0	0.0	39.51
		-257.84	0.0	0.0	0.0	500.0	-146.75	-291.30	0.0	0.0	0.0	-257.84
1	175	198.48	0.0	-0.05	-463.65	0.0	-94.10	174.27	0.0	0.0	0.0	34.72
		-253.05	0.0	0.0	0.0	500.0	-146.75	-289.38	0.0	0.0	0.0	-253.05
1	176	203.87	0.0	-0.05	-463.65	0.0	-92.73	173.31	0.0	0.0	0.0	41.91
		-250.65	0.0	0.0	0.0	500.0	-145.38	-290.34	0.0	0.0	0.0	-250.65
1	177	194.28	0.0	-0.05	-463.65	0.0	-95.46	173.31	0.0	0.0	0.0	32.32
		-260.24	0.0	0.0	0.0	500.0	-148.11	-290.34	0.0	0.0	0.0	-260.24
1	178	205.72	0.0	-0.03	-463.65	0.0	-73.33	190.07	0.0	0.0	0.0	11.80
		-196.95	0.0	0.0	0.0	500.0	-125.98	-273.58	0.0	0.0	0.0	-196.95
1	179	205.12	0.0	-0.03	-463.65	0.0	-73.33	191.99	0.0	0.0	0.0	7.00
		-192.16	0.0	0.0	0.0	500.0	-125.98	-271.66	0.0	0.0	0.0	-192.16
1	180	210.22	0.0	-0.03	-463.65	0.0	-71.96	191.03	0.0	0.0	0.0	14.20
		-189.76	0.0	0.0	0.0	500.0	-124.61	-272.62	0.0	0.0	0.0	-189.76
1	181	200.62	0.0	-0.03	-463.65	0.0	-74.69	191.03	0.0	0.0	0.0	4.60
		-199.35	0.0	0.0	0.0	500.0	-127.34	-272.62	0.0	0.0	0.0	-199.35
3	1	-115.74	0.0	-2.92e-06	-21.89	0.0	-135.17	202.39	0.0	0.0	0.0	-173.18
		-173.18	0.0	0.0	0.0	30.0	-135.17	180.50	0.0	0.0	0.0	-115.74
3	2	-125.34	0.0	-3.91e-05	-21.89	0.0	-135.17	206.23	0.0	0.0	0.0	-183.92
		-183.92	0.0	0.0	0.0	30.0	-135.17	184.34	0.0	0.0	0.0	-125.34
3	3	-110.94	0.0	-3.03e-05	-21.89	0.0	-132.44	204.31	0.0	0.0	0.0	-168.95
		-168.95	0.0	0.0	0.0	30.0	-132.44	182.42	0.0	0.0	0.0	-110.94
3	4	-130.14	0.0	-1.18e-05	-21.89	0.0	-137.91	204.31	0.0	0.0	0.0	-188.15
		-188.15	0.0	0.0	0.0	30.0	-137.91	182.42	0.0	0.0	0.0	-130.14
3	5	-33.54	0.0	-1.68e-03	-21.89	0.0	-107.13	178.47	0.0	0.0	0.0	-83.80
		-83.80	0.0	0.0	0.0	30.0	-107.13	156.58	0.0	0.0	0.0	-33.54
3	6	-43.14	0.0	-1.72e-03	-21.89	0.0	-107.13	182.30	0.0	0.0	0.0	-94.55
		-94.55	0.0	0.0	0.0	30.0	-107.13	160.41	0.0	0.0	0.0	-43.14
3	7	-28.74	0.0	-1.71e-03	-21.89	0.0	-104.40	180.39	0.0	0.0	0.0	-79.58
		-79.58	0.0	0.0	0.0	30.0	-104.40	158.50	0.0	0.0	0.0	-28.74
3	8	-47.94	0.0	-1.69e-03	-21.89	0.0	-109.87	180.39	0.0	0.0	0.0	-98.77
		-98.77	0.0	0.0	0.0	30.0	-109.87	158.50	0.0	0.0	0.0	-47.94
3	9	-70.96	0.0	-4.61e-05	-21.89	0.0	-79.09	202.39	0.0	0.0	0.0	-128.40
		-128.40	0.0	0.0	0.0	30.0	-79.09	180.50	0.0	0.0	0.0	-70.96
3	10	-80.55	0.0	-8.23e-05	-21.89	0.0	-79.09	206.23	0.0	0.0	0.0	-139.14
		-139.14	0.0	0.0	0.0	30.0	-79.09	184.34	0.0	0.0	0.0	-80.55
3	11	-66.16	0.0	-7.34e-05	-21.89	0.0	-76.36	204.31	0.0	0.0	0.0	-124.17
		-124.17	0.0	0.0	0.0	30.0	-76.36	182.42	0.0	0.0	0.0	-66.16
3	12	-85.36	0.0	-5.49e-05	-21.89	0.0	-81.83	204.31	0.0	0.0	0.0	-143.36
		-143.36	0.0	0.0	0.0	30.0	-81.83	182.42	0.0	0.0	0.0	-85.36
3	13	-86.83	0.0	-1.64e-03	-37.56	0.0	-164.18	323.61	0.0	0.0	0.0	-178.28
		-178.28	0.0	0.0	0.0	30.0	-164.18	286.05	0.0	0.0	0.0	-86.83
3	14	-92.58	0.0	-1.67e-03	-37.56	0.0	-164.18	325.91	0.0	0.0	0.0	-184.72
		-184.72	0.0	0.0	0.0	30.0	-164.18	288.35	0.0	0.0	0.0	-92.58
3	15	-83.95	0.0	-1.66e-03	-37.56	0.0	-162.54	324.76	0.0	0.0	0.0	-175.74
		-175.74	0.0	0.0	0.0	30.0	-162.54	287.20	0.0	0.0	0.0	-83.95
3	16	-95.46	0.0	-1.65e-03	-37.56	0.0	-165.82	324.76	0.0	0.0	0.0	-187.26
		-187.26	0.0	0.0	0.0	30.0	-165.82	287.20	0.0	0.0	0.0	-95.46
3	17	-4.63	0.0	-3.32e-03	-37.56	0.0	-136.14	299.68	0.0	0.0	0.0	-88.90
		-88.90	0.0	0.0	0.0	30.0	-136.14	262.13	0.0	0.0	0.0	-4.63
3	18	-10.38	0.0	-3.35e-03	-37.56	0.0	-136.14	301.99	0.0	0.0	0.0	-95.35
		-95.35	0.0	0.0	0.0	30.0	-136.14	264.43	0.0	0.0	0.0	-10.38
3	19	-1.75	0.0	-3.34e-03	-37.56	0.0	-134.50	300.84	0.0	0.0	0.0	-86.36
		-86.36	0.0	0.0	0.0	30.0	-134.50	263.28	0.0	0.0	0.0	-1.75
3	20	-13.26	0.0	-3.33e-03	-37.56	0.0	-137.78	300.84	0.0	0.0	0.0	-97.88
		-97.88	0.0	0.0	0.0	30.0	-137.78	263.28	0.0	0.0	0.0	-13.26
3	21	-42.04	0.0	-1.69e-03	-37.56	0.0	-108.10	323.61	0.0	0.0	0.0	-133.49
		-133.49	0.0	0.0	0.0	30.0	-108.10	286.05	0.0	0.0	0.0	-42.04
3	22	-47.80	0.0	-1.71e-03	-37.56	0.0	-108.10	325.91	0.0	0.0	0.0	-139.94
		-139.94	0.0	0.0	0.0	30.0	-108.10	288.35	0.0	0.0	0.0	-47.80
3	23	-39.16	0.0	-1.70e-03	-37.56	0.0	-106.46	324.76	0.0	0.0	0.0	-130.96
		-130.96	0.0	0.0	0.0	30.0	-106.46	287.20	0.0	0.0	0.0	-39.16
3	24	-50.68	0.0	-1.69e-03	-37.56	0.0	-109.74	324.76	0.0	0.0	0.0	-142.47
		-142.47	0.0	0.0	0.0	30.0	-109.74	287.20	0.0	0.0	0.0	-50.68
3	25	-167.49	0.0	-6.03e-05	-37.56	0.0	-191.07	349.37	0.0	0.0	0.0	-266.67
		-266.67	0.0	0.0	0.0	30.0	-191.07	311.81	0.0	0.0	0.0	-167.49
3	26	-173.25	0.0	-8.20e-05	-37.56	0.0	-191.07	351.67	0.0	0.0	0.0	-273.11

Trave	Cmb	M3 mx/mn	M2 mx/mn	D 2 / D 3	Q 2 / Q 3	Pos.	N	V 2	V 3	T	M 2	M 3
		-273.11	0.0	0.0	0.0	30.0	-191.07	314.11	0.0	0.0	0.0	-173.25
3	27	-164.61	0.0	-7.67e-05	-37.56	0.0	-189.43	350.52	0.0	0.0	0.0	-264.13
		-264.13	0.0	0.0	0.0	30.0	-189.43	312.96	0.0	0.0	0.0	-164.61
3	28	-176.13	0.0	-6.56e-05	-37.56	0.0	-192.71	350.52	0.0	0.0	0.0	-275.65
		-275.65	0.0	0.0	0.0	30.0	-192.71	312.96	0.0	0.0	0.0	-176.13
3	29	-85.29	0.0	-1.74e-03	-37.56	0.0	-163.03	325.44	0.0	0.0	0.0	-177.29
		-177.29	0.0	0.0	0.0	30.0	-163.03	287.89	0.0	0.0	0.0	-85.29
3	30	-91.05	0.0	-1.76e-03	-37.56	0.0	-163.03	327.75	0.0	0.0	0.0	-183.74
		-183.74	0.0	0.0	0.0	30.0	-163.03	290.19	0.0	0.0	0.0	-91.05
3	31	-82.41	0.0	-1.76e-03	-37.56	0.0	-161.39	326.60	0.0	0.0	0.0	-174.76
		-174.76	0.0	0.0	0.0	30.0	-161.39	289.04	0.0	0.0	0.0	-82.41
3	32	-93.93	0.0	-1.75e-03	-37.56	0.0	-164.67	326.60	0.0	0.0	0.0	-186.27
		-186.27	0.0	0.0	0.0	30.0	-164.67	289.04	0.0	0.0	0.0	-93.93
3	33	-122.71	0.0	-1.03e-04	-37.56	0.0	-134.99	349.37	0.0	0.0	0.0	-221.88
		-221.88	0.0	0.0	0.0	30.0	-134.99	311.81	0.0	0.0	0.0	-122.71
3	34	-128.46	0.0	-1.25e-04	-37.56	0.0	-134.99	351.67	0.0	0.0	0.0	-228.33
		-228.33	0.0	0.0	0.0	30.0	-134.99	314.11	0.0	0.0	0.0	-128.46
3	35	-119.83	0.0	-1.20e-04	-37.56	0.0	-133.35	350.52	0.0	0.0	0.0	-219.35
		-219.35	0.0	0.0	0.0	30.0	-133.35	312.96	0.0	0.0	0.0	-119.83
3	36	-131.34	0.0	-1.09e-04	-37.56	0.0	-136.63	350.52	0.0	0.0	0.0	-230.87
		-230.87	0.0	0.0	0.0	30.0	-136.63	312.96	0.0	0.0	0.0	-131.34
3	37	-95.44	0.0	-1.23e-03	-33.61	0.0	-157.52	293.27	0.0	0.0	0.0	-178.38
		-178.38	0.0	0.0	0.0	30.0	-157.52	259.66	0.0	0.0	0.0	-95.44
3	38	-101.20	0.0	-1.25e-03	-33.61	0.0	-157.52	295.57	0.0	0.0	0.0	-184.83
		-184.83	0.0	0.0	0.0	30.0	-157.52	261.96	0.0	0.0	0.0	-101.20
3	39	-92.56	0.0	-1.25e-03	-33.61	0.0	-155.88	294.42	0.0	0.0	0.0	-175.84
		-175.84	0.0	0.0	0.0	30.0	-155.88	260.81	0.0	0.0	0.0	-92.56
3	40	-104.08	0.0	-1.24e-03	-33.61	0.0	-159.16	294.42	0.0	0.0	0.0	-187.36
		-187.36	0.0	0.0	0.0	30.0	-159.16	260.81	0.0	0.0	0.0	-104.08
3	41	-13.24	0.0	-2.91e-03	-33.61	0.0	-129.48	269.35	0.0	0.0	0.0	-89.00
		-89.00	0.0	0.0	0.0	30.0	-129.48	235.74	0.0	0.0	0.0	-13.24
3	42	-19.00	0.0	-2.93e-03	-33.61	0.0	-129.48	271.65	0.0	0.0	0.0	-95.45
		-95.45	0.0	0.0	0.0	30.0	-129.48	238.04	0.0	0.0	0.0	-19.00
3	43	-10.36	0.0	-2.93e-03	-33.61	0.0	-127.84	270.50	0.0	0.0	0.0	-86.47
		-86.47	0.0	0.0	0.0	30.0	-127.84	236.89	0.0	0.0	0.0	-10.36
3	44	-21.88	0.0	-2.92e-03	-33.61	0.0	-131.12	270.50	0.0	0.0	0.0	-97.98
		-97.98	0.0	0.0	0.0	30.0	-131.12	236.89	0.0	0.0	0.0	-21.88
3	45	-50.66	0.0	-1.28e-03	-33.61	0.0	-101.44	293.27	0.0	0.0	0.0	-133.60
		-133.60	0.0	0.0	0.0	30.0	-101.44	259.66	0.0	0.0	0.0	-50.66
3	46	-56.41	0.0	-1.30e-03	-33.61	0.0	-101.44	295.57	0.0	0.0	0.0	-140.04
		-140.04	0.0	0.0	0.0	30.0	-101.44	261.96	0.0	0.0	0.0	-56.41
3	47	-47.78	0.0	-1.29e-03	-33.61	0.0	-99.80	294.42	0.0	0.0	0.0	-131.06
		-131.06	0.0	0.0	0.0	30.0	-99.80	260.81	0.0	0.0	0.0	-47.78
3	48	-59.29	0.0	-1.28e-03	-33.61	0.0	-103.08	294.42	0.0	0.0	0.0	-142.58
		-142.58	0.0	0.0	0.0	30.0	-103.08	260.81	0.0	0.0	0.0	-59.29
3	49	-155.79	0.0	-4.69e-05	-33.61	0.0	-177.63	312.54	0.0	0.0	0.0	-244.51
		-244.51	0.0	0.0	0.0	30.0	-177.63	278.93	0.0	0.0	0.0	-155.79
3	50	-161.54	0.0	-6.86e-05	-33.61	0.0	-177.63	314.85	0.0	0.0	0.0	-250.96
		-250.96	0.0	0.0	0.0	30.0	-177.63	281.24	0.0	0.0	0.0	-161.54
3	51	-152.91	0.0	-6.33e-05	-33.61	0.0	-175.99	313.70	0.0	0.0	0.0	-241.97
		-241.97	0.0	0.0	0.0	30.0	-175.99	280.09	0.0	0.0	0.0	-152.91
3	52	-164.42	0.0	-5.22e-05	-33.61	0.0	-179.27	313.70	0.0	0.0	0.0	-253.49
		-253.49	0.0	0.0	0.0	30.0	-179.27	280.09	0.0	0.0	0.0	-164.42
3	53	-73.59	0.0	-1.73e-03	-33.61	0.0	-149.59	288.62	0.0	0.0	0.0	-155.13
		-155.13	0.0	0.0	0.0	30.0	-149.59	255.01	0.0	0.0	0.0	-73.59
3	54	-79.34	0.0	-1.75e-03	-33.61	0.0	-149.59	290.92	0.0	0.0	0.0	-161.58
		-161.58	0.0	0.0	0.0	30.0	-149.59	257.31	0.0	0.0	0.0	-79.34
3	55	-70.71	0.0	-1.74e-03	-33.61	0.0	-147.95	289.77	0.0	0.0	0.0	-152.60
		-152.60	0.0	0.0	0.0	30.0	-147.95	256.16	0.0	0.0	0.0	-70.71
3	56	-82.22	0.0	-1.73e-03	-33.61	0.0	-151.23	289.77	0.0	0.0	0.0	-164.11
		-164.11	0.0	0.0	0.0	30.0	-151.23	256.16	0.0	0.0	0.0	-82.22
3	57	-111.00	0.0	-9.00e-05	-33.61	0.0	-121.56	312.54	0.0	0.0	0.0	-199.73
		-199.73	0.0	0.0	0.0	30.0	-121.56	278.93	0.0	0.0	0.0	-111.00
3	58	-116.76	0.0	-1.12e-04	-33.61	0.0	-121.56	314.85	0.0	0.0	0.0	-206.17
		-206.17	0.0	0.0	0.0	30.0	-121.56	281.24	0.0	0.0	0.0	-116.76
3	59	-108.12	0.0	-1.06e-04	-33.61	0.0	-119.92	313.70	0.0	0.0	0.0	-197.19
		-197.19	0.0	0.0	0.0	30.0	-119.92	280.09	0.0	0.0	0.0	-108.12
3	60	-119.64	0.0	-9.53e-05	-33.61	0.0	-123.20	313.70	0.0	0.0	0.0	-208.71
		-208.71	0.0	0.0	0.0	30.0	-123.20	280.09	0.0	0.0	0.0	-119.64
3	61	87.50	0.0	-4.75e-03	-33.61	0.0	-104.92	219.85	0.0	0.0	0.0	26.59
		26.59	0.0	0.0	0.0	30.0	-110.60	186.24	0.0	0.0	0.0	87.50
3	62	81.75	0.0	-4.78e-03	-33.61	0.0	-104.92	222.15	0.0	0.0	0.0	20.14
		20.14	0.0	0.0	0.0	30.0	-110.60	188.54	0.0	0.0	0.0	81.75
3	63	90.38	0.0	-4.77e-03	-33.61	0.0	-103.28	221.00	0.0	0.0	0.0	29.12
		29.12	0.0	0.0	0.0	30.0	-108.96	187.39	0.0	0.0	0.0	90.38

Trave	Cmb	M3 mx/mn	M2 mx/mn	D 2 / D 3	Q 2 / Q 3	Pos.	N	V 2	V 3	T	M 2	M 3
3	64	78.87	0.0	-4.76e-03	-33.61	0.0	-106.56	221.00	0.0	0.0	0.0	17.61
		17.61	0.0	0.0	0.0	30.0	-112.24	187.39	0.0	0.0	0.0	78.87
3	65	169.70	0.0	-6.43e-03	-33.61	0.0	-76.88	195.93	0.0	0.0	0.0	115.97
		115.97	0.0	0.0	0.0	30.0	-82.56	162.32	0.0	0.0	0.0	169.70
3	66	163.95	0.0	-6.46e-03	-33.61	0.0	-76.88	198.23	0.0	0.0	0.0	109.52
		109.52	0.0	0.0	0.0	30.0	-82.56	164.62	0.0	0.0	0.0	163.95
3	67	172.58	0.0	-6.45e-03	-33.61	0.0	-75.24	197.08	0.0	0.0	0.0	118.50
		118.50	0.0	0.0	0.0	30.0	-80.92	163.47	0.0	0.0	0.0	172.58
3	68	161.07	0.0	-6.44e-03	-33.61	0.0	-78.52	197.08	0.0	0.0	0.0	106.98
		106.98	0.0	0.0	0.0	30.0	-84.20	163.47	0.0	0.0	0.0	161.07
3	69	132.29	0.0	-4.80e-03	-33.61	0.0	-48.84	219.85	0.0	0.0	0.0	71.37
		71.37	0.0	0.0	0.0	30.0	-54.52	186.24	0.0	0.0	0.0	132.29
3	70	126.53	0.0	-4.82e-03	-33.61	0.0	-48.84	222.15	0.0	0.0	0.0	64.93
		64.93	0.0	0.0	0.0	30.0	-54.52	188.54	0.0	0.0	0.0	126.53
3	71	135.17	0.0	-4.81e-03	-33.61	0.0	-47.20	221.00	0.0	0.0	0.0	73.91
		73.91	0.0	0.0	0.0	30.0	-52.88	187.39	0.0	0.0	0.0	135.17
3	72	123.65	0.0	-4.80e-03	-33.61	0.0	-50.48	221.00	0.0	0.0	0.0	62.39
		62.39	0.0	0.0	0.0	30.0	-56.16	187.39	0.0	0.0	0.0	123.65
3	73	27.15	0.0	-3.57e-03	-33.61	0.0	-125.03	239.12	0.0	0.0	0.0	-39.54
		-39.54	0.0	0.0	0.0	30.0	-130.72	205.51	0.0	0.0	0.0	27.15
3	74	21.40	0.0	-3.59e-03	-33.61	0.0	-125.03	241.42	0.0	0.0	0.0	-45.99
		-45.99	0.0	0.0	0.0	30.0	-130.72	207.81	0.0	0.0	0.0	21.40
3	75	30.03	0.0	-3.59e-03	-33.61	0.0	-123.39	240.27	0.0	0.0	0.0	-37.01
		-37.01	0.0	0.0	0.0	30.0	-129.08	206.66	0.0	0.0	0.0	30.03
3	76	18.52	0.0	-3.57e-03	-33.61	0.0	-126.67	240.27	0.0	0.0	0.0	-48.52
		-48.52	0.0	0.0	0.0	30.0	-132.36	206.66	0.0	0.0	0.0	18.52
3	77	109.35	0.0	-5.25e-03	-33.61	0.0	-96.99	215.20	0.0	0.0	0.0	49.84
		49.84	0.0	0.0	0.0	30.0	-102.68	181.59	0.0	0.0	0.0	109.35
3	78	103.60	0.0	-5.27e-03	-33.61	0.0	-96.99	217.50	0.0	0.0	0.0	43.39
		43.39	0.0	0.0	0.0	30.0	-102.68	183.89	0.0	0.0	0.0	103.60
3	79	112.23	0.0	-5.27e-03	-33.61	0.0	-95.35	216.35	0.0	0.0	0.0	52.37
		52.37	0.0	0.0	0.0	30.0	-101.04	182.74	0.0	0.0	0.0	112.23
3	80	100.72	0.0	-5.25e-03	-33.61	0.0	-98.63	216.35	0.0	0.0	0.0	40.85
		40.85	0.0	0.0	0.0	30.0	-104.32	182.74	0.0	0.0	0.0	100.72
3	81	71.94	0.0	-3.61e-03	-33.61	0.0	-68.95	239.12	0.0	0.0	0.0	5.24
		5.24	0.0	0.0	0.0	30.0	-74.64	205.51	0.0	0.0	0.0	71.94
3	82	66.18	0.0	-3.63e-03	-33.61	0.0	-68.95	241.42	0.0	0.0	0.0	-1.20
		-1.20	0.0	0.0	0.0	30.0	-74.64	207.81	0.0	0.0	0.0	66.18
3	83	74.82	0.0	-3.63e-03	-33.61	0.0	-67.31	240.27	0.0	0.0	0.0	7.78
		7.78	0.0	0.0	0.0	30.0	-73.00	206.66	0.0	0.0	0.0	74.82
3	84	63.30	0.0	-3.62e-03	-33.61	0.0	-70.59	240.27	0.0	0.0	0.0	-3.74
		-3.74	0.0	0.0	0.0	30.0	-76.28	206.66	0.0	0.0	0.0	63.30
3	85	-96.06	0.0	-1.23e-03	-33.61	0.0	-157.99	293.27	0.0	0.0	0.0	-179.00
		-179.00	0.0	0.0	0.0	30.0	-157.99	259.66	0.0	0.0	0.0	-96.06
3	86	-101.81	0.0	-1.25e-03	-33.61	0.0	-157.99	295.57	0.0	0.0	0.0	-185.44
		-185.44	0.0	0.0	0.0	30.0	-157.99	261.96	0.0	0.0	0.0	-101.81
3	87	-93.18	0.0	-1.25e-03	-33.61	0.0	-156.35	294.42	0.0	0.0	0.0	-176.46
		-176.46	0.0	0.0	0.0	30.0	-156.35	260.81	0.0	0.0	0.0	-93.18
3	88	-104.69	0.0	-1.24e-03	-33.61	0.0	-159.63	294.42	0.0	0.0	0.0	-187.98
		-187.98	0.0	0.0	0.0	30.0	-159.63	260.81	0.0	0.0	0.0	-104.69
3	89	-13.86	0.0	-2.91e-03	-33.61	0.0	-129.95	269.35	0.0	0.0	0.0	-89.62
		-89.62	0.0	0.0	0.0	30.0	-129.95	235.74	0.0	0.0	0.0	-13.86
3	90	-19.61	0.0	-2.93e-03	-33.61	0.0	-129.95	271.65	0.0	0.0	0.0	-96.07
		-96.07	0.0	0.0	0.0	30.0	-129.95	238.04	0.0	0.0	0.0	-19.61
3	91	-10.98	0.0	-2.93e-03	-33.61	0.0	-128.31	270.50	0.0	0.0	0.0	-87.08
		-87.08	0.0	0.0	0.0	30.0	-128.31	236.89	0.0	0.0	0.0	-10.98
3	92	-22.49	0.0	-2.92e-03	-33.61	0.0	-131.59	270.50	0.0	0.0	0.0	-98.60
		-98.60	0.0	0.0	0.0	30.0	-131.59	236.89	0.0	0.0	0.0	-22.49
3	93	-51.27	0.0	-1.27e-03	-33.61	0.0	-101.91	293.27	0.0	0.0	0.0	-134.21
		-134.21	0.0	0.0	0.0	30.0	-101.91	259.66	0.0	0.0	0.0	-51.27
3	94	-57.03	0.0	-1.30e-03	-33.61	0.0	-101.91	295.57	0.0	0.0	0.0	-140.66
		-140.66	0.0	0.0	0.0	30.0	-101.91	261.96	0.0	0.0	0.0	-57.03
3	95	-48.39	0.0	-1.29e-03	-33.61	0.0	-100.27	294.42	0.0	0.0	0.0	-131.68
		-131.68	0.0	0.0	0.0	30.0	-100.27	260.81	0.0	0.0	0.0	-48.39
3	96	-59.91	0.0	-1.28e-03	-33.61	0.0	-103.55	294.42	0.0	0.0	0.0	-143.20
		-143.20	0.0	0.0	0.0	30.0	-103.55	260.81	0.0	0.0	0.0	-59.91
3	97	-156.41	0.0	-4.63e-05	-33.61	0.0	-178.10	312.54	0.0	0.0	0.0	-245.13
		-245.13	0.0	0.0	0.0	30.0	-178.10	278.93	0.0	0.0	0.0	-156.41
3	98	-162.16	0.0	-6.80e-05	-33.61	0.0	-178.10	314.85	0.0	0.0	0.0	-251.57
		-251.57	0.0	0.0	0.0	30.0	-178.10	281.24	0.0	0.0	0.0	-162.16
3	99	-153.52	0.0	-6.27e-05	-33.61	0.0	-176.46	313.70	0.0	0.0	0.0	-242.59
		-242.59	0.0	0.0	0.0	30.0	-176.46	280.09	0.0	0.0	0.0	-153.52
3	100	-165.04	0.0	-5.16e-05	-33.61	0.0	-179.74	313.70	0.0	0.0	0.0	-254.11
		-254.11	0.0	0.0	0.0	30.0	-179.74	280.09	0.0	0.0	0.0	-165.04
3	101	-74.20	0.0	-1.73e-03	-33.61	0.0	-150.06	288.62	0.0	0.0	0.0	-155.75

Trave	Cmb	M3 mx/mn	M2 mx/mn	D 2 / D 3	Q 2 / Q 3	Pos.	N	V 2	V 3	T	M 2	M 3
		-155.75	0.0	0.0	0.0	30.0	-150.06	255.01	0.0	0.0	0.0	-74.20
3	102	-79.96	0.0	-1.75e-03	-33.61	0.0	-150.06	290.92	0.0	0.0	0.0	-162.20
		-162.20	0.0	0.0	0.0	30.0	-150.06	257.31	0.0	0.0	0.0	-79.96
3	103	-71.32	0.0	-1.74e-03	-33.61	0.0	-148.42	289.77	0.0	0.0	0.0	-153.21
		-153.21	0.0	0.0	0.0	30.0	-148.42	256.16	0.0	0.0	0.0	-71.32
3	104	-82.84	0.0	-1.73e-03	-33.61	0.0	-151.70	289.77	0.0	0.0	0.0	-164.73
		-164.73	0.0	0.0	0.0	30.0	-151.70	256.16	0.0	0.0	0.0	-82.84
3	105	-111.62	0.0	-8.94e-05	-33.61	0.0	-122.02	312.54	0.0	0.0	0.0	-200.34
		-200.34	0.0	0.0	0.0	30.0	-122.02	278.93	0.0	0.0	0.0	-111.62
3	106	-117.38	0.0	-1.11e-04	-33.61	0.0	-122.02	314.85	0.0	0.0	0.0	-206.79
		-206.79	0.0	0.0	0.0	30.0	-122.02	281.24	0.0	0.0	0.0	-117.38
3	107	-108.74	0.0	-1.06e-04	-33.61	0.0	-120.38	313.70	0.0	0.0	0.0	-197.81
		-197.81	0.0	0.0	0.0	30.0	-120.38	280.09	0.0	0.0	0.0	-108.74
3	108	-120.26	0.0	-9.47e-05	-33.61	0.0	-123.66	313.70	0.0	0.0	0.0	-209.33
		-209.33	0.0	0.0	0.0	30.0	-123.66	280.09	0.0	0.0	0.0	-120.26
3	109	431.83	0.0	0.01	-18.23	0.0	-62.14	-33.72	0.0	0.0	0.0	431.83
		418.98	0.0	0.0	0.0	30.0	-66.18	-51.95	0.0	0.0	0.0	418.98
3	110	-93.28	0.0	-5.49e-05	-24.92	0.0	-98.85	231.61	0.0	0.0	0.0	-159.02
		-159.02	0.0	0.0	0.0	30.0	-98.85	206.69	0.0	0.0	0.0	-93.28
3	111	-98.07	0.0	-7.30e-05	-24.92	0.0	-98.85	233.53	0.0	0.0	0.0	-164.39
		-164.39	0.0	0.0	0.0	30.0	-98.85	208.61	0.0	0.0	0.0	-98.07
3	112	-90.87	0.0	-6.86e-05	-24.92	0.0	-97.48	232.57	0.0	0.0	0.0	-156.91
		-156.91	0.0	0.0	0.0	30.0	-97.48	207.65	0.0	0.0	0.0	-90.87
3	113	-100.47	0.0	-5.93e-05	-24.92	0.0	-100.22	232.57	0.0	0.0	0.0	-166.50
		-166.50	0.0	0.0	0.0	30.0	-100.22	207.65	0.0	0.0	0.0	-100.47
3	114	-32.39	0.0	-1.30e-03	-24.92	0.0	-78.08	213.89	0.0	0.0	0.0	-92.81
		-92.81	0.0	0.0	0.0	30.0	-78.08	188.97	0.0	0.0	0.0	-32.39
3	115	-37.18	0.0	-1.32e-03	-24.92	0.0	-78.08	215.81	0.0	0.0	0.0	-98.19
		-98.19	0.0	0.0	0.0	30.0	-78.08	190.89	0.0	0.0	0.0	-37.18
3	116	-29.99	0.0	-1.31e-03	-24.92	0.0	-76.71	214.85	0.0	0.0	0.0	-90.70
		-90.70	0.0	0.0	0.0	30.0	-76.71	189.93	0.0	0.0	0.0	-29.99
3	117	-39.58	0.0	-1.30e-03	-24.92	0.0	-79.45	214.85	0.0	0.0	0.0	-100.30
		-100.30	0.0	0.0	0.0	30.0	-79.45	189.93	0.0	0.0	0.0	-39.58
3	118	-60.10	0.0	-8.69e-05	-24.92	0.0	-57.31	231.61	0.0	0.0	0.0	-125.85
		-125.85	0.0	0.0	0.0	30.0	-57.31	206.69	0.0	0.0	0.0	-60.10
3	119	-64.90	0.0	-1.05e-04	-24.92	0.0	-57.31	233.53	0.0	0.0	0.0	-131.22
		-131.22	0.0	0.0	0.0	30.0	-57.31	208.61	0.0	0.0	0.0	-64.90
3	120	-57.70	0.0	-1.01e-04	-24.92	0.0	-55.94	232.57	0.0	0.0	0.0	-123.73
		-123.73	0.0	0.0	0.0	30.0	-55.94	207.65	0.0	0.0	0.0	-57.70
3	121	-67.30	0.0	-9.13e-05	-24.92	0.0	-58.68	232.57	0.0	0.0	0.0	-133.33
		-133.33	0.0	0.0	0.0	30.0	-58.68	207.65	0.0	0.0	0.0	-67.30
3	122	35.45	0.0	-2.87e-03	-24.92	0.0	-84.30	176.51	0.0	0.0	0.0	-13.77
		-13.77	0.0	0.0	0.0	30.0	-87.46	151.59	0.0	0.0	0.0	35.45
3	123	30.65	0.0	-2.89e-03	-24.92	0.0	-84.30	178.43	0.0	0.0	0.0	-19.14
		-19.14	0.0	0.0	0.0	30.0	-87.46	153.51	0.0	0.0	0.0	30.65
3	124	37.85	0.0	-2.89e-03	-24.92	0.0	-82.94	177.47	0.0	0.0	0.0	-11.66
		-11.66	0.0	0.0	0.0	30.0	-86.10	152.55	0.0	0.0	0.0	37.85
3	125	28.25	0.0	-2.88e-03	-24.92	0.0	-85.67	177.47	0.0	0.0	0.0	-21.25
		-21.25	0.0	0.0	0.0	30.0	-88.83	152.55	0.0	0.0	0.0	28.25
3	126	96.33	0.0	-4.12e-03	-24.92	0.0	-63.53	158.79	0.0	0.0	0.0	52.44
		52.44	0.0	0.0	0.0	30.0	-66.69	133.87	0.0	0.0	0.0	96.33
3	127	91.54	0.0	-4.14e-03	-24.92	0.0	-63.53	160.70	0.0	0.0	0.0	47.06
		47.06	0.0	0.0	0.0	30.0	-66.69	135.79	0.0	0.0	0.0	91.54
3	128	98.73	0.0	-4.13e-03	-24.92	0.0	-62.17	159.74	0.0	0.0	0.0	54.55
		54.55	0.0	0.0	0.0	30.0	-65.33	134.83	0.0	0.0	0.0	98.73
3	129	89.14	0.0	-4.12e-03	-24.92	0.0	-64.90	159.74	0.0	0.0	0.0	44.95
		44.95	0.0	0.0	0.0	30.0	-68.06	134.83	0.0	0.0	0.0	89.14
3	130	68.62	0.0	-2.91e-03	-24.92	0.0	-42.76	176.51	0.0	0.0	0.0	19.40
		19.40	0.0	0.0	0.0	30.0	-45.92	151.59	0.0	0.0	0.0	68.62
3	131	63.82	0.0	-2.93e-03	-24.92	0.0	-42.76	178.43	0.0	0.0	0.0	14.03
		14.03	0.0	0.0	0.0	30.0	-45.92	153.51	0.0	0.0	0.0	63.82
3	132	71.02	0.0	-2.92e-03	-24.92	0.0	-41.40	177.47	0.0	0.0	0.0	21.52
		21.52	0.0	0.0	0.0	30.0	-44.56	152.55	0.0	0.0	0.0	71.02
3	133	61.42	0.0	-2.91e-03	-24.92	0.0	-44.13	177.47	0.0	0.0	0.0	11.92
		11.92	0.0	0.0	0.0	30.0	-47.29	152.55	0.0	0.0	0.0	61.42
3	134	-9.37	0.0	-1.99e-03	-24.92	0.0	-99.24	190.82	0.0	0.0	0.0	-62.88
		-62.88	0.0	0.0	0.0	30.0	-102.40	165.90	0.0	0.0	0.0	-9.37
3	135	-14.16	0.0	-2.01e-03	-24.92	0.0	-99.24	192.74	0.0	0.0	0.0	-68.25
		-68.25	0.0	0.0	0.0	30.0	-102.40	167.82	0.0	0.0	0.0	-14.16
3	136	-6.97	0.0	-2.01e-03	-24.92	0.0	-97.87	191.78	0.0	0.0	0.0	-60.76
		-60.76	0.0	0.0	0.0	30.0	-101.03	166.86	0.0	0.0	0.0	-6.97
3	137	-16.57	0.0	-2.00e-03	-24.92	0.0	-100.61	191.78	0.0	0.0	0.0	-70.36
		-70.36	0.0	0.0	0.0	30.0	-103.77	166.86	0.0	0.0	0.0	-16.57
3	138	51.52	0.0	-3.24e-03	-24.92	0.0	-78.47	173.10	0.0	0.0	0.0	3.33
		3.33	0.0	0.0	0.0	30.0	-81.63	148.18	0.0	0.0	0.0	51.52

Trave	Cmb	M3 mx/mn	M2 mx/mn	D 2 / D 3	Q 2 / Q 3	Pos.	N	V 2	V 3	T	M 2	M 3
3	139	46.72	0.0	-3.26e-03	-24.92	0.0	-78.47	175.02	0.0	0.0	0.0	-2.04
		-2.04	0.0	0.0	0.0	30.0	-81.63	150.10	0.0	0.0	0.0	46.72
3	140	53.92	0.0	-3.25e-03	-24.92	0.0	-77.10	174.06	0.0	0.0	0.0	5.44
		5.44	0.0	0.0	0.0	30.0	-80.26	149.14	0.0	0.0	0.0	53.92
3	141	44.32	0.0	-3.24e-03	-24.92	0.0	-79.84	174.06	0.0	0.0	0.0	-4.16
		-4.16	0.0	0.0	0.0	30.0	-83.00	149.14	0.0	0.0	0.0	44.32
3	142	23.80	0.0	-2.03e-03	-24.92	0.0	-57.70	190.82	0.0	0.0	0.0	-29.70
		-29.70	0.0	0.0	0.0	30.0	-60.86	165.90	0.0	0.0	0.0	23.80
3	143	19.01	0.0	-2.04e-03	-24.92	0.0	-57.70	192.74	0.0	0.0	0.0	-35.08
		-35.08	0.0	0.0	0.0	30.0	-60.86	167.82	0.0	0.0	0.0	19.01
3	144	26.21	0.0	-2.04e-03	-24.92	0.0	-56.34	191.78	0.0	0.0	0.0	-27.59
		-27.59	0.0	0.0	0.0	30.0	-59.49	166.86	0.0	0.0	0.0	26.21
3	145	16.61	0.0	-2.03e-03	-24.92	0.0	-59.07	191.78	0.0	0.0	0.0	-37.19
		-37.19	0.0	0.0	0.0	30.0	-62.23	166.86	0.0	0.0	0.0	16.61
3	146	-87.29	0.0	-8.03e-06	-16.22	0.0	-100.13	150.54	0.0	0.0	0.0	-130.02
		-130.02	0.0	0.0	0.0	30.0	-100.13	134.33	0.0	0.0	0.0	-87.29
3	147	-91.29	0.0	-2.31e-05	-16.22	0.0	-100.13	152.14	0.0	0.0	0.0	-134.50
		-134.50	0.0	0.0	0.0	30.0	-100.13	135.92	0.0	0.0	0.0	-91.29
3	148	-85.29	0.0	-1.94e-05	-16.22	0.0	-98.99	151.34	0.0	0.0	0.0	-128.26
		-128.26	0.0	0.0	0.0	30.0	-98.99	135.13	0.0	0.0	0.0	-85.29
3	149	-93.29	0.0	-1.17e-05	-16.22	0.0	-101.27	151.34	0.0	0.0	0.0	-136.26
		-136.26	0.0	0.0	0.0	30.0	-101.27	135.13	0.0	0.0	0.0	-93.29
3	150	-26.40	0.0	-1.25e-03	-16.22	0.0	-79.36	132.82	0.0	0.0	0.0	-63.82
		-63.82	0.0	0.0	0.0	30.0	-79.36	116.60	0.0	0.0	0.0	-26.40
3	151	-30.40	0.0	-1.27e-03	-16.22	0.0	-79.36	134.42	0.0	0.0	0.0	-68.29
		-68.29	0.0	0.0	0.0	30.0	-79.36	118.20	0.0	0.0	0.0	-30.40
3	152	-24.40	0.0	-1.26e-03	-16.22	0.0	-78.22	133.62	0.0	0.0	0.0	-62.06
		-62.06	0.0	0.0	0.0	30.0	-78.22	117.40	0.0	0.0	0.0	-24.40
3	153	-24.40	0.0	-1.26e-03	-16.22	0.0	-78.22	133.62	0.0	0.0	0.0	-62.06
		-62.06	0.0	0.0	0.0	30.0	-78.22	117.40	0.0	0.0	0.0	-24.40
3	154	-54.12	0.0	-4.00e-05	-16.22	0.0	-58.59	150.54	0.0	0.0	0.0	-96.85
		-96.85	0.0	0.0	0.0	30.0	-58.59	134.33	0.0	0.0	0.0	-54.12
3	155	-58.12	0.0	-5.51e-05	-16.22	0.0	-58.59	152.14	0.0	0.0	0.0	-101.33
		-101.33	0.0	0.0	0.0	30.0	-58.59	135.92	0.0	0.0	0.0	-58.12
3	156	-52.12	0.0	-5.14e-05	-16.22	0.0	-57.45	151.34	0.0	0.0	0.0	-95.09
		-95.09	0.0	0.0	0.0	30.0	-57.45	135.13	0.0	0.0	0.0	-52.12
3	157	-52.12	0.0	-5.14e-05	-16.22	0.0	-57.45	151.34	0.0	0.0	0.0	-95.09
		-95.09	0.0	0.0	0.0	30.0	-57.45	135.13	0.0	0.0	0.0	-52.12
3	158	38.37	0.0	-3.17e-03	-27.82	0.0	-91.79	198.81	0.0	0.0	0.0	-17.10
		-17.10	0.0	0.0	0.0	30.0	-94.95	170.99	0.0	0.0	0.0	38.37
3	159	33.58	0.0	-3.19e-03	-27.82	0.0	-91.79	200.73	0.0	0.0	0.0	-22.47
		-22.47	0.0	0.0	0.0	30.0	-94.95	172.91	0.0	0.0	0.0	33.58
3	160	40.78	0.0	-3.19e-03	-27.82	0.0	-90.42	199.77	0.0	0.0	0.0	-14.98
		-14.98	0.0	0.0	0.0	30.0	-93.58	171.95	0.0	0.0	0.0	40.78
3	161	31.18	0.0	-3.18e-03	-27.82	0.0	-93.16	199.77	0.0	0.0	0.0	-24.58
		-24.58	0.0	0.0	0.0	30.0	-96.32	171.95	0.0	0.0	0.0	31.18
3	162	99.26	0.0	-4.42e-03	-27.82	0.0	-71.02	181.09	0.0	0.0	0.0	49.11
		49.11	0.0	0.0	0.0	30.0	-74.18	153.27	0.0	0.0	0.0	99.26
3	163	94.47	0.0	-4.44e-03	-27.82	0.0	-71.02	183.01	0.0	0.0	0.0	43.74
		43.74	0.0	0.0	0.0	30.0	-74.18	155.19	0.0	0.0	0.0	94.47
3	164	101.66	0.0	-4.43e-03	-27.82	0.0	-69.65	182.05	0.0	0.0	0.0	51.22
		51.22	0.0	0.0	0.0	30.0	-72.81	154.23	0.0	0.0	0.0	101.66
3	165	92.07	0.0	-4.42e-03	-27.82	0.0	-72.39	182.05	0.0	0.0	0.0	41.62
		41.62	0.0	0.0	0.0	30.0	-75.55	154.23	0.0	0.0	0.0	92.07
3	166	71.55	0.0	-3.21e-03	-27.82	0.0	-50.25	198.81	0.0	0.0	0.0	16.08
		16.08	0.0	0.0	0.0	30.0	-53.41	170.99	0.0	0.0	0.0	71.55
3	167	66.75	0.0	-3.23e-03	-27.82	0.0	-50.25	200.73	0.0	0.0	0.0	10.70
		10.70	0.0	0.0	0.0	30.0	-53.41	172.91	0.0	0.0	0.0	66.75
3	168	73.95	0.0	-3.22e-03	-27.82	0.0	-48.88	199.77	0.0	0.0	0.0	18.19
		18.19	0.0	0.0	0.0	30.0	-52.04	171.95	0.0	0.0	0.0	73.95
3	169	64.35	0.0	-3.21e-03	-27.82	0.0	-51.62	199.77	0.0	0.0	0.0	8.59
		8.59	0.0	0.0	0.0	30.0	-54.78	171.95	0.0	0.0	0.0	64.35
3	170	-21.38	0.0	-2.00e-03	-27.82	0.0	-111.71	217.89	0.0	0.0	0.0	-82.57
		-82.57	0.0	0.0	0.0	30.0	-114.87	190.07	0.0	0.0	0.0	-21.38
3	171	-26.17	0.0	-2.02e-03	-27.82	0.0	-111.71	219.81	0.0	0.0	0.0	-87.94
		-87.94	0.0	0.0	0.0	30.0	-114.87	191.99	0.0	0.0	0.0	-26.17
3	172	-18.98	0.0	-2.02e-03	-27.82	0.0	-110.34	218.85	0.0	0.0	0.0	-80.46
		-80.46	0.0	0.0	0.0	30.0	-113.50	191.03	0.0	0.0	0.0	-18.98
3	173	-28.57	0.0	-2.01e-03	-27.82	0.0	-113.07	218.85	0.0	0.0	0.0	-90.06
		-90.06	0.0	0.0	0.0	30.0	-116.23	191.03	0.0	0.0	0.0	-28.57
3	174	39.51	0.0	-3.25e-03	-27.82	0.0	-90.94	200.17	0.0	0.0	0.0	-16.37
		-16.37	0.0	0.0	0.0	30.0	-94.10	172.35	0.0	0.0	0.0	39.51
3	175	34.72	0.0	-3.26e-03	-27.82	0.0	-90.94	202.09	0.0	0.0	0.0	-21.74
		-21.74	0.0	0.0	0.0	30.0	-94.10	174.27	0.0	0.0	0.0	34.72
3	176	41.91	0.0	-3.26e-03	-27.82	0.0	-89.57	201.13	0.0	0.0	0.0	-14.25

Trave	Cmb	M3 mx/mn	M2 mx/mn	D 2 / D 3	Q 2 / Q 3	Pos.	N	V 2	V 3	T	M 2	M 3
		-14.25	0.0	0.0	0.0	30.0	-92.73	173.31	0.0	0.0	0.0	41.91
3	177	32.32	0.0	-3.25e-03	-27.82	0.0	-92.30	201.13	0.0	0.0	0.0	-23.85
		-23.85	0.0	0.0	0.0	30.0	-95.46	173.31	0.0	0.0	0.0	32.32
3	178	11.80	0.0	-2.03e-03	-27.82	0.0	-70.17	217.89	0.0	0.0	0.0	-49.40
		-49.40	0.0	0.0	0.0	30.0	-73.33	190.07	0.0	0.0	0.0	11.80
3	179	7.00	0.0	-2.05e-03	-27.82	0.0	-70.17	219.81	0.0	0.0	0.0	-54.77
		-54.77	0.0	0.0	0.0	30.0	-73.33	191.99	0.0	0.0	0.0	7.00
3	180	14.20	0.0	-2.05e-03	-27.82	0.0	-68.80	218.85	0.0	0.0	0.0	-47.29
		-47.29	0.0	0.0	0.0	30.0	-71.96	191.03	0.0	0.0	0.0	14.20
3	181	4.60	0.0	-2.04e-03	-27.82	0.0	-71.53	218.85	0.0	0.0	0.0	-56.88
		-56.88	0.0	0.0	0.0	30.0	-74.69	191.03	0.0	0.0	0.0	4.60
8	1	-125.34	0.0	-3.91e-05	-21.89	0.0	-135.17	-184.34	0.0	0.0	0.0	-125.34
		-183.92	0.0	0.0	0.0	30.0	-135.17	-206.23	0.0	0.0	0.0	-183.92
8	2	-115.74	0.0	-2.92e-06	-21.89	0.0	-135.17	-180.50	0.0	0.0	0.0	-115.74
		-173.18	0.0	0.0	0.0	30.0	-135.17	-202.39	0.0	0.0	0.0	-173.18
8	3	-110.94	0.0	-3.03e-05	-21.89	0.0	-132.44	-182.42	0.0	0.0	0.0	-110.94
		-168.95	0.0	0.0	0.0	30.0	-132.44	-204.31	0.0	0.0	0.0	-168.95
8	4	-130.14	0.0	-1.18e-05	-21.89	0.0	-137.91	-182.42	0.0	0.0	0.0	-130.14
		-188.15	0.0	0.0	0.0	30.0	-137.91	-204.31	0.0	0.0	0.0	-188.15
8	5	-162.75	0.0	-1.60e-03	-21.89	0.0	-107.13	-208.26	0.0	0.0	0.0	-162.75
		-228.52	0.0	0.0	0.0	30.0	-107.13	-230.15	0.0	0.0	0.0	-228.52
8	6	-153.16	0.0	-1.63e-03	-21.89	0.0	-107.13	-204.42	0.0	0.0	0.0	-153.16
		-217.77	0.0	0.0	0.0	30.0	-107.13	-226.31	0.0	0.0	0.0	-217.77
8	7	-148.36	0.0	-1.61e-03	-21.89	0.0	-104.40	-206.34	0.0	0.0	0.0	-148.36
		-213.55	0.0	0.0	0.0	30.0	-104.40	-228.23	0.0	0.0	0.0	-213.55
8	8	-167.56	0.0	-1.62e-03	-21.89	0.0	-109.87	-206.34	0.0	0.0	0.0	-167.56
		-232.74	0.0	0.0	0.0	30.0	-109.87	-228.23	0.0	0.0	0.0	-232.74
8	9	-80.55	0.0	-8.23e-05	-21.89	0.0	-79.09	-184.34	0.0	0.0	0.0	-80.55
		-139.14	0.0	0.0	0.0	30.0	-79.09	-206.23	0.0	0.0	0.0	-139.14
8	10	-70.96	0.0	-4.61e-05	-21.89	0.0	-79.09	-180.50	0.0	0.0	0.0	-70.96
		-128.40	0.0	0.0	0.0	30.0	-79.09	-202.39	0.0	0.0	0.0	-128.40
8	11	-66.16	0.0	-7.34e-05	-21.89	0.0	-76.36	-182.42	0.0	0.0	0.0	-66.16
		-124.17	0.0	0.0	0.0	30.0	-76.36	-204.31	0.0	0.0	0.0	-124.17
8	12	-85.36	0.0	-5.49e-05	-21.89	0.0	-81.83	-182.42	0.0	0.0	0.0	-85.36
		-143.36	0.0	0.0	0.0	30.0	-81.83	-204.31	0.0	0.0	0.0	-143.36
8	13	-221.38	0.0	-1.47e-03	-37.56	0.0	-164.18	-339.88	0.0	0.0	0.0	-221.38
		-328.98	0.0	0.0	0.0	30.0	-164.18	-377.43	0.0	0.0	0.0	-328.98
8	14	-215.63	0.0	-1.49e-03	-37.56	0.0	-164.18	-337.57	0.0	0.0	0.0	-215.63
		-322.53	0.0	0.0	0.0	30.0	-164.18	-375.13	0.0	0.0	0.0	-322.53
8	15	-212.75	0.0	-1.48e-03	-37.56	0.0	-162.54	-338.72	0.0	0.0	0.0	-212.75
		-320.00	0.0	0.0	0.0	30.0	-162.54	-376.28	0.0	0.0	0.0	-320.00
8	16	-224.27	0.0	-1.49e-03	-37.56	0.0	-165.82	-338.72	0.0	0.0	0.0	-224.27
		-331.52	0.0	0.0	0.0	30.0	-165.82	-376.28	0.0	0.0	0.0	-331.52
8	17	-258.80	0.0	-3.11e-03	-37.56	0.0	-136.14	-363.80	0.0	0.0	0.0	-258.80
		-373.57	0.0	0.0	0.0	30.0	-136.14	-401.35	0.0	0.0	0.0	-373.57
8	18	-253.05	0.0	-3.13e-03	-37.56	0.0	-136.14	-361.50	0.0	0.0	0.0	-253.05
		-367.13	0.0	0.0	0.0	30.0	-136.14	-399.05	0.0	0.0	0.0	-367.13
8	19	-250.17	0.0	-3.11e-03	-37.56	0.0	-134.50	-362.65	0.0	0.0	0.0	-250.17
		-364.59	0.0	0.0	0.0	30.0	-134.50	-400.20	0.0	0.0	0.0	-364.59
8	20	-261.68	0.0	-3.12e-03	-37.56	0.0	-137.78	-362.65	0.0	0.0	0.0	-261.68
		-376.11	0.0	0.0	0.0	30.0	-137.78	-400.20	0.0	0.0	0.0	-376.11
8	21	-176.60	0.0	-1.43e-03	-37.56	0.0	-108.10	-339.88	0.0	0.0	0.0	-176.60
		-284.20	0.0	0.0	0.0	30.0	-108.10	-377.43	0.0	0.0	0.0	-284.20
8	22	-170.85	0.0	-1.45e-03	-37.56	0.0	-108.10	-337.57	0.0	0.0	0.0	-170.85
		-277.75	0.0	0.0	0.0	30.0	-108.10	-375.13	0.0	0.0	0.0	-277.75
8	23	-167.96	0.0	-1.43e-03	-37.56	0.0	-106.46	-338.72	0.0	0.0	0.0	-167.96
		-275.22	0.0	0.0	0.0	30.0	-106.46	-376.28	0.0	0.0	0.0	-275.22
8	24	-179.48	0.0	-1.44e-03	-37.56	0.0	-109.74	-338.72	0.0	0.0	0.0	-179.48
		-286.73	0.0	0.0	0.0	30.0	-109.74	-376.28	0.0	0.0	0.0	-286.73
8	25	-173.25	0.0	-8.20e-05	-37.56	0.0	-191.07	-314.11	0.0	0.0	0.0	-173.25
		-273.11	0.0	0.0	0.0	30.0	-191.07	-351.67	0.0	0.0	0.0	-273.11
8	26	-167.49	0.0	-6.03e-05	-37.56	0.0	-191.07	-311.81	0.0	0.0	0.0	-167.49
		-266.67	0.0	0.0	0.0	30.0	-191.07	-349.37	0.0	0.0	0.0	-266.67
8	27	-164.61	0.0	-7.67e-05	-37.56	0.0	-189.43	-312.96	0.0	0.0	0.0	-164.61
		-264.13	0.0	0.0	0.0	30.0	-189.43	-350.52	0.0	0.0	0.0	-264.13
8	28	-176.13	0.0	-6.56e-05	-37.56	0.0	-192.71	-312.96	0.0	0.0	0.0	-176.13
		-275.65	0.0	0.0	0.0	30.0	-192.71	-350.52	0.0	0.0	0.0	-275.65
8	29	-210.66	0.0	-1.55e-03	-37.56	0.0	-163.03	-338.04	0.0	0.0	0.0	-210.66
		-317.71	0.0	0.0	0.0	30.0	-163.03	-375.59	0.0	0.0	0.0	-317.71
8	30	-204.91	0.0	-1.58e-03	-37.56	0.0	-163.03	-335.74	0.0	0.0	0.0	-204.91
		-311.26	0.0	0.0	0.0	30.0	-163.03	-373.29	0.0	0.0	0.0	-311.26
8	31	-202.03	0.0	-1.56e-03	-37.56	0.0	-161.39	-336.89	0.0	0.0	0.0	-202.03
		-308.73	0.0	0.0	0.0	30.0	-161.39	-374.44	0.0	0.0	0.0	-308.73
8	32	-213.54	0.0	-1.57e-03	-37.56	0.0	-164.67	-336.89	0.0	0.0	0.0	-213.54
		-320.24	0.0	0.0	0.0	30.0	-164.67	-374.44	0.0	0.0	0.0	-320.24

Trave	Cmb	M3 mx/mn	M2 mx/mn	D 2 / D 3	Q 2 / Q 3	Pos.	N	V 2	V 3	T	M 2	M 3
8	33	-128.46	0.0	-1.25e-04	-37.56	0.0	-134.99	-314.11	0.0	0.0	0.0	-128.46
		-228.33	0.0	0.0	0.0	30.0	-134.99	-351.67	0.0	0.0	0.0	-228.33
8	34	-122.71	0.0	-1.03e-04	-37.56	0.0	-134.99	-311.81	0.0	0.0	0.0	-122.71
		-221.88	0.0	0.0	0.0	30.0	-134.99	-349.37	0.0	0.0	0.0	-221.88
8	35	-119.83	0.0	-1.20e-04	-37.56	0.0	-133.35	-312.96	0.0	0.0	0.0	-119.83
		-219.35	0.0	0.0	0.0	30.0	-133.35	-350.52	0.0	0.0	0.0	-219.35
8	36	-131.34	0.0	-1.09e-04	-37.56	0.0	-136.63	-312.96	0.0	0.0	0.0	-131.34
		-230.87	0.0	0.0	0.0	30.0	-136.63	-350.52	0.0	0.0	0.0	-230.87
8	37	-197.56	0.0	-1.09e-03	-33.61	0.0	-157.52	-300.51	0.0	0.0	0.0	-197.56
		-292.75	0.0	0.0	0.0	30.0	-157.52	-334.12	0.0	0.0	0.0	-292.75
8	38	-191.80	0.0	-1.11e-03	-33.61	0.0	-157.52	-298.21	0.0	0.0	0.0	-191.80
		-286.31	0.0	0.0	0.0	30.0	-157.52	-331.82	0.0	0.0	0.0	-286.31
8	39	-188.92	0.0	-1.10e-03	-33.61	0.0	-155.88	-299.36	0.0	0.0	0.0	-188.92
		-283.77	0.0	0.0	0.0	30.0	-155.88	-332.97	0.0	0.0	0.0	-283.77
8	40	-200.44	0.0	-1.11e-03	-33.61	0.0	-159.16	-299.36	0.0	0.0	0.0	-200.44
		-295.29	0.0	0.0	0.0	30.0	-159.16	-332.97	0.0	0.0	0.0	-295.29
8	41	-234.98	0.0	-2.73e-03	-33.61	0.0	-129.48	-324.43	0.0	0.0	0.0	-234.98
		-337.35	0.0	0.0	0.0	30.0	-129.48	-358.04	0.0	0.0	0.0	-337.35
8	42	-229.22	0.0	-2.75e-03	-33.61	0.0	-129.48	-322.13	0.0	0.0	0.0	-229.22
		-330.90	0.0	0.0	0.0	30.0	-129.48	-355.74	0.0	0.0	0.0	-330.90
8	43	-226.34	0.0	-2.73e-03	-33.61	0.0	-127.84	-323.28	0.0	0.0	0.0	-226.34
		-328.36	0.0	0.0	0.0	30.0	-127.84	-356.89	0.0	0.0	0.0	-328.36
8	44	-237.86	0.0	-2.75e-03	-33.61	0.0	-131.12	-323.28	0.0	0.0	0.0	-237.86
		-339.88	0.0	0.0	0.0	30.0	-131.12	-356.89	0.0	0.0	0.0	-339.88
8	45	-152.77	0.0	-1.05e-03	-33.61	0.0	-101.44	-300.51	0.0	0.0	0.0	-152.77
		-247.97	0.0	0.0	0.0	30.0	-101.44	-334.12	0.0	0.0	0.0	-247.97
8	46	-147.02	0.0	-1.07e-03	-33.61	0.0	-101.44	-298.21	0.0	0.0	0.0	-147.02
		-241.52	0.0	0.0	0.0	30.0	-101.44	-331.82	0.0	0.0	0.0	-241.52
8	47	-144.14	0.0	-1.06e-03	-33.61	0.0	-99.80	-299.36	0.0	0.0	0.0	-144.14
		-238.99	0.0	0.0	0.0	30.0	-99.80	-332.97	0.0	0.0	0.0	-238.99
8	48	-155.66	0.0	-1.07e-03	-33.61	0.0	-103.08	-299.36	0.0	0.0	0.0	-155.66
		-250.50	0.0	0.0	0.0	30.0	-103.08	-332.97	0.0	0.0	0.0	-250.50
8	49	-161.54	0.0	-6.86e-05	-33.61	0.0	-177.63	-281.24	0.0	0.0	0.0	-161.54
		-250.96	0.0	0.0	0.0	30.0	-177.63	-314.85	0.0	0.0	0.0	-250.96
8	50	-155.79	0.0	-4.69e-05	-33.61	0.0	-177.63	-278.93	0.0	0.0	0.0	-155.79
		-244.51	0.0	0.0	0.0	30.0	-177.63	-312.54	0.0	0.0	0.0	-244.51
8	51	-152.91	0.0	-6.33e-05	-33.61	0.0	-175.99	-280.09	0.0	0.0	0.0	-152.91
		-241.97	0.0	0.0	0.0	30.0	-175.99	-313.70	0.0	0.0	0.0	-241.97
8	52	-164.42	0.0	-5.22e-05	-33.61	0.0	-179.27	-280.09	0.0	0.0	0.0	-164.42
		-253.49	0.0	0.0	0.0	30.0	-179.27	-313.70	0.0	0.0	0.0	-253.49
8	53	-198.96	0.0	-1.57e-03	-33.61	0.0	-149.59	-305.16	0.0	0.0	0.0	-198.96
		-295.55	0.0	0.0	0.0	30.0	-149.59	-338.77	0.0	0.0	0.0	-295.55
8	54	-193.21	0.0	-1.59e-03	-33.61	0.0	-149.59	-302.86	0.0	0.0	0.0	-193.21
		-289.10	0.0	0.0	0.0	30.0	-149.59	-336.47	0.0	0.0	0.0	-289.10
8	55	-190.32	0.0	-1.57e-03	-33.61	0.0	-147.95	-304.01	0.0	0.0	0.0	-190.32
		-286.57	0.0	0.0	0.0	30.0	-147.95	-337.62	0.0	0.0	0.0	-286.57
8	56	-201.84	0.0	-1.58e-03	-33.61	0.0	-151.23	-304.01	0.0	0.0	0.0	-201.84
		-298.09	0.0	0.0	0.0	30.0	-151.23	-337.62	0.0	0.0	0.0	-298.09
8	57	-116.76	0.0	-1.12e-04	-33.61	0.0	-121.56	-281.24	0.0	0.0	0.0	-116.76
		-206.17	0.0	0.0	0.0	30.0	-121.56	-314.85	0.0	0.0	0.0	-206.17
8	58	-111.00	0.0	-9.00e-05	-33.61	0.0	-121.56	-278.93	0.0	0.0	0.0	-111.00
		-199.73	0.0	0.0	0.0	30.0	-121.56	-312.54	0.0	0.0	0.0	-199.73
8	59	-108.12	0.0	-1.06e-04	-33.61	0.0	-119.92	-280.09	0.0	0.0	0.0	-108.12
		-197.19	0.0	0.0	0.0	30.0	-119.92	-313.70	0.0	0.0	0.0	-197.19
8	60	-119.64	0.0	-9.53e-05	-33.61	0.0	-123.20	-280.09	0.0	0.0	0.0	-119.64
		-208.71	0.0	0.0	0.0	30.0	-123.20	-313.70	0.0	0.0	0.0	-208.71
8	61	-381.73	0.0	-4.62e-03	-33.61	0.0	-205.37	-373.93	0.0	0.0	0.0	-381.73
		-498.96	0.0	0.0	0.0	30.0	-211.06	-407.54	0.0	0.0	0.0	-498.96
8	62	-375.98	0.0	-4.64e-03	-33.61	0.0	-205.37	-371.63	0.0	0.0	0.0	-375.98
		-492.51	0.0	0.0	0.0	30.0	-211.06	-405.24	0.0	0.0	0.0	-492.51
8	63	-373.10	0.0	-4.62e-03	-33.61	0.0	-203.73	-372.78	0.0	0.0	0.0	-373.10
		-489.97	0.0	0.0	0.0	30.0	-209.42	-406.39	0.0	0.0	0.0	-489.97
8	64	-384.61	0.0	-4.63e-03	-33.61	0.0	-207.01	-372.78	0.0	0.0	0.0	-384.61
		-501.49	0.0	0.0	0.0	30.0	-212.70	-406.39	0.0	0.0	0.0	-501.49
8	65	-419.15	0.0	-6.25e-03	-33.61	0.0	-177.33	-397.86	0.0	0.0	0.0	-419.15
		-543.55	0.0	0.0	0.0	30.0	-183.02	-431.47	0.0	0.0	0.0	-543.55
8	66	-413.40	0.0	-6.28e-03	-33.61	0.0	-177.33	-395.55	0.0	0.0	0.0	-413.40
		-537.10	0.0	0.0	0.0	30.0	-183.02	-429.16	0.0	0.0	0.0	-537.10
8	67	-410.51	0.0	-6.26e-03	-33.61	0.0	-175.69	-396.71	0.0	0.0	0.0	-410.51
		-534.57	0.0	0.0	0.0	30.0	-181.38	-430.32	0.0	0.0	0.0	-534.57
8	68	-422.03	0.0	-6.27e-03	-33.61	0.0	-178.97	-396.71	0.0	0.0	0.0	-422.03
		-546.08	0.0	0.0	0.0	30.0	-184.66	-430.32	0.0	0.0	0.0	-546.08
8	69	-336.95	0.0	-4.57e-03	-33.61	0.0	-149.29	-373.93	0.0	0.0	0.0	-336.95
		-454.17	0.0	0.0	0.0	30.0	-154.98	-407.54	0.0	0.0	0.0	-454.17
8	70	-331.20	0.0	-4.60e-03	-33.61	0.0	-149.29	-371.63	0.0	0.0	0.0	-331.20

Trave	Cmb	M3 mx/mn	M2 mx/mn	D 2 / D 3	Q 2 / Q 3	Pos.	N	V 2	V 3	T	M 2	M 3
		-447.73	0.0	0.0	0.0	30.0	-154.98	-405.24	0.0	0.0	0.0	-447.73
8	71	-328.31	0.0	-4.58e-03	-33.61	0.0	-147.65	-372.78	0.0	0.0	0.0	-328.31
		-445.19	0.0	0.0	0.0	30.0	-153.34	-406.39	0.0	0.0	0.0	-445.19
8	72	-339.83	0.0	-4.59e-03	-33.61	0.0	-150.93	-372.78	0.0	0.0	0.0	-339.83
		-456.71	0.0	0.0	0.0	30.0	-156.62	-406.39	0.0	0.0	0.0	-456.71
8	73	-345.72	0.0	-3.46e-03	-33.61	0.0	-225.49	-354.66	0.0	0.0	0.0	-345.72
		-457.16	0.0	0.0	0.0	30.0	-231.17	-388.27	0.0	0.0	0.0	-457.16
8	74	-339.96	0.0	-3.48e-03	-33.61	0.0	-225.49	-352.36	0.0	0.0	0.0	-339.96
		-450.71	0.0	0.0	0.0	30.0	-231.17	-385.97	0.0	0.0	0.0	-450.71
8	75	-337.08	0.0	-3.46e-03	-33.61	0.0	-223.85	-353.51	0.0	0.0	0.0	-337.08
		-448.18	0.0	0.0	0.0	30.0	-229.53	-387.12	0.0	0.0	0.0	-448.18
8	76	-348.60	0.0	-3.47e-03	-33.61	0.0	-227.13	-353.51	0.0	0.0	0.0	-348.60
		-459.69	0.0	0.0	0.0	30.0	-232.81	-387.12	0.0	0.0	0.0	-459.69
8	77	-383.14	0.0	-5.09e-03	-33.61	0.0	-197.45	-378.58	0.0	0.0	0.0	-383.14
		-501.75	0.0	0.0	0.0	30.0	-203.13	-412.19	0.0	0.0	0.0	-501.75
8	78	-377.38	0.0	-5.11e-03	-33.61	0.0	-197.45	-376.28	0.0	0.0	0.0	-377.38
		-495.31	0.0	0.0	0.0	30.0	-203.13	-409.89	0.0	0.0	0.0	-495.31
8	79	-374.50	0.0	-5.10e-03	-33.61	0.0	-195.81	-377.43	0.0	0.0	0.0	-374.50
		-492.77	0.0	0.0	0.0	30.0	-201.49	-411.04	0.0	0.0	0.0	-492.77
8	80	-386.02	0.0	-5.11e-03	-33.61	0.0	-199.09	-377.43	0.0	0.0	0.0	-386.02
		-504.29	0.0	0.0	0.0	30.0	-204.77	-411.04	0.0	0.0	0.0	-504.29
8	81	-300.94	0.0	-3.41e-03	-33.61	0.0	-169.41	-354.66	0.0	0.0	0.0	-300.94
		-412.38	0.0	0.0	0.0	30.0	-175.10	-388.27	0.0	0.0	0.0	-412.38
8	82	-295.18	0.0	-3.43e-03	-33.61	0.0	-169.41	-352.36	0.0	0.0	0.0	-295.18
		-405.93	0.0	0.0	0.0	30.0	-175.10	-385.97	0.0	0.0	0.0	-405.93
8	83	-292.30	0.0	-3.42e-03	-33.61	0.0	-167.77	-353.51	0.0	0.0	0.0	-292.30
		-403.39	0.0	0.0	0.0	30.0	-173.46	-387.12	0.0	0.0	0.0	-403.39
8	84	-303.82	0.0	-3.43e-03	-33.61	0.0	-171.05	-353.51	0.0	0.0	0.0	-303.82
		-414.91	0.0	0.0	0.0	30.0	-176.74	-387.12	0.0	0.0	0.0	-414.91
8	85	-198.18	0.0	-1.09e-03	-33.61	0.0	-157.99	-300.51	0.0	0.0	0.0	-198.18
		-293.37	0.0	0.0	0.0	30.0	-157.99	-334.12	0.0	0.0	0.0	-293.37
8	86	-192.42	0.0	-1.12e-03	-33.61	0.0	-157.99	-298.21	0.0	0.0	0.0	-192.42
		-286.92	0.0	0.0	0.0	30.0	-157.99	-331.82	0.0	0.0	0.0	-286.92
8	87	-189.54	0.0	-1.10e-03	-33.61	0.0	-156.35	-299.36	0.0	0.0	0.0	-189.54
		-284.39	0.0	0.0	0.0	30.0	-156.35	-332.97	0.0	0.0	0.0	-284.39
8	88	-201.06	0.0	-1.11e-03	-33.61	0.0	-159.63	-299.36	0.0	0.0	0.0	-201.06
		-295.90	0.0	0.0	0.0	30.0	-159.63	-332.97	0.0	0.0	0.0	-295.90
8	89	-235.59	0.0	-2.73e-03	-33.61	0.0	-129.95	-324.43	0.0	0.0	0.0	-235.59
		-337.96	0.0	0.0	0.0	30.0	-129.95	-358.04	0.0	0.0	0.0	-337.96
8	90	-229.84	0.0	-2.75e-03	-33.61	0.0	-129.95	-322.13	0.0	0.0	0.0	-229.84
		-331.52	0.0	0.0	0.0	30.0	-129.95	-355.74	0.0	0.0	0.0	-331.52
8	91	-226.96	0.0	-2.74e-03	-33.61	0.0	-128.31	-323.28	0.0	0.0	0.0	-226.96
		-328.98	0.0	0.0	0.0	30.0	-128.31	-356.89	0.0	0.0	0.0	-328.98
8	92	-238.47	0.0	-2.75e-03	-33.61	0.0	-131.59	-323.28	0.0	0.0	0.0	-238.47
		-340.50	0.0	0.0	0.0	30.0	-131.59	-356.89	0.0	0.0	0.0	-340.50
8	93	-153.39	0.0	-1.05e-03	-33.61	0.0	-101.91	-300.51	0.0	0.0	0.0	-153.39
		-248.59	0.0	0.0	0.0	30.0	-101.91	-334.12	0.0	0.0	0.0	-248.59
8	94	-147.64	0.0	-1.07e-03	-33.61	0.0	-101.91	-298.21	0.0	0.0	0.0	-147.64
		-242.14	0.0	0.0	0.0	30.0	-101.91	-331.82	0.0	0.0	0.0	-242.14
8	95	-144.76	0.0	-1.06e-03	-33.61	0.0	-100.27	-299.36	0.0	0.0	0.0	-144.76
		-239.60	0.0	0.0	0.0	30.0	-100.27	-332.97	0.0	0.0	0.0	-239.60
8	96	-156.27	0.0	-1.07e-03	-33.61	0.0	-103.55	-299.36	0.0	0.0	0.0	-156.27
		-251.12	0.0	0.0	0.0	30.0	-103.55	-332.97	0.0	0.0	0.0	-251.12
8	97	-162.16	0.0	-6.80e-05	-33.61	0.0	-178.10	-281.24	0.0	0.0	0.0	-162.16
		-251.57	0.0	0.0	0.0	30.0	-178.10	-314.85	0.0	0.0	0.0	-251.57
8	98	-156.41	0.0	-4.63e-05	-33.61	0.0	-178.10	-278.93	0.0	0.0	0.0	-156.41
		-245.13	0.0	0.0	0.0	30.0	-178.10	-312.54	0.0	0.0	0.0	-245.13
8	99	-153.52	0.0	-6.27e-05	-33.61	0.0	-176.46	-280.09	0.0	0.0	0.0	-153.52
		-242.59	0.0	0.0	0.0	30.0	-176.46	-313.70	0.0	0.0	0.0	-242.59
8	100	-165.04	0.0	-5.16e-05	-33.61	0.0	-179.74	-280.09	0.0	0.0	0.0	-165.04
		-254.11	0.0	0.0	0.0	30.0	-179.74	-313.70	0.0	0.0	0.0	-254.11
8	101	-199.58	0.0	-1.57e-03	-33.61	0.0	-150.06	-305.16	0.0	0.0	0.0	-199.58
		-296.17	0.0	0.0	0.0	30.0	-150.06	-338.77	0.0	0.0	0.0	-296.17
8	102	-193.82	0.0	-1.59e-03	-33.61	0.0	-150.06	-302.86	0.0	0.0	0.0	-193.82
		-289.72	0.0	0.0	0.0	30.0	-150.06	-336.47	0.0	0.0	0.0	-289.72
8	103	-190.94	0.0	-1.57e-03	-33.61	0.0	-148.42	-304.01	0.0	0.0	0.0	-190.94
		-287.19	0.0	0.0	0.0	30.0	-148.42	-337.62	0.0	0.0	0.0	-287.19
8	104	-202.46	0.0	-1.58e-03	-33.61	0.0	-151.70	-304.01	0.0	0.0	0.0	-202.46
		-298.70	0.0	0.0	0.0	30.0	-151.70	-337.62	0.0	0.0	0.0	-298.70
8	105	-117.38	0.0	-1.11e-04	-33.61	0.0	-122.02	-281.24	0.0	0.0	0.0	-117.38
		-206.79	0.0	0.0	0.0	30.0	-122.02	-314.85	0.0	0.0	0.0	-206.79
8	106	-111.62	0.0	-8.94e-05	-33.61	0.0	-122.02	-278.93	0.0	0.0	0.0	-111.62
		-200.34	0.0	0.0	0.0	30.0	-122.02	-312.54	0.0	0.0	0.0	-200.34
8	107	-108.74	0.0	-1.06e-04	-33.61	0.0	-120.38	-280.09	0.0	0.0	0.0	-108.74
		-197.81	0.0	0.0	0.0	30.0	-120.38	-313.70	0.0	0.0	0.0	-197.81

Trave	Cmb	M3 mx/mn	M2 mx/mn	D 2 / D 3	Q 2 / Q 3	Pos.	N	V 2	V 3	T	M 2	M 3
8	108	-120.26	0.0	-9.47e-05	-33.61	0.0	-123.66	-280.09	0.0	0.0	0.0	-120.26
		-209.33	0.0	0.0	0.0	30.0	-123.66	-313.70	0.0	0.0	0.0	-209.33
8	109	-600.53	0.0	-0.01	-18.23	0.0	-133.48	-355.85	0.0	0.0	0.0	-600.53
		-710.02	0.0	0.0	0.0	30.0	-137.52	-374.09	0.0	0.0	0.0	-710.02
8	110	-98.07	0.0	-7.30e-05	-24.92	0.0	-98.85	-208.61	0.0	0.0	0.0	-98.07
		-164.39	0.0	0.0	0.0	30.0	-98.85	-233.53	0.0	0.0	0.0	-164.39
8	111	-93.28	0.0	-5.49e-05	-24.92	0.0	-98.85	-206.69	0.0	0.0	0.0	-93.28
		-159.02	0.0	0.0	0.0	30.0	-98.85	-231.61	0.0	0.0	0.0	-159.02
8	112	-90.87	0.0	-6.86e-05	-24.92	0.0	-97.48	-207.65	0.0	0.0	0.0	-90.87
		-156.91	0.0	0.0	0.0	30.0	-97.48	-232.57	0.0	0.0	0.0	-156.91
8	113	-100.47	0.0	-5.93e-05	-24.92	0.0	-100.22	-207.65	0.0	0.0	0.0	-100.47
		-166.50	0.0	0.0	0.0	30.0	-100.22	-232.57	0.0	0.0	0.0	-166.50
8	114	-125.79	0.0	-1.14e-03	-24.92	0.0	-78.08	-226.33	0.0	0.0	0.0	-125.79
		-197.42	0.0	0.0	0.0	30.0	-78.08	-251.25	0.0	0.0	0.0	-197.42
8	115	-120.99	0.0	-1.16e-03	-24.92	0.0	-78.08	-224.41	0.0	0.0	0.0	-120.99
		-192.05	0.0	0.0	0.0	30.0	-78.08	-249.33	0.0	0.0	0.0	-192.05
8	116	-118.59	0.0	-1.14e-03	-24.92	0.0	-76.71	-225.37	0.0	0.0	0.0	-118.59
		-189.94	0.0	0.0	0.0	30.0	-76.71	-250.29	0.0	0.0	0.0	-189.94
8	117	-128.19	0.0	-1.15e-03	-24.92	0.0	-79.45	-225.37	0.0	0.0	0.0	-128.19
		-199.54	0.0	0.0	0.0	30.0	-79.45	-250.29	0.0	0.0	0.0	-199.54
8	118	-64.90	0.0	-1.05e-04	-24.92	0.0	-57.31	-208.61	0.0	0.0	0.0	-64.90
		-131.22	0.0	0.0	0.0	30.0	-57.31	-233.53	0.0	0.0	0.0	-131.22
8	119	-60.10	0.0	-8.69e-05	-24.92	0.0	-57.31	-206.69	0.0	0.0	0.0	-60.10
		-125.85	0.0	0.0	0.0	30.0	-57.31	-231.61	0.0	0.0	0.0	-125.85
8	120	-57.70	0.0	-1.01e-04	-24.92	0.0	-55.94	-207.65	0.0	0.0	0.0	-57.70
		-123.73	0.0	0.0	0.0	30.0	-55.94	-232.57	0.0	0.0	0.0	-123.73
8	121	-67.30	0.0	-9.13e-05	-24.92	0.0	-58.68	-207.65	0.0	0.0	0.0	-67.30
		-133.33	0.0	0.0	0.0	30.0	-58.68	-232.57	0.0	0.0	0.0	-133.33
8	122	-244.86	0.0	-2.76e-03	-24.92	0.0	-140.11	-263.71	0.0	0.0	0.0	-244.86
		-327.71	0.0	0.0	0.0	30.0	-143.27	-288.63	0.0	0.0	0.0	-327.71
8	123	-240.07	0.0	-2.78e-03	-24.92	0.0	-140.11	-261.79	0.0	0.0	0.0	-240.07
		-322.34	0.0	0.0	0.0	30.0	-143.27	-286.71	0.0	0.0	0.0	-322.34
8	124	-237.67	0.0	-2.77e-03	-24.92	0.0	-138.75	-262.75	0.0	0.0	0.0	-237.67
		-320.23	0.0	0.0	0.0	30.0	-141.90	-287.67	0.0	0.0	0.0	-320.23
8	125	-247.26	0.0	-2.78e-03	-24.92	0.0	-141.48	-262.75	0.0	0.0	0.0	-247.26
		-329.83	0.0	0.0	0.0	30.0	-144.64	-287.67	0.0	0.0	0.0	-329.83
8	126	-272.58	0.0	-3.98e-03	-24.92	0.0	-119.34	-281.43	0.0	0.0	0.0	-272.58
		-360.75	0.0	0.0	0.0	30.0	-122.50	-306.35	0.0	0.0	0.0	-360.75
8	127	-267.78	0.0	-3.99e-03	-24.92	0.0	-119.34	-279.51	0.0	0.0	0.0	-267.78
		-355.37	0.0	0.0	0.0	30.0	-122.50	-304.43	0.0	0.0	0.0	-355.37
8	128	-265.38	0.0	-3.98e-03	-24.92	0.0	-117.98	-280.47	0.0	0.0	0.0	-265.38
		-353.26	0.0	0.0	0.0	30.0	-121.14	-305.39	0.0	0.0	0.0	-353.26
8	129	-274.98	0.0	-3.99e-03	-24.92	0.0	-120.71	-280.47	0.0	0.0	0.0	-274.98
		-362.86	0.0	0.0	0.0	30.0	-123.87	-305.39	0.0	0.0	0.0	-362.86
8	130	-211.69	0.0	-2.73e-03	-24.92	0.0	-98.57	-263.71	0.0	0.0	0.0	-211.69
		-294.54	0.0	0.0	0.0	30.0	-101.73	-288.63	0.0	0.0	0.0	-294.54
8	131	-206.89	0.0	-2.75e-03	-24.92	0.0	-98.57	-261.79	0.0	0.0	0.0	-206.89
		-289.17	0.0	0.0	0.0	30.0	-101.73	-286.71	0.0	0.0	0.0	-289.17
8	132	-204.49	0.0	-2.74e-03	-24.92	0.0	-97.21	-262.75	0.0	0.0	0.0	-204.49
		-287.06	0.0	0.0	0.0	30.0	-100.37	-287.67	0.0	0.0	0.0	-287.06
8	133	-214.09	0.0	-2.75e-03	-24.92	0.0	-99.94	-262.75	0.0	0.0	0.0	-214.09
		-296.65	0.0	0.0	0.0	30.0	-103.10	-287.67	0.0	0.0	0.0	-296.65
8	134	-218.12	0.0	-1.90e-03	-24.92	0.0	-155.05	-249.40	0.0	0.0	0.0	-218.12
		-296.68	0.0	0.0	0.0	30.0	-158.21	-274.32	0.0	0.0	0.0	-296.68
8	135	-213.32	0.0	-1.92e-03	-24.92	0.0	-155.05	-247.48	0.0	0.0	0.0	-213.32
		-291.30	0.0	0.0	0.0	30.0	-158.21	-272.40	0.0	0.0	0.0	-291.30
8	136	-210.92	0.0	-1.91e-03	-24.92	0.0	-153.68	-248.44	0.0	0.0	0.0	-210.92
		-289.19	0.0	0.0	0.0	30.0	-156.84	-273.36	0.0	0.0	0.0	-289.19
8	137	-220.52	0.0	-1.92e-03	-24.92	0.0	-156.42	-248.44	0.0	0.0	0.0	-220.52
		-298.79	0.0	0.0	0.0	30.0	-159.58	-273.36	0.0	0.0	0.0	-298.79
8	138	-245.84	0.0	-3.11e-03	-24.92	0.0	-134.28	-267.12	0.0	0.0	0.0	-245.84
		-329.71	0.0	0.0	0.0	30.0	-137.44	-292.04	0.0	0.0	0.0	-329.71
8	139	-241.04	0.0	-3.13e-03	-24.92	0.0	-134.28	-265.20	0.0	0.0	0.0	-241.04
		-324.34	0.0	0.0	0.0	30.0	-137.44	-290.12	0.0	0.0	0.0	-324.34
8	140	-238.64	0.0	-3.12e-03	-24.92	0.0	-132.91	-266.16	0.0	0.0	0.0	-238.64
		-322.22	0.0	0.0	0.0	30.0	-136.07	-291.08	0.0	0.0	0.0	-322.22
8	141	-248.24	0.0	-3.13e-03	-24.92	0.0	-135.65	-266.16	0.0	0.0	0.0	-248.24
		-331.82	0.0	0.0	0.0	30.0	-138.81	-291.08	0.0	0.0	0.0	-331.82
8	142	-184.95	0.0	-1.87e-03	-24.92	0.0	-113.51	-249.40	0.0	0.0	0.0	-184.95
		-263.50	0.0	0.0	0.0	30.0	-116.67	-274.32	0.0	0.0	0.0	-263.50
8	143	-180.15	0.0	-1.89e-03	-24.92	0.0	-113.51	-247.48	0.0	0.0	0.0	-180.15
		-258.13	0.0	0.0	0.0	30.0	-116.67	-272.40	0.0	0.0	0.0	-258.13
8	144	-177.75	0.0	-1.87e-03	-24.92	0.0	-112.14	-248.44	0.0	0.0	0.0	-177.75
		-256.02	0.0	0.0	0.0	30.0	-115.30	-273.36	0.0	0.0	0.0	-256.02
8	145	-187.35	0.0	-1.88e-03	-24.92	0.0	-114.88	-248.44	0.0	0.0	0.0	-187.35

Trave	Cmb	M3 mx/mn	M2 mx/mn	D 2 / D 3	Q 2 / Q 3	Pos.	N	V 2	V 3	T	M 2	M 3
		-265.62	0.0	0.0	0.0	30.0	-118.04	-273.36	0.0	0.0	0.0	-265.62
8	146	-91.29	0.0	-2.31e-05	-16.22	0.0	-100.13	-135.92	0.0	0.0	0.0	-91.29
		-134.50	0.0	0.0	0.0	30.0	-100.13	-152.14	0.0	0.0	0.0	-134.50
8	147	-87.29	0.0	-8.03e-06	-16.22	0.0	-100.13	-134.33	0.0	0.0	0.0	-87.29
		-130.02	0.0	0.0	0.0	30.0	-100.13	-150.54	0.0	0.0	0.0	-130.02
8	148	-85.29	0.0	-1.94e-05	-16.22	0.0	-98.99	-135.12	0.0	0.0	0.0	-85.29
		-128.26	0.0	0.0	0.0	30.0	-98.99	-151.34	0.0	0.0	0.0	-128.26
8	149	-93.29	0.0	-1.17e-05	-16.22	0.0	-101.27	-135.13	0.0	0.0	0.0	-93.29
		-136.26	0.0	0.0	0.0	30.0	-101.27	-151.34	0.0	0.0	0.0	-136.26
8	150	-119.00	0.0	-1.19e-03	-16.22	0.0	-79.36	-153.65	0.0	0.0	0.0	-119.00
		-167.53	0.0	0.0	0.0	30.0	-79.36	-169.86	0.0	0.0	0.0	-167.53
8	151	-115.01	0.0	-1.20e-03	-16.22	0.0	-79.36	-152.05	0.0	0.0	0.0	-115.01
		-163.05	0.0	0.0	0.0	30.0	-79.36	-168.26	0.0	0.0	0.0	-163.05
8	152	-113.01	0.0	-1.19e-03	-16.22	0.0	-78.22	-152.85	0.0	0.0	0.0	-113.01
		-161.29	0.0	0.0	0.0	30.0	-78.22	-169.06	0.0	0.0	0.0	-161.29
8	153	-113.01	0.0	-1.19e-03	-16.22	0.0	-78.22	-152.85	0.0	0.0	0.0	-113.01
		-161.29	0.0	0.0	0.0	30.0	-78.22	-169.06	0.0	0.0	0.0	-161.29
8	154	-58.12	0.0	-5.51e-05	-16.22	0.0	-58.59	-135.92	0.0	0.0	0.0	-58.12
		-101.33	0.0	0.0	0.0	30.0	-58.59	-152.14	0.0	0.0	0.0	-101.33
8	155	-54.12	0.0	-4.00e-05	-16.22	0.0	-58.59	-134.33	0.0	0.0	0.0	-54.12
		-96.85	0.0	0.0	0.0	30.0	-58.59	-150.54	0.0	0.0	0.0	-96.85
8	156	-52.12	0.0	-5.14e-05	-16.22	0.0	-57.45	-135.12	0.0	0.0	0.0	-52.12
		-95.09	0.0	0.0	0.0	30.0	-57.45	-151.34	0.0	0.0	0.0	-95.09
8	157	-52.12	0.0	-5.14e-05	-16.22	0.0	-57.45	-135.12	0.0	0.0	0.0	-52.12
		-95.09	0.0	0.0	0.0	30.0	-57.45	-151.34	0.0	0.0	0.0	-95.09
8	158	-265.78	0.0	-3.05e-03	-27.82	0.0	-147.60	-292.66	0.0	0.0	0.0	-265.78
		-357.75	0.0	0.0	0.0	30.0	-150.76	-320.48	0.0	0.0	0.0	-357.75
8	159	-260.99	0.0	-3.06e-03	-27.82	0.0	-147.60	-290.74	0.0	0.0	0.0	-260.99
		-352.38	0.0	0.0	0.0	30.0	-150.76	-318.56	0.0	0.0	0.0	-352.38
8	160	-258.59	0.0	-3.05e-03	-27.82	0.0	-146.23	-291.70	0.0	0.0	0.0	-258.59
		-350.27	0.0	0.0	0.0	30.0	-149.39	-319.52	0.0	0.0	0.0	-350.27
8	161	-268.18	0.0	-3.06e-03	-27.82	0.0	-148.97	-291.70	0.0	0.0	0.0	-268.18
		-359.87	0.0	0.0	0.0	30.0	-152.12	-319.52	0.0	0.0	0.0	-359.87
8	162	-293.50	0.0	-4.26e-03	-27.82	0.0	-126.83	-310.38	0.0	0.0	0.0	-293.50
		-390.79	0.0	0.0	0.0	30.0	-129.99	-338.20	0.0	0.0	0.0	-390.79
8	163	-288.70	0.0	-4.28e-03	-27.82	0.0	-126.83	-308.46	0.0	0.0	0.0	-288.70
		-385.42	0.0	0.0	0.0	30.0	-129.99	-336.28	0.0	0.0	0.0	-385.42
8	164	-286.30	0.0	-4.26e-03	-27.82	0.0	-125.46	-309.42	0.0	0.0	0.0	-286.30
		-383.30	0.0	0.0	0.0	30.0	-128.62	-337.24	0.0	0.0	0.0	-383.30
8	165	-295.90	0.0	-4.27e-03	-27.82	0.0	-128.20	-309.42	0.0	0.0	0.0	-295.90
		-392.90	0.0	0.0	0.0	30.0	-131.35	-337.24	0.0	0.0	0.0	-392.90
8	166	-232.61	0.0	-3.01e-03	-27.82	0.0	-106.06	-292.66	0.0	0.0	0.0	-232.61
		-324.58	0.0	0.0	0.0	30.0	-109.22	-320.48	0.0	0.0	0.0	-324.58
8	167	-227.82	0.0	-3.03e-03	-27.82	0.0	-106.06	-290.74	0.0	0.0	0.0	-227.82
		-319.21	0.0	0.0	0.0	30.0	-109.22	-318.56	0.0	0.0	0.0	-319.21
8	168	-225.41	0.0	-3.02e-03	-27.82	0.0	-104.69	-291.70	0.0	0.0	0.0	-225.41
		-317.10	0.0	0.0	0.0	30.0	-107.85	-319.52	0.0	0.0	0.0	-317.10
8	169	-235.01	0.0	-3.03e-03	-27.82	0.0	-107.43	-291.70	0.0	0.0	0.0	-235.01
		-326.69	0.0	0.0	0.0	30.0	-110.59	-319.52	0.0	0.0	0.0	-326.69
8	170	-230.13	0.0	-1.90e-03	-27.82	0.0	-167.52	-273.58	0.0	0.0	0.0	-230.13
		-316.37	0.0	0.0	0.0	30.0	-170.67	-301.39	0.0	0.0	0.0	-316.37
8	171	-225.33	0.0	-1.91e-03	-27.82	0.0	-167.52	-271.66	0.0	0.0	0.0	-225.33
		-311.00	0.0	0.0	0.0	30.0	-170.67	-299.48	0.0	0.0	0.0	-311.00
8	172	-222.93	0.0	-1.90e-03	-27.82	0.0	-166.15	-272.62	0.0	0.0	0.0	-222.93
		-308.89	0.0	0.0	0.0	30.0	-169.31	-300.43	0.0	0.0	0.0	-308.89
8	173	-232.53	0.0	-1.91e-03	-27.82	0.0	-168.88	-272.62	0.0	0.0	0.0	-232.53
		-318.48	0.0	0.0	0.0	30.0	-172.04	-300.43	0.0	0.0	0.0	-318.48
8	174	-257.84	0.0	-3.11e-03	-27.82	0.0	-146.75	-291.30	0.0	0.0	0.0	-257.84
		-349.40	0.0	0.0	0.0	30.0	-149.90	-319.12	0.0	0.0	0.0	-349.40
8	175	-253.05	0.0	-3.13e-03	-27.82	0.0	-146.75	-289.38	0.0	0.0	0.0	-253.05
		-344.03	0.0	0.0	0.0	30.0	-149.90	-317.20	0.0	0.0	0.0	-344.03
8	176	-250.65	0.0	-3.11e-03	-27.82	0.0	-145.38	-290.34	0.0	0.0	0.0	-250.65
		-341.92	0.0	0.0	0.0	30.0	-148.54	-318.16	0.0	0.0	0.0	-341.92
8	177	-260.24	0.0	-3.12e-03	-27.82	0.0	-148.11	-290.34	0.0	0.0	0.0	-260.24
		-351.52	0.0	0.0	0.0	30.0	-151.27	-318.16	0.0	0.0	0.0	-351.52
8	178	-196.95	0.0	-1.86e-03	-27.82	0.0	-125.98	-273.58	0.0	0.0	0.0	-196.95
		-283.20	0.0	0.0	0.0	30.0	-129.14	-301.39	0.0	0.0	0.0	-283.20
8	179	-192.16	0.0	-1.88e-03	-27.82	0.0	-125.98	-271.66	0.0	0.0	0.0	-192.16
		-277.83	0.0	0.0	0.0	30.0	-129.14	-299.48	0.0	0.0	0.0	-277.83
8	180	-189.76	0.0	-1.87e-03	-27.82	0.0	-124.61	-272.62	0.0	0.0	0.0	-189.76
		-275.71	0.0	0.0	0.0	30.0	-127.77	-300.43	0.0	0.0	0.0	-275.71
8	181	-199.35	0.0	-1.88e-03	-27.82	0.0	-127.34	-272.62	0.0	0.0	0.0	-199.35
		-285.31	0.0	0.0	0.0	30.0	-130.50	-300.43	0.0	0.0	0.0	-285.31
9	1	0.0	0.0	-6.93e-06	-21.89	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		-3.28	0.0	0.0	0.0	30.0	0.0	-21.89	0.0	0.0	0.0	-3.28

Trave	Cmb	M3 mx/mn	M2 mx/mn	D 2 / D 3	Q 2 / Q 3	Pos.	N	V 2	V 3	T	M 2	M 3
9	2	0.0	0.0	-3.15e-05	-21.89	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		-3.28	0.0	0.0	0.0	30.0	0.0	-21.89	0.0	0.0	0.0	-3.28
9	3	0.0	0.0	-2.20e-05	-21.89	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		-3.28	0.0	0.0	0.0	30.0	0.0	-21.89	0.0	0.0	0.0	-3.28
9	4	0.0	0.0	-2.50e-06	-21.89	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		-3.28	0.0	0.0	0.0	30.0	0.0	-21.89	0.0	0.0	0.0	-3.28
9	5	0.0	0.0	-1.68e-03	-21.89	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		-3.28	0.0	0.0	0.0	30.0	0.0	-21.89	0.0	0.0	0.0	-3.28
9	6	0.0	0.0	-1.72e-03	-21.89	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		-3.28	0.0	0.0	0.0	30.0	0.0	-21.89	0.0	0.0	0.0	-3.28
9	7	0.0	0.0	-1.71e-03	-21.89	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		-3.28	0.0	0.0	0.0	30.0	0.0	-21.89	0.0	0.0	0.0	-3.28
9	8	0.0	0.0	-1.69e-03	-21.89	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		-3.28	0.0	0.0	0.0	30.0	0.0	-21.89	0.0	0.0	0.0	-3.28
9	9	0.0	0.0	-3.87e-05	-21.89	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		-3.28	0.0	0.0	0.0	30.0	0.0	-21.89	0.0	0.0	0.0	-3.28
9	10	0.0	0.0	-7.71e-05	-21.89	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		-3.28	0.0	0.0	0.0	30.0	0.0	-21.89	0.0	0.0	0.0	-3.28
9	11	0.0	0.0	-6.76e-05	-21.89	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		-3.28	0.0	0.0	0.0	30.0	0.0	-21.89	0.0	0.0	0.0	-3.28
9	12	0.0	0.0	-4.81e-05	-21.89	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		-3.28	0.0	0.0	0.0	30.0	0.0	-21.89	0.0	0.0	0.0	-3.28
9	13	0.0	0.0	-1.64e-03	-37.56	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		-5.63	0.0	0.0	0.0	30.0	0.0	-37.56	0.0	0.0	0.0	-5.63
9	14	0.0	0.0	-1.66e-03	-37.56	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		-5.63	0.0	0.0	0.0	30.0	0.0	-37.56	0.0	0.0	0.0	-5.63
9	15	0.0	0.0	-1.65e-03	-37.56	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		-5.63	0.0	0.0	0.0	30.0	0.0	-37.56	0.0	0.0	0.0	-5.63
9	16	0.0	0.0	-1.64e-03	-37.56	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		-5.63	0.0	0.0	0.0	30.0	0.0	-37.56	0.0	0.0	0.0	-5.63
9	17	0.0	0.0	-3.32e-03	-37.56	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		-5.63	0.0	0.0	0.0	30.0	0.0	-37.56	0.0	0.0	0.0	-5.63
9	18	0.0	0.0	-3.34e-03	-37.56	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		-5.63	0.0	0.0	0.0	30.0	0.0	-37.56	0.0	0.0	0.0	-5.63
9	19	0.0	0.0	-3.34e-03	-37.56	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		-5.63	0.0	0.0	0.0	30.0	0.0	-37.56	0.0	0.0	0.0	-5.63
9	20	0.0	0.0	-3.33e-03	-37.56	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		-5.63	0.0	0.0	0.0	30.0	0.0	-37.56	0.0	0.0	0.0	-5.63
9	21	0.0	0.0	-1.68e-03	-37.56	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		-5.63	0.0	0.0	0.0	30.0	0.0	-37.56	0.0	0.0	0.0	-5.63
9	22	0.0	0.0	-1.70e-03	-37.56	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		-5.63	0.0	0.0	0.0	30.0	0.0	-37.56	0.0	0.0	0.0	-5.63
9	23	0.0	0.0	-1.70e-03	-37.56	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		-5.63	0.0	0.0	0.0	30.0	0.0	-37.56	0.0	0.0	0.0	-5.63
9	24	0.0	0.0	-1.69e-03	-37.56	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		-5.63	0.0	0.0	0.0	30.0	0.0	-37.56	0.0	0.0	0.0	-5.63
9	25	0.0	0.0	-4.66e-05	-37.56	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		-5.63	0.0	0.0	0.0	30.0	0.0	-37.56	0.0	0.0	0.0	-5.63
9	26	0.0	0.0	-6.97e-05	-37.56	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		-5.63	0.0	0.0	0.0	30.0	0.0	-37.56	0.0	0.0	0.0	-5.63
9	27	0.0	0.0	-6.40e-05	-37.56	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		-5.63	0.0	0.0	0.0	30.0	0.0	-37.56	0.0	0.0	0.0	-5.63
9	28	0.0	0.0	-5.23e-05	-37.56	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		-5.63	0.0	0.0	0.0	30.0	0.0	-37.56	0.0	0.0	0.0	-5.63
9	29	0.0	0.0	-1.73e-03	-37.56	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		-5.63	0.0	0.0	0.0	30.0	0.0	-37.56	0.0	0.0	0.0	-5.63
9	30	0.0	0.0	-1.75e-03	-37.56	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		-5.63	0.0	0.0	0.0	30.0	0.0	-37.56	0.0	0.0	0.0	-5.63
9	31	0.0	0.0	-1.75e-03	-37.56	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		-5.63	0.0	0.0	0.0	30.0	0.0	-37.56	0.0	0.0	0.0	-5.63
9	32	0.0	0.0	-1.74e-03	-37.56	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		-5.63	0.0	0.0	0.0	30.0	0.0	-37.56	0.0	0.0	0.0	-5.63
9	33	0.0	0.0	-9.22e-05	-37.56	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		-5.63	0.0	0.0	0.0	30.0	0.0	-37.56	0.0	0.0	0.0	-5.63
9	34	0.0	0.0	-1.15e-04	-37.56	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		-5.63	0.0	0.0	0.0	30.0	0.0	-37.56	0.0	0.0	0.0	-5.63
9	35	0.0	0.0	-1.10e-04	-37.56	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		-5.63	0.0	0.0	0.0	30.0	0.0	-37.56	0.0	0.0	0.0	-5.63
9	36	0.0	0.0	-9.79e-05	-37.56	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		-5.63	0.0	0.0	0.0	30.0	0.0	-37.56	0.0	0.0	0.0	-5.63
9	37	0.0	0.0	-1.22e-03	-33.61	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		-5.04	0.0	0.0	0.0	30.0	0.0	-33.61	0.0	0.0	0.0	-5.04
9	38	0.0	0.0	-1.25e-03	-33.61	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		-5.04	0.0	0.0	0.0	30.0	0.0	-33.61	0.0	0.0	0.0	-5.04
9	39	0.0	0.0	-1.24e-03	-33.61	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Trave	Cmb	M3 mx/mn	M2 mx/mn	D 2 / D 3	Q 2 / Q 3	Pos.	N	V 2	V 3	T	M 2	M 3
		-5.04	0.0	0.0	0.0	30.0	0.0	-33.61	0.0	0.0	0.0	-5.04
9	40	0.0	0.0	-1.23e-03	-33.61	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		-5.04	0.0	0.0	0.0	30.0	0.0	-33.61	0.0	0.0	0.0	-5.04
9	41	0.0	0.0	-2.91e-03	-33.61	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		-5.04	0.0	0.0	0.0	30.0	0.0	-33.61	0.0	0.0	0.0	-5.04
9	42	0.0	0.0	-2.93e-03	-33.61	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		-5.04	0.0	0.0	0.0	30.0	0.0	-33.61	0.0	0.0	0.0	-5.04
9	43	0.0	0.0	-2.92e-03	-33.61	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		-5.04	0.0	0.0	0.0	30.0	0.0	-33.61	0.0	0.0	0.0	-5.04
9	44	0.0	0.0	-2.91e-03	-33.61	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		-5.04	0.0	0.0	0.0	30.0	0.0	-33.61	0.0	0.0	0.0	-5.04
9	45	0.0	0.0	-1.27e-03	-33.61	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		-5.04	0.0	0.0	0.0	30.0	0.0	-33.61	0.0	0.0	0.0	-5.04
9	46	0.0	0.0	-1.29e-03	-33.61	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		-5.04	0.0	0.0	0.0	30.0	0.0	-33.61	0.0	0.0	0.0	-5.04
9	47	0.0	0.0	-1.29e-03	-33.61	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		-5.04	0.0	0.0	0.0	30.0	0.0	-33.61	0.0	0.0	0.0	-5.04
9	48	0.0	0.0	-1.27e-03	-33.61	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		-5.04	0.0	0.0	0.0	30.0	0.0	-33.61	0.0	0.0	0.0	-5.04
9	49	0.0	0.0	-3.42e-05	-33.61	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		-5.04	0.0	0.0	0.0	30.0	0.0	-33.61	0.0	0.0	0.0	-5.04
9	50	0.0	0.0	-5.72e-05	-33.61	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		-5.04	0.0	0.0	0.0	30.0	0.0	-33.61	0.0	0.0	0.0	-5.04
9	51	0.0	0.0	-5.16e-05	-33.61	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		-5.04	0.0	0.0	0.0	30.0	0.0	-33.61	0.0	0.0	0.0	-5.04
9	52	0.0	0.0	-3.99e-05	-33.61	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		-5.04	0.0	0.0	0.0	30.0	0.0	-33.61	0.0	0.0	0.0	-5.04
9	53	0.0	0.0	-1.72e-03	-33.61	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		-5.04	0.0	0.0	0.0	30.0	0.0	-33.61	0.0	0.0	0.0	-5.04
9	54	0.0	0.0	-1.74e-03	-33.61	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		-5.04	0.0	0.0	0.0	30.0	0.0	-33.61	0.0	0.0	0.0	-5.04
9	55	0.0	0.0	-1.74e-03	-33.61	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		-5.04	0.0	0.0	0.0	30.0	0.0	-33.61	0.0	0.0	0.0	-5.04
9	56	0.0	0.0	-1.72e-03	-33.61	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		-5.04	0.0	0.0	0.0	30.0	0.0	-33.61	0.0	0.0	0.0	-5.04
9	57	0.0	0.0	-7.98e-05	-33.61	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		-5.04	0.0	0.0	0.0	30.0	0.0	-33.61	0.0	0.0	0.0	-5.04
9	58	0.0	0.0	-1.03e-04	-33.61	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		-5.04	0.0	0.0	0.0	30.0	0.0	-33.61	0.0	0.0	0.0	-5.04
9	59	0.0	0.0	-9.72e-05	-33.61	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		-5.04	0.0	0.0	0.0	30.0	0.0	-33.61	0.0	0.0	0.0	-5.04
9	60	0.0	0.0	-8.55e-05	-33.61	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		-5.04	0.0	0.0	0.0	30.0	0.0	-33.61	0.0	0.0	0.0	-5.04
9	61	0.0	0.0	-4.76e-03	-33.61	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		-5.04	0.0	0.0	0.0	30.0	-5.69	-33.61	0.0	0.0	0.0	-5.04
9	62	0.0	0.0	-4.78e-03	-33.61	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		-5.04	0.0	0.0	0.0	30.0	-5.69	-33.61	0.0	0.0	0.0	-5.04
9	63	0.0	0.0	-4.77e-03	-33.61	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		-5.04	0.0	0.0	0.0	30.0	-5.69	-33.61	0.0	0.0	0.0	-5.04
9	64	0.0	0.0	-4.76e-03	-33.61	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		-5.04	0.0	0.0	0.0	30.0	-5.69	-33.61	0.0	0.0	0.0	-5.04
9	65	0.0	0.0	-6.44e-03	-33.61	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		-5.04	0.0	0.0	0.0	30.0	-5.69	-33.61	0.0	0.0	0.0	-5.04
9	66	0.0	0.0	-6.46e-03	-33.61	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		-5.04	0.0	0.0	0.0	30.0	-5.69	-33.61	0.0	0.0	0.0	-5.04
9	67	0.0	0.0	-6.46e-03	-33.61	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		-5.04	0.0	0.0	0.0	30.0	-5.69	-33.61	0.0	0.0	0.0	-5.04
9	68	0.0	0.0	-6.45e-03	-33.61	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		-5.04	0.0	0.0	0.0	30.0	-5.69	-33.61	0.0	0.0	0.0	-5.04
9	69	0.0	0.0	-4.80e-03	-33.61	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		-5.04	0.0	0.0	0.0	30.0	-5.69	-33.61	0.0	0.0	0.0	-5.04
9	70	0.0	0.0	-4.82e-03	-33.61	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		-5.04	0.0	0.0	0.0	30.0	-5.69	-33.61	0.0	0.0	0.0	-5.04
9	71	0.0	0.0	-4.82e-03	-33.61	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		-5.04	0.0	0.0	0.0	30.0	-5.69	-33.61	0.0	0.0	0.0	-5.04
9	72	0.0	0.0	-4.81e-03	-33.61	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		-5.04	0.0	0.0	0.0	30.0	-5.69	-33.61	0.0	0.0	0.0	-5.04
9	73	0.0	0.0	-3.57e-03	-33.61	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		-5.04	0.0	0.0	0.0	30.0	-5.69	-33.61	0.0	0.0	0.0	-5.04
9	74	0.0	0.0	-3.59e-03	-33.61	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		-5.04	0.0	0.0	0.0	30.0	-5.69	-33.61	0.0	0.0	0.0	-5.04
9	75	0.0	0.0	-3.58e-03	-33.61	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		-5.04	0.0	0.0	0.0	30.0	-5.69	-33.61	0.0	0.0	0.0	-5.04
9	76	0.0	0.0	-3.57e-03	-33.61	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		-5.04	0.0	0.0	0.0	30.0	-5.69	-33.61	0.0	0.0	0.0	-5.04

Trave	Cmb	M3 mx/mn	M2 mx/mn	D 2 / D 3	Q 2 / Q 3	Pos.	N	V 2	V 3	T	M 2	M 3
9	77	0.0	0.0	-5.25e-03	-33.61	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		-5.04	0.0	0.0	0.0	30.0	-5.69	-33.61	0.0	0.0	0.0	-5.04
9	78	0.0	0.0	-5.27e-03	-33.61	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		-5.04	0.0	0.0	0.0	30.0	-5.69	-33.61	0.0	0.0	0.0	-5.04
9	79	0.0	0.0	-5.27e-03	-33.61	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		-5.04	0.0	0.0	0.0	30.0	-5.69	-33.61	0.0	0.0	0.0	-5.04
9	80	0.0	0.0	-5.26e-03	-33.61	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		-5.04	0.0	0.0	0.0	30.0	-5.69	-33.61	0.0	0.0	0.0	-5.04
9	81	0.0	0.0	-3.61e-03	-33.61	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		-5.04	0.0	0.0	0.0	30.0	-5.69	-33.61	0.0	0.0	0.0	-5.04
9	82	0.0	0.0	-3.64e-03	-33.61	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		-5.04	0.0	0.0	0.0	30.0	-5.69	-33.61	0.0	0.0	0.0	-5.04
9	83	0.0	0.0	-3.63e-03	-33.61	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		-5.04	0.0	0.0	0.0	30.0	-5.69	-33.61	0.0	0.0	0.0	-5.04
9	84	0.0	0.0	-3.62e-03	-33.61	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		-5.04	0.0	0.0	0.0	30.0	-5.69	-33.61	0.0	0.0	0.0	-5.04
9	85	0.0	0.0	-1.22e-03	-33.61	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		-5.04	0.0	0.0	0.0	30.0	0.0	-33.61	0.0	0.0	0.0	-5.04
9	86	0.0	0.0	-1.25e-03	-33.61	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		-5.04	0.0	0.0	0.0	30.0	0.0	-33.61	0.0	0.0	0.0	-5.04
9	87	0.0	0.0	-1.24e-03	-33.61	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		-5.04	0.0	0.0	0.0	30.0	0.0	-33.61	0.0	0.0	0.0	-5.04
9	88	0.0	0.0	-1.23e-03	-33.61	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		-5.04	0.0	0.0	0.0	30.0	0.0	-33.61	0.0	0.0	0.0	-5.04
9	89	0.0	0.0	-2.91e-03	-33.61	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		-5.04	0.0	0.0	0.0	30.0	0.0	-33.61	0.0	0.0	0.0	-5.04
9	90	0.0	0.0	-2.93e-03	-33.61	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		-5.04	0.0	0.0	0.0	30.0	0.0	-33.61	0.0	0.0	0.0	-5.04
9	91	0.0	0.0	-2.92e-03	-33.61	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		-5.04	0.0	0.0	0.0	30.0	0.0	-33.61	0.0	0.0	0.0	-5.04
9	92	0.0	0.0	-2.91e-03	-33.61	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		-5.04	0.0	0.0	0.0	30.0	0.0	-33.61	0.0	0.0	0.0	-5.04
9	93	0.0	0.0	-1.27e-03	-33.61	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		-5.04	0.0	0.0	0.0	30.0	0.0	-33.61	0.0	0.0	0.0	-5.04
9	94	0.0	0.0	-1.29e-03	-33.61	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		-5.04	0.0	0.0	0.0	30.0	0.0	-33.61	0.0	0.0	0.0	-5.04
9	95	0.0	0.0	-1.29e-03	-33.61	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		-5.04	0.0	0.0	0.0	30.0	0.0	-33.61	0.0	0.0	0.0	-5.04
9	96	0.0	0.0	-1.27e-03	-33.61	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		-5.04	0.0	0.0	0.0	30.0	0.0	-33.61	0.0	0.0	0.0	-5.04
9	97	0.0	0.0	-3.36e-05	-33.61	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		-5.04	0.0	0.0	0.0	30.0	0.0	-33.61	0.0	0.0	0.0	-5.04
9	98	0.0	0.0	-5.66e-05	-33.61	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		-5.04	0.0	0.0	0.0	30.0	0.0	-33.61	0.0	0.0	0.0	-5.04
9	99	0.0	0.0	-5.10e-05	-33.61	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		-5.04	0.0	0.0	0.0	30.0	0.0	-33.61	0.0	0.0	0.0	-5.04
9	100	0.0	0.0	-3.92e-05	-33.61	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		-5.04	0.0	0.0	0.0	30.0	0.0	-33.61	0.0	0.0	0.0	-5.04
9	101	0.0	0.0	-1.72e-03	-33.61	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		-5.04	0.0	0.0	0.0	30.0	0.0	-33.61	0.0	0.0	0.0	-5.04
9	102	0.0	0.0	-1.74e-03	-33.61	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		-5.04	0.0	0.0	0.0	30.0	0.0	-33.61	0.0	0.0	0.0	-5.04
9	103	0.0	0.0	-1.74e-03	-33.61	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		-5.04	0.0	0.0	0.0	30.0	0.0	-33.61	0.0	0.0	0.0	-5.04
9	104	0.0	0.0	-1.72e-03	-33.61	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		-5.04	0.0	0.0	0.0	30.0	0.0	-33.61	0.0	0.0	0.0	-5.04
9	105	0.0	0.0	-7.92e-05	-33.61	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		-5.04	0.0	0.0	0.0	30.0	0.0	-33.61	0.0	0.0	0.0	-5.04
9	106	0.0	0.0	-1.02e-04	-33.61	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		-5.04	0.0	0.0	0.0	30.0	0.0	-33.61	0.0	0.0	0.0	-5.04
9	107	0.0	0.0	-9.66e-05	-33.61	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		-5.04	0.0	0.0	0.0	30.0	0.0	-33.61	0.0	0.0	0.0	-5.04
9	108	0.0	0.0	-8.48e-05	-33.61	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		-5.04	0.0	0.0	0.0	30.0	0.0	-33.61	0.0	0.0	0.0	-5.04
9	109	0.0	0.0	0.01	-18.23	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		-2.74	0.0	0.0	0.0	30.0	-4.04	-18.23	0.0	0.0	0.0	-2.74
9	110	0.0	0.0	-4.67e-05	-24.92	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		-3.74	0.0	0.0	0.0	30.0	0.0	-24.92	0.0	0.0	0.0	-3.74
9	111	0.0	0.0	-6.59e-05	-24.92	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		-3.74	0.0	0.0	0.0	30.0	0.0	-24.92	0.0	0.0	0.0	-3.74
9	112	0.0	0.0	-6.11e-05	-24.92	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		-3.74	0.0	0.0	0.0	30.0	0.0	-24.92	0.0	0.0	0.0	-3.74
9	113	0.0	0.0	-5.14e-05	-24.92	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		-3.74	0.0	0.0	0.0	30.0	0.0	-24.92	0.0	0.0	0.0	-3.74
9	114	0.0	0.0	-1.29e-03	-24.92	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Trave	Cmb	M3 mx/mn	M2 mx/mn	D 2 / D 3	Q 2 / Q 3	Pos.	N	V 2	V 3	T	M 2	M 3
		-3.74	0.0	0.0	0.0	30.0	0.0	-24.92	0.0	0.0	0.0	-3.74
9	115	0.0	0.0	-1.31e-03	-24.92	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		-3.74	0.0	0.0	0.0	30.0	0.0	-24.92	0.0	0.0	0.0	-3.74
9	116	0.0	0.0	-1.31e-03	-24.92	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		-3.74	0.0	0.0	0.0	30.0	0.0	-24.92	0.0	0.0	0.0	-3.74
9	117	0.0	0.0	-1.30e-03	-24.92	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		-3.74	0.0	0.0	0.0	30.0	0.0	-24.92	0.0	0.0	0.0	-3.74
9	118	0.0	0.0	-8.04e-05	-24.92	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		-3.74	0.0	0.0	0.0	30.0	0.0	-24.92	0.0	0.0	0.0	-3.74
9	119	0.0	0.0	-9.96e-05	-24.92	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		-3.74	0.0	0.0	0.0	30.0	0.0	-24.92	0.0	0.0	0.0	-3.74
9	120	0.0	0.0	-9.49e-05	-24.92	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		-3.74	0.0	0.0	0.0	30.0	0.0	-24.92	0.0	0.0	0.0	-3.74
9	121	0.0	0.0	-8.51e-05	-24.92	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		-3.74	0.0	0.0	0.0	30.0	0.0	-24.92	0.0	0.0	0.0	-3.74
9	122	0.0	0.0	-2.87e-03	-24.92	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		-3.74	0.0	0.0	0.0	30.0	-3.16	-24.92	0.0	0.0	0.0	-3.74
9	123	0.0	0.0	-2.89e-03	-24.92	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		-3.74	0.0	0.0	0.0	30.0	-3.16	-24.92	0.0	0.0	0.0	-3.74
9	124	0.0	0.0	-2.89e-03	-24.92	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		-3.74	0.0	0.0	0.0	30.0	-3.16	-24.92	0.0	0.0	0.0	-3.74
9	125	0.0	0.0	-2.88e-03	-24.92	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		-3.74	0.0	0.0	0.0	30.0	-3.16	-24.92	0.0	0.0	0.0	-3.74
9	126	0.0	0.0	-4.12e-03	-24.92	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		-3.74	0.0	0.0	0.0	30.0	-3.16	-24.92	0.0	0.0	0.0	-3.74
9	127	0.0	0.0	-4.14e-03	-24.92	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		-3.74	0.0	0.0	0.0	30.0	-3.16	-24.92	0.0	0.0	0.0	-3.74
9	128	0.0	0.0	-4.14e-03	-24.92	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		-3.74	0.0	0.0	0.0	30.0	-3.16	-24.92	0.0	0.0	0.0	-3.74
9	129	0.0	0.0	-4.13e-03	-24.92	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		-3.74	0.0	0.0	0.0	30.0	-3.16	-24.92	0.0	0.0	0.0	-3.74
9	130	0.0	0.0	-2.91e-03	-24.92	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		-3.74	0.0	0.0	0.0	30.0	-3.16	-24.92	0.0	0.0	0.0	-3.74
9	131	0.0	0.0	-2.93e-03	-24.92	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		-3.74	0.0	0.0	0.0	30.0	-3.16	-24.92	0.0	0.0	0.0	-3.74
9	132	0.0	0.0	-2.92e-03	-24.92	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		-3.74	0.0	0.0	0.0	30.0	-3.16	-24.92	0.0	0.0	0.0	-3.74
9	133	0.0	0.0	-2.91e-03	-24.92	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		-3.74	0.0	0.0	0.0	30.0	-3.16	-24.92	0.0	0.0	0.0	-3.74
9	134	0.0	0.0	-1.99e-03	-24.92	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		-3.74	0.0	0.0	0.0	30.0	-3.16	-24.92	0.0	0.0	0.0	-3.74
9	135	0.0	0.0	-2.01e-03	-24.92	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		-3.74	0.0	0.0	0.0	30.0	-3.16	-24.92	0.0	0.0	0.0	-3.74
9	136	0.0	0.0	-2.01e-03	-24.92	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		-3.74	0.0	0.0	0.0	30.0	-3.16	-24.92	0.0	0.0	0.0	-3.74
9	137	0.0	0.0	-2.00e-03	-24.92	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		-3.74	0.0	0.0	0.0	30.0	-3.16	-24.92	0.0	0.0	0.0	-3.74
9	138	0.0	0.0	-3.24e-03	-24.92	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		-3.74	0.0	0.0	0.0	30.0	-3.16	-24.92	0.0	0.0	0.0	-3.74
9	139	0.0	0.0	-3.26e-03	-24.92	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		-3.74	0.0	0.0	0.0	30.0	-3.16	-24.92	0.0	0.0	0.0	-3.74
9	140	0.0	0.0	-3.25e-03	-24.92	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		-3.74	0.0	0.0	0.0	30.0	-3.16	-24.92	0.0	0.0	0.0	-3.74
9	141	0.0	0.0	-3.24e-03	-24.92	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		-3.74	0.0	0.0	0.0	30.0	-3.16	-24.92	0.0	0.0	0.0	-3.74
9	142	0.0	0.0	-2.03e-03	-24.92	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		-3.74	0.0	0.0	0.0	30.0	-3.16	-24.92	0.0	0.0	0.0	-3.74
9	143	0.0	0.0	-2.04e-03	-24.92	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		-3.74	0.0	0.0	0.0	30.0	-3.16	-24.92	0.0	0.0	0.0	-3.74
9	144	0.0	0.0	-2.04e-03	-24.92	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		-3.74	0.0	0.0	0.0	30.0	-3.16	-24.92	0.0	0.0	0.0	-3.74
9	145	0.0	0.0	-2.03e-03	-24.92	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		-3.74	0.0	0.0	0.0	30.0	-3.16	-24.92	0.0	0.0	0.0	-3.74
9	146	0.0	0.0	-1.09e-06	-16.22	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		-2.43	0.0	0.0	0.0	30.0	0.0	-16.22	0.0	0.0	0.0	-2.43
9	147	0.0	0.0	-1.71e-05	-16.22	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		-2.43	0.0	0.0	0.0	30.0	0.0	-16.22	0.0	0.0	0.0	-2.43
9	148	0.0	0.0	-1.32e-05	-16.22	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		-2.43	0.0	0.0	0.0	30.0	0.0	-16.22	0.0	0.0	0.0	-2.43
9	149	0.0	0.0	-5.02e-06	-16.22	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		-2.43	0.0	0.0	0.0	30.0	0.0	-16.22	0.0	0.0	0.0	-2.43
9	150	0.0	0.0	-1.25e-03	-16.22	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		-2.43	0.0	0.0	0.0	30.0	0.0	-16.21	0.0	0.0	0.0	-2.43
9	151	0.0	0.0	-1.26e-03	-16.22	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		-2.43	0.0	0.0	0.0	30.0	0.0	-16.21	0.0	0.0	0.0	-2.43

Trave	Cmb	M3 mx/mn	M2 mx/mn	D 2 / D 3	Q 2 / Q 3	Pos.	N	V 2	V 3	T	M 2	M 3
9	152	0.0	0.0	-1.26e-03	-16.22	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		-2.43	0.0	0.0	0.0	30.0	0.0	-16.21	0.0	0.0	0.0	-2.43
9	153	0.0	0.0	-1.26e-03	-16.22	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		-2.43	0.0	0.0	0.0	30.0	0.0	-16.21	0.0	0.0	0.0	-2.43
9	154	0.0	0.0	-3.49e-05	-16.22	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		-2.43	0.0	0.0	0.0	30.0	0.0	-16.22	0.0	0.0	0.0	-2.43
9	155	0.0	0.0	-5.09e-05	-16.22	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		-2.43	0.0	0.0	0.0	30.0	0.0	-16.21	0.0	0.0	0.0	-2.43
9	156	0.0	0.0	-4.69e-05	-16.22	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		-2.43	0.0	0.0	0.0	30.0	0.0	-16.22	0.0	0.0	0.0	-2.43
9	157	0.0	0.0	-4.69e-05	-16.22	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		-2.43	0.0	0.0	0.0	30.0	0.0	-16.22	0.0	0.0	0.0	-2.43
9	158	0.0	0.0	-3.17e-03	-27.82	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		-4.17	0.0	0.0	0.0	30.0	-3.16	-27.82	0.0	0.0	0.0	-4.17
9	159	0.0	0.0	-3.19e-03	-27.82	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		-4.17	0.0	0.0	0.0	30.0	-3.16	-27.82	0.0	0.0	0.0	-4.17
9	160	0.0	0.0	-3.19e-03	-27.82	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		-4.17	0.0	0.0	0.0	30.0	-3.16	-27.82	0.0	0.0	0.0	-4.17
9	161	0.0	0.0	-3.18e-03	-27.82	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		-4.17	0.0	0.0	0.0	30.0	-3.16	-27.82	0.0	0.0	0.0	-4.17
9	162	0.0	0.0	-4.42e-03	-27.82	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		-4.17	0.0	0.0	0.0	30.0	-3.16	-27.82	0.0	0.0	0.0	-4.17
9	163	0.0	0.0	-4.44e-03	-27.82	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		-4.17	0.0	0.0	0.0	30.0	-3.16	-27.82	0.0	0.0	0.0	-4.17
9	164	0.0	0.0	-4.44e-03	-27.82	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		-4.17	0.0	0.0	0.0	30.0	-3.16	-27.82	0.0	0.0	0.0	-4.17
9	165	0.0	0.0	-4.43e-03	-27.82	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		-4.17	0.0	0.0	0.0	30.0	-3.16	-27.82	0.0	0.0	0.0	-4.17
9	166	0.0	0.0	-3.21e-03	-27.82	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		-4.17	0.0	0.0	0.0	30.0	-3.16	-27.82	0.0	0.0	0.0	-4.17
9	167	0.0	0.0	-3.23e-03	-27.82	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		-4.17	0.0	0.0	0.0	30.0	-3.16	-27.82	0.0	0.0	0.0	-4.17
9	168	0.0	0.0	-3.22e-03	-27.82	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		-4.17	0.0	0.0	0.0	30.0	-3.16	-27.82	0.0	0.0	0.0	-4.17
9	169	0.0	0.0	-3.21e-03	-27.82	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		-4.17	0.0	0.0	0.0	30.0	-3.16	-27.82	0.0	0.0	0.0	-4.17
9	170	0.0	0.0	-2.00e-03	-27.82	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		-4.17	0.0	0.0	0.0	30.0	-3.16	-27.82	0.0	0.0	0.0	-4.17
9	171	0.0	0.0	-2.02e-03	-27.82	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		-4.17	0.0	0.0	0.0	30.0	-3.16	-27.82	0.0	0.0	0.0	-4.17
9	172	0.0	0.0	-2.01e-03	-27.82	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		-4.17	0.0	0.0	0.0	30.0	-3.16	-27.82	0.0	0.0	0.0	-4.17
9	173	0.0	0.0	-2.00e-03	-27.82	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		-4.17	0.0	0.0	0.0	30.0	-3.16	-27.82	0.0	0.0	0.0	-4.17
9	174	0.0	0.0	-3.24e-03	-27.82	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		-4.17	0.0	0.0	0.0	30.0	-3.16	-27.82	0.0	0.0	0.0	-4.17
9	175	0.0	0.0	-3.26e-03	-27.82	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		-4.17	0.0	0.0	0.0	30.0	-3.16	-27.82	0.0	0.0	0.0	-4.17
9	176	0.0	0.0	-3.26e-03	-27.82	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		-4.17	0.0	0.0	0.0	30.0	-3.16	-27.82	0.0	0.0	0.0	-4.17
9	177	0.0	0.0	-3.25e-03	-27.82	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		-4.17	0.0	0.0	0.0	30.0	-3.16	-27.82	0.0	0.0	0.0	-4.17
9	178	0.0	0.0	-2.03e-03	-27.82	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		-4.17	0.0	0.0	0.0	30.0	-3.16	-27.82	0.0	0.0	0.0	-4.17
9	179	0.0	0.0	-2.05e-03	-27.82	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		-4.17	0.0	0.0	0.0	30.0	-3.16	-27.82	0.0	0.0	0.0	-4.17
9	180	0.0	0.0	-2.05e-03	-27.82	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		-4.17	0.0	0.0	0.0	30.0	-3.16	-27.82	0.0	0.0	0.0	-4.17
9	181	0.0	0.0	-2.04e-03	-27.82	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		-4.17	0.0	0.0	0.0	30.0	-3.16	-27.82	0.0	0.0	0.0	-4.17
15	1	0.0	0.0	-3.15e-05	-21.89	0.0	0.0	21.89	0.0	0.0	0.0	-3.28
		-3.28	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0
15	2	0.0	0.0	-6.93e-06	-21.89	0.0	0.0	21.89	0.0	0.0	0.0	-3.28
		-3.28	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0
15	3	0.0	0.0	-2.20e-05	-21.89	0.0	0.0	21.89	0.0	0.0	0.0	-3.28
		-3.28	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0
15	4	0.0	0.0	-2.50e-06	-21.89	0.0	0.0	21.89	0.0	0.0	0.0	-3.28
		-3.28	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0
15	5	0.0	0.0	-1.61e-03	-21.89	0.0	0.0	21.89	0.0	0.0	0.0	-3.28
		-3.28	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0
15	6	0.0	0.0	-1.65e-03	-21.89	0.0	0.0	21.89	0.0	0.0	0.0	-3.28
		-3.28	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0
15	7	0.0	0.0	-1.62e-03	-21.89	0.0	0.0	21.89	0.0	0.0	0.0	-3.28
		-3.28	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0
15	8	0.0	0.0	-1.64e-03	-21.89	0.0	0.0	21.89	0.0	0.0	0.0	-3.28

Trave	Cmb	M3 mx/mn	M2 mx/mn	D 2 / D 3	Q 2 / Q 3	Pos.	N	V 2	V 3	T	M 2	M 3
		-3.28	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0
15	9	0.0	0.0	-7.71e-05	-21.89	0.0	0.0	21.89	0.0	0.0	0.0	-3.28
		-3.28	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0
15	10	0.0	0.0	-3.87e-05	-21.89	0.0	0.0	21.89	0.0	0.0	0.0	-3.28
		-3.28	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0
15	11	0.0	0.0	-6.76e-05	-21.89	0.0	0.0	21.89	0.0	0.0	0.0	-3.28
		-3.28	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0
15	12	0.0	0.0	-4.81e-05	-21.89	0.0	0.0	21.89	0.0	0.0	0.0	-3.28
		-3.28	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0
15	13	0.0	0.0	-1.49e-03	-37.56	0.0	0.0	37.56	0.0	0.0	0.0	-5.63
		-5.63	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0
15	14	0.0	0.0	-1.51e-03	-37.56	0.0	0.0	37.56	0.0	0.0	0.0	-5.63
		-5.63	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0
15	15	0.0	0.0	-1.49e-03	-37.56	0.0	0.0	37.56	0.0	0.0	0.0	-5.63
		-5.63	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0
15	16	0.0	0.0	-1.50e-03	-37.56	0.0	0.0	37.56	0.0	0.0	0.0	-5.63
		-5.63	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0
15	17	0.0	0.0	-3.12e-03	-37.56	0.0	0.0	37.56	0.0	0.0	0.0	-5.63
		-5.63	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0
15	18	0.0	0.0	-3.15e-03	-37.56	0.0	0.0	37.56	0.0	0.0	0.0	-5.63
		-5.63	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0
15	19	0.0	0.0	-3.13e-03	-37.56	0.0	0.0	37.56	0.0	0.0	0.0	-5.63
		-5.63	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0
15	20	0.0	0.0	-3.14e-03	-37.56	0.0	0.0	37.56	0.0	0.0	0.0	-5.63
		-5.63	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0
15	21	0.0	0.0	-1.44e-03	-37.56	0.0	0.0	37.56	0.0	0.0	0.0	-5.63
		-5.63	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0
15	22	0.0	0.0	-1.46e-03	-37.56	0.0	0.0	37.56	0.0	0.0	0.0	-5.63
		-5.63	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0
15	23	0.0	0.0	-1.45e-03	-37.56	0.0	0.0	37.56	0.0	0.0	0.0	-5.63
		-5.63	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0
15	24	0.0	0.0	-1.46e-03	-37.56	0.0	0.0	37.56	0.0	0.0	0.0	-5.63
		-5.63	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0
15	25	0.0	0.0	-6.97e-05	-37.56	0.0	0.0	37.56	0.0	0.0	0.0	-5.63
		-5.63	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0
15	26	0.0	0.0	-4.66e-05	-37.56	0.0	0.0	37.56	0.0	0.0	0.0	-5.63
		-5.63	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0
15	27	0.0	0.0	-6.40e-05	-37.56	0.0	0.0	37.56	0.0	0.0	0.0	-5.63
		-5.63	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0
15	28	0.0	0.0	-5.23e-05	-37.56	0.0	0.0	37.56	0.0	0.0	0.0	-5.63
		-5.63	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0
15	29	0.0	0.0	-1.57e-03	-37.56	0.0	0.0	37.56	0.0	0.0	0.0	-5.63
		-5.63	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0
15	30	0.0	0.0	-1.59e-03	-37.56	0.0	0.0	37.56	0.0	0.0	0.0	-5.63
		-5.63	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0
15	31	0.0	0.0	-1.57e-03	-37.56	0.0	0.0	37.56	0.0	0.0	0.0	-5.63
		-5.63	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0
15	32	0.0	0.0	-1.59e-03	-37.56	0.0	0.0	37.56	0.0	0.0	0.0	-5.63
		-5.63	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0
15	33	0.0	0.0	-1.15e-04	-37.56	0.0	0.0	37.56	0.0	0.0	0.0	-5.63
		-5.63	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0
15	34	0.0	0.0	-9.22e-05	-37.56	0.0	0.0	37.56	0.0	0.0	0.0	-5.63
		-5.63	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0
15	35	0.0	0.0	-1.10e-04	-37.56	0.0	0.0	37.56	0.0	0.0	0.0	-5.63
		-5.63	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0
15	36	0.0	0.0	-9.79e-05	-37.56	0.0	0.0	37.56	0.0	0.0	0.0	-5.63
		-5.63	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0
15	37	0.0	0.0	-1.11e-03	-33.61	0.0	0.0	33.61	0.0	0.0	0.0	-5.04
		-5.04	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0
15	38	0.0	0.0	-1.13e-03	-33.61	0.0	0.0	33.61	0.0	0.0	0.0	-5.04
		-5.04	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0
15	39	0.0	0.0	-1.11e-03	-33.61	0.0	0.0	33.61	0.0	0.0	0.0	-5.04
		-5.04	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0
15	40	0.0	0.0	-1.12e-03	-33.61	0.0	0.0	33.61	0.0	0.0	0.0	-5.04
		-5.04	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0
15	41	0.0	0.0	-2.75e-03	-33.61	0.0	0.0	33.61	0.0	0.0	0.0	-5.04
		-5.04	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0
15	42	0.0	0.0	-2.77e-03	-33.61	0.0	0.0	33.61	0.0	0.0	0.0	-5.04
		-5.04	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0
15	43	0.0	0.0	-2.75e-03	-33.61	0.0	0.0	33.61	0.0	0.0	0.0	-5.04
		-5.04	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0
15	44	0.0	0.0	-2.76e-03	-33.61	0.0	0.0	33.61	0.0	0.0	0.0	-5.04
		-5.04	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0
15	45	0.0	0.0	-1.06e-03	-33.61	0.0	0.0	33.61	0.0	0.0	0.0	-5.04
		-5.04	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0

Trave	Cmb	M3 mx/mn	M2 mx/mn	D 2 / D 3	Q 2 / Q 3	Pos.	N	V 2	V 3	T	M 2	M 3
15	46	0.0	0.0	-1.08e-03	-33.61	0.0	0.0	33.61	0.0	0.0	0.0	-5.04
		-5.04	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0
15	47	0.0	0.0	-1.07e-03	-33.61	0.0	0.0	33.61	0.0	0.0	0.0	-5.04
		-5.04	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0
15	48	0.0	0.0	-1.08e-03	-33.61	0.0	0.0	33.61	0.0	0.0	0.0	-5.04
		-5.04	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0
15	49	0.0	0.0	-5.72e-05	-33.61	0.0	0.0	33.61	0.0	0.0	0.0	-5.04
		-5.04	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0
15	50	0.0	0.0	-3.42e-05	-33.61	0.0	0.0	33.61	0.0	0.0	0.0	-5.04
		-5.04	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0
15	51	0.0	0.0	-5.16e-05	-33.61	0.0	0.0	33.61	0.0	0.0	0.0	-5.04
		-5.04	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0
15	52	0.0	0.0	-3.99e-05	-33.61	0.0	0.0	33.61	0.0	0.0	0.0	-5.04
		-5.04	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0
15	53	0.0	0.0	-1.58e-03	-33.61	0.0	0.0	33.61	0.0	0.0	0.0	-5.04
		-5.04	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0
15	54	0.0	0.0	-1.60e-03	-33.61	0.0	0.0	33.61	0.0	0.0	0.0	-5.04
		-5.04	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0
15	55	0.0	0.0	-1.59e-03	-33.61	0.0	0.0	33.61	0.0	0.0	0.0	-5.04
		-5.04	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0
15	56	0.0	0.0	-1.60e-03	-33.61	0.0	0.0	33.61	0.0	0.0	0.0	-5.04
		-5.04	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0
15	57	0.0	0.0	-1.03e-04	-33.61	0.0	0.0	33.61	0.0	0.0	0.0	-5.04
		-5.04	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0
15	58	0.0	0.0	-7.98e-05	-33.61	0.0	0.0	33.61	0.0	0.0	0.0	-5.04
		-5.04	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0
15	59	0.0	0.0	-9.72e-05	-33.61	0.0	0.0	33.61	0.0	0.0	0.0	-5.04
		-5.04	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0
15	60	0.0	0.0	-8.55e-05	-33.61	0.0	0.0	33.61	0.0	0.0	0.0	-5.04
		-5.04	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0
15	61	0.0	0.0	-4.64e-03	-33.61	0.0	5.69	33.61	0.0	0.0	0.0	-5.04
		-5.04	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0
15	62	0.0	0.0	-4.66e-03	-33.61	0.0	5.69	33.61	0.0	0.0	0.0	-5.04
		-5.04	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0
15	63	0.0	0.0	-4.65e-03	-33.61	0.0	5.69	33.61	0.0	0.0	0.0	-5.04
		-5.04	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0
15	64	0.0	0.0	-4.66e-03	-33.61	0.0	5.69	33.61	0.0	0.0	0.0	-5.04
		-5.04	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0
15	65	0.0	0.0	-6.28e-03	-33.61	0.0	5.69	33.61	0.0	0.0	0.0	-5.04
		-5.04	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0
15	66	0.0	0.0	-6.30e-03	-33.61	0.0	5.69	33.61	0.0	0.0	0.0	-5.04
		-5.04	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0
15	67	0.0	0.0	-6.29e-03	-33.61	0.0	5.69	33.61	0.0	0.0	0.0	-5.04
		-5.04	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0
15	68	0.0	0.0	-6.30e-03	-33.61	0.0	5.69	33.61	0.0	0.0	0.0	-5.04
		-5.04	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0
15	69	0.0	0.0	-4.60e-03	-33.61	0.0	5.69	33.61	0.0	0.0	0.0	-5.04
		-5.04	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0
15	70	0.0	0.0	-4.62e-03	-33.61	0.0	5.69	33.61	0.0	0.0	0.0	-5.04
		-5.04	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0
15	71	0.0	0.0	-4.60e-03	-33.61	0.0	5.69	33.61	0.0	0.0	0.0	-5.04
		-5.04	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0
15	72	0.0	0.0	-4.61e-03	-33.61	0.0	5.69	33.61	0.0	0.0	0.0	-5.04
		-5.04	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0
15	73	0.0	0.0	-3.48e-03	-33.61	0.0	5.69	33.61	0.0	0.0	0.0	-5.04
		-5.04	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0
15	74	0.0	0.0	-3.50e-03	-33.61	0.0	5.69	33.61	0.0	0.0	0.0	-5.04
		-5.04	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0
15	75	0.0	0.0	-3.48e-03	-33.61	0.0	5.69	33.61	0.0	0.0	0.0	-5.04
		-5.04	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0
15	76	0.0	0.0	-3.49e-03	-33.61	0.0	5.69	33.61	0.0	0.0	0.0	-5.04
		-5.04	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0
15	77	0.0	0.0	-5.12e-03	-33.61	0.0	5.69	33.61	0.0	0.0	0.0	-5.04
		-5.04	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0
15	78	0.0	0.0	-5.14e-03	-33.61	0.0	5.69	33.61	0.0	0.0	0.0	-5.04
		-5.04	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0
15	79	0.0	0.0	-5.12e-03	-33.61	0.0	5.69	33.61	0.0	0.0	0.0	-5.04
		-5.04	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0
15	80	0.0	0.0	-5.13e-03	-33.61	0.0	5.69	33.61	0.0	0.0	0.0	-5.04
		-5.04	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0
15	81	0.0	0.0	-3.43e-03	-33.61	0.0	5.69	33.61	0.0	0.0	0.0	-5.04
		-5.04	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0
15	82	0.0	0.0	-3.45e-03	-33.61	0.0	5.69	33.61	0.0	0.0	0.0	-5.04
		-5.04	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0
15	83	0.0	0.0	-3.44e-03	-33.61	0.0	5.69	33.61	0.0	0.0	0.0	-5.04

Trave	Cmb	M3 mx/mn	M2 mx/mn	D 2 / D 3	Q 2 / Q 3	Pos.	N	V 2	V 3	T	M 2	M 3
		-5.04	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0
15	84	0.0	0.0	-3.45e-03	-33.61	0.0	5.69	33.61	0.0	0.0	0.0	-5.04
		-5.04	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0
15	85	0.0	0.0	-1.11e-03	-33.61	0.0	0.0	33.61	0.0	0.0	0.0	-5.04
		-5.04	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0
15	86	0.0	0.0	-1.13e-03	-33.61	0.0	0.0	33.61	0.0	0.0	0.0	-5.04
		-5.04	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0
15	87	0.0	0.0	-1.11e-03	-33.61	0.0	0.0	33.61	0.0	0.0	0.0	-5.04
		-5.04	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0
15	88	0.0	0.0	-1.12e-03	-33.61	0.0	0.0	33.61	0.0	0.0	0.0	-5.04
		-5.04	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0
15	89	0.0	0.0	-2.75e-03	-33.61	0.0	0.0	33.61	0.0	0.0	0.0	-5.04
		-5.04	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0
15	90	0.0	0.0	-2.77e-03	-33.61	0.0	0.0	33.61	0.0	0.0	0.0	-5.04
		-5.04	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0
15	91	0.0	0.0	-2.75e-03	-33.61	0.0	0.0	33.61	0.0	0.0	0.0	-5.04
		-5.04	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0
15	92	0.0	0.0	-2.76e-03	-33.61	0.0	0.0	33.61	0.0	0.0	0.0	-5.04
		-5.04	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0
15	93	0.0	0.0	-1.06e-03	-33.61	0.0	0.0	33.61	0.0	0.0	0.0	-5.04
		-5.04	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0
15	94	0.0	0.0	-1.08e-03	-33.61	0.0	0.0	33.61	0.0	0.0	0.0	-5.04
		-5.04	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0
15	95	0.0	0.0	-1.07e-03	-33.61	0.0	0.0	33.61	0.0	0.0	0.0	-5.04
		-5.04	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0
15	96	0.0	0.0	-1.08e-03	-33.61	0.0	0.0	33.61	0.0	0.0	0.0	-5.04
		-5.04	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0
15	97	0.0	0.0	-5.66e-05	-33.61	0.0	0.0	33.61	0.0	0.0	0.0	-5.04
		-5.04	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0
15	98	0.0	0.0	-3.36e-05	-33.61	0.0	0.0	33.61	0.0	0.0	0.0	-5.04
		-5.04	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0
15	99	0.0	0.0	-5.10e-05	-33.61	0.0	0.0	33.61	0.0	0.0	0.0	-5.04
		-5.04	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0
15	100	0.0	0.0	-3.92e-05	-33.61	0.0	0.0	33.61	0.0	0.0	0.0	-5.04
		-5.04	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0
15	101	0.0	0.0	-1.58e-03	-33.61	0.0	0.0	33.61	0.0	0.0	0.0	-5.04
		-5.04	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0
15	102	0.0	0.0	-1.61e-03	-33.61	0.0	0.0	33.61	0.0	0.0	0.0	-5.04
		-5.04	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0
15	103	0.0	0.0	-1.59e-03	-33.61	0.0	0.0	33.61	0.0	0.0	0.0	-5.04
		-5.04	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0
15	104	0.0	0.0	-1.60e-03	-33.61	0.0	0.0	33.61	0.0	0.0	0.0	-5.04
		-5.04	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0
15	105	0.0	0.0	-1.02e-04	-33.61	0.0	0.0	33.61	0.0	0.0	0.0	-5.04
		-5.04	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0
15	106	0.0	0.0	-7.92e-05	-33.61	0.0	0.0	33.61	0.0	0.0	0.0	-5.04
		-5.04	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0
15	107	0.0	0.0	-9.66e-05	-33.61	0.0	0.0	33.61	0.0	0.0	0.0	-5.04
		-5.04	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0
15	108	0.0	0.0	-8.48e-05	-33.61	0.0	0.0	33.61	0.0	0.0	0.0	-5.04
		-5.04	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0
15	109	0.0	0.0	-0.01	-18.23	0.0	4.04	18.23	0.0	0.0	0.0	-2.74
		-2.74	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0
15	110	0.0	0.0	-6.59e-05	-24.92	0.0	0.0	24.92	0.0	0.0	0.0	-3.74
		-3.74	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0
15	111	0.0	0.0	-4.67e-05	-24.92	0.0	0.0	24.92	0.0	0.0	0.0	-3.74
		-3.74	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0
15	112	0.0	0.0	-6.11e-05	-24.92	0.0	0.0	24.92	0.0	0.0	0.0	-3.74
		-3.74	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0
15	113	0.0	0.0	-5.14e-05	-24.92	0.0	0.0	24.92	0.0	0.0	0.0	-3.74
		-3.74	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0
15	114	0.0	0.0	-1.15e-03	-24.92	0.0	0.0	24.92	0.0	0.0	0.0	-3.74
		-3.74	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0
15	115	0.0	0.0	-1.17e-03	-24.92	0.0	0.0	24.92	0.0	0.0	0.0	-3.74
		-3.74	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0
15	116	0.0	0.0	-1.15e-03	-24.92	0.0	0.0	24.92	0.0	0.0	0.0	-3.74
		-3.74	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0
15	117	0.0	0.0	-1.16e-03	-24.92	0.0	0.0	24.92	0.0	0.0	0.0	-3.74
		-3.74	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0
15	118	0.0	0.0	-9.96e-05	-24.92	0.0	0.0	24.92	0.0	0.0	0.0	-3.74
		-3.74	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0
15	119	0.0	0.0	-8.04e-05	-24.92	0.0	0.0	24.92	0.0	0.0	0.0	-3.74
		-3.74	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0
15	120	0.0	0.0	-9.49e-05	-24.92	0.0	0.0	24.92	0.0	0.0	0.0	-3.74
		-3.74	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0

Trave	Cmb	M3 mx/mn	M2 mx/mn	D 2 / D 3	Q 2 / Q 3	Pos.	N	V 2	V 3	T	M 2	M 3
15	121	0.0	0.0	-8.51e-05	-24.92	0.0	0.0	24.92	0.0	0.0	0.0	-3.74
		-3.74	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0
15	122	0.0	0.0	-2.78e-03	-24.92	0.0	3.16	24.92	0.0	0.0	0.0	-3.74
		-3.74	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0
15	123	0.0	0.0	-2.80e-03	-24.92	0.0	3.16	24.92	0.0	0.0	0.0	-3.74
		-3.74	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0
15	124	0.0	0.0	-2.78e-03	-24.92	0.0	3.16	24.92	0.0	0.0	0.0	-3.74
		-3.74	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0
15	125	0.0	0.0	-2.79e-03	-24.92	0.0	3.16	24.92	0.0	0.0	0.0	-3.74
		-3.74	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0
15	126	0.0	0.0	-3.99e-03	-24.92	0.0	3.16	24.92	0.0	0.0	0.0	-3.74
		-3.74	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0
15	127	0.0	0.0	-4.01e-03	-24.92	0.0	3.16	24.92	0.0	0.0	0.0	-3.74
		-3.74	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0
15	128	0.0	0.0	-4.00e-03	-24.92	0.0	3.16	24.92	0.0	0.0	0.0	-3.74
		-3.74	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0
15	129	0.0	0.0	-4.01e-03	-24.92	0.0	3.16	24.92	0.0	0.0	0.0	-3.74
		-3.74	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0
15	130	0.0	0.0	-2.75e-03	-24.92	0.0	3.16	24.92	0.0	0.0	0.0	-3.74
		-3.74	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0
15	131	0.0	0.0	-2.77e-03	-24.92	0.0	3.16	24.92	0.0	0.0	0.0	-3.74
		-3.74	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0
15	132	0.0	0.0	-2.75e-03	-24.92	0.0	3.16	24.92	0.0	0.0	0.0	-3.74
		-3.74	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0
15	133	0.0	0.0	-2.76e-03	-24.92	0.0	3.16	24.92	0.0	0.0	0.0	-3.74
		-3.74	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0
15	134	0.0	0.0	-1.92e-03	-24.92	0.0	3.16	24.92	0.0	0.0	0.0	-3.74
		-3.74	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0
15	135	0.0	0.0	-1.94e-03	-24.92	0.0	3.16	24.92	0.0	0.0	0.0	-3.74
		-3.74	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0
15	136	0.0	0.0	-1.92e-03	-24.92	0.0	3.16	24.92	0.0	0.0	0.0	-3.74
		-3.74	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0
15	137	0.0	0.0	-1.93e-03	-24.92	0.0	3.16	24.92	0.0	0.0	0.0	-3.74
		-3.74	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0
15	138	0.0	0.0	-3.13e-03	-24.92	0.0	3.16	24.92	0.0	0.0	0.0	-3.74
		-3.74	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0
15	139	0.0	0.0	-3.15e-03	-24.92	0.0	3.16	24.92	0.0	0.0	0.0	-3.74
		-3.74	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0
15	140	0.0	0.0	-3.13e-03	-24.92	0.0	3.16	24.92	0.0	0.0	0.0	-3.74
		-3.74	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0
15	141	0.0	0.0	-3.14e-03	-24.92	0.0	3.16	24.92	0.0	0.0	0.0	-3.74
		-3.74	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0
15	142	0.0	0.0	-1.88e-03	-24.92	0.0	3.16	24.92	0.0	0.0	0.0	-3.74
		-3.74	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0
15	143	0.0	0.0	-1.90e-03	-24.92	0.0	3.16	24.92	0.0	0.0	0.0	-3.74
		-3.74	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0
15	144	0.0	0.0	-1.89e-03	-24.92	0.0	3.16	24.92	0.0	0.0	0.0	-3.74
		-3.74	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0
15	145	0.0	0.0	-1.90e-03	-24.92	0.0	3.16	24.92	0.0	0.0	0.0	-3.74
		-3.74	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0
15	146	0.0	0.0	-1.71e-05	-16.22	0.0	0.0	16.21	0.0	0.0	0.0	-2.43
		-2.43	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0
15	147	0.0	0.0	-1.09e-06	-16.22	0.0	0.0	16.21	0.0	0.0	0.0	-2.43
		-2.43	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0
15	148	0.0	0.0	-1.32e-05	-16.22	0.0	0.0	16.21	0.0	0.0	0.0	-2.43
		-2.43	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0
15	149	0.0	0.0	-5.02e-06	-16.22	0.0	0.0	16.21	0.0	0.0	0.0	-2.43
		-2.43	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0
15	150	0.0	0.0	-1.20e-03	-16.22	0.0	0.0	16.21	0.0	0.0	0.0	-2.43
		-2.43	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0
15	151	0.0	0.0	-1.21e-03	-16.22	0.0	0.0	16.21	0.0	0.0	0.0	-2.43
		-2.43	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0
15	152	0.0	0.0	-1.20e-03	-16.22	0.0	0.0	16.21	0.0	0.0	0.0	-2.43
		-2.43	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0
15	153	0.0	0.0	-1.20e-03	-16.22	0.0	0.0	16.21	0.0	0.0	0.0	-2.43
		-2.43	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0
15	154	0.0	0.0	-5.09e-05	-16.22	0.0	0.0	16.21	0.0	0.0	0.0	-2.43
		-2.43	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0
15	155	0.0	0.0	-3.49e-05	-16.22	0.0	0.0	16.21	0.0	0.0	0.0	-2.43
		-2.43	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0
15	156	0.0	0.0	-4.69e-05	-16.22	0.0	0.0	16.21	0.0	0.0	0.0	-2.43
		-2.43	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0
15	157	0.0	0.0	-4.69e-05	-16.22	0.0	0.0	16.21	0.0	0.0	0.0	-2.43
		-2.43	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0
15	158	0.0	0.0	-3.06e-03	-27.82	0.0	3.16	27.82	0.0	0.0	0.0	-4.17

Trave	Cmb	M3 mx/mn	M2 mx/mn	D 2 / D 3	Q 2 / Q 3	Pos.	N	V 2	V 3	T	M 2	M 3
		-4.17	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0
15	159	0.0	0.0	-3.08e-03	-27.82	0.0	3.16	27.82	0.0	0.0	0.0	-4.17
		-4.17	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0
15	160	0.0	0.0	-3.07e-03	-27.82	0.0	3.16	27.82	0.0	0.0	0.0	-4.17
		-4.17	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0
15	161	0.0	0.0	-3.08e-03	-27.82	0.0	3.16	27.82	0.0	0.0	0.0	-4.17
		-4.17	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0
15	162	0.0	0.0	-4.28e-03	-27.82	0.0	3.16	27.82	0.0	0.0	0.0	-4.17
		-4.17	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0
15	163	0.0	0.0	-4.30e-03	-27.82	0.0	3.16	27.82	0.0	0.0	0.0	-4.17
		-4.17	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0
15	164	0.0	0.0	-4.28e-03	-27.82	0.0	3.16	27.82	0.0	0.0	0.0	-4.17
		-4.17	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0
15	165	0.0	0.0	-4.29e-03	-27.82	0.0	3.16	27.82	0.0	0.0	0.0	-4.17
		-4.17	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0
15	166	0.0	0.0	-3.03e-03	-27.82	0.0	3.16	27.82	0.0	0.0	0.0	-4.17
		-4.17	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0
15	167	0.0	0.0	-3.05e-03	-27.82	0.0	3.16	27.82	0.0	0.0	0.0	-4.17
		-4.17	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0
15	168	0.0	0.0	-3.03e-03	-27.82	0.0	3.16	27.82	0.0	0.0	0.0	-4.17
		-4.17	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0
15	169	0.0	0.0	-3.04e-03	-27.82	0.0	3.16	27.82	0.0	0.0	0.0	-4.17
		-4.17	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0
15	170	0.0	0.0	-1.91e-03	-27.82	0.0	3.16	27.82	0.0	0.0	0.0	-4.17
		-4.17	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0
15	171	0.0	0.0	-1.93e-03	-27.82	0.0	3.16	27.82	0.0	0.0	0.0	-4.17
		-4.17	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0
15	172	0.0	0.0	-1.91e-03	-27.82	0.0	3.16	27.82	0.0	0.0	0.0	-4.17
		-4.17	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0
15	173	0.0	0.0	-1.92e-03	-27.82	0.0	3.16	27.82	0.0	0.0	0.0	-4.17
		-4.17	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0
15	174	0.0	0.0	-3.12e-03	-27.82	0.0	3.16	27.82	0.0	0.0	0.0	-4.17
		-4.17	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0
15	175	0.0	0.0	-3.14e-03	-27.82	0.0	3.16	27.82	0.0	0.0	0.0	-4.17
		-4.17	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0
15	176	0.0	0.0	-3.13e-03	-27.82	0.0	3.16	27.82	0.0	0.0	0.0	-4.17
		-4.17	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0
15	177	0.0	0.0	-3.14e-03	-27.82	0.0	3.16	27.82	0.0	0.0	0.0	-4.17
		-4.17	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0
15	178	0.0	0.0	-1.88e-03	-27.82	0.0	3.16	27.82	0.0	0.0	0.0	-4.17
		-4.17	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0
15	179	0.0	0.0	-1.90e-03	-27.82	0.0	3.16	27.82	0.0	0.0	0.0	-4.17
		-4.17	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0
15	180	0.0	0.0	-1.88e-03	-27.82	0.0	3.16	27.82	0.0	0.0	0.0	-4.17
		-4.17	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0
15	181	0.0	0.0	-1.89e-03	-27.82	0.0	3.16	27.82	0.0	0.0	0.0	-4.17
		-4.17	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0
Trave		**M3 mx/mn**	**M2 mx/mn**	**D 2 / D 3**	**Q 2 / Q 3**		**N**	**V 2**	**V 3**	**T**		
		-710.02	0.0	-0.20	-625.93		-232.81	-431.47	0.0	0.0		
		431.83	0.0	0.01	0.0		5.69	351.67	0.0	0.0		

Trave f.	Cmb	M3 mx/mn	M2 mx/mn	D 2 / D 3	Pt	Pos.	N	V 2	V 3	T	M 2	M 3
		kN m	kN m	m	kN/ m2	cm	kN	kN	kN	kN m	kN m	kN m
10	1	275.25	0.0	-0.04	-150.92	0.0	-236.53	283.24	0.0	0.0	0.0	184.40
		184.40	0.0	0.0		30.0	-236.53	322.42	0.0	0.0	0.0	275.25
10	2	264.51	0.0	-0.04	-150.94	0.0	-236.53	279.39	0.0	0.0	0.0	174.81
		174.81	0.0	0.0		30.0	-236.53	318.57	0.0	0.0	0.0	264.51
10	3	278.31	0.0	-0.04	-150.82	0.0	-239.26	281.38	0.0	0.0	0.0	188.03
		188.03	0.0	0.0		30.0	-239.26	320.53	0.0	0.0	0.0	278.31
10	4	261.44	0.0	-0.04	-151.03	0.0	-233.80	281.25	0.0	0.0	0.0	171.19
		171.19	0.0	0.0		30.0	-233.80	320.45	0.0	0.0	0.0	261.44
10	5	140.88	0.0	-0.06	-203.15	0.0	-135.75	275.80	0.0	0.0	0.0	50.09
		50.09	0.0	0.0		30.0	-135.75	329.77	0.0	0.0	0.0	140.88
10	6	130.14	0.0	-0.06	-203.18	0.0	-135.75	271.95	0.0	0.0	0.0	40.51
		40.51	0.0	0.0		30.0	-135.75	325.92	0.0	0.0	0.0	130.14
10	7	143.95	0.0	-0.06	-203.06	0.0	-138.48	273.94	0.0	0.0	0.0	53.72
		53.72	0.0	0.0		30.0	-138.48	327.89	0.0	0.0	0.0	143.95
10	8	127.08	0.0	-0.06	-203.27	0.0	-133.02	273.81	0.0	0.0	0.0	36.88
		36.88	0.0	0.0		30.0	-133.02	327.81	0.0	0.0	0.0	127.08
10	9	234.07	0.0	-0.04	-151.44	0.0	-153.71	282.91	0.0	0.0	0.0	143.30
		143.30	0.0	0.0		30.0	-153.71	322.22	0.0	0.0	0.0	234.07
10	10	223.32	0.0	-0.04	-151.46	0.0	-153.71	279.06	0.0	0.0	0.0	133.71

Trave f.	Cmb	M3 mx/mn	M2 mx/mn	D 2 / D 3	Pt	Pos.	N	V 2	V 3	T	M 2	M 3
		133.71	0.0	0.0		30.0	-153.71	318.38	0.0	0.0	0.0	223.32
10	11	237.13	0.0	-0.04	-151.34	0.0	-156.44	281.05	0.0	0.0	0.0	146.92
		146.92	0.0	0.0		30.0	-156.44	320.34	0.0	0.0	0.0	237.13
10	12	220.26	0.0	-0.04	-151.56	0.0	-150.97	280.92	0.0	0.0	0.0	130.09
		130.09	0.0	0.0		30.0	-150.97	320.26	0.0	0.0	0.0	220.26
10	13	234.09	0.0	-0.09	-315.51	0.0	-214.09	371.35	0.0	0.0	0.0	109.57
		109.57	0.0	0.0		30.0	-214.09	459.06	0.0	0.0	0.0	234.09
10	14	227.64	0.0	-0.09	-315.53	0.0	-214.09	369.04	0.0	0.0	0.0	103.82
		103.82	0.0	0.0		30.0	-214.09	456.75	0.0	0.0	0.0	227.64
10	15	235.93	0.0	-0.09	-315.45	0.0	-215.73	370.24	0.0	0.0	0.0	111.75
		111.75	0.0	0.0		30.0	-215.73	457.93	0.0	0.0	0.0	235.93
10	16	225.81	0.0	-0.09	-315.58	0.0	-212.46	370.16	0.0	0.0	0.0	101.64
		101.64	0.0	0.0		30.0	-212.46	457.89	0.0	0.0	0.0	225.81
10	17	99.73	0.0	-0.11	-367.75	0.0	-113.31	363.91	0.0	0.0	0.0	-24.74
		-24.74	0.0	0.0		30.0	-113.31	466.42	0.0	0.0	0.0	99.73
10	18	93.28	0.0	-0.11	-367.77	0.0	-113.31	361.60	0.0	0.0	0.0	-30.49
		-30.49	0.0	0.0		30.0	-113.31	464.11	0.0	0.0	0.0	93.28
10	19	101.56	0.0	-0.11	-367.69	0.0	-114.95	362.80	0.0	0.0	0.0	-22.56
		-22.56	0.0	0.0		30.0	-114.95	465.29	0.0	0.0	0.0	101.56
10	20	91.44	0.0	-0.11	-367.82	0.0	-111.68	362.72	0.0	0.0	0.0	-32.67
		-32.67	0.0	0.0		30.0	-111.68	465.24	0.0	0.0	0.0	91.44
10	21	192.91	0.0	-0.09	-316.04	0.0	-131.27	371.03	0.0	0.0	0.0	68.47
		68.47	0.0	0.0		30.0	-131.27	458.87	0.0	0.0	0.0	192.91
10	22	186.46	0.0	-0.09	-316.05	0.0	-131.27	368.72	0.0	0.0	0.0	62.72
		62.72	0.0	0.0		30.0	-131.27	456.56	0.0	0.0	0.0	186.46
10	23	194.75	0.0	-0.09	-315.98	0.0	-132.91	369.91	0.0	0.0	0.0	70.64
		70.64	0.0	0.0		30.0	-132.91	457.74	0.0	0.0	0.0	194.75
10	24	184.62	0.0	-0.09	-316.11	0.0	-129.63	369.83	0.0	0.0	0.0	60.54
		60.54	0.0	0.0		30.0	-129.63	457.69	0.0	0.0	0.0	184.62
10	25	344.70	0.0	-0.08	-266.27	0.0	-271.20	375.00	0.0	0.0	0.0	221.14
		221.14	0.0	0.0		30.0	-271.20	448.76	0.0	0.0	0.0	344.70
10	26	338.25	0.0	-0.08	-266.28	0.0	-271.20	372.69	0.0	0.0	0.0	215.38
		215.38	0.0	0.0		30.0	-271.20	446.45	0.0	0.0	0.0	338.25
10	27	346.54	0.0	-0.08	-266.21	0.0	-272.84	373.89	0.0	0.0	0.0	223.31
		223.31	0.0	0.0		30.0	-272.84	447.63	0.0	0.0	0.0	346.54
10	28	336.41	0.0	-0.08	-266.34	0.0	-269.56	373.81	0.0	0.0	0.0	213.21
		213.21	0.0	0.0		30.0	-269.56	447.59	0.0	0.0	0.0	336.41
10	29	210.33	0.0	-0.09	-318.51	0.0	-170.42	367.57	0.0	0.0	0.0	86.83
		86.83	0.0	0.0		30.0	-170.42	456.12	0.0	0.0	0.0	210.33
10	30	203.89	0.0	-0.09	-318.52	0.0	-170.42	365.26	0.0	0.0	0.0	81.07
		81.07	0.0	0.0		30.0	-170.42	453.81	0.0	0.0	0.0	203.89
10	31	212.17	0.0	-0.09	-318.45	0.0	-172.06	366.45	0.0	0.0	0.0	89.00
		89.00	0.0	0.0		30.0	-172.06	454.99	0.0	0.0	0.0	212.17
10	32	202.05	0.0	-0.09	-318.58	0.0	-168.78	366.37	0.0	0.0	0.0	78.90
		78.90	0.0	0.0		30.0	-168.78	454.94	0.0	0.0	0.0	202.05
10	33	303.52	0.0	-0.08	-266.79	0.0	-188.38	374.68	0.0	0.0	0.0	180.03
		180.03	0.0	0.0		30.0	-188.38	448.57	0.0	0.0	0.0	303.52
10	34	297.07	0.0	-0.08	-266.81	0.0	-188.38	372.37	0.0	0.0	0.0	174.28
		174.28	0.0	0.0		30.0	-188.38	446.26	0.0	0.0	0.0	297.07
10	35	305.35	0.0	-0.08	-266.74	0.0	-190.02	373.56	0.0	0.0	0.0	182.21
		182.21	0.0	0.0		30.0	-190.02	447.44	0.0	0.0	0.0	305.35
10	36	295.23	0.0	-0.08	-266.87	0.0	-186.74	373.48	0.0	0.0	0.0	172.10
		172.10	0.0	0.0		30.0	-186.74	447.39	0.0	0.0	0.0	295.23
10	37	240.92	0.0	-0.08	-283.12	0.0	-219.10	343.52	0.0	0.0	0.0	126.17
		126.17	0.0	0.0		30.0	-219.10	421.73	0.0	0.0	0.0	240.92
10	38	234.47	0.0	-0.08	-283.13	0.0	-219.10	341.21	0.0	0.0	0.0	120.41
		120.41	0.0	0.0		30.0	-219.10	419.42	0.0	0.0	0.0	234.47
10	39	242.76	0.0	-0.08	-283.06	0.0	-220.74	342.40	0.0	0.0	0.0	128.34
		128.34	0.0	0.0		30.0	-220.74	420.60	0.0	0.0	0.0	242.76
10	40	232.64	0.0	-0.08	-283.19	0.0	-217.46	342.32	0.0	0.0	0.0	118.24
		118.24	0.0	0.0		30.0	-217.46	420.55	0.0	0.0	0.0	232.64
10	41	106.55	0.0	-0.10	-335.36	0.0	-118.32	336.08	0.0	0.0	0.0	-8.14
		-8.14	0.0	0.0		30.0	-118.32	429.08	0.0	0.0	0.0	106.55
10	42	100.11	0.0	-0.10	-335.37	0.0	-118.32	333.77	0.0	0.0	0.0	-13.90
		-13.90	0.0	0.0		30.0	-118.32	426.77	0.0	0.0	0.0	100.11
10	43	108.39	0.0	-0.10	-335.30	0.0	-119.96	334.97	0.0	0.0	0.0	-5.97
		-5.97	0.0	0.0		30.0	-119.96	427.95	0.0	0.0	0.0	108.39
10	44	98.27	0.0	-0.10	-335.43	0.0	-116.68	334.89	0.0	0.0	0.0	-16.07
		-16.07	0.0	0.0		30.0	-116.68	427.91	0.0	0.0	0.0	98.27
10	45	199.74	0.0	-0.08	-283.65	0.0	-136.28	343.19	0.0	0.0	0.0	85.06
		85.06	0.0	0.0		30.0	-136.28	421.53	0.0	0.0	0.0	199.74
10	46	193.29	0.0	-0.08	-283.66	0.0	-136.28	340.88	0.0	0.0	0.0	79.31
		79.31	0.0	0.0		30.0	-136.28	419.23	0.0	0.0	0.0	193.29
10	47	201.57	0.0	-0.08	-283.59	0.0	-137.92	342.08	0.0	0.0	0.0	87.24
		87.24	0.0	0.0		30.0	-137.92	420.40	0.0	0.0	0.0	201.57

Trave f.	Cmb	M3 mx/mn	M2 mx/mn	D 2 / D 3	Pt	Pos.	N	V 2	V 3	T	M 2	M 3
10	48	191.45	0.0	-0.08	-283.72	0.0	-134.64	342.00	0.0	0.0	0.0	77.13
		77.13	0.0	0.0		30.0	-134.64	420.36	0.0	0.0	0.0	191.45
10	49	323.67	0.0	-0.07	-246.28	0.0	-261.82	346.25	0.0	0.0	0.0	209.63
		209.63	0.0	0.0		30.0	-261.82	414.02	0.0	0.0	0.0	323.67
10	50	317.22	0.0	-0.07	-246.29	0.0	-261.82	343.94	0.0	0.0	0.0	203.88
		203.88	0.0	0.0		30.0	-261.82	411.71	0.0	0.0	0.0	317.22
10	51	325.51	0.0	-0.07	-246.22	0.0	-263.46	345.13	0.0	0.0	0.0	211.81
		211.81	0.0	0.0		30.0	-263.46	412.89	0.0	0.0	0.0	325.51
10	52	315.39	0.0	-0.07	-246.35	0.0	-260.19	345.06	0.0	0.0	0.0	201.70
		201.70	0.0	0.0		30.0	-260.19	412.84	0.0	0.0	0.0	315.39
10	53	189.31	0.0	-0.09	-298.52	0.0	-161.04	338.81	0.0	0.0	0.0	75.32
		75.32	0.0	0.0		30.0	-161.04	421.38	0.0	0.0	0.0	189.31
10	54	182.86	0.0	-0.09	-298.53	0.0	-161.04	336.50	0.0	0.0	0.0	69.57
		69.57	0.0	0.0		30.0	-161.04	419.07	0.0	0.0	0.0	182.86
10	55	191.14	0.0	-0.09	-298.46	0.0	-162.68	337.70	0.0	0.0	0.0	77.50
		77.50	0.0	0.0		30.0	-162.68	420.25	0.0	0.0	0.0	191.14
10	56	181.02	0.0	-0.09	-298.59	0.0	-159.41	337.62	0.0	0.0	0.0	67.39
		67.39	0.0	0.0		30.0	-159.41	420.20	0.0	0.0	0.0	181.02
10	57	282.49	0.0	-0.07	-246.80	0.0	-179.00	345.93	0.0	0.0	0.0	168.53
		168.53	0.0	0.0		30.0	-179.00	413.83	0.0	0.0	0.0	282.49
10	58	276.04	0.0	-0.07	-246.82	0.0	-179.00	343.62	0.0	0.0	0.0	162.78
		162.78	0.0	0.0		30.0	-179.00	411.52	0.0	0.0	0.0	276.04
10	59	284.33	0.0	-0.07	-246.75	0.0	-180.64	344.81	0.0	0.0	0.0	170.70
		170.70	0.0	0.0		30.0	-180.64	412.70	0.0	0.0	0.0	284.33
10	60	274.20	0.0	-0.07	-246.88	0.0	-177.36	344.73	0.0	0.0	0.0	160.60
		160.60	0.0	0.0		30.0	-177.36	412.65	0.0	0.0	0.0	274.20
10	61	61.75	0.0	-0.12	-399.58	0.0	-168.41	346.51	0.0	0.0	0.0	-58.78
		-58.78	0.0	0.0		30.0	-168.41	457.85	0.0	0.0	0.0	61.75
10	62	55.30	0.0	-0.12	-399.60	0.0	-168.41	344.20	0.0	0.0	0.0	-64.53
		-64.53	0.0	0.0		30.0	-168.41	455.54	0.0	0.0	0.0	55.30
10	63	63.59	0.0	-0.12	-399.52	0.0	-170.05	345.40	0.0	0.0	0.0	-56.61
		-56.61	0.0	0.0		30.0	-170.05	456.71	0.0	0.0	0.0	63.59
10	64	53.47	0.0	-0.12	-399.65	0.0	-166.77	345.32	0.0	0.0	0.0	-66.71
		-66.71	0.0	0.0		30.0	-166.77	456.67	0.0	0.0	0.0	53.47
10	65	-72.62	0.0	-0.13	-451.82	0.0	-67.63	339.08	0.0	0.0	0.0	-193.09
		-193.09	0.0	0.0		30.0	-67.63	465.20	0.0	0.0	0.0	-72.62
10	66	-79.06	0.0	-0.13	-451.84	0.0	-67.63	336.77	0.0	0.0	0.0	-198.84
		-198.84	0.0	0.0		30.0	-67.63	462.89	0.0	0.0	0.0	-79.06
10	67	-70.78	0.0	-0.13	-451.76	0.0	-69.27	337.96	0.0	0.0	0.0	-190.92
		-190.92	0.0	0.0		30.0	-69.27	464.07	0.0	0.0	0.0	-70.78
10	68	-80.90	0.0	-0.13	-451.89	0.0	-65.99	337.88	0.0	0.0	0.0	-201.02
		-201.02	0.0	0.0		30.0	-65.99	464.02	0.0	0.0	0.0	-80.90
10	69	20.57	0.0	-0.12	-400.11	0.0	-85.58	346.19	0.0	0.0	0.0	-99.88
		-99.88	0.0	0.0		30.0	-85.58	457.65	0.0	0.0	0.0	20.57
10	70	14.12	0.0	-0.12	-400.12	0.0	-85.58	343.88	0.0	0.0	0.0	-105.64
		-105.64	0.0	0.0		30.0	-85.58	455.34	0.0	0.0	0.0	14.12
10	71	22.40	0.0	-0.12	-400.05	0.0	-87.22	345.07	0.0	0.0	0.0	-97.71
		-97.71	0.0	0.0		30.0	-87.22	456.52	0.0	0.0	0.0	22.40
10	72	12.28	0.0	-0.12	-400.18	0.0	-83.95	345.00	0.0	0.0	0.0	-107.81
		-107.81	0.0	0.0		30.0	-83.95	456.48	0.0	0.0	0.0	12.28
10	73	144.50	0.0	-0.11	-362.74	0.0	-211.13	349.25	0.0	0.0	0.0	24.69
		24.69	0.0	0.0		30.0	-211.13	450.14	0.0	0.0	0.0	144.50
10	74	138.05	0.0	-0.11	-362.75	0.0	-211.13	346.94	0.0	0.0	0.0	18.93
		18.93	0.0	0.0		30.0	-211.13	447.83	0.0	0.0	0.0	138.05
10	75	146.34	0.0	-0.11	-362.68	0.0	-212.77	348.13	0.0	0.0	0.0	26.86
		26.86	0.0	0.0		30.0	-212.77	449.01	0.0	0.0	0.0	146.34
10	76	136.22	0.0	-0.11	-362.81	0.0	-209.49	348.05	0.0	0.0	0.0	16.76
		16.76	0.0	0.0		30.0	-209.49	448.96	0.0	0.0	0.0	136.22
10	77	10.14	0.0	-0.12	-414.98	0.0	-110.35	341.81	0.0	0.0	0.0	-109.62
		-109.62	0.0	0.0		30.0	-110.35	457.50	0.0	0.0	0.0	10.14
10	78	3.69	0.0	-0.12	-414.99	0.0	-110.35	339.50	0.0	0.0	0.0	-115.38
		-115.38	0.0	0.0		30.0	-110.35	455.19	0.0	0.0	0.0	3.69
10	79	11.97	0.0	-0.12	-414.92	0.0	-111.99	340.69	0.0	0.0	0.0	-107.45
		-107.45	0.0	0.0		30.0	-111.99	456.36	0.0	0.0	0.0	11.97
10	80	1.85	0.0	-0.12	-415.05	0.0	-108.71	340.61	0.0	0.0	0.0	-117.55
		-117.55	0.0	0.0		30.0	-108.71	456.32	0.0	0.0	0.0	1.85
10	81	103.32	0.0	-0.11	-363.27	0.0	-128.31	348.92	0.0	0.0	0.0	-16.42
		-16.42	0.0	0.0		30.0	-128.31	449.95	0.0	0.0	0.0	103.32
10	82	96.87	0.0	-0.11	-363.28	0.0	-128.31	346.61	0.0	0.0	0.0	-22.17
		-22.17	0.0	0.0		30.0	-128.31	447.64	0.0	0.0	0.0	96.87
10	83	105.16	0.0	-0.11	-363.21	0.0	-129.95	347.80	0.0	0.0	0.0	-14.24
		-14.24	0.0	0.0		30.0	-129.95	448.82	0.0	0.0	0.0	105.16
10	84	95.03	0.0	-0.11	-363.34	0.0	-126.67	347.73	0.0	0.0	0.0	-24.35
		-24.35	0.0	0.0		30.0	-126.67	448.77	0.0	0.0	0.0	95.03
10	85	238.73	0.0	-0.09	-289.73	0.0	-218.63	339.55	0.0	0.0	0.0	124.87

Trave f.	Cmb	M3 mx/mn	M2 mx/mn	D 2 / D 3	Pt	Pos.	N	V 2	V 3	T	M 2	M 3
		124.87	0.0	0.0		30.0	-218.63	419.74	0.0	0.0	0.0	238.73
10	86	232.29	0.0	-0.09	-289.74	0.0	-218.63	337.24	0.0	0.0	0.0	119.12
		119.12	0.0	0.0		30.0	-218.63	417.43	0.0	0.0	0.0	232.29
10	87	240.57	0.0	-0.09	-289.67	0.0	-220.27	338.43	0.0	0.0	0.0	127.05
		127.05	0.0	0.0		30.0	-220.27	418.61	0.0	0.0	0.0	240.57
10	88	230.45	0.0	-0.09	-289.80	0.0	-216.99	338.35	0.0	0.0	0.0	116.95
		116.95	0.0	0.0		30.0	-216.99	418.56	0.0	0.0	0.0	230.45
10	89	104.37	0.0	-0.10	-341.97	0.0	-117.85	332.11	0.0	0.0	0.0	-9.43
		-9.43	0.0	0.0		30.0	-117.85	427.09	0.0	0.0	0.0	104.37
10	90	97.92	0.0	-0.10	-341.98	0.0	-117.85	329.80	0.0	0.0	0.0	-15.19
		-15.19	0.0	0.0		30.0	-117.85	424.79	0.0	0.0	0.0	97.92
10	91	106.21	0.0	-0.10	-341.91	0.0	-119.49	330.99	0.0	0.0	0.0	-7.26
		-7.26	0.0	0.0		30.0	-119.49	425.96	0.0	0.0	0.0	106.21
10	92	96.09	0.0	-0.10	-342.04	0.0	-116.21	330.92	0.0	0.0	0.0	-17.36
		-17.36	0.0	0.0		30.0	-116.21	425.92	0.0	0.0	0.0	96.09
10	93	197.55	0.0	-0.09	-290.25	0.0	-135.81	339.22	0.0	0.0	0.0	83.77
		83.77	0.0	0.0		30.0	-135.81	419.54	0.0	0.0	0.0	197.55
10	94	191.11	0.0	-0.09	-290.27	0.0	-135.81	336.91	0.0	0.0	0.0	78.02
		78.02	0.0	0.0		30.0	-135.81	417.24	0.0	0.0	0.0	191.11
10	95	199.39	0.0	-0.09	-290.20	0.0	-137.45	338.11	0.0	0.0	0.0	85.95
		85.95	0.0	0.0		30.0	-137.45	418.41	0.0	0.0	0.0	199.39
10	96	189.27	0.0	-0.09	-290.33	0.0	-134.17	338.03	0.0	0.0	0.0	75.84
		75.84	0.0	0.0		30.0	-134.17	418.37	0.0	0.0	0.0	189.27
10	97	321.49	0.0	-0.07	-252.88	0.0	-261.36	342.28	0.0	0.0	0.0	208.34
		208.34	0.0	0.0		30.0	-261.36	412.03	0.0	0.0	0.0	321.49
10	98	315.04	0.0	-0.07	-252.90	0.0	-261.36	339.97	0.0	0.0	0.0	202.59
		202.59	0.0	0.0		30.0	-261.36	409.72	0.0	0.0	0.0	315.04
10	99	323.32	0.0	-0.07	-252.83	0.0	-263.00	341.16	0.0	0.0	0.0	210.52
		210.52	0.0	0.0		30.0	-263.00	410.90	0.0	0.0	0.0	323.32
10	100	313.20	0.0	-0.07	-252.95	0.0	-259.72	341.08	0.0	0.0	0.0	200.41
		200.41	0.0	0.0		30.0	-259.72	410.86	0.0	0.0	0.0	313.20
10	101	187.12	0.0	-0.09	-305.12	0.0	-160.58	334.84	0.0	0.0	0.0	74.03
		74.03	0.0	0.0		30.0	-160.58	419.39	0.0	0.0	0.0	187.12
10	102	180.67	0.0	-0.09	-305.14	0.0	-160.58	332.53	0.0	0.0	0.0	68.28
		68.28	0.0	0.0		30.0	-160.58	417.08	0.0	0.0	0.0	180.67
10	103	188.96	0.0	-0.09	-305.06	0.0	-162.22	333.73	0.0	0.0	0.0	76.21
		76.21	0.0	0.0		30.0	-162.22	418.26	0.0	0.0	0.0	188.96
10	104	178.84	0.0	-0.09	-305.19	0.0	-158.94	333.65	0.0	0.0	0.0	66.10
		66.10	0.0	0.0		30.0	-158.94	418.21	0.0	0.0	0.0	178.84
10	105	280.30	0.0	-0.07	-253.41	0.0	-178.53	341.95	0.0	0.0	0.0	167.24
		167.24	0.0	0.0		30.0	-178.53	411.84	0.0	0.0	0.0	280.30
10	106	273.86	0.0	-0.07	-253.42	0.0	-178.53	339.64	0.0	0.0	0.0	161.48
		161.48	0.0	0.0		30.0	-178.53	409.53	0.0	0.0	0.0	273.86
10	107	282.14	0.0	-0.07	-253.35	0.0	-180.17	340.84	0.0	0.0	0.0	169.41
		169.41	0.0	0.0		30.0	-180.17	410.71	0.0	0.0	0.0	282.14
10	108	272.02	0.0	-0.07	-253.48	0.0	-176.90	340.76	0.0	0.0	0.0	159.31
		159.31	0.0	0.0		30.0	-176.90	410.66	0.0	0.0	0.0	272.02
10	109	-543.75	0.0	-0.15	-499.05	0.0	136.39	200.67	0.0	0.0	0.0	-624.46
		-624.46	0.0	0.0		30.0	136.39	339.54	0.0	0.0	0.0	-543.75
10	110	240.51	0.0	-0.04	-141.48	0.0	-176.48	281.42	0.0	0.0	0.0	150.40
		150.40	0.0	0.0		30.0	-176.48	319.33	0.0	0.0	0.0	240.51
10	111	235.14	0.0	-0.04	-141.49	0.0	-176.48	279.50	0.0	0.0	0.0	145.60
		145.60	0.0	0.0		30.0	-176.48	317.40	0.0	0.0	0.0	235.14
10	112	242.04	0.0	-0.04	-141.43	0.0	-177.85	280.49	0.0	0.0	0.0	152.21
		152.21	0.0	0.0		30.0	-177.85	318.38	0.0	0.0	0.0	242.04
10	113	233.60	0.0	-0.04	-141.54	0.0	-175.12	280.43	0.0	0.0	0.0	143.79
		143.79	0.0	0.0		30.0	-175.12	318.35	0.0	0.0	0.0	233.60
10	114	140.98	0.0	-0.05	-180.18	0.0	-101.83	275.92	0.0	0.0	0.0	50.91
		50.91	0.0	0.0		30.0	-101.83	324.77	0.0	0.0	0.0	140.98
10	115	135.61	0.0	-0.05	-180.19	0.0	-101.83	273.99	0.0	0.0	0.0	46.11
		46.11	0.0	0.0		30.0	-101.83	322.85	0.0	0.0	0.0	135.61
10	116	142.51	0.0	-0.05	-180.13	0.0	-103.20	274.99	0.0	0.0	0.0	52.72
		52.72	0.0	0.0		30.0	-103.20	323.83	0.0	0.0	0.0	142.51
10	117	134.07	0.0	-0.05	-180.24	0.0	-100.47	274.92	0.0	0.0	0.0	44.30
		44.30	0.0	0.0		30.0	-100.47	323.79	0.0	0.0	0.0	134.07
10	118	210.00	0.0	-0.04	-141.87	0.0	-115.14	281.18	0.0	0.0	0.0	119.95
		119.95	0.0	0.0		30.0	-115.14	319.18	0.0	0.0	0.0	210.00
10	119	204.63	0.0	-0.04	-141.88	0.0	-115.14	279.26	0.0	0.0	0.0	115.16
		115.16	0.0	0.0		30.0	-115.14	317.26	0.0	0.0	0.0	204.63
10	120	211.53	0.0	-0.04	-141.83	0.0	-116.50	280.25	0.0	0.0	0.0	121.76
		121.76	0.0	0.0		30.0	-116.50	318.24	0.0	0.0	0.0	211.53
10	121	203.10	0.0	-0.04	-141.93	0.0	-113.77	280.19	0.0	0.0	0.0	113.34
		113.34	0.0	0.0		30.0	-113.77	318.20	0.0	0.0	0.0	203.10
10	122	94.03	0.0	-0.07	-229.70	0.0	-137.29	283.37	0.0	0.0	0.0	-0.35
		-0.35	0.0	0.0		30.0	-137.29	346.28	0.0	0.0	0.0	94.03

Trave f.	Cmb	M3 mx/mn	M2 mx/mn	D 2 / D 3	Pt	Pos.	N	V 2	V 3	T	M 2	M 3
10	123	88.65	0.0	-0.07	-229.71	0.0	-137.29	281.44	0.0	0.0	0.0	-5.14
		-5.14	0.0	0.0		30.0	-137.29	344.36	0.0	0.0	0.0	88.65
10	124	95.56	0.0	-0.07	-229.65	0.0	-138.66	282.44	0.0	0.0	0.0	1.47
		1.47	0.0	0.0		30.0	-138.66	345.34	0.0	0.0	0.0	95.56
10	125	87.12	0.0	-0.07	-229.76	0.0	-135.93	282.38	0.0	0.0	0.0	-6.95
		-6.95	0.0	0.0		30.0	-135.93	345.30	0.0	0.0	0.0	87.12
10	126	-5.50	0.0	-0.08	-268.40	0.0	-62.64	277.86	0.0	0.0	0.0	-99.83
		-99.83	0.0	0.0		30.0	-62.64	351.73	0.0	0.0	0.0	-5.50
10	127	-10.88	0.0	-0.08	-268.41	0.0	-62.64	275.94	0.0	0.0	0.0	-104.63
		-104.63	0.0	0.0		30.0	-62.64	349.80	0.0	0.0	0.0	-10.88
10	128	-3.97	0.0	-0.08	-268.35	0.0	-64.01	276.93	0.0	0.0	0.0	-98.02
		-98.02	0.0	0.0		30.0	-64.01	350.79	0.0	0.0	0.0	-3.97
10	129	-12.41	0.0	-0.08	-268.46	0.0	-61.28	276.87	0.0	0.0	0.0	-106.44
		-106.44	0.0	0.0		30.0	-61.28	350.75	0.0	0.0	0.0	-12.41
10	130	63.52	0.0	-0.07	-230.09	0.0	-75.95	283.13	0.0	0.0	0.0	-30.79
		-30.79	0.0	0.0		30.0	-75.95	346.14	0.0	0.0	0.0	63.52
10	131	58.15	0.0	-0.07	-230.10	0.0	-75.95	281.20	0.0	0.0	0.0	-35.59
		-35.59	0.0	0.0		30.0	-75.95	344.21	0.0	0.0	0.0	58.15
10	132	65.05	0.0	-0.07	-230.05	0.0	-77.31	282.20	0.0	0.0	0.0	-28.98
		-28.98	0.0	0.0		30.0	-77.31	345.19	0.0	0.0	0.0	65.05
10	133	56.62	0.0	-0.07	-230.15	0.0	-74.58	282.13	0.0	0.0	0.0	-37.40
		-37.40	0.0	0.0		30.0	-74.58	345.16	0.0	0.0	0.0	56.62
10	134	155.47	0.0	-0.06	-202.34	0.0	-169.02	285.40	0.0	0.0	0.0	61.63
		61.63	0.0	0.0		30.0	-169.02	340.56	0.0	0.0	0.0	155.47
10	135	150.10	0.0	-0.06	-202.35	0.0	-169.02	283.47	0.0	0.0	0.0	56.84
		56.84	0.0	0.0		30.0	-169.02	338.63	0.0	0.0	0.0	150.10
10	136	157.01	0.0	-0.06	-202.30	0.0	-170.39	284.47	0.0	0.0	0.0	63.45
		63.45	0.0	0.0		30.0	-170.39	339.61	0.0	0.0	0.0	157.01
10	137	148.57	0.0	-0.06	-202.40	0.0	-167.65	284.40	0.0	0.0	0.0	55.03
		55.03	0.0	0.0		30.0	-167.65	339.58	0.0	0.0	0.0	148.57
10	138	55.95	0.0	-0.07	-241.04	0.0	-94.37	279.89	0.0	0.0	0.0	-37.85
		-37.85	0.0	0.0		30.0	-94.37	346.01	0.0	0.0	0.0	55.95
10	139	50.57	0.0	-0.07	-241.05	0.0	-94.37	277.96	0.0	0.0	0.0	-42.65
		-42.65	0.0	0.0		30.0	-94.37	344.08	0.0	0.0	0.0	50.57
10	140	57.48	0.0	-0.07	-240.99	0.0	-95.73	278.96	0.0	0.0	0.0	-36.04
		-36.04	0.0	0.0		30.0	-95.73	345.06	0.0	0.0	0.0	57.48
10	141	49.04	0.0	-0.07	-241.10	0.0	-93.00	278.89	0.0	0.0	0.0	-44.46
		-44.46	0.0	0.0		30.0	-93.00	345.03	0.0	0.0	0.0	49.04
10	142	124.97	0.0	-0.06	-202.73	0.0	-107.67	285.16	0.0	0.0	0.0	31.19
		31.19	0.0	0.0		30.0	-107.67	340.41	0.0	0.0	0.0	124.97
10	143	119.60	0.0	-0.06	-202.75	0.0	-107.67	283.23	0.0	0.0	0.0	26.39
		26.39	0.0	0.0		30.0	-107.67	338.49	0.0	0.0	0.0	119.60
10	144	126.50	0.0	-0.06	-202.69	0.0	-109.04	284.23	0.0	0.0	0.0	33.00
		33.00	0.0	0.0		30.0	-109.04	339.47	0.0	0.0	0.0	126.50
10	145	118.07	0.0	-0.06	-202.79	0.0	-106.30	284.16	0.0	0.0	0.0	24.58
		24.58	0.0	0.0		30.0	-106.30	339.43	0.0	0.0	0.0	118.07
10	146	202.15	0.0	-0.03	-111.79	0.0	-175.21	209.18	0.0	0.0	0.0	135.04
		135.04	0.0	0.0		30.0	-175.21	238.20	0.0	0.0	0.0	202.15
10	147	197.67	0.0	-0.03	-111.80	0.0	-175.21	207.58	0.0	0.0	0.0	131.05
		131.05	0.0	0.0		30.0	-175.21	236.60	0.0	0.0	0.0	197.67
10	148	203.42	0.0	-0.03	-111.75	0.0	-176.34	208.41	0.0	0.0	0.0	136.55
		136.55	0.0	0.0		30.0	-176.34	237.42	0.0	0.0	0.0	203.42
10	149	196.40	0.0	-0.03	-111.84	0.0	-174.07	208.35	0.0	0.0	0.0	129.54
		129.54	0.0	0.0		30.0	-174.07	237.39	0.0	0.0	0.0	196.40
10	150	102.62	0.0	-0.04	-150.49	0.0	-100.55	203.67	0.0	0.0	0.0	35.55
		35.55	0.0	0.0		30.0	-100.55	243.65	0.0	0.0	0.0	102.62
10	151	98.14	0.0	-0.04	-150.50	0.0	-100.55	202.07	0.0	0.0	0.0	31.56
		31.56	0.0	0.0		30.0	-100.55	242.05	0.0	0.0	0.0	98.14
10	152	103.89	0.0	-0.04	-150.45	0.0	-101.69	202.90	0.0	0.0	0.0	37.06
		37.06	0.0	0.0		30.0	-101.69	242.87	0.0	0.0	0.0	103.89
10	153	103.89	0.0	-0.04	-150.45	0.0	-101.69	202.90	0.0	0.0	0.0	37.06
		37.06	0.0	0.0		30.0	-101.69	242.87	0.0	0.0	0.0	103.89
10	154	171.64	0.0	-0.03	-112.18	0.0	-113.86	208.94	0.0	0.0	0.0	104.59
		104.59	0.0	0.0		30.0	-113.86	238.06	0.0	0.0	0.0	171.64
10	155	167.17	0.0	-0.03	-112.19	0.0	-113.86	207.34	0.0	0.0	0.0	100.60
		100.60	0.0	0.0		30.0	-113.86	236.46	0.0	0.0	0.0	167.17
10	156	172.92	0.0	-0.03	-112.14	0.0	-115.00	208.17	0.0	0.0	0.0	106.10
		106.10	0.0	0.0		30.0	-115.00	237.27	0.0	0.0	0.0	172.92
10	157	172.92	0.0	-0.03	-112.14	0.0	-115.00	208.17	0.0	0.0	0.0	106.10
		106.10	0.0	0.0		30.0	-115.00	237.27	0.0	0.0	0.0	172.92
10	158	76.96	0.0	-0.09	-289.95	0.0	-131.03	281.93	0.0	0.0	0.0	-19.66
		-19.66	0.0	0.0		30.0	-131.03	362.77	0.0	0.0	0.0	76.96
10	159	71.59	0.0	-0.09	-289.96	0.0	-131.03	280.01	0.0	0.0	0.0	-24.46
		-24.46	0.0	0.0		30.0	-131.03	360.84	0.0	0.0	0.0	71.59
10	160	78.49	0.0	-0.09	-289.90	0.0	-132.39	281.00	0.0	0.0	0.0	-17.85

Trave f.	Cmb	M3 mx/mn	M2 mx/mn	D 2 / D 3	Pt	Pos.	N	V 2	V 3	T	M 2	M 3
		-17.85	0.0	0.0		30.0	-132.39	361.82	0.0	0.0	0.0	78.49
10	161	70.06	0.0	-0.09	-290.01	0.0	-129.66	280.94	0.0	0.0	0.0	-26.27
		-26.27	0.0	0.0		30.0	-129.66	361.79	0.0	0.0	0.0	70.06
10	162	-22.57	0.0	-0.10	-328.65	0.0	-56.37	276.42	0.0	0.0	0.0	-119.15
		-119.15	0.0	0.0		30.0	-56.37	368.22	0.0	0.0	0.0	-22.57
10	163	-27.94	0.0	-0.10	-328.66	0.0	-56.37	274.50	0.0	0.0	0.0	-123.95
		-123.95	0.0	0.0		30.0	-56.37	366.29	0.0	0.0	0.0	-27.94
10	164	-21.04	0.0	-0.10	-328.60	0.0	-57.74	275.49	0.0	0.0	0.0	-117.34
		-117.34	0.0	0.0		30.0	-57.74	367.27	0.0	0.0	0.0	-21.04
10	165	-29.47	0.0	-0.10	-328.71	0.0	-55.01	275.43	0.0	0.0	0.0	-125.76
		-125.76	0.0	0.0		30.0	-55.01	367.23	0.0	0.0	0.0	-29.47
10	166	46.45	0.0	-0.09	-290.34	0.0	-69.68	281.69	0.0	0.0	0.0	-50.11
		-50.11	0.0	0.0		30.0	-69.68	362.62	0.0	0.0	0.0	46.45
10	167	41.08	0.0	-0.09	-290.35	0.0	-69.68	279.77	0.0	0.0	0.0	-54.91
		-54.91	0.0	0.0		30.0	-69.68	360.70	0.0	0.0	0.0	41.08
10	168	47.98	0.0	-0.09	-290.29	0.0	-71.04	280.76	0.0	0.0	0.0	-48.30
		-48.30	0.0	0.0		30.0	-71.04	361.68	0.0	0.0	0.0	47.98
10	169	39.55	0.0	-0.09	-290.40	0.0	-68.31	280.70	0.0	0.0	0.0	-56.72
		-56.72	0.0	0.0		30.0	-68.31	361.64	0.0	0.0	0.0	39.55
10	170	158.89	0.0	-0.07	-253.47	0.0	-173.33	284.64	0.0	0.0	0.0	62.98
		62.98	0.0	0.0		30.0	-173.33	355.14	0.0	0.0	0.0	158.89
10	171	153.52	0.0	-0.07	-253.48	0.0	-173.33	282.71	0.0	0.0	0.0	58.18
		58.18	0.0	0.0		30.0	-173.33	353.21	0.0	0.0	0.0	153.52
10	172	160.42	0.0	-0.07	-253.42	0.0	-174.69	283.71	0.0	0.0	0.0	64.79
		64.79	0.0	0.0		30.0	-174.69	354.19	0.0	0.0	0.0	160.42
10	173	151.99	0.0	-0.07	-253.53	0.0	-171.96	283.64	0.0	0.0	0.0	56.37
		56.37	0.0	0.0		30.0	-171.96	354.16	0.0	0.0	0.0	151.99
10	174	59.36	0.0	-0.09	-292.17	0.0	-98.67	279.13	0.0	0.0	0.0	-36.51
		-36.51	0.0	0.0		30.0	-98.67	360.59	0.0	0.0	0.0	59.36
10	175	53.99	0.0	-0.09	-292.18	0.0	-98.67	277.20	0.0	0.0	0.0	-41.31
		-41.31	0.0	0.0		30.0	-98.67	358.66	0.0	0.0	0.0	53.99
10	176	60.89	0.0	-0.09	-292.12	0.0	-100.04	278.20	0.0	0.0	0.0	-34.70
		-34.70	0.0	0.0		30.0	-100.04	359.64	0.0	0.0	0.0	60.89
10	177	52.46	0.0	-0.09	-292.23	0.0	-97.31	278.13	0.0	0.0	0.0	-43.12
		-43.12	0.0	0.0		30.0	-97.31	359.61	0.0	0.0	0.0	52.46
10	178	128.38	0.0	-0.07	-253.86	0.0	-111.98	284.40	0.0	0.0	0.0	32.53
		32.53	0.0	0.0		30.0	-111.98	354.99	0.0	0.0	0.0	128.38
10	179	123.01	0.0	-0.07	-253.87	0.0	-111.98	282.47	0.0	0.0	0.0	27.73
		27.73	0.0	0.0		30.0	-111.98	353.07	0.0	0.0	0.0	123.01
10	180	129.92	0.0	-0.07	-253.82	0.0	-113.34	283.47	0.0	0.0	0.0	34.34
		34.34	0.0	0.0		30.0	-113.34	354.05	0.0	0.0	0.0	129.92
10	181	121.48	0.0	-0.07	-253.92	0.0	-110.61	283.40	0.0	0.0	0.0	25.92
		25.92	0.0	0.0		30.0	-110.61	354.01	0.0	0.0	0.0	121.48
11	1	264.51	0.0	-0.04	-150.94	0.0	-236.53	-318.57	0.0	0.0	0.0	264.51
		174.81	0.0	0.0		30.0	-236.53	-279.39	0.0	0.0	0.0	174.81
11	2	275.25	0.0	-0.04	-150.92	0.0	-236.53	-322.42	0.0	0.0	0.0	275.25
		184.40	0.0	0.0		30.0	-236.53	-283.24	0.0	0.0	0.0	184.40
11	3	278.31	0.0	-0.04	-150.82	0.0	-239.26	-320.53	0.0	0.0	0.0	278.31
		188.03	0.0	0.0		30.0	-239.26	-281.38	0.0	0.0	0.0	188.03
11	4	261.44	0.0	-0.04	-151.03	0.0	-233.80	-320.46	0.0	0.0	0.0	261.44
		171.19	0.0	0.0		30.0	-233.80	-281.25	0.0	0.0	0.0	171.19
11	5	357.69	0.0	-0.03	-104.71	0.0	-254.49	-311.05	0.0	0.0	0.0	357.69
		268.02	0.0	0.0		30.0	-254.49	-286.53	0.0	0.0	0.0	268.02
11	6	368.44	0.0	-0.03	-104.71	0.0	-254.49	-314.89	0.0	0.0	0.0	368.44
		277.60	0.0	0.0		30.0	-254.49	-290.38	0.0	0.0	0.0	277.60
11	7	371.50	0.0	-0.03	-104.64	0.0	-257.22	-313.01	0.0	0.0	0.0	371.50
		281.23	0.0	0.0		30.0	-257.22	-288.52	0.0	0.0	0.0	281.23
11	8	354.63	0.0	-0.03	-104.78	0.0	-251.75	-312.93	0.0	0.0	0.0	354.63
		264.39	0.0	0.0		30.0	-251.75	-288.39	0.0	0.0	0.0	264.39
11	9	223.32	0.0	-0.04	-151.46	0.0	-153.71	-318.38	0.0	0.0	0.0	223.32
		133.71	0.0	0.0		30.0	-153.71	-279.06	0.0	0.0	0.0	133.71
11	10	234.07	0.0	-0.04	-151.44	0.0	-153.71	-322.22	0.0	0.0	0.0	234.07
		143.30	0.0	0.0		30.0	-153.71	-282.91	0.0	0.0	0.0	143.30
11	11	237.13	0.0	-0.04	-151.34	0.0	-156.44	-320.34	0.0	0.0	0.0	237.13
		146.92	0.0	0.0		30.0	-156.44	-281.05	0.0	0.0	0.0	146.92
11	12	220.26	0.0	-0.04	-151.56	0.0	-150.97	-320.26	0.0	0.0	0.0	220.26
		130.09	0.0	0.0		30.0	-150.97	-280.93	0.0	0.0	0.0	130.09
11	13	425.03	0.0	-0.07	-222.39	0.0	-291.52	-436.70	0.0	0.0	0.0	425.03
		302.97	0.0	0.0		30.0	-291.52	-376.81	0.0	0.0	0.0	302.97
11	14	431.48	0.0	-0.07	-222.38	0.0	-291.52	-439.00	0.0	0.0	0.0	431.48
		308.72	0.0	0.0		30.0	-291.52	-379.12	0.0	0.0	0.0	308.72
11	15	433.31	0.0	-0.07	-222.34	0.0	-293.15	-437.87	0.0	0.0	0.0	433.31
		310.90	0.0	0.0		30.0	-293.15	-378.00	0.0	0.0	0.0	310.90
11	16	423.19	0.0	-0.07	-222.43	0.0	-289.88	-437.83	0.0	0.0	0.0	423.19
		300.79	0.0	0.0		30.0	-289.88	-377.92	0.0	0.0	0.0	300.79

Trave f.	Cmb	M3 mx/mn	M2 mx/mn	D 2 / D 3	Pt	Pos.	N	V 2	V 3	T	M 2	M 3
11	17	518.22	0.0	-0.05	-176.35	0.0	-309.47	-429.17	0.0	0.0	0.0	518.22
		396.17	0.0	0.0		30.0	-309.47	-383.95	0.0	0.0	0.0	396.17
11	18	524.66	0.0	-0.05	-176.34	0.0	-309.47	-431.48	0.0	0.0	0.0	524.66
		401.92	0.0	0.0		30.0	-309.47	-386.26	0.0	0.0	0.0	401.92
11	19	526.50	0.0	-0.05	-176.30	0.0	-311.11	-430.35	0.0	0.0	0.0	526.50
		404.10	0.0	0.0		30.0	-311.11	-385.14	0.0	0.0	0.0	404.10
11	20	516.38	0.0	-0.05	-176.39	0.0	-307.83	-430.30	0.0	0.0	0.0	516.38
		393.99	0.0	0.0		30.0	-307.83	-385.06	0.0	0.0	0.0	393.99
11	21	383.85	0.0	-0.07	-222.73	0.0	-208.69	-436.50	0.0	0.0	0.0	383.85
		261.86	0.0	0.0		30.0	-208.69	-376.48	0.0	0.0	0.0	261.86
11	22	390.29	0.0	-0.07	-222.73	0.0	-208.69	-438.81	0.0	0.0	0.0	390.29
		267.62	0.0	0.0		30.0	-208.69	-378.79	0.0	0.0	0.0	267.62
11	23	392.13	0.0	-0.07	-222.69	0.0	-210.33	-437.68	0.0	0.0	0.0	392.13
		269.79	0.0	0.0		30.0	-210.33	-377.68	0.0	0.0	0.0	269.79
11	24	382.01	0.0	-0.07	-222.77	0.0	-207.05	-437.63	0.0	0.0	0.0	382.01
		259.69	0.0	0.0		30.0	-207.05	-377.60	0.0	0.0	0.0	259.69
11	25	338.32	0.0	-0.08	-266.28	0.0	-271.20	-446.89	0.0	0.0	0.0	338.32
		215.32	0.0	0.0		30.0	-271.20	-373.13	0.0	0.0	0.0	215.32
11	26	344.76	0.0	-0.08	-266.27	0.0	-271.20	-449.20	0.0	0.0	0.0	344.76
		221.07	0.0	0.0		30.0	-271.20	-375.44	0.0	0.0	0.0	221.07
11	27	346.60	0.0	-0.08	-266.21	0.0	-272.84	-448.07	0.0	0.0	0.0	346.60
		223.25	0.0	0.0		30.0	-272.84	-374.32	0.0	0.0	0.0	223.25
11	28	336.48	0.0	-0.08	-266.34	0.0	-269.56	-448.02	0.0	0.0	0.0	336.48
		213.14	0.0	0.0		30.0	-269.56	-374.24	0.0	0.0	0.0	213.14
11	29	431.50	0.0	-0.06	-219.91	0.0	-289.16	-439.37	0.0	0.0	0.0	431.50
		308.52	0.0	0.0		30.0	-289.16	-380.27	0.0	0.0	0.0	308.52
11	30	437.95	0.0	-0.06	-219.91	0.0	-289.16	-441.68	0.0	0.0	0.0	437.95
		314.27	0.0	0.0		30.0	-289.16	-382.58	0.0	0.0	0.0	314.27
11	31	439.79	0.0	-0.06	-219.86	0.0	-290.80	-440.54	0.0	0.0	0.0	439.79
		316.45	0.0	0.0		30.0	-290.80	-381.46	0.0	0.0	0.0	316.45
11	32	429.67	0.0	-0.06	-219.95	0.0	-287.52	-440.50	0.0	0.0	0.0	429.67
		306.34	0.0	0.0		30.0	-287.52	-381.38	0.0	0.0	0.0	306.34
11	33	297.14	0.0	-0.08	-266.81	0.0	-188.38	-446.70	0.0	0.0	0.0	297.14
		174.21	0.0	0.0		30.0	-188.38	-372.80	0.0	0.0	0.0	174.21
11	34	303.58	0.0	-0.08	-266.79	0.0	-188.38	-449.00	0.0	0.0	0.0	303.58
		179.97	0.0	0.0		30.0	-188.38	-375.11	0.0	0.0	0.0	179.97
11	35	305.42	0.0	-0.08	-266.74	0.0	-190.02	-447.87	0.0	0.0	0.0	305.42
		182.14	0.0	0.0		30.0	-190.02	-374.00	0.0	0.0	0.0	182.14
11	36	295.30	0.0	-0.08	-266.87	0.0	-186.74	-447.83	0.0	0.0	0.0	295.30
		172.04	0.0	0.0		30.0	-186.74	-373.92	0.0	0.0	0.0	172.04
11	37	382.15	0.0	-0.06	-213.42	0.0	-277.02	-404.41	0.0	0.0	0.0	382.15
		269.40	0.0	0.0		30.0	-277.02	-347.02	0.0	0.0	0.0	269.40
11	38	388.59	0.0	-0.06	-213.42	0.0	-277.02	-406.72	0.0	0.0	0.0	388.59
		275.16	0.0	0.0		30.0	-277.02	-349.33	0.0	0.0	0.0	275.16
11	39	390.43	0.0	-0.06	-213.37	0.0	-278.66	-405.59	0.0	0.0	0.0	390.43
		277.33	0.0	0.0		30.0	-278.66	-348.21	0.0	0.0	0.0	277.33
11	40	380.31	0.0	-0.06	-213.46	0.0	-275.38	-405.54	0.0	0.0	0.0	380.31
		267.23	0.0	0.0		30.0	-275.38	-348.14	0.0	0.0	0.0	267.23
11	41	475.33	0.0	-0.05	-167.38	0.0	-294.98	-396.89	0.0	0.0	0.0	475.33
		362.61	0.0	0.0		30.0	-294.98	-354.16	0.0	0.0	0.0	362.61
11	42	481.78	0.0	-0.05	-167.37	0.0	-294.98	-399.20	0.0	0.0	0.0	481.78
		368.36	0.0	0.0		30.0	-294.98	-356.47	0.0	0.0	0.0	368.36
11	43	483.62	0.0	-0.05	-167.33	0.0	-296.62	-398.07	0.0	0.0	0.0	483.62
		370.53	0.0	0.0		30.0	-296.62	-355.35	0.0	0.0	0.0	370.53
11	44	473.50	0.0	-0.05	-167.42	0.0	-293.34	-398.02	0.0	0.0	0.0	473.50
		360.43	0.0	0.0		30.0	-293.34	-355.27	0.0	0.0	0.0	360.43
11	45	340.96	0.0	-0.06	-213.76	0.0	-194.20	-404.22	0.0	0.0	0.0	340.96
		228.30	0.0	0.0		30.0	-194.20	-346.69	0.0	0.0	0.0	228.30
11	46	347.41	0.0	-0.06	-213.76	0.0	-194.20	-406.53	0.0	0.0	0.0	347.41
		234.05	0.0	0.0		30.0	-194.20	-349.00	0.0	0.0	0.0	234.05
11	47	349.25	0.0	-0.06	-213.72	0.0	-195.84	-405.40	0.0	0.0	0.0	349.25
		236.23	0.0	0.0		30.0	-195.84	-347.89	0.0	0.0	0.0	236.23
11	48	339.13	0.0	-0.06	-213.81	0.0	-192.56	-405.35	0.0	0.0	0.0	339.13
		226.13	0.0	0.0		30.0	-192.56	-347.81	0.0	0.0	0.0	226.13
11	49	317.27	0.0	-0.07	-246.29	0.0	-261.82	-412.04	0.0	0.0	0.0	317.27
		203.83	0.0	0.0		30.0	-261.82	-344.27	0.0	0.0	0.0	203.83
11	50	323.72	0.0	-0.07	-246.28	0.0	-261.82	-414.35	0.0	0.0	0.0	323.72
		209.58	0.0	0.0		30.0	-261.82	-346.58	0.0	0.0	0.0	209.58
11	51	325.56	0.0	-0.07	-246.22	0.0	-263.46	-413.22	0.0	0.0	0.0	325.56
		211.76	0.0	0.0		30.0	-263.46	-345.46	0.0	0.0	0.0	211.76
11	52	315.44	0.0	-0.07	-246.35	0.0	-260.19	-413.17	0.0	0.0	0.0	315.44
		201.65	0.0	0.0		30.0	-260.19	-345.38	0.0	0.0	0.0	201.65
11	53	410.46	0.0	-0.06	-199.97	0.0	-279.78	-404.52	0.0	0.0	0.0	410.46
		297.03	0.0	0.0		30.0	-279.78	-351.40	0.0	0.0	0.0	297.03
11	54	416.91	0.0	-0.06	-199.96	0.0	-279.78	-406.82	0.0	0.0	0.0	416.91

Trave f.	Cmb	M3 mx/mn	M2 mx/mn	D 2 / D 3	Pt	Pos.	N	V 2	V 3	T	M 2	M 3
		302.78	0.0	0.0		30.0	-279.78	-353.71	0.0	0.0	0.0	302.78
11	55	418.74	0.0	-0.06	-199.92	0.0	-281.42	-405.69	0.0	0.0	0.0	418.74
		304.96	0.0	0.0		30.0	-281.42	-352.60	0.0	0.0	0.0	304.96
11	56	408.62	0.0	-0.06	-200.01	0.0	-278.14	-405.65	0.0	0.0	0.0	408.62
		294.86	0.0	0.0		30.0	-278.14	-352.52	0.0	0.0	0.0	294.86
11	57	276.09	0.0	-0.07	-246.82	0.0	-179.00	-411.85	0.0	0.0	0.0	276.09
		162.73	0.0	0.0		30.0	-179.00	-343.94	0.0	0.0	0.0	162.73
11	58	282.54	0.0	-0.07	-246.80	0.0	-179.00	-414.15	0.0	0.0	0.0	282.54
		168.48	0.0	0.0		30.0	-179.00	-346.25	0.0	0.0	0.0	168.48
11	59	284.37	0.0	-0.07	-246.75	0.0	-180.64	-413.02	0.0	0.0	0.0	284.37
		170.65	0.0	0.0		30.0	-180.64	-345.14	0.0	0.0	0.0	170.65
11	60	274.25	0.0	-0.07	-246.88	0.0	-177.36	-412.98	0.0	0.0	0.0	274.25
		160.55	0.0	0.0		30.0	-177.36	-345.06	0.0	0.0	0.0	160.55
11	61	556.95	0.0	-0.04	-122.27	0.0	-326.78	-364.32	0.0	0.0	0.0	556.95
		451.77	0.0	0.0		30.0	-326.78	-336.08	0.0	0.0	0.0	451.77
11	62	563.39	0.0	-0.04	-122.27	0.0	-326.78	-366.62	0.0	0.0	0.0	563.39
		457.52	0.0	0.0		30.0	-326.78	-338.39	0.0	0.0	0.0	457.52
11	63	565.23	0.0	-0.04	-122.22	0.0	-328.42	-365.49	0.0	0.0	0.0	565.23
		459.70	0.0	0.0		30.0	-328.42	-337.27	0.0	0.0	0.0	459.70
11	64	555.11	0.0	-0.04	-122.31	0.0	-325.14	-365.45	0.0	0.0	0.0	555.11
		449.59	0.0	0.0		30.0	-325.14	-337.20	0.0	0.0	0.0	449.59
11	65	650.13	0.0	-0.02	-76.23	0.0	-344.74	-356.79	0.0	0.0	0.0	650.13
		544.97	0.0	0.0		30.0	-344.74	-343.22	0.0	0.0	0.0	544.97
11	66	656.58	0.0	-0.02	-76.22	0.0	-344.74	-359.10	0.0	0.0	0.0	656.58
		550.72	0.0	0.0		30.0	-344.74	-345.53	0.0	0.0	0.0	550.72
11	67	658.42	0.0	-0.02	-76.18	0.0	-346.38	-357.97	0.0	0.0	0.0	658.42
		552.90	0.0	0.0		30.0	-346.38	-344.41	0.0	0.0	0.0	552.90
11	68	648.30	0.0	-0.02	-76.27	0.0	-343.10	-357.92	0.0	0.0	0.0	648.30
		542.80	0.0	0.0		30.0	-343.10	-344.34	0.0	0.0	0.0	542.80
11	69	515.77	0.0	-0.04	-122.61	0.0	-243.96	-364.12	0.0	0.0	0.0	515.77
		410.67	0.0	0.0		30.0	-243.96	-335.76	0.0	0.0	0.0	410.67
11	70	522.21	0.0	-0.04	-122.61	0.0	-243.96	-366.43	0.0	0.0	0.0	522.21
		416.42	0.0	0.0		30.0	-243.96	-338.07	0.0	0.0	0.0	416.42
11	71	524.05	0.0	-0.04	-122.57	0.0	-245.60	-365.30	0.0	0.0	0.0	524.05
		418.59	0.0	0.0		30.0	-245.60	-336.95	0.0	0.0	0.0	418.59
11	72	513.93	0.0	-0.04	-122.66	0.0	-242.32	-365.25	0.0	0.0	0.0	513.93
		408.49	0.0	0.0		30.0	-242.32	-336.87	0.0	0.0	0.0	408.49
11	73	492.07	0.0	-0.05	-154.86	0.0	-311.58	-371.94	0.0	0.0	0.0	492.07
		386.20	0.0	0.0		30.0	-311.58	-333.33	0.0	0.0	0.0	386.20
11	74	498.52	0.0	-0.05	-154.86	0.0	-311.58	-374.25	0.0	0.0	0.0	498.52
		391.95	0.0	0.0		30.0	-311.58	-335.64	0.0	0.0	0.0	391.95
11	75	500.36	0.0	-0.05	-154.82	0.0	-313.22	-373.12	0.0	0.0	0.0	500.36
		394.12	0.0	0.0		30.0	-313.22	-334.52	0.0	0.0	0.0	394.12
11	76	490.24	0.0	-0.05	-154.90	0.0	-309.94	-373.07	0.0	0.0	0.0	490.24
		384.02	0.0	0.0		30.0	-309.94	-334.44	0.0	0.0	0.0	384.02
11	77	585.26	0.0	-0.03	-108.82	0.0	-329.54	-364.42	0.0	0.0	0.0	585.26
		479.40	0.0	0.0		30.0	-329.54	-340.47	0.0	0.0	0.0	479.40
11	78	591.71	0.0	-0.03	-108.81	0.0	-329.54	-366.73	0.0	0.0	0.0	591.71
		485.15	0.0	0.0		30.0	-329.54	-342.78	0.0	0.0	0.0	485.15
11	79	593.54	0.0	-0.03	-108.77	0.0	-331.18	-365.60	0.0	0.0	0.0	593.54
		487.32	0.0	0.0		30.0	-331.18	-341.66	0.0	0.0	0.0	487.32
11	80	583.42	0.0	-0.03	-108.86	0.0	-327.90	-365.55	0.0	0.0	0.0	583.42
		477.22	0.0	0.0		30.0	-327.90	-341.58	0.0	0.0	0.0	477.22
11	81	450.89	0.0	-0.05	-155.21	0.0	-228.76	-371.75	0.0	0.0	0.0	450.89
		345.09	0.0	0.0		30.0	-228.76	-333.00	0.0	0.0	0.0	345.09
11	82	457.34	0.0	-0.05	-155.20	0.0	-228.76	-374.06	0.0	0.0	0.0	457.34
		350.84	0.0	0.0		30.0	-228.76	-335.31	0.0	0.0	0.0	350.84
11	83	459.18	0.0	-0.05	-155.16	0.0	-230.40	-372.93	0.0	0.0	0.0	459.18
		353.02	0.0	0.0		30.0	-230.40	-334.20	0.0	0.0	0.0	353.02
11	84	449.05	0.0	-0.05	-155.25	0.0	-227.12	-372.88	0.0	0.0	0.0	449.05
		342.92	0.0	0.0		30.0	-227.12	-334.12	0.0	0.0	0.0	342.92
11	85	379.96	0.0	-0.06	-220.03	0.0	-276.55	-402.42	0.0	0.0	0.0	379.96
		268.11	0.0	0.0		30.0	-276.55	-343.05	0.0	0.0	0.0	268.11
11	86	386.41	0.0	-0.06	-220.03	0.0	-276.55	-404.73	0.0	0.0	0.0	386.41
		273.87	0.0	0.0		30.0	-276.55	-345.36	0.0	0.0	0.0	273.87
11	87	388.25	0.0	-0.06	-219.99	0.0	-278.19	-403.60	0.0	0.0	0.0	388.25
		276.04	0.0	0.0		30.0	-278.19	-344.24	0.0	0.0	0.0	276.04
11	88	378.12	0.0	-0.06	-220.07	0.0	-274.91	-403.55	0.0	0.0	0.0	378.12
		265.94	0.0	0.0		30.0	-274.91	-344.16	0.0	0.0	0.0	265.94
11	89	473.15	0.0	-0.05	-173.99	0.0	-294.51	-394.90	0.0	0.0	0.0	473.15
		361.31	0.0	0.0		30.0	-294.51	-350.19	0.0	0.0	0.0	361.31
11	90	479.59	0.0	-0.05	-173.99	0.0	-294.51	-397.21	0.0	0.0	0.0	479.59
		367.07	0.0	0.0		30.0	-294.51	-352.50	0.0	0.0	0.0	367.07
11	91	481.43	0.0	-0.05	-173.95	0.0	-296.15	-396.08	0.0	0.0	0.0	481.43
		369.24	0.0	0.0		30.0	-296.15	-351.38	0.0	0.0	0.0	369.24

Trave f.	Cmb	M3 mx/mn	M2 mx/mn	D 2 / D 3	Pt	Pos.	N	V 2	V 3	T	M 2	M 3
11	92	471.31	0.0	-0.05	-174.03	0.0	-292.87	-396.03	0.0	0.0	0.0	471.31
		359.14	0.0	0.0		30.0	-292.87	-351.30	0.0	0.0	0.0	359.14
11	93	338.78	0.0	-0.06	-220.38	0.0	-193.73	-402.23	0.0	0.0	0.0	338.78
		227.01	0.0	0.0		30.0	-193.73	-342.72	0.0	0.0	0.0	227.01
11	94	345.23	0.0	-0.06	-220.38	0.0	-193.73	-404.54	0.0	0.0	0.0	345.23
		232.76	0.0	0.0		30.0	-193.73	-345.03	0.0	0.0	0.0	232.76
11	95	347.06	0.0	-0.06	-220.33	0.0	-195.37	-403.41	0.0	0.0	0.0	347.06
		234.94	0.0	0.0		30.0	-195.37	-343.92	0.0	0.0	0.0	234.94
11	96	336.94	0.0	-0.06	-220.42	0.0	-192.09	-403.36	0.0	0.0	0.0	336.94
		224.84	0.0	0.0		30.0	-192.09	-343.84	0.0	0.0	0.0	224.84
11	97	315.09	0.0	-0.07	-252.90	0.0	-261.36	-410.05	0.0	0.0	0.0	315.09
		202.54	0.0	0.0		30.0	-261.36	-340.29	0.0	0.0	0.0	202.54
11	98	321.53	0.0	-0.07	-252.88	0.0	-261.36	-412.36	0.0	0.0	0.0	321.53
		208.29	0.0	0.0		30.0	-261.36	-342.60	0.0	0.0	0.0	208.29
11	99	323.37	0.0	-0.07	-252.83	0.0	-263.00	-411.23	0.0	0.0	0.0	323.37
		210.47	0.0	0.0		30.0	-263.00	-341.49	0.0	0.0	0.0	210.47
11	100	313.25	0.0	-0.07	-252.95	0.0	-259.72	-411.18	0.0	0.0	0.0	313.25
		200.36	0.0	0.0		30.0	-259.72	-341.41	0.0	0.0	0.0	200.36
11	101	408.28	0.0	-0.06	-206.58	0.0	-279.31	-402.53	0.0	0.0	0.0	408.28
		295.74	0.0	0.0		30.0	-279.31	-347.43	0.0	0.0	0.0	295.74
11	102	414.72	0.0	-0.06	-206.58	0.0	-279.31	-404.84	0.0	0.0	0.0	414.72
		301.49	0.0	0.0		30.0	-279.31	-349.74	0.0	0.0	0.0	301.49
11	103	416.56	0.0	-0.06	-206.54	0.0	-280.95	-403.70	0.0	0.0	0.0	416.56
		303.67	0.0	0.0		30.0	-280.95	-348.63	0.0	0.0	0.0	303.67
11	104	406.44	0.0	-0.06	-206.62	0.0	-277.68	-403.66	0.0	0.0	0.0	406.44
		293.57	0.0	0.0		30.0	-277.68	-348.55	0.0	0.0	0.0	293.57
11	105	273.91	0.0	-0.07	-253.42	0.0	-178.53	-409.86	0.0	0.0	0.0	273.91
		161.44	0.0	0.0		30.0	-178.53	-339.97	0.0	0.0	0.0	161.44
11	106	280.35	0.0	-0.07	-253.41	0.0	-178.53	-412.16	0.0	0.0	0.0	280.35
		167.19	0.0	0.0		30.0	-178.53	-342.28	0.0	0.0	0.0	167.19
11	107	282.19	0.0	-0.07	-253.35	0.0	-180.17	-411.03	0.0	0.0	0.0	282.19
		169.36	0.0	0.0		30.0	-180.17	-341.16	0.0	0.0	0.0	169.36
11	108	272.07	0.0	-0.07	-253.48	0.0	-176.90	-410.99	0.0	0.0	0.0	272.07
		159.26	0.0	0.0		30.0	-176.90	-341.09	0.0	0.0	0.0	159.26
11	109	961.15	0.0	0.08	261.68	0.0	-487.39	-172.81	0.0	0.0	0.0	961.15
		897.49	0.0	0.0		30.0	-487.39	-249.52	0.0	0.0	0.0	897.49
11	110	235.17	0.0	-0.04	-141.49	0.0	-176.48	-317.64	0.0	0.0	0.0	235.17
		145.57	0.0	0.0		30.0	-176.48	-279.74	0.0	0.0	0.0	145.57
11	111	240.54	0.0	-0.04	-141.48	0.0	-176.48	-319.57	0.0	0.0	0.0	240.54
		150.36	0.0	0.0		30.0	-176.48	-281.67	0.0	0.0	0.0	150.36
11	112	242.07	0.0	-0.04	-141.43	0.0	-177.85	-318.62	0.0	0.0	0.0	242.07
		152.17	0.0	0.0		30.0	-177.85	-280.74	0.0	0.0	0.0	152.17
11	113	233.64	0.0	-0.04	-141.54	0.0	-175.12	-318.59	0.0	0.0	0.0	233.64
		143.75	0.0	0.0		30.0	-175.12	-280.67	0.0	0.0	0.0	143.75
11	114	304.20	0.0	-0.03	-107.07	0.0	-189.79	-312.07	0.0	0.0	0.0	304.20
		214.60	0.0	0.0		30.0	-189.79	-285.03	0.0	0.0	0.0	214.60
11	115	309.57	0.0	-0.03	-107.07	0.0	-189.79	-314.00	0.0	0.0	0.0	309.57
		219.40	0.0	0.0		30.0	-189.79	-286.95	0.0	0.0	0.0	219.40
11	116	311.10	0.0	-0.03	-107.04	0.0	-191.15	-313.05	0.0	0.0	0.0	311.10
		221.21	0.0	0.0		30.0	-191.15	-286.02	0.0	0.0	0.0	221.21
11	117	302.67	0.0	-0.03	-107.11	0.0	-188.42	-313.01	0.0	0.0	0.0	302.67
		212.79	0.0	0.0		30.0	-188.42	-285.96	0.0	0.0	0.0	212.79
11	118	204.67	0.0	-0.04	-141.88	0.0	-115.14	-317.50	0.0	0.0	0.0	204.67
		115.12	0.0	0.0		30.0	-115.14	-279.50	0.0	0.0	0.0	115.12
11	119	210.04	0.0	-0.04	-141.87	0.0	-115.14	-319.42	0.0	0.0	0.0	210.04
		119.91	0.0	0.0		30.0	-115.14	-281.43	0.0	0.0	0.0	119.91
11	120	211.57	0.0	-0.04	-141.83	0.0	-116.50	-318.48	0.0	0.0	0.0	211.57
		121.73	0.0	0.0		30.0	-116.50	-280.50	0.0	0.0	0.0	121.73
11	121	203.13	0.0	-0.04	-141.93	0.0	-113.77	-318.44	0.0	0.0	0.0	203.13
		113.31	0.0	0.0		30.0	-113.77	-280.43	0.0	0.0	0.0	113.31
11	122	394.96	0.0	-0.02	-62.55	0.0	-236.11	-290.87	0.0	0.0	0.0	394.96
		309.56	0.0	0.0		30.0	-236.11	-278.02	0.0	0.0	0.0	309.56
11	123	400.33	0.0	-0.02	-62.55	0.0	-236.11	-292.79	0.0	0.0	0.0	400.33
		314.35	0.0	0.0		30.0	-236.11	-279.94	0.0	0.0	0.0	314.35
11	124	401.87	0.0	-0.02	-62.51	0.0	-237.48	-291.85	0.0	0.0	0.0	401.87
		316.17	0.0	0.0		30.0	-237.48	-279.01	0.0	0.0	0.0	316.17
11	125	393.43	0.0	-0.02	-62.58	0.0	-234.75	-291.81	0.0	0.0	0.0	393.43
		307.75	0.0	0.0		30.0	-234.75	-278.95	0.0	0.0	0.0	307.75
11	126	463.99	0.0	-8.37e-03	-28.44	0.0	-249.42	-285.30	0.0	0.0	0.0	463.99
		378.60	0.0	0.0		30.0	-249.42	-283.31	0.0	0.0	0.0	378.60
11	127	469.36	0.0	-8.37e-03	-28.44	0.0	-249.42	-287.22	0.0	0.0	0.0	469.36
		383.39	0.0	0.0		30.0	-249.42	-285.23	0.0	0.0	0.0	383.39
11	128	470.89	0.0	-8.36e-03	-28.41	0.0	-250.78	-286.28	0.0	0.0	0.0	470.89
		385.20	0.0	0.0		30.0	-250.78	-284.30	0.0	0.0	0.0	385.20
11	129	462.46	0.0	-8.38e-03	-28.48	0.0	-248.05	-286.24	0.0	0.0	0.0	462.46

Trave f.	Cmb	M3 mx/mn	M2 mx/mn	D 2 / D 3	Pt	Pos.	N	V 2	V 3	T	M 2	M 3
		376.78	0.0	0.0		30.0	-248.05	-284.24	0.0	0.0	0.0	376.78
11	130	364.46	0.0	-0.02	-62.81	0.0	-174.76	-290.73	0.0	0.0	0.0	364.46
		279.11	0.0	0.0		30.0	-174.76	-277.78	0.0	0.0	0.0	279.11
11	131	369.83	0.0	-0.02	-62.80	0.0	-174.76	-292.65	0.0	0.0	0.0	369.83
		283.91	0.0	0.0		30.0	-174.76	-279.70	0.0	0.0	0.0	283.91
11	132	371.36	0.0	-0.02	-62.77	0.0	-176.13	-291.71	0.0	0.0	0.0	371.36
		285.72	0.0	0.0		30.0	-176.13	-278.77	0.0	0.0	0.0	285.72
11	133	362.93	0.0	-0.02	-62.84	0.0	-173.40	-291.67	0.0	0.0	0.0	362.93
		277.30	0.0	0.0		30.0	-173.40	-278.71	0.0	0.0	0.0	277.30
11	134	346.79	0.0	-0.03	-86.75	0.0	-224.83	-296.53	0.0	0.0	0.0	346.79
		260.87	0.0	0.0		30.0	-224.83	-275.97	0.0	0.0	0.0	260.87
11	135	352.16	0.0	-0.03	-86.75	0.0	-224.83	-298.46	0.0	0.0	0.0	352.16
		265.66	0.0	0.0		30.0	-224.83	-277.90	0.0	0.0	0.0	265.66
11	136	353.69	0.0	-0.03	-86.72	0.0	-226.19	-297.51	0.0	0.0	0.0	353.69
		267.47	0.0	0.0		30.0	-226.19	-276.97	0.0	0.0	0.0	267.47
11	137	345.26	0.0	-0.03	-86.79	0.0	-223.46	-297.48	0.0	0.0	0.0	345.26
		259.05	0.0	0.0		30.0	-223.46	-276.90	0.0	0.0	0.0	259.05
11	138	415.82	0.0	-0.02	-52.65	0.0	-238.13	-290.96	0.0	0.0	0.0	415.82
		329.90	0.0	0.0		30.0	-238.13	-281.26	0.0	0.0	0.0	329.90
11	139	421.19	0.0	-0.02	-52.64	0.0	-238.13	-292.88	0.0	0.0	0.0	421.19
		334.70	0.0	0.0		30.0	-238.13	-283.19	0.0	0.0	0.0	334.70
11	140	422.72	0.0	-0.02	-52.61	0.0	-239.50	-291.94	0.0	0.0	0.0	422.72
		336.51	0.0	0.0		30.0	-239.50	-282.26	0.0	0.0	0.0	336.51
11	141	414.29	0.0	-0.02	-52.68	0.0	-236.76	-291.90	0.0	0.0	0.0	414.29
		328.09	0.0	0.0		30.0	-236.76	-282.19	0.0	0.0	0.0	328.09
11	142	316.28	0.0	-0.03	-87.01	0.0	-163.48	-296.39	0.0	0.0	0.0	316.28
		230.42	0.0	0.0		30.0	-163.48	-275.73	0.0	0.0	0.0	230.42
11	143	321.66	0.0	-0.03	-87.01	0.0	-163.48	-298.31	0.0	0.0	0.0	321.66
		235.21	0.0	0.0		30.0	-163.48	-277.66	0.0	0.0	0.0	235.21
11	144	323.19	0.0	-0.03	-86.97	0.0	-164.84	-297.37	0.0	0.0	0.0	323.19
		237.03	0.0	0.0		30.0	-164.84	-276.73	0.0	0.0	0.0	237.03
11	145	314.75	0.0	-0.03	-87.04	0.0	-162.11	-297.33	0.0	0.0	0.0	314.75
		228.61	0.0	0.0		30.0	-162.11	-276.66	0.0	0.0	0.0	228.61
11	146	197.67	0.0	-0.03	-111.80	0.0	-175.21	-236.60	0.0	0.0	0.0	197.67
		131.05	0.0	0.0		30.0	-175.21	-207.58	0.0	0.0	0.0	131.05
11	147	202.15	0.0	-0.03	-111.79	0.0	-175.21	-238.20	0.0	0.0	0.0	202.15
		135.04	0.0	0.0		30.0	-175.21	-209.18	0.0	0.0	0.0	135.04
11	148	203.42	0.0	-0.03	-111.75	0.0	-176.34	-237.42	0.0	0.0	0.0	203.42
		136.55	0.0	0.0		30.0	-176.34	-208.41	0.0	0.0	0.0	136.55
11	149	196.40	0.0	-0.03	-111.84	0.0	-174.07	-237.39	0.0	0.0	0.0	196.40
		129.54	0.0	0.0		30.0	-174.07	-208.35	0.0	0.0	0.0	129.54
11	150	266.70	0.0	-0.02	-77.56	0.0	-188.51	-231.03	0.0	0.0	0.0	266.70
		200.08	0.0	0.0		30.0	-188.51	-212.87	0.0	0.0	0.0	200.08
11	151	271.17	0.0	-0.02	-77.56	0.0	-188.51	-232.63	0.0	0.0	0.0	271.17
		204.08	0.0	0.0		30.0	-188.51	-214.47	0.0	0.0	0.0	204.08
11	152	272.45	0.0	-0.02	-77.53	0.0	-189.65	-231.85	0.0	0.0	0.0	272.45
		205.59	0.0	0.0		30.0	-189.65	-213.70	0.0	0.0	0.0	205.59
11	153	272.45	0.0	-0.02	-77.53	0.0	-189.65	-231.85	0.0	0.0	0.0	272.45
		205.59	0.0	0.0		30.0	-189.65	-213.70	0.0	0.0	0.0	205.59
11	154	167.17	0.0	-0.03	-112.19	0.0	-113.86	-236.46	0.0	0.0	0.0	167.17
		100.60	0.0	0.0		30.0	-113.86	-207.34	0.0	0.0	0.0	100.60
11	155	171.64	0.0	-0.03	-112.18	0.0	-113.86	-238.06	0.0	0.0	0.0	171.64
		104.59	0.0	0.0		30.0	-113.86	-208.94	0.0	0.0	0.0	104.59
11	156	172.92	0.0	-0.03	-112.14	0.0	-115.00	-237.27	0.0	0.0	0.0	172.92
		106.10	0.0	0.0		30.0	-115.00	-208.17	0.0	0.0	0.0	106.10
11	157	172.92	0.0	-0.03	-112.14	0.0	-115.00	-237.27	0.0	0.0	0.0	172.92
		106.10	0.0	0.0		30.0	-115.00	-208.17	0.0	0.0	0.0	106.10
11	158	414.45	0.0	-0.03	-105.62	0.0	-244.18	-303.64	0.0	0.0	0.0	414.45
		327.12	0.0	0.0		30.0	-244.18	-278.02	0.0	0.0	0.0	327.12
11	159	419.82	0.0	-0.03	-105.62	0.0	-244.18	-305.57	0.0	0.0	0.0	419.82
		331.91	0.0	0.0		30.0	-244.18	-279.94	0.0	0.0	0.0	331.91
11	160	421.35	0.0	-0.03	-105.58	0.0	-245.55	-304.62	0.0	0.0	0.0	421.35
		333.73	0.0	0.0		30.0	-245.55	-279.01	0.0	0.0	0.0	333.73
11	161	412.92	0.0	-0.03	-105.66	0.0	-242.81	-304.59	0.0	0.0	0.0	412.92
		325.31	0.0	0.0		30.0	-242.81	-278.95	0.0	0.0	0.0	325.31
11	162	483.48	0.0	-0.02	-71.52	0.0	-257.48	-298.07	0.0	0.0	0.0	483.48
		396.16	0.0	0.0		30.0	-257.48	-283.31	0.0	0.0	0.0	396.16
11	163	488.85	0.0	-0.02	-71.51	0.0	-257.48	-299.99	0.0	0.0	0.0	488.85
		400.95	0.0	0.0		30.0	-257.48	-285.23	0.0	0.0	0.0	400.95
11	164	490.38	0.0	-0.02	-71.48	0.0	-258.85	-299.05	0.0	0.0	0.0	490.38
		402.77	0.0	0.0		30.0	-258.85	-284.30	0.0	0.0	0.0	402.77
11	165	481.94	0.0	-0.02	-71.55	0.0	-256.12	-299.01	0.0	0.0	0.0	481.94
		394.35	0.0	0.0		30.0	-256.12	-284.24	0.0	0.0	0.0	394.35
11	166	383.94	0.0	-0.03	-105.88	0.0	-182.83	-303.50	0.0	0.0	0.0	383.94
		296.67	0.0	0.0		30.0	-182.83	-277.78	0.0	0.0	0.0	296.67

Trave f.	Cmb	M3 mx/mn	M2 mx/mn	D 2 / D 3	Pt	Pos.	N	V 2	V 3	T	M 2	M 3
11	167	389.31	0.0	-0.03	-105.87	0.0	-182.83	-305.42	0.0	0.0	0.0	389.31
		301.47	0.0	0.0		30.0	-182.83	-279.70	0.0	0.0	0.0	301.47
11	168	390.85	0.0	-0.03	-105.84	0.0	-184.20	-304.48	0.0	0.0	0.0	390.85
		303.28	0.0	0.0		30.0	-184.20	-278.77	0.0	0.0	0.0	303.28
11	169	382.41	0.0	-0.03	-105.91	0.0	-181.47	-304.44	0.0	0.0	0.0	382.41
		294.86	0.0	0.0		30.0	-181.47	-278.71	0.0	0.0	0.0	294.86
11	170	350.22	0.0	-0.04	-137.89	0.0	-229.13	-311.19	0.0	0.0	0.0	350.22
		262.20	0.0	0.0		30.0	-229.13	-275.29	0.0	0.0	0.0	262.20
11	171	355.59	0.0	-0.04	-137.89	0.0	-229.13	-313.12	0.0	0.0	0.0	355.59
		266.99	0.0	0.0		30.0	-229.13	-277.22	0.0	0.0	0.0	266.99
11	172	357.12	0.0	-0.04	-137.85	0.0	-230.50	-312.17	0.0	0.0	0.0	357.12
		268.80	0.0	0.0		30.0	-230.50	-276.29	0.0	0.0	0.0	268.80
11	173	348.69	0.0	-0.04	-137.92	0.0	-227.77	-312.14	0.0	0.0	0.0	348.69
		260.38	0.0	0.0		30.0	-227.77	-276.22	0.0	0.0	0.0	260.38
11	174	419.24	0.0	-0.03	-103.78	0.0	-242.44	-305.62	0.0	0.0	0.0	419.24
		331.23	0.0	0.0		30.0	-242.44	-280.58	0.0	0.0	0.0	331.23
11	175	424.62	0.0	-0.03	-103.78	0.0	-242.44	-307.54	0.0	0.0	0.0	424.62
		336.03	0.0	0.0		30.0	-242.44	-282.51	0.0	0.0	0.0	336.03
11	176	426.15	0.0	-0.03	-103.75	0.0	-243.80	-306.60	0.0	0.0	0.0	426.15
		337.84	0.0	0.0		30.0	-243.80	-281.58	0.0	0.0	0.0	337.84
11	177	417.71	0.0	-0.03	-103.82	0.0	-241.07	-306.56	0.0	0.0	0.0	417.71
		329.42	0.0	0.0		30.0	-241.07	-281.51	0.0	0.0	0.0	329.42
11	178	319.71	0.0	-0.04	-138.15	0.0	-167.78	-311.05	0.0	0.0	0.0	319.71
		231.75	0.0	0.0		30.0	-167.78	-275.05	0.0	0.0	0.0	231.75
11	179	325.08	0.0	-0.04	-138.14	0.0	-167.78	-312.97	0.0	0.0	0.0	325.08
		236.54	0.0	0.0		30.0	-167.78	-276.98	0.0	0.0	0.0	236.54
11	180	326.61	0.0	-0.04	-138.11	0.0	-169.15	-312.03	0.0	0.0	0.0	326.61
		238.36	0.0	0.0		30.0	-169.15	-276.05	0.0	0.0	0.0	238.36
11	181	318.18	0.0	-0.04	-138.18	0.0	-166.42	-311.99	0.0	0.0	0.0	318.18
		229.94	0.0	0.0		30.0	-166.42	-275.98	0.0	0.0	0.0	229.94
12	1	184.38	0.0	-0.04	-150.75	0.0	-236.48	-279.53	0.0	0.0	0.0	174.79
		-171.09	0.0	0.0		500.0	0.0	0.0	0.0	0.0	0.0	0.0
12	2	184.38	0.0	-0.04	-150.75	0.0	-236.48	-283.38	0.0	0.0	0.0	184.38
		-171.09	0.0	0.0		500.0	0.0	0.0	0.0	0.0	0.0	0.0
12	3	188.01	0.0	-0.04	-150.68	0.0	-239.21	-281.52	0.0	0.0	0.0	188.01
		-162.83	0.0	0.0		500.0	0.0	0.0	0.0	0.0	0.0	0.0
12	4	171.17	0.0	-0.04	-150.82	0.0	-233.75	-281.39	0.0	0.0	0.0	171.17
		-179.35	0.0	0.0		500.0	0.0	0.0	0.0	0.0	0.0	0.0
12	5	268.00	0.0	-0.06	-197.14	0.0	-195.08	-286.63	0.0	0.0	0.0	268.00
		-207.84	0.0	0.0		500.0	0.0	0.0	0.0	0.0	0.0	0.0
12	6	277.59	0.0	-0.06	-197.14	0.0	-195.08	-290.48	0.0	0.0	0.0	277.59
		-210.23	0.0	0.0		500.0	0.0	0.0	0.0	0.0	0.0	0.0
12	7	281.21	0.0	-0.06	-197.07	0.0	-197.81	-288.62	0.0	0.0	0.0	281.21
		-200.76	0.0	0.0		500.0	0.0	0.0	0.0	0.0	0.0	0.0
12	8	264.37	0.0	-0.06	-197.21	0.0	-192.35	-288.49	0.0	0.0	0.0	264.37
		-217.31	0.0	0.0		500.0	0.0	0.0	0.0	0.0	0.0	0.0
12	9	143.28	0.0	-0.04	-151.10	0.0	-153.68	-279.21	0.0	0.0	0.0	133.69
		-211.43	0.0	0.0		500.0	0.0	0.0	0.0	0.0	0.0	0.0
12	10	143.28	0.0	-0.04	-151.10	0.0	-153.68	-283.06	0.0	0.0	0.0	143.28
		-211.43	0.0	0.0		500.0	0.0	0.0	0.0	0.0	0.0	0.0
12	11	146.90	0.0	-0.04	-151.03	0.0	-156.41	-281.20	0.0	0.0	0.0	146.90
		-203.17	0.0	0.0		500.0	0.0	0.0	0.0	0.0	0.0	0.0
12	12	130.06	0.0	-0.04	-151.17	0.0	-150.94	-281.07	0.0	0.0	0.0	130.06
		-219.69	0.0	0.0		500.0	0.0	0.0	0.0	0.0	0.0	0.0
12	13	302.96	0.0	-0.09	-309.71	0.0	-252.75	-376.57	0.0	0.0	0.0	302.96
		-269.85	0.0	0.0		500.0	-252.75	371.48	0.0	0.0	0.0	109.51
12	14	308.71	0.0	-0.09	-309.71	0.0	-252.75	-378.88	0.0	0.0	0.0	308.71
		-270.57	0.0	0.0		500.0	-252.75	369.17	0.0	0.0	0.0	103.76
12	15	310.89	0.0	-0.09	-309.67	0.0	-254.39	-377.76	0.0	0.0	0.0	310.89
		-265.25	0.0	0.0		500.0	-254.39	370.37	0.0	0.0	0.0	111.68
12	16	300.78	0.0	-0.09	-309.76	0.0	-251.11	-377.69	0.0	0.0	0.0	300.78
		-275.17	0.0	0.0		500.0	-251.11	370.29	0.0	0.0	0.0	101.58
12	17	396.17	0.0	-0.10	-356.10	0.0	-211.35	-383.68	0.0	0.0	0.0	396.17
		-324.92	0.0	0.0		500.0	-211.35	364.06	0.0	0.0	0.0	-24.80
12	18	401.92	0.0	-0.10	-356.10	0.0	-211.35	-385.99	0.0	0.0	0.0	401.92
		-326.35	0.0	0.0		500.0	-211.35	361.75	0.0	0.0	0.0	-30.55
12	19	404.09	0.0	-0.10	-356.06	0.0	-212.99	-384.87	0.0	0.0	0.0	404.09
		-320.67	0.0	0.0		500.0	-212.99	362.94	0.0	0.0	0.0	-22.63
12	20	393.99	0.0	-0.10	-356.14	0.0	-209.71	-384.79	0.0	0.0	0.0	393.99
		-330.60	0.0	0.0		500.0	-209.71	362.87	0.0	0.0	0.0	-32.73
12	21	261.86	0.0	-0.09	-310.06	0.0	-169.95	-376.25	0.0	0.0	0.0	261.86
		-310.21	0.0	0.0		500.0	-169.95	371.17	0.0	0.0	0.0	68.40
12	22	267.61	0.0	-0.09	-310.06	0.0	-169.95	-378.56	0.0	0.0	0.0	267.61
		-310.92	0.0	0.0		500.0	-169.95	368.86	0.0	0.0	0.0	62.65
12	23	269.78	0.0	-0.09	-310.02	0.0	-171.59	-377.45	0.0	0.0	0.0	269.78

Trave f.	Cmb	M3 mx/mn	M2 mx/mn	D 2 / D 3	Pt	Pos.	N	V 2	V 3	T	M 2	M 3
		-305.61	0.0	0.0		500.0	-171.59	370.05	0.0	0.0	0.0	70.58
12	24	259.68	0.0	-0.09	-310.10	0.0	-168.31	-377.37	0.0	0.0	0.0	259.68
		-315.52	0.0	0.0		500.0	-168.31	369.97	0.0	0.0	0.0	60.48
12	25	221.05	0.0	-0.08	-265.95	0.0	-271.14	-372.96	0.0	0.0	0.0	215.30
		-247.78	0.0	0.0		500.0	-271.14	375.27	0.0	0.0	0.0	221.05
12	26	221.05	0.0	-0.08	-265.95	0.0	-271.14	-375.27	0.0	0.0	0.0	221.05
		-247.78	0.0	0.0		500.0	-271.14	372.96	0.0	0.0	0.0	215.30
12	27	223.23	0.0	-0.08	-265.91	0.0	-272.78	-374.16	0.0	0.0	0.0	223.23
		-242.82	0.0	0.0		500.0	-272.78	374.16	0.0	0.0	0.0	223.23
12	28	213.12	0.0	-0.08	-265.99	0.0	-269.50	-374.08	0.0	0.0	0.0	213.12
		-252.74	0.0	0.0		500.0	-269.50	374.08	0.0	0.0	0.0	213.12
12	29	308.51	0.0	-0.09	-312.34	0.0	-229.74	-380.07	0.0	0.0	0.0	308.51
		-280.39	0.0	0.0		500.0	-229.74	367.85	0.0	0.0	0.0	86.74
12	30	314.26	0.0	-0.09	-312.34	0.0	-229.74	-382.38	0.0	0.0	0.0	314.26
		-281.11	0.0	0.0		500.0	-229.74	365.54	0.0	0.0	0.0	80.99
12	31	316.43	0.0	-0.09	-312.30	0.0	-231.38	-381.26	0.0	0.0	0.0	316.43
		-275.79	0.0	0.0		500.0	-231.38	366.73	0.0	0.0	0.0	88.92
12	32	306.33	0.0	-0.09	-312.38	0.0	-228.10	-381.19	0.0	0.0	0.0	306.33
		-285.71	0.0	0.0		500.0	-228.10	366.66	0.0	0.0	0.0	78.81
12	33	179.95	0.0	-0.08	-266.30	0.0	-188.34	-372.65	0.0	0.0	0.0	174.19
		-288.12	0.0	0.0		500.0	-188.34	374.96	0.0	0.0	0.0	179.95
12	34	179.95	0.0	-0.08	-266.30	0.0	-188.34	-374.96	0.0	0.0	0.0	179.95
		-288.12	0.0	0.0		500.0	-188.34	372.65	0.0	0.0	0.0	174.20
12	35	182.12	0.0	-0.08	-266.25	0.0	-189.98	-373.84	0.0	0.0	0.0	182.12
		-283.16	0.0	0.0		500.0	-189.98	373.84	0.0	0.0	0.0	182.12
12	36	172.02	0.0	-0.08	-266.34	0.0	-186.70	-373.76	0.0	0.0	0.0	172.02
		-293.08	0.0	0.0		500.0	-186.70	373.76	0.0	0.0	0.0	172.02
12	37	269.38	0.0	-0.08	-278.75	0.0	-248.01	-346.89	0.0	0.0	0.0	269.38
		-238.64	0.0	0.0		500.0	-248.01	343.66	0.0	0.0	0.0	126.10
12	38	275.13	0.0	-0.08	-278.75	0.0	-248.01	-349.20	0.0	0.0	0.0	275.13
		-239.35	0.0	0.0		500.0	-248.01	341.35	0.0	0.0	0.0	120.35
12	39	277.31	0.0	-0.08	-278.71	0.0	-249.65	-348.08	0.0	0.0	0.0	277.31
		-234.04	0.0	0.0		500.0	-249.65	342.55	0.0	0.0	0.0	128.28
12	40	267.21	0.0	-0.08	-278.79	0.0	-246.37	-348.00	0.0	0.0	0.0	267.21
		-243.95	0.0	0.0		500.0	-246.37	342.47	0.0	0.0	0.0	118.17
12	41	362.59	0.0	-0.10	-325.14	0.0	-206.61	-353.99	0.0	0.0	0.0	362.59
		-290.98	0.0	0.0		500.0	-206.61	336.24	0.0	0.0	0.0	-8.21
12	42	368.34	0.0	-0.10	-325.14	0.0	-206.61	-356.30	0.0	0.0	0.0	368.34
		-292.41	0.0	0.0		500.0	-206.61	333.93	0.0	0.0	0.0	-13.96
12	43	370.52	0.0	-0.10	-325.10	0.0	-208.25	-355.19	0.0	0.0	0.0	370.52
		-286.73	0.0	0.0		500.0	-208.25	335.12	0.0	0.0	0.0	-6.03
12	44	360.41	0.0	-0.10	-325.18	0.0	-204.97	-355.11	0.0	0.0	0.0	360.41
		-296.66	0.0	0.0		500.0	-204.97	335.05	0.0	0.0	0.0	-16.14
12	45	228.28	0.0	-0.08	-279.10	0.0	-165.21	-346.57	0.0	0.0	0.0	228.28
		-278.99	0.0	0.0		500.0	-165.21	343.35	0.0	0.0	0.0	85.00
12	46	234.03	0.0	-0.08	-279.10	0.0	-165.21	-348.88	0.0	0.0	0.0	234.03
		-279.71	0.0	0.0		500.0	-165.21	341.04	0.0	0.0	0.0	79.24
12	47	236.20	0.0	-0.08	-279.05	0.0	-166.85	-347.76	0.0	0.0	0.0	236.20
		-274.39	0.0	0.0		500.0	-166.85	342.23	0.0	0.0	0.0	87.17
12	48	226.10	0.0	-0.08	-279.14	0.0	-163.57	-347.68	0.0	0.0	0.0	226.10
		-284.31	0.0	0.0		500.0	-163.57	342.15	0.0	0.0	0.0	77.07
12	49	209.55	0.0	-0.07	-246.01	0.0	-261.77	-344.19	0.0	0.0	0.0	203.80
		-223.49	0.0	0.0		500.0	-261.77	346.50	0.0	0.0	0.0	209.55
12	50	209.55	0.0	-0.07	-246.01	0.0	-261.77	-346.50	0.0	0.0	0.0	209.55
		-223.49	0.0	0.0		500.0	-261.77	344.19	0.0	0.0	0.0	203.80
12	51	211.73	0.0	-0.07	-245.97	0.0	-263.41	-345.38	0.0	0.0	0.0	211.73
		-218.53	0.0	0.0		500.0	-263.41	345.38	0.0	0.0	0.0	211.73
12	52	201.62	0.0	-0.07	-246.05	0.0	-260.13	-345.30	0.0	0.0	0.0	201.62
		-228.45	0.0	0.0		500.0	-260.13	345.30	0.0	0.0	0.0	201.62
12	53	297.00	0.0	-0.09	-292.40	0.0	-220.37	-351.29	0.0	0.0	0.0	297.00
		-256.66	0.0	0.0		500.0	-220.37	339.08	0.0	0.0	0.0	75.24
12	54	302.76	0.0	-0.09	-292.40	0.0	-220.37	-353.60	0.0	0.0	0.0	302.76
		-257.38	0.0	0.0		500.0	-220.37	336.77	0.0	0.0	0.0	69.49
12	55	304.93	0.0	-0.09	-292.35	0.0	-222.01	-352.49	0.0	0.0	0.0	304.93
		-252.06	0.0	0.0		500.0	-222.01	337.96	0.0	0.0	0.0	77.42
12	56	294.83	0.0	-0.09	-292.44	0.0	-218.73	-352.41	0.0	0.0	0.0	294.83
		-261.98	0.0	0.0		500.0	-218.73	337.88	0.0	0.0	0.0	67.31
12	57	168.45	0.0	-0.07	-246.36	0.0	-178.97	-343.87	0.0	0.0	0.0	162.69
		-263.83	0.0	0.0		500.0	-178.97	346.18	0.0	0.0	0.0	168.45
12	58	168.45	0.0	-0.07	-246.36	0.0	-178.97	-346.18	0.0	0.0	0.0	168.45
		-263.83	0.0	0.0		500.0	-178.97	343.87	0.0	0.0	0.0	162.69
12	59	170.62	0.0	-0.07	-246.31	0.0	-180.61	-345.07	0.0	0.0	0.0	170.62
		-258.87	0.0	0.0		500.0	-180.61	345.07	0.0	0.0	0.0	170.62
12	60	160.52	0.0	-0.07	-246.40	0.0	-177.33	-344.99	0.0	0.0	0.0	160.52
		-268.79	0.0	0.0		500.0	-177.33	344.99	0.0	0.0	0.0	160.52

Trave f.	Cmb	M3 mx/mn	M2 mx/mn	D 2 / D 3	Pt	Pos.	N	V 2	V 3	T	M 2	M 3
12	61	451.83	0.0	-0.11	-383.13	0.0	-247.54	-335.42	0.0	0.0	0.0	451.83
		-307.95	0.0	0.0		500.0	-247.54	347.20	0.0	0.0	0.0	-58.93
12	62	457.58	0.0	-0.11	-383.13	0.0	-247.54	-337.73	0.0	0.0	0.0	457.58
		-310.10	0.0	0.0		500.0	-247.54	344.89	0.0	0.0	0.0	-64.68
12	63	459.75	0.0	-0.11	-383.09	0.0	-249.18	-336.61	0.0	0.0	0.0	459.75
		-304.05	0.0	0.0		500.0	-249.18	346.09	0.0	0.0	0.0	-56.75
12	64	449.65	0.0	-0.11	-383.17	0.0	-245.90	-336.53	0.0	0.0	0.0	449.65
		-314.00	0.0	0.0		500.0	-245.90	346.01	0.0	0.0	0.0	-66.86
12	65	545.03	0.0	-0.13	-429.52	0.0	-206.14	-342.52	0.0	0.0	0.0	545.03
		-395.47	0.0	0.0		500.0	-206.14	339.78	0.0	0.0	0.0	-193.24
12	66	550.79	0.0	-0.13	-429.52	0.0	-206.14	-344.83	0.0	0.0	0.0	550.79
		-398.34	0.0	0.0		500.0	-206.14	337.47	0.0	0.0	0.0	-198.99
12	67	552.96	0.0	-0.13	-429.47	0.0	-207.78	-343.72	0.0	0.0	0.0	552.96
		-391.92	0.0	0.0		500.0	-207.78	338.67	0.0	0.0	0.0	-191.06
12	68	542.86	0.0	-0.13	-429.56	0.0	-204.50	-343.64	0.0	0.0	0.0	542.86
		-401.90	0.0	0.0		500.0	-204.50	338.59	0.0	0.0	0.0	-201.17
12	69	410.72	0.0	-0.11	-383.47	0.0	-164.74	-335.10	0.0	0.0	0.0	410.72
		-348.44	0.0	0.0		500.0	-164.74	346.89	0.0	0.0	0.0	-100.03
12	70	416.47	0.0	-0.11	-383.48	0.0	-164.74	-337.41	0.0	0.0	0.0	416.47
		-350.59	0.0	0.0		500.0	-164.74	344.58	0.0	0.0	0.0	-105.79
12	71	418.65	0.0	-0.11	-383.43	0.0	-166.38	-336.29	0.0	0.0	0.0	418.65
		-344.54	0.0	0.0		500.0	-166.38	345.77	0.0	0.0	0.0	-97.86
12	72	408.55	0.0	-0.11	-383.52	0.0	-163.10	-336.22	0.0	0.0	0.0	408.55
		-354.50	0.0	0.0		500.0	-163.10	345.69	0.0	0.0	0.0	-107.96
12	73	386.24	0.0	-0.10	-350.39	0.0	-261.30	-332.72	0.0	0.0	0.0	386.24
		-262.12	0.0	0.0		500.0	-261.30	350.04	0.0	0.0	0.0	24.52
12	74	392.00	0.0	-0.10	-350.39	0.0	-261.30	-335.03	0.0	0.0	0.0	392.00
		-263.56	0.0	0.0		500.0	-261.30	347.73	0.0	0.0	0.0	18.77
12	75	394.17	0.0	-0.10	-350.34	0.0	-262.94	-333.91	0.0	0.0	0.0	394.17
		-257.87	0.0	0.0		500.0	-262.94	348.92	0.0	0.0	0.0	26.70
12	76	384.07	0.0	-0.10	-350.43	0.0	-259.66	-333.83	0.0	0.0	0.0	384.07
		-267.81	0.0	0.0		500.0	-259.66	348.85	0.0	0.0	0.0	16.59
12	77	479.45	0.0	-0.12	-396.77	0.0	-219.90	-339.82	0.0	0.0	0.0	479.45
		-338.60	0.0	0.0		500.0	-219.90	342.62	0.0	0.0	0.0	-109.79
12	78	485.20	0.0	-0.12	-396.78	0.0	-219.90	-342.13	0.0	0.0	0.0	485.20
		-340.75	0.0	0.0		500.0	-219.90	340.31	0.0	0.0	0.0	-115.54
12	79	487.38	0.0	-0.12	-396.73	0.0	-221.54	-341.02	0.0	0.0	0.0	487.38
		-334.70	0.0	0.0		500.0	-221.54	341.50	0.0	0.0	0.0	-107.61
12	80	477.27	0.0	-0.12	-396.82	0.0	-218.26	-340.94	0.0	0.0	0.0	477.27
		-344.65	0.0	0.0		500.0	-218.26	341.42	0.0	0.0	0.0	-117.72
12	81	345.14	0.0	-0.10	-350.73	0.0	-178.50	-332.40	0.0	0.0	0.0	345.14
		-302.53	0.0	0.0		500.0	-178.50	349.72	0.0	0.0	0.0	-16.58
12	82	350.89	0.0	-0.10	-350.73	0.0	-178.50	-334.71	0.0	0.0	0.0	350.89
		-303.97	0.0	0.0		500.0	-178.50	347.41	0.0	0.0	0.0	-22.33
12	83	353.07	0.0	-0.10	-350.69	0.0	-180.14	-333.60	0.0	0.0	0.0	353.07
		-298.28	0.0	0.0		500.0	-180.14	348.61	0.0	0.0	0.0	-14.41
12	84	342.96	0.0	-0.10	-350.78	0.0	-176.86	-333.52	0.0	0.0	0.0	342.96
		-308.22	0.0	0.0		500.0	-176.86	348.53	0.0	0.0	0.0	-24.51
12	85	268.09	0.0	-0.08	-285.36	0.0	-247.54	-342.92	0.0	0.0	0.0	268.09
		-235.08	0.0	0.0		500.0	-247.54	339.70	0.0	0.0	0.0	124.81
12	86	273.84	0.0	-0.08	-285.37	0.0	-247.54	-345.23	0.0	0.0	0.0	273.84
		-235.79	0.0	0.0		500.0	-247.54	337.39	0.0	0.0	0.0	119.06
12	87	276.02	0.0	-0.08	-285.32	0.0	-249.18	-344.12	0.0	0.0	0.0	276.02
		-230.47	0.0	0.0		500.0	-249.18	338.58	0.0	0.0	0.0	126.98
12	88	265.91	0.0	-0.08	-285.41	0.0	-245.90	-344.04	0.0	0.0	0.0	265.91
		-240.39	0.0	0.0		500.0	-245.90	338.51	0.0	0.0	0.0	116.88
12	89	361.30	0.0	-0.10	-331.75	0.0	-206.14	-350.03	0.0	0.0	0.0	361.30
		-287.64	0.0	0.0		500.0	-206.14	332.28	0.0	0.0	0.0	-9.50
12	90	367.05	0.0	-0.10	-331.75	0.0	-206.14	-352.34	0.0	0.0	0.0	367.05
		-289.08	0.0	0.0		500.0	-206.14	329.97	0.0	0.0	0.0	-15.25
12	91	369.22	0.0	-0.10	-331.71	0.0	-207.78	-351.22	0.0	0.0	0.0	369.22
		-283.39	0.0	0.0		500.0	-207.78	331.16	0.0	0.0	0.0	-7.33
12	92	359.12	0.0	-0.10	-331.80	0.0	-204.50	-351.14	0.0	0.0	0.0	359.12
		-293.33	0.0	0.0		500.0	-204.50	331.08	0.0	0.0	0.0	-17.43
12	93	226.98	0.0	-0.08	-285.71	0.0	-164.74	-342.60	0.0	0.0	0.0	226.98
		-275.43	0.0	0.0		500.0	-164.74	339.38	0.0	0.0	0.0	83.70
12	94	232.74	0.0	-0.08	-285.71	0.0	-164.74	-344.91	0.0	0.0	0.0	232.74
		-276.15	0.0	0.0		500.0	-164.74	337.07	0.0	0.0	0.0	77.95
12	95	234.91	0.0	-0.08	-285.67	0.0	-166.38	-343.80	0.0	0.0	0.0	234.91
		-270.83	0.0	0.0		500.0	-166.38	338.27	0.0	0.0	0.0	85.88
12	96	224.81	0.0	-0.08	-285.75	0.0	-163.10	-343.72	0.0	0.0	0.0	224.81
		-280.75	0.0	0.0		500.0	-163.10	338.19	0.0	0.0	0.0	75.78
12	97	208.26	0.0	-0.07	-252.62	0.0	-261.30	-340.22	0.0	0.0	0.0	202.51
		-219.85	0.0	0.0		500.0	-261.30	342.53	0.0	0.0	0.0	208.26
12	98	208.26	0.0	-0.07	-252.62	0.0	-261.30	-342.53	0.0	0.0	0.0	208.26

Trave f.	Cmb	M3 mx/mn	M2 mx/mn	D 2 / D 3	Pt	Pos.	N	V 2	V 3	T	M 2	M 3
		-219.85	0.0	0.0		500.0	-261.30	340.22	0.0	0.0	0.0	202.51
12	99	210.44	0.0	-0.07	-252.58	0.0	-262.94	-341.42	0.0	0.0	0.0	210.43
		-214.90	0.0	0.0		500.0	-262.94	341.42	0.0	0.0	0.0	210.44
12	100	200.33	0.0	-0.07	-252.66	0.0	-259.66	-341.34	0.0	0.0	0.0	200.33
		-224.81	0.0	0.0		500.0	-259.66	341.34	0.0	0.0	0.0	200.33
12	101	295.71	0.0	-0.09	-299.01	0.0	-219.90	-347.33	0.0	0.0	0.0	295.71
		-253.10	0.0	0.0		500.0	-219.90	335.11	0.0	0.0	0.0	73.95
12	102	301.47	0.0	-0.09	-299.01	0.0	-219.90	-349.64	0.0	0.0	0.0	301.47
		-253.82	0.0	0.0		500.0	-219.90	332.80	0.0	0.0	0.0	68.20
12	103	303.64	0.0	-0.09	-298.97	0.0	-221.54	-348.52	0.0	0.0	0.0	303.64
		-248.50	0.0	0.0		500.0	-221.54	334.00	0.0	0.0	0.0	76.12
12	104	293.54	0.0	-0.09	-299.05	0.0	-218.26	-348.45	0.0	0.0	0.0	293.54
		-258.42	0.0	0.0		500.0	-218.26	333.92	0.0	0.0	0.0	66.02
12	105	167.16	0.0	-0.07	-252.97	0.0	-178.50	-339.91	0.0	0.0	0.0	161.40
		-260.19	0.0	0.0		500.0	-178.50	342.22	0.0	0.0	0.0	167.16
12	106	167.15	0.0	-0.07	-252.97	0.0	-178.50	-342.22	0.0	0.0	0.0	167.15
		-260.19	0.0	0.0		500.0	-178.50	339.91	0.0	0.0	0.0	161.40
12	107	169.33	0.0	-0.07	-252.93	0.0	-180.14	-341.10	0.0	0.0	0.0	169.33
		-255.24	0.0	0.0		500.0	-180.14	341.10	0.0	0.0	0.0	169.33
12	108	159.23	0.0	-0.07	-253.01	0.0	-176.86	-341.02	0.0	0.0	0.0	159.23
		-265.15	0.0	0.0		500.0	-176.86	341.02	0.0	0.0	0.0	159.23
12	109	897.48	0.0	-0.13	-456.82	0.0	-175.47	-249.55	0.0	0.0	0.0	897.48
		-671.85	0.0	0.0		500.0	0.0	0.0	0.0	0.0	0.0	0.0
12	110	150.38	0.0	-0.04	-141.18	0.0	-176.45	-279.64	0.0	0.0	0.0	145.58
		-201.36	0.0	0.0		500.0	0.0	0.0	0.0	0.0	0.0	0.0
12	111	150.38	0.0	-0.04	-141.18	0.0	-176.45	-281.56	0.0	0.0	0.0	150.38
		-201.36	0.0	0.0		500.0	0.0	0.0	0.0	0.0	0.0	0.0
12	112	152.19	0.0	-0.04	-141.14	0.0	-177.81	-280.63	0.0	0.0	0.0	152.19
		-197.22	0.0	0.0		500.0	0.0	0.0	0.0	0.0	0.0	0.0
12	113	143.77	0.0	-0.04	-141.21	0.0	-175.08	-280.57	0.0	0.0	0.0	143.77
		-205.49	0.0	0.0		500.0	0.0	0.0	0.0	0.0	0.0	0.0
12	114	214.62	0.0	-0.05	-175.54	0.0	-145.78	-284.90	0.0	0.0	0.0	214.62
		-225.44	0.0	0.0		500.0	0.0	0.0	0.0	0.0	0.0	0.0
12	115	219.42	0.0	-0.05	-175.54	0.0	-145.78	-286.82	0.0	0.0	0.0	219.42
		-226.03	0.0	0.0		500.0	0.0	0.0	0.0	0.0	0.0	0.0
12	116	221.23	0.0	-0.05	-175.50	0.0	-147.15	-285.89	0.0	0.0	0.0	221.23
		-221.60	0.0	0.0		500.0	0.0	0.0	0.0	0.0	0.0	0.0
12	117	212.81	0.0	-0.05	-175.57	0.0	-144.41	-285.83	0.0	0.0	0.0	212.81
		-229.87	0.0	0.0		500.0	0.0	0.0	0.0	0.0	0.0	0.0
12	118	119.93	0.0	-0.04	-141.43	0.0	-115.11	-279.40	0.0	0.0	0.0	115.13
		-231.24	0.0	0.0		500.0	0.0	0.0	0.0	0.0	0.0	0.0
12	119	119.93	0.0	-0.04	-141.43	0.0	-115.11	-281.33	0.0	0.0	0.0	119.93
		-231.24	0.0	0.0		500.0	0.0	0.0	0.0	0.0	0.0	0.0
12	120	121.74	0.0	-0.04	-141.40	0.0	-116.48	-280.40	0.0	0.0	0.0	121.74
		-227.11	0.0	0.0		500.0	0.0	0.0	0.0	0.0	0.0	0.0
12	121	113.32	0.0	-0.04	-141.47	0.0	-113.75	-280.33	0.0	0.0	0.0	113.32
		-235.37	0.0	0.0		500.0	0.0	0.0	0.0	0.0	0.0	0.0
12	122	309.63	0.0	-0.06	-219.69	0.0	-186.66	-277.57	0.0	0.0	0.0	309.63
		-230.83	0.0	0.0		500.0	0.0	0.0	0.0	0.0	0.0	0.0
12	123	314.42	0.0	-0.06	-219.69	0.0	-186.66	-279.50	0.0	0.0	0.0	314.42
		-232.03	0.0	0.0		500.0	0.0	0.0	0.0	0.0	0.0	0.0
12	124	316.23	0.0	-0.06	-219.66	0.0	-188.03	-278.57	0.0	0.0	0.0	316.23
		-227.29	0.0	0.0		500.0	0.0	0.0	0.0	0.0	0.0	0.0
12	125	307.81	0.0	-0.06	-219.73	0.0	-185.30	-278.50	0.0	0.0	0.0	307.81
		-235.57	0.0	0.0		500.0	0.0	0.0	0.0	0.0	0.0	0.0
12	126	378.67	0.0	-0.07	-254.05	0.0	-156.00	-282.84	0.0	0.0	0.0	378.67
		-288.08	0.0	0.0		500.0	0.0	0.0	0.0	0.0	0.0	0.0
12	127	383.46	0.0	-0.07	-254.05	0.0	-156.00	-284.76	0.0	0.0	0.0	383.46
		-289.87	0.0	0.0		500.0	0.0	0.0	0.0	0.0	0.0	0.0
12	128	385.27	0.0	-0.07	-254.02	0.0	-157.36	-283.83	0.0	0.0	0.0	385.27
		-284.83	0.0	0.0		500.0	0.0	0.0	0.0	0.0	0.0	0.0
12	129	376.86	0.0	-0.07	-254.09	0.0	-154.63	-283.77	0.0	0.0	0.0	376.86
		-293.12	0.0	0.0		500.0	0.0	0.0	0.0	0.0	0.0	0.0
12	130	279.18	0.0	-0.06	-219.95	0.0	-125.33	-277.34	0.0	0.0	0.0	279.18
		-260.76	0.0	0.0		500.0	0.0	0.0	0.0	0.0	0.0	0.0
12	131	283.97	0.0	-0.06	-219.95	0.0	-125.33	-279.26	0.0	0.0	0.0	283.97
		-261.96	0.0	0.0		500.0	0.0	0.0	0.0	0.0	0.0	0.0
12	132	285.79	0.0	-0.06	-219.91	0.0	-126.70	-278.33	0.0	0.0	0.0	285.79
		-257.22	0.0	0.0		500.0	0.0	0.0	0.0	0.0	0.0	0.0
12	133	277.37	0.0	-0.06	-219.98	0.0	-123.96	-278.27	0.0	0.0	0.0	277.37
		-265.50	0.0	0.0		500.0	0.0	0.0	0.0	0.0	0.0	0.0
12	134	260.93	0.0	-0.06	-195.38	0.0	-196.88	-275.57	0.0	0.0	0.0	260.93
		-204.62	0.0	0.0		500.0	0.0	0.0	0.0	0.0	0.0	0.0
12	135	265.72	0.0	-0.06	-195.38	0.0	-196.88	-277.49	0.0	0.0	0.0	265.72
		-205.82	0.0	0.0		500.0	0.0	0.0	0.0	0.0	0.0	0.0

Trave f.	Cmb	M3 mx/mn	M2 mx/mn	D 2 / D 3	Pt	Pos.	N	V 2	V 3	T	M 2	M 3
12	136	267.53	0.0	-0.06	-195.34	0.0	-198.25	-276.56	0.0	0.0	0.0	267.53
		-201.08	0.0	0.0		500.0	0.0	0.0	0.0	0.0	0.0	0.0
12	137	259.11	0.0	-0.06	-195.41	0.0	-195.52	-276.50	0.0	0.0	0.0	259.11
		-209.36	0.0	0.0		500.0	0.0	0.0	0.0	0.0	0.0	0.0
12	138	329.97	0.0	-0.07	-229.74	0.0	-166.21	-280.83	0.0	0.0	0.0	329.97
		-252.74	0.0	0.0		500.0	0.0	0.0	0.0	0.0	0.0	0.0
12	139	334.76	0.0	-0.07	-229.74	0.0	-166.21	-282.76	0.0	0.0	0.0	334.76
		-254.54	0.0	0.0		500.0	0.0	0.0	0.0	0.0	0.0	0.0
12	140	336.57	0.0	-0.07	-229.70	0.0	-167.58	-281.83	0.0	0.0	0.0	336.57
		-249.49	0.0	0.0		500.0	0.0	0.0	0.0	0.0	0.0	0.0
12	141	328.16	0.0	-0.07	-229.77	0.0	-164.85	-281.76	0.0	0.0	0.0	328.16
		-257.79	0.0	0.0		500.0	0.0	0.0	0.0	0.0	0.0	0.0
12	142	230.48	0.0	-0.06	-195.63	0.0	-135.55	-275.33	0.0	0.0	0.0	230.48
		-234.55	0.0	0.0		500.0	0.0	0.0	0.0	0.0	0.0	0.0
12	143	235.27	0.0	-0.06	-195.64	0.0	-135.55	-277.26	0.0	0.0	0.0	235.27
		-235.75	0.0	0.0		500.0	0.0	0.0	0.0	0.0	0.0	0.0
12	144	237.09	0.0	-0.06	-195.60	0.0	-136.91	-276.33	0.0	0.0	0.0	237.09
		-231.01	0.0	0.0		500.0	0.0	0.0	0.0	0.0	0.0	0.0
12	145	228.67	0.0	-0.06	-195.67	0.0	-134.18	-276.26	0.0	0.0	0.0	228.67
		-239.29	0.0	0.0		500.0	0.0	0.0	0.0	0.0	0.0	0.0
12	146	135.03	0.0	-0.03	-111.67	0.0	-175.17	-207.68	0.0	0.0	0.0	131.03
		-126.73	0.0	0.0		500.0	0.0	0.0	0.0	0.0	0.0	0.0
12	147	135.03	0.0	-0.03	-111.67	0.0	-175.17	-209.28	0.0	0.0	0.0	135.03
		-126.73	0.0	0.0		500.0	0.0	0.0	0.0	0.0	0.0	0.0
12	148	136.54	0.0	-0.03	-111.64	0.0	-176.31	-208.51	0.0	0.0	0.0	136.54
		-123.29	0.0	0.0		500.0	0.0	0.0	0.0	0.0	0.0	0.0
12	149	129.52	0.0	-0.03	-111.70	0.0	-174.03	-208.45	0.0	0.0	0.0	129.52
		-130.18	0.0	0.0		500.0	0.0	0.0	0.0	0.0	0.0	0.0
12	150	200.07	0.0	-0.04	-146.03	0.0	-144.50	-212.94	0.0	0.0	0.0	200.07
		-154.35	0.0	0.0		500.0	0.0	0.0	0.0	0.0	0.0	0.0
12	151	204.07	0.0	-0.04	-146.03	0.0	-144.50	-214.55	0.0	0.0	0.0	204.07
		-155.34	0.0	0.0		500.0	0.0	0.0	0.0	0.0	0.0	0.0
12	152	205.58	0.0	-0.04	-146.00	0.0	-145.64	-213.77	0.0	0.0	0.0	205.58
		-151.39	0.0	0.0		500.0	0.0	0.0	0.0	0.0	0.0	0.0
12	153	205.58	0.0	-0.04	-146.00	0.0	-145.64	-213.77	0.0	0.0	0.0	205.58
		-151.39	0.0	0.0		500.0	0.0	0.0	0.0	0.0	0.0	0.0
12	154	104.58	0.0	-0.03	-111.92	0.0	-113.83	-207.44	0.0	0.0	0.0	100.58
		-156.61	0.0	0.0		500.0	0.0	0.0	0.0	0.0	0.0	0.0
12	155	104.58	0.0	-0.03	-111.92	0.0	-113.83	-209.05	0.0	0.0	0.0	104.58
		-156.61	0.0	0.0		500.0	0.0	0.0	0.0	0.0	0.0	0.0
12	156	106.09	0.0	-0.03	-111.89	0.0	-114.97	-208.27	0.0	0.0	0.0	106.09
		-153.17	0.0	0.0		500.0	0.0	0.0	0.0	0.0	0.0	0.0
12	157	106.09	0.0	-0.03	-111.89	0.0	-114.97	-208.27	0.0	0.0	0.0	106.09
		-153.17	0.0	0.0		500.0	0.0	0.0	0.0	0.0	0.0	0.0
12	158	327.16	0.0	-0.08	-278.93	0.0	-187.56	-277.54	0.0	0.0	0.0	327.16
		-239.71	0.0	0.0		500.0	-187.56	282.33	0.0	0.0	0.0	-19.75
12	159	331.96	0.0	-0.08	-278.93	0.0	-187.56	-279.46	0.0	0.0	0.0	331.96
		-241.51	0.0	0.0		500.0	-187.56	280.40	0.0	0.0	0.0	-24.55
12	160	333.77	0.0	-0.08	-278.90	0.0	-188.93	-278.53	0.0	0.0	0.0	333.77
		-236.46	0.0	0.0		500.0	-188.93	281.40	0.0	0.0	0.0	-17.94
12	161	325.35	0.0	-0.08	-278.97	0.0	-186.20	-278.47	0.0	0.0	0.0	325.35
		-244.76	0.0	0.0		500.0	-186.20	281.33	0.0	0.0	0.0	-26.36
12	162	396.20	0.0	-0.09	-313.29	0.0	-156.90	-282.80	0.0	0.0	0.0	396.20
		-298.37	0.0	0.0		500.0	-156.90	276.83	0.0	0.0	0.0	-119.24
12	163	401.00	0.0	-0.09	-313.30	0.0	-156.90	-284.73	0.0	0.0	0.0	401.00
		-300.76	0.0	0.0		500.0	-156.90	274.90	0.0	0.0	0.0	-124.04
12	164	402.81	0.0	-0.09	-313.26	0.0	-158.26	-283.80	0.0	0.0	0.0	402.81
		-295.41	0.0	0.0		500.0	-158.26	275.90	0.0	0.0	0.0	-117.43
12	165	394.39	0.0	-0.09	-313.33	0.0	-155.53	-283.73	0.0	0.0	0.0	394.39
		-303.73	0.0	0.0		500.0	-155.53	275.83	0.0	0.0	0.0	-125.85
12	166	296.71	0.0	-0.08	-279.19	0.0	-126.23	-277.30	0.0	0.0	0.0	296.71
		-269.71	0.0	0.0		500.0	-126.23	282.09	0.0	0.0	0.0	-50.20
12	167	301.51	0.0	-0.08	-279.19	0.0	-126.23	-279.23	0.0	0.0	0.0	301.51
		-271.50	0.0	0.0		500.0	-126.23	280.16	0.0	0.0	0.0	-55.00
12	168	303.32	0.0	-0.08	-279.15	0.0	-127.59	-278.30	0.0	0.0	0.0	303.32
		-266.46	0.0	0.0		500.0	-127.59	281.16	0.0	0.0	0.0	-48.39
12	169	294.90	0.0	-0.08	-279.23	0.0	-124.86	-278.23	0.0	0.0	0.0	294.90
		-274.75	0.0	0.0		500.0	-124.86	281.09	0.0	0.0	0.0	-56.81
12	170	262.23	0.0	-0.07	-246.51	0.0	-201.19	-274.87	0.0	0.0	0.0	262.23
		-202.45	0.0	0.0		500.0	-201.19	285.13	0.0	0.0	0.0	62.87
12	171	267.02	0.0	-0.07	-246.52	0.0	-201.19	-276.79	0.0	0.0	0.0	267.02
		-203.64	0.0	0.0		500.0	-201.19	283.21	0.0	0.0	0.0	58.08
12	172	268.83	0.0	-0.07	-246.48	0.0	-202.55	-275.86	0.0	0.0	0.0	268.83
		-198.91	0.0	0.0		500.0	-202.55	284.20	0.0	0.0	0.0	64.68
12	173	260.42	0.0	-0.07	-246.55	0.0	-199.82	-275.80	0.0	0.0	0.0	260.42

Trave f.	Cmb	M3 mx/mn	M2 mx/mn	D 2 / D 3	Pt	Pos.	N	V 2	V 3	T	M 2	M 3
		-207.18	0.0	0.0		500.0	-199.82	284.14	0.0	0.0	0.0	56.26
12	174	331.27	0.0	-0.08	-280.88	0.0	-170.52	-280.13	0.0	0.0	0.0	331.27
		-250.55	0.0	0.0		500.0	-170.52	279.63	0.0	0.0	0.0	-36.62
12	175	336.06	0.0	-0.08	-280.88	0.0	-170.52	-282.06	0.0	0.0	0.0	336.06
		-252.34	0.0	0.0		500.0	-170.52	277.71	0.0	0.0	0.0	-41.41
12	176	337.88	0.0	-0.08	-280.84	0.0	-171.89	-281.13	0.0	0.0	0.0	337.88
		-247.30	0.0	0.0		500.0	-171.89	278.70	0.0	0.0	0.0	-34.81
12	177	329.46	0.0	-0.08	-280.91	0.0	-169.15	-281.06	0.0	0.0	0.0	329.46
		-255.59	0.0	0.0		500.0	-169.15	278.64	0.0	0.0	0.0	-43.23
12	178	231.78	0.0	-0.07	-246.77	0.0	-139.85	-274.63	0.0	0.0	0.0	231.78
		-232.38	0.0	0.0		500.0	-139.85	284.90	0.0	0.0	0.0	32.42
12	179	236.57	0.0	-0.07	-246.77	0.0	-139.85	-276.56	0.0	0.0	0.0	236.57
		-233.58	0.0	0.0		500.0	-139.85	282.97	0.0	0.0	0.0	27.63
12	180	238.39	0.0	-0.07	-246.74	0.0	-141.22	-275.63	0.0	0.0	0.0	238.39
		-228.84	0.0	0.0		500.0	-141.22	283.97	0.0	0.0	0.0	34.23
12	181	229.97	0.0	-0.07	-246.81	0.0	-138.49	-275.56	0.0	0.0	0.0	229.97
		-237.12	0.0	0.0		500.0	-138.49	283.90	0.0	0.0	0.0	25.82
14	1	5.84	0.0	-0.04	-151.06	0.0	8.35e-03	-0.33	0.0	0.0	0.0	0.05
		0.05	0.0	0.0		30.0	8.35e-03	38.89	0.0	0.0	0.0	5.84
14	2	5.83	0.0	-0.04	-151.02	0.0	8.35e-03	-0.33	0.0	0.0	0.0	0.05
		0.05	0.0	0.0		30.0	8.35e-03	38.89	0.0	0.0	0.0	5.83
14	3	5.83	0.0	-0.04	-150.89	0.0	8.44e-03	-0.33	0.0	0.0	0.0	0.05
		0.05	0.0	0.0		30.0	8.44e-03	38.85	0.0	0.0	0.0	5.83
14	4	5.84	0.0	-0.04	-151.19	0.0	8.25e-03	-0.33	0.0	0.0	0.0	0.05
		0.05	0.0	0.0		30.0	8.25e-03	38.93	0.0	0.0	0.0	5.84
14	5	3.36	0.0	-0.03	-99.22	0.0	3.37	-0.18	0.0	0.0	0.0	0.03
		0.03	0.0	0.0		30.0	3.37	22.68	0.0	0.0	0.0	3.36
14	6	3.36	0.0	-0.03	-99.20	0.0	3.37	-0.18	0.0	0.0	0.0	0.03
		0.03	0.0	0.0		30.0	3.37	22.67	0.0	0.0	0.0	3.36
14	7	3.35	0.0	-0.03	-99.11	0.0	3.37	-0.18	0.0	0.0	0.0	0.03
		0.03	0.0	0.0		30.0	3.37	22.63	0.0	0.0	0.0	3.35
14	8	3.36	0.0	-0.03	-99.32	0.0	3.37	-0.18	0.0	0.0	0.0	0.03
		0.03	0.0	0.0		30.0	3.37	22.71	0.0	0.0	0.0	3.36
14	9	5.86	0.0	-0.04	-151.78	0.0	5.42e-03	-0.34	0.0	0.0	0.0	0.05
		0.05	0.0	0.0		30.0	5.42e-03	39.07	0.0	0.0	0.0	5.86
14	10	5.86	0.0	-0.04	-151.74	0.0	5.42e-03	-0.34	0.0	0.0	0.0	0.05
		0.05	0.0	0.0		30.0	5.42e-03	39.06	0.0	0.0	0.0	5.86
14	11	5.86	0.0	-0.04	-151.61	0.0	5.52e-03	-0.34	0.0	0.0	0.0	0.05
		0.05	0.0	0.0		30.0	5.52e-03	39.03	0.0	0.0	0.0	5.86
14	12	5.87	0.0	-0.04	-151.91	0.0	5.33e-03	-0.34	0.0	0.0	0.0	0.05
		0.05	0.0	0.0		30.0	5.33e-03	39.11	0.0	0.0	0.0	5.87
14	13	8.66	0.0	-0.06	-217.34	0.0	2.20	-0.39	0.0	0.0	0.0	0.06
		0.06	0.0	0.0		30.0	2.20	57.97	0.0	0.0	0.0	8.66
14	14	8.66	0.0	-0.06	-217.33	0.0	2.20	-0.39	0.0	0.0	0.0	0.06
		0.06	0.0	0.0		30.0	2.20	57.96	0.0	0.0	0.0	8.66
14	15	8.65	0.0	-0.06	-217.27	0.0	2.20	-0.39	0.0	0.0	0.0	0.06
		0.06	0.0	0.0		30.0	2.20	57.94	0.0	0.0	0.0	8.65
14	16	8.66	0.0	-0.06	-217.40	0.0	2.20	-0.39	0.0	0.0	0.0	0.06
		0.06	0.0	0.0		30.0	2.20	57.99	0.0	0.0	0.0	8.66
14	17	6.18	0.0	-0.05	-165.63	0.0	5.56	-0.24	0.0	0.0	0.0	0.04
		0.04	0.0	0.0		30.0	5.56	41.75	0.0	0.0	0.0	6.18
14	18	6.18	0.0	-0.05	-165.61	0.0	5.56	-0.24	0.0	0.0	0.0	0.04
		0.04	0.0	0.0		30.0	5.56	41.74	0.0	0.0	0.0	6.18
14	19	6.18	0.0	-0.05	-165.56	0.0	5.56	-0.24	0.0	0.0	0.0	0.04
		0.04	0.0	0.0		30.0	5.56	41.72	0.0	0.0	0.0	6.18
14	20	6.18	0.0	-0.05	-165.69	0.0	5.56	-0.24	0.0	0.0	0.0	0.04
		0.04	0.0	0.0		30.0	5.56	41.77	0.0	0.0	0.0	6.18
14	21	8.69	0.0	-0.06	-217.87	0.0	2.20	-0.40	0.0	0.0	0.0	0.06
		0.06	0.0	0.0		30.0	2.20	58.15	0.0	0.0	0.0	8.69
14	22	8.68	0.0	-0.06	-217.85	0.0	2.20	-0.40	0.0	0.0	0.0	0.06
		0.06	0.0	0.0		30.0	2.20	58.14	0.0	0.0	0.0	8.68
14	23	8.68	0.0	-0.06	-217.80	0.0	2.20	-0.40	0.0	0.0	0.0	0.06
		0.06	0.0	0.0		30.0	2.20	58.12	0.0	0.0	0.0	8.68
14	24	8.69	0.0	-0.06	-217.93	0.0	2.20	-0.40	0.0	0.0	0.0	0.06
		0.06	0.0	0.0		30.0	2.20	58.17	0.0	0.0	0.0	8.69
14	25	11.03	0.0	-0.08	-266.53	0.0	9.57e-03	-0.30	0.0	0.0	0.0	0.04
		0.04	0.0	0.0		30.0	9.57e-03	73.55	0.0	0.0	0.0	11.03
14	26	11.03	0.0	-0.08	-266.51	0.0	9.57e-03	-0.30	0.0	0.0	0.0	0.04
		0.04	0.0	0.0		30.0	9.57e-03	73.54	0.0	0.0	0.0	11.03
14	27	11.03	0.0	-0.08	-266.43	0.0	9.63e-03	-0.30	0.0	0.0	0.0	0.04
		0.04	0.0	0.0		30.0	9.63e-03	73.52	0.0	0.0	0.0	11.03
14	28	11.04	0.0	-0.08	-266.61	0.0	9.51e-03	-0.30	0.0	0.0	0.0	0.04
		0.04	0.0	0.0		30.0	9.51e-03	73.57	0.0	0.0	0.0	11.04
14	29	8.56	0.0	-0.06	-214.57	0.0	3.37	-0.15	0.0	0.0	0.0	0.02
		0.02	0.0	0.0		30.0	3.37	57.33	0.0	0.0	0.0	8.56

Trave f.	Cmb	M3 mx/mn	M2 mx/mn	D 2 / D 3	Pt	Pos.	N	V 2	V 3	T	M 2	M 3
14	30	8.56	0.0	-0.06	-214.55	0.0	3.37	-0.15	0.0	0.0	0.0	0.02
		0.02	0.0	0.0		30.0	3.37	57.32	0.0	0.0	0.0	8.56
14	31	8.55	0.0	-0.06	-214.50	0.0	3.37	-0.15	0.0	0.0	0.0	0.02
		0.02	0.0	0.0		30.0	3.37	57.30	0.0	0.0	0.0	8.55
14	32	8.56	0.0	-0.06	-214.63	0.0	3.37	-0.15	0.0	0.0	0.0	0.02
		0.02	0.0	0.0		30.0	3.37	57.35	0.0	0.0	0.0	8.56
14	33	11.06	0.0	-0.08	-267.25	0.0	6.65e-03	-0.31	0.0	0.0	0.0	0.05
		0.05	0.0	0.0		30.0	6.65e-03	73.73	0.0	0.0	0.0	11.06
14	34	11.06	0.0	-0.08	-267.23	0.0	6.65e-03	-0.31	0.0	0.0	0.0	0.05
		0.05	0.0	0.0		30.0	6.65e-03	73.72	0.0	0.0	0.0	11.06
14	35	11.06	0.0	-0.08	-267.15	0.0	6.70e-03	-0.31	0.0	0.0	0.0	0.05
		0.05	0.0	0.0		30.0	6.70e-03	73.70	0.0	0.0	0.0	11.06
14	36	11.07	0.0	-0.08	-267.33	0.0	6.59e-03	-0.31	0.0	0.0	0.0	0.05
		0.05	0.0	0.0		30.0	6.59e-03	73.75	0.0	0.0	0.0	11.07
14	37	8.35	0.0	-0.06	-209.68	0.0	1.65	-0.40	0.0	0.0	0.0	0.06
		0.06	0.0	0.0		30.0	1.65	55.85	0.0	0.0	0.0	8.35
14	38	8.35	0.0	-0.06	-209.66	0.0	1.65	-0.40	0.0	0.0	0.0	0.06
		0.06	0.0	0.0		30.0	1.65	55.85	0.0	0.0	0.0	8.35
14	39	8.35	0.0	-0.06	-209.60	0.0	1.65	-0.40	0.0	0.0	0.0	0.06
		0.06	0.0	0.0		30.0	1.65	55.83	0.0	0.0	0.0	8.35
14	40	8.35	0.0	-0.06	-209.73	0.0	1.65	-0.40	0.0	0.0	0.0	0.06
		0.06	0.0	0.0		30.0	1.65	55.87	0.0	0.0	0.0	8.35
14	41	5.87	0.0	-0.05	-157.96	0.0	5.01	-0.25	0.0	0.0	0.0	0.04
		0.04	0.0	0.0		30.0	5.01	39.63	0.0	0.0	0.0	5.87
14	42	5.87	0.0	-0.05	-157.95	0.0	5.01	-0.25	0.0	0.0	0.0	0.04
		0.04	0.0	0.0		30.0	5.01	39.63	0.0	0.0	0.0	5.87
14	43	5.87	0.0	-0.05	-157.89	0.0	5.01	-0.25	0.0	0.0	0.0	0.04
		0.04	0.0	0.0		30.0	5.01	39.61	0.0	0.0	0.0	5.87
14	44	5.88	0.0	-0.05	-158.02	0.0	5.01	-0.25	0.0	0.0	0.0	0.04
		0.04	0.0	0.0		30.0	5.01	39.66	0.0	0.0	0.0	5.88
14	45	8.38	0.0	-0.06	-210.20	0.0	1.65	-0.41	0.0	0.0	0.0	0.06
		0.06	0.0	0.0		30.0	1.65	56.03	0.0	0.0	0.0	8.38
14	46	8.38	0.0	-0.06	-210.19	0.0	1.65	-0.41	0.0	0.0	0.0	0.06
		0.06	0.0	0.0		30.0	1.65	56.03	0.0	0.0	0.0	8.38
14	47	8.37	0.0	-0.06	-210.13	0.0	1.65	-0.41	0.0	0.0	0.0	0.06
		0.06	0.0	0.0		30.0	1.65	56.01	0.0	0.0	0.0	8.37
14	48	8.38	0.0	-0.06	-210.26	0.0	1.65	-0.41	0.0	0.0	0.0	0.06
		0.06	0.0	0.0		30.0	1.65	56.05	0.0	0.0	0.0	8.38
14	49	10.13	0.0	-0.07	-246.50	0.0	9.24e-03	-0.34	0.0	0.0	0.0	0.05
		0.05	0.0	0.0		30.0	9.24e-03	67.51	0.0	0.0	0.0	10.13
14	50	10.13	0.0	-0.07	-246.48	0.0	9.24e-03	-0.34	0.0	0.0	0.0	0.05
		0.05	0.0	0.0		30.0	9.24e-03	67.50	0.0	0.0	0.0	10.13
14	51	10.12	0.0	-0.07	-246.40	0.0	9.30e-03	-0.34	0.0	0.0	0.0	0.05
		0.05	0.0	0.0		30.0	9.30e-03	67.48	0.0	0.0	0.0	10.12
14	52	10.13	0.0	-0.07	-246.58	0.0	9.18e-03	-0.34	0.0	0.0	0.0	0.05
		0.05	0.0	0.0		30.0	9.18e-03	67.53	0.0	0.0	0.0	10.13
14	53	7.65	0.0	-0.06	-194.58	0.0	3.37	-0.19	0.0	0.0	0.0	0.03
		0.03	0.0	0.0		30.0	3.37	51.29	0.0	0.0	0.0	7.65
14	54	7.65	0.0	-0.06	-194.57	0.0	3.37	-0.19	0.0	0.0	0.0	0.03
		0.03	0.0	0.0		30.0	3.37	51.29	0.0	0.0	0.0	7.65
14	55	7.65	0.0	-0.06	-194.51	0.0	3.37	-0.19	0.0	0.0	0.0	0.03
		0.03	0.0	0.0		30.0	3.37	51.26	0.0	0.0	0.0	7.65
14	56	7.65	0.0	-0.06	-194.64	0.0	3.37	-0.19	0.0	0.0	0.0	0.03
		0.03	0.0	0.0		30.0	3.37	51.31	0.0	0.0	0.0	7.65
14	57	10.16	0.0	-0.07	-247.22	0.0	6.32e-03	-0.34	0.0	0.0	0.0	0.05
		0.05	0.0	0.0		30.0	6.32e-03	67.69	0.0	0.0	0.0	10.16
14	58	10.16	0.0	-0.07	-247.19	0.0	6.32e-03	-0.34	0.0	0.0	0.0	0.05
		0.05	0.0	0.0		30.0	6.32e-03	67.68	0.0	0.0	0.0	10.16
14	59	10.15	0.0	-0.07	-247.12	0.0	6.37e-03	-0.34	0.0	0.0	0.0	0.05
		0.05	0.0	0.0		30.0	6.37e-03	67.66	0.0	0.0	0.0	10.15
14	60	10.16	0.0	-0.07	-247.29	0.0	6.26e-03	-0.34	0.0	0.0	0.0	0.05
		0.05	0.0	0.0		30.0	6.26e-03	67.71	0.0	0.0	0.0	10.16
14	61	3.41	0.0	-0.03	-106.43	0.0	4.49	0.04	0.0	0.0	0.0	-4.92e-03
		-4.92e-03	0.0	0.0		30.0	4.49	23.50	0.0	0.0	0.0	3.41
14	62	3.41	0.0	-0.03	-106.41	0.0	4.49	0.04	0.0	0.0	0.0	-4.90e-03
		-4.90e-03	0.0	0.0		30.0	4.49	23.49	0.0	0.0	0.0	3.41
14	63	3.40	0.0	-0.03	-106.36	0.0	4.49	0.04	0.0	0.0	0.0	-4.91e-03
		-4.91e-03	0.0	0.0		30.0	4.49	23.47	0.0	0.0	0.0	3.40
14	64	3.41	0.0	-0.03	-106.48	0.0	4.49	0.04	0.0	0.0	0.0	-4.92e-03
		-4.92e-03	0.0	0.0		30.0	4.49	23.52	0.0	0.0	0.0	3.41
14	65	0.93	0.0	-0.02	-54.71	0.0	7.85	0.19	0.0	0.0	0.0	-0.03
		-0.03	0.0	0.0		30.0	7.85	7.28	0.0	0.0	0.0	0.93
14	66	0.93	0.0	-0.02	-54.70	0.0	7.85	0.19	0.0	0.0	0.0	-0.03
		-0.03	0.0	0.0		30.0	7.85	7.28	0.0	0.0	0.0	0.93
14	67	0.93	0.0	-0.02	-54.64	0.0	7.85	0.19	0.0	0.0	0.0	-0.03

Trave f.	Cmb	M3 mx/mn	M2 mx/mn	D 2 / D 3	Pt	Pos.	N	V 2	V 3	T	M 2	M 3
		-0.03	0.0	0.0		30.0	7.85	7.26	0.0	0.0	0.0	0.93
14	68	0.93	0.0	-0.02	-54.77	0.0	7.85	0.19	0.0	0.0	0.0	-0.03
		-0.03	0.0	0.0		30.0	7.85	7.30	0.0	0.0	0.0	0.93
14	69	3.44	0.0	-0.03	-106.95	0.0	4.49	0.04	0.0	0.0	0.0	-3.67e-03
		-3.67e-03	0.0	0.0		30.0	4.49	23.68	0.0	0.0	0.0	3.44
14	70	3.43	0.0	-0.03	-106.94	0.0	4.49	0.04	0.0	0.0	0.0	-3.65e-03
		-3.65e-03	0.0	0.0		30.0	4.49	23.67	0.0	0.0	0.0	3.43
14	71	3.43	0.0	-0.03	-106.88	0.0	4.49	0.04	0.0	0.0	0.0	-3.65e-03
		-3.65e-03	0.0	0.0		30.0	4.49	23.65	0.0	0.0	0.0	3.43
14	72	3.44	0.0	-0.03	-107.01	0.0	4.49	0.04	0.0	0.0	0.0	-3.66e-03
		-3.66e-03	0.0	0.0		30.0	4.49	23.70	0.0	0.0	0.0	3.44
14	73	5.19	0.0	-0.04	-143.04	0.0	2.85	0.11	0.0	0.0	0.0	-0.02
		-0.02	0.0	0.0		30.0	2.85	35.16	0.0	0.0	0.0	5.19
14	74	5.18	0.0	-0.04	-143.03	0.0	2.85	0.11	0.0	0.0	0.0	-0.02
		-0.02	0.0	0.0		30.0	2.85	35.15	0.0	0.0	0.0	5.18
14	75	5.18	0.0	-0.04	-142.97	0.0	2.85	0.11	0.0	0.0	0.0	-0.02
		-0.02	0.0	0.0		30.0	2.85	35.13	0.0	0.0	0.0	5.18
14	76	5.19	0.0	-0.04	-143.10	0.0	2.85	0.11	0.0	0.0	0.0	-0.02
		-0.02	0.0	0.0		30.0	2.85	35.18	0.0	0.0	0.0	5.19
14	77	2.71	0.0	-0.03	-91.33	0.0	6.21	0.26	0.0	0.0	0.0	-0.04
		-0.04	0.0	0.0		30.0	6.21	18.94	0.0	0.0	0.0	2.71
14	78	2.71	0.0	-0.03	-91.32	0.0	6.21	0.26	0.0	0.0	0.0	-0.04
		-0.04	0.0	0.0		30.0	6.21	18.93	0.0	0.0	0.0	2.71
14	79	2.70	0.0	-0.03	-91.26	0.0	6.21	0.26	0.0	0.0	0.0	-0.04
		-0.04	0.0	0.0		30.0	6.21	18.91	0.0	0.0	0.0	2.70
14	80	2.71	0.0	-0.03	-91.39	0.0	6.21	0.26	0.0	0.0	0.0	-0.04
		-0.04	0.0	0.0		30.0	6.21	18.96	0.0	0.0	0.0	2.71
14	81	5.21	0.0	-0.04	-143.57	0.0	2.85	0.10	0.0	0.0	0.0	-0.01
		-0.01	0.0	0.0		30.0	2.85	35.34	0.0	0.0	0.0	5.21
14	82	5.21	0.0	-0.04	-143.56	0.0	2.85	0.10	0.0	0.0	0.0	-0.01
		-0.01	0.0	0.0		30.0	2.85	35.33	0.0	0.0	0.0	5.21
14	83	5.21	0.0	-0.04	-143.50	0.0	2.85	0.10	0.0	0.0	0.0	-0.01
		-0.01	0.0	0.0		30.0	2.85	35.31	0.0	0.0	0.0	5.21
14	84	5.22	0.0	-0.04	-143.63	0.0	2.85	0.10	0.0	0.0	0.0	-0.01
		-0.01	0.0	0.0		30.0	2.85	35.36	0.0	0.0	0.0	5.22
14	85	8.64	0.0	-0.06	-216.28	0.0	1.65	-0.42	0.0	0.0	0.0	0.06
		0.06	0.0	0.0		30.0	1.65	57.81	0.0	0.0	0.0	8.64
14	86	8.64	0.0	-0.06	-216.27	0.0	1.65	-0.42	0.0	0.0	0.0	0.06
		0.06	0.0	0.0		30.0	1.65	57.81	0.0	0.0	0.0	8.64
14	87	8.64	0.0	-0.06	-216.21	0.0	1.65	-0.42	0.0	0.0	0.0	0.06
		0.06	0.0	0.0		30.0	1.65	57.79	0.0	0.0	0.0	8.64
14	88	8.65	0.0	-0.06	-216.34	0.0	1.65	-0.42	0.0	0.0	0.0	0.06
		0.06	0.0	0.0		30.0	1.65	57.83	0.0	0.0	0.0	8.65
14	89	6.17	0.0	-0.05	-164.57	0.0	5.01	-0.27	0.0	0.0	0.0	0.04
		0.04	0.0	0.0		30.0	5.01	41.59	0.0	0.0	0.0	6.17
14	90	6.17	0.0	-0.05	-164.56	0.0	5.01	-0.27	0.0	0.0	0.0	0.04
		0.04	0.0	0.0		30.0	5.01	41.59	0.0	0.0	0.0	6.17
14	91	6.16	0.0	-0.05	-164.50	0.0	5.01	-0.27	0.0	0.0	0.0	0.04
		0.04	0.0	0.0		30.0	5.01	41.57	0.0	0.0	0.0	6.16
14	92	6.17	0.0	-0.05	-164.63	0.0	5.01	-0.27	0.0	0.0	0.0	0.04
		0.04	0.0	0.0		30.0	5.01	41.62	0.0	0.0	0.0	6.17
14	93	8.67	0.0	-0.06	-216.81	0.0	1.65	-0.43	0.0	0.0	0.0	0.06
		0.06	0.0	0.0		30.0	1.65	57.99	0.0	0.0	0.0	8.67
14	94	8.67	0.0	-0.06	-216.80	0.0	1.65	-0.43	0.0	0.0	0.0	0.06
		0.06	0.0	0.0		30.0	1.65	57.99	0.0	0.0	0.0	8.67
14	95	8.67	0.0	-0.06	-216.74	0.0	1.65	-0.43	0.0	0.0	0.0	0.06
		0.06	0.0	0.0		30.0	1.65	57.97	0.0	0.0	0.0	8.67
14	96	8.67	0.0	-0.06	-216.87	0.0	1.65	-0.43	0.0	0.0	0.0	0.06
		0.06	0.0	0.0		30.0	1.65	58.01	0.0	0.0	0.0	8.67
14	97	10.42	0.0	-0.07	-253.10	0.0	9.22e-03	-0.36	0.0	0.0	0.0	0.05
		0.05	0.0	0.0		30.0	9.22e-03	69.47	0.0	0.0	0.0	10.42
14	98	10.42	0.0	-0.07	-253.07	0.0	9.22e-03	-0.36	0.0	0.0	0.0	0.05
		0.05	0.0	0.0		30.0	9.22e-03	69.46	0.0	0.0	0.0	10.42
14	99	10.42	0.0	-0.07	-253.00	0.0	9.28e-03	-0.36	0.0	0.0	0.0	0.05
		0.05	0.0	0.0		30.0	9.28e-03	69.44	0.0	0.0	0.0	10.42
14	100	10.42	0.0	-0.07	-253.17	0.0	9.16e-03	-0.36	0.0	0.0	0.0	0.05
		0.05	0.0	0.0		30.0	9.16e-03	69.49	0.0	0.0	0.0	10.42
14	101	7.95	0.0	-0.06	-201.18	0.0	3.37	-0.21	0.0	0.0	0.0	0.03
		0.03	0.0	0.0		30.0	3.37	53.25	0.0	0.0	0.0	7.95
14	102	7.94	0.0	-0.06	-201.17	0.0	3.37	-0.21	0.0	0.0	0.0	0.03
		0.03	0.0	0.0		30.0	3.37	53.25	0.0	0.0	0.0	7.94
14	103	7.94	0.0	-0.06	-201.11	0.0	3.37	-0.21	0.0	0.0	0.0	0.03
		0.03	0.0	0.0		30.0	3.37	53.22	0.0	0.0	0.0	7.94
14	104	7.95	0.0	-0.06	-201.24	0.0	3.37	-0.21	0.0	0.0	0.0	0.03
		0.03	0.0	0.0		30.0	3.37	53.27	0.0	0.0	0.0	7.95

Trave f.	Cmb	M3 mx/mn	M2 mx/mn	D 2 / D 3	Pt	Pos.	N	V 2	V 3	T	M 2	M 3
14	105	10.45	0.0	-0.07	-253.82	0.0	6.30e-03	-0.36	0.0	0.0	0.0	0.05
		0.05	0.0	0.0		30.0	6.30e-03	69.65	0.0	0.0	0.0	10.45
14	106	10.45	0.0	-0.07	-253.79	0.0	6.30e-03	-0.36	0.0	0.0	0.0	0.05
		0.05	0.0	0.0		30.0	6.30e-03	69.64	0.0	0.0	0.0	10.45
14	107	10.45	0.0	-0.07	-253.72	0.0	6.36e-03	-0.36	0.0	0.0	0.0	0.05
		0.05	0.0	0.0		30.0	6.36e-03	69.62	0.0	0.0	0.0	10.45
14	108	10.45	0.0	-0.07	-253.89	0.0	6.24e-03	-0.36	0.0	0.0	0.0	0.05
		0.05	0.0	0.0		30.0	6.24e-03	69.67	0.0	0.0	0.0	10.45
14	109	-0.03	0.0	0.09	303.79	0.0	17.66	0.21	0.0	0.0	0.0	-0.03
		-13.68	0.0	0.0		30.0	17.66	-89.11	0.0	0.0	0.0	-13.68
14	110	5.68	0.0	-0.04	-141.76	0.0	6.23e-03	-0.12	0.0	0.0	0.0	0.02
		0.02	0.0	0.0		30.0	6.23e-03	37.87	0.0	0.0	0.0	5.68
14	111	5.68	0.0	-0.04	-141.74	0.0	6.23e-03	-0.12	0.0	0.0	0.0	0.02
		0.02	0.0	0.0		30.0	6.23e-03	37.86	0.0	0.0	0.0	5.68
14	112	5.68	0.0	-0.04	-141.68	0.0	6.28e-03	-0.12	0.0	0.0	0.0	0.02
		0.02	0.0	0.0		30.0	6.28e-03	37.85	0.0	0.0	0.0	5.68
14	113	5.68	0.0	-0.04	-141.82	0.0	6.18e-03	-0.12	0.0	0.0	0.0	0.02
		0.02	0.0	0.0		30.0	6.18e-03	37.89	0.0	0.0	0.0	5.68
14	114	3.85	0.0	-0.03	-103.19	0.0	2.50	-7.86e-03	0.0	0.0	0.0	5.63e-04
		5.63e-04	0.0	0.0		30.0	2.50	25.86	0.0	0.0	0.0	3.85
14	115	3.85	0.0	-0.03	-103.18	0.0	2.50	-7.98e-03	0.0	0.0	0.0	5.80e-04
		5.80e-04	0.0	0.0		30.0	2.50	25.85	0.0	0.0	0.0	3.85
14	116	3.84	0.0	-0.03	-103.13	0.0	2.50	-7.96e-03	0.0	0.0	0.0	5.75e-04
		5.75e-04	0.0	0.0		30.0	2.50	25.83	0.0	0.0	0.0	3.84
14	117	3.85	0.0	-0.03	-103.24	0.0	2.49	-7.88e-03	0.0	0.0	0.0	5.68e-04
		5.68e-04	0.0	0.0		30.0	2.49	25.87	0.0	0.0	0.0	3.85
14	118	5.70	0.0	-0.04	-142.29	0.0	4.06e-03	-0.13	0.0	0.0	0.0	0.02
		0.02	0.0	0.0		30.0	4.06e-03	38.00	0.0	0.0	0.0	5.70
14	119	5.70	0.0	-0.04	-142.27	0.0	4.06e-03	-0.13	0.0	0.0	0.0	0.02
		0.02	0.0	0.0		30.0	4.06e-03	38.00	0.0	0.0	0.0	5.70
14	120	5.70	0.0	-0.04	-142.21	0.0	4.11e-03	-0.13	0.0	0.0	0.0	0.02
		0.02	0.0	0.0		30.0	4.11e-03	37.98	0.0	0.0	0.0	5.70
14	121	5.71	0.0	-0.04	-142.35	0.0	4.01e-03	-0.13	0.0	0.0	0.0	0.02
		0.02	0.0	0.0		30.0	4.01e-03	38.02	0.0	0.0	0.0	5.71
14	122	1.44	0.0	-0.02	-53.10	0.0	2.80	0.09	0.0	0.0	0.0	-0.01
		-0.01	0.0	0.0		30.0	2.80	10.09	0.0	0.0	0.0	1.44
14	123	1.44	0.0	-0.02	-53.09	0.0	2.80	0.09	0.0	0.0	0.0	-0.01
		-0.01	0.0	0.0		30.0	2.80	10.09	0.0	0.0	0.0	1.44
14	124	1.44	0.0	-0.02	-53.04	0.0	2.80	0.09	0.0	0.0	0.0	-0.01
		-0.01	0.0	0.0		30.0	2.80	10.07	0.0	0.0	0.0	1.44
14	125	1.45	0.0	-0.02	-53.15	0.0	2.80	0.09	0.0	0.0	0.0	-0.01
		-0.01	0.0	0.0		30.0	2.80	10.11	0.0	0.0	0.0	1.45
14	126	-0.03	0.0	-4.35e-03	-14.80	0.0	5.29	0.20	0.0	0.0	0.0	-0.03
		-0.39	0.0	0.0		30.0	5.29	-1.92	0.0	0.0	0.0	-0.39
14	127	-0.03	0.0	-4.35e-03	-14.79	0.0	5.29	0.20	0.0	0.0	0.0	-0.03
		-0.39	0.0	0.0		30.0	5.29	-1.93	0.0	0.0	0.0	-0.39
14	128	-0.03	0.0	-4.34e-03	-14.74	0.0	5.29	0.20	0.0	0.0	0.0	-0.03
		-0.39	0.0	0.0		30.0	5.29	-1.94	0.0	0.0	0.0	-0.39
14	129	-0.03	0.0	-4.37e-03	-14.85	0.0	5.29	0.20	0.0	0.0	0.0	-0.03
		-0.39	0.0	0.0		30.0	5.29	-1.91	0.0	0.0	0.0	-0.39
14	130	1.46	0.0	-0.02	-53.49	0.0	2.80	0.08	0.0	0.0	0.0	-0.01
		-0.01	0.0	0.0		30.0	2.80	10.22	0.0	0.0	0.0	1.46
14	131	1.46	0.0	-0.02	-53.48	0.0	2.80	0.08	0.0	0.0	0.0	-0.01
		-0.01	0.0	0.0		30.0	2.80	10.22	0.0	0.0	0.0	1.46
14	132	1.46	0.0	-0.02	-53.44	0.0	2.80	0.08	0.0	0.0	0.0	-0.01
		-0.01	0.0	0.0		30.0	2.80	10.20	0.0	0.0	0.0	1.46
14	133	1.47	0.0	-0.02	-53.54	0.0	2.80	0.08	0.0	0.0	0.0	-0.01
		-0.01	0.0	0.0		30.0	2.80	10.24	0.0	0.0	0.0	1.47
14	134	2.76	0.0	-0.02	-80.29	0.0	1.59	0.14	0.0	0.0	0.0	-0.02
		-0.02	0.0	0.0		30.0	1.59	18.75	0.0	0.0	0.0	2.76
14	135	2.76	0.0	-0.02	-80.28	0.0	1.59	0.14	0.0	0.0	0.0	-0.02
		-0.02	0.0	0.0		30.0	1.59	18.74	0.0	0.0	0.0	2.76
14	136	2.76	0.0	-0.02	-80.23	0.0	1.59	0.14	0.0	0.0	0.0	-0.02
		-0.02	0.0	0.0		30.0	1.59	18.72	0.0	0.0	0.0	2.76
14	137	2.77	0.0	-0.02	-80.34	0.0	1.59	0.14	0.0	0.0	0.0	-0.02
		-0.02	0.0	0.0		30.0	1.59	18.76	0.0	0.0	0.0	2.77
14	138	0.93	0.0	-0.01	-41.99	0.0	4.08	0.25	0.0	0.0	0.0	-0.04
		-0.04	0.0	0.0		30.0	4.08	6.73	0.0	0.0	0.0	0.93
14	139	0.93	0.0	-0.01	-41.98	0.0	4.08	0.25	0.0	0.0	0.0	-0.04
		-0.04	0.0	0.0		30.0	4.08	6.73	0.0	0.0	0.0	0.93
14	140	0.93	0.0	-0.01	-41.93	0.0	4.08	0.25	0.0	0.0	0.0	-0.04
		-0.04	0.0	0.0		30.0	4.08	6.71	0.0	0.0	0.0	0.93
14	141	0.93	0.0	-0.01	-42.04	0.0	4.08	0.25	0.0	0.0	0.0	-0.04
		-0.04	0.0	0.0		30.0	4.08	6.75	0.0	0.0	0.0	0.93
14	142	2.78	0.0	-0.02	-80.68	0.0	1.58	0.13	0.0	0.0	0.0	-0.02

Trave f.	Cmb	M3 mx/mn	M2 mx/mn	D 2 / D 3	Pt	Pos.	N	V 2	V 3	T	M 2	M 3
		-0.02	0.0	0.0		30.0	1.58	18.88	0.0	0.0	0.0	2.78
14	143	2.78	0.0	-0.02	-80.67	0.0	1.58	0.13	0.0	0.0	0.0	-0.02
		-0.02	0.0	0.0		30.0	1.58	18.87	0.0	0.0	0.0	2.78
14	144	2.78	0.0	-0.02	-80.62	0.0	1.58	0.13	0.0	0.0	0.0	-0.02
		-0.02	0.0	0.0		30.0	1.58	18.86	0.0	0.0	0.0	2.78
14	145	2.79	0.0	-0.02	-80.73	0.0	1.58	0.13	0.0	0.0	0.0	-0.02
		-0.02	0.0	0.0		30.0	1.58	18.90	0.0	0.0	0.0	2.79
14	146	4.32	0.0	-0.03	-111.89	0.0	6.18e-03	-0.24	0.0	0.0	0.0	0.04
		0.04	0.0	0.0		30.0	6.18e-03	28.81	0.0	0.0	0.0	4.32
14	147	4.32	0.0	-0.03	-111.87	0.0	6.18e-03	-0.24	0.0	0.0	0.0	0.04
		0.04	0.0	0.0		30.0	6.18e-03	28.81	0.0	0.0	0.0	4.32
14	148	4.32	0.0	-0.03	-111.82	0.0	6.22e-03	-0.24	0.0	0.0	0.0	0.04
		0.04	0.0	0.0		30.0	6.22e-03	28.79	0.0	0.0	0.0	4.32
14	149	4.32	0.0	-0.03	-111.94	0.0	6.14e-03	-0.24	0.0	0.0	0.0	0.04
		0.04	0.0	0.0		30.0	6.14e-03	28.82	0.0	0.0	0.0	4.32
14	150	2.49	0.0	-0.02	-73.50	0.0	2.49	-0.13	0.0	0.0	0.0	0.02
		0.02	0.0	0.0		30.0	2.49	16.80	0.0	0.0	0.0	2.49
14	151	2.49	0.0	-0.02	-73.49	0.0	2.49	-0.13	0.0	0.0	0.0	0.02
		0.02	0.0	0.0		30.0	2.49	16.79	0.0	0.0	0.0	2.49
14	152	2.49	0.0	-0.02	-73.45	0.0	2.49	-0.13	0.0	0.0	0.0	0.02
		0.02	0.0	0.0		30.0	2.49	16.78	0.0	0.0	0.0	2.49
14	153	2.49	0.0	-0.02	-73.45	0.0	2.49	-0.13	0.0	0.0	0.0	0.02
		0.02	0.0	0.0		30.0	2.49	16.78	0.0	0.0	0.0	2.49
14	154	4.34	0.0	-0.03	-112.42	0.0	4.02e-03	-0.25	0.0	0.0	0.0	0.04
		0.04	0.0	0.0		30.0	4.02e-03	28.94	0.0	0.0	0.0	4.34
14	155	4.34	0.0	-0.03	-112.41	0.0	4.02e-03	-0.25	0.0	0.0	0.0	0.04
		0.04	0.0	0.0		30.0	4.02e-03	28.94	0.0	0.0	0.0	4.34
14	156	4.34	0.0	-0.03	-112.35	0.0	4.06e-03	-0.25	0.0	0.0	0.0	0.04
		0.04	0.0	0.0		30.0	4.06e-03	28.92	0.0	0.0	0.0	4.34
14	157	4.34	0.0	-0.03	-112.35	0.0	4.06e-03	-0.25	0.0	0.0	0.0	0.04
		0.04	0.0	0.0		30.0	4.06e-03	28.92	0.0	0.0	0.0	4.34
14	158	3.29	0.0	-0.03	-95.17	0.0	3.21	-0.01	0.0	0.0	0.0	3.09e-03
		3.09e-03	0.0	0.0		30.0	3.21	22.46	0.0	0.0	0.0	3.29
14	159	3.29	0.0	-0.03	-95.16	0.0	3.21	-0.01	0.0	0.0	0.0	3.11e-03
		3.11e-03	0.0	0.0		30.0	3.21	22.45	0.0	0.0	0.0	3.29
14	160	3.29	0.0	-0.03	-95.11	0.0	3.21	-0.01	0.0	0.0	0.0	3.10e-03
		3.10e-03	0.0	0.0		30.0	3.21	22.43	0.0	0.0	0.0	3.29
14	161	3.29	0.0	-0.03	-95.22	0.0	3.21	-0.01	0.0	0.0	0.0	3.09e-03
		3.09e-03	0.0	0.0		30.0	3.21	22.47	0.0	0.0	0.0	3.29
14	162	1.46	0.0	-0.02	-56.87	0.0	5.70	0.10	0.0	0.0	0.0	-0.01
		-0.01	0.0	0.0		30.0	5.70	10.44	0.0	0.0	0.0	1.46
14	163	1.46	0.0	-0.02	-56.85	0.0	5.70	0.10	0.0	0.0	0.0	-0.01
		-0.01	0.0	0.0		30.0	5.70	10.44	0.0	0.0	0.0	1.46
14	164	1.45	0.0	-0.02	-56.81	0.0	5.70	0.10	0.0	0.0	0.0	-0.01
		-0.01	0.0	0.0		30.0	5.70	10.42	0.0	0.0	0.0	1.45
14	165	1.46	0.0	-0.02	-56.91	0.0	5.70	0.10	0.0	0.0	0.0	-0.01
		-0.01	0.0	0.0		30.0	5.70	10.46	0.0	0.0	0.0	1.46
14	166	3.31	0.0	-0.03	-95.56	0.0	3.21	-0.02	0.0	0.0	0.0	4.02e-03
		4.02e-03	0.0	0.0		30.0	3.21	22.59	0.0	0.0	0.0	3.31
14	167	3.31	0.0	-0.03	-95.55	0.0	3.21	-0.02	0.0	0.0	0.0	4.04e-03
		4.04e-03	0.0	0.0		30.0	3.21	22.58	0.0	0.0	0.0	3.31
14	168	3.31	0.0	-0.03	-95.50	0.0	3.21	-0.02	0.0	0.0	0.0	4.03e-03
		4.03e-03	0.0	0.0		30.0	3.21	22.57	0.0	0.0	0.0	3.31
14	169	3.31	0.0	-0.03	-95.61	0.0	3.21	-0.02	0.0	0.0	0.0	4.02e-03
		4.02e-03	0.0	0.0		30.0	3.21	22.60	0.0	0.0	0.0	3.31
14	170	5.05	0.0	-0.04	-131.42	0.0	1.59	0.05	0.0	0.0	0.0	-7.17e-03
		-7.17e-03	0.0	0.0		30.0	1.59	34.00	0.0	0.0	0.0	5.05
14	171	5.05	0.0	-0.04	-131.41	0.0	1.59	0.05	0.0	0.0	0.0	-7.15e-03
		-7.15e-03	0.0	0.0		30.0	1.59	33.99	0.0	0.0	0.0	5.05
14	172	5.05	0.0	-0.04	-131.36	0.0	1.59	0.05	0.0	0.0	0.0	-7.16e-03
		-7.16e-03	0.0	0.0		30.0	1.59	33.97	0.0	0.0	0.0	5.05
14	173	5.05	0.0	-0.04	-131.47	0.0	1.59	0.05	0.0	0.0	0.0	-7.16e-03
		-7.16e-03	0.0	0.0		30.0	1.59	34.01	0.0	0.0	0.0	5.05
14	174	3.22	0.0	-0.03	-93.12	0.0	4.08	0.16	0.0	0.0	0.0	-0.02
		-0.02	0.0	0.0		30.0	4.08	21.98	0.0	0.0	0.0	3.22
14	175	3.22	0.0	-0.03	-93.11	0.0	4.08	0.16	0.0	0.0	0.0	-0.02
		-0.02	0.0	0.0		30.0	4.08	21.98	0.0	0.0	0.0	3.22
14	176	3.21	0.0	-0.03	-93.06	0.0	4.08	0.16	0.0	0.0	0.0	-0.02
		-0.02	0.0	0.0		30.0	4.08	21.96	0.0	0.0	0.0	3.21
14	177	3.22	0.0	-0.03	-93.17	0.0	4.08	0.16	0.0	0.0	0.0	-0.02
		-0.02	0.0	0.0		30.0	4.08	22.00	0.0	0.0	0.0	3.22
14	178	5.07	0.0	-0.04	-131.81	0.0	1.58	0.05	0.0	0.0	0.0	-6.24e-03
		-6.24e-03	0.0	0.0		30.0	1.58	34.13	0.0	0.0	0.0	5.07
14	179	5.07	0.0	-0.04	-131.80	0.0	1.58	0.05	0.0	0.0	0.0	-6.22e-03
		-6.22e-03	0.0	0.0		30.0	1.58	34.12	0.0	0.0	0.0	5.07

Trave f.	Cmb	M3 mx/mn	M2 mx/mn	D 2 / D 3	Pt	Pos.	N	V 2	V 3	T	M 2	M 3
14	180	5.07	0.0	-0.04	-131.75	0.0	1.58	0.05	0.0	0.0	0.0	-6.23e-03
		-6.23e-03	0.0	0.0		30.0	1.58	34.11	0.0	0.0	0.0	5.07
14	181	5.07	0.0	-0.04	-131.86	0.0	1.58	0.05	0.0	0.0	0.0	-6.24e-03
		-6.24e-03	0.0	0.0		30.0	1.58	34.15	0.0	0.0	0.0	5.07
16	1	5.83	0.0	-0.04	-151.02	0.0	8.35e-03	-38.89	0.0	0.0	0.0	5.83
		0.05	0.0	0.0		30.0	8.35e-03	0.33	0.0	0.0	0.0	0.05
16	2	5.84	0.0	-0.04	-151.06	0.0	8.35e-03	-38.90	0.0	0.0	0.0	5.84
		0.05	0.0	0.0		30.0	8.35e-03	0.33	0.0	0.0	0.0	0.05
16	3	5.83	0.0	-0.04	-150.89	0.0	8.44e-03	-38.85	0.0	0.0	0.0	5.83
		0.05	0.0	0.0		30.0	8.44e-03	0.33	0.0	0.0	0.0	0.05
16	4	5.84	0.0	-0.04	-151.19	0.0	8.25e-03	-38.93	0.0	0.0	0.0	5.84
		0.05	0.0	0.0		30.0	8.25e-03	0.33	0.0	0.0	0.0	0.05
16	5	8.38	0.0	-0.06	-209.14	0.0	-3.35	-55.54	0.0	0.0	0.0	8.38
		0.03	0.0	0.0		30.0	-3.35	0.23	0.0	0.0	0.0	0.03
16	6	8.38	0.0	-0.06	-209.18	0.0	-3.35	-55.55	0.0	0.0	0.0	8.38
		0.03	0.0	0.0		30.0	-3.35	0.23	0.0	0.0	0.0	0.03
16	7	8.37	0.0	-0.06	-209.02	0.0	-3.35	-55.51	0.0	0.0	0.0	8.37
		0.03	0.0	0.0		30.0	-3.35	0.23	0.0	0.0	0.0	0.03
16	8	8.38	0.0	-0.06	-209.31	0.0	-3.35	-55.58	0.0	0.0	0.0	8.38
		0.03	0.0	0.0		30.0	-3.35	0.23	0.0	0.0	0.0	0.03
16	9	5.86	0.0	-0.04	-151.74	0.0	5.42e-03	-39.06	0.0	0.0	0.0	5.86
		0.05	0.0	0.0		30.0	5.42e-03	0.34	0.0	0.0	0.0	0.05
16	10	5.86	0.0	-0.04	-151.78	0.0	5.42e-03	-39.07	0.0	0.0	0.0	5.86
		0.05	0.0	0.0		30.0	5.42e-03	0.34	0.0	0.0	0.0	0.05
16	11	5.86	0.0	-0.04	-151.61	0.0	5.52e-03	-39.03	0.0	0.0	0.0	5.86
		0.05	0.0	0.0		30.0	5.52e-03	0.34	0.0	0.0	0.0	0.05
16	12	5.87	0.0	-0.04	-151.91	0.0	5.33e-03	-39.11	0.0	0.0	0.0	5.87
		0.05	0.0	0.0		30.0	5.33e-03	0.34	0.0	0.0	0.0	0.05
16	13	13.40	0.0	-0.09	-321.26	0.0	-2.18	-89.08	0.0	0.0	0.0	13.40
		0.06	0.0	0.0		30.0	-2.18	0.37	0.0	0.0	0.0	0.06
16	14	13.41	0.0	-0.09	-321.29	0.0	-2.18	-89.08	0.0	0.0	0.0	13.41
		0.05	0.0	0.0		30.0	-2.18	0.37	0.0	0.0	0.0	0.05
16	15	13.40	0.0	-0.09	-321.19	0.0	-2.18	-89.05	0.0	0.0	0.0	13.40
		0.06	0.0	0.0		30.0	-2.18	0.37	0.0	0.0	0.0	0.06
16	16	13.41	0.0	-0.09	-321.37	0.0	-2.18	-89.10	0.0	0.0	0.0	13.41
		0.06	0.0	0.0		30.0	-2.18	0.37	0.0	0.0	0.0	0.06
16	17	15.95	0.0	-0.11	-379.39	0.0	-5.55	-105.73	0.0	0.0	0.0	15.95
		0.04	0.0	0.0		30.0	-5.55	0.27	0.0	0.0	0.0	0.04
16	18	15.95	0.0	-0.11	-379.41	0.0	-5.55	-105.74	0.0	0.0	0.0	15.95
		0.04	0.0	0.0		30.0	-5.55	0.27	0.0	0.0	0.0	0.04
16	19	15.94	0.0	-0.11	-379.31	0.0	-5.55	-105.71	0.0	0.0	0.0	15.94
		0.04	0.0	0.0		30.0	-5.55	0.27	0.0	0.0	0.0	0.04
16	20	15.95	0.0	-0.11	-379.49	0.0	-5.55	-105.76	0.0	0.0	0.0	15.95
		0.04	0.0	0.0		30.0	-5.55	0.27	0.0	0.0	0.0	0.04
16	21	13.43	0.0	-0.09	-321.98	0.0	-2.19	-89.25	0.0	0.0	0.0	13.43
		0.06	0.0	0.0		30.0	-2.19	0.37	0.0	0.0	0.0	0.06
16	22	13.43	0.0	-0.09	-322.01	0.0	-2.19	-89.26	0.0	0.0	0.0	13.43
		0.06	0.0	0.0		30.0	-2.19	0.37	0.0	0.0	0.0	0.06
16	23	13.43	0.0	-0.09	-321.91	0.0	-2.19	-89.23	0.0	0.0	0.0	13.43
		0.06	0.0	0.0		30.0	-2.19	0.37	0.0	0.0	0.0	0.06
16	24	13.44	0.0	-0.09	-322.08	0.0	-2.19	-89.28	0.0	0.0	0.0	13.44
		0.06	0.0	0.0		30.0	-2.19	0.37	0.0	0.0	0.0	0.06
16	25	11.03	0.0	-0.08	-266.51	0.0	9.57e-03	-73.54	0.0	0.0	0.0	11.03
		0.04	0.0	0.0		30.0	9.57e-03	0.30	0.0	0.0	0.0	0.04
16	26	11.03	0.0	-0.08	-266.53	0.0	9.57e-03	-73.55	0.0	0.0	0.0	11.03
		0.04	0.0	0.0		30.0	9.57e-03	0.30	0.0	0.0	0.0	0.04
16	27	11.03	0.0	-0.08	-266.43	0.0	9.63e-03	-73.52	0.0	0.0	0.0	11.03
		0.04	0.0	0.0		30.0	9.63e-03	0.30	0.0	0.0	0.0	0.04
16	28	11.04	0.0	-0.08	-266.61	0.0	9.51e-03	-73.57	0.0	0.0	0.0	11.04
		0.04	0.0	0.0		30.0	9.51e-03	0.30	0.0	0.0	0.0	0.04
16	29	13.58	0.0	-0.10	-324.63	0.0	-3.35	-90.20	0.0	0.0	0.0	13.58
		0.03	0.0	0.0		30.0	-3.35	0.20	0.0	0.0	0.0	0.03
16	30	13.58	0.0	-0.10	-324.66	0.0	-3.35	-90.20	0.0	0.0	0.0	13.58
		0.03	0.0	0.0		30.0	-3.35	0.20	0.0	0.0	0.0	0.03
16	31	13.57	0.0	-0.10	-324.56	0.0	-3.35	-90.18	0.0	0.0	0.0	13.57
		0.03	0.0	0.0		30.0	-3.35	0.20	0.0	0.0	0.0	0.03
16	32	13.58	0.0	-0.10	-324.73	0.0	-3.35	-90.22	0.0	0.0	0.0	13.58
		0.03	0.0	0.0		30.0	-3.35	0.20	0.0	0.0	0.0	0.03
16	33	11.06	0.0	-0.08	-267.23	0.0	6.65e-03	-73.72	0.0	0.0	0.0	11.06
		0.05	0.0	0.0		30.0	6.65e-03	0.31	0.0	0.0	0.0	0.05
16	34	11.06	0.0	-0.08	-267.25	0.0	6.65e-03	-73.73	0.0	0.0	0.0	11.06
		0.05	0.0	0.0		30.0	6.65e-03	0.31	0.0	0.0	0.0	0.05
16	35	11.06	0.0	-0.08	-267.15	0.0	6.70e-03	-73.70	0.0	0.0	0.0	11.06
		0.05	0.0	0.0		30.0	6.70e-03	0.31	0.0	0.0	0.0	0.05
16	36	11.07	0.0	-0.08	-267.33	0.0	6.59e-03	-73.75	0.0	0.0	0.0	11.07

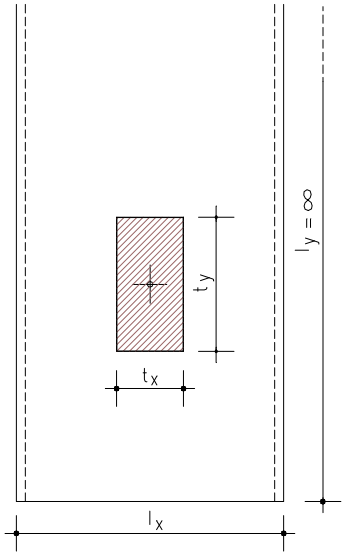
Trave f.	Cmb	M3 mx/mn	M2 mx/mn	D 2 / D 3	Pt	Pos.	N	V 2	V 3	T	M 2	M 3
		0.05	0.0	0.0		30.0	6.59e-03	0.31	0.0	0.0	0.0	0.05
16	37	11.90	0.0	-0.08	-287.44	0.0	-1.63	-79.12	0.0	0.0	0.0	11.90
		0.06	0.0	0.0		30.0	-1.63	0.39	0.0	0.0	0.0	0.06
16	38	11.90	0.0	-0.08	-287.47	0.0	-1.63	-79.13	0.0	0.0	0.0	11.90
		0.06	0.0	0.0		30.0	-1.63	0.39	0.0	0.0	0.0	0.06
16	39	11.90	0.0	-0.08	-287.37	0.0	-1.63	-79.10	0.0	0.0	0.0	11.90
		0.06	0.0	0.0		30.0	-1.63	0.39	0.0	0.0	0.0	0.06
16	40	11.91	0.0	-0.08	-287.54	0.0	-1.63	-79.15	0.0	0.0	0.0	11.91
		0.06	0.0	0.0		30.0	-1.63	0.39	0.0	0.0	0.0	0.06
16	41	14.44	0.0	-0.10	-345.57	0.0	-4.99	-95.78	0.0	0.0	0.0	14.44
		0.04	0.0	0.0		30.0	-4.99	0.29	0.0	0.0	0.0	0.04
16	42	14.44	0.0	-0.10	-345.59	0.0	-4.99	-95.78	0.0	0.0	0.0	14.44
		0.04	0.0	0.0		30.0	-4.99	0.29	0.0	0.0	0.0	0.04
16	43	14.44	0.0	-0.10	-345.49	0.0	-4.99	-95.76	0.0	0.0	0.0	14.44
		0.04	0.0	0.0		30.0	-4.99	0.29	0.0	0.0	0.0	0.04
16	44	14.45	0.0	-0.10	-345.67	0.0	-4.99	-95.80	0.0	0.0	0.0	14.45
		0.04	0.0	0.0		30.0	-4.99	0.29	0.0	0.0	0.0	0.04
16	45	11.93	0.0	-0.08	-288.16	0.0	-1.63	-79.30	0.0	0.0	0.0	11.93
		0.06	0.0	0.0		30.0	-1.63	0.39	0.0	0.0	0.0	0.06
16	46	11.93	0.0	-0.08	-288.18	0.0	-1.63	-79.31	0.0	0.0	0.0	11.93
		0.06	0.0	0.0		30.0	-1.63	0.39	0.0	0.0	0.0	0.06
16	47	11.93	0.0	-0.08	-288.08	0.0	-1.63	-79.28	0.0	0.0	0.0	11.93
		0.06	0.0	0.0		30.0	-1.63	0.39	0.0	0.0	0.0	0.06
16	48	11.93	0.0	-0.08	-288.26	0.0	-1.63	-79.33	0.0	0.0	0.0	11.93
		0.06	0.0	0.0		30.0	-1.63	0.39	0.0	0.0	0.0	0.06
16	49	10.13	0.0	-0.07	-246.48	0.0	9.24e-03	-67.50	0.0	0.0	0.0	10.13
		0.05	0.0	0.0		30.0	9.24e-03	0.33	0.0	0.0	0.0	0.05
16	50	10.13	0.0	-0.07	-246.50	0.0	9.24e-03	-67.51	0.0	0.0	0.0	10.13
		0.05	0.0	0.0		30.0	9.24e-03	0.33	0.0	0.0	0.0	0.05
16	51	10.12	0.0	-0.07	-246.40	0.0	9.30e-03	-67.48	0.0	0.0	0.0	10.12
		0.05	0.0	0.0		30.0	9.30e-03	0.33	0.0	0.0	0.0	0.05
16	52	10.13	0.0	-0.07	-246.58	0.0	9.18e-03	-67.53	0.0	0.0	0.0	10.13
		0.05	0.0	0.0		30.0	9.18e-03	0.33	0.0	0.0	0.0	0.05
16	53	12.67	0.0	-0.09	-304.60	0.0	-3.35	-84.16	0.0	0.0	0.0	12.67
		0.04	0.0	0.0		30.0	-3.35	0.23	0.0	0.0	0.0	0.04
16	54	12.67	0.0	-0.09	-304.62	0.0	-3.35	-84.16	0.0	0.0	0.0	12.67
		0.04	0.0	0.0		30.0	-3.35	0.23	0.0	0.0	0.0	0.04
16	55	12.67	0.0	-0.09	-304.52	0.0	-3.35	-84.14	0.0	0.0	0.0	12.67
		0.04	0.0	0.0		30.0	-3.35	0.23	0.0	0.0	0.0	0.04
16	56	12.67	0.0	-0.09	-304.70	0.0	-3.35	-84.18	0.0	0.0	0.0	12.67
		0.04	0.0	0.0		30.0	-3.35	0.23	0.0	0.0	0.0	0.04
16	57	10.16	0.0	-0.07	-247.19	0.0	6.32e-03	-67.68	0.0	0.0	0.0	10.16
		0.05	0.0	0.0		30.0	6.32e-03	0.34	0.0	0.0	0.0	0.05
16	58	10.16	0.0	-0.07	-247.22	0.0	6.32e-03	-67.69	0.0	0.0	0.0	10.16
		0.05	0.0	0.0		30.0	6.32e-03	0.34	0.0	0.0	0.0	0.05
16	59	10.15	0.0	-0.07	-247.12	0.0	6.37e-03	-67.66	0.0	0.0	0.0	10.15
		0.05	0.0	0.0		30.0	6.37e-03	0.34	0.0	0.0	0.0	0.05
16	60	10.16	0.0	-0.07	-247.29	0.0	6.26e-03	-67.71	0.0	0.0	0.0	10.16
		0.05	0.0	0.0		30.0	6.26e-03	0.34	0.0	0.0	0.0	0.05
16	61	17.43	0.0	-0.12	-416.03	0.0	-4.47	-115.40	0.0	0.0	0.0	17.43
		0.13	0.0	0.0		30.0	-4.47	0.87	0.0	0.0	0.0	0.13
16	62	17.43	0.0	-0.12	-416.06	0.0	-4.47	-115.40	0.0	0.0	0.0	17.43
		0.13	0.0	0.0		30.0	-4.47	0.87	0.0	0.0	0.0	0.13
16	63	17.43	0.0	-0.12	-415.96	0.0	-4.47	-115.38	0.0	0.0	0.0	17.43
		0.13	0.0	0.0		30.0	-4.47	0.87	0.0	0.0	0.0	0.13
16	64	17.44	0.0	-0.12	-416.13	0.0	-4.47	-115.42	0.0	0.0	0.0	17.44
		0.13	0.0	0.0		30.0	-4.47	0.87	0.0	0.0	0.0	0.13
16	65	19.97	0.0	-0.14	-474.16	0.0	-7.84	-132.05	0.0	0.0	0.0	19.97
		0.11	0.0	0.0		30.0	-7.84	0.77	0.0	0.0	0.0	0.11
16	66	19.97	0.0	-0.14	-474.18	0.0	-7.84	-132.06	0.0	0.0	0.0	19.97
		0.11	0.0	0.0		30.0	-7.84	0.77	0.0	0.0	0.0	0.11
16	67	19.97	0.0	-0.14	-474.08	0.0	-7.84	-132.03	0.0	0.0	0.0	19.97
		0.11	0.0	0.0		30.0	-7.84	0.77	0.0	0.0	0.0	0.11
16	68	19.98	0.0	-0.14	-474.26	0.0	-7.84	-132.08	0.0	0.0	0.0	19.98
		0.11	0.0	0.0		30.0	-7.84	0.77	0.0	0.0	0.0	0.11
16	69	17.46	0.0	-0.12	-416.75	0.0	-4.48	-115.57	0.0	0.0	0.0	17.46
		0.13	0.0	0.0		30.0	-4.48	0.88	0.0	0.0	0.0	0.13
16	70	17.46	0.0	-0.12	-416.77	0.0	-4.48	-115.58	0.0	0.0	0.0	17.46
		0.13	0.0	0.0		30.0	-4.48	0.88	0.0	0.0	0.0	0.13
16	71	17.46	0.0	-0.12	-416.67	0.0	-4.48	-115.55	0.0	0.0	0.0	17.46
		0.13	0.0	0.0		30.0	-4.48	0.88	0.0	0.0	0.0	0.13
16	72	17.46	0.0	-0.12	-416.85	0.0	-4.48	-115.60	0.0	0.0	0.0	17.46
		0.13	0.0	0.0		30.0	-4.48	0.88	0.0	0.0	0.0	0.13
16	73	15.66	0.0	-0.11	-375.07	0.0	-2.83	-103.78	0.0	0.0	0.0	15.66
		0.12	0.0	0.0		30.0	-2.83	0.82	0.0	0.0	0.0	0.12

Trave f.	Cmb	M3 mx/mn	M2 mx/mn	D 2 / D 3	Pt	Pos.	N	V 2	V 3	T	M 2	M 3
16	74	15.66	0.0	-0.11	-375.09	0.0	-2.83	-103.78	0.0	0.0	0.0	15.66
		0.12	0.0	0.0		30.0	-2.83	0.82	0.0	0.0	0.0	0.12
16	75	15.65	0.0	-0.11	-374.99	0.0	-2.83	-103.75	0.0	0.0	0.0	15.65
		0.12	0.0	0.0		30.0	-2.83	0.82	0.0	0.0	0.0	0.12
16	76	15.66	0.0	-0.11	-375.17	0.0	-2.83	-103.80	0.0	0.0	0.0	15.66
		0.12	0.0	0.0		30.0	-2.83	0.82	0.0	0.0	0.0	0.12
16	77	18.20	0.0	-0.13	-433.19	0.0	-6.20	-120.43	0.0	0.0	0.0	18.20
		0.11	0.0	0.0		30.0	-6.20	0.72	0.0	0.0	0.0	0.11
16	78	18.20	0.0	-0.13	-433.21	0.0	-6.20	-120.44	0.0	0.0	0.0	18.20
		0.11	0.0	0.0		30.0	-6.20	0.72	0.0	0.0	0.0	0.11
16	79	18.20	0.0	-0.13	-433.11	0.0	-6.20	-120.41	0.0	0.0	0.0	18.20
		0.11	0.0	0.0		30.0	-6.20	0.72	0.0	0.0	0.0	0.11
16	80	18.20	0.0	-0.13	-433.29	0.0	-6.20	-120.46	0.0	0.0	0.0	18.20
		0.11	0.0	0.0		30.0	-6.20	0.72	0.0	0.0	0.0	0.11
16	81	15.69	0.0	-0.11	-375.78	0.0	-2.84	-103.95	0.0	0.0	0.0	15.69
		0.12	0.0	0.0		30.0	-2.84	0.83	0.0	0.0	0.0	0.12
16	82	15.69	0.0	-0.11	-375.81	0.0	-2.84	-103.96	0.0	0.0	0.0	15.69
		0.12	0.0	0.0		30.0	-2.84	0.83	0.0	0.0	0.0	0.12
16	83	15.68	0.0	-0.11	-375.71	0.0	-2.84	-103.93	0.0	0.0	0.0	15.68
		0.12	0.0	0.0		30.0	-2.84	0.83	0.0	0.0	0.0	0.12
16	84	15.69	0.0	-0.11	-375.89	0.0	-2.84	-103.98	0.0	0.0	0.0	15.69
		0.12	0.0	0.0		30.0	-2.84	0.83	0.0	0.0	0.0	0.12
16	85	12.19	0.0	-0.09	-294.04	0.0	-1.63	-81.08	0.0	0.0	0.0	12.19
		0.06	0.0	0.0		30.0	-1.63	0.41	0.0	0.0	0.0	0.06
16	86	12.20	0.0	-0.09	-294.06	0.0	-1.63	-81.09	0.0	0.0	0.0	12.20
		0.06	0.0	0.0		30.0	-1.63	0.41	0.0	0.0	0.0	0.06
16	87	12.19	0.0	-0.09	-293.96	0.0	-1.63	-81.06	0.0	0.0	0.0	12.19
		0.06	0.0	0.0		30.0	-1.63	0.41	0.0	0.0	0.0	0.06
16	88	12.20	0.0	-0.09	-294.14	0.0	-1.63	-81.11	0.0	0.0	0.0	12.20
		0.06	0.0	0.0		30.0	-1.63	0.41	0.0	0.0	0.0	0.06
16	89	14.74	0.0	-0.10	-352.16	0.0	-4.99	-97.74	0.0	0.0	0.0	14.74
		0.05	0.0	0.0		30.0	-4.99	0.31	0.0	0.0	0.0	0.05
16	90	14.74	0.0	-0.10	-352.19	0.0	-4.99	-97.74	0.0	0.0	0.0	14.74
		0.05	0.0	0.0		30.0	-4.99	0.31	0.0	0.0	0.0	0.05
16	91	14.73	0.0	-0.10	-352.09	0.0	-4.99	-97.72	0.0	0.0	0.0	14.73
		0.05	0.0	0.0		30.0	-4.99	0.31	0.0	0.0	0.0	0.05
16	92	14.74	0.0	-0.10	-352.26	0.0	-4.99	-97.76	0.0	0.0	0.0	14.74
		0.05	0.0	0.0		30.0	-4.99	0.31	0.0	0.0	0.0	0.05
16	93	12.22	0.0	-0.09	-294.76	0.0	-1.63	-81.26	0.0	0.0	0.0	12.22
		0.06	0.0	0.0		30.0	-1.63	0.41	0.0	0.0	0.0	0.06
16	94	12.22	0.0	-0.09	-294.78	0.0	-1.63	-81.27	0.0	0.0	0.0	12.22
		0.06	0.0	0.0		30.0	-1.63	0.41	0.0	0.0	0.0	0.06
16	95	12.22	0.0	-0.09	-294.68	0.0	-1.63	-81.24	0.0	0.0	0.0	12.22
		0.06	0.0	0.0		30.0	-1.63	0.41	0.0	0.0	0.0	0.06
16	96	12.23	0.0	-0.09	-294.86	0.0	-1.63	-81.29	0.0	0.0	0.0	12.23
		0.06	0.0	0.0		30.0	-1.63	0.41	0.0	0.0	0.0	0.06
16	97	10.42	0.0	-0.07	-253.07	0.0	9.22e-03	-69.46	0.0	0.0	0.0	10.42
		0.05	0.0	0.0		30.0	9.22e-03	0.36	0.0	0.0	0.0	0.05
16	98	10.42	0.0	-0.07	-253.10	0.0	9.22e-03	-69.47	0.0	0.0	0.0	10.42
		0.05	0.0	0.0		30.0	9.22e-03	0.36	0.0	0.0	0.0	0.05
16	99	10.42	0.0	-0.07	-253.00	0.0	9.28e-03	-69.44	0.0	0.0	0.0	10.42
		0.05	0.0	0.0		30.0	9.28e-03	0.36	0.0	0.0	0.0	0.05
16	100	10.42	0.0	-0.07	-253.17	0.0	9.16e-03	-69.49	0.0	0.0	0.0	10.42
		0.05	0.0	0.0		30.0	9.16e-03	0.36	0.0	0.0	0.0	0.05
16	101	12.96	0.0	-0.09	-311.20	0.0	-3.35	-86.12	0.0	0.0	0.0	12.96
		0.04	0.0	0.0		30.0	-3.35	0.26	0.0	0.0	0.0	0.04
16	102	12.96	0.0	-0.09	-311.22	0.0	-3.35	-86.12	0.0	0.0	0.0	12.96
		0.04	0.0	0.0		30.0	-3.35	0.26	0.0	0.0	0.0	0.04
16	103	12.96	0.0	-0.09	-311.12	0.0	-3.35	-86.10	0.0	0.0	0.0	12.96
		0.04	0.0	0.0		30.0	-3.35	0.26	0.0	0.0	0.0	0.04
16	104	12.97	0.0	-0.09	-311.30	0.0	-3.35	-86.14	0.0	0.0	0.0	12.97
		0.04	0.0	0.0		30.0	-3.35	0.26	0.0	0.0	0.0	0.04
16	105	10.45	0.0	-0.07	-253.79	0.0	6.30e-03	-69.64	0.0	0.0	0.0	10.45
		0.05	0.0	0.0		30.0	6.30e-03	0.36	0.0	0.0	0.0	0.05
16	106	10.45	0.0	-0.07	-253.82	0.0	6.30e-03	-69.65	0.0	0.0	0.0	10.45
		0.05	0.0	0.0		30.0	6.30e-03	0.36	0.0	0.0	0.0	0.05
16	107	10.45	0.0	-0.07	-253.72	0.0	6.36e-03	-69.62	0.0	0.0	0.0	10.45
		0.05	0.0	0.0		30.0	6.36e-03	0.36	0.0	0.0	0.0	0.05
16	108	10.45	0.0	-0.07	-253.89	0.0	6.24e-03	-69.67	0.0	0.0	0.0	10.45
		0.05	0.0	0.0		30.0	6.24e-03	0.36	0.0	0.0	0.0	0.05
16	109	22.94	0.0	-0.16	-541.41	0.0	-17.65	-150.84	0.0	0.0	0.0	22.94
		0.11	0.0	0.0		30.0	-17.65	0.73	0.0	0.0	0.0	0.11
16	110	5.68	0.0	-0.04	-141.74	0.0	6.23e-03	-37.86	0.0	0.0	0.0	5.68
		0.02	0.0	0.0		30.0	6.23e-03	0.12	0.0	0.0	0.0	0.02
16	111	5.68	0.0	-0.04	-141.76	0.0	6.23e-03	-37.87	0.0	0.0	0.0	5.68

Trave f.	Cmb	M3 mx/mn	M2 mx/mn	D 2 / D 3	Pt	Pos.	N	V 2	V 3	T	M 2	M 3
		0.02	0.0	0.0		30.0	6.23e-03	0.12	0.0	0.0	0.0	0.02
16	112	5.68	0.0	-0.04	-141.68	0.0	6.28e-03	-37.85	0.0	0.0	0.0	5.68
		0.02	0.0	0.0		30.0	6.28e-03	0.12	0.0	0.0	0.0	0.02
16	113	5.68	0.0	-0.04	-141.82	0.0	6.18e-03	-37.89	0.0	0.0	0.0	5.68
		0.02	0.0	0.0		30.0	6.18e-03	0.12	0.0	0.0	0.0	0.02
16	114	7.56	0.0	-0.05	-184.79	0.0	-2.48	-50.20	0.0	0.0	0.0	7.56
		6.69e-03	0.0	0.0		30.0	-2.48	0.04	0.0	0.0	0.0	6.69e-03
16	115	7.57	0.0	-0.05	-184.81	0.0	-2.48	-50.21	0.0	0.0	0.0	7.57
		6.67e-03	0.0	0.0		30.0	-2.48	0.04	0.0	0.0	0.0	6.67e-03
16	116	7.56	0.0	-0.05	-184.73	0.0	-2.48	-50.18	0.0	0.0	0.0	7.56
		6.69e-03	0.0	0.0		30.0	-2.48	0.04	0.0	0.0	0.0	6.69e-03
16	117	7.57	0.0	-0.05	-184.88	0.0	-2.48	-50.22	0.0	0.0	0.0	7.57
		6.68e-03	0.0	0.0		30.0	-2.48	0.04	0.0	0.0	0.0	6.68e-03
16	118	5.70	0.0	-0.04	-142.27	0.0	4.06e-03	-38.00	0.0	0.0	0.0	5.70
		0.02	0.0	0.0		30.0	4.06e-03	0.12	0.0	0.0	0.0	0.02
16	119	5.70	0.0	-0.04	-142.29	0.0	4.06e-03	-38.00	0.0	0.0	0.0	5.70
		0.02	0.0	0.0		30.0	4.06e-03	0.12	0.0	0.0	0.0	0.02
16	120	5.70	0.0	-0.04	-142.21	0.0	4.11e-03	-37.98	0.0	0.0	0.0	5.70
		0.02	0.0	0.0		30.0	4.11e-03	0.12	0.0	0.0	0.0	0.02
16	121	5.71	0.0	-0.04	-142.35	0.0	4.01e-03	-38.02	0.0	0.0	0.0	5.71
		0.02	0.0	0.0		30.0	4.01e-03	0.12	0.0	0.0	0.0	0.02
16	122	9.90	0.0	-0.07	-239.70	0.0	-2.79	-65.50	0.0	0.0	0.0	9.90
		0.06	0.0	0.0		30.0	-2.79	0.42	0.0	0.0	0.0	0.06
16	123	9.90	0.0	-0.07	-239.72	0.0	-2.79	-65.50	0.0	0.0	0.0	9.90
		0.06	0.0	0.0		30.0	-2.79	0.42	0.0	0.0	0.0	0.06
16	124	9.90	0.0	-0.07	-239.64	0.0	-2.79	-65.48	0.0	0.0	0.0	9.90
		0.06	0.0	0.0		30.0	-2.79	0.42	0.0	0.0	0.0	0.06
16	125	9.90	0.0	-0.07	-239.78	0.0	-2.79	-65.52	0.0	0.0	0.0	9.90
		0.06	0.0	0.0		30.0	-2.79	0.42	0.0	0.0	0.0	0.06
16	126	11.78	0.0	-0.08	-282.76	0.0	-5.28	-77.83	0.0	0.0	0.0	11.78
		0.05	0.0	0.0		30.0	-5.28	0.34	0.0	0.0	0.0	0.05
16	127	11.78	0.0	-0.08	-282.78	0.0	-5.28	-77.84	0.0	0.0	0.0	11.78
		0.05	0.0	0.0		30.0	-5.28	0.34	0.0	0.0	0.0	0.05
16	128	11.78	0.0	-0.08	-282.69	0.0	-5.28	-77.82	0.0	0.0	0.0	11.78
		0.05	0.0	0.0		30.0	-5.28	0.34	0.0	0.0	0.0	0.05
16	129	11.79	0.0	-0.08	-282.84	0.0	-5.28	-77.85	0.0	0.0	0.0	11.79
		0.05	0.0	0.0		30.0	-5.28	0.34	0.0	0.0	0.0	0.05
16	130	9.92	0.0	-0.07	-240.23	0.0	-2.79	-65.63	0.0	0.0	0.0	9.92
		0.06	0.0	0.0		30.0	-2.79	0.42	0.0	0.0	0.0	0.06
16	131	9.92	0.0	-0.07	-240.25	0.0	-2.79	-65.63	0.0	0.0	0.0	9.92
		0.06	0.0	0.0		30.0	-2.79	0.42	0.0	0.0	0.0	0.06
16	132	9.92	0.0	-0.07	-240.17	0.0	-2.79	-65.61	0.0	0.0	0.0	9.92
		0.06	0.0	0.0		30.0	-2.79	0.42	0.0	0.0	0.0	0.06
16	133	9.92	0.0	-0.07	-240.32	0.0	-2.79	-65.65	0.0	0.0	0.0	9.92
		0.06	0.0	0.0		30.0	-2.79	0.42	0.0	0.0	0.0	0.06
16	134	8.58	0.0	-0.06	-209.28	0.0	-1.57	-56.87	0.0	0.0	0.0	8.58
		0.06	0.0	0.0		30.0	-1.57	0.38	0.0	0.0	0.0	0.06
16	135	8.58	0.0	-0.06	-209.30	0.0	-1.57	-56.87	0.0	0.0	0.0	8.58
		0.06	0.0	0.0		30.0	-1.57	0.38	0.0	0.0	0.0	0.06
16	136	8.58	0.0	-0.06	-209.22	0.0	-1.57	-56.85	0.0	0.0	0.0	8.58
		0.06	0.0	0.0		30.0	-1.57	0.38	0.0	0.0	0.0	0.06
16	137	8.58	0.0	-0.06	-209.36	0.0	-1.57	-56.89	0.0	0.0	0.0	8.58
		0.06	0.0	0.0		30.0	-1.57	0.38	0.0	0.0	0.0	0.06
16	138	10.46	0.0	-0.07	-252.34	0.0	-4.06	-69.20	0.0	0.0	0.0	10.46
		0.04	0.0	0.0		30.0	-4.06	0.30	0.0	0.0	0.0	0.04
16	139	10.47	0.0	-0.07	-252.36	0.0	-4.06	-69.21	0.0	0.0	0.0	10.47
		0.04	0.0	0.0		30.0	-4.06	0.30	0.0	0.0	0.0	0.04
16	140	10.46	0.0	-0.07	-252.27	0.0	-4.06	-69.19	0.0	0.0	0.0	10.46
		0.04	0.0	0.0		30.0	-4.06	0.30	0.0	0.0	0.0	0.04
16	141	10.47	0.0	-0.07	-252.42	0.0	-4.06	-69.22	0.0	0.0	0.0	10.47
		0.04	0.0	0.0		30.0	-4.06	0.30	0.0	0.0	0.0	0.04
16	142	8.60	0.0	-0.06	-209.81	0.0	-1.58	-57.00	0.0	0.0	0.0	8.60
		0.06	0.0	0.0		30.0	-1.58	0.38	0.0	0.0	0.0	0.06
16	143	8.60	0.0	-0.06	-209.83	0.0	-1.58	-57.00	0.0	0.0	0.0	8.60
		0.06	0.0	0.0		30.0	-1.58	0.38	0.0	0.0	0.0	0.06
16	144	8.60	0.0	-0.06	-209.75	0.0	-1.57	-56.98	0.0	0.0	0.0	8.60
		0.06	0.0	0.0		30.0	-1.57	0.38	0.0	0.0	0.0	0.06
16	145	8.61	0.0	-0.06	-209.90	0.0	-1.58	-57.02	0.0	0.0	0.0	8.61
		0.06	0.0	0.0		30.0	-1.58	0.38	0.0	0.0	0.0	0.06
16	146	4.32	0.0	-0.03	-111.87	0.0	6.18e-03	-28.81	0.0	0.0	0.0	4.32
		0.04	0.0	0.0		30.0	6.18e-03	0.24	0.0	0.0	0.0	0.04
16	147	4.32	0.0	-0.03	-111.89	0.0	6.18e-03	-28.81	0.0	0.0	0.0	4.32
		0.04	0.0	0.0		30.0	6.18e-03	0.24	0.0	0.0	0.0	0.04
16	148	4.32	0.0	-0.03	-111.82	0.0	6.22e-03	-28.79	0.0	0.0	0.0	4.32
		0.04	0.0	0.0		30.0	6.22e-03	0.24	0.0	0.0	0.0	0.04

Trave f.	Cmb	M3 mx/mn	M2 mx/mn	D 2 / D 3	Pt	Pos.	N	V 2	V 3	T	M 2	M 3
16	149	4.32	0.0	-0.03	-111.94	0.0	6.14e-03	-28.82	0.0	0.0	0.0	4.32
		0.04	0.0	0.0		30.0	6.14e-03	0.24	0.0	0.0	0.0	0.04
16	150	6.20	0.0	-0.05	-154.93	0.0	-2.48	-41.14	0.0	0.0	0.0	6.20
		0.03	0.0	0.0		30.0	-2.48	0.17	0.0	0.0	0.0	0.03
16	151	6.21	0.0	-0.05	-154.95	0.0	-2.48	-41.15	0.0	0.0	0.0	6.21
		0.03	0.0	0.0		30.0	-2.48	0.17	0.0	0.0	0.0	0.03
16	152	6.20	0.0	-0.05	-154.88	0.0	-2.48	-41.13	0.0	0.0	0.0	6.20
		0.03	0.0	0.0		30.0	-2.48	0.17	0.0	0.0	0.0	0.03
16	153	6.20	0.0	-0.05	-154.88	0.0	-2.48	-41.13	0.0	0.0	0.0	6.20
		0.03	0.0	0.0		30.0	-2.48	0.17	0.0	0.0	0.0	0.03
16	154	4.34	0.0	-0.03	-112.41	0.0	4.02e-03	-28.94	0.0	0.0	0.0	4.34
		0.04	0.0	0.0		30.0	4.02e-03	0.25	0.0	0.0	0.0	0.04
16	155	4.34	0.0	-0.03	-112.42	0.0	4.02e-03	-28.94	0.0	0.0	0.0	4.34
		0.04	0.0	0.0		30.0	4.02e-03	0.25	0.0	0.0	0.0	0.04
16	156	4.34	0.0	-0.03	-112.35	0.0	4.06e-03	-28.92	0.0	0.0	0.0	4.34
		0.04	0.0	0.0		30.0	4.06e-03	0.25	0.0	0.0	0.0	0.04
16	157	4.34	0.0	-0.03	-112.35	0.0	4.06e-03	-28.92	0.0	0.0	0.0	4.34
		0.04	0.0	0.0		30.0	4.06e-03	0.25	0.0	0.0	0.0	0.04
16	158	12.63	0.0	-0.09	-300.96	0.0	-3.20	-83.62	0.0	0.0	0.0	12.63
		0.08	0.0	0.0		30.0	-3.20	0.52	0.0	0.0	0.0	0.08
16	159	12.63	0.0	-0.09	-300.98	0.0	-3.20	-83.63	0.0	0.0	0.0	12.63
		0.08	0.0	0.0		30.0	-3.20	0.52	0.0	0.0	0.0	0.08
16	160	12.62	0.0	-0.09	-300.90	0.0	-3.20	-83.60	0.0	0.0	0.0	12.62
		0.08	0.0	0.0		30.0	-3.20	0.52	0.0	0.0	0.0	0.08
16	161	12.63	0.0	-0.09	-301.04	0.0	-3.20	-83.64	0.0	0.0	0.0	12.63
		0.08	0.0	0.0		30.0	-3.20	0.52	0.0	0.0	0.0	0.08
16	162	14.51	0.0	-0.10	-344.02	0.0	-5.69	-95.96	0.0	0.0	0.0	14.51
		0.07	0.0	0.0		30.0	-5.69	0.44	0.0	0.0	0.0	0.07
16	163	14.51	0.0	-0.10	-344.04	0.0	-5.69	-95.96	0.0	0.0	0.0	14.51
		0.07	0.0	0.0		30.0	-5.69	0.44	0.0	0.0	0.0	0.07
16	164	14.51	0.0	-0.10	-343.95	0.0	-5.69	-95.94	0.0	0.0	0.0	14.51
		0.07	0.0	0.0		30.0	-5.69	0.44	0.0	0.0	0.0	0.07
16	165	14.51	0.0	-0.10	-344.10	0.0	-5.69	-95.98	0.0	0.0	0.0	14.51
		0.07	0.0	0.0		30.0	-5.69	0.44	0.0	0.0	0.0	0.07
16	166	12.65	0.0	-0.09	-301.49	0.0	-3.20	-83.75	0.0	0.0	0.0	12.65
		0.08	0.0	0.0		30.0	-3.20	0.52	0.0	0.0	0.0	0.08
16	167	12.65	0.0	-0.09	-301.51	0.0	-3.20	-83.76	0.0	0.0	0.0	12.65
		0.08	0.0	0.0		30.0	-3.20	0.52	0.0	0.0	0.0	0.08
16	168	12.64	0.0	-0.09	-301.43	0.0	-3.20	-83.74	0.0	0.0	0.0	12.64
		0.08	0.0	0.0		30.0	-3.20	0.52	0.0	0.0	0.0	0.08
16	169	12.65	0.0	-0.09	-301.58	0.0	-3.20	-83.78	0.0	0.0	0.0	12.65
		0.08	0.0	0.0		30.0	-3.20	0.52	0.0	0.0	0.0	0.08
16	170	10.87	0.0	-0.08	-260.40	0.0	-1.57	-72.12	0.0	0.0	0.0	10.87
		0.07	0.0	0.0		30.0	-1.57	0.46	0.0	0.0	0.0	0.07
16	171	10.87	0.0	-0.08	-260.42	0.0	-1.57	-72.12	0.0	0.0	0.0	10.87
		0.07	0.0	0.0		30.0	-1.57	0.46	0.0	0.0	0.0	0.07
16	172	10.87	0.0	-0.08	-260.34	0.0	-1.57	-72.10	0.0	0.0	0.0	10.87
		0.07	0.0	0.0		30.0	-1.57	0.46	0.0	0.0	0.0	0.07
16	173	10.87	0.0	-0.08	-260.48	0.0	-1.57	-72.14	0.0	0.0	0.0	10.87
		0.07	0.0	0.0		30.0	-1.57	0.46	0.0	0.0	0.0	0.07
16	174	12.75	0.0	-0.09	-303.45	0.0	-4.06	-84.45	0.0	0.0	0.0	12.75
		0.06	0.0	0.0		30.0	-4.06	0.39	0.0	0.0	0.0	0.06
16	175	12.75	0.0	-0.09	-303.48	0.0	-4.06	-84.46	0.0	0.0	0.0	12.75
		0.06	0.0	0.0		30.0	-4.06	0.39	0.0	0.0	0.0	0.06
16	176	12.75	0.0	-0.09	-303.39	0.0	-4.06	-84.44	0.0	0.0	0.0	12.75
		0.06	0.0	0.0		30.0	-4.06	0.39	0.0	0.0	0.0	0.06
16	177	12.76	0.0	-0.09	-303.54	0.0	-4.06	-84.47	0.0	0.0	0.0	12.76
		0.06	0.0	0.0		30.0	-4.06	0.39	0.0	0.0	0.0	0.06
16	178	10.89	0.0	-0.08	-260.93	0.0	-1.57	-72.25	0.0	0.0	0.0	10.89
		0.07	0.0	0.0		30.0	-1.57	0.47	0.0	0.0	0.0	0.07
16	179	10.89	0.0	-0.08	-260.95	0.0	-1.57	-72.25	0.0	0.0	0.0	10.89
		0.07	0.0	0.0		30.0	-1.57	0.47	0.0	0.0	0.0	0.07
16	180	10.89	0.0	-0.08	-260.87	0.0	-1.57	-72.23	0.0	0.0	0.0	10.89
		0.07	0.0	0.0		30.0	-1.57	0.47	0.0	0.0	0.0	0.07
16	181	10.89	0.0	-0.08	-261.02	0.0	-1.57	-72.27	0.0	0.0	0.0	10.89
		0.07	0.0	0.0		30.0	-1.57	0.47	0.0	0.0	0.0	0.07
Trave f.		**M3 mx/mn**	**M2 mx/mn**	**D 2 / D 3**	**Pt**		**N**	**V 2**	**V 3**	**T**		
		-671.85	0.0	-0.16	-541.41		-487.39	-449.20	0.0	0.0		
		961.15	0.0	0.09	303.79		136.39	466.42	0.0	0.0		

14.3 ALLEGATO C –tabelle per il calcolo delle sollecitazioni trasversali nella soletta superiore



Piastra rettangolare appoggiata sui quattro lati caricata uniformemente su una zona rettangolare centrale
Valori di α_{ym}

t_x/l_x t_y/l_x	1.00	0.90	0.80	0.70	0.60	0.50	0.40	0.30	0.20	0.10	0.05
1.00	0.0210	0.0230	0.0250	0.0268	0.0285	0.0299	0.0312	0.0322	0.0330	0.0334	0.0335
0.90	0.0245	0.0269	0.0292	0.0313	0.0333	0.0351	0.0366	0.0378	0.0388	0.0393	0.0395
0.80	0.0286	0.0314	0.0341	0.0366	0.0390	0.0411	0.0430	0.0445	0.0456	0.0463	0.0465
0.70	0.0333	0.0366	0.0398	0.0428	0.0457	0.0483	0.0506	0.0525	0.0539	0.0548	0.0550
0.60	0.0388	0.0427	0.0464	0.0501	0.0535	0.0567	0.0596	0.0620	0.0639	0.0651	0.0654
0.50	0.0452	0.0496	0.0541	0.0585	0.0627	0.0667	0.0704	0.0736	0.0761	0.0778	0.0782
0.40	0.0525	0.0578	0.0630	0.0683	0.0735	0.0786	0.0834	0.0878	0.0914	0.0938	0.0945
0.30	0.0608	0.0670	0.0732	0.0796	0.0861	0.0927	0.0993	0.1055	0.1111	0.1150	0.1161
0.20	0.0703	0.0774	0.0849	0.0926	0.1008	0.1095	0.1186	0.1280	0.1372	0.1449	0.1471
0.10	0.0809	0.0892	0.0981	0.1075	0.1179	0.1293	0.1422	0.1569	0.1739	0.1921	0.1993
0.05	0.0867	0.0957	0.1053	0.1157	0.1273	0.1405	0.1558	0.1745	0.1979	0.2290	0.2472

$l_y = \infty$ $\quad P = p * t_x * t_y$ $\quad M_{ym} = \alpha_{ym} * P$