IMPIANTO AGROVOLTAICO DI PRODUZIONE DI ENERGIA
DA FONTE SOLARE DENOMINATO "STRECAPRETE" DI POTENZA
NOMINALE PARI A 15,0 MVA E POTENZA INSTALLATA PARI A 16,396 MW

REGIONE BASILICATA
PROVINCIA di POTENZA
COMUNI DI VENOSA e MONTEMILONE

PROGETTO DEFINITIVO

Tav.: R04c.2

Titolo:

Relazione di calcolo preliminare e verifica delle strutture - SSE

Firmato digitalmente da CALCARELLA FABIO
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Scala:	Formato Stampa:	Codice Identificatore Elaborato
n.a.	A4	R04c.2_CalcoliPrelStrutture_04c.2

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Data	Motivo della revisione:	Redatto:	Controllato:	Approvato:
Novembre 2021	Prima emissione	STC	FC	Stern PV 5 srl

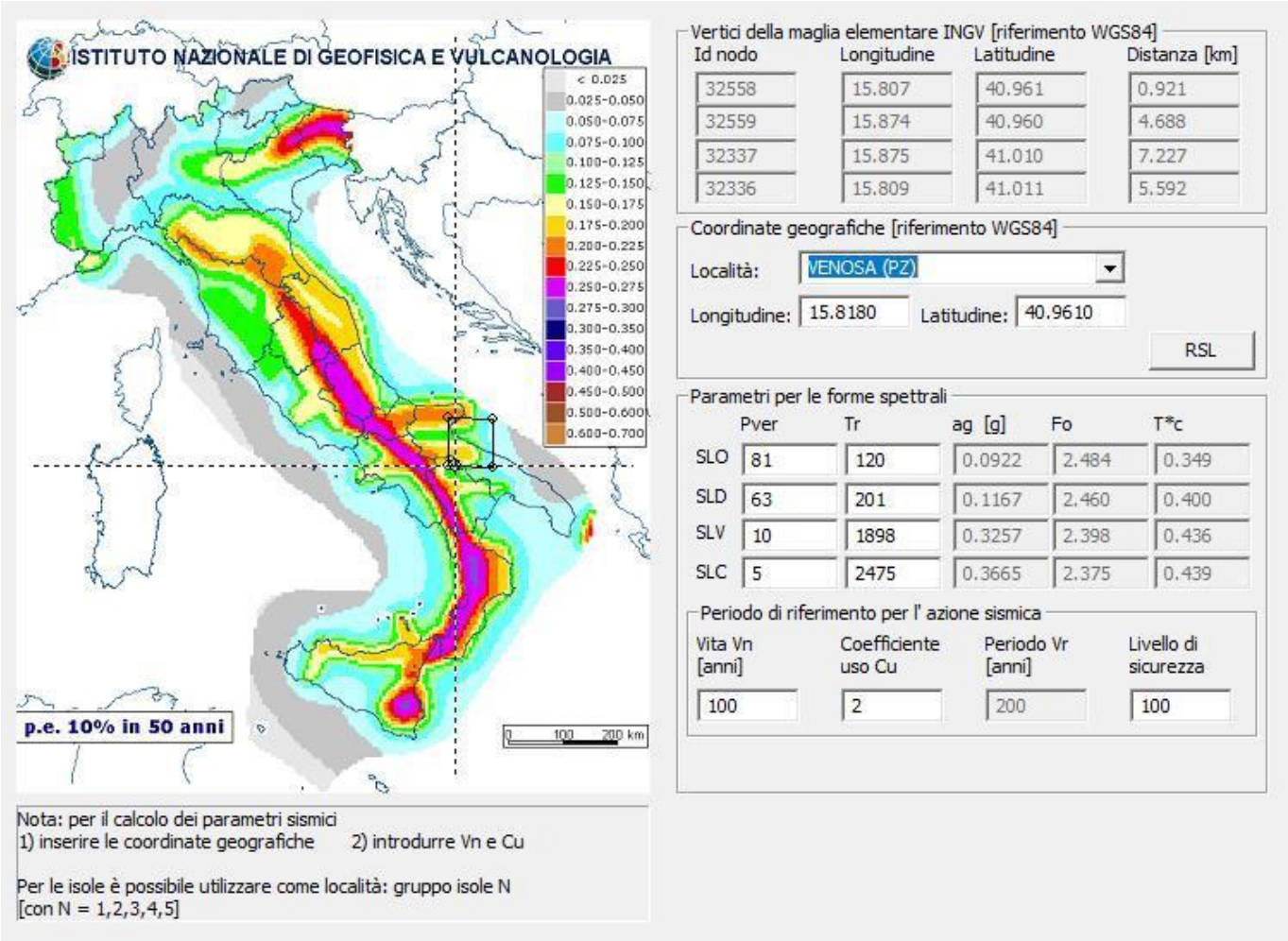
Sommario

NORMATIVA DI RIFERIMENTO

1. D.Min. Infrastrutture Min. Interni e Prot. Civile 17 Gennaio 2018 e allegate "Norme tecniche per le costruzioni".
2. Circolare 21/01/19, n. 7 C.S.LL.PP "Istruzioni per l'applicazione dell'aggiornamento delle Norme Tecniche delle Costruzioni di cui al decreto ministeriale 17 gennaio 2018"
3. D.Min. Infrastrutture e trasporti 14 Settembre 2005 e allegate "Norme tecniche per le costruzioni".
4. D.M. LL.PP. 9 Gennaio 1996 "Norme tecniche per il calcolo, l'esecuzione ed il collaudo delle strutture in cemento armato, normale e precompresso e per le strutture metalliche".
5. D.M. LL.PP. 16 Gennaio 1996 "Norme tecniche relative ai <<Criteri generali per la verifica di sicurezza delle costruzioni e dei carichi e sovraccarichi>>".
6. D.M. LL.PP. 16 Gennaio 1996 "Norme tecniche per le costruzioni in zone sismiche".
7. Circolare 4/07/96, n.156AA.GG./STC. istruzioni per l'applicazione delle "Norme tecniche relative ai <<Criteri generali per la verifica di sicurezza delle costruzioni e dei carichi e sovraccarichi>>" di cui al D.M. 16/01/96.
8. Circolare 10/04/97, n.65AA.GG. istruzioni per l'applicazione delle "Norme tecniche per le costruzioni in zone sismiche" di cui al D.M. 16/01/96.
9. D.M. LL.PP. 20 Novembre 1987 "Norme tecniche per la progettazione, esecuzione e collaudo degli edifici in muratura e per il loro consolidamento".
10. Circolare 4 Gennaio 1989 n. 30787 "Istruzioni in merito alle norme tecniche per la progettazione, esecuzione e collaudo degli edifici in muratura e per il loro consolidamento".
11. D.M. LL.PP. 11 Marzo 1988 "Norme tecniche riguardanti le indagini sui terreni e sulle rocce, la stabilità dei pendii naturali e delle scarpate, i criteri generali e le prescrizioni per la progettazione, l'esecuzione e il collaudo delle opere di sostegno delle terre e delle opere di fondazione".
12. D.M. LL.PP. 3 Dicembre 1987 "Norme tecniche per la progettazione, esecuzione e collaudo delle costruzioni prefabbricate".
13. UNI 9502 - Procedimento analitico per valutare la resistenza al fuoco degli elementi costruttivi di conglomerato cementizio armato, normale e precompresso - edizione maggio 2001
14. Ordinanza del Presidente del Consiglio dei Ministri n. 3274 del 20 marzo 2003 "Primi elementi in materia di criteri generali per la classificazione sismica del territorio nazionale e di normative tecniche per le costruzioni in zona sismica" e successive modificazioni e integrazioni.
15. UNI EN 1990:2006 13/04/2006 Eurocodice 0 - Criteri generali di progettazione strutturale.
16. UNI EN 1991-1-1:2004 01/08/2004 Eurocodice 1 - Azioni sulle strutture - Parte 1-1: Azioni in generale - Pesi per unità di volume, pesi propri e sovraccarichi per gli edifici.
17. UNI EN 1991-2:2005 01/03/2005 Eurocodice 1 - Azioni sulle strutture - Parte 2: Carichi da traffico sui ponti.
18. UNI EN 1991-1-3:2004 01/10/2004 Eurocodice 1 - Azioni sulle strutture - Parte 1-3: Azioni in generale - Carichi da neve.
19. UNI EN 1991-1-4:2005 01/07/2005 Eurocodice 1 - Azioni sulle strutture - Parte 1-4: Azioni in generale - Azioni del vento.
20. UNI EN 1991-1-5:2004 01/10/2004 Eurocodice 1 - Azioni sulle strutture - Parte 1-5: Azioni in generale - Azioni termiche.
21. UNI EN 1992-1-1:2005 24/11/2005 Eurocodice 2 - Progettazione delle strutture di calcestruzzo - Parte 1-1: Regole generali e regole per gli edifici.
22. UNI EN 1992-1-2:2005 01/04/2005 Eurocodice 2 - Progettazione delle strutture di calcestruzzo - Parte 1-2: Regole generali - Progettazione strutturale contro l'incendio.
23. UNI EN 1993-1-1:2005 01/08/2005 Eurocodice 3 - Progettazione delle strutture di acciaio - Parte 1-1: Regole generali e regole per gli edifici.
24. UNI EN 1993-1-8:2005 01/08/2005 Eurocodice 3 - Progettazione delle strutture di acciaio - Parte 1-8: Progettazione dei collegamenti.
25. UNI EN 1994-1-1:2005 01/03/2005 Eurocodice 4 - Progettazione delle strutture composte acciaio-calcestruzzo - Parte 1-1: Regole generali e regole per gli edifici.
26. UNI EN 1994-2:2006 12/01/2006 Eurocodice 4 - Progettazione delle strutture composte acciaio-calcestruzzo - Parte 2: Regole generali e regole per i ponti.
27. UNI EN 1995-1-1:2005 01/02/2005 Eurocodice 5 - Progettazione delle strutture di legno - Parte 1-1: Regole generali – Regole comuni e regole per gli edifici.
28. UNI EN 1995-2:2005 01/01/2005 Eurocodice 5 - Progettazione delle strutture di legno - Parte 2: Ponti.
29. UNI EN 1996-1-1:2006 26/01/2006 Eurocodice 6 - Progettazione delle strutture di muratura - Parte 1-1: Regole generali per strutture di muratura armata e non armata.

30. UNI EN 1996-3:2006 09/03/2006 Eurocodice 6 - Progettazione delle strutture di muratura - Parte 3: Metodi di calcolo semplificato per strutture di muratura non armata.
31. UNI EN 1997-1:2005 01/02/2005 Eurocodice 7 - Progettazione geotecnica - Parte 1: Regole generali.
32. UNI EN 1998-1:2005 01/03/2005 Eurocodice 8 - Progettazione delle strutture per la resistenza sismica - Parte 1: Regole generali, azioni sismiche e regole per gli edifici.
33. UNI EN 1998-3:2005 01/08/2005 Eurocodice 8 - Progettazione delle strutture per la resistenza sismica - Parte 3: Valutazione e adeguamento degli edifici.
34. UNI EN 1998-5:2005 01/01/2005 Eurocodice 8 - Progettazione delle strutture per la resistenza sismica - Parte 5: Fondazioni, strutture di contenimento ed aspetti geotecnici.

NOTA il capitolo "normativa di riferimento": riporta l' elenco delle normative implementate nel software. Le norme utilizzate per la struttura oggetto della presente relazione sono indicate nel precedente capitolo "RELAZIONE DI CALCOLO STRUTTURALE" "ANALISI E VERIFICHE SVOLTE CON L'AUSILIO DI CODICI DI CALCOLO". Laddove nei capitoli successivi vengano richiamate norme antecedenti al DM 17.01.18 è dovuto o a progettazione simulata di edifico esistente.



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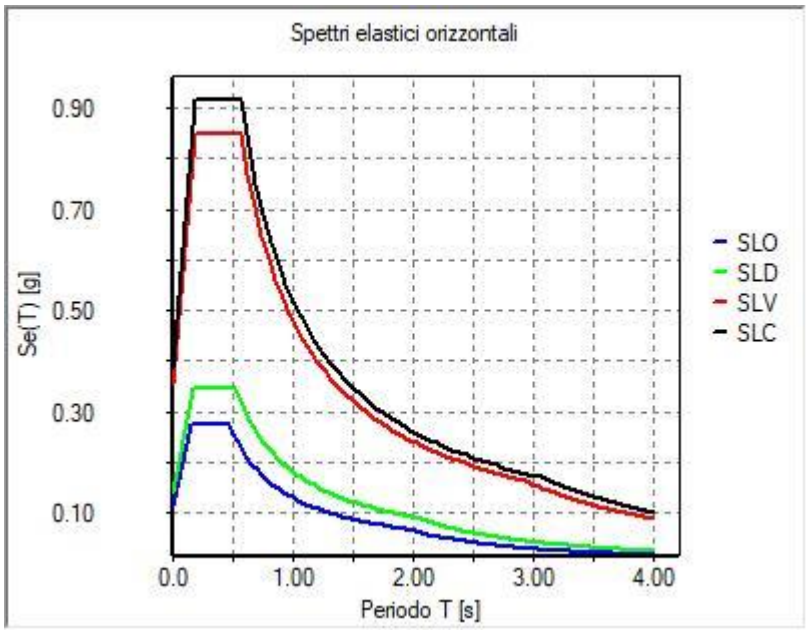

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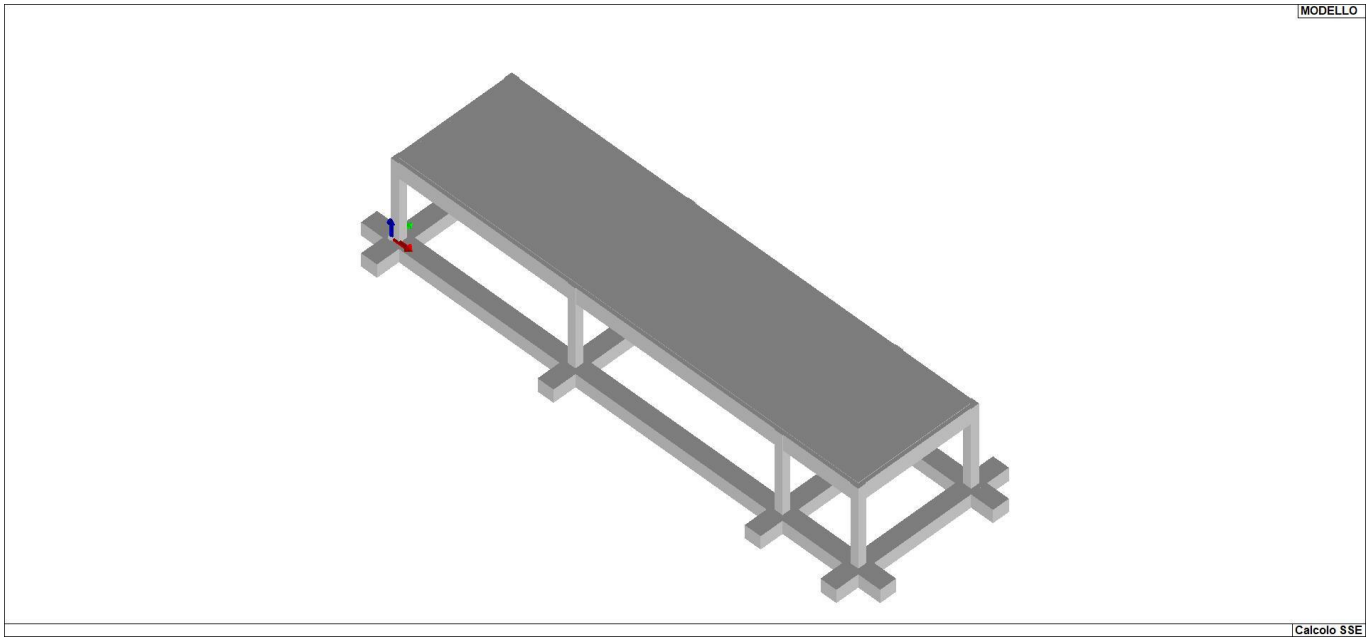

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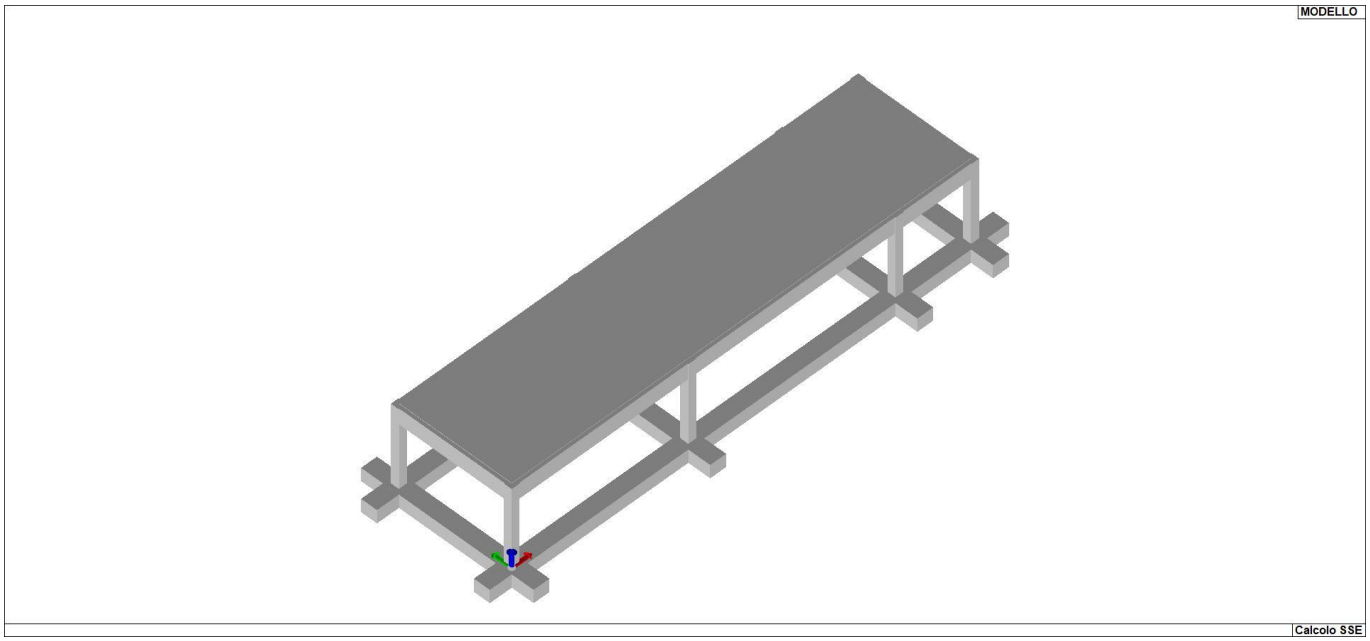

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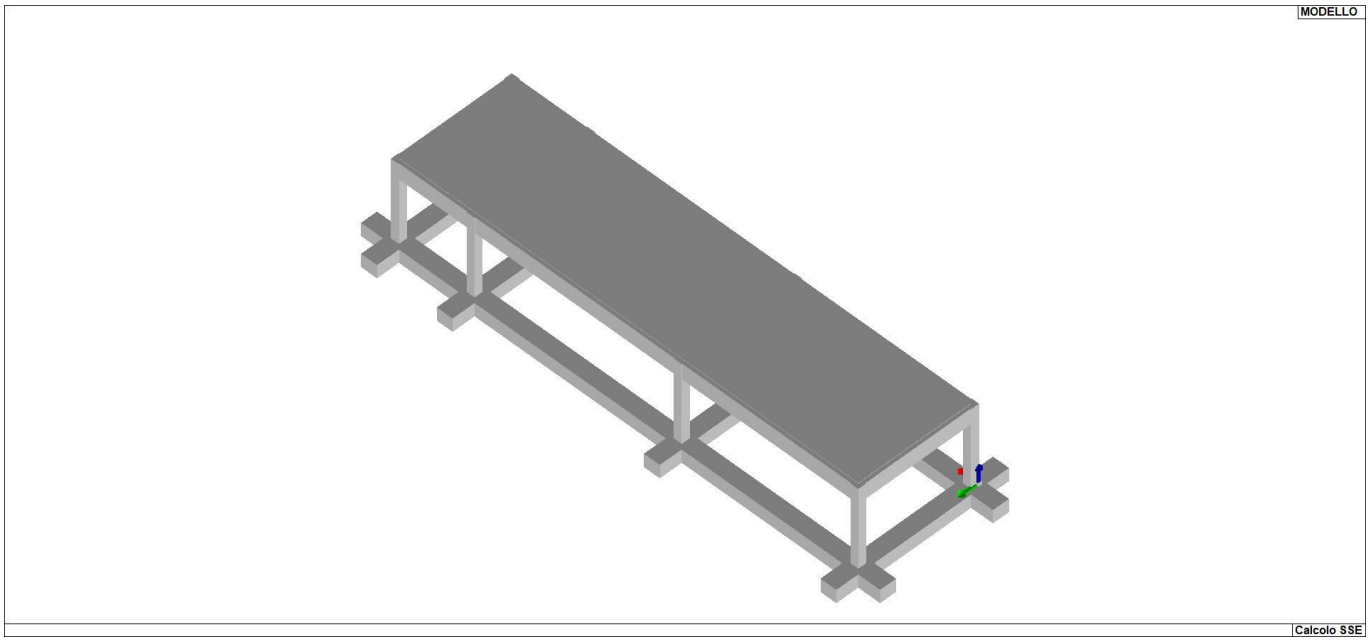

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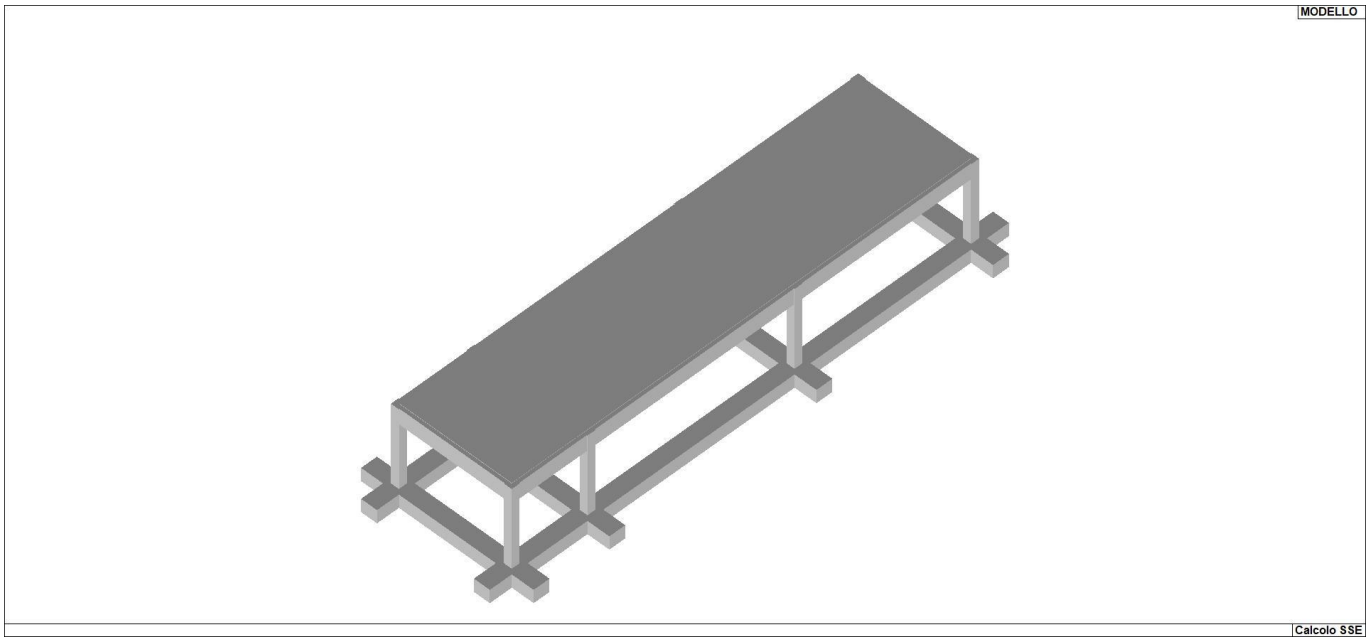


01_INT_VISTA_SOLIDA_004

CARATTERISTICHE MATERIALI UTILIZZATI

LEGENDA TABELLA DATI MATERIALI

Il programma consente l'uso di materiali diversi. Sono previsti i seguenti tipi di materiale:

1	materiale tipo cemento armato
2	materiale tipo acciaio
3	materiale tipo muratura
4	materiale tipo legno
5	materiale tipo generico

I materiali utilizzati nella modellazione sono individuati da una sigla identificativa ed un codice numerico (gli elementi strutturali richiamano quest'ultimo nella propria descrizione). Per ogni materiale vengono riportati in tabella i seguenti dati:

Young	modulo di elasticità normale E
Poisson	coefficiente di contrazione trasversale ni
G	modulo di elasticità tangenziale
Gamma	peso specifico
Alfa	coefficiente di dilatazione termica
Fattore di confidenza FC m	Fattore di confidenza specifico per materiale; (è riportato solo se diverso da quello globale della struttura)
Fattore di confidenza FC a	Fattore di confidenza specifico per l'armatura (è riportato solo se diverso da quello globale della struttura)
Elasto-plastico	Materiale elastico perfettamente plastico per aste non lineari
Massima compressione	Massima tensione di compressione per aste non lineari
Massima trazione	Massima tensione di trazione per aste non lineari
Fattore attrito	Coefficinete di attrito per aste non lineari
Rapporto HRDb	Rapporto di hardening a flessione
Rapporto HRDv	Rapporto di hardening a taglio

I dati soprariportati vengono utilizzati per la modellazione dello schema statico e per la determinazione dei carichi inerziali e termici. In relazione al tipo di materiale vengono riportati inoltre:

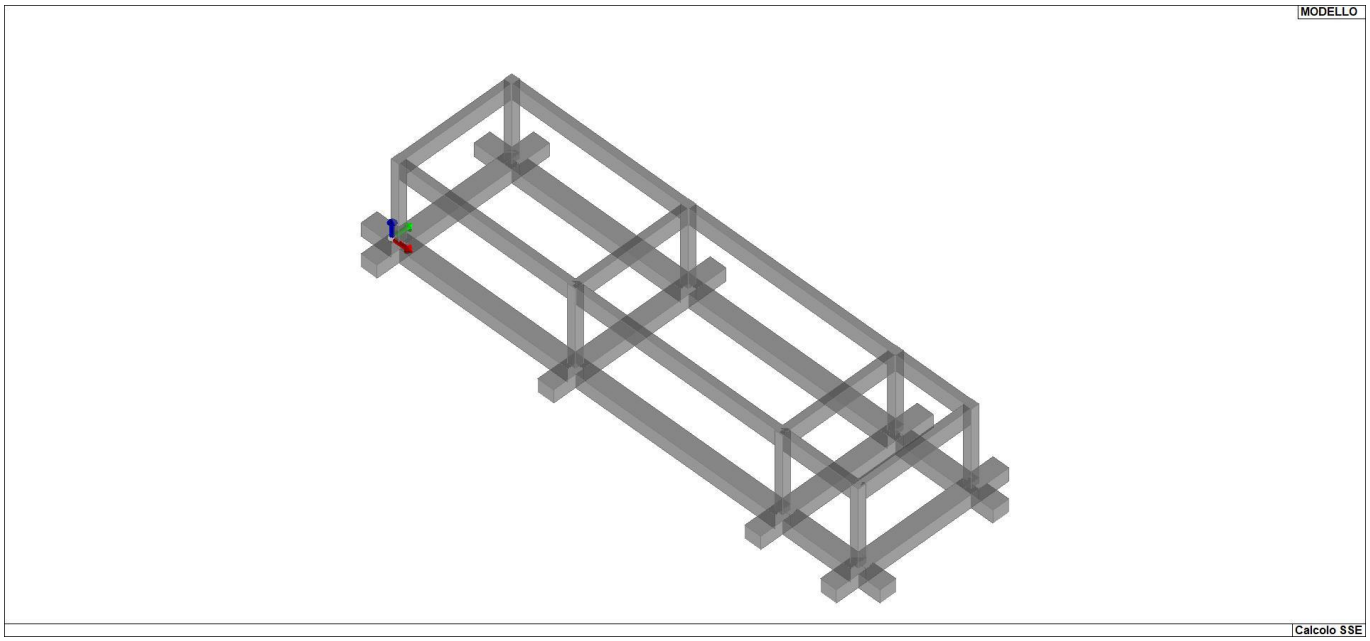
1	c.a.		
		Resistenza Rc	resistenza a cmpressione cubica
		Resistenza fctm	resistenza media a trazione semplice
		Coefficiente ksb	Coefficiente di riduzione della resistenza a compressione da utilizzare nello stress block
2	acciaio		
		Tensione ft	Valore della tensione di rottura
		Tensione fy	Valore della tensione di snervamento
		Resistenza fd	Resistenza di calcolo per SL CNR-UNI 10011
		Resistenza fd (>40)	Resistenza di calcolo per SL CNR-UNI 10011 per spessori > 40mm
		Tensione ammissibile	Tensione ammissibile CNR-UNI 10011
		Tensione ammissibile(>40)	Tensione ammissibile CNR-UNI 10011 per spessori > 40mm
3	muratur		

	a		
		Muratura consolidata	Muratura per la quale si prevedono interventi di rinforzo"
		Incremento resistenza	Incremento conseguito in termini di resistenza
		Incremento rigidezza	Incremento conseguito in termini di rigidezza
		Resistenza f	Valore della resistenza a compressione
		Resistenza fv0	Valore della resistenza a taglio in assenza di tensioni normali
		Resistenza fh	Valore della resistenza a compressione orizzontale
		Resistenza fb	Valore della resistenza a compressione dei blocchi
		Resistenza fbh	Valore della resistenza a compressione dei blocchi in direzione orizzontale
		Resistenza fv0h	Valore della resistenza a taglio in assenza di tensioni normali per le travi
		Resistenza ft	Valore della resistenza a trazione per fessurazione diagonale
		Resistenza fvlim	Valore della massima resistenza a taglio
		Resistenza fbt	Valore della resistenza a trazione dei blocchi
		Coefficiente mu	Coefficiente d'attrito utilizzato per la resistenza a taglio (tipicamente 0.4)
		Coefficiente fi	Coefficiente d'ingranamento utilizzato per la resistenza a taglio
		Coefficiente ksb	Coefficiente di riduzione della resistenza a compressione da utilizzare nello stress block
4	legno		
		E0,05	Modulo di elasticità corrispondente ad un frattile del 5%
		Resistenza fc0	Valore della resistenza a compressione parallela
		Resistenza ft0	Valore della resistenza a trazione parallela
		Resistenza fm	Valore della resistenza a flessione
		Resistenza fv	Valore della resistenza a taglio
		Resist. ft0k	Resistenza caratteristica (tensione amm. per REGLES) per trazione
		Resist. fmk	Resistenza caratteristica (tensione amm. per REGLES) per flessione
		Resist. fvk	Resistenza caratteristica (tensione amm. per REGLES) per taglio
		Modulo E0,05	Modulo elastico parallelo caratteristico
		Lamellare	lamellare o massiccio

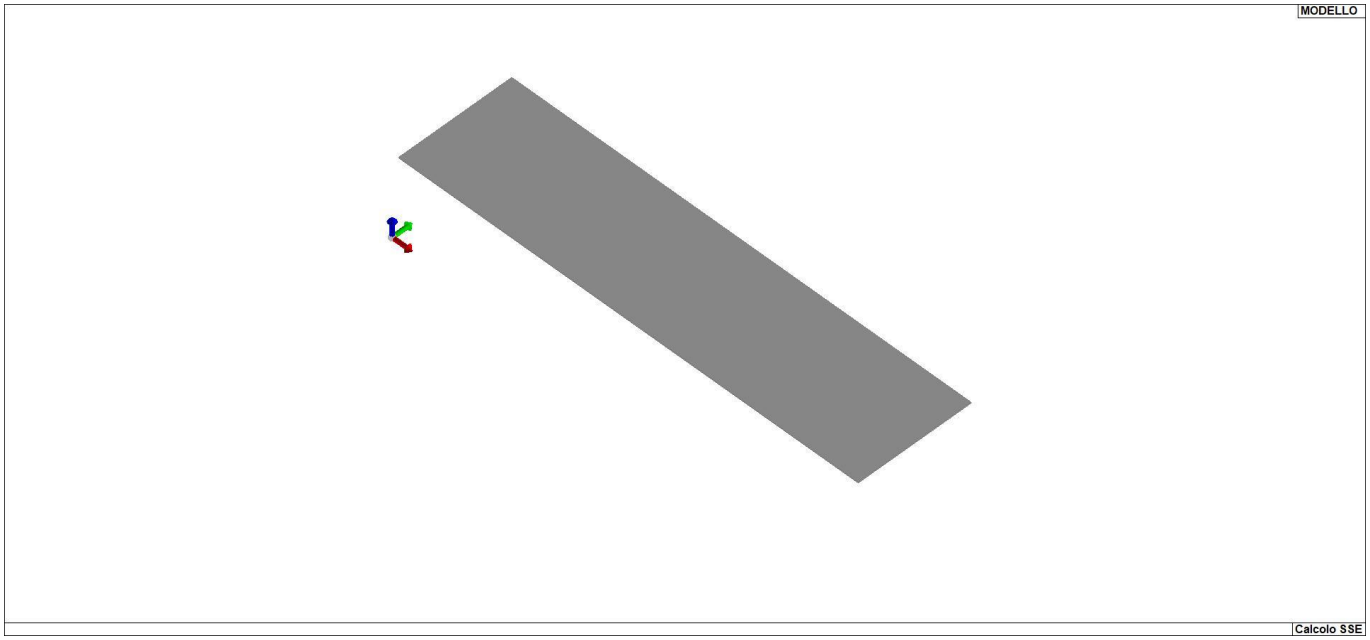
Nel tabulato si riportano sia i valori caratteristici che medi utilizzando gli uni e/o gli altri in relazione alle richieste di normativa ed alla tipologia di verifica. (Cap.7 NTC18 per materiali nuovi, Cap.8 NTC18 e relativa circolare 21/01/2019 per materiali esistenti, Linee Guida Reluis per incamiciatura CAM, CNR-DT 200 per interventi con FRP)

Vengono inoltre riportate le tabelle contenenti il riassunto delle informazioni assegnate nei criteri di progetto in uso.

Id	Tipo / Note	V. caratt.	V. medio	Young	Poisson	G	Gamma	Alfa	Altri
		daN/cm2	daN/cm2	daN/cm2		daN/cm2	daN/cm3		
1	Calcestruzzo Classe C25/30			3.145e+05	0.20	1.310e+05	2.50e-03	1.00e-05	
	Resistenza Rc	300.0							
	Resistenza fctm		25.6						
	Rapporto Rfessurata								1.00
	Coefficiente ksb								0.85
	Rapporto HRDb								1.00e-05
	Rapporto HRDv								1.00e-05



11_MOD_MATERIALI_D2



11_MOD_MATERIALI_SOLAI

Travi c.a.	**1/7/..**	**2/8/..**	**3/9/..**	**4/10/..**	**5/11/..**	**6/12/..**
Generalità						
Progetta a filo	NO					
Af inf: da q*L*L /	0.0					
Armatura						
Minima tesa	0.31					
Minima compressa	0.31					
Massima tesa	0.78					
Da sezione	SI					
Usa armatura teorica	NO					

Travi c.a.	1/7/..	2/8/..	3/9/..	4/10/..	5/11/..	6/12/..
Stati limite ultimi						
Tensione fy [daN/cm2]	4500.00					
Tensione fy staffe [daN/cm2]	4500.00					
Tipo acciaio	tipo C					
Coefficiente gamma s	1.15					
Coefficiente gamma c	1.50					
Verifiche con N costante	SI					
Fattore di ridistribuzione	0.0					
Modello per il confinamento						
Relazione tensio-deformativa	Mander					
Incrudimento acciaio	5.000e-03					
Fattore lambda	1.00					
epsilon max,s	4.000e-02					
epsilon cu2	4.500e-03					
epsilon c2	0.0					
epsilon cy	0.0					
Tensioni ammissibili						
Tensione amm. cls [daN/cm2]	97.50					
Tensione amm. acciaio [daN/cm2]	2600.00					
Rapporto omogeneizzazione N	15.00					
Massimo rapporto area compressa/tesa	1.00					
Staffe						
Diametro staffe	0.0					
Passo minimo [cm]	4.00					
Passo massimo [cm]	30.00					
Passo raffittito [cm]	15.00					
Lunghezza zona raffittita [cm]	50.00					
Ctg(Teta) Max	2.50					
Percentuale sagomati	0.0					
Luce di taglio per GR [cm]	1.00					
Adotta scorrimento medio	NO					
Torsione non essenziale inclusa	SI					

Pilastri c.a.	1/7/..	2/8/..	3/9/..	4/10/..	5/11/..	6/12/..
Generalità						
Progetto armatura	Privilegia lati					
Progetta a filo	NO					
Effetti del 2 ordine	SI					
Beta per 2-2	1.00					
Beta per 3-3	1.00					
Armatura						
Massima tesa	4.00					
Minima tesa	1.00					
Stati limite ultimi						
Tensione fy [daN/cm2]	4500.00					
Tensione fy staffe [daN/cm2]	4500.00					
Tipo acciaio	tipo C					
Coefficiente gamma s	1.15					
Coefficiente gamma c	1.50					
Verifiche con N costante	SI					
Modello per il confinamento						
Relazione tensio-deformativa	Mander					
Incrudimento acciaio	5.000e-03					
Fattore lambda	1.00					
epsilon max,s	4.000e-02					
epsilon cu2	4.500e-03					
epsilon c2	0.0					
epsilon cy	0.0					
Tensioni ammissibili						
Tensione amm. cls [daN/cm2]	97.50					
Tensione amm. acciaio [daN/cm2]	2600.00					
Rapporto omogeneizzazione N	15.00					
Staffe						
Diametro staffe	0.0					
Passo minimo [cm]	5.00					
Passo massimo [cm]	25.00					
Passo raffittito [cm]	15.00					
Lunghezza zona raffittita [cm]	45.00					
Ctg(Teta) Max	2.50					
Luce di taglio per GR [cm]	1.00					

Pilastri c.a.	1/7/..	2/8/..	3/9/..	4/10/..	5/11/..	6/12/..
Massimizza gerarchia	SI					

Solai e pannelli	1/7/..	2/8/..	3/9/..	4/10/..	5/11/..	6/12/..
Generalità						
Usa tensioni ammissibili	NO					
Af inf: da traliccio	SI					
Consenti armatura a taglio	NO					
Incrementa armatura longitudinale per taglio	SI					
Af inf: da q*L*L /	20.00					
Incremento fascia piena [cm]	5.00					
Armatura						
Minima tesa	0.15					
Massima tesa	3.00					
Minima compressa	0.0					
Af/h [cm]	7.000e-02					
Stati limite ultimi						
Tensione fy [daN/cm2]	4500.00					
Tipo acciaio	tipo C					
Coefficiente gamma s	1.15					
Coefficiente gamma c	1.50					
Fattore di ridistribuzione	0.0					
Tensioni ammissibili						
Tensione amm. cls [daN/cm2]	85.00					
Tensione amm. acciaio [daN/cm2]	2600.00					
Rapporto omogeneizzazione N	15.00					
Massimo rapporto area compressa/tesa	1.00					
Verifica freccia						
Infinita	250.00					
Istantanea	500.00					
Fattore viscosità	3.00					
Usa J non fessurato	NO					
Elementi non strutturali						
Tamponatura antiespulsione	NO					
Tamponatura con armatura	NO					
Fattore di struttura/comportamento	2.00					
Coefficiente gamma m	0.0					
Periodo Ta	0.0					
Altezza pannello	0.0					

MODELLAZIONE DELLE SEZIONI

LEGENDA TABELLA DATI SEZIONI

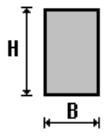
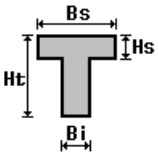
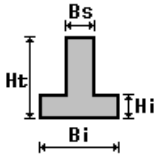
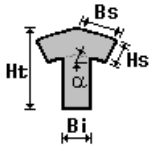
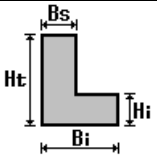
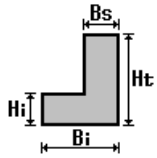
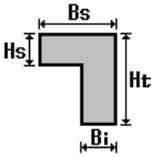
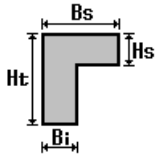
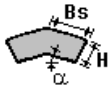
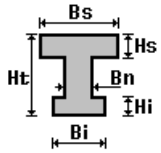
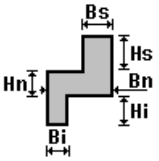
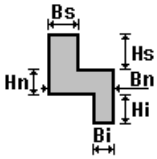
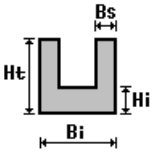
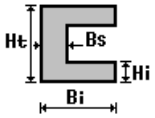
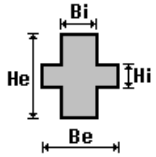
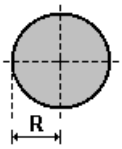
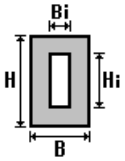
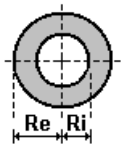
Il programma consente l'uso di sezioni diverse. Sono previsti i seguenti tipi di sezione:

1. sezione di tipo generico
2. profilati semplici
3. profilati accoppiati e speciali

Le sezioni utilizzate nella modellazione sono individuate da una sigla identificativa ed un codice numerico (gli elementi strutturali richiamano quest'ultimo nella propria descrizione). Per ogni sezione vengono riportati in tabella i seguenti dati:

Area	area della sezione
A V2	area della sezione/fattore di taglio (per il taglio in direzione 2)
A V3	area della sezione/fattore di taglio (per il taglio in direzione 3)
Jt	fattore torsionale di rigidezza
J2-2	momento d'inerzia della sezione riferito all'asse 2
J3-3	momento d'inerzia della sezione riferito all'asse 3
W2-2	modulo di resistenza della sezione riferito all'asse 2
W3-3	modulo di resistenza della sezione riferito all'asse 3
Wp2-2	modulo di resistenza plastico della sezione riferito all'asse 2
Wp3-3	modulo di resistenza plastico della sezione riferito all'asse 3

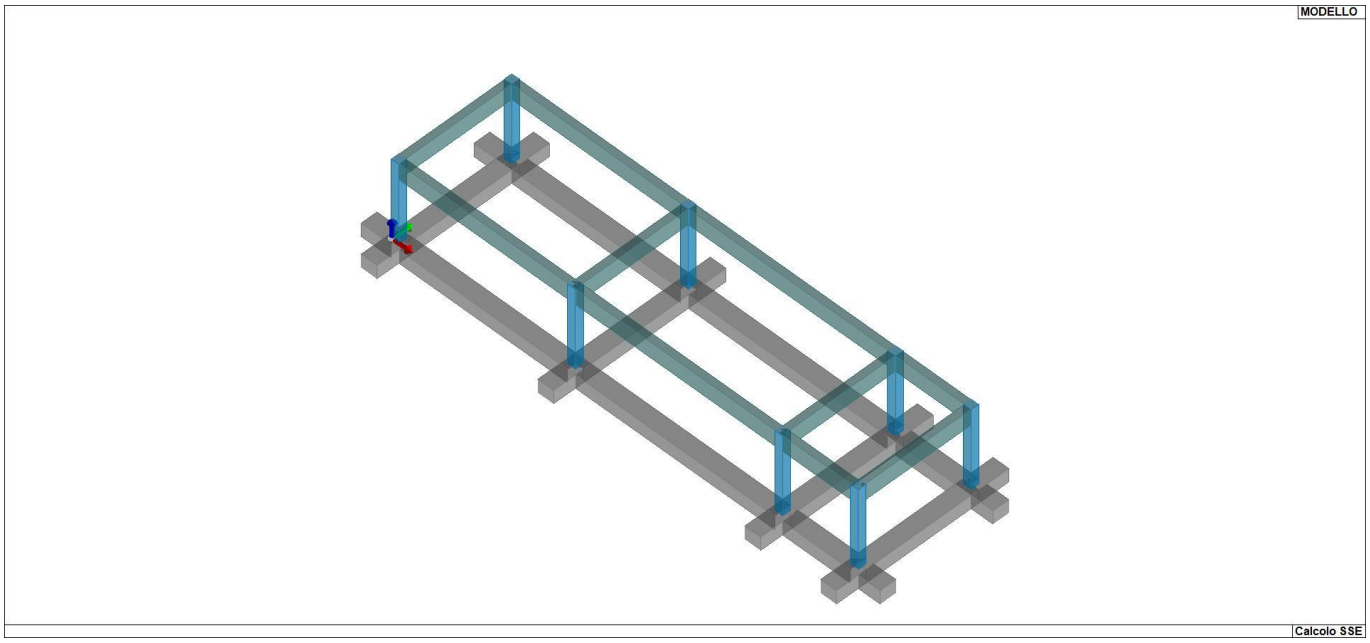
I dati sopra riportati vengono utilizzati per la determinazione dei carichi inerziali e per la definizione delle rigidezze degli elementi strutturali; qualora il valore di Area V2 (e/o Area V3) sia nullo la deformabilità per taglio V2 (e/o V3) è trascurata. La valutazione delle caratteristiche inerziali delle sezioni è condotta nel riferimento 2-3 dell'elemento.

 rettangolare	 a T	 a T rovescia	 a T di colmo	 a L	 a L specchiata
 a L specchiata rovescia	 a L rovescia	 a L di colmo	 a doppio T	 a quattro specchiata	 a quattro
 a U	 a C	 a croce	 circolare	 rettangolare cava	 circolare cava

Per quanto concerne i profilati semplici ed accoppiati l'asse 2 del riferimento coincide con l'asse x riportato nei più diffusi profilatari.

Per quanto concerne le sezioni di tipo generico (tipo 1.):
i valori dimensionali con prefisso B sono riferiti all'asse 2
i valori dimensionali con prefisso H sono riferiti all'asse 3

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
1	Travi rovesce-Rettangolare: b=60 h=50	3000.00	2500.00	2500.00	1.246e+06	9.000e+05	6.250e+05	3.000e+04	2.500e+04	4.500e+04	3.750e+04
2	Pilastri-Rettangolare: b=30 h=30	900.00	750.00	750.00	1.139e+05	6.750e+04	6.750e+04	4500.00	4500.00	6750.00	6750.00
3	Travi in elevazione-Rettangolare: b=25 h=60	1500.00	1250.00	1250.00	2.305e+05	7.813e+04	4.500e+05	6250.00	1.500e+04	9375.00	2.250e+04
13	T ribassata: bi=12.00 ht=24.00 bs=50.00 hs=4.00	440.00	0.0	0.0	1.048e+04	4.455e+04	2.398e+04	1781.87	1551.37	2138.24	1861.65



13_MOD_SEZIONI

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

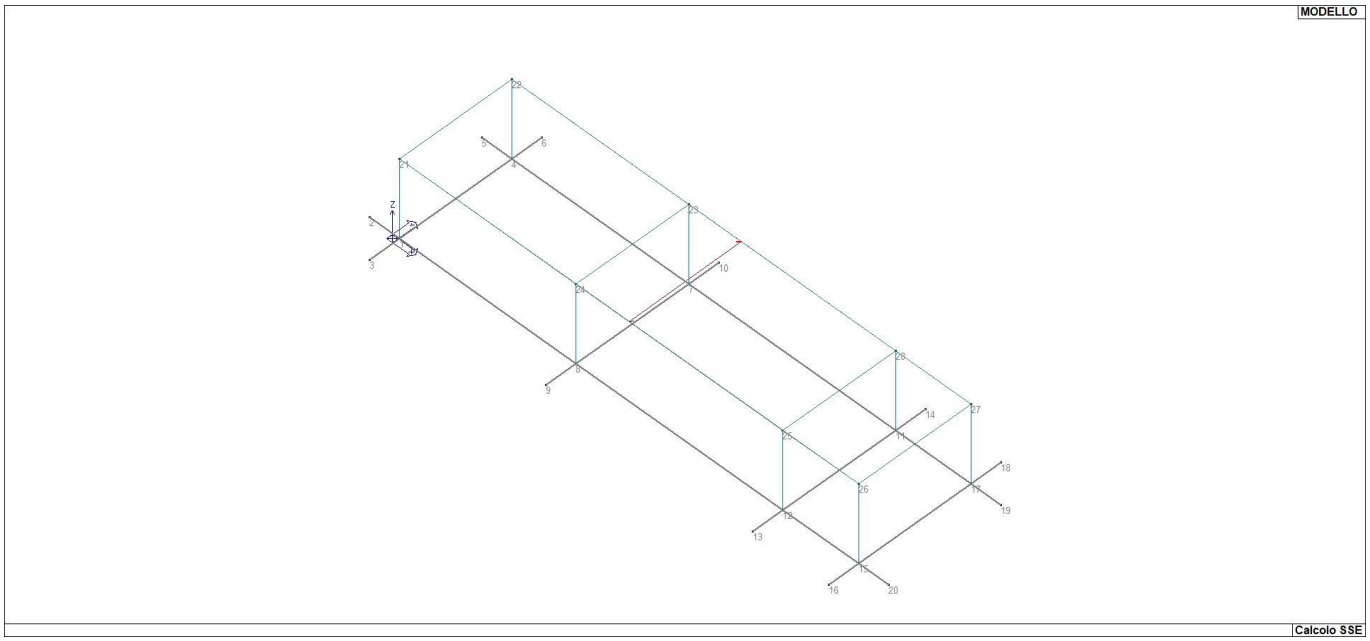
Per i nodi ai quali sia associato un codice di vincolamento rigido, un codice di fondazione speciale o un set di molle viene indicato in tabella:

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).

Per strutture sismicamente isolate viene inoltre inserita la tabella delle caratteristiche per gli isolatori utilizzati; le caratteristiche sono indicate in conformità al cap. 7.10 del D.M. 17/01/18

TABELLA DATI NODI

Nodo	X	Y	Z	Nodo	X	Y	Z	Nodo	X	Y	Z
	cm	cm	cm		cm	cm	cm		cm	cm	cm
1	12.5	12.5	0.0	2	-100.0	12.5	0.0	3	12.5	-100.0	0.0
4	12.5	437.5	0.0	5	-100.0	437.5	0.0	6	12.5	550.0	0.0
7	677.5	437.5	0.0	8	677.5	12.5	0.0	9	677.5	-100.0	0.0
10	677.5	550.0	0.0	11	1457.5	437.5	0.0	12	1457.5	12.5	0.0
13	1457.5	-100.0	0.0	14	1457.5	550.0	0.0	15	1742.5	12.5	0.0
16	1742.5	-100.0	0.0	17	1742.5	437.5	0.0	18	1742.5	550.0	0.0
19	1855.0	437.5	0.0	20	1855.0	12.5	0.0	21	12.5	12.5	
300.0											
22	12.5	437.5	300.0	23	677.5	437.5	300.0	24	677.5	12.5	
300.0											
25	1457.5	12.5	300.0	26	1742.5	12.5	300.0	27	1742.5	437.5	
300.0											
28	1457.5	437.5	300.0								

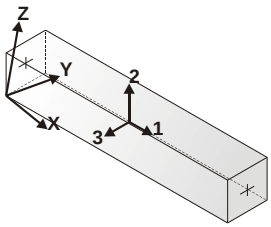


14_MOD_NUMERAZIONE_NODI

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.



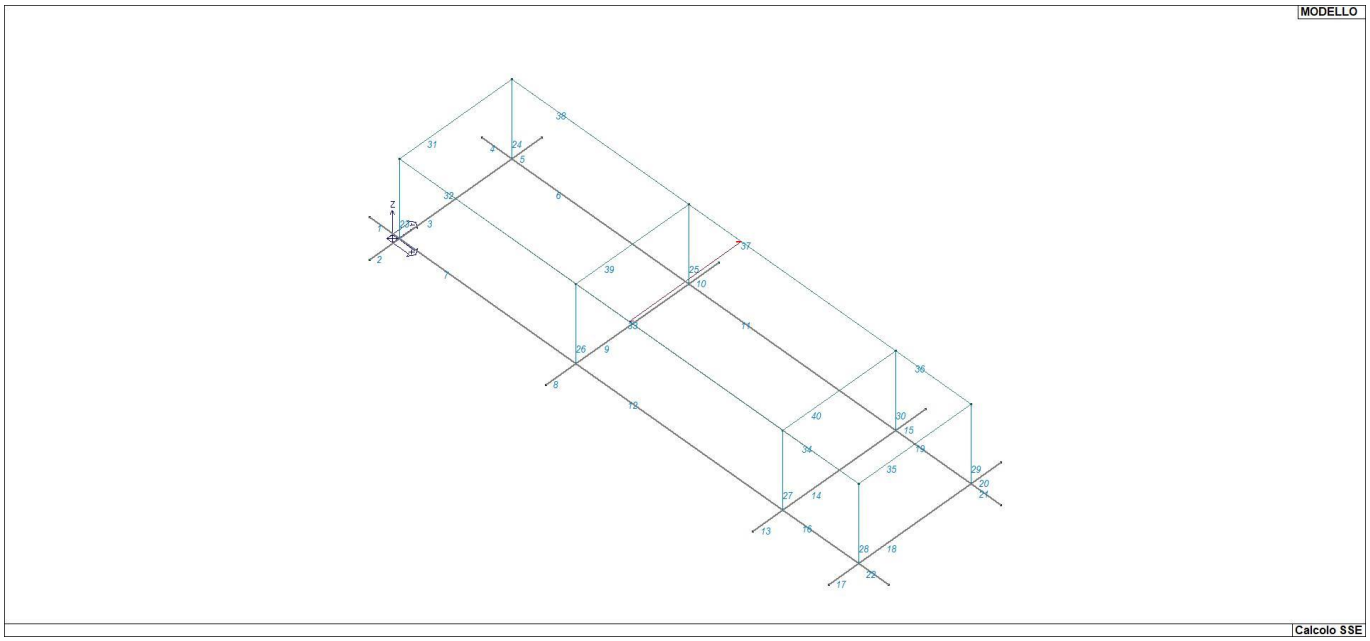
orientamento elementi 2D non verticali

orientamento elementi 2D verticali

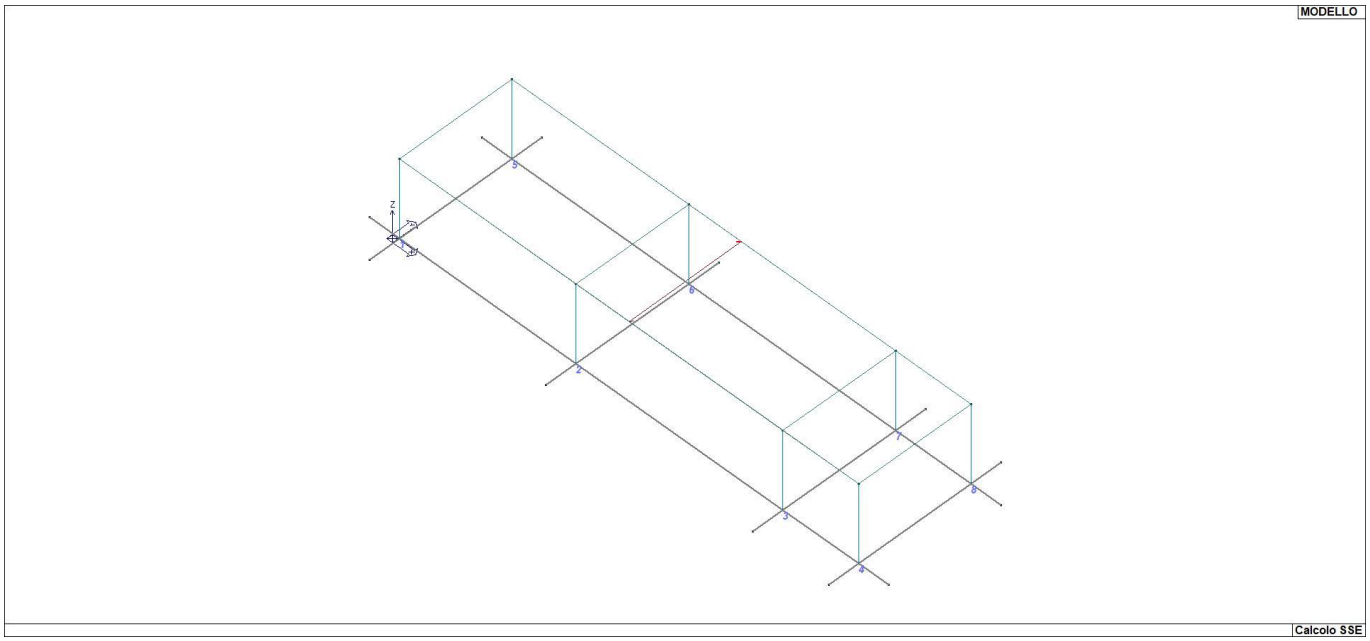
In particolare per ogni elemento viene indicato in tabella:

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

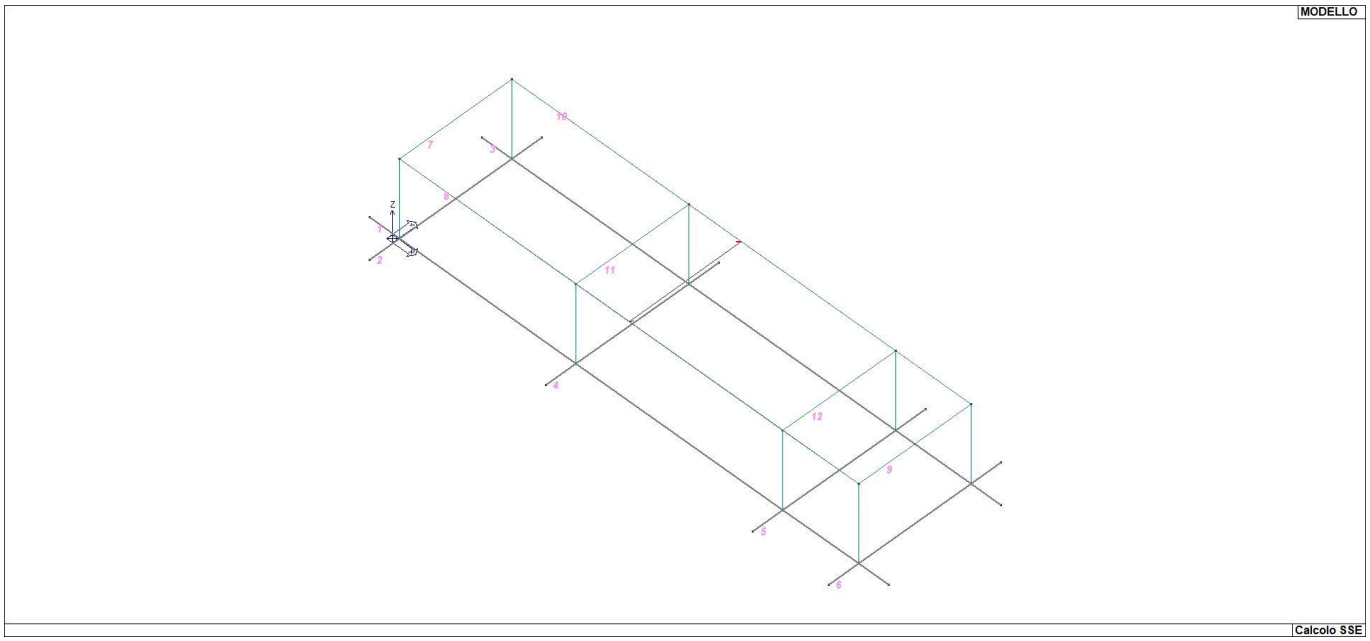
Elem.	Note	Nodo I	Nodo J	Mat.	Sez.	Crit.	Rotaz.	Svincolo I	Svincolo J	Wink V	Wink O
							gradi			daN/cm3	daN/cm3
1	Trave f.	2	1	1	1	1				2.96	1.76
2	Trave f.	3	1	1	1	1				2.96	1.75
3	Trave f.	1	4	1	1	1				2.96	1.75
4	Trave f.	5	4	1	1	1				2.96	1.76
5	Trave f.	4	6	1	1	1				2.96	1.75
6	Trave f.	4	7	1	1	1				2.96	1.76
7	Trave f.	1	8	1	1	1				2.96	1.76
8	Trave f.	9	8	1	1	1				2.96	1.75
9	Trave f.	8	7	1	1	1				2.96	1.75
10	Trave f.	7	10	1	1	1				2.96	1.75
11	Trave f.	7	11	1	1	1				2.96	1.76
12	Trave f.	8	12	1	1	1				2.96	1.76
13	Trave f.	13	12	1	1	1				2.96	1.75
14	Trave f.	12	11	1	1	1				2.96	1.75
15	Trave f.	11	14	1	1	1				2.96	1.75
16	Trave f.	12	15	1	1	1				2.96	1.76
17	Trave f.	16	15	1	1	1				2.96	1.75
18	Trave f.	15	17	1	1	1				2.96	1.75
19	Trave f.	11	17	1	1	1				2.96	1.76
20	Trave f.	17	18	1	1	1				2.96	1.75
21	Trave f.	17	19	1	1	1				2.96	1.76
22	Trave f.	15	20	1	1	1				2.96	1.76
23	Pilas.	1	21	1	2	1					
24	Pilas.	4	22	1	2	1					
25	Pilas.	7	23	1	2	1					
26	Pilas.	8	24	1	2	1					
27	Pilas.	12	25	1	2	1					
28	Pilas.	15	26	1	2	1					
29	Pilas.	17	27	1	2	1					
30	Pilas.	11	28	1	2	1					
31	Trave	21	22	1	3	1					
32	Trave	21	24	1	3	1					
33	Trave	24	25	1	3	1					
34	Trave	25	26	1	3	1					
35	Trave	26	27	1	3	1					
36	Trave	28	27	1	3	1					
37	Trave	23	28	1	3	1					
38	Trave	22	23	1	3	1					
39	Trave	24	23	1	3	1					
40	Trave	25	28	1	3	1					



15_MOD_NUMERAZIONE_D2



15_MOD_NUMERAZIONE_D2_PILASTRATE



15_MOD_NUMERAZIONE_D2_TRAVATE

MODELLAZIONE DELLA STRUTTURA: ELEMENTI SOLAIO-PANNELLO

LEGENDA TABELLA DATI SOLAI-PANNELLI

Il programma utilizza per la modellazione elementi a tre o più nodi denominati in generale solaio o pannello.
Ogni elemento solaio-pannello è individuato da una poligonale di nodi 1,2, ..., N.
L'elemento solaio è utilizzato in primo luogo per la modellazione dei carichi agenti sugli elementi strutturali. In secondo luogo può essere utilizzato per la corretta ripartizione delle forze orizzontali agenti nel proprio piano.
L'elemento balcone è derivato dall'elemento solaio.
I carichi agenti sugli elementi solaio, raccolti in un archivio, sono direttamente assegnati agli elementi utilizzando le informazioni raccolte nell' archivio (es. i coefficienti combinatori). La tabella seguente riporta i dati utilizzati per la definizione dei carichi e delle masse.
L'elemento pannello è utilizzato solo per l'applicazione dei carichi, quali pesi delle tamponature o spinte dovute al vento o terre. In questo caso i carichi sono applicati in analogia agli altri elementi strutturali (si veda il cap. SCHEMATIZZAZIONE DEI CASI DI CARICO).

Id.Arch.	Identificativo dell' archivio
Tipo	Tipo di carico ***Variab.*** Carico variabile generico ***Var. rid.*** Carico variabile generico con riduzione in funzione dell' area (c.5.5. …) ***Neve*** Carico di neve
G1k	carico permanente (comprensivo del peso proprio)
G2k	carico permanente non strutturale e non compiutamente definito
Qk	carico variabile
Fatt. A	fattore di riduzione del carico variabile (0.5 o 0.75) per tipo "Var.rid."
S sis.	fattore di riduzione del carico variabile per la definizione delle masse sismiche per D.M. 96 (vedi NOTA sul capitolo "normativa di riferimento")
Psi 0	Coefficiente combinatorio dei valori caratteristici delle azioni variabili: ***per valore raro***
Psi 1	Coefficiente combinatorio dei valori caratteristici delle azioni variabili: ***per valore frequente***
Psi 2	Coefficiente combinatorio dei valori caratteristici delle azioni variabili: ***per valore quasi permanente***
Psi S 2	Coefficiente di combinazione che fornisce il valore quasi-permanente dell'azione variabile: ***per la definizione delle masse sismiche***
Fatt. Fi	Coefficiente di correlazione dei carichi per edifici

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
Tipo	codice di comportamento ***S*** elemento utilizzato solo per scarico ***C*** elemento utilizzato per scarico e per modellazione piano rigido ***P*** elemento utilizzato come pannello ***M*** scarico monodirezionale ***B*** scarico bidirezionale
Id.Arch.	Identificativo dell' archivio
Mat	codice del materiale assegnato all'elemento
Spessore	spessore dell'elemento (costante)
Orditura	angolo (rispetto all'asse X) della direzione dei travetti principali

Gk	carico permanente solaio (comprensivo del peso proprio)
Qk	carico variabile solaio
Nodi	numero dei nodi che definiscono l'elemento (5 per riga)

Nel caso in cui si sia proceduto alla progettazione dei solai con le tensioni ammissibili vengono riportate le massime tensioni nell'elemento (massima compressione nel calcestruzzo, massima tensione nell'acciaio, massima tensione tangenziale); nel caso in cui si sia proceduto alla progettazione con il metodo degli stati limite vengono riportati il rapporto x/d e le verifiche per sollecitazioni proporzionali nonché le verifiche in esercizio.

In particolare i simboli utilizzati in tabella assumono il seguente significato:

Elem.	numero identificativo dell'elemento
Stato	Codici di verifica relativi alle tensioni normali e alle tensioni tangenziali
Note	Viene riportato il codice relativo alla sezione(s) e relativo al materiale(m);
Pos.	Ascissa del punto di verifica
F ist, F infi	Frecce instantanee e a tempo infinito
Momento	Momento flettente
Taglio	Sollecitazione di taglio
Af inf.	Area di armatura longitudinale posta all'intradosso della trave
Af sup.	Area di armatura longitudinale posta all'estradosso della trave
AfV	Area dell'armatura atta ad assorbire le azioni di taglio
Beff	Base della sezione di cls per l'assorbimento del taglio
	simboli utilizzati con il metodo delle tensioni ammissibili:
sc max	Massima tensione di compressione del calcestruzzo
sf max	Massima tensione nell'acciaio
tau max	Massima tensione tangenziale nel cls
	simboli utilizzati con il metodo degli stati limite:
x/d	rapporto tra posizione dell'asse neutro e altezza utile alla rottura della sezione (per sola flessione)
verif.	rapporto Sd/Su con sollecitazioni ultime proporzionali: valore minore o uguale a 1 per verifica positiva
Verif.V	rapporto Sd/Su con sollecitazioni taglianti proporzionali valore minore o uguale a 1 per verifica positiva
rRfck	rapporto tra la massima compressione nel calcestruzzo e la tensione fck in combinazioni rare [normalizzato a 1]
rFfck	rapporto tra la massima compressione nel calcestruzzo e la tensione fck in combinazioni frequenti [normalizzato a 1]
rPfck	rapporto tra la massima compressione nel calcestruzzo e la tensione fck in combinazioni quasi permanenti [normalizzato a 1]
rRfyk	rapporto tra la massima tensione nell'acciaio e la tensione fyk in combinazioni frequenti [normalizzato a 1]
rFyk	rapporto tra la massima tensione nell'acciaio e la tensione fyk in combinazioni rare [normalizzato a 1]
rPfyk	rapporto tra la massima tensione nell'acciaio e la tensione fyk in combinazioni quasi permanenti [normalizzato a 1]
wR	apertura caratteristica delle fessure in combinazioni rare [mm]
wF	apertura caratteristica delle fessure in combinazioni frequenti [mm]
wP	apertura caratteristica delle fessure in combinazioni quasi permanenti [mm]

Nel caso in cui si sia proceduto alla verifica delle tamponature secondo il D.M. 17.01.2018 - §7.2.3 viene riportata una tabella riassuntiva delle verifiche degli elementi pannello. La verifica confronta i momenti

sollecitanti indotti dal sisma con i momenti resistenti, secondo tre ipotesi, due basate sulla resistenza a pressoflessione della tamponatura ed una basata sul cinematismo a seguito della formazione di tre cerniere plastiche sulla tamponatura (rif. Ufficio di Vigilanza sulle Costruzioni, Provincia di Terni).
Qualora la tamponatura sia di tipo antiespulsione (nelle due possibili varianti ordinaria o armata) viene condotta una verifica con meccanismo ad arco con degrado di resistenza. La verifica confronta le pressioni sollecitanti indotte dal sisma con le pressioni resistenti che la tamponatura sviluppa attraverso il meccanismo ad arco. La verifica considera anche il degrado di resistenza dovuto al danneggiamento nel piano della tamponatura.
Per quest'ultima tamponatura sono disponibili, in funzione del materiale impiegato (materiale [52] o materiale [53]):

- **Tamponatura Antiespulsione ordinaria Poroton® Cis Edil** sp.30 cm; con metodo di verifica per meccanismo ad arco con degrado di resistenza, sviluppato attraverso i risultati di un progetto di ricerca sperimentale condotto dall'Università degli Studi di Padova.
  Utilizzabile per il materiale [52].
- **Tamponatura Antiespulsione armata Poroton® Cis Edil** sp.30 cm; con metodo di verifica per meccanismo ad arco con degrado di resistenza, sviluppato attraverso i risultati di un progetto di ricerca sperimentale condotto dall'Università degli Studi di Padova.
  Utilizzabile per il materiale [53].

La verifica è stata calibrata sulla base di prove sperimentali sul sistema di Tamponatura Antiespulsione anche in presenza di aperture.
(rif. Rapporti di Prova redatti dal Dipartimento ICEA - Università degli Studi di Padova di test sperimentali condotti sul sistema Tamponatura Antiespulsione di Cis Edil)

In particolare i simboli utilizzati in tabella assumono il seguente significato:

Elem.	Numero identificativo dell'elemento
Stato	Codice di verifica
Ver. c.c.	Verifica nell'ipotesi di trave appoggiata con carico concentrato in mezzeria
Ver. c.d.	Verifica nell'ipotesi di trave appoggiata con carico distribuito
Ver. c.cin.	Verifica nell'ipotesi di cinematismo con formazione di cerniere plastiche in appoggio e mezzeria
Ver. CIS	Rapporto pa/pr (valore minore o uguale a 1 per verifica positiva)
Z	Quota del baricentro dell'elemento
T1	Periodo proprio dell'edificio nella direzione di interesse (ortogonale al pannello)
Ta	Periodo proprio della parete
Sa	Accelerazione massima, adimensionalizzata allo SLV
pa	Pressione sulla parete causata dall'azione sismica
pr	Pressione resistente del meccanismo ad arco
Drift	Spostamento relativo interpiano allo SLV valutato secondo il D.M. 14.01.2018 - § 7.3.3.3
Beta a	Coef. riduttivo per tener conto del danneggiamento del piano dipendente dallo spostamento, ottenuto sperimentalmente

ID Arch.	Tipo	G1k	G2k	Qk	Fatt. A	s sis.	Psi 0	Psi 1	Psi 2	Psi S 2	Fatt. Fi
		daN/ m2	daN/ m2	daN/ m2							
1	Variab.	450.00	100.00	200.00		1.00	0.70	0.50	0.30	0.30	1.00

Elem.	Tipo	ID Arch.	Mat.	Spessore	Orditura	G1k	G2k	Qk	Nodo 1/6..	Nodo 2/7..	Nodo 3/8..	Nodo..	Nodo..
						daN/ m2	daN/ m2	daN/ m2					
1	CM	1	m=1	4.0	90.0	450.00	100.00	200.00	22	21	26	27	

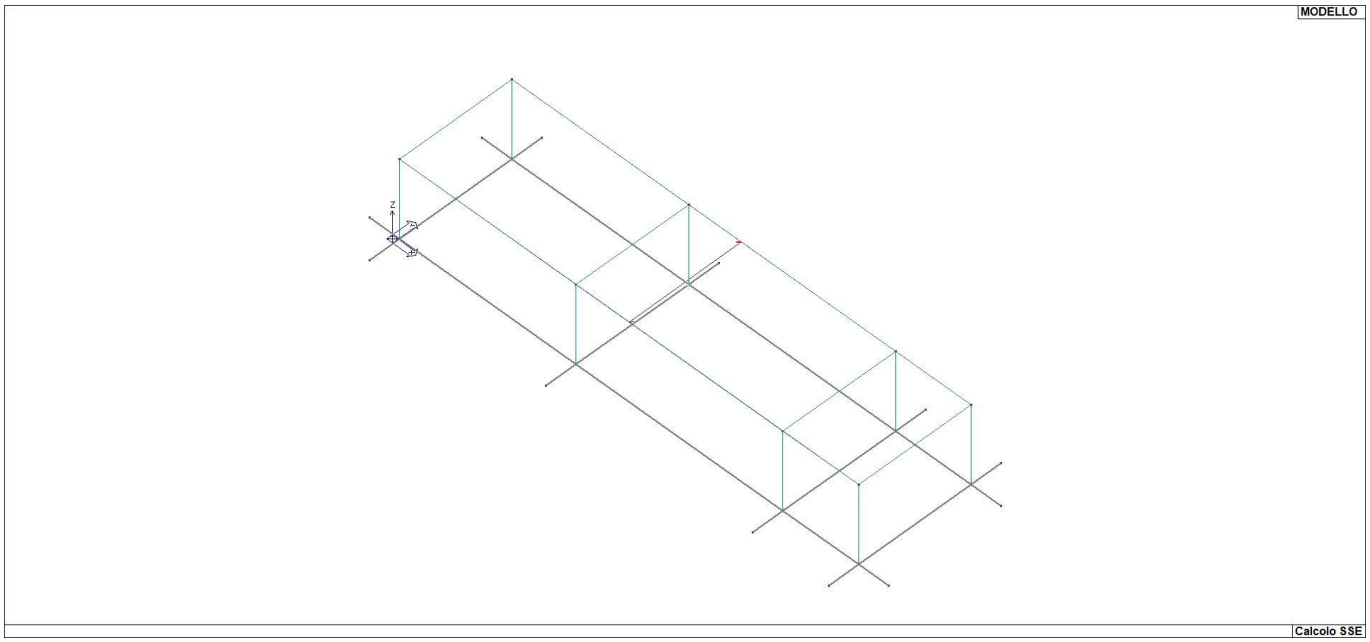
Elem.	Stato	Note	f ist	f infi	Pos.	Momento	Af inf.	Af. sup	V N/M	x/d	Taglio	Af V	verif. V B

eff												
		cm	cm	cm	daN cm	cm2	cm2			daN	cm2	
cm												
1	ok Ls=13,m=1	-0.20	-0.31	0.0	-1.951e+05	1.47	4.73	0.49	0.11	-5737.50	0.0	1.00
50.0												
				127.5	3.170e+05	5.26	0.0	0.73	0.16	-2295.00	0.0	1.00
12.0												
				212.5	4.145e+05	5.31	0.0	0.95	0.16	0.0	0.0	0.0
12.0												
				297.5	3.170e+05	5.26	0.0	0.73	0.16	2295.00	0.0	1.00
12.0												
				425.0	-1.951e+05	1.47	4.73	0.49	0.11	5737.50	0.0	1.00
50.0												

Elem.	**f ist**	**f infi**	**Momento**	**Af inf.**	**Af. sup**	**V N/M**	**x/d**	**Taglio**	**Af V**	**verif. V**
			-1.951e+05					-5737.50		
	-0.20	-0.31	4.145e+05	5.31	4.73	0.95	0.16	5737.50	0.0	1.00

Elem.	**Pos.**	**rRfck**	**rFfck**	**rPfck**	**rRfyk**	**rFfyk**	**rPfyk**	**wR**	**wF**	**wP**
	cm							mm	mm	mm
1	0.0	0.06	0.05	0.07	0.10	0.08	0.08	0.0	0.0	0.0
	127.5	0.11	0.10	0.12	0.14	0.12	0.12	5.97e-03	0.0	0.0
	212.5	0.15	0.13	0.16	0.18	0.16	0.15	7.68e-03	7.51e-03	
6.82e-03										
	297.5	0.11	0.10	0.12	0.14	0.12	0.12	5.97e-03	0.0	0.0
	425.0	0.06	0.05	0.07	0.10	0.08	0.08	0.0	0.0	0.0

Elem.		**rRfck**	**rFfck**	**rPfck**	**rRfyk**	**rFfyk**	**rPfyk**	**wR**	**wF**	**wP**
		0.15	0.13	0.16	0.18	0.16	0.15	7.68e-03	7.51e-03	
6.82e-03										



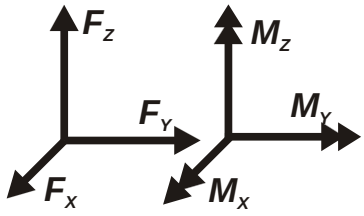
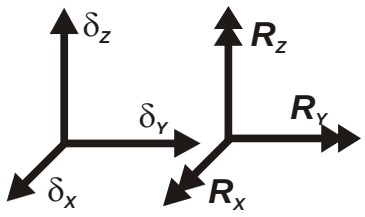
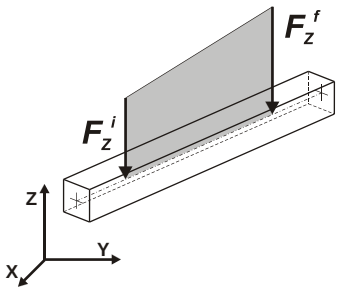
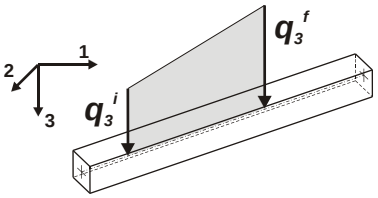
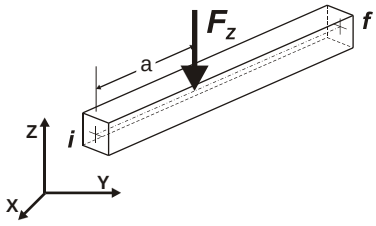
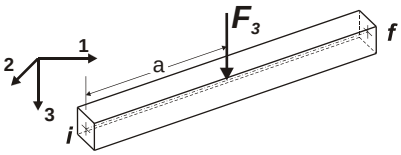
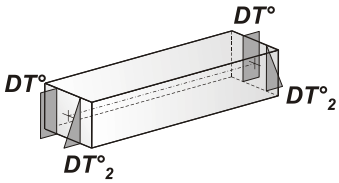
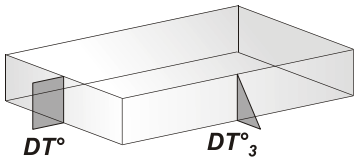
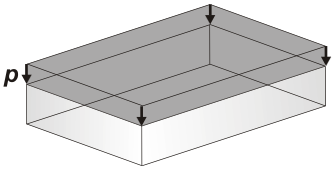
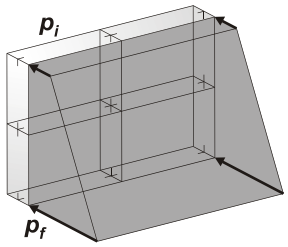
17_MOD_NUMERAZIONE_SOLAI

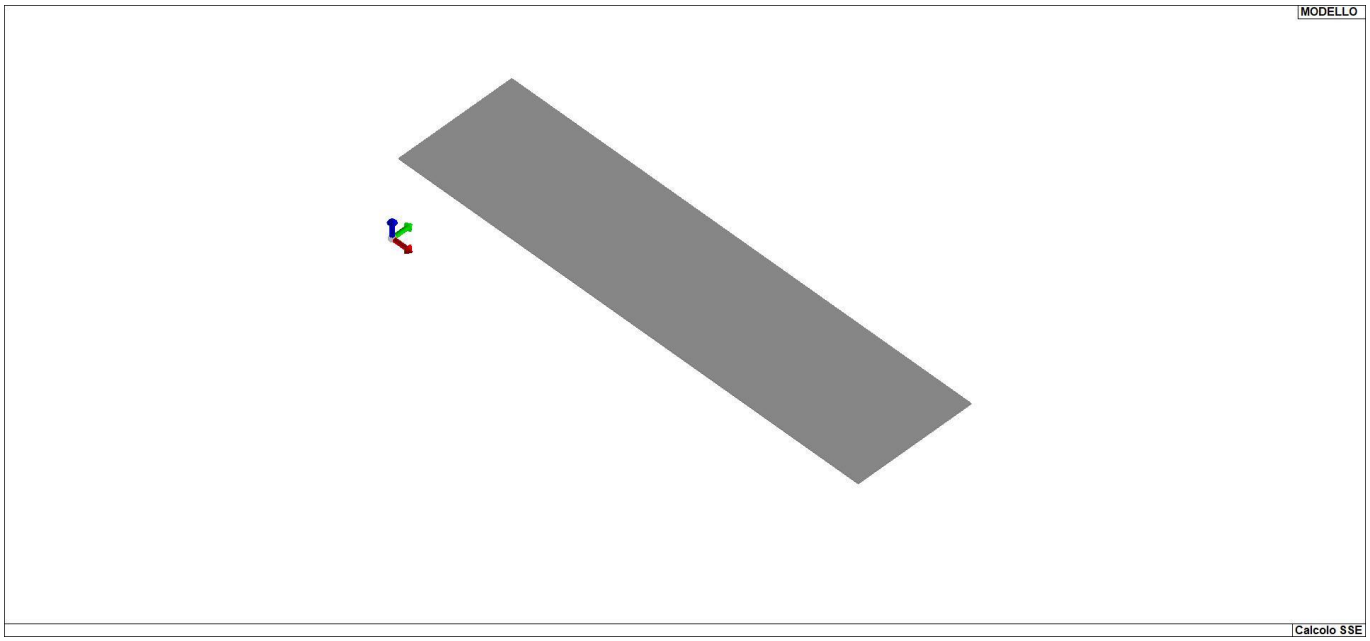
MODELLAZIONE DELLE AZIONI

LEGENDA TABELLA DATI AZIONI

Il programma consente l'uso di diverse tipologie di carico (azioni). Le azioni utilizzate nella modellazione sono individuate da una sigla identificativa ed un codice numerico (gli elementi strutturali richiamano quest'ultimo nella propria descrizione). Per ogni azione applicata alla struttura viene di riportato il codice, il tipo e la sigla identificativa. Le tabelle successive dettagliano i valori caratteristici di ogni azione in relazione al tipo. Le tabelle riportano infatti i seguenti dati in relazione al tipo:

1	**carico concentrato nodale** 6 dati (forza Fx, Fy, Fz, momento Mx, My, Mz)
2	**spostamento nodale impresso** 6 dati (spostamento Tx,Ty,Tz, rotazione Rx,Ry,Rz)
3	**carico distribuito globale su elemento tipo trave** 7 dati (fx,fy,fz,mx,my,mz,ascissa di inizio carico) 7 dati (fx,fy,fz,mx,my,mz,ascissa di fine carico)
4	**carico distribuito locale su elemento tipo trave** 7 dati (f1,f2,f3,m1,m2,m3,ascissa di inizio carico) 7 dati (f1,f2,f3,m1,m2,m3,ascissa di fine carico)
5	**carico concentrato globale su elemento tipo trave** 7 dati (Fx,Fy,Fz,Mx,My,Mz,ascissa di carico)
6	**carico concentrato locale su elemento tipo trave** 7 dati (F1, F2, F3, M1, M2, M3, ascissa di carico)
7	**variazione termica applicata ad elemento tipo trave** 7 dati (variazioni termiche: uniforme, media e differenza in altezza e larghezza al nodo iniziale e finale)
8	**carico di pressione uniforme su elemento tipo piastra** 1 dato (pressione)
9	**carico di pressione variabile su elemento tipo piastra** 4 dati (pressione, quota, pressione, quota)
10	**variazione termica applicata ad elemento tipo piastra** 2 dati (variazioni termiche: media e differenza nello spessore)
11	**carico variabile generale su elementi tipo trave e piastra** 1 dato descrizione della tipologia 4 dati per segmento (posizione, valore, posizione, valore) la tipologia precisa l'ascissa di definizione, la direzione del carico, la modalità di carico e la larghezza d'influenza per gli elementi tipo trave
12	**gruppo di carichi con impronta su piastra** 9 dati (numero di ripetizioni in direzione X e Y, valore di ciascun carico, posizione centrale del primo, dimensioni dell' impronta, interasse tra i carichi

	Carico concentrato nodale
	Spostamento impresso
	Carico distribuito globale
	Carico distribuito locale
	Carico concentrato globale
	Carico concentrato locale
	Carico termico 2D
	Carico termico 3D
	Carico pressione uniforme
	Carico pressione variabile



21_CAR_CARICHI_SOLAI

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 equivalente
10	**Edk**	SA	caso di carico sismico con analisi dinamica
11	**Etk**	NA	caso di carico comprensivo di azioni derivanti dall' incremento di spinta delle terre in condizione sismica
12	**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.

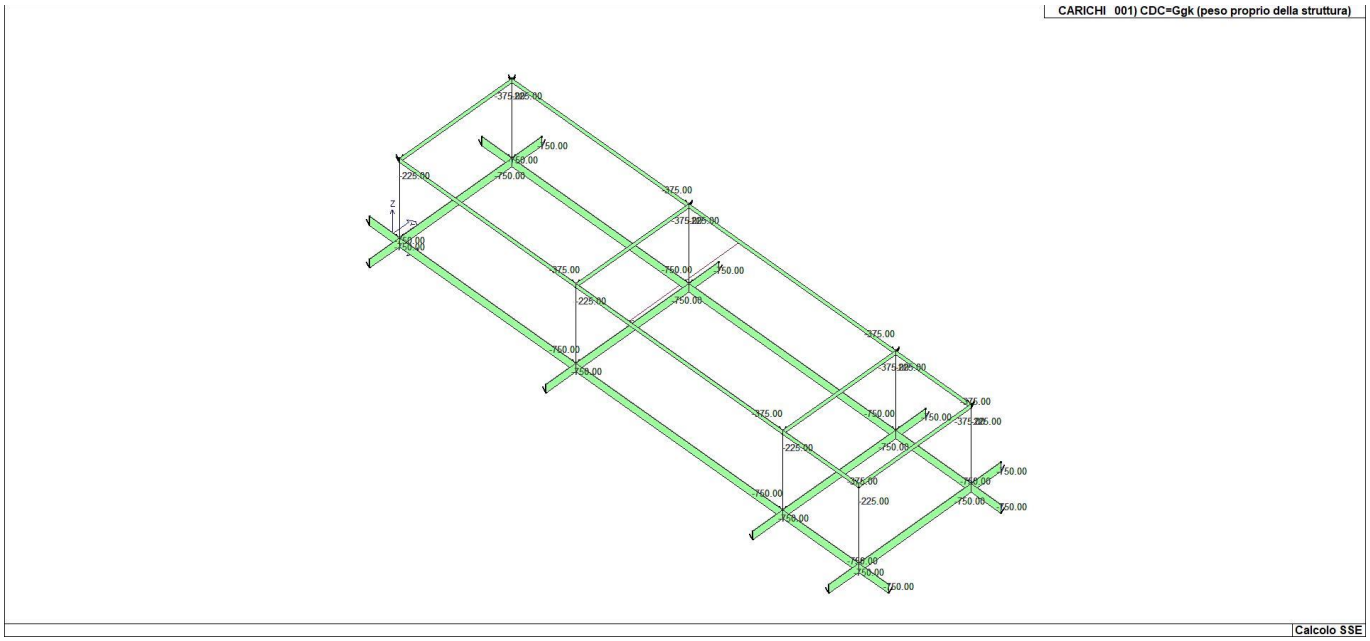
Nella tabella successiva vengono riportati i casi di carico agenti sulla struttura, con l'indicazione dei dati relativi al caso di carico stesso:
Numero Tipo e *Sigla identificativa*, *Valore di riferimento* del caso di carico (se previsto).

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.

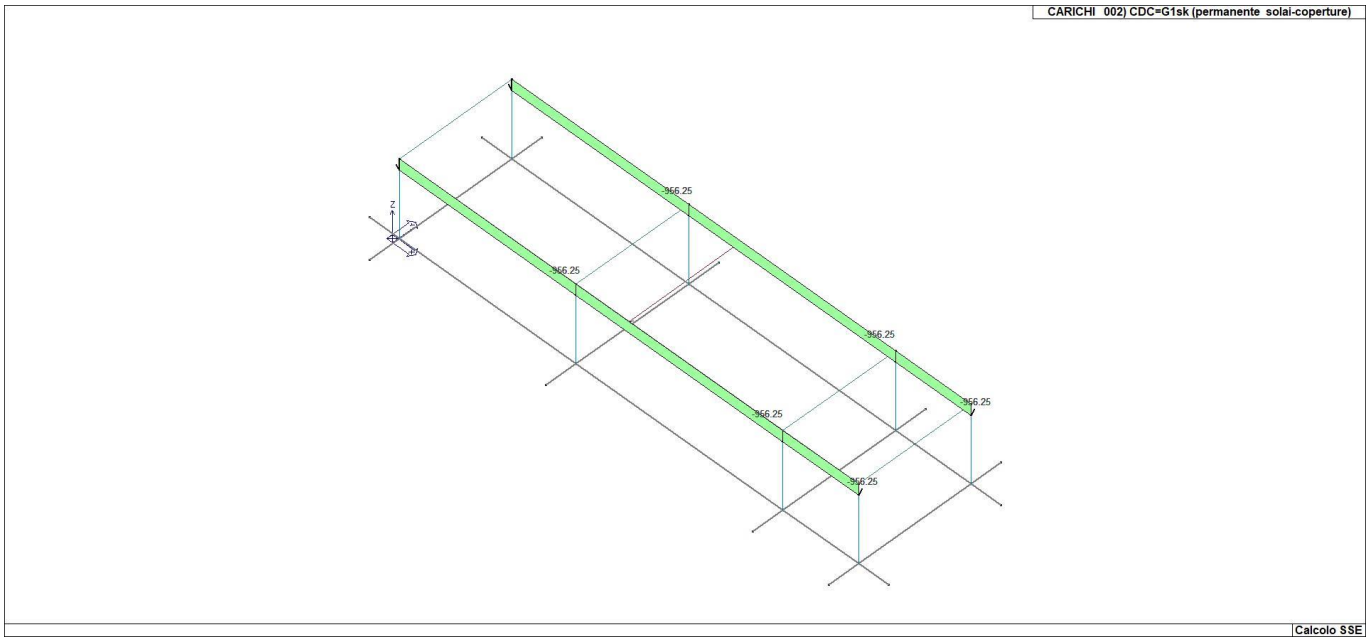
Per i casi di carico di tipo sismico (9-Esk e 10-Edk), viene riportata la tabella di definizione delle masse: per ogni caso di carico partecipante alla definizione delle masse viene indicata la relativa aliquota (partecipazione) considerata. Si precisa che per i caso di carico 5-Qsk e 6-Qnk la partecipazione 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	Gsk	CDC=G1sk (permanente solai-coperture)	
3	Gsk	CDC=G2sk (permanente solai-coperture n.c.d.)	
4	Qsk	CDC=Qsk (variabile solai)	
5	Edk	CDC=Ed (dinamico SLU) alfa=0.0 (ecc. +)	partecipazione:1.00 per 1 CDC=Ggk (peso proprio della struttura)
			partecipazione:1.00 per 2 CDC=G1sk (permanente solai-coperture)

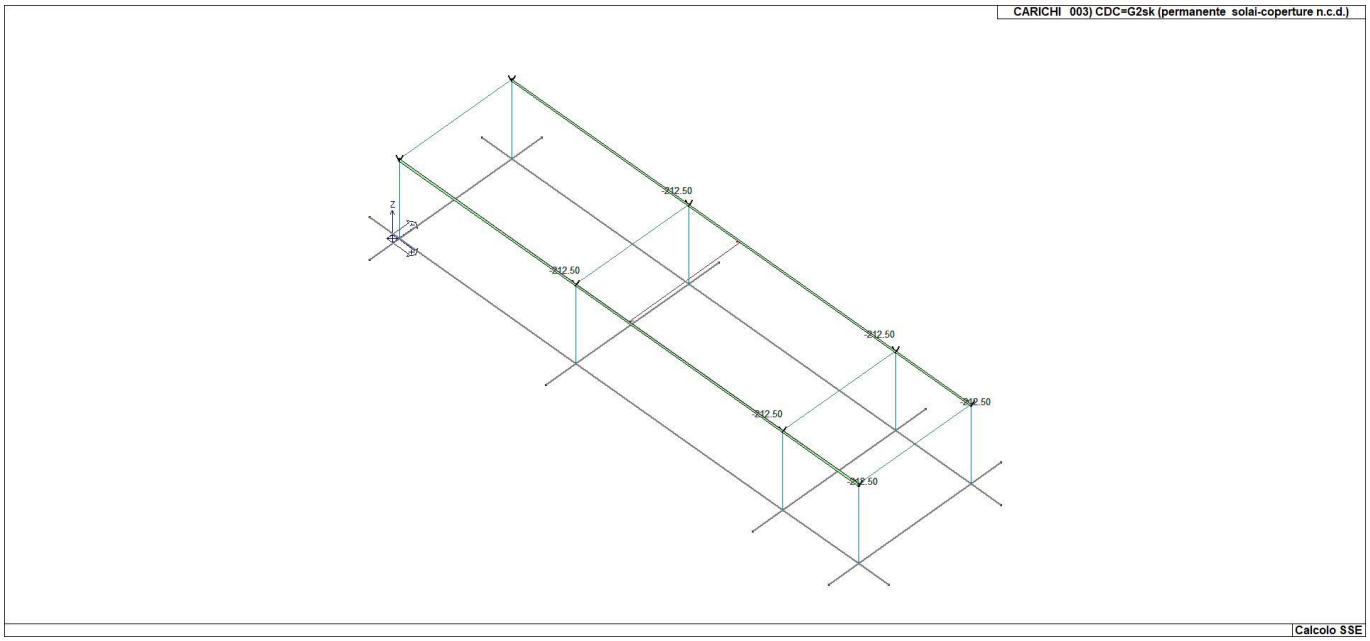
CDC	Tipo	Sigla Id	Note
			partecipazione:1.00 per 3 CDC=G2sk (permanente solai-coperture n.c.d.)
			partecipazione:1.00 per 4 CDC=Qsk (variabile solai)
6	Edk	CDC=Ed (dinamico SLU) alfa=0.0 (ecc. -)	come precedente CDC sismico
7	Edk	CDC=Ed (dinamico SLU) alfa=90.00 (ecc. +)	come precedente CDC sismico
8	Edk	CDC=Ed (dinamico SLU) alfa=90.00 (ecc. -)	come precedente CDC sismico
9	Edk	CDC=Ed (dinamico SLD) alfa=0.0 (ecc. +)	come precedente CDC sismico
10	Edk	CDC=Ed (dinamico SLD) alfa=0.0 (ecc. -)	come precedente CDC sismico
11	Edk	CDC=Ed (dinamico SLD) alfa=90.00 (ecc. +)	come precedente CDC sismico
12	Edk	CDC=Ed (dinamico SLD) alfa=90.00 (ecc. -)	come precedente CDC sismico



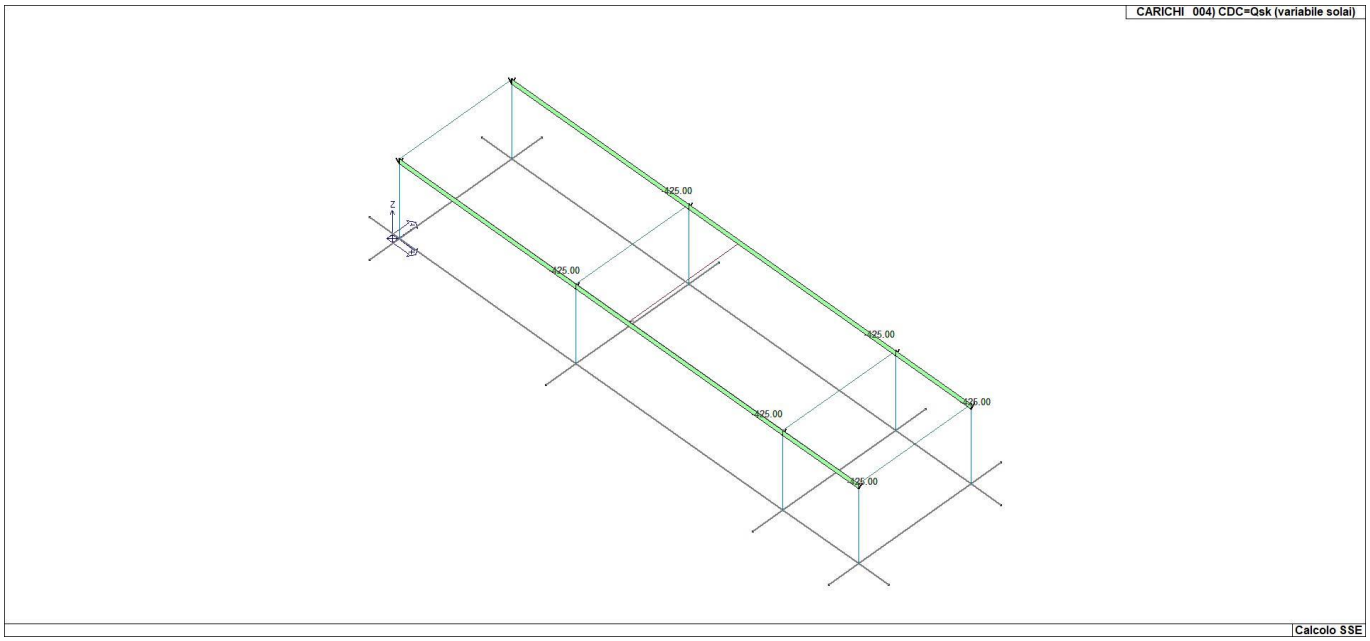
22_CDC_001_CDC=Ggk (peso proprio della struttura)



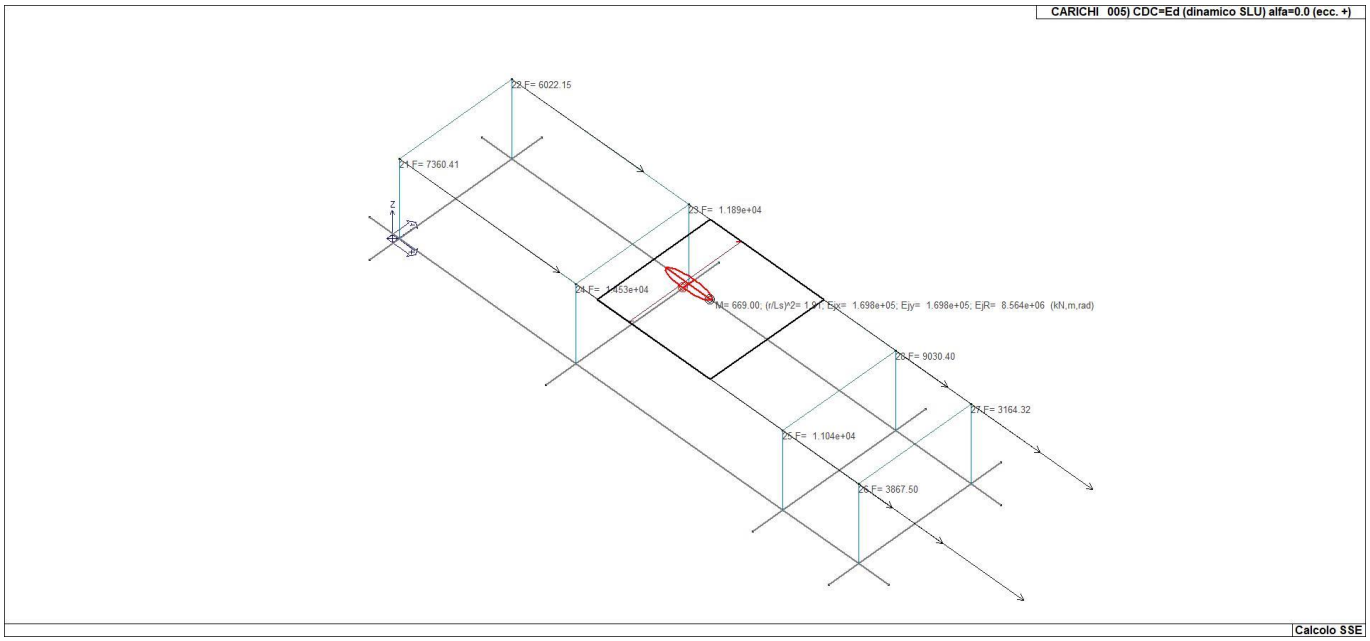
22_CDC_002_CDC=G1sk (permanente solai-coperture)



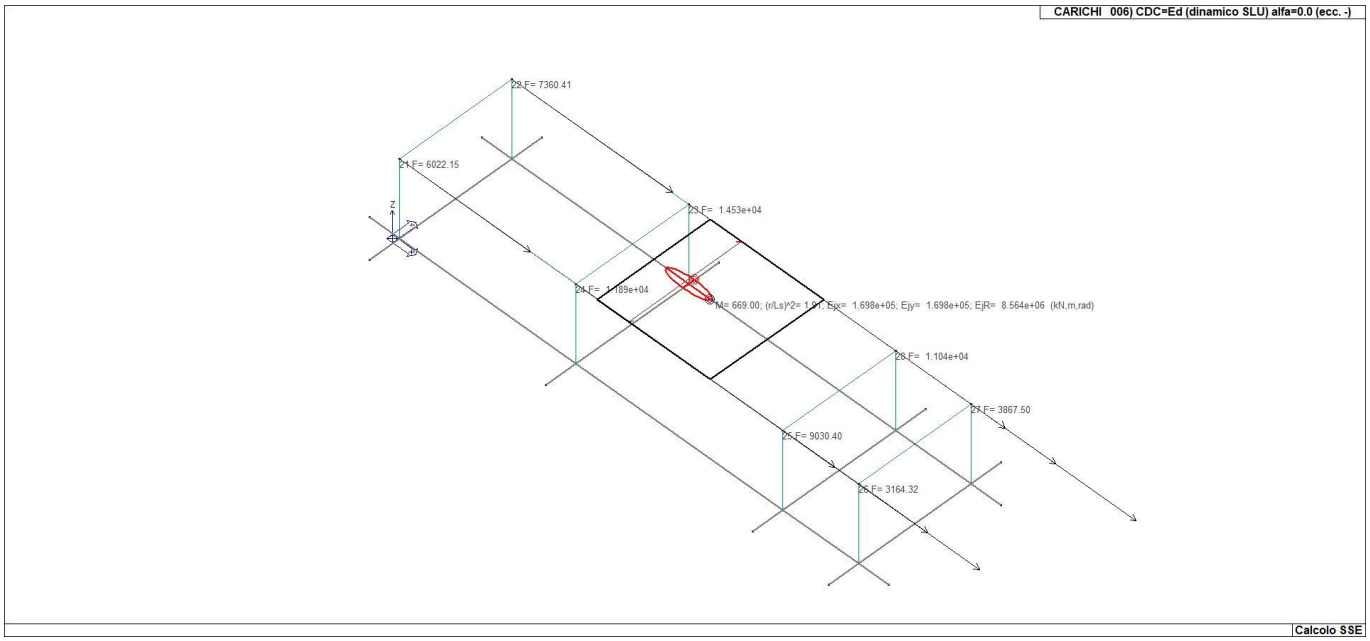
22_CDC_003_CDC=G2sk (permanente solai-coperture n.c.d.)



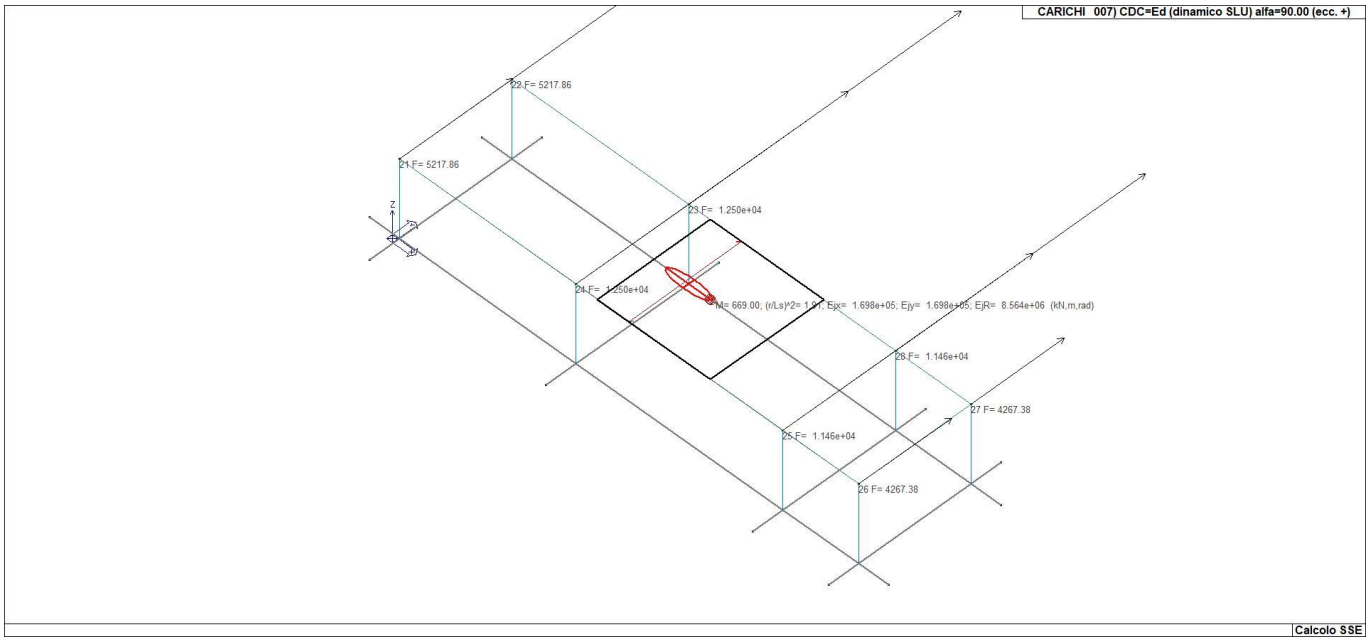
22_CDC_004_CDC=Qsk (variabile solai)



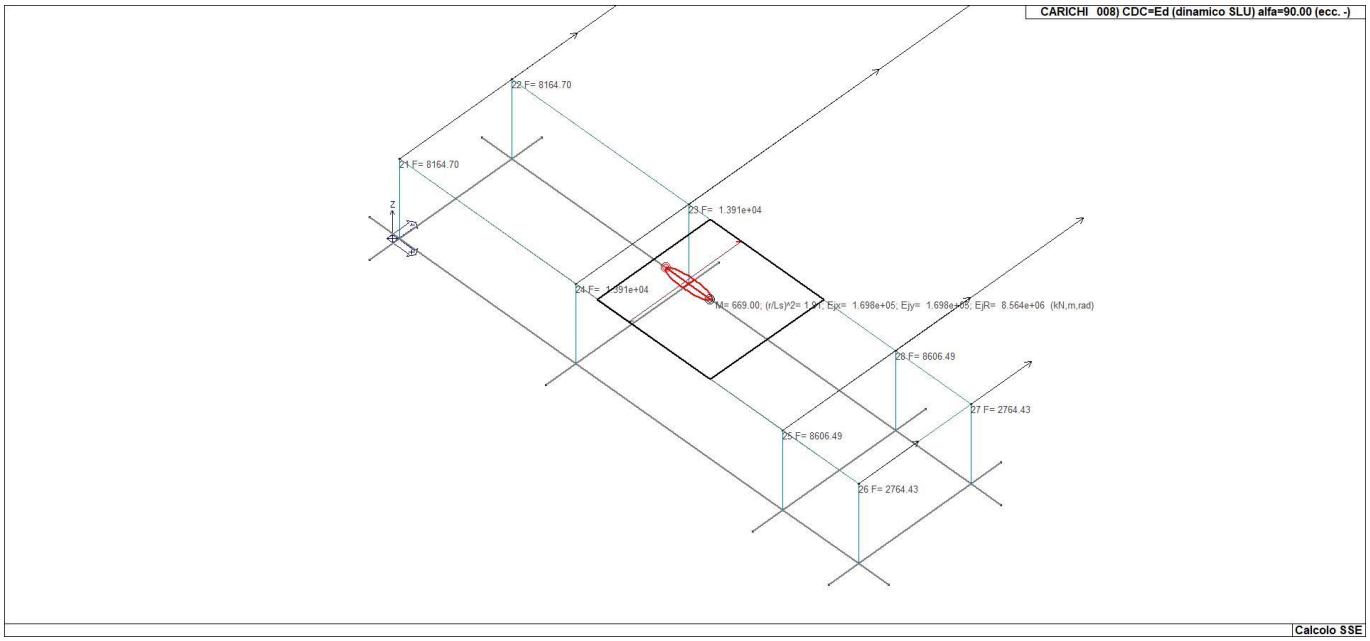
22_CDC_005_CDC=Ed (dinamico SLU) alfa=0.0 (ecc. +)



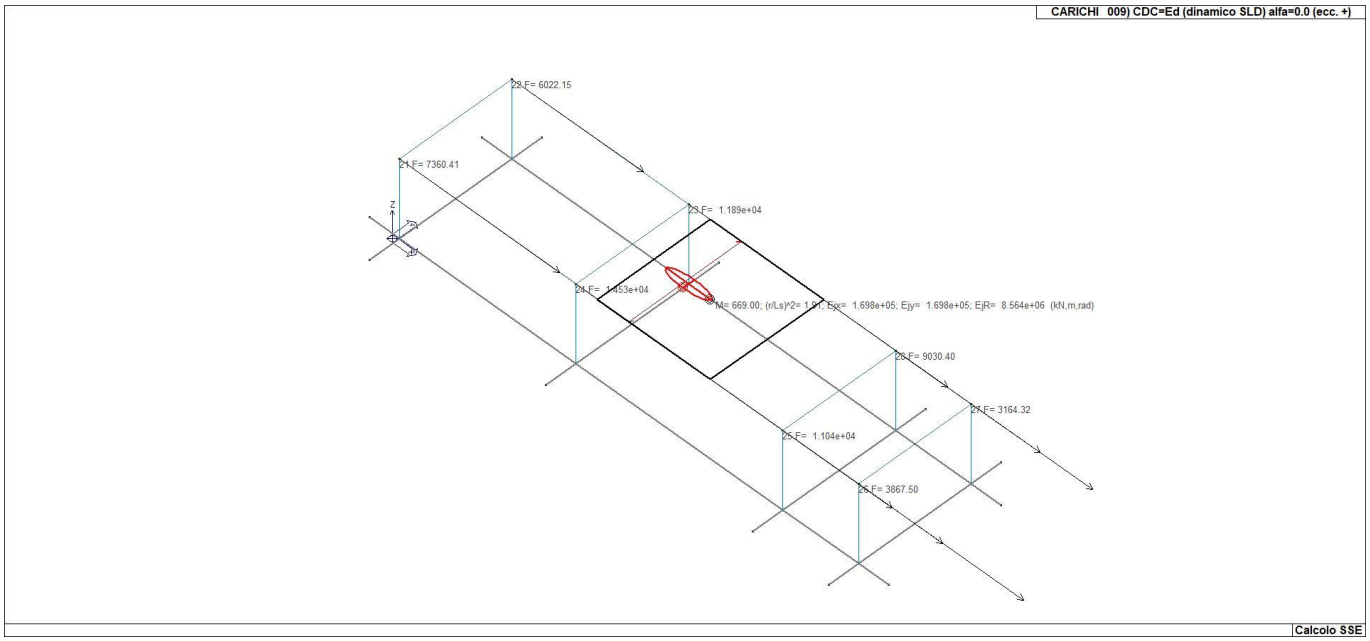
22_CDC_006_CDC=Ed (dinamico SLU) alfa=0.0 (ecc. -)



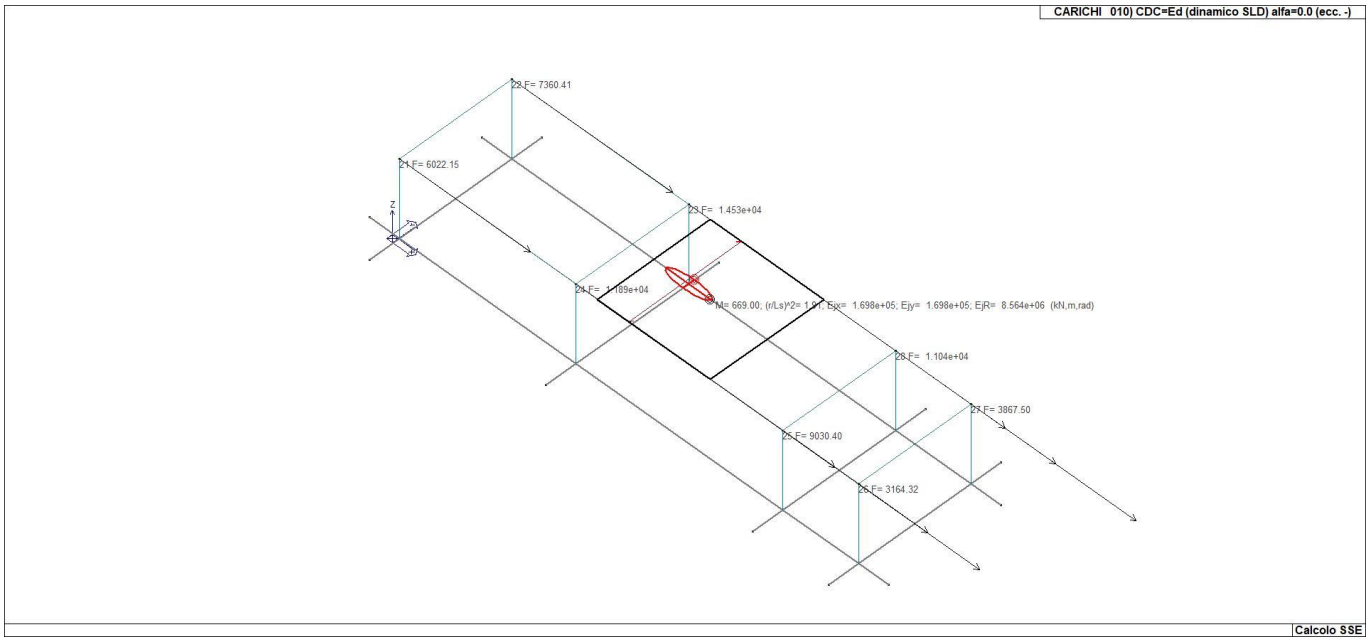
22_CDC_007_CDC=Ed (dinamico SLU) alfa=90.00 (ecc. +)



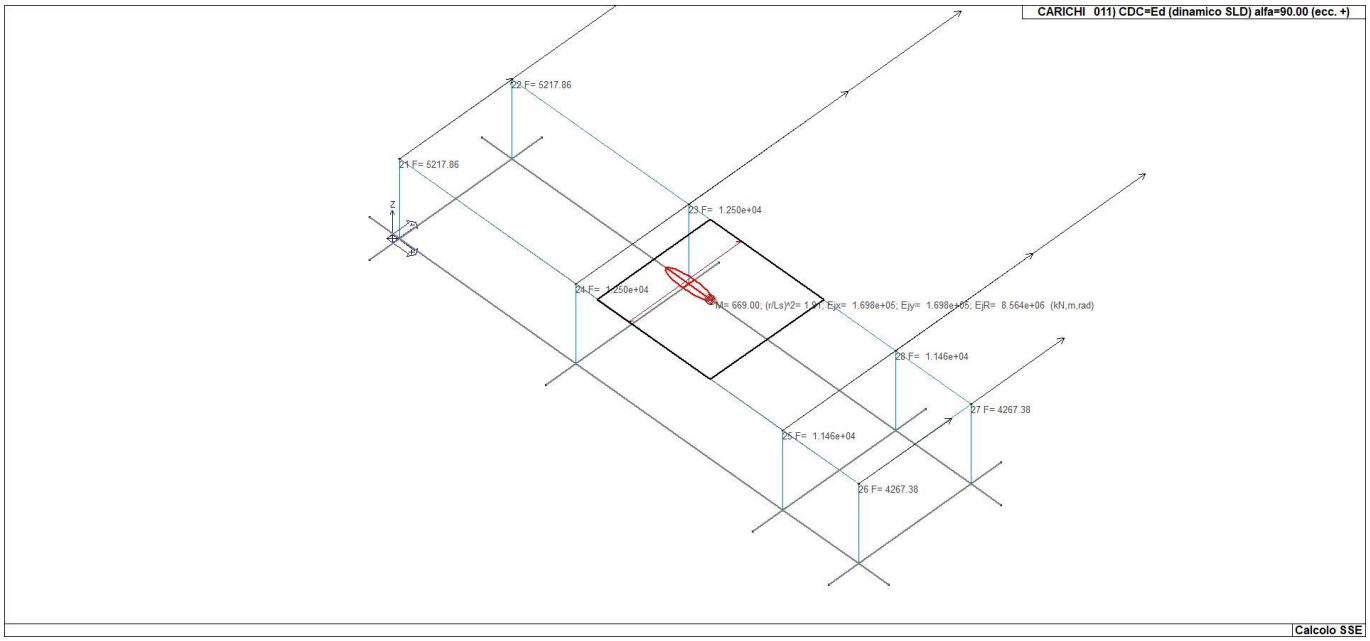
22_CDC_008_CDC=Ed (dinamico SLU) alfa=90.00 (ecc. -)



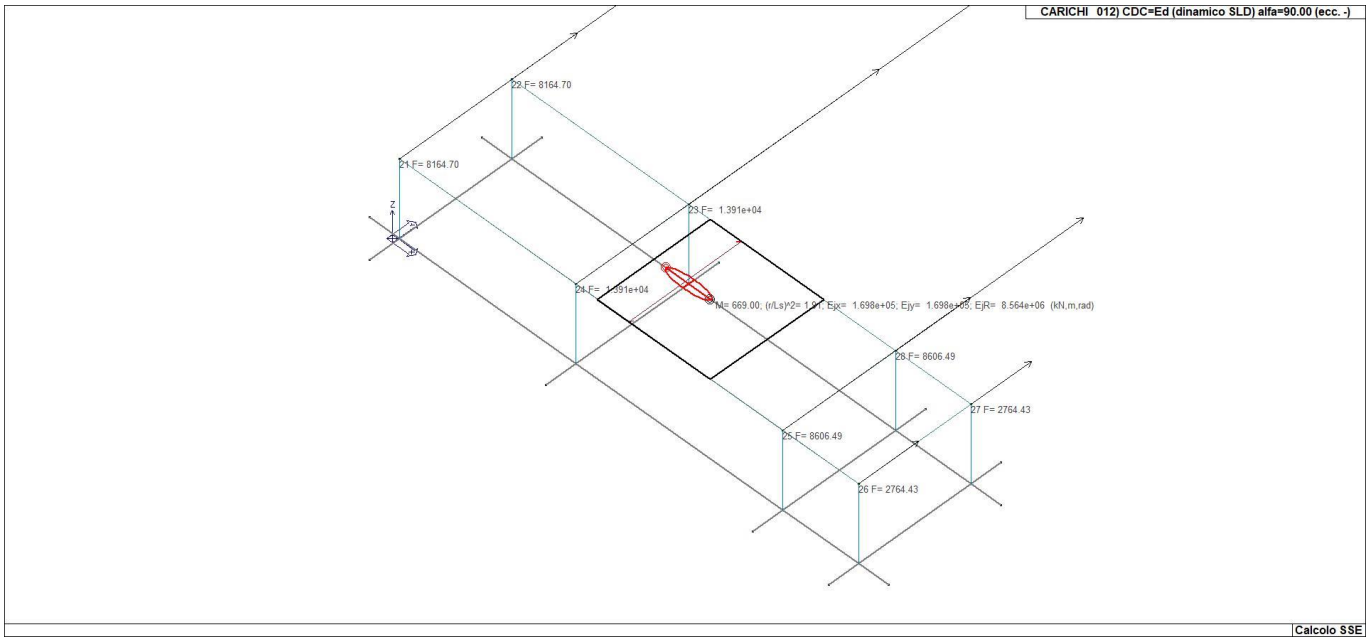
22_CDC_009_CDC=Ed (dinamico SLD) alfa=0.0 (ecc. +)



22_CDC_010_CDC=Ed (dinamico SLD) alfa=0.0 (ecc. -)



22_CDC_011_CDC=Ed (dinamico SLD) alfa=90.00 (ecc. +)



22_CDC_012_CDC=Ed (dinamico SLD) alfa=90.00 (ecc. -)

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 le seguenti informazioni: Numero, Tipo, Sigla identificativa. Una seconda tabella riporta il peso nella combinazione assunto per ogni caso di carico.

Ai fini delle verifiche degli stati limite si definiscono le seguenti combinazioni delle azioni:

Combinazione fondamentale *SLU*

$\gamma G1 \cdot G1 + \gamma G2 \cdot G2 + \gamma P \cdot P + \gamma Q1 \cdot Qk1 + \gamma Q2 \cdot \psi 02 \cdot Qk2 + \gamma Q3 \cdot \psi 03 \cdot Qk3 + \ldots$

Combinazione caratteristica *(rara) SLE*

$G_1 + G_2 + P + Qk1 + \psi 02 \cdot Qk2 + \psi 03 \cdot Qk3 + \ldots$

Combinazione frequente *SLE*

$G_1 + G_2 + P + \psi 11 \cdot Qk1 + \psi 22 \cdot Qk2 + \psi 23 \cdot Qk3 + \ldots$

Combinazione quasi permanente *SLE*

$G1 + G2 + P + \psi 21 \cdot Qk1 + \psi 22 \cdot Qk2 + \psi 23 \cdot Qk3 + \ldots$

Combinazione sismica*, impiegata per gli stati limite ultimi e di esercizio connessi all'azione sismica E*

$E + G_1 + G_2 + P + \psi 21 \cdot Qk1 + \psi 22 \cdot Qk2 + \ldots$

Combinazione eccezionale*, impiegata per gli stati limite connessi alle azioni eccezionali*

$G_1 + G_2 + A_d + P + \psi 21 \cdot Qk1 + \psi 22 \cdot Qk2 + \ldots$

Dove:

NTC 2018 Tabella 2.5.I

Destinazione d'uso/azione	***ψ0***	***ψ1***	***ψ2***
Categoria A residenziali	*0,70*	*0,50*	*0,30*
Categoria B uffici	*0,70*	*0,50*	*0,30*
Categoria C ambienti suscettibili di affollamento	*0,70*	*0,70*	*0,60*
Categoria D ambienti ad uso commerciale	*0,70*	*0,70*	*0,60*
Categoria E biblioteche, archivi, magazzini,…	*1,00*	*0,90*	*0,80*
Categoria F Rimesse e parcheggi (autoveicoli <= 30kN)	*0,70*	*0,70*	*0,60*
Categoria G Rimesse e parcheggi (autoveicoli > 30kN)	*0,70*	*0,50*	*0,30*
Categoria H Coperture	*0,00*	*0,00*	*0,00*
Vento	*0,60*	*0,20*	*0,00*
Neve a quota <= 1000 m	*0,50*	*0,20*	*0,00*
Neve a quota > 1000 m	*0,70*	*0,50*	*0,20*
Variazioni Termiche	*0,60*	*0,50*	*0,00*

Nelle verifiche possono essere adottati in alternativa due diversi approcci progettuali:

- per l'approccio 1 si considerano due diverse combinazioni di gruppi di coefficienti di sicurezza parziali per le azioni, per i materiali e per la resistenza globale (combinazione 1 con coefficienti A1 e combinazione 2 con coefficienti A2),

- per l'approccio 2 si definisce un'unica combinazione per le azioni, per la resistenza dei materiali e per la resistenza globale (con coefficienti A1).

NTC 2018 Tabella 2.6.I

	Coefficiente	***EQU***	***A1***	***A2***

		γf			
Carichi permanenti	*Favorevoli*	$\gamma G1$	*0,9*	*1,0*	*1,0*
	Sfavorevoli		*1,1*	*1,3*	*1,0*
Carichi permanenti non strutturali (Non compiutamente definiti)	*Favorevoli*	$\gamma G2$	*0,8*	*0,8*	*0,8*
	Sfavorevoli		*1,5*	*1,5*	*1,3*
Carichi variabili	*Favorevoli*	γQi	*0,0*	*0,0*	*0,0*
	Sfavorevoli		*1,5*	*1,5*	*1,3*

Cmb	Tipo	Sigla Id	effetto P-delta
1	SLU	Comb. SLU A1 1	
2	SLU	Comb. SLU A1 2	
3	SLU	Comb. SLU A1 3	
4	SLU	Comb. SLU A1 4	
5	SLU	Comb. SLU A1 (SLV sism.) 5	
6	SLU	Comb. SLU A1 (SLV sism.) 6	
7	SLU	Comb. SLU A1 (SLV sism.) 7	
8	SLU	Comb. SLU A1 (SLV sism.) 8	
9	SLU	Comb. SLU A1 (SLV sism.) 9	
10	SLU	Comb. SLU A1 (SLV sism.) 10	
11	SLU	Comb. SLU A1 (SLV sism.) 11	
12	SLU	Comb. SLU A1 (SLV sism.) 12	
13	SLU	Comb. SLU A1 (SLV sism.) 13	
14	SLU	Comb. SLU A1 (SLV sism.) 14	
15	SLU	Comb. SLU A1 (SLV sism.) 15	
16	SLU	Comb. SLU A1 (SLV sism.) 16	
17	SLU	Comb. SLU A1 (SLV sism.) 17	
18	SLU	Comb. SLU A1 (SLV sism.) 18	
19	SLU	Comb. SLU A1 (SLV sism.) 19	
20	SLU	Comb. SLU A1 (SLV sism.) 20	
21	SLU	Comb. SLU A1 (SLV sism.) 21	
22	SLU	Comb. SLU A1 (SLV sism.) 22	
23	SLU	Comb. SLU A1 (SLV sism.) 23	
24	SLU	Comb. SLU A1 (SLV sism.) 24	
25	SLU	Comb. SLU A1 (SLV sism.) 25	
26	SLU	Comb. SLU A1 (SLV sism.) 26	
27	SLU	Comb. SLU A1 (SLV sism.) 27	
28	SLU	Comb. SLU A1 (SLV sism.) 28	
29	SLU	Comb. SLU A1 (SLV sism.) 29	
30	SLU	Comb. SLU A1 (SLV sism.) 30	
31	SLU	Comb. SLU A1 (SLV sism.) 31	
32	SLU	Comb. SLU A1 (SLV sism.) 32	
33	SLU	Comb. SLU A1 (SLV sism.) 33	
34	SLU	Comb. SLU A1 (SLV sism.) 34	
35	SLU	Comb. SLU A1 (SLV sism.) 35	
36	SLU	Comb. SLU A1 (SLV sism.) 36	
37	SLD(sis)	Comb. SLE (SLD Danno sism.) 37	
38	SLD(sis)	Comb. SLE (SLD Danno sism.) 38	
39	SLD(sis)	Comb. SLE (SLD Danno sism.) 39	
40	SLD(sis)	Comb. SLE (SLD Danno sism.) 40	
41	SLD(sis)	Comb. SLE (SLD Danno sism.) 41	
42	SLD(sis)	Comb. SLE (SLD Danno sism.) 42	
43	SLD(sis)	Comb. SLE (SLD Danno sism.) 43	
44	SLD(sis)	Comb. SLE (SLD Danno sism.) 44	
45	SLD(sis)	Comb. SLE (SLD Danno sism.) 45	
46	SLD(sis)	Comb. SLE (SLD Danno sism.) 46	
47	SLD(sis)	Comb. SLE (SLD Danno sism.) 47	
48	SLD(sis)	Comb. SLE (SLD Danno sism.) 48	
49	SLD(sis)	Comb. SLE (SLD Danno sism.) 49	
50	SLD(sis)	Comb. SLE (SLD Danno sism.) 50	
51	SLD(sis)	Comb. SLE (SLD Danno sism.) 51	
52	SLD(sis)	Comb. SLE (SLD Danno sism.) 52	
53	SLD(sis)	Comb. SLE (SLD Danno sism.) 53	
54	SLD(sis)	Comb. SLE (SLD Danno sism.) 54	
55	SLD(sis)	Comb. SLE (SLD Danno sism.) 55	

Cmb	Tipo	Sigla Id	effetto P-delta
56	SLD(sis)	Comb. SLE (SLD Danno sism.) 56	
57	SLD(sis)	Comb. SLE (SLD Danno sism.) 57	
58	SLD(sis)	Comb. SLE (SLD Danno sism.) 58	
59	SLD(sis)	Comb. SLE (SLD Danno sism.) 59	
60	SLD(sis)	Comb. SLE (SLD Danno sism.) 60	
61	SLD(sis)	Comb. SLE (SLD Danno sism.) 61	
62	SLD(sis)	Comb. SLE (SLD Danno sism.) 62	
63	SLD(sis)	Comb. SLE (SLD Danno sism.) 63	
64	SLD(sis)	Comb. SLE (SLD Danno sism.) 64	
65	SLD(sis)	Comb. SLE (SLD Danno sism.) 65	
66	SLD(sis)	Comb. SLE (SLD Danno sism.) 66	
67	SLD(sis)	Comb. SLE (SLD Danno sism.) 67	
68	SLD(sis)	Comb. SLE (SLD Danno sism.) 68	
69	SLU(acc.)	Comb. SLU (Accid.) 69	
70	SLU(acc.)	Comb. SLU (Accid.) 70	
71	SLE(r)	Comb. SLE(rara) 71	
72	SLE(r)	Comb. SLE(rara) 72	
73	SLE(f)	Comb. SLE(freq.) 73	
74	SLE(f)	Comb. SLE(freq.) 74	
75	SLE(p)	Comb. SLE(perm.) 75	
76	SLE(p)	Comb. SLE(perm.) 76	

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	1.30	1.30	1.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
2	1.30	1.30	1.50	1.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
3	1.00	1.00	0.80	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
4	1.00	1.00	0.80	1.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
5	1.00	1.00	1.00	0.30	-1.00	0.0	-0.30	0.0	0.0	0.0	0.0	0.0		
6	1.00	1.00	1.00	0.30	-1.00	0.0	0.30	0.0	0.0	0.0	0.0	0.0		
7	1.00	1.00	1.00	0.30	1.00	0.0	-0.30	0.0	0.0	0.0	0.0	0.0		
8	1.00	1.00	1.00	0.30	1.00	0.0	0.30	0.0	0.0	0.0	0.0	0.0		
9	1.00	1.00	1.00	0.30	-1.00	0.0	0.0	-0.30	0.0	0.0	0.0	0.0		
10	1.00	1.00	1.00	0.30	-1.00	0.0	0.0	0.30	0.0	0.0	0.0	0.0		
11	1.00	1.00	1.00	0.30	1.00	0.0	0.0	-0.30	0.0	0.0	0.0	0.0		
12	1.00	1.00	1.00	0.30	1.00	0.0	0.0	0.30	0.0	0.0	0.0	0.0		
13	1.00	1.00	1.00	0.30	0.0	-1.00	-0.30	0.0	0.0	0.0	0.0	0.0		
14	1.00	1.00	1.00	0.30	0.0	-1.00	0.30	0.0	0.0	0.0	0.0	0.0		
15	1.00	1.00	1.00	0.30	0.0	1.00	-0.30	0.0	0.0	0.0	0.0	0.0		
16	1.00	1.00	1.00	0.30	0.0	1.00	0.30	0.0	0.0	0.0	0.0	0.0		
17	1.00	1.00	1.00	0.30	0.0	-1.00	0.0	-0.30	0.0	0.0	0.0	0.0		
18	1.00	1.00	1.00	0.30	0.0	-1.00	0.0	0.30	0.0	0.0	0.0	0.0		
19	1.00	1.00	1.00	0.30	0.0	1.00	0.0	-0.30	0.0	0.0	0.0	0.0		
20	1.00	1.00	1.00	0.30	0.0	1.00	0.0	0.30	0.0	0.0	0.0	0.0		
21	1.00	1.00	1.00	0.30	-0.30	0.0	-1.00	0.0	0.0	0.0	0.0	0.0		
22	1.00	1.00	1.00	0.30	-0.30	0.0	1.00	0.0	0.0	0.0	0.0	0.0		
23	1.00	1.00	1.00	0.30	0.30	0.0	-1.00	0.0	0.0	0.0	0.0	0.0		
24	1.00	1.00	1.00	0.30	0.30	0.0	1.00	0.0	0.0	0.0	0.0	0.0		
25	1.00	1.00	1.00	0.30	0.0	-0.30	-1.00	0.0	0.0	0.0	0.0	0.0		
26	1.00	1.00	1.00	0.30	0.0	-0.30	1.00	0.0	0.0	0.0	0.0	0.0		
27	1.00	1.00	1.00	0.30	0.0	0.30	-1.00	0.0	0.0	0.0	0.0	0.0		
28	1.00	1.00	1.00	0.30	0.0	0.30	1.00	0.0	0.0	0.0	0.0	0.0		
29	1.00	1.00	1.00	0.30	-0.30	0.0	0.0	-1.00	0.0	0.0	0.0	0.0		
30	1.00	1.00	1.00	0.30	-0.30	0.0	0.0	1.00	0.0	0.0	0.0	0.0		
31	1.00	1.00	1.00	0.30	0.30	0.0	0.0	-1.00	0.0	0.0	0.0	0.0		
32	1.00	1.00	1.00	0.30	0.30	0.0	0.0	1.00	0.0	0.0	0.0	0.0		
33	1.00	1.00	1.00	0.30	0.0	-0.30	0.0	-1.00	0.0	0.0	0.0	0.0		
34	1.00	1.00	1.00	0.30	0.0	-0.30	0.0	1.00	0.0	0.0	0.0	0.0		
35	1.00	1.00	1.00	0.30	0.0	0.30	0.0	-1.00	0.0	0.0	0.0	0.0		
36	1.00	1.00	1.00	0.30	0.0	0.30	0.0	1.00	0.0	0.0	0.0	0.0		
37	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	-1.00	0.0	-0.30	0.0		
38	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	-1.00	0.0	0.30	0.0		
39	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	1.00	0.0	-0.30	0.0		
40	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	1.00	0.0	0.30	0.0		
41	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	-1.00	0.0	0.0	-0.30		
42	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	-1.00	0.0	0.0	0.30		
43	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	1.00	0.0	0.0	-0.30		
44	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	1.00	0.0	0.0	0.30		
45	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	-1.00	-0.30	0.0		
46	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	-1.00	0.30	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...
47	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	1.00	-0.30	0.0		
48	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	1.00	0.30	0.0		
49	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	-1.00	0.0	-0.30		
50	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	-1.00	0.0	0.30		
51	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	1.00	0.0	-0.30		
52	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	1.00	0.0	0.30		
53	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	-0.30	0.0	-1.00	0.0		
54	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	-0.30	0.0	1.00	0.0		
55	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.30	0.0	-1.00	0.0		
56	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.30	0.0	1.00	0.0		
57	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	-0.30	-1.00	0.0		
58	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	-0.30	1.00	0.0		
59	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	0.30	-1.00	0.0		
60	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	0.30	1.00	0.0		
61	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	-0.30	0.0	0.0	-1.00		
62	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	-0.30	0.0	0.0	1.00		
63	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.30	0.0	0.0	-1.00		
64	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.30	0.0	0.0	1.00		
65	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	-0.30	0.0	-1.00		
66	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	-0.30	0.0	1.00		
67	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	0.30	0.0	-1.00		
68	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	0.30	0.0	1.00		
69	1.00	1.00	1.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
70	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
71	1.00	1.00	1.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
72	1.00	1.00	1.00	1.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
73	1.00	1.00	1.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
74	1.00	1.00	1.00	0.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
75	1.00	1.00	1.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
76	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		

AZIONE SISMICA

VALUTAZIONE DELL' AZIONE SISMICA

L'azione sismica sulle costruzioni è valutata a partire dalla "pericolosità sismica di base", in condizioni ideali di sito di riferimento rigido con superficie topografica orizzontale.
Allo stato attuale, la pericolosità sismica su reticolo di riferimento nell'intervallo di riferimento è fornita dai dati pubblicati sul sito http://esse1.mi.ingv.it/. Per punti non coincidenti con il reticolo di riferimento e periodi di ritorno non contemplati direttamente si opera come indicato nell' allegato alle NTC (rispettivamente media pesata e interpolazione).

L' azione sismica viene definita in relazione ad un periodo di riferimento Vr che si ricava, per ciascun tipo di costruzione, moltiplicandone la vita nominale per il coefficiente d'uso (vedi tabella Parametri della struttura). Fissato il periodo di riferimento Vr e la probabilità di superamento Pver associata a ciascuno degli stati limite considerati, si ottiene il periodo di ritorno Tr e i relativi parametri di pericolosità sismica (vedi tabella successiva):
ag: accelerazione orizzontale massima del terreno;
Fo: valore massimo del fattore di amplificazione dello spettro in accelerazione orizzontale;
T*c: periodo di inizio del tratto a velocità costante dello spettro in accelerazione orizzontale;

Parametri della struttura					
Classe d'uso	Vita Vn [anni]	Coeff. Uso	Periodo Vr [anni]	Tipo di suolo	Categoria topografica
IV	100.0	2.0	200.0	B	T1

Individuati su reticolo di riferimento i parametri di pericolosità sismica si valutano i parametri spettrali riportati in tabella:
S è il coefficiente che tiene conto della categoria di sottosuolo e delle condizioni topografiche mediante la relazione seguente S = Ss*St (3.2.3)
Fo è il fattore che quantifica l'amplificazione spettrale massima, su sito di riferimento rigido orizzontale
Fv è il fattore che quantifica l'amplificazione spettrale massima verticale, in termini di accelerazione orizzontale massima del terreno ag su sito di riferimento rigido orizzontale
Tb è il periodo corrispondente all'inizio del tratto dello spettro ad accelerazione costante.
Tc è il periodo corrispondente all'inizio del tratto dello spettro a velocità costante.
Td è il periodo corrispondente all'inizio del tratto dello spettro a spostamento costante.

Lo spettro di risposta elastico in accelerazione della componente orizzontale del moto sismico, Se, è definito dalle seguenti espressioni:

$$0 \le T < T_B \qquad S_e(T) = a_g \cdot S \cdot \eta \cdot F_o \cdot \left[\frac{T}{T_B} + \frac{1}{\eta \cdot F_o}\left(1 - \frac{T}{T_B}\right)\right]$$

$$T_B \le T < T_C \qquad S_e(T) = a_g \cdot S \cdot \eta \cdot F_o$$

$$T_C \le T < T_D \qquad S_e(T) = a_g \cdot S \cdot \eta \cdot F_o \cdot \left(\frac{T_C}{T}\right)$$

$$T_D \le T \qquad S_e(T) = a_g \cdot S \cdot \eta \cdot F_o \cdot \left(\frac{T_C \cdot T_D}{T^2}\right)$$

Dove per sottosuolo di categoria **A** i coefficienti S_S e C_C valgono 1; mentre per le categorie di sottosuolo B, C, D, E i coefficienti S_S e C_C vengono calcolati mediante le espressioni riportane nella seguente Tabella

Categoria sottosuolo	S_S	C_C
A	1,00	1,00
B	$1,00 \le 1,40 - 0,40 \cdot F_o \cdot \frac{a_g}{g} \le 1,20$	$1,10 \cdot (T_C^*)^{-0,20}$
C	$1,00 \le 1,70 - 0,60 \cdot F_o \cdot \frac{a_g}{g} \le 1,50$	$1,05 \cdot (T_C^*)^{-0,33}$
D	$0,90 \le 2,40 - 1,50 \cdot F_o \cdot \frac{a_g}{g} \le 1,80$	$1,25 \cdot (T_C^*)^{-0,50}$
E	$1,00 \le 2,00 - 1,10 \cdot F_o \cdot \frac{a_g}{g} \le 1,60$	$1,15 \cdot (T_C^*)^{-0,40}$

Per tenere conto delle condizioni topografiche e in assenza di specifiche analisi di risposta sismica locale, si utilizzano i valori del coefficiente topografico S_T riportati nella seguente Tabella

Categoria topografica	Ubicazione dell'opera o dell'intervento	S_T
T1	-	1,0
T2	In corrispondenza della sommità del pendio	1,2
T3	In corrispondenza della cresta di un rilievo con pendenza media minore o uguale a 30°	1,2
T4	In corrispondenza della cresta di un rilievo con pendenza media maggiore di 30°	1,4

Lo spettro di risposta elastico in accelerazione della componente verticale del moto sismico, Sve, è definito dalle espressioni:

$$0 \le T < T_B \qquad S_{ve}(T) = a_g \cdot S \cdot \eta \cdot F_v \cdot \left[\frac{T}{T_B} + \frac{1}{\eta \cdot F_o}\left(1 - \frac{T}{T_B}\right)\right]$$

$$T_B \le T < T_C \qquad S_{ve}(T) = a_g \cdot S \cdot \eta \cdot F_v$$

$$T_C \le T < T_D \qquad S_{ve}(T) = a_g \cdot S \cdot \eta \cdot F_v \cdot \left(\frac{T_C}{T}\right)$$

$$T_D \le T \qquad S_{ve}(T) = a_g \cdot S \cdot \eta \cdot F_v \cdot \left(\frac{T_C \cdot T_D}{T^2}\right)$$

I valori di S_S, T_B, T_C e T_D, sono riportati nella seguenteTabella

Categoria di sottosuolo	S_S	T_B	T_C	T_D
A, B, C, D, E	1,0	0,05 s	0,15 s	1,0 s

Id nodo	Longitudine	Latitudine	Distanza
			Km
Loc.	15.818	40.961	
32558	15.807	40.961	0.921
32559	15.874	40.960	4.688
32337	15.875	41.010	7.227
32336	15.809	41.011	5.592

SL	Pver	Tr	ag	Fo	T*c
		Anni	g		sec
SLO	81.0	120.0	0.092	2.484	0.349
SLD	63.0	201.0	0.117	2.460	0.400
SLV	10.0	1898.0	0.326	2.398	0.436

SL	Pver	Tr	ag	Fo	T*c
SLC	5.0	2475.0	0.366	2.375	0.439

SL	ag	S	Fo	Fv	Tb	Tc	Td
	g				sec	sec	sec
SLO	0.092	1.200	2.484	1.018	0.158	0.474	1.969
SLD	0.117	1.200	2.460	1.134	0.176	0.528	2.067
SLV	0.326	1.088	2.398	1.848	0.189	0.566	2.903
SLC	0.366	1.052	2.375	1.941	0.190	0.569	3.066

RISULTATI ANALISI SISMICHE

LEGENDA TABELLA ANALISI SISMICHE

Il programma consente l'analisi di diverse configurazioni sismiche.

Sono previsti, infatti, i seguenti casi di carico:

9. Esk caso di carico sismico con analisi statica equivalente
10. Edk caso di carico sismico con analisi dinamica

Ciascun caso di carico è caratterizzato da un angolo di ingresso e da una configurazione di masse determinante la forza sismica complessiva (si rimanda al capitolo relativo ai casi di carico per chiarimenti inerenti questo aspetto).

Nella colonna Note, in funzione della norma in uso sono riportati i parametri fondamentali che caratterizzano l' azione sismica: in particolare possono essere presenti i seguenti valori:

Angolo di ingresso	Angolo di ingresso dell'azione sismica orizzontale
Fattore di importanza	Fattore di importanza dell'edificio, in base alla categoria di appartenenza
Zona sismica	Zona sismica
Accelerazione ag	Accelerazione orizzontale massima sul suolo
Categoria suolo	Categoria di profilo stratigrafico del suolo di fondazione
Fattore q	Fattore di struttura/di comportamento. Dipendente dalla tipologia strutturale
Fattore di sito S	Fattore dipendente dalla stratigrafia e dal profilo topografico
Classe di duttilità CD	Classe di duttilità della struttura – "A" duttilità alta, "B" duttilità bassa
Fattore riduz. SLD	Fattore di riduzione dello spettro elastico per lo stato limite di danno
Periodo proprio T1	Periodo proprio di vibrazione della struttura
Coefficiente Lambda	Coefficiente dipendente dal periodo proprio T1 e dal numero di piani della struttura
Ordinata spettro Sd(T1)	Valore delle ordinate dello spettro di progetto per lo stato limite ultimo, componente orizzontale (verticale Svd)
Ordinata spettro Se(T1)	Valore delle ordinate dello spettro elastico ridotta del fattore SLD per lo stato limite di danno, componente orizzontale (verticale Sve)
Ordinata spettro S (Tb-Tc)	Valore dell' ordinata dello spettro in uso nel tratto costante
numero di modi considerati	Numero di modi di vibrare della struttura considerati nell'analisi dinamica

Per ciascun caso di carico sismico viene riportato l'insieme di dati sotto riportati (le masse sono espresse in unità di forza):

a) **analisi sismica statica equivalente**:
   - quota, posizione del centro di applicazione e azione orizzontale risultante, posizione del baricentro delle rigidezze, rapporto r/Ls (per strutture a nucleo), indici di regolarità e/r secondo EC8 4.2.3.2
   - azione sismica complessiva

b) **analisi sismica dinamica con spettro di risposta**:

- quota, posizione del centro di massa e massa risultante, posizione del baricentro delle rigidezze, rapporto r/Ls (per strutture a nucleo) **,** indici di regolarità e/r secondo EC8 4.2.3.2
- frequenza, periodo, accelerazione spettrale, massa eccitata nelle tre direzioni globali per tutti i modi
- massa complessiva ed aliquota di massa complessiva eccitata.

Per ciascuna combinazione sismica definita SLD o SLO viene riportato il livello di deformazione etaT (dr) degli elementi strutturali verticali. Per semplicità di consultazione il livello è espresso anche in unità 1000*etaT/h da confrontare direttamente con i valori forniti nella norma (es. 5 per edifici con tamponamenti collegati rigidamente alla struttura, 10.0 per edifici con tamponamenti collegati elasticamente, 3 per edifici in muratura ordinaria, 4 per edifici in muratura armata).

Qualora si applichi il D.M. 96 (vedi NOTA sul capitolo "normativa di riferimento") l'analisi sismica dinamica può essere comprensiva di sollecitazione verticale contemporanea a quella orizzontale, nel qual caso è effettuata una sovrapposizione degli effetti in ragione della radice dei quadrati degli effetti stessi. Per ciascuna combinazione sismica - analisi effettuate con il D.M. 96 (vedi NOTA sul capitolo "normativa di riferimento") - viene riportato il livello di deformazione etaT, etaP e etaD degli elementi strutturali verticali. Per semplicità di consultazione il livello è espresso in unità 1000*etaT/h da confrontare direttamente con il valore 2 o 4 per la verifica.

Per gli edifici sismicamente isolati si riportano di seguito le verifiche condotte sui dispositivi di isolamento. Le verifiche sono effettuate secondo la circolare n.7/2019 del C.S.LL.PP nelle combinazioni in SLC come previsto dal DM 17-01-2018. Per ogni combinazione è riportato il codice di verifica ed i valori utilizzati per la verifica: spostamento dE, area ridotta e dimensione A2, azione verticale, deformazioni di taglio dell'elastomero e tensioni nell'acciaio.
Qualora si applichi l'Ordinanza 3274 e s.m.i. le verifiche sono eseguite in accordo con l'allegato 10.A.
In particolare la tabella, per ogni combinazione di calcolo, riporta:

Nodo	Nodo di appoggio dell' isolatore
Cmb	Combinazione oggetto della verifica
Verif.	Codice di verifica ok – verifica positiva , NV – verifica negativa, ND – verifica non completata
dE	Spostamento relativo tra le due facce (amplificato del 20% per Ordinanza 3274 e smi) combinato con la regola del 30%
Ang fi	Angolo utilizzato per il calcolo dell' area ridotta Ar (per dispositivi circolari)
V	Azione verticale agente
Ar	Area ridotta efficace
Dim A2	Dimensione utile per il calcolo della deformazione per rotazione
Sig s	Tensione nell' inserto in acciaio
Gam c(a,s,t)	Deformazioni di taglio dell' elestomero
Vcr	Carico critico per instabilità

Affinché la verifica sia positiva deve essere:

1) V > 0
2) Sig s < fyk
3) Gam t < 5
4) Gam s < Gam * (caratteristica dell' elastomero)
5) Gam s < 2
6) V < 0.5 Vcr

Calcolo dei fattori di comportamento secondo il D.M. 17/01/2018

La costruzione, nuova, è caratterizzata da regolarità sia in pianta sia in altezza ed è progettata considerando un comportamento non dissipativo (ND).

Parametri fattore in direzione x e y

Sistema costruttivo: calcestruzzo
Tipologia strutturale: strutture a telaio, a pareti accoppiate, miste
Definizione rapporto α_u/α_1: valore come da normativa
Riferimento normativo α_u/α_1: strutture a telaio di un piano
Valore rapporto $\alpha_u/\alpha_1 =$ 1.100
Valore base fattore $q_0 = 3.000$ $\alpha_u/\alpha_1 =$ 3.300
Fattore pareti $k_w =$ 1.000
Fattore di regolarità $K_R =$ 1.0
Fattore dissipativo $q_D = q_0 \cdot k_w \cdot K_R =$ 3.300
Fattore non dissipativo $q_{ND} = 2/3 \cdot q_D =$ 1.500 (≤1.5)

Fattori di comportamento utilizzati

	Dissipativi	Non dissipativi
q SLU x	3.300	1.500
q SLU y	3.300	1.500
q SLU z	1.500	1.500

CDC	Tipo	Sigla Id	Note
5	Edk	CDC=Ed (dinamico SLU) alfa=0.0 (ecc. +)	
			categoria suolo: B
			fattore di sito S = 1.088
			ordinata spettro (tratto Tb-Tc) = 0.566 g
			angolo di ingresso:0.0
			eccentricità aggiuntiva: positiva
			periodo proprio T1: 0.227 sec.
			fattore q: 1.500
			fattore per spost. mu d: 2.248
			classe di duttilità CD: ND
			numero di modi considerati: 9
			combinaz. modale: CQC

Quota	M Sismica x g	Pos. GX	Pos. GY	E agg. X-X	E agg. Y-Y	Pos. KX	Pos. KY	(r/Ls)^2	rapp. ex/rx	rapp. ey/ry
m	daN	m	m	m	m	m	m			
3.00	6.690e+04	8.90	2.25	0.0	-0.21	9.72	2.25	1.907	0.116	0.0
Risulta	6.690e+04									

Modo	Frequenza	Periodo	Acc. Spettrale	M efficace X x g	%	M efficace Y x g	%	M efficace Z x g	%	Energia	Energia x v
	Hz	sec	g	daN		daN		daN			
1	3.751	0.267	0.566	7.60	1.14e-02	4.362e+04	65.2	4.28e-04	0.0	0.0	0.0
2	4.410	0.227	0.566	6.546e+04	97.8	61.35	9.17e-02	7.31	1.09e-02	0.0	0.0
3	4.752	0.210	0.566	787.24	1.2	1.399e+04	20.9	0.12	1.81e-04	0.0	0.0
4	5.034	0.199	0.566	481.52	0.7	7962.74	11.9	0.10	1.42e-04	0.0	0.0
5	9.852	0.102	0.468	7.04	1.05e-02	993.11	1.5	0.03	4.55e-05	0.0	0.0
6	15.767	0.063	0.425	3.66	5.48e-03	0.44	6.65e-04	2.729e+04	40.8	0.0	0.0
7	18.316	0.055	0.415	13.56	2.03e-02	47.23	7.06e-02	1.951e+04	29.2	0.0	0.0
8	19.215	0.052	0.413	45.27	6.77e-02	47.56	7.11e-02	1.834e+04	27.4	0.0	0.0
9	29.021	0.034	0.393	89.53	0.1	6.25	9.35e-03	1745.35	2.6	0.0	0.0
Risulta				6.689e+04		6.673e+04		6.689e+04			
In percentuale				99.99		99.74		99.99			

CDC	Tipo	Sigla Id	Note
6	Edk	CDC=Ed (dinamico SLU) alfa=0.0 (ecc. -)	
			categoria suolo: B
			fattore di sito S = 1.088
			ordinata spettro (tratto Tb-Tc) = 0.566 g
			angolo di ingresso:0.0

CDC	Tipo	Sigla Id	Note
			eccentricità aggiuntiva: negativa
			periodo proprio T1: 0.227 sec.
			fattore q: 1.500
			fattore per spost. mu d: 2.248
			classe di duttilità CD: ND
			numero di modi considerati: 9
			combinaz. modale: CQC

Quota	M Sismica x g	Pos. GX	Pos. GY	E agg. X-X	E agg. Y-Y	Pos. KX	Pos. KY	(r/Ls)^2	rapp. ex/rx	rapp. ey/ry
m	daN	m	m	m	m	m	m			
3.00	6.690e+04	8.90	2.25	0.0	0.21	9.72	2.25	1.907	0.116	0.0
Risulta	6.690e+04									

Modo	Frequenza	Periodo	Acc. Spettrale	M efficace X x g	%	M efficace Y x g	%	M efficace Z x g	%	Energia	Energia x v
	Hz	sec	g	daN		daN		daN			
1	3.751	0.267	0.566	7.60	1.14e-02	4.362e+04	65.2	4.28e-04	0.0	0.0	0.0
2	4.410	0.227	0.566	6.546e+04	97.8	61.35	9.17e-02	7.31	1.09e-02	0.0	0.0
3	4.752	0.210	0.566	787.24	1.2	1.399e+04	20.9	0.12	1.81e-04	0.0	0.0
4	5.034	0.199	0.566	481.52	0.7	7962.74	11.9	0.10	1.42e-04	0.0	0.0
5	9.852	0.102	0.468	7.04	1.05e-02	993.11	1.5	0.03	4.55e-05	0.0	0.0
6	15.767	0.063	0.425	3.66	5.48e-03	0.44	6.65e-04	2.729e+04	40.8	0.0	0.0
7	18.316	0.055	0.415	13.56	2.03e-02	47.23	7.06e-02	1.951e+04	29.2	0.0	0.0
8	19.215	0.052	0.413	45.27	6.77e-02	47.56	7.11e-02	1.834e+04	27.4	0.0	0.0
9	29.021	0.034	0.393	89.53	0.1	6.25	9.35e-03	1745.35	2.6	0.0	0.0
Risulta				6.689e+04		6.673e+04		6.689e+04			
In percentuale				99.99		99.74		99.99			

CDC	Tipo	Sigla Id	Note
7	Edk	CDC=Ed (dinamico SLU) alfa=90.00 (ecc. +)	
			categoria suolo: B
			fattore di sito S = 1.088
			ordinata spettro (tratto Tb-Tc) = 0.566 g
			angolo di ingresso:90.00
			eccentricità aggiuntiva: positiva
			periodo proprio T1: 0.260 sec.
			fattore q: 1.500
			fattore per spost. mu d: 2.088
			classe di duttilità CD: ND
			numero di modi considerati: 9
			combinaz. modale: CQC

Quota	M Sismica x g	Pos. GX	Pos. GY	E agg. X-X	E agg. Y-Y	Pos. KX	Pos. KY	(r/Ls)^2	rapp. ex/rx	rapp. ey/ry
m	daN	m	m	m	m	m	m			
3.00	6.690e+04	8.90	2.25	0.86	0.0	9.72	2.25	1.907	0.116	0.0
Risulta	6.690e+04									

Modo	Frequenza	Periodo	Acc. Spettrale	M efficace X x g	%	M efficace Y x g	%	M efficace Z x g	%	Energia	Energia x v
	Hz	sec	g	daN		daN		daN			
1	3.844	0.260	0.566	0.0	0.0	4.834e+04	72.3	0.0	0.0	0.0	0.0
2	4.420	0.226	0.566	6.674e+04	99.8	0.0	0.0	7.52	1.12e-02	0.0	0.0
3	4.618	0.217	0.566	0.0	0.0	1.411e+04	21.1	0.0	0.0	0.0	0.0
4	6.706	0.149	0.522	0.0	0.0	4068.33	6.1	0.0	0.0	0.0	0.0

Modo	Frequenza	Periodo	Acc. Spettrale	M efficace X x g	%	M efficace Y x g	%	M efficace Z x g	%	Energia	Energia x v
5	15.765	0.063	0.425	3.57	5.33e-03	0.0	0.0	2.719e+04	40.6	0.0	0.0
6	18.326	0.055	0.415	15.47	2.31e-02	0.0	0.0	2.186e+04	32.7	0.0	0.0
7	19.333	0.052	0.412	43.73	6.54e-02	0.0	0.0	1.614e+04	24.1	0.0	0.0
8	29.099	0.034	0.393	90.19	0.1	0.0	0.0	1672.63	2.5	0.0	0.0
9	41.262	0.024	0.381	7.40	1.11e-02	0.0	0.0	23.50	3.51e-02	0.0	0.0
Risulta				6.690e+04		6.652e+04		6.690e+04			
In percentuale				100.00		99.43		100.00			

CDC	Tipo	Sigla Id	Note
8	Edk	CDC=Ed (dinamico SLU) alfa=90.00 (ecc. -)	
			categoria suolo: B
			fattore di sito S = 1.088
			ordinata spettro (tratto Tb-Tc) = 0.566 g
			angolo di ingresso:90.00
			eccentricità aggiuntiva: negativa
			periodo proprio T1: 0.274 sec.
			fattore q: 1.500
			fattore per spost. mu d: 2.034
			classe di duttilità CD: ND
			numero di modi considerati: 9
			combinaz. modale: CQC

Quota	M Sismica x g	Pos. GX	Pos. GY	E agg. X-X	E agg. Y-Y	Pos. KX	Pos. KY	(r/Ls)^2	rapp. ex/rx	rapp. ey/ry
m	daN	m	m	m	m	m	m			
3.00	6.690e+04	8.90	2.25	-0.86	0.0	9.72	2.25	1.907	0.116	0.0
Risulta	6.690e+04									

Modo	Frequenza	Periodo	Acc. Spettrale	M efficace X x g	%	M efficace Y x g	%	M efficace Z x g	%	Energia	Energia x v
	Hz	sec	g	daN		daN		daN			
1	3.654	0.274	0.566	0.0	0.0	4.444e+04	66.4	0.0	0.0	0.0	0.0
2	4.420	0.226	0.566	6.674e+04	99.8	0.0	0.0	7.52	1.12e-02	0.0	0.0
3	4.960	0.202	0.566	0.0	0.0	2.034e+04	30.4	0.0	0.0	0.0	0.0
4	7.410	0.135	0.506	0.0	0.0	1708.16	2.6	0.0	0.0	0.0	0.0
5	15.765	0.063	0.425	3.57	5.33e-03	0.0	0.0	2.719e+04	40.6	0.0	0.0
6	18.326	0.055	0.415	15.44	2.31e-02	0.0	0.0	2.185e+04	32.7	0.0	0.0
7	19.333	0.052	0.412	43.76	6.54e-02	0.0	0.0	1.615e+04	24.1	0.0	0.0
8	29.099	0.034	0.393	90.19	0.1	0.0	0.0	1672.53	2.5	0.0	0.0
9	41.258	0.024	0.381	7.41	1.11e-02	0.0	0.0	23.56	3.52e-02	0.0	0.0
Risulta				6.690e+04		6.650e+04		6.690e+04			
In percentuale				100.00		99.39		100.00			

CDC	Tipo	Sigla Id	Note
9	Edk	CDC=Ed (dinamico SLD) alfa=0.0 (ecc. +)	
			categoria suolo: B
			fattore di sito S = 1.200
			ordinata spettro (tratto Tb-Tc) = 0.344 g
			angolo di ingresso:0.0
			eccentricità aggiuntiva: positiva
			periodo proprio T1: 0.227 sec.
			numero di modi considerati: 9
			combinaz. modale: CQC

Quota	M Sismica x g	Pos. GX	Pos. GY	E agg. X-X	E agg. Y-Y	Pos. KX	Pos. KY	(r/Ls)^2	rapp. ex/rx	rapp. ey/ry
m	daN	m	m	m	m	m	m			
3.00	6.690e+04	8.90	2.25	0.0	-0.21	9.72	2.25	1.907	0.116	0.0
Risulta	6.690e+04									

Modo	Frequenza	Periodo	Acc. Spettrale	M efficace X x g	%	M efficace Y x g	%	M efficace Z x g	%	Energia	Energia x v
	Hz	sec	g	daN		daN		daN			
1	3.751	0.267	0.344	7.60	1.14e-02	4.362e+04	65.2	4.28e-04	0.0	0.0	0.0
2	4.410	0.227	0.344	6.546e+04	97.8	61.35	9.17e-02	7.31	1.09e-02	0.0	0.0
3	4.752	0.210	0.344	787.24	1.2	1.399e+04	20.9	0.12	1.81e-04	0.0	0.0
4	5.034	0.199	0.344	481.52	0.7	7962.74	11.9	0.10	1.42e-04	0.0	0.0
5	9.852	0.102	0.258	7.04	1.05e-02	993.11	1.5	0.03	4.55e-05	0.0	0.0
6	15.767	0.063	0.214	3.66	5.48e-03	0.44	6.65e-04	2.729e+04	40.8	0.0	0.0
7	18.316	0.055	0.203	13.56	2.03e-02	47.23	7.06e-02	1.951e+04	29.2	0.0	0.0
8	19.215	0.052	0.200	45.27	6.77e-02	47.56	7.11e-02	1.834e+04	27.4	0.0	0.0
9	29.021	0.034	0.180	89.53	0.1	6.25	9.35e-03	1745.35	2.6	0.0	0.0
Risulta				6.689e+04		6.673e+04		6.689e+04			
In percentuale				99.99		99.74		99.99			

CDC	Tipo	Sigla Id	Note
10	Edk	CDC=Ed (dinamico SLD) alfa=0.0 (ecc. -)	
			categoria suolo: B
			fattore di sito S = 1.200
			ordinata spettro (tratto Tb-Tc) = 0.344 g
			angolo di ingresso:0.0
			eccentricità aggiuntiva: negativa
			periodo proprio T1: 0.227 sec.
			numero di modi considerati: 9
			combinaz. modale: CQC

Quota	M Sismica x g	Pos. GX	Pos. GY	E agg. X-X	E agg. Y-Y	Pos. KX	Pos. KY	(r/Ls)^2	rapp. ex/rx	rapp. ey/ry
m	daN	m	m	m	m	m	m			
3.00	6.690e+04	8.90	2.25	0.0	0.21	9.72	2.25	1.907	0.116	0.0
Risulta	6.690e+04									

Modo	Frequenza	Periodo	Acc. Spettrale	M efficace X x g	%	M efficace Y x g	%	M efficace Z x g	%	Energia	Energia x v
	Hz	sec	g	daN		daN		daN			
1	3.751	0.267	0.344	7.60	1.14e-02	4.362e+04	65.2	4.28e-04	0.0	0.0	0.0
2	4.410	0.227	0.344	6.546e+04	97.8	61.35	9.17e-02	7.31	1.09e-02	0.0	0.0
3	4.752	0.210	0.344	787.24	1.2	1.399e+04	20.9	0.12	1.81e-04	0.0	0.0
4	5.034	0.199	0.344	481.52	0.7	7962.74	11.9	0.10	1.42e-04	0.0	0.0
5	9.852	0.102	0.258	7.04	1.05e-02	993.11	1.5	0.03	4.55e-05	0.0	0.0
6	15.767	0.063	0.214	3.66	5.48e-03	0.44	6.65e-04	2.729e+04	40.8	0.0	0.0
7	18.316	0.055	0.203	13.56	2.03e-02	47.23	7.06e-02	1.951e+04	29.2	0.0	0.0
8	19.215	0.052	0.200	45.27	6.77e-02	47.56	7.11e-02	1.834e+04	27.4	0.0	0.0
9	29.021	0.034	0.180	89.53	0.1	6.25	9.35e-03	1745.35	2.6	0.0	0.0
Risulta				6.689e+04		6.673e+04		6.689e+04			
In percentuale				99.99		99.74		99.99			

CDC	Tipo	Sigla Id	Note
11	Edk	CDC=Ed (dinamico SLD) alfa=90.00 (ecc. +)	
			categoria suolo: B

CDC	Tipo	Sigla Id	Note
			fattore di sito S = 1.200
			ordinata spettro (tratto Tb-Tc) = 0.344 g
			angolo di ingresso:90.00
			eccentricità aggiuntiva: positiva
			periodo proprio T1: 0.260 sec.
			numero di modi considerati: 9
			combinaz. modale: CQC

Quota	M Sismica x g	Pos. GX	Pos. GY	E agg. X-X	E agg. Y-Y	Pos. KX	Pos. KY	(r/Ls)^2	rapp. ex/rx	rapp. ey/ry
m	daN	m	m	m	m	m	m			
3.00	6.690e+04	8.90	2.25	0.86	0.0	9.72	2.25	1.907	0.116	0.0
Risulta	6.690e+04									

Modo	Frequenza	Periodo	Acc. Spettrale	M efficace X x g	%	M efficace Y x g	%	M efficace Z x g	%	Energia	Energia x v
	Hz	sec	g	daN		daN		daN			
1	3.844	0.260	0.344	0.0	0.0	4.834e+04	72.3	0.0	0.0	0.0	0.0
2	4.420	0.226	0.344	6.674e+04	99.8	0.0	0.0	7.52	1.12e-02	0.0	0.0
3	4.618	0.217	0.344	0.0	0.0	1.411e+04	21.1	0.0	0.0	0.0	0.0
4	6.706	0.149	0.313	0.0	0.0	4068.33	6.1	0.0	0.0	0.0	0.0
5	15.765	0.063	0.214	3.57	5.33e-03	0.0	0.0	2.719e+04	40.6	0.0	0.0
6	18.326	0.055	0.203	15.47	2.31e-02	0.0	0.0	2.186e+04	32.7	0.0	0.0
7	19.333	0.052	0.200	43.73	6.54e-02	0.0	0.0	1.614e+04	24.1	0.0	0.0
8	29.099	0.034	0.180	90.19	0.1	0.0	0.0	1672.63	2.5	0.0	0.0
9	41.262	0.024	0.168	7.40	1.11e-02	0.0	0.0	23.50	3.51e-02	0.0	0.0
Risulta				6.690e+04		6.652e+04		6.690e+04			
In percentuale				100.00		99.43		100.00			

CDC	Tipo	Sigla Id	Note
12	Edk	CDC=Ed (dinamico SLD) alfa=90.00 (ecc. -)	
			categoria suolo: B
			fattore di sito S = 1.200
			ordinata spettro (tratto Tb-Tc) = 0.344 g
			angolo di ingresso:90.00
			eccentricità aggiuntiva: negativa
			periodo proprio T1: 0.274 sec.
			numero di modi considerati: 9
			combinaz. modale: CQC

Quota	M Sismica x g	Pos. GX	Pos. GY	E agg. X-X	E agg. Y-Y	Pos. KX	Pos. KY	(r/Ls)^2	rapp. ex/rx	rapp. ey/ry
m	daN	m	m	m	m	m	m			
3.00	6.690e+04	8.90	2.25	-0.86	0.0	9.72	2.25	1.907	0.116	0.0
Risulta	6.690e+04									

Modo	Frequenza	Periodo	Acc. Spettrale	M efficace X x g	%	M efficace Y x g	%	M efficace Z x g	%	Energia	Energia x v
	Hz	sec	g	daN		daN		daN			
1	3.654	0.274	0.344	0.0	0.0	4.444e+04	66.4	0.0	0.0	0.0	0.0
2	4.420	0.226	0.344	6.674e+04	99.8	0.0	0.0	7.52	1.12e-02	0.0	0.0
3	4.960	0.202	0.344	0.0	0.0	2.034e+04	30.4	0.0	0.0	0.0	0.0
4	7.410	0.135	0.297	0.0	0.0	1708.16	2.6	0.0	0.0	0.0	0.0
5	15.765	0.063	0.214	3.57	5.33e-03	0.0	0.0	2.719e+04	40.6	0.0	0.0
6	18.326	0.055	0.203	15.44	2.31e-02	0.0	0.0	2.185e+04	32.7	0.0	0.0
7	19.333	0.052	0.200	43.76	6.54e-02	0.0	0.0	1.615e+04	24.1	0.0	0.0

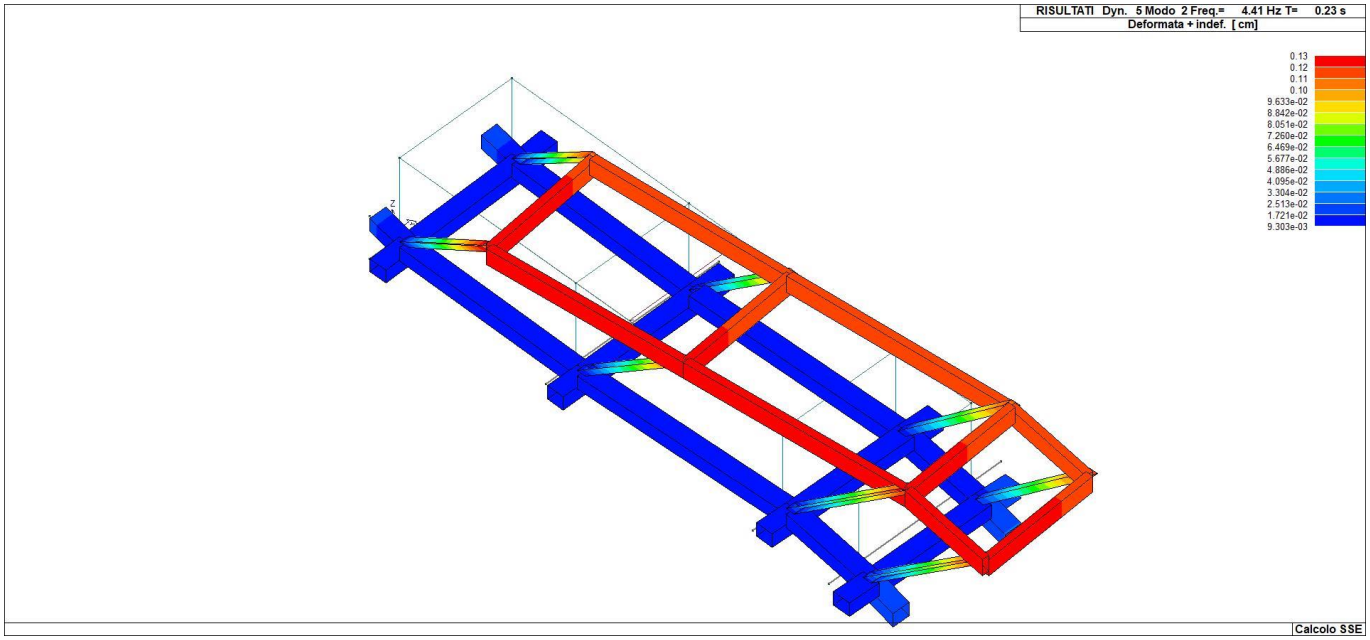
Modo	Frequenza	Periodo	Acc. Spettrale	M efficace X x g	%	M efficace Y x g	%	M efficace Z x g	%	Energia	Energia x v
8	29.099	0.034	0.180	90.19	0.1	0.0	0.0	1672.53	2.5	0.0	0.0
9	41.258	0.024	0.168	7.41	1.11e-02	0.0	0.0	23.56	3.52e-02	0.0	0.0
Risulta				6.690e+04		6.650e+04		6.690e+04			
In percentuale				100.00		99.39		100.00			

Cmb inter. h	Pilas.	1000 etaT/h	etaT	inter. h	Pilas.	1000 etaT/h	etaT	inter. h	Pilas.	1000 etaT/h	etaT
			cm	cm			cm	cm			cm
cm											
37	23	1.41	0.42	300.0	24	1.32	0.40	300.0	25	1.40	0.42
300.0											
	26	1.50	0.45	300.0	27	1.42	0.42	300.0	28	1.41	0.42
300.0											
	29	1.32	0.40	300.0	30	1.32	0.40	300.0			
38	23	1.46	0.44	300.0	24	1.41	0.42	300.0	25	1.47	0.44
300.0											
	26	1.51	0.45	300.0	27	1.29	0.39	300.0	28	1.33	0.40
300.0											
	29	1.29	0.39	300.0	30	1.25	0.37	300.0			
39	23	1.39	0.42	300.0	24	1.33	0.40	300.0	25	1.48	0.44
300.0											
	26	1.54	0.46	300.0	27	1.42	0.43	300.0	28	1.34	0.40
300.0											
	29	1.29	0.39	300.0	30	1.37	0.41	300.0			
40	23	1.33	0.40	300.0	24	1.24	0.37	300.0	25	1.43	0.43
300.0											
	26	1.51	0.45	300.0	27	1.52	0.46	300.0	28	1.42	0.43
300.0											
	29	1.33	0.40	300.0	30	1.44	0.43	300.0			
41	23	1.37	0.41	300.0	24	1.36	0.41	300.0	25	1.45	0.44
300.0											
	26	1.48	0.44	300.0	27	1.34	0.40	300.0	28	1.35	0.41
300.0											
	29	1.34	0.40	300.0	30	1.31	0.39	300.0			
42	23	1.54	0.46	300.0	24	1.43	0.43	300.0	25	1.46	0.44
300.0											
	26	1.56	0.47	300.0	27	1.32	0.40	300.0	28	1.37	0.41
300.0											
	29	1.24	0.37	300.0	30	1.19	0.36	300.0			
43	23	1.48	0.44	300.0	24	1.35	0.41	300.0	25	1.46	0.44
300.0											
	26	1.59	0.48	300.0	27	1.45	0.43	300.0	28	1.38	0.41
300.0											
	29	1.25	0.38	300.0	30	1.32	0.40	300.0			
44	23	1.29	0.39	300.0	24	1.28	0.38	300.0	25	1.48	0.44
300.0											
	26	1.49	0.45	300.0	27	1.45	0.44	300.0	28	1.36	0.41
300.0											
	29	1.35	0.41	300.0	30	1.44	0.43	300.0			
45	23	1.41	0.42	300.0	24	1.46	0.44	300.0	25	1.51	0.45
300.0											
	26	1.47	0.44	300.0	27	1.25	0.37	300.0	28	1.29	0.39
300.0											
	29	1.33	0.40	300.0	30	1.29	0.39	300.0			
46	23	1.32	0.40	300.0	24	1.41	0.42	300.0	25	1.50	0.45
300.0											
	26	1.40	0.42	300.0	27	1.32	0.40	300.0	28	1.32	0.40
300.0											
	29	1.41	0.42	300.0	30	1.42	0.42	300.0			
47	23	1.24	0.37	300.0	24	1.33	0.40	300.0	25	1.51	0.45
300.0											
	26	1.43	0.43	300.0	27	1.44	0.43	300.0	28	1.33	0.40
300.0											
	29	1.42	0.43	300.0	30	1.52	0.46	300.0			
48	23	1.33	0.40	300.0	24	1.39	0.42	300.0	25	1.54	0.46
300.0											
	26	1.48	0.44	300.0	27	1.37	0.41	300.0	28	1.29	0.39
300.0											
	29	1.34	0.40	300.0	30	1.42	0.43	300.0			

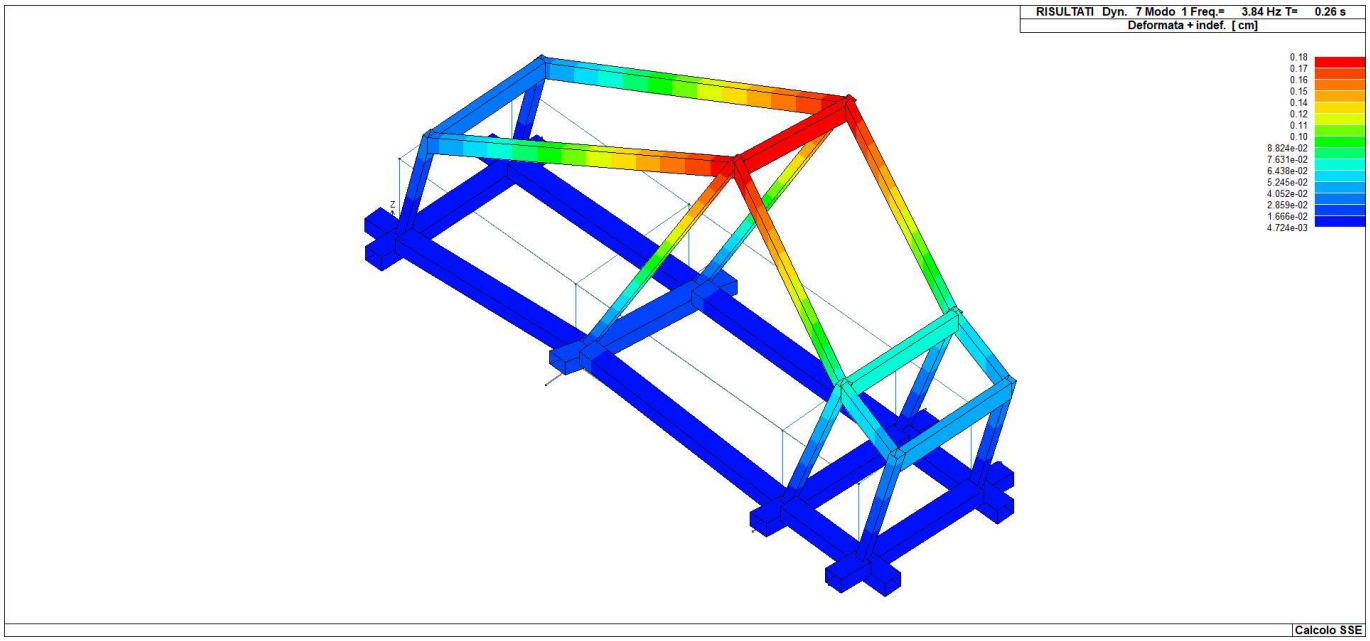
49	23	1.43	0.43	300.0	24	1.54	0.46	300.0	25	1.56	0.47
300.0											
	26	1.46	0.44	300.0	27	1.19	0.36	300.0	28	1.24	0.37
300.0											
	29	1.37	0.41	300.0	30	1.32	0.40	300.0			
50	23	1.36	0.41	300.0	24	1.37	0.41	300.0	25	1.48	0.44
300.0											
	26	1.45	0.44	300.0	27	1.31	0.39	300.0	28	1.34	0.40
300.0											
	29	1.35	0.41	300.0	30	1.34	0.40	300.0			
51	23	1.28	0.38	300.0	24	1.29	0.39	300.0	25	1.49	0.45
300.0											
	26	1.48	0.44	300.0	27	1.44	0.43	300.0	28	1.35	0.41
300.0											
	29	1.36	0.41	300.0	30	1.45	0.44	300.0			
52	23	1.35	0.41	300.0	24	1.48	0.44	300.0	25	1.59	0.48
300.0											
	26	1.46	0.44	300.0	27	1.32	0.40	300.0	28	1.25	0.38
300.0											
	29	1.38	0.41	300.0	30	1.45	0.43	300.0			
53	23	0.75	0.23	300.0	24	0.69	0.21	300.0	25	2.25	0.68
300.0											
	26	2.30	0.69	300.0	27	1.41	0.42	300.0	28	0.95	0.28
300.0											
	29	0.90	0.27	300.0	30	1.36	0.41	300.0			
54	23	0.83	0.25	300.0	24	0.86	0.26	300.0	25	2.32	0.70
300.0											
	26	2.28	0.68	300.0	27	1.27	0.38	300.0	28	0.83	0.25
300.0											
	29	0.85	0.26	300.0	30	1.31	0.39	300.0			
55	23	0.81	0.24	300.0	24	0.82	0.25	300.0	25	2.29	0.69
300.0											
	26	2.31	0.69	300.0	27	1.33	0.40	300.0	28	0.84	0.25
300.0											
	29	0.85	0.26	300.0	30	1.33	0.40	300.0			
56	23	0.70	0.21	300.0	24	0.66	0.20	300.0	25	2.28	0.69
300.0											
	26	2.27	0.68	300.0	27	1.43	0.43	300.0	28	0.95	0.28
300.0											
	29	0.91	0.27	300.0	30	1.42	0.43	300.0			
57	23	0.86	0.26	300.0	24	0.83	0.25	300.0	25	2.28	0.68
300.0											
	26	2.32	0.70	300.0	27	1.31	0.39	300.0	28	0.85	0.26
300.0											
	29	0.83	0.25	300.0	30	1.27	0.38	300.0			
58	23	0.69	0.21	300.0	24	0.75	0.23	300.0	25	2.30	0.69
300.0											
	26	2.25	0.68	300.0	27	1.36	0.41	300.0	28	0.90	0.27
300.0											
	29	0.95	0.28	300.0	30	1.41	0.42	300.0			
59	23	0.66	0.20	300.0	24	0.70	0.21	300.0	25	2.27	0.68
300.0											
	26	2.28	0.69	300.0	27	1.42	0.43	300.0	28	0.91	0.27
300.0											
	29	0.95	0.28	300.0	30	1.43	0.43	300.0			
60	23	0.82	0.25	300.0	24	0.81	0.24	300.0	25	2.31	0.69
300.0											
	26	2.29	0.69	300.0	27	1.33	0.40	300.0	28	0.85	0.26
300.0											
	29	0.84	0.25	300.0	30	1.33	0.40	300.0			
61	23	1.13	0.34	300.0	24	1.18	0.36	300.0	25	2.40	0.72
300.0											
	26	2.40	0.72	300.0	27	1.03	0.31	300.0	28	0.68	0.20
300.0											
	29	0.76	0.23	300.0	30	1.06	0.32	300.0			
62	23	1.33	0.40	300.0	24	1.27	0.38	300.0	25	2.42	0.73
300.0											
	26	2.43	0.73	300.0	27	0.98	0.29	300.0	28	0.71	0.21
300.0											
	29	0.59	0.18	300.0	30	0.93	0.28	300.0			
63	23	1.31	0.39	300.0	24	1.24	0.37	300.0	25	2.40	0.72
300.0											
	26	2.46	0.74	300.0	27	1.06	0.32	300.0	28	0.72	0.22
300.0											
	29	0.58	0.18	300.0	30	0.95	0.28	300.0			
64	23	1.10	0.33	300.0	24	1.16	0.35	300.0	25	2.43	0.73
300.0											

	26	2.37	0.71	300.0	27	1.04	0.31	300.0	28	0.68	0.20
300.0											
	29	0.78	0.23	300.0	30	1.13	0.34	300.0			
65	23	1.27	0.38	300.0	24	1.33	0.40	300.0	25	2.43	0.73
300.0											
	26	2.42	0.73	300.0	27	0.93	0.28	300.0	28	0.59	0.18
300.0											
	29	0.71	0.21	300.0	30	0.98	0.29	300.0			
66	23	1.18	0.36	300.0	24	1.13	0.34	300.0	25	2.40	0.72
300.0											
	26	2.40	0.72	300.0	27	1.06	0.32	300.0	28	0.76	0.23
300.0											
	29	0.68	0.20	300.0	30	1.03	0.31	300.0			
67	23	1.16	0.35	300.0	24	1.10	0.33	300.0	25	2.37	0.71
300.0											
	26	2.43	0.73	300.0	27	1.13	0.34	300.0	28	0.78	0.23
300.0											
	29	0.68	0.20	300.0	30	1.04	0.31	300.0			
68	23	1.24	0.37	300.0	24	1.31	0.39	300.0	25	2.46	0.74
300.0											
	26	2.40	0.72	300.0	27	0.95	0.28	300.0	28	0.58	0.18
300.0											
	29	0.72	0.22	300.0	30	1.06	0.32	300.0			

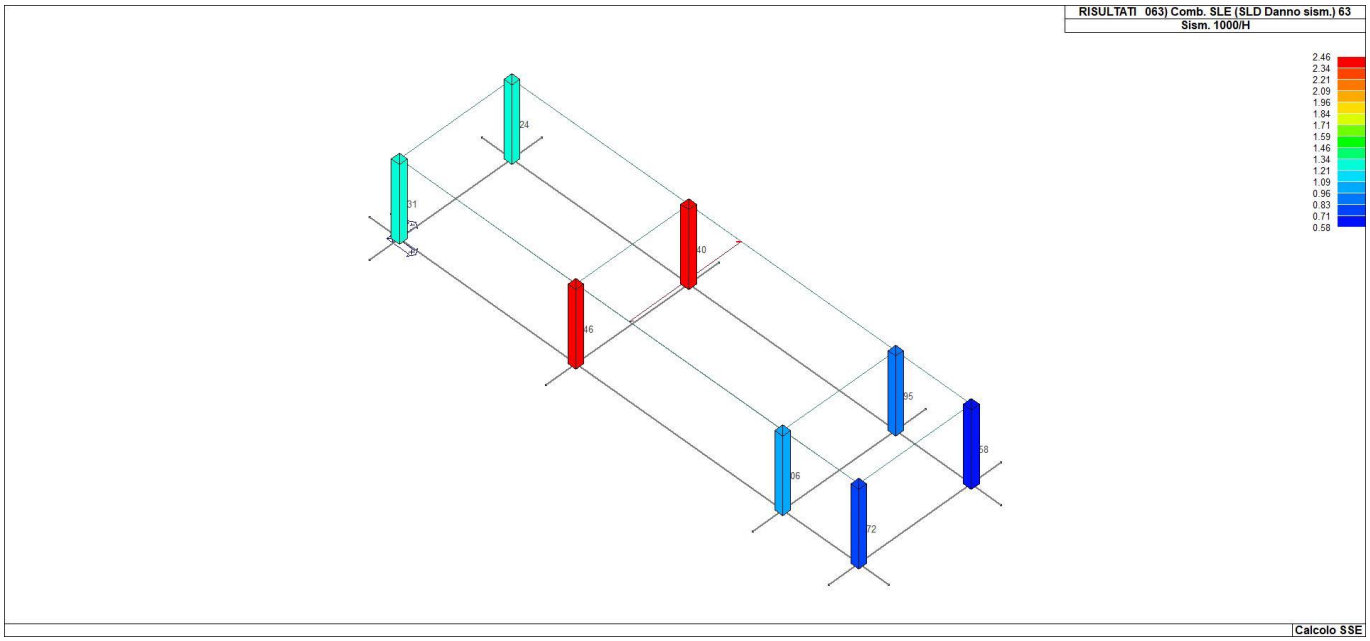
Cmb	**1000 etaT/h**
	2.46



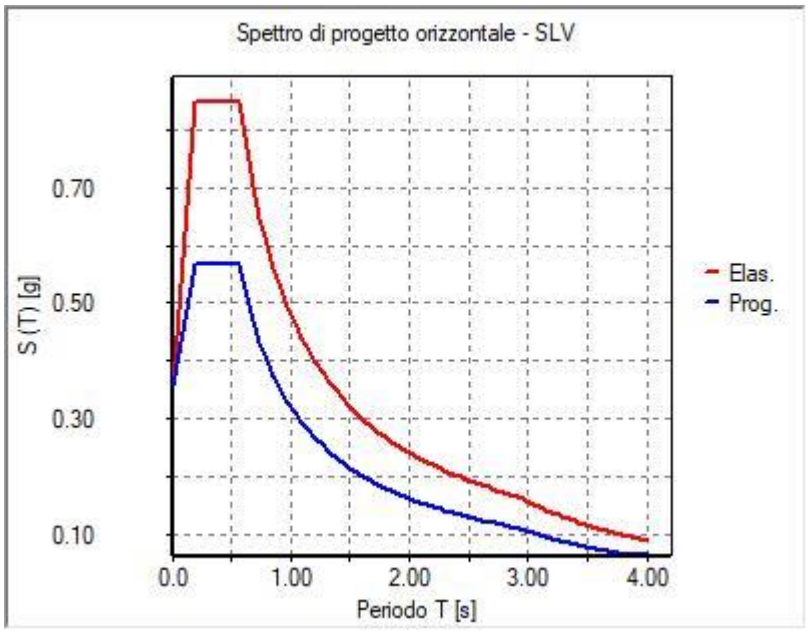
31_RIS_MODOX_002_CDC=Ed (dinamico SLU) alfa=0.0 (ecc. +)



31_RIS_MODOY_001_CDC=Ed (dinamico SLU) alfa=90.00 (ecc. +)



31_RIS_SLE_063_Comb. SLE (SLD Danno sism.) 63



31_RIS_SPETTRI_PROGETTO_SLV_O

RISULTATI NODALI

LEGENDA 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	2	-5.57e-03	-2.06e-03	-0.14	8.31e-05	-1.89e-04	0.0
1	11	-0.07	0.03	-0.11	-1.66e-05	-6.30e-04	1.84e-05
1	36	-0.02	-0.06	-0.16	5.66e-04	-3.43e-04	-2.61e-05
1	43	-0.05	0.02	-0.10	1.12e-05	-4.31e-04	1.12e-05
1	68	-0.01	-0.04	-0.14	3.66e-04	-2.56e-04	-1.58e-05
1	70	-3.59e-03	-1.35e-03	-0.10	5.44e-05	-1.23e-04	0.0
1	72	-4.11e-03	-1.52e-03	-0.10	6.16e-05	-1.40e-04	0.0
1	74	-3.74e-03	-1.40e-03	-0.10	5.65e-05	-1.27e-04	0.0
1	76	-3.59e-03	-1.35e-03	-0.10	5.44e-05	-1.23e-04	0.0
2	2	-5.06e-03	-2.07e-03	-0.16	8.30e-05	-1.68e-04	0.0
2	11	-0.07	0.03	-0.18	-1.65e-05	-6.04e-04	1.75e-05
2	20	-0.07	-0.03	-0.23	3.08e-04	-6.35e-04	9.41e-06
2	36	-0.02	-0.06	-0.20	5.65e-04	-3.12e-04	-2.71e-05
2	43	-0.05	0.02	-0.15	1.12e-05	-4.10e-04	1.07e-05
2	52	-0.04	-0.02	-0.18	2.09e-04	-4.29e-04	5.78e-06
2	68	-0.01	-0.04	-0.16	3.65e-04	-2.32e-04	-1.64e-05
2	70	-3.25e-03	-1.36e-03	-0.11	5.43e-05	-1.09e-04	0.0
2	72	-3.73e-03	-1.54e-03	-0.12	6.15e-05	-1.24e-04	0.0
2	74	-3.39e-03	-1.41e-03	-0.11	5.63e-05	-1.13e-04	0.0
2	76	-3.25e-03	-1.36e-03	-0.11	5.43e-05	-1.09e-04	0.0
3	2	-5.53e-03	-1.59e-03	-0.14	6.44e-05	-1.89e-04	0.0
3	8	-0.07	4.93e-04	-0.15	1.99e-04	-6.62e-04	0.0
3	36	-0.02	-0.06	-0.22	5.30e-04	-3.42e-04	-2.37e-05
3	40	-0.05	-9.43e-05	-0.13	1.38e-04	-4.51e-04	0.0
3	68	-0.01	-0.04	-0.18	3.39e-04	-2.56e-04	-1.43e-05
3	70	-3.56e-03	-1.04e-03	-0.10	4.22e-05	-1.22e-04	0.0
3	72	-4.08e-03	-1.18e-03	-0.11	4.77e-05	-1.39e-04	0.0
3	74	-3.71e-03	-1.08e-03	-0.10	4.38e-05	-1.27e-04	0.0
3	76	-3.56e-03	-1.04e-03	-0.10	4.22e-05	-1.22e-04	0.0
4	2	-5.57e-03	2.06e-03	-0.14	-8.31e-05	-1.89e-04	0.0
4	20	-0.07	-0.03	-0.11	1.66e-05	-6.30e-04	-1.84e-05
4	31	-0.02	0.06	-0.16	-5.66e-04	-3.43e-04	2.61e-05
4	52	-0.05	-0.02	-0.10	-1.12e-05	-4.31e-04	-1.12e-05
4	63	-0.01	0.04	-0.14	-3.66e-04	-2.56e-04	1.58e-05
4	70	-3.59e-03	1.35e-03	-0.10	-5.44e-05	-1.23e-04	0.0
4	72	-4.11e-03	1.52e-03	-0.10	-6.16e-05	-1.40e-04	0.0
4	74	-3.74e-03	1.40e-03	-0.10	-5.65e-05	-1.27e-04	0.0
4	76	-3.59e-03	1.35e-03	-0.10	-5.44e-05	-1.23e-04	0.0
5	2	-5.06e-03	2.07e-03	-0.16	-8.30e-05	-1.68e-04	0.0
5	11	-0.07	0.03	-0.23	-3.08e-04	-6.35e-04	-9.41e-06
5	20	-0.07	-0.03	-0.18	1.65e-05	-6.04e-04	-1.75e-05
5	31	-0.02	0.06	-0.20	-5.65e-04	-3.12e-04	2.71e-05
5	43	-0.04	0.02	-0.18	-2.09e-04	-4.29e-04	-5.78e-06
5	52	-0.05	-0.02	-0.15	-1.12e-05	-4.10e-04	-1.07e-05
5	63	-0.01	0.04	-0.16	-3.65e-04	-2.32e-04	1.64e-05
5	70	-3.25e-03	1.36e-03	-0.11	-5.43e-05	-1.09e-04	0.0
5	72	-3.73e-03	1.54e-03	-0.12	-6.15e-05	-1.24e-04	0.0

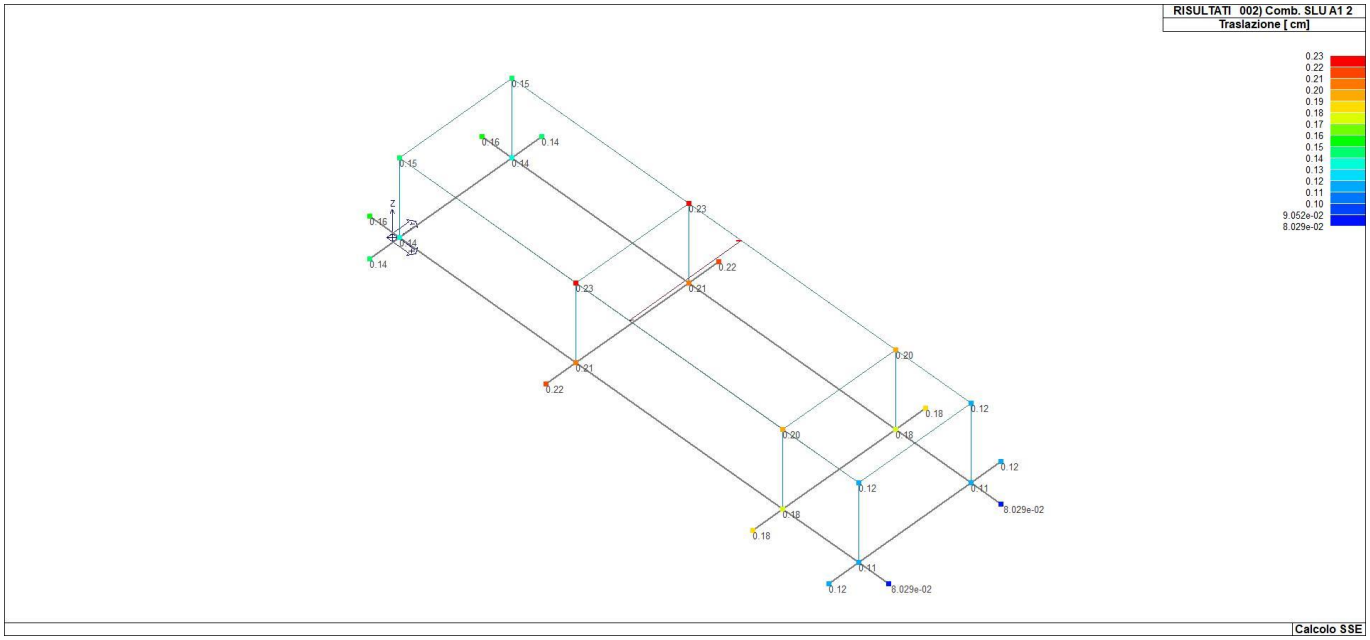
5	74	-3.39e-03	1.41e-03	-0.11	-5.63e-05	-1.13e-04	0.0
5	76	-3.25e-03	1.36e-03	-0.11	-5.43e-05	-1.09e-04	0.0
6	2	-5.53e-03	1.59e-03	-0.14	-6.44e-05	-1.89e-04	0.0
6	15	-0.07	-4.93e-04	-0.15	-1.99e-04	-6.62e-04	0.0
6	31	-0.02	0.06	-0.22	-5.30e-04	-3.42e-04	2.37e-05
6	47	-0.05	9.43e-05	-0.13	-1.38e-04	-4.51e-04	0.0
6	63	-0.01	0.04	-0.18	-3.39e-04	-2.56e-04	1.43e-05
6	70	-3.56e-03	1.04e-03	-0.10	-4.22e-05	-1.22e-04	0.0
6	72	-4.08e-03	1.18e-03	-0.11	-4.77e-05	-1.39e-04	0.0
6	74	-3.71e-03	1.08e-03	-0.10	-4.38e-05	-1.27e-04	0.0
6	76	-3.56e-03	1.04e-03	-0.10	-4.22e-05	-1.22e-04	0.0
7	2	-5.37e-04	3.30e-03	-0.21	-1.33e-04	-1.01e-05	0.0
7	20	-0.06	-0.03	-0.11	1.58e-04	-2.49e-04	-4.99e-06
7	29	0.02	0.09	-0.22	-8.56e-04	7.24e-05	-8.48e-06
7	31	-0.01	0.09	-0.22	-8.64e-04	-6.55e-05	-1.81e-05
7	52	-0.04	-0.01	-0.12	6.26e-05	-1.54e-04	-3.05e-06
7	61	0.01	0.06	-0.19	-5.54e-04	4.15e-05	-5.13e-06
7	63	-8.41e-03	0.06	-0.19	-5.59e-04	-4.24e-05	-1.10e-05
7	70	-3.38e-04	2.12e-03	-0.14	-8.54e-05	-6.54e-06	0.0
7	72	-3.95e-04	2.44e-03	-0.16	-9.82e-05	-7.49e-06	0.0
7	74	-3.54e-04	2.21e-03	-0.14	-8.90e-05	-6.81e-06	0.0
7	76	-3.38e-04	2.12e-03	-0.14	-8.54e-05	-6.54e-06	0.0
8	2	-5.37e-04	-3.30e-03	-0.21	1.33e-04	-1.01e-05	0.0
8	11	-0.06	0.03	-0.11	-1.58e-04	-2.49e-04	4.99e-06
8	34	0.02	-0.09	-0.22	8.56e-04	7.24e-05	8.48e-06
8	36	-0.01	-0.09	-0.22	8.64e-04	-6.55e-05	1.81e-05
8	43	-0.04	0.01	-0.12	-6.26e-05	-1.54e-04	3.05e-06
8	66	0.01	-0.06	-0.19	5.54e-04	4.15e-05	5.13e-06
8	68	-8.41e-03	-0.06	-0.19	5.59e-04	-4.24e-05	1.10e-05
8	70	-3.38e-04	-2.12e-03	-0.14	8.54e-05	-6.54e-06	0.0
8	72	-3.95e-04	-2.44e-03	-0.16	9.82e-05	-7.49e-06	0.0
8	74	-3.54e-04	-2.21e-03	-0.14	8.90e-05	-6.81e-06	0.0
8	76	-3.38e-04	-2.12e-03	-0.14	8.54e-05	-6.54e-06	0.0
9	2	-5.32e-04	-2.43e-03	-0.22	9.81e-05	-1.01e-05	0.0
9	11	-0.06	0.03	-0.09	-1.71e-04	-2.49e-04	5.77e-06
9	30	0.02	-0.09	-0.32	8.10e-04	7.53e-05	9.75e-06
9	34	0.02	-0.09	-0.32	8.04e-04	7.23e-05	6.02e-06
9	43	-0.04	0.02	-0.11	-7.93e-05	-1.54e-04	3.53e-06
9	62	0.01	-0.06	-0.25	5.18e-04	4.32e-05	5.91e-06
9	66	0.01	-0.06	-0.25	5.14e-04	4.14e-05	3.64e-06
9	70	-3.34e-04	-1.57e-03	-0.15	6.32e-05	-6.52e-06	0.0
9	72	-3.90e-04	-1.79e-03	-0.16	7.24e-05	-7.47e-06	0.0
9	74	-3.50e-04	-1.63e-03	-0.15	6.58e-05	-6.79e-06	0.0
9	76	-3.34e-04	-1.57e-03	-0.15	6.32e-05	-6.52e-06	0.0
10	2	-5.32e-04	2.43e-03	-0.22	-9.81e-05	-1.01e-05	0.0
10	20	-0.06	-0.03	-0.09	1.71e-04	-2.49e-04	-5.77e-06
10	29	0.02	0.09	-0.32	-8.04e-04	7.23e-05	-6.02e-06
10	33	0.02	0.09	-0.32	-8.10e-04	7.53e-05	-9.75e-06
10	52	-0.04	-0.02	-0.11	7.93e-05	-1.54e-04	-3.53e-06
10	61	0.01	0.06	-0.25	-5.14e-04	4.14e-05	-3.64e-06
10	65	0.01	0.06	-0.25	-5.18e-04	4.32e-05	-5.91e-06
10	70	-3.34e-04	1.57e-03	-0.15	-6.32e-05	-6.52e-06	0.0
10	72	-3.90e-04	1.79e-03	-0.16	-7.24e-05	-7.47e-06	0.0
10	74	-3.50e-04	1.63e-03	-0.15	-6.58e-05	-6.79e-06	0.0
10	76	-3.34e-04	1.57e-03	-0.15	-6.32e-05	-6.52e-06	0.0
11	2	1.23e-03	2.60e-03	-0.18	-1.05e-04	2.51e-05	0.0
11	17	0.07	6.59e-03	-0.09	-1.05e-04	3.20e-04	-1.99e-05
11	27	-0.02	0.06	-0.19	-5.81e-04	-2.75e-05	-2.05e-05
11	49	0.04	4.67e-03	-0.10	-9.07e-05	2.02e-04	-1.21e-05
11	59	-0.01	0.04	-0.16	-3.80e-04	-9.17e-06	-1.25e-05
11	70	8.56e-04	1.69e-03	-0.12	-6.80e-05	1.93e-05	0.0
11	72	9.27e-04	1.92e-03	-0.13	-7.74e-05	1.93e-05	0.0
11	74	8.76e-04	1.76e-03	-0.12	-7.07e-05	1.93e-05	0.0
11	76	8.56e-04	1.69e-03	-0.12	-6.80e-05	1.93e-05	0.0
12	2	1.23e-03	-2.60e-03	-0.18	1.05e-04	2.51e-05	0.0
12	10	0.07	-6.59e-03	-0.09	1.05e-04	3.20e-04	1.99e-05
12	24	-0.02	-0.06	-0.19	5.81e-04	-2.75e-05	2.05e-05
12	42	0.04	-4.67e-03	-0.10	9.07e-05	2.02e-04	1.21e-05
12	56	-0.01	-0.04	-0.16	3.80e-04	-9.17e-06	1.25e-05
12	70	8.56e-04	-1.69e-03	-0.12	6.80e-05	1.93e-05	0.0
12	72	9.27e-04	-1.92e-03	-0.13	7.74e-05	1.93e-05	0.0
12	74	8.76e-04	-1.76e-03	-0.12	7.07e-05	1.93e-05	0.0
12	76	8.56e-04	-1.69e-03	-0.12	6.80e-05	1.93e-05	0.0
13	2	1.22e-03	-1.92e-03	-0.18	7.73e-05	2.51e-05	0.0
13	10	0.07	-6.21e-03	-0.11	9.03e-05	3.20e-04	5.41e-06
13	24	-0.02	-0.06	-0.25	5.40e-04	-2.74e-05	2.44e-05
13	42	0.04	-4.26e-03	-0.11	7.47e-05	2.02e-04	3.25e-06

13	56	-9.39e-03	-0.04	-0.20	3.49e-04	-9.15e-06	1.48e-05
13	70	8.48e-04	-1.25e-03	-0.13	5.05e-05	1.93e-05	0.0
13	72	9.17e-04	-1.42e-03	-0.14	5.73e-05	1.93e-05	0.0
13	74	8.67e-04	-1.30e-03	-0.13	5.24e-05	1.93e-05	0.0
13	76	8.48e-04	-1.25e-03	-0.13	5.05e-05	1.93e-05	0.0
14	2	1.22e-03	1.92e-03	-0.18	-7.73e-05	2.51e-05	0.0
14	17	0.07	6.21e-03	-0.11	-9.03e-05	3.20e-04	-5.41e-06
14	27	-0.02	0.06	-0.25	-5.40e-04	-2.74e-05	-2.44e-05
14	49	0.04	4.26e-03	-0.11	-7.47e-05	2.02e-04	-3.25e-06
14	59	-9.39e-03	0.04	-0.20	-3.49e-04	-9.15e-06	-1.48e-05
14	70	8.48e-04	1.25e-03	-0.13	-5.05e-05	1.93e-05	0.0
14	72	9.17e-04	1.42e-03	-0.14	-5.73e-05	1.93e-05	0.0
14	74	8.67e-04	1.30e-03	-0.13	-5.24e-05	1.93e-05	0.0
14	76	8.48e-04	1.25e-03	-0.13	-5.05e-05	1.93e-05	0.0
15	2	-6.29e-03	-1.68e-03	-0.11	6.79e-05	-2.81e-04	0.0
15	11	-0.08	1.01e-04	-7.76e-03	-8.89e-05	-7.79e-04	-3.61e-06
15	14	0.06	-0.03	-0.17	2.55e-04	3.99e-04	-1.01e-05
15	26	0.01	-0.06	-0.15	4.61e-04	-4.32e-05	1.14e-05
15	43	-0.05	-3.93e-04	-0.04	-3.63e-05	-5.42e-04	-2.20e-06
15	46	0.04	-0.02	-0.13	1.73e-04	1.75e-04	-6.15e-06
15	58	7.54e-03	-0.03	-0.12	2.98e-04	-9.43e-05	6.88e-06
15	70	-3.90e-03	-1.12e-03	-0.08	4.53e-05	-1.74e-04	0.0
15	72	-4.61e-03	-1.25e-03	-0.08	5.05e-05	-2.06e-04	0.0
15	74	-4.10e-03	-1.16e-03	-0.08	4.68e-05	-1.83e-04	0.0
15	76	-3.90e-03	-1.12e-03	-0.08	4.53e-05	-1.74e-04	0.0
16	2	-6.30e-03	-1.35e-03	-0.12	5.45e-05	-2.81e-04	0.0
16	11	-0.08	7.61e-05	-2.97e-03	-9.30e-05	-7.78e-04	-1.92e-06
16	26	0.02	-0.06	-0.20	4.30e-04	-4.31e-05	9.25e-06
16	43	-0.05	-3.21e-04	-0.04	-4.23e-05	-5.41e-04	-1.19e-06
16	58	8.29e-03	-0.03	-0.16	2.76e-04	-9.41e-05	5.55e-06
16	70	-3.90e-03	-8.99e-04	-0.09	3.63e-05	-1.74e-04	0.0
16	72	-4.61e-03	-1.00e-03	-0.09	4.06e-05	-2.06e-04	0.0
16	74	-4.10e-03	-9.29e-04	-0.09	3.75e-05	-1.83e-04	0.0
16	76	-3.90e-03	-8.99e-04	-0.09	3.63e-05	-1.74e-04	0.0
17	2	-6.29e-03	1.68e-03	-0.11	-6.79e-05	-2.81e-04	0.0
17	5	0.06	0.03	-0.17	-2.55e-04	3.99e-04	1.01e-05
17	20	-0.08	-1.01e-04	-7.76e-03	8.89e-05	-7.79e-04	3.61e-06
17	21	0.01	0.06	-0.15	-4.61e-04	-4.32e-05	-1.14e-05
17	37	0.04	0.02	-0.13	-1.73e-04	1.75e-04	6.15e-06
17	52	-0.05	3.93e-04	-0.04	3.63e-05	-5.42e-04	2.20e-06
17	53	7.54e-03	0.03	-0.12	-2.98e-04	-9.43e-05	-6.88e-06
17	70	-3.90e-03	1.12e-03	-0.08	-4.53e-05	-1.74e-04	0.0
17	72	-4.61e-03	1.25e-03	-0.08	-5.05e-05	-2.06e-04	0.0
17	74	-4.10e-03	1.16e-03	-0.08	-4.68e-05	-1.83e-04	0.0
17	76	-3.90e-03	1.12e-03	-0.08	-4.53e-05	-1.74e-04	0.0
18	2	-6.30e-03	1.35e-03	-0.12	-5.45e-05	-2.81e-04	0.0
18	20	-0.08	-7.61e-05	-2.97e-03	9.30e-05	-7.78e-04	1.92e-06
18	21	0.02	0.06	-0.20	-4.30e-04	-4.31e-05	-9.25e-06
18	52	-0.05	3.21e-04	-0.04	4.23e-05	-5.41e-04	1.19e-06
18	53	8.29e-03	0.03	-0.16	-2.76e-04	-9.41e-05	-5.55e-06
18	70	-3.90e-03	8.99e-04	-0.09	-3.63e-05	-1.74e-04	0.0
18	72	-4.61e-03	1.00e-03	-0.09	-4.06e-05	-2.06e-04	0.0
18	74	-4.10e-03	9.29e-04	-0.09	-3.75e-05	-1.83e-04	0.0
18	76	-3.90e-03	8.99e-04	-0.09	-3.63e-05	-1.74e-04	0.0
19	2	-6.47e-03	1.69e-03	-0.08	-6.78e-05	-2.89e-04	0.0
19	5	0.06	0.03	-0.21	-2.54e-04	3.66e-04	7.51e-06
19	20	-0.08	1.06e-03	0.08	8.87e-05	-7.53e-04	5.15e-06
19	21	0.01	0.05	-0.15	-4.60e-04	-6.42e-05	-1.63e-05
19	37	0.04	0.02	-0.15	-1.72e-04	1.53e-04	4.60e-06
19	52	-0.05	1.11e-03	0.02	3.62e-05	-5.28e-04	3.14e-06
19	53	7.16e-03	0.03	-0.11	-2.98e-04	-1.09e-04	-9.88e-06
19	70	-4.02e-03	1.13e-03	-0.06	-4.52e-05	-1.79e-04	0.0
19	72	-4.74e-03	1.26e-03	-0.06	-5.04e-05	-2.11e-04	0.0
19	74	-4.23e-03	1.16e-03	-0.06	-4.67e-05	-1.88e-04	0.0
19	76	-4.02e-03	1.13e-03	-0.06	-4.52e-05	-1.79e-04	0.0
20	2	-6.47e-03	-1.69e-03	-0.08	6.78e-05	-2.89e-04	0.0
20	11	-0.08	-1.06e-03	0.08	-8.87e-05	-7.53e-04	-5.15e-06
20	14	0.06	-0.03	-0.21	2.54e-04	3.66e-04	-7.51e-06
20	26	0.01	-0.05	-0.15	4.60e-04	-6.42e-05	1.63e-05
20	43	-0.05	-1.11e-03	0.02	-3.62e-05	-5.28e-04	-3.14e-06
20	46	0.04	-0.02	-0.15	1.72e-04	1.53e-04	-4.60e-06
20	58	7.16e-03	-0.03	-0.11	2.98e-04	-1.09e-04	9.88e-06
20	70	-4.02e-03	-1.13e-03	-0.06	4.52e-05	-1.79e-04	0.0
20	72	-4.74e-03	-1.26e-03	-0.06	5.04e-05	-2.11e-04	0.0
20	74	-4.23e-03	-1.16e-03	-0.06	4.67e-05	-1.88e-04	0.0
20	76	-4.02e-03	-1.13e-03	-0.06	4.52e-05	-1.79e-04	0.0
21	2	0.01	-1.54e-04	-0.15	-2.73e-05	9.43e-04	0.0

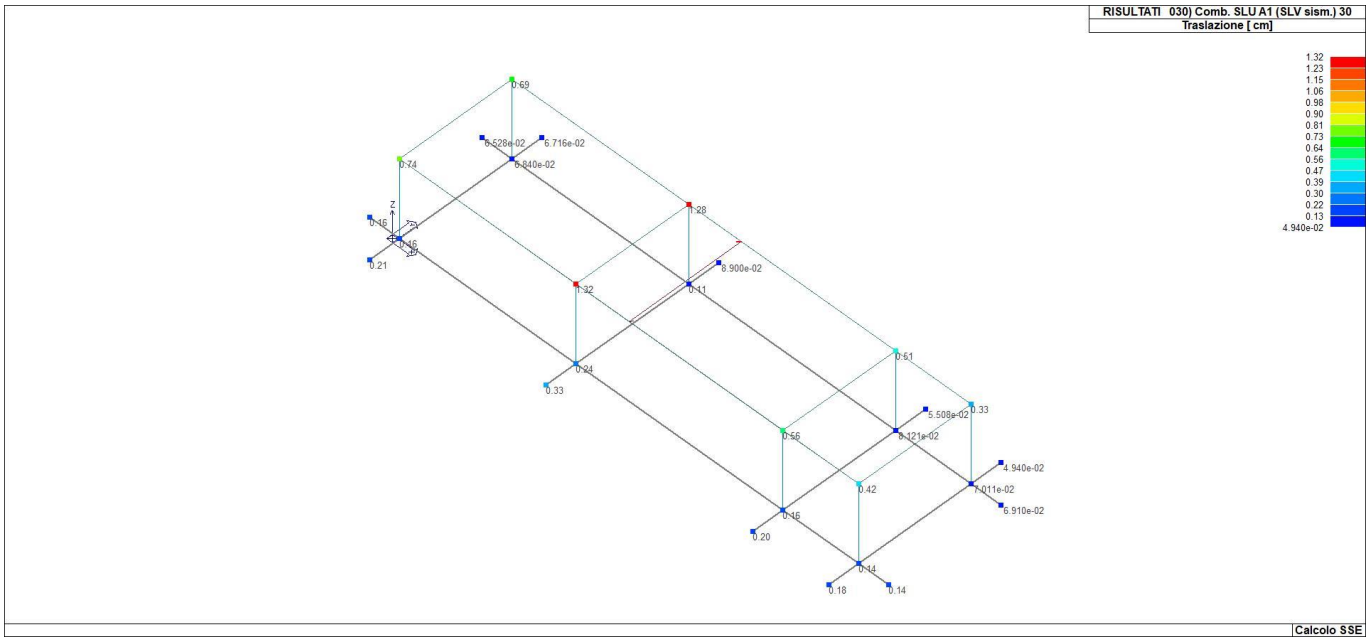
21	10	0.76	-0.32	-0.09	2.68e-04	1.31e-03	4.28e-06
21	30	0.28	-0.66	-0.15	5.84e-04	9.22e-04	-4.43e-04
21	36	-0.15	-0.66	-0.17	5.82e-04	5.07e-04	-4.42e-04
21	42	0.47	-0.20	-0.09	1.54e-04	1.02e-03	2.88e-06
21	62	0.17	-0.40	-0.13	3.47e-04	7.90e-04	-2.69e-04
21	68	-0.09	-0.40	-0.15	3.46e-04	5.38e-04	-2.68e-04
21	70	8.14e-03	-5.08e-05	-0.10	-2.20e-05	5.86e-04	0.0
21	72	9.56e-03	-1.02e-04	-0.11	-2.12e-05	6.91e-04	0.0
21	74	8.55e-03	-6.53e-05	-0.10	-2.18e-05	6.16e-04	0.0
21	76	8.14e-03	-5.08e-05	-0.10	-2.20e-05	5.86e-04	0.0
22	2	0.01	1.54e-04	-0.15	2.73e-05	9.43e-04	0.0
22	17	0.76	0.32	-0.09	-2.68e-04	1.31e-03	-4.28e-06
22	31	-0.15	0.66	-0.17	-5.82e-04	5.07e-04	4.42e-04
22	33	0.28	0.66	-0.15	-5.84e-04	9.22e-04	4.43e-04
22	49	0.47	0.20	-0.09	-1.54e-04	1.02e-03	-2.88e-06
22	63	-0.09	0.40	-0.15	-3.46e-04	5.38e-04	2.68e-04
22	65	0.17	0.40	-0.13	-3.47e-04	7.90e-04	2.69e-04
22	70	8.14e-03	5.08e-05	-0.10	2.20e-05	5.86e-04	0.0
22	72	9.56e-03	1.02e-04	-0.11	2.12e-05	6.91e-04	0.0
22	74	8.55e-03	6.53e-05	-0.10	2.18e-05	6.16e-04	0.0
22	76	8.14e-03	5.08e-05	-0.10	2.20e-05	5.86e-04	0.0
23	2	-5.79e-03	-2.92e-03	-0.23	9.90e-05	1.93e-04	0.0
23	20	-0.75	-0.40	-0.12	4.04e-04	-1.81e-04	1.66e-04
23	29	0.25	1.25	-0.25	-9.61e-04	1.90e-04	-5.04e-05
23	30	0.15	-1.27	-0.07	1.12e-03	2.15e-04	1.33e-04
23	52	-0.46	-0.25	-0.13	2.75e-04	-6.36e-05	1.01e-04
23	61	0.15	0.76	-0.21	-5.56e-04	1.62e-04	-3.05e-05
23	62	0.09	-0.77	-0.10	7.11e-04	1.77e-04	8.02e-05
23	70	-3.56e-03	-2.19e-03	-0.16	7.40e-05	1.19e-04	0.0
23	72	-4.23e-03	-2.23e-03	-0.17	7.56e-05	1.41e-04	0.0
23	74	-3.75e-03	-2.21e-03	-0.16	7.44e-05	1.26e-04	0.0
23	76	-3.56e-03	-2.19e-03	-0.16	7.40e-05	1.19e-04	0.0
24	2	-5.79e-03	2.92e-03	-0.23	-9.90e-05	1.93e-04	0.0
24	11	-0.75	0.40	-0.12	-4.04e-04	-1.81e-04	-1.66e-04
24	33	0.15	1.27	-0.07	-1.12e-03	2.15e-04	-1.33e-04
24	34	0.25	-1.25	-0.25	9.61e-04	1.90e-04	5.04e-05
24	43	-0.46	0.25	-0.13	-2.75e-04	-6.36e-05	-1.01e-04
24	65	0.09	0.77	-0.10	-7.11e-04	1.77e-04	-8.02e-05
24	66	0.15	-0.76	-0.21	5.56e-04	1.62e-04	3.05e-05
24	70	-3.56e-03	2.19e-03	-0.16	-7.40e-05	1.19e-04	0.0
24	72	-4.23e-03	2.23e-03	-0.17	-7.56e-05	1.41e-04	0.0
24	74	-3.75e-03	2.21e-03	-0.16	-7.44e-05	1.26e-04	0.0
24	76	-3.56e-03	2.19e-03	-0.16	-7.40e-05	1.19e-04	0.0
25	2	-0.03	2.72e-03	-0.19	-9.16e-05	-7.19e-04	-2.04e-06
25	11	-0.76	0.07	-0.16	-1.24e-04	-8.44e-04	-2.54e-04
25	24	-0.25	-0.72	-0.21	5.96e-04	-6.14e-04	5.24e-04
25	27	-0.21	0.73	-0.08	-7.35e-04	-5.16e-04	-5.27e-04
25	43	-0.47	0.04	-0.15	-1.02e-04	-6.88e-04	-1.55e-04
25	56	-0.16	-0.44	-0.18	3.36e-04	-5.48e-04	3.18e-04
25	59	-0.13	0.44	-0.10	-4.74e-04	-4.88e-04	-3.21e-04
25	70	-0.02	2.06e-03	-0.13	-6.90e-05	-4.46e-04	-1.51e-06
25	72	-0.02	2.08e-03	-0.14	-7.01e-05	-5.26e-04	-1.55e-06
25	74	-0.02	2.06e-03	-0.14	-6.94e-05	-4.69e-04	-1.52e-06
25	76	-0.02	2.06e-03	-0.13	-6.90e-05	-4.46e-04	-1.51e-06
26	2	-8.74e-03	-1.35e-04	-0.12	-2.80e-05	-9.22e-05	-2.66e-06
26	11	-0.76	5.35e-03	-6.08e-03	-4.37e-05	-7.24e-04	-2.31e-04
26	14	0.69	-0.22	-0.17	1.78e-04	5.88e-04	7.75e-05
26	26	0.19	-0.47	-0.16	4.28e-04	7.94e-05	4.93e-04
26	43	-0.46	3.07e-03	-0.04	-3.54e-05	-4.62e-04	-1.41e-04
26	46	0.42	-0.13	-0.14	9.94e-05	3.36e-04	4.63e-05
26	58	0.11	-0.29	-0.13	2.51e-04	2.68e-05	2.99e-04
26	70	-5.31e-03	-3.52e-05	-0.08	-2.26e-05	-5.53e-05	-1.96e-06
26	72	-6.37e-03	-8.69e-05	-0.09	-2.18e-05	-6.70e-05	-2.02e-06
26	74	-5.61e-03	-5.00e-05	-0.08	-2.24e-05	-5.87e-05	-1.98e-06
26	76	-5.31e-03	-3.52e-05	-0.08	-2.26e-05	-5.53e-05	-1.96e-06
27	2	-8.74e-03	1.35e-04	-0.12	2.80e-05	-9.22e-05	2.66e-06
27	5	0.69	0.22	-0.17	-1.78e-04	5.88e-04	-7.75e-05
27	20	-0.76	-5.35e-03	-6.08e-03	4.37e-05	-7.24e-04	2.31e-04
27	21	0.19	0.47	-0.16	-4.28e-04	7.94e-05	-4.93e-04
27	37	0.42	0.13	-0.14	-9.94e-05	3.36e-04	-4.63e-05
27	52	-0.46	-3.07e-03	-0.04	3.54e-05	-4.62e-04	1.41e-04
27	53	0.11	0.29	-0.13	-2.51e-04	2.68e-05	-2.99e-04
27	70	-5.31e-03	3.52e-05	-0.08	2.26e-05	-5.53e-05	1.96e-06
27	72	-6.37e-03	8.69e-05	-0.09	2.18e-05	-6.70e-05	2.02e-06
27	74	-5.61e-03	5.00e-05	-0.08	2.24e-05	-5.87e-05	1.98e-06
27	76	-5.31e-03	3.52e-05	-0.08	2.26e-05	-5.53e-05	1.96e-06
28	2	-0.03	-2.72e-03	-0.19	9.16e-05	-7.19e-04	2.04e-06

28	20	-0.76	-0.07	-0.16	1.24e-04	-8.44e-04	2.54e-04
28	24	-0.21	-0.73	-0.08	7.35e-04	-5.16e-04	5.27e-04
28	27	-0.25	0.72	-0.21	-5.96e-04	-6.14e-04	-5.24e-04
28	52	-0.47	-0.04	-0.15	1.02e-04	-6.88e-04	1.55e-04
28	56	-0.13	-0.44	-0.10	4.74e-04	-4.88e-04	3.21e-04
28	59	-0.16	0.44	-0.18	-3.36e-04	-5.48e-04	-3.18e-04
28	70	-0.02	-2.06e-03	-0.13	6.90e-05	-4.46e-04	1.51e-06
28	72	-0.02	-2.08e-03	-0.14	7.01e-05	-5.26e-04	1.55e-06
28	74	-0.02	-2.06e-03	-0.14	6.94e-05	-4.69e-04	1.52e-06
28	76	-0.02	-2.06e-03	-0.13	6.90e-05	-4.46e-04	1.51e-06

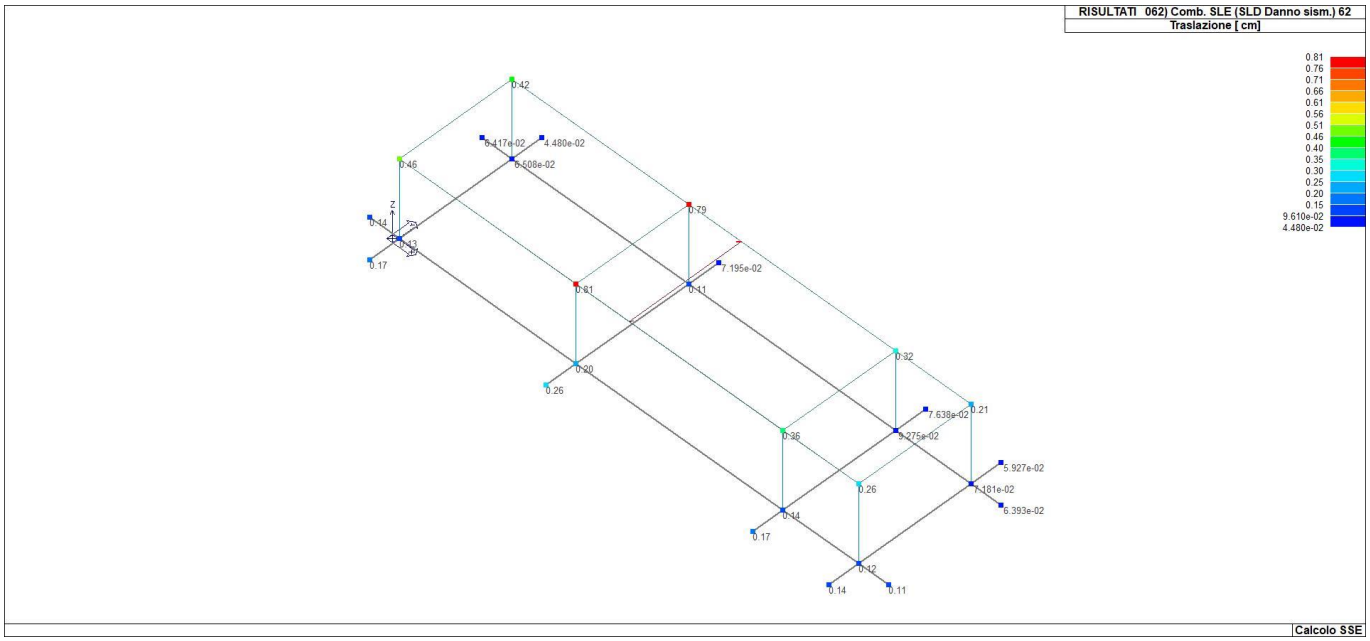
Nodo	Traslazione X	Traslazione Y	Traslazione Z	Rotazione X	Rotazione Y	Rotazione Z
	-0.76	-1.27	-0.32	-1.12e-03	-8.44e-04	-5.27e-04
	0.76	1.27	0.08	1.12e-03	1.31e-03	5.27e-04



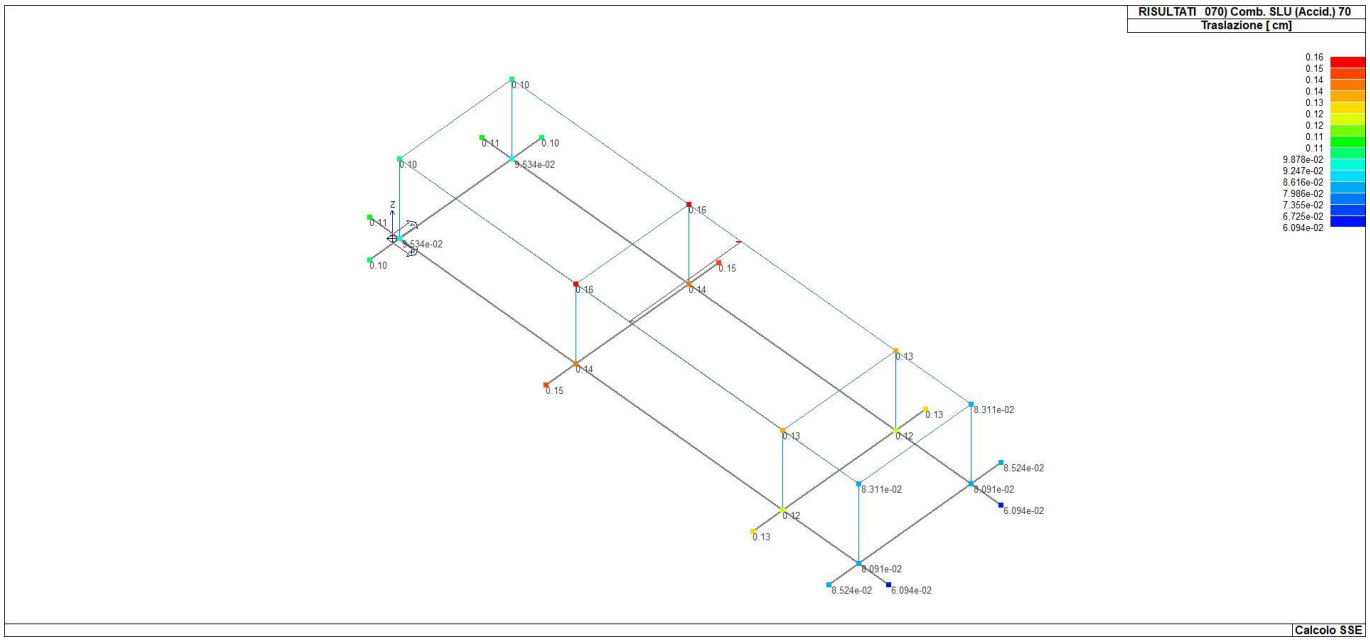
41_RIS_SPOSTAMENTI_002_Comb. SLU A1 2



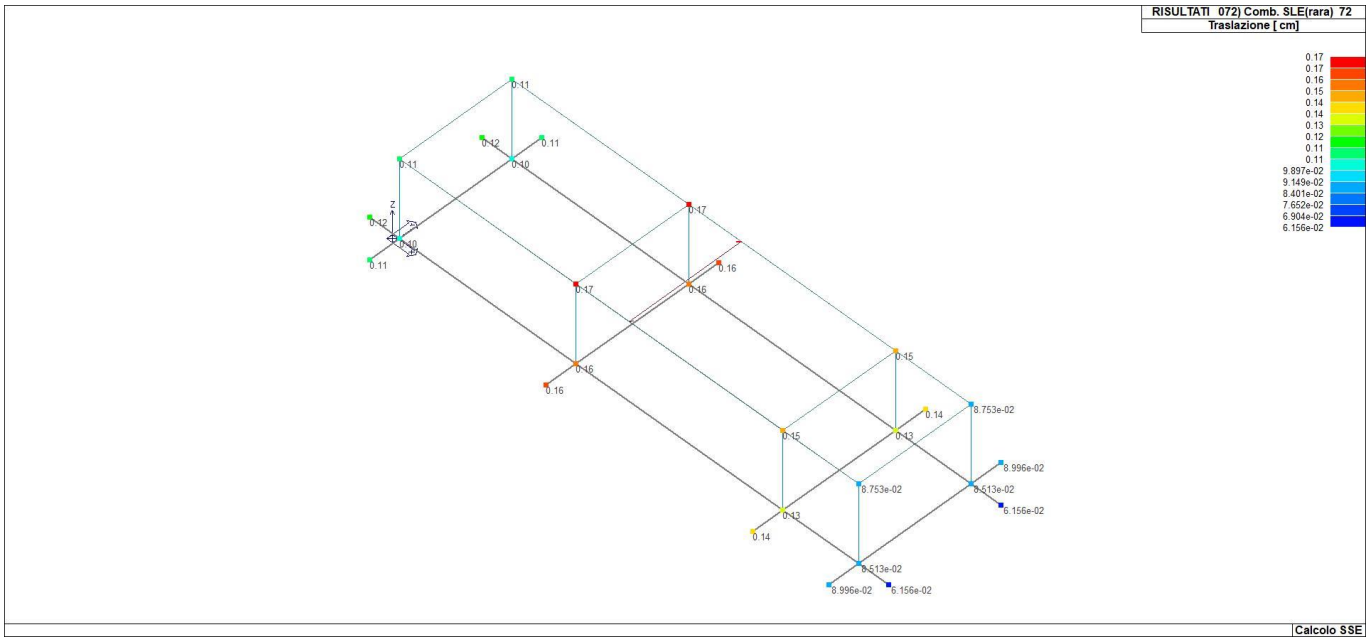
41_RIS_SPOSTAMENTI_030_Comb. SLU A1 (SLV sism.) 30



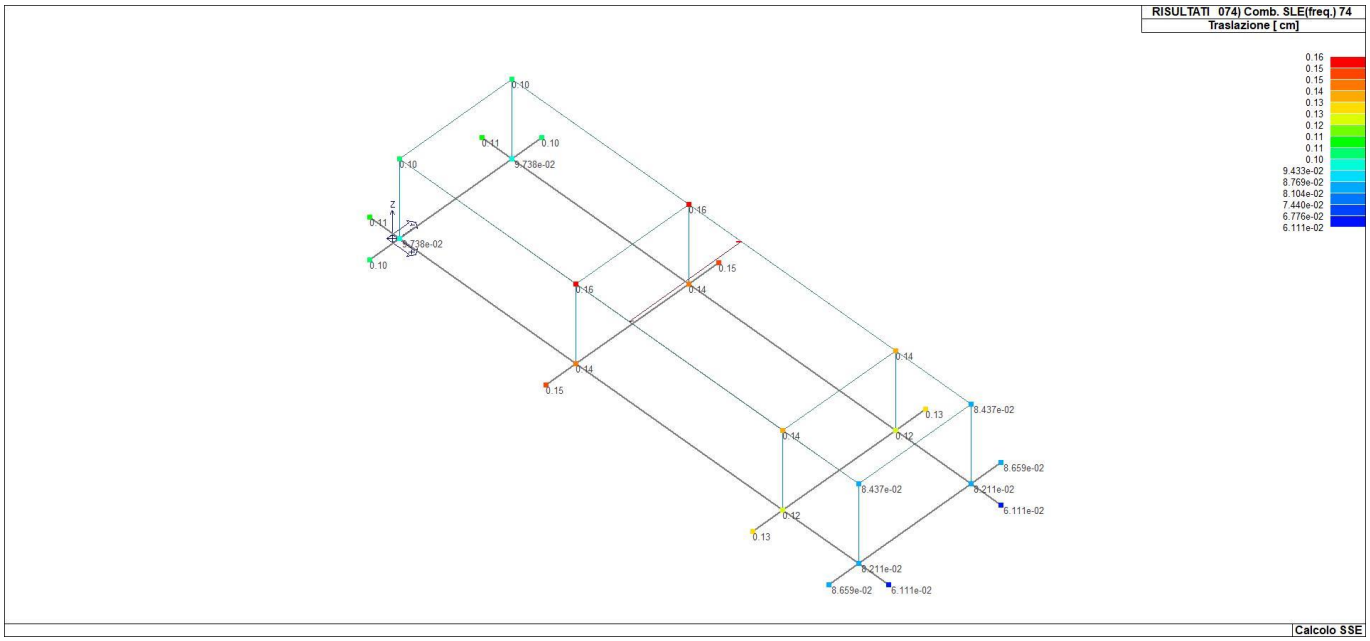
41_RIS_SPOSTAMENTI_062_Comb. SLE (SLD Danno sism.) 62



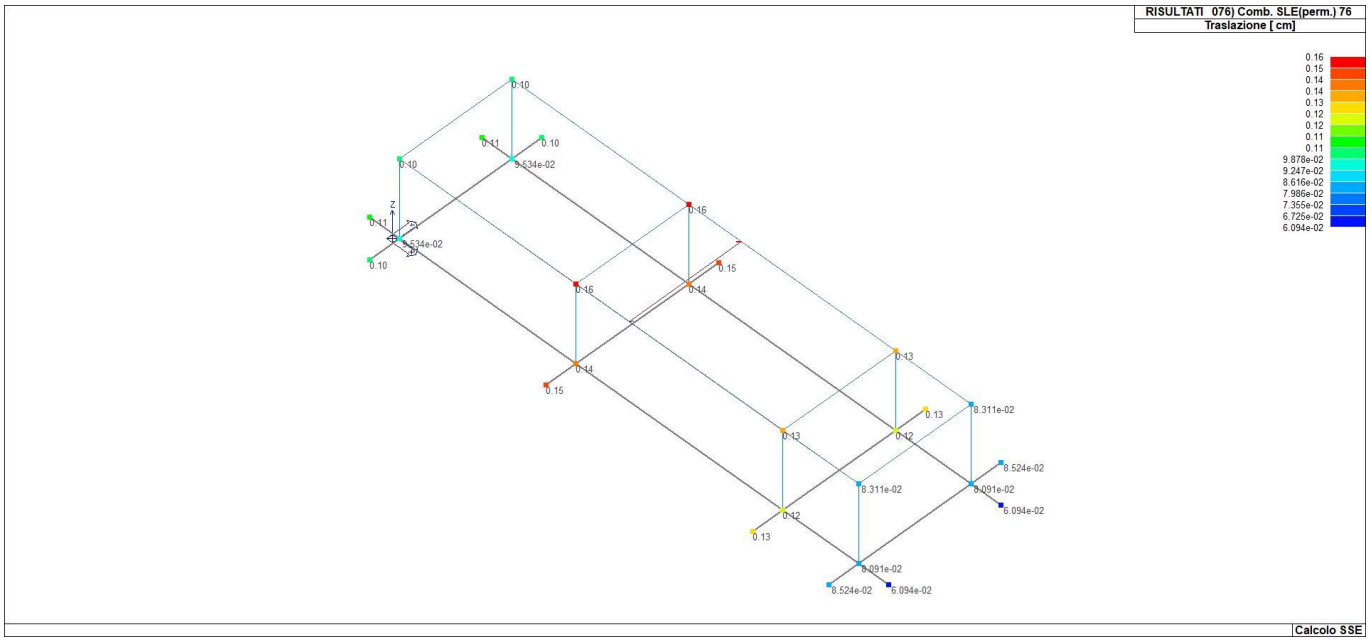
41_RIS_SPOSTAMENTI_070_Comb. SLU (Accid.) 70



41_RIS_SPOSTAMENTI_072_Comb. SLE(rara) 72



41_RIS_SPOSTAMENTI_074_Comb. SLE(freq.) 74



41_RIS_SPOSTAMENTI_076_Comb. SLE(perm.) 76

Nodo	Cmb	Azione X	Azione Y	Azione Z	Azione RX	Azione RY	Azione RZ
		daN	daN	daN	daN cm	daN cm	daN cm

Nodo	Azione X	Azione Y	Azione Z	Azione RX	Azione RY	Azione RZ

Nodo	Cmb	Azione X	Azione Y	Azione Z	Azione RX	Azione RY	Azione RZ
		daN	daN	daN	daN cm	daN cm	daN cm

RISULTATI OPERE DI FONDAZIONE

LEGENDA RISULTATI OPERE DI FONDAZIONE

Il controllo dei risultati delle analisi condotte, per quanto concerne le opere di fondazione, è possibile in relazione alle tabelle sotto riportate.

La prima tabella è riferita alle fondazioni tipo palo e plinto su pali.
Per questo tipo di fondazione vengono riportate le sei componenti di sollecitazione (espresse nel riferimento globale della struttura) per ogni palo componente l'opera.
In particolare viene riportato:

Nodo	numero del nodo a cui è applicato il plinto
Tipo	codice corrispondente al nome assegnato al tipo di plinto di fondazione: 3) palo singolo (*PALO*) 4) plinto su palo 5) plinto su due pali (*PL.2P*) 6) plinto su tre pali (*PL.3P*) 7) plinto su quattro pali (*PL.4P*) 8) plinto rettangolare su cinque pali (*PL.5P.R*) 9) plinto pentagonale su cinque pali (*PL.5P*) 10) plinto su sei pali (*PL.6P*)
Palo	numero del palo
Comb.	combinazione di carico in cui si verificano le sei componenti di sollecitazione.
Quota	quota assoluta della sezione del palo per cui si riportano le sei componenti di sollecitazione.

L'azione Fz (corrispondente allo sforzo normale nel palo) è costante poiché il peso del palo stesso non è considerato nella modellazione.

La seconda tabella è riferita alle fondazioni tipo plinto su suolo elastico.
Per questo tipo di fondazione vengono riportate le pressioni nei quattro vertici dell'impronta sul terreno.
In particolare viene riportato:

Nodo	numero del nodo a cui è applicato il plinto
Tipo	Codice identificativo del nome assegnato al plinto
area	area dell'impronta del plinto
Wink O **Wink V**	coefficienti di Winkler (orizzontale e verticale) adottati
Comb	Combinazione di carico in cui si verificano i valori riportati
Pt (P1 P2 P3 P4)	valori di pressione nei vertici

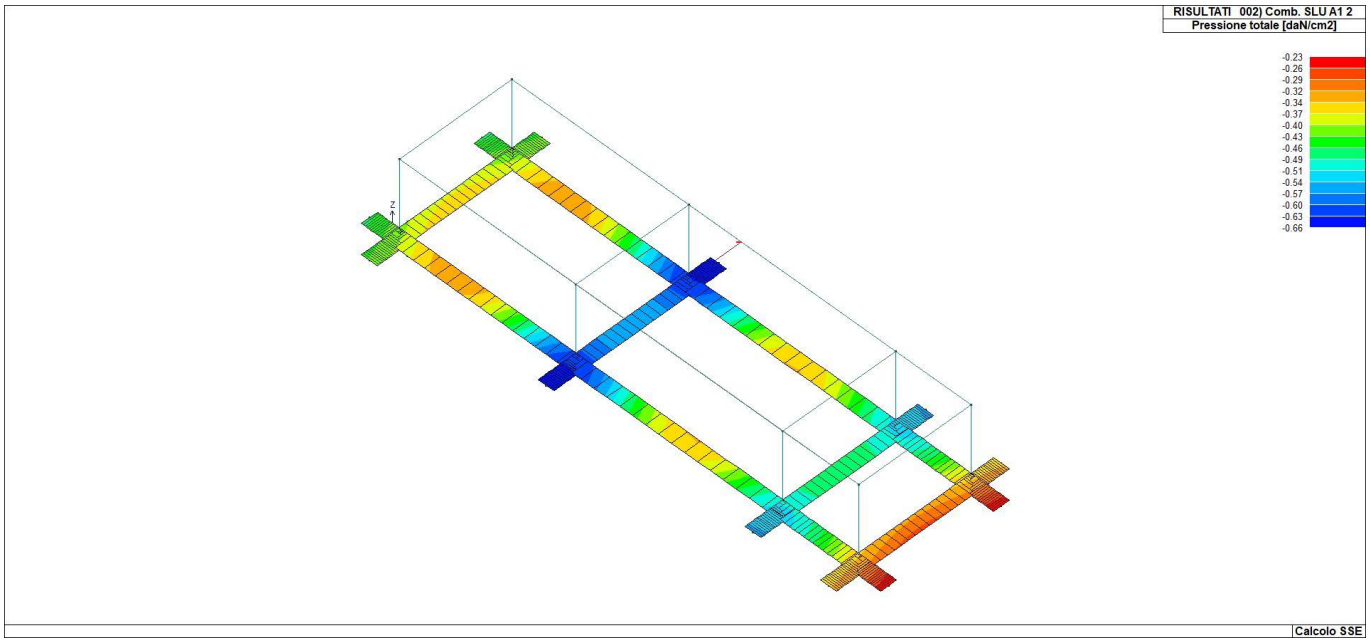
La terza tabella è riferita alle fondazioni tipo platea su suolo elastico.
Per questo tipo di fondazione vengono riportate le pressioni in ogni vertice (nodo) degli elementi costituenti la platea.

La quarta tabella è riferita alle fondazioni tipo trave su suolo elastico.
Per questo tipo di fondazione vengono riportate le pressioni alle estremità dell'elemento e la massima (in valore assoluto) pressione lungo lo sviluppo dell'elemento.
Vengono inoltre riportati, con funzione statistica, i valori massimo e minimo delle pressioni che compaiono nella tabella.

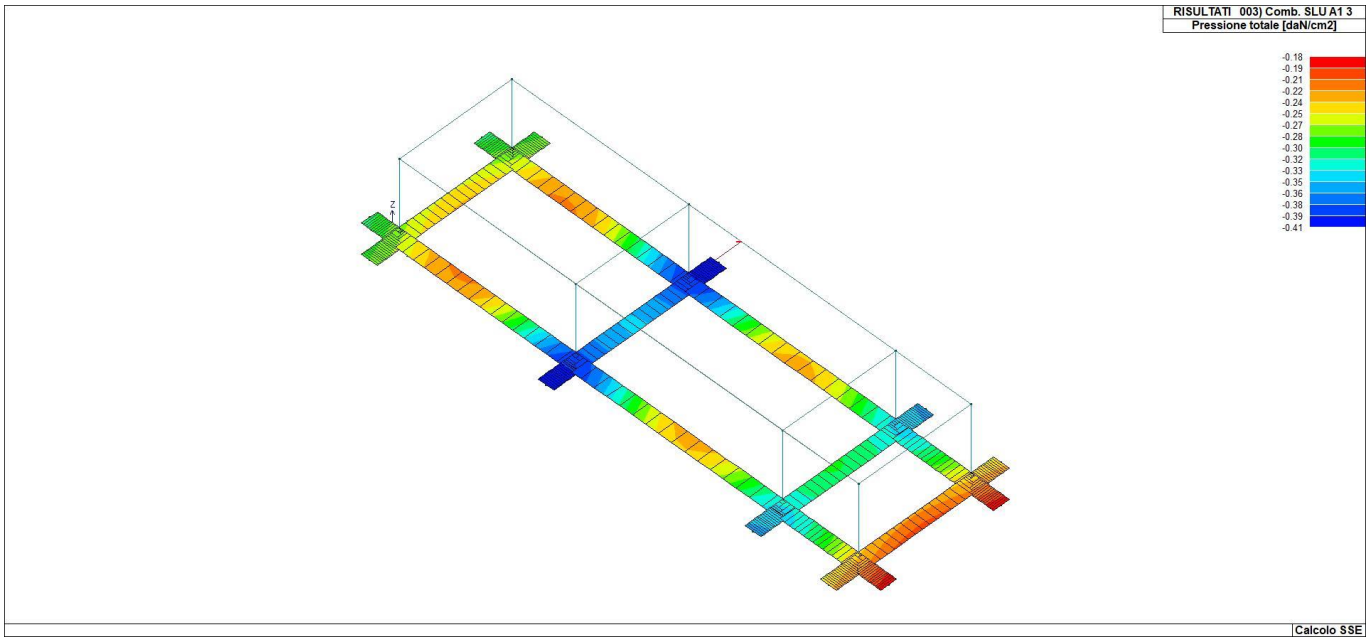
Elem.	Cmb	Pt ini	Pt fin	Pt max	Cmb	Pt ini	Pt fin	Pt max	Cmb	Pt ini	Pt fin	Pt max
		daN/cm2	daN/cm2	daN/cm2		daN/cm2	daN/cm2	daN/cm2		daN/cm2	daN/cm2	daN/cm2
1	2	-0.47	-0.41	-0.47	17	-0.73	-0.51	-0.73	49	-0.57	-0.42	-0.57
	70	-0.32	-0.29	-0.32	72	-0.35	-0.31	-0.35	74	-0.33	-0.29	-0.33
	76	-0.32	-0.29	-0.32								
2	2	-0.44	-0.42	-0.44	33	-0.71	-0.52	-0.71	65	-0.55	-0.43	-0.55
	70	-0.31	-0.29	-0.31	72	-0.33	-0.32	-0.33	74	-0.31	-0.30	-0.31
	76	-0.31	-0.29	-0.31								
3	2	-0.42	-0.42	-0.42	17	-0.54	-0.47	-0.54	49	-0.44	-0.40	-0.44
	70	-0.29	-0.29	-0.29	72	-0.32	-0.32	-0.32	74	-0.30	-0.30	-0.30
	76	-0.29	-0.29	-0.29								
4	2	-0.47	-0.41	-0.47	9	-0.70	-0.49	-0.70	41	-0.55	-0.41	-0.55
	70	-0.32	-0.29	-0.32	72	-0.35	-0.31	-0.35	74	-0.33	-0.29	-0.33
	76	-0.32	-0.29	-0.32								
5	2	-0.42	-0.44	-0.44	29	-0.52	-0.70	-0.70	61	-0.43	-0.54	-0.54
	70	-0.29	-0.31	-0.31	72	-0.32	-0.33	-0.33	74	-0.30	-0.31	-0.31
	76	-0.29	-0.31	-0.31								
6	2	-0.41	-0.63	-0.63	29	-0.54	-0.74	-0.74	61	-0.44	-0.62	-0.62
	70	-0.29	-0.42	-0.42	72	-0.31	-0.47	-0.47	74	-0.29	-0.44	-0.44
	76	-0.29	-0.42	-0.42								
7	2	-0.41	-0.63	-0.63	33	-0.54	-0.74	-0.74	65	-0.44	-0.62	-0.62
	70	-0.29	-0.42	-0.42	72	-0.31	-0.47	-0.47	74	-0.29	-0.44	-0.44
	76	-0.29	-0.42	-0.42								
8	2	-0.66	-0.62	-0.66	33	-0.94	-0.67	-0.94	65	-0.75	-0.57	-0.75
	70	-0.44	-0.41	-0.44	72	-0.49	-0.46	-0.49	74	-0.45	-0.43	-0.45
	76	-0.44	-0.41	-0.44								
9	2	-0.62	-0.62	-0.62	33	-0.67	-0.67	-0.67	65	-0.57	-0.57	-0.57
	70	-0.41	-0.41	-0.41	72	-0.46	-0.46	-0.46	74	-0.43	-0.43	-0.43
	76	-0.41	-0.41	-0.41								
10	2	-0.62	-0.66	-0.66	29	-0.67	-0.94	-0.94	61	-0.57	-0.74	-0.74
	70	-0.41	-0.44	-0.44	72	-0.46	-0.49	-0.49	74	-0.43	-0.45	-0.45
	76	-0.41	-0.44	-0.44								
11	2	-0.63	-0.53	-0.63	29	-0.74	-0.53	-0.74	61	-0.62	-0.46	-0.62
	70	-0.42	-0.36	-0.42	72	-0.47	-0.40	-0.47	74	-0.44	-0.37	-0.44
	76	-0.42	-0.36	-0.42								
12	2	-0.63	-0.53	-0.63	33	-0.74	-0.54	-0.74	65	-0.62	-0.47	-0.62
	70	-0.42	-0.36	-0.42	72	-0.47	-0.40	-0.47	74	-0.44	-0.37	-0.44
	76	-0.42	-0.36	-0.42								
13	2	-0.55	-0.52	-0.55	21	-0.77	-0.58	-0.77	53	-0.61	-0.49	-0.61
	70	-0.37	-0.35	-0.37	72	-0.41	-0.39	-0.41	74	-0.38	-0.36	-0.38
	76	-0.37	-0.35	-0.37								
14	2	-0.52	-0.52	-0.52	21	-0.58	-0.55	-0.58	53	-0.49	-0.47	-0.49
	70	-0.35	-0.35	-0.35	72	-0.39	-0.39	-0.39	74	-0.36	-0.36	-0.36
	76	-0.35	-0.35	-0.35								
15	2	-0.52	-0.55	-0.55	25	-0.57	-0.75	-0.75	57	-0.49	-0.60	-0.60
	70	-0.35	-0.37	-0.37	72	-0.39	-0.41	-0.41	74	-0.36	-0.38	-0.38

0.38												
	76	-0.35	-0.37	-0.37								
16	2	-0.53	-0.34	-0.53	21	-0.62	-0.48	-0.62	53	-0.52	-0.38	-
0.52												
	70	-0.36	-0.24	-0.36	72	-0.40	-0.26	-0.40	74	-0.37	-0.25	-
0.37												
	76	-0.36	-0.24	-0.36								
17	2	-0.38	-0.36	-0.38	25	-0.63	-0.49	-0.63	57	-0.49	-0.39	-
0.49												
	70	-0.27	-0.25	-0.27	72	-0.28	-0.27	-0.28	74	-0.27	-0.26	-
0.27												
	76	-0.27	-0.25	-0.27								
18	2	-0.36	-0.36	-0.36	5	-0.50	-0.58	-0.58	37	-0.40	-0.46	-
0.46												
	70	-0.25	-0.25	-0.25	72	-0.27	-0.27	-0.27	74	-0.26	-0.26	-
0.26												
	76	-0.25	-0.25	-0.25								
19	2	-0.53	-0.34	-0.53	25	-0.61	-0.49	-0.61	57	-0.51	-0.39	-
0.51												
	70	-0.36	-0.24	-0.36	72	-0.40	-0.26	-0.40	74	-0.37	-0.25	-
0.37												
	76	-0.36	-0.24	-0.36								
20	2	-0.36	-0.38	-0.38	5	-0.58	-0.69	-0.69	37	-0.46	-0.52	-
0.52												
	70	-0.25	-0.27	-0.27	72	-0.27	-0.28	-0.28	74	-0.26	-0.27	-
0.27												
	76	-0.25	-0.27	-0.27								
21	2	-0.34	-0.24	-0.34	5	-0.55	-0.67	-0.67	37	-0.43	-0.48	-
0.48												
	70	-0.24	-0.18	-0.24	72	-0.26	-0.19	-0.26	74	-0.25	-0.18	-
0.25												
	76	-0.24	-0.18	-0.24								
22	2	-0.34	-0.24	-0.34	13	-0.51	-0.63	-0.63	45	-0.41	-0.46	-
0.46												
	70	-0.24	-0.18	-0.24	72	-0.26	-0.19	-0.26	74	-0.25	-0.18	-
0.25												
	76	-0.24	-0.18	-0.24								

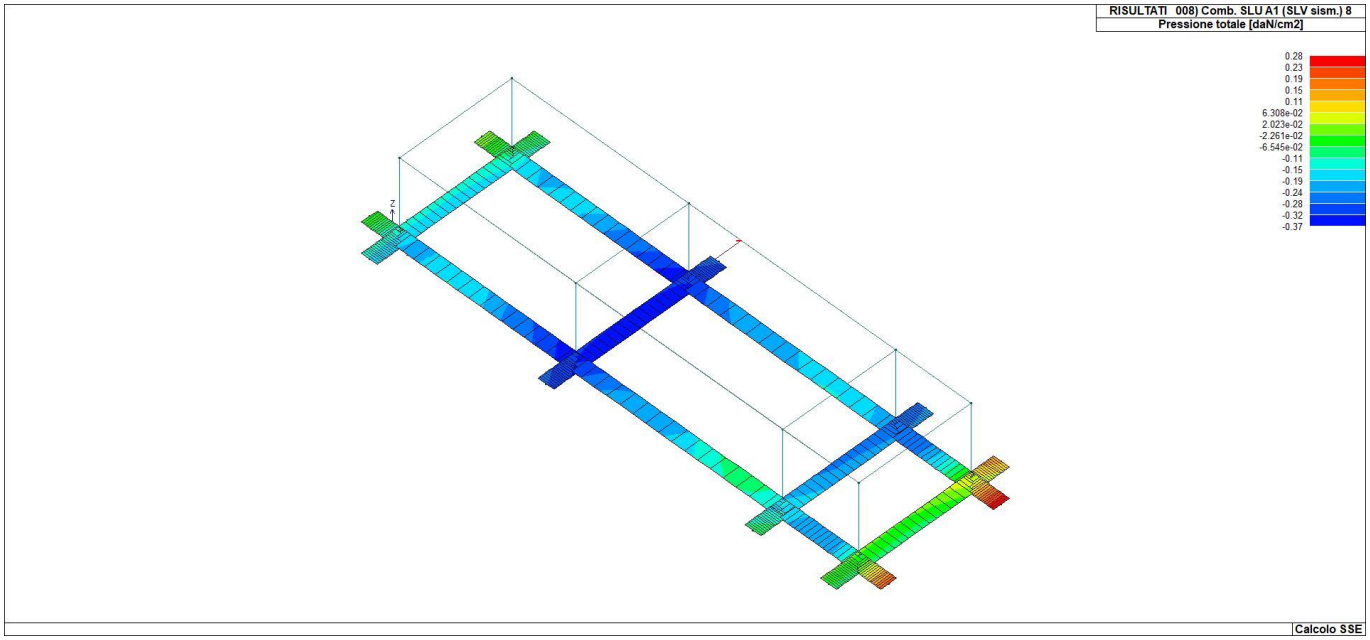
Elem.		**Pt ini**	**Pt fin**	**Pt max**		**Pt ini**	**Pt fin**	**Pt max**		**Pt ini**	**Pt fin**	**Pt max**
		-0.94										
		-0.18										



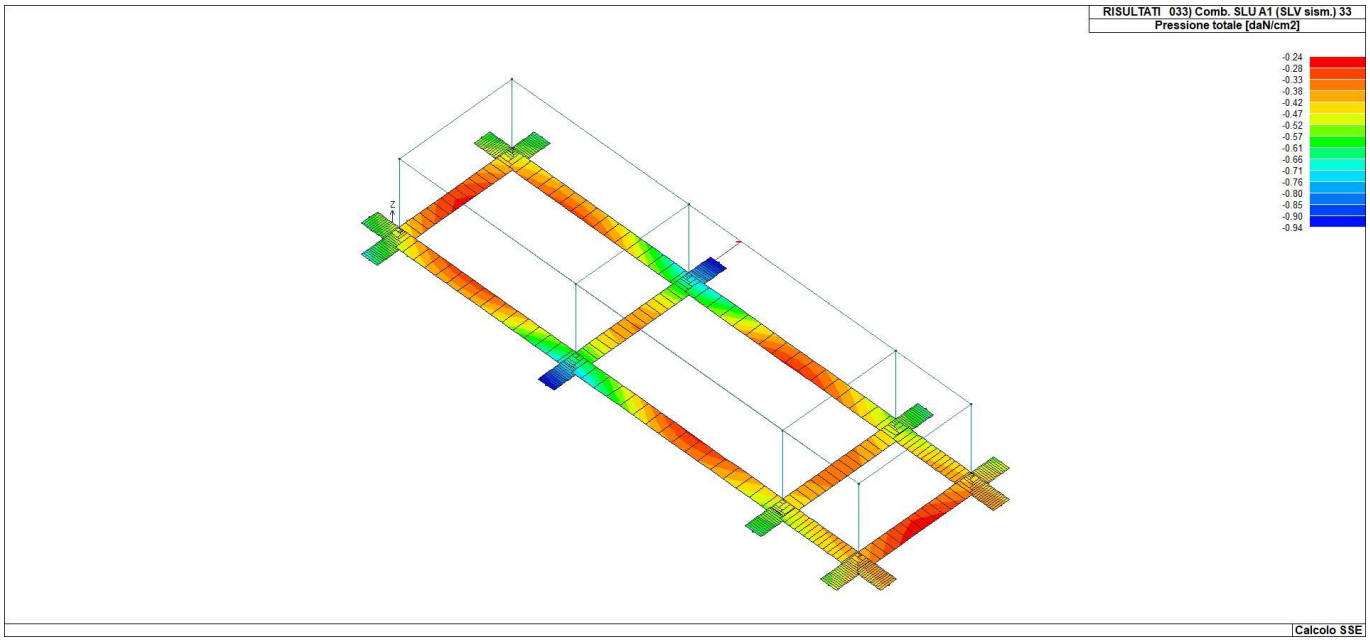
46_RIS_PRESSIONI_002_Comb. SLU A1 2



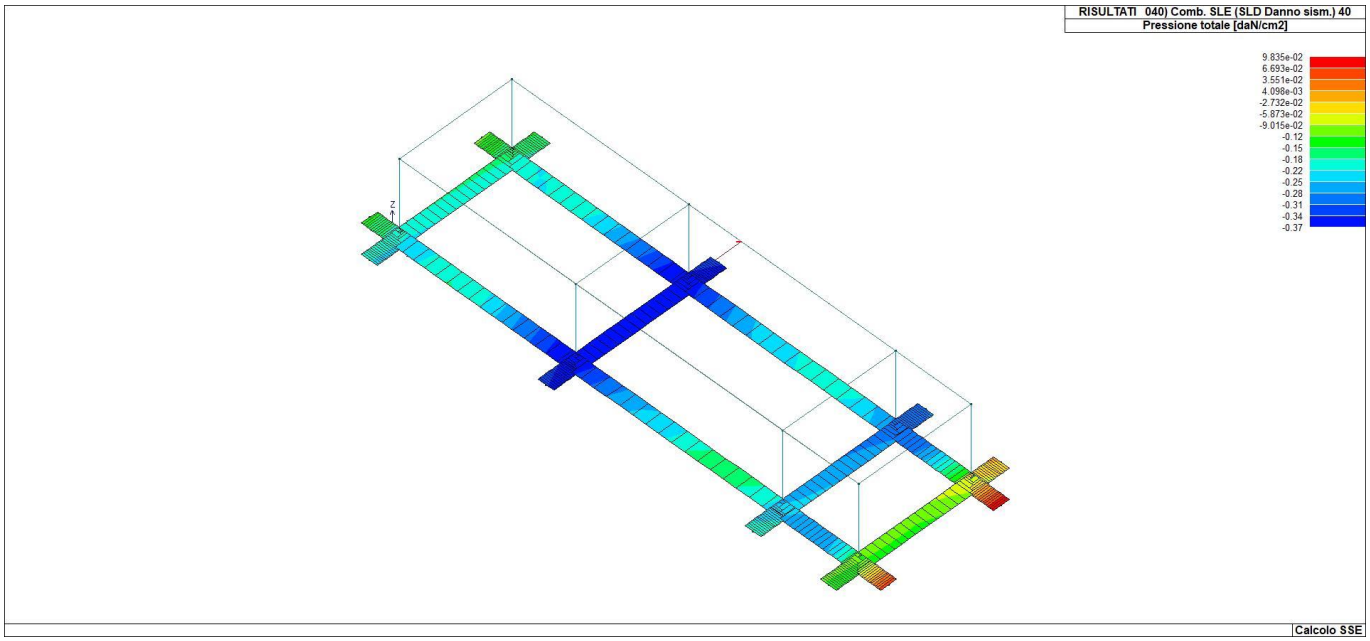
46_RIS_PRESSIONI_003_Comb. SLU A1 3



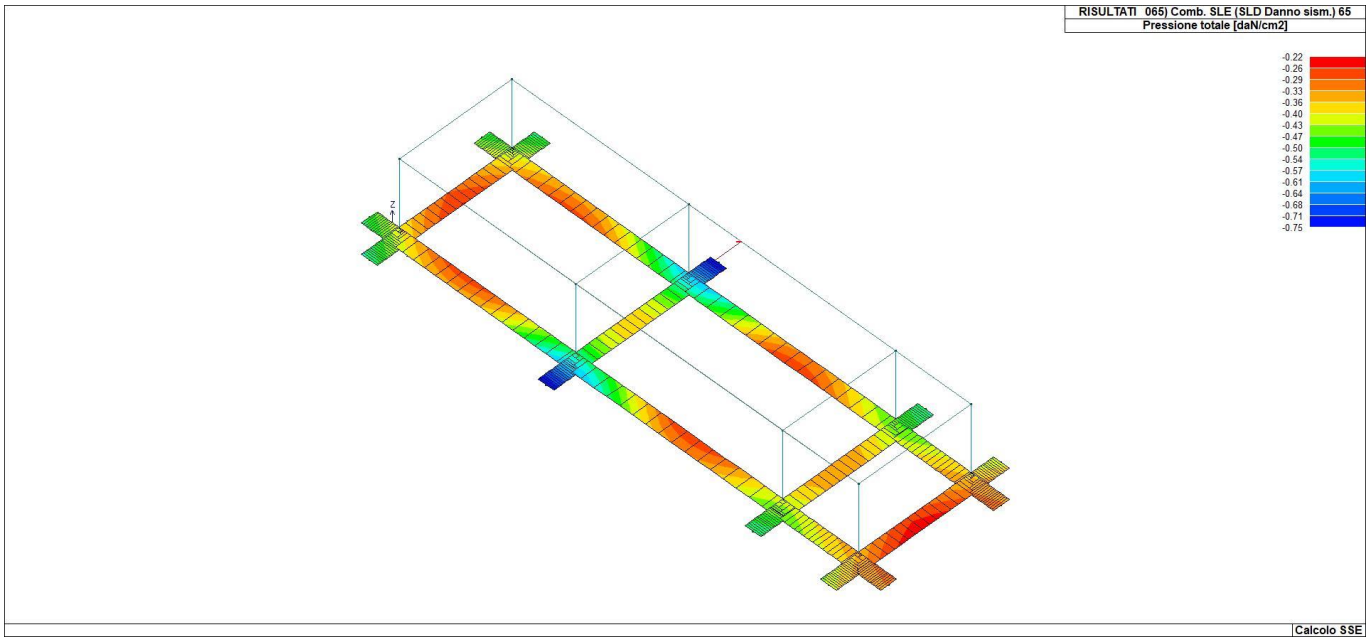
46_RIS_PRESSIONI_008_Comb. SLU A1 (SLV sism.) 8



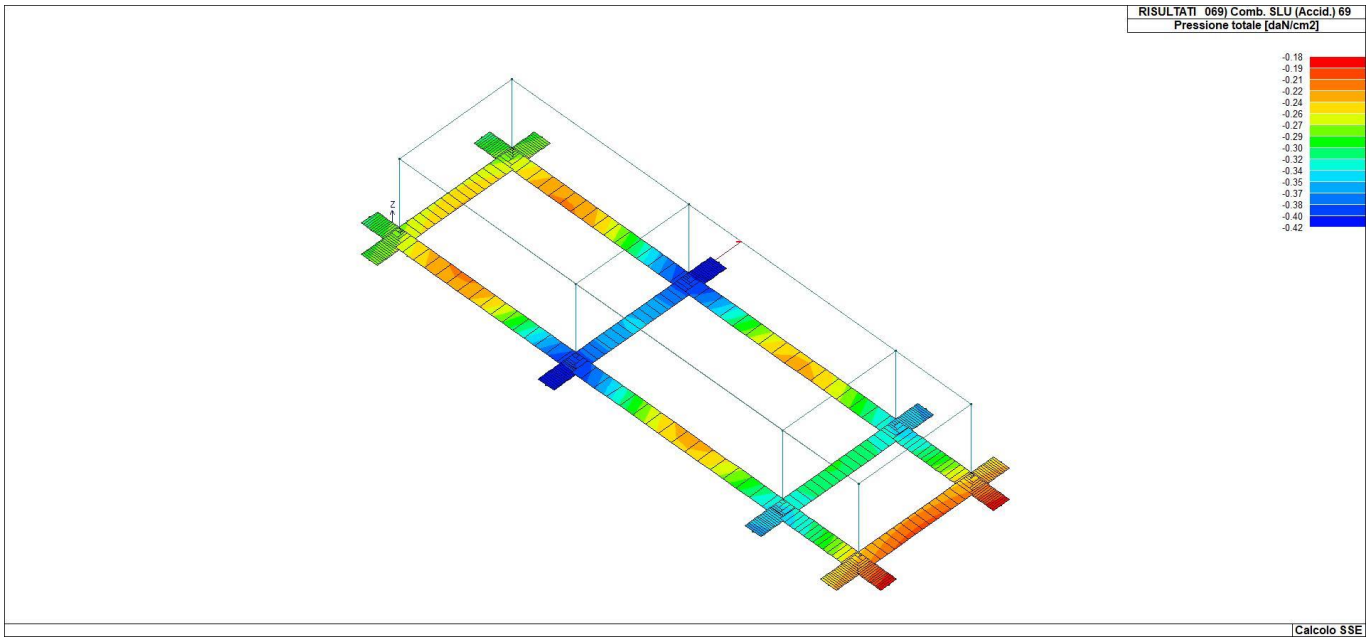
46_RIS_PRESSIONI_033_Comb. SLU A1 (SLV sism.) 33



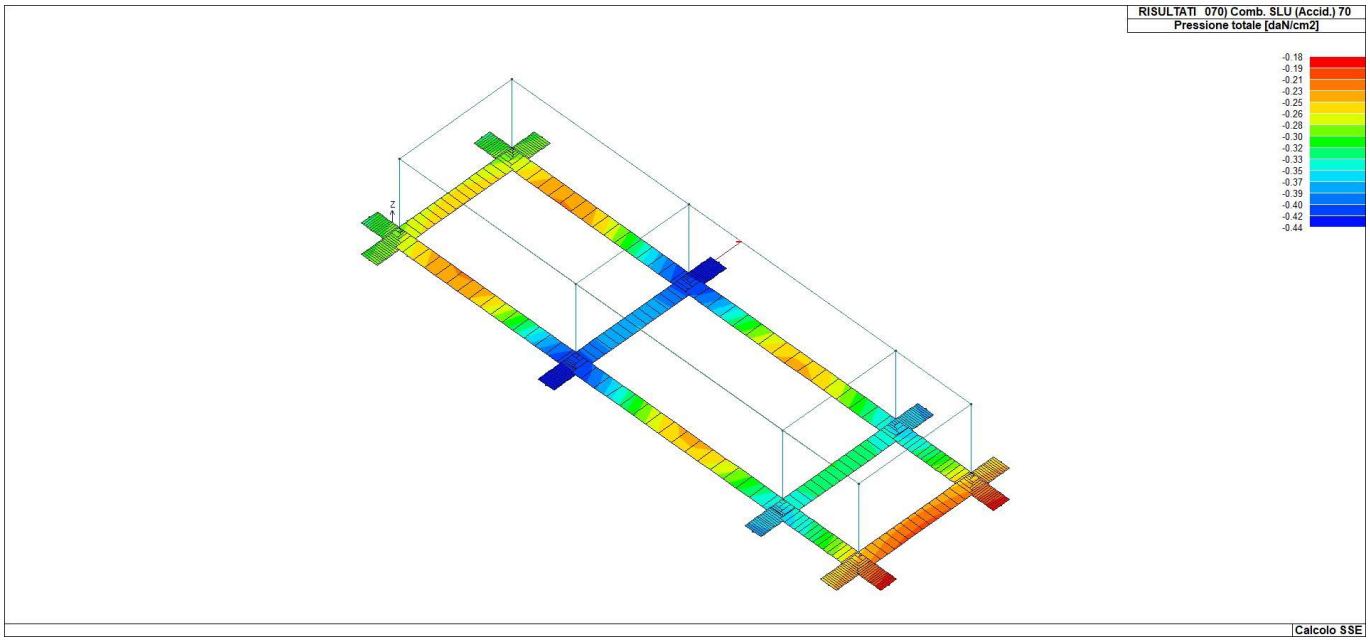
46_RIS_PRESSIONI_040_Comb. SLE (SLD Danno sism.) 40



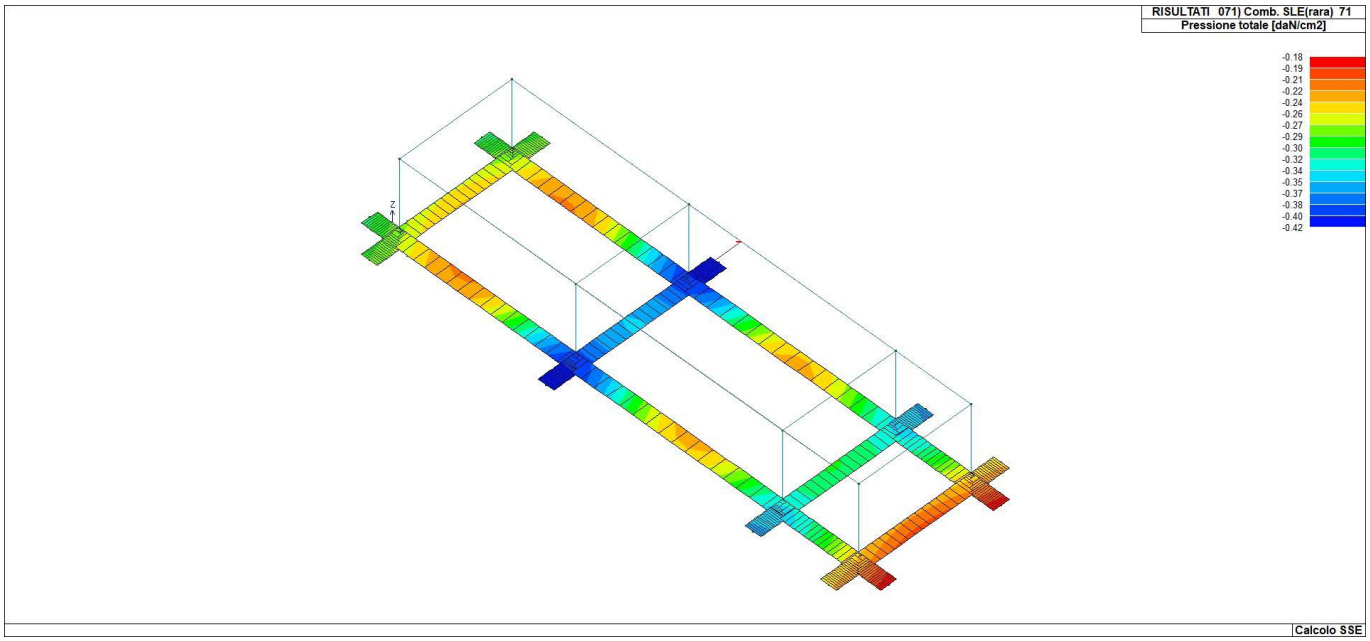
46_RIS_PRESSIONI_065_Comb. SLE (SLD Danno sism.) 65



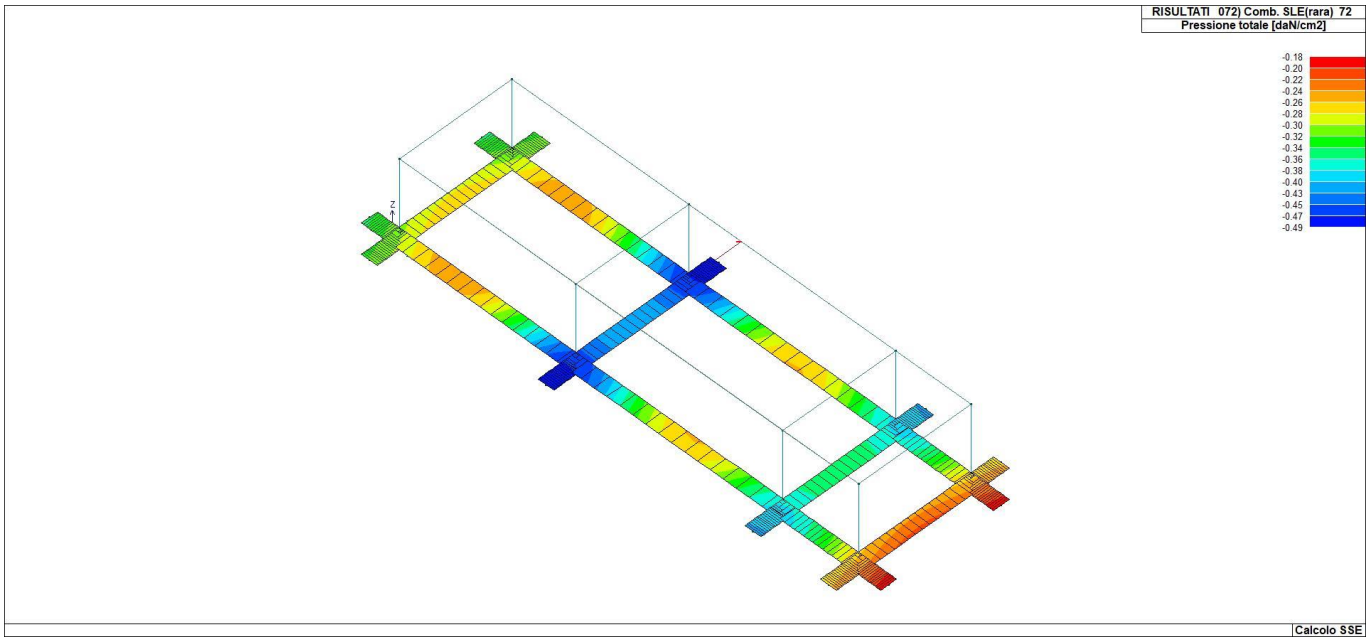
46_RIS_PRESSIONI_069_Comb. SLU (Accid.) 69



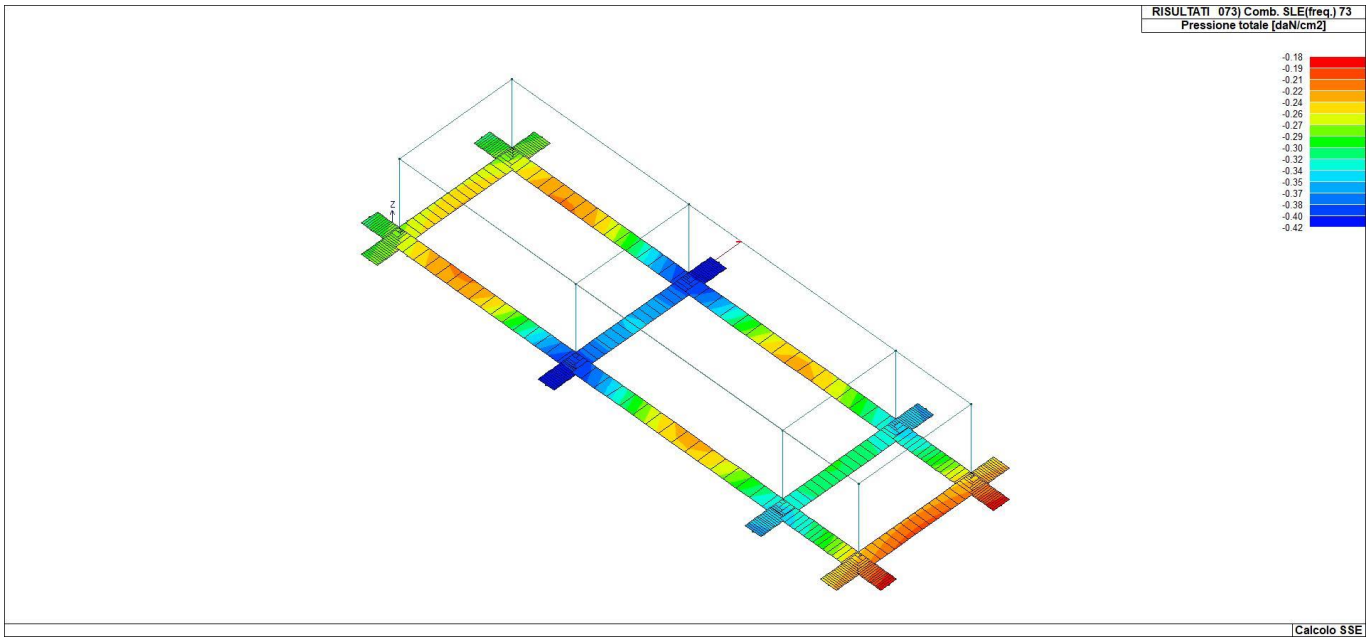
46_RIS_PRESSIONI_070_Comb. SLU (Accid.) 70



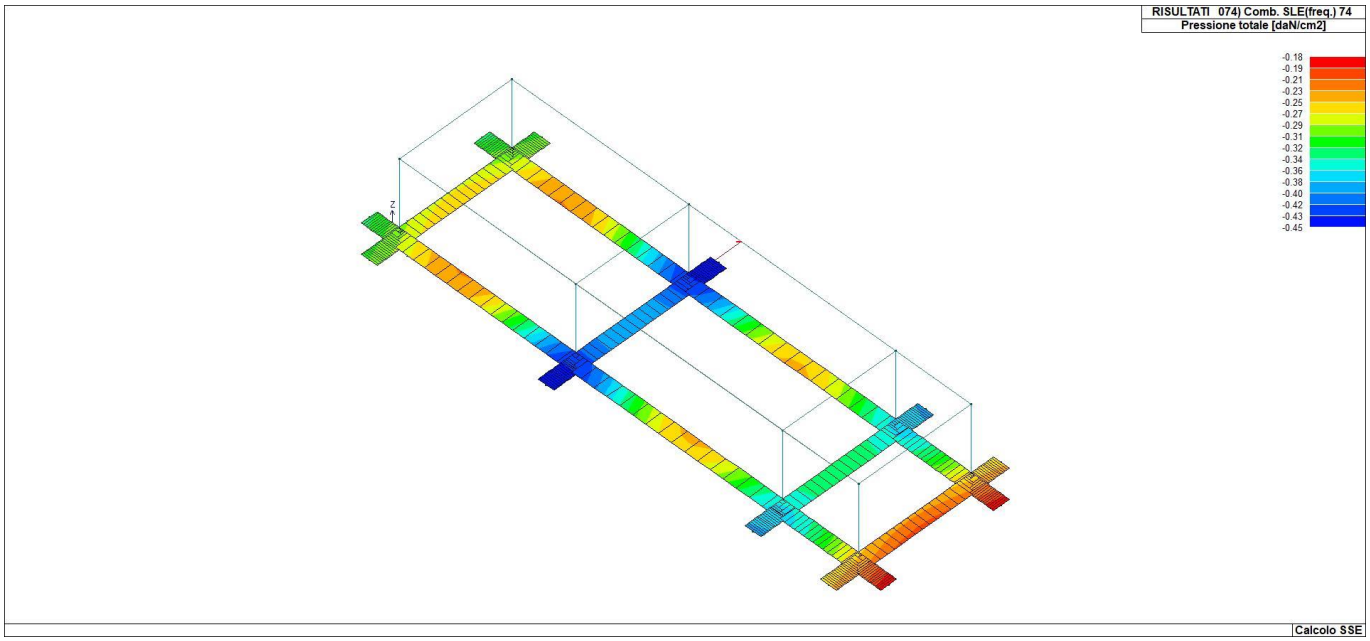
46_RIS_PRESSIONI_071_Comb. SLE(rara) 71



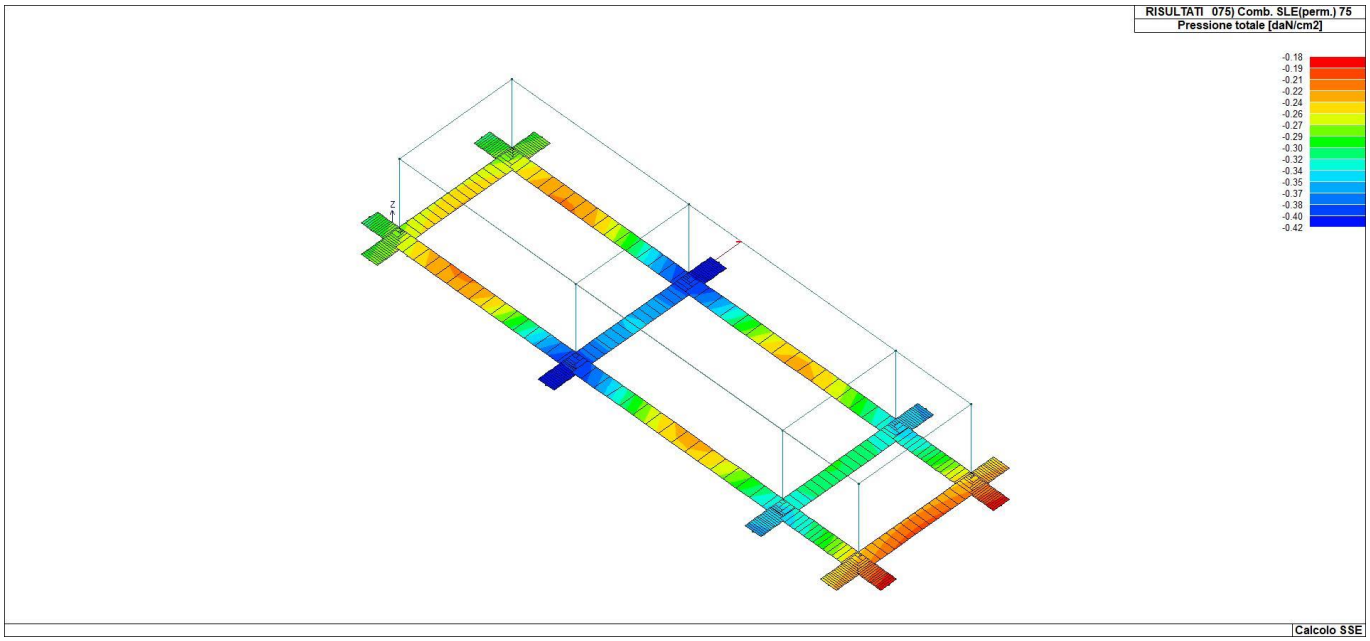
46_RIS_PRESSIONI_072_Comb. SLE(rara) 72



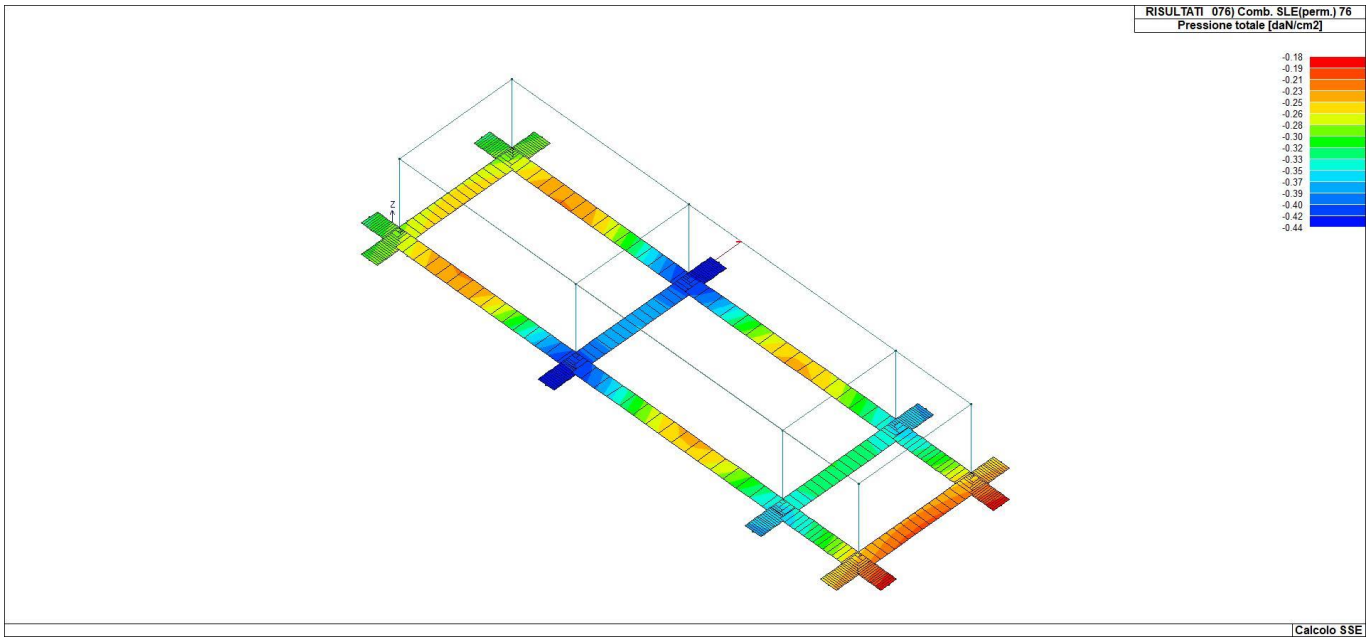
46_RIS_PRESSIONI_073_Comb. SLE(freq.) 73



46_RIS_PRESSIONI_074_Comb. SLE(freq.) 74



46_RIS_PRESSIONI_075_Comb. SLE(perm.) 75



46_RIS_PRESSIONI_076_Comb. SLE(perm.) 76

RISULTATI ELEMENTI TIPO TRAVE

LEGENDA RISULTATI ELEMENTI TIPO TRAVE

Il controllo dei risultati delle analisi condotte, per quanto concerne gli elementi tipo trave, è possibile in relazione alle tabelle sotto riportate.

Gli elementi vengono suddivisi in relazione alle proprietà in elementi:

- tipo **pilastro**
- tipo **trave in elevazione**
- tipo **trave in fondazione**

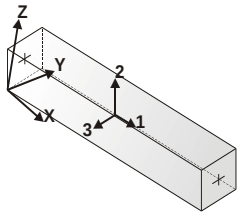
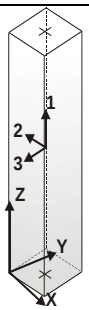
Per ogni elemento e per ogni combinazione (o caso di carico) vengono riportati i risultati più significativi.

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.

 orientamento elementi 2D non verticali	 orientamento elementi 2D verticali

Pilas.	Cmb	M3 mx/mn daN cm	M2 mx/mn daN cm	D 2 / D 3 cm	Q 2 / Q 3 daN	Pos. cm	N daN	V 2 daN	V 3 daN	T daN cm	M 2M 3 daN cm	
23	2	4.984e+04	6326.69	0.03	0.0	0.0	-9215.12	-865.94	94.27	30.91	-2.195e+04	4.984e+04
		-2.099e+05	-2.195e+04	3.76e-03	0.0	300.0	-8337.62	-865.94	94.27	30.91	6326.69	-2.099e+05
23	3	2.547e+04	2304.18	0.02	0.0	0.0	-5548.38	-471.21	49.64	23.92	-1.259e+04	2.547e+04
		-1.159e+05	-1.259e+04	2.41e-03	0.0	300.0	-4873.38	-471.21	49.64	23.92	2304.18	-1.159e+05
23	11	7.331e+05	2.989e+05	0.67	0.0	0.0	-6542.63	-5131.30	2065.77	-369.08	-3.208e+05	7.331e+05
		-8.066e+05	-3.208e+05	-0.30	0.0	300.0	-5867.63	-5131.30	2065.77	-369.08	2.989e+05	-8.066e+05
23	31	3.028e+05	5.950e+05	0.24	0.0	0.0	-3325.54	-2275.33	4053.70	2.055e+04	-6.211e+05	3.028e+05
		-3.807e+05	-6.211e+05	-0.60	0.0	300.0	-2650.54	-2275.33	4053.70	2.055e+04	5.950e+05	-3.807e+05
23	33	-148.81	5.933e+05	-0.15	0.0	0.0	-2229.12	307.60	4036.12	2.073e+04	-6.175e+05	9.155e+04
		-9.155e+04	-6.175e+05	-0.60	0.0	300.0	-1554.12	307.60	4036.12	2.073e+04	5.933e+05	-148.81
23	36	1.502e+05	5.898e+05	0.14	0.0	0.0	-9793.52	-1367.19	-3923.10	-2.068e+04	5.898e+05	1.502e+05
		-2.591e+05	-5.872e+05	0.60	0.0	300.0	-9118.52	-1367.19	-3923.10	-2.068e+04	-5.872e+05	-2.591e+05
23	43	4.574e+05	1.831e+05	0.40	0.0	0.0	-6333.72	-3328.85	1278.83	-217.11	-2.006e+05	4.574e+05
		-5.414e+05	-2.006e+05	-0.18	0.0	300.0	-5658.72	-3328.85	1278.83	-217.11	1.831e+05	-5.414e+05
23	63	1.956e+05	3.632e+05	0.15	0.0	0.0	-4379.98	-1590.93	2488.17	1.251e+04	-3.833e+05	1.956e+05
		-2.822e+05	-3.833e+05	-0.37	0.0	300.0	-3704.98	-1590.93	2488.17	1.251e+04	3.632e+05	-2.822e+05
23	65	-4.430e+04	3.621e+05	-0.10	0.0	0.0	-3713.75	-19.63	2477.48	1.261e+04	-3.811e+05	4.430e+04
		-5.073e+04	-3.811e+05	-0.37	0.0	300.0	-3038.75	-19.63	2477.48	1.261e+04	3.621e+05	-5.073e+04
23	68	1.030e+05	3.533e+05	0.09	0.0	0.0	-8308.89	-1039.96	-2364.45	-1.257e+04	3.533e+05	1.030e+05
		-2.085e+05	-3.560e+05	0.36	0.0	300.0	-7633.89	-1039.96	-2364.45	-1.257e+04	-3.560e+05	-2.085e+05
23	69	2.644e+04	2496.73	0.02	0.0	0.0	-5664.11	-485.86	51.36	23.91	-1.291e+04	2.644e+04
		-1.193e+05	-1.291e+04	2.44e-03	0.0	300.0	-4989.11	-485.86	51.36	23.91	2496.73	-1.193e+05
23	70	2.934e+04	3074.41	0.02	0.0	0.0	-6011.32	-529.79	56.51	23.88	-1.388e+04	2.934e+04
		-1.296e+05	-1.388e+04	2.55e-03	0.0	300.0	-5336.32	-529.79	56.51	23.88	3074.41	-1.296e+05
23	71	2.644e+04	2496.73	0.02	0.0	0.0	-5664.11	-485.86	51.36	23.91	-1.291e+04	2.644e+04
		-1.193e+05	-1.291e+04	2.44e-03	0.0	300.0	-4989.11	-485.86	51.36	23.91	2496.73	-1.193e+05
23	72	3.611e+04	4422.32	0.02	0.0	0.0	-6821.47	-632.31	68.55	23.80	-1.614e+04	3.611e+04
		-1.536e+05	-1.614e+04	2.81e-03	0.0	300.0	-6146.47	-632.31	68.55	23.80	4422.32	-1.536e+05
23	73	2.644e+04	2496.73	0.02	0.0	0.0	-5664.11	-485.86	51.36	23.91	-1.291e+04	2.644e+04
		-1.193e+05	-1.291e+04	2.44e-03	0.0	300.0	-4989.11	-485.86	51.36	23.91	2496.73	-1.193e+05
23	74	3.127e+04	3459.53	0.02	0.0	0.0	-6242.79	-559.08	59.95	23.85	-1.453e+04	3.127e+04
		-1.365e+05	-1.453e+04	2.63e-03	0.0	300.0	-5567.79	-559.08	59.95	23.85	3459.53	-1.365e+05
23	75	2.644e+04	2496.73	0.02	0.0	0.0	-5664.11	-485.86	51.36	23.91	-1.291e+04	2.644e+04
		-1.193e+05	-1.291e+04	2.44e-03	0.0	300.0	-4989.11	-485.86	51.36	23.91	2496.73	-1.193e+05
23	76	2.934e+04	3074.41	0.02	0.0	0.0	-6011.32	-529.79	56.51	23.88	-1.388e+04	2.934e+04
		-1.296e+05	-1.388e+04	2.55e-03	0.0	300.0	-5336.32	-529.79	56.51	23.88	3074.41	-1.296e+05

1.296e+05												
24	2	4.984e+04	2.195e+04	0.03	0.0	0.0	-9215.12	-865.94	-94.27	-30.91	2.195e+04	
4.984e+04												
		-2.099e+05	-6326.69	-3.76e-03	0.0	300.0	-8337.62	-865.94	-94.27	-30.91	-6326.69	-
2.099e+05												
24	3	2.547e+04	1.259e+04	0.02	0.0	0.0	-5548.38	-471.21	-49.64	-23.92	1.259e+04	
2.547e+04												
		-1.159e+05	-2304.18	-2.41e-03	0.0	300.0	-4873.38	-471.21	-49.64	-23.92	-2304.18	-
1.159e+05												
24	20	7.331e+05	3.208e+05	0.67	0.0	0.0	-6542.63	-5131.30	-2065.77	369.08	3.208e+05	
7.331e+05												
		-8.066e+05	-2.989e+05	0.30	0.0	300.0	-5867.63	-5131.30	-2065.77	369.08	-2.989e+05	-
8.066e+05												
24	30	-148.81	6.175e+05	-0.15	0.0	0.0	-2229.12	307.60	-4036.12	-2.073e+04	6.175e+05	-
9.155e+04												
		-9.155e+04	-5.933e+05	0.60	0.0	300.0	-1554.12	307.60	-4036.12	-2.073e+04	-5.933e+05	-
148.81												
24	31	1.502e+05	5.872e+05	0.14	0.0	0.0	-9793.52	-1367.19	3923.10	2.068e+04	-5.898e+05	
1.502e+05												
		-2.591e+05	-5.898e+05	-0.60	0.0	300.0	-9118.52	-1367.19	3923.10	2.068e+04	5.872e+05	-
2.591e+05												
24	36	3.028e+05	6.211e+05	0.24	0.0	0.0	-3325.54	-2275.33	-4053.70	-2.055e+04	6.211e+05	
3.028e+05												
		-3.807e+05	-5.950e+05	0.60	0.0	300.0	-2650.54	-2275.33	-4053.70	-2.055e+04	-5.950e+05	-
3.807e+05												
24	52	4.574e+05	2.006e+05	0.40	0.0	0.0	-6333.72	-3328.85	-1278.83	217.11	2.006e+05	
4.574e+05												
		-5.414e+05	-1.831e+05	0.18	0.0	300.0	-5658.72	-3328.85	-1278.83	217.11	-1.831e+05	-
5.414e+05												
24	62	-4.430e+04	3.811e+05	-0.10	0.0	0.0	-3713.75	-19.63	-2477.48	-1.261e+04	3.811e+05	-
4.430e+04												
		-5.073e+04	-3.621e+05	0.37	0.0	300.0	-3038.75	-19.63	-2477.48	-1.261e+04	-3.621e+05	-
5.073e+04												
24	63	1.030e+05	3.560e+05	0.09	0.0	0.0	-8308.89	-1039.96	2364.45	1.257e+04	-3.533e+05	
1.030e+05												
		-2.085e+05	-3.533e+05	-0.36	0.0	300.0	-7633.89	-1039.96	2364.45	1.257e+04	3.560e+05	-
2.085e+05												
24	68	1.956e+05	3.833e+05	0.15	0.0	0.0	-4379.98	-1590.93	-2488.17	-1.251e+04	3.833e+05	
1.956e+05												
		-2.822e+05	-3.632e+05	0.37	0.0	300.0	-3704.98	-1590.93	-2488.17	-1.251e+04	-3.632e+05	-
2.822e+05												
24	69	2.644e+04	1.291e+04	0.02	0.0	0.0	-5664.11	-485.86	-51.36	-23.91	1.291e+04	
2.644e+04												
		-1.193e+05	-2496.73	-2.44e-03	0.0	300.0	-4989.11	-485.86	-51.36	-23.91	-2496.73	-
1.193e+05												
24	70	2.934e+04	1.388e+04	0.02	0.0	0.0	-6011.32	-529.79	-56.51	-23.88	1.388e+04	
2.934e+04												
		-1.296e+05	-3074.41	-2.55e-03	0.0	300.0	-5336.32	-529.79	-56.51	-23.88	-3074.41	-
1.296e+05												
24	71	2.644e+04	1.291e+04	0.02	0.0	0.0	-5664.11	-485.86	-51.36	-23.91	1.291e+04	
2.644e+04												
		-1.193e+05	-2496.73	-2.44e-03	0.0	300.0	-4989.11	-485.86	-51.36	-23.91	-2496.73	-
1.193e+05												
24	72	3.611e+04	1.614e+04	0.02	0.0	0.0	-6821.47	-632.31	-68.55	-23.80	1.614e+04	
3.611e+04												
		-1.536e+05	-4422.32	-2.81e-03	0.0	300.0	-6146.47	-632.31	-68.55	-23.80	-4422.32	-
1.536e+05												
24	73	2.644e+04	1.291e+04	0.02	0.0	0.0	-5664.11	-485.86	-51.36	-23.91	1.291e+04	
2.644e+04												
		-1.193e+05	-2496.73	-2.44e-03	0.0	300.0	-4989.11	-485.86	-51.36	-23.91	-2496.73	-
1.193e+05												
24	74	3.127e+04	1.453e+04	0.02	0.0	0.0	-6242.79	-559.08	-59.95	-23.85	1.453e+04	
3.127e+04												
		-1.365e+05	-3459.53	-2.63e-03	0.0	300.0	-5567.79	-559.08	-59.95	-23.85	-3459.53	-
1.365e+05												
24	75	2.644e+04	1.291e+04	0.02	0.0	0.0	-5664.11	-485.86	-51.36	-23.91	1.291e+04	
2.644e+04												
		-1.193e+05	-2496.73	-2.44e-03	0.0	300.0	-4989.11	-485.86	-51.36	-23.91	-2496.73	-
1.193e+05												
24	76	2.934e+04	1.388e+04	0.02	0.0	0.0	-6011.32	-529.79	-56.51	-23.88	1.388e+04	
2.934e+04												
		-1.296e+05	-3074.41	-2.55e-03	0.0	300.0	-5336.32	-529.79	-56.51	-23.88	-3074.41	-
1.296e+05												
25	2	3.056e+04	3.203e+04	0.01	0.0	0.0	-2.354e+04	-299.52	-104.07	-42.15	3.203e+04	
3.056e+04												
		-5.929e+04	810.57	-6.48e-03	0.0	300.0	-2.266e+04	-299.52	-104.07	-42.15	810.57	-
5.929e+04												

25	3	1.680e+04	1.739e+04	6.96e-03	0.0	0.0	-1.356e+04	-165.29	-44.65	-30.78	1.739e+04	-1.680e+04
		-3.279e+04	3994.14	4.11e-03	0.0	300.0	-1.288e+04	-165.29	-44.65	-30.78	3994.14	-3.279e+04
25	4	2.436e+04	2.556e+04	0.01	0.0	0.0	-1.869e+04	-238.68	-84.56	-32.63	2.556e+04	-2.436e+04
		-4.724e+04	194.88	-5.10e-03	0.0	300.0	-1.801e+04	-238.68	-84.56	-32.63	194.88	-4.724e+04
25	20	8.468e+05	4.225e+05	0.68	0.0	0.0	-1.262e+04	-5674.95	-2699.72	7668.59	4.225e+05	-8.468e+05
		-8.557e+05	-3.874e+05	0.38	0.0	300.0	-1.195e+04	-5674.95	-2699.72	7668.59	-3.874e+05	-8.557e+05
25	29	2.505e+05	1.218e+06	-0.23	0.0	0.0	-2.109e+04	1733.34	8169.98	-2081.07	-1.233e+06	-2.695e+05
		-2.695e+05	-1.233e+06	-1.16	0.0	300.0	-2.042e+04	1733.34	8169.98	-2081.07	1.218e+06	2.505e+05
25	32	3.071e+05	1.272e+06	0.24	0.0	0.0	-8759.44	-2103.06	-8280.56	2018.52	1.272e+06	-3.071e+05
		-3.238e+05	-1.212e+06	1.17	0.0	300.0	-8084.44	-2103.06	-8280.56	2018.52	-1.212e+06	-3.238e+05
25	33	2.631e+05	1.232e+06	-0.24	0.0	0.0	-2.106e+04	1820.22	8266.63	-5895.50	-1.248e+06	-2.829e+05
		-2.829e+05	-1.248e+06	-1.18	0.0	300.0	-2.038e+04	1820.22	8266.63	-5895.50	1.232e+06	2.631e+05
25	36	3.206e+05	1.287e+06	0.25	0.0	0.0	-8796.88	-2189.94	-8377.21	5832.95	1.287e+06	-3.206e+05
		-3.364e+05	-1.226e+06	1.18	0.0	300.0	-8121.88	-2189.94	-8377.21	5832.95	-1.226e+06	-3.364e+05
25	52	5.225e+05	2.647e+05	0.42	0.0	0.0	-1.353e+04	-3524.53	-1663.98	4646.98	2.647e+05	-5.225e+05
		-5.349e+05	-2.345e+05	0.23	0.0	300.0	-1.285e+04	-3524.53	-1663.98	4646.98	-2.345e+05	-5.349e+05
25	61	1.380e+05	7.421e+05	-0.14	0.0	0.0	-1.867e+04	981.48	4948.42	-1258.62	-7.425e+05	-1.565e+05
		-1.565e+05	-7.425e+05	-0.71	0.0	300.0	-1.800e+04	981.48	4948.42	-1258.62	7.421e+05	1.380e+05
25	64	1.941e+05	7.816e+05	0.15	0.0	0.0	-1.118e+04	-1351.20	-5059.00	1196.07	7.816e+05	-1.941e+05
		-2.112e+05	-7.361e+05	0.71	0.0	300.0	-1.050e+04	-1351.20	-5059.00	1196.07	-7.361e+05	-2.112e+05
25	65	1.457e+05	7.507e+05	-0.15	0.0	0.0	-1.865e+04	1034.33	5007.21	-3579.10	-7.515e+05	-1.647e+05
		-1.647e+05	-7.515e+05	-0.71	0.0	300.0	-1.798e+04	1034.33	5007.21	-3579.10	7.507e+05	1.457e+05
25	68	2.023e+05	7.906e+05	0.15	0.0	0.0	-1.120e+04	-1404.05	-5117.79	3516.55	7.906e+05	-2.023e+05
		-2.189e+05	-7.447e+05	0.72	0.0	300.0	-1.053e+04	-1404.05	-5117.79	3516.55	-7.447e+05	-2.189e+05
25	69	1.730e+04	1.793e+04	7.16e-03	0.0	0.0	-1.390e+04	-170.18	-47.31	-30.90	1.793e+04	-1.730e+04
		-3.375e+04	3740.86	4.16e-03	0.0	300.0	-1.323e+04	-170.18	-47.31	-30.90	3740.86	-3.375e+04
25	70	1.882e+04	1.957e+04	7.78e-03	0.0	0.0	-1.493e+04	-184.86	-55.29	-31.27	1.957e+04	-1.882e+04
		-3.664e+04	2981.01	-4.33e-03	0.0	300.0	-1.425e+04	-184.86	-55.29	-31.27	2981.01	-3.664e+04
25	71	1.730e+04	1.793e+04	7.16e-03	0.0	0.0	-1.390e+04	-170.18	-47.31	-30.90	1.793e+04	-1.730e+04
		-3.375e+04	3740.86	4.16e-03	0.0	300.0	-1.323e+04	-170.18	-47.31	-30.90	3740.86	-3.375e+04
25	72	2.235e+04	2.338e+04	9.21e-03	0.0	0.0	-1.732e+04	-219.11	-73.92	-32.14	2.338e+04	-2.235e+04
		-4.339e+04	1208.02	-4.82e-03	0.0	300.0	-1.664e+04	-219.11	-73.92	-32.14	1208.02	-4.339e+04
25	73	1.730e+04	1.793e+04	7.16e-03	0.0	0.0	-1.390e+04	-170.18	-47.31	-30.90	1.793e+04	-1.730e+04
		-3.375e+04	3740.86	4.16e-03	0.0	300.0	-1.323e+04	-170.18	-47.31	-30.90	3740.86	-3.375e+04
25	74	1.982e+04	2.066e+04	8.19e-03	0.0	0.0	-1.561e+04	-194.64	-60.61	-31.52	2.066e+04	-1.982e+04
		-3.857e+04	2474.44	-4.47e-03	0.0	300.0	-1.493e+04	-194.64	-60.61	-31.52	2474.44	-3.857e+04
25	75	1.730e+04	1.793e+04	7.16e-03	0.0	0.0	-1.390e+04	-170.18	-47.31	-30.90	1.793e+04	-1.730e+04
		-3.375e+04	3740.86	4.16e-03	0.0	300.0	-1.323e+04	-170.18	-47.31	-30.90	3740.86	-3.375e+04
25	76	1.882e+04	1.957e+04	7.78e-03	0.0	0.0	-1.493e+04	-184.86	-55.29	-31.27	1.957e+04	

1.882e+04
-3.664e+04 2981.01 -4.33e-03 0.0 300.0 -1.425e+04 -184.86 -55.29 -31.27 2981.01 -
3.664e+04
26 2 3.056e+04 -810.57 0.01 0.0 0.0 -2.354e+04 -299.52 104.07 42.15 -3.203e+04
3.056e+04
-5.929e+04 -3.203e+04 6.48e-03 0.0 300.0 -2.266e+04 -299.52 104.07 42.15 -810.57 -
5.929e+04
26 3 1.680e+04 -3994.14 6.96e-03 0.0 0.0 -1.356e+04 -165.29 44.65 30.78 -1.739e+04
1.680e+04
-3.279e+04 -1.739e+04 -4.11e-03 0.0 300.0 -1.288e+04 -165.29 44.65 30.78 -3994.14 -
3.279e+04
26 4 2.436e+04 -194.88 0.01 0.0 0.0 -1.869e+04 -238.68 84.56 32.63 -2.556e+04
2.436e+04
-4.724e+04 -2.556e+04 5.10e-03 0.0 300.0 -1.801e+04 -238.68 84.56 32.63 -194.88 -
4.724e+04
26 11 8.468e+05 3.874e+05 0.68 0.0 0.0 -1.262e+04 -5674.95 2699.72 -7668.59 -4.225e+05
8.468e+05
-8.557e+05 -4.225e+05 -0.38 0.0 300.0 -1.195e+04 -5674.95 2699.72 -7668.59 3.874e+05 -
8.557e+05
26 30 2.631e+05 1.248e+06 -0.24 0.0 0.0 -2.106e+04 1820.22 -8266.63 5895.50 1.248e+06 -
2.829e+05
-2.829e+05 -1.232e+06 1.18 0.0 300.0 -2.038e+04 1820.22 -8266.63 5895.50 -1.232e+06
2.631e+05
26 31 3.206e+05 1.226e+06 0.25 0.0 0.0 -8796.88 -2189.94 8377.21 -5832.95 -1.287e+06
3.206e+05
-3.364e+05 -1.287e+06 -1.18 0.0 300.0 -8121.88 -2189.94 8377.21 -5832.95 1.226e+06 -
3.364e+05
26 34 2.505e+05 1.233e+06 -0.23 0.0 0.0 -2.109e+04 1733.34 -8169.98 2081.07 1.233e+06 -
2.695e+05
-2.695e+05 -1.218e+06 1.16 0.0 300.0 -2.042e+04 1733.34 -8169.98 2081.07 -1.218e+06
2.505e+05
26 35 3.071e+05 1.212e+06 0.24 0.0 0.0 -8759.44 -2103.06 8280.56 -2018.52 -1.272e+06
3.071e+05
-3.238e+05 -1.272e+06 -1.17 0.0 300.0 -8084.44 -2103.06 8280.56 -2018.52 1.212e+06 -
3.238e+05
26 43 5.225e+05 2.345e+05 0.42 0.0 0.0 -1.353e+04 -3524.53 1663.98 -4646.98 -2.647e+05
5.225e+05
-5.349e+05 -2.647e+05 -0.23 0.0 300.0 -1.285e+04 -3524.53 1663.98 -4646.98 2.345e+05 -
5.349e+05
26 62 1.457e+05 7.515e+05 -0.15 0.0 0.0 -1.865e+04 1034.33 -5007.21 3579.10 7.515e+05 -
1.647e+05
-1.647e+05 -7.507e+05 0.71 0.0 300.0 -1.798e+04 1034.33 -5007.21 3579.10 -7.507e+05
1.457e+05
26 63 2.023e+05 7.447e+05 0.15 0.0 0.0 -1.120e+04 -1404.05 5117.79 -3516.55 -7.906e+05
2.023e+05
-2.189e+05 -7.906e+05 -0.72 0.0 300.0 -1.053e+04 -1404.05 5117.79 -3516.55 7.447e+05 -
2.189e+05
26 66 1.380e+05 7.425e+05 -0.14 0.0 0.0 -1.867e+04 981.48 -4948.42 1258.62 7.425e+05 -
1.565e+05
-1.565e+05 -7.421e+05 0.71 0.0 300.0 -1.800e+04 981.48 -4948.42 1258.62 -7.421e+05
1.380e+05
26 67 1.941e+05 7.361e+05 0.15 0.0 0.0 -1.118e+04 -1351.20 5059.00 -1196.07 -7.816e+05
1.941e+05
-2.112e+05 -7.816e+05 -0.71 0.0 300.0 -1.050e+04 -1351.20 5059.00 -1196.07 7.361e+05 -
2.112e+05
26 69 1.730e+04 -3740.86 7.16e-03 0.0 0.0 -1.390e+04 -170.18 47.31 30.90 -1.793e+04
1.730e+04
-3.375e+04 -1.793e+04 -4.16e-03 0.0 300.0 -1.323e+04 -170.18 47.31 30.90 -3740.86 -
3.375e+04
26 70 1.882e+04 -2981.01 7.78e-03 0.0 0.0 -1.493e+04 -184.86 55.29 31.27 -1.957e+04
1.882e+04
-3.664e+04 -1.957e+04 4.33e-03 0.0 300.0 -1.425e+04 -184.86 55.29 31.27 -2981.01 -
3.664e+04
26 71 1.730e+04 -3740.86 7.16e-03 0.0 0.0 -1.390e+04 -170.18 47.31 30.90 -1.793e+04
1.730e+04
-3.375e+04 -1.793e+04 -4.16e-03 0.0 300.0 -1.323e+04 -170.18 47.31 30.90 -3740.86 -
3.375e+04
26 72 2.235e+04 -1208.02 9.21e-03 0.0 0.0 -1.732e+04 -219.11 73.92 32.14 -2.338e+04
2.235e+04
-4.339e+04 -2.338e+04 4.82e-03 0.0 300.0 -1.664e+04 -219.11 73.92 32.14 -1208.02 -
4.339e+04
26 73 1.730e+04 -3740.86 7.16e-03 0.0 0.0 -1.390e+04 -170.18 47.31 30.90 -1.793e+04
1.730e+04
-3.375e+04 -1.793e+04 -4.16e-03 0.0 300.0 -1.323e+04 -170.18 47.31 30.90 -3740.86 -
3.375e+04
26 74 1.982e+04 -2474.44 8.19e-03 0.0 0.0 -1.561e+04 -194.64 60.61 31.52 -2.066e+04
1.982e+04

		-3.857e+04	-2.066e+04	4.47e-03	0.0	300.0	-1.493e+04	-194.64	60.61	31.52	-2474.44	-3.857e+04	
26	75	1.730e+04	-3740.86	7.16e-03	0.0	0.0	-1.390e+04	-170.18	47.31	30.90	-1.793e+04	1.730e+04	
		-3.375e+04	-1.793e+04	-4.16e-03	0.0	300.0	-1.323e+04	-170.18	47.31	30.90	-3740.86	-3.375e+04	
26	76	1.882e+04	-2981.01	7.78e-03	0.0	0.0	-1.493e+04	-184.86	55.29	31.27	-1.957e+04	1.882e+04	
		-3.664e+04	-1.957e+04	4.33e-03	0.0	300.0	-1.425e+04	-184.86	55.29	31.27	-2981.01	-3.664e+04	
27	2	1.537e+05	-3887.64	0.03	0.0	0.0	-1.805e+04	673.91	66.68	-98.89	-2.389e+04	-4.845e+04	
		-4.845e+04	-2.389e+04	5.32e-03	0.0	300.0	-1.717e+04	673.91	66.68	-98.89	-3887.64	1.537e+05	
27	3	8.460e+04	-5507.05	0.02	0.0	0.0	-1.049e+04	366.48	25.12	-72.60	-1.304e+04	-2.534e+04	
		-2.534e+04	-1.304e+04	-3.60e-03	0.0	300.0	-9819.79	366.48	25.12	-72.60	-5507.05	8.460e+04	
27	4	1.225e+05	-2670.47	0.02	0.0	0.0	-1.432e+04	537.71	54.62	-76.51	-1.906e+04	-3.878e+04	
		-3.878e+04	-1.906e+04	4.18e-03	0.0	300.0	-1.364e+04	537.71	54.62	-76.51	-2670.47	1.225e+05	
27	10	8.778e+05	4.828e+04	-0.66	0.0	0.0	-9882.43	5683.16	-378.81	1.158e+04	4.828e+04	-8.271e+05	
		-8.271e+05	-6.536e+04	0.06	0.0	300.0	-9207.43	5683.16	-378.81	1.158e+04	-6.536e+04	8.778e+05	
27	21	3.461e+05	6.555e+05	-0.20	0.0	0.0	-6368.78	2125.73	4505.72	-2.542e+04	-6.963e+05	-2.921e+05	
		-2.921e+05	-6.963e+05	-0.67	0.0	300.0	-5693.78	2125.73	4505.72	-2.542e+04	6.555e+05	3.461e+05	
27	24	2.343e+05	6.670e+05	0.24	0.0	0.0	-1.666e+04	-1301.44	-4439.74	2.527e+04	6.670e+05	2.343e+05	
		-1.567e+05	-6.650e+05	0.66	0.0	300.0	-1.598e+04	-1301.44	-4439.74	2.527e+04	-6.650e+05	-1.567e+05	
27	26	2.886e+05	6.678e+05	-0.16	0.0	0.0	-1.526e+04	1697.74	-4443.83	2.535e+04	6.678e+05	-2.203e+05	
		-2.203e+05	-6.654e+05	0.66	0.0	300.0	-1.458e+04	1697.74	-4443.83	2.535e+04	-6.654e+05	2.886e+05	
27	27	1.624e+05	6.559e+05	0.19	0.0	0.0	-7768.07	-873.45	4509.81	-2.550e+04	-6.971e+05	1.624e+05	
		-9.912e+04	-6.971e+05	-0.67	0.0	300.0	-7093.07	-873.45	4509.81	-2.550e+04	6.559e+05	-9.912e+04	
27	42	5.711e+05	2.362e+04	-0.39	0.0	0.0	-1.052e+04	3618.46	-217.42	7004.95	2.362e+04	-5.145e+05	
		-5.145e+05	-4.161e+04	0.03	0.0	300.0	-9846.43	3618.46	-217.42	7004.95	-4.161e+04	5.711e+05	
27	53	2.476e+05	3.969e+05	-0.12	0.0	0.0	-8386.49	1454.48	2753.95	-1.548e+04	-4.293e+05	-1.890e+05	
		-1.890e+05	-4.293e+05	-0.41	0.0	300.0	-7711.49	1454.48	2753.95	-1.548e+04	3.969e+05	2.476e+05	
27	56	1.312e+05	4.000e+05	0.15	0.0	0.0	-1.464e+04	-630.19	-2687.97	1.533e+04	4.000e+05	1.312e+05	
		-5.820e+04	-4.064e+05	0.40	0.0	300.0	-1.397e+04	-630.19	-2687.97	1.533e+04	-4.064e+05	-5.820e+04	
27	58	2.126e+05	4.005e+05	-0.09	0.0	0.0	-1.379e+04	1194.34	-2690.46	1.538e+04	4.005e+05	-1.453e+05	
		-1.453e+05	-4.066e+05	0.40	0.0	300.0	-1.311e+04	1194.34	-2690.46	1.538e+04	-4.066e+05	2.126e+05	
27	59	8.748e+04	3.971e+05	0.12	0.0	0.0	-9237.26	-370.05	2756.45	-1.553e+04	-4.298e+05	8.748e+04	
		-2.322e+04	-4.298e+05	-0.41	0.0	300.0	-8562.26	-370.05	2756.45	-1.553e+04	3.971e+05	-2.322e+04	
27	69	8.713e+04	-5317.94	0.02	0.0	0.0	-1.075e+04	377.90	27.09	-72.86	-1.345e+04	-2.624e+04	
		-2.624e+04	-1.345e+04	-3.64e-03	0.0	300.0	-1.007e+04	377.90	27.09	-72.86	-5317.94	8.713e+04	
27	70	9.472e+04	-4750.63	0.02	0.0	0.0	-1.151e+04	412.15	32.99	-73.65	-1.465e+04	-2.893e+04	
		-2.893e+04	-1.465e+04	-3.75e-03	0.0	300.0	-1.084e+04	412.15	32.99	-73.65	-4750.63	9.472e+04	
27	71	8.713e+04	-5317.94	0.02	0.0	0.0	-1.075e+04	377.90	27.09	-72.86	-1.345e+04	-2.624e+04	
		-2.624e+04	-1.345e+04	-3.64e-03	0.0	300.0	-1.007e+04	377.90	27.09	-72.86	-5317.94	8.713e+04	
27	72	1.124e+05	-3426.89	0.02	0.0	0.0	-1.330e+04	492.05	46.76	-75.47	-1.745e+04	-3.520e+04	
		-3.520e+04	-1.745e+04	-4.01e-03	0.0	300.0	-1.262e+04	492.05	46.76	-75.47	-3426.89		

1.124e+05													
27	73	8.713e+04	-5317.94	0.02	0.0	0.0	-1.075e+04	377.90	27.09	-72.86	-1.345e+04	-	
2.624e+04													
		-2.624e+04	-1.345e+04	-3.64e-03	0.0	300.0	-1.007e+04	377.90	27.09	-72.86	-5317.94		
8.713e+04													
27	74	9.977e+04	-4372.42	0.02	0.0	0.0	-1.202e+04	434.98	36.92	-74.17	-1.545e+04	-	
3.072e+04													
		-3.072e+04	-1.545e+04	-3.82e-03	0.0	300.0	-1.135e+04	434.98	36.92	-74.17	-4372.42		
9.977e+04													
27	75	8.713e+04	-5317.94	0.02	0.0	0.0	-1.075e+04	377.90	27.09	-72.86	-1.345e+04	-	
2.624e+04													
		-2.624e+04	-1.345e+04	-3.64e-03	0.0	300.0	-1.007e+04	377.90	27.09	-72.86	-5317.94		
8.713e+04													
27	76	9.472e+04	-4750.63	0.02	0.0	0.0	-1.151e+04	412.15	32.99	-73.65	-1.465e+04	-	
2.893e+04													
		-2.893e+04	-1.465e+04	-3.75e-03	0.0	300.0	-1.084e+04	412.15	32.99	-73.65	-4750.63		
9.472e+04													
28	2	6.034e+04	3576.04	0.01	0.0	0.0	-3331.99	491.55	69.08	-127.20	-1.715e+04	-	
8.713e+04													
		-8.713e+04	-1.715e+04	3.22e-03	0.0	300.0	-2454.49	491.55	69.08	-127.20	3576.04		
6.034e+04													
28	3	3.292e+04	768.48	6.01e-03	0.0	0.0	-2257.01	270.01	35.98	-93.44	-1.003e+04	-	
4.808e+04													
		-4.808e+04	-1.003e+04	2.13e-03	0.0	300.0	-1582.01	270.01	35.98	-93.44	768.48		
3.292e+04													
28	10	7.043e+05	8102.29	-0.68	0.0	0.0	-5947.78	4779.36	101.09	1.072e+04	-2.227e+04	-	
7.295e+05													
		-7.295e+05	-2.227e+04	5.31e-03	0.0	300.0	-5272.78	4779.36	101.09	1.072e+04	8102.29		
7.043e+05													
28	14	6.408e+05	1.729e+05	-0.62	0.0	0.0	-6406.38	4361.77	-1185.80	4316.77	1.729e+05	-	
6.683e+05													
		-6.683e+05	-1.829e+05	0.19	0.0	300.0	-5731.38	4361.77	-1185.80	4316.77	-1.829e+05		
6.408e+05													
28	15	5.607e+05	1.856e+05	0.63	0.0	0.0	1708.37	-3756.76	1268.08	-4506.30	-1.949e+05		
5.607e+05													
		-5.668e+05	-1.949e+05	-0.20	0.0	300.0	2383.37	-3756.76	1268.08	-4506.30	1.856e+05	-	
5.668e+05													
28	21	2.293e+05	3.930e+05	-0.21	0.0	0.0	-1380.44	1599.20	2678.33	-2.403e+04	-4.105e+05	-	
2.488e+05													
		-2.488e+05	-4.105e+05	-0.41	0.0	300.0	-705.44	1599.20	2678.33	-2.403e+04	3.930e+05		
2.293e+05													
28	42	4.429e+05	5671.04	-0.41	0.0	0.0	-4537.60	3025.63	79.02	6472.58	-1.806e+04	-	
4.648e+05													
		-4.648e+05	-1.806e+04	4.06e-03	0.0	300.0	-3862.60	3025.63	79.02	6472.58	5671.04		
4.429e+05													
28	46	4.043e+05	1.009e+05	-0.38	0.0	0.0	-4816.59	2771.90	-704.95	2586.18	1.009e+05	-	
4.276e+05													
		-4.276e+05	-1.107e+05	0.12	0.0	300.0	-4141.59	2771.90	-704.95	2586.18	-1.107e+05		
4.043e+05													
28	47	3.200e+05	1.134e+05	0.38	0.0	0.0	118.58	-2166.89	787.23	-2775.71	-1.228e+05		
3.200e+05													
		-3.303e+05	-1.228e+05	-0.12	0.0	300.0	793.58	-2166.89	787.23	-2775.71	1.134e+05	-	
3.303e+05													
28	53	1.540e+05	2.395e+05	-0.13	0.0	0.0	-1759.57	1091.37	1644.59	-1.464e+04	-2.539e+05	-	
1.724e+05													
		-1.724e+05	-2.539e+05	-0.25	0.0	300.0	-1084.57	1091.37	1644.59	-1.464e+04	2.395e+05		
1.540e+05													
28	69	3.394e+04	917.44	6.18e-03	0.0	0.0	-2280.01	278.14	37.27	-93.77	-1.026e+04	-	
4.950e+04													
		-4.950e+04	-1.026e+04	2.16e-03	0.0	300.0	-1605.01	278.14	37.27	-93.77	917.44		
3.394e+04													
28	70	3.698e+04	1364.32	6.71e-03	0.0	0.0	-2349.00	302.51	41.14	-94.76	-1.098e+04	-	
5.377e+04													
		-5.377e+04	-1.098e+04	2.24e-03	0.0	300.0	-1674.00	302.51	41.14	-94.76	1364.32		
3.698e+04													
28	71	3.394e+04	917.44	6.18e-03	0.0	0.0	-2280.01	278.14	37.27	-93.77	-1.026e+04	-	
4.950e+04													
		-4.950e+04	-1.026e+04	2.16e-03	0.0	300.0	-1605.01	278.14	37.27	-93.77	917.44		
3.394e+04													
28	72	4.407e+04	2407.04	7.93e-03	0.0	0.0	-2509.99	359.37	50.17	-97.08	-1.264e+04	-	
6.374e+04													
		-6.374e+04	-1.264e+04	2.42e-03	0.0	300.0	-1834.99	359.37	50.17	-97.08	2407.04		
4.407e+04													
28	73	3.394e+04	917.44	6.18e-03	0.0	0.0	-2280.01	278.14	37.27	-93.77	-1.026e+04	-	
4.950e+04													
		-4.950e+04	-1.026e+04	2.16e-03	0.0	300.0	-1605.01	278.14	37.27	-93.77	917.44		
3.394e+04													

28	74	3.901e+04	1662.24	7.06e-03	0.0	0.0	-2395.00	318.75	43.72	-95.43	-1.145e+04	-5.662e+04
		-5.662e+04	-1.145e+04	2.29e-03	0.0	300.0	-1720.00	318.75	43.72	-95.43	1662.24	3.901e+04
28	75	3.394e+04	917.44	6.18e-03	0.0	0.0	-2280.01	278.14	37.27	-93.77	-1.026e+04	-4.950e+04
		-4.950e+04	-1.026e+04	2.16e-03	0.0	300.0	-1605.01	278.14	37.27	-93.77	917.44	3.394e+04
28	76	3.698e+04	1364.32	6.71e-03	0.0	0.0	-2349.00	302.51	41.14	-94.76	-1.098e+04	-5.377e+04
		-5.377e+04	-1.098e+04	2.24e-03	0.0	300.0	-1674.00	302.51	41.14	-94.76	1364.32	3.698e+04
29	2	6.034e+04	1.715e+04	0.01	0.0	0.0	-3331.99	491.55	-69.08	127.20	1.715e+04	-8.713e+04
		-8.713e+04	-3576.04	-3.22e-03	0.0	300.0	-2454.49	491.55	-69.08	127.20	-3576.04	6.034e+04
29	3	3.292e+04	1.003e+04	6.01e-03	0.0	0.0	-2257.01	270.01	-35.98	93.44	1.003e+04	-4.808e+04
		-4.808e+04	-768.48	-2.13e-03	0.0	300.0	-1582.01	270.01	-35.98	93.44	-768.48	3.292e+04
29	5	6.408e+05	1.829e+05	-0.62	0.0	0.0	-6406.38	4361.77	1185.80	-4316.77	-1.729e+05	-6.683e+05
		-6.683e+05	-1.729e+05	-0.19	0.0	300.0	-5731.38	4361.77	1185.80	-4316.77	1.829e+05	6.408e+05
29	8	5.607e+05	1.949e+05	0.63	0.0	0.0	1708.37	-3756.76	-1268.08	4506.30	1.949e+05	5.607e+05
		-5.668e+05	-1.856e+05	0.20	0.0	300.0	2383.37	-3756.76	-1268.08	4506.30	-1.856e+05	-5.668e+05
29	17	7.043e+05	2.227e+04	-0.68	0.0	0.0	-5947.78	4779.36	-101.09	-1.072e+04	2.227e+04	-7.295e+05
		-7.295e+05	-8102.29	-5.31e-03	0.0	300.0	-5272.78	4779.36	-101.09	-1.072e+04	-8102.29	7.043e+05
29	26	2.293e+05	4.105e+05	-0.21	0.0	0.0	-1380.44	1599.20	-2678.33	2.403e+04	4.105e+05	-2.488e+05
		-2.488e+05	-3.930e+05	0.41	0.0	300.0	-705.44	1599.20	-2678.33	2.403e+04	-3.930e+05	2.293e+05
29	37	4.043e+05	1.107e+05	-0.38	0.0	0.0	-4816.59	2771.90	704.95	-2586.18	-1.009e+05	-4.276e+05
		-4.276e+05	-1.009e+05	-0.12	0.0	300.0	-4141.59	2771.90	704.95	-2586.18	1.107e+05	4.043e+05
29	40	3.200e+05	1.228e+05	0.38	0.0	0.0	118.58	-2166.89	-787.23	2775.71	1.228e+05	3.200e+05
		-3.303e+05	-1.134e+05	0.12	0.0	300.0	793.58	-2166.89	-787.23	2775.71	-1.134e+05	-3.303e+05
29	49	4.429e+05	1.806e+04	-0.41	0.0	0.0	-4537.60	3025.63	-79.02	-6472.58	1.806e+04	-4.648e+05
		-4.648e+05	-5671.04	-4.06e-03	0.0	300.0	-3862.60	3025.63	-79.02	-6472.58	-5671.04	4.429e+05
29	58	1.540e+05	2.539e+05	-0.13	0.0	0.0	-1759.57	1091.37	-1644.59	1.464e+04	2.539e+05	-1.724e+05
		-1.724e+05	-2.395e+05	0.25	0.0	300.0	-1084.57	1091.37	-1644.59	1.464e+04	-2.395e+05	1.540e+05
29	69	3.394e+04	1.026e+04	6.18e-03	0.0	0.0	-2280.01	278.14	-37.27	93.77	1.026e+04	-4.950e+04
		-4.950e+04	-917.44	-2.16e-03	0.0	300.0	-1605.01	278.14	-37.27	93.77	-917.44	3.394e+04
29	70	3.698e+04	1.098e+04	6.71e-03	0.0	0.0	-2349.00	302.51	-41.14	94.76	1.098e+04	-5.377e+04
		-5.377e+04	-1364.32	-2.24e-03	0.0	300.0	-1674.00	302.51	-41.14	94.76	-1364.32	3.698e+04
29	71	3.394e+04	1.026e+04	6.18e-03	0.0	0.0	-2280.01	278.14	-37.27	93.77	1.026e+04	-4.950e+04
		-4.950e+04	-917.44	-2.16e-03	0.0	300.0	-1605.01	278.14	-37.27	93.77	-917.44	3.394e+04
29	72	4.407e+04	1.264e+04	7.93e-03	0.0	0.0	-2509.99	359.37	-50.17	97.08	1.264e+04	-6.374e+04
		-6.374e+04	-2407.04	-2.42e-03	0.0	300.0	-1834.99	359.37	-50.17	97.08	-2407.04	4.407e+04
29	73	3.394e+04	1.026e+04	6.18e-03	0.0	0.0	-2280.01	278.14	-37.27	93.77	1.026e+04	-4.950e+04
		-4.950e+04	-917.44	-2.16e-03	0.0	300.0	-1605.01	278.14	-37.27	93.77	-917.44	3.394e+04
29	74	3.901e+04	1.145e+04	7.06e-03	0.0	0.0	-2395.00	318.75	-43.72	95.43	1.145e+04	-5.662e+04
		-5.662e+04	-1662.24	-2.29e-03	0.0	300.0	-1720.00	318.75	-43.72	95.43	-1662.24	3.901e+04
29	75	3.394e+04	1.026e+04	6.18e-03	0.0	0.0	-2280.01	278.14	-37.27	93.77	1.026e+04	-

4.950e+04
-4.950e+04 -917.44 -2.16e-03 0.0 300.0 -1605.01 278.14 -37.27 93.77 -917.44
3.394e+04
29 76 3.698e+04 1.098e+04 6.71e-03 0.0 0.0 -2349.00 302.51 -41.14 94.76 1.098e+04 -
5.377e+04
-5.377e+04 -1364.32 -2.24e-03 0.0 300.0 -1674.00 302.51 -41.14 94.76 -1364.32
3.698e+04
30 2 1.537e+05 2.389e+04 0.03 0.0 0.0 -1.805e+04 673.91 -66.68 98.89 2.389e+04 -
4.845e+04
-4.845e+04 3887.64 -5.32e-03 0.0 300.0 -1.717e+04 673.91 -66.68 98.89 3887.64
1.537e+05
30 3 8.460e+04 1.304e+04 0.02 0.0 0.0 -1.049e+04 366.48 -25.12 72.60 1.304e+04 -
2.534e+04
-2.534e+04 5507.05 3.60e-03 0.0 300.0 -9819.79 366.48 -25.12 72.60 5507.05
8.460e+04
30 4 1.225e+05 1.906e+04 0.02 0.0 0.0 -1.432e+04 537.71 -54.62 76.51 1.906e+04 -
3.878e+04
-3.878e+04 2670.47 -4.18e-03 0.0 300.0 -1.364e+04 537.71 -54.62 76.51 2670.47
1.225e+05
30 17 8.778e+05 6.536e+04 -0.66 0.0 0.0 -9882.43 5683.16 378.81 -1.158e+04 -4.828e+04 -
8.271e+05
-8.271e+05 -4.828e+04 -0.06 0.0 300.0 -9207.43 5683.16 378.81 -1.158e+04 6.536e+04
8.778e+05
30 21 2.886e+05 6.654e+05 -0.16 0.0 0.0 -1.526e+04 1697.74 4443.83 -2.535e+04 -6.678e+05 -
2.203e+05
-2.203e+05 -6.678e+05 -0.66 0.0 300.0 -1.458e+04 1697.74 4443.83 -2.535e+04 6.654e+05
2.886e+05
30 24 1.624e+05 6.971e+05 0.19 0.0 0.0 -7768.07 -873.45 -4509.81 2.550e+04 6.971e+05
1.624e+05
-9.912e+04 -6.559e+05 0.67 0.0 300.0 -7093.07 -873.45 -4509.81 2.550e+04 -6.559e+05 -
9.912e+04
30 26 3.461e+05 6.963e+05 -0.20 0.0 0.0 -6368.78 2125.73 -4505.72 2.542e+04 6.963e+05 -
2.921e+05
-2.921e+05 -6.555e+05 0.67 0.0 300.0 -5693.78 2125.73 -4505.72 2.542e+04 -6.555e+05
3.461e+05
30 27 2.343e+05 6.650e+05 0.24 0.0 0.0 -1.666e+04 -1301.44 4439.74 -2.527e+04 -6.670e+05
2.343e+05
-1.567e+05 -6.670e+05 -0.66 0.0 300.0 -1.598e+04 -1301.44 4439.74 -2.527e+04 6.650e+05 -
1.567e+05
30 49 5.711e+05 4.161e+04 -0.39 0.0 0.0 -1.052e+04 3618.46 217.42 -7004.95 -2.362e+04 -
5.145e+05
-5.145e+05 -2.362e+04 -0.03 0.0 300.0 -9846.43 3618.46 217.42 -7004.95 4.161e+04
5.711e+05
30 53 2.126e+05 4.066e+05 -0.09 0.0 0.0 -1.379e+04 1194.34 2690.46 -1.538e+04 -4.005e+05 -
1.453e+05
-1.453e+05 -4.005e+05 -0.40 0.0 300.0 -1.311e+04 1194.34 2690.46 -1.538e+04 4.066e+05
2.126e+05
30 56 8.748e+04 4.298e+05 0.12 0.0 0.0 -9237.26 -370.05 -2756.45 1.553e+04 4.298e+05
8.748e+04
-2.322e+04 -3.971e+05 0.41 0.0 300.0 -8562.26 -370.05 -2756.45 1.553e+04 -3.971e+05 -
2.322e+04
30 58 2.476e+05 4.293e+05 -0.12 0.0 0.0 -8386.49 1454.48 -2753.95 1.548e+04 4.293e+05 -
1.890e+05
-1.890e+05 -3.969e+05 0.41 0.0 300.0 -7711.49 1454.48 -2753.95 1.548e+04 -3.969e+05
2.476e+05
30 59 1.312e+05 4.064e+05 0.15 0.0 0.0 -1.464e+04 -630.19 2687.97 -1.533e+04 -4.000e+05
1.312e+05
-5.820e+04 -4.000e+05 -0.40 0.0 300.0 -1.397e+04 -630.19 2687.97 -1.533e+04 4.064e+05 -
5.820e+04
30 69 8.713e+04 1.345e+04 0.02 0.0 0.0 -1.075e+04 377.90 -27.09 72.86 1.345e+04 -
2.624e+04
-2.624e+04 5317.94 3.64e-03 0.0 300.0 -1.007e+04 377.90 -27.09 72.86 5317.94
8.713e+04
30 70 9.472e+04 1.465e+04 0.02 0.0 0.0 -1.151e+04 412.15 -32.99 73.65 1.465e+04 -
2.893e+04
-2.893e+04 4750.63 3.75e-03 0.0 300.0 -1.084e+04 412.15 -32.99 73.65 4750.63
9.472e+04
30 71 8.713e+04 1.345e+04 0.02 0.0 0.0 -1.075e+04 377.90 -27.09 72.86 1.345e+04 -
2.624e+04
-2.624e+04 5317.94 3.64e-03 0.0 300.0 -1.007e+04 377.90 -27.09 72.86 5317.94
8.713e+04
30 72 1.124e+05 1.745e+04 0.02 0.0 0.0 -1.330e+04 492.05 -46.76 75.47 1.745e+04 -
3.520e+04
-3.520e+04 3426.89 4.01e-03 0.0 300.0 -1.262e+04 492.05 -46.76 75.47 3426.89
1.124e+05
30 73 8.713e+04 1.345e+04 0.02 0.0 0.0 -1.075e+04 377.90 -27.09 72.86 1.345e+04 -
2.624e+04

		-2.624e+04	5317.94	3.64e-03	0.0	300.0	-1.007e+04	377.90	-27.09	72.86	5317.94	8.713e+04
	30	74 9.977e+04	1.545e+04	0.02	0.0	0.0	-1.202e+04	434.98	-36.92	74.17	1.545e+04	-3.072e+04
		-3.072e+04	4372.42	3.82e-03	0.0	300.0	-1.135e+04	434.98	-36.92	74.17	4372.42	9.977e+04
	30	75 8.713e+04	1.345e+04	0.02	0.0	0.0	-1.075e+04	377.90	-27.09	72.86	1.345e+04	-2.624e+04
		-2.624e+04	5317.94	3.64e-03	0.0	300.0	-1.007e+04	377.90	-27.09	72.86	5317.94	8.713e+04
	30	76 9.472e+04	1.465e+04	0.02	0.0	0.0	-1.151e+04	412.15	-32.99	73.65	1.465e+04	-2.893e+04
		-2.893e+04	4750.63	3.75e-03	0.0	300.0	-1.084e+04	412.15	-32.99	73.65	4750.63	9.472e+04

Pilas.	M3 mx/mn	M2 mx/mn	D 2 / D 3	Q 2 / Q 3	N	V 2	V 3	T
	-8.557e+05	-1.287e+06	-1.18	0.0	-2.354e+04	-5674.95	-8377.21	-2.550e+04
	8.778e+05	1.287e+06	1.18	0.0	2383.37	5683.16	8377.21	2.550e+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 2M 3
		daN cm	daN cm	cm	daN	cm	daN	daN	daN	daN cm	daN cm
31	1	5.590e+04	88.36	-6.58e-03	-2071.88	0.0	2020.81	1035.94	0.0	0.0	88.36	-5.417e+04
		-5.417e+04	88.36	-8.12e-05	0.0	425.0	2020.81	-1035.94	0.0	0.0	88.36	-5.417e+04
31	2	5.487e+04	93.52	-6.42e-03	-2071.88	0.0	2159.11	1035.94	0.0	0.0	93.52	-5.520e+04
		-5.520e+04	93.52	-8.59e-05	0.0	425.0	2159.11	-1035.94	0.0	0.0	93.52	-5.520e+04
31	3	4.312e+04	67.36	-5.08e-03	-1593.75	0.0	1538.16	796.88	0.0	0.0	67.36	-4.155e+04
		-4.155e+04	67.36	-6.19e-05	0.0	425.0	1538.16	-796.87	0.0	0.0	67.36	-4.155e+04
31	9	4.665e+04	5.208e+04	-0.02	-1593.75	0.0	1524.47	594.34	-349.75	7677.59	5.208e+04	-460.82
		-8.651e+04	-7.435e+04	9.90e-03	0.0	425.0	1524.47	-999.41	-349.75	7677.59	-7.435e+04	-8.651e+04
31	12	4.997e+04	7.449e+04	0.02	-1593.75	0.0	1625.60	999.41	349.75	-7677.59	-5.195e+04	-8.319e+04
		-8.319e+04	-5.195e+04	-0.01	0.0	425.0	1625.60	-594.34	349.75	-7677.59	7.449e+04	2867.30
31	29	4.742e+05	2.071e+05	-0.11	-1593.75	0.0	1559.87	-1633.77	-1005.95	1.935e+04	2.071e+05	4.742e+05
		-5.588e+05	-2.137e+05	0.10	0.0	425.0	1559.87	-3227.52	-1005.95	1.935e+04	-2.137e+05	-5.588e+05
31	30	5.480e+05	2.071e+05	0.12	-1593.75	0.0	1559.87	3574.76	974.33	-1.812e+04	-2.137e+05	-6.326e+05
		-6.326e+05	-2.137e+05	-0.12	0.0	425.0	1559.87	1981.01	974.33	-1.812e+04	2.071e+05	5.480e+05
31	31	5.490e+05	2.138e+05	-0.12	-1593.75	0.0	1590.21	-1981.01	-974.33	1.812e+04	2.138e+05	5.490e+05
		-6.316e+05	-2.069e+05	0.12	0.0	425.0	1590.21	-3574.76	-974.33	1.812e+04	-2.069e+05	-6.316e+05
31	32	4.752e+05	2.139e+05	0.11	-1593.75	0.0	1590.21	3227.52	1005.95	-1.935e+04	-2.070e+05	-5.578e+05
		-5.578e+05	-2.070e+05	-0.10	0.0	425.0	1590.21	1633.77	1005.95	-1.935e+04	2.139e+05	4.752e+05
31	41	4.378e+04	3.171e+04	-0.01	-1593.75	0.0	1544.29	673.66	-212.77	4670.50	3.171e+04	-1.666e+04
		-6.901e+04	-4.520e+04	5.97e-03	0.0	425.0	1544.29	-920.09	-212.77	4670.50	-4.520e+04	-6.901e+04
31	44	4.581e+04	4.534e+04	0.01	-1593.75	0.0	1605.78	920.09	212.77	-4670.50	-3.157e+04	-6.699e+04
		-6.699e+04	-3.157e+04	-6.07e-03	0.0	425.0	1605.78	-673.66	212.77	-4670.50	4.534e+04	-1.464e+04
31	61	2.721e+05	1.260e+05	-0.07	-1593.75	0.0	1565.81	-681.80	-611.96	1.177e+04	1.260e+05	2.721e+05
		-3.563e+05	-1.300e+05	0.06	0.0	425.0	1565.81	-2275.55	-611.96	1.177e+04	-1.300e+05	-3.563e+05
31	62	3.170e+05	1.260e+05	0.07	-1593.75	0.0	1565.81	2486.79	592.72	-1.102e+04	-1.300e+05	-4.012e+05
		-4.012e+05	-1.300e+05	-0.07	0.0	425.0	1565.81	893.04	592.72	-1.102e+04	1.260e+05	3.170e+05
31	63	3.176e+05	1.301e+05	-0.07	-1593.75	0.0	1584.26	-893.04	-592.72	1.102e+04	1.301e+05	

3.176e+05												
		-4.006e+05	-1.259e+05	0.07	0.0	425.0	1584.26	-2486.79	-592.72	1.102e+04	-1.259e+05	-
4.006e+05												
31	64	2.727e+05	1.301e+05	0.07	-1593.75	0.0	1584.26	2275.55	611.96	-1.177e+04	-1.259e+05	-
3.557e+05												
		-3.557e+05	-1.259e+05	-0.06	0.0	425.0	1584.26	681.80	611.96	-1.177e+04	1.301e+05	
2.727e+05												
31	69	4.305e+04	67.70	-5.07e-03	-1593.75	0.0	1547.38	796.88	0.0	0.0	67.70	-
4.162e+04												
		-4.162e+04	67.70	-6.22e-05	0.0	425.0	1547.38	-796.87	0.0	0.0	67.70	-
4.162e+04												
31	70	4.284e+04	68.74	-5.04e-03	-1593.75	0.0	1575.04	796.88	0.0	0.0	68.74	-
4.182e+04												
		-4.182e+04	68.74	-6.32e-05	0.0	425.0	1575.04	-796.87	0.0	0.0	68.74	-
4.182e+04												
31	71	4.305e+04	67.70	-5.07e-03	-1593.75	0.0	1547.38	796.88	0.0	0.0	67.70	-
4.162e+04												
		-4.162e+04	67.70	-6.22e-05	0.0	425.0	1547.38	-796.87	0.0	0.0	67.70	-
4.162e+04												
31	72	4.236e+04	71.14	-4.96e-03	-1593.75	0.0	1639.57	796.88	0.0	0.0	71.14	-
4.230e+04												
		-4.230e+04	71.14	-6.54e-05	0.0	425.0	1639.57	-796.87	0.0	0.0	71.14	-
4.230e+04												
31	73	4.305e+04	67.70	-5.07e-03	-1593.75	0.0	1547.38	796.88	0.0	0.0	67.70	-
4.162e+04												
		-4.162e+04	67.70	-6.22e-05	0.0	425.0	1547.38	-796.87	0.0	0.0	67.70	-
4.162e+04												
31	74	4.271e+04	69.42	-5.02e-03	-1593.75	0.0	1593.48	796.88	0.0	0.0	69.42	-
4.196e+04												
		-4.196e+04	69.42	-6.38e-05	0.0	425.0	1593.48	-796.87	0.0	0.0	69.42	-
4.196e+04												
31	75	4.305e+04	67.70	-5.07e-03	-1593.75	0.0	1547.38	796.88	0.0	0.0	67.70	-
4.162e+04												
		-4.162e+04	67.70	-6.22e-05	0.0	425.0	1547.38	-796.87	0.0	0.0	67.70	-
4.162e+04												
31	76	4.284e+04	68.74	-5.04e-03	-1593.75	0.0	1575.04	796.88	0.0	0.0	68.74	-
4.182e+04												
		-4.182e+04	68.74	-6.32e-05	0.0	425.0	1575.04	-796.87	0.0	0.0	68.74	-
4.182e+04												
32	2	6.992e+05	120.04	-0.21	-1.787e+04	0.0	2600.33	7301.68	0.37	-3255.25	-124.42	-
2.880e+05												
		-1.373e+06	-124.42	-3.08e-03	0.0	665.0	2600.33	-1.057e+04	0.37	-3255.25	120.04	-
1.373e+06												
32	3	3.909e+05	87.80	-0.12	-9983.31	0.0	1462.01	4076.50	0.27	-2300.75	-91.28	-
1.598e+05												
		-7.683e+05	-91.28	-2.19e-03	0.0	665.0	1462.01	-5906.81	0.27	-2300.75	87.80	-
7.683e+05												
32	5	6.989e+05	9.336e+04	-0.18	-1.111e+04	0.0	2796.14	2870.80	264.56	-1.881e+04	-8.263e+04	
4.529e+05												
		-1.335e+06	-8.263e+04	-0.37	0.0	665.0	2796.14	-8243.01	264.56	-1.881e+04	9.336e+04	-
1.335e+06												
32	6	6.905e+05	4.785e+04	-0.19	-1.111e+04	0.0	3332.37	2969.97	-154.98	2502.28	4.785e+04	
4.274e+05												
		-1.292e+06	-5.522e+04	0.14	0.0	665.0	3332.37	-8143.84	-154.98	2502.28	-5.522e+04	-
1.292e+06												
32	7	3.311e+05	5.540e+04	-0.07	-1.111e+04	0.0	-84.79	6108.93	155.53	-7225.99	-4.803e+04	-
7.840e+05												
		-7.840e+05	-4.803e+04	-0.14	0.0	665.0	-84.79	-5004.89	155.53	-7225.99	5.540e+04	-
4.183e+05												
32	10	6.992e+05	5.219e+04	-0.19	-1.111e+04	0.0	3271.10	2878.11	-171.53	1827.02	5.219e+04	
4.527e+05												
		-1.333e+06	-6.186e+04	0.09	0.0	665.0	3271.10	-8235.71	-171.53	1827.02	-6.186e+04	-
1.333e+06												
32	29	4.970e+05	2.755e+05	-0.14	-1.111e+04	0.0	1366.45	4194.66	771.01	-3.736e+04	-2.372e+05	-
3.452e+04												
		-9.268e+05	-2.372e+05	-0.68	0.0	665.0	1366.45	-6919.16	771.01	-3.736e+04	2.755e+05	-
9.268e+05												
32	32	3.856e+05	2.370e+05	-0.12	-1.111e+04	0.0	1881.13	4884.24	-770.47	3.264e+04	2.370e+05	-
3.221e+05												
		-7.831e+05	-2.754e+05	0.68	0.0	665.0	1881.13	-6229.58	-770.47	3.264e+04	-2.754e+05	-
7.831e+05												
32	37	5.769e+05	5.682e+04	-0.16	-1.111e+04	0.0	2337.26	3524.39	161.03	-1.236e+04	-5.030e+04	
2.057e+05												
		-1.147e+06	-5.030e+04	-0.22	0.0	665.0	2337.26	-7589.42	161.03	-1.236e+04	5.682e+04	-
1.147e+06												
32	38	5.745e+05	2.906e+04	-0.17	-1.111e+04	0.0	2662.82	3584.62	-94.16	594.57	2.906e+04	
1.902e+05												

		-1.121e+06	-3.355e+04	0.08	0.0	665.0	2662.82	-7529.19	-94.16	594.57	-3.355e+04	-
1.121e+06													
32	39	3.558e+05	3.373e+04	-0.09	-1.111e+04	0.0	584.77	5494.27	94.70	-5318.28	-2.925e+04	-
5.468e+05													
		-5.893e+05	-2.925e+04	-0.09	0.0	665.0	584.77	-5619.54	94.70	-5318.28	3.373e+04	-
5.893e+05													
32	42	5.772e+05	3.171e+04	-0.17	-1.111e+04	0.0	2624.96	3528.83	-104.24	186.20	3.171e+04		
2.055e+05													
		-1.146e+06	-3.760e+04	0.05	0.0	665.0	2624.96	-7584.99	-104.24	186.20	-3.760e+04	-
1.146e+06													
32	61	4.723e+05	1.677e+05	-0.13	-1.111e+04	0.0	1470.25	4329.57	469.15	-2.365e+04	-1.443e+05	-
9.081e+04													
		-8.987e+05	-1.443e+05	-0.42	0.0	665.0	1470.25	-6784.24	469.15	-2.365e+04	1.677e+05	-
8.987e+05													
32	64	4.050e+05	1.442e+05	-0.13	-1.111e+04	0.0	1777.34	4749.32	-468.60	1.893e+04	1.442e+05	-
2.658e+05													
		-8.112e+05	-1.675e+05	0.41	0.0	665.0	1777.34	-6364.49	-468.60	1.893e+04	-1.675e+05	-
8.112e+05													
32	69	4.019e+05	88.14	-0.12	-1.027e+04	0.0	1502.45	4192.24	0.27	-2316.03	-91.61	-
1.644e+05													
		-7.900e+05	-91.61	-2.21e-03	0.0	665.0	1502.45	-6073.70	0.27	-2316.03	88.14	-
7.900e+05													
32	70	4.351e+05	89.16	-0.13	-1.111e+04	0.0	1623.79	4539.45	0.27	-2361.85	-92.61	-
1.783e+05													
		-8.549e+05	-92.61	-2.24e-03	0.0	665.0	1623.79	-6574.37	0.27	-2361.85	89.16	-
8.549e+05													
32	71	4.019e+05	88.14	-0.12	-1.027e+04	0.0	1502.45	4192.24	0.27	-2316.03	-91.61	-
1.644e+05													
		-7.900e+05	-91.61	-2.21e-03	0.0	665.0	1502.45	-6073.70	0.27	-2316.03	88.14	-
7.900e+05													
32	72	5.124e+05	91.55	-0.15	-1.309e+04	0.0	1906.92	5349.60	0.28	-2468.79	-94.94	-
2.108e+05													
		-1.006e+06	-94.94	-2.34e-03	0.0	665.0	1906.92	-7742.59	0.28	-2468.79	91.55	-
1.006e+06													
32	73	4.019e+05	88.14	-0.12	-1.027e+04	0.0	1502.45	4192.24	0.27	-2316.03	-91.61	-
1.644e+05													
		-7.900e+05	-91.61	-2.21e-03	0.0	665.0	1502.45	-6073.70	0.27	-2316.03	88.14	-
7.900e+05													
32	74	4.572e+05	89.85	-0.14	-1.168e+04	0.0	1704.69	4770.92	0.28	-2392.41	-93.28	-
1.876e+05													
		-8.982e+05	-93.28	-2.27e-03	0.0	665.0	1704.69	-6908.14	0.28	-2392.41	89.85	-
8.982e+05													
32	75	4.019e+05	88.14	-0.12	-1.027e+04	0.0	1502.45	4192.24	0.27	-2316.03	-91.61	-
1.644e+05													
		-7.900e+05	-91.61	-2.21e-03	0.0	665.0	1502.45	-6073.70	0.27	-2316.03	88.14	-
7.900e+05													
32	76	4.351e+05	89.16	-0.13	-1.111e+04	0.0	1623.79	4539.45	0.27	-2361.85	-92.61	-
1.783e+05													
		-8.549e+05	-92.61	-2.24e-03	0.0	665.0	1623.79	-6574.37	0.27	-2361.85	89.16	-
8.549e+05													
33	2	8.465e+05	205.67	-0.26	-2.096e+04	0.0	2300.81	1.106e+04	0.29	283.58	-22.48	-
1.424e+06													
		-1.424e+06	-22.48	2.05e-04	0.0	780.0	2300.81	-9897.21	0.29	283.58	205.67	-
9.700e+05													
33	3	4.724e+05	149.01	-0.14	-1.171e+04	0.0	1296.72	6180.26	0.21	178.55	-15.79	-
7.962e+05													
		-7.962e+05	-15.79	-1.41e-04	0.0	780.0	1296.72	-5529.49	0.21	178.55	149.01	-
5.424e+05													
33	5	5.221e+05	7.366e+04	-0.14	-1.304e+04	0.0	-390.85	5776.62	-178.86	5201.50	7.366e+04	-
4.763e+05													
		-1.054e+06	-6.724e+04	0.05	0.0	780.0	-390.85	-7259.13	-178.86	5201.50	-6.724e+04	-
1.054e+06													
33	8	6.098e+05	6.754e+04	-0.20	-1.304e+04	0.0	3268.72	7983.24	179.29	-4820.60	-7.369e+04	-
1.296e+06													
		-1.296e+06	-7.369e+04	-0.05	0.0	780.0	3268.72	-5052.51	179.29	-4820.60	6.754e+04	-
1.533e+05													
33	11	6.178e+05	5.721e+04	-0.21	-1.304e+04	0.0	2651.24	8095.13	-138.35	1.441e+04	5.721e+04	-
1.343e+06													
		-1.343e+06	-5.042e+04	0.34	0.0	780.0	2651.24	-4940.62	-138.35	1.441e+04	-5.042e+04	-
1.124e+05													
33	34	5.263e+05	2.212e+05	-0.14	-1.304e+04	0.0	2029.75	6340.08	593.72	-3.561e+04	-2.428e+05	-
6.753e+05													
		-8.141e+05	-2.428e+05	-0.73	0.0	780.0	2029.75	-6695.67	593.72	-3.561e+04	2.212e+05	-
8.141e+05													
33	35	5.502e+05	2.428e+05	-0.19	-1.304e+04	0.0	848.12	7419.78	-593.29	3.599e+04	2.428e+05	-
1.097e+06													
		-1.097e+06	-2.209e+05	0.73	0.0	780.0	848.12	-5615.97	-593.29	3.599e+04	-2.209e+05	-

3.932e+05													
33	37	5.138e+05	4.480e+04	-0.14	-1.304e+04	0.0	326.06	6208.74	-108.72	3238.81	4.480e+04	-	
6.368e+05													
		-8.776e+05	-4.084e+04	0.03	0.0	780.0	326.06	-6827.01	-108.72	3238.81	-4.084e+04	-	
8.776e+05													
33	40	5.690e+05	4.114e+04	-0.19	-1.304e+04	0.0	2551.81	7551.12	109.15	-2857.92	-4.483e+04	-	
1.135e+06													
		-1.135e+06	-4.483e+04	-0.03	0.0	780.0	2551.81	-5484.63	109.15	-2857.92	4.114e+04	-	
3.297e+05													
33	43	5.705e+05	3.480e+04	-0.19	-1.304e+04	0.0	2176.42	7619.17	-84.08	8840.02	3.480e+04	-	
1.164e+06													
		-1.164e+06	-3.062e+04	0.21	0.0	780.0	2176.42	-5416.58	-84.08	8840.02	-3.062e+04	-	
3.048e+05													
33	66	5.262e+05	1.346e+05	-0.14	-1.304e+04	0.0	1798.31	6551.56	361.24	-2.159e+04	-1.477e+05	-	
7.579e+05													
		-7.579e+05	-1.477e+05	-0.44	0.0	780.0	1798.31	-6484.19	361.24	-2.159e+04	1.346e+05	-	
7.316e+05													
33	67	5.399e+05	1.477e+05	-0.18	-1.304e+04	0.0	1079.56	7208.30	-360.81	2.197e+04	1.477e+05	-	
1.014e+06													
		-1.014e+06	-1.343e+05	0.44	0.0	780.0	1079.56	-5827.45	-360.81	2.197e+04	-1.343e+05	-	
4.756e+05													
33	69	4.859e+05	149.70	-0.15	-1.204e+04	0.0	1332.27	6355.18	0.21	181.52	-15.91	-	
8.186e+05													
		-8.186e+05	-15.91	-1.41e-04	0.0	780.0	1332.27	-5686.07	0.21	181.52	149.70	-	
5.577e+05													
33	70	5.262e+05	151.77	-0.16	-1.304e+04	0.0	1438.93	6879.93	0.22	190.45	-16.24	-	
8.860e+05													
		-8.860e+05	-16.24	-1.40e-04	0.0	780.0	1438.93	-6155.82	0.22	190.45	151.77	-	
6.036e+05													
33	71	4.859e+05	149.70	-0.15	-1.204e+04	0.0	1332.27	6355.18	0.21	181.52	-15.91	-	
8.186e+05													
		-8.186e+05	-15.91	-1.41e-04	0.0	780.0	1332.27	-5686.07	0.21	181.52	149.70	-	
5.577e+05													
33	72	6.202e+05	156.61	-0.19	-1.536e+04	0.0	1687.81	8104.36	0.22	211.28	-17.03	-	
1.043e+06													
		-1.043e+06	-17.03	1.53e-04	0.0	780.0	1687.81	-7251.89	0.22	211.28	156.61	-	
7.108e+05													
33	73	4.859e+05	149.70	-0.15	-1.204e+04	0.0	1332.27	6355.18	0.21	181.52	-15.91	-	
8.186e+05													
		-8.186e+05	-15.91	-1.41e-04	0.0	780.0	1332.27	-5686.07	0.21	181.52	149.70	-	
5.577e+05													
33	74	5.530e+05	153.16	-0.17	-1.370e+04	0.0	1510.04	7229.77	0.22	196.40	-16.47	-	
9.310e+05													
		-9.310e+05	-16.47	1.43e-04	0.0	780.0	1510.04	-6468.98	0.22	196.40	153.16	-	
6.342e+05													
33	75	4.859e+05	149.70	-0.15	-1.204e+04	0.0	1332.27	6355.18	0.21	181.52	-15.91	-	
8.186e+05													
		-8.186e+05	-15.91	-1.41e-04	0.0	780.0	1332.27	-5686.07	0.21	181.52	149.70	-	
5.577e+05													
33	76	5.262e+05	151.77	-0.16	-1.304e+04	0.0	1438.93	6879.93	0.22	190.45	-16.24	-	
8.860e+05													
		-8.860e+05	-16.24	-1.40e-04	0.0	780.0	1438.93	-6155.82	0.22	190.45	151.77	-	
6.036e+05													
34	2	-1.121e+05	540.41	0.08	-7657.59	0.0	2974.72	6239.05	-3.42	6744.21	540.41	-	
8.365e+05													
		-8.365e+05	-434.24	2.85e-03	0.0	285.0	2974.72	-1418.55	-3.42	6744.21	-434.24	-	
1.496e+05													
34	3	-6.230e+04	393.29	0.04	-4278.56	0.0	1663.21	3493.43	-2.49	4801.28	393.29	-	
4.688e+05													
		-4.688e+05	-316.56	2.05e-03	0.0	285.0	1663.21	-785.14	-2.49	4801.28	-316.56	-	
8.282e+04													
34	6	-1.867e+05	9.399e+04	-0.05	-4763.06	0.0	-875.27	754.77	684.33	-4589.32	-1.020e+05	-	
2.050e+05													
		-6.589e+05	-1.020e+05	-0.08	0.0	285.0	-875.27	-4008.29	684.33	-4589.32	9.399e+04	-	
6.589e+05													
34	7	4.739e+05	1.028e+05	0.15	-4763.06	0.0	4577.43	7017.10	-689.40	1.442e+04	1.028e+05	-	
8.376e+05													
		-8.376e+05	-9.464e+04	0.08	0.0	285.0	4577.43	2254.03	-689.40	1.442e+04	-9.464e+04		
4.739e+05													
34	11	4.976e+05	8.161e+04	0.15	-4763.06	0.0	4260.30	7129.74	-519.09	1.202e+04	8.161e+04	-	
8.657e+05													
		-8.657e+05	-6.792e+04	0.06	0.0	285.0	4260.30	2366.68	-519.09	1.202e+04	-6.792e+04		
4.976e+05													
34	25	-1.658e+05	2.548e+05	0.02	-4763.06	0.0	2068.72	2834.80	-1713.66	3.016e+04	2.548e+05	-	
3.873e+05													
		-3.873e+05	-2.364e+05	0.26	0.0	285.0	2068.72	-1928.27	-1713.66	3.016e+04	-2.364e+05	-	
2.904e+05													

34	28	1.054e+05	2.357e+05	0.09	-4763.06	0.0	1633.44	4937.07	1708.60	-2.033e+04	-2.540e+05	-6.553e+05
		-6.553e+05	-2.540e+05	-0.25	0.0	285.0	1633.44	174.01	1708.60	-2.033e+04	2.357e+05	1.054e+05
34	38	-2.092e+05	5.697e+04	-0.01	-4763.06	0.0	192.53	1981.13	414.73	-853.17	-6.179e+04	-3.289e+05
		-4.371e+05	-6.179e+04	-0.04	0.0	285.0	192.53	-2781.93	414.73	-853.17	5.697e+04	-4.371e+05
34	39	2.521e+05	6.259e+04	0.11	-4763.06	0.0	3509.63	5790.73	-419.80	1.069e+04	6.259e+04	-7.137e+05
		-7.137e+05	-5.762e+04	0.05	0.0	285.0	3509.63	1027.67	-419.80	1.069e+04	-5.762e+04	2.521e+05
34	43	2.664e+05	4.974e+04	0.11	-4763.06	0.0	3317.44	5858.90	-316.33	9226.13	4.974e+04	-7.308e+05
		-7.308e+05	-4.138e+04	0.04	0.0	285.0	3317.44	1095.83	-316.33	9226.13	-4.138e+04	2.664e+05
34	57	-1.380e+05	1.549e+05	0.03	-4763.06	0.0	1983.50	3246.51	-1041.89	2.024e+04	1.549e+05	-4.398e+05
		-4.398e+05	-1.437e+05	0.16	0.0	285.0	1983.50	-1516.56	-1041.89	2.024e+04	-1.437e+05	-2.129e+05
34	60	2.854e+04	1.431e+05	0.07	-4763.06	0.0	1718.66	4525.36	1036.82	-1.041e+04	-1.541e+05	-6.028e+05
		-6.028e+05	-1.541e+05	-0.15	0.0	285.0	1718.66	-237.70	1036.82	-1.041e+04	1.431e+05	2.789e+04
34	69	-6.410e+04	394.97	0.04	-4399.69	0.0	1710.17	3591.55	-2.50	4830.33	394.97	-4.819e+05
		-4.819e+05	-317.88	2.06e-03	0.0	285.0	1710.17	-808.13	-2.50	4830.33	-317.88	-8.524e+04
34	70	-6.950e+04	400.03	0.05	-4763.06	0.0	1851.08	3885.93	-2.53	4917.48	400.03	-5.213e+05
		-5.213e+05	-321.82	2.09e-03	0.0	285.0	1851.08	-877.13	-2.53	4917.48	-321.82	-9.251e+04
34	71	-6.410e+04	394.97	0.04	-4399.69	0.0	1710.17	3591.55	-2.50	4830.33	394.97	-4.819e+05
		-4.819e+05	-317.88	2.06e-03	0.0	285.0	1710.17	-808.13	-2.50	4830.33	-317.88	-8.524e+04
34	72	-8.210e+04	411.82	0.06	-5610.94	0.0	2179.86	4572.82	-2.61	5120.82	411.82	-6.132e+05
		-6.132e+05	-331.00	2.17e-03	0.0	285.0	2179.86	-1038.12	-2.61	5120.82	-331.00	-1.095e+05
34	73	-6.410e+04	394.97	0.04	-4399.69	0.0	1710.17	3591.55	-2.50	4830.33	394.97	-4.819e+05
		-4.819e+05	-317.88	2.06e-03	0.0	285.0	1710.17	-808.13	-2.50	4830.33	-317.88	-8.524e+04
34	74	-7.310e+04	403.39	0.05	-5005.31	0.0	1945.02	4082.19	-2.55	4975.58	403.39	-5.475e+05
		-5.475e+05	-324.44	2.11e-03	0.0	285.0	1945.02	-923.13	-2.55	4975.58	-324.44	-9.736e+04
34	75	-6.410e+04	394.97	0.04	-4399.69	0.0	1710.17	3591.55	-2.50	4830.33	394.97	-4.819e+05
		-4.819e+05	-317.88	2.06e-03	0.0	285.0	1710.17	-808.13	-2.50	4830.33	-317.88	-8.524e+04
34	76	-6.950e+04	400.03	0.05	-4763.06	0.0	1851.08	3885.93	-2.53	4917.48	400.03	-5.213e+05
		-5.213e+05	-321.82	2.09e-03	0.0	285.0	1851.08	-877.13	-2.53	4917.48	-321.82	-9.251e+04
35	1	5.652e+04	-292.32	-6.68e-03	-2071.88	0.0	2036.80	1035.94	0.0	0.0	-292.32	-5.355e+04
		-5.355e+04	-292.32	2.69e-04	0.0	425.0	2036.80	-1035.94	0.0	0.0	-292.32	-5.355e+04
35	2	5.534e+04	-307.04	-6.49e-03	-2071.88	0.0	2164.90	1035.94	0.0	0.0	-307.04	-5.473e+04
		-5.473e+04	-307.04	2.82e-04	0.0	425.0	2164.90	-1035.94	0.0	0.0	-307.04	-5.473e+04
35	3	4.361e+04	-223.13	-5.16e-03	-1593.75	0.0	1551.66	796.87	0.0	0.0	-223.13	-4.105e+04
		-4.105e+04	-223.13	2.05e-04	0.0	425.0	1551.66	-796.88	0.0	0.0	-223.13	-4.105e+04
35	9	1.075e+05	8004.46	-0.03	-1593.75	0.0	1754.56	107.27	38.63	4007.06	-8410.98	-1.060e+05
		-1.871e+05	-8410.98	-7.47e-03	0.0	425.0	1754.56	-1486.48	38.63	4007.06	8004.46	-1.871e+05
35	12	1.059e+05	7956.87	0.03	-1593.75	0.0	1417.08	1486.48	-38.63	-4007.06	7956.87	-1.887e+05
		-1.887e+05	-8458.56	7.54e-03	0.0	425.0	1417.08	-107.27	-38.63	-4007.06	-8458.56	1.044e+05
35	21	3.284e+05	1.951e+05	-0.11	-1593.75	0.0	1636.44	-942.23	919.09	-8436.60	-1.955e+05	

3.284e+05												
		-4.107e+05	-1.955e+05	-0.06	0.0	425.0	1636.44	-2535.98	919.09	-8436.60	1.951e+05	-
4.107e+05												
35	22	2.836e+05	2.111e+05	0.10	-1593.75	0.0	1636.44	2325.20	-994.33	9797.07	2.111e+05	-
3.659e+05												
		-3.659e+05	-2.115e+05	0.05	0.0	425.0	1636.44	731.45	-994.33	9797.07	-2.115e+05	
2.836e+05												
35	23	2.832e+05	2.111e+05	-0.10	-1593.75	0.0	1535.20	-731.45	994.33	-9797.07	-2.115e+05	
2.832e+05												
		-3.664e+05	-2.115e+05	-0.05	0.0	425.0	1535.20	-2325.20	994.33	-9797.07	2.111e+05	-
3.664e+05												
35	24	3.280e+05	1.951e+05	0.11	-1593.75	0.0	1535.20	2535.98	-919.09	8436.60	1.951e+05	-
4.112e+05												
		-4.112e+05	-1.955e+05	0.06	0.0	425.0	1535.20	942.23	-919.09	8436.60	-1.955e+05	
3.280e+05												
35	41	6.706e+04	4755.90	-0.02	-1593.75	0.0	1688.47	378.51	23.38	2433.95	-5181.05	
4.801e+04												
		-1.298e+05	-5181.05	-4.58e-03	0.0	425.0	1688.47	-1215.24	23.38	2433.95	4755.90	-
1.298e+05												
35	44	6.611e+04	4726.94	0.02	-1593.75	0.0	1483.17	1215.24	-23.38	-2433.95	4726.94	-
1.307e+05												
		-1.307e+05	-5210.01	4.65e-03	0.0	425.0	1483.17	-378.51	-23.38	-2433.95	-5210.01	
4.706e+04												
35	53	1.834e+05	1.184e+05	-0.07	-1593.75	0.0	1616.62	-260.34	558.21	-5108.65	-1.188e+05	
1.834e+05												
		-2.659e+05	-1.188e+05	-0.04	0.0	425.0	1616.62	-1854.09	558.21	-5108.65	1.184e+05	-
2.659e+05												
35	54	1.562e+05	1.281e+05	0.06	-1593.75	0.0	1616.62	1725.89	-603.95	5936.04	1.281e+05	-
2.386e+05												
		-2.386e+05	-1.286e+05	0.03	0.0	425.0	1616.62	132.14	-603.95	5936.04	-1.286e+05	
1.562e+05												
35	55	1.559e+05	1.281e+05	-0.06	-1593.75	0.0	1555.03	-132.14	603.95	-5936.04	-1.286e+05	
1.559e+05												
		-2.389e+05	-1.286e+05	-0.03	0.0	425.0	1555.03	-1725.89	603.95	-5936.04	1.281e+05	-
2.389e+05												
35	56	1.831e+05	1.184e+05	0.07	-1593.75	0.0	1555.03	1854.09	-558.21	5108.65	1.184e+05	-
2.662e+05												
		-2.662e+05	-1.189e+05	0.04	0.0	425.0	1555.03	260.34	-558.21	5108.65	-1.189e+05	
1.831e+05												
35	69	4.353e+04	-224.11	-5.15e-03	-1593.75	0.0	1560.20	796.87	0.0	0.0	-224.11	-
4.113e+04												
		-4.113e+04	-224.11	2.06e-04	0.0	425.0	1560.20	-796.88	0.0	0.0	-224.11	-
4.113e+04												
35	70	4.330e+04	-227.05	-5.11e-03	-1593.75	0.0	1585.82	796.87	0.0	0.0	-227.05	-
4.137e+04												
		-4.137e+04	-227.05	2.09e-04	0.0	425.0	1585.82	-796.88	0.0	0.0	-227.05	-
4.137e+04												
35	71	4.353e+04	-224.11	-5.15e-03	-1593.75	0.0	1560.20	796.87	0.0	0.0	-224.11	-
4.113e+04												
		-4.113e+04	-224.11	2.06e-04	0.0	425.0	1560.20	-796.88	0.0	0.0	-224.11	-
4.113e+04												
35	72	4.275e+04	-233.92	-5.02e-03	-1593.75	0.0	1645.60	796.87	0.0	0.0	-233.92	-
4.192e+04												
		-4.192e+04	-233.92	2.15e-04	0.0	425.0	1645.60	-796.88	0.0	0.0	-233.92	-
4.192e+04												
35	73	4.353e+04	-224.11	-5.15e-03	-1593.75	0.0	1560.20	796.87	0.0	0.0	-224.11	-
4.113e+04												
		-4.113e+04	-224.11	2.06e-04	0.0	425.0	1560.20	-796.88	0.0	0.0	-224.11	-
4.113e+04												
35	74	4.314e+04	-229.02	-5.08e-03	-1593.75	0.0	1602.90	796.87	0.0	0.0	-229.02	-
4.153e+04												
		-4.153e+04	-229.02	2.10e-04	0.0	425.0	1602.90	-796.88	0.0	0.0	-229.02	-
4.153e+04												
35	75	4.353e+04	-224.11	-5.15e-03	-1593.75	0.0	1560.20	796.87	0.0	0.0	-224.11	-
4.113e+04												
		-4.113e+04	-224.11	2.06e-04	0.0	425.0	1560.20	-796.88	0.0	0.0	-224.11	-
4.113e+04												
35	76	4.330e+04	-227.05	-5.11e-03	-1593.75	0.0	1585.82	796.87	0.0	0.0	-227.05	-
4.137e+04												
		-4.137e+04	-227.05	2.09e-04	0.0	425.0	1585.82	-796.88	0.0	0.0	-227.05	-
4.137e+04												
36	2	-1.121e+05	434.24	0.08	-7657.59	0.0	2974.72	6239.05	3.42	-6744.21	-540.41	-
8.365e+05												
		-8.365e+05	-540.41	-2.85e-03	0.0	285.0	2974.72	-1418.55	3.42	-6744.21	434.24	-
1.496e+05												
36	3	-6.230e+04	316.56	0.04	-4278.56	0.0	1663.21	3493.43	2.49	-4801.28	-393.29	-
4.688e+05												

	-4.688e+05	-393.29	-2.05e-03	0.0	285.0	1663.21	-785.14	2.49	-4801.28	316.56	-8.282e+04
36	13 -1.867e+05	1.020e+05	-0.05	-4763.06	0.0	-875.27	754.77	-684.33	4589.32	1.020e+05	-2.050e+05
	-6.589e+05	-9.399e+04	0.08	0.0	285.0	-875.27	-4008.29	-684.33	4589.32	-9.399e+04	-6.589e+05
36	16 4.739e+05	9.464e+04	0.15	-4763.06	0.0	4577.43	7017.10	689.40	-1.442e+04	-1.028e+05	-8.376e+05
	-8.376e+05	-1.028e+05	-0.08	0.0	285.0	4577.43	2254.03	689.40	-1.442e+04	9.464e+04	-4.739e+05
36	20 4.976e+05	6.792e+04	0.15	-4763.06	0.0	4260.30	7129.74	519.09	-1.202e+04	-8.161e+04	-8.657e+05
	-8.657e+05	-8.161e+04	-0.06	0.0	285.0	4260.30	2366.68	519.09	-1.202e+04	6.792e+04	-4.976e+05
36	22 -1.658e+05	2.364e+05	0.02	-4763.06	0.0	2068.72	2834.80	1713.66	-3.016e+04	-2.548e+05	-3.873e+05
	-3.873e+05	-2.548e+05	-0.26	0.0	285.0	2068.72	-1928.27	1713.66	-3.016e+04	2.364e+05	-2.904e+05
36	23 1.054e+05	2.540e+05	0.09	-4763.06	0.0	1633.44	4937.07	-1708.60	2.033e+04	2.540e+05	-6.553e+05
	-6.553e+05	-2.357e+05	0.25	0.0	285.0	1633.44	174.01	-1708.60	2.033e+04	-2.357e+05	-1.054e+05
36	45 -2.092e+05	6.179e+04	-0.01	-4763.06	0.0	192.53	1981.13	-414.73	853.17	6.179e+04	-3.289e+05
	-4.371e+05	-5.697e+04	0.04	0.0	285.0	192.53	-2781.93	-414.73	853.17	-5.697e+04	-4.371e+05
36	48 2.521e+05	5.762e+04	0.11	-4763.06	0.0	3509.63	5790.73	419.80	-1.069e+04	-6.259e+04	-7.137e+05
	-7.137e+05	-6.259e+04	-0.05	0.0	285.0	3509.63	1027.67	419.80	-1.069e+04	5.762e+04	-2.521e+05
36	52 2.664e+05	4.138e+04	0.11	-4763.06	0.0	3317.44	5858.90	316.33	-9226.13	-4.974e+04	-7.308e+05
	-7.308e+05	-4.974e+04	-0.04	0.0	285.0	3317.44	1095.83	316.33	-9226.13	4.138e+04	-2.664e+05
36	54 -1.380e+05	1.437e+05	0.03	-4763.06	0.0	1983.50	3246.51	1041.89	-2.024e+04	-1.549e+05	-4.398e+05
	-4.398e+05	-1.549e+05	-0.16	0.0	285.0	1983.50	-1516.56	1041.89	-2.024e+04	1.437e+05	-2.129e+05
36	55 2.854e+04	1.541e+05	0.07	-4763.06	0.0	1718.66	4525.36	-1036.82	1.041e+04	1.541e+05	-6.028e+05
	-6.028e+05	-1.431e+05	0.15	0.0	285.0	1718.66	-237.70	-1036.82	1.041e+04	-1.431e+05	-2.789e+04
36	69 -6.410e+04	317.88	0.04	-4399.69	0.0	1710.17	3591.55	2.50	-4830.33	-394.97	-4.819e+05
	-4.819e+05	-394.97	-2.06e-03	0.0	285.0	1710.17	-808.13	2.50	-4830.33	317.88	-8.524e+04
36	70 -6.950e+04	321.82	0.05	-4763.06	0.0	1851.08	3885.93	2.53	-4917.48	-400.03	-5.213e+05
	-5.213e+05	-400.03	-2.09e-03	0.0	285.0	1851.08	-877.13	2.53	-4917.48	321.82	-9.251e+04
36	71 -6.410e+04	317.88	0.04	-4399.69	0.0	1710.17	3591.55	2.50	-4830.33	-394.97	-4.819e+05
	-4.819e+05	-394.97	-2.06e-03	0.0	285.0	1710.17	-808.13	2.50	-4830.33	317.88	-8.524e+04
36	72 -8.210e+04	331.00	0.06	-5610.94	0.0	2179.86	4572.82	2.61	-5120.82	-411.82	-6.132e+05
	-6.132e+05	-411.82	-2.17e-03	0.0	285.0	2179.86	-1038.12	2.61	-5120.82	331.00	-1.095e+05
36	73 -6.410e+04	317.88	0.04	-4399.69	0.0	1710.17	3591.55	2.50	-4830.33	-394.97	-4.819e+05
	-4.819e+05	-394.97	-2.06e-03	0.0	285.0	1710.17	-808.13	2.50	-4830.33	317.88	-8.524e+04
36	74 -7.310e+04	324.44	0.05	-5005.31	0.0	1945.02	4082.19	2.55	-4975.58	-403.39	-5.475e+05
	-5.475e+05	-403.39	-2.11e-03	0.0	285.0	1945.02	-923.13	2.55	-4975.58	324.44	-9.736e+04
36	75 -6.410e+04	317.88	0.04	-4399.69	0.0	1710.17	3591.55	2.50	-4830.33	-394.97	-4.819e+05
	-4.819e+05	-394.97	-2.06e-03	0.0	285.0	1710.17	-808.13	2.50	-4830.33	317.88	-8.524e+04
36	76 -6.950e+04	321.82	0.05	-4763.06	0.0	1851.08	3885.93	2.53	-4917.48	-400.03	-5.213e+05
	-5.213e+05	-400.03	-2.09e-03	0.0	285.0	1851.08	-877.13	2.53	-4917.48	321.82	-9.251e+04
37	2 8.465e+05	22.48	-0.26	-2.096e+04	0.0	2300.81	1.106e+04	-0.29	-283.58	22.48	-1.424e+06
	-1.424e+06	-205.67	-2.05e-04	0.0	780.0	2300.81	-9897.21	-0.29	-283.58	-205.67	-

9.700e+05													
37	3	4.724e+05	15.79	-0.14	-1.171e+04	0.0	1296.72	6180.26	-0.21	-178.55	15.79	-	
7.962e+05													
		-7.962e+05	-149.01	1.41e-04	0.0	780.0	1296.72	-5529.49	-0.21	-178.55	-149.01	-	
5.424e+05													
37	14	5.221e+05	6.724e+04	-0.14	-1.304e+04	0.0	-390.85	5776.62	178.86	-5201.50	-7.366e+04	-	
4.763e+05													
		-1.054e+06	-7.366e+04	-0.05	0.0	780.0	-390.85	-7259.13	178.86	-5201.50	6.724e+04	-	
1.054e+06													
37	15	6.098e+05	7.369e+04	-0.20	-1.304e+04	0.0	3268.72	7983.24	-179.29	4820.60	7.369e+04	-	
1.296e+06													
		-1.296e+06	-6.754e+04	0.05	0.0	780.0	3268.72	-5052.51	-179.29	4820.60	-6.754e+04	-	
1.533e+05													
37	20	6.178e+05	5.042e+04	-0.21	-1.304e+04	0.0	2651.24	8095.13	138.35	-1.441e+04	-5.721e+04	-	
1.343e+06													
		-1.343e+06	-5.721e+04	-0.34	0.0	780.0	2651.24	-4940.62	138.35	-1.441e+04	5.042e+04	-	
1.124e+05													
37	29	5.263e+05	2.428e+05	-0.14	-1.304e+04	0.0	2029.75	6340.08	-593.72	3.561e+04	2.428e+05	-	
6.753e+05													
		-8.141e+05	-2.212e+05	0.73	0.0	780.0	2029.75	-6695.67	-593.72	3.561e+04	-2.212e+05	-	
8.141e+05													
37	32	5.502e+05	2.209e+05	-0.19	-1.304e+04	0.0	848.12	7419.78	593.29	-3.599e+04	-2.428e+05	-	
1.097e+06													
		-1.097e+06	-2.428e+05	-0.73	0.0	780.0	848.12	-5615.97	593.29	-3.599e+04	2.209e+05	-	
3.932e+05													
37	46	5.138e+05	4.084e+04	-0.14	-1.304e+04	0.0	326.06	6208.74	108.72	-3238.81	-4.480e+04	-	
6.368e+05													
		-8.776e+05	-4.480e+04	-0.03	0.0	780.0	326.06	-6827.01	108.72	-3238.81	4.084e+04	-	
8.776e+05													
37	47	5.690e+05	4.483e+04	-0.19	-1.304e+04	0.0	2551.81	7551.12	-109.15	2857.92	4.483e+04	-	
1.135e+06													
		-1.135e+06	-4.114e+04	0.03	0.0	780.0	2551.81	-5484.63	-109.15	2857.92	-4.114e+04	-	
3.297e+05													
37	52	5.705e+05	3.062e+04	-0.19	-1.304e+04	0.0	2176.42	7619.17	84.08	-8840.02	-3.480e+04	-	
1.164e+06													
		-1.164e+06	-3.480e+04	-0.21	0.0	780.0	2176.42	-5416.58	84.08	-8840.02	3.062e+04	-	
3.048e+05													
37	61	5.262e+05	1.477e+05	-0.14	-1.304e+04	0.0	1798.31	6551.56	-361.24	2.159e+04	1.477e+05	-	
7.579e+05													
		-7.579e+05	-1.346e+05	0.44	0.0	780.0	1798.31	-6484.19	-361.24	2.159e+04	-1.346e+05	-	
7.316e+05													
37	64	5.399e+05	1.343e+05	-0.18	-1.304e+04	0.0	1079.56	7208.30	360.81	-2.197e+04	-1.477e+05	-	
1.014e+06													
		-1.014e+06	-1.477e+05	-0.44	0.0	780.0	1079.56	-5827.45	360.81	-2.197e+04	1.343e+05	-	
4.756e+05													
37	69	4.859e+05	15.91	-0.15	-1.204e+04	0.0	1332.27	6355.18	-0.21	-181.52	15.91	-	
8.186e+05													
		-8.186e+05	-149.70	1.41e-04	0.0	780.0	1332.27	-5686.07	-0.21	-181.52	-149.70	-	
5.577e+05													
37	70	5.262e+05	16.24	-0.16	-1.304e+04	0.0	1438.93	6879.93	-0.22	-190.45	16.24	-	
8.860e+05													
		-8.860e+05	-151.77	1.40e-04	0.0	780.0	1438.93	-6155.82	-0.22	-190.45	-151.77	-	
6.036e+05													
37	71	4.859e+05	15.91	-0.15	-1.204e+04	0.0	1332.27	6355.18	-0.21	-181.52	15.91	-	
8.186e+05													
		-8.186e+05	-149.70	1.41e-04	0.0	780.0	1332.27	-5686.07	-0.21	-181.52	-149.70	-	
5.577e+05													
37	72	6.202e+05	17.03	-0.19	-1.536e+04	0.0	1687.81	8104.36	-0.22	-211.28	17.03	-	
1.043e+06													
		-1.043e+06	-156.61	-1.53e-04	0.0	780.0	1687.81	-7251.89	-0.22	-211.28	-156.61	-	
7.108e+05													
37	73	4.859e+05	15.91	-0.15	-1.204e+04	0.0	1332.27	6355.18	-0.21	-181.52	15.91	-	
8.186e+05													
		-8.186e+05	-149.70	1.41e-04	0.0	780.0	1332.27	-5686.07	-0.21	-181.52	-149.70	-	
5.577e+05													
37	74	5.530e+05	16.47	-0.17	-1.370e+04	0.0	1510.04	7229.77	-0.22	-196.40	16.47	-	
9.310e+05													
		-9.310e+05	-153.16	-1.43e-04	0.0	780.0	1510.04	-6468.98	-0.22	-196.40	-153.16	-	
6.342e+05													
37	75	4.859e+05	15.91	-0.15	-1.204e+04	0.0	1332.27	6355.18	-0.21	-181.52	15.91	-	
8.186e+05													
		-8.186e+05	-149.70	1.41e-04	0.0	780.0	1332.27	-5686.07	-0.21	-181.52	-149.70	-	
5.577e+05													
37	76	5.262e+05	16.24	-0.16	-1.304e+04	0.0	1438.93	6879.93	-0.22	-190.45	16.24	-	
8.860e+05													
		-8.860e+05	-151.77	1.40e-04	0.0	780.0	1438.93	-6155.82	-0.22	-190.45	-151.77	-	
6.036e+05													

38	2	6.992e+05	124.42	-0.21	-1.787e+04	0.0	2600.33	7301.68	-0.37	3255.25	124.42	-2.880e+05
		-1.373e+06	-120.04	3.08e-03	0.0	665.0	2600.33	-1.057e+04	-0.37	3255.25	-120.04	-1.373e+06
38	3	3.909e+05	91.28	-0.12	-9983.31	0.0	1462.01	4076.50	-0.27	2300.75	91.28	-1.598e+05
		-7.683e+05	-87.80	2.19e-03	0.0	665.0	1462.01	-5906.81	-0.27	2300.75	-87.80	-7.683e+05
38	13	6.905e+05	5.522e+04	-0.19	-1.111e+04	0.0	3332.37	2969.97	154.98	-2502.28	-4.785e+04	4.274e+05
		-1.292e+06	-4.785e+04	-0.14	0.0	665.0	3332.37	-8143.84	154.98	-2502.28	5.522e+04	-1.292e+06
38	14	6.989e+05	8.263e+04	-0.18	-1.111e+04	0.0	2796.14	2870.80	-264.56	1.881e+04	8.263e+04	4.529e+05
		-1.335e+06	-9.336e+04	0.37	0.0	665.0	2796.14	-8243.01	-264.56	1.881e+04	-9.336e+04	-1.335e+06
38	16	3.311e+05	4.803e+04	-0.07	-1.111e+04	0.0	-84.79	6108.93	-155.53	7225.99	4.803e+04	-7.840e+05
		-7.840e+05	-5.540e+04	0.14	0.0	665.0	-84.79	-5004.89	-155.53	7225.99	-5.540e+04	-4.183e+05
38	17	6.992e+05	6.186e+04	-0.19	-1.111e+04	0.0	3271.10	2878.11	171.53	-1827.02	-5.219e+04	4.527e+05
		-1.333e+06	-5.219e+04	-0.09	0.0	665.0	3271.10	-8235.71	171.53	-1827.02	6.186e+04	-1.333e+06
38	34	4.970e+05	2.372e+05	-0.14	-1.111e+04	0.0	1366.45	4194.66	-771.01	3.736e+04	2.372e+05	-3.452e+04
		-9.268e+05	-2.755e+05	0.68	0.0	665.0	1366.45	-6919.16	-771.01	3.736e+04	-2.755e+05	-9.268e+05
38	35	3.856e+05	2.754e+05	-0.12	-1.111e+04	0.0	1881.13	4884.24	770.47	-3.264e+04	-2.370e+05	-3.221e+05
		-7.831e+05	-2.370e+05	-0.68	0.0	665.0	1881.13	-6229.58	770.47	-3.264e+04	2.754e+05	-7.831e+05
38	45	5.745e+05	3.355e+04	-0.17	-1.111e+04	0.0	2662.82	3584.62	94.16	-594.57	-2.906e+04	1.902e+05
		-1.121e+06	-2.906e+04	-0.08	0.0	665.0	2662.82	-7529.19	94.16	-594.57	3.355e+04	-1.121e+06
38	46	5.769e+05	5.030e+04	-0.16	-1.111e+04	0.0	2337.26	3524.39	-161.03	1.236e+04	5.030e+04	2.057e+05
		-1.147e+06	-5.682e+04	0.22	0.0	665.0	2337.26	-7589.42	-161.03	1.236e+04	-5.682e+04	-1.147e+06
38	48	3.558e+05	2.925e+04	-0.09	-1.111e+04	0.0	584.77	5494.27	-94.70	5318.28	2.925e+04	-5.468e+05
		-5.893e+05	-3.373e+04	0.09	0.0	665.0	584.77	-5619.54	-94.70	5318.28	-3.373e+04	-5.893e+05
38	49	5.772e+05	3.760e+04	-0.17	-1.111e+04	0.0	2624.96	3528.83	104.24	-186.20	-3.171e+04	2.055e+05
		-1.146e+06	-3.171e+04	-0.05	0.0	665.0	2624.96	-7584.99	104.24	-186.20	3.760e+04	-1.146e+06
38	66	4.723e+05	1.443e+05	-0.13	-1.111e+04	0.0	1470.25	4329.57	-469.15	2.365e+04	1.443e+05	-9.081e+04
		-8.987e+05	-1.677e+05	0.42	0.0	665.0	1470.25	-6784.24	-469.15	2.365e+04	-1.677e+05	-8.987e+05
38	67	4.050e+05	1.675e+05	-0.13	-1.111e+04	0.0	1777.34	4749.32	468.60	-1.893e+04	-1.442e+05	-2.658e+05
		-8.112e+05	-1.442e+05	-0.41	0.0	665.0	1777.34	-6364.49	468.60	-1.893e+04	1.675e+05	-8.112e+05
38	69	4.019e+05	91.61	-0.12	-1.027e+04	0.0	1502.45	4192.24	-0.27	2316.03	91.61	-1.644e+05
		-7.900e+05	-88.14	2.21e-03	0.0	665.0	1502.45	-6073.70	-0.27	2316.03	-88.14	-7.900e+05
38	70	4.351e+05	92.61	-0.13	-1.111e+04	0.0	1623.79	4539.45	-0.27	2361.85	92.61	-1.783e+05
		-8.549e+05	-89.16	2.24e-03	0.0	665.0	1623.79	-6574.37	-0.27	2361.85	-89.16	-8.549e+05
38	71	4.019e+05	91.61	-0.12	-1.027e+04	0.0	1502.45	4192.24	-0.27	2316.03	91.61	-1.644e+05
		-7.900e+05	-88.14	2.21e-03	0.0	665.0	1502.45	-6073.70	-0.27	2316.03	-88.14	-7.900e+05
38	72	5.124e+05	94.94	-0.15	-1.309e+04	0.0	1906.92	5349.60	-0.28	2468.79	94.94	-2.108e+05
		-1.006e+06	-91.55	2.34e-03	0.0	665.0	1906.92	-7742.59	-0.28	2468.79	-91.55	-1.006e+06
38	73	4.019e+05	91.61	-0.12	-1.027e+04	0.0	1502.45	4192.24	-0.27	2316.03	91.61	-1.644e+05
		-7.900e+05	-88.14	2.21e-03	0.0	665.0	1502.45	-6073.70	-0.27	2316.03	-88.14	-7.900e+05
38	74	4.572e+05	93.28	-0.14	-1.168e+04	0.0	1704.69	4770.92	-0.28	2392.41	93.28	-

1.876e+05													
		-8.982e+05	-89.85	2.27e-03	0.0	665.0	1704.69	-6908.14	-0.28	2392.41	-89.85	-	
8.982e+05													
38	75	4.019e+05	91.61	-0.12	-1.027e+04	0.0	1502.45	4192.24	-0.27	2316.03	91.61	-	
1.644e+05													
		-7.900e+05	-88.14	2.21e-03	0.0	665.0	1502.45	-6073.70	-0.27	2316.03	-88.14	-	
7.900e+05													
38	76	4.351e+05	92.61	-0.13	-1.111e+04	0.0	1623.79	4539.45	-0.27	2361.85	92.61	-	
1.783e+05													
		-8.549e+05	-89.16	2.24e-03	0.0	665.0	1623.79	-6574.37	-0.27	2361.85	-89.16	-	
8.549e+05													
39	1	1.003e+05	95.41	-0.01	-2071.88	0.0	64.24	1035.94	0.0	0.0	95.41	-	
9799.71													
		-9799.71	95.41	-8.77e-05	0.0	425.0	64.24	-1035.94	0.0	0.0	95.41	-	
9799.71													
39	2	1.026e+05	100.37	-0.01	-2071.88	0.0	104.15	1035.94	0.0	0.0	100.37	-	
7471.60													
		-7471.60	100.37	-9.22e-05	0.0	425.0	104.15	-1035.94	0.0	0.0	100.37	-	
7471.60													
39	3	7.686e+04	72.81	-0.01	-1593.75	0.0	44.70	796.87	0.0	0.0	72.81	-	
7812.83													
		-7812.83	72.81	-6.69e-05	0.0	425.0	44.70	-796.88	0.0	0.0	72.81	-	
7812.83													
39	10	3.733e+05	1.999e+04	0.05	-1593.75	0.0	62.41	2587.44	93.76	-1503.89	-1.985e+04	-	
3.877e+05													
		-3.877e+05	-1.985e+04	-0.07	0.0	425.0	62.41	993.69	93.76	-1503.89	1.999e+04		
3.733e+05													
39	11	3.733e+05	2.000e+04	-0.05	-1593.75	0.0	48.29	-993.69	-93.76	1503.89	2.000e+04		
3.733e+05													
		-3.877e+05	-1.985e+04	0.07	0.0	425.0	48.29	-2587.44	-93.76	1503.89	-1.985e+04	-	
3.877e+05													
39	22	1.134e+06	7.145e+04	0.16	-1593.75	0.0	57.47	6167.35	335.91	-4126.90	-7.131e+04	-	
1.148e+06													
		-1.148e+06	-7.131e+04	0.02	0.0	425.0	57.47	4573.60	335.91	-4126.90	7.145e+04		
1.134e+06													
39	23	1.134e+06	7.146e+04	-0.16	-1593.75	0.0	53.23	-4573.60	-335.91	4126.90	7.146e+04		
1.134e+06													
		-1.148e+06	-7.131e+04	-0.02	0.0	425.0	53.23	-6167.35	-335.91	4126.90	-7.131e+04	-	
1.148e+06													
39	30	1.194e+06	5.078e+04	0.17	-1593.75	0.0	57.47	6450.38	238.63	1156.46	-5.064e+04	-	
1.209e+06													
		-1.209e+06	-5.064e+04	-0.11	0.0	425.0	57.47	4856.63	238.63	1156.46	5.078e+04		
1.194e+06													
39	31	1.194e+06	5.078e+04	-0.17	-1593.75	0.0	53.23	-4856.63	-238.63	-1156.46	5.078e+04		
1.194e+06													
		-1.209e+06	-5.063e+04	0.11	0.0	425.0	53.23	-6450.38	-238.63	-1156.46	-5.063e+04	-	
1.209e+06													
39	42	2.243e+05	1.218e+04	0.03	-1593.75	0.0	59.06	1886.13	56.96	-922.33	-1.203e+04	-	
2.387e+05													
		-2.387e+05	-1.203e+04	-0.04	0.0	425.0	59.06	292.38	56.96	-922.33	1.218e+04		
2.243e+05													
39	43	2.243e+05	1.218e+04	-0.03	-1593.75	0.0	51.64	-292.38	-56.96	922.33	1.218e+04		
2.243e+05													
		-2.387e+05	-1.203e+04	0.04	0.0	425.0	51.64	-1886.13	-56.96	922.33	-1.203e+04	-	
2.387e+05													
39	54	6.871e+05	4.345e+04	0.10	-1593.75	0.0	56.46	4063.94	204.11	-2502.06	-4.330e+04	-	
7.014e+05													
		-7.014e+05	-4.330e+04	0.01	0.0	425.0	56.46	2470.19	204.11	-2502.06	4.345e+04		
6.871e+05													
39	55	6.871e+05	4.345e+04	-0.10	-1593.75	0.0	54.23	-2470.19	-204.11	2502.06	4.345e+04		
6.871e+05													
		-7.014e+05	-4.330e+04	-0.01	0.0	425.0	54.23	-4063.94	-204.11	2502.06	-4.330e+04	-	
7.014e+05													
39	62	7.236e+05	3.089e+04	0.11	-1593.75	0.0	56.46	4236.09	145.00	678.13	-3.074e+04	-	
7.380e+05													
		-7.380e+05	-3.074e+04	-0.07	0.0	425.0	56.46	2642.34	145.00	678.13	3.089e+04		
7.236e+05													
39	63	7.236e+05	3.089e+04	-0.11	-1593.75	0.0	54.23	-2642.34	-145.00	-678.13	3.089e+04		
7.236e+05													
		-7.380e+05	-3.074e+04	0.07	0.0	425.0	54.23	-4236.09	-145.00	-678.13	-3.074e+04	-	
7.380e+05													
39	69	7.701e+04	73.14	-0.01	-1593.75	0.0	47.37	796.87	0.0	0.0	73.14	-	
7657.63													
		-7657.63	73.14	-6.72e-05	0.0	425.0	47.37	-796.88	0.0	0.0	73.14	-	
7657.63													
39	70	7.748e+04	74.13	-0.01	-1593.75	0.0	55.35	796.87	0.0	0.0	74.13	-	
7192.00													

		-7192.00	74.13	-6.81e-05	0.0	425.0	55.35	-796.88	0.0	0.0	74.13	-7192.00
39	71	7.701e+04	73.14	-0.01	-1593.75	0.0	47.37	796.87	0.0	0.0	73.14	-7657.63
		-7657.63	73.14	-6.72e-05	0.0	425.0	47.37	-796.88	0.0	0.0	73.14	-7657.63
39	72	7.856e+04	76.45	-0.01	-1593.75	0.0	73.97	796.87	0.0	0.0	76.45	-6105.55
		-6105.55	76.45	-7.03e-05	0.0	425.0	73.97	-796.88	0.0	0.0	76.45	-6105.55
39	73	7.701e+04	73.14	-0.01	-1593.75	0.0	47.37	796.87	0.0	0.0	73.14	-7657.63
		-7657.63	73.14	-6.72e-05	0.0	425.0	47.37	-796.88	0.0	0.0	73.14	-7657.63
39	74	7.779e+04	74.79	-0.01	-1593.75	0.0	60.67	796.87	0.0	0.0	74.79	-6881.59
		-6881.59	74.79	-6.87e-05	0.0	425.0	60.67	-796.88	0.0	0.0	74.79	-6881.59
39	75	7.701e+04	73.14	-0.01	-1593.75	0.0	47.37	796.87	0.0	0.0	73.14	-7657.63
		-7657.63	73.14	-6.72e-05	0.0	425.0	47.37	-796.88	0.0	0.0	73.14	-7657.63
39	76	7.748e+04	74.13	-0.01	-1593.75	0.0	55.35	796.87	0.0	0.0	74.13	-7192.00
		-7192.00	74.13	-6.81e-05	0.0	425.0	55.35	-796.88	0.0	0.0	74.13	-7192.00
40	1	9.616e+04	-224.86	-0.01	-2071.88	0.0	40.72	1035.94	0.0	0.0	-224.86	-1.391e+04
		-1.391e+04	-224.86	2.07e-04	0.0	425.0	40.72	-1035.94	0.0	0.0	-224.86	-1.391e+04
40	2	9.772e+04	-235.85	-0.01	-2071.88	0.0	70.40	1035.94	0.0	0.0	-235.85	-1.235e+04
		-1.235e+04	-235.85	2.17e-04	0.0	425.0	70.40	-1035.94	0.0	0.0	-235.85	-1.235e+04
40	3	7.378e+04	-171.68	-9.97e-03	-1593.75	0.0	27.83	796.87	0.0	0.0	-171.68	-1.088e+04
		-1.088e+04	-171.68	1.58e-04	0.0	425.0	27.83	-796.88	0.0	0.0	-171.68	-1.088e+04
40	9	2.126e+05	1.588e+04	-0.03	-1593.75	0.0	20.07	-254.64	75.48	-3577.22	-1.620e+04	2.126e+05
		-2.343e+05	-1.620e+04	-0.01	0.0	425.0	20.07	-1848.39	75.48	-3577.22	1.588e+04	-2.343e+05
40	12	2.133e+05	1.585e+04	0.03	-1593.75	0.0	51.41	1848.39	-75.48	3577.22	1.585e+04	-2.336e+05
		-2.336e+05	-1.623e+04	0.01	0.0	425.0	51.41	254.64	-75.48	3577.22	-1.623e+04	2.133e+05
40	21	6.747e+05	2.008e+05	-0.13	-1593.75	0.0	31.04	-2427.83	945.53	-7033.26	-2.011e+05	6.747e+05
		-6.958e+05	-2.011e+05	-0.06	0.0	425.0	31.04	-4021.58	945.53	-7033.26	2.008e+05	-6.958e+05
40	22	6.268e+05	2.151e+05	0.12	-1593.75	0.0	31.04	3796.21	-1013.13	5828.77	2.151e+05	-6.479e+05
		-6.479e+05	-2.155e+05	0.04	0.0	425.0	31.04	2202.46	-1013.13	5828.77	-2.155e+05	6.268e+05
40	23	6.270e+05	2.151e+05	-0.12	-1593.75	0.0	40.44	-2202.46	1013.13	-5828.77	-2.155e+05	6.270e+05
		-6.477e+05	-2.155e+05	-0.04	0.0	425.0	40.44	-3796.21	1013.13	-5828.77	2.151e+05	-6.477e+05
40	24	6.749e+05	2.007e+05	0.13	-1593.75	0.0	40.44	4021.58	-945.53	7033.26	2.007e+05	-6.956e+05
		-6.956e+05	-2.011e+05	0.06	0.0	425.0	40.44	2427.83	-945.53	7033.26	-2.011e+05	6.749e+05
40	41	1.283e+05	9582.10	-0.02	-1593.75	0.0	26.39	157.26	45.88	-2175.61	-9915.24	1.252e+05
		-1.466e+05	-9915.24	-6.42e-03	0.0	425.0	26.39	-1436.49	45.88	-2175.61	9582.10	-1.466e+05
40	44	1.287e+05	9566.03	0.02	-1593.75	0.0	45.09	1436.49	-45.88	2175.61	9566.03	-1.462e+05
		-1.462e+05	-9931.31	6.51e-03	0.0	425.0	45.09	-157.26	-45.88	2175.61	-9931.31	1.257e+05
40	53	4.063e+05	1.219e+05	-0.08	-1593.75	0.0	32.93	-1164.85	574.54	-4267.46	-1.223e+05	4.063e+05
		-4.274e+05	-1.223e+05	-0.04	0.0	425.0	32.93	-2758.60	574.54	-4267.46	1.219e+05	-4.274e+05
40	54	3.772e+05	1.307e+05	0.07	-1593.75	0.0	32.93	2621.50	-615.64	3534.78	1.307e+05	-3.983e+05
		-3.983e+05	-1.310e+05	0.03	0.0	425.0	32.93	1027.75	-615.64	3534.78	-1.310e+05	

3.772e+05												
40	55	3.773e+05	1.306e+05	-0.07	-1593.75	0.0	38.54	-1027.75	615.64	-3534.78	-1.310e+05	
3.773e+05												
		-3.981e+05	-1.310e+05	-0.03	0.0	425.0	38.54	-2621.50	615.64	-3534.78	1.306e+05	-
3.981e+05												
40	56	4.065e+05	1.219e+05	0.08	-1593.75	0.0	38.54	2758.60	-574.54	4267.46	1.219e+05	-
4.273e+05												
		-4.273e+05	-1.223e+05	0.04	0.0	425.0	38.54	1164.85	-574.54	4267.46	-1.223e+05	
4.065e+05												
40	69	7.389e+04	-172.41	-9.99e-03	-1593.75	0.0	29.80	796.87	0.0	0.0	-172.41	-
1.078e+04												
		-1.078e+04	-172.41	1.58e-04	0.0	425.0	29.80	-796.88	0.0	0.0	-172.41	-
1.078e+04												
40	70	7.420e+04	-174.61	-0.01	-1593.75	0.0	35.74	796.87	0.0	0.0	-174.61	-
1.047e+04												
		-1.047e+04	-174.61	1.60e-04	0.0	425.0	35.74	-796.88	0.0	0.0	-174.61	-
1.047e+04												
40	71	7.389e+04	-172.41	-9.99e-03	-1593.75	0.0	29.80	796.87	0.0	0.0	-172.41	-
1.078e+04												
		-1.078e+04	-172.41	1.58e-04	0.0	425.0	29.80	-796.88	0.0	0.0	-172.41	-
1.078e+04												
40	72	7.493e+04	-179.73	-0.01	-1593.75	0.0	49.59	796.87	0.0	0.0	-179.73	-
9739.14												
		-9739.14	-179.73	1.65e-04	0.0	425.0	49.59	-796.88	0.0	0.0	-179.73	-
9739.14												
40	73	7.389e+04	-172.41	-9.99e-03	-1593.75	0.0	29.80	796.87	0.0	0.0	-172.41	-
1.078e+04												
		-1.078e+04	-172.41	1.58e-04	0.0	425.0	29.80	-796.88	0.0	0.0	-172.41	-
1.078e+04												
40	74	7.441e+04	-176.07	-0.01	-1593.75	0.0	39.70	796.87	0.0	0.0	-176.07	-
1.026e+04												
		-1.026e+04	-176.07	1.62e-04	0.0	425.0	39.70	-796.88	0.0	0.0	-176.07	-
1.026e+04												
40	75	7.389e+04	-172.41	-9.99e-03	-1593.75	0.0	29.80	796.87	0.0	0.0	-172.41	-
1.078e+04												
		-1.078e+04	-172.41	1.58e-04	0.0	425.0	29.80	-796.88	0.0	0.0	-172.41	-
1.078e+04												
40	76	7.420e+04	-174.61	-0.01	-1593.75	0.0	35.74	796.87	0.0	0.0	-174.61	-
1.047e+04												
		-1.047e+04	-174.61	1.60e-04	0.0	425.0	35.74	-796.88	0.0	0.0	-174.61	-
1.047e+04												

Trave	**M3 mx/mn**	**M2 mx/mn**	**D 2 / D 3**	**Q 2 / Q 3**	**N**	**V 2**	**V 3**	**T**
	-1.424e+06	-2.755e+05	-0.73	-2.096e+04	-875.27	-1.057e+04	-1713.66	-3.736e+04
	1.194e+06	2.755e+05	0.73	0.0	4577.43	1.106e+04	1713.66	3.736e+04

Trave f.	**Cmb**	**M3 mx/mn**	**M2 mx/mn**	**D 2 / D 3**	**Pt**	**Pos.**	**N**	**V 2**	**V 3**	**T**	**M 2M 3**
		daN cm	daN cm	cm	daN/cm2	cm	daN	daN	daN	daN cm	daN cm
daN cm											
1	1	8.628e+04	0.0	0.02	-0.41	0.0	-3.77	-1.11e-03	-3.66e-03	-0.02	0.0
0.07											
		0.07	-0.41	-1.22e-05		112.5	-3.77	1481.83	-3.66e-03	406.01	-0.41
8.628e+04											
1	2	1.064e+05	0.0	0.02	-0.47	0.0	-5.05	-1.79e-03	-1.90e-03	-0.03	0.0
0.11											
		0.11	-0.21	-1.68e-05		112.5	-5.05	1826.02	-1.90e-03	498.28	-0.21
1.064e+05											
1	3	6.401e+04	0.0	0.01	-0.31	0.0	-2.75	-1.05e-03	-3.03e-03	-0.02	0.0
0.06											
		0.06	-0.34	-8.85e-06		112.5	-2.75	1099.27	-3.03e-03	301.43	-0.34
6.401e+04											
1	10	1.266e+05	0.0	-0.10	-0.53	0.0	336.94	4.24e-03	-147.20	2.96e-03	0.0
0.35											
		0.35	-1.656e+04	-4.27e-04		112.5	336.94	2024.05	-147.20	771.44	-1.656e+04
1.266e+05											
1	11	1.208e+04	1.656e+04	0.10	-0.26	0.0	-343.13	-6.39e-03	147.20	-0.04	0.0 -
0.22											
		-37.05	0.0	4.06e-04		112.5	-343.13	358.05	147.20	-119.36	1.656e+04
1.208e+04											
1	17	1.905e+05	1.755e+04	-0.20	-0.73	0.0	302.27	1.22e-03	156.01	-0.12	0.0
0.19											
		0.19	0.0	1.88e-03		112.5	302.27	3145.07	156.01	-1428.64	1.755e+04
1.905e+05											
1	20	-0.06	0.0	0.20	-0.09	0.0	-308.45	-3.37e-03	-156.02	0.09	0.0 -
0.06											

		-5.174e+04	-1.755e+04	-1.90e-03		112.5	-308.45	-762.97	-156.02	2080.71	-1.755e+04	-5.174e+04
1	33	1.666e+05	3.375e+04	-0.18	-0.65	0.0	67.63	7.05e-04	299.96	-0.20	0.0	0.16
		0.16	0.0	-8.99e-05		112.5	67.63	2844.27	299.96	-2809.09	3.375e+04	1.666e+05
1	36	-0.03	0.0	0.18	-0.11	0.0	-73.81	-2.86e-03	-299.96	0.17	0.0	-0.03
		-2.789e+04	-3.375e+04	7.85e-05		112.5	-73.81	-462.17	-299.96	3461.17	-3.375e+04	-2.789e+04
1	42	1.042e+05	0.0	-0.06	-0.45	0.0	203.75	-5.84e-04	-89.55	2.95e-03	0.0	0.06
		0.06	-1.007e+04	-2.63e-04		112.5	203.75	1697.78	-89.55	596.94	-1.007e+04	1.042e+05
1	43	3.451e+04	1.007e+04	0.06	-0.27	0.0	-209.93	-1.57e-03	89.54	-0.04	0.0	0.07
		0.07	0.0	2.43e-04		112.5	-209.93	684.32	89.54	55.14	1.007e+04	3.451e+04
1	49	1.430e+05	1.068e+04	-0.13	-0.57	0.0	182.69	4.56e-03	94.91	-0.09	0.0	0.38
		0.38	0.0	1.14e-03		112.5	182.69	2379.62	94.91	-741.33	1.068e+04	1.430e+05
1	52	-0.26	0.0	0.13	-0.16	0.0	-188.88	-6.71e-03	-94.91	0.05	0.0	-0.26
		-4303.59	-1.068e+04	-1.16e-03		112.5	-188.88	2.48	-94.91	1393.40	-1.068e+04	-4303.59
1	65	1.285e+05	2.053e+04	-0.11	-0.52	0.0	40.00	2.04e-03	182.47	-0.15	0.0	0.24
		0.24	0.0	-5.75e-05		112.5	40.00	2196.46	182.47	-1580.93	2.053e+04	1.285e+05
1	68	1.021e+04	0.0	0.11	-0.18	0.0	-46.18	-4.19e-03	-182.47	0.11	0.0	-0.11
		-0.11	-2.053e+04	4.61e-05		112.5	-46.18	185.65	-182.47	2233.01	-2.053e+04	1.021e+04
1	69	6.534e+04	0.0	0.01	-0.31	0.0	-2.84	-9.41e-04	-2.91e-03	-0.02	0.0	0.06
		0.06	-0.33	-9.15e-06		112.5	-2.84	1122.22	-2.91e-03	307.58	-0.33	6.534e+04
1	70	6.936e+04	0.0	0.01	-0.32	0.0	-3.09	-1.08e-03	-2.56e-03	-0.02	0.0	0.06
		0.06	-0.29	-1.01e-05		112.5	-3.09	1191.05	-2.56e-03	326.04	-0.29	6.936e+04
1	71	6.534e+04	0.0	0.01	-0.31	0.0	-2.84	-9.41e-04	-2.91e-03	-0.02	0.0	0.06
		0.06	-0.33	-9.15e-06		112.5	-2.84	1122.22	-2.91e-03	307.58	-0.33	6.534e+04
1	72	7.872e+04	0.0	0.01	-0.35	0.0	-3.68	-1.39e-03	-1.73e-03	-0.02	0.0	0.08
		0.08	-0.19	-1.22e-05		112.5	-3.68	1351.68	-1.73e-03	369.10	-0.19	7.872e+04
1	73	6.534e+04	0.0	0.01	-0.31	0.0	-2.84	-9.41e-04	-2.91e-03	-0.02	0.0	0.06
		0.06	-0.33	-9.15e-06		112.5	-2.84	1122.22	-2.91e-03	307.58	-0.33	6.534e+04
1	74	7.203e+04	0.0	0.01	-0.33	0.0	-3.26	-1.17e-03	-2.32e-03	-0.02	0.0	0.07
		0.07	-0.26	-1.07e-05		112.5	-3.26	1236.95	-2.32e-03	338.34	-0.26	7.203e+04
1	75	6.534e+04	0.0	0.01	-0.31	0.0	-2.84	-9.41e-04	-2.91e-03	-0.02	0.0	0.06
		0.06	-0.33	-9.15e-06		112.5	-2.84	1122.22	-2.91e-03	307.58	-0.33	6.534e+04
1	76	6.936e+04	0.0	0.01	-0.32	0.0	-3.09	-1.08e-03	-2.56e-03	-0.02	0.0	0.06
		0.06	-0.29	-1.01e-05		112.5	-3.09	1191.05	-2.56e-03	326.04	-0.29	6.936e+04
2	2	9.726e+04	547.13	7.78e-03	-0.44	0.0	0.12	-2.29e-03	4.86	0.07	0.0	0.13
		0.13	0.0	-3.90e-05		112.5	0.12	1703.52	4.86	-1130.31	547.13	9.726e+04
2	3	5.861e+04	298.33	4.71e-03	-0.29	0.0	0.06	-3.06e-03	2.65	0.04	0.0	0.17
		0.17	0.0	-2.17e-05		112.5	0.06	1026.51	2.65	-674.95	298.33	5.861e+04
2	4	7.688e+04	436.45	6.15e-03	-0.35	0.0	0.10	-1.59e-03	3.88	0.06	0.0	0.09
		0.09	0.0	-3.10e-05		112.5	0.10	1346.50	3.88	-894.21	436.45	

7.688e+04
2 5 1.146e+05 0.0 -0.10 -0.50 0.0 -10.79 -8.23e-04 -337.09 -0.10 0.0
0.26
0.26 -3.792e+04 -6.49e-04 112.5 -10.79 1996.92 -337.09 -3952.89 -3.792e+04
1.146e+05
2 8 1.234e+04 3.859e+04 0.10 -0.20 0.0 10.93 -4.52e-03 343.05 0.19 0.0
0.05
0.05 0.0 6.01e-04 112.5 10.93 226.76 343.05 2486.05 3.859e+04
1.234e+04
2 33 1.859e+05 0.0 -0.20 -0.71 0.0 298.91 4.69e-03 -54.23 -0.03 0.0
0.53
0.53 -6101.03 2.16e-03 112.5 298.91 3100.57 -54.23 -2055.21 -6101.03
1.859e+05
2 36 -0.23 6771.36 0.20 0.08 0.0 -298.77 -0.01 60.19 0.13 0.0 -
0.23
-5.896e+04 0.0 -2.21e-03 112.5 -298.77 -876.89 60.19 588.37 6771.36 -
5.896e+04
2 37 9.458e+04 0.0 -0.06 -0.42 0.0 -6.61 -1.13e-03 -203.89 -0.04 0.0
0.24
0.24 -2.294e+04 -4.04e-04 112.5 -6.61 1649.96 -203.89 -2691.91 -2.294e+04
9.458e+04
2 40 3.239e+04 2.361e+04 0.06 -0.23 0.0 6.76 -4.21e-03 209.85 0.14 0.0
0.06
0.06 0.0 3.56e-04 112.5 6.76 573.72 209.85 1225.07 2.361e+04
3.239e+04
2 65 1.379e+05 0.0 -0.12 -0.55 0.0 181.87 9.61e-04 -31.93 8.05e-03 0.0
0.36
0.36 -3592.08 1.30e-03 112.5 181.87 2321.32 -31.93 -1537.51 -3592.08
1.379e+05
2 68 -0.05 4262.41 0.12 -0.15 0.0 -181.72 -6.30e-03 37.89 0.09 0.0 -
0.05
-1.098e+04 0.0 -1.35e-03 112.5 -181.72 -97.64 37.89 70.67 4262.41 -
1.098e+04
2 69 5.983e+04 307.54 4.80e-03 -0.30 0.0 0.07 -2.96e-03 2.73 0.04 0.0
0.17
0.17 0.0 -2.23e-05 112.5 0.07 1047.84 2.73 -689.57 307.54
5.983e+04
2 70 6.348e+04 335.17 5.09e-03 -0.31 0.0 0.07 -2.67e-03 2.98 0.05 0.0
0.15
0.15 0.0 -2.42e-05 112.5 0.07 1111.84 2.98 -733.42 335.17
6.348e+04
2 71 5.983e+04 307.54 4.80e-03 -0.30 0.0 0.07 -2.96e-03 2.73 0.04 0.0
0.17
0.17 0.0 -2.23e-05 112.5 0.07 1047.84 2.73 -689.57 307.54
5.983e+04
2 72 7.201e+04 399.62 5.76e-03 -0.33 0.0 0.09 -1.98e-03 3.55 0.05 0.0
0.11
0.11 0.0 -2.86e-05 112.5 0.09 1261.17 3.55 -835.74 399.62
7.201e+04
2 73 5.983e+04 307.54 4.80e-03 -0.30 0.0 0.07 -2.96e-03 2.73 0.04 0.0
0.17
0.17 0.0 -2.23e-05 112.5 0.07 1047.84 2.73 -689.57 307.54
5.983e+04
2 74 6.592e+04 353.58 5.28e-03 -0.31 0.0 0.08 -2.47e-03 3.14 0.05 0.0
0.14
0.14 0.0 -2.54e-05 112.5 0.08 1154.50 3.14 -762.65 353.58
6.592e+04
2 75 5.983e+04 307.54 4.80e-03 -0.30 0.0 0.07 -2.96e-03 2.73 0.04 0.0
0.17
0.17 0.0 -2.23e-05 112.5 0.07 1047.84 2.73 -689.57 307.54
5.983e+04
2 76 6.348e+04 335.17 5.09e-03 -0.31 0.0 0.07 -2.67e-03 2.98 0.05 0.0
0.15
0.15 0.0 -2.42e-05 112.5 0.07 1111.84 2.98 -733.42 335.17
6.348e+04
3 2 1.115e+05 249.81 0.01 -0.42 0.0 -92.24 -2735.42 0.0 2127.67 249.81
1.115e+05
-1.689e+05 249.81 -1.99e-05 425.0 -92.24 2735.42 0.0 -2127.67 249.81
1.115e+05
3 3 6.696e+04 135.52 8.55e-03 -0.28 0.0 -48.54 -1647.41 0.0 1270.51 135.52
6.696e+04
-1.019e+05 135.52 -1.08e-05 425.0 -48.54 1647.41 0.0 -1270.51 135.52
6.696e+04
3 10 6.229e+04 2.630e+04 -0.08 -0.42 0.0 -63.88 -800.38 241.25 3570.32 -5.502e+04
6.229e+04
-1.254e+05 -5.502e+04 -5.03e-03 425.0 -63.88 2075.56 241.25 4279.94 2.630e+04 -
3.190e+04

3	11	1.772e+05	5.532e+04	0.08	-0.28	0.0	-46.67	-2769.03	-241.25	-809.18	5.532e+04	
8.296e+04												
		-1.801e+05	-2.600e+04	5.03e-03		425.0	-46.67	1493.85	-241.25	-7041.08	-2.600e+04	
1.772e+05												
3	29	7.055e+05	1.430e+05	-0.13	-0.52	0.0	-57.86	891.40	-677.90	-4.918e+04	1.430e+05	
7.055e+05												
		-8.942e+04	-1.514e+05	5.25e-03		425.0	-57.86	4252.77	-677.90	-5.090e+04	-1.514e+05	
6.772e+05												
3	32	-1.313e+05	1.517e+05	0.13	-0.23	0.0	-52.69	-4460.81	677.90	5.195e+04	-1.427e+05	-
5.602e+05												
		-5.602e+05	-1.427e+05	-5.27e-03		425.0	-52.69	-683.36	677.90	4.814e+04	1.517e+05	-
5.320e+05												
3	33	7.172e+05	1.411e+05	-0.13	-0.52	0.0	-57.86	652.40	-698.75	-4.996e+04	1.411e+05	
6.842e+05												
		-8.902e+04	-1.495e+05	7.03e-03		425.0	-57.86	4507.07	-698.75	-5.075e+04	-1.495e+05	
7.172e+05												
3	36	-1.317e+05	1.498e+05	0.13	-0.23	0.0	-52.69	-4221.80	698.75	5.272e+04	-1.408e+05	-
5.390e+05												
		-5.719e+05	-1.408e+05	-7.04e-03		425.0	-52.69	-937.67	698.75	4.799e+04	1.498e+05	-
5.719e+05												
3	42	6.633e+04	1.606e+04	-0.05	-0.37	0.0	-60.48	-1186.05	146.75	2712.66	-3.341e+04	
6.633e+04												
		-1.098e+05	-3.341e+04	-3.05e-03		425.0	-60.48	1961.41	146.75	2062.82	1.606e+04	
9031.29												
3	43	1.362e+05	3.372e+04	0.05	-0.28	0.0	-50.07	-2383.36	-146.75	48.48	3.372e+04	
7.892e+04												
		-1.528e+05	-1.576e+04	3.05e-03		425.0	-50.07	1608.00	-146.75	-4823.96	-1.576e+04	
1.362e+05												
3	61	4.576e+05	8.707e+04	-0.08	-0.43	0.0	-56.84	-156.81	-412.38	-2.938e+04	8.707e+04	
4.576e+05												
		-9.762e+04	-9.206e+04	3.17e-03		425.0	-56.84	3286.01	-412.38	-3.151e+04	-9.206e+04	
4.404e+05												
3	64	-1.231e+05	9.237e+04	0.08	-0.24	0.0	-53.71	-3412.60	412.38	3.214e+04	-8.677e+04	-
3.124e+05												
		-3.133e+05	-8.677e+04	-3.18e-03		425.0	-53.71	283.39	412.38	2.875e+04	9.237e+04	-
2.952e+05												
3	65	4.647e+05	8.590e+04	-0.08	-0.43	0.0	-56.84	-302.23	-425.06	-2.985e+04	8.590e+04	
4.447e+05												
		-9.738e+04	-9.089e+04	4.25e-03		425.0	-56.84	3440.74	-425.06	-3.142e+04	-9.089e+04	
4.647e+05												
3	68	-1.233e+05	9.119e+04	0.08	-0.24	0.0	-53.71	-3267.18	425.06	3.261e+04	-8.559e+04	-
2.994e+05												
		-3.200e+05	-8.559e+04	-4.26e-03		425.0	-53.71	128.66	425.06	2.865e+04	9.119e+04	-
3.195e+05												
3	69	6.838e+04	139.78	8.73e-03	-0.28	0.0	-50.22	-1681.74	0.0	1298.02	139.78	
6.838e+04												
		-1.040e+05	139.78	-1.12e-05		425.0	-50.22	1681.74	0.0	-1298.02	139.78	
6.838e+04												
3	70	7.263e+04	152.55	9.26e-03	-0.29	0.0	-55.28	-1784.70	0.0	1380.57	152.55	
7.263e+04												
		-1.104e+05	152.55	-1.22e-05		425.0	-55.28	1784.70	0.0	-1380.57	152.55	
7.263e+04												
3	71	6.838e+04	139.78	8.73e-03	-0.28	0.0	-50.22	-1681.74	0.0	1298.02	139.78	
6.838e+04												
		-1.040e+05	139.78	-1.12e-05		425.0	-50.22	1681.74	0.0	-1298.02	139.78	
6.838e+04												
3	72	8.254e+04	182.34	0.01	-0.32	0.0	-67.07	-2024.96	0.0	1573.17	182.34	
8.254e+04												
		-1.251e+05	182.34	-1.45e-05		425.0	-67.07	2024.96	0.0	-1573.17	182.34	
8.254e+04												
3	73	6.838e+04	139.78	8.73e-03	-0.28	0.0	-50.22	-1681.74	0.0	1298.02	139.78	
6.838e+04												
		-1.040e+05	139.78	-1.12e-05		425.0	-50.22	1681.74	0.0	-1298.02	139.78	
6.838e+04												
3	74	7.546e+04	161.06	9.61e-03	-0.30	0.0	-58.65	-1853.35	0.0	1435.60	161.06	
7.546e+04												
		-1.146e+05	161.06	-1.28e-05		425.0	-58.65	1853.35	0.0	-1435.60	161.06	
7.546e+04												
3	75	6.838e+04	139.78	8.73e-03	-0.28	0.0	-50.22	-1681.74	0.0	1298.02	139.78	
6.838e+04												
		-1.040e+05	139.78	-1.12e-05		425.0	-50.22	1681.74	0.0	-1298.02	139.78	
6.838e+04												
3	76	7.263e+04	152.55	9.26e-03	-0.29	0.0	-55.28	-1784.70	0.0	1380.57	152.55	
7.263e+04												
		-1.104e+05	152.55	-1.22e-05		425.0	-55.28	1784.70	0.0	-1380.57	152.55	
7.263e+04												
4	1	8.628e+04	0.41	0.02	-0.41	0.0	-3.77	-1.11e-03	3.66e-03	0.02	0.0	

0.07												
		0.07	0.0	1.22e-05		112.5	-3.77	1481.83	3.66e-03	-406.01	0.41	
8.628e+04												
4	2	1.064e+05	0.21	0.02	-0.47	0.0	-5.05	-1.79e-03	1.90e-03	0.03	0.0	
0.11												
		0.11	0.0	1.68e-05		112.5	-5.05	1826.02	1.90e-03	-498.28	0.21	
1.064e+05												
4	3	6.401e+04	0.34	0.01	-0.31	0.0	-2.75	-1.05e-03	3.03e-03	0.02	0.0	
0.06												
		0.06	0.0	8.85e-06		112.5	-2.75	1099.27	3.03e-03	-301.43	0.34	
6.401e+04												
4	9	1.822e+05	1226.19	-0.16	-0.70	0.0	316.04	1.72e-03	10.90	-0.08	0.0	
0.21												
		0.21	0.0	-2.24e-03		112.5	316.04	3004.42	10.90	-1858.61	1226.19	
1.822e+05												
4	12	-0.09	0.0	0.16	-0.11	0.0	-322.22	-3.87e-03	-10.89	0.11	0.0	-
0.09												
		-4.347e+04	-1225.61	2.26e-03		112.5	-322.22	-622.31	-10.89	1206.53	-1225.61	-
4.347e+04												
4	17	1.611e+05	1.656e+04	-0.13	-0.65	0.0	336.94	4.56e-03	147.20	-0.07	0.0	
0.37												
		0.37	0.0	4.27e-04		112.5	336.94	2628.98	147.20	-1770.94	1.656e+04	
1.611e+05												
4	20	-0.24	0.0	0.13	-0.16	0.0	-343.13	-6.71e-03	-147.20	0.11	0.0	-
0.24												
		-2.243e+04	-1.656e+04	-4.06e-04		112.5	-343.13	-246.87	-147.20	1118.86	-1.656e+04	-
2.243e+04												
4	30	3.023e+04	0.0	-0.05	-0.26	0.0	67.63	-1.55e-03	-299.96	0.17	0.0	
0.04												
		0.04	-3.375e+04	8.99e-05		112.5	67.63	456.99	-299.96	2338.93	-3.375e+04	
3.023e+04												
4	31	1.085e+05	3.375e+04	0.06	-0.46	0.0	-73.81	-6.05e-04	299.96	-0.14	0.0	
0.09												
		0.09	0.0	-7.85e-05		112.5	-73.81	1925.11	299.96	-2991.00	3.375e+04	
1.085e+05												
4	41	1.380e+05	745.88	-0.10	-0.55	0.0	191.03	4.76e-03	6.63	-0.04	0.0	
0.40												
		0.40	0.0	-1.36e-03		112.5	191.03	2294.04	6.63	-1258.28	745.88	
1.380e+05												
4	44	728.62	0.0	0.10	-0.18	0.0	-197.21	-6.92e-03	-6.62	0.08	0.0	-
0.27												
		-954.23	-745.30	1.38e-03		112.5	-197.21	88.06	-6.62	606.21	-745.30	
728.62												
4	49	1.252e+05	1.007e+04	-0.08	-0.52	0.0	203.75	5.97e-04	89.55	-0.04	0.0	
0.12												
		0.12	0.0	2.63e-04		112.5	203.75	2065.60	89.55	-1204.95	1.007e+04	
1.252e+05												
4	52	1.353e+04	0.0	0.08	-0.21	0.0	-209.93	-2.75e-03	-89.54	0.07	0.0	
0.01												
		0.01	-1.007e+04	-2.43e-04		112.5	-209.93	316.50	-89.54	552.87	-1.007e+04	
1.353e+04												
4	62	4.557e+04	0.0	-0.04	-0.28	0.0	40.00	-1.03e-03	-182.47	0.13	0.0	
0.07												
		0.07	-2.053e+04	5.75e-05		112.5	40.00	744.77	-182.47	1294.92	-2.053e+04	
4.557e+04												
4	63	9.314e+04	2.053e+04	0.04	-0.40	0.0	-46.18	-1.12e-03	182.47	-0.09	0.0	
0.06												
		0.06	0.0	-4.61e-05		112.5	-46.18	1637.33	182.47	-1946.99	2.053e+04	
9.314e+04												
4	69	6.534e+04	0.33	0.01	-0.31	0.0	-2.84	-9.41e-04	2.91e-03	0.02	0.0	
0.06												
		0.06	0.0	9.15e-06		112.5	-2.84	1122.22	2.91e-03	-307.58	0.33	
6.534e+04												
4	70	6.936e+04	0.29	0.01	-0.32	0.0	-3.09	-1.08e-03	2.56e-03	0.02	0.0	
0.06												
		0.06	0.0	1.01e-05		112.5	-3.09	1191.05	2.56e-03	-326.04	0.29	
6.936e+04												
4	71	6.534e+04	0.33	0.01	-0.31	0.0	-2.84	-9.41e-04	2.91e-03	0.02	0.0	
0.06												
		0.06	0.0	9.15e-06		112.5	-2.84	1122.22	2.91e-03	-307.58	0.33	
6.534e+04												
4	72	7.872e+04	0.19	0.01	-0.35	0.0	-3.68	-1.39e-03	1.73e-03	0.02	0.0	
0.08												
		0.08	0.0	1.22e-05		112.5	-3.68	1351.68	1.73e-03	-369.10	0.19	
7.872e+04												
4	73	6.534e+04	0.33	0.01	-0.31	0.0	-2.84	-9.41e-04	2.91e-03	0.02	0.0	
0.06												

		0.06	0.0	9.15e-06		112.5	-2.84	1122.22	2.91e-03	-307.58	0.33	6.534e+04
4	74	7.203e+04	0.26	0.01	-0.33	0.0	-3.26	-1.17e-03	2.32e-03	0.02	0.0	0.07
		0.07	0.0	1.07e-05		112.5	-3.26	1236.95	2.32e-03	-338.34	0.26	7.203e+04
4	75	6.534e+04	0.33	0.01	-0.31	0.0	-2.84	-9.41e-04	2.91e-03	0.02	0.0	0.06
		0.06	0.0	9.15e-06		112.5	-2.84	1122.22	2.91e-03	-307.58	0.33	6.534e+04
4	76	6.936e+04	0.29	0.01	-0.32	0.0	-3.09	-1.08e-03	2.56e-03	0.02	0.0	0.06
		0.06	0.0	1.01e-05		112.5	-3.09	1191.05	2.56e-03	-326.04	0.29	6.936e+04
5	2	9.726e+04	547.13	7.78e-03	-0.44	0.0	0.12	-1703.52	-4.86	1130.31	547.13	9.726e+04
		0.13	0.0	3.90e-05		112.5	0.12	2.29e-03	-4.86	-0.07	0.0	0.13
5	3	5.861e+04	298.33	4.71e-03	-0.29	0.0	0.06	-1026.51	-2.65	674.95	298.33	5.861e+04
		0.17	0.0	2.17e-05		112.5	0.06	3.06e-03	-2.65	-0.04	0.0	0.17
5	4	7.688e+04	436.45	6.15e-03	-0.35	0.0	0.10	-1346.50	-3.88	894.21	436.45	7.688e+04
		0.09	0.0	3.10e-05		112.5	0.10	1.59e-03	-3.88	-0.06	0.0	0.09
5	14	6.962e+04	0.0	-0.06	-0.38	0.0	-10.79	-953.77	337.09	-2273.69	-3.792e+04	6.962e+04
		0.14	-3.792e+04	6.49e-04		112.5	-10.79	2.38e-03	337.09	-0.18	0.0	0.14
5	15	5.734e+04	3.859e+04	0.07	-0.33	0.0	10.93	-1269.90	-343.05	3740.53	3.859e+04	5.734e+04
		0.16	0.0	-6.01e-04		112.5	10.93	2.96e-03	-343.05	0.09	0.0	0.16
5	29	1.829e+05	0.0	-0.09	-0.70	0.0	-262.66	827.67	117.67	-556.02	-1.324e+04	1.829e+05
		0.54	-1.324e+04	6.35e-04		112.5	-262.66	0.01	117.67	-0.12	0.0	0.54
5	30	-0.16	0.0	-0.08	-0.18	0.0	298.91	-2447.37	54.23	172.45	-6101.03	-2.074e+04
		-2.074e+04	-6101.03	-2.16e-03		112.5	298.91	-3.42e-03	54.23	-0.08	0.0	-0.16
5	31	1.477e+05	6771.36	0.09	-0.57	0.0	-298.77	223.69	-60.19	1294.39	6771.36	1.477e+05
		0.46	0.0	2.21e-03		112.5	-298.77	8.76e-03	-60.19	-0.01	0.0	0.46
5	32	-0.23	1.391e+04	0.08	-0.08	0.0	262.81	-3051.35	-123.63	2022.85	1.391e+04	-5.595e+04
		-5.595e+04	0.0	-5.86e-04		112.5	262.81	-4.72e-03	-123.63	0.03	0.0	-0.23
5	46	6.721e+04	0.0	-0.04	-0.35	0.0	-6.61	-1015.76	203.89	-1095.93	-2.294e+04	6.721e+04
		0.20	-2.294e+04	4.04e-04		112.5	-6.61	3.59e-03	203.89	-0.13	0.0	0.20
5	47	5.975e+04	2.361e+04	0.05	-0.31	0.0	6.76	-1207.92	-209.85	2562.77	2.361e+04	5.975e+04
		0.10	0.0	-3.56e-04		112.5	6.76	1.75e-03	-209.85	0.04	0.0	0.10
5	61	1.361e+05	0.0	-0.06	-0.54	0.0	-159.76	67.69	70.31	-50.99	-7909.91	1.361e+05
		0.36	-7909.91	3.89e-04		112.5	-159.76	6.32e-03	70.31	-0.09	0.0	0.36
5	62	1.226e+04	0.0	-0.04	-0.22	0.0	181.87	-1923.99	31.93	392.14	-3592.08	1.226e+04
		-9.01e-04	-3592.08	-1.30e-03		112.5	181.87	-1.77e-04	31.93	-0.06	0.0	-9.01e-04
5	63	1.147e+05	4262.41	0.06	-0.47	0.0	-181.72	-299.68	-37.89	1074.69	4262.41	1.147e+05
		0.31	0.0	1.35e-03		112.5	-181.72	5.52e-03	-37.89	-0.04	0.0	0.31
5	64	-0.05	8580.24	0.05	-0.16	0.0	159.90	-2291.37	-76.27	1517.83	8580.24	-9151.77
		-9151.77	0.0	-3.41e-04		112.5	159.90	-9.85e-04	-76.27	-9.36e-03	0.0	-0.05
5	69	5.983e+04	307.54	4.80e-03	-0.30	0.0	0.07	-1047.84	-2.73	689.57	307.54	5.983e+04
		0.17	0.0	2.23e-05		112.5	0.07	2.96e-03	-2.73	-0.04	0.0	

0.17												
5	70	6.348e+04	335.17	5.09e-03	-0.31	0.0	0.07	-1111.84	-2.98	733.42	335.17	
6.348e+04												
		0.15	0.0	2.42e-05		112.5	0.07	2.67e-03	-2.98	-0.05	0.0	
0.15												
5	71	5.983e+04	307.54	4.80e-03	-0.30	0.0	0.07	-1047.84	-2.73	689.57	307.54	
5.983e+04												
		0.17	0.0	2.23e-05		112.5	0.07	2.96e-03	-2.73	-0.04	0.0	
0.17												
5	72	7.201e+04	399.62	5.76e-03	-0.33	0.0	0.09	-1261.17	-3.55	835.74	399.62	
7.201e+04												
		0.11	0.0	2.86e-05		112.5	0.09	1.98e-03	-3.55	-0.05	0.0	
0.11												
5	73	5.983e+04	307.54	4.80e-03	-0.30	0.0	0.07	-1047.84	-2.73	689.57	307.54	
5.983e+04												
		0.17	0.0	2.23e-05		112.5	0.07	2.96e-03	-2.73	-0.04	0.0	
0.17												
5	74	6.592e+04	353.58	5.28e-03	-0.31	0.0	0.08	-1154.50	-3.14	762.65	353.58	
6.592e+04												
		0.14	0.0	2.54e-05		112.5	0.08	2.47e-03	-3.14	-0.05	0.0	
0.14												
5	75	5.983e+04	307.54	4.80e-03	-0.30	0.0	0.07	-1047.84	-2.73	689.57	307.54	
5.983e+04												
		0.17	0.0	2.23e-05		112.5	0.07	2.96e-03	-2.73	-0.04	0.0	
0.17												
5	76	6.348e+04	335.17	5.09e-03	-0.31	0.0	0.07	-1111.84	-2.98	733.42	335.17	
6.348e+04												
		0.15	0.0	2.42e-05		112.5	0.07	2.67e-03	-2.98	-0.05	0.0	
0.15												
6	2	9.233e+05	186.09	0.08	-0.63	0.0	803.79	-2950.16	0.77	-1.052e+04	-328.01	
3.813e+04												
		-3.228e+05	-328.01	-1.25e-03		665.0	803.79	7553.67	0.77	-1.431e+04	186.09	
9.233e+05												
6	3	5.308e+05	109.15	0.05	-0.40	0.0	437.32	-1775.18	0.44	-5775.55	-186.39	
2.870e+04												
		-1.885e+05	-186.39	-6.95e-04		665.0	437.32	4356.95	0.44	-8025.62	109.15	
5.308e+05												
6	13	1.196e+06	1.295e+04	-0.10	-0.53	0.0	751.12	704.99	24.57	-7.083e+04	-3380.41	
7.856e+05												
		-1.165e+05	-3380.41	-5.10e-03		665.0	751.12	7535.33	24.57	-7.622e+04	1.295e+04	
1.196e+06												
6	20	-2.385e+04	5970.90	0.06	-0.35	0.0	221.24	-4844.59	-35.11	5.468e+04	5970.90	-
7.601e+05												
		-7.601e+05	-1.735e+04	-2.43e-03		665.0	221.24	1994.22	-35.11	5.474e+04	-1.735e+04	-
2.385e+04												
6	29	1.150e+06	1.401e+05	-0.09	-0.74	0.0	1207.80	862.52	374.87	-1.286e+05	-1.091e+05	
4.002e+05												
		-1.497e+04	-1.091e+05	-0.03		665.0	1207.80	9058.78	374.87	-1.440e+05	1.401e+05	
1.150e+06												
6	32	1.975e+04	1.087e+05	0.03	-0.23	0.0	-224.36	-4709.96	-373.89	1.157e+05	1.087e+05	-
3.425e+05												
		-4.172e+05	-1.399e+05	0.03		665.0	-224.36	528.94	-373.89	1.262e+05	-1.399e+05	
1.975e+04												
6	34	2.890e+05	1.223e+05	-0.03	-0.24	0.0	-159.40	-3658.05	-412.31	9.837e+04	1.223e+05	
5.939e+04												
		-3.326e+05	-1.519e+05	0.03		665.0	-159.40	1484.01	-412.31	1.099e+05	-1.519e+05	
2.890e+05												
6	35	8.805e+05	1.521e+05	0.09	-0.72	0.0	1142.84	-189.40	413.29	-1.113e+05	-1.228e+05	-
1614.14												
		-2.216e+05	-1.228e+05	-0.03		665.0	1142.84	8103.71	413.29	-1.277e+05	1.521e+05	
8.805e+05												
6	45	9.565e+05	7915.17	-0.08	-0.49	0.0	649.40	-324.77	15.11	-4.561e+04	-2126.19	
4.892e+05												
		-1.356e+05	-2126.19	-3.42e-03		665.0	649.40	6461.50	15.11	-4.985e+04	7915.17	
9.565e+05												
6	52	2.145e+05	3551.00	0.06	-0.37	0.0	327.23	-3700.29	-21.17	3.073e+04	3551.00	-
4.510e+05												
		-4.523e+05	-1.051e+04	-1.78e-03		665.0	327.23	3090.88	-21.17	2.981e+04	-1.051e+04	
2.145e+05												
6	61	9.284e+05	8.529e+04	-0.07	-0.62	0.0	927.32	-229.53	228.23	-8.078e+04	-6.646e+04	
2.547e+05												
		-8.250e+04	-6.646e+04	-0.02		665.0	927.32	7388.07	228.23	-9.112e+04	8.529e+04	
9.284e+05												
6	64	2.411e+05	6.605e+04	0.04	-0.30	0.0	56.13	-3617.91	-227.26	6.784e+04	6.605e+04	-
1.969e+05												
		-3.346e+05	-8.505e+04	0.02		665.0	56.13	2199.66	-227.26	7.327e+04	-8.505e+04	
2.411e+05												

6	66	4.049e+05	7.435e+04	-0.04	-0.31	0.0	95.62	-2978.04	-250.63	5.730e+04	7.435e+04
4.755e+04											
		-2.795e+05	-9.234e+04	0.02		665.0	95.62	2780.63	-250.63	6.335e+04	-9.234e+04
4.049e+05											
6	67	7.647e+05	9.258e+04	0.07	-0.61	0.0	887.82	-869.40	251.60	-7.025e+04	-7.476e+04
1.023e+04											
		-1.914e+05	-7.476e+04	-0.02		665.0	887.82	6807.09	251.60	-8.119e+04	9.258e+04
7.647e+05											
6	69	5.443e+05	111.70	0.05	-0.40	0.0	450.92	-1812.32	0.46	-5949.72	-191.34
2.875e+04											
		-1.930e+05	-191.34	-7.15e-04		665.0	450.92	4466.18	0.46	-8249.83	111.70
5.443e+05											
6	70	5.848e+05	119.37	0.05	-0.42	0.0	491.72	-1923.72	0.49	-6472.22	-206.21
2.889e+04											
		-2.065e+05	-206.21	-7.75e-04		665.0	491.72	4793.86	0.49	-8922.43	119.37
5.848e+05											
6	71	5.443e+05	111.70	0.05	-0.40	0.0	450.92	-1812.32	0.46	-5949.72	-191.34
2.875e+04											
		-1.930e+05	-191.34	-7.15e-04		665.0	450.92	4466.18	0.46	-8249.83	111.70
5.443e+05											
6	72	6.791e+05	137.25	0.06	-0.47	0.0	586.92	-2183.66	0.57	-7691.38	-240.89
2.922e+04											
		-2.379e+05	-240.89	-9.14e-04		665.0	586.92	5558.46	0.57	-1.049e+04	137.25
6.791e+05											
6	73	5.443e+05	111.70	0.05	-0.40	0.0	450.92	-1812.32	0.46	-5949.72	-191.34
2.875e+04											
		-1.930e+05	-191.34	-7.15e-04		665.0	450.92	4466.18	0.46	-8249.83	111.70
5.443e+05											
6	74	6.117e+05	124.48	0.05	-0.44	0.0	518.92	-1997.99	0.51	-6820.55	-216.12
2.898e+04											
		-2.154e+05	-216.12	-8.14e-04		665.0	518.92	5012.32	0.51	-9370.84	124.48
6.117e+05											
6	75	5.443e+05	111.70	0.05	-0.40	0.0	450.92	-1812.32	0.46	-5949.72	-191.34
2.875e+04											
		-1.930e+05	-191.34	-7.15e-04		665.0	450.92	4466.18	0.46	-8249.83	111.70
5.443e+05											
6	76	5.848e+05	119.37	0.05	-0.42	0.0	491.72	-1923.72	0.49	-6472.22	-206.21
2.889e+04											
		-2.065e+05	-206.21	-7.75e-04		665.0	491.72	4793.86	0.49	-8922.43	119.37
5.848e+05											
7	2	9.233e+05	328.01	0.08	-0.63	0.0	803.79	-2950.16	-0.77	1.052e+04	328.01
3.813e+04											
		-3.228e+05	-186.09	1.25e-03		665.0	803.79	7553.67	-0.77	1.431e+04	-186.09
9.233e+05											
7	3	5.308e+05	186.39	0.05	-0.40	0.0	437.32	-1775.18	-0.44	5775.55	186.39
2.870e+04											
		-1.885e+05	-109.15	6.95e-04		665.0	437.32	4356.95	-0.44	8025.62	-109.15
5.308e+05											
7	5	1.188e+06	6.432e+04	-0.12	-0.54	0.0	370.20	527.34	185.50	-4.990e+04	-5.910e+04
7.660e+05											
		-1.205e+05	-5.910e+04	-0.02		665.0	370.20	7513.06	185.50	-5.086e+04	6.432e+04
1.188e+06											
7	12	-1.641e+04	6.251e+04	0.11	-0.35	0.0	624.32	-4666.94	-198.00	5.965e+04	6.251e+04	-
7.405e+05											
		-7.405e+05	-6.920e+04	0.02		665.0	624.32	2016.49	-198.00	6.507e+04	-6.920e+04	-
1.641e+04											
7	29	1.164e+06	1.519e+05	-0.19	-0.74	0.0	-159.40	1078.73	412.31	-1.123e+05	-1.223e+05
4.318e+05											
		-1.699e+04	-1.223e+05	-0.03		665.0	-159.40	9091.54	412.31	-1.230e+05	1.519e+05
1.164e+06											
7	32	5057.44	1.228e+05	0.19	-0.23	0.0	1142.84	-4926.17	-413.29	1.253e+05	1.228e+05	-
3.741e+05											
		-4.158e+05	-1.521e+05	0.03		665.0	1142.84	496.19	-413.29	1.409e+05	-1.521e+05
5057.44											
7	34	2.726e+05	1.091e+05	0.17	-0.24	0.0	1207.80	-3976.47	-374.87	1.072e+05	1.091e+05
1.964e+04											
		-3.235e+05	-1.401e+05	0.03		665.0	1207.80	1449.40	-374.87	1.238e+05	-1.401e+05
2.726e+05											
7	35	8.969e+05	1.399e+05	-0.17	-0.72	0.0	-224.36	129.03	373.89	-9.423e+04	-1.087e+05
3.814e+04											
		-2.123e+05	-1.087e+05	-0.03		665.0	-224.36	8138.33	373.89	-1.060e+05	1.399e+05
8.969e+05											
7	37	9.520e+05	3.907e+04	-0.09	-0.49	0.0	417.82	-432.86	112.63	-2.781e+04	-3.586e+04
4.773e+05											
		-1.376e+05	-3.586e+04	-0.01		665.0	417.82	6447.97	112.63	-2.743e+04	3.907e+04
9.520e+05											
7	44	2.190e+05	3.811e+04	0.08	-0.37	0.0	572.43	-3592.20	-120.64	3.882e+04	3.811e+04	-

4.391e+05												
		-4.421e+05	-4.214e+04	0.01		665.0	572.43	3104.41	-120.64	4.308e+04	-4.214e+04	
2.190e+05												
7	61	9.374e+05	9.234e+04	-0.14	-0.62	0.0	95.62	-98.00	250.63	-6.579e+04	-7.435e+04	
2.739e+05												
		-8.470e+04	-7.435e+04	-0.02		665.0	95.62	7407.99	250.63	-7.136e+04	9.234e+04	
9.374e+05												
7	64	2.321e+05	7.476e+04	0.13	-0.30	0.0	887.82	-3749.44	-251.60	7.874e+04	7.476e+04	-
2.161e+05												
		-3.338e+05	-9.258e+04	0.02		665.0	887.82	2179.73	-251.60	8.920e+04	-9.258e+04	
2.321e+05												
7	66	3.949e+05	6.646e+04	0.12	-0.31	0.0	927.32	-3171.77	-228.23	6.773e+04	6.646e+04	
2.336e+04												
		-2.749e+05	-8.529e+04	0.02		665.0	927.32	2759.58	-228.23	7.883e+04	-8.529e+04	
3.949e+05												
7	67	7.746e+05	8.505e+04	-0.12	-0.60	0.0	56.13	-675.67	227.26	-5.478e+04	-6.605e+04	
3.441e+04												
		-1.857e+05	-6.605e+04	-0.02		665.0	56.13	6828.14	227.26	-6.099e+04	8.505e+04	
7.746e+05												
7	69	5.443e+05	191.34	0.05	-0.40	0.0	450.92	-1812.32	-0.46	5949.72	191.34	
2.875e+04												
		-1.930e+05	-111.70	7.15e-04		665.0	450.92	4466.18	-0.46	8249.83	-111.70	
5.443e+05												
7	70	5.848e+05	206.21	0.05	-0.42	0.0	491.72	-1923.72	-0.49	6472.22	206.21	
2.889e+04												
		-2.065e+05	-119.37	7.75e-04		665.0	491.72	4793.86	-0.49	8922.43	-119.37	
5.848e+05												
7	71	5.443e+05	191.34	0.05	-0.40	0.0	450.92	-1812.32	-0.46	5949.72	191.34	
2.875e+04												
		-1.930e+05	-111.70	7.15e-04		665.0	450.92	4466.18	-0.46	8249.83	-111.70	
5.443e+05												
7	72	6.791e+05	240.89	0.06	-0.47	0.0	586.92	-2183.66	-0.57	7691.38	240.89	
2.922e+04												
		-2.379e+05	-137.25	9.14e-04		665.0	586.92	5558.46	-0.57	1.049e+04	-137.25	
6.791e+05												
7	73	5.443e+05	191.34	0.05	-0.40	0.0	450.92	-1812.32	-0.46	5949.72	191.34	
2.875e+04												
		-1.930e+05	-111.70	7.15e-04		665.0	450.92	4466.18	-0.46	8249.83	-111.70	
5.443e+05												
7	74	6.117e+05	216.12	0.05	-0.44	0.0	518.92	-1997.99	-0.51	6820.55	216.12	
2.898e+04												
		-2.154e+05	-124.48	8.14e-04		665.0	518.92	5012.32	-0.51	9370.84	-124.48	
6.117e+05												
7	75	5.443e+05	191.34	0.05	-0.40	0.0	450.92	-1812.32	-0.46	5949.72	191.34	
2.875e+04												
		-1.930e+05	-111.70	7.15e-04		665.0	450.92	4466.18	-0.46	8249.83	-111.70	
5.443e+05												
7	76	5.848e+05	206.21	0.05	-0.42	0.0	491.72	-1923.72	-0.49	6472.22	206.21	
2.889e+04												
		-2.065e+05	-119.37	7.75e-04		665.0	491.72	4793.86	-0.49	8922.43	-119.37	
5.848e+05												
8	2	1.826e+05	185.67	0.01	-0.66	0.0	0.14	8.87e-04	1.65	3.83e-03	0.0	-
0.04												
		-0.04	0.0	-5.63e-06		112.5	0.14	3207.71	1.65	-60.68	185.67	
1.826e+05												
8	3	1.052e+05	101.68	7.08e-03	-0.41	0.0	0.06	-2.44e-04	0.90	2.28e-03	0.0	
0.02												
		0.02	0.0	-3.06e-06		112.5	0.06	1847.37	0.90	-35.85	101.68	
1.052e+05												
8	10	7.897e+04	0.0	0.08	-0.39	0.0	-130.11	-2.58e-03	-340.23	-0.09	0.0	-
0.14												
		-0.14	-3.828e+04	-1.99e-04		112.5	-130.11	1462.26	-340.23	-1462.41	-3.828e+04	
7.897e+04												
8	11	1.527e+05	3.850e+04	-0.08	-0.58	0.0	130.25	2.65e-03	342.26	0.10	0.0	
0.15												
		0.15	0.0	1.92e-04		112.5	130.25	2605.26	342.26	1384.20	3.850e+04	
1.527e+05												
8	33	2.739e+05	0.0	-0.25	-0.94	0.0	414.79	9.71e-03	-56.54	-0.02	0.0	
0.54												
		0.54	-6360.64	2.04e-03		112.5	414.79	4561.40	-56.54	-505.48	-6360.64	
2.739e+05												
8	36	-0.54	6588.73	0.25	-0.17	0.0	-414.65	-9.64e-03	58.57	0.03	0.0	-
0.54												
		-4.221e+04	0.0	-2.05e-03		112.5	-414.65	-493.87	58.57	427.27	6588.73	-
4.221e+04												
8	42	9.340e+04	0.0	0.05	-0.40	0.0	-79.12	-9.10e-04	-206.55	-0.05	0.0	-
0.05												

		-0.05	-2.324e+04	-1.21e-04		112.5	-79.12	1686.07	-206.55	-905.02	-2.324e+04	
9.340e+04												
8	43	1.382e+05	2.347e+04	-0.05	-0.52	0.0	79.27	9.79e-04	208.58	0.05	0.0	
0.06												
		0.06	0.0	1.14e-04		112.5	79.27	2381.46	208.58	826.81	2.347e+04	
1.382e+05												
8	60	2.548e+04	7558.88	0.15	-0.28	0.0	-239.92	-6.06e-03	67.19	0.02	0.0	-
0.36												
		-0.36	0.0	7.70e-04		112.5	-239.92	589.66	67.19	240.14	7558.88	
2.548e+04												
8	65	2.120e+05	0.0	-0.16	-0.75	0.0	252.36	3.77e-03	-34.09	-0.02	0.0	
0.22												
		0.22	-3835.16	1.23e-03		112.5	252.36	3571.28	-34.09	-322.64	-3835.16	
2.120e+05												
8	68	1.969e+04	4063.25	0.16	-0.27	0.0	-252.22	-3.71e-03	36.12	0.02	0.0	-
0.22												
		-0.22	0.0	-1.24e-03		112.5	-252.22	496.24	36.12	244.43	4063.25	
1.969e+04												
8	69	1.079e+05	104.77	7.24e-03	-0.42	0.0	0.06	-1.74e-04	0.93	2.33e-03	0.0	
0.01												
		0.01	0.0	-3.16e-06		112.5	0.06	1893.97	0.93	-36.67	104.77	
1.079e+05												
8	70	1.158e+05	114.05	7.73e-03	-0.44	0.0	0.07	3.48e-05	1.01	2.48e-03	0.0	
3.37e-03												
		3.37e-03	0.0	-3.44e-06		112.5	0.07	2033.76	1.01	-39.11	114.05	
1.158e+05												
8	71	1.079e+05	104.77	7.24e-03	-0.42	0.0	0.06	-1.74e-04	0.93	2.33e-03	0.0	
0.01												
		0.01	0.0	-3.16e-06		112.5	0.06	1893.97	0.93	-36.67	104.77	
1.079e+05												
8	72	1.344e+05	135.69	8.87e-03	-0.49	0.0	0.10	5.22e-04	1.21	2.83e-03	0.0	-
0.02												
		-0.02	0.0	-4.11e-06		112.5	0.10	2359.94	1.21	-44.80	135.69	
1.344e+05												
8	73	1.079e+05	104.77	7.24e-03	-0.42	0.0	0.06	-1.74e-04	0.93	2.33e-03	0.0	
0.01												
		0.01	0.0	-3.16e-06		112.5	0.06	1893.97	0.93	-36.67	104.77	
1.079e+05												
8	74	1.211e+05	120.23	8.06e-03	-0.45	0.0	0.08	1.74e-04	1.07	2.58e-03	0.0	-
4.20e-03												
		-4.20e-03	0.0	-3.64e-06		112.5	0.08	2126.96	1.07	-40.73	120.23	
1.211e+05												
8	75	1.079e+05	104.77	7.24e-03	-0.42	0.0	0.06	-1.74e-04	0.93	2.33e-03	0.0	
0.01												
		0.01	0.0	-3.16e-06		112.5	0.06	1893.97	0.93	-36.67	104.77	
1.079e+05												
8	76	1.158e+05	114.05	7.73e-03	-0.44	0.0	0.07	3.48e-05	1.01	2.48e-03	0.0	
3.37e-03												
		3.37e-03	0.0	-3.44e-06		112.5	0.07	2033.76	1.01	-39.11	114.05	
1.158e+05												
9	2	2.401e+05	27.74	0.02	-0.62	0.0	-102.67	-5257.90	0.0	114.22	27.74	
2.401e+05												
		-3.009e+05	27.74	-2.21e-06		425.0	-102.67	5257.90	0.0	-114.22	27.74	
2.401e+05												
9	3	1.365e+05	14.67	0.01	-0.39	0.0	-44.15	-3021.69	0.0	67.49	14.67	
1.365e+05												
		-1.743e+05	14.67	-1.17e-06		425.0	-44.15	3021.69	0.0	-67.49	14.67	
1.365e+05												
9	10	-1.407e+05	-1619.31	0.05	-0.41	0.0	-24.21	-4269.93	55.03	-7779.92	-1.570e+04	-
1.407e+05												
		-2.677e+05	-1.570e+04	-6.28e-03		425.0	-24.21	2357.10	55.03	-2847.55	-1619.31	-
1.466e+05												
9	11	4.485e+05	1.573e+04	-0.05	-0.48	0.0	-85.03	-2388.33	-55.03	7927.14	1.573e+04	
4.426e+05												
		-2.033e+05	1652.66	6.28e-03		425.0	-85.03	4301.16	-55.03	2700.33	1652.66	
4.485e+05												
9	22	-1.879e+05	4.215e+04	0.15	-0.38	0.0	-45.50	-7307.86	217.12	3799.08	-4.733e+04	-
8.627e+05												
		-8.644e+05	-4.733e+04	1.83e-03		425.0	-45.50	-658.96	217.12	5175.73	4.215e+04	-
8.644e+05												
9	23	1.166e+06	4.736e+04	-0.15	-0.64	0.0	-63.74	649.59	-217.12	-3651.86	4.736e+04	
1.165e+06												
		-1.950e+05	-4.212e+04	-1.83e-03		425.0	-63.74	7317.23	-217.12	-5322.96	-4.212e+04	
1.166e+06												
9	33	1.225e+06	2.079e+04	-0.16	-0.67	0.0	-45.50	968.94	-116.57	-8619.46	2.079e+04	
1.221e+06												
		-1.879e+05	-2.596e+04	9.69e-03		425.0	-45.50	7637.71	-116.57	-1.027e+04	-2.596e+04	

1.225e+06											
9	36	-1.950e+05	2.600e+04	0.16	-0.37	0.0	-63.74	-7627.20	116.57	8766.68	-2.076e+04
9.196e+05											
		-9.226e+05	-2.076e+04	-9.69e-03		425.0	-63.74	-979.45	116.57	1.012e+04	2.600e+04
9.226e+05											
9	42	-2.645e+04	-998.55	0.03	-0.40	0.0	-36.12	-3901.45	33.34	-4710.59	-9518.97
2.645e+04											
		-2.167e+05	-9518.97	-3.82e-03		425.0	-36.12	2737.81	33.34	-1767.66	-998.55
3.005e+04											
9	43	3.320e+05	9552.31	-0.03	-0.46	0.0	-73.12	-2756.81	-33.34	4857.81	9552.31
3.284e+05											
		-1.987e+05	1031.90	3.82e-03		425.0	-73.12	3920.45	-33.34	1620.44	1031.90
3.320e+05											
9	54	-1.893e+05	2.558e+04	0.09	-0.38	0.0	-49.07	-5749.38	131.71	2335.59	-2.871e+04
4.657e+05											
		-4.817e+05	-2.871e+04	1.11e-03		425.0	-49.07	903.18	131.71	3115.41	2.558e+04
4.667e+05											
9	55	7.686e+05	2.874e+04	-0.09	-0.55	0.0	-60.17	-908.88	-131.71	-2188.36	2.874e+04
7.676e+05											
		-1.936e+05	-2.554e+04	-1.11e-03		425.0	-60.17	5755.08	-131.71	-3262.63	-2.554e+04
7.686e+05											
9	65	8.040e+05	1.258e+04	-0.10	-0.57	0.0	-49.07	-714.75	-70.55	-5192.59	1.258e+04
8.022e+05											
		-1.893e+05	-1.571e+04	5.87e-03		425.0	-49.07	5949.91	-70.55	-6253.83	-1.571e+04
8.040e+05											
9	68	-1.936e+05	1.574e+04	0.10	-0.37	0.0	-60.17	-5943.51	70.55	5339.81	-1.254e+04
5.003e+05											
		-5.122e+05	-1.254e+04	-5.87e-03		425.0	-60.17	708.35	70.55	6106.61	1.574e+04
5.021e+05											
9	69	1.401e+05	15.17	0.01	-0.39	0.0	-46.77	-3098.55	0.0	69.02	15.17
1.401e+05											
		-1.786e+05	15.17	-1.21e-06		425.0	-46.77	3098.55	0.0	-69.02	15.17
1.401e+05											
9	70	1.510e+05	16.67	0.02	-0.41	0.0	-54.62	-3329.13	0.0	73.61	16.67
1.510e+05											
		-1.915e+05	16.67	-1.33e-06		425.0	-54.62	3329.13	0.0	-73.61	16.67
1.510e+05											
9	71	1.401e+05	15.17	0.01	-0.39	0.0	-46.77	-3098.55	0.0	69.02	15.17
1.401e+05											
		-1.786e+05	15.17	-1.21e-06		425.0	-46.77	3098.55	0.0	-69.02	15.17
1.401e+05											
9	72	1.763e+05	20.18	0.02	-0.46	0.0	-72.94	-3867.16	0.0	84.33	20.18
1.763e+05											
		-2.215e+05	20.18	-1.61e-06		425.0	-72.94	3867.16	0.0	-84.33	20.18
1.763e+05											
9	73	1.401e+05	15.17	0.01	-0.39	0.0	-46.77	-3098.55	0.0	69.02	15.17
1.401e+05											
		-1.786e+05	15.17	-1.21e-06		425.0	-46.77	3098.55	0.0	-69.02	15.17
1.401e+05											
9	74	1.582e+05	17.67	0.02	-0.43	0.0	-59.85	-3482.85	0.0	76.67	17.67
1.582e+05											
		-2.001e+05	17.67	-1.41e-06		425.0	-59.85	3482.85	0.0	-76.67	17.67
1.582e+05											
9	75	1.401e+05	15.17	0.01	-0.39	0.0	-46.77	-3098.55	0.0	69.02	15.17
1.401e+05											
		-1.786e+05	15.17	-1.21e-06		425.0	-46.77	3098.55	0.0	-69.02	15.17
1.401e+05											
9	76	1.510e+05	16.67	0.02	-0.41	0.0	-54.62	-3329.13	0.0	73.61	16.67
1.510e+05											
		-1.915e+05	16.67	-1.33e-06		425.0	-54.62	3329.13	0.0	-73.61	16.67
1.510e+05											
10	2	1.826e+05	185.67	0.01	-0.66	0.0	0.14	-3207.71	-1.65	60.68	185.67
1.826e+05											
		-0.04	0.0	5.63e-06		112.5	0.14	-8.87e-04	-1.65	-3.83e-03	0.0
0.04											
10	3	1.052e+05	101.68	7.08e-03	-0.41	0.0	0.06	-1847.37	-0.90	35.85	101.68
1.052e+05											
		0.02	0.0	3.06e-06		112.5	0.06	2.44e-04	-0.90	-2.28e-03	0.0
0.02											
10	17	1.704e+05	0.0	0.03	-0.63	0.0	-130.11	-1147.19	340.23	-1419.12	-3.828e+04
1.704e+05											
		0.17	-3.828e+04	2.17e-04		112.5	-130.11	2.98e-03	340.23	-0.10	0.0
0.17											
10	20	6.128e+04	3.850e+04	-0.02	-0.34	0.0	130.25	-2920.34	-342.26	1497.33	3.850e+04
6.128e+04											
		-0.17	0.0	-2.13e-04		112.5	130.25	-3.05e-03	-342.26	0.09	0.0
0.17											

10	29	2.734e+05	0.0	0.09	-0.94	0.0	-410.83	486.66	121.72	-418.48	-1.369e+04	2.734e+05
		0.55	-1.369e+04	8.39e-04		112.5	-410.83	9.68e-03	121.72	-0.03	0.0	0.55
10	30	-0.51	0.0	0.08	-0.19	0.0	414.79	-4446.01	56.54	-298.88	-6360.64	-3.563e+04
		-3.563e+04	-6360.64	-2.04e-03		112.5	414.79	-9.27e-03	56.54	-0.02	0.0	-0.51
10	31	2.673e+05	6588.73	-0.09	-0.92	0.0	-414.65	378.49	-58.57	377.10	6588.73	2.673e+05
		0.52	0.0	2.05e-03		112.5	-414.65	9.20e-03	-58.57	0.01	0.0	0.52
10	32	-0.54	1.392e+04	-0.08	-0.17	0.0	410.97	-4554.18	-123.75	496.69	1.392e+04	-4.178e+04
		-4.178e+04	0.0	-8.32e-04		112.5	410.97	-9.75e-03	-123.75	0.02	0.0	-0.54
10	49	1.490e+05	0.0	0.02	-0.55	0.0	-79.12	-1494.53	206.55	-847.95	-2.324e+04	1.490e+05
		0.07	-2.324e+04	1.32e-04		112.5	-79.12	1.15e-03	206.55	-0.05	0.0	0.07
10	52	8.265e+04	2.347e+04	-7.77e-03	-0.37	0.0	79.27	-2572.99	-208.58	926.16	2.347e+04	8.265e+04
		-0.07	0.0	-1.28e-04		112.5	79.27	-1.22e-03	-208.58	0.05	0.0	-0.07
10	56	2.574e+04	5007.61	-0.04	-0.28	0.0	237.74	-3473.47	-44.51	313.01	5007.61	2.574e+04
		-0.36	0.0	1.51e-03		112.5	237.74	-6.14e-03	-44.51	0.01	0.0	-0.36
10	61	2.117e+05	0.0	0.06	-0.74	0.0	-249.89	-500.63	73.56	-239.09	-8275.15	2.117e+05
		0.22	-8275.15	5.08e-04		112.5	-249.89	3.71e-03	73.56	-0.02	0.0	0.22
10	62	2.370e+04	0.0	0.04	-0.28	0.0	252.36	-3501.12	34.09	-166.68	-3835.16	2.370e+04
		-0.20	-3835.16	-1.23e-03		112.5	252.36	-3.39e-03	34.09	-0.02	0.0	-0.20
10	63	2.080e+05	4063.25	-0.06	-0.73	0.0	-252.22	-566.40	-36.12	244.89	4063.25	2.080e+05
		0.20	0.0	1.24e-03		112.5	-252.22	3.32e-03	-36.12	0.01	0.0	0.20
10	69	1.079e+05	104.77	7.24e-03	-0.42	0.0	0.06	-1893.97	-0.93	36.67	104.77	1.079e+05
		0.01	0.0	3.16e-06		112.5	0.06	1.74e-04	-0.93	-2.33e-03	0.0	0.01
10	70	1.158e+05	114.05	7.73e-03	-0.44	0.0	0.07	-2033.76	-1.01	39.11	114.05	1.158e+05
		3.37e-03	0.0	3.44e-06		112.5	0.07	-3.48e-05	-1.01	-2.48e-03	0.0	3.37e-03
10	71	1.079e+05	104.77	7.24e-03	-0.42	0.0	0.06	-1893.97	-0.93	36.67	104.77	1.079e+05
		0.01	0.0	3.16e-06		112.5	0.06	1.74e-04	-0.93	-2.33e-03	0.0	0.01
10	72	1.344e+05	135.69	8.87e-03	-0.49	0.0	0.10	-2359.94	-1.21	44.80	135.69	1.344e+05
		-0.02	0.0	4.11e-06		112.5	0.10	-5.22e-04	-1.21	-2.83e-03	0.0	-0.02
10	73	1.079e+05	104.77	7.24e-03	-0.42	0.0	0.06	-1893.97	-0.93	36.67	104.77	1.079e+05
		0.01	0.0	3.16e-06		112.5	0.06	1.74e-04	-0.93	-2.33e-03	0.0	0.01
10	74	1.211e+05	120.23	8.06e-03	-0.45	0.0	0.08	-2126.96	-1.07	40.73	120.23	1.211e+05
		-4.20e-03	0.0	3.64e-06		112.5	0.08	-1.74e-04	-1.07	-2.58e-03	0.0	-4.20e-03
10	75	1.079e+05	104.77	7.24e-03	-0.42	0.0	0.06	-1893.97	-0.93	36.67	104.77	1.079e+05
		0.01	0.0	3.16e-06		112.5	0.06	1.74e-04	-0.93	-2.33e-03	0.0	0.01
10	76	1.158e+05	114.05	7.73e-03	-0.44	0.0	0.07	-2033.76	-1.01	39.11	114.05	1.158e+05
		3.37e-03	0.0	3.44e-06		112.5	0.07	-3.48e-05	-1.01	-2.48e-03	0.0	3.37e-03
11	2	8.854e+05	-14.00	0.08	-0.63	0.0	1077.64	-7520.61	-0.03	8486.60	-14.00	8.854e+05
		-3.524e+05	-38.81	7.04e-04		780.0	1077.64	5998.04	-0.03	3619.35	-38.81	6.544e+05
11	3	5.100e+05	-8.64	0.04	-0.40	0.0	588.56	-4332.93	-0.01	4715.30	-8.64	

5.100e+05
-2.045e+05 -17.78 3.81e-04 780.0 588.56 3480.77 -0.01 1834.32 -17.78
3.765e+05
11 13 1.198e+06 4.273e+04 -0.07 -0.56 0.0 1755.68 -2024.37 -99.81 -4.278e+04 4.273e+04
1.158e+06
-1.609e+05 -3.547e+04 0.02 780.0 1755.68 8011.20 -99.81 -4.352e+04 -3.547e+04
1.198e+06
11 16 -3.509e+04 3.542e+04 0.08 -0.34 0.0 -434.05 -7514.46 99.78 5.330e+04 -4.275e+04 -
3.509e+04
-3.685e+05 -4.275e+04 -0.02 780.0 -434.05 -368.48 99.78 4.776e+04 3.542e+04 -
3.685e+05
11 28 -1.508e+04 9.786e+04 0.02 -0.24 0.0 -342.07 -8879.96 274.56 1.191e+05 -1.172e+05 -
1.508e+04
-3.946e+05 -1.172e+05 -0.03 780.0 -342.07 152.58 274.56 1.039e+05 9.786e+04 -
7.353e+04
11 29 1.188e+06 1.409e+05 0.09 -0.74 0.0 1635.83 -408.45 -333.00 -1.508e+05 1.409e+05
1.188e+06
-8.680e+04 -1.191e+05 0.04 780.0 1635.83 6320.22 -333.00 -1.400e+05 -1.191e+05
7.582e+05
11 32 7.117e+04 1.191e+05 0.03 -0.25 0.0 -314.19 -9130.38 332.97 1.613e+05 -1.409e+05 -
6.562e+04
-3.623e+05 -1.409e+05 -0.04 780.0 -314.19 1322.50 332.97 1.442e+05 1.191e+05
7.117e+04
11 45 9.243e+05 2.599e+04 -0.05 -0.49 0.0 1326.60 -3099.56 -60.72 -2.396e+04 2.599e+04
9.243e+05
-1.831e+05 -2.158e+04 0.01 780.0 1326.60 6369.98 -60.72 -2.564e+04 -2.158e+04
8.911e+05
11 48 1.985e+05 2.154e+04 0.06 -0.37 0.0 -4.97 -6439.27 60.69 3.448e+04 -2.601e+04
1.985e+05
-2.867e+05 -2.601e+04 -9.80e-03 780.0 -4.97 1272.74 60.69 2.988e+04 2.154e+04 -
6.173e+04
11 60 2.107e+05 5.952e+04 0.03 -0.31 0.0 51.57 -7269.84 167.02 7.450e+04 -7.129e+04
2.107e+05
-3.280e+05 -7.129e+04 -0.02 780.0 51.57 1589.98 167.02 6.405e+04 5.952e+04
1.178e+05
11 61 9.428e+05 8.569e+04 0.07 -0.62 0.0 1253.41 -2116.85 -202.55 -8.968e+04 8.569e+04
9.428e+05
-1.408e+05 -7.245e+04 0.03 780.0 1253.41 5341.42 -202.55 -8.434e+04 -7.245e+04
6.236e+05
11 64 2.057e+05 7.241e+04 0.03 -0.30 0.0 68.22 -7421.98 202.52 1.002e+05 -8.571e+04
1.800e+05
-3.083e+05 -8.571e+04 -0.03 780.0 68.22 2301.30 202.52 8.858e+04 7.241e+04
2.057e+05
11 65 9.473e+05 8.333e+04 0.07 -0.61 0.0 1255.80 -2120.96 -196.75 -8.755e+04 8.333e+04
9.473e+05
-1.361e+05 -7.029e+04 0.03 780.0 1255.80 5512.03 -196.75 -8.197e+04 -7.029e+04
6.459e+05
11 69 5.229e+05 -8.80 0.05 -0.40 0.0 606.62 -4442.05 -0.01 4851.52 -8.80
5.229e+05
-2.095e+05 -18.69 3.93e-04 780.0 606.62 3565.92 -0.01 1905.69 -18.69
3.861e+05
11 70 5.614e+05 -9.28 0.05 -0.42 0.0 660.82 -4769.41 -0.02 5260.20 -9.28
5.614e+05
-2.246e+05 -21.41 4.29e-04 780.0 660.82 3821.36 -0.02 2119.80 -21.41
4.147e+05
11 71 5.229e+05 -8.80 0.05 -0.40 0.0 606.62 -4442.05 -0.01 4851.52 -8.80
5.229e+05
-2.095e+05 -18.69 3.93e-04 780.0 606.62 3565.92 -0.01 1905.69 -18.69
3.861e+05
11 72 6.514e+05 -10.40 0.06 -0.47 0.0 787.27 -5533.26 -0.02 6213.79 -10.40
6.514e+05
-2.596e+05 -27.76 5.13e-04 780.0 787.27 4417.39 -0.02 2619.41 -27.76
4.814e+05
11 73 5.229e+05 -8.80 0.05 -0.40 0.0 606.62 -4442.05 -0.01 4851.52 -8.80
5.229e+05
-2.095e+05 -18.69 3.93e-04 780.0 606.62 3565.92 -0.01 1905.69 -18.69
3.861e+05
11 74 5.871e+05 -9.60 0.05 -0.44 0.0 696.95 -4987.66 -0.02 5532.66 -9.60
5.871e+05
-2.346e+05 -23.22 4.53e-04 780.0 696.95 3991.65 -0.02 2262.55 -23.22
4.337e+05
11 75 5.229e+05 -8.80 0.05 -0.40 0.0 606.62 -4442.05 -0.01 4851.52 -8.80
5.229e+05
-2.095e+05 -18.69 3.93e-04 780.0 606.62 3565.92 -0.01 1905.69 -18.69
3.861e+05
11 76 5.614e+05 -9.28 0.05 -0.42 0.0 660.82 -4769.41 -0.02 5260.20 -9.28
5.614e+05

		-2.246e+05	-21.41	4.29e-04		780.0	660.82	3821.36	-0.02	2119.80	-21.41	4.147e+05
12	2	8.854e+05	38.81	0.08	-0.63	0.0	1077.64	-7520.61	0.03	-8486.60	14.00	8.854e+05
		-3.524e+05	14.00	-7.04e-04		780.0	1077.64	5998.04	0.03	-3619.35	38.81	6.544e+05
12	3	5.100e+05	17.78	0.04	-0.40	0.0	588.56	-4332.93	0.01	-4715.30	8.64	5.100e+05
		-2.045e+05	8.64	-3.81e-04		780.0	588.56	3480.77	0.01	-1834.32	17.78	3.765e+05
12	5	1.248e+06	2.607e+04	-0.11	-0.60	0.0	1311.00	-2031.76	-61.49	-6.896e+04	2.607e+04	1.163e+06
		-1.592e+05	-2.206e+04	-1.72e-03		780.0	1311.00	8467.96	-61.49	-6.508e+04	-2.206e+04	1.248e+06
12	6	1.081e+06	3.547e+04	0.05	-0.47	0.0	1755.68	-4199.04	99.81	-3417.74	-4.273e+04	9.006e+05
		-2.526e+05	-4.273e+04	-0.02		780.0	1755.68	6877.74	99.81	-6988.51	3.547e+04	1.081e+06
12	7	2.223e+05	4.275e+04	0.06	-0.48	0.0	-434.05	-5339.79	-99.78	-7102.67	4.275e+04	2.223e+05
		-2.925e+05	-3.542e+04	0.02		780.0	-434.05	764.98	-99.78	2748.90	-3.542e+04	-
12	8	-3.982e+04	2.210e+04	0.13	-0.34	0.0	10.63	-7507.06	61.52	5.844e+04	-2.605e+04	-
		-4.182e+05	-2.605e+04	1.42e-03		780.0	10.63	-825.24	61.52	6.084e+04	2.210e+04	-
12	34	4.362e+05	1.191e+05	0.14	-0.29	0.0	1635.83	-8112.43	333.00	1.386e+05	-1.409e+05	2.029e+05
		-3.519e+05	-1.409e+05	-0.04		780.0	1635.83	2949.73	333.00	1.266e+05	1.191e+05	4.362e+05
12	35	9.199e+05	1.409e+05	-0.13	-0.72	0.0	-314.19	-1426.40	-332.97	-1.491e+05	1.409e+05	9.199e+05
		-1.114e+05	-1.191e+05	0.04		780.0	-314.19	4692.99	-332.97	-1.309e+05	-1.191e+05	3.931e+05
12	38	8.198e+05	2.158e+04	0.05	-0.42	0.0	1326.60	-4422.41	60.72	-4139.45	-2.599e+04	7.677e+05
		-2.389e+05	-2.599e+04	-0.01		780.0	1326.60	5680.76	60.72	-5081.83	2.158e+04	8.198e+05
12	39	3.551e+05	2.601e+04	0.06	-0.46	0.0	-4.97	-5116.42	-60.69	-6380.96	2.601e+04	3.551e+05
		-2.397e+05	-2.154e+04	9.80e-03		780.0	-4.97	1961.96	-60.69	842.22	-2.154e+04	9572.11
12	56	2.099e+05	5.712e+04	0.12	-0.31	0.0	951.60	-7268.49	160.07	6.683e+04	-6.823e+04	2.099e+05
		-3.305e+05	-6.823e+04	-0.01		780.0	951.60	1506.61	160.07	6.297e+04	5.712e+04	1.087e+05
12	61	9.482e+05	8.031e+04	-0.10	-0.62	0.0	384.31	-2122.32	-189.73	-1.009e+05	8.031e+04	9.482e+05
		-1.339e+05	-6.781e+04	0.03		780.0	384.31	5595.40	-189.73	-8.937e+04	-6.781e+04	6.550e+05
12	66	4.278e+05	7.245e+04	0.10	-0.31	0.0	1253.41	-6802.73	202.55	8.224e+04	-8.569e+04	3.434e+05
		-3.020e+05	-8.569e+04	-0.03		780.0	1253.41	3291.17	202.55	7.621e+04	7.245e+04	4.278e+05
12	67	7.795e+05	8.571e+04	-0.09	-0.60	0.0	68.22	-2736.10	-202.52	-9.276e+04	8.571e+04	7.795e+05
		-1.492e+05	-7.241e+04	0.03		780.0	68.22	4351.55	-202.52	-8.045e+04	-7.241e+04	4.016e+05
12	69	5.229e+05	18.69	0.05	-0.40	0.0	606.62	-4442.05	0.01	-4851.52	8.80	5.229e+05
		-2.095e+05	8.80	-3.93e-04		780.0	606.62	3565.92	0.01	-1905.69	18.69	3.861e+05
12	70	5.614e+05	21.41	0.05	-0.42	0.0	660.82	-4769.41	0.02	-5260.20	9.28	5.614e+05
		-2.246e+05	9.28	-4.29e-04		780.0	660.82	3821.36	0.02	-2119.80	21.41	4.147e+05
12	71	5.229e+05	18.69	0.05	-0.40	0.0	606.62	-4442.05	0.01	-4851.52	8.80	5.229e+05
		-2.095e+05	8.80	-3.93e-04		780.0	606.62	3565.92	0.01	-1905.69	18.69	3.861e+05
12	72	6.514e+05	27.76	0.06	-0.47	0.0	787.27	-5533.26	0.02	-6213.79	10.40	6.514e+05
		-2.596e+05	10.40	-5.13e-04		780.0	787.27	4417.39	0.02	-2619.41	27.76	4.814e+05
12	73	5.229e+05	18.69	0.05	-0.40	0.0	606.62	-4442.05	0.01	-4851.52	8.80	5.229e+05
		-2.095e+05	8.80	-3.93e-04		780.0	606.62	3565.92	0.01	-1905.69	18.69	

3.861e+05
12 74 5.871e+05 23.22 0.05 -0.44 0.0 696.95 -4987.66 0.02 -5532.66 9.60
5.871e+05
-2.346e+05 9.60 -4.53e-04 780.0 696.95 3991.65 0.02 -2262.55 23.22
4.337e+05
12 75 5.229e+05 18.69 0.05 -0.40 0.0 606.62 -4442.05 0.01 -4851.52 8.80
5.229e+05
-2.095e+05 8.80 -3.93e-04 780.0 606.62 3565.92 0.01 -1905.69 18.69
3.861e+05
12 76 5.614e+05 21.41 0.05 -0.42 0.0 660.82 -4769.41 0.02 -5260.20 9.28
5.614e+05
-2.246e+05 9.28 -4.29e-04 780.0 660.82 3821.36 0.02 -2119.80 21.41
4.147e+05
13 2 1.425e+05 0.0 -9.47e-03 -0.55 0.0 0.09 0.01 -3.53 -0.01 0.0 -
0.59
-0.59 -396.79 1.31e-05 112.5 0.09 2501.80 -3.53 150.21 -396.79
1.425e+05
13 3 8.357e+04 0.0 -5.70e-03 -0.35 0.0 0.04 7.85e-03 -1.93 -8.11e-03 0.0 -
0.44
-0.44 -216.69 7.08e-06 112.5 0.04 1467.09 -1.93 115.81 -216.69
8.357e+04
13 10 1.351e+05 0.0 -0.07 -0.52 0.0 -23.44 8.25e-03 -354.32 -0.14 0.0 -
0.43
-0.43 -3.986e+04 -1.12e-03 112.5 -23.44 2369.05 -354.32 -1466.83 -3.986e+04
1.351e+05
13 11 4.767e+04 3.937e+04 0.06 -0.28 0.0 23.53 7.61e-03 350.00 0.12 0.0 -
0.46
-0.46 0.0 1.14e-03 112.5 23.53 840.08 350.00 1698.30 3.937e+04
4.767e+04
13 21 2.160e+05 0.0 -0.20 -0.77 0.0 285.74 0.01 -115.70 -0.06 0.0 -
0.07
-0.07 -1.302e+04 1.77e-03 112.5 285.74 3626.13 -115.70 -618.80 -1.302e+04
2.160e+05
13 24 -0.81 1.253e+04 0.20 -0.14 0.0 -285.65 1.57e-03 111.37 0.05 0.0 -
0.81
-3.317e+04 0.0 -1.76e-03 112.5 -285.65 -417.00 111.37 850.27 1.253e+04 -
3.317e+04
13 42 1.180e+05 0.0 -0.05 -0.46 0.0 -14.22 8.86e-03 -216.36 -0.06 0.0 -
0.40
-0.40 -2.434e+04 -6.79e-04 112.5 -14.22 2069.59 -216.36 -847.03 -2.434e+04
1.180e+05
13 43 6.480e+04 2.385e+04 0.04 -0.31 0.0 14.31 7.00e-03 212.04 0.04 0.0 -
0.48
-0.48 0.0 6.95e-04 112.5 14.31 1139.54 212.04 1078.49 2.385e+04
6.480e+04
13 53 1.672e+05 0.0 -0.13 -0.61 0.0 173.84 0.01 -71.22 -0.03 0.0 -
0.20
-0.20 -8012.77 1.08e-03 112.5 173.84 2834.23 -71.22 -331.03 -8012.77
1.672e+05
13 56 1.562e+04 7526.17 0.13 -0.22 0.0 -173.75 3.69e-03 66.90 0.02 0.0 -
0.69
-0.69 0.0 -1.07e-03 112.5 -173.75 374.90 66.90 562.49 7526.17
1.562e+04
13 69 8.553e+04 0.0 -5.82e-03 -0.36 0.0 0.04 7.87e-03 -1.99 -8.11e-03 0.0 -
0.44
-0.44 -223.34 7.31e-06 112.5 0.04 1501.46 -1.99 115.79 -223.34
8.553e+04
13 70 9.139e+04 0.0 -6.18e-03 -0.37 0.0 0.05 7.93e-03 -2.16 -8.11e-03 0.0 -
0.44
-0.44 -243.30 7.97e-06 112.5 0.05 1604.57 -2.16 115.73 -243.30
9.139e+04
13 71 8.553e+04 0.0 -5.82e-03 -0.36 0.0 0.04 7.87e-03 -1.99 -8.11e-03 0.0 -
0.44
-0.44 -223.34 7.31e-06 112.5 0.04 1501.46 -1.99 115.79 -223.34
8.553e+04
13 72 1.051e+05 0.0 -7.01e-03 -0.41 0.0 0.06 8.07e-03 -2.58 -8.10e-03 0.0 -
0.45
-0.45 -289.87 9.53e-06 112.5 0.06 1845.15 -2.58 115.59 -289.87
1.051e+05
13 73 8.553e+04 0.0 -5.82e-03 -0.36 0.0 0.04 7.87e-03 -1.99 -8.11e-03 0.0 -
0.44
-0.44 -223.34 7.31e-06 112.5 0.04 1501.46 -1.99 115.79 -223.34
8.553e+04
13 74 9.531e+04 0.0 -6.41e-03 -0.38 0.0 0.05 7.97e-03 -2.28 -8.11e-03 0.0 -
0.45
-0.45 -256.61 8.42e-06 112.5 0.05 1673.30 -2.28 115.69 -256.61
9.531e+04

13	75	8.553e+04	0.0	-5.82e-03	-0.36	0.0	0.04	7.87e-03	-1.99	-8.11e-03	0.0	-0.44
		-0.44	-223.34	7.31e-06		112.5	0.04	1501.46	-1.99	115.79	-223.34	8.553e+04
13	76	9.139e+04	0.0	-6.18e-03	-0.37	0.0	0.05	7.93e-03	-2.16	-8.11e-03	0.0	-0.44
		-0.44	-243.30	7.97e-06		112.5	0.05	1604.57	-2.16	115.73	-243.30	9.139e+04
14	2	1.862e+05	-69.18	0.02	-0.52	0.0	-68.53	-4096.94	0.0	-282.75	-69.18	1.862e+05
		-2.353e+05	-69.18	5.52e-06		425.0	-68.53	4096.94	0.0	282.75	-69.18	1.862e+05
14	3	1.075e+05	-33.82	0.01	-0.34	0.0	-26.51	-2396.55	0.0	-218.01	-33.82	1.075e+05
		-1.389e+05	-33.82	2.70e-06		425.0	-26.51	2396.55	0.0	218.01	-33.82	1.075e+05
14	9	4.734e+05	2.392e+04	-0.08	-0.56	0.0	-171.38	-1413.14	108.05	-1.586e+04	-4.232e+04	3.505e+05
		-1.039e+05	-4.232e+04	8.33e-04		425.0	-171.38	4777.77	108.05	-1.953e+04	2.392e+04	4.734e+05
14	12	-1.140e+05	4.224e+04	0.08	-0.29	0.0	102.60	-3833.80	-108.05	1.542e+04	4.224e+04	-1.140e+05
		-2.621e+05	-2.400e+04	-8.27e-04		425.0	102.60	469.17	-108.05	1.997e+04	-2.400e+04	-2.369e+05
14	21	7.906e+05	9.807e+04	-0.13	-0.58	0.0	-75.49	-125.72	460.28	-3.253e+04	-1.036e+05	7.537e+05
		-1.373e+05	-1.036e+05	1.23e-03		425.0	-75.49	5404.40	460.28	-3.333e+04	9.807e+04	7.906e+05
14	24	-1.659e+05	1.036e+05	0.13	-0.30	0.0	6.71	-5121.22	-460.28	3.210e+04	1.036e+05	-5.173e+05
		-5.541e+05	-9.815e+04	-1.23e-03		425.0	6.71	-157.47	-460.28	3.377e+04	-9.815e+04	-5.541e+05
14	29	6.322e+05	1.020e+05	-0.10	-0.53	0.0	-75.49	-690.15	478.69	-3.470e+04	-1.076e+05	5.953e+05
		-1.373e+05	-1.076e+05	9.62e-03		425.0	-75.49	4839.98	478.69	-3.550e+04	1.020e+05	6.322e+05
14	32	-1.659e+05	1.075e+05	0.10	-0.30	0.0	6.71	-4556.79	-478.69	3.427e+04	1.075e+05	-3.588e+05
		-4.002e+05	-1.021e+05	-9.62e-03		425.0	6.71	406.96	-478.69	3.594e+04	-1.021e+05	-3.957e+05
14	41	3.343e+05	1.453e+04	-0.05	-0.48	0.0	-117.73	-1887.61	65.71	-9732.40	-2.575e+04	2.595e+05
		-1.226e+05	-2.575e+04	5.06e-04		425.0	-117.73	3933.68	65.71	-1.180e+04	1.453e+04	3.343e+05
14	44	-2.303e+04	2.567e+04	0.05	-0.31	0.0	48.95	-3359.33	-65.71	9296.69	2.567e+04	-2.303e+04
		-2.068e+05	-1.461e+04	-5.00e-04		425.0	48.95	1313.26	-65.71	1.223e+04	-1.461e+04	-9.779e+04
14	53	5.273e+05	5.956e+04	-0.08	-0.49	0.0	-59.39	-1104.18	279.63	-1.986e+04	-6.299e+04	5.048e+05
		-1.429e+05	-6.299e+04	7.48e-04		425.0	-59.39	4315.06	279.63	-2.018e+04	5.956e+04	5.273e+05
14	56	-1.603e+05	6.291e+04	0.08	-0.30	0.0	-9.39	-4142.76	-279.63	1.943e+04	6.291e+04	-2.684e+05
		-3.154e+05	-5.964e+04	-7.43e-04		425.0	-9.39	931.88	-279.63	2.061e+04	-5.964e+04	-2.908e+05
14	61	4.308e+05	6.200e+04	-0.06	-0.46	0.0	-59.39	-1448.33	291.09	-2.119e+04	-6.542e+04	4.083e+05
		-1.429e+05	-6.542e+04	5.83e-03		425.0	-59.39	3970.91	291.09	-2.151e+04	6.200e+04	4.308e+05
14	64	-1.603e+05	6.534e+04	0.06	-0.30	0.0	-9.39	-3798.61	-291.09	2.076e+04	6.534e+04	-1.719e+05
		-2.489e+05	-6.208e+04	-5.83e-03		425.0	-9.39	1276.03	-291.09	2.194e+04	-6.208e+04	-1.943e+05
14	69	1.102e+05	-35.28	0.01	-0.34	0.0	-28.48	-2453.28	0.0	-217.97	-35.28	1.102e+05
		-1.421e+05	-35.28	2.81e-06		425.0	-28.48	2453.28	0.0	217.97	-35.28	1.102e+05
14	70	1.182e+05	-39.65	0.01	-0.35	0.0	-34.39	-2623.47	0.0	-217.85	-39.65	1.182e+05
		-1.516e+05	-39.65	3.16e-06		425.0	-34.39	2623.47	0.0	217.85	-39.65	1.182e+05
14	71	1.102e+05	-35.28	0.01	-0.34	0.0	-28.48	-2453.28	0.0	-217.97	-35.28	1.102e+05
		-1.421e+05	-35.28	2.81e-06		425.0	-28.48	2453.28	0.0	217.97	-35.28	1.102e+05
14	72	1.370e+05	-49.85	0.01	-0.39	0.0	-48.17	-3020.58	0.0	-217.59	-49.85	

1.370e+05
-1.737e+05 -49.85 3.98e-06 425.0 -48.17 3020.58 0.0 217.59 -49.85
1.370e+05
14 73 1.102e+05 -35.28 0.01 -0.34 0.0 -28.48 -2453.28 0.0 -217.97 -35.28
1.102e+05
-1.421e+05 -35.28 2.81e-06 425.0 -28.48 2453.28 0.0 217.97 -35.28
1.102e+05
14 74 1.236e+05 -42.57 0.01 -0.36 0.0 -38.33 -2736.93 0.0 -217.78 -42.57
1.236e+05
-1.579e+05 -42.57 3.40e-06 425.0 -38.33 2736.93 0.0 217.78 -42.57
1.236e+05
14 75 1.102e+05 -35.28 0.01 -0.34 0.0 -28.48 -2453.28 0.0 -217.97 -35.28
1.102e+05
-1.421e+05 -35.28 2.81e-06 425.0 -28.48 2453.28 0.0 217.97 -35.28
1.102e+05
14 76 1.182e+05 -39.65 0.01 -0.35 0.0 -34.39 -2623.47 0.0 -217.85 -39.65
1.182e+05
-1.516e+05 -39.65 3.16e-06 425.0 -34.39 2623.47 0.0 217.85 -39.65
1.182e+05
15 2 1.425e+05 0.0 -9.47e-03 -0.55 0.0 0.09 -2501.80 3.53 -150.21 -396.79
1.425e+05
-0.59 -396.79 -1.31e-05 112.5 0.09 -0.01 3.53 0.01 0.0 -
0.59
15 3 8.357e+04 0.0 -5.70e-03 -0.35 0.0 0.04 -1467.09 1.93 -115.81 -216.69
8.357e+04
-0.44 -216.69 -7.08e-06 112.5 0.04 -7.85e-03 1.93 8.11e-03 0.0 -
0.44
15 17 1.590e+05 0.0 -0.10 -0.59 0.0 -23.44 -458.28 354.32 -1925.50 -3.986e+04
1.590e+05
-0.20 -3.986e+04 1.12e-03 112.5 -23.44 -3.62e-03 354.32 -0.13 0.0 -
0.20
15 20 2.378e+04 3.937e+04 0.08 -0.23 0.0 23.53 -2750.85 -350.00 1694.04 3.937e+04
2.378e+04
-0.69 0.0 -1.14e-03 112.5 23.53 -0.01 -350.00 0.15 0.0 -
0.69
15 25 2.098e+05 0.0 -0.08 -0.75 0.0 -264.30 317.63 90.51 -872.75 -1.018e+04
2.098e+05
-0.07 -1.018e+04 1.69e-03 112.5 -264.30 -1.47e-03 90.51 -0.05 0.0 -
0.07
15 26 233.00 0.0 -0.07 -0.22 0.0 285.74 -3052.90 115.70 -398.90 -1.302e+04
233.00
-2416.71 -1.302e+04 -1.77e-03 112.5 285.74 -0.01 115.70 -0.02 0.0 -
0.74
15 27 1.826e+05 1.253e+04 0.08 -0.67 0.0 -285.65 -156.23 -111.37 167.43 1.253e+04
1.826e+05
-0.15 0.0 1.76e-03 112.5 -285.65 -2.96e-03 -111.37 0.03 0.0 -
0.15
15 28 -0.82 9696.28 0.07 -0.15 0.0 264.39 -3526.76 -86.19 641.29 9696.28 -
2.702e+04
-2.702e+04 0.0 -1.70e-03 112.5 264.39 -0.01 -86.19 0.07 0.0 -
0.82
15 49 1.325e+05 0.0 -0.06 -0.51 0.0 -14.22 -907.29 216.36 -1216.70 -2.434e+04
1.325e+05
-0.34 -2.434e+04 6.79e-04 112.5 -14.22 -6.22e-03 216.36 -0.05 0.0 -
0.34
15 52 5.026e+04 2.385e+04 0.05 -0.28 0.0 14.31 -2301.84 -212.04 985.24 2.385e+04
5.026e+04
-0.55 0.0 -6.95e-04 112.5 14.31 -9.64e-03 -212.04 0.07 0.0 -
0.55
15 57 1.634e+05 0.0 -0.05 -0.60 0.0 -160.76 -435.35 55.92 -576.17 -6290.56
1.634e+05
-0.21 -6290.56 1.03e-03 112.5 -160.76 -3.93e-03 55.92 -0.02 0.0 -
0.21
15 58 3.594e+04 0.0 -0.04 -0.27 0.0 173.84 -2485.54 71.22 -288.09 -8012.77
3.594e+04
-0.64 -8012.77 -1.08e-03 112.5 173.84 -0.01 71.22 -6.44e-04 0.0 -
0.64
15 59 1.468e+05 7526.17 0.05 -0.55 0.0 -173.75 -723.59 -66.90 56.63 7526.17
1.468e+05
-0.24 0.0 1.07e-03 112.5 -173.75 -4.48e-03 -66.90 0.02 0.0 -
0.24
15 60 1.937e+04 5803.96 0.04 -0.23 0.0 160.85 -2773.78 -51.59 344.71 5803.96
1.937e+04
-0.68 0.0 -1.04e-03 112.5 160.85 -0.01 -51.59 0.03 0.0 -
0.68
15 69 8.553e+04 0.0 -5.82e-03 -0.36 0.0 0.04 -1501.46 1.99 -115.79 -223.34
8.553e+04

		-0.44	-223.34	-7.31e-06		112.5	0.04	-7.87e-03	1.99	8.11e-03	0.0	-0.44
15	70	9.139e+04	0.0	-6.18e-03	-0.37	0.0	0.05	-1604.57	2.16	-115.73	-243.30	9.139e+04
		-0.44	-243.30	-7.97e-06		112.5	0.05	-7.93e-03	2.16	8.11e-03	0.0	-0.44
15	71	8.553e+04	0.0	-5.82e-03	-0.36	0.0	0.04	-1501.46	1.99	-115.79	-223.34	8.553e+04
		-0.44	-223.34	-7.31e-06		112.5	0.04	-7.87e-03	1.99	8.11e-03	0.0	-0.44
15	72	1.051e+05	0.0	-7.01e-03	-0.41	0.0	0.06	-1845.15	2.58	-115.59	-289.87	1.051e+05
		-0.45	-289.87	-9.53e-06		112.5	0.06	-8.07e-03	2.58	8.10e-03	0.0	-0.45
15	73	8.553e+04	0.0	-5.82e-03	-0.36	0.0	0.04	-1501.46	1.99	-115.79	-223.34	8.553e+04
		-0.44	-223.34	-7.31e-06		112.5	0.04	-7.87e-03	1.99	8.11e-03	0.0	-0.44
15	74	9.531e+04	0.0	-6.41e-03	-0.38	0.0	0.05	-1673.30	2.28	-115.69	-256.61	9.531e+04
		-0.45	-256.61	-8.42e-06		112.5	0.05	-7.97e-03	2.28	8.11e-03	0.0	-0.45
15	75	8.553e+04	0.0	-5.82e-03	-0.36	0.0	0.04	-1501.46	1.99	-115.79	-223.34	8.553e+04
		-0.44	-223.34	-7.31e-06		112.5	0.04	-7.87e-03	1.99	8.11e-03	0.0	-0.44
15	76	9.139e+04	0.0	-6.18e-03	-0.37	0.0	0.05	-1604.57	2.16	-115.73	-243.30	9.139e+04
		-0.44	-243.30	-7.97e-06		112.5	0.05	-7.93e-03	2.16	8.11e-03	0.0	-0.44
16	2	7.193e+05	480.56	0.06	-0.53	0.0	446.97	-5452.93	3.05	-2.175e+04	-387.70	7.193e+05
		-6.376e+04	-387.70	-9.18e-04		285.0	446.97	-617.60	3.05	-2.045e+04	480.56	6.376e+04
16	3	4.107e+05	289.67	0.03	-0.34	0.0	245.66	-3150.39	1.85	-1.209e+04	-237.69	4.107e+05
		-3.015e+04	-237.69	-5.11e-04		285.0	245.66	-258.01	1.85	-1.129e+04	289.67	3.015e+04
16	6	5.962e+05	1.939e+04	0.03	-0.45	0.0	1249.25	-1797.63	121.15	-2.313e+04	-1.283e+04	5.612e+05
		2.277e+05	-1.283e+04	-4.29e-03		285.0	1249.25	2107.61	121.15	-2.230e+04	1.939e+04	5.962e+05
16	7	3.460e+05	1.232e+04	0.09	-0.34	0.0	-698.91	-5130.85	-117.16	-3842.81	1.232e+04	3.460e+05
		-6.679e+05	-1.876e+04	3.15e-03		285.0	-698.91	-2754.12	-117.16	-2951.88	-1.876e+04	6.679e+05
16	12	2.282e+05	3.629e+04	0.15	-0.24	0.0	-501.31	-6273.74	-237.41	3.299e+04	3.629e+04	2.282e+05
		-6.927e+05	-3.787e+04	-8.16e-04		285.0	-501.31	-3142.39	-237.41	3.100e+04	-3.787e+04	6.927e+05
16	21	7.237e+05	4.572e+04	-0.14	-0.62	0.0	164.12	-653.32	327.40	-9.287e+04	-5.560e+04	7.237e+05
		1.418e+05	-5.560e+04	5.62e-03		285.0	164.12	1220.69	327.40	-8.553e+04	4.572e+04	1.902e+05
16	24	1.834e+05	5.509e+04	0.17	-0.19	0.0	386.22	-6275.16	-323.40	6.589e+04	5.509e+04	1.834e+05
		-2.619e+05	-4.509e+04	-6.76e-03		285.0	386.22	-1867.20	-323.40	6.027e+04	-4.509e+04	2.619e+05
16	25	7.315e+05	4.452e+04	-0.13	-0.60	0.0	143.10	-542.01	315.60	-9.306e+04	-5.346e+04	7.315e+05
		1.351e+05	-5.346e+04	7.14e-03		285.0	143.10	1028.44	315.60	-8.645e+04	4.452e+04	1.705e+05
16	38	5.190e+05	1.197e+04	0.02	-0.42	0.0	867.57	-2450.34	74.88	-1.938e+04	-7951.86	5.190e+05
		2.197e+05	-7951.86	-2.84e-03		285.0	867.57	1155.53	74.88	-1.854e+04	1.197e+04	3.487e+05
16	39	3.881e+05	7440.10	0.07	-0.33	0.0	-317.23	-4478.14	-70.88	-7595.41	7440.10	3.881e+05
		-4.204e+05	-1.135e+04	1.70e-03		285.0	-317.23	-1802.04	-70.88	-6714.44	-1.135e+04	4.204e+05
16	44	3.165e+05	2.191e+04	0.11	-0.27	0.0	-197.42	-5173.04	-142.95	1.475e+04	2.191e+04	3.165e+05
		-4.353e+05	-2.285e+04	-7.32e-04		285.0	-197.42	-2037.33	-142.95	1.388e+04	-2.285e+04	4.353e+05
16	53	6.178e+05	2.774e+04	-0.10	-0.52	0.0	208.14	-1754.81	198.60	-6.169e+04	-3.377e+04	6.178e+05
		8.766e+04	-3.377e+04	3.20e-03		285.0	208.14	615.56	198.60	-5.688e+04	2.774e+04	

1.016e+05												
16	56	2.893e+05	3.326e+04	0.12	-0.25	0.0	342.19	-5173.68	-194.60	3.471e+04	3.326e+04	
2.893e+05												
		-1.733e+05	-2.712e+04	-4.34e-03		285.0	342.19	-1262.07	-194.60	3.163e+04	-2.712e+04	-
1.733e+05												
16	57	6.226e+05	2.701e+04	-0.10	-0.51	0.0	195.35	-1687.08	191.42	-6.181e+04	-3.246e+04	
6.226e+05												
		8.023e+04	-3.246e+04	4.12e-03		285.0	195.35	498.60	191.42	-5.744e+04	2.701e+04	
8.961e+04												
16	69	4.214e+05	295.68	0.04	-0.34	0.0	253.04	-3228.85	1.89	-1.244e+04	-242.24	
4.214e+05												
		-3.157e+04	-242.24	-5.26e-04		285.0	253.04	-274.32	1.89	-1.163e+04	295.68	-
3.157e+04												
16	70	4.536e+05	313.71	0.04	-0.36	0.0	275.17	-3464.24	2.00	-1.349e+04	-255.88	
4.536e+05												
		-3.583e+04	-255.88	-5.70e-04		285.0	275.17	-323.26	2.00	-1.263e+04	313.71	-
3.583e+04												
16	71	4.214e+05	295.68	0.04	-0.34	0.0	253.04	-3228.85	1.89	-1.244e+04	-242.24	
4.214e+05												
		-3.157e+04	-242.24	-5.26e-04		285.0	253.04	-274.32	1.89	-1.163e+04	295.68	-
3.157e+04												
16	72	5.286e+05	355.79	0.05	-0.40	0.0	326.80	-4013.49	2.26	-1.593e+04	-287.73	
5.286e+05												
		-4.577e+04	-287.73	-6.72e-04		285.0	326.80	-437.43	2.26	-1.496e+04	355.79	-
4.577e+04												
16	73	4.214e+05	295.68	0.04	-0.34	0.0	253.04	-3228.85	1.89	-1.244e+04	-242.24	
4.214e+05												
		-3.157e+04	-242.24	-5.26e-04		285.0	253.04	-274.32	1.89	-1.163e+04	295.68	-
3.157e+04												
16	74	4.750e+05	325.73	0.04	-0.37	0.0	289.92	-3621.17	2.07	-1.418e+04	-264.98	
4.750e+05												
		-3.867e+04	-264.98	-5.99e-04		285.0	289.92	-355.88	2.07	-1.329e+04	325.73	-
3.867e+04												
16	75	4.214e+05	295.68	0.04	-0.34	0.0	253.04	-3228.85	1.89	-1.244e+04	-242.24	
4.214e+05												
		-3.157e+04	-242.24	-5.26e-04		285.0	253.04	-274.32	1.89	-1.163e+04	295.68	-
3.157e+04												
16	76	4.536e+05	313.71	0.04	-0.36	0.0	275.17	-3464.24	2.00	-1.349e+04	-255.88	
4.536e+05												
		-3.583e+04	-255.88	-5.70e-04		285.0	275.17	-323.26	2.00	-1.263e+04	313.71	-
3.583e+04												
17	2	6.945e+04	0.0	6.51e-03	-0.38	0.0	0.09	-5.26e-03	-4.29	0.10	0.0	
0.30												
		0.30	-482.41	4.07e-06		112.5	0.09	1213.24	-4.29	-1684.25	-482.41	
6.945e+04												
17	3	4.374e+04	0.0	4.05e-03	-0.26	0.0	0.05	-4.38e-03	-2.34	0.06	0.0	
0.25												
		0.25	-263.71	1.93e-06		112.5	0.05	764.28	-2.34	-931.85	-263.71	
4.374e+04												
17	4	5.465e+04	0.0	5.13e-03	-0.29	0.0	0.07	-4.00e-03	-3.42	0.08	0.0	
0.23												
		0.23	-384.74	3.29e-06		112.5	0.07	954.75	-3.42	-1341.83	-384.74	
5.465e+04												
17	10	7.515e+04	0.0	0.05	-0.42	0.0	-0.17	-9.67e-04	-353.86	-0.12	0.0	
0.42												
		0.42	-3.981e+04	-7.23e-04		112.5	-0.17	1381.28	-353.86	-4630.28	-3.981e+04	
7.515e+04												
17	11	1.815e+04	3.922e+04	-0.06	-0.23	0.0	0.27	-7.59e-03	348.60	0.24	0.0	
0.06												
		0.06	0.0	7.28e-04		112.5	0.27	248.86	348.60	2547.91	3.922e+04	
1.815e+04												
17	25	1.604e+05	0.0	-0.15	-0.63	0.0	235.48	-2.19e-04	-87.39	-0.02	0.0	
0.44												
		0.44	-9831.30	2.47e-03		112.5	235.48	2689.02	-87.39	-2349.82	-9831.30	
1.604e+05												
17	26	0.27	0.0	0.15	-0.18	0.0	-265.68	-4.43e-03	-101.41	0.02	0.0	
0.27												
		-1.753e+04	-1.141e+04	-1.23e-03		112.5	-265.68	-193.83	-101.41	-1809.45	-1.141e+04	-
1.753e+04												
17	27	1.108e+05	1.082e+04	-0.15	-0.46	0.0	265.78	-4.13e-03	96.15	0.11	0.0	
0.22												
		0.22	0.0	1.24e-03		112.5	265.78	1823.96	96.15	-272.91	1.082e+04	
1.108e+05												
17	28	0.05	9239.33	0.15	0.09	0.0	-235.37	-8.34e-03	82.13	0.14	0.0	
0.05												
		-6.707e+04	0.0	-2.47e-03		112.5	-235.37	-1058.88	82.13	267.45	9239.33	-
6.707e+04												

17	42	6.399e+04	0.0	0.03	-0.35	0.0	1.82e-03	-8.50e-04	-216.26	-0.10	0.0	0.44
		0.44	-2.433e+04	-4.36e-04		112.5	1.82e-03	1159.48	-216.26	-3224.61	-2.433e+04	6.399e+04
17	43	2.932e+04	2.374e+04	-0.04	-0.23	0.0	0.10	-7.71e-03	211.00	0.22	0.0	0.05
		0.05	0.0	4.41e-04		112.5	0.10	470.66	211.00	1142.25	2.374e+04	2.932e+04
17	57	1.158e+05	0.0	-0.09	-0.49	0.0	143.25	-2.87e-03	-54.21	0.02	0.0	0.33
		0.33	-6098.27	1.50e-03		112.5	143.25	1955.06	-54.21	-1836.59	-6098.27	1.158e+05
17	58	7608.28	0.0	0.09	-0.21	0.0	-161.58	-5.40e-03	-62.71	0.04	0.0	0.17
		0.17	-7054.74	-7.45e-04		112.5	-161.58	201.29	-62.71	-1509.23	-7054.74	7608.28
17	59	8.569e+04	6462.77	-0.09	-0.39	0.0	161.68	-3.15e-03	57.45	0.09	0.0	0.32
		0.32	0.0	7.49e-04		112.5	161.68	1428.84	57.45	-573.13	6462.77	8.569e+04
17	60	0.16	5506.30	0.09	-0.11	0.0	-143.14	-5.69e-03	48.94	0.11	0.0	0.16
		-2.253e+04	0.0	-1.50e-03		112.5	-143.14	-324.92	48.94	-245.77	5506.30	-2.253e+04
17	69	4.447e+04	0.0	4.12e-03	-0.26	0.0	0.05	-4.35e-03	-2.42	0.06	0.0	0.25
		0.25	-271.78	2.02e-06		112.5	0.05	776.97	-2.42	-959.18	-271.78	4.447e+04
17	70	4.665e+04	0.0	4.34e-03	-0.27	0.0	0.05	-4.28e-03	-2.63	0.06	0.0	0.24
		0.24	-295.98	2.29e-06		112.5	0.05	815.07	-2.63	-1041.18	-295.98	4.665e+04
17	71	4.447e+04	0.0	4.12e-03	-0.26	0.0	0.05	-4.35e-03	-2.42	0.06	0.0	0.25
		0.25	-271.78	2.02e-06		112.5	0.05	776.97	-2.42	-959.18	-271.78	4.447e+04
17	72	5.174e+04	0.0	4.84e-03	-0.28	0.0	0.06	-4.10e-03	-3.13	0.07	0.0	0.23
		0.23	-352.47	2.92e-06		112.5	0.06	903.95	-3.13	-1232.51	-352.47	5.174e+04
17	73	4.447e+04	0.0	4.12e-03	-0.26	0.0	0.05	-4.35e-03	-2.42	0.06	0.0	0.25
		0.25	-271.78	2.02e-06		112.5	0.05	776.97	-2.42	-959.18	-271.78	4.447e+04
17	74	4.811e+04	0.0	4.48e-03	-0.27	0.0	0.06	-4.23e-03	-2.77	0.07	0.0	0.24
		0.24	-312.12	2.47e-06		112.5	0.06	840.46	-2.77	-1095.84	-312.12	4.811e+04
17	75	4.447e+04	0.0	4.12e-03	-0.26	0.0	0.05	-4.35e-03	-2.42	0.06	0.0	0.25
		0.25	-271.78	2.02e-06		112.5	0.05	776.97	-2.42	-959.18	-271.78	4.447e+04
17	76	4.665e+04	0.0	4.34e-03	-0.27	0.0	0.05	-4.28e-03	-2.63	0.06	0.0	0.24
		0.24	-295.98	2.29e-06		112.5	0.05	815.07	-2.63	-1041.18	-295.98	4.665e+04
18	2	6.829e+04	-131.45	0.01	-0.36	0.0	-65.42	-1908.37	0.0	3170.38	-131.45	6.829e+04
		-1.267e+05	-131.45	1.05e-05		425.0	-65.42	1908.37	0.0	-3170.38	-131.45	6.829e+04
18	3	4.362e+04	-68.68	6.83e-03	-0.25	0.0	-33.81	-1204.34	0.0	1754.09	-68.68	4.362e+04
		-7.946e+04	-68.68	5.48e-06		425.0	-33.81	1204.34	0.0	-1754.09	-68.68	4.362e+04
18	9	3.953e+05	2453.96	-0.04	-0.57	0.0	71.85	1718.86	23.74	-2.156e+04	-2.372e+04	3.953e+05
		-2886.58	-2.372e+04	-1.10e-03		425.0	71.85	3200.36	23.74	-1.282e+04	2453.96	1.888e+05
18	12	-9.623e+04	2.356e+04	0.04	-0.10	0.0	-149.41	-4286.01	-23.74	2.548e+04	2.356e+04	-3.027e+05
		-3.027e+05	-2610.83	1.10e-03		425.0	-149.41	-633.20	-23.74	8899.29	-2610.83	-9.623e+04
18	21	5.233e+05	7.160e+04	-0.11	-0.49	0.0	-5.59	871.10	340.85	-3.916e+04	-7.809e+04	5.233e+05
		-5.130e+04	-7.809e+04	-4.63e-03		425.0	-5.59	3112.56	340.85	-3.929e+04	7.160e+04	4.614e+05
18	24	-1.184e+05	7.793e+04	0.11	-0.17	0.0	-71.97	-3438.26	-340.85	4.308e+04	7.793e+04	-

4.307e+05												
		-4.307e+05	-7.176e+04	4.63e-03		425.0	-71.97	-545.40	-340.85	3.537e+04	-7.176e+04	-
3.688e+05												
18	41	2.584e+05	1435.42	-0.03	-0.45	0.0	28.52	541.57	14.33	-1.233e+04	-1.442e+04	
2.584e+05												
		-2.812e+04	-1.442e+04	-6.78e-04		425.0	28.52	2448.25	14.33	-8550.62	1435.42	
1.328e+05												
18	44	-4.020e+04	1.426e+04	0.03	-0.15	0.0	-106.08	-3108.73	-14.33	1.625e+04	1.426e+04	-
1.658e+05												
		-1.755e+05	-1592.29	6.78e-04		425.0	-106.08	118.91	-14.33	4630.85	-1592.29	-
4.020e+04												
18	53	3.364e+05	4.341e+04	-0.07	-0.40	0.0	-18.59	26.65	206.82	-2.297e+04	-4.742e+04	
3.364e+05												
		-6.445e+04	-4.742e+04	-2.81e-03		425.0	-18.59	2395.66	206.82	-2.458e+04	4.341e+04	
2.987e+05												
18	56	-1.053e+05	4.726e+04	0.07	-0.19	0.0	-58.97	-2593.81	-206.82	2.689e+04	4.726e+04	-
2.438e+05												
		-2.438e+05	-4.357e+04	2.81e-03		425.0	-58.97	171.50	-206.82	2.066e+04	-4.357e+04	-
2.061e+05												
18	69	4.429e+04	-71.12	6.95e-03	-0.25	0.0	-35.05	-1224.15	0.0	1805.54	-71.12	
4.429e+04												
		-8.081e+04	-71.12	5.67e-06		425.0	-35.05	1224.15	0.0	-1805.54	-71.12	
4.429e+04												
18	70	4.630e+04	-78.43	7.30e-03	-0.25	0.0	-38.78	-1283.58	0.0	1959.88	-78.43	
4.630e+04												
		-8.487e+04	-78.43	6.26e-06		425.0	-38.78	1283.58	0.0	-1959.88	-78.43	
4.630e+04												
18	71	4.429e+04	-71.12	6.95e-03	-0.25	0.0	-35.05	-1224.15	0.0	1805.54	-71.12	
4.429e+04												
		-8.081e+04	-71.12	5.67e-06		425.0	-35.05	1224.15	0.0	-1805.54	-71.12	
4.429e+04												
18	72	5.098e+04	-95.49	8.13e-03	-0.27	0.0	-47.46	-1422.26	0.0	2320.02	-95.49	
5.098e+04												
		-9.433e+04	-95.49	7.62e-06		425.0	-47.46	1422.26	0.0	-2320.02	-95.49	
5.098e+04												
18	73	4.429e+04	-71.12	6.95e-03	-0.25	0.0	-35.05	-1224.15	0.0	1805.54	-71.12	
4.429e+04												
		-8.081e+04	-71.12	5.67e-06		425.0	-35.05	1224.15	0.0	-1805.54	-71.12	
4.429e+04												
18	74	4.764e+04	-83.31	7.54e-03	-0.26	0.0	-41.26	-1323.20	0.0	2062.78	-83.31	
4.764e+04												
		-8.757e+04	-83.31	6.65e-06		425.0	-41.26	1323.20	0.0	-2062.78	-83.31	
4.764e+04												
18	75	4.429e+04	-71.12	6.95e-03	-0.25	0.0	-35.05	-1224.15	0.0	1805.54	-71.12	
4.429e+04												
		-8.081e+04	-71.12	5.67e-06		425.0	-35.05	1224.15	0.0	-1805.54	-71.12	
4.429e+04												
18	76	4.630e+04	-78.43	7.30e-03	-0.25	0.0	-38.78	-1283.58	0.0	1959.88	-78.43	
4.630e+04												
		-8.487e+04	-78.43	6.26e-06		425.0	-38.78	1283.58	0.0	-1959.88	-78.43	
4.630e+04												
19	2	7.193e+05	387.70	0.06	-0.53	0.0	446.97	-5452.93	-3.05	2.175e+04	387.70	
7.193e+05												
		-6.376e+04	-480.56	9.18e-04		285.0	446.97	-617.60	-3.05	2.045e+04	-480.56	-
6.376e+04												
19	3	4.107e+05	237.69	0.03	-0.34	0.0	245.66	-3150.39	-1.85	1.209e+04	237.69	
4.107e+05												
		-3.015e+04	-289.67	5.11e-04		285.0	245.66	-258.01	-1.85	1.129e+04	-289.67	-
3.015e+04												
19	5	7.508e+05	5668.02	-0.07	-0.55	0.0	1179.19	190.28	-81.82	-3.350e+04	5668.02	
7.508e+05												
		2.636e+05	-1.538e+04	-7.58e-04		285.0	1179.19	1672.81	-81.82	-3.464e+04	-1.538e+04	
5.309e+05												
19	13	7.302e+05	1.283e+04	-0.06	-0.54	0.0	1249.25	-113.71	-121.15	-3.343e+04	1.283e+04	
7.302e+05												
		2.715e+05	-1.939e+04	4.29e-03		285.0	1249.25	2351.53	-121.15	-3.217e+04	-1.939e+04	
6.084e+05												
19	16	2.027e+05	1.876e+04	0.14	-0.26	0.0	-698.91	-6814.77	117.16	6.041e+04	-1.232e+04	
1.769e+05												
		-6.800e+05	-1.232e+04	-3.15e-03		285.0	-698.91	-2998.04	117.16	5.742e+04	1.876e+04	-
6.800e+05												
19	20	2.091e+05	2.150e+04	0.14	-0.27	0.0	-674.53	-6685.58	156.34	5.514e+04	-1.674e+04	
1.901e+05												
		-6.848e+05	-1.674e+04	-3.10e-03		285.0	-674.53	-2937.85	156.34	5.284e+04	2.150e+04	-
6.848e+05												
19	26	2.987e+05	5.560e+04	-0.02	-0.25	0.0	164.12	-4770.02	-327.40	7.590e+04	5.560e+04	
2.987e+05												

		1.210e+05	-4.572e+04	-5.62e-03		285.0	164.12	-335.50	-327.40	6.919e+04	-4.572e+04	1.210e+05
19	27	6.085e+05	4.509e+04	0.07	-0.55	0.0	386.22	-2158.46	323.40	-4.892e+04	-5.509e+04	6.085e+05
		-1.927e+05	-5.509e+04	6.76e-03		285.0	386.22	-311.01	323.40	-4.393e+04	4.509e+04	-1.927e+05
19	37	6.344e+05	3591.42	-0.03	-0.44	0.0	824.93	-1241.25	-50.94	-1.507e+04	3591.42	6.344e+05
		2.232e+05	-9531.46	-2.36e-04		285.0	824.93	890.74	-50.94	-1.609e+04	-9531.46	3.089e+05
19	45	6.218e+05	7951.86	-0.03	-0.47	0.0	867.57	-1426.21	-74.88	-1.503e+04	7951.86	6.218e+05
		2.308e+05	-1.197e+04	2.84e-03		285.0	867.57	1303.68	-74.88	-1.459e+04	-1.197e+04	3.560e+05
19	48	2.853e+05	1.135e+04	0.10	-0.28	0.0	-317.23	-5502.27	70.88	4.200e+04	-7440.10	2.853e+05
		-4.277e+05	-7440.10	-1.70e-03		285.0	-317.23	-1950.20	70.88	3.984e+04	1.135e+04	-4.277e+05
19	52	2.934e+05	1.301e+04	0.10	-0.29	0.0	-302.33	-5423.63	95.00	3.879e+04	-1.015e+04	2.934e+05
		-4.305e+05	-1.015e+04	-1.68e-03		285.0	-302.33	-1912.91	95.00	3.705e+04	1.301e+04	-4.305e+05
19	58	3.594e+05	3.377e+04	-0.03	-0.29	0.0	208.14	-4258.10	-198.60	5.137e+04	3.377e+04	3.594e+05
		5.967e+04	-2.774e+04	-3.20e-03		285.0	208.14	-330.35	-198.60	4.694e+04	-2.774e+04	5.967e+04
19	59	5.477e+05	2.712e+04	0.06	-0.47	0.0	342.19	-2670.38	194.60	-2.439e+04	-3.326e+04	5.477e+05
		-1.313e+05	-3.326e+04	4.34e-03		285.0	342.19	-316.16	194.60	-2.169e+04	2.712e+04	-1.313e+05
19	69	4.214e+05	242.24	0.04	-0.34	0.0	253.04	-3228.85	-1.89	1.244e+04	242.24	4.214e+05
		-3.157e+04	-295.68	5.26e-04		285.0	253.04	-274.32	-1.89	1.163e+04	-295.68	-3.157e+04
19	70	4.536e+05	255.88	0.04	-0.36	0.0	275.17	-3464.24	-2.00	1.349e+04	255.88	4.536e+05
		-3.583e+04	-313.71	5.70e-04		285.0	275.17	-323.26	-2.00	1.263e+04	-313.71	-3.583e+04
19	71	4.214e+05	242.24	0.04	-0.34	0.0	253.04	-3228.85	-1.89	1.244e+04	242.24	4.214e+05
		-3.157e+04	-295.68	5.26e-04		285.0	253.04	-274.32	-1.89	1.163e+04	-295.68	-3.157e+04
19	72	5.286e+05	287.73	0.05	-0.40	0.0	326.80	-4013.49	-2.26	1.593e+04	287.73	5.286e+05
		-4.577e+04	-355.79	6.72e-04		285.0	326.80	-437.43	-2.26	1.496e+04	-355.79	-4.577e+04
19	73	4.214e+05	242.24	0.04	-0.34	0.0	253.04	-3228.85	-1.89	1.244e+04	242.24	4.214e+05
		-3.157e+04	-295.68	5.26e-04		285.0	253.04	-274.32	-1.89	1.163e+04	-295.68	-3.157e+04
19	74	4.750e+05	264.98	0.04	-0.37	0.0	289.92	-3621.17	-2.07	1.418e+04	264.98	4.750e+05
		-3.867e+04	-325.73	5.99e-04		285.0	289.92	-355.88	-2.07	1.329e+04	-325.73	-3.867e+04
19	75	4.214e+05	242.24	0.04	-0.34	0.0	253.04	-3228.85	-1.89	1.244e+04	242.24	4.214e+05
		-3.157e+04	-295.68	5.26e-04		285.0	253.04	-274.32	-1.89	1.163e+04	-295.68	-3.157e+04
19	76	4.536e+05	255.88	0.04	-0.36	0.0	275.17	-3464.24	-2.00	1.349e+04	255.88	4.536e+05
		-3.583e+04	-313.71	5.70e-04		285.0	275.17	-323.26	-2.00	1.263e+04	-313.71	-3.583e+04
20	2	6.945e+04	0.0	6.51e-03	-0.38	0.0	0.09	-1213.24	4.29	1684.25	-482.41	6.945e+04
		0.30	-482.41	-3.79e-06		112.5	0.09	5.26e-03	4.29	-0.10	0.0	0.30
20	3	4.374e+04	0.0	4.05e-03	-0.26	0.0	0.05	-764.28	2.34	931.85	-263.71	4.374e+04
		0.25	-263.71	-1.71e-06		112.5	0.05	4.38e-03	2.34	-0.06	0.0	0.25
20	4	5.465e+04	0.0	5.13e-03	-0.29	0.0	0.07	-954.75	3.42	1341.83	-384.74	5.465e+04
		0.23	-384.74	-3.07e-06		112.5	0.07	4.00e-03	3.42	-0.08	0.0	0.23
20	5	1.751e+05	0.0	-0.04	-0.69	0.0	-125.63	1368.31	310.63	-2432.60	-3.495e+04	1.751e+05
		0.61	-3.495e+04	-1.51e-03		112.5	-125.63	0.01	310.63	-0.28	0.0	

0.61
20 8 -0.13 3.435e+04 0.04 0.15 0.0 125.73 -2998.45 -305.37 4514.96 3.435e+04 -
8.179e+04
-8.179e+04 0.0 1.50e-03 112.5 125.73 -2.57e-03 -305.37 0.15 0.0 -
0.13
20 17 1.368e+05 0.0 -0.01 -0.57 0.0 -0.17 754.99 353.86 -2590.61 -3.981e+04
1.368e+05
0.54 -3.981e+04 7.23e-04 112.5 -0.17 9.42e-03 353.86 -0.25 0.0
0.54
20 20 -0.05 3.922e+04 5.99e-03 -0.06 0.0 0.27 -2385.13 -348.60 4672.97 3.922e+04 -
4.347e+04
-4.347e+04 0.0 -7.28e-04 112.5 0.27 -8.62e-04 -348.60 0.12 0.0 -
0.05
20 21 1.661e+05 0.0 -0.05 -0.65 0.0 -265.68 1151.64 101.41 -246.82 -1.141e+04
1.661e+05
0.43 -1.141e+04 1.23e-03 112.5 -265.68 8.25e-03 101.41 -0.14 0.0
0.43
20 24 0.06 1.082e+04 0.05 0.11 0.0 265.78 -2781.78 -96.15 2329.18 1.082e+04 -
7.282e+04
-7.282e+04 0.0 -1.24e-03 112.5 265.78 3.09e-04 -96.15 0.02 0.0
0.06
20 37 1.248e+05 0.0 -0.03 -0.52 0.0 -76.39 513.13 190.00 -1071.85 -2.137e+04
1.248e+05
0.31 -2.137e+04 -9.19e-04 112.5 -76.39 5.45e-03 190.00 -0.18 0.0
0.31
20 40 0.18 2.078e+04 0.02 -0.08 0.0 76.50 -2143.27 -184.73 3154.21 2.078e+04 -
3.148e+04
-3.148e+04 0.0 9.15e-04 112.5 76.50 3.11e-03 -184.73 0.05 0.0
0.18
20 49 1.015e+05 0.0 -0.01 -0.45 0.0 1.82e-03 139.97 216.26 -1168.00 -2.433e+04
1.015e+05
0.49 -2.433e+04 4.36e-04 112.5 1.82e-03 8.61e-03 216.26 -0.23 0.0
0.49
20 52 -1.78e-04 2.374e+04 1.94e-03 -0.12 0.0 0.10 -1770.11 -211.00 3250.36 2.374e+04 -
8168.71
-8168.71 0.0 -4.41e-04 112.5 0.10 -4.97e-05 -211.00 0.10 0.0 -
1.78e-04
20 53 1.193e+05 0.0 -0.03 -0.50 0.0 -161.58 381.36 62.71 258.32 -7054.74
1.193e+05
0.34 -7054.74 7.45e-04 112.5 -161.58 5.78e-03 62.71 -0.11 0.0
0.34
20 56 0.15 6462.77 0.03 -0.11 0.0 161.68 -2011.49 -57.45 1824.04 6462.77 -
2.603e+04
-2.603e+04 0.0 -7.49e-04 112.5 161.68 2.77e-03 -57.45 -0.02 0.0
0.15
20 69 4.447e+04 0.0 4.12e-03 -0.26 0.0 0.05 -776.97 2.42 959.18 -271.78
4.447e+04
0.25 -271.78 -1.80e-06 112.5 0.05 4.35e-03 2.42 -0.06 0.0
0.25
20 70 4.665e+04 0.0 4.34e-03 -0.27 0.0 0.05 -815.07 2.63 1041.18 -295.98
4.665e+04
0.24 -295.98 -2.07e-06 112.5 0.05 4.28e-03 2.63 -0.06 0.0
0.24
20 71 4.447e+04 0.0 4.12e-03 -0.26 0.0 0.05 -776.97 2.42 959.18 -271.78
4.447e+04
0.25 -271.78 -1.80e-06 112.5 0.05 4.35e-03 2.42 -0.06 0.0
0.25
20 72 5.174e+04 0.0 4.84e-03 -0.28 0.0 0.06 -903.95 3.13 1232.51 -352.47
5.174e+04
0.23 -352.47 -2.71e-06 112.5 0.06 4.10e-03 3.13 -0.07 0.0
0.23
20 73 4.447e+04 0.0 4.12e-03 -0.26 0.0 0.05 -776.97 2.42 959.18 -271.78
4.447e+04
0.25 -271.78 -1.80e-06 112.5 0.05 4.35e-03 2.42 -0.06 0.0
0.25
20 74 4.811e+04 0.0 4.48e-03 -0.27 0.0 0.06 -840.46 2.77 1095.84 -312.12
4.811e+04
0.24 -312.12 -2.25e-06 112.5 0.06 4.23e-03 2.77 -0.07 0.0
0.24
20 75 4.447e+04 0.0 4.12e-03 -0.26 0.0 0.05 -776.97 2.42 959.18 -271.78
4.447e+04
0.25 -271.78 -1.80e-06 112.5 0.05 4.35e-03 2.42 -0.06 0.0
0.25
20 76 4.665e+04 0.0 4.34e-03 -0.27 0.0 0.05 -815.07 2.63 1041.18 -295.98
4.665e+04
0.24 -295.98 -2.07e-06 112.5 0.05 4.28e-03 2.63 -0.06 0.0
0.24

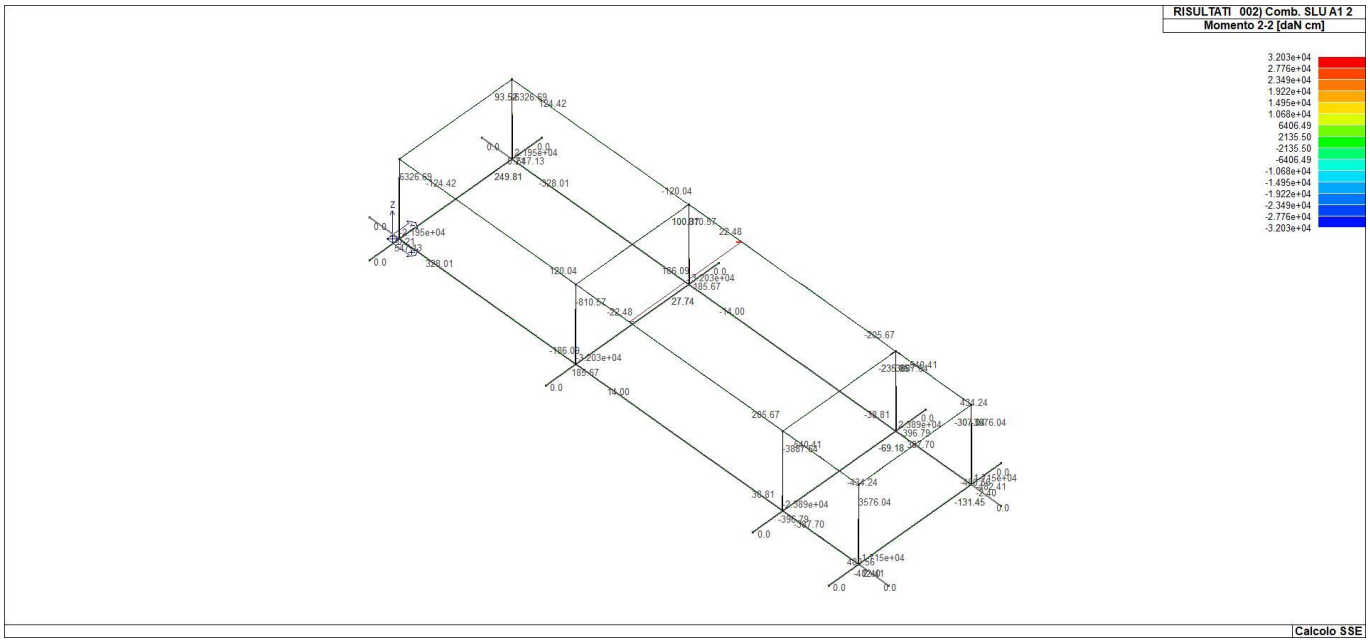
21	2	4.051e+04	0.0	0.03	-0.34	0.0	-4.40	-827.96	0.02	407.02	-2.40
4.051e+04											
		0.52	-2.40	-7.63e-06		112.5	-4.40	9.34e-03	0.02	-0.02	0.0
0.52											
21	3	2.736e+04	0.0	0.02	-0.24	0.0	-2.41	-546.40	0.01	253.57	-1.20
2.736e+04											
		0.40	-1.20	-3.64e-06		112.5	-2.41	7.21e-03	0.01	-0.02	0.0
0.40											
21	4	3.164e+04	0.0	0.03	-0.26	0.0	-3.51	-648.40	0.02	320.66	-1.93
3.164e+04											
		0.40	-1.93	-6.16e-06		112.5	-3.51	7.18e-03	0.02	-0.02	0.0
0.40											
21	5	1.795e+05	1.472e+04	-0.05	-0.67	0.0	-320.08	1912.16	-130.83	-1469.64	1.472e+04
1.795e+05											
		0.61	0.0	-8.34e-04		112.5	-320.08	0.01	-130.83	-0.13	0.0
0.61											
21	8	0.19	0.0	0.09	0.28	0.0	314.67	-3059.35	130.85	2012.56	-1.472e+04	-
1.225e+05											
		-1.225e+05	-1.472e+04	8.25e-04		112.5	314.67	3.94e-03	130.85	0.10	0.0
0.19											
21	17	1.607e+05	0.0	-0.05	-0.61	0.0	-350.01	1558.17	6.35	-570.86	-714.13
1.607e+05											
		0.64	-714.13	1.15e-03		112.5	-350.01	0.01	6.35	-0.07	0.0
0.64											
21	20	0.16	711.34	0.09	0.24	0.0	344.61	-2705.37	-6.32	1113.78	711.34	-
1.036e+05											
		-1.036e+05	0.0	-1.16e-03		112.5	344.61	2.27e-03	-6.32	0.04	0.0
0.16											
21	21	1.227e+05	2.902e+04	-8.69e-03	-0.50	0.0	-94.65	1056.52	-257.92	-2368.21	2.902e+04
1.227e+05											
		0.57	0.0	1.46e-03		112.5	-94.65	0.01	-257.92	-0.21	0.0
0.57											
21	24	0.23	0.0	0.04	0.11	0.0	89.24	-2203.71	257.94	2911.13	-2.902e+04	-
6.571e+04											
		-6.571e+04	-2.902e+04	-1.47e-03		112.5	89.24	4.40e-03	257.94	0.17	0.0
0.23											
21	37	1.204e+05	8951.43	-0.02	-0.48	0.0	-195.77	938.56	-79.57	-787.71	8951.43
1.204e+05											
		0.83	0.0	-5.08e-04		112.5	-195.77	0.02	-79.57	-0.08	0.0
0.83											
21	40	-0.03	0.0	0.06	0.10	0.0	190.37	-2085.75	79.59	1330.62	-8954.22	-
6.337e+04											
		-6.337e+04	-8954.22	5.00e-04		112.5	190.37	-6.01e-04	79.59	0.05	0.0	-
0.03											
21	49	1.089e+05	0.0	-0.02	-0.44	0.0	-213.96	723.19	3.99	-240.72	-448.65
1.089e+05											
		0.70	-448.65	7.05e-04		112.5	-213.96	0.01	3.99	-0.05	0.0
0.70											
21	52	0.10	445.86	0.06	-0.11	0.0	208.56	-1870.39	-3.96	783.64	445.86	-
5.189e+04											
		-5.189e+04	0.0	-7.14e-04		112.5	208.56	1.37e-03	-3.96	0.01	0.0
0.10											
21	53	8.582e+04	1.765e+04	-0.01	-0.40	0.0	-58.64	418.06	-156.86	-1334.32	1.765e+04
8.582e+04											
		0.59	0.0	8.88e-04		112.5	-58.64	0.01	-156.86	-0.12	0.0
0.59											
21	56	0.21	0.0	0.03	-0.12	0.0	53.24	-1565.25	156.89	1877.24	-1.765e+04	-
2.881e+04											
		-2.881e+04	-1.765e+04	-8.97e-04		112.5	53.24	3.70e-03	156.89	0.09	0.0
0.21											
21	69	2.765e+04	0.0	0.02	-0.24	0.0	-2.48	-553.20	0.01	258.04	-1.25
2.765e+04											
		0.40	-1.25	-3.80e-06		112.5	-2.48	7.21e-03	0.01	-0.02	0.0
0.40											
21	70	2.851e+04	0.0	0.02	-0.24	0.0	-2.70	-573.60	0.01	271.46	-1.39
2.851e+04											
		0.40	-1.39	-4.31e-06		112.5	-2.70	7.20e-03	0.01	-0.02	0.0
0.40											
21	71	2.765e+04	0.0	0.02	-0.24	0.0	-2.48	-553.20	0.01	258.04	-1.25
2.765e+04											
		0.40	-1.25	-3.80e-06		112.5	-2.48	7.21e-03	0.01	-0.02	0.0
0.40											
21	72	3.050e+04	0.0	0.02	-0.26	0.0	-3.22	-621.20	0.02	302.77	-1.74
3.050e+04											
		0.40	-1.74	-5.48e-06		112.5	-3.22	7.19e-03	0.02	-0.02	0.0
0.40											
21	73	2.765e+04	0.0	0.02	-0.24	0.0	-2.48	-553.20	0.01	258.04	-1.25

2.765e+04

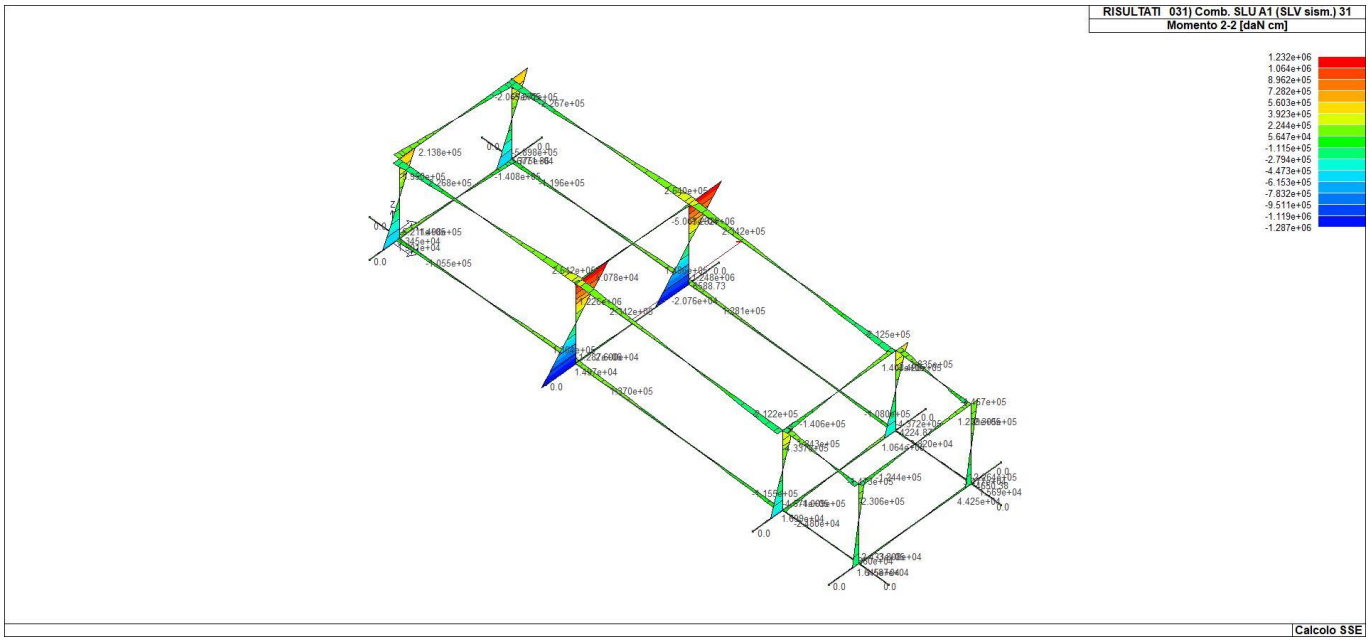
		0.40	-1.25	-3.80e-06		112.5	-2.48	7.21e-03	0.01	-0.02	0.0	
0.40												
21	74	2.908e+04	0.0	0.02	-0.25	0.0	-2.85	-587.20	0.01	280.41	-1.49	
2.908e+04												
		0.40	-1.49	-4.64e-06		112.5	-2.85	7.20e-03	0.01	-0.02	0.0	
0.40												
21	75	2.765e+04	0.0	0.02	-0.24	0.0	-2.48	-553.20	0.01	258.04	-1.25	
2.765e+04												
		0.40	-1.25	-3.80e-06		112.5	-2.48	7.21e-03	0.01	-0.02	0.0	
0.40												
21	76	2.851e+04	0.0	0.02	-0.24	0.0	-2.70	-573.60	0.01	271.46	-1.39	
2.851e+04												
		0.40	-1.39	-4.31e-06		112.5	-2.70	7.20e-03	0.01	-0.02	0.0	
0.40												
22	2	4.051e+04	2.40	0.03	-0.34	0.0	-4.40	-827.96	-0.02	-407.02	2.40	
4.051e+04												
		0.52	0.0	7.63e-06		112.5	-4.40	9.34e-03	-0.02	0.02	0.0	
0.52												
22	3	2.736e+04	1.20	0.02	-0.24	0.0	-2.41	-546.40	-0.01	-253.57	1.20	
2.736e+04												
		0.40	0.0	3.64e-06		112.5	-2.41	7.21e-03	-0.01	0.02	0.0	
0.40												
22	4	3.164e+04	1.93	0.03	-0.26	0.0	-3.51	-648.40	-0.02	-320.66	1.93	
3.164e+04												
		0.40	0.0	6.16e-06		112.5	-3.51	7.18e-03	-0.02	0.02	0.0	
0.40												
22	10	1.203e+05	714.13	0.08	-0.49	0.0	-350.01	838.81	-6.35	-369.56	714.13	
1.203e+05												
		0.45	0.0	-1.15e-03		112.5	-350.01	8.71e-03	-6.35	2.44e-03	0.0	
0.45												
22	11	0.35	0.0	-0.12	-0.14	0.0	344.61	-1986.01	6.32	-173.36	-711.34	-
6.333e+04												
		-6.333e+04	-711.34	1.16e-03		112.5	344.61	5.70e-03	6.32	0.03	0.0	
0.35												
22	13	1.686e+05	1502.97	-0.07	-0.63	0.0	-322.23	1712.73	-13.36	-1529.35	1502.97	
1.686e+05												
		0.61	0.0	1.96e-03		112.5	-322.23	0.01	-13.36	-0.07	0.0	
0.61												
22	16	0.19	0.0	0.11	0.25	0.0	316.83	-2859.93	13.33	986.43	-1500.18	-
1.116e+05												
		-1.116e+05	-1500.18	-1.95e-03		112.5	316.83	4.04e-03	13.33	0.10	0.0	
0.19												
22	26	1.196e+04	0.0	0.10	-0.19	0.0	-94.65	-947.02	257.92	1887.33	-2.902e+04	
1.196e+04												
		0.34	-2.902e+04	-1.46e-03		112.5	-94.65	5.97e-03	257.92	0.18	0.0	
0.34												
22	27	4.505e+04	2.902e+04	-0.14	-0.37	0.0	89.24	-200.18	-257.94	-2430.25	2.902e+04	
4.505e+04												
		0.46	0.0	1.47e-03		112.5	89.24	8.44e-03	-257.94	-0.15	0.0	
0.46												
22	42	8.437e+04	448.65	0.04	-0.37	0.0	-213.96	285.59	-3.99	-331.35	448.65	
8.437e+04												
		0.65	0.0	-7.05e-04		112.5	-213.96	0.01	-3.99	0.01	0.0	
0.65												
22	43	0.15	0.0	-0.08	-0.18	0.0	208.56	-1432.79	3.96	-211.57	-445.86	-
2.736e+04												
		-2.736e+04	-445.86	7.14e-04		112.5	208.56	2.24e-03	3.96	0.02	0.0	
0.15												
22	45	1.137e+05	913.94	-0.04	-0.46	0.0	-197.08	817.24	-8.12	-1036.67	913.94	
1.137e+05												
		0.85	0.0	1.20e-03		112.5	-197.08	0.02	-8.12	-0.03	0.0	
0.85												
22	48	-0.05	0.0	0.08	-0.09	0.0	191.68	-1964.43	8.10	493.75	-911.15	-
5.672e+04												
		-5.672e+04	-911.15	-1.19e-03		112.5	191.68	-9.97e-04	8.10	0.06	0.0	-
0.05												
22	58	1.844e+04	0.0	0.07	-0.20	0.0	-58.64	-800.78	156.86	1041.78	-1.765e+04	
1.844e+04												
		0.46	-1.765e+04	-8.88e-04		112.5	-58.64	8.27e-03	156.86	0.10	0.0	
0.46												
22	59	3.857e+04	1.765e+04	-0.09	-0.32	0.0	53.24	-346.42	-156.89	-1584.70	1.765e+04	
3.857e+04												
		0.34	0.0	8.97e-04		112.5	53.24	6.13e-03	-156.89	-0.07	0.0	
0.34												
22	69	2.765e+04	1.25	0.02	-0.24	0.0	-2.48	-553.20	-0.01	-258.04	1.25	
2.765e+04												

		0.40	0.0	3.80e-06		112.5	-2.48	7.21e-03	-0.01	0.02	0.0
0.40											
22	70	2.851e+04	1.39	0.02	-0.24	0.0	-2.70	-573.60	-0.01	-271.46	1.39
2.851e+04											
		0.40	0.0	4.31e-06		112.5	-2.70	7.20e-03	-0.01	0.02	0.0
0.40											
22	71	2.765e+04	1.25	0.02	-0.24	0.0	-2.48	-553.20	-0.01	-258.04	1.25
2.765e+04											
		0.40	0.0	3.80e-06		112.5	-2.48	7.21e-03	-0.01	0.02	0.0
0.40											
22	72	3.050e+04	1.74	0.02	-0.26	0.0	-3.22	-621.20	-0.02	-302.77	1.74
3.050e+04											
		0.40	0.0	5.48e-06		112.5	-3.22	7.19e-03	-0.02	0.02	0.0
0.40											
22	73	2.765e+04	1.25	0.02	-0.24	0.0	-2.48	-553.20	-0.01	-258.04	1.25
2.765e+04											
		0.40	0.0	3.80e-06		112.5	-2.48	7.21e-03	-0.01	0.02	0.0
0.40											
22	74	2.908e+04	1.49	0.02	-0.25	0.0	-2.85	-587.20	-0.01	-280.41	1.49
2.908e+04											
		0.40	0.0	4.64e-06		112.5	-2.85	7.20e-03	-0.01	0.02	0.0
0.40											
22	75	2.765e+04	1.25	0.02	-0.24	0.0	-2.48	-553.20	-0.01	-258.04	1.25
2.765e+04											
		0.40	0.0	3.80e-06		112.5	-2.48	7.21e-03	-0.01	0.02	0.0
0.40											
22	76	2.851e+04	1.39	0.02	-0.24	0.0	-2.70	-573.60	-0.01	-271.46	1.39
2.851e+04											
		0.40	0.0	4.31e-06		112.5	-2.70	7.20e-03	-0.01	0.02	0.0
0.40											

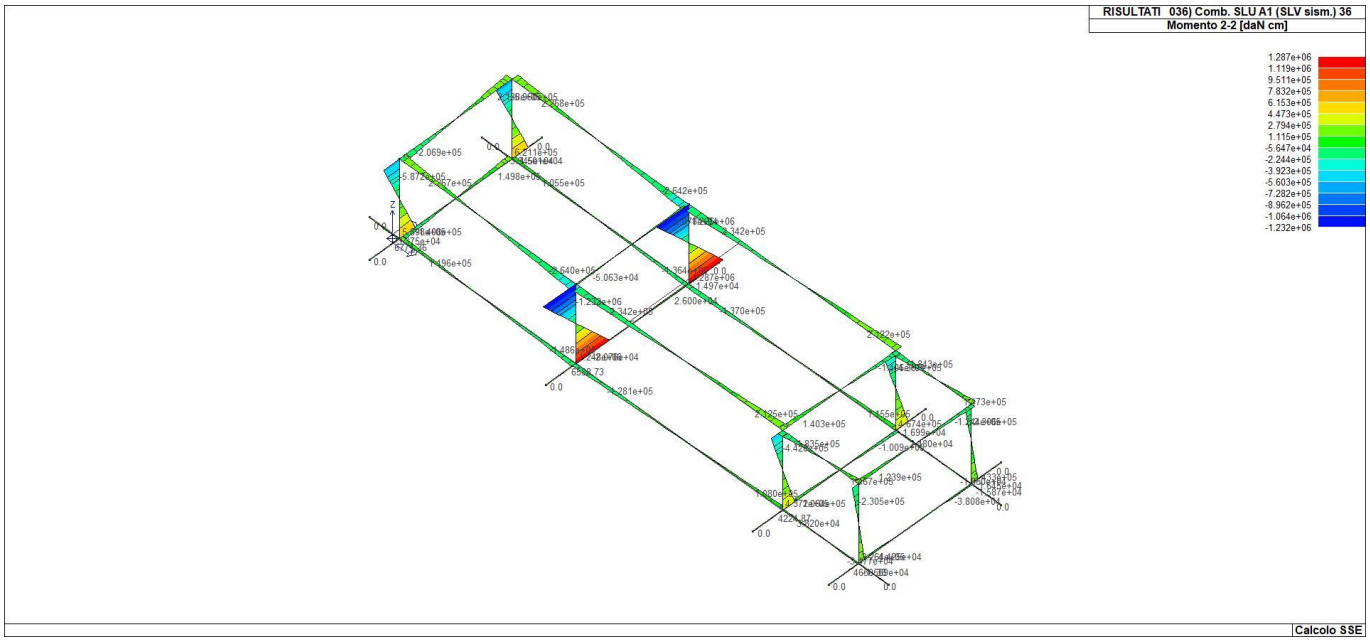
Trave f.	**M3 mx/mn**	**M2 mx/mn**	**D 2 / D 3**	**Pt**	**N**	**V 2**	**V 3**	**T**
	-9.226e+05	-1.521e+05	-0.25	-0.94	-698.91	-9130.38	-698.75	-1.508e+05
	1.248e+06	1.521e+05	0.25	0.28	1755.68	9091.54	698.75	1.613e+05



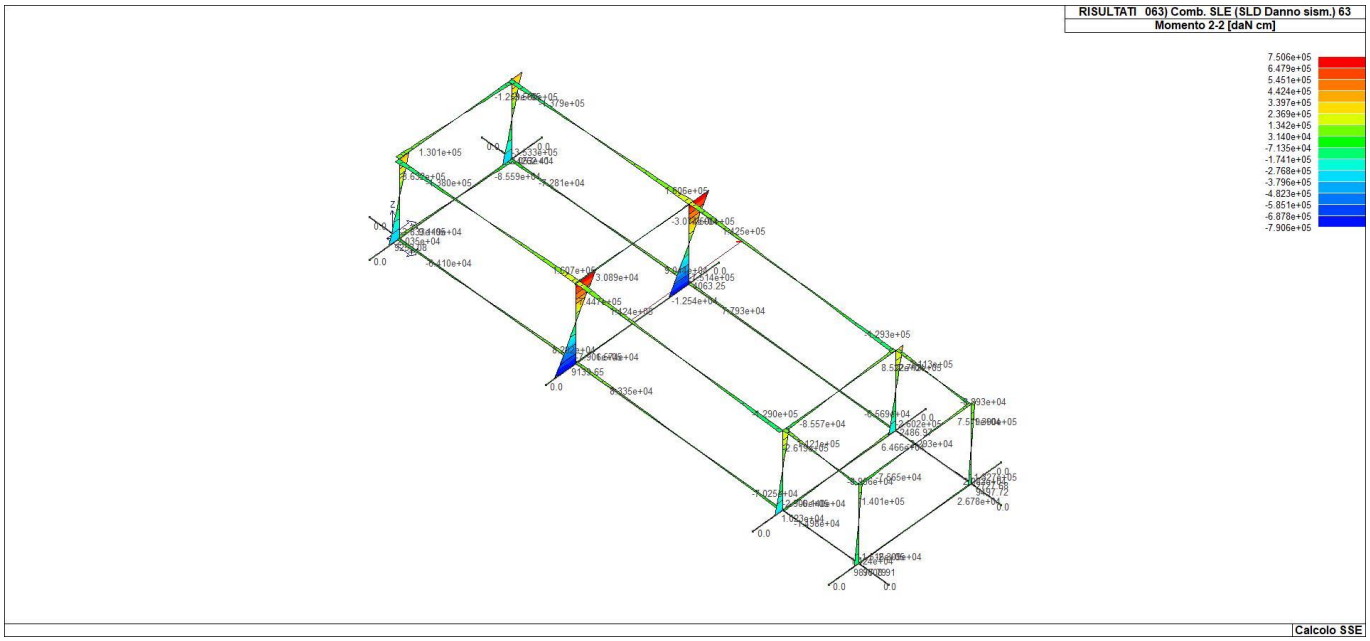
43_RIS_M2_002_Comb. SLU A1 2



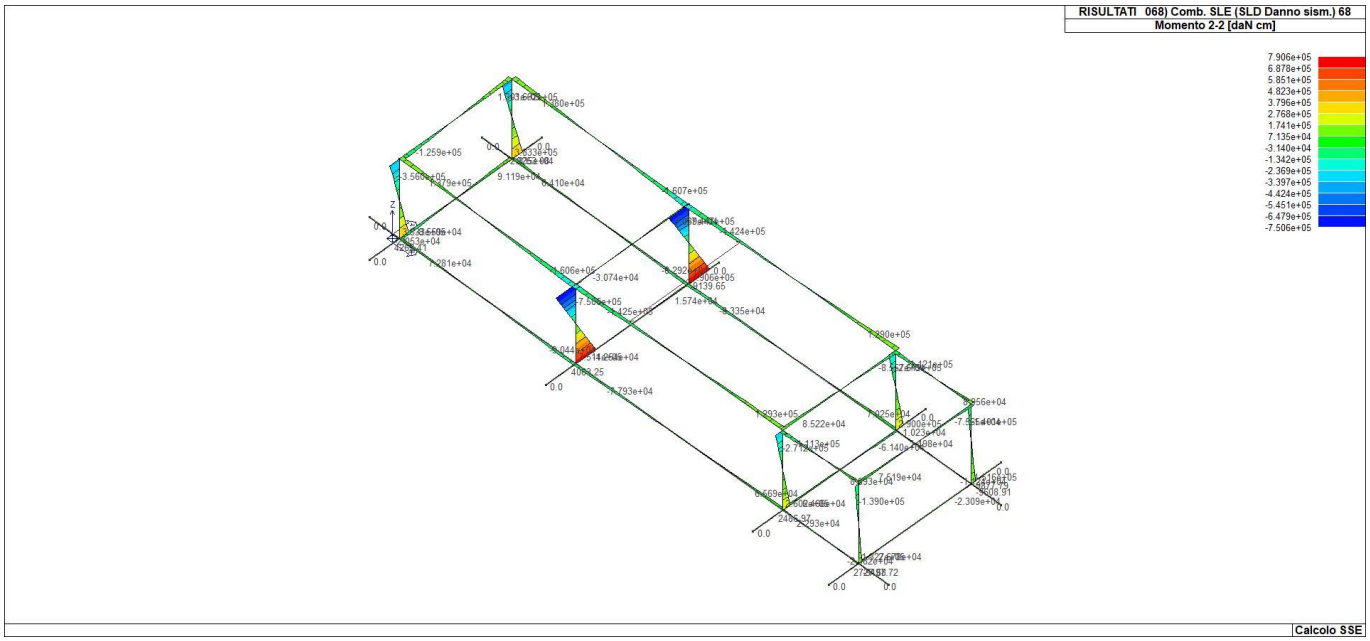
43_RIS_M2_031_Comb. SLU A1 (SLV sism.) 31



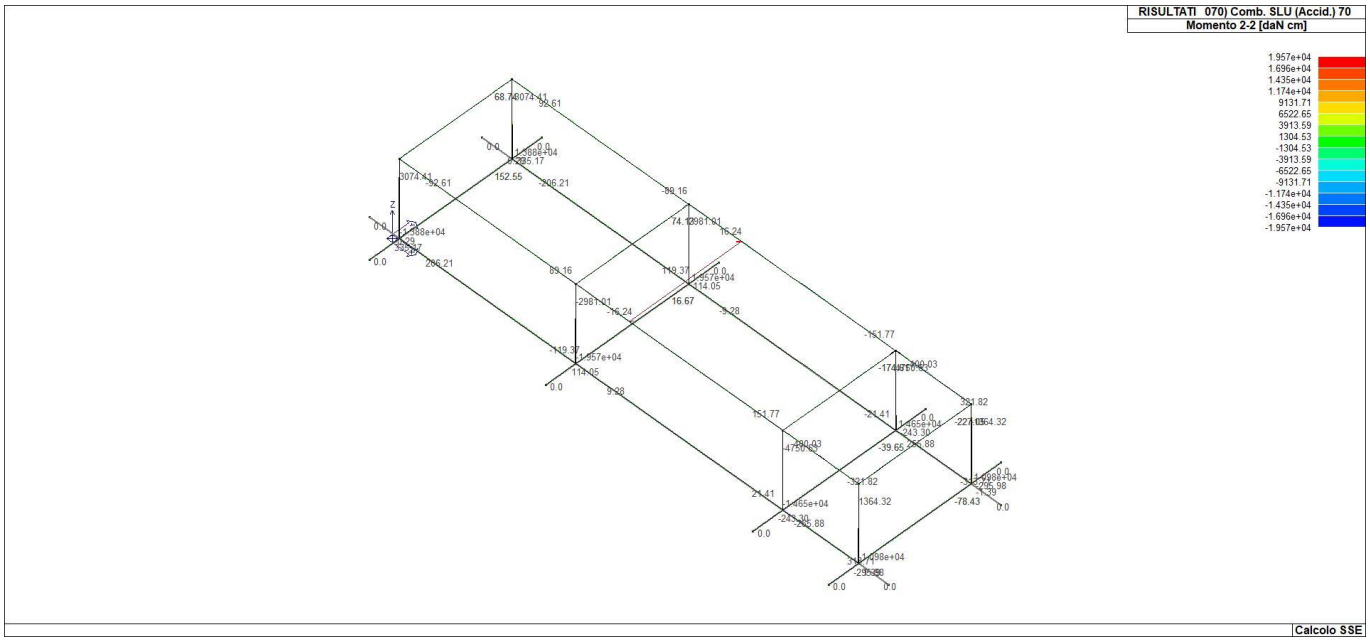
43_RIS_M2_036_Comb. SLU A1 (SLV sism.) 36



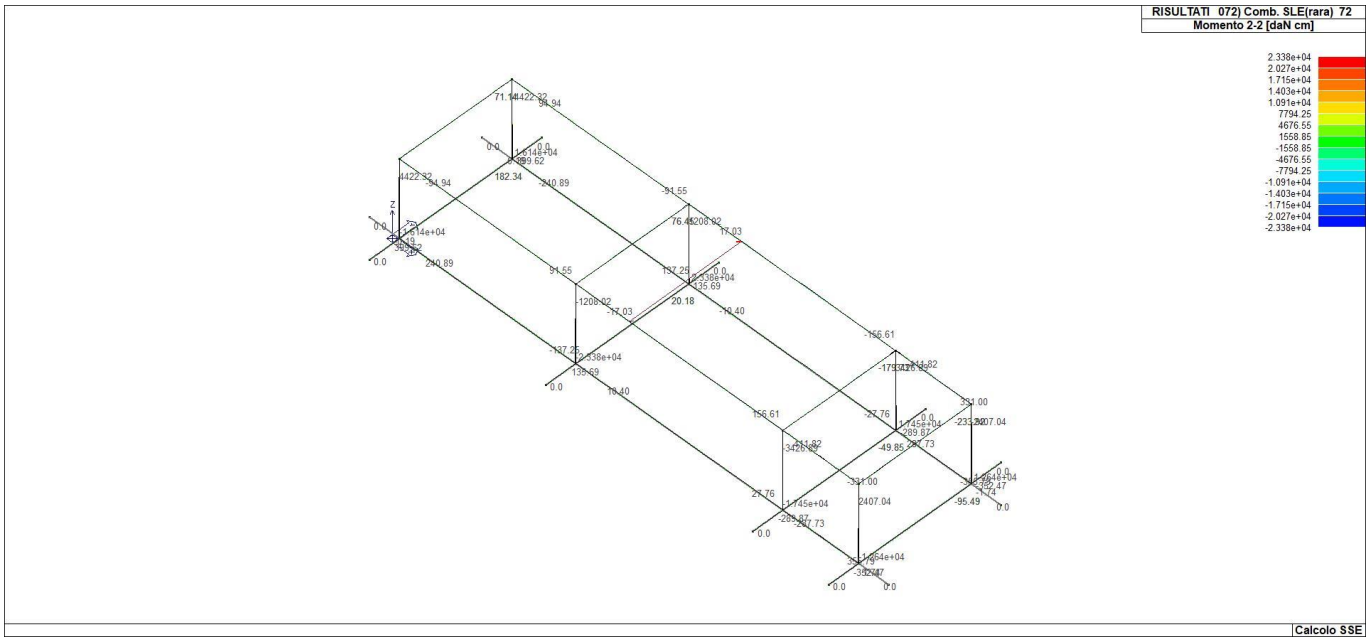
43_RIS_M2_063_Comb. SLE (SLD Danno sism.) 63



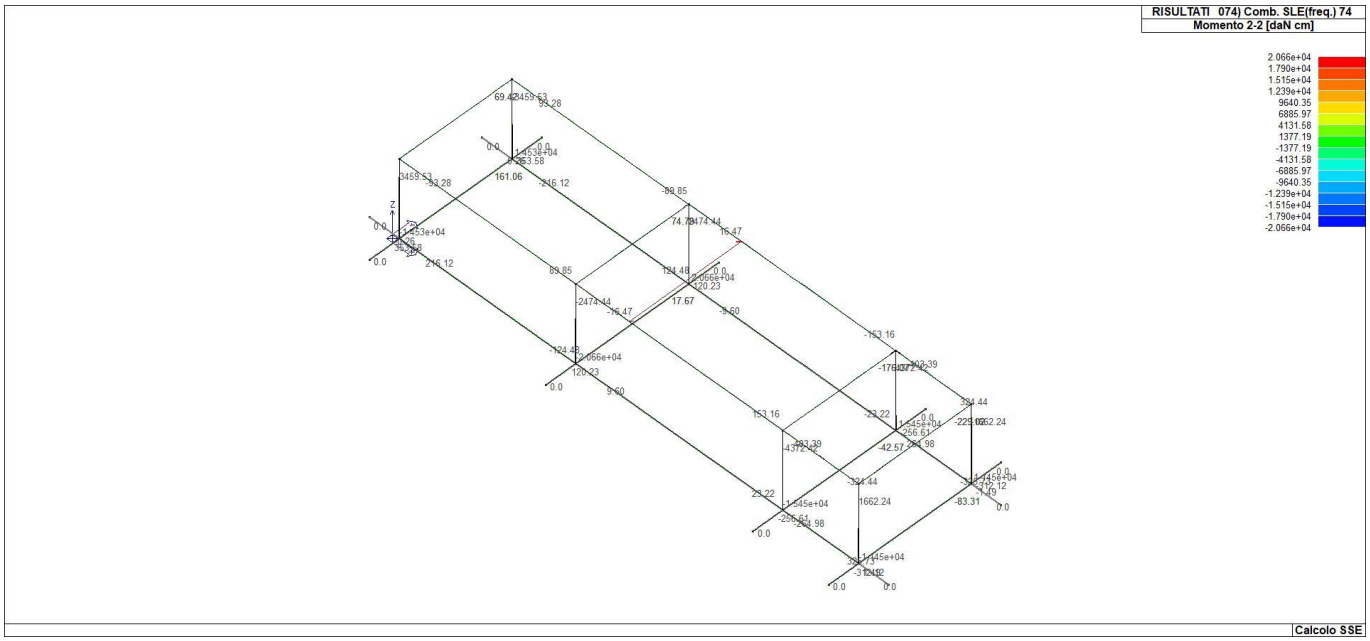
43_RIS_M2_068_Comb. SLE (SLD Danno sism.) 68



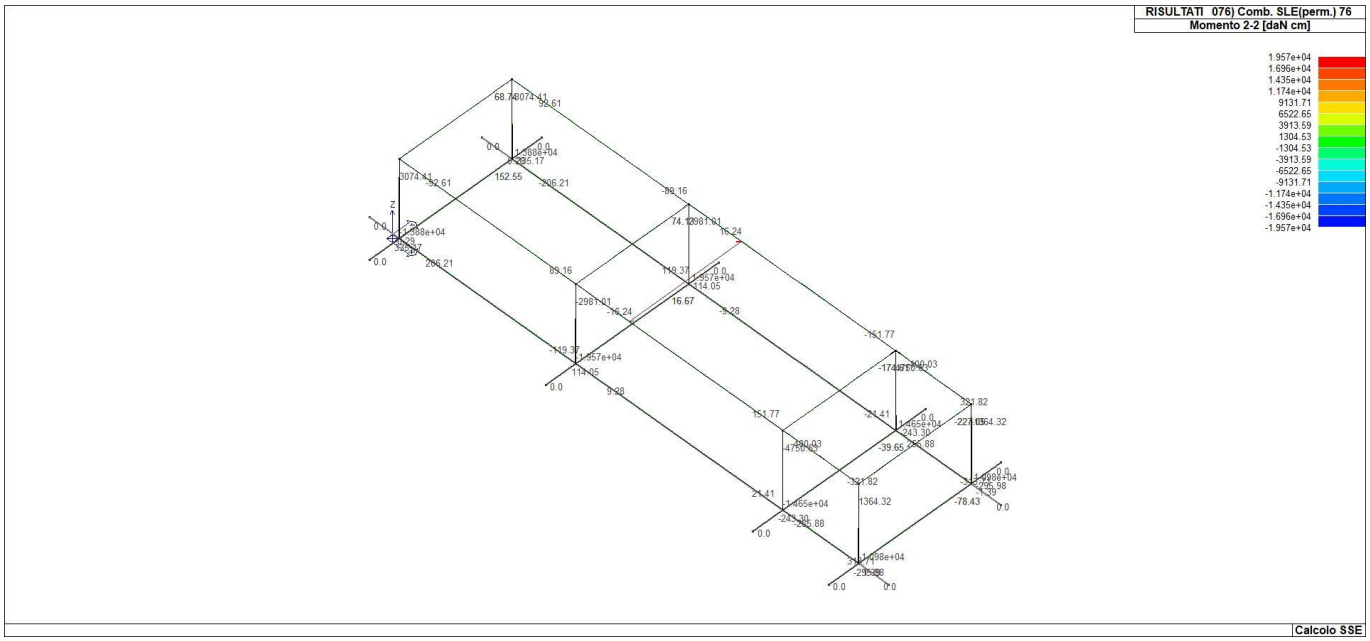
43_RIS_M2_070_Comb. SLU (Accid.) 70



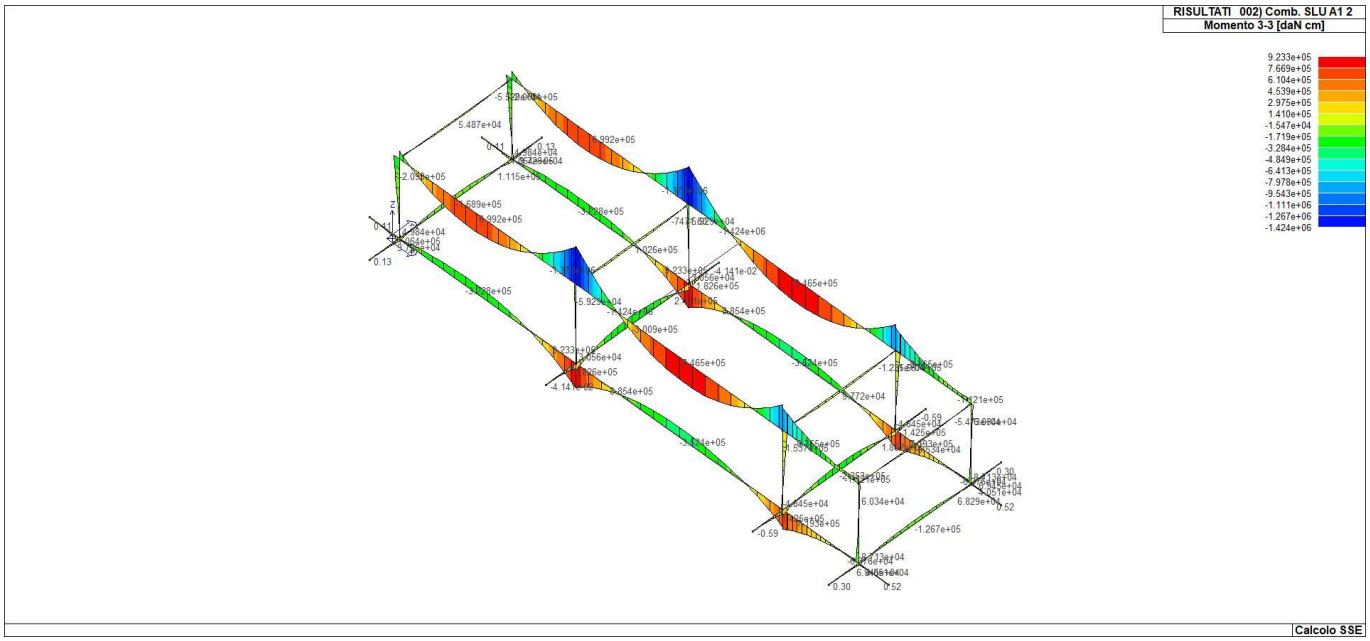
43_RIS_M2_072_Comb. SLE(rara) 72



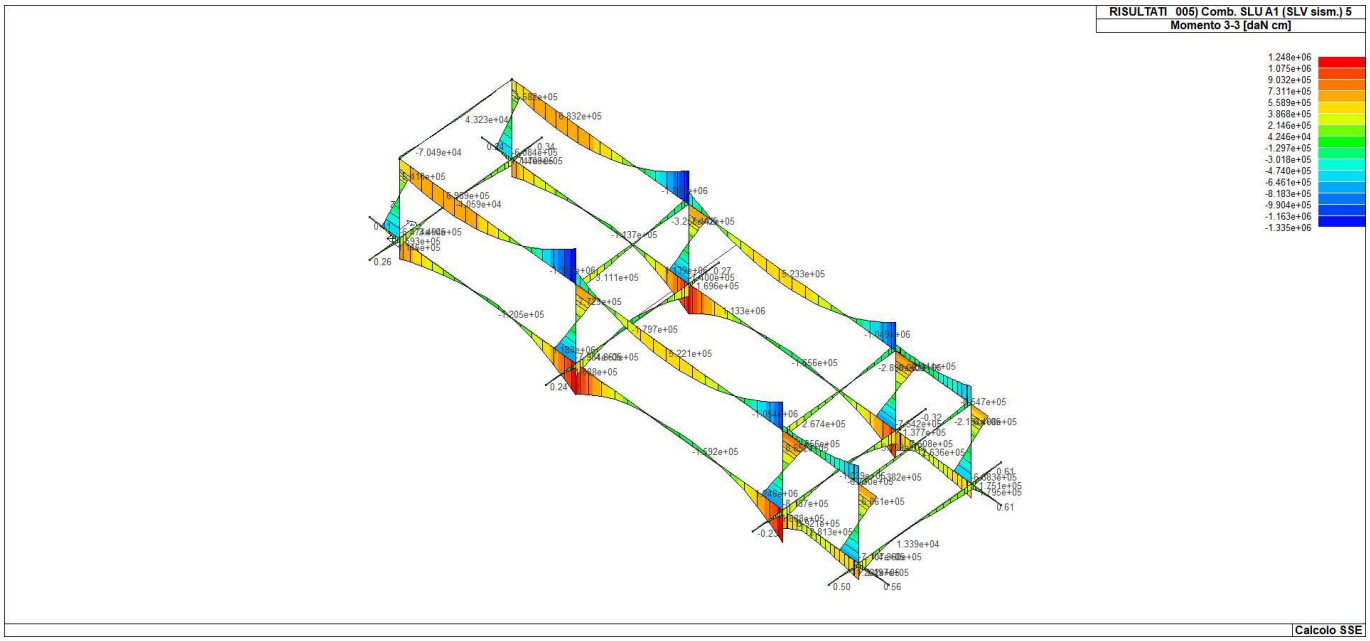
43_RIS_M2_074_Comb. SLE(freq.) 74



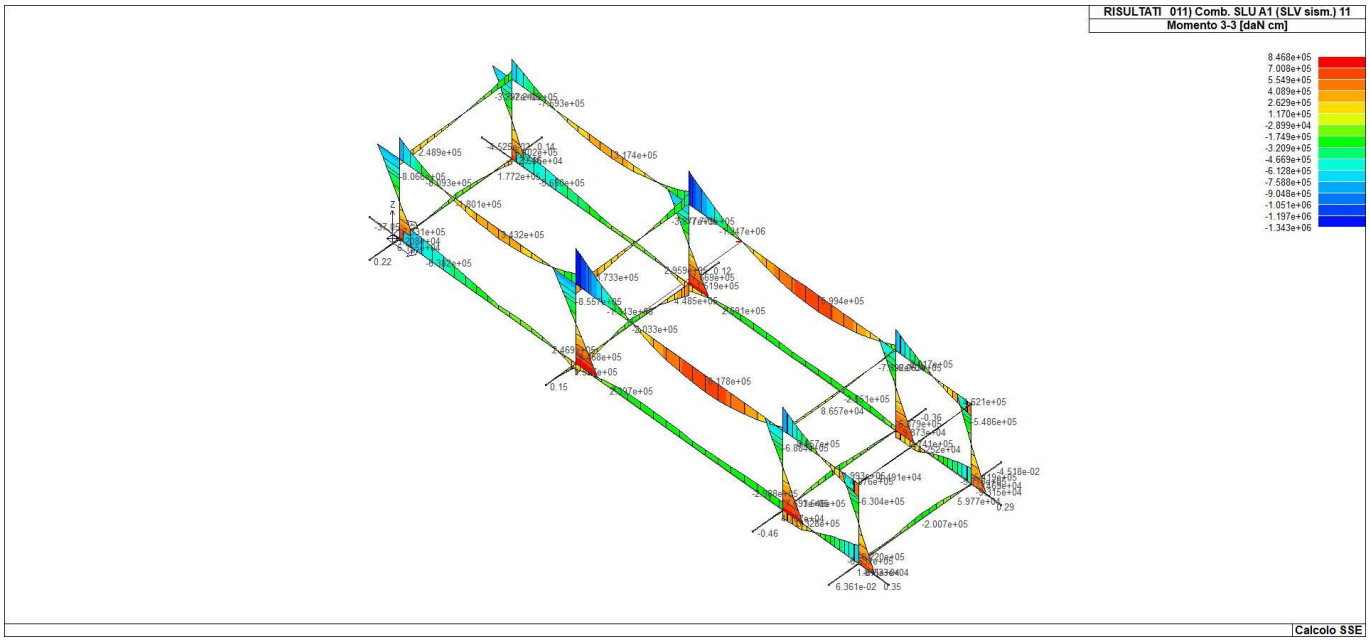
43_RIS_M2_076_Comb. SLE(perm.) 76



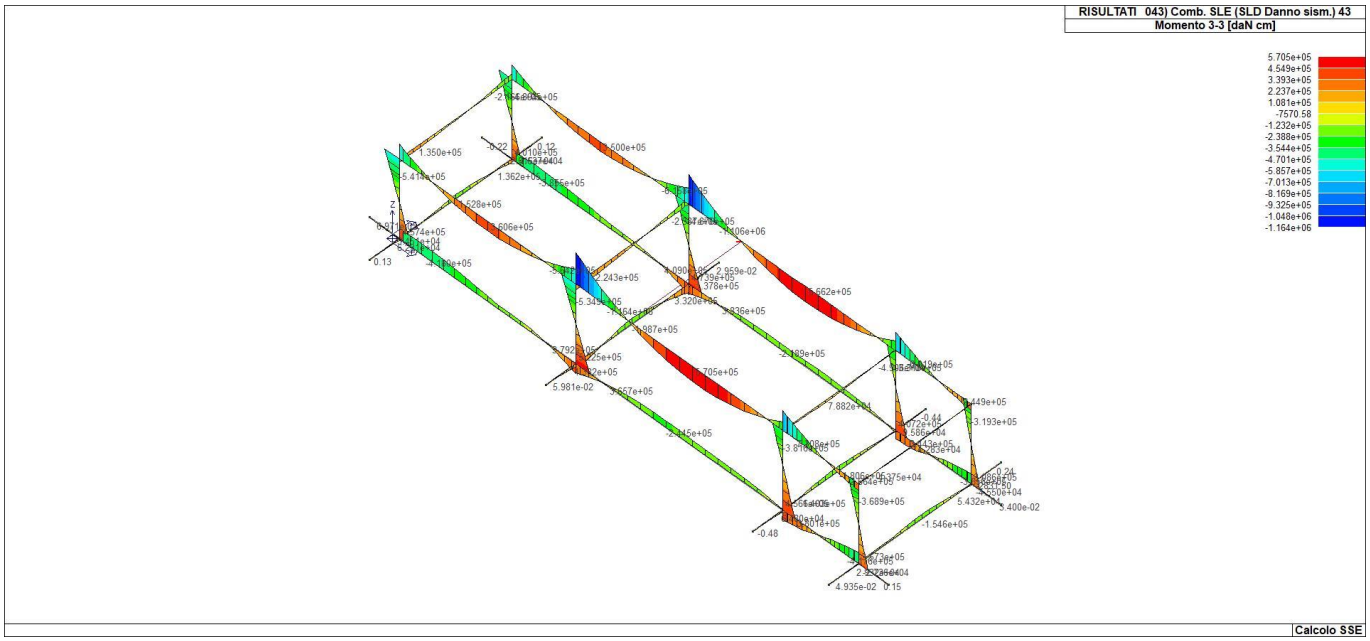
43_RIS_M3_002_Comb. SLU A1 2



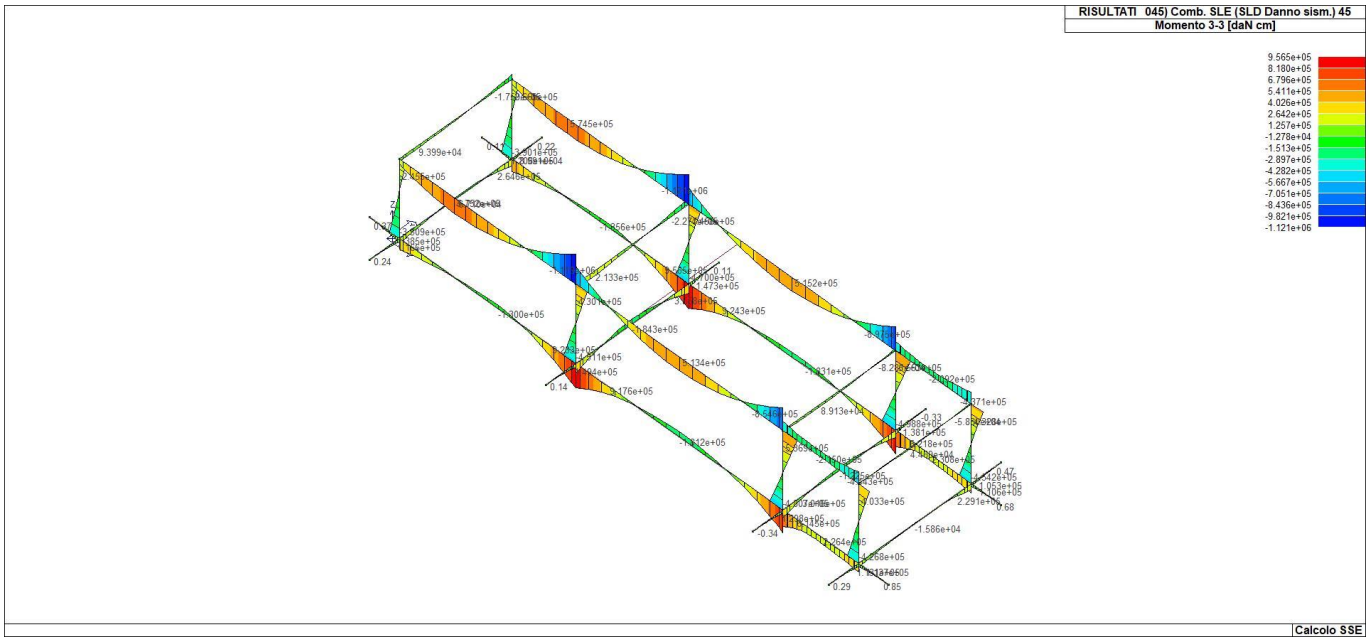
43_RIS_M3_005_Comb. SLU A1 (SLV sism.) 5



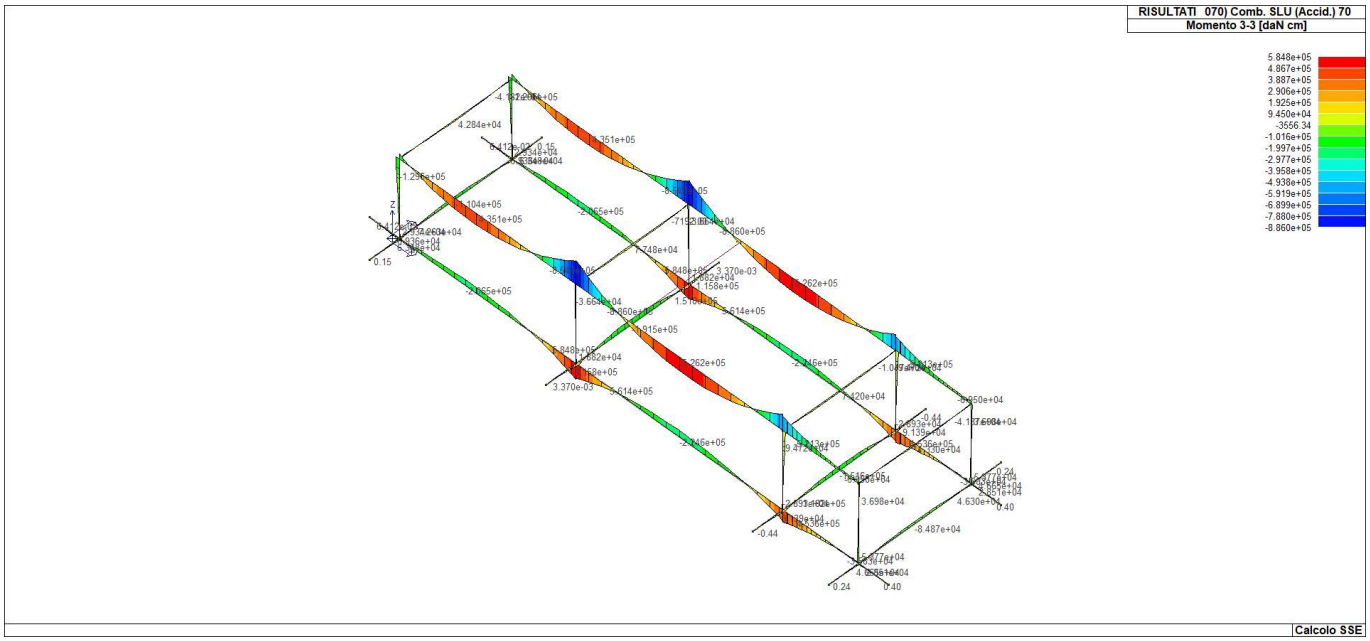
43_RIS_M3_011_Comb. SLU A1 (SLV sism.) 11



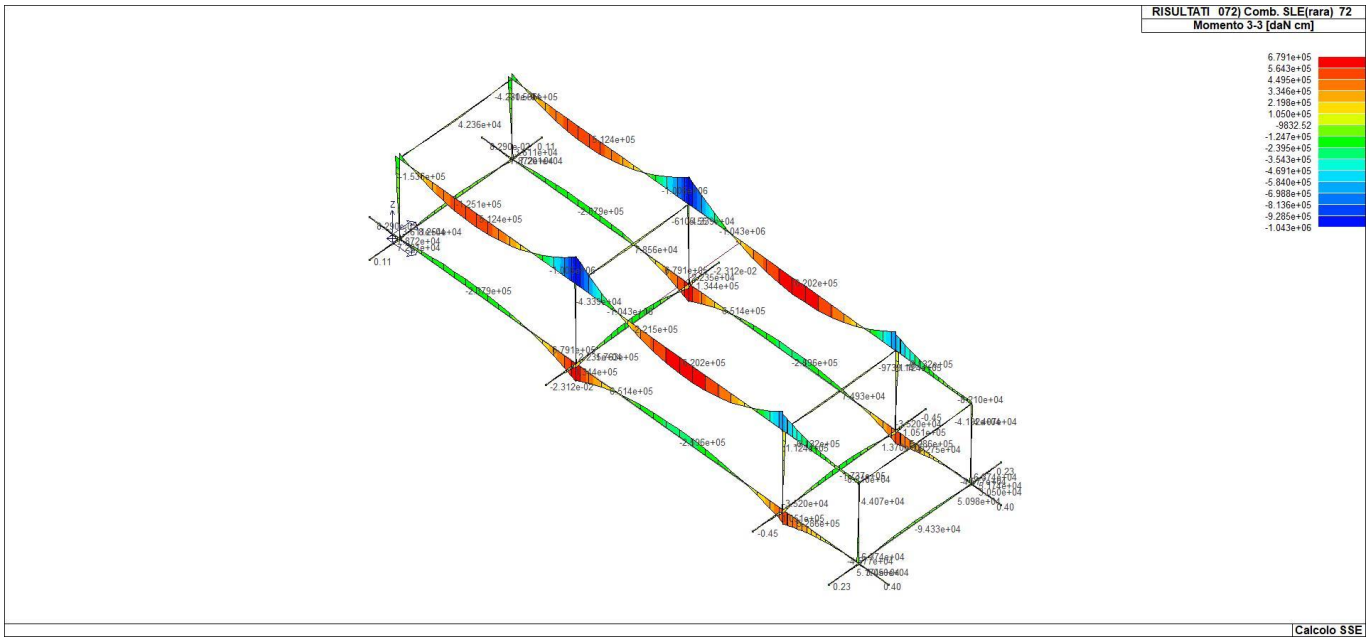
43_RIS_M3_043_Comb. SLE (SLD Danno sism.) 43



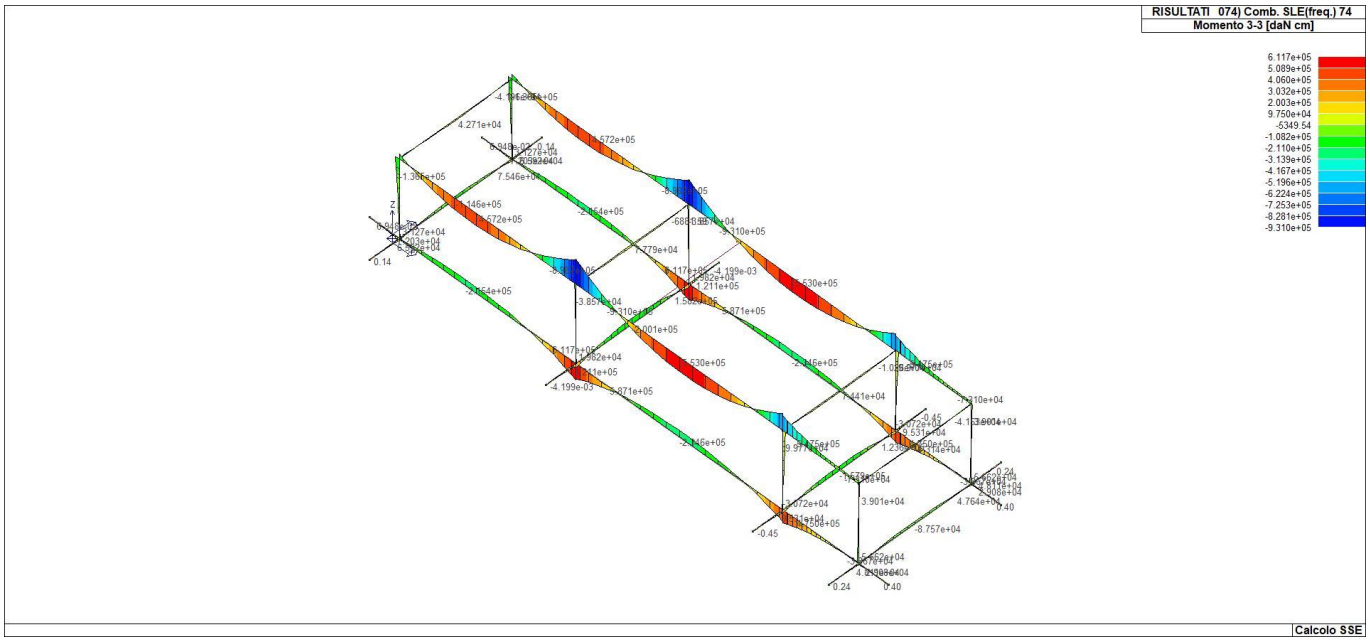
43_RIS_M3_045_Comb. SLE (SLD Danno sism.) 45



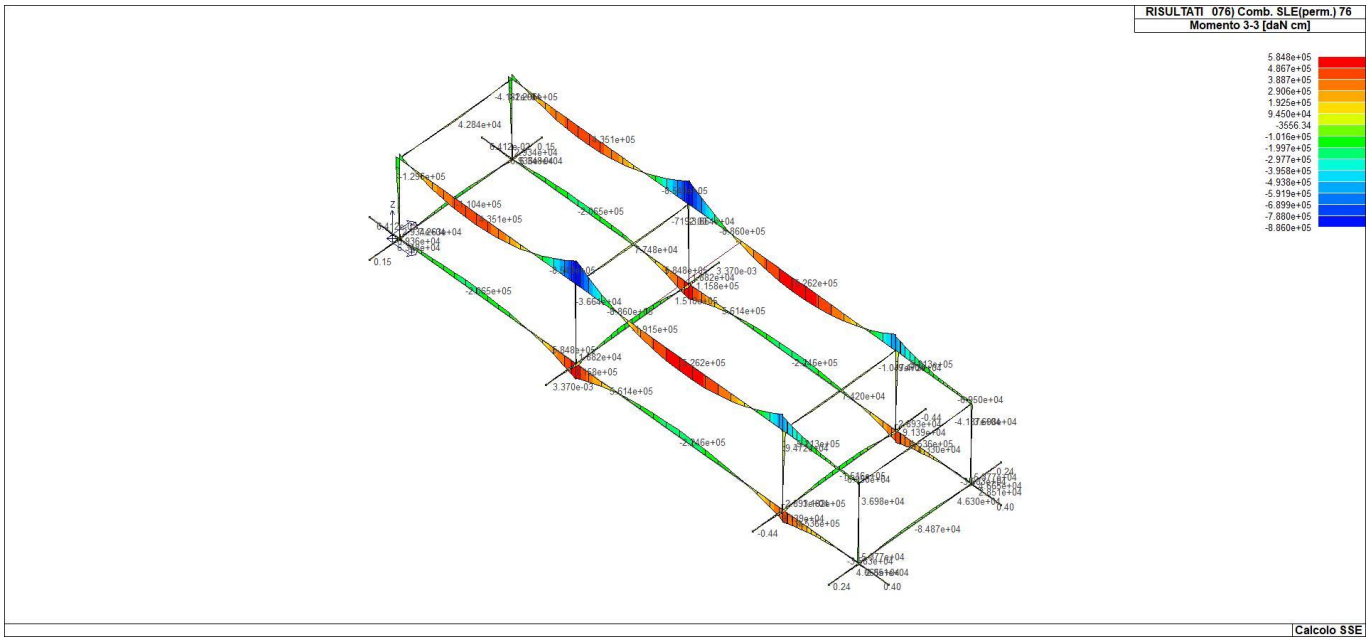
43_RIS_M3_070_Comb. SLU (Accid.) 70



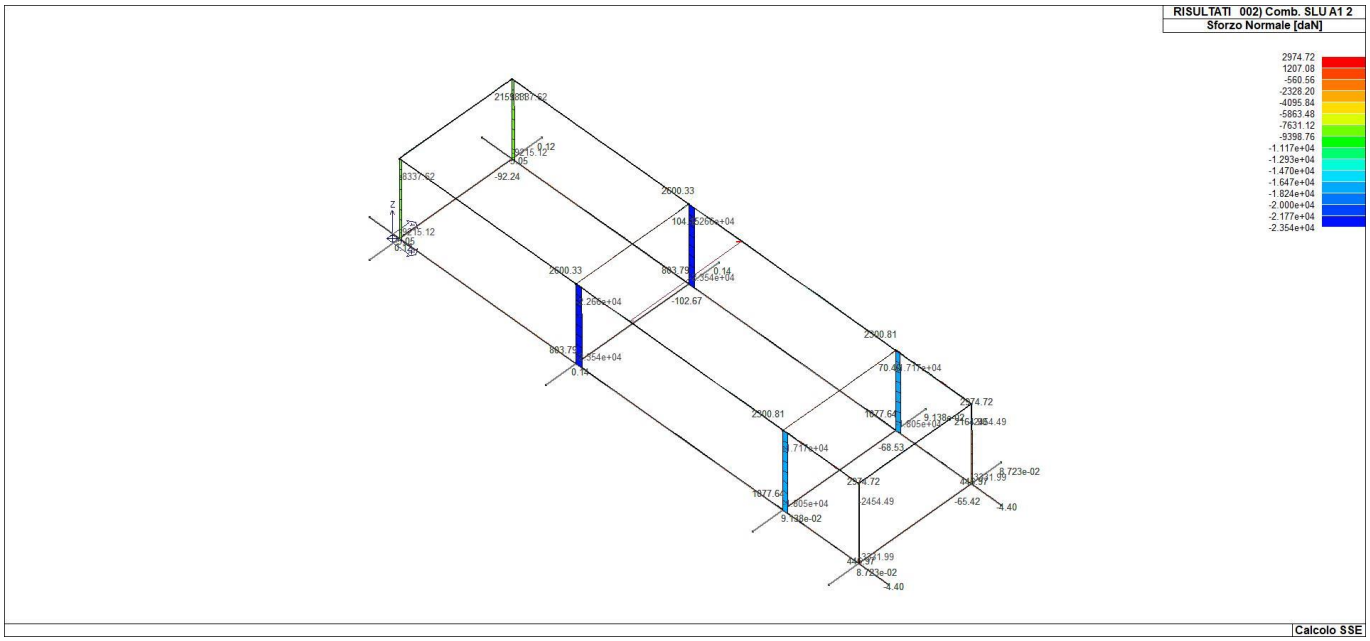
43_RIS_M3_072_Comb. SLE(rara) 72



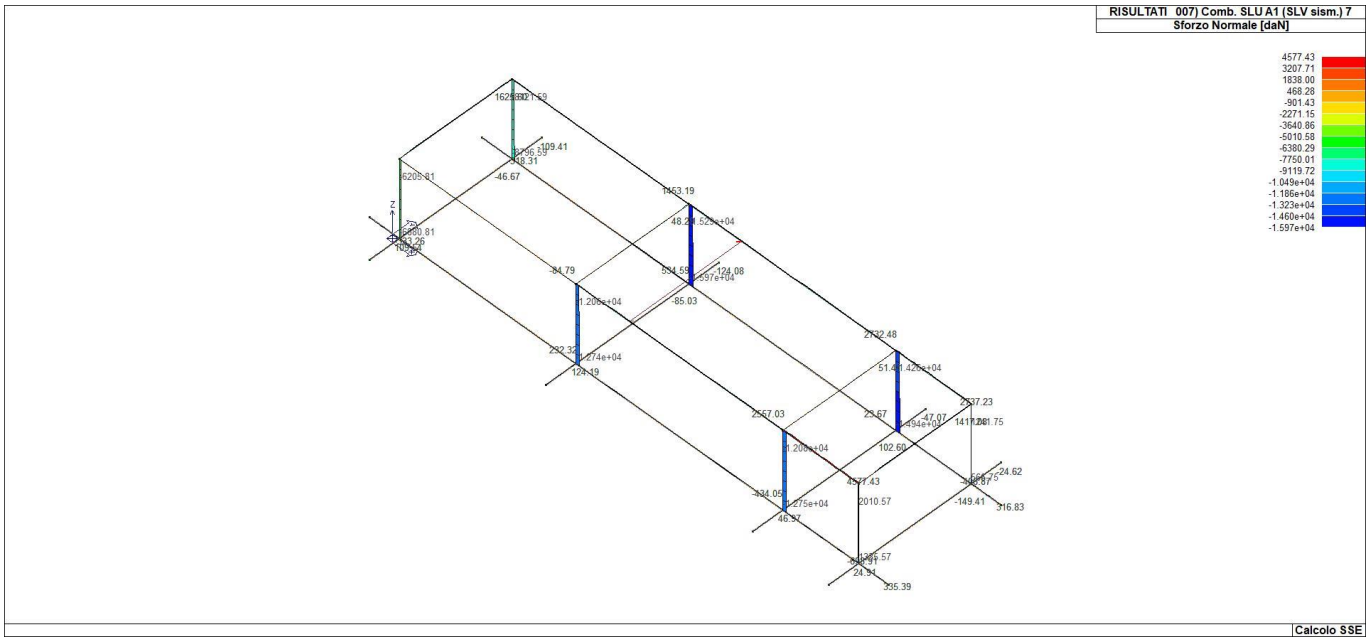
43_RIS_M3_074_Comb. SLE(freq.) 74



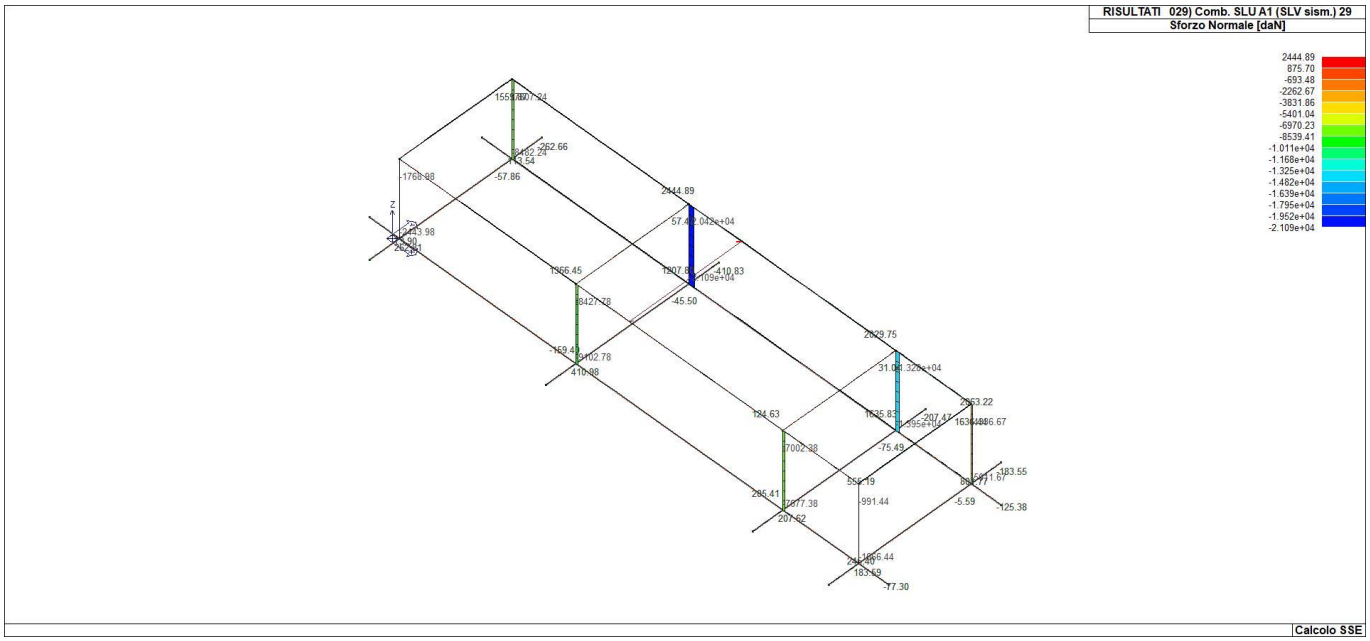
43_RIS_M3_076_Comb. SLE(perm.) 76



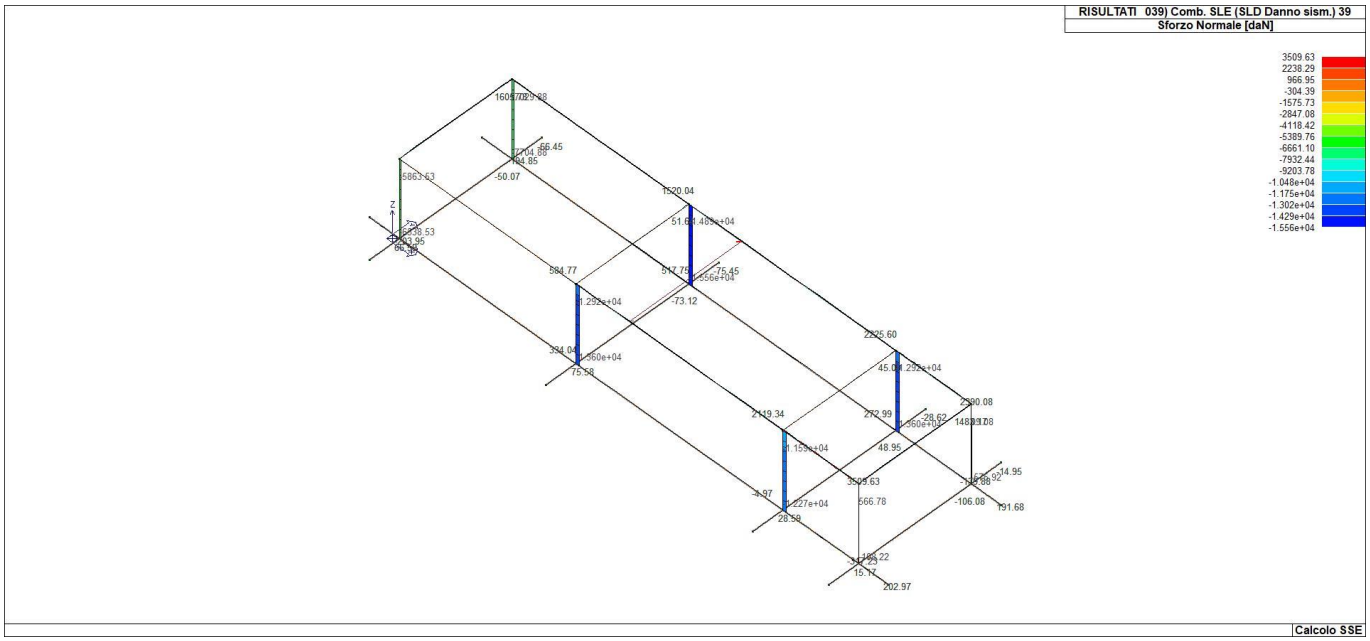
43_RIS_N_002_Comb. SLU A1 2



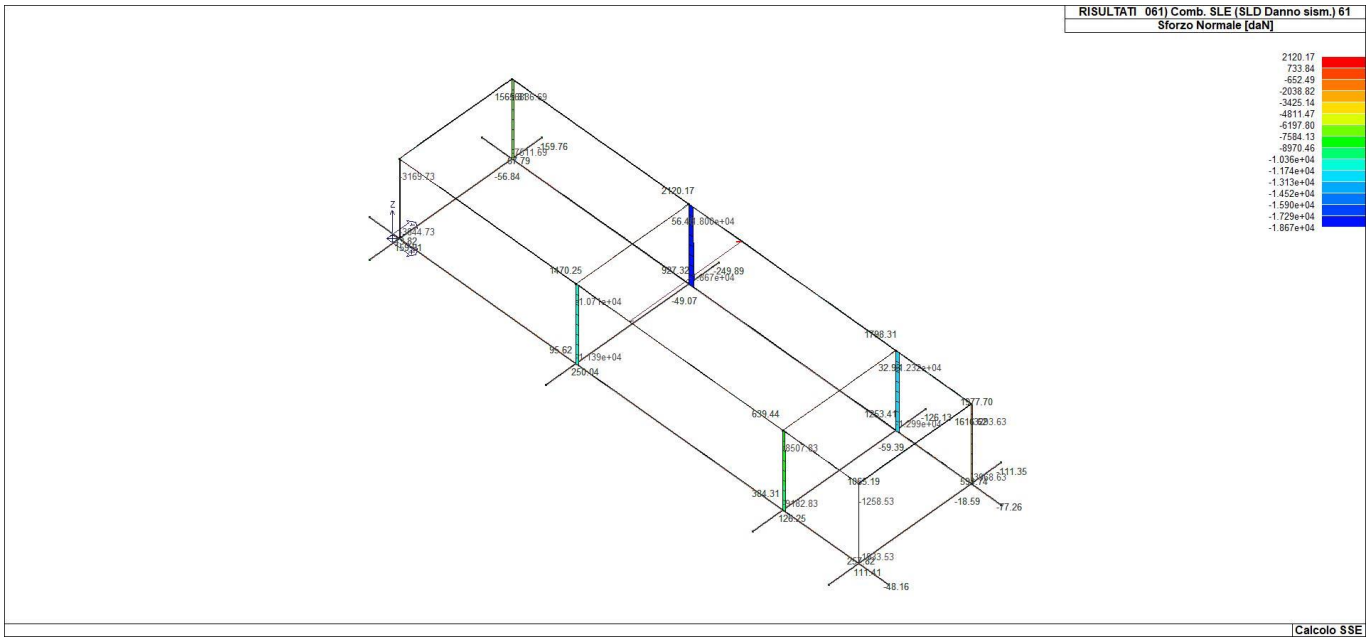
43_RIS_N_007_Comb. SLU A1 (SLV sism.) 7



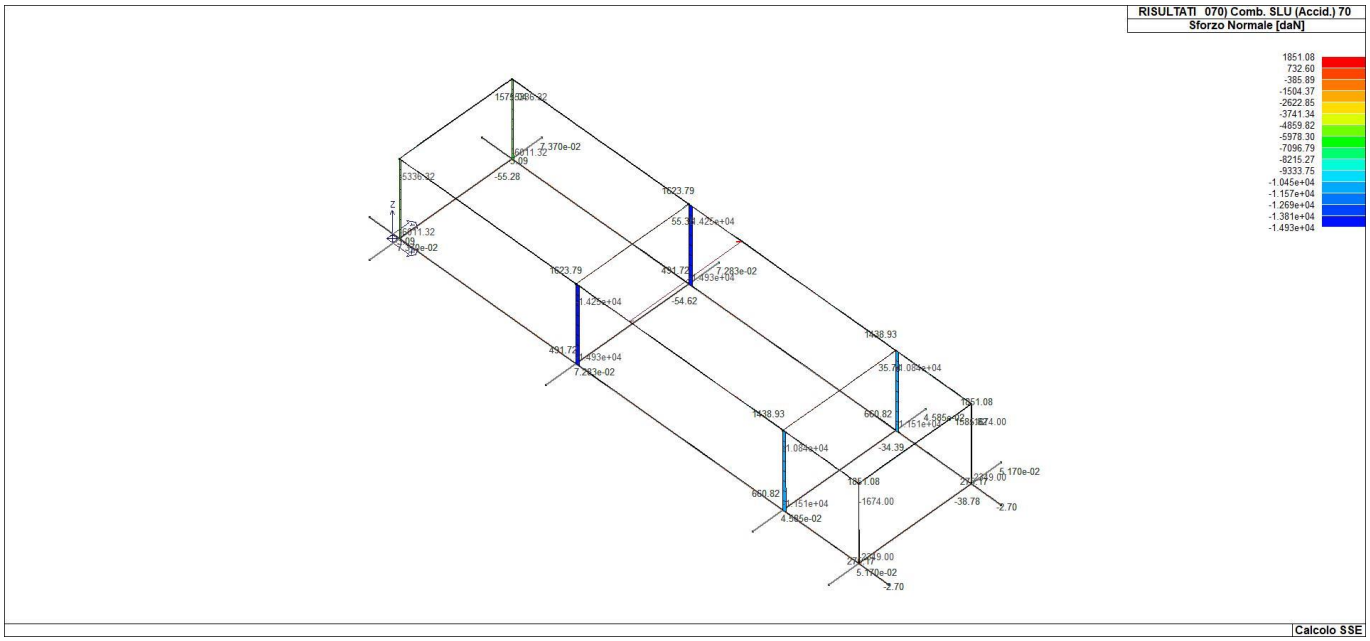
43_RIS_N_029_Comb. SLU A1 (SLV sism.) 29



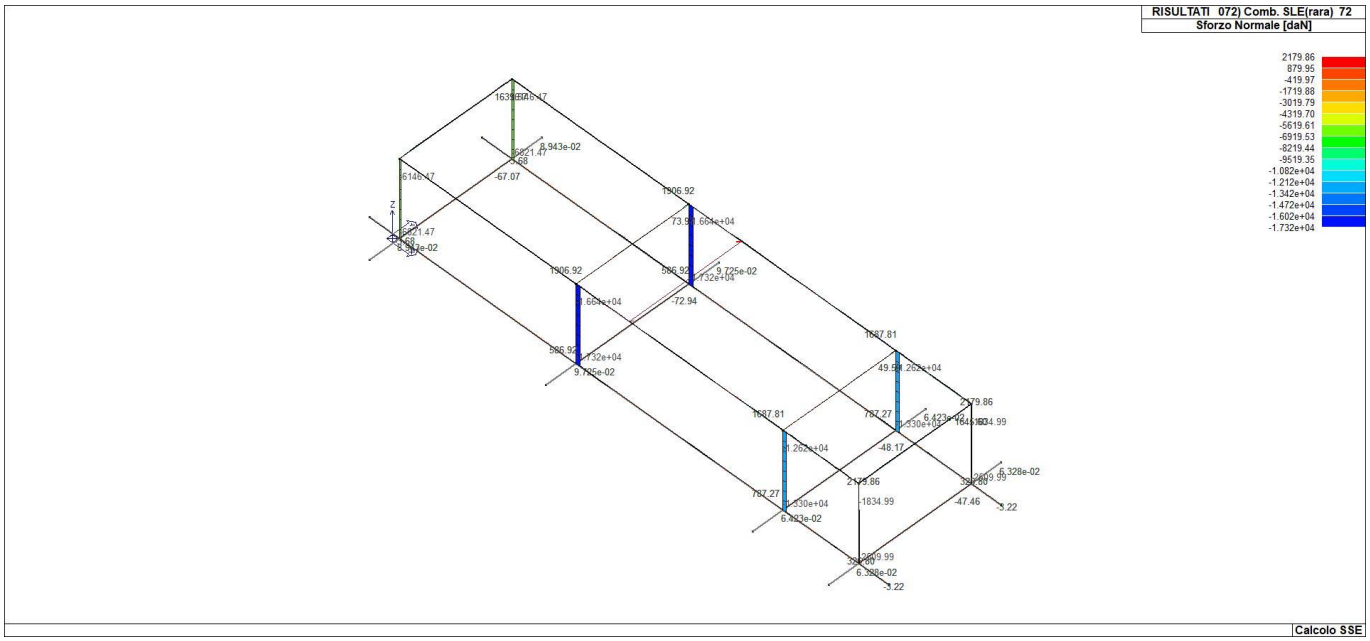
43_RIS_N_039_Comb. SLE (SLD Danno sism.) 39



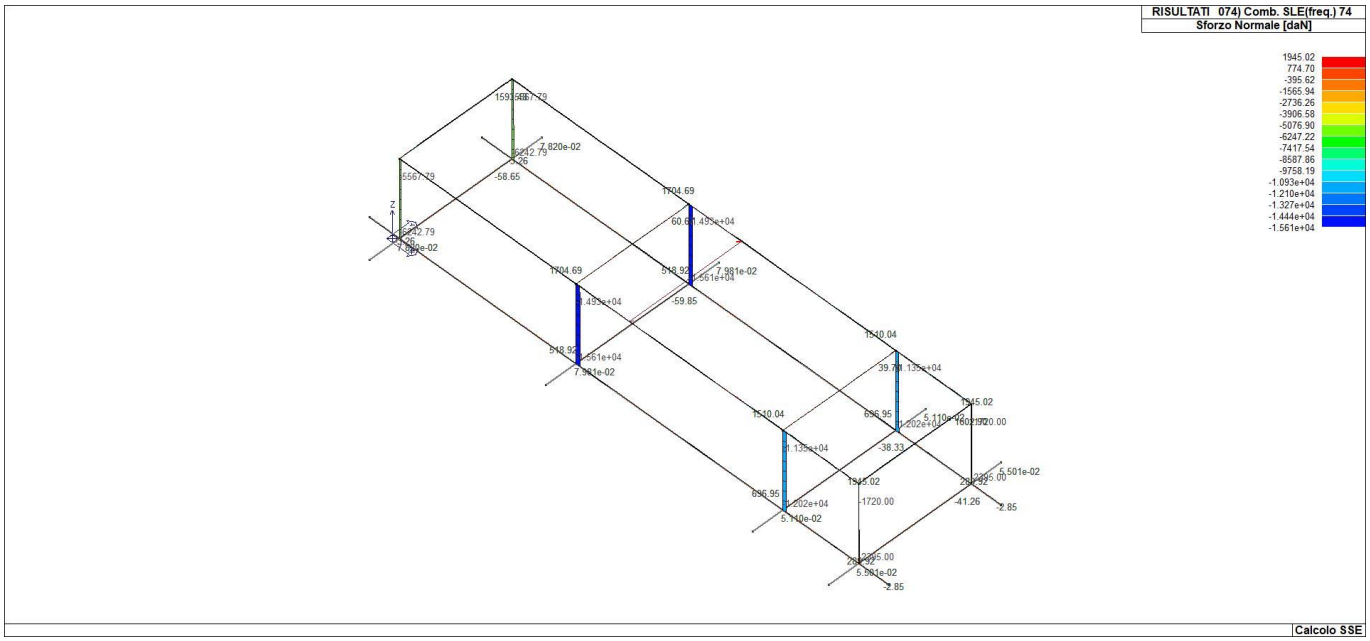
43_RIS_N_061_Comb. SLE (SLD Danno sism.) 61



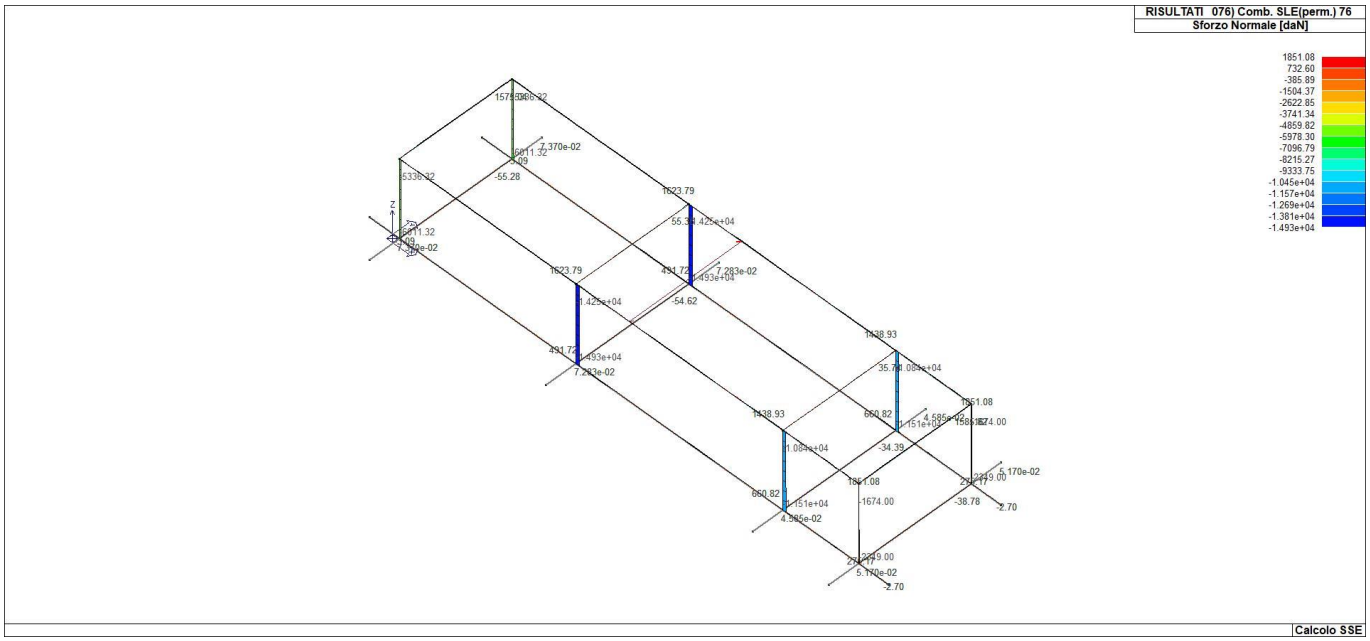
43_RIS_N_070_Comb. SLU (Accid.) 70



43_RIS_N_072_Comb. SLE(rara) 72



43_RIS_N_074_Comb. SLE(freq.) 74



43_RIS_N_076_Comb. SLE(perm.) 76