REGIONE EMILIA ROMAGNA - PROVINCIA DI FERRARA

PROGETTO ESECUTIVO

IN VARIANTE AL PROGETTO DEFINITIVO OFFERTO

NUOVA SEDE DEL CENTRO UNIFICATO PER L'EMERGENZA DELLA PROTEZIONE CIVILE A FERRARA

redatto secondo il Decreto legislativo 18 aprile 2016, n. 50 e il DPR 207/2010

REV	DATA	DESCRIZIONE
	17/09/2018	CONSEGNA PROGETTO ESECUTIVO

Committente: **REGIONE EMILIA ROMAGNA**

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RELAZIONE ILLUSTRATIVA E DI CALCOLO - FONDAZIONI

ELABORATO E1.2.01

Indice degli Elaborati

RELAZIONE DI CALCOLO

Azioni di progetto sulla costruzione

Nei capitoli “modellazione delle azioni” e “schematizzazione dei casi di carico” sono indicate le azioni sulla costruzioni.

Nel prosieguo si indicano tipo di analisi strutturale condotta (statico,dinamico, lineare o non lineare) e il metodo adottato per la risoluzione del problema strutturale nonché le metodologie seguite per la verifica o per il progetto-verifica delle sezioni. Si riportano le combinazioni di carico adottate e, nel caso di calcoli non lineari, i percorsi di carico seguiti; le configurazioni studiate per la struttura in esame *sono risultate effettivamente esaustive per la progettazione-verifica.*
La verifica della sicurezza degli elementi strutturali avviene con i metodi della scienza delle costruzioni. L’analisi strutturale è condotta con il metodo degli spostamenti per la valutazione dello stato tensodeformativo indotto da carichi statici. L’analisi strutturale è condotta con il metodo dell’analisi modale e dello spettro di risposta in termini di accelerazione per la valutazione dello stato tensodeformativo indotto da carichi dinamici (tra cui quelli di tipo sismico).
L’analisi strutturale viene effettuata con il metodo degli elementi finiti. Il metodo sopraindicato si basa sulla schematizzazione della struttura in elementi connessi solo in corrispondenza di un numero prefissato di punti denominati nodi. I nodi sono definiti dalle tre coordinate cartesiane in un sistema di riferimento globale. Le incognite del problema (nell’ambito del metodo degli spostamenti) sono le componenti di spostamento dei nodi riferite al sistema di riferimento globale (traslazioni secondo X, Y, Z, rotazioni attorno X, Y, Z). La soluzione del problema si ottiene con un sistema di equazioni algebriche lineari i cui termini noti sono costituiti dai carichi agenti sulla struttura opportunamente concentrati ai nodi:

K * u = F dove **K** = matrice di rigidezza
u = vettore spostamenti nodali
F = vettore forze nodali

Dagli spostamenti ottenuti con la risoluzione del sistema vengono quindi dedotte le sollecitazioni e/o le tensioni di ogni elemento, riferite generalmente ad una terna locale all’elemento stesso.
Il sistema di riferimento utilizzato è costituito da una terna cartesiana destrorsa XYZ. Si assume l’asse Z verticale ed orientato verso l'alto.
Gli elementi utilizzati per la modellazione dello schema statico della struttura sono i seguenti:

Elemento tipo ***TRUSS*** (biella-D2)
Elemento tipo ***BEAM*** (trave-D2)
Elemento tipo ***MEMBRANE*** (membrana-D3)
Elemento tipo ***PLATE*** (piastra-guscio-D3)
Elemento tipo ***BOUNDARY*** (molla)
Elemento tipo ***STIFFNESS*** (matrice di rigidezza)
Elemento tipo ***BRICK*** (elemento solido)
Elemento tipo ***SOLAIO*** (macro elemento composto da più membrane)

Modello numerico

In questa parte viene descritto il modello numerico utilizzato (o i modelli numerici utilizzati) per l’analisi della struttura. La presentazione delle informazioni deve essere, coerentemente con le prescrizioni del paragrafo 10.2 delle NTC-08, tale da garantirne la leggibilità, la corretta interpretazione e la riproducibilità

Tipo di analisi strutturale	
Carichi verticali	SI
Statica non lineare	NO
Sismica statica lineare	NO
Sismica dinamica lineare	SI
Sismica statica non lineare (prop. masse)	NO
Sismica statica non lineare (prop. modo)	NO

Sismica statica non lineare (triangolare)	NO
Non linearità geometriche (fattore P delta)	NO

Di seguito si indicano l'origine e le caratteristiche dei codici di calcolo utilizzati riportando titolo, produttore e distributore, versione, estremi della licenza d'uso:

Informazioni sul codice di calcolo	
Titolo:	PRO_SAP PROfessional Structural Analysis Program
Versione:	PROFESSIONAL (build 2018-07-183)
Produttore-Distributore:	2S.I. Software e Servizi per l'Ingegneria s.r.l., Ferrara
Codice Licenza:	Licenza dsi4792

Un attento esame preliminare della documentazione a corredo del software ***ha consentito di valutarne l'affidabilità e soprattutto l'idoneità al caso specifico***. La documentazione, fornita dal produttore e distributore del software, contiene una esauriente descrizione delle basi teoriche e degli algoritmi impiegati, l'individuazione dei campi d'impiego, nonché casi prova interamente risolti e commentati, corredati dei file di input necessari a riprodurre l'elaborazione:

Affidabilità dei codici utilizzati
2S.I. ha verificato l'affidabilità e la robustezza del codice di calcolo attraverso un numero significativo di casi prova in cui i risultati dell'analisi numerica sono stati confrontati con soluzioni teoriche. E' possibile reperire la documentazione contenente alcuni dei più significativi casi trattati al seguente link: http://www.2si.it/Software/Affidabilità.htm

Modellazione della geometria e proprietà meccaniche:	
nodi	1101
elementi D2 (per aste, travi, pilastri…)	546
elementi D3 (per pareti, platee, gusci…)	710
elementi solaio	41
elementi solidi	0
Dimensione del modello strutturale [cm]:	
X min =	0.00
Xmax =	10000.00
Ymin =	0.00
Ymax =	4500.00
Zmin =	0.00
Zmax =	722.00
Strutture verticali:	
Elementi di tipo asta	NO
Pilastri	SI
Pareti	SI
Setti (a comportamento membranale)	NO
Strutture non verticali:	
Elementi di tipo asta	NO
Travi	SI
Gusci	NO
Membrane	NO

Orizzontamenti:	
Solai con la proprietà piano rigido	SI
Solai senza la proprietà piano rigido	SI
Tipo di vincoli:	
Nodi vincolati rigidamente	NO
Nodi vincolati elasticamente	NO
Nodi con isolatori sismici	NO
Fondazioni puntuali (plinti/plinti su palo)	SI
Fondazioni di tipo trave	SI
Fondazioni di tipo platea	NO
Fondazioni con elementi solidi	NO

Modellazione delle azioni

Si veda il capitolo **"Schematizzazione dei casi di carico"** per le informazioni necessarie alla comprensione ed alla ricostruzione delle azioni applicate al modello numerico, coerentemente con quanto indicato nella parte "*2.6. Azioni di progetto sulla costruzione*".

Combinazioni e/o percorsi di carico

Si veda il capitolo **"Definizione delle combinazioni"** in cui sono indicate le combinazioni di carico adottate e, nel caso di calcoli non lineari, i percorsi di carico seguiti.

Combinazioni dei casi di carico	
APPROCCIO PROGETTUALE	Approccio 2
Tensioni ammissibili	NO
SLU	SI
SLV (SLU con sisma)	SI
SLC	NO
SLD	SI
SLO	SI
SLU GEO A2 (per approccio 1)	NO
SLU EQU	NO
Combinazione caratteristica (rara)	SI
Combinazione frequente	SI
Combinazione quasi permanente (SLE)	SI
SLA (accidentale quale incendio)	NO

Verifiche agli stati limite ultimi

Nel capitolo relativo alla progettazione degli elementi strutturali agli SLU vengono indicate, con riferimento alla normativa adottata, le modalità ed i criteri seguiti per valutare la sicurezza della struttura nei confronti delle possibili situazioni di crisi ed i risultati delle valutazioni svolte. In via generale, oltre alle verifiche di resistenza e di spostamento, devono essere prese in considerazione verifiche nei confronti dei fenomeni di instabilità, locale e globale, di fatica, di duttilità, di degrado.

Verifiche agli stati limite di esercizio

Nel capitolo relativo alla progettazione degli elementi strutturali agli SLU vengono indicate, con riferimento alla normativa adottata, le modalità seguite per valutare l'affidabilità della struttura nei confronti delle possibili situazioni di perdita di funzionalità (per eccessive deformazioni, fessurazioni, vibrazioni, etc.) ed i risultati delle valutazioni svolte.

RELAZIONE SUI MATERIALI

Il capitolo Materiali riportata informazioni esaustive relative all'elenco dei materiali impiegati e loro modalità di

posa in opera e ai valori di calcolo.

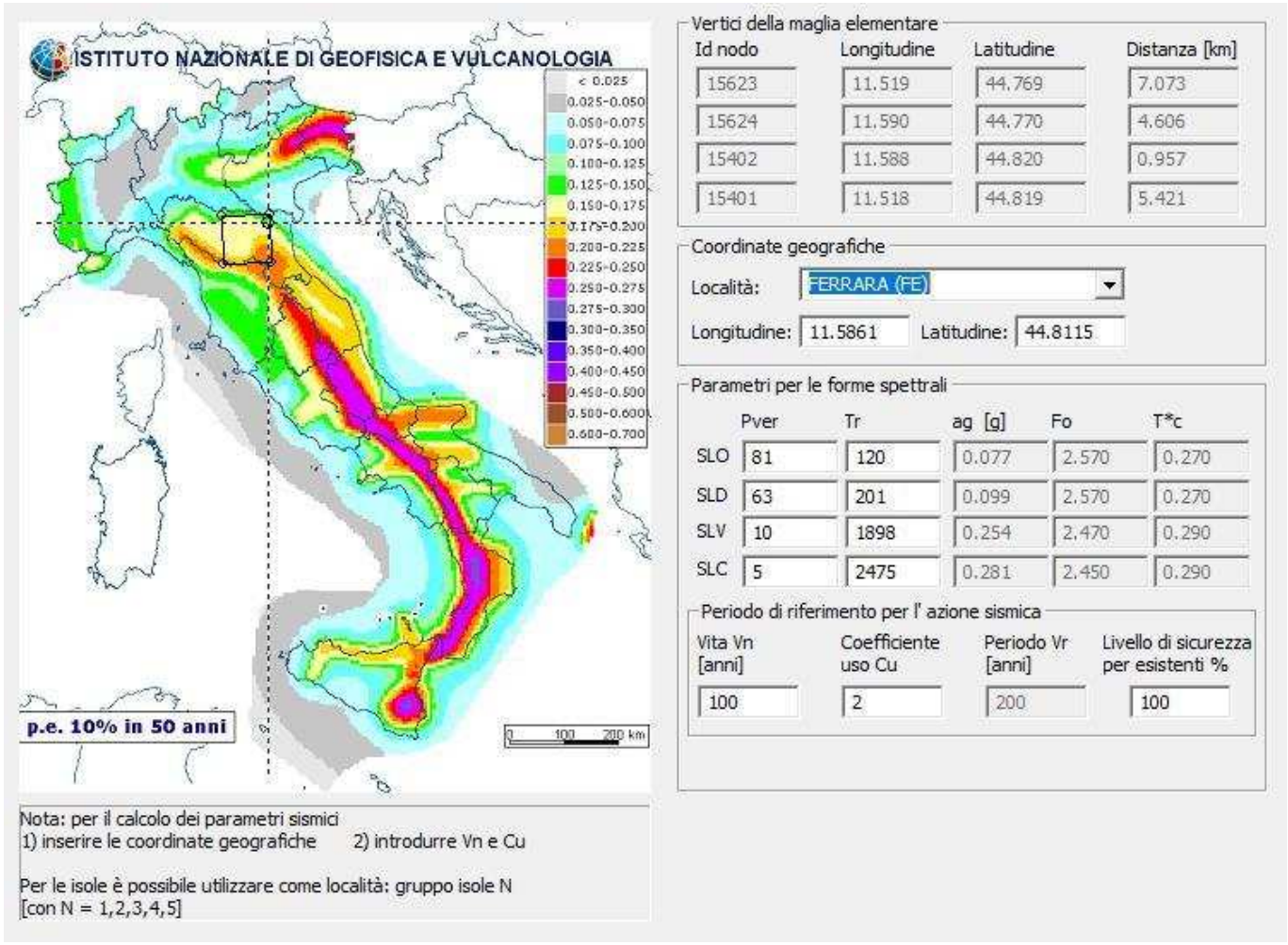
NORMATIVA DI RIFERIMENTO

1. D.Min. Infrastrutture Min. Interni e Prot. Civile 14 Gennaio 2008 e allegate "Norme tecniche per le costruzioni".
2. D.Min. Infrastrutture e trasporti 14 Settembre 2005 e allegate "Norme tecniche per le costruzioni".
3. 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".
4. 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>>".
5. D.M. LL.PP. 16 Gennaio 1996 "Norme tecniche per le costruzioni in zone sismiche".
6. 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.
7. 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.
8. D.M. LL.PP. 20 Novembre 1987 "Norme tecniche per la progettazione, esecuzione e collaudo degli edifici in muratura e per il loro consolidamento".
9. 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”.
10. 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”.
11. D.M. LL.PP. 3 Dicembre 1987 “Norme tecniche per la progettazione, esecuzione e collaudo delle costruzioni prefabbricate”.
12. UNI 9502 - Procedimento analitico per valutare la resistenza al fuoco degli elementi costruttivi di conglomerato cementizio armato, normale e precompresso - edizione maggio 2001
13. 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.
14. UNI EN 1990:2006 13/04/2006 Eurocodice 0 - Criteri generali di progettazione strutturale.
15. 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.
16. UNI EN 1991-2:2005 01/03/2005 Eurocodice 1 - Azioni sulle strutture - Parte 2: Carichi da traffico sui ponti.
17. UNI EN 1991-1-3:2004 01/10/2004 Eurocodice 1 - Azioni sulle strutture - Parte 1-3: Azioni in generale - Carichi da neve.
18. UNI EN 1991-1-4:2005 01/07/2005 Eurocodice 1 - Azioni sulle strutture - Parte 1-4: Azioni in generale - Azioni del vento.
19. UNI EN 1991-1-5:2004 01/10/2004 Eurocodice 1 - Azioni sulle strutture - Parte 1-5: Azioni in generale - Azioni termiche.
20. 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.
21. 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.
22. 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.
23. UNI EN 1993-1-8:2005 01/08/2005 Eurocodice 3 - Progettazione delle strutture di acciaio - Parte 1-8: Progettazione dei collegamenti.
24. 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.
25. 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.
26. 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.
27. UNI EN 1995-2:2005 01/01/2005 Eurocodice 5 - Progettazione delle strutture di legno - Parte 2: Ponti.
28. 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.

29. 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.
30. UNI EN 1997-1:2005 01/02/2005 Eurocodice 7 - Progettazione geotecnica - Parte 1: Regole generali.
31. 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.
32. UNI EN 1998-3:2005 01/08/2005 Eurocodice 8 - Progettazione delle strutture per la resistenza sismica - Parte 3: Valutazione e adeguamento degli edifici.

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 sul 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 14.01.08 è dovuto o a progettazione simulata di edifico esistente o ad applicazione del punto 2.7 del DM 14.01.08



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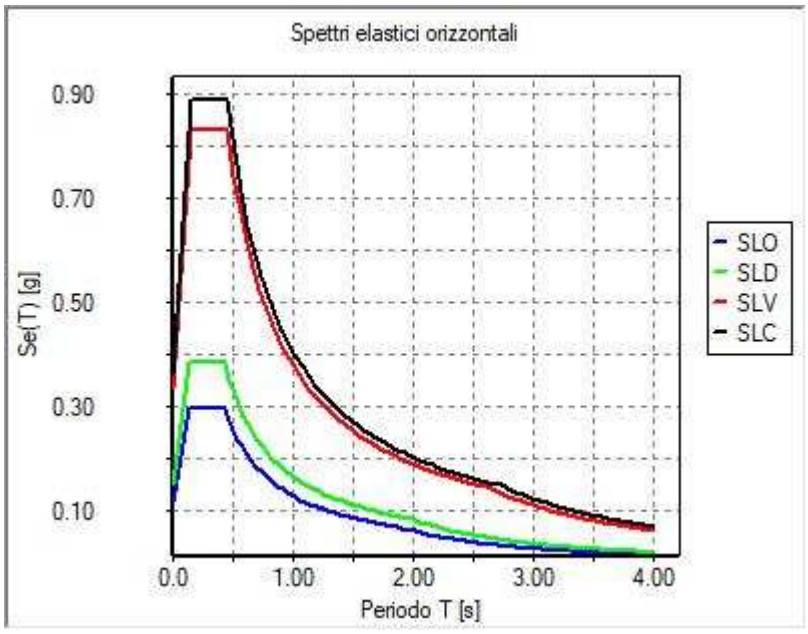

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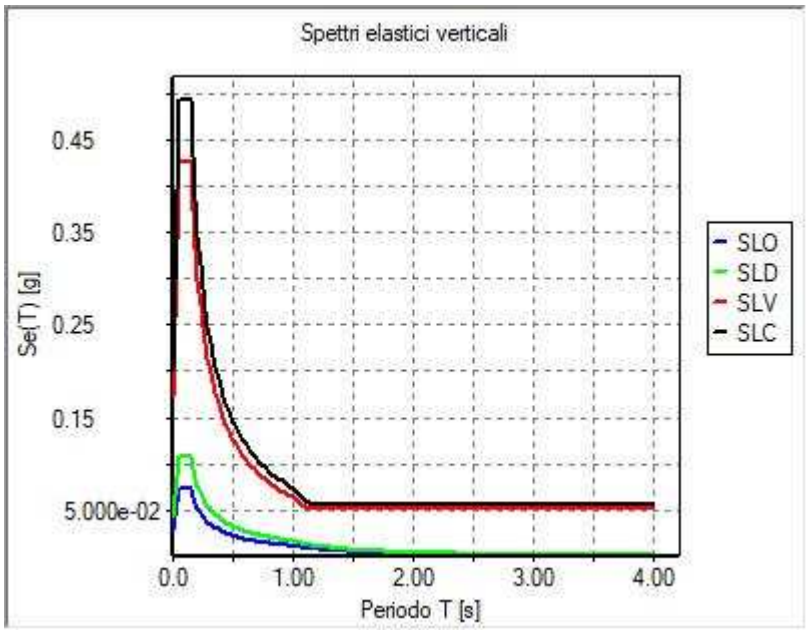

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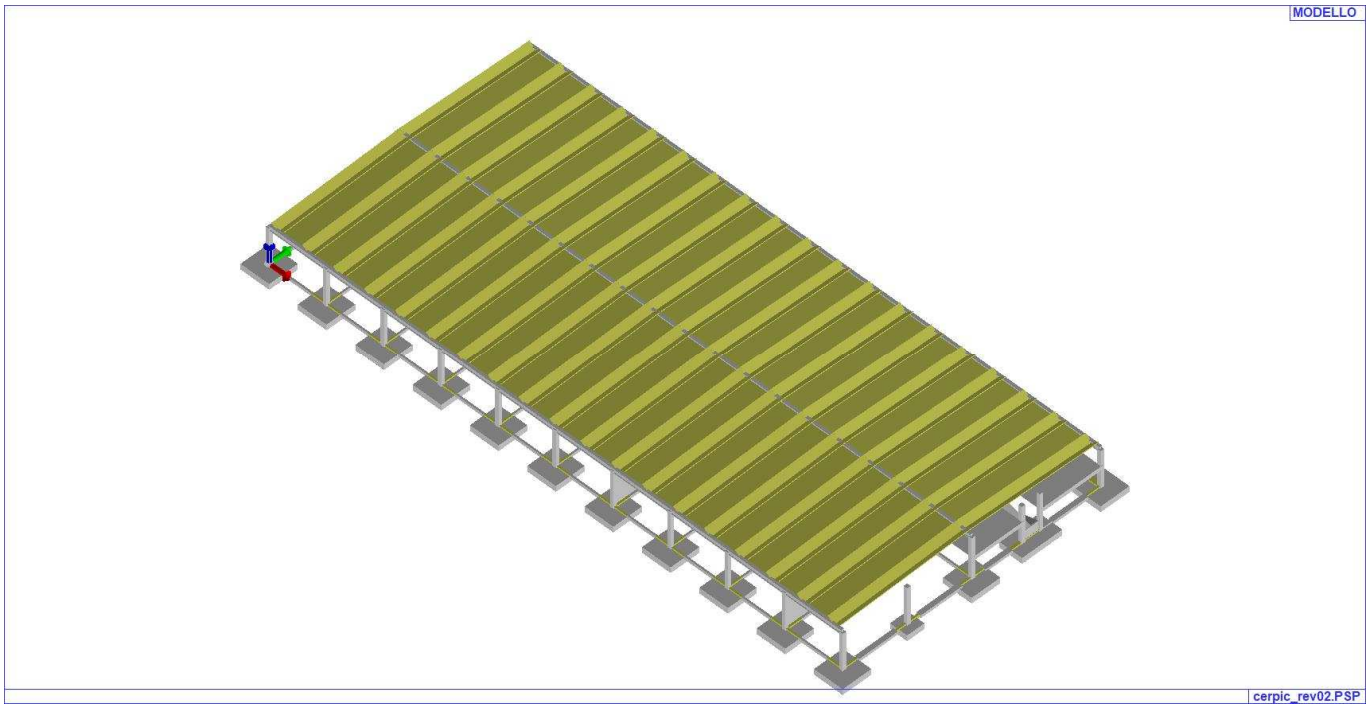

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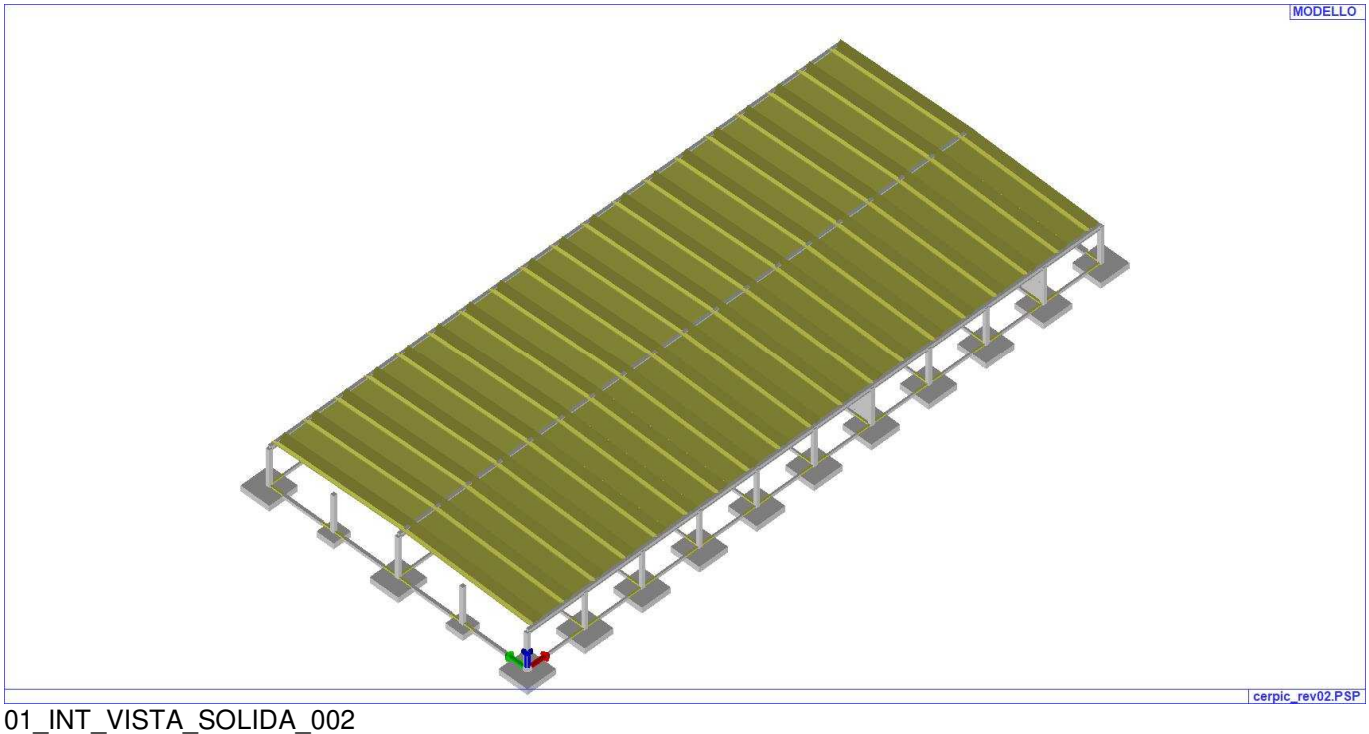

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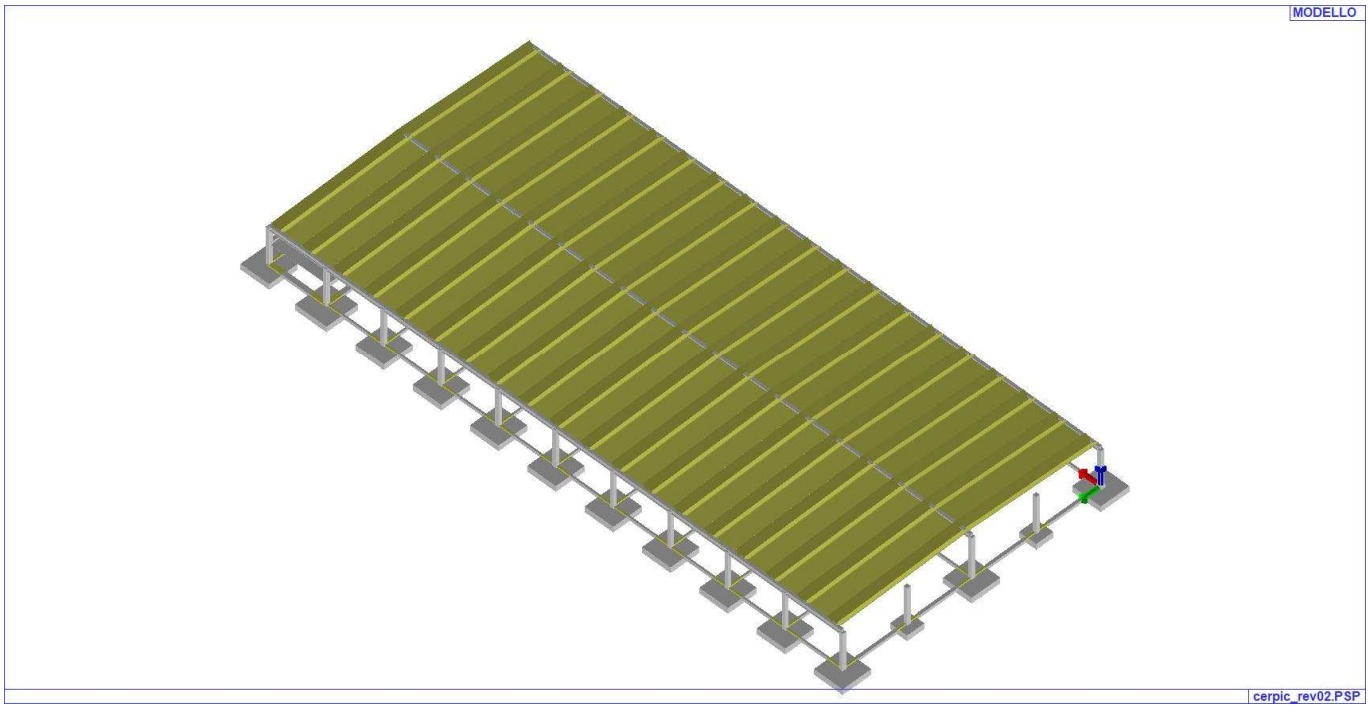

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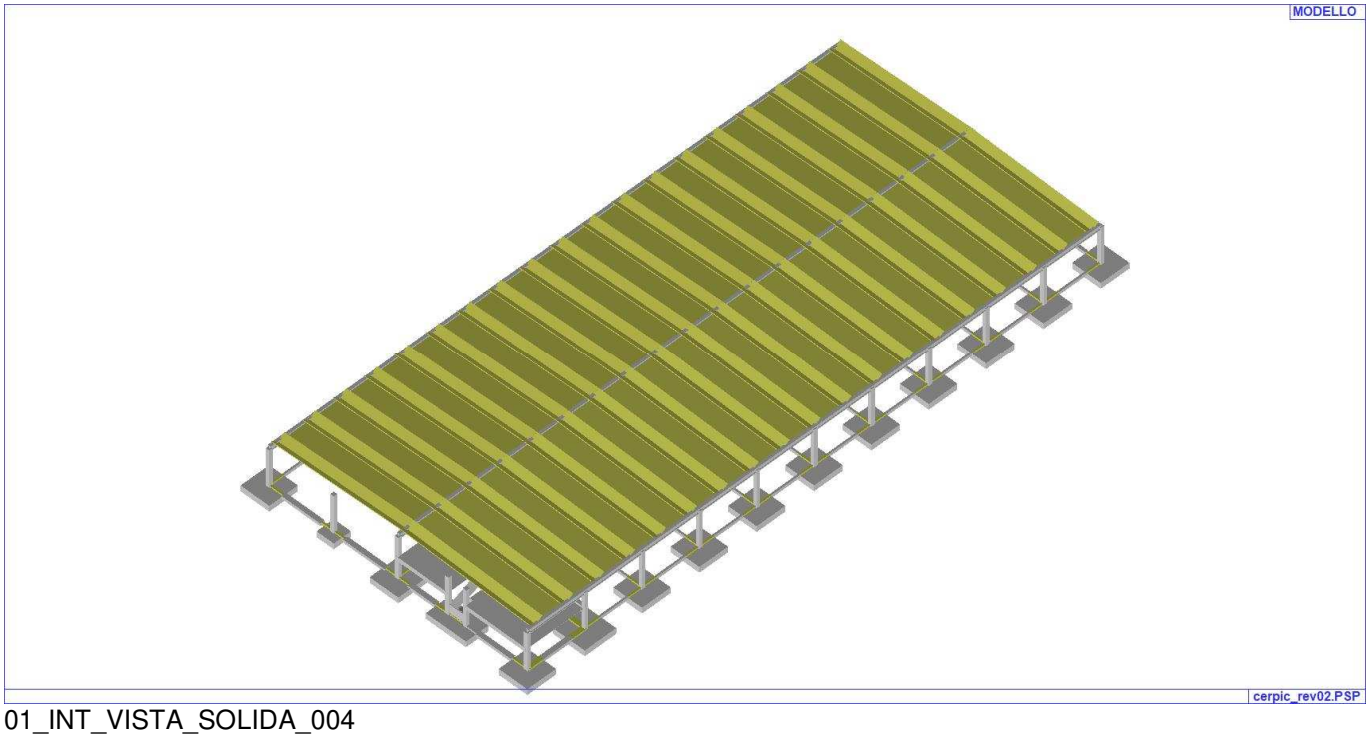


01_INT_VISTA_SOLIDA_004

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
Poisson	coefficiente di contrazione trasversale
G	modulo di elasticità tangenziale
Gamma	peso specifico
Alfa	coefficiente di dilatazione termica

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	cemento armato		
		Rck	resistenza caratteristica cubica
		Fctm	resistenza media a trazione semplice
2	acciaio		
		Ft	tensione di rottura a trazione
		Fy	tensione di snervamento
		Fd	resistenza di calcolo
		Fdt	resistenza di calcolo per spess. t>40 mm
		Sadm	tensione ammissibile
		Sadmt	tensione ammissibile per spess. t>40 mm
3	muratura		
		Resist. Fk	resistenza caratteristica a compressione
		Resist. Fvko	resistenza caratteristica a taglio
4	legno		
		Resist. fc0k	Resistenza caratteristica (tensione amm. per REGLES) per compressione
		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

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

Con riferimento al **Documento di Affidabilità** "*Test di validazione del software di calcolo PRO_SAP e dei moduli aggiuntivi PRO_SAP Modulo Geotecnico, PRO_CAD nodi acciaio e PRO_MST*" - versione Maggio 2011, disponibile per il download sul sito **www.2si.it**, si segnalano i seguenti esempi applicativi:

Modellazione di strutture in c.a.

Test N°	Titolo
41	GERARCHIA DELLE RESISTENZE PER TRAVI IN C.A.
42	GERARCHIA DELLE RESISTENZE PER PILASTRI IN C.A.
43	VERIFICA ALLE TA DI STRUTTURE IN C.A.
44	VERIFICA AGLI SLU DI STRUTTURE IN C.A.
45	VERIFICA A PUNZONAMENTO ALLO SLU DI PIASTRE IN C.A.
46	VERIFICA A PUNZONAMENTO ALLO SLU DI TRAVI IN C.A.
47	PROGETTAZIONE A TAGLIO DI STRUTTURE IN C.A. SECONDO IL D.M. 9/1/96
48	PROGETTAZIONE A TAGLIO DI STRUTTURE IN C.A. SECONDO IL D.M. 14/1/2008
49	VERIFICA ALLO SLE (TENSIONI E FESSURAZIONE) DI STRUTTURE IN C.A.
50	VERIFICA ALLO SLE (DEFORMAZIONE) DI STRUTTURE IN C.A.
51	FATTORE DI STRUTTURA
52	SOVRARESISTENZE
53	DETTAGLI COSTRUTTIVI C.A.: LIMITI D'ARMATURA PILASTRI E NODI TRAVE-PILASTRO
54	PARETI IN C.A. SNELLE IN ZONA SISMICA
80	ANALISI PUSHOVER DI UN EDIFICIO IN C.A.
120	PROGETTO E VERIFICA DI TRAVI PREM

Modellazione di strutture in acciaio

Test N°	Titolo
55	VERIFICA DI STABILITA' DI ASTE COMPRESSE IN ACCIAIO – METODO OMEGA
56	LUCE LIBERA DI TRAVI E ASTE IN ACCIAIO
57	LUCE LIBERA DI COLONNE IN ACCIAIO
58	SVERGOLAMENTO DI TRAVI IN ACCIAIO
59	FATTORE DI STRUTTURA
60	ACCIAIO D.M.2008
61	ACCIAIO EC3
62	GERARCHIA RESISTENZE STRUTTURE IN ACCIAIO
63	STABILITA' DI ASTE COMPOSTE IN ACCIAIO
73	COLLEGAMENTI IN ACCIAIO: NODO TRAVE COLONNA FLANGIATO CON PRESENZA IRRIGIDIMENTI TRASVERSALI
74	COLLEGAMENTI IN ACCIAIO: NODO TRAVE COLONNA FLANGIATO CON PRESENZA DI UN PIATTO DI RINFORZO SALDATO ALL'ANIMA DELLA COLONNA
75	COLLEGAMENTI IN ACCIAIO: NODO TRAVE COLONNA FLANGIATO CON PRESENZA DI DUE PIATTI DI RINFORZO SALDATI ALL'ANIMA DELLA COLONNA
76	COLLEGAMENTI IN ACCIAIO: NODO TRAVE COLONNA FLANGIATO A DUE VIE SU ALI COLONNA
77	COLLEGAMENTI IN ACCIAIO: NODO TRAVE COLONNA FLANGIATO A UNA VIA CON DUE COMBINAZIONI DI CARICO
78	COLLEGAMENTI IN ACCIAIO: NODO TRAVE COLONNA FLANGIATO SU ANIMA SENZA RINFORZI A QUATTRO FILE DI BULLONI DI CUI UNA SU PIASTRA INFERIORE E UNA SU PIASTRA SUPERIORE
79	VERIFICA DELLA PIASTRA NODO TRAVE COLONNA
85	TELAIO ACCIAIO: CONTROVENTI CONCENTRICI

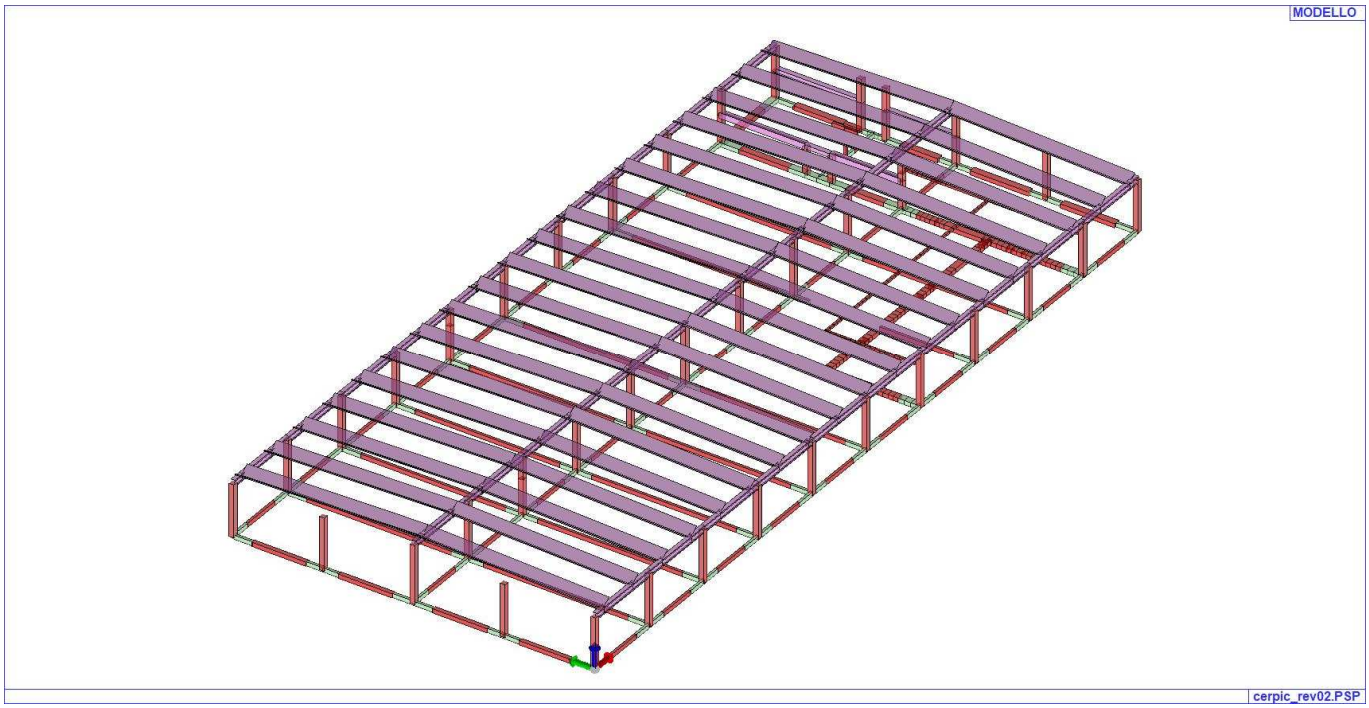
Modellazione di strutture in muratura

Test N°	Titolo
81	ANALISI PUSHOVER DI UNA STRUTTURA IN MURATURA
84	ANALISI ELASTO PLASTICA INCREMENTALE, PARETE IN MURATURA
86	VERIFICA NON SISMICA DELLE MURATURE (D.M. 87 TA)
87	VERIFICA NON SISMICA DELLE MURATURE (D.M. 2005 SL)
88	FATTORE DI STRUTTURA

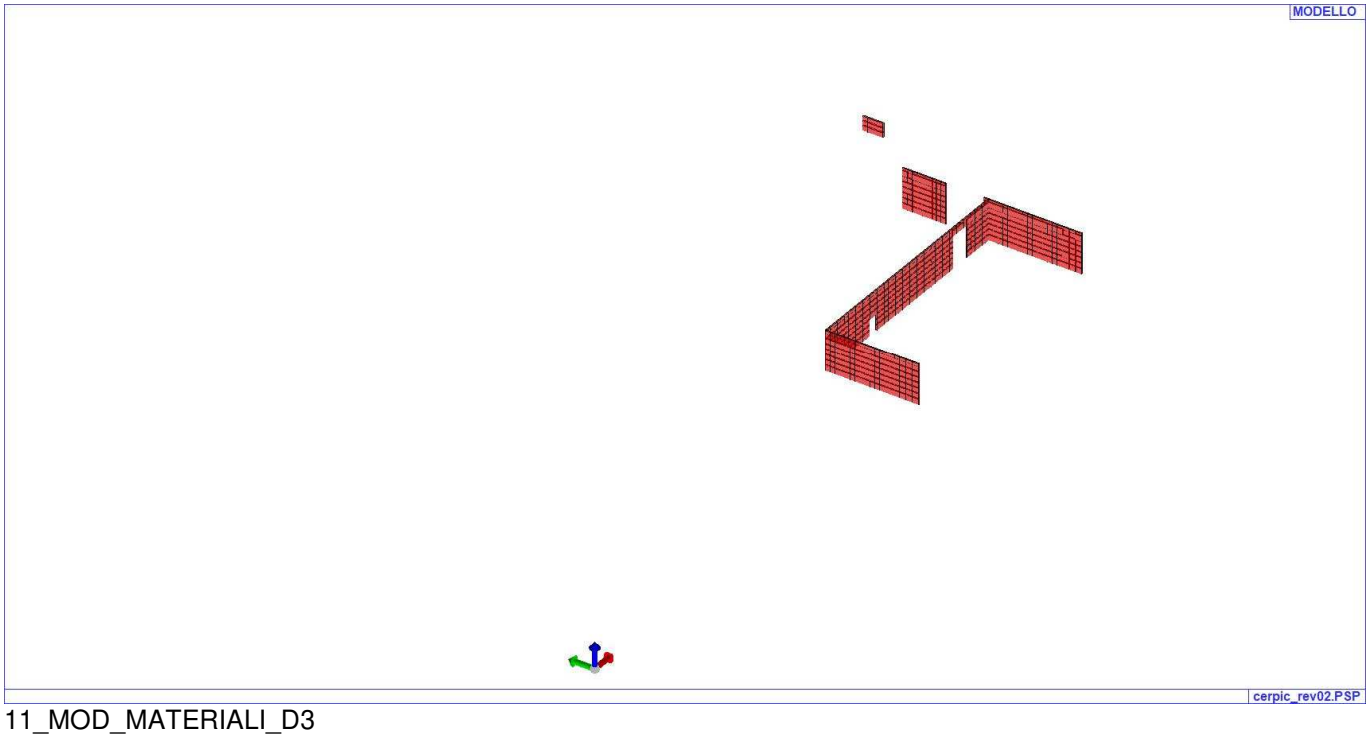
Modellazione di strutture in legno

Test N°	Titolo
17	SOLAIO: MISTO LEGNO-CALCESTRUZZO
89	VERIFICA ALLO SLU DI STRUTTURE IN LEGNO SECONDO EC5
90	VERIFICA ALLO SLE DI STRUTTURE IN LEGNO SECONDO EC5
91	FATTORE DI STRUTTURA
92	VERIFICHE EC5
93	SNELLEZZE EC5
94	VERIFICA AL FUOCO DI STRUTTURE IN LEGNO SECONDO EC5
117	PROGETTO E VERIFICA DI GUSCI IN MATERIALE XLAM
118	PROGETTO E VERIFICA DI PARETI IN MATERIALE XLAM E RELATIVI COLLEGAMENTI
119	PROGETTO E VERIFICA DI SOLAI IN MATERIALE XLAM

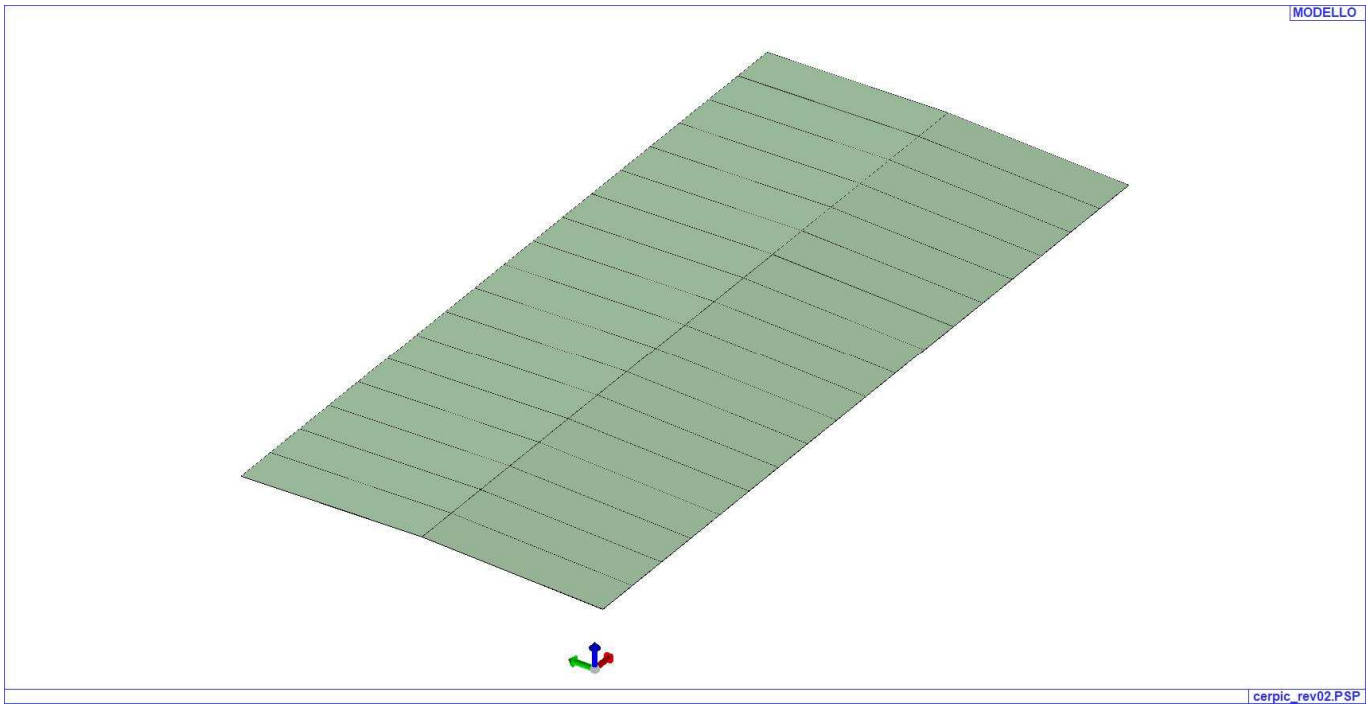
Id	Tipo / Note		Young	Poisson	G	Gamma	Alfa
		daN/cm2	daN/cm2		daN/cm2	daN/cm3	
1	Calcestruzzo Classe C25/30		3.145e+05	0.20	1.310e+05	2.50e-03	1.00e-05
	Rck	300.0					
	fctm	25.6					
7	Calcestruzzo Classe C45/55		3.640e+05	0.20	1.517e+05	2.50e-03	1.00e-05
	Rck	550.0					
	fctm	38.3					
9	Calcestruzzo Classe C45/55 pilastri		1.820e+05	0.20	7.583e+04	2.50e-03	1.00e-05
	Rck	550.0					
	fctm	38.3					
51	materiale inf rigido no peso E = 1.000e+09		1.000e+09	0.0	5.000e+08	0.0	1.20e-05
54	materiale E = 3.640e+05		3.640e+05	0.0	1.820e+05	0.0	1.20e-05



11_MOD_MATERIALI_D2



11_MOD_MATERIALI_D3



11_MOD_MATERIALI_SOLAI

Pareti c.a.	**1/7/..**	**2/8/..**	**3/9/..**	**4/10/..**	**5/11/..**	**6/12/..**
Generalità						
Progetto armatura	Pareti	Parete sismica	Parete sismica	Parete sismica	Parete sismica	Pareti
	Parete sismica	Parete sismica	Parete sismica	Parete sismica	Parete sismica	
Armatura						
Inclinazione Av [gradi]	90.00	90.00	90.00	90.00	90.00	90.00
	90.00	90.00	90.00	90.00	90.00	
Angolo Av-Ao [gradi]	90.00	90.00	90.00	90.00	90.00	90.00
	90.00	90.00	90.00	90.00	90.00	
Minima tesa	0.25	0.25	0.25	0.25	0.25	0.25
	0.25	0.25	0.25	0.25	0.25	
Massima tesa	4.00	4.00	4.00	4.00	4.00	4.00
	4.00	4.00	4.00	4.00	4.00	
Maglia unica centrale	No	No	No	No	No	No
	No	No	No	No	No	
Unico strato verticale	No	No	No	No	No	No
	No	No	No	No	No	
Unico strato orizzontale	No	No	No	No	No	No
	No	No	No	No	No	
Copriferro [cm]	2.00	2.00	2.00	2.00	2.00	2.00
	2.00	2.00	2.00	2.00	2.00	
Maglia V						
diametro	10	10	10	10	10	10
	10	10	10	10	10	
passo	25	25	25	25	25	25
	25	25	25	25	25	
diametro aggiuntivi	12	12	12	12	12	12
	12	12	12	12	12	
Maglia O						
diametro	8	8	8	8	8	8
	8	8	8	8	8	
passo	25	25	25	25	25	25
	25	25	25	25	25	
diametro aggiuntivi	8	8	8	8	8	8
	8	8	8	8	8	
Stati limite ultimi						
Tensione fy [daN/cm2]	4500.00	4500.00	4500.00	4500.00	4500.00	4500.00
	4500.00	4500.00	4500.00	4500.00	4500.00	
Tipo acciaio	tipo C	tipo C	tipo C	tipo C	tipo C	tipo C
	tipo C	tipo C	tipo C	tipo C	tipo C	
Coefficiente gamma s	1.15	1.15	1.15	1.15	1.15	1.15
	1.15	1.15	1.15	1.15	1.15	
Coefficiente gamma c	1.50	1.50	1.50	1.50	1.50	1.50
	1.50	1.50	1.50	1.50	1.50	
Fattore di confidenza FC	0.0	0.0	0.0	0.0	0.0	0.0

Pareti c.a.	1/7/..	2/8/..	3/9/..	4/10/..	5/11/..	6/12/..
	0.0	0.0	0.0	0.0	0.0	
Verifiche con N costante	Si	Si	Si	Si	Si	Si
	Si	Si	Si	Si	Si	
Tensioni ammissibili						
Tensione amm. cls [daN/cm2]	97.50	97.50	97.50	97.50	97.50	97.50
	97.50	97.50	97.50	97.50	97.50	
Tensione amm. acciaio [daN/cm2]	2600.00	2600.00	2600.00	2600.00	2600.00	2600.00
	2600.00	2600.00	2600.00	2600.00	2600.00	
Rapporto omogeneizzazione N	15.00	15.00	15.00	15.00	15.00	15.00
	15.00	15.00	15.00	15.00	15.00	
Massimo rapporto area compressa/tesa	1.00	1.00	1.00	1.00	1.00	1.00
	1.00	1.00	1.00	1.00	1.00	
Parete estesa debolmente armata						
Fattore amplificazione taglio V	1.50	1.50	1.50	1.50	1.50	1.50
	1.50	1.50	1.50	1.50	1.50	
Hcrit. par. 7.4.4.5.1 [cm]	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	
Hcrit. par. 7.4.6.1.4 [cm]	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	
Diagramma inviluppo taglio	No	No	No	Si	No	No
	No	No	Si	No	No	
Vincolo lati	nessun lato	nessun lato	nessun lato	nessun lato	nessun lato	nessun lato
	nessun lato	nessun lato	nessun lato	nessun lato	nessun lato	
Verifica come fascia	No	No	No	No	No	Si
	No	No	No	No	No	
Diametro di estremità	0	0	0	0	0	0
	0	0	0	0	0	
Zona confinata						
Minima tesa	1.00	1.00	1.00	1.00	1.00	1.00
	1.00	1.00	1.00	1.00	1.00	
Massima tesa	4.00	4.00	4.00	4.00	4.00	4.00
	4.00	4.00	4.00	4.00	4.00	
Distanza barre [cm]	2.00	2.00	2.00	2.00	2.00	2.00
	2.00	2.00	2.00	2.00	2.00	
Interferro	2	2	2	2	2	2
	2	2	2	2	2	
Armatura inclinata						
Area barre [cm2]	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	
Angolo orizzontale [gradi]	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	
Distanza di base [cm]	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	
Resistenza al fuoco						
3- intradosso	No	No	No	No	No	No
	No	No	No	No	No	
3+ estradosso	No	No	No	No	No	No
	No	No	No	No	No	
Tempo di esposizione R	15	15	15	15	15	15
	15	15	15	15	15	

Gusci c.a.	1/7/..	2/8/..	3/9/..	4/10/..	5/11/..	6/12/..
Armatura						
Inclinazione Ax [gradi]	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	
Angolo Ax-Ay [gradi]	90.00	90.00	90.00	90.00	90.00	90.00
	90.00	90.00	90.00	90.00	90.00	
Minima tesa	0.31	0.31	0.31	0.31	0.31	0.31
	0.31	0.31	0.31	0.31	0.31	
Massima tesa	0.78	0.78	0.78	0.78	0.78	0.78
	0.78	0.78	0.78	0.78	0.78	
Maglia unica centrale	No	No	No	No	No	No
	No	No	No	No	No	
Copriferro [cm]	2.00	2.00	2.00	2.00	2.00	2.00
	2.00	2.00	2.00	2.00	2.00	
Maglia x						
diametro	10	10	10	10	10	10
	10	10	10	10	10	
passo	20	20	20	20	20	20
	20	20	20	20	20	
diametro aggiuntivi	12	12	12	12	12	12
	12	12	12	12	12	

Gusci c.a.	1/7/..	2/8/..	3/9/..	4/10/..	5/11/..	6/12/..
Maglia y						
diametro	10	10	10	10	10	10
	10	10	10	10	10	
passo	20	20	20	20	20	20
	20	20	20	20	20	
diametro aggiuntivi	12	12	12	12	12	12
	12	12	12	12	12	
Stati limite ultimi						
Tensione fy [daN/cm2]	4500.00	4500.00	4500.00	4500.00	4500.00	4500.00
	4500.00	4500.00	4500.00	4500.00	4500.00	
Tipo acciaio	tipo C	tipo C	tipo C	tipo C	tipo C	tipo C
	tipo C	tipo C	tipo C	tipo C	tipo C	
Coefficiente gamma s	1.15	1.15	1.15	1.15	1.15	1.15
	1.15	1.15	1.15	1.15	1.15	
Coefficiente gamma c	1.50	1.50	1.50	1.50	1.50	1.50
	1.50	1.50	1.50	1.50	1.50	
Fattore di confidenza FC	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	
Verifiche con N costante	Si	Si	Si	Si	Si	Si
	Si	Si	Si	Si	Si	
Applica SLU da DIN	No	No	No	No	No	No
	No	No	No	No	No	
Tensioni ammissibili						
Tensione amm. cls [daN/cm2]	97.50	97.50	97.50	97.50	97.50	97.50
	97.50	97.50	97.50	97.50	97.50	
Tensione amm. acciaio [daN/cm2]	2600.00	2600.00	2600.00	2600.00	2600.00	2600.00
	2600.00	2600.00	2600.00	2600.00	2600.00	
Rapporto omogeneizzazione N	15.00	15.00	15.00	15.00	15.00	15.00
	15.00	15.00	15.00	15.00	15.00	
Massimo rapporto area compressa/tesa	1.00	1.00	1.00	1.00	1.00	1.00
	1.00	1.00	1.00	1.00	1.00	
Resistenza al fuoco						
3- intradosso	No	No	No	No	No	No
	No	No	No	No	No	
3+ estradosso	No	No	No	No	No	No
	No	No	No	No	No	
Tempo di esposizione R	15	15	15	15	15	15
	15	15	15	15	15	

Travi c.a.	1/7/..	2/8/..	3/9/..	4/10/..	5/11/..	6/12/..
Generalità						
Progetta a filo	No	No	No	No	No	No
	No	No	No	No	No	
Af inf: da q*L*L /	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	
Armatura						
Minima tesa	0.31	0.0	0.0	0.31	0.0	0.31
	0.0	0.0	0.31	0.31	0.0	
Minima compressa	0.31	0.0	0.0	0.31	0.0	0.31
	0.0	0.0	0.31	0.31	0.0	
Massima tesa	0.78	2.00	2.00	0.78	2.00	0.78
	2.00	2.00	0.78	0.78	2.00	
Da sezione	Si	Si	Si	Si	Si	Si
	Si	Si	Si	Si	Si	
Usa armatura teorica	No	No	No	No	No	No
	No	No	No	No	No	
Stati limite ultimi						
Tensione fy [daN/cm2]	4500.00	4500.00	4500.00	4500.00	4500.00	4500.00
	4500.00	4500.00	4500.00	4500.00	4500.00	
Tensione fy staffe [daN/cm2]	4500.00	4500.00	4500.00	4500.00	4500.00	4500.00
	4500.00	4500.00	4500.00	4500.00	4500.00	
Tipo acciaio	tipo C	tipo C	tipo C	tipo C	tipo C	tipo C
	tipo C	tipo C	tipo C	tipo C	tipo C	
Coefficiente gamma s	1.15	1.15	1.15	1.15	1.15	1.15
	1.15	1.15	1.15	1.15	1.15	
Coefficiente gamma c	1.50	1.50	1.50	1.50	1.50	1.50
	1.50	1.50	1.50	1.50	1.50	
Fattore di confidenza FC	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	
Verifiche con N costante	Si	Si	Si	Si	Si	Si
	Si	Si	Si	Si	Si	
Fattore di ridistribuzione	0.0	0.0	0.0	0.0	0.0	0.0

Travi c.a.	1/7/..	2/8/..	3/9/..	4/10/..	5/11/..	6/12/..
	0.0	0.0	0.0	0.0	0.0	
Modello per il confinamento						
Relazione tensio-deformativa	Mander	Mander	Mander	Mander	Mander	Mander
	Mander	Mander	Mander	Mander	Mander	
Incrudimento acciaio	5.000e-03	5.000e-03	5.000e-03	5.000e-03	5.000e-03	5.000e-03
	5.000e-03	5.000e-03	5.000e-03	5.000e-03	5.000e-03	
Fattore lambda	1.00	1.00	1.00	1.00	1.00	1.00
	1.00	1.00	1.00	1.00	1.00	
epsilon max,s	4.000e-02	4.000e-02	4.000e-02	4.000e-02	4.000e-02	4.000e-02
	4.000e-02	4.000e-02	4.000e-02	4.000e-02	4.000e-02	
epsilon cu2	4.500e-03	4.500e-03	4.500e-03	4.500e-03	4.500e-03	4.500e-03
	4.500e-03	4.500e-03	4.500e-03	4.500e-03	4.500e-03	
epsilon c2	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	
epsilon cy	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	
Tensioni ammissibili						
Tensione amm. cls [daN/cm2]	97.50	97.50	97.50	97.50	97.50	97.50
	97.50	97.50	97.50	97.50	97.50	
Tensione amm. acciaio [daN/cm2]	2600.00	2600.00	2600.00	2600.00	2600.00	2600.00
	2600.00	2600.00	2600.00	2600.00	2600.00	
Rapporto omogeneizzazione N	15.00	15.00	15.00	15.00	15.00	15.00
	15.00	15.00	15.00	15.00	15.00	
Massimo rapporto area compressa/tesa	1.00	1.00	1.00	1.00	1.00	1.00
	1.00	1.00	1.00	1.00	1.00	
Staffe						
Diametro staffe	0.0	10.00	10.00	0.0	10.00	0.0
	10.00	10.00	0.0	0.0	10.00	
Passo minimo [cm]	4.00	20.00	5.00	4.00	20.00	4.00
	15.00	10.00	4.00	4.00	19.00	
Passo massimo [cm]	30.00	20.00	5.00	30.00	20.00	30.00
	15.00	10.00	30.00	30.00	19.00	
Passo raffittito [cm]	15.00	20.00	5.00	15.00	20.00	15.00
	15.00	10.00	15.00	15.00	19.00	
Lunghezza zona raffittita [cm]	50.00	0.0	0.0	50.00	0.0	50.00
	0.0	0.0	50.00	50.00	0.0	
Ctg(Teta) Max	2.50	2.50	2.50	2.50	2.50	2.50
	2.50	2.50	2.50	2.50	2.50	
Percentuale sagomati	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	
Luce di taglio per GR [cm]	1.00	0.0	0.0	1.00	0.0	1.00
	0.0	0.0	1.00	1.00	0.0	
Adotta scorrimento medio	No	No	No	No	No	No
	No	No	No	No	No	
Torsione non essenziale inclusa	Si	Si	Si	Si	Si	Si
	Si	Si	Si	Si	Si	

Pilastri c.a.	1/7/..	2/8/..	3/9/..	4/10/..	5/11/..	6/12/..
Generalità						
Progetto armatura	Privilegia lati	Privilegia lati	Privilegia lati	Privilegia lati	Privilegia lati	Privilegia lati
	Privilegia lati	Privilegia lati	Privilegia lati	Privilegia lati	Privilegia lati	
Progetta a filo	No	No	No	No	No	No
	No	No	No	No	No	
Effetti del 2 ordine	Si	Si	Si	Si	Si	Si
	Si	Si	Si	Si	Si	
Beta per 2-2	1.00	1.00	1.00	1.00	1.00	1.00
	1.00	1.00	1.00	1.00	1.00	
Beta per 3-3	1.00	1.00	1.00	1.00	1.00	1.00
	1.00	1.00	1.00	1.00	1.00	
Armatura						
Massima tesa	4.00	4.00	4.00	4.00	4.00	4.00
	4.00	4.00	4.00	4.00	4.00	
Minima tesa	1.00	1.00	1.00	1.00	1.00	1.00
	1.00	1.00	1.00	1.00	1.00	
Stati limite ultimi						
Tensione fy [daN/cm2]	4500.00	4500.00	4500.00	4500.00	4500.00	4500.00
	4500.00	4500.00	4500.00	4500.00	4500.00	
Tensione fy staffe [daN/cm2]	4500.00	4500.00	4500.00	4500.00	4500.00	4500.00
	4500.00	4500.00	4500.00	4500.00	4500.00	
Tipo acciaio	tipo C	tipo C	tipo C	tipo C	tipo C	tipo C
	tipo C	tipo C	tipo C	tipo C	tipo C	
Coefficiente gamma s	1.15	1.15	1.15	1.15	1.15	1.15

Pilastri c.a.	1/7/..	2/8/..	3/9/..	4/10/..	5/11/..	6/12/..
	1.15	1.15	1.15	1.15	1.15	
Coefficiente gamma c	1.50	1.50	1.50	1.50	1.50	1.50
	1.50	1.50	1.50	1.50	1.50	
Fattore di confidenza FC	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	
Verifiche con N costante	Si	Si	Si	Si	Si	Si
	Si	Si	Si	Si	Si	
Modello per il confinamento						
Relazione tensio-deformativa	Mander	Mander	Mander	Mander	Mander	Mander
	Mander	Mander	Mander	Mander	Mander	
Incrudimento acciaio	5.000e-03	5.000e-03	5.000e-03	5.000e-03	5.000e-03	5.000e-03
	5.000e-03	5.000e-03	5.000e-03	5.000e-03	5.000e-03	
Fattore lambda	1.00	1.00	1.00	1.00	1.00	1.00
	1.00	1.00	1.00	1.00	1.00	
epsilon max,s	4.000e-02	4.000e-02	4.000e-02	4.000e-02	4.000e-02	4.000e-02
	4.000e-02	4.000e-02	4.000e-02	4.000e-02	4.000e-02	
epsilon cu2	4.500e-03	4.500e-03	4.500e-03	4.500e-03	4.500e-03	4.500e-03
	4.500e-03	4.500e-03	4.500e-03	4.500e-03	4.500e-03	
epsilon c2	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	
epsilon cy	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	
Tensioni ammissibili						
Tensione amm. cls [daN/cm2]	97.50	97.50	97.50	97.50	97.50	97.50
	97.50	97.50	97.50	97.50	97.50	
Tensione amm. acciaio [daN/cm2]	2600.00	2600.00	2600.00	2600.00	2600.00	2600.00
	2600.00	2600.00	2600.00	2600.00	2600.00	
Rapporto omogeneizzazione N	15.00	15.00	15.00	15.00	15.00	15.00
	15.00	15.00	15.00	15.00	15.00	
Staffe						
Diametro staffe	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	
Passo minimo [cm]	5.00	5.00	5.00	5.00	5.00	5.00
	5.00	5.00	5.00	5.00	5.00	
Passo massimo [cm]	25.00	25.00	25.00	25.00	25.00	25.00
	25.00	25.00	25.00	25.00	25.00	
Passo raffittito [cm]	15.00	15.00	15.00	15.00	15.00	15.00
	15.00	15.00	15.00	15.00	15.00	
Lunghezza zona raffittita [cm]	45.00	45.00	45.00	45.00	45.00	45.00
	45.00	45.00	45.00	45.00	45.00	
Ctg(Teta) Max	2.50	2.50	2.50	2.50	2.50	2.50
	2.50	2.50	2.50	2.50	2.50	
Luce di taglio per GR [cm]	1.00	0.0	0.0	1.00	0.0	1.00
	0.0	0.0	1.00	1.00	0.0	
Massimizza gerarchia	Si	Si	Si	Si	Si	Si
	Si	Si	Si	Si	Si	

Solai e pannelli	1/7/..	2/8/..	3/9/..	4/10/..	5/11/..	6/12/..
Generalità						
Usa tensioni ammissibili	No	No	No	No	No	No
	No	No	No	No	No	
Af inf: da traliccio	Si	Si	Si	Si	Si	Si
	Si	Si	Si	Si	Si	
Consenti armatura a taglio	No	No	No	No	No	No
	No	No	No	No	No	
Incrementa armatura longitudinale per taglio	Si	Si	Si	Si	Si	Si
	Si	Si	Si	Si	Si	
Af inf: da q*L*L /	20.00	20.00	20.00	20.00	20.00	20.00
	20.00	20.00	20.00	20.00	20.00	
Incremento fascia piena [cm]	5.00	5.00	5.00	5.00	5.00	5.00
	5.00	5.00	5.00	5.00	5.00	
Armatura						
Minima tesa	0.15	0.15	0.15	0.15	0.15	0.15
	0.15	0.15	0.15	0.15	0.15	
Massima tesa	3.00	3.00	3.00	3.00	3.00	3.00
	3.00	3.00	3.00	3.00	3.00	
Minima compressa	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	
Af/h [cm]	7.000e-02	7.000e-02	7.000e-02	7.000e-02	7.000e-02	7.000e-02
	7.000e-02	7.000e-02	7.000e-02	7.000e-02	7.000e-02	
Stati limite ultimi						
Tensione fy [daN/cm2]	4500.00	4500.00	4500.00	4500.00	4500.00	4500.00

Solai e pannelli	**1/7/..**	**2/8/..**	**3/9/..**	**4/10/..**	**5/11/..**	**6/12/..**
	4500.00	4500.00	4500.00	4500.00	4500.00	
Tipo acciaio	tipo C	tipo C	tipo C	tipo C	tipo C	tipo C
	tipo C	tipo C	tipo C	tipo C	tipo C	
Coefficiente gamma s	1.15	1.15	1.15	1.15	1.15	1.15
	1.15	1.15	1.15	1.15	1.15	
Coefficiente gamma c	1.50	1.50	1.50	1.50	1.50	1.50
	1.50	1.50	1.50	1.50	1.50	
Fattore di ridistribuzione	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	
Tensioni ammissibili						
Tensione amm. cls [daN/cm2]	85.00	85.00	85.00	85.00	85.00	85.00
	85.00	85.00	85.00	85.00	85.00	
Tensione amm. acciaio [daN/cm2]	2600.00	2600.00	2600.00	2600.00	2600.00	2600.00
	2600.00	2600.00	2600.00	2600.00	2600.00	
Rapporto omogeneizzazione N	15.00	15.00	15.00	15.00	15.00	15.00
	15.00	15.00	15.00	15.00	15.00	
Massimo rapporto area compressa/tesa	1.00	1.00	1.00	1.00	1.00	1.00
	1.00	1.00	1.00	1.00	1.00	
Verifica freccia						
Infinita	250.00	500.00	500.00	250.00	500.00	250.00
	500.00	500.00	250.00	250.00	500.00	
Istantanea	500.00	1000.00	1000.00	500.00	1000.00	500.00
	1000.00	1000.00	500.00	500.00	1000.00	
Fattore viscosità	3.00	3.00	3.00	3.00	3.00	3.00
	3.00	3.00	3.00	3.00	3.00	
Usa J non fessurato	No	No	No	No	No	No
	No	No	No	No	No	
Elementi non strutturali						
Tamponatura antiespulsione	No	Si	Si	No	Si	No
	Si	Si	No	No	Si	
Tamponatura con armatura	No	No	No	No	No	No
	No	No	No	No	No	
Fattore di struttura/comportamento	2.00	2.00	2.00	2.00	2.00	2.00
	2.00	2.00	2.00	2.00	2.00	
Coefficiente gamma m	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	
Periodo Ta	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	
Altezza pannello	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	

MODELLAZIONE DELLE SEZIONI

LEGENDA TABELLA DATI SEZIONI

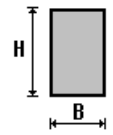
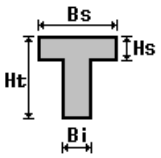
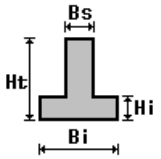
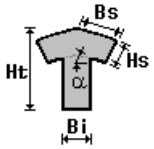
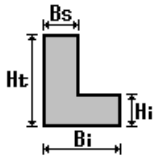
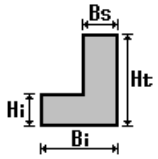
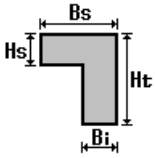
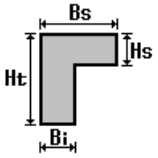
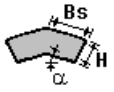
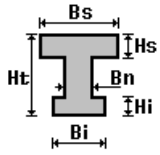
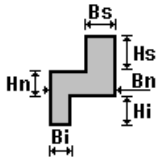
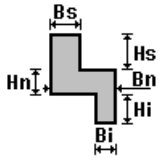
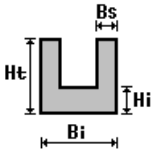
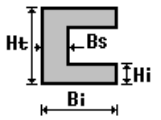
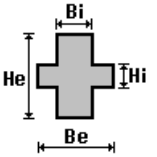
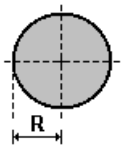
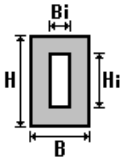
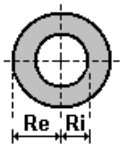
Il programma consente l'uso di sezioni diverse. Sono previsti i seguenti tipi di sezione:

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

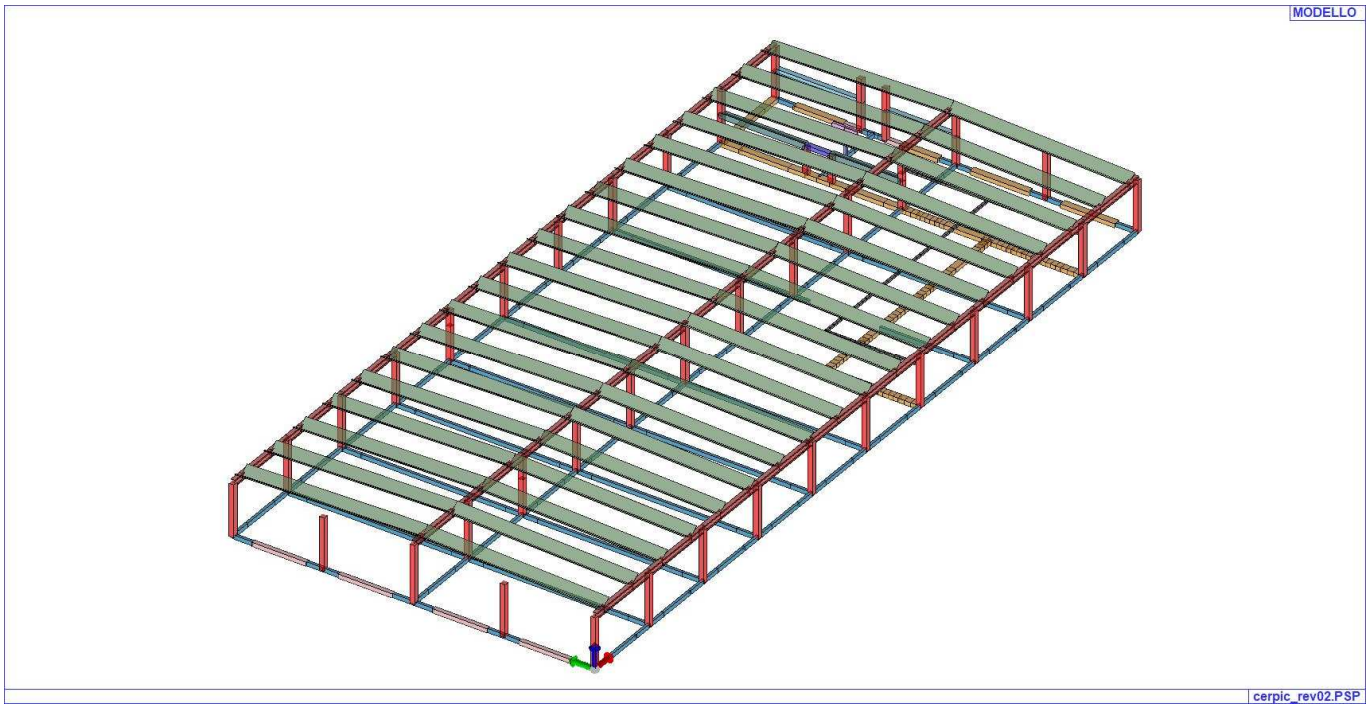
Per quanto concerne i profilati semplici ed accoppiati l'asse 2 del riferimento coincide con l'asse x riportato nei più diffusi profilatari.

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

Con riferimento al Documento di Affidabilità "Test di validazione del software di calcolo PRO_SAP e dei moduli aggiuntivi PRO_SAP Modulo Geotecnico, PRO_CAD nodi acciaio e PRO_MST" - versione Settembre 2014, disponibile per il download sul sito www.2si.it, si segnalano i seguenti esempi applicativi:

Test N°	Titolo
1	CARATTERISTICHE GEOMETRICHE E INERZIALI
45	VERIFICA AGLI SLU DI STRUTTURE IN C.A.
48	PROGETTAZIONE A TAGLIO DI STRUTTURE IN C.A. SECONDO IL D.M. 9/1/96
49	PROGETTAZIONE A TAGLIO DI STRUTTURE IN C.A. SECONDO IL D.M. 14/1/2008
50	VERIFICA ALLO SLE (TENSIONI E FESSURAZIONE) DI STRUTTURE IN C.A.
51	VERIFICA ALLO SLE (DEFORMAZIONE) DI STRUTTURE IN C.A.
104	ANALISI DI RESISTENZA AL FUOCO

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	Rettangolare: b=60.00 h=60.00	3600.00	3000.00	3000.00	1.822e+06	1.080e+06	1.080e+06	3.600e+04	3.600e+04	5.400e+04	5.400e+04
2	Rettangolare: b=30 h=50	1500.00	1250.00	1250.00	2.799e+05	1.125e+05	3.125e+05	7500.00	1.250e+04	1.125e+04	1.875e+04
3	L regolare: bi=80 ht=70 bs=60 hi=30	4800.00	0.0	0.0	2.998e+06	2.120e+06	1.970e+06	4.711e+04	5.253e+04	8.571e+04	8.400e+04
4	L angolata: bs=145 hs=10 alfa=35	2829.98	0.0	0.0	7.708e+04	1.268e+07	1.579e+06	1.068e+05	3.385e+04	1.640e+05	5.773e+04
5	L inversa: bi=80 ht=70 bs=60 hi=30	4800.00	0.0	0.0	2.998e+06	2.120e+06	1.970e+06	4.711e+04	5.253e+04	8.571e+04	8.400e+04
6	Rettangolare: b=40 h=40	1600.00	1333.33	1333.33	3.599e+05	2.133e+05	2.133e+05	1.067e+04	1.067e+04	1.600e+04	1.600e+04
7	Rettangolare: b=30 h=55	1650.00	1375.00	1375.00	3.249e+05	1.238e+05	4.159e+05	8250.00	1.512e+04	1.238e+04	2.269e+04
8	Rettangolare: b=50 h=50	2500.00	2083.33	2083.33	8.785e+05	5.208e+05	5.208e+05	2.083e+04	2.083e+04	3.125e+04	3.125e+04
9	Doppio T: bi=50 ba=24 bs=50 ht=80 hi=12 hs=14	2596.00	0.0	0.0	3.611e+05	3.330e+05	1.790e+06	1.332e+04	4.415e+04	2.403e+04	6.099e+04
10	Rettangolare: b=80 h=50	4000.00	3333.33	3333.33	2.021e+06	2.133e+06	8.333e+05	5.333e+04	3.333e+04	8.000e+04	5.000e+04
11	Rettangolare: b=25 h=25	625.00	520.83	520.83	5.491e+04	3.255e+04	3.255e+04	2604.17	2604.17	3906.25	3906.25
14	Rettangolare: b=60 h=45	2700.00	2250.00	2250.00	9.851e+05	8.100e+05	4.556e+05	2.700e+04	2.025e+04	4.050e+04	3.038e+04



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. 14/01/08

TABELLA DATI NODI

Nodo	X	Y	Z	Nodo	X	Y	Z	Nodo	X	Y	Z
	cm	cm	cm		cm	cm	cm		cm	cm	cm
2	0.0	0.0	650.0	4	0.0	2250.0	722.0	6	0.0	4500.0	650.0
7	0.0	4250.0	0.0	8	0.0	2500.0	0.0	9	0.0	2000.0	0.0
10	0.0	250.0	0.0	13	250.0	4500.0	0.0	14	750.0	4500.0	0.0
15	750.0	0.0	0.0	16	250.0	0.0	0.0	17	1000.0	4500.0	650.0
18	1000.0	0.0	650.0	21	0.0	3575.0	0.0	22	0.0	3175.0	0.0
23	0.0	1325.0	0.0	24	0.0	925.0	0.0	25	0.0	3375.0	650.0
26	0.0	1125.0	650.0	29	1250.0	4500.0	0.0	30	1750.0	4500.0	0.0
31	1750.0	0.0	0.0	32	1250.0	0.0	0.0	33	2000.0	4500.0	650.0
34	2000.0	0.0	650.0	37	2250.0	4500.0	0.0	38	2750.0	4500.0	0.0
39	2750.0	0.0	0.0	40	2250.0	0.0	0.0	41	3000.0	4500.0	650.0
42	3000.0	0.0	650.0	45	3250.0	4500.0	0.0	46	3750.0	4500.0	0.0
47	3750.0	0.0	0.0	48	3250.0	0.0	0.0	49	4000.0	4500.0	650.0
50	4000.0	0.0	650.0	53	4250.0	4500.0	0.0	54	4750.0	4500.0	0.0
55	4750.0	0.0	0.0	56	4250.0	0.0	0.0	57	5000.0	4500.0	650.0
58	5000.0	0.0	650.0	61	5250.0	4500.0	0.0	62	5750.0	4500.0	0.0
63	5750.0	0.0	0.0	64	5250.0	0.0	0.0	65	6000.0	4500.0	650.0
66	6000.0	0.0	650.0	69	6250.0	4500.0	0.0	70	6750.0	4500.0	0.0
71	6750.0	0.0	0.0	72	6250.0	0.0	0.0	73	7000.0	4500.0	650.0
74	7000.0	0.0	650.0	77	7250.0	4500.0	0.0	78	7750.0	4500.0	0.0
79	7750.0	0.0	0.0	80	7250.0	0.0	0.0	81	8000.0	4500.0	650.0
82	8000.0	0.0	650.0	85	8250.0	4500.0	0.0	86	8750.0	4500.0	0.0
87	8750.0	0.0	0.0	88	8250.0	0.0	0.0	89	9000.0	4500.0	650.0
90	9000.0	0.0	650.0	93	9250.0	4500.0	0.0	94	9750.0	4500.0	0.0
95	9750.0	0.0	0.0	96	9250.0	0.0	0.0	97	1.000e+04	4500.0	650.0
98	1.000e+04	0.0	650.0	100	250.0	2250.0	0.0	101	750.0	2250.0	0.0
102	1000.0	2250.0	722.0	104	1250.0	2250.0	0.0	105	1750.0	2250.0	0.0
106	2000.0	2250.0	722.0	108	2250.0	2250.0	0.0	109	2750.0	2250.0	0.0
110	3000.0	2250.0	722.0	112	3250.0	2250.0	0.0	113	3750.0	2250.0	0.0
114	4000.0	2250.0	722.0	116	4250.0	2250.0	0.0	117	4750.0	2250.0	0.0
118	5000.0	2250.0	722.0	120	5250.0	2250.0	0.0	121	5750.0	2250.0	0.0
122	6000.0	2250.0	722.0	124	6250.0	2250.0	0.0	125	6750.0	2250.0	0.0
126	7000.0	2250.0	722.0	128	7250.0	2250.0	0.0	129	7750.0	2250.0	0.0
130	8000.0	2250.0	722.0	132	8250.0	2250.0	0.0	133	8750.0	2250.0	0.0
134	9000.0	2250.0	722.0	135	9250.0	2250.0	0.0	136	9750.0	2250.0	0.0
137	1.000e+04	2250.0	722.0	139	1000.0	4250.0	0.0	140	1000.0	250.0	0.0
141	1000.0	2050.0	0.0	142	1000.0	2450.0	0.0	143	2000.0	4250.0	0.0
144	2000.0	250.0	0.0	145	2000.0	2050.0	0.0	146	2000.0	2450.0	0.0
147	3000.0	4250.0	0.0	148	3000.0	250.0	0.0	149	3000.0	2050.0	0.0
150	3000.0	2450.0	0.0	151	4000.0	4250.0	0.0	152	4000.0	250.0	0.0
153	4000.0	2050.0	0.0	154	4000.0	2450.0	0.0	155	5000.0	4250.0	0.0
156	5000.0	250.0	0.0	157	5000.0	2050.0	0.0	158	5000.0	2450.0	0.0
159	6000.0	4250.0	0.0	160	6000.0	250.0	0.0	161	6000.0	2050.0	0.0
162	6000.0	2450.0	0.0	163	7000.0	4250.0	0.0	164	7000.0	250.0	0.0
165	7000.0	2050.0	0.0	166	7000.0	2450.0	0.0	167	8000.0	4250.0	0.0
168	8000.0	250.0	0.0	169	8000.0	2050.0	0.0	170	8000.0	2450.0	0.0
171	9000.0	4250.0	0.0	172	9000.0	250.0	0.0	173	9000.0	2050.0	0.0
174	9000.0	2450.0	0.0	175	1.000e+04	4250.0	0.0	176	1.000e+04	250.0	0.0
177	1.000e+04	2050.0	0.0	178	1.000e+04	2450.0	0.0	179	1227.8	4500.0	650.0
180	1766.7	0.0	650.0	181	1.000e+04	3435.5	650.0	182	688.9	0.0	650.0
183	9850.0	0.0	650.0	184	9000.0	3435.5	0.0	185	9000.0	3123.5	350.0
186	1.000e+04	1325.0	0.0	187	2844.4	4500.0	650.0	188	1.000e+04	3123.5	650.0
189	9000.0	3123.5	0.0	190	4461.1	2250.0	722.0	191	4000.0	4500.0	450.0
192	8233.3	0.0	650.0	193	9850.0	2250.0	722.0	194	9850.0	4500.0	650.0
195	1766.7	4500.0	650.0	196	1766.7	2250.0	722.0	197	7694.4	0.0	650.0
198	9311.1	0.0	650.0	199	8772.2	0.0	650.0	200	688.9	2250.0	722.0
201	150.0	2250.0	722.0	202	1227.8	0.0	650.0	203	7155.6	0.0	650.0
204	150.0	4500.0	650.0	205	4461.1	4500.0	650.0	206	6616.7	0.0	650.0
207	6077.8	0.0	650.0	208	1.000e+04	925.0	0.0	209	150.0	0.0	650.0
210	9000.0	3435.5	350.0	211	5538.9	2250.0	722.0	212	5538.9	0.0	650.0
213	3922.2	2250.0	722.0	214	4461.1	0.0	650.0	215	3922.2	0.0	650.0
216	3383.3	0.0	650.0	217	2844.4	0.0	650.0	218	2305.6	0.0	650.0
219	3922.2	4500.0	650.0	220	1227.8	2250.0	722.0	221	6077.8	2250.0	722.0
222	6077.8	4500.0	650.0	223	9311.1	2250.0	722.0	224	1.000e+04	3123.5	350.0
225	9311.1	4500.0	650.0	226	2000.0	2250.0	450.0	227	1.000e+04	2250.0	350.0
228	688.9	4500.0	650.0	229	1.000e+04	4500.0	350.0	230	2305.6	2250.0	722.0
231	9000.0	4500.0	350.0	232	2305.6	4500.0	650.0	233	5538.9	4500.0	650.0

Nodo	X	Y	Z	Nodo	X	Y	Z	Nodo	X	Y	Z
234	3383.3	2250.0	722.0	235	7155.6	2250.0	722.0	236	3383.3	4500.0	650.0
237	7155.6	4500.0	650.0	238	9000.0	2250.0	350.0	239	8233.3	2250.0	722.0
240	1.000e+04	3435.5	350.0	241	1.000e+04	3123.5	0.0	242	7694.4	2250.0	722.0
243	7694.4	4500.0	650.0	244	6616.7	2250.0	722.0	245	6616.7	4500.0	650.0
246	8772.2	2250.0	722.0	247	8233.3	4500.0	650.0	248	1.000e+04	3435.5	0.0
250	8772.2	4500.0	650.0	251	1.000e+04	1125.0	650.0	252	2844.4	2250.0	722.0
254	9484.0	3279.5	350.0	255	9484.0	3123.5	350.0	256	9484.0	3435.5	350.0
257	9800.0	3279.5	0.0	258	9634.0	3279.5	0.0	259	9334.0	3279.5	0.0
260	7800.0	1172.5	466.7	261	9000.0	3635.5	0.0	262	9000.0	2923.5	0.0
263	9200.0	3279.5	0.0	264	9484.0	3435.5	0.0	265	10000.0	3153.5	0.0
266	10000.0	3153.5	58.3	267	10000.0	3216.5	58.3	268	10000.0	3216.5	0.0
269	10000.0	3153.5	116.7	270	10000.0	3216.5	116.7	271	10000.0	3153.5	175.0
272	10000.0	3216.5	175.0	273	10000.0	3279.5	58.3	275	10000.0	3279.5	116.7
276	10000.0	3279.5	175.0	277	10000.0	3342.5	58.3	278	10000.0	3342.5	0.0
279	10000.0	3342.5	116.7	280	10000.0	3342.5	175.0	281	10000.0	3405.5	58.3
282	10000.0	3405.5	0.0	283	10000.0	3405.5	116.7	284	10000.0	3405.5	175.0
285	9000.0	1172.5	0.0	286	8000.0	1172.5	0.0	287	7000.0	1172.5	0.0
288	6000.0	1172.5	0.0	290	9000.0	2250.0	450.0	291	7000.0	10.0	0.0
292	6000.0	10.0	0.0	293	9000.0	10.0	0.0	294	9000.0	2240.0	0.0
295	6000.0	10.0	66.7	296	6000.0	90.0	66.7	297	6000.0	90.0	0.0
298	6000.0	10.0	133.3	299	6000.0	90.0	133.3	300	6000.0	10.0	200.0
301	6000.0	90.0	200.0	302	6000.0	10.0	266.7	303	6000.0	90.0	266.7
304	6000.0	10.0	333.3	305	6000.0	90.0	333.3	306	6000.0	10.0	400.0
307	6000.0	90.0	400.0	308	6000.0	170.0	66.7	309	6000.0	170.0	0.0
310	6000.0	170.0	133.3	311	6000.0	170.0	200.0	312	6000.0	170.0	266.7
313	6000.0	170.0	333.3	314	6000.0	170.0	400.0	315	6000.0	250.0	66.7
316	6000.0	250.0	133.3	317	6000.0	250.0	200.0	318	6000.0	250.0	266.7
319	6000.0	250.0	333.3	320	6000.0	250.0	400.0	321	6000.0	311.5	66.7
322	6000.0	311.5	0.0	323	6000.0	311.5	133.3	324	6000.0	311.5	200.0
325	6000.0	311.5	266.7	326	6000.0	311.5	333.3	327	6000.0	311.5	400.0
328	6000.0	373.0	66.7	329	6000.0	373.0	0.0	330	6000.0	373.0	133.3
331	6000.0	373.0	200.0	332	6000.0	373.0	266.7	333	6000.0	373.0	333.3
334	6000.0	373.0	400.0	335	6000.0	434.5	66.7	336	6000.0	434.5	0.0
337	6000.0	434.5	133.3	338	6000.0	434.5	200.0	339	6000.0	434.5	266.7
340	6000.0	434.5	333.3	341	6000.0	434.5	400.0	342	6000.0	496.0	66.7
343	6000.0	496.0	0.0	344	6000.0	496.0	133.3	345	6000.0	496.0	200.0
346	6000.0	496.0	266.7	347	6000.0	496.0	333.3	348	6000.0	496.0	400.0
349	6000.0	557.5	66.7	350	6000.0	557.5	0.0	351	6000.0	557.5	133.3
352	6000.0	557.5	200.0	353	6000.0	557.5	266.7	354	6000.0	557.5	333.3
355	6000.0	557.5	400.0	356	6000.0	619.0	66.7	357	6000.0	619.0	0.0
358	6000.0	619.0	133.3	359	6000.0	619.0	200.0	360	6000.0	619.0	266.7
361	6000.0	619.0	333.3	362	6000.0	619.0	400.0	363	6000.0	680.5	66.7
364	6000.0	680.5	0.0	365	6000.0	680.5	133.3	366	6000.0	680.5	200.0
367	6000.0	680.5	266.7	368	6000.0	680.5	333.3	369	6000.0	680.5	400.0
370	6000.0	742.0	66.7	371	6000.0	742.0	0.0	372	6000.0	742.0	133.3
373	6000.0	742.0	200.0	374	6000.0	742.0	266.7	375	6000.0	742.0	333.3
376	6000.0	742.0	400.0	377	6000.0	803.5	66.7	378	6000.0	803.5	0.0
379	6000.0	803.5	133.3	380	6000.0	803.5	200.0	381	6000.0	803.5	266.7
382	6000.0	803.5	333.3	383	6000.0	803.5	400.0	384	6000.0	865.0	66.7
385	6000.0	865.0	0.0	386	6000.0	865.0	133.3	387	6000.0	865.0	200.0
388	6000.0	865.0	266.7	389	6000.0	865.0	333.3	390	6000.0	865.0	400.0
391	6000.0	926.5	66.7	392	6000.0	926.5	0.0	393	6000.0	926.5	133.3
394	6000.0	926.5	200.0	395	6000.0	926.5	266.7	396	6000.0	926.5	333.3
397	6000.0	926.5	400.0	398	6000.0	988.0	66.7	399	6000.0	988.0	0.0
400	6000.0	988.0	133.3	401	6000.0	988.0	200.0	402	6000.0	988.0	266.7
403	6000.0	988.0	333.3	404	6000.0	988.0	400.0	405	6000.0	1049.5	66.7
406	6000.0	1049.5	0.0	407	6000.0	1049.5	133.3	408	6000.0	1049.5	200.0
409	6000.0	1049.5	266.7	410	6000.0	1049.5	333.3	411	6000.0	1049.5	400.0
412	6000.0	1111.0	66.7	413	6000.0	1111.0	0.0	414	6000.0	1111.0	133.3
415	6000.0	1111.0	200.0	416	6000.0	1111.0	266.7	417	6000.0	1111.0	333.3
418	6000.0	1111.0	400.0	419	6000.0	1172.5	66.7	420	6000.0	1172.5	133.3
421	6000.0	1172.5	200.0	422	6000.0	1172.5	266.7	423	6000.0	1172.5	333.3
424	6000.0	1172.5	400.0	425	6066.7	1172.5	66.7	426	6066.7	1172.5	0.0
427	6066.7	1172.5	133.3	428	6066.7	1172.5	200.0	429	6066.7	1172.5	266.7
430	6066.7	1172.5	333.3	431	6066.7	1172.5	400.0	432	6133.3	1172.5	66.7
433	6133.3	1172.5	0.0	434	6133.3	1172.5	133.3	435	6133.3	1172.5	200.0
436	6133.3	1172.5	266.7	437	6133.3	1172.5	333.3	438	6133.3	1172.5	400.0
439	6200.0	1172.5	66.7	440	6200.0	1172.5	0.0	441	6200.0	1172.5	133.3
442	6200.0	1172.5	200.0	443	6200.0	1172.5	266.7	444	6200.0	1172.5	333.3
445	6200.0	1172.5	400.0	446	6266.7	1172.5	66.7	447	6266.7	1172.5	0.0
448	6266.7	1172.5	133.3	449	6266.7	1172.5	200.0	450	6266.7	1172.5	266.7
451	6266.7	1172.5	333.3	452	6266.7	1172.5	400.0	453	6333.3	1172.5	66.7
454	6333.3	1172.5	0.0	455	6333.3	1172.5	133.3	456	6333.3	1172.5	200.0
457	6333.3	1172.5	266.7	458	6333.3	1172.5	333.3	459	6333.3	1172.5	400.0

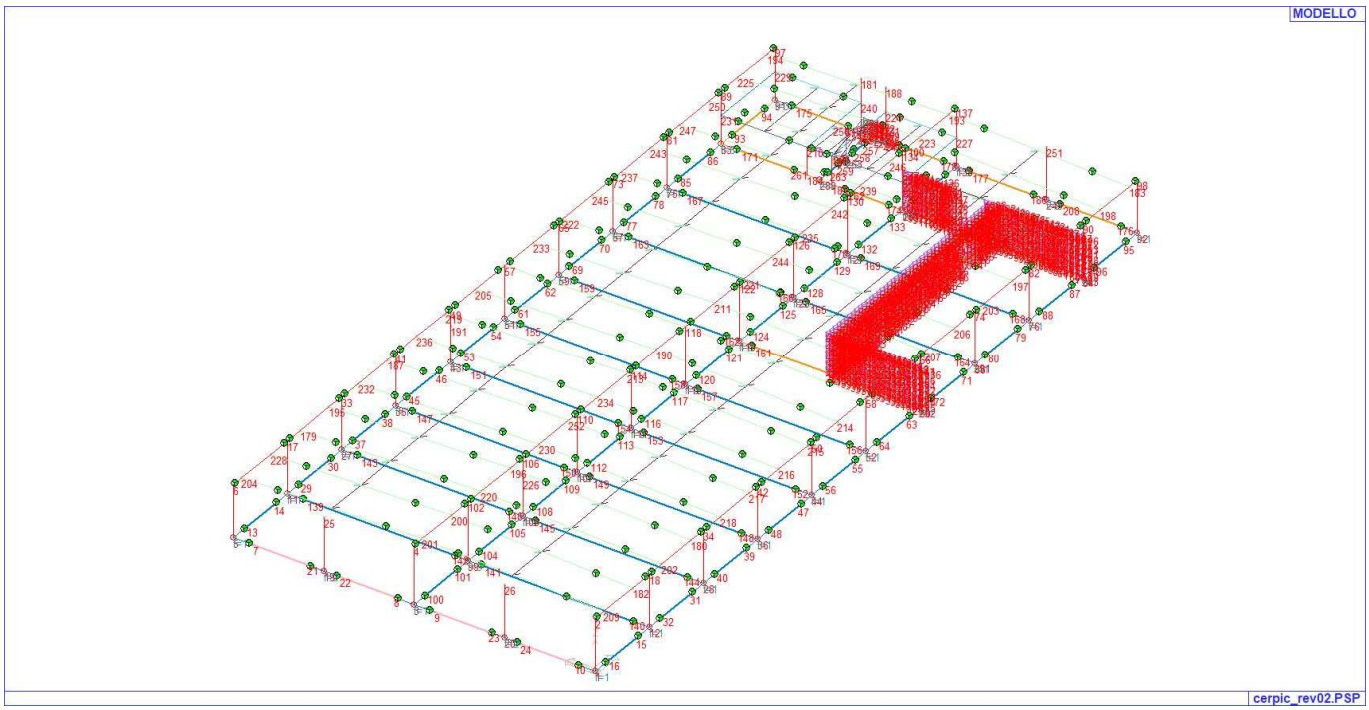
Nodo	X	Y	Z	Nodo	X	Y	Z	Nodo	X	Y	Z
460	6400.0	1172.5	66.7	461	6400.0	1172.5	0.0	462	6400.0	1172.5	133.3
463	6400.0	1172.5	200.0	464	6400.0	1172.5	266.7	465	6400.0	1172.5	333.3
466	6400.0	1172.5	400.0	467	6466.7	1172.5	66.7	468	6466.7	1172.5	0.0
469	6466.7	1172.5	133.3	470	6466.7	1172.5	200.0	471	6466.7	1172.5	266.7
472	6466.7	1172.5	333.3	473	6466.7	1172.5	400.0	474	6533.3	1172.5	66.7
475	6533.3	1172.5	0.0	476	6533.3	1172.5	133.3	477	6533.3	1172.5	200.0
478	6533.3	1172.5	266.7	479	6533.3	1172.5	333.3	480	6533.3	1172.5	400.0
481	6600.0	1172.5	66.7	482	6600.0	1172.5	0.0	483	6600.0	1172.5	133.3
484	6600.0	1172.5	200.0	485	6600.0	1172.5	266.7	486	6600.0	1172.5	333.3
487	6600.0	1172.5	400.0	488	6666.7	1172.5	66.7	489	6666.7	1172.5	0.0
490	6666.7	1172.5	133.3	491	6666.7	1172.5	200.0	492	6666.7	1172.5	266.7
493	6666.7	1172.5	333.3	494	6666.7	1172.5	400.0	495	6733.3	1172.5	66.7
496	6733.3	1172.5	0.0	497	6733.3	1172.5	133.3	498	6733.3	1172.5	200.0
499	6733.3	1172.5	266.7	500	6733.3	1172.5	333.3	501	6733.3	1172.5	400.0
502	6800.0	1172.5	66.7	503	6800.0	1172.5	0.0	504	6800.0	1172.5	133.3
505	6800.0	1172.5	200.0	506	6800.0	1172.5	266.7	507	6800.0	1172.5	333.3
508	6800.0	1172.5	400.0	509	9000.0	10.0	66.7	510	9000.0	2240.0	400.0
511	9000.0	90.0	66.7	512	6866.7	1172.5	200.0	513	6866.7	1172.5	266.7
514	6866.7	1172.5	333.3	515	6866.7	1172.5	400.0	516	6933.3	1172.5	66.7
517	6933.3	1172.5	0.0	518	6933.3	1172.5	133.3	519	6933.3	1172.5	200.0
520	6933.3	1172.5	266.7	521	6933.3	1172.5	333.3	522	6933.3	1172.5	400.0
523	7000.0	1172.5	66.7	524	7000.0	1172.5	133.3	525	7000.0	1172.5	200.0
526	7000.0	1172.5	266.7	527	7000.0	1172.5	333.3	528	7000.0	1172.5	400.0
529	9000.0	1231.0	466.7	530	8000.0	1172.5	466.7	531	9000.0	2113.3	466.7
532	9000.0	2050.0	466.7	533	9000.0	2176.7	466.7	534	9000.0	1874.5	466.7
535	9000.0	1933.0	466.7	536	9000.0	1816.0	466.7	537	8066.7	1172.5	466.7
538	9000.0	1991.5	466.7	539	9000.0	1699.0	466.7	540	9000.0	1757.5	466.7
541	6000.0	10.0	500.0	542	6000.0	90.0	500.0	543	6000.0	170.0	500.0
544	8133.3	1172.5	466.7	545	6000.0	250.0	500.0	546	6000.0	311.5	500.0
547	6000.0	373.0	500.0	548	6000.0	434.5	500.0	549	6000.0	496.0	500.0
550	6000.0	557.5	500.0	551	8200.0	1172.5	466.7	552	6000.0	619.0	500.0
553	6000.0	680.5	500.0	554	6000.0	742.0	500.0	555	6000.0	803.5	500.0
556	6000.0	865.0	500.0	557	6000.0	926.5	500.0	558	8266.7	1172.5	466.7
559	6000.0	988.0	500.0	560	6000.0	1049.5	500.0	561	6000.0	1111.0	500.0
562	6000.0	1172.5	500.0	563	6066.7	1172.5	500.0	564	6133.3	1172.5	500.0
565	8333.3	1172.5	466.7	566	6200.0	1172.5	500.0	567	6266.7	1172.5	500.0
568	6333.3	1172.5	500.0	569	6400.0	1172.5	500.0	570	6466.7	1172.5	500.0
571	6533.3	1172.5	500.0	572	9000.0	10.0	466.7	573	6600.0	1172.5	500.0
574	6666.7	1172.5	500.0	575	6733.3	1172.5	500.0	576	6800.0	1172.5	500.0
577	9000.0	2240.0	500.0	578	6866.7	1172.5	500.0	579	9000.0	90.0	466.7
580	6933.3	1172.5	500.0	581	7000.0	1172.5	500.0	582	8933.3	1172.5	466.7
583	9000.0	1172.5	466.7	584	9000.0	250.0	466.7	585	9000.0	311.5	466.7
586	9000.0	170.0	466.7	587	9000.0	373.0	466.7	588	9000.0	434.5	466.7
589	9000.0	496.0	466.7	590	9000.0	557.5	466.7	591	9000.0	619.0	466.7
592	9000.0	680.5	466.7	593	8600.0	1172.5	466.7	594	9000.0	742.0	466.7
595	9000.0	803.5	466.7	596	9000.0	865.0	466.7	597	9000.0	926.5	466.7
598	9000.0	988.0	466.7	599	9000.0	1049.5	466.7	600	8666.7	1172.5	466.7
601	9000.0	1111.0	466.7	602	8400.0	1172.5	400.0	603	7066.7	1172.5	500.0
604	7133.3	1172.5	500.0	605	7200.0	1172.5	500.0	606	7266.7	1172.5	500.0
607	8733.3	1172.5	466.7	608	7333.3	1172.5	500.0	609	7400.0	1172.5	500.0
610	7466.7	1172.5	500.0	611	7533.3	1172.5	500.0	612	7600.0	1172.5	500.0
613	7666.7	1172.5	500.0	614	8800.0	1172.5	466.7	615	7733.3	1172.5	500.0
616	7800.0	1172.5	500.0	617	7866.7	1172.5	500.0	618	7933.3	1172.5	500.0
619	8000.0	1172.5	500.0	620	8066.7	1172.5	500.0	621	7866.7	1172.5	466.7
622	8133.3	1172.5	500.0	623	8200.0	1172.5	500.0	624	8266.7	1172.5	500.0
625	8333.3	1172.5	500.0	626	9000.0	10.0	500.0	627	9000.0	90.0	500.0
628	9000.0	170.0	500.0	629	8600.0	1172.5	500.0	630	8666.7	1172.5	500.0
631	8733.3	1172.5	500.0	632	8800.0	1172.5	500.0	633	8866.7	1172.5	500.0
634	8866.7	1172.5	466.7	635	8933.3	1172.5	500.0	636	9000.0	1172.5	500.0
637	9000.0	250.0	500.0	638	9000.0	311.5	500.0	639	9000.0	373.0	500.0
640	8466.7	1172.5	466.7	641	7933.3	1172.5	466.7	642	8466.7	1172.5	400.0
643	8533.3	1172.5	466.7	644	9000.0	1933.0	500.0	645	9000.0	1816.0	500.0
646	9000.0	1991.5	500.0	647	8533.3	1172.5	500.0	648	8533.3	1172.5	400.0
649	8400.0	1172.5	500.0	650	8466.7	1172.5	500.0	651	9000.0	1699.0	500.0
652	9000.0	1757.5	500.0	653	7066.7	1172.5	66.7	654	7066.7	1172.5	0.0
655	7066.7	1172.5	133.3	656	7066.7	1172.5	200.0	657	7066.7	1172.5	266.7
658	7066.7	1172.5	333.3	659	7066.7	1172.5	400.0	660	7133.3	1172.5	66.7
661	7133.3	1172.5	0.0	662	7133.3	1172.5	133.3	663	7133.3	1172.5	200.0
664	7133.3	1172.5	266.7	665	7133.3	1172.5	333.3	666	7133.3	1172.5	400.0
667	7200.0	1172.5	66.7	668	7200.0	1172.5	0.0	669	7200.0	1172.5	133.3
670	7200.0	1172.5	200.0	671	7200.0	1172.5	266.7	672	7200.0	1172.5	333.3
673	7200.0	1172.5	400.0	674	7266.7	1172.5	66.7	675	7266.7	1172.5	0.0
676	7266.7	1172.5	133.3	677	7266.7	1172.5	200.0	678	7266.7	1172.5	266.7
679	7266.7	1172.5	333.3	680	7266.7	1172.5	400.0	681	7333.3	1172.5	66.7

Nodo	X	Y	Z	Nodo	X	Y	Z	Nodo	X	Y	Z
682	7333.3	1172.5	0.0	683	7333.3	1172.5	133.3	684	7333.3	1172.5	200.0
685	7333.3	1172.5	266.7	686	7333.3	1172.5	333.3	687	7333.3	1172.5	400.0
688	7400.0	1172.5	66.7	689	7400.0	1172.5	0.0	690	7400.0	1172.5	133.3
691	7400.0	1172.5	200.0	692	7400.0	1172.5	266.7	693	7400.0	1172.5	333.3
694	7400.0	1172.5	400.0	695	7466.7	1172.5	66.7	696	7466.7	1172.5	0.0
697	7466.7	1172.5	133.3	698	7466.7	1172.5	200.0	699	7466.7	1172.5	266.7
700	7466.7	1172.5	333.3	701	7466.7	1172.5	400.0	702	7533.3	1172.5	66.7
703	7533.3	1172.5	0.0	704	7533.3	1172.5	133.3	705	7533.3	1172.5	200.0
706	7533.3	1172.5	266.7	707	7533.3	1172.5	333.3	708	7533.3	1172.5	400.0
709	7600.0	1172.5	66.7	710	7600.0	1172.5	0.0	711	7600.0	1172.5	133.3
712	7600.0	1172.5	200.0	713	7600.0	1172.5	266.7	714	7600.0	1172.5	333.3
715	7600.0	1172.5	400.0	716	7666.7	1172.5	66.7	717	7666.7	1172.5	0.0
718	7666.7	1172.5	133.3	719	7666.7	1172.5	200.0	720	7666.7	1172.5	266.7
721	7666.7	1172.5	333.3	722	7666.7	1172.5	400.0	723	7733.3	1172.5	66.7
724	7733.3	1172.5	0.0	725	7733.3	1172.5	133.3	726	7733.3	1172.5	200.0
727	7733.3	1172.5	266.7	728	7733.3	1172.5	333.3	729	7733.3	1172.5	400.0
730	7800.0	1172.5	66.7	731	7800.0	1172.5	0.0	732	7800.0	1172.5	133.3
733	7800.0	1172.5	200.0	734	7800.0	1172.5	266.7	735	7800.0	1172.5	333.3
736	7800.0	1172.5	400.0	737	7866.7	1172.5	66.7	738	7866.7	1172.5	0.0
739	7866.7	1172.5	133.3	740	7866.7	1172.5	200.0	741	7866.7	1172.5	266.7
742	7866.7	1172.5	333.3	743	7866.7	1172.5	400.0	744	7933.3	1172.5	66.7
745	7933.3	1172.5	0.0	746	7933.3	1172.5	133.3	747	7933.3	1172.5	200.0
748	7933.3	1172.5	266.7	749	7933.3	1172.5	333.3	750	7933.3	1172.5	400.0
751	8000.0	1172.5	66.7	752	8000.0	1172.5	133.3	753	8000.0	1172.5	200.0
754	8000.0	1172.5	266.7	755	8000.0	1172.5	333.3	756	8000.0	1172.5	400.0
757	8066.7	1172.5	66.7	758	8066.7	1172.5	0.0	759	8066.7	1172.5	133.3
760	8066.7	1172.5	200.0	761	8066.7	1172.5	266.7	762	8066.7	1172.5	333.3
763	8066.7	1172.5	400.0	764	8133.3	1172.5	66.7	765	8133.3	1172.5	0.0
766	8133.3	1172.5	133.3	767	8133.3	1172.5	200.0	768	8133.3	1172.5	266.7
769	8133.3	1172.5	333.3	770	8133.3	1172.5	400.0	771	8200.0	1172.5	66.7
772	8200.0	1172.5	0.0	773	8200.0	1172.5	133.3	774	8200.0	1172.5	200.0
775	8200.0	1172.5	266.7	776	8200.0	1172.5	333.3	777	8200.0	1172.5	400.0
778	8266.7	1172.5	66.7	779	8266.7	1172.5	0.0	780	8266.7	1172.5	133.3
781	8266.7	1172.5	200.0	782	8266.7	1172.5	266.7	783	8266.7	1172.5	333.3
784	8266.7	1172.5	400.0	785	8333.3	1172.5	66.7	786	8333.3	1172.5	0.0
787	8333.3	1172.5	133.3	788	8333.3	1172.5	200.0	789	8333.3	1172.5	266.7
790	8333.3	1172.5	333.3	791	8333.3	1172.5	400.0	792	9000.0	90.0	0.0
793	9000.0	2240.0	200.0	794	9000.0	10.0	133.3	795	9000.0	90.0	133.3
796	9000.0	10.0	200.0	797	9000.0	90.0	200.0	798	9000.0	10.0	266.7
799	9000.0	90.0	266.7	800	9000.0	2240.0	266.7	801	9000.0	10.0	333.3
802	9000.0	90.0	333.3	803	9000.0	10.0	400.0	804	9000.0	90.0	400.0
805	9000.0	170.0	66.7	806	9000.0	170.0	0.0	807	9000.0	2240.0	333.3
808	9000.0	170.0	133.3	809	9000.0	170.0	200.0	810	9000.0	170.0	266.7
811	9000.0	170.0	333.3	812	9000.0	170.0	400.0	813	8600.0	1172.5	66.7
814	8600.0	1172.5	0.0	815	8600.0	1172.5	133.3	816	8600.0	1172.5	200.0
817	8600.0	1172.5	266.7	818	8600.0	1172.5	333.3	819	8600.0	1172.5	400.0
820	8666.7	1172.5	66.7	821	8666.7	1172.5	0.0	822	8666.7	1172.5	133.3
823	8666.7	1172.5	200.0	824	8666.7	1172.5	266.7	825	8666.7	1172.5	333.3
826	8666.7	1172.5	400.0	827	8733.3	1172.5	66.7	828	8733.3	1172.5	0.0
829	8733.3	1172.5	133.3	830	8733.3	1172.5	200.0	831	8733.3	1172.5	266.7
832	8733.3	1172.5	333.3	833	8733.3	1172.5	400.0	834	8800.0	1172.5	66.7
835	8800.0	1172.5	0.0	836	8800.0	1172.5	133.3	837	8800.0	1172.5	200.0
838	8800.0	1172.5	266.7	839	8800.0	1172.5	333.3	840	8800.0	1172.5	400.0
841	8866.7	1172.5	66.7	842	8866.7	1172.5	0.0	843	8866.7	1172.5	133.3
844	8866.7	1172.5	200.0	845	8866.7	1172.5	266.7	846	8866.7	1172.5	333.3
847	8866.7	1172.5	400.0	848	8933.3	1172.5	66.7	849	8933.3	1172.5	0.0
850	8933.3	1172.5	133.3	851	8933.3	1172.5	200.0	852	8933.3	1172.5	266.7
853	8933.3	1172.5	333.3	854	8933.3	1172.5	400.0	855	9000.0	1172.5	66.7
856	9000.0	1172.5	133.3	857	9000.0	1172.5	200.0	858	9000.0	1172.5	266.7
859	9000.0	1172.5	333.3	860	9000.0	1172.5	400.0	861	9000.0	250.0	66.7
862	9000.0	311.5	66.7	863	9000.0	311.5	0.0	864	9000.0	250.0	133.3
865	9000.0	311.5	133.3	866	9000.0	250.0	200.0	867	9000.0	311.5	200.0
868	9000.0	250.0	266.7	869	9000.0	311.5	266.7	870	9000.0	250.0	333.3
871	9000.0	311.5	333.3	872	9000.0	250.0	400.0	873	9000.0	311.5	400.0
874	9000.0	373.0	66.7	875	9000.0	373.0	0.0	876	9000.0	373.0	133.3
877	9000.0	373.0	200.0	878	9000.0	373.0	266.7	879	9000.0	373.0	333.3
880	9000.0	373.0	400.0	881	9000.0	434.5	66.7	882	9000.0	434.5	0.0
883	9000.0	434.5	133.3	884	9000.0	434.5	200.0	885	9000.0	434.5	266.7
886	9000.0	434.5	333.3	887	9000.0	434.5	400.0	888	9000.0	496.0	66.7
889	9000.0	496.0	0.0	890	9000.0	496.0	133.3	891	9000.0	496.0	200.0
892	9000.0	496.0	266.7	893	9000.0	496.0	333.3	894	9000.0	496.0	400.0
895	9000.0	557.5	66.7	896	9000.0	557.5	0.0	897	9000.0	557.5	133.3
898	9000.0	557.5	200.0	899	9000.0	557.5	266.7	900	9000.0	557.5	333.3
901	9000.0	557.5	400.0	902	9000.0	619.0	66.7	903	9000.0	619.0	0.0

Nodo	X	Y	Z	Nodo	X	Y	Z	Nodo	X	Y	Z
904	9000.0	619.0	133.3	905	9000.0	619.0	200.0	906	9000.0	619.0	266.7
907	9000.0	619.0	333.3	908	9000.0	619.0	400.0	909	9000.0	680.5	66.7
910	9000.0	680.5	0.0	911	9000.0	680.5	133.3	912	9000.0	680.5	200.0
913	9000.0	680.5	266.7	914	9000.0	680.5	333.3	915	9000.0	680.5	400.0
916	9000.0	742.0	66.7	917	9000.0	742.0	0.0	918	9000.0	742.0	133.3
919	9000.0	742.0	200.0	920	9000.0	742.0	266.7	921	9000.0	742.0	333.3
922	9000.0	742.0	400.0	923	9000.0	803.5	66.7	924	9000.0	803.5	0.0
925	9000.0	803.5	133.3	926	9000.0	803.5	200.0	927	9000.0	803.5	266.7
928	9000.0	803.5	333.3	929	9000.0	803.5	400.0	930	9000.0	865.0	66.7
931	9000.0	865.0	0.0	932	9000.0	865.0	133.3	933	9000.0	865.0	200.0
934	9000.0	865.0	266.7	935	9000.0	865.0	333.3	936	9000.0	865.0	400.0
937	9000.0	926.5	66.7	938	9000.0	926.5	0.0	939	9000.0	926.5	133.3
940	9000.0	926.5	200.0	941	9000.0	926.5	266.7	942	9000.0	926.5	333.3
943	9000.0	926.5	400.0	944	9000.0	988.0	66.7	945	9000.0	988.0	0.0
946	9000.0	988.0	133.3	947	9000.0	988.0	200.0	948	9000.0	988.0	266.7
949	9000.0	988.0	333.3	950	9000.0	988.0	400.0	951	9000.0	1049.5	66.7
952	9000.0	1049.5	0.0	953	9000.0	1049.5	133.3	954	9000.0	1049.5	200.0
955	9000.0	1049.5	266.7	956	9000.0	1049.5	333.3	957	9000.0	1049.5	400.0
958	9000.0	1111.0	66.7	959	9000.0	1111.0	0.0	960	9000.0	1111.0	133.3
961	9000.0	1111.0	200.0	962	9000.0	1111.0	266.7	963	9000.0	1111.0	333.3
964	9000.0	1111.0	400.0	965	9000.0	1231.0	66.7	966	9000.0	1231.0	0.0
967	9000.0	1231.0	133.3	968	9000.0	1231.0	200.0	969	9000.0	1231.0	266.7
970	9000.0	1231.0	333.3	971	9000.0	1231.0	400.0	972	9000.0	2113.3	0.0
973	9000.0	1816.0	0.0	974	9000.0	2113.3	133.3	975	9000.0	2113.3	200.0
976	9000.0	2113.3	266.7	977	9000.0	2113.3	333.3	978	9000.0	2050.0	333.3
979	9000.0	2113.3	400.0	980	9000.0	1816.0	133.3	981	9000.0	2176.7	66.7
982	9000.0	2176.7	0.0	983	9000.0	2176.7	133.3	984	9000.0	2176.7	200.0
985	9000.0	2050.0	400.0	986	9000.0	2176.7	266.7	987	9000.0	1816.0	200.0
988	9000.0	2176.7	333.3	989	9000.0	2176.7	400.0	990	9000.0	2240.0	66.7
991	9000.0	2240.0	133.3	992	9000.0	2113.3	66.7	993	9000.0	1874.5	0.0
994	9000.0	1816.0	266.7	995	9000.0	1874.5	133.3	996	9000.0	1874.5	200.0
997	9000.0	1874.5	266.7	998	9000.0	1874.5	333.3	999	9000.0	1874.5	400.0
1000	9000.0	1933.0	66.7	1001	9000.0	1816.0	333.3	1002	9000.0	1933.0	0.0
1003	9000.0	1933.0	133.3	1004	9000.0	1933.0	200.0	1005	9000.0	1933.0	266.7
1006	9000.0	1933.0	333.3	1007	9000.0	1933.0	400.0	1008	9000.0	1816.0	400.0
1009	9000.0	1991.5	66.7	1010	9000.0	1991.5	0.0	1011	9000.0	1991.5	133.3
1012	9000.0	1991.5	200.0	1013	9000.0	1991.5	266.7	1014	9000.0	1991.5	333.3
1015	9000.0	1874.5	66.7	1016	9000.0	1991.5	400.0	1017	9000.0	2050.0	66.7
1018	9000.0	2050.0	133.3	1019	9000.0	2050.0	200.0	1020	9000.0	2050.0	266.7
1021	9000.0	1699.0	66.7	1022	9000.0	1699.0	0.0	1023	9000.0	1699.0	133.3
1024	9000.0	1699.0	200.0	1025	9000.0	1699.0	266.7	1026	9000.0	1699.0	333.3
1027	9000.0	1699.0	400.0	1028	9000.0	1757.5	66.7	1029	9000.0	1757.5	0.0
1030	9000.0	1757.5	133.3	1031	9000.0	1757.5	200.0	1032	9000.0	1757.5	266.7
1033	9000.0	1757.5	333.3	1034	9000.0	1757.5	400.0	1035	9000.0	1816.0	66.7
1036	6000.0	10.0	466.7	1037	6000.0	90.0	466.7	1038	6000.0	170.0	466.7
1039	6000.0	250.0	466.7	1040	6000.0	311.5	466.7	1041	6000.0	373.0	466.7
1042	6000.0	434.5	466.7	1043	6000.0	496.0	466.7	1044	6000.0	557.5	466.7
1045	6000.0	619.0	466.7	1046	6000.0	680.5	466.7	1047	6000.0	742.0	466.7
1048	6000.0	803.5	466.7	1049	6000.0	865.0	466.7	1050	6000.0	926.5	466.7
1051	6000.0	988.0	466.7	1052	6000.0	1049.5	466.7	1053	6000.0	1111.0	466.7
1054	6000.0	1172.5	466.7	1055	6066.7	1172.5	466.7	1056	6133.3	1172.5	466.7
1057	6200.0	1172.5	466.7	1058	6266.7	1172.5	466.7	1059	6333.3	1172.5	466.7
1060	6400.0	1172.5	466.7	1061	6466.7	1172.5	466.7	1062	6533.3	1172.5	466.7
1063	6600.0	1172.5	466.7	1064	6666.7	1172.5	466.7	1065	6733.3	1172.5	466.7
1066	6800.0	1172.5	466.7	1067	9000.0	2240.0	466.7	1068	6866.7	1172.5	466.7
1069	6933.3	1172.5	466.7	1070	7000.0	1172.5	466.7	1071	9000.0	434.5	500.0
1072	9000.0	496.0	500.0	1073	9000.0	557.5	500.0	1074	9000.0	619.0	500.0
1075	9000.0	680.5	500.0	1076	9000.0	742.0	500.0	1077	9000.0	803.5	500.0
1078	9000.0	865.0	500.0	1079	9000.0	926.5	500.0	1080	9000.0	988.0	500.0
1081	9000.0	1049.5	500.0	1082	9000.0	1111.0	500.0	1083	9000.0	1231.0	500.0
1084	9000.0	2113.3	500.0	1085	9000.0	2050.0	500.0	1086	9000.0	2176.7	500.0
1087	9000.0	1874.5	500.0	1088	8400.0	1172.5	466.7	1089	7066.7	1172.5	466.7
1090	7133.3	1172.5	466.7	1091	7200.0	1172.5	466.7	1092	7266.7	1172.5	466.7
1093	7333.3	1172.5	466.7	1094	7400.0	1172.5	466.7	1095	7466.7	1172.5	466.7
1096	7533.3	1172.5	466.7	1097	7600.0	1172.5	466.7	1098	7666.7	1172.5	466.7
1099	7733.3	1172.5	466.7	1100	1.000e+04	2923.5	0.0	1101	1.000e+04	3635.5	0.0

Nodo	X	Y	Z	Note	Rig. TX	Rig. TY	Rig. TZ	Rig. RX	Rig. RY	Rig. RZ
	cm	cm	cm		daN/cm	daN/cm	daN/cm	daN cm/rad	daN cm/rad	daN cm/rad
1	0.0	0.0	0.0	FS=1						
3	0.0	2250.0	0.0	FS=1						
5	0.0	4500.0	0.0	FS=1						

Nodo	X	Y	Z	Note	Rig. TX	Rig. TY	Rig. TZ	Rig. RX	Rig. RY	Rig. RZ
11	1000.0	4500.0	0.0	FS=1						
12	1000.0	0.0	0.0	FS=1						
19	0.0	3375.0	0.0	FS=2						
20	0.0	1125.0	0.0	FS=2						
27	2000.0	4500.0	0.0	FS=1						
28	2000.0	0.0	0.0	FS=1						
35	3000.0	4500.0	0.0	FS=1						
36	3000.0	0.0	0.0	FS=1						
43	4000.0	4500.0	0.0	FS=1						
44	4000.0	0.0	0.0	FS=1						
51	5000.0	4500.0	0.0	FS=1						
52	5000.0	0.0	0.0	FS=1						
59	6000.0	4500.0	0.0	FS=1						
60	6000.0	0.0	0.0	FS=1						
67	7000.0	4500.0	0.0	FS=1						
68	7000.0	0.0	0.0	FS=1						
75	8000.0	4500.0	0.0	FS=1						
76	8000.0	0.0	0.0	FS=1						
83	9000.0	4500.0	0.0	FS=5						
84	9000.0	0.0	0.0	FS=1						
91	1.000e+04	4500.0	0.0	FS=3						
92	1.000e+04	0.0	0.0	FS=1						
99	1000.0	2250.0	0.0	FS=3						
103	2000.0	2250.0	0.0	FS=3						
107	3000.0	2250.0	0.0	FS=3						
111	4000.0	2250.0	0.0	FS=3						
115	5000.0	2250.0	0.0	FS=3						
119	6000.0	2250.0	0.0	FS=3						
123	7000.0	2250.0	0.0	FS=3						
127	8000.0	2250.0	0.0	FS=3						
131	9000.0	2250.0	0.0	FS=5						
138	1.000e+04	2250.0	0.0	FS=3						
249	1.000e+04	1125.0	0.0	FS=2						
253	9484.0	3279.5	0.0	FS=2						
274	10000.0	3279.5	0.0	FS=4						
289	9000.0	3279.5	0.0	FS=4						

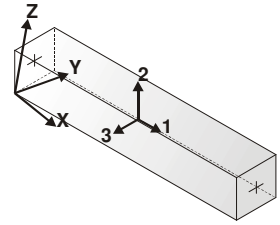


14_MOD_NUMERAZIONE_NODI

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

Con riferimento al **Documento di Affidabilità** "*Test di validazione del software di calcolo PRO_SAP e dei moduli aggiuntivi PRO_SAP Modulo Geotecnico, PRO_CAD nodi acciaio e PRO_MST*" - versione Settembre 2014, disponibile per il download sul sito **www.2si.it**, si segnalano i seguenti esempi applicativi:

Test N°	Titolo
2	TRAVI A UNA CAMPATA
3	TRAVE A PIU' CAMPATE
4	TRAVE A UNA CAMPATA SU TERRENO ALLA WINKLER
5	TRAVI SU TERRENO ALLA WINKLER CON CARICO TRASVERSALE
6	TELAI PIANI CON CERNIERE ALLA BASE
7	TELAI PIANI CON INCASTRI ALLA BASE
11	STRUTTURE SOGGETTE A VARIAZIONI TERMICHE
12	STRUTTURE SU TERRENO ALLA WINKLER SOTTOPOSTE A CARICHI DISTRIBUITI TRIANGOLARI
21	DRILLING
24	TENSIONI E ROTAZIONI RISPETTO ALLA CORDA DI ELEMENTI TRAVE
27	FRECCIA DI ELEMENTI TRAVE

42	GERARCHIA DELLE RESISTENZE PER TRAVI IN C.A.
43	GERARCHIA DELLE RESISTENZE PER PILASTRI IN C.A.
44	VERIFICA ALLE TA DI STRUTTURE IN C.A.
45	VERIFICA AGLI SLU DI STRUTTURE IN C.A.
47	VERIFICA A PUNZONAMENTO ALLO SLU DI TRAVI IN C.A.
48	PROGETTAZIONE A TAGLIO DI STRUTTURE IN C.A. SECONDO IL D.M. 9/1/96
49	PROGETTAZIONE A TAGLIO DI STRUTTURE IN C.A. SECONDO IL D.M. 14/1/2008
50	VERIFICA ALLO SLE (TENSIONI E FESSURAZIONE) DI STRUTTURE IN C.A.
51	VERIFICA ALLO SLE (DEFORMAZIONE) DI STRUTTURE IN C.A.
52	FATTORE DI STRUTTURA
53	SOVRARESISTENZE
54	DETTAGLI COSTRUTTIVI C.A.: LIMITI D'ARMATURA PILASTRI E NODI TRAVE-PILASTRO
56	VERIFICA DI STABILITA' DI ASTE COMPRESSE IN ACCIAIO – METODO OMEGA
57	LUCE LIBERA DI TRAVI E ASTE IN ACCIAIO
58	LUCE LIBERA DI COLONNE IN ACCIAIO
59	SVERGOLAMENTO DI TRAVI IN ACCIAIO
64	STABILITA' DI ASTE COMPOSTE IN ACCIAIO
73	VALUTAZIONE EFFETTO P-δ SU PILASTRATA
74	VALUTAZIONE EFFETTO P-δ SU TELAIO 3D
85	ANALISI PUSHOVER DI UN EDIFICIO IN C.A.
87	ANALISI ELASTO PLASTICA INCREMENTALE
88	ANALISI ELASTO PLASTICA INCREMENTALE
98	VERIFICA ALLO SLU DI STRUTTURE IN LEGNO SECONDO EC5
99	VERIFICA ALLO SLE DI STRUTTURE IN LEGNO SECONDO EC5
102	SNELLEZZE EC5
130	PROGETTO E VERIFICA DI TRAVI PREM

Elem.	Note	Nodo I	Nodo J	Mat.	Sez.	Rotaz.	Svincolo I	Svincolo J	Wink V	Wink O
						gradi			daN/cm3	daN/cm3
1	Pilas.	1	2	9	1					
2	Pilas.	3	4	9	1					
3	Pilas.	5	6	9	1					
4	Trave	3	8	51	2			000011		
5	Trave	1	10	51	2			000011		
6	Trave	7	5	51	2		000011			
7	Trave	9	3	51	2		000011			
8	Trave f.	8	22	1	8				0.50	0.50
9	Trave f.	10	24	1	8				0.50	0.50
10	Trave	5	13	51	2			000011		
11	Trave	1	16	51	2			000011		
12	Trave f.	13	14	1	2				0.50	0.50
13	Trave	15	12	51	2		000011			
14	Trave f.	16	15	1	2				0.50	0.50
15	Trave	14	11	51	2		000011			
16	Pilas.	12	18	9	1					
17	Pilas.	11	17	9	1					
18	Trave	6	204	7	9		000011			
19	Trave f.	186	177	1	10				0.50	0.50
20	Trave	19	21	51	2			000011		
21	Trave	20	23	51	2			000011		
22	Trave	22	19	51	2		000011			
23	Trave	24	20	51	2		000011			
24	Trave f.	21	7	1	8				0.50	0.50
25	Trave f.	23	9	1	8				0.50	0.50
26	Pilas.	19	25	9	1					
27	Pilas.	20	26	9	1					
28	Trave	11	29	51	2			000011		
29	Trave	12	32	51	2			000011		
30	Trave f.	29	30	1	2				0.50	0.50
31	Trave	31	28	51	2		000011			
32	Trave f.	32	31	1	2				0.50	0.50

Elem.	Note	Nodo I	Nodo J	Mat.	Sez.	Rotaz.	Svincolo I	Svincolo J	Wink V	Wink O
33	Trave	30	27	51	2		000011			
34	Pilas.	28	34	9	1					
35	Pilas.	27	33	9	1					
36	Trave	118	57	54	4	180.00	000011	000011		
37	Trave	242	243	54	4	180.00	000011	000011		
38	Trave	27	37	51	2			000011		
39	Trave	28	40	51	2			000011		
40	Trave f.	37	38	1	2				0.50	0.50
41	Trave	39	36	51	2		000011			
42	Trave f.	40	39	1	2				0.50	0.50
43	Trave	38	35	51	2		000011			
44	Pilas.	36	42	9	1					
45	Pilas.	35	41	9	1					
46	Trave	197	242	54	4	180.00	000011	000011		
47	Trave	230	232	54	4	180.00	000011	000011		
48	Trave	35	45	51	2			000011		
49	Trave	36	48	51	2			000011		
50	Trave f.	45	46	1	2				0.50	0.50
51	Trave	47	44	51	2		000011			
52	Trave f.	48	47	1	2				0.50	0.50
53	Trave	46	43	51	2		000011			
54	Pilas.	44	50	9	1					
55	Pilas.	43	191	9	1					
56	Trave	234	236	54	4	180.00	000011	000011		
57	Trave	182	200	54	4	180.00	000011	000011		
58	Trave	43	53	51	2			000011		
59	Trave	44	56	51	2			000011		
60	Trave f.	53	54	1	2				0.50	0.50
61	Trave	55	52	51	2		000011			
62	Trave f.	56	55	1	2				0.50	0.50
63	Trave	54	51	51	2		000011			
64	Pilas.	52	58	9	1					
65	Pilas.	51	57	9	1					
66	Trave	58	118	54	4	180.00	000011	000011		
67	Trave	203	235	54	4	180.00	000011	000011		
68	Trave	51	61	51	2			000011		
69	Trave	52	64	51	2			000011		
70	Trave f.	61	62	1	2				0.50	0.50
71	Trave	63	60	51	2		000011			
72	Trave f.	64	63	1	2				0.50	0.50
73	Trave	62	59	51	2		000011			
74	Pilas.	60	66	9	1					
75	Pilas.	59	65	9	1					
76	Trave	239	247	54	4	180.00	000011	000011		
77	Trave	214	190	54	4	180.00	000011	000011		
78	Trave	59	69	51	2			000011		
79	Trave	60	72	51	2			000011		
80	Trave f.	69	70	1	2				0.50	0.50
81	Trave	71	68	51	2		000011			
82	Trave f.	72	71	1	2				0.50	0.50
83	Trave	70	67	51	2		000011			
84	Pilas.	68	74	9	1					
85	Pilas.	67	73	9	1					
86	Trave	196	195	54	4	180.00	000011	000011		
87	Trave	235	237	54	4	180.00	000011	000011		
88	Trave	67	77	51	2			000011		
89	Trave	68	80	51	2			000011		
90	Trave f.	77	78	1	2				0.50	0.50
91	Trave	79	76	51	2		000011			
92	Trave f.	80	79	1	2				0.50	0.50
93	Trave	78	75	51	2		000011			
94	Pilas.	76	82	9	1					
95	Pilas.	75	81	9	1					
96	Trave	192	239	54	4	180.00	000011	000011		
97	Trave	217	252	54	4	180.00	000011	000011		
98	Trave	75	85	51	2			000011		
99	Trave	76	88	51	2			000011		
100	Trave f.	85	86	1	2				0.50	0.50
101	Trave	87	84	51	2		000011			
102	Trave f.	88	87	1	2				0.50	0.50
103	Trave	86	83	51	2		000011			
104	Pilas.	84	90	9	1					
105	Pilas.	83	231	9	1					
106	Trave	216	234	54	4	180.00	000011	000011		

Elem.	Note	Nodo I	Nodo J	Mat.	Sez.	Rotaz.	Svincolo I	Svincolo J	Wink V	Wink O
107	Trave	190	205	54	4	180.00	000011	000011		
108	Trave	83	93	51	10			000011		
109	Trave	84	96	51	2			000011		
110	Trave f.	93	94	1	10				0.50	0.50
111	Trave	95	92	51	2		000011			
112	Trave f.	96	95	1	2				0.50	0.50
113	Trave	94	91	51	10		000011			
114	Pilas.	92	98	9	1					
115	Pilas.	91	229	9	1					
116	Trave	195	33	7	9			000011		
117	Trave	199	90	7	9			000011		
118	Trave	3	100	51	2			000011		
119	Trave f.	100	101	1	2				0.50	0.50
120	Trave	101	99	51	2		000011			
121	Pilas.	99	102	9	1					
122	Trave	17	179	7	9		000011			
123	Trave	99	104	51	2			000011		
124	Trave f.	104	105	1	2				0.50	0.50
125	Trave	105	103	51	2		000011			
126	Pilas.	103	226	9	1					
127	Trave	82	192	7	9		000011			
128	Trave	103	108	51	2			000011		
129	Trave f.	108	109	1	2				0.50	0.50
130	Trave	109	107	51	2		000011			
131	Pilas.	107	110	9	1					
132	Trave	74	203	7	9		000011			
133	Trave	107	112	51	2			000011		
134	Trave f.	112	113	1	2				0.50	0.50
135	Trave	113	111	51	2		000011			
136	Pilas.	111	114	9	1					
137	Trave	66	207	7	9		000011			
138	Trave	111	116	51	2			000011		
139	Trave f.	116	117	1	2				0.50	0.50
140	Trave	117	115	51	2		000011			
141	Pilas.	115	118	9	1					
142	Trave	58	212	7	9		000011			
143	Trave	115	120	51	2			000011		
144	Trave f.	120	121	1	2				0.50	0.50
145	Trave	121	119	51	2		000011			
146	Pilas.	119	122	9	1					
147	Trave	50	214	7	9		000011			
148	Trave	119	124	51	2			000011		
149	Trave f.	124	125	1	2				0.50	0.50
150	Trave	125	123	51	2		000011			
151	Pilas.	123	126	9	1					
152	Trave	42	216	7	9		000011			
153	Trave	123	128	51	2			000011		
154	Trave f.	128	129	1	2				0.50	0.50
155	Trave	129	127	51	2		000011			
156	Pilas.	127	130	9	1					
157	Trave	34	218	7	9		000011			
158	Trave	127	132	51	2			000011		
159	Trave f.	132	133	1	2				0.50	0.50
160	Trave	133	131	51	2		000011			
161	Pilas.	131	238	9	1					
162	Trave	18	202	7	9		000011			
163	Trave	131	135	51	2			000011		
164	Trave f.	135	136	1	2				0.50	0.50
165	Trave	136	138	51	2		000011			
166	Pilas.	138	227	9	1					
167	Trave	245	73	7	9			000011		
168	Trave	12	140	51	2			000011		
169	Trave	139	11	51	2		000011			
170	Trave f.	140	141	1	2				0.50	0.50
171	Trave	99	142	51	2			000011		
172	Trave	141	99	51	2		000011			
173	Trave f.	142	139	1	2				0.50	0.50
174	Trave	28	144	51	2			000011		
175	Trave	143	27	51	2		000011			
176	Trave f.	144	145	1	2				0.50	0.50
177	Trave	103	146	51	2			000011		
178	Trave	145	103	51	2		000011			
179	Trave f.	146	143	1	2				0.50	0.50
180	Trave	36	148	51	2			000011		

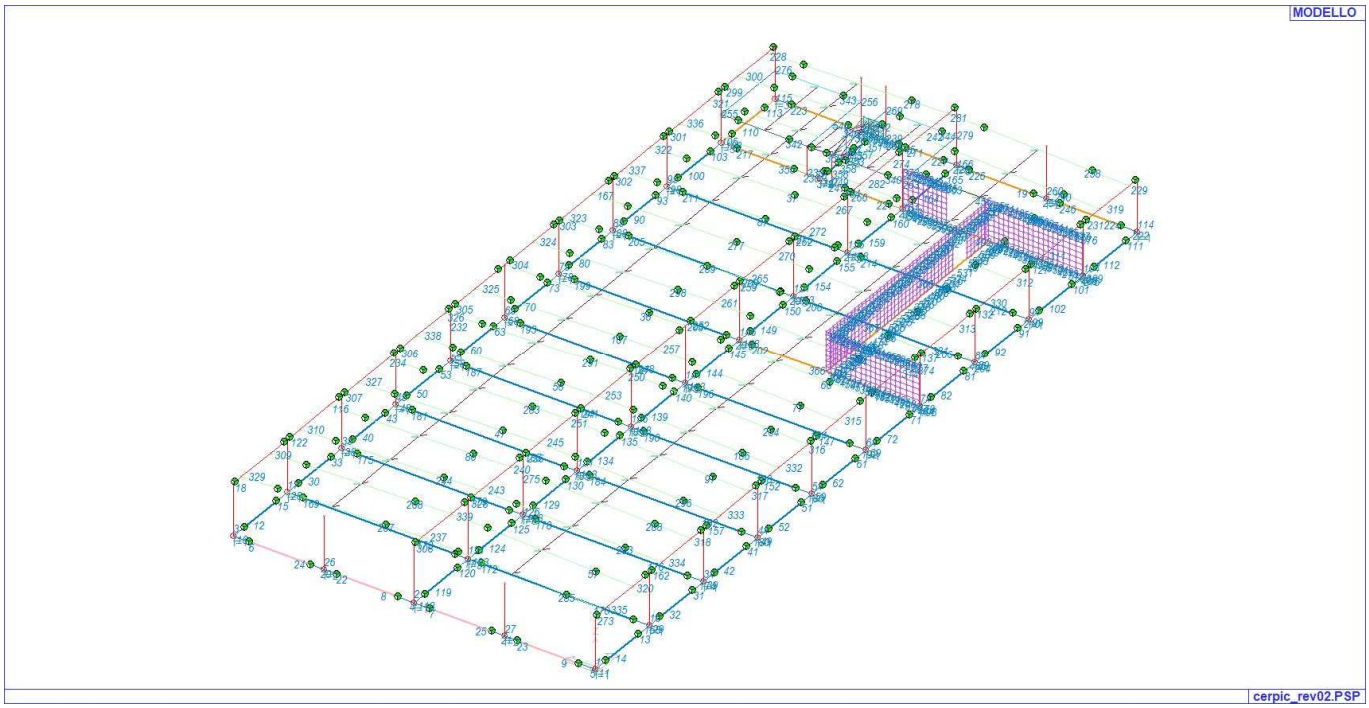
Elem.	Note	Nodo I	Nodo J	Mat.	Sez.	Rotaz.	Svincolo I	Svincolo J	Wink V	Wink O
181	Trave	147	35	51	2		000011			
182	Trave f.	148	149	1	2				0.50	0.50
183	Trave	107	150	51	2			000011		
184	Trave	149	107	51	2		000011			
185	Trave f.	150	147	1	2				0.50	0.50
186	Trave	44	152	51	2			000011		
187	Trave	151	43	51	2		000011			
188	Trave f.	152	153	1	2				0.50	0.50
189	Trave	111	154	51	2			000011		
190	Trave	153	111	51	2		000011			
191	Trave f.	154	151	1	2				0.50	0.50
192	Trave	52	156	51	2			000011		
193	Trave	155	51	51	2		000011			
194	Trave f.	156	157	1	2				0.50	0.50
195	Trave	115	158	51	2			000011		
196	Trave	157	115	51	2		000011			
197	Trave f.	158	155	1	2				0.50	0.50
198	Trave	60	292	51	10					
199	Trave	159	59	51	2		000011			
200	Trave f.	160	322	1	10				1.00	1.00
201	Trave	119	162	51	2			000011		
202	Trave	161	119	51	10		000011			
203	Trave f.	162	159	1	2				0.50	0.50
204	Trave	68	291	51	10					
205	Trave	163	67	51	2		000011			
206	Trave f.	164	287	1	2				1.00	1.00
207	Trave	123	166	51	2			000011		
208	Trave	165	123	51	2		000011			
209	Trave f.	166	163	1	2				0.50	0.50
210	Trave	76	168	51	2			000011		
211	Trave	167	75	51	2		000011			
212	Trave f.	168	286	1	2				1.00	1.00
213	Trave	127	170	51	2			000011		
214	Trave	169	127	51	2		000011			
215	Trave f.	170	167	1	2				0.50	0.50
216	Trave	84	293	51	10					
217	Trave	171	83	51	10		000011			
218	Trave f.	172	863	1	10				1.00	1.00
219	Trave	131	174	51	10			000011		
220	Trave	173	972	51	10					
221	Trave f.	174	262	1	10				0.50	0.50
222	Trave	92	176	51	2			000011		
223	Trave	175	91	51	2		000011			
224	Trave f.	176	208	1	10				0.50	0.50
225	Trave	138	178	51	2			000011		
226	Trave	177	138	51	2		000011			
227	Trave f.	178	1100	1	10				0.50	0.50
228	Trave	194	97	7	9			000011		
229	Trave	183	98	7	9			000011		
230	Trave	184	261	51	10			000011		
231	Trave	90	198	7	9		000011			
232	Pilas.	191	49	9	1					
233	Pilas.	184	210	9	1					
234	Trave	187	41	7	9			000011		
235	Trave	248	1101	1	8			000011		
236	Trave	106	230	7	9		000011			
237	Trave	201	200	7	9					
238	Trave	206	244	54	4	180.00	000011	000011		
239	Pilas.	241	224	9	1					
240	Trave	196	106	7	9			000011		
241	Trave	110	234	7	9		000011			
242	Trave	223	193	7	9					
243	Trave	220	196	7	9					
244	Trave	220	179	54	4	180.00	000011	000011		
245	Trave	230	252	7	9					
246	Trave	208	249	51	2		000011			
247	Trave	189	289	51	10					
248	Trave	114	190	7	9		000011			
249	Pilas.	189	185	9	1					
250	Trave	213	114	7	9			000011		
251	Trave	252	110	7	9			000011		
252	Trave	118	211	7	9		000011			
253	Trave	234	213	7	9					
254	Trave	249	186	51	2			000011		

Elem.	Note	Nodo I	Nodo J	Mat.	Sez.	Rotaz.	Svincolo I	Svincolo J	Wink V	Wink O
255	Pilas.	231	89	9	1					
256	Pilas.	240	181	9	1					
257	Trave	190	118	7	9			000011		
258	Trave	183	193	54	4	180.00	000011	000011		
259	Trave	122	221	7	9		000011			
260	Pilas.	249	251	9	1					
261	Trave	211	122	7	9			000011		
262	Trave	126	235	7	9		000011			
263	Pilas.	238	290	9	1					
264	Trave	241	265	51	2					
265	Trave	221	244	7	9					
266	Trave	130	239	7	9		000011			
267	Trave	242	130	7	9			000011		
268	Trave	200	228	54	4	180.00	000011	000011		
269	Pilas.	224	188	9	1					
270	Trave	244	126	7	9			000011		
271	Trave	134	223	7	9		000011			
272	Trave	235	242	7	9					
273	Trave	2	209	7	9		000011			
274	Trave	246	134	7	9			000011		
275	Pilas.	226	106	9	1					
276	Pilas.	229	97	9	1					
277	Trave	244	245	54	4	180.00	000011	000011		
278	Trave	193	194	54	4	180.00	000011	000011		
279	Pilas.	227	137	9	1					
280	Pilas.	248	240	9	1					
281	Trave	193	137	7	9			000011		
282	Trave	239	246	7	9					
283	Trave	252	187	54	4	180.00	000011	000011		
284	Trave	215	213	54	4	180.00	000011	000011		
285	Trave	209	201	54	4	180.00	000011	000011		
286	Trave	207	221	54	4	180.00	000011	000011		
287	Trave	201	204	54	4	180.00	000011	000011		
288	Trave	180	196	54	4	180.00	000011	000011		
289	Trave	221	222	54	4	180.00	000011	000011		
290	Trave	198	223	54	4	180.00	000011	000011		
291	Trave	213	219	54	4	180.00	000011	000011		
292	Trave	223	225	54	4	180.00	000011	000011		
293	Trave	202	220	54	4	180.00	000011	000011		
294	Trave	212	211	54	4	180.00	000011	000011		
295	Trave	199	246	54	4	180.00	000011	000011		
296	Trave	218	230	54	4	180.00	000011	000011		
297	Trave	246	250	54	4	180.00	000011	000011		
298	Trave	211	233	54	4	180.00	000011	000011		
299	Trave	89	225	7	9		000011			
300	Trave	225	194	7	9					
301	Trave	81	247	7	9		000011			
302	Trave	73	237	7	9		000011			
303	Trave	65	222	7	9		000011			
304	Trave	57	233	7	9		000011			
305	Trave	49	205	7	9		000011			
306	Trave	41	236	7	9		000011			
307	Trave	33	232	7	9		000011			
308	Trave	4	201	7	9		000011			
309	Trave	228	17	7	9			000011		
310	Trave	179	195	7	9					
311	Trave	192	199	7	9					
312	Trave	197	82	7	9			000011		
313	Trave	206	74	7	9			000011		
314	Trave	212	66	7	9			000011		
315	Trave	214	58	7	9			000011		
316	Trave	215	50	7	9			000011		
317	Trave	217	42	7	9			000011		
318	Trave	180	34	7	9			000011		
319	Trave	198	183	7	9					
320	Trave	182	18	7	9			000011		
321	Trave	250	89	7	9			000011		
322	Trave	243	81	7	9			000011		
323	Trave	222	245	7	9					
324	Trave	233	65	7	9			000011		
325	Trave	205	57	7	9			000011		
326	Trave	219	49	7	9			000011		
327	Trave	232	187	7	9					
328	Trave	102	220	7	9		000011			

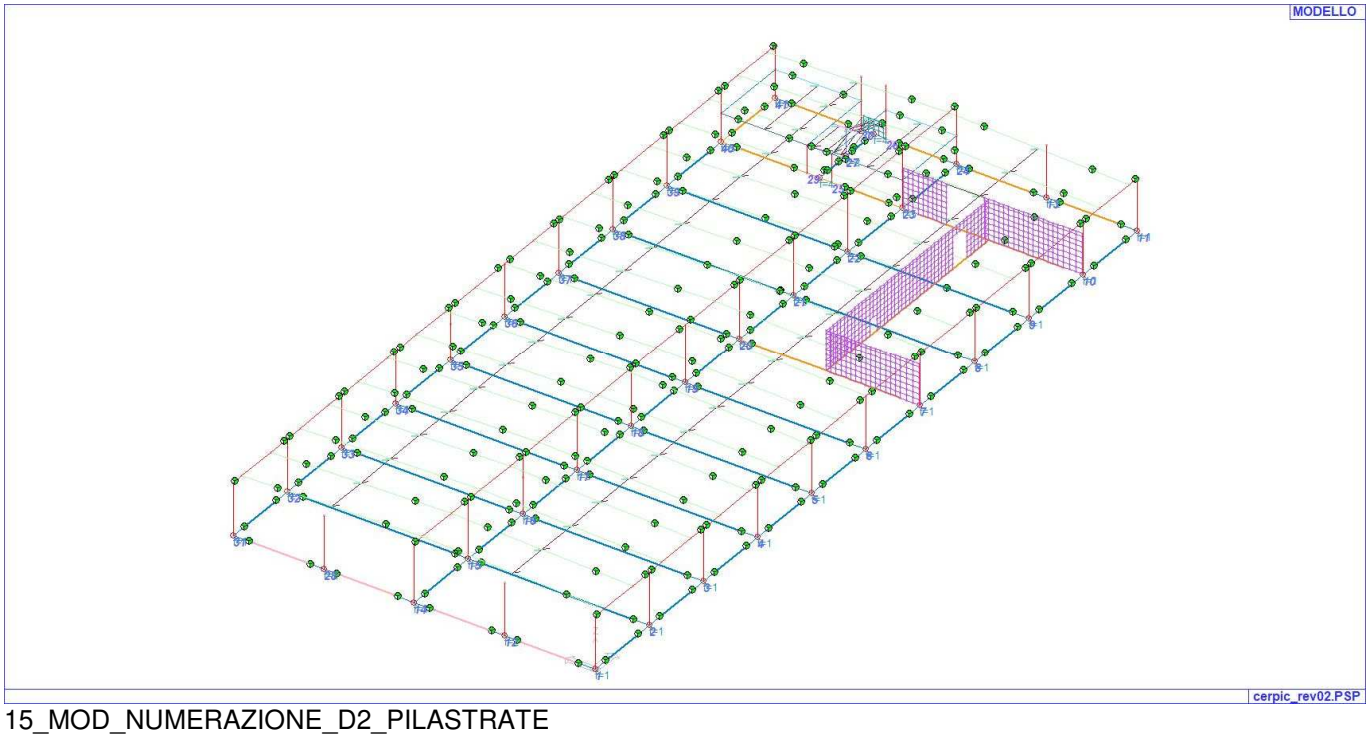
Elem.	Note	Nodo I	Nodo J	Mat.	Sez.	Rotaz.	Svincolo I	Svincolo J	Wink V	Wink O
329	Trave	204	228	7	9					
330	Trave	203	197	7	9					
331	Trave	207	206	7	9					
332	Trave	216	215	7	9					
333	Trave	218	217	7	9					
334	Trave	202	180	7	9					
335	Trave	209	182	7	9					
336	Trave	247	250	7	9					
337	Trave	237	243	7	9					
338	Trave	236	219	7	9					
339	Trave	200	102	7	9			000011		
340	Trave	238	185	7	3		000011	000011		
341	Trave	255	254	1	7					
342	Trave	210	231	7	3		000011	000011		
343	Trave	240	229	7	5		000011	000011		
344	Trave	227	224	7	5		000011	000011		
345	Pilas.	253	254	1	6					
346	Trave	254	256	1	7					
347	Trave	289	263	51	2			000011		
348	Trave f.	710	717	1	10				1.00	1.00
349	Trave f.	371	378	1	10				1.00	1.00
350	Trave f.	917	924	1	10				1.00	1.00
351	Trave	257	274	51	2		000011			
352	Trave f.	475	482	1	10				1.00	1.00
353	Trave	253	258	51	2			000011		
354	Trave	262	189	51	10		000011			
355	Trave f.	261	171	1	10				0.50	0.50
356	Trave f.	263	259	1	2				0.50	0.50
357	Trave f.	258	257	1	2				0.50	0.50
358	Trave	259	253	51	2		000011			
359	Trave	185	210	7	14		000011	000011		
360	Trave	265	268	51	2					
361	Trave	268	274	51	2					
362	Trave	274	278	51	2					
363	Trave	278	282	51	2					
364	Trave	282	248	51	2					
365	Trave f.	288	426	1	10				1.00	1.00
366	Trave f.	288	161	1	10				1.00	1.00
367	Trave f.	287	165	1	2				1.00	1.00
368	Trave f.	286	169	1	2				1.00	1.00
369	Trave f.	285	966	1	10				1.00	1.00
370	Trave f.	286	758	1	10				1.00	1.00
371	Trave f.	287	654	1	10				1.00	1.00
372	Trave	289	184	51	10					
373	Pilas.	290	134	9	1					
374	Trave	541	542	1	11					
375	Trave	562	563	1	11					
376	Trave	626	627	1	11					
377	Trave	542	543	1	11					
378	Trave	563	564	1	11					
379	Trave	627	628	1	11					
380	Trave	543	545	1	11					
381	Trave	564	566	1	11					
382	Trave	628	637	1	11					
383	Trave	545	546	1	11					
384	Trave	566	567	1	11					
385	Trave	637	638	1	11					
386	Trave	546	547	1	11					
387	Trave	567	568	1	11					
388	Trave	638	639	1	11					
389	Trave	547	548	1	11					
390	Trave	568	569	1	11					
391	Trave	639	1071	1	11					
392	Trave	548	549	1	11					
393	Trave	569	570	1	11					
394	Trave	1071	1072	1	11					
395	Trave	549	550	1	11					
396	Trave	570	571	1	11					
397	Trave	1072	1073	1	11					
398	Trave	550	552	1	11					
399	Trave	571	573	1	11					
400	Trave	1073	1074	1	11					
401	Trave	552	553	1	11					
402	Trave	573	574	1	11					

Elem.	Note	Nodo I	Nodo J	Mat.	Sez.	Rotaz.	Svincolo I	Svincolo J	Wink V	Wink O
403	Trave	1074	1075	1	11					
404	Trave	553	554	1	11					
405	Trave	574	575	1	11					
406	Trave	1075	1076	1	11					
407	Trave	554	555	1	11					
408	Trave	575	576	1	11					
409	Trave	1076	1077	1	11					
410	Trave	555	556	1	11					
411	Trave	576	578	1	11					
412	Trave	1077	1078	1	11					
413	Trave	556	557	1	11					
414	Trave	578	580	1	11					
415	Trave	1078	1079	1	11					
416	Trave	557	559	1	11					
417	Trave	580	581	1	11					
418	Trave	1079	1080	1	11					
419	Trave	559	560	1	11					
420	Trave	581	603	1	11					
421	Trave	1080	1081	1	11					
422	Trave	560	561	1	11					
423	Trave	603	604	1	11					
424	Trave	1081	1082	1	11					
425	Trave	561	562	1	11					
426	Trave	604	605	1	11					
427	Trave	1082	636	1	11					
428	Trave	605	606	1	11					
429	Trave	606	608	1	11					
430	Trave	608	609	1	11					
431	Trave	609	610	1	11					
432	Trave	610	611	1	11					
433	Trave	611	612	1	11					
434	Trave	612	613	1	11					
435	Trave	613	615	1	11					
436	Trave	615	616	1	11					
437	Trave	616	617	1	11					
438	Trave	617	618	1	11					
439	Trave	618	619	1	11					
440	Trave	619	620	1	11					
441	Trave	620	622	1	11					
442	Trave	622	623	1	11					
443	Trave	623	624	1	11					
444	Trave	624	625	1	11					
445	Trave	625	649	1	11					
446	Trave	629	630	1	11					
447	Trave	649	650	1	11					
448	Trave	630	631	1	11					
449	Trave	650	647	1	11					
450	Trave	631	632	1	11					
451	Trave	647	629	1	11					
452	Trave	632	633	1	11					
453	Trave	633	635	1	11					
454	Trave	635	636	1	11					
455	Trave	636	1083	1	11					
456	Trave	1083	651	1	11					
457	Trave	1084	1086	1	11					
458	Trave	1085	1084	1	11					
459	Trave	1086	577	1	11					
460	Trave	1087	644	1	11					
461	Trave	645	1087	1	11					
462	Trave	644	646	1	11					
463	Trave	651	652	1	11					
464	Trave	646	1085	1	11					
465	Trave	652	645	1	11					
466	Trave f.	745	286	1	10				1.00	1.00
467	Trave f.	938	945	1	10				1.00	1.00
468	Trave f.	496	503	1	10				1.00	1.00
469	Trave f.	849	285	1	10				1.00	1.00
470	Trave f.	724	731	1	10				1.00	1.00
471	Trave f.	385	392	1	10				1.00	1.00
472	Trave f.	399	406	1	10				1.00	1.00
473	Trave f.	945	952	1	10				1.00	1.00
474	Trave f.	503	517	1	10				1.00	1.00
475	Trave f.	731	738	1	10				1.00	1.00
476	Trave f.	931	938	1	10				1.00	1.00

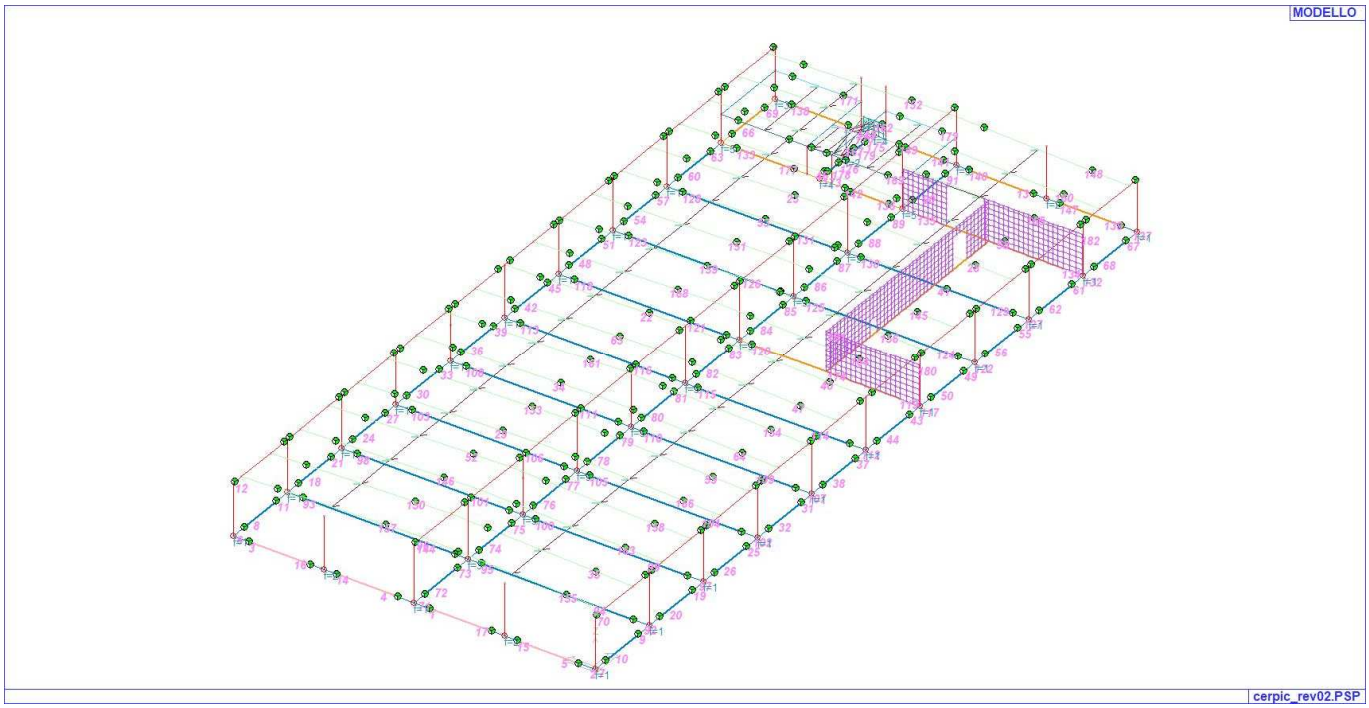
Elem.	Note	Nodo I	Nodo J	Mat.	Sez.	Rotaz.	Svincolo I	Svincolo J	Wink V	Wink O
477	Trave f.	406	413	1	10				1.00	1.00
478	Trave f.	952	959	1	10				1.00	1.00
479	Trave f.	517	287	1	10				1.00	1.00
480	Trave f.	738	745	1	10				1.00	1.00
481	Trave f.	489	496	1	10				1.00	1.00
482	Trave f.	413	288	1	10				1.00	1.00
483	Trave f.	959	285	1	10				1.00	1.00
484	Trave	292	297	51	10					
485	Trave f.	322	329	1	10				1.00	1.00
486	Trave	291	164	51	2			000011		
487	Trave f.	828	835	1	10				1.00	1.00
488	Trave	293	792	51	10					
489	Trave f.	863	875	1	10				1.00	1.00
490	Trave	294	131	51	10					
491	Trave f.	426	433	1	10				1.00	1.00
492	Trave f.	966	1022	1	10				1.00	1.00
493	Trave f.	758	765	1	10				1.00	1.00
494	Trave f.	654	661	1	10				1.00	1.00
495	Trave f.	703	710	1	10				1.00	1.00
496	Trave	972	982	51	10					
497	Trave	297	309	51	10					
498	Trave f.	329	336	1	10				1.00	1.00
499	Trave f.	842	849	1	10				1.00	1.00
500	Trave	792	806	51	10					
501	Trave f.	875	882	1	10				1.00	1.00
502	Trave f.	433	440	1	10				1.00	1.00
503	Trave f.	973	993	1	10				1.00	1.00
504	Trave f.	765	772	1	10				1.00	1.00
505	Trave f.	661	668	1	10				1.00	1.00
506	Trave f.	717	724	1	10				1.00	1.00
507	Trave f.	392	399	1	10				1.00	1.00
508	Trave f.	1022	1029	1	10				1.00	1.00
509	Trave	982	294	51	10					
510	Trave	309	160	51	10					
511	Trave f.	336	343	1	10				1.00	1.00
512	Trave	806	172	51	10					
513	Trave f.	882	889	1	10				1.00	1.00
514	Trave f.	440	447	1	10				1.00	1.00
515	Trave f.	993	1002	1	10				1.00	1.00
516	Trave f.	772	779	1	10				1.00	1.00
517	Trave f.	668	675	1	10				1.00	1.00
518	Trave f.	378	385	1	10				1.00	1.00
519	Trave f.	1029	973	1	10				1.00	1.00
520	Trave f.	343	350	1	10				1.00	1.00
521	Trave f.	889	896	1	10				1.00	1.00
522	Trave f.	447	454	1	10				1.00	1.00
523	Trave f.	1002	1010	1	10				1.00	1.00
524	Trave f.	779	786	1	10				1.00	1.00
525	Trave f.	675	682	1	10				1.00	1.00
526	Trave f.	924	931	1	10				1.00	1.00
527	Trave f.	350	357	1	10				1.00	1.00
528	Trave f.	896	903	1	10				1.00	1.00
529	Trave f.	454	461	1	10				1.00	1.00
530	Trave f.	1010	173	1	10				1.00	1.00
531	Trave f.	786	814	1	10				1.00	1.00
532	Trave f.	682	689	1	10				1.00	1.00
533	Trave f.	482	489	1	10				1.00	1.00
534	Trave f.	357	364	1	10				1.00	1.00
535	Trave f.	903	910	1	10				1.00	1.00
536	Trave f.	461	468	1	10				1.00	1.00
537	Trave f.	814	821	1	10				1.00	1.00
538	Trave f.	689	696	1	10				1.00	1.00
539	Trave f.	835	842	1	10				1.00	1.00
540	Trave f.	364	371	1	10				1.00	1.00
541	Trave f.	910	917	1	10				1.00	1.00
542	Trave f.	468	475	1	10				1.00	1.00
543	Trave f.	821	828	1	10				1.00	1.00
544	Trave f.	696	703	1	10				1.00	1.00
545	Trave	1100	241	51	8		000011			
546	Trave f.	1101	175	1	10				0.50	0.50



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. 14.01.2008 - §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. 14.01.2008 - § 7.3.3.3
Beta a	Coef. riduttivo per tener conto del danneggiamento del piano dipendente dallo spostamento, ottenuto sperimentalmente

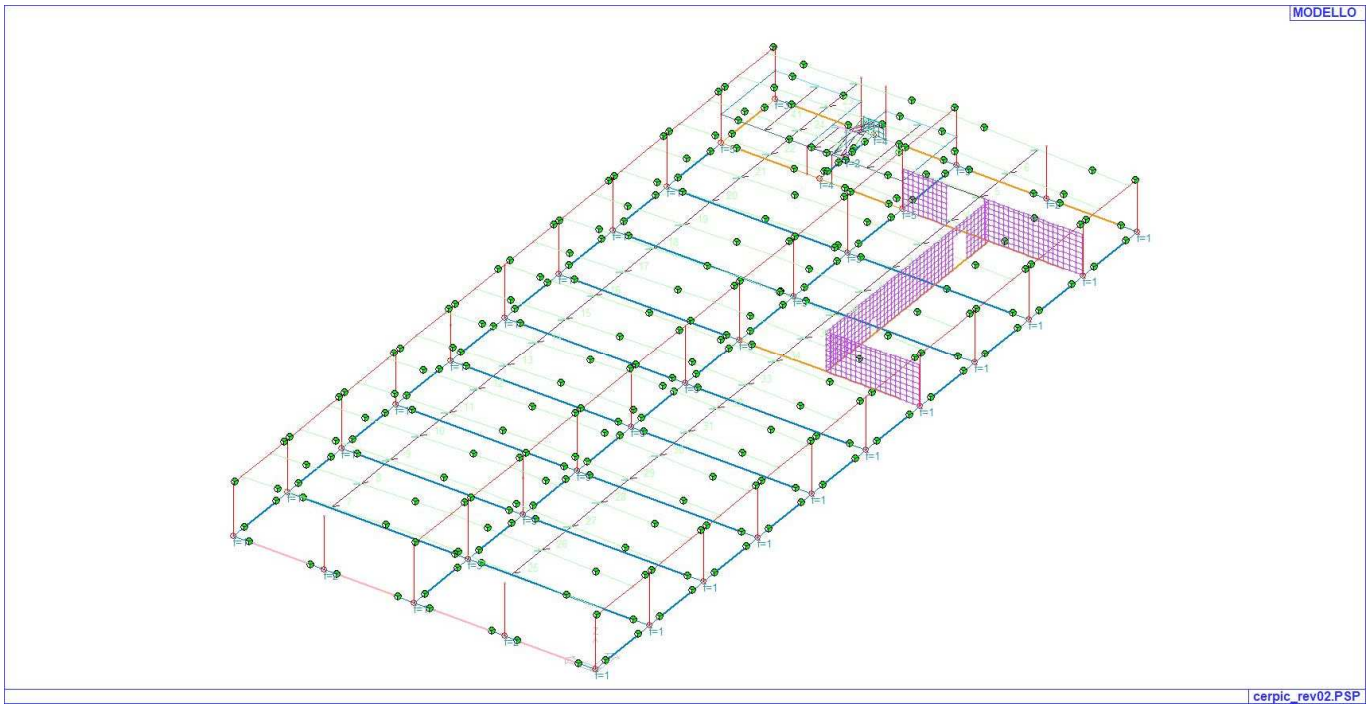
Con riferimento al **Documento di Affidabilità** "*Test di validazione del software di calcolo PRO_SAP e dei moduli aggiuntivi PRO_SAP Modulo Geotecnico, PRO_CAD nodi acciaio e PRO_MST*" - versione Maggio 2011, disponibile per il download sul sito **www.2si.it**, si segnalano i seguenti esempi applicativi:

Test N°	Titolo
14	**ANALISI DEI CARICHI PER UN SOLAIO DI COPERTURA**
15	**EFFETTI DELLO SPESSORE SULLA RIGIDEZZA DEI SOLAI**
16	**SOLAIO: CONFRONTO FRA RIGIDO E DEFORMABILE**
17	**SOLAIO: MISTO LEGNO-CALCESTRUZZO**
28	**FRECCIA DI SOLAI IN C.A.**
119	**PROGETTO E VERIFICA DI SOLAI IN MATERIALE XLAM**

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	Neve	70.00		100.00		1.00	0.50	0.20	0.0	0.0	1.00
2	Variab.	430.00	250.00	300.00		1.00	0.70	0.50	0.30	0.30	1.00
3	Variab.	500.00	150.00	400.00		1.00	0.70	0.50	0.30	0.30	1.00
4	Variab.	625.00	250.00	300.00		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	SM	1	m=51	1.0	0.0	70.00		100.00	74	203	235	126	244
									206				
2	SM	1	m=51	1.0	0.0	70.00		100.00	197	242	235	203	
3	SM	1	m=51	1.0	0.0	70.00		100.00	82	192	239	130	242
									197				
4	SM	1	m=51	1.0	0.0	70.00		100.00	199	246	239	192	
5	SM	1	m=51	1.0	0.0	70.00		100.00	90	198	223	134	246
									199				
6	SM	1	m=51	1.0	0.0	70.00		100.00	183	193	223	198	
7	SM	1	m=51	1.0	0.0	70.00		100.00	200	228	204	201	
8	SM	1	m=51	1.0	0.0	70.00		100.00	102	220	179	17	228
									200				

Elem.	Tipo	ID Arch.	Mat.	Spessore	Orditura	G1k	G2k	Qk	Nodo 1/6..	Nodo 2/7..	Nodo 3/8..	Nodo..	Nodo..
9	SM	1	m=51	1.0	0.0	70.00		100.00	196	195	179	220	
10	SM	1	m=51	1.0	0.0	70.00		100.00	106	230	232	33	195
									196				
11	SM	1	m=51	1.0	0.0	70.00		100.00	252	187	232	230	
12	SM	1	m=51	1.0	0.0	70.00		100.00	110	234	236	41	187
									252				
13	SM	1	m=51	1.0	0.0	70.00		100.00	213	219	236	234	
14	SM	1	m=51	1.0	0.0	70.00		100.00	114	190	205	49	219
									213				
15	SM	1	m=51	1.0	0.0	70.00		100.00	118	57	205	190	
16	SM	1	m=51	1.0	0.0	70.00		100.00	211	233	57	118	
17	SM	1	m=51	1.0	0.0	70.00		100.00	122	221	222	65	233
									211				
18	SM	1	m=51	1.0	0.0	70.00		100.00	244	245	222	221	
19	SM	1	m=51	1.0	0.0	70.00		100.00	126	235	237	73	245
									244				
20	SM	1	m=51	1.0	0.0	70.00		100.00	242	243	237	235	
21	SM	1	m=51	1.0	0.0	70.00		100.00	130	239	247	81	243
									242				
22	SM	1	m=51	1.0	0.0	70.00		100.00	246	250	247	239	
23	SM	1	m=51	1.0	0.0	70.00		100.00	193	194	225	223	
24	SM	1	m=51	1.0	0.0	70.00		100.00	246	134	223	225	89
									250				
25	SM	1	m=51	1.0	0.0	70.00		100.00	182	200	201	209	
26	SM	1	m=51	1.0	0.0	70.00		100.00	18	202	220	102	200
									182				
27	SM	1	m=51	1.0	0.0	70.00		100.00	180	196	220	202	
28	SM	1	m=51	1.0	0.0	70.00		100.00	34	218	230	106	196
									180				
29	SM	1	m=51	1.0	0.0	70.00		100.00	217	252	230	218	
30	SM	1	m=51	1.0	0.0	70.00		100.00	42	216	234	110	252
									217				
31	SM	1	m=51	1.0	0.0	70.00		100.00	215	213	234	216	
32	SM	1	m=51	1.0	0.0	70.00		100.00	50	214	190	114	213
									215				
33	SM	1	m=51	1.0	0.0	70.00		100.00	58	118	190	214	
34	SM	1	m=51	1.0	0.0	70.00		100.00	212	211	118	58	
35	SM	1	m=51	1.0	0.0	70.00		100.00	66	207	221	122	211
									212				
36	SM	1	m=51	1.0	0.0	70.00		100.00	206	244	221	207	
37	SM	3	m=1	1.0	0.0	500.00	150.00	400.00	253	276	284	264	
38	SM	3	m=1	1.0	0.0	500.00	150.00	400.00	271	272	276	254	255
39	CM	4	m=1	5.0	0.0	625.00	250.00	300.00	185	255	254	256	210
40	CM	2	m=1	5.0	0.0	430.00	250.00	300.00	238	227	224	185	
41	CM	2	m=1	5.0	0.0	430.00	250.00	300.00	210	240	229	231	



17_MOD_NUMERAZIONE_SOLAI

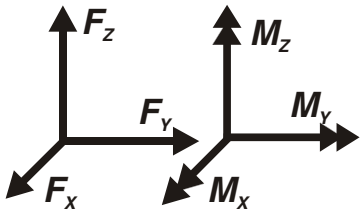
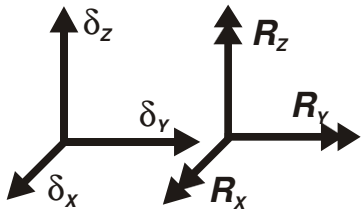
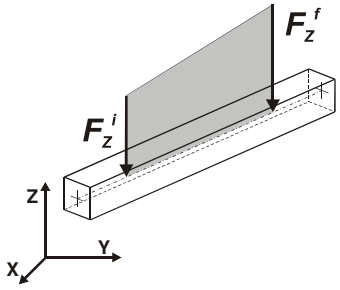
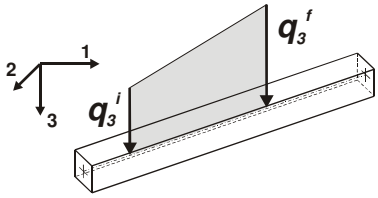
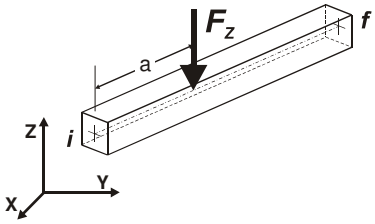
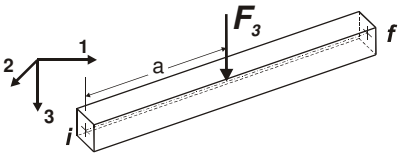
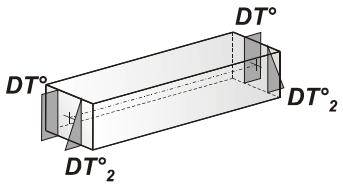
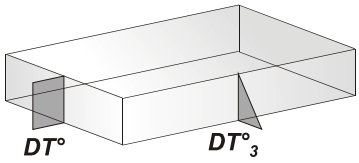
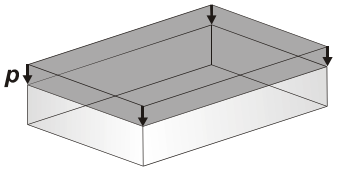
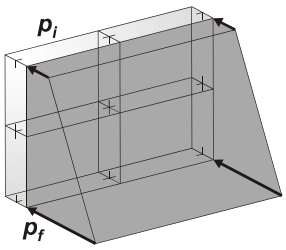
MODELLAZIONE DELLE AZIONI

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

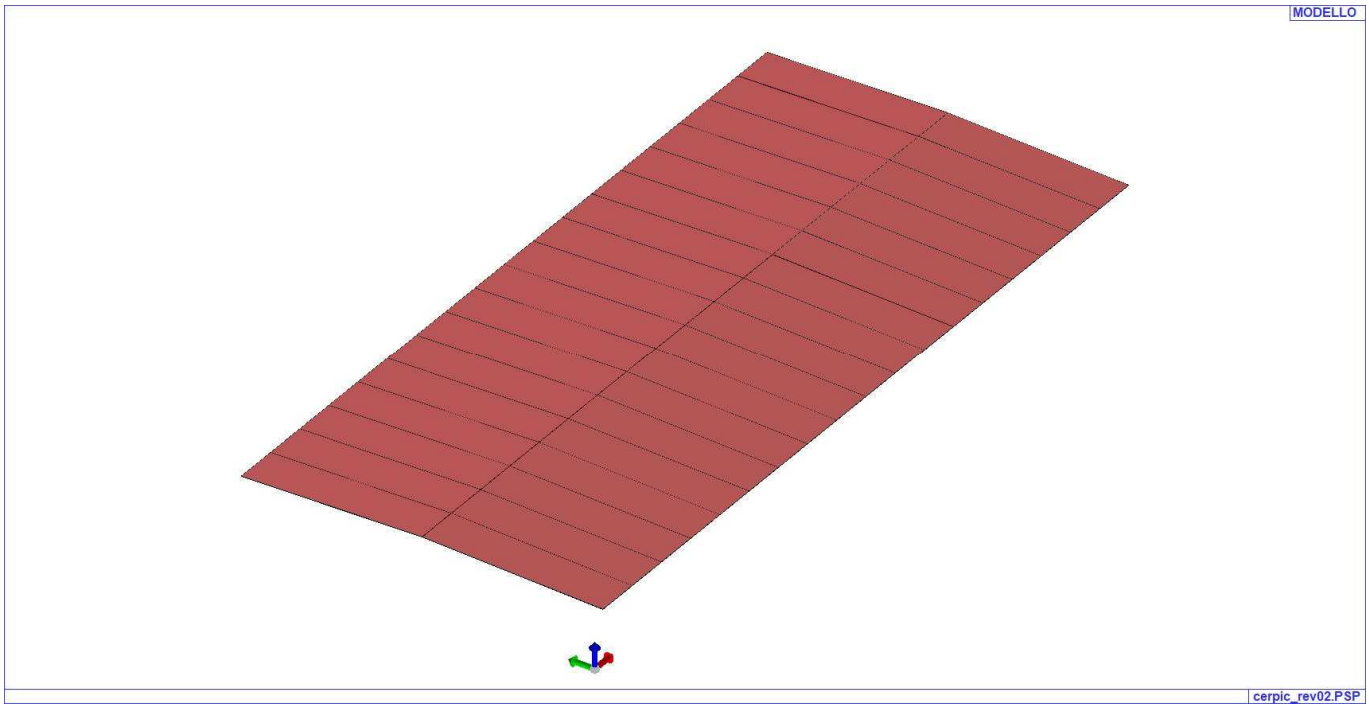
	Carico concentrato nodale
	Spostamento impresso
	Carico distribuito globale
	Carico distribuito locale
	Carico concentrato globale
	Carico concentrato locale
	Carico termico 2D
	Carico termico 3D
	Carico pressione uniforme
	Carico pressione variabile

Tipo	carico concentrato nodale

Id	Tipo	Fx	Fy	Fz	Mx	My	Mz
		daN	daN	daN	daN m	daN m	daN m
5	CN:Fx=-600.00 Fy=860.00 Fz=-5500.00	-600.00	860.00	-5500.00	0.0	0.0	0.0

Tipo	carico distribuito globale su trave

Id	Tipo	Pos.	fx	fy	fz	mx	my	mz
		m	daN/ m	daN/ m	daN/ m	daN	daN	daN
1	p.p. tegolo	0.0	0.0	0.0	-1000.00	0.0	0.0	0.0
		0.0	0.0	0.0	-1000.00	0.0	0.0	0.0
4	DG:Fzi=-43.00 Fzf=-43.00	0.0	0.0	0.0	-4300.00	0.0	0.0	0.0
		0.0	0.0	0.0	-4300.00	0.0	0.0	0.0



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.

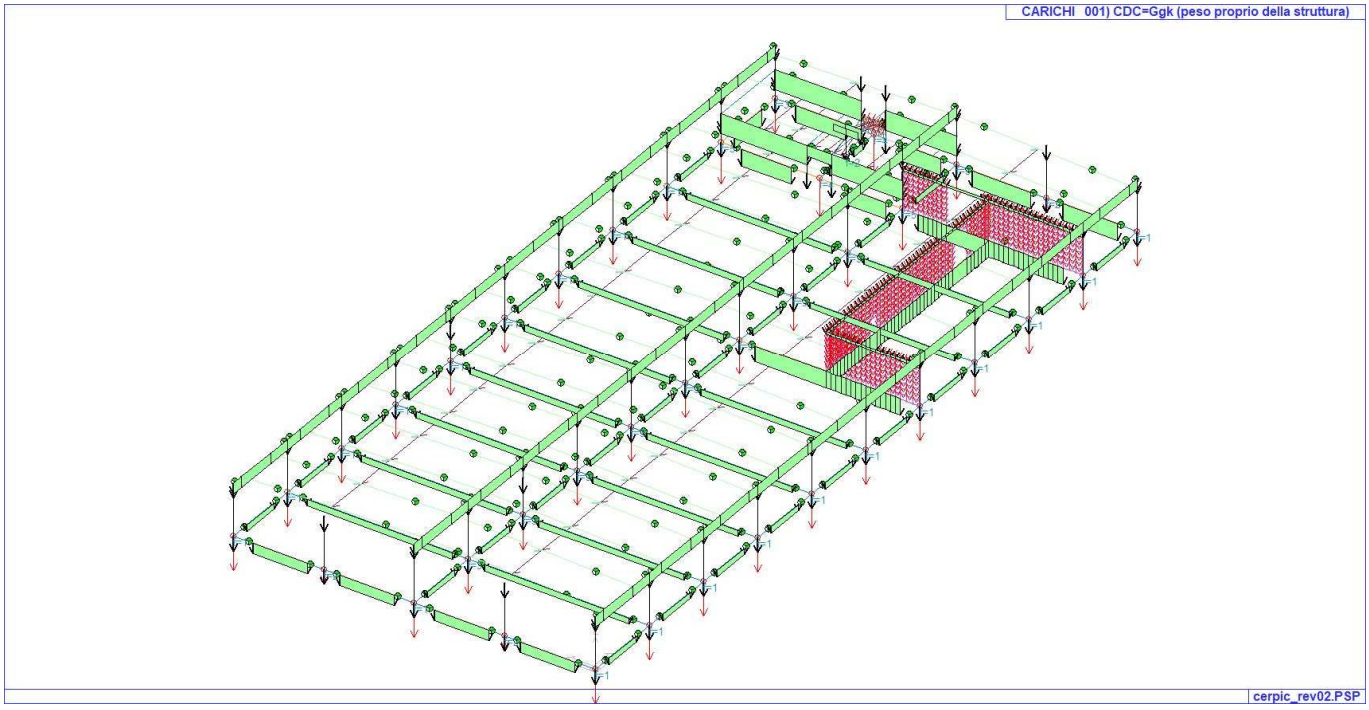
Nella tabella successiva vengono riportati i casi di carico agenti sulla struttura, con l'indicazione dei dati relativi al caso di carico stesso:
Numero Tipo e *Sigla identificativa*, *Valore di riferimento* del caso di carico (se previsto).

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.

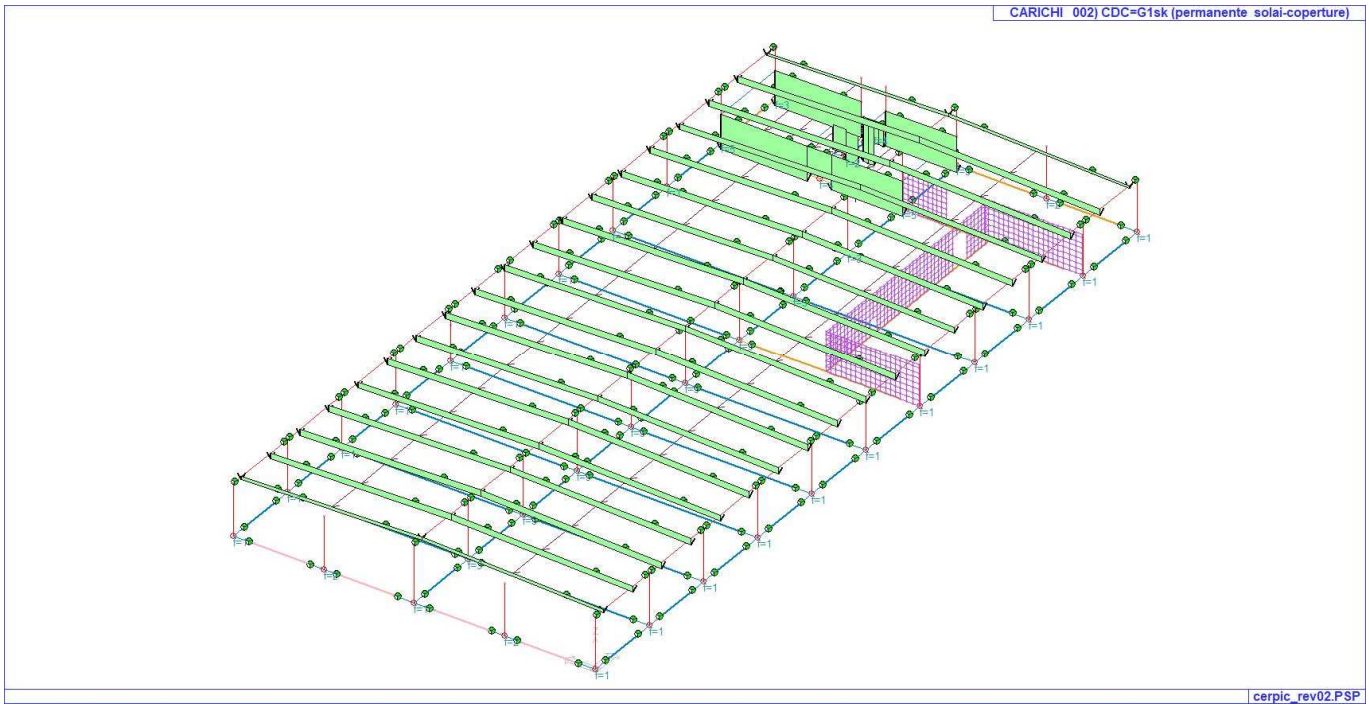
Per i casi di carico di tipo sismico (9-Esk e 10-Edk), viene riportata la tabella di definizione delle masse: per ogni caso di carico partecipante alla definizione delle masse viene indicata la relativa aliquota (partecipazione) considerata. Si precisa che per i caso di carico 5-Qsk e 6-Qnk la partecipazione 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	Qnk	CDC=Qnk (carico da neve)	
6	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)
			partecipazione:1.00 per 3 CDC=G2sk (permanente solai-coperture n.c.d.)
			partecipazione:1.00 per 4 CDC=Qsk (variabile solai)
			partecipazione:1.00 per 5 CDC=Qnk (carico da neve)
			partecipazione:1.00 per 14 CDC=G1k (permanente tamponamenti - peso tegoli e coppelle)
7	Edk	CDC=Ed (dinamico SLU) alfa=0.0 (ecc. -)	come precedente CDC sismico
8	Edk	CDC=Ed (dinamico SLU) alfa=90.00 (ecc. +)	come precedente CDC sismico
9	Edk	CDC=Ed (dinamico SLU) alfa=90.00 (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=0.0 (ecc. -)	come precedente CDC sismico
12	Edk	CDC=Ed (dinamico SLD) alfa=90.00 (ecc. +)	come precedente CDC sismico
13	Edk	CDC=Ed (dinamico SLD) alfa=90.00 (ecc. -)	come precedente CDC sismico
14	Gk	CDC=G1k (permanente tamponamenti - peso tegoli e coppelle)	D2 :da 1 a 3 Azione : DG:Fzi=-43.00 Fzf=-43.00
			D2 :da 16 a 17 Azione : DG:Fzi=-43.00 Fzf=-43.00
			D2 :da 26 a 27 Azione : DG:Fzi=-43.00 Fzf=-43.00
			D2 :da 34 a 35 Azione : DG:Fzi=-43.00 Fzf=-43.00
			D2 :da 36 a 37 Azione : p.p. tegolo
			D2 :da 44 a 45 Azione : DG:Fzi=-43.00 Fzf=-43.00
			D2 :da 46 a 47 Azione : p.p. tegolo
			D2 :da 54 a 55 Azione : DG:Fzi=-43.00 Fzf=-43.00
			D2 :da 56 a 57 Azione : p.p. tegolo
			D2 :da 64 a 65 Azione : DG:Fzi=-43.00 Fzf=-43.00
			D2 :da 66 a 67 Azione : p.p. tegolo
			D2 :da 74 a 75 Azione : DG:Fzi=-43.00 Fzf=-43.00
			D2 :da 76 a 77 Azione : p.p. tegolo
			D2 :da 84 a 85 Azione : DG:Fzi=-43.00 Fzf=-43.00
			D2 :da 86 a 87 Azione : p.p. tegolo
			D2 :da 94 a 95 Azione : DG:Fzi=-43.00 Fzf=-43.00
			D2 :da 96 a 97 Azione : p.p. tegolo
			D2 :da 104 a 105 Azione : DG:Fzi=-43.00 Fzf=-43.00
			D2 :da 106 a 107 Azione : p.p. tegolo
			D2 :da 114 a 115 Azione : DG:Fzi=-43.00 Fzf=-43.00
			D2 : 166 Azione : DG:Fzi=-43.00 Fzf=-43.00
			D2 : 232 Azione : DG:Fzi=-43.00 Fzf=-43.00
			D2 : 238 Azione : p.p. tegolo
			D2 : 239 Azione : DG:Fzi=-43.00 Fzf=-43.00
			D2 : 244 Azione : p.p. tegolo

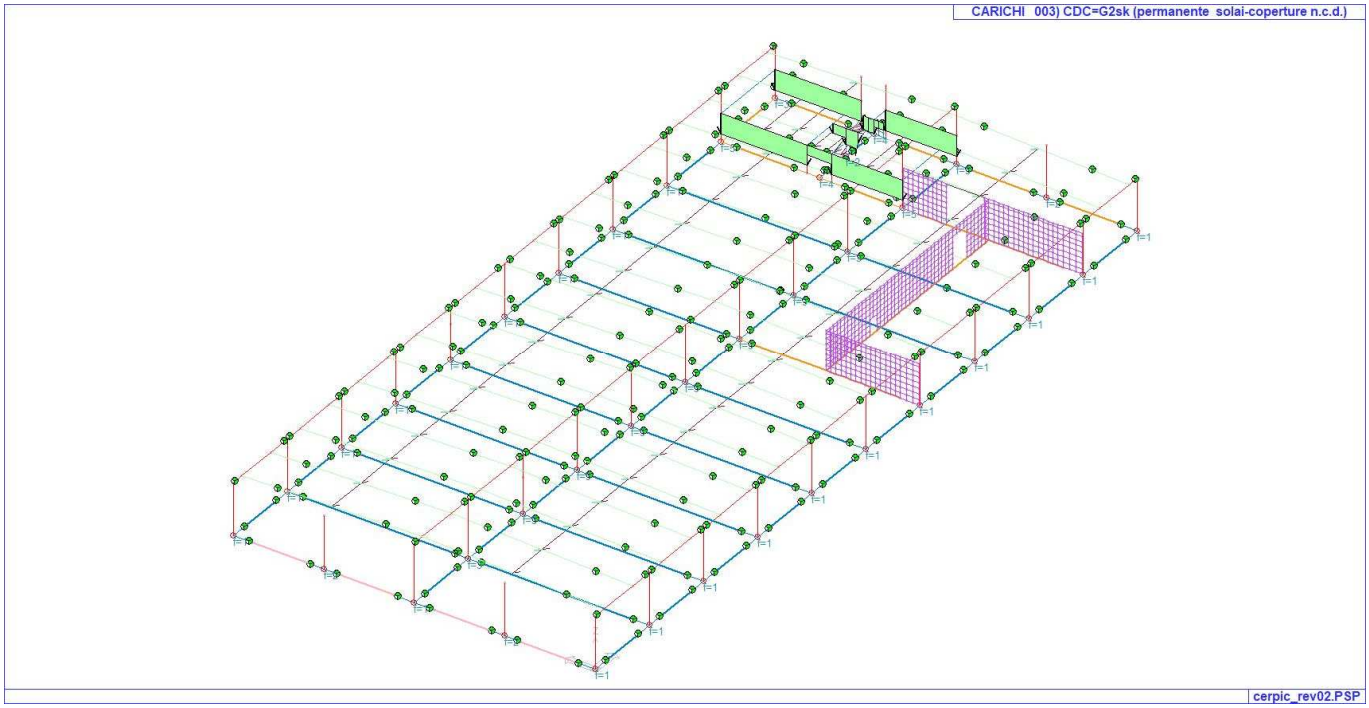
CDC	Tipo	Sigla Id	Note
			D2 :da 255 a 256 Azione : DG:Fzi=-43.00 Fzf=-43.00
			D2 : 258 Azione : p.p. tegolo
			D2 : 260 Azione : DG:Fzi=-43.00 Fzf=-43.00
			D2 : 268 Azione : p.p. tegolo
			D2 : 269 Azione : DG:Fzi=-43.00 Fzf=-43.00
			D2 : 276 Azione : DG:Fzi=-43.00 Fzf=-43.00
			D2 :da 277 a 278 Azione : p.p. tegolo
			D2 :da 279 a 280 Azione : DG:Fzi=-43.00 Fzf=-43.00
			D2 :da 283 a 298 Azione : p.p. tegolo
15	Edk	CDC=Ed (dinamico SLO) alfa=0.0 (ecc. +)	come precedente CDC sismico
16	Edk	CDC=Ed (dinamico SLO) alfa=0.0 (ecc. -)	come precedente CDC sismico
17	Edk	CDC=Ed (dinamico SLO) alfa=90.00 (ecc. +)	come precedente CDC sismico
18	Edk	CDC=Ed (dinamico SLO) alfa=90.00 (ecc. -)	come precedente CDC sismico
19	Qk	CDC=Qk (variabile carroponte 1)	Nodo: 226 Azione : CN:Fx=-600.00 Fy=860.00 Fz=-5500.00
20	Qk	CDC=Qk (variabile carroponte 2)	Nodo: 191 Azione : CN:Fx=-600.00 Fy=860.00 Fz=-5500.00
21	Edk	CDC=Ed (dinamico SLU) verticale	come precedente CDC sismico
22	Edk	CDC=Ed (dinamico SLD) verticale	come precedente CDC sismico
23	Edk	CDC=Ed (dinamico SLO) verticale	come precedente CDC sismico
24	Qk	CDC=Qk (variabile carroponte 3)	Nodo: 290 Azione : CN:Fx=-600.00 Fy=860.00 Fz=-5500.00



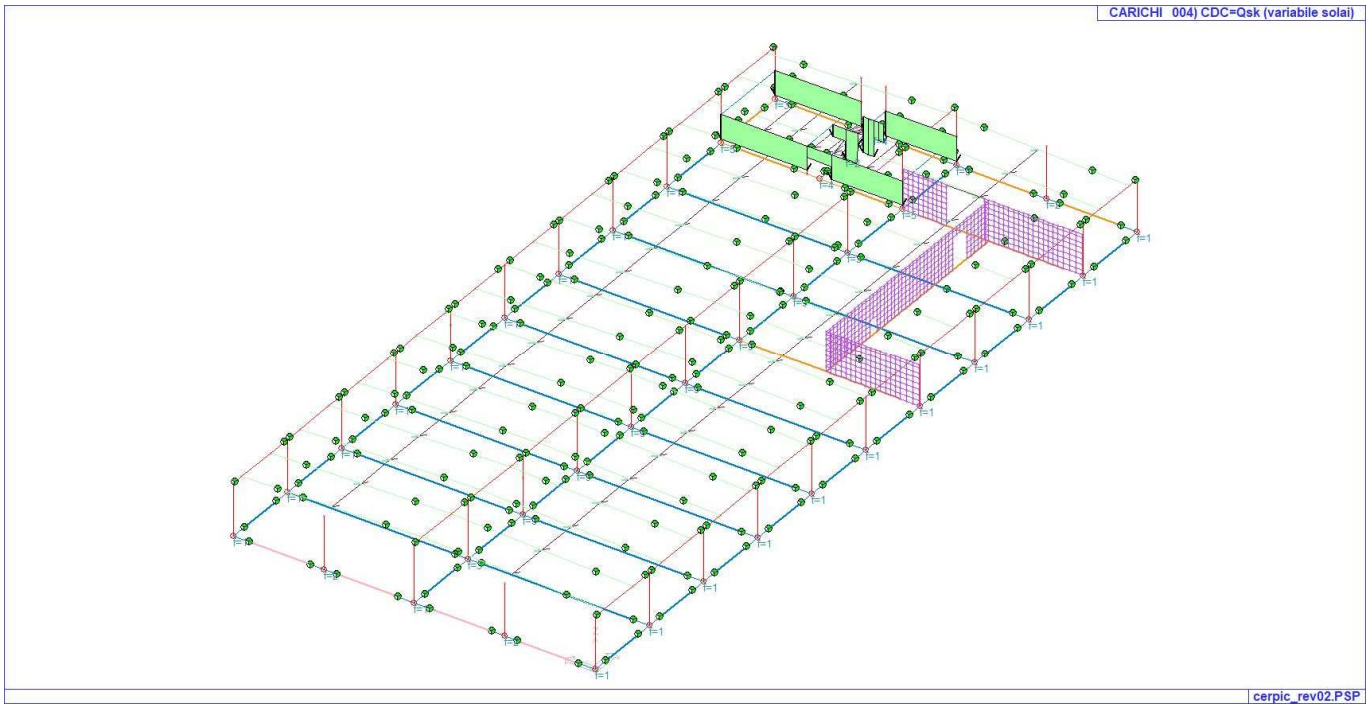
22_CDC_001_CDC=Ggk (peso proprio della struttura)



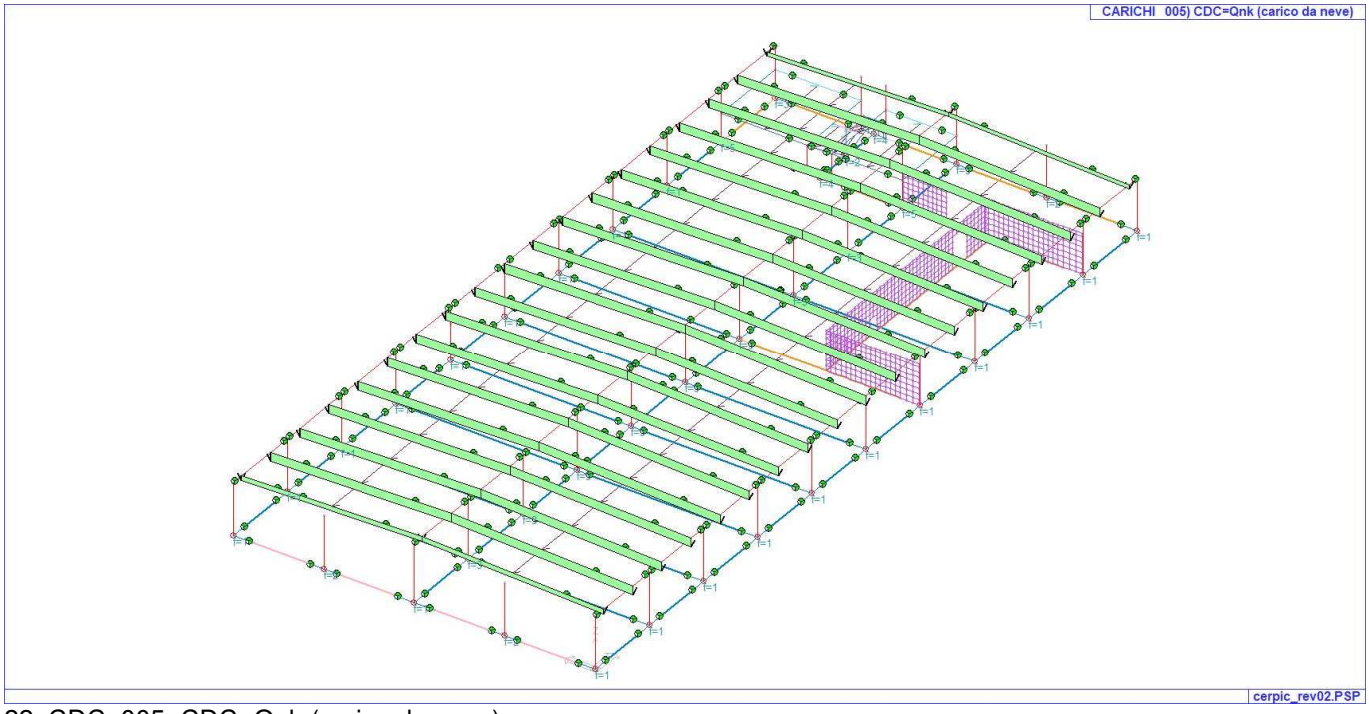
22_CDC_002_CDC=G1sk (permanente solai-coperture)



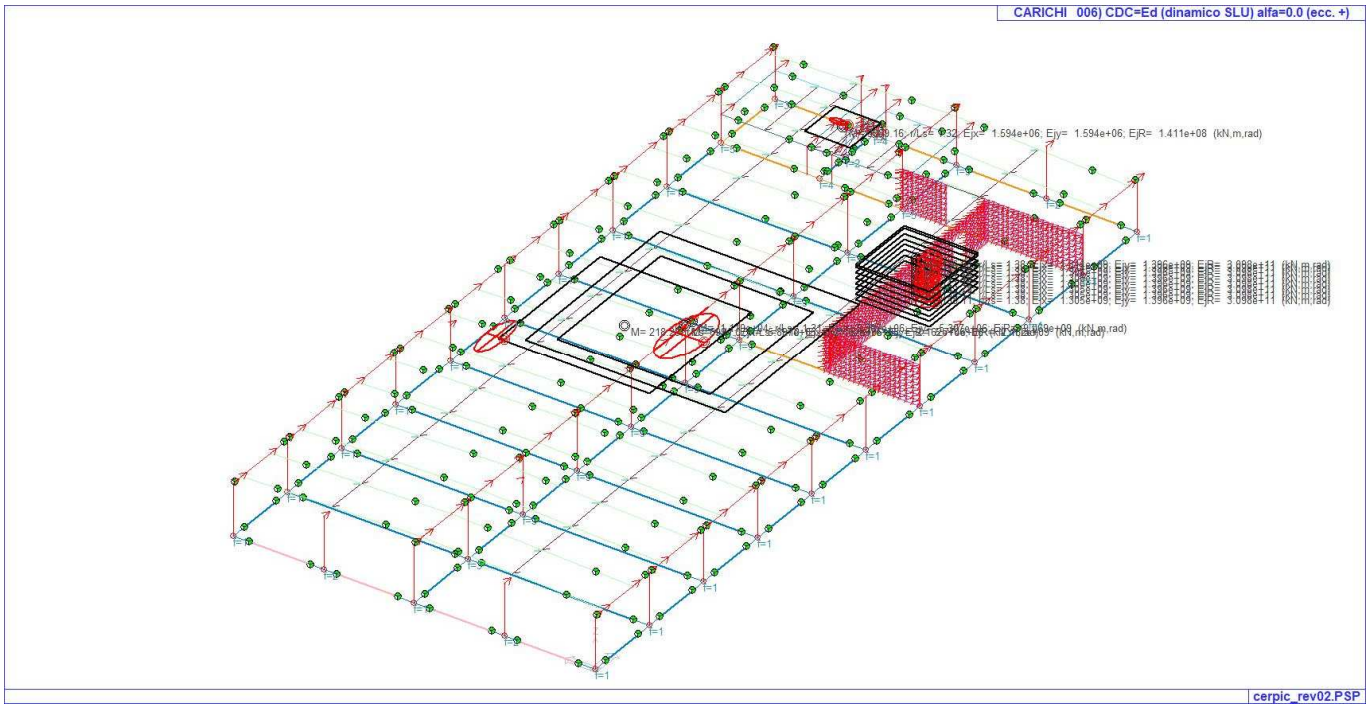
22_CDC_003_CDC=G2sk (permanente solai-coperture n.c.d.)



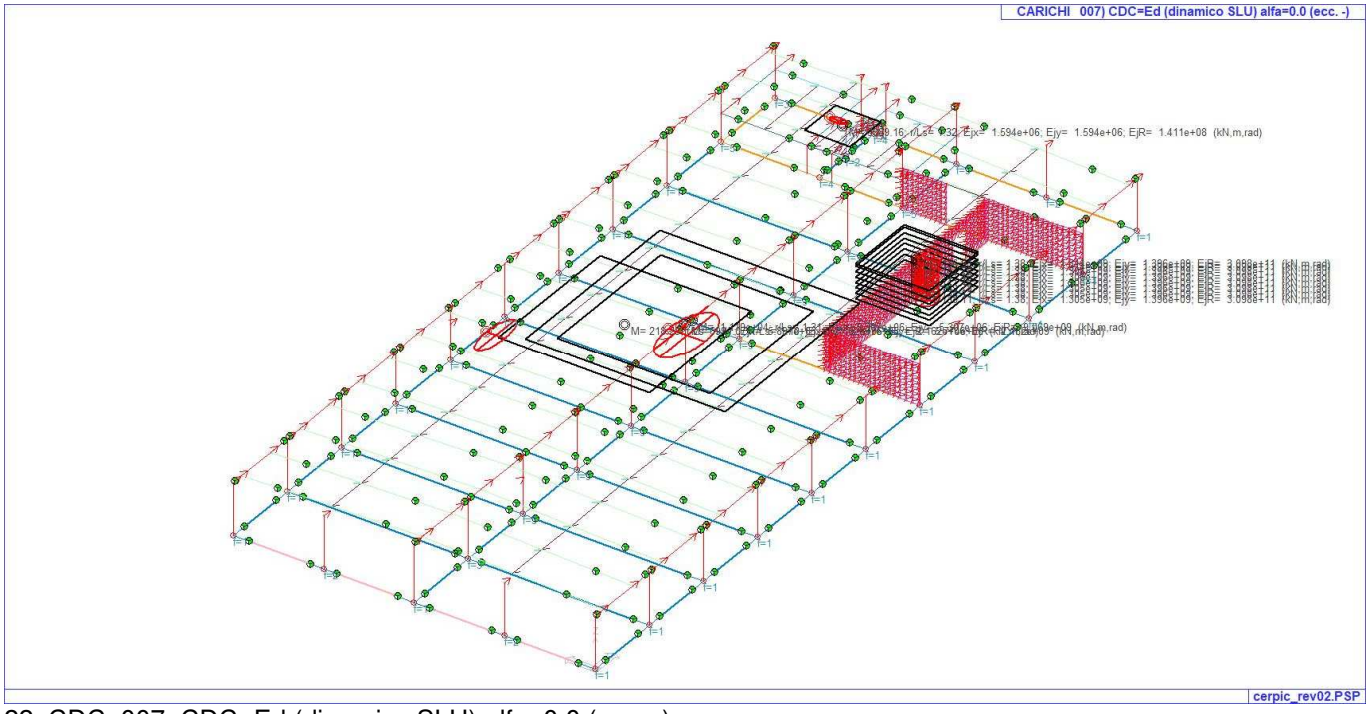
22_CDC_004_CDC=Qsk (variabile solai)



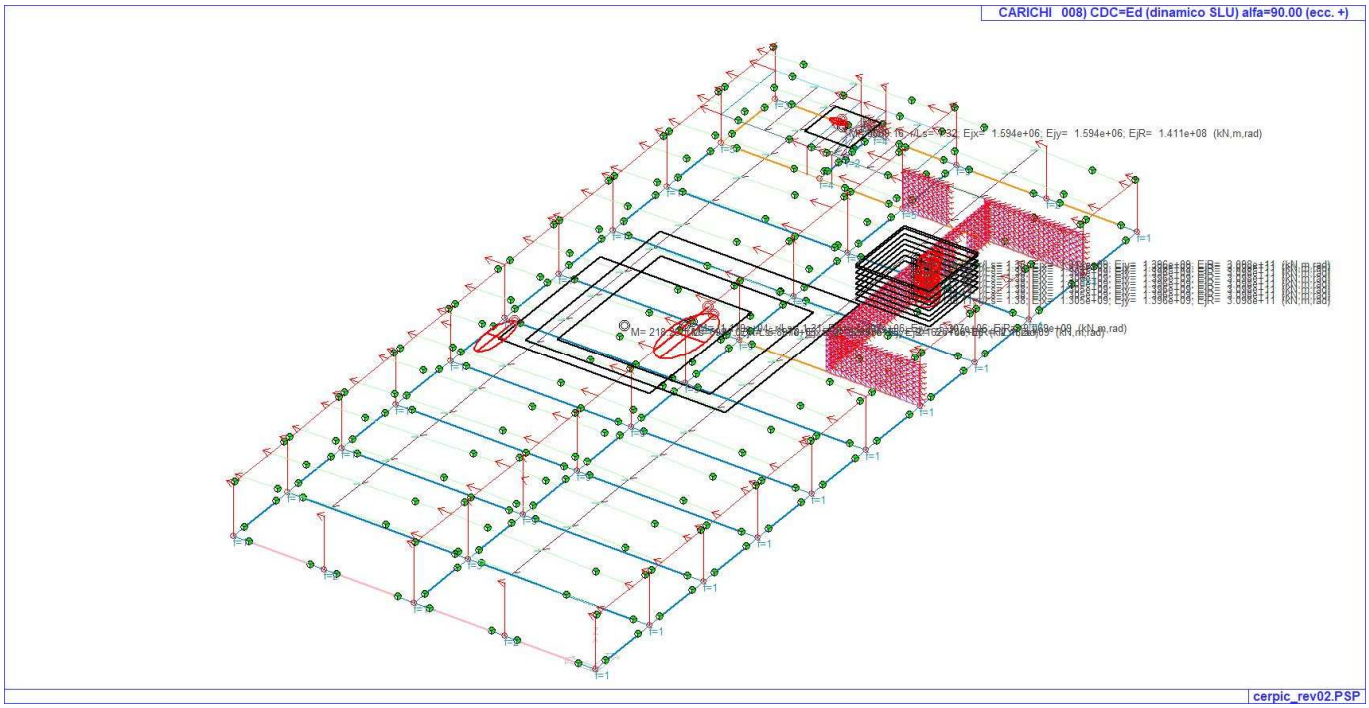
22_CDC_005_CDC=Qnk (carico da neve)



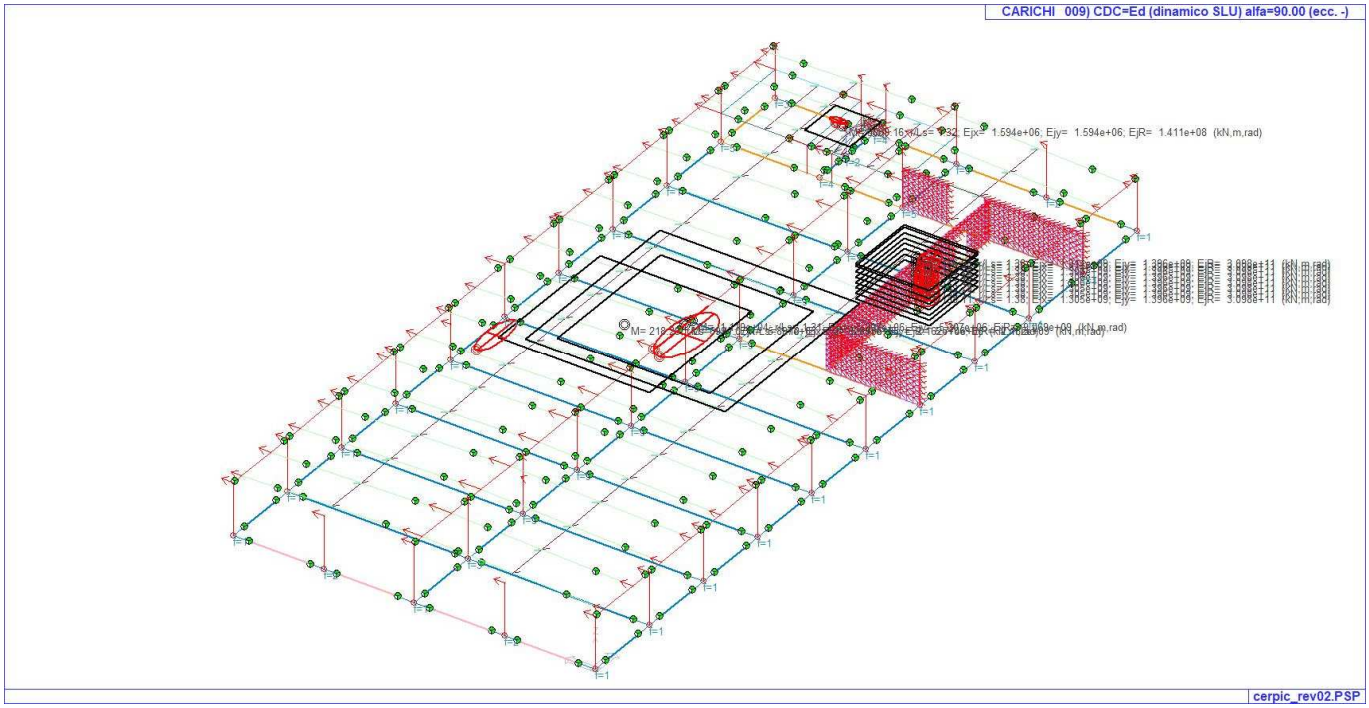
22_CDC_006_CDC=Ed (dinamico SLU) alfa=0.0 (ecc. +)



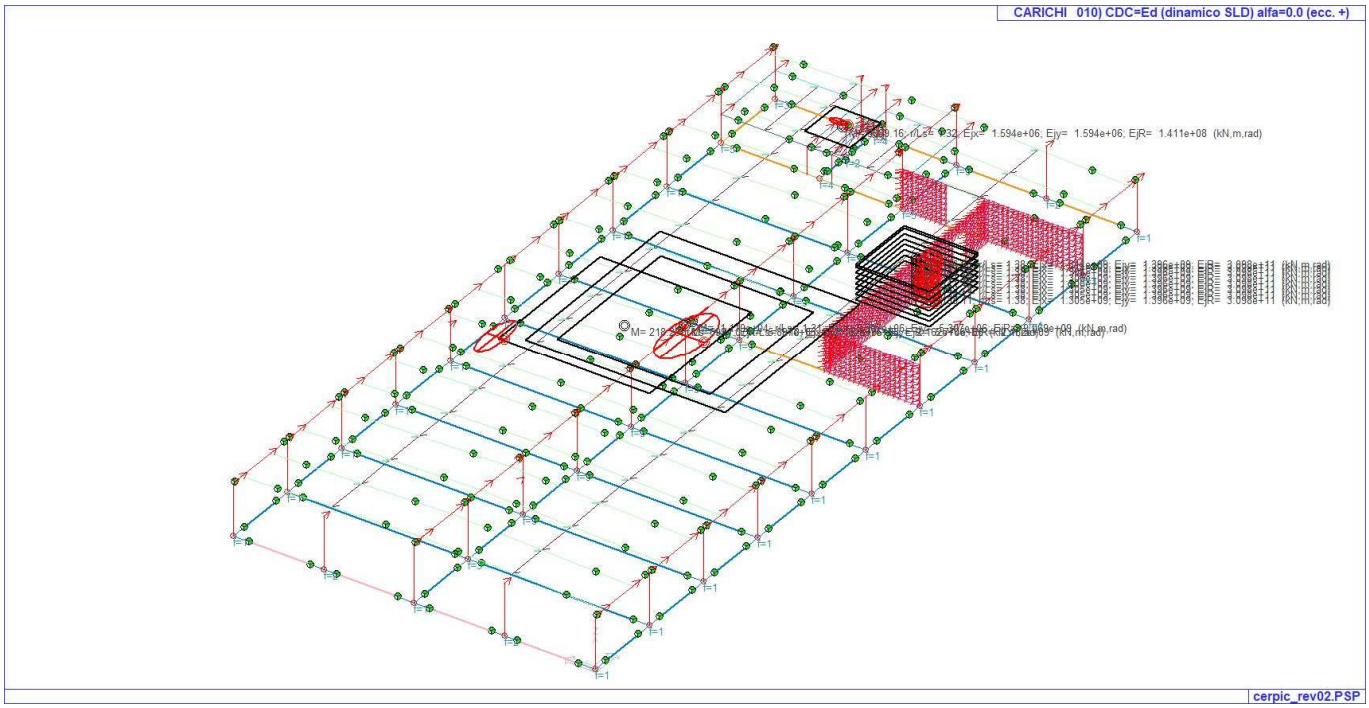
22_CDC_007_CDC=Ed (dinamico SLU) alfa=0.0 (ecc. -)



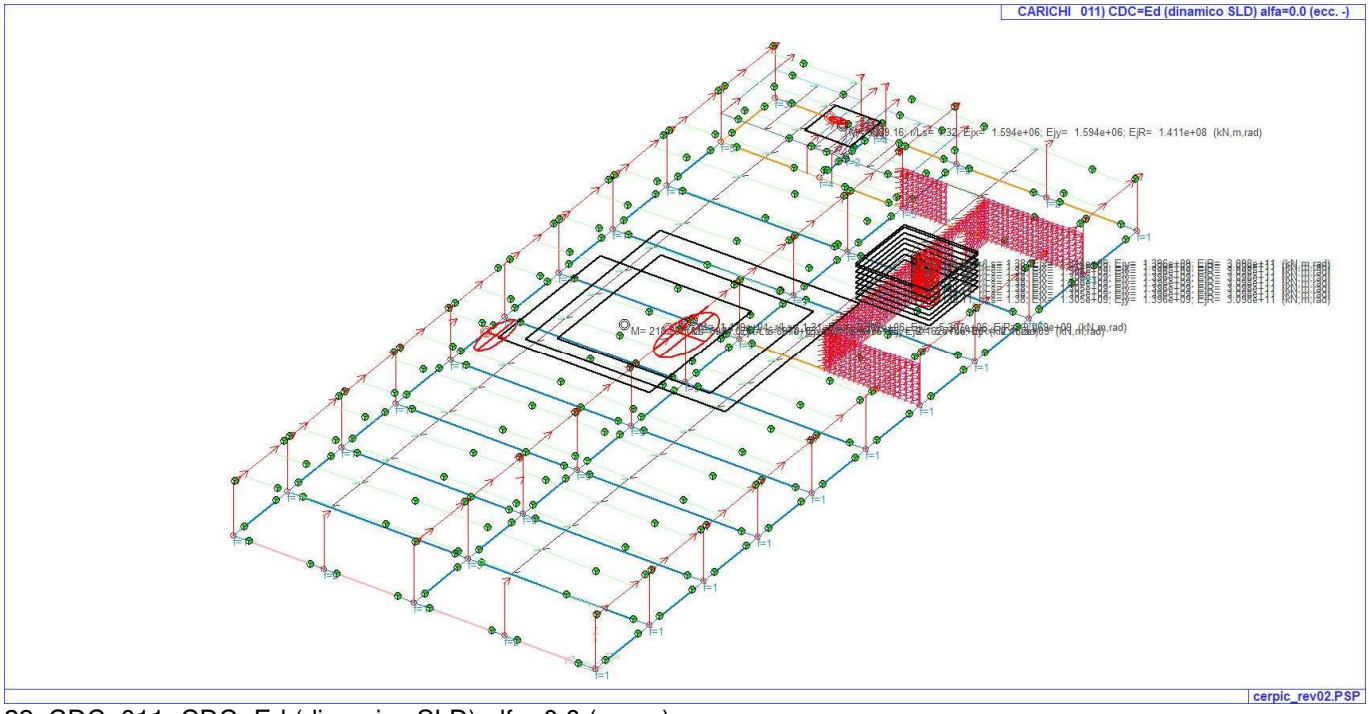
22_CDC_008_CDC=Ed (dinamico SLU) alfa=90.00 (ecc. +)



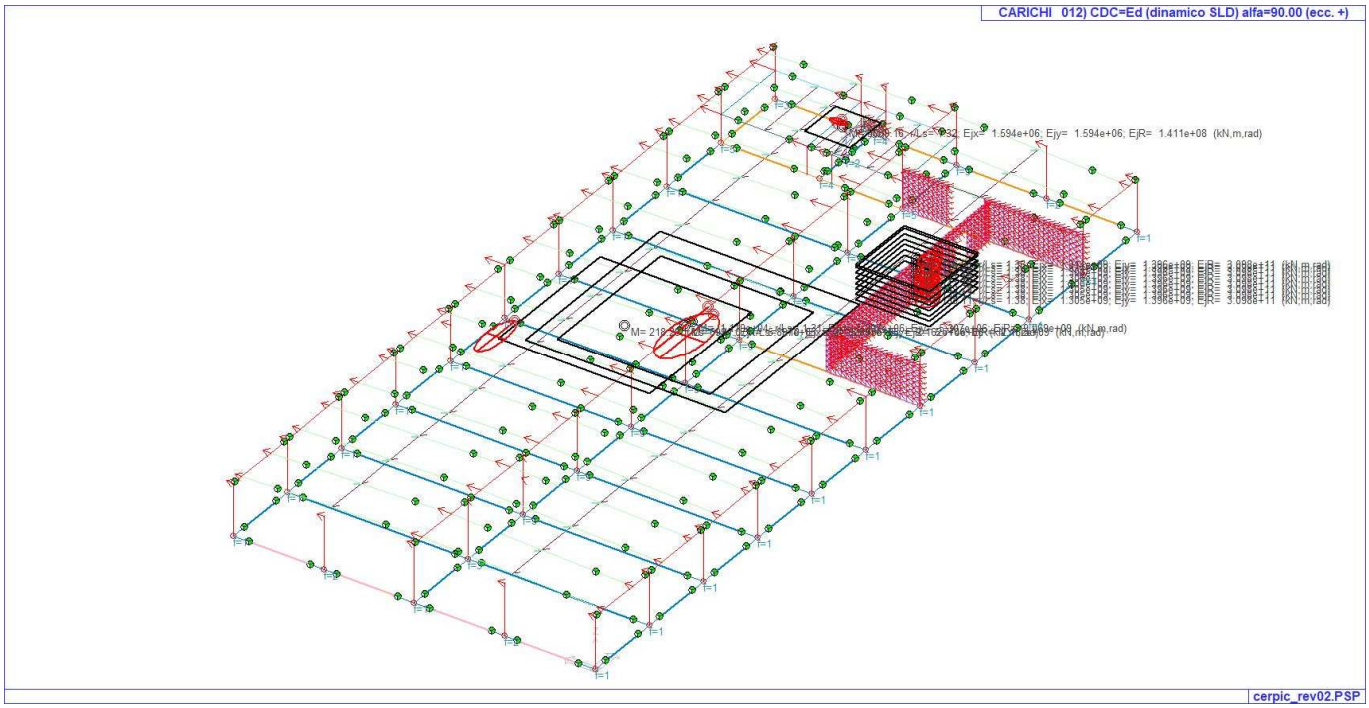
22_CDC_009_CDC=Ed (dinamico SLU) alfa=90.00 (ecc. -)



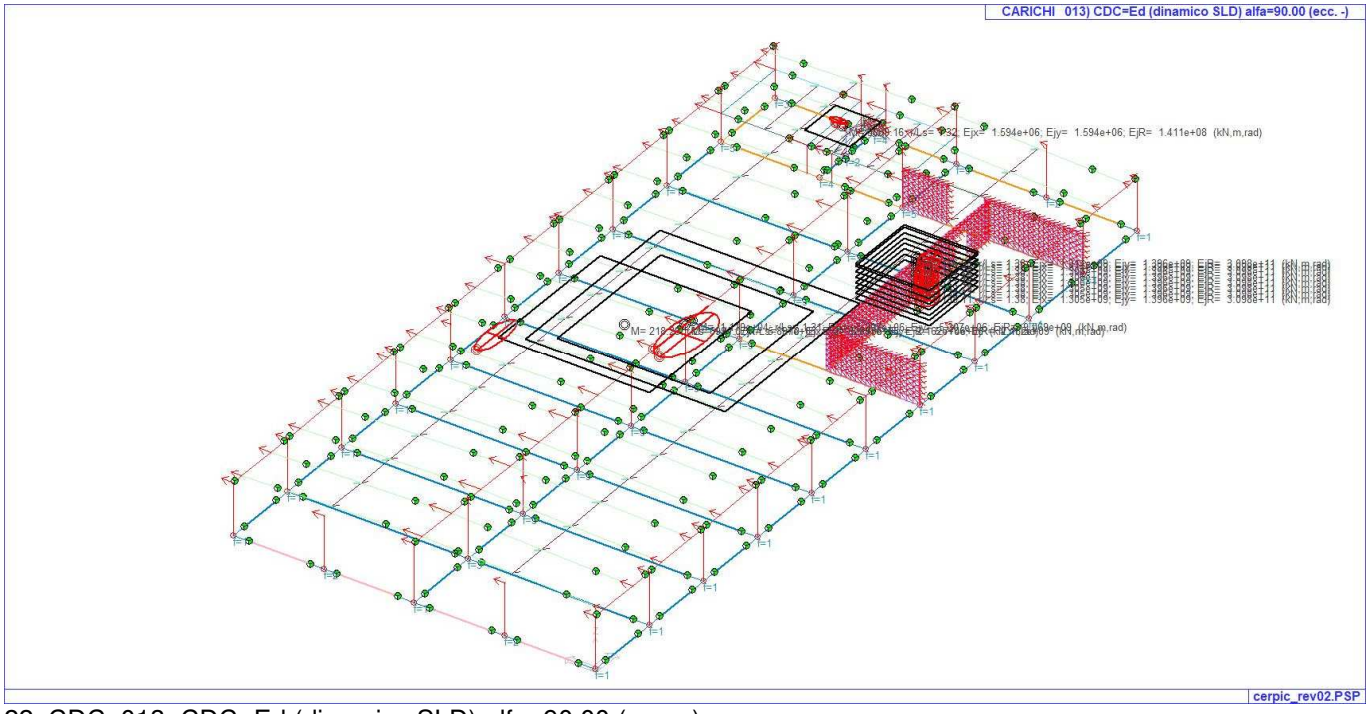
22_CDC_010_CDC=Ed (dinamico SLD) alfa=0.0 (ecc. +)



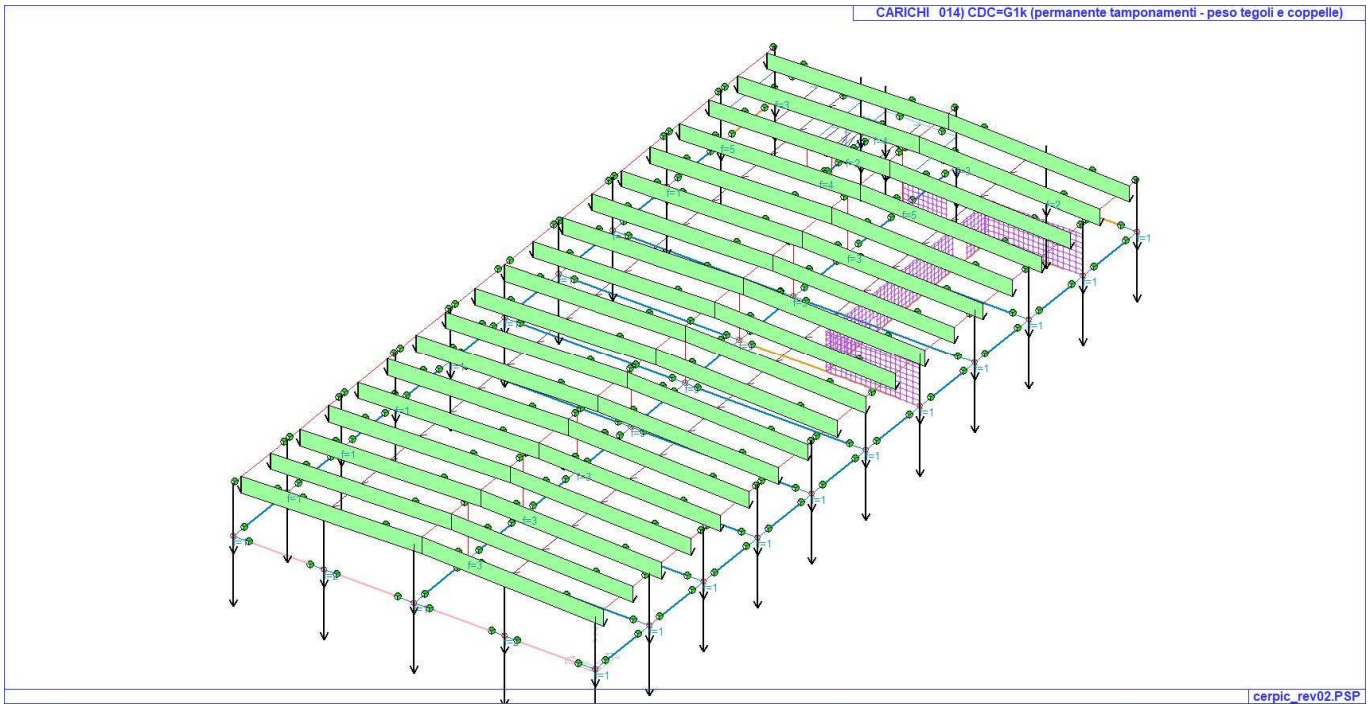
22_CDC_011_CDC=Ed (dinamico SLD) alfa=0.0 (ecc. -)



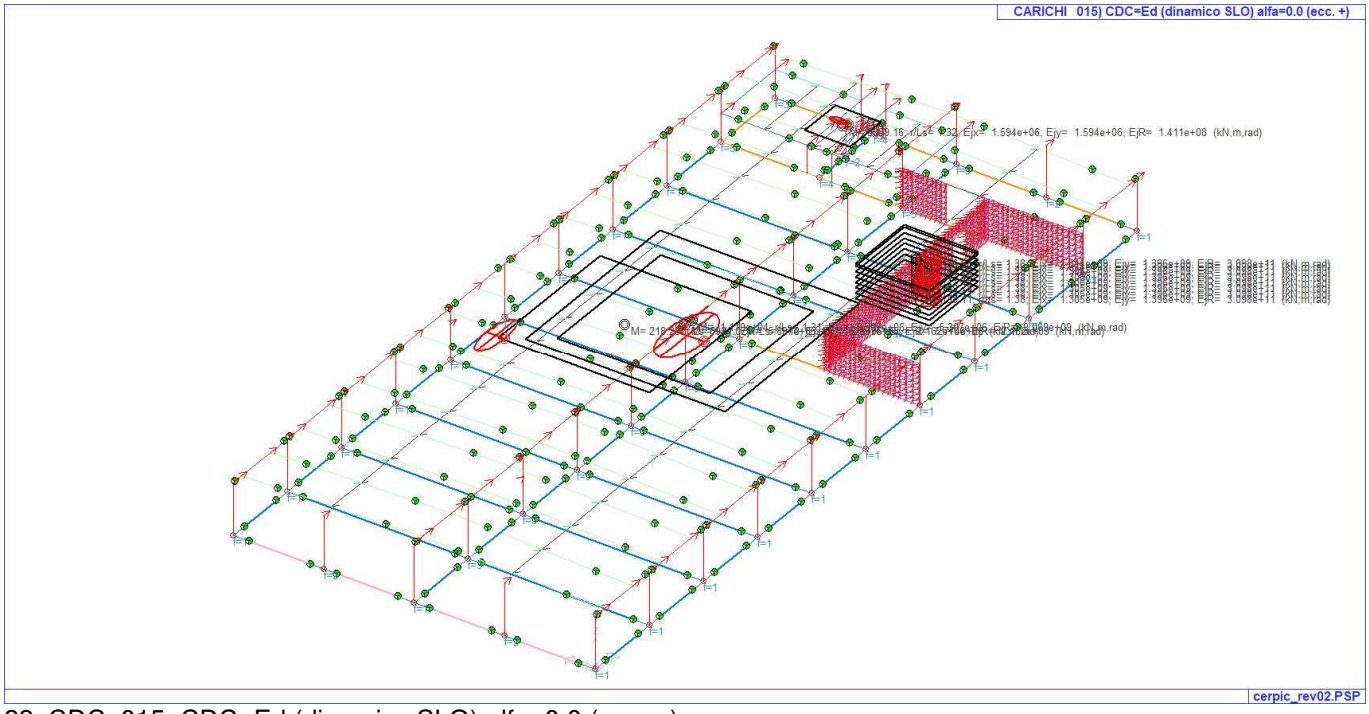
22_CDC_012_CDC=Ed (dinamico SLD) alfa=90.00 (ecc. +)



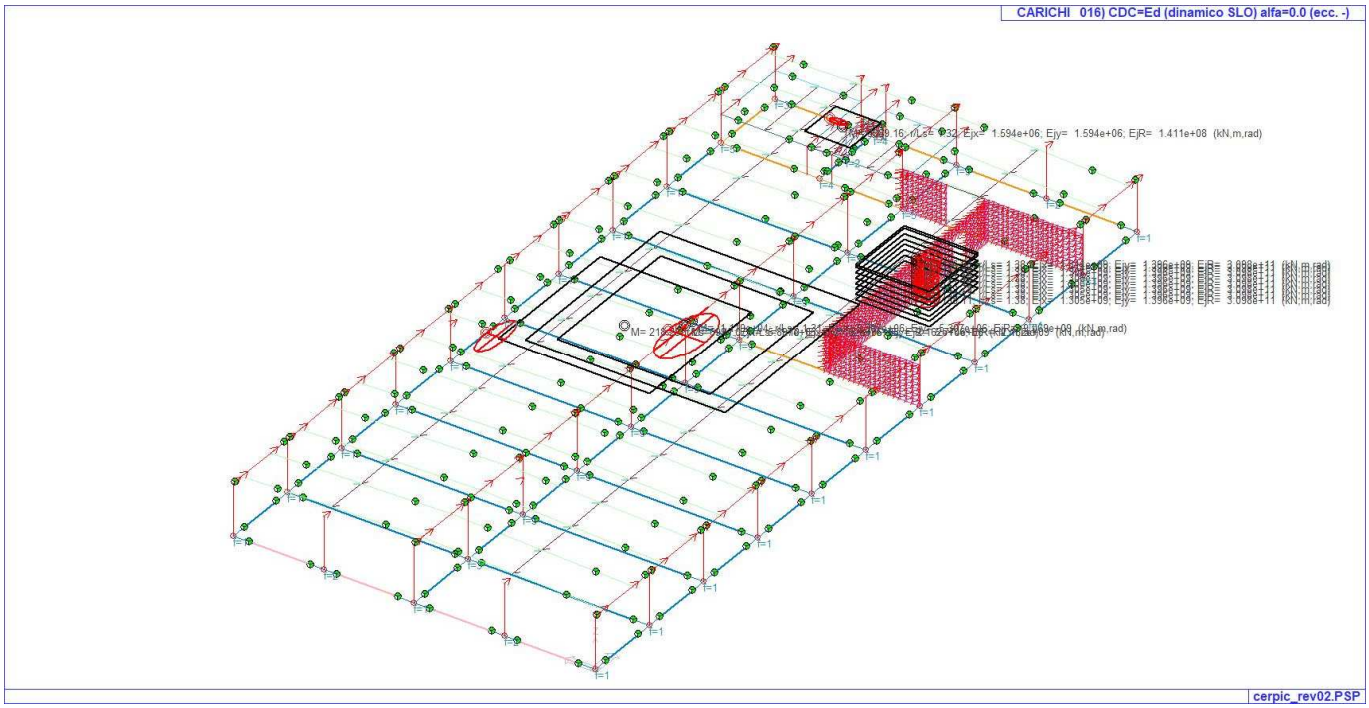
22_CDC_013_CDC=Ed (dinamico SLD) alfa=90.00 (ecc. -)



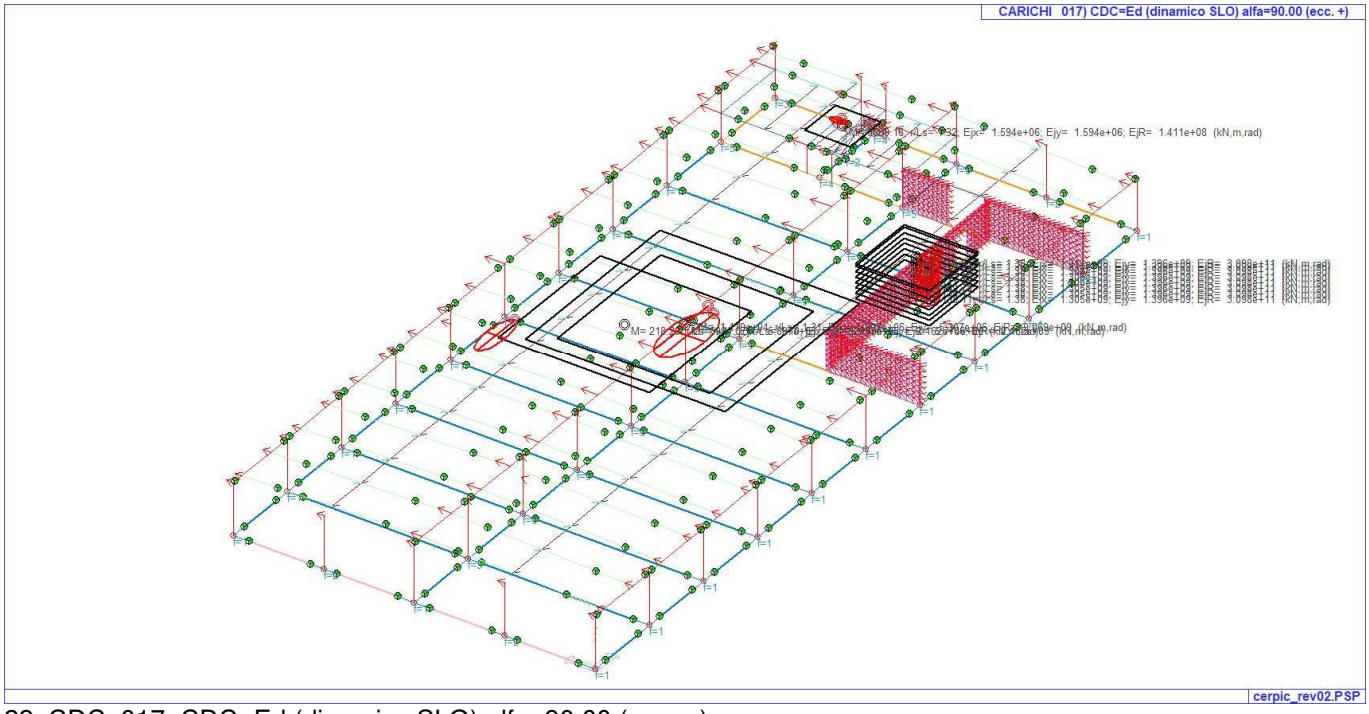
22_CDC_014_CDC=G1k (permanente tamponamenti - peso tegoli e coppelle)



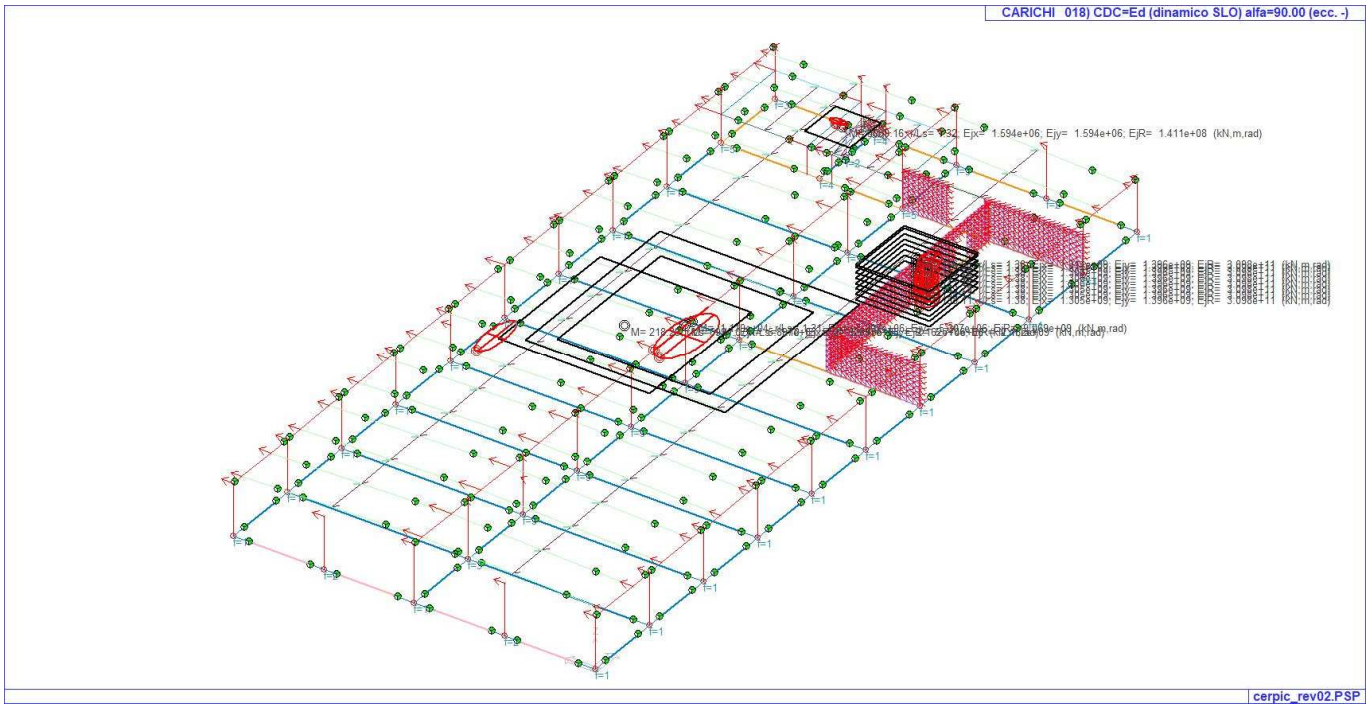
22_CDC_015_CDC=Ed (dinamico SLO) alfa=0.0 (ecc. +)



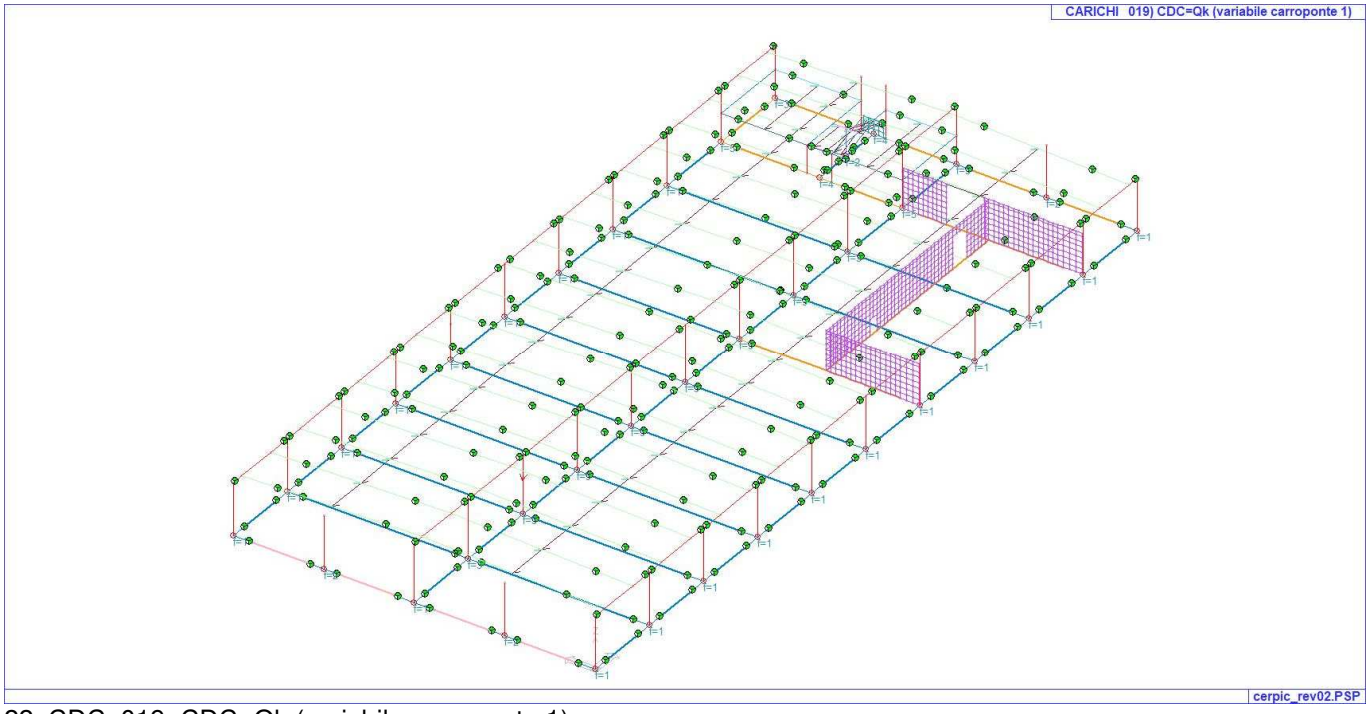
22_CDC_016_CDC=Ed (dinamico SLO) alfa=0.0 (ecc. -)



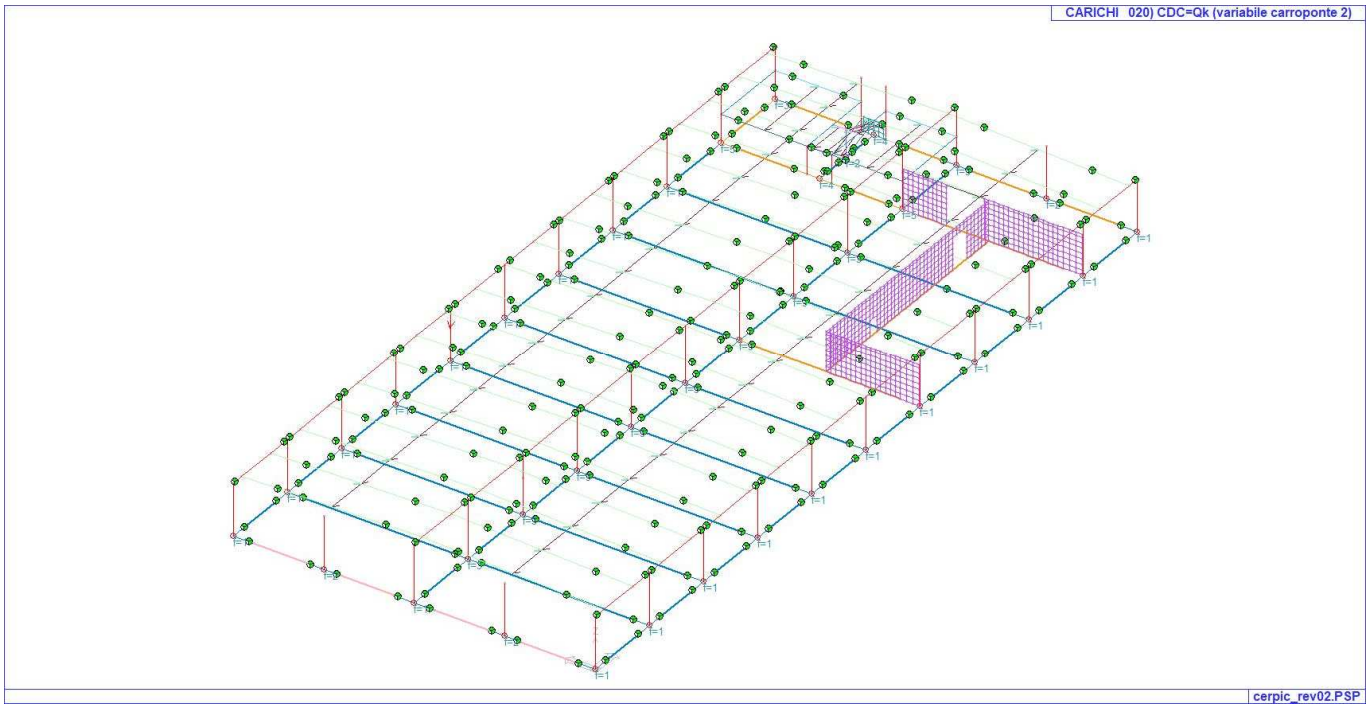
22_CDC_017_CDC=Ed (dinamico SLO) alfa=90.00 (ecc. +)



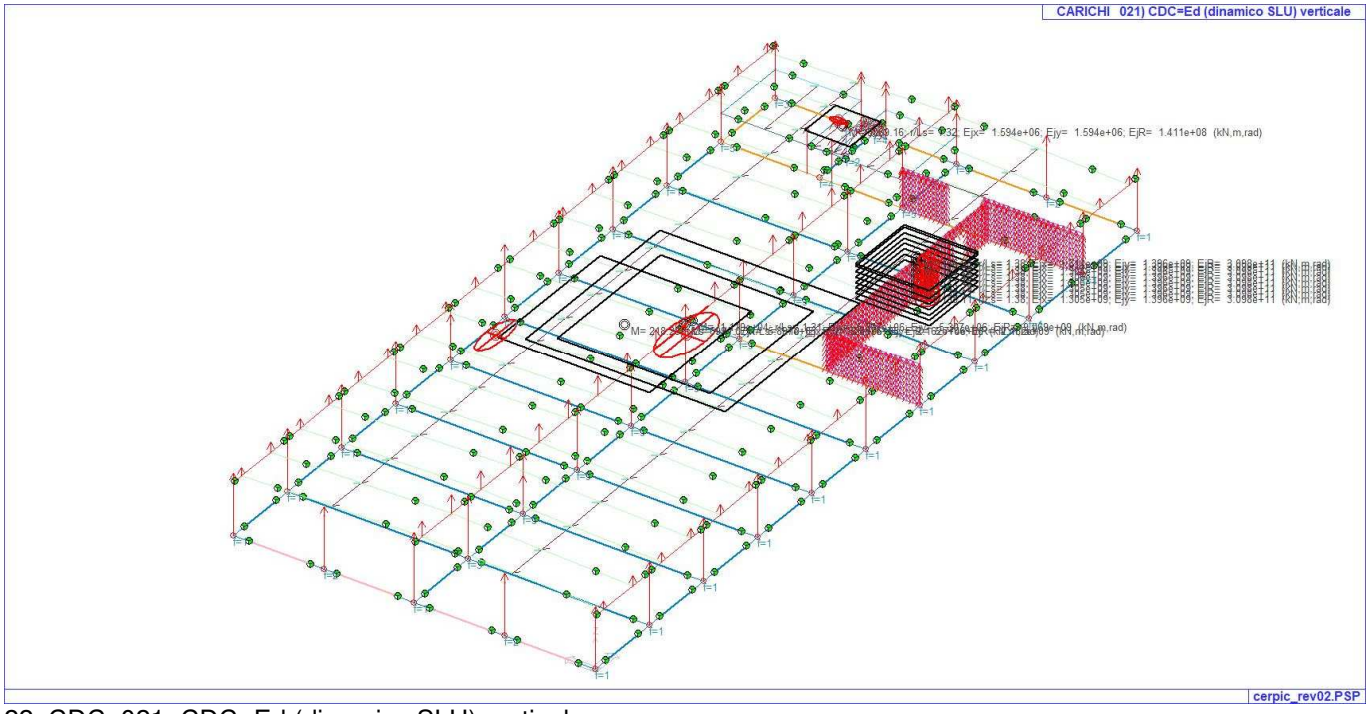
22_CDC_018_CDC=Ed (dinamico SLO) alfa=90.00 (ecc. -)



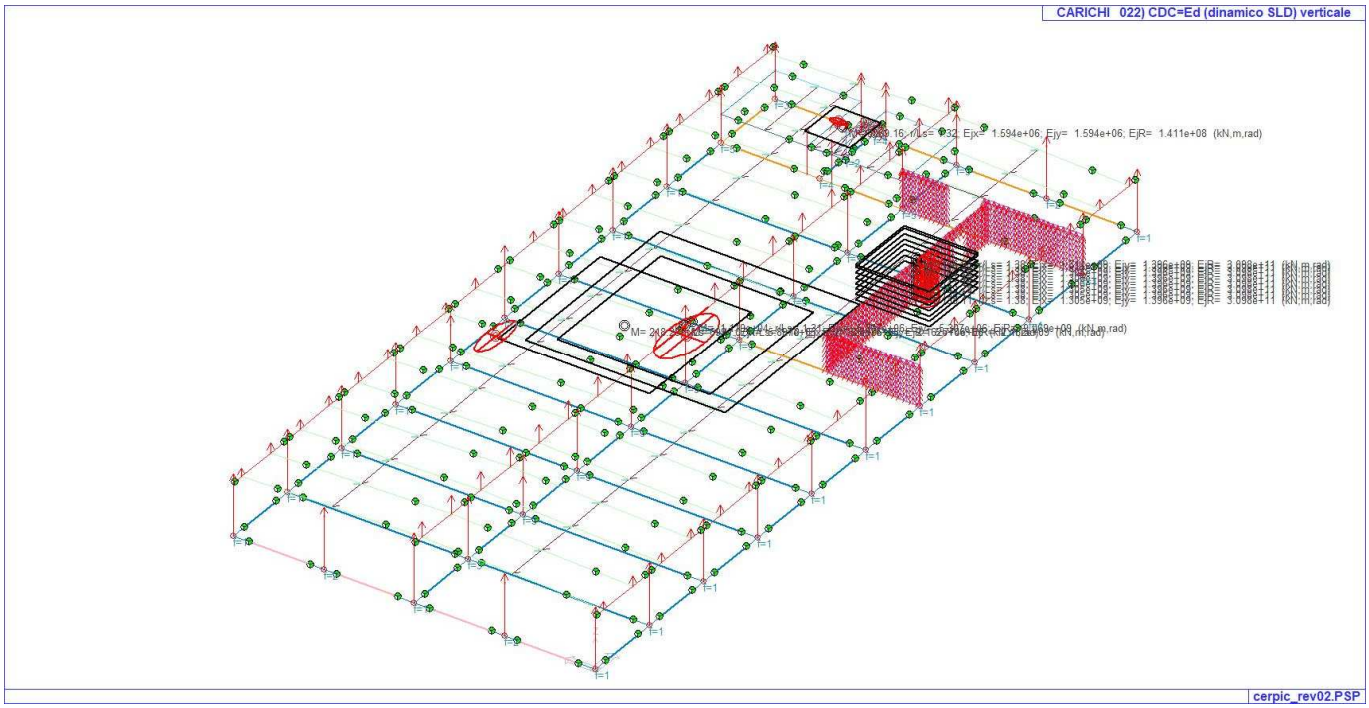
22_CDC_019_CDC=Qk (variabile carroponte 1)



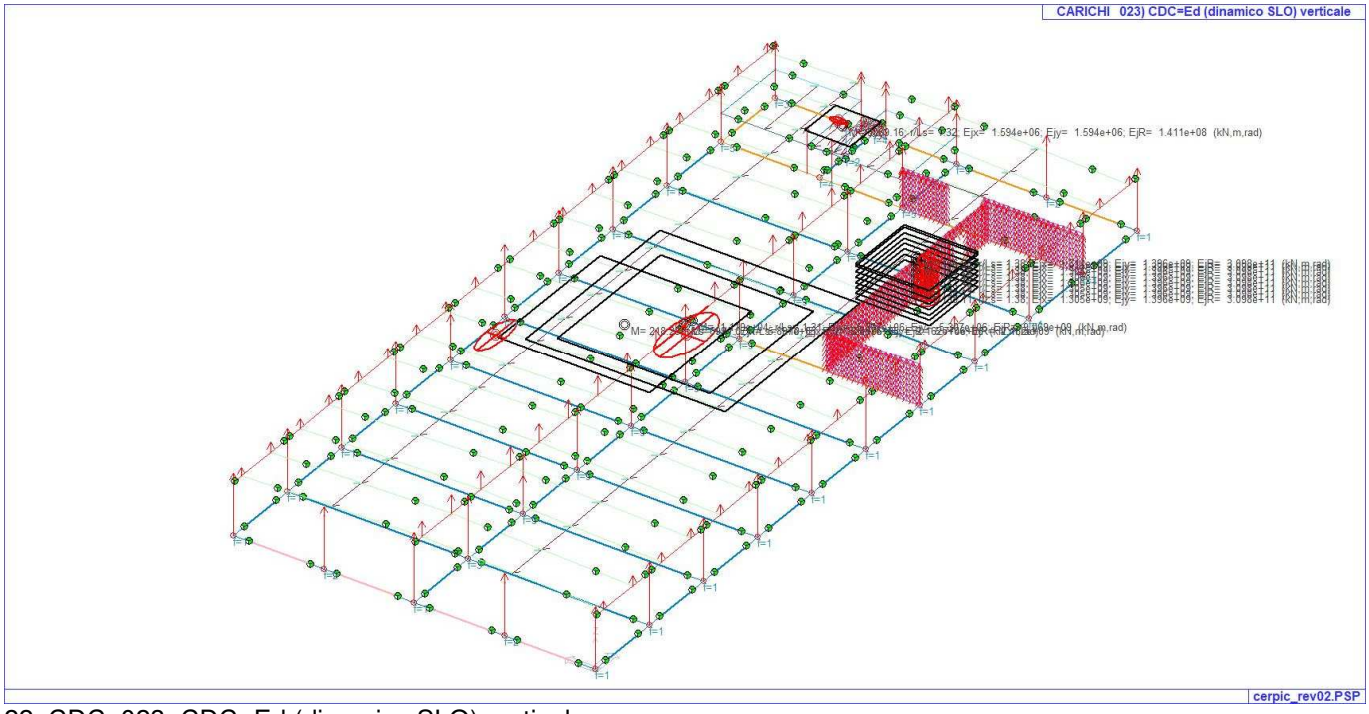
22_CDC_020_CDC=Qk (variabile carroponte 2)



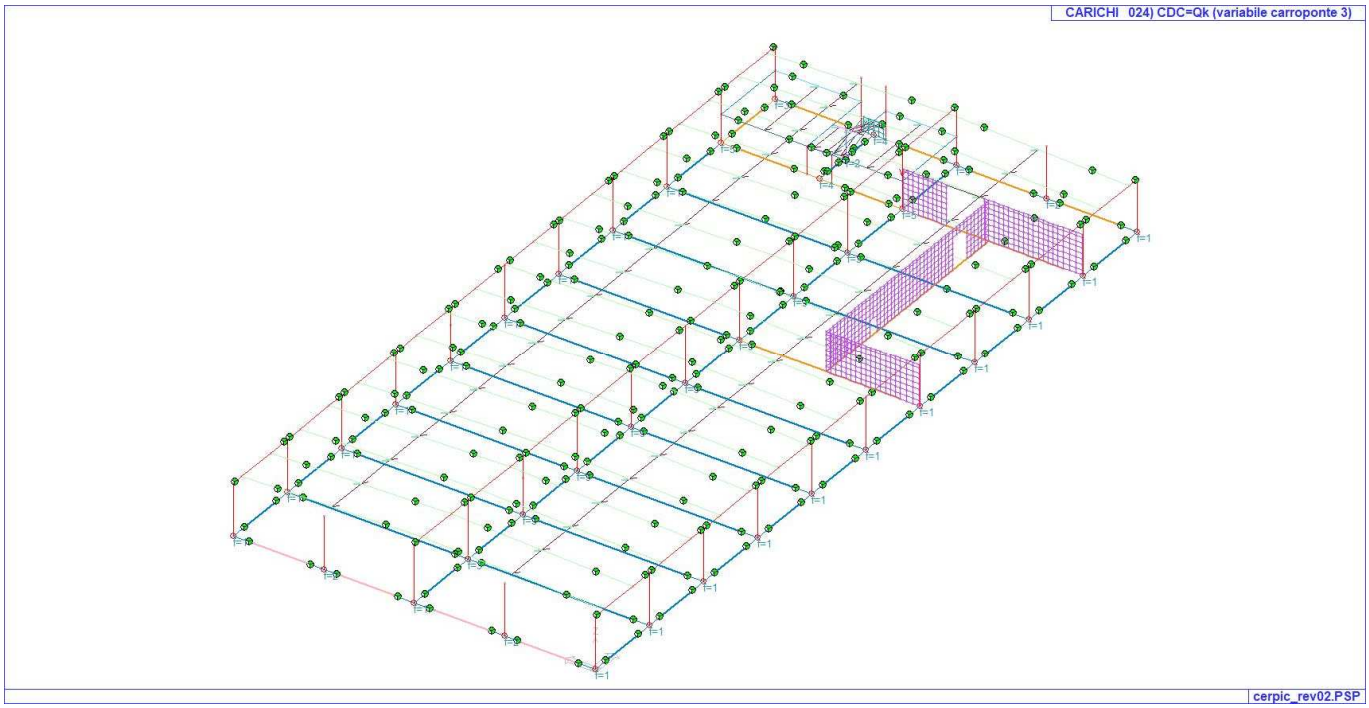
22_CDC_021_CDC=Ed (dinamico SLU) verticale



22_CDC_022_CDC=Ed (dinamico SLD) verticale



22_CDC_023_CDC=Ed (dinamico SLO) verticale



22_CDC_024_CDC=Qk (variabile carroponte 3)

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*

$G1 + G2 + P + Qk1 + \psi 02 \cdot Qk2 + \psi 03 \cdot Qk3 + \ldots$

***Combinazione frequente** SLE*

$G1 + G2 + P + \psi 11 \cdot Qk1 + \psi 22 \cdot Qk2 + \psi 23 \cdot Qk3 + \ldots$

***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*

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

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

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

Dove:

NTC 2008 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 2008 Tabella 2.6.I

		Coefficiente γf	***EQU***	***A1***	***A2***
Carichi permanenti	*Favorevoli* *Sfavorevoli*	$\gamma G1$	*0,9* *1,1*	*1,0* *1,3*	*1,0* *1,0*
Carichi permanenti non strutturali *(Non compiutamente definiti)*	*Favorevoli* *Sfavorevoli*	$\gamma G2$	*0,0* *1,5*	*0,0* *1,5*	*0,0* *1,3*
Carichi variabili	*Favorevoli* *Sfavorevoli*	γQi	*0,0* *1,5*	*0,0* *1,5*	*0,0* *1,3*

Cmb	Tipo	Sigla Id
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 5
6	SLU	Comb. SLU A1 6
7	SLU	Comb. SLU A1 7
8	SLU	Comb. SLU A1 8
9	SLU	Comb. SLU A1 9
10	SLU	Comb. SLU A1 10
11	SLU	Comb. SLU A1 11
12	SLU	Comb. SLU A1 12
13	SLE(r)	Comb. SLE(rara) 13
14	SLE(r)	Comb. SLE(rara) 14
15	SLE(r)	Comb. SLE(rara) 15
16	SLE(r)	Comb. SLE(rara) 16
17	SLE(r)	Comb. SLE(rara) 17
18	SLE(r)	Comb. SLE(rara) 18
19	SLE(r)	Comb. SLE(rara) 19
20	SLE(r)	Comb. SLE(rara) 20
21	SLE(r)	Comb. SLE(rara) 21
22	SLE(r)	Comb. SLE(rara) 22
23	SLE(r)	Comb. SLE(rara) 23
24	SLE(r)	Comb. SLE(rara) 24
25	SLE(f)	Comb. SLE(freq.) 25
26	SLE(f)	Comb. SLE(freq.) 26
27	SLE(f)	Comb. SLE(freq.) 27
28	SLE(f)	Comb. SLE(freq.) 28
29	SLE(f)	Comb. SLE(freq.) 29
30	SLE(f)	Comb. SLE(freq.) 30
31	SLE(f)	Comb. SLE(freq.) 31
32	SLE(f)	Comb. SLE(freq.) 32
33	SLE(f)	Comb. SLE(freq.) 33
34	SLE(f)	Comb. SLE(freq.) 34
35	SLE(f)	Comb. SLE(freq.) 35
36	SLE(f)	Comb. SLE(freq.) 36
37	SLE(f)	Comb. SLE(freq.) 37
38	SLE(f)	Comb. SLE(freq.) 38
39	SLE(f)	Comb. SLE(freq.) 39

Cmb	Tipo	Sigla Id
40	SLE(p)	Comb. SLE(perm.) 40
41	SLE(p)	Comb. SLE(perm.) 41
42	SLE(p)	Comb. SLE(perm.) 42
43	SLE(p)	Comb. SLE(perm.) 43
44	SLU	Comb. SLU A1 (SLV sism.) 44
45	SLU	Comb. SLU A1 (SLV sism.) 45
46	SLU	Comb. SLU A1 (SLV sism.) 46
47	SLU	Comb. SLU A1 (SLV sism.) 47
48	SLU	Comb. SLU A1 (SLV sism.) 48
49	SLU	Comb. SLU A1 (SLV sism.) 49
50	SLU	Comb. SLU A1 (SLV sism.) 50
51	SLU	Comb. SLU A1 (SLV sism.) 51
52	SLU	Comb. SLU A1 (SLV sism.) 52
53	SLU	Comb. SLU A1 (SLV sism.) 53
54	SLU	Comb. SLU A1 (SLV sism.) 54
55	SLU	Comb. SLU A1 (SLV sism.) 55
56	SLU	Comb. SLU A1 (SLV sism.) 56
57	SLU	Comb. SLU A1 (SLV sism.) 57
58	SLU	Comb. SLU A1 (SLV sism.) 58
59	SLU	Comb. SLU A1 (SLV sism.) 59
60	SLU	Comb. SLU A1 (SLV sism.) 60
61	SLU	Comb. SLU A1 (SLV sism.) 61
62	SLU	Comb. SLU A1 (SLV sism.) 62
63	SLU	Comb. SLU A1 (SLV sism.) 63
64	SLU	Comb. SLU A1 (SLV sism.) 64
65	SLU	Comb. SLU A1 (SLV sism.) 65
66	SLU	Comb. SLU A1 (SLV sism.) 66
67	SLU	Comb. SLU A1 (SLV sism.) 67
68	SLU	Comb. SLU A1 (SLV sism.) 68
69	SLU	Comb. SLU A1 (SLV sism.) 69
70	SLU	Comb. SLU A1 (SLV sism.) 70
71	SLU	Comb. SLU A1 (SLV sism.) 71
72	SLU	Comb. SLU A1 (SLV sism.) 72
73	SLU	Comb. SLU A1 (SLV sism.) 73
74	SLU	Comb. SLU A1 (SLV sism.) 74
75	SLU	Comb. SLU A1 (SLV sism.) 75
76	SLU	Comb. SLU A1 (SLV sism.) 76
77	SLU	Comb. SLU A1 (SLV sism.) 77
78	SLU	Comb. SLU A1 (SLV sism.) 78

Cmb	Tipo	Sigla Id
79	SLU	Comb. SLU A1 (SLV sism.) 79
80	SLU	Comb. SLU A1 (SLV sism.) 80
81	SLU	Comb. SLU A1 (SLV sism.) 81
82	SLU	Comb. SLU A1 (SLV sism.) 82
83	SLU	Comb. SLU A1 (SLV sism.) 83
84	SLU	Comb. SLU A1 (SLV sism.) 84
85	SLU	Comb. SLU A1 (SLV sism.) 85
86	SLU	Comb. SLU A1 (SLV sism.) 86
87	SLU	Comb. SLU A1 (SLV sism.) 87
88	SLU	Comb. SLU A1 (SLV sism.) 88
89	SLU	Comb. SLU A1 (SLV sism.) 89
90	SLU	Comb. SLU A1 (SLV sism.) 90
91	SLU	Comb. SLU A1 (SLV sism.) 91
92	SLU	Comb. SLU A1 (SLV sism.) 92
93	SLU	Comb. SLU A1 (SLV sism.) 93
94	SLU	Comb. SLU A1 (SLV sism.) 94
95	SLU	Comb. SLU A1 (SLV sism.) 95
96	SLU	Comb. SLU A1 (SLV sism.) 96
97	SLU	Comb. SLU A1 (SLV sism.) 97
98	SLU	Comb. SLU A1 (SLV sism.) 98
99	SLU	Comb. SLU A1 (SLV sism.) 99
100	SLU	Comb. SLU A1 (SLV sism.) 100
101	SLU	Comb. SLU A1 (SLV sism.) 101
102	SLU	Comb. SLU A1 (SLV sism.) 102
103	SLU	Comb. SLU A1 (SLV sism.) 103
104	SLU	Comb. SLU A1 (SLV sism.) 104
105	SLU	Comb. SLU A1 (SLV sism.) 105
106	SLU	Comb. SLU A1 (SLV sism.) 106
107	SLU	Comb. SLU A1 (SLV sism.) 107
108	SLD(sis)	Comb. SLE (SLD Danno sism.) 108
109	SLD(sis)	Comb. SLE (SLD Danno sism.) 109
110	SLD(sis)	Comb. SLE (SLD Danno sism.) 110
111	SLD(sis)	Comb. SLE (SLD Danno sism.) 111
112	SLD(sis)	Comb. SLE (SLD Danno sism.) 112
113	SLD(sis)	Comb. SLE (SLD Danno sism.) 113
114	SLD(sis)	Comb. SLE (SLD Danno sism.) 114
115	SLD(sis)	Comb. SLE (SLD Danno sism.) 115
116	SLD(sis)	Comb. SLE (SLD Danno sism.) 116
117	SLD(sis)	Comb. SLE (SLD Danno sism.) 117
118	SLD(sis)	Comb. SLE (SLD Danno sism.) 118
119	SLD(sis)	Comb. SLE (SLD Danno sism.) 119
120	SLD(sis)	Comb. SLE (SLD Danno sism.) 120
121	SLD(sis)	Comb. SLE (SLD Danno sism.) 121
122	SLD(sis)	Comb. SLE (SLD Danno sism.) 122
123	SLD(sis)	Comb. SLE (SLD Danno sism.) 123
124	SLD(sis)	Comb. SLE (SLD Danno sism.) 124
125	SLD(sis)	Comb. SLE (SLD Danno sism.) 125
126	SLD(sis)	Comb. SLE (SLD Danno sism.) 126
127	SLD(sis)	Comb. SLE (SLD Danno sism.) 127
128	SLD(sis)	Comb. SLE (SLD Danno sism.) 128
129	SLD(sis)	Comb. SLE (SLD Danno sism.) 129
130	SLD(sis)	Comb. SLE (SLD Danno sism.) 130
131	SLD(sis)	Comb. SLE (SLD Danno sism.) 131
132	SLD(sis)	Comb. SLE (SLD Danno sism.) 132
133	SLD(sis)	Comb. SLE (SLD Danno sism.) 133
134	SLD(sis)	Comb. SLE (SLD Danno sism.) 134
135	SLD(sis)	Comb. SLE (SLD Danno sism.) 135
136	SLD(sis)	Comb. SLE (SLD Danno sism.) 136
137	SLD(sis)	Comb. SLE (SLD Danno sism.) 137
138	SLD(sis)	Comb. SLE (SLD Danno sism.) 138
139	SLD(sis)	Comb. SLE (SLD Danno sism.) 139
140	SLD(sis)	Comb. SLE (SLD Danno sism.) 140
141	SLD(sis)	Comb. SLE (SLD Danno sism.) 141
142	SLD(sis)	Comb. SLE (SLD Danno sism.) 142
143	SLD(sis)	Comb. SLE (SLD Danno sism.) 143
144	SLD(sis)	Comb. SLE (SLD Danno sism.) 144
145	SLD(sis)	Comb. SLE (SLD Danno sism.) 145
146	SLD(sis)	Comb. SLE (SLD Danno sism.) 146
147	SLD(sis)	Comb. SLE (SLD Danno sism.) 147
148	SLD(sis)	Comb. SLE (SLD Danno sism.) 148
149	SLD(sis)	Comb. SLE (SLD Danno sism.) 149
150	SLD(sis)	Comb. SLE (SLD Danno sism.) 150
151	SLD(sis)	Comb. SLE (SLD Danno sism.) 151
152	SLD(sis)	Comb. SLE (SLD Danno sism.) 152
153	SLD(sis)	Comb. SLE (SLD Danno sism.) 153
154	SLD(sis)	Comb. SLE (SLD Danno sism.) 154
155	SLD(sis)	Comb. SLE (SLD Danno sism.) 155
156	SLD(sis)	Comb. SLE (SLD Danno sism.) 156
157	SLD(sis)	Comb. SLE (SLD Danno sism.) 157
158	SLD(sis)	Comb. SLE (SLD Danno sism.) 158
159	SLD(sis)	Comb. SLE (SLD Danno sism.) 159
160	SLD(sis)	Comb. SLE (SLD Danno sism.) 160
161	SLD(sis)	Comb. SLE (SLD Danno sism.) 161
162	SLD(sis)	Comb. SLE (SLD Danno sism.) 162
163	SLD(sis)	Comb. SLE (SLD Danno sism.) 163
164	SLD(sis)	Comb. SLE (SLD Danno sism.) 164
165	SLD(sis)	Comb. SLE (SLD Danno sism.) 165
166	SLD(sis)	Comb. SLE (SLD Danno sism.) 166
167	SLD(sis)	Comb. SLE (SLD Danno sism.) 167
168	SLD(sis)	Comb. SLE (SLD Danno sism.) 168
169	SLD(sis)	Comb. SLE (SLD Danno sism.) 169
170	SLD(sis)	Comb. SLE (SLD Danno sism.) 170
171	SLD(sis)	Comb. SLE (SLD Danno sism.) 171
172	SLD(sis)	Comb. SLE (SLO Operativo sism.) 172
173	SLD(sis)	Comb. SLE (SLO Operativo sism.) 173
174	SLD(sis)	Comb. SLE (SLO Operativo sism.) 174
175	SLD(sis)	Comb. SLE (SLO Operativo sism.) 175
176	SLD(sis)	Comb. SLE (SLO Operativo sism.) 176
177	SLD(sis)	Comb. SLE (SLO Operativo sism.) 177
178	SLD(sis)	Comb. SLE (SLO Operativo sism.) 178
179	SLD(sis)	Comb. SLE (SLO Operativo sism.) 179
180	SLD(sis)	Comb. SLE (SLO Operativo sism.) 180
181	SLD(sis)	Comb. SLE (SLO Operativo sism.) 181
182	SLD(sis)	Comb. SLE (SLO Operativo sism.) 182
183	SLD(sis)	Comb. SLE (SLO Operativo sism.) 183
184	SLD(sis)	Comb. SLE (SLO Operativo sism.) 184
185	SLD(sis)	Comb. SLE (SLO Operativo sism.) 185
186	SLD(sis)	Comb. SLE (SLO Operativo sism.) 186
187	SLD(sis)	Comb. SLE (SLO Operativo sism.) 187
188	SLD(sis)	Comb. SLE (SLO Operativo sism.) 188
189	SLD(sis)	Comb. SLE (SLO Operativo sism.) 189
190	SLD(sis)	Comb. SLE (SLO Operativo sism.) 190
191	SLD(sis)	Comb. SLE (SLO Operativo sism.) 191
192	SLD(sis)	Comb. SLE (SLO Operativo sism.) 192
193	SLD(sis)	Comb. SLE (SLO Operativo sism.) 193
194	SLD(sis)	Comb. SLE (SLO Operativo sism.) 194
195	SLD(sis)	Comb. SLE (SLO Operativo sism.) 195
196	SLD(sis)	Comb. SLE (SLO Operativo sism.) 196
197	SLD(sis)	Comb. SLE (SLO Operativo sism.) 197
198	SLD(sis)	Comb. SLE (SLO Operativo sism.) 198
199	SLD(sis)	Comb. SLE (SLO Operativo sism.) 199
200	SLD(sis)	Comb. SLE (SLO Operativo sism.) 200
201	SLD(sis)	Comb. SLE (SLO Operativo sism.) 201
202	SLD(sis)	Comb. SLE (SLO Operativo sism.) 202
203	SLD(sis)	Comb. SLE (SLO Operativo sism.) 203
204	SLD(sis)	Comb. SLE (SLO Operativo sism.) 204
205	SLD(sis)	Comb. SLE (SLO Operativo sism.) 205
206	SLD(sis)	Comb. SLE (SLO Operativo sism.) 206
207	SLD(sis)	Comb. SLE (SLO Operativo sism.) 207
208	SLD(sis)	Comb. SLE (SLO Operativo sism.) 208
209	SLD(sis)	Comb. SLE (SLO Operativo sism.) 209
210	SLD(sis)	Comb. SLE (SLO Operativo sism.) 210
211	SLD(sis)	Comb. SLE (SLO Operativo sism.) 211
212	SLD(sis)	Comb. SLE (SLO Operativo sism.) 212
213	SLD(sis)	Comb. SLE (SLO Operativo sism.) 213
214	SLD(sis)	Comb. SLE (SLO Operativo sism.) 214
215	SLD(sis)	Comb. SLE (SLO Operativo sism.) 215
216	SLD(sis)	Comb. SLE (SLO Operativo sism.) 216
217	SLD(sis)	Comb. SLE (SLO Operativo sism.) 217
218	SLD(sis)	Comb. SLE (SLO Operativo sism.) 218
219	SLD(sis)	Comb. SLE (SLO Operativo sism.) 219
220	SLD(sis)	Comb. SLE (SLO Operativo sism.) 220
221	SLD(sis)	Comb. SLE (SLO Operativo sism.) 221
222	SLD(sis)	Comb. SLE (SLO Operativo sism.) 222
223	SLD(sis)	Comb. SLE (SLO Operativo sism.) 223
224	SLD(sis)	Comb. SLE (SLO Operativo sism.) 224
225	SLD(sis)	Comb. SLE (SLO Operativo sism.) 225
226	SLD(sis)	Comb. SLE (SLO Operativo sism.) 226

Cmb	Tipo	Sigla Id
227	SLD(sis)	Comb. SLE (SLO Operativo sism.) 227
228	SLD(sis)	Comb. SLE (SLO Operativo sism.) 228
229	SLD(sis)	Comb. SLE (SLO Operativo sism.) 229
230	SLD(sis)	Comb. SLE (SLO Operativo sism.) 230
231	SLD(sis)	Comb. SLE (SLO Operativo sism.) 231
232	SLD(sis)	Comb. SLE (SLO Operativo sism.) 232
233	SLD(sis)	Comb. SLE (SLO Operativo sism.) 233
234	SLD(sis)	Comb. SLE (SLO Operativo sism.) 234
235	SLD(sis)	Comb. SLE (SLO Operativo sism.) 235
236	SLU	Comb. SLU A1 (SLV sism.) 236
237	SLU	Comb. SLU A1 (SLV sism.) 237
238	SLU	Comb. SLU A1 (SLV sism.) 238
239	SLU	Comb. SLU A1 (SLV sism.) 239
240	SLU	Comb. SLU A1 (SLV sism.) 240
241	SLU	Comb. SLU A1 (SLV sism.) 241
242	SLU	Comb. SLU A1 (SLV sism.) 242
243	SLU	Comb. SLU A1 (SLV sism.) 243
244	SLU	Comb. SLU A1 (SLV sism.) 244
245	SLU	Comb. SLU A1 (SLV sism.) 245
246	SLU	Comb. SLU A1 (SLV sism.) 246
247	SLU	Comb. SLU A1 (SLV sism.) 247
248	SLU	Comb. SLU A1 (SLV sism.) 248
249	SLU	Comb. SLU A1 (SLV sism.) 249
250	SLU	Comb. SLU A1 (SLV sism.) 250
251	SLU	Comb. SLU A1 (SLV sism.) 251
252	SLU	Comb. SLU A1 (SLV sism.) 252
253	SLU	Comb. SLU A1 (SLV sism.) 253
254	SLU	Comb. SLU A1 (SLV sism.) 254
255	SLU	Comb. SLU A1 (SLV sism.) 255
256	SLU	Comb. SLU A1 (SLV sism.) 256
257	SLU	Comb. SLU A1 (SLV sism.) 257
258	SLU	Comb. SLU A1 (SLV sism.) 258
259	SLU	Comb. SLU A1 (SLV sism.) 259
260	SLU	Comb. SLU A1 (SLV sism.) 260
261	SLU	Comb. SLU A1 (SLV sism.) 261
262	SLU	Comb. SLU A1 (SLV sism.) 262
263	SLU	Comb. SLU A1 (SLV sism.) 263
264	SLU	Comb. SLU A1 (SLV sism.) 264
265	SLU	Comb. SLU A1 (SLV sism.) 265
266	SLU	Comb. SLU A1 (SLV sism.) 266
267	SLU	Comb. SLU A1 (SLV sism.) 267
268	SLD(sis)	Comb. SLE (SLD Danno sism.) 268
269	SLD(sis)	Comb. SLE (SLD Danno sism.) 269
270	SLD(sis)	Comb. SLE (SLD Danno sism.) 270
271	SLD(sis)	Comb. SLE (SLD Danno sism.) 271
272	SLD(sis)	Comb. SLE (SLD Danno sism.) 272
273	SLD(sis)	Comb. SLE (SLD Danno sism.) 273
274	SLD(sis)	Comb. SLE (SLD Danno sism.) 274
275	SLD(sis)	Comb. SLE (SLD Danno sism.) 275
276	SLD(sis)	Comb. SLE (SLD Danno sism.) 276
277	SLD(sis)	Comb. SLE (SLD Danno sism.) 277
278	SLD(sis)	Comb. SLE (SLD Danno sism.) 278
279	SLD(sis)	Comb. SLE (SLD Danno sism.) 279

Cmb	Tipo	Sigla Id
280	SLD(sis)	Comb. SLE (SLD Danno sism.) 280
281	SLD(sis)	Comb. SLE (SLD Danno sism.) 281
282	SLD(sis)	Comb. SLE (SLD Danno sism.) 282
283	SLD(sis)	Comb. SLE (SLD Danno sism.) 283
284	SLD(sis)	Comb. SLE (SLD Danno sism.) 284
285	SLD(sis)	Comb. SLE (SLD Danno sism.) 285
286	SLD(sis)	Comb. SLE (SLD Danno sism.) 286
287	SLD(sis)	Comb. SLE (SLD Danno sism.) 287
288	SLD(sis)	Comb. SLE (SLD Danno sism.) 288
289	SLD(sis)	Comb. SLE (SLD Danno sism.) 289
290	SLD(sis)	Comb. SLE (SLD Danno sism.) 290
291	SLD(sis)	Comb. SLE (SLD Danno sism.) 291
292	SLD(sis)	Comb. SLE (SLD Danno sism.) 292
293	SLD(sis)	Comb. SLE (SLD Danno sism.) 293
294	SLD(sis)	Comb. SLE (SLD Danno sism.) 294
295	SLD(sis)	Comb. SLE (SLD Danno sism.) 295
296	SLD(sis)	Comb. SLE (SLD Danno sism.) 296
297	SLD(sis)	Comb. SLE (SLD Danno sism.) 297
298	SLD(sis)	Comb. SLE (SLD Danno sism.) 298
299	SLD(sis)	Comb. SLE (SLD Danno sism.) 299
300	SLD(sis)	Comb. SLE (SLO Operativo sism.) 300
301	SLD(sis)	Comb. SLE (SLO Operativo sism.) 301
302	SLD(sis)	Comb. SLE (SLO Operativo sism.) 302
303	SLD(sis)	Comb. SLE (SLO Operativo sism.) 303
304	SLD(sis)	Comb. SLE (SLO Operativo sism.) 304
305	SLD(sis)	Comb. SLE (SLO Operativo sism.) 305
306	SLD(sis)	Comb. SLE (SLO Operativo sism.) 306
307	SLD(sis)	Comb. SLE (SLO Operativo sism.) 307
308	SLD(sis)	Comb. SLE (SLO Operativo sism.) 308
309	SLD(sis)	Comb. SLE (SLO Operativo sism.) 309
310	SLD(sis)	Comb. SLE (SLO Operativo sism.) 310
311	SLD(sis)	Comb. SLE (SLO Operativo sism.) 311
312	SLD(sis)	Comb. SLE (SLO Operativo sism.) 312
313	SLD(sis)	Comb. SLE (SLO Operativo sism.) 313
314	SLD(sis)	Comb. SLE (SLO Operativo sism.) 314
315	SLD(sis)	Comb. SLE (SLO Operativo sism.) 315
316	SLD(sis)	Comb. SLE (SLO Operativo sism.) 316
317	SLD(sis)	Comb. SLE (SLO Operativo sism.) 317
318	SLD(sis)	Comb. SLE (SLO Operativo sism.) 318
319	SLD(sis)	Comb. SLE (SLO Operativo sism.) 319
320	SLD(sis)	Comb. SLE (SLO Operativo sism.) 320
321	SLD(sis)	Comb. SLE (SLO Operativo sism.) 321
322	SLD(sis)	Comb. SLE (SLO Operativo sism.) 322
323	SLD(sis)	Comb. SLE (SLO Operativo sism.) 323
324	SLD(sis)	Comb. SLE (SLO Operativo sism.) 324
325	SLD(sis)	Comb. SLE (SLO Operativo sism.) 325
326	SLD(sis)	Comb. SLE (SLO Operativo sism.) 326
327	SLD(sis)	Comb. SLE (SLO Operativo sism.) 327
328	SLD(sis)	Comb. SLE (SLO Operativo sism.) 328
329	SLD(sis)	Comb. SLE (SLO Operativo sism.) 329
330	SLD(sis)	Comb. SLE (SLO Operativo sism.) 330
331	SLD(sis)	Comb. SLE (SLO Operativo sism.) 331

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	1.50	0.75	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.30
	0.0	0.0	0.0	0.0	1.50	0.0	0.0	0.0	0.0	0.0				
2	1.30	1.30	1.50	1.05	1.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.30
	0.0	0.0	0.0	0.0	1.50	0.0	0.0	0.0	0.0	0.0				
3	1.30	1.30	1.50	1.05	0.75	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.30
	0.0	0.0	0.0	0.0	1.50	0.0	0.0	0.0	0.0	0.0				
4	1.30	1.30	1.50	1.50	0.75	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.30
	0.0	0.0	0.0	0.0	0.0	1.50	0.0	0.0	0.0	0.0				
5	1.30	1.30	1.50	1.05	1.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.30
	0.0	0.0	0.0	0.0	0.0	1.50	0.0	0.0	0.0	0.0				
6	1.30	1.30	1.50	1.05	0.75	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.30
	0.0	0.0	0.0	0.0	0.0	1.50	0.0	0.0	0.0	0.0				
7	1.30	1.30	1.50	1.50	0.75	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.30
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.50				
8	1.30	1.30	1.50	1.05	1.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.30
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.50				

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...
9	1.30	1.30	1.50	1.05	0.75	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.30
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.50				
10	1.30	1.30	1.50	1.50	0.75	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.30
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
11	1.30	1.30	1.50	1.05	1.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.30
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
12	1.30	1.30	1.50	1.05	0.75	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.30
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
13	1.00	1.00	1.00	1.00	0.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00
	0.0	0.0	0.0	0.0	1.00	0.0	0.0	0.0	0.0	0.0				
14	1.00	1.00	1.00	0.70	1.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00
	0.0	0.0	0.0	0.0	1.00	0.0	0.0	0.0	0.0	0.0				
15	1.00	1.00	1.00	0.70	0.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00
	0.0	0.0	0.0	0.0	1.00	0.0	0.0	0.0	0.0	0.0				
16	1.00	1.00	1.00	1.00	0.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00
	0.0	0.0	0.0	0.0	0.0	1.00	0.0	0.0	0.0	0.0				
17	1.00	1.00	1.00	0.70	1.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00
	0.0	0.0	0.0	0.0	0.0	1.00	0.0	0.0	0.0	0.0				
18	1.00	1.00	1.00	0.70	0.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00
	0.0	0.0	0.0	0.0	0.0	1.00	0.0	0.0	0.0	0.0				
19	1.00	1.00	1.00	1.00	0.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00				
20	1.00	1.00	1.00	0.70	1.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00				
21	1.00	1.00	1.00	0.70	0.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00				
22	1.00	1.00	1.00	1.00	0.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
23	1.00	1.00	1.00	0.70	1.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
24	1.00	1.00	1.00	0.70	0.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
25	1.00	1.00	1.00	0.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00
	0.0	0.0	0.0	0.0	0.80	0.0	0.0	0.0	0.0	0.0				
26	1.00	1.00	1.00	0.30	0.20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00
	0.0	0.0	0.0	0.0	0.80	0.0	0.0	0.0	0.0	0.0				
27	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00
	0.0	0.0	0.0	0.0	0.90	0.0	0.0	0.0	0.0	0.0				
28	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00
	0.0	0.0	0.0	0.0	0.80	0.0	0.0	0.0	0.0	0.0				
29	1.00	1.00	1.00	0.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00
	0.0	0.0	0.0	0.0	0.0	0.80	0.0	0.0	0.0	0.0				
30	1.00	1.00	1.00	0.30	0.20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00
	0.0	0.0	0.0	0.0	0.0	0.80	0.0	0.0	0.0	0.0				
31	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00
	0.0	0.0	0.0	0.0	0.0	0.80	0.0	0.0	0.0	0.0				
32	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00
	0.0	0.0	0.0	0.0	0.0	0.90	0.0	0.0	0.0	0.0				
33	1.00	1.00	1.00	0.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.80				
34	1.00	1.00	1.00	0.30	0.20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.80				
35	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.80				
36	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.90				
37	1.00	1.00	1.00	0.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
38	1.00	1.00	1.00	0.30	0.20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
39	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
40	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00
	0.0	0.0	0.0	0.0	0.80	0.0	0.0	0.0	0.0	0.0				
41	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00
	0.0	0.0	0.0	0.0	0.0	0.80	0.0	0.0	0.0	0.0				
42	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.80				
43	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
44	1.00	1.00	1.00	0.30	0.0	-1.00	0.0	-0.30	0.0	0.0	0.0	0.0	0.0	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	-0.30	0.0	0.0	0.0				
45	1.00	1.00	1.00	0.30	0.0	-1.00	0.0	-0.30	0.0	0.0	0.0	0.0	0.0	1.00

Cmb	CDC 1/15...	CDC 2/16...	CDC 3/17...	CDC 4/18...	CDC 5/19...	CDC 6/20...	CDC 7/21...	CDC 8/22...	CDC 9/23...	CDC 10/24...	CDC 11/25...	CDC 12/26...	CDC 13/27...	CDC 14/28...
	0.0	0.0	0.0	0.0	0.0	0.0	0.30	0.0	0.0	0.0				
46	1.00	1.00	1.00	0.30	0.0	-1.00	0.0	0.30	0.0	0.0	0.0	0.0	0.0	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	-0.30	0.0	0.0	0.0				
47	1.00	1.00	1.00	0.30	0.0	-1.00	0.0	0.30	0.0	0.0	0.0	0.0	0.0	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	0.30	0.0	0.0	0.0				
48	1.00	1.00	1.00	0.30	0.0	1.00	0.0	-0.30	0.0	0.0	0.0	0.0	0.0	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	-0.30	0.0	0.0	0.0				
49	1.00	1.00	1.00	0.30	0.0	1.00	0.0	-0.30	0.0	0.0	0.0	0.0	0.0	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	0.30	0.0	0.0	0.0				
50	1.00	1.00	1.00	0.30	0.0	1.00	0.0	0.30	0.0	0.0	0.0	0.0	0.0	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	-0.30	0.0	0.0	0.0				
51	1.00	1.00	1.00	0.30	0.0	1.00	0.0	0.30	0.0	0.0	0.0	0.0	0.0	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	0.30	0.0	0.0	0.0				
52	1.00	1.00	1.00	0.30	0.0	-1.00	0.0	0.0	-0.30	0.0	0.0	0.0	0.0	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	-0.30	0.0	0.0	0.0				
53	1.00	1.00	1.00	0.30	0.0	-1.00	0.0	0.0	-0.30	0.0	0.0	0.0	0.0	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	0.30	0.0	0.0	0.0				
54	1.00	1.00	1.00	0.30	0.0	-1.00	0.0	0.0	0.30	0.0	0.0	0.0	0.0	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	-0.30	0.0	0.0	0.0				
55	1.00	1.00	1.00	0.30	0.0	-1.00	0.0	0.0	0.30	0.0	0.0	0.0	0.0	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	0.30	0.0	0.0	0.0				
56	1.00	1.00	1.00	0.30	0.0	1.00	0.0	0.0	-0.30	0.0	0.0	0.0	0.0	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	-0.30	0.0	0.0	0.0				
57	1.00	1.00	1.00	0.30	0.0	1.00	0.0	0.0	-0.30	0.0	0.0	0.0	0.0	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	0.30	0.0	0.0	0.0				
58	1.00	1.00	1.00	0.30	0.0	1.00	0.0	0.0	0.30	0.0	0.0	0.0	0.0	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	-0.30	0.0	0.0	0.0				
59	1.00	1.00	1.00	0.30	0.0	1.00	0.0	0.0	0.30	0.0	0.0	0.0	0.0	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	0.30	0.0	0.0	0.0				
60	1.00	1.00	1.00	0.30	0.0	0.0	-1.00	-0.30	0.0	0.0	0.0	0.0	0.0	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	-0.30	0.0	0.0	0.0				
61	1.00	1.00	1.00	0.30	0.0	0.0	-1.00	-0.30	0.0	0.0	0.0	0.0	0.0	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	0.30	0.0	0.0	0.0				
62	1.00	1.00	1.00	0.30	0.0	0.0	-1.00	0.30	0.0	0.0	0.0	0.0	0.0	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	-0.30	0.0	0.0	0.0				
63	1.00	1.00	1.00	0.30	0.0	0.0	-1.00	0.30	0.0	0.0	0.0	0.0	0.0	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	0.30	0.0	0.0	0.0				
64	1.00	1.00	1.00	0.30	0.0	0.0	1.00	-0.30	0.0	0.0	0.0	0.0	0.0	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	-0.30	0.0	0.0	0.0				
65	1.00	1.00	1.00	0.30	0.0	0.0	1.00	-0.30	0.0	0.0	0.0	0.0	0.0	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	0.30	0.0	0.0	0.0				
66	1.00	1.00	1.00	0.30	0.0	0.0	1.00	0.30	0.0	0.0	0.0	0.0	0.0	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	-0.30	0.0	0.0	0.0				
67	1.00	1.00	1.00	0.30	0.0	0.0	1.00	0.30	0.0	0.0	0.0	0.0	0.0	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	0.30	0.0	0.0	0.0				
68	1.00	1.00	1.00	0.30	0.0	0.0	-1.00	0.0	-0.30	0.0	0.0	0.0	0.0	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	-0.30	0.0	0.0	0.0				
69	1.00	1.00	1.00	0.30	0.0	0.0	-1.00	0.0	-0.30	0.0	0.0	0.0	0.0	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	0.30	0.0	0.0	0.0				
70	1.00	1.00	1.00	0.30	0.0	0.0	-1.00	0.0	0.30	0.0	0.0	0.0	0.0	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	-0.30	0.0	0.0	0.0				
71	1.00	1.00	1.00	0.30	0.0	0.0	-1.00	0.0	0.30	0.0	0.0	0.0	0.0	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	0.30	0.0	0.0	0.0				
72	1.00	1.00	1.00	0.30	0.0	0.0	1.00	0.0	-0.30	0.0	0.0	0.0	0.0	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	-0.30	0.0	0.0	0.0				
73	1.00	1.00	1.00	0.30	0.0	0.0	1.00	0.0	-0.30	0.0	0.0	0.0	0.0	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	0.30	0.0	0.0	0.0				
74	1.00	1.00	1.00	0.30	0.0	0.0	1.00	0.0	0.30	0.0	0.0	0.0	0.0	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	-0.30	0.0	0.0	0.0				
75	1.00	1.00	1.00	0.30	0.0	0.0	1.00	0.0	0.30	0.0	0.0	0.0	0.0	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	0.30	0.0	0.0	0.0				
76	1.00	1.00	1.00	0.30	0.0	-0.30	0.0	-1.00	0.0	0.0	0.0	0.0	0.0	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	-0.30	0.0	0.0	0.0				
77	1.00	1.00	1.00	0.30	0.0	-0.30	0.0	-1.00	0.0	0.0	0.0	0.0	0.0	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	0.30	0.0	0.0	0.0				
78	1.00	1.00	1.00	0.30	0.0	-0.30	0.0	1.00	0.0	0.0	0.0	0.0	0.0	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	-0.30	0.0	0.0	0.0				
79	1.00	1.00	1.00	0.30	0.0	-0.30	0.0	1.00	0.0	0.0	0.0	0.0	0.0	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	0.30	0.0	0.0	0.0				
80	1.00	1.00	1.00	0.30	0.0	0.30	0.0	-1.00	0.0	0.0	0.0	0.0	0.0	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	-0.30	0.0	0.0	0.0				
81	1.00	1.00	1.00	0.30	0.0	0.30	0.0	-1.00	0.0	0.0	0.0	0.0	0.0	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	0.30	0.0	0.0	0.0				

Cmb	CDC 1/15...	CDC 2/16...	CDC 3/17...	CDC 4/18...	CDC 5/19...	CDC 6/20...	CDC 7/21...	CDC 8/22...	CDC 9/23...	CDC 10/24...	CDC 11/25...	CDC 12/26...	CDC 13/27...	CDC 14/28...
82	1.00	1.00	1.00	0.30	0.0	0.30	0.0	1.00	0.0	0.0	0.0	0.0	0.0	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	-0.30	0.0	0.0	0.0				
83	1.00	1.00	1.00	0.30	0.0	0.30	0.0	1.00	0.0	0.0	0.0	0.0	0.0	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	0.30	0.0	0.0	0.0				
84	1.00	1.00	1.00	0.30	0.0	0.0	-0.30	-1.00	0.0	0.0	0.0	0.0	0.0	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	-0.30	0.0	0.0	0.0				
85	1.00	1.00	1.00	0.30	0.0	0.0	-0.30	-1.00	0.0	0.0	0.0	0.0	0.0	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	0.30	0.0	0.0	0.0				
86	1.00	1.00	1.00	0.30	0.0	0.0	-0.30	1.00	0.0	0.0	0.0	0.0	0.0	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	-0.30	0.0	0.0	0.0				
87	1.00	1.00	1.00	0.30	0.0	0.0	-0.30	1.00	0.0	0.0	0.0	0.0	0.0	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	0.30	0.0	0.0	0.0				
88	1.00	1.00	1.00	0.30	0.0	0.0	0.30	-1.00	0.0	0.0	0.0	0.0	0.0	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	-0.30	0.0	0.0	0.0				
89	1.00	1.00	1.00	0.30	0.0	0.0	0.30	-1.00	0.0	0.0	0.0	0.0	0.0	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	0.30	0.0	0.0	0.0				
90	1.00	1.00	1.00	0.30	0.0	0.0	0.30	1.00	0.0	0.0	0.0	0.0	0.0	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	-0.30	0.0	0.0	0.0				
91	1.00	1.00	1.00	0.30	0.0	0.0	0.30	1.00	0.0	0.0	0.0	0.0	0.0	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	0.30	0.0	0.0	0.0				
92	1.00	1.00	1.00	0.30	0.0	-0.30	0.0	0.0	-1.00	0.0	0.0	0.0	0.0	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	-0.30	0.0	0.0	0.0				
93	1.00	1.00	1.00	0.30	0.0	-0.30	0.0	0.0	-1.00	0.0	0.0	0.0	0.0	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	0.30	0.0	0.0	0.0				
94	1.00	1.00	1.00	0.30	0.0	-0.30	0.0	0.0	1.00	0.0	0.0	0.0	0.0	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	-0.30	0.0	0.0	0.0				
95	1.00	1.00	1.00	0.30	0.0	-0.30	0.0	0.0	1.00	0.0	0.0	0.0	0.0	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	0.30	0.0	0.0	0.0				
96	1.00	1.00	1.00	0.30	0.0	0.30	0.0	0.0	-1.00	0.0	0.0	0.0	0.0	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	-0.30	0.0	0.0	0.0				
97	1.00	1.00	1.00	0.30	0.0	0.30	0.0	0.0	-1.00	0.0	0.0	0.0	0.0	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	0.30	0.0	0.0	0.0				
98	1.00	1.00	1.00	0.30	0.0	0.30	0.0	0.0	1.00	0.0	0.0	0.0	0.0	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	-0.30	0.0	0.0	0.0				
99	1.00	1.00	1.00	0.30	0.0	0.30	0.0	0.0	1.00	0.0	0.0	0.0	0.0	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	0.30	0.0	0.0	0.0				
100	1.00	1.00	1.00	0.30	0.0	0.0	-0.30	0.0	-1.00	0.0	0.0	0.0	0.0	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	-0.30	0.0	0.0	0.0				
101	1.00	1.00	1.00	0.30	0.0	0.0	-0.30	0.0	-1.00	0.0	0.0	0.0	0.0	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	0.30	0.0	0.0	0.0				
102	1.00	1.00	1.00	0.30	0.0	0.0	-0.30	0.0	1.00	0.0	0.0	0.0	0.0	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	-0.30	0.0	0.0	0.0				
103	1.00	1.00	1.00	0.30	0.0	0.0	-0.30	0.0	1.00	0.0	0.0	0.0	0.0	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	0.30	0.0	0.0	0.0				
104	1.00	1.00	1.00	0.30	0.0	0.0	0.30	0.0	-1.00	0.0	0.0	0.0	0.0	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	-0.30	0.0	0.0	0.0				
105	1.00	1.00	1.00	0.30	0.0	0.0	0.30	0.0	-1.00	0.0	0.0	0.0	0.0	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	0.30	0.0	0.0	0.0				
106	1.00	1.00	1.00	0.30	0.0	0.0	0.30	0.0	1.00	0.0	0.0	0.0	0.0	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	-0.30	0.0	0.0	0.0				
107	1.00	1.00	1.00	0.30	0.0	0.0	0.30	0.0	1.00	0.0	0.0	0.0	0.0	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	0.30	0.0	0.0	0.0				
108	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	-1.00	0.0	-0.30	0.0	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.30	0.0	0.0				
109	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	-1.00	0.0	-0.30	0.0	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.30	0.0	0.0				
110	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	-1.00	0.0	0.30	0.0	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.30	0.0	0.0				
111	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	-1.00	0.0	0.30	0.0	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.30	0.0	0.0				
112	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	1.00	0.0	-0.30	0.0	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.30	0.0	0.0				
113	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	1.00	0.0	-0.30	0.0	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.30	0.0	0.0				
114	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	1.00	0.0	0.30	0.0	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.30	0.0	0.0				
115	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	1.00	0.0	0.30	0.0	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.30	0.0	0.0				
116	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	-1.00	0.0	0.0	-0.30	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.30	0.0	0.0				
117	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	-1.00	0.0	0.0	-0.30	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.30	0.0	0.0				
118	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	-1.00	0.0	0.0	0.30	1.00

Cmb	CDC 1/15...	CDC 2/16...	CDC 3/17...	CDC 4/18...	CDC 5/19...	CDC 6/20...	CDC 7/21...	CDC 8/22...	CDC 9/23...	CDC 10/24...	CDC 11/25...	CDC 12/26...	CDC 13/27...	CDC 14/28...
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.30	0.0	0.0				
119	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	-1.00	0.0	0.0	0.30	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.30	0.0	0.0				
120	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	1.00	0.0	0.0	-0.30	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.30	0.0	0.0				
121	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	1.00	0.0	0.0	-0.30	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.30	0.0	0.0				
122	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	1.00	0.0	0.0	0.30	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.30	0.0	0.0				
123	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	1.00	0.0	0.0	0.30	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.30	0.0	0.0				
124	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	0.0	-1.00	-0.30	0.0	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.30	0.0	0.0				
125	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	0.0	-1.00	-0.30	0.0	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.30	0.0	0.0				
126	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	0.0	-1.00	0.30	0.0	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.30	0.0	0.0				
127	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	0.0	-1.00	0.30	0.0	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.30	0.0	0.0				
128	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	0.0	1.00	-0.30	0.0	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.30	0.0	0.0				
129	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	0.0	1.00	-0.30	0.0	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.30	0.0	0.0				
130	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	0.0	1.00	0.30	0.0	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.30	0.0	0.0				
131	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	0.0	1.00	0.30	0.0	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.30	0.0	0.0				
132	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	0.0	-1.00	0.0	-0.30	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.30	0.0	0.0				
133	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	0.0	-1.00	0.0	-0.30	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.30	0.0	0.0				
134	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	0.0	-1.00	0.0	0.30	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.30	0.0	0.0				
135	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	0.0	-1.00	0.0	0.30	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.30	0.0	0.0				
136	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	0.0	1.00	0.0	-0.30	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.30	0.0	0.0				
137	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	0.0	1.00	0.0	-0.30	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.30	0.0	0.0				
138	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	0.0	1.00	0.0	0.30	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.30	0.0	0.0				
139	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	0.0	1.00	0.0	0.30	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.30	0.0	0.0				
140	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	-0.30	0.0	-1.00	0.0	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.30	0.0	0.0				
141	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	-0.30	0.0	-1.00	0.0	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.30	0.0	0.0				
142	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	-0.30	0.0	1.00	0.0	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.30	0.0	0.0				
143	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	-0.30	0.0	1.00	0.0	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.30	0.0	0.0				
144	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	0.30	0.0	-1.00	0.0	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.30	0.0	0.0				
145	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	0.30	0.0	-1.00	0.0	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.30	0.0	0.0				
146	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	0.30	0.0	1.00	0.0	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.30	0.0	0.0				
147	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	0.30	0.0	1.00	0.0	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.30	0.0	0.0				
148	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	0.0	-0.30	-1.00	0.0	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.30	0.0	0.0				
149	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	0.0	-0.30	-1.00	0.0	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.30	0.0	0.0				
150	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	0.0	-0.30	1.00	0.0	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.30	0.0	0.0				
151	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	0.0	-0.30	1.00	0.0	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.30	0.0	0.0				
152	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	0.0	0.30	-1.00	0.0	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.30	0.0	0.0				
153	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	0.0	0.30	-1.00	0.0	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.30	0.0	0.0				
154	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	0.0	0.30	1.00	0.0	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.30	0.0	0.0				

Cmb	CDC 1/15...	CDC 2/16...	CDC 3/17...	CDC 4/18...	CDC 5/19...	CDC 6/20...	CDC 7/21...	CDC 8/22...	CDC 9/23...	CDC 10/24...	CDC 11/25...	CDC 12/26...	CDC 13/27...	CDC 14/28...
155	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	0.0	0.30	1.00	0.0	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.30	0.0	0.0				
156	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	-0.30	0.0	0.0	-1.00	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.30	0.0	0.0				
157	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	-0.30	0.0	0.0	-1.00	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.30	0.0	0.0				
158	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	-0.30	0.0	0.0	1.00	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.30	0.0	0.0				
159	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	-0.30	0.0	0.0	1.00	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.30	0.0	0.0				
160	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	0.30	0.0	0.0	-1.00	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.30	0.0	0.0				
161	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	0.30	0.0	0.0	-1.00	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.30	0.0	0.0				
162	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	0.30	0.0	0.0	1.00	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.30	0.0	0.0				
163	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	0.30	0.0	0.0	1.00	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.30	0.0	0.0				
164	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	0.0	-0.30	0.0	-1.00	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.30	0.0	0.0				
165	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	0.0	-0.30	0.0	-1.00	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.30	0.0	0.0				
166	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	0.0	-0.30	0.0	1.00	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.30	0.0	0.0				
167	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	0.0	-0.30	0.0	1.00	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.30	0.0	0.0				
168	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	0.0	0.30	0.0	-1.00	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.30	0.0	0.0				
169	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	0.0	0.30	0.0	-1.00	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.30	0.0	0.0				
170	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	0.0	0.30	0.0	1.00	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.30	0.0	0.0				
171	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	0.0	0.30	0.0	1.00	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.30	0.0	0.0				
172	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00
	-1.00	0.0	-0.30	0.0	0.0	0.0	0.0	0.0	-0.30	0.0				
173	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00
	-1.00	0.0	-0.30	0.0	0.0	0.0	0.0	0.0	0.30	0.0				
174	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00
	-1.00	0.0	0.30	0.0	0.0	0.0	0.0	0.0	-0.30	0.0				
175	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00
	-1.00	0.0	0.30	0.0	0.0	0.0	0.0	0.0	0.30	0.0				
176	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00
	1.00	0.0	-0.30	0.0	0.0	0.0	0.0	0.0	-0.30	0.0				
177	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00
	1.00	0.0	-0.30	0.0	0.0	0.0	0.0	0.0	0.30	0.0				
178	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00
	1.00	0.0	0.30	0.0	0.0	0.0	0.0	0.0	-0.30	0.0				
179	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00
	1.00	0.0	0.30	0.0	0.0	0.0	0.0	0.0	0.30	0.0				
180	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00
	-1.00	0.0	0.0	-0.30	0.0	0.0	0.0	0.0	-0.30	0.0				
181	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00
	-1.00	0.0	0.0	-0.30	0.0	0.0	0.0	0.0	0.30	0.0				
182	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00
	-1.00	0.0	0.0	0.30	0.0	0.0	0.0	0.0	-0.30	0.0				
183	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00
	-1.00	0.0	0.0	0.30	0.0	0.0	0.0	0.0	0.30	0.0				
184	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00
	1.00	0.0	0.0	-0.30	0.0	0.0	0.0	0.0	-0.30	0.0				
185	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00
	1.00	0.0	0.0	-0.30	0.0	0.0	0.0	0.0	0.30	0.0				
186	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00
	1.00	0.0	0.0	0.30	0.0	0.0	0.0	0.0	-0.30	0.0				
187	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00
	1.00	0.0	0.0	0.30	0.0	0.0	0.0	0.0	0.30	0.0				
188	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00
	0.0	-1.00	-0.30	0.0	0.0	0.0	0.0	0.0	-0.30	0.0				
189	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00
	0.0	-1.00	-0.30	0.0	0.0	0.0	0.0	0.0	0.30	0.0				
190	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00
	0.0	-1.00	0.30	0.0	0.0	0.0	0.0	0.0	-0.30	0.0				
191	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00

Cmb	CDC 1/15...	CDC 2/16...	CDC 3/17...	CDC 4/18...	CDC 5/19...	CDC 6/20...	CDC 7/21...	CDC 8/22...	CDC 9/23...	CDC 10/24...	CDC 11/25...	CDC 12/26...	CDC 13/27...	CDC 14/28...
	0.0	-1.00	0.30	0.0	0.0	0.0	0.0	0.0	0.30	0.0				
192	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00
	0.0	1.00	-0.30	0.0	0.0	0.0	0.0	0.0	-0.30	0.0				
193	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00
	0.0	1.00	-0.30	0.0	0.0	0.0	0.0	0.0	0.30	0.0				
194	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00
	0.0	1.00	0.30	0.0	0.0	0.0	0.0	0.0	-0.30	0.0				
195	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00
	0.0	1.00	0.30	0.0	0.0	0.0	0.0	0.0	0.30	0.0				
196	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00
	0.0	-1.00	0.0	-0.30	0.0	0.0	0.0	0.0	-0.30	0.0				
197	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00
	0.0	-1.00	0.0	-0.30	0.0	0.0	0.0	0.0	0.30	0.0				
198	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00
	0.0	-1.00	0.0	0.30	0.0	0.0	0.0	0.0	-0.30	0.0				
199	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00
	0.0	-1.00	0.0	0.30	0.0	0.0	0.0	0.0	0.30	0.0				
200	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00
	0.0	1.00	0.0	-0.30	0.0	0.0	0.0	0.0	-0.30	0.0				
201	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00
	0.0	1.00	0.0	-0.30	0.0	0.0	0.0	0.0	0.30	0.0				
202	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00
	0.0	1.00	0.0	0.30	0.0	0.0	0.0	0.0	-0.30	0.0				
203	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00
	0.0	1.00	0.0	0.30	0.0	0.0	0.0	0.0	0.30	0.0				
204	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00
	-0.30	0.0	-1.00	0.0	0.0	0.0	0.0	0.0	-0.30	0.0				
205	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00
	-0.30	0.0	-1.00	0.0	0.0	0.0	0.0	0.0	0.30	0.0				
206	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00
	-0.30	0.0	1.00	0.0	0.0	0.0	0.0	0.0	-0.30	0.0				
207	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00
	-0.30	0.0	1.00	0.0	0.0	0.0	0.0	0.0	0.30	0.0				
208	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00
	0.30	0.0	-1.00	0.0	0.0	0.0	0.0	0.0	-0.30	0.0				
209	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00
	0.30	0.0	-1.00	0.0	0.0	0.0	0.0	0.0	0.30	0.0				
210	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00
	0.30	0.0	1.00	0.0	0.0	0.0	0.0	0.0	-0.30	0.0				
211	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00
	0.30	0.0	1.00	0.0	0.0	0.0	0.0	0.0	0.30	0.0				
212	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00
	0.0	-0.30	-1.00	0.0	0.0	0.0	0.0	0.0	-0.30	0.0				
213	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00
	0.0	-0.30	-1.00	0.0	0.0	0.0	0.0	0.0	0.30	0.0				
214	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00
	0.0	-0.30	1.00	0.0	0.0	0.0	0.0	0.0	-0.30	0.0				
215	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00
	0.0	-0.30	1.00	0.0	0.0	0.0	0.0	0.0	0.30	0.0				
216	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00
	0.0	0.30	-1.00	0.0	0.0	0.0	0.0	0.0	-0.30	0.0				
217	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00
	0.0	0.30	-1.00	0.0	0.0	0.0	0.0	0.0	0.30	0.0				
218	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00
	0.0	0.30	1.00	0.0	0.0	0.0	0.0	0.0	-0.30	0.0				
219	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00
	0.0	0.30	1.00	0.0	0.0	0.0	0.0	0.0	0.30	0.0				
220	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00
	-0.30	0.0	0.0	-1.00	0.0	0.0	0.0	0.0	-0.30	0.0				
221	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00
	-0.30	0.0	0.0	-1.00	0.0	0.0	0.0	0.0	0.30	0.0				
222	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00
	-0.30	0.0	0.0	1.00	0.0	0.0	0.0	0.0	-0.30	0.0				
223	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00
	-0.30	0.0	0.0	1.00	0.0	0.0	0.0	0.0	0.30	0.0				
224	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00
	0.30	0.0	0.0	-1.00	0.0	0.0	0.0	0.0	-0.30	0.0				
225	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00
	0.30	0.0	0.0	-1.00	0.0	0.0	0.0	0.0	0.30	0.0				
226	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00
	0.30	0.0	0.0	1.00	0.0	0.0	0.0	0.0	-0.30	0.0				
227	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00
	0.30	0.0	0.0	1.00	0.0	0.0	0.0	0.0	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...
228	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00
	0.0	-0.30	0.0	-1.00	0.0	0.0	0.0	0.0	-0.30	0.0				
229	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00
	0.0	-0.30	0.0	-1.00	0.0	0.0	0.0	0.0	0.30	0.0				
230	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00
	0.0	-0.30	0.0	1.00	0.0	0.0	0.0	0.0	-0.30	0.0				
231	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00
	0.0	-0.30	0.0	1.00	0.0	0.0	0.0	0.0	0.30	0.0				
232	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00
	0.0	0.30	0.0	-1.00	0.0	0.0	0.0	0.0	-0.30	0.0				
233	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00
	0.0	0.30	0.0	-1.00	0.0	0.0	0.0	0.0	0.30	0.0				
234	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00
	0.0	0.30	0.0	1.00	0.0	0.0	0.0	0.0	-0.30	0.0				
235	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00
	0.0	0.30	0.0	1.00	0.0	0.0	0.0	0.0	0.30	0.0				
236	1.00	1.00	1.00	0.30	0.0	-0.30	0.0	-0.30	0.0	0.0	0.0	0.0	0.0	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	-1.00	0.0	0.0	0.0				
237	1.00	1.00	1.00	0.30	0.0	-0.30	0.0	-0.30	0.0	0.0	0.0	0.0	0.0	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	1.00	0.0	0.0	0.0				
238	1.00	1.00	1.00	0.30	0.0	-0.30	0.0	0.30	0.0	0.0	0.0	0.0	0.0	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	-1.00	0.0	0.0	0.0				
239	1.00	1.00	1.00	0.30	0.0	-0.30	0.0	0.30	0.0	0.0	0.0	0.0	0.0	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	1.00	0.0	0.0	0.0				
240	1.00	1.00	1.00	0.30	0.0	0.30	0.0	-0.30	0.0	0.0	0.0	0.0	0.0	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	-1.00	0.0	0.0	0.0				
241	1.00	1.00	1.00	0.30	0.0	0.30	0.0	-0.30	0.0	0.0	0.0	0.0	0.0	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	1.00	0.0	0.0	0.0				
242	1.00	1.00	1.00	0.30	0.0	0.30	0.0	0.30	0.0	0.0	0.0	0.0	0.0	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	-1.00	0.0	0.0	0.0				
243	1.00	1.00	1.00	0.30	0.0	0.30	0.0	0.30	0.0	0.0	0.0	0.0	0.0	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	1.00	0.0	0.0	0.0				
244	1.00	1.00	1.00	0.30	0.0	-0.30	0.0	0.0	-0.30	0.0	0.0	0.0	0.0	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	-1.00	0.0	0.0	0.0				
245	1.00	1.00	1.00	0.30	0.0	-0.30	0.0	0.0	-0.30	0.0	0.0	0.0	0.0	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	1.00	0.0	0.0	0.0				
246	1.00	1.00	1.00	0.30	0.0	-0.30	0.0	0.0	0.30	0.0	0.0	0.0	0.0	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	-1.00	0.0	0.0	0.0				
247	1.00	1.00	1.00	0.30	0.0	-0.30	0.0	0.0	0.30	0.0	0.0	0.0	0.0	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	1.00	0.0	0.0	0.0				
248	1.00	1.00	1.00	0.30	0.0	0.30	0.0	0.0	-0.30	0.0	0.0	0.0	0.0	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	-1.00	0.0	0.0	0.0				
249	1.00	1.00	1.00	0.30	0.0	0.30	0.0	0.0	-0.30	0.0	0.0	0.0	0.0	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	1.00	0.0	0.0	0.0				
250	1.00	1.00	1.00	0.30	0.0	0.30	0.0	0.0	0.30	0.0	0.0	0.0	0.0	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	-1.00	0.0	0.0	0.0				
251	1.00	1.00	1.00	0.30	0.0	0.30	0.0	0.0	0.30	0.0	0.0	0.0	0.0	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	1.00	0.0	0.0	0.0				
252	1.00	1.00	1.00	0.30	0.0	0.0	-0.30	-0.30	0.0	0.0	0.0	0.0	0.0	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	-1.00	0.0	0.0	0.0				
253	1.00	1.00	1.00	0.30	0.0	0.0	-0.30	-0.30	0.0	0.0	0.0	0.0	0.0	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	1.00	0.0	0.0	0.0				
254	1.00	1.00	1.00	0.30	0.0	0.0	-0.30	0.30	0.0	0.0	0.0	0.0	0.0	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	-1.00	0.0	0.0	0.0				
255	1.00	1.00	1.00	0.30	0.0	0.0	-0.30	0.30	0.0	0.0	0.0	0.0	0.0	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	1.00	0.0	0.0	0.0				
256	1.00	1.00	1.00	0.30	0.0	0.0	0.30	-0.30	0.0	0.0	0.0	0.0	0.0	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	-1.00	0.0	0.0	0.0				
257	1.00	1.00	1.00	0.30	0.0	0.0	0.30	-0.30	0.0	0.0	0.0	0.0	0.0	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	1.00	0.0	0.0	0.0				
258	1.00	1.00	1.00	0.30	0.0	0.0	0.30	0.30	0.0	0.0	0.0	0.0	0.0	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	-1.00	0.0	0.0	0.0				
259	1.00	1.00	1.00	0.30	0.0	0.0	0.30	0.30	0.0	0.0	0.0	0.0	0.0	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	1.00	0.0	0.0	0.0				
260	1.00	1.00	1.00	0.30	0.0	0.0	-0.30	0.0	-0.30	0.0	0.0	0.0	0.0	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	-1.00	0.0	0.0	0.0				
261	1.00	1.00	1.00	0.30	0.0	0.0	-0.30	0.0	-0.30	0.0	0.0	0.0	0.0	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	1.00	0.0	0.0	0.0				
262	1.00	1.00	1.00	0.30	0.0	0.0	-0.30	0.0	0.30	0.0	0.0	0.0	0.0	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	-1.00	0.0	0.0	0.0				
263	1.00	1.00	1.00	0.30	0.0	0.0	-0.30	0.0	0.30	0.0	0.0	0.0	0.0	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	1.00	0.0	0.0	0.0				
264	1.00	1.00	1.00	0.30	0.0	0.0	0.30	0.0	-0.30	0.0	0.0	0.0	0.0	1.00

Cmb	CDC 1/15...	CDC 2/16...	CDC 3/17...	CDC 4/18...	CDC 5/19...	CDC 6/20...	CDC 7/21...	CDC 8/22...	CDC 9/23...	CDC 10/24...	CDC 11/25...	CDC 12/26...	CDC 13/27...	CDC 14/28...
	0.0	0.0	0.0	0.0	0.0	0.0	-1.00	0.0	0.0	0.0				
265	1.00	1.00	1.00	0.30	0.0	0.0	0.30	0.0	-0.30	0.0	0.0	0.0	0.0	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	1.00	0.0	0.0	0.0				
266	1.00	1.00	1.00	0.30	0.0	0.0	0.30	0.0	0.30	0.0	0.0	0.0	0.0	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	-1.00	0.0	0.0	0.0				
267	1.00	1.00	1.00	0.30	0.0	0.0	0.30	0.0	0.30	0.0	0.0	0.0	0.0	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	1.00	0.0	0.0	0.0				
268	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	-0.30	0.0	-0.30	0.0	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-1.00	0.0	0.0				
269	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	-0.30	0.0	-0.30	0.0	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00	0.0	0.0				
270	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	-0.30	0.0	0.30	0.0	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-1.00	0.0	0.0				
271	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	-0.30	0.0	0.30	0.0	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00	0.0	0.0				
272	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	0.30	0.0	-0.30	0.0	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-1.00	0.0	0.0				
273	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	0.30	0.0	-0.30	0.0	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00	0.0	0.0				
274	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	0.30	0.0	0.30	0.0	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-1.00	0.0	0.0				
275	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	0.30	0.0	0.30	0.0	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00	0.0	0.0				
276	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	-0.30	0.0	0.0	-0.30	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-1.00	0.0	0.0				
277	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	-0.30	0.0	0.0	-0.30	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00	0.0	0.0				
278	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	-0.30	0.0	0.0	0.30	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-1.00	0.0	0.0				
279	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	-0.30	0.0	0.0	0.30	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00	0.0	0.0				
280	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	0.30	0.0	0.0	-0.30	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-1.00	0.0	0.0				
281	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	0.30	0.0	0.0	-0.30	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00	0.0	0.0				
282	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	0.30	0.0	0.0	0.30	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-1.00	0.0	0.0				
283	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	0.30	0.0	0.0	0.30	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00	0.0	0.0				
284	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	0.0	-0.30	-0.30	0.0	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-1.00	0.0	0.0				
285	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	0.0	-0.30	-0.30	0.0	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00	0.0	0.0				
286	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	0.0	-0.30	0.30	0.0	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-1.00	0.0	0.0				
287	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	0.0	-0.30	0.30	0.0	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00	0.0	0.0				
288	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	0.0	0.30	-0.30	0.0	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-1.00	0.0	0.0				
289	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	0.0	0.30	-0.30	0.0	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00	0.0	0.0				
290	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	0.0	0.30	0.30	0.0	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-1.00	0.0	0.0				
291	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	0.0	0.30	0.30	0.0	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00	0.0	0.0				
292	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	0.0	-0.30	0.0	-0.30	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-1.00	0.0	0.0				
293	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	0.0	-0.30	0.0	-0.30	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00	0.0	0.0				
294	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	0.0	-0.30	0.0	0.30	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-1.00	0.0	0.0				
295	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	0.0	-0.30	0.0	0.30	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00	0.0	0.0				
296	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	0.0	0.30	0.0	-0.30	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-1.00	0.0	0.0				
297	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	0.0	0.30	0.0	-0.30	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00	0.0	0.0				
298	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	0.0	0.30	0.0	0.30	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-1.00	0.0	0.0				
299	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	0.0	0.30	0.0	0.30	1.00
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00	0.0	0.0				
300	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00
	-0.30	0.0	-0.30	0.0	0.0	0.0	0.0	0.0	-1.00	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...
301	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00
	-0.30	0.0	-0.30	0.0	0.0	0.0	0.0	0.0	1.00	0.0				
302	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00
	-0.30	0.0	0.30	0.0	0.0	0.0	0.0	0.0	-1.00	0.0				
303	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00
	-0.30	0.0	0.30	0.0	0.0	0.0	0.0	0.0	1.00	0.0				
304	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00
	0.30	0.0	-0.30	0.0	0.0	0.0	0.0	0.0	-1.00	0.0				
305	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00
	0.30	0.0	-0.30	0.0	0.0	0.0	0.0	0.0	1.00	0.0				
306	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00
	0.30	0.0	0.30	0.0	0.0	0.0	0.0	0.0	-1.00	0.0				
307	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00
	0.30	0.0	0.30	0.0	0.0	0.0	0.0	0.0	1.00	0.0				
308	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00
	-0.30	0.0	0.0	-0.30	0.0	0.0	0.0	0.0	-1.00	0.0				
309	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00
	-0.30	0.0	0.0	-0.30	0.0	0.0	0.0	0.0	1.00	0.0				
310	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00
	-0.30	0.0	0.0	0.30	0.0	0.0	0.0	0.0	-1.00	0.0				
311	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00
	-0.30	0.0	0.0	0.30	0.0	0.0	0.0	0.0	1.00	0.0				
312	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00
	0.30	0.0	0.0	-0.30	0.0	0.0	0.0	0.0	-1.00	0.0				
313	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00
	0.30	0.0	0.0	-0.30	0.0	0.0	0.0	0.0	1.00	0.0				
314	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00
	0.30	0.0	0.0	0.30	0.0	0.0	0.0	0.0	-1.00	0.0				
315	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00
	0.30	0.0	0.0	0.30	0.0	0.0	0.0	0.0	1.00	0.0				
316	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00
	0.0	-0.30	-0.30	0.0	0.0	0.0	0.0	0.0	-1.00	0.0				
317	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00
	0.0	-0.30	-0.30	0.0	0.0	0.0	0.0	0.0	1.00	0.0				
318	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00
	0.0	-0.30	0.30	0.0	0.0	0.0	0.0	0.0	-1.00	0.0				
319	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00
	0.0	-0.30	0.30	0.0	0.0	0.0	0.0	0.0	1.00	0.0				
320	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00
	0.0	0.30	-0.30	0.0	0.0	0.0	0.0	0.0	-1.00	0.0				
321	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00
	0.0	0.30	-0.30	0.0	0.0	0.0	0.0	0.0	1.00	0.0				
322	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00
	0.0	0.30	0.30	0.0	0.0	0.0	0.0	0.0	-1.00	0.0				
323	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00
	0.0	0.30	0.30	0.0	0.0	0.0	0.0	0.0	1.00	0.0				
324	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00
	0.0	-0.30	0.0	-0.30	0.0	0.0	0.0	0.0	-1.00	0.0				
325	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00
	0.0	-0.30	0.0	-0.30	0.0	0.0	0.0	0.0	1.00	0.0				
326	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00
	0.0	-0.30	0.0	0.30	0.0	0.0	0.0	0.0	-1.00	0.0				
327	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00
	0.0	-0.30	0.0	0.30	0.0	0.0	0.0	0.0	1.00	0.0				
328	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00
	0.0	0.30	0.0	-0.30	0.0	0.0	0.0	0.0	-1.00	0.0				
329	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00
	0.0	0.30	0.0	-0.30	0.0	0.0	0.0	0.0	1.00	0.0				
330	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00
	0.0	0.30	0.0	0.30	0.0	0.0	0.0	0.0	-1.00	0.0				
331	1.00	1.00	1.00	0.30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00
	0.0	0.30	0.0	0.30	0.0	0.0	0.0	0.0	1.00	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	C	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 (3.2.5)
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.

Id nodo	Longitudine	Latitudine	Distanza
			Km
Loc.	11.586	44.812	
15623	11.519	44.769	7.073
15624	11.590	44.770	4.606
15402	11.588	44.820	0.957
15401	11.518	44.819	5.421

SL	Pver	Tr	ag	Fo	T*c
		Anni	g		sec
SLO	81.0	120.0	0.077	2.570	0.270
SLD	63.0	201.0	0.099	2.570	0.270
SLV	10.0	1898.0	0.254	2.470	0.290
SLC	5.0	2475.0	0.281	2.450	0.290

SL	ag	S	Fo	Fv	Tb	Tc	Td
	g				sec	sec	sec
SLO	0.077	1.500	2.570	0.962	0.146	0.437	1.908
SLD	0.099	1.500	2.570	1.094	0.146	0.437	1.998
SLV	0.254	1.324	2.470	1.680	0.153	0.458	2.615
SLC	0.281	1.286	2.450	1.754	0.153	0.458	2.725

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 di struttura q	Fattore 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 l' allegato 10.A dell'Ordinanza 3274 e smi. In particolare la tabella, per ogni combinazione SLU (SLC per il DM 14-01-2008) sismica riporta il codice di verifica e i valori utilizzati per la verifica: spostamento dE, area ridotta e dimensione A2, azione verticale, deformazioni di taglio dell' elastomero e tensioni nell' acciaio.

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

Con riferimento al **Documento di Affidabilità** "Test di validazione del software di calcolo PRO_SAP e dei moduli aggiuntivi PRO_SAP Modulo Geotecnico, PRO_CAD nodi acciaio e PRO_MST" - versione Maggio 2011, disponibile per il download sul sito **www.2si.it**, si segnalano i seguenti esempi applicativi:

Test N°	Titolo
23	DM 2008: SPETTRO
29	SISMICA 1000/H, SOMMA V, EFFETTO P-δ
30	ANALISI DI UN EDIFICIO CON ISOLATORI SISMICI
70	MASSE SISMICHE
75	PROGETTO DI ISOLATORI ELASTOMERICI
76	VERIFICA DI ISOLATORI ELASTOMERICI
77	VERIFICA DI ISOLATORI FRICTION PENDULUM

CDC	Tipo	Sigla Id	Note
6	Edk	CDC=Ed (dinamico SLU) alfa=0.0 (ecc. +)	
			categoria suolo: C
			fattore di sito S = 1.324
			ordinata spettro (tratto Tb-Tc) = 0.553 g
			angolo di ingresso:0.0
			eccentricità aggiuntiva: positiva
			periodo proprio T1: 1.332 sec.
			fattore q: 1.500
			fattore per spost. mu d: 1.500
			classe di duttilità CD:

CDC	Tipo	Sigla Id	Note
			numero di modi considerati:200
			combinaz. modale: CQC

Quota	M Sismica x g	Pos. GX	Pos. GY	E agg. X-X	E agg. Y-Y	Pos. KX	Pos. KY	rapp. r/Ls	rapp. ex/rx	rapp. ey/ry
m	daN	m	m	m	m	m	m			
7.22	6.991e+05	49.32	22.50	0.0	0.0	50.00	22.50	1.095	0.021	0.0
6.50	1.119e+06	49.31	21.87	0.0	-2.25	51.85	22.85	1.306	0.061	0.024
5.00	1.369e+04	77.24	10.41	0.0	-1.11	76.72	11.72	1.381	0.035	0.085
4.67	1.111e+04	76.52	10.17	0.0	-1.11	76.72	11.72	1.381	0.014	0.101
4.50	2.182e+04	40.86	39.92	0.0	-1.13	50.00	30.00	1.474	0.292	0.317
4.00	1.448e+04	76.33	10.14	0.0	-1.11	76.72	11.72	1.381	0.026	0.103
3.50	3.089e+05	95.61	34.13	0.0	-1.13	94.99	33.25	1.305	0.066	0.095
3.33	1.414e+04	76.13	10.10	0.0	-1.11	76.72	11.72	1.381	0.039	0.105
2.67	1.414e+04	76.13	10.10	0.0	-1.11	76.72	11.72	1.381	0.039	0.105
2.00	1.398e+04	76.22	10.08	0.0	-1.11	76.72	11.72	1.381	0.034	0.107
1.75	8296.96	100.00	33.00	0.0	-0.13	0.0	0.0	0.0	0.0	0.0
1.33	1.381e+04	76.31	10.06	0.0	-1.11	76.72	11.72	1.381	0.027	0.108
1.17	735.00	100.00	32.79	0.0	-0.13	0.0	0.0	0.0	0.0	0.0
0.67	1.381e+04	76.31	10.06	0.0	-1.11	76.72	11.72	1.381	0.027	0.108
0.58	735.00	100.00	32.79	0.0	-0.13	0.0	0.0	0.0	0.0	0.0
Risulta	2.267e+06									

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	0.751	1.332	0.190	8.523e+05	37.6	168.15	7.42e-03	0.02	1.06e-06	0.0	0.0
2	0.825	1.213	0.209	86.74	3.83e-03	1.402e+06	61.8	2.25e-03	0.0	0.0	0.0
3	0.853	1.173	0.216	521.00	2.30e-02	9.787e+04	4.3	4.50e-03	0.0	0.0	0.0
4	0.897	1.114	0.227	5.983e+05	26.4	77.63	3.42e-03	2.04e-05	0.0	0.0	0.0
5	0.898	1.113	0.228	74.78	3.30e-03	1.520e+05	6.7	1.36e-04	0.0	0.0	0.0
6	0.963	1.039	0.244	780.90	3.44e-02	5535.28	0.2	4.01e-03	0.0	0.0	0.0
7	1.039	0.962	0.263	8807.99	0.4	1.397e+05	6.2	8.02e-05	0.0	0.0	0.0
8	1.052	0.950	0.267	5.137e+05	22.7	1.011e+04	0.4	0.05	2.14e-06	0.0	0.0
9	1.111	0.900	0.281	613.54	2.71e-02	3.584e+04	1.6	0.03	1.31e-06	0.0	0.0
10	1.187	0.843	0.301	1135.92	5.01e-02	1.092e+05	4.8	0.14	5.97e-06	0.0	0.0
11	1.217	0.821	0.308	1.512e+04	0.7	0.01	0.0	1.34e-03	0.0	0.0	0.0
12	1.276	0.784	0.323	286.83	1.27e-02	1541.48	6.80e-02	0.03	1.50e-06	0.0	0.0
13	1.283	0.779	0.325	1.212e+04	0.5	0.07	3.15e-06	1.89e-03	0.0	0.0	0.0
14	1.322	0.757	0.335	1.430e+04	0.6	0.68	2.99e-05	6.14e-03	0.0	0.0	0.0
15	1.367	0.732	0.346	303.05	1.34e-02	1.715e+04	0.8	0.02	0.0	0.0	0.0
16	1.411	0.709	0.358	8.35	3.68e-04	1.800e+04	0.8	2.16e-04	0.0	0.0	0.0
17	1.453	0.688	0.368	6.77e-05	0.0	0.0	0.0	0.04	1.88e-06	0.0	0.0
18	1.466	0.682	0.371	2.98	1.32e-04	1776.75	7.84e-02	3.70e-03	0.0	0.0	0.0
19	1.469	0.681	0.372	0.82	3.60e-05	8814.46	0.4	0.11	4.98e-06	0.0	0.0
20	1.923	0.520	0.487	1481.17	6.53e-02	1165.80	5.14e-02	8.36	3.69e-04	0.0	0.0
21	2.567	0.390	0.553	306.90	1.35e-02	13.14	5.80e-04	1.53	6.74e-05	0.0	0.0
22	2.623	0.381	0.553	130.95	5.78e-03	2.755e+04	1.2	0.27	1.19e-05	0.0	0.0
23	2.661	0.376	0.553	4.008e+04	1.8	47.66	2.10e-03	3.40	1.50e-04	0.0	0.0
24	2.703	0.370	0.553	5261.60	0.2	224.84	9.92e-03	3.14	1.38e-04	0.0	0.0
25	2.847	0.351	0.553	322.81	1.42e-02	46.53	2.05e-03	8.97	3.96e-04	0.0	0.0
26	2.876	0.348	0.553	2.484e+04	1.1	124.21	5.48e-03	0.04	1.60e-06	0.0	0.0
27	2.916	0.343	0.553	287.05	1.27e-02	1485.63	6.55e-02	3.95e-06	0.0	0.0	0.0
28	2.999	0.333	0.553	101.14	4.46e-03	297.21	1.31e-02	2.42	1.07e-04	0.0	0.0
29	3.108	0.322	0.553	543.44	2.40e-02	3.968e+04	1.7	0.99	4.37e-05	0.0	0.0
30	3.237	0.309	0.553	0.31	1.37e-05	3.409e+04	1.5	6.87	3.03e-04	0.0	0.0
31	3.394	0.295	0.553	0.31	1.36e-05	4105.07	0.2	0.28	1.25e-05	0.0	0.0
32	3.611	0.277	0.553	1.85	8.16e-05	1.731e+04	0.8	18.60	8.20e-04	0.0	0.0
33	3.822	0.262	0.553	651.69	2.87e-02	144.18	6.36e-03	4.31	1.90e-04	0.0	0.0
34	3.922	0.255	0.553	0.01	0.0	160.60	7.08e-03	0.03	1.38e-06	0.0	0.0
35	4.073	0.246	0.553	1622.51	7.16e-02	6349.14	0.3	212.11	9.36e-03	0.0	0.0
36	4.155	0.241	0.553	5.547e+04	2.4	1829.13	8.07e-02	118.59	5.23e-03	0.0	0.0
37	4.279	0.234	0.553	4.97e-05	0.0	0.04	1.55e-06	8914.72	0.4	0.0	0.0
38	4.425	0.226	0.553	144.44	6.37e-03	220.41	9.72e-03	4.029e+05	17.8	0.0	0.0
39	4.447	0.225	0.553	512.62	2.26e-02	840.95	3.71e-02	1.135e+04	0.5	0.0	0.0
40	4.479	0.223	0.553	514.47	2.27e-02	906.19	4.00e-02	39.09	1.72e-03	0.0	0.0
41	4.499	0.222	0.553	0.49	2.15e-05	113.28	5.00e-03	99.20	4.38e-03	0.0	0.0
42	4.522	0.221	0.553	76.36	3.37e-03	177.96	7.85e-03	1.261e+05	5.6	0.0	0.0
43	4.575	0.219	0.553	4.95	2.18e-04	24.08	1.06e-03	4553.70	0.2	0.0	0.0
44	4.650	0.215	0.553	1.68	7.39e-05	1.11	4.90e-05	3.852e+04	1.7	0.0	0.0
45	4.654	0.215	0.553	1.12e-04	0.0	1104.17	4.87e-02	0.70	3.09e-05	0.0	0.0
46	4.704	0.213	0.553	2.76	1.22e-04	14.03	6.19e-04	2803.68	0.1	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
47	4.791	0.209	0.553	21.83	9.63e-04	529.08	2.33e-02	3778.88	0.2	0.0	0.0
48	4.817	0.208	0.553	13.22	5.83e-04	79.34	3.50e-03	9495.81	0.4	0.0	0.0
49	4.836	0.207	0.553	8.65	3.82e-04	27.98	1.23e-03	681.61	3.01e-02	0.0	0.0
50	4.937	0.203	0.553	4.06e-05	0.0	0.10	4.57e-06	114.70	5.06e-03	0.0	0.0
51	5.013	0.199	0.553	9.39	4.14e-04	17.80	7.85e-04	1789.83	7.89e-02	0.0	0.0
52	5.018	0.199	0.553	0.49	2.15e-05	0.81	3.56e-05	1064.00	4.69e-02	0.0	0.0
53	5.103	0.196	0.553	3474.63	0.2	7564.13	0.3	54.71	2.41e-03	0.0	0.0
54	5.360	0.187	0.553	34.56	1.52e-03	2469.09	0.1	190.04	8.38e-03	0.0	0.0
55	5.714	0.175	0.553	0.0	0.0	1.24	5.46e-05	4.13e-04	0.0	0.0	0.0
56	5.783	0.173	0.553	358.23	1.58e-02	357.80	1.58e-02	6.82	3.01e-04	0.0	0.0
57	5.820	0.172	0.553	7.39e-04	0.0	2836.27	0.1	605.44	2.67e-02	0.0	0.0
58	5.895	0.170	0.553	0.09	4.16e-06	75.47	3.33e-03	7.660e+04	3.4	0.0	0.0
59	5.897	0.170	0.553	0.10	4.28e-06	77.45	3.42e-03	994.85	4.39e-02	0.0	0.0
60	5.933	0.169	0.553	0.20	9.02e-06	6.36	2.81e-04	1.069e+05	4.7	0.0	0.0
61	5.941	0.168	0.553	1.76	7.76e-05	0.08	3.54e-06	3.862e+05	17.0	0.0	0.0
62	5.979	0.167	0.553	8.73e-03	0.0	1.47	6.48e-05	2871.89	0.1	0.0	0.0
63	5.980	0.167	0.553	0.51	2.24e-05	3.87	1.71e-04	242.59	1.07e-02	0.0	0.0
64	5.988	0.167	0.553	13.58	5.99e-04	5.37	2.37e-04	1123.29	4.95e-02	0.0	0.0
65	6.050	0.165	0.553	4.20	1.85e-04	1.60	7.07e-05	1.065e+05	4.7	0.0	0.0
66	6.054	0.165	0.553	5645.76	0.2	24.73	1.09e-03	8308.11	0.4	0.0	0.0
67	6.062	0.165	0.553	886.18	3.91e-02	1.25	5.50e-05	7.349e+04	3.2	0.0	0.0
68	6.122	0.163	0.553	5.27e-03	0.0	0.10	4.58e-06	65.00	2.87e-03	0.0	0.0
69	6.140	0.163	0.553	8.35	3.68e-04	0.22	9.79e-06	537.21	2.37e-02	0.0	0.0
70	6.186	0.162	0.553	0.70	3.09e-05	0.04	1.84e-06	0.75	3.32e-05	0.0	0.0
71	6.241	0.160	0.553	0.05	2.02e-06	1.61e-03	0.0	1.748e+04	0.8	0.0	0.0
72	6.258	0.160	0.553	2.21	9.74e-05	4.19	1.85e-04	1.699e+04	0.7	0.0	0.0
73	6.326	0.158	0.553	47.29	2.09e-03	575.10	2.54e-02	23.37	1.03e-03	0.0	0.0
74	6.326	0.158	0.553	2.33	1.03e-04	19.54	8.62e-04	16.53	7.29e-04	0.0	0.0
75	6.343	0.158	0.553	3.10	1.37e-04	43.98	1.94e-03	523.34	2.31e-02	0.0	0.0
76	6.457	0.155	0.553	326.38	1.44e-02	166.83	7.36e-03	47.13	2.08e-03	0.0	0.0
77	6.489	0.154	0.553	7.08	3.12e-04	1.76	7.75e-05	7201.87	0.3	0.0	0.0
78	6.509	0.154	0.553	3.61	1.59e-04	4.33e-03	0.0	6906.08	0.3	0.0	0.0
79	6.532	0.153	0.553	3.82	1.69e-04	0.52	2.28e-05	236.92	1.04e-02	0.0	0.0
80	6.541	0.153	0.553	3.10	1.37e-04	3.34e-05	0.0	130.37	5.75e-03	0.0	0.0
81	6.585	0.152	0.552	2.817e+04	1.2	50.49	2.23e-03	0.05	2.02e-06	0.0	0.0
82	6.703	0.149	0.548	25.56	1.13e-03	1.827e+04	0.8	339.94	1.50e-02	0.0	0.0
83	6.791	0.147	0.545	1.86	8.21e-05	21.94	9.68e-04	1328.76	5.86e-02	0.0	0.0
84	6.815	0.147	0.544	8.70e-03	0.0	1.70	7.49e-05	2406.36	0.1	0.0	0.0
85	6.817	0.147	0.544	1.69e-05	0.0	1.11	4.88e-05	11.83	5.22e-04	0.0	0.0
86	6.819	0.147	0.544	0.01	0.0	5.07	2.24e-04	68.79	3.03e-03	0.0	0.0
87	6.865	0.146	0.543	6.01e-06	0.0	13.83	6.10e-04	5.00e-04	0.0	0.0	0.0
88	6.914	0.145	0.541	11.81	5.21e-04	91.41	4.03e-03	2.94	1.30e-04	0.0	0.0
89	7.119	0.140	0.535	1355.99	5.98e-02	1550.23	6.84e-02	6.02	2.65e-04	0.0	0.0
90	7.378	0.136	0.528	150.84	6.65e-03	7742.56	0.3	56.64	2.50e-03	0.0	0.0
91	7.466	0.134	0.526	3646.39	0.2	184.62	8.14e-03	42.55	1.88e-03	0.0	0.0
92	7.532	0.133	0.524	1.19e-04	0.0	1860.68	8.21e-02	17.29	7.63e-04	0.0	0.0
93	7.807	0.128	0.518	4.58	2.02e-04	31.24	1.38e-03	4.59	2.02e-04	0.0	0.0
94	7.808	0.128	0.518	2.65e-04	0.0	13.79	6.08e-04	0.15	6.79e-06	0.0	0.0
95	7.893	0.127	0.516	640.35	2.82e-02	36.70	1.62e-03	6.82	3.01e-04	0.0	0.0
96	7.941	0.126	0.515	0.23	9.94e-06	69.43	3.06e-03	1.043e+05	4.6	0.0	0.0
97	8.377	0.119	0.505	9.98e-06	0.0	337.88	1.49e-02	3.71e-03	0.0	0.0	0.0
98	8.575	0.117	0.501	11.45	5.05e-04	2232.05	9.84e-02	8.02	3.54e-04	0.0	0.0
99	8.666	0.115	0.500	0.60	2.65e-05	2460.83	0.1	0.06	2.76e-06	0.0	0.0
100	8.791	0.114	0.497	2.32e-03	0.0	37.15	1.64e-03	7.84e-03	0.0	0.0	0.0
101	8.906	0.112	0.495	4.74	2.09e-04	2.36	1.04e-04	2.54	1.12e-04	0.0	0.0
102	8.970	0.111	0.494	570.18	2.51e-02	7.88	3.47e-04	5.13	2.26e-04	0.0	0.0
103	9.048	0.111	0.493	13.13	5.79e-04	13.01	5.74e-04	7.52	3.32e-04	0.0	0.0
104	9.072	0.110	0.492	8.43	3.72e-04	3.41	1.50e-04	21.40	9.44e-04	0.0	0.0
105	9.240	0.108	0.490	10.15	4.48e-04	0.11	4.86e-06	107.17	4.73e-03	0.0	0.0
106	9.348	0.107	0.488	4.32	1.91e-04	12.24	5.40e-04	2.517e+04	1.1	0.0	0.0
107	9.381	0.107	0.487	7.68	3.39e-04	0.93	4.12e-05	1245.00	5.49e-02	0.0	0.0
108	9.592	0.104	0.484	8.18	3.61e-04	3.30	1.45e-04	169.55	7.48e-03	0.0	0.0
109	9.673	0.103	0.483	0.81	3.57e-05	2.10	9.28e-05	41.37	1.82e-03	0.0	0.0
110	9.708	0.103	0.482	2.14	9.44e-05	14.02	6.18e-04	101.81	4.49e-03	0.0	0.0
111	9.923	0.101	0.479	9.35	4.12e-04	35.89	1.58e-03	7418.14	0.3	0.0	0.0
112	9.967	0.100	0.478	0.58	2.58e-05	16.97	7.48e-04	1.064e+04	0.5	0.0	0.0
113	9.993	0.100	0.478	0.03	1.14e-06	0.05	2.43e-06	15.99	7.05e-04	0.0	0.0
114	10.139	0.099	0.476	0.20	8.98e-06	34.35	1.52e-03	64.57	2.85e-03	0.0	0.0
115	10.182	0.098	0.475	2.27	1.00e-04	247.80	1.09e-02	1.09	4.83e-05	0.0	0.0
116	10.270	0.097	0.474	71.26	3.14e-03	3610.63	0.2	1293.24	5.70e-02	0.0	0.0
117	10.290	0.097	0.474	3.24e-03	0.0	108.03	4.76e-03	0.05	2.17e-06	0.0	0.0
118	10.349	0.097	0.473	3.97	1.75e-04	33.68	1.49e-03	32.53	1.43e-03	0.0	0.0
119	10.396	0.096	0.472	35.12	1.55e-03	353.80	1.56e-02	247.10	1.09e-02	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
120	10.438	0.096	0.472	2675.60	0.1	1.54	6.79e-05	3.61	1.59e-04	0.0	0.0
121	10.474	0.095	0.471	1.82	8.04e-05	20.79	9.17e-04	5.272e+04	2.3	0.0	0.0
122	10.488	0.095	0.471	0.39	1.73e-05	13.43	5.92e-04	282.12	1.24e-02	0.0	0.0
123	10.661	0.094	0.469	22.13	9.76e-04	194.77	8.59e-03	71.89	3.17e-03	0.0	0.0
124	10.801	0.093	0.467	9.03	3.98e-04	181.75	8.02e-03	22.57	9.95e-04	0.0	0.0
125	10.828	0.092	0.467	37.44	1.65e-03	1.06	4.65e-05	28.22	1.24e-03	0.0	0.0
126	10.955	0.091	0.466	8.47	3.73e-04	98.63	4.35e-03	257.93	1.14e-02	0.0	0.0
127	10.966	0.091	0.465	0.76	3.36e-05	8.17	3.60e-04	2994.22	0.1	0.0	0.0
128	11.013	0.091	0.465	1.037e+04	0.5	27.78	1.23e-03	150.48	6.64e-03	0.0	0.0
129	11.030	0.091	0.465	6705.95	0.3	380.58	1.68e-02	84.82	3.74e-03	0.0	0.0
130	11.169	0.090	0.463	4074.50	0.2	204.29	9.01e-03	2.907e+04	1.3	0.0	0.0
131	11.264	0.089	0.462	43.43	1.92e-03	0.44	1.96e-05	0.78	3.45e-05	0.0	0.0
132	11.270	0.089	0.462	3.92e-03	0.0	4.15	1.83e-04	2.59	1.14e-04	0.0	0.0
133	11.280	0.089	0.462	0.03	1.21e-06	55.47	2.45e-03	59.21	2.61e-03	0.0	0.0
134	11.382	0.088	0.461	3.32e-03	0.0	69.00	3.04e-03	9.00e-03	0.0	0.0	0.0
135	11.486	0.087	0.460	149.31	6.59e-03	0.41	1.82e-05	3.49	1.54e-04	0.0	0.0
136	11.520	0.087	0.459	0.09	3.82e-06	8.76e-03	0.0	1.515e+04	0.7	0.0	0.0
137	11.535	0.087	0.459	1.60e-06	0.0	1.84e-03	0.0	8.03e-04	0.0	0.0	0.0
138	11.630	0.086	0.458	0.43	1.91e-05	0.19	8.37e-06	3.153e+04	1.4	0.0	0.0
139	11.650	0.086	0.458	0.05	2.06e-06	0.12	5.29e-06	4.033e+04	1.8	0.0	0.0
140	11.676	0.086	0.457	468.84	2.07e-02	214.45	9.46e-03	38.85	1.71e-03	0.0	0.0
141	11.839	0.084	0.456	3.96	1.75e-04	1.54	6.79e-05	2.031e+04	0.9	0.0	0.0
142	11.845	0.084	0.456	10.43	4.60e-04	4.23	1.87e-04	338.10	1.49e-02	0.0	0.0
143	12.019	0.083	0.454	12.99	5.73e-04	555.96	2.45e-02	649.45	2.86e-02	0.0	0.0
144	12.047	0.083	0.454	1.09	4.81e-05	498.59	2.20e-02	658.62	2.90e-02	0.0	0.0
145	12.079	0.083	0.453	5054.49	0.2	426.56	1.88e-02	3.953e+04	1.7	0.0	0.0
146	12.108	0.083	0.453	19.59	8.64e-04	0.38	1.66e-05	704.64	3.11e-02	0.0	0.0
147	12.187	0.082	0.452	516.79	2.28e-02	0.25	1.09e-05	2417.12	0.1	0.0	0.0
148	12.225	0.082	0.452	0.09	3.94e-06	2.43e-04	0.0	0.02	0.0	0.0	0.0
149	12.373	0.081	0.451	3.60	1.59e-04	0.24	1.08e-05	7898.93	0.3	0.0	0.0
150	12.453	0.080	0.450	305.86	1.35e-02	27.98	1.23e-03	6068.67	0.3	0.0	0.0
151	12.473	0.080	0.450	8.99	3.96e-04	1888.78	8.33e-02	22.20	9.79e-04	0.0	0.0
152	12.570	0.080	0.449	0.12	5.38e-06	0.03	1.28e-06	1.160e+04	0.5	0.0	0.0
153	12.599	0.079	0.449	68.76	3.03e-03	131.05	5.78e-03	1.480e+04	0.7	0.0	0.0
154	12.608	0.079	0.449	0.03	1.44e-06	24.87	1.10e-03	1.320e+04	0.6	0.0	0.0
155	12.739	0.078	0.447	225.54	9.95e-03	3.89	1.72e-04	2.134e+04	0.9	0.0	0.0
156	12.838	0.078	0.446	1595.05	7.03e-02	1510.20	6.66e-02	39.08	1.72e-03	0.0	0.0
157	12.970	0.077	0.445	0.01	0.0	0.10	4.59e-06	1123.83	4.96e-02	0.0	0.0
158	13.076	0.076	0.444	2.96	1.31e-04	5.49	2.42e-04	2.189e+04	1.0	0.0	0.0
159	13.107	0.076	0.444	872.05	3.85e-02	690.94	3.05e-02	5344.23	0.2	0.0	0.0
160	13.128	0.076	0.444	15.55	6.86e-04	1.87	8.23e-05	2691.44	0.1	0.0	0.0
161	13.138	0.076	0.444	397.73	1.75e-02	230.78	1.02e-02	4058.44	0.2	0.0	0.0
162	13.146	0.076	0.444	35.09	1.55e-03	5.69e-03	0.0	1008.60	4.45e-02	0.0	0.0
163	13.241	0.076	0.443	90.16	3.98e-03	56.20	2.48e-03	4.175e+04	1.8	0.0	0.0
164	13.288	0.075	0.443	20.50	9.04e-04	37.89	1.67e-03	2798.95	0.1	0.0	0.0
165	13.818	0.072	0.439	298.91	1.32e-02	1.74	7.68e-05	1.703e+04	0.8	0.0	0.0
166	13.884	0.072	0.438	3.67e-03	0.0	0.14	6.15e-06	2.477e+04	1.1	0.0	0.0
167	14.002	0.071	0.437	0.37	1.62e-05	0.87	3.85e-05	3.373e+04	1.5	0.0	0.0
168	14.023	0.071	0.437	0.59	2.60e-05	0.46	2.05e-05	1.142e+04	0.5	0.0	0.0
169	14.351	0.070	0.435	1803.94	7.96e-02	478.79	2.11e-02	1001.42	4.42e-02	0.0	0.0
170	14.419	0.069	0.434	1842.73	8.13e-02	4.49	1.98e-04	8108.13	0.4	0.0	0.0
171	14.430	0.069	0.434	261.71	1.15e-02	14.94	6.59e-04	2107.04	9.29e-02	0.0	0.0
172	14.709	0.068	0.432	2.071e+04	0.9	14.93	6.58e-04	106.54	4.70e-03	0.0	0.0
173	14.717	0.068	0.432	0.16	6.92e-06	6.32	2.79e-04	8.40	3.71e-04	0.0	0.0
174	14.872	0.067	0.431	7.79	3.44e-04	493.52	2.18e-02	35.83	1.58e-03	0.0	0.0
175	14.910	0.067	0.431	0.07	2.98e-06	2.67	1.18e-04	5.38	2.37e-04	0.0	0.0
176	14.942	0.067	0.431	0.01	0.0	0.36	1.61e-05	349.15	1.54e-02	0.0	0.0
177	14.978	0.067	0.431	9.52e-03	0.0	0.27	1.19e-05	230.38	1.02e-02	0.0	0.0
178	15.071	0.066	0.430	15.42	6.80e-04	218.72	9.65e-03	0.76	3.37e-05	0.0	0.0
179	15.173	0.066	0.429	9.48	4.18e-04	278.63	1.23e-02	293.52	1.29e-02	0.0	0.0
180	15.514	0.064	0.427	6227.15	0.3	136.08	6.00e-03	1887.74	8.33e-02	0.0	0.0
181	15.723	0.064	0.426	6.24	2.75e-04	7556.55	0.3	57.76	2.55e-03	0.0	0.0
182	15.865	0.063	0.425	0.78	3.46e-05	3.92	1.73e-04	18.05	7.96e-04	0.0	0.0
183	15.869	0.063	0.425	1.19e-05	0.0	3.18e-05	0.0	0.22	9.84e-06	0.0	0.0
184	15.883	0.063	0.425	37.82	1.67e-03	42.61	1.88e-03	515.01	2.27e-02	0.0	0.0
185	15.902	0.063	0.425	1.31e-05	0.0	2.13	9.37e-05	0.09	3.84e-06	0.0	0.0
186	16.271	0.061	0.423	147.43	6.50e-03	96.05	4.24e-03	2115.79	9.33e-02	0.0	0.0
187	16.462	0.061	0.422	2.63	1.16e-04	3.14e-03	0.0	3.170e+04	1.4	0.0	0.0
188	16.476	0.061	0.422	0.0	0.0	0.09	3.87e-06	7.15e-05	0.0	0.0	0.0
189	16.637	0.060	0.421	223.27	9.85e-03	0.06	2.50e-06	0.09	3.89e-06	0.0	0.0
190	16.819	0.059	0.420	19.63	8.66e-04	80.74	3.56e-03	4011.35	0.2	0.0	0.0
191	16.833	0.059	0.420	55.39	2.44e-03	9.77	4.31e-04	1.894e+04	0.8	0.0	0.0
192	16.926	0.059	0.420	1.19e-03	0.0	0.05	2.06e-06	5.23	2.31e-04	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
193	16.929	0.059	0.420	1.44	6.37e-05	5.42	2.39e-04	283.54	1.25e-02	0.0	0.0
194	17.079	0.059	0.419	763.74	3.37e-02	6.35e-03	0.0	5.88e-03	0.0	0.0	0.0
195	17.367	0.058	0.418	50.33	2.22e-03	2271.14	0.1	7065.76	0.3	0.0	0.0
196	17.550	0.057	0.417	14.03	6.19e-04	5513.36	0.2	5977.54	0.3	0.0	0.0
197	17.559	0.057	0.417	3.70e-03	0.0	452.91	2.00e-02	0.56	2.47e-05	0.0	0.0
198	17.920	0.056	0.415	0.0	0.0	0.0	0.0	0.75	3.29e-05	0.0	0.0
199	17.996	0.056	0.415	17.68	7.80e-04	38.59	1.70e-03	2.251e+04	1.0	0.0	0.0
200	18.106	0.055	0.414	4.68e-06	0.0	0.13	5.80e-06	0.03	1.14e-06	0.0	0.0
Risulta				2.263e+06		2.217e+06		2.169e+06			
In percentuale				99.79		97.80		95.68			

CDC	Tipo	Sigla Id	Note
7	Edk	CDC=Ed (dinamico SLU) alfa=0.0 (ecc. -)	
			categoria suolo: C
			fattore di sito S = 1.324
			ordinata spettro (tratto Tb-Tc) = 0.553 g
			angolo di ingresso:0.0
			eccentricità aggiuntiva: negativa
			periodo proprio T1: 1.329 sec.
			fattore q: 1.500
			fattore per spost. mu d: 1.500
			classe di duttilità CD:
			numero di modi considerati:200
			combinaz. modale: CQC

Quota	M Sismica x g	Pos. GX	Pos. GY	E agg. X-X	E agg. Y-Y	Pos. KX	Pos. KY	rapp. r/Ls	rapp. ex/rx	rapp. ey/ry
m	daN	m	m	m	m	m	m			
7.22	6.991e+05	49.32	22.50	0.0	0.0	50.00	22.50	1.095	0.021	0.0
6.50	1.119e+06	49.31	21.87	0.0	2.25	51.85	22.85	1.306	0.061	0.024
5.00	1.369e+04	77.24	10.41	0.0	1.11	76.72	11.72	1.381	0.035	0.085
4.67	1.111e+04	76.52	10.17	0.0	1.11	76.72	11.72	1.381	0.014	0.101
4.50	2.182e+04	40.86	39.92	0.0	1.13	50.00	30.00	1.474	0.292	0.317
4.00	1.448e+04	76.33	10.14	0.0	1.11	76.72	11.72	1.381	0.026	0.103
3.50	3.089e+05	95.61	34.13	0.0	1.13	94.99	33.25	1.305	0.066	0.095
3.33	1.414e+04	76.13	10.10	0.0	1.11	76.72	11.72	1.381	0.039	0.105
2.67	1.414e+04	76.13	10.10	0.0	1.11	76.72	11.72	1.381	0.039	0.105
2.00	1.398e+04	76.22	10.08	0.0	1.11	76.72	11.72	1.381	0.034	0.107
1.75	8296.96	100.00	33.00	0.0	0.13	0.0	0.0	0.0	0.0	0.0
1.33	1.381e+04	76.31	10.06	0.0	1.11	76.72	11.72	1.381	0.027	0.108
1.17	735.00	100.00	32.79	0.0	0.13	0.0	0.0	0.0	0.0	0.0
0.67	1.381e+04	76.31	10.06	0.0	1.11	76.72	11.72	1.381	0.027	0.108
0.58	735.00	100.00	32.79	0.0	0.13	0.0	0.0	0.0	0.0	0.0
Risulta	2.267e+06									

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	0.752	1.329	0.191	8.602e+05	37.9	169.99	7.50e-03	0.02	1.02e-06	0.0	0.0
2	0.825	1.213	0.209	139.47	6.15e-03	1.402e+06	61.8	2.31e-03	0.0	0.0	0.0
3	0.853	1.173	0.216	1099.85	4.85e-02	9.767e+04	4.3	4.82e-03	0.0	0.0	0.0
4	0.898	1.114	0.227	3076.44	0.1	1.506e+05	6.6	1.74e-05	0.0	0.0	0.0
5	0.945	1.058	0.239	6.162e+05	27.2	1760.10	7.76e-02	0.04	1.77e-06	0.0	0.0
6	0.963	1.038	0.244	8677.04	0.4	6523.30	0.3	9.25e-03	0.0	0.0	0.0
7	0.994	1.006	0.252	4.889e+05	21.6	0.11	4.76e-06	2.57e-05	0.0	0.0	0.0
8	1.039	0.962	0.263	45.73	2.02e-03	1.472e+05	6.5	4.57e-04	0.0	0.0	0.0
9	1.111	0.900	0.281	85.99	3.79e-03	3.649e+04	1.6	0.03	1.24e-06	0.0	0.0
10	1.187	0.843	0.301	299.77	1.32e-02	1.099e+05	4.8	0.13	5.78e-06	0.0	0.0
11	1.214	0.824	0.308	1.479e+04	0.7	0.15	6.67e-06	1.58e-03	0.0	0.0	0.0
12	1.276	0.784	0.323	76.91	3.39e-03	1545.63	6.82e-02	0.03	1.46e-06	0.0	0.0
13	1.279	0.782	0.324	1.275e+04	0.6	0.04	1.59e-06	1.35e-03	0.0	0.0	0.0
14	1.367	0.732	0.346	205.00	9.04e-03	1.713e+04	0.8	0.02	0.0	0.0	0.0
15	1.389	0.720	0.352	1.274e+04	0.6	6.02	2.66e-04	6.51e-03	0.0	0.0	0.0
16	1.411	0.709	0.358	2.92	1.29e-04	1.801e+04	0.8	1.98e-04	0.0	0.0	0.0
17	1.453	0.688	0.368	5.78e-05	0.0	0.0	0.0	0.04	1.88e-06	0.0	0.0
18	1.466	0.682	0.371	1.17	5.16e-05	1783.81	7.87e-02	3.77e-03	0.0	0.0	0.0
19	1.469	0.681	0.372	2.84e-04	0.0	8805.70	0.4	0.11	5.00e-06	0.0	0.0
20	1.920	0.521	0.486	1227.92	5.42e-02	1145.36	5.05e-02	8.39	3.70e-04	0.0	0.0
21	2.565	0.390	0.553	1265.40	5.58e-02	3.18	1.40e-04	1.85	8.16e-05	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
22	2.594	0.386	0.553	1.147e+04	0.5	9264.67	0.4	0.03	1.25e-06	0.0	0.0
23	2.648	0.378	0.553	3.262e+04	1.4	6100.95	0.3	4.72	2.08e-04	0.0	0.0
24	2.661	0.376	0.553	353.14	1.56e-02	1.395e+04	0.6	0.41	1.80e-05	0.0	0.0
25	2.709	0.369	0.553	6930.95	0.3	192.11	8.47e-03	1.87	8.26e-05	0.0	0.0
26	2.848	0.351	0.553	682.30	3.01e-02	67.21	2.96e-03	8.17	3.60e-04	0.0	0.0
27	2.999	0.333	0.553	27.97	1.23e-03	308.87	1.36e-02	2.27	1.00e-04	0.0	0.0
28	3.107	0.322	0.553	16.83	7.42e-04	3.913e+04	1.7	0.81	3.59e-05	0.0	0.0
29	3.237	0.309	0.553	5.24e-05	0.0	3.464e+04	1.5	6.72	2.96e-04	0.0	0.0
30	3.394	0.295	0.553	0.07	3.02e-06	4121.59	0.2	0.28	1.22e-05	0.0	0.0
31	3.610	0.277	0.553	2.09	9.23e-05	1.739e+04	0.8	18.32	8.08e-04	0.0	0.0
32	3.740	0.267	0.553	3916.87	0.2	107.09	4.72e-03	1.40	6.19e-05	0.0	0.0
33	3.922	0.255	0.553	2.68e-03	0.0	160.46	7.08e-03	0.03	1.41e-06	0.0	0.0
34	4.075	0.245	0.553	0.42	1.86e-05	7281.16	0.3	242.75	1.07e-02	0.0	0.0
35	4.166	0.240	0.553	104.84	4.62e-03	9.16	4.04e-04	3.61e-03	0.0	0.0	0.0
36	4.223	0.237	0.553	5.638e+04	2.5	45.40	2.00e-03	7.26	3.20e-04	0.0	0.0
37	4.262	0.235	0.553	1.302e+04	0.6	15.35	6.77e-04	28.32	1.25e-03	0.0	0.0
38	4.279	0.234	0.553	1.15e-03	0.0	0.03	1.52e-06	8914.32	0.4	0.0	0.0
39	4.424	0.226	0.553	11.31	4.99e-04	245.26	1.08e-02	3.751e+05	16.5	0.0	0.0
40	4.443	0.225	0.553	17.98	7.93e-04	587.05	2.59e-02	3.689e+04	1.6	0.0	0.0
41	4.475	0.223	0.553	7.08	3.12e-04	397.42	1.75e-02	290.70	1.28e-02	0.0	0.0
42	4.521	0.221	0.553	0.45	1.98e-05	67.84	2.99e-03	1.282e+05	5.7	0.0	0.0
43	4.575	0.219	0.553	3.80e-04	0.0	12.73	5.61e-04	4402.46	0.2	0.0	0.0
44	4.650	0.215	0.553	0.02	0.0	0.05	2.02e-06	3.860e+04	1.7	0.0	0.0
45	4.654	0.215	0.553	0.0	0.0	1103.68	4.87e-02	0.68	3.01e-05	0.0	0.0
46	4.703	0.213	0.553	0.01	0.0	5.35	2.36e-04	2798.12	0.1	0.0	0.0
47	4.790	0.209	0.553	2.47	1.09e-04	952.10	4.20e-02	3419.74	0.2	0.0	0.0
48	4.816	0.208	0.553	1.18	5.21e-05	227.46	1.00e-02	9911.01	0.4	0.0	0.0
49	4.835	0.207	0.553	0.90	3.96e-05	125.93	5.55e-03	526.97	2.32e-02	0.0	0.0
50	4.914	0.203	0.553	77.37	3.41e-03	7756.49	0.3	208.65	9.20e-03	0.0	0.0
51	4.937	0.203	0.553	3.11e-05	0.0	0.11	4.75e-06	114.68	5.06e-03	0.0	0.0
52	5.014	0.199	0.553	0.28	1.24e-05	8.34	3.68e-04	1770.50	7.81e-02	0.0	0.0
53	5.018	0.199	0.553	0.01	0.0	0.48	2.11e-05	1029.01	4.54e-02	0.0	0.0
54	5.496	0.182	0.553	8.40	3.71e-04	3348.43	0.1	407.98	1.80e-02	0.0	0.0
55	5.714	0.175	0.553	0.0	0.0	1.24	5.47e-05	4.24e-04	0.0	0.0	0.0
56	5.750	0.174	0.553	266.42	1.18e-02	1089.98	4.81e-02	373.91	1.65e-02	0.0	0.0
57	5.780	0.173	0.553	38.09	1.68e-03	1245.43	5.49e-02	66.68	2.94e-03	0.0	0.0
58	5.894	0.170	0.553	7.86	3.47e-04	36.83	1.62e-03	7.557e+04	3.3	0.0	0.0
59	5.897	0.170	0.553	8.45	3.73e-04	9.13	4.03e-04	570.46	2.52e-02	0.0	0.0
60	5.933	0.169	0.553	0.77	3.40e-05	1.39	6.15e-05	1.145e+05	5.0	0.0	0.0
61	5.941	0.168	0.553	1.05	4.61e-05	2.83e-04	0.0	3.799e+05	16.8	0.0	0.0
62	5.979	0.167	0.553	0.56	2.46e-05	0.50	2.20e-05	2881.28	0.1	0.0	0.0
63	5.980	0.167	0.553	0.91	4.01e-05	0.71	3.14e-05	199.30	8.79e-03	0.0	0.0
64	5.989	0.167	0.553	1.13	5.00e-05	2.26	9.98e-05	1339.13	5.91e-02	0.0	0.0
65	6.050	0.165	0.553	2.88	1.27e-04	0.16	7.16e-06	1.055e+05	4.7	0.0	0.0
66	6.061	0.165	0.553	0.73	3.21e-05	0.78	3.45e-05	8.286e+04	3.7	0.0	0.0
67	6.122	0.163	0.553	5.46	2.41e-04	0.94	4.15e-05	57.37	2.53e-03	0.0	0.0
68	6.139	0.163	0.553	1.73	7.64e-05	0.39	1.70e-05	489.82	2.16e-02	0.0	0.0
69	6.231	0.160	0.553	9370.66	0.4	2955.24	0.1	742.11	3.27e-02	0.0	0.0
70	6.241	0.160	0.553	606.16	2.67e-02	195.47	8.62e-03	1.646e+04	0.7	0.0	0.0
71	6.258	0.160	0.553	24.10	1.06e-03	3.34	1.47e-04	1.743e+04	0.8	0.0	0.0
72	6.326	0.158	0.553	3.33	1.47e-04	1.32	5.81e-05	11.66	5.14e-04	0.0	0.0
73	6.341	0.158	0.553	2.21	9.76e-05	1.02	4.48e-05	404.47	1.78e-02	0.0	0.0
74	6.489	0.154	0.553	0.17	7.64e-06	1.50	6.60e-05	7307.82	0.3	0.0	0.0
75	6.508	0.154	0.553	45.45	2.00e-03	3.02	1.33e-04	6924.46	0.3	0.0	0.0
76	6.532	0.153	0.553	0.01	0.0	0.24	1.08e-05	237.95	1.05e-02	0.0	0.0
77	6.540	0.153	0.553	1306.68	5.76e-02	184.81	8.15e-03	116.01	5.12e-03	0.0	0.0
78	6.548	0.153	0.553	1.023e+04	0.5	1493.94	6.59e-02	0.32	1.40e-05	0.0	0.0
79	6.627	0.151	0.550	1.079e+04	0.5	1719.42	7.58e-02	22.43	9.89e-04	0.0	0.0
80	6.731	0.149	0.547	1534.10	6.77e-02	1.229e+04	0.5	231.73	1.02e-02	0.0	0.0
81	6.791	0.147	0.545	6.06	2.67e-04	33.59	1.48e-03	1350.14	5.95e-02	0.0	0.0
82	6.815	0.147	0.544	2.33e-03	0.0	0.95	4.21e-05	2410.57	0.1	0.0	0.0
83	6.817	0.147	0.544	5.70e-04	0.0	0.30	1.33e-05	34.79	1.53e-03	0.0	0.0
84	6.819	0.147	0.544	0.84	3.68e-05	0.10	4.63e-06	35.50	1.57e-03	0.0	0.0
85	6.823	0.147	0.544	101.06	4.46e-03	61.50	2.71e-03	24.55	1.08e-03	0.0	0.0
86	6.852	0.146	0.543	0.78	3.43e-05	2.76	1.22e-04	0.07	3.11e-06	0.0	0.0
87	6.863	0.146	0.543	3497.94	0.2	988.58	4.36e-02	1.29	5.68e-05	0.0	0.0
88	6.865	0.146	0.543	4.80e-03	0.0	13.55	5.98e-04	5.51e-04	0.0	0.0	0.0
89	7.134	0.140	0.535	239.04	1.05e-02	3326.63	0.1	13.74	6.06e-04	0.0	0.0
90	7.457	0.134	0.526	445.29	1.96e-02	6535.82	0.3	97.77	4.31e-03	0.0	0.0
91	7.528	0.133	0.524	2011.04	8.87e-02	8.62	3.80e-04	1.87	8.24e-05	0.0	0.0
92	7.532	0.133	0.524	0.02	1.02e-06	1859.68	8.20e-02	17.32	7.64e-04	0.0	0.0
93	7.806	0.128	0.518	0.01	0.0	35.03	1.54e-03	6.94	3.06e-04	0.0	0.0
94	7.808	0.128	0.518	8.27e-06	0.0	13.80	6.09e-04	0.16	6.85e-06	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
95	7.941	0.126	0.515	1.22	5.40e-05	77.37	3.41e-03	1.043e+05	4.6	0.0	0.0
96	8.307	0.120	0.507	3.37	1.49e-04	7.71	3.40e-04	0.48	2.10e-05	0.0	0.0
97	8.377	0.119	0.505	5.87e-05	0.0	337.88	1.49e-02	3.59e-03	0.0	0.0	0.0
98	8.536	0.117	0.502	8047.33	0.4	68.11	3.00e-03	106.43	4.69e-03	0.0	0.0
99	8.574	0.117	0.501	1016.09	4.48e-02	1853.41	8.17e-02	40.30	1.78e-03	0.0	0.0
100	8.673	0.115	0.500	35.29	1.56e-03	2681.83	0.1	1.22	5.40e-05	0.0	0.0
101	8.767	0.114	0.498	539.79	2.38e-02	25.19	1.11e-03	1.58	6.96e-05	0.0	0.0
102	8.791	0.114	0.497	6.22	2.75e-04	45.41	2.00e-03	0.08	3.66e-06	0.0	0.0
103	8.908	0.112	0.495	4.68	2.06e-04	0.43	1.89e-05	1.27	5.58e-05	0.0	0.0
104	9.048	0.111	0.493	0.01	0.0	10.27	4.53e-04	4.06	1.79e-04	0.0	0.0
105	9.071	0.110	0.492	2.95	1.30e-04	3.46	1.53e-04	21.57	9.51e-04	0.0	0.0
106	9.239	0.108	0.490	3.50	1.54e-04	0.11	5.03e-06	113.93	5.02e-03	0.0	0.0
107	9.348	0.107	0.488	0.80	3.51e-05	12.64	5.58e-04	2.491e+04	1.1	0.0	0.0
108	9.381	0.107	0.487	2.77	1.22e-04	1.12	4.95e-05	1403.66	6.19e-02	0.0	0.0
109	9.591	0.104	0.484	3.24	1.43e-04	3.50	1.54e-04	187.17	8.25e-03	0.0	0.0
110	9.673	0.103	0.483	0.21	9.41e-06	2.13	9.40e-05	43.59	1.92e-03	0.0	0.0
111	9.709	0.103	0.482	1.53	6.76e-05	12.90	5.69e-04	98.54	4.35e-03	0.0	0.0
112	9.767	0.102	0.481	2998.44	0.1	3.98e-03	0.0	0.08	3.60e-06	0.0	0.0
113	9.922	0.101	0.479	8.46	3.73e-04	34.94	1.54e-03	7232.57	0.3	0.0	0.0
114	9.966	0.100	0.478	0.18	7.91e-06	15.13	6.67e-04	1.084e+04	0.5	0.0	0.0
115	9.993	0.100	0.478	0.02	0.0	0.05	2.08e-06	15.42	6.80e-04	0.0	0.0
116	10.139	0.099	0.476	0.13	5.73e-06	26.06	1.15e-03	70.60	3.11e-03	0.0	0.0
117	10.183	0.098	0.475	1.42	6.26e-05	145.93	6.44e-03	0.98	4.34e-05	0.0	0.0
118	10.290	0.097	0.474	2.32e-05	0.0	116.58	5.14e-03	4.78e-04	0.0	0.0	0.0
119	10.348	0.097	0.473	1.63	7.20e-05	142.69	6.29e-03	85.88	3.79e-03	0.0	0.0
120	10.389	0.096	0.473	36.22	1.60e-03	638.54	2.82e-02	259.00	1.14e-02	0.0	0.0
121	10.474	0.095	0.471	0.39	1.72e-05	18.37	8.10e-04	5.278e+04	2.3	0.0	0.0
122	10.489	0.095	0.471	0.28	1.22e-05	5.76	2.54e-04	329.23	1.45e-02	0.0	0.0
123	10.568	0.095	0.470	585.20	2.58e-02	4257.61	0.2	2408.43	0.1	0.0	0.0
124	10.663	0.094	0.469	8.14	3.59e-04	213.90	9.43e-03	57.29	2.53e-03	0.0	0.0
125	10.802	0.093	0.467	4.91	2.16e-04	177.20	7.82e-03	22.32	9.84e-04	0.0	0.0
126	10.829	0.092	0.467	23.61	1.04e-03	1.09	4.80e-05	31.11	1.37e-03	0.0	0.0
127	10.955	0.091	0.465	3.52	1.55e-04	95.91	4.23e-03	264.84	1.17e-02	0.0	0.0
128	10.966	0.091	0.465	0.27	1.20e-05	8.27	3.65e-04	2989.92	0.1	0.0	0.0
129	11.024	0.091	0.465	587.38	2.59e-02	98.19	4.33e-03	3.81	1.68e-04	0.0	0.0
130	11.071	0.090	0.464	1.047e+04	0.5	37.59	1.66e-03	1130.98	4.99e-02	0.0	0.0
131	11.204	0.089	0.463	9430.99	0.4	87.72	3.87e-03	2.858e+04	1.3	0.0	0.0
132	11.266	0.089	0.462	49.33	2.18e-03	0.84	3.70e-05	0.03	1.12e-06	0.0	0.0
133	11.270	0.089	0.462	0.04	1.68e-06	3.93	1.73e-04	4.28	1.89e-04	0.0	0.0
134	11.280	0.089	0.462	8.41	3.71e-04	48.72	2.15e-03	134.25	5.92e-03	0.0	0.0
135	11.382	0.088	0.461	6.94e-03	0.0	68.96	3.04e-03	3.77e-03	0.0	0.0	0.0
136	11.487	0.087	0.459	242.51	1.07e-02	0.04	1.67e-06	10.90	4.81e-04	0.0	0.0
137	11.520	0.087	0.459	0.18	7.82e-06	4.50e-03	0.0	1.519e+04	0.7	0.0	0.0
138	11.535	0.087	0.459	0.0	0.0	1.79e-03	0.0	8.24e-04	0.0	0.0	0.0
139	11.630	0.086	0.458	1.17	5.16e-05	0.06	2.51e-06	3.141e+04	1.4	0.0	0.0
140	11.650	0.086	0.458	0.20	8.62e-06	0.04	1.84e-06	4.034e+04	1.8	0.0	0.0
141	11.839	0.084	0.456	2.88	1.27e-04	1.80	7.95e-05	1.987e+04	0.9	0.0	0.0
142	11.846	0.084	0.456	7.68	3.39e-04	5.05	2.23e-04	355.38	1.57e-02	0.0	0.0
143	12.020	0.083	0.454	1.81	7.96e-05	516.23	2.28e-02	399.75	1.76e-02	0.0	0.0
144	12.047	0.083	0.454	24.16	1.07e-03	400.30	1.77e-02	61.99	2.73e-03	0.0	0.0
145	12.108	0.083	0.453	1.60	7.07e-05	5.26	2.32e-04	99.94	4.41e-03	0.0	0.0
146	12.159	0.082	0.453	1283.24	5.66e-02	223.95	9.88e-03	3.055e+04	1.3	0.0	0.0
147	12.282	0.081	0.451	6099.84	0.3	314.09	1.39e-02	1.616e+04	0.7	0.0	0.0
148	12.374	0.081	0.451	51.87	2.29e-03	1.35	5.98e-05	6462.04	0.3	0.0	0.0
149	12.466	0.080	0.450	141.71	6.25e-03	1723.06	7.60e-02	3076.01	0.1	0.0	0.0
150	12.498	0.080	0.449	2036.48	8.98e-02	115.91	5.11e-03	2.587e+04	1.1	0.0	0.0
151	12.571	0.080	0.449	1.36	6.00e-05	0.42	1.86e-05	9668.79	0.4	0.0	0.0
152	12.609	0.079	0.449	2.61e-03	0.0	17.68	7.80e-04	1.199e+04	0.5	0.0	0.0
153	12.721	0.079	0.448	1089.06	4.80e-02	129.77	5.72e-03	1.193e+04	0.5	0.0	0.0
154	12.857	0.078	0.446	5656.47	0.2	1794.65	7.92e-02	2239.43	9.88e-02	0.0	0.0
155	12.961	0.077	0.445	2.55	1.13e-04	1.73	7.63e-05	7.71	3.40e-04	0.0	0.0
156	12.970	0.077	0.445	0.16	6.84e-06	0.04	1.61e-06	1114.89	4.92e-02	0.0	0.0
157	13.076	0.076	0.444	2.01	8.86e-05	0.08	3.68e-06	2.291e+04	1.0	0.0	0.0
158	13.127	0.076	0.444	16.34	7.21e-04	13.24	5.84e-04	181.92	8.02e-03	0.0	0.0
159	13.131	0.076	0.444	45.60	2.01e-03	2.54	1.12e-04	1.042e+04	0.5	0.0	0.0
160	13.146	0.076	0.444	1.74	7.66e-05	17.36	7.66e-04	569.72	2.51e-02	0.0	0.0
161	13.237	0.076	0.443	108.76	4.80e-03	4.45	1.96e-04	3.734e+04	1.6	0.0	0.0
162	13.287	0.075	0.443	39.95	1.76e-03	8.03	3.54e-04	4764.11	0.2	0.0	0.0
163	13.458	0.074	0.441	3365.12	0.1	312.27	1.38e-02	2739.14	0.1	0.0	0.0
164	13.541	0.074	0.441	0.10	4.52e-06	5.18e-04	0.0	3.10e-04	0.0	0.0	0.0
165	13.838	0.072	0.438	1718.68	7.58e-02	24.51	1.08e-03	1.551e+04	0.7	0.0	0.0
166	13.884	0.072	0.438	9.71e-05	0.0	0.14	6.05e-06	2.480e+04	1.1	0.0	0.0
167	14.002	0.071	0.437	4.13	1.82e-04	1.20	5.29e-05	3.421e+04	1.5	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
168	14.023	0.071	0.437	0.28	1.23e-05	0.51	2.23e-05	1.121e+04	0.5	0.0	0.0
169	14.335	0.070	0.435	3480.84	0.2	558.79	2.46e-02	2085.47	9.20e-02	0.0	0.0
170	14.464	0.069	0.434	9944.56	0.4	6.67	2.94e-04	9199.72	0.4	0.0	0.0
171	14.654	0.068	0.433	174.48	7.70e-03	0.25	1.08e-05	1599.88	7.06e-02	0.0	0.0
172	14.717	0.068	0.432	3.62e-03	0.0	6.27	2.76e-04	7.95	3.50e-04	0.0	0.0
173	14.884	0.067	0.431	1926.16	8.50e-02	669.62	2.95e-02	417.25	1.84e-02	0.0	0.0
174	14.910	0.067	0.431	13.60	6.00e-04	5.78	2.55e-04	12.49	5.51e-04	0.0	0.0
175	14.942	0.067	0.431	0.21	9.11e-06	0.39	1.73e-05	352.17	1.55e-02	0.0	0.0
176	14.978	0.067	0.431	0.07	3.21e-06	0.30	1.33e-05	230.83	1.02e-02	0.0	0.0
177	15.193	0.066	0.429	400.83	1.77e-02	159.63	7.04e-03	1026.30	4.53e-02	0.0	0.0
178	15.708	0.064	0.426	39.68	1.75e-03	7763.26	0.3	13.29	5.86e-04	0.0	0.0
179	15.865	0.063	0.425	0.02	0.0	5.27	2.33e-04	17.18	7.58e-04	0.0	0.0
180	15.869	0.063	0.425	1.01e-05	0.0	3.85e-05	0.0	0.22	9.84e-06	0.0	0.0
181	15.882	0.063	0.425	4.05	1.79e-04	49.77	2.20e-03	461.87	2.04e-02	0.0	0.0
182	15.902	0.063	0.425	2.64e-06	0.0	2.12	9.36e-05	0.09	3.89e-06	0.0	0.0
183	16.119	0.062	0.424	18.53	8.17e-04	206.84	9.12e-03	413.15	1.82e-02	0.0	0.0
184	16.267	0.061	0.423	36.64	1.62e-03	115.37	5.09e-03	1662.92	7.33e-02	0.0	0.0
185	16.462	0.061	0.422	0.53	2.35e-05	7.65e-03	0.0	3.196e+04	1.4	0.0	0.0
186	16.476	0.061	0.422	0.0	0.0	0.09	3.87e-06	6.74e-05	0.0	0.0	0.0
187	16.753	0.060	0.421	0.62	2.73e-05	0.23	1.00e-05	0.69	3.03e-05	0.0	0.0
188	16.818	0.059	0.420	11.24	4.96e-04	80.30	3.54e-03	6514.72	0.3	0.0	0.0
189	16.832	0.059	0.420	18.05	7.96e-04	9.62	4.24e-04	1.646e+04	0.7	0.0	0.0
190	16.926	0.059	0.420	0.0	0.0	0.05	2.07e-06	5.23	2.31e-04	0.0	0.0
191	16.929	0.059	0.420	1.21	5.33e-05	2.65	1.17e-04	246.44	1.09e-02	0.0	0.0
192	17.224	0.058	0.418	2217.86	9.78e-02	207.48	9.15e-03	701.76	3.10e-02	0.0	0.0
193	17.403	0.057	0.417	17.25	7.61e-04	2.30	1.02e-04	1655.66	7.30e-02	0.0	0.0
194	17.559	0.057	0.417	3.85e-05	0.0	513.73	2.27e-02	0.59	2.61e-05	0.0	0.0
195	17.696	0.057	0.416	34.47	1.52e-03	7512.61	0.3	2.472e+04	1.1	0.0	0.0
196	17.920	0.056	0.415	1.02e-06	0.0	1.17e-06	0.0	0.75	3.30e-05	0.0	0.0
197	18.106	0.055	0.414	7.31e-05	0.0	0.17	7.53e-06	0.01	0.0	0.0	0.0
198	18.124	0.055	0.414	0.16	6.86e-06	9.63	4.25e-04	98.60	4.35e-03	0.0	0.0
199	18.222	0.055	0.414	18.95	8.36e-04	1717.24	7.57e-02	9171.02	0.4	0.0	0.0
200	18.356	0.054	0.413	9.19	4.05e-04	0.29	1.27e-05	301.63	1.33e-02	0.0	0.0
Risulta				2.262e+06		2.219e+06		2.170e+06			
In percentuale				99.77		97.88		95.72			

CDC	Tipo	Sigla Id	Note
8	Edk	CDC=Ed (dinamico SLU) alfa=90.00 (ecc. +)	
			categoria suolo: C
			fattore di sito S = 1.324
			ordinata spettro (tratto Tb-Tc) = 0.553 g
			angolo di ingresso:90.00
			eccentricità aggiuntiva: positiva
			periodo proprio T1: 1.237 sec.
			fattore q: 1.500
			fattore per spost. mu d: 1.500
			classe di duttilità CD:
			numero di modi considerati:200
			combinaz. modale: CQC

Quota	M Sismica x g	Pos. GX	Pos. GY	E agg. X-X	E agg. Y-Y	Pos. KX	Pos. KY	rapp. r/Ls	rapp. ex/rx	rapp. ey/ry
m	daN	m	m	m	m	m	m			
7.22	6.991e+05	49.32	22.50	5.00	0.0	50.00	22.50	1.095	0.021	0.0
6.50	1.119e+06	49.31	21.87	5.00	0.0	51.85	22.85	1.306	0.061	0.024
5.00	1.369e+04	77.24	10.41	1.50	0.0	76.72	11.72	1.381	0.035	0.085
4.67	1.111e+04	76.52	10.17	1.50	0.0	76.72	11.72	1.381	0.014	0.101
4.50	2.182e+04	40.86	39.92	3.50	0.0	50.00	30.00	1.474	0.292	0.317
4.00	1.448e+04	76.33	10.14	1.50	0.0	76.72	11.72	1.381	0.026	0.103
3.50	3.089e+05	95.61	34.13	0.50	0.0	94.99	33.25	1.305	0.066	0.095
3.33	1.414e+04	76.13	10.10	1.50	0.0	76.72	11.72	1.381	0.039	0.105
2.67	1.414e+04	76.13	10.10	1.50	0.0	76.72	11.72	1.381	0.039	0.105
2.00	1.398e+04	76.22	10.08	1.50	0.0	76.72	11.72	1.381	0.034	0.107
1.75	8296.96	100.00	33.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.33	1.381e+04	76.31	10.06	1.50	0.0	76.72	11.72	1.381	0.027	0.108
1.17	735.00	100.00	32.79	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.67	1.381e+04	76.31	10.06	1.50	0.0	76.72	11.72	1.381	0.027	0.108
0.58	735.00	100.00	32.79	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Risulta	2.267e+06									

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	0.751	1.331	0.190	8.501e+05	37.5	937.17	4.13e-02	0.02	1.01e-06	0.0	0.0
2	0.808	1.237	0.205	2617.46	0.1	1.163e+06	51.3	4.04e-03	0.0	0.0	0.0
3	0.866	1.154	0.219	734.57	3.24e-02	1.728e+05	7.6	1.65e-03	0.0	0.0	0.0
4	0.921	1.086	0.233	607.59	2.68e-02	3.604e+05	15.9	2.00e-03	0.0	0.0	0.0
5	0.942	1.061	0.239	5.429e+05	23.9	0.47	2.07e-05	2.33e-05	0.0	0.0	0.0
6	0.977	1.023	0.248	983.39	4.34e-02	1.663e+04	0.7	2.19e-03	0.0	0.0	0.0
7	0.993	1.007	0.252	5.724e+05	25.2	7276.22	0.3	0.03	1.47e-06	0.0	0.0
8	1.038	0.964	0.263	4225.18	0.2	1.802e+05	7.9	0.05	2.13e-06	0.0	0.0
9	1.109	0.902	0.281	2103.89	9.28e-02	1.773e+04	0.8	0.12	5.09e-06	0.0	0.0
10	1.199	0.834	0.304	383.78	1.69e-02	3.803e+04	1.7	0.03	1.29e-06	0.0	0.0
11	1.246	0.802	0.316	2.745e+04	1.2	6.24e-03	0.0	3.01e-03	0.0	0.0	0.0
12	1.248	0.801	0.316	1.30	5.72e-05	0.01	0.0	5.23e-06	0.0	0.0	0.0
13	1.297	0.771	0.329	309.59	1.37e-02	1134.49	5.00e-02	3.94e-04	0.0	0.0	0.0
14	1.311	0.763	0.332	4.61	2.04e-04	1.156e+04	0.5	0.11	4.77e-06	0.0	0.0
15	1.354	0.739	0.343	1.355e+04	0.6	1.29e-03	0.0	6.82e-03	0.0	0.0	0.0
16	1.385	0.722	0.351	12.08	5.33e-04	4791.11	0.2	2.93e-04	0.0	0.0	0.0
17	1.588	0.630	0.402	0.21	9.28e-06	1.284e+04	0.6	5.68e-05	0.0	0.0	0.0
18	1.656	0.604	0.419	0.06	2.46e-06	7088.94	0.3	5.13e-05	0.0	0.0	0.0
19	1.678	0.596	0.425	2.86e-05	0.0	0.0	0.0	0.06	2.73e-06	0.0	0.0
20	1.780	0.562	0.451	1388.68	6.12e-02	1862.57	8.21e-02	5.71	2.52e-04	0.0	0.0
21	2.499	0.400	0.553	2999.30	0.1	969.98	4.28e-02	5.26	2.32e-04	0.0	0.0
22	2.560	0.391	0.553	3.467e+04	1.5	209.56	9.24e-03	0.95	4.18e-05	0.0	0.0
23	2.654	0.377	0.553	37.46	1.65e-03	2.830e+04	1.2	0.28	1.22e-05	0.0	0.0
24	2.668	0.375	0.553	612.94	2.70e-02	4379.77	0.2	5.12	2.26e-04	0.0	0.0
25	2.827	0.354	0.553	40.84	1.80e-03	2498.31	0.1	3.94	1.74e-04	0.0	0.0
26	2.991	0.334	0.553	418.36	1.85e-02	2.260e+04	1.0	9.48	4.18e-04	0.0	0.0
27	3.070	0.326	0.553	27.56	1.22e-03	3.340e+04	1.5	2.66	1.17e-04	0.0	0.0
28	3.170	0.315	0.553	1524.93	6.73e-02	618.72	2.73e-02	0.11	4.83e-06	0.0	0.0
29	3.204	0.312	0.553	0.14	6.07e-06	6397.48	0.3	0.75	3.29e-05	0.0	0.0
30	3.339	0.299	0.553	2.013e+04	0.9	77.03	3.40e-03	0.04	1.56e-06	0.0	0.0
31	3.390	0.295	0.553	120.34	5.31e-03	1.928e+04	0.9	10.49	4.63e-04	0.0	0.0
32	3.406	0.294	0.553	8105.80	0.4	20.61	9.09e-04	0.01	0.0	0.0	0.0
33	3.637	0.275	0.553	0.10	4.58e-06	792.31	3.49e-02	0.11	4.68e-06	0.0	0.0
34	3.764	0.266	0.553	36.29	1.60e-03	5829.44	0.3	61.54	2.71e-03	0.0	0.0
35	3.906	0.256	0.553	501.15	2.21e-02	31.68	1.40e-03	7.87	3.47e-04	0.0	0.0
36	4.096	0.244	0.553	5.108e+04	2.3	0.36	1.60e-05	146.77	6.47e-03	0.0	0.0
37	4.149	0.241	0.553	7902.53	0.3	2659.33	0.1	1070.07	4.72e-02	0.0	0.0
38	4.273	0.234	0.553	2.75e-03	0.0	130.50	5.76e-03	0.09	4.02e-06	0.0	0.0
39	4.419	0.226	0.553	17.50	7.72e-04	526.83	2.32e-02	1.771e+05	7.8	0.0	0.0
40	4.429	0.226	0.553	11.24	4.96e-04	243.66	1.07e-02	2.452e+05	10.8	0.0	0.0
41	4.460	0.224	0.553	3.54	1.56e-04	48.39	2.13e-03	8486.39	0.4	0.0	0.0
42	4.511	0.222	0.553	0.23	1.04e-05	3.15	1.39e-04	1.114e+05	4.9	0.0	0.0
43	4.570	0.219	0.553	0.31	1.36e-05	0.87	3.83e-05	7890.13	0.3	0.0	0.0
44	4.650	0.215	0.553	2.54	1.12e-04	7.46	3.29e-04	3.032e+04	1.3	0.0	0.0
45	4.705	0.213	0.553	3.90	1.72e-04	12.23	5.39e-04	3762.54	0.2	0.0	0.0
46	4.715	0.212	0.553	8.50e-03	0.0	0.18	7.81e-06	1.073e+04	0.5	0.0	0.0
47	4.814	0.208	0.553	4.60	2.03e-04	23.82	1.05e-03	1.316e+04	0.6	0.0	0.0
48	4.835	0.207	0.553	2.49	1.10e-04	14.04	6.19e-04	46.47	2.05e-03	0.0	0.0
49	4.921	0.203	0.553	1156.84	5.10e-02	1.065e+04	0.5	435.43	1.92e-02	0.0	0.0
50	5.013	0.199	0.553	1.45	6.42e-05	18.29	8.07e-04	1572.11	6.93e-02	0.0	0.0
51	5.018	0.199	0.553	0.03	1.46e-06	0.55	2.40e-05	1184.62	5.22e-02	0.0	0.0
52	5.122	0.195	0.553	0.0	0.0	876.83	3.87e-02	1.34e-04	0.0	0.0	0.0
53	5.443	0.184	0.553	3.34e-06	0.0	0.18	7.85e-06	3.93	1.73e-04	0.0	0.0
54	5.470	0.183	0.553	8.64	3.81e-04	3183.18	0.1	351.66	1.55e-02	0.0	0.0
55	5.604	0.178	0.553	3.61	1.59e-04	4.77	2.11e-04	950.32	4.19e-02	0.0	0.0
56	5.736	0.174	0.553	69.81	3.08e-03	1605.02	7.08e-02	0.17	7.41e-06	0.0	0.0
57	5.773	0.173	0.553	44.14	1.95e-03	386.14	1.70e-02	229.90	1.01e-02	0.0	0.0
58	5.930	0.169	0.553	5.32	2.35e-04	0.31	1.38e-05	3.292e+05	14.5	0.0	0.0
59	5.938	0.168	0.553	6.98	3.08e-04	0.77	3.38e-05	2.416e+05	10.7	0.0	0.0
60	5.951	0.168	0.553	685.47	3.02e-02	294.31	1.30e-02	376.93	1.66e-02	0.0	0.0
61	5.979	0.167	0.553	7.94	3.50e-04	22.66	9.99e-04	3216.53	0.1	0.0	0.0
62	5.987	0.167	0.553	8.91	3.93e-04	51.84	2.29e-03	1445.43	6.37e-02	0.0	0.0
63	6.050	0.165	0.553	0.32	1.39e-05	18.41	8.12e-04	1.057e+05	4.7	0.0	0.0
64	6.061	0.165	0.553	3.04	1.34e-04	96.14	4.24e-03	7.956e+04	3.5	0.0	0.0
65	6.122	0.163	0.553	0.03	1.37e-06	8.23	3.63e-04	10.38	4.58e-04	0.0	0.0
66	6.138	0.163	0.553	0.08	3.72e-06	391.40	1.73e-02	127.98	5.64e-03	0.0	0.0
67	6.192	0.161	0.553	390.69	1.72e-02	1.305e+04	0.6	50.69	2.24e-03	0.0	0.0
68	6.225	0.161	0.553	5.84	2.58e-04	53.24	2.35e-03	1.275e+04	0.6	0.0	0.0
69	6.244	0.160	0.553	3.45e-04	0.0	4.46	1.97e-04	6054.19	0.3	0.0	0.0
70	6.260	0.160	0.553	40.38	1.78e-03	22.84	1.01e-03	1.762e+04	0.8	0.0	0.0
71	6.327	0.158	0.553	222.89	9.83e-03	92.62	4.09e-03	0.25	1.10e-05	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
72	6.337	0.158	0.553	1.141e+04	0.5	7380.87	0.3	101.84	4.49e-03	0.0	0.0
73	6.341	0.158	0.553	1445.91	6.38e-02	1093.37	4.82e-02	572.23	2.52e-02	0.0	0.0
74	6.489	0.154	0.553	2.03	8.95e-05	12.73	5.61e-04	7324.89	0.3	0.0	0.0
75	6.494	0.154	0.553	1.25	5.50e-05	6.08e-05	0.0	0.16	6.86e-06	0.0	0.0
76	6.508	0.154	0.553	2.07	9.12e-05	0.73	3.22e-05	6885.97	0.3	0.0	0.0
77	6.532	0.153	0.553	0.09	3.94e-06	2.95	1.30e-04	302.32	1.33e-02	0.0	0.0
78	6.540	0.153	0.553	3.20	1.41e-04	0.17	7.55e-06	68.58	3.02e-03	0.0	0.0
79	6.598	0.152	0.551	1.874e+04	0.8	6763.95	0.3	38.29	1.69e-03	0.0	0.0
80	6.638	0.151	0.550	3.43e-04	0.0	0.18	7.73e-06	1.43e-03	0.0	0.0	0.0
81	6.705	0.149	0.548	4682.55	0.2	9.43	4.16e-04	45.79	2.02e-03	0.0	0.0
82	6.771	0.148	0.546	80.68	3.56e-03	1799.00	7.93e-02	125.92	5.55e-03	0.0	0.0
83	6.790	0.147	0.545	0.10	4.42e-06	32.22	1.42e-03	1183.97	5.22e-02	0.0	0.0
84	6.815	0.147	0.544	0.05	2.11e-06	0.48	2.11e-05	2345.28	0.1	0.0	0.0
85	6.817	0.147	0.544	0.15	6.49e-06	0.19	8.28e-06	4.38	1.93e-04	0.0	0.0
86	6.819	0.147	0.544	0.11	4.72e-06	0.17	7.59e-06	25.79	1.14e-03	0.0	0.0
87	6.891	0.145	0.542	1.17e-06	0.0	2.96e-04	0.0	99.16	4.37e-03	0.0	0.0
88	6.926	0.144	0.541	1665.39	7.35e-02	4256.17	0.2	15.41	6.80e-04	0.0	0.0
89	7.008	0.143	0.538	3271.14	0.1	1.34	5.93e-05	19.09	8.42e-04	0.0	0.0
90	7.030	0.142	0.538	1.79	7.88e-05	142.40	6.28e-03	10.06	4.44e-04	0.0	0.0
91	7.380	0.135	0.528	1.74	7.69e-05	97.61	4.30e-03	2.26	9.98e-05	0.0	0.0
92	7.632	0.131	0.522	0.0	0.0	1382.86	6.10e-02	11.56	5.10e-04	0.0	0.0
93	7.633	0.131	0.522	0.0	0.0	446.33	1.97e-02	2.56	1.13e-04	0.0	0.0
94	7.887	0.127	0.516	33.71	1.49e-03	309.13	1.36e-02	8.47	3.74e-04	0.0	0.0
95	7.931	0.126	0.515	35.39	1.56e-03	2306.24	0.1	5.733e+04	2.5	0.0	0.0
96	7.951	0.126	0.514	74.85	3.30e-03	3517.72	0.2	4.715e+04	2.1	0.0	0.0
97	8.018	0.125	0.513	2664.48	0.1	393.69	1.74e-02	3.41	1.50e-04	0.0	0.0
98	8.296	0.121	0.507	1.15e-06	0.0	9.95	4.39e-04	0.02	1.02e-06	0.0	0.0
99	8.411	0.119	0.505	264.20	1.17e-02	2.71	1.20e-04	0.14	6.20e-06	0.0	0.0
100	8.451	0.118	0.504	2.07	9.12e-05	42.91	1.89e-03	7.58	3.34e-04	0.0	0.0
101	8.756	0.114	0.498	3.14	1.38e-04	10.24	4.51e-04	7.28	3.21e-04	0.0	0.0
102	8.817	0.113	0.497	0.76	3.37e-05	6.92	3.05e-04	4.94	2.18e-04	0.0	0.0
103	8.870	0.113	0.496	321.33	1.42e-02	57.82	2.55e-03	1.52	6.69e-05	0.0	0.0
104	8.906	0.112	0.495	227.85	1.00e-02	35.65	1.57e-03	5.80	2.56e-04	0.0	0.0
105	9.024	0.111	0.493	37.44	1.65e-03	48.02	2.12e-03	11.98	5.28e-04	0.0	0.0
106	9.219	0.108	0.490	9.84	4.34e-04	64.27	2.83e-03	169.59	7.48e-03	0.0	0.0
107	9.325	0.107	0.488	9.62	4.24e-04	149.35	6.59e-03	1.312e+04	0.6	0.0	0.0
108	9.368	0.107	0.487	21.16	9.33e-04	259.61	1.14e-02	9395.60	0.4	0.0	0.0
109	9.404	0.106	0.487	43.09	1.90e-03	168.37	7.43e-03	3982.47	0.2	0.0	0.0
110	9.439	0.106	0.486	1.56	6.86e-05	322.31	1.42e-02	61.43	2.71e-03	0.0	0.0
111	9.605	0.104	0.484	1.05e-04	0.0	47.79	2.11e-03	0.25	1.11e-05	0.0	0.0
112	9.614	0.104	0.484	1.34	5.90e-05	446.50	1.97e-02	16.55	7.30e-04	0.0	0.0
113	9.911	0.101	0.479	0.29	1.29e-05	339.37	1.50e-02	1092.66	4.82e-02	0.0	0.0
114	9.950	0.100	0.479	0.16	7.12e-06	64.58	2.85e-03	1.705e+04	0.8	0.0	0.0
115	9.986	0.100	0.478	0.01	0.0	6.34	2.80e-04	1.00	4.42e-05	0.0	0.0
116	10.086	0.099	0.477	2406.59	0.1	0.08	3.55e-06	3.14	1.38e-04	0.0	0.0
117	10.087	0.099	0.477	414.81	1.83e-02	0.05	2.23e-06	48.32	2.13e-03	0.0	0.0
118	10.310	0.097	0.474	0.07	3.17e-06	214.36	9.45e-03	12.22	5.39e-04	0.0	0.0
119	10.474	0.095	0.471	128.76	5.68e-03	1013.50	4.47e-02	4.630e+04	2.0	0.0	0.0
120	10.475	0.095	0.471	262.01	1.16e-02	2948.32	0.1	8791.82	0.4	0.0	0.0
121	10.489	0.095	0.471	2.45	1.08e-04	17.75	7.83e-04	20.30	8.95e-04	0.0	0.0
122	10.528	0.095	0.471	12.49	5.51e-04	8.77	3.87e-04	97.51	4.30e-03	0.0	0.0
123	10.724	0.093	0.468	0.12	5.28e-06	32.78	1.45e-03	13.02	5.74e-04	0.0	0.0
124	10.796	0.093	0.467	24.47	1.08e-03	1269.66	5.60e-02	4.55	2.01e-04	0.0	0.0
125	10.898	0.092	0.466	2.04e-03	0.0	27.73	1.22e-03	6.32	2.79e-04	0.0	0.0
126	10.967	0.091	0.465	2.92e-03	0.0	0.76	3.36e-05	3233.61	0.1	0.0	0.0
127	11.072	0.090	0.464	1.006e+04	0.4	1.71	7.56e-05	1875.90	8.27e-02	0.0	0.0
128	11.097	0.090	0.464	31.53	1.39e-03	73.26	3.23e-03	120.17	5.30e-03	0.0	0.0
129	11.133	0.090	0.463	1.96	8.65e-05	99.08	4.37e-03	468.13	2.06e-02	0.0	0.0
130	11.154	0.090	0.463	280.42	1.24e-02	0.89	3.94e-05	4298.00	0.2	0.0	0.0
131	11.231	0.089	0.462	1.264e+04	0.6	39.06	1.72e-03	2.334e+04	1.0	0.0	0.0
132	11.264	0.089	0.462	30.17	1.33e-03	0.39	1.73e-05	1.87	8.27e-05	0.0	0.0
133	11.352	0.088	0.461	0.04	1.87e-06	24.51	1.08e-03	19.84	8.75e-04	0.0	0.0
134	11.520	0.087	0.459	0.25	1.11e-05	0.05	2.32e-06	1.536e+04	0.7	0.0	0.0
135	11.535	0.087	0.459	1.20e-05	0.0	0.03	1.52e-06	6.98e-04	0.0	0.0	0.0
136	11.631	0.086	0.458	1.66	7.34e-05	0.37	1.65e-05	3.132e+04	1.4	0.0	0.0
137	11.649	0.086	0.458	0.11	5.00e-06	0.41	1.79e-05	4.044e+04	1.8	0.0	0.0
138	11.681	0.086	0.457	3.46e-04	0.0	61.85	2.73e-03	7.64	3.37e-04	0.0	0.0
139	11.838	0.084	0.456	3.63	1.60e-04	2.62	1.16e-04	1.889e+04	0.8	0.0	0.0
140	11.844	0.084	0.456	8.67	3.82e-04	3.80	1.67e-04	1275.03	5.62e-02	0.0	0.0
141	11.850	0.084	0.456	4.94	2.18e-04	0.15	6.62e-06	0.18	8.01e-06	0.0	0.0
142	12.069	0.083	0.454	538.70	2.38e-02	44.53	1.96e-03	304.66	1.34e-02	0.0	0.0
143	12.108	0.083	0.453	0.83	3.65e-05	4.12	1.82e-04	163.13	7.19e-03	0.0	0.0
144	12.157	0.082	0.453	893.53	3.94e-02	384.36	1.70e-02	3.427e+04	1.5	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
145	12.272	0.081	0.452	5489.03	0.2	318.02	1.40e-02	1.916e+04	0.8	0.0	0.0
146	12.376	0.081	0.451	37.19	1.64e-03	0.82	3.64e-05	6544.92	0.3	0.0	0.0
147	12.400	0.081	0.450	22.80	1.01e-03	1019.16	4.49e-02	664.57	2.93e-02	0.0	0.0
148	12.402	0.081	0.450	18.38	8.11e-04	200.35	8.84e-03	2.87	1.27e-04	0.0	0.0
149	12.487	0.080	0.450	59.41	2.62e-03	0.84	3.72e-05	578.56	2.55e-02	0.0	0.0
150	12.497	0.080	0.450	2168.69	9.56e-02	32.91	1.45e-03	2.073e+04	0.9	0.0	0.0
151	12.571	0.080	0.449	1.16	5.12e-05	0.01	0.0	9857.56	0.4	0.0	0.0
152	12.608	0.079	0.449	1.24e-03	0.0	12.45	5.49e-04	1.194e+04	0.5	0.0	0.0
153	12.714	0.079	0.448	1120.06	4.94e-02	334.63	1.48e-02	7394.82	0.3	0.0	0.0
154	12.827	0.078	0.447	2588.37	0.1	1207.91	5.33e-02	7173.03	0.3	0.0	0.0
155	12.832	0.078	0.447	0.95	4.20e-05	0.75	3.29e-05	4.27	1.88e-04	0.0	0.0
156	12.867	0.078	0.446	2.40	1.06e-04	13.72	6.05e-04	25.79	1.14e-03	0.0	0.0
157	12.972	0.077	0.445	0.40	1.75e-05	0.15	6.71e-06	1213.64	5.35e-02	0.0	0.0
158	13.031	0.077	0.445	471.63	2.08e-02	2011.96	8.87e-02	353.33	1.56e-02	0.0	0.0
159	13.078	0.076	0.444	0.77	3.39e-05	2.67	1.18e-04	2.306e+04	1.0	0.0	0.0
160	13.131	0.076	0.444	2.05	9.05e-05	7.32	3.23e-04	1.064e+04	0.5	0.0	0.0
161	13.184	0.076	0.444	5.29	2.33e-04	154.63	6.82e-03	291.41	1.29e-02	0.0	0.0
162	13.242	0.076	0.443	5.54	2.44e-04	71.38	3.15e-03	4.180e+04	1.8	0.0	0.0
163	13.290	0.075	0.443	0.91	4.03e-05	38.15	1.68e-03	2714.30	0.1	0.0	0.0
164	13.634	0.073	0.440	0.68	3.01e-05	0.43	1.89e-05	0.16	7.25e-06	0.0	0.0
165	13.778	0.073	0.439	98.14	4.33e-03	267.78	1.18e-02	13.06	5.76e-04	0.0	0.0
166	13.830	0.072	0.439	704.17	3.11e-02	8.27	3.65e-04	1.738e+04	0.8	0.0	0.0
167	13.884	0.072	0.438	2.57e-03	0.0	0.08	3.58e-06	2.338e+04	1.0	0.0	0.0
168	13.998	0.071	0.437	1.43	6.32e-05	0.40	1.77e-05	3.340e+04	1.5	0.0	0.0
169	14.022	0.071	0.437	0.08	3.37e-06	0.03	1.15e-06	1.213e+04	0.5	0.0	0.0
170	14.058	0.071	0.437	0.07	3.25e-06	23.19	1.02e-03	1155.89	5.10e-02	0.0	0.0
171	14.197	0.070	0.436	425.94	1.88e-02	13.81	6.09e-04	248.75	1.10e-02	0.0	0.0
172	14.524	0.069	0.434	8607.06	0.4	136.31	6.01e-03	7473.88	0.3	0.0	0.0
173	14.639	0.068	0.433	1686.71	7.44e-02	10.88	4.80e-04	2461.54	0.1	0.0	0.0
174	14.884	0.067	0.431	478.65	2.11e-02	104.18	4.59e-03	14.26	6.29e-04	0.0	0.0
175	14.892	0.067	0.431	3813.57	0.2	849.26	3.75e-02	434.62	1.92e-02	0.0	0.0
176	14.941	0.067	0.431	0.06	2.67e-06	6.84e-03	0.0	107.09	4.72e-03	0.0	0.0
177	14.967	0.067	0.431	0.17	7.52e-06	0.05	2.07e-06	464.59	2.05e-02	0.0	0.0
178	14.972	0.067	0.431	141.86	6.26e-03	25.07	1.11e-03	39.50	1.74e-03	0.0	0.0
179	15.039	0.066	0.430	22.44	9.90e-04	178.07	7.85e-03	55.23	2.44e-03	0.0	0.0
180	15.478	0.065	0.428	9443.67	0.4	43.55	1.92e-03	55.25	2.44e-03	0.0	0.0
181	15.801	0.063	0.426	58.10	2.56e-03	7836.27	0.3	209.90	9.26e-03	0.0	0.0
182	16.004	0.062	0.425	1.76	7.77e-05	6.42	2.83e-04	103.76	4.58e-03	0.0	0.0
183	16.241	0.062	0.423	22.73	1.00e-03	0.41	1.80e-05	17.68	7.80e-04	0.0	0.0
184	16.263	0.061	0.423	234.99	1.04e-02	91.93	4.05e-03	2578.80	0.1	0.0	0.0
185	16.297	0.061	0.423	1.51e-06	0.0	4.09	1.81e-04	0.01	0.0	0.0	0.0
186	16.459	0.061	0.422	3.54	1.56e-04	0.11	5.06e-06	3.178e+04	1.4	0.0	0.0
187	16.742	0.060	0.421	0.25	1.10e-05	0.04	1.68e-06	0.31	1.35e-05	0.0	0.0
188	16.831	0.059	0.420	108.21	4.77e-03	7.72	3.40e-04	2.494e+04	1.1	0.0	0.0
189	16.938	0.059	0.420	4.30e-06	0.0	1.13	4.98e-05	8.49e-03	0.0	0.0	0.0
190	17.054	0.059	0.419	1.75	7.74e-05	85.75	3.78e-03	105.65	4.66e-03	0.0	0.0
191	17.072	0.059	0.419	277.37	1.22e-02	16.78	7.40e-04	0.45	1.96e-05	0.0	0.0
192	17.391	0.058	0.418	205.18	9.05e-03	6316.74	0.3	1.818e+04	0.8	0.0	0.0
193	17.459	0.057	0.417	3.43e-06	0.0	1.09e-03	0.0	6.06e-03	0.0	0.0	0.0
194	17.694	0.057	0.416	1074.15	4.74e-02	15.08	6.65e-04	137.67	6.07e-03	0.0	0.0
195	17.916	0.056	0.415	48.57	2.14e-03	1179.70	5.20e-02	1.361e+04	0.6	0.0	0.0
196	17.953	0.056	0.415	0.0	0.0	408.53	1.80e-02	0.04	1.62e-06	0.0	0.0
197	17.965	0.056	0.415	5.97e-05	0.0	60.17	2.65e-03	0.89	3.94e-05	0.0	0.0
198	18.079	0.055	0.414	1.13e-06	0.0	14.26	6.29e-04	5.82e-03	0.0	0.0	0.0
199	18.209	0.055	0.414	0.53	2.33e-05	1626.48	7.17e-02	4068.42	0.2	0.0	0.0
200	18.444	0.054	0.413	4.74	2.09e-04	6.49	2.86e-04	202.17	8.92e-03	0.0	0.0
Risulta				2.263e+06		2.220e+06		2.170e+06			
In percentuale				99.80		97.90		95.71			

CDC	Tipo	Sigla Id	Note
9	Edk	CDC=Ed (dinamico SLU) alfa=90.00 (ecc. -)	
			categoria suolo: C
			fattore di sito S = 1.324
			ordinata spettro (tratto Tb-Tc) = 0.553 g
			angolo di ingresso:90.00
			eccentricità aggiuntiva: negativa
			periodo proprio T1: 1.292 sec.
			fattore q: 1.500
			fattore per spost. mu d: 1.500
			classe di duttilità CD:

CDC	Tipo	Sigla Id	Note
			numero di modi considerati:200
			combinaz. modale: CQC

Quota	M Sismica x g	Pos. GX	Pos. GY	E agg. X-X	E agg. Y-Y	Pos. KX	Pos. KY	rapp. r/Ls	rapp. ex/rx	rapp. ey/ry
m	daN	m	m	m	m	m	m			
7.22	6.991e+05	49.32	22.50	-5.00	0.0	50.00	22.50	1.095	0.021	0.0
6.50	1.119e+06	49.31	21.87	-5.00	0.0	51.85	22.85	1.306	0.061	0.024
5.00	1.369e+04	77.24	10.41	-1.50	0.0	76.72	11.72	1.381	0.035	0.085
4.67	1.111e+04	76.52	10.17	-1.50	0.0	76.72	11.72	1.381	0.014	0.101
4.50	2.182e+04	40.86	39.92	-3.50	0.0	50.00	30.00	1.474	0.292	0.317
4.00	1.448e+04	76.33	10.14	-1.50	0.0	76.72	11.72	1.381	0.026	0.103
3.50	3.089e+05	95.61	34.13	-0.50	0.0	94.99	33.25	1.305	0.066	0.095
3.33	1.414e+04	76.13	10.10	-1.50	0.0	76.72	11.72	1.381	0.039	0.105
2.67	1.414e+04	76.13	10.10	-1.50	0.0	76.72	11.72	1.381	0.039	0.105
2.00	1.398e+04	76.22	10.08	-1.50	0.0	76.72	11.72	1.381	0.034	0.107
1.75	8296.96	100.00	33.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.33	1.381e+04	76.31	10.06	-1.50	0.0	76.72	11.72	1.381	0.027	0.108
1.17	735.00	100.00	32.79	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.67	1.381e+04	76.31	10.06	-1.50	0.0	76.72	11.72	1.381	0.027	0.108
0.58	735.00	100.00	32.79	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Risulta	2.267e+06									

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	0.752	1.330	0.190	8.560e+05	37.8	59.94	2.64e-03	0.02	1.08e-06	0.0	0.0
2	0.774	1.292	0.196	1.12	4.92e-05	1.004e+06	44.3	8.58e-05	0.0	0.0	0.0
3	0.842	1.188	0.213	23.08	1.02e-03	2.262e+05	10.0	2.82e-03	0.0	0.0	0.0
4	0.898	1.113	0.228	357.79	1.58e-02	3.383e+05	14.9	6.67e-03	0.0	0.0	0.0
5	0.942	1.061	0.239	5.430e+05	23.9	0.48	2.13e-05	2.27e-05	0.0	0.0	0.0
6	0.958	1.044	0.243	4268.61	0.2	6.129e+04	2.7	2.88e-04	0.0	0.0	0.0
7	0.995	1.005	0.252	5.722e+05	25.2	393.97	1.74e-02	0.05	2.30e-06	0.0	0.0
8	1.038	0.963	0.263	1686.21	7.44e-02	8.060e+04	3.6	9.20e-03	0.0	0.0	0.0
9	1.123	0.890	0.285	141.61	6.25e-03	4.137e+04	1.8	8.03e-03	0.0	0.0	0.0
10	1.202	0.832	0.305	0.04	1.91e-06	9.053e+04	4.0	4.82e-03	0.0	0.0	0.0
11	1.246	0.802	0.316	2.745e+04	1.2	0.06	2.47e-06	3.00e-03	0.0	0.0	0.0
12	1.248	0.801	0.316	1.35	5.94e-05	0.29	1.28e-05	3.98e-06	0.0	0.0	0.0
13	1.266	0.790	0.321	11.71	5.17e-04	3.81	1.68e-04	0.02	0.0	0.0	0.0
14	1.292	0.774	0.327	85.07	3.75e-03	1.193e+05	5.3	0.11	4.98e-06	0.0	0.0
15	1.299	0.770	0.329	3.78e-05	0.0	8.00e-06	0.0	0.03	1.43e-06	0.0	0.0
16	1.354	0.739	0.343	1.356e+04	0.6	3.06	1.35e-04	6.72e-03	0.0	0.0	0.0
17	1.363	0.734	0.345	13.42	5.92e-04	1.207e+04	0.5	0.02	0.0	0.0	0.0
18	1.459	0.685	0.370	171.79	7.58e-03	2.546e+04	1.1	0.07	3.12e-06	0.0	0.0
19	1.704	0.587	0.432	0.29	1.28e-05	7895.19	0.3	0.13	5.62e-06	0.0	0.0
20	2.091	0.478	0.530	1485.74	6.55e-02	457.03	2.02e-02	13.43	5.92e-04	0.0	0.0
21	2.520	0.397	0.553	9.48	4.18e-04	100.37	4.43e-03	0.10	4.56e-06	0.0	0.0
22	2.606	0.384	0.553	96.63	4.26e-03	2.959e+04	1.3	0.33	1.46e-05	0.0	0.0
23	2.708	0.369	0.553	1394.04	6.15e-02	197.94	8.73e-03	1.83	8.07e-05	0.0	0.0
24	2.771	0.361	0.553	4.891e+04	2.2	356.24	1.57e-02	1.77	7.82e-05	0.0	0.0
25	2.853	0.350	0.553	2544.65	0.1	720.39	3.18e-02	3.30	1.46e-04	0.0	0.0
26	2.984	0.335	0.553	812.46	3.58e-02	3104.07	0.1	7.58	3.35e-04	0.0	0.0
27	3.167	0.316	0.553	807.01	3.56e-02	25.37	1.12e-03	0.04	1.75e-06	0.0	0.0
28	3.210	0.312	0.553	6.42	2.83e-04	4235.47	0.2	0.30	1.31e-05	0.0	0.0
29	3.310	0.302	0.553	530.82	2.34e-02	2.474e+04	1.1	0.50	2.21e-05	0.0	0.0
30	3.334	0.300	0.553	1.852e+04	0.8	628.09	2.77e-02	5.35e-03	0.0	0.0	0.0
31	3.406	0.294	0.553	7697.99	0.3	3.92	1.73e-04	0.15	6.61e-06	0.0	0.0
32	3.449	0.290	0.553	15.76	6.95e-04	5.248e+04	2.3	15.85	6.99e-04	0.0	0.0
33	3.669	0.273	0.553	8.32e-03	0.0	499.11	2.20e-02	0.01	0.0	0.0	0.0
34	3.837	0.261	0.553	973.39	4.29e-02	68.57	3.02e-03	9.25	4.08e-04	0.0	0.0
35	3.899	0.256	0.553	55.26	2.44e-03	1.392e+04	0.6	26.01	1.15e-03	0.0	0.0
36	3.952	0.253	0.553	1.21e-05	0.0	0.02	0.0	758.72	3.35e-02	0.0	0.0
37	4.302	0.232	0.553	1.16e-04	0.0	1328.18	5.86e-02	0.02	0.0	0.0	0.0
38	4.420	0.226	0.553	4.605e+04	2.0	175.67	7.75e-03	5136.01	0.2	0.0	0.0
39	4.426	0.226	0.553	452.38	2.00e-02	3.79	1.67e-04	4.237e+05	18.7	0.0	0.0
40	4.457	0.224	0.553	116.52	5.14e-03	141.08	6.22e-03	3823.29	0.2	0.0	0.0
41	4.497	0.222	0.553	122.86	5.42e-03	6465.29	0.3	1.564e+04	0.7	0.0	0.0
42	4.517	0.221	0.553	0.04	1.62e-06	1950.55	8.60e-02	9.749e+04	4.3	0.0	0.0
43	4.547	0.220	0.553	0.18	7.76e-06	11.15	4.92e-04	4865.23	0.2	0.0	0.0
44	4.574	0.219	0.553	7.90	3.48e-04	231.90	1.02e-02	4548.26	0.2	0.0	0.0
45	4.654	0.215	0.553	4.65	2.05e-04	49.46	2.18e-03	3.316e+04	1.5	0.0	0.0
46	4.707	0.212	0.553	1.54	6.78e-05	16.04	7.07e-04	2736.90	0.1	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
47	4.813	0.208	0.553	12.95	5.71e-04	5.12	2.26e-04	1.689e+04	0.7	0.0	0.0
48	4.834	0.207	0.553	27.11	1.20e-03	11.87	5.23e-04	53.02	2.34e-03	0.0	0.0
49	4.860	0.206	0.553	597.77	2.64e-02	272.53	1.20e-02	935.71	4.13e-02	0.0	0.0
50	5.014	0.199	0.553	21.34	9.41e-04	94.55	4.17e-03	1861.35	8.21e-02	0.0	0.0
51	5.017	0.199	0.553	3.06	1.35e-04	12.17	5.37e-04	824.28	3.64e-02	0.0	0.0
52	5.038	0.198	0.553	1445.51	6.38e-02	4607.46	0.2	98.78	4.36e-03	0.0	0.0
53	5.093	0.196	0.553	0.0	0.0	4.07	1.80e-04	7.50e-06	0.0	0.0	0.0
54	5.295	0.189	0.553	0.78	3.45e-05	293.62	1.30e-02	42.48	1.87e-03	0.0	0.0
55	5.354	0.187	0.553	2.77e-06	0.0	9.81e-03	0.0	44.84	1.98e-03	0.0	0.0
56	5.387	0.186	0.553	10.05	4.43e-04	3194.65	0.1	252.97	1.12e-02	0.0	0.0
57	5.625	0.178	0.553	0.0	0.0	3.44	1.52e-04	1144.79	5.05e-02	0.0	0.0
58	5.785	0.173	0.553	259.94	1.15e-02	1014.35	4.47e-02	279.61	1.23e-02	0.0	0.0
59	5.811	0.172	0.553	72.05	3.18e-03	2216.14	9.77e-02	130.82	5.77e-03	0.0	0.0
60	5.931	0.169	0.553	4.36e-04	0.0	0.39	1.71e-05	3.314e+05	14.6	0.0	0.0
61	5.938	0.168	0.553	0.08	3.44e-06	4.79	2.11e-04	2.401e+05	10.6	0.0	0.0
62	5.979	0.167	0.553	4.17e-03	0.0	0.12	5.48e-06	2043.20	9.01e-02	0.0	0.0
63	5.987	0.167	0.553	0.34	1.50e-05	4.88	2.15e-04	637.05	2.81e-02	0.0	0.0
64	6.050	0.165	0.553	0.06	2.58e-06	0.66	2.92e-05	1.063e+05	4.7	0.0	0.0
65	6.061	0.165	0.553	0.80	3.52e-05	0.11	4.73e-06	8.005e+04	3.5	0.0	0.0
66	6.121	0.163	0.553	0.14	6.37e-06	0.14	6.31e-06	261.03	1.15e-02	0.0	0.0
67	6.139	0.163	0.553	1.72	7.58e-05	3.87	1.71e-04	722.92	3.19e-02	0.0	0.0
68	6.234	0.160	0.553	3.00	1.32e-04	6.06	2.67e-04	2.121e+04	0.9	0.0	0.0
69	6.249	0.160	0.553	3.89	1.71e-04	8.03	3.54e-04	483.76	2.13e-02	0.0	0.0
70	6.263	0.160	0.553	0.02	0.0	3.75	1.66e-04	1.421e+04	0.6	0.0	0.0
71	6.294	0.159	0.553	0.06	2.86e-06	16.80	7.41e-04	68.45	3.02e-03	0.0	0.0
72	6.327	0.158	0.553	0.34	1.49e-05	0.45	1.98e-05	35.74	1.58e-03	0.0	0.0
73	6.342	0.158	0.553	3.18	1.40e-04	1.71	7.53e-05	431.25	1.90e-02	0.0	0.0
74	6.485	0.154	0.553	2.330e+04	1.0	457.04	2.02e-02	269.89	1.19e-02	0.0	0.0
75	6.490	0.154	0.553	1385.40	6.11e-02	23.11	1.02e-03	7144.83	0.3	0.0	0.0
76	6.494	0.154	0.553	2.50	1.10e-04	7.04e-05	0.0	0.17	7.44e-06	0.0	0.0
77	6.508	0.154	0.553	16.19	7.14e-04	0.37	1.64e-05	6773.12	0.3	0.0	0.0
78	6.531	0.153	0.553	4.33	1.91e-04	0.09	3.92e-06	157.12	6.93e-03	0.0	0.0
79	6.541	0.153	0.553	1.17	5.15e-05	0.12	5.15e-06	163.33	7.20e-03	0.0	0.0
80	6.696	0.149	0.548	5153.66	0.2	0.06	2.53e-06	34.89	1.54e-03	0.0	0.0
81	6.775	0.148	0.545	6092.28	0.3	1624.97	7.17e-02	168.30	7.42e-03	0.0	0.0
82	6.791	0.147	0.545	0.94	4.14e-05	0.04	1.82e-06	1293.40	5.70e-02	0.0	0.0
83	6.814	0.147	0.544	8.25e-04	0.0	0.71	3.11e-05	2226.92	9.82e-02	0.0	0.0
84	6.816	0.147	0.544	5.21e-04	0.0	0.53	2.35e-05	19.77	8.72e-04	0.0	0.0
85	6.820	0.147	0.544	0.05	2.07e-06	2.77	1.22e-04	228.09	1.01e-02	0.0	0.0
86	6.969	0.143	0.540	3402.16	0.2	10.38	4.58e-04	16.71	7.37e-04	0.0	0.0
87	7.017	0.143	0.538	2.49	1.10e-04	147.97	6.53e-03	8.79	3.88e-04	0.0	0.0
88	7.185	0.139	0.534	166.03	7.32e-03	782.71	3.45e-02	0.16	6.86e-06	0.0	0.0
89	7.365	0.136	0.529	3.33e-06	0.0	700.77	3.09e-02	2.01	8.88e-05	0.0	0.0
90	7.447	0.134	0.527	4.03e-06	0.0	1299.40	5.73e-02	19.62	8.66e-04	0.0	0.0
91	7.547	0.132	0.524	20.02	8.83e-04	1.463e+04	0.6	1245.18	5.49e-02	0.0	0.0
92	7.636	0.131	0.522	0.0	0.0	336.58	1.48e-02	6.10e-04	0.0	0.0	0.0
93	7.942	0.126	0.515	639.17	2.82e-02	6.54	2.89e-04	8.205e+04	3.6	0.0	0.0
94	7.943	0.126	0.515	2144.41	9.46e-02	346.41	1.53e-02	2.050e+04	0.9	0.0	0.0
95	8.003	0.125	0.513	164.34	7.25e-03	8.55	3.77e-04	347.57	1.53e-02	0.0	0.0
96	8.144	0.123	0.510	1.43e-06	0.0	32.55	1.44e-03	0.04	1.78e-06	0.0	0.0
97	8.316	0.120	0.507	3.47e-03	0.0	3.31	1.46e-04	0.06	2.77e-06	0.0	0.0
98	8.356	0.120	0.506	0.33	1.43e-05	3859.79	0.2	478.63	2.11e-02	0.0	0.0
99	8.393	0.119	0.505	418.33	1.85e-02	143.88	6.35e-03	4.90	2.16e-04	0.0	0.0
100	8.556	0.117	0.502	1.10e-04	0.0	6.54	2.88e-04	0.23	1.01e-05	0.0	0.0
101	8.836	0.113	0.497	3.77e-03	0.0	3.41e-03	0.0	0.45	2.00e-05	0.0	0.0
102	8.909	0.112	0.495	691.40	3.05e-02	11.32	4.99e-04	3.46	1.52e-04	0.0	0.0
103	9.072	0.110	0.492	0.06	2.47e-06	0.29	1.26e-05	0.06	2.56e-06	0.0	0.0
104	9.240	0.108	0.490	3.76e-05	0.0	85.43	3.77e-03	4.30	1.90e-04	0.0	0.0
105	9.283	0.108	0.489	0.44	1.96e-05	30.48	1.34e-03	15.21	6.71e-04	0.0	0.0
106	9.307	0.107	0.488	11.00	4.85e-04	26.00	1.15e-03	5.66	2.50e-04	0.0	0.0
107	9.351	0.107	0.488	6.15	2.71e-04	0.44	1.92e-05	2.657e+04	1.2	0.0	0.0
108	9.404	0.106	0.487	0.02	0.0	6.91	3.05e-04	34.98	1.54e-03	0.0	0.0
109	9.409	0.106	0.487	0.59	2.60e-05	283.21	1.25e-02	171.45	7.56e-03	0.0	0.0
110	9.490	0.105	0.486	9.15e-03	0.0	1300.43	5.74e-02	49.49	2.18e-03	0.0	0.0
111	9.617	0.104	0.484	0.67	2.96e-05	1506.79	6.65e-02	1.58	6.99e-05	0.0	0.0
112	9.804	0.102	0.481	2.45e-05	0.0	3.40	1.50e-04	4.87	2.15e-04	0.0	0.0
113	9.897	0.101	0.479	1.72	7.58e-05	115.58	5.10e-03	175.35	7.73e-03	0.0	0.0
114	9.948	0.101	0.479	0.73	3.23e-05	0.32	1.40e-05	1.805e+04	0.8	0.0	0.0
115	10.086	0.099	0.477	2815.53	0.1	0.0	0.0	0.85	3.77e-05	0.0	0.0
116	10.151	0.099	0.476	1.36e-03	0.0	7.09	3.13e-04	17.01	7.50e-04	0.0	0.0
117	10.336	0.097	0.473	5.87	2.59e-04	109.45	4.83e-03	1.64	7.25e-05	0.0	0.0
118	10.336	0.097	0.473	0.01	0.0	159.65	7.04e-03	0.02	0.0	0.0	0.0
119	10.368	0.096	0.473	4.19	1.85e-04	9.21	4.06e-04	0.02	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
120	10.384	0.096	0.473	761.85	3.36e-02	4420.09	0.2	2223.66	9.81e-02	0.0	0.0
121	10.474	0.095	0.471	0.07	3.13e-06	17.86	7.88e-04	5.323e+04	2.3	0.0	0.0
122	10.509	0.095	0.471	0.04	1.56e-06	44.93	1.98e-03	9.35	4.12e-04	0.0	0.0
123	10.630	0.094	0.469	0.10	4.28e-06	147.16	6.49e-03	0.74	3.28e-05	0.0	0.0
124	10.716	0.093	0.468	1.10	4.84e-05	17.49	7.71e-04	6.46	2.85e-04	0.0	0.0
125	10.823	0.092	0.467	80.94	3.57e-03	0.96	4.22e-05	55.05	2.43e-03	0.0	0.0
126	10.964	0.091	0.465	0.20	8.64e-06	0.10	4.47e-06	3246.78	0.1	0.0	0.0
127	10.999	0.091	0.465	416.31	1.84e-02	73.19	3.23e-03	0.43	1.88e-05	0.0	0.0
128	11.037	0.091	0.465	881.45	3.89e-02	0.07	3.15e-06	2.91	1.28e-04	0.0	0.0
129	11.039	0.091	0.465	1.322e+04	0.6	170.48	7.52e-03	53.64	2.37e-03	0.0	0.0
130	11.180	0.089	0.463	4894.79	0.2	219.57	9.68e-03	3.053e+04	1.3	0.0	0.0
131	11.264	0.089	0.462	34.75	1.53e-03	1.65e-04	0.0	0.01	0.0	0.0	0.0
132	11.497	0.087	0.459	44.60	1.97e-03	190.75	8.41e-03	118.64	5.23e-03	0.0	0.0
133	11.519	0.087	0.459	0.14	6.15e-06	0.02	1.05e-06	1.486e+04	0.7	0.0	0.0
134	11.535	0.087	0.459	0.0	0.0	9.72e-04	0.0	8.09e-04	0.0	0.0	0.0
135	11.628	0.086	0.458	0.75	3.33e-05	0.09	4.11e-06	3.183e+04	1.4	0.0	0.0
136	11.649	0.086	0.458	0.06	2.49e-06	2.32	1.02e-04	3.999e+04	1.8	0.0	0.0
137	11.838	0.084	0.456	16.41	7.24e-04	1.46	6.44e-05	1.790e+04	0.8	0.0	0.0
138	11.842	0.084	0.456	31.33	1.38e-03	17.91	7.90e-04	2543.01	0.1	0.0	0.0
139	11.849	0.084	0.456	24.41	1.08e-03	4.27	1.88e-04	15.29	6.74e-04	0.0	0.0
140	11.897	0.084	0.455	17.27	7.62e-04	531.90	2.35e-02	297.60	1.31e-02	0.0	0.0
141	12.016	0.083	0.454	452.34	2.00e-02	749.00	3.30e-02	859.43	3.79e-02	0.0	0.0
142	12.108	0.083	0.453	16.11	7.11e-04	6.62	2.92e-04	41.95	1.85e-03	0.0	0.0
143	12.149	0.082	0.453	2291.99	0.1	295.02	1.30e-02	2.978e+04	1.3	0.0	0.0
144	12.207	0.082	0.452	359.75	1.59e-02	29.13	1.28e-03	1565.59	6.90e-02	0.0	0.0
145	12.254	0.082	0.452	6096.54	0.3	249.19	1.10e-02	6769.71	0.3	0.0	0.0
146	12.371	0.081	0.451	36.44	1.61e-03	1.51	6.66e-05	7172.21	0.3	0.0	0.0
147	12.425	0.080	0.450	11.67	5.15e-04	20.68	9.12e-04	444.12	1.96e-02	0.0	0.0
148	12.457	0.080	0.450	19.94	8.80e-04	1111.10	4.90e-02	714.43	3.15e-02	0.0	0.0
149	12.497	0.080	0.450	1998.72	8.82e-02	62.71	2.77e-03	2.958e+04	1.3	0.0	0.0
150	12.572	0.080	0.449	0.06	2.58e-06	0.01	0.0	1.037e+04	0.5	0.0	0.0
151	12.608	0.079	0.449	0.02	0.0	15.24	6.72e-04	1.197e+04	0.5	0.0	0.0
152	12.692	0.079	0.448	2.09	9.21e-05	48.35	2.13e-03	7.20	3.17e-04	0.0	0.0
153	12.710	0.079	0.448	3280.08	0.1	366.14	1.61e-02	3442.50	0.2	0.0	0.0
154	12.762	0.078	0.447	2358.05	0.1	557.52	2.46e-02	1.379e+04	0.6	0.0	0.0
155	12.832	0.078	0.447	0.03	1.17e-06	3.65e-03	0.0	0.04	1.70e-06	0.0	0.0
156	12.969	0.077	0.445	9.10e-04	0.0	0.44	1.93e-05	933.76	4.12e-02	0.0	0.0
157	13.078	0.076	0.444	0.01	0.0	0.14	6.37e-06	2.360e+04	1.0	0.0	0.0
158	13.118	0.076	0.444	170.11	7.50e-03	557.87	2.46e-02	6555.76	0.3	0.0	0.0
159	13.136	0.076	0.444	169.35	7.47e-03	469.25	2.07e-02	4881.63	0.2	0.0	0.0
160	13.242	0.076	0.443	51.91	2.29e-03	61.42	2.71e-03	4.133e+04	1.8	0.0	0.0
161	13.285	0.075	0.443	14.07	6.20e-04	44.16	1.95e-03	2844.69	0.1	0.0	0.0
162	13.558	0.074	0.441	0.02	0.0	8.99	3.96e-04	2.81	1.24e-04	0.0	0.0
163	13.634	0.073	0.440	2.24	9.87e-05	0.80	3.53e-05	1.26	5.55e-05	0.0	0.0
164	13.826	0.072	0.439	730.25	3.22e-02	38.73	1.71e-03	1.731e+04	0.8	0.0	0.0
165	13.881	0.072	0.438	3.84e-04	0.0	0.10	4.47e-06	2.422e+04	1.1	0.0	0.0
166	13.908	0.072	0.438	42.97	1.90e-03	709.78	3.13e-02	651.33	2.87e-02	0.0	0.0
167	13.999	0.071	0.437	0.54	2.40e-05	0.68	3.01e-05	3.425e+04	1.5	0.0	0.0
168	14.021	0.071	0.437	14.58	6.43e-04	76.61	3.38e-03	1.100e+04	0.5	0.0	0.0
169	14.069	0.071	0.437	62.85	2.77e-03	330.09	1.46e-02	532.71	2.35e-02	0.0	0.0
170	14.174	0.071	0.436	258.85	1.14e-02	72.35	3.19e-03	107.15	4.73e-03	0.0	0.0
171	14.512	0.069	0.434	9381.78	0.4	2.87	1.26e-04	1.255e+04	0.6	0.0	0.0
172	14.616	0.068	0.433	6.01e-05	0.0	2.99e-05	0.0	135.81	5.99e-03	0.0	0.0
173	14.756	0.068	0.432	1.94e-03	0.0	0.20	8.60e-06	6.28	2.77e-04	0.0	0.0
174	14.935	0.067	0.431	24.87	1.10e-03	0.64	2.83e-05	1.64	7.23e-05	0.0	0.0
175	14.949	0.067	0.431	0.77	3.38e-05	0.83	3.68e-05	0.71	3.15e-05	0.0	0.0
176	14.960	0.067	0.431	3605.28	0.2	100.99	4.45e-03	1885.19	8.31e-02	0.0	0.0
177	14.981	0.067	0.431	4.25	1.87e-04	1.24e-03	0.0	527.25	2.33e-02	0.0	0.0
178	15.061	0.066	0.430	0.02	0.0	2.47	1.09e-04	21.40	9.44e-04	0.0	0.0
179	15.431	0.065	0.428	5952.78	0.3	3934.02	0.2	3.43	1.51e-04	0.0	0.0
180	15.538	0.064	0.427	4725.13	0.2	4322.10	0.2	5.95	2.63e-04	0.0	0.0
181	16.051	0.062	0.424	80.25	3.54e-03	169.70	7.48e-03	9.12	4.02e-04	0.0	0.0
182	16.058	0.062	0.424	1.06e-05	0.0	0.03	1.24e-06	19.15	8.45e-04	0.0	0.0
183	16.111	0.062	0.424	1.05e-05	0.0	6.60e-05	0.0	2.27	1.00e-04	0.0	0.0
184	16.268	0.061	0.423	120.14	5.30e-03	113.79	5.02e-03	2532.22	0.1	0.0	0.0
185	16.454	0.061	0.422	0.82	3.64e-05	17.62	7.77e-04	3.079e+04	1.4	0.0	0.0
186	16.742	0.060	0.421	0.43	1.90e-05	6.96e-06	0.0	0.40	1.75e-05	0.0	0.0
187	16.761	0.060	0.421	101.34	4.47e-03	18.68	8.24e-04	6023.56	0.3	0.0	0.0
188	16.826	0.059	0.420	29.89	1.32e-03	2.76	1.22e-04	1.803e+04	0.8	0.0	0.0
189	16.928	0.059	0.420	1.62	7.15e-05	51.07	2.25e-03	128.72	5.68e-03	0.0	0.0
190	17.086	0.059	0.419	48.69	2.15e-03	24.86	1.10e-03	5.84	2.58e-04	0.0	0.0
191	17.167	0.058	0.419	10.59	4.67e-04	1291.72	5.70e-02	750.73	3.31e-02	0.0	0.0
192	17.189	0.058	0.418	8.85e-04	0.0	537.99	2.37e-02	0.50	2.21e-05	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
193	17.359	0.058	0.418	372.78	1.64e-02	469.42	2.07e-02	80.20	3.54e-03	0.0	0.0
194	17.564	0.057	0.417	3.16	1.39e-04	2767.79	0.1	5289.69	0.2	0.0	0.0
195	17.610	0.057	0.417	5.82	2.57e-04	2410.12	0.1	2430.30	0.1	0.0	0.0
196	17.696	0.057	0.416	1056.86	4.66e-02	139.75	6.16e-03	254.77	1.12e-02	0.0	0.0
197	18.027	0.055	0.415	12.08	5.33e-04	2.14	9.46e-05	6655.09	0.3	0.0	0.0
198	18.056	0.055	0.415	24.82	1.09e-03	9.60	4.23e-04	1.872e+04	0.8	0.0	0.0
199	18.139	0.055	0.414	1.78e-05	0.0	0.72	3.16e-05	0.04	1.83e-06	0.0	0.0
200	18.271	0.055	0.414	3.49	1.54e-04	7.14	3.15e-04	1354.68	5.97e-02	0.0	0.0
Risulta				2.263e+06		2.217e+06		2.170e+06			
In percentuale				99.81		97.77		95.73			

CDC	Tipo	Sigla Id	Note
10	Edk	CDC=Ed (dinamico SLD) alfa=0.0 (ecc. +)	
			categoria suolo: C
			fattore di sito S = 1.500
			ordinata spettro (tratto Tb-Tc) = 0.383 g
			angolo di ingresso:0.0
			eccentricità aggiuntiva: positiva
			periodo proprio T1: 1.332 sec.
			numero di modi considerati:200
			combinaz. modale: CQC

Quota	M Sismica x g	Pos. GX	Pos. GY	E agg. X-X	E agg. Y-Y	Pos. KX	Pos. KY	rapp. r/Ls	rapp. ex/rx	rapp. ey/ry
m	daN	m	m	m	m	m	m			
7.22	6.991e+05	49.32	22.50	0.0	0.0	50.00	22.50	1.095	0.021	0.0
6.50	1.119e+06	49.31	21.87	0.0	-2.25	51.85	22.85	1.306	0.061	0.024
5.00	1.369e+04	77.24	10.41	0.0	-1.11	76.72	11.72	1.381	0.035	0.085
4.67	1.111e+04	76.52	10.17	0.0	-1.11	76.72	11.72	1.381	0.014	0.101
4.50	2.182e+04	40.86	39.92	0.0	-1.13	50.00	30.00	1.474	0.292	0.317
4.00	1.448e+04	76.33	10.14	0.0	-1.11	76.72	11.72	1.381	0.026	0.103
3.50	3.089e+05	95.61	34.13	0.0	-1.13	94.99	33.25	1.305	0.066	0.095
3.33	1.414e+04	76.13	10.10	0.0	-1.11	76.72	11.72	1.381	0.039	0.105
2.67	1.414e+04	76.13	10.10	0.0	-1.11	76.72	11.72	1.381	0.039	0.105
2.00	1.398e+04	76.22	10.08	0.0	-1.11	76.72	11.72	1.381	0.034	0.107
1.75	8296.96	100.00	33.00	0.0	-0.13	0.0	0.0	0.0	0.0	0.0
1.33	1.381e+04	76.31	10.06	0.0	-1.11	76.72	11.72	1.381	0.027	0.108
1.17	735.00	100.00	32.79	0.0	-0.13	0.0	0.0	0.0	0.0	0.0
0.67	1.381e+04	76.31	10.06	0.0	-1.11	76.72	11.72	1.381	0.027	0.108
0.58	735.00	100.00	32.79	0.0	-0.13	0.0	0.0	0.0	0.0	0.0
Risulta	2.267e+06									

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	0.751	1.332	0.126	8.523e+05	37.6	168.15	7.42e-03	0.02	1.06e-06	0.0	0.0
2	0.825	1.213	0.138	86.74	3.83e-03	1.402e+06	61.8	2.25e-03	0.0	0.0	0.0
3	0.853	1.173	0.143	521.00	2.30e-02	9.787e+04	4.3	4.50e-03	0.0	0.0	0.0
4	0.897	1.114	0.150	5.983e+05	26.4	77.63	3.42e-03	2.04e-05	0.0	0.0	0.0
5	0.898	1.113	0.150	74.78	3.30e-03	1.520e+05	6.7	1.36e-04	0.0	0.0	0.0
6	0.963	1.039	0.161	780.90	3.44e-02	5535.28	0.2	4.01e-03	0.0	0.0	0.0
7	1.039	0.962	0.174	8807.99	0.4	1.397e+05	6.2	8.02e-05	0.0	0.0	0.0
8	1.052	0.950	0.176	5.137e+05	22.7	1.011e+04	0.4	0.05	2.14e-06	0.0	0.0
9	1.111	0.900	0.186	613.54	2.71e-02	3.584e+04	1.6	0.03	1.31e-06	0.0	0.0
10	1.187	0.843	0.199	1135.92	5.01e-02	1.092e+05	4.8	0.14	5.97e-06	0.0	0.0
11	1.217	0.821	0.204	1.512e+04	0.7	0.01	0.0	1.34e-03	0.0	0.0	0.0
12	1.276	0.784	0.214	286.83	1.27e-02	1541.48	6.80e-02	0.03	1.50e-06	0.0	0.0
13	1.283	0.779	0.215	1.212e+04	0.5	0.07	3.15e-06	1.89e-03	0.0	0.0	0.0
14	1.322	0.757	0.221	1.430e+04	0.6	0.68	2.99e-05	6.14e-03	0.0	0.0	0.0
15	1.367	0.732	0.229	303.05	1.34e-02	1.715e+04	0.8	0.02	0.0	0.0	0.0
16	1.411	0.709	0.236	8.35	3.68e-04	1.800e+04	0.8	2.16e-04	0.0	0.0	0.0
17	1.453	0.688	0.243	6.77e-05	0.0	0.0	0.0	0.04	1.88e-06	0.0	0.0
18	1.466	0.682	0.246	2.98	1.32e-04	1776.75	7.84e-02	3.70e-03	0.0	0.0	0.0
19	1.469	0.681	0.246	0.82	3.60e-05	8814.46	0.4	0.11	4.98e-06	0.0	0.0
20	1.923	0.520	0.322	1481.17	6.53e-02	1165.80	5.14e-02	8.36	3.69e-04	0.0	0.0
21	2.567	0.390	0.383	306.90	1.35e-02	13.14	5.80e-04	1.53	6.74e-05	0.0	0.0
22	2.623	0.381	0.383	130.95	5.78e-03	2.755e+04	1.2	0.27	1.19e-05	0.0	0.0
23	2.661	0.376	0.383	4.008e+04	1.8	47.66	2.10e-03	3.40	1.50e-04	0.0	0.0
24	2.703	0.370	0.383	5261.60	0.2	224.84	9.92e-03	3.14	1.38e-04	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
25	2.847	0.351	0.383	322.81	1.42e-02	46.53	2.05e-03	8.97	3.96e-04	0.0	0.0
26	2.876	0.348	0.383	2.484e+04	1.1	124.21	5.48e-03	0.04	1.60e-06	0.0	0.0
27	2.916	0.343	0.383	287.05	1.27e-02	1485.63	6.55e-02	3.95e-06	0.0	0.0	0.0
28	2.999	0.333	0.383	101.14	4.46e-03	297.21	1.31e-02	2.42	1.07e-04	0.0	0.0
29	3.108	0.322	0.383	543.44	2.40e-02	3.968e+04	1.7	0.99	4.37e-05	0.0	0.0
30	3.237	0.309	0.383	0.31	1.37e-05	3.409e+04	1.5	6.87	3.03e-04	0.0	0.0
31	3.394	0.295	0.383	0.31	1.36e-05	4105.07	0.2	0.28	1.25e-05	0.0	0.0
32	3.611	0.277	0.383	1.85	8.16e-05	1.731e+04	0.8	18.60	8.20e-04	0.0	0.0
33	3.822	0.262	0.383	651.69	2.87e-02	144.18	6.36e-03	4.31	1.90e-04	0.0	0.0
34	3.922	0.255	0.383	0.01	0.0	160.60	7.08e-03	0.03	1.38e-06	0.0	0.0
35	4.073	0.246	0.383	1622.51	7.16e-02	6349.14	0.3	212.11	9.36e-03	0.0	0.0
36	4.155	0.241	0.383	5.547e+04	2.4	1829.13	8.07e-02	118.59	5.23e-03	0.0	0.0
37	4.279	0.234	0.383	4.97e-05	0.0	0.04	1.55e-06	8914.72	0.4	0.0	0.0
38	4.425	0.226	0.383	144.44	6.37e-03	220.41	9.72e-03	4.029e+05	17.8	0.0	0.0
39	4.447	0.225	0.383	512.62	2.26e-02	840.95	3.71e-02	1.135e+04	0.5	0.0	0.0
40	4.479	0.223	0.383	514.47	2.27e-02	906.19	4.00e-02	39.09	1.72e-03	0.0	0.0
41	4.499	0.222	0.383	0.49	2.15e-05	113.28	5.00e-03	99.20	4.38e-03	0.0	0.0
42	4.522	0.221	0.383	76.36	3.37e-03	177.96	7.85e-03	1.261e+05	5.6	0.0	0.0
43	4.575	0.219	0.383	4.95	2.18e-04	24.08	1.06e-03	4553.70	0.2	0.0	0.0
44	4.650	0.215	0.383	1.68	7.39e-05	1.11	4.90e-05	3.852e+04	1.7	0.0	0.0
45	4.654	0.215	0.383	1.12e-04	0.0	1104.17	4.87e-02	0.70	3.09e-05	0.0	0.0
46	4.704	0.213	0.383	2.76	1.22e-04	14.03	6.19e-04	2803.68	0.1	0.0	0.0
47	4.791	0.209	0.383	21.83	9.63e-04	529.08	2.33e-02	3778.88	0.2	0.0	0.0
48	4.817	0.208	0.383	13.22	5.83e-04	79.34	3.50e-03	9495.81	0.4	0.0	0.0
49	4.836	0.207	0.383	8.65	3.82e-04	27.98	1.23e-03	681.61	3.01e-02	0.0	0.0
50	4.937	0.203	0.383	4.06e-05	0.0	0.10	4.57e-06	114.70	5.06e-03	0.0	0.0
51	5.013	0.199	0.383	9.39	4.14e-04	17.80	7.85e-04	1789.83	7.89e-02	0.0	0.0
52	5.018	0.199	0.383	0.49	2.15e-05	0.81	3.56e-05	1064.00	4.69e-02	0.0	0.0
53	5.103	0.196	0.383	3474.63	0.2	7564.13	0.3	54.71	2.41e-03	0.0	0.0
54	5.360	0.187	0.383	34.56	1.52e-03	2469.09	0.1	190.04	8.38e-03	0.0	0.0
55	5.714	0.175	0.383	0.0	0.0	1.24	5.46e-05	4.13e-04	0.0	0.0	0.0
56	5.783	0.173	0.383	358.23	1.58e-02	357.80	1.58e-02	6.82	3.01e-04	0.0	0.0
57	5.820	0.172	0.383	7.39e-04	0.0	2836.27	0.1	605.44	2.67e-02	0.0	0.0
58	5.895	0.170	0.383	0.09	4.16e-06	75.47	3.33e-03	7.660e+04	3.4	0.0	0.0
59	5.897	0.170	0.383	0.10	4.28e-06	77.45	3.42e-03	994.85	4.39e-02	0.0	0.0
60	5.933	0.169	0.383	0.20	9.02e-06	6.36	2.81e-04	1.069e+05	4.7	0.0	0.0
61	5.941	0.168	0.383	1.76	7.76e-05	0.08	3.54e-06	3.862e+05	17.0	0.0	0.0
62	5.979	0.167	0.383	8.73e-03	0.0	1.47	6.48e-05	2871.89	0.1	0.0	0.0
63	5.980	0.167	0.383	0.51	2.24e-05	3.87	1.71e-04	242.59	1.07e-02	0.0	0.0
64	5.988	0.167	0.383	13.58	5.99e-04	5.37	2.37e-04	1123.29	4.95e-02	0.0	0.0
65	6.050	0.165	0.383	4.20	1.85e-04	1.60	7.07e-05	1.065e+05	4.7	0.0	0.0
66	6.054	0.165	0.383	5645.76	0.2	24.73	1.09e-03	8308.11	0.4	0.0	0.0
67	6.062	0.165	0.383	886.18	3.91e-02	1.25	5.50e-05	7.349e+04	3.2	0.0	0.0
68	6.122	0.163	0.383	5.27e-03	0.0	0.10	4.58e-06	65.00	2.87e-03	0.0	0.0
69	6.140	0.163	0.383	8.35	3.68e-04	0.22	9.79e-06	537.21	2.37e-02	0.0	0.0
70	6.186	0.162	0.383	0.70	3.09e-05	0.04	1.84e-06	0.75	3.32e-05	0.0	0.0
71	6.241	0.160	0.383	0.05	2.02e-06	1.61e-03	0.0	1.748e+04	0.8	0.0	0.0
72	6.258	0.160	0.383	2.21	9.74e-05	4.19	1.85e-04	1.699e+04	0.7	0.0	0.0
73	6.326	0.158	0.383	47.29	2.09e-03	575.10	2.54e-02	23.37	1.03e-03	0.0	0.0
74	6.326	0.158	0.383	2.33	1.03e-04	19.54	8.62e-04	16.53	7.29e-04	0.0	0.0
75	6.343	0.158	0.383	3.10	1.37e-04	43.98	1.94e-03	523.34	2.31e-02	0.0	0.0
76	6.457	0.155	0.383	326.38	1.44e-02	166.83	7.36e-03	47.13	2.08e-03	0.0	0.0
77	6.489	0.154	0.383	7.08	3.12e-04	1.76	7.75e-05	7201.87	0.3	0.0	0.0
78	6.509	0.154	0.383	3.61	1.59e-04	4.33e-03	0.0	6906.08	0.3	0.0	0.0
79	6.532	0.153	0.383	3.82	1.69e-04	0.52	2.28e-05	236.92	1.04e-02	0.0	0.0
80	6.541	0.153	0.383	3.10	1.37e-04	3.34e-05	0.0	130.37	5.75e-03	0.0	0.0
81	6.585	0.152	0.383	2.817e+04	1.2	50.49	2.23e-03	0.05	2.02e-06	0.0	0.0
82	6.703	0.149	0.383	25.56	1.13e-03	1.827e+04	0.8	339.94	1.50e-02	0.0	0.0
83	6.791	0.147	0.383	1.86	8.21e-05	21.94	9.68e-04	1328.76	5.86e-02	0.0	0.0
84	6.815	0.147	0.383	8.70e-03	0.0	1.70	7.49e-05	2406.36	0.1	0.0	0.0
85	6.817	0.147	0.383	1.69e-05	0.0	1.11	4.88e-05	11.83	5.22e-04	0.0	0.0
86	6.819	0.147	0.383	0.01	0.0	5.07	2.24e-04	68.79	3.03e-03	0.0	0.0
87	6.865	0.146	0.383	6.01e-06	0.0	13.83	6.10e-04	5.00e-04	0.0	0.0	0.0
88	6.914	0.145	0.381	11.81	5.21e-04	91.41	4.03e-03	2.94	1.30e-04	0.0	0.0
89	7.119	0.140	0.374	1355.99	5.98e-02	1550.23	6.84e-02	6.02	2.65e-04	0.0	0.0
90	7.378	0.136	0.366	150.84	6.65e-03	7742.56	0.3	56.64	2.50e-03	0.0	0.0
91	7.466	0.134	0.364	3646.39	0.2	184.62	8.14e-03	42.55	1.88e-03	0.0	0.0
92	7.532	0.133	0.362	1.19e-04	0.0	1860.68	8.21e-02	17.29	7.63e-04	0.0	0.0
93	7.807	0.128	0.354	4.58	2.02e-04	31.24	1.38e-03	4.59	2.02e-04	0.0	0.0
94	7.808	0.128	0.354	2.65e-04	0.0	13.79	6.08e-04	0.15	6.79e-06	0.0	0.0
95	7.893	0.127	0.352	640.35	2.82e-02	36.70	1.62e-03	6.82	3.01e-04	0.0	0.0
96	7.941	0.126	0.351	0.23	9.94e-06	69.43	3.06e-03	1.043e+05	4.6	0.0	0.0
97	8.377	0.119	0.340	9.98e-06	0.0	337.88	1.49e-02	3.71e-03	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
98	8.575	0.117	0.336	11.45	5.05e-04	2232.05	9.84e-02	8.02	3.54e-04	0.0	0.0
99	8.666	0.115	0.334	0.60	2.65e-05	2460.83	0.1	0.06	2.76e-06	0.0	0.0
100	8.791	0.114	0.331	2.32e-03	0.0	37.15	1.64e-03	7.84e-03	0.0	0.0	0.0
101	8.906	0.112	0.329	4.74	2.09e-04	2.36	1.04e-04	2.54	1.12e-04	0.0	0.0
102	8.970	0.111	0.328	570.18	2.51e-02	7.88	3.47e-04	5.13	2.26e-04	0.0	0.0
103	9.048	0.111	0.326	13.13	5.79e-04	13.01	5.74e-04	7.52	3.32e-04	0.0	0.0
104	9.072	0.110	0.326	8.43	3.72e-04	3.41	1.50e-04	21.40	9.44e-04	0.0	0.0
105	9.240	0.108	0.323	10.15	4.48e-04	0.11	4.86e-06	107.17	4.73e-03	0.0	0.0
106	9.348	0.107	0.321	4.32	1.91e-04	12.24	5.40e-04	2.517e+04	1.1	0.0	0.0
107	9.381	0.107	0.320	7.68	3.39e-04	0.93	4.12e-05	1245.00	5.49e-02	0.0	0.0
108	9.592	0.104	0.316	8.18	3.61e-04	3.30	1.45e-04	169.55	7.48e-03	0.0	0.0
109	9.673	0.103	0.315	0.81	3.57e-05	2.10	9.28e-05	41.37	1.82e-03	0.0	0.0
110	9.708	0.103	0.314	2.14	9.44e-05	14.02	6.18e-04	101.81	4.49e-03	0.0	0.0
111	9.923	0.101	0.311	9.35	4.12e-04	35.89	1.58e-03	7418.14	0.3	0.0	0.0
112	9.967	0.100	0.310	0.58	2.58e-05	16.97	7.48e-04	1.064e+04	0.5	0.0	0.0
113	9.993	0.100	0.310	0.03	1.14e-06	0.05	2.43e-06	15.99	7.05e-04	0.0	0.0
114	10.139	0.099	0.307	0.20	8.98e-06	34.35	1.52e-03	64.57	2.85e-03	0.0	0.0
115	10.182	0.098	0.307	2.27	1.00e-04	247.80	1.09e-02	1.09	4.83e-05	0.0	0.0
116	10.270	0.097	0.305	71.26	3.14e-03	3610.63	0.2	1293.24	5.70e-02	0.0	0.0
117	10.290	0.097	0.305	3.24e-03	0.0	108.03	4.76e-03	0.05	2.17e-06	0.0	0.0
118	10.349	0.097	0.304	3.97	1.75e-04	33.68	1.49e-03	32.53	1.43e-03	0.0	0.0
119	10.396	0.096	0.303	35.12	1.55e-03	353.80	1.56e-02	247.10	1.09e-02	0.0	0.0
120	10.438	0.096	0.303	2675.60	0.1	1.54	6.79e-05	3.61	1.59e-04	0.0	0.0
121	10.474	0.095	0.302	1.82	8.04e-05	20.79	9.17e-04	5.272e+04	2.3	0.0	0.0
122	10.488	0.095	0.302	0.39	1.73e-05	13.43	5.92e-04	282.12	1.24e-02	0.0	0.0
123	10.661	0.094	0.299	22.13	9.76e-04	194.77	8.59e-03	71.89	3.17e-03	0.0	0.0
124	10.801	0.093	0.298	9.03	3.98e-04	181.75	8.02e-03	22.57	9.95e-04	0.0	0.0
125	10.828	0.092	0.297	37.44	1.65e-03	1.06	4.65e-05	28.22	1.24e-03	0.0	0.0
126	10.955	0.091	0.295	8.47	3.73e-04	98.63	4.35e-03	257.93	1.14e-02	0.0	0.0
127	10.966	0.091	0.295	0.76	3.36e-05	8.17	3.60e-04	2994.22	0.1	0.0	0.0
128	11.013	0.091	0.295	1.037e+04	0.5	27.78	1.23e-03	150.48	6.64e-03	0.0	0.0
129	11.030	0.091	0.294	6705.95	0.3	380.58	1.68e-02	84.82	3.74e-03	0.0	0.0
130	11.169	0.090	0.293	4074.50	0.2	204.29	9.01e-03	2.907e+04	1.3	0.0	0.0
131	11.264	0.089	0.291	43.43	1.92e-03	0.44	1.96e-05	0.78	3.45e-05	0.0	0.0
132	11.270	0.089	0.291	3.92e-03	0.0	4.15	1.83e-04	2.59	1.14e-04	0.0	0.0
133	11.280	0.089	0.291	0.03	1.21e-06	55.47	2.45e-03	59.21	2.61e-03	0.0	0.0
134	11.382	0.088	0.290	3.32e-03	0.0	69.00	3.04e-03	9.00e-03	0.0	0.0	0.0
135	11.486	0.087	0.289	149.31	6.59e-03	0.41	1.82e-05	3.49	1.54e-04	0.0	0.0
136	11.520	0.087	0.288	0.09	3.82e-06	8.76e-03	0.0	1.515e+04	0.7	0.0	0.0
137	11.535	0.087	0.288	1.60e-06	0.0	1.84e-03	0.0	8.03e-04	0.0	0.0	0.0
138	11.630	0.086	0.287	0.43	1.91e-05	0.19	8.37e-06	3.153e+04	1.4	0.0	0.0
139	11.650	0.086	0.287	0.05	2.06e-06	0.12	5.29e-06	4.033e+04	1.8	0.0	0.0
140	11.676	0.086	0.286	468.84	2.07e-02	214.45	9.46e-03	38.85	1.71e-03	0.0	0.0
141	11.839	0.084	0.285	3.96	1.75e-04	1.54	6.79e-05	2.031e+04	0.9	0.0	0.0
142	11.845	0.084	0.284	10.43	4.60e-04	4.23	1.87e-04	338.10	1.49e-02	0.0	0.0
143	12.019	0.083	0.282	12.99	5.73e-04	555.96	2.45e-02	649.45	2.86e-02	0.0	0.0
144	12.047	0.083	0.282	1.09	4.81e-05	498.59	2.20e-02	658.62	2.90e-02	0.0	0.0
145	12.079	0.083	0.282	5054.49	0.2	426.56	1.88e-02	3.953e+04	1.7	0.0	0.0
146	12.108	0.083	0.282	19.59	8.64e-04	0.38	1.66e-05	704.64	3.11e-02	0.0	0.0
147	12.187	0.082	0.281	516.79	2.28e-02	0.25	1.09e-05	2417.12	0.1	0.0	0.0
148	12.225	0.082	0.280	0.09	3.94e-06	2.43e-04	0.0	0.02	0.0	0.0	0.0
149	12.373	0.081	0.279	3.60	1.59e-04	0.24	1.08e-05	7898.93	0.3	0.0	0.0
150	12.453	0.080	0.278	305.86	1.35e-02	27.98	1.23e-03	6068.67	0.3	0.0	0.0
151	12.473	0.080	0.278	8.99	3.96e-04	1888.78	8.33e-02	22.20	9.79e-04	0.0	0.0
152	12.570	0.080	0.277	0.12	5.38e-06	0.03	1.28e-06	1.160e+04	0.5	0.0	0.0
153	12.599	0.079	0.276	68.76	3.03e-03	131.05	5.78e-03	1.480e+04	0.7	0.0	0.0
154	12.608	0.079	0.276	0.03	1.44e-06	24.87	1.10e-03	1.320e+04	0.6	0.0	0.0
155	12.739	0.078	0.275	225.54	9.95e-03	3.89	1.72e-04	2.134e+04	0.9	0.0	0.0
156	12.838	0.078	0.274	1595.05	7.03e-02	1510.20	6.66e-02	39.08	1.72e-03	0.0	0.0
157	12.970	0.077	0.273	0.01	0.0	0.10	4.59e-06	1123.83	4.96e-02	0.0	0.0
158	13.076	0.076	0.272	2.96	1.31e-04	5.49	2.42e-04	2.189e+04	1.0	0.0	0.0
159	13.107	0.076	0.271	872.05	3.85e-02	690.94	3.05e-02	5344.23	0.2	0.0	0.0
160	13.128	0.076	0.271	15.55	6.86e-04	1.87	8.23e-05	2691.44	0.1	0.0	0.0
161	13.138	0.076	0.271	397.73	1.75e-02	230.78	1.02e-02	4058.44	0.2	0.0	0.0
162	13.146	0.076	0.271	35.09	1.55e-03	5.69e-03	0.0	1008.60	4.45e-02	0.0	0.0
163	13.241	0.076	0.270	90.16	3.98e-03	56.20	2.48e-03	4.175e+04	1.8	0.0	0.0
164	13.288	0.075	0.270	20.50	9.04e-04	37.89	1.67e-03	2798.95	0.1	0.0	0.0
165	13.818	0.072	0.265	298.91	1.32e-02	1.74	7.68e-05	1.703e+04	0.8	0.0	0.0
166	13.884	0.072	0.265	3.67e-03	0.0	0.14	6.15e-06	2.477e+04	1.1	0.0	0.0
167	14.002	0.071	0.264	0.37	1.62e-05	0.87	3.85e-05	3.373e+04	1.5	0.0	0.0
168	14.023	0.071	0.263	0.59	2.60e-05	0.46	2.05e-05	1.142e+04	0.5	0.0	0.0
169	14.351	0.070	0.261	1803.94	7.96e-02	478.79	2.11e-02	1001.42	4.42e-02	0.0	0.0
170	14.419	0.069	0.260	1842.73	8.13e-02	4.49	1.98e-04	8108.13	0.4	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
171	14.430	0.069	0.260	261.71	1.15e-02	14.94	6.59e-04	2107.04	9.29e-02	0.0	0.0
172	14.709	0.068	0.258	2.071e+04	0.9	14.93	6.58e-04	106.54	4.70e-03	0.0	0.0
173	14.717	0.068	0.258	0.16	6.92e-06	6.32	2.79e-04	8.40	3.71e-04	0.0	0.0
174	14.872	0.067	0.257	7.79	3.44e-04	493.52	2.18e-02	35.83	1.58e-03	0.0	0.0
175	14.910	0.067	0.257	0.07	2.98e-06	2.67	1.18e-04	5.38	2.37e-04	0.0	0.0
176	14.942	0.067	0.256	0.01	0.0	0.36	1.61e-05	349.15	1.54e-02	0.0	0.0
177	14.978	0.067	0.256	9.52e-03	0.0	0.27	1.19e-05	230.38	1.02e-02	0.0	0.0
178	15.071	0.066	0.255	15.42	6.80e-04	218.72	9.65e-03	0.76	3.37e-05	0.0	0.0
179	15.173	0.066	0.255	9.48	4.18e-04	278.63	1.23e-02	293.52	1.29e-02	0.0	0.0
180	15.514	0.064	0.252	6227.15	0.3	136.08	6.00e-03	1887.74	8.33e-02	0.0	0.0
181	15.723	0.064	0.251	6.24	2.75e-04	7556.55	0.3	57.76	2.55e-03	0.0	0.0
182	15.865	0.063	0.250	0.78	3.46e-05	3.92	1.73e-04	18.05	7.96e-04	0.0	0.0
183	15.869	0.063	0.250	1.19e-05	0.0	3.18e-05	0.0	0.22	9.84e-06	0.0	0.0
184	15.883	0.063	0.250	37.82	1.67e-03	42.61	1.88e-03	515.01	2.27e-02	0.0	0.0
185	15.902	0.063	0.250	1.31e-05	0.0	2.13	9.37e-05	0.09	3.84e-06	0.0	0.0
186	16.271	0.061	0.248	147.43	6.50e-03	96.05	4.24e-03	2115.79	9.33e-02	0.0	0.0
187	16.462	0.061	0.246	2.63	1.16e-04	3.14e-03	0.0	3.170e+04	1.4	0.0	0.0
188	16.476	0.061	0.246	0.0	0.0	0.09	3.87e-06	7.15e-05	0.0	0.0	0.0
189	16.637	0.060	0.245	223.27	9.85e-03	0.06	2.50e-06	0.09	3.89e-06	0.0	0.0
190	16.819	0.059	0.244	19.63	8.66e-04	80.74	3.56e-03	4011.35	0.2	0.0	0.0
191	16.833	0.059	0.244	55.39	2.44e-03	9.77	4.31e-04	1.894e+04	0.8	0.0	0.0
192	16.926	0.059	0.244	1.19e-03	0.0	0.05	2.06e-06	5.23	2.31e-04	0.0	0.0
193	16.929	0.059	0.244	1.44	6.37e-05	5.42	2.39e-04	283.54	1.25e-02	0.0	0.0
194	17.079	0.059	0.243	763.74	3.37e-02	6.35e-03	0.0	5.88e-03	0.0	0.0	0.0
195	17.367	0.058	0.241	50.33	2.22e-03	2271.14	0.1	7065.76	0.3	0.0	0.0
196	17.550	0.057	0.240	14.03	6.19e-04	5513.36	0.2	5977.54	0.3	0.0	0.0
197	17.559	0.057	0.240	3.70e-03	0.0	452.91	2.00e-02	0.56	2.47e-05	0.0	0.0
198	17.920	0.056	0.239	0.0	0.0	0.0	0.0	0.75	3.29e-05	0.0	0.0
199	17.996	0.056	0.238	17.68	7.80e-04	38.59	1.70e-03	2.251e+04	1.0	0.0	0.0
200	18.106	0.055	0.238	4.68e-06	0.0	0.13	5.80e-06	0.03	1.14e-06	0.0	0.0
Risulta				2.263e+06		2.217e+06		2.169e+06			
In percentuale				99.79		97.80		95.68			

CDC	Tipo	Sigla Id	Note
11	Edk	CDC=Ed (dinamico SLD) alfa=0.0 (ecc. -)	
			categoria suolo: C
			fattore di sito S = 1.500
			ordinata spettro (tratto Tb-Tc) = 0.383 g
			angolo di ingresso:0.0
			eccentricità aggiuntiva: negativa
			periodo proprio T1: 1.329 sec.
			numero di modi considerati:200
			combinaz. modale: CQC

Quota	M Sismica x g	Pos. GX	Pos. GY	E agg. X-X	E agg. Y-Y	Pos. KX	Pos. KY	rapp. r/Ls	rapp. ex/rx	rapp. ey/ry
m	daN	m	m	m	m	m	m			
7.22	6.991e+05	49.32	22.50	0.0	0.0	50.00	22.50	1.095	0.021	0.0
6.50	1.119e+06	49.31	21.87	0.0	2.25	51.85	22.85	1.306	0.061	0.024
5.00	1.369e+04	77.24	10.41	0.0	1.11	76.72	11.72	1.381	0.035	0.085
4.67	1.111e+04	76.52	10.17	0.0	1.11	76.72	11.72	1.381	0.014	0.101
4.50	2.182e+04	40.86	39.92	0.0	1.13	50.00	30.00	1.474	0.292	0.317
4.00	1.448e+04	76.33	10.14	0.0	1.11	76.72	11.72	1.381	0.026	0.103
3.50	3.089e+05	95.61	34.13	0.0	1.13	94.99	33.25	1.305	0.066	0.095
3.33	1.414e+04	76.13	10.10	0.0	1.11	76.72	11.72	1.381	0.039	0.105
2.67	1.414e+04	76.13	10.10	0.0	1.11	76.72	11.72	1.381	0.039	0.105
2.00	1.398e+04	76.22	10.08	0.0	1.11	76.72	11.72	1.381	0.034	0.107
1.75	8296.96	100.00	33.00	0.0	0.13	0.0	0.0	0.0	0.0	0.0
1.33	1.381e+04	76.31	10.06	0.0	1.11	76.72	11.72	1.381	0.027	0.108
1.17	735.00	100.00	32.79	0.0	0.13	0.0	0.0	0.0	0.0	0.0
0.67	1.381e+04	76.31	10.06	0.0	1.11	76.72	11.72	1.381	0.027	0.108
0.58	735.00	100.00	32.79	0.0	0.13	0.0	0.0	0.0	0.0	0.0
Risulta	2.267e+06									

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	0.752	1.329	0.126	8.602e+05	37.9	169.99	7.50e-03	0.02	1.02e-06	0.0	0.0
2	0.825	1.213	0.138	139.47	6.15e-03	1.402e+06	61.8	2.31e-03	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
3	0.853	1.173	0.143	1099.85	4.85e-02	9.767e+04	4.3	4.82e-03	0.0	0.0	0.0
4	0.898	1.114	0.150	3076.44	0.1	1.506e+05	6.6	1.74e-05	0.0	0.0	0.0
5	0.945	1.058	0.158	6.162e+05	27.2	1760.10	7.76e-02	0.04	1.77e-06	0.0	0.0
6	0.963	1.038	0.161	8677.04	0.4	6523.30	0.3	9.25e-03	0.0	0.0	0.0
7	0.994	1.006	0.166	4.889e+05	21.6	0.11	4.76e-06	2.57e-05	0.0	0.0	0.0
8	1.039	0.962	0.174	45.73	2.02e-03	1.472e+05	6.5	4.57e-04	0.0	0.0	0.0
9	1.111	0.900	0.186	85.99	3.79e-03	3.649e+04	1.6	0.03	1.24e-06	0.0	0.0
10	1.187	0.843	0.199	299.77	1.32e-02	1.099e+05	4.8	0.13	5.78e-06	0.0	0.0
11	1.214	0.824	0.203	1.479e+04	0.7	0.15	6.67e-06	1.58e-03	0.0	0.0	0.0
12	1.276	0.784	0.214	76.91	3.39e-03	1545.63	6.82e-02	0.03	1.46e-06	0.0	0.0
13	1.279	0.782	0.214	1.275e+04	0.6	0.04	1.59e-06	1.35e-03	0.0	0.0	0.0
14	1.367	0.732	0.229	205.00	9.04e-03	1.713e+04	0.8	0.02	0.0	0.0	0.0
15	1.389	0.720	0.233	1.274e+04	0.6	6.02	2.66e-04	6.51e-03	0.0	0.0	0.0
16	1.411	0.709	0.236	2.92	1.29e-04	1.801e+04	0.8	1.98e-04	0.0	0.0	0.0
17	1.453	0.688	0.243	5.78e-05	0.0	0.0	0.0	0.04	1.88e-06	0.0	0.0
18	1.466	0.682	0.246	1.17	5.16e-05	1783.81	7.87e-02	3.77e-03	0.0	0.0	0.0
19	1.469	0.681	0.246	2.84e-04	0.0	8805.70	0.4	0.11	5.00e-06	0.0	0.0
20	1.920	0.521	0.322	1227.92	5.42e-02	1145.36	5.05e-02	8.39	3.70e-04	0.0	0.0
21	2.565	0.390	0.383	1265.40	5.58e-02	3.18	1.40e-04	1.85	8.16e-05	0.0	0.0
22	2.594	0.386	0.383	1.147e+04	0.5	9264.67	0.4	0.03	1.25e-06	0.0	0.0
23	2.648	0.378	0.383	3.262e+04	1.4	6100.95	0.3	4.72	2.08e-04	0.0	0.0
24	2.661	0.376	0.383	353.14	1.56e-02	1.395e+04	0.6	0.41	1.80e-05	0.0	0.0
25	2.709	0.369	0.383	6930.95	0.3	192.11	8.47e-03	1.87	8.26e-05	0.0	0.0
26	2.848	0.351	0.383	682.30	3.01e-02	67.21	2.96e-03	8.17	3.60e-04	0.0	0.0
27	2.999	0.333	0.383	27.97	1.23e-03	308.87	1.36e-02	2.27	1.00e-04	0.0	0.0
28	3.107	0.322	0.383	16.83	7.42e-04	3.913e+04	1.7	0.81	3.59e-05	0.0	0.0
29	3.237	0.309	0.383	5.24e-05	0.0	3.464e+04	1.5	6.72	2.96e-04	0.0	0.0
30	3.394	0.295	0.383	0.07	3.02e-06	4121.59	0.2	0.28	1.22e-05	0.0	0.0
31	3.610	0.277	0.383	2.09	9.23e-05	1.739e+04	0.8	18.32	8.08e-04	0.0	0.0
32	3.740	0.267	0.383	3916.87	0.2	107.09	4.72e-03	1.40	6.19e-05	0.0	0.0
33	3.922	0.255	0.383	2.68e-03	0.0	160.46	7.08e-03	0.03	1.41e-06	0.0	0.0
34	4.075	0.245	0.383	0.42	1.86e-05	7281.16	0.3	242.75	1.07e-02	0.0	0.0
35	4.166	0.240	0.383	104.84	4.62e-03	9.16	4.04e-04	3.61e-03	0.0	0.0	0.0
36	4.223	0.237	0.383	5.638e+04	2.5	45.40	2.00e-03	7.26	3.20e-04	0.0	0.0
37	4.262	0.235	0.383	1.302e+04	0.6	15.35	6.77e-04	28.32	1.25e-03	0.0	0.0
38	4.279	0.234	0.383	1.15e-03	0.0	0.03	1.52e-06	8914.32	0.4	0.0	0.0
39	4.424	0.226	0.383	11.31	4.99e-04	245.26	1.08e-02	3.751e+05	16.5	0.0	0.0
40	4.443	0.225	0.383	17.98	7.93e-04	587.05	2.59e-02	3.689e+04	1.6	0.0	0.0
41	4.475	0.223	0.383	7.08	3.12e-04	397.42	1.75e-02	290.70	1.28e-02	0.0	0.0
42	4.521	0.221	0.383	0.45	1.98e-05	67.84	2.99e-03	1.282e+05	5.7	0.0	0.0
43	4.575	0.219	0.383	3.80e-04	0.0	12.73	5.61e-04	4402.46	0.2	0.0	0.0
44	4.650	0.215	0.383	0.02	0.0	0.05	2.02e-06	3.860e+04	1.7	0.0	0.0
45	4.654	0.215	0.383	0.0	0.0	1103.68	4.87e-02	0.68	3.01e-05	0.0	0.0
46	4.703	0.213	0.383	0.01	0.0	5.35	2.36e-04	2798.12	0.1	0.0	0.0
47	4.790	0.209	0.383	2.47	1.09e-04	952.10	4.20e-02	3419.74	0.2	0.0	0.0
48	4.816	0.208	0.383	1.18	5.21e-05	227.46	1.00e-02	9911.01	0.4	0.0	0.0
49	4.835	0.207	0.383	0.90	3.96e-05	125.93	5.55e-03	526.97	2.32e-02	0.0	0.0
50	4.914	0.203	0.383	77.37	3.41e-03	7756.49	0.3	208.65	9.20e-03	0.0	0.0
51	4.937	0.203	0.383	3.11e-05	0.0	0.11	4.75e-06	114.68	5.06e-03	0.0	0.0
52	5.014	0.199	0.383	0.28	1.24e-05	8.34	3.68e-04	1770.50	7.81e-02	0.0	0.0
53	5.018	0.199	0.383	0.01	0.0	0.48	2.11e-05	1029.01	4.54e-02	0.0	0.0
54	5.496	0.182	0.383	8.40	3.71e-04	3348.43	0.1	407.98	1.80e-02	0.0	0.0
55	5.714	0.175	0.383	0.0	0.0	1.24	5.47e-05	4.24e-04	0.0	0.0	0.0
56	5.750	0.174	0.383	266.42	1.18e-02	1089.98	4.81e-02	373.91	1.65e-02	0.0	0.0
57	5.780	0.173	0.383	38.09	1.68e-03	1245.43	5.49e-02	66.68	2.94e-03	0.0	0.0
58	5.894	0.170	0.383	7.86	3.47e-04	36.83	1.62e-03	7.557e+04	3.3	0.0	0.0
59	5.897	0.170	0.383	8.45	3.73e-04	9.13	4.03e-04	570.46	2.52e-02	0.0	0.0
60	5.933	0.169	0.383	0.77	3.40e-05	1.39	6.15e-05	1.145e+05	5.0	0.0	0.0
61	5.941	0.168	0.383	1.05	4.61e-05	2.83e-04	0.0	3.799e+05	16.8	0.0	0.0
62	5.979	0.167	0.383	0.56	2.46e-05	0.50	2.20e-05	2881.28	0.1	0.0	0.0
63	5.980	0.167	0.383	0.91	4.01e-05	0.71	3.14e-05	199.30	8.79e-03	0.0	0.0
64	5.989	0.167	0.383	1.13	5.00e-05	2.26	9.98e-05	1339.13	5.91e-02	0.0	0.0
65	6.050	0.165	0.383	2.88	1.27e-04	0.16	7.16e-06	1.055e+05	4.7	0.0	0.0
66	6.061	0.165	0.383	0.73	3.21e-05	0.78	3.45e-05	8.286e+04	3.7	0.0	0.0
67	6.122	0.163	0.383	5.46	2.41e-04	0.94	4.15e-05	57.37	2.53e-03	0.0	0.0
68	6.139	0.163	0.383	1.73	7.64e-05	0.39	1.70e-05	489.82	2.16e-02	0.0	0.0
69	6.231	0.160	0.383	9370.66	0.4	2955.24	0.1	742.11	3.27e-02	0.0	0.0
70	6.241	0.160	0.383	606.16	2.67e-02	195.47	8.62e-03	1.646e+04	0.7	0.0	0.0
71	6.258	0.160	0.383	24.10	1.06e-03	3.34	1.47e-04	1.743e+04	0.8	0.0	0.0
72	6.326	0.158	0.383	3.33	1.47e-04	1.32	5.81e-05	11.66	5.14e-04	0.0	0.0
73	6.341	0.158	0.383	2.21	9.76e-05	1.02	4.48e-05	404.47	1.78e-02	0.0	0.0
74	6.489	0.154	0.383	0.17	7.64e-06	1.50	6.60e-05	7307.82	0.3	0.0	0.0
75	6.508	0.154	0.383	45.45	2.00e-03	3.02	1.33e-04	6924.46	0.3	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
76	6.532	0.153	0.383	0.01	0.0	0.24	1.08e-05	237.95	1.05e-02	0.0	0.0
77	6.540	0.153	0.383	1306.68	5.76e-02	184.81	8.15e-03	116.01	5.12e-03	0.0	0.0
78	6.548	0.153	0.383	1.023e+04	0.5	1493.94	6.59e-02	0.32	1.40e-05	0.0	0.0
79	6.627	0.151	0.383	1.079e+04	0.5	1719.42	7.58e-02	22.43	9.89e-04	0.0	0.0
80	6.731	0.149	0.383	1534.10	6.77e-02	1.229e+04	0.5	231.73	1.02e-02	0.0	0.0
81	6.791	0.147	0.383	6.06	2.67e-04	33.59	1.48e-03	1350.14	5.95e-02	0.0	0.0
82	6.815	0.147	0.383	2.33e-03	0.0	0.95	4.21e-05	2410.57	0.1	0.0	0.0
83	6.817	0.147	0.383	5.70e-04	0.0	0.30	1.33e-05	34.79	1.53e-03	0.0	0.0
84	6.819	0.147	0.383	0.84	3.68e-05	0.10	4.63e-06	35.50	1.57e-03	0.0	0.0
85	6.823	0.147	0.383	101.06	4.46e-03	61.50	2.71e-03	24.55	1.08e-03	0.0	0.0
86	6.852	0.146	0.383	0.78	3.43e-05	2.76	1.22e-04	0.07	3.11e-06	0.0	0.0
87	6.863	0.146	0.383	3497.94	0.2	988.58	4.36e-02	1.29	5.68e-05	0.0	0.0
88	6.865	0.146	0.383	4.80e-03	0.0	13.55	5.98e-04	5.51e-04	0.0	0.0	0.0
89	7.134	0.140	0.374	239.04	1.05e-02	3326.63	0.1	13.74	6.06e-04	0.0	0.0
90	7.457	0.134	0.364	445.29	1.96e-02	6535.82	0.3	97.77	4.31e-03	0.0	0.0
91	7.528	0.133	0.362	2011.04	8.87e-02	8.62	3.80e-04	1.87	8.24e-05	0.0	0.0
92	7.532	0.133	0.362	0.02	1.02e-06	1859.68	8.20e-02	17.32	7.64e-04	0.0	0.0
93	7.806	0.128	0.354	0.01	0.0	35.03	1.54e-03	6.94	3.06e-04	0.0	0.0
94	7.808	0.128	0.354	8.27e-06	0.0	13.80	6.09e-04	0.16	6.85e-06	0.0	0.0
95	7.941	0.126	0.351	1.22	5.40e-05	77.37	3.41e-03	1.043e+05	4.6	0.0	0.0
96	8.307	0.120	0.342	3.37	1.49e-04	7.71	3.40e-04	0.48	2.10e-05	0.0	0.0
97	8.377	0.119	0.340	5.87e-05	0.0	337.88	1.49e-02	3.59e-03	0.0	0.0	0.0
98	8.536	0.117	0.337	8047.33	0.4	68.11	3.00e-03	106.43	4.69e-03	0.0	0.0
99	8.574	0.117	0.336	1016.09	4.48e-02	1853.41	8.17e-02	40.30	1.78e-03	0.0	0.0
100	8.673	0.115	0.334	35.29	1.56e-03	2681.83	0.1	1.22	5.40e-05	0.0	0.0
101	8.767	0.114	0.332	539.79	2.38e-02	25.19	1.11e-03	1.58	6.96e-05	0.0	0.0
102	8.791	0.114	0.331	6.22	2.75e-04	45.41	2.00e-03	0.08	3.66e-06	0.0	0.0
103	8.908	0.112	0.329	4.68	2.06e-04	0.43	1.89e-05	1.27	5.58e-05	0.0	0.0
104	9.048	0.111	0.326	0.01	0.0	10.27	4.53e-04	4.06	1.79e-04	0.0	0.0
105	9.071	0.110	0.326	2.95	1.30e-04	3.46	1.53e-04	21.57	9.51e-04	0.0	0.0
106	9.239	0.108	0.323	3.50	1.54e-04	0.11	5.03e-06	113.93	5.02e-03	0.0	0.0
107	9.348	0.107	0.321	0.80	3.51e-05	12.64	5.58e-04	2.491e+04	1.1	0.0	0.0
108	9.381	0.107	0.320	2.77	1.22e-04	1.12	4.95e-05	1403.66	6.19e-02	0.0	0.0
109	9.591	0.104	0.316	3.24	1.43e-04	3.50	1.54e-04	187.17	8.25e-03	0.0	0.0
110	9.673	0.103	0.315	0.21	9.41e-06	2.13	9.40e-05	43.59	1.92e-03	0.0	0.0
111	9.709	0.103	0.314	1.53	6.76e-05	12.90	5.69e-04	98.54	4.35e-03	0.0	0.0
112	9.767	0.102	0.313	2998.44	0.1	3.98e-03	0.0	0.08	3.60e-06	0.0	0.0
113	9.922	0.101	0.311	8.46	3.73e-04	34.94	1.54e-03	7232.57	0.3	0.0	0.0
114	9.966	0.100	0.310	0.18	7.91e-06	15.13	6.67e-04	1.084e+04	0.5	0.0	0.0
115	9.993	0.100	0.310	0.02	0.0	0.05	2.08e-06	15.42	6.80e-04	0.0	0.0
116	10.139	0.099	0.307	0.13	5.73e-06	26.06	1.15e-03	70.60	3.11e-03	0.0	0.0
117	10.183	0.098	0.307	1.42	6.26e-05	145.93	6.44e-03	0.98	4.34e-05	0.0	0.0
118	10.290	0.097	0.305	2.32e-05	0.0	116.58	5.14e-03	4.78e-04	0.0	0.0	0.0
119	10.348	0.097	0.304	1.63	7.20e-05	142.69	6.29e-03	85.88	3.79e-03	0.0	0.0
120	10.389	0.096	0.303	36.22	1.60e-03	638.54	2.82e-02	259.00	1.14e-02	0.0	0.0
121	10.474	0.095	0.302	0.39	1.72e-05	18.37	8.10e-04	5.278e+04	2.3	0.0	0.0
122	10.489	0.095	0.302	0.28	1.22e-05	5.76	2.54e-04	329.23	1.45e-02	0.0	0.0
123	10.568	0.095	0.301	585.20	2.58e-02	4257.61	0.2	2408.43	0.1	0.0	0.0
124	10.663	0.094	0.299	8.14	3.59e-04	213.90	9.43e-03	57.29	2.53e-03	0.0	0.0
125	10.802	0.093	0.298	4.91	2.16e-04	177.20	7.82e-03	22.32	9.84e-04	0.0	0.0
126	10.829	0.092	0.297	23.61	1.04e-03	1.09	4.80e-05	31.11	1.37e-03	0.0	0.0
127	10.955	0.091	0.295	3.52	1.55e-04	95.91	4.23e-03	264.84	1.17e-02	0.0	0.0
128	10.966	0.091	0.295	0.27	1.20e-05	8.27	3.65e-04	2989.92	0.1	0.0	0.0
129	11.024	0.091	0.295	587.38	2.59e-02	98.19	4.33e-03	3.81	1.68e-04	0.0	0.0
130	11.071	0.090	0.294	1.047e+04	0.5	37.59	1.66e-03	1130.98	4.99e-02	0.0	0.0
131	11.204	0.089	0.292	9430.99	0.4	87.72	3.87e-03	2.858e+04	1.3	0.0	0.0
132	11.266	0.089	0.291	49.33	2.18e-03	0.84	3.70e-05	0.03	1.12e-06	0.0	0.0
133	11.270	0.089	0.291	0.04	1.68e-06	3.93	1.73e-04	4.28	1.89e-04	0.0	0.0
134	11.280	0.089	0.291	8.41	3.71e-04	48.72	2.15e-03	134.25	5.92e-03	0.0	0.0
135	11.382	0.088	0.290	6.94e-03	0.0	68.96	3.04e-03	3.77e-03	0.0	0.0	0.0
136	11.487	0.087	0.289	242.51	1.07e-02	0.04	1.67e-06	10.90	4.81e-04	0.0	0.0
137	11.520	0.087	0.288	0.18	7.82e-06	4.50e-03	0.0	1.519e+04	0.7	0.0	0.0
138	11.535	0.087	0.288	0.0	0.0	1.79e-03	0.0	8.24e-04	0.0	0.0	0.0
139	11.630	0.086	0.287	1.17	5.16e-05	0.06	2.51e-06	3.141e+04	1.4	0.0	0.0
140	11.650	0.086	0.287	0.20	8.62e-06	0.04	1.84e-06	4.034e+04	1.8	0.0	0.0
141	11.839	0.084	0.285	2.88	1.27e-04	1.80	7.95e-05	1.987e+04	0.9	0.0	0.0
142	11.846	0.084	0.284	7.68	3.39e-04	5.05	2.23e-04	355.38	1.57e-02	0.0	0.0
143	12.020	0.083	0.282	1.81	7.96e-05	516.23	2.28e-02	399.75	1.76e-02	0.0	0.0
144	12.047	0.083	0.282	24.16	1.07e-03	400.30	1.77e-02	61.99	2.73e-03	0.0	0.0
145	12.108	0.083	0.282	1.60	7.07e-05	5.26	2.32e-04	99.94	4.41e-03	0.0	0.0
146	12.159	0.082	0.281	1283.24	5.66e-02	223.95	9.88e-03	3.055e+04	1.3	0.0	0.0
147	12.282	0.081	0.280	6099.84	0.3	314.09	1.39e-02	1.616e+04	0.7	0.0	0.0
148	12.374	0.081	0.279	51.87	2.29e-03	1.35	5.98e-05	6462.04	0.3	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
149	12.466	0.080	0.278	141.71	6.25e-03	1723.06	7.60e-02	3076.01	0.1	0.0	0.0
150	12.498	0.080	0.277	2036.48	8.98e-02	115.91	5.11e-03	2.587e+04	1.1	0.0	0.0
151	12.571	0.080	0.277	1.36	6.00e-05	0.42	1.86e-05	9668.79	0.4	0.0	0.0
152	12.609	0.079	0.276	2.61e-03	0.0	17.68	7.80e-04	1.199e+04	0.5	0.0	0.0
153	12.721	0.079	0.275	1089.06	4.80e-02	129.77	5.72e-03	1.193e+04	0.5	0.0	0.0
154	12.857	0.078	0.274	5656.47	0.2	1794.65	7.92e-02	2239.43	9.88e-02	0.0	0.0
155	12.961	0.077	0.273	2.55	1.13e-04	1.73	7.63e-05	7.71	3.40e-04	0.0	0.0
156	12.970	0.077	0.273	0.16	6.84e-06	0.04	1.61e-06	1114.89	4.92e-02	0.0	0.0
157	13.076	0.076	0.272	2.01	8.86e-05	0.08	3.68e-06	2.291e+04	1.0	0.0	0.0
158	13.127	0.076	0.271	16.34	7.21e-04	13.24	5.84e-04	181.92	8.02e-03	0.0	0.0
159	13.131	0.076	0.271	45.60	2.01e-03	2.54	1.12e-04	1.042e+04	0.5	0.0	0.0
160	13.146	0.076	0.271	1.74	7.66e-05	17.36	7.66e-04	569.72	2.51e-02	0.0	0.0
161	13.237	0.076	0.270	108.76	4.80e-03	4.45	1.96e-04	3.734e+04	1.6	0.0	0.0
162	13.287	0.075	0.270	39.95	1.76e-03	8.03	3.54e-04	4764.11	0.2	0.0	0.0
163	13.458	0.074	0.268	3365.12	0.1	312.27	1.38e-02	2739.14	0.1	0.0	0.0
164	13.541	0.074	0.268	0.10	4.52e-06	5.18e-04	0.0	3.10e-04	0.0	0.0	0.0
165	13.838	0.072	0.265	1718.68	7.58e-02	24.51	1.08e-03	1.551e+04	0.7	0.0	0.0
166	13.884	0.072	0.265	9.71e-05	0.0	0.14	6.05e-06	2.480e+04	1.1	0.0	0.0
167	14.002	0.071	0.264	4.13	1.82e-04	1.20	5.29e-05	3.421e+04	1.5	0.0	0.0
168	14.023	0.071	0.263	0.28	1.23e-05	0.51	2.23e-05	1.121e+04	0.5	0.0	0.0
169	14.335	0.070	0.261	3480.84	0.2	558.79	2.46e-02	2085.47	9.20e-02	0.0	0.0
170	14.464	0.069	0.260	9944.56	0.4	6.67	2.94e-04	9199.72	0.4	0.0	0.0
171	14.654	0.068	0.259	174.48	7.70e-03	0.25	1.08e-05	1599.88	7.06e-02	0.0	0.0
172	14.717	0.068	0.258	3.62e-03	0.0	6.27	2.76e-04	7.95	3.50e-04	0.0	0.0
173	14.884	0.067	0.257	1926.16	8.50e-02	669.62	2.95e-02	417.25	1.84e-02	0.0	0.0
174	14.910	0.067	0.257	13.60	6.00e-04	5.78	2.55e-04	12.49	5.51e-04	0.0	0.0
175	14.942	0.067	0.256	0.21	9.11e-06	0.39	1.73e-05	352.17	1.55e-02	0.0	0.0
176	14.978	0.067	0.256	0.07	3.21e-06	0.30	1.33e-05	230.83	1.02e-02	0.0	0.0
177	15.193	0.066	0.255	400.83	1.77e-02	159.63	7.04e-03	1026.30	4.53e-02	0.0	0.0
178	15.708	0.064	0.251	39.68	1.75e-03	7763.26	0.3	13.29	5.86e-04	0.0	0.0
179	15.865	0.063	0.250	0.02	0.0	5.27	2.33e-04	17.18	7.58e-04	0.0	0.0
180	15.869	0.063	0.250	1.01e-05	0.0	3.85e-05	0.0	0.22	9.84e-06	0.0	0.0
181	15.882	0.063	0.250	4.05	1.79e-04	49.77	2.20e-03	461.87	2.04e-02	0.0	0.0
182	15.902	0.063	0.250	2.64e-06	0.0	2.12	9.36e-05	0.09	3.89e-06	0.0	0.0
183	16.119	0.062	0.249	18.53	8.17e-04	206.84	9.12e-03	413.15	1.82e-02	0.0	0.0
184	16.267	0.061	0.248	36.64	1.62e-03	115.37	5.09e-03	1662.92	7.33e-02	0.0	0.0
185	16.462	0.061	0.246	0.53	2.35e-05	7.65e-03	0.0	3.196e+04	1.4	0.0	0.0
186	16.476	0.061	0.246	0.0	0.0	0.09	3.87e-06	6.74e-05	0.0	0.0	0.0
187	16.753	0.060	0.245	0.62	2.73e-05	0.23	1.00e-05	0.69	3.03e-05	0.0	0.0
188	16.818	0.059	0.244	11.24	4.96e-04	80.30	3.54e-03	6514.72	0.3	0.0	0.0
189	16.832	0.059	0.244	18.05	7.96e-04	9.62	4.24e-04	1.646e+04	0.7	0.0	0.0
190	16.926	0.059	0.244	0.0	0.0	0.05	2.07e-06	5.23	2.31e-04	0.0	0.0
191	16.929	0.059	0.244	1.21	5.33e-05	2.65	1.17e-04	246.44	1.09e-02	0.0	0.0
192	17.224	0.058	0.242	2217.86	9.78e-02	207.48	9.15e-03	701.76	3.10e-02	0.0	0.0
193	17.403	0.057	0.241	17.25	7.61e-04	2.30	1.02e-04	1655.66	7.30e-02	0.0	0.0
194	17.559	0.057	0.240	3.85e-05	0.0	513.73	2.27e-02	0.59	2.61e-05	0.0	0.0
195	17.696	0.057	0.240	34.47	1.52e-03	7512.61	0.3	2.472e+04	1.1	0.0	0.0
196	17.920	0.056	0.239	1.02e-06	0.0	1.17e-06	0.0	0.75	3.30e-05	0.0	0.0
197	18.106	0.055	0.238	7.31e-05	0.0	0.17	7.53e-06	0.01	0.0	0.0	0.0
198	18.124	0.055	0.238	0.16	6.86e-06	9.63	4.25e-04	98.60	4.35e-03	0.0	0.0
199	18.222	0.055	0.237	18.95	8.36e-04	1717.24	7.57e-02	9171.02	0.4	0.0	0.0
200	18.356	0.054	0.236	9.19	4.05e-04	0.29	1.27e-05	301.63	1.33e-02	0.0	0.0
Risulta				2.262e+06		2.219e+06		2.170e+06			
In percentuale				99.77		97.88		95.72			

CDC	Tipo	Sigla Id	Note
12	Edk	CDC=Ed (dinamico SLD) alfa=90.00 (ecc. +)	
			categoria suolo: C
			fattore di sito S = 1.500
			ordinata spettro (tratto Tb-Tc) = 0.383 g
			angolo di ingresso:90.00
			eccentricità aggiuntiva: positiva
			periodo proprio T1: 1.237 sec.
			numero di modi considerati:200
			combinaz. modale: CQC

Quota	M Sismica x g	Pos. GX	Pos. GY	E agg. X-X	E agg. Y-Y	Pos. KX	Pos. KY	rapp. r/Ls	rapp. ex/rx	rapp. ey/ry
m	daN	m	m	m	m	m	m			
7.22	6.991e+05	49.32	22.50	5.00	0.0	50.00	22.50	1.095	0.021	0.0

Quota	M Sismica x g	Pos. GX	Pos. GY	E agg. X-X	E agg. Y-Y	Pos. KX	Pos. KY	rapp. r/Ls	rapp. ex/rx	rapp. ey/ry
6.50	1.119e+06	49.31	21.87	5.00	0.0	51.85	22.85	1.306	0.061	0.024
5.00	1.369e+04	77.24	10.41	1.50	0.0	76.72	11.72	1.381	0.035	0.085
4.67	1.111e+04	76.52	10.17	1.50	0.0	76.72	11.72	1.381	0.014	0.101
4.50	2.182e+04	40.86	39.92	3.50	0.0	50.00	30.00	1.474	0.292	0.317
4.00	1.448e+04	76.33	10.14	1.50	0.0	76.72	11.72	1.381	0.026	0.103
3.50	3.089e+05	95.61	34.13	0.50	0.0	94.99	33.25	1.305	0.066	0.095
3.33	1.414e+04	76.13	10.10	1.50	0.0	76.72	11.72	1.381	0.039	0.105
2.67	1.414e+04	76.13	10.10	1.50	0.0	76.72	11.72	1.381	0.039	0.105
2.00	1.398e+04	76.22	10.08	1.50	0.0	76.72	11.72	1.381	0.034	0.107
1.75	8296.96	100.00	33.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.33	1.381e+04	76.31	10.06	1.50	0.0	76.72	11.72	1.381	0.027	0.108
1.17	735.00	100.00	32.79	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.67	1.381e+04	76.31	10.06	1.50	0.0	76.72	11.72	1.381	0.027	0.108
0.58	735.00	100.00	32.79	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Risulta	2.267e+06									

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	0.751	1.331	0.126	8.501e+05	37.5	937.17	4.13e-02	0.02	1.01e-06	0.0	0.0
2	0.808	1.237	0.135	2617.46	0.1	1.163e+06	51.3	4.04e-03	0.0	0.0	0.0
3	0.866	1.154	0.145	734.57	3.24e-02	1.728e+05	7.6	1.65e-03	0.0	0.0	0.0
4	0.921	1.086	0.154	607.59	2.68e-02	3.604e+05	15.9	2.00e-03	0.0	0.0	0.0
5	0.942	1.061	0.158	5.429e+05	23.9	0.47	2.07e-05	2.33e-05	0.0	0.0	0.0
6	0.977	1.023	0.164	983.39	4.34e-02	1.663e+04	0.7	2.19e-03	0.0	0.0	0.0
7	0.993	1.007	0.166	5.724e+05	25.2	7276.22	0.3	0.03	1.47e-06	0.0	0.0
8	1.038	0.964	0.174	4225.18	0.2	1.802e+05	7.9	0.05	2.13e-06	0.0	0.0
9	1.109	0.902	0.186	2103.89	9.28e-02	1.773e+04	0.8	0.12	5.09e-06	0.0	0.0
10	1.199	0.834	0.201	383.78	1.69e-02	3.803e+04	1.7	0.03	1.29e-06	0.0	0.0
11	1.246	0.802	0.209	2.745e+04	1.2	6.24e-03	0.0	3.01e-03	0.0	0.0	0.0
12	1.248	0.801	0.209	1.30	5.72e-05	0.01	0.0	5.23e-06	0.0	0.0	0.0
13	1.297	0.771	0.217	309.59	1.37e-02	1134.49	5.00e-02	3.94e-04	0.0	0.0	0.0
14	1.311	0.763	0.220	4.61	2.04e-04	1.156e+04	0.5	0.11	4.77e-06	0.0	0.0
15	1.354	0.739	0.227	1.355e+04	0.6	1.29e-03	0.0	6.82e-03	0.0	0.0	0.0
16	1.385	0.722	0.232	12.08	5.33e-04	4791.11	0.2	2.93e-04	0.0	0.0	0.0
17	1.588	0.630	0.266	0.21	9.28e-06	1.284e+04	0.6	5.68e-05	0.0	0.0	0.0
18	1.656	0.604	0.277	0.06	2.46e-06	7088.94	0.3	5.13e-05	0.0	0.0	0.0
19	1.678	0.596	0.281	2.86e-05	0.0	0.0	0.0	0.06	2.73e-06	0.0	0.0
20	1.780	0.562	0.298	1388.68	6.12e-02	1862.57	8.21e-02	5.71	2.52e-04	0.0	0.0
21	2.499	0.400	0.383	2999.30	0.1	969.98	4.28e-02	5.26	2.32e-04	0.0	0.0
22	2.560	0.391	0.383	3.467e+04	1.5	209.56	9.24e-03	0.95	4.18e-05	0.0	0.0
23	2.654	0.377	0.383	37.46	1.65e-03	2.830e+04	1.2	0.28	1.22e-05	0.0	0.0
24	2.668	0.375	0.383	612.94	2.70e-02	4379.77	0.2	5.12	2.26e-04	0.0	0.0
25	2.827	0.354	0.383	40.84	1.80e-03	2498.31	0.1	3.94	1.74e-04	0.0	0.0
26	2.991	0.334	0.383	418.36	1.85e-02	2.260e+04	1.0	9.48	4.18e-04	0.0	0.0
27	3.070	0.326	0.383	27.56	1.22e-03	3.340e+04	1.5	2.66	1.17e-04	0.0	0.0
28	3.170	0.315	0.383	1524.93	6.73e-02	618.72	2.73e-02	0.11	4.83e-06	0.0	0.0
29	3.204	0.312	0.383	0.14	6.07e-06	6397.48	0.3	0.75	3.29e-05	0.0	0.0
30	3.339	0.299	0.383	2.013e+04	0.9	77.03	3.40e-03	0.04	1.56e-06	0.0	0.0
31	3.390	0.295	0.383	120.34	5.31e-03	1.928e+04	0.9	10.49	4.63e-04	0.0	0.0
32	3.406	0.294	0.383	8105.80	0.4	20.61	9.09e-04	0.01	0.0	0.0	0.0
33	3.637	0.275	0.383	0.10	4.58e-06	792.31	3.49e-02	0.11	4.68e-06	0.0	0.0
34	3.764	0.266	0.383	36.29	1.60e-03	5829.44	0.3	61.54	2.71e-03	0.0	0.0
35	3.906	0.256	0.383	501.15	2.21e-02	31.68	1.40e-03	7.87	3.47e-04	0.0	0.0
36	4.096	0.244	0.383	5.108e+04	2.3	0.36	1.60e-05	146.77	6.47e-03	0.0	0.0
37	4.149	0.241	0.383	7902.53	0.3	2659.33	0.1	1070.07	4.72e-02	0.0	0.0
38	4.273	0.234	0.383	2.75e-03	0.0	130.50	5.76e-03	0.09	4.02e-06	0.0	0.0
39	4.419	0.226	0.383	17.50	7.72e-04	526.83	2.32e-02	1.771e+05	7.8	0.0	0.0
40	4.429	0.226	0.383	11.24	4.96e-04	243.66	1.07e-02	2.452e+05	10.8	0.0	0.0
41	4.460	0.224	0.383	3.54	1.56e-04	48.39	2.13e-03	8486.39	0.4	0.0	0.0
42	4.511	0.222	0.383	0.23	1.04e-05	3.15	1.39e-04	1.114e+05	4.9	0.0	0.0
43	4.570	0.219	0.383	0.31	1.36e-05	0.87	3.83e-05	7890.13	0.3	0.0	0.0
44	4.650	0.215	0.383	2.54	1.12e-04	7.46	3.29e-04	3.032e+04	1.3	0.0	0.0
45	4.705	0.213	0.383	3.90	1.72e-04	12.23	5.39e-04	3762.54	0.2	0.0	0.0
46	4.715	0.212	0.383	8.50e-03	0.0	0.18	7.81e-06	1.073e+04	0.5	0.0	0.0
47	4.814	0.208	0.383	4.60	2.03e-04	23.82	1.05e-03	1.316e+04	0.6	0.0	0.0
48	4.835	0.207	0.383	2.49	1.10e-04	14.04	6.19e-04	46.47	2.05e-03	0.0	0.0
49	4.921	0.203	0.383	1156.84	5.10e-02	1.065e+04	0.5	435.43	1.92e-02	0.0	0.0
50	5.013	0.199	0.383	1.45	6.42e-05	18.29	8.07e-04	1572.11	6.93e-02	0.0	0.0
51	5.018	0.199	0.383	0.03	1.46e-06	0.55	2.40e-05	1184.62	5.22e-02	0.0	0.0
52	5.122	0.195	0.383	0.0	0.0	876.83	3.87e-02	1.34e-04	0.0	0.0	0.0
53	5.443	0.184	0.383	3.34e-06	0.0	0.18	7.85e-06	3.93	1.73e-04	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
54	5.470	0.183	0.383	8.64	3.81e-04	3183.18	0.1	351.66	1.55e-02	0.0	0.0
55	5.604	0.178	0.383	3.61	1.59e-04	4.77	2.11e-04	950.32	4.19e-02	0.0	0.0
56	5.736	0.174	0.383	69.81	3.08e-03	1605.02	7.08e-02	0.17	7.41e-06	0.0	0.0
57	5.773	0.173	0.383	44.14	1.95e-03	386.14	1.70e-02	229.90	1.01e-02	0.0	0.0
58	5.930	0.169	0.383	5.32	2.35e-04	0.31	1.38e-05	3.292e+05	14.5	0.0	0.0
59	5.938	0.168	0.383	6.98	3.08e-04	0.77	3.38e-05	2.416e+05	10.7	0.0	0.0
60	5.951	0.168	0.383	685.47	3.02e-02	294.31	1.30e-02	376.93	1.66e-02	0.0	0.0
61	5.979	0.167	0.383	7.94	3.50e-04	22.66	9.99e-04	3216.53	0.1	0.0	0.0
62	5.987	0.167	0.383	8.91	3.93e-04	51.84	2.29e-03	1445.43	6.37e-02	0.0	0.0
63	6.050	0.165	0.383	0.32	1.39e-05	18.41	8.12e-04	1.057e+05	4.7	0.0	0.0
64	6.061	0.165	0.383	3.04	1.34e-04	96.14	4.24e-03	7.956e+04	3.5	0.0	0.0
65	6.122	0.163	0.383	0.03	1.37e-06	8.23	3.63e-04	10.38	4.58e-04	0.0	0.0
66	6.138	0.163	0.383	0.08	3.72e-06	391.40	1.73e-02	127.98	5.64e-03	0.0	0.0
67	6.192	0.161	0.383	390.69	1.72e-02	1.305e+04	0.6	50.69	2.24e-03	0.0	0.0
68	6.225	0.161	0.383	5.84	2.58e-04	53.24	2.35e-03	1.275e+04	0.6	0.0	0.0
69	6.244	0.160	0.383	3.45e-04	0.0	4.46	1.97e-04	6054.19	0.3	0.0	0.0
70	6.260	0.160	0.383	40.38	1.78e-03	22.84	1.01e-03	1.762e+04	0.8	0.0	0.0
71	6.327	0.158	0.383	222.89	9.83e-03	92.62	4.09e-03	0.25	1.10e-05	0.0	0.0
72	6.337	0.158	0.383	1.141e+04	0.5	7380.87	0.3	101.84	4.49e-03	0.0	0.0
73	6.341	0.158	0.383	1445.91	6.38e-02	1093.37	4.82e-02	572.23	2.52e-02	0.0	0.0
74	6.489	0.154	0.383	2.03	8.95e-05	12.73	5.61e-04	7324.89	0.3	0.0	0.0
75	6.494	0.154	0.383	1.25	5.50e-05	6.08e-05	0.0	0.16	6.86e-06	0.0	0.0
76	6.508	0.154	0.383	2.07	9.12e-05	0.73	3.22e-05	6885.97	0.3	0.0	0.0
77	6.532	0.153	0.383	0.09	3.94e-06	2.95	1.30e-04	302.32	1.33e-02	0.0	0.0
78	6.540	0.153	0.383	3.20	1.41e-04	0.17	7.55e-06	68.58	3.02e-03	0.0	0.0
79	6.598	0.152	0.383	1.874e+04	0.8	6763.95	0.3	38.29	1.69e-03	0.0	0.0
80	6.638	0.151	0.383	3.43e-04	0.0	0.18	7.73e-06	1.43e-03	0.0	0.0	0.0
81	6.705	0.149	0.383	4682.55	0.2	9.43	4.16e-04	45.79	2.02e-03	0.0	0.0
82	6.771	0.148	0.383	80.68	3.56e-03	1799.00	7.93e-02	125.92	5.55e-03	0.0	0.0
83	6.790	0.147	0.383	0.10	4.42e-06	32.22	1.42e-03	1183.97	5.22e-02	0.0	0.0
84	6.815	0.147	0.383	0.05	2.11e-06	0.48	2.11e-05	2345.28	0.1	0.0	0.0
85	6.817	0.147	0.383	0.15	6.49e-06	0.19	8.28e-06	4.38	1.93e-04	0.0	0.0
86	6.819	0.147	0.383	0.11	4.72e-06	0.17	7.59e-06	25.79	1.14e-03	0.0	0.0
87	6.891	0.145	0.382	1.17e-06	0.0	2.96e-04	0.0	99.16	4.37e-03	0.0	0.0
88	6.926	0.144	0.381	1665.39	7.35e-02	4256.17	0.2	15.41	6.80e-04	0.0	0.0
89	7.008	0.143	0.378	3271.14	0.1	1.34	5.93e-05	19.09	8.42e-04	0.0	0.0
90	7.030	0.142	0.377	1.79	7.88e-05	142.40	6.28e-03	10.06	4.44e-04	0.0	0.0
91	7.380	0.135	0.366	1.74	7.69e-05	97.61	4.30e-03	2.26	9.98e-05	0.0	0.0
92	7.632	0.131	0.359	0.0	0.0	1382.86	6.10e-02	11.56	5.10e-04	0.0	0.0
93	7.633	0.131	0.359	0.0	0.0	446.33	1.97e-02	2.56	1.13e-04	0.0	0.0
94	7.887	0.127	0.352	33.71	1.49e-03	309.13	1.36e-02	8.47	3.74e-04	0.0	0.0
95	7.931	0.126	0.351	35.39	1.56e-03	2306.24	0.1	5.733e+04	2.5	0.0	0.0
96	7.951	0.126	0.351	74.85	3.30e-03	3517.72	0.2	4.715e+04	2.1	0.0	0.0
97	8.018	0.125	0.349	2664.48	0.1	393.69	1.74e-02	3.41	1.50e-04	0.0	0.0
98	8.296	0.121	0.342	1.15e-06	0.0	9.95	4.39e-04	0.02	1.02e-06	0.0	0.0
99	8.411	0.119	0.340	264.20	1.17e-02	2.71	1.20e-04	0.14	6.20e-06	0.0	0.0
100	8.451	0.118	0.339	2.07	9.12e-05	42.91	1.89e-03	7.58	3.34e-04	0.0	0.0
101	8.756	0.114	0.332	3.14	1.38e-04	10.24	4.51e-04	7.28	3.21e-04	0.0	0.0
102	8.817	0.113	0.331	0.76	3.37e-05	6.92	3.05e-04	4.94	2.18e-04	0.0	0.0
103	8.870	0.113	0.330	321.33	1.42e-02	57.82	2.55e-03	1.52	6.69e-05	0.0	0.0
104	8.906	0.112	0.329	227.85	1.00e-02	35.65	1.57e-03	5.80	2.56e-04	0.0	0.0
105	9.024	0.111	0.327	37.44	1.65e-03	48.02	2.12e-03	11.98	5.28e-04	0.0	0.0
106	9.219	0.108	0.323	9.84	4.34e-04	64.27	2.83e-03	169.59	7.48e-03	0.0	0.0
107	9.325	0.107	0.321	9.62	4.24e-04	149.35	6.59e-03	1.312e+04	0.6	0.0	0.0
108	9.368	0.107	0.320	21.16	9.33e-04	259.61	1.14e-02	9395.60	0.4	0.0	0.0
109	9.404	0.106	0.320	43.09	1.90e-03	168.37	7.43e-03	3982.47	0.2	0.0	0.0
110	9.439	0.106	0.319	1.56	6.86e-05	322.31	1.42e-02	61.43	2.71e-03	0.0	0.0
111	9.605	0.104	0.316	1.05e-04	0.0	47.79	2.11e-03	0.25	1.11e-05	0.0	0.0
112	9.614	0.104	0.316	1.34	5.90e-05	446.50	1.97e-02	16.55	7.30e-04	0.0	0.0
113	9.911	0.101	0.311	0.29	1.29e-05	339.37	1.50e-02	1092.66	4.82e-02	0.0	0.0
114	9.950	0.100	0.310	0.16	7.12e-06	64.58	2.85e-03	1.705e+04	0.8	0.0	0.0
115	9.986	0.100	0.310	0.01	0.0	6.34	2.80e-04	1.00	4.42e-05	0.0	0.0
116	10.086	0.099	0.308	2406.59	0.1	0.08	3.55e-06	3.14	1.38e-04	0.0	0.0
117	10.087	0.099	0.308	414.81	1.83e-02	0.05	2.23e-06	48.32	2.13e-03	0.0	0.0
118	10.310	0.097	0.305	0.07	3.17e-06	214.36	9.45e-03	12.22	5.39e-04	0.0	0.0
119	10.474	0.095	0.302	128.76	5.68e-03	1013.50	4.47e-02	4.630e+04	2.0	0.0	0.0
120	10.475	0.095	0.302	262.01	1.16e-02	2948.32	0.1	8791.82	0.4	0.0	0.0
121	10.489	0.095	0.302	2.45	1.08e-04	17.75	7.83e-04	20.30	8.95e-04	0.0	0.0
122	10.528	0.095	0.301	12.49	5.51e-04	8.77	3.87e-04	97.51	4.30e-03	0.0	0.0
123	10.724	0.093	0.299	0.12	5.28e-06	32.78	1.45e-03	13.02	5.74e-04	0.0	0.0
124	10.796	0.093	0.298	24.47	1.08e-03	1269.66	5.60e-02	4.55	2.01e-04	0.0	0.0
125	10.898	0.092	0.296	2.04e-03	0.0	27.73	1.22e-03	6.32	2.79e-04	0.0	0.0
126	10.967	0.091	0.295	2.92e-03	0.0	0.76	3.36e-05	3233.61	0.1	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
127	11.072	0.090	0.294	1.006e+04	0.4	1.71	7.56e-05	1875.90	8.27e-02	0.0	0.0
128	11.097	0.090	0.294	31.53	1.39e-03	73.26	3.23e-03	120.17	5.30e-03	0.0	0.0
129	11.133	0.090	0.293	1.96	8.65e-05	99.08	4.37e-03	468.13	2.06e-02	0.0	0.0
130	11.154	0.090	0.293	280.42	1.24e-02	0.89	3.94e-05	4298.00	0.2	0.0	0.0
131	11.231	0.089	0.292	1.264e+04	0.6	39.06	1.72e-03	2.334e+04	1.0	0.0	0.0
132	11.264	0.089	0.291	30.17	1.33e-03	0.39	1.73e-05	1.87	8.27e-05	0.0	0.0
133	11.352	0.088	0.290	0.04	1.87e-06	24.51	1.08e-03	19.84	8.75e-04	0.0	0.0
134	11.520	0.087	0.288	0.25	1.11e-05	0.05	2.32e-06	1.536e+04	0.7	0.0	0.0
135	11.535	0.087	0.288	1.20e-05	0.0	0.03	1.52e-06	6.98e-04	0.0	0.0	0.0
136	11.631	0.086	0.287	1.66	7.34e-05	0.37	1.65e-05	3.132e+04	1.4	0.0	0.0
137	11.649	0.086	0.287	0.11	5.00e-06	0.41	1.79e-05	4.044e+04	1.8	0.0	0.0
138	11.681	0.086	0.286	3.46e-04	0.0	61.85	2.73e-03	7.64	3.37e-04	0.0	0.0
139	11.838	0.084	0.285	3.63	1.60e-04	2.62	1.16e-04	1.889e+04	0.8	0.0	0.0
140	11.844	0.084	0.284	8.67	3.82e-04	3.80	1.67e-04	1275.03	5.62e-02	0.0	0.0
141	11.850	0.084	0.284	4.94	2.18e-04	0.15	6.62e-06	0.18	8.01e-06	0.0	0.0
142	12.069	0.083	0.282	538.70	2.38e-02	44.53	1.96e-03	304.66	1.34e-02	0.0	0.0
143	12.108	0.083	0.282	0.83	3.65e-05	4.12	1.82e-04	163.13	7.19e-03	0.0	0.0
144	12.157	0.082	0.281	893.53	3.94e-02	384.36	1.70e-02	3.427e+04	1.5	0.0	0.0
145	12.272	0.081	0.280	5489.03	0.2	318.02	1.40e-02	1.916e+04	0.8	0.0	0.0
146	12.376	0.081	0.279	37.19	1.64e-03	0.82	3.64e-05	6544.92	0.3	0.0	0.0
147	12.400	0.081	0.278	22.80	1.01e-03	1019.16	4.49e-02	664.57	2.93e-02	0.0	0.0
148	12.402	0.081	0.278	18.38	8.11e-04	200.35	8.84e-03	2.87	1.27e-04	0.0	0.0
149	12.487	0.080	0.277	59.41	2.62e-03	0.84	3.72e-05	578.56	2.55e-02	0.0	0.0
150	12.497	0.080	0.277	2168.69	9.56e-02	32.91	1.45e-03	2.073e+04	0.9	0.0	0.0
151	12.571	0.080	0.277	1.16	5.12e-05	0.01	0.0	9857.56	0.4	0.0	0.0
152	12.608	0.079	0.276	1.24e-03	0.0	12.45	5.49e-04	1.194e+04	0.5	0.0	0.0
153	12.714	0.079	0.275	1120.06	4.94e-02	334.63	1.48e-02	7394.82	0.3	0.0	0.0
154	12.827	0.078	0.274	2588.37	0.1	1207.91	5.33e-02	7173.03	0.3	0.0	0.0
155	12.832	0.078	0.274	0.95	4.20e-05	0.75	3.29e-05	4.27	1.88e-04	0.0	0.0
156	12.867	0.078	0.274	2.40	1.06e-04	13.72	6.05e-04	25.79	1.14e-03	0.0	0.0
157	12.972	0.077	0.273	0.40	1.75e-05	0.15	6.71e-06	1213.64	5.35e-02	0.0	0.0
158	13.031	0.077	0.272	471.63	2.08e-02	2011.96	8.87e-02	353.33	1.56e-02	0.0	0.0
159	13.078	0.076	0.272	0.77	3.39e-05	2.67	1.18e-04	2.306e+04	1.0	0.0	0.0
160	13.131	0.076	0.271	2.05	9.05e-05	7.32	3.23e-04	1.064e+04	0.5	0.0	0.0
161	13.184	0.076	0.271	5.29	2.33e-04	154.63	6.82e-03	291.41	1.29e-02	0.0	0.0
162	13.242	0.076	0.270	5.54	2.44e-04	71.38	3.15e-03	4.180e+04	1.8	0.0	0.0
163	13.290	0.075	0.270	0.91	4.03e-05	38.15	1.68e-03	2714.30	0.1	0.0	0.0
164	13.634	0.073	0.267	0.68	3.01e-05	0.43	1.89e-05	0.16	7.25e-06	0.0	0.0
165	13.778	0.073	0.265	98.14	4.33e-03	267.78	1.18e-02	13.06	5.76e-04	0.0	0.0
166	13.830	0.072	0.265	704.17	3.11e-02	8.27	3.65e-04	1.738e+04	0.8	0.0	0.0
167	13.884	0.072	0.265	2.57e-03	0.0	0.08	3.58e-06	2.338e+04	1.0	0.0	0.0
168	13.998	0.071	0.264	1.43	6.32e-05	0.40	1.77e-05	3.340e+04	1.5	0.0	0.0
169	14.022	0.071	0.263	0.08	3.37e-06	0.03	1.15e-06	1.213e+04	0.5	0.0	0.0
170	14.058	0.071	0.263	0.07	3.25e-06	23.19	1.02e-03	1155.89	5.10e-02	0.0	0.0
171	14.197	0.070	0.262	425.94	1.88e-02	13.81	6.09e-04	248.75	1.10e-02	0.0	0.0
172	14.524	0.069	0.259	8607.06	0.4	136.31	6.01e-03	7473.88	0.3	0.0	0.0
173	14.639	0.068	0.259	1686.71	7.44e-02	10.88	4.80e-04	2461.54	0.1	0.0	0.0
174	14.884	0.067	0.257	478.65	2.11e-02	104.18	4.59e-03	14.26	6.29e-04	0.0	0.0
175	14.892	0.067	0.257	3813.57	0.2	849.26	3.75e-02	434.62	1.92e-02	0.0	0.0
176	14.941	0.067	0.256	0.06	2.67e-06	6.84e-03	0.0	107.09	4.72e-03	0.0	0.0
177	14.967	0.067	0.256	0.17	7.52e-06	0.05	2.07e-06	464.59	2.05e-02	0.0	0.0
178	14.972	0.067	0.256	141.86	6.26e-03	25.07	1.11e-03	39.50	1.74e-03	0.0	0.0
179	15.039	0.066	0.256	22.44	9.90e-04	178.07	7.85e-03	55.23	2.44e-03	0.0	0.0
180	15.478	0.065	0.253	9443.67	0.4	43.55	1.92e-03	55.25	2.44e-03	0.0	0.0
181	15.801	0.063	0.251	58.10	2.56e-03	7836.27	0.3	209.90	9.26e-03	0.0	0.0
182	16.004	0.062	0.249	1.76	7.77e-05	6.42	2.83e-04	103.76	4.58e-03	0.0	0.0
183	16.241	0.062	0.248	22.73	1.00e-03	0.41	1.80e-05	17.68	7.80e-04	0.0	0.0
184	16.263	0.061	0.248	234.99	1.04e-02	91.93	4.05e-03	2578.80	0.1	0.0	0.0
185	16.297	0.061	0.247	1.51e-06	0.0	4.09	1.81e-04	0.01	0.0	0.0	0.0
186	16.459	0.061	0.247	3.54	1.56e-04	0.11	5.06e-06	3.178e+04	1.4	0.0	0.0
187	16.742	0.060	0.245	0.25	1.10e-05	0.04	1.68e-06	0.31	1.35e-05	0.0	0.0
188	16.831	0.059	0.244	108.21	4.77e-03	7.72	3.40e-04	2.494e+04	1.1	0.0	0.0
189	16.938	0.059	0.244	4.30e-06	0.0	1.13	4.98e-05	8.49e-03	0.0	0.0	0.0
190	17.054	0.059	0.243	1.75	7.74e-05	85.75	3.78e-03	105.65	4.66e-03	0.0	0.0
191	17.072	0.059	0.243	277.37	1.22e-02	16.78	7.40e-04	0.45	1.96e-05	0.0	0.0
192	17.391	0.058	0.241	205.18	9.05e-03	6316.74	0.3	1.818e+04	0.8	0.0	0.0
193	17.459	0.057	0.241	3.43e-06	0.0	1.09e-03	0.0	6.06e-03	0.0	0.0	0.0
194	17.694	0.057	0.240	1074.15	4.74e-02	15.08	6.65e-04	137.67	6.07e-03	0.0	0.0
195	17.916	0.056	0.239	48.57	2.14e-03	1179.70	5.20e-02	1.361e+04	0.6	0.0	0.0
196	17.953	0.056	0.238	0.0	0.0	408.53	1.80e-02	0.04	1.62e-06	0.0	0.0
197	17.965	0.056	0.238	5.97e-05	0.0	60.17	2.65e-03	0.89	3.94e-05	0.0	0.0
198	18.079	0.055	0.238	1.13e-06	0.0	14.26	6.29e-04	5.82e-03	0.0	0.0	0.0
199	18.209	0.055	0.237	0.53	2.33e-05	1626.48	7.17e-02	4068.42	0.2	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
200	18.444	0.054	0.236	4.74	2.09e-04	6.49	2.86e-04	202.17	8.92e-03	0.0	0.0
Risulta				2.263e+06		2.220e+06		2.170e+06			
In percentuale				99.80		97.90		95.71			

CDC	Tipo	Sigla Id	Note
13	Edk	CDC=Ed (dinamico SLD) alfa=90.00 (ecc. -)	
			categoria suolo: C
			fattore di sito S = 1.500
			ordinata spettro (tratto Tb-Tc) = 0.383 g
			angolo di ingresso:90.00
			eccentricità aggiuntiva: negativa
			periodo proprio T1: 1.292 sec.
			numero di modi considerati:200
			combinaz. modale: CQC

Quota	M Sismica x g	Pos. GX	Pos. GY	E agg. X-X	E agg. Y-Y	Pos. KX	Pos. KY	rapp. r/Ls	rapp. ex/rx	rapp. ey/ry
m	daN	m	m	m	m	m	m			
7.22	6.991e+05	49.32	22.50	-5.00	0.0	50.00	22.50	1.095	0.021	0.0
6.50	1.119e+06	49.31	21.87	-5.00	0.0	51.85	22.85	1.306	0.061	0.024
5.00	1.369e+04	77.24	10.41	-1.50	0.0	76.72	11.72	1.381	0.035	0.085
4.67	1.111e+04	76.52	10.17	-1.50	0.0	76.72	11.72	1.381	0.014	0.101
4.50	2.182e+04	40.86	39.92	-3.50	0.0	50.00	30.00	1.474	0.292	0.317
4.00	1.448e+04	76.33	10.14	-1.50	0.0	76.72	11.72	1.381	0.026	0.103
3.50	3.089e+05	95.61	34.13	-0.50	0.0	94.99	33.25	1.305	0.066	0.095
3.33	1.414e+04	76.13	10.10	-1.50	0.0	76.72	11.72	1.381	0.039	0.105
2.67	1.414e+04	76.13	10.10	-1.50	0.0	76.72	11.72	1.381	0.039	0.105
2.00	1.398e+04	76.22	10.08	-1.50	0.0	76.72	11.72	1.381	0.034	0.107
1.75	8296.96	100.00	33.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.33	1.381e+04	76.31	10.06	-1.50	0.0	76.72	11.72	1.381	0.027	0.108
1.17	735.00	100.00	32.79	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.67	1.381e+04	76.31	10.06	-1.50	0.0	76.72	11.72	1.381	0.027	0.108
0.58	735.00	100.00	32.79	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Risulta	2.267e+06									

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	0.752	1.330	0.126	8.560e+05	37.8	59.94	2.64e-03	0.02	1.08e-06	0.0	0.0
2	0.774	1.292	0.130	1.12	4.92e-05	1.004e+06	44.3	8.58e-05	0.0	0.0	0.0
3	0.842	1.188	0.141	23.08	1.02e-03	2.262e+05	10.0	2.82e-03	0.0	0.0	0.0
4	0.898	1.113	0.150	357.79	1.58e-02	3.383e+05	14.9	6.67e-03	0.0	0.0	0.0
5	0.942	1.061	0.158	5.430e+05	23.9	0.48	2.13e-05	2.27e-05	0.0	0.0	0.0
6	0.958	1.044	0.160	4268.61	0.2	6.129e+04	2.7	2.88e-04	0.0	0.0	0.0
7	0.995	1.005	0.167	5.722e+05	25.2	393.97	1.74e-02	0.05	2.30e-06	0.0	0.0
8	1.038	0.963	0.174	1686.21	7.44e-02	8.060e+04	3.6	9.20e-03	0.0	0.0	0.0
9	1.123	0.890	0.188	141.61	6.25e-03	4.137e+04	1.8	8.03e-03	0.0	0.0	0.0
10	1.202	0.832	0.201	0.04	1.91e-06	9.053e+04	4.0	4.82e-03	0.0	0.0	0.0
11	1.246	0.802	0.209	2.745e+04	1.2	0.06	2.47e-06	3.00e-03	0.0	0.0	0.0
12	1.248	0.801	0.209	1.35	5.94e-05	0.29	1.28e-05	3.98e-06	0.0	0.0	0.0
13	1.266	0.790	0.212	11.71	5.17e-04	3.81	1.68e-04	0.02	0.0	0.0	0.0
14	1.292	0.774	0.216	85.07	3.75e-03	1.193e+05	5.3	0.11	4.98e-06	0.0	0.0
15	1.299	0.770	0.218	3.78e-05	0.0	8.00e-06	0.0	0.03	1.43e-06	0.0	0.0
16	1.354	0.739	0.227	1.356e+04	0.6	3.06	1.35e-04	6.72e-03	0.0	0.0	0.0
17	1.363	0.734	0.228	13.42	5.92e-04	1.207e+04	0.5	0.02	0.0	0.0	0.0
18	1.459	0.685	0.244	171.79	7.58e-03	2.546e+04	1.1	0.07	3.12e-06	0.0	0.0
19	1.704	0.587	0.285	0.29	1.28e-05	7895.19	0.3	0.13	5.62e-06	0.0	0.0
20	2.091	0.478	0.350	1485.74	6.55e-02	457.03	2.02e-02	13.43	5.92e-04	0.0	0.0
21	2.520	0.397	0.383	9.48	4.18e-04	100.37	4.43e-03	0.10	4.56e-06	0.0	0.0
22	2.606	0.384	0.383	96.63	4.26e-03	2.959e+04	1.3	0.33	1.46e-05	0.0	0.0
23	2.708	0.369	0.383	1394.04	6.15e-02	197.94	8.73e-03	1.83	8.07e-05	0.0	0.0
24	2.771	0.361	0.383	4.891e+04	2.2	356.24	1.57e-02	1.77	7.82e-05	0.0	0.0
25	2.853	0.350	0.383	2544.65	0.1	720.39	3.18e-02	3.30	1.46e-04	0.0	0.0
26	2.984	0.335	0.383	812.46	3.58e-02	3104.07	0.1	7.58	3.35e-04	0.0	0.0
27	3.167	0.316	0.383	807.01	3.56e-02	25.37	1.12e-03	0.04	1.75e-06	0.0	0.0
28	3.210	0.312	0.383	6.42	2.83e-04	4235.47	0.2	0.30	1.31e-05	0.0	0.0
29	3.310	0.302	0.383	530.82	2.34e-02	2.474e+04	1.1	0.50	2.21e-05	0.0	0.0
30	3.334	0.300	0.383	1.852e+04	0.8	628.09	2.77e-02	5.35e-03	0.0	0.0	0.0
31	3.406	0.294	0.383	7697.99	0.3	3.92	1.73e-04	0.15	6.61e-06	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
32	3.449	0.290	0.383	15.76	6.95e-04	5.248e+04	2.3	15.85	6.99e-04	0.0	0.0
33	3.669	0.273	0.383	8.32e-03	0.0	499.11	2.20e-02	0.01	0.0	0.0	0.0
34	3.837	0.261	0.383	973.39	4.29e-02	68.57	3.02e-03	9.25	4.08e-04	0.0	0.0
35	3.899	0.256	0.383	55.26	2.44e-03	1.392e+04	0.6	26.01	1.15e-03	0.0	0.0
36	3.952	0.253	0.383	1.21e-05	0.0	0.02	0.0	758.72	3.35e-02	0.0	0.0
37	4.302	0.232	0.383	1.16e-04	0.0	1328.18	5.86e-02	0.02	0.0	0.0	0.0
38	4.420	0.226	0.383	4.605e+04	2.0	175.67	7.75e-03	5136.01	0.2	0.0	0.0
39	4.426	0.226	0.383	452.38	2.00e-02	3.79	1.67e-04	4.237e+05	18.7	0.0	0.0
40	4.457	0.224	0.383	116.52	5.14e-03	141.08	6.22e-03	3823.29	0.2	0.0	0.0
41	4.497	0.222	0.383	122.86	5.42e-03	6465.29	0.3	1.564e+04	0.7	0.0	0.0
42	4.517	0.221	0.383	0.04	1.62e-06	1950.55	8.60e-02	9.749e+04	4.3	0.0	0.0
43	4.547	0.220	0.383	0.18	7.76e-06	11.15	4.92e-04	4865.23	0.2	0.0	0.0
44	4.574	0.219	0.383	7.90	3.48e-04	231.90	1.02e-02	4548.26	0.2	0.0	0.0
45	4.654	0.215	0.383	4.65	2.05e-04	49.46	2.18e-03	3.316e+04	1.5	0.0	0.0
46	4.707	0.212	0.383	1.54	6.78e-05	16.04	7.07e-04	2736.90	0.1	0.0	0.0
47	4.813	0.208	0.383	12.95	5.71e-04	5.12	2.26e-04	1.689e+04	0.7	0.0	0.0
48	4.834	0.207	0.383	27.11	1.20e-03	11.87	5.23e-04	53.02	2.34e-03	0.0	0.0
49	4.860	0.206	0.383	597.77	2.64e-02	272.53	1.20e-02	935.71	4.13e-02	0.0	0.0
50	5.014	0.199	0.383	21.34	9.41e-04	94.55	4.17e-03	1861.35	8.21e-02	0.0	0.0
51	5.017	0.199	0.383	3.06	1.35e-04	12.17	5.37e-04	824.28	3.64e-02	0.0	0.0
52	5.038	0.198	0.383	1445.51	6.38e-02	4607.46	0.2	98.78	4.36e-03	0.0	0.0
53	5.093	0.196	0.383	0.0	0.0	4.07	1.80e-04	7.50e-06	0.0	0.0	0.0
54	5.295	0.189	0.383	0.78	3.45e-05	293.62	1.30e-02	42.48	1.87e-03	0.0	0.0
55	5.354	0.187	0.383	2.77e-06	0.0	9.81e-03	0.0	44.84	1.98e-03	0.0	0.0
56	5.387	0.186	0.383	10.05	4.43e-04	3194.65	0.1	252.97	1.12e-02	0.0	0.0
57	5.625	0.178	0.383	0.0	0.0	3.44	1.52e-04	1144.79	5.05e-02	0.0	0.0
58	5.785	0.173	0.383	259.94	1.15e-02	1014.35	4.47e-02	279.61	1.23e-02	0.0	0.0
59	5.811	0.172	0.383	72.05	3.18e-03	2216.14	9.77e-02	130.82	5.77e-03	0.0	0.0
60	5.931	0.169	0.383	4.36e-04	0.0	0.39	1.71e-05	3.314e+05	14.6	0.0	0.0
61	5.938	0.168	0.383	0.08	3.44e-06	4.79	2.11e-04	2.401e+05	10.6	0.0	0.0
62	5.979	0.167	0.383	4.17e-03	0.0	0.12	5.48e-06	2043.20	9.01e-02	0.0	0.0
63	5.987	0.167	0.383	0.34	1.50e-05	4.88	2.15e-04	637.05	2.81e-02	0.0	0.0
64	6.050	0.165	0.383	0.06	2.58e-06	0.66	2.92e-05	1.063e+05	4.7	0.0	0.0
65	6.061	0.165	0.383	0.80	3.52e-05	0.11	4.73e-06	8.005e+04	3.5	0.0	0.0
66	6.121	0.163	0.383	0.14	6.37e-06	0.14	6.31e-06	261.03	1.15e-02	0.0	0.0
67	6.139	0.163	0.383	1.72	7.58e-05	3.87	1.71e-04	722.92	3.19e-02	0.0	0.0
68	6.234	0.160	0.383	3.00	1.32e-04	6.06	2.67e-04	2.121e+04	0.9	0.0	0.0
69	6.249	0.160	0.383	3.89	1.71e-04	8.03	3.54e-04	483.76	2.13e-02	0.0	0.0
70	6.263	0.160	0.383	0.02	0.0	3.75	1.66e-04	1.421e+04	0.6	0.0	0.0
71	6.294	0.159	0.383	0.06	2.86e-06	16.80	7.41e-04	68.45	3.02e-03	0.0	0.0
72	6.327	0.158	0.383	0.34	1.49e-05	0.45	1.98e-05	35.74	1.58e-03	0.0	0.0
73	6.342	0.158	0.383	3.18	1.40e-04	1.71	7.53e-05	431.25	1.90e-02	0.0	0.0
74	6.485	0.154	0.383	2.330e+04	1.0	457.04	2.02e-02	269.89	1.19e-02	0.0	0.0
75	6.490	0.154	0.383	1385.40	6.11e-02	23.11	1.02e-03	7144.83	0.3	0.0	0.0
76	6.494	0.154	0.383	2.50	1.10e-04	7.04e-05	0.0	0.17	7.44e-06	0.0	0.0
77	6.508	0.154	0.383	16.19	7.14e-04	0.37	1.64e-05	6773.12	0.3	0.0	0.0
78	6.531	0.153	0.383	4.33	1.91e-04	0.09	3.92e-06	157.12	6.93e-03	0.0	0.0
79	6.541	0.153	0.383	1.17	5.15e-05	0.12	5.15e-06	163.33	7.20e-03	0.0	0.0
80	6.696	0.149	0.383	5153.66	0.2	0.06	2.53e-06	34.89	1.54e-03	0.0	0.0
81	6.775	0.148	0.383	6092.28	0.3	1624.97	7.17e-02	168.30	7.42e-03	0.0	0.0
82	6.791	0.147	0.383	0.94	4.14e-05	0.04	1.82e-06	1293.40	5.70e-02	0.0	0.0
83	6.814	0.147	0.383	8.25e-04	0.0	0.71	3.11e-05	2226.92	9.82e-02	0.0	0.0
84	6.816	0.147	0.383	5.21e-04	0.0	0.53	2.35e-05	19.77	8.72e-04	0.0	0.0
85	6.820	0.147	0.383	0.05	2.07e-06	2.77	1.22e-04	228.09	1.01e-02	0.0	0.0
86	6.969	0.143	0.379	3402.16	0.2	10.38	4.58e-04	16.71	7.37e-04	0.0	0.0
87	7.017	0.143	0.378	2.49	1.10e-04	147.97	6.53e-03	8.79	3.88e-04	0.0	0.0
88	7.185	0.139	0.372	166.03	7.32e-03	782.71	3.45e-02	0.16	6.86e-06	0.0	0.0
89	7.365	0.136	0.367	3.33e-06	0.0	700.77	3.09e-02	2.01	8.88e-05	0.0	0.0
90	7.447	0.134	0.364	4.03e-06	0.0	1299.40	5.73e-02	19.62	8.66e-04	0.0	0.0
91	7.547	0.132	0.362	20.02	8.83e-04	1.463e+04	0.6	1245.18	5.49e-02	0.0	0.0
92	7.636	0.131	0.359	0.0	0.0	336.58	1.48e-02	6.10e-04	0.0	0.0	0.0
93	7.942	0.126	0.351	639.17	2.82e-02	6.54	2.89e-04	8.205e+04	3.6	0.0	0.0
94	7.943	0.126	0.351	2144.41	9.46e-02	346.41	1.53e-02	2.050e+04	0.9	0.0	0.0
95	8.003	0.125	0.349	164.34	7.25e-03	8.55	3.77e-04	347.57	1.53e-02	0.0	0.0
96	8.144	0.123	0.346	1.43e-06	0.0	32.55	1.44e-03	0.04	1.78e-06	0.0	0.0
97	8.316	0.120	0.342	3.47e-03	0.0	3.31	1.46e-04	0.06	2.77e-06	0.0	0.0
98	8.356	0.120	0.341	0.33	1.43e-05	3859.79	0.2	478.63	2.11e-02	0.0	0.0
99	8.393	0.119	0.340	418.33	1.85e-02	143.88	6.35e-03	4.90	2.16e-04	0.0	0.0
100	8.556	0.117	0.336	1.10e-04	0.0	6.54	2.88e-04	0.23	1.01e-05	0.0	0.0
101	8.836	0.113	0.331	3.77e-03	0.0	3.41e-03	0.0	0.45	2.00e-05	0.0	0.0
102	8.909	0.112	0.329	691.40	3.05e-02	11.32	4.99e-04	3.46	1.52e-04	0.0	0.0
103	9.072	0.110	0.326	0.06	2.47e-06	0.29	1.26e-05	0.06	2.56e-06	0.0	0.0
104	9.240	0.108	0.323	3.76e-05	0.0	85.43	3.77e-03	4.30	1.90e-04	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
105	9.283	0.108	0.322	0.44	1.96e-05	30.48	1.34e-03	15.21	6.71e-04	0.0	0.0
106	9.307	0.107	0.321	11.00	4.85e-04	26.00	1.15e-03	5.66	2.50e-04	0.0	0.0
107	9.351	0.107	0.321	6.15	2.71e-04	0.44	1.92e-05	2.657e+04	1.2	0.0	0.0
108	9.404	0.106	0.320	0.02	0.0	6.91	3.05e-04	34.98	1.54e-03	0.0	0.0
109	9.409	0.106	0.320	0.59	2.60e-05	283.21	1.25e-02	171.45	7.56e-03	0.0	0.0
110	9.490	0.105	0.318	9.15e-03	0.0	1300.43	5.74e-02	49.49	2.18e-03	0.0	0.0
111	9.617	0.104	0.316	0.67	2.96e-05	1506.79	6.65e-02	1.58	6.99e-05	0.0	0.0
112	9.804	0.102	0.313	2.45e-05	0.0	3.40	1.50e-04	4.87	2.15e-04	0.0	0.0
113	9.897	0.101	0.311	1.72	7.58e-05	115.58	5.10e-03	175.35	7.73e-03	0.0	0.0
114	9.948	0.101	0.310	0.73	3.23e-05	0.32	1.40e-05	1.805e+04	0.8	0.0	0.0
115	10.086	0.099	0.308	2815.53	0.1	0.0	0.0	0.85	3.77e-05	0.0	0.0
116	10.151	0.099	0.307	1.36e-03	0.0	7.09	3.13e-04	17.01	7.50e-04	0.0	0.0
117	10.336	0.097	0.304	5.87	2.59e-04	109.45	4.83e-03	1.64	7.25e-05	0.0	0.0
118	10.336	0.097	0.304	0.01	0.0	159.65	7.04e-03	0.02	0.0	0.0	0.0
119	10.368	0.096	0.304	4.19	1.85e-04	9.21	4.06e-04	0.02	0.0	0.0	0.0
120	10.384	0.096	0.304	761.85	3.36e-02	4420.09	0.2	2223.66	9.81e-02	0.0	0.0
121	10.474	0.095	0.302	0.07	3.13e-06	17.86	7.88e-04	5.323e+04	2.3	0.0	0.0
122	10.509	0.095	0.302	0.04	1.56e-06	44.93	1.98e-03	9.35	4.12e-04	0.0	0.0
123	10.630	0.094	0.300	0.10	4.28e-06	147.16	6.49e-03	0.74	3.28e-05	0.0	0.0
124	10.716	0.093	0.299	1.10	4.84e-05	17.49	7.71e-04	6.46	2.85e-04	0.0	0.0
125	10.823	0.092	0.297	80.94	3.57e-03	0.96	4.22e-05	55.05	2.43e-03	0.0	0.0
126	10.964	0.091	0.295	0.20	8.64e-06	0.10	4.47e-06	3246.78	0.1	0.0	0.0
127	10.999	0.091	0.295	416.31	1.84e-02	73.19	3.23e-03	0.43	1.88e-05	0.0	0.0
128	11.037	0.091	0.294	881.45	3.89e-02	0.07	3.15e-06	2.91	1.28e-04	0.0	0.0
129	11.039	0.091	0.294	1.322e+04	0.6	170.48	7.52e-03	53.64	2.37e-03	0.0	0.0
130	11.180	0.089	0.293	4894.79	0.2	219.57	9.68e-03	3.053e+04	1.3	0.0	0.0
131	11.264	0.089	0.291	34.75	1.53e-03	1.65e-04	0.0	0.01	0.0	0.0	0.0
132	11.497	0.087	0.289	44.60	1.97e-03	190.75	8.41e-03	118.64	5.23e-03	0.0	0.0
133	11.519	0.087	0.288	0.14	6.15e-06	0.02	1.05e-06	1.486e+04	0.7	0.0	0.0
134	11.535	0.087	0.288	0.0	0.0	9.72e-04	0.0	8.09e-04	0.0	0.0	0.0
135	11.628	0.086	0.287	0.75	3.33e-05	0.09	4.11e-06	3.183e+04	1.4	0.0	0.0
136	11.649	0.086	0.287	0.06	2.49e-06	2.32	1.02e-04	3.999e+04	1.8	0.0	0.0
137	11.838	0.084	0.285	16.41	7.24e-04	1.46	6.44e-05	1.790e+04	0.8	0.0	0.0
138	11.842	0.084	0.284	31.33	1.38e-03	17.91	7.90e-04	2543.01	0.1	0.0	0.0
139	11.849	0.084	0.284	24.41	1.08e-03	4.27	1.88e-04	15.29	6.74e-04	0.0	0.0
140	11.897	0.084	0.284	17.27	7.62e-04	531.90	2.35e-02	297.60	1.31e-02	0.0	0.0
141	12.016	0.083	0.283	452.34	2.00e-02	749.00	3.30e-02	859.43	3.79e-02	0.0	0.0
142	12.108	0.083	0.282	16.11	7.11e-04	6.62	2.92e-04	41.95	1.85e-03	0.0	0.0
143	12.149	0.082	0.281	2291.99	0.1	295.02	1.30e-02	2.978e+04	1.3	0.0	0.0
144	12.207	0.082	0.280	359.75	1.59e-02	29.13	1.28e-03	1565.59	6.90e-02	0.0	0.0
145	12.254	0.082	0.280	6096.54	0.3	249.19	1.10e-02	6769.71	0.3	0.0	0.0
146	12.371	0.081	0.279	36.44	1.61e-03	1.51	6.66e-05	7172.21	0.3	0.0	0.0
147	12.425	0.080	0.278	11.67	5.15e-04	20.68	9.12e-04	444.12	1.96e-02	0.0	0.0
148	12.457	0.080	0.278	19.94	8.80e-04	1111.10	4.90e-02	714.43	3.15e-02	0.0	0.0
149	12.497	0.080	0.277	1998.72	8.82e-02	62.71	2.77e-03	2.958e+04	1.3	0.0	0.0
150	12.572	0.080	0.277	0.06	2.58e-06	0.01	0.0	1.037e+04	0.5	0.0	0.0
151	12.608	0.079	0.276	0.02	0.0	15.24	6.72e-04	1.197e+04	0.5	0.0	0.0
152	12.692	0.079	0.275	2.09	9.21e-05	48.35	2.13e-03	7.20	3.17e-04	0.0	0.0
153	12.710	0.079	0.275	3280.08	0.1	366.14	1.61e-02	3442.50	0.2	0.0	0.0
154	12.762	0.078	0.275	2358.05	0.1	557.52	2.46e-02	1.379e+04	0.6	0.0	0.0
155	12.832	0.078	0.274	0.03	1.17e-06	3.65e-03	0.0	0.04	1.70e-06	0.0	0.0
156	12.969	0.077	0.273	9.10e-04	0.0	0.44	1.93e-05	933.76	4.12e-02	0.0	0.0
157	13.078	0.076	0.272	0.01	0.0	0.14	6.37e-06	2.360e+04	1.0	0.0	0.0
158	13.118	0.076	0.271	170.11	7.50e-03	557.87	2.46e-02	6555.76	0.3	0.0	0.0
159	13.136	0.076	0.271	169.35	7.47e-03	469.25	2.07e-02	4881.63	0.2	0.0	0.0
160	13.242	0.076	0.270	51.91	2.29e-03	61.42	2.71e-03	4.133e+04	1.8	0.0	0.0
161	13.285	0.075	0.270	14.07	6.20e-04	44.16	1.95e-03	2844.69	0.1	0.0	0.0
162	13.558	0.074	0.267	0.02	0.0	8.99	3.96e-04	2.81	1.24e-04	0.0	0.0
163	13.634	0.073	0.267	2.24	9.87e-05	0.80	3.53e-05	1.26	5.55e-05	0.0	0.0
164	13.826	0.072	0.265	730.25	3.22e-02	38.73	1.71e-03	1.731e+04	0.8	0.0	0.0
165	13.881	0.072	0.265	3.84e-04	0.0	0.10	4.47e-06	2.422e+04	1.1	0.0	0.0
166	13.908	0.072	0.264	42.97	1.90e-03	709.78	3.13e-02	651.33	2.87e-02	0.0	0.0
167	13.999	0.071	0.264	0.54	2.40e-05	0.68	3.01e-05	3.425e+04	1.5	0.0	0.0
168	14.021	0.071	0.263	14.58	6.43e-04	76.61	3.38e-03	1.100e+04	0.5	0.0	0.0
169	14.069	0.071	0.263	62.85	2.77e-03	330.09	1.46e-02	532.71	2.35e-02	0.0	0.0
170	14.174	0.071	0.262	258.85	1.14e-02	72.35	3.19e-03	107.15	4.73e-03	0.0	0.0
171	14.512	0.069	0.260	9381.78	0.4	2.87	1.26e-04	1.255e+04	0.6	0.0	0.0
172	14.616	0.068	0.259	6.01e-05	0.0	2.99e-05	0.0	135.81	5.99e-03	0.0	0.0
173	14.756	0.068	0.258	1.94e-03	0.0	0.20	8.60e-06	6.28	2.77e-04	0.0	0.0
174	14.935	0.067	0.256	24.87	1.10e-03	0.64	2.83e-05	1.64	7.23e-05	0.0	0.0
175	14.949	0.067	0.256	0.77	3.38e-05	0.83	3.68e-05	0.71	3.15e-05	0.0	0.0
176	14.960	0.067	0.256	3605.28	0.2	100.99	4.45e-03	1885.19	8.31e-02	0.0	0.0
177	14.981	0.067	0.256	4.25	1.87e-04	1.24e-03	0.0	527.25	2.33e-02	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
178	15.061	0.066	0.256	0.02	0.0	2.47	1.09e-04	21.40	9.44e-04	0.0	0.0
179	15.431	0.065	0.253	5952.78	0.3	3934.02	0.2	3.43	1.51e-04	0.0	0.0
180	15.538	0.064	0.252	4725.13	0.2	4322.10	0.2	5.95	2.63e-04	0.0	0.0
181	16.051	0.062	0.249	80.25	3.54e-03	169.70	7.48e-03	9.12	4.02e-04	0.0	0.0
182	16.058	0.062	0.249	1.06e-05	0.0	0.03	1.24e-06	19.15	8.45e-04	0.0	0.0
183	16.111	0.062	0.249	1.05e-05	0.0	6.60e-05	0.0	2.27	1.00e-04	0.0	0.0
184	16.268	0.061	0.248	120.14	5.30e-03	113.79	5.02e-03	2532.22	0.1	0.0	0.0
185	16.454	0.061	0.247	0.82	3.64e-05	17.62	7.77e-04	3.079e+04	1.4	0.0	0.0
186	16.742	0.060	0.245	0.43	1.90e-05	6.96e-06	0.0	0.40	1.75e-05	0.0	0.0
187	16.761	0.060	0.245	101.34	4.47e-03	18.68	8.24e-04	6023.56	0.3	0.0	0.0
188	16.826	0.059	0.244	29.89	1.32e-03	2.76	1.22e-04	1.803e+04	0.8	0.0	0.0
189	16.928	0.059	0.244	1.62	7.15e-05	51.07	2.25e-03	128.72	5.68e-03	0.0	0.0
190	17.086	0.059	0.243	48.69	2.15e-03	24.86	1.10e-03	5.84	2.58e-04	0.0	0.0
191	17.167	0.058	0.242	10.59	4.67e-04	1291.72	5.70e-02	750.73	3.31e-02	0.0	0.0
192	17.189	0.058	0.242	8.85e-04	0.0	537.99	2.37e-02	0.50	2.21e-05	0.0	0.0
193	17.359	0.058	0.241	372.78	1.64e-02	469.42	2.07e-02	80.20	3.54e-03	0.0	0.0
194	17.564	0.057	0.240	3.16	1.39e-04	2767.79	0.1	5289.69	0.2	0.0	0.0
195	17.610	0.057	0.240	5.82	2.57e-04	2410.12	0.1	2430.30	0.1	0.0	0.0
196	17.696	0.057	0.240	1056.86	4.66e-02	139.75	6.16e-03	254.77	1.12e-02	0.0	0.0
197	18.027	0.055	0.238	12.08	5.33e-04	2.14	9.46e-05	6655.09	0.3	0.0	0.0
198	18.056	0.055	0.238	24.82	1.09e-03	9.60	4.23e-04	1.872e+04	0.8	0.0	0.0
199	18.139	0.055	0.237	1.78e-05	0.0	0.72	3.16e-05	0.04	1.83e-06	0.0	0.0
200	18.271	0.055	0.237	3.49	1.54e-04	7.14	3.15e-04	1354.68	5.97e-02	0.0	0.0
Risulta				2.263e+06		2.217e+06		2.170e+06			
In percentuale				99.81		97.77		95.73			

CDC	Tipo	Sigla Id	Note
15	Edk	CDC=Ed (dinamico SLO) alfa=0.0 (ecc. +)	
			categoria suolo: C
			fattore di sito S = 1.500
			ordinata spettro (tratto Tb-Tc) = 0.296 g
			angolo di ingresso:0.0
			eccentricità aggiuntiva: positiva
			periodo proprio T1: 1.332 sec.
			numero di modi considerati:200
			combinaz. modale: CQC

Quota	M Sismica x g	Pos. GX	Pos. GY	E agg. X-X	E agg. Y-Y	Pos. KX	Pos. KY	rapp. r/Ls	rapp. ex/rx	rapp. ey/ry
m	daN	m	m	m	m	m	m			
7.22	6.991e+05	49.32	22.50	0.0	0.0	50.00	22.50	1.095	0.021	0.0
6.50	1.119e+06	49.31	21.87	0.0	-2.25	51.85	22.85	1.306	0.061	0.024
5.00	1.369e+04	77.24	10.41	0.0	-1.11	76.72	11.72	1.381	0.035	0.085
4.67	1.111e+04	76.52	10.17	0.0	-1.11	76.72	11.72	1.381	0.014	0.101
4.50	2.182e+04	40.86	39.92	0.0	-1.13	50.00	30.00	1.474	0.292	0.317
4.00	1.448e+04	76.33	10.14	0.0	-1.11	76.72	11.72	1.381	0.026	0.103
3.50	3.089e+05	95.61	34.13	0.0	-1.13	94.99	33.25	1.305	0.066	0.095
3.33	1.414e+04	76.13	10.10	0.0	-1.11	76.72	11.72	1.381	0.039	0.105
2.67	1.414e+04	76.13	10.10	0.0	-1.11	76.72	11.72	1.381	0.039	0.105
2.00	1.398e+04	76.22	10.08	0.0	-1.11	76.72	11.72	1.381	0.034	0.107
1.75	8296.96	100.00	33.00	0.0	-0.13	0.0	0.0	0.0	0.0	0.0
1.33	1.381e+04	76.31	10.06	0.0	-1.11	76.72	11.72	1.381	0.027	0.108
1.17	735.00	100.00	32.79	0.0	-0.13	0.0	0.0	0.0	0.0	0.0
0.67	1.381e+04	76.31	10.06	0.0	-1.11	76.72	11.72	1.381	0.027	0.108
0.58	735.00	100.00	32.79	0.0	-0.13	0.0	0.0	0.0	0.0	0.0
Risulta	2.267e+06									

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	0.751	1.332	0.097	8.523e+05	37.6	168.15	7.42e-03	0.02	1.06e-06	0.0	0.0
2	0.825	1.213	0.107	86.74	3.83e-03	1.402e+06	61.8	2.25e-03	0.0	0.0	0.0
3	0.853	1.173	0.110	521.00	2.30e-02	9.787e+04	4.3	4.50e-03	0.0	0.0	0.0
4	0.897	1.114	0.116	5.983e+05	26.4	77.63	3.42e-03	2.04e-05	0.0	0.0	0.0
5	0.898	1.113	0.116	74.78	3.30e-03	1.520e+05	6.7	1.36e-04	0.0	0.0	0.0
6	0.963	1.039	0.125	780.90	3.44e-02	5535.28	0.2	4.01e-03	0.0	0.0	0.0
7	1.039	0.962	0.135	8807.99	0.4	1.397e+05	6.2	8.02e-05	0.0	0.0	0.0
8	1.052	0.950	0.136	5.137e+05	22.7	1.011e+04	0.4	0.05	2.14e-06	0.0	0.0
9	1.111	0.900	0.144	613.54	2.71e-02	3.584e+04	1.6	0.03	1.31e-06	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
10	1.187	0.843	0.154	1135.92	5.01e-02	1.092e+05	4.8	0.14	5.97e-06	0.0	0.0
11	1.217	0.821	0.158	1.512e+04	0.7	0.01	0.0	1.34e-03	0.0	0.0	0.0
12	1.276	0.784	0.165	286.83	1.27e-02	1541.48	6.80e-02	0.03	1.50e-06	0.0	0.0
13	1.283	0.779	0.166	1.212e+04	0.5	0.07	3.15e-06	1.89e-03	0.0	0.0	0.0
14	1.322	0.757	0.171	1.430e+04	0.6	0.68	2.99e-05	6.14e-03	0.0	0.0	0.0
15	1.367	0.732	0.177	303.05	1.34e-02	1.715e+04	0.8	0.02	0.0	0.0	0.0
16	1.411	0.709	0.183	8.35	3.68e-04	1.800e+04	0.8	2.16e-04	0.0	0.0	0.0
17	1.453	0.688	0.188	6.77e-05	0.0	0.0	0.0	0.04	1.88e-06	0.0	0.0
18	1.466	0.682	0.190	2.98	1.32e-04	1776.75	7.84e-02	3.70e-03	0.0	0.0	0.0
19	1.469	0.681	0.190	0.82	3.60e-05	8814.46	0.4	0.11	4.98e-06	0.0	0.0
20	1.923	0.520	0.249	1481.17	6.53e-02	1165.80	5.14e-02	8.36	3.69e-04	0.0	0.0
21	2.567	0.390	0.296	306.90	1.35e-02	13.14	5.80e-04	1.53	6.74e-05	0.0	0.0
22	2.623	0.381	0.296	130.95	5.78e-03	2.755e+04	1.2	0.27	1.19e-05	0.0	0.0
23	2.661	0.376	0.296	4.008e+04	1.8	47.66	2.10e-03	3.40	1.50e-04	0.0	0.0
24	2.703	0.370	0.296	5261.60	0.2	224.84	9.92e-03	3.14	1.38e-04	0.0	0.0
25	2.847	0.351	0.296	322.81	1.42e-02	46.53	2.05e-03	8.97	3.96e-04	0.0	0.0
26	2.876	0.348	0.296	2.484e+04	1.1	124.21	5.48e-03	0.04	1.60e-06	0.0	0.0
27	2.916	0.343	0.296	287.05	1.27e-02	1485.63	6.55e-02	3.95e-06	0.0	0.0	0.0
28	2.999	0.333	0.296	101.14	4.46e-03	297.21	1.31e-02	2.42	1.07e-04	0.0	0.0
29	3.108	0.322	0.296	543.44	2.40e-02	3.968e+04	1.7	0.99	4.37e-05	0.0	0.0
30	3.237	0.309	0.296	0.31	1.37e-05	3.409e+04	1.5	6.87	3.03e-04	0.0	0.0
31	3.394	0.295	0.296	0.31	1.36e-05	4105.07	0.2	0.28	1.25e-05	0.0	0.0
32	3.611	0.277	0.296	1.85	8.16e-05	1.731e+04	0.8	18.60	8.20e-04	0.0	0.0
33	3.822	0.262	0.296	651.69	2.87e-02	144.18	6.36e-03	4.31	1.90e-04	0.0	0.0
34	3.922	0.255	0.296	0.01	0.0	160.60	7.08e-03	0.03	1.38e-06	0.0	0.0
35	4.073	0.246	0.296	1622.51	7.16e-02	6349.14	0.3	212.11	9.36e-03	0.0	0.0
36	4.155	0.241	0.296	5.547e+04	2.4	1829.13	8.07e-02	118.59	5.23e-03	0.0	0.0
37	4.279	0.234	0.296	4.97e-05	0.0	0.04	1.55e-06	8914.72	0.4	0.0	0.0
38	4.425	0.226	0.296	144.44	6.37e-03	220.41	9.72e-03	4.029e+05	17.8	0.0	0.0
39	4.447	0.225	0.296	512.62	2.26e-02	840.95	3.71e-02	1.135e+04	0.5	0.0	0.0
40	4.479	0.223	0.296	514.47	2.27e-02	906.19	4.00e-02	39.09	1.72e-03	0.0	0.0
41	4.499	0.222	0.296	0.49	2.15e-05	113.28	5.00e-03	99.20	4.38e-03	0.0	0.0
42	4.522	0.221	0.296	76.36	3.37e-03	177.96	7.85e-03	1.261e+05	5.6	0.0	0.0
43	4.575	0.219	0.296	4.95	2.18e-04	24.08	1.06e-03	4553.70	0.2	0.0	0.0
44	4.650	0.215	0.296	1.68	7.39e-05	1.11	4.90e-05	3.852e+04	1.7	0.0	0.0
45	4.654	0.215	0.296	1.12e-04	0.0	1104.17	4.87e-02	0.70	3.09e-05	0.0	0.0
46	4.704	0.213	0.296	2.76	1.22e-04	14.03	6.19e-04	2803.68	0.1	0.0	0.0
47	4.791	0.209	0.296	21.83	9.63e-04	529.08	2.33e-02	3778.88	0.2	0.0	0.0
48	4.817	0.208	0.296	13.22	5.83e-04	79.34	3.50e-03	9495.81	0.4	0.0	0.0
49	4.836	0.207	0.296	8.65	3.82e-04	27.98	1.23e-03	681.61	3.01e-02	0.0	0.0
50	4.937	0.203	0.296	4.06e-05	0.0	0.10	4.57e-06	114.70	5.06e-03	0.0	0.0
51	5.013	0.199	0.296	9.39	4.14e-04	17.80	7.85e-04	1789.83	7.89e-02	0.0	0.0
52	5.018	0.199	0.296	0.49	2.15e-05	0.81	3.56e-05	1064.00	4.69e-02	0.0	0.0
53	5.103	0.196	0.296	3474.63	0.2	7564.13	0.3	54.71	2.41e-03	0.0	0.0
54	5.360	0.187	0.296	34.56	1.52e-03	2469.09	0.1	190.04	8.38e-03	0.0	0.0
55	5.714	0.175	0.296	0.0	0.0	1.24	5.46e-05	4.13e-04	0.0	0.0	0.0
56	5.783	0.173	0.296	358.23	1.58e-02	357.80	1.58e-02	6.82	3.01e-04	0.0	0.0
57	5.820	0.172	0.296	7.39e-04	0.0	2836.27	0.1	605.44	2.67e-02	0.0	0.0
58	5.895	0.170	0.296	0.09	4.16e-06	75.47	3.33e-03	7.660e+04	3.4	0.0	0.0
59	5.897	0.170	0.296	0.10	4.28e-06	77.45	3.42e-03	994.85	4.39e-02	0.0	0.0
60	5.933	0.169	0.296	0.20	9.02e-06	6.36	2.81e-04	1.069e+05	4.7	0.0	0.0
61	5.941	0.168	0.296	1.76	7.76e-05	0.08	3.54e-06	3.862e+05	17.0	0.0	0.0
62	5.979	0.167	0.296	8.73e-03	0.0	1.47	6.48e-05	2871.89	0.1	0.0	0.0
63	5.980	0.167	0.296	0.51	2.24e-05	3.87	1.71e-04	242.59	1.07e-02	0.0	0.0
64	5.988	0.167	0.296	13.58	5.99e-04	5.37	2.37e-04	1123.29	4.95e-02	0.0	0.0
65	6.050	0.165	0.296	4.20	1.85e-04	1.60	7.07e-05	1.065e+05	4.7	0.0	0.0
66	6.054	0.165	0.296	5645.76	0.2	24.73	1.09e-03	8308.11	0.4	0.0	0.0
67	6.062	0.165	0.296	886.18	3.91e-02	1.25	5.50e-05	7.349e+04	3.2	0.0	0.0
68	6.122	0.163	0.296	5.27e-03	0.0	0.10	4.58e-06	65.00	2.87e-03	0.0	0.0
69	6.140	0.163	0.296	8.35	3.68e-04	0.22	9.79e-06	537.21	2.37e-02	0.0	0.0
70	6.186	0.162	0.296	0.70	3.09e-05	0.04	1.84e-06	0.75	3.32e-05	0.0	0.0
71	6.241	0.160	0.296	0.05	2.02e-06	1.61e-03	0.0	1.748e+04	0.8	0.0	0.0
72	6.258	0.160	0.296	2.21	9.74e-05	4.19	1.85e-04	1.699e+04	0.7	0.0	0.0
73	6.326	0.158	0.296	47.29	2.09e-03	575.10	2.54e-02	23.37	1.03e-03	0.0	0.0
74	6.326	0.158	0.296	2.33	1.03e-04	19.54	8.62e-04	16.53	7.29e-04	0.0	0.0
75	6.343	0.158	0.296	3.10	1.37e-04	43.98	1.94e-03	523.34	2.31e-02	0.0	0.0
76	6.457	0.155	0.296	326.38	1.44e-02	166.83	7.36e-03	47.13	2.08e-03	0.0	0.0
77	6.489	0.154	0.296	7.08	3.12e-04	1.76	7.75e-05	7201.87	0.3	0.0	0.0
78	6.509	0.154	0.296	3.61	1.59e-04	4.33e-03	0.0	6906.08	0.3	0.0	0.0
79	6.532	0.153	0.296	3.82	1.69e-04	0.52	2.28e-05	236.92	1.04e-02	0.0	0.0
80	6.541	0.153	0.296	3.10	1.37e-04	3.34e-05	0.0	130.37	5.75e-03	0.0	0.0
81	6.585	0.152	0.296	2.817e+04	1.2	50.49	2.23e-03	0.05	2.02e-06	0.0	0.0
82	6.703	0.149	0.296	25.56	1.13e-03	1.827e+04	0.8	339.94	1.50e-02	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
83	6.791	0.147	0.296	1.86	8.21e-05	21.94	9.68e-04	1328.76	5.86e-02	0.0	0.0
84	6.815	0.147	0.296	8.70e-03	0.0	1.70	7.49e-05	2406.36	0.1	0.0	0.0
85	6.817	0.147	0.296	1.69e-05	0.0	1.11	4.88e-05	11.83	5.22e-04	0.0	0.0
86	6.819	0.147	0.296	0.01	0.0	5.07	2.24e-04	68.79	3.03e-03	0.0	0.0
87	6.865	0.146	0.296	6.01e-06	0.0	13.83	6.10e-04	5.00e-04	0.0	0.0	0.0
88	6.914	0.145	0.295	11.81	5.21e-04	91.41	4.03e-03	2.94	1.30e-04	0.0	0.0
89	7.119	0.140	0.290	1355.99	5.98e-02	1550.23	6.84e-02	6.02	2.65e-04	0.0	0.0
90	7.378	0.136	0.283	150.84	6.65e-03	7742.56	0.3	56.64	2.50e-03	0.0	0.0
91	7.466	0.134	0.281	3646.39	0.2	184.62	8.14e-03	42.55	1.88e-03	0.0	0.0
92	7.532	0.133	0.280	1.19e-04	0.0	1860.68	8.21e-02	17.29	7.63e-04	0.0	0.0
93	7.807	0.128	0.274	4.58	2.02e-04	31.24	1.38e-03	4.59	2.02e-04	0.0	0.0
94	7.808	0.128	0.274	2.65e-04	0.0	13.79	6.08e-04	0.15	6.79e-06	0.0	0.0
95	7.893	0.127	0.273	640.35	2.82e-02	36.70	1.62e-03	6.82	3.01e-04	0.0	0.0
96	7.941	0.126	0.272	0.23	9.94e-06	69.43	3.06e-03	1.043e+05	4.6	0.0	0.0
97	8.377	0.119	0.263	9.98e-06	0.0	337.88	1.49e-02	3.71e-03	0.0	0.0	0.0
98	8.575	0.117	0.260	11.45	5.05e-04	2232.05	9.84e-02	8.02	3.54e-04	0.0	0.0
99	8.666	0.115	0.258	0.60	2.65e-05	2460.83	0.1	0.06	2.76e-06	0.0	0.0
100	8.791	0.114	0.256	2.32e-03	0.0	37.15	1.64e-03	7.84e-03	0.0	0.0	0.0
101	8.906	0.112	0.255	4.74	2.09e-04	2.36	1.04e-04	2.54	1.12e-04	0.0	0.0
102	8.970	0.111	0.254	570.18	2.51e-02	7.88	3.47e-04	5.13	2.26e-04	0.0	0.0
103	9.048	0.111	0.252	13.13	5.79e-04	13.01	5.74e-04	7.52	3.32e-04	0.0	0.0
104	9.072	0.110	0.252	8.43	3.72e-04	3.41	1.50e-04	21.40	9.44e-04	0.0	0.0
105	9.240	0.108	0.250	10.15	4.48e-04	0.11	4.86e-06	107.17	4.73e-03	0.0	0.0
106	9.348	0.107	0.248	4.32	1.91e-04	12.24	5.40e-04	2.517e+04	1.1	0.0	0.0
107	9.381	0.107	0.248	7.68	3.39e-04	0.93	4.12e-05	1245.00	5.49e-02	0.0	0.0
108	9.592	0.104	0.245	8.18	3.61e-04	3.30	1.45e-04	169.55	7.48e-03	0.0	0.0
109	9.673	0.103	0.244	0.81	3.57e-05	2.10	9.28e-05	41.37	1.82e-03	0.0	0.0
110	9.708	0.103	0.243	2.14	9.44e-05	14.02	6.18e-04	101.81	4.49e-03	0.0	0.0
111	9.923	0.101	0.240	9.35	4.12e-04	35.89	1.58e-03	7418.14	0.3	0.0	0.0
112	9.967	0.100	0.240	0.58	2.58e-05	16.97	7.48e-04	1.064e+04	0.5	0.0	0.0
113	9.993	0.100	0.239	0.03	1.14e-06	0.05	2.43e-06	15.99	7.05e-04	0.0	0.0
114	10.139	0.099	0.238	0.20	8.98e-06	34.35	1.52e-03	64.57	2.85e-03	0.0	0.0
115	10.182	0.098	0.237	2.27	1.00e-04	247.80	1.09e-02	1.09	4.83e-05	0.0	0.0
116	10.270	0.097	0.236	71.26	3.14e-03	3610.63	0.2	1293.24	5.70e-02	0.0	0.0
117	10.290	0.097	0.236	3.24e-03	0.0	108.03	4.76e-03	0.05	2.17e-06	0.0	0.0
118	10.349	0.097	0.235	3.97	1.75e-04	33.68	1.49e-03	32.53	1.43e-03	0.0	0.0
119	10.396	0.096	0.235	35.12	1.55e-03	353.80	1.56e-02	247.10	1.09e-02	0.0	0.0
120	10.438	0.096	0.234	2675.60	0.1	1.54	6.79e-05	3.61	1.59e-04	0.0	0.0
121	10.474	0.095	0.234	1.82	8.04e-05	20.79	9.17e-04	5.272e+04	2.3	0.0	0.0
122	10.488	0.095	0.234	0.39	1.73e-05	13.43	5.92e-04	282.12	1.24e-02	0.0	0.0
123	10.661	0.094	0.232	22.13	9.76e-04	194.77	8.59e-03	71.89	3.17e-03	0.0	0.0
124	10.801	0.093	0.230	9.03	3.98e-04	181.75	8.02e-03	22.57	9.95e-04	0.0	0.0
125	10.828	0.092	0.230	37.44	1.65e-03	1.06	4.65e-05	28.22	1.24e-03	0.0	0.0
126	10.955	0.091	0.229	8.47	3.73e-04	98.63	4.35e-03	257.93	1.14e-02	0.0	0.0
127	10.966	0.091	0.228	0.76	3.36e-05	8.17	3.60e-04	2994.22	0.1	0.0	0.0
128	11.013	0.091	0.228	1.037e+04	0.5	27.78	1.23e-03	150.48	6.64e-03	0.0	0.0
129	11.030	0.091	0.228	6705.95	0.3	380.58	1.68e-02	84.82	3.74e-03	0.0	0.0
130	11.169	0.090	0.226	4074.50	0.2	204.29	9.01e-03	2.907e+04	1.3	0.0	0.0
131	11.264	0.089	0.225	43.43	1.92e-03	0.44	1.96e-05	0.78	3.45e-05	0.0	0.0
132	11.270	0.089	0.225	3.92e-03	0.0	4.15	1.83e-04	2.59	1.14e-04	0.0	0.0
133	11.280	0.089	0.225	0.03	1.21e-06	55.47	2.45e-03	59.21	2.61e-03	0.0	0.0
134	11.382	0.088	0.224	3.32e-03	0.0	69.00	3.04e-03	9.00e-03	0.0	0.0	0.0
135	11.486	0.087	0.223	149.31	6.59e-03	0.41	1.82e-05	3.49	1.54e-04	0.0	0.0
136	11.520	0.087	0.223	0.09	3.82e-06	8.76e-03	0.0	1.515e+04	0.7	0.0	0.0
137	11.535	0.087	0.223	1.60e-06	0.0	1.84e-03	0.0	8.03e-04	0.0	0.0	0.0
138	11.630	0.086	0.222	0.43	1.91e-05	0.19	8.37e-06	3.153e+04	1.4	0.0	0.0
139	11.650	0.086	0.222	0.05	2.06e-06	0.12	5.29e-06	4.033e+04	1.8	0.0	0.0
140	11.676	0.086	0.222	468.84	2.07e-02	214.45	9.46e-03	38.85	1.71e-03	0.0	0.0
141	11.839	0.084	0.220	3.96	1.75e-04	1.54	6.79e-05	2.031e+04	0.9	0.0	0.0
142	11.845	0.084	0.220	10.43	4.60e-04	4.23	1.87e-04	338.10	1.49e-02	0.0	0.0
143	12.019	0.083	0.219	12.99	5.73e-04	555.96	2.45e-02	649.45	2.86e-02	0.0	0.0
144	12.047	0.083	0.218	1.09	4.81e-05	498.59	2.20e-02	658.62	2.90e-02	0.0	0.0
145	12.079	0.083	0.218	5054.49	0.2	426.56	1.88e-02	3.953e+04	1.7	0.0	0.0
146	12.108	0.083	0.218	19.59	8.64e-04	0.38	1.66e-05	704.64	3.11e-02	0.0	0.0
147	12.187	0.082	0.217	516.79	2.28e-02	0.25	1.09e-05	2417.12	0.1	0.0	0.0
148	12.225	0.082	0.217	0.09	3.94e-06	2.43e-04	0.0	0.02	0.0	0.0	0.0
149	12.373	0.081	0.216	3.60	1.59e-04	0.24	1.08e-05	7898.93	0.3	0.0	0.0
150	12.453	0.080	0.215	305.86	1.35e-02	27.98	1.23e-03	6068.67	0.3	0.0	0.0
151	12.473	0.080	0.215	8.99	3.96e-04	1888.78	8.33e-02	22.20	9.79e-04	0.0	0.0
152	12.570	0.080	0.214	0.12	5.38e-06	0.03	1.28e-06	1.160e+04	0.5	0.0	0.0
153	12.599	0.079	0.214	68.76	3.03e-03	131.05	5.78e-03	1.480e+04	0.7	0.0	0.0
154	12.608	0.079	0.214	0.03	1.44e-06	24.87	1.10e-03	1.320e+04	0.6	0.0	0.0
155	12.739	0.078	0.213	225.54	9.95e-03	3.89	1.72e-04	2.134e+04	0.9	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
156	12.838	0.078	0.212	1595.05	7.03e-02	1510.20	6.66e-02	39.08	1.72e-03	0.0	0.0
157	12.970	0.077	0.211	0.01	0.0	0.10	4.59e-06	1123.83	4.96e-02	0.0	0.0
158	13.076	0.076	0.210	2.96	1.31e-04	5.49	2.42e-04	2.189e+04	1.0	0.0	0.0
159	13.107	0.076	0.210	872.05	3.85e-02	690.94	3.05e-02	5344.23	0.2	0.0	0.0
160	13.128	0.076	0.210	15.55	6.86e-04	1.87	8.23e-05	2691.44	0.1	0.0	0.0
161	13.138	0.076	0.210	397.73	1.75e-02	230.78	1.02e-02	4058.44	0.2	0.0	0.0
162	13.146	0.076	0.210	35.09	1.55e-03	5.69e-03	0.0	1008.60	4.45e-02	0.0	0.0
163	13.241	0.076	0.209	90.16	3.98e-03	56.20	2.48e-03	4.175e+04	1.8	0.0	0.0
164	13.288	0.075	0.209	20.50	9.04e-04	37.89	1.67e-03	2798.95	0.1	0.0	0.0
165	13.818	0.072	0.205	298.91	1.32e-02	1.74	7.68e-05	1.703e+04	0.8	0.0	0.0
166	13.884	0.072	0.205	3.67e-03	0.0	0.14	6.15e-06	2.477e+04	1.1	0.0	0.0
167	14.002	0.071	0.204	0.37	1.62e-05	0.87	3.85e-05	3.373e+04	1.5	0.0	0.0
168	14.023	0.071	0.204	0.59	2.60e-05	0.46	2.05e-05	1.142e+04	0.5	0.0	0.0
169	14.351	0.070	0.202	1803.94	7.96e-02	478.79	2.11e-02	1001.42	4.42e-02	0.0	0.0
170	14.419	0.069	0.201	1842.73	8.13e-02	4.49	1.98e-04	8108.13	0.4	0.0	0.0
171	14.430	0.069	0.201	261.71	1.15e-02	14.94	6.59e-04	2107.04	9.29e-02	0.0	0.0
172	14.709	0.068	0.200	2.071e+04	0.9	14.93	6.58e-04	106.54	4.70e-03	0.0	0.0
173	14.717	0.068	0.200	0.16	6.92e-06	6.32	2.79e-04	8.40	3.71e-04	0.0	0.0
174	14.872	0.067	0.199	7.79	3.44e-04	493.52	2.18e-02	35.83	1.58e-03	0.0	0.0
175	14.910	0.067	0.199	0.07	2.98e-06	2.67	1.18e-04	5.38	2.37e-04	0.0	0.0
176	14.942	0.067	0.198	0.01	0.0	0.36	1.61e-05	349.15	1.54e-02	0.0	0.0
177	14.978	0.067	0.198	9.52e-03	0.0	0.27	1.19e-05	230.38	1.02e-02	0.0	0.0
178	15.071	0.066	0.198	15.42	6.80e-04	218.72	9.65e-03	0.76	3.37e-05	0.0	0.0
179	15.173	0.066	0.197	9.48	4.18e-04	278.63	1.23e-02	293.52	1.29e-02	0.0	0.0
180	15.514	0.064	0.195	6227.15	0.3	136.08	6.00e-03	1887.74	8.33e-02	0.0	0.0
181	15.723	0.064	0.194	6.24	2.75e-04	7556.55	0.3	57.76	2.55e-03	0.0	0.0
182	15.865	0.063	0.194	0.78	3.46e-05	3.92	1.73e-04	18.05	7.96e-04	0.0	0.0
183	15.869	0.063	0.194	1.19e-05	0.0	3.18e-05	0.0	0.22	9.84e-06	0.0	0.0
184	15.883	0.063	0.193	37.82	1.67e-03	42.61	1.88e-03	515.01	2.27e-02	0.0	0.0
185	15.902	0.063	0.193	1.31e-05	0.0	2.13	9.37e-05	0.09	3.84e-06	0.0	0.0
186	16.271	0.061	0.192	147.43	6.50e-03	96.05	4.24e-03	2115.79	9.33e-02	0.0	0.0
187	16.462	0.061	0.191	2.63	1.16e-04	3.14e-03	0.0	3.170e+04	1.4	0.0	0.0
188	16.476	0.061	0.191	0.0	0.0	0.09	3.87e-06	7.15e-05	0.0	0.0	0.0
189	16.637	0.060	0.190	223.27	9.85e-03	0.06	2.50e-06	0.09	3.89e-06	0.0	0.0
190	16.819	0.059	0.189	19.63	8.66e-04	80.74	3.56e-03	4011.35	0.2	0.0	0.0
191	16.833	0.059	0.189	55.39	2.44e-03	9.77	4.31e-04	1.894e+04	0.8	0.0	0.0
192	16.926	0.059	0.189	1.19e-03	0.0	0.05	2.06e-06	5.23	2.31e-04	0.0	0.0
193	16.929	0.059	0.189	1.44	6.37e-05	5.42	2.39e-04	283.54	1.25e-02	0.0	0.0
194	17.079	0.059	0.188	763.74	3.37e-02	6.35e-03	0.0	5.88e-03	0.0	0.0	0.0
195	17.367	0.058	0.187	50.33	2.22e-03	2271.14	0.1	7065.76	0.3	0.0	0.0
196	17.550	0.057	0.186	14.03	6.19e-04	5513.36	0.2	5977.54	0.3	0.0	0.0
197	17.559	0.057	0.186	3.70e-03	0.0	452.91	2.00e-02	0.56	2.47e-05	0.0	0.0
198	17.920	0.056	0.185	0.0	0.0	0.0	0.0	0.75	3.29e-05	0.0	0.0
199	17.996	0.056	0.184	17.68	7.80e-04	38.59	1.70e-03	2.251e+04	1.0	0.0	0.0
200	18.106	0.055	0.184	4.68e-06	0.0	0.13	5.80e-06	0.03	1.14e-06	0.0	0.0
Risulta				2.263e+06		2.217e+06		2.169e+06			
In percentuale				99.79		97.80		95.68			

CDC	Tipo	Sigla Id	Note
16	Edk	CDC=Ed (dinamico SLO) alfa=0.0 (ecc. -)	
			categoria suolo: C
			fattore di sito S = 1.500
			ordinata spettro (tratto Tb-Tc) = 0.296 g
			angolo di ingresso:0.0
			eccentricità aggiuntiva: negativa
			periodo proprio T1: 1.329 sec.
			numero di modi considerati:200
			combinaz. modale: CQC

Quota	M Sismica x g	Pos. GX	Pos. GY	E agg. X-X	E agg. Y-Y	Pos. KX	Pos. KY	rapp. r/Ls	rapp. ex/rx	rapp. ey/ry
m	daN	m	m	m	m	m	m			
7.22	6.991e+05	49.32	22.50	0.0	0.0	50.00	22.50	1.095	0.021	0.0
6.50	1.119e+06	49.31	21.87	0.0	2.25	51.85	22.85	1.306	0.061	0.024
5.00	1.369e+04	77.24	10.41	0.0	1.11	76.72	11.72	1.381	0.035	0.085
4.67	1.111e+04	76.52	10.17	0.0	1.11	76.72	11.72	1.381	0.014	0.101
4.50	2.182e+04	40.86	39.92	0.0	1.13	50.00	30.00	1.474	0.292	0.317
4.00	1.448e+04	76.33	10.14	0.0	1.11	76.72	11.72	1.381	0.026	0.103
3.50	3.089e+05	95.61	34.13	0.0	1.13	94.99	33.25	1.305	0.066	0.095
3.33	1.414e+04	76.13	10.10	0.0	1.11	76.72	11.72	1.381	0.039	0.105

Quota	M Sismica x g	Pos. GX	Pos. GY	E agg. X-X	E agg. Y-Y	Pos. KX	Pos. KY	rapp. r/Ls	rapp. ex/rx	rapp. ey/ry
2.67	1.414e+04	76.13	10.10	0.0	1.11	76.72	11.72	1.381	0.039	0.105
2.00	1.398e+04	76.22	10.08	0.0	1.11	76.72	11.72	1.381	0.034	0.107
1.75	8296.96	100.00	33.00	0.0	0.13	0.0	0.0	0.0	0.0	0.0
1.33	1.381e+04	76.31	10.06	0.0	1.11	76.72	11.72	1.381	0.027	0.108
1.17	735.00	100.00	32.79	0.0	0.13	0.0	0.0	0.0	0.0	0.0
0.67	1.381e+04	76.31	10.06	0.0	1.11	76.72	11.72	1.381	0.027	0.108
0.58	735.00	100.00	32.79	0.0	0.13	0.0	0.0	0.0	0.0	0.0
Risulta	2.267e+06									

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	0.752	1.329	0.097	8.602e+05	37.9	169.99	7.50e-03	0.02	1.02e-06	0.0	0.0
2	0.825	1.213	0.107	139.47	6.15e-03	1.402e+06	61.8	2.31e-03	0.0	0.0	0.0
3	0.853	1.173	0.110	1099.85	4.85e-02	9.767e+04	4.3	4.82e-03	0.0	0.0	0.0
4	0.898	1.114	0.116	3076.44	0.1	1.506e+05	6.6	1.74e-05	0.0	0.0	0.0
5	0.945	1.058	0.122	6.162e+05	27.2	1760.10	7.76e-02	0.04	1.77e-06	0.0	0.0
6	0.963	1.038	0.125	8677.04	0.4	6523.30	0.3	9.25e-03	0.0	0.0	0.0
7	0.994	1.006	0.129	4.889e+05	21.6	0.11	4.76e-06	2.57e-05	0.0	0.0	0.0
8	1.039	0.962	0.135	45.73	2.02e-03	1.472e+05	6.5	4.57e-04	0.0	0.0	0.0
9	1.111	0.900	0.144	85.99	3.79e-03	3.649e+04	1.6	0.03	1.24e-06	0.0	0.0
10	1.187	0.843	0.154	299.77	1.32e-02	1.099e+05	4.8	0.13	5.78e-06	0.0	0.0
11	1.214	0.824	0.157	1.479e+04	0.7	0.15	6.67e-06	1.58e-03	0.0	0.0	0.0
12	1.276	0.784	0.165	76.91	3.39e-03	1545.63	6.82e-02	0.03	1.46e-06	0.0	0.0
13	1.279	0.782	0.166	1.275e+04	0.6	0.04	1.59e-06	1.35e-03	0.0	0.0	0.0
14	1.367	0.732	0.177	205.00	9.04e-03	1.713e+04	0.8	0.02	0.0	0.0	0.0
15	1.389	0.720	0.180	1.274e+04	0.6	6.02	2.66e-04	6.51e-03	0.0	0.0	0.0
16	1.411	0.709	0.183	2.92	1.29e-04	1.801e+04	0.8	1.98e-04	0.0	0.0	0.0
17	1.453	0.688	0.188	5.78e-05	0.0	0.0	0.0	0.04	1.88e-06	0.0	0.0
18	1.466	0.682	0.190	1.17	5.16e-05	1783.81	7.87e-02	3.77e-03	0.0	0.0	0.0
19	1.469	0.681	0.190	2.84e-04	0.0	8805.70	0.4	0.11	5.00e-06	0.0	0.0
20	1.920	0.521	0.249	1227.92	5.42e-02	1145.36	5.05e-02	8.39	3.70e-04	0.0	0.0
21	2.565	0.390	0.296	1265.40	5.58e-02	3.18	1.40e-04	1.85	8.16e-05	0.0	0.0
22	2.594	0.386	0.296	1.147e+04	0.5	9264.67	0.4	0.03	1.25e-06	0.0	0.0
23	2.648	0.378	0.296	3.262e+04	1.4	6100.95	0.3	4.72	2.08e-04	0.0	0.0
24	2.661	0.376	0.296	353.14	1.56e-02	1.395e+04	0.6	0.41	1.80e-05	0.0	0.0
25	2.709	0.369	0.296	6930.95	0.3	192.11	8.47e-03	1.87	8.26e-05	0.0	0.0
26	2.848	0.351	0.296	682.30	3.01e-02	67.21	2.96e-03	8.17	3.60e-04	0.0	0.0
27	2.999	0.333	0.296	27.97	1.23e-03	308.87	1.36e-02	2.27	1.00e-04	0.0	0.0
28	3.107	0.322	0.296	16.83	7.42e-04	3.913e+04	1.7	0.81	3.59e-05	0.0	0.0
29	3.237	0.309	0.296	5.24e-05	0.0	3.464e+04	1.5	6.72	2.96e-04	0.0	0.0
30	3.394	0.295	0.296	0.07	3.02e-06	4121.59	0.2	0.28	1.22e-05	0.0	0.0
31	3.610	0.277	0.296	2.09	9.23e-05	1.739e+04	0.8	18.32	8.08e-04	0.0	0.0
32	3.740	0.267	0.296	3916.87	0.2	107.09	4.72e-03	1.40	6.19e-05	0.0	0.0
33	3.922	0.255	0.296	2.68e-03	0.0	160.46	7.08e-03	0.03	1.41e-06	0.0	0.0
34	4.075	0.245	0.296	0.42	1.86e-05	7281.16	0.3	242.75	1.07e-02	0.0	0.0
35	4.166	0.240	0.296	104.84	4.62e-03	9.16	4.04e-04	3.61e-03	0.0	0.0	0.0
36	4.223	0.237	0.296	5.638e+04	2.5	45.40	2.00e-03	7.26	3.20e-04	0.0	0.0
37	4.262	0.235	0.296	1.302e+04	0.6	15.35	6.77e-04	28.32	1.25e-03	0.0	0.0
38	4.279	0.234	0.296	1.15e-03	0.0	0.03	1.52e-06	8914.32	0.4	0.0	0.0
39	4.424	0.226	0.296	11.31	4.99e-04	245.26	1.08e-02	3.751e+05	16.5	0.0	0.0
40	4.443	0.225	0.296	17.98	7.93e-04	587.05	2.59e-02	3.689e+04	1.6	0.0	0.0
41	4.475	0.223	0.296	7.08	3.12e-04	397.42	1.75e-02	290.70	1.28e-02	0.0	0.0
42	4.521	0.221	0.296	0.45	1.98e-05	67.84	2.99e-03	1.282e+05	5.7	0.0	0.0
43	4.575	0.219	0.296	3.80e-04	0.0	12.73	5.61e-04	4402.46	0.2	0.0	0.0
44	4.650	0.215	0.296	0.02	0.0	0.05	2.02e-06	3.860e+04	1.7	0.0	0.0
45	4.654	0.215	0.296	0.0	0.0	1103.68	4.87e-02	0.68	3.01e-05	0.0	0.0
46	4.703	0.213	0.296	0.01	0.0	5.35	2.36e-04	2798.12	0.1	0.0	0.0
47	4.790	0.209	0.296	2.47	1.09e-04	952.10	4.20e-02	3419.74	0.2	0.0	0.0
48	4.816	0.208	0.296	1.18	5.21e-05	227.46	1.00e-02	9911.01	0.4	0.0	0.0
49	4.835	0.207	0.296	0.90	3.96e-05	125.93	5.55e-03	526.97	2.32e-02	0.0	0.0
50	4.914	0.203	0.296	77.37	3.41e-03	7756.49	0.3	208.65	9.20e-03	0.0	0.0
51	4.937	0.203	0.296	3.11e-05	0.0	0.11	4.75e-06	114.68	5.06e-03	0.0	0.0
52	5.014	0.199	0.296	0.28	1.24e-05	8.34	3.68e-04	1770.50	7.81e-02	0.0	0.0
53	5.018	0.199	0.296	0.01	0.0	0.48	2.11e-05	1029.01	4.54e-02	0.0	0.0
54	5.496	0.182	0.296	8.40	3.71e-04	3348.43	0.1	407.98	1.80e-02	0.0	0.0
55	5.714	0.175	0.296	0.0	0.0	1.24	5.47e-05	4.24e-04	0.0	0.0	0.0
56	5.750	0.174	0.296	266.42	1.18e-02	1089.98	4.81e-02	373.91	1.65e-02	0.0	0.0
57	5.780	0.173	0.296	38.09	1.68e-03	1245.43	5.49e-02	66.68	2.94e-03	0.0	0.0
58	5.894	0.170	0.296	7.86	3.47e-04	36.83	1.62e-03	7.557e+04	3.3	0.0	0.0
59	5.897	0.170	0.296	8.45	3.73e-04	9.13	4.03e-04	570.46	2.52e-02	0.0	0.0
60	5.933	0.169	0.296	0.77	3.40e-05	1.39	6.15e-05	1.145e+05	5.0	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
61	5.941	0.168	0.296	1.05	4.61e-05	2.83e-04	0.0	3.799e+05	16.8	0.0	0.0
62	5.979	0.167	0.296	0.56	2.46e-05	0.50	2.20e-05	2881.28	0.1	0.0	0.0
63	5.980	0.167	0.296	0.91	4.01e-05	0.71	3.14e-05	199.30	8.79e-03	0.0	0.0
64	5.989	0.167	0.296	1.13	5.00e-05	2.26	9.98e-05	1339.13	5.91e-02	0.0	0.0
65	6.050	0.165	0.296	2.88	1.27e-04	0.16	7.16e-06	1.055e+05	4.7	0.0	0.0
66	6.061	0.165	0.296	0.73	3.21e-05	0.78	3.45e-05	8.286e+04	3.7	0.0	0.0
67	6.122	0.163	0.296	5.46	2.41e-04	0.94	4.15e-05	57.37	2.53e-03	0.0	0.0
68	6.139	0.163	0.296	1.73	7.64e-05	0.39	1.70e-05	489.82	2.16e-02	0.0	0.0
69	6.231	0.160	0.296	9370.66	0.4	2955.24	0.1	742.11	3.27e-02	0.0	0.0
70	6.241	0.160	0.296	606.16	2.67e-02	195.47	8.62e-03	1.646e+04	0.7	0.0	0.0
71	6.258	0.160	0.296	24.10	1.06e-03	3.34	1.47e-04	1.743e+04	0.8	0.0	0.0
72	6.326	0.158	0.296	3.33	1.47e-04	1.32	5.81e-05	11.66	5.14e-04	0.0	0.0
73	6.341	0.158	0.296	2.21	9.76e-05	1.02	4.48e-05	404.47	1.78e-02	0.0	0.0
74	6.489	0.154	0.296	0.17	7.64e-06	1.50	6.60e-05	7307.82	0.3	0.0	0.0
75	6.508	0.154	0.296	45.45	2.00e-03	3.02	1.33e-04	6924.46	0.3	0.0	0.0
76	6.532	0.153	0.296	0.01	0.0	0.24	1.08e-05	237.95	1.05e-02	0.0	0.0
77	6.540	0.153	0.296	1306.68	5.76e-02	184.81	8.15e-03	116.01	5.12e-03	0.0	0.0
78	6.548	0.153	0.296	1.023e+04	0.5	1493.94	6.59e-02	0.32	1.40e-05	0.0	0.0
79	6.627	0.151	0.296	1.079e+04	0.5	1719.42	7.58e-02	22.43	9.89e-04	0.0	0.0
80	6.731	0.149	0.296	1534.10	6.77e-02	1.229e+04	0.5	231.73	1.02e-02	0.0	0.0
81	6.791	0.147	0.296	6.06	2.67e-04	33.59	1.48e-03	1350.14	5.95e-02	0.0	0.0
82	6.815	0.147	0.296	2.33e-03	0.0	0.95	4.21e-05	2410.57	0.1	0.0	0.0
83	6.817	0.147	0.296	5.70e-04	0.0	0.30	1.33e-05	34.79	1.53e-03	0.0	0.0
84	6.819	0.147	0.296	0.84	3.68e-05	0.10	4.63e-06	35.50	1.57e-03	0.0	0.0
85	6.823	0.147	0.296	101.06	4.46e-03	61.50	2.71e-03	24.55	1.08e-03	0.0	0.0
86	6.852	0.146	0.296	0.78	3.43e-05	2.76	1.22e-04	0.07	3.11e-06	0.0	0.0
87	6.863	0.146	0.296	3497.94	0.2	988.58	4.36e-02	1.29	5.68e-05	0.0	0.0
88	6.865	0.146	0.296	4.80e-03	0.0	13.55	5.98e-04	5.51e-04	0.0	0.0	0.0
89	7.134	0.140	0.289	239.04	1.05e-02	3326.63	0.1	13.74	6.06e-04	0.0	0.0
90	7.457	0.134	0.282	445.29	1.96e-02	6535.82	0.3	97.77	4.31e-03	0.0	0.0
91	7.528	0.133	0.280	2011.04	8.87e-02	8.62	3.80e-04	1.87	8.24e-05	0.0	0.0
92	7.532	0.133	0.280	0.02	1.02e-06	1859.68	8.20e-02	17.32	7.64e-04	0.0	0.0
93	7.806	0.128	0.274	0.01	0.0	35.03	1.54e-03	6.94	3.06e-04	0.0	0.0
94	7.808	0.128	0.274	8.27e-06	0.0	13.80	6.09e-04	0.16	6.85e-06	0.0	0.0
95	7.941	0.126	0.272	1.22	5.40e-05	77.37	3.41e-03	1.043e+05	4.6	0.0	0.0
96	8.307	0.120	0.265	3.37	1.49e-04	7.71	3.40e-04	0.48	2.10e-05	0.0	0.0
97	8.377	0.119	0.263	5.87e-05	0.0	337.88	1.49e-02	3.59e-03	0.0	0.0	0.0
98	8.536	0.117	0.261	8047.33	0.4	68.11	3.00e-03	106.43	4.69e-03	0.0	0.0
99	8.574	0.117	0.260	1016.09	4.48e-02	1853.41	8.17e-02	40.30	1.78e-03	0.0	0.0
100	8.673	0.115	0.258	35.29	1.56e-03	2681.83	0.1	1.22	5.40e-05	0.0	0.0
101	8.767	0.114	0.257	539.79	2.38e-02	25.19	1.11e-03	1.58	6.96e-05	0.0	0.0
102	8.791	0.114	0.256	6.22	2.75e-04	45.41	2.00e-03	0.08	3.66e-06	0.0	0.0
103	8.908	0.112	0.255	4.68	2.06e-04	0.43	1.89e-05	1.27	5.58e-05	0.0	0.0
104	9.048	0.111	0.252	0.01	0.0	10.27	4.53e-04	4.06	1.79e-04	0.0	0.0
105	9.071	0.110	0.252	2.95	1.30e-04	3.46	1.53e-04	21.57	9.51e-04	0.0	0.0
106	9.239	0.108	0.250	3.50	1.54e-04	0.11	5.03e-06	113.93	5.02e-03	0.0	0.0
107	9.348	0.107	0.248	0.80	3.51e-05	12.64	5.58e-04	2.491e+04	1.1	0.0	0.0
108	9.381	0.107	0.248	2.77	1.22e-04	1.12	4.95e-05	1403.66	6.19e-02	0.0	0.0
109	9.591	0.104	0.245	3.24	1.43e-04	3.50	1.54e-04	187.17	8.25e-03	0.0	0.0
110	9.673	0.103	0.244	0.21	9.41e-06	2.13	9.40e-05	43.59	1.92e-03	0.0	0.0
111	9.709	0.103	0.243	1.53	6.76e-05	12.90	5.69e-04	98.54	4.35e-03	0.0	0.0
112	9.767	0.102	0.242	2998.44	0.1	3.98e-03	0.0	0.08	3.60e-06	0.0	0.0
113	9.922	0.101	0.240	8.46	3.73e-04	34.94	1.54e-03	7232.57	0.3	0.0	0.0
114	9.966	0.100	0.240	0.18	7.91e-06	15.13	6.67e-04	1.084e+04	0.5	0.0	0.0
115	9.993	0.100	0.239	0.02	0.0	0.05	2.08e-06	15.42	6.80e-04	0.0	0.0
116	10.139	0.099	0.238	0.13	5.73e-06	26.06	1.15e-03	70.60	3.11e-03	0.0	0.0
117	10.183	0.098	0.237	1.42	6.26e-05	145.93	6.44e-03	0.98	4.34e-05	0.0	0.0
118	10.290	0.097	0.236	2.32e-05	0.0	116.58	5.14e-03	4.78e-04	0.0	0.0	0.0
119	10.348	0.097	0.235	1.63	7.20e-05	142.69	6.29e-03	85.88	3.79e-03	0.0	0.0
120	10.389	0.096	0.235	36.22	1.60e-03	638.54	2.82e-02	259.00	1.14e-02	0.0	0.0
121	10.474	0.095	0.234	0.39	1.72e-05	18.37	8.10e-04	5.278e+04	2.3	0.0	0.0
122	10.489	0.095	0.234	0.28	1.22e-05	5.76	2.54e-04	329.23	1.45e-02	0.0	0.0
123	10.568	0.095	0.233	585.20	2.58e-02	4257.61	0.2	2408.43	0.1	0.0	0.0
124	10.663	0.094	0.232	8.14	3.59e-04	213.90	9.43e-03	57.29	2.53e-03	0.0	0.0
125	10.802	0.093	0.230	4.91	2.16e-04	177.20	7.82e-03	22.32	9.84e-04	0.0	0.0
126	10.829	0.092	0.230	23.61	1.04e-03	1.09	4.80e-05	31.11	1.37e-03	0.0	0.0
127	10.955	0.091	0.229	3.52	1.55e-04	95.91	4.23e-03	264.84	1.17e-02	0.0	0.0
128	10.966	0.091	0.228	0.27	1.20e-05	8.27	3.65e-04	2989.92	0.1	0.0	0.0
129	11.024	0.091	0.228	587.38	2.59e-02	98.19	4.33e-03	3.81	1.68e-04	0.0	0.0
130	11.071	0.090	0.227	1.047e+04	0.5	37.59	1.66e-03	1130.98	4.99e-02	0.0	0.0
131	11.204	0.089	0.226	9430.99	0.4	87.72	3.87e-03	2.858e+04	1.3	0.0	0.0
132	11.266	0.089	0.225	49.33	2.18e-03	0.84	3.70e-05	0.03	1.12e-06	0.0	0.0
133	11.270	0.089	0.225	0.04	1.68e-06	3.93	1.73e-04	4.28	1.89e-04	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
134	11.280	0.089	0.225	8.41	3.71e-04	48.72	2.15e-03	134.25	5.92e-03	0.0	0.0
135	11.382	0.088	0.224	6.94e-03	0.0	68.96	3.04e-03	3.77e-03	0.0	0.0	0.0
136	11.487	0.087	0.223	242.51	1.07e-02	0.04	1.67e-06	10.90	4.81e-04	0.0	0.0
137	11.520	0.087	0.223	0.18	7.82e-06	4.50e-03	0.0	1.519e+04	0.7	0.0	0.0
138	11.535	0.087	0.223	0.0	0.0	1.79e-03	0.0	8.24e-04	0.0	0.0	0.0
139	11.630	0.086	0.222	1.17	5.16e-05	0.06	2.51e-06	3.141e+04	1.4	0.0	0.0
140	11.650	0.086	0.222	0.20	8.62e-06	0.04	1.84e-06	4.034e+04	1.8	0.0	0.0
141	11.839	0.084	0.220	2.88	1.27e-04	1.80	7.95e-05	1.987e+04	0.9	0.0	0.0
142	11.846	0.084	0.220	7.68	3.39e-04	5.05	2.23e-04	355.38	1.57e-02	0.0	0.0
143	12.020	0.083	0.219	1.81	7.96e-05	516.23	2.28e-02	399.75	1.76e-02	0.0	0.0
144	12.047	0.083	0.218	24.16	1.07e-03	400.30	1.77e-02	61.99	2.73e-03	0.0	0.0
145	12.108	0.083	0.218	1.60	7.07e-05	5.26	2.32e-04	99.94	4.41e-03	0.0	0.0
146	12.159	0.082	0.217	1283.24	5.66e-02	223.95	9.88e-03	3.055e+04	1.3	0.0	0.0
147	12.282	0.081	0.216	6099.84	0.3	314.09	1.39e-02	1.616e+04	0.7	0.0	0.0
148	12.374	0.081	0.216	51.87	2.29e-03	1.35	5.98e-05	6462.04	0.3	0.0	0.0
149	12.466	0.080	0.215	141.71	6.25e-03	1723.06	7.60e-02	3076.01	0.1	0.0	0.0
150	12.498	0.080	0.215	2036.48	8.98e-02	115.91	5.11e-03	2.587e+04	1.1	0.0	0.0
151	12.571	0.080	0.214	1.36	6.00e-05	0.42	1.86e-05	9668.79	0.4	0.0	0.0
152	12.609	0.079	0.214	2.61e-03	0.0	17.68	7.80e-04	1.199e+04	0.5	0.0	0.0
153	12.721	0.079	0.213	1089.06	4.80e-02	129.77	5.72e-03	1.193e+04	0.5	0.0	0.0
154	12.857	0.078	0.212	5656.47	0.2	1794.65	7.92e-02	2239.43	9.88e-02	0.0	0.0
155	12.961	0.077	0.211	2.55	1.13e-04	1.73	7.63e-05	7.71	3.40e-04	0.0	0.0
156	12.970	0.077	0.211	0.16	6.84e-06	0.04	1.61e-06	1114.89	4.92e-02	0.0	0.0
157	13.076	0.076	0.210	2.01	8.86e-05	0.08	3.68e-06	2.291e+04	1.0	0.0	0.0
158	13.127	0.076	0.210	16.34	7.21e-04	13.24	5.84e-04	181.92	8.02e-03	0.0	0.0
159	13.131	0.076	0.210	45.60	2.01e-03	2.54	1.12e-04	1.042e+04	0.5	0.0	0.0
160	13.146	0.076	0.210	1.74	7.66e-05	17.36	7.66e-04	569.72	2.51e-02	0.0	0.0
161	13.237	0.076	0.209	108.76	4.80e-03	4.45	1.96e-04	3.734e+04	1.6	0.0	0.0
162	13.287	0.075	0.209	39.95	1.76e-03	8.03	3.54e-04	4764.11	0.2	0.0	0.0
163	13.458	0.074	0.208	3365.12	0.1	312.27	1.38e-02	2739.14	0.1	0.0	0.0
164	13.541	0.074	0.207	0.10	4.52e-06	5.18e-04	0.0	3.10e-04	0.0	0.0	0.0
165	13.838	0.072	0.205	1718.68	7.58e-02	24.51	1.08e-03	1.551e+04	0.7	0.0	0.0
166	13.884	0.072	0.205	9.71e-05	0.0	0.14	6.05e-06	2.480e+04	1.1	0.0	0.0
167	14.002	0.071	0.204	4.13	1.82e-04	1.20	5.29e-05	3.421e+04	1.5	0.0	0.0
168	14.023	0.071	0.204	0.28	1.23e-05	0.51	2.23e-05	1.121e+04	0.5	0.0	0.0
169	14.335	0.070	0.202	3480.84	0.2	558.79	2.46e-02	2085.47	9.20e-02	0.0	0.0
170	14.464	0.069	0.201	9944.56	0.4	6.67	2.94e-04	9199.72	0.4	0.0	0.0
171	14.654	0.068	0.200	174.48	7.70e-03	0.25	1.08e-05	1599.88	7.06e-02	0.0	0.0
172	14.717	0.068	0.200	3.62e-03	0.0	6.27	2.76e-04	7.95	3.50e-04	0.0	0.0
173	14.884	0.067	0.199	1926.16	8.50e-02	669.62	2.95e-02	417.25	1.84e-02	0.0	0.0
174	14.910	0.067	0.199	13.60	6.00e-04	5.78	2.55e-04	12.49	5.51e-04	0.0	0.0
175	14.942	0.067	0.198	0.21	9.11e-06	0.39	1.73e-05	352.17	1.55e-02	0.0	0.0
176	14.978	0.067	0.198	0.07	3.21e-06	0.30	1.33e-05	230.83	1.02e-02	0.0	0.0
177	15.193	0.066	0.197	400.83	1.77e-02	159.63	7.04e-03	1026.30	4.53e-02	0.0	0.0
178	15.708	0.064	0.194	39.68	1.75e-03	7763.26	0.3	13.29	5.86e-04	0.0	0.0
179	15.865	0.063	0.194	0.02	0.0	5.27	2.33e-04	17.18	7.58e-04	0.0	0.0
180	15.869	0.063	0.194	1.01e-05	0.0	3.85e-05	0.0	0.22	9.84e-06	0.0	0.0
181	15.882	0.063	0.193	4.05	1.79e-04	49.77	2.20e-03	461.87	2.04e-02	0.0	0.0
182	15.902	0.063	0.193	2.64e-06	0.0	2.12	9.36e-05	0.09	3.89e-06	0.0	0.0
183	16.119	0.062	0.192	18.53	8.17e-04	206.84	9.12e-03	413.15	1.82e-02	0.0	0.0
184	16.267	0.061	0.192	36.64	1.62e-03	115.37	5.09e-03	1662.92	7.33e-02	0.0	0.0
185	16.462	0.061	0.191	0.53	2.35e-05	7.65e-03	0.0	3.196e+04	1.4	0.0	0.0
186	16.476	0.061	0.191	0.0	0.0	0.09	3.87e-06	6.74e-05	0.0	0.0	0.0
187	16.753	0.060	0.189	0.62	2.73e-05	0.23	1.00e-05	0.69	3.03e-05	0.0	0.0
188	16.818	0.059	0.189	11.24	4.96e-04	80.30	3.54e-03	6514.72	0.3	0.0	0.0
189	16.832	0.059	0.189	18.05	7.96e-04	9.62	4.24e-04	1.646e+04	0.7	0.0	0.0
190	16.926	0.059	0.189	0.0	0.0	0.05	2.07e-06	5.23	2.31e-04	0.0	0.0
191	16.929	0.059	0.189	1.21	5.33e-05	2.65	1.17e-04	246.44	1.09e-02	0.0	0.0
192	17.224	0.058	0.187	2217.86	9.78e-02	207.48	9.15e-03	701.76	3.10e-02	0.0	0.0
193	17.403	0.057	0.187	17.25	7.61e-04	2.30	1.02e-04	1655.66	7.30e-02	0.0	0.0
194	17.559	0.057	0.186	3.85e-05	0.0	513.73	2.27e-02	0.59	2.61e-05	0.0	0.0
195	17.696	0.057	0.185	34.47	1.52e-03	7512.61	0.3	2.472e+04	1.1	0.0	0.0
196	17.920	0.056	0.185	1.02e-06	0.0	1.17e-06	0.0	0.75	3.30e-05	0.0	0.0
197	18.106	0.055	0.184	7.31e-05	0.0	0.17	7.53e-06	0.01	0.0	0.0	0.0
198	18.124	0.055	0.184	0.16	6.86e-06	9.63	4.25e-04	98.60	4.35e-03	0.0	0.0
199	18.222	0.055	0.183	18.95	8.36e-04	1717.24	7.57e-02	9171.02	0.4	0.0	0.0
200	18.356	0.054	0.183	9.19	4.05e-04	0.29	1.27e-05	301.63	1.33e-02	0.0	0.0
Risulta				2.262e+06		2.219e+06		2.170e+06			
In percentuale				99.77		97.88		95.72			

CDC	Tipo	Sigla Id	Note
17	Edk	CDC=Ed (dinamico SLO) alfa=90.00 (ecc. +)	
			categoria suolo: C
			fattore di sito S = 1.500
			ordinata spettro (tratto Tb-Tc) = 0.296 g
			angolo di ingresso:90.00
			eccentricità aggiuntiva: positiva
			periodo proprio T1: 1.237 sec.
			numero di modi considerati:200
			combinaz. modale: CQC

Quota	M Sismica x g	Pos. GX	Pos. GY	E agg. X-X	E agg. Y-Y	Pos. KX	Pos. KY	rapp. r/Ls	rapp. ex/rx	rapp. ey/ry
m	daN	m	m	m	m	m	m			
7.22	6.991e+05	49.32	22.50	5.00	0.0	50.00	22.50	1.095	0.021	0.0
6.50	1.119e+06	49.31	21.87	5.00	0.0	51.85	22.85	1.306	0.061	0.024
5.00	1.369e+04	77.24	10.41	1.50	0.0	76.72	11.72	1.381	0.035	0.085
4.67	1.111e+04	76.52	10.17	1.50	0.0	76.72	11.72	1.381	0.014	0.101
4.50	2.182e+04	40.86	39.92	3.50	0.0	50.00	30.00	1.474	0.292	0.317
4.00	1.448e+04	76.33	10.14	1.50	0.0	76.72	11.72	1.381	0.026	0.103
3.50	3.089e+05	95.61	34.13	0.50	0.0	94.99	33.25	1.305	0.066	0.095
3.33	1.414e+04	76.13	10.10	1.50	0.0	76.72	11.72	1.381	0.039	0.105
2.67	1.414e+04	76.13	10.10	1.50	0.0	76.72	11.72	1.381	0.039	0.105
2.00	1.398e+04	76.22	10.08	1.50	0.0	76.72	11.72	1.381	0.034	0.107
1.75	8296.96	100.00	33.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.33	1.381e+04	76.31	10.06	1.50	0.0	76.72	11.72	1.381	0.027	0.108
1.17	735.00	100.00	32.79	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.67	1.381e+04	76.31	10.06	1.50	0.0	76.72	11.72	1.381	0.027	0.108
0.58	735.00	100.00	32.79	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Risulta	2.267e+06									

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	0.751	1.331	0.097	8.501e+05	37.5	937.17	4.13e-02	0.02	1.01e-06	0.0	0.0
2	0.808	1.237	0.105	2617.46	0.1	1.163e+06	51.3	4.04e-03	0.0	0.0	0.0
3	0.866	1.154	0.112	734.57	3.24e-02	1.728e+05	7.6	1.65e-03	0.0	0.0	0.0
4	0.921	1.086	0.119	607.59	2.68e-02	3.604e+05	15.9	2.00e-03	0.0	0.0	0.0
5	0.942	1.061	0.122	5.429e+05	23.9	0.47	2.07e-05	2.33e-05	0.0	0.0	0.0
6	0.977	1.023	0.127	983.39	4.34e-02	1.663e+04	0.7	2.19e-03	0.0	0.0	0.0
7	0.993	1.007	0.129	5.724e+05	25.2	7276.22	0.3	0.03	1.47e-06	0.0	0.0
8	1.038	0.964	0.134	4225.18	0.2	1.802e+05	7.9	0.05	2.13e-06	0.0	0.0
9	1.109	0.902	0.144	2103.89	9.28e-02	1.773e+04	0.8	0.12	5.09e-06	0.0	0.0
10	1.199	0.834	0.155	383.78	1.69e-02	3.803e+04	1.7	0.03	1.29e-06	0.0	0.0
11	1.246	0.802	0.161	2.745e+04	1.2	6.24e-03	0.0	3.01e-03	0.0	0.0	0.0
12	1.248	0.801	0.162	1.30	5.72e-05	0.01	0.0	5.23e-06	0.0	0.0	0.0
13	1.297	0.771	0.168	309.59	1.37e-02	1134.49	5.00e-02	3.94e-04	0.0	0.0	0.0
14	1.311	0.763	0.170	4.61	2.04e-04	1.156e+04	0.5	0.11	4.77e-06	0.0	0.0
15	1.354	0.739	0.175	1.355e+04	0.6	1.29e-03	0.0	6.82e-03	0.0	0.0	0.0
16	1.385	0.722	0.179	12.08	5.33e-04	4791.11	0.2	2.93e-04	0.0	0.0	0.0
17	1.588	0.630	0.206	0.21	9.28e-06	1.284e+04	0.6	5.68e-05	0.0	0.0	0.0
18	1.656	0.604	0.214	0.06	2.46e-06	7088.94	0.3	5.13e-05	0.0	0.0	0.0
19	1.678	0.596	0.217	2.86e-05	0.0	0.0	0.0	0.06	2.73e-06	0.0	0.0
20	1.780	0.562	0.231	1388.68	6.12e-02	1862.57	8.21e-02	5.71	2.52e-04	0.0	0.0
21	2.499	0.400	0.296	2999.30	0.1	969.98	4.28e-02	5.26	2.32e-04	0.0	0.0
22	2.560	0.391	0.296	3.467e+04	1.5	209.56	9.24e-03	0.95	4.18e-05	0.0	0.0
23	2.654	0.377	0.296	37.46	1.65e-03	2.830e+04	1.2	0.28	1.22e-05	0.0	0.0
24	2.668	0.375	0.296	612.94	2.70e-02	4379.77	0.2	5.12	2.26e-04	0.0	0.0
25	2.827	0.354	0.296	40.84	1.80e-03	2498.31	0.1	3.94	1.74e-04	0.0	0.0
26	2.991	0.334	0.296	418.36	1.85e-02	2.260e+04	1.0	9.48	4.18e-04	0.0	0.0
27	3.070	0.326	0.296	27.56	1.22e-03	3.340e+04	1.5	2.66	1.17e-04	0.0	0.0
28	3.170	0.315	0.296	1524.93	6.73e-02	618.72	2.73e-02	0.11	4.83e-06	0.0	0.0
29	3.204	0.312	0.296	0.14	6.07e-06	6397.48	0.3	0.75	3.29e-05	0.0	0.0
30	3.339	0.299	0.296	2.013e+04	0.9	77.03	3.40e-03	0.04	1.56e-06	0.0	0.0
31	3.390	0.295	0.296	120.34	5.31e-03	1.928e+04	0.9	10.49	4.63e-04	0.0	0.0
32	3.406	0.294	0.296	8105.80	0.4	20.61	9.09e-04	0.01	0.0	0.0	0.0
33	3.637	0.275	0.296	0.10	4.58e-06	792.31	3.49e-02	0.11	4.68e-06	0.0	0.0
34	3.764	0.266	0.296	36.29	1.60e-03	5829.44	0.3	61.54	2.71e-03	0.0	0.0
35	3.906	0.256	0.296	501.15	2.21e-02	31.68	1.40e-03	7.87	3.47e-04	0.0	0.0
36	4.096	0.244	0.296	5.108e+04	2.3	0.36	1.60e-05	146.77	6.47e-03	0.0	0.0
37	4.149	0.241	0.296	7902.53	0.3	2659.33	0.1	1070.07	4.72e-02	0.0	0.0
38	4.273	0.234	0.296	2.75e-03	0.0	130.50	5.76e-03	0.09	4.02e-06	0.0	0.0
39	4.419	0.226	0.296	17.50	7.72e-04	526.83	2.32e-02	1.771e+05	7.8	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
40	4.429	0.226	0.296	11.24	4.96e-04	243.66	1.07e-02	2.452e+05	10.8	0.0	0.0
41	4.460	0.224	0.296	3.54	1.56e-04	48.39	2.13e-03	8486.39	0.4	0.0	0.0
42	4.511	0.222	0.296	0.23	1.04e-05	3.15	1.39e-04	1.114e+05	4.9	0.0	0.0
43	4.570	0.219	0.296	0.31	1.36e-05	0.87	3.83e-05	7890.13	0.3	0.0	0.0
44	4.650	0.215	0.296	2.54	1.12e-04	7.46	3.29e-04	3.032e+04	1.3	0.0	0.0
45	4.705	0.213	0.296	3.90	1.72e-04	12.23	5.39e-04	3762.54	0.2	0.0	0.0
46	4.715	0.212	0.296	8.50e-03	0.0	0.18	7.81e-06	1.073e+04	0.5	0.0	0.0
47	4.814	0.208	0.296	4.60	2.03e-04	23.82	1.05e-03	1.316e+04	0.6	0.0	0.0
48	4.835	0.207	0.296	2.49	1.10e-04	14.04	6.19e-04	46.47	2.05e-03	0.0	0.0
49	4.921	0.203	0.296	1156.84	5.10e-02	1.065e+04	0.5	435.43	1.92e-02	0.0	0.0
50	5.013	0.199	0.296	1.45	6.42e-05	18.29	8.07e-04	1572.11	6.93e-02	0.0	0.0
51	5.018	0.199	0.296	0.03	1.46e-06	0.55	2.40e-05	1184.62	5.22e-02	0.0	0.0
52	5.122	0.195	0.296	0.0	0.0	876.83	3.87e-02	1.34e-04	0.0	0.0	0.0
53	5.443	0.184	0.296	3.34e-06	0.0	0.18	7.85e-06	3.93	1.73e-04	0.0	0.0
54	5.470	0.183	0.296	8.64	3.81e-04	3183.18	0.1	351.66	1.55e-02	0.0	0.0
55	5.604	0.178	0.296	3.61	1.59e-04	4.77	2.11e-04	950.32	4.19e-02	0.0	0.0
56	5.736	0.174	0.296	69.81	3.08e-03	1605.02	7.08e-02	0.17	7.41e-06	0.0	0.0
57	5.773	0.173	0.296	44.14	1.95e-03	386.14	1.70e-02	229.90	1.01e-02	0.0	0.0
58	5.930	0.169	0.296	5.32	2.35e-04	0.31	1.38e-05	3.292e+05	14.5	0.0	0.0
59	5.938	0.168	0.296	6.98	3.08e-04	0.77	3.38e-05	2.416e+05	10.7	0.0	0.0
60	5.951	0.168	0.296	685.47	3.02e-02	294.31	1.30e-02	376.93	1.66e-02	0.0	0.0
61	5.979	0.167	0.296	7.94	3.50e-04	22.66	9.99e-04	3216.53	0.1	0.0	0.0
62	5.987	0.167	0.296	8.91	3.93e-04	51.84	2.29e-03	1445.43	6.37e-02	0.0	0.0
63	6.050	0.165	0.296	0.32	1.39e-05	18.41	8.12e-04	1.057e+05	4.7	0.0	0.0
64	6.061	0.165	0.296	3.04	1.34e-04	96.14	4.24e-03	7.956e+04	3.5	0.0	0.0
65	6.122	0.163	0.296	0.03	1.37e-06	8.23	3.63e-04	10.38	4.58e-04	0.0	0.0
66	6.138	0.163	0.296	0.08	3.72e-06	391.40	1.73e-02	127.98	5.64e-03	0.0	0.0
67	6.192	0.161	0.296	390.69	1.72e-02	1.305e+04	0.6	50.69	2.24e-03	0.0	0.0
68	6.225	0.161	0.296	5.84	2.58e-04	53.24	2.35e-03	1.275e+04	0.6	0.0	0.0
69	6.244	0.160	0.296	3.45e-04	0.0	4.46	1.97e-04	6054.19	0.3	0.0	0.0
70	6.260	0.160	0.296	40.38	1.78e-03	22.84	1.01e-03	1.762e+04	0.8	0.0	0.0
71	6.327	0.158	0.296	222.89	9.83e-03	92.62	4.09e-03	0.25	1.10e-05	0.0	0.0
72	6.337	0.158	0.296	1.141e+04	0.5	7380.87	0.3	101.84	4.49e-03	0.0	0.0
73	6.341	0.158	0.296	1445.91	6.38e-02	1093.37	4.82e-02	572.23	2.52e-02	0.0	0.0
74	6.489	0.154	0.296	2.03	8.95e-05	12.73	5.61e-04	7324.89	0.3	0.0	0.0
75	6.494	0.154	0.296	1.25	5.50e-05	6.08e-05	0.0	0.16	6.86e-06	0.0	0.0
76	6.508	0.154	0.296	2.07	9.12e-05	0.73	3.22e-05	6885.97	0.3	0.0	0.0
77	6.532	0.153	0.296	0.09	3.94e-06	2.95	1.30e-04	302.32	1.33e-02	0.0	0.0
78	6.540	0.153	0.296	3.20	1.41e-04	0.17	7.55e-06	68.58	3.02e-03	0.0	0.0
79	6.598	0.152	0.296	1.874e+04	0.8	6763.95	0.3	38.29	1.69e-03	0.0	0.0
80	6.638	0.151	0.296	3.43e-04	0.0	0.18	7.73e-06	1.43e-03	0.0	0.0	0.0
81	6.705	0.149	0.296	4682.55	0.2	9.43	4.16e-04	45.79	2.02e-03	0.0	0.0
82	6.771	0.148	0.296	80.68	3.56e-03	1799.00	7.93e-02	125.92	5.55e-03	0.0	0.0
83	6.790	0.147	0.296	0.10	4.42e-06	32.22	1.42e-03	1183.97	5.22e-02	0.0	0.0
84	6.815	0.147	0.296	0.05	2.11e-06	0.48	2.11e-05	2345.28	0.1	0.0	0.0
85	6.817	0.147	0.296	0.15	6.49e-06	0.19	8.28e-06	4.38	1.93e-04	0.0	0.0
86	6.819	0.147	0.296	0.11	4.72e-06	0.17	7.59e-06	25.79	1.14e-03	0.0	0.0
87	6.891	0.145	0.295	1.17e-06	0.0	2.96e-04	0.0	99.16	4.37e-03	0.0	0.0
88	6.926	0.144	0.294	1665.39	7.35e-02	4256.17	0.2	15.41	6.80e-04	0.0	0.0
89	7.008	0.143	0.292	3271.14	0.1	1.34	5.93e-05	19.09	8.42e-04	0.0	0.0
90	7.030	0.142	0.292	1.79	7.88e-05	142.40	6.28e-03	10.06	4.44e-04	0.0	0.0
91	7.380	0.135	0.283	1.74	7.69e-05	97.61	4.30e-03	2.26	9.98e-05	0.0	0.0
92	7.632	0.131	0.278	0.0	0.0	1382.86	6.10e-02	11.56	5.10e-04	0.0	0.0
93	7.633	0.131	0.278	0.0	0.0	446.33	1.97e-02	2.56	1.13e-04	0.0	0.0
94	7.887	0.127	0.273	33.71	1.49e-03	309.13	1.36e-02	8.47	3.74e-04	0.0	0.0
95	7.931	0.126	0.272	35.39	1.56e-03	2306.24	0.1	5.733e+04	2.5	0.0	0.0
96	7.951	0.126	0.271	74.85	3.30e-03	3517.72	0.2	4.715e+04	2.1	0.0	0.0
97	8.018	0.125	0.270	2664.48	0.1	393.69	1.74e-02	3.41	1.50e-04	0.0	0.0
98	8.296	0.121	0.265	1.15e-06	0.0	9.95	4.39e-04	0.02	1.02e-06	0.0	0.0
99	8.411	0.119	0.263	264.20	1.17e-02	2.71	1.20e-04	0.14	6.20e-06	0.0	0.0
100	8.451	0.118	0.262	2.07	9.12e-05	42.91	1.89e-03	7.58	3.34e-04	0.0	0.0
101	8.756	0.114	0.257	3.14	1.38e-04	10.24	4.51e-04	7.28	3.21e-04	0.0	0.0
102	8.817	0.113	0.256	0.76	3.37e-05	6.92	3.05e-04	4.94	2.18e-04	0.0	0.0
103	8.870	0.113	0.255	321.33	1.42e-02	57.82	2.55e-03	1.52	6.69e-05	0.0	0.0
104	8.906	0.112	0.255	227.85	1.00e-02	35.65	1.57e-03	5.80	2.56e-04	0.0	0.0
105	9.024	0.111	0.253	37.44	1.65e-03	48.02	2.12e-03	11.98	5.28e-04	0.0	0.0
106	9.219	0.108	0.250	9.84	4.34e-04	64.27	2.83e-03	169.59	7.48e-03	0.0	0.0
107	9.325	0.107	0.248	9.62	4.24e-04	149.35	6.59e-03	1.312e+04	0.6	0.0	0.0
108	9.368	0.107	0.248	21.16	9.33e-04	259.61	1.14e-02	9395.60	0.4	0.0	0.0
109	9.404	0.106	0.247	43.09	1.90e-03	168.37	7.43e-03	3982.47	0.2	0.0	0.0
110	9.439	0.106	0.247	1.56	6.86e-05	322.31	1.42e-02	61.43	2.71e-03	0.0	0.0
111	9.605	0.104	0.244	1.05e-04	0.0	47.79	2.11e-03	0.25	1.11e-05	0.0	0.0
112	9.614	0.104	0.244	1.34	5.90e-05	446.50	1.97e-02	16.55	7.30e-04	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
113	9.911	0.101	0.241	0.29	1.29e-05	339.37	1.50e-02	1092.66	4.82e-02	0.0	0.0
114	9.950	0.100	0.240	0.16	7.12e-06	64.58	2.85e-03	1.705e+04	0.8	0.0	0.0
115	9.986	0.100	0.240	0.01	0.0	6.34	2.80e-04	1.00	4.42e-05	0.0	0.0
116	10.086	0.099	0.238	2406.59	0.1	0.08	3.55e-06	3.14	1.38e-04	0.0	0.0
117	10.087	0.099	0.238	414.81	1.83e-02	0.05	2.23e-06	48.32	2.13e-03	0.0	0.0
118	10.310	0.097	0.236	0.07	3.17e-06	214.36	9.45e-03	12.22	5.39e-04	0.0	0.0
119	10.474	0.095	0.234	128.76	5.68e-03	1013.50	4.47e-02	4.630e+04	2.0	0.0	0.0
120	10.475	0.095	0.234	262.01	1.16e-02	2948.32	0.1	8791.82	0.4	0.0	0.0
121	10.489	0.095	0.234	2.45	1.08e-04	17.75	7.83e-04	20.30	8.95e-04	0.0	0.0
122	10.528	0.095	0.233	12.49	5.51e-04	8.77	3.87e-04	97.51	4.30e-03	0.0	0.0
123	10.724	0.093	0.231	0.12	5.28e-06	32.78	1.45e-03	13.02	5.74e-04	0.0	0.0
124	10.796	0.093	0.230	24.47	1.08e-03	1269.66	5.60e-02	4.55	2.01e-04	0.0	0.0
125	10.898	0.092	0.229	2.04e-03	0.0	27.73	1.22e-03	6.32	2.79e-04	0.0	0.0
126	10.967	0.091	0.228	2.92e-03	0.0	0.76	3.36e-05	3233.61	0.1	0.0	0.0
127	11.072	0.090	0.227	1.006e+04	0.4	1.71	7.56e-05	1875.90	8.27e-02	0.0	0.0
128	11.097	0.090	0.227	31.53	1.39e-03	73.26	3.23e-03	120.17	5.30e-03	0.0	0.0
129	11.133	0.090	0.227	1.96	8.65e-05	99.08	4.37e-03	468.13	2.06e-02	0.0	0.0
130	11.154	0.090	0.227	280.42	1.24e-02	0.89	3.94e-05	4298.00	0.2	0.0	0.0
131	11.231	0.089	0.226	1.264e+04	0.6	39.06	1.72e-03	2.334e+04	1.0	0.0	0.0
132	11.264	0.089	0.225	30.17	1.33e-03	0.39	1.73e-05	1.87	8.27e-05	0.0	0.0
133	11.352	0.088	0.225	0.04	1.87e-06	24.51	1.08e-03	19.84	8.75e-04	0.0	0.0
134	11.520	0.087	0.223	0.25	1.11e-05	0.05	2.32e-06	1.536e+04	0.7	0.0	0.0
135	11.535	0.087	0.223	1.20e-05	0.0	0.03	1.52e-06	6.98e-04	0.0	0.0	0.0
136	11.631	0.086	0.222	1.66	7.34e-05	0.37	1.65e-05	3.132e+04	1.4	0.0	0.0
137	11.649	0.086	0.222	0.11	5.00e-06	0.41	1.79e-05	4.044e+04	1.8	0.0	0.0
138	11.681	0.086	0.222	3.46e-04	0.0	61.85	2.73e-03	7.64	3.37e-04	0.0	0.0
139	11.838	0.084	0.220	3.63	1.60e-04	2.62	1.16e-04	1.889e+04	0.8	0.0	0.0
140	11.844	0.084	0.220	8.67	3.82e-04	3.80	1.67e-04	1275.03	5.62e-02	0.0	0.0
141	11.850	0.084	0.220	4.94	2.18e-04	0.15	6.62e-06	0.18	8.01e-06	0.0	0.0
142	12.069	0.083	0.218	538.70	2.38e-02	44.53	1.96e-03	304.66	1.34e-02	0.0	0.0
143	12.108	0.083	0.218	0.83	3.65e-05	4.12	1.82e-04	163.13	7.19e-03	0.0	0.0
144	12.157	0.082	0.217	893.53	3.94e-02	384.36	1.70e-02	3.427e+04	1.5	0.0	0.0
145	12.272	0.081	0.216	5489.03	0.2	318.02	1.40e-02	1.916e+04	0.8	0.0	0.0
146	12.376	0.081	0.216	37.19	1.64e-03	0.82	3.64e-05	6544.92	0.3	0.0	0.0
147	12.400	0.081	0.215	22.80	1.01e-03	1019.16	4.49e-02	664.57	2.93e-02	0.0	0.0
148	12.402	0.081	0.215	18.38	8.11e-04	200.35	8.84e-03	2.87	1.27e-04	0.0	0.0
149	12.487	0.080	0.215	59.41	2.62e-03	0.84	3.72e-05	578.56	2.55e-02	0.0	0.0
150	12.497	0.080	0.215	2168.69	9.56e-02	32.91	1.45e-03	2.073e+04	0.9	0.0	0.0
151	12.571	0.080	0.214	1.16	5.12e-05	0.01	0.0	9857.56	0.4	0.0	0.0
152	12.608	0.079	0.214	1.24e-03	0.0	12.45	5.49e-04	1.194e+04	0.5	0.0	0.0
153	12.714	0.079	0.213	1120.06	4.94e-02	334.63	1.48e-02	7394.82	0.3	0.0	0.0
154	12.827	0.078	0.212	2588.37	0.1	1207.91	5.33e-02	7173.03	0.3	0.0	0.0
155	12.832	0.078	0.212	0.95	4.20e-05	0.75	3.29e-05	4.27	1.88e-04	0.0	0.0
156	12.867	0.078	0.212	2.40	1.06e-04	13.72	6.05e-04	25.79	1.14e-03	0.0	0.0
157	12.972	0.077	0.211	0.40	1.75e-05	0.15	6.71e-06	1213.64	5.35e-02	0.0	0.0
158	13.031	0.077	0.211	471.63	2.08e-02	2011.96	8.87e-02	353.33	1.56e-02	0.0	0.0
159	13.078	0.076	0.210	0.77	3.39e-05	2.67	1.18e-04	2.306e+04	1.0	0.0	0.0
160	13.131	0.076	0.210	2.05	9.05e-05	7.32	3.23e-04	1.064e+04	0.5	0.0	0.0
161	13.184	0.076	0.209	5.29	2.33e-04	154.63	6.82e-03	291.41	1.29e-02	0.0	0.0
162	13.242	0.076	0.209	5.54	2.44e-04	71.38	3.15e-03	4.180e+04	1.8	0.0	0.0
163	13.290	0.075	0.209	0.91	4.03e-05	38.15	1.68e-03	2714.30	0.1	0.0	0.0
164	13.634	0.073	0.206	0.68	3.01e-05	0.43	1.89e-05	0.16	7.25e-06	0.0	0.0
165	13.778	0.073	0.205	98.14	4.33e-03	267.78	1.18e-02	13.06	5.76e-04	0.0	0.0
166	13.830	0.072	0.205	704.17	3.11e-02	8.27	3.65e-04	1.738e+04	0.8	0.0	0.0
167	13.884	0.072	0.205	2.57e-03	0.0	0.08	3.58e-06	2.338e+04	1.0	0.0	0.0
168	13.998	0.071	0.204	1.43	6.32e-05	0.40	1.77e-05	3.340e+04	1.5	0.0	0.0
169	14.022	0.071	0.204	0.08	3.37e-06	0.03	1.15e-06	1.213e+04	0.5	0.0	0.0
170	14.058	0.071	0.204	0.07	3.25e-06	23.19	1.02e-03	1155.89	5.10e-02	0.0	0.0
171	14.197	0.070	0.203	425.94	1.88e-02	13.81	6.09e-04	248.75	1.10e-02	0.0	0.0
172	14.524	0.069	0.201	8607.06	0.4	136.31	6.01e-03	7473.88	0.3	0.0	0.0
173	14.639	0.068	0.200	1686.71	7.44e-02	10.88	4.80e-04	2461.54	0.1	0.0	0.0
174	14.884	0.067	0.199	478.65	2.11e-02	104.18	4.59e-03	14.26	6.29e-04	0.0	0.0
175	14.892	0.067	0.199	3813.57	0.2	849.26	3.75e-02	434.62	1.92e-02	0.0	0.0
176	14.941	0.067	0.198	0.06	2.67e-06	6.84e-03	0.0	107.09	4.72e-03	0.0	0.0
177	14.967	0.067	0.198	0.17	7.52e-06	0.05	2.07e-06	464.59	2.05e-02	0.0	0.0
178	14.972	0.067	0.198	141.86	6.26e-03	25.07	1.11e-03	39.50	1.74e-03	0.0	0.0
179	15.039	0.066	0.198	22.44	9.90e-04	178.07	7.85e-03	55.23	2.44e-03	0.0	0.0
180	15.478	0.065	0.195	9443.67	0.4	43.55	1.92e-03	55.25	2.44e-03	0.0	0.0
181	15.801	0.063	0.194	58.10	2.56e-03	7836.27	0.3	209.90	9.26e-03	0.0	0.0
182	16.004	0.062	0.193	1.76	7.77e-05	6.42	2.83e-04	103.76	4.58e-03	0.0	0.0
183	16.241	0.062	0.192	22.73	1.00e-03	0.41	1.80e-05	17.68	7.80e-04	0.0	0.0
184	16.263	0.061	0.192	234.99	1.04e-02	91.93	4.05e-03	2578.80	0.1	0.0	0.0
185	16.297	0.061	0.191	1.51e-06	0.0	4.09	1.81e-04	0.01	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
186	16.459	0.061	0.191	3.54	1.56e-04	0.11	5.06e-06	3.178e+04	1.4	0.0	0.0
187	16.742	0.060	0.189	0.25	1.10e-05	0.04	1.68e-06	0.31	1.35e-05	0.0	0.0
188	16.831	0.059	0.189	108.21	4.77e-03	7.72	3.40e-04	2.494e+04	1.1	0.0	0.0
189	16.938	0.059	0.189	4.30e-06	0.0	1.13	4.98e-05	8.49e-03	0.0	0.0	0.0
190	17.054	0.059	0.188	1.75	7.74e-05	85.75	3.78e-03	105.65	4.66e-03	0.0	0.0
191	17.072	0.059	0.188	277.37	1.22e-02	16.78	7.40e-04	0.45	1.96e-05	0.0	0.0
192	17.391	0.058	0.187	205.18	9.05e-03	6316.74	0.3	1.818e+04	0.8	0.0	0.0
193	17.459	0.057	0.186	3.43e-06	0.0	1.09e-03	0.0	6.06e-03	0.0	0.0	0.0
194	17.694	0.057	0.185	1074.15	4.74e-02	15.08	6.65e-04	137.67	6.07e-03	0.0	0.0
195	17.916	0.056	0.185	48.57	2.14e-03	1179.70	5.20e-02	1.361e+04	0.6	0.0	0.0
196	17.953	0.056	0.184	0.0	0.0	408.53	1.80e-02	0.04	1.62e-06	0.0	0.0
197	17.965	0.056	0.184	5.97e-05	0.0	60.17	2.65e-03	0.89	3.94e-05	0.0	0.0
198	18.079	0.055	0.184	1.13e-06	0.0	14.26	6.29e-04	5.82e-03	0.0	0.0	0.0
199	18.209	0.055	0.183	0.53	2.33e-05	1626.48	7.17e-02	4068.42	0.2	0.0	0.0
200	18.444	0.054	0.183	4.74	2.09e-04	6.49	2.86e-04	202.17	8.92e-03	0.0	0.0
Risulta				2.263e+06		2.220e+06		2.170e+06			
In percentuale				99.80		97.90		95.71			

CDC	Tipo	Sigla Id	Note
18	Edk	CDC=Ed (dinamico SLO) alfa=90.00 (ecc. -)	
			categoria suolo: C
			fattore di sito S = 1.500
			ordinata spettro (tratto Tb-Tc) = 0.296 g
			angolo di ingresso:90.00
			eccentricità aggiuntiva: negativa
			periodo proprio T1: 1.292 sec.
			numero di modi considerati:200
			combinaz. modale: CQC

Quota	M Sismica x g	Pos. GX	Pos. GY	E agg. X-X	E agg. Y-Y	Pos. KX	Pos. KY	rapp. r/Ls	rapp. ex/rx	rapp. ey/ry
m	daN	m	m	m	m	m	m			
7.22	6.991e+05	49.32	22.50	-5.00	0.0	50.00	22.50	1.095	0.021	0.0
6.50	1.119e+06	49.31	21.87	-5.00	0.0	51.85	22.85	1.306	0.061	0.024
5.00	1.369e+04	77.24	10.41	-1.50	0.0	76.72	11.72	1.381	0.035	0.085
4.67	1.111e+04	76.52	10.17	-1.50	0.0	76.72	11.72	1.381	0.014	0.101
4.50	2.182e+04	40.86	39.92	-3.50	0.0	50.00	30.00	1.474	0.292	0.317
4.00	1.448e+04	76.33	10.14	-1.50	0.0	76.72	11.72	1.381	0.026	0.103
3.50	3.089e+05	95.61	34.13	-0.50	0.0	94.99	33.25	1.305	0.066	0.095
3.33	1.414e+04	76.13	10.10	-1.50	0.0	76.72	11.72	1.381	0.039	0.105
2.67	1.414e+04	76.13	10.10	-1.50	0.0	76.72	11.72	1.381	0.039	0.105
2.00	1.398e+04	76.22	10.08	-1.50	0.0	76.72	11.72	1.381	0.034	0.107
1.75	8296.96	100.00	33.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.33	1.381e+04	76.31	10.06	-1.50	0.0	76.72	11.72	1.381	0.027	0.108
1.17	735.00	100.00	32.79	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.67	1.381e+04	76.31	10.06	-1.50	0.0	76.72	11.72	1.381	0.027	0.108
0.58	735.00	100.00	32.79	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Risulta	2.267e+06									

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	0.752	1.330	0.097	8.560e+05	37.8	59.94	2.64e-03	0.02	1.08e-06	0.0	0.0
2	0.774	1.292	0.100	1.12	4.92e-05	1.004e+06	44.3	8.58e-05	0.0	0.0	0.0
3	0.842	1.188	0.109	23.08	1.02e-03	2.262e+05	10.0	2.82e-03	0.0	0.0	0.0
4	0.898	1.113	0.116	357.79	1.58e-02	3.383e+05	14.9	6.67e-03	0.0	0.0	0.0
5	0.942	1.061	0.122	5.430e+05	23.9	0.48	2.13e-05	2.27e-05	0.0	0.0	0.0
6	0.958	1.044	0.124	4268.61	0.2	6.129e+04	2.7	2.88e-04	0.0	0.0	0.0
7	0.995	1.005	0.129	5.722e+05	25.2	393.97	1.74e-02	0.05	2.30e-06	0.0	0.0
8	1.038	0.963	0.135	1686.21	7.44e-02	8.060e+04	3.6	9.20e-03	0.0	0.0	0.0
9	1.123	0.890	0.145	141.61	6.25e-03	4.137e+04	1.8	8.03e-03	0.0	0.0	0.0
10	1.202	0.832	0.156	0.04	1.91e-06	9.053e+04	4.0	4.82e-03	0.0	0.0	0.0
11	1.246	0.802	0.161	2.745e+04	1.2	0.06	2.47e-06	3.00e-03	0.0	0.0	0.0
12	1.248	0.801	0.162	1.35	5.94e-05	0.29	1.28e-05	3.98e-06	0.0	0.0	0.0
13	1.266	0.790	0.164	11.71	5.17e-04	3.81	1.68e-04	0.02	0.0	0.0	0.0
14	1.292	0.774	0.167	85.07	3.75e-03	1.193e+05	5.3	0.11	4.98e-06	0.0	0.0
15	1.299	0.770	0.168	3.78e-05	0.0	8.00e-06	0.0	0.03	1.43e-06	0.0	0.0
16	1.354	0.739	0.175	1.356e+04	0.6	3.06	1.35e-04	6.72e-03	0.0	0.0	0.0
17	1.363	0.734	0.177	13.42	5.92e-04	1.207e+04	0.5	0.02	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
18	1.459	0.685	0.189	171.79	7.58e-03	2.546e+04	1.1	0.07	3.12e-06	0.0	0.0
19	1.704	0.587	0.221	0.29	1.28e-05	7895.19	0.3	0.13	5.62e-06	0.0	0.0
20	2.091	0.478	0.271	1485.74	6.55e-02	457.03	2.02e-02	13.43	5.92e-04	0.0	0.0
21	2.520	0.397	0.296	9.48	4.18e-04	100.37	4.43e-03	0.10	4.56e-06	0.0	0.0
22	2.606	0.384	0.296	96.63	4.26e-03	2.959e+04	1.3	0.33	1.46e-05	0.0	0.0
23	2.708	0.369	0.296	1394.04	6.15e-02	197.94	8.73e-03	1.83	8.07e-05	0.0	0.0
24	2.771	0.361	0.296	4.891e+04	2.2	356.24	1.57e-02	1.77	7.82e-05	0.0	0.0
25	2.853	0.350	0.296	2544.65	0.1	720.39	3.18e-02	3.30	1.46e-04	0.0	0.0
26	2.984	0.335	0.296	812.46	3.58e-02	3104.07	0.1	7.58	3.35e-04	0.0	0.0
27	3.167	0.316	0.296	807.01	3.56e-02	25.37	1.12e-03	0.04	1.75e-06	0.0	0.0
28	3.210	0.312	0.296	6.42	2.83e-04	4235.47	0.2	0.30	1.31e-05	0.0	0.0
29	3.310	0.302	0.296	530.82	2.34e-02	2.474e+04	1.1	0.50	2.21e-05	0.0	0.0
30	3.334	0.300	0.296	1.852e+04	0.8	628.09	2.77e-02	5.35e-03	0.0	0.0	0.0
31	3.406	0.294	0.296	7697.99	0.3	3.92	1.73e-04	0.15	6.61e-06	0.0	0.0
32	3.449	0.290	0.296	15.76	6.95e-04	5.248e+04	2.3	15.85	6.99e-04	0.0	0.0
33	3.669	0.273	0.296	8.32e-03	0.0	499.11	2.20e-02	0.01	0.0	0.0	0.0
34	3.837	0.261	0.296	973.39	4.29e-02	68.57	3.02e-03	9.25	4.08e-04	0.0	0.0
35	3.899	0.256	0.296	55.26	2.44e-03	1.392e+04	0.6	26.01	1.15e-03	0.0	0.0
36	3.952	0.253	0.296	1.21e-05	0.0	0.02	0.0	758.72	3.35e-02	0.0	0.0
37	4.302	0.232	0.296	1.16e-04	0.0	1328.18	5.86e-02	0.02	0.0	0.0	0.0
38	4.420	0.226	0.296	4.605e+04	2.0	175.67	7.75e-03	5136.01	0.2	0.0	0.0
39	4.426	0.226	0.296	452.38	2.00e-02	3.79	1.67e-04	4.237e+05	18.7	0.0	0.0
40	4.457	0.224	0.296	116.52	5.14e-03	141.08	6.22e-03	3823.29	0.2	0.0	0.0
41	4.497	0.222	0.296	122.86	5.42e-03	6465.29	0.3	1.564e+04	0.7	0.0	0.0
42	4.517	0.221	0.296	0.04	1.62e-06	1950.55	8.60e-02	9.749e+04	4.3	0.0	0.0
43	4.547	0.220	0.296	0.18	7.76e-06	11.15	4.92e-04	4865.23	0.2	0.0	0.0
44	4.574	0.219	0.296	7.90	3.48e-04	231.90	1.02e-02	4548.26	0.2	0.0	0.0
45	4.654	0.215	0.296	4.65	2.05e-04	49.46	2.18e-03	3.316e+04	1.5	0.0	0.0
46	4.707	0.212	0.296	1.54	6.78e-05	16.04	7.07e-04	2736.90	0.1	0.0	0.0
47	4.813	0.208	0.296	12.95	5.71e-04	5.12	2.26e-04	1.689e+04	0.7	0.0	0.0
48	4.834	0.207	0.296	27.11	1.20e-03	11.87	5.23e-04	53.02	2.34e-03	0.0	0.0
49	4.860	0.206	0.296	597.77	2.64e-02	272.53	1.20e-02	935.71	4.13e-02	0.0	0.0
50	5.014	0.199	0.296	21.34	9.41e-04	94.55	4.17e-03	1861.35	8.21e-02	0.0	0.0
51	5.017	0.199	0.296	3.06	1.35e-04	12.17	5.37e-04	824.28	3.64e-02	0.0	0.0
52	5.038	0.198	0.296	1445.51	6.38e-02	4607.46	0.2	98.78	4.36e-03	0.0	0.0
53	5.093	0.196	0.296	0.0	0.0	4.07	1.80e-04	7.50e-06	0.0	0.0	0.0
54	5.295	0.189	0.296	0.78	3.45e-05	293.62	1.30e-02	42.48	1.87e-03	0.0	0.0
55	5.354	0.187	0.296	2.77e-06	0.0	9.81e-03	0.0	44.84	1.98e-03	0.0	0.0
56	5.387	0.186	0.296	10.05	4.43e-04	3194.65	0.1	252.97	1.12e-02	0.0	0.0
57	5.625	0.178	0.296	0.0	0.0	3.44	1.52e-04	1144.79	5.05e-02	0.0	0.0
58	5.785	0.173	0.296	259.94	1.15e-02	1014.35	4.47e-02	279.61	1.23e-02	0.0	0.0
59	5.811	0.172	0.296	72.05	3.18e-03	2216.14	9.77e-02	130.82	5.77e-03	0.0	0.0
60	5.931	0.169	0.296	4.36e-04	0.0	0.39	1.71e-05	3.314e+05	14.6	0.0	0.0
61	5.938	0.168	0.296	0.08	3.44e-06	4.79	2.11e-04	2.401e+05	10.6	0.0	0.0
62	5.979	0.167	0.296	4.17e-03	0.0	0.12	5.48e-06	2043.20	9.01e-02	0.0	0.0
63	5.987	0.167	0.296	0.34	1.50e-05	4.88	2.15e-04	637.05	2.81e-02	0.0	0.0
64	6.050	0.165	0.296	0.06	2.58e-06	0.66	2.92e-05	1.063e+05	4.7	0.0	0.0
65	6.061	0.165	0.296	0.80	3.52e-05	0.11	4.73e-06	8.005e+04	3.5	0.0	0.0
66	6.121	0.163	0.296	0.14	6.37e-06	0.14	6.31e-06	261.03	1.15e-02	0.0	0.0
67	6.139	0.163	0.296	1.72	7.58e-05	3.87	1.71e-04	722.92	3.19e-02	0.0	0.0
68	6.234	0.160	0.296	3.00	1.32e-04	6.06	2.67e-04	2.121e+04	0.9	0.0	0.0
69	6.249	0.160	0.296	3.89	1.71e-04	8.03	3.54e-04	483.76	2.13e-02	0.0	0.0
70	6.263	0.160	0.296	0.02	0.0	3.75	1.66e-04	1.421e+04	0.6	0.0	0.0
71	6.294	0.159	0.296	0.06	2.86e-06	16.80	7.41e-04	68.45	3.02e-03	0.0	0.0
72	6.327	0.158	0.296	0.34	1.49e-05	0.45	1.98e-05	35.74	1.58e-03	0.0	0.0
73	6.342	0.158	0.296	3.18	1.40e-04	1.71	7.53e-05	431.25	1.90e-02	0.0	0.0
74	6.485	0.154	0.296	2.330e+04	1.0	457.04	2.02e-02	269.89	1.19e-02	0.0	0.0
75	6.490	0.154	0.296	1385.40	6.11e-02	23.11	1.02e-03	7144.83	0.3	0.0	0.0
76	6.494	0.154	0.296	2.50	1.10e-04	7.04e-05	0.0	0.17	7.44e-06	0.0	0.0
77	6.508	0.154	0.296	16.19	7.14e-04	0.37	1.64e-05	6773.12	0.3	0.0	0.0
78	6.531	0.153	0.296	4.33	1.91e-04	0.09	3.92e-06	157.12	6.93e-03	0.0	0.0
79	6.541	0.153	0.296	1.17	5.15e-05	0.12	5.15e-06	163.33	7.20e-03	0.0	0.0
80	6.696	0.149	0.296	5153.66	0.2	0.06	2.53e-06	34.89	1.54e-03	0.0	0.0
81	6.775	0.148	0.296	6092.28	0.3	1624.97	7.17e-02	168.30	7.42e-03	0.0	0.0
82	6.791	0.147	0.296	0.94	4.14e-05	0.04	1.82e-06	1293.40	5.70e-02	0.0	0.0
83	6.814	0.147	0.296	8.25e-04	0.0	0.71	3.11e-05	2226.92	9.82e-02	0.0	0.0
84	6.816	0.147	0.296	5.21e-04	0.0	0.53	2.35e-05	19.77	8.72e-04	0.0	0.0
85	6.820	0.147	0.296	0.05	2.07e-06	2.77	1.22e-04	228.09	1.01e-02	0.0	0.0
86	6.969	0.143	0.293	3402.16	0.2	10.38	4.58e-04	16.71	7.37e-04	0.0	0.0
87	7.017	0.143	0.292	2.49	1.10e-04	147.97	6.53e-03	8.79	3.88e-04	0.0	0.0
88	7.185	0.139	0.288	166.03	7.32e-03	782.71	3.45e-02	0.16	6.86e-06	0.0	0.0
89	7.365	0.136	0.284	3.33e-06	0.0	700.77	3.09e-02	2.01	8.88e-05	0.0	0.0
90	7.447	0.134	0.282	4.03e-06	0.0	1299.40	5.73e-02	19.62	8.66e-04	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
91	7.547	0.132	0.280	20.02	8.83e-04	1.463e+04	0.6	1245.18	5.49e-02	0.0	0.0
92	7.636	0.131	0.278	0.0	0.0	336.58	1.48e-02	6.10e-04	0.0	0.0	0.0
93	7.942	0.126	0.272	639.17	2.82e-02	6.54	2.89e-04	8.205e+04	3.6	0.0	0.0
94	7.943	0.126	0.272	2144.41	9.46e-02	346.41	1.53e-02	2.050e+04	0.9	0.0	0.0
95	8.003	0.125	0.270	164.34	7.25e-03	8.55	3.77e-04	347.57	1.53e-02	0.0	0.0
96	8.144	0.123	0.268	1.43e-06	0.0	32.55	1.44e-03	0.04	1.78e-06	0.0	0.0
97	8.316	0.120	0.265	3.47e-03	0.0	3.31	1.46e-04	0.06	2.77e-06	0.0	0.0
98	8.356	0.120	0.264	0.33	1.43e-05	3859.79	0.2	478.63	2.11e-02	0.0	0.0
99	8.393	0.119	0.263	418.33	1.85e-02	143.88	6.35e-03	4.90	2.16e-04	0.0	0.0
100	8.556	0.117	0.260	1.10e-04	0.0	6.54	2.88e-04	0.23	1.01e-05	0.0	0.0
101	8.836	0.113	0.256	3.77e-03	0.0	3.41e-03	0.0	0.45	2.00e-05	0.0	0.0
102	8.909	0.112	0.255	691.40	3.05e-02	11.32	4.99e-04	3.46	1.52e-04	0.0	0.0
103	9.072	0.110	0.252	0.06	2.47e-06	0.29	1.26e-05	0.06	2.56e-06	0.0	0.0
104	9.240	0.108	0.250	3.76e-05	0.0	85.43	3.77e-03	4.30	1.90e-04	0.0	0.0
105	9.283	0.108	0.249	0.44	1.96e-05	30.48	1.34e-03	15.21	6.71e-04	0.0	0.0
106	9.307	0.107	0.249	11.00	4.85e-04	26.00	1.15e-03	5.66	2.50e-04	0.0	0.0
107	9.351	0.107	0.248	6.15	2.71e-04	0.44	1.92e-05	2.657e+04	1.2	0.0	0.0
108	9.404	0.106	0.247	0.02	0.0	6.91	3.05e-04	34.98	1.54e-03	0.0	0.0
109	9.409	0.106	0.247	0.59	2.60e-05	283.21	1.25e-02	171.45	7.56e-03	0.0	0.0
110	9.490	0.105	0.246	9.15e-03	0.0	1300.43	5.74e-02	49.49	2.18e-03	0.0	0.0
111	9.617	0.104	0.244	0.67	2.96e-05	1506.79	6.65e-02	1.58	6.99e-05	0.0	0.0
112	9.804	0.102	0.242	2.45e-05	0.0	3.40	1.50e-04	4.87	2.15e-04	0.0	0.0
113	9.897	0.101	0.241	1.72	7.58e-05	115.58	5.10e-03	175.35	7.73e-03	0.0	0.0
114	9.948	0.101	0.240	0.73	3.23e-05	0.32	1.40e-05	1.805e+04	0.8	0.0	0.0
115	10.086	0.099	0.238	2815.53	0.1	0.0	0.0	0.85	3.77e-05	0.0	0.0
116	10.151	0.099	0.238	1.36e-03	0.0	7.09	3.13e-04	17.01	7.50e-04	0.0	0.0
117	10.336	0.097	0.235	5.87	2.59e-04	109.45	4.83e-03	1.64	7.25e-05	0.0	0.0
118	10.336	0.097	0.235	0.01	0.0	159.65	7.04e-03	0.02	0.0	0.0	0.0
119	10.368	0.096	0.235	4.19	1.85e-04	9.21	4.06e-04	0.02	0.0	0.0	0.0
120	10.384	0.096	0.235	761.85	3.36e-02	4420.09	0.2	2223.66	9.81e-02	0.0	0.0
121	10.474	0.095	0.234	0.07	3.13e-06	17.86	7.88e-04	5.323e+04	2.3	0.0	0.0
122	10.509	0.095	0.233	0.04	1.56e-06	44.93	1.98e-03	9.35	4.12e-04	0.0	0.0
123	10.630	0.094	0.232	0.10	4.28e-06	147.16	6.49e-03	0.74	3.28e-05	0.0	0.0
124	10.716	0.093	0.231	1.10	4.84e-05	17.49	7.71e-04	6.46	2.85e-04	0.0	0.0
125	10.823	0.092	0.230	80.94	3.57e-03	0.96	4.22e-05	55.05	2.43e-03	0.0	0.0
126	10.964	0.091	0.228	0.20	8.64e-06	0.10	4.47e-06	3246.78	0.1	0.0	0.0
127	10.999	0.091	0.228	416.31	1.84e-02	73.19	3.23e-03	0.43	1.88e-05	0.0	0.0
128	11.037	0.091	0.228	881.45	3.89e-02	0.07	3.15e-06	2.91	1.28e-04	0.0	0.0
129	11.039	0.091	0.228	1.322e+04	0.6	170.48	7.52e-03	53.64	2.37e-03	0.0	0.0
130	11.180	0.089	0.226	4894.79	0.2	219.57	9.68e-03	3.053e+04	1.3	0.0	0.0
131	11.264	0.089	0.225	34.75	1.53e-03	1.65e-04	0.0	0.01	0.0	0.0	0.0
132	11.497	0.087	0.223	44.60	1.97e-03	190.75	8.41e-03	118.64	5.23e-03	0.0	0.0
133	11.519	0.087	0.223	0.14	6.15e-06	0.02	1.05e-06	1.486e+04	0.7	0.0	0.0
134	11.535	0.087	0.223	0.0	0.0	9.72e-04	0.0	8.09e-04	0.0	0.0	0.0
135	11.628	0.086	0.222	0.75	3.33e-05	0.09	4.11e-06	3.183e+04	1.4	0.0	0.0
136	11.649	0.086	0.222	0.06	2.49e-06	2.32	1.02e-04	3.999e+04	1.8	0.0	0.0
137	11.838	0.084	0.220	16.41	7.24e-04	1.46	6.44e-05	1.790e+04	0.8	0.0	0.0
138	11.842	0.084	0.220	31.33	1.38e-03	17.91	7.90e-04	2543.01	0.1	0.0	0.0
139	11.849	0.084	0.220	24.41	1.08e-03	4.27	1.88e-04	15.29	6.74e-04	0.0	0.0
140	11.897	0.084	0.220	17.27	7.62e-04	531.90	2.35e-02	297.60	1.31e-02	0.0	0.0
141	12.016	0.083	0.219	452.34	2.00e-02	749.00	3.30e-02	859.43	3.79e-02	0.0	0.0
142	12.108	0.083	0.218	16.11	7.11e-04	6.62	2.92e-04	41.95	1.85e-03	0.0	0.0
143	12.149	0.082	0.217	2291.99	0.1	295.02	1.30e-02	2.978e+04	1.3	0.0	0.0
144	12.207	0.082	0.217	359.75	1.59e-02	29.13	1.28e-03	1565.59	6.90e-02	0.0	0.0
145	12.254	0.082	0.217	6096.54	0.3	249.19	1.10e-02	6769.71	0.3	0.0	0.0
146	12.371	0.081	0.216	36.44	1.61e-03	1.51	6.66e-05	7172.21	0.3	0.0	0.0
147	12.425	0.080	0.215	11.67	5.15e-04	20.68	9.12e-04	444.12	1.96e-02	0.0	0.0
148	12.457	0.080	0.215	19.94	8.80e-04	1111.10	4.90e-02	714.43	3.15e-02	0.0	0.0
149	12.497	0.080	0.215	1998.72	8.82e-02	62.71	2.77e-03	2.958e+04	1.3	0.0	0.0
150	12.572	0.080	0.214	0.06	2.58e-06	0.01	0.0	1.037e+04	0.5	0.0	0.0
151	12.608	0.079	0.214	0.02	0.0	15.24	6.72e-04	1.197e+04	0.5	0.0	0.0
152	12.692	0.079	0.213	2.09	9.21e-05	48.35	2.13e-03	7.20	3.17e-04	0.0	0.0
153	12.710	0.079	0.213	3280.08	0.1	366.14	1.61e-02	3442.50	0.2	0.0	0.0
154	12.762	0.078	0.213	2358.05	0.1	557.52	2.46e-02	1.379e+04	0.6	0.0	0.0
155	12.832	0.078	0.212	0.03	1.17e-06	3.65e-03	0.0	0.04	1.70e-06	0.0	0.0
156	12.969	0.077	0.211	9.10e-04	0.0	0.44	1.93e-05	933.76	4.12e-02	0.0	0.0
157	13.078	0.076	0.210	0.01	0.0	0.14	6.37e-06	2.360e+04	1.0	0.0	0.0
158	13.118	0.076	0.210	170.11	7.50e-03	557.87	2.46e-02	6555.76	0.3	0.0	0.0
159	13.136	0.076	0.210	169.35	7.47e-03	469.25	2.07e-02	4881.63	0.2	0.0	0.0
160	13.242	0.076	0.209	51.91	2.29e-03	61.42	2.71e-03	4.133e+04	1.8	0.0	0.0
161	13.285	0.075	0.209	14.07	6.20e-04	44.16	1.95e-03	2844.69	0.1	0.0	0.0
162	13.558	0.074	0.207	0.02	0.0	8.99	3.96e-04	2.81	1.24e-04	0.0	0.0
163	13.634	0.073	0.206	2.24	9.87e-05	0.80	3.53e-05	1.26	5.55e-05	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
164	13.826	0.072	0.205	730.25	3.22e-02	38.73	1.71e-03	1.731e+04	0.8	0.0	0.0
165	13.881	0.072	0.205	3.84e-04	0.0	0.10	4.47e-06	2.422e+04	1.1	0.0	0.0
166	13.908	0.072	0.205	42.97	1.90e-03	709.78	3.13e-02	651.33	2.87e-02	0.0	0.0
167	13.999	0.071	0.204	0.54	2.40e-05	0.68	3.01e-05	3.425e+04	1.5	0.0	0.0
168	14.021	0.071	0.204	14.58	6.43e-04	76.61	3.38e-03	1.100e+04	0.5	0.0	0.0
169	14.069	0.071	0.204	62.85	2.77e-03	330.09	1.46e-02	532.71	2.35e-02	0.0	0.0
170	14.174	0.071	0.203	258.85	1.14e-02	72.35	3.19e-03	107.15	4.73e-03	0.0	0.0
171	14.512	0.069	0.201	9381.78	0.4	2.87	1.26e-04	1.255e+04	0.6	0.0	0.0
172	14.616	0.068	0.200	6.01e-05	0.0	2.99e-05	0.0	135.81	5.99e-03	0.0	0.0
173	14.756	0.068	0.199	1.94e-03	0.0	0.20	8.60e-06	6.28	2.77e-04	0.0	0.0
174	14.935	0.067	0.198	24.87	1.10e-03	0.64	2.83e-05	1.64	7.23e-05	0.0	0.0
175	14.949	0.067	0.198	0.77	3.38e-05	0.83	3.68e-05	0.71	3.15e-05	0.0	0.0
176	14.960	0.067	0.198	3605.28	0.2	100.99	4.45e-03	1885.19	8.31e-02	0.0	0.0
177	14.981	0.067	0.198	4.25	1.87e-04	1.24e-03	0.0	527.25	2.33e-02	0.0	0.0
178	15.061	0.066	0.198	0.02	0.0	2.47	1.09e-04	21.40	9.44e-04	0.0	0.0
179	15.431	0.065	0.196	5952.78	0.3	3934.02	0.2	3.43	1.51e-04	0.0	0.0
180	15.538	0.064	0.195	4725.13	0.2	4322.10	0.2	5.95	2.63e-04	0.0	0.0
181	16.051	0.062	0.193	80.25	3.54e-03	169.70	7.48e-03	9.12	4.02e-04	0.0	0.0
182	16.058	0.062	0.193	1.06e-05	0.0	0.03	1.24e-06	19.15	8.45e-04	0.0	0.0
183	16.111	0.062	0.192	1.05e-05	0.0	6.60e-05	0.0	2.27	1.00e-04	0.0	0.0
184	16.268	0.061	0.192	120.14	5.30e-03	113.79	5.02e-03	2532.22	0.1	0.0	0.0
185	16.454	0.061	0.191	0.82	3.64e-05	17.62	7.77e-04	3.079e+04	1.4	0.0	0.0
186	16.742	0.060	0.189	0.43	1.90e-05	6.96e-06	0.0	0.40	1.75e-05	0.0	0.0
187	16.761	0.060	0.189	101.34	4.47e-03	18.68	8.24e-04	6023.56	0.3	0.0	0.0
188	16.826	0.059	0.189	29.89	1.32e-03	2.76	1.22e-04	1.803e+04	0.8	0.0	0.0
189	16.928	0.059	0.189	1.62	7.15e-05	51.07	2.25e-03	128.72	5.68e-03	0.0	0.0
190	17.086	0.059	0.188	48.69	2.15e-03	24.86	1.10e-03	5.84	2.58e-04	0.0	0.0
191	17.167	0.058	0.188	10.59	4.67e-04	1291.72	5.70e-02	750.73	3.31e-02	0.0	0.0
192	17.189	0.058	0.188	8.85e-04	0.0	537.99	2.37e-02	0.50	2.21e-05	0.0	0.0
193	17.359	0.058	0.187	372.78	1.64e-02	469.42	2.07e-02	80.20	3.54e-03	0.0	0.0
194	17.564	0.057	0.186	3.16	1.39e-04	2767.79	0.1	5289.69	0.2	0.0	0.0
195	17.610	0.057	0.186	5.82	2.57e-04	2410.12	0.1	2430.30	0.1	0.0	0.0
196	17.696	0.057	0.185	1056.86	4.66e-02	139.75	6.16e-03	254.77	1.12e-02	0.0	0.0
197	18.027	0.055	0.184	12.08	5.33e-04	2.14	9.46e-05	6655.09	0.3	0.0	0.0
198	18.056	0.055	0.184	24.82	1.09e-03	9.60	4.23e-04	1.872e+04	0.8	0.0	0.0
199	18.139	0.055	0.184	1.78e-05	0.0	0.72	3.16e-05	0.04	1.83e-06	0.0	0.0
200	18.271	0.055	0.183	3.49	1.54e-04	7.14	3.15e-04	1354.68	5.97e-02	0.0	0.0
Risulta				2.263e+06		2.217e+06		2.170e+06			
In percentuale				99.81		97.77		95.73			

CDC	Tipo	Sigla Id	Note
21	Edk	CDC=Ed (dinamico SLU) verticale	
			categoria suolo: C
			fattore di sito S = 1.000
			ordinata spettro (tratto Tb-Tc) = 0.284 g
			fattore q: 1.500
			classe di duttilità CD:
			numero di modi considerati:200
			combinaz. modale: CQC

Quota	M Sismica x g	Pos. GX	Pos. GY	E agg. X-X	E agg. Y-Y	Pos. KX	Pos. KY	rapp. r/Ls	rapp. ex/rx	rapp. ey/ry
m	daN	m	m	m	m	m	m			
7.22	6.991e+05	49.32	22.50	0.0	0.0	50.00	22.50	1.095	0.021	0.0
6.50	1.119e+06	49.31	21.87	0.0	0.0	51.85	22.85	1.306	0.061	0.024
5.00	1.369e+04	77.24	10.41	0.0	0.0	76.72	11.72	1.381	0.035	0.085
4.67	1.111e+04	76.52	10.17	0.0	0.0	76.72	11.72	1.381	0.014	0.101
4.50	2.182e+04	40.86	39.92	0.0	0.0	50.00	30.00	1.474	0.292	0.317
4.00	1.448e+04	76.33	10.14	0.0	0.0	76.72	11.72	1.381	0.026	0.103
3.50	3.089e+05	95.61	34.13	0.0	0.0	94.99	33.25	1.305	0.066	0.095
3.33	1.414e+04	76.13	10.10	0.0	0.0	76.72	11.72	1.381	0.039	0.105
2.67	1.414e+04	76.13	10.10	0.0	0.0	76.72	11.72	1.381	0.039	0.105
2.00	1.398e+04	76.22	10.08	0.0	0.0	76.72	11.72	1.381	0.034	0.107
1.75	8296.96	100.00	33.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.33	1.381e+04	76.31	10.06	0.0	0.0	76.72	11.72	1.381	0.027	0.108
1.17	735.00	100.00	32.79	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.67	1.381e+04	76.31	10.06	0.0	0.0	76.72	11.72	1.381	0.027	0.108
0.58	735.00	100.00	32.79	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Risulta	2.267e+06									

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	0.752	1.330	0.051	8.538e+05	37.7	169.49	7.48e-03	0.02	1.04e-06	0.0	0.0
2	0.825	1.213	0.051	105.97	4.67e-03	1.402e+06	61.8	2.27e-03	0.0	0.0	0.0
3	0.853	1.173	0.051	702.68	3.10e-02	9.780e+04	4.3	4.61e-03	0.0	0.0	0.0
4	0.898	1.114	0.051	1118.80	4.93e-02	1.518e+05	6.7	9.20e-05	0.0	0.0	0.0
5	0.942	1.061	0.051	5.430e+05	24.0	0.15	6.50e-06	2.15e-05	0.0	0.0	0.0
6	0.963	1.039	0.051	4035.82	0.2	5203.65	0.2	2.83e-03	0.0	0.0	0.0
7	0.995	1.005	0.051	5.735e+05	25.3	1626.44	7.17e-02	0.05	2.15e-06	0.0	0.0
8	1.039	0.962	0.051	404.34	1.78e-02	1.479e+05	6.5	6.52e-04	0.0	0.0	0.0
9	1.111	0.900	0.051	166.60	7.35e-03	3.634e+04	1.6	0.03	1.26e-06	0.0	0.0
10	1.187	0.843	0.051	509.81	2.25e-02	1.097e+05	4.8	0.13	5.84e-06	0.0	0.0
11	1.246	0.802	0.053	2.745e+04	1.2	1.16e-03	0.0	3.01e-03	0.0	0.0	0.0
12	1.248	0.801	0.053	1.31	5.77e-05	2.23e-06	0.0	4.61e-06	0.0	0.0	0.0
13	1.276	0.784	0.054	137.53	6.07e-03	1544.42	6.81e-02	0.03	1.47e-06	0.0	0.0
14	1.354	0.739	0.058	1.364e+04	0.6	13.29	5.86e-04	7.12e-03	0.0	0.0	0.0
15	1.367	0.732	0.058	130.30	5.75e-03	1.713e+04	0.8	0.02	0.0	0.0	0.0
16	1.411	0.709	0.060	5.27	2.32e-04	1.801e+04	0.8	2.07e-04	0.0	0.0	0.0
17	1.453	0.688	0.062	5.92e-05	0.0	0.0	0.0	0.04	1.88e-06	0.0	0.0
18	1.466	0.682	0.062	1.85	8.14e-05	1781.24	7.86e-02	3.74e-03	0.0	0.0	0.0
19	1.469	0.681	0.063	0.14	6.21e-06	8809.10	0.4	0.11	4.99e-06	0.0	0.0
20	1.922	0.520	0.082	1326.26	5.85e-02	1155.86	5.10e-02	8.37	3.69e-04	0.0	0.0
21	2.566	0.390	0.109	566.83	2.50e-02	16.15	7.12e-04	1.67	7.38e-05	0.0	0.0
22	2.633	0.380	0.112	173.42	7.65e-03	2.885e+04	1.3	0.25	1.11e-05	0.0	0.0
23	2.656	0.377	0.113	3.691e+04	1.6	134.39	5.93e-03	4.29	1.89e-04	0.0	0.0
24	2.706	0.370	0.115	7020.88	0.3	293.87	1.30e-02	2.42	1.07e-04	0.0	0.0
25	2.847	0.351	0.121	674.81	2.98e-02	62.46	2.75e-03	8.54	3.77e-04	0.0	0.0
26	2.999	0.333	0.128	83.87	3.70e-03	307.32	1.36e-02	2.33	1.03e-04	0.0	0.0
27	3.105	0.322	0.132	540.04	2.38e-02	3.715e+04	1.6	0.79	3.47e-05	0.0	0.0
28	3.171	0.315	0.135	945.52	4.17e-02	2327.17	0.1	0.13	5.67e-06	0.0	0.0
29	3.237	0.309	0.138	1.07	4.73e-05	3.442e+04	1.5	6.80	3.00e-04	0.0	0.0
30	3.336	0.300	0.142	1.963e+04	0.9	152.29	6.72e-03	0.02	0.0	0.0	0.0
31	3.394	0.295	0.145	0.02	0.0	4102.07	0.2	0.28	1.23e-05	0.0	0.0
32	3.406	0.294	0.145	7935.71	0.3	6.04	2.66e-04	0.11	4.78e-06	0.0	0.0
33	3.610	0.277	0.154	5.99	2.64e-04	1.733e+04	0.8	18.39	8.11e-04	0.0	0.0
34	3.868	0.259	0.165	780.08	3.44e-02	94.48	4.17e-03	5.62	2.48e-04	0.0	0.0
35	3.922	0.255	0.167	1.49e-03	0.0	160.34	7.07e-03	0.03	1.37e-06	0.0	0.0
36	4.075	0.245	0.174	107.79	4.75e-03	7182.10	0.3	240.23	1.06e-02	0.0	0.0
37	4.237	0.236	0.181	5.294e+04	2.3	272.85	1.20e-02	60.03	2.65e-03	0.0	0.0
38	4.279	0.234	0.182	9.65e-04	0.0	0.04	1.57e-06	8914.83	0.4	0.0	0.0
39	4.424	0.226	0.189	108.16	4.77e-03	238.46	1.05e-02	3.863e+05	17.0	0.0	0.0
40	4.444	0.225	0.189	282.33	1.25e-02	677.97	2.99e-02	2.632e+04	1.2	0.0	0.0
41	4.476	0.223	0.191	195.92	8.64e-03	527.61	2.33e-02	126.95	5.60e-03	0.0	0.0
42	4.521	0.221	0.193	26.60	1.17e-03	90.95	4.01e-03	1.278e+05	5.6	0.0	0.0
43	4.575	0.219	0.195	1.80	7.93e-05	15.55	6.86e-04	4442.62	0.2	0.0	0.0
44	4.650	0.215	0.198	0.93	4.10e-05	0.24	1.07e-05	3.857e+04	1.7	0.0	0.0
45	4.654	0.215	0.198	5.87e-05	0.0	1103.84	4.87e-02	0.69	3.03e-05	0.0	0.0
46	4.704	0.213	0.200	1.59	7.01e-05	7.98	3.52e-04	2799.36	0.1	0.0	0.0
47	4.791	0.209	0.204	22.50	9.92e-04	725.25	3.20e-02	3615.62	0.2	0.0	0.0
48	4.816	0.208	0.205	13.76	6.07e-04	143.59	6.33e-03	9688.69	0.4	0.0	0.0
49	4.835	0.207	0.206	9.66	4.26e-04	65.48	2.89e-03	612.64	2.70e-02	0.0	0.0
50	4.937	0.203	0.210	3.10e-05	0.0	0.10	4.57e-06	114.70	5.06e-03	0.0	0.0
51	4.965	0.201	0.212	1462.98	6.45e-02	8065.67	0.4	185.44	8.18e-03	0.0	0.0
52	5.014	0.199	0.214	8.44	3.72e-04	46.46	2.05e-03	1754.86	7.74e-02	0.0	0.0
53	5.018	0.199	0.214	0.41	1.81e-05	2.50	1.10e-04	1008.36	4.45e-02	0.0	0.0
54	5.421	0.184	0.231	9.75	4.30e-04	3169.32	0.1	287.58	1.27e-02	0.0	0.0
55	5.714	0.175	0.243	0.0	0.0	1.24	5.46e-05	4.19e-04	0.0	0.0	0.0
56	5.776	0.173	0.246	178.41	7.87e-03	18.29	8.06e-04	120.73	5.32e-03	0.0	0.0
57	5.796	0.173	0.247	1.07	4.73e-05	2882.07	0.1	380.08	1.68e-02	0.0	0.0
58	5.894	0.170	0.251	0.64	2.80e-05	58.09	2.56e-03	7.688e+04	3.4	0.0	0.0
59	5.897	0.170	0.251	1.12	4.95e-05	36.54	1.61e-03	70.27	3.10e-03	0.0	0.0
60	5.933	0.169	0.253	0.07	2.98e-06	3.48	1.53e-04	1.115e+05	4.9	0.0	0.0
61	5.941	0.168	0.253	0.28	1.24e-05	0.02	0.0	3.822e+05	16.9	0.0	0.0
62	5.979	0.167	0.255	0.08	3.39e-06	1.10	4.86e-05	2879.98	0.1	0.0	0.0
63	5.980	0.167	0.255	0.08	3.39e-06	2.06	9.10e-05	219.56	9.68e-03	0.0	0.0
64	5.989	0.167	0.255	0.54	2.40e-05	2.25	9.92e-05	1287.79	5.68e-02	0.0	0.0
65	6.050	0.165	0.258	0.44	1.92e-05	1.21	5.32e-05	1.055e+05	4.7	0.0	0.0
66	6.061	0.165	0.258	0.72	3.16e-05	0.58	2.56e-05	8.297e+04	3.7	0.0	0.0
67	6.122	0.163	0.261	0.55	2.41e-05	5.08e-04	0.0	63.02	2.78e-03	0.0	0.0
68	6.139	0.163	0.262	1.27	5.59e-05	0.04	1.61e-06	494.94	2.18e-02	0.0	0.0
69	6.241	0.160	0.266	2.20	9.72e-05	0.25	1.09e-05	1.748e+04	0.8	0.0	0.0
70	6.258	0.160	0.267	3.71	1.64e-04	2.90	1.28e-04	1.698e+04	0.7	0.0	0.0
71	6.326	0.158	0.270	14.47	6.38e-04	2.15	9.49e-05	8.24	3.63e-04	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
72	6.341	0.158	0.270	44.78	1.97e-03	21.47	9.47e-04	364.19	1.61e-02	0.0	0.0
73	6.367	0.157	0.271	8931.56	0.4	1353.88	5.97e-02	62.39	2.75e-03	0.0	0.0
74	6.489	0.154	0.277	1.12	4.96e-05	1.56	6.89e-05	7278.25	0.3	0.0	0.0
75	6.494	0.154	0.277	1.46	6.44e-05	5.28e-04	0.0	0.14	6.16e-06	0.0	0.0
76	6.508	0.154	0.277	186.47	8.22e-03	1.98	8.73e-05	6890.16	0.3	0.0	0.0
77	6.531	0.153	0.278	1.677e+04	0.7	461.25	2.03e-02	0.13	5.84e-06	0.0	0.0
78	6.532	0.153	0.278	30.22	1.33e-03	0.04	1.85e-06	237.19	1.05e-02	0.0	0.0
79	6.541	0.153	0.279	906.91	4.00e-02	28.60	1.26e-03	114.33	5.04e-03	0.0	0.0
80	6.691	0.149	0.284	4522.71	0.2	1.562e+04	0.7	314.96	1.39e-02	0.0	0.0
81	6.699	0.149	0.284	3778.88	0.2	309.31	1.36e-02	78.05	3.44e-03	0.0	0.0
82	6.791	0.147	0.284	9.80	4.32e-04	2.97	1.31e-04	1314.62	5.80e-02	0.0	0.0
83	6.815	0.147	0.284	4.57	2.02e-04	0.07	3.18e-06	2389.93	0.1	0.0	0.0
84	6.817	0.147	0.284	5.77	2.54e-04	0.07	3.04e-06	23.56	1.04e-03	0.0	0.0
85	6.819	0.147	0.284	20.53	9.06e-04	0.05	2.24e-06	51.10	2.25e-03	0.0	0.0
86	6.857	0.146	0.284	2199.77	9.70e-02	1253.03	5.53e-02	12.97	5.72e-04	0.0	0.0
87	6.865	0.146	0.284	9.35e-05	0.0	13.75	6.06e-04	4.70e-04	0.0	0.0	0.0
88	6.959	0.144	0.284	3003.13	0.1	205.33	9.06e-03	11.56	5.10e-04	0.0	0.0
89	7.022	0.142	0.284	1.72	7.58e-05	120.87	5.33e-03	8.63	3.81e-04	0.0	0.0
90	7.189	0.139	0.284	716.03	3.16e-02	2645.70	0.1	34.15	1.51e-03	0.0	0.0
91	7.405	0.135	0.284	34.18	1.51e-03	6913.84	0.3	58.00	2.56e-03	0.0	0.0
92	7.532	0.133	0.284	0.0	0.0	1860.44	8.21e-02	17.28	7.62e-04	0.0	0.0
93	7.806	0.128	0.284	0.82	3.64e-05	34.62	1.53e-03	6.47	2.86e-04	0.0	0.0
94	7.808	0.128	0.284	7.00e-05	0.0	13.80	6.08e-04	0.16	6.84e-06	0.0	0.0
95	7.941	0.126	0.284	0.10	4.60e-06	72.29	3.19e-03	1.042e+05	4.6	0.0	0.0
96	7.974	0.125	0.284	2811.05	0.1	32.09	1.42e-03	103.31	4.56e-03	0.0	0.0
97	8.377	0.119	0.284	0.0	0.0	337.86	1.49e-02	3.71e-03	0.0	0.0	0.0
98	8.400	0.119	0.284	345.93	1.53e-02	8.25	3.64e-04	0.03	1.36e-06	0.0	0.0
99	8.572	0.117	0.284	0.19	8.32e-06	2119.81	9.35e-02	8.34	3.68e-04	0.0	0.0
100	8.669	0.115	0.284	0.04	1.78e-06	2541.98	0.1	4.40e-03	0.0	0.0	0.0
101	8.791	0.114	0.284	0.17	7.36e-06	37.30	1.64e-03	8.17e-03	0.0	0.0	0.0
102	8.888	0.113	0.284	479.44	2.11e-02	11.97	5.28e-04	4.97	2.19e-04	0.0	0.0
103	8.912	0.112	0.284	140.54	6.20e-03	0.30	1.33e-05	0.07	3.09e-06	0.0	0.0
104	9.048	0.111	0.284	8.69	3.83e-04	12.39	5.46e-04	6.73	2.97e-04	0.0	0.0
105	9.071	0.110	0.284	2.80	1.23e-04	3.69	1.63e-04	22.51	9.93e-04	0.0	0.0
106	9.240	0.108	0.284	6.43	2.83e-04	0.11	4.90e-06	110.40	4.87e-03	0.0	0.0
107	9.348	0.107	0.284	4.26	1.88e-04	11.98	5.28e-04	2.506e+04	1.1	0.0	0.0
108	9.381	0.107	0.284	5.73	2.53e-04	0.99	4.37e-05	1324.60	5.84e-02	0.0	0.0
109	9.591	0.104	0.284	5.59	2.46e-04	3.43	1.51e-04	179.53	7.92e-03	0.0	0.0
110	9.673	0.103	0.284	0.48	2.12e-05	2.14	9.44e-05	42.53	1.88e-03	0.0	0.0
111	9.708	0.103	0.284	2.03	8.95e-05	13.41	5.91e-04	100.10	4.42e-03	0.0	0.0
112	9.922	0.101	0.284	5.72	2.52e-04	35.47	1.56e-03	7279.39	0.3	0.0	0.0
113	9.967	0.100	0.284	0.26	1.13e-05	15.80	6.97e-04	1.079e+04	0.5	0.0	0.0
114	9.993	0.100	0.284	0.02	0.0	0.05	2.17e-06	15.60	6.88e-04	0.0	0.0
115	10.086	0.099	0.284	2812.27	0.1	8.81e-03	0.0	0.76	3.36e-05	0.0	0.0
116	10.139	0.099	0.284	0.16	6.92e-06	28.26	1.25e-03	68.86	3.04e-03	0.0	0.0
117	10.183	0.098	0.284	2.16	9.53e-05	165.08	7.28e-03	0.30	1.31e-05	0.0	0.0
118	10.290	0.097	0.284	8.71e-05	0.0	117.15	5.17e-03	1.52e-03	0.0	0.0	0.0
119	10.349	0.097	0.284	0.44	1.94e-05	196.72	8.68e-03	116.52	5.14e-03	0.0	0.0
120	10.388	0.096	0.284	0.94	4.14e-05	1551.57	6.84e-02	723.06	3.19e-02	0.0	0.0
121	10.420	0.096	0.284	610.73	2.69e-02	2963.55	0.1	1358.43	5.99e-02	0.0	0.0
122	10.474	0.095	0.284	0.67	2.94e-05	18.95	8.36e-04	5.277e+04	2.3	0.0	0.0
123	10.489	0.095	0.284	0.01	0.0	20.16	8.89e-04	275.00	1.21e-02	0.0	0.0
124	10.662	0.094	0.284	14.56	6.42e-04	206.75	9.12e-03	63.74	2.81e-03	0.0	0.0
125	10.801	0.093	0.284	6.41	2.83e-04	183.66	8.10e-03	21.15	9.33e-04	0.0	0.0
126	10.829	0.092	0.284	27.68	1.22e-03	0.58	2.57e-05	26.40	1.16e-03	0.0	0.0
127	10.955	0.091	0.284	4.09	1.80e-04	99.78	4.40e-03	255.46	1.13e-02	0.0	0.0
128	10.966	0.091	0.284	0.32	1.40e-05	8.42	3.71e-04	2998.23	0.1	0.0	0.0
129	11.022	0.091	0.284	748.26	3.30e-02	90.81	4.01e-03	2.71	1.19e-04	0.0	0.0
130	11.064	0.090	0.284	1.165e+04	0.5	86.73	3.83e-03	577.06	2.55e-02	0.0	0.0
131	11.198	0.089	0.284	8739.71	0.4	152.27	6.72e-03	2.991e+04	1.3	0.0	0.0
132	11.265	0.089	0.284	40.18	1.77e-03	0.62	2.75e-05	0.01	0.0	0.0	0.0
133	11.270	0.089	0.284	0.03	1.14e-06	4.08	1.80e-04	3.78	1.67e-04	0.0	0.0
134	11.280	0.089	0.284	4.48	1.98e-04	52.89	2.33e-03	112.32	4.95e-03	0.0	0.0
135	11.382	0.088	0.284	6.40e-03	0.0	68.99	3.04e-03	4.06e-03	0.0	0.0	0.0
136	11.487	0.087	0.284	235.06	1.04e-02	0.20	9.00e-06	10.23	4.51e-04	0.0	0.0
137	11.520	0.087	0.284	0.17	7.29e-06	6.11e-03	0.0	1.519e+04	0.7	0.0	0.0
138	11.535	0.087	0.284	0.0	0.0	1.80e-03	0.0	8.27e-04	0.0	0.0	0.0
139	11.630	0.086	0.284	1.11	4.88e-05	0.07	3.20e-06	3.141e+04	1.4	0.0	0.0
140	11.650	0.086	0.284	0.21	9.30e-06	0.04	1.89e-06	4.034e+04	1.8	0.0	0.0
141	11.839	0.084	0.284	2.95	1.30e-04	1.89	8.32e-05	1.990e+04	0.9	0.0	0.0
142	11.846	0.084	0.284	6.98	3.08e-04	5.88	2.59e-04	372.33	1.64e-02	0.0	0.0
143	12.019	0.083	0.284	1.88	8.31e-05	514.00	2.27e-02	369.46	1.63e-02	0.0	0.0
144	12.046	0.083	0.284	1.33	5.85e-05	466.12	2.06e-02	288.97	1.27e-02	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
145	12.108	0.083	0.284	3.82	1.68e-04	6.20	2.74e-04	67.20	2.96e-03	0.0	0.0
146	12.155	0.082	0.284	1865.15	8.23e-02	271.01	1.20e-02	3.339e+04	1.5	0.0	0.0
147	12.261	0.082	0.284	6066.28	0.3	274.93	1.21e-02	1.186e+04	0.5	0.0	0.0
148	12.374	0.081	0.284	36.11	1.59e-03	0.59	2.62e-05	6936.71	0.3	0.0	0.0
149	12.468	0.080	0.284	123.38	5.44e-03	1743.01	7.69e-02	2831.18	0.1	0.0	0.0
150	12.499	0.080	0.284	2089.83	9.22e-02	119.82	5.28e-03	2.388e+04	1.1	0.0	0.0
151	12.571	0.080	0.284	1.47	6.47e-05	0.42	1.87e-05	9727.14	0.4	0.0	0.0
152	12.608	0.079	0.284	4.42e-03	0.0	17.90	7.90e-04	1.197e+04	0.5	0.0	0.0
153	12.713	0.079	0.284	1952.25	8.61e-02	274.50	1.21e-02	6197.21	0.3	0.0	0.0
154	12.789	0.078	0.284	2961.76	0.1	800.09	3.53e-02	1.027e+04	0.5	0.0	0.0
155	12.832	0.078	0.284	9.39e-03	0.0	9.94e-03	0.0	0.09	3.98e-06	0.0	0.0
156	12.970	0.077	0.284	0.02	0.0	0.16	7.27e-06	1120.26	4.94e-02	0.0	0.0
157	13.076	0.076	0.284	0.30	1.33e-05	6.40	2.82e-04	2.204e+04	1.0	0.0	0.0
158	13.108	0.076	0.284	2.72	1.20e-04	928.10	4.09e-02	4871.55	0.2	0.0	0.0
159	13.128	0.076	0.284	3.32	1.47e-04	1.19	5.26e-05	2205.57	9.73e-02	0.0	0.0
160	13.138	0.076	0.284	28.71	1.27e-03	300.32	1.32e-02	4710.60	0.2	0.0	0.0
161	13.146	0.076	0.284	2.37	1.04e-04	0.13	5.93e-06	1006.51	4.44e-02	0.0	0.0
162	13.241	0.076	0.284	23.76	1.05e-03	62.47	2.76e-03	4.119e+04	1.8	0.0	0.0
163	13.288	0.075	0.284	4.82	2.13e-04	39.64	1.75e-03	2962.15	0.1	0.0	0.0
164	13.635	0.073	0.284	0.89	3.91e-05	0.65	2.88e-05	0.81	3.57e-05	0.0	0.0
165	13.829	0.072	0.284	665.02	2.93e-02	6.75	2.98e-04	1.728e+04	0.8	0.0	0.0
166	13.884	0.072	0.284	2.31e-03	0.0	0.14	6.10e-06	2.478e+04	1.1	0.0	0.0
167	14.002	0.071	0.284	1.09	4.80e-05	1.02	4.48e-05	3.411e+04	1.5	0.0	0.0
168	14.023	0.071	0.284	0.50	2.19e-05	0.48	2.11e-05	1.134e+04	0.5	0.0	0.0
169	14.185	0.070	0.284	345.08	1.52e-02	30.52	1.35e-03	164.91	7.27e-03	0.0	0.0
170	14.352	0.070	0.284	1247.24	5.50e-02	539.68	2.38e-02	332.95	1.47e-02	0.0	0.0
171	14.531	0.069	0.284	8786.98	0.4	0.85	3.74e-05	1.094e+04	0.5	0.0	0.0
172	14.717	0.068	0.284	2.98e-03	0.0	6.27	2.77e-04	8.03	3.54e-04	0.0	0.0
173	14.893	0.067	0.284	3521.52	0.2	684.74	3.02e-02	569.11	2.51e-02	0.0	0.0
174	14.910	0.067	0.284	68.47	3.02e-03	14.32	6.32e-04	25.83	1.14e-03	0.0	0.0
175	14.942	0.067	0.284	0.61	2.71e-05	0.47	2.09e-05	355.58	1.57e-02	0.0	0.0
176	14.978	0.067	0.284	0.26	1.14e-05	0.27	1.18e-05	232.55	1.03e-02	0.0	0.0
177	15.192	0.066	0.284	168.03	7.41e-03	135.16	5.96e-03	1068.30	4.71e-02	0.0	0.0
178	15.471	0.065	0.284	1.020e+04	0.4	329.12	1.45e-02	2.69	1.19e-04	0.0	0.0
179	15.722	0.064	0.284	304.37	1.34e-02	7600.78	0.3	30.01	1.32e-03	0.0	0.0
180	15.865	0.063	0.284	1.39	6.13e-05	2.78	1.23e-04	20.59	9.08e-04	0.0	0.0
181	15.869	0.063	0.284	0.0	0.0	5.27e-05	0.0	0.22	9.87e-06	0.0	0.0
182	15.883	0.063	0.284	40.50	1.79e-03	26.61	1.17e-03	432.75	1.91e-02	0.0	0.0
183	15.902	0.063	0.284	1.18e-05	0.0	2.12	9.35e-05	0.09	3.90e-06	0.0	0.0
184	16.268	0.061	0.284	169.30	7.47e-03	105.14	4.64e-03	1782.94	7.86e-02	0.0	0.0
185	16.462	0.061	0.284	3.13	1.38e-04	5.72e-03	0.0	3.194e+04	1.4	0.0	0.0
186	16.476	0.061	0.284	0.0	0.0	0.09	3.87e-06	6.48e-05	0.0	0.0	0.0
187	16.741	0.060	0.284	0.29	1.28e-05	0.13	5.83e-06	0.35	1.54e-05	0.0	0.0
188	16.817	0.059	0.284	62.74	2.77e-03	66.61	2.94e-03	9399.83	0.4	0.0	0.0
189	16.829	0.059	0.284	60.75	2.68e-03	23.06	1.02e-03	1.408e+04	0.6	0.0	0.0
190	16.926	0.059	0.284	1.58e-04	0.0	0.05	2.02e-06	5.30	2.34e-04	0.0	0.0
191	16.927	0.059	0.284	11.49	5.07e-04	2.92	1.29e-04	145.09	6.40e-03	0.0	0.0
192	16.986	0.059	0.284	145.57	6.42e-03	14.55	6.42e-04	75.18	3.32e-03	0.0	0.0
193	17.073	0.059	0.284	38.18	1.68e-03	59.53	2.63e-03	35.88	1.58e-03	0.0	0.0
194	17.494	0.057	0.284	122.48	5.40e-03	4813.14	0.2	1.282e+04	0.6	0.0	0.0
195	17.559	0.057	0.284	1.27e-03	0.0	511.93	2.26e-02	0.40	1.76e-05	0.0	0.0
196	17.663	0.057	0.284	286.80	1.26e-02	3159.84	0.1	3840.84	0.2	0.0	0.0
197	17.695	0.057	0.284	902.06	3.98e-02	160.39	7.07e-03	203.93	8.99e-03	0.0	0.0
198	17.920	0.056	0.284	5.11e-06	0.0	0.0	0.0	0.75	3.29e-05	0.0	0.0
199	18.046	0.055	0.284	27.67	1.22e-03	56.45	2.49e-03	1.892e+04	0.8	0.0	0.0
200	18.106	0.055	0.284	7.31e-05	0.0	0.11	5.02e-06	0.09	4.07e-06	0.0	0.0
Risulta				2.263e+06		2.218e+06		2.170e+06			
In percentuale				99.81		97.82		95.70			

CDC	Tipo	Sigla Id	Note
22	Edk	CDC=Ed (dinamico SLD) verticale	
			categoria suolo: C
			fattore di sito S = 1.000
			ordinata spettro (tratto Tb-Tc) = 0.109 g
			numero di modi considerati:200
			combinaz. modale: CQC

Quota	M Sismica x g	Pos. GX	Pos. GY	E agg. X-X	E agg. Y-Y	Pos. KX	Pos. KY	rapp. r/Ls	rapp. ex/rx	rapp. ey/ry
m	daN	m	m	m	m	m	m			

Quota	M Sismica x g	Pos. GX	Pos. GY	E agg. X-X	E agg. Y-Y	Pos. KX	Pos. KY	rapp. r/Ls	rapp. ex/rx	rapp. ey/ry
7.22	6.991e+05	49.32	22.50	0.0	0.0	50.00	22.50	1.095	0.021	0.0
6.50	1.119e+06	49.31	21.87	0.0	0.0	51.85	22.85	1.306	0.061	0.024
5.00	1.369e+04	77.24	10.41	0.0	0.0	76.72	11.72	1.381	0.035	0.085
4.67	1.111e+04	76.52	10.17	0.0	0.0	76.72	11.72	1.381	0.014	0.101
4.50	2.182e+04	40.86	39.92	0.0	0.0	50.00	30.00	1.474	0.292	0.317
4.00	1.448e+04	76.33	10.14	0.0	0.0	76.72	11.72	1.381	0.026	0.103
3.50	3.089e+05	95.61	34.13	0.0	0.0	94.99	33.25	1.305	0.066	0.095
3.33	1.414e+04	76.13	10.10	0.0	0.0	76.72	11.72	1.381	0.039	0.105
2.67	1.414e+04	76.13	10.10	0.0	0.0	76.72	11.72	1.381	0.039	0.105
2.00	1.398e+04	76.22	10.08	0.0	0.0	76.72	11.72	1.381	0.034	0.107
1.75	8296.96	100.00	33.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.33	1.381e+04	76.31	10.06	0.0	0.0	76.72	11.72	1.381	0.027	0.108
1.17	735.00	100.00	32.79	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.67	1.381e+04	76.31	10.06	0.0	0.0	76.72	11.72	1.381	0.027	0.108
0.58	735.00	100.00	32.79	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Risulta	2.267e+06									

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	0.752	1.330	0.009	8.538e+05	37.7	169.49	7.48e-03	0.02	1.04e-06	0.0	0.0
2	0.825	1.213	0.011	105.97	4.67e-03	1.402e+06	61.8	2.27e-03	0.0	0.0	0.0
3	0.853	1.173	0.012	702.68	3.10e-02	9.780e+04	4.3	4.61e-03	0.0	0.0	0.0
4	0.898	1.114	0.013	1118.80	4.93e-02	1.518e+05	6.7	9.20e-05	0.0	0.0	0.0
5	0.942	1.061	0.014	5.430e+05	24.0	0.15	6.50e-06	2.15e-05	0.0	0.0	0.0
6	0.963	1.039	0.015	4035.82	0.2	5203.65	0.2	2.83e-03	0.0	0.0	0.0
7	0.995	1.005	0.016	5.735e+05	25.3	1626.44	7.17e-02	0.05	2.15e-06	0.0	0.0
8	1.039	0.962	0.017	404.34	1.78e-02	1.479e+05	6.5	6.52e-04	0.0	0.0	0.0
9	1.111	0.900	0.018	166.60	7.35e-03	3.634e+04	1.6	0.03	1.26e-06	0.0	0.0
10	1.187	0.843	0.019	509.81	2.25e-02	1.097e+05	4.8	0.13	5.84e-06	0.0	0.0
11	1.246	0.802	0.020	2.745e+04	1.2	1.16e-03	0.0	3.01e-03	0.0	0.0	0.0
12	1.248	0.801	0.020	1.31	5.77e-05	2.23e-06	0.0	4.61e-06	0.0	0.0	0.0
13	1.276	0.784	0.021	137.53	6.07e-03	1544.42	6.81e-02	0.03	1.47e-06	0.0	0.0
14	1.354	0.739	0.022	1.364e+04	0.6	13.29	5.86e-04	7.12e-03	0.0	0.0	0.0
15	1.367	0.732	0.022	130.30	5.75e-03	1.713e+04	0.8	0.02	0.0	0.0	0.0
16	1.411	0.709	0.023	5.27	2.32e-04	1.801e+04	0.8	2.07e-04	0.0	0.0	0.0
17	1.453	0.688	0.024	5.92e-05	0.0	0.0	0.0	0.04	1.88e-06	0.0	0.0
18	1.466	0.682	0.024	1.85	8.14e-05	1781.24	7.86e-02	3.74e-03	0.0	0.0	0.0
19	1.469	0.681	0.024	0.14	6.21e-06	8809.10	0.4	0.11	4.99e-06	0.0	0.0
20	1.922	0.520	0.031	1326.26	5.85e-02	1155.86	5.10e-02	8.37	3.69e-04	0.0	0.0
21	2.566	0.390	0.042	566.83	2.50e-02	16.15	7.12e-04	1.67	7.38e-05	0.0	0.0
22	2.633	0.380	0.043	173.42	7.65e-03	2.885e+04	1.3	0.25	1.11e-05	0.0	0.0
23	2.656	0.377	0.043	3.691e+04	1.6	134.39	5.93e-03	4.29	1.89e-04	0.0	0.0
24	2.706	0.370	0.044	7020.88	0.3	293.87	1.30e-02	2.42	1.07e-04	0.0	0.0
25	2.847	0.351	0.046	674.81	2.98e-02	62.46	2.75e-03	8.54	3.77e-04	0.0	0.0
26	2.999	0.333	0.049	83.87	3.70e-03	307.32	1.36e-02	2.33	1.03e-04	0.0	0.0
27	3.105	0.322	0.051	540.04	2.38e-02	3.715e+04	1.6	0.79	3.47e-05	0.0	0.0
28	3.171	0.315	0.052	945.52	4.17e-02	2327.17	0.1	0.13	5.67e-06	0.0	0.0
29	3.237	0.309	0.053	1.07	4.73e-05	3.442e+04	1.5	6.80	3.00e-04	0.0	0.0
30	3.336	0.300	0.054	1.963e+04	0.9	152.29	6.72e-03	0.02	0.0	0.0	0.0
31	3.394	0.295	0.055	0.02	0.0	4102.07	0.2	0.28	1.23e-05	0.0	0.0
32	3.406	0.294	0.056	7935.71	0.3	6.04	2.66e-04	0.11	4.78e-06	0.0	0.0
33	3.610	0.277	0.059	5.99	2.64e-04	1.733e+04	0.8	18.39	8.11e-04	0.0	0.0
34	3.868	0.259	0.063	780.08	3.44e-02	94.48	4.17e-03	5.62	2.48e-04	0.0	0.0
35	3.922	0.255	0.064	1.49e-03	0.0	160.34	7.07e-03	0.03	1.37e-06	0.0	0.0
36	4.075	0.245	0.066	107.79	4.75e-03	7182.10	0.3	240.23	1.06e-02	0.0	0.0
37	4.237	0.236	0.069	5.294e+04	2.3	272.85	1.20e-02	60.03	2.65e-03	0.0	0.0
38	4.279	0.234	0.070	9.65e-04	0.0	0.04	1.57e-06	8914.83	0.4	0.0	0.0
39	4.424	0.226	0.072	108.16	4.77e-03	238.46	1.05e-02	3.863e+05	17.0	0.0	0.0
40	4.444	0.225	0.072	282.33	1.25e-02	677.97	2.99e-02	2.632e+04	1.2	0.0	0.0
41	4.476	0.223	0.073	195.92	8.64e-03	527.61	2.33e-02	126.95	5.60e-03	0.0	0.0
42	4.521	0.221	0.074	26.60	1.17e-03	90.95	4.01e-03	1.278e+05	5.6	0.0	0.0
43	4.575	0.219	0.075	1.80	7.93e-05	15.55	6.86e-04	4442.62	0.2	0.0	0.0
44	4.650	0.215	0.076	0.93	4.10e-05	0.24	1.07e-05	3.857e+04	1.7	0.0	0.0
45	4.654	0.215	0.076	5.87e-05	0.0	1103.84	4.87e-02	0.69	3.03e-05	0.0	0.0
46	4.704	0.213	0.077	1.59	7.01e-05	7.98	3.52e-04	2799.36	0.1	0.0	0.0
47	4.791	0.209	0.078	22.50	9.92e-04	725.25	3.20e-02	3615.62	0.2	0.0	0.0
48	4.816	0.208	0.079	13.76	6.07e-04	143.59	6.33e-03	9688.69	0.4	0.0	0.0
49	4.835	0.207	0.079	9.66	4.26e-04	65.48	2.89e-03	612.64	2.70e-02	0.0	0.0
50	4.937	0.203	0.081	3.10e-05	0.0	0.10	4.57e-06	114.70	5.06e-03	0.0	0.0
51	4.965	0.201	0.081	1462.98	6.45e-02	8065.67	0.4	185.44	8.18e-03	0.0	0.0
52	5.014	0.199	0.082	8.44	3.72e-04	46.46	2.05e-03	1754.86	7.74e-02	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
53	5.018	0.199	0.082	0.41	1.81e-05	2.50	1.10e-04	1008.36	4.45e-02	0.0	0.0
54	5.421	0.184	0.088	9.75	4.30e-04	3169.32	0.1	287.58	1.27e-02	0.0	0.0
55	5.714	0.175	0.093	0.0	0.0	1.24	5.46e-05	4.19e-04	0.0	0.0	0.0
56	5.776	0.173	0.094	178.41	7.87e-03	18.29	8.06e-04	120.73	5.32e-03	0.0	0.0
57	5.796	0.173	0.095	1.07	4.73e-05	2882.07	0.1	380.08	1.68e-02	0.0	0.0
58	5.894	0.170	0.096	0.64	2.80e-05	58.09	2.56e-03	7.688e+04	3.4	0.0	0.0
59	5.897	0.170	0.096	1.12	4.95e-05	36.54	1.61e-03	70.27	3.10e-03	0.0	0.0
60	5.933	0.169	0.097	0.07	2.98e-06	3.48	1.53e-04	1.115e+05	4.9	0.0	0.0
61	5.941	0.168	0.097	0.28	1.24e-05	0.02	0.0	3.822e+05	16.9	0.0	0.0
62	5.979	0.167	0.098	0.08	3.39e-06	1.10	4.86e-05	2879.98	0.1	0.0	0.0
63	5.980	0.167	0.098	0.08	3.39e-06	2.06	9.10e-05	219.56	9.68e-03	0.0	0.0
64	5.989	0.167	0.098	0.54	2.40e-05	2.25	9.92e-05	1287.79	5.68e-02	0.0	0.0
65	6.050	0.165	0.099	0.44	1.92e-05	1.21	5.32e-05	1.055e+05	4.7	0.0	0.0
66	6.061	0.165	0.099	0.72	3.16e-05	0.58	2.56e-05	8.297e+04	3.7	0.0	0.0
67	6.122	0.163	0.100	0.55	2.41e-05	5.08e-04	0.0	63.02	2.78e-03	0.0	0.0
68	6.139	0.163	0.100	1.27	5.59e-05	0.04	1.61e-06	494.94	2.18e-02	0.0	0.0
69	6.241	0.160	0.102	2.20	9.72e-05	0.25	1.09e-05	1.748e+04	0.8	0.0	0.0
70	6.258	0.160	0.102	3.71	1.64e-04	2.90	1.28e-04	1.698e+04	0.7	0.0	0.0
71	6.326	0.158	0.103	14.47	6.38e-04	2.15	9.49e-05	8.24	3.63e-04	0.0	0.0
72	6.341	0.158	0.103	44.78	1.97e-03	21.47	9.47e-04	364.19	1.61e-02	0.0	0.0
73	6.367	0.157	0.104	8931.56	0.4	1353.88	5.97e-02	62.39	2.75e-03	0.0	0.0
74	6.489	0.154	0.106	1.12	4.96e-05	1.56	6.89e-05	7278.25	0.3	0.0	0.0
75	6.494	0.154	0.106	1.46	6.44e-05	5.28e-04	0.0	0.14	6.16e-06	0.0	0.0
76	6.508	0.154	0.106	186.47	8.22e-03	1.98	8.73e-05	6890.16	0.3	0.0	0.0
77	6.531	0.153	0.107	1.677e+04	0.7	461.25	2.03e-02	0.13	5.84e-06	0.0	0.0
78	6.532	0.153	0.107	30.22	1.33e-03	0.04	1.85e-06	237.19	1.05e-02	0.0	0.0
79	6.541	0.153	0.107	906.91	4.00e-02	28.60	1.26e-03	114.33	5.04e-03	0.0	0.0
80	6.691	0.149	0.109	4522.71	0.2	1.562e+04	0.7	314.96	1.39e-02	0.0	0.0
81	6.699	0.149	0.109	3778.88	0.2	309.31	1.36e-02	78.05	3.44e-03	0.0	0.0
82	6.791	0.147	0.109	9.80	4.32e-04	2.97	1.31e-04	1314.62	5.80e-02	0.0	0.0
83	6.815	0.147	0.109	4.57	2.02e-04	0.07	3.18e-06	2389.93	0.1	0.0	0.0
84	6.817	0.147	0.109	5.77	2.54e-04	0.07	3.04e-06	23.56	1.04e-03	0.0	0.0
85	6.819	0.147	0.109	20.53	9.06e-04	0.05	2.24e-06	51.10	2.25e-03	0.0	0.0
86	6.857	0.146	0.109	2199.77	9.70e-02	1253.03	5.53e-02	12.97	5.72e-04	0.0	0.0
87	6.865	0.146	0.109	9.35e-05	0.0	13.75	6.06e-04	4.70e-04	0.0	0.0	0.0
88	6.959	0.144	0.109	3003.13	0.1	205.33	9.06e-03	11.56	5.10e-04	0.0	0.0
89	7.022	0.142	0.109	1.72	7.58e-05	120.87	5.33e-03	8.63	3.81e-04	0.0	0.0
90	7.189	0.139	0.109	716.03	3.16e-02	2645.70	0.1	34.15	1.51e-03	0.0	0.0
91	7.405	0.135	0.109	34.18	1.51e-03	6913.84	0.3	58.00	2.56e-03	0.0	0.0
92	7.532	0.133	0.109	0.0	0.0	1860.44	8.21e-02	17.28	7.62e-04	0.0	0.0
93	7.806	0.128	0.109	0.82	3.64e-05	34.62	1.53e-03	6.47	2.86e-04	0.0	0.0
94	7.808	0.128	0.109	7.00e-05	0.0	13.80	6.08e-04	0.16	6.84e-06	0.0	0.0
95	7.941	0.126	0.109	0.10	4.60e-06	72.29	3.19e-03	1.042e+05	4.6	0.0	0.0
96	7.974	0.125	0.109	2811.05	0.1	32.09	1.42e-03	103.31	4.56e-03	0.0	0.0
97	8.377	0.119	0.109	0.0	0.0	337.86	1.49e-02	3.71e-03	0.0	0.0	0.0
98	8.400	0.119	0.109	345.93	1.53e-02	8.25	3.64e-04	0.03	1.36e-06	0.0	0.0
99	8.572	0.117	0.109	0.19	8.32e-06	2119.81	9.35e-02	8.34	3.68e-04	0.0	0.0
100	8.669	0.115	0.109	0.04	1.78e-06	2541.98	0.1	4.40e-03	0.0	0.0	0.0
101	8.791	0.114	0.109	0.17	7.36e-06	37.30	1.64e-03	8.17e-03	0.0	0.0	0.0
102	8.888	0.113	0.109	479.44	2.11e-02	11.97	5.28e-04	4.97	2.19e-04	0.0	0.0
103	8.912	0.112	0.109	140.54	6.20e-03	0.30	1.33e-05	0.07	3.09e-06	0.0	0.0
104	9.048	0.111	0.109	8.69	3.83e-04	12.39	5.46e-04	6.73	2.97e-04	0.0	0.0
105	9.071	0.110	0.109	2.80	1.23e-04	3.69	1.63e-04	22.51	9.93e-04	0.0	0.0
106	9.240	0.108	0.109	6.43	2.83e-04	0.11	4.90e-06	110.40	4.87e-03	0.0	0.0
107	9.348	0.107	0.109	4.26	1.88e-04	11.98	5.28e-04	2.506e+04	1.1	0.0	0.0
108	9.381	0.107	0.109	5.73	2.53e-04	0.99	4.37e-05	1324.60	5.84e-02	0.0	0.0
109	9.591	0.104	0.109	5.59	2.46e-04	3.43	1.51e-04	179.53	7.92e-03	0.0	0.0
110	9.673	0.103	0.109	0.48	2.12e-05	2.14	9.44e-05	42.53	1.88e-03	0.0	0.0
111	9.708	0.103	0.109	2.03	8.95e-05	13.41	5.91e-04	100.10	4.42e-03	0.0	0.0
112	9.922	0.101	0.109	5.72	2.52e-04	35.47	1.56e-03	7279.39	0.3	0.0	0.0
113	9.967	0.100	0.109	0.26	1.13e-05	15.80	6.97e-04	1.079e+04	0.5	0.0	0.0
114	9.993	0.100	0.109	0.02	0.0	0.05	2.17e-06	15.60	6.88e-04	0.0	0.0
115	10.086	0.099	0.109	2812.27	0.1	8.81e-03	0.0	0.76	3.36e-05	0.0	0.0
116	10.139	0.099	0.109	0.16	6.92e-06	28.26	1.25e-03	68.86	3.04e-03	0.0	0.0
117	10.183	0.098	0.109	2.16	9.53e-05	165.08	7.28e-03	0.30	1.31e-05	0.0	0.0
118	10.290	0.097	0.109	8.71e-05	0.0	117.15	5.17e-03	1.52e-03	0.0	0.0	0.0
119	10.349	0.097	0.109	0.44	1.94e-05	196.72	8.68e-03	116.52	5.14e-03	0.0	0.0
120	10.388	0.096	0.109	0.94	4.14e-05	1551.57	6.84e-02	723.06	3.19e-02	0.0	0.0
121	10.420	0.096	0.109	610.73	2.69e-02	2963.55	0.1	1358.43	5.99e-02	0.0	0.0
122	10.474	0.095	0.109	0.67	2.94e-05	18.95	8.36e-04	5.277e+04	2.3	0.0	0.0
123	10.489	0.095	0.109	0.01	0.0	20.16	8.89e-04	275.00	1.21e-02	0.0	0.0
124	10.662	0.094	0.109	14.56	6.42e-04	206.75	9.12e-03	63.74	2.81e-03	0.0	0.0
125	10.801	0.093	0.109	6.41	2.83e-04	183.66	8.10e-03	21.15	9.33e-04	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
126	10.829	0.092	0.109	27.68	1.22e-03	0.58	2.57e-05	26.40	1.16e-03	0.0	0.0
127	10.955	0.091	0.109	4.09	1.80e-04	99.78	4.40e-03	255.46	1.13e-02	0.0	0.0
128	10.966	0.091	0.109	0.32	1.40e-05	8.42	3.71e-04	2998.23	0.1	0.0	0.0
129	11.022	0.091	0.109	748.26	3.30e-02	90.81	4.01e-03	2.71	1.19e-04	0.0	0.0
130	11.064	0.090	0.109	1.165e+04	0.5	86.73	3.83e-03	577.06	2.55e-02	0.0	0.0
131	11.198	0.089	0.109	8739.71	0.4	152.27	6.72e-03	2.991e+04	1.3	0.0	0.0
132	11.265	0.089	0.109	40.18	1.77e-03	0.62	2.75e-05	0.01	0.0	0.0	0.0
133	11.270	0.089	0.109	0.03	1.14e-06	4.08	1.80e-04	3.78	1.67e-04	0.0	0.0
134	11.280	0.089	0.109	4.48	1.98e-04	52.89	2.33e-03	112.32	4.95e-03	0.0	0.0
135	11.382	0.088	0.109	6.40e-03	0.0	68.99	3.04e-03	4.06e-03	0.0	0.0	0.0
136	11.487	0.087	0.109	235.06	1.04e-02	0.20	9.00e-06	10.23	4.51e-04	0.0	0.0
137	11.520	0.087	0.109	0.17	7.29e-06	6.11e-03	0.0	1.519e+04	0.7	0.0	0.0
138	11.535	0.087	0.109	0.0	0.0	1.80e-03	0.0	8.27e-04	0.0	0.0	0.0
139	11.630	0.086	0.109	1.11	4.88e-05	0.07	3.20e-06	3.141e+04	1.4	0.0	0.0
140	11.650	0.086	0.109	0.21	9.30e-06	0.04	1.89e-06	4.034e+04	1.8	0.0	0.0
141	11.839	0.084	0.109	2.95	1.30e-04	1.89	8.32e-05	1.990e+04	0.9	0.0	0.0
142	11.846	0.084	0.109	6.98	3.08e-04	5.88	2.59e-04	372.33	1.64e-02	0.0	0.0
143	12.019	0.083	0.109	1.88	8.31e-05	514.00	2.27e-02	369.46	1.63e-02	0.0	0.0
144	12.046	0.083	0.109	1.33	5.85e-05	466.12	2.06e-02	288.97	1.27e-02	0.0	0.0
145	12.108	0.083	0.109	3.82	1.68e-04	6.20	2.74e-04	67.20	2.96e-03	0.0	0.0
146	12.155	0.082	0.109	1865.15	8.23e-02	271.01	1.20e-02	3.339e+04	1.5	0.0	0.0
147	12.261	0.082	0.109	6066.28	0.3	274.93	1.21e-02	1.186e+04	0.5	0.0	0.0
148	12.374	0.081	0.109	36.11	1.59e-03	0.59	2.62e-05	6936.71	0.3	0.0	0.0
149	12.468	0.080	0.109	123.38	5.44e-03	1743.01	7.69e-02	2831.18	0.1	0.0	0.0
150	12.499	0.080	0.109	2089.83	9.22e-02	119.82	5.28e-03	2.388e+04	1.1	0.0	0.0
151	12.571	0.080	0.109	1.47	6.47e-05	0.42	1.87e-05	9727.14	0.4	0.0	0.0
152	12.608	0.079	0.109	4.42e-03	0.0	17.90	7.90e-04	1.197e+04	0.5	0.0	0.0
153	12.713	0.079	0.109	1952.25	8.61e-02	274.50	1.21e-02	6197.21	0.3	0.0	0.0
154	12.789	0.078	0.109	2961.76	0.1	800.09	3.53e-02	1.027e+04	0.5	0.0	0.0
155	12.832	0.078	0.109	9.39e-03	0.0	9.94e-03	0.0	0.09	3.98e-06	0.0	0.0
156	12.970	0.077	0.109	0.02	0.0	0.16	7.27e-06	1120.26	4.94e-02	0.0	0.0
157	13.076	0.076	0.109	0.30	1.33e-05	6.40	2.82e-04	2.204e+04	1.0	0.0	0.0
158	13.108	0.076	0.109	2.72	1.20e-04	928.10	4.09e-02	4871.55	0.2	0.0	0.0
159	13.128	0.076	0.109	3.32	1.47e-04	1.19	5.26e-05	2205.57	9.73e-02	0.0	0.0
160	13.138	0.076	0.109	28.71	1.27e-03	300.32	1.32e-02	4710.60	0.2	0.0	0.0
161	13.146	0.076	0.109	2.37	1.04e-04	0.13	5.93e-06	1006.51	4.44e-02	0.0	0.0
162	13.241	0.076	0.109	23.76	1.05e-03	62.47	2.76e-03	4.119e+04	1.8	0.0	0.0
163	13.288	0.075	0.109	4.82	2.13e-04	39.64	1.75e-03	2962.15	0.1	0.0	0.0
164	13.635	0.073	0.109	0.89	3.91e-05	0.65	2.88e-05	0.81	3.57e-05	0.0	0.0
165	13.829	0.072	0.109	665.02	2.93e-02	6.75	2.98e-04	1.728e+04	0.8	0.0	0.0
166	13.884	0.072	0.109	2.31e-03	0.0	0.14	6.10e-06	2.478e+04	1.1	0.0	0.0
167	14.002	0.071	0.109	1.09	4.80e-05	1.02	4.48e-05	3.411e+04	1.5	0.0	0.0
168	14.023	0.071	0.109	0.50	2.19e-05	0.48	2.11e-05	1.134e+04	0.5	0.0	0.0
169	14.185	0.070	0.109	345.08	1.52e-02	30.52	1.35e-03	164.91	7.27e-03	0.0	0.0
170	14.352	0.070	0.109	1247.24	5.50e-02	539.68	2.38e-02	332.95	1.47e-02	0.0	0.0
171	14.531	0.069	0.109	8786.98	0.4	0.85	3.74e-05	1.094e+04	0.5	0.0	0.0
172	14.717	0.068	0.109	2.98e-03	0.0	6.27	2.77e-04	8.03	3.54e-04	0.0	0.0
173	14.893	0.067	0.109	3521.52	0.2	684.74	3.02e-02	569.11	2.51e-02	0.0	0.0
174	14.910	0.067	0.109	68.47	3.02e-03	14.32	6.32e-04	25.83	1.14e-03	0.0	0.0
175	14.942	0.067	0.109	0.61	2.71e-05	0.47	2.09e-05	355.58	1.57e-02	0.0	0.0
176	14.978	0.067	0.109	0.26	1.14e-05	0.27	1.18e-05	232.55	1.03e-02	0.0	0.0
177	15.192	0.066	0.109	168.03	7.41e-03	135.16	5.96e-03	1068.30	4.71e-02	0.0	0.0
178	15.471	0.065	0.109	1.020e+04	0.4	329.12	1.45e-02	2.69	1.19e-04	0.0	0.0
179	15.722	0.064	0.109	304.37	1.34e-02	7600.78	0.3	30.01	1.32e-03	0.0	0.0
180	15.865	0.063	0.109	1.39	6.13e-05	2.78	1.23e-04	20.59	9.08e-04	0.0	0.0
181	15.869	0.063	0.109	0.0	0.0	5.27e-05	0.0	0.22	9.87e-06	0.0	0.0
182	15.883	0.063	0.109	40.50	1.79e-03	26.61	1.17e-03	432.75	1.91e-02	0.0	0.0
183	15.902	0.063	0.109	1.18e-05	0.0	2.12	9.35e-05	0.09	3.90e-06	0.0	0.0
184	16.268	0.061	0.109	169.30	7.47e-03	105.14	4.64e-03	1782.94	7.86e-02	0.0	0.0
185	16.462	0.061	0.109	3.13	1.38e-04	5.72e-03	0.0	3.194e+04	1.4	0.0	0.0
186	16.476	0.061	0.109	0.0	0.0	0.09	3.87e-06	6.48e-05	0.0	0.0	0.0
187	16.741	0.060	0.109	0.29	1.28e-05	0.13	5.83e-06	0.35	1.54e-05	0.0	0.0
188	16.817	0.059	0.109	62.74	2.77e-03	66.61	2.94e-03	9399.83	0.4	0.0	0.0
189	16.829	0.059	0.109	60.75	2.68e-03	23.06	1.02e-03	1.408e+04	0.6	0.0	0.0
190	16.926	0.059	0.109	1.58e-04	0.0	0.05	2.02e-06	5.30	2.34e-04	0.0	0.0
191	16.927	0.059	0.109	11.49	5.07e-04	2.92	1.29e-04	145.09	6.40e-03	0.0	0.0
192	16.986	0.059	0.109	145.57	6.42e-03	14.55	6.42e-04	75.18	3.32e-03	0.0	0.0
193	17.073	0.059	0.109	38.18	1.68e-03	59.53	2.63e-03	35.88	1.58e-03	0.0	0.0
194	17.494	0.057	0.109	122.48	5.40e-03	4813.14	0.2	1.282e+04	0.6	0.0	0.0
195	17.559	0.057	0.109	1.27e-03	0.0	511.93	2.26e-02	0.40	1.76e-05	0.0	0.0
196	17.663	0.057	0.109	286.80	1.26e-02	3159.84	0.1	3840.84	0.2	0.0	0.0
197	17.695	0.057	0.109	902.06	3.98e-02	160.39	7.07e-03	203.93	8.99e-03	0.0	0.0
198	17.920	0.056	0.109	5.11e-06	0.0	0.0	0.0	0.75	3.29e-05	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
199	18.046	0.055	0.109	27.67	1.22e-03	56.45	2.49e-03	1.892e+04	0.8	0.0	0.0
200	18.106	0.055	0.109	7.31e-05	0.0	0.11	5.02e-06	0.09	4.07e-06	0.0	0.0
Risulta				2.263e+06		2.218e+06		2.170e+06			
In percentuale				99.81		97.82		95.70			

CDC	Tipo	Sigla Id	Note
23	Edk	CDC=Ed (dinamico SLO) verticale	
			categoria suolo: C
			fattore di sito S = 1.000
			ordinata spettro (tratto Tb-Tc) = 0.074 g
			numero di modi considerati:200
			combinaz. modale: CQC

Quota	M Sismica x g	Pos. GX	Pos. GY	E agg. X-X	E agg. Y-Y	Pos. KX	Pos. KY	rapp. r/Ls	rapp. ex/rx	rapp. ey/ry
m	daN	m	m	m	m	m	m			
7.22	6.991e+05	49.32	22.50	0.0	0.0	50.00	22.50	1.095	0.021	0.0
6.50	1.119e+06	49.31	21.87	0.0	0.0	51.85	22.85	1.306	0.061	0.024
5.00	1.369e+04	77.24	10.41	0.0	0.0	76.72	11.72	1.381	0.035	0.085
4.67	1.111e+04	76.52	10.17	0.0	0.0	76.72	11.72	1.381	0.014	0.101
4.50	2.182e+04	40.86	39.92	0.0	0.0	50.00	30.00	1.474	0.292	0.317
4.00	1.448e+04	76.33	10.14	0.0	0.0	76.72	11.72	1.381	0.026	0.103
3.50	3.089e+05	95.61	34.13	0.0	0.0	94.99	33.25	1.305	0.066	0.095
3.33	1.414e+04	76.13	10.10	0.0	0.0	76.72	11.72	1.381	0.039	0.105
2.67	1.414e+04	76.13	10.10	0.0	0.0	76.72	11.72	1.381	0.039	0.105
2.00	1.398e+04	76.22	10.08	0.0	0.0	76.72	11.72	1.381	0.034	0.107
1.75	8296.96	100.00	33.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.33	1.381e+04	76.31	10.06	0.0	0.0	76.72	11.72	1.381	0.027	0.108
1.17	735.00	100.00	32.79	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.67	1.381e+04	76.31	10.06	0.0	0.0	76.72	11.72	1.381	0.027	0.108
0.58	735.00	100.00	32.79	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Risulta	2.267e+06									

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	0.752	1.330	0.006	8.538e+05	37.7	169.49	7.48e-03	0.02	1.04e-06	0.0	0.0
2	0.825	1.213	0.008	105.97	4.67e-03	1.402e+06	61.8	2.27e-03	0.0	0.0	0.0
3	0.853	1.173	0.008	702.68	3.10e-02	9.780e+04	4.3	4.61e-03	0.0	0.0	0.0
4	0.898	1.114	0.009	1118.80	4.93e-02	1.518e+05	6.7	9.20e-05	0.0	0.0	0.0
5	0.942	1.061	0.010	5.430e+05	24.0	0.15	6.50e-06	2.15e-05	0.0	0.0	0.0
6	0.963	1.039	0.010	4035.82	0.2	5203.65	0.2	2.83e-03	0.0	0.0	0.0
7	0.995	1.005	0.011	5.735e+05	25.3	1626.44	7.17e-02	0.05	2.15e-06	0.0	0.0
8	1.039	0.962	0.012	404.34	1.78e-02	1.479e+05	6.5	6.52e-04	0.0	0.0	0.0
9	1.111	0.900	0.012	166.60	7.35e-03	3.634e+04	1.6	0.03	1.26e-06	0.0	0.0
10	1.187	0.843	0.013	509.81	2.25e-02	1.097e+05	4.8	0.13	5.84e-06	0.0	0.0
11	1.246	0.802	0.014	2.745e+04	1.2	1.16e-03	0.0	3.01e-03	0.0	0.0	0.0
12	1.248	0.801	0.014	1.31	5.77e-05	2.23e-06	0.0	4.61e-06	0.0	0.0	0.0
13	1.276	0.784	0.014	137.53	6.07e-03	1544.42	6.81e-02	0.03	1.47e-06	0.0	0.0
14	1.354	0.739	0.015	1.364e+04	0.6	13.29	5.86e-04	7.12e-03	0.0	0.0	0.0
15	1.367	0.732	0.015	130.30	5.75e-03	1.713e+04	0.8	0.02	0.0	0.0	0.0
16	1.411	0.709	0.016	5.27	2.32e-04	1.801e+04	0.8	2.07e-04	0.0	0.0	0.0
17	1.453	0.688	0.016	5.92e-05	0.0	0.0	0.0	0.04	1.88e-06	0.0	0.0
18	1.466	0.682	0.016	1.85	8.14e-05	1781.24	7.86e-02	3.74e-03	0.0	0.0	0.0
19	1.469	0.681	0.016	0.14	6.21e-06	8809.10	0.4	0.11	4.99e-06	0.0	0.0
20	1.922	0.520	0.021	1326.26	5.85e-02	1155.86	5.10e-02	8.37	3.69e-04	0.0	0.0
21	2.566	0.390	0.028	566.83	2.50e-02	16.15	7.12e-04	1.67	7.38e-05	0.0	0.0
22	2.633	0.380	0.029	173.42	7.65e-03	2.885e+04	1.3	0.25	1.11e-05	0.0	0.0
23	2.656	0.377	0.029	3.691e+04	1.6	134.39	5.93e-03	4.29	1.89e-04	0.0	0.0
24	2.706	0.370	0.030	7020.88	0.3	293.87	1.30e-02	2.42	1.07e-04	0.0	0.0
25	2.847	0.351	0.032	674.81	2.98e-02	62.46	2.75e-03	8.54	3.77e-04	0.0	0.0
26	2.999	0.333	0.033	83.87	3.70e-03	307.32	1.36e-02	2.33	1.03e-04	0.0	0.0
27	3.105	0.322	0.034	540.04	2.38e-02	3.715e+04	1.6	0.79	3.47e-05	0.0	0.0
28	3.171	0.315	0.035	945.52	4.17e-02	2327.17	0.1	0.13	5.67e-06	0.0	0.0
29	3.237	0.309	0.036	1.07	4.73e-05	3.442e+04	1.5	6.80	3.00e-04	0.0	0.0
30	3.336	0.300	0.037	1.963e+04	0.9	152.29	6.72e-03	0.02	0.0	0.0	0.0
31	3.394	0.295	0.038	0.02	0.0	4102.07	0.2	0.28	1.23e-05	0.0	0.0
32	3.406	0.294	0.038	7935.71	0.3	6.04	2.66e-04	0.11	4.78e-06	0.0	0.0
33	3.610	0.277	0.040	5.99	2.64e-04	1.733e+04	0.8	18.39	8.11e-04	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
34	3.868	0.259	0.043	780.08	3.44e-02	94.48	4.17e-03	5.62	2.48e-04	0.0	0.0
35	3.922	0.255	0.044	1.49e-03	0.0	160.34	7.07e-03	0.03	1.37e-06	0.0	0.0
36	4.075	0.245	0.045	107.79	4.75e-03	7182.10	0.3	240.23	1.06e-02	0.0	0.0
37	4.237	0.236	0.047	5.294e+04	2.3	272.85	1.20e-02	60.03	2.65e-03	0.0	0.0
38	4.279	0.234	0.047	9.65e-04	0.0	0.04	1.57e-06	8914.83	0.4	0.0	0.0
39	4.424	0.226	0.049	108.16	4.77e-03	238.46	1.05e-02	3.863e+05	17.0	0.0	0.0
40	4.444	0.225	0.049	282.33	1.25e-02	677.97	2.99e-02	2.632e+04	1.2	0.0	0.0
41	4.476	0.223	0.050	195.92	8.64e-03	527.61	2.33e-02	126.95	5.60e-03	0.0	0.0
42	4.521	0.221	0.050	26.60	1.17e-03	90.95	4.01e-03	1.278e+05	5.6	0.0	0.0
43	4.575	0.219	0.051	1.80	7.93e-05	15.55	6.86e-04	4442.62	0.2	0.0	0.0
44	4.650	0.215	0.052	0.93	4.10e-05	0.24	1.07e-05	3.857e+04	1.7	0.0	0.0
45	4.654	0.215	0.052	5.87e-05	0.0	1103.84	4.87e-02	0.69	3.03e-05	0.0	0.0
46	4.704	0.213	0.052	1.59	7.01e-05	7.98	3.52e-04	2799.36	0.1	0.0	0.0
47	4.791	0.209	0.053	22.50	9.92e-04	725.25	3.20e-02	3615.62	0.2	0.0	0.0
48	4.816	0.208	0.053	13.76	6.07e-04	143.59	6.33e-03	9688.69	0.4	0.0	0.0
49	4.835	0.207	0.054	9.66	4.26e-04	65.48	2.89e-03	612.64	2.70e-02	0.0	0.0
50	4.937	0.203	0.055	3.10e-05	0.0	0.10	4.57e-06	114.70	5.06e-03	0.0	0.0
51	4.965	0.201	0.055	1462.98	6.45e-02	8065.67	0.4	185.44	8.18e-03	0.0	0.0
52	5.014	0.199	0.056	8.44	3.72e-04	46.46	2.05e-03	1754.86	7.74e-02	0.0	0.0
53	5.018	0.199	0.056	0.41	1.81e-05	2.50	1.10e-04	1008.36	4.45e-02	0.0	0.0
54	5.421	0.184	0.060	9.75	4.30e-04	3169.32	0.1	287.58	1.27e-02	0.0	0.0
55	5.714	0.175	0.063	0.0	0.0	1.24	5.46e-05	4.19e-04	0.0	0.0	0.0
56	5.776	0.173	0.064	178.41	7.87e-03	18.29	8.06e-04	120.73	5.32e-03	0.0	0.0
57	5.796	0.173	0.064	1.07	4.73e-05	2882.07	0.1	380.08	1.68e-02	0.0	0.0
58	5.894	0.170	0.065	0.64	2.80e-05	58.09	2.56e-03	7.688e+04	3.4	0.0	0.0
59	5.897	0.170	0.065	1.12	4.95e-05	36.54	1.61e-03	70.27	3.10e-03	0.0	0.0
60	5.933	0.169	0.066	0.07	2.98e-06	3.48	1.53e-04	1.115e+05	4.9	0.0	0.0
61	5.941	0.168	0.066	0.28	1.24e-05	0.02	0.0	3.822e+05	16.9	0.0	0.0
62	5.979	0.167	0.066	0.08	3.39e-06	1.10	4.86e-05	2879.98	0.1	0.0	0.0
63	5.980	0.167	0.066	0.08	3.39e-06	2.06	9.10e-05	219.56	9.68e-03	0.0	0.0
64	5.989	0.167	0.066	0.54	2.40e-05	2.25	9.92e-05	1287.79	5.68e-02	0.0	0.0
65	6.050	0.165	0.067	0.44	1.92e-05	1.21	5.32e-05	1.055e+05	4.7	0.0	0.0
66	6.061	0.165	0.067	0.72	3.16e-05	0.58	2.56e-05	8.297e+04	3.7	0.0	0.0
67	6.122	0.163	0.068	0.55	2.41e-05	5.08e-04	0.0	63.02	2.78e-03	0.0	0.0
68	6.139	0.163	0.068	1.27	5.59e-05	0.04	1.61e-06	494.94	2.18e-02	0.0	0.0
69	6.241	0.160	0.069	2.20	9.72e-05	0.25	1.09e-05	1.748e+04	0.8	0.0	0.0
70	6.258	0.160	0.069	3.71	1.64e-04	2.90	1.28e-04	1.698e+04	0.7	0.0	0.0
71	6.326	0.158	0.070	14.47	6.38e-04	2.15	9.49e-05	8.24	3.63e-04	0.0	0.0
72	6.341	0.158	0.070	44.78	1.97e-03	21.47	9.47e-04	364.19	1.61e-02	0.0	0.0
73	6.367	0.157	0.071	8931.56	0.4	1353.88	5.97e-02	62.39	2.75e-03	0.0	0.0
74	6.489	0.154	0.072	1.12	4.96e-05	1.56	6.89e-05	7278.25	0.3	0.0	0.0
75	6.494	0.154	0.072	1.46	6.44e-05	5.28e-04	0.0	0.14	6.16e-06	0.0	0.0
76	6.508	0.154	0.072	186.47	8.22e-03	1.98	8.73e-05	6890.16	0.3	0.0	0.0
77	6.531	0.153	0.072	1.677e+04	0.7	461.25	2.03e-02	0.13	5.84e-06	0.0	0.0
78	6.532	0.153	0.072	30.22	1.33e-03	0.04	1.85e-06	237.19	1.05e-02	0.0	0.0
79	6.541	0.153	0.073	906.91	4.00e-02	28.60	1.26e-03	114.33	5.04e-03	0.0	0.0
80	6.691	0.149	0.074	4522.71	0.2	1.562e+04	0.7	314.96	1.39e-02	0.0	0.0
81	6.699	0.149	0.074	3778.88	0.2	309.31	1.36e-02	78.05	3.44e-03	0.0	0.0
82	6.791	0.147	0.074	9.80	4.32e-04	2.97	1.31e-04	1314.62	5.80e-02	0.0	0.0
83	6.815	0.147	0.074	4.57	2.02e-04	0.07	3.18e-06	2389.93	0.1	0.0	0.0
84	6.817	0.147	0.074	5.77	2.54e-04	0.07	3.04e-06	23.56	1.04e-03	0.0	0.0
85	6.819	0.147	0.074	20.53	9.06e-04	0.05	2.24e-06	51.10	2.25e-03	0.0	0.0
86	6.857	0.146	0.074	2199.77	9.70e-02	1253.03	5.53e-02	12.97	5.72e-04	0.0	0.0
87	6.865	0.146	0.074	9.35e-05	0.0	13.75	6.06e-04	4.70e-04	0.0	0.0	0.0
88	6.959	0.144	0.074	3003.13	0.1	205.33	9.06e-03	11.56	5.10e-04	0.0	0.0
89	7.022	0.142	0.074	1.72	7.58e-05	120.87	5.33e-03	8.63	3.81e-04	0.0	0.0
90	7.189	0.139	0.074	716.03	3.16e-02	2645.70	0.1	34.15	1.51e-03	0.0	0.0
91	7.405	0.135	0.074	34.18	1.51e-03	6913.84	0.3	58.00	2.56e-03	0.0	0.0
92	7.532	0.133	0.074	0.0	0.0	1860.44	8.21e-02	17.28	7.62e-04	0.0	0.0
93	7.806	0.128	0.074	0.82	3.64e-05	34.62	1.53e-03	6.47	2.86e-04	0.0	0.0
94	7.808	0.128	0.074	7.00e-05	0.0	13.80	6.08e-04	0.16	6.84e-06	0.0	0.0
95	7.941	0.126	0.074	0.10	4.60e-06	72.29	3.19e-03	1.042e+05	4.6	0.0	0.0
96	7.974	0.125	0.074	2811.05	0.1	32.09	1.42e-03	103.31	4.56e-03	0.0	0.0
97	8.377	0.119	0.074	0.0	0.0	337.86	1.49e-02	3.71e-03	0.0	0.0	0.0
98	8.400	0.119	0.074	345.93	1.53e-02	8.25	3.64e-04	0.03	1.36e-06	0.0	0.0
99	8.572	0.117	0.074	0.19	8.32e-06	2119.81	9.35e-02	8.34	3.68e-04	0.0	0.0
100	8.669	0.115	0.074	0.04	1.78e-06	2541.98	0.1	4.40e-03	0.0	0.0	0.0
101	8.791	0.114	0.074	0.17	7.36e-06	37.30	1.64e-03	8.17e-03	0.0	0.0	0.0
102	8.888	0.113	0.074	479.44	2.11e-02	11.97	5.28e-04	4.97	2.19e-04	0.0	0.0
103	8.912	0.112	0.074	140.54	6.20e-03	0.30	1.33e-05	0.07	3.09e-06	0.0	0.0
104	9.048	0.111	0.074	8.69	3.83e-04	12.39	5.46e-04	6.73	2.97e-04	0.0	0.0
105	9.071	0.110	0.074	2.80	1.23e-04	3.69	1.63e-04	22.51	9.93e-04	0.0	0.0
106	9.240	0.108	0.074	6.43	2.83e-04	0.11	4.90e-06	110.40	4.87e-03	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
107	9.348	0.107	0.074	4.26	1.88e-04	11.98	5.28e-04	2.506e+04	1.1	0.0	0.0
108	9.381	0.107	0.074	5.73	2.53e-04	0.99	4.37e-05	1324.60	5.84e-02	0.0	0.0
109	9.591	0.104	0.074	5.59	2.46e-04	3.43	1.51e-04	179.53	7.92e-03	0.0	0.0
110	9.673	0.103	0.074	0.48	2.12e-05	2.14	9.44e-05	42.53	1.88e-03	0.0	0.0
111	9.708	0.103	0.074	2.03	8.95e-05	13.41	5.91e-04	100.10	4.42e-03	0.0	0.0
112	9.922	0.101	0.074	5.72	2.52e-04	35.47	1.56e-03	7279.39	0.3	0.0	0.0
113	9.967	0.100	0.074	0.26	1.13e-05	15.80	6.97e-04	1.079e+04	0.5	0.0	0.0
114	9.993	0.100	0.074	0.02	0.0	0.05	2.17e-06	15.60	6.88e-04	0.0	0.0
115	10.086	0.099	0.074	2812.27	0.1	8.81e-03	0.0	0.76	3.36e-05	0.0	0.0
116	10.139	0.099	0.074	0.16	6.92e-06	28.26	1.25e-03	68.86	3.04e-03	0.0	0.0
117	10.183	0.098	0.074	2.16	9.53e-05	165.08	7.28e-03	0.30	1.31e-05	0.0	0.0
118	10.290	0.097	0.074	8.71e-05	0.0	117.15	5.17e-03	1.52e-03	0.0	0.0	0.0
119	10.349	0.097	0.074	0.44	1.94e-05	196.72	8.68e-03	116.52	5.14e-03	0.0	0.0
120	10.388	0.096	0.074	0.94	4.14e-05	1551.57	6.84e-02	723.06	3.19e-02	0.0	0.0
121	10.420	0.096	0.074	610.73	2.69e-02	2963.55	0.1	1358.43	5.99e-02	0.0	0.0
122	10.474	0.095	0.074	0.67	2.94e-05	18.95	8.36e-04	5.277e+04	2.3	0.0	0.0
123	10.489	0.095	0.074	0.01	0.0	20.16	8.89e-04	275.00	1.21e-02	0.0	0.0
124	10.662	0.094	0.074	14.56	6.42e-04	206.75	9.12e-03	63.74	2.81e-03	0.0	0.0
125	10.801	0.093	0.074	6.41	2.83e-04	183.66	8.10e-03	21.15	9.33e-04	0.0	0.0
126	10.829	0.092	0.074	27.68	1.22e-03	0.58	2.57e-05	26.40	1.16e-03	0.0	0.0
127	10.955	0.091	0.074	4.09	1.80e-04	99.78	4.40e-03	255.46	1.13e-02	0.0	0.0
128	10.966	0.091	0.074	0.32	1.40e-05	8.42	3.71e-04	2998.23	0.1	0.0	0.0
129	11.022	0.091	0.074	748.26	3.30e-02	90.81	4.01e-03	2.71	1.19e-04	0.0	0.0
130	11.064	0.090	0.074	1.165e+04	0.5	86.73	3.83e-03	577.06	2.55e-02	0.0	0.0
131	11.198	0.089	0.074	8739.71	0.4	152.27	6.72e-03	2.991e+04	1.3	0.0	0.0
132	11.265	0.089	0.074	40.18	1.77e-03	0.62	2.75e-05	0.01	0.0	0.0	0.0
133	11.270	0.089	0.074	0.03	1.14e-06	4.08	1.80e-04	3.78	1.67e-04	0.0	0.0
134	11.280	0.089	0.074	4.48	1.98e-04	52.89	2.33e-03	112.32	4.95e-03	0.0	0.0
135	11.382	0.088	0.074	6.40e-03	0.0	68.99	3.04e-03	4.06e-03	0.0	0.0	0.0
136	11.487	0.087	0.074	235.06	1.04e-02	0.20	9.00e-06	10.23	4.51e-04	0.0	0.0
137	11.520	0.087	0.074	0.17	7.29e-06	6.11e-03	0.0	1.519e+04	0.7	0.0	0.0
138	11.535	0.087	0.074	0.0	0.0	1.80e-03	0.0	8.27e-04	0.0	0.0	0.0
139	11.630	0.086	0.074	1.11	4.88e-05	0.07	3.20e-06	3.141e+04	1.4	0.0	0.0
140	11.650	0.086	0.074	0.21	9.30e-06	0.04	1.89e-06	4.034e+04	1.8	0.0	0.0
141	11.839	0.084	0.074	2.95	1.30e-04	1.89	8.32e-05	1.990e+04	0.9	0.0	0.0
142	11.846	0.084	0.074	6.98	3.08e-04	5.88	2.59e-04	372.33	1.64e-02	0.0	0.0
143	12.019	0.083	0.074	1.88	8.31e-05	514.00	2.27e-02	369.46	1.63e-02	0.0	0.0
144	12.046	0.083	0.074	1.33	5.85e-05	466.12	2.06e-02	288.97	1.27e-02	0.0	0.0
145	12.108	0.083	0.074	3.82	1.68e-04	6.20	2.74e-04	67.20	2.96e-03	0.0	0.0
146	12.155	0.082	0.074	1865.15	8.23e-02	271.01	1.20e-02	3.339e+04	1.5	0.0	0.0
147	12.261	0.082	0.074	6066.28	0.3	274.93	1.21e-02	1.186e+04	0.5	0.0	0.0
148	12.374	0.081	0.074	36.11	1.59e-03	0.59	2.62e-05	6936.71	0.3	0.0	0.0
149	12.468	0.080	0.074	123.38	5.44e-03	1743.01	7.69e-02	2831.18	0.1	0.0	0.0
150	12.499	0.080	0.074	2089.83	9.22e-02	119.82	5.28e-03	2.388e+04	1.1	0.0	0.0
151	12.571	0.080	0.074	1.47	6.47e-05	0.42	1.87e-05	9727.14	0.4	0.0	0.0
152	12.608	0.079	0.074	4.42e-03	0.0	17.90	7.90e-04	1.197e+04	0.5	0.0	0.0
153	12.713	0.079	0.074	1952.25	8.61e-02	274.50	1.21e-02	6197.21	0.3	0.0	0.0
154	12.789	0.078	0.074	2961.76	0.1	800.09	3.53e-02	1.027e+04	0.5	0.0	0.0
155	12.832	0.078	0.074	9.39e-03	0.0	9.94e-03	0.0	0.09	3.98e-06	0.0	0.0
156	12.970	0.077	0.074	0.02	0.0	0.16	7.27e-06	1120.26	4.94e-02	0.0	0.0
157	13.076	0.076	0.074	0.30	1.33e-05	6.40	2.82e-04	2.204e+04	1.0	0.0	0.0
158	13.108	0.076	0.074	2.72	1.20e-04	928.10	4.09e-02	4871.55	0.2	0.0	0.0
159	13.128	0.076	0.074	3.32	1.47e-04	1.19	5.26e-05	2205.57	9.73e-02	0.0	0.0
160	13.138	0.076	0.074	28.71	1.27e-03	300.32	1.32e-02	4710.60	0.2	0.0	0.0
161	13.146	0.076	0.074	2.37	1.04e-04	0.13	5.93e-06	1006.51	4.44e-02	0.0	0.0
162	13.241	0.076	0.074	23.76	1.05e-03	62.47	2.76e-03	4.119e+04	1.8	0.0	0.0
163	13.288	0.075	0.074	4.82	2.13e-04	39.64	1.75e-03	2962.15	0.1	0.0	0.0
164	13.635	0.073	0.074	0.89	3.91e-05	0.65	2.88e-05	0.81	3.57e-05	0.0	0.0
165	13.829	0.072	0.074	665.02	2.93e-02	6.75	2.98e-04	1.728e+04	0.8	0.0	0.0
166	13.884	0.072	0.074	2.31e-03	0.0	0.14	6.10e-06	2.478e+04	1.1	0.0	0.0
167	14.002	0.071	0.074	1.09	4.80e-05	1.02	4.48e-05	3.411e+04	1.5	0.0	0.0
168	14.023	0.071	0.074	0.50	2.19e-05	0.48	2.11e-05	1.134e+04	0.5	0.0	0.0
169	14.185	0.070	0.074	345.08	1.52e-02	30.52	1.35e-03	164.91	7.27e-03	0.0	0.0
170	14.352	0.070	0.074	1247.24	5.50e-02	539.68	2.38e-02	332.95	1.47e-02	0.0	0.0
171	14.531	0.069	0.074	8786.98	0.4	0.85	3.74e-05	1.094e+04	0.5	0.0	0.0
172	14.717	0.068	0.074	2.98e-03	0.0	6.27	2.77e-04	8.03	3.54e-04	0.0	0.0
173	14.893	0.067	0.074	3521.52	0.2	684.74	3.02e-02	569.11	2.51e-02	0.0	0.0
174	14.910	0.067	0.074	68.47	3.02e-03	14.32	6.32e-04	25.83	1.14e-03	0.0	0.0
175	14.942	0.067	0.074	0.61	2.71e-05	0.47	2.09e-05	355.58	1.57e-02	0.0	0.0
176	14.978	0.067	0.074	0.26	1.14e-05	0.27	1.18e-05	232.55	1.03e-02	0.0	0.0
177	15.192	0.066	0.074	168.03	7.41e-03	135.16	5.96e-03	1068.30	4.71e-02	0.0	0.0
178	15.471	0.065	0.074	1.020e+04	0.4	329.12	1.45e-02	2.69	1.19e-04	0.0	0.0
179	15.722	0.064	0.074	304.37	1.34e-02	7600.78	0.3	30.01	1.32e-03	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
180	15.865	0.063	0.074	1.39	6.13e-05	2.78	1.23e-04	20.59	9.08e-04	0.0	0.0
181	15.869	0.063	0.074	0.0	0.0	5.27e-05	0.0	0.22	9.87e-06	0.0	0.0
182	15.883	0.063	0.074	40.50	1.79e-03	26.61	1.17e-03	432.75	1.91e-02	0.0	0.0
183	15.902	0.063	0.074	1.18e-05	0.0	2.12	9.35e-05	0.09	3.90e-06	0.0	0.0
184	16.268	0.061	0.074	169.30	7.47e-03	105.14	4.64e-03	1782.94	7.86e-02	0.0	0.0
185	16.462	0.061	0.074	3.13	1.38e-04	5.72e-03	0.0	3.194e+04	1.4	0.0	0.0
186	16.476	0.061	0.074	0.0	0.0	0.09	3.87e-06	6.48e-05	0.0	0.0	0.0
187	16.741	0.060	0.074	0.29	1.28e-05	0.13	5.83e-06	0.35	1.54e-05	0.0	0.0
188	16.817	0.059	0.074	62.74	2.77e-03	66.61	2.94e-03	9399.83	0.4	0.0	0.0
189	16.829	0.059	0.074	60.75	2.68e-03	23.06	1.02e-03	1.408e+04	0.6	0.0	0.0
190	16.926	0.059	0.074	1.58e-04	0.0	0.05	2.02e-06	5.30	2.34e-04	0.0	0.0
191	16.927	0.059	0.074	11.49	5.07e-04	2.92	1.29e-04	145.09	6.40e-03	0.0	0.0
192	16.986	0.059	0.074	145.57	6.42e-03	14.55	6.42e-04	75.18	3.32e-03	0.0	0.0
193	17.073	0.059	0.074	38.18	1.68e-03	59.53	2.63e-03	35.88	1.58e-03	0.0	0.0
194	17.494	0.057	0.074	122.48	5.40e-03	4813.14	0.2	1.282e+04	0.6	0.0	0.0
195	17.559	0.057	0.074	1.27e-03	0.0	511.93	2.26e-02	0.40	1.76e-05	0.0	0.0
196	17.663	0.057	0.074	286.80	1.26e-02	3159.84	0.1	3840.84	0.2	0.0	0.0
197	17.695	0.057	0.074	902.06	3.98e-02	160.39	7.07e-03	203.93	8.99e-03	0.0	0.0
198	17.920	0.056	0.074	5.11e-06	0.0	0.0	0.0	0.75	3.29e-05	0.0	0.0
199	18.046	0.055	0.074	27.67	1.22e-03	56.45	2.49e-03	1.892e+04	0.8	0.0	0.0
200	18.106	0.055	0.074	7.31e-05	0.0	0.11	5.02e-06	0.09	4.07e-06	0.0	0.0
Risulta				2.263e+06		2.218e+06		2.170e+06			
In percentuale				99.81		97.82		95.70			

VERIFICHE ELEMENTI TRAVE C.A.

LEGENDA TABELLA VERIFICHE ELEMENTI TRAVE C.A.

In tabella vengono riportati per ogni elemento il numero dello stesso ed il codice di verifica.

Nel caso in cui si sia proceduto alla progettazione con le tensioni ammissibili vengono riportate le massime tensioni nell'elemento (massima compressione nel calcestruzzo, massima compressione media nel calcestruzzo, massima tensione nell'acciaio, massima tensione tangenziale) con l'indicazione delle combinazioni in cui si sono attinti i rispettivi valori.

Nel caso in cui si sia proceduto alla progettazione con il metodo degli stati limite vengono riportati il rapporto x/d, le verifiche per sollecitazioni proporzionali e la verifica per compressione media con l'indicazione delle combinazioni in cui si sono attinti i rispettivi valori.

Per gli elementi tipo pilastro sono riportati numero e diametro dei ferri di vertice, numero e diametro di ferri disposti lungo i lati L1 (paralleli alla base della sezione) e lungo i lati L2 (paralleli all'altezza della sezione).

Per gli elementi tipo trave sono riportati infine le quantità di armatura inferiore e superiore.

In particolare i simboli utilizzati con il metodo delle tensioni ammissibili assumono il seguente significato:

M_P X Y	Numero della pilastrata e posizione in pianta
M_T Z P P	Numero della travata, quota media pilastrata iniziale e finale (nodo in assenza di pilastrata)
Pilas. o Trave	numero identificativo dell'elemento
Note	Viene riportato il codice relativo alla sezione(s) e relativo al materiale(m); nella terza riga viene riportato il valore delle snellezze in direzione 2-2 e 3-3
Stato	Codici di verifica relativi alle tensioni normali e alle tensioni tangenziali
Quota	Ascissa del punto di verifica
%Af	Percentuale di area di armatura rispetto a quella di calcestruzzo
Armat. long.	Numero e diametro dei ferri di armatura longitudinale: ferri di vertice + ferri di lato *(vedi seguente figura)*
Af inf.	Area di armatura longitudinale posta all'intradosso della trave
Af sup	Area di armatura longitudinale posta all'estradosso della trave

Sc max	Massima tensione di compressione del calcestruzzo
Sc med	Massima tensione media di compressione del calcestruzzo
Sf max	Tensione massima nell'acciaio
staffe	Vengono riportati i dati del tratto di staffatura in cui cade la sezione di verifica; in particolare: numero dei bracci, diametro, passo, lunghezza tratto
Tau max	Tensione massima tangenziale nel cls
Rif. comb	Combinazioni in cui si generano i seguenti valori di tensione: Sc max, Sc med, Sf max, Tau max
AfV	area dell'armatura atta ad assorbire le azioni di taglio
AfT	area dell'armatura atta ad assorbire le azioni di torsione
Scorr. P	Scorrimento dei piegati
Af long.	Area del ferro longitudinale aggiuntivo per assorbire la torsione

Progettazione delle fondazioni

Il D.M.14/02/2008 - par: 7.2.5 prevede:
"Per le strutture progettate sia per CD "A" sia per CD "B" il dimensionamento delle strutture di fondazione e la verifica di sicurezza del complesso fondazione-terreno devono essere eseguiti assumendo come azioni in fondazione le resistenze degli elementi strutturali soprastanti [...] si richiede tuttavia che tali azioni risultino non maggiori di quelle trasferite dagli elementi soprastanti, amplificate con un γRd pari a 1,1 in CD "B" e 1,3 in CD "A" e comunque non maggiori di quelle derivanti da una analisi elastica della struttura in elevazione eseguita con un fattore di struttura q pari a 1...."

Nel contesto visualizzazione risultati e nella stampa della relazione sulle fondazioni PRO_SAP mostra le sollecitazioni che derivano dall'analisi non incrementate sia in termini di pressioni sul terreno che in termini di sollecitazioni.

La progettazione degli elementi strutturali con proprietà fondazione è effettuata da PRO_SAP (per travi e platee) o da PRO_CAD Plinti (per plinti e pali di fondazione) incrementando le sollecitazioni delle combinazioni con sisma del fattore: γrd= 1.1 in CDB γrd=1.3 in CDA per pali, plinti, travi e platee.
Per i bicchieri dei plinti di fondazione prefabbricati l'incremento delle sollecitazioni ha un fattore: γrd= 1.2 in CDB γrd=1.35 in CDA.
N.B.: se il fattore di struttura q è =1 la progettazione viene effettuata senza nessun incremento.

Le verifiche geotecniche vengono effettuate dal modulo geotecnico incrementando automaticamente le sollecitazioni del fattore: γrd= 1.1 in CDB γrd=1.3 in CDA per pali, plinti, travi e platee.
N.B.: se il fattore di struttura q è =1 le verifiche geotecniche vengono effettuate senza nessun incremento.

Mentre i simboli utilizzati con il metodo degli stati limite assumono il seguente significato:

r. snell.	Rapporto λ su λ^*: valore superiore a 1 per elementi snelli, caso in cui viene effettuata la verifica con il metodo diretto dello stato di equilibrio
Verifica(verif.)	rapporto Sd/Su con sollecitazioni ultime proporzionali o a sforzo normale costante: valore minore o uguale a 1 per verifica positiva
ver.sis	rapporto Nd/Nu con Nu calcolato come al punto 7.4.4.2.2.1; valore minore o uguale a 1 per verifica positiva
ver.V/T	rapporto Sd/Su con sollecitazioni taglianti e torcenti proporzionali valore minore o uguale a 1 per verifica positiva
x/d	rapporto tra posizione dell'asse neutro e altezza utile alla rottura della sezione (per sola flessione)

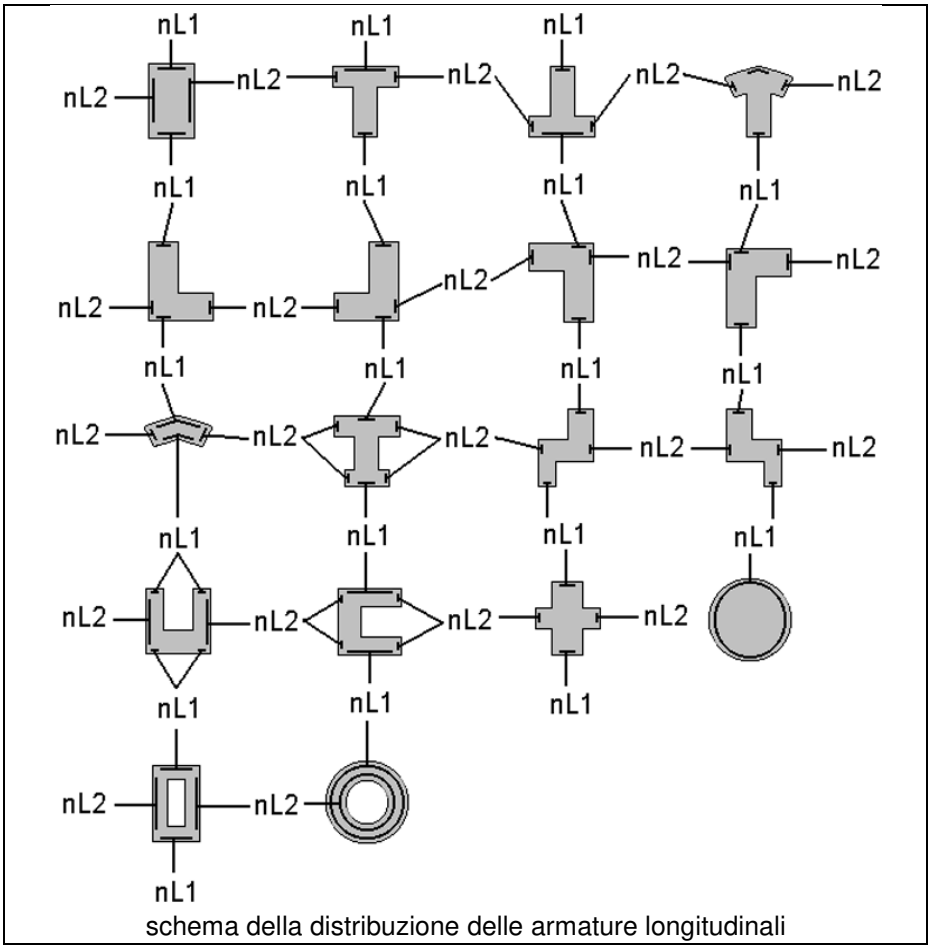
Per gli elementi progettati secondo il criterio della gerarchia delle resistenze (pilastri e travi) si riporta una ulteriore tabella di seguito descritta:

M negativo i	Valore del momento resistente negativo (positivo) all' estremità iniziale i (finale f) della trave
V M-i M+f	Taglio generato dai momenti resistenti negativo i e positivo f (positivo i e negativo f)
V totale	Massimo valore assoluto ottenuto per combinazione del taglio isostatico e dei tagli concomitanti (p.to 7.4.4.1.1.)

Verif. V	Rapporto tra il taglio massimo e Vr1 (p.to 7.4.4.1.2.2);
Sovr. 2-2 i	Sovraresistenza del pilastro (come da formula 7.4.4). Rapporto tra i momenti resistenti delle travi e dei pilastri. Il valore del fattore rispettivamente per il momento 2-2 (3-3) alla base i ed alla sommità f del pilastro deve essere maggiore del gammaRd adottato
M 2-2 i	Valore del momento resistente rispettivamente per 2-2 (3-3) alla base i ed alla sommità f del pilastro (massimo momento in presenza dello sforzo normale di calcolo)
Luce per V	Luce di calcolo per la definizione del taglio (generato dai momenti resistenti)
V M2-2	Valore del taglio generato dai momenti resistenti 2-2 (3-3)

Per i nodi trave-pilastro viene riportata la seguente tabella relativa al calcolo delle armature di confinamento e
alla verifica di resistenza del nodo (richiesta solo per strutture in classe di duttilità alta); le caselle vuote indicano parametri non riportati in quanto non necessari.

Stato	Esito della verifica (come da formula 7.4.8) per resistenza a compressione del nodo (solo CDA)
I 7.4.29	Passo delle staffe di confinamento come richiesto dalla formula 7.4.29
Bj2(3)	Dimensione del nodo per il taglio in direzione 2 (3)
Hjc2(2)	Distanza tra le giaciture di armatura del pilastro per il taglio in direzione 2 (3)
V. 7.4.8	Rapporto tra il taglio Vjbd e il taglio resistente come da formula 7.4.8 (solo CDA)
I 7.4.10	Passo delle staffe valutato in funzione della formula 7.4.10 (solo CDA)



schema della distribuzione delle armature longitudinali

Con riferimento al **Documento di Affidabilità** "*Test di validazione del software di calcolo PRO_SAP e dei moduli aggiuntivi PRO_SAP Modulo Geotecnico, PRO_CAD nodi acciaio e PRO_MST*" - versione Maggio 2011, disponibile per il download sul sito **www.2si.it**, si segnalano i seguenti esempi applicativi:

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120	PROGETTO E VERIFICA DI TRAVI PREM

					M_P= 27	**X=9484.0**	**Y=3279.5**					
Pilas.	Note	Stato	Quota	%Af	r. snell.	Armat. long.	V N/M	V N sis	Staffe	V V/T cls	V V/T acc	Rif. cmb
			cm						L=cm			
345	s=6,m=1	ok,ok	0.0	1.57	0.69	4d20 2+2 d20	0.68	0.13	2+2d8/5 L=60	0.73	0.23	61,259,53,49
			175.0	1.57	0.69	4d20 2+2 d20	0.46	0.13	2+2d8/10 L=230	0.73	0.47	83,259,53,49
	[b=1.0;1.0]		350.0	1.57	0.69	4d20 2+2 d20	0.45	0.12	2+2d8/5 L=60	0.73	0.23	87,259,53,49
Pilas.				**%Af**	**r. snell.**		**V N/M**	**V N sis**		**V V/T cls**	**V V/T acc**	
				1.57	0.69		0.68	0.13		0.73	0.47	

Pilas.	**sovr. Xi**	**sovr. Xf**	**sovr. Yi**	**sovr. Yf**	**M 2-2 i**	**M 2-2 f**	**M 3-3 i**	**M 3-3 f**	**Luce per V**	**V M2-2**	**V M3-3**
					kN m	kN m	kN m	kN m	cm	kN	kN
345	0.0	0.0	0.0	0.0	173.57	171.76	173.57	171.76	600.00	75.22	75.22
Pilas.					**M 2-2 i**	**M 2-2 f**	**M 3-3 i**	**M 3-3 f**		**V M2-2**	**V M3-3**
					173.57	171.76	173.57	171.76		75.22	75.22

Nodo	**Stato**	**Pilas.**	**Diam st**	**l 7.4.29**	**n. br. 2**	**Bj2**	**Hjc2**	**n. br. 3**	**Bj3**	**Hjc3**	**V. 7.4.8**	**l 7.4.10**	**Rif. cmb**
			mm	cm		cm	cm		cm	cm			
2		1	10	10.0	4	60.0		4	60.0				
4		2	10	10.0	4	60.0		4	60.0				
6		3	10	10.0	4	60.0		4	60.0				
17		17	10	10.0	4	60.0		4	60.0				
18		16	10	10.0	4	60.0		4	60.0				
33		35	10	10.0	4	60.0		4	60.0				
34		34	10	10.0	4	60.0		4	60.0				
41		45	10	10.0	4	60.0		4	60.0				
42		44	10	10.0	4	60.0		4	60.0				
49		232	10	10.0	4	60.0		4	60.0				
50		54	10	10.0	4	60.0		4	60.0				
57		65	10	5.0	4	60.0		4	90.0				
58		64	10	5.0	4	60.0		4	90.0				
65		75	10	10.0	4	60.0		4	60.0				
66		74	10	10.0	4	60.0		4	60.0				
73		85	10	10.0	4	60.0		4	60.0				
74		84	10	10.0	4	60.0		4	60.0				
81		95	10	10.0	4	60.0		4	60.0				
82		94	10	10.0	4	60.0		4	60.0				
89		255	10	10.0	4	60.0		4	60.0				
90		104	10	10.0	4	60.0		4	60.0				
97		276	10	10.0	4	60.0		4	60.0				
98		114	10	10.0	4	60.0		4	60.0				
102		121	10	10.0	4	60.0		4	60.0				
106		275	10	10.0	4	60.0		4	60.0				
110		131	10	10.0	4	60.0		4	60.0				

Nodo	Stato	Pilas.	Diam st	I 7.4.29	n. br. 2	Bj2	Hjc2	n. br. 3	Bj3	Hjc3	V. 7.4.8	I 7.4.10	Rif. cmb
114		136	10	10.0	4	60.0		4	60.0				
122		146	10	10.0	4	60.0		4	60.0				
126		151	10	10.0	4	60.0		4	60.0				
130		156	10	10.0	4	60.0		4	60.0				
134		373	10	10.0	4	60.0		4	60.0				
137		279	10	10.0	4	60.0		4	60.0				
185		249	10	10.0	4	60.0		4	60.0				
210		233	10	10.0	4	60.0		4	60.0				
224		239	10	5.0	4	60.0		4	80.0				
227		166	10	5.0	4	60.0		4	80.0				
229		115	10	5.0	4	60.0		4	80.0				
231		105	10	5.0	4	60.0		4	80.0				
238		161	10	5.0	4	60.0		4	80.0				
240		280	10	5.0	4	60.0		4	80.0				
254		345	8	8.0	2	40.0		2	40.0				
Nodo				**I 7.4.29**							**V. 7.4.8**	**I 7.4.10**	
				5.00									

							M_T= 4	**Z=0.0**	**N=8**	**N=22**			
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe	Rif. cmb	
		cm									L=cm		
8	ok,ok	0.0	0.24	6.0	6.0	12.1	0.12	1.99e-05	0.64	0.49	2d10/5 L=44	107,67,67	
	s=8,m=1	337.5	0.24	6.0	6.0	12.1	0.12	0.48	0.61	0.44	2d10/5 L=587	91,67,67	
		675.0	0.24	6.0	6.0	12.1	0.12	2.38e-05	0.64	0.49	2d10/5 L=44	83,60,60	
							M_T= 5	**Z=0.0**	**N=10**	**N=24**			
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe	Rif. cmb	
9	ok,ok	0.0	0.24	6.0	6.0	12.1	0.12	1.68e-05	0.62	0.47	2d10/5 L=44	91,59,59	
	s=8,m=1	337.5	0.24	6.0	6.0	12.1	0.12	0.41	0.59	0.43	2d10/5 L=587	91,51,51	
		675.0	0.24	6.0	6.0	12.1	0.12	2.06e-05	0.62	0.47	2d10/5 L=44	83,44,44	
							M_T= 8	**Z=0.0**	**N=13**	**N=14**			
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe	Rif. cmb	
12	ok,ok	0.0	0.27	4.0	4.0	4.0	0.12	6.19e-03	0.29	0.79	2d10/20 L=44	60,99,99	
	s=2,m=1	250.0	0.27	4.0	4.0	4.0	0.12	0.22	0.27	0.72	2d10/20 L=412	2,99,99	
		500.0	0.27	4.0	4.0	4.0	0.12	0.0	0.29	0.79	2d10/20 L=44	44,92,92	
							M_T= 10	**Z=0.0**	**N=15**	**N=16**			
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe	Rif. cmb	
14	ok,ok	0.0	0.27	4.0	4.0	4.0	0.12	0.07	0.29	0.78	2d10/20 L=44	73,99,99	
	s=2,m=1	250.0	0.27	4.0	4.0	4.0	0.12	0.22	0.27	0.72	2d10/20 L=412	11,92,92	
		500.0	0.27	4.0	4.0	4.0	0.12	5.85e-03	0.29	0.80	2d10/20 L=44	70,92,92	
							M_T= 13	**Z=0.0**	**N=177**	**N=186**			
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe	Rif. cmb	
19	ok,ok	0.0	0.20	8.0	8.0	16.1	0.11	1.75e-05	0.56	0.51	4d10/5 L=44	87,51,51	
	s=10,m=1	362.5	0.20	8.0	8.0	16.1	0.11	0.62	0.52	0.46	4d10/5 L=637	8,51,51	
		725.0	0.20	8.0	8.0	16.1	0.11	1.78e-05	0.55	0.50	4d10/5 L=44	8,44,44	
							M_T= 16	**Z=0.0**	**N=7**	**N=21**			
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe	Rif. cmb	
24	ok,ok	0.0	0.24	6.0	6.0	12.1	0.12	3.26e-05	0.61	0.47	2d10/5 L=44	83,67,67	
	s=8,m=1	337.5	0.24	6.0	6.0	12.1	0.12	0.69	0.58	0.42	2d10/5 L=587	107,60,60	
		675.0	0.24	6.0	6.0	12.1	0.12	3.19e-05	0.61	0.46	2d10/5 L=44	107,60,60	
							M_T= 17	**Z=0.0**	**N=9**	**N=23**			
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe	Rif. cmb	
25	ok,ok	0.0	0.24	6.0	6.0	12.1	0.12	3.04e-05	0.64	0.49	2d10/5 L=44	83,51,51	
	s=8,m=1	337.5	0.24	6.0	6.0	12.1	0.12	0.61	0.61	0.44	2d10/5 L=587	91,44,44	
		675.0	0.24	6.0	6.0	12.1	0.12	2.73e-05	0.64	0.48	2d10/5 L=44	107,44,44	
							M_T= 18	**Z=0.0**	**N=29**	**N=30**			
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe	Rif. cmb	
30	ok,ok	0.0	0.27	4.0	4.0	4.0	0.12	4.70e-03	0.25	0.68	2d10/20 L=44	60,107,107	
	s=2,m=1	250.0	0.27	4.0	4.0	4.0	0.12	0.26	0.22	0.59	2d10/20 L=412	8,107,107	
		500.0	0.27	4.0	4.0	4.0	0.12	0.05	0.25	0.68	2d10/20 L=44	67,100,100	
							M_T= 20	**Z=0.0**	**N=31**	**N=32**			
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe	Rif. cmb	
32	ok,ok	0.0	0.27	4.0	4.0	4.0	0.12	0.02	0.25	0.68	2d10/20 L=44	105,107,107	
	s=2,m=1	250.0	0.27	4.0	4.0	4.0	0.12	0.26	0.22	0.59	2d10/20 L=412	11,107,107	
		500.0	0.27	4.0	4.0	4.0	0.12	0.01	0.25	0.68	2d10/20 L=44	8,100,100	
							M_T= 24	**Z=0.0**	**N=37**	**N=38**			
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe	Rif. cmb	
40	ok,ok	0.0	0.27	4.0	4.0	4.0	0.12	0.06	0.20	0.56	2d10/20 L=44	63,91,91	
	s=2,m=1	250.0	0.27	4.0	4.0	4.0	0.12	0.26	0.20	0.47	2d10/20 L=412	2,106,91	
		500.0	0.27	4.0	4.0	4.0	0.12	0.03	0.20	0.55	2d10/20 L=44	87,84,84	
							M_T= 26	**Z=0.0**	**N=39**	**N=40**			
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe	Rif. cmb	

42	ok,ok	0.0	0.27	4.0	4.0	4.0	0.12	7.89e-03	0.20	0.55	2d10/20 L=44	2,91,91
	s=2,m=1	250.0	0.27	4.0	4.0	4.0	0.12	0.26	0.20	0.46	2d10/20 L=412	11,101,84
		500.0	0.27	4.0	4.0	4.0	0.12	7.89e-03	0.20	0.55	2d10/20 L=44	2,84,84
							M_T= 30	**Z=0.0**	**N=45**	**N=46**		
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe	Rif. cmb
50	ok,ok	0.0	0.27	4.0	4.0	4.0	0.12	0.08	0.30	0.82	2d10/20 L=44	63,99,99
	s=2,m=1	250.0	0.27	4.0	4.0	4.0	0.12	0.27	0.27	0.73	2d10/20 L=412	5,99,99
		500.0	0.27	4.0	4.0	4.0	0.12	0.05	0.30	0.82	2d10/20 L=44	87,92,92
							M_T= 32	**Z=0.0**	**N=47**	**N=48**		
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe	Rif. cmb
52	ok,ok	0.0	0.27	4.0	4.0	4.0	0.12	3.76e-03	0.30	0.81	2d10/20 L=44	94,99,99
	s=2,m=1	250.0	0.27	4.0	4.0	4.0	0.12	0.26	0.27	0.72	2d10/20 L=412	11,92,92
		500.0	0.27	4.0	4.0	4.0	0.12	0.05	0.30	0.81	2d10/20 L=44	72,92,92
							M_T= 36	**Z=0.0**	**N=53**	**N=54**		
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe	Rif. cmb
60	ok,ok	0.0	0.27	4.0	4.0	4.0	0.12	0.01	0.36	0.97	2d10/20 L=44	84,107,107
	s=2,m=1	250.0	0.27	4.0	4.0	4.0	0.12	0.28	0.33	0.88	2d10/20 L=412	5,107,107
		500.0	0.27	4.0	4.0	4.0	0.12	0.0	0.36	0.97	2d10/20 L=44	44,100,100
							M_T= 38	**Z=0.0**	**N=55**	**N=56**		
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe	Rif. cmb
62	ok,ok	0.0	0.27	4.0	4.0	4.0	0.12	0.06	0.35	0.96	2d10/20 L=44	93,107,107
	s=2,m=1	250.0	0.27	4.0	4.0	4.0	0.12	0.26	0.32	0.87	2d10/20 L=412	11,107,107
		500.0	0.27	4.0	4.0	4.0	0.12	0.04	0.35	0.96	2d10/20 L=44	105,100,100
							M_T= 42	**Z=0.0**	**N=61**	**N=62**		
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe	Rif. cmb
70	ok,ok	0.0	0.27	4.0	4.0	4.0	0.12	0.03	0.25	0.70	2d10/20 L=44	260,99,99
	s=2,m=1	250.0	0.27	4.0	4.0	4.0	0.12	0.27	0.23	0.61	2d10/20 L=412	5,99,99
		500.0	0.27	4.0	4.0	4.0	0.12	0.0	0.25	0.69	2d10/20 L=44	68,92,92
							M_T= 44	**Z=0.0**	**N=63**	**N=64**		
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe	Rif. cmb
72	ok,ok	0.0	0.27	4.0	4.0	4.0	0.12	0.0	0.33	0.90	2d10/20 L=44	67,99,99
	s=2,m=1	250.0	0.27	4.0	4.0	4.0	0.12	0.27	0.30	0.81	2d10/20 L=412	8,99,99
		500.0	0.27	4.0	4.0	4.0	0.12	0.05	0.31	0.84	2d10/20 L=44	265,99,99
							M_T= 48	**Z=0.0**	**N=69**	**N=70**		
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe	Rif. cmb
80	ok,ok	0.0	0.27	4.0	4.0	4.0	0.12	0.18	0.21	0.58	2d10/20 L=44	87,107,107
	s=2,m=1	250.0	0.27	4.0	4.0	4.0	0.12	0.26	0.20	0.49	2d10/20 L=412	5,80,100
		500.0	0.27	4.0	4.0	4.0	0.12	0.27	0.21	0.58	2d10/20 L=44	63,100,100
							M_T= 50	**Z=0.0**	**N=71**	**N=72**		
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe	Rif. cmb
82	ok,ok	0.0	0.27	4.0	4.0	4.0	0.12	5.60e-03	0.35	0.90	2d10/19 L=174	72,76,76
	s=2,m=1	250.0	0.27	4.0	4.0	4.0	0.12	0.26	0.34	0.86	2d10/19 L=152	8,76,76
		500.0	0.27	4.0	4.0	8.0	0.12	0.0	0.37	0.96	2d10/19 L=174	51,76,76
							M_T= 54	**Z=0.0**	**N=77**	**N=78**		
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe	Rif. cmb
90	ok,ok	0.0	0.27	4.0	4.0	4.0	0.12	0.29	0.22	0.59	2d10/20 L=44	47,99,99
	s=2,m=1	250.0	0.27	4.0	4.0	4.0	0.12	0.27	0.20	0.51	2d10/20 L=412	63,77,92
		500.0	0.27	4.0	4.0	4.0	0.12	0.0	0.21	0.59	2d10/20 L=44	46,92,92
							M_T= 56	**Z=0.0**	**N=79**	**N=80**		
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe	Rif. cmb
92	ok,ok	0.0	0.27	4.0	4.0	4.0	0.12	0.03	0.21	0.58	2d10/20 L=44	91,99,99
	s=2,m=1	250.0	0.27	4.0	4.0	4.0	0.12	0.26	0.20	0.49	2d10/20 L=412	5,83,99
		500.0	0.27	4.0	4.0	4.0	0.12	0.05	0.21	0.57	2d10/20 L=44	79,92,92
							M_T= 60	**Z=0.0**	**N=85**	**N=86**		
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe	Rif. cmb
100	ok,ok	0.0	0.27	4.0	4.0	4.0	0.12	0.42	0.34	0.93	2d10/20 L=44	87,83,83
	s=2,m=1	250.0	0.40	4.0	6.0	4.0	0.14	0.19	0.32	0.85	2d10/20 L=412	8,76,76
		500.0	0.27	4.0	4.0	4.0	0.12	0.05	0.34	0.94	2d10/20 L=44	88,76,76
							M_T= 62	**Z=0.0**	**N=87**	**N=88**		
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe	Rif. cmb
102	ok,ok	0.0	0.27	4.0	4.0	4.0	0.12	0.06	0.36	0.98	2d10/20 L=44	239,83,83
	s=2,m=1	250.0	0.27	4.0	4.0	4.0	0.12	0.25	0.33	0.89	2d10/20 L=412	5,83,83
		500.0	0.27	4.0	4.0	4.0	0.12	0.08	0.35	0.95	2d10/20 L=44	79,76,76
							M_T= 66	**Z=0.0**	**N=93**	**N=94**		
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe	Rif. cmb
110	ok,ok	0.0	0.20	8.0	8.0	8.0	0.11	9.74e-06	0.25	0.87	4d10/19 L=174	8,52,59
	s=10,m=1	250.0	0.20	8.0	8.0	8.0	0.11	0.36	0.25	0.83	4d10/19 L=152	8,52,52
		500.0	0.20	8.0	8.0	8.0	0.11	9.56e-06	0.28	0.98	4d10/19 L=174	5,52,52
							M_T= 68	**Z=0.0**	**N=95**	**N=96**		
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe	Rif. cmb
112	ok,ok	0.0	0.27	4.0	4.0	0.0	0.12	0.14	0.15	0.12	2d10/20 L=44	45,51,51
	s=2,m=1	250.0	0.27	4.0	4.0	0.0	0.12	0.21	0.19	0.01	2d10/20 L=412	5,44,44
		500.0	0.27	4.0	4.0	0.0	0.12	5.12e-03	0.16	0.12	2d10/20 L=44	82,44,44
							M_T= 72	**Z=0.0**	**N=100**	**N=101**		
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe	Rif. cmb

119	ok,ok	0.0	0.27	4.0	4.0	4.0	0.12	0.11	0.26	0.71	2d10/20 L=44	65,99,99	
	s=2,m=1	250.0	0.27	4.0	4.0	4.0	0.12	0.28	0.23	0.62	2d10/20 L=412	8,92,92	
		500.0	0.27	4.0	4.0	4.0	0.12	0.11	0.26	0.72	2d10/20 L=44	65,92,92	
							M_T= 74	**Z=0.0**	**N=104**	**N=105**			
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe	Rif. cmb	
124	ok,ok	0.0	0.27	4.0	4.0	4.0	0.12	0.08	0.22	0.61	2d10/20 L=44	65,107,107	
	s=2,m=1	250.0	0.27	4.0	4.0	4.0	0.12	0.31	0.20	0.52	2d10/20 L=412	2,80,107	
		500.0	0.27	4.0	4.0	4.0	0.12	0.0	0.22	0.61	2d10/20 L=44	51,100,100	
							M_T= 76	**Z=0.0**	**N=108**	**N=109**			
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe	Rif. cmb	
129	ok,ok	0.0	0.27	4.0	4.0	4.0	0.12	0.02	0.18	0.50	2d10/20 L=44	2,91,91	
	s=2,m=1	250.0	0.27	4.0	4.0	4.0	0.12	0.32	0.20	0.41	2d10/20 L=412	2,82,91	
		500.0	0.27	4.0	4.0	4.0	0.12	0.09	0.18	0.50	2d10/20 L=44	49,84,84	
							M_T= 78	**Z=0.0**	**N=112**	**N=113**			
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe	Rif. cmb	
134	ok,ok	0.0	0.27	4.0	4.0	4.0	0.12	0.0	0.26	0.72	2d10/20 L=44	59,99,99	
	s=2,m=1	250.0	0.27	4.0	4.0	4.0	0.12	0.31	0.24	0.64	2d10/20 L=412	2,99,99	
		500.0	0.27	4.0	4.0	4.0	0.12	0.11	0.26	0.72	2d10/20 L=44	49,92,92	
							M_T= 80	**Z=0.0**	**N=116**	**N=117**			
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe	Rif. cmb	
139	ok,ok	0.0	0.27	4.0	4.0	4.0	0.12	1.16e-04	0.31	0.86	2d10/20 L=44	84,107,107	
	s=2,m=1	250.0	0.27	4.0	4.0	4.0	0.12	0.31	0.29	0.76	2d10/20 L=412	2,100,100	
		500.0	0.27	4.0	4.0	4.0	0.12	0.16	0.31	0.86	2d10/20 L=44	49,100,100	
							M_T= 82	**Z=0.0**	**N=120**	**N=121**			
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe	Rif. cmb	
144	ok,ok	0.0	0.27	4.0	4.0	4.0	0.12	0.24	0.22	0.61	2d10/20 L=44	65,93,93	
	s=2,m=1	250.0	0.27	4.0	4.0	4.0	0.12	0.30	0.21	0.56	2d10/20 L=412	2,92,92	
		500.0	0.27	4.0	4.0	4.0	0.12	0.24	0.23	0.65	2d10/20 L=44	65,92,92	
							M_T= 84	**Z=0.0**	**N=124**	**N=125**			
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe	Rif. cmb	
149	ok,ok	0.0	0.27	4.0	4.0	4.0	0.12	0.02	0.19	0.52	2d10/20 L=44	82,107,107	
	s=2,m=1	250.0	0.27	4.0	4.0	4.0	0.12	0.29	0.20	0.43	2d10/20 L=412	2,93,107	
		500.0	0.27	4.0	4.0	4.0	0.12	0.17	0.17	0.48	2d10/20 L=44	77,106,94	
							M_T= 86	**Z=0.0**	**N=128**	**N=129**			
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe	Rif. cmb	
154	ok,ok	0.0	0.27	4.0	4.0	4.0	0.12	0.48	0.18	0.51	2d10/20 L=44	45,99,99	
	s=2,m=1	250.0	0.27	4.0	4.0	4.0	0.12	0.30	0.19	0.42	2d10/20 L=412	2,103,92	
		500.0	0.27	4.0	4.0	4.0	0.12	0.06	0.18	0.51	2d10/20 L=44	50,92,92	
							M_T= 88	**Z=0.0**	**N=132**	**N=133**			
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe	Rif. cmb	
159	ok,ok	0.0	0.27	4.0	4.0	4.0	0.12	0.64	0.31	0.86	2d10/20 L=44	61,83,83	
	s=2,m=1	250.0	0.40	4.0	6.0	4.0	0.14	0.20	0.28	0.76	2d10/20 L=412	8,83,83	
		500.0	0.27	4.0	4.0	4.0	0.12	0.10	0.31	0.83	2d10/20 L=44	50,76,76	
							M_T= 90	**Z=0.0**	**N=135**	**N=136**			
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe	Rif. cmb	
164	ok,ok	0.0	0.27	4.0	4.0	4.0	0.12	0.21	0.18	0.50	2d10/20 L=44	76,51,51	
	s=2,m=1	250.0	0.27	4.0	4.0	4.0	0.12	0.31	0.18	0.41	2d10/20 L=412	8,60,51	
		500.0	0.27	4.0	4.0	4.0	0.12	0.04	0.19	0.54	2d10/20 L=44	107,44,44	
							M_T= 94	**Z=0.0**	**N=140**	**N=141**			
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe	Rif. cmb	
170	ok,ok	0.0	0.27	4.0	4.0	0.0	0.12	4.10e-03	0.14	0.25	2d10/20 L=44	68,75,107	
	s=2,m=1	900.0	0.27	4.0	4.0	0.0	0.12	0.13	0.15	0.02	2d10/20 L=1712	5,67,107	
		1800.0	0.27	4.0	4.0	0.0	0.12	0.02	0.14	0.20	2d10/20 L=44	96,68,100	
							M_T= 96	**Z=0.0**	**N=139**	**N=142**			
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe	Rif. cmb	
173	ok,ok	0.0	0.27	4.0	4.0	0.0	0.12	0.10	0.13	0.20	2d10/20 L=44	89,67,107	
	s=2,m=1	900.0	0.27	4.0	4.0	0.0	0.12	0.13	0.15	0.02	2d10/20 L=1712	11,60,100	
		1800.0	0.27	4.0	4.0	0.0	0.12	0.09	0.14	0.25	2d10/20 L=44	85,68,100	
							M_T= 99	**Z=0.0**	**N=144**	**N=145**			
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe	Rif. cmb	
176	ok,ok	0.0	0.27	4.0	4.0	0.0	0.12	0.0	0.13	0.24	2d10/20 L=44	99,75,99	
	s=2,m=1	900.0	0.27	4.0	4.0	0.0	0.12	0.14	0.15	0.02	2d10/20 L=1712	2,67,99	
		1800.0	0.27	4.0	4.0	0.0	0.12	0.01	0.13	0.19	2d10/20 L=44	76,68,92	
							M_T= 101	**Z=0.0**	**N=143**	**N=146**			
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe	Rif. cmb	
179	ok,ok	0.0	0.27	4.0	4.0	0.0	0.12	0.0	0.13	0.19	2d10/20 L=44	99,51,99	
	s=2,m=1	900.0	0.27	4.0	4.0	0.0	0.12	0.14	0.15	0.02	2d10/20 L=1712	2,44,92	
		1800.0	0.27	4.0	4.0	0.0	0.12	0.11	0.13	0.24	2d10/20 L=44	81,52,92	
							M_T= 104	**Z=0.0**	**N=148**	**N=149**			
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe	Rif. cmb	
182	ok,ok	0.0	0.27	4.0	4.0	0.0	0.12	0.01	0.14	0.23	2d10/20 L=44	96,75,107	
	s=2,m=1	900.0	0.27	4.0	4.0	0.0	0.12	0.13	0.15	0.02	2d10/20 L=1712	5,67,107	
		1800.0	0.27	4.0	4.0	0.0	0.12	0.01	0.14	0.18	2d10/20 L=44	80,60,100	
							M_T= 106	**Z=0.0**	**N=147**	**N=150**			
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe	Rif. cmb	

185	ok,ok	0.0	0.27	4.0	4.0	0.0	0.12	0.13	0.13	0.18	2d10/20 L=44	93,67,107	
	s=2,m=1	900.0	0.27	4.0	4.0	0.0	0.12	0.13	0.15	0.02	2d10/20 L=1712	11,60,100	
		1800.0	0.27	4.0	4.0	0.0	0.12	0.13	0.14	0.23	2d10/20 L=44	93,60,100	
							M_T= 109	**Z=0.0**	**N=152**	**N=153**			
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe	Rif. cmb	
188	ok,ok	0.0	0.27	4.0	4.0	0.0	0.12	0.01	0.14	0.23	2d10/20 L=44	97,75,107	
	s=2,m=1	900.0	0.27	4.0	4.0	0.0	0.12	0.13	0.15	0.02	2d10/20 L=1712	5,67,107	
		1800.0	0.27	4.0	4.0	0.0	0.12	0.01	0.13	0.18	2d10/20 L=44	104,68,100	
							M_T= 111	**Z=0.0**	**N=151**	**N=154**			
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe	Rif. cmb	
191	ok,ok	0.0	0.27	4.0	4.0	0.0	0.12	0.14	0.13	0.18	2d10/20 L=44	92,67,107	
	s=2,m=1	900.0	0.27	4.0	4.0	0.0	0.12	0.14	0.15	0.02	2d10/20 L=1712	5,60,100	
		1800.0	0.27	4.0	4.0	0.0	0.12	0.14	0.14	0.23	2d10/20 L=44	93,60,100	
							M_T= 114	**Z=0.0**	**N=156**	**N=157**			
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe	Rif. cmb	
194	ok,ok	0.0	0.27	4.0	4.0	0.0	0.12	0.01	0.14	0.22	2d10/20 L=44	96,67,99	
	s=2,m=1	900.0	0.27	4.0	4.0	0.0	0.12	0.14	0.15	0.02	2d10/20 L=1712	5,67,99	
		1800.0	0.27	4.0	4.0	0.0	0.12	0.01	0.13	0.18	2d10/20 L=44	97,60,92	
							M_T= 116	**Z=0.0**	**N=155**	**N=158**			
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe	Rif. cmb	
197	ok,ok	0.0	0.27	4.0	4.0	0.0	0.12	0.13	0.13	0.18	2d10/20 L=44	77,51,99	
	s=2,m=1	900.0	0.27	4.0	4.0	0.0	0.12	0.14	0.15	0.02	2d10/20 L=1712	11,44,92	
		1800.0	0.27	4.0	4.0	0.0	0.12	0.13	0.14	0.22	2d10/20 L=44	77,44,92	
							M_T= 119	**Z=0.0**	**N=160**	**N=161**			
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe	Rif. cmb	
200	ok,ok	0.0	0.50	20.1	8.0	16.1	0.17	0.95	0.69	0.62	4d10/5 L=61	84,51,51	
	s=10,m=1	61.5	0.45	18.1	8.0	16.1	0.15	0.12	0.67	0.60	4d10/5 L=61	84,51,51	
485	ok,ok	0.0	0.25	10.0	8.0	12.1	0.12	0.25	0.49	0.41	4d10/5 L=61	84,59,59	
	s=10,m=1	61.5	0.20	8.0	8.0	12.1	0.11	0.21	0.47	0.40	4d10/5 L=61	84,59,59	
498	ok,ok	0.0	0.20	8.0	8.0	12.1	0.11	0.17	0.38	0.97	4d10/15 L=61	84,59,59	
	s=10,m=1	61.5	0.20	8.0	8.0	12.1	0.11	0.11	0.38	0.95	4d10/15 L=61	84,59,52	
511	ok,ok	0.0	0.20	8.0	8.0	12.1	0.11	0.10	0.33	0.83	4d10/15 L=61	84,59,59	
	s=10,m=1	61.5	0.20	8.0	8.0	12.1	0.11	0.03	0.32	0.82	4d10/15 L=61	84,52,52	
520	ok,ok	0.0	0.20	8.0	8.0	8.0	0.11	0.03	0.29	0.99	4d10/20 L=61	84,59,59	
	s=10,m=1	61.5	0.20	8.0	8.0	8.0	0.11	8.00e-03	0.29	0.98	4d10/20 L=61	84,59,59	
527	ok,ok	0.0	0.20	8.0	8.0	8.0	0.11	7.78e-03	0.27	0.94	4d10/20 L=61	84,59,59	
	s=10,m=1	61.5	0.20	8.0	8.0	8.0	0.11	0.02	0.27	0.92	4d10/20 L=61	84,59,59	
534	ok,ok	0.0	0.20	8.0	8.0	8.0	0.11	0.02	0.27	0.94	4d10/20 L=61	84,59,59	
	s=10,m=1	61.5	0.20	8.0	8.0	8.0	0.11	0.02	0.27	0.92	4d10/20 L=61	84,59,59	
540	ok,ok	0.0	0.20	8.0	8.0	8.0	0.11	0.02	0.28	0.98	4d10/20 L=61	84,59,59	
	s=10,m=1	61.5	0.20	8.0	8.0	8.0	0.11	0.02	0.28	0.96	4d10/20 L=61	84,59,59	
349	ok,ok	0.0	0.20	8.0	8.0	8.0	0.11	0.02	0.30	0.78	4d10/15 L=61	84,59,59	
	s=10,m=1	61.5	0.20	8.0	8.0	8.0	0.11	0.02	0.29	0.76	4d10/15 L=61	84,59,59	
518	ok,ok	0.0	0.20	8.0	8.0	12.1	0.11	0.02	0.32	0.83	4d10/15 L=61	84,59,59	
	s=10,m=1	61.5	0.20	8.0	8.0	12.1	0.11	0.02	0.31	0.81	4d10/15 L=61	76,59,59	
471	ok,ok	0.0	0.20	8.0	8.0	12.1	0.11	0.02	0.33	0.87	4d10/15 L=61	76,59,59	
	s=10,m=1	61.5	0.20	8.0	8.0	12.1	0.11	0.02	0.33	0.85	4d10/15 L=61	76,59,59	
507	ok,ok	0.0	0.20	8.0	8.0	12.1	0.11	0.02	0.34	0.90	4d10/15 L=61	76,59,59	
	s=10,m=1	61.5	0.20	8.0	8.0	12.1	0.11	0.03	0.34	0.89	4d10/15 L=61	76,59,59	
472	ok,ok	0.0	0.20	8.0	8.0	12.1	0.11	0.03	0.35	0.92	4d10/15 L=61	76,59,59	
	s=10,m=1	61.5	0.20	8.0	8.0	12.1	0.11	0.11	0.36	0.94	4d10/15 L=61	76,52,52	
477	ok,ok	0.0	0.20	8.0	8.0	12.1	0.11	0.11	0.37	0.65	4d10/10 L=61	76,52,52	
	s=10,m=1	61.5	0.20	8.0	8.0	12.1	0.11	0.36	0.38	0.67	4d10/10 L=61	84,52,52	
482	ok,ok	0.0	0.20	8.0	8.0	12.1	0.11	0.37	0.39	0.69	4d10/10 L=61	84,59,59	
	s=10,m=1	61.5	0.20	8.0	8.0	12.1	0.11	0.57	0.38	0.67	4d10/10 L=61	100,59,59	
366	ok,ok	0.0	0.30	12.1	8.0	8.0	0.12	0.73	0.32	0.89	4d10/15 L=124	84,67,67	
	s=10,m=1	438.8	0.25	8.0	10.0	8.0	0.12	0.59	0.27	0.72	4d10/15 L=629	2,60,67	
		877.5	0.20	8.0	8.0	8.0	0.11	3.08e-05	0.35	0.97	4d10/15 L=124	2,60,60	
							M_T= 121	**Z=0.0**	**N=159**	**N=162**			
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe	Rif. cmb	
203	ok,ok	0.0	0.34	5.1	5.1	0.0	0.13	0.0	0.13	0.17	2d10/20 L=1800	5,67,91	
	s=2,m=1	1800.0	0.34	5.1	5.1	0.0	0.13	0.38	0.13	0.21	2d10/20 L=1800	81,60,84	
							M_T= 124	**Z=0.0**	**N=164**	**N=165**			
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe	Rif. cmb	
206	ok,ok	0.0	0.27	4.0	4.0	4.0	0.12	0.20	0.24	0.69	2d10/20 L=144	47,51,51	
	s=2,m=1	461.3	0.40	4.0	6.0	4.0	0.14	0.86	0.24	0.46	2d10/20 L=634	91,60,44	
		922.5	0.67	10.1	8.0	4.0	0.17	0.96	0.26	0.69	2d10/20 L=144	100,68,52	
367	ok,ok	0.0	0.80	12.1	6.0	4.0	0.21	0.98	0.29	0.86	2d10/20 L=119	100,75,75	
	s=2,m=1	438.8	0.27	4.0	4.0	4.0	0.12	0.58	0.19	0.54	2d10/20 L=639	91,67,67	
		877.5	0.27	4.0	4.0	4.0	0.12	0.15	0.24	0.70	2d10/20 L=119	72,44,44	
							M_T= 126	**Z=0.0**	**N=163**	**N=166**			
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe	Rif. cmb	
209	ok,ok	0.0	0.27	4.0	4.0	0.0	0.12	0.25	0.13	0.20	2d10/20 L=44	104,51,83	
	s=2,m=1	900.0	0.27	4.0	4.0	0.0	0.12	0.13	0.15	0.02	2d10/20 L=1712	11,44,76	
		1800.0	0.27	4.0	4.0	0.0	0.12	0.34	0.14	0.25	2d10/20 L=44	89,44,76	

							M_T= 129	**Z=0.0**	**N=168**	**N=169**			
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe	Rif. cmb	
212	ok,ok	0.0	0.27	4.0	4.0	4.0	0.12	0.37	0.24	0.69	2d10/20 L=144	107,51,51	
	s=2,m=1	461.3	0.40	4.0	6.0	4.0	0.14	0.85	0.24	0.46	2d10/20 L=634	91,60,44	
		922.5	0.67	10.1	8.0	4.0	0.17	0.97	0.27	0.71	2d10/20 L=144	91,68,44	
368	ok,ok	0.0	0.94	14.1	6.0	4.0	0.24	0.87	0.30	0.90	2d10/20 L=119	107,67,67	
	s=2,m=1	438.8	0.27	4.0	4.0	4.0	0.12	0.59	0.19	0.54	2d10/20 L=639	91,67,67	
		877.5	0.27	4.0	4.0	4.0	0.12	0.03	0.24	0.70	2d10/20 L=119	102,44,44	
							M_T= 131	**Z=0.0**	**N=167**	**N=170**			
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe	Rif. cmb	
215	ok,ok	0.0	0.27	4.0	4.0	0.0	0.12	0.0	0.13	0.19	2d10/20 L=44	99,51,83	
	s=2,m=1	900.0	0.27	4.0	4.0	0.0	0.12	0.13	0.15	0.02	2d10/20 L=1712	5,44,76	
		1800.0	0.27	4.0	4.0	0.0	0.12	0.23	0.13	0.23	2d10/20 L=44	97,44,76	
							M_T= 134	**Z=0.0**	**N=172**	**N=173**			
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe	Rif. cmb	
218	ok,ok	0.0	0.25	10.0	8.0	16.1	0.12	0.92	0.63	0.55	4d10/5 L=61	84,51,51	
	s=10,m=1	61.5	0.25	10.0	8.0	16.1	0.12	0.09	0.62	0.53	4d10/5 L=61	84,51,51	
489	ok,ok	0.0	0.20	8.0	8.0	12.1	0.11	0.11	0.46	0.39	4d10/5 L=61	84,51,51	
	s=10,m=1	61.5	0.20	8.0	8.0	12.1	0.11	0.07	0.45	0.37	4d10/5 L=61	84,51,44	
501	ok,ok	0.0	0.20	8.0	8.0	12.1	0.11	0.06	0.37	0.31	4d10/5 L=61	84,51,51	
	s=10,m=1	61.5	0.20	8.0	8.0	12.1	0.11	0.04	0.37	0.31	4d10/5 L=61	91,51,51	
513	ok,ok	0.0	0.20	8.0	8.0	12.1	0.11	0.04	0.32	0.82	4d10/15 L=61	91,51,51	
	s=10,m=1	61.5	0.20	8.0	8.0	8.0	0.11	0.01	0.32	0.80	4d10/15 L=61	91,51,44	
521	ok,ok	0.0	0.20	8.0	8.0	8.0	0.11	0.01	0.29	0.98	4d10/20 L=61	91,51,51	
	s=10,m=1	61.5	0.20	8.0	8.0	8.0	0.11	3.15e-03	0.28	0.97	4d10/20 L=61	84,51,51	
528	ok,ok	0.0	0.20	8.0	8.0	8.0	0.11	3.08e-03	0.27	0.93	4d10/20 L=61	84,51,51	
	s=10,m=1	61.5	0.20	8.0	8.0	8.0	0.11	2.97e-03	0.27	0.92	4d10/20 L=61	84,51,51	
535	ok,ok	0.0	0.20	8.0	8.0	8.0	0.11	2.94e-03	0.27	0.93	4d10/20 L=61	84,51,51	
	s=10,m=1	61.5	0.20	8.0	8.0	8.0	0.11	3.09e-03	0.26	0.91	4d10/20 L=61	84,51,51	
541	ok,ok	0.0	0.20	8.0	8.0	8.0	0.11	3.03e-03	0.28	0.96	4d10/20 L=61	84,59,59	
	s=10,m=1	61.5	0.20	8.0	8.0	8.0	0.11	3.30e-03	0.27	0.95	4d10/20 L=61	67,59,59	
350	ok,ok	0.0	0.20	8.0	8.0	8.0	0.11	3.27e-03	0.29	0.76	4d10/15 L=61	67,59,59	
	s=10,m=1	61.5	0.20	8.0	8.0	8.0	0.11	3.41e-03	0.29	0.75	4d10/15 L=61	8,59,59	
526	ok,ok	0.0	0.20	8.0	8.0	8.0	0.11	3.37e-03	0.31	0.80	4d10/15 L=61	8,51,51	
	s=10,m=1	61.5	0.20	8.0	8.0	8.0	0.11	2.29e-03	0.30	0.79	4d10/15 L=61	67,51,51	
476	ok,ok	0.0	0.20	8.0	8.0	12.1	0.11	2.28e-03	0.32	0.83	4d10/15 L=61	67,51,51	
	s=10,m=1	61.5	0.20	8.0	8.0	12.1	0.11	6.83e-03	0.32	0.82	4d10/15 L=61	84,51,51	
467	ok,ok	0.0	0.20	8.0	8.0	12.1	0.11	6.80e-03	0.33	0.86	4d10/15 L=61	84,51,51	
	s=10,m=1	61.5	0.20	8.0	8.0	12.1	0.11	0.02	0.33	0.85	4d10/15 L=61	84,51,51	
473	ok,ok	0.0	0.20	8.0	8.0	12.1	0.11	0.02	0.34	0.88	4d10/15 L=61	84,51,51	
	s=10,m=1	61.5	0.20	8.0	8.0	12.1	0.11	0.02	0.33	0.86	4d10/15 L=61	44,51,44	
478	ok,ok	0.0	0.20	8.0	8.0	12.1	0.11	0.02	0.36	0.94	4d10/15 L=61	44,51,51	
	s=10,m=1	61.5	0.20	8.0	8.0	12.1	0.11	0.09	0.35	0.90	4d10/15 L=61	91,51,51	
483	ok,ok	0.0	0.20	8.0	8.0	12.1	0.11	0.09	0.40	0.70	4d10/10 L=61	91,51,51	
	s=10,m=1	61.5	0.20	8.0	8.0	12.1	0.11	0.36	0.39	0.68	4d10/10 L=61	91,51,51	
369	ok,ok	0.0	0.20	8.0	8.0	8.0	0.11	0.38	0.30	0.54	4d10/10 L=58	84,67,67	
	s=10,m=1	58.5	0.20	8.0	8.0	8.0	0.11	0.23	0.29	0.51	4d10/10 L=58	51,60,67	
492	ok,ok	0.0	0.20	8.0	8.0	8.0	0.11	0.71	0.28	0.77	4d10/15 L=134	67,67,67	
	s=10,m=1	234.0	0.20	8.0	8.0	8.0	0.11	0.31	0.28	0.78	4d10/15 L=200	8,60,60	
		468.0	0.30	12.1	8.0	8.0	0.12	0.92	0.34	0.99	4d10/15 L=134	84,60,60	
508	ok,ok	0.0	0.20	8.0	8.0	8.0	0.11	0.30	0.27	0.89	4d10/20 L=58	84,60,60	
	s=10,m=1	58.5	0.20	8.0	8.0	8.0	0.11	0.53	0.29	0.97	4d10/20 L=58	8,60,60	
519	ok,ok	0.0	0.20	8.0	8.0	8.0	0.11	0.52	0.28	0.98	4d10/20 L=58	8,67,67	
	s=10,m=1	58.5	0.20	8.0	8.0	8.0	0.11	0.26	0.27	0.91	4d10/20 L=58	8,67,67	
503	ok,ok	0.0	0.20	8.0	8.0	8.0	0.11	0.26	0.28	0.94	4d10/20 L=58	8,67,67	
	s=10,m=1	58.5	0.20	8.0	8.0	8.0	0.11	0.08	0.26	0.87	4d10/20 L=58	84,67,67	
515	ok,ok	0.0	0.20	8.0	8.0	8.0	0.11	0.08	0.31	1.00	4d10/20 L=58	84,60,67	
	s=10,m=1	58.5	0.20	8.0	8.0	8.0	0.11	0.08	0.30	0.94	4d10/20 L=58	91,60,60	
523	ok,ok	0.0	0.20	8.0	8.0	12.1	0.11	0.08	0.40	0.32	4d10/5 L=58	91,67,67	
	s=10,m=1	58.5	0.20	8.0	8.0	12.1	0.11	0.15	0.40	0.33	4d10/5 L=58	91,60,60	
530	ok,ok	0.0	0.20	8.0	8.0	12.1	0.11	0.15	0.58	0.50	4d10/5 L=58	91,60,60	
	s=10,m=1	58.5	0.25	8.0	10.0	12.1	0.12	0.80	0.59	0.52	4d10/5 L=58	84,60,60	
							M_T= 136	**Z=0.0**	**N=174**	**N=262**			
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe	Rif. cmb	
221	ok,ok	0.0	0.20	8.0	8.0	12.1	0.11	8.73e-06	0.45	0.81	4d10/10 L=129	8,67,67	
	s=10,m=1	236.8	0.20	8.0	8.0	12.1	0.11	0.31	0.43	0.77	4d10/10 L=215	8,67,67	
		473.5	0.20	8.0	8.0	12.1	0.11	8.45e-06	0.46	0.84	4d10/10 L=129	73,60,60	
							M_T= 139	**Z=0.0**	**N=176**	**N=208**			
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe	Rif. cmb	
224	ok,ok	0.0	0.20	8.0	8.0	16.1	0.11	1.18e-05	0.55	0.49	4d10/5 L=44	83,51,51	
	s=10,m=1	337.5	0.20	8.0	8.0	16.1	0.11	0.51	0.52	0.46	4d10/5 L=587	87,44,44	
		675.0	0.20	8.0	8.0	16.1	0.11	1.64e-05	0.57	0.51	4d10/5 L=44	87,44,44	
							M_T= 141	**Z=0.0**	**N=178**	**N=1100**			
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe	Rif. cmb	
227	ok,ok	0.0	0.20	8.0	8.0	12.1	0.11	1.91e-05	0.42	0.38	4d10/5 L=129	49,67,67	

	s=10,m=1	236.8	0.30	8.0	12.1	12.1	0.12	0.37	0.39	0.35	4d10/5 L=215	49,60,60	
		473.5	0.20	8.0	8.0	12.1	0.11	2.02e-05	0.43	0.40	4d10/5 L=129	49,60,60	
							M_T= 143	**Z=0.0**	**N=175**	**N=248**			
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe	Rif. cmb	
235	ok,ok	0.0	0.40	10.1	6.0	8.0	0.14	0.61	0.41	0.31	2d10/5 L=170	7,45,45	
	s=8,m=1	200.0	0.24	6.0	6.0	8.0	0.12	0.55	0.43	0.34	2d10/5 L=170	51,45,45	
546	ok,ok	0.0	0.20	8.0	8.0	8.0	0.11	2.83e-05	0.28	0.26	4d10/5 L=44	51,51,51	
	s=10,m=1	307.3	0.25	8.0	10.0	8.0	0.12	0.64	0.23	0.20	4d10/5 L=526	51,51,51	
		614.5	0.20	8.0	8.0	8.0	0.11	2.49e-05	0.25	0.24	4d10/5 L=44	51,44,44	
							M_T= 174	**Z=0.0**	**N=285**	**N=288**			
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe	Rif. cmb	
365	ok,ok	0.0	0.20	8.0	8.0	16.1	0.11	0.33	0.55	0.95	4d10/10 L=67	59,100,100	
	s=10,m=1	66.7	0.20	8.0	8.0	16.1	0.11	0.21	0.56	0.97	4d10/10 L=67	44,100,100	
491	ok,ok	0.0	0.20	8.0	8.0	16.1	0.11	0.21	0.52	0.89	4d10/10 L=67	44,100,100	
	s=10,m=1	66.7	0.20	8.0	8.0	16.1	0.11	0.06	0.53	0.90	4d10/10 L=67	44,100,100	
502	ok,ok	0.0	0.20	8.0	8.0	16.1	0.11	0.06	0.51	0.87	4d10/10 L=67	44,100,100	
	s=10,m=1	66.7	0.20	8.0	8.0	16.1	0.11	0.03	0.51	0.88	4d10/10 L=67	52,100,100	
514	ok,ok	0.0	0.20	8.0	8.0	16.1	0.11	0.03	0.49	0.85	4d10/10 L=67	52,100,100	
	s=10,m=1	66.7	0.20	8.0	8.0	16.1	0.11	0.02	0.50	0.86	4d10/10 L=67	52,100,100	
522	ok,ok	0.0	0.20	8.0	8.0	16.1	0.11	0.02	0.47	0.81	4d10/10 L=67	52,100,100	
	s=10,m=1	66.7	0.20	8.0	8.0	16.1	0.11	8.94e-03	0.47	0.82	4d10/10 L=67	60,100,100	
529	ok,ok	0.0	0.20	8.0	8.0	12.1	0.11	8.86e-03	0.43	0.76	4d10/10 L=67	60,100,100	
	s=10,m=1	66.7	0.20	8.0	8.0	12.1	0.11	8.72e-03	0.44	0.77	4d10/10 L=67	84,100,100	
536	ok,ok	0.0	0.20	8.0	8.0	12.1	0.11	8.60e-03	0.39	0.69	4d10/10 L=67	84,100,100	
	s=10,m=1	66.7	0.20	8.0	8.0	12.1	0.11	8.98e-03	0.40	0.70	4d10/10 L=67	76,100,100	
542	ok,ok	0.0	0.20	8.0	8.0	12.1	0.11	8.89e-03	0.35	0.60	4d10/10 L=67	76,100,100	
	s=10,m=1	66.7	0.20	8.0	8.0	12.1	0.11	9.76e-03	0.35	0.62	4d10/10 L=67	76,100,100	
352	ok,ok	0.0	0.20	8.0	8.0	8.0	0.11	9.66e-03	0.29	0.50	4d10/10 L=67	76,100,100	
	s=10,m=1	66.7	0.20	8.0	8.0	8.0	0.11	0.01	0.30	0.51	4d10/10 L=67	76,100,100	
533	ok,ok	0.0	0.20	8.0	8.0	8.0	0.11	0.01	0.23	0.74	4d10/20 L=67	76,100,100	
	s=10,m=1	66.7	0.20	8.0	8.0	8.0	0.11	0.02	0.24	0.78	4d10/20 L=67	44,100,100	
481	ok,ok	0.0	0.20	8.0	8.0	4.0	0.11	0.02	0.17	0.51	4d10/20 L=67	44,84,84	
	s=10,m=1	66.7	0.20	8.0	8.0	4.0	0.11	0.04	0.18	0.55	4d10/20 L=67	46,84,84	
468	ok,ok	0.0	0.20	8.0	8.0	0.0	0.11	0.04	0.14	0.05	4d10/20 L=67	46,84,83	
	s=10,m=1	66.7	0.20	8.0	8.0	0.0	0.11	8.20e-03	0.13	7.82e-03	4d10/20 L=67	44,84,51	
474	ok,ok	0.0	0.20	8.0	8.0	0.0	0.11	0.07	0.17	0.11	4d10/20 L=44	44,100,83	
	s=10,m=1	66.7	0.20	8.0	8.0	0.0	0.11	0.03	0.24	0.02	4d10/20 L=45	83,100,51	
		133.3	0.20	8.0	8.0	0.0	0.11	0.06	0.17	0.04	4d10/20 L=44	83,100,44	
479	ok,ok	0.0	0.20	8.0	8.0	8.0	0.11	0.06	0.22	0.61	4d10/20 L=67	83,100,100	
	s=10,m=1	66.7	0.20	8.0	8.0	8.0	0.11	0.11	0.21	0.58	4d10/20 L=67	83,100,68	
371	ok,ok	0.0	0.20	8.0	8.0	24.1	0.11	0.07	0.89	0.74	4d10/5 L=67	51,100,100	
	s=10,m=1	66.7	0.20	8.0	8.0	24.1	0.11	0.03	0.91	0.75	4d10/5 L=67	44,100,100	
494	ok,ok	0.0	0.20	8.0	8.0	20.1	0.11	0.03	0.74	0.61	4d10/5 L=67	44,91,107	
	s=10,m=1	66.7	0.20	8.0	8.0	20.1	0.11	0.02	0.74	0.62	4d10/5 L=67	6,100,100	
505	ok,ok	0.0	0.20	8.0	8.0	16.1	0.11	0.02	0.61	0.50	4d10/5 L=67	6,91,91	
	s=10,m=1	66.7	0.20	8.0	8.0	16.1	0.11	0.02	0.62	0.50	4d10/5 L=67	84,84,84	
517	ok,ok	0.0	0.20	8.0	8.0	16.1	0.11	0.02	0.49	0.81	4d10/10 L=67	84,84,84	
	s=10,m=1	66.7	0.20	8.0	8.0	16.1	0.11	0.01	0.50	0.82	4d10/10 L=67	84,84,84	
525	ok,ok	0.0	0.20	8.0	8.0	12.1	0.11	0.01	0.38	0.63	4d10/10 L=67	84,84,84	
	s=10,m=1	66.7	0.20	8.0	8.0	12.1	0.11	9.86e-03	0.39	0.64	4d10/10 L=67	84,84,84	
532	ok,ok	0.0	0.20	8.0	8.0	8.0	0.11	9.84e-03	0.27	0.90	4d10/20 L=67	84,84,84	
	s=10,m=1	66.7	0.20	8.0	8.0	8.0	0.11	9.32e-03	0.28	0.92	4d10/20 L=67	84,84,84	
538	ok,ok	0.0	0.20	8.0	8.0	8.0	0.11	9.29e-03	0.17	0.61	4d10/20 L=67	84,60,60	
	s=10,m=1	66.7	0.20	8.0	8.0	8.0	0.11	9.13e-03	0.18	0.63	4d10/20 L=67	84,60,60	
544	ok,ok	0.0	0.20	8.0	8.0	0.0	0.11	9.15e-03	0.14	0.03	4d10/20 L=67	76,68,8	
	s=10,m=1	66.7	0.20	8.0	8.0	0.0	0.11	8.97e-03	0.14	0.03	4d10/20 L=67	76,68,8	
495	ok,ok	0.0	0.20	8.0	8.0	8.0	0.11	8.96e-03	0.17	0.59	4d10/20 L=67	84,100,100	
	s=10,m=1	66.7	0.20	8.0	8.0	8.0	0.11	8.85e-03	0.17	0.58	4d10/20 L=67	84,100,100	
348	ok,ok	0.0	0.20	8.0	8.0	8.0	0.11	8.84e-03	0.28	0.93	4d10/20 L=67	84,100,100	
	s=10,m=1	66.7	0.20	8.0	8.0	8.0	0.11	9.12e-03	0.27	0.92	4d10/20 L=67	84,100,100	
506	ok,ok	0.0	0.20	8.0	8.0	12.1	0.11	9.10e-03	0.38	0.64	4d10/10 L=67	84,100,100	
	s=10,m=1	66.7	0.20	8.0	8.0	12.1	0.11	0.01	0.38	0.64	4d10/10 L=67	84,100,100	
470	ok,ok	0.0	0.20	8.0	8.0	16.1	0.11	0.01	0.50	0.83	4d10/10 L=67	84,100,100	
	s=10,m=1	66.7	0.20	8.0	8.0	16.1	0.11	0.01	0.49	0.83	4d10/10 L=67	84,100,100	
475	ok,ok	0.0	0.20	8.0	8.0	16.1	0.11	0.01	0.61	0.51	4d10/5 L=67	84,100,100	
	s=10,m=1	66.7	0.20	8.0	8.0	16.1	0.11	0.02	0.61	0.51	4d10/5 L=67	84,100,100	
480	ok,ok	0.0	0.20	8.0	8.0	20.1	0.11	0.02	0.73	0.61	4d10/5 L=67	84,100,100	
	s=10,m=1	66.7	0.20	8.0	8.0	20.1	0.11	9.37e-03	0.73	0.60	4d10/5 L=67	51,100,100	
466	ok,ok	0.0	0.20	8.0	8.0	24.1	0.11	9.35e-03	0.87	0.72	4d10/5 L=67	51,100,100	
	s=10,m=1	66.7	0.20	8.0	8.0	24.1	0.11	0.07	0.86	0.71	4d10/5 L=67	51,100,100	
370	ok,ok	0.0	0.20	8.0	8.0	8.0	0.11	0.07	0.26	0.18	4d10/5 L=67	51,91,91	
	s=10,m=1	66.7	0.20	8.0	8.0	8.0	0.11	9.26e-03	0.27	0.19	4d10/5 L=67	44,91,91	
493	ok,ok	0.0	0.20	8.0	8.0	0.0	0.11	9.30e-03	0.14	4.22e-03	4d10/5 L=67	44,91,51	
	s=10,m=1	66.7	0.20	8.0	8.0	0.0	0.11	0.02	0.15	0.01	4d10/5 L=67	6,91,8	
504	ok,ok	0.0	0.20	8.0	8.0	0.0	0.11	0.02	0.15	0.03	4d10/20 L=67	6,107,83	

	s=10,m=1	66.7	0.20	8.0	8.0	0.0	0.11	0.03	0.15	0.03	4d10/20 L=67	76,107,44	
516	ok,ok	0.0	0.20	8.0	8.0	8.0	0.11	0.03	0.23	0.75	4d10/20 L=67	76,91,107	
	s=10,m=1	66.7	0.20	8.0	8.0	8.0	0.11	0.05	0.22	0.69	4d10/20 L=67	76,91,107	
524	ok,ok	0.0	0.20	8.0	8.0	8.0	0.11	0.05	0.31	0.77	4d10/15 L=67	76,91,91	
	s=10,m=1	66.7	0.20	8.0	8.0	8.0	0.11	0.06	0.30	0.72	4d10/15 L=67	83,91,91	
531	ok,ok	0.0	0.20	8.0	8.0	12.1	0.11	0.18	0.34	0.90	4d10/15 L=84	83,91,91	
	s=10,m=1	133.3	0.20	8.0	8.0	8.0	0.11	0.09	0.32	0.82	4d10/15 L=98	8,91,84	
		266.7	0.20	8.0	8.0	8.0	0.11	0.24	0.33	0.90	4d10/15 L=84	76,84,84	
537	ok,ok	0.0	0.20	8.0	8.0	12.1	0.11	0.05	0.33	0.86	4d10/15 L=67	44,91,91	
	s=10,m=1	66.7	0.20	8.0	8.0	12.1	0.11	0.10	0.34	0.88	4d10/15 L=67	76,91,91	
543	ok,ok	0.0	0.20	8.0	8.0	12.1	0.11	0.10	0.39	0.68	4d10/10 L=67	76,91,91	
	s=10,m=1	66.7	0.20	8.0	8.0	12.1	0.11	0.05	0.37	0.65	4d10/10 L=67	8,91,91	
487	ok,ok	0.0	0.20	8.0	8.0	12.1	0.11	0.05	0.41	0.71	4d10/10 L=67	8,91,91	
	s=10,m=1	66.7	0.20	8.0	8.0	12.1	0.11	0.03	0.40	0.68	4d10/10 L=67	44,91,91	
539	ok,ok	0.0	0.20	8.0	8.0	12.1	0.11	0.03	0.42	0.72	4d10/10 L=67	44,91,91	
	s=10,m=1	66.7	0.20	8.0	8.0	12.1	0.11	0.02	0.42	0.71	4d10/10 L=67	44,91,91	
499	ok,ok	0.0	0.20	8.0	8.0	12.1	0.11	0.02	0.44	0.37	4d10/5 L=67	44,91,91	
	s=10,m=1	66.7	0.20	8.0	8.0	12.1	0.11	0.14	0.43	0.36	4d10/5 L=67	44,84,84	
469	ok,ok	0.0	0.20	8.0	8.0	12.1	0.11	0.14	0.46	0.79	4d10/10 L=67	44,91,91	
	s=10,m=1	66.7	0.20	8.0	8.0	12.1	0.11	0.63	0.45	0.77	4d10/10 L=67	51,84,84	
							M_T= 177	**Z=0.0**	**N=171**	**N=261**			
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe	Rif. cmb	
355	ok,ok	0.0	0.20	8.0	8.0	12.1	0.11	1.63e-05	0.41	0.74	4d10/10 L=44	91,51,51	
	s=10,m=1	307.3	0.20	8.0	8.0	12.1	0.11	0.52	0.38	0.68	4d10/10 L=526	91,44,44	
		614.5	0.20	8.0	8.0	12.1	0.11	1.24e-05	0.41	0.74	4d10/10 L=44	7,44,44	
							M_T= 178	**Z=0.0**	**N=259**	**N=263**			
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe	Rif. cmb	
356	ok,ok	0.0	0.27	4.0	4.0	8.0	0.12	0.31	0.68	0.90	2d10/10 L=44	48,44,44	
	s=2,m=1	67.0	0.27	4.0	4.0	8.0	0.12	0.02	0.68	0.90	2d10/10 L=46	67,44,44	
		134.0	0.27	4.0	4.0	8.0	0.12	0.02	0.68	0.91	2d10/10 L=44	85,44,44	
							M_T= 179	**Z=0.0**	**N=257**	**N=258**			
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe	Rif. cmb	
357	ok,ok	0.0	0.27	4.0	4.0	4.0	0.12	0.01	0.25	0.34	2d10/10 L=64	10,51,51	
	s=2,m=1	83.0	0.27	4.0	4.0	4.0	0.12	0.03	0.25	0.33	2d10/10 L=38	1,51,51	
		166.0	0.27	4.0	4.0	4.0	0.12	0.10	0.25	0.34	2d10/10 L=64	255,83,83	
							M_T= 170	**Z=350.0**	**N=255**	**N=256**			
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe	Rif. cmb	
341	ok,ok	0.0	0.43	7.1	7.1	0.0	0.11	0.03	0.42	0.74	2d8/5 L=141	91,49,267	
	s=7,m=1	156.0	0.43	7.1	7.1	0.0	0.11	0.78	0.43	0.75	2d8/5 L=141	7,49,267	
346	ok,ok	0.0	0.43	7.1	7.1	0.0	0.11	0.42	0.40	0.69	2d8/5 L=141	7,49,267	
	s=7,m=1	156.0	0.43	7.1	7.1	0.0	0.11	0.03	0.40	0.70	2d8/5 L=141	67,49,267	
Trave			**%Af**	**Af inf.**	**Af. sup**	**Af long.**	**x/d**	**V N/M**	**V V/T cls**	**V V/T acc**			
			0.94	20.10	12.06	24.13	0.24	0.98	0.91	1.00			

Trave	**M negativo i**	**M positivo i**	**M negativo f**	**M positivo f**	**Luce per V**	**V M-i M+f**	**V M+i M-f**	**VEd,min**	**VEd,max**	**Vr1**	**As**
	kN m	kN m	kN m	kN m	cm	kN	kN	kN	kN	kN	cm2
341	131.56	131.56	131.56	131.56	141.00	223.94	223.94	0.0	0.0	0.0	0.0
346	131.56	131.56	131.56	131.56	141.00	223.94	223.94	0.0	0.0	0.0	0.0
Trave	**M negativo i**	**M positivo i**	**M negativo f**	**M positivo f**		**V M-i M+f**	**V M+i M-f**	**VEd,min**	**VEd,max**	**Vr1**	**As**
								0.0			
	131.56	131.56	131.56	131.56		223.94	223.94		0.0	0.0	0.0

STATI LIMITE D' ESERCIZIO

LEGENDA TABELLA STATI LIMITE D' ESERCIZIO

In tabella vengono riportati i valori di interesse per il controllo degli stati limite d'esercizio.

In particolare vengono riportati, in relazione al tipo di elemento strutturale, i risultati relativi alle tre categorie di combinazione considerate:

- Combinazioni rare
- Combinazioni frequenti
- Combinazioni quasi permanenti.

I valori di interesse sono i seguenti:

rRfck	rapporto tra la massima compressione nel calcestruzzo e la tensione fck in combinazioni rare [*normalizzato a 1*]
rRfyk	rapporto tra la massima tensione nell'acciaio e la tensione fyk in combinazioni rare [*normalizzato a 1*]
rPfck	rapporto tra la massima compressione nel calcestruzzo e la tensione fck 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*]
dR	massima deformazione in combinazioni rare
dF	massima deformazione in combinazioni frequenti
dP	massima deformazione in combinazioni quasi permanenti

Per ognuno dei nove valori soprariportati viene indicata (Rif.cmb) la combinazione in cui si è verificato.

In relazione al tipo di elemento strutturale i valori sono selezionati nel modo seguente:

pilastri	**rRfck**	**rRfyk**	**rPfck**	per sezioni significative
travi	**rRfck**	**rRfyk**	**rPfck**	per sezioni significative
	wR	**wF**	**wP**	per sezioni significative
	dR	**dF**	**dP**	massimi in campata
setti e gusci	**rRfck**	**rRfyk**	**rPfck**	massimi nei nodi dell'elemento
	wR	**wF**	**wP**	massimi nei nodi dell'elemento

Si precisa che i valori di massima deformazione per travi sono riferiti al piano verticale (piano locale 1-2 con momenti flettenti 3-3).

Pilas.	Pos.	rRfck	rRfyk	rPfck	Rif. cmb	Pos.	rRfck	rRfyk	rPfck	Rif. cmb
	cm					cm				
345	0.0	0.08	0.05	0.09	19,19,42	175.0	0.13	0.07	0.13	13,13,40
	350.0	0.27	0.15	0.27	13,13,40					
Pilas.		**rRfck**	**rRfyk**	**rPfck**			**rRfck**	**rRfyk**	**rPfck**	
		0.27	0.15	0.27						

Trave	Pos.	rRfck	rRfyk	rPfck	Rif. cmb	wR	wF	wP	Rif. cmb	dR	dF	dP	Rif. cmb
	cm					mm	mm	mm		mm	mm	mm	
8	0.0	0.0	0.02	0.0	0,20,0	0.0	0.0	0.0	0,0,0	2.05	1.95	1.95	20,39,43
	337.5	0.19	0.41	0.23	14,14,40	0.0	0.0	0.0	0,0,0				
	675.0	0.0	0.02	0.0	0,20,0	0.0	0.0	0.0	0,0,0				
9	0.0	0.0	0.02	0.0	0,20,0	0.0	0.0	0.0	0,0,0	-2.83	-3.01	-3.01	21,36,42
	337.5	0.16	0.35	0.21	14,14,40	0.0	0.0	0.0	0,0,0				
	675.0	0.0	0.02	0.0	0,20,0	0.0	0.0	0.0	0,0,0				
12	0.0	0.0	0.01	0.0	0,20,0	0.0	0.0	0.0	0,0,0	-1.95	-1.52	-1.42	17,30,41
	250.0	0.10	0.20	0.11	17,20,41	0.0	0.0	0.0	0,0,0				
	500.0	0.0	0.01	0.0	0,20,0	0.0	0.0	0.0	0,0,0				
14	0.0	0.0	0.01	0.0	0,20,0	0.0	0.0	0.0	0,0,0	1.92	-1.50	-1.40	14,26,40
	250.0	0.10	0.20	0.11	23,20,43	0.0	0.0	0.0	0,0,0				
	500.0	0.0	0.01	0.0	0,20,0	0.0	0.0	0.0	0,0,0				
19	0.0	0.0	0.04	0.0	0,19,0	0.0	0.0	0.0	0,0,0	2.77	2.64	2.61	14,26,40
	362.5	0.23	0.57	0.29	14,20,40	0.0	0.0	0.0	0,0,0				
	725.0	0.0	0.04	0.0	0,19,0	0.0	0.0	0.0	0,0,0				
24	0.0	0.0	0.02	0.0	0,14,0	0.0	0.0	0.0	0,0,0	2.83	3.01	3.01	13,27,40
	337.5	0.16	0.35	0.21	17,17,41	0.0	0.0	0.0	0,0,0				
	675.0	0.0	0.02	0.0	0,14,0	0.0	0.0	0.0	0,0,0				
25	0.0	0.0	0.02	0.0	0,14,0	0.0	0.0	0.0	0,0,0	2.05	1.95	1.95	14,27,40
	337.5	0.19	0.41	0.23	20,20,42	0.0	0.0	0.0	0,0,0				
	675.0	0.0	0.02	0.0	0,14,0	0.0	0.0	0.0	0,0,0				
30	0.0	0.0	9.35e-03	0.0	0,20,0	0.0	0.0	0.0	0,0,0	0.72	0.64	0.62	17,26,40
	250.0	0.11	0.23	0.13	17,20,41	0.0	0.0	0.0	0,0,0				
	500.0	0.0	9.35e-03	0.0	0,20,0	0.0	0.0	0.0	0,0,0				
32	0.0	0.0	9.48e-03	0.0	0,20,0	0.0	0.0	0.0	0,0,0	0.72	0.64	0.62	23,38,43
	250.0	0.11	0.23	0.13	23,20,43	0.0	0.0	0.0	0,0,0				
	500.0	0.0	9.48e-03	0.0	0,20,0	0.0	0.0	0.0	0,0,0				
40	0.0	0.0	6.26e-03	0.0	0,20,0	0.0	0.0	0.0	0,0,0	0.72	0.64	0.62	17,30,41
	250.0	0.12	0.23	0.13	17,20,41	0.0	0.0	0.0	0,0,0				
	500.0	0.0	6.26e-03	0.0	0,20,0	0.0	0.0	0.0	0,0,0				

Trave	Pos.	rRfck	rRfyk	rPfck	Rif. cmb	wR	wF	wP	Rif. cmb	dR	dF	dP	Rif. cmb
42	0.0	0.0	6.47e-03	0.0	0,14,0	0.0	0.0	0.0	0,0,0	0.72	0.64	0.62	23,38,43
	250.0	0.12	0.23	0.13	23,20,43	0.0	0.0	0.0	0,0,0				
	500.0	0.0	6.47e-03	0.0	0,14,0	0.0	0.0	0.0	0,0,0				
50	0.0	1.22e-04	4.44e-03	4.67e-05	16,20,41	0.0	0.0	0.0	0,0,0	0.75	0.66	0.64	17,30,41
	250.0	0.12	0.23	0.14	17,17,41	0.0	0.0	0.0	0,0,0				
	500.0	1.22e-04	4.44e-03	4.67e-05	16,20,41	0.0	0.0	0.0	0,0,0				
52	0.0	0.0	4.78e-03	0.0	0,20,0	0.0	0.0	0.0	0,0,0	0.72	0.64	0.62	23,38,43
	250.0	0.12	0.23	0.13	23,20,43	0.0	0.0	0.0	0,0,0				
	500.0	0.0	4.78e-03	0.0	0,20,0	0.0	0.0	0.0	0,0,0				
60	0.0	0.0	9.34e-03	0.0	0,17,0	0.0	0.0	0.0	0,0,0	0.75	0.66	0.64	17,30,41
	250.0	0.12	0.24	0.14	17,17,41	0.0	0.0	0.0	0,0,0				
	500.0	0.0	9.34e-03	0.0	0,17,0	0.0	0.0	0.0	0,0,0				
62	0.0	0.0	4.32e-03	0.0	0,20,0	0.0	0.0	0.0	0,0,0	0.73	0.64	0.62	17,30,41
	250.0	0.12	0.23	0.13	23,20,43	0.0	0.0	0.0	0,0,0				
	500.0	0.0	4.32e-03	0.0	0,20,0	0.0	0.0	0.0	0,0,0				
70	0.0	0.0	6.55e-03	0.0	0,17,0	0.0	0.0	0.0	0,0,0	0.73	0.64	0.62	20,34,42
	250.0	0.12	0.23	0.13	14,17,40	0.0	0.0	0.0	0,0,0				
	500.0	0.0	6.55e-03	0.0	0,17,0	0.0	0.0	0.0	0,0,0				
72	0.0	0.0	4.80e-03	0.0	0,20,0	0.0	0.0	0.0	0,0,0	0.74	0.66	0.64	20,26,40
	250.0	0.12	0.24	0.14	14,20,40	0.0	0.0	0.0	0,0,0				
	500.0	0.0	4.80e-03	0.0	0,20,0	0.0	0.0	0.0	0,0,0				
80	0.0	0.0	5.49e-03	0.0	0,17,0	0.0	0.0	0.0	0,0,0	0.72	0.64	0.62	14,26,40
	250.0	0.12	0.23	0.13	23,17,43	0.0	0.0	0.0	0,0,0				
	500.0	0.0	5.49e-03	0.0	0,17,0	0.0	0.0	0.0	0,0,0				
82	0.0	0.0	4.30e-03	0.0	0,20,0	0.0	0.0	0.0	0,0,0	0.72	0.65	0.63	20,34,42
	250.0	0.12	0.23	0.13	20,20,42	0.0	0.0	0.0	0,0,0				
	500.0	0.0	4.30e-03	0.0	0,20,0	0.0	0.0	0.0	0,0,0				
90	0.0	0.0	5.78e-03	0.0	0,20,0	0.0	0.0	0.0	0,0,0	0.72	0.64	0.62	14,26,40
	250.0	0.12	0.23	0.13	23,20,43	0.0	0.0	0.0	0,0,0				
	500.0	0.0	5.78e-03	0.0	0,20,0	0.0	0.0	0.0	0,0,0				
92	0.0	0.0	6.08e-03	0.0	0,20,0	0.0	0.0	0.0	0,0,0	0.71	0.63	0.61	17,30,41
	250.0	0.11	0.23	0.13	14,20,40	0.0	0.0	0.0	0,0,0				
	500.0	0.0	6.08e-03	0.0	0,20,0	0.0	0.0	0.0	0,0,0				
100	0.0	0.0	9.59e-03	0.0	0,20,0	0.0	0.0	0.0	0,0,0	1.03	0.86	0.76	16,29,41
	250.0	0.10	0.17	0.12	14,20,40	0.0	0.0	0.0	0,0,0				
	500.0	0.0	9.59e-03	0.0	0,20,0	0.0	0.0	0.0	0,0,0				
102	0.0	0.0	9.11e-03	0.0	0,20,0	0.0	0.0	0.0	0,0,0	0.69	0.61	0.60	20,34,42
	250.0	0.11	0.22	0.13	17,17,41	0.0	0.0	0.0	0,0,0				
	500.0	0.0	9.11e-03	0.0	0,20,0	0.0	0.0	0.0	0,0,0				
110	0.0	0.0	0.02	0.0	0,20,0	0.0	0.0	0.0	0,0,0	0.77	0.69	0.68	20,34,42
	250.0	0.14	0.33	0.16	17,20,41	0.0	0.0	0.0	0,0,0				
	500.0	0.0	0.02	0.0	0,20,0	0.0	0.0	0.0	0,0,0				
112	0.0	0.0	0.01	0.0	0,17,0	0.0	0.0	0.0	0,0,0	1.60	1.32	1.24	17,30,41
	250.0	0.09	0.19	0.11	17,17,41	0.0	0.0	0.0	0,0,0				
	500.0	0.0	0.01	0.0	0,17,0	0.0	0.0	0.0	0,0,0				
119	0.0	0.0	0.02	0.0	0,17,0	0.0	0.0	0.0	0,0,0	-1.07	0.65	0.62	14,26,40
	250.0	0.12	0.25	0.13	14,17,40	0.0	0.0	0.0	0,0,0				
	500.0	0.0	0.02	0.0	0,17,0	0.0	0.0	0.0	0,0,0				
124	0.0	0.0	0.01	0.0	0,17,0	0.0	0.0	0.0	0,0,0	0.84	0.68	0.64	14,26,40
	250.0	0.13	0.27	0.14	14,14,40	0.0	0.0	0.0	0,0,0				
	500.0	0.0	0.01	0.0	0,17,0	0.0	0.0	0.0	0,0,0				
129	0.0	0.0	0.02	0.0	0,14,0	0.0	0.0	0.0	0,0,0	0.84	0.68	0.64	14,26,40
	250.0	0.13	0.28	0.14	14,14,40	0.0	0.0	0.0	0,0,0				
	500.0	0.0	0.02	0.0	0,14,0	0.0	0.0	0.0	0,0,0				
134	0.0	0.0	0.01	0.0	0,14,0	0.0	0.0	0.0	0,0,0	0.82	0.66	0.62	17,30,41
	250.0	0.13	0.27	0.13	20,14,42	0.0	0.0	0.0	0,0,0				
	500.0	0.0	0.01	0.0	0,14,0	0.0	0.0	0.0	0,0,0				
139	0.0	0.0	7.90e-03	0.0	0,14,0	0.0	0.0	0.0	0,0,0	0.84	0.67	0.63	20,34,42
	250.0	0.13	0.27	0.14	20,14,42	0.0	0.0	0.0	0,0,0				
	500.0	0.0	7.90e-03	0.0	0,14,0	0.0	0.0	0.0	0,0,0				
144	0.0	0.0	6.76e-03	0.0	0,14,0	0.0	0.0	0.0	0,0,0	0.81	0.65	0.61	23,38,43
	250.0	0.13	0.26	0.13	20,14,42	0.0	0.0	0.0	0,0,0				
	500.0	0.0	6.76e-03	0.0	0,14,0	0.0	0.0	0.0	0,0,0				
149	0.0	0.0	5.61e-03	0.0	0,14,0	0.0	0.0	0.0	0,0,0	0.79	0.64	0.60	20,34,42
	250.0	0.13	0.25	0.13	20,14,42	0.0	0.0	0.0	0,0,0				
	500.0	0.0	5.61e-03	0.0	0,14,0	0.0	0.0	0.0	0,0,0				
154	0.0	0.0	8.02e-03	0.0	0,14,0	0.0	0.0	0.0	0,0,0	0.81	0.65	0.61	20,34,42
	250.0	0.13	0.26	0.13	20,14,42	0.0	0.0	0.0	0,0,0				
	500.0	0.0	8.02e-03	0.0	0,14,0	0.0	0.0	0.0	0,0,0				
159	0.0	0.0	0.01	0.0	0,14,0	0.0	0.0	0.0	0,0,0	0.76	0.61	0.61	23,33,42
	250.0	0.11	0.17	0.11	20,14,42	0.0	0.0	0.0	0,0,0				
	500.0	0.0	0.01	0.0	0,14,0	0.0	0.0	0.0	0,0,0				
164	0.0	0.0	0.01	0.0	0,14,0	0.0	0.0	0.0	0,0,0	-1.47	-1.68	-1.65	13,25,40
	250.0	0.14	0.27	0.15	20,20,42	0.0	0.0	0.0	0,0,0				

Trave	Pos.	rRfck	rRfyk	rPfck	Rif. cmb	wR	wF	wP	Rif. cmb	dR	dF	dP	Rif. cmb
	500.0	0.0	0.01	0.0	0,14,0	0.0	0.0	0.0	0,0,0				
170	0.0	0.0	0.01	0.0	0,14,0	0.0	0.0	0.0	0,0,0	7.53	6.39	6.11	17,30,41
	900.0	0.06	0.13	0.06	17,14,41	0.0	0.0	0.0	0,0,0				
	1800.0	0.0	0.01	0.0	0,14,0	0.0	0.0	0.0	0,0,0				
173	0.0	0.0	0.01	0.0	0,17,0	0.0	0.0	0.0	0,0,0	7.53	6.39	6.11	14,26,40
	900.0	0.06	0.13	0.06	14,17,40	0.0	0.0	0.0	0,0,0				
	1800.0	0.0	0.01	0.0	0,17,0	0.0	0.0	0.0	0,0,0				
176	0.0	0.0	0.02	0.0	0,14,0	0.0	0.0	0.0	0,0,0	7.85	6.62	6.32	14,26,40
	900.0	0.06	0.14	0.06	14,14,40	0.0	0.0	0.0	0,0,0				
	1800.0	0.0	0.02	0.0	0,14,0	0.0	0.0	0.0	0,0,0				
179	0.0	0.0	0.01	0.0	0,17,0	0.0	0.0	0.0	0,0,0	7.91	6.66	6.37	14,26,40
	900.0	0.06	0.13	0.06	14,17,40	0.0	0.0	0.0	0,0,0				
	1800.0	0.0	0.01	0.0	0,17,0	0.0	0.0	0.0	0,0,0				
182	0.0	0.0	0.01	0.0	0,14,0	0.0	0.0	0.0	0,0,0	7.63	6.45	6.15	17,30,41
	900.0	0.06	0.13	0.06	17,14,41	0.0	0.0	0.0	0,0,0				
	1800.0	0.0	0.01	0.0	0,14,0	0.0	0.0	0.0	0,0,0				
185	0.0	0.0	0.01	0.0	0,17,0	0.0	0.0	0.0	0,0,0	7.63	6.45	6.15	23,38,43
	900.0	0.06	0.13	0.06	14,17,40	0.0	0.0	0.0	0,0,0				
	1800.0	0.0	0.01	0.0	0,17,0	0.0	0.0	0.0	0,0,0				
188	0.0	0.0	0.02	0.0	0,17,0	0.0	0.0	0.0	0,0,0	7.65	6.46	6.16	17,30,41
	900.0	0.06	0.13	0.06	14,17,40	0.0	0.0	0.0	0,0,0				
	1800.0	0.0	0.02	0.0	0,17,0	0.0	0.0	0.0	0,0,0				
191	0.0	0.0	0.02	0.0	0,17,0	0.0	0.0	0.0	0,0,0	7.83	6.60	6.30	17,30,41
	900.0	0.06	0.14	0.06	17,17,41	0.0	0.0	0.0	0,0,0				
	1800.0	0.0	0.02	0.0	0,17,0	0.0	0.0	0.0	0,0,0				
194	0.0	0.0	0.01	0.0	0,17,0	0.0	0.0	0.0	0,0,0	7.86	6.62	6.31	17,30,41
	900.0	0.06	0.13	0.06	17,17,41	0.0	0.0	0.0	0,0,0				
	1800.0	0.0	0.01	0.0	0,17,0	0.0	0.0	0.0	0,0,0				
197	0.0	0.0	0.01	0.0	0,17,0	0.0	0.0	0.0	0,0,0	7.87	6.63	6.32	23,38,43
	900.0	0.06	0.13	0.06	23,17,43	0.0	0.0	0.0	0,0,0				
	1800.0	0.0	0.01	0.0	0,17,0	0.0	0.0	0.0	0,0,0				
200	0.0	0.07	0.15	0.08	20,20,42	0.0	0.0	0.0	0,0,0	-0.29	-0.25	-0.24	20,34,42
	61.5	0.0	0.08	0.0	0,20,0	0.0	0.0	0.0	0,0,0				
203	0.0	0.0	8.57e-03	0.0	0,20,0	0.0	0.0	0.0	0,0,0	7.40	6.25	5.96	23,38,43
	1800.0	0.0	8.57e-03	0.0	0,20,0	0.0	0.0	0.0	0,0,0				
206	0.0	0.0	0.04	0.0	0,14,0	0.0	0.0	0.0	0,0,0	4.79	3.82	3.68	17,34,42
	461.3	0.18	0.31	0.22	20,20,42	0.0	0.0	0.0	0,0,0				
	922.5	0.21	0.28	0.28	20,20,42	0.08	0.09	0.08	20,34,42				
209	0.0	0.0	0.01	0.0	0,20,0	0.0	0.0	0.0	0,0,0	7.65	6.46	6.17	23,38,43
	900.0	0.06	0.12	0.06	14,20,40	0.0	0.0	0.0	0,0,0				
	1800.0	0.0	0.01	0.0	0,20,0	0.0	0.0	0.0	0,0,0				
212	0.0	0.0	0.04	0.0	0,20,0	0.0	0.0	0.0	0,0,0	4.79	3.87	3.80	20,34,42
	461.3	0.19	0.32	0.23	20,20,42	0.0	0.0	0.0	0,0,0				
	922.5	0.23	0.30	0.30	20,20,42	0.09	0.09	0.09	20,34,42				
215	0.0	0.0	0.01	0.0	0,20,0	0.0	0.0	0.0	0,0,0	7.65	6.46	6.16	17,30,41
	900.0	0.06	0.12	0.06	17,14,41	0.0	0.0	0.0	0,0,0				
	1800.0	0.0	0.01	0.0	0,20,0	0.0	0.0	0.0	0,0,0				
218	0.0	0.04	0.10	0.06	20,21,42	0.0	0.0	0.0	0,0,0	-0.18	-0.16	-0.15	17,30,41
	61.5	0.0	0.02	0.0	0,21,0	0.0	0.0	0.0	0,0,0				
221	0.0	0.0	0.05	0.0	0,20,0	0.0	0.0	0.0	0,0,0	2.83	1.96	1.70	20,34,42
	236.8	0.11	0.30	0.12	20,20,42	0.0	0.0	0.0	0,0,0				
	473.5	0.0	0.05	0.0	0,20,0	0.0	0.0	0.0	0,0,0				
224	0.0	0.0	0.03	0.0	0,20,0	0.0	0.0	0.0	0,0,0	-2.60	-2.78	-2.78	15,27,40
	337.5	0.16	0.40	0.21	20,20,42	0.0	0.0	0.0	0,0,0				
	675.0	0.0	0.03	0.0	0,20,0	0.0	0.0	0.0	0,0,0				
227	0.0	0.0	0.05	0.0	0,19,0	0.0	0.0	0.0	0,0,0	1.10	1.14	1.01	13,25,40
	236.8	0.13	0.28	0.16	22,19,43	0.0	0.0	0.0	0,0,0				
	473.5	0.0	0.05	0.0	0,19,0	0.0	0.0	0.0	0,0,0				
235	0.0	0.32	0.52	0.38	19,19,42	0.19	0.19	0.18	19,33,42	1.23	1.22	1.07	13,25,40
	200.0	0.0	0.03	0.0	0,19,0	0.0	0.0	0.0	0,0,0				
341	0.0	0.0	1.44e-03	0.0	0,19,0	0.0	0.0	0.0	0,0,0	10.15	7.91	6.43	13,25,40
	156.0	0.34	0.64	0.36	13,19,40	0.23	0.21	0.19	19,33,42				
346	0.0	0.18	0.35	0.21	22,19,43	0.0	0.0	0.0	0,0,0	6.50	5.24	4.74	13,25,40
	156.0	0.0	5.92e-03	0.0	0,19,0	0.0	0.0	0.0	0,0,0				
348	0.0	4.28e-03	2.56e-03	4.63e-03	20,20,42	0.0	0.0	0.0	0,0,0	0.04	0.03	0.03	20,34,42
	66.7	4.38e-03	2.61e-03	4.76e-03	20,20,42	0.0	0.0	0.0	0,0,0				
349	0.0	0.0	0.08	0.0	0,20,0	0.0	0.0	0.0	0,0,0	0.15	0.13	0.13	20,34,42
	61.5	0.0	0.08	0.0	0,20,0	0.0	0.0	0.0	0,0,0				
350	0.0	0.01	6.51e-03	0.01	20,20,42	0.0	0.0	0.0	0,0,0	-0.15	-0.14	-0.14	17,30,41
	61.5	0.01	6.54e-03	0.01	20,20,42	0.0	0.0	0.0	0,0,0				
352	0.0	2.16e-04	0.02	0.0	20,18,0	0.0	0.0	0.0	0,0,0	-0.03	-0.03	-0.03	20,34,42
	66.7	2.71e-03	0.02	2.45e-03	20,18,42	0.0	0.0	0.0	0,0,0				
355	0.0	0.0	0.03	0.0	0,20,0	0.0	0.0	0.0	0,0,0	1.59	1.34	1.25	17,30,41
	307.3	0.17	0.41	0.19	19,19,42	0.0	0.0	0.0	0,0,0				

Trave	Pos.	rRfck	rRfyk	rPfck	Rif. cmb	wR	wF	wP	Rif. cmb	dR	dF	dP	Rif. cmb
	614.5	0.0	0.03	0.0	0,20,0	0.0	0.0	0.0	0,0,0				
356	0.0	0.0	3.40e-03	0.0	0,16,0	0.0	0.0	0.0	0,0,0	1.84	1.70	1.64	22,37,43
	67.0	5.88e-03	0.02	6.53e-03	19,16,42	0.0	0.0	0.0	0,0,0				
	134.0	0.0	3.40e-03	0.0	0,16,0	0.0	0.0	0.0	0,0,0				
357	0.0	0.0	8.30e-03	0.0	0,22,0	0.0	0.0	0.0	0,0,0	-6.30	-6.10	-6.02	19,33,42
	83.0	0.01	0.04	0.02	19,22,42	0.0	0.0	0.0	0,0,0				
	166.0	0.0	8.30e-03	0.0	0,22,0	0.0	0.0	0.0	0,0,0				
365	0.0	0.01	0.06	0.02	15,15,40	0.0	0.0	0.0	0,0,0	-0.06	-0.06	-0.06	20,34,42
	66.7	0.01	0.07	0.02	18,18,41	0.0	0.0	0.0	0,0,0				
366	0.0	0.12	0.25	0.17	18,18,41	0.0	0.0	0.0	0,0,0	-9.43	-4.42	-4.06	20,34,42
	438.8	0.24	0.53	0.28	14,17,40	0.0	0.0	0.0	0,0,0				
	877.5	0.0	0.06	0.0	0,20,0	0.0	0.0	0.0	0,0,0				
367	0.0	0.17	0.20	0.23	19,20,42	0.05	0.05	0.05	20,34,42	-10.69	-6.93	-4.12	23,38,43
	438.8	0.24	0.51	0.28	20,20,42	0.24	0.0	0.0	20,0,0				
	877.5	0.0	0.04	0.0	0,20,0	0.0	0.0	0.0	0,0,0				
368	0.0	0.20	0.20	0.26	20,20,42	0.05	0.05	0.05	20,34,42	-10.26	-6.25	5.94	17,30,41
	438.8	0.25	0.52	0.28	20,20,42	0.25	0.0	0.0	20,0,0				
	877.5	0.0	0.04	0.0	0,20,0	0.0	0.0	0.0	0,0,0				
369	0.0	0.05	0.03	0.04	20,20,42	0.0	0.0	0.0	0,0,0	-0.07	-0.08	-0.08	15,27,40
	58.5	0.07	0.03	0.07	20,20,42	0.0	0.0	0.0	0,0,0				
370	0.0	0.02	0.01	0.03	20,20,40	0.0	0.0	0.0	0,0,0	-0.06	-0.05	-0.05	20,34,42
	66.7	6.40e-03	3.92e-03	7.26e-03	20,20,42	0.0	0.0	0.0	0,0,0				
371	0.0	0.02	0.03	0.03	20,15,42	0.0	0.0	0.0	0,0,0	-0.05	-0.05	-0.05	20,34,42
	66.7	6.35e-03	3.19e-03	9.09e-03	18,18,41	0.0	0.0	0.0	0,0,0				
466	0.0	6.10e-03	3.78e-03	6.52e-03	20,20,42	0.0	0.0	0.0	0,0,0	0.04	0.03	0.03	20,34,42
	66.7	0.02	0.01	0.03	23,20,41	0.0	0.0	0.0	0,0,0				
467	0.0	0.01	8.14e-03	0.01	20,20,42	0.0	0.0	0.0	0,0,0	0.15	0.13	0.13	17,30,41
	61.5	0.01	8.47e-03	0.01	20,20,42	0.0	0.0	0.0	0,0,0				
468	0.0	0.01	0.03	0.02	20,18,42	0.0	0.0	0.0	0,0,0	0.01	9.59e-03	8.38e-03	20,34,42
	66.7	7.08e-04	1.81e-03	4.83e-04	22,18,42	0.0	0.0	0.0	0,0,0				
469	0.0	5.71e-03	0.02	7.76e-03	21,21,42	0.0	0.0	0.0	0,0,0	0.07	0.06	0.06	20,34,42
	66.7	0.01	0.03	0.01	20,20,42	0.0	0.0	0.0	0,0,0				
470	0.0	5.59e-03	3.31e-03	6.27e-03	20,20,42	0.0	0.0	0.0	0,0,0	0.04	0.03	0.03	20,34,42
	66.7	6.55e-03	3.76e-03	7.48e-03	20,20,42	0.0	0.0	0.0	0,0,0				
471	0.0	0.0	0.08	0.0	0,20,0	0.0	0.0	0.0	0,0,0	-0.15	-0.13	-0.27	20,34,42
	61.5	0.0	0.08	0.0	0,20,0	0.0	0.0	0.0	0,0,0				
472	0.0	0.0	0.10	0.0	0,17,0	0.0	0.0	0.0	0,0,0	0.33	0.29	0.28	20,34,42
	61.5	0.0	0.13	0.0	0,18,0	0.0	0.0	0.0	0,0,0				
473	0.0	0.01	9.18e-03	0.02	20,20,42	0.0	0.0	0.0	0,0,0	0.14	0.13	0.13	17,30,41
	61.5	0.01	8.93e-03	0.01	20,20,42	0.0	0.0	0.0	0,0,0				
474	0.0	0.02	0.02	0.03	20,24,42	0.0	0.0	0.0	0,0,0	-0.02	-0.01	-0.01	20,34,42
	66.7	7.43e-03	3.79e-03	0.01	18,19,41	0.0	0.0	0.0	0,0,0				
	133.3	0.01	0.01	0.02	20,18,42	0.0	0.0	0.0	0,0,0				
475	0.0	7.05e-03	4.07e-03	8.11e-03	20,20,42	0.0	0.0	0.0	0,0,0	-0.04	-0.03	-0.03	20,34,42
	66.7	7.85e-03	4.46e-03	9.12e-03	20,20,42	0.0	0.0	0.0	0,0,0				
476	0.0	0.01	7.65e-03	0.01	20,20,42	0.0	0.0	0.0	0,0,0	-0.15	-0.13	-0.13	17,30,41
	61.5	0.01	7.53e-03	0.01	20,20,42	0.0	0.0	0.0	0,0,0				
477	0.0	0.0	0.13	0.0	0,18,0	0.0	0.0	0.0	0,0,0	0.34	0.30	0.29	20,34,42
	61.5	0.03	0.19	0.04	18,18,41	0.0	0.0	0.0	0,0,0				
478	0.0	0.02	9.84e-03	0.02	20,20,42	0.0	0.0	0.0	0,0,0	-0.14	-0.13	-0.13	17,30,41
	61.5	0.02	0.01	0.02	20,20,42	0.0	0.0	0.0	0,0,0				
479	0.0	0.02	0.02	0.02	20,18,42	0.0	0.0	0.0	0,0,0	-0.03	-0.03	-0.03	20,34,42
	66.7	0.03	0.05	0.04	20,18,42	0.0	0.0	0.0	0,0,0				
480	0.0	8.46e-03	4.84e-03	9.90e-03	20,20,42	0.0	0.0	0.0	0,0,0	-0.04	-0.03	-0.03	20,34,42
	66.7	5.62e-03	3.48e-03	5.90e-03	20,20,42	0.0	0.0	0.0	0,0,0				
481	0.0	8.37e-03	0.02	0.01	20,18,42	0.0	0.0	0.0	0,0,0	-0.02	-0.02	-0.02	20,34,42
	66.7	0.01	0.03	0.02	20,18,42	0.0	0.0	0.0	0,0,0				
482	0.0	0.02	0.20	0.04	24,18,43	0.0	0.0	0.0	0,0,0	0.36	0.33	0.32	20,34,42
	61.5	0.02	0.19	0.03	15,18,40	0.0	0.0	0.0	0,0,0				
483	0.0	0.03	0.01	0.02	20,20,42	0.0	0.0	0.0	0,0,0	-0.12	-0.12	-0.11	17,30,41
	61.5	0.05	0.03	0.05	20,20,42	0.0	0.0	0.0	0,0,0				
485	0.0	0.0	0.12	0.0	0,20,0	0.0	0.0	0.0	0,0,0	-0.26	-0.26	-0.25	20,34,42
	61.5	0.0	0.12	0.0	0,20,0	0.0	0.0	0.0	0,0,0				
487	0.0	0.02	0.04	0.02	20,15,42	0.0	0.0	0.0	0,0,0	-0.09	-0.07	-0.07	20,34,42
	66.7	7.16e-03	0.01	9.55e-03	21,15,42	0.0	0.0	0.0	0,0,0				
489	0.0	3.37e-03	7.91e-03	4.59e-03	21,15,42	0.0	0.0	0.0	0,0,0	0.18	0.17	0.16	17,30,41
	61.5	6.91e-03	0.01	6.82e-03	20,21,42	0.0	0.0	0.0	0,0,0				
491	0.0	0.02	0.06	0.02	18,18,41	0.0	0.0	0.0	0,0,0	-0.06	-0.05	-0.05	20,34,42
	66.7	0.01	0.06	0.02	18,18,41	0.0	0.0	0.0	0,0,0				
492	0.0	0.20	0.28	0.18	20,20,42	0.0	0.0	0.0	0,0,0	-3.37	-2.73	-2.59	20,34,42
	234.0	0.14	0.17	0.17	20,20,42	0.0	0.0	0.0	0,0,0				
	468.0	0.39	0.57	0.43	20,20,42	0.24	0.21	0.20	20,34,42				
493	0.0	5.94e-03	3.64e-03	6.69e-03	20,20,42	0.0	0.0	0.0	0,0,0	-0.07	-0.06	-0.05	20,34,42
	66.7	9.97e-03	5.56e-03	0.01	20,20,42	0.0	0.0	0.0	0,0,0				

Trave	Pos.	rRfck	rRfyk	rPfck	Rif. cmb	wR	wF	wP	Rif. cmb	dR	dF	dP	Rif. cmb
494	0.0	6.56e-03	4.28e-03	9.39e-03	18,18,41	0.0	0.0	0.0	0,0,0	-0.05	-0.05	-0.04	20,34,42
	66.7	9.67e-03	9.73e-03	0.01	18,18,41	0.0	0.0	0.0	0,0,0				
495	0.0	3.95e-03	2.36e-03	4.24e-03	20,20,42	0.0	0.0	0.0	0,0,0	0.04	0.03	0.03	20,34,42
	66.7	3.93e-03	2.35e-03	4.22e-03	20,20,42	0.0	0.0	0.0	0,0,0				
498	0.0	0.0	0.11	0.0	0,20,0	0.0	0.0	0.0	0,0,0	0.33	0.29	0.28	20,34,42
	61.5	0.0	0.11	0.0	0,20,0	0.0	0.0	0.0	0,0,0				
499	0.0	4.00e-03	0.01	5.60e-03	21,15,42	0.0	0.0	0.0	0,0,0	0.08	0.07	0.06	20,34,42
	66.7	6.15e-03	0.02	8.23e-03	19,21,42	0.0	0.0	0.0	0,0,0				
501	0.0	5.74e-03	3.03e-03	6.92e-03	20,20,42	0.0	0.0	0.0	0,0,0	-0.18	-0.16	-0.16	17,30,41
	61.5	4.51e-03	2.47e-03	4.59e-03	20,20,42	0.0	0.0	0.0	0,0,0				
502	0.0	0.01	0.06	0.02	18,18,41	0.0	0.0	0.0	0,0,0	-0.04	-0.04	-0.04	20,34,42
	66.7	8.60e-04	0.04	1.08e-03	19,18,42	0.0	0.0	0.0	0,0,0				
503	0.0	0.09	0.26	0.10	20,20,42	0.0	0.0	0.0	0,0,0	-0.07	-0.05	-0.04	20,34,42
	58.5	0.02	0.11	0.02	20,20,42	0.0	0.0	0.0	0,0,0				
504	0.0	9.54e-03	5.30e-03	0.01	20,20,42	0.0	0.0	0.0	0,0,0	-0.06	-0.05	-0.05	20,34,42
	66.7	9.28e-03	5.17e-03	0.01	20,20,42	0.0	0.0	0.0	0,0,0				
505	0.0	9.76e-03	0.01	0.01	18,18,41	0.0	0.0	0.0	0,0,0	-0.05	-0.04	-0.04	20,34,42
	66.7	5.60e-03	3.24e-03	8.00e-03	18,18,41	0.0	0.0	0.0	0,0,0				
506	0.0	4.75e-03	2.84e-03	5.21e-03	20,20,42	0.0	0.0	0.0	0,0,0	0.04	0.04	0.03	20,34,42
	66.7	5.18e-03	3.05e-03	5.76e-03	20,20,42	0.0	0.0	0.0	0,0,0				
507	0.0	0.0	0.09	0.0	0,17,0	0.0	0.0	0.0	0,0,0	-0.33	-0.28	-0.27	20,34,42
	61.5	0.0	0.09	0.0	0,17,0	0.0	0.0	0.0	0,0,0				
508	0.0	0.10	0.31	0.10	20,20,42	0.0	0.0	0.0	0,0,0	-0.25	-0.20	-0.19	20,34,42
	58.5	0.18	0.50	0.20	20,20,42	0.0	0.0	0.0	0,0,0				
511	0.0	0.0	0.10	0.0	0,20,0	0.0	0.0	0.0	0,0,0	0.33	0.28	0.27	20,34,42
	61.5	0.0	0.08	0.0	0,20,0	0.0	0.0	0.0	0,0,0				
513	0.0	6.12e-03	3.47e-03	5.70e-03	20,20,42	0.0	0.0	0.0	0,0,0	-0.17	-0.15	-0.15	17,30,41
	61.5	4.79e-03	2.84e-03	4.02e-03	20,20,42	0.0	0.0	0.0	0,0,0				
514	0.0	1.73e-03	0.04	2.23e-03	19,18,42	0.0	0.0	0.0	0,0,0	0.04	0.03	0.03	20,34,42
	66.7	0.0	0.03	0.0	0,18,0	0.0	0.0	0.0	0,0,0				
515	0.0	0.02	0.09	0.02	20,20,42	0.0	0.0	0.0	0,0,0	0.05	0.03	0.02	20,34,42
	58.5	0.0	0.05	0.0	0,20,0	0.0	0.0	0.0	0,0,0				
516	0.0	9.23e-03	5.14e-03	0.01	20,20,42	0.0	0.0	0.0	0,0,0	-0.06	-0.05	-0.04	20,34,42
	66.7	6.39e-03	3.78e-03	8.53e-03	22,20,43	0.0	0.0	0.0	0,0,0				
517	0.0	5.48e-03	2.67e-03	7.88e-03	18,20,41	0.0	0.0	0.0	0,0,0	-0.04	-0.03	-0.03	20,34,42
	66.7	3.30e-03	1.83e-03	3.89e-03	20,20,41	0.0	0.0	0.0	0,0,0				
518	0.0	0.0	0.08	0.0	0,20,0	0.0	0.0	0.0	0,0,0	0.15	0.28	0.27	20,34,42
	61.5	0.0	0.08	0.0	0,20,0	0.0	0.0	0.0	0,0,0				
519	0.0	0.18	0.48	0.20	20,20,42	0.0	0.0	0.0	0,0,0	-0.13	-0.11	-0.10	20,34,42
	58.5	0.09	0.28	0.10	20,20,42	0.0	0.0	0.0	0,0,0				
520	0.0	0.0	0.08	0.0	0,20,0	0.0	0.0	0.0	0,0,0	-0.32	-0.28	-0.27	20,34,42
	61.5	0.0	0.08	0.0	0,20,0	0.0	0.0	0.0	0,0,0				
521	0.0	6.23e-03	3.73e-03	5.59e-03	20,20,42	0.0	0.0	0.0	0,0,0	-0.17	-0.15	-0.15	17,30,41
	61.5	5.61e-03	3.44e-03	4.78e-03	20,20,42	0.0	0.0	0.0	0,0,0				
522	0.0	0.0	0.03	0.0	0,18,0	0.0	0.0	0.0	0,0,0	0.04	0.03	0.03	20,34,42
	66.7	0.0	0.03	0.0	0,24,0	0.0	0.0	0.0	0,0,0				
523	0.0	0.0	0.04	0.0	0,20,0	0.0	0.0	0.0	0,0,0	0.05	0.03	0.03	20,34,42
	58.5	6.54e-03	0.05	3.76e-03	20,20,42	0.0	0.0	0.0	0,0,0				
524	0.0	6.64e-03	3.94e-03	8.78e-03	20,20,42	0.0	0.0	0.0	0,0,0	0.06	0.04	0.04	20,34,42
	66.7	0.01	6.16e-03	0.01	20,20,42	0.0	0.0	0.0	0,0,0				
525	0.0	3.55e-03	1.98e-03	3.98e-03	20,20,42	0.0	0.0	0.0	0,0,0	0.04	0.03	0.03	20,34,42
	66.7	2.95e-03	1.70e-03	3.13e-03	20,20,42	0.0	0.0	0.0	0,0,0				
526	0.0	0.01	7.16e-03	0.01	20,20,42	0.0	0.0	0.0	0,0,0	-0.15	0.14	0.13	17,30,41
	61.5	0.01	7.05e-03	0.01	20,20,42	0.0	0.0	0.0	0,0,0				
527	0.0	0.0	0.08	0.0	0,20,0	0.0	0.0	0.0	0,0,0	-0.32	-0.28	-0.27	20,34,42
	61.5	0.0	0.08	0.0	0,20,0	0.0	0.0	0.0	0,0,0				
528	0.0	6.93e-03	4.26e-03	6.20e-03	20,20,42	0.0	0.0	0.0	0,0,0	0.16	0.15	0.14	17,30,41
	61.5	6.84e-03	4.21e-03	6.09e-03	20,20,42	0.0	0.0	0.0	0,0,0				
529	0.0	0.0	0.03	0.0	0,18,0	0.0	0.0	0.0	0,0,0	-0.03	-0.03	-0.03	20,34,42
	66.7	0.0	0.02	0.0	0,24,0	0.0	0.0	0.0	0,0,0				
530	0.0	6.45e-03	0.05	4.16e-03	20,20,42	0.0	0.0	0.0	0,0,0	0.05	0.04	0.03	20,34,42
	58.5	0.01	0.06	7.11e-03	16,19,41	0.0	0.0	0.0	0,0,0				
531	0.0	0.02	9.55e-03	0.02	20,20,42	0.0	0.0	0.0	0,0,0	0.50	0.43	0.41	20,34,42
	133.3	0.04	0.03	0.05	20,18,42	0.0	0.0	0.0	0,0,0				
	266.7	0.07	0.09	0.08	20,20,42	0.0	0.0	0.0	0,0,0				
532	0.0	3.26e-03	1.88e-03	3.46e-03	20,20,42	0.0	0.0	0.0	0,0,0	0.04	0.03	0.03	20,34,42
	66.7	3.07e-03	1.79e-03	3.23e-03	20,20,42	0.0	0.0	0.0	0,0,0				
533	0.0	3.65e-03	0.02	4.17e-03	20,18,42	0.0	0.0	0.0	0,0,0	-0.03	-0.02	-0.02	20,34,42
	66.7	8.09e-03	0.02	0.01	20,18,42	0.0	0.0	0.0	0,0,0				
534	0.0	0.0	0.08	0.0	0,20,0	0.0	0.0	0.0	0,0,0	-0.15	-0.13	-0.13	20,34,42
	61.5	0.0	0.08	0.0	0,20,0	0.0	0.0	0.0	0,0,0				
535	0.0	8.07e-03	4.98e-03	7.42e-03	20,20,42	0.0	0.0	0.0	0,0,0	-0.16	-0.15	-0.14	17,30,41
	61.5	8.21e-03	5.05e-03	7.51e-03	20,20,42	0.0	0.0	0.0	0,0,0				
536	0.0	0.0	0.02	0.0	0,18,0	0.0	0.0	0.0	0,0,0	0.03	0.03	0.03	20,34,42

Trave	Pos.	rRfck	rRfyk	rPfck	Rif. cmb	wR	wF	wP	Rif. cmb	dR	dF	dP	Rif. cmb
	66.7	0.0	0.02	0.0	0,18,0	0.0	0.0	0.0	0,0,0				
537	0.0	7.97e-03	9.56e-03	9.35e-03	20,15,42	0.0	0.0	0.0	0,0,0	-0.12	-0.11	-0.11	20,34,42
	66.7	0.04	0.07	0.04	20,20,42	0.0	0.0	0.0	0,0,0				
538	0.0	3.38e-03	1.99e-03	3.58e-03	20,20,42	0.0	0.0	0.0	0,0,0	0.04	0.03	0.03	20,34,42
	66.7	3.33e-03	1.96e-03	3.52e-03	20,20,42	0.0	0.0	0.0	0,0,0				
539	0.0	7.07e-03	0.02	9.31e-03	20,15,42	0.0	0.0	0.0	0,0,0	0.08	0.07	0.06	20,34,42
	66.7	4.39e-03	0.01	6.12e-03	21,15,42	0.0	0.0	0.0	0,0,0				
540	0.0	0.0	0.08	0.0	0,20,0	0.0	0.0	0.0	0,0,0	0.15	0.28	0.27	20,34,42
	61.5	0.0	0.08	0.0	0,20,0	0.0	0.0	0.0	0,0,0				
541	0.0	9.36e-03	5.76e-03	8.76e-03	20,20,42	0.0	0.0	0.0	0,0,0	-0.16	-0.14	-0.14	17,30,41
	61.5	9.53e-03	5.84e-03	8.95e-03	20,20,42	0.0	0.0	0.0	0,0,0				
542	0.0	0.0	0.02	0.0	0,18,0	0.0	0.0	0.0	0,0,0	0.03	0.03	0.03	20,34,42
	66.7	0.0	0.02	0.0	0,18,0	0.0	0.0	0.0	0,0,0				
543	0.0	0.04	0.07	0.04	20,20,42	0.0	0.0	0.0	0,0,0	-0.10	-0.09	-0.08	20,34,42
	66.7	0.02	0.03	0.02	20,15,42	0.0	0.0	0.0	0,0,0				
544	0.0	3.65e-03	2.17e-03	3.89e-03	20,20,42	0.0	0.0	0.0	0,0,0	-0.04	-0.03	-0.03	20,34,42
	66.7	3.61e-03	2.15e-03	3.85e-03	20,20,42	0.0	0.0	0.0	0,0,0				
546	0.0	0.0	0.03	0.0	0,19,0	0.0	0.0	0.0	0,0,0	-3.23	-3.01	-2.86	19,33,42
	307.3	0.20	0.41	0.24	22,19,43	0.0	0.0	0.0	0,0,0				
	614.5	0.0	0.03	0.0	0,19,0	0.0	0.0	0.0	0,0,0				
Trave		**rRfck**	**rRfyk**	**rPfck**		**wR**	**wF**	**wP**		**dR**	**dF**	**dP**	
		0.39	0.64	0.43		0.25	0.21	0.20		10.15	7.91	6.43	