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# COMUNE DI LAGOSANTO - COMACCHIO

**REALIZZAZIONE IMPIANTO FOTOVOLTAICO A TERRA SU AREA  
IDONEA AI SENSI DEL D.lgs. 199/2021 comma 8  
lettera c-ter) E c-quater) DI POTENZA DI PICCO PARI A 27,036  
MW<sub>p</sub> E POTENZA NOMINALE PARI A 21,600 MW UBICATO IN  
PROSSIMITA' DELLA STRADA PROVINCIALE 32  
NEL COMUNE DI LAGOSANTO**

**COMMITENTE: LAGOSANTO SOLAR S.R.L.**

p.IVA 02715640393

Legale rappresentante: **Rametta Paolo Giovanni**

C.F. RMTPGV68P25Z404N

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C.F. CSTMZ60R01E289N

N. ELABORATO

**F 3.1**

ELABORATO

**Relazione geologica e di  
caratterizzazione geotecnica  
Impianto Fotovoltaico**

SCALA

RIFERIMENTO PRATICA

**IMPIANTO LAGOSANTO**

DATA

**30/11/2022**

REVISIONE

**General contractor**

**PROTESA**  
A COMPANY OF SACMI

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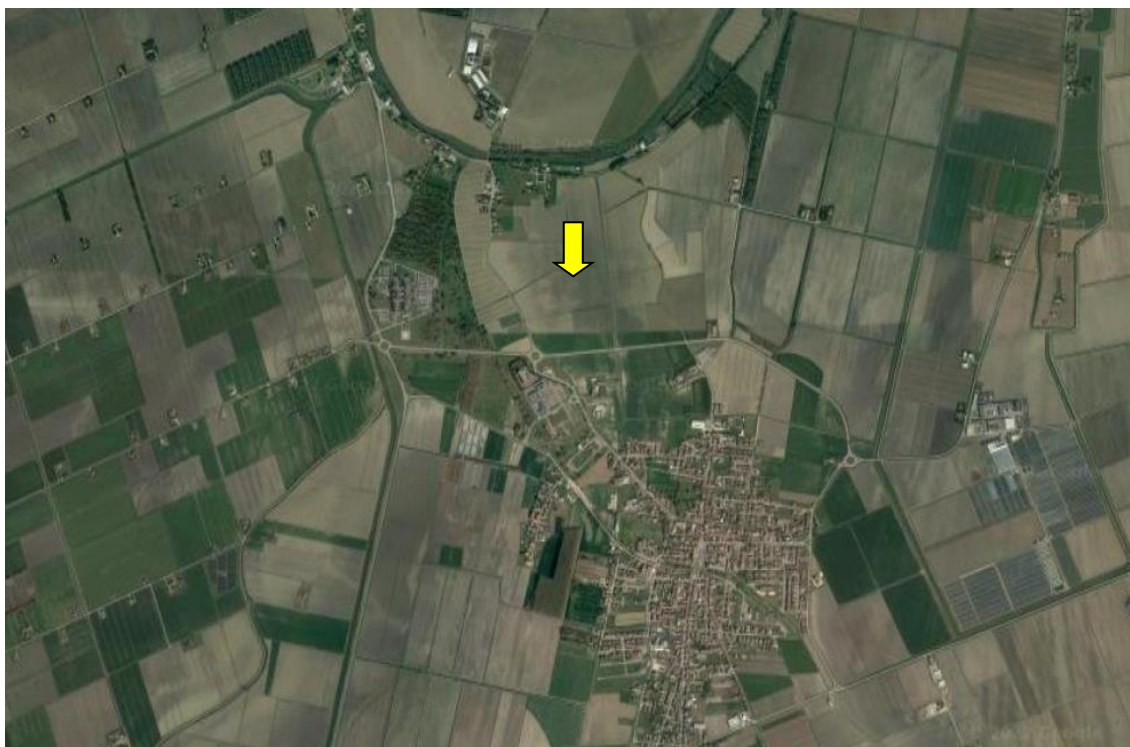
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## 1 Premessa

Su incarico della committenza viene redatta la presente relazione allo scopo di fornire i parametri geologici e sismici necessari per il progetto di un nuovo impianto fotovoltaico e della creazione di cabine elettriche a servizio. L'area oggetto di studio si trova in comune di Lagosanto (FE).



*Figura 1. – Inquadramento territoriale*

## 2 Normative e riferimenti tecnici

Relativamente alla parte geologica, si fa riferimento alle seguenti normative:

- Ordinanza del Presidente del Consiglio dei ministri 20/03/2003 n.3274 – “Primi elementi in materia di criteri generali per la classificazione sismica del territorio nazionale e di normative tecniche per le costruzioni in zona sismica”.
- Consiglio Superiore dei lavori pubblici – Pericolosità sismica e Criteri generali per la classificazione sismica del territorio nazionale. Allegato al voto n. 36 del 27.07.2007;
- D.M. 14.01.2008 “*Nuove norme tecniche per le costruzioni*”;
- Circ. Ministero Infrastrutture e Trasporti 2 febbraio 2009, n. 617 “*Istruzioni per l’applicazione delle Nuove norme tecniche per le costruzioni*” di cui al D.M. 14 gennaio 2008”;
- DGR n. 1373/2011 del 26.09.2011 della Regione Emilia-Romagna.
- DGR n. 1878/2011 del 19.12.2011 “*Approvazione dell’atto di indirizzo recante la modulistica unificata Regionale relativa ai procedimenti in materia sismica*”;
- D.M. 17.01.2018 “*Aggiornamento delle Norme tecniche per le costruzioni*”;

### 3 Vincolistica

#### 3.1 Piano Di Gestione Del Rischio Alluvioni

La mappa della pericolosità all'interno del PGRA dell'Autorità di Bacino del fiume Po, carta del reticolo secondario di pianura, indica che l'area oggetto di studio è caratterizzata da una pericolosità media, ovvero P2 – M (Alluvioni poco frequenti: tempo di ritorno tra 100 e 200 anni - media probabilità). La carta del reticolo naturale principale e secondario indica l'area come P1, scarsa probabilità di alluvioni.



- P3 – H (Alluvioni frequenti: tempo di ritorno tra 20 e 50 anni - elevata probabilità)
- P2 – M (Alluvioni poco frequenti: tempo di ritorno tra 100 e 200 anni - media probabilità)
- P1 – L (Scarsa probabilità di alluvioni o scenari di eventi estremi)

Figura 2. – PGRA, tavola pericolosità

La mappa rischio derivata dalla mappa della pericolosità indica la presenza nell'area di studio di un rischio moderato o nullo (R1 - giallo).



Figura 3. – PGRA, tavola rischio

## 4 Inquadramento geologico generale

L'area in oggetto si trova all'interno del foglio 205 della Carta Geologica d'Italia.

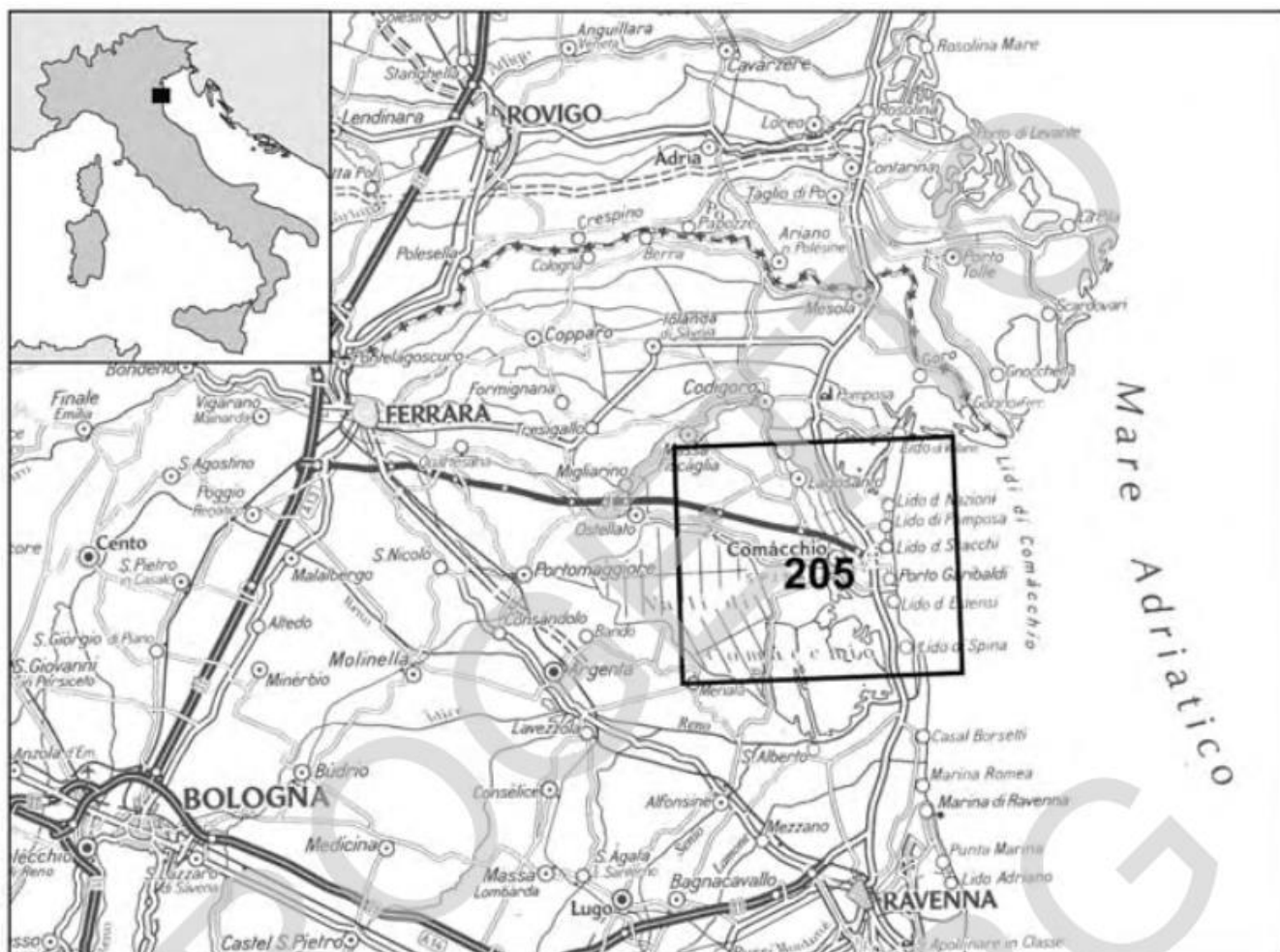


Figura 4. – Ubicazione Foglio 205 Comacchio

Il Foglio 205 comprende una porzione della Pianura Padana sud-orientale che, da un punto di vista strutturale, costituisce una parte del bacino d'avampaese di età plio-quadernaria delimitato a sud dalla catena appenninica e a nord da quella alpina. Le successioni quadernarie che riempiono tale bacino sono coinvolte in una serie di pieghe e thrust ad andamento parallelo con orientazione circa NO-SE nel settore di pianura in esame e raggiungono lo spessore massimo di circa 2000 m.

La porzione di successione sepolta maggiormente investigata, ovvero quella datata Pleistocene medio-Olocene, è caratterizzata dall'organizzazione ciclica di depositi marini e continentali in successioni di vario ordine gerarchico per uno spessore massimo di circa 600 metri.

In superficie, l'area in cui si estende il Foglio è caratterizzata dall'affioramento dei depositi olocenici della piana deltizia del fiume Po; questi depositi rappresentano lo stadio attuale del progressivo colmamento del bacino plio-quadernario.

La morfologia del territorio è pianeggiante con quote prossime all'attuale livello del mare e con deboli variazioni. In particolare, le quote tendono ad aumentare procedendo da ovest verso la linea di costa. Lungo la zona costiera, infatti, le quote sono positive (1-2 metri s.l.m.), mentre il settore occidentale, coincidente per gran parte con l'area della bonifica del Mezzano, presenta quasi costantemente quote inferiori al livello del mare (fino a -3,5 m s.l.m.).

La rete idrografica è rappresentata, escludendo un piccolo tratto del Po di Volano presente nel settore settentrionale del foglio, da una fitta rete di canali artificiali, il più importante dei quali è il canale navigabile che unisce Migliarino a Portomaggiore.

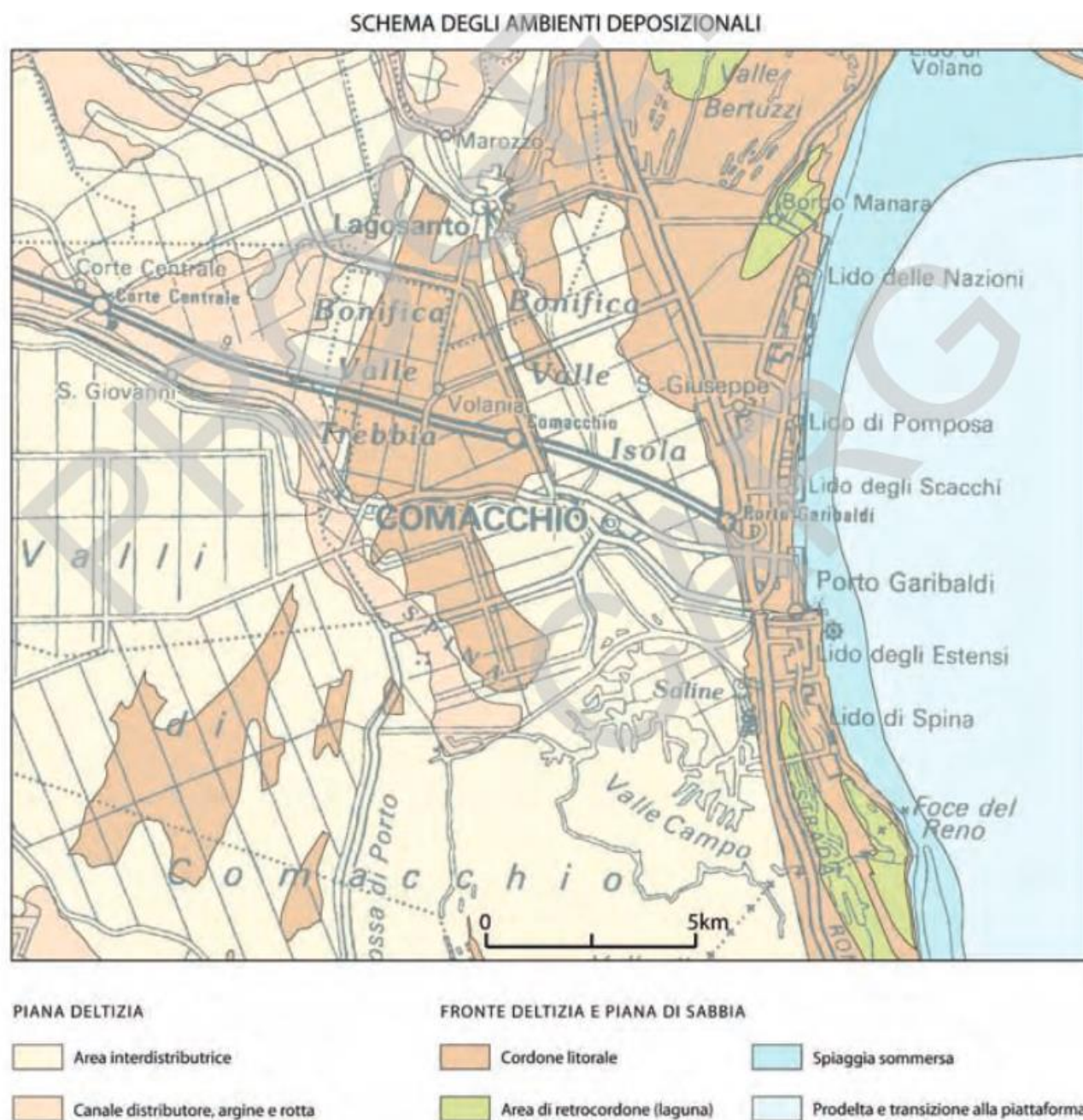


Figura 5. - Distribuzione degli ambienti deposizionali distinti all'interno dei depositi affioranti nel Foglio 205.

L'inquadramento geologico-strutturale del Foglio 205, esteso ai fogli limitrofi per avere un quadro regionale più ampio, mostra che il settore occidentale del sottosuolo è caratterizzato dalla presenza di thrust i cui fronti si sviluppano in direzione NO-SE. Questi sovrascorrimenti rappresentano le propaggini più orientali delle "pieghe ferraresi" e marcano il passaggio tra il settore occidentale dominato da anticlinali, sinclinali e sovrascorrimenti e quello orientale dominato dalla monoclinale di avampaese immergente verso NE e solo blandamente deformata. Questa conformazione determina, in generale, l'individuazione di alti strutturali relativi e di un assottigliamento della successione sedimentaria verso ovest, mentre verso est si configura un settore di basso strutturale relativo e di un inspessimento della successione.

Le unità più antiche del supersistema Emiliano-Romagnolo non affiorano nel Foglio 205.

Il substrato marino mio-plio-pleistocenico è costituito al tetto dalle Argille Azzurre di ambiente di piattaforma marina. Queste passano, con contatto erosivo e discordante, alle Sabbie di Imola (IMO) il cui contenuto faunistico indica un'età compresa tra 800 000 e 650 000 anni.

### **Subsistema di Ravenna (AES8) ed unità di Modena (AES8a)**

Il subsistema di Ravenna costituisce la porzione sommitale del sistema Emiliano-Romagnolo Superiore.

È delimitato alla base da un limite inconforme non affiorante, corrispondente ad una lacuna stratigrafica, evidenziato da datazioni con il metodo del 14 C; superiormente il limite coincide con l'attuale piano topografico. La base del subsistema di Ravenna è riferibile, nel Foglio 205, al passaggio tra il Pleistocene superiore e l'Olocene (età di  $10480 \pm 40$  B P e  $10450 \pm 100$  yr B P, sondaggi 205-S14 e 205-S7) ed è dunque più antica rispetto a quanto osservato nel Foglio 223 ( $8790 \pm 90$  yr B P in Carta geologica d'Italia in scala 1:50.000 foglio 223 Ravenna, 2002).

Il subsistema di Ravenna presenta spessori mediamente compresi tra 12 e 30 metri, e comprende sabbie, argille e limi di ambiente deltizio, litorale e marino.



## 4.1 Inquadramento Geologico e Geomorfologico di Dettaglio

Dove è ubicata la zona oggetto di studio affiorano essenzialmente depositi fini di piana interdistributrice, attraversati da un fitto intreccio di depositi di paleoalveo, presente tra depositi di cordoni dunari.

I terreni dell'area in oggetto sono costituiti da argille, argille limose e subordinati limi, spesso arricchite in sostanza organica, di colore scuro, passanti ad argille torbose e torbe.

Le argille contengono frequentemente tracce d'apparati radicali o sono intensamente bioturbate da organismi limivori. La stratificazione è da media a spessa, frequentemente poco evidente.

I valori di permeabilità sono in genere assai bassi e si accompagnano a tempi di dissipazione particolarmente lunghi.

Di seguito si riporta uno stralcio della cartografia geologica.

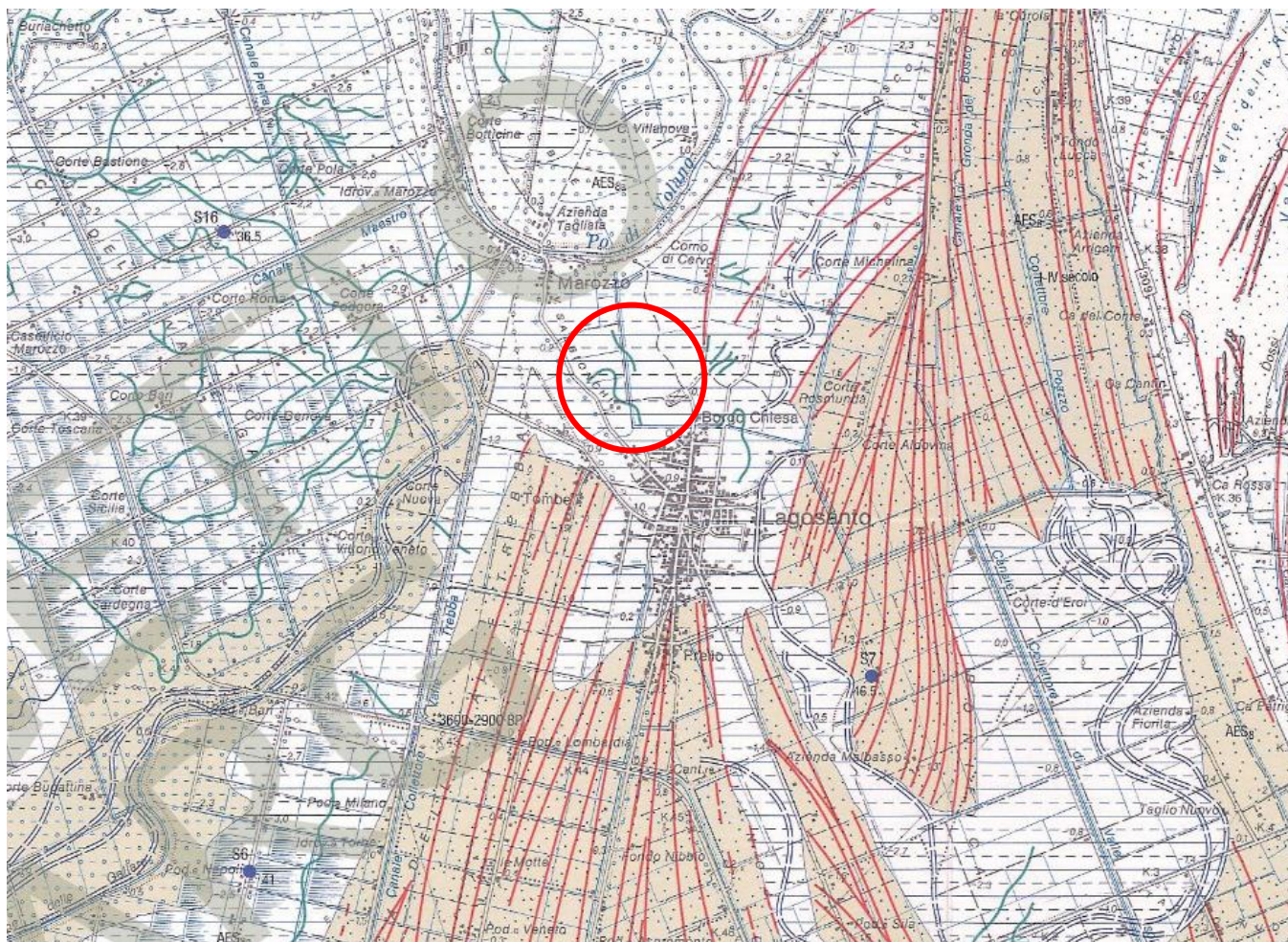


Fig. 6. Carta geologica dell'area

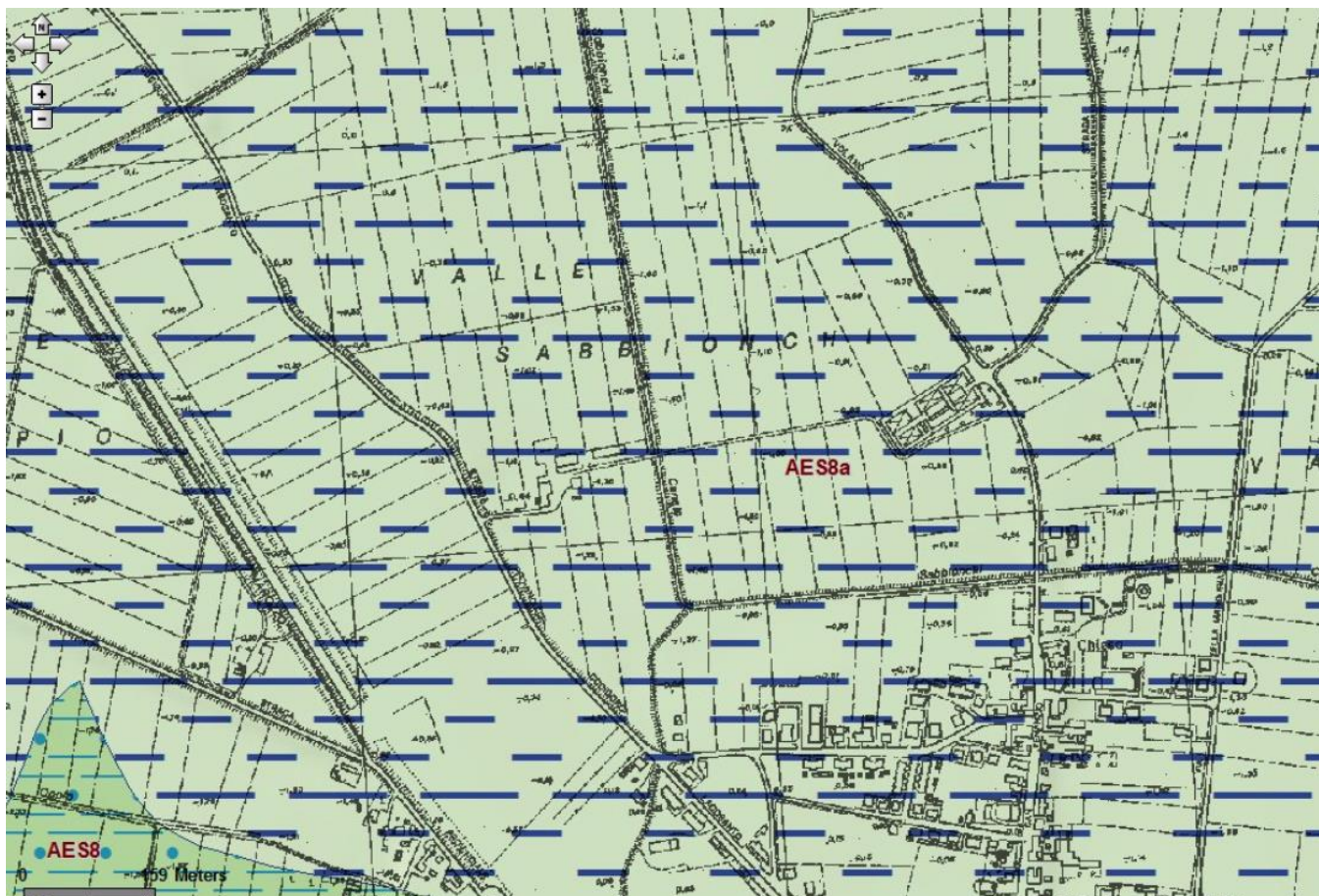


Figura 7.- Estratto della carta geologica tratto dalla parte centrale dell'area cartografata.

## 5 Indagini geognostiche

Nelle date 15/09/2022 e 16/09/2022 è stata eseguita una campagna d'indagini consistente nell'esecuzione di:

- **n°6 prove penetrometriche statiche elettriche con piezocono (CPTU)** delle quali 2 spinte a 20,0 m e 4 a 5,0 m da piano campagna attuale. Le prove hanno avuto come obiettivo la caratterizzazione geotecnica dei terreni e sono servite come supporto per l'interpretazione geofisica;
- **n°1 acquisizione HVSR e n°1 indagine MASW** eseguite utilizzando un tromografo digitale Tromino-Micromed che avvalendosi del metodo di Nakamura sul rapporto spettrale H/V fornisce una valutazione diretta della Vs30 in base all'individuazione delle discontinuità sismiche e della profondità della formazione rocciosa.

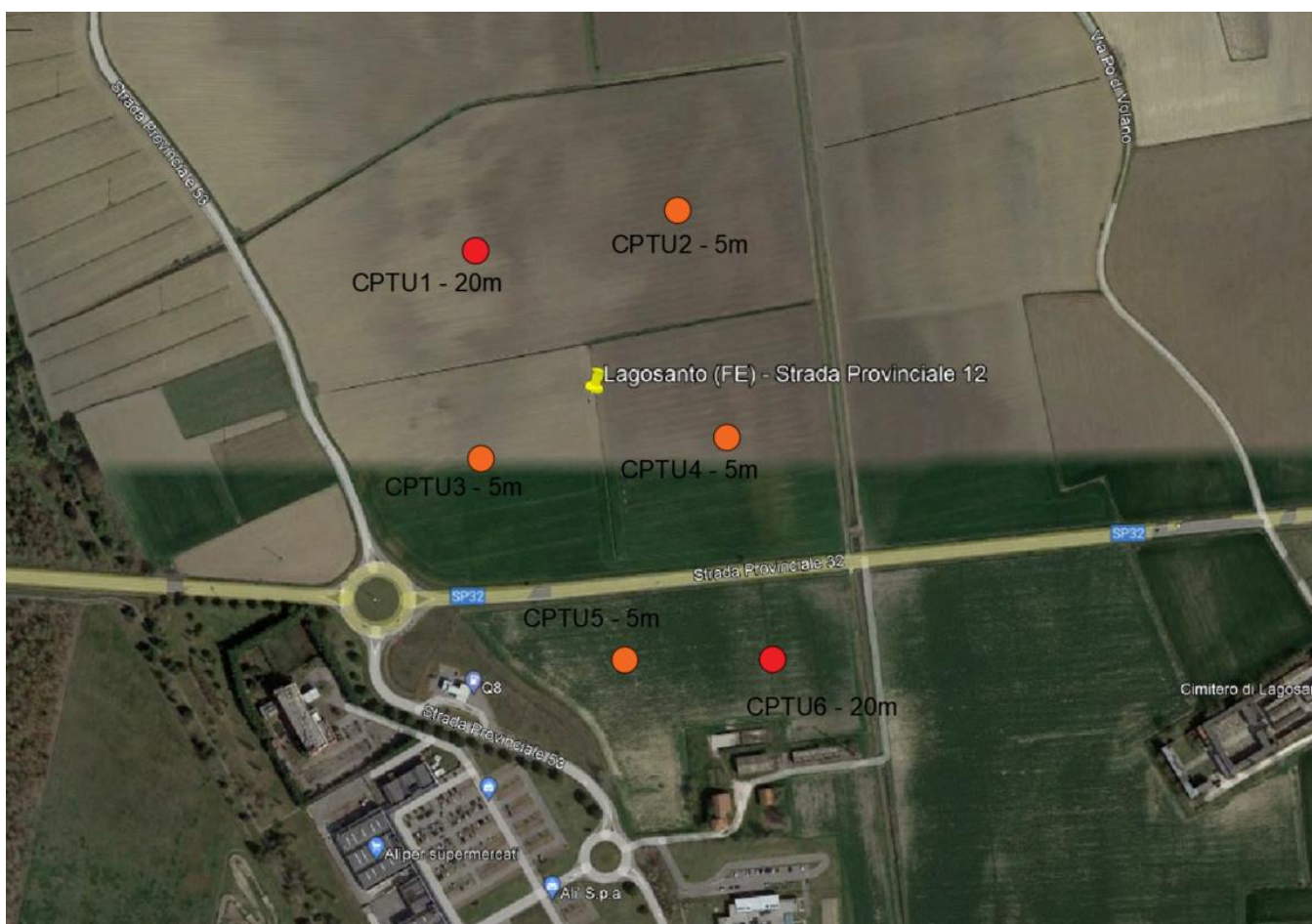


Figura 8.- Ubicazione delle prove effettuate.

## 5.1 Interpretazione stratigrafica

Le prove hanno identificato la presenza di terreni generalmente sabbioso limosi con intercalazioni argilloso limose di spessore massimo circa un metro, fino alla profondità di 14,0/15,0 m, al di sotto sono presenti argille limose a consistenza media fino alla profondità di 19,0 m da p.c., seguite da limi sabbioso argillosi o sabbie limose fino a 20,0 m.

Di seguito viene descritto il modello geologico riscontrato dalle singole prove:

- CPTU1 → profondità massima indagata: 20,0 m
- CPTU2 → profondità massima indagata: 5,8 m
- CPTU3 → profondità massima indagata: 5,0 m
- CPTU4 → profondità massima indagata: 5,8 m
- CPTU5 → profondità massima indagata: 5,7 m
- CPTU6 → profondità massima indagata: 20,0 m

CPTU1				
Profondità strato [m]	Descrizione	Peso unità di volume [kN/m <sup>3</sup> ]	Angolo di attrito [°]	Coesione non drenata [kN/m <sup>2</sup> ]
0,0 – 5,5	Sabbie limose ad addensamento elevato	18,0	35	-
5,5 – 6,1	Argille limose a consistenza medio alta	18,0	-	105
6,1 – 15,0	Sabbie limose ad addensamento elevato	18,0	35	-
15,0 – 19,2	Argille limose a consistenza media	18,0	-	61
19,2 – 20,0	Sabbie limose ad addensamento medio	18,0	30	-

<b>CPTU2</b>				
Profondità strato [m]	Descrizione	Peso unità di volume [kN/m <sup>3</sup> ]	Angolo di attrito [°]	Coesione non drenata [kN/m <sup>2</sup> ]
0,0 – 0,75	Sabbie limose ad addensamento medio alto	18,0	33	-
0,75 – 4,1	Argille limose a consistenza bassa	18,0	-	27
4,1 – 4,5	Limi sabbiosi	18,0	30	-
4,5 – 5,25	Argille limose a consistenza bassa	18,0	-	27
5,25 – 5,8	Sabbie limose ad addensamento elevato	18,0	35	-

<b>CPTU3</b>				
Profondità strato [m]	Descrizione	Peso unità di volume [kN/m <sup>3</sup> ]	Angolo di attrito [°]	Coesione non drenata [kN/m <sup>2</sup> ]
0,0 – 0,85	Sabbie limose ad addensamento elevato	18,0	35	-
0,85 – 3,0	Argille limose a consistenza medio bassa	18,0	-	48
3,0 – 5,0	Sabbie limose ad addensamento elevato	18,0	35	-

<b>CPTU4</b>				
Profondità strato [m]	Descrizione	Peso unità di volume [kN/m <sup>3</sup> ]	Angolo di attrito [°]	Coesione non drenata [kN/m <sup>2</sup> ]
0,0 - 0,9	Argille limose a consistenza medio bassa	18,0	-	54
0,9 – 3,9	Sabbie limose ad addensamento elevato	18,0	35	-
3,9 – 4,75	Argille limose a consistenza bassa	18,0	-	37
4,75 – 5,8	Sabbie limose ad addensamento elevato	18,0	35	-

<b>CPTU5</b>				
Profondità strato [m]	Descrizione	Peso unità di volume [kN/m <sup>3</sup> ]	Angolo di attrito [°]	Coesione non drenata [kN/m <sup>2</sup> ]
0,0 – 1,1	Sabbie limose ad addensamento medio alto	18,0	33	-
1,1 – 4,0	Argille limose a consistenza bassa	18,0	-	29
4,0 – 5,7	Sabbie limose ad addensamento elevato	18,0	35	-

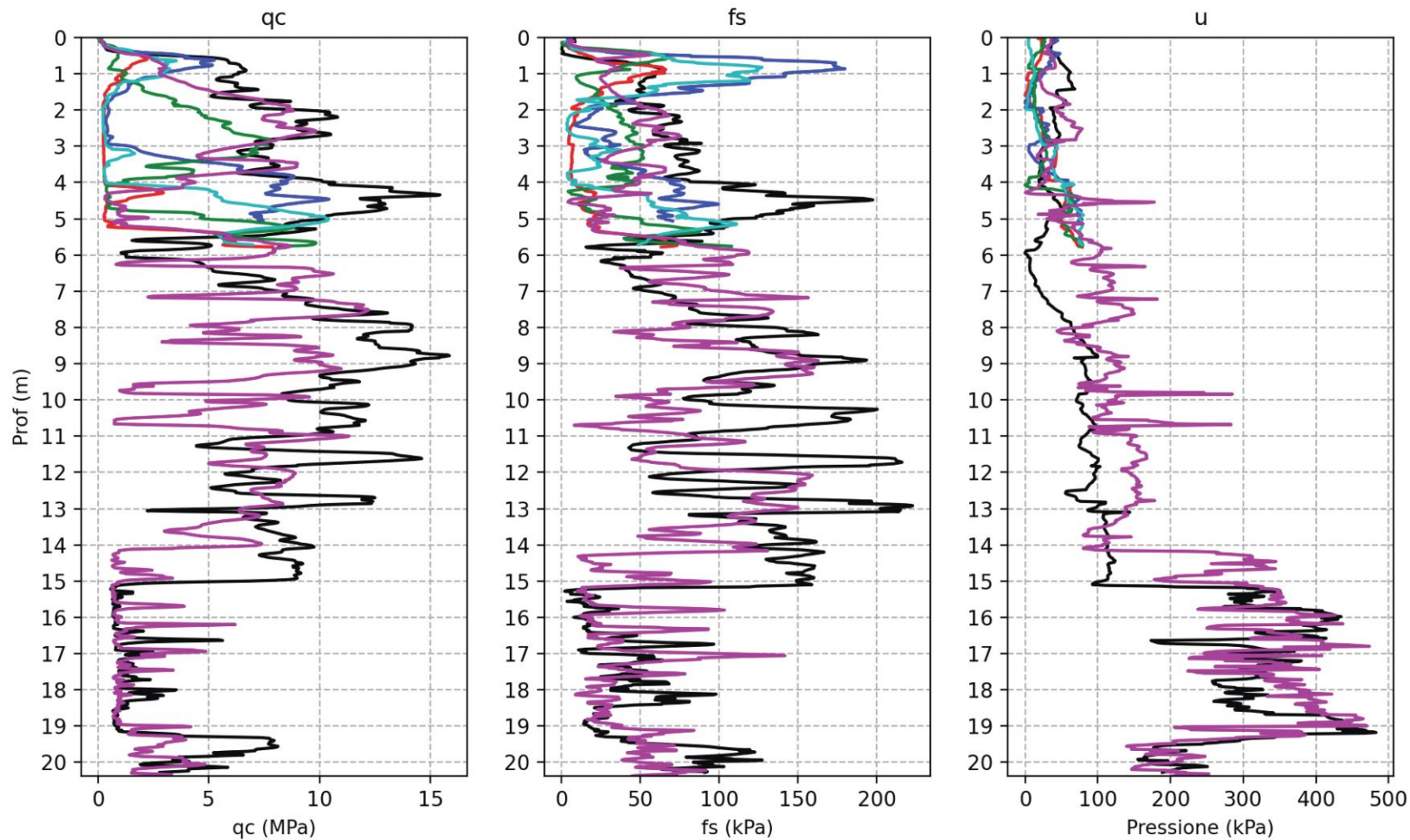
<b>CPTU6</b>				
Profondità strato [m]	Descrizione	Peso unità di volume [kN/m <sup>3</sup> ]	Angolo di attrito [°]	Coesione non drenata [kN/m <sup>2</sup> ]
0,0 – 4,2	Sabbie limose ad addensamento elevato	18,0	35	-
4,2 – 5,2	Argille limose a consistenza medio bassa	18,0	-	50
5,2 – 14,0	Sabbie limose ad addensamento medio alto con intercalazioni limoso argillose	18,0	33	-
14,0 - 19,0	Argille limose a consistenza media, con intercalazioni limoso argillose	18,0	-	58
19,0 – 20,0	Limi argilloso sabbiosi a consistenza alta	18,0	-	119

## 5.2 Rilievo acqua nel sottosuolo

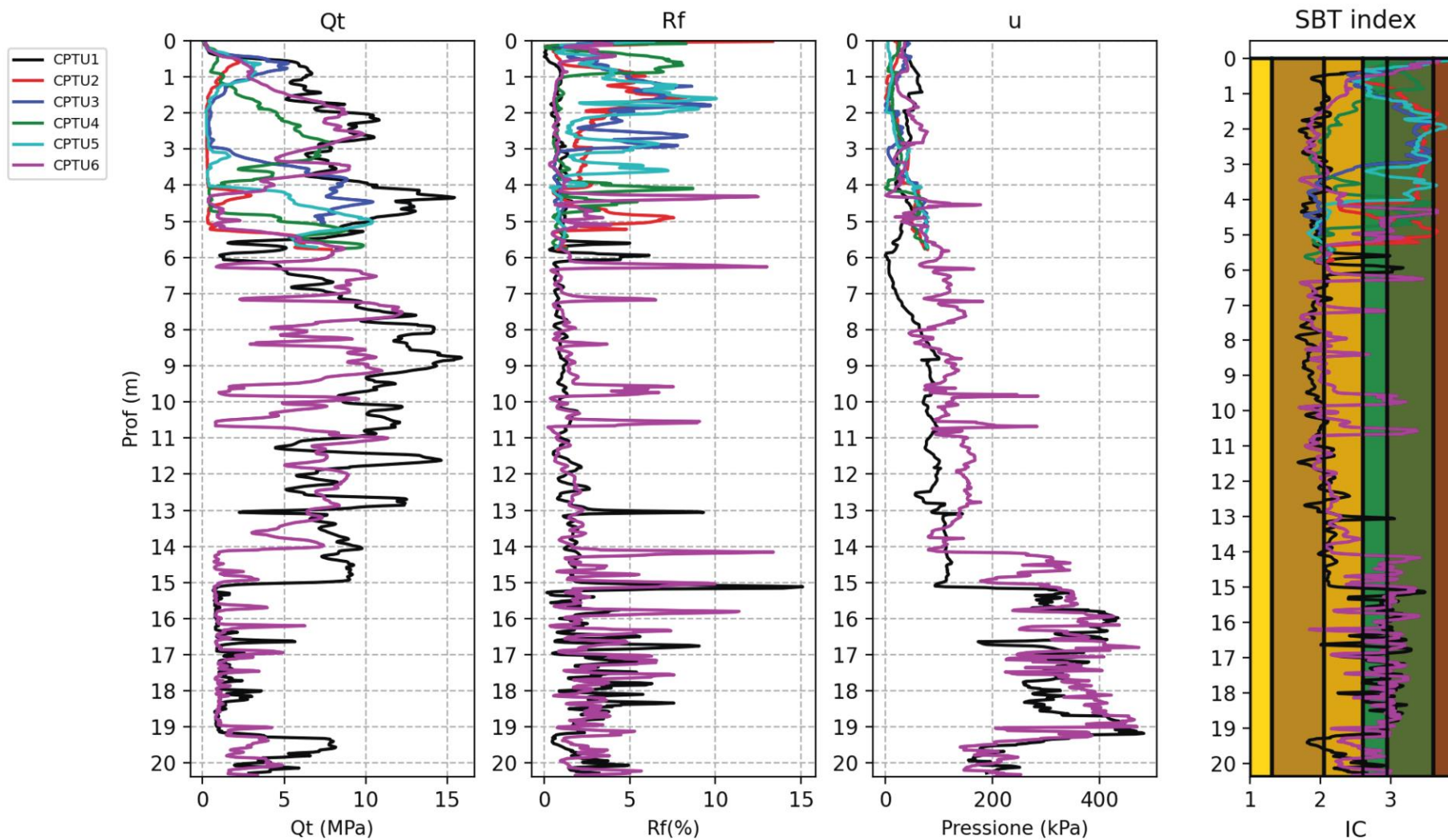
Al momento delle prove è stata rilevata la presenza di falda freatica a profondità comprese tra 0,8 e 2,0 m dal p.c., tale livello misurato può subire oscillazioni verticali al variare delle stagioni e in seguito a precipitazioni prolungate e/o intense.

Si riportano di seguito i grafici sovrapposti delle prove effettuate per un migliore confronto.

### 1 - Parametri prove



## 2 - Parametri prove e confronto IC-Litologia





## 6 Sismicità dell'area

In base alla normativa riguardante la situazione sismica del territorio, con riferimento al D.M. Min. LLPP 16 gennaio 1996 "Norme tecniche per le costruzioni in zone sismiche", il Comune di Lagosanto, ricadeva in una zona classificata in classe III.

Nel mese di marzo 2003 è stata redatta una bozza al fine di definire un sistema normativo per la progettazione antisismica e acquisire dei criteri generali per la classificazione sismica del territorio nazionale. In riferimento a tale bozza il Comune di Lagosanto ricade in classe 3, indicativa di zona a media pericolosità sismica.

Con l'entrata in vigore, il 24/10/2005, dell'OPCM n. 3274/2003 e successive modifiche, in materia di classificazione sismica del territorio nazionale e del D.M. 14/09/2005 recante "Norme tecniche per le costruzioni", il Comune di Lagosanto è stato classificato in classe di sismicità 3 (zona a media sismicità).

Estratto dal D.M. 17/01/2018 recante "Aggiornamento delle Norme tecniche per le costruzioni":

### 3.2 AZIONE SISMICA

#### 3.2.2 CATEGORIE DI SOTTOSUOLO E CONDIZIONI TOPOGRAFICHE

##### **Categorie di sottosuolo**

*Ai fini della definizione dell'azione sismica di progetto, l'effetto della risposta sismica locale si valuta mediante specifiche analisi, da eseguire con le modalità indicate nel § 7.11.3. In alternativa, qualora le condizioni stratigrafiche e le proprietà dei terreni siano chiaramente riconducibili alle categorie definite nella Tab. 3.2.II, si può fare riferimento a un approccio semplificato che si basa sulla classificazione del sottosuolo in funzione dei valori della velocità di propagazione delle onde di taglio, VS. I valori dei parametri meccanici necessari per le analisi di risposta sismica locale o delle velocità VS per l'approccio semplificato costituiscono parte integrante della caratterizzazione geotecnica dei terreni compresi nel volume significativo, di cui al § 6.2.2.*

*I valori di VS sono ottenuti mediante specifiche prove oppure, con giustificata motivazione e limitatamente all'approccio semplificato, sono valutati tramite relazioni empiriche di comprovata affidabilità con i risultati di altre prove in sito, quali ad esempio le prove penetrometriche dinamiche per i terreni a grana grossa e le prove penetrometriche statiche.*

*La classificazione del sottosuolo si effettua in base alle condizioni stratigrafiche ed ai valori della velocità equivalente di propagazione delle onde di taglio, VS,eq (in m/s), definita dall'espressione:*

$$V_{S,eq} = \frac{H}{\sum_{i=1}^N \frac{h_i}{V_{S,i}}}$$

hi spessore dell'*i*-esimo strato;

- *VS*, i velocità delle onde di taglio nell'*i*-esimo strato;
- *N* numero di strati;
- *H* profondità del substrato, definito come quella formazione costituita da roccia o terreno molto rigido, caratterizzata da *VS* non inferiore a 800 m/s.

Per le fondazioni superficiali, la profondità del substrato è riferita al piano di imposta delle stesse, mentre per le fondazioni su pali è riferita alla testa dei pali. Nel caso di opere di sostegno di terreni naturali, la profondità è riferita alla testa dell'opera. Per muri di sostegno di terrapieni, la profondità è riferita al piano di imposta della fondazione.

Per depositi con profondità *H* del substrato superiore a 30 m, la velocità equivalente delle onde di taglio *VS,eq* è definita dal parametro *VS,30*, ottenuto ponendo *H*=30 m nella precedente espressione e considerando le proprietà degli strati di terreno fino a tale profondità.

Le categorie di sottosuolo che permettono l'utilizzo dell'approccio semplificato sono definite in Tab. 3.2.II.

**Tab. 3.2.II – Categorie di sottosuolo che permettono l'utilizzo dell'approccio semplificato.**

Categoria	Caratteristiche della superficie topografica
A	<i>Ammassi rocciosi affioranti o terreni molto rigidi</i> caratterizzati da valori di velocità delle onde di taglio superiori a 800 m/s, eventualmente comprendenti in superficie terreni di caratteristiche meccaniche più scadenti con spessore massimo pari a 3 m.
B	<i>Rocce tenere e depositi di terreni a grana grossa molto addensati o terreni a grana fina molto consistenti</i> , caratterizzati da un miglioramento delle proprietà meccaniche con la profondità e da valori di velocità equivalente compresi tra 360 m/s e 800 m/s.
C	<i>Deposit</i> i di terreni a grana grossa mediamente addensati o terreni a grana fina mediamente consistenti con profondità del substrato superiori a 30 m, caratterizzati da un miglioramento delle proprietà meccaniche con la profondità e da valori di velocità equivalente compresi tra 180 m/s e 360 m/s.
D	<i>Deposit</i> i di terreni a grana grossa scarsamente addensati o di terreni a grana fina scarsamente consistenti, con profondità del substrato superiori a 30 m, caratterizzati da un miglioramento delle proprietà meccaniche con la profondità e da valori di velocità equivalente compresi tra 100 e 180 m/s.
E	<i>Terreni con caratteristiche e valori di velocità equivalente riconducibili a quelle definite per le categorie C o D</i> , con profondità del substrato non superiore a 30 m.

Per queste cinque categorie di sottosuolo, le azioni sismiche sono definibili come descritto al § 3.2.3 delle presenti norme.

Per qualsiasi condizione di sottosuolo non classificabile nelle categorie precedenti, è necessario predisporre specifiche analisi di risposta locale per la definizione delle azioni sismiche.

#### **Condizioni topografiche**

Per condizioni topografiche complesse è necessario predisporre specifiche analisi di risposta sismica locale. Per configurazioni superficiali semplici si può adottare la seguente classificazione (Tab. 3.2.III):

Tab. 3.2.III – *Categorie topografiche*

Categoria	Caratteristiche della superficie topografica
T1	Superficie pianeggiante, pendii e rilievi isolati con inclinazione media $i \leq 15^\circ$
T2	Pendii con inclinazione media $i > 15^\circ$
T3	Rilievi con larghezza in cresta molto minore che alla base e inclinazione media $15^\circ \leq i \leq 30^\circ$
T4	Rilievi con larghezza in cresta molto minore che alla base e inclinazione media $i > 30^\circ$

Le suesposte categorie topografiche si riferiscono a configurazioni geometriche prevalentemente bidimensionali, creste o dorsali allungate, e devono essere considerate nella definizione dell'azione sismica se di altezza maggiore di 30 m.

Secondo la classificazione del suolo, sulla base della nuova normativa sismica per gli edifici (D.M. 17/01/2018 recante "Aggiornamento delle Norme tecniche per le costruzioni") in base ai dati ottenuti dalle indagini geognostiche in sito si classifica il terreno di fondazione del fabbricato come appartenente alla categoria C Depositi di terreni a grana grossa mediamente addensati o terreni a grana fina mediamente consistenti con profondità del substrato superiori a 30 m, caratterizzati da un miglioramento delle proprietà meccaniche con la profondità e da valori di velocità equivalente compresi tra 180 m/s e 360 m/s.

### 6.1 Caratterizzazione sismica del terreno attraverso prove HVSR e MASW

Ai fini della caratterizzazione sismica del sottosuolo, l'indagine geofisica con apparecchio tromografico digitale **TROMINO**, avvalendosi del metodo di Nakamura sul rapporto spettrale H/V fornisce una valutazione diretta della  $V_{s30}$  in base all'individuazione delle discontinuità sismiche e della profondità della formazione rocciosa.

Inoltre, questa tecnica dei rapporti spettrali o HVSR (Horizontal to Vertical Spectral Ratio) con apparecchio tromografico **TROMINO** permette anche di misurare la frequenza caratteristica di risonanza del sito, parametro che è utilizzabile in termini di risposta sismica locale (RSL) per progettare edifici non con la stessa frequenza di risonanza del terreno, in modo da evitare l'effetto di doppia risonanza pericoloso per la stabilità degli edifici.

La  $V_{s30}$  viene calcolata o meglio stimata mediante un codice di calcolo apposito attraverso il software **GRILLA**, è necessario conoscere la profondità di un riflettore stratigrafico (prova penetrometrica o sondaggio) e riconoscibile dalla curva H/V.

La tecnica HVSR si basa in parte sulla sismica tradizionale dei microtremiti, cioè di oscillazioni molto piccole rispetto al sisma; il metodo di acquisizione dei dati è quindi detto passivo in quanto il rumore non è generato come ad esempio dalle esplosioni della sismica attiva.

I dati sono stati acquisiti con una frequenza base di 128 Hz e convertiti in file ASCII mediante il software Grilla, e il rumore sismico è stato registrato nelle sue tre componenti per un intervallo di tempo di 20 o 30 minuti, suddiviso in intervalli della durata di 8 sec.

Successivamente si è operato alla costruzione di un modello teorico HVSR e, tramite un algoritmo, all'adattamento della curva sperimentale e quella teorica. Le acquisizioni rispettano le indicazioni del processo SESAME.

Nel presente studio, che sfrutta la teoria di Nakamura che relaziona lo spettro di risposta del substrato roccioso (rapporto spettrale H/V = 1) con quello misurato in superficie, la frequenza di risonanza del terreno è regolata dalla formula:

$$f = V_s / 4H$$

dove f è la frequenza e H lo spessore dello strato sismico.

*ELABORAZIONE MASW/REMI*

**Dati sperimentali e risultati ottenuti**

Inizio registrazione: 15/09/2022 16:53:47    Fine registrazione: 15/09/2022 16:59:26

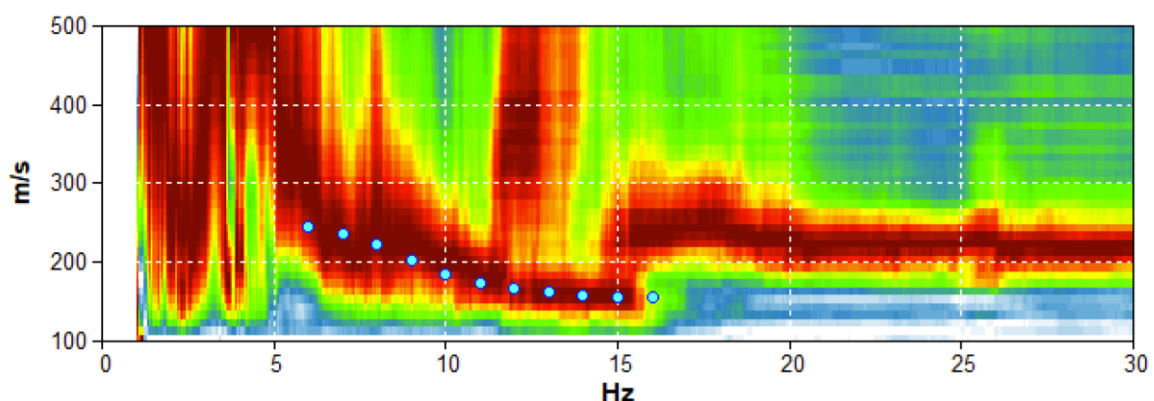
Durata registrazione: 0h05'37".

Freq. campionamento: 256 Hz

Nomi canali: TR1+ TR1-; TR2+ TR2-; TR3+ TR3-; TR4+ TR4-; TR5+ TR5-; TR6+ TR6-; TR7+ TR7-; TR8+ TR8-

Array geometry (x): 0.0 3.0 6.0 9.0 12.0 15.0 18.0 21.0 m.

**MODELLED RAYLEIGH WAVE PHASE VELOCITY DISPERSION CURVE**



Depth at the bottom of the layer [m]	Thickness [m]	Vs [m/s]	Poisson ratio
7.60	7.60	158	0.45
inf.	inf.	283	0.42

$$V_{s\_eq}(0.0-30.0) = 236 \text{ m/s}$$

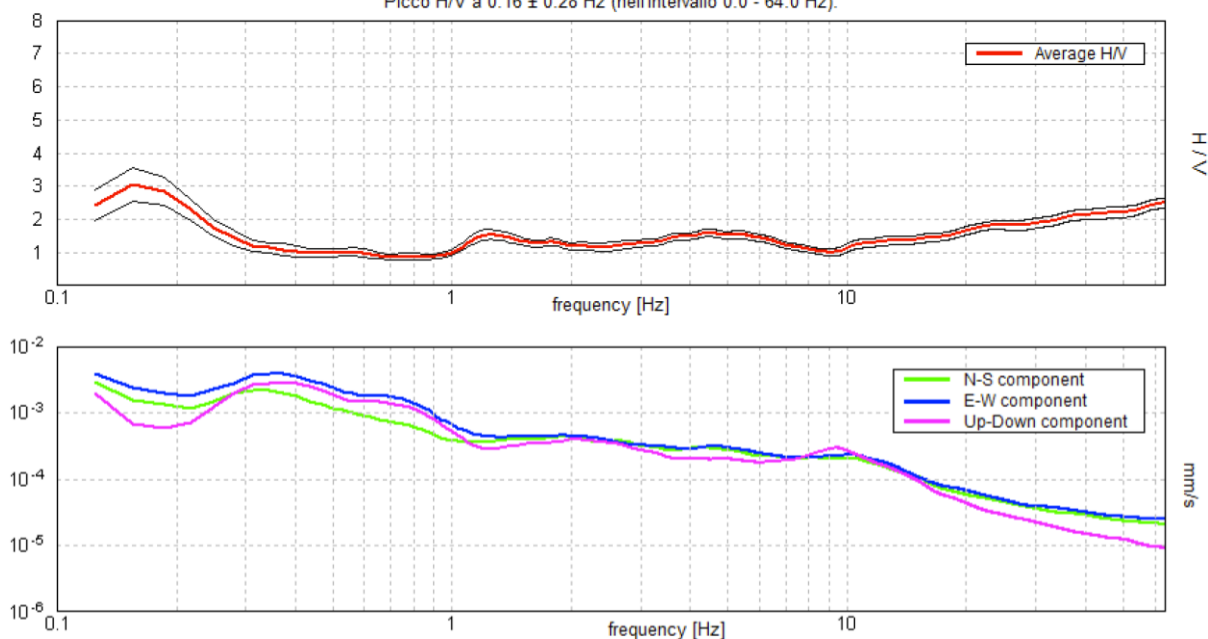
### Dati sperimentali misure HVSR e risultati

Strumento: TZB-0127/01-20  
 Formato dati: 32 bit  
 Fondo scala [mV]: 179  
 Inizio registrazione: 15/09/2022 16:24:08 Fine registrazione: 15/09/2022 16:54:08  
 Nomi canali: NORTH SOUTH; EAST WEST ; UP DOWN  
 Dato GPS non disponibile

Durata registrazione: 0h30'00". Analizzato 76% tracciato (selezione manuale)  
 Freq. campionamento: 128 Hz  
 Lunghezza finestre: 20 s  
 Tipo di lisciamento: Triangular window  
 Lisciamento: 10%

### RAPPORTO SPETTRALE ORIZZONTALE SU VERTICALE

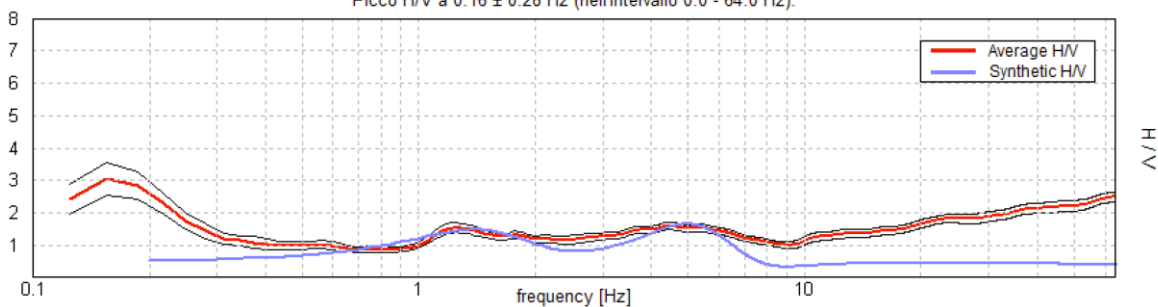
Picco H/V a  $0.16 \pm 0.28$  Hz (nell'intervallo 0.0 - 64.0 Hz).



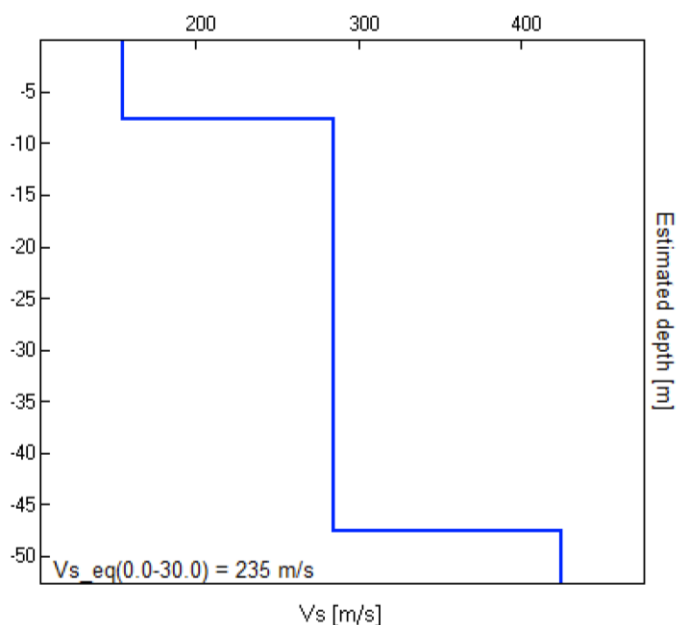
Curva H/V (HVSR) registrata nel sito in esame

### Modello di sottosuolo

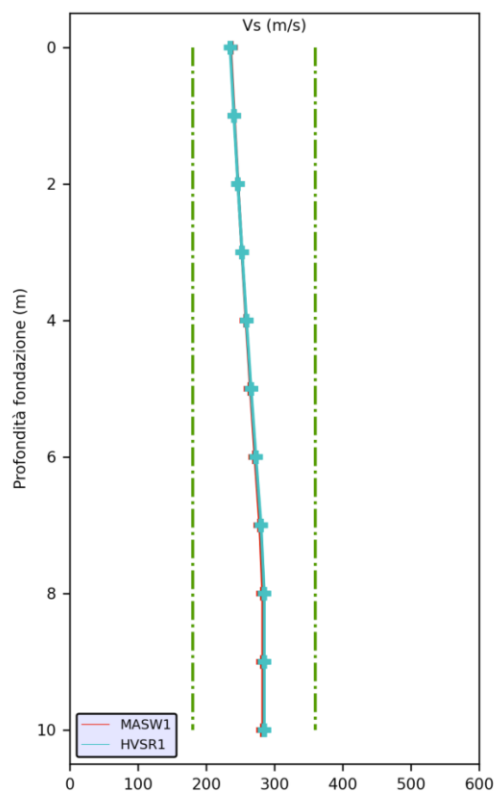
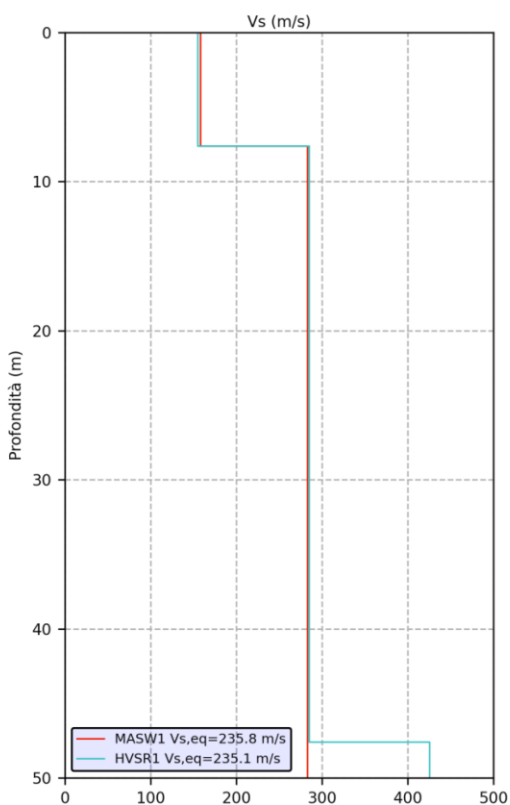
Picco H/V a  $0.16 \pm 0.28$  Hz (nell'intervallo 0.0 - 64.0 Hz).



Profondità alla base dello strato [m]	Spessore [m]	Vs [m/s]	Rapporto di Poisson
7.60	7.60	155	0.45
47.60	40.00	285	0.45
inf.	inf.	425	0.42



Modello di velocità delle onde di taglio S derivato da fit congiunto con acquisizione attiva, passiva e tecnica H/V.



L'analisi congiunta delle tecniche di acquisizione utilizzate, ha permesso sia di ricostruire il profilo verticale di velocità delle onde S nel sito in esame, sia di individuare la presenza di contrasti di impedenza-rigidezza nel sottosuolo medesimo.

Il profilo sismico (MASW, REMI) e la relativa elaborazione ha permesso di ricostruire il modello delle velocità delle onde di taglio fino ad una profondità di circa 13 - 20 m dal piano campagna. L'estensione in profondità è stata eseguita utilizzando l'analisi congiunta con le acquisizioni HVSR.

La Vs30 [m/s] relativa alla quota del piano campagna è risultata pari a 235 m/s.

### ELEMENTI di MICROZONAZIONE SISMICA

L'area di intervento è morfologicamente classificabile come Pianura 2.

Si considerano i coefficienti di amplificazione sismica relativi alla fascia di velocità relativa a 200 m/s.

#### Tabella per il calcolo dei coefficienti di amplificazione sismica

(DGR n.630 del 29/04/2019 aggiornamento DGR n.476 del 12/04/2021)

**F.A. P.G.A.:** accelerazione di picco orizzontale a periodo  $T=0$  alla superficie del sito.

**F.A. S.I.:** Intensità spettrale di risposta in velocità relativo a tre intervalli.

**F.A. S.A.:** Intensità spettrale di risposta in accelerazione relativo a quattro intervalli.

**PIANURA 2:** settore di pianura con sedimenti alluvionali prevalentemente fini, alternanze di limi, argille e sabbie, caratterizzato dalla presenza di una importante discontinuità stratigrafica responsabile di un significativo contrasto di impedenza a circa 100 m da p.c. e dal tetto del substrato rigido a circa 150 m da p.c.;

Vs30 (m/s) →	150	200	250	300	350	400
PGA	1,7	1,7	1,7	1,6	1,5	1,5

Fattore di Amplificazione PGA

Vs30 (m/s) →	150	200	250	300	350	400
SA1	1,8	1,8	1,8	1,7	1,6	1,5
SA2	2,7	2,7	2,4	2,1	1,9	1,8
SA3	3,3	3,2	2,8	2,5	2,3	2,1
SA4	3,3	3,1	2,7	2,4	2,1	1,9

Fattori di Amplificazione SA1 ( $0,1s \leq T \leq 0,5s$ ), SA2 ( $0,4s \leq T \leq 0,8s$ ), SA3 ( $0,7s \leq T \leq 1,1s$ ), SA4 ( $0,5s \leq T \leq 1,5s$ )

Vs30 (m/s) →	150	200	250	300	350	400
SI1	2,0	2,0	1,9	1,8	1,7	1,6
SI2	3,1	3,0	2,7	2,4	2,1	2,0
SI3	3,6	3,3	2,9	2,5	2,2	2,0

Fattori di Amplificazione SI1 ( $0,1s \leq T \leq 0,5s$ ), SI2 ( $0,5s \leq T \leq 1,0s$ ), SI3 ( $0,5s \leq T \leq 1,5s$ )

## 6.2 Verifica a liquefazione

La liquefazione delle sabbie è un processo che può avvenire durante un evento sismico: essa nasce dall'incremento della pressione dell'acqua interstiziale ( $u$ ) durante sollecitazioni di tipo ciclico. Se tale aumento è tale da eguagliare la pressione litostatica totale, si ha l'annullamento della resistenza al taglio. Le verifiche sono state effettuate sulle prove spinte fino a 20 m da p.c..

### CPT1

I valori inseriti per i calcoli eseguiti con il metodo Boulanger & Idriss (2014) sono:

- $A_{max}/g$ : 0,123
- Magnitudo: 6,6
- Profondità della falda: 2,0 m

Tabella 1 - Parametri inseriti e IPL verticale prova penetrometrica

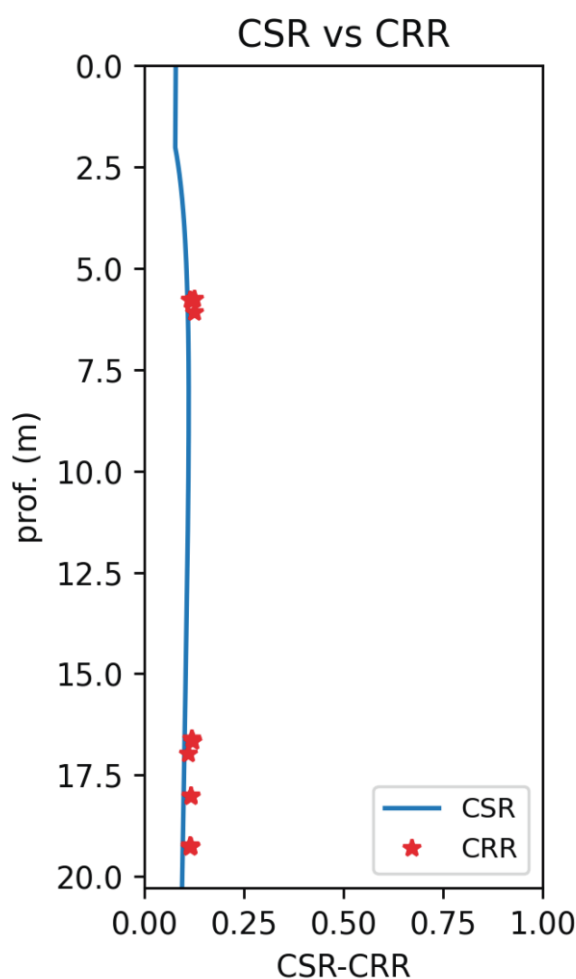


Grafico 1 - CSR vs CRR, i valori di CRR indicati con asterisco rosso che ricadono a sinistra della curva CRR indicano valori con  $FS < 1$  e quindi potenzialmente liquefacibili-

L'indice potenziale di liquefazione è 0,002.



## CPT6

I valori inseriti per i calcoli eseguiti con il metodo Boulanger & Idriss (2014) sono:

- $A_{max}/g$ : 0,123
- Magnitudo: 6,6
- Profondità della falda: 1,6 m

Tabella 1 - Parametri inseriti e IPL verticale prova penetrometrica

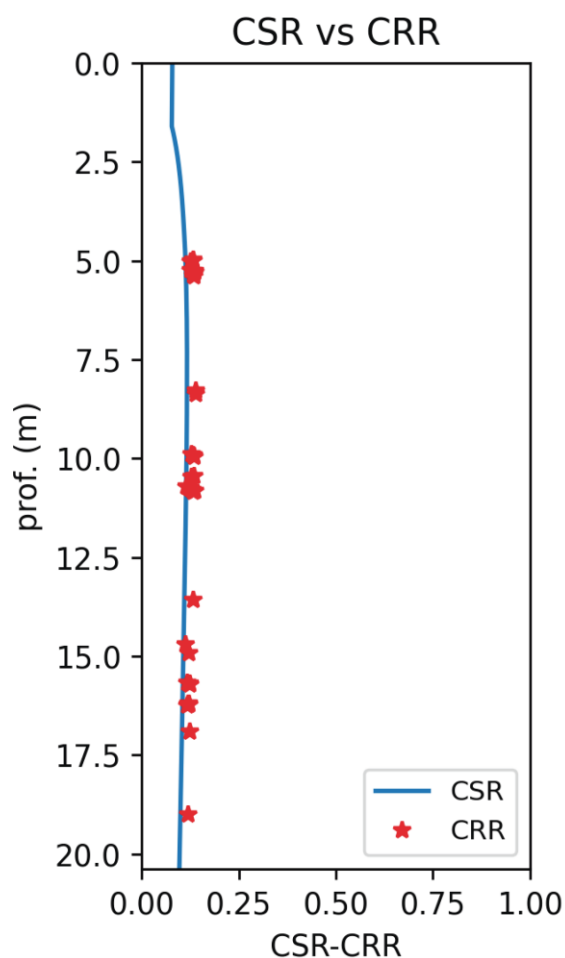


Grafico 1 - CSR vs CRR, i valori di CRR indicati con asterisco rosso che ricadono a sinistra della curva CRR indicano valori con  $FS < 1$  e quindi potenzialmente liquefacibili.

L'indice potenziale di liquefazione è 0,008.

Le verifiche a liquefazione hanno identificato per tutte le prove un rischio di liquefazione basso.

In allegato sono riportati i grafici dei calcoli.

## 7 Conclusioni

Sulla base dei risultati ottenuti si può stabilire quanto segue:

- Le prove hanno identificato la presenza di terreni argillosi fino alla profondità di 10/15 m, seguiti da argille limose e limi argillosi, che, nelle prove effettuate nella zona ovest sono continue fino a 20 m, mentre nelle prove effettuate nella zona est sono intervallati da pacchi sabbiosi di spessore compreso tra 1 e 3 m.
- Al momento delle prove è stata rilevata la presenza di falda freatica fra le profondità di 0,6 e 2,0 m dal p.c., tale livello misurato può subire oscillazioni verticali al variare delle stagioni e in seguito a precipitazioni prolungate e/o intense.
- Secondo la classificazione del suolo, sulla base della nuova normativa sismica per gli edifici (D.M. 17/01/2018 recante "Aggiornamento delle Norme tecniche per le costruzioni") in base ai dati ottenuti dalle indagini in sito si classifica il terreno di fondazione del fabbricato come appartenente alla **C- Depositi di terreni a grana grossa scarsamente addensati o terreni a grana fina scarsamente consistenti con profondità del substrato superiori a 30 m, caratterizzati da un graduale miglioramento delle proprietà meccaniche con la profondità e da valori di velocità equivalente compresi tra 100 m/s e 180 m/s.**
- Le verifiche a liquefazione hanno identificato per tutte le prove un rischio di liquefazione basso.

Imola 17 ottobre '22

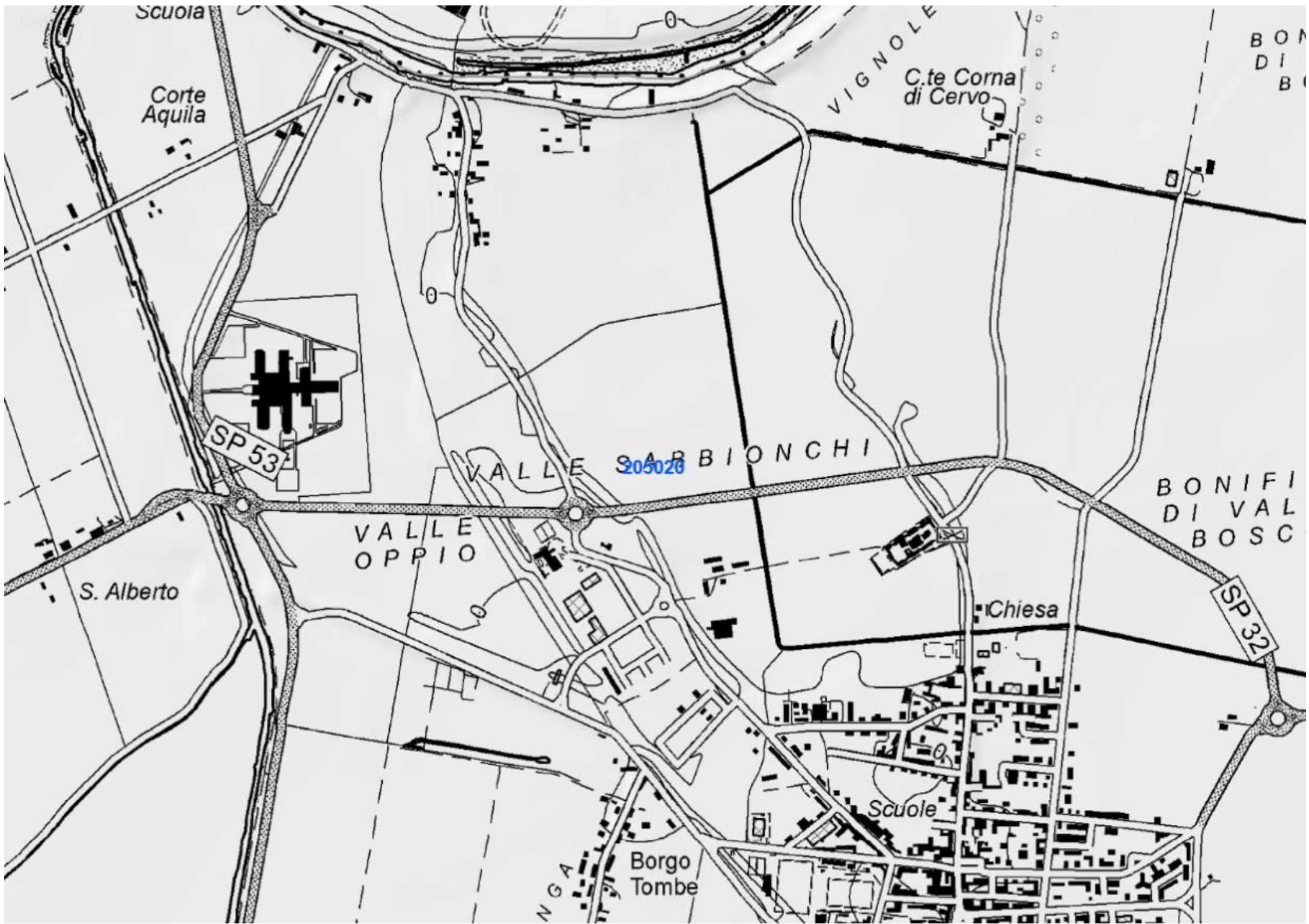
Il geologo

*Dott. Maurizio Castellari*



# **Allegato 1**

## **Ubicazione intervento**



Scuola

Corte Aquila

VIGNOLE

C.te Corna di Cervo

BONIFI DI BOSCO

SP 53

VALLE SARBIONCHI

205020

VALLE OPPIO

BONIFI DI VAL BOSCO

S. Alberto

Chiesa

SP 32

Scuole

Borgo Tombe

NGA

## **Allegato 2**

# **Grafici prove penetrometriche e verifica a liquefazione**



# CPT Office V. 1.0

Elaborato grafico confronto prove penetrometriche

21/09/2022

19:33:34

Committente	Dott. Geol. Maurizio Castellari
Località	Lagosanto (Fe)
Via	Lagosanto
Tipo Prove	CPTe/U

# 1 - Parametri prove

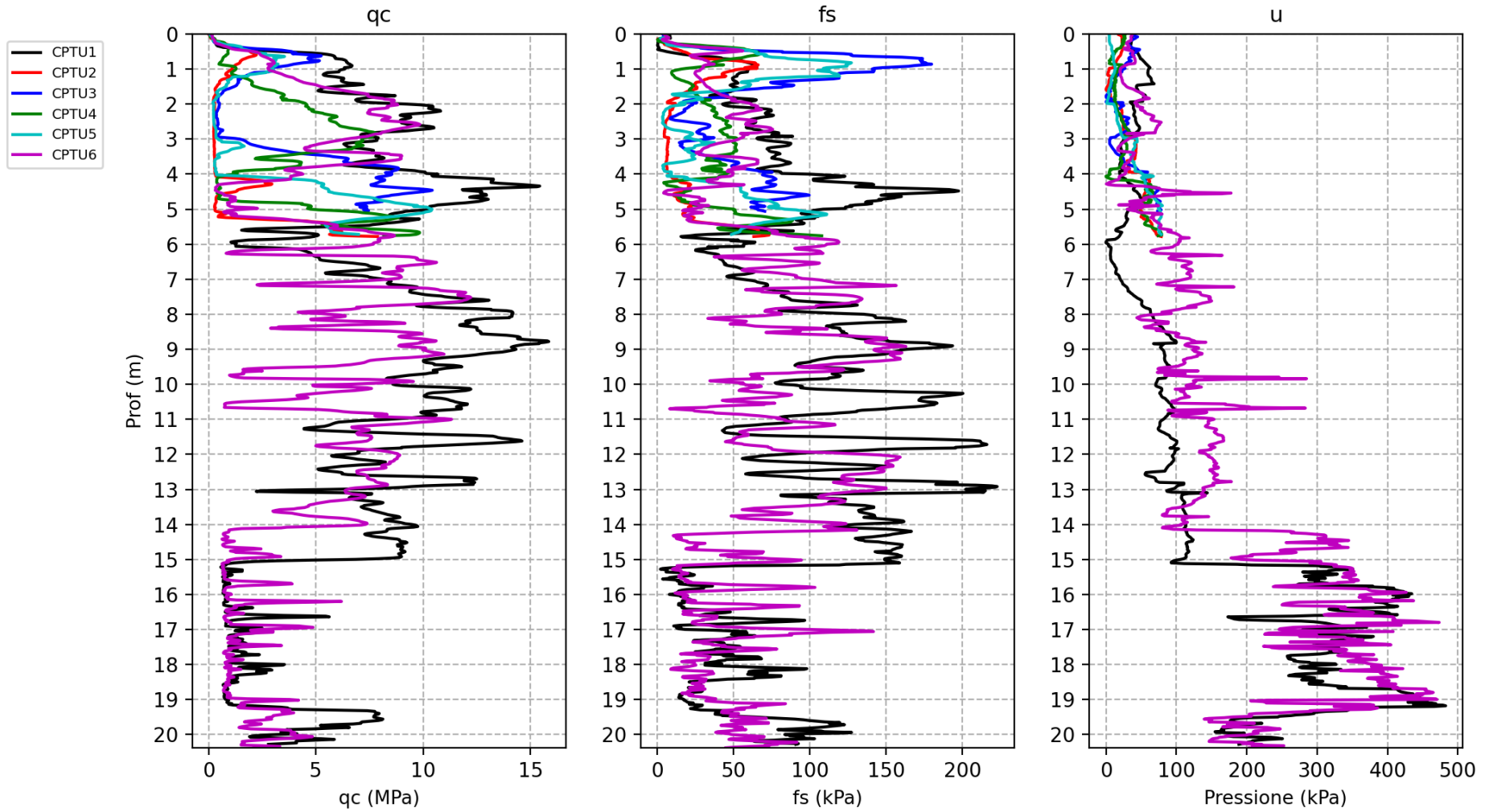


Fig 1 - Plot profondità-variabile delle prove penetrometriche elaborate

## 2 - Parametri prove e confronto IC-Litologia

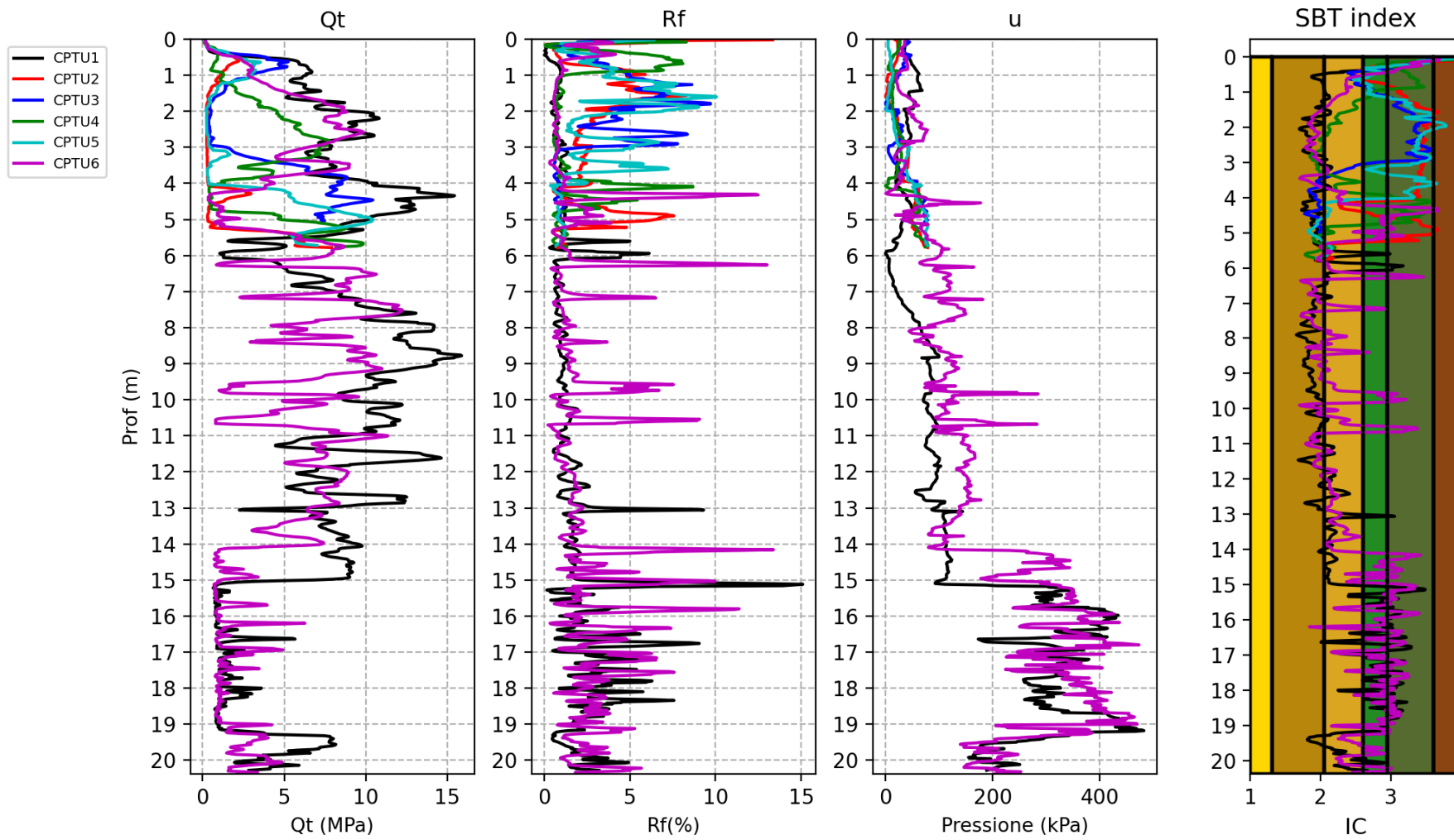


Fig 2 - Plot profondità-variabile delle prove penetrometriche elaborate



## 2 - Parametri prove e confronto ICn-Litologia

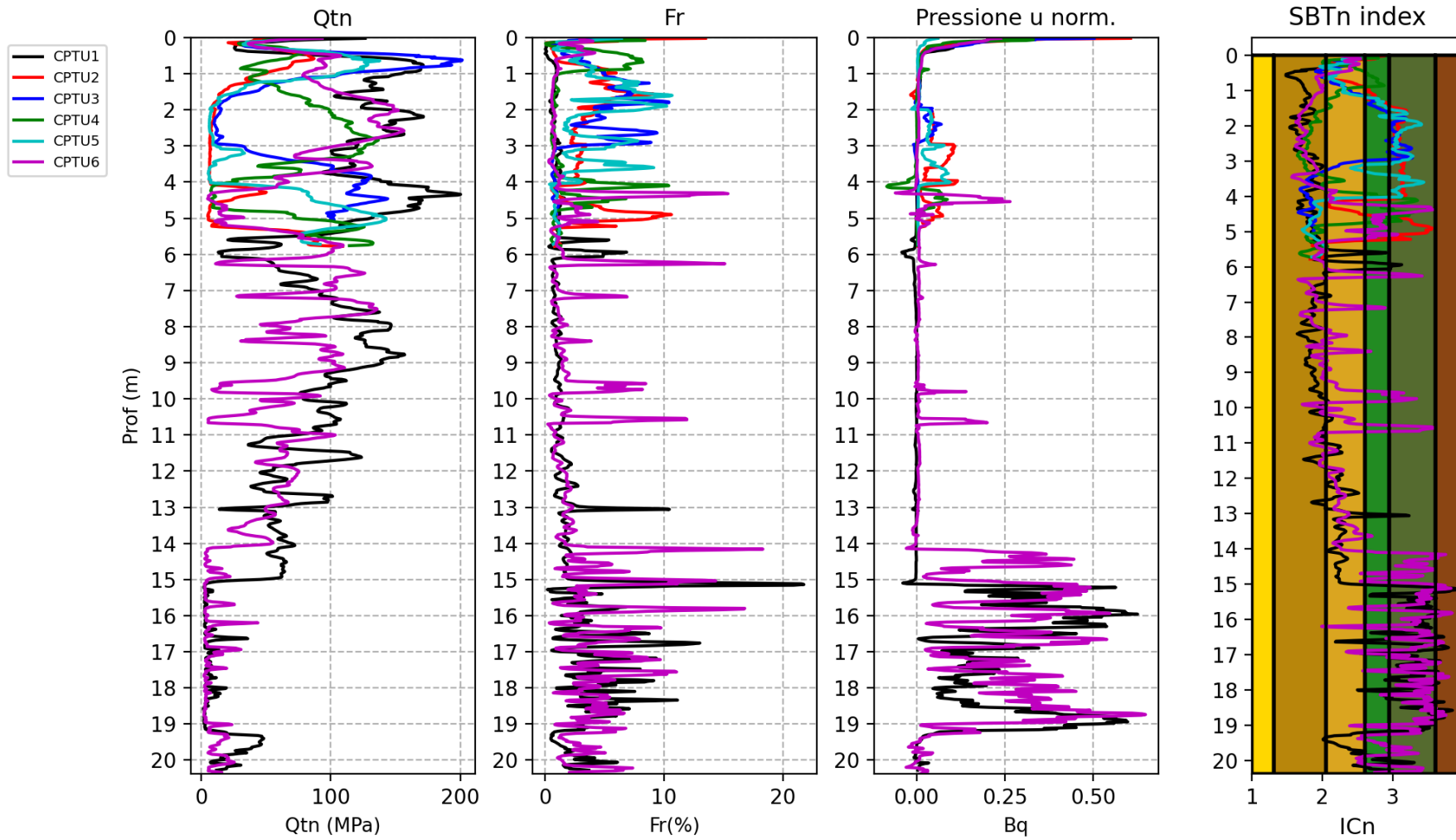


Fig 3 - Plot profondità-variabile delle prove penetrometriche elaborate

### 3 - Parametri di output delle prove penetrometriche elaborate

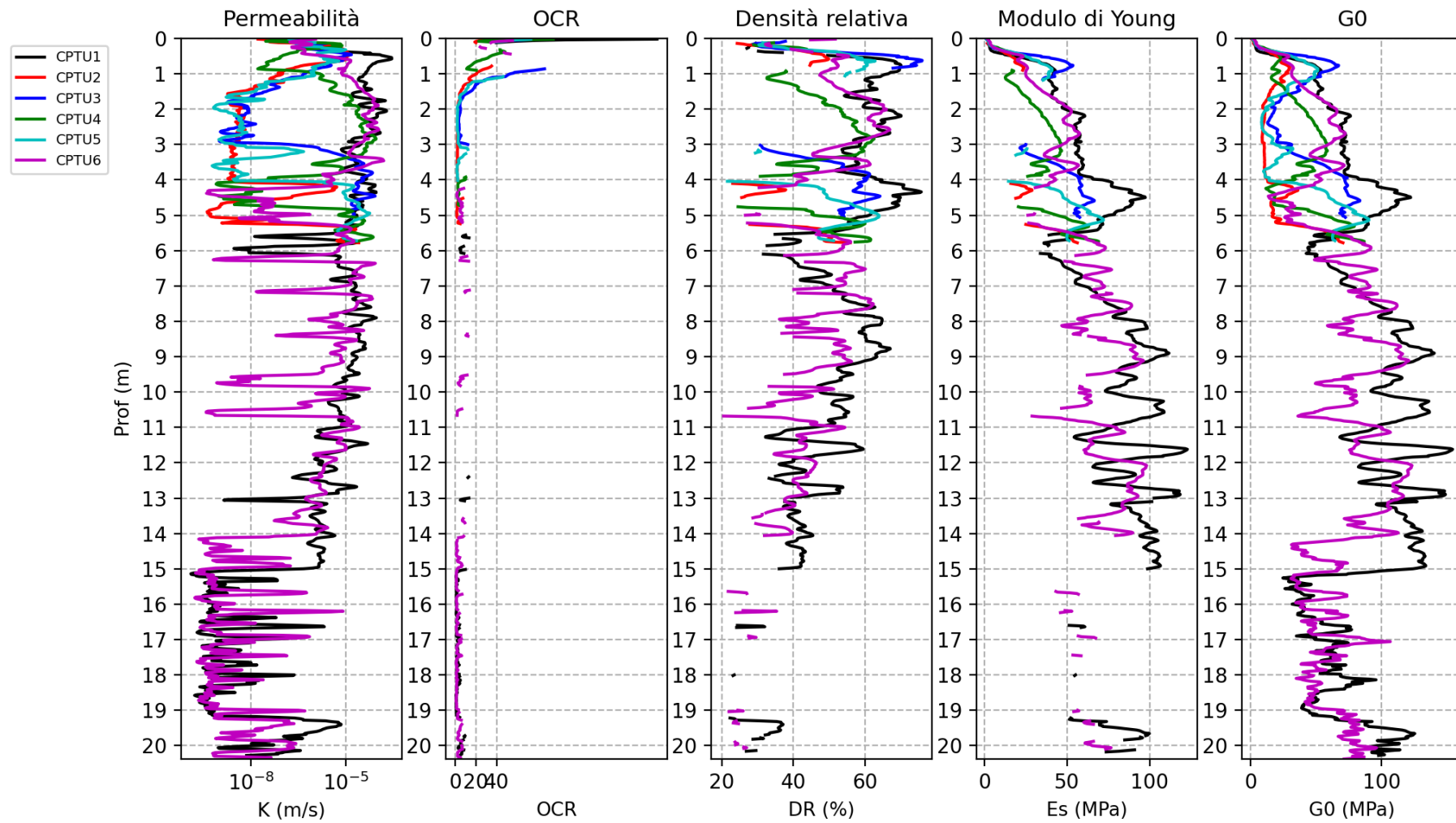


Fig 4 - Plot profondità-variabile delle prove penetrometriche elaborate

### 3 - Parametri di output delle prove penetrometriche elaborate

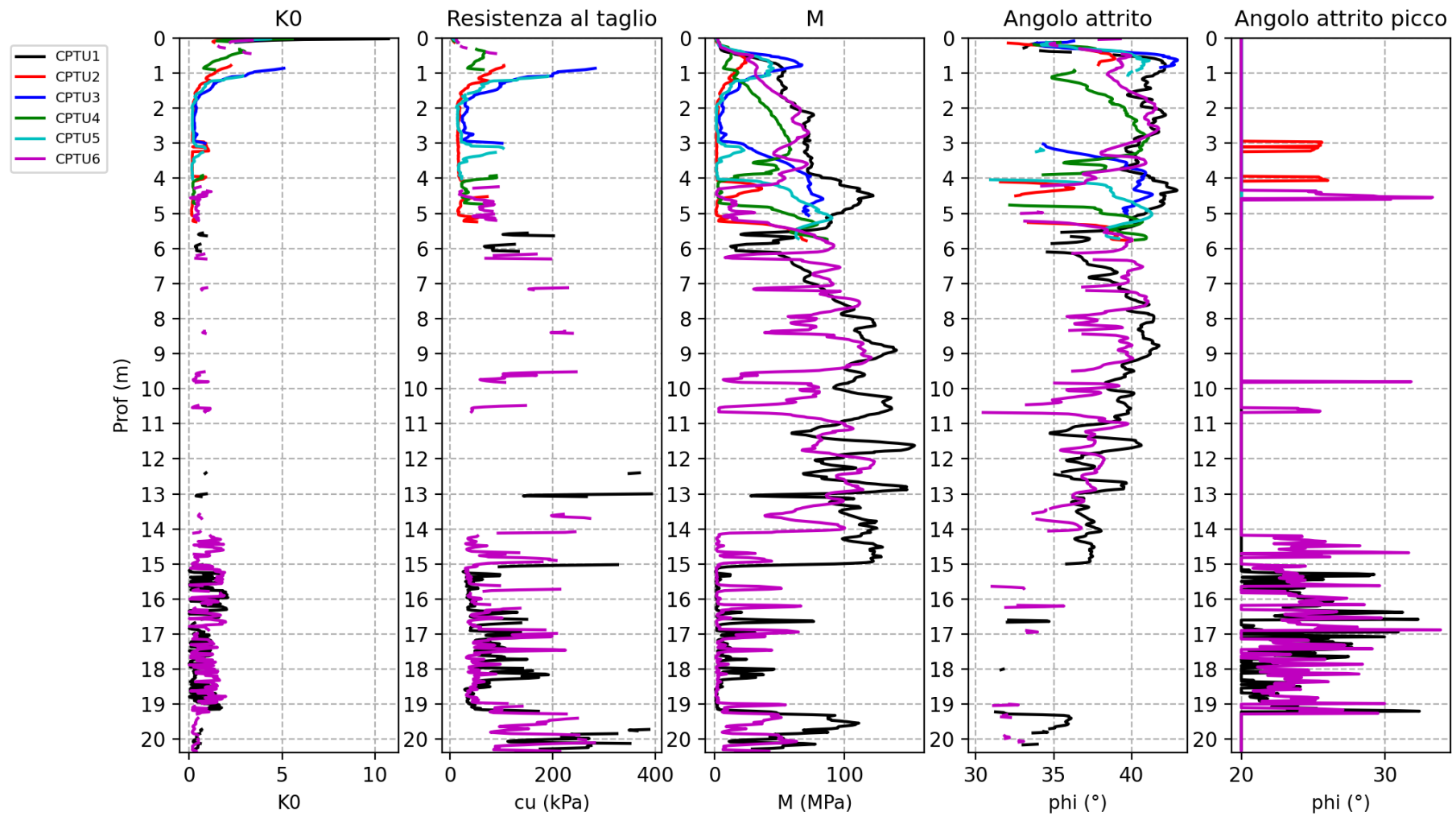


Fig 5 - Plot profondità-variabile delle prove penetrometriche elaborate



# CPT Office V. 1.1

## Elaborato grafico prova penetrometrica

21/09/2022

19:22:52

Committente	Dott. Geol. Maurizio Castellari		
Località	Lagosanto (Fe)		
Via	Lagosanto		
Prova	CPTU1		
Tipo prova	CPTU		
Tipo di Prova	Prof. max (m)	Preforo (m)	Falda (m da p.c.)
CPTU	20.28	0.02	2

Tabella 1 - Informazioni generali

# 1 - Parametri prova penetrometrica CPTU1

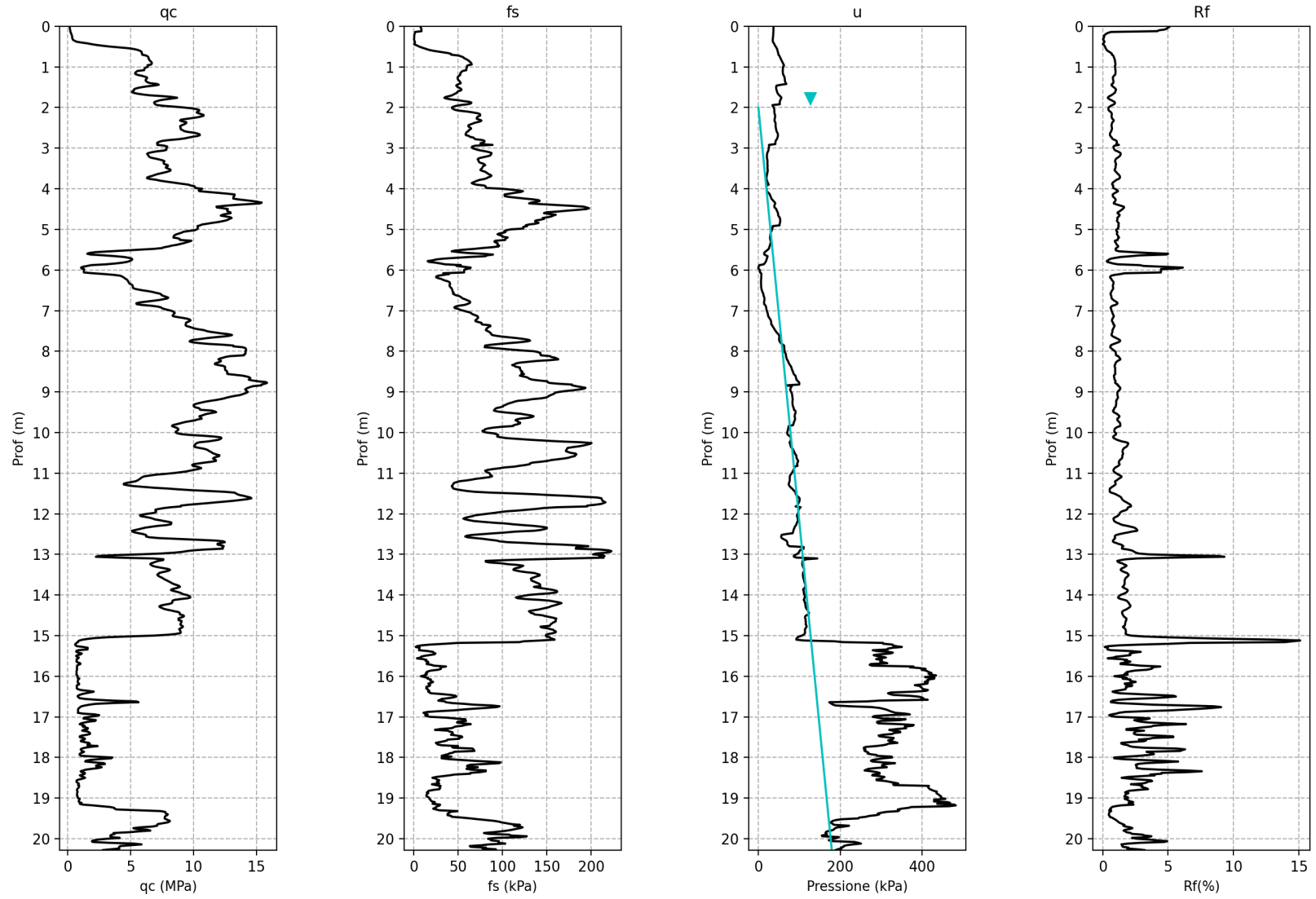


Fig 1 - Plot profondità-variabile della prova penetrometrica elaborata

# 1 - Parametri prova penetrometrica CPTU1

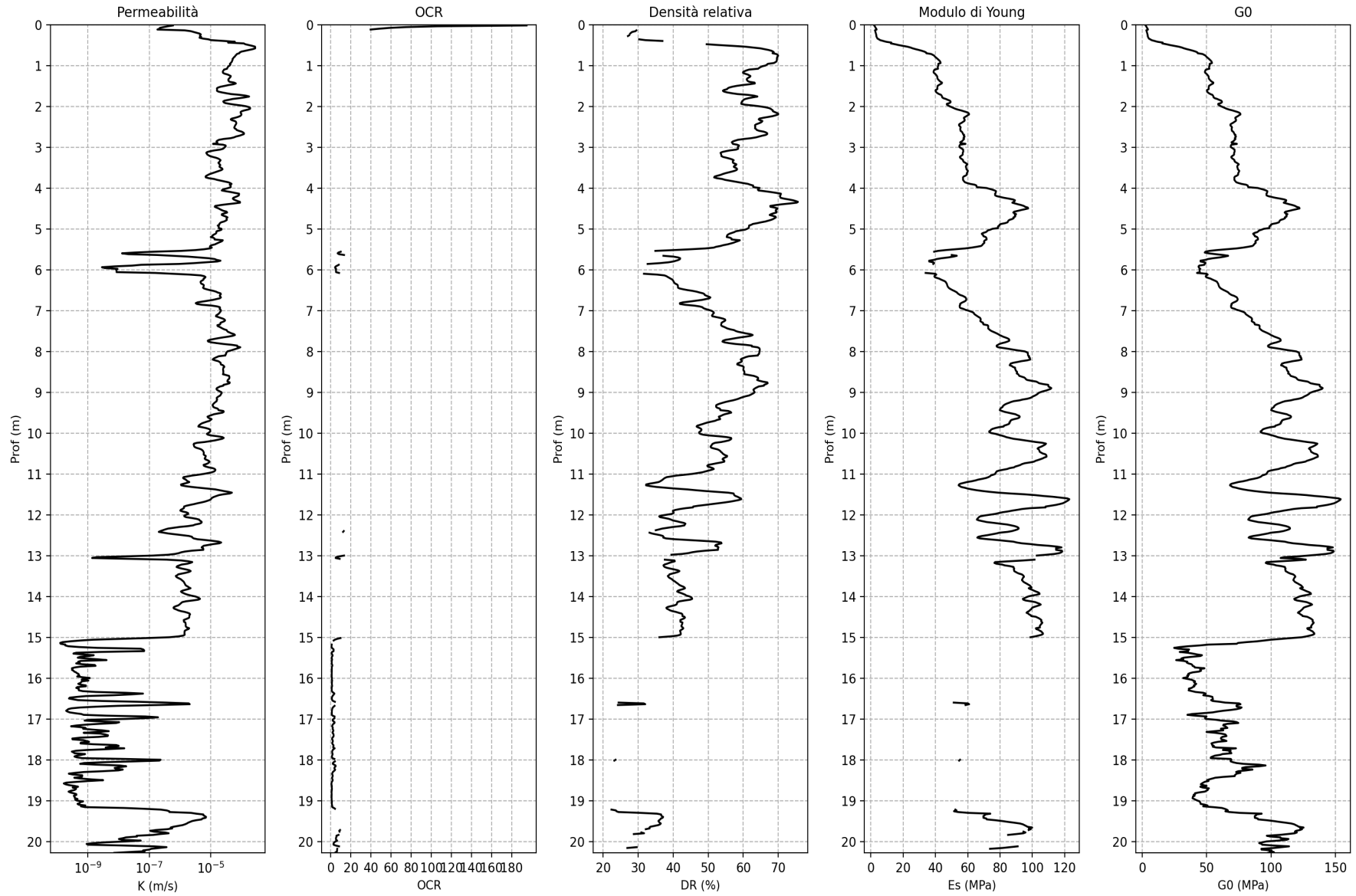


Fig 2 - Plot profondità-variabile della prova penetrometrica elaborata

# 1 - Parametri prova penetrometrica CPTU1

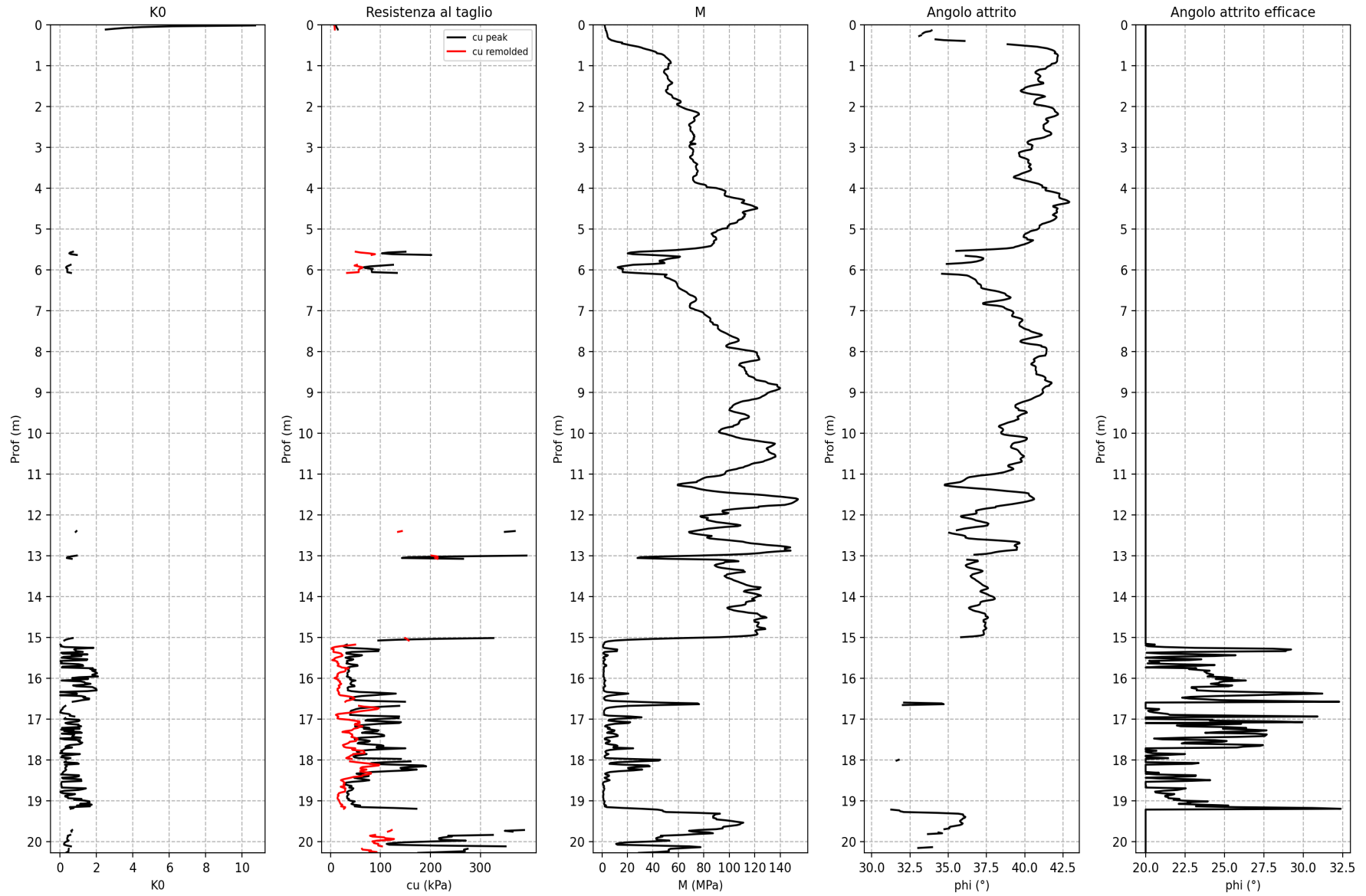


Fig 3 - Plot profondità-variabile della prova penetrometrica elaborata

## 2 - SBT & SBT(n) CPTU1

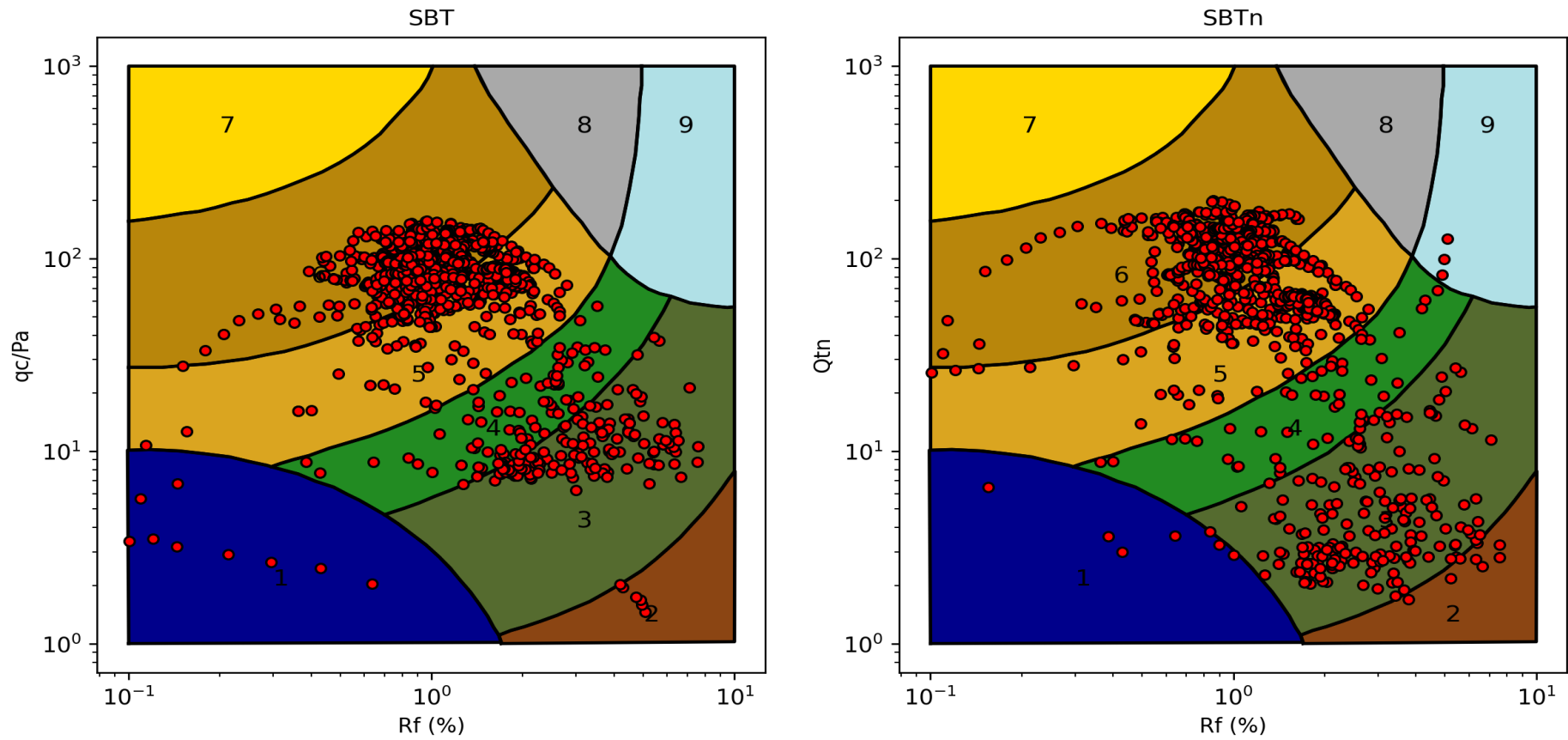


Fig 4 - A sinistra plot valori  $q_c/Pa$ - $R_f$  su SBT chart, a destra plot valori  $Q_{tn}$ - $R_f$  su SBT(n) chart



## 2 - Stratigrafia CPTU1

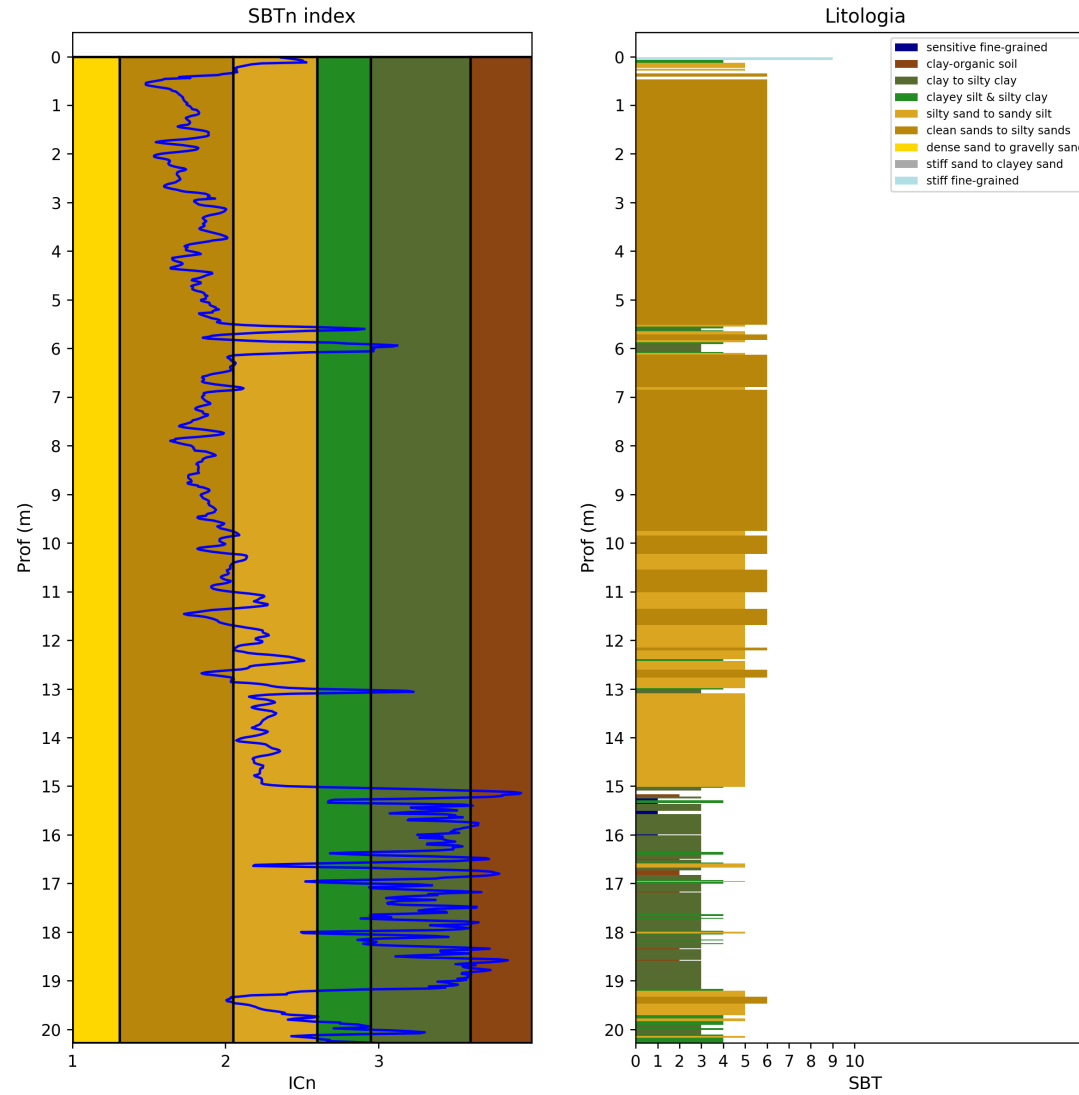


Fig 3 - A sinistra Indice SBT, a destra classificazione stratigrafica da SBT chart

# CPT Office V. 1.1



## Report calcolo prova penetrometrica

21/09/2022

19:22:51

Committente	Dott. Geol. Maurizio Castellari
Località	Lagosanto (Fe)
Via	Lagosanto
Prova	CPTU1
Tipo prova	CPTU

### Tabella 1 - Dati input

Tipo di Prova	Profondità max (m)	Falda (m da p.c.)
CPTU	20.28	2

Prof.(m)	qc (MPa)	fs (kPa)	u2 (kPa)	u0 (kPa)	Qt (MPa)	$\gamma$ (KN/m3)	$\sigma_v$ (kPa)	$\sigma_{vp}$ (kPa)	cu (kPa)	$\phi$ (°)	$\phi$ picco(°)	Dr (%)
0.02	0.14	7.51	36.88	0.0	0.15	12.5	0.25	0.25	10.54	0.0	20.0	0.0
0.04	0.15	8.0	36.88	0.0	0.16	12.5	0.5	0.5	11.49	0.0	20.0	0.0
0.06	0.16	8.37	36.8	0.0	0.17	12.5	0.75	0.75	12.17	0.0	20.0	0.0
0.08	0.17	8.37	36.8	0.0	0.18	12.5	1.0	1.0	12.56	0.0	20.0	0.0
0.1	0.19	8.49	36.8	0.0	0.2	17.5	1.35	1.35	14.06	0.0	20.0	0.0
0.12	0.2	8.61	36.65	0.0	0.21	17.5	1.7	1.7	14.57	0.0	20.0	0.0
0.14	0.2	1.32	36.49	0.0	0.21	17.5	2.05	2.05	0.0	33.92	20.0	29.48
0.16	0.24	1.08	36.41	0.0	0.25	17.5	2.4	2.4	0.0	33.83	20.0	29.22
0.18	0.26	0.79	36.41	0.0	0.27	17.5	2.75	2.75	0.0	33.51	20.0	28.26
0.2	0.29	0.63	36.25	0.0	0.29	17.5	3.1	3.1	0.0	33.4	20.0	27.94
0.22	0.31	0.46	36.17	0.0	0.32	17.5	3.45	3.45	0.0	33.32	20.0	27.7
0.24	0.33	0.3	35.93	0.0	0.34	17.5	3.8	3.8	0.0	0.0	20.0	0.0
0.26	0.35	0.43	35.86	0.0	0.35	17.5	4.15	4.15	0.0	33.23	20.0	27.43
0.28	0.34	0.35	35.62	0.0	0.35	17.5	4.5	4.5	0.0	33.1	20.0	27.06
0.3	0.36	0.23	35.3	0.0	0.37	17.5	4.85	4.85	0.0	0.0	20.0	0.0
0.32	0.38	0.11	35.14	0.0	0.39	17.5	5.2	5.2	0.0	0.0	20.0	0.0
0.34	0.43	0.34	35.14	0.0	0.43	17.5	5.55	5.55	0.0	0.0	20.0	0.0
0.36	0.57	0.63	35.14	0.0	0.57	17.5	5.9	5.9	0.0	34.17	20.0	30.26
0.38	0.68	0.99	35.38	0.0	0.69	17.5	6.25	6.25	0.0	34.72	20.0	32.06
0.4	1.08	1.24	36.57	0.0	1.09	18.0	6.61	6.61	0.0	36.07	20.0	36.94
0.42	1.55	0.87	37.91	0.0	1.55	18.0	6.97	6.97	0.0	0.0	20.0	0.0
0.44	1.88	0.2	38.94	0.0	1.89	18.5	7.34	7.34	0.0	0.0	20.0	0.0
0.46	2.27	1.97	39.88	0.0	2.28	18.5	7.71	7.71	0.0	0.0	20.0	0.0
0.48	2.79	4.22	41.07	0.0	2.8	18.5	8.08	8.08	0.0	38.88	20.0	49.55
0.5	3.36	6.03	42.25	0.0	3.37	18.5	8.45	8.45	0.0	39.53	20.0	53.05
0.52	4.09	8.45	43.67	0.0	4.1	19.0	8.83	8.83	0.0	40.21	20.0	57.0
0.54	4.82	11.15	44.94	0.0	4.83	19.0	9.21	9.21	0.0	40.79	20.0	60.56
0.56	5.24	14.02	45.65	0.0	5.25	19.0	9.59	9.59	0.0	41.12	20.0	62.7
0.58	5.53	16.89	46.2	0.0	5.54	19.0	9.97	9.97	0.0	41.45	20.0	64.88
0.6	5.72	20.95	46.83	0.0	5.73	19.0	10.35	10.35	0.0	41.62	20.0	66.07
0.62	5.83	26.73	47.39	0.0	5.84	19.0	10.73	10.73	0.0	41.79	20.0	67.22
0.64	5.88	32.71	47.86	0.0	5.89	19.0	11.11	11.11	0.0	41.91	20.0	68.07
0.66	5.87	38.53	48.33	0.0	5.88	19.0	11.49	11.49	0.0	41.98	20.0	68.54
0.68	5.92	41.93	48.81	0.0	5.92	19.0	11.87	11.87	0.0	42.01	20.0	68.78
0.7	5.92	41.93	48.81	0.0	5.92	19.0	12.25	12.25	0.0	41.95	20.0	68.37
0.72	6.23	50.33	50.94	0.0	6.24	19.0	12.63	12.63	0.0	42.11	20.0	69.49
0.74	6.34	52.91	51.89	0.0	6.35	19.0	13.01	13.01	0.0	42.15	20.0	69.83
0.76	6.4	55.49	52.91	0.0	6.41	19.0	13.39	13.39	0.0	42.18	20.0	70.0
0.78	6.43	56.31	53.86	0.0	6.44	19.0	13.77	13.77	0.0	42.16	20.0	69.84
0.8	6.42	58.02	54.65	0.0	6.43	19.0	14.15	14.15	0.0	42.13	20.0	69.65
0.82	6.48	59.78	55.68	0.0	6.49	19.0	14.53	14.53	0.0	42.13	20.0	69.68
0.84	6.5	61.46	56.39	0.0	6.51	19.0	14.91	14.91	0.0	42.12	20.0	69.58
0.86	6.59	62.16	57.57	0.0	6.6	19.0	15.29	15.29	0.0	42.13	20.0	69.63
0.88	6.63	63.59	58.52	0.0	6.65	19.0	15.67	15.67	0.0	42.12	20.0	69.59
0.9	6.69	64.4	59.63	0.0	6.7	19.0	16.05	16.05	0.0	42.11	20.0	69.53
0.92	6.67	64.89	60.57	0.0	6.68	19.0	16.43	16.43	0.0	42.07	20.0	69.2
0.94	6.63	65.26	61.52	0.0	6.64	19.0	16.81	16.81	0.0	42.01	20.0	68.77
0.96	6.33	60.95	62.63	0.0	6.34	19.0	17.19	17.19	0.0	41.76	20.0	67.03

0.98	6.38	59.64	61.36	0.0	6.39	19.0	17.57	17.57	0.0	41.73	20.0	66.77
1.0	6.34	60.01	60.57	0.0	6.35	19.0	17.95	17.95	0.0	41.67	20.0	66.4
1.02	6.17	59.52	59.94	0.0	6.18	19.0	18.33	18.33	0.0	41.54	20.0	65.47
1.04	6.11	59.11	59.86	0.0	6.12	19.0	18.71	18.71	0.0	41.46	20.0	64.94
1.06	6.07	59.11	59.71	0.0	6.09	19.0	19.09	19.09	0.0	41.4	20.0	64.54
1.08	6.07	59.11	59.71	0.0	6.09	19.0	19.47	19.47	0.0	41.36	20.0	64.27
1.1	5.54	55.05	59.39	0.0	5.55	18.5	19.84	19.84	0.0	40.97	20.0	61.7
1.12	5.45	53.62	59.63	0.0	5.46	18.5	20.21	20.21	0.0	40.86	20.0	60.98
1.14	5.37	53.08	59.71	0.0	5.38	18.5	20.58	20.58	0.0	40.77	20.0	60.39
1.16	5.34	52.26	59.94	0.0	5.35	18.5	20.95	20.95	0.0	40.7	20.0	59.97
1.18	5.39	52.22	60.34	0.0	5.4	18.5	21.32	21.32	0.0	40.69	20.0	59.93
1.2	5.59	52.25	61.13	0.0	5.6	19.0	21.7	21.7	0.0	40.78	20.0	60.45
1.22	5.9	50.69	62.31	0.0	5.91	19.0	22.08	22.08	0.0	40.9	20.0	61.24
1.24	6.11	49.91	63.1	0.0	6.12	19.0	22.46	22.46	0.0	40.97	20.0	61.7
1.26	6.3	49.17	63.97	0.0	6.31	19.0	22.84	22.84	0.0	41.03	20.0	62.09
1.28	6.3	49.42	64.29	0.0	6.32	19.0	23.22	23.22	0.0	41.0	20.0	61.91
1.3	6.24	49.41	64.44	0.0	6.25	19.0	23.6	23.6	0.0	40.94	20.0	61.48
1.32	6.19	49.9	64.6	0.0	6.2	19.0	23.98	23.98	0.0	40.88	20.0	61.12
1.34	6.19	50.88	64.76	0.0	6.2	19.0	24.36	24.36	0.0	40.86	20.0	61.0
1.36	6.25	51.78	65.31	0.0	6.27	19.0	24.74	24.74	0.0	40.88	20.0	61.09
1.38	6.36	52.23	66.18	0.0	6.37	19.0	25.12	25.12	0.0	40.91	20.0	61.29
1.4	6.53	52.84	66.89	0.0	6.55	19.0	25.5	25.5	0.0	40.98	20.0	61.75
1.42	7.09	50.87	68.47	0.0	7.1	19.0	25.88	25.88	0.0	41.21	20.0	63.26
1.44	7.23	48.7	55.36	0.0	7.24	19.0	26.26	26.26	0.0	41.22	20.0	63.35
1.46	6.85	47.68	44.7	0.0	6.86	19.0	26.64	26.64	0.0	40.99	20.0	61.84
1.48	6.27	48.82	43.52	0.0	6.28	19.0	27.02	27.02	0.0	40.66	20.0	59.75
1.5	5.86	49.23	43.28	0.0	5.87	19.0	27.4	27.4	0.0	40.4	20.0	58.12
1.52	5.54	51.77	43.36	0.0	5.55	18.5	27.77	27.77	0.0	40.2	20.0	56.92
1.54	5.33	52.99	43.67	0.0	5.34	18.5	28.14	28.14	0.0	40.05	20.0	56.01
1.56	5.25	53.65	43.91	0.0	5.26	18.5	28.51	28.51	0.0	39.97	20.0	55.57
1.58	5.26	52.95	44.94	0.0	5.27	18.5	28.88	28.88	0.0	39.94	20.0	55.41
1.6	5.13	49.83	45.33	0.0	5.14	18.5	29.25	29.25	0.0	39.79	20.0	54.52
1.62	5.1	48.97	45.73	0.0	5.11	18.5	29.62	29.62	0.0	39.73	20.0	54.18
1.64	5.24	48.27	46.6	0.0	5.25	18.5	29.99	29.99	0.0	39.79	20.0	54.53
1.66	5.55	46.35	47.78	0.0	5.56	19.0	30.37	30.37	0.0	39.95	20.0	55.44
1.68	5.98	44.5	49.28	0.0	5.99	19.0	30.75	30.75	0.0	40.17	20.0	56.76
1.7	6.52	43.03	50.78	0.0	6.53	19.0	31.13	31.13	0.0	40.45	20.0	58.4
1.72	7.57	39.62	53.39	0.0	7.58	19.0	31.51	31.51	0.0	40.93	20.0	61.4
1.74	8.29	35.98	55.2	0.0	8.3	19.0	31.89	31.89	0.0	41.19	20.0	63.16
1.76	8.7	34.26	56.23	0.0	8.71	19.5	32.28	32.28	0.0	41.33	20.0	64.07
1.78	8.25	36.67	55.52	0.0	8.26	19.0	32.66	32.66	0.0	41.14	20.0	62.82
1.8	7.75	41.71	54.34	0.0	7.77	19.0	33.04	33.04	0.0	40.95	20.0	61.55
1.82	7.34	49.9	53.31	0.0	7.35	19.0	33.42	33.42	0.0	40.8	20.0	60.61
1.84	7.13	55.19	52.76	0.0	7.14	19.0	33.8	33.8	0.0	40.72	20.0	60.1
1.86	6.92	62.68	52.28	0.0	6.93	19.0	34.18	34.18	0.0	40.69	20.0	59.93
1.88	6.85	64.9	52.12	0.0	6.86	19.0	34.56	34.56	0.0	40.65	20.0	59.64
1.9	6.9	64.16	52.2	0.0	6.91	19.0	34.94	34.94	0.0	40.64	20.0	59.59
1.92	6.95	60.6	52.28	0.0	6.96	19.0	35.32	35.32	0.0	40.61	20.0	59.43
1.94	7.12	52.4	34.43	0.0	7.12	19.0	35.7	35.7	0.0	40.61	20.0	59.44
1.96	7.66	47.41	34.91	0.0	7.67	19.0	36.08	36.08	0.0	40.78	20.0	60.47
1.98	8.5	44.5	36.09	0.0	8.51	19.0	36.46	36.46	0.0	41.13	20.0	62.72
2.0	9.26	42.7	37.36	0.0	9.26	19.5	36.85	36.85	0.0	41.41	20.0	64.61
2.02	9.85	43.27	38.22	0.2	9.86	19.5	37.24	37.04	0.0	41.65	20.0	66.21
2.04	10.24	44.58	38.78	0.39	10.25	19.5	37.63	37.24	0.0	41.79	20.0	67.26
2.06	10.44	46.84	39.01	0.59	10.45	19.5	38.02	37.43	0.0	41.88	20.0	67.86
2.08	10.46	51.96	39.09	0.78	10.47	19.5	38.41	37.63	0.0	41.92	20.0	68.13
2.1	10.33	60.19	38.94	0.98	10.34	19.5	38.8	37.82	0.0	41.97	20.0	68.47
2.12	10.25	66.33	38.94	1.18	10.26	19.5	39.19	38.01	0.0	41.97	20.0	68.47
2.14	10.38	71.49	39.41	1.37	10.39	19.5	39.58	38.21	0.0	42.04	20.0	68.98
2.16	10.59	74.36	39.88	1.57	10.6	19.5	39.97	38.4	0.0	42.12	20.0	69.56
2.18	10.78	74.77	40.51	1.77	10.79	19.5	40.36	38.59	0.0	42.18	20.0	70.02
2.2	10.81	74.61	40.91	1.96	10.82	19.5	40.75	38.79	0.0	42.18	20.0	70.01
2.22	10.6	72.27	40.91	2.16	10.6	19.5	41.14	38.98	0.0	42.08	20.0	69.27
2.24	10.33	71.37	40.67	2.35	10.34	19.0	41.52	39.17	0.0	41.96	20.0	68.46
2.26	9.9	70.71	40.36	2.55	9.91	19.0	41.9	39.35	0.0	41.78	20.0	67.18
2.28	9.43	71.0	39.88	2.75	9.43	19.0	42.28	39.53	0.0	41.59	20.0	65.8
2.3	9.0	74.11	39.41	2.94	9.01	19.0	42.66	39.72	0.0	41.42	20.0	64.64
2.32	8.93	76.15	39.41	3.14	8.93	19.0	43.04	39.9	0.0	41.38	20.0	64.42
2.34	9.08	75.05	40.04	3.34	9.09	19.0	43.42	40.08	0.0	41.43	20.0	64.76
2.36	9.41	71.44	41.3	3.53	9.42	19.0	43.8	40.27	0.0	41.54	20.0	65.5
2.38	9.43	68.08	41.7	3.73	9.43	19.0	44.18	40.45	0.0	41.52	20.0	65.33
2.4	9.35	65.79	42.02	3.92	9.35	19.0	44.56	40.64	0.0	41.46	20.0	64.94
2.42	9.2	63.21	42.09	4.12	9.21	19.0	44.94	40.82	0.0	41.37	20.0	64.36

2.44	9.03	61.36	41.94	4.32	9.04	19.0	45.32	41.0	0.0	41.28	20.0	63.73
2.46	8.94	61.36	42.02	4.51	8.94	19.0	45.7	41.19	0.0	41.23	20.0	63.38
2.48	8.94	62.26	42.25	4.71	8.95	19.0	46.08	41.37	0.0	41.22	20.0	63.36
2.5	8.98	63.9	42.57	4.9	8.99	19.0	46.46	41.56	0.0	41.24	20.0	63.48
2.52	8.97	64.51	43.04	5.1	8.98	19.0	46.84	41.74	0.0	41.23	20.0	63.4
2.54	9.0	63.37	43.28	5.3	9.0	19.0	47.22	41.92	0.0	41.23	20.0	63.37
2.56	9.16	61.81	43.91	5.49	9.17	19.0	47.6	42.11	0.0	41.28	20.0	63.71
2.58	9.25	61.52	44.31	5.69	9.26	19.0	47.98	42.29	0.0	41.3	20.0	63.89
2.6	9.53	59.72	45.17	5.89	9.54	19.5	48.37	42.48	0.0	41.4	20.0	64.55
2.62	10.03	58.98	46.36	6.08	10.04	19.5	48.76	42.68	0.0	41.59	20.0	65.82
2.64	10.32	58.69	47.15	6.28	10.32	19.5	49.15	42.87	0.0	41.69	20.0	66.51
2.66	10.49	58.2	47.7	6.47	10.5	19.5	49.54	43.07	0.0	41.74	20.0	66.87
2.68	10.5	58.65	47.78	6.67	10.51	19.5	49.93	43.26	0.0	41.74	20.0	66.87
2.7	10.33	62.01	47.78	6.87	10.34	19.5	50.32	43.45	0.0	41.68	20.0	66.47
2.72	9.94	63.0	47.23	7.06	9.95	19.5	50.71	43.65	0.0	41.53	20.0	65.4
2.74	9.6	67.13	46.6	7.26	9.61	19.0	51.09	43.83	0.0	41.4	20.0	64.55
2.76	9.3	67.95	46.04	7.46	9.31	19.0	51.47	44.01	0.0	41.27	20.0	63.67
2.78	8.82	69.34	45.02	7.65	8.83	19.0	51.85	44.2	0.0	41.06	20.0	62.29
2.8	8.08	76.92	43.52	7.85	8.09	19.0	52.23	44.38	0.0	40.74	20.0	60.22
2.82	7.52	79.54	42.25	8.04	7.53	19.0	52.61	44.57	0.0	40.46	20.0	58.48
2.84	7.31	79.63	41.86	8.24	7.32	19.0	52.99	44.75	0.0	40.33	20.0	57.73
2.86	7.14	78.64	41.54	8.44	7.15	19.0	53.37	44.93	0.0	40.22	20.0	57.06
2.88	7.09	74.96	41.46	8.63	7.1	19.0	53.75	45.12	0.0	40.17	20.0	56.73
2.9	7.16	75.16	41.54	8.83	7.17	19.0	54.13	45.3	0.0	40.2	20.0	56.91
2.92	7.11	88.68	25.75	9.03	7.12	18.5	54.5	45.47	0.0	40.22	20.0	57.04
2.94	7.68	69.27	26.06	9.22	7.68	19.0	54.88	45.66	0.0	40.43	20.0	58.28
2.96	7.91	65.75	26.14	9.42	7.91	19.0	55.26	45.84	0.0	40.51	20.0	58.82
2.98	7.89	65.22	25.67	9.61	7.9	19.0	55.64	46.03	0.0	40.5	20.0	58.7
3.0	7.82	66.04	25.19	9.81	7.82	19.0	56.02	46.21	0.0	40.45	20.0	58.43
3.02	7.84	68.78	24.96	10.01	7.85	19.0	56.4	46.39	0.0	40.47	20.0	58.54
3.04	7.84	71.49	24.8	10.2	7.85	19.0	56.78	46.58	0.0	40.47	20.0	58.56
3.06	7.64	75.95	24.48	10.4	7.64	19.0	57.16	46.76	0.0	40.38	20.0	57.98
3.08	7.06	81.15	23.38	10.59	7.06	18.5	57.53	46.94	0.0	40.07	20.0	56.17
3.1	6.69	85.08	22.51	10.79	6.7	18.5	57.9	47.11	0.0	39.87	20.0	54.96
3.12	6.41	87.5	21.64	10.99	6.42	18.5	58.27	47.28	0.0	39.69	20.0	53.98
3.14	6.3	87.37	21.24	11.18	6.31	18.5	58.64	47.46	0.0	39.61	20.0	53.52
3.16	6.35	86.68	21.09	11.38	6.36	18.5	59.01	47.63	0.0	39.63	20.0	53.63
3.18	6.39	86.1	21.01	11.58	6.4	18.5	59.38	47.8	0.0	39.64	20.0	53.7
3.2	6.45	83.03	20.85	11.77	6.45	18.5	59.75	47.98	0.0	39.66	20.0	53.77
3.22	6.49	78.89	20.77	11.97	6.5	18.5	60.12	48.15	0.0	39.66	20.0	53.77
3.24	6.69	74.71	20.85	12.16	6.69	18.5	60.49	48.33	0.0	39.75	20.0	54.27
3.26	7.0	72.37	21.24	12.36	7.01	19.0	60.87	48.51	0.0	39.91	20.0	55.23
3.28	7.28	71.88	21.72	12.56	7.29	19.0	61.25	48.69	0.0	40.06	20.0	56.08
3.3	7.53	72.66	22.03	12.75	7.53	19.0	61.63	48.88	0.0	40.19	20.0	56.85
3.32	7.69	72.99	22.27	12.95	7.69	19.0	62.01	49.06	0.0	40.27	20.0	57.31
3.34	7.62	73.36	22.11	13.15	7.63	19.0	62.39	49.24	0.0	40.22	20.0	57.05
3.36	7.62	74.63	22.11	13.34	7.62	19.0	62.77	49.43	0.0	40.22	20.0	57.01
3.38	7.63	77.95	21.96	13.54	7.63	19.0	63.15	49.61	0.0	40.23	20.0	57.08
3.4	7.76	79.63	22.19	13.73	7.77	19.0	63.53	49.8	0.0	40.3	20.0	57.5
3.42	7.95	80.44	22.35	13.93	7.96	19.0	63.91	49.98	0.0	40.39	20.0	58.06
3.44	7.95	78.19	22.51	14.13	7.96	19.0	64.29	50.16	0.0	40.37	20.0	57.95
3.46	7.82	77.54	22.27	14.32	7.82	19.0	64.67	50.35	0.0	40.29	20.0	57.45
3.48	7.79	77.21	22.03	14.52	7.8	19.0	65.05	50.53	0.0	40.26	20.0	57.29
3.5	7.93	76.51	22.35	14.72	7.94	19.0	65.43	50.72	0.0	40.32	20.0	57.66
3.52	8.11	75.37	22.51	14.91	8.12	19.0	65.81	50.9	0.0	40.4	20.0	58.14
3.54	8.18	74.92	22.82	15.11	8.19	19.0	66.19	51.08	0.0	40.43	20.0	58.28
3.56	8.12	77.01	22.75	15.3	8.13	19.0	66.57	51.27	0.0	40.4	20.0	58.1
3.58	7.94	80.24	22.43	15.5	7.94	19.0	66.95	51.45	0.0	40.3	20.0	57.54
3.6	7.67	81.64	21.96	15.7	7.68	19.0	67.33	51.63	0.0	40.16	20.0	56.69
3.62	7.4	83.07	21.56	15.89	7.4	19.0	67.71	51.82	0.0	40.01	20.0	55.78
3.64	7.12	84.22	21.17	16.09	7.12	18.5	68.08	51.99	0.0	39.84	20.0	54.83
3.66	6.91	86.59	20.69	16.28	6.91	18.5	68.45	52.17	0.0	39.72	20.0	54.12
3.68	6.74	87.41	20.45	16.48	6.74	18.5	68.82	52.34	0.0	39.61	20.0	53.52
3.7	6.5	86.27	20.06	16.68	6.51	18.5	69.19	52.51	0.0	39.45	20.0	52.61
3.72	6.31	83.65	19.67	16.87	6.32	18.5	69.56	52.69	0.0	39.31	20.0	51.84
3.74	6.29	82.05	19.59	17.07	6.3	18.5	69.93	52.86	0.0	39.28	20.0	51.68
3.76	6.54	79.31	19.67	17.27	6.55	18.5	70.3	53.03	0.0	39.42	20.0	52.46
3.78	7.05	74.31	20.38	17.46	7.05	19.0	70.68	53.22	0.0	39.7	20.0	54.02
3.8	7.32	71.65	20.77	17.66	7.32	19.0	71.06	53.4	0.0	39.84	20.0	54.79
3.82	7.75	69.19	21.56	17.85	7.76	19.0	71.44	53.59	0.0	40.06	20.0	56.07
3.84	8.22	66.98	22.43	18.05	8.23	19.0	71.82	53.77	0.0	40.28	20.0	57.42
3.86	8.7	65.14	23.3	18.25	8.71	19.0	72.2	53.95	0.0	40.5	20.0	58.76
3.88	9.17	67.02	24.32	18.44	9.18	19.0	72.58	54.14	0.0	40.72	20.0	60.11

3.9	9.61	70.38	25.19	18.64	9.61	19.0	72.96	54.32	0.0	40.92	20.0	61.38
3.92	9.78	79.2	19.27	18.84	9.78	19.0	73.34	54.5	0.0	41.02	20.0	62.02
3.94	10.09	80.93	19.43	19.03	10.09	19.0	73.72	54.69	0.0	41.15	20.0	62.86
3.96	10.09	80.93	19.43	19.23	10.09	19.0	74.1	54.87	0.0	41.14	20.0	62.81
3.98	10.14	81.46	19.51	19.42	10.14	19.0	74.48	55.06	0.0	41.16	20.0	62.9
4.0	10.69	99.98	20.3	19.62	10.69	19.0	74.86	55.24	0.0	41.43	20.0	64.71
4.02	10.53	108.99	20.3	19.82	10.54	19.0	75.24	55.42	0.0	41.38	20.0	64.42
4.04	10.4	117.14	20.3	20.01	10.41	19.0	75.62	55.61	0.0	41.35	20.0	64.16
4.06	10.46	122.95	20.61	20.21	10.47	19.0	76.0	55.79	0.0	41.38	20.0	64.37
4.08	11.21	120.16	22.43	20.4	11.22	19.0	76.38	55.98	0.0	41.65	20.0	66.25
4.1	11.95	113.48	24.48	20.6	11.96	19.0	76.76	56.16	0.0	41.89	20.0	67.95
4.12	12.65	108.24	26.22	20.8	12.65	19.0	77.14	56.34	0.0	42.11	20.0	69.49
4.14	13.27	102.21	28.19	20.99	13.27	19.5	77.53	56.54	0.0	42.28	20.0	70.79
4.16	13.27	102.21	28.19	21.19	13.27	19.5	77.92	56.73	0.0	42.28	20.0	70.74
4.18	13.23	102.33	29.62	21.39	13.23	19.5	78.31	56.92	0.0	42.26	20.0	70.59
4.2	13.17	106.83	30.17	21.58	13.17	19.5	78.7	57.12	0.0	42.24	20.0	70.48
4.22	13.17	115.27	31.04	21.78	13.18	19.5	79.09	57.31	0.0	42.26	20.0	70.59
4.24	13.16	124.19	31.67	21.97	13.16	19.0	79.47	57.5	0.0	42.27	20.0	70.66
4.26	13.51	133.73	33.09	22.17	13.52	19.0	79.85	57.68	0.0	42.39	20.0	71.6
4.28	14.09	140.69	34.99	22.37	14.09	19.0	80.23	57.86	0.0	42.58	20.0	72.98
4.3	14.64	141.84	36.96	22.56	14.65	19.5	80.62	58.06	0.0	42.73	20.0	74.2
4.32	15.07	138.23	38.7	22.76	15.08	19.5	81.01	58.25	0.0	42.84	20.0	75.02
4.34	15.43	132.49	40.44	22.96	15.43	19.5	81.4	58.44	0.0	42.92	20.0	75.65
4.36	15.3	129.86	41.15	23.15	15.31	19.5	81.79	58.64	0.0	42.87	20.0	75.27
4.38	14.3	144.24	40.59	23.35	14.3	19.0	82.17	58.82	0.0	42.61	20.0	73.22
4.4	13.23	160.66	39.49	23.54	13.24	19.0	82.55	59.01	0.0	42.3	20.0	70.93
4.42	12.44	177.45	38.94	23.74	12.45	19.0	82.93	59.19	0.0	42.06	20.0	69.17
4.44	11.82	191.2	38.86	23.94	11.83	19.0	83.31	59.37	0.0	41.86	20.0	67.71
4.46	11.86	194.68	39.73	24.13	11.86	19.0	83.69	59.56	0.0	41.87	20.0	67.78
4.48	12.36	197.42	41.7	24.33	12.36	19.0	84.07	59.74	0.0	42.04	20.0	69.0
4.5	12.73	194.34	43.67	24.52	12.74	19.0	84.45	59.93	0.0	42.15	20.0	69.83
4.52	12.71	183.93	44.46	24.72	12.71	19.0	84.83	60.11	0.0	42.12	20.0	69.6
4.54	12.66	172.46	45.17	24.92	12.67	19.0	85.21	60.29	0.0	42.08	20.0	69.3
4.56	12.73	162.17	46.04	25.11	12.74	19.0	85.59	60.48	0.0	42.08	20.0	69.28
4.58	12.93	149.67	47.15	25.31	12.94	19.0	85.97	60.66	0.0	42.12	20.0	69.56
4.6	12.95	146.6	47.94	25.51	12.96	19.0	86.35	60.84	0.0	42.11	20.0	69.5
4.62	12.59	152.45	48.1	25.7	12.6	19.0	86.73	61.03	0.0	41.99	20.0	68.65
4.64	12.3	159.94	48.18	25.9	12.31	19.0	87.11	61.21	0.0	41.9	20.0	67.99
4.66	12.16	156.95	48.57	26.09	12.17	19.0	87.49	61.4	0.0	41.84	20.0	67.54
4.68	12.52	155.18	50.07	26.29	12.53	19.0	87.87	61.58	0.0	41.95	20.0	68.36
4.7	12.92	151.05	51.41	26.49	12.93	19.0	88.25	61.76	0.0	42.07	20.0	69.21
4.72	13.03	145.1	52.44	26.68	13.04	19.0	88.63	61.95	0.0	42.09	20.0	69.35
4.74	12.87	146.82	52.76	26.88	12.89	19.0	89.01	62.13	0.0	42.03	20.0	68.94
4.76	12.75	143.38	53.23	27.08	12.76	19.0	89.39	62.31	0.0	41.98	20.0	68.55
4.78	12.57	137.52	53.31	27.27	12.58	19.0	89.77	62.5	0.0	41.9	20.0	67.99
4.8	12.28	136.45	53.31	27.47	12.29	19.0	90.15	62.68	0.0	41.79	20.0	67.2
4.82	11.95	137.8	53.15	27.66	11.96	19.0	90.53	62.87	0.0	41.66	20.0	66.35
4.84	11.48	140.54	52.6	27.86	11.49	19.0	90.91	63.05	0.0	41.49	20.0	65.13
4.86	11.1	137.22	52.12	28.06	11.11	19.0	91.29	63.23	0.0	41.33	20.0	64.07
4.88	10.67	129.52	51.73	28.25	10.68	19.0	91.67	63.42	0.0	41.14	20.0	62.78
4.9	10.54	126.04	51.81	28.45	10.55	19.0	92.05	63.6	0.0	41.07	20.0	62.34
4.92	10.3	127.62	34.83	28.65	10.31	19.0	92.43	63.78	0.0	40.97	20.0	61.67
4.94	10.34	123.28	34.51	28.84	10.35	19.0	92.81	63.97	0.0	40.97	20.0	61.67
4.96	10.34	123.28	34.51	29.04	10.35	19.0	93.19	64.15	0.0	40.96	20.0	61.62
4.98	10.34	123.28	34.51	29.23	10.35	19.0	93.57	64.34	0.0	40.95	20.0	61.57
5.0	10.25	108.75	33.09	29.43	10.26	19.0	93.95	64.52	0.0	40.88	20.0	61.1
5.02	10.09	104.78	32.78	29.63	10.1	19.0	94.33	64.7	0.0	40.79	20.0	60.56
5.04	9.61	101.83	31.91	29.82	9.62	19.0	94.71	64.89	0.0	40.57	20.0	59.14
5.06	9.18	103.46	31.04	30.02	9.19	19.0	95.09	65.07	0.0	40.36	20.0	57.89
5.08	9.06	101.54	30.64	30.21	9.06	19.0	95.47	65.26	0.0	40.29	20.0	57.46
5.1	8.86	96.29	30.09	30.41	8.87	19.0	95.85	65.44	0.0	40.18	20.0	56.78
5.12	8.65	94.2	29.54	30.61	8.65	19.0	96.23	65.62	0.0	40.06	20.0	56.08
5.14	8.51	96.78	29.22	30.8	8.52	19.0	96.61	65.81	0.0	39.99	20.0	55.66
5.16	8.43	99.73	28.98	31.0	8.44	19.0	96.99	65.99	0.0	39.94	20.0	55.41
5.18	8.43	99.73	28.98	31.2	8.44	19.0	97.37	66.17	0.0	39.94	20.0	55.36
5.2	8.39	105.75	28.35	31.39	8.4	19.0	97.75	66.36	0.0	39.92	20.0	55.27
5.22	8.77	103.91	28.75	31.59	8.77	19.0	98.13	66.54	0.0	40.1	20.0	56.32
5.24	8.92	103.05	28.98	31.78	8.92	19.0	98.51	66.73	0.0	40.16	20.0	56.7
5.26	8.92	103.05	28.98	31.98	8.92	19.0	98.89	66.91	0.0	40.16	20.0	56.66
5.28	9.83	91.74	31.04	32.18	9.83	19.0	99.27	67.09	0.0	40.55	20.0	59.05
5.3	9.65	90.68	30.72	32.37	9.65	19.0	99.65	67.28	0.0	40.46	20.0	58.5
5.32	9.41	91.82	30.17	32.57	9.42	19.0	100.03	67.46	0.0	40.35	20.0	57.81
5.34	9.21	94.45	29.7	32.77	9.22	19.0	100.41	67.64	0.0	40.25	20.0	57.23

5.36	8.93	94.45	29.22	32.96	8.94	19.0	100.79	67.83	0.0	40.11	20.0	56.37
5.38	8.67	94.12	28.59	33.16	8.67	19.0	101.17	68.01	0.0	39.97	20.0	55.55
5.4	8.26	96.29	27.8	33.35	8.27	19.0	101.55	68.2	0.0	39.75	20.0	54.32
5.42	8.01	95.43	27.17	33.55	8.01	19.0	101.93	68.38	0.0	39.61	20.0	53.48
5.44	7.66	87.81	26.54	33.75	7.66	19.0	102.31	68.56	0.0	39.38	20.0	52.26
5.46	7.49	76.84	26.3	33.94	7.5	19.0	102.69	68.75	0.0	39.25	20.0	51.56
5.48	6.82	67.7	25.04	34.14	6.82	19.0	103.07	68.93	0.0	38.81	20.0	49.19
5.5	5.68	56.11	23.06	34.34	5.69	18.5	103.44	69.11	0.0	37.96	20.0	45.01
5.52	4.49	46.32	20.61	34.53	4.49	18.5	103.81	69.28	0.0	36.86	20.0	40.14
5.54	3.35	42.6	18.16	34.73	3.35	18.5	104.18	69.45	0.0	35.52	20.0	34.88
5.56	2.2	50.34	15.64	34.92	2.21	18.0	104.54	69.62	150.22	0.0	20.0	0.0
5.58	1.71	59.8	14.29	35.12	1.72	18.0	104.9	69.78	115.09	0.0	20.0	0.0
5.6	1.54	77.29	13.82	35.32	1.54	17.5	105.25	69.93	102.81	0.0	20.0	0.0
5.62	1.83	89.17	14.61	35.51	1.83	17.5	105.6	70.09	123.47	0.0	20.0	0.0
5.64	2.92	82.25	18.72	35.71	2.93	18.0	105.96	70.25	201.4	0.0	20.0	0.0
5.66	3.79	80.7	22.59	35.9	3.79	18.0	106.32	70.42	0.0	36.14	20.0	37.2
5.68	4.48	62.19	21.8	36.1	4.49	18.5	106.69	70.59	0.0	36.85	20.0	40.07
5.7	4.85	47.81	21.24	36.3	4.86	18.5	107.06	70.76	0.0	37.15	20.0	41.36
5.72	5.09	33.27	20.69	36.49	5.09	19.0	107.44	70.95	0.0	37.3	20.0	42.01
5.74	5.12	25.05	20.06	36.69	5.13	19.0	107.82	71.13	0.0	37.29	20.0	41.96
5.76	5.05	21.57	19.35	36.89	5.06	19.0	108.2	71.31	0.0	37.2	20.0	41.57
5.78	4.92	15.47	18.72	37.08	4.92	19.0	108.58	71.5	0.0	37.03	20.0	40.84
5.8	4.71	16.54	17.61	37.28	4.71	19.0	108.96	71.68	0.0	36.83	20.0	40.01
5.82	4.33	24.78	16.43	37.47	4.33	19.0	109.34	71.87	0.0	36.49	20.0	38.59
5.84	3.76	30.19	14.77	37.67	3.76	18.5	109.71	72.04	0.0	35.86	20.0	36.15
5.86	3.03	35.15	13.03	37.87	3.04	18.5	110.08	72.21	0.0	34.9	20.0	32.68
5.88	1.86	53.0	2.37	38.06	1.86	18.0	110.44	72.38	125.22	0.0	20.0	0.0
5.9	1.53	48.01	1.58	38.26	1.54	18.0	110.8	72.54	101.73	0.0	20.0	0.0
5.92	1.21	56.2	0.55	38.46	1.21	17.5	111.15	72.69	78.5	0.0	20.0	0.0
5.94	1.04	64.03	0.0	38.65	1.04	17.5	111.5	72.85	66.62	0.0	20.0	0.0
5.96	1.09	63.29	0.08	38.85	1.09	17.5	111.85	73.0	69.94	0.0	20.0	0.0
5.98	1.3	57.93	1.58	39.04	1.3	17.5	112.2	73.16	84.9	0.0	20.0	0.0
6.0	1.25	56.53	3.47	39.24	1.25	17.5	112.55	73.31	81.59	0.0	20.0	0.0
6.02	1.27	56.62	3.79	39.44	1.27	17.5	112.9	73.46	82.68	0.0	20.0	0.0
6.04	1.27	56.62	3.79	39.63	1.27	17.5	113.25	73.62	82.65	0.0	20.0	0.0
6.06	1.27	56.62	4.03	39.83	1.27	17.5	113.6	73.77	82.76	0.0	20.0	0.0
6.08	1.97	32.98	6.71	40.02	1.97	18.0	113.96	73.94	132.87	0.0	20.0	0.0
6.1	2.89	39.62	7.34	40.22	2.9	18.0	114.32	74.1	0.0	34.59	20.0	31.63
6.12	3.67	33.64	7.27	40.42	3.67	18.5	114.69	74.27	0.0	35.66	20.0	35.41
6.14	4.16	27.37	7.27	40.61	4.16	18.5	115.06	74.45	0.0	36.21	20.0	37.48
6.16	4.32	25.12	7.11	40.81	4.32	19.0	115.44	74.63	0.0	36.37	20.0	38.1
6.18	4.42	25.04	6.95	41.01	4.42	19.0	115.82	74.81	0.0	36.46	20.0	38.47
6.2	4.51	27.34	6.79	41.2	4.52	19.0	116.2	75.0	0.0	36.56	20.0	38.88
6.22	4.6	30.91	6.71	41.4	4.6	19.0	116.58	75.18	0.0	36.65	20.0	39.27
6.24	4.71	32.63	6.63	41.59	4.71	19.0	116.96	75.37	0.0	36.76	20.0	39.69
6.26	4.77	35.25	6.56	41.79	4.77	19.0	117.34	75.55	0.0	36.82	20.0	39.94
6.28	4.79	38.37	6.4	41.99	4.79	18.5	117.71	75.72	0.0	36.84	20.0	40.04
6.3	4.83	40.13	6.32	42.18	4.83	18.5	118.08	75.9	0.0	36.88	20.0	40.19
6.32	4.87	40.46	6.24	42.38	4.87	18.5	118.45	76.07	0.0	36.91	20.0	40.33
6.34	4.93	40.91	6.63	42.58	4.93	19.0	118.83	76.25	0.0	36.96	20.0	40.55
6.36	5.07	40.34	6.71	42.77	5.07	19.0	119.21	76.44	0.0	37.08	20.0	41.06
6.38	5.15	40.01	6.71	42.97	5.15	19.0	119.59	76.62	0.0	37.14	20.0	41.32
6.4	5.17	40.47	6.71	43.16	5.17	19.0	119.97	76.81	0.0	37.15	20.0	41.35
6.42	5.17	40.92	6.71	43.36	5.18	19.0	120.35	76.99	0.0	37.15	20.0	41.36
6.44	5.18	42.06	7.11	43.56	5.18	19.0	120.73	77.17	0.0	37.15	20.0	41.36
6.46	5.3	42.64	7.42	43.75	5.3	19.0	121.11	77.36	0.0	37.25	20.0	41.8
6.48	5.59	43.09	7.82	43.95	5.59	19.0	121.49	77.54	0.0	37.49	20.0	42.86
6.5	5.94	43.34	8.53	44.14	5.94	19.0	121.87	77.73	0.0	37.76	20.0	44.09
6.52	6.38	43.54	9.32	44.34	6.39	19.0	122.25	77.91	0.0	38.08	20.0	45.61
6.54	6.73	44.07	10.03	44.54	6.73	19.0	122.63	78.09	0.0	38.32	20.0	46.76
6.56	6.99	44.85	10.66	44.73	6.99	19.0	123.01	78.28	0.0	38.49	20.0	47.58
6.58	7.3	43.99	11.77	44.93	7.3	19.0	123.39	78.46	0.0	38.68	20.0	48.53
6.6	7.43	45.26	12.24	45.13	7.43	19.0	123.77	78.64	0.0	38.76	20.0	48.94
6.62	7.45	47.35	12.48	45.32	7.46	19.0	124.15	78.83	0.0	38.77	20.0	49.01
6.64	7.62	50.79	13.03	45.52	7.62	19.0	124.53	79.01	0.0	38.87	20.0	49.53
6.66	7.82	52.47	13.74	45.71	7.83	19.0	124.91	79.2	0.0	38.99	20.0	50.15
6.68	7.99	53.82	14.45	45.91	7.99	19.0	125.29	79.38	0.0	39.08	20.0	50.64
6.7	7.91	54.93	14.85	46.11	7.91	19.0	125.67	79.56	0.0	39.03	20.0	50.36
6.72	7.58	57.63	14.93	46.3	7.59	19.0	126.05	79.75	0.0	38.84	20.0	49.36
6.74	7.24	59.6	14.69	46.5	7.24	19.0	126.43	79.93	0.0	38.62	20.0	48.24
6.76	6.71	61.97	14.29	46.7	6.71	19.0	126.81	80.11	0.0	38.27	20.0	46.49
6.78	6.19	63.36	14.14	46.89	6.19	18.5	127.18	80.29	0.0	37.89	20.0	44.7
6.8	5.67	63.49	13.82	47.09	5.68	18.5	127.55	80.46	0.0	37.47	20.0	42.77

6.82	5.44	62.21	13.82	47.28	5.45	18.5	127.92	80.64	0.0	37.27	20.0	41.89
6.84	5.47	59.76	14.14	47.48	5.47	18.5	128.29	80.81	0.0	37.28	20.0	41.93
6.86	5.87	57.03	16.35	47.68	5.87	19.0	128.67	80.99	0.0	37.61	20.0	43.4
6.88	6.65	50.06	17.61	47.87	6.65	19.0	129.05	81.18	0.0	38.17	20.0	46.0
6.9	7.14	46.95	18.48	48.07	7.15	19.0	129.43	81.36	0.0	38.48	20.0	47.56
6.92	7.41	45.48	18.95	48.27	7.41	19.0	129.81	81.54	0.0	38.64	20.0	48.37
6.94	7.49	46.42	19.11	48.46	7.49	19.0	130.19	81.73	0.0	38.69	20.0	48.59
6.96	7.67	50.27	19.43	48.66	7.67	19.0	130.57	81.91	0.0	38.8	20.0	49.16
6.98	7.92	51.99	19.98	48.85	7.92	19.0	130.95	82.1	0.0	38.95	20.0	49.91
7.0	8.2	55.43	20.53	49.05	8.2	19.0	131.33	82.28	0.0	39.1	20.0	50.75
7.02	8.37	58.99	21.17	49.25	8.37	19.0	131.71	82.46	0.0	39.2	20.0	51.26
7.04	8.46	62.39	21.56	49.44	8.47	19.0	132.09	82.65	0.0	39.25	20.0	51.52
7.06	8.51	64.56	22.59	49.64	8.51	19.0	132.47	82.83	0.0	39.27	20.0	51.65
7.08	8.43	65.41	23.06	49.83	8.44	19.0	132.85	83.02	0.0	39.23	20.0	51.4
7.1	8.39	67.46	23.38	50.03	8.4	19.0	133.23	83.2	0.0	39.2	20.0	51.26
7.12	8.33	70.12	23.69	50.23	8.33	19.0	133.61	83.38	0.0	39.16	20.0	51.05
7.14	8.39	71.92	24.01	50.42	8.4	19.0	133.99	83.57	0.0	39.18	20.0	51.17
7.16	8.75	72.29	25.51	50.62	8.76	19.0	134.37	83.75	0.0	39.38	20.0	52.24
7.18	9.16	72.37	26.62	50.82	9.17	19.0	134.75	83.93	0.0	39.59	20.0	53.39
7.2	9.5	71.3	27.88	51.01	9.51	19.0	135.13	84.12	0.0	39.75	20.0	54.3
7.22	9.71	70.4	29.46	51.21	9.72	19.0	135.51	84.3	0.0	39.84	20.0	54.84
7.24	9.76	69.25	30.17	51.4	9.77	19.0	135.89	84.49	0.0	39.86	20.0	54.93
7.26	9.67	69.41	30.8	51.6	9.67	19.0	136.27	84.67	0.0	39.81	20.0	54.64
7.28	9.52	72.35	31.2	51.8	9.53	19.0	136.65	84.85	0.0	39.73	20.0	54.18
7.3	9.39	76.2	31.35	51.99	9.4	19.0	137.03	85.04	0.0	39.66	20.0	53.81
7.32	9.39	76.2	31.35	52.19	9.4	19.0	137.41	85.22	0.0	39.66	20.0	53.78
7.34	9.37	76.86	31.43	52.39	9.38	19.0	137.79	85.4	0.0	39.64	20.0	53.69
7.36	9.37	85.7	33.8	52.58	9.37	19.0	138.17	85.59	0.0	39.64	20.0	53.69
7.38	9.45	86.43	34.51	52.78	9.46	19.0	138.55	85.77	0.0	39.68	20.0	53.9
7.4	9.69	84.58	35.62	52.97	9.7	19.0	138.93	85.96	0.0	39.79	20.0	54.52
7.42	9.89	83.15	37.28	53.17	9.9	19.0	139.31	86.14	0.0	39.88	20.0	55.02
7.44	10.08	81.83	38.22	53.37	10.08	19.0	139.69	86.32	0.0	39.96	20.0	55.48
7.46	10.4	81.87	39.33	53.56	10.41	19.0	140.07	86.51	0.0	40.1	20.0	56.31
7.48	10.84	81.01	40.75	53.76	10.85	19.0	140.45	86.69	0.0	40.28	20.0	57.42
7.5	11.0	82.6	42.17	53.96	11.01	19.0	140.83	86.88	0.0	40.35	20.0	57.82
7.52	11.29	84.69	43.44	54.15	11.3	19.5	141.22	87.07	0.0	40.47	20.0	58.53
7.54	11.74	85.75	44.78	54.35	11.75	19.5	141.61	87.26	0.0	40.64	20.0	59.62
7.56	12.21	86.94	46.83	54.54	12.22	19.5	142.0	87.46	0.0	40.82	20.0	60.76
7.58	12.79	87.06	48.81	54.74	12.8	19.5	142.39	87.65	0.0	41.03	20.0	62.1
7.6	13.07	88.2	50.07	54.94	13.08	19.5	142.78	87.84	0.0	41.13	20.0	62.72
7.62	12.83	92.87	51.18	55.13	12.84	19.5	143.17	88.04	0.0	41.04	20.0	62.17
7.64	12.25	99.54	51.1	55.33	12.26	19.5	143.56	88.23	0.0	40.83	20.0	60.77
7.66	11.55	108.8	51.02	55.52	11.56	19.0	143.94	88.42	0.0	40.55	20.0	59.04
7.68	10.98	117.35	50.7	55.72	10.99	19.0	144.32	88.6	0.0	40.31	20.0	57.6
7.7	10.5	124.19	50.62	55.92	10.51	19.0	144.7	88.78	0.0	40.1	20.0	56.34
7.72	9.96	129.59	50.54	56.11	9.97	19.0	145.08	88.97	0.0	39.85	20.0	54.88
7.74	9.74	131.07	51.18	56.31	9.75	19.0	145.46	89.15	0.0	39.74	20.0	54.24
7.76	9.69	127.01	51.97	56.51	9.7	19.0	145.84	89.33	0.0	39.71	20.0	54.05
7.78	9.94	118.61	53.23	56.7	9.95	19.0	146.22	89.52	0.0	39.82	20.0	54.68
7.8	10.47	106.81	54.89	56.9	10.49	19.0	146.6	89.7	0.0	40.05	20.0	56.03
7.82	11.21	96.36	56.86	57.09	11.22	19.0	146.98	89.89	0.0	40.36	20.0	57.86
7.84	12.38	86.89	60.34	57.29	12.39	19.5	147.37	90.08	0.0	40.81	20.0	60.68
7.86	13.17	80.27	62.87	57.49	13.18	19.5	147.76	90.27	0.0	41.09	20.0	62.48
7.88	13.17	80.27	62.87	57.68	13.18	19.5	148.15	90.47	0.0	41.09	20.0	62.45
7.9	13.89	79.69	63.18	57.88	13.9	19.5	148.54	90.66	0.0	41.33	20.0	64.07
7.92	14.11	89.69	63.26	58.08	14.12	19.5	148.93	90.85	0.0	41.41	20.0	64.58
7.94	14.17	100.09	63.34	58.27	14.18	19.5	149.32	91.05	0.0	41.43	20.0	64.71
7.96	14.18	110.04	63.42	58.47	14.19	19.5	149.71	91.24	0.0	41.43	20.0	64.74
7.98	14.17	121.67	63.66	58.66	14.19	19.5	150.1	91.44	0.0	41.43	20.0	64.72
8.0	14.11	135.35	63.89	58.86	14.13	19.0	150.48	91.62	0.0	41.41	20.0	64.59
8.02	14.15	139.57	64.52	59.06	14.16	19.0	150.86	91.8	0.0	41.42	20.0	64.64
8.04	14.12	142.64	65.39	59.25	14.14	19.0	151.24	91.99	0.0	41.4	20.0	64.56
8.06	14.14	142.18	66.89	59.45	14.15	19.0	151.62	92.17	0.0	41.4	20.0	64.56
8.08	14.02	143.08	67.21	59.64	14.03	19.0	152.0	92.36	0.0	41.36	20.0	64.25
8.1	14.02	143.08	67.21	59.84	14.03	19.0	152.38	92.54	0.0	41.35	20.0	64.21
8.12	12.9	153.6	67.68	60.04	12.91	19.0	152.76	92.72	0.0	40.96	20.0	61.62
8.14	12.55	154.82	67.84	60.23	12.57	19.0	153.14	92.91	0.0	40.82	20.0	60.76
8.16	12.33	159.24	68.55	60.43	12.35	19.0	153.52	93.09	0.0	40.74	20.0	60.2
8.18	12.09	161.28	69.1	60.63	12.1	19.0	153.9	93.27	0.0	40.63	20.0	59.56
8.2	11.97	162.79	69.66	60.82	11.99	19.0	154.28	93.46	0.0	40.58	20.0	59.26
8.22	12.12	152.92	71.16	61.02	12.13	19.0	154.66	93.64	0.0	40.63	20.0	59.56
8.24	12.19	138.0	72.34	61.21	12.2	19.0	155.04	93.83	0.0	40.65	20.0	59.66
8.26	12.1	129.03	73.21	61.41	12.12	19.0	155.42	94.01	0.0	40.61	20.0	59.4

8.28	11.91	119.6	73.53	61.61	11.92	19.0	155.8	94.19	0.0	40.52	20.0	58.87
8.3	11.7	114.93	74.79	61.8	11.72	19.0	156.18	94.38	0.0	40.43	20.0	58.33
8.32	11.7	113.81	76.05	62.0	11.71	19.0	156.56	94.56	0.0	40.43	20.0	58.28
8.34	11.98	110.74	77.08	62.2	12.0	19.0	156.94	94.74	0.0	40.53	20.0	58.94
8.36	12.35	113.48	78.58	62.39	12.36	19.0	157.32	94.93	0.0	40.67	20.0	59.8
8.38	12.51	114.62	80.08	62.59	12.52	19.0	157.7	95.11	0.0	40.73	20.0	60.15
8.4	12.52	119.53	80.4	62.78	12.53	19.0	158.08	95.3	0.0	40.73	20.0	60.15
8.42	12.5	119.16	81.42	62.98	12.51	19.0	158.46	95.48	0.0	40.71	20.0	60.07
8.44	12.5	120.02	81.74	63.18	12.52	19.0	158.84	95.66	0.0	40.71	20.0	60.04
8.46	12.52	120.18	82.53	63.37	12.53	19.0	159.22	95.85	0.0	40.71	20.0	60.05
8.48	12.62	120.42	83.24	63.57	12.64	19.0	159.6	96.03	0.0	40.75	20.0	60.26
8.5	12.67	122.3	84.43	63.76	12.68	19.0	159.98	96.22	0.0	40.76	20.0	60.34
8.52	12.7	122.06	84.82	63.96	12.72	19.0	160.36	96.4	0.0	40.76	20.0	60.38
8.54	12.66	121.11	85.53	64.16	12.68	19.0	160.74	96.58	0.0	40.75	20.0	60.26
8.56	12.7	124.22	86.32	64.35	12.72	19.0	161.12	96.77	0.0	40.76	20.0	60.33
8.58	13.31	121.64	88.14	64.55	13.32	19.0	161.5	96.95	0.0	40.97	20.0	61.7
8.6	13.89	119.39	90.27	64.75	13.91	19.5	161.89	97.14	0.0	41.17	20.0	63.0
8.62	14.2	123.32	91.14	64.94	14.22	19.5	162.28	97.34	0.0	41.27	20.0	63.68
8.64	14.44	127.41	91.53	65.14	14.45	19.5	162.67	97.53	0.0	41.35	20.0	64.17
8.66	14.52	129.05	92.01	65.33	14.54	19.5	163.06	97.73	0.0	41.37	20.0	64.32
8.68	14.46	130.48	92.96	65.53	14.48	19.5	163.45	97.92	0.0	41.34	20.0	64.15
8.7	14.39	133.59	92.96	65.73	14.41	19.5	163.84	98.11	0.0	41.32	20.0	63.96
8.72	14.7	141.53	94.77	65.92	14.71	19.5	164.23	98.31	0.0	41.41	20.0	64.61
8.74	15.14	150.5	96.67	66.12	15.16	19.5	164.62	98.5	0.0	41.55	20.0	65.56
8.76	15.78	150.54	99.04	66.32	15.8	19.5	165.01	98.69	0.0	41.74	20.0	66.9
8.78	15.85	152.79	99.75	66.51	15.87	19.5	165.4	98.89	0.0	41.76	20.0	67.0
8.8	15.67	163.03	100.06	66.71	15.69	19.5	165.79	99.08	0.0	41.7	20.0	66.59
8.82	15.4	178.34	99.59	66.9	15.42	19.0	166.17	99.27	0.0	41.61	20.0	65.97
8.84	15.4	178.34	67.6	67.1	15.41	19.0	166.55	99.45	0.0	41.6	20.0	65.92
8.86	14.72	183.04	81.66	67.3	14.73	19.0	166.93	99.63	0.0	41.38	20.0	64.42
8.88	14.52	188.32	80.24	67.49	14.54	19.0	167.31	99.82	0.0	41.31	20.0	63.95
8.9	14.33	193.48	79.21	67.69	14.35	19.0	167.69	100.0	0.0	41.24	20.0	63.49
8.92	14.19	192.09	78.58	67.89	14.2	19.0	168.07	100.18	0.0	41.19	20.0	63.13
8.94	14.1	186.6	77.32	68.08	14.12	19.0	168.45	100.37	0.0	41.16	20.0	62.9
8.96	14.18	179.67	78.19	68.28	14.19	19.0	168.83	100.55	0.0	41.17	20.0	63.03
8.98	14.22	170.74	78.74	68.47	14.23	19.0	169.21	100.74	0.0	41.18	20.0	63.08
9.0	14.33	163.77	79.85	68.67	14.34	19.0	169.59	100.92	0.0	41.21	20.0	63.29
9.02	14.23	159.21	81.27	68.87	14.25	19.0	169.97	101.1	0.0	41.18	20.0	63.04
9.04	14.06	158.47	81.74	69.06	14.07	19.0	170.35	101.29	0.0	41.11	20.0	62.62
9.06	13.88	156.5	82.29	69.26	13.9	19.0	170.73	101.47	0.0	41.05	20.0	62.18
9.08	13.67	154.16	82.69	69.45	13.69	19.0	171.11	101.66	0.0	40.97	20.0	61.67
9.1	13.26	152.15	82.85	69.65	13.28	19.0	171.49	101.84	0.0	40.81	20.0	60.7
9.12	12.93	151.0	82.77	69.85	12.95	19.0	171.87	102.02	0.0	40.69	20.0	59.9
9.14	12.66	148.82	83.32	70.04	12.68	19.0	172.25	102.21	0.0	40.58	20.0	59.22
9.16	12.44	143.12	83.48	70.24	12.46	19.0	172.63	102.39	0.0	40.49	20.0	58.67
9.18	12.14	133.16	83.95	70.44	12.16	19.0	173.01	102.57	0.0	40.37	20.0	57.92
9.2	11.79	127.71	83.72	70.63	11.81	19.0	173.39	102.76	0.0	40.22	20.0	57.04
9.22	11.35	117.3	83.56	70.83	11.37	19.0	173.77	102.94	0.0	40.03	20.0	55.9
9.24	10.97	113.53	83.24	71.02	10.98	19.0	174.15	103.13	0.0	39.86	20.0	54.91
9.26	10.66	110.87	83.16	71.22	10.68	19.0	174.53	103.31	0.0	39.71	20.0	54.1
9.28	10.38	107.59	83.24	71.42	10.4	19.0	174.91	103.49	0.0	39.58	20.0	53.33
9.3	10.15	105.09	83.48	71.61	10.17	19.0	175.29	103.68	0.0	39.46	20.0	52.7
9.32	10.01	103.32	83.72	71.81	10.02	19.0	175.67	103.86	0.0	39.39	20.0	52.28
9.34	10.01	101.11	84.11	72.01	10.03	19.0	176.05	104.04	0.0	39.38	20.0	52.26
9.36	10.03	100.41	84.74	72.2	10.04	19.0	176.43	104.23	0.0	39.39	20.0	52.27
9.38	10.13	97.17	85.37	72.4	10.15	19.0	176.81	104.41	0.0	39.43	20.0	52.53
9.4	10.42	92.87	86.48	72.59	10.44	19.0	177.19	104.6	0.0	39.57	20.0	53.27
9.42	10.51	91.6	86.72	72.79	10.53	19.0	177.57	104.78	0.0	39.6	20.0	53.46
9.44	10.52	90.74	86.87	72.99	10.53	19.0	177.95	104.96	0.0	39.6	20.0	53.45
9.46	11.42	90.13	89.8	73.18	11.44	19.0	178.33	105.15	0.0	40.0	20.0	55.72
9.48	11.69	93.48	90.66	73.38	11.7	19.0	178.71	105.33	0.0	40.1	20.0	56.35
9.5	11.8	100.12	91.14	73.58	11.82	19.0	179.09	105.52	0.0	40.15	20.0	56.6
9.52	11.45	109.91	90.51	73.77	11.47	19.0	179.47	105.7	0.0	39.99	20.0	55.68
9.54	11.08	120.8	89.56	73.97	11.1	19.0	179.85	105.88	0.0	39.82	20.0	54.71
9.56	10.86	125.93	89.24	74.16	10.88	19.0	180.23	106.07	0.0	39.72	20.0	54.12
9.58	10.68	131.99	88.85	74.36	10.7	19.0	180.61	106.25	0.0	39.63	20.0	53.63
9.6	10.46	134.98	88.53	74.56	10.48	19.0	180.99	106.43	0.0	39.52	20.0	53.02
9.62	10.52	133.3	88.85	74.75	10.54	19.0	181.37	106.62	0.0	39.55	20.0	53.15
9.64	10.61	128.63	89.4	74.95	10.63	19.0	181.75	106.8	0.0	39.58	20.0	53.35
9.66	10.65	119.53	89.72	75.14	10.67	19.0	182.13	106.99	0.0	39.6	20.0	53.44
9.68	10.3	115.72	89.24	75.34	10.32	19.0	182.51	107.17	0.0	39.43	20.0	52.5
9.7	10.12	114.49	88.93	75.54	10.14	19.0	182.89	107.35	0.0	39.34	20.0	51.99
9.72	9.74	117.11	87.82	75.73	9.76	19.0	183.27	107.54	0.0	39.14	20.0	50.94



9.74	9.36	117.2	87.11	75.93	9.38	19.0	183.65	107.72	0.0	38.94	20.0	49.88
9.76	9.1	119.94	86.4	76.13	9.12	19.0	184.03	107.9	0.0	38.79	20.0	49.11
9.78	8.86	119.37	85.93	76.32	8.88	19.0	184.41	108.09	0.0	38.66	20.0	48.43
9.8	8.6	116.5	85.29	76.52	8.62	18.5	184.78	108.26	0.0	38.5	20.0	47.66
9.82	8.34	112.36	84.58	76.71	8.36	18.5	185.15	108.44	0.0	38.35	20.0	46.88
9.84	8.28	112.05	74.16	76.91	8.3	18.5	185.52	108.61	0.0	38.3	20.0	46.67
9.86	8.42	98.7	73.61	77.11	8.44	19.0	185.9	108.79	0.0	38.39	20.0	47.07
9.88	8.62	89.86	73.21	77.3	8.63	19.0	186.28	108.98	0.0	38.5	20.0	47.62
9.9	8.75	83.55	72.9	77.5	8.77	19.0	186.66	109.16	0.0	38.57	20.0	48.0
9.92	8.8	80.27	72.58	77.7	8.81	19.0	187.04	109.34	0.0	38.59	20.0	48.1
9.94	8.77	79.49	72.03	77.89	8.78	19.0	187.42	109.53	0.0	38.57	20.0	47.99
9.96	8.69	77.2	71.47	78.09	8.7	19.0	187.8	109.71	0.0	38.52	20.0	47.73
9.98	8.58	78.1	70.92	78.28	8.6	19.0	188.18	109.9	0.0	38.45	20.0	47.41
10.0	8.59	81.62	70.68	78.48	8.6	19.0	188.56	110.08	0.0	38.45	20.0	47.38
10.02	8.72	89.48	70.53	78.68	8.73	19.0	188.94	110.26	0.0	38.51	20.0	47.71
10.04	9.02	92.96	70.92	78.87	9.03	19.0	189.32	110.45	0.0	38.68	20.0	48.52
10.06	9.7	95.09	72.34	79.07	9.71	19.0	189.7	110.63	0.0	39.03	20.0	50.36
10.08	10.79	94.31	75.19	79.26	10.8	19.0	190.08	110.82	0.0	39.55	20.0	53.19
10.1	11.65	93.86	77.63	79.46	11.67	19.0	190.46	111.0	0.0	39.93	20.0	55.34
10.12	12.17	98.16	79.13	79.66	12.18	19.5	190.85	111.19	0.0	40.14	20.0	56.55
10.14	12.22	104.96	79.37	79.85	12.24	19.0	191.23	111.38	0.0	40.15	20.0	56.62
10.16	12.14	118.59	79.37	80.05	12.16	19.0	191.61	111.56	0.0	40.11	20.0	56.37
10.18	11.97	131.9	79.21	80.25	11.99	19.0	191.99	111.74	0.0	40.03	20.0	55.9
10.2	11.58	147.47	78.58	80.44	11.6	19.0	192.37	111.93	0.0	39.85	20.0	54.89
10.22	11.14	164.51	77.71	80.64	11.16	19.0	192.75	112.11	0.0	39.65	20.0	53.73
10.24	10.47	188.51	76.53	80.83	10.49	18.5	193.12	112.29	0.0	39.33	20.0	51.95
10.26	10.26	200.26	76.37	81.03	10.28	18.5	193.49	112.46	0.0	39.22	20.0	51.36
10.28	10.17	198.86	77.55	81.23	10.18	18.5	193.86	112.63	0.0	39.17	20.0	51.07
10.3	10.14	194.89	78.19	81.42	10.15	18.5	194.23	112.81	0.0	39.15	20.0	50.98
10.32	10.06	191.11	78.34	81.62	10.07	18.5	194.6	112.98	0.0	39.1	20.0	50.74
10.34	10.04	186.11	78.98	81.82	10.06	18.5	194.97	113.15	0.0	39.09	20.0	50.68
10.36	10.13	179.14	79.69	82.01	10.15	18.5	195.34	113.33	0.0	39.13	20.0	50.89
10.38	10.46	173.28	81.19	82.21	10.47	18.5	195.71	113.5	0.0	39.29	20.0	51.72
10.4	10.83	172.62	83.72	82.4	10.85	19.0	196.09	113.69	0.0	39.46	20.0	52.66
10.42	11.04	172.21	84.98	82.6	11.06	19.0	196.47	113.87	0.0	39.55	20.0	53.15
10.44	11.17	171.51	85.53	82.8	11.19	19.0	196.85	114.05	0.0	39.6	20.0	53.46
10.46	11.25	171.38	86.64	82.99	11.27	19.0	197.23	114.24	0.0	39.63	20.0	53.62
10.48	11.4	173.75	87.9	83.19	11.42	19.0	197.61	114.42	0.0	39.69	20.0	53.95
10.5	11.48	176.65	88.45	83.38	11.5	19.0	197.99	114.61	0.0	39.72	20.0	54.11
10.52	11.63	182.43	89.4	83.58	11.64	19.0	198.37	114.79	0.0	39.77	20.0	54.43
10.54	11.8	183.28	90.59	83.78	11.81	19.0	198.75	114.97	0.0	39.84	20.0	54.81
10.56	12.06	181.56	92.32	83.97	12.08	19.0	199.13	115.16	0.0	39.95	20.0	55.42
10.58	12.05	181.52	92.96	84.17	12.07	19.0	199.51	115.34	0.0	39.94	20.0	55.36
10.6	11.82	177.33	92.8	84.37	11.84	19.0	199.89	115.52	0.0	39.84	20.0	54.79
10.62	11.63	174.63	93.11	84.56	11.65	19.0	200.27	115.71	0.0	39.75	20.0	54.29
10.64	11.55	169.26	93.82	84.76	11.57	19.0	200.65	115.89	0.0	39.71	20.0	54.08
10.66	11.67	161.97	94.93	84.95	11.69	19.0	201.03	116.08	0.0	39.76	20.0	54.37
10.68	11.78	154.55	96.11	85.15	11.8	19.0	201.41	116.26	0.0	39.81	20.0	54.62
10.7	11.79	150.49	97.22	85.35	11.81	19.0	201.79	116.44	0.0	39.81	20.0	54.62
10.72	11.43	143.03	96.75	85.54	11.45	19.0	202.17	116.63	0.0	39.65	20.0	53.74
10.74	10.89	134.1	95.72	85.74	10.91	19.0	202.55	116.81	0.0	39.41	20.0	52.4
10.76	10.46	130.91	95.01	85.94	10.48	19.0	202.93	116.99	0.0	39.2	20.0	51.28
10.78	10.0	130.62	94.61	86.13	10.02	19.0	203.31	117.18	0.0	38.97	20.0	50.04
10.8	9.89	125.87	95.01	86.33	9.9	19.0	203.69	117.36	0.0	38.91	20.0	49.73
10.82	9.94	118.82	95.8	86.52	9.96	19.0	204.07	117.55	0.0	38.94	20.0	49.86
10.84	10.24	113.67	88.22	86.72	10.26	19.0	204.45	117.73	0.0	39.08	20.0	50.64
10.86	10.5	102.09	88.06	86.92	10.52	19.0	204.83	117.91	0.0	39.21	20.0	51.32
10.88	10.61	96.84	87.66	87.11	10.63	19.0	205.21	118.1	0.0	39.26	20.0	51.61
10.9	10.37	89.31	86.8	87.31	10.39	19.0	205.59	118.28	0.0	39.15	20.0	50.99
10.92	10.02	83.29	85.69	87.51	10.04	19.0	205.97	118.46	0.0	38.98	20.0	50.08
10.94	9.71	80.3	84.66	87.7	9.73	19.0	206.35	118.65	0.0	38.82	20.0	49.24
10.96	9.4	81.08	83.95	87.9	9.42	19.0	206.73	118.83	0.0	38.65	20.0	48.37
10.98	8.92	82.47	82.77	88.09	8.94	19.0	207.11	119.02	0.0	38.37	20.0	47.01
11.0	8.4	85.25	81.58	88.29	8.41	19.0	207.49	119.2	0.0	38.06	20.0	45.48
11.02	7.7	85.74	80.0	88.49	7.72	19.0	207.87	119.38	0.0	37.61	20.0	43.41
11.04	6.95	85.86	78.5	88.68	6.97	18.5	208.24	119.56	0.0	37.08	20.0	41.08
11.06	6.51	87.79	77.55	88.88	6.53	18.5	208.61	119.73	0.0	36.74	20.0	39.64
11.08	6.07	88.11	76.84	89.07	6.09	18.5	208.98	119.91	0.0	36.38	20.0	38.16
11.1	5.92	84.71	76.69	89.27	5.94	18.5	209.35	120.08	0.0	36.25	20.0	37.63
11.12	5.82	77.83	76.69	89.47	5.83	18.5	209.72	120.25	0.0	36.16	20.0	37.28
11.14	5.74	69.97	76.69	89.66	5.75	18.5	210.09	120.43	0.0	36.09	20.0	37.01
11.16	5.65	65.25	76.61	89.86	5.66	18.5	210.46	120.6	0.0	36.01	20.0	36.7
11.18	5.54	59.07	76.53	90.06	5.55	18.5	210.83	120.77	0.0	35.91	20.0	36.32

11.2	5.4	51.49	76.21	90.25	5.41	18.5	211.2	120.95	0.0	35.78	20.0	35.84
11.22	5.07	48.38	75.58	90.45	5.09	18.5	211.57	121.12	0.0	35.46	20.0	34.66
11.24	4.69	45.35	74.79	90.64	4.71	18.5	211.94	121.3	0.0	35.05	20.0	33.21
11.26	4.45	44.61	74.24	90.84	4.46	18.5	212.31	121.47	0.0	34.77	20.0	32.26
11.28	4.45	43.96	74.16	91.04	4.46	18.5	212.68	121.64	0.0	34.77	20.0	32.23
11.3	4.77	43.71	74.95	91.23	4.78	18.5	213.05	121.82	0.0	35.12	20.0	33.44
11.32	5.23	42.57	76.05	91.43	5.25	19.0	213.43	122.0	0.0	35.6	20.0	35.18
11.34	6.02	43.59	77.87	91.63	6.04	19.0	213.81	122.18	0.0	36.32	20.0	37.92
11.36	6.85	43.68	79.77	91.82	6.87	19.0	214.19	122.37	0.0	36.98	20.0	40.62
11.38	7.97	44.41	82.37	92.02	7.98	19.0	214.57	122.55	0.0	37.74	20.0	44.01
11.4	8.82	48.18	84.11	92.21	8.83	19.0	214.95	122.74	0.0	38.26	20.0	46.45
11.42	9.84	53.43	85.77	92.41	9.86	19.5	215.34	122.93	0.0	38.81	20.0	49.19
11.44	11.15	59.78	87.9	92.61	11.17	19.5	215.73	123.12	0.0	39.43	20.0	52.5
11.46	12.5	68.79	89.95	92.8	12.52	19.5	216.12	123.32	0.0	39.99	20.0	55.7
11.48	13.24	86.49	90.66	93.0	13.26	19.5	216.51	123.51	0.0	40.26	20.0	57.27
11.5	13.39	113.81	90.98	93.2	13.41	19.5	216.9	123.71	0.0	40.27	20.0	57.35
11.52	13.48	135.84	91.61	93.39	13.5	19.0	217.28	123.89	0.0	40.29	20.0	57.43
11.54	13.67	152.06	92.88	93.59	13.69	19.0	217.66	124.07	0.0	40.34	20.0	57.75
11.56	14.01	173.77	94.85	93.78	14.03	19.0	218.04	124.26	0.0	40.44	20.0	58.39
11.58	14.23	190.48	96.67	93.98	14.25	19.0	218.42	124.44	0.0	40.51	20.0	58.79
11.6	14.53	206.58	99.04	94.18	14.55	19.0	218.8	124.62	0.0	40.6	20.0	59.35
11.62	14.6	211.45	100.69	94.37	14.62	19.0	219.18	124.81	0.0	40.62	20.0	59.47
11.64	14.3	211.9	100.69	94.57	14.32	19.0	219.56	124.99	0.0	40.51	20.0	58.76
11.66	13.76	212.1	100.69	94.76	13.78	19.0	219.94	125.18	0.0	40.31	20.0	57.55
11.68	13.21	212.58	100.38	94.96	13.23	19.0	220.32	125.36	0.0	40.09	20.0	56.29
11.7	12.53	214.42	99.98	95.16	12.55	19.0	220.7	125.54	0.0	39.82	20.0	54.68
11.72	11.78	215.97	98.88	95.35	11.8	18.5	221.07	125.72	0.0	39.5	20.0	52.87
11.74	11.09	213.59	98.09	95.55	11.11	18.5	221.44	125.89	0.0	39.18	20.0	51.17
11.76	10.3	210.8	96.75	95.75	10.32	18.5	221.81	126.06	0.0	38.8	20.0	49.17
11.78	9.55	203.79	96.19	95.94	9.57	18.5	222.18	126.24	0.0	38.41	20.0	47.2
11.8	9.0	195.38	95.8	96.14	9.01	18.5	222.55	126.41	0.0	38.11	20.0	45.71
11.82	9.0	195.38	90.9	96.33	9.01	18.5	222.92	126.59	0.0	38.1	20.0	45.68
11.84	8.2	161.14	103.3	96.53	8.22	18.5	223.29	126.76	0.0	37.64	20.0	43.54
11.86	7.66	146.11	101.09	96.73	7.68	18.5	223.66	126.93	0.0	37.29	20.0	41.99
11.88	7.26	138.29	99.51	96.92	7.28	18.5	224.03	127.11	0.0	37.02	20.0	40.8
11.9	6.97	128.34	98.17	97.12	6.99	18.5	224.4	127.28	0.0	36.81	20.0	39.92
11.92	6.96	117.85	97.69	97.32	6.98	18.5	224.77	127.45	0.0	36.81	20.0	39.91
11.94	7.02	104.62	97.69	97.51	7.04	18.5	225.14	127.63	0.0	36.86	20.0	40.13
11.96	7.02	96.8	97.46	97.71	7.04	18.5	225.51	127.8	0.0	36.86	20.0	40.13
11.98	6.84	90.57	96.98	97.9	6.86	18.5	225.88	127.98	0.0	36.73	20.0	39.59
12.0	6.37	82.82	96.11	98.1	6.39	18.5	226.25	128.15	0.0	36.37	20.0	38.1
12.02	5.94	75.49	94.93	98.3	5.96	18.5	226.62	128.32	0.0	36.01	20.0	36.69
12.04	5.73	68.81	94.22	98.49	5.75	18.5	226.99	128.5	0.0	35.82	20.0	35.99
12.06	5.8	65.9	94.38	98.69	5.82	18.5	227.36	128.67	0.0	35.89	20.0	36.25
12.08	6.2	61.64	95.01	98.88	6.22	19.0	227.74	128.86	0.0	36.23	20.0	37.57
12.1	6.54	57.92	95.8	99.08	6.56	19.0	228.12	129.04	0.0	36.51	20.0	38.69
12.12	6.76	55.66	96.27	99.28	6.78	19.0	228.5	129.22	0.0	36.68	20.0	39.39
12.14	6.94	58.37	96.35	99.47	6.96	19.0	228.88	129.41	0.0	36.81	20.0	39.91
12.16	7.32	62.71	96.35	99.67	7.34	19.0	229.26	129.59	0.0	37.07	20.0	41.03
12.18	7.63	67.54	96.19	99.87	7.65	19.0	229.64	129.77	0.0	37.28	20.0	41.93
12.2	8.04	78.07	95.32	100.06	8.06	19.0	230.02	129.96	0.0	37.53	20.0	43.03
12.22	8.24	89.09	94.38	100.26	8.26	19.0	230.4	130.14	0.0	37.64	20.0	43.52
12.24	8.21	103.35	93.27	100.45	8.23	19.0	230.78	130.33	0.0	37.59	20.0	43.32
12.26	8.21	111.95	93.03	100.65	8.22	18.5	231.15	130.5	0.0	37.57	20.0	43.23
12.28	7.83	123.21	92.01	100.85	7.85	18.5	231.52	130.67	0.0	37.31	20.0	42.08
12.3	7.13	135.5	90.27	101.04	7.15	18.5	231.89	130.85	0.0	36.8	20.0	39.89
12.32	6.66	143.86	89.16	101.24	6.67	18.5	232.26	131.02	0.0	36.43	20.0	38.36
12.34	6.2	149.88	88.22	101.44	6.22	18.0	232.62	131.18	0.0	36.05	20.0	36.86
12.36	5.93	149.96	87.66	101.63	5.94	18.0	232.98	131.35	0.0	35.81	20.0	35.93
12.38	5.66	146.88	86.56	101.83	5.67	18.0	233.34	131.51	0.0	35.56	20.0	35.01
12.4	5.38	142.95	86.24	102.02	5.4	18.0	233.7	131.68	368.82	0.0	20.0	0.0
12.42	5.1	135.0	85.37	102.22	5.12	18.0	234.06	131.84	348.67	0.0	20.0	0.0
12.44	5.13	114.23	84.74	102.42	5.15	18.0	234.42	132.0	0.0	35.06	20.0	33.23
12.46	5.33	103.91	84.58	102.61	5.35	18.5	234.79	132.18	0.0	35.27	20.0	33.96
12.48	5.64	90.97	83.64	102.81	5.65	18.5	235.16	132.35	0.0	35.57	20.0	35.07
12.5	5.97	78.76	88.08	103.01	5.99	18.5	235.53	132.53	0.0	35.89	20.0	36.25
12.52	6.2	66.55	56.94	103.2	6.21	18.5	235.9	132.7	0.0	36.1	20.0	37.05
12.54	6.25	59.71	56.15	103.4	6.26	19.0	236.28	132.88	0.0	36.15	20.0	37.26
12.56	6.22	57.83	55.6	103.59	6.23	19.0	236.66	133.07	0.0	36.12	20.0	37.14
12.58	6.49	60.61	55.76	103.79	6.5	19.0	237.04	133.25	0.0	36.33	20.0	37.97
12.6	7.27	69.87	57.26	103.99	7.28	19.0	237.42	133.43	0.0	36.92	20.0	40.37
12.62	8.74	78.72	60.5	104.18	8.75	19.0	237.8	133.62	0.0	37.86	20.0	44.57
12.64	10.25	85.56	64.37	104.38	10.27	19.0	238.18	133.8	0.0	38.68	20.0	48.56

12.66	11.74	93.46	68.16	104.57	11.75	19.0	238.56	133.99	0.0	39.37	20.0	52.18
12.68	12.39	96.62	69.82	104.77	12.41	19.5	238.95	134.18	0.0	39.64	20.0	53.7
12.7	12.49	105.75	70.37	104.97	12.51	19.0	239.33	134.36	0.0	39.67	20.0	53.83
12.72	12.17	126.36	71.0	105.16	12.19	19.0	239.71	134.55	0.0	39.5	20.0	52.91
12.74	11.91	142.29	70.84	105.36	11.92	19.0	240.09	134.73	0.0	39.36	20.0	52.15
12.76	11.91	167.77	71.16	105.56	11.92	19.0	240.47	134.91	0.0	39.33	20.0	51.99
12.78	12.26	185.83	73.53	105.75	12.27	19.0	240.85	135.1	0.0	39.46	20.0	52.69
12.8	12.4	196.72	75.82	105.95	12.42	19.0	241.23	135.28	0.0	39.51	20.0	52.96
12.82	12.29	183.06	110.72	106.14	12.31	19.0	241.61	135.47	0.0	39.47	20.0	52.75
12.84	12.34	183.02	110.72	106.34	12.36	19.0	241.99	135.65	0.0	39.49	20.0	52.83
12.86	12.33	182.4	110.41	106.54	12.36	19.0	242.37	135.83	0.0	39.48	20.0	52.8
12.88	10.96	208.82	104.33	106.73	10.98	18.5	242.74	136.01	0.0	38.83	20.0	49.3
12.9	10.03	219.3	101.88	106.93	10.05	18.5	243.11	136.18	0.0	38.35	20.0	46.9
12.92	9.46	222.7	100.38	107.13	9.48	18.5	243.48	136.35	0.0	38.04	20.0	45.39
12.94	9.08	221.47	99.35	107.32	9.1	18.5	243.85	136.53	0.0	37.82	20.0	44.35
12.96	8.42	215.27	98.4	107.52	8.44	18.0	244.21	136.69	0.0	37.42	20.0	42.56
12.98	7.35	205.48	96.43	107.71	7.37	18.0	244.57	136.86	0.0	36.7	20.0	39.48
13.0	5.72	201.99	92.72	107.91	5.74	18.0	244.93	137.02	392.37	0.0	20.0	0.0
13.02	3.76	213.04	88.69	108.11	3.78	17.5	245.28	137.17	252.31	0.0	20.0	0.0
13.04	2.4	214.96	86.24	108.3	2.42	17.5	245.63	137.33	155.45	0.0	20.0	0.0
13.06	2.23	208.89	86.95	108.5	2.24	17.5	245.98	137.48	142.73	0.0	20.0	0.0
13.08	3.94	214.05	93.35	108.69	3.96	17.5	246.33	137.64	265.42	0.0	20.0	0.0
13.1	6.72	178.66	144.05	108.89	6.75	18.0	246.69	137.8	0.0	36.24	20.0	37.59
13.12	7.61	138.92	117.52	109.09	7.63	18.5	247.06	137.97	0.0	36.92	20.0	40.38
13.14	7.59	106.56	111.2	109.28	7.61	18.5	247.43	138.15	0.0	36.94	20.0	40.48
13.16	7.22	80.95	108.12	109.48	7.24	19.0	247.81	138.33	0.0	36.73	20.0	39.59
13.18	7.0	80.95	107.57	109.68	7.02	18.5	248.18	138.5	0.0	36.56	20.0	38.88
13.2	6.84	85.46	107.49	109.87	6.86	18.5	248.55	138.68	0.0	36.41	20.0	38.27
13.22	6.63	98.89	107.57	110.07	6.65	18.5	248.92	138.85	0.0	36.22	20.0	37.52
13.24	6.55	104.95	107.09	110.26	6.57	18.5	249.29	139.03	0.0	36.14	20.0	37.2
13.26	6.62	116.34	107.49	110.46	6.64	18.5	249.66	139.2	0.0	36.17	20.0	37.32
13.28	6.72	123.34	108.12	110.66	6.74	18.5	250.03	139.37	0.0	36.23	20.0	37.58
13.3	6.92	121.25	108.75	110.85	6.94	18.5	250.4	139.55	0.0	36.39	20.0	38.21
13.32	7.26	119.49	109.7	111.05	7.28	18.5	250.77	139.72	0.0	36.64	20.0	39.21
13.34	7.63	114.98	110.8	111.25	7.65	18.5	251.14	139.89	0.0	36.91	20.0	40.32
13.36	7.98	112.69	111.59	111.44	8.0	18.5	251.51	140.07	0.0	37.14	20.0	41.32
13.38	8.13	112.08	112.15	111.64	8.15	18.5	251.88	140.24	0.0	37.25	20.0	41.81
13.4	8.04	115.4	111.51	111.83	8.06	18.5	252.25	140.42	0.0	37.17	20.0	41.43
13.42	7.8	120.27	111.04	112.03	7.82	18.5	252.62	140.59	0.0	36.99	20.0	40.68
13.44	7.5	126.91	109.94	112.23	7.53	18.5	252.99	140.76	0.0	36.78	20.0	39.77
13.46	7.25	135.96	109.07	112.42	7.27	18.5	253.36	140.94	0.0	36.57	20.0	38.94
13.48	7.22	138.95	108.91	112.62	7.24	18.5	253.73	141.11	0.0	36.54	20.0	38.81
13.5	7.11	141.86	108.83	112.82	7.13	18.5	254.1	141.29	0.0	36.45	20.0	38.45
13.52	7.17	141.86	108.75	113.01	7.19	18.5	254.47	141.46	0.0	36.49	20.0	38.6
13.54	7.24	138.78	109.07	113.21	7.26	18.5	254.84	141.63	0.0	36.54	20.0	38.81
13.56	7.39	136.08	109.46	113.4	7.41	18.5	255.21	141.81	0.0	36.65	20.0	39.24
13.58	7.53	133.58	109.62	113.6	7.55	18.5	255.58	141.98	0.0	36.75	20.0	39.65
13.6	7.6	131.82	110.33	113.8	7.63	18.5	255.95	142.15	0.0	36.8	20.0	39.86
13.62	7.73	132.39	111.12	113.99	7.75	18.5	256.32	142.33	0.0	36.88	20.0	40.2
13.64	7.87	132.35	111.59	114.19	7.89	18.5	256.69	142.5	0.0	36.97	20.0	40.58
13.66	7.98	134.23	111.83	114.38	8.0	18.5	257.06	142.68	0.0	37.04	20.0	40.87
13.68	8.11	136.53	112.54	114.58	8.13	18.5	257.43	142.85	0.0	37.11	20.0	41.2
13.7	8.23	138.66	113.17	114.78	8.25	18.5	257.8	143.02	0.0	37.18	20.0	41.51
13.72	8.34	140.87	113.81	114.97	8.36	18.5	258.17	143.2	0.0	37.24	20.0	41.77
13.74	8.51	142.22	114.36	115.17	8.54	18.5	258.54	143.37	0.0	37.35	20.0	42.23
13.76	8.72	142.14	115.23	115.37	8.74	18.5	258.91	143.54	0.0	37.49	20.0	42.84
13.78	8.87	142.67	115.94	115.56	8.9	18.5	259.28	143.72	0.0	37.57	20.0	43.24
13.8	8.92	135.3	113.88	115.76	8.94	18.5	259.65	143.89	0.0	37.61	20.0	43.39
13.82	8.75	140.17	113.65	115.95	8.77	18.5	260.02	144.07	0.0	37.49	20.0	42.86
13.84	8.5	146.44	111.99	116.15	8.52	18.5	260.39	144.24	0.0	37.31	20.0	42.05
13.86	8.27	152.54	109.3	116.35	8.29	18.5	260.76	144.41	0.0	37.15	20.0	41.34
13.88	8.2	157.83	109.62	116.54	8.22	18.5	261.13	144.59	0.0	37.09	20.0	41.11
13.9	8.39	161.06	111.04	116.74	8.42	18.5	261.5	144.76	0.0	37.21	20.0	41.62
13.92	8.66	161.63	110.65	116.94	8.69	18.5	261.87	144.93	0.0	37.37	20.0	42.33
13.94	8.89	160.11	110.72	117.13	8.91	18.5	262.24	145.11	0.0	37.5	20.0	42.92
13.96	9.04	152.12	111.91	117.33	9.07	18.5	262.61	145.28	0.0	37.62	20.0	43.44
13.98	9.16	139.58	111.75	117.52	9.18	18.5	262.98	145.46	0.0	37.7	20.0	43.81
14.0	9.46	129.38	112.86	117.72	9.48	19.0	263.36	145.64	0.0	37.88	20.0	44.64
14.02	9.64	123.6	113.73	117.92	9.66	19.0	263.74	145.82	0.0	37.98	20.0	45.13
14.04	9.72	119.46	113.49	118.11	9.74	19.0	264.12	146.01	0.0	38.03	20.0	45.34
14.06	9.75	114.91	113.49	118.31	9.77	19.0	264.5	146.19	0.0	38.05	20.0	45.45
14.08	9.56	117.0	112.46	118.5	9.58	19.0	264.88	146.38	0.0	37.93	20.0	44.9
14.1	8.98	125.97	112.07	118.7	9.0	19.0	265.26	146.56	0.0	37.58	20.0	43.27

14.12	8.51	141.2	110.65	118.9	8.53	18.5	265.63	146.73	0.0	37.26	20.0	41.85
14.14	8.33	152.87	112.15	119.09	8.35	18.5	266.0	146.91	0.0	37.11	20.0	41.2
14.16	8.31	157.87	112.78	119.29	8.33	18.5	266.37	147.08	0.0	37.09	20.0	41.1
14.18	8.32	163.06	113.09	119.49	8.34	18.5	266.74	147.25	0.0	37.09	20.0	41.08
14.2	8.27	166.5	114.99	119.68	8.3	18.5	267.11	147.43	0.0	37.05	20.0	40.91
14.22	8.07	163.76	114.67	119.88	8.09	18.5	267.48	147.6	0.0	36.91	20.0	40.33
14.24	7.69	160.93	114.36	120.07	7.71	18.5	267.85	147.78	0.0	36.65	20.0	39.25
14.26	7.4	157.44	115.31	120.27	7.42	18.5	268.22	147.95	0.0	36.44	20.0	38.4
14.28	7.27	154.2	115.46	120.47	7.3	18.5	268.59	148.12	0.0	36.35	20.0	38.03
14.3	7.32	152.27	115.46	120.66	7.35	18.5	268.96	148.3	0.0	36.38	20.0	38.17
14.32	7.5	148.34	116.81	120.86	7.52	18.5	269.33	148.47	0.0	36.51	20.0	38.67
14.34	7.63	144.49	117.36	121.06	7.65	18.5	269.7	148.64	0.0	36.6	20.0	39.05
14.36	7.86	140.22	119.49	121.25	7.89	18.5	270.07	148.82	0.0	36.77	20.0	39.73
14.38	8.21	134.04	120.44	121.45	8.23	18.5	270.44	148.99	0.0	37.02	20.0	40.79
14.4	8.47	129.65	121.47	121.64	8.49	18.5	270.81	149.17	0.0	37.19	20.0	41.53
14.42	8.79	130.92	122.18	121.84	8.82	18.5	271.18	149.34	0.0	37.38	20.0	42.39
14.44	8.9	131.82	123.99	122.04	8.92	18.5	271.55	149.51	0.0	37.44	20.0	42.65
14.46	8.91	135.22	122.89	122.23	8.93	18.5	271.92	149.69	0.0	37.44	20.0	42.63
14.48	8.91	136.08	122.89	122.43	8.94	18.5	272.29	149.86	0.0	37.44	20.0	42.62
14.5	9.18	144.88	117.36	122.62	9.21	18.5	272.66	150.04	0.0	37.58	20.0	43.25
14.52	9.24	147.95	114.75	122.82	9.27	18.5	273.03	150.21	0.0	37.6	20.0	43.37
14.54	9.15	152.46	113.96	123.02	9.18	18.5	273.4	150.38	0.0	37.54	20.0	43.08
14.56	8.96	156.84	113.96	123.21	8.98	18.5	273.77	150.56	0.0	37.41	20.0	42.52
14.58	8.79	160.6	114.59	123.41	8.82	18.5	274.14	150.73	0.0	37.3	20.0	42.02
14.6	8.81	159.74	115.31	123.61	8.83	18.5	274.51	150.9	0.0	37.31	20.0	42.06
14.62	8.81	159.74	115.31	123.8	8.83	18.5	274.88	151.08	0.0	37.3	20.0	42.03
14.64	9.05	160.11	115.15	124.0	9.08	18.5	275.25	151.25	0.0	37.45	20.0	42.66
14.66	9.04	159.12	116.1	124.19	9.07	18.5	275.62	151.43	0.0	37.44	20.0	42.62
14.68	9.02	156.79	115.7	124.39	9.04	18.5	275.99	151.6	0.0	37.42	20.0	42.55
14.7	8.99	155.68	116.02	124.59	9.01	18.5	276.36	151.77	0.0	37.4	20.0	42.45
14.72	8.94	154.2	115.46	124.78	8.97	18.5	276.73	151.95	0.0	37.37	20.0	42.32
14.74	8.98	153.71	116.65	124.98	9.0	18.5	277.1	152.12	0.0	37.39	20.0	42.39
14.76	9.11	153.01	117.67	125.18	9.13	18.5	277.47	152.29	0.0	37.46	20.0	42.72
14.78	9.16	142.65	117.83	125.37	9.18	18.5	277.84	152.47	0.0	37.5	20.0	42.91
14.8	9.09	144.13	116.73	125.57	9.12	18.5	278.21	152.64	0.0	37.45	20.0	42.7
14.82	8.96	150.36	114.99	125.76	8.98	18.5	278.58	152.82	0.0	37.36	20.0	42.28
14.84	8.85	153.96	114.28	125.96	8.88	18.5	278.95	152.99	0.0	37.29	20.0	41.95
14.86	8.89	157.4	113.49	126.16	8.91	18.5	279.32	153.16	0.0	37.3	20.0	42.0
14.88	8.94	158.18	113.88	126.35	8.97	18.5	279.69	153.34	0.0	37.32	20.0	42.12
14.9	8.95	160.06	113.96	126.55	8.98	18.5	280.06	153.51	0.0	37.32	20.0	42.12
14.92	8.99	159.85	114.04	126.75	9.02	18.5	280.43	153.68	0.0	37.34	20.0	42.2
14.94	8.93	156.69	113.88	126.94	8.95	18.5	280.8	153.86	0.0	37.3	20.0	42.02
14.96	8.59	151.86	112.38	127.14	8.61	18.5	281.17	154.03	0.0	37.1	20.0	41.13
14.98	7.89	149.11	110.49	127.33	7.92	18.5	281.54	154.21	0.0	36.61	20.0	39.11
15.0	6.84	148.74	106.14	127.53	6.86	18.5	281.91	154.38	0.0	35.83	20.0	36.02
15.02	4.83	149.27	100.46	127.73	4.85	18.0	282.27	154.54	326.04	0.0	20.0	0.0
15.04	3.19	152.99	96.19	127.92	3.2	17.5	282.62	154.7	208.74	0.0	20.0	0.0
15.06	2.15	153.85	94.14	128.12	2.17	17.5	282.97	154.85	134.85	0.0	20.0	0.0
15.08	1.6	156.59	92.72	128.31	1.62	17.5	283.32	155.01	95.58	0.0	20.0	0.0
15.1	1.19	158.76	92.8	128.51	1.21	17.5	283.67	155.16	0.0	0.0	20.0	0.0
15.12	0.93	143.03	111.04	128.71	0.95	17.5	284.02	155.31	0.0	0.0	20.0	0.0
15.14	0.82	123.69	186.07	128.9	0.85	17.5	284.37	155.47	0.0	0.0	20.0	0.0
15.16	0.81	119.19	206.52	129.1	0.86	17.5	284.72	155.62	0.0	0.0	20.0	0.0
15.18	0.68	49.51	304.61	129.3	0.75	17.5	285.07	155.77	32.89	0.0	20.59	0.0
15.2	0.63	35.87	304.53	129.49	0.69	17.5	285.42	155.93	28.66	0.0	20.0	0.0
15.22	0.57	19.07	327.59	129.69	0.64	17.5	285.77	156.08	25.07	0.0	20.14	0.0
15.24	0.62	8.67	328.62	129.88	0.68	17.5	286.12	156.24	28.4	0.0	21.22	0.0
15.26	0.71	3.35	336.2	130.08	0.78	17.5	286.47	156.39	35.31	0.0	23.14	0.0
15.28	1.22	2.0	350.73	130.28	1.29	18.0	286.83	156.55	71.39	0.0	28.07	0.0
15.3	1.58	6.59	327.36	130.47	1.65	18.0	287.19	156.72	97.12	0.0	29.24	0.0
15.32	1.57	5.93	316.3	130.67	1.63	18.0	287.55	156.88	96.12	0.0	28.91	0.0
15.34	1.57	5.93	316.3	130.87	1.63	18.0	287.91	157.04	96.11	0.0	28.9	0.0
15.36	0.83	5.7	279.34	131.06	0.89	18.0	288.27	157.21	42.81	0.0	22.36	0.0
15.38	0.67	15.5	289.53	131.26	0.73	18.0	288.63	157.37	31.36	0.0	20.06	0.0
15.4	0.67	21.44	318.2	131.45	0.74	18.0	288.99	157.54	31.88	0.0	20.99	0.0
15.42	0.86	22.19	328.7	131.65	0.92	18.0	289.35	157.7	45.17	0.0	23.59	0.0
15.44	1.11	24.32	322.54	131.85	1.17	18.0	289.71	157.86	63.19	0.0	25.71	0.0
15.46	1.04	23.26	297.58	132.04	1.1	18.0	290.07	158.03	57.7	0.0	24.37	0.0
15.48	0.77	17.49	281.71	132.24	0.83	18.0	290.43	158.19	38.23	0.0	21.04	0.0
15.5	0.65	11.48	288.5	132.44	0.71	18.0	290.79	158.36	30.0	0.0	20.0	0.0
15.52	0.73	7.92	302.8	132.63	0.79	17.5	291.14	158.51	35.57	0.0	21.5	0.0
15.54	0.87	7.8	311.72	132.83	0.93	18.0	291.5	158.67	45.78	0.0	23.54	0.0
15.56	0.83	3.43	294.66	133.02	0.89	18.0	291.86	158.84	42.63	0.0	22.76	0.0

15.58	0.69	10.56	287.79	133.22	0.75	18.0	292.22	159.0	32.67	0.0	20.22	0.0
15.6	0.69	14.17	302.16	133.42	0.75	18.0	292.58	159.16	33.01	0.0	20.64	0.0
15.62	0.71	13.07	301.14	133.61	0.77	18.0	292.94	159.33	34.2	0.0	20.86	0.0
15.64	0.68	15.65	297.5	133.81	0.74	18.0	293.3	159.49	31.77	0.0	20.12	0.0
15.66	0.79	16.39	307.06	134.0	0.86	18.0	293.66	159.66	40.14	0.0	22.02	0.0
15.68	0.98	14.47	315.04	134.2	1.05	18.0	294.02	159.82	53.78	0.0	24.39	0.0
15.7	1.0	14.36	274.52	134.4	1.06	18.0	294.38	159.98	54.4	0.0	23.28	0.0
15.72	0.81	19.77	271.99	134.59	0.87	18.0	294.74	160.15	40.91	0.0	20.9	0.0
15.74	0.72	22.39	277.29	134.79	0.78	18.0	295.1	160.31	34.56	0.0	20.0	0.0
15.76	0.75	36.2	378.93	134.99	0.82	17.5	295.45	160.46	37.59	0.0	23.22	0.0
15.78	0.72	30.01	370.16	135.18	0.8	17.5	295.8	160.62	35.81	0.0	22.75	0.0
15.8	0.71	30.05	394.88	135.38	0.79	17.5	296.15	160.77	35.05	0.0	23.33	0.0
15.82	0.74	30.42	408.78	135.57	0.82	17.5	296.5	160.93	37.43	0.0	24.07	0.0
15.84	0.73	27.55	398.83	135.77	0.81	17.5	296.85	161.08	36.84	0.0	23.73	0.0
15.86	0.7	19.4	408.86	135.97	0.78	18.0	297.21	161.24	34.61	0.0	23.84	0.0
15.88	0.68	16.21	412.89	136.16	0.77	18.0	297.57	161.41	33.53	0.0	23.86	0.0
15.9	0.69	14.08	417.15	136.36	0.77	18.0	297.93	161.57	33.98	0.0	24.1	0.0
15.92	0.7	14.82	423.0	136.56	0.78	18.0	298.29	161.73	34.45	0.0	24.3	0.0
15.94	0.69	13.01	415.73	136.75	0.78	18.0	298.65	161.9	34.19	0.0	24.08	0.0
15.96	0.67	14.45	421.26	136.95	0.75	18.0	299.01	162.06	32.45	0.0	23.93	0.0
15.98	0.74	12.07	434.29	137.14	0.83	18.0	299.37	162.23	37.61	0.0	25.09	0.0
16.0	0.79	7.85	427.5	137.34	0.87	18.0	299.73	162.39	40.96	0.0	25.52	0.0
16.02	0.76	11.99	407.36	137.54	0.84	18.0	300.09	162.55	38.59	0.0	24.44	0.0
16.04	0.77	15.88	430.26	137.73	0.86	18.0	300.45	162.72	39.89	0.0	25.09	0.0
16.06	0.92	15.31	429.63	137.93	1.0	18.0	300.81	162.88	50.12	0.0	26.37	0.0
16.08	0.82	19.2	415.73	138.12	0.9	18.0	301.17	163.05	43.0	0.0	24.99	0.0
16.1	0.8	18.26	411.94	138.32	0.88	18.0	301.53	163.21	41.42	0.0	24.68	0.0
16.12	0.79	19.25	415.1	138.52	0.87	18.0	301.89	163.37	40.92	0.0	24.65	0.0
16.14	0.77	21.66	406.41	138.71	0.86	18.0	302.25	163.54	39.55	0.0	24.13	0.0
16.16	0.8	19.9	413.76	138.91	0.89	18.0	302.61	163.7	41.73	0.0	24.67	0.0
16.18	0.89	16.3	413.13	139.11	0.97	18.0	302.97	163.86	47.54	0.0	25.5	0.0
16.2	0.9	16.88	400.88	139.3	0.98	18.0	303.33	164.03	48.33	0.0	25.27	0.0
16.22	0.73	18.35	382.17	139.5	0.81	18.0	303.69	164.19	36.17	0.0	22.92	0.0
16.24	0.7	17.45	393.78	139.69	0.78	18.0	304.05	164.36	33.99	0.0	22.91	0.0
16.26	0.71	14.01	396.38	139.89	0.79	18.0	304.41	164.52	34.71	0.0	23.19	0.0
16.28	0.71	14.5	399.15	140.09	0.79	18.0	304.77	164.68	34.89	0.0	23.27	0.0
16.3	0.71	13.81	400.25	140.28	0.79	18.0	305.13	164.85	34.49	0.0	23.24	0.0
16.32	0.81	15.65	404.04	140.48	0.89	18.0	305.49	165.01	41.88	0.0	24.38	0.0
16.34	1.03	15.86	414.39	140.68	1.12	18.0	305.85	165.17	57.92	0.0	26.68	0.0
16.36	1.61	17.42	409.41	140.87	1.7	18.0	306.21	165.34	99.33	0.0	30.0	0.0
16.38	2.06	16.15	381.22	141.07	2.14	18.5	306.58	165.51	130.88	0.0	31.22	0.0
16.4	1.75	17.38	323.72	141.26	1.82	18.0	306.94	165.68	107.93	0.0	28.68	0.0
16.42	1.42	19.47	316.62	141.46	1.48	18.0	307.3	165.84	83.76	0.0	26.73	0.0
16.44	1.12	31.8	321.43	141.66	1.18	18.0	307.66	166.0	62.27	0.0	24.47	0.0
16.46	0.94	41.67	329.41	141.85	1.0	17.5	308.01	166.16	49.52	0.0	22.87	0.0
16.48	0.79	46.95	367.64	142.05	0.87	17.5	308.36	166.31	39.83	0.0	22.31	0.0
16.5	0.78	47.9	389.59	142.24	0.86	17.5	308.71	166.47	39.02	0.0	22.76	0.0
16.52	0.85	44.78	398.67	142.44	0.93	17.5	309.06	166.62	44.67	0.0	23.87	0.0
16.54	0.93	38.8	402.86	142.64	1.01	17.5	309.41	166.77	49.97	0.0	24.76	0.0
16.56	1.39	31.43	398.28	142.83	1.47	18.0	309.77	166.94	82.65	0.0	28.16	0.0
16.58	2.32	29.59	413.92	143.03	2.4	18.0	310.13	167.1	149.21	0.0	32.29	0.0
16.6	3.52	27.42	296.16	143.23	3.58	18.5	310.5	167.27	0.0	32.11	20.0	24.4
16.62	5.46	34.87	265.99	143.42	5.52	19.0	310.88	167.46	0.0	34.57	20.0	31.58
16.64	5.63	35.89	173.12	143.62	5.66	19.0	311.26	167.64	0.0	34.71	20.0	32.03
16.66	3.56	42.82	176.28	143.81	3.59	18.5	311.63	167.82	0.0	32.02	20.0	24.19
16.68	2.2	56.82	179.12	144.01	2.24	18.0	311.99	167.98	137.69	0.0	20.0	0.0
16.7	1.73	66.98	182.28	144.21	1.77	18.0	312.35	168.14	104.11	0.0	20.0	0.0
16.72	1.36	88.2	189.31	144.4	1.4	17.5	312.7	168.3	77.36	0.0	20.0	0.0
16.74	1.09	96.6	224.29	144.6	1.14	17.5	313.05	168.45	58.73	0.0	20.0	0.0
16.76	0.97	93.24	277.29	144.8	1.03	17.5	313.4	168.6	51.18	0.0	20.87	0.0
16.78	0.91	81.57	295.29	144.99	0.97	17.5	313.75	168.76	46.7	0.0	20.76	0.0
16.8	0.83	67.15	304.45	145.19	0.89	17.5	314.1	168.91	41.11	0.0	20.15	0.0
16.82	0.81	54.98	312.27	145.38	0.87	17.5	314.45	169.07	39.77	0.0	20.24	0.0
16.84	0.81	45.64	317.41	145.58	0.87	17.5	314.8	169.22	39.92	0.0	20.51	0.0
16.86	0.82	28.73	321.91	145.78	0.88	17.5	315.15	169.37	40.32	0.0	20.96	0.0
16.88	0.81	14.96	328.31	145.97	0.88	18.0	315.51	169.54	40.07	0.0	21.42	0.0
16.9	0.79	10.74	334.62	146.17	0.86	18.0	315.87	169.7	38.85	0.0	21.53	0.0
16.92	1.17	13.16	358.08	146.37	1.24	18.0	316.23	169.86	66.12	0.0	25.83	0.0
16.94	2.16	15.49	370.32	146.56	2.24	18.5	316.6	170.04	137.19	0.0	30.91	0.0
16.96	2.5	12.62	314.41	146.76	2.56	18.5	316.97	170.21	0.0	30.16	20.0	19.91
16.98	2.17	13.94	283.84	146.95	2.23	18.5	317.34	170.39	136.48	0.0	20.0	0.0
17.0	1.7	18.24	279.34	147.15	1.76	18.0	317.7	170.55	103.07	0.0	20.0	0.0
17.02	1.29	36.71	291.27	147.35	1.34	18.0	318.06	170.71	73.35	0.0	24.26	0.0

17.04	1.23	46.62	303.19	147.54	1.3	18.0	318.42	170.88	69.77	0.0	24.07	0.0
17.06	1.68	58.13	359.82	147.74	1.75	18.0	318.78	171.04	102.09	0.0	28.07	0.0
17.08	2.23	55.39	347.1	147.93	2.3	18.0	319.14	171.21	141.17	0.0	29.96	0.0
17.1	2.19	58.79	300.11	148.13	2.25	18.0	319.5	171.37	137.71	0.0	20.0	0.0
17.12	1.62	49.33	290.24	148.33	1.68	18.0	319.86	171.53	97.17	0.0	26.07	0.0
17.14	1.32	48.55	289.84	148.52	1.38	18.0	320.22	171.7	75.42	0.0	24.17	0.0
17.16	1.05	55.67	293.24	148.72	1.11	17.5	320.57	171.85	56.37	0.0	21.98	0.0
17.18	0.94	64.15	345.76	148.92	1.01	17.5	320.92	172.0	48.94	0.0	22.23	0.0
17.2	1.16	57.68	379.8	149.11	1.23	17.5	321.27	172.16	65.16	0.0	25.17	0.0
17.22	1.34	54.61	376.95	149.31	1.41	17.5	321.62	172.31	77.93	0.0	26.39	0.0
17.24	1.18	46.54	357.53	149.5	1.25	17.5	321.97	172.47	66.56	0.0	24.9	0.0
17.26	1.4	44.78	359.11	149.7	1.48	18.0	322.33	172.63	82.46	0.0	26.48	0.0
17.28	1.6	42.11	361.16	149.9	1.67	18.0	322.69	172.79	96.26	0.0	27.68	0.0
17.3	1.57	29.7	339.12	150.09	1.63	18.0	323.05	172.96	93.66	0.0	27.15	0.0
17.32	1.25	23.72	319.78	150.29	1.31	18.0	323.41	173.12	70.67	0.0	24.7	0.0
17.34	1.14	38.14	327.83	150.49	1.2	18.0	323.77	173.28	62.87	0.0	23.78	0.0
17.36	1.54	39.98	345.68	150.68	1.61	18.0	324.13	173.45	91.86	0.0	26.97	0.0
17.38	1.69	43.5	347.02	150.88	1.76	18.0	324.49	173.61	102.36	0.0	27.69	0.0
17.4	1.76	43.5	330.52	151.07	1.83	18.0	324.85	173.78	107.48	0.0	27.63	0.0
17.42	1.77	44.12	327.99	151.27	1.83	18.0	325.21	173.94	107.56	0.0	27.55	0.0
17.44	1.53	41.66	305.88	151.47	1.59	18.0	325.57	174.1	90.47	0.0	25.8	0.0
17.46	1.12	48.25	293.71	151.66	1.18	17.5	325.92	174.26	60.94	0.0	22.38	0.0
17.48	0.94	53.87	296.08	151.86	1.0	17.5	326.27	174.41	48.09	0.0	20.53	0.0
17.5	0.95	54.56	312.11	152.06	1.01	17.5	326.62	174.57	48.71	0.0	21.06	0.0
17.52	1.25	50.47	330.83	152.25	1.32	17.5	326.97	174.72	70.8	0.0	24.41	0.0
17.54	1.37	51.16	329.41	152.45	1.43	18.0	327.33	174.88	78.9	0.0	25.15	0.0
17.56	1.32	38.14	326.8	152.64	1.38	18.0	327.69	175.05	75.23	0.0	24.88	0.0
17.58	1.06	37.23	317.01	152.84	1.12	18.0	328.05	175.21	56.64	0.0	22.5	0.0
17.6	1.02	34.16	320.57	153.04	1.09	18.0	328.41	175.37	54.17	0.0	22.29	0.0
17.62	1.29	29.62	333.2	153.23	1.35	18.0	328.77	175.54	73.1	0.0	24.91	0.0
17.64	1.66	24.7	339.84	153.43	1.73	18.0	329.13	175.7	100.27	0.0	27.45	0.0
17.66	1.75	25.85	317.56	153.62	1.82	18.0	329.49	175.87	106.17	0.0	27.27	0.0
17.68	1.56	26.67	313.38	153.82	1.63	18.0	329.85	176.03	92.54	0.0	26.17	0.0
17.7	1.56	31.5	304.3	154.02	1.62	18.0	330.21	176.19	91.98	0.0	25.8	0.0
17.72	2.37	49.76	286.53	154.21	2.43	18.0	330.57	176.36	150.0	0.0	20.0	0.0
17.74	1.78	42.88	262.44	154.41	1.83	18.0	330.93	176.52	107.2	0.0	20.0	0.0
17.76	1.36	44.47	257.54	154.61	1.41	18.0	331.29	176.68	77.1	0.0	20.0	0.0
17.78	1.12	66.02	257.7	154.8	1.17	17.5	331.64	176.84	60.2	0.0	20.69	0.0
17.8	1.01	67.21	261.73	155.0	1.07	17.5	331.99	176.99	52.48	0.0	20.0	0.0
17.82	1.07	67.86	258.73	155.19	1.12	17.5	332.34	177.15	56.14	0.0	20.12	0.0
17.84	1.1	68.27	259.67	155.39	1.15	17.5	332.69	177.3	58.34	0.0	20.43	0.0
17.86	1.29	45.17	265.12	155.59	1.35	18.0	333.05	177.46	72.4	0.0	22.5	0.0
17.88	1.16	44.35	268.76	155.78	1.21	17.5	333.4	177.62	62.59	0.0	21.49	0.0
17.9	0.99	39.96	266.62	155.98	1.04	17.5	333.75	177.77	50.47	0.0	20.0	0.0
17.92	0.92	38.32	274.05	156.18	0.98	17.5	334.1	177.92	45.95	0.0	20.0	0.0
17.94	0.95	34.55	289.21	156.37	1.01	17.5	334.45	178.08	47.91	0.0	20.1	0.0
17.96	1.07	31.28	289.92	156.57	1.12	18.0	334.81	178.24	56.32	0.0	21.44	0.0
17.98	2.24	42.33	325.7	156.76	2.31	18.0	335.17	178.41	141.0	0.0	20.0	0.0
18.0	3.54	31.81	326.88	156.96	3.6	18.5	335.54	178.58	0.0	31.77	20.0	23.54
18.02	3.45	31.19	305.09	157.16	3.52	18.5	335.91	178.75	0.0	31.62	20.0	23.18
18.04	2.52	38.89	291.9	157.35	2.58	18.0	336.27	178.92	160.31	0.0	20.0	0.0
18.06	1.81	52.04	279.89	157.55	1.87	18.0	336.63	179.08	109.51	0.0	20.0	0.0
18.08	1.43	66.21	274.92	157.74	1.49	17.5	336.98	179.24	82.33	0.0	23.37	0.0
18.1	1.38	82.68	278.63	157.94	1.43	17.5	337.33	179.39	78.21	0.0	22.94	0.0
18.12	2.07	97.95	302.72	158.14	2.13	17.5	337.68	179.54	127.74	0.0	20.0	0.0
18.14	2.87	96.15	333.99	158.33	2.94	18.0	338.04	179.71	185.74	0.0	20.0	0.0
18.16	2.96	80.95	315.12	158.53	3.02	18.0	338.4	179.87	191.53	0.0	20.0	0.0
18.18	2.45	63.58	303.19	158.73	2.52	18.0	338.76	180.03	155.46	0.0	20.0	0.0
18.2	2.24	60.22	301.93	158.92	2.3	18.0	339.12	180.2	139.87	0.0	20.0	0.0
18.22	2.27	59.85	305.09	159.12	2.33	18.0	339.48	180.36	142.19	0.0	20.0	0.0
18.24	2.69	72.06	313.93	159.31	2.76	18.0	339.84	180.53	172.69	0.0	20.0	0.0
18.26	2.44	64.6	287.55	159.51	2.49	18.0	340.2	180.69	153.86	0.0	20.0	0.0
18.28	1.89	59.2	269.07	159.71	1.95	18.0	340.56	180.85	114.7	0.0	20.0	0.0
18.3	1.44	64.52	263.62	159.9	1.49	17.5	340.91	181.01	81.92	0.0	20.0	0.0
18.32	1.22	81.15	259.44	160.1	1.27	17.5	341.26	181.16	66.17	0.0	20.85	0.0
18.34	1.01	81.02	276.02	160.3	1.07	17.5	341.61	181.31	51.96	0.0	20.0	0.0
18.36	1.09	74.92	289.29	160.49	1.15	17.5	341.96	181.47	57.63	0.0	20.69	0.0
18.38	1.35	63.61	296.4	160.69	1.41	17.5	342.31	181.62	76.49	0.0	23.19	0.0
18.4	1.35	63.61	296.4	160.88	1.41	17.5	342.66	181.78	76.46	0.0	23.17	0.0
18.42	1.21	46.16	280.52	161.08	1.27	18.0	343.02	181.94	66.02	0.0	21.75	0.0
18.44	0.95	40.14	278.0	161.28	1.01	17.5	343.37	182.09	47.4	0.0	20.0	0.0
18.46	1.06	32.64	295.21	161.47	1.11	18.0	343.73	182.26	55.07	0.0	20.92	0.0
18.48	1.24	25.15	308.17	161.67	1.3	18.0	344.09	182.42	68.35	0.0	23.11	0.0

18.5	1.37	20.8	303.51	161.86	1.43	18.0	344.45	182.59	77.78	0.0	24.1	0.0
18.52	1.2	24.69	302.32	162.06	1.26	18.0	344.81	182.75	65.42	0.0	22.58	0.0
18.54	0.9	25.68	288.34	162.26	0.96	18.0	345.17	182.91	44.02	0.0	20.0	0.0
18.56	0.72	28.54	288.82	162.45	0.78	17.5	345.52	183.07	31.15	0.0	20.0	0.0
18.58	0.68	28.09	310.61	162.65	0.74	17.5	345.87	183.22	28.27	0.0	20.0	0.0
18.6	0.69	25.88	321.04	162.85	0.76	17.5	346.22	183.37	29.23	0.0	20.0	0.0
18.62	0.75	27.23	331.7	163.04	0.82	17.5	346.57	183.53	33.51	0.0	20.0	0.0
18.64	0.87	28.55	341.65	163.24	0.94	18.0	346.93	183.69	42.07	0.0	20.03	0.0
18.66	0.87	20.27	329.25	163.43	0.94	18.0	347.29	183.86	42.31	0.0	20.0	0.0
18.68	0.8	24.82	330.91	163.63	0.87	18.0	347.65	184.02	37.35	0.0	20.0	0.0
18.7	0.91	30.18	416.84	163.83	0.99	18.0	348.01	184.18	45.96	0.0	22.55	0.0
18.72	0.89	28.66	414.31	164.02	0.97	18.0	348.37	184.35	44.54	0.0	22.29	0.0
18.74	0.87	29.61	415.02	164.22	0.95	18.0	348.73	184.51	42.87	0.0	22.0	0.0
18.76	0.79	29.53	416.84	164.42	0.87	17.5	349.08	184.66	37.5	0.0	21.13	0.0
18.78	0.74	28.75	418.97	164.61	0.83	17.5	349.43	184.82	34.18	0.0	20.6	0.0
18.8	0.72	21.66	423.79	164.81	0.81	18.0	349.79	184.98	32.71	0.0	20.64	0.0
18.82	0.73	16.62	428.21	165.0	0.82	18.0	350.15	185.15	33.45	0.0	21.05	0.0
18.84	0.78	15.97	436.27	165.2	0.86	18.0	350.51	185.31	36.58	0.0	21.83	0.0
18.86	0.76	14.54	435.16	165.4	0.85	18.0	350.87	185.47	35.58	0.0	21.67	0.0
18.88	0.73	16.22	435.16	165.59	0.82	18.0	351.23	185.64	33.63	0.0	21.24	0.0
18.9	0.72	14.58	438.48	165.79	0.81	18.0	351.59	185.8	32.83	0.0	21.24	0.0
18.92	0.73	14.25	441.32	165.99	0.82	18.0	351.95	185.96	33.55	0.0	21.44	0.0
18.94	0.73	14.01	443.69	166.18	0.82	18.0	352.31	186.13	33.16	0.0	21.44	0.0
18.96	0.78	14.46	446.77	166.38	0.87	18.0	352.67	186.29	37.2	0.0	22.16	0.0
18.98	0.76	16.46	445.9	166.57	0.85	18.0	353.03	186.46	35.65	0.0	21.77	0.0
19.0	0.81	17.45	447.88	166.77	0.9	18.0	353.39	186.62	39.12	0.0	22.33	0.0
19.02	0.95	17.49	456.88	166.97	1.04	18.0	353.75	186.78	48.77	0.0	23.95	0.0
19.04	0.89	18.55	429.16	167.16	0.98	18.0	354.11	186.95	44.76	0.0	22.66	0.0
19.06	0.89	19.17	439.74	167.36	0.98	18.0	354.47	187.11	44.49	0.0	22.84	0.0
19.08	0.85	19.91	429.0	167.55	0.94	18.0	354.83	187.28	41.71	0.0	22.09	0.0
19.1	0.92	23.55	462.88	167.75	1.01	18.0	355.19	187.44	46.6	0.0	23.52	0.0
19.12	1.09	23.51	468.57	167.95	1.19	18.0	355.55	187.6	59.42	0.0	25.25	0.0
19.14	0.94	20.97	436.82	168.14	1.03	18.0	355.91	187.77	48.3	0.0	23.19	0.0
19.16	1.16	29.53	478.36	168.34	1.25	18.0	356.27	187.93	63.94	0.0	25.77	0.0
19.18	2.02	29.09	482.47	168.54	2.12	18.0	356.63	188.09	125.97	0.0	30.57	0.0
19.2	2.67	26.83	466.12	168.73	2.77	18.5	357.0	188.27	172.03	0.0	32.39	0.0
19.22	3.38	24.62	373.72	168.93	3.46	18.5	357.37	188.44	0.0	31.27	20.0	22.35
19.24	3.69	24.54	366.61	169.12	3.76	18.5	357.74	188.62	0.0	31.8	20.0	23.64
19.26	3.71	21.67	350.34	169.32	3.78	18.5	358.11	188.79	0.0	31.86	20.0	23.78
19.28	3.88	25.07	340.55	169.52	3.95	18.5	358.48	188.96	0.0	32.09	20.0	24.36
19.3	5.67	28.35	344.65	169.71	5.74	19.0	358.86	189.15	0.0	34.28	20.0	30.62
19.32	7.39	48.99	342.05	169.91	7.46	19.0	359.24	189.33	0.0	35.66	20.0	35.38
19.34	7.75	40.27	312.43	170.11	7.81	19.0	359.62	189.51	0.0	35.97	20.0	36.57
19.36	7.75	40.22	300.82	170.3	7.81	19.0	360.0	189.7	0.0	35.97	20.0	36.56
19.38	7.81	38.18	291.66	170.5	7.87	19.0	360.38	189.88	0.0	36.02	20.0	36.75
19.4	7.95	37.93	295.53	170.69	8.01	19.0	360.76	190.07	0.0	36.12	20.0	37.15
19.42	7.9	37.85	288.34	170.89	7.96	19.0	361.14	190.25	0.0	36.08	20.0	36.98
19.44	7.77	42.15	270.42	171.09	7.82	19.0	361.52	190.43	0.0	35.95	20.0	36.47
19.46	7.72	42.51	262.68	171.28	7.77	19.0	361.9	190.62	0.0	35.91	20.0	36.31
19.48	7.7	54.06	246.09	171.48	7.75	19.0	362.28	190.8	0.0	35.82	20.0	35.99
19.5	7.69	63.85	244.43	171.68	7.74	19.0	362.66	190.99	0.0	35.76	20.0	35.77
19.52	7.81	71.96	204.08	171.87	7.85	19.0	363.04	191.17	0.0	35.8	20.0	35.92
19.54	7.95	81.42	189.78	172.07	7.99	19.0	363.42	191.35	0.0	35.86	20.0	36.14
19.56	8.12	90.26	182.12	172.26	8.16	19.0	363.8	191.54	0.0	35.95	20.0	36.47
19.58	8.08	95.75	179.04	172.46	8.12	19.0	364.18	191.72	0.0	35.89	20.0	36.27
19.6	7.91	99.43	176.51	172.66	7.95	19.0	364.56	191.9	0.0	35.75	20.0	35.74
19.62	7.52	104.79	179.67	172.85	7.56	18.5	364.93	192.08	0.0	35.44	20.0	34.59
19.64	7.16	109.78	181.8	173.05	7.19	18.5	365.3	192.25	0.0	35.13	20.0	33.48
19.66	7.1	119.57	186.54	173.24	7.13	18.5	365.67	192.43	0.0	35.05	20.0	33.2
19.68	7.1	112.54	221.53	173.44	7.14	18.5	366.04	192.6	0.0	35.08	20.0	33.29
19.7	6.74	119.05	210.39	173.64	6.78	18.5	366.41	192.77	0.0	34.74	20.0	32.15
19.72	5.75	122.61	193.65	173.83	5.79	18.5	366.78	192.95	387.37	0.0	20.0	0.0
19.74	5.21	119.54	187.73	174.03	5.25	18.0	367.14	193.11	348.64	0.0	20.0	0.0
19.76	5.43	114.75	185.44	174.23	5.47	18.5	367.51	193.28	364.34	0.0	20.0	0.0
19.78	6.34	110.53	183.62	174.42	6.38	18.5	367.88	193.46	0.0	34.36	20.0	30.89
19.8	6.56	105.24	177.22	174.62	6.6	18.5	368.25	193.63	0.0	34.61	20.0	31.69
19.82	5.61	98.36	167.59	174.81	5.64	18.5	368.62	193.81	0.0	33.67	20.0	28.73
19.84	4.89	89.43	164.67	175.01	4.92	18.5	368.99	193.98	325.02	0.0	20.0	0.0
19.86	3.63	78.93	163.8	175.21	3.66	18.0	369.35	194.14	235.33	0.0	20.0	0.0
19.88	3.74	83.97	167.27	175.4	3.77	18.0	369.71	194.31	243.09	0.0	20.0	0.0
19.9	3.5	107.31	167.59	175.6	3.54	18.0	370.07	194.47	226.29	0.0	20.0	0.0
19.92	3.38	109.36	154.95	175.8	3.41	18.0	370.43	194.63	217.13	0.0	20.0	0.0
19.94	3.38	127.26	156.29	175.99	3.41	18.0	370.79	194.8	217.13	0.0	20.0	0.0

19.96	3.47	121.15	196.65	176.19	3.51	18.0	371.15	194.96	224.01	0.0	20.0	0.0
19.98	4.12	93.21	192.23	176.38	4.16	18.0	371.51	195.13	270.8	0.0	20.0	0.0
20.0	3.17	83.5	184.65	176.58	3.2	18.0	371.87	195.29	202.26	0.0	20.0	0.0
20.02	2.43	87.23	176.35	176.78	2.47	18.0	372.23	195.45	149.75	0.0	20.0	0.0
20.04	2.08	86.77	171.93	176.97	2.11	18.0	372.59	195.62	124.28	0.0	20.0	0.0
20.06	1.91	95.86	180.86	177.17	1.94	17.5	372.94	195.77	112.28	0.0	20.0	0.0
20.08	1.97	95.29	234.64	177.36	2.02	17.5	373.29	195.93	117.38	0.0	20.0	0.0
20.1	3.24	95.45	243.96	177.56	3.29	18.0	373.65	196.09	208.39	0.0	20.0	0.0
20.12	5.23	103.02	250.75	177.76	5.28	18.5	374.02	196.26	350.43	0.0	20.0	0.0
20.14	5.86	84.59	230.22	177.95	5.91	18.5	374.39	196.44	0.0	33.95	20.0	29.58
20.16	5.03	76.64	216.0	178.15	5.07	18.5	374.76	196.61	0.0	33.03	20.0	26.88
20.18	4.18	62.92	208.34	178.35	4.22	18.5	375.13	196.78	274.47	0.0	20.0	0.0
20.2	4.07	63.99	208.02	178.54	4.11	18.5	375.5	196.96	267.03	0.0	20.0	0.0
20.22	4.07	81.31	201.47	178.74	4.11	18.0	375.86	197.12	266.91	0.0	20.0	0.0
20.24	4.1	77.22	203.21	178.93	4.14	18.5	376.23	197.3	269.12	0.0	20.0	0.0
20.26	3.46	92.45	194.12	179.13	3.5	18.0	376.59	197.46	223.28	0.0	20.0	0.0
20.28	2.8	90.73	188.83	179.33	2.83	18.0	376.95	197.62	175.46	0.0	20.0	0.0



Tabella 2 - Dati output

Prof.(m)	Rf (%)	FR (%)	Qt1	Qtn	IC	Es (MPa)	M (MPa)	G0 (MPa)	OCR	K0	KSBT
0.02	5.08	5.09	590.39	126.62	2.36	2.11	2.07	2.65	194.83	10.72	5.89E-07
0.04	4.96	4.97	321.79	99.36	2.42	2.47	2.25	3.09	106.19	6.16	4.02E-07
0.06	4.89	4.91	227.08	82.65	2.46	2.77	2.38	3.47	74.94	4.48	2.92E-07
0.08	4.73	4.76	175.87	68.58	2.5	3.01	2.46	3.77	58.04	3.55	2.19E-07
0.1	4.28	4.31	145.84	61.04	2.51	3.38	2.76	4.23	48.13	2.99	2.16E-07
0.12	4.19	4.22	120.03	54.99	2.53	3.61	2.86	4.52	39.61	2.5	1.83E-07
0.14	0.64	0.64	100.29	30.43	2.24	2.51	2.88	3.15	0.0	0.0	1.41E-06
0.16	0.43	0.44	103.2	29.89	2.17	2.78	3.49	3.49	0.0	0.0	2.24E-06
0.18	0.3	0.3	96.28	27.95	2.14	2.86	3.58	3.58	0.0	0.0	2.80E-06
0.2	0.21	0.22	94.07	27.33	2.11	3.02	3.78	3.78	0.0	0.0	3.52E-06
0.22	0.14	0.15	92.38	26.86	2.08	3.17	3.98	3.98	0.0	0.0	4.35E-06
0.24	0.09	0.09	87.5	25.99	2.06	3.25	4.08	4.08	0.0	0.0	4.79E-06
0.26	0.12	0.12	84.36	26.34	2.07	3.47	4.35	4.35	0.0	0.0	4.49E-06
0.28	0.1	0.1	75.74	25.63	2.07	3.38	4.24	4.24	0.0	0.0	4.44E-06
0.3	0.06	0.06	75.55	25.74	2.06	3.57	4.47	4.47	0.0	0.0	4.91E-06
0.32	0.03	0.03	74.25	26.34	2.08	3.85	4.83	4.83	0.0	0.0	4.32E-06
0.34	0.08	0.08	76.94	26.9	2.04	4.08	5.12	5.12	0.0	0.0	5.47E-06
0.36	0.11	0.11	96.12	32.06	1.98	5.01	6.28	6.28	0.0	0.0	8.46E-06
0.38	0.14	0.15	109.07	35.97	1.95	5.8	7.27	7.27	0.0	0.0	1.04E-05
0.4	0.11	0.11	163.62	47.77	1.81	7.71	9.66	9.66	0.0	0.0	2.77E-05
0.42	0.06	0.06	221.95	59.14	1.7	9.54	11.96	11.96	0.0	0.0	6.15E-05
0.44	0.01	0.01	256.26	73.18	1.77	12.73	15.95	15.95	0.0	0.0	3.69E-05
0.46	0.09	0.09	294.56	74.99	1.6	12.41	15.56	15.56	0.0	0.0	1.20E-04
0.48	0.15	0.15	344.95	85.95	1.59	14.93	18.72	18.72	0.0	0.0	1.34E-04
0.5	0.18	0.18	397.93	98.51	1.55	17.2	21.56	21.56	0.0	0.0	1.73E-04
0.52	0.21	0.21	463.05	113.73	1.51	19.92	24.97	24.97	0.0	0.0	2.27E-04
0.54	0.23	0.23	523.07	128.38	1.48	22.59	28.31	28.31	0.0	0.0	2.80E-04
0.56	0.27	0.27	546.6	137.58	1.48	24.54	30.75	30.75	0.0	0.0	2.83E-04
0.58	0.31	0.31	554.51	147.32	1.48	25.88	32.43	32.43	0.0	0.0	2.83E-04
0.6	0.37	0.37	552.57	152.77	1.51	27.65	34.66	34.66	0.0	0.0	2.36E-04
0.62	0.46	0.46	543.23	158.14	1.55	29.67	37.19	37.19	0.0	0.0	1.78E-04
0.64	0.56	0.56	529.39	162.16	1.59	31.52	39.5	39.5	0.0	0.0	1.34E-04
0.66	0.66	0.66	510.79	164.44	1.63	33.09	41.47	41.47	0.0	0.0	1.01E-04
0.68	0.71	0.71	498.16	165.59	1.65	34.16	42.82	42.82	0.0	0.0	8.84E-05
0.7	0.71	0.71	482.67	163.6	1.65	34.33	43.03	43.03	0.0	0.0	8.59E-05
0.72	0.81	0.81	492.9	168.99	1.68	37.41	46.88	46.88	0.0	0.0	7.11E-05
0.74	0.83	0.83	487.08	170.69	1.68	38.38	48.1	48.1	0.0	0.0	6.81E-05
0.76	0.87	0.87	477.89	171.51	1.69	39.23	49.17	49.17	0.0	0.0	6.36E-05
0.78	0.87	0.88	466.93	170.73	1.7	39.64	49.68	49.68	0.0	0.0	6.17E-05
0.8	0.9	0.9	453.6	169.8	1.71	40.14	50.31	50.31	0.0	0.0	5.70E-05
0.82	0.92	0.92	445.44	169.94	1.72	40.79	51.13	51.13	0.0	0.0	5.46E-05
0.84	0.94	0.95	435.42	169.47	1.72	41.35	51.82	51.82	0.0	0.0	5.16E-05
0.86	0.94	0.94	430.66	169.68	1.72	41.87	52.48	52.48	0.0	0.0	5.20E-05
0.88	0.96	0.96	423.12	169.52	1.73	42.43	53.18	53.18	0.0	0.0	5.02E-05
0.9	0.96	0.96	416.43	169.19	1.73	42.89	53.75	53.75	0.0	0.0	4.95E-05
0.92	0.97	0.97	405.78	167.58	1.74	43.1	54.02	54.02	0.0	0.0	4.74E-05
0.94	0.98	0.99	394.04	165.53	1.74	43.24	54.19	54.19	0.0	0.0	4.50E-05
0.96	0.96	0.96	367.87	157.27	1.75	41.77	52.36	52.36	0.0	0.0	4.21E-05
0.98	0.93	0.94	362.56	156.06	1.75	41.75	52.33	52.33	0.0	0.0	4.40E-05
1.0	0.94	0.95	352.99	154.32	1.75	41.9	52.51	52.51	0.0	0.0	4.19E-05
1.02	0.96	0.97	336.29	150.03	1.77	41.53	52.05	52.05	0.0	0.0	3.78E-05
1.04	0.97	0.97	326.1	147.58	1.77	41.43	51.92	51.92	0.0	0.0	3.62E-05
1.06	0.97	0.97	317.82	145.79	1.78	41.49	52.0	52.0	0.0	0.0	3.48E-05
1.08	0.97	0.97	311.6	144.58	1.78	41.62	52.17	52.17	0.0	0.0	3.42E-05
1.1	0.99	1.0	278.82	133.23	1.81	39.54	49.56	49.56	0.0	0.0	2.72E-05
1.12	0.98	0.99	269.13	130.13	1.82	39.12	49.03	49.03	0.0	0.0	2.63E-05
1.14	0.99	0.99	260.57	127.66	1.83	38.93	48.8	48.8	0.0	0.0	2.50E-05
1.16	0.98	0.98	254.54	125.89	1.83	38.8	48.63	48.63	0.0	0.0	2.47E-05
1.18	0.97	0.97	252.51	125.73	1.83	39.04	48.93	48.93	0.0	0.0	2.52E-05
1.2	0.93	0.94	257.13	127.91	1.81	39.67	49.72	49.72	0.0	0.0	2.81E-05
1.22	0.86	0.86	266.77	131.27	1.78	40.19	50.37	50.37	0.0	0.0	3.52E-05
1.24	0.82	0.82	271.47	133.23	1.76	40.61	50.9	50.9	0.0	0.0	4.02E-05
1.26	0.78	0.78	275.32	134.93	1.74	40.99	51.38	51.38	0.0	0.0	4.53E-05
1.28	0.78	0.79	270.99	134.16	1.75	41.18	51.61	51.61	0.0	0.0	4.44E-05
1.3	0.79	0.79	263.93	132.29	1.75	41.15	51.58	51.58	0.0	0.0	4.21E-05
1.32	0.8	0.81	257.52	130.77	1.76	41.27	51.72	51.72	0.0	0.0	3.95E-05
1.34	0.82	0.82	253.57	130.25	1.77	41.63	52.18	52.18	0.0	0.0	3.77E-05
1.36	0.83	0.83	252.25	130.64	1.77	42.11	52.78	52.78	0.0	0.0	3.74E-05
1.38	0.82	0.82	252.53	131.47	1.77	42.58	53.36	53.36	0.0	0.0	3.86E-05
1.4	0.81	0.81	255.76	133.47	1.76	43.25	54.21	54.21	0.0	0.0	4.12E-05

1.42	0.72	0.72	273.46	140.08	1.71	44.09	55.26	55.26	0.0	0.0	5.82E-05
1.44	0.67	0.68	274.7	140.45	1.69	43.93	55.06	55.06	0.0	0.0	6.60E-05
1.46	0.69	0.7	256.51	133.86	1.71	42.97	53.85	53.85	0.0	0.0	5.53E-05
1.48	0.78	0.78	231.3	124.96	1.77	42.08	52.74	52.74	0.0	0.0	3.79E-05
1.5	0.84	0.84	213.07	118.23	1.81	41.33	51.8	51.8	0.0	0.0	2.87E-05
1.52	0.93	0.94	198.68	113.39	1.85	41.28	51.73	51.73	0.0	0.0	2.12E-05
1.54	0.99	1.0	188.64	109.82	1.88	41.15	51.57	51.57	0.0	0.0	1.74E-05
1.56	1.02	1.03	183.44	108.09	1.89	41.21	51.65	51.65	0.0	0.0	1.59E-05
1.58	1.0	1.01	181.59	107.47	1.89	41.19	51.62	51.62	0.0	0.0	1.62E-05
1.6	0.97	0.98	174.72	104.04	1.89	40.19	50.37	50.37	0.0	0.0	1.61E-05
1.62	0.96	0.96	171.54	102.75	1.89	40.0	50.14	50.14	0.0	0.0	1.60E-05
1.64	0.92	0.92	174.08	104.08	1.88	40.29	50.5	50.5	0.0	0.0	1.78E-05
1.66	0.83	0.84	182.06	107.56	1.84	40.68	50.98	50.98	0.0	0.0	2.32E-05
1.68	0.74	0.75	193.91	112.75	1.79	41.32	51.79	51.79	0.0	0.0	3.23E-05
1.7	0.66	0.66	208.89	119.37	1.74	42.22	52.92	52.92	0.0	0.0	4.63E-05
1.72	0.52	0.53	239.44	131.97	1.64	43.49	54.51	54.51	0.0	0.0	8.95E-05
1.74	0.43	0.44	259.23	139.64	1.58	43.84	54.94	54.94	0.0	0.0	1.42E-04
1.76	0.39	0.39	268.81	143.67	1.55	44.12	55.3	55.3	0.0	0.0	1.79E-04
1.78	0.44	0.45	251.97	138.13	1.59	44.17	55.36	55.36	0.0	0.0	1.33E-04
1.8	0.54	0.54	234.03	132.58	1.65	44.85	56.22	56.22	0.0	0.0	8.64E-05
1.82	0.68	0.68	218.83	128.59	1.72	46.44	58.2	58.2	0.0	0.0	5.24E-05
1.84	0.77	0.78	210.28	126.42	1.76	47.52	59.56	59.56	0.0	0.0	3.94E-05
1.86	0.9	0.91	201.71	125.69	1.81	48.85	61.23	61.23	0.0	0.0	2.86E-05
1.88	0.95	0.95	197.62	124.5	1.82	49.36	61.87	61.87	0.0	0.0	2.56E-05
1.9	0.93	0.93	196.67	124.27	1.82	49.39	61.9	61.9	0.0	0.0	2.64E-05
1.92	0.87	0.88	195.95	123.63	1.8	48.72	61.06	61.06	0.0	0.0	2.96E-05
1.94	0.74	0.74	198.57	123.66	1.76	47.04	58.96	58.96	0.0	0.0	4.11E-05
1.96	0.62	0.62	211.56	128.0	1.7	47.07	59.0	59.0	0.0	0.0	6.16E-05
1.98	0.52	0.53	232.46	137.66	1.63	47.93	60.07	60.07	0.0	0.0	9.95E-05
2.0	0.46	0.46	250.4	146.13	1.58	48.82	61.19	61.19	0.0	0.0	1.44E-04
2.02	0.44	0.44	265.16	153.44	1.55	50.07	62.75	62.75	0.0	0.0	1.77E-04
2.04	0.44	0.44	274.18	158.32	1.53	51.16	64.12	64.12	0.0	0.0	1.94E-04
2.06	0.45	0.45	278.23	161.19	1.54	52.24	65.48	65.48	0.0	0.0	1.93E-04
2.08	0.5	0.5	277.2	162.48	1.56	53.86	67.5	67.5	0.0	0.0	1.64E-04
2.1	0.58	0.58	272.27	164.1	1.6	55.82	69.97	69.97	0.0	0.0	1.26E-04
2.12	0.65	0.65	268.75	164.07	1.63	57.43	71.98	71.98	0.0	0.0	1.03E-04
2.14	0.69	0.69	270.91	166.52	1.64	59.1	74.08	74.08	0.0	0.0	9.43E-05
2.16	0.7	0.7	274.88	169.37	1.64	60.27	75.54	75.54	0.0	0.0	9.43E-05
2.18	0.69	0.7	278.56	171.58	1.63	60.77	76.17	76.17	0.0	0.0	9.97E-05
2.2	0.69	0.69	277.92	171.53	1.63	60.84	76.25	76.25	0.0	0.0	1.01E-04
2.22	0.68	0.68	270.99	167.92	1.63	59.9	75.08	75.08	0.0	0.0	9.80E-05
2.24	0.69	0.69	263.01	164.03	1.64	59.26	74.27	74.27	0.0	0.0	9.05E-05
2.26	0.71	0.72	250.73	157.96	1.67	58.36	73.14	73.14	0.0	0.0	7.76E-05
2.28	0.75	0.76	237.58	151.54	1.69	57.61	72.21	72.21	0.0	0.0	6.35E-05
2.3	0.82	0.83	225.85	146.25	1.73	57.65	72.26	72.26	0.0	0.0	4.90E-05
2.32	0.85	0.86	222.83	145.24	1.74	58.07	72.78	72.78	0.0	0.0	4.49E-05
2.34	0.83	0.83	225.75	146.81	1.73	58.15	72.88	72.88	0.0	0.0	4.91E-05
2.36	0.76	0.76	232.9	150.15	1.7	57.91	72.58	72.58	0.0	0.0	6.12E-05
2.38	0.72	0.72	232.15	149.38	1.69	57.1	71.57	71.57	0.0	0.0	6.66E-05
2.4	0.7	0.71	229.09	147.6	1.68	56.39	70.67	70.67	0.0	0.0	6.81E-05
2.42	0.69	0.69	224.6	145.0	1.68	55.47	69.53	69.53	0.0	0.0	6.84E-05
2.44	0.68	0.68	219.39	142.14	1.69	54.7	68.55	68.55	0.0	0.0	6.66E-05
2.46	0.69	0.69	216.06	140.59	1.69	54.56	68.39	68.39	0.0	0.0	6.36E-05
2.48	0.7	0.7	215.15	140.49	1.7	54.86	68.76	68.76	0.0	0.0	6.18E-05
2.5	0.71	0.71	215.25	141.06	1.7	55.44	69.49	69.49	0.0	0.0	5.99E-05
2.52	0.72	0.72	213.92	140.67	1.71	55.63	69.72	69.72	0.0	0.0	5.82E-05
2.54	0.7	0.71	213.65	140.54	1.7	55.42	69.46	69.46	0.0	0.0	6.05E-05
2.56	0.67	0.68	216.6	142.07	1.69	55.34	69.36	69.36	0.0	0.0	6.74E-05
2.58	0.66	0.67	217.8	142.88	1.68	55.48	69.53	69.53	0.0	0.0	7.02E-05
2.6	0.63	0.63	223.47	145.83	1.66	55.53	69.6	69.6	0.0	0.0	8.25E-05
2.62	0.59	0.59	234.14	151.65	1.63	56.25	70.5	70.5	0.0	0.0	1.02E-04
2.64	0.57	0.57	239.68	154.81	1.61	56.7	71.06	71.06	0.0	0.0	1.14E-04
2.66	0.55	0.56	242.58	156.53	1.6	56.89	71.3	71.3	0.0	0.0	1.23E-04
2.68	0.56	0.56	241.85	156.5	1.6	57.1	71.56	71.56	0.0	0.0	1.21E-04
2.7	0.6	0.6	236.69	154.64	1.63	57.82	72.46	72.46	0.0	0.0	1.03E-04
2.72	0.63	0.64	226.82	149.72	1.65	57.48	72.04	72.04	0.0	0.0	8.60E-05
2.74	0.7	0.7	218.03	145.84	1.69	58.06	72.77	72.77	0.0	0.0	6.69E-05
2.76	0.73	0.73	210.31	141.91	1.71	57.78	72.41	72.41	0.0	0.0	5.77E-05
2.78	0.79	0.79	198.67	135.79	1.74	57.29	71.8	71.8	0.0	0.0	4.51E-05
2.8	0.95	0.96	181.03	126.93	1.82	57.76	72.4	72.4	0.0	0.0	2.64E-05
2.82	1.06	1.06	167.85	119.71	1.87	57.24	71.74	71.74	0.0	0.0	1.87E-05
2.84	1.09	1.1	162.39	116.63	1.89	56.83	71.22	71.22	0.0	0.0	1.66E-05
2.86	1.1	1.11	157.89	113.97	1.9	56.25	70.5	70.5	0.0	0.0	1.54E-05

2.88	1.06	1.06	156.15	112.63	1.89	55.29	69.3	69.3	0.0	0.0	1.63E-05
2.9	1.05	1.06	157.06	113.34	1.88	55.55	69.63	69.63	0.0	0.0	1.67E-05
2.92	1.25	1.26	155.29	113.89	1.93	58.66	73.52	73.52	0.0	0.0	1.19E-05
2.94	0.9	0.91	167.09	118.88	1.83	55.31	69.32	69.32	0.0	0.0	2.52E-05
2.96	0.83	0.84	171.36	121.09	1.8	54.91	68.82	68.82	0.0	0.0	3.08E-05
2.98	0.83	0.83	170.4	120.61	1.8	54.79	68.67	68.67	0.0	0.0	3.09E-05
3.0	0.84	0.85	168.09	119.51	1.81	54.89	68.8	68.8	0.0	0.0	2.90E-05
3.02	0.88	0.88	167.97	119.95	1.81	55.72	69.83	69.83	0.0	0.0	2.72E-05
3.04	0.91	0.92	167.3	120.04	1.83	56.46	70.77	70.77	0.0	0.0	2.53E-05
3.06	0.99	1.0	162.24	117.67	1.86	57.2	71.69	71.69	0.0	0.0	2.03E-05
3.08	1.15	1.16	149.26	110.42	1.92	57.18	71.67	71.67	0.0	0.0	1.31E-05
3.1	1.27	1.28	140.91	105.71	1.96	57.26	71.76	71.76	0.0	0.0	9.65E-06
3.12	1.36	1.38	134.49	101.98	2.0	57.14	71.62	71.62	0.0	0.0	7.69E-06
3.14	1.39	1.4	131.63	100.24	2.01	56.87	71.28	71.28	0.0	0.0	7.15E-06
3.16	1.36	1.38	132.22	100.66	2.0	56.9	71.31	71.31	0.0	0.0	7.47E-06
3.18	1.35	1.36	132.6	100.94	1.99	56.92	71.34	71.34	0.0	0.0	7.72E-06
3.2	1.29	1.3	133.29	101.21	1.98	56.41	70.7	70.7	0.0	0.0	8.52E-06
3.22	1.21	1.23	133.7	101.19	1.96	55.6	69.68	69.68	0.0	0.0	9.58E-06
3.24	1.12	1.13	137.19	103.1	1.93	55.11	69.07	69.07	0.0	0.0	1.18E-05
3.26	1.03	1.04	143.19	106.77	1.9	55.32	69.33	69.33	0.0	0.0	1.50E-05
3.28	0.99	1.0	148.36	110.09	1.88	55.87	70.03	70.03	0.0	0.0	1.76E-05
3.3	0.96	0.97	152.84	113.12	1.86	56.67	71.02	71.02	0.0	0.0	1.96E-05
3.32	0.95	0.96	155.5	114.95	1.85	57.14	71.62	71.62	0.0	0.0	2.10E-05
3.34	0.96	0.97	153.59	113.93	1.86	57.14	71.62	71.62	0.0	0.0	2.01E-05
3.36	0.98	0.99	152.9	113.77	1.86	57.5	72.07	72.07	0.0	0.0	1.93E-05
3.38	1.02	1.03	152.54	114.02	1.88	58.4	73.2	73.2	0.0	0.0	1.78E-05
3.4	1.02	1.03	154.74	115.72	1.87	59.17	74.16	74.16	0.0	0.0	1.83E-05
3.42	1.01	1.02	157.97	117.99	1.86	59.84	75.0	75.0	0.0	0.0	1.97E-05
3.44	0.98	0.99	157.38	117.53	1.85	59.32	74.35	74.35	0.0	0.0	2.07E-05
3.46	0.99	1.0	154.12	115.52	1.86	58.91	73.84	73.84	0.0	0.0	1.95E-05
3.48	0.99	1.0	152.98	114.89	1.86	58.81	73.71	73.71	0.0	0.0	1.93E-05
3.5	0.96	0.97	155.19	116.37	1.85	58.99	73.93	73.93	0.0	0.0	2.10E-05
3.52	0.93	0.94	158.2	118.31	1.84	59.13	74.1	74.1	0.0	0.0	2.35E-05
3.54	0.92	0.92	158.96	118.89	1.83	59.2	74.19	74.19	0.0	0.0	2.44E-05
3.56	0.95	0.96	157.27	118.16	1.84	59.66	74.78	74.78	0.0	0.0	2.25E-05
3.58	1.01	1.02	153.01	115.88	1.87	60.12	75.35	75.35	0.0	0.0	1.89E-05
3.6	1.06	1.07	147.38	112.48	1.89	59.94	75.12	75.12	0.0	0.0	1.59E-05
3.62	1.12	1.13	141.54	108.89	1.92	59.71	74.84	74.84	0.0	0.0	1.33E-05
3.64	1.18	1.19	135.66	105.21	1.94	59.38	74.42	74.42	0.0	0.0	1.10E-05
3.66	1.25	1.27	131.17	102.51	1.97	59.48	74.55	74.55	0.0	0.0	9.24E-06
3.68	1.3	1.31	127.55	100.24	1.99	59.31	74.33	74.33	0.0	0.0	8.19E-06
3.7	1.33	1.34	122.57	96.87	2.0	58.48	73.3	73.3	0.0	0.0	7.23E-06
3.72	1.32	1.34	118.61	94.07	2.01	57.44	71.99	71.99	0.0	0.0	6.79E-06
3.74	1.3	1.32	117.82	93.49	2.01	57.05	71.51	71.51	0.0	0.0	6.91E-06
3.76	1.21	1.22	122.14	96.31	1.98	57.07	71.53	71.53	0.0	0.0	8.58E-06
3.78	1.05	1.06	131.24	102.14	1.92	57.09	71.55	71.55	0.0	0.0	1.30E-05
3.8	0.98	0.99	135.8	105.07	1.89	57.06	71.51	71.51	0.0	0.0	1.60E-05
3.82	0.89	0.9	143.43	110.04	1.85	57.39	71.93	71.93	0.0	0.0	2.14E-05
3.84	0.81	0.82	151.69	115.4	1.81	57.81	72.45	72.45	0.0	0.0	2.86E-05
3.86	0.75	0.75	160.09	120.85	1.77	58.28	73.05	73.05	0.0	0.0	3.75E-05
3.88	0.73	0.74	168.14	126.47	1.75	59.74	74.88	74.88	0.0	0.0	4.37E-05
3.9	0.73	0.74	175.61	131.87	1.73	61.54	77.13	77.13	0.0	0.0	4.80E-05
3.92	0.81	0.82	178.13	134.62	1.75	64.31	80.6	80.6	0.0	0.0	4.15E-05
3.94	0.8	0.81	183.24	138.32	1.74	65.39	81.96	81.96	0.0	0.0	4.51E-05
3.96	0.8	0.81	182.62	138.08	1.74	65.43	82.01	82.01	0.0	0.0	4.49E-05
3.98	0.8	0.81	182.9	138.49	1.74	65.71	82.36	82.36	0.0	0.0	4.51E-05
4.0	0.94	0.94	192.15	146.56	1.77	71.52	89.64	89.64	0.0	0.0	3.78E-05
4.02	1.03	1.04	188.73	145.24	1.8	73.46	92.07	92.07	0.0	0.0	3.00E-05
4.04	1.13	1.13	185.8	144.1	1.83	75.17	94.21	94.21	0.0	0.0	2.47E-05
4.06	1.17	1.18	186.28	145.04	1.84	76.67	96.09	96.09	0.0	0.0	2.29E-05
4.08	1.07	1.08	199.05	153.61	1.79	77.54	97.19	97.19	0.0	0.0	3.16E-05
4.1	0.95	0.96	211.54	161.59	1.74	77.37	96.97	96.97	0.0	0.0	4.56E-05
4.12	0.86	0.86	223.17	169.02	1.7	77.33	96.93	96.93	0.0	0.0	6.25E-05
4.14	0.77	0.77	233.41	175.42	1.65	76.87	96.35	96.35	0.0	0.0	8.44E-05
4.16	0.77	0.77	232.61	175.13	1.65	76.92	96.41	96.41	0.0	0.0	8.41E-05
4.18	0.77	0.78	231.12	174.41	1.66	76.94	96.43	96.43	0.0	0.0	8.26E-05
4.2	0.81	0.82	229.28	173.87	1.67	78.05	97.82	97.82	0.0	0.0	7.44E-05
4.22	0.87	0.88	228.58	174.42	1.69	80.22	100.54	100.54	0.0	0.0	6.41E-05
4.24	0.94	0.95	227.57	174.75	1.71	82.41	103.29	103.29	0.0	0.0	5.48E-05
4.26	0.99	1.0	233.02	179.44	1.72	85.32	106.94	106.94	0.0	0.0	5.25E-05
4.28	1.0	1.0	242.2	186.43	1.71	87.97	110.25	110.25	0.0	0.0	5.59E-05
4.3	0.97	0.97	250.98	192.7	1.69	89.22	111.82	111.82	0.0	0.0	6.41E-05
4.32	0.92	0.92	257.42	197.0	1.67	89.11	111.69	111.69	0.0	0.0	7.56E-05

4.34	0.86	0.86	262.7	200.3	1.64	88.36	110.74	110.74	0.0	0.0	9.03E-05
4.36	0.85	0.85	259.64	198.28	1.64	87.57	109.76	109.76	0.0	0.0	9.05E-05
4.38	1.01	1.01	241.78	187.63	1.71	89.41	112.06	112.06	0.0	0.0	5.54E-05
4.4	1.21	1.22	223.0	176.07	1.79	91.23	114.34	114.34	0.0	0.0	3.22E-05
4.42	1.43	1.43	208.96	167.47	1.86	93.26	116.89	116.89	0.0	0.0	2.03E-05
4.44	1.62	1.63	197.81	160.46	1.91	94.74	118.75	118.75	0.0	0.0	1.40E-05
4.46	1.64	1.65	197.79	160.79	1.91	95.55	119.76	119.76	0.0	0.0	1.35E-05
4.48	1.6	1.61	205.55	166.65	1.9	97.2	121.83	121.83	0.0	0.0	1.55E-05
4.5	1.53	1.54	211.18	170.69	1.87	97.44	122.13	122.13	0.0	0.0	1.81E-05
4.52	1.45	1.46	210.12	169.54	1.86	95.39	119.55	119.55	0.0	0.0	2.01E-05
4.54	1.36	1.37	208.78	168.11	1.84	93.02	116.59	116.59	0.0	0.0	2.27E-05
4.56	1.27	1.28	209.24	168.01	1.82	91.05	114.12	114.12	0.0	0.0	2.63E-05
4.58	1.16	1.16	211.95	169.34	1.79	88.77	111.26	111.26	0.0	0.0	3.30E-05
4.6	1.13	1.14	211.61	169.08	1.78	88.17	110.5	110.5	0.0	0.0	3.45E-05
4.62	1.21	1.22	205.05	164.97	1.81	88.85	111.36	111.36	0.0	0.0	2.83E-05
4.64	1.3	1.31	199.73	161.77	1.84	89.97	112.76	112.76	0.0	0.0	2.32E-05
4.66	1.29	1.3	196.83	159.68	1.84	89.11	111.68	111.68	0.0	0.0	2.29E-05
4.68	1.24	1.25	202.11	163.55	1.82	89.48	112.15	112.15	0.0	0.0	2.64E-05
4.7	1.17	1.18	207.9	167.65	1.79	89.36	112.0	112.0	0.0	0.0	3.16E-05
4.72	1.11	1.12	209.12	168.34	1.78	88.29	110.66	110.66	0.0	0.0	3.54E-05
4.74	1.14	1.15	205.96	166.36	1.79	88.44	110.85	110.85	0.0	0.0	3.28E-05
4.76	1.12	1.13	203.4	164.48	1.79	87.5	109.66	109.66	0.0	0.0	3.30E-05
4.78	1.09	1.1	199.93	161.79	1.78	85.89	107.64	107.64	0.0	0.0	3.38E-05
4.8	1.11	1.12	194.6	158.04	1.8	85.15	106.72	106.72	0.0	0.0	3.11E-05
4.82	1.15	1.16	188.8	154.06	1.82	84.9	106.4	106.4	0.0	0.0	2.71E-05
4.84	1.22	1.23	180.74	148.47	1.85	84.66	106.11	106.11	0.0	0.0	2.20E-05
4.86	1.23	1.25	174.29	143.68	1.86	83.23	104.32	104.32	0.0	0.0	2.01E-05
4.88	1.21	1.22	166.9	137.94	1.87	80.67	101.11	101.11	0.0	0.0	1.91E-05
4.9	1.19	1.21	164.39	136.03	1.87	79.67	99.85	99.85	0.0	0.0	1.91E-05
4.92	1.24	1.25	160.16	133.1	1.88	79.6	99.76	99.76	0.0	0.0	1.69E-05
4.94	1.19	1.2	160.31	133.11	1.87	78.73	98.67	98.67	0.0	0.0	1.84E-05
4.96	1.19	1.2	159.85	132.89	1.87	78.78	98.74	98.74	0.0	0.0	1.83E-05
4.98	1.19	1.2	159.38	132.68	1.87	78.83	98.8	98.8	0.0	0.0	1.82E-05
5.0	1.06	1.07	157.58	130.66	1.84	75.24	94.3	94.3	0.0	0.0	2.25E-05
5.02	1.04	1.05	154.64	128.37	1.84	74.0	92.74	92.74	0.0	0.0	2.26E-05
5.04	1.06	1.07	146.78	122.43	1.86	72.36	90.69	90.69	0.0	0.0	1.94E-05
5.06	1.13	1.14	139.71	117.31	1.89	71.93	90.15	90.15	0.0	0.0	1.55E-05
5.08	1.12	1.13	137.39	115.56	1.9	71.24	89.29	89.29	0.0	0.0	1.52E-05
5.1	1.09	1.1	134.01	112.82	1.9	69.57	87.2	87.2	0.0	0.0	1.53E-05
5.12	1.09	1.1	130.42	110.08	1.91	68.65	86.04	86.04	0.0	0.0	1.44E-05
5.14	1.14	1.15	127.95	108.42	1.92	69.05	86.54	86.54	0.0	0.0	1.28E-05
5.16	1.18	1.2	126.37	107.45	1.94	69.64	87.28	87.28	0.0	0.0	1.15E-05
5.18	1.18	1.2	126.01	107.27	1.94	69.69	87.34	87.34	0.0	0.0	1.15E-05
5.2	1.26	1.27	125.06	106.91	1.96	71.1	89.11	89.11	0.0	0.0	1.00E-05
5.22	1.18	1.2	130.37	111.03	1.93	71.53	89.65	89.65	0.0	0.0	1.24E-05
5.24	1.16	1.17	132.23	112.53	1.92	71.68	89.84	89.84	0.0	0.0	1.34E-05
5.26	1.16	1.17	131.86	112.35	1.92	71.72	89.89	89.89	0.0	0.0	1.34E-05
5.28	0.93	0.94	145.09	122.05	1.83	70.73	88.65	88.65	0.0	0.0	2.49E-05
5.3	0.94	0.95	142.02	119.76	1.84	70.15	87.92	87.92	0.0	0.0	2.35E-05
5.32	0.97	0.99	138.16	116.97	1.85	70.04	87.78	87.78	0.0	0.0	2.07E-05
5.34	1.02	1.04	134.82	114.64	1.88	70.36	88.19	88.19	0.0	0.0	1.79E-05
5.36	1.06	1.07	130.27	111.22	1.89	69.83	87.52	87.52	0.0	0.0	1.56E-05
5.38	1.09	1.1	126.05	108.02	1.91	69.24	86.78	86.78	0.0	0.0	1.39E-05
5.4	1.16	1.18	119.76	103.28	1.95	68.96	86.43	86.43	0.0	0.0	1.09E-05
5.42	1.19	1.21	115.67	100.11	1.96	68.22	85.5	85.5	0.0	0.0	9.65E-06
5.44	1.15	1.16	110.27	95.6	1.97	65.56	82.17	82.17	0.0	0.0	9.37E-06
5.46	1.02	1.04	107.56	93.03	1.95	62.34	78.14	78.14	0.0	0.0	1.09E-05
5.48	0.99	1.01	97.46	84.67	1.97	58.35	73.13	73.13	0.0	0.0	9.28E-06
5.5	0.99	1.0	80.81	70.89	2.03	52.35	65.61	65.61	0.0	0.0	6.09E-06
5.52	1.03	1.06	63.38	56.4	2.12	46.27	57.99	57.99	0.0	0.0	3.19E-06
5.54	1.27	1.31	46.78	42.59	2.28	41.62	45.48	52.16	0.0	0.0	1.08E-06
5.56	2.28	2.39	30.21	28.63	2.57	39.17	29.44	49.1	9.97	0.71	1.37E-07
5.58	3.48	3.71	23.09	22.56	2.77	0.0	22.56	48.51	7.62	0.56	3.36E-08
5.6	5.0	5.37	20.58	20.52	2.91	0.0	20.15	51.51	6.79	0.5	1.29E-08
5.62	4.86	5.16	24.66	24.35	2.84	0.0	24.2	56.86	8.14	0.59	2.06E-08
5.64	2.81	2.92	40.14	37.89	2.53	50.06	39.47	62.75	13.24	0.92	1.78E-07
5.66	2.13	2.19	52.31	48.44	2.37	53.25	51.57	66.74	0.0	0.0	5.55E-07
5.68	1.39	1.42	62.08	56.19	2.2	51.06	61.35	63.99	0.0	0.0	1.83E-06
5.7	0.98	1.01	67.14	59.88	2.09	48.01	60.18	60.18	0.0	0.0	4.02E-06
5.72	0.65	0.67	70.24	61.77	1.98	43.78	54.87	54.87	0.0	0.0	8.71E-06
5.74	0.49	0.5	70.58	61.61	1.91	40.73	51.05	51.05	0.0	0.0	1.35E-05
5.76	0.43	0.44	69.39	60.47	1.89	39.14	49.05	49.05	0.0	0.0	1.56E-05
5.78	0.31	0.32	67.3	58.38	1.85	36.08	45.22	45.22	0.0	0.0	2.09E-05

5.8	0.35	0.36	64.21	56.02	1.89	36.11	45.26	45.26	0.0	0.0	1.63E-05
5.82	0.57	0.59	58.72	52.12	2.01	38.75	48.57	48.57	0.0	0.0	6.82E-06
5.84	0.8	0.83	50.66	45.74	2.14	39.26	49.21	49.21	0.0	0.0	2.84E-06
5.86	1.16	1.2	40.51	37.37	2.3	38.65	40.95	48.45	0.0	0.0	9.12E-07
5.88	2.84	3.02	24.22	23.51	2.7	0.0	24.54	48.27	7.99	0.58	5.50E-08
5.9	3.13	3.37	19.63	19.31	2.8	0.0	19.94	44.3	6.48	0.48	2.80E-08
5.92	4.64	5.11	15.12	15.25	2.99	0.0	15.39	43.7	4.99	0.38	7.21E-09
5.94	6.13	6.87	12.8	13.14	3.12	0.0	12.26	43.85	4.22	0.32	2.85E-09
5.96	5.8	6.46	13.41	13.71	3.09	0.0	13.42	44.26	4.43	0.34	3.55E-09
5.98	4.45	4.87	16.25	16.31	2.96	0.0	16.64	45.16	5.36	0.4	9.27E-09
6.0	4.51	4.95	15.58	15.68	2.97	0.0	15.99	44.37	5.14	0.39	8.20E-09
6.02	4.46	4.89	15.76	15.84	2.97	0.0	16.2	44.59	5.2	0.39	8.59E-09
6.04	4.46	4.89	15.72	15.81	2.97	0.0	16.2	44.62	5.19	0.39	8.54E-09
6.06	4.45	4.89	15.71	15.79	2.97	0.0	16.22	44.67	5.18	0.39	8.55E-09
6.08	1.67	1.77	25.16	24.02	2.55	33.91	26.04	42.5	8.3	0.6	1.54E-07
6.1	1.37	1.42	37.54	35.02	2.37	39.93	38.94	50.05	0.0	0.0	5.77E-07
6.12	0.92	0.95	47.88	43.88	2.18	40.58	50.87	50.87	0.0	0.0	2.05E-06
6.14	0.66	0.68	54.36	49.17	2.07	39.73	49.8	49.8	0.0	0.0	4.72E-06
6.16	0.58	0.6	56.39	50.81	2.03	39.3	49.26	49.26	0.0	0.0	6.22E-06
6.18	0.57	0.58	57.51	51.79	2.01	39.54	49.56	49.56	0.0	0.0	6.79E-06
6.2	0.61	0.62	58.65	52.9	2.02	40.74	51.06	51.06	0.0	0.0	6.51E-06
6.22	0.67	0.69	59.69	53.98	2.03	42.37	53.11	53.11	0.0	0.0	5.85E-06
6.24	0.69	0.71	60.93	55.14	2.03	43.32	54.29	54.29	0.0	0.0	5.88E-06
6.26	0.74	0.76	61.58	55.84	2.04	44.46	55.72	55.72	0.0	0.0	5.47E-06
6.28	0.8	0.82	61.72	56.12	2.06	45.64	57.2	57.2	0.0	0.0	4.86E-06
6.3	0.83	0.85	62.09	56.54	2.07	46.38	58.13	58.13	0.0	0.0	4.65E-06
6.32	0.83	0.85	62.5	56.94	2.06	46.63	58.45	58.45	0.0	0.0	4.74E-06
6.34	0.83	0.85	63.14	57.54	2.06	46.97	58.88	58.88	0.0	0.0	4.88E-06
6.36	0.79	0.81	64.83	59.0	2.04	47.17	59.12	59.12	0.0	0.0	5.59E-06
6.38	0.78	0.8	65.66	59.74	2.03	47.28	59.26	59.26	0.0	0.0	6.00E-06
6.4	0.78	0.8	65.71	59.85	2.03	47.51	59.55	59.55	0.0	0.0	5.95E-06
6.42	0.79	0.81	65.65	59.86	2.03	47.72	59.81	59.81	0.0	0.0	5.85E-06
6.44	0.81	0.83	65.56	59.87	2.04	48.16	60.36	60.36	0.0	0.0	5.60E-06
6.46	0.8	0.82	66.99	61.15	2.03	48.69	61.02	61.02	0.0	0.0	6.01E-06
6.48	0.77	0.79	70.58	64.3	2.0	49.58	62.14	62.14	0.0	0.0	7.35E-06
6.5	0.73	0.74	74.86	68.02	1.97	50.51	63.3	63.3	0.0	0.0	9.31E-06
6.52	0.68	0.7	80.39	72.81	1.93	51.61	64.68	64.68	0.0	0.0	1.24E-05
6.54	0.65	0.67	84.66	76.53	1.9	52.57	65.89	65.89	0.0	0.0	1.51E-05
6.56	0.64	0.65	87.71	79.23	1.88	53.4	66.93	66.93	0.0	0.0	1.71E-05
6.58	0.6	0.61	91.45	82.44	1.85	53.76	67.38	67.38	0.0	0.0	2.10E-05
6.6	0.61	0.62	92.91	83.82	1.85	54.5	68.31	68.31	0.0	0.0	2.15E-05
6.62	0.63	0.65	93.02	84.07	1.86	55.31	69.32	69.32	0.0	0.0	2.02E-05
6.64	0.67	0.68	94.88	85.86	1.86	56.84	71.24	71.24	0.0	0.0	1.97E-05
6.66	0.67	0.68	97.25	88.03	1.85	57.84	72.49	72.49	0.0	0.0	2.07E-05
6.68	0.67	0.68	99.11	89.75	1.85	58.64	73.5	73.5	0.0	0.0	2.16E-05
6.7	0.69	0.71	97.83	88.77	1.86	58.88	73.8	73.8	0.0	0.0	1.99E-05
6.72	0.76	0.77	93.56	85.26	1.9	59.15	74.13	74.13	0.0	0.0	1.54E-05
6.74	0.82	0.84	88.98	81.44	1.93	59.08	74.05	74.05	0.0	0.0	1.19E-05
6.76	0.92	0.94	82.18	75.66	1.99	58.7	73.57	73.57	0.0	0.0	8.03E-06
6.78	1.02	1.04	75.55	69.94	2.04	57.94	72.62	72.62	0.0	0.0	5.49E-06
6.8	1.12	1.14	68.95	64.04	2.1	56.78	71.16	71.16	0.0	0.0	3.75E-06
6.82	1.14	1.17	65.96	61.41	2.12	55.84	69.99	69.99	0.0	0.0	3.25E-06
6.84	1.09	1.12	66.13	61.55	2.11	55.22	69.21	69.21	0.0	0.0	3.55E-06
6.86	0.97	0.99	70.95	65.92	2.05	55.39	69.43	69.43	0.0	0.0	5.22E-06
6.88	0.75	0.77	80.36	74.06	1.94	54.99	68.92	68.92	0.0	0.0	1.10E-05
6.9	0.66	0.67	86.25	79.17	1.89	55.0	68.93	68.93	0.0	0.0	1.64E-05
6.92	0.61	0.62	89.33	81.88	1.86	55.05	69.0	69.0	0.0	0.0	2.00E-05
6.94	0.62	0.63	90.08	82.63	1.86	55.57	69.65	69.65	0.0	0.0	2.02E-05
6.96	0.66	0.67	92.09	84.59	1.86	57.29	71.8	71.8	0.0	0.0	1.95E-05
6.98	0.66	0.67	94.92	87.19	1.85	58.39	73.19	73.19	0.0	0.0	2.10E-05
7.0	0.68	0.69	98.08	90.14	1.85	60.11	75.34	75.34	0.0	0.0	2.17E-05
7.02	0.7	0.72	99.96	91.98	1.85	61.64	77.26	77.26	0.0	0.0	2.12E-05
7.04	0.74	0.75	100.83	92.92	1.86	62.94	78.89	78.89	0.0	0.0	2.01E-05
7.06	0.76	0.77	101.19	93.38	1.86	63.76	79.91	79.91	0.0	0.0	1.93E-05
7.08	0.78	0.79	100.05	92.47	1.87	63.92	80.11	80.11	0.0	0.0	1.81E-05
7.1	0.8	0.82	99.34	91.98	1.88	64.51	80.85	80.85	0.0	0.0	1.68E-05
7.12	0.84	0.86	98.34	91.23	1.9	65.23	81.75	81.75	0.0	0.0	1.51E-05
7.14	0.86	0.87	98.88	91.66	1.9	65.99	82.71	82.71	0.0	0.0	1.48E-05
7.16	0.83	0.84	102.94	95.52	1.88	66.78	83.7	83.7	0.0	0.0	1.75E-05
7.18	0.79	0.8	107.63	99.76	1.85	67.62	84.75	84.75	0.0	0.0	2.11E-05
7.2	0.75	0.76	111.43	103.19	1.83	67.95	85.16	85.16	0.0	0.0	2.52E-05
7.22	0.72	0.73	113.67	105.24	1.81	68.08	85.32	85.32	0.0	0.0	2.82E-05
7.24	0.71	0.72	113.99	105.59	1.8	67.84	85.02	85.02	0.0	0.0	2.95E-05

7.26	0.72	0.73	112.65	104.5	1.81	67.76	84.93	84.93	0.0	0.0	2.82E-05
7.28	0.76	0.77	110.71	102.75	1.83	68.51	85.87	85.87	0.0	0.0	2.44E-05
7.3	0.81	0.82	108.93	101.35	1.85	69.48	87.08	87.08	0.0	0.0	2.09E-05
7.32	0.81	0.82	108.69	101.23	1.85	69.51	87.12	87.12	0.0	0.0	2.08E-05
7.34	0.82	0.83	108.21	100.9	1.86	69.71	87.36	87.36	0.0	0.0	2.02E-05
7.36	0.91	0.93	107.88	100.88	1.89	72.31	90.63	90.63	0.0	0.0	1.64E-05
7.38	0.91	0.93	108.67	101.69	1.88	72.73	91.15	91.15	0.0	0.0	1.68E-05
7.4	0.87	0.88	111.2	104.02	1.86	72.68	91.09	91.09	0.0	0.0	1.94E-05
7.42	0.84	0.85	113.28	105.94	1.85	72.66	91.07	91.07	0.0	0.0	2.17E-05
7.44	0.81	0.82	115.19	107.73	1.83	72.65	91.05	91.05	0.0	0.0	2.41E-05
7.46	0.79	0.8	118.69	110.97	1.81	73.26	91.82	91.82	0.0	0.0	2.75E-05
7.48	0.75	0.76	123.49	115.38	1.79	73.79	92.48	92.48	0.0	0.0	3.33E-05
7.5	0.75	0.76	125.13	117.0	1.78	74.58	93.48	93.48	0.0	0.0	3.42E-05
7.52	0.75	0.76	128.18	119.91	1.77	75.73	94.91	94.91	0.0	0.0	3.63E-05
7.54	0.73	0.74	133.01	124.41	1.75	76.81	96.27	96.27	0.0	0.0	4.17E-05
7.56	0.71	0.72	138.14	129.19	1.73	77.95	97.7	97.7	0.0	0.0	4.80E-05
7.58	0.68	0.69	144.41	134.99	1.71	78.91	98.91	98.91	0.0	0.0	5.80E-05
7.6	0.67	0.68	147.23	137.7	1.7	79.71	99.91	99.91	0.0	0.0	6.18E-05
7.62	0.72	0.73	144.27	135.27	1.72	80.8	101.27	101.27	0.0	0.0	5.19E-05
7.64	0.81	0.82	137.37	129.26	1.77	81.86	102.6	102.6	0.0	0.0	3.73E-05
7.66	0.94	0.95	129.1	121.99	1.83	83.29	104.39	104.39	0.0	0.0	2.43E-05
7.68	1.07	1.08	122.46	116.13	1.88	84.59	106.02	106.02	0.0	0.0	1.69E-05
7.7	1.18	1.2	116.77	111.08	1.93	85.47	107.12	107.12	0.0	0.0	1.24E-05
7.72	1.3	1.32	110.47	105.41	1.97	85.77	107.5	107.5	0.0	0.0	9.04E-06
7.74	1.34	1.36	107.75	102.98	1.99	85.71	107.42	107.42	0.0	0.0	8.00E-06
7.76	1.31	1.33	106.93	102.25	1.98	84.66	106.1	106.1	0.0	0.0	8.30E-06
7.78	1.19	1.21	109.53	104.64	1.95	83.13	104.18	104.18	0.0	0.0	1.06E-05
7.8	1.02	1.03	115.26	109.88	1.89	81.11	101.66	101.66	0.0	0.0	1.63E-05
7.82	0.86	0.87	123.21	117.18	1.82	79.57	99.72	99.72	0.0	0.0	2.65E-05
7.84	0.7	0.71	135.91	128.86	1.73	78.71	98.66	98.66	0.0	0.0	4.89E-05
7.86	0.61	0.62	144.36	136.65	1.67	77.87	97.6	97.6	0.0	0.0	7.33E-05
7.88	0.61	0.62	144.04	136.5	1.67	77.91	97.64	97.64	0.0	0.0	7.31E-05
7.9	0.57	0.58	151.7	143.69	1.64	78.78	98.74	98.74	0.0	0.0	9.26E-05
7.92	0.64	0.64	153.8	145.97	1.66	82.26	103.11	103.11	0.0	0.0	7.96E-05
7.94	0.71	0.71	154.09	146.57	1.69	85.51	107.18	107.18	0.0	0.0	6.57E-05
7.96	0.78	0.78	153.91	146.71	1.71	88.45	110.86	110.86	0.0	0.0	5.48E-05
7.98	0.86	0.87	153.5	146.62	1.74	91.71	114.94	114.94	0.0	0.0	4.48E-05
8.0	0.96	0.97	152.54	146.03	1.78	95.29	119.42	119.42	0.0	0.0	3.54E-05
8.02	0.99	1.0	152.59	146.26	1.79	96.47	120.91	120.91	0.0	0.0	3.35E-05
8.04	1.01	1.02	152.03	145.89	1.79	97.26	121.89	121.89	0.0	0.0	3.17E-05
8.06	1.0	1.02	151.9	145.88	1.79	97.21	121.84	121.84	0.0	0.0	3.20E-05
8.08	1.02	1.03	150.26	144.47	1.8	97.28	121.93	121.93	0.0	0.0	3.03E-05
8.1	1.02	1.03	149.96	144.31	1.8	97.32	121.98	121.98	0.0	0.0	3.03E-05
8.12	1.19	1.2	137.63	132.89	1.87	98.08	122.93	122.93	0.0	0.0	1.82E-05
8.14	1.23	1.25	133.62	129.21	1.89	97.8	122.58	122.58	0.0	0.0	1.59E-05
8.16	1.29	1.31	130.97	126.82	1.91	98.49	123.43	123.43	0.0	0.0	1.39E-05
8.18	1.33	1.35	128.07	124.17	1.93	98.55	123.51	123.51	0.0	0.0	1.23E-05
8.2	1.36	1.38	126.62	122.89	1.94	98.73	123.74	123.74	0.0	0.0	1.16E-05
8.22	1.26	1.28	127.91	124.15	1.91	96.73	121.23	121.23	0.0	0.0	1.39E-05
8.24	1.13	1.15	128.4	124.58	1.88	93.24	116.87	116.87	0.0	0.0	1.75E-05
8.26	1.06	1.08	127.24	123.5	1.86	90.85	113.87	113.87	0.0	0.0	1.95E-05
8.28	1.0	1.02	124.91	121.3	1.85	88.09	110.4	110.4	0.0	0.0	2.11E-05
8.3	0.98	0.99	122.52	119.07	1.85	86.52	108.44	108.44	0.0	0.0	2.12E-05
8.32	0.97	0.98	122.23	118.88	1.85	86.26	108.11	108.11	0.0	0.0	2.15E-05
8.34	0.92	0.94	125.0	121.6	1.83	85.94	107.71	107.71	0.0	0.0	2.51E-05
8.36	0.92	0.93	128.58	125.15	1.82	87.34	109.46	109.46	0.0	0.0	2.71E-05
8.38	0.92	0.93	129.99	126.61	1.81	87.95	110.23	110.23	0.0	0.0	2.80E-05
8.4	0.95	0.97	129.85	126.61	1.82	89.35	111.98	111.98	0.0	0.0	2.58E-05
8.42	0.95	0.96	129.41	126.28	1.82	89.26	111.87	111.87	0.0	0.0	2.57E-05
8.44	0.96	0.97	129.2	126.18	1.83	89.53	112.22	112.22	0.0	0.0	2.53E-05
8.46	0.96	0.97	129.11	126.2	1.83	89.64	112.35	112.35	0.0	0.0	2.53E-05
8.48	0.95	0.97	129.92	127.09	1.82	89.92	112.7	112.7	0.0	0.0	2.60E-05
8.5	0.96	0.98	130.15	127.41	1.82	90.54	113.48	113.48	0.0	0.0	2.56E-05
8.52	0.96	0.97	130.24	127.6	1.82	90.57	113.52	113.52	0.0	0.0	2.59E-05
8.54	0.96	0.97	129.63	127.1	1.82	90.3	113.18	113.18	0.0	0.0	2.59E-05
8.56	0.98	0.99	129.8	127.38	1.83	91.24	114.36	114.36	0.0	0.0	2.49E-05
8.58	0.91	0.92	135.75	133.25	1.79	91.56	114.76	114.76	0.0	0.0	3.16E-05
8.6	0.86	0.87	141.47	138.91	1.76	91.89	115.17	115.17	0.0	0.0	3.94E-05
8.62	0.87	0.88	144.42	141.93	1.76	93.49	117.18	117.18	0.0	0.0	4.06E-05
8.64	0.88	0.89	146.54	144.13	1.76	95.01	119.08	119.08	0.0	0.0	4.07E-05
8.66	0.89	0.9	147.08	144.79	1.76	95.62	119.84	119.84	0.0	0.0	4.05E-05
8.68	0.9	0.91	146.18	144.04	1.76	95.96	120.27	120.27	0.0	0.0	3.88E-05
8.7	0.93	0.94	145.19	143.2	1.77	96.73	121.24	121.24	0.0	0.0	3.62E-05

8.72	0.96	0.97	148.01	146.11	1.78	99.34	124.51	124.51	0.0	0.0	3.51E-05
8.74	0.99	1.0	152.25	150.44	1.78	102.4	128.34	128.34	0.0	0.0	3.51E-05
8.76	0.95	0.96	158.44	156.64	1.75	103.42	129.62	129.62	0.0	0.0	4.19E-05
8.78	0.96	0.97	158.79	157.12	1.76	104.14	130.52	130.52	0.0	0.0	4.12E-05
8.8	1.04	1.05	156.67	155.19	1.78	106.51	133.49	133.49	0.0	0.0	3.42E-05
8.82	1.16	1.17	153.63	152.34	1.82	109.87	137.7	137.7	0.0	0.0	2.61E-05
8.84	1.16	1.17	153.27	152.11	1.82	109.9	137.74	137.74	0.0	0.0	2.60E-05
8.86	1.24	1.26	146.21	145.24	1.86	109.94	137.8	137.8	0.0	0.0	2.02E-05
8.88	1.3	1.31	143.95	143.12	1.88	110.88	138.97	138.97	0.0	0.0	1.78E-05
8.9	1.35	1.36	141.8	141.09	1.89	111.78	140.1	140.1	0.0	0.0	1.59E-05
8.92	1.35	1.37	140.11	139.51	1.9	111.26	139.45	139.45	0.0	0.0	1.54E-05
8.94	1.32	1.34	138.98	138.48	1.89	109.9	137.74	137.74	0.0	0.0	1.59E-05
8.96	1.27	1.28	139.46	139.05	1.88	108.46	135.94	135.94	0.0	0.0	1.76E-05
8.98	1.2	1.21	139.6	139.28	1.86	106.46	133.43	133.43	0.0	0.0	1.98E-05
9.0	1.14	1.16	140.44	140.21	1.84	104.99	131.59	131.59	0.0	0.0	2.24E-05
9.02	1.12	1.13	139.22	139.09	1.84	103.75	130.04	130.04	0.0	0.0	2.30E-05
9.04	1.13	1.14	137.25	137.23	1.85	103.33	129.51	129.51	0.0	0.0	2.20E-05
9.06	1.13	1.14	135.27	135.34	1.85	102.59	128.58	128.58	0.0	0.0	2.13E-05
9.08	1.13	1.14	132.95	133.12	1.86	101.7	127.47	127.47	0.0	0.0	2.05E-05
9.1	1.15	1.16	128.7	128.95	1.87	100.56	126.03	126.03	0.0	0.0	1.84E-05
9.12	1.17	1.18	125.26	125.59	1.88	99.75	125.02	125.02	0.0	0.0	1.67E-05
9.14	1.17	1.19	122.36	122.76	1.89	98.77	123.8	123.8	0.0	0.0	1.57E-05
9.16	1.15	1.16	119.99	120.46	1.89	97.0	121.57	121.57	0.0	0.0	1.57E-05
9.18	1.1	1.11	116.87	117.41	1.89	93.96	117.77	117.77	0.0	0.0	1.64E-05
9.2	1.08	1.1	113.26	113.86	1.89	91.96	115.26	115.26	0.0	0.0	1.57E-05
9.22	1.03	1.05	108.73	109.38	1.89	88.43	110.84	110.84	0.0	0.0	1.57E-05
9.24	1.03	1.05	104.82	105.51	1.91	86.77	108.75	108.75	0.0	0.0	1.44E-05
9.26	1.04	1.06	101.7	102.43	1.92	85.53	107.19	107.19	0.0	0.0	1.33E-05
9.28	1.03	1.05	98.77	99.53	1.93	84.14	105.45	105.45	0.0	0.0	1.25E-05
9.3	1.03	1.05	96.4	97.2	1.93	83.06	104.1	104.1	0.0	0.0	1.18E-05
9.32	1.03	1.05	94.82	95.66	1.94	82.33	103.19	103.19	0.0	0.0	1.15E-05
9.34	1.01	1.03	94.66	95.57	1.93	81.75	102.46	102.46	0.0	0.0	1.19E-05
9.36	1.0	1.02	94.66	95.64	1.93	81.62	102.3	102.3	0.0	0.0	1.21E-05
9.38	0.96	0.97	95.53	96.59	1.91	80.93	101.43	101.43	0.0	0.0	1.35E-05
9.4	0.89	0.9	98.12	99.3	1.89	80.21	100.54	100.54	0.0	0.0	1.66E-05
9.42	0.87	0.89	98.76	100.03	1.88	80.02	100.29	100.29	0.0	0.0	1.76E-05
9.44	0.86	0.88	98.66	100.0	1.87	79.81	100.03	100.03	0.0	0.0	1.80E-05
9.46	0.79	0.8	107.06	108.66	1.82	81.17	101.73	101.73	0.0	0.0	2.60E-05
9.48	0.8	0.81	109.42	111.15	1.82	82.66	103.6	103.6	0.0	0.0	2.67E-05
9.5	0.85	0.86	110.32	112.12	1.83	84.87	106.38	106.38	0.0	0.0	2.44E-05
9.52	0.96	0.97	106.79	108.53	1.88	87.16	109.24	109.24	0.0	0.0	1.78E-05
9.54	1.09	1.11	103.09	104.75	1.92	89.55	112.24	112.24	0.0	0.0	1.27E-05
9.56	1.16	1.18	100.86	102.5	1.95	90.56	113.5	113.5	0.0	0.0	1.07E-05
9.58	1.23	1.25	99.02	100.65	1.97	91.85	115.11	115.11	0.0	0.0	9.03E-06
9.6	1.29	1.31	96.76	98.38	1.99	92.22	115.59	115.59	0.0	0.0	7.84E-06
9.62	1.26	1.29	97.17	98.86	1.99	91.96	115.26	115.26	0.0	0.0	8.23E-06
9.64	1.21	1.23	97.83	99.62	1.97	90.97	114.01	114.01	0.0	0.0	9.16E-06
9.66	1.12	1.14	98.04	99.94	1.95	88.68	111.14	111.14	0.0	0.0	1.08E-05
9.68	1.12	1.14	94.59	96.45	1.96	87.03	109.08	109.08	0.0	0.0	9.90E-06
9.7	1.13	1.15	92.75	94.62	1.97	86.4	108.29	108.29	0.0	0.0	9.33E-06
9.72	1.2	1.22	89.03	90.82	2.0	86.41	108.3	108.3	0.0	0.0	7.51E-06
9.74	1.25	1.27	85.38	87.08	2.02	85.71	107.43	107.43	0.0	0.0	6.29E-06
9.76	1.32	1.34	82.77	84.42	2.05	85.93	107.7	107.7	0.0	0.0	5.27E-06
9.78	1.34	1.37	80.47	82.08	2.06	85.33	106.94	106.94	0.0	0.0	4.73E-06
9.8	1.35	1.38	77.93	79.51	2.08	84.06	105.35	105.35	0.0	0.0	4.35E-06
9.82	1.34	1.37	75.38	76.92	2.09	82.43	103.32	103.32	0.0	0.0	4.06E-06
9.84	1.35	1.38	74.67	76.23	2.09	82.25	103.09	103.09	0.0	0.0	3.94E-06
9.86	1.17	1.2	75.84	77.56	2.04	78.95	98.95	98.95	0.0	0.0	5.44E-06
9.88	1.04	1.06	77.48	79.36	2.01	76.83	96.29	96.29	0.0	0.0	7.18E-06
9.9	0.95	0.97	78.61	80.63	1.98	75.24	94.31	94.31	0.0	0.0	8.81E-06
9.92	0.91	0.93	78.88	80.98	1.96	74.35	93.19	93.19	0.0	0.0	9.67E-06
9.94	0.91	0.92	78.48	80.62	1.96	74.09	92.86	92.86	0.0	0.0	9.68E-06
9.96	0.89	0.91	77.59	79.74	1.96	73.25	91.8	91.8	0.0	0.0	9.77E-06
9.98	0.91	0.93	76.52	78.67	1.97	73.37	91.96	91.96	0.0	0.0	9.05E-06
10.0	0.95	0.97	76.41	78.57	1.98	74.51	93.38	93.38	0.0	0.0	8.33E-06
10.02	1.02	1.05	77.48	79.67	2.0	77.18	96.74	96.74	0.0	0.0	7.46E-06
10.04	1.03	1.05	80.07	82.41	1.99	78.84	98.82	98.82	0.0	0.0	8.04E-06
10.06	0.98	1.0	86.09	88.77	1.95	80.8	101.27	101.27	0.0	0.0	1.06E-05
10.08	0.87	0.89	95.77	99.03	1.88	82.53	103.44	103.44	0.0	0.0	1.71E-05
10.1	0.8	0.82	103.41	107.18	1.83	83.86	105.1	105.1	0.0	0.0	2.41E-05
10.12	0.81	0.82	107.86	111.93	1.82	86.03	107.82	107.82	0.0	0.0	2.67E-05
10.14	0.86	0.87	108.14	112.22	1.83	88.18	110.52	110.52	0.0	0.0	2.39E-05
10.16	0.98	0.99	107.25	111.21	1.87	92.02	115.33	115.33	0.0	0.0	1.82E-05

10.18	1.1	1.12	105.56	109.36	1.91	95.42	119.59	119.59	0.0	0.0	1.37E-05
10.2	1.27	1.29	101.92	105.45	1.97	98.81	123.84	123.84	0.0	0.0	9.42E-06
10.22	1.47	1.5	97.82	101.04	2.02	102.19	128.08	128.08	0.0	0.0	6.29E-06
10.24	1.8	1.83	91.69	94.45	2.11	106.34	133.28	133.28	0.0	0.0	3.56E-06
10.26	1.95	1.99	89.69	92.31	2.14	108.48	135.96	135.96	0.0	0.0	2.85E-06
10.28	1.95	1.99	88.68	91.3	2.14	108.0	135.36	135.36	0.0	0.0	2.77E-06
10.3	1.92	1.96	88.3	90.96	2.14	107.13	134.27	134.27	0.0	0.0	2.85E-06
10.32	1.9	1.93	87.43	90.1	2.14	106.17	133.06	133.06	0.0	0.0	2.86E-06
10.34	1.85	1.89	87.16	89.88	2.13	105.08	131.7	131.7	0.0	0.0	3.00E-06
10.36	1.77	1.8	87.81	90.66	2.11	103.77	130.06	130.06	0.0	0.0	3.38E-06
10.38	1.65	1.69	90.54	93.64	2.08	103.19	129.33	129.33	0.0	0.0	4.16E-06
10.4	1.59	1.62	93.7	97.05	2.06	103.87	130.18	130.18	0.0	0.0	4.90E-06
10.42	1.56	1.59	95.36	98.87	2.05	104.24	130.65	130.65	0.0	0.0	5.34E-06
10.44	1.53	1.56	96.39	100.02	2.04	104.4	130.85	130.85	0.0	0.0	5.67E-06
10.46	1.52	1.55	96.91	100.63	2.03	104.57	131.06	131.06	0.0	0.0	5.84E-06
10.48	1.52	1.55	98.05	101.87	2.03	105.47	132.19	132.19	0.0	0.0	5.99E-06
10.5	1.54	1.56	98.58	102.47	2.03	106.35	133.3	133.3	0.0	0.0	5.95E-06
10.52	1.57	1.59	99.71	103.69	2.03	108.04	135.41	135.41	0.0	0.0	5.86E-06
10.54	1.55	1.58	101.03	105.14	2.03	108.62	136.14	136.14	0.0	0.0	6.17E-06
10.56	1.5	1.53	103.17	107.51	2.01	108.78	136.34	136.34	0.0	0.0	6.93E-06
10.58	1.5	1.53	102.89	107.27	2.01	108.8	136.36	136.36	0.0	0.0	6.88E-06
10.6	1.5	1.52	100.74	105.05	2.02	107.42	134.63	134.63	0.0	0.0	6.63E-06
10.62	1.5	1.53	98.92	103.17	2.02	106.45	133.42	133.42	0.0	0.0	6.36E-06
10.64	1.46	1.49	98.07	102.37	2.02	105.07	131.69	131.69	0.0	0.0	6.58E-06
10.66	1.39	1.41	98.96	103.45	2.0	103.58	129.82	129.82	0.0	0.0	7.54E-06
10.68	1.31	1.33	99.74	104.42	1.98	101.99	127.83	127.83	0.0	0.0	8.66E-06
10.7	1.27	1.3	99.66	104.43	1.97	101.03	126.62	126.62	0.0	0.0	9.16E-06
10.72	1.25	1.27	96.43	101.06	1.98	98.51	123.46	123.46	0.0	0.0	8.86E-06
10.74	1.23	1.25	91.69	96.09	1.99	95.23	119.35	119.35	0.0	0.0	8.16E-06
10.76	1.25	1.27	87.87	92.03	2.01	93.61	117.33	117.33	0.0	0.0	7.14E-06
10.78	1.3	1.33	83.75	87.63	2.03	92.67	116.15	116.15	0.0	0.0	5.84E-06
10.8	1.27	1.3	82.66	86.54	2.03	91.24	114.35	114.35	0.0	0.0	5.98E-06
10.82	1.19	1.22	82.99	87.02	2.01	89.48	112.15	112.15	0.0	0.0	6.86E-06
10.84	1.11	1.13	85.42	89.77	1.98	88.67	111.13	111.13	0.0	0.0	8.54E-06
10.86	0.97	0.99	87.45	92.19	1.93	85.82	107.57	107.57	0.0	0.0	1.17E-05
10.88	0.91	0.93	88.28	93.22	1.91	84.49	105.89	105.89	0.0	0.0	1.36E-05
10.9	0.86	0.88	86.1	91.0	1.91	81.79	102.51	102.51	0.0	0.0	1.43E-05
10.92	0.83	0.85	83.02	87.78	1.91	79.32	99.41	99.41	0.0	0.0	1.40E-05
10.94	0.83	0.84	80.28	84.87	1.92	77.85	97.57	97.57	0.0	0.0	1.30E-05
10.96	0.86	0.88	77.53	81.89	1.94	77.58	97.23	97.23	0.0	0.0	1.10E-05
10.98	0.92	0.94	73.36	77.35	1.98	77.17	96.72	96.72	0.0	0.0	8.42E-06
11.0	1.01	1.04	68.83	72.4	2.03	77.06	96.58	96.58	0.0	0.0	6.02E-06
11.02	1.11	1.14	62.88	65.94	2.09	75.81	95.01	95.01	0.0	0.0	4.04E-06
11.04	1.23	1.27	56.52	59.05	2.15	74.21	93.01	93.01	0.0	0.0	2.54E-06
11.06	1.34	1.39	52.78	55.0	2.2	73.77	88.48	92.46	0.0	0.0	1.81E-06
11.08	1.45	1.5	49.04	50.97	2.25	72.79	82.32	91.22	0.0	0.0	1.31E-06
11.1	1.43	1.48	47.68	49.55	2.25	71.43	80.16	89.53	0.0	0.0	1.25E-06
11.12	1.33	1.38	46.77	48.65	2.24	69.15	78.73	86.67	0.0	0.0	1.36E-06
11.14	1.22	1.26	46.02	47.95	2.22	66.54	77.59	83.39	0.0	0.0	1.55E-06
11.16	1.15	1.2	45.22	47.15	2.22	64.82	76.35	81.25	0.0	0.0	1.64E-06
11.18	1.06	1.11	44.22	46.16	2.2	62.5	74.77	78.34	0.0	0.0	1.79E-06
11.2	0.95	0.99	42.99	44.95	2.19	59.52	74.59	74.59	0.0	0.0	2.02E-06
11.22	0.95	0.99	40.27	42.04	2.21	57.59	68.28	72.18	0.0	0.0	1.70E-06
11.24	0.96	1.01	37.05	38.61	2.25	55.47	62.92	69.53	0.0	0.0	1.33E-06
11.26	1.0	1.05	35.01	36.41	2.28	54.56	59.53	68.38	0.0	0.0	1.07E-06
11.28	0.99	1.03	34.94	36.36	2.27	54.33	59.5	68.1	0.0	0.0	1.10E-06
11.3	0.91	0.96	37.49	39.15	2.23	55.14	63.94	69.11	0.0	0.0	1.50E-06
11.32	0.81	0.85	41.27	43.31	2.16	55.92	70.09	70.09	0.0	0.0	2.38E-06
11.34	0.72	0.75	47.66	50.32	2.08	58.21	72.95	72.95	0.0	0.0	4.27E-06
11.36	0.64	0.66	54.37	57.75	2.0	60.03	75.24	75.24	0.0	0.0	7.52E-06
11.38	0.56	0.57	63.39	67.79	1.91	62.5	78.33	78.33	0.0	0.0	1.42E-05
11.4	0.55	0.56	70.22	75.52	1.86	65.48	82.07	82.07	0.0	0.0	1.95E-05
11.42	0.54	0.55	78.45	84.69	1.82	69.26	86.8	86.8	0.0	0.0	2.65E-05
11.44	0.54	0.55	88.95	96.45	1.77	73.72	92.39	92.39	0.0	0.0	3.80E-05
11.46	0.55	0.56	99.79	108.57	1.73	79.02	99.03	99.03	0.0	0.0	4.93E-05
11.48	0.65	0.66	105.62	114.8	1.75	86.24	108.08	108.08	0.0	0.0	4.20E-05
11.5	0.85	0.86	106.62	115.13	1.82	95.19	119.31	119.31	0.0	0.0	2.58E-05
11.52	1.01	1.02	107.21	115.43	1.87	101.72	127.49	127.49	0.0	0.0	1.86E-05
11.54	1.11	1.13	108.55	116.72	1.89	106.46	133.43	133.43	0.0	0.0	1.56E-05
11.56	1.24	1.26	111.13	119.33	1.92	112.66	141.2	141.2	0.0	0.0	1.31E-05
11.58	1.34	1.36	112.77	120.98	1.94	117.2	146.89	146.89	0.0	0.0	1.15E-05
11.6	1.42	1.44	114.96	123.27	1.95	121.59	152.39	152.39	0.0	0.0	1.05E-05
11.62	1.45	1.47	115.41	123.77	1.95	122.9	154.04	154.04	0.0	0.0	1.02E-05



11.64	1.48	1.5	112.78	120.87	1.97	122.52	153.56	153.56	0.0	0.0	9.25E-06
11.66	1.54	1.56	108.33	115.93	1.99	121.65	152.47	152.47	0.0	0.0	7.76E-06
11.68	1.61	1.63	103.81	110.89	2.02	120.8	151.4	151.4	0.0	0.0	6.43E-06
11.7	1.71	1.74	98.2	104.64	2.06	119.94	150.33	150.33	0.0	0.0	4.96E-06
11.72	1.83	1.87	92.1	97.85	2.1	118.82	148.92	148.92	0.0	0.0	3.69E-06
11.74	1.92	1.96	86.47	91.64	2.14	116.87	146.48	146.48	0.0	0.0	2.88E-06
11.76	2.04	2.09	80.1	84.61	2.18	114.55	143.57	143.57	0.0	0.0	2.12E-06
11.78	2.13	2.18	74.03	77.99	2.22	111.32	130.84	139.52	0.0	0.0	1.62E-06
11.8	2.17	2.22	69.55	73.13	2.24	108.19	123.09	135.59	0.0	0.0	1.35E-06
11.82	2.17	2.22	69.45	73.04	2.24	108.23	123.07	135.65	0.0	0.0	1.35E-06
11.84	1.96	2.02	63.07	66.34	2.25	98.56	111.93	123.53	0.0	0.0	1.34E-06
11.86	1.9	1.96	58.72	61.71	2.26	93.66	104.36	117.39	0.0	0.0	1.21E-06
11.88	1.9	1.96	55.51	58.26	2.28	90.77	98.78	113.77	0.0	0.0	1.06E-06
11.9	1.84	1.9	53.14	55.76	2.28	87.57	94.7	109.75	0.0	0.0	1.02E-06
11.92	1.69	1.74	53.0	55.74	2.26	84.88	94.58	106.38	0.0	0.0	1.21E-06
11.94	1.49	1.53	53.41	56.38	2.22	81.48	95.44	102.13	0.0	0.0	1.59E-06
11.96	1.38	1.42	53.29	56.36	2.2	79.28	99.37	99.37	0.0	0.0	1.84E-06
11.98	1.32	1.36	51.85	54.86	2.2	77.08	96.6	96.6	0.0	0.0	1.86E-06
12.0	1.3	1.34	48.09	50.81	2.22	73.64	86.28	92.29	0.0	0.0	1.59E-06
12.02	1.27	1.32	44.68	47.12	2.24	70.32	80.26	88.14	0.0	0.0	1.38E-06
12.04	1.2	1.25	42.97	45.34	2.24	67.67	77.3	84.82	0.0	0.0	1.38E-06
12.06	1.13	1.18	43.49	45.98	2.22	66.93	78.35	83.89	0.0	0.0	1.58E-06
12.08	0.99	1.03	46.47	49.4	2.16	66.45	83.29	83.29	0.0	0.0	2.40E-06
12.1	0.88	0.92	49.04	52.39	2.11	65.93	82.63	82.63	0.0	0.0	3.40E-06
12.12	0.82	0.85	50.68	54.3	2.08	65.62	82.24	82.24	0.0	0.0	4.21E-06
12.14	0.84	0.87	51.99	55.75	2.08	67.02	84.0	84.0	0.0	0.0	4.35E-06
12.16	0.85	0.88	54.85	58.92	2.06	69.4	86.98	86.98	0.0	0.0	4.86E-06
12.18	0.88	0.91	57.21	61.53	2.05	71.78	89.96	89.96	0.0	0.0	5.13E-06
12.2	0.97	1.0	60.25	64.79	2.06	76.18	95.48	95.48	0.0	0.0	4.96E-06
12.22	1.08	1.11	61.72	66.28	2.08	80.14	100.44	100.44	0.0	0.0	4.31E-06
12.24	1.26	1.29	61.4	65.69	2.12	84.4	105.78	105.78	0.0	0.0	3.17E-06
12.26	1.36	1.4	61.26	65.42	2.15	86.88	108.89	108.89	0.0	0.0	2.69E-06
12.28	1.57	1.62	58.33	61.97	2.2	89.15	106.7	111.74	0.0	0.0	1.79E-06
12.3	1.9	1.96	52.84	55.69	2.29	90.62	96.8	113.57	0.0	0.0	9.55E-07
12.32	2.16	2.23	49.16	51.51	2.36	91.42	90.17	114.58	0.0	0.0	6.14E-07
12.34	2.41	2.5	45.62	47.55	2.42	91.55	83.79	114.75	0.0	0.0	4.06E-07
12.36	2.52	2.63	43.48	45.19	2.45	90.77	79.96	113.76	0.0	0.0	3.29E-07
12.38	2.59	2.7	41.36	42.9	2.47	89.23	76.16	111.83	0.0	0.0	2.76E-07
12.4	2.65	2.77	39.21	40.57	2.5	87.45	72.29	109.6	12.94	0.9	2.32E-07
12.42	2.64	2.77	37.02	38.24	2.51	84.68	68.34	106.13	12.22	0.86	2.03E-07
12.44	2.22	2.32	37.22	38.65	2.46	79.73	68.79	99.93	0.0	0.0	2.93E-07
12.46	1.94	2.03	38.68	40.37	2.41	77.69	71.58	97.37	0.0	0.0	4.22E-07
12.48	1.61	1.68	40.94	43.04	2.34	74.99	75.85	93.99	0.0	0.0	7.06E-07
12.5	1.32	1.37	43.4	45.99	2.26	72.24	80.52	90.54	0.0	0.0	1.21E-06
12.52	1.07	1.11	45.03	48.05	2.19	68.83	86.27	86.27	0.0	0.0	1.95E-06
12.54	0.95	0.99	45.37	48.58	2.16	66.6	83.47	83.47	0.0	0.0	2.46E-06
12.56	0.93	0.96	45.04	48.27	2.15	65.88	82.56	82.56	0.0	0.0	2.53E-06
12.58	0.93	0.97	46.99	50.45	2.14	67.52	84.62	84.62	0.0	0.0	2.81E-06
12.6	0.96	0.99	52.77	57.05	2.1	72.39	90.73	90.73	0.0	0.0	3.65E-06
12.62	0.9	0.92	63.69	69.52	2.01	78.32	98.16	98.16	0.0	0.0	6.74E-06
12.64	0.83	0.85	74.96	82.55	1.93	83.3	104.41	104.41	0.0	0.0	1.19E-05
12.66	0.8	0.81	85.91	95.29	1.87	88.31	110.68	110.68	0.0	0.0	1.84E-05
12.68	0.78	0.79	90.7	100.92	1.84	90.36	113.25	113.25	0.0	0.0	2.21E-05
12.7	0.85	0.86	91.3	101.42	1.86	93.45	117.12	117.12	0.0	0.0	1.92E-05
12.72	1.04	1.06	88.81	97.99	1.93	99.17	124.29	124.29	0.0	0.0	1.19E-05
12.74	1.19	1.22	86.69	95.18	1.98	103.22	129.37	129.37	0.0	0.0	8.43E-06
12.76	1.41	1.44	86.59	94.6	2.03	109.96	137.81	137.81	0.0	0.0	5.95E-06
12.78	1.51	1.54	89.05	97.18	2.05	115.12	144.29	144.29	0.0	0.0	5.43E-06
12.8	1.58	1.62	90.01	98.16	2.06	118.06	147.97	147.97	0.0	0.0	5.05E-06
12.82	1.49	1.52	89.11	97.39	2.04	114.62	143.65	143.65	0.0	0.0	5.67E-06
12.84	1.48	1.51	89.33	97.69	2.04	114.74	143.8	143.8	0.0	0.0	5.76E-06
12.86	1.48	1.51	89.19	97.58	2.04	114.63	143.66	143.66	0.0	0.0	5.78E-06
12.88	1.9	1.94	78.97	85.06	2.16	118.29	148.26	148.26	0.0	0.0	2.50E-06
12.9	2.18	2.24	72.02	76.99	2.23	118.56	137.31	148.59	0.0	0.0	1.49E-06
12.92	2.35	2.41	67.76	72.11	2.27	117.96	129.35	147.84	0.0	0.0	1.10E-06
12.94	2.43	2.5	64.86	68.85	2.3	116.78	123.98	146.36	0.0	0.0	9.23E-07
12.96	2.55	2.63	59.99	63.41	2.34	113.79	114.8	142.61	0.0	0.0	6.97E-07
12.98	2.79	2.89	52.03	54.55	2.41	108.72	99.69	136.26	0.0	0.0	4.11E-07
13.0	3.52	3.68	40.09	41.3	2.57	102.72	76.9	128.74	13.23	0.92	1.34E-07
13.02	5.64	6.03	25.75	25.66	2.87	0.0	49.45	120.73	8.5	0.61	1.66E-08
13.04	8.88	9.88	15.85	15.25	3.18	0.0	30.47	110.33	5.23	0.39	1.88E-09
13.06	9.31	10.45	14.53	13.91	3.23	0.0	27.8	107.35	4.8	0.36	1.37E-09
13.08	5.4	5.76	27.0	26.99	2.84	0.0	52.02	122.32	8.91	0.64	2.05E-08

13.1	2.65	2.75	47.22	49.46	2.43	101.37	91.1	127.05	0.0	0.0	3.67E-07
13.12	1.82	1.88	53.52	57.07	2.27	94.4	103.39	118.32	0.0	0.0	1.10E-06
13.14	1.4	1.45	53.32	57.34	2.2	85.64	107.33	107.33	0.0	0.0	1.85E-06
13.16	1.12	1.16	50.58	54.85	2.15	76.93	96.41	96.41	0.0	0.0	2.52E-06
13.18	1.15	1.2	48.89	52.9	2.18	76.46	95.84	95.84	0.0	0.0	2.18E-06
13.2	1.25	1.29	47.67	51.25	2.21	77.67	92.54	97.35	0.0	0.0	1.75E-06
13.22	1.49	1.54	46.12	49.26	2.27	81.28	89.66	101.87	0.0	0.0	1.14E-06
13.24	1.6	1.66	45.48	48.45	2.29	82.86	88.53	103.85	0.0	0.0	9.56E-07
13.26	1.75	1.82	45.89	48.76	2.32	86.22	89.43	108.06	0.0	0.0	8.12E-07
13.28	1.83	1.9	46.56	49.44	2.32	88.4	90.84	110.79	0.0	0.0	7.71E-07
13.3	1.75	1.81	47.97	51.09	2.3	88.41	93.71	110.81	0.0	0.0	9.15E-07
13.32	1.64	1.7	50.3	53.81	2.26	88.82	98.4	111.32	0.0	0.0	1.17E-06
13.34	1.5	1.55	52.9	56.89	2.22	88.5	103.6	110.92	0.0	0.0	1.58E-06
13.36	1.41	1.45	55.32	59.75	2.19	88.68	111.14	111.14	0.0	0.0	2.02E-06
13.38	1.37	1.42	56.34	61.17	2.17	88.75	111.24	111.24	0.0	0.0	2.24E-06
13.4	1.43	1.48	55.6	60.07	2.19	89.65	112.37	112.37	0.0	0.0	1.98E-06
13.42	1.54	1.59	53.81	57.93	2.22	90.51	105.92	113.43	0.0	0.0	1.58E-06
13.44	1.69	1.74	51.68	55.37	2.26	91.66	101.84	114.88	0.0	0.0	1.19E-06
13.46	1.87	1.94	49.78	53.07	2.31	93.43	98.23	117.1	0.0	0.0	8.75E-07
13.48	1.92	1.99	49.5	52.72	2.32	94.15	97.79	118.01	0.0	0.0	8.18E-07
13.5	1.99	2.06	48.66	51.73	2.33	94.65	96.25	118.62	0.0	0.0	7.28E-07
13.52	1.97	2.05	49.02	52.16	2.33	94.84	97.09	118.87	0.0	0.0	7.55E-07
13.54	1.91	1.98	49.47	52.73	2.31	94.3	98.1	118.18	0.0	0.0	8.25E-07
13.56	1.84	1.9	50.44	53.89	2.3	94.01	100.13	117.83	0.0	0.0	9.40E-07
13.58	1.77	1.83	51.38	55.02	2.28	93.76	102.12	117.51	0.0	0.0	1.06E-06
13.6	1.73	1.79	51.84	55.6	2.27	93.52	103.17	117.21	0.0	0.0	1.14E-06
13.62	1.71	1.77	52.67	56.57	2.26	94.02	104.94	117.84	0.0	0.0	1.22E-06
13.64	1.68	1.73	53.58	57.65	2.25	94.38	106.9	118.29	0.0	0.0	1.32E-06
13.66	1.68	1.73	54.3	58.46	2.24	95.18	108.46	119.3	0.0	0.0	1.36E-06
13.68	1.68	1.73	55.14	59.42	2.24	96.13	110.27	120.49	0.0	0.0	1.42E-06
13.7	1.68	1.73	55.91	60.3	2.23	97.01	111.94	121.59	0.0	0.0	1.46E-06
13.72	1.68	1.74	56.58	61.06	2.23	97.88	113.43	122.67	0.0	0.0	1.50E-06
13.74	1.67	1.72	57.74	62.41	2.22	98.67	115.9	123.67	0.0	0.0	1.61E-06
13.76	1.63	1.68	59.1	64.25	2.2	99.01	118.76	124.09	0.0	0.0	1.81E-06
13.78	1.6	1.65	60.09	65.43	2.19	99.53	124.74	124.74	0.0	0.0	1.94E-06
13.8	1.51	1.56	60.34	65.88	2.17	97.7	122.45	122.45	0.0	0.0	2.22E-06
13.82	1.6	1.65	59.06	64.3	2.2	98.67	123.67	123.67	0.0	0.0	1.88E-06
13.84	1.72	1.77	57.27	61.89	2.23	99.94	115.65	125.26	0.0	0.0	1.49E-06
13.86	1.84	1.9	55.58	59.83	2.26	100.99	112.37	126.57	0.0	0.0	1.20E-06
13.88	1.92	1.98	55.06	59.16	2.28	102.2	111.45	128.08	0.0	0.0	1.07E-06
13.9	1.91	1.98	56.33	60.62	2.27	103.51	114.17	129.73	0.0	0.0	1.14E-06
13.92	1.86	1.92	58.12	62.71	2.25	104.33	117.93	130.76	0.0	0.0	1.31E-06
13.94	1.8	1.85	59.58	64.46	2.23	104.51	121.04	130.99	0.0	0.0	1.49E-06
13.96	1.68	1.73	60.59	66.04	2.2	102.72	123.24	128.75	0.0	0.0	1.81E-06
13.98	1.52	1.56	61.33	67.17	2.17	99.72	124.98	124.98	0.0	0.0	2.30E-06
14.0	1.37	1.4	63.27	69.73	2.12	97.57	122.29	122.29	0.0	0.0	3.11E-06
14.02	1.28	1.32	64.43	71.28	2.1	96.33	120.73	120.73	0.0	0.0	3.71E-06
14.04	1.23	1.26	64.89	71.96	2.08	95.32	119.47	119.47	0.0	0.0	4.12E-06
14.06	1.18	1.21	65.04	72.29	2.07	94.09	117.92	117.92	0.0	0.0	4.52E-06
14.08	1.22	1.26	63.64	70.56	2.09	94.38	118.28	118.28	0.0	0.0	3.96E-06
14.1	1.4	1.44	59.61	65.53	2.15	95.85	120.13	120.13	0.0	0.0	2.55E-06
14.12	1.66	1.71	56.3	61.31	2.22	99.02	115.66	124.11	0.0	0.0	1.56E-06
14.14	1.83	1.89	55.03	59.4	2.26	101.83	113.17	127.62	0.0	0.0	1.19E-06
14.16	1.89	1.96	54.85	59.13	2.27	103.09	112.94	129.2	0.0	0.0	1.10E-06
14.18	1.95	2.02	54.85	59.07	2.28	104.44	113.07	130.9	0.0	0.0	1.03E-06
14.2	2.01	2.07	54.46	58.58	2.29	105.21	112.4	131.87	0.0	0.0	9.56E-07
14.22	2.02	2.09	53.01	56.94	2.31	104.08	109.54	130.45	0.0	0.0	8.80E-07
14.24	2.09	2.16	50.39	53.93	2.33	102.48	104.24	128.44	0.0	0.0	7.29E-07
14.26	2.12	2.2	48.33	51.6	2.35	100.9	100.11	126.46	0.0	0.0	6.35E-07
14.28	2.11	2.19	47.44	50.62	2.36	99.82	98.38	125.1	0.0	0.0	6.12E-07
14.3	2.07	2.15	47.73	50.99	2.35	99.52	99.09	124.73	0.0	0.0	6.48E-07
14.32	1.97	2.05	48.84	52.35	2.33	99.02	101.51	124.11	0.0	0.0	7.61E-07
14.34	1.89	1.96	49.66	53.38	2.31	98.41	103.35	123.34	0.0	0.0	8.69E-07
14.36	1.78	1.84	51.19	55.25	2.28	97.92	106.64	122.73	0.0	0.0	1.06E-06
14.38	1.63	1.68	53.42	58.24	2.24	96.95	111.43	121.52	0.0	0.0	1.43E-06
14.4	1.53	1.58	55.11	60.37	2.21	96.37	115.09	120.79	0.0	0.0	1.77E-06
14.42	1.49	1.53	57.21	62.89	2.18	97.46	122.15	122.15	0.0	0.0	2.06E-06
14.44	1.48	1.52	57.86	63.66	2.18	97.97	122.79	122.79	0.0	0.0	2.14E-06
14.46	1.51	1.56	57.85	63.61	2.19	98.96	124.03	124.03	0.0	0.0	2.04E-06
14.48	1.52	1.57	57.83	63.59	2.19	99.25	124.4	124.4	0.0	0.0	2.01E-06
14.5	1.57	1.62	59.54	65.48	2.19	102.23	128.13	128.13	0.0	0.0	2.02E-06
14.52	1.6	1.65	59.87	65.85	2.19	103.22	129.37	129.37	0.0	0.0	1.99E-06
14.54	1.66	1.71	59.19	64.96	2.2	104.25	124.62	130.66	0.0	0.0	1.78E-06

14.56	1.75	1.8	57.84	63.27	2.23	105.0	121.92	131.6	0.0	0.0	1.51E-06
14.58	1.82	1.88	56.67	61.81	2.25	105.63	119.58	132.39	0.0	0.0	1.32E-06
14.6	1.81	1.87	56.72	61.91	2.24	105.49	119.83	132.22	0.0	0.0	1.34E-06
14.62	1.81	1.87	56.65	61.84	2.25	105.53	119.82	132.27	0.0	0.0	1.34E-06
14.64	1.76	1.82	58.19	63.7	2.23	106.21	123.22	133.12	0.0	0.0	1.51E-06
14.66	1.76	1.81	58.05	63.57	2.23	105.98	123.07	132.83	0.0	0.0	1.52E-06
14.68	1.73	1.79	57.82	63.36	2.23	105.37	122.72	132.06	0.0	0.0	1.54E-06
14.7	1.73	1.78	57.55	63.06	2.23	105.05	122.27	131.67	0.0	0.0	1.53E-06
14.72	1.72	1.77	57.2	62.69	2.23	104.62	121.68	131.12	0.0	0.0	1.53E-06
14.74	1.71	1.76	57.35	62.9	2.22	104.61	122.14	131.11	0.0	0.0	1.56E-06
14.76	1.68	1.73	58.13	63.88	2.21	104.75	123.95	131.28	0.0	0.0	1.68E-06
14.78	1.55	1.6	58.41	64.44	2.19	102.15	128.02	128.02	0.0	0.0	1.99E-06
14.8	1.58	1.63	57.9	63.81	2.2	102.44	128.39	128.39	0.0	0.0	1.88E-06
14.82	1.67	1.73	56.96	62.57	2.22	103.85	121.87	130.16	0.0	0.0	1.61E-06
14.84	1.73	1.79	56.2	61.6	2.23	104.6	120.37	131.1	0.0	0.0	1.44E-06
14.86	1.77	1.82	56.37	61.75	2.24	105.61	120.87	132.37	0.0	0.0	1.40E-06
14.88	1.76	1.82	56.65	62.1	2.24	105.97	121.62	132.82	0.0	0.0	1.42E-06
14.9	1.78	1.84	56.65	62.08	2.24	106.52	121.75	133.51	0.0	0.0	1.39E-06
14.92	1.77	1.83	56.85	62.34	2.24	106.6	122.31	133.6	0.0	0.0	1.42E-06
14.94	1.75	1.81	56.33	61.79	2.24	105.67	121.34	132.45	0.0	0.0	1.42E-06
14.96	1.76	1.82	54.1	59.2	2.25	103.71	116.66	129.99	0.0	0.0	1.27E-06
14.98	1.88	1.95	49.51	53.52	2.31	101.59	106.88	127.32	0.0	0.0	8.78E-07
15.0	2.17	2.26	42.62	45.42	2.4	98.8	92.11	123.84	0.0	0.0	4.50E-07
15.02	3.08	3.27	29.54	30.36	2.64	0.0	63.9	116.02	9.75	0.7	8.55E-08
15.04	4.77	5.24	18.89	18.56	2.93	0.0	40.91	107.98	6.23	0.46	1.08E-08
15.06	7.09	8.15	12.19	11.47	3.22	0.0	21.65	99.95	4.02	0.31	1.48E-09
15.08	9.66	11.7	8.63	7.8	3.45	0.0	10.43	94.74	2.85	0.23	5.72E-10
15.1	13.14	17.17	5.96	5.17	3.69	0.0	4.78	89.15	0.0	0.0	2.65E-10
15.12	15.09	21.56	4.27	3.6	3.87	0.0	2.39	80.72	0.0	0.0	1.49E-10
15.14	14.5	21.75	3.66	3.05	3.93	0.0	1.73	74.32	0.0	0.0	1.24E-10
15.16	13.94	20.9	3.67	3.06	3.92	0.0	1.75	73.38	0.0	0.0	1.29E-10
15.18	6.64	10.75	2.96	2.51	3.81	0.0	1.16	51.41	0.98	0.01	1.84E-10
15.2	5.22	8.94	2.57	2.19	3.81	0.0	0.88	44.96	0.85	0.07	1.82E-10
15.22	3.0	5.43	2.25	1.93	3.74	0.0	0.68	35.83	0.74	0.03	2.30E-10
15.24	1.27	2.18	2.54	2.28	3.48	0.0	0.91	29.36	0.84	0.27	5.15E-10
15.26	0.43	0.68	3.16	2.99	3.17	0.0	1.48	24.74	1.04	1.84	2.02E-09
15.28	0.16	0.2	6.38	6.49	2.71	0.0	6.49	27.76	2.11	0.93	5.24E-08
15.3	0.4	0.48	8.68	8.86	2.68	0.0	12.05	36.45	2.86	0.77	6.38E-08
15.32	0.36	0.44	8.58	8.77	2.67	0.0	11.81	35.64	2.83	0.86	6.81E-08
15.34	0.36	0.44	8.57	8.76	2.67	0.0	11.79	35.66	2.83	0.86	6.79E-08
15.36	0.64	0.95	3.81	3.62	3.15	0.0	2.17	29.08	1.26	1.25	2.40E-09
15.38	2.13	3.53	2.79	2.47	3.55	0.0	1.08	35.38	0.92	0.06	4.14E-10
15.4	2.92	4.8	2.83	2.48	3.62	0.0	1.11	39.16	0.94	0.15	3.35E-10
15.42	2.41	3.51	4.01	3.63	3.4	0.0	2.3	42.36	1.32	1.51	6.57E-10
15.44	2.07	2.75	5.6	5.26	3.21	0.0	4.65	46.44	1.85	0.63	1.55E-09
15.46	2.12	2.88	5.11	4.74	3.26	0.0	3.83	45.13	1.69	1.18	1.10E-09
15.48	2.12	3.27	3.38	3.04	3.45	0.0	1.62	38.26	1.12	0.2	5.59E-10
15.5	1.61	2.73	2.65	2.36	3.51	0.0	0.99	32.33	0.88	0.08	4.65E-10
15.52	1.0	1.59	3.14	2.88	3.33	0.0	1.43	30.38	1.04	0.54	8.29E-10
15.54	0.84	1.22	4.04	3.82	3.17	0.0	2.45	31.94	1.33	1.5	2.07E-09
15.56	0.39	0.57	3.76	3.6	3.07	0.0	2.15	26.32	1.24	1.46	4.06E-09
15.58	1.41	2.31	2.88	2.58	3.44	0.0	1.18	32.24	0.95	0.02	5.79E-10
15.6	1.88	3.07	2.9	2.58	3.5	0.0	1.19	35.09	0.96	0.02	4.81E-10
15.62	1.69	2.73	3.01	2.69	3.46	0.0	1.29	34.56	0.99	0.09	5.45E-10
15.64	2.12	3.52	2.79	2.46	3.55	0.0	1.09	35.89	0.92	0.04	4.13E-10
15.66	1.92	2.92	3.52	3.17	3.41	0.0	1.78	38.13	1.16	1.03	6.36E-10
15.68	1.38	1.92	4.71	4.42	3.2	0.0	3.33	38.97	1.55	1.24	1.68E-09
15.7	1.36	1.88	4.76	4.47	3.19	0.0	3.41	39.0	1.57	1.27	1.78E-09
15.72	2.28	3.45	3.58	3.2	3.45	0.0	1.83	40.53	1.18	0.13	5.73E-10
15.74	2.87	4.63	3.02	2.64	3.58	0.0	1.28	40.78	1.0	0.09	3.71E-10
15.76	4.4	6.88	3.28	2.83	3.65	0.0	1.49	48.34	1.08	1.8	2.99E-10
15.78	3.76	5.99	3.12	2.7	3.64	0.0	1.35	45.09	1.03	1.65	3.15E-10
15.8	3.82	6.12	3.05	2.63	3.65	0.0	1.29	44.96	1.01	1.96	3.01E-10
15.82	3.71	5.81	3.26	2.83	3.61	0.0	1.48	45.72	1.07	1.76	3.40E-10
15.84	3.39	5.34	3.2	2.79	3.6	0.0	1.44	44.19	1.06	1.88	3.56E-10
15.86	2.48	4.0	3.0	2.64	3.55	0.0	1.28	39.19	0.99	1.98	4.11E-10
15.88	2.11	3.45	2.91	2.56	3.53	0.0	1.2	36.94	0.96	2.03	4.40E-10
15.9	1.82	2.96	2.94	2.61	3.49	0.0	1.24	35.59	0.97	1.9	4.99E-10
15.92	1.9	3.07	2.98	2.64	3.49	0.0	1.27	36.23	0.98	1.76	4.94E-10
15.94	1.67	2.72	2.96	2.63	3.47	0.0	1.26	34.89	0.98	1.91	5.32E-10
15.96	1.92	3.18	2.8	2.47	3.53	0.0	1.12	35.6	0.93	2.08	4.45E-10
15.98	1.46	2.29	3.25	2.92	3.39	0.0	1.54	34.88	1.07	1.04	6.76E-10
16.0	0.9	1.37	3.53	3.26	3.25	0.0	1.87	31.76	1.17	0.66	1.16E-09

16.02	1.43	2.22	3.32	3.0	3.38	0.0	1.62	35.04	1.1	1.55	7.12E-10
16.04	1.85	2.84	3.43	3.07	3.42	0.0	1.72	38.2	1.13	1.04	6.23E-10
16.06	1.53	2.18	4.31	3.97	3.27	0.0	2.78	39.58	1.42	0.08	1.04E-09
16.08	2.13	3.19	3.69	3.31	3.42	0.0	1.99	41.04	1.22	1.11	6.29E-10
16.1	2.07	3.15	3.55	3.17	3.43	0.0	1.84	40.17	1.17	1.34	6.04E-10
16.12	2.2	3.36	3.51	3.12	3.45	0.0	1.79	40.73	1.16	1.37	5.66E-10
16.14	2.53	3.91	3.39	2.98	3.5	0.0	1.65	41.96	1.12	1.68	4.83E-10
16.16	2.24	3.41	3.57	3.18	3.45	0.0	1.86	41.35	1.18	1.35	5.73E-10
16.18	1.68	2.45	4.06	3.7	3.32	0.0	2.46	40.02	1.34	0.71	8.59E-10
16.2	1.72	2.49	4.12	3.76	3.32	0.0	2.54	40.58	1.36	0.9	8.65E-10
16.22	2.27	3.62	3.08	2.71	3.52	0.0	1.37	39.34	1.02	1.78	4.54E-10
16.24	2.24	3.67	2.9	2.53	3.55	0.0	1.2	38.32	0.96	1.86	4.15E-10
16.26	1.77	2.88	2.95	2.61	3.49	0.0	1.27	36.12	0.97	1.98	5.07E-10
16.28	1.83	2.97	2.97	2.61	3.49	0.0	1.28	36.54	0.98	2.0	4.99E-10
16.3	1.75	2.86	2.93	2.58	3.49	0.0	1.25	35.97	0.97	2.01	5.04E-10
16.32	1.76	2.67	3.55	3.19	3.39	0.0	1.87	38.76	1.17	1.51	6.79E-10
16.34	1.42	1.96	4.91	4.59	3.19	0.0	3.72	41.4	1.62	0.0	1.81E-09
16.36	1.03	1.25	8.41	8.31	2.87	0.0	11.56	47.44	2.78	0.72	1.68E-08
16.38	0.75	0.88	11.07	11.31	2.68	0.0	20.72	49.29	3.65	0.93	6.25E-08
16.4	0.96	1.15	9.12	9.1	2.82	0.0	13.74	48.28	3.01	0.9	2.41E-08
16.42	1.32	1.66	7.07	6.83	3.0	0.0	8.01	47.34	2.33	0.0	6.63E-09
16.44	2.7	3.65	5.25	4.77	3.31	0.0	4.16	51.98	1.73	1.15	8.78E-10
16.46	4.16	6.01	4.17	3.64	3.53	0.0	2.52	54.48	1.38	1.38	4.41E-10
16.48	5.42	8.42	3.35	2.83	3.7	0.0	1.58	54.58	1.11	1.27	2.55E-10
16.5	5.6	8.77	3.28	2.76	3.72	0.0	1.51	54.79	1.08	1.6	2.40E-10
16.52	4.79	7.16	3.75	3.22	3.62	0.0	2.01	54.89	1.24	1.59	3.35E-10
16.54	3.85	5.55	4.2	3.67	3.51	0.0	2.57	53.42	1.38	1.21	4.74E-10
16.56	2.14	2.72	6.93	6.54	3.13	0.0	7.57	54.65	2.29	0.97	2.78E-09
16.58	1.23	1.42	12.5	12.65	2.74	0.0	26.42	60.13	4.13	0.69	4.30E-08
16.6	0.77	0.84	19.52	20.83	2.44	51.3	45.71	64.3	0.0	0.0	3.51E-07
16.62	0.63	0.67	31.08	34.91	2.19	60.05	75.26	75.26	0.0	0.0	1.93E-06
16.64	0.63	0.67	31.91	35.92	2.18	60.9	76.33	76.33	0.0	0.0	2.08E-06
16.66	1.19	1.31	19.54	20.48	2.54	58.62	45.9	73.47	0.0	0.0	1.72E-07
16.68	2.54	2.95	11.48	11.16	2.95	0.0	21.52	73.02	3.79	0.29	9.43E-09
16.7	3.78	4.6	8.67	8.1	3.18	0.0	11.8	73.49	2.86	0.23	1.94E-09
16.72	6.32	8.14	6.43	5.68	3.45	0.0	6.15	77.16	2.12	0.17	5.63E-10
16.74	8.51	11.75	4.88	4.14	3.66	0.0	3.4	76.11	1.61	0.13	2.94E-10
16.76	9.05	13.01	4.25	3.54	3.74	0.0	2.54	73.4	1.4	0.13	2.28E-10
16.78	8.43	12.48	3.87	3.22	3.76	0.0	2.1	68.84	1.28	0.07	2.13E-10
16.8	7.55	11.67	3.41	2.81	3.79	0.0	1.62	62.83	1.12	0.04	1.95E-10
16.82	6.31	9.87	3.29	2.74	3.76	0.0	1.52	58.26	1.09	0.02	2.16E-10
16.84	5.22	8.17	3.3	2.77	3.7	0.0	1.55	54.71	1.09	0.0	2.55E-10
16.86	3.27	5.09	3.33	2.86	3.58	0.0	1.62	47.07	1.1	0.15	3.81E-10
16.88	1.71	2.67	3.31	2.93	3.42	0.0	1.64	38.62	1.09	0.48	6.14E-10
16.9	1.25	1.97	3.21	2.87	3.37	0.0	1.56	35.04	1.06	0.57	7.24E-10
16.92	1.06	1.42	5.45	5.18	3.08	0.0	4.79	41.11	1.8	0.52	3.91E-09
16.94	0.69	0.81	11.3	11.59	2.66	0.0	22.27	49.97	3.73	0.79	7.52E-08
16.96	0.49	0.56	13.19	13.87	2.52	39.29	31.12	49.24	0.0	0.0	1.93E-07
16.98	0.63	0.73	11.21	11.54	2.64	0.0	22.06	48.68	3.7	0.29	8.44E-08
17.0	1.04	1.26	8.46	8.35	2.87	0.0	12.04	49.24	2.79	0.22	1.68E-08
17.02	2.73	3.57	6.02	5.49	3.26	0.0	5.64	57.04	1.99	1.04	1.14E-09
17.04	3.6	4.77	5.72	5.12	3.35	0.0	5.0	61.2	1.89	1.08	7.76E-10
17.06	3.33	4.07	8.36	7.81	3.16	0.0	11.16	70.4	2.76	0.98	2.21E-09
17.08	2.41	2.8	11.54	11.24	2.94	0.0	22.22	73.45	3.81	0.53	1.05E-08
17.1	2.62	3.05	11.25	10.89	2.97	0.0	20.99	74.64	3.71	0.29	8.35E-09
17.12	2.94	3.63	7.93	7.42	3.15	0.0	10.1	66.13	2.62	0.42	2.37E-09
17.14	3.53	4.6	6.15	5.55	3.31	0.0	5.86	63.08	2.03	1.02	8.74E-10
17.16	5.02	7.05	4.59	3.96	3.54	0.0	3.12	62.85	1.52	0.99	4.27E-10
17.18	6.38	9.36	3.98	3.34	3.67	0.0	2.29	64.48	1.31	1.16	2.82E-10
17.2	4.68	6.32	5.3	4.64	3.46	0.0	4.23	65.32	1.75	0.99	5.56E-10
17.22	3.87	5.01	6.33	5.69	3.32	0.0	6.21	66.17	2.09	0.1	8.42E-10
17.24	3.71	4.99	5.4	4.8	3.39	0.0	4.47	61.0	1.78	1.08	6.96E-10
17.26	3.03	3.88	6.69	6.12	3.24	0.0	7.06	62.57	2.21	0.05	1.30E-09
17.28	2.52	3.13	7.8	7.34	3.12	0.0	9.89	62.93	2.57	0.75	2.96E-09
17.3	1.82	2.27	7.58	7.22	3.05	0.0	9.47	56.11	2.5	0.22	4.80E-09
17.32	1.81	2.4	5.72	5.29	3.18	0.0	5.23	49.87	1.89	1.09	1.94E-09
17.34	3.17	4.33	5.08	4.52	3.37	0.0	3.97	56.7	1.68	1.19	7.24E-10
17.36	2.48	3.11	7.41	6.94	3.14	0.0	8.93	61.49	2.45	0.08	2.60E-09
17.38	2.48	3.04	8.25	7.8	3.09	0.0	11.18	64.49	2.72	0.78	3.64E-09
17.4	2.38	2.89	8.66	8.23	3.06	0.0	12.39	65.09	2.86	0.75	4.52E-09
17.42	2.41	2.93	8.66	8.22	3.06	0.0	12.38	65.43	2.86	0.68	4.41E-09
17.44	2.62	3.29	7.27	6.78	3.16	0.0	8.59	62.28	2.4	0.65	2.23E-09
17.46	4.09	5.66	4.9	4.27	3.46	0.0	3.64	61.2	1.62	1.15	5.54E-10

17.48	5.39	8.0	3.86	3.24	3.64	0.0	2.18	61.03	1.27	0.01	3.09E-10
17.5	5.41	8.0	3.91	3.28	3.64	0.0	2.24	61.47	1.29	0.25	3.13E-10
17.52	3.83	5.09	5.67	5.03	3.37	0.0	4.99	63.88	1.87	1.1	7.23E-10
17.54	3.57	4.63	6.32	5.68	3.31	0.0	6.27	65.43	2.08	1.0	8.92E-10
17.56	2.76	3.62	6.02	5.46	3.26	0.0	5.75	58.9	1.99	1.05	1.09E-09
17.58	3.32	4.7	4.53	3.96	3.44	0.0	3.14	55.62	1.49	1.22	5.86E-10
17.6	3.14	4.5	4.32	3.77	3.45	0.0	2.86	53.69	1.43	1.16	5.72E-10
17.62	2.19	2.89	5.83	5.34	3.22	0.0	5.46	54.16	1.92	1.06	1.48E-09
17.64	1.43	1.76	7.99	7.72	2.97	0.0	10.83	54.27	2.64	0.54	8.42E-09
17.66	1.42	1.74	8.45	8.2	2.94	0.0	12.19	55.63	2.79	0.37	1.01E-08
17.68	1.64	2.06	7.36	7.01	3.04	0.0	9.08	54.74	2.43	0.29	5.15E-09
17.7	1.95	2.45	7.31	6.9	3.08	0.0	8.89	57.56	2.41	0.66	3.78E-09
17.72	2.05	2.37	11.91	11.69	2.88	0.0	24.55	72.8	3.93	0.3	1.54E-08
17.74	2.34	2.86	8.5	8.06	3.06	0.0	12.09	65.33	2.81	0.22	4.37E-09
17.76	3.15	4.12	6.11	5.5	3.29	0.0	5.94	62.57	2.02	0.17	9.42E-10
17.78	5.62	7.83	4.77	4.05	3.56	0.0	3.41	68.7	1.57	0.06	4.03E-10
17.8	6.3	9.15	4.15	3.46	3.65	0.0	2.54	67.59	1.37	0.12	2.98E-10
17.82	6.07	8.63	4.44	3.73	3.61	0.0	2.93	68.64	1.46	0.06	3.39E-10
17.84	5.94	8.36	4.61	3.89	3.59	0.0	3.17	69.27	1.52	0.0	3.65E-10
17.86	3.35	4.46	5.71	5.08	3.34	0.0	5.15	62.38	1.88	1.09	8.11E-10
17.88	3.67	5.06	4.93	4.31	3.43	0.0	3.77	60.49	1.63	0.66	6.09E-10
17.9	3.84	5.66	3.97	3.39	3.54	0.0	2.39	56.32	1.31	0.11	4.26E-10
17.92	3.92	5.96	3.62	3.05	3.59	0.0	1.96	54.68	1.19	0.1	3.63E-10
17.94	3.44	5.15	3.77	3.21	3.54	0.0	2.15	53.27	1.24	0.06	4.30E-10
17.96	2.78	3.97	4.42	3.87	3.41	0.0	3.06	53.1	1.46	0.58	6.48E-10
17.98	1.83	2.14	11.06	10.85	2.89	0.0	21.41	68.76	3.65	0.28	1.50E-08
18.0	0.88	0.97	18.3	19.4	2.49	55.24	45.75	69.23	0.0	0.0	2.34E-07
18.02	0.89	0.98	17.79	18.81	2.51	54.67	44.51	68.52	0.0	0.0	2.13E-07
18.04	1.51	1.73	12.54	12.55	2.78	0.0	28.17	68.63	4.14	0.32	3.08E-08
18.06	2.78	3.39	8.56	8.03	3.11	0.0	12.31	70.46	2.83	0.22	3.24E-09
18.08	4.44	5.74	6.43	5.68	3.36	0.0	6.55	73.12	2.12	0.95	7.52E-10
18.1	5.77	7.55	6.1	5.28	3.46	0.0	5.78	78.5	2.01	1.03	5.55E-10
18.12	4.61	5.48	9.96	9.14	3.18	0.0	16.34	90.63	3.29	0.26	1.89E-09
18.14	3.27	3.7	14.47	14.05	2.93	0.0	36.41	95.75	4.78	0.36	1.10E-08
18.16	2.68	3.02	14.91	14.67	2.86	0.0	37.54	90.58	4.92	0.37	1.78E-08
18.18	2.53	2.92	12.09	11.73	2.93	0.0	25.53	80.4	3.99	0.31	1.08E-08
18.2	2.62	3.08	10.87	10.43	2.99	0.0	20.42	77.53	3.59	0.28	7.38E-09
18.22	2.57	3.01	11.04	10.62	2.98	0.0	21.13	77.62	3.64	0.28	8.03E-09
18.24	2.61	2.98	13.39	13.08	2.9	0.0	31.62	85.6	4.42	0.34	1.37E-08
18.26	2.59	3.0	11.92	11.53	2.95	0.0	24.84	80.85	3.93	0.3	9.92E-09
18.28	3.04	3.69	8.88	8.3	3.11	0.0	13.33	74.61	2.93	0.23	3.05E-09
18.3	4.34	5.63	6.34	5.58	3.36	0.0	6.4	72.84	2.09	0.17	7.50E-10
18.32	6.4	8.76	5.11	4.3	3.57	0.0	3.99	76.3	1.69	0.15	3.93E-10
18.34	7.58	11.14	4.01	3.26	3.73	0.0	2.37	73.31	1.32	0.11	2.38E-10
18.36	6.52	9.29	4.45	3.68	3.64	0.0	2.97	72.54	1.47	0.05	3.16E-10
18.38	4.5	5.94	5.9	5.14	3.4	0.0	5.5	71.8	1.95	1.04	6.55E-10
18.4	4.5	5.94	5.89	5.13	3.4	0.0	5.49	71.83	1.94	1.04	6.54E-10
18.42	3.64	4.99	5.08	4.42	3.41	0.0	4.08	62.82	1.68	0.86	6.34E-10
18.44	3.99	6.05	3.64	3.04	3.6	0.0	2.02	56.7	1.2	0.1	3.58E-10
18.46	2.93	4.23	4.23	3.65	3.44	0.0	2.81	54.41	1.4	0.17	5.77E-10
18.48	1.93	2.63	5.25	4.74	3.24	0.0	4.53	52.12	1.73	1.16	1.27E-09
18.5	1.45	1.91	5.96	5.57	3.11	0.0	6.07	50.32	1.97	1.04	3.14E-09
18.52	1.96	2.7	5.01	4.5	3.26	0.0	4.12	51.49	1.65	1.18	1.06E-09
18.54	2.67	4.17	3.37	2.85	3.53	0.0	1.76	48.61	1.11	0.1	4.37E-10
18.56	3.65	6.55	2.38	1.9	3.78	0.0	0.83	47.36	0.79	0.07	1.97E-10
18.58	3.79	7.1	2.16	1.7	3.84	0.0	0.67	46.37	0.71	0.06	1.63E-10
18.6	3.43	6.32	2.23	1.77	3.8	0.0	0.73	45.45	0.74	0.07	1.86E-10
18.62	3.34	5.81	2.56	2.07	3.73	0.0	0.97	47.33	0.84	0.07	2.37E-10
18.64	3.05	4.85	3.21	2.67	3.59	0.0	1.57	50.01	1.06	0.08	3.64E-10
18.66	2.16	3.42	3.22	2.74	3.5	0.0	1.62	45.05	1.06	0.09	4.79E-10
18.68	2.85	4.75	2.84	2.34	3.63	0.0	1.23	46.93	0.94	0.08	3.17E-10
18.7	3.04	4.69	3.49	2.94	3.55	0.0	1.89	51.79	1.15	1.42	4.16E-10
18.72	2.95	4.6	3.38	2.84	3.56	0.0	1.77	50.7	1.12	1.25	4.05E-10
18.74	3.12	4.93	3.25	2.71	3.59	0.0	1.62	50.92	1.07	1.01	3.65E-10
18.76	3.38	5.62	2.84	2.32	3.68	0.0	1.22	49.74	0.94	0.23	2.77E-10
18.78	3.47	6.01	2.59	2.09	3.73	0.0	1.0	48.57	0.85	0.01	2.33E-10
18.8	2.68	4.73	2.48	2.01	3.69	0.0	0.92	44.11	0.82	0.02	2.66E-10
18.82	2.03	3.55	2.53	2.09	3.61	0.0	0.98	40.91	0.83	0.17	3.39E-10
18.84	1.85	3.12	2.76	2.32	3.55	0.0	1.19	41.12	0.91	0.83	4.18E-10
18.86	1.71	2.92	2.69	2.25	3.54	0.0	1.12	39.84	0.89	0.66	4.22E-10
18.88	1.97	3.44	2.54	2.1	3.61	0.0	0.99	40.73	0.84	0.28	3.47E-10
18.9	1.8	3.17	2.47	2.05	3.6	0.0	0.94	39.34	0.82	0.28	3.57E-10
18.92	1.73	3.03	2.53	2.1	3.58	0.0	0.99	39.26	0.83	0.44	3.78E-10

18.94	1.72	3.02	2.49	2.07	3.58	0.0	0.96	39.01	0.82	0.43	3.73E-10
18.96	1.65	2.78	2.8	2.36	3.52	0.0	1.23	40.23	0.92	1.18	4.61E-10
18.98	1.93	3.3	2.68	2.23	3.57	0.0	1.11	41.47	0.88	0.76	3.84E-10
19.0	1.94	3.19	2.94	2.47	3.53	0.0	1.35	42.93	0.97	1.35	4.44E-10
19.02	1.69	2.56	3.66	3.18	3.39	0.0	2.17	44.72	1.21	1.62	6.95E-10
19.04	1.89	2.96	3.35	2.86	3.46	0.0	1.79	44.83	1.11	1.52	5.58E-10
19.06	1.96	3.08	3.33	2.84	3.47	0.0	1.77	45.25	1.1	1.63	5.37E-10
19.08	2.12	3.41	3.12	2.62	3.52	0.0	1.53	45.27	1.03	1.1	4.57E-10
19.1	2.34	3.61	3.48	2.95	3.49	0.0	1.92	48.61	1.15	1.74	5.04E-10
19.12	1.98	2.83	4.43	3.9	3.33	0.0	3.24	50.73	1.46	0.92	8.30E-10
19.14	2.03	3.1	3.6	3.09	3.44	0.0	2.09	47.28	1.19	1.64	5.90E-10
19.16	2.36	3.3	4.76	4.18	3.34	0.0	3.74	55.18	1.57	0.53	8.08E-10
19.18	1.37	1.65	9.38	9.14	2.89	0.0	16.12	61.78	3.09	0.75	1.45E-08
19.2	0.97	1.11	12.79	13.08	2.67	0.0	31.49	63.96	4.22	0.57	6.71E-08
19.22	0.71	0.79	16.45	17.48	2.49	52.32	43.4	65.57	0.0	0.0	2.36E-07
19.24	0.65	0.72	18.04	19.55	2.43	53.07	47.63	66.52	0.0	0.0	3.65E-07
19.26	0.57	0.63	18.13	19.78	2.4	51.45	47.91	64.48	0.0	0.0	4.47E-07
19.28	0.63	0.7	19.02	20.76	2.4	53.99	50.31	67.66	0.0	0.0	4.49E-07
19.3	0.49	0.53	28.46	32.82	2.17	60.25	75.52	75.52	0.0	0.0	2.28E-06
19.32	0.66	0.69	37.48	43.82	2.11	74.01	92.75	92.75	0.0	0.0	3.38E-06
19.34	0.52	0.54	39.32	46.81	2.04	70.52	88.38	88.38	0.0	0.0	5.78E-06
19.36	0.51	0.54	39.29	46.79	2.04	70.53	88.4	88.4	0.0	0.0	5.78E-06
19.38	0.49	0.51	39.54	47.28	2.02	69.62	87.26	87.26	0.0	0.0	6.47E-06
19.4	0.47	0.5	40.26	48.29	2.01	69.77	87.45	87.45	0.0	0.0	7.09E-06
19.42	0.48	0.5	39.94	47.87	2.01	69.67	87.32	87.32	0.0	0.0	6.88E-06
19.44	0.54	0.57	39.16	46.55	2.05	71.6	89.73	89.73	0.0	0.0	5.34E-06
19.46	0.55	0.57	38.88	46.15	2.05	71.72	89.89	89.89	0.0	0.0	5.11E-06
19.48	0.7	0.73	38.73	45.33	2.11	77.06	96.58	96.58	0.0	0.0	3.38E-06
19.5	0.82	0.87	38.64	44.78	2.16	81.25	101.83	101.83	0.0	0.0	2.50E-06
19.52	0.92	0.96	39.17	45.17	2.18	84.74	106.2	106.2	0.0	0.0	2.15E-06
19.54	1.02	1.07	39.83	45.7	2.2	88.63	111.08	111.08	0.0	0.0	1.85E-06
19.56	1.11	1.16	40.7	46.56	2.21	92.22	109.14	115.58	0.0	0.0	1.68E-06
19.58	1.18	1.24	40.43	46.03	2.23	94.1	108.53	117.94	0.0	0.0	1.46E-06
19.6	1.25	1.31	39.5	44.7	2.26	95.06	106.13	119.14	0.0	0.0	1.22E-06
19.62	1.39	1.46	37.46	41.88	2.31	96.1	100.72	120.44	0.0	0.0	8.60E-07
19.64	1.53	1.61	35.51	39.24	2.36	96.95	95.57	121.51	0.0	0.0	6.12E-07
19.66	1.68	1.77	35.17	38.59	2.39	99.93	94.75	125.25	0.0	0.0	4.94E-07
19.68	1.58	1.66	35.19	38.78	2.37	97.8	94.9	122.57	0.0	0.0	5.61E-07
19.7	1.76	1.86	33.26	36.18	2.42	99.0	89.77	124.08	0.0	0.0	3.86E-07
19.72	2.12	2.26	28.11	29.57	2.54	97.7	75.93	122.45	9.28	0.67	1.65E-07
19.74	2.28	2.45	25.28	26.22	2.61	0.0	68.33	119.29	8.34	0.6	1.06E-07
19.76	2.1	2.25	26.39	27.62	2.57	94.48	71.41	118.41	8.71	0.63	1.41E-07
19.78	1.73	1.84	31.06	33.4	2.45	95.77	84.12	120.03	0.0	0.0	3.24E-07
19.8	1.59	1.69	32.18	35.15	2.41	94.41	87.25	118.32	0.0	0.0	4.29E-07
19.82	1.74	1.87	27.2	28.89	2.5	89.97	73.8	112.76	0.0	0.0	2.22E-07
19.84	1.82	1.97	23.46	24.52	2.57	84.94	63.7	106.46	7.74	0.56	1.35E-07
19.86	2.15	2.4	16.97	17.03	2.75	0.0	46.13	96.66	5.6	0.42	3.87E-08
19.88	2.23	2.47	17.51	17.59	2.75	0.0	47.65	99.35	5.78	0.43	3.98E-08
19.9	3.03	3.39	16.29	15.93	2.86	0.0	44.35	107.25	5.38	0.4	1.75E-08
19.92	3.21	3.6	15.62	15.16	2.9	0.0	42.56	107.31	5.15	0.39	1.39E-08
19.94	3.73	4.19	15.6	14.99	2.94	0.0	42.56	113.55	5.15	0.39	1.02E-08
19.96	3.45	3.86	16.09	15.57	2.91	0.0	43.91	112.1	5.31	0.4	1.30E-08
19.98	2.24	2.46	19.43	19.69	2.71	0.0	53.08	105.15	6.41	0.47	5.28E-08
20.0	2.61	2.95	14.5	14.16	2.87	0.0	39.64	96.45	4.78	0.36	1.70E-08
20.02	3.53	4.16	10.73	9.98	3.08	0.0	20.91	93.29	3.54	0.28	3.87E-09
20.04	4.11	4.99	8.89	7.97	3.21	0.0	13.87	90.72	2.94	0.23	1.61E-09
20.06	4.93	6.1	8.03	7.02	3.3	0.0	11.04	92.62	2.65	0.21	9.04E-10
20.08	4.73	5.8	8.39	7.39	3.27	0.0	12.15	93.11	2.77	0.22	9.97E-10
20.1	2.9	3.27	14.88	14.46	2.89	0.0	40.84	101.86	4.91	0.37	1.48E-08
20.12	1.95	2.1	25.0	26.16	2.57	90.94	68.69	113.98	8.25	0.6	1.41E-07
20.14	1.43	1.53	28.18	30.63	2.43	86.3	77.49	108.16	0.0	0.0	3.66E-07
20.16	1.51	1.63	23.88	25.29	2.52	81.47	65.72	102.1	0.0	0.0	2.02E-07
20.18	1.49	1.64	19.53	20.31	2.59	73.76	53.8	92.45	6.44	0.48	1.16E-07
20.2	1.56	1.71	18.98	19.63	2.62	0.0	52.34	92.58	6.26	0.46	9.87E-08
20.22	1.98	2.18	18.96	19.31	2.68	0.0	52.31	100.49	6.26	0.46	6.26E-08
20.24	1.86	2.05	19.1	19.54	2.66	0.0	52.75	98.88	6.3	0.47	7.16E-08
20.26	2.64	2.96	15.83	15.56	2.84	0.0	43.76	102.21	5.22	0.39	2.13E-08
20.28	3.2	3.69	12.43	11.78	2.99	0.0	28.94	97.68	4.1	0.32	7.21E-09



# CPT Office V. 1.1

## Elaborato grafico prova penetrometrica

21/09/2022

19:25:12

Committente	Dott. Geol. Maurizio Castellari		
Località	Lagosanto (Fe)		
Via	Lagosanto		
Prova	CPTU2		
Tipo prova	CPTU		
Tipo di Prova	Prof. max (m)	Preforo (m)	Falda (m da p.c.)
CPTU	5.78	0.02	1.1

Tabella 1 - Informazioni generali

# 1 - Parametri prova penetrometrica CPTU2

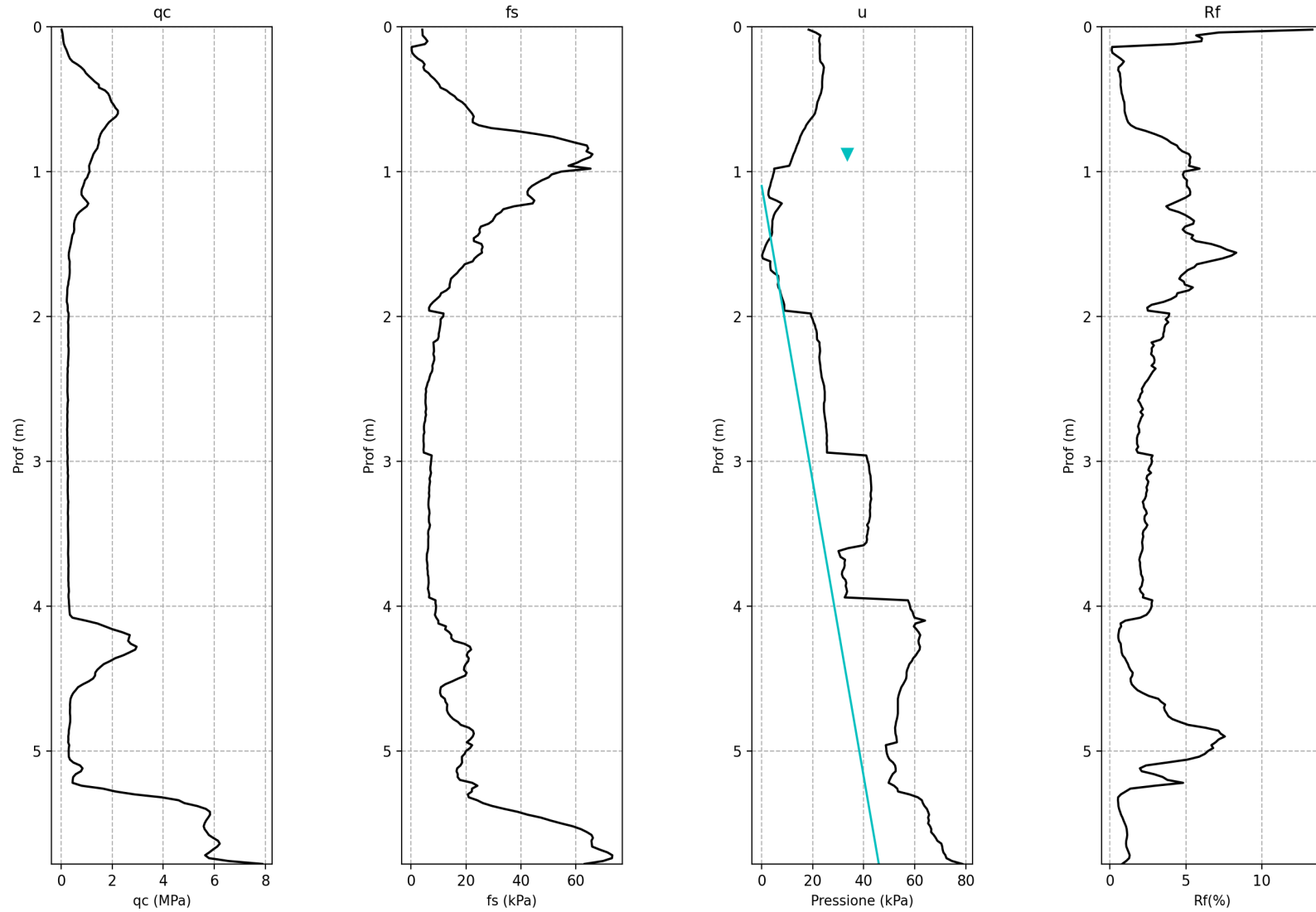


Fig 1 - Plot profondità-variabile della prova penetrometrica elaborata



# 1 - Parametri prova penetrometrica CPTU2

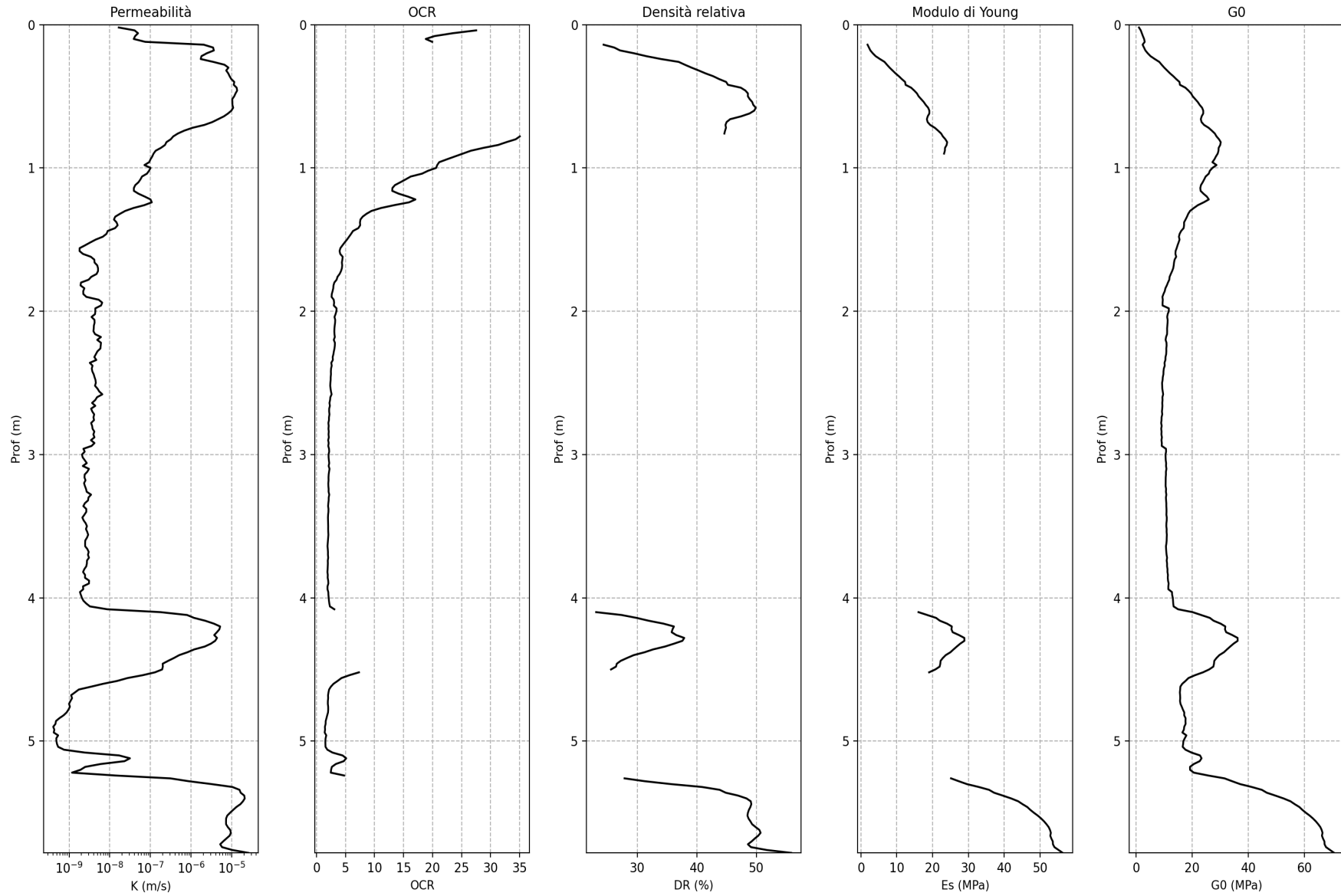


Fig 2 - Plot profondità-variabile della prova penetrometrica elaborata

# 1 - Parametri prova penetrometrica CPTU2

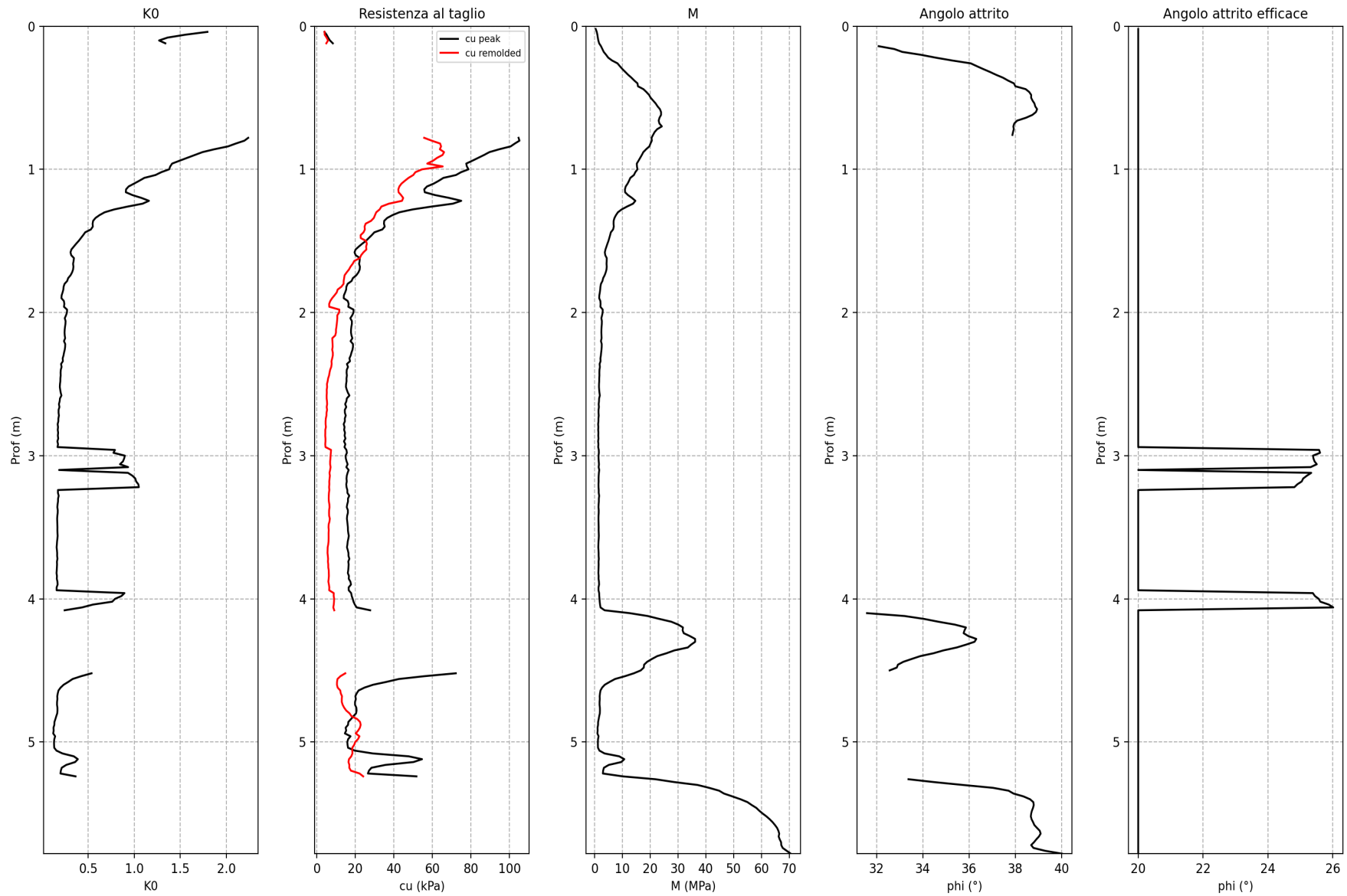


Fig 3 - Plot profondità-variabile della prova penetrometrica elaborata

## 2 - SBT & SBT(n) CPTU2

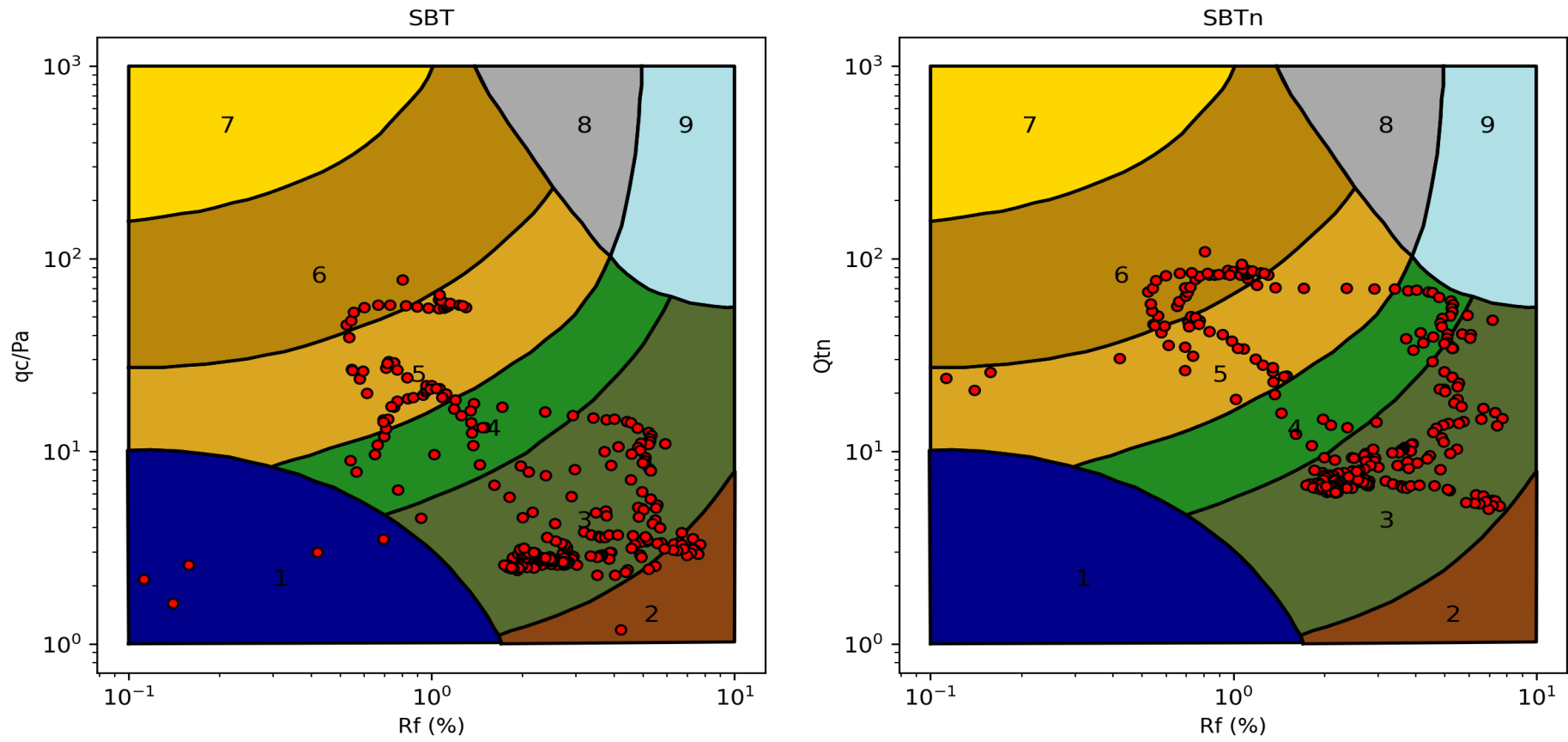


Fig 4 - A sinistra plot valori  $q_c/Pa$ - $R_f$  su SBT chart, a destra plot valori  $Q_{tn}$ - $R_f$  su SBT(n) chart

## 2 - Stratigrafia CPTU2

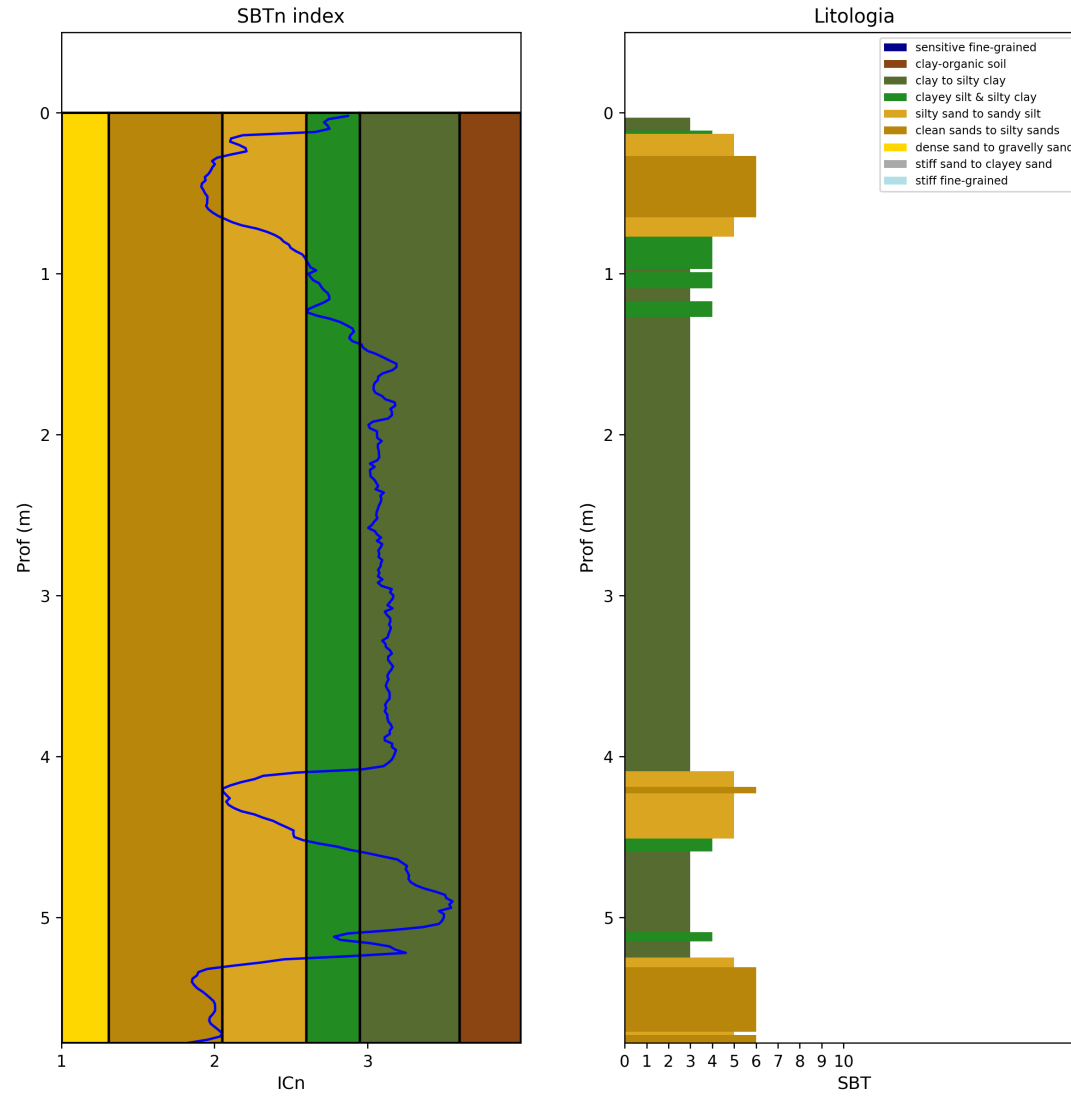


Fig 3 - A sinistra Indice SBT, a destra classificazione stratigrafica da SBT chart

# CPT Office V. 1.1



## Report calcolo prova penetrometrica

21/09/2022

19:25:11

Committente	Dott. Geol. Maurizio Castellari
Località	Lagosanto (Fe)
Via	Lagosanto
Prova	CPTU2
Tipo prova	CPTU

### Tabella 1 - Dati input

Tipo di Prova	Profondità max (m)	Falda (m da p.c.)
CPTU	5.78	1.1

Prof.(m)	qc (MPa)	fs (kPa)	u2 (kPa)	u0 (kPa)	Qt (MPa)	$\gamma$ (KN/m3)	$\sigma_v$ (kPa)	$\sigma_{vp}$ (kPa)	cu (kPa)	$\phi$ (°)	$\phi$ picco(°)	Dr (%)
0.02	0.03	4.1	18.4	0.0	0.03	17.5	0.35	0.35	0.0	0.0	20.0	0.0
0.04	0.05	4.18	21.17	0.0	0.06	17.0	0.69	0.69	4.11	0.0	20.0	0.0
0.06	0.07	4.22	23.06	0.0	0.07	17.0	1.03	1.03	5.23	0.0	20.0	0.0
0.08	0.08	5.2	22.59	0.0	0.09	17.0	1.37	1.37	6.03	0.0	20.0	0.0
0.1	0.09	5.98	22.51	0.0	0.1	17.0	1.71	1.71	6.97	0.0	20.0	0.0
0.12	0.12	5.08	22.82	0.0	0.12	12.5	1.96	1.96	8.46	0.0	20.0	0.0
0.14	0.16	0.23	22.75	0.0	0.16	17.5	2.31	2.31	0.0	32.09	20.0	24.34
0.16	0.21	0.25	22.75	0.0	0.22	17.5	2.66	2.66	0.0	32.77	20.0	26.15
0.18	0.26	0.41	22.75	0.0	0.26	17.5	3.01	3.01	0.0	33.11	20.0	27.1
0.2	0.3	1.27	22.82	0.0	0.3	17.5	3.36	3.36	0.0	33.91	20.0	29.46
0.22	0.35	2.46	22.82	0.0	0.36	17.5	3.71	3.71	0.0	34.55	20.0	31.51
0.24	0.45	4.18	22.98	0.0	0.45	17.5	4.06	4.06	0.0	35.27	20.0	33.98
0.26	0.64	4.96	23.93	0.0	0.64	17.5	4.41	4.41	0.0	36.07	20.0	36.95
0.28	0.79	4.47	24.4	0.0	0.79	17.5	4.76	4.76	0.0	36.34	20.0	38.0
0.3	0.9	4.88	24.25	0.0	0.91	18.0	5.12	5.12	0.0	36.61	20.0	39.11
0.32	0.97	6.36	24.09	0.0	0.98	18.0	5.48	5.48	0.0	36.9	20.0	40.31
0.34	1.09	7.22	23.85	0.0	1.09	18.0	5.84	5.84	0.0	37.17	20.0	41.44
0.36	1.21	8.45	23.77	0.0	1.21	18.0	6.2	6.2	0.0	37.46	20.0	42.75
0.38	1.33	9.4	23.69	0.0	1.33	18.0	6.56	6.56	0.0	37.68	20.0	43.74
0.4	1.48	10.26	23.69	0.0	1.48	18.0	6.92	6.92	0.0	37.94	20.0	44.92
0.42	1.49	10.71	23.69	0.0	1.49	18.0	7.28	7.28	0.0	38.0	20.0	45.22
0.44	1.72	12.93	23.46	0.0	1.73	18.0	7.64	7.64	0.0	38.45	20.0	47.38
0.46	1.84	14.21	23.22	0.0	1.84	18.0	8.0	8.0	0.0	38.6	20.0	48.15
0.48	1.9	15.85	22.75	0.0	1.9	18.0	8.36	8.36	0.0	38.69	20.0	48.57
0.5	1.93	16.75	22.35	0.0	1.93	18.0	8.72	8.72	0.0	38.68	20.0	48.56
0.52	1.98	18.56	21.88	0.0	1.98	18.0	9.08	9.08	0.0	38.74	20.0	48.87
0.54	2.06	19.71	21.64	0.0	2.07	18.5	9.45	9.45	0.0	38.83	20.0	49.29
0.56	2.13	20.5	21.48	0.0	2.13	18.5	9.82	9.82	0.0	38.86	20.0	49.47
0.58	2.23	21.4	21.17	0.0	2.23	18.5	10.19	10.19	0.0	38.94	20.0	49.89
0.6	2.23	22.27	20.85	0.0	2.23	18.5	10.56	10.56	0.0	38.89	20.0	49.63
0.62	2.15	22.84	20.06	0.0	2.16	18.0	10.92	10.92	0.0	38.74	20.0	48.84
0.64	2.01	22.48	19.11	0.0	2.02	18.0	11.28	11.28	0.0	38.46	20.0	47.43
0.66	1.88	22.48	18.24	0.0	1.88	18.0	11.64	11.64	0.0	38.08	20.0	45.58
0.68	1.79	24.62	17.45	0.0	1.79	18.0	12.0	12.0	0.0	37.95	20.0	44.99
0.7	1.71	29.25	16.98	0.0	1.71	18.0	12.36	12.36	0.0	37.91	20.0	44.8
0.72	1.62	38.38	16.19	0.0	1.62	18.0	12.72	12.72	0.0	37.93	20.0	44.89
0.74	1.55	45.39	15.64	0.0	1.56	18.0	13.08	13.08	0.0	37.9	20.0	44.74
0.76	1.51	51.74	15.08	0.0	1.52	18.0	13.44	13.44	0.0	37.87	20.0	44.62
0.78	1.48	55.76	14.77	0.0	1.48	18.0	13.8	13.8	104.66	0.0	20.0	0.0
0.8	1.48	59.7	14.37	0.0	1.49	17.5	14.15	14.15	105.15	0.0	20.0	0.0
0.82	1.45	64.04	13.82	0.0	1.45	17.5	14.5	14.5	102.73	0.0	20.0	0.0
0.84	1.42	64.54	13.43	0.0	1.42	17.5	14.85	14.85	100.56	0.0	20.0	0.0
0.86	1.34	63.88	13.03	0.0	1.34	17.5	15.2	15.2	94.65	0.0	20.0	0.0
0.88	1.27	66.1	12.48	0.0	1.27	17.5	15.55	15.55	89.54	0.0	20.0	0.0
0.9	1.23	65.28	12.08	0.0	1.23	17.5	15.9	15.9	86.79	0.0	20.0	0.0
0.92	1.19	62.46	11.69	0.0	1.19	17.5	16.25	16.25	83.76	0.0	20.0	0.0
0.94	1.14	60.37	11.29	0.0	1.15	17.5	16.6	16.6	80.72	0.0	20.0	0.0
0.96	1.1	57.34	10.82	0.0	1.1	17.5	16.95	16.95	77.56	0.0	20.0	0.0

0.98	1.11	65.39	4.9	0.0	1.11	17.5	17.3	17.3	77.89	0.0	20.0	0.0
1.0	1.12	54.74	4.9	0.0	1.12	17.5	17.65	17.65	78.75	0.0	20.0	0.0
1.02	1.07	51.22	4.5	0.0	1.07	17.5	18.0	18.0	74.88	0.0	20.0	0.0
1.04	1.03	50.12	4.26	0.0	1.03	17.5	18.35	18.35	72.23	0.0	20.0	0.0
1.06	0.94	47.66	3.87	0.0	0.94	17.5	18.7	18.7	65.72	0.0	20.0	0.0
1.08	0.91	45.78	3.55	0.0	0.91	17.5	19.05	19.05	63.34	0.0	20.0	0.0
1.1	0.87	44.01	3.32	0.0	0.87	17.5	19.4	19.4	60.68	0.0	20.0	0.0
1.12	0.82	42.91	2.92	0.2	0.82	17.5	19.75	19.55	57.2	0.0	20.0	0.0
1.14	0.8	42.38	2.69	0.39	0.8	17.5	20.1	19.71	55.8	0.0	20.0	0.0
1.16	0.8	42.5	2.61	0.59	0.81	17.5	20.45	19.86	56.06	0.0	20.0	0.0
1.18	0.88	43.81	3.08	0.78	0.88	17.5	20.8	20.02	61.44	0.0	20.0	0.0
1.2	0.98	44.92	5.77	0.98	0.98	17.5	21.15	20.17	68.78	0.0	20.0	0.0
1.22	1.07	44.3	7.9	1.18	1.07	17.5	21.5	20.32	75.0	0.0	20.0	0.0
1.24	1.01	37.5	7.03	1.37	1.01	17.5	21.85	20.48	70.66	0.0	20.0	0.0
1.26	0.86	33.61	6.24	1.57	0.86	17.5	22.2	20.63	59.72	0.0	20.0	0.0
1.28	0.72	32.71	5.37	1.77	0.72	17.5	22.55	20.78	49.88	0.0	20.0	0.0
1.3	0.62	30.95	4.82	1.96	0.62	17.5	22.9	20.94	42.95	0.0	20.0	0.0
1.32	0.57	30.3	4.5	2.16	0.57	17.5	23.25	21.09	39.35	0.0	20.0	0.0
1.34	0.54	29.68	4.19	2.35	0.54	17.5	23.6	21.25	36.59	0.0	20.0	0.0
1.36	0.51	28.25	4.19	2.55	0.51	17.5	23.95	21.4	35.07	0.0	20.0	0.0
1.38	0.51	25.43	4.11	2.75	0.51	17.5	24.3	21.55	34.93	0.0	20.0	0.0
1.4	0.52	24.89	4.03	2.94	0.52	17.5	24.65	21.71	35.35	0.0	20.0	0.0
1.42	0.5	25.06	4.11	3.14	0.5	17.5	25.0	21.86	34.11	0.0	20.0	0.0
1.44	0.44	24.36	3.87	3.34	0.44	17.5	25.35	22.01	29.97	0.0	20.0	0.0
1.46	0.43	22.85	3.24	3.53	0.43	17.5	25.7	22.17	28.6	0.0	20.0	0.0
1.48	0.4	22.89	2.45	3.73	0.41	17.5	26.05	22.32	27.08	0.0	20.0	0.0
1.5	0.38	25.64	1.82	3.92	0.38	17.5	26.4	22.48	25.57	0.0	20.0	0.0
1.52	0.36	26.09	1.34	4.12	0.36	12.5	26.65	22.53	23.65	0.0	20.0	0.0
1.54	0.33	25.68	0.95	4.32	0.33	12.5	26.9	22.58	21.87	0.0	20.0	0.0
1.56	0.31	25.85	0.47	4.51	0.31	17.5	27.25	22.74	20.24	0.0	20.0	0.0
1.58	0.3	24.29	0.16	4.71	0.3	17.5	27.6	22.89	19.69	0.0	20.0	0.0
1.6	0.31	23.11	0.46	4.9	0.31	12.5	27.85	22.95	20.29	0.0	20.0	0.0
1.62	0.34	22.45	3.4	5.1	0.34	12.5	28.1	23.0	22.45	0.0	20.0	0.0
1.64	0.34	19.55	3.32	5.3	0.34	17.5	28.45	23.15	22.33	0.0	20.0	0.0
1.66	0.34	18.73	3.4	5.49	0.34	17.5	28.8	23.31	22.05	0.0	20.0	0.0
1.68	0.34	17.62	3.55	5.69	0.34	17.5	29.15	23.46	22.49	0.0	20.0	0.0
1.7	0.34	16.8	4.82	5.89	0.34	17.5	29.5	23.61	22.36	0.0	20.0	0.0
1.72	0.33	15.62	6.48	6.08	0.33	17.5	29.85	23.77	21.71	0.0	20.0	0.0
1.74	0.32	14.55	6.56	6.28	0.32	17.5	30.2	23.92	20.62	0.0	20.0	0.0
1.76	0.29	14.31	6.56	6.47	0.29	17.5	30.55	24.08	18.84	0.0	20.0	0.0
1.78	0.28	14.07	6.32	6.67	0.29	17.5	30.9	24.23	18.16	0.0	20.0	0.0
1.8	0.26	14.03	6.56	6.87	0.26	12.5	31.15	24.28	16.12	0.0	20.0	0.0
1.82	0.25	12.88	7.19	7.06	0.25	17.5	31.5	24.44	15.47	0.0	20.0	0.0
1.84	0.25	10.96	7.42	7.26	0.25	17.5	31.85	24.59	15.36	0.0	20.0	0.0
1.86	0.24	10.47	7.74	7.46	0.24	17.5	32.2	24.74	14.83	0.0	20.0	0.0
1.88	0.23	9.33	8.13	7.65	0.23	17.5	32.55	24.9	14.19	0.0	20.0	0.0
1.9	0.23	8.1	8.53	7.85	0.23	17.5	32.9	25.05	14.07	0.0	20.0	0.0
1.92	0.26	7.12	8.85	8.04	0.26	17.5	33.25	25.21	16.2	0.0	20.0	0.0
1.94	0.27	6.55	8.85	8.24	0.27	17.5	33.6	25.36	16.66	0.0	20.0	0.0
1.96	0.26	6.59	8.85	8.44	0.26	17.5	33.95	25.51	16.44	0.0	20.0	0.0
1.98	0.3	11.84	19.27	8.63	0.3	17.5	34.3	25.67	19.18	0.0	20.0	0.0
2.0	0.3	11.71	19.43	8.83	0.3	17.5	34.65	25.82	19.17	0.0	20.0	0.0
2.02	0.29	10.77	19.98	9.03	0.29	17.5	35.0	25.97	18.48	0.0	20.0	0.0
2.04	0.28	10.77	20.3	9.22	0.28	17.5	35.35	26.13	17.5	0.0	20.0	0.0
2.06	0.29	10.65	20.85	9.42	0.29	17.5	35.7	26.28	18.34	0.0	20.0	0.0
2.08	0.29	10.49	21.09	9.61	0.29	17.5	36.05	26.44	18.32	0.0	20.0	0.0
2.1	0.28	10.32	21.48	9.81	0.29	17.5	36.4	26.59	18.04	0.0	20.0	0.0
2.12	0.28	10.08	21.64	10.01	0.29	17.5	36.75	26.74	17.88	0.0	20.0	0.0
2.14	0.28	10.08	21.64	10.2	0.29	17.5	37.1	26.9	17.86	0.0	20.0	0.0
2.16	0.29	9.71	21.72	10.4	0.29	17.5	37.45	27.05	18.11	0.0	20.0	0.0
2.18	0.29	8.16	22.67	10.59	0.3	17.5	37.8	27.21	18.59	0.0	20.0	0.0
2.2	0.28	8.24	22.67	10.79	0.28	17.5	38.15	27.36	17.63	0.0	20.0	0.0
2.22	0.3	8.32	22.82	10.99	0.3	17.5	38.5	27.51	18.88	0.0	20.0	0.0
2.24	0.3	8.36	22.9	11.18	0.3	17.5	38.85	27.67	18.89	0.0	20.0	0.0
2.26	0.3	8.12	22.75	11.38	0.3	17.5	39.2	27.82	18.64	0.0	20.0	0.0
2.28	0.29	8.45	22.59	11.58	0.29	17.5	39.55	27.97	18.11	0.0	20.0	0.0
2.3	0.28	8.45	22.67	11.77	0.29	17.5	39.9	28.13	17.72	0.0	20.0	0.0
2.32	0.27	8.13	22.82	11.97	0.28	17.5	40.25	28.28	17.05	0.0	20.0	0.0
2.34	0.28	7.76	22.98	12.16	0.28	17.5	40.6	28.44	17.36	0.0	20.0	0.0
2.36	0.26	7.84	23.06	12.36	0.26	17.5	40.95	28.59	15.73	0.0	20.0	0.0
2.38	0.27	7.64	23.22	12.56	0.27	17.5	41.3	28.74	16.33	0.0	20.0	0.0
2.4	0.26	7.07	23.38	12.75	0.26	17.5	41.65	28.9	15.67	0.0	20.0	0.0
2.42	0.26	6.75	23.53	12.95	0.26	17.5	42.0	29.05	15.57	0.0	20.0	0.0

2.44	0.26	6.5	23.85	13.15	0.26	17.5	42.35	29.2	15.74	0.0	20.0	0.0
2.46	0.26	6.01	24.17	13.34	0.26	17.5	42.7	29.36	15.52	0.0	20.0	0.0
2.48	0.26	5.77	24.48	13.54	0.26	17.5	43.05	29.51	15.56	0.0	20.0	0.0
2.5	0.25	5.4	24.56	13.73	0.26	17.5	43.4	29.67	15.31	0.0	20.0	0.0
2.52	0.25	5.49	24.72	13.93	0.26	17.5	43.75	29.82	15.24	0.0	20.0	0.0
2.54	0.26	5.29	24.72	14.13	0.26	17.5	44.1	29.97	15.69	0.0	20.0	0.0
2.56	0.27	5.33	24.72	14.32	0.27	17.5	44.45	30.13	16.25	0.0	20.0	0.0
2.58	0.28	5.25	24.72	14.52	0.28	17.5	44.8	30.28	17.06	0.0	20.0	0.0
2.6	0.26	5.25	24.4	14.72	0.26	17.5	45.15	30.44	15.7	0.0	20.0	0.0
2.62	0.26	5.42	24.4	14.91	0.26	17.5	45.5	30.59	15.47	0.0	20.0	0.0
2.64	0.25	5.5	24.4	15.11	0.25	17.5	45.85	30.74	14.83	0.0	20.0	0.0
2.66	0.26	5.26	24.48	15.3	0.26	17.5	46.2	30.9	15.42	0.0	20.0	0.0
2.68	0.25	5.47	24.64	15.5	0.25	17.5	46.55	31.05	14.65	0.0	20.0	0.0
2.7	0.25	5.18	24.8	15.7	0.25	17.5	46.9	31.2	14.69	0.0	20.0	0.0
2.72	0.25	5.15	24.96	15.89	0.26	17.5	47.25	31.36	15.16	0.0	20.0	0.0
2.74	0.25	4.82	25.19	16.09	0.25	17.5	47.6	31.51	14.65	0.0	20.0	0.0
2.76	0.25	4.7	25.19	16.28	0.25	17.5	47.95	31.67	14.7	0.0	20.0	0.0
2.78	0.24	4.7	25.35	16.48	0.25	17.5	48.3	31.82	14.06	0.0	20.0	0.0
2.8	0.25	4.87	25.43	16.68	0.25	17.5	48.65	31.97	14.53	0.0	20.0	0.0
2.82	0.24	4.55	25.59	16.87	0.25	17.5	49.0	32.13	14.3	0.0	20.0	0.0
2.84	0.25	4.55	25.51	17.07	0.26	17.5	49.35	32.28	14.77	0.0	20.0	0.0
2.86	0.25	4.51	25.59	17.27	0.25	17.5	49.7	32.43	14.54	0.0	20.0	0.0
2.88	0.26	4.64	25.43	17.46	0.26	17.5	50.05	32.59	15.0	0.0	20.0	0.0
2.9	0.24	4.64	25.59	17.66	0.25	17.5	50.4	32.74	14.21	0.0	20.0	0.0
2.92	0.26	4.52	25.59	17.85	0.26	17.5	50.75	32.9	14.96	0.0	20.0	0.0
2.94	0.25	4.65	25.59	18.05	0.25	17.5	51.1	33.05	14.46	0.0	20.0	0.0
2.96	0.26	7.54	40.99	18.25	0.27	17.5	51.45	33.2	15.5	0.0	25.58	0.0
2.98	0.26	7.41	41.3	18.44	0.27	17.5	51.8	33.36	15.76	0.0	25.61	0.0
3.0	0.25	7.29	41.54	18.64	0.26	17.5	52.15	33.51	15.06	0.0	25.39	0.0
3.02	0.26	7.21	41.94	18.84	0.27	17.5	52.5	33.66	15.19	0.0	25.41	0.0
3.04	0.26	7.05	42.09	19.03	0.27	17.5	52.85	33.82	15.59	0.0	25.44	0.0
3.06	0.27	7.05	42.17	19.23	0.28	17.5	53.2	33.97	16.13	0.0	25.51	0.0
3.08	0.26	7.29	42.33	19.42	0.27	17.5	53.55	34.13	15.42	0.0	25.32	0.0
3.1	0.28	7.05	42.65	19.62	0.29	17.5	53.9	34.28	16.66	0.0	20.0	0.0
3.12	0.27	6.72	42.73	19.82	0.28	17.5	54.25	34.43	16.1	0.0	25.34	0.0
3.14	0.27	6.92	42.81	20.01	0.27	17.5	54.6	34.59	15.68	0.0	25.2	0.0
3.16	0.26	6.76	42.88	20.21	0.27	17.5	54.95	34.74	15.53	0.0	25.09	0.0
3.18	0.27	6.6	42.96	20.4	0.27	17.5	55.3	34.9	15.68	0.0	25.04	0.0
3.2	0.26	6.64	42.96	20.6	0.27	17.5	55.65	35.05	15.41	0.0	24.91	0.0
3.22	0.27	6.52	42.73	20.8	0.27	17.5	56.0	35.2	15.55	0.0	24.82	0.0
3.24	0.27	6.64	42.73	20.99	0.28	17.5	56.35	35.36	15.97	0.0	20.0	0.0
3.26	0.27	6.44	42.96	21.19	0.28	17.5	56.7	35.51	16.0	0.0	20.0	0.0
3.28	0.29	6.36	42.65	21.39	0.29	17.5	57.05	35.66	16.97	0.0	20.0	0.0
3.3	0.28	6.32	42.49	21.58	0.29	17.5	57.4	35.82	16.3	0.0	20.0	0.0
3.32	0.28	6.4	42.57	21.78	0.29	17.5	57.75	35.97	16.32	0.0	20.0	0.0
3.34	0.27	6.65	42.41	21.97	0.28	17.5	58.1	36.13	15.91	0.0	20.0	0.0
3.36	0.27	6.74	42.49	22.17	0.28	17.5	58.45	36.28	15.66	0.0	20.0	0.0
3.38	0.28	6.53	42.49	22.37	0.29	17.5	58.8	36.43	16.24	0.0	20.0	0.0
3.4	0.28	6.49	42.25	22.56	0.29	17.5	59.15	36.59	16.25	0.0	20.0	0.0
3.42	0.27	6.54	42.02	22.76	0.28	17.5	59.5	36.74	15.87	0.0	20.0	0.0
3.44	0.27	6.91	41.3	22.96	0.28	17.5	59.85	36.89	15.75	0.0	20.0	0.0
3.46	0.27	6.7	41.86	23.15	0.28	17.5	60.2	37.05	15.93	0.0	20.0	0.0
3.48	0.28	6.3	41.62	23.35	0.29	17.5	60.55	37.2	16.08	0.0	20.0	0.0
3.5	0.28	6.22	41.46	23.54	0.29	17.5	60.9	37.36	16.25	0.0	20.0	0.0
3.52	0.28	6.34	41.15	23.74	0.29	17.5	61.25	37.51	16.27	0.0	20.0	0.0
3.54	0.28	6.26	41.3	23.94	0.29	17.5	61.6	37.66	16.45	0.0	20.0	0.0
3.56	0.29	6.26	41.07	24.13	0.3	17.5	61.95	37.82	16.74	0.0	20.0	0.0
3.58	0.29	6.27	39.96	24.33	0.29	17.5	62.3	37.97	16.48	0.0	20.0	0.0
3.6	0.28	6.23	33.88	24.52	0.29	17.5	62.65	38.13	16.16	0.0	20.0	0.0
3.62	0.28	6.07	30.09	24.72	0.29	17.5	63.0	38.28	16.0	0.0	20.0	0.0
3.64	0.28	5.78	30.48	24.92	0.28	17.5	63.35	38.43	15.76	0.0	20.0	0.0
3.66	0.28	5.74	30.88	25.11	0.29	17.5	63.7	38.59	16.21	0.0	20.0	0.0
3.68	0.29	5.7	32.7	25.31	0.3	17.5	64.05	38.74	16.55	0.0	20.0	0.0
3.7	0.29	5.87	32.46	25.51	0.3	17.5	64.4	38.89	16.57	0.0	20.0	0.0
3.72	0.3	5.99	32.54	25.7	0.3	17.5	64.75	39.05	17.03	0.0	20.0	0.0
3.74	0.29	5.91	32.22	25.9	0.3	17.5	65.1	39.2	16.45	0.0	20.0	0.0
3.76	0.29	6.08	31.59	26.09	0.3	17.5	65.45	39.36	16.65	0.0	20.0	0.0
3.78	0.29	6.08	31.43	26.29	0.3	17.5	65.8	39.51	16.54	0.0	20.0	0.0
3.8	0.29	6.33	31.83	26.49	0.3	17.5	66.15	39.66	16.44	0.0	20.0	0.0
3.82	0.29	6.37	32.85	26.68	0.29	17.5	66.5	39.82	16.21	0.0	20.0	0.0
3.84	0.3	6.42	33.17	26.88	0.3	17.5	66.85	39.97	16.8	0.0	20.0	0.0
3.86	0.29	6.3	32.93	27.08	0.3	17.5	67.2	40.12	16.7	0.0	20.0	0.0
3.88	0.31	6.13	33.25	27.27	0.31	17.5	67.55	40.28	17.56	0.0	20.0	0.0

3.9	0.31	6.42	33.49	27.47	0.32	17.5	67.9	40.43	17.87	0.0	20.0	0.0
3.92	0.29	6.63	33.09	27.66	0.3	17.5	68.25	40.59	16.65	0.0	20.0	0.0
3.94	0.3	6.55	32.54	27.86	0.3	17.5	68.6	40.74	16.68	0.0	20.0	0.0
3.96	0.31	8.93	57.34	28.06	0.32	17.5	68.95	40.89	17.95	0.0	25.39	0.0
3.98	0.31	8.89	57.81	28.25	0.32	17.5	69.3	41.05	18.22	0.0	25.45	0.0
4.0	0.32	9.14	58.13	28.45	0.33	17.5	69.65	41.2	18.76	0.0	25.57	0.0
4.02	0.33	9.06	58.36	28.65	0.34	17.5	70.0	41.35	19.16	0.0	25.62	0.0
4.04	0.34	8.93	59.15	28.84	0.35	17.5	70.35	41.51	19.84	0.0	25.88	0.0
4.06	0.35	8.69	59.47	29.04	0.36	17.5	70.7	41.66	20.79	0.0	26.02	0.0
4.08	0.45	9.18	59.94	29.23	0.46	18.0	71.06	41.83	27.82	0.0	20.0	0.0
4.1	0.96	9.92	64.05	29.43	0.97	18.0	71.42	41.99	0.0	31.58	20.0	23.09
4.12	1.43	9.96	60.34	29.63	1.44	18.0	71.78	42.15	0.0	33.21	20.0	27.38
4.14	1.72	12.74	59.63	29.82	1.73	18.0	72.14	42.32	0.0	34.04	20.0	29.87
4.16	2.02	12.42	60.65	30.02	2.03	18.5	72.51	42.49	0.0	34.67	20.0	31.92
4.18	2.39	13.89	61.52	30.21	2.4	18.5	72.88	42.67	0.0	35.38	20.0	34.38
4.2	2.69	14.71	62.15	30.41	2.7	18.5	73.25	42.84	0.0	35.87	20.0	36.16
4.22	2.66	14.63	61.76	30.61	2.67	18.5	73.62	43.01	0.0	35.8	20.0	35.92
4.24	2.63	15.65	61.44	30.8	2.64	18.5	73.99	43.19	0.0	35.76	20.0	35.77
4.26	2.73	19.38	61.6	31.0	2.74	18.5	74.36	43.36	0.0	35.97	20.0	36.54
4.28	2.96	21.43	62.08	31.2	2.97	18.5	74.73	43.53	0.0	36.31	20.0	37.89
4.3	2.91	21.88	61.92	31.39	2.92	18.5	75.1	43.71	0.0	36.24	20.0	37.59
4.32	2.67	20.66	61.13	31.59	2.69	18.5	75.47	43.88	0.0	35.87	20.0	36.17
4.34	2.43	20.29	60.42	31.78	2.44	18.5	75.84	44.06	0.0	35.46	20.0	34.66
4.36	2.12	21.03	59.39	31.98	2.13	18.5	76.21	44.23	0.0	34.89	20.0	32.66
4.38	1.91	20.82	58.84	32.18	1.93	18.0	76.57	44.39	0.0	34.46	20.0	31.23
4.4	1.68	19.96	57.89	32.37	1.69	18.0	76.93	44.56	0.0	33.89	20.0	29.4
4.42	1.54	19.39	57.49	32.57	1.55	18.0	77.29	44.72	0.0	33.52	20.0	28.28
4.44	1.42	19.27	57.02	32.77	1.43	18.0	77.65	44.88	0.0	33.15	20.0	27.22
4.46	1.34	20.25	56.78	32.96	1.35	18.0	78.01	45.05	0.0	32.92	20.0	26.57
4.48	1.33	19.72	56.78	33.16	1.34	18.0	78.37	45.21	0.0	32.87	20.0	26.44
4.5	1.25	17.18	56.63	33.35	1.27	18.0	78.73	45.38	0.0	32.56	20.0	25.59
4.52	1.08	14.93	56.07	33.55	1.09	18.0	79.09	45.54	72.18	0.0	20.0	0.0
4.54	0.85	12.43	55.44	33.75	0.86	18.0	79.45	45.7	56.1	0.0	20.0	0.0
4.56	0.67	10.87	54.73	33.94	0.68	18.0	79.81	45.87	42.65	0.0	20.0	0.0
4.58	0.58	10.62	54.34	34.14	0.59	18.0	80.17	46.03	36.26	0.0	20.0	0.0
4.6	0.48	10.58	53.94	34.34	0.49	18.0	80.53	46.2	29.32	0.0	20.0	0.0
4.62	0.42	10.95	53.63	34.53	0.43	17.5	80.88	46.35	24.87	0.0	20.0	0.0
4.64	0.38	12.3	53.39	34.73	0.39	17.5	81.23	46.5	21.81	0.0	20.0	0.0
4.66	0.36	12.55	53.39	34.92	0.37	17.5	81.58	46.66	20.82	0.0	20.0	0.0
4.68	0.35	13.21	53.39	35.12	0.36	17.5	81.93	46.81	20.12	0.0	20.0	0.0
4.7	0.36	13.08	53.39	35.32	0.37	17.5	82.28	46.96	20.38	0.0	20.0	0.0
4.72	0.35	13.08	53.39	35.51	0.36	17.5	82.63	47.12	19.95	0.0	20.0	0.0
4.74	0.35	13.54	53.39	35.71	0.36	17.5	82.98	47.27	19.95	0.0	20.0	0.0
4.76	0.36	14.31	53.23	35.9	0.37	17.5	83.33	47.43	20.63	0.0	20.0	0.0
4.78	0.36	15.38	52.99	36.1	0.37	17.5	83.68	47.58	20.77	0.0	20.0	0.0
4.8	0.36	17.1	52.68	36.3	0.37	17.5	84.03	47.73	20.48	0.0	20.0	0.0
4.82	0.34	18.13	52.52	36.49	0.35	17.5	84.38	47.89	19.09	0.0	20.0	0.0
4.84	0.32	21.12	52.28	36.69	0.33	17.5	84.73	48.04	17.86	0.0	20.0	0.0
4.86	0.31	22.55	52.36	36.89	0.32	12.5	84.98	48.09	16.48	0.0	20.0	0.0
4.88	0.3	22.88	52.44	37.08	0.31	12.5	85.23	48.15	16.34	0.0	20.0	0.0
4.9	0.29	22.47	52.76	37.28	0.3	12.5	85.48	48.2	15.1	0.0	20.0	0.0
4.92	0.29	21.57	52.91	37.47	0.3	12.5	85.73	48.26	15.38	0.0	20.0	0.0
4.94	0.28	20.3	52.99	37.67	0.29	12.5	85.98	48.31	14.69	0.0	20.0	0.0
4.96	0.32	22.26	48.65	37.87	0.33	12.5	86.23	48.36	17.64	0.0	20.0	0.0
4.98	0.31	21.48	48.81	38.06	0.32	12.5	86.48	48.42	16.38	0.0	20.0	0.0
5.0	0.3	20.05	48.89	38.26	0.31	12.5	86.73	48.47	15.95	0.0	20.0	0.0
5.02	0.3	19.51	49.12	38.46	0.31	12.5	86.98	48.52	16.08	0.0	20.0	0.0
5.04	0.31	18.53	49.52	38.65	0.32	17.5	87.33	48.68	16.33	0.0	20.0	0.0
5.06	0.35	18.53	50.15	38.85	0.36	17.5	87.68	48.83	19.77	0.0	20.0	0.0
5.08	0.49	18.61	51.49	39.04	0.5	17.5	88.03	48.99	29.16	0.0	20.0	0.0
5.1	0.75	18.0	52.28	39.24	0.76	18.0	88.39	49.15	47.79	0.0	20.0	0.0
5.12	0.84	16.81	52.52	39.44	0.85	18.0	88.75	49.31	54.68	0.0	20.0	0.0
5.14	0.78	16.56	52.52	39.63	0.79	18.0	89.11	49.48	50.23	0.0	20.0	0.0
5.16	0.58	17.01	51.33	39.83	0.59	17.5	89.46	49.63	35.67	0.0	20.0	0.0
5.18	0.48	16.97	50.7	40.02	0.49	17.5	89.81	49.79	28.45	0.0	20.0	0.0
5.2	0.46	17.79	50.15	40.22	0.47	17.5	90.16	49.94	27.17	0.0	20.0	0.0
5.22	0.45	22.3	49.76	40.42	0.46	17.5	90.51	50.09	26.61	0.0	20.0	0.0
5.24	0.81	24.18	51.89	40.61	0.82	18.0	90.87	50.26	51.79	0.0	20.0	0.0
5.26	1.64	22.22	53.15	40.81	1.65	18.0	91.23	50.42	0.0	33.38	20.0	27.86
5.28	2.13	22.14	53.47	41.01	2.15	18.0	91.59	50.58	0.0	34.48	20.0	31.29
5.3	2.88	20.66	57.97	41.2	2.9	18.5	91.96	50.76	0.0	35.73	20.0	35.65
5.32	3.94	21.03	61.21	41.4	3.95	18.5	92.33	50.93	0.0	37.03	20.0	40.86
5.34	4.6	24.06	62.79	41.59	4.61	19.0	92.71	51.12	0.0	37.71	20.0	43.84



5.36	4.82	26.2	63.18	41.79	4.84	19.0	93.09	51.3	0.0	37.92	20.0	44.83
5.38	5.32	29.55	63.81	41.99	5.34	19.0	93.47	51.48	0.0	38.35	20.0	46.91
5.4	5.66	33.98	64.76	42.18	5.68	19.0	93.85	51.67	0.0	38.64	20.0	48.33
5.42	5.82	38.81	65.23	42.38	5.84	19.0	94.23	51.85	0.0	38.78	20.0	49.05
5.44	5.83	42.46	65.63	42.58	5.84	19.0	94.61	52.03	0.0	38.8	20.0	49.14
5.46	5.76	47.29	65.23	42.77	5.77	19.0	94.99	52.22	0.0	38.77	20.0	48.98
5.48	5.68	50.77	65.55	42.97	5.69	19.0	95.37	52.4	0.0	38.72	20.0	48.73
5.5	5.62	54.7	65.23	43.16	5.63	18.5	95.74	52.58	0.0	38.68	20.0	48.57
5.52	5.58	58.92	66.02	43.36	5.59	18.5	96.11	52.75	0.0	38.67	20.0	48.49
5.54	5.62	61.91	66.5	43.56	5.63	18.5	96.48	52.92	0.0	38.7	20.0	48.67
5.56	5.7	64.04	66.42	43.75	5.72	18.5	96.85	53.1	0.0	38.77	20.0	48.99
5.58	5.78	65.76	67.45	43.95	5.79	18.5	97.22	53.27	0.0	38.82	20.0	49.27
5.6	5.95	66.25	68.24	44.14	5.96	18.5	97.59	53.45	0.0	38.94	20.0	49.87
5.62	6.14	65.71	68.87	44.34	6.15	18.5	97.96	53.62	0.0	39.06	20.0	50.5
5.64	6.21	65.83	70.45	44.54	6.22	18.5	98.33	53.79	0.0	39.09	20.0	50.7
5.66	6.11	65.95	70.76	44.73	6.13	18.5	98.7	53.97	0.0	39.02	20.0	50.31
5.68	5.95	68.57	70.92	44.93	5.96	18.5	99.07	54.14	0.0	38.91	20.0	49.72
5.7	5.8	71.52	71.24	45.13	5.81	18.5	99.44	54.31	0.0	38.81	20.0	49.19
5.72	5.64	73.32	72.03	45.32	5.65	18.5	99.81	54.49	0.0	38.68	20.0	48.56
5.74	5.79	73.19	72.42	45.52	5.8	18.5	100.18	54.66	0.0	38.79	20.0	49.08
5.76	6.56	69.87	74.63	45.71	6.58	19.0	100.56	54.85	0.0	39.29	20.0	51.74
5.78	7.87	63.23	78.66	45.91	7.89	19.0	100.94	55.03	0.0	40.02	20.0	55.85

Tabella 2 - Dati output

Prof.(m)	Rf (%)	FR (%)	Qt1	Qtn	IC	Es (MPa)	M (MPa)	G0 (MPa)	OCR	K0	KSBT
0.02	13.34	13.49	86.76	65.87	2.87	0.0	0.43	1.04	0.0	0.0	1.66E-08
0.04	7.17	7.26	83.4	47.92	2.74	0.0	0.81	1.67	27.52	1.8	4.06E-08
0.06	5.68	5.76	71.15	40.82	2.72	0.0	1.03	2.06	23.48	1.55	4.95E-08
0.08	6.07	6.16	61.6	40.55	2.74	0.0	1.18	2.44	20.33	1.36	4.20E-08
0.1	6.03	6.13	57.03	38.79	2.75	0.0	1.37	2.86	18.82	1.27	3.87E-08
0.12	4.22	4.29	60.42	36.61	2.66	0.0	1.66	3.09	19.94	1.34	7.44E-08
0.14	0.14	0.14	70.36	20.74	2.18	1.86	2.33	2.33	0.0	0.0	2.04E-06
0.16	0.11	0.11	81.37	23.93	2.11	2.25	2.82	2.82	0.0	0.0	3.47E-06
0.18	0.16	0.16	85.35	25.71	2.1	2.65	3.32	3.32	0.0	0.0	3.62E-06
0.2	0.42	0.42	89.08	30.38	2.16	3.32	4.16	4.16	0.0	0.0	2.42E-06
0.22	0.69	0.7	94.76	34.75	2.2	4.11	4.92	5.15	0.0	0.0	1.79E-06
0.24	0.92	0.93	110.95	40.41	2.21	5.31	6.31	6.66	0.0	0.0	1.72E-06
0.26	0.77	0.78	144.38	47.79	2.11	6.6	8.27	8.27	0.0	0.0	3.51E-06
0.28	0.56	0.57	165.61	50.53	2.02	7.28	9.13	9.13	0.0	0.0	6.61E-06
0.3	0.54	0.54	176.36	53.53	1.99	8.01	10.04	10.04	0.0	0.0	8.26E-06
0.32	0.65	0.65	177.55	56.87	2.0	8.83	11.07	11.07	0.0	0.0	7.27E-06
0.34	0.66	0.67	185.93	60.12	1.99	9.65	12.1	12.1	0.0	0.0	8.17E-06
0.36	0.7	0.7	194.92	63.95	1.98	10.59	13.27	13.27	0.0	0.0	8.83E-06
0.38	0.71	0.71	202.0	66.97	1.96	11.42	14.31	14.31	0.0	0.0	9.71E-06
0.4	0.69	0.69	213.44	70.63	1.94	12.34	15.46	15.46	0.0	0.0	1.15E-05
0.42	0.72	0.72	203.65	71.56	1.94	12.46	15.62	15.62	0.0	0.0	1.11E-05
0.44	0.75	0.75	224.98	78.56	1.92	14.02	17.57	17.57	0.0	0.0	1.31E-05
0.46	0.77	0.77	229.31	81.13	1.91	14.88	18.65	18.65	0.0	0.0	1.35E-05
0.48	0.83	0.84	226.78	82.57	1.93	15.64	19.6	19.6	0.0	0.0	1.23E-05
0.5	0.87	0.87	220.89	82.52	1.94	16.1	20.18	20.18	0.0	0.0	1.15E-05
0.52	0.94	0.94	217.19	83.6	1.95	16.83	21.09	21.09	0.0	0.0	1.02E-05
0.54	0.95	0.96	217.83	85.04	1.95	17.54	21.98	21.98	0.0	0.0	1.03E-05
0.56	0.96	0.97	216.24	85.65	1.95	18.08	22.67	22.67	0.0	0.0	1.03E-05
0.58	0.96	0.96	218.03	87.13	1.95	18.77	23.52	23.52	0.0	0.0	1.08E-05
0.6	1.0	1.0	210.11	86.21	1.96	19.09	23.93	23.93	0.0	0.0	9.77E-06
0.62	1.06	1.07	196.36	83.5	1.99	19.1	23.93	23.93	0.0	0.0	8.08E-06
0.64	1.11	1.12	177.83	78.74	2.02	18.64	23.36	23.36	0.0	0.0	6.38E-06
0.66	1.2	1.2	160.42	72.72	2.07	18.4	23.07	23.07	0.0	0.0	4.61E-06
0.68	1.37	1.38	148.26	70.84	2.12	18.62	23.33	23.33	0.0	0.0	3.32E-06
0.7	1.71	1.72	137.72	70.25	2.18	19.32	24.22	24.22	0.0	0.0	2.11E-06
0.72	2.37	2.39	126.44	70.54	2.28	20.63	22.52	25.86	0.0	0.0	1.08E-06
0.74	2.92	2.94	117.98	70.05	2.34	21.54	21.6	27.0	0.0	0.0	6.74E-07
0.76	3.41	3.44	111.86	69.68	2.39	22.39	21.05	28.06	0.0	0.0	4.71E-07
0.78	3.77	3.81	106.18	68.53	2.43	22.87	20.51	28.67	35.04	2.24	3.64E-07
0.8	4.02	4.06	104.03	68.61	2.45	23.57	20.61	29.54	34.33	2.2	3.16E-07
0.82	4.41	4.45	99.19	67.54	2.49	24.07	20.14	30.17	32.73	2.1	2.47E-07
0.84	4.54	4.58	94.81	66.98	2.5	23.92	19.71	29.98	31.29	2.02	2.27E-07
0.86	4.77	4.82	87.18	63.25	2.53	23.47	18.55	29.42	28.77	1.87	1.81E-07
0.88	5.21	5.27	80.61	60.42	2.57	23.43	17.55	29.36	26.6	1.74	1.34E-07
0.9	5.3	5.37	76.42	58.13	2.59	23.21	17.01	29.09	25.22	1.66	1.19E-07
0.92	5.25	5.33	72.16	55.47	2.6	0.0	16.42	28.45	23.81	1.57	1.11E-07
0.94	5.26	5.34	68.08	53.0	2.62	0.0	15.82	27.92	22.47	1.49	1.00E-07
0.96	5.2	5.28	64.06	50.38	2.63	0.0	15.2	27.2	21.14	1.41	9.27E-08
0.98	5.9	6.0	63.03	50.92	2.66	0.0	15.27	28.66	20.8	1.39	7.11E-08
1.0	4.89	4.97	62.46	49.04	2.61	0.0	15.43	27.21	20.61	1.38	1.01E-07
1.02	4.8	4.89	58.24	46.22	2.63	0.0	14.68	26.28	19.22	1.29	9.22E-08
1.04	4.87	4.96	55.11	44.32	2.64	0.0	14.16	25.91	18.19	1.23	8.19E-08
1.06	5.08	5.18	49.2	40.65	2.68	0.0	12.88	24.79	16.24	1.11	6.20E-08
1.08	5.05	5.16	46.55	38.85	2.7	0.0	12.41	24.28	15.36	1.05	5.67E-08
1.1	5.07	5.18	43.79	36.98	2.71	0.0	11.89	23.74	14.45	1.0	5.07E-08
1.12	5.23	5.36	40.95	35.16	2.74	0.0	11.21	23.12	13.51	0.94	4.23E-08
1.14	5.29	5.42	39.64	34.29	2.75	0.0	10.94	22.88	13.08	0.91	3.91E-08
1.16	5.28	5.42	39.52	34.21	2.75	0.0	10.99	22.99	13.04	0.91	3.90E-08
1.18	4.97	5.09	42.97	36.41	2.71	0.0	12.04	24.02	14.18	0.98	5.09E-08
1.2	4.56	4.66	47.74	39.29	2.66	0.0	13.48	25.22	15.75	1.08	7.24E-08
1.22	4.13	4.22	51.67	41.41	2.61	0.0	14.7	25.92	17.05	1.16	1.01E-07
1.24	3.71	3.79	48.31	38.55	2.6	0.0	13.85	24.1	15.94	1.09	1.08E-07
1.26	3.92	4.02	40.52	33.55	2.67	0.0	11.7	22.02	13.37	0.93	7.03E-08
1.28	4.54	4.68	33.6	29.3	2.75	0.0	9.78	20.57	11.09	0.78	3.79E-08
1.3	4.96	5.15	28.72	26.02	2.82	0.0	8.42	19.24	9.48	0.68	2.39E-08
1.32	5.28	5.5	26.12	24.26	2.86	0.0	7.71	18.59	8.62	0.62	1.79E-08
1.34	5.54	5.79	24.11	22.56	2.9	0.0	7.17	18.15	7.96	0.58	1.36E-08
1.36	5.49	5.75	22.94	21.65	2.91	0.0	6.87	17.64	7.57	0.55	1.26E-08
1.38	4.95	5.2	22.69	21.09	2.89	0.0	6.85	17.1	7.49	0.55	1.47E-08
1.4	4.79	5.03	22.8	21.06	2.88	0.0	6.93	17.11	7.52	0.55	1.56E-08

1.42	4.99	5.25	21.85	20.5	2.9	0.0	6.69	16.95	7.21	0.53	1.35E-08
1.44	5.48	5.81	19.06	18.68	2.96	0.0	5.87	16.06	6.29	0.47	8.90E-09
1.46	5.36	5.71	18.06	17.83	2.97	0.0	5.61	15.52	5.96	0.44	8.30E-09
1.48	5.65	6.04	16.99	17.12	3.0	0.0	5.31	15.26	5.61	0.42	6.75E-09
1.5	6.67	7.16	15.93	16.72	3.06	0.0	5.01	15.49	5.26	0.4	4.51E-09
1.52	7.29	7.88	14.7	15.91	3.1	0.0	4.64	15.15	4.85	0.37	3.32E-09
1.54	7.71	8.39	13.56	14.77	3.14	0.0	4.29	14.78	4.47	0.34	2.47E-09
1.56	8.32	9.12	12.46	13.9	3.19	0.0	3.94	14.46	4.11	0.32	1.81E-09
1.58	8.01	8.81	12.04	13.43	3.19	0.0	3.7	14.08	3.97	0.31	1.81E-09
1.6	7.41	8.13	12.38	13.6	3.16	0.0	3.86	14.01	4.09	0.31	2.19E-09
1.62	6.56	7.14	13.66	14.74	3.1	0.0	4.4	14.3	4.51	0.34	3.42E-09
1.64	5.73	6.25	13.5	14.28	3.07	0.0	4.38	13.73	4.46	0.34	4.16E-09
1.66	5.55	6.07	13.25	13.99	3.07	0.0	4.32	13.53	4.37	0.33	4.22E-09
1.68	5.12	5.6	13.42	13.96	3.05	0.0	4.4	13.41	4.43	0.34	4.92E-09
1.7	4.9	5.37	13.26	13.74	3.04	0.0	4.3	13.23	4.38	0.33	5.14E-09
1.72	4.68	5.14	12.79	13.25	3.04	0.0	4.03	12.85	4.22	0.32	5.14E-09
1.74	4.57	5.04	12.07	12.6	3.05	0.0	3.64	12.38	3.98	0.31	4.73E-09
1.76	4.86	5.43	10.95	11.77	3.09	0.0	3.1	11.95	3.61	0.28	3.51E-09
1.78	4.93	5.53	10.49	11.23	3.12	0.0	2.85	11.83	3.46	0.27	3.02E-09
1.8	5.46	6.22	9.29	10.27	3.18	0.0	2.32	11.36	3.07	0.24	1.96E-09
1.82	5.19	5.95	8.86	9.81	3.18	0.0	2.12	10.95	2.92	0.23	1.91E-09
1.84	4.44	5.1	8.74	9.52	3.15	0.0	2.05	10.45	2.89	0.23	2.38E-09
1.86	4.37	5.04	8.39	9.18	3.16	0.0	1.91	10.22	2.77	0.22	2.22E-09
1.88	4.03	4.7	7.98	8.71	3.16	0.0	1.73	9.76	2.63	0.21	2.23E-09
1.9	3.52	4.11	7.86	8.48	3.13	0.0	1.67	9.38	2.6	0.21	2.66E-09
1.92	2.74	3.14	9.0	9.29	3.03	0.0	2.11	9.52	2.97	0.24	5.34E-09
1.94	2.45	2.81	9.2	9.32	3.01	0.0	2.17	9.45	3.04	0.24	6.52E-09
1.96	2.5	2.86	9.02	9.2	3.02	0.0	2.12	9.44	2.98	0.24	6.10E-09
1.98	3.91	4.41	10.46	10.99	3.06	0.0	2.95	11.67	3.45	0.27	4.40E-09
2.0	3.87	4.37	10.39	10.91	3.06	0.0	2.93	11.66	3.43	0.27	4.41E-09
2.02	3.67	4.16	9.96	10.47	3.06	0.0	2.71	11.27	3.29	0.26	4.35E-09
2.04	3.84	4.4	9.38	10.04	3.09	0.0	2.46	11.07	3.09	0.24	3.55E-09
2.06	3.64	4.15	9.77	10.3	3.07	0.0	2.64	11.25	3.22	0.25	4.20E-09
2.08	3.59	4.09	9.7	10.22	3.07	0.0	2.62	11.23	3.2	0.25	4.24E-09
2.1	3.57	4.09	9.5	10.04	3.07	0.0	2.54	11.14	3.13	0.25	4.06E-09
2.12	3.51	4.03	9.36	9.9	3.07	0.0	2.48	11.06	3.09	0.24	4.03E-09
2.14	3.51	4.03	9.29	9.84	3.08	0.0	2.46	11.08	3.07	0.24	3.97E-09
2.16	3.34	3.83	9.37	9.84	3.06	0.0	2.5	11.05	3.09	0.24	4.35E-09
2.18	2.74	3.13	9.57	9.76	3.02	0.0	2.54	10.68	3.16	0.25	6.06E-09
2.2	2.89	3.34	9.02	9.37	3.05	0.0	2.31	10.52	2.98	0.24	4.91E-09
2.22	2.75	3.15	9.61	9.8	3.02	0.0	2.59	10.84	3.17	0.25	6.08E-09
2.24	2.76	3.16	9.56	9.77	3.02	0.0	2.58	10.88	3.16	0.25	5.98E-09
2.26	2.71	3.11	9.38	9.6	3.02	0.0	2.5	10.77	3.1	0.24	5.88E-09
2.28	2.88	3.33	9.06	9.41	3.04	0.0	2.38	10.78	2.99	0.24	4.96E-09
2.3	2.94	3.41	8.82	9.22	3.06	0.0	2.29	10.72	2.91	0.23	4.55E-09
2.32	2.91	3.4	8.44	8.89	3.07	0.0	2.12	10.49	2.79	0.22	4.16E-09
2.34	2.74	3.19	8.55	8.91	3.05	0.0	2.17	10.45	2.82	0.22	4.68E-09
2.36	3.0	3.56	7.7	8.29	3.11	0.0	1.82	10.13	2.54	0.2	3.23E-09
2.38	2.83	3.34	7.95	8.44	3.08	0.0	1.93	10.22	2.62	0.21	3.77E-09
2.4	2.71	3.22	7.59	8.09	3.09	0.0	1.77	9.89	2.51	0.2	3.60E-09
2.42	2.59	3.09	7.5	7.97	3.09	0.0	1.74	9.77	2.48	0.2	3.72E-09
2.44	2.47	2.95	7.55	7.96	3.07	0.0	1.75	9.74	2.49	0.2	4.02E-09
2.46	2.31	2.77	7.4	7.78	3.07	0.0	1.69	9.52	2.44	0.2	4.22E-09
2.48	2.21	2.65	7.38	7.73	3.06	0.0	1.68	9.45	2.44	0.2	4.45E-09
2.5	2.1	2.52	7.23	7.55	3.06	0.0	1.62	9.27	2.38	0.19	4.54E-09
2.52	2.13	2.57	7.15	7.5	3.06	0.0	1.6	9.3	2.36	0.19	4.32E-09
2.54	2.0	2.41	7.33	7.6	3.04	0.0	1.67	9.34	2.42	0.19	4.98E-09
2.56	1.96	2.34	7.55	7.77	3.03	0.0	1.77	9.5	2.49	0.2	5.50E-09
2.58	1.85	2.2	7.89	8.0	3.0	0.0	1.91	9.66	2.6	0.21	6.57E-09
2.6	1.98	2.39	7.22	7.5	3.05	0.0	1.65	9.38	2.38	0.19	4.86E-09
2.62	2.07	2.5	7.08	7.41	3.06	0.0	1.61	9.42	2.34	0.19	4.39E-09
2.64	2.17	2.65	6.75	7.17	3.09	0.0	1.49	9.33	2.23	0.18	3.66E-09
2.66	2.01	2.44	6.99	7.31	3.06	0.0	1.58	9.38	2.31	0.19	4.42E-09
2.68	2.17	2.67	6.61	7.04	3.1	0.0	1.44	9.31	2.18	0.18	3.47E-09
2.7	2.05	2.52	6.59	6.99	3.09	0.0	1.44	9.22	2.18	0.18	3.72E-09
2.72	1.98	2.43	6.77	7.11	3.07	0.0	1.51	9.33	2.23	0.18	4.14E-09
2.74	1.91	2.35	6.51	6.86	3.08	0.0	1.41	9.09	2.15	0.17	3.97E-09
2.76	1.85	2.28	6.5	6.83	3.07	0.0	1.41	9.06	2.14	0.17	4.10E-09
2.78	1.92	2.39	6.19	6.59	3.1	0.0	1.3	8.93	2.04	0.17	3.47E-09
2.8	1.93	2.39	6.36	6.74	3.09	0.0	1.37	9.14	2.1	0.17	3.68E-09
2.82	1.82	2.27	6.23	6.59	3.08	0.0	1.32	8.95	2.06	0.17	3.77E-09
2.84	1.78	2.2	6.41	6.73	3.07	0.0	1.39	9.08	2.11	0.17	4.17E-09
2.86	1.78	2.22	6.27	6.61	3.08	0.0	1.35	9.03	2.07	0.17	3.94E-09

2.88	1.78	2.21	6.45	6.76	3.07	0.0	1.42	9.21	2.13	0.17	4.20E-09
2.9	1.86	2.33	6.08	6.47	3.1	0.0	1.29	9.05	2.01	0.16	3.44E-09
2.92	1.74	2.16	6.37	6.67	3.07	0.0	1.4	9.18	2.1	0.17	4.21E-09
2.94	1.83	2.29	6.13	6.5	3.09	0.0	1.32	9.14	2.02	0.17	3.57E-09
2.96	2.81	3.47	6.53	7.05	3.16	0.0	1.53	10.66	2.16	0.79	2.24E-09
2.98	2.72	3.36	6.62	7.1	3.15	0.0	1.57	10.69	2.18	0.77	2.42E-09
3.0	2.77	3.46	6.29	6.81	3.17	0.0	1.44	10.5	2.08	0.9	2.07E-09
3.02	2.72	3.39	6.32	6.83	3.16	0.0	1.45	10.52	2.08	0.89	2.16E-09
3.04	2.6	3.23	6.46	6.92	3.15	0.0	1.51	10.57	2.13	0.88	2.43E-09
3.06	2.52	3.12	6.65	7.08	3.13	0.0	1.6	10.71	2.19	0.84	2.72E-09
3.08	2.71	3.38	6.33	6.83	3.16	0.0	1.47	10.67	2.09	0.93	2.17E-09
3.1	2.45	3.02	6.81	7.28	3.11	0.0	1.7	10.82	2.25	0.18	3.08E-09
3.12	2.4	2.98	6.55	6.96	3.13	0.0	1.57	10.63	2.16	0.93	2.80E-09
3.14	2.53	3.15	6.35	6.8	3.15	0.0	1.49	10.64	2.09	0.98	2.41E-09
3.16	2.48	3.11	6.26	6.71	3.15	0.0	1.46	10.56	2.07	1.01	2.39E-09
3.18	2.4	3.01	6.29	6.72	3.14	0.0	1.48	10.55	2.08	1.02	2.53E-09
3.2	2.45	3.08	6.15	6.61	3.15	0.0	1.42	10.52	2.03	1.04	2.33E-09
3.22	2.38	2.99	6.18	6.62	3.15	0.0	1.44	10.52	2.04	1.05	2.45E-09
3.24	2.37	2.97	6.33	6.75	3.14	0.0	1.51	10.69	2.09	0.17	2.60E-09
3.26	2.29	2.88	6.31	6.71	3.13	0.0	1.5	10.63	2.08	0.17	2.71E-09
3.28	2.16	2.68	6.66	7.06	3.1	0.0	1.68	10.79	2.2	0.18	3.47E-09
3.3	2.21	2.77	6.37	6.81	3.12	0.0	1.55	10.64	2.1	0.17	2.99E-09
3.32	2.24	2.8	6.35	6.8	3.12	0.0	1.55	10.69	2.1	0.17	2.92E-09
3.34	2.37	2.99	6.17	6.59	3.15	0.0	1.47	10.78	2.03	0.17	2.44E-09
3.36	2.43	3.07	6.04	6.49	3.16	0.0	1.42	10.78	1.99	0.16	2.23E-09
3.38	2.28	2.87	6.24	6.64	3.13	0.0	1.51	10.84	2.06	0.17	2.64E-09
3.4	2.26	2.85	6.22	6.62	3.13	0.0	1.51	10.85	2.05	0.17	2.65E-09
3.42	2.32	2.94	6.05	6.47	3.15	0.0	1.44	10.8	2.0	0.16	2.38E-09
3.44	2.46	3.13	5.98	6.43	3.17	0.0	1.42	10.95	1.97	0.16	2.11E-09
3.46	2.37	3.01	6.02	6.45	3.16	0.0	1.44	10.92	1.99	0.16	2.28E-09
3.48	2.2	2.8	6.05	6.45	3.14	0.0	1.45	10.8	2.0	0.16	2.56E-09
3.5	2.16	2.73	6.09	6.53	3.13	0.0	1.49	10.77	2.01	0.16	2.75E-09
3.52	2.19	2.78	6.07	6.46	3.14	0.0	1.47	10.9	2.0	0.16	2.59E-09
3.54	2.15	2.72	6.12	6.55	3.13	0.0	1.51	10.87	2.02	0.17	2.79E-09
3.56	2.11	2.67	6.2	6.62	3.12	0.0	1.55	10.96	2.05	0.17	2.94E-09
3.58	2.14	2.72	6.08	6.51	3.13	0.0	1.5	10.92	2.01	0.16	2.75E-09
3.6	2.16	2.75	5.93	6.32	3.14	0.0	1.43	10.9	1.96	0.16	2.49E-09
3.62	2.11	2.71	5.85	6.24	3.14	0.0	1.4	10.81	1.93	0.16	2.47E-09
3.64	2.04	2.62	5.74	6.12	3.14	0.0	1.35	10.64	1.89	0.16	2.48E-09
3.66	1.98	2.53	5.88	6.29	3.13	0.0	1.43	10.7	1.94	0.16	2.81E-09
3.68	1.93	2.46	5.98	6.36	3.12	0.0	1.47	10.77	1.97	0.16	3.03E-09
3.7	1.98	2.53	5.96	6.36	3.12	0.0	1.48	10.87	1.97	0.16	2.90E-09
3.72	1.98	2.51	6.1	6.49	3.11	0.0	1.55	11.05	2.01	0.17	3.08E-09
3.74	2.0	2.57	5.88	6.29	3.13	0.0	1.45	10.91	1.94	0.16	2.75E-09
3.76	2.04	2.61	5.92	6.34	3.13	0.0	1.48	11.05	1.95	0.16	2.74E-09
3.78	2.05	2.63	5.86	6.28	3.13	0.0	1.46	11.04	1.93	0.16	2.65E-09
3.8	2.14	2.75	5.8	6.19	3.15	0.0	1.42	11.2	1.92	0.16	2.36E-09
3.82	2.17	2.81	5.7	6.1	3.16	0.0	1.38	11.18	1.88	0.16	2.20E-09
3.84	2.12	2.73	5.89	6.26	3.14	0.0	1.47	11.36	1.94	0.16	2.47E-09
3.86	2.09	2.69	5.83	6.2	3.15	0.0	1.45	11.3	1.92	0.16	2.45E-09
3.88	1.96	2.5	6.1	6.47	3.11	0.0	1.59	11.39	2.01	0.16	3.10E-09
3.9	2.02	2.57	6.19	6.57	3.11	0.0	1.64	11.61	2.04	0.17	3.08E-09
3.92	2.2	2.84	5.74	6.14	3.16	0.0	1.43	11.49	1.9	0.16	2.20E-09
3.94	2.17	2.81	5.73	6.12	3.16	0.0	1.43	11.48	1.89	0.16	2.23E-09
3.96	2.79	3.55	6.15	6.62	3.19	0.0	1.66	12.79	2.03	0.89	1.84E-09
3.98	2.74	3.48	6.22	6.68	3.18	0.0	1.7	12.86	2.05	0.86	1.95E-09
4.0	2.75	3.48	6.37	6.83	3.17	0.0	1.79	13.09	2.1	0.79	2.07E-09
4.02	2.68	3.38	6.48	6.92	3.16	0.0	1.86	13.17	2.14	0.76	2.25E-09
4.04	2.57	3.22	6.69	7.15	3.13	0.0	1.99	13.24	2.21	0.55	2.65E-09
4.06	2.4	2.98	6.99	7.38	3.11	0.0	2.15	13.37	2.31	0.43	3.25E-09
4.08	1.99	2.36	9.31	9.31	2.96	0.0	3.63	14.97	3.07	0.24	8.69E-09
4.1	1.02	1.1	21.5	18.67	2.53	16.06	12.64	20.13	0.0	0.0	1.76E-07
4.12	0.69	0.73	32.42	26.24	2.32	18.5	19.13	23.19	0.0	0.0	7.98E-07
4.14	0.74	0.77	39.24	31.22	2.26	20.96	23.25	26.27	0.0	0.0	1.18E-06
4.16	0.61	0.63	46.1	35.66	2.17	22.05	27.63	27.63	0.0	0.0	2.22E-06
4.18	0.58	0.6	54.63	41.36	2.1	24.02	30.11	30.11	0.0	0.0	3.60E-06
4.2	0.54	0.56	61.36	45.76	2.05	25.38	31.81	31.81	0.0	0.0	5.17E-06
4.22	0.55	0.56	60.35	45.16	2.06	25.27	31.67	31.67	0.0	0.0	4.94E-06
4.24	0.59	0.61	59.39	44.78	2.08	25.6	32.09	32.09	0.0	0.0	4.30E-06
4.26	0.71	0.73	61.49	46.74	2.1	27.36	34.29	34.29	0.0	0.0	3.69E-06
4.28	0.72	0.74	66.5	50.24	2.08	28.86	36.17	36.17	0.0	0.0	4.33E-06
4.3	0.75	0.77	65.04	49.44	2.09	28.88	36.2	36.2	0.0	0.0	3.90E-06
4.32	0.77	0.79	59.5	45.79	2.13	27.72	34.74	34.74	0.0	0.0	3.06E-06

4.34	0.83	0.86	53.72	42.04	2.18	26.76	33.54	33.54	0.0	0.0	2.16E-06
4.36	0.99	1.02	46.42	37.34	2.26	25.85	28.74	32.4	0.0	0.0	1.19E-06
4.38	1.08	1.13	41.67	34.13	2.32	24.97	25.9	31.3	0.0	0.0	8.10E-07
4.4	1.18	1.24	36.16	30.26	2.38	23.67	22.56	29.66	0.0	0.0	5.09E-07
4.42	1.25	1.31	32.99	27.99	2.43	22.86	20.65	28.66	0.0	0.0	3.78E-07
4.44	1.35	1.43	30.1	25.94	2.47	22.23	18.92	27.86	0.0	0.0	2.72E-07
4.46	1.5	1.59	28.27	24.7	2.52	22.16	17.83	27.77	0.0	0.0	2.00E-07
4.48	1.47	1.56	27.99	24.46	2.52	21.97	17.72	27.54	0.0	0.0	2.02E-07
4.5	1.36	1.45	26.17	22.92	2.52	20.77	16.62	26.03	0.0	0.0	1.94E-07
4.52	1.37	1.48	22.19	19.8	2.58	19.03	14.15	23.85	7.32	0.54	1.29E-07
4.54	1.44	1.58	17.18	15.8	2.68	0.0	10.99	21.0	5.67	0.42	6.45E-08
4.56	1.61	1.82	13.02	12.34	2.8	0.0	7.37	18.67	4.3	0.33	2.72E-08
4.58	1.81	2.09	11.03	10.75	2.88	0.0	5.46	17.62	3.64	0.28	1.53E-08
4.6	2.16	2.58	8.89	9.0	3.0	0.0	3.7	16.46	2.93	0.23	6.88E-09
4.62	2.55	3.15	7.51	7.86	3.09	0.0	2.74	15.78	2.48	0.2	3.49E-09
4.64	3.18	4.03	6.57	7.04	3.2	0.0	2.15	15.71	2.17	0.18	1.73E-09
4.66	3.36	4.31	6.25	6.76	3.23	0.0	1.97	15.6	2.06	0.17	1.39E-09
4.68	3.63	4.69	6.02	6.56	3.26	0.0	1.85	15.69	1.99	0.16	1.12E-09
4.7	3.56	4.59	6.08	6.61	3.25	0.0	1.89	15.73	2.01	0.16	1.18E-09
4.72	3.61	4.68	5.93	6.47	3.26	0.0	1.81	15.66	1.96	0.16	1.08E-09
4.74	3.74	4.85	5.91	6.47	3.27	0.0	1.81	15.83	1.95	0.16	9.95E-10
4.76	3.85	4.96	6.09	6.65	3.27	0.0	1.92	16.28	2.01	0.16	1.05E-09
4.78	4.11	5.29	6.11	6.7	3.28	0.0	1.95	16.69	2.02	0.17	9.65E-10
4.8	4.61	5.96	6.01	6.65	3.32	0.0	1.91	17.18	1.98	0.16	8.68E-10
4.82	5.15	6.78	5.58	6.27	3.37	0.0	1.68	17.15	1.84	0.15	7.32E-10
4.84	6.31	8.45	5.2	5.97	3.44	0.0	1.49	17.65	1.72	0.14	5.77E-10
4.86	7.14	9.77	4.8	5.6	3.51	0.0	1.29	17.6	1.58	0.13	4.75E-10
4.88	7.29	10.0	4.75	5.56	3.51	0.0	1.27	17.65	1.57	0.13	4.62E-10
4.9	7.57	10.63	4.38	5.19	3.56	0.0	1.1	17.16	1.45	0.12	4.07E-10
4.92	7.16	10.02	4.46	5.25	3.53	0.0	1.13	17.04	1.47	0.12	4.34E-10
4.94	6.96	9.87	4.26	5.02	3.55	0.0	1.03	16.5	1.4	0.12	4.19E-10
4.96	6.68	9.01	5.11	5.89	3.47	0.0	1.46	17.93	1.69	0.14	5.38E-10
4.98	6.8	9.36	4.74	5.51	3.5	0.0	1.26	17.36	1.56	0.13	4.85E-10
5.0	6.47	8.98	4.61	5.36	3.5	0.0	1.2	16.86	1.52	0.13	4.87E-10
5.02	6.25	8.67	4.64	5.38	3.49	0.0	1.21	16.77	1.53	0.13	5.04E-10
5.04	5.87	8.11	4.7	5.41	3.47	0.0	1.24	16.6	1.55	0.13	5.37E-10
5.06	5.08	6.69	5.67	6.34	3.36	0.0	1.76	17.6	1.87	0.15	7.49E-10
5.08	3.75	4.56	8.33	8.84	3.15	0.0	3.61	19.75	2.75	0.22	2.44E-09
5.1	2.38	2.69	13.61	13.26	2.87	0.0	8.87	22.79	4.49	0.34	1.70E-08
5.12	1.97	2.2	15.52	14.73	2.78	0.0	10.72	23.33	5.12	0.39	3.13E-08
5.14	2.09	2.36	14.21	13.67	2.83	0.0	9.61	22.66	4.69	0.36	2.30E-08
5.16	2.89	3.41	10.06	10.26	3.02	0.0	5.12	20.57	3.32	0.26	5.93E-09
5.18	3.48	4.26	8.0	8.47	3.14	0.0	3.37	19.21	2.64	0.21	2.48E-09
5.2	3.78	4.68	7.62	8.15	3.18	0.0	3.1	19.23	2.51	0.2	1.91E-09
5.22	4.82	5.99	7.44	8.05	3.25	0.0	3.0	20.56	2.45	0.2	1.18E-09
5.24	2.96	3.34	14.43	14.2	2.9	0.0	10.15	25.68	4.76	0.36	1.37E-08
5.26	1.34	1.42	30.98	27.18	2.46	25.14	21.87	31.51	0.0	0.0	3.07E-07
5.28	1.03	1.08	40.6	34.26	2.31	27.32	28.75	34.24	0.0	0.0	8.79E-07
5.3	0.71	0.74	55.25	44.49	2.12	29.57	37.06	37.06	0.0	0.0	3.18E-06
5.32	0.53	0.55	75.69	58.43	1.95	32.86	41.19	41.19	0.0	0.0	1.03E-05
5.34	0.52	0.53	88.34	67.26	1.9	35.76	44.81	44.81	0.0	0.0	1.55E-05
5.36	0.54	0.55	92.48	70.35	1.89	37.14	46.55	46.55	0.0	0.0	1.65E-05
5.38	0.55	0.56	101.84	77.01	1.86	39.56	49.59	49.59	0.0	0.0	2.02E-05
5.4	0.6	0.61	108.07	81.75	1.85	41.91	52.52	52.52	0.0	0.0	2.08E-05
5.42	0.66	0.68	110.75	84.2	1.87	43.9	55.02	55.02	0.0	0.0	1.88E-05
5.44	0.73	0.74	110.45	84.53	1.89	45.09	56.52	56.52	0.0	0.0	1.63E-05
5.46	0.82	0.83	108.66	83.97	1.92	46.42	58.18	58.18	0.0	0.0	1.29E-05
5.48	0.89	0.91	106.74	83.12	1.95	47.27	59.25	59.25	0.0	0.0	1.08E-05
5.5	0.97	0.99	105.24	82.57	1.97	48.27	60.49	60.49	0.0	0.0	9.06E-06
5.52	1.05	1.07	104.19	82.31	1.99	49.36	61.86	61.86	0.0	0.0	7.72E-06
5.54	1.1	1.12	104.57	82.9	2.0	50.29	63.02	63.02	0.0	0.0	7.23E-06
5.56	1.12	1.14	105.83	84.01	2.0	51.1	64.04	64.04	0.0	0.0	7.20E-06
5.58	1.14	1.15	106.93	84.98	2.0	51.78	64.9	64.9	0.0	0.0	7.21E-06
5.6	1.11	1.13	109.78	87.04	1.99	52.39	65.66	65.66	0.0	0.0	7.97E-06
5.62	1.07	1.09	112.94	89.24	1.97	52.76	66.13	66.13	0.0	0.0	9.12E-06
5.64	1.06	1.07	113.86	89.97	1.97	53.0	66.43	66.43	0.0	0.0	9.47E-06
5.66	1.08	1.09	111.69	88.57	1.98	52.84	66.22	66.22	0.0	0.0	8.82E-06
5.68	1.15	1.17	108.28	86.51	2.0	53.14	66.6	66.6	0.0	0.0	7.33E-06
5.7	1.23	1.25	105.23	84.69	2.03	53.54	67.1	67.1	0.0	0.0	6.11E-06
5.72	1.3	1.32	101.86	82.54	2.05	53.58	67.16	67.16	0.0	0.0	5.17E-06
5.74	1.26	1.28	104.31	84.32	2.04	54.0	67.68	67.68	0.0	0.0	5.75E-06
5.76	1.06	1.08	118.05	93.7	1.95	55.15	69.12	69.12	0.0	0.0	1.03E-05
5.78	0.8	0.81	141.5	109.15	1.82	56.31	70.57	70.57	0.0	0.0	2.56E-05



# CPT Office V. 1.1

## Elaborato grafico prova penetrometrica

21/09/2022

19:26:37

Committente	Dott. Geol. Maurizio Castellari		
Località	Lagosanto (Fe)		
Via	Lagosanto		
Prova	CPTU3		
Tipo prova	CPTU		
Tipo di Prova	Prof. max (m)	Preforo (m)	Falda (m da p.c.)
CPTU	5.06	0.02	1.6

Tabella 1 - Informazioni generali

# 1 - Parametri prova penetrometrica CPTU3

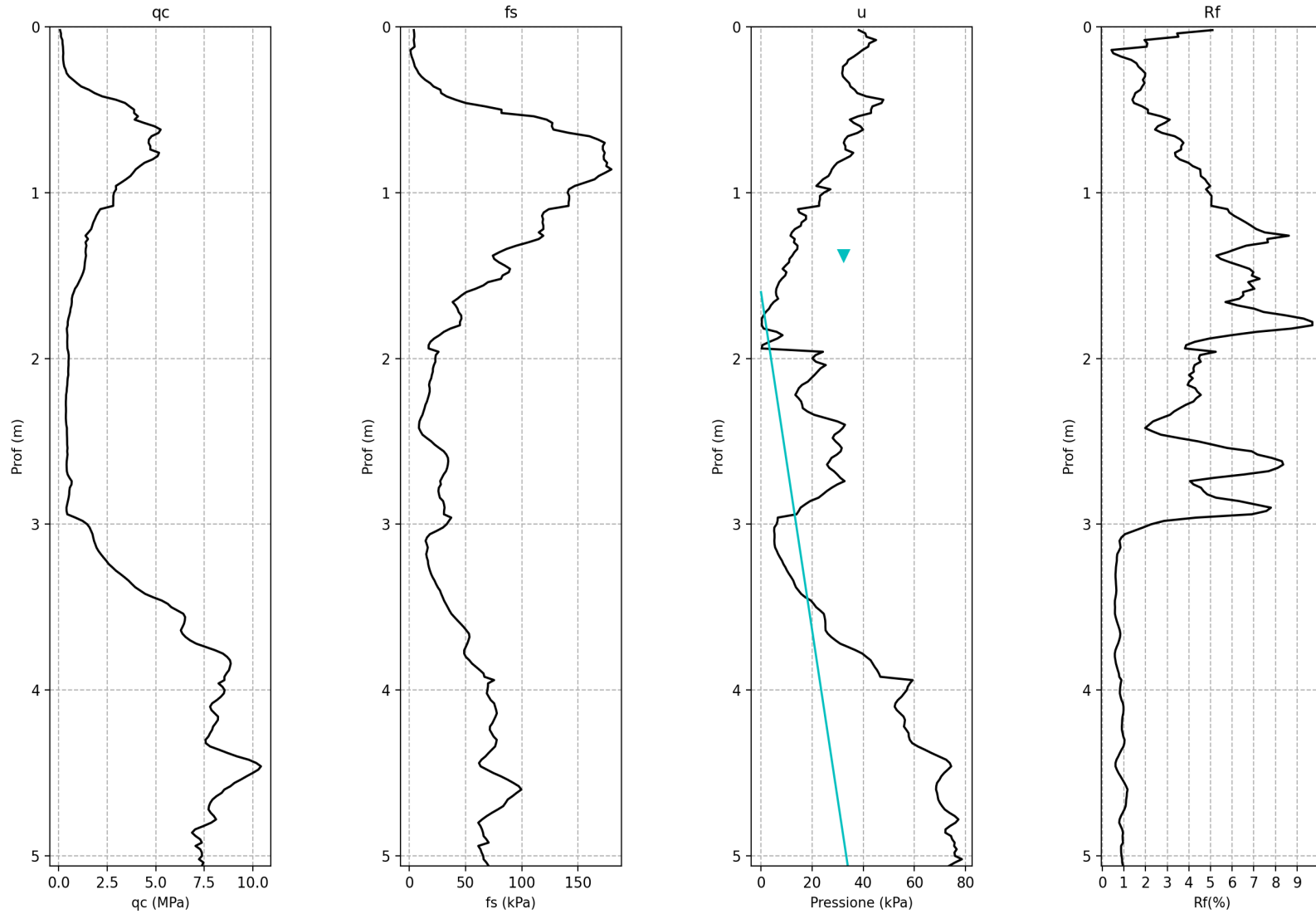


Fig 1 - Plot profondità-variabile della prova penetrometrica elaborata

# 1 - Parametri prova penetrometrica CPTU3

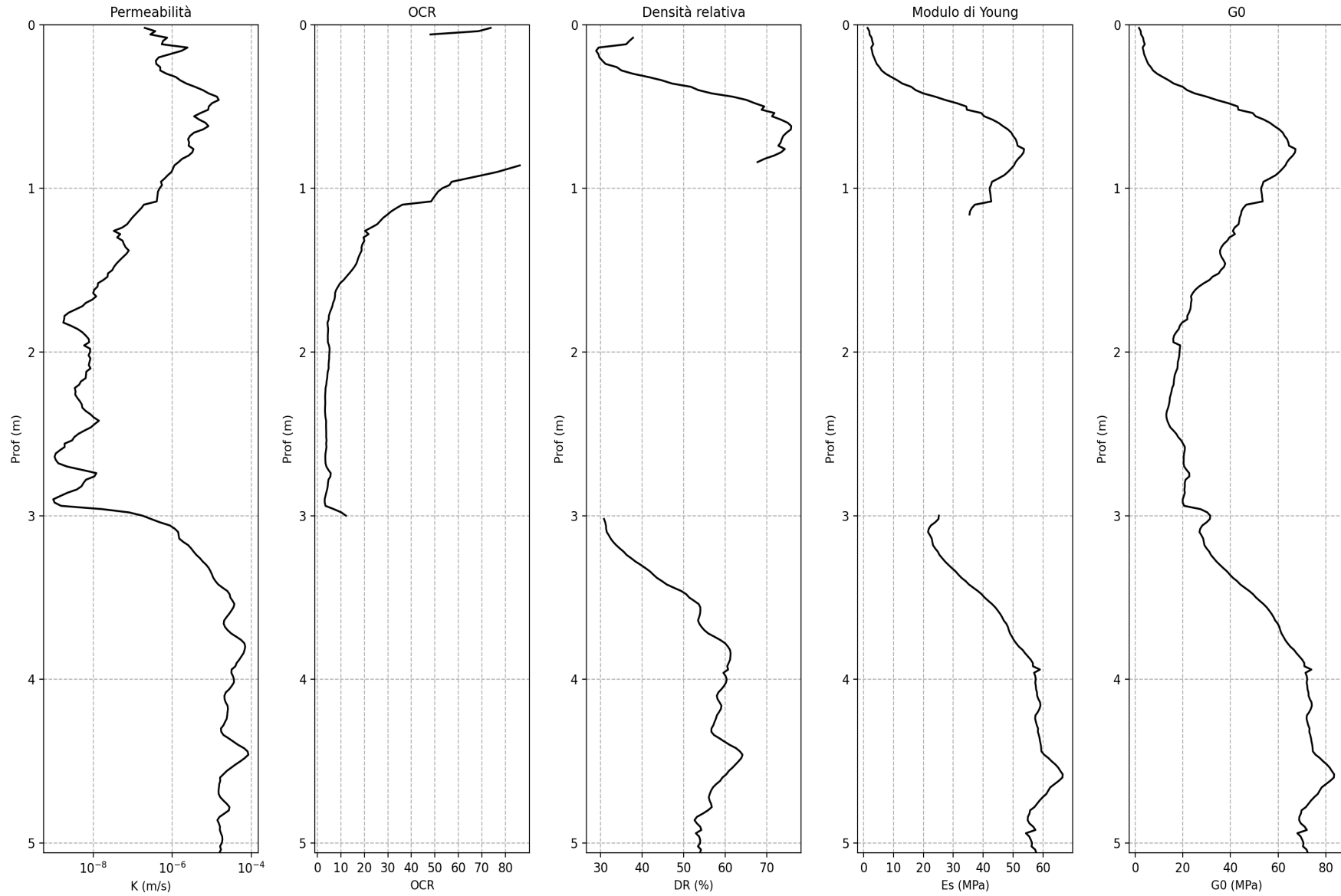


Fig 2 - Plot profondità-variabile della prova penetrometrica elaborata



# 1 - Parametri prova penetrometrica CPTU3

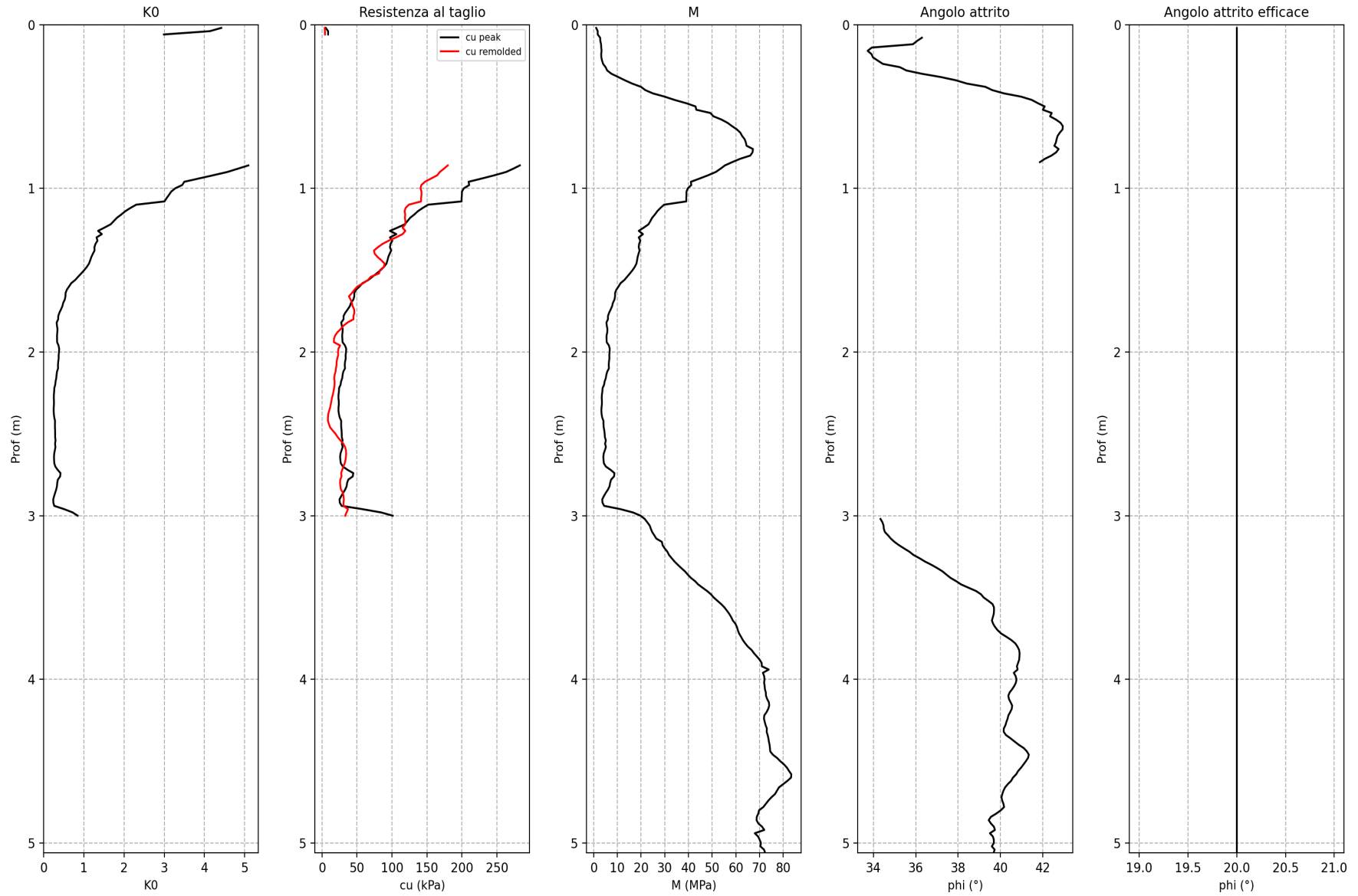


Fig 3 - Plot profondità-variabile della prova penetrometrica elaborata

## 2 - SBT & SBT(n) CPTU3

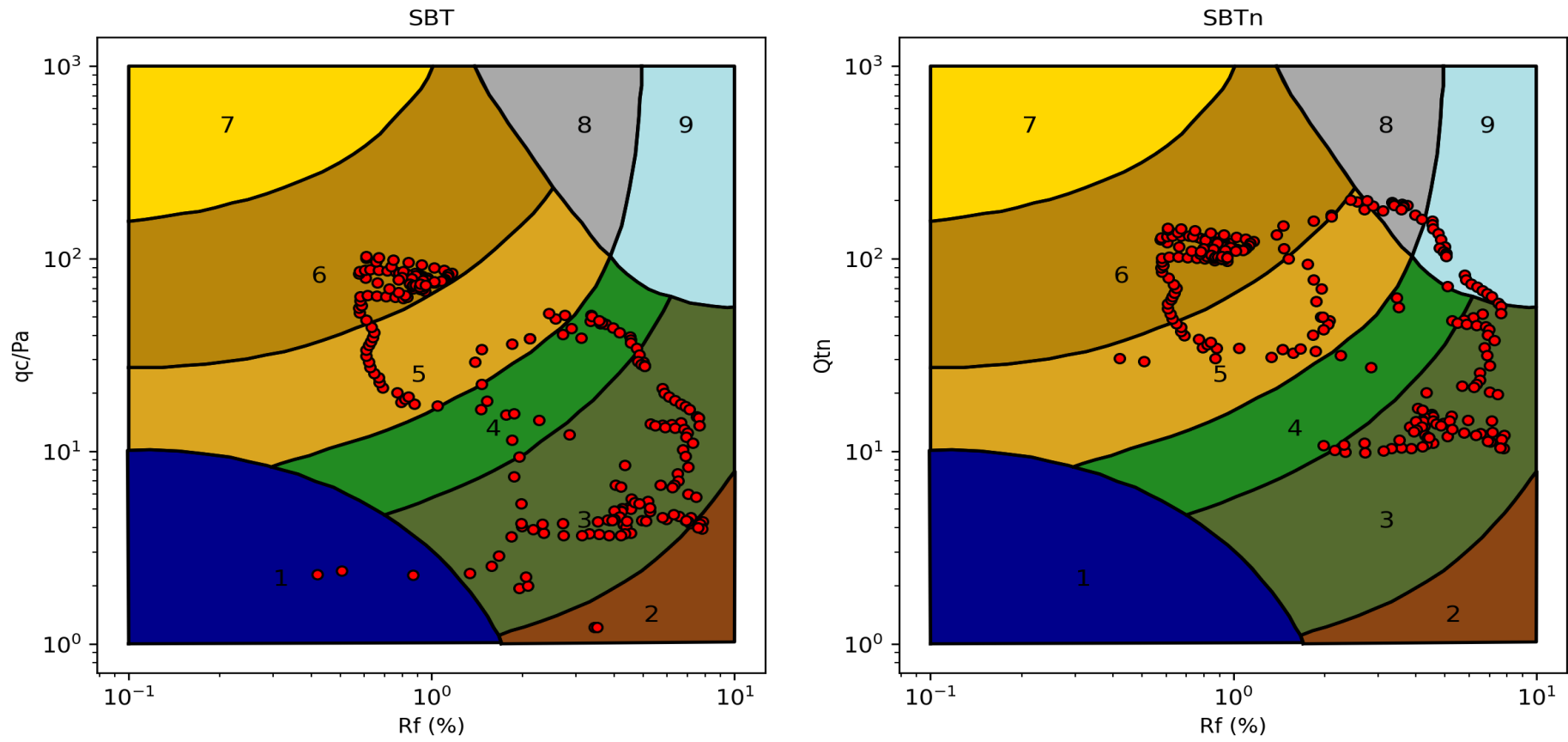


Fig 4 - A sinistra plot valori  $q_c/P_a$ - $R_f$  su SBT chart, a destra plot valori  $Q_{tn}$ - $R_f$  su SBT(n) chart

## 2 - Stratigrafia CPTU3

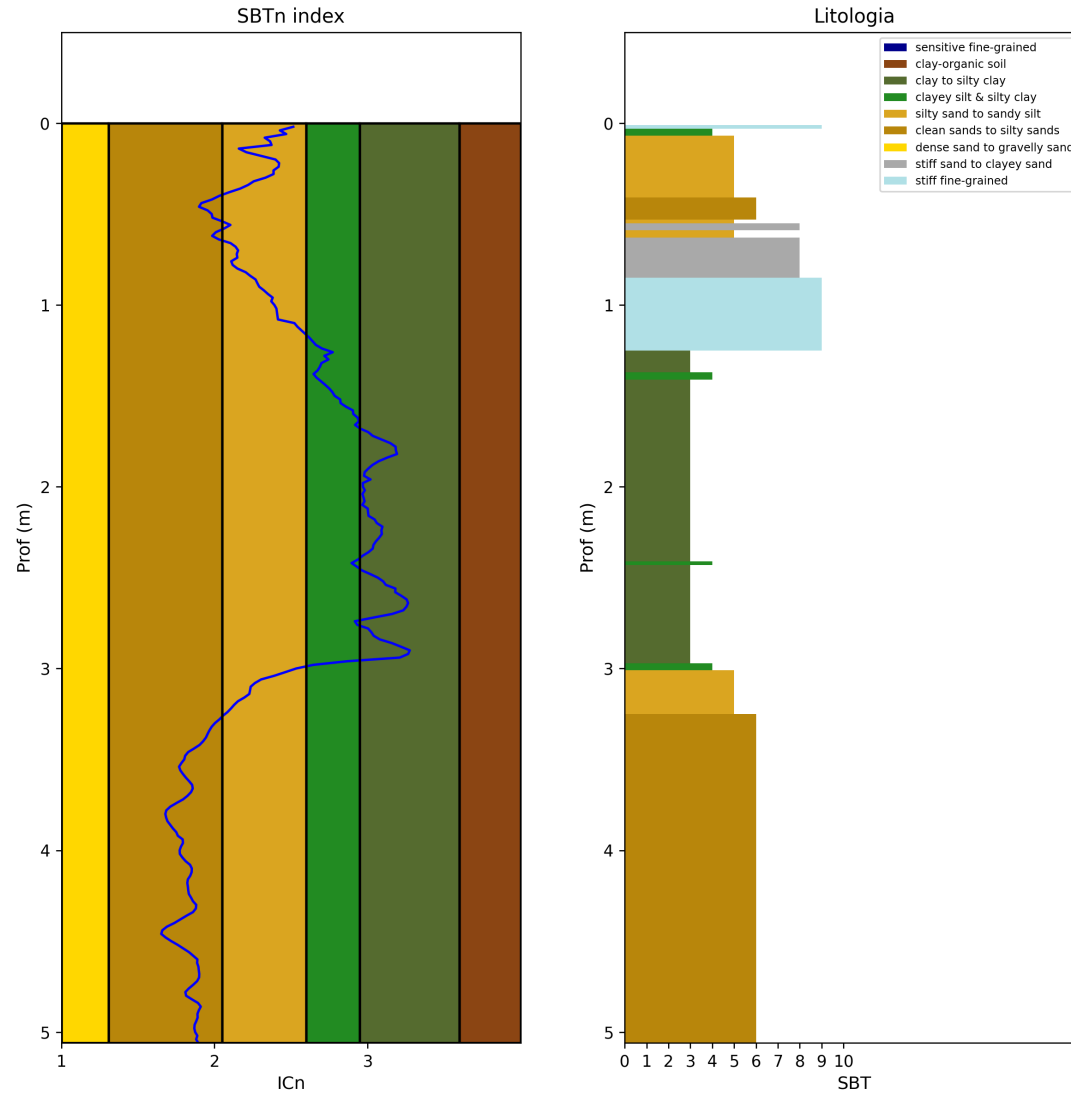


Fig 3 - A sinistra Indice SBT, a destra classificazione stratigrafica da SBT chart

# CPT Office V. 1.1



## Report calcolo prova penetrometrica

21/09/2022

19:26:36

Committente	Dott. Geol. Maurizio Castellari
Località	Lagosanto (Fe)
Via	Lagosanto
Prova	CPTU3
Tipo prova	CPTU

### Tabella 1 - Dati input

Tipo di Prova	Profondità max (m)	Falda (m da p.c.)
CPTU	5.06	1.6

Prof.(m)	qc (MPa)	fs (kPa)	u2 (kPa)	u0 (kPa)	Qt (MPa)	$\gamma$ (KN/m3)	$\sigma_v$ (kPa)	$\sigma_{vp}$ (kPa)	cu (kPa)	$\phi$ (°)	$\phi$ picco(°)	Dr (%)
0.02	0.07	3.89	38.22	0.0	0.08	17.0	0.34	0.34	5.43	0.0	20.0	0.0
0.04	0.12	4.26	40.83	0.0	0.12	12.5	0.59	0.59	8.76	0.0	20.0	0.0
0.06	0.12	4.34	41.23	0.0	0.12	12.5	0.84	0.84	8.75	0.0	20.0	0.0
0.08	0.19	3.85	45.02	0.0	0.2	17.5	1.19	1.19	0.0	36.29	20.0	37.79
0.1	0.19	4.22	42.33	0.0	0.2	17.5	1.54	1.54	0.0	36.06	20.0	36.89
0.12	0.22	4.62	41.94	0.0	0.23	17.5	1.89	1.89	0.0	35.86	20.0	36.14
0.14	0.23	0.98	39.73	0.0	0.23	17.5	2.24	2.24	0.0	33.92	20.0	29.5
0.16	0.23	1.22	38.07	0.0	0.24	17.5	2.59	2.59	0.0	33.72	20.0	28.89
0.18	0.22	2.0	36.25	0.0	0.23	17.5	2.94	2.94	0.0	33.9	20.0	29.45
0.2	0.23	3.15	34.12	0.0	0.24	17.5	3.29	3.29	0.0	33.98	20.0	29.67
0.22	0.25	4.05	33.56	0.0	0.26	17.5	3.64	3.64	0.0	34.2	20.0	30.39
0.24	0.28	4.83	32.06	0.0	0.29	17.5	3.99	3.99	0.0	34.44	20.0	31.16
0.26	0.36	6.68	31.99	0.0	0.36	17.5	4.34	4.34	0.0	35.25	20.0	33.91
0.28	0.41	8.19	31.75	0.0	0.41	17.5	4.69	4.69	0.0	35.55	20.0	34.99
0.3	0.53	10.65	32.06	0.0	0.54	18.0	5.05	5.05	0.0	36.28	20.0	37.75
0.32	0.74	13.97	33.25	0.0	0.75	18.0	5.41	5.41	0.0	37.17	20.0	41.46
0.34	0.94	18.48	34.51	0.0	0.95	18.0	5.77	5.77	0.0	37.89	20.0	44.71
0.36	1.16	21.43	34.99	0.0	1.16	18.0	6.13	6.13	0.0	38.41	20.0	47.19
0.38	1.56	27.58	36.65	0.0	1.57	18.0	6.49	6.49	0.0	39.29	20.0	51.73
0.4	1.85	28.24	37.67	0.0	1.85	18.0	6.85	6.85	0.0	39.61	20.0	53.52
0.42	2.25	33.08	41.23	0.0	2.26	18.0	7.21	7.21	0.0	40.17	20.0	56.71
0.44	2.94	40.99	47.86	0.0	2.95	18.5	7.58	7.58	0.0	40.98	20.0	61.74
0.46	3.42	50.17	47.15	0.0	3.43	18.5	7.95	7.95	0.0	41.48	20.0	65.08
0.48	3.65	67.17	43.6	0.0	3.65	18.0	8.31	8.31	0.0	41.77	20.0	67.09
0.5	3.88	81.92	43.04	0.0	3.89	18.0	8.67	8.67	0.0	42.09	20.0	69.39
0.52	3.88	81.92	43.04	0.0	3.89	18.0	9.03	9.03	0.0	42.0	20.0	68.74
0.54	4.08	110.69	37.99	0.0	4.09	18.0	9.39	9.39	0.0	42.42	20.0	71.84
0.56	3.91	122.08	34.75	0.0	3.92	18.0	9.75	9.75	0.0	42.34	20.0	71.24
0.58	4.4	127.21	36.33	0.0	4.41	18.0	10.11	10.11	0.0	42.62	20.0	73.35
0.6	4.93	126.72	38.86	0.0	4.94	18.0	10.47	10.47	0.0	42.84	20.0	75.05
0.62	5.25	128.12	39.96	0.0	5.26	18.0	10.83	10.83	0.0	42.95	20.0	75.89
0.64	5.14	141.92	37.75	0.0	5.15	18.0	11.19	11.19	0.0	42.94	20.0	75.8
0.66	4.79	160.15	33.96	0.0	4.79	18.0	11.55	11.55	0.0	42.81	20.0	74.77
0.68	4.65	167.86	32.85	0.0	4.65	18.0	11.91	11.91	0.0	42.7	20.0	73.95
0.7	4.63	173.8	32.38	0.0	4.64	18.0	12.27	12.27	0.0	42.66	20.0	73.59
0.72	4.72	172.08	33.01	0.0	4.73	18.0	12.63	12.63	0.0	42.62	20.0	73.34
0.74	4.72	172.08	33.01	0.0	4.73	18.0	12.99	12.99	0.0	42.55	20.0	72.77
0.76	5.17	173.77	36.09	0.0	5.18	18.0	13.35	13.35	0.0	42.75	20.0	74.34
0.78	5.1	172.83	34.91	0.0	5.1	18.0	13.71	13.71	0.0	42.63	20.0	73.44
0.8	4.83	173.07	32.38	0.0	4.84	18.0	14.07	14.07	0.0	42.41	20.0	71.74
0.82	4.42	175.9	29.85	0.0	4.43	18.0	14.43	14.43	0.0	42.1	20.0	69.44
0.84	4.19	175.16	28.67	0.0	4.19	18.0	14.79	14.79	0.0	41.87	20.0	67.75
0.86	3.97	179.74	27.72	0.0	3.97	18.0	15.15	15.15	282.74	0.0	20.0	0.0
0.88	3.84	174.25	27.17	0.0	3.84	18.0	15.51	15.51	273.33	0.0	20.0	0.0
0.9	3.7	168.39	26.38	0.0	3.7	18.0	15.87	15.87	263.18	0.0	20.0	0.0
0.92	3.46	164.74	24.25	0.0	3.47	18.0	16.23	16.23	246.68	0.0	20.0	0.0
0.94	3.21	156.01	22.98	0.0	3.22	17.5	16.58	16.58	228.54	0.0	20.0	0.0
0.96	2.94	147.08	21.64	0.0	2.95	17.5	16.93	16.93	209.46	0.0	20.0	0.0

0.98	2.96	141.95	27.17	0.0	2.96	17.5	17.28	17.28	210.33	0.0	20.0	0.0
1.0	2.85	140.76	24.64	0.0	2.86	17.5	17.63	17.63	202.74	0.0	20.0	0.0
1.02	2.81	142.15	23.06	0.0	2.82	17.5	17.98	17.98	199.92	0.0	20.0	0.0
1.04	2.81	142.15	23.06	0.0	2.82	17.5	18.33	18.33	199.9	0.0	20.0	0.0
1.06	2.81	141.62	22.75	0.0	2.81	17.5	18.68	18.68	199.5	0.0	20.0	0.0
1.08	2.81	141.62	22.75	0.0	2.81	17.5	19.03	19.03	199.48	0.0	20.0	0.0
1.1	2.14	124.01	14.45	0.0	2.14	17.5	19.38	19.38	151.7	0.0	20.0	0.0
1.12	2.03	119.46	15.01	0.0	2.03	17.5	19.73	19.73	143.94	0.0	20.0	0.0
1.14	1.93	117.99	17.61	0.0	1.94	17.5	20.08	20.08	136.98	0.0	20.0	0.0
1.16	1.86	118.93	17.61	0.0	1.87	17.5	20.43	20.43	131.93	0.0	20.0	0.0
1.18	1.78	118.43	15.87	0.0	1.78	17.5	20.78	20.78	126.01	0.0	20.0	0.0
1.2	1.73	119.17	15.56	0.0	1.73	17.5	21.13	21.13	122.21	0.0	20.0	0.0
1.22	1.67	119.17	13.27	0.0	1.68	17.5	21.48	21.48	118.12	0.0	20.0	0.0
1.24	1.53	115.07	12.08	0.0	1.53	17.5	21.83	21.83	107.98	0.0	20.0	0.0
1.26	1.38	119.12	11.53	0.0	1.38	17.5	22.18	22.18	97.09	0.0	20.0	0.0
1.28	1.51	115.11	13.19	0.0	1.51	17.5	22.53	22.53	106.25	0.0	20.0	0.0
1.3	1.38	105.77	12.87	0.0	1.38	17.5	22.88	22.88	97.1	0.0	20.0	0.0
1.32	1.43	95.16	14.29	0.0	1.43	17.5	23.23	23.23	100.53	0.0	20.0	0.0
1.34	1.39	86.36	14.22	0.0	1.39	17.5	23.58	23.58	97.87	0.0	20.0	0.0
1.36	1.38	79.88	13.03	0.0	1.38	17.5	23.93	23.93	97.12	0.0	20.0	0.0
1.38	1.41	74.19	12.24	0.0	1.41	17.5	24.28	24.28	98.89	0.0	20.0	0.0
1.4	1.38	75.42	11.14	0.0	1.38	17.5	24.63	24.63	96.65	0.0	20.0	0.0
1.42	1.35	79.52	10.98	0.0	1.35	17.5	24.98	24.98	94.7	0.0	20.0	0.0
1.44	1.33	84.88	9.64	0.0	1.33	17.5	25.33	25.33	93.55	0.0	20.0	0.0
1.46	1.31	89.51	8.45	0.0	1.32	17.5	25.68	25.68	92.16	0.0	20.0	0.0
1.48	1.26	88.41	9.95	0.0	1.27	17.5	26.03	26.03	88.59	0.0	20.0	0.0
1.5	1.2	82.84	9.48	0.0	1.2	17.5	26.38	26.38	83.79	0.0	20.0	0.0
1.52	1.12	81.49	8.13	0.0	1.12	17.5	26.73	26.73	78.14	0.0	20.0	0.0
1.54	1.04	69.9	7.11	0.0	1.04	17.5	27.08	27.08	72.13	0.0	20.0	0.0
1.56	0.95	65.69	6.56	0.0	0.95	17.5	27.43	27.43	66.21	0.0	20.0	0.0
1.58	0.84	58.85	6.0	0.0	0.84	17.5	27.78	27.78	57.83	0.0	20.0	0.0
1.6	0.78	50.58	5.84	0.0	0.78	17.5	28.13	28.13	53.57	0.0	20.0	0.0
1.62	0.71	46.32	6.0	0.2	0.71	17.5	28.48	28.28	48.73	0.0	20.0	0.0
1.64	0.67	42.72	6.71	0.39	0.67	17.5	28.83	28.44	46.15	0.0	20.0	0.0
1.66	0.67	38.42	4.98	0.59	0.68	17.5	29.18	28.59	46.15	0.0	20.0	0.0
1.68	0.66	40.96	3.87	0.78	0.66	17.5	29.53	28.75	44.83	0.0	20.0	0.0
1.7	0.61	42.77	3.16	0.98	0.61	17.5	29.88	28.9	41.42	0.0	20.0	0.0
1.72	0.59	43.75	1.9	1.18	0.59	17.5	30.23	29.05	39.8	0.0	20.0	0.0
1.74	0.54	46.01	1.03	1.37	0.54	17.5	30.58	29.21	36.69	0.0	20.0	0.0
1.76	0.5	46.26	0.32	1.57	0.5	17.5	30.93	29.36	33.3	0.0	20.0	0.0
1.78	0.46	44.95	0.32	1.77	0.46	17.5	31.28	29.51	30.85	0.0	20.0	0.0
1.8	0.46	44.95	0.32	1.96	0.46	17.5	31.63	29.67	30.82	0.0	20.0	0.0
1.82	0.42	36.44	1.03	2.16	0.42	17.5	31.98	29.82	27.48	0.0	20.0	0.0
1.84	0.43	30.55	6.16	2.35	0.43	17.5	32.33	29.98	28.34	0.0	20.0	0.0
1.86	0.45	26.7	8.45	2.55	0.45	17.5	32.68	30.13	29.69	0.0	20.0	0.0
1.88	0.44	21.96	6.4	2.75	0.44	17.5	33.03	30.28	29.35	0.0	20.0	0.0
1.9	0.44	18.69	3.32	2.94	0.44	17.5	33.38	30.44	28.87	0.0	20.0	0.0
1.92	0.44	17.1	0.55	3.14	0.44	17.5	33.73	30.59	29.14	0.0	20.0	0.0
1.94	0.45	17.02	0.25	3.34	0.45	17.5	34.08	30.74	29.41	0.0	20.0	0.0
1.96	0.49	25.92	24.25	3.53	0.49	17.5	34.43	30.9	32.85	0.0	20.0	0.0
1.98	0.52	23.46	21.32	3.73	0.52	17.5	34.78	31.05	34.65	0.0	20.0	0.0
2.0	0.51	23.01	20.06	3.92	0.52	17.5	35.13	31.21	34.38	0.0	20.0	0.0
2.02	0.5	23.1	21.48	4.12	0.51	17.5	35.48	31.36	33.73	0.0	20.0	0.0
2.04	0.51	21.79	25.35	4.32	0.51	17.5	35.83	31.51	33.93	0.0	20.0	0.0
2.06	0.49	20.93	23.3	4.51	0.5	17.5	36.18	31.67	32.95	0.0	20.0	0.0
2.08	0.49	20.81	22.11	4.71	0.49	17.5	36.53	31.82	32.53	0.0	20.0	0.0
2.1	0.49	19.95	20.93	4.9	0.5	17.5	36.88	31.98	32.94	0.0	20.0	0.0
2.12	0.46	19.38	19.59	5.1	0.46	17.5	37.23	32.13	30.45	0.0	20.0	0.0
2.14	0.45	18.07	18.32	5.3	0.45	17.5	37.58	32.28	29.48	0.0	20.0	0.0
2.16	0.44	17.46	16.03	5.49	0.44	17.5	37.93	32.44	28.93	0.0	20.0	0.0
2.18	0.42	18.03	14.77	5.69	0.42	17.5	38.28	32.59	27.28	0.0	20.0	0.0
2.2	0.41	18.03	14.14	5.89	0.41	17.5	38.63	32.74	26.59	0.0	20.0	0.0
2.22	0.38	17.34	13.43	6.08	0.38	17.5	38.98	32.9	24.43	0.0	20.0	0.0
2.24	0.38	16.44	14.69	6.28	0.38	17.5	39.33	33.05	24.24	0.0	20.0	0.0
2.26	0.37	15.58	15.72	6.47	0.37	17.5	39.68	33.21	23.61	0.0	20.0	0.0
2.28	0.37	14.23	16.11	6.67	0.37	17.5	40.03	33.36	23.52	0.0	20.0	0.0
2.3	0.37	13.46	16.35	6.87	0.38	17.5	40.38	33.51	23.98	0.0	20.0	0.0
2.32	0.37	12.52	18.16	7.06	0.38	17.5	40.73	33.67	24.07	0.0	20.0	0.0
2.34	0.37	11.62	20.77	7.26	0.37	17.5	41.08	33.82	23.6	0.0	20.0	0.0
2.36	0.37	10.11	25.35	7.46	0.37	17.5	41.43	33.97	23.57	0.0	20.0	0.0
2.38	0.38	8.93	29.93	7.65	0.38	17.5	41.78	34.13	24.26	0.0	20.0	0.0
2.4	0.39	8.56	32.85	7.85	0.4	17.5	42.13	34.28	25.32	0.0	20.0	0.0
2.42	0.42	8.44	31.99	8.04	0.43	18.0	42.49	34.45	27.45	0.0	20.0	0.0

2.44	0.42	9.88	30.64	8.24	0.43	17.5	42.84	34.6	27.35	0.0	20.0	0.0
2.46	0.42	11.6	28.75	8.44	0.43	17.5	43.19	34.75	27.52	0.0	20.0	0.0
2.48	0.43	15.37	28.04	8.63	0.44	17.5	43.54	34.91	28.0	0.0	20.0	0.0
2.5	0.43	19.39	29.14	8.83	0.44	17.5	43.89	35.06	28.24	0.0	20.0	0.0
2.52	0.43	22.47	30.56	9.03	0.44	17.5	44.24	35.21	28.31	0.0	20.0	0.0
2.54	0.45	26.4	31.59	9.22	0.46	17.5	44.59	35.37	29.52	0.0	20.0	0.0
2.56	0.44	30.5	31.2	9.42	0.44	17.5	44.94	35.52	28.36	0.0	20.0	0.0
2.58	0.45	32.88	29.7	9.61	0.46	17.5	45.29	35.68	29.51	0.0	20.0	0.0
2.6	0.43	34.28	27.56	9.81	0.44	12.5	45.54	35.73	28.02	0.0	20.0	0.0
2.62	0.41	34.53	26.77	10.01	0.42	17.5	45.89	35.88	26.43	0.0	20.0	0.0
2.64	0.4	34.2	25.83	10.2	0.41	17.5	46.24	36.04	25.92	0.0	20.0	0.0
2.66	0.41	33.59	26.69	10.4	0.41	17.5	46.59	36.19	26.26	0.0	20.0	0.0
2.68	0.42	32.53	28.51	10.59	0.42	12.5	46.84	36.25	26.89	0.0	20.0	0.0
2.7	0.46	30.44	29.85	10.79	0.47	17.5	47.19	36.4	29.88	0.0	20.0	0.0
2.72	0.55	28.89	31.04	10.99	0.56	17.5	47.54	36.55	36.57	0.0	20.0	0.0
2.74	0.67	27.38	32.7	11.18	0.68	17.5	47.89	36.71	44.8	0.0	20.0	0.0
2.76	0.66	27.99	29.85	11.38	0.66	17.5	48.24	36.86	43.99	0.0	20.0	0.0
2.78	0.57	26.15	27.64	11.58	0.57	17.5	48.59	37.01	37.5	0.0	20.0	0.0
2.8	0.55	25.79	25.75	11.77	0.55	17.5	48.94	37.17	35.89	0.0	20.0	0.0
2.82	0.54	26.32	24.17	11.97	0.54	17.5	49.29	37.32	35.25	0.0	20.0	0.0
2.84	0.51	27.07	22.51	12.16	0.51	17.5	49.64	37.48	33.23	0.0	20.0	0.0
2.86	0.47	29.94	19.27	12.36	0.47	17.5	49.99	37.63	30.34	0.0	20.0	0.0
2.88	0.43	30.76	17.3	12.56	0.44	17.5	50.34	37.78	27.6	0.0	20.0	0.0
2.9	0.4	31.25	15.48	12.75	0.4	12.5	50.59	37.84	25.04	0.0	20.0	0.0
2.92	0.4	30.81	14.77	12.95	0.41	12.5	50.84	37.89	25.38	0.0	20.0	0.0
2.94	0.44	30.69	13.9	13.15	0.44	17.5	51.19	38.04	28.07	0.0	20.0	0.0
2.96	0.86	37.2	6.56	13.34	0.86	17.5	51.54	38.2	57.63	0.0	20.0	0.0
2.98	1.23	35.11	6.48	13.54	1.23	18.0	51.9	38.36	84.33	0.0	20.0	0.0
3.0	1.47	33.15	6.08	13.73	1.47	18.0	52.26	38.53	101.06	0.0	20.0	0.0
3.02	1.59	29.79	5.21	13.93	1.59	18.0	52.62	38.69	0.0	34.33	20.0	30.8
3.04	1.67	24.26	5.13	14.13	1.67	18.0	52.98	38.85	0.0	34.42	20.0	31.09
3.06	1.74	18.2	5.29	14.32	1.74	18.0	53.34	39.02	0.0	34.47	20.0	31.26
3.08	1.78	15.62	5.29	14.52	1.78	18.0	53.7	39.18	0.0	34.49	20.0	31.3
3.1	1.82	14.39	5.21	14.72	1.82	18.0	54.06	39.35	0.0	34.54	20.0	31.47
3.12	1.88	15.42	5.29	14.91	1.88	18.0	54.42	39.51	0.0	34.69	20.0	31.97
3.14	1.94	16.32	5.53	15.11	1.94	18.0	54.78	39.67	0.0	34.82	20.0	32.41
3.16	2.04	15.71	6.16	15.3	2.04	18.5	55.15	39.85	0.0	34.99	20.0	32.99
3.18	2.17	14.93	6.71	15.5	2.17	18.5	55.52	40.02	0.0	35.2	20.0	33.73
3.2	2.3	15.47	7.42	15.7	2.3	18.5	55.89	40.19	0.0	35.44	20.0	34.6
3.22	2.45	16.41	8.21	15.89	2.45	18.5	56.26	40.37	0.0	35.7	20.0	35.52
3.24	2.58	16.66	8.77	16.09	2.58	18.5	56.63	40.54	0.0	35.89	20.0	36.25
3.26	2.77	17.36	9.56	16.28	2.77	18.5	57.0	40.72	0.0	36.18	20.0	37.35
3.28	2.95	18.26	10.19	16.48	2.95	18.5	57.37	40.89	0.0	36.43	20.0	38.37
3.3	3.18	19.29	10.98	16.68	3.18	18.5	57.74	41.06	0.0	36.74	20.0	39.61
3.32	3.39	20.64	11.85	16.87	3.39	18.5	58.11	41.24	0.0	37.01	20.0	40.76
3.34	3.6	22.36	12.64	17.07	3.6	18.5	58.48	41.41	0.0	37.26	20.0	41.84
3.36	3.77	23.68	13.11	17.27	3.77	18.5	58.85	41.58	0.0	37.45	20.0	42.67
3.38	3.94	25.24	13.66	17.46	3.95	18.5	59.22	41.76	0.0	37.64	20.0	43.54
3.4	4.2	27.21	14.69	17.66	4.2	18.5	59.59	41.93	0.0	37.91	20.0	44.77
3.42	4.45	28.27	15.72	17.85	4.46	19.0	59.97	42.12	0.0	38.14	20.0	45.88
3.44	4.86	29.59	17.3	18.05	4.86	19.0	60.35	42.3	0.0	38.49	20.0	47.58
3.46	5.31	30.78	19.51	18.25	5.31	19.0	60.73	42.48	0.0	38.84	20.0	49.39
3.48	5.62	32.42	20.61	18.44	5.62	19.0	61.11	42.67	0.0	39.08	20.0	50.62
3.5	5.8	34.02	21.56	18.64	5.8	19.0	61.49	42.85	0.0	39.21	20.0	51.31
3.52	6.11	35.57	23.14	18.84	6.12	19.0	61.87	43.03	0.0	39.43	20.0	52.48
3.54	6.42	37.34	24.56	19.03	6.43	19.0	62.25	43.22	0.0	39.63	20.0	53.6
3.56	6.51	40.0	24.88	19.23	6.52	19.0	62.63	43.4	0.0	39.7	20.0	53.99
3.58	6.5	42.75	25.11	19.42	6.5	19.0	63.01	43.59	0.0	39.7	20.0	54.0
3.6	6.46	45.57	25.19	19.62	6.46	19.0	63.39	43.77	0.0	39.68	20.0	53.92
3.62	6.37	48.32	25.19	19.82	6.38	19.0	63.77	43.95	0.0	39.64	20.0	53.69
3.64	6.29	50.7	25.27	20.01	6.3	19.0	64.15	44.14	0.0	39.6	20.0	53.43
3.66	6.37	52.99	26.14	20.21	6.38	19.0	64.53	44.32	0.0	39.65	20.0	53.75
3.68	6.54	53.44	27.48	20.4	6.54	19.0	64.91	44.51	0.0	39.75	20.0	54.28
3.7	6.77	52.54	29.14	20.6	6.77	19.0	65.29	44.69	0.0	39.87	20.0	54.98
3.72	7.08	51.47	30.96	20.8	7.09	19.0	65.67	44.87	0.0	40.03	20.0	55.94
3.74	7.57	50.08	34.04	20.99	7.58	19.0	66.05	45.06	0.0	40.28	20.0	57.42
3.76	8.06	48.73	37.04	21.19	8.07	19.0	66.43	45.24	0.0	40.52	20.0	58.84
3.78	8.46	48.73	39.65	21.39	8.47	19.0	66.81	45.42	0.0	40.7	20.0	59.99
3.8	8.68	50.2	41.23	21.58	8.69	19.0	67.19	45.61	0.0	40.81	20.0	60.64
3.82	8.82	53.27	42.88	21.78	8.83	19.0	67.57	45.79	0.0	40.88	20.0	61.13
3.84	8.86	55.69	43.67	21.97	8.87	19.0	67.95	45.98	0.0	40.91	20.0	61.28
3.86	8.82	59.17	44.46	22.17	8.83	19.0	68.33	46.16	0.0	40.9	20.0	61.23
3.88	8.77	62.69	45.41	22.37	8.78	19.0	68.71	46.34	0.0	40.89	20.0	61.15

3.9	8.64	65.93	46.12	22.56	8.65	19.0	69.09	46.53	0.0	40.83	20.0	60.81
3.92	8.54	66.7	46.68	22.76	8.55	19.0	69.47	46.71	0.0	40.78	20.0	60.47
3.94	8.54	75.34	59.31	22.96	8.55	19.0	69.85	46.89	0.0	40.81	20.0	60.69
3.96	8.23	69.93	58.21	23.15	8.25	19.0	70.23	47.08	0.0	40.63	20.0	59.54
3.98	8.43	69.85	57.42	23.35	8.45	19.0	70.61	47.26	0.0	40.72	20.0	60.09
4.0	8.55	69.36	57.02	23.54	8.56	19.0	70.99	47.45	0.0	40.76	20.0	60.35
4.02	8.51	68.87	55.99	23.74	8.52	19.0	71.37	47.63	0.0	40.73	20.0	60.17
4.04	8.36	70.55	54.97	23.94	8.37	19.0	71.75	47.81	0.0	40.66	20.0	59.7
4.06	8.15	72.31	53.55	24.13	8.16	19.0	72.13	48.0	0.0	40.55	20.0	59.07
4.08	7.91	75.38	52.6	24.33	7.92	19.0	72.51	48.18	0.0	40.43	20.0	58.33
4.1	7.8	76.28	52.28	24.52	7.81	19.0	72.89	48.36	0.0	40.37	20.0	57.96
4.12	7.87	77.13	53.07	24.72	7.88	19.0	73.27	48.55	0.0	40.4	20.0	58.13
4.14	8.03	77.79	54.41	24.92	8.04	19.0	73.65	48.73	0.0	40.48	20.0	58.62
4.16	8.21	76.6	55.76	25.11	8.22	19.0	74.03	48.92	0.0	40.55	20.0	59.07
4.18	8.2	75.2	56.31	25.31	8.21	19.0	74.41	49.1	0.0	40.54	20.0	58.95
4.2	8.09	73.77	56.15	25.51	8.1	19.0	74.79	49.28	0.0	40.46	20.0	58.5
4.22	7.96	71.68	55.92	25.7	7.97	19.0	75.17	49.47	0.0	40.38	20.0	57.97
4.24	7.9	71.51	56.86	25.9	7.91	19.0	75.55	49.65	0.0	40.34	20.0	57.75
4.26	7.8	73.19	57.73	26.09	7.81	19.0	75.93	49.84	0.0	40.28	20.0	57.41
4.28	7.71	74.86	57.81	26.29	7.73	19.0	76.31	50.02	0.0	40.24	20.0	57.13
4.3	7.57	77.69	58.21	26.49	7.58	19.0	76.69	50.2	0.0	40.16	20.0	56.67
4.32	7.58	77.07	59.15	26.68	7.59	19.0	77.07	50.39	0.0	40.15	20.0	56.64
4.34	7.8	76.25	61.36	26.88	7.81	19.0	77.45	50.57	0.0	40.26	20.0	57.27
4.36	8.27	73.26	64.13	27.08	8.28	19.0	77.83	50.75	0.0	40.48	20.0	58.58
4.38	8.71	70.35	66.74	27.27	8.72	19.0	78.21	50.94	0.0	40.67	20.0	59.79
4.4	9.19	67.69	69.58	27.47	9.2	19.0	78.59	51.12	0.0	40.87	20.0	61.05
4.42	9.79	64.12	72.42	27.66	9.8	19.0	78.97	51.31	0.0	41.11	20.0	62.57
4.44	10.18	61.91	73.84	27.86	10.2	19.5	79.36	51.5	0.0	41.25	20.0	63.52
4.46	10.42	63.34	74.4	28.06	10.44	19.5	79.75	51.69	0.0	41.34	20.0	64.15
4.48	10.28	68.95	73.05	28.25	10.3	19.5	80.14	51.89	0.0	41.3	20.0	63.89
4.5	9.99	74.6	71.63	28.45	10.01	19.0	80.52	52.07	0.0	41.2	20.0	63.21
4.52	9.68	81.36	70.53	28.65	9.69	19.0	80.9	52.25	0.0	41.09	20.0	62.46
4.54	9.38	87.26	69.82	28.84	9.4	19.0	81.28	52.44	0.0	40.97	20.0	61.71
4.56	9.06	92.5	68.87	29.04	9.07	19.0	81.66	52.62	0.0	40.84	20.0	60.83
4.58	8.85	97.33	68.55	29.23	8.86	19.0	82.04	52.81	0.0	40.74	20.0	60.26
4.6	8.53	99.54	68.47	29.43	8.55	19.0	82.42	52.99	0.0	40.59	20.0	59.31
4.62	8.4	95.4	68.87	29.63	8.41	19.0	82.8	53.17	0.0	40.5	20.0	58.76
4.64	8.13	91.67	69.1	29.82	8.14	19.0	83.18	53.36	0.0	40.35	20.0	57.81
4.66	7.93	87.45	69.34	30.02	7.94	19.0	83.56	53.54	0.0	40.22	20.0	57.03
4.68	7.81	85.57	69.97	30.21	7.82	19.0	83.94	53.73	0.0	40.14	20.0	56.58
4.7	7.74	83.43	70.84	30.41	7.76	19.0	84.32	53.91	0.0	40.09	20.0	56.26
4.72	7.72	78.64	71.87	30.61	7.73	19.0	84.7	54.09	0.0	40.05	20.0	56.03
4.74	7.83	73.48	73.69	30.8	7.85	19.0	85.08	54.28	0.0	40.08	20.0	56.22
4.76	8.0	68.77	75.82	31.0	8.01	19.0	85.46	54.46	0.0	40.14	20.0	56.57
4.78	8.11	64.71	77.24	31.2	8.12	19.0	85.84	54.64	0.0	40.17	20.0	56.76
4.8	7.85	61.23	76.05	31.39	7.87	19.0	86.22	54.83	0.0	40.02	20.0	55.83
4.82	7.46	63.19	73.92	31.59	7.47	19.0	86.6	55.01	0.0	39.8	20.0	54.59
4.84	7.03	64.54	72.18	31.78	7.04	19.0	86.98	55.2	0.0	39.55	20.0	53.17
4.86	6.87	65.48	72.11	31.98	6.88	19.0	87.36	55.38	0.0	39.44	20.0	52.59
4.88	7.05	65.97	74.32	32.18	7.06	19.0	87.74	55.56	0.0	39.55	20.0	53.16
4.9	7.29	68.51	74.79	32.37	7.3	19.0	88.12	55.75	0.0	39.69	20.0	53.97
4.92	7.38	70.48	75.74	32.57	7.39	19.0	88.5	55.93	0.0	39.74	20.0	54.24
4.94	7.05	61.23	75.56	32.77	7.06	19.0	88.88	56.11	0.0	39.5	20.0	52.9
4.96	7.29	63.19	76.56	32.96	7.31	19.0	89.26	56.3	0.0	39.64	20.0	53.7
4.98	7.38	64.25	75.66	33.16	7.39	19.0	89.64	56.48	0.0	39.69	20.0	53.95
5.0	7.38	65.65	75.9	33.35	7.4	19.0	90.02	56.67	0.0	39.69	20.0	53.95
5.02	7.23	65.97	78.58	33.55	7.24	19.0	90.4	56.85	0.0	39.59	20.0	53.41
5.04	7.46	68.51	75.86	33.75	7.47	19.0	90.78	57.03	0.0	39.73	20.0	54.16
5.06	7.38	70.41	73.59	33.94	7.39	19.0	91.16	57.22	0.0	39.68	20.0	53.89

Tabella 2 - Dati output

Prof.(m)	Rf (%)	FR (%)	Qt1	Qtn	IC	Es (MPa)	M (MPa)	G0 (MPa)	OCR	K0	KSBT
0.02	5.09	5.11	223.66	71.68	2.52	1.32	1.06	1.65	73.81	4.42	2.02E-07
0.04	3.45	3.47	207.87	62.84	2.43	1.91	1.72	2.39	68.6	4.13	3.73E-07
0.06	3.52	3.54	145.88	55.93	2.47	2.01	1.72	2.51	48.14	2.99	2.79E-07
0.08	1.95	1.96	165.03	49.99	2.33	2.69	2.75	3.37	0.0	0.0	7.46E-07
0.1	2.08	2.09	130.67	47.63	2.36	2.88	2.82	3.61	0.0	0.0	5.84E-07
0.12	2.05	2.07	118.43	45.7	2.37	3.25	3.13	4.07	0.0	0.0	5.46E-07
0.14	0.42	0.42	103.0	30.46	2.16	2.55	3.2	3.2	0.0	0.0	2.44E-06
0.16	0.51	0.51	92.5	29.22	2.21	2.82	3.35	3.54	0.0	0.0	1.73E-06
0.18	0.87	0.88	77.3	30.35	2.3	3.02	3.18	3.78	0.0	0.0	8.86E-07
0.2	1.34	1.36	70.62	30.81	2.4	3.48	3.25	4.36	0.0	0.0	4.57E-07
0.22	1.58	1.6	69.61	32.32	2.42	3.91	3.55	4.9	0.0	0.0	3.86E-07
0.24	1.67	1.69	71.7	33.99	2.42	4.4	4.0	5.51	0.0	0.0	3.95E-07
0.26	1.83	1.85	82.97	40.24	2.39	5.31	5.04	6.65	0.0	0.0	4.99E-07
0.28	1.98	2.01	87.12	42.85	2.39	6.02	5.72	7.55	0.0	0.0	4.98E-07
0.3	1.97	1.99	105.97	49.87	2.33	7.38	7.49	9.25	0.0	0.0	7.19E-07
0.32	1.87	1.89	137.01	60.17	2.26	9.28	10.38	11.63	0.0	0.0	1.23E-06
0.34	1.95	1.96	163.18	69.95	2.22	11.25	13.18	14.1	0.0	0.0	1.59E-06
0.36	1.84	1.85	188.79	77.95	2.17	12.95	16.24	16.24	0.0	0.0	2.28E-06
0.38	1.76	1.77	240.35	93.67	2.1	15.95	19.99	19.99	0.0	0.0	3.77E-06
0.4	1.52	1.53	269.73	100.24	2.03	17.39	21.8	21.8	0.0	0.0	5.95E-06
0.42	1.47	1.47	312.14	112.56	1.98	19.94	24.99	24.99	0.0	0.0	8.32E-06
0.44	1.39	1.39	388.77	133.39	1.92	23.92	29.98	29.98	0.0	0.0	1.35E-05
0.46	1.46	1.47	430.65	148.26	1.9	27.25	34.15	34.15	0.0	0.0	1.50E-05
0.48	1.84	1.84	438.72	157.54	1.96	31.17	39.06	39.06	0.0	0.0	1.01E-05
0.5	2.1	2.11	447.95	168.53	1.98	34.33	43.03	43.03	0.0	0.0	8.42E-06
0.52	2.1	2.11	430.05	165.4	1.99	34.55	43.31	43.31	0.0	0.0	8.12E-06
0.54	2.71	2.71	434.67	180.64	2.05	39.33	49.3	49.3	0.0	0.0	5.22E-06
0.56	3.12	3.12	400.84	177.64	2.1	40.33	50.55	50.55	0.0	0.0	3.58E-06
0.58	2.89	2.89	435.09	188.3	2.06	43.04	53.95	53.95	0.0	0.0	4.80E-06
0.6	2.56	2.57	470.95	197.16	2.01	45.1	56.53	56.53	0.0	0.0	6.97E-06
0.62	2.44	2.44	484.78	201.57	1.99	46.59	58.4	58.4	0.0	0.0	8.24E-06
0.64	2.76	2.76	459.22	201.09	2.03	48.24	60.46	60.46	0.0	0.0	6.04E-06
0.66	3.34	3.35	413.89	195.65	2.11	49.4	61.91	61.91	0.0	0.0	3.55E-06
0.68	3.61	3.62	389.68	191.42	2.14	50.0	62.67	62.67	0.0	0.0	2.82E-06
0.7	3.75	3.76	376.83	189.56	2.15	50.85	63.73	63.73	0.0	0.0	2.52E-06
0.72	3.64	3.65	373.13	188.24	2.15	51.26	64.24	64.24	0.0	0.0	2.68E-06
0.74	3.64	3.65	362.76	185.35	2.15	51.5	64.54	64.54	0.0	0.0	2.61E-06
0.76	3.36	3.36	386.83	193.44	2.11	53.66	67.25	67.25	0.0	0.0	3.45E-06
0.78	3.39	3.4	371.19	188.75	2.12	53.5	67.06	67.06	0.0	0.0	3.23E-06
0.8	3.58	3.59	342.78	180.13	2.15	52.75	66.12	66.12	0.0	0.0	2.59E-06
0.82	3.97	3.99	305.85	168.76	2.2	51.66	61.79	64.75	0.0	0.0	1.78E-06
0.84	4.18	4.19	282.52	160.67	2.23	50.82	58.5	63.69	0.0	0.0	1.44E-06
0.86	4.52	4.54	261.28	156.88	2.27	50.29	55.42	63.03	86.22	5.09	1.13E-06
0.88	4.54	4.55	246.72	150.3	2.28	49.33	53.57	61.83	81.42	4.83	1.05E-06
0.9	4.55	4.57	232.17	143.57	2.29	48.27	51.58	60.49	76.62	4.57	9.58E-07
0.92	4.75	4.77	212.79	135.11	2.32	47.01	48.35	58.92	70.22	4.22	7.74E-07
0.94	4.85	4.88	192.97	125.43	2.35	45.04	44.79	56.45	63.68	3.86	6.43E-07
0.96	4.99	5.02	173.21	115.51	2.38	42.93	41.05	53.81	57.16	3.5	5.18E-07
0.98	4.79	4.82	170.41	113.51	2.37	42.6	41.23	53.4	56.23	3.45	5.53E-07
1.0	4.93	4.96	161.0	109.14	2.39	42.12	39.74	52.79	53.13	3.27	4.81E-07
1.02	5.05	5.08	155.67	106.92	2.41	42.26	39.18	52.97	51.37	3.17	4.37E-07
1.04	5.05	5.08	152.68	105.54	2.41	42.44	39.18	53.19	50.38	3.12	4.26E-07
1.06	5.04	5.07	149.51	103.99	2.41	42.53	39.1	53.3	49.34	3.06	4.17E-07
1.08	5.04	5.07	146.75	102.69	2.42	42.7	39.1	53.52	48.43	3.01	4.07E-07
1.1	5.79	5.84	109.59	82.24	2.52	37.21	29.73	46.63	36.16	2.3	1.92E-07
1.12	5.87	5.93	102.14	77.84	2.54	36.21	28.21	45.38	33.71	2.16	1.67E-07
1.14	6.09	6.15	95.51	74.14	2.57	35.6	26.85	44.62	31.52	2.03	1.39E-07
1.16	6.37	6.44	90.4	71.45	2.59	35.41	25.86	44.38	29.83	1.93	1.17E-07
1.18	6.64	6.71	84.9	68.31	2.62	0.0	24.7	43.83	28.02	1.82	9.70E-08
1.2	6.88	6.97	80.97	66.12	2.64	0.0	23.95	43.67	26.72	1.75	8.36E-08
1.22	7.11	7.21	76.99	63.79	2.66	0.0	23.15	43.36	25.41	1.67	7.20E-08
1.24	7.5	7.61	69.25	58.84	2.7	0.0	21.16	41.73	22.85	1.52	5.42E-08
1.26	8.62	8.76	61.28	54.25	2.77	0.0	19.03	40.98	20.22	1.36	3.33E-08
1.28	7.62	7.74	66.02	56.79	2.72	0.0	20.83	41.86	21.79	1.45	4.87E-08
1.3	7.65	7.78	59.41	51.94	2.74	0.0	19.03	39.55	19.61	1.32	4.05E-08
1.32	6.65	6.76	60.59	51.76	2.7	0.0	19.7	38.66	19.99	1.34	5.57E-08
1.34	6.2	6.3	58.1	49.46	2.69	0.0	19.18	37.15	19.17	1.29	5.98E-08
1.36	5.77	5.88	56.82	48.08	2.67	0.0	19.03	36.19	18.75	1.26	6.63E-08
1.38	5.27	5.36	57.02	47.66	2.65	0.0	19.38	35.61	18.82	1.27	8.01E-08
1.4	5.47	5.57	54.94	46.49	2.67	0.0	18.94	35.69	18.13	1.23	6.97E-08



1.42	5.89	6.0	53.07	45.66	2.7	0.0	18.56	36.27	17.51	1.19	5.69E-08
1.44	6.36	6.48	51.7	45.2	2.72	0.0	18.33	37.12	17.06	1.16	4.68E-08
1.46	6.8	6.94	50.24	44.58	2.75	0.0	18.06	37.8	16.58	1.13	3.90E-08
1.48	6.98	7.13	47.64	42.78	2.77	0.0	17.36	37.3	15.72	1.08	3.37E-08
1.5	6.91	7.06	44.47	40.26	2.79	0.0	16.42	35.93	14.67	1.01	3.05E-08
1.52	7.27	7.45	40.93	37.77	2.82	0.0	15.32	35.07	13.51	0.94	2.37E-08
1.54	6.74	6.92	37.29	34.5	2.82	0.0	14.14	32.5	12.31	0.86	2.32E-08
1.56	6.88	7.09	33.79	31.44	2.86	0.0	12.98	31.19	11.15	0.79	1.82E-08
1.58	7.03	7.27	29.14	27.85	2.9	0.0	11.33	28.82	9.62	0.69	1.33E-08
1.6	6.5	6.74	26.66	25.54	2.91	0.0	10.5	26.81	8.8	0.63	1.30E-08
1.62	6.52	6.79	24.12	23.49	2.94	0.0	9.55	25.27	7.96	0.58	1.07E-08
1.64	6.33	6.61	22.72	22.24	2.94	0.0	9.04	24.2	7.5	0.55	1.00E-08
1.66	5.69	5.95	22.6	21.81	2.92	0.0	9.05	23.43	7.46	0.55	1.20E-08
1.68	6.23	6.53	21.84	21.47	2.95	0.0	8.79	23.73	7.21	0.53	9.54E-09
1.7	7.01	7.38	20.07	20.34	3.01	0.0	8.12	23.46	6.62	0.49	6.55E-09
1.72	7.45	7.85	19.18	19.75	3.03	0.0	7.8	23.36	6.33	0.47	5.38E-09
1.74	8.46	8.96	17.58	18.69	3.09	0.0	7.19	23.15	5.8	0.43	3.60E-09
1.76	9.31	9.92	15.88	17.16	3.15	0.0	6.53	22.61	5.24	0.39	2.41E-09
1.78	9.71	10.41	14.63	16.06	3.18	0.0	6.05	21.89	4.83	0.37	1.88E-09
1.8	9.71	10.42	14.54	15.97	3.19	0.0	6.04	21.93	4.8	0.36	1.86E-09
1.82	8.74	9.47	12.9	14.21	3.19	0.0	5.39	19.74	4.26	0.33	1.76E-09
1.84	7.12	7.7	13.23	14.36	3.13	0.0	5.55	18.76	4.37	0.33	2.76E-09
1.86	5.96	6.43	13.79	14.51	3.07	0.0	5.82	18.31	4.55	0.35	4.09E-09
1.88	4.95	5.34	13.57	13.97	3.03	0.0	5.74	17.22	4.48	0.34	5.39E-09
1.9	4.27	4.62	13.28	13.47	3.01	0.0	5.44	16.35	4.38	0.34	6.54E-09
1.92	3.87	4.19	13.34	13.36	2.98	0.0	5.45	16.02	4.4	0.34	7.73E-09
1.94	3.82	4.13	13.39	13.38	2.98	0.0	5.51	16.08	4.42	0.34	7.96E-09
1.96	5.24	5.63	14.89	15.22	3.02	0.0	6.44	18.95	4.91	0.37	5.92E-09
1.98	4.51	4.84	15.62	15.55	2.97	0.0	6.79	18.76	5.16	0.39	8.41E-09
2.0	4.46	4.78	15.42	15.36	2.97	0.0	6.74	18.63	5.09	0.38	8.36E-09
2.02	4.55	4.89	15.06	15.1	2.98	0.0	6.61	18.56	4.97	0.38	7.68E-09
2.04	4.26	4.59	15.07	14.99	2.97	0.0	6.65	18.31	4.97	0.38	8.56E-09
2.06	4.21	4.54	14.57	14.54	2.97	0.0	6.46	17.95	4.81	0.36	8.13E-09
2.08	4.23	4.57	14.31	14.34	2.98	0.0	6.38	17.87	4.72	0.36	7.76E-09
2.1	4.01	4.33	14.42	14.34	2.97	0.0	6.46	17.75	4.76	0.36	8.62E-09
2.12	4.18	4.54	13.27	13.44	3.0	0.0	5.73	17.17	4.38	0.34	6.73E-09
2.14	4.01	4.38	12.79	12.96	3.0	0.0	5.35	16.66	4.22	0.32	6.63E-09
2.16	3.94	4.31	12.49	12.68	3.01	0.0	5.14	16.42	4.12	0.32	6.47E-09
2.18	4.29	4.72	11.72	12.14	3.05	0.0	4.64	16.27	3.87	0.3	4.92E-09
2.2	4.39	4.84	11.37	11.87	3.06	0.0	4.42	16.16	3.75	0.29	4.43E-09
2.22	4.55	5.07	10.4	11.05	3.1	0.0	3.78	15.55	3.43	0.27	3.43E-09
2.24	4.34	4.85	10.27	10.88	3.09	0.0	3.69	15.3	3.39	0.27	3.60E-09
2.26	4.21	4.71	9.95	10.56	3.09	0.0	3.49	14.96	3.28	0.26	3.53E-09
2.28	3.86	4.32	9.87	10.38	3.08	0.0	3.42	14.58	3.26	0.26	3.97E-09
2.3	3.58	4.01	10.02	10.42	3.06	0.0	3.5	14.48	3.31	0.26	4.61E-09
2.32	3.31	3.72	10.01	10.33	3.04	0.0	3.48	14.23	3.3	0.26	5.17E-09
2.34	3.13	3.52	9.77	10.06	3.03	0.0	3.32	13.87	3.22	0.25	5.34E-09
2.36	2.72	3.06	9.71	9.87	3.01	0.0	3.26	13.38	3.21	0.25	6.48E-09
2.38	2.34	2.63	9.95	9.92	2.97	0.0	3.37	13.1	3.28	0.26	8.52E-09
2.4	2.16	2.41	10.34	10.16	2.94	0.0	3.6	13.18	3.41	0.27	1.04E-08
2.42	1.98	2.2	11.16	10.74	2.9	0.0	4.13	13.54	3.68	0.29	1.41E-08
2.44	2.32	2.58	11.07	10.84	2.93	0.0	4.15	14.1	3.65	0.28	1.10E-08
2.46	2.71	3.01	11.09	11.03	2.96	0.0	4.25	14.77	3.66	0.28	8.81E-09
2.48	3.53	3.92	11.23	11.46	3.02	0.0	4.49	16.09	3.71	0.29	6.05E-09
2.5	4.41	4.9	11.28	11.78	3.07	0.0	4.66	17.29	3.72	0.29	4.26E-09
2.52	5.1	5.67	11.26	11.95	3.1	0.0	4.74	18.12	3.71	0.29	3.34E-09
2.54	5.77	6.39	11.69	12.51	3.12	0.0	5.17	19.33	3.86	0.3	2.94E-09
2.56	6.9	7.68	11.18	12.13	3.18	0.0	4.82	20.1	3.69	0.29	1.90E-09
2.58	7.17	7.96	11.58	12.56	3.18	0.0	5.19	20.88	3.82	0.3	1.91E-09
2.6	7.83	8.74	10.98	12.1	3.22	0.0	4.75	20.85	3.62	0.28	1.45E-09
2.62	8.3	9.33	10.31	11.51	3.26	0.0	4.26	20.55	3.4	0.27	1.14E-09
2.64	8.36	9.42	10.07	11.28	3.27	0.0	4.09	20.4	3.32	0.26	1.06E-09
2.66	8.11	9.14	10.16	11.33	3.25	0.0	4.17	20.4	3.35	0.26	1.14E-09
2.68	7.68	8.64	10.39	11.49	3.23	0.0	4.33	20.35	3.43	0.27	1.32E-09
2.7	6.54	7.28	11.49	12.36	3.16	0.0	5.17	20.61	3.79	0.29	2.21E-09
2.72	5.16	5.64	14.01	14.43	3.04	0.0	7.17	21.58	4.62	0.35	5.22E-09
2.74	4.05	4.36	17.09	16.69	2.92	0.0	8.78	22.71	5.64	0.42	1.21E-08
2.76	4.22	4.55	16.71	16.44	2.93	0.0	8.62	22.76	5.51	0.41	1.08E-08
2.78	4.56	4.98	14.18	14.39	3.0	0.0	7.35	21.2	4.68	0.36	6.63E-09
2.8	4.68	5.13	13.52	13.85	3.02	0.0	6.96	20.84	4.46	0.34	5.71E-09
2.82	4.85	5.33	13.22	13.64	3.04	0.0	6.73	20.88	4.36	0.33	5.11E-09
2.84	5.26	5.82	12.41	13.02	3.08	0.0	6.06	20.69	4.1	0.32	3.88E-09
2.86	6.31	7.05	11.29	12.11	3.16	0.0	5.14	20.86	3.72	0.29	2.24E-09

2.88	7.04	7.96	10.23	11.21	3.22	0.0	4.33	20.47	3.38	0.26	1.48E-09
2.9	7.79	8.92	9.26	10.37	3.28	0.0	3.64	19.98	3.06	0.24	9.82E-10
2.92	7.58	8.67	9.38	10.46	3.27	0.0	3.72	19.98	3.09	0.24	1.06E-09
2.94	6.91	7.81	10.33	11.29	3.21	0.0	4.43	20.62	3.41	0.27	1.56E-09
2.96	4.33	4.61	21.12	20.24	2.87	0.0	11.29	27.46	6.97	0.51	1.70E-08
2.98	2.85	2.97	30.78	27.36	2.65	0.0	16.53	30.3	10.16	0.72	8.11E-08
3.0	2.26	2.34	36.72	31.38	2.53	25.15	19.81	31.52	12.12	0.85	1.77E-07
3.02	1.87	1.93	39.82	33.19	2.46	25.04	21.57	31.38	0.0	0.0	2.91E-07
3.04	1.45	1.5	41.59	33.82	2.39	23.97	22.62	30.04	0.0	0.0	4.82E-07
3.06	1.04	1.08	43.3	34.2	2.31	22.49	23.65	28.19	0.0	0.0	8.76E-07
3.08	0.88	0.91	44.01	34.3	2.26	21.79	24.14	27.31	0.0	0.0	1.17E-06
3.1	0.79	0.82	44.86	34.67	2.24	21.54	24.71	27.0	0.0	0.0	1.41E-06
3.12	0.82	0.84	46.3	35.76	2.23	22.21	25.61	27.83	0.0	0.0	1.46E-06
3.14	0.84	0.86	47.62	36.77	2.23	22.8	26.45	28.57	0.0	0.0	1.51E-06
3.16	0.77	0.79	49.85	38.1	2.2	22.99	28.81	28.81	0.0	0.0	1.90E-06
3.18	0.69	0.71	52.79	39.83	2.15	23.21	29.09	29.09	0.0	0.0	2.53E-06
3.2	0.67	0.69	55.94	41.9	2.13	23.93	29.99	29.99	0.0	0.0	3.02E-06
3.22	0.67	0.69	59.32	44.17	2.11	24.83	31.12	31.12	0.0	0.0	3.49E-06
3.24	0.65	0.66	62.18	46.0	2.09	25.38	31.81	31.81	0.0	0.0	4.10E-06
3.26	0.63	0.64	66.58	48.83	2.06	26.3	32.96	32.96	0.0	0.0	5.04E-06
3.28	0.62	0.63	70.7	51.52	2.03	27.23	34.13	34.13	0.0	0.0	5.92E-06
3.3	0.61	0.62	75.98	54.92	2.0	28.35	35.53	35.53	0.0	0.0	7.24E-06
3.32	0.61	0.62	80.91	58.15	1.98	29.51	36.98	36.98	0.0	0.0	8.40E-06
3.34	0.62	0.63	85.55	61.27	1.97	30.74	38.53	38.53	0.0	0.0	9.32E-06
3.36	0.63	0.64	89.2	63.73	1.96	31.7	39.73	39.73	0.0	0.0	1.01E-05
3.38	0.64	0.65	93.08	66.36	1.94	32.76	41.06	41.06	0.0	0.0	1.10E-05
3.4	0.65	0.66	98.85	70.16	1.93	34.15	42.8	42.8	0.0	0.0	1.24E-05
3.42	0.63	0.64	104.42	73.69	1.9	35.2	44.12	44.12	0.0	0.0	1.46E-05
3.44	0.61	0.62	113.45	79.25	1.87	36.68	45.97	45.97	0.0	0.0	1.88E-05
3.46	0.58	0.59	123.57	85.38	1.83	38.19	47.86	47.86	0.0	0.0	2.47E-05
3.48	0.58	0.58	130.35	89.67	1.81	39.49	49.49	49.49	0.0	0.0	2.83E-05
3.5	0.59	0.59	133.99	92.16	1.8	40.45	50.7	50.7	0.0	0.0	2.95E-05
3.52	0.58	0.59	140.74	96.4	1.78	41.69	52.25	52.25	0.0	0.0	3.36E-05
3.54	0.58	0.59	147.25	100.55	1.77	42.95	53.84	53.84	0.0	0.0	3.74E-05
3.56	0.61	0.62	148.73	102.01	1.78	44.03	55.18	55.18	0.0	0.0	3.53E-05
3.58	0.66	0.66	147.75	102.07	1.79	44.88	56.24	56.24	0.0	0.0	3.14E-05
3.6	0.71	0.71	146.19	101.77	1.81	45.67	57.24	57.24	0.0	0.0	2.75E-05
3.62	0.76	0.77	143.68	100.89	1.84	46.33	58.06	58.06	0.0	0.0	2.36E-05
3.64	0.81	0.81	141.2	99.92	1.85	46.86	58.73	58.73	0.0	0.0	2.06E-05
3.66	0.83	0.84	142.49	101.13	1.86	47.73	59.82	59.82	0.0	0.0	2.00E-05
3.68	0.82	0.83	145.52	103.11	1.85	48.26	60.49	60.49	0.0	0.0	2.16E-05
3.7	0.78	0.78	150.1	105.8	1.82	48.57	60.87	60.87	0.0	0.0	2.54E-05
3.72	0.73	0.73	156.49	109.52	1.8	48.99	61.4	61.4	0.0	0.0	3.12E-05
3.74	0.66	0.67	166.76	115.4	1.75	49.64	62.22	62.22	0.0	0.0	4.21E-05
3.76	0.6	0.61	176.88	121.16	1.71	50.24	62.97	62.97	0.0	0.0	5.58E-05
3.78	0.58	0.58	184.97	125.95	1.69	51.04	63.97	63.97	0.0	0.0	6.70E-05
3.8	0.58	0.58	189.01	128.7	1.68	51.93	65.09	65.09	0.0	0.0	7.01E-05
3.82	0.6	0.61	191.42	130.79	1.69	53.16	66.63	66.63	0.0	0.0	6.75E-05
3.84	0.63	0.63	191.49	131.42	1.69	53.99	67.67	67.67	0.0	0.0	6.35E-05
3.86	0.67	0.68	189.82	131.2	1.71	54.96	68.88	68.88	0.0	0.0	5.61E-05
3.88	0.71	0.72	187.99	130.87	1.73	55.9	70.07	70.07	0.0	0.0	4.95E-05
3.9	0.76	0.77	184.44	129.44	1.75	56.59	70.92	70.92	0.0	0.0	4.25E-05
3.92	0.78	0.79	181.47	127.98	1.76	56.64	70.99	70.99	0.0	0.0	3.96E-05
3.94	0.88	0.89	180.81	128.89	1.79	58.96	73.9	73.9	0.0	0.0	3.17E-05
3.96	0.85	0.86	173.66	124.09	1.79	56.99	71.42	71.42	0.0	0.0	3.13E-05
3.98	0.83	0.83	177.21	126.38	1.78	57.42	71.97	71.97	0.0	0.0	3.43E-05
4.0	0.81	0.82	178.88	127.48	1.77	57.56	72.14	72.14	0.0	0.0	3.64E-05
4.02	0.81	0.81	177.41	126.7	1.77	57.4	71.94	71.94	0.0	0.0	3.61E-05
4.04	0.84	0.85	173.51	124.73	1.79	57.58	72.17	72.17	0.0	0.0	3.20E-05
4.06	0.89	0.89	168.6	122.12	1.81	57.67	72.28	72.28	0.0	0.0	2.77E-05
4.08	0.95	0.96	162.8	119.08	1.84	57.99	72.68	72.68	0.0	0.0	2.26E-05
4.1	0.98	0.99	159.96	117.56	1.85	58.03	72.73	72.73	0.0	0.0	2.09E-05
4.12	0.98	0.99	160.73	118.28	1.85	58.44	73.24	73.24	0.0	0.0	2.11E-05
4.14	0.97	0.98	163.57	120.26	1.84	59.01	73.96	73.96	0.0	0.0	2.24E-05
4.16	0.93	0.94	166.55	122.13	1.83	59.13	74.11	74.11	0.0	0.0	2.50E-05
4.18	0.92	0.92	165.75	121.62	1.82	58.8	73.7	73.7	0.0	0.0	2.57E-05
4.2	0.91	0.92	162.78	119.76	1.83	58.24	72.99	72.99	0.0	0.0	2.50E-05
4.22	0.9	0.91	159.53	117.64	1.83	57.47	72.02	72.02	0.0	0.0	2.46E-05
4.24	0.9	0.91	157.87	116.72	1.83	57.36	71.89	71.89	0.0	0.0	2.39E-05
4.26	0.94	0.95	155.18	115.35	1.85	57.62	72.21	72.21	0.0	0.0	2.17E-05
4.28	0.97	0.98	152.93	114.24	1.86	57.91	72.58	72.58	0.0	0.0	1.98E-05
4.3	1.03	1.04	149.39	112.41	1.88	58.34	73.12	73.12	0.0	0.0	1.71E-05
4.32	1.02	1.03	149.09	112.28	1.88	58.26	73.02	73.02	0.0	0.0	1.74E-05

4.34	0.98	0.99	152.96	114.81	1.86	58.59	73.43	73.43	0.0	0.0	1.98E-05
4.36	0.89	0.89	161.56	120.11	1.82	58.85	73.76	73.76	0.0	0.0	2.67E-05
4.38	0.81	0.81	169.75	125.11	1.78	59.02	73.97	73.97	0.0	0.0	3.52E-05
4.4	0.74	0.74	178.48	130.44	1.74	59.25	74.26	74.26	0.0	0.0	4.63E-05
4.42	0.65	0.66	189.53	137.03	1.69	59.38	74.42	74.42	0.0	0.0	6.51E-05
4.44	0.61	0.61	196.48	141.23	1.66	59.47	74.53	74.53	0.0	0.0	8.04E-05
4.46	0.61	0.61	200.36	144.03	1.65	60.34	75.62	75.62	0.0	0.0	8.44E-05
4.48	0.67	0.67	196.93	142.86	1.68	61.76	77.41	77.41	0.0	0.0	6.88E-05
4.5	0.75	0.75	190.68	139.84	1.72	62.87	78.79	78.79	0.0	0.0	5.33E-05
4.52	0.84	0.85	183.97	136.54	1.76	64.13	80.38	80.38	0.0	0.0	3.99E-05
4.54	0.93	0.94	177.66	133.28	1.8	65.12	81.62	81.62	0.0	0.0	3.08E-05
4.56	1.02	1.03	170.8	129.5	1.83	65.81	82.48	82.48	0.0	0.0	2.39E-05
4.58	1.1	1.11	166.21	127.08	1.86	66.58	83.45	83.45	0.0	0.0	1.96E-05
4.6	1.16	1.18	159.73	123.13	1.89	66.48	83.32	83.32	0.0	0.0	1.62E-05
4.62	1.13	1.15	156.62	120.85	1.89	65.26	81.79	81.79	0.0	0.0	1.64E-05
4.64	1.13	1.14	151.04	116.96	1.9	63.83	80.0	80.0	0.0	0.0	1.55E-05
4.66	1.1	1.11	146.72	113.84	1.9	62.41	78.22	78.22	0.0	0.0	1.52E-05
4.68	1.09	1.11	144.07	112.03	1.9	61.74	77.38	77.38	0.0	0.0	1.49E-05
4.7	1.08	1.09	142.31	110.78	1.9	61.11	76.59	76.59	0.0	0.0	1.50E-05
4.72	1.02	1.03	141.38	109.87	1.89	59.9	75.07	75.07	0.0	0.0	1.64E-05
4.74	0.94	0.95	142.99	110.62	1.86	58.86	73.77	73.77	0.0	0.0	1.96E-05
4.76	0.86	0.87	145.55	112.01	1.83	57.99	72.68	72.68	0.0	0.0	2.40E-05
4.78	0.8	0.81	147.09	112.77	1.81	57.14	71.62	71.62	0.0	0.0	2.81E-05
4.8	0.78	0.79	141.93	109.11	1.82	55.68	69.79	69.79	0.0	0.0	2.71E-05
4.82	0.85	0.86	134.3	104.3	1.85	55.46	69.51	69.51	0.0	0.0	2.08E-05
4.84	0.92	0.93	126.06	98.94	1.89	54.94	68.85	68.85	0.0	0.0	1.57E-05
4.86	0.95	0.96	122.67	96.8	1.91	54.86	68.76	68.76	0.0	0.0	1.39E-05
4.88	0.93	0.95	125.54	98.92	1.9	55.45	69.5	69.5	0.0	0.0	1.51E-05
4.9	0.94	0.95	129.46	101.93	1.89	56.71	71.08	71.08	0.0	0.0	1.61E-05
4.92	0.95	0.97	130.56	102.96	1.89	57.47	72.03	72.03	0.0	0.0	1.60E-05
4.94	0.87	0.88	124.29	97.96	1.88	54.27	68.02	68.02	0.0	0.0	1.70E-05
4.96	0.87	0.88	128.17	100.91	1.87	55.39	69.42	69.42	0.0	0.0	1.84E-05
4.98	0.87	0.88	129.26	101.87	1.87	55.9	70.07	70.07	0.0	0.0	1.86E-05
5.0	0.89	0.9	128.94	101.88	1.87	56.35	70.62	70.62	0.0	0.0	1.79E-05
5.02	0.91	0.92	125.8	99.84	1.89	56.14	70.36	70.36	0.0	0.0	1.62E-05
5.04	0.92	0.93	129.42	102.67	1.88	57.38	71.91	71.91	0.0	0.0	1.71E-05
5.06	0.95	0.96	127.56	101.64	1.89	57.75	72.38	72.38	0.0	0.0	1.55E-05



# CPT Office V. 1.1

## Elaborato grafico prova penetrometrica

21/09/2022

19:28:48

Committente	Dott. Geol. Maurizio Castellari		
Località	Lagosanto (Fe)		
Via	Lagosanto		
Prova	CPTU4		
Tipo prova	CPTU		
Tipo di Prova	Prof. max (m)	Preforo (m)	Falda (m da p.c.)
CPTU	5.76	0.02	0.8

Tabella 1 - Informazioni generali

# 1 - Parametri prova penetrometrica CPTU4

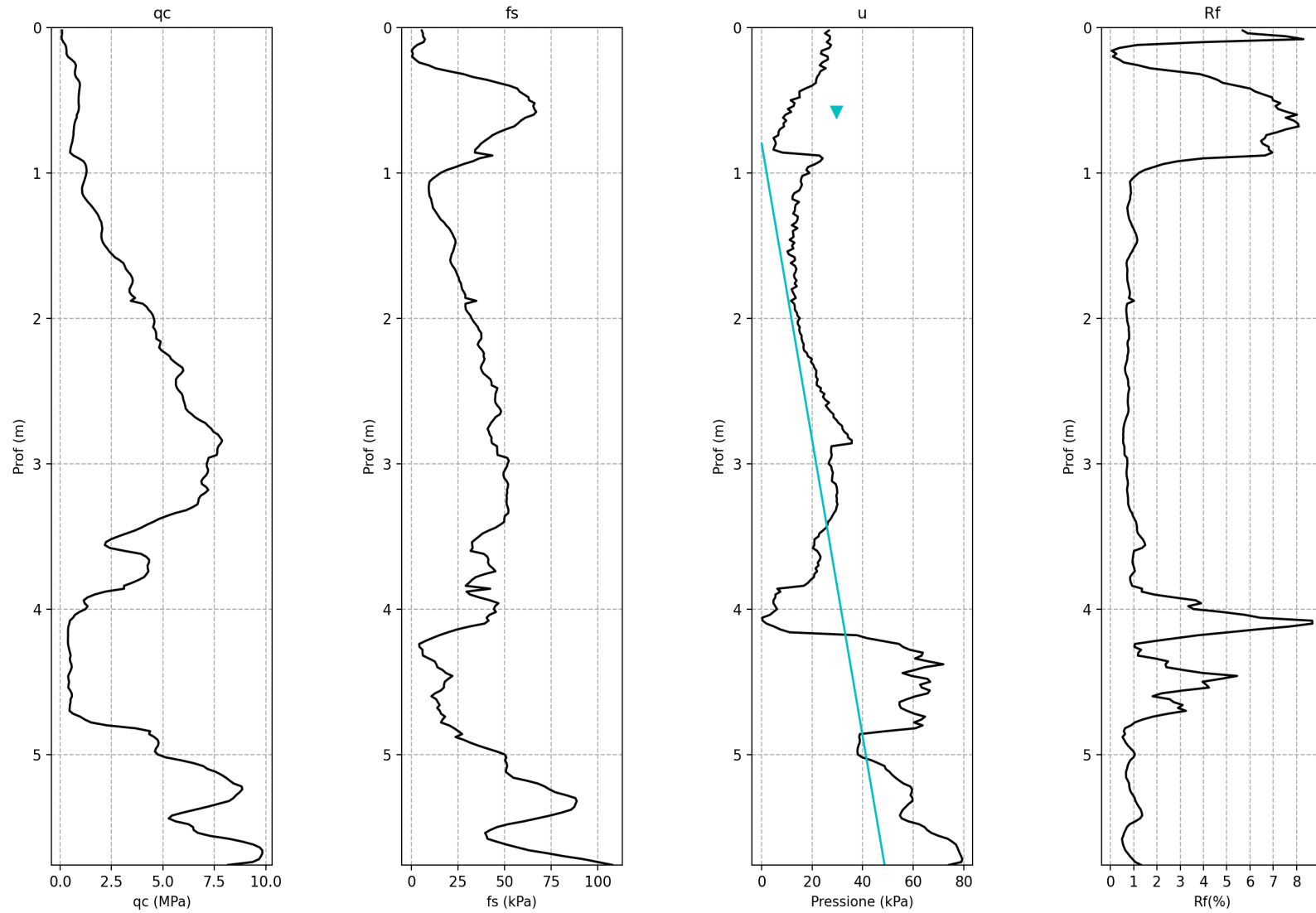


Fig 1 - Plot profondità-variabile della prova penetrometrica elaborata

# 1 - Parametri prova penetrometrica CPTU4

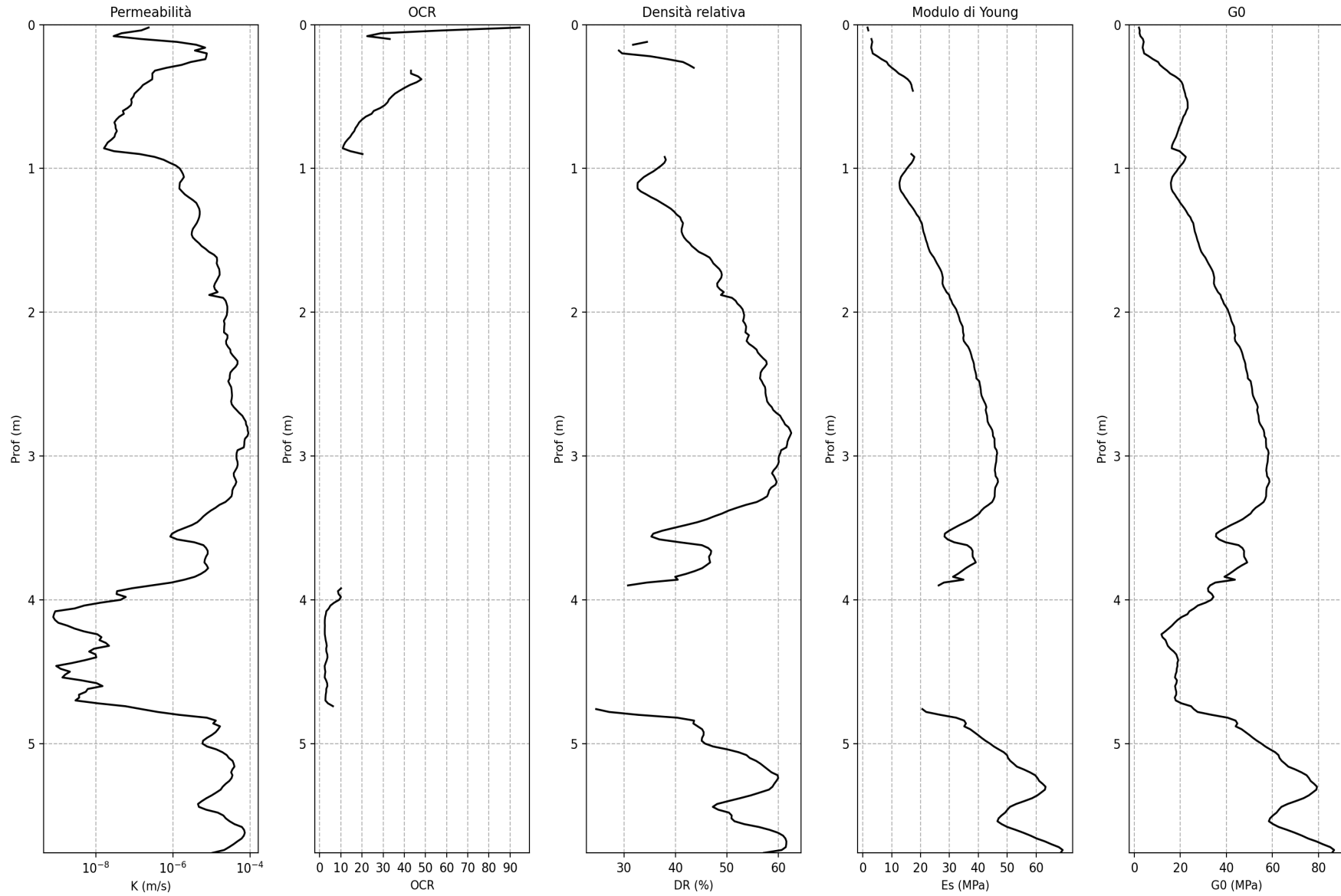


Fig 2 - Plot profondità-variabile della prova penetrometrica elaborata

# 1 - Parametri prova penetrometrica CPTU4

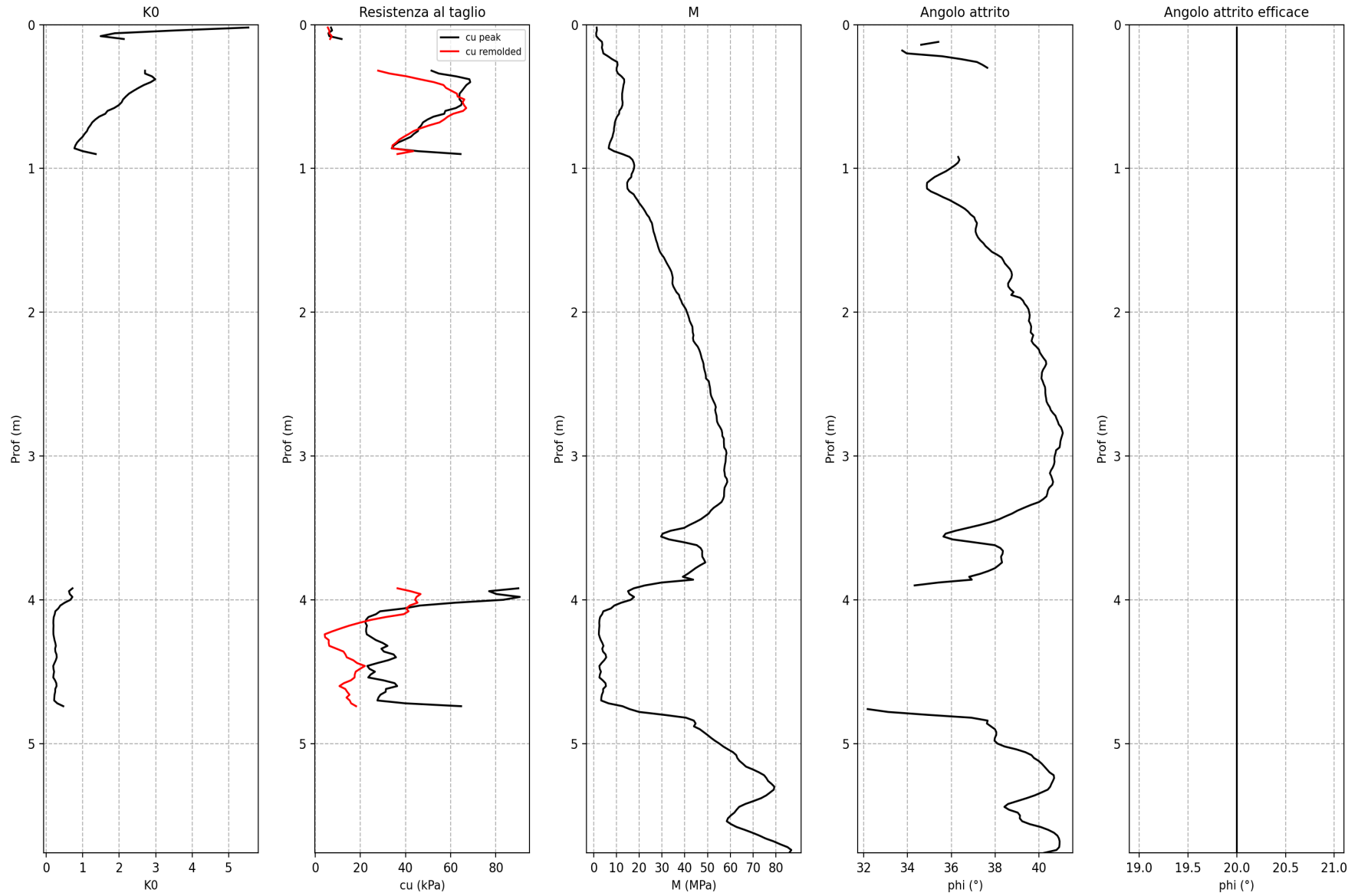


Fig 3 - Plot profondità-variabile della prova penetrometrica elaborata

## 2 - SBT & SBT(n) CPTU4

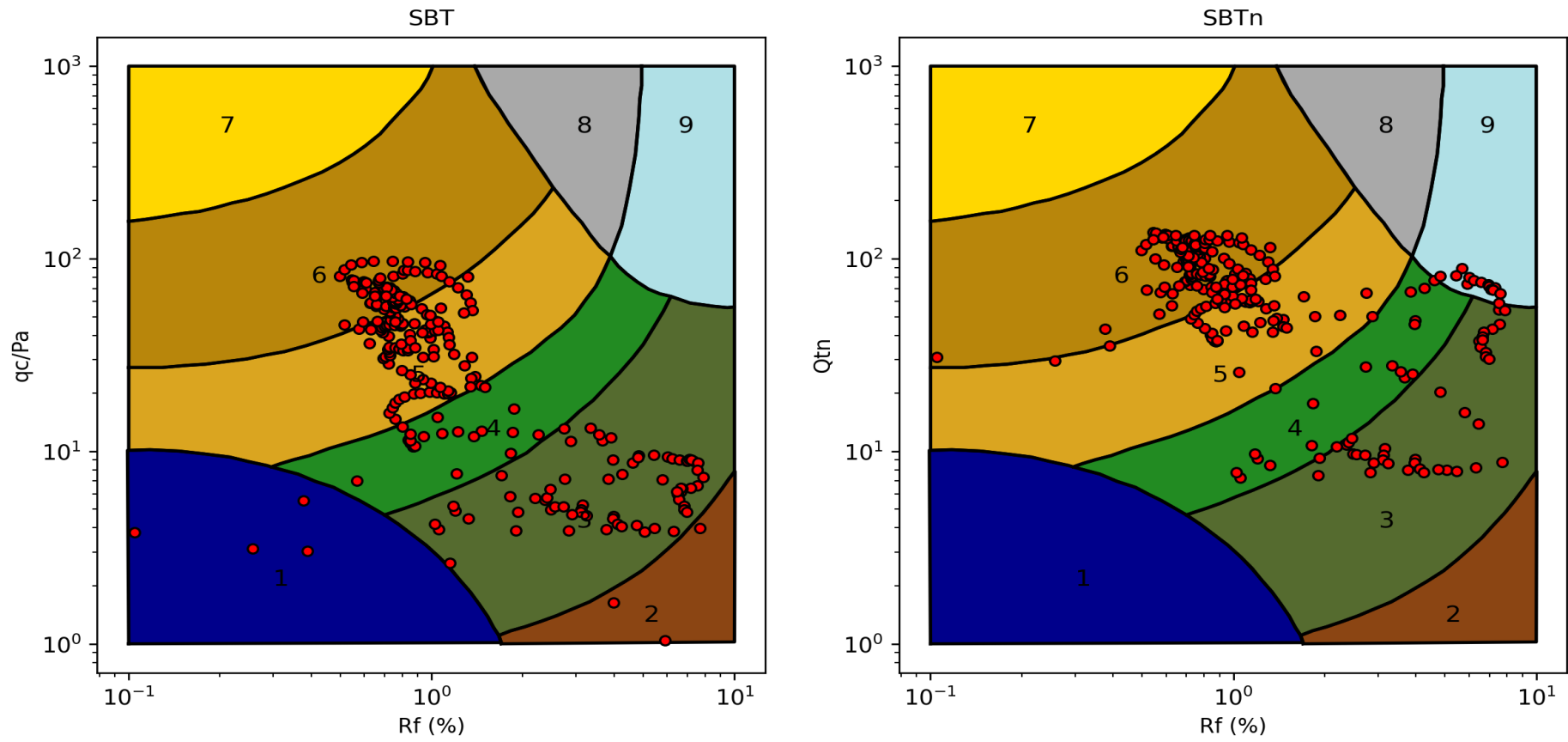


Fig 4 - A sinistra plot valori  $q_c/Pa$ - $R_f$  su SBT chart, a destra plot valori  $Q_{tn}$ - $R_f$  su SBT(n) chart



## 2 - Stratigrafia CPTU4

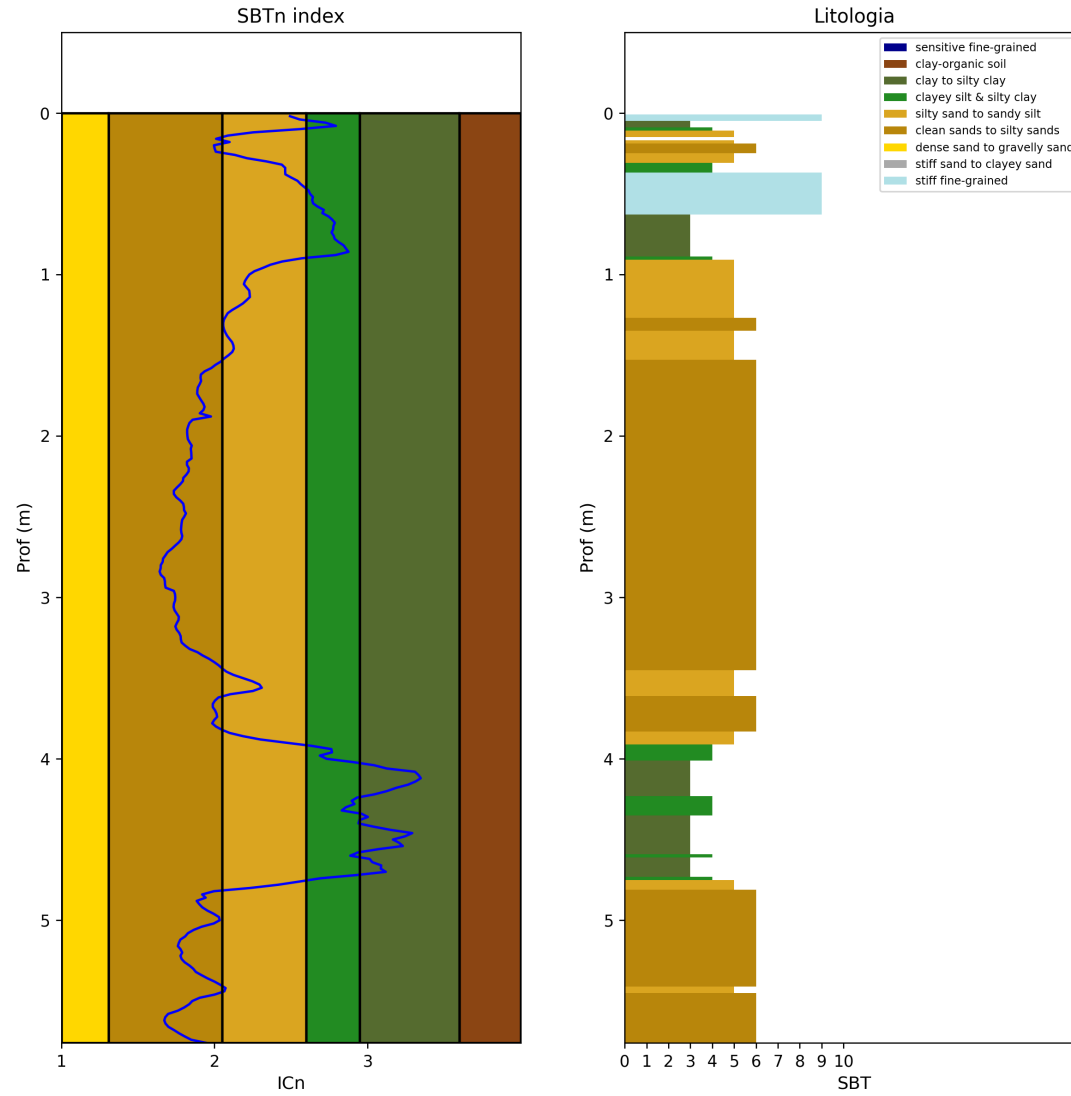


Fig 3 - A sinistra Indice SBT, a destra classificazione stratigrafica da SBT chart

# CPT Office V. 1.1



## Report calcolo prova penetrometrica

21/09/2022

19:28:48

Committente	Dott. Geol. Maurizio Castellari
Località	Lagosanto (Fe)
Via	Lagosanto
Prova	CPTU4
Tipo prova	CPTU

Tabella 1 - Dati input

Tipo di Prova	Profondità max (m)	Falda (m da p.c.)
CPTU	5.76	0.8

Prof.(m)	qc (MPa)	fs (kPa)	u2 (kPa)	u0 (kPa)	Qt (MPa)	$\gamma$ (KN/m3)	$\sigma_v$ (kPa)	$\sigma_{vp}$ (kPa)	cu (kPa)	$\phi$ (°)	$\phi$ picco(°)	Dr (%)
0.02	0.09	5.56	26.62	0.0	0.1	17.0	0.34	0.34	6.97	0.0	20.0	0.0
0.04	0.1	6.22	25.04	0.0	0.11	12.5	0.59	0.59	7.48	0.0	20.0	0.0
0.06	0.08	6.22	27.01	0.0	0.08	17.0	0.93	0.93	5.82	0.0	20.0	0.0
0.08	0.08	7.33	27.01	0.0	0.09	17.5	1.28	1.28	6.21	0.0	20.0	0.0
0.1	0.16	6.59	25.75	0.0	0.17	17.5	1.63	1.63	11.7	0.0	20.0	0.0
0.12	0.26	3.06	27.48	0.0	0.27	17.5	1.98	1.98	0.0	35.41	20.0	34.48
0.14	0.3	1.2	26.77	0.0	0.31	17.5	2.33	2.33	0.0	34.62	20.0	31.75
0.16	0.31	0.17	23.77	0.0	0.32	17.5	2.68	2.68	0.0	0.0	20.0	0.0
0.18	0.31	0.81	23.46	0.0	0.32	17.5	3.03	3.03	0.0	33.76	20.0	29.0
0.2	0.38	0.4	26.14	0.0	0.38	17.5	3.38	3.38	0.0	33.96	20.0	29.63
0.22	0.56	2.12	26.22	0.0	0.56	17.5	3.73	3.73	0.0	35.59	20.0	35.12
0.24	0.71	4.05	24.01	0.0	0.71	17.5	4.08	4.08	0.0	36.46	20.0	38.46
0.26	0.77	9.38	22.98	0.0	0.78	18.0	4.44	4.44	0.0	37.18	20.0	41.47
0.28	0.75	12.9	25.35	0.0	0.76	18.0	4.8	4.8	0.0	37.43	20.0	42.6
0.3	0.72	20.03	23.3	0.0	0.73	18.0	5.16	5.16	0.0	37.65	20.0	43.57
0.32	0.72	27.86	22.75	0.0	0.73	17.5	5.51	5.51	51.5	0.0	20.0	0.0
0.34	0.77	32.94	21.96	0.0	0.77	17.5	5.86	5.86	54.74	0.0	20.0	0.0
0.36	0.88	40.64	21.56	0.0	0.88	17.5	6.21	6.21	62.57	0.0	20.0	0.0
0.38	0.96	46.42	21.48	0.0	0.96	17.5	6.56	6.56	68.34	0.0	20.0	0.0
0.4	0.96	52.57	19.9	0.0	0.97	17.5	6.91	6.91	68.7	0.0	20.0	0.0
0.42	0.94	56.84	17.22	0.0	0.95	17.5	7.26	7.26	66.99	0.0	20.0	0.0
0.44	0.93	57.95	14.93	0.0	0.93	17.5	7.61	7.61	65.98	0.0	20.0	0.0
0.46	0.92	60.37	14.93	0.0	0.92	17.5	7.96	7.96	65.02	0.0	20.0	0.0
0.48	0.9	62.8	15.08	0.0	0.9	17.5	8.31	8.31	63.96	0.0	20.0	0.0
0.5	0.9	63.09	11.45	0.0	0.9	17.5	8.66	8.66	63.9	0.0	20.0	0.0
0.52	0.9	66.09	13.03	0.0	0.9	17.5	9.01	9.01	63.95	0.0	20.0	0.0
0.54	0.92	65.32	12.64	0.0	0.92	17.5	9.36	9.36	65.06	0.0	20.0	0.0
0.56	0.91	65.94	10.35	0.0	0.91	17.5	9.71	9.71	64.66	0.0	20.0	0.0
0.58	0.88	66.93	11.69	0.0	0.88	17.5	10.06	10.06	62.32	0.0	20.0	0.0
0.6	0.82	65.54	9.4	0.0	0.82	17.5	10.41	10.41	57.62	0.0	20.0	0.0
0.62	0.81	61.12	8.45	0.0	0.81	17.5	10.76	10.76	57.18	0.0	20.0	0.0
0.64	0.74	58.72	9.71	0.0	0.74	17.5	11.11	11.11	52.4	0.0	20.0	0.0
0.66	0.71	57.08	8.61	0.0	0.71	17.5	11.46	11.46	49.75	0.0	20.0	0.0
0.68	0.68	55.08	8.85	0.0	0.68	17.5	11.81	11.81	47.73	0.0	20.0	0.0
0.7	0.67	50.63	7.19	0.0	0.67	17.5	12.16	12.16	47.01	0.0	20.0	0.0
0.72	0.65	46.82	6.63	0.0	0.65	17.5	12.51	12.51	45.78	0.0	20.0	0.0
0.74	0.65	43.6	6.63	0.0	0.65	17.5	12.86	12.86	45.54	0.0	20.0	0.0
0.76	0.62	41.55	4.66	0.0	0.63	17.5	13.21	13.21	43.72	0.0	20.0	0.0
0.78	0.61	39.27	5.29	0.0	0.61	17.5	13.56	13.56	42.35	0.0	20.0	0.0
0.8	0.57	37.22	5.61	0.0	0.57	17.5	13.91	13.91	39.58	0.0	20.0	0.0
0.82	0.53	35.92	5.05	0.2	0.53	17.5	14.26	14.06	36.68	0.0	20.0	0.0
0.84	0.5	34.25	4.66	0.39	0.5	17.5	14.61	14.22	34.88	0.0	20.0	0.0
0.86	0.49	34.05	8.21	0.59	0.49	17.5	14.96	14.37	33.86	0.0	20.0	0.0
0.88	0.65	43.45	22.82	0.78	0.65	17.5	15.31	14.53	45.58	0.0	20.0	0.0
0.9	0.91	36.4	24.17	0.98	0.92	17.5	15.66	14.68	64.43	0.0	20.0	0.0
0.92	1.14	32.92	23.14	1.18	1.14	18.0	16.02	14.84	0.0	36.32	20.0	37.91
0.94	1.23	27.77	21.09	1.37	1.24	18.0	16.38	15.01	0.0	36.37	20.0	38.13
0.96	1.27	23.63	18.32	1.57	1.27	18.0	16.74	15.17	0.0	36.31	20.0	37.86

0.98	1.29	18.92	17.69	1.77	1.29	18.0	17.1	15.33	0.0	36.15	20.0	37.25
1.0	1.28	15.69	18.95	1.96	1.28	18.0	17.46	15.5	0.0	35.95	20.0	36.5
1.02	1.25	13.56	16.11	2.16	1.25	18.0	17.82	15.66	0.0	35.75	20.0	35.73
1.04	1.21	11.39	15.64	2.35	1.21	18.0	18.18	15.83	0.0	35.49	20.0	34.76
1.06	1.16	9.75	15.48	2.55	1.16	18.0	18.54	15.99	0.0	35.24	20.0	33.86
1.08	1.11	9.47	15.95	2.75	1.12	18.0	18.9	16.15	0.0	35.06	20.0	33.24
1.1	1.07	9.31	15.48	2.94	1.07	18.0	19.26	16.32	0.0	34.89	20.0	32.66
1.12	1.07	9.39	14.85	3.14	1.07	18.0	19.62	16.48	0.0	34.88	20.0	32.62
1.14	1.08	9.56	12.87	3.34	1.08	18.0	19.98	16.64	0.0	34.89	20.0	32.65
1.16	1.15	9.77	12.24	3.53	1.15	18.0	20.34	16.81	0.0	35.07	20.0	33.26
1.18	1.25	10.59	12.16	3.73	1.25	18.0	20.7	16.97	0.0	35.36	20.0	34.31
1.2	1.35	10.88	14.77	3.92	1.36	18.0	21.06	17.14	0.0	35.63	20.0	35.26
1.22	1.48	11.29	13.43	4.12	1.49	18.0	21.42	17.3	0.0	35.92	20.0	36.38
1.24	1.6	11.58	13.19	4.32	1.6	18.0	21.78	17.46	0.0	36.16	20.0	37.29
1.26	1.7	12.65	13.11	4.51	1.71	18.0	22.14	17.63	0.0	36.4	20.0	38.22
1.28	1.81	13.68	12.48	4.71	1.81	18.0	22.5	17.79	0.0	36.61	20.0	39.09
1.3	1.88	14.7	14.29	4.9	1.88	18.0	22.86	17.95	0.0	36.77	20.0	39.73
1.32	1.94	15.73	14.22	5.1	1.94	18.0	23.22	18.12	0.0	36.88	20.0	40.21
1.34	2.01	17.54	13.58	5.3	2.01	18.0	23.58	18.28	0.0	37.05	20.0	40.93
1.36	2.03	18.61	11.93	5.49	2.03	18.0	23.94	18.45	0.0	37.1	20.0	41.13
1.38	2.06	20.21	14.14	5.69	2.06	18.0	24.3	18.61	0.0	37.17	20.0	41.47
1.4	2.03	21.15	12.32	5.89	2.04	18.0	24.66	18.77	0.0	37.15	20.0	41.36
1.42	2.01	22.06	12.48	6.08	2.01	18.0	25.02	18.94	0.0	37.11	20.0	41.2
1.44	2.01	22.71	12.64	6.28	2.01	18.0	25.38	19.1	0.0	37.11	20.0	41.19
1.46	2.03	23.54	11.06	6.47	2.04	18.0	25.74	19.27	0.0	37.15	20.0	41.38
1.48	2.09	23.7	12.95	6.67	2.09	18.0	26.1	19.43	0.0	37.22	20.0	41.68
1.5	2.18	23.21	12.0	6.87	2.18	18.0	26.46	19.59	0.0	37.33	20.0	42.14
1.52	2.3	22.81	12.56	7.06	2.3	18.5	26.83	19.77	0.0	37.47	20.0	42.76
1.54	2.39	22.36	10.19	7.26	2.39	18.5	27.2	19.94	0.0	37.56	20.0	43.2
1.56	2.53	21.58	10.74	7.46	2.53	18.5	27.57	20.11	0.0	37.71	20.0	43.88
1.58	2.66	21.22	13.03	7.65	2.67	18.5	27.94	20.29	0.0	37.85	20.0	44.53
1.6	2.89	20.81	13.19	7.85	2.89	18.5	28.31	20.46	0.0	38.09	20.0	45.66
1.62	3.07	21.26	11.53	8.04	3.08	18.5	28.68	20.64	0.0	38.3	20.0	46.64
1.64	3.15	22.12	13.19	8.24	3.15	18.5	29.05	20.81	0.0	38.38	20.0	47.04
1.66	3.2	23.27	13.74	8.44	3.2	18.5	29.42	20.98	0.0	38.44	20.0	47.36
1.68	3.31	24.01	13.43	8.63	3.31	18.5	29.79	21.16	0.0	38.56	20.0	47.94
1.7	3.43	24.59	12.79	8.83	3.43	18.5	30.16	21.33	0.0	38.68	20.0	48.53
1.72	3.5	25.33	12.95	9.03	3.5	18.5	30.53	21.5	0.0	38.75	20.0	48.89
1.74	3.54	25.7	13.82	9.22	3.54	18.5	30.9	21.68	0.0	38.77	20.0	49.02
1.76	3.51	26.6	13.03	9.42	3.51	18.5	31.27	21.85	0.0	38.75	20.0	48.89
1.78	3.44	26.85	13.9	9.61	3.44	18.5	31.64	22.03	0.0	38.67	20.0	48.5
1.8	3.37	27.22	11.85	9.81	3.38	18.5	32.01	22.2	0.0	38.59	20.0	48.11
1.82	3.38	28.2	12.32	10.01	3.38	18.5	32.38	22.37	0.0	38.6	20.0	48.15
1.84	3.48	28.94	12.95	10.2	3.48	18.5	32.75	22.55	0.0	38.7	20.0	48.64
1.86	3.65	28.94	13.5	10.4	3.65	18.5	33.12	22.72	0.0	38.85	20.0	49.39
1.88	3.44	34.85	11.61	10.59	3.44	18.5	33.49	22.9	0.0	38.74	20.0	48.84
1.9	4.02	28.99	12.87	10.79	4.03	18.5	33.86	23.07	0.0	39.15	20.0	50.98
1.92	4.2	28.99	13.11	10.99	4.2	18.5	34.23	23.24	0.0	39.28	20.0	51.69
1.94	4.3	29.24	13.11	11.18	4.3	18.5	34.6	23.42	0.0	39.34	20.0	52.04
1.96	4.43	30.3	13.9	11.38	4.43	18.5	34.97	23.59	0.0	39.45	20.0	52.63
1.98	4.51	31.57	14.14	11.58	4.52	18.5	35.34	23.76	0.0	39.53	20.0	53.05
2.0	4.55	32.31	15.08	11.77	4.56	18.5	35.71	23.94	0.0	39.56	20.0	53.21
2.02	4.59	33.21	14.29	11.97	4.59	18.5	36.08	24.11	0.0	39.58	20.0	53.36
2.04	4.57	34.44	14.29	12.16	4.57	18.5	36.45	24.29	0.0	39.57	20.0	53.29
2.06	4.52	35.63	15.08	12.36	4.52	18.5	36.82	24.46	0.0	39.54	20.0	53.13
2.08	4.62	36.24	14.85	12.56	4.62	18.5	37.19	24.63	0.0	39.61	20.0	53.52
2.1	4.67	37.43	15.16	12.75	4.67	18.5	37.56	24.81	0.0	39.65	20.0	53.74
2.12	4.67	37.51	15.8	12.95	4.68	18.5	37.93	24.98	0.0	39.64	20.0	53.68
2.14	4.67	37.51	15.8	13.15	4.68	18.5	38.3	25.15	0.0	39.63	20.0	53.6
2.16	4.89	36.24	16.11	13.34	4.89	19.0	38.68	25.34	0.0	39.75	20.0	54.29
2.18	4.86	35.58	16.66	13.54	4.86	19.0	39.06	25.52	0.0	39.7	20.0	54.02
2.2	4.81	36.57	16.51	13.73	4.82	19.0	39.44	25.71	0.0	39.67	20.0	53.83
2.22	4.92	38.0	16.74	13.93	4.92	19.0	39.82	25.89	0.0	39.75	20.0	54.3
2.24	5.12	38.9	17.93	14.13	5.13	19.0	40.2	26.07	0.0	39.89	20.0	55.1
2.26	5.32	38.7	18.24	14.32	5.32	19.0	40.58	26.26	0.0	40.0	20.0	55.77
2.28	5.39	39.23	19.9	14.52	5.4	19.0	40.96	26.44	0.0	40.05	20.0	56.0
2.3	5.56	38.65	19.51	14.71	5.56	19.0	41.34	26.62	0.0	40.13	20.0	56.49
2.32	5.75	37.71	20.45	14.91	5.75	19.0	41.72	26.81	0.0	40.22	20.0	57.03
2.34	5.95	37.22	20.85	15.11	5.95	19.0	42.1	26.99	0.0	40.32	20.0	57.64
2.36	5.99	37.75	21.64	15.3	6.0	19.0	42.48	27.18	0.0	40.34	20.0	57.76
2.38	5.88	38.7	21.56	15.5	5.89	19.0	42.86	27.36	0.0	40.28	20.0	57.37
2.4	5.73	40.58	21.48	15.7	5.74	19.0	43.24	27.54	0.0	40.19	20.0	56.87
2.42	5.63	42.38	22.19	15.89	5.64	19.0	43.62	27.73	0.0	40.14	20.0	56.56

2.44	5.63	43.0	21.8	16.09	5.63	19.0	44.0	27.91	0.0	40.13	20.0	56.51
2.46	5.63	43.0	21.8	16.28	5.63	19.0	44.38	28.1	0.0	40.12	20.0	56.43
2.48	5.69	46.15	23.46	16.48	5.69	19.0	44.76	28.28	0.0	40.18	20.0	56.78
2.5	5.79	45.66	23.22	16.68	5.79	19.0	45.14	28.46	0.0	40.22	20.0	57.05
2.52	5.92	45.09	24.88	16.87	5.92	19.0	45.52	28.65	0.0	40.28	20.0	57.4
2.54	5.97	45.0	24.25	17.07	5.97	19.0	45.9	28.83	0.0	40.3	20.0	57.49
2.56	5.99	44.84	25.11	17.27	6.0	19.0	46.28	29.01	0.0	40.3	20.0	57.49
2.58	6.04	45.05	26.69	17.46	6.04	19.0	46.66	29.2	0.0	40.31	20.0	57.57
2.6	6.08	46.07	25.35	17.66	6.09	19.0	47.04	29.38	0.0	40.33	20.0	57.72
2.62	6.1	47.42	26.22	17.85	6.11	19.0	47.42	29.57	0.0	40.35	20.0	57.82
2.64	6.22	48.12	27.17	18.05	6.22	19.0	47.8	29.75	0.0	40.41	20.0	58.19
2.66	6.4	47.5	28.43	18.25	6.41	19.0	48.18	29.93	0.0	40.5	20.0	58.72
2.68	6.56	45.09	28.43	18.44	6.56	19.0	48.56	30.12	0.0	40.54	20.0	59.0
2.7	6.78	43.94	29.62	18.64	6.79	19.0	48.94	30.3	0.0	40.64	20.0	59.6
2.72	7.06	42.67	30.41	18.84	7.06	19.0	49.32	30.48	0.0	40.76	20.0	60.35
2.74	7.2	41.77	31.83	19.03	7.2	19.0	49.7	30.67	0.0	40.81	20.0	60.66
2.76	7.35	40.87	31.99	19.23	7.36	19.0	50.08	30.85	0.0	40.87	20.0	61.02
2.78	7.45	41.52	32.7	19.42	7.46	19.0	50.46	31.04	0.0	40.91	20.0	61.3
2.8	7.68	42.02	34.04	19.62	7.68	19.0	50.84	31.22	0.0	41.01	20.0	61.97
2.82	7.78	43.0	34.2	19.82	7.78	19.0	51.22	31.4	0.0	41.06	20.0	62.28
2.84	7.88	42.88	35.7	20.01	7.89	19.0	51.6	31.59	0.0	41.1	20.0	62.51
2.86	7.81	43.29	35.62	20.21	7.82	19.0	51.98	31.77	0.0	41.06	20.0	62.27
2.88	7.69	45.89	27.64	20.4	7.7	19.0	52.36	31.96	0.0	41.02	20.0	61.99
2.9	7.65	46.01	27.48	20.6	7.65	19.0	52.74	32.14	0.0	40.98	20.0	61.77
2.92	7.65	46.01	27.48	20.8	7.65	19.0	53.12	32.32	0.0	40.97	20.0	61.7
2.94	7.62	46.26	27.72	20.99	7.62	19.0	53.5	32.51	0.0	40.95	20.0	61.55
2.96	7.22	51.38	27.48	21.19	7.22	19.0	53.88	32.69	0.0	40.79	20.0	60.53
2.98	7.18	52.24	26.85	21.39	7.19	19.0	54.26	32.87	0.0	40.76	20.0	60.38
3.0	7.13	51.62	26.54	21.58	7.14	19.0	54.64	33.06	0.0	40.72	20.0	60.11
3.02	7.14	51.21	27.56	21.78	7.14	19.0	55.02	33.24	0.0	40.71	20.0	60.03
3.04	7.19	50.31	27.72	21.97	7.2	19.0	55.4	33.43	0.0	40.72	20.0	60.09
3.06	7.18	49.45	28.19	22.17	7.18	19.0	55.78	33.61	0.0	40.69	20.0	59.91
3.08	7.1	49.32	28.04	22.37	7.1	19.0	56.16	33.79	0.0	40.64	20.0	59.57
3.1	6.96	49.86	27.88	22.56	6.96	19.0	56.54	33.98	0.0	40.55	20.0	59.06
3.12	6.87	51.12	27.8	22.76	6.87	19.0	56.92	34.16	0.0	40.5	20.0	58.76
3.14	6.9	51.86	29.3	22.96	6.9	19.0	57.3	34.34	0.0	40.57	20.0	59.15
3.16	7.1	51.74	29.7	23.15	7.11	19.0	57.68	34.53	0.0	40.61	20.0	59.42
3.18	7.21	51.29	29.85	23.35	7.21	19.0	58.06	34.71	0.0	40.65	20.0	59.68
3.2	7.06	51.37	29.93	23.54	7.07	19.0	58.44	34.9	0.0	40.61	20.0	59.44
3.22	6.84	51.04	29.54	23.74	6.85	19.0	58.82	35.08	0.0	40.48	20.0	58.61
3.24	6.74	51.2	29.77	23.94	6.75	19.0	59.2	35.26	0.0	40.41	20.0	58.21
3.26	6.72	51.0	29.7	24.13	6.73	19.0	59.58	35.45	0.0	40.39	20.0	58.06
3.28	6.68	51.12	30.01	24.33	6.68	19.0	59.96	35.63	0.0	40.35	20.0	57.83
3.3	6.43	51.69	29.62	24.52	6.44	19.0	60.34	35.82	0.0	40.2	20.0	56.92
3.32	6.13	52.06	29.38	24.72	6.14	19.0	60.72	36.0	0.0	40.01	20.0	55.79
3.34	5.59	51.94	28.59	24.92	5.59	19.0	61.1	36.18	0.0	39.64	20.0	53.68
3.36	5.18	50.09	27.96	25.11	5.19	18.5	61.47	36.36	0.0	39.32	20.0	51.93
3.38	4.81	49.81	27.33	25.31	4.81	18.5	61.84	36.53	0.0	39.02	20.0	50.31
3.4	4.53	49.81	26.3	25.51	4.54	18.5	62.21	36.7	0.0	38.78	20.0	49.06
3.42	4.22	47.64	26.06	25.7	4.22	18.5	62.58	36.88	0.0	38.47	20.0	47.5
3.44	3.95	45.14	25.51	25.9	3.96	18.5	62.95	37.05	0.0	38.19	20.0	46.09
3.46	3.63	41.45	24.25	26.09	3.63	18.5	63.32	37.23	0.0	37.8	20.0	44.29
3.48	3.23	38.22	22.82	26.29	3.23	18.5	63.69	37.4	0.0	37.31	20.0	42.04
3.5	2.83	36.33	22.51	26.49	2.83	18.5	64.06	37.57	0.0	36.75	20.0	39.67
3.52	2.47	34.37	20.93	26.68	2.48	18.0	64.42	37.74	0.0	36.19	20.0	37.4
3.54	2.23	32.48	20.85	26.88	2.23	18.0	64.78	37.9	0.0	35.74	20.0	35.69
3.56	2.18	32.65	20.85	27.08	2.18	18.0	65.14	38.06	0.0	35.64	20.0	35.31
3.58	2.43	32.86	20.22	27.27	2.43	18.0	65.5	38.23	0.0	36.06	20.0	36.89
3.6	3.13	31.75	21.96	27.47	3.14	18.5	65.87	38.4	0.0	37.03	20.0	40.85
3.62	3.93	38.8	22.75	27.66	3.93	18.5	66.24	38.58	0.0	37.98	20.0	45.13
3.64	4.19	40.76	23.3	27.86	4.19	18.5	66.61	38.75	0.0	38.24	20.0	46.38
3.66	4.33	41.3	23.06	28.06	4.33	18.5	66.98	38.92	0.0	38.36	20.0	46.95
3.68	4.32	41.06	22.19	28.25	4.33	18.5	67.35	39.1	0.0	38.34	20.0	46.86
3.7	4.25	41.84	22.51	28.45	4.25	18.5	67.72	39.27	0.0	38.27	20.0	46.52
3.72	4.26	43.72	21.32	28.65	4.27	18.5	68.09	39.44	0.0	38.29	20.0	46.6
3.74	4.3	45.08	21.96	28.84	4.3	18.5	68.46	39.62	0.0	38.32	20.0	46.75
3.76	4.2	39.22	20.85	29.04	4.2	18.5	68.83	39.79	0.0	38.17	20.0	46.0
3.78	4.08	34.56	20.69	29.23	4.09	18.5	69.2	39.97	0.0	38.0	20.0	45.19
3.8	3.81	32.43	19.35	29.43	3.82	18.5	69.57	40.14	0.0	37.69	20.0	43.77
3.82	3.49	30.83	18.32	29.63	3.49	18.5	69.94	40.31	0.0	37.3	20.0	42.04
3.84	3.11	29.12	16.66	29.82	3.11	18.5	70.31	40.49	0.0	36.81	20.0	39.94
3.86	3.11	42.26	6.16	30.02	3.11	18.5	70.68	40.66	0.0	36.94	20.0	40.46
3.88	2.2	29.57	7.42	30.21	2.2	18.0	71.04	40.83	0.0	35.4	20.0	34.45

3.9	1.68	31.45	5.45	30.41	1.68	18.0	71.4	40.99	0.0	34.32	20.0	30.77
3.92	1.33	36.45	5.37	30.61	1.33	18.0	71.76	41.15	90.02	0.0	20.0	0.0
3.94	1.15	42.18	4.66	30.8	1.15	17.5	72.11	41.31	77.01	0.0	20.0	0.0
3.96	1.2	46.69	4.66	31.0	1.2	17.5	72.46	41.46	80.32	0.0	20.0	0.0
3.98	1.34	44.89	5.37	31.2	1.34	18.0	72.82	41.62	90.69	0.0	20.0	0.0
4.0	1.24	44.23	6.08	31.39	1.24	18.0	73.18	41.79	83.35	0.0	20.0	0.0
4.02	0.94	45.34	4.66	31.59	0.94	17.5	73.53	41.94	62.15	0.0	20.0	0.0
4.04	0.72	41.86	3.24	31.78	0.72	17.5	73.88	42.1	46.34	0.0	20.0	0.0
4.06	0.63	40.34	0.1	31.98	0.63	17.5	74.23	42.25	39.36	0.0	20.0	0.0
4.08	0.48	41.37	0.39	32.18	0.48	17.5	74.58	42.4	28.72	0.0	20.0	0.0
4.1	0.45	39.24	1.9	32.37	0.45	17.5	74.93	42.56	26.93	0.0	20.0	0.0
4.12	0.4	31.17	4.9	32.57	0.4	12.5	75.18	42.61	23.54	0.0	20.0	0.0
4.14	0.39	24.58	7.34	32.77	0.39	17.5	75.53	42.76	22.47	0.0	20.0	0.0
4.16	0.39	19.58	11.14	32.96	0.39	17.5	75.88	42.92	22.25	0.0	20.0	0.0
4.18	0.39	15.0	37.75	33.16	0.4	17.5	76.23	43.07	22.93	0.0	20.0	0.0
4.2	0.38	11.11	41.7	33.35	0.39	17.5	76.58	43.23	22.58	0.0	20.0	0.0
4.22	0.38	7.46	48.02	33.55	0.39	17.5	76.93	43.38	22.54	0.0	20.0	0.0
4.24	0.39	4.19	54.41	33.75	0.4	17.5	77.28	43.53	22.83	0.0	20.0	0.0
4.26	0.41	4.36	55.92	33.94	0.43	17.5	77.63	43.69	24.84	0.0	20.0	0.0
4.28	0.44	6.0	58.6	34.14	0.45	17.5	77.98	43.84	26.87	0.0	20.0	0.0
4.3	0.48	5.96	63.81	34.34	0.5	17.5	78.33	44.0	29.91	0.0	20.0	0.0
4.32	0.51	6.21	63.34	34.53	0.53	17.5	78.68	44.15	32.04	0.0	20.0	0.0
4.34	0.48	9.41	60.73	34.73	0.49	18.0	79.04	44.31	29.31	0.0	20.0	0.0
4.36	0.49	12.52	66.02	34.92	0.51	17.5	79.39	44.47	30.42	0.0	20.0	0.0
4.38	0.55	13.39	71.95	35.12	0.57	18.0	79.75	44.63	34.73	0.0	20.0	0.0
4.4	0.57	13.97	64.44	35.32	0.58	18.0	80.11	44.79	35.8	0.0	20.0	0.0
4.42	0.52	16.84	60.42	35.51	0.53	17.5	80.46	44.95	32.35	0.0	20.0	0.0
4.44	0.45	18.56	55.76	35.71	0.47	17.5	80.81	45.1	27.5	0.0	20.0	0.0
4.46	0.39	22.0	59.39	35.9	0.4	17.5	81.16	45.26	23.06	0.0	20.0	0.0
4.48	0.4	19.84	65.63	36.1	0.42	17.5	81.51	45.41	24.04	0.0	20.0	0.0
4.5	0.44	17.91	66.74	36.3	0.45	17.5	81.86	45.56	26.47	0.0	20.0	0.0
4.52	0.41	17.51	62.71	36.49	0.43	17.5	82.21	45.72	24.53	0.0	20.0	0.0
4.54	0.4	17.43	63.42	36.69	0.41	17.5	82.56	45.87	23.47	0.0	20.0	0.0
4.56	0.49	15.79	66.58	36.89	0.51	17.5	82.91	46.02	30.21	0.0	20.0	0.0
4.58	0.56	12.64	65.71	37.08	0.58	18.0	83.27	46.19	35.23	0.0	20.0	0.0
4.6	0.58	10.72	60.89	37.28	0.59	18.0	83.63	46.35	36.32	0.0	20.0	0.0
4.62	0.51	13.3	57.49	37.47	0.52	17.5	83.98	46.51	31.33	0.0	20.0	0.0
4.64	0.51	14.17	54.57	37.67	0.52	17.5	84.33	46.66	31.2	0.0	20.0	0.0
4.66	0.48	15.19	54.57	37.87	0.49	17.5	84.68	46.81	28.9	0.0	20.0	0.0
4.68	0.47	13.84	55.13	38.06	0.48	17.5	85.03	46.97	28.0	0.0	20.0	0.0
4.7	0.46	15.28	57.57	38.26	0.47	17.5	85.38	47.12	27.54	0.0	20.0	0.0
4.72	0.63	15.9	60.5	38.46	0.64	18.0	85.74	47.28	39.94	0.0	20.0	0.0
4.74	0.98	18.11	64.68	38.65	0.99	18.0	86.1	47.45	64.67	0.0	20.0	0.0
4.76	1.2	16.72	63.26	38.85	1.21	18.0	86.46	47.61	0.0	32.18	20.0	24.58
4.78	1.51	15.87	60.26	39.04	1.52	18.0	86.82	47.78	0.0	33.12	20.0	27.12
4.8	2.28	20.25	63.73	39.24	2.3	18.5	87.19	47.95	0.0	34.92	20.0	32.77
4.82	3.67	22.96	60.81	39.44	3.68	18.5	87.56	48.12	0.0	36.92	20.0	40.38
4.84	4.38	25.21	49.12	39.63	4.39	19.0	87.94	48.31	0.0	37.66	20.0	43.64
4.86	4.33	27.23	38.86	39.83	4.34	18.5	88.31	48.48	0.0	37.63	20.0	43.47
4.88	4.58	23.67	38.62	40.02	4.59	19.0	88.69	48.67	0.0	37.81	20.0	44.32
4.9	4.74	28.18	38.86	40.22	4.75	19.0	89.07	48.85	0.0	37.99	20.0	45.18
4.92	4.79	31.74	38.78	40.42	4.8	19.0	89.45	49.03	0.0	38.06	20.0	45.48
4.94	4.76	36.04	38.3	40.61	4.77	19.0	89.83	49.22	0.0	38.05	20.0	45.47
4.96	4.66	40.83	37.99	40.81	4.66	18.5	90.2	49.39	0.0	37.99	20.0	45.17
4.98	4.61	45.87	37.91	41.01	4.62	18.5	90.57	49.56	0.0	37.98	20.0	45.09
5.0	4.75	50.01	38.07	41.2	4.75	18.5	90.94	49.74	0.0	38.11	20.0	45.75
5.02	5.13	50.95	39.8	41.4	5.14	18.5	91.31	49.91	0.0	38.43	20.0	47.31
5.04	5.87	50.17	43.44	41.59	5.88	19.0	91.69	50.1	0.0	38.97	20.0	50.05
5.06	6.5	51.07	46.12	41.79	6.51	19.0	92.07	50.28	0.0	39.39	20.0	52.27
5.08	6.96	51.36	48.65	41.99	6.97	19.0	92.45	50.46	0.0	39.66	20.0	53.81
5.1	7.17	50.9	49.12	42.18	7.18	19.0	92.83	50.65	0.0	39.78	20.0	54.44
5.12	7.57	50.57	50.62	42.38	7.58	19.0	93.21	50.83	0.0	39.99	20.0	55.67
5.14	7.84	52.58	51.65	42.58	7.85	19.0	93.59	51.01	0.0	40.14	20.0	56.53
5.16	8.07	54.63	52.99	42.77	8.08	19.0	93.97	51.2	0.0	40.26	20.0	57.25
5.18	8.24	61.71	54.49	42.97	8.25	19.0	94.35	51.38	0.0	40.37	20.0	57.95
5.2	8.44	67.77	56.15	43.16	8.45	19.0	94.73	51.57	0.0	40.49	20.0	58.67
5.22	8.82	71.41	58.84	43.36	8.84	19.0	95.11	51.75	0.0	40.68	20.0	59.86
5.24	8.86	73.99	59.55	43.56	8.87	19.0	95.49	51.93	0.0	40.7	20.0	59.97
5.26	8.73	77.1	59.39	43.75	8.74	19.0	95.87	52.12	0.0	40.64	20.0	59.61
5.28	8.56	82.92	58.92	43.95	8.57	19.0	96.25	52.3	0.0	40.58	20.0	59.2
5.3	8.43	87.87	59.71	44.14	8.44	19.0	96.63	52.49	0.0	40.52	20.0	58.85
5.32	8.22	88.64	59.71	44.34	8.23	19.0	97.01	52.67	0.0	40.41	20.0	58.18
5.34	7.69	88.03	58.21	44.54	7.7	19.0	97.39	52.85	0.0	40.12	20.0	56.44

5.36	7.16	87.41	57.1	44.73	7.17	18.5	97.76	53.03	0.0	39.81	20.0	54.66
5.38	6.56	85.6	55.92	44.93	6.57	18.5	98.13	53.2	0.0	39.43	20.0	52.53
5.4	5.97	80.52	55.2	45.13	5.98	18.5	98.5	53.37	0.0	39.01	20.0	50.26
5.42	5.44	74.5	54.73	45.32	5.45	18.5	98.87	53.55	0.0	38.59	20.0	48.09
5.44	5.28	67.41	55.44	45.52	5.29	18.5	99.24	53.72	0.0	38.42	20.0	47.26
5.46	5.61	60.32	58.05	45.71	5.62	18.5	99.61	53.9	0.0	38.64	20.0	48.33
5.48	6.25	51.8	62.31	45.91	6.26	19.0	99.99	54.08	0.0	39.04	20.0	50.39
5.5	6.46	45.81	64.52	46.11	6.48	19.0	100.37	54.26	0.0	39.14	20.0	50.93
5.52	6.49	42.29	65.55	46.3	6.51	19.0	100.75	54.45	0.0	39.13	20.0	50.88
5.54	6.71	39.54	67.21	46.5	6.72	19.0	101.13	54.63	0.0	39.24	20.0	51.47
5.56	7.28	40.31	70.05	46.7	7.3	19.0	101.51	54.81	0.0	39.58	20.0	53.36
5.58	8.21	40.8	73.69	46.89	8.22	19.0	101.89	55.0	0.0	40.08	20.0	56.22
5.6	8.87	45.72	75.42	47.09	8.89	19.0	102.27	55.18	0.0	40.43	20.0	58.31
5.62	9.4	51.04	76.92	47.28	9.41	19.5	102.66	55.38	0.0	40.69	20.0	59.93
5.64	9.71	57.06	77.48	47.48	9.72	19.5	103.05	55.57	0.0	40.85	20.0	60.91
5.66	9.83	63.33	77.95	47.68	9.85	19.5	103.44	55.76	0.0	40.92	20.0	61.37
5.68	9.83	73.07	78.42	47.87	9.85	19.0	103.82	55.95	0.0	40.95	20.0	61.56
5.7	9.77	81.76	78.98	48.07	9.78	19.0	104.2	56.13	0.0	40.95	20.0	61.54
5.72	9.67	92.16	79.45	48.27	9.69	19.0	104.58	56.31	0.0	40.93	20.0	61.44
5.74	9.36	99.94	79.06	48.46	9.38	19.0	104.96	56.5	0.0	40.81	20.0	60.65
5.76	8.16	107.72	74.16	48.66	8.18	18.5	105.33	56.67	0.0	40.24	20.0	57.17

Tabella 2 - Dati output

Prof.(m)	Rf (%)	FR (%)	Qt1	Qtn	IC	Es (MPa)	M (MPa)	G0 (MPa)	OCR	K0	KSBT
0.02	5.69	5.71	286.82	88.94	2.49	1.65	1.37	2.06	94.65	5.54	2.35E-07
0.04	5.91	5.94	177.45	74.07	2.56	1.92	1.47	2.4	58.56	3.58	1.51E-07
0.06	7.54	7.63	87.65	54.42	2.73	0.0	1.14	2.31	28.93	1.88	4.64E-08
0.08	8.3	8.42	67.95	47.99	2.79	0.0	1.22	2.69	22.42	1.49	2.89E-08
0.1	3.98	4.02	100.46	47.58	2.56	3.0	2.29	3.76	33.15	2.13	1.50E-07
0.12	1.15	1.16	133.41	41.61	2.25	3.29	3.7	4.12	0.0	0.0	1.27E-06
0.14	0.39	0.39	130.58	35.28	2.09	3.07	3.85	3.85	0.0	0.0	4.03E-06
0.16	0.05	0.05	118.18	28.8	2.01	2.9	3.64	3.64	0.0	0.0	6.89E-06
0.18	0.26	0.26	103.09	29.43	2.1	3.2	4.01	4.01	0.0	0.0	3.71E-06
0.2	0.1	0.11	112.56	30.74	2.0	3.43	4.29	4.29	0.0	0.0	7.59E-06
0.22	0.38	0.38	149.7	43.16	2.0	5.06	6.34	6.34	0.0	0.0	7.36E-06
0.24	0.57	0.57	173.83	51.77	2.01	6.49	8.13	8.13	0.0	0.0	6.98E-06
0.26	1.21	1.21	174.13	60.19	2.13	8.29	10.39	10.39	0.0	0.0	2.90E-06
0.28	1.7	1.71	156.85	63.51	2.21	8.9	10.54	11.16	0.0	0.0	1.69E-06
0.3	2.75	2.77	140.27	66.43	2.34	10.07	10.13	12.62	0.0	0.0	6.88E-07
0.32	3.83	3.86	130.86	67.59	2.44	11.38	10.09	14.27	43.18	2.71	3.42E-07
0.34	4.27	4.3	130.78	70.52	2.46	12.44	10.73	15.6	43.16	2.71	2.92E-07
0.36	4.61	4.64	141.06	77.25	2.46	14.21	12.26	17.82	46.55	2.9	2.93E-07
0.38	4.82	4.85	145.85	81.13	2.46	15.55	13.39	19.49	48.13	2.99	2.90E-07
0.4	5.43	5.47	139.19	81.7	2.5	16.41	13.47	20.57	45.93	2.87	2.22E-07
0.42	6.01	6.06	129.18	79.98	2.54	16.85	13.13	21.12	42.63	2.68	1.67E-07
0.44	6.22	6.27	121.39	77.46	2.56	17.04	12.93	21.35	40.06	2.53	1.45E-07
0.46	6.57	6.63	114.36	75.53	2.59	17.35	12.74	21.74	37.74	2.39	1.21E-07
0.48	6.95	7.01	107.76	73.58	2.62	0.0	12.54	22.1	35.56	2.27	1.01E-07
0.5	6.98	7.05	103.31	71.65	2.62	0.0	12.53	22.34	34.09	2.18	9.44E-08
0.52	7.31	7.38	99.36	70.65	2.64	0.0	12.53	22.91	32.79	2.11	8.24E-08
0.54	7.1	7.17	97.32	69.31	2.64	0.0	12.75	23.17	32.12	2.07	8.52E-08
0.56	7.21	7.28	93.23	69.05	2.64	0.0	12.67	23.21	30.76	1.99	8.15E-08
0.58	7.58	7.67	86.72	66.09	2.67	0.0	12.21	23.22	28.62	1.86	6.63E-08
0.6	8.02	8.12	77.5	61.25	2.71	0.0	11.29	22.59	25.57	1.68	5.01E-08
0.62	7.53	7.63	74.4	58.6	2.71	0.0	11.21	22.16	24.55	1.62	5.34E-08
0.64	7.88	8.0	66.03	53.83	2.74	0.0	10.27	21.34	21.79	1.45	4.06E-08
0.66	8.06	8.2	60.78	50.66	2.77	0.0	9.75	20.9	20.06	1.34	3.42E-08
0.68	8.1	8.24	56.58	47.92	2.79	0.0	9.36	20.5	18.67	1.26	3.03E-08
0.7	7.55	7.69	54.12	45.64	2.78	0.0	9.21	19.95	17.86	1.21	3.23E-08
0.72	7.17	7.31	51.23	43.26	2.78	0.0	8.97	19.39	16.91	1.15	3.26E-08
0.74	6.7	6.84	49.58	41.65	2.77	0.0	8.93	19.04	16.36	1.12	3.51E-08
0.76	6.65	6.79	46.33	39.41	2.78	0.0	8.57	18.6	15.29	1.05	3.19E-08
0.78	6.47	6.62	43.73	37.47	2.79	0.0	8.3	18.17	14.43	1.0	3.04E-08
0.8	6.55	6.72	39.84	34.85	2.81	0.0	7.76	17.55	13.15	0.91	2.53E-08
0.82	6.81	7.0	36.51	32.69	2.84	0.0	7.19	16.94	12.05	0.84	2.03E-08
0.84	6.81	7.01	34.35	31.12	2.86	0.0	6.84	16.43	11.33	0.8	1.82E-08
0.86	6.96	7.18	32.98	30.24	2.88	0.0	6.64	16.28	10.88	0.77	1.62E-08
0.88	6.65	6.81	43.93	37.98	2.79	0.0	8.93	19.68	14.5	1.0	2.94E-08
0.9	3.97	4.04	61.45	45.7	2.57	16.8	12.63	21.06	20.28	1.36	1.37E-07
0.92	2.88	2.92	76.04	50.3	2.44	17.87	15.8	22.4	0.0	0.0	3.36E-07
0.94	2.25	2.28	81.27	50.9	2.37	17.52	17.07	21.96	0.0	0.0	5.75E-07
0.96	1.85	1.88	82.92	50.17	2.32	16.96	17.61	21.26	0.0	0.0	8.17E-07
0.98	1.46	1.48	83.31	48.56	2.26	16.08	17.88	20.16	0.0	0.0	1.19E-06
1.0	1.22	1.24	81.7	46.63	2.23	15.3	17.73	19.17	0.0	0.0	1.50E-06
1.02	1.08	1.1	78.97	44.68	2.21	14.65	17.32	18.36	0.0	0.0	1.67E-06
1.04	0.94	0.96	75.23	42.29	2.2	13.87	16.67	17.38	0.0	0.0	1.83E-06
1.06	0.84	0.85	71.58	40.13	2.19	13.2	16.55	16.55	0.0	0.0	1.93E-06
1.08	0.85	0.86	67.9	38.66	2.21	12.92	15.35	16.2	0.0	0.0	1.72E-06
1.1	0.87	0.88	64.51	37.34	2.23	12.69	14.74	15.91	0.0	0.0	1.51E-06
1.12	0.87	0.89	64.03	37.25	2.23	12.76	14.77	16.0	0.0	0.0	1.49E-06
1.14	0.88	0.9	63.85	37.31	2.23	12.88	14.88	16.15	0.0	0.0	1.47E-06
1.16	0.85	0.87	67.09	38.72	2.21	13.29	15.79	16.66	0.0	0.0	1.72E-06
1.18	0.85	0.86	72.3	41.2	2.19	14.03	17.59	17.59	0.0	0.0	2.03E-06
1.2	0.8	0.81	77.9	43.52	2.15	14.64	18.34	18.34	0.0	0.0	2.56E-06
1.22	0.76	0.77	84.7	46.33	2.12	15.35	19.24	19.24	0.0	0.0	3.29E-06
1.24	0.72	0.73	90.49	48.67	2.09	15.95	19.99	19.99	0.0	0.0	4.05E-06
1.26	0.74	0.75	95.51	51.13	2.07	16.72	20.96	20.96	0.0	0.0	4.42E-06
1.28	0.76	0.77	100.34	53.49	2.06	17.46	21.89	21.89	0.0	0.0	4.81E-06
1.3	0.78	0.79	103.58	55.25	2.06	18.09	22.67	22.67	0.0	0.0	4.97E-06
1.32	0.81	0.82	105.67	56.6	2.06	18.63	23.35	23.35	0.0	0.0	4.96E-06
1.34	0.87	0.88	108.7	58.63	2.06	19.45	24.38	24.38	0.0	0.0	4.80E-06
1.36	0.92	0.93	108.7	59.2	2.07	19.85	24.88	24.88	0.0	0.0	4.51E-06
1.38	0.98	0.99	109.28	60.18	2.08	20.42	25.6	25.6	0.0	0.0	4.16E-06
1.4	1.04	1.05	107.21	59.87	2.1	20.63	25.86	25.86	0.0	0.0	3.72E-06

1.42	1.1	1.11	104.89	59.42	2.12	20.8	26.07	26.07	0.0	0.0	3.30E-06
1.44	1.13	1.14	103.93	59.38	2.12	21.0	26.32	26.32	0.0	0.0	3.12E-06
1.46	1.16	1.17	104.39	59.94	2.13	21.35	26.75	26.75	0.0	0.0	3.06E-06
1.48	1.13	1.15	106.24	60.8	2.12	21.63	27.12	27.12	0.0	0.0	3.28E-06
1.5	1.06	1.08	109.93	62.14	2.09	21.9	27.44	27.44	0.0	0.0	3.89E-06
1.52	0.99	1.0	114.88	63.99	2.06	22.27	27.91	27.91	0.0	0.0	4.75E-06
1.54	0.94	0.95	118.53	65.31	2.04	22.53	28.23	28.23	0.0	0.0	5.56E-06
1.56	0.85	0.86	124.56	67.38	2.01	22.85	28.64	28.64	0.0	0.0	7.08E-06
1.58	0.8	0.8	130.03	69.39	1.98	23.24	29.13	29.13	0.0	0.0	8.58E-06
1.6	0.72	0.73	139.93	72.97	1.94	23.89	29.94	29.94	0.0	0.0	1.16E-05
1.62	0.69	0.7	147.7	76.12	1.91	24.63	30.87	30.87	0.0	0.0	1.38E-05
1.64	0.7	0.71	149.87	77.44	1.91	25.14	31.51	31.51	0.0	0.0	1.40E-05
1.66	0.73	0.73	151.01	78.5	1.91	25.66	32.16	32.16	0.0	0.0	1.37E-05
1.68	0.73	0.73	155.07	80.44	1.9	26.25	32.89	32.89	0.0	0.0	1.46E-05
1.7	0.72	0.72	159.42	82.43	1.89	26.8	33.59	33.59	0.0	0.0	1.59E-05
1.72	0.72	0.73	161.53	83.67	1.89	27.27	34.18	34.18	0.0	0.0	1.62E-05
1.74	0.73	0.73	161.82	84.1	1.89	27.51	34.48	34.48	0.0	0.0	1.63E-05
1.76	0.76	0.76	159.23	83.68	1.9	27.73	34.75	34.75	0.0	0.0	1.49E-05
1.78	0.78	0.79	154.92	82.33	1.91	27.64	34.64	34.64	0.0	0.0	1.36E-05
1.8	0.81	0.81	150.66	81.02	1.93	27.58	34.57	34.57	0.0	0.0	1.24E-05
1.82	0.83	0.84	149.62	81.14	1.94	27.9	34.97	34.97	0.0	0.0	1.17E-05
1.84	0.83	0.84	152.86	82.79	1.93	28.44	35.65	35.65	0.0	0.0	1.23E-05
1.86	0.79	0.8	159.25	85.39	1.9	28.99	36.34	36.34	0.0	0.0	1.45E-05
1.88	1.01	1.02	148.76	83.47	1.98	29.92	37.5	37.5	0.0	0.0	8.72E-06
1.9	0.72	0.73	173.11	90.98	1.86	30.15	37.79	37.79	0.0	0.0	2.01E-05
1.92	0.69	0.7	179.42	93.52	1.84	30.67	38.44	38.44	0.0	0.0	2.33E-05
1.94	0.68	0.69	182.08	94.79	1.83	31.03	38.89	38.89	0.0	0.0	2.47E-05
1.96	0.68	0.69	186.25	96.96	1.82	31.71	39.75	39.75	0.0	0.0	2.58E-05
1.98	0.7	0.7	188.59	98.52	1.82	32.34	40.53	40.53	0.0	0.0	2.59E-05
2.0	0.71	0.71	188.84	99.09	1.82	32.69	40.97	40.97	0.0	0.0	2.56E-05
2.02	0.72	0.73	188.96	99.66	1.83	33.07	41.45	41.45	0.0	0.0	2.50E-05
2.04	0.75	0.76	186.63	99.41	1.84	33.39	41.85	41.85	0.0	0.0	2.31E-05
2.06	0.79	0.79	183.48	98.8	1.85	33.63	42.15	42.15	0.0	0.0	2.10E-05
2.08	0.78	0.79	186.17	100.24	1.85	34.1	42.74	42.74	0.0	0.0	2.19E-05
2.1	0.8	0.81	186.84	101.09	1.85	34.59	43.35	43.35	0.0	0.0	2.15E-05
2.12	0.8	0.81	185.74	100.87	1.85	34.67	43.45	43.45	0.0	0.0	2.13E-05
2.14	0.8	0.81	184.44	100.55	1.85	34.72	43.51	43.51	0.0	0.0	2.12E-05
2.16	0.74	0.75	191.59	103.14	1.82	34.98	43.84	43.84	0.0	0.0	2.61E-05
2.18	0.73	0.74	189.08	102.14	1.82	34.78	43.59	43.59	0.0	0.0	2.60E-05
2.2	0.76	0.77	185.88	101.41	1.83	34.97	43.83	43.83	0.0	0.0	2.39E-05
2.22	0.77	0.78	188.67	103.19	1.83	35.68	44.71	44.71	0.0	0.0	2.42E-05
2.24	0.76	0.76	195.1	106.25	1.82	36.47	45.71	45.71	0.0	0.0	2.68E-05
2.26	0.73	0.73	201.25	108.84	1.8	36.95	46.31	46.31	0.0	0.0	3.08E-05
2.28	0.73	0.73	202.6	109.78	1.79	37.32	46.77	46.77	0.0	0.0	3.14E-05
2.3	0.7	0.7	207.33	111.69	1.78	37.61	47.13	47.13	0.0	0.0	3.55E-05
2.32	0.66	0.66	212.98	113.84	1.75	37.84	47.42	47.42	0.0	0.0	4.14E-05
2.34	0.63	0.63	219.02	116.3	1.74	38.21	47.89	47.89	0.0	0.0	4.75E-05
2.36	0.63	0.63	219.07	116.75	1.74	38.5	48.26	48.26	0.0	0.0	4.74E-05
2.38	0.66	0.66	213.68	115.18	1.75	38.57	48.34	48.34	0.0	0.0	4.24E-05
2.4	0.71	0.71	206.68	113.21	1.78	38.78	48.6	48.6	0.0	0.0	3.55E-05
2.42	0.75	0.76	201.74	111.97	1.8	39.08	48.98	48.98	0.0	0.0	3.09E-05
2.44	0.76	0.77	200.3	111.78	1.8	39.28	49.23	49.23	0.0	0.0	3.00E-05
2.46	0.76	0.77	198.98	111.45	1.8	39.33	49.3	49.3	0.0	0.0	2.97E-05
2.48	0.81	0.82	199.62	112.84	1.81	40.33	50.55	50.55	0.0	0.0	2.73E-05
2.5	0.79	0.79	201.97	113.9	1.8	40.51	50.77	50.77	0.0	0.0	2.95E-05
2.52	0.76	0.77	205.21	115.32	1.79	40.71	51.03	51.03	0.0	0.0	3.24E-05
2.54	0.75	0.76	205.6	115.68	1.79	40.86	51.21	51.21	0.0	0.0	3.33E-05
2.56	0.75	0.75	205.18	115.68	1.78	40.92	51.29	51.29	0.0	0.0	3.38E-05
2.58	0.75	0.75	205.32	116.02	1.78	41.12	51.54	51.54	0.0	0.0	3.42E-05
2.6	0.76	0.76	205.52	116.62	1.78	41.54	52.07	52.07	0.0	0.0	3.37E-05
2.62	0.78	0.78	205.03	117.0	1.79	42.0	52.64	52.64	0.0	0.0	3.24E-05
2.64	0.77	0.78	207.6	118.52	1.78	42.5	53.26	53.26	0.0	0.0	3.36E-05
2.66	0.74	0.75	212.49	120.67	1.77	42.81	53.65	53.65	0.0	0.0	3.80E-05
2.68	0.69	0.69	216.27	121.84	1.74	42.55	53.33	53.33	0.0	0.0	4.48E-05
2.7	0.65	0.65	222.33	124.32	1.72	42.77	53.6	53.6	0.0	0.0	5.25E-05
2.72	0.6	0.61	230.11	127.48	1.69	43.04	53.95	53.95	0.0	0.0	6.33E-05
2.74	0.58	0.58	233.22	128.77	1.68	43.12	54.04	54.04	0.0	0.0	6.98E-05
2.76	0.56	0.56	236.95	130.32	1.66	43.23	54.18	54.18	0.0	0.0	7.78E-05
2.78	0.56	0.56	238.64	131.52	1.66	43.65	54.71	54.71	0.0	0.0	7.91E-05
2.8	0.55	0.55	244.48	134.41	1.65	44.29	55.51	55.51	0.0	0.0	8.62E-05
2.82	0.55	0.56	246.27	135.76	1.65	44.82	56.18	56.18	0.0	0.0	8.68E-05
2.84	0.54	0.55	248.05	136.76	1.64	45.03	56.44	56.44	0.0	0.0	9.10E-05
2.86	0.55	0.56	244.56	135.7	1.65	45.07	56.49	56.49	0.0	0.0	8.64E-05



2.88	0.6	0.6	239.31	134.51	1.67	45.62	57.18	57.18	0.0	0.0	7.40E-05
2.9	0.6	0.61	236.41	133.56	1.68	45.6	57.16	57.16	0.0	0.0	7.16E-05
2.92	0.6	0.61	235.05	133.24	1.68	45.65	57.22	57.22	0.0	0.0	7.11E-05
2.94	0.61	0.61	232.83	132.61	1.68	45.71	57.29	57.29	0.0	0.0	6.92E-05
2.96	0.71	0.72	219.29	128.22	1.74	46.34	58.08	58.08	0.0	0.0	4.75E-05
2.98	0.73	0.73	216.93	127.61	1.74	46.54	58.33	58.33	0.0	0.0	4.51E-05
3.0	0.72	0.73	214.21	126.46	1.74	46.32	58.06	58.06	0.0	0.0	4.45E-05
3.02	0.72	0.72	213.17	126.11	1.74	46.27	57.99	57.99	0.0	0.0	4.49E-05
3.04	0.7	0.7	213.76	126.39	1.74	46.2	57.9	57.9	0.0	0.0	4.74E-05
3.06	0.69	0.69	212.1	125.64	1.73	45.98	57.63	57.63	0.0	0.0	4.81E-05
3.08	0.69	0.7	208.54	124.2	1.74	45.82	57.43	57.43	0.0	0.0	4.60E-05
3.1	0.72	0.72	203.26	122.1	1.75	45.71	57.29	57.29	0.0	0.0	4.17E-05
3.12	0.74	0.75	199.48	120.84	1.77	45.9	57.53	57.53	0.0	0.0	3.78E-05
3.14	0.75	0.76	199.31	122.46	1.77	46.0	57.66	57.66	0.0	0.0	3.83E-05
3.16	0.73	0.73	204.11	123.6	1.75	46.67	58.49	58.49	0.0	0.0	4.16E-05
3.18	0.71	0.72	206.08	124.64	1.75	46.82	58.68	58.68	0.0	0.0	4.43E-05
3.2	0.73	0.73	200.8	123.67	1.75	46.37	58.11	58.11	0.0	0.0	4.17E-05
3.22	0.75	0.75	193.5	120.23	1.77	45.86	57.48	57.48	0.0	0.0	3.72E-05
3.24	0.76	0.77	189.68	118.57	1.78	45.74	57.33	57.33	0.0	0.0	3.48E-05
3.26	0.76	0.76	188.16	117.97	1.78	45.69	57.27	57.27	0.0	0.0	3.45E-05
3.28	0.76	0.77	185.87	117.04	1.79	45.67	57.24	57.24	0.0	0.0	3.32E-05
3.3	0.8	0.81	178.0	113.38	1.81	45.33	56.81	56.81	0.0	0.0	2.81E-05
3.32	0.85	0.86	168.77	108.94	1.84	44.79	56.14	56.14	0.0	0.0	2.30E-05
3.34	0.93	0.94	152.89	100.85	1.89	43.5	54.52	54.52	0.0	0.0	1.61E-05
3.36	0.97	0.98	140.99	94.38	1.92	42.05	52.7	52.7	0.0	0.0	1.27E-05
3.38	1.03	1.05	130.06	88.58	1.96	41.03	51.42	51.42	0.0	0.0	9.58E-06
3.4	1.1	1.11	121.92	84.25	2.0	40.31	50.52	50.52	0.0	0.0	7.59E-06
3.42	1.13	1.15	112.81	78.97	2.03	38.9	48.76	48.76	0.0	0.0	6.17E-06
3.44	1.14	1.16	105.11	74.37	2.05	37.52	47.03	47.03	0.0	0.0	5.23E-06
3.46	1.14	1.16	95.88	68.66	2.08	35.62	44.64	44.64	0.0	0.0	4.31E-06
3.48	1.18	1.21	84.79	61.86	2.12	33.52	42.02	42.02	0.0	0.0	3.13E-06
3.5	1.28	1.31	73.66	55.09	2.19	31.67	39.7	39.7	0.0	0.0	2.02E-06
3.52	1.39	1.43	63.89	48.96	2.25	29.86	33.75	37.42	0.0	0.0	1.31E-06
3.54	1.46	1.5	57.13	44.58	2.29	28.42	30.31	35.62	0.0	0.0	9.48E-07
3.56	1.5	1.54	55.56	43.64	2.31	28.29	29.61	35.45	0.0	0.0	8.54E-07
3.58	1.35	1.39	61.86	47.62	2.25	29.39	33.11	36.83	0.0	0.0	1.28E-06
3.6	1.01	1.03	79.93	58.41	2.1	31.64	39.66	39.66	0.0	0.0	3.60E-06
3.62	0.99	1.0	100.19	71.29	2.03	36.13	45.28	45.28	0.0	0.0	6.18E-06
3.64	0.97	0.99	106.53	75.29	2.0	37.47	46.96	46.96	0.0	0.0	7.27E-06
3.66	0.95	0.97	109.53	77.16	1.99	38.04	47.68	47.68	0.0	0.0	8.00E-06
3.68	0.95	0.96	108.92	76.86	1.99	38.0	47.63	47.63	0.0	0.0	7.99E-06
3.7	0.98	1.0	106.6	75.74	2.0	38.05	47.69	47.69	0.0	0.0	7.22E-06
3.72	1.02	1.04	106.47	76.02	2.01	38.64	48.43	48.43	0.0	0.0	6.75E-06
3.74	1.05	1.07	106.81	76.49	2.02	39.14	49.05	49.05	0.0	0.0	6.56E-06
3.76	0.93	0.95	103.94	74.06	2.0	37.31	46.77	46.77	0.0	0.0	7.52E-06
3.78	0.85	0.86	100.57	71.47	1.99	35.68	44.72	44.72	0.0	0.0	8.22E-06
3.8	0.85	0.86	93.4	67.05	2.01	34.32	43.01	43.01	0.0	0.0	6.94E-06
3.82	0.88	0.9	84.88	61.85	2.05	32.9	41.24	41.24	0.0	0.0	5.29E-06
3.84	0.94	0.96	75.15	55.82	2.1	31.23	39.14	39.14	0.0	0.0	3.69E-06
3.86	1.36	1.39	74.77	57.29	2.19	34.88	43.71	43.71	0.0	0.0	1.99E-06
3.88	1.34	1.39	52.11	41.53	2.3	28.09	29.79	35.2	0.0	0.0	9.18E-07
3.9	1.87	1.96	39.25	33.14	2.47	26.26	22.52	32.91	0.0	0.0	2.84E-07
3.92	2.74	2.89	30.62	27.41	2.64	0.0	17.64	32.0	10.11	0.72	8.60E-08
3.94	3.67	3.91	26.1	24.16	2.76	0.0	15.09	32.14	8.61	0.62	3.54E-08
3.96	3.9	4.15	27.12	25.16	2.77	0.0	15.74	33.69	8.95	0.64	3.45E-08
3.98	3.34	3.54	30.5	27.82	2.69	0.0	17.77	34.42	10.07	0.72	5.99E-08
4.0	3.57	3.79	27.93	25.85	2.73	0.0	16.34	33.44	9.22	0.66	4.41E-08
4.02	4.8	5.21	20.75	20.28	2.9	0.0	12.18	30.95	6.85	0.5	1.34E-08
4.04	5.79	6.45	15.41	15.89	3.04	0.0	9.08	27.58	5.09	0.38	4.98E-09
4.06	6.45	7.32	13.04	13.86	3.13	0.0	7.64	25.96	4.3	0.33	2.83E-09
4.08	8.68	10.29	9.48	10.62	3.31	0.0	4.27	23.93	3.13	0.25	8.82E-10
4.1	8.68	10.41	8.86	9.99	3.33	0.0	3.77	23.1	2.92	0.23	8.20E-10
4.12	7.7	9.46	7.74	8.77	3.35	0.0	2.89	20.58	2.55	0.2	7.83E-10
4.14	6.3	7.81	7.36	8.24	3.31	0.0	2.59	18.83	2.43	0.2	8.69E-10
4.16	5.05	6.29	7.26	8.0	3.27	0.0	2.49	17.52	2.4	0.19	1.06E-09
4.18	3.78	4.67	7.45	8.01	3.19	0.0	2.57	16.35	2.46	0.2	1.83E-09
4.2	2.83	3.51	7.31	7.77	3.13	0.0	2.45	14.91	2.41	0.19	2.81E-09
4.22	1.9	2.37	7.27	7.5	3.05	0.0	2.37	13.43	2.4	0.19	4.94E-09
4.24	1.06	1.31	7.34	7.26	2.93	0.0	2.32	11.79	2.42	0.2	1.09E-08
4.26	1.02	1.25	7.96	7.77	2.9	0.0	2.7	12.26	2.63	0.21	1.40E-08
4.28	1.32	1.59	8.58	8.44	2.91	0.0	3.17	13.57	2.83	0.23	1.24E-08
4.3	1.2	1.42	9.52	9.17	2.86	0.0	3.84	14.08	3.14	0.25	1.82E-08
4.32	1.18	1.38	10.16	9.7	2.83	0.0	4.35	14.57	3.35	0.26	2.20E-08

4.34	1.92	2.29	9.26	9.26	2.96	0.0	3.8	15.69	3.06	0.24	8.95E-09
4.36	2.48	2.94	9.58	9.72	3.0	0.0	4.14	17.16	3.16	0.25	6.69E-09
4.38	2.37	2.75	10.89	10.84	2.95	0.0	5.27	18.27	3.59	0.28	9.85E-09
4.4	2.4	2.79	11.19	11.11	2.94	0.0	5.57	18.69	3.69	0.29	1.03E-08
4.42	3.16	3.72	10.08	10.35	3.04	0.0	4.69	19.11	3.32	0.26	5.19E-09
4.44	3.98	4.82	8.54	9.12	3.15	0.0	3.51	18.71	2.82	0.22	2.38E-09
4.46	5.45	6.82	7.13	7.89	3.29	0.0	2.55	18.78	2.35	0.19	9.33E-10
4.48	4.74	5.89	7.41	8.08	3.24	0.0	2.72	18.44	2.45	0.2	1.22E-09
4.5	3.96	4.83	8.13	8.73	3.17	0.0	3.23	18.38	2.68	0.21	2.13E-09
4.52	4.11	5.1	7.51	8.09	3.21	0.0	2.78	17.92	2.48	0.2	1.61E-09
4.54	4.24	5.3	7.16	7.77	3.23	0.0	2.55	17.68	2.36	0.19	1.35E-09
4.56	3.12	3.73	9.19	9.54	3.07	0.0	4.03	18.54	3.03	0.24	4.21E-09
4.58	2.19	2.56	10.68	10.6	2.94	0.0	5.23	18.31	3.52	0.27	1.05E-08
4.6	1.81	2.11	10.97	10.71	2.89	0.0	5.45	17.72	3.62	0.28	1.49E-08
4.62	2.55	3.03	9.43	9.61	3.01	0.0	4.21	17.94	3.11	0.25	6.16E-09
4.64	2.72	3.24	9.36	9.59	3.03	0.0	4.19	18.26	3.09	0.24	5.47E-09
4.66	3.11	3.76	8.64	9.02	3.09	0.0	3.65	18.21	2.85	0.23	3.63E-09
4.68	2.9	3.53	8.35	8.71	3.09	0.0	3.41	17.58	2.75	0.22	3.70E-09
4.7	3.25	3.96	8.18	8.62	3.12	0.0	3.32	18.02	2.7	0.22	2.95E-09
4.72	2.47	2.84	11.83	11.71	2.93	0.0	6.55	20.49	3.9	0.3	1.13E-08
4.74	1.83	2.0	19.08	17.7	2.69	0.0	12.68	24.67	6.3	0.47	5.83E-08
4.76	1.38	1.48	23.7	21.15	2.56	20.63	15.8	25.85	0.0	0.0	1.52E-07
4.78	1.04	1.11	29.98	25.74	2.42	21.94	20.06	27.5	0.0	0.0	4.03E-07
4.8	0.88	0.92	46.05	37.57	2.23	26.83	30.92	33.63	0.0	0.0	1.45E-06
4.82	0.62	0.64	74.65	57.06	2.0	32.35	40.55	40.55	0.0	0.0	7.60E-06
4.84	0.57	0.59	88.97	66.65	1.92	35.11	44.0	44.0	0.0	0.0	1.30E-05
4.86	0.63	0.64	87.61	66.14	1.94	35.72	44.77	44.77	0.0	0.0	1.11E-05
4.88	0.52	0.53	92.4	68.76	1.88	35.12	44.01	44.01	0.0	0.0	1.67E-05
4.9	0.59	0.6	95.46	71.45	1.9	37.18	46.6	46.6	0.0	0.0	1.49E-05
4.92	0.66	0.67	96.05	72.4	1.92	38.54	48.31	48.31	0.0	0.0	1.29E-05
4.94	0.76	0.77	95.0	72.35	1.95	39.88	49.99	49.99	0.0	0.0	1.03E-05
4.96	0.88	0.89	92.61	71.42	2.0	41.11	51.53	51.53	0.0	0.0	7.68E-06
4.98	0.99	1.01	91.33	71.17	2.03	42.48	53.24	53.24	0.0	0.0	6.05E-06
5.0	1.05	1.07	93.77	73.26	2.03	44.05	55.2	55.2	0.0	0.0	5.84E-06
5.02	0.99	1.01	101.2	78.33	2.0	45.39	56.89	56.89	0.0	0.0	7.69E-06
5.04	0.85	0.87	115.51	87.68	1.92	47.06	58.98	58.98	0.0	0.0	1.34E-05
5.06	0.79	0.8	127.55	95.62	1.86	48.81	61.17	61.17	0.0	0.0	1.93E-05
5.08	0.74	0.75	136.29	101.35	1.83	49.95	62.6	62.6	0.0	0.0	2.50E-05
5.1	0.71	0.72	139.94	103.73	1.81	50.3	63.04	63.04	0.0	0.0	2.83E-05
5.12	0.67	0.68	147.3	108.47	1.78	51.06	64.0	64.0	0.0	0.0	3.53E-05
5.14	0.67	0.68	152.05	111.86	1.77	52.25	65.48	65.48	0.0	0.0	3.78E-05
5.16	0.68	0.68	155.91	114.7	1.76	53.34	66.85	66.85	0.0	0.0	3.95E-05
5.18	0.75	0.76	158.78	117.54	1.78	55.78	69.9	69.9	0.0	0.0	3.48E-05
5.2	0.8	0.81	162.08	120.48	1.79	57.9	72.57	72.57	0.0	0.0	3.24E-05
5.22	0.81	0.82	168.92	125.41	1.78	59.69	74.81	74.81	0.0	0.0	3.51E-05
5.24	0.83	0.84	168.95	125.87	1.79	60.49	75.82	75.82	0.0	0.0	3.33E-05
5.26	0.88	0.89	165.84	124.36	1.81	61.1	76.58	76.58	0.0	0.0	2.90E-05
5.28	0.97	0.98	162.06	122.64	1.84	62.29	78.07	78.07	0.0	0.0	2.34E-05
5.3	1.04	1.05	158.94	121.22	1.86	63.29	79.32	79.32	0.0	0.0	1.96E-05
5.32	1.08	1.09	154.46	118.48	1.88	63.08	79.06	79.06	0.0	0.0	1.74E-05
5.34	1.14	1.16	143.8	111.49	1.92	61.79	77.44	77.44	0.0	0.0	1.34E-05
5.36	1.22	1.24	133.4	104.56	1.96	60.46	75.78	75.78	0.0	0.0	1.01E-05
5.38	1.3	1.32	121.69	96.57	2.0	58.6	73.45	73.45	0.0	0.0	7.38E-06
5.4	1.35	1.37	110.25	88.42	2.04	55.93	70.09	70.09	0.0	0.0	5.64E-06
5.42	1.37	1.39	100.01	80.95	2.07	53.1	66.55	66.55	0.0	0.0	4.46E-06
5.44	1.27	1.3	96.66	78.18	2.07	50.96	63.87	63.87	0.0	0.0	4.72E-06
5.46	1.07	1.09	102.5	81.76	2.0	50.07	62.75	62.75	0.0	0.0	7.33E-06
5.48	0.83	0.84	113.91	88.88	1.9	49.29	61.77	61.77	0.0	0.0	1.46E-05
5.5	0.71	0.72	117.51	90.8	1.86	48.02	60.19	60.19	0.0	0.0	2.04E-05
5.52	0.65	0.66	117.67	90.62	1.84	47.02	58.93	58.93	0.0	0.0	2.35E-05
5.54	0.59	0.6	121.15	92.73	1.8	46.61	58.42	58.42	0.0	0.0	2.96E-05
5.56	0.55	0.56	131.26	99.66	1.76	48.08	60.26	60.26	0.0	0.0	3.95E-05
5.58	0.5	0.5	147.64	110.63	1.7	50.05	62.73	62.73	0.0	0.0	6.18E-05
5.6	0.51	0.52	159.25	119.01	1.68	52.93	66.34	66.34	0.0	0.0	7.02E-05
5.62	0.54	0.55	168.16	125.69	1.67	55.61	69.7	69.7	0.0	0.0	7.36E-05
5.64	0.59	0.59	173.13	129.86	1.68	58.07	72.78	72.78	0.0	0.0	6.94E-05
5.66	0.64	0.65	174.71	131.81	1.7	60.21	75.47	75.47	0.0	0.0	6.09E-05
5.68	0.74	0.75	174.12	132.65	1.74	63.05	79.02	79.02	0.0	0.0	4.72E-05
5.7	0.84	0.84	172.43	132.54	1.77	65.33	81.88	81.88	0.0	0.0	3.74E-05
5.72	0.95	0.96	170.2	132.12	1.81	67.89	85.08	85.08	0.0	0.0	2.87E-05
5.74	1.07	1.08	164.11	128.75	1.85	69.23	86.76	86.76	0.0	0.0	2.14E-05
5.76	1.32	1.33	142.43	114.4	1.95	68.48	85.83	85.83	0.0	0.0	1.06E-05



# CPT Office V. 1.1

## Elaborato grafico prova penetrometrica

21/09/2022

19:30:42

Committente	Dott. Geol. Maurizio Castellari		
Località	Lagosanto (Fe)		
Via	Lagosanto		
Prova	CPTU5		
Tipo prova	CPTU		
Tipo di Prova	Prof. max (m)	Preforo (m)	Falda (m da p.c.)
CPTU	5.72	0.02	1.6

Tabella 1 - Informazioni generali

# 1 - Parametri prova penetrometrica CPTU5

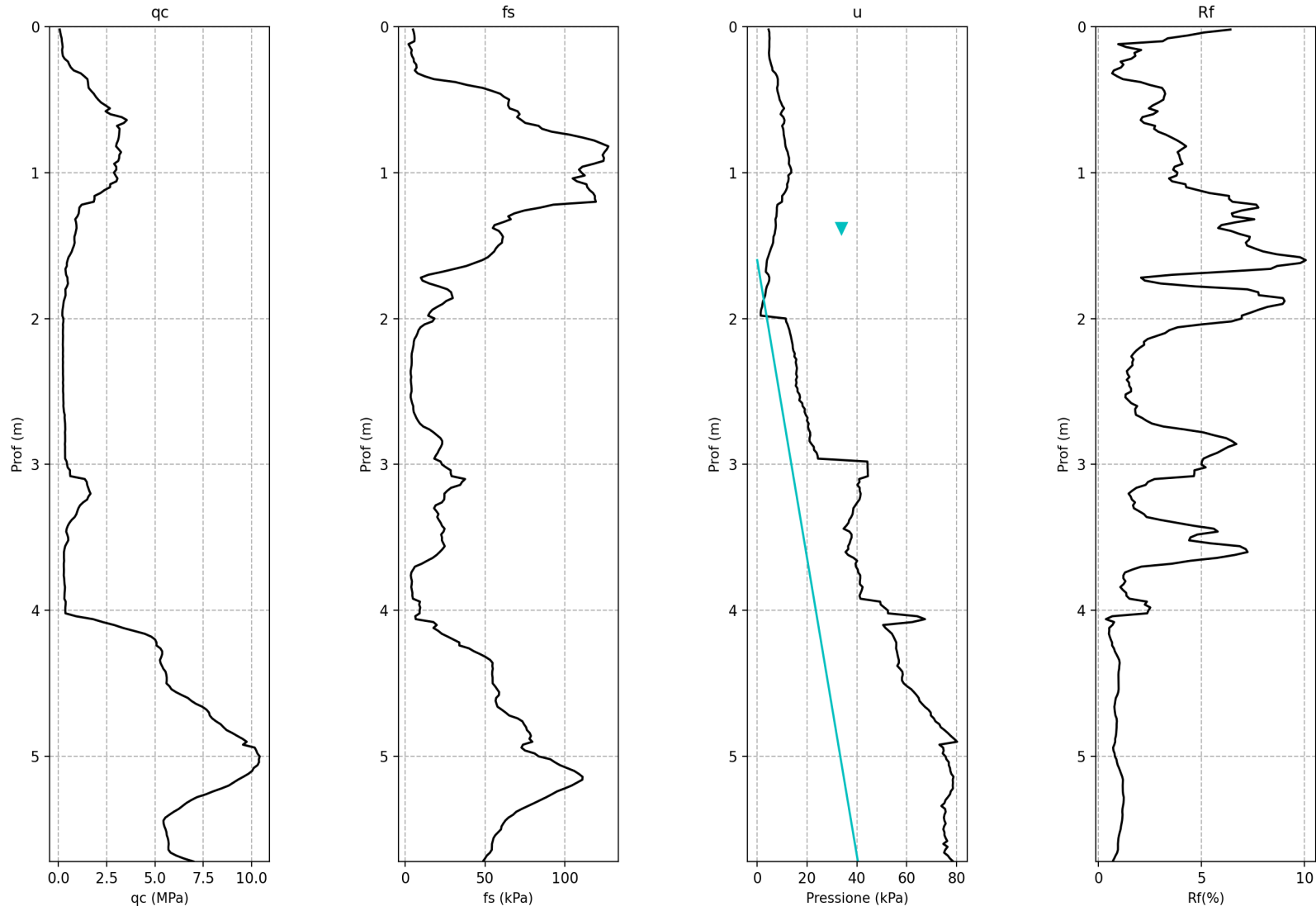


Fig 1 - Plot profondità-variabile della prova penetrometrica elaborata

# 1 - Parametri prova penetrometrica CPTU5

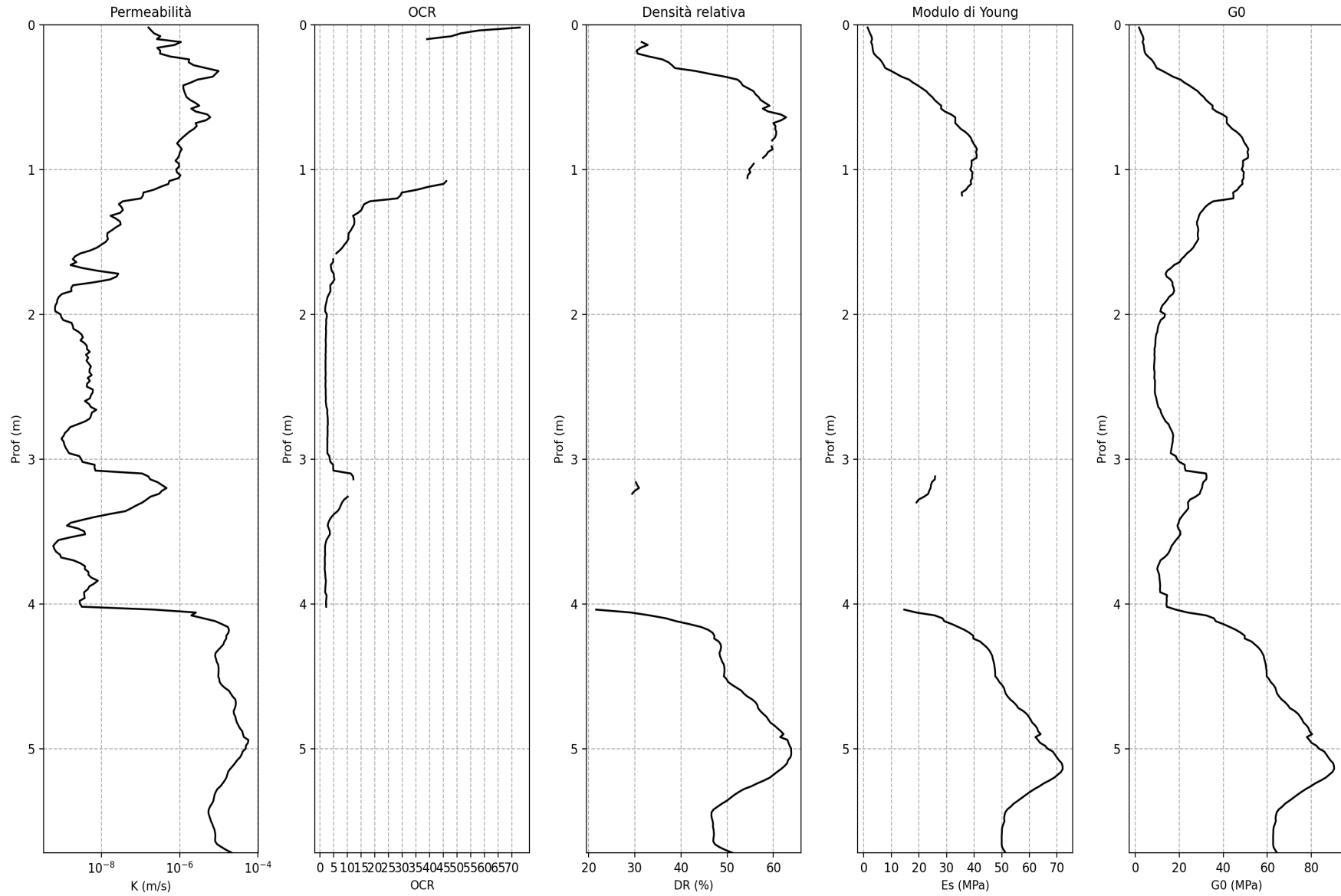


Fig 2 - Plot profondità-variabile della prova penetrometrica elaborata

# 1 - Parametri prova penetrometrica CPTU5

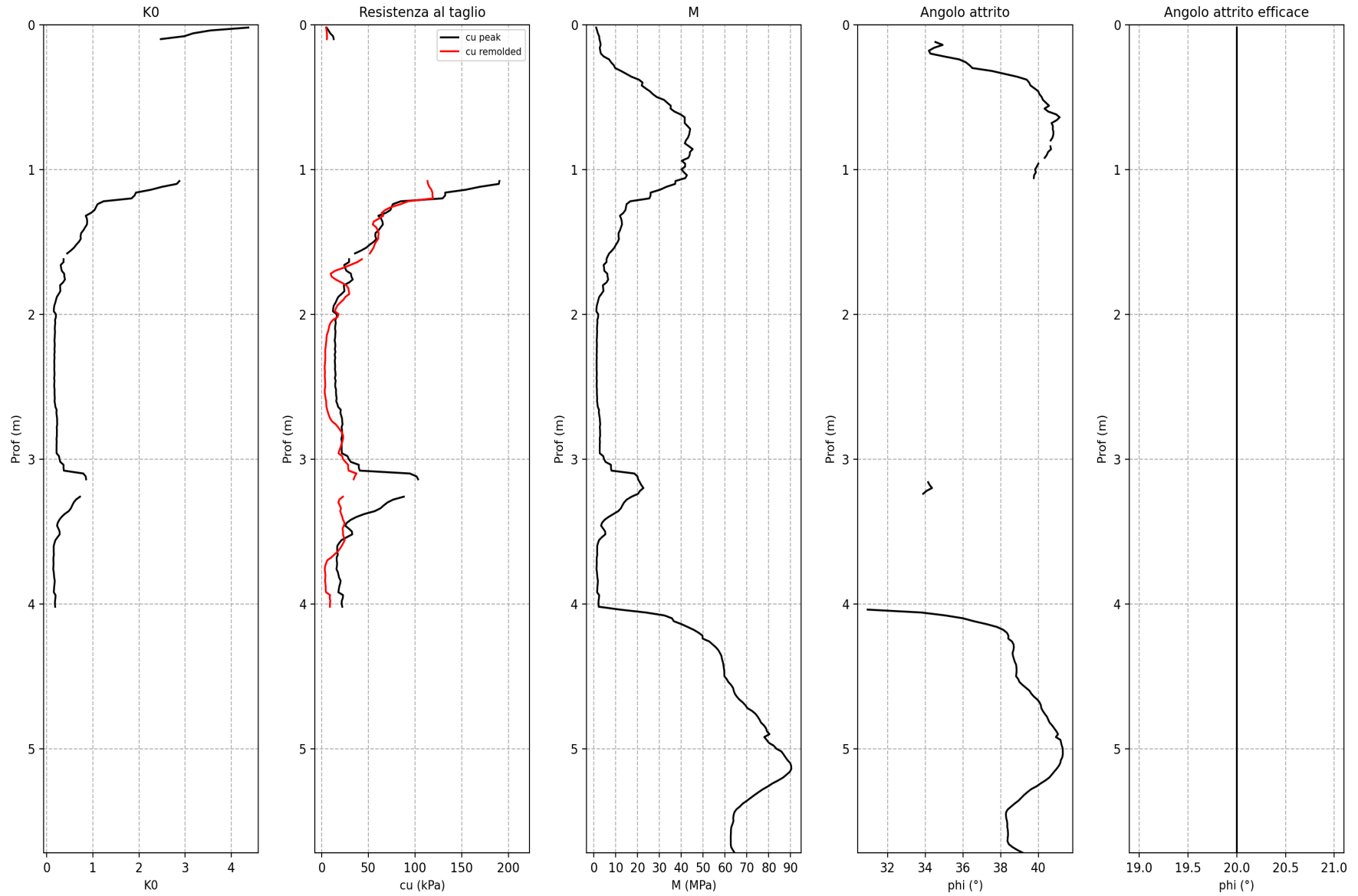


Fig 3 - Plot profondità-variabile della prova penetrometrica elaborata

## 2 - SBT & SBT(n) CPTU5

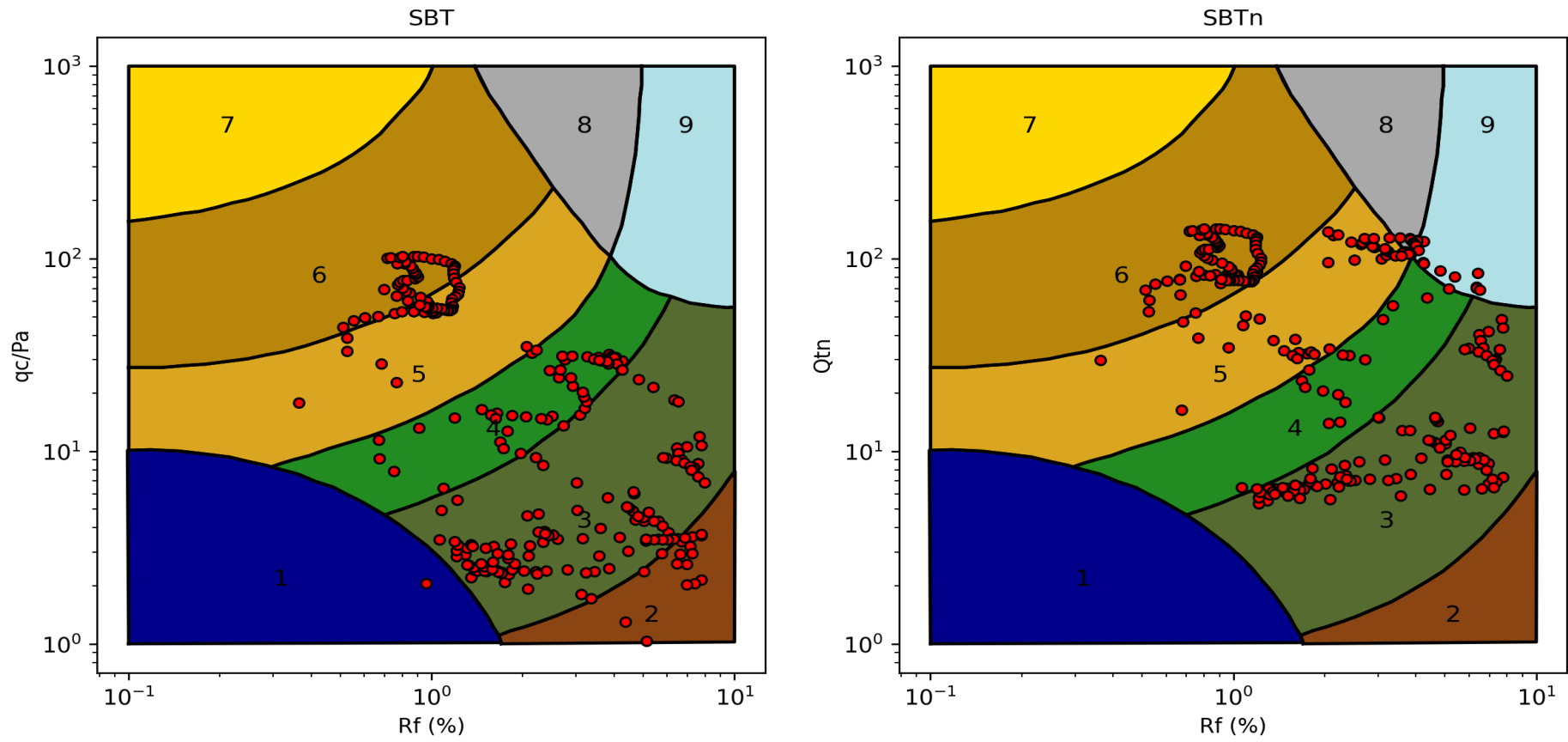


Fig 4 - A sinistra plot valori qc/Pa-Rf su SBT chart, a destra plot valori Qtn-Fr su SBT(n) chart

## 2 - Stratigrafia CPTU5

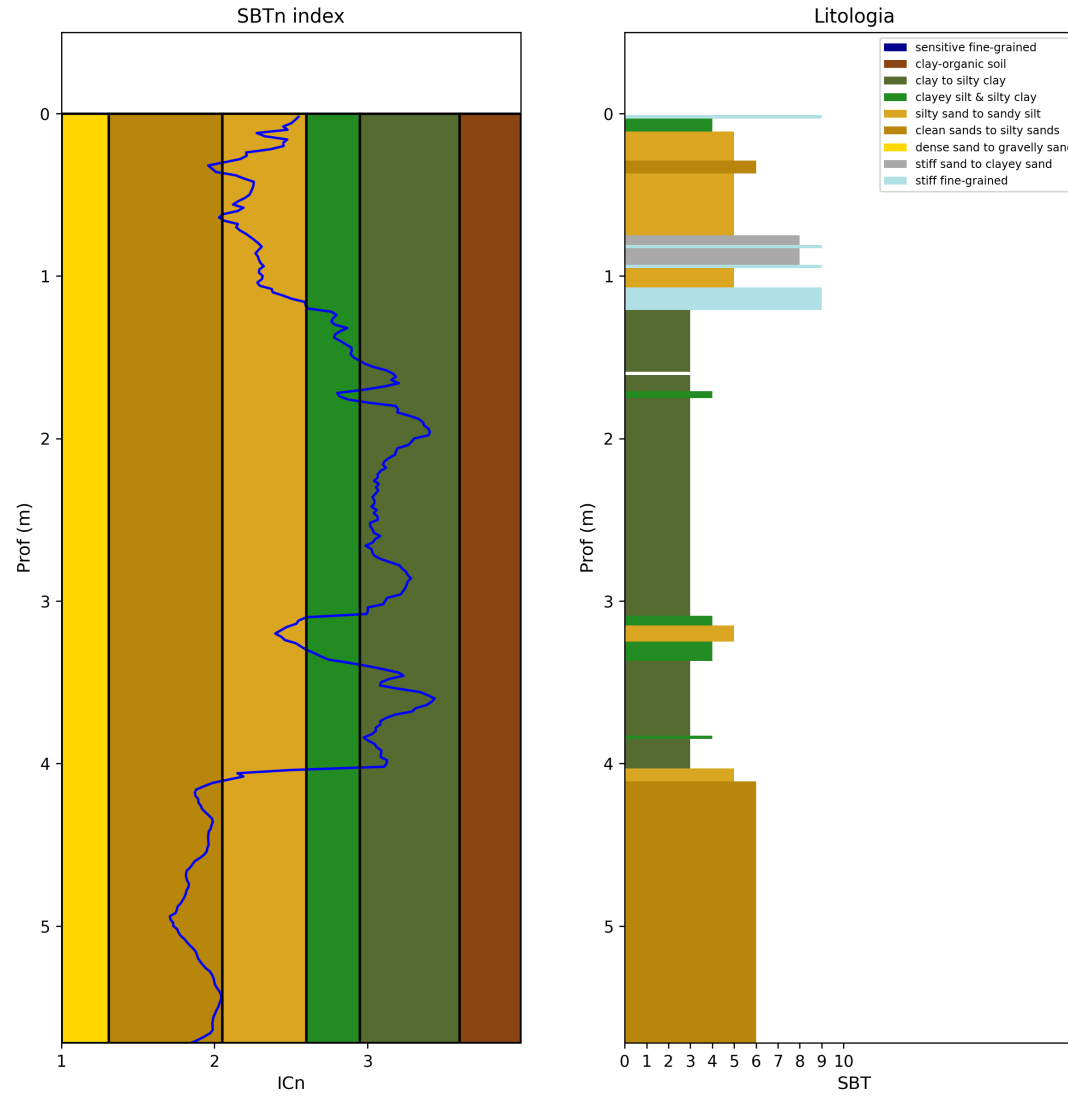


Fig 3 - A sinistra Indice SBT, a destra classificazione stratigrafica da SBT chart



# CPT Office V. 1.1



## Report calcolo prova penetrometrica

21/09/2022

19:30:41

Committente	Dott. Geol. Maurizio Castellari
Località	Lagosanto (Fe)
Via	Lagosanto
Prova	CPTU5
Tipo prova	CPTU

### Tabella 1 - Dati input

Tipo di Prova	Profondità max (m)	Falda (m da p.c.)
CPTU	5.72	1.6

Prof.(m)	qc (MPa)	fs (kPa)	u2 (kPa)	u0 (kPa)	Qt (MPa)	$\gamma$ (KN/m3)	$\sigma_v$ (kPa)	$\sigma_{vp}$ (kPa)	cu (kPa)	$\phi$ (°)	$\phi$ picco(°)	Dr (%)
0.02	0.07	4.84	4.58	0.0	0.08	17.0	0.34	0.34	5.37	0.0	20.0	0.0
0.04	0.1	5.37	4.9	0.0	0.1	12.5	0.59	0.59	7.43	0.0	20.0	0.0
0.06	0.13	5.74	4.9	0.0	0.13	12.5	0.84	0.84	9.34	0.0	20.0	0.0
0.08	0.17	5.86	4.98	0.0	0.17	17.5	1.19	1.19	12.36	0.0	20.0	0.0
0.1	0.18	5.74	4.9	0.0	0.18	17.5	1.54	1.54	13.02	0.0	20.0	0.0
0.12	0.21	2.01	4.9	0.0	0.21	17.5	1.89	1.89	0.0	34.54	20.0	31.48
0.14	0.22	3.03	4.9	0.0	0.22	17.5	2.24	2.24	0.0	34.93	20.0	32.78
0.16	0.19	4.06	4.82	0.0	0.2	17.5	2.59	2.59	0.0	34.47	20.0	31.25
0.18	0.21	3.69	4.74	0.0	0.21	17.5	2.94	2.94	0.0	34.2	20.0	30.37
0.2	0.23	4.18	4.82	0.0	0.23	17.5	3.29	3.29	0.0	34.27	20.0	30.61
0.22	0.32	5.21	4.98	0.0	0.33	17.5	3.64	3.64	0.0	35.01	20.0	33.07
0.24	0.5	5.41	5.29	0.0	0.5	17.5	3.99	3.99	0.0	35.81	20.0	35.94
0.26	0.57	6.89	5.61	0.0	0.57	17.5	4.34	4.34	0.0	36.16	20.0	37.28
0.28	0.65	7.13	6.0	0.0	0.65	17.5	4.69	4.69	0.0	36.35	20.0	38.04
0.3	0.8	5.99	6.16	0.0	0.8	17.5	5.04	5.04	0.0	36.51	20.0	38.67
0.32	1.16	7.75	7.34	0.0	1.16	18.0	5.4	5.4	0.0	37.54	20.0	43.08
0.34	1.34	12.17	7.98	0.0	1.34	18.0	5.76	5.76	0.0	38.21	20.0	46.21
0.36	1.51	17.99	8.29	0.0	1.51	18.0	6.12	6.12	0.0	38.88	20.0	49.59
0.38	1.53	31.46	8.29	0.0	1.53	18.0	6.48	6.48	0.0	39.39	20.0	52.27
0.4	1.55	38.75	8.29	0.0	1.55	18.0	6.84	6.84	0.0	39.51	20.0	52.98
0.42	1.57	48.5	7.98	0.0	1.57	18.0	7.2	7.2	0.0	39.59	20.0	53.37
0.44	1.7	54.2	8.13	0.0	1.7	18.0	7.56	7.56	0.0	39.8	20.0	54.56
0.46	1.84	59.52	8.45	0.0	1.84	18.0	7.92	7.92	0.0	40.0	20.0	55.72
0.48	1.94	61.74	8.77	0.0	1.94	18.0	8.28	8.28	0.0	40.06	20.0	56.1
0.5	2.06	65.1	9.0	0.0	2.06	18.0	8.64	8.64	0.0	40.18	20.0	56.81
0.52	2.21	64.57	9.56	0.0	2.21	18.0	9.0	9.0	0.0	40.25	20.0	57.21
0.54	2.44	64.4	10.03	0.0	2.45	18.0	9.36	9.36	0.0	40.41	20.0	58.19
0.56	2.67	65.39	10.82	0.0	2.67	18.0	9.72	9.72	0.0	40.57	20.0	59.18
0.58	2.44	70.39	9.95	0.0	2.45	18.0	10.08	10.08	0.0	40.33	20.0	57.7
0.6	2.69	71.62	9.4	0.0	2.69	18.0	10.44	10.44	0.0	40.52	20.0	58.87
0.62	3.27	70.02	10.5	0.0	3.28	18.0	10.8	10.8	0.0	40.95	20.0	61.58
0.64	3.54	72.72	10.98	0.0	3.54	18.0	11.16	11.16	0.0	41.14	20.0	62.77
0.66	3.39	75.14	10.82	0.0	3.39	18.0	11.52	11.52	0.0	40.98	20.0	61.73
0.68	3.03	83.49	10.03	0.0	3.03	18.0	11.88	11.88	0.0	40.7	20.0	59.99
0.7	3.17	85.62	10.42	0.0	3.17	18.0	12.24	12.24	0.0	40.78	20.0	60.46
0.72	3.16	91.72	10.58	0.0	3.16	18.0	12.6	12.6	0.0	40.77	20.0	60.4
0.74	3.14	102.74	10.66	0.0	3.14	18.0	12.96	12.96	0.0	40.8	20.0	60.63
0.76	3.12	111.05	10.9	0.0	3.13	18.0	13.32	13.32	0.0	40.8	20.0	60.59
0.78	3.09	118.26	11.14	0.0	3.09	18.0	13.68	13.68	0.0	40.76	20.0	60.33
0.8	3.02	122.68	11.21	0.0	3.02	18.0	14.04	14.04	0.0	40.66	20.0	59.71
0.82	2.99	127.19	11.37	0.0	2.99	18.0	14.4	14.4	212.35	0.0	20.0	0.0
0.84	3.12	126.24	11.77	0.0	3.12	18.0	14.76	14.76	0.0	40.64	20.0	59.62
0.86	3.24	124.73	12.24	0.0	3.25	18.0	15.12	15.12	0.0	40.68	20.0	59.85
0.88	3.15	123.58	12.48	0.0	3.16	18.0	15.48	15.48	0.0	40.52	20.0	58.84
0.9	3.15	124.44	12.79	0.0	3.15	18.0	15.84	15.84	0.0	40.45	20.0	58.44
0.92	3.1	124.15	12.79	0.0	3.1	18.0	16.2	16.2	0.0	40.34	20.0	57.76
0.94	2.89	117.92	12.72	0.0	2.89	18.0	16.56	16.56	205.12	0.0	20.0	0.0
0.96	3.0	110.88	13.27	0.0	3.0	18.0	16.92	16.92	0.0	40.0	20.0	55.74

0.98	3.0	108.78	13.66	0.0	3.0	18.0	17.28	17.28	0.0	39.92	20.0	55.3
1.0	2.88	110.38	13.66	0.0	2.88	18.0	17.64	17.64	0.0	39.83	20.0	54.74
1.02	2.96	112.4	12.48	0.0	2.96	18.0	18.0	18.0	0.0	39.87	20.0	55.01
1.04	3.06	104.83	12.64	0.0	3.06	18.0	18.36	18.36	0.0	39.78	20.0	54.45
1.06	3.0	107.49	12.48	0.0	3.01	18.0	18.72	18.72	0.0	39.76	20.0	54.37
1.08	2.68	113.47	12.0	0.0	2.69	18.0	19.08	19.08	190.44	0.0	20.0	0.0
1.1	2.67	114.0	12.08	0.0	2.68	18.0	19.44	19.44	189.83	0.0	20.0	0.0
1.12	2.39	115.43	11.61	0.0	2.39	17.5	19.79	19.79	169.49	0.0	20.0	0.0
1.14	2.18	117.6	10.98	0.0	2.18	17.5	20.14	20.14	154.61	0.0	20.0	0.0
1.16	1.87	118.74	10.03	0.0	1.87	17.5	20.49	20.49	132.39	0.0	20.0	0.0
1.18	1.87	118.74	10.03	0.0	1.87	17.5	20.84	20.84	132.37	0.0	20.0	0.0
1.2	1.83	119.36	9.95	0.0	1.84	17.5	21.19	21.19	129.56	0.0	20.0	0.0
1.22	1.21	92.64	8.13	0.0	1.21	17.5	21.54	21.54	84.87	0.0	20.0	0.0
1.24	1.09	84.61	7.9	0.0	1.09	17.5	21.89	21.89	76.32	0.0	20.0	0.0
1.26	1.07	74.49	7.9	0.0	1.07	17.5	22.24	22.24	74.99	0.0	20.0	0.0
1.28	1.05	68.27	7.82	0.0	1.06	17.5	22.59	22.59	73.79	0.0	20.0	0.0
1.3	0.99	64.45	7.74	0.0	0.99	17.5	22.94	22.94	68.86	0.0	20.0	0.0
1.32	0.87	66.09	7.34	0.0	0.87	17.5	23.29	23.29	60.77	0.0	20.0	0.0
1.34	0.91	61.26	7.42	0.0	0.92	17.5	23.64	23.64	63.75	0.0	20.0	0.0
1.36	0.94	55.89	7.5	0.0	0.94	17.5	23.99	23.99	65.2	0.0	20.0	0.0
1.38	0.94	54.82	7.42	0.0	0.94	17.5	24.34	24.34	65.7	0.0	20.0	0.0
1.4	0.91	58.59	7.19	0.0	0.91	17.5	24.69	24.69	63.31	0.0	20.0	0.0
1.42	0.88	60.11	7.03	0.0	0.88	17.5	25.04	25.04	61.06	0.0	20.0	0.0
1.44	0.83	61.21	6.56	0.0	0.83	17.5	25.39	25.39	57.72	0.0	20.0	0.0
1.46	0.83	60.72	6.48	0.0	0.83	17.5	25.74	25.74	57.55	0.0	20.0	0.0
1.48	0.85	60.56	6.4	0.0	0.85	17.5	26.09	26.09	58.63	0.0	20.0	0.0
1.5	0.81	58.3	6.0	0.0	0.81	17.5	26.44	26.44	55.84	0.0	20.0	0.0
1.52	0.75	56.75	5.53	0.0	0.75	17.5	26.79	26.79	51.53	0.0	20.0	0.0
1.54	0.7	55.73	5.13	0.0	0.7	17.5	27.14	27.14	47.94	0.0	20.0	0.0
1.56	0.62	53.76	4.74	0.0	0.62	17.5	27.49	27.49	42.42	0.0	20.0	0.0
1.58	0.53	51.71	4.34	0.0	0.53	17.5	27.84	27.84	35.79	0.0	20.0	0.0
1.6	0.48	48.19	3.95	0.0	0.48	17.5	28.19	28.19	0.0	0.0	20.0	0.0
1.62	0.44	43.2	3.79	0.2	0.44	17.5	28.54	28.34	29.48	0.0	20.0	0.0
1.64	0.44	38.29	3.71	0.39	0.44	17.5	28.89	28.5	29.48	0.0	20.0	0.0
1.66	0.37	30.79	3.55	0.59	0.37	17.5	29.24	28.65	24.25	0.0	20.0	0.0
1.68	0.38	23.13	3.47	0.78	0.38	17.5	29.59	28.81	25.23	0.0	20.0	0.0
1.7	0.4	14.53	4.5	0.98	0.4	17.5	29.94	28.96	26.62	0.0	20.0	0.0
1.72	0.47	9.74	4.9	1.18	0.47	18.0	30.3	29.12	31.48	0.0	20.0	0.0
1.74	0.48	10.77	4.82	1.37	0.48	17.5	30.65	29.28	31.98	0.0	20.0	0.0
1.76	0.5	15.08	4.42	1.57	0.5	17.5	31.0	29.43	33.44	0.0	20.0	0.0
1.78	0.45	21.06	3.87	1.77	0.45	17.5	31.35	29.58	29.69	0.0	20.0	0.0
1.8	0.37	26.43	3.55	1.96	0.37	12.5	31.6	29.64	23.87	0.0	20.0	0.0
1.82	0.37	28.69	3.4	2.16	0.37	12.5	31.85	29.69	24.15	0.0	20.0	0.0
1.84	0.38	29.23	3.24	2.35	0.38	12.5	32.1	29.75	24.54	0.0	20.0	0.0
1.86	0.33	29.77	2.84	2.55	0.33	17.5	32.45	29.9	21.45	0.0	20.0	0.0
1.88	0.28	25.63	2.37	2.75	0.28	17.5	32.8	30.05	17.93	0.0	20.0	0.0
1.9	0.26	23.43	2.13	2.94	0.26	17.5	33.15	30.21	16.36	0.0	20.0	0.0
1.92	0.24	20.03	1.97	3.14	0.24	17.5	33.5	30.36	15.04	0.0	20.0	0.0
1.94	0.22	16.96	1.58	3.34	0.22	12.5	33.75	30.41	13.19	0.0	20.0	0.0
1.96	0.21	15.37	1.42	3.53	0.21	12.5	34.0	30.47	12.45	0.0	20.0	0.0
1.98	0.21	14.31	1.42	3.73	0.21	12.5	34.25	30.52	12.25	0.0	20.0	0.0
2.0	0.26	18.3	11.45	3.92	0.26	12.5	34.5	30.58	16.35	0.0	20.0	0.0
2.02	0.26	16.99	11.61	4.12	0.26	12.5	34.75	30.63	16.34	0.0	20.0	0.0
2.04	0.24	12.12	12.16	4.32	0.24	17.5	35.1	30.78	14.7	0.0	20.0	0.0
2.06	0.25	9.58	12.56	4.51	0.25	17.5	35.45	30.94	15.25	0.0	20.0	0.0
2.08	0.24	8.31	12.95	4.71	0.24	17.5	35.8	31.09	14.7	0.0	20.0	0.0
2.1	0.24	7.7	13.19	4.9	0.24	17.5	36.15	31.25	14.42	0.0	20.0	0.0
2.12	0.24	6.92	13.5	5.1	0.25	17.5	36.5	31.4	14.98	0.0	20.0	0.0
2.14	0.24	5.81	13.74	5.3	0.24	17.5	36.85	31.55	14.7	0.0	20.0	0.0
2.16	0.24	5.32	13.98	5.49	0.24	17.5	37.2	31.71	14.57	0.0	20.0	0.0
2.18	0.23	5.2	14.22	5.69	0.23	17.5	37.55	31.86	14.03	0.0	20.0	0.0
2.2	0.24	4.88	14.29	5.89	0.24	17.5	37.9	32.01	14.61	0.0	20.0	0.0
2.22	0.24	4.51	14.53	6.08	0.25	17.5	38.25	32.17	14.78	0.0	20.0	0.0
2.24	0.24	4.06	15.08	6.28	0.24	17.5	38.6	32.32	14.27	0.0	20.0	0.0
2.26	0.24	3.94	14.93	6.47	0.25	17.5	38.95	32.48	14.85	0.0	20.0	0.0
2.28	0.23	4.02	15.72	6.67	0.24	17.5	39.3	32.63	14.09	0.0	20.0	0.0
2.3	0.24	4.03	15.48	6.87	0.25	17.5	39.65	32.78	14.68	0.0	20.0	0.0
2.32	0.24	3.95	15.72	7.06	0.24	17.5	40.0	32.94	14.19	0.0	20.0	0.0
2.34	0.24	3.66	15.95	7.26	0.24	17.5	40.35	33.09	14.38	0.0	20.0	0.0
2.36	0.24	3.38	15.8	7.46	0.24	17.5	40.7	33.24	14.58	0.0	20.0	0.0
2.38	0.24	3.43	15.64	7.65	0.24	17.5	41.05	33.4	14.35	0.0	20.0	0.0
2.4	0.25	3.76	16.03	7.85	0.25	17.5	41.4	33.55	14.82	0.0	20.0	0.0
2.42	0.25	3.47	15.56	8.04	0.25	17.5	41.75	33.71	15.05	0.0	20.0	0.0

2.44	0.24	3.6	15.8	8.24	0.24	17.5	42.1	33.86	14.26	0.0	20.0	0.0
2.46	0.25	3.81	15.48	8.44	0.25	17.5	42.45	34.01	15.17	0.0	20.0	0.0
2.48	0.24	3.93	16.19	8.63	0.25	17.5	42.8	34.17	14.66	0.0	20.0	0.0
2.5	0.24	3.93	16.19	8.83	0.25	17.5	43.15	34.32	14.64	0.0	20.0	0.0
2.52	0.26	3.45	16.98	9.03	0.26	17.5	43.5	34.47	15.53	0.0	20.0	0.0
2.54	0.26	3.41	17.22	9.22	0.26	17.5	43.85	34.63	15.47	0.0	20.0	0.0
2.56	0.26	3.83	16.9	9.42	0.26	17.5	44.2	34.78	15.67	0.0	20.0	0.0
2.58	0.27	4.32	18.09	9.61	0.27	17.5	44.55	34.94	16.17	0.0	20.0	0.0
2.6	0.26	4.98	18.24	9.81	0.26	17.5	44.9	35.09	15.69	0.0	20.0	0.0
2.62	0.28	5.02	19.11	10.01	0.28	17.5	45.25	35.24	16.89	0.0	20.0	0.0
2.64	0.29	5.27	19.03	10.2	0.29	17.5	45.6	35.4	17.77	0.0	20.0	0.0
2.66	0.33	6.1	19.51	10.4	0.33	17.5	45.95	35.55	20.63	0.0	20.0	0.0
2.68	0.32	6.92	20.22	10.59	0.33	17.5	46.3	35.71	20.15	0.0	20.0	0.0
2.7	0.34	7.95	19.98	10.79	0.34	17.5	46.65	35.86	21.05	0.0	20.0	0.0
2.72	0.35	9.22	20.69	10.99	0.35	17.5	47.0	36.01	21.95	0.0	20.0	0.0
2.74	0.35	11.27	20.38	11.18	0.36	17.5	47.35	36.17	22.14	0.0	20.0	0.0
2.76	0.36	15.12	20.69	11.38	0.36	17.5	47.7	36.32	22.49	0.0	20.0	0.0
2.78	0.34	17.71	21.24	11.58	0.35	17.5	48.05	36.47	21.44	0.0	20.0	0.0
2.8	0.35	19.92	21.32	11.77	0.36	17.5	48.4	36.63	21.92	0.0	20.0	0.0
2.82	0.35	22.1	21.01	11.97	0.36	17.5	48.75	36.78	21.96	0.0	20.0	0.0
2.84	0.35	23.16	21.01	12.16	0.36	17.5	49.1	36.94	22.02	0.0	20.0	0.0
2.86	0.34	23.09	21.8	12.36	0.35	12.5	49.35	36.99	21.12	0.0	20.0	0.0
2.88	0.35	22.27	22.75	12.56	0.35	17.5	49.7	37.14	21.73	0.0	20.0	0.0
2.9	0.35	21.17	22.82	12.75	0.35	17.5	50.05	37.3	21.51	0.0	20.0	0.0
2.92	0.35	20.31	23.85	12.95	0.35	17.5	50.4	37.45	21.55	0.0	20.0	0.0
2.94	0.35	19.08	24.25	13.15	0.35	17.5	50.75	37.6	21.6	0.0	20.0	0.0
2.96	0.35	18.14	24.4	13.34	0.36	17.5	51.1	37.76	21.78	0.0	20.0	0.0
2.98	0.43	22.11	44.23	13.54	0.44	17.5	51.45	37.91	27.79	0.0	20.0	0.0
3.0	0.45	23.01	44.31	13.73	0.46	17.5	51.8	38.07	29.16	0.0	20.0	0.0
3.02	0.48	25.55	44.31	13.93	0.49	17.5	52.15	38.22	31.35	0.0	20.0	0.0
3.04	0.6	28.45	44.38	14.13	0.61	17.5	52.5	38.37	39.9	0.0	20.0	0.0
3.06	0.6	28.45	44.38	14.32	0.61	17.5	52.85	38.53	39.88	0.0	20.0	0.0
3.08	0.62	29.03	44.46	14.52	0.63	17.5	53.2	38.68	40.96	0.0	20.0	0.0
3.1	1.37	37.47	40.91	14.72	1.38	18.0	53.56	38.85	94.56	0.0	20.0	0.0
3.12	1.47	35.54	41.07	14.91	1.48	18.0	53.92	39.01	101.73	0.0	20.0	0.0
3.14	1.49	34.39	40.2	15.11	1.5	18.0	54.28	39.17	103.37	0.0	20.0	0.0
3.16	1.55	28.66	41.15	15.3	1.55	18.0	54.64	39.34	0.0	34.16	20.0	30.23
3.18	1.6	26.33	41.15	15.5	1.61	18.0	55.0	39.5	0.0	34.24	20.0	30.5
3.2	1.67	24.53	41.54	15.7	1.67	18.0	55.36	39.66	0.0	34.37	20.0	30.91
3.22	1.55	24.53	41.38	15.89	1.56	18.0	55.72	39.83	0.0	34.07	20.0	29.97
3.24	1.49	24.36	41.07	16.09	1.5	18.0	56.08	39.99	0.0	33.89	20.0	29.41
3.26	1.28	22.93	40.2	16.28	1.29	18.0	56.44	40.16	88.14	0.0	20.0	0.0
3.28	1.12	19.0	39.41	16.48	1.13	18.0	56.8	40.32	76.8	0.0	20.0	0.0
3.3	1.04	18.02	38.62	16.68	1.05	18.0	57.16	40.48	70.59	0.0	20.0	0.0
3.32	0.98	19.5	38.46	16.87	0.99	18.0	57.52	40.65	66.6	0.0	20.0	0.0
3.34	0.93	20.81	38.3	17.07	0.94	18.0	57.88	40.81	63.15	0.0	20.0	0.0
3.36	0.85	19.99	37.75	17.27	0.86	18.0	58.24	40.97	56.97	0.0	20.0	0.0
3.38	0.69	21.02	36.96	17.46	0.7	17.5	58.59	41.13	45.65	0.0	20.0	0.0
3.4	0.57	22.21	36.65	17.66	0.58	17.5	58.94	41.28	37.38	0.0	20.0	0.0
3.42	0.49	22.99	35.78	17.85	0.5	17.5	59.29	41.44	31.31	0.0	20.0	0.0
3.44	0.43	24.63	34.67	18.05	0.44	17.5	59.64	41.59	27.18	0.0	20.0	0.0
3.46	0.41	23.98	37.04	18.25	0.41	17.5	59.99	41.74	25.3	0.0	20.0	0.0
3.48	0.46	22.46	37.91	18.44	0.47	17.5	60.34	41.9	29.1	0.0	20.0	0.0
3.5	0.51	23.0	37.91	18.64	0.52	17.5	60.69	42.05	32.47	0.0	20.0	0.0
3.52	0.51	22.96	37.43	18.84	0.52	17.5	61.04	42.2	32.91	0.0	20.0	0.0
3.54	0.43	23.82	37.12	19.03	0.44	17.5	61.39	42.36	27.0	0.0	20.0	0.0
3.56	0.35	24.73	36.49	19.23	0.36	12.5	61.64	42.41	21.36	0.0	20.0	0.0
3.58	0.32	23.33	36.57	19.42	0.33	12.5	61.89	42.47	18.91	0.0	20.0	0.0
3.6	0.29	21.58	35.46	19.62	0.3	12.5	62.14	42.52	16.85	0.0	20.0	0.0
3.62	0.29	19.65	36.49	19.82	0.3	12.5	62.39	42.57	16.77	0.0	20.0	0.0
3.64	0.29	17.2	38.7	20.01	0.3	17.5	62.74	42.73	16.83	0.0	20.0	0.0
3.66	0.3	13.68	40.12	20.21	0.31	17.5	63.09	42.88	17.44	0.0	20.0	0.0
3.68	0.28	10.36	39.49	20.4	0.29	17.5	63.44	43.04	16.21	0.0	20.0	0.0
3.7	0.28	6.06	39.65	20.6	0.29	17.5	63.79	43.19	16.24	0.0	20.0	0.0
3.72	0.29	4.92	40.36	20.8	0.3	17.5	64.14	43.34	16.69	0.0	20.0	0.0
3.74	0.29	3.81	40.59	20.99	0.3	17.5	64.49	43.5	16.47	0.0	20.0	0.0
3.76	0.28	3.49	41.38	21.19	0.29	17.5	64.84	43.65	15.95	0.0	20.0	0.0
3.78	0.3	3.74	41.38	21.39	0.31	17.5	65.19	43.8	17.39	0.0	20.0	0.0
3.8	0.31	4.19	41.23	21.58	0.32	17.5	65.54	43.96	18.13	0.0	20.0	0.0
3.82	0.32	4.03	41.23	21.78	0.33	17.5	65.89	44.11	18.85	0.0	20.0	0.0
3.84	0.34	3.75	42.33	21.97	0.35	17.5	66.24	44.27	20.43	0.0	20.0	0.0
3.86	0.34	4.12	42.02	22.17	0.35	17.5	66.59	44.42	19.92	0.0	20.0	0.0
3.88	0.32	4.49	41.54	22.37	0.33	17.5	66.94	44.57	18.99	0.0	20.0	0.0

3.9	0.32	4.45	41.07	22.56	0.33	17.5	67.29	44.73	18.5	0.0	20.0	0.0
3.92	0.31	4.82	41.46	22.76	0.32	17.5	67.64	44.88	18.0	0.0	20.0	0.0
3.94	0.38	9.2	49.36	22.96	0.39	17.5	67.99	45.03	23.05	0.0	20.0	0.0
3.96	0.38	8.71	49.6	23.15	0.39	17.5	68.34	45.19	22.76	0.0	20.0	0.0
3.98	0.36	9.36	51.02	23.35	0.37	17.5	68.69	45.34	21.65	0.0	20.0	0.0
4.0	0.36	8.99	52.44	23.54	0.37	17.5	69.04	45.5	21.51	0.0	20.0	0.0
4.02	0.37	8.99	52.52	23.74	0.38	17.5	69.39	45.65	22.17	0.0	20.0	0.0
4.04	0.91	6.25	64.29	23.94	0.93	18.0	69.75	45.81	0.0	30.95	20.0	21.61
4.06	1.79	6.58	67.37	24.13	1.81	18.5	70.12	45.99	0.0	33.81	20.0	29.15
4.08	2.3	17.68	62.23	24.33	2.31	18.5	70.49	46.16	0.0	35.06	20.0	33.24
4.1	2.89	19.72	50.54	24.52	2.9	18.5	70.86	46.34	0.0	36.01	20.0	36.72
4.12	3.34	17.64	51.49	24.72	3.35	18.5	71.23	46.51	0.0	36.58	20.0	38.95
4.14	3.91	20.63	52.84	24.92	3.92	18.5	71.6	46.68	0.0	37.25	20.0	41.79
4.16	4.47	22.88	54.1	25.11	4.48	19.0	71.98	46.87	0.0	37.81	20.0	44.34
4.18	4.81	26.65	54.73	25.31	4.82	19.0	72.36	47.05	0.0	38.15	20.0	45.91
4.2	5.01	30.25	55.28	25.51	5.02	19.0	72.74	47.23	0.0	38.34	20.0	46.84
4.22	5.08	33.86	55.84	25.7	5.09	19.0	73.12	47.42	0.0	38.42	20.0	47.23
4.24	5.08	33.86	55.84	25.9	5.09	19.0	73.5	47.6	0.0	38.41	20.0	47.18
4.26	5.28	39.88	55.76	26.09	5.29	19.0	73.88	47.79	0.0	38.6	20.0	48.16
4.28	5.37	42.99	56.07	26.29	5.38	19.0	74.26	47.97	0.0	38.69	20.0	48.59
4.3	5.37	46.97	56.31	26.49	5.38	19.0	74.64	48.15	0.0	38.71	20.0	48.68
4.32	5.32	50.45	56.55	26.68	5.33	18.5	75.01	48.33	0.0	38.68	20.0	48.55
4.34	5.25	53.23	56.86	26.88	5.27	18.5	75.38	48.5	0.0	38.64	20.0	48.32
4.36	5.29	54.71	56.86	27.08	5.3	18.5	75.75	48.67	0.0	38.66	20.0	48.44
4.38	5.36	54.54	56.23	27.27	5.37	18.5	76.12	48.85	0.0	38.71	20.0	48.67
4.4	5.43	54.83	57.34	27.47	5.44	18.5	76.49	49.02	0.0	38.75	20.0	48.91
4.42	5.55	54.46	58.28	27.66	5.56	18.5	76.86	49.2	0.0	38.83	20.0	49.29
4.44	5.58	54.41	58.44	27.86	5.6	18.5	77.23	49.37	0.0	38.84	20.0	49.38
4.46	5.61	54.7	58.13	28.06	5.62	18.5	77.6	49.54	0.0	38.85	20.0	49.42
4.48	5.61	54.7	58.13	28.25	5.62	18.5	77.97	49.72	0.0	38.84	20.0	49.37
4.5	5.59	54.74	58.84	28.45	5.6	18.5	78.34	49.89	0.0	38.82	20.0	49.27
4.52	5.75	56.25	60.18	28.65	5.76	18.5	78.71	50.06	0.0	38.94	20.0	49.86
4.54	5.85	57.52	61.84	28.84	5.86	18.5	79.08	50.24	0.0	39.0	20.0	50.21
4.56	6.09	58.78	62.94	29.04	6.1	19.0	79.46	50.42	0.0	39.16	20.0	51.07
4.58	6.38	58.66	63.97	29.23	6.4	19.0	79.84	50.61	0.0	39.35	20.0	52.07
4.6	6.7	56.9	64.84	29.43	6.71	19.0	80.22	50.79	0.0	39.53	20.0	53.07
4.62	6.88	56.57	65.16	29.63	6.9	19.0	80.6	50.97	0.0	39.63	20.0	53.62
4.64	7.12	57.14	66.18	29.82	7.13	19.0	80.98	51.16	0.0	39.76	20.0	54.37
4.66	7.44	57.75	67.29	30.02	7.46	19.0	81.36	51.34	0.0	39.94	20.0	55.4
4.68	7.66	60.41	68.71	30.21	7.68	19.0	81.74	51.53	0.0	40.07	20.0	56.13
4.7	7.79	62.86	69.66	30.41	7.81	19.0	82.12	51.71	0.0	40.14	20.0	56.55
4.72	7.83	65.07	69.74	30.61	7.85	19.0	82.5	51.89	0.0	40.16	20.0	56.68
4.74	7.96	70.4	70.92	30.8	7.97	19.0	82.88	52.08	0.0	40.24	20.0	57.17
4.76	8.16	73.34	71.55	31.0	8.17	19.0	83.26	52.26	0.0	40.35	20.0	57.8
4.78	8.4	74.36	73.13	31.2	8.41	19.0	83.64	52.44	0.0	40.46	20.0	58.5
4.8	8.54	75.63	73.69	31.39	8.56	19.0	84.02	52.63	0.0	40.53	20.0	58.91
4.82	8.7	76.2	75.19	31.59	8.72	19.0	84.4	52.81	0.0	40.6	20.0	59.35
4.84	9.0	77.96	76.53	31.78	9.01	19.0	84.78	53.0	0.0	40.74	20.0	60.21
4.86	9.26	78.7	77.71	31.98	9.27	19.0	85.16	53.18	0.0	40.85	20.0	60.92
4.88	9.53	77.75	79.06	32.18	9.55	19.0	85.54	53.36	0.0	40.96	20.0	61.62
4.9	9.74	79.59	80.24	32.37	9.76	19.0	85.92	53.55	0.0	41.05	20.0	62.21
4.92	9.55	73.72	73.13	32.57	9.56	19.0	86.3	53.73	0.0	40.93	20.0	61.46
4.94	10.16	72.73	74.63	32.77	10.17	19.0	86.68	53.91	0.0	41.18	20.0	63.05
4.96	10.24	74.99	74.87	32.96	10.25	19.0	87.06	54.1	0.0	41.21	20.0	63.28
4.98	10.3	81.01	74.47	33.16	10.31	19.0	87.44	54.28	0.0	41.25	20.0	63.53
5.0	10.41	83.51	75.58	33.35	10.43	19.0	87.82	54.47	0.0	41.3	20.0	63.85
5.02	10.37	90.84	75.98	33.55	10.39	19.0	88.2	54.65	0.0	41.3	20.0	63.86
5.04	10.38	93.62	76.92	33.75	10.39	19.0	88.58	54.83	0.0	41.3	20.0	63.87
5.06	10.31	96.81	76.92	33.94	10.32	19.0	88.96	55.02	0.0	41.27	20.0	63.69
5.08	10.1	101.28	77.4	34.14	10.12	19.0	89.34	55.2	0.0	41.2	20.0	63.17
5.1	10.02	105.82	77.55	34.34	10.04	19.0	89.72	55.39	0.0	41.17	20.0	62.98
5.12	9.83	108.68	77.95	34.53	9.84	19.0	90.1	55.57	0.0	41.08	20.0	62.44
5.14	9.57	111.01	78.82	34.73	9.58	19.0	90.48	55.75	0.0	40.97	20.0	61.7
5.16	9.29	110.89	78.5	34.92	9.31	19.0	90.86	55.94	0.0	40.84	20.0	60.85
5.18	9.06	107.57	78.58	35.12	9.07	19.0	91.24	56.12	0.0	40.71	20.0	60.06
5.2	8.82	104.2	78.5	35.32	8.83	19.0	91.62	56.3	0.0	40.58	20.0	59.24
5.22	8.43	99.82	78.58	35.51	8.45	19.0	92.0	56.49	0.0	40.37	20.0	57.97
5.24	8.01	95.06	77.71	35.71	8.02	19.0	92.38	56.67	0.0	40.13	20.0	56.52
5.26	7.63	91.78	77.4	35.9	7.65	19.0	92.76	56.86	0.0	39.91	20.0	55.23
5.28	7.16	88.34	76.53	36.1	7.18	18.5	93.13	57.03	0.0	39.62	20.0	53.59
5.3	6.87	84.56	75.58	36.3	6.89	18.5	93.5	57.2	0.0	39.43	20.0	52.5
5.32	6.62	80.79	75.19	36.49	6.64	18.5	93.87	57.38	0.0	39.25	20.0	51.52
5.34	6.42	76.86	73.92	36.69	6.44	18.5	94.24	57.55	0.0	39.1	20.0	50.72

5.36	6.23	73.0	75.42	36.89	6.25	18.5	94.61	57.72	0.0	38.95	20.0	49.92
5.38	5.97	69.48	75.66	37.08	5.98	18.5	94.98	57.9	0.0	38.74	20.0	48.86
5.4	5.74	67.55	75.19	37.28	5.76	18.5	95.35	58.07	0.0	38.56	20.0	47.95
5.42	5.53	64.6	74.95	37.47	5.55	18.5	95.72	58.25	0.0	38.38	20.0	47.06
5.44	5.44	62.67	75.19	37.67	5.45	18.5	96.09	58.42	0.0	38.29	20.0	46.6
5.46	5.45	61.4	75.66	37.87	5.46	18.5	96.46	58.59	0.0	38.28	20.0	46.57
5.48	5.48	60.29	75.03	38.06	5.5	18.5	96.83	58.77	0.0	38.3	20.0	46.65
5.5	5.55	59.96	74.71	38.26	5.56	18.5	97.2	58.94	0.0	38.34	20.0	46.85
5.52	5.59	58.16	75.19	38.46	5.61	18.5	97.57	59.11	0.0	38.36	20.0	46.94
5.54	5.61	56.4	75.19	38.65	5.62	18.5	97.94	59.29	0.0	38.35	20.0	46.91
5.56	5.66	55.25	75.66	38.85	5.68	18.5	98.31	59.46	0.0	38.38	20.0	47.05
5.58	5.69	54.8	76.29	39.04	5.71	18.5	98.68	59.64	0.0	38.39	20.0	47.12
5.6	5.71	54.31	74.71	39.24	5.72	19.0	99.06	59.82	0.0	38.39	20.0	47.12
5.62	5.69	54.26	76.45	39.44	5.71	19.0	99.44	60.0	0.0	38.37	20.0	47.02
5.64	5.7	54.18	75.5	39.63	5.71	19.0	99.82	60.19	0.0	38.37	20.0	46.98
5.66	5.81	53.04	75.03	39.83	5.82	19.0	100.2	60.37	0.0	38.44	20.0	47.33
5.68	6.1	51.07	76.53	40.02	6.12	19.0	100.58	60.56	0.0	38.63	20.0	48.3
5.7	6.49	49.92	77.4	40.22	6.51	19.0	100.96	60.74	0.0	38.89	20.0	49.61
5.72	6.99	48.61	78.66	40.42	7.0	19.0	101.34	60.92	0.0	39.19	20.0	51.2

Tabella 2 - Dati output

Prof.(m)	Rf (%)	FR (%)	Qt1	Qtn	IC	Es (MPa)	M (MPa)	G0 (MPa)	OCR	K0	KSBT
0.02	6.4	6.43	221.11	84.26	2.55	1.36	1.05	1.71	72.97	4.37	1.59E-07
0.04	5.13	5.16	176.21	69.82	2.53	1.83	1.46	2.29	58.15	3.55	1.88E-07
0.06	4.36	4.39	155.74	62.74	2.5	2.24	1.83	2.8	51.39	3.18	2.20E-07
0.08	3.36	3.39	145.39	57.05	2.45	2.76	2.42	3.46	47.98	2.98	3.21E-07
0.1	3.12	3.15	118.39	48.3	2.48	3.02	2.55	3.78	39.07	2.47	2.62E-07
0.12	0.96	0.97	109.6	34.67	2.28	2.66	2.9	3.33	0.0	0.0	1.08E-06
0.14	1.35	1.36	99.23	37.62	2.33	3.05	3.11	3.82	0.0	0.0	7.43E-07
0.16	2.08	2.1	74.5	34.17	2.48	3.19	2.7	3.99	0.0	0.0	2.66E-07
0.18	1.75	1.77	70.84	32.27	2.45	3.33	2.92	4.17	0.0	0.0	3.19E-07
0.2	1.8	1.82	69.7	32.8	2.45	3.67	3.21	4.6	0.0	0.0	3.15E-07
0.22	1.6	1.62	88.5	38.27	2.37	4.63	4.51	5.81	0.0	0.0	5.71E-07
0.24	1.08	1.09	124.87	45.2	2.21	5.85	6.98	7.34	0.0	0.0	1.75E-06
0.26	1.22	1.23	129.49	48.64	2.21	6.64	7.87	8.32	0.0	0.0	1.70E-06
0.28	1.09	1.1	137.93	50.64	2.17	7.25	9.09	9.09	0.0	0.0	2.26E-06
0.3	0.75	0.76	157.15	52.33	2.07	7.79	9.77	9.77	0.0	0.0	4.65E-06
0.32	0.67	0.67	214.1	64.95	1.96	9.93	12.45	12.45	0.0	0.0	9.86E-06
0.34	0.91	0.91	231.95	74.73	1.98	11.85	14.85	14.85	0.0	0.0	8.27E-06
0.36	1.19	1.2	245.46	86.08	2.01	13.76	17.24	17.24	0.0	0.0	6.92E-06
0.38	2.05	2.06	235.72	95.63	2.14	16.44	20.61	20.61	0.0	0.0	2.83E-06
0.4	2.5	2.52	225.27	98.23	2.19	17.79	22.29	22.29	0.0	0.0	1.93E-06
0.42	3.09	3.1	217.24	99.7	2.26	19.58	21.9	24.53	0.0	0.0	1.23E-06
0.44	3.19	3.21	223.57	104.21	2.26	21.12	23.66	26.47	0.0	0.0	1.24E-06
0.46	3.24	3.25	231.03	108.65	2.25	22.66	25.62	28.41	0.0	0.0	1.31E-06
0.48	3.19	3.2	232.95	110.16	2.24	23.61	27.0	29.59	0.0	0.0	1.39E-06
0.5	3.15	3.17	237.82	112.94	2.23	24.83	28.77	31.12	0.0	0.0	1.50E-06
0.52	2.92	2.93	244.91	114.56	2.2	25.64	32.13	32.13	0.0	0.0	1.85E-06
0.54	2.63	2.64	260.35	118.5	2.16	26.82	33.61	33.61	0.0	0.0	2.51E-06
0.56	2.45	2.46	274.0	122.57	2.12	28.08	35.19	35.19	0.0	0.0	3.18E-06
0.58	2.88	2.89	241.59	116.52	2.19	28.0	35.09	35.09	0.0	0.0	1.97E-06
0.6	2.66	2.67	256.87	121.3	2.15	29.4	36.84	36.84	0.0	0.0	2.56E-06
0.62	2.14	2.14	302.43	132.72	2.05	31.63	39.64	39.64	0.0	0.0	5.09E-06
0.64	2.05	2.06	316.64	137.9	2.03	33.18	41.59	41.59	0.0	0.0	6.03E-06
0.66	2.21	2.22	293.55	133.36	2.06	33.18	41.59	41.59	0.0	0.0	4.73E-06
0.68	2.75	2.76	254.4	125.94	2.15	33.17	41.57	41.57	0.0	0.0	2.55E-06
0.7	2.7	2.71	257.88	127.93	2.14	34.18	42.84	42.84	0.0	0.0	2.74E-06
0.72	2.9	2.92	249.6	127.67	2.17	35.15	44.06	44.06	0.0	0.0	2.30E-06
0.74	3.27	3.28	241.61	128.66	2.21	36.72	43.84	46.02	0.0	0.0	1.77E-06
0.76	3.55	3.57	233.68	128.48	2.23	37.87	43.58	47.47	0.0	0.0	1.44E-06
0.78	3.83	3.85	224.83	127.4	2.26	38.78	43.06	48.6	0.0	0.0	1.18E-06
0.8	4.06	4.08	214.21	124.79	2.29	39.18	42.11	49.11	0.0	0.0	9.87E-07
0.82	4.26	4.28	206.45	123.03	2.31	39.74	41.62	49.81	68.13	4.11	8.56E-07
0.84	4.04	4.06	210.52	124.4	2.29	40.45	43.5	50.7	0.0	0.0	9.91E-07
0.86	3.84	3.86	213.73	125.36	2.27	41.03	45.24	51.43	0.0	0.0	1.14E-06
0.88	3.92	3.94	202.83	121.17	2.28	40.67	43.96	50.97	0.0	0.0	1.02E-06
0.9	3.95	3.97	197.83	119.55	2.29	40.93	43.87	51.3	0.0	0.0	9.73E-07
0.92	4.0	4.02	190.51	116.76	2.3	40.86	43.21	51.21	0.0	0.0	9.03E-07
0.94	4.08	4.11	173.41	110.83	2.32	39.04	40.2	48.93	57.22	3.5	7.80E-07
0.96	3.7	3.72	176.27	108.76	2.29	39.09	41.75	48.99	0.0	0.0	9.55E-07
0.98	3.62	3.65	172.67	107.03	2.29	39.0	41.77	48.88	0.0	0.0	9.69E-07
1.0	3.84	3.86	162.14	104.87	2.32	38.57	40.04	48.35	0.0	0.0	8.15E-07
1.02	3.79	3.82	163.64	105.92	2.31	39.4	41.24	49.38	0.0	0.0	8.53E-07
1.04	3.43	3.45	165.67	103.79	2.28	39.23	42.58	49.17	0.0	0.0	1.04E-06
1.06	3.58	3.6	159.55	103.47	2.3	39.28	41.81	49.23	0.0	0.0	9.37E-07
1.08	4.23	4.26	139.74	95.52	2.37	38.72	37.33	48.53	46.11	2.88	5.41E-07
1.1	4.26	4.29	136.71	94.22	2.38	38.92	37.21	48.77	45.11	2.82	5.17E-07
1.12	4.82	4.86	119.9	86.34	2.45	37.79	33.22	47.36	39.57	2.5	3.25E-07
1.14	5.38	5.43	107.48	80.35	2.5	37.05	30.3	46.44	35.47	2.26	2.18E-07
1.16	6.34	6.41	90.46	71.45	2.59	35.46	25.95	44.44	29.85	1.93	1.18E-07
1.18	6.34	6.41	88.92	70.56	2.6	35.61	25.94	44.63	29.34	1.9	1.15E-07
1.2	6.5	6.58	85.6	68.74	2.61	0.0	25.39	44.58	28.25	1.84	1.03E-07
1.22	7.66	7.8	55.16	48.49	2.76	0.0	16.63	35.46	18.2	1.23	3.52E-08
1.24	7.76	7.92	48.81	43.8	2.8	0.0	14.96	33.28	16.11	1.1	2.78E-08
1.26	6.95	7.1	47.21	41.88	2.78	0.0	14.7	31.76	15.58	1.07	3.27E-08
1.28	6.47	6.61	45.73	40.36	2.76	0.0	14.46	30.77	15.09	1.04	3.56E-08
1.3	6.53	6.69	42.02	37.64	2.79	0.0	13.5	29.61	13.87	0.96	3.00E-08
1.32	7.56	7.77	36.53	33.71	2.87	0.0	11.91	28.94	12.06	0.84	1.71E-08
1.34	6.69	6.86	37.75	34.53	2.82	0.0	12.49	28.62	12.46	0.87	2.37E-08
1.36	5.97	6.12	38.05	34.23	2.79	0.0	12.78	28.06	12.56	0.88	2.99E-08
1.38	5.81	5.96	37.79	33.94	2.78	0.0	12.88	28.07	12.47	0.87	3.11E-08
1.4	6.43	6.61	35.9	32.97	2.82	0.0	12.41	28.49	11.85	0.83	2.34E-08

1.42	6.83	7.03	34.14	31.46	2.86	0.0	11.97	28.67	11.27	0.79	1.85E-08
1.44	7.34	7.58	31.83	30.06	2.89	0.0	11.31	28.4	10.5	0.75	1.43E-08
1.46	7.3	7.54	31.3	29.64	2.9	0.0	11.28	28.41	10.33	0.73	1.40E-08
1.48	7.15	7.38	31.46	29.69	2.89	0.0	11.49	28.68	10.38	0.74	1.47E-08
1.5	7.21	7.46	29.57	28.24	2.91	0.0	10.94	27.97	9.76	0.7	1.29E-08
1.52	7.58	7.87	26.93	26.33	2.95	0.0	10.1	27.07	8.89	0.64	9.93E-09
1.54	7.98	8.3	24.73	24.71	2.98	0.0	9.4	26.36	8.16	0.59	7.71E-09
1.56	8.65	9.05	21.6	22.33	3.04	0.0	8.31	25.09	7.13	0.52	5.16E-09
1.58	9.78	10.32	18.0	19.5	3.12	0.0	7.01	23.48	5.94	0.44	2.91E-09
1.6	10.06	10.69	16.0	17.46	3.17	0.0	6.31	22.36	0.0	0.0	2.13E-09
1.62	9.79	10.47	14.56	16.03	3.19	0.0	5.78	20.98	4.8	0.36	1.85E-09
1.64	8.67	9.28	14.48	15.72	3.16	0.0	5.78	20.19	4.78	0.36	2.29E-09
1.66	8.35	9.07	11.85	13.15	3.2	0.0	4.46	17.68	3.91	0.3	1.62E-09
1.68	6.04	6.55	12.26	13.19	3.11	0.0	4.66	16.3	4.05	0.31	3.16E-09
1.7	3.61	3.9	12.87	12.84	2.98	0.0	4.78	14.53	4.25	0.33	8.03E-09
1.72	2.07	2.21	15.14	13.95	2.8	0.0	6.15	13.8	4.99	0.38	2.70E-08
1.74	2.25	2.41	15.29	14.19	2.82	0.0	6.27	14.28	5.05	0.38	2.44E-08
1.76	3.02	3.22	15.91	14.97	2.87	0.0	6.55	16.01	5.25	0.4	1.66E-08
1.78	4.71	5.07	14.05	14.29	3.01	0.0	5.82	16.93	4.64	0.35	6.31E-09
1.8	7.23	7.91	11.27	12.37	3.18	0.0	4.13	16.96	3.72	0.29	1.87E-09
1.82	7.76	8.49	11.39	12.58	3.2	0.0	4.25	17.49	3.76	0.29	1.68E-09
1.84	7.78	8.51	11.55	12.74	3.2	0.0	4.38	17.7	3.81	0.3	1.72E-09
1.86	8.95	9.91	10.04	11.48	3.27	0.0	3.45	17.08	3.31	0.26	9.87E-10
1.88	9.03	10.21	8.35	9.8	3.33	0.0	2.46	15.4	2.76	0.22	8.18E-10
1.9	8.94	10.23	7.58	9.0	3.36	0.0	2.06	14.55	2.5	0.2	7.49E-10
1.92	8.21	9.51	6.93	8.26	3.37	0.0	1.74	13.51	2.29	0.19	7.31E-10
1.94	7.77	9.18	6.07	7.32	3.4	0.0	1.35	12.3	2.0	0.16	6.66E-10
1.96	7.38	8.82	5.72	6.92	3.41	0.0	1.21	11.72	1.89	0.16	6.50E-10
1.98	6.95	8.34	5.62	6.77	3.4	0.0	1.16	11.42	1.85	0.15	6.66E-10
2.0	6.95	8.0	7.49	8.65	3.3	0.0	1.98	13.53	2.47	0.2	8.96E-10
2.02	6.45	7.43	7.47	8.57	3.29	0.0	1.96	13.24	2.46	0.2	9.46E-10
2.04	5.03	5.89	6.69	7.59	3.27	0.0	1.56	11.59	2.21	0.18	1.05E-09
2.06	3.85	4.49	6.9	7.59	3.2	0.0	1.62	10.99	2.28	0.18	1.73E-09
2.08	3.44	4.04	6.62	7.25	3.19	0.0	1.49	10.46	2.18	0.18	1.86E-09
2.1	3.23	3.81	6.46	7.06	3.18	0.0	1.42	10.2	2.13	0.17	1.92E-09
2.12	2.81	3.3	6.68	7.16	3.14	0.0	1.5	10.06	2.2	0.18	2.55E-09
2.14	2.4	2.82	6.52	7.0	3.11	0.0	1.44	9.53	2.15	0.18	3.11E-09
2.16	2.21	2.61	6.44	6.87	3.1	0.0	1.4	9.31	2.12	0.17	3.37E-09
2.18	2.22	2.65	6.16	6.56	3.12	0.0	1.29	9.2	2.03	0.17	2.91E-09
2.2	2.01	2.38	6.39	6.76	3.09	0.0	1.38	9.16	2.11	0.17	3.74E-09
2.22	1.84	2.18	6.43	6.74	3.07	0.0	1.4	9.05	2.12	0.17	4.26E-09
2.24	1.7	2.03	6.18	6.48	3.07	0.0	1.29	8.73	2.04	0.17	4.27E-09
2.26	1.6	1.89	6.4	6.63	3.04	0.0	1.38	8.82	2.11	0.17	5.04E-09
2.28	1.7	2.04	6.04	6.36	3.07	0.0	1.25	8.71	1.99	0.16	4.04E-09
2.3	1.64	1.96	6.27	6.53	3.06	0.0	1.34	8.86	2.07	0.17	4.61E-09
2.32	1.65	1.99	6.03	6.33	3.07	0.0	1.26	8.73	1.99	0.16	4.15E-09
2.34	1.52	1.82	6.08	6.32	3.05	0.0	1.27	8.64	2.01	0.16	4.72E-09
2.36	1.38	1.66	6.14	6.32	3.03	0.0	1.29	8.55	2.03	0.17	5.41E-09
2.38	1.42	1.7	6.02	6.23	3.04	0.0	1.25	8.54	1.99	0.16	4.99E-09
2.4	1.51	1.81	6.18	6.41	3.05	0.0	1.33	8.84	2.04	0.17	4.93E-09
2.42	1.38	1.65	6.25	6.41	3.03	0.0	1.35	8.75	2.06	0.17	5.66E-09
2.44	1.49	1.8	5.9	6.15	3.06	0.0	1.23	8.66	1.95	0.16	4.45E-09
2.46	1.49	1.79	6.24	6.45	3.04	0.0	1.37	8.99	2.06	0.17	5.09E-09
2.48	1.59	1.92	6.01	6.28	3.07	0.0	1.29	8.96	1.98	0.16	4.30E-09
2.5	1.59	1.92	5.97	6.25	3.07	0.0	1.28	8.97	1.97	0.16	4.23E-09
2.52	1.32	1.59	6.31	6.44	3.02	0.0	1.4	8.92	2.08	0.17	6.06E-09
2.54	1.31	1.58	6.26	6.39	3.02	0.0	1.38	8.91	2.06	0.17	5.99E-09
2.56	1.45	1.74	6.31	6.49	3.03	0.0	1.42	9.19	2.08	0.17	5.39E-09
2.58	1.6	1.91	6.48	6.69	3.04	0.0	1.51	9.58	2.14	0.17	5.11E-09
2.6	1.88	2.27	6.26	6.6	3.08	0.0	1.45	9.81	2.07	0.17	3.79E-09
2.62	1.78	2.12	6.71	6.96	3.05	0.0	1.65	10.12	2.21	0.18	4.81E-09
2.64	1.79	2.12	7.03	7.24	3.03	0.0	1.8	10.44	2.32	0.19	5.35E-09
2.66	1.82	2.11	8.12	8.18	2.99	0.0	2.36	11.42	2.68	0.21	7.41E-09
2.68	2.11	2.45	7.9	8.1	3.03	0.0	2.28	11.71	2.61	0.21	5.69E-09
2.7	2.33	2.7	8.22	8.45	3.03	0.0	2.49	12.33	2.71	0.22	5.43E-09
2.72	2.6	3.0	8.53	8.81	3.04	0.0	2.71	13.03	2.82	0.22	5.05E-09
2.74	3.15	3.64	8.57	9.01	3.08	0.0	2.79	13.82	2.83	0.22	3.83E-09
2.76	4.17	4.8	8.67	9.26	3.14	0.0	2.91	15.18	2.86	0.23	2.48E-09
2.78	5.09	5.9	8.23	9.01	3.21	0.0	2.7	15.7	2.72	0.22	1.59E-09
2.8	5.61	6.49	8.38	9.23	3.23	0.0	2.83	16.41	2.76	0.22	1.40E-09
2.82	6.2	7.19	8.36	9.3	3.25	0.0	2.86	16.99	2.76	0.22	1.17E-09
2.84	6.48	7.51	8.35	9.32	3.26	0.0	2.87	17.28	2.75	0.22	1.08E-09
2.86	6.69	7.81	7.99	9.0	3.29	0.0	2.66	17.05	2.64	0.21	9.54E-10

2.88	6.29	7.32	8.19	9.14	3.26	0.0	2.78	17.04	2.7	0.22	1.09E-09
2.9	6.03	7.03	8.07	8.99	3.26	0.0	2.71	16.75	2.66	0.21	1.13E-09
2.92	5.77	6.73	8.06	8.93	3.25	0.0	2.69	16.57	2.66	0.21	1.21E-09
2.94	5.4	6.31	8.04	8.86	3.23	0.0	2.68	16.3	2.65	0.21	1.34E-09
2.96	5.1	5.95	8.07	8.84	3.22	0.0	2.7	16.12	2.66	0.21	1.49E-09
2.98	5.02	5.68	10.26	11.0	3.13	0.0	4.28	18.44	3.39	0.27	2.73E-09
3.0	5.0	5.63	10.73	11.42	3.12	0.0	4.66	18.99	3.54	0.28	3.03E-09
3.02	5.2	5.82	11.48	12.16	3.1	0.0	5.34	20.1	3.79	0.29	3.30E-09
3.04	4.66	5.09	14.56	14.76	3.0	0.0	7.82	22.49	4.8	0.36	6.73E-09
3.06	4.66	5.1	14.49	14.7	3.0	0.0	7.82	22.52	4.78	0.36	6.66E-09
3.08	4.63	5.06	14.82	14.99	2.99	0.0	8.03	22.89	4.89	0.37	7.06E-09
3.1	2.72	2.83	34.08	29.89	2.6	0.0	18.53	32.17	11.25	0.79	1.10E-07
3.12	2.4	2.5	36.51	31.45	2.55	25.85	19.94	32.4	12.05	0.84	1.58E-07
3.14	2.29	2.38	36.94	31.67	2.53	25.75	20.26	32.27	12.19	0.85	1.76E-07
3.16	1.84	1.91	38.12	32.0	2.47	24.67	20.99	30.92	0.0	0.0	2.72E-07
3.18	1.64	1.7	39.28	32.57	2.44	24.35	21.72	30.52	0.0	0.0	3.53E-07
3.2	1.46	1.51	40.83	33.43	2.4	24.21	22.67	30.34	0.0	0.0	4.62E-07
3.22	1.57	1.63	37.84	31.44	2.44	23.7	21.1	29.7	0.0	0.0	3.49E-07
3.24	1.62	1.69	36.13	30.28	2.46	23.37	20.23	29.29	0.0	0.0	2.99E-07
3.26	1.78	1.86	30.73	26.43	2.53	21.88	17.28	27.42	10.14	0.72	1.80E-07
3.28	1.68	1.77	26.67	23.22	2.57	19.88	15.05	24.92	8.8	0.63	1.43E-07
3.3	1.72	1.82	24.41	21.53	2.6	19.1	13.84	23.93	8.06	0.58	1.12E-07
3.32	1.97	2.09	22.94	20.59	2.65	0.0	13.05	24.06	7.57	0.55	7.87E-08
3.34	2.21	2.35	21.67	19.75	2.69	0.0	12.38	24.14	7.15	0.52	5.76E-08
3.36	2.34	2.51	19.46	18.05	2.74	0.0	11.17	23.14	6.42	0.48	4.12E-08
3.38	3.01	3.29	15.54	15.01	2.88	0.0	8.95	21.98	5.13	0.39	1.61E-08
3.4	3.81	4.24	12.68	12.84	3.0	0.0	6.72	20.99	4.18	0.32	6.87E-09
3.42	4.62	5.24	10.58	11.16	3.1	0.0	4.89	20.08	3.49	0.27	3.30E-09
3.44	5.6	6.47	9.15	9.9	3.2	0.0	3.77	19.73	3.02	0.24	1.66E-09
3.46	5.79	6.77	8.49	9.29	3.23	0.0	3.29	19.17	2.8	0.22	1.31E-09
3.48	4.8	5.51	9.72	10.4	3.14	0.0	4.24	19.57	3.21	0.25	2.53E-09
3.5	4.46	5.06	10.81	11.33	3.09	0.0	5.15	20.43	3.57	0.28	3.66E-09
3.52	4.4	4.98	10.92	11.41	3.08	0.0	5.26	20.54	3.6	0.28	3.83E-09
3.54	5.42	6.3	8.92	9.65	3.2	0.0	3.65	19.63	2.94	0.23	1.65E-09
3.56	6.86	8.27	7.05	7.98	3.34	0.0	2.39	18.51	2.33	0.19	7.99E-10
3.58	7.15	8.82	6.23	7.18	3.39	0.0	1.9	17.53	2.06	0.17	6.75E-10
3.6	7.24	9.15	5.55	6.48	3.44	0.0	1.53	16.53	1.83	0.15	5.87E-10
3.62	6.61	8.37	5.51	6.4	3.42	0.0	1.5	16.04	1.82	0.15	6.25E-10
3.64	5.76	7.3	5.52	6.33	3.39	0.0	1.49	15.44	1.82	0.15	6.95E-10
3.66	4.45	5.6	5.69	6.38	3.31	0.0	1.56	14.59	1.88	0.15	8.72E-10
3.68	3.57	4.57	5.27	5.86	3.29	0.0	1.33	13.19	1.74	0.14	9.35E-10
3.7	2.08	2.67	5.26	5.64	3.18	0.0	1.28	11.45	1.74	0.14	1.95E-09
3.72	1.65	2.11	5.39	5.72	3.12	0.0	1.34	10.95	1.78	0.15	2.91E-09
3.74	1.29	1.65	5.3	5.54	3.08	0.0	1.28	10.29	1.75	0.15	3.81E-09
3.76	1.21	1.56	5.12	5.35	3.08	0.0	1.2	9.99	1.69	0.14	3.76E-09
3.78	1.21	1.54	5.56	5.75	3.05	0.0	1.4	10.47	1.83	0.15	4.67E-09
3.8	1.31	1.65	5.77	5.97	3.05	0.0	1.52	10.92	1.91	0.16	4.66E-09
3.82	1.22	1.53	5.98	6.13	3.03	0.0	1.62	10.99	1.97	0.16	5.59E-09
3.84	1.06	1.31	6.46	6.49	2.97	0.0	1.86	11.14	2.13	0.17	8.10E-09
3.86	1.19	1.48	6.28	6.38	3.01	0.0	1.78	11.29	2.07	0.17	6.53E-09
3.88	1.35	1.69	5.97	6.15	3.05	0.0	1.64	11.34	1.97	0.16	4.90E-09
3.9	1.36	1.72	5.79	6.0	3.06	0.0	1.55	11.23	1.91	0.16	4.46E-09
3.92	1.51	1.91	5.61	5.88	3.09	0.0	1.48	11.36	1.85	0.15	3.61E-09
3.94	2.35	2.85	7.17	7.49	3.09	0.0	2.42	14.51	2.36	0.19	3.65E-09
3.96	2.25	2.73	7.05	7.36	3.09	0.0	2.35	14.27	2.33	0.19	3.74E-09
3.98	2.52	3.09	6.68	7.09	3.13	0.0	2.15	14.33	2.21	0.18	2.77E-09
4.0	2.43	2.99	6.62	7.0	3.12	0.0	2.11	14.17	2.18	0.18	2.84E-09
4.02	2.37	2.9	6.8	7.16	3.11	0.0	2.22	14.33	2.24	0.18	3.16E-09
4.04	0.67	0.73	18.73	16.35	2.5	14.65	12.01	18.37	0.0	0.0	2.21E-07
4.06	0.36	0.38	37.79	29.74	2.15	19.0	23.81	23.81	0.0	0.0	2.60E-06
4.08	0.77	0.79	48.53	38.66	2.19	25.73	32.25	32.25	0.0	0.0	1.98E-06
4.1	0.68	0.7	60.95	47.19	2.09	28.53	35.75	35.75	0.0	0.0	4.03E-06
4.12	0.53	0.54	70.56	53.11	1.99	29.17	36.56	36.56	0.0	0.0	8.17E-06
4.14	0.53	0.54	82.38	61.12	1.93	31.93	40.02	40.02	0.0	0.0	1.19E-05
4.16	0.51	0.52	93.98	68.8	1.88	34.26	42.94	42.94	0.0	0.0	1.71E-05
4.18	0.55	0.56	100.9	73.78	1.87	36.51	45.76	45.76	0.0	0.0	1.82E-05
4.2	0.6	0.61	104.69	76.78	1.88	38.27	47.96	47.96	0.0	0.0	1.76E-05
4.22	0.67	0.68	105.76	78.06	1.89	39.67	49.72	49.72	0.0	0.0	1.56E-05
4.24	0.67	0.68	105.35	77.9	1.9	39.71	49.76	49.76	0.0	0.0	1.55E-05
4.26	0.75	0.76	109.13	81.17	1.91	42.13	52.8	52.8	0.0	0.0	1.39E-05
4.28	0.8	0.81	110.66	82.63	1.92	43.33	54.31	54.31	0.0	0.0	1.31E-05
4.3	0.87	0.88	110.23	82.93	1.94	44.53	55.81	55.81	0.0	0.0	1.12E-05
4.32	0.95	0.96	108.81	82.49	1.96	45.42	56.93	56.93	0.0	0.0	9.56E-06



4.34	1.01	1.03	107.01	81.72	1.99	46.05	57.72	57.72	0.0	0.0	8.25E-06
4.36	1.03	1.05	107.26	82.11	1.99	46.57	58.36	58.36	0.0	0.0	8.01E-06
4.38	1.02	1.03	108.4	82.92	1.98	46.76	58.6	58.6	0.0	0.0	8.47E-06
4.4	1.01	1.02	109.49	83.74	1.98	47.06	58.98	58.98	0.0	0.0	8.81E-06
4.42	0.98	0.99	111.42	85.03	1.96	47.29	59.27	59.27	0.0	0.0	9.63E-06
4.44	0.97	0.99	111.8	85.35	1.96	47.42	59.43	59.43	0.0	0.0	9.86E-06
4.46	0.97	0.99	111.81	85.47	1.96	47.58	59.64	59.64	0.0	0.0	9.86E-06
4.48	0.97	0.99	111.41	85.3	1.96	47.62	59.69	59.69	0.0	0.0	9.81E-06
4.5	0.98	0.99	110.75	84.97	1.96	47.64	59.71	59.71	0.0	0.0	9.67E-06
4.52	0.98	0.99	113.54	87.02	1.95	48.49	60.77	60.77	0.0	0.0	1.03E-05
4.54	0.98	0.99	115.09	88.25	1.95	49.11	61.56	61.56	0.0	0.0	1.05E-05
4.56	0.96	0.98	119.4	91.28	1.93	50.08	62.77	62.77	0.0	0.0	1.18E-05
4.58	0.92	0.93	124.8	94.88	1.91	50.79	63.66	63.66	0.0	0.0	1.42E-05
4.6	0.85	0.86	130.62	98.57	1.87	51.08	64.01	64.01	0.0	0.0	1.81E-05
4.62	0.82	0.83	133.69	100.63	1.86	51.43	64.46	64.46	0.0	0.0	2.02E-05
4.64	0.8	0.81	137.82	103.47	1.84	52.14	65.35	65.35	0.0	0.0	2.26E-05
4.66	0.77	0.78	143.69	107.43	1.82	53.05	66.49	66.49	0.0	0.0	2.63E-05
4.68	0.79	0.8	147.44	110.27	1.81	54.31	68.06	68.06	0.0	0.0	2.72E-05
4.7	0.81	0.81	149.36	111.91	1.82	55.3	69.3	69.3	0.0	0.0	2.70E-05
4.72	0.83	0.84	149.61	112.45	1.82	56.03	70.23	70.23	0.0	0.0	2.58E-05
4.74	0.88	0.89	151.51	114.38	1.83	57.78	72.41	72.41	0.0	0.0	2.38E-05
4.76	0.9	0.91	154.78	116.94	1.83	59.02	73.97	73.97	0.0	0.0	2.43E-05
4.78	0.88	0.89	158.78	119.78	1.82	59.82	74.98	74.98	0.0	0.0	2.65E-05
4.8	0.88	0.89	160.97	121.47	1.81	60.49	75.82	75.82	0.0	0.0	2.74E-05
4.82	0.87	0.88	163.45	123.28	1.81	61.01	76.47	76.47	0.0	0.0	2.90E-05
4.84	0.87	0.87	168.45	126.86	1.79	62.11	77.84	77.84	0.0	0.0	3.16E-05
4.86	0.85	0.86	172.73	129.87	1.78	62.85	78.77	78.77	0.0	0.0	3.47E-05
4.88	0.81	0.82	177.28	132.88	1.76	63.17	79.17	79.17	0.0	0.0	3.97E-05
4.9	0.82	0.82	180.67	135.44	1.75	64.11	80.35	80.35	0.0	0.0	4.14E-05
4.92	0.77	0.78	176.41	132.22	1.75	62.21	77.97	77.97	0.0	0.0	4.37E-05
4.94	0.72	0.72	187.04	139.15	1.71	63.08	79.06	79.06	0.0	0.0	5.70E-05
4.96	0.73	0.74	187.89	140.13	1.71	63.89	80.08	80.08	0.0	0.0	5.54E-05
4.98	0.79	0.79	188.35	141.27	1.73	65.68	82.32	82.32	0.0	0.0	4.92E-05
5.0	0.8	0.81	189.86	142.69	1.73	66.6	83.47	83.47	0.0	0.0	4.85E-05
5.02	0.87	0.88	188.49	142.71	1.76	68.48	85.83	85.83	0.0	0.0	4.07E-05
5.04	0.9	0.91	187.94	142.79	1.77	69.25	86.79	86.79	0.0	0.0	3.83E-05
5.06	0.94	0.95	185.97	141.96	1.78	69.96	87.68	87.68	0.0	0.0	3.48E-05
5.08	1.0	1.01	181.7	139.69	1.8	70.72	88.63	88.63	0.0	0.0	2.94E-05
5.1	1.05	1.06	179.63	138.84	1.82	71.7	89.86	89.86	0.0	0.0	2.60E-05
5.12	1.1	1.11	175.5	136.44	1.84	72.03	90.28	90.28	0.0	0.0	2.27E-05
5.14	1.16	1.17	170.28	133.23	1.86	72.09	90.36	90.36	0.0	0.0	1.95E-05
5.16	1.19	1.2	164.76	129.6	1.88	71.53	89.65	89.65	0.0	0.0	1.73E-05
5.18	1.19	1.2	160.02	126.24	1.89	70.31	88.13	88.13	0.0	0.0	1.65E-05
5.2	1.18	1.19	155.23	122.82	1.89	69.07	86.56	86.56	0.0	0.0	1.56E-05
5.22	1.18	1.19	147.97	117.61	1.91	67.25	84.29	84.29	0.0	0.0	1.42E-05
5.24	1.18	1.2	139.93	111.8	1.93	65.22	81.75	81.75	0.0	0.0	1.25E-05
5.26	1.2	1.21	132.91	106.76	1.94	63.64	79.76	79.76	0.0	0.0	1.10E-05
5.28	1.23	1.25	124.26	100.52	1.97	61.75	77.39	77.39	0.0	0.0	9.11E-06
5.3	1.23	1.24	118.76	96.45	1.98	60.18	75.42	75.42	0.0	0.0	8.32E-06
5.32	1.22	1.24	114.01	92.9	1.99	58.69	73.55	73.55	0.0	0.0	7.76E-06
5.34	1.19	1.21	110.25	90.03	2.0	57.27	71.77	71.77	0.0	0.0	7.51E-06
5.36	1.17	1.19	106.56	87.21	2.0	55.85	70.0	70.0	0.0	0.0	7.26E-06
5.38	1.16	1.18	101.73	83.56	2.02	54.33	68.1	68.1	0.0	0.0	6.65E-06
5.4	1.17	1.19	97.54	80.48	2.03	53.3	66.8	66.8	0.0	0.0	5.97E-06
5.42	1.16	1.18	93.61	77.5	2.04	52.01	65.19	65.19	0.0	0.0	5.53E-06
5.44	1.15	1.17	91.67	76.02	2.05	51.29	64.28	64.28	0.0	0.0	5.41E-06
5.46	1.12	1.14	91.56	75.92	2.04	51.01	63.93	63.93	0.0	0.0	5.63E-06
5.48	1.1	1.12	91.93	76.18	2.03	50.85	63.73	63.73	0.0	0.0	5.95E-06
5.5	1.08	1.1	92.75	76.82	2.02	50.97	63.88	63.88	0.0	0.0	6.27E-06
5.52	1.04	1.06	93.21	77.1	2.01	50.62	63.45	63.45	0.0	0.0	6.80E-06
5.54	1.0	1.02	93.19	77.03	2.0	50.21	62.93	62.93	0.0	0.0	7.23E-06
5.56	0.97	0.99	93.82	77.48	1.99	50.06	62.74	62.74	0.0	0.0	7.75E-06
5.58	0.96	0.98	94.07	77.7	1.99	50.04	62.72	62.72	0.0	0.0	8.01E-06
5.6	0.95	0.97	94.02	77.7	1.99	49.98	62.64	62.64	0.0	0.0	8.18E-06
5.62	0.95	0.97	93.48	77.37	1.99	49.97	62.63	62.63	0.0	0.0	8.07E-06
5.64	0.95	0.97	93.22	77.25	1.99	49.99	62.65	62.65	0.0	0.0	8.06E-06
5.66	0.91	0.93	94.78	78.39	1.97	49.97	62.63	62.63	0.0	0.0	9.01E-06
5.68	0.83	0.85	99.35	81.67	1.94	50.13	62.82	62.82	0.0	0.0	1.17E-05
5.7	0.77	0.78	105.51	86.15	1.89	50.71	63.56	63.56	0.0	0.0	1.55E-05
5.72	0.69	0.7	113.26	91.75	1.85	51.4	64.42	64.42	0.0	0.0	2.17E-05



# CPT Office V. 1.1

## Elaborato grafico prova penetrometrica

21/09/2022

19:32:56

Committente	Dott. Geol. Maurizio Castellari		
Località	Lagosanto (Fe)		
Via	Lagosanto		
Prova	CPTU6		
Tipo prova	CPTU		
Tipo di Prova	Prof. max (m)	Preforo (m)	Falda (m da p.c.)
CPTU	20.38	0.02	1.6

Tabella 1 - Informazioni generali

# 1 - Parametri prova penetrometrica CPTU6

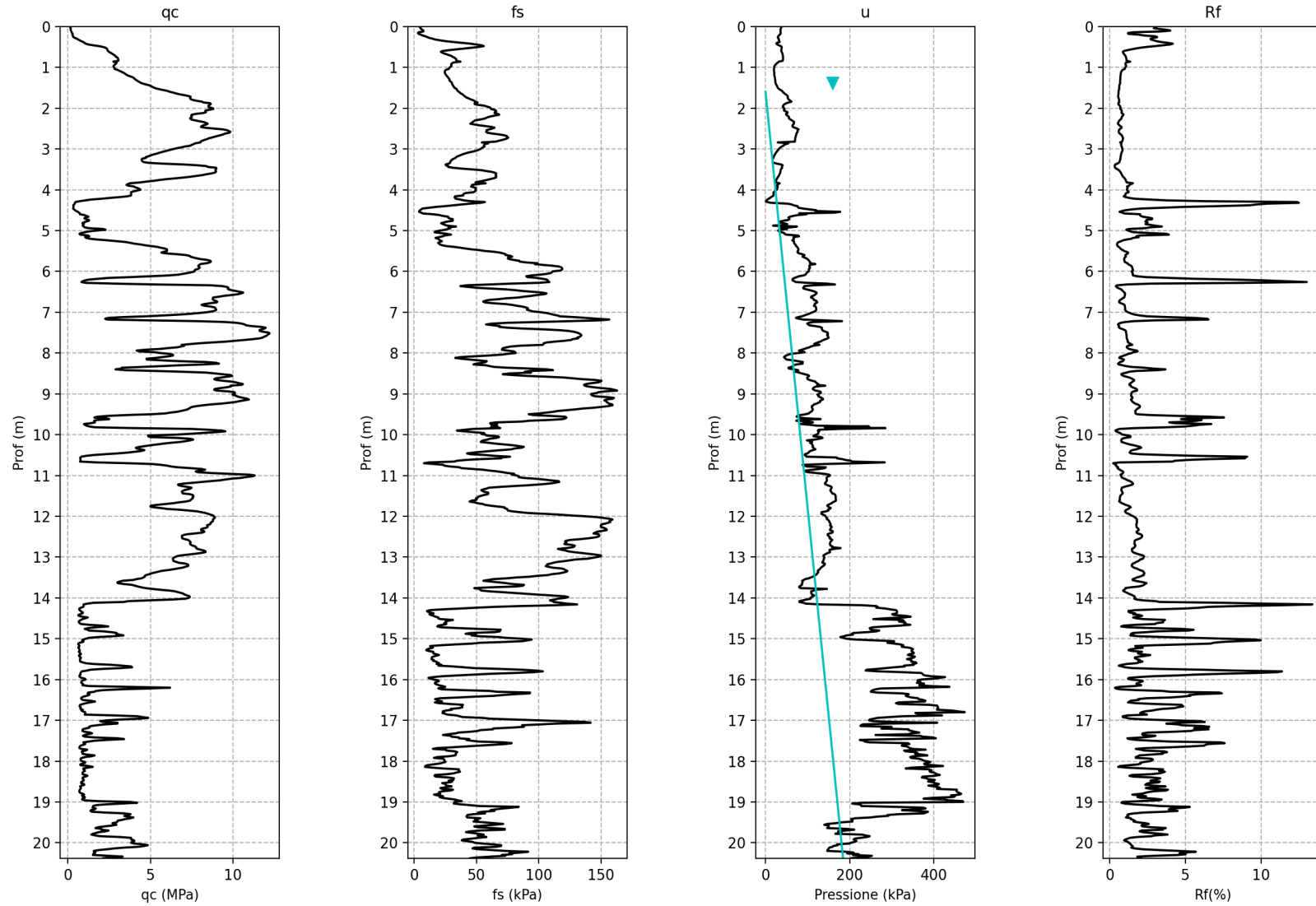


Fig 1 - Plot profondità-variabile della prova penetrometrica elaborata

# 1 - Parametri prova penetrometrica CPTU6

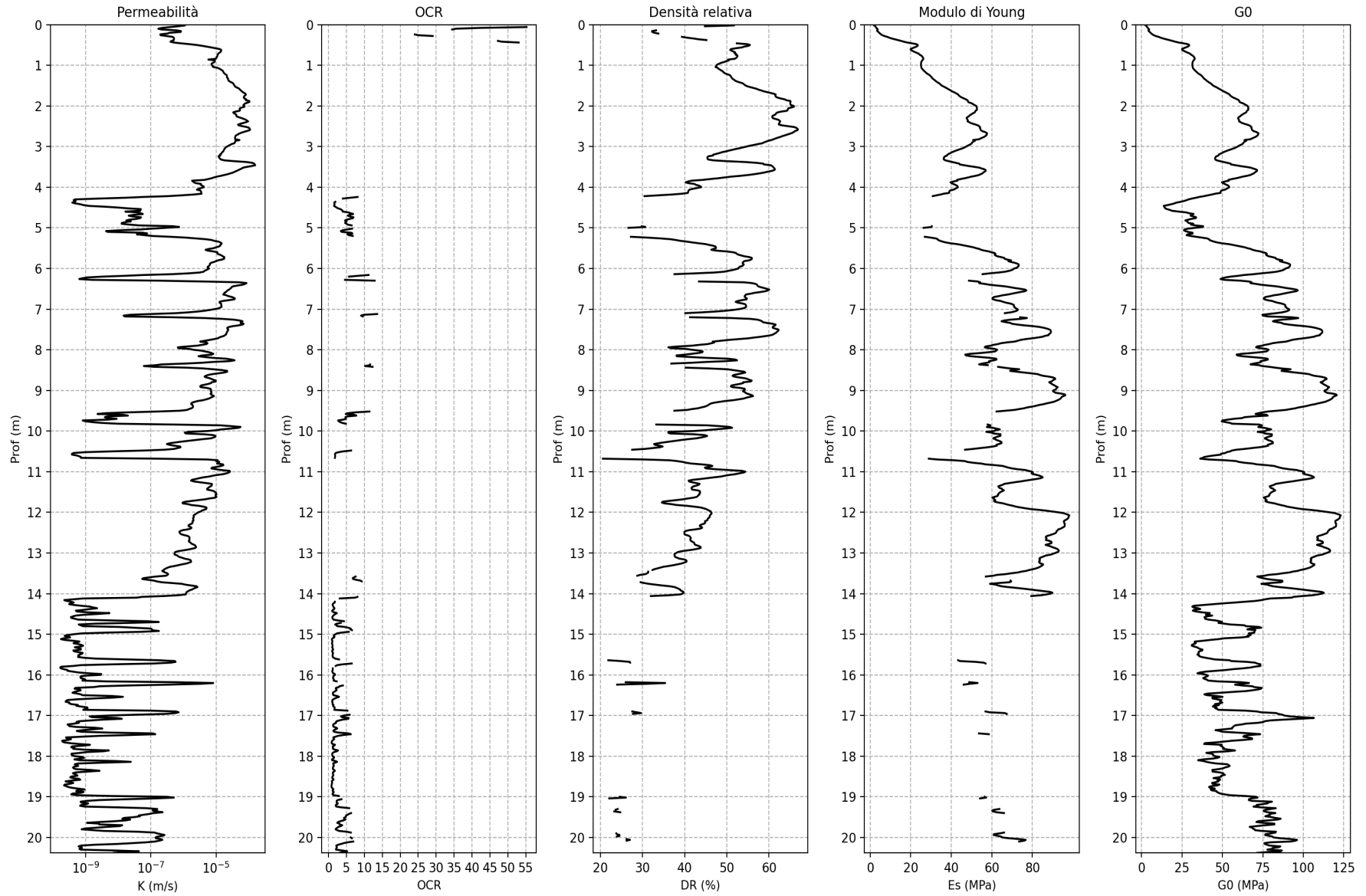


Fig 2 - Plot profondità-variabile della prova penetrometrica elaborata

# 1 - Parametri prova penetrometrica CPTU6

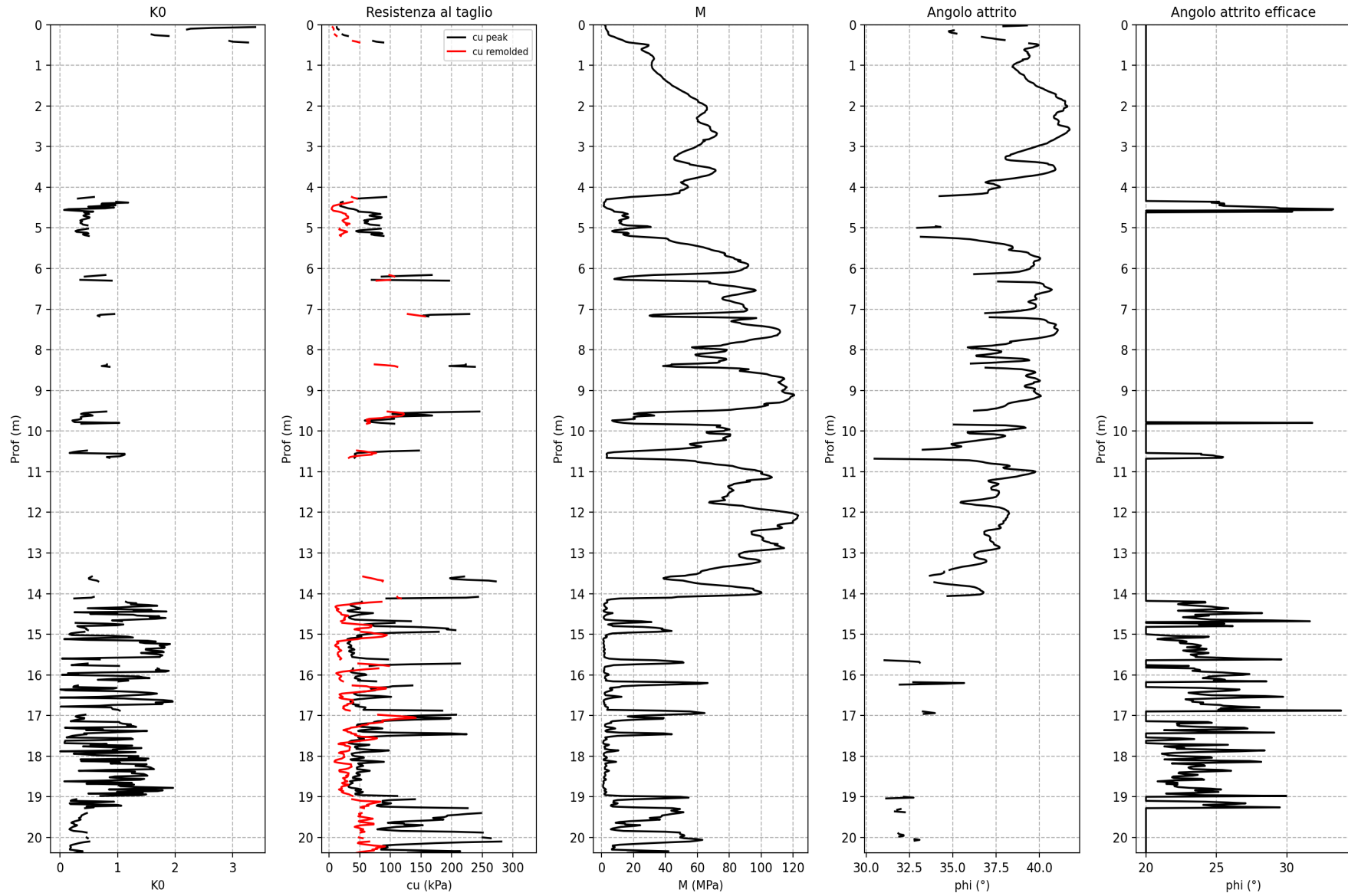


Fig 3 - Plot profondità-variabile della prova penetrometrica elaborata

## 2 - SBT & SBT(n) CPTU6

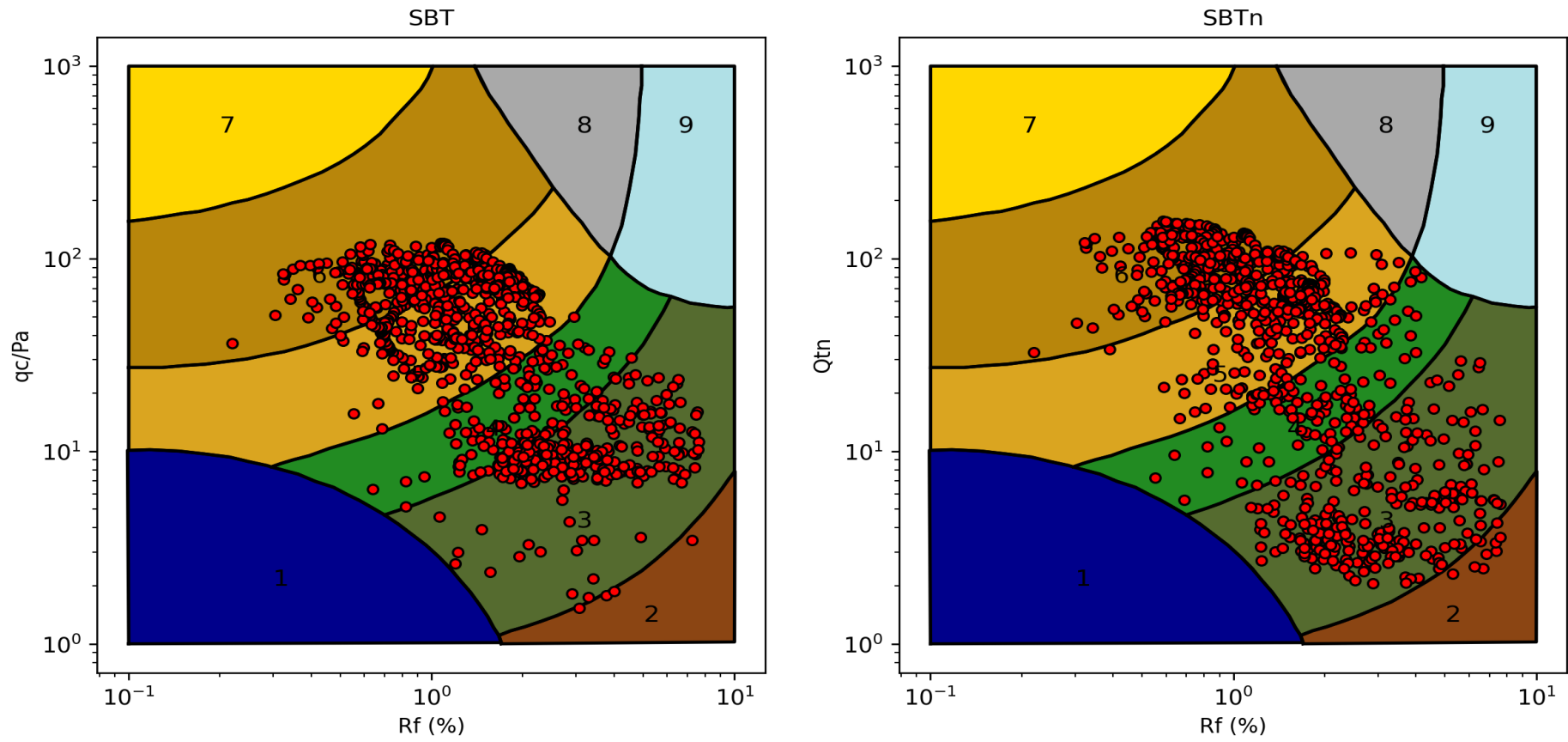


Fig 4 - A sinistra plot valori  $q_c/Pa$ - $R_f$  su SBT chart, a destra plot valori  $Q_{tn}$ - $R_f$  su SBT(n) chart

## 2 - Stratigrafia CPTU6

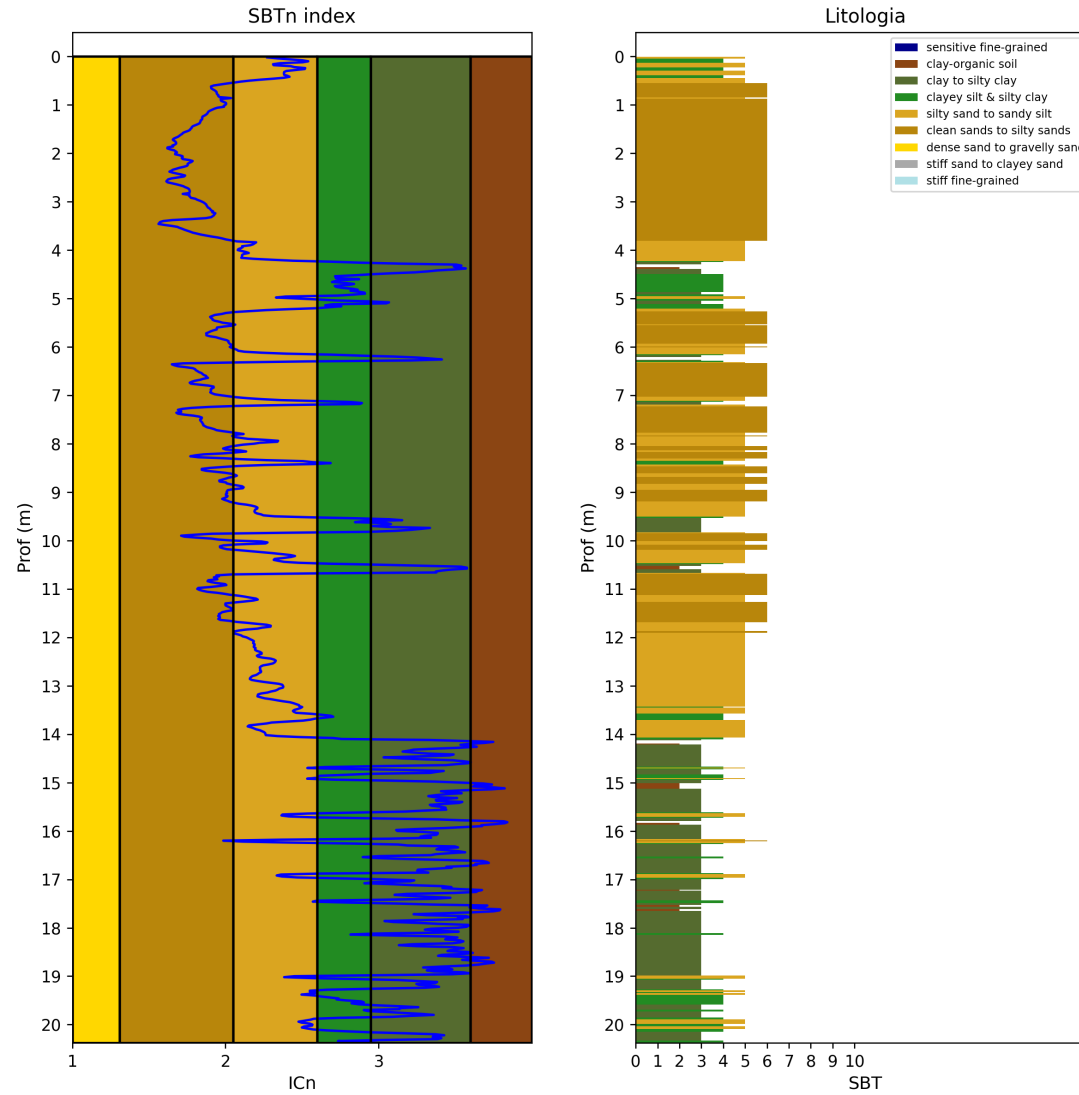


Fig 3 - A sinistra Indice SBT, a destra classificazione stratigrafica da SBT chart

# CPT Office V. 1.1



## Report calcolo prova penetrometrica

21/09/2022

19:32:55

Committente	Dott. Geol. Maurizio Castellari
Località	Lagosanto (Fe)
Via	Lagosanto
Prova	CPTU6
Tipo prova	CPTU

### Tabella 1 - Dati input

Tipo di Prova	Profondità max (m)	Falda (m da p.c.)
CPTU	20.38	1.6

Prof.(m)	qc (MPa)	fs (kPa)	u2 (kPa)	u0 (kPa)	Qt (MPa)	$\gamma$ (KN/m3)	$\sigma_v$ (kPa)	$\sigma_{vp}$ (kPa)	cu (kPa)	$\phi$ (°)	$\phi$ picco(°)	Dr (%)
0.02	0.15	4.79	37.12	0.0	0.16	17.5	0.35	0.35	0.0	39.28	20.0	51.68
0.04	0.18	5.36	37.04	0.0	0.18	17.5	0.7	0.7	0.0	37.91	20.0	44.78
0.06	0.17	5.81	35.86	0.0	0.18	17.5	1.05	1.05	12.55	0.0	20.0	0.0
0.08	0.17	6.8	35.38	0.0	0.18	17.5	1.4	1.4	12.8	0.0	20.0	0.0
0.1	0.18	7.62	35.62	0.0	0.19	17.5	1.75	1.75	13.47	0.0	20.0	0.0
0.12	0.21	7.53	35.93	0.0	0.22	17.5	2.1	2.1	15.66	0.0	20.0	0.0
0.14	0.23	3.72	35.62	0.0	0.24	17.5	2.45	2.45	0.0	35.06	20.0	33.22
0.16	0.26	3.15	35.93	0.0	0.26	17.5	2.8	2.8	0.0	34.76	20.0	32.21
0.18	0.3	3.68	35.7	0.0	0.3	17.5	3.15	3.15	0.0	34.78	20.0	32.28
0.2	0.28	5.61	33.49	0.0	0.29	17.5	3.5	3.5	0.0	34.93	20.0	32.79
0.22	0.3	6.96	31.43	0.0	0.31	17.5	3.85	3.85	0.0	35.21	20.0	33.75
0.24	0.3	9.33	30.25	0.0	0.31	17.5	4.2	4.2	21.87	0.0	20.0	0.0
0.26	0.34	10.93	29.3	0.0	0.35	17.5	4.55	4.55	24.6	0.0	20.0	0.0
0.28	0.43	12.41	29.38	0.0	0.44	17.5	4.9	4.9	30.81	0.0	20.0	0.0
0.3	0.56	15.19	31.27	0.0	0.56	17.5	5.25	5.25	0.0	36.67	20.0	39.32
0.32	0.63	17.4	31.83	0.0	0.64	18.0	5.61	5.61	0.0	36.93	20.0	40.44
0.34	0.72	21.26	31.67	0.0	0.73	18.0	5.97	5.97	0.0	37.3	20.0	42.03
0.36	0.83	25.84	33.01	0.0	0.83	17.5	6.32	6.32	0.0	37.58	20.0	43.27
0.38	0.93	31.78	33.41	0.0	0.94	17.5	6.67	6.67	0.0	37.99	20.0	45.17
0.4	1.01	38.79	26.69	0.0	1.01	17.5	7.02	7.02	71.73	0.0	20.0	0.0
0.42	1.08	45.3	25.75	0.0	1.09	17.5	7.37	7.37	77.11	0.0	20.0	0.0
0.44	1.24	49.68	27.8	0.0	1.25	17.5	7.72	7.72	88.62	0.0	20.0	0.0
0.46	1.54	54.43	31.75	0.0	1.55	18.0	8.08	8.08	0.0	39.4	20.0	52.34
0.48	1.89	55.99	36.72	0.0	1.89	18.0	8.44	8.44	0.0	39.83	20.0	54.77
0.5	2.13	52.15	38.15	0.0	2.14	18.0	8.8	8.8	0.0	39.96	20.0	55.49
0.52	2.28	46.29	38.62	0.0	2.29	18.0	9.16	9.16	0.0	39.9	20.0	55.18
0.54	2.35	39.86	38.22	0.0	2.36	18.0	9.52	9.52	0.0	39.73	20.0	54.16
0.56	2.39	33.81	37.83	0.0	2.4	18.0	9.88	9.88	0.0	39.62	20.0	53.59
0.58	2.41	27.66	37.51	0.0	2.41	18.0	10.24	10.24	0.0	39.37	20.0	52.2
0.6	2.43	22.75	37.67	0.0	2.44	18.5	10.61	10.61	0.0	39.16	20.0	51.03
0.62	2.49	21.53	38.46	0.0	2.5	18.5	10.98	10.98	0.0	39.11	20.0	50.77
0.64	2.57	22.68	39.33	0.0	2.58	18.5	11.35	11.35	0.0	39.17	20.0	51.09
0.66	2.66	24.11	40.04	0.0	2.67	18.5	11.72	11.72	0.0	39.25	20.0	51.52
0.68	2.74	26.25	40.67	0.0	2.75	18.5	12.09	12.09	0.0	39.33	20.0	51.96
0.7	2.81	27.93	40.99	0.0	2.82	18.5	12.46	12.46	0.0	39.3	20.0	51.79
0.72	2.89	30.1	41.38	0.0	2.9	18.5	12.83	12.83	0.0	39.38	20.0	52.23
0.74	2.9	30.68	41.38	0.0	2.91	18.5	13.2	13.2	0.0	39.35	20.0	52.08
0.76	3.0	32.28	41.62	0.0	3.01	18.5	13.57	13.57	0.0	39.43	20.0	52.52
0.78	3.04	33.06	41.7	0.0	3.04	18.5	13.94	13.94	0.0	39.43	20.0	52.52
0.8	3.05	33.92	41.62	0.0	3.06	18.5	14.31	14.31	0.0	39.41	20.0	52.39
0.82	3.07	33.84	41.38	0.0	3.08	18.5	14.68	14.68	0.0	39.37	20.0	52.2
0.84	3.05	34.13	40.83	0.0	3.06	18.5	15.05	15.05	0.0	39.31	20.0	51.86
0.86	2.76	37.31	31.59	0.0	2.76	18.0	15.41	15.41	0.0	39.02	20.0	50.3
0.88	2.96	31.86	29.77	0.0	2.97	18.5	15.78	15.78	0.0	39.05	20.0	50.48
0.9	2.92	30.47	26.77	0.0	2.93	18.5	16.15	16.15	0.0	38.93	20.0	49.83
0.92	2.9	29.9	25.43	0.0	2.9	18.5	16.52	16.52	0.0	38.84	20.0	49.35
0.94	2.82	29.78	23.14	0.0	2.83	18.5	16.89	16.89	0.0	38.7	20.0	48.64
0.96	2.78	30.15	21.88	0.0	2.78	18.5	17.26	17.26	0.0	38.61	20.0	48.2



0.98	2.76	29.54	20.77	0.0	2.77	18.5	17.63	17.63	0.0	38.53	20.0	47.79
1.0	2.78	28.8	20.53	0.0	2.78	18.5	18.0	18.0	0.0	38.48	20.0	47.55
1.02	2.83	28.1	20.3	0.0	2.84	18.5	18.37	18.37	0.0	38.48	20.0	47.53
1.04	2.83	27.94	20.38	0.0	2.84	18.5	18.74	18.74	0.0	38.43	20.0	47.3
1.06	3.0	25.65	19.82	0.0	3.01	18.5	19.11	19.11	0.0	38.52	20.0	47.73
1.08	3.11	24.95	19.98	0.0	3.11	18.5	19.48	19.48	0.0	38.57	20.0	47.97
1.1	3.2	24.83	20.22	0.0	3.21	18.5	19.85	19.85	0.0	38.62	20.0	48.27
1.12	3.3	24.58	20.85	0.0	3.31	18.5	20.22	20.22	0.0	38.68	20.0	48.54
1.14	3.41	24.79	21.01	0.0	3.41	18.5	20.59	20.59	0.0	38.75	20.0	48.9
1.16	3.48	25.2	20.85	0.0	3.48	18.5	20.96	20.96	0.0	38.79	20.0	49.1
1.18	3.55	25.65	20.61	0.0	3.55	18.5	21.33	21.33	0.0	38.83	20.0	49.3
1.2	3.64	25.98	20.77	0.0	3.64	18.5	21.7	21.7	0.0	38.88	20.0	49.59
1.22	3.76	26.56	21.48	0.0	3.77	18.5	22.07	22.07	0.0	38.97	20.0	50.06
1.24	3.92	27.17	22.19	0.0	3.92	18.5	22.44	22.44	0.0	39.09	20.0	50.68
1.26	3.99	27.58	22.35	0.0	4.0	18.5	22.81	22.81	0.0	39.13	20.0	50.86
1.28	4.05	28.24	22.51	0.0	4.05	18.5	23.18	23.18	0.0	39.15	20.0	51.0
1.3	4.09	28.57	22.9	0.0	4.1	18.5	23.55	23.55	0.0	39.16	20.0	51.07
1.32	4.18	28.41	23.46	0.0	4.18	18.5	23.92	23.92	0.0	39.2	20.0	51.26
1.34	4.25	29.11	23.14	0.0	4.25	18.5	24.29	24.29	0.0	39.23	20.0	51.45
1.36	4.34	29.89	23.38	0.0	4.35	18.5	24.66	24.66	0.0	39.29	20.0	51.77
1.38	4.42	30.38	23.85	0.0	4.42	18.5	25.03	25.03	0.0	39.33	20.0	51.97
1.4	4.56	30.63	24.32	0.0	4.57	19.0	25.41	25.41	0.0	39.42	20.0	52.44
1.42	4.73	30.75	25.19	0.0	4.74	19.0	25.79	25.79	0.0	39.52	20.0	52.98
1.44	4.93	31.24	26.54	0.0	4.94	19.0	26.17	26.17	0.0	39.64	20.0	53.67
1.46	5.04	31.53	27.4	0.0	5.05	19.0	26.55	26.55	0.0	39.69	20.0	53.98
1.48	5.13	32.15	28.27	0.0	5.13	19.0	26.93	26.93	0.0	39.73	20.0	54.2
1.5	5.24	32.36	29.3	0.0	5.24	19.0	27.31	27.31	0.0	39.78	20.0	54.48
1.52	5.37	33.54	30.88	0.0	5.38	19.0	27.69	27.69	0.0	39.86	20.0	54.94
1.54	5.59	34.41	33.33	0.0	5.59	19.0	28.07	28.07	0.0	39.99	20.0	55.66
1.56	5.83	34.61	36.8	0.0	5.84	19.0	28.45	28.45	0.0	40.12	20.0	56.41
1.58	6.05	35.15	39.49	0.0	6.06	19.0	28.83	28.83	0.0	40.23	20.0	57.09
1.6	6.19	36.09	41.07	0.0	6.2	19.0	29.21	29.21	0.0	40.3	20.0	57.52
1.62	6.38	36.79	42.96	0.2	6.39	19.0	29.59	29.39	0.0	40.41	20.0	58.16
1.64	6.56	37.61	44.94	0.39	6.57	19.0	29.97	29.58	0.0	40.5	20.0	58.74
1.66	6.78	38.88	47.7	0.59	6.79	19.0	30.35	29.76	0.0	40.63	20.0	59.51
1.68	7.03	39.57	50.47	0.78	7.04	19.0	30.73	29.95	0.0	40.76	20.0	60.33
1.7	7.29	40.31	52.36	0.98	7.3	19.0	31.11	30.13	0.0	40.88	20.0	61.13
1.72	7.44	41.26	53.15	1.18	7.45	19.0	31.49	30.31	0.0	40.96	20.0	61.61
1.74	7.41	42.08	52.44	1.37	7.42	19.0	31.87	30.5	0.0	40.94	20.0	61.49
1.76	7.4	43.8	53.15	1.57	7.41	19.0	32.25	30.68	0.0	40.94	20.0	61.53
1.78	7.45	45.11	54.34	1.77	7.46	19.0	32.63	30.86	0.0	40.97	20.0	61.7
1.8	7.58	46.87	56.86	1.96	7.59	19.0	33.01	31.05	0.0	41.04	20.0	62.15
1.82	7.82	48.38	59.0	2.16	7.83	19.0	33.39	31.23	0.0	41.16	20.0	62.91
1.84	8.12	48.92	61.84	2.35	8.13	19.0	33.77	31.42	0.0	41.29	20.0	63.79
1.86	8.21	51.05	55.05	2.55	8.22	19.0	34.15	31.6	0.0	41.34	20.0	64.11
1.88	8.62	48.56	49.36	2.75	8.63	19.0	34.53	31.78	0.0	41.48	20.0	65.1
1.9	8.66	48.64	45.73	2.94	8.67	19.0	34.91	31.97	0.0	41.49	20.0	65.13
1.92	8.59	51.71	43.2	3.14	8.6	19.0	35.29	32.15	0.0	41.48	20.0	65.06
1.94	8.51	56.34	41.86	3.34	8.52	19.0	35.67	32.33	0.0	41.47	20.0	65.04
1.96	8.52	58.47	40.91	3.53	8.53	19.0	36.05	32.52	0.0	41.48	20.0	65.1
1.98	8.54	60.64	41.62	3.73	8.54	19.0	36.43	32.7	0.0	41.5	20.0	65.2
2.0	8.78	61.66	44.38	3.92	8.78	19.0	36.81	32.89	0.0	41.6	20.0	65.88
2.02	8.82	61.7	45.33	4.12	8.83	19.0	37.19	33.07	0.0	41.61	20.0	65.93
2.04	8.56	64.4	43.6	4.32	8.56	19.0	37.57	33.25	0.0	41.5	20.0	65.23
2.06	8.33	65.75	44.23	4.51	8.34	19.0	37.95	33.44	0.0	41.4	20.0	64.55
2.08	8.33	65.92	48.49	4.71	8.34	19.0	38.33	33.62	0.0	41.39	20.0	64.49
2.1	8.37	64.77	52.36	4.9	8.38	19.0	38.71	33.81	0.0	41.39	20.0	64.46
2.12	8.21	64.56	51.89	5.1	8.22	19.0	39.09	33.99	0.0	41.36	20.0	64.23
2.14	7.76	67.18	48.81	5.3	7.77	19.0	39.47	34.17	0.0	41.15	20.0	62.88
2.16	7.51	68.37	49.2	5.49	7.52	19.0	39.85	34.36	0.0	41.03	20.0	62.06
2.18	7.47	65.17	51.33	5.69	7.48	19.0	40.23	34.54	0.0	40.97	20.0	61.7
2.2	7.52	61.81	54.57	5.89	7.53	19.0	40.61	34.72	0.0	40.96	20.0	61.61
2.22	7.51	59.35	55.92	6.08	7.52	19.0	40.99	34.91	0.0	40.92	20.0	61.4
2.24	7.41	57.71	55.13	6.28	7.42	19.0	41.37	35.09	0.0	40.85	20.0	60.91
2.26	7.41	56.19	56.86	6.47	7.42	19.0	41.75	35.28	0.0	40.83	20.0	60.77
2.28	7.5	52.63	59.39	6.67	7.51	19.0	42.13	35.46	0.0	40.83	20.0	60.79
2.3	7.72	48.98	63.18	6.87	7.73	19.0	42.51	35.64	0.0	40.85	20.0	60.9
2.32	7.96	48.0	65.39	7.06	7.97	19.0	42.89	35.83	0.0	40.94	20.0	61.51
2.34	8.23	46.97	68.08	7.26	8.24	19.0	43.27	36.01	0.0	41.05	20.0	62.21
2.36	8.36	46.44	66.97	7.46	8.37	19.0	43.65	36.19	0.0	41.09	20.0	62.49
2.38	8.47	45.09	67.68	7.65	8.48	19.0	44.03	36.38	0.0	41.12	20.0	62.67
2.4	8.39	48.36	66.02	7.85	8.41	19.0	44.41	36.56	0.0	41.11	20.0	62.57
2.42	8.21	52.42	64.05	8.04	8.22	19.0	44.79	36.75	0.0	41.09	20.0	62.48

2.44	8.1	57.41	63.97	8.24	8.11	19.0	45.17	36.93	0.0	41.07	20.0	62.32
2.46	8.06	62.41	64.84	8.44	8.08	19.0	45.55	37.11	0.0	41.07	20.0	62.37
2.48	8.32	64.62	69.5	8.63	8.33	19.0	45.93	37.3	0.0	41.2	20.0	63.17
2.5	8.84	62.62	75.03	8.83	8.85	19.0	46.31	37.48	0.0	41.4	20.0	64.56
2.52	9.4	60.53	78.58	9.03	9.42	19.0	46.69	37.66	0.0	41.62	20.0	66.01
2.54	9.64	58.19	76.45	9.22	9.66	19.5	47.08	37.86	0.0	41.69	20.0	66.5
2.56	9.76	58.23	75.9	9.42	9.77	19.5	47.47	38.05	0.0	41.72	20.0	66.74
2.58	9.85	57.82	76.45	9.61	9.86	19.5	47.86	38.25	0.0	41.74	20.0	66.89
2.6	9.79	58.73	75.11	9.81	9.8	19.5	48.25	38.44	0.0	41.72	20.0	66.7
2.62	9.56	62.25	73.13	10.01	9.57	19.0	48.63	38.62	0.0	41.64	20.0	66.15
2.64	9.42	67.49	73.29	10.2	9.43	19.0	49.01	38.81	0.0	41.6	20.0	65.92
2.66	9.28	71.67	72.82	10.4	9.29	19.0	49.39	38.99	0.0	41.56	20.0	65.61
2.68	9.08	74.29	71.71	10.59	9.09	19.0	49.77	39.18	0.0	41.48	20.0	65.08
2.7	8.9	74.41	71.79	10.79	8.92	19.0	50.15	39.36	0.0	41.39	20.0	64.49
2.72	8.72	75.6	71.08	10.99	8.73	19.0	50.53	39.54	0.0	41.31	20.0	63.92
2.74	8.53	74.66	70.37	11.18	8.55	19.0	50.91	39.73	0.0	41.21	20.0	63.26
2.76	8.42	73.14	70.68	11.38	8.44	19.0	51.29	39.91	0.0	41.14	20.0	62.8
2.78	8.26	70.56	69.97	11.58	8.27	19.0	51.67	40.09	0.0	41.04	20.0	62.13
2.8	8.14	67.9	70.21	11.77	8.15	19.0	52.05	40.28	0.0	40.95	20.0	61.59
2.82	8.04	65.44	69.97	11.97	8.05	19.0	52.43	40.46	0.0	40.88	20.0	61.11
2.84	8.04	54.43	29.14	12.16	8.04	19.0	52.81	40.65	0.0	40.79	20.0	60.55
2.86	7.73	59.67	54.1	12.36	7.74	19.0	53.19	40.83	0.0	40.67	20.0	59.78
2.88	7.62	57.09	48.49	12.56	7.63	19.0	53.57	41.01	0.0	40.59	20.0	59.26
2.9	7.5	56.23	44.23	12.75	7.51	19.0	53.95	41.2	0.0	40.5	20.0	58.76
2.92	7.42	55.95	42.73	12.95	7.43	19.0	54.33	41.38	0.0	40.45	20.0	58.41
2.94	7.09	56.65	38.54	13.15	7.1	19.0	54.71	41.56	0.0	40.26	20.0	57.3
2.96	6.88	55.46	35.86	13.34	6.89	19.0	55.09	41.75	0.0	40.13	20.0	56.5
2.98	6.61	54.19	33.49	13.54	6.62	19.0	55.47	41.93	0.0	39.95	20.0	55.45
3.0	6.41	53.37	31.75	13.73	6.42	19.0	55.85	42.12	0.0	39.81	20.0	54.65
3.02	6.21	51.93	30.33	13.93	6.21	19.0	56.23	42.3	0.0	39.66	20.0	53.81
3.04	6.04	50.25	28.91	14.13	6.04	19.0	56.61	42.48	0.0	39.53	20.0	53.05
3.06	5.83	47.67	27.01	14.32	5.84	19.0	56.99	42.67	0.0	39.36	20.0	52.13
3.08	5.66	44.68	25.75	14.52	5.66	19.0	57.37	42.85	0.0	39.21	20.0	51.3
3.1	5.49	42.22	24.56	14.72	5.49	19.0	57.75	43.04	0.0	39.05	20.0	50.48
3.12	5.33	39.97	23.22	14.91	5.34	19.0	58.13	43.22	0.0	38.91	20.0	49.73
3.14	5.14	38.21	21.96	15.11	5.14	19.0	58.51	43.4	0.0	38.73	20.0	48.82
3.16	5.02	36.73	20.93	15.3	5.02	19.0	58.89	43.59	0.0	38.62	20.0	48.22
3.18	4.88	34.93	20.14	15.5	4.88	19.0	59.27	43.77	0.0	38.47	20.0	47.51
3.2	4.72	33.87	18.88	15.7	4.72	19.0	59.65	43.95	0.0	38.32	20.0	46.75
3.22	4.73	33.21	18.8	15.89	4.74	19.0	60.03	44.14	0.0	38.32	20.0	46.73
3.24	4.5	31.9	17.22	16.09	4.5	18.5	60.4	44.31	0.0	38.09	20.0	45.62
3.26	4.47	30.43	16.66	16.28	4.47	18.5	60.77	44.49	0.0	38.03	20.0	45.37
3.28	4.48	30.02	16.82	16.48	4.48	18.5	61.14	44.66	0.0	38.03	20.0	45.36
3.3	4.51	29.25	16.74	16.68	4.51	19.0	61.52	44.84	0.0	38.04	20.0	45.38
3.32	4.58	29.0	17.06	16.87	4.58	19.0	61.9	45.03	0.0	38.09	20.0	45.63
3.34	4.89	29.04	19.74	17.07	4.89	19.0	62.28	45.21	0.0	38.34	20.0	46.84
3.36	5.74	27.69	27.33	17.27	5.75	19.0	62.66	45.39	0.0	38.97	20.0	50.05
3.38	7.0	25.36	37.43	17.46	7.01	19.0	63.04	45.58	0.0	39.74	20.0	54.27
3.4	7.86	25.57	40.91	17.66	7.87	19.0	63.42	45.76	0.0	40.2	20.0	56.95
3.42	8.4	27.54	39.09	17.85	8.41	19.5	63.81	45.96	0.0	40.48	20.0	58.64
3.44	8.48	27.41	38.94	18.05	8.49	19.5	64.2	46.15	0.0	40.51	20.0	58.81
3.46	8.98	31.23	39.57	18.25	8.98	19.5	64.59	46.34	0.0	40.77	20.0	60.41
3.48	9.0	37.74	38.07	18.44	9.01	19.5	64.98	46.54	0.0	40.82	20.0	60.76
3.5	8.96	46.35	36.49	18.64	8.97	19.0	65.36	46.72	0.0	40.86	20.0	60.98
3.52	8.93	54.17	35.86	18.84	8.94	19.0	65.74	46.9	0.0	40.88	20.0	61.14
3.54	8.96	57.66	35.86	19.03	8.97	19.0	66.12	47.09	0.0	40.91	20.0	61.3
3.56	8.98	62.08	35.14	19.23	8.98	19.0	66.5	47.27	0.0	40.93	20.0	61.43
3.58	8.9	64.75	35.14	19.42	8.91	19.0	66.88	47.46	0.0	40.9	20.0	61.24
3.6	8.69	65.98	34.2	19.62	8.7	19.0	67.26	47.64	0.0	40.8	20.0	60.62
3.62	8.4	65.57	33.09	19.82	8.4	19.0	67.64	47.82	0.0	40.65	20.0	59.66
3.64	8.15	65.36	32.46	20.01	8.16	19.0	68.02	48.01	0.0	40.52	20.0	58.85
3.66	7.81	66.02	31.51	20.21	7.81	19.0	68.4	48.19	0.0	40.34	20.0	57.74
3.68	7.44	65.53	29.93	20.4	7.45	19.0	68.78	48.38	0.0	40.13	20.0	56.51
3.7	7.01	65.78	28.91	20.6	7.02	19.0	69.16	48.56	0.0	39.88	20.0	55.04
3.72	6.52	63.73	27.33	20.8	6.52	19.0	69.54	48.74	0.0	39.56	20.0	53.23
3.74	5.95	60.9	26.38	20.99	5.95	18.5	69.91	48.92	0.0	39.16	20.0	51.06
3.76	5.55	58.4	25.43	21.19	5.56	18.5	70.28	49.09	0.0	38.86	20.0	49.45
3.78	5.21	55.37	25.19	21.39	5.21	18.5	70.65	49.26	0.0	38.57	20.0	47.98
3.8	4.76	51.89	24.48	21.58	4.76	18.5	71.02	49.44	0.0	38.16	20.0	45.99
3.82	4.38	49.31	23.53	21.78	4.39	18.5	71.39	49.61	0.0	37.8	20.0	44.27
3.84	3.76	57.5	33.64	21.97	3.76	18.5	71.76	49.79	0.0	37.21	20.0	41.6
3.86	3.63	51.16	30.8	22.17	3.64	18.5	72.13	49.96	0.0	37.02	20.0	40.79
3.88	3.55	46.49	27.88	22.37	3.55	18.5	72.5	50.13	0.0	36.88	20.0	40.21

3.9	3.68	46.74	26.93	22.56	3.69	18.5	72.87	50.31	0.0	37.02	20.0	40.81
3.92	4.01	45.71	29.22	22.76	4.02	18.5	73.24	50.48	0.0	37.36	20.0	42.29
3.94	4.08	48.09	28.59	22.96	4.08	18.5	73.61	50.65	0.0	37.43	20.0	42.6
3.96	4.23	49.73	27.4	23.15	4.24	18.5	73.98	50.83	0.0	37.59	20.0	43.29
3.98	4.35	49.36	27.8	23.35	4.35	18.5	74.35	51.0	0.0	37.69	20.0	43.76
4.0	4.4	49.64	26.85	23.54	4.4	18.5	74.72	51.18	0.0	37.72	20.0	43.92
4.02	4.18	49.35	23.93	23.74	4.19	18.5	75.09	51.35	0.0	37.51	20.0	42.94
4.04	3.98	48.7	21.72	23.94	3.98	18.5	75.46	51.52	0.0	37.28	20.0	41.93
4.06	3.83	47.72	19.51	24.13	3.83	18.5	75.83	51.7	0.0	37.1	20.0	41.15
4.08	3.82	41.45	18.72	24.33	3.82	18.5	76.2	51.87	0.0	37.04	20.0	40.91
4.1	3.83	39.85	18.95	24.52	3.84	18.5	76.57	52.05	0.0	37.04	20.0	40.87
4.12	3.83	39.44	18.95	24.72	3.83	18.5	76.94	52.22	0.0	37.02	20.0	40.81
4.14	3.83	39.44	18.95	24.92	3.83	18.5	77.31	52.39	0.0	37.01	20.0	40.76
4.16	3.6	33.01	16.43	25.11	3.61	18.5	77.68	52.57	0.0	36.69	20.0	39.43
4.18	3.13	32.52	13.11	25.31	3.13	18.5	78.05	52.74	0.0	36.08	20.0	36.99
4.2	2.54	32.85	10.74	25.51	2.54	18.0	78.41	52.9	0.0	35.18	20.0	33.67
4.22	2.03	33.71	7.19	25.7	2.03	18.0	78.77	53.07	0.0	34.22	20.0	30.45
4.24	1.39	37.19	4.42	25.9	1.39	18.0	79.13	53.23	93.6	0.0	20.0	0.0
4.26	1.06	40.06	2.92	26.09	1.06	17.5	79.48	53.39	69.93	0.0	20.0	0.0
4.28	0.73	45.68	0.56	26.29	0.73	17.5	79.83	53.54	46.14	0.0	20.0	0.0
4.3	0.46	56.86	3.79	26.49	0.46	17.5	80.18	53.69	0.0	0.0	20.0	0.0
4.32	0.43	53.62	13.19	26.68	0.43	17.5	80.53	53.85	0.0	0.0	20.0	0.0
4.34	0.42	44.7	52.28	26.88	0.43	17.5	80.88	54.0	0.0	0.0	20.0	0.0
4.36	0.38	38.19	62.08	27.08	0.39	17.5	81.23	54.15	22.35	0.0	25.2	0.0
4.38	0.33	31.59	66.5	27.27	0.34	17.5	81.58	54.31	18.57	0.0	24.65	0.0
4.4	0.33	25.33	75.74	27.47	0.35	12.5	81.83	54.36	19.15	0.0	25.55	0.0
4.42	0.35	17.75	76.77	27.66	0.36	17.5	82.18	54.52	20.02	0.0	25.58	0.0
4.44	0.33	12.02	77.95	27.86	0.35	17.5	82.53	54.67	19.08	0.0	25.2	0.0
4.46	0.32	6.95	88.93	28.06	0.33	17.5	82.88	54.82	17.9	0.0	25.53	0.0
4.48	0.38	5.8	103.78	28.25	0.4	17.5	83.23	54.98	22.44	0.0	27.52	0.0
4.5	0.44	4.9	120.36	28.45	0.46	17.5	83.58	55.13	27.01	0.0	29.19	0.0
4.52	0.5	4.29	118.31	28.65	0.52	17.5	83.93	55.28	31.33	0.0	29.54	0.0
4.54	0.61	4.13	177.7	28.84	0.65	17.5	84.28	55.44	40.11	0.0	33.3	0.0
4.56	0.67	5.77	164.43	29.04	0.7	17.5	84.63	55.59	44.28	0.0	33.18	0.0
4.58	0.73	7.09	80.0	29.23	0.75	17.5	84.98	55.75	47.43	0.0	20.0	0.0
4.6	0.73	15.08	97.38	29.43	0.75	18.0	85.34	55.91	47.48	0.0	30.39	0.0
4.62	1.01	20.53	76.92	29.63	1.03	18.0	85.7	56.07	67.19	0.0	20.0	0.0
4.64	1.11	22.95	65.71	29.82	1.13	18.0	86.06	56.24	74.37	0.0	20.0	0.0
4.66	1.25	27.62	58.44	30.02	1.26	18.0	86.42	56.4	83.97	0.0	20.0	0.0
4.68	1.07	27.34	54.26	30.21	1.08	18.0	86.78	56.57	70.98	0.0	20.0	0.0
4.7	1.0	28.25	55.52	30.41	1.01	18.0	87.14	56.73	65.82	0.0	20.0	0.0
4.72	1.1	31.08	57.1	30.61	1.11	18.0	87.5	56.89	73.1	0.0	20.0	0.0
4.74	1.28	31.2	53.31	30.8	1.29	18.0	87.86	57.06	86.13	0.0	20.0	0.0
4.76	1.27	31.04	41.78	31.0	1.28	18.0	88.22	57.22	84.78	0.0	20.0	0.0
4.78	1.12	26.42	33.64	31.2	1.13	18.0	88.58	57.38	74.07	0.0	20.0	0.0
4.8	0.96	24.17	34.59	31.39	0.97	18.0	88.94	57.55	62.81	0.0	20.0	0.0
4.82	0.88	21.75	42.81	31.59	0.89	18.0	89.3	57.71	57.02	0.0	20.0	0.0
4.84	0.97	23.14	51.73	31.78	0.98	18.0	89.66	57.88	63.67	0.0	20.0	0.0
4.86	0.91	24.65	49.6	31.98	0.92	18.0	90.02	58.04	59.36	0.0	20.0	0.0
4.88	0.9	27.07	18.01	32.18	0.9	18.0	90.38	58.2	57.95	0.0	20.0	0.0
4.9	0.97	33.75	74.79	32.37	0.98	17.5	90.73	58.36	63.58	0.0	20.0	0.0
4.92	1.01	27.56	60.89	32.57	1.02	18.0	91.09	58.52	66.68	0.0	20.0	0.0
4.94	1.23	29.32	36.41	32.77	1.24	18.0	91.45	58.68	81.94	0.0	20.0	0.0
4.96	2.13	27.36	51.1	32.96	2.14	18.0	91.81	58.85	0.0	34.01	20.0	29.77
4.98	2.29	24.82	34.51	33.16	2.29	18.0	92.17	59.01	0.0	34.29	20.0	30.67
5.0	1.7	20.85	30.17	33.35	1.71	18.0	92.53	59.18	0.0	32.94	20.0	26.61
5.02	1.27	17.49	32.46	33.55	1.28	18.0	92.89	59.34	84.47	0.0	20.0	0.0
5.04	1.03	16.51	38.38	33.75	1.04	18.0	93.25	59.5	67.39	0.0	20.0	0.0
5.06	0.79	20.93	44.46	33.94	0.8	18.0	93.61	59.67	50.48	0.0	20.0	0.0
5.08	0.7	26.67	45.33	34.14	0.71	17.5	93.96	59.82	44.12	0.0	20.0	0.0
5.1	0.75	29.78	49.83	34.34	0.76	17.5	94.31	59.98	47.77	0.0	20.0	0.0
5.12	1.23	24.37	76.69	34.53	1.24	18.0	94.67	60.14	81.92	0.0	20.0	0.0
5.14	1.3	23.07	79.77	34.73	1.32	18.0	95.03	60.3	87.24	0.0	20.0	0.0
5.16	1.05	20.28	66.5	34.92	1.06	18.0	95.39	60.47	68.8	0.0	20.0	0.0
5.18	1.12	17.25	66.26	35.12	1.13	18.0	95.75	60.63	74.03	0.0	20.0	0.0
5.2	1.33	19.26	67.84	35.32	1.34	18.0	96.11	60.79	88.99	0.0	20.0	0.0
5.22	1.83	20.0	65.31	35.51	1.84	18.0	96.47	60.96	0.0	33.14	20.0	27.2
5.24	2.43	20.94	63.58	35.71	2.44	18.5	96.84	61.13	0.0	34.41	20.0	31.06
5.26	2.99	22.46	67.68	35.9	3.01	18.5	97.21	61.31	0.0	35.33	20.0	34.2
5.28	3.49	20.9	67.6	36.1	3.51	18.5	97.58	61.48	0.0	35.99	20.0	36.64
5.3	3.78	19.35	67.76	36.3	3.79	18.5	97.95	61.65	0.0	36.31	20.0	37.9
5.32	4.02	20.13	68.79	36.49	4.03	18.5	98.32	61.83	0.0	36.58	20.0	38.97
5.34	4.4	20.7	70.76	36.69	4.41	19.0	98.7	62.01	0.0	36.97	20.0	40.6

5.36	4.68	22.71	72.18	36.89	4.7	19.0	99.08	62.19	0.0	37.26	20.0	41.82
5.38	5.05	25.99	72.66	37.08	5.06	19.0	99.46	62.38	0.0	37.6	20.0	43.34
5.4	5.42	32.3	75.26	37.28	5.44	19.0	99.84	62.56	0.0	37.94	20.0	44.93
5.42	5.63	37.18	76.21	37.47	5.64	19.0	100.22	62.75	0.0	38.12	20.0	45.78
5.44	5.87	41.44	77.79	37.67	5.89	19.0	100.6	62.93	0.0	38.32	20.0	46.75
5.46	6.01	46.43	78.42	37.87	6.02	19.0	100.98	63.11	0.0	38.43	20.0	47.3
5.48	6.02	52.62	77.4	38.06	6.03	19.0	101.36	63.3	0.0	38.46	20.0	47.42
5.5	6.01	56.92	77.48	38.26	6.02	19.0	101.74	63.48	0.0	38.46	20.0	47.42
5.52	5.81	64.29	75.74	38.46	5.83	18.5	102.11	63.65	0.0	38.33	20.0	46.81
5.54	5.67	68.8	76.53	38.65	5.68	18.5	102.48	63.83	0.0	38.23	20.0	46.29
5.56	5.97	71.58	80.08	38.85	5.98	18.5	102.85	64.0	0.0	38.45	20.0	47.41
5.58	6.65	73.55	87.66	39.04	6.67	18.5	103.22	64.18	0.0	38.93	20.0	49.81
5.6	7.16	73.38	92.72	39.24	7.18	19.0	103.6	64.36	0.0	39.24	20.0	51.48
5.62	7.38	77.56	90.03	39.44	7.39	19.0	103.98	64.54	0.0	39.37	20.0	52.19
5.64	7.43	78.79	87.82	39.63	7.45	19.0	104.36	64.73	0.0	39.4	20.0	52.34
5.66	7.59	75.51	92.72	39.83	7.61	19.0	104.74	64.91	0.0	39.48	20.0	52.76
5.68	7.81	75.18	96.98	40.02	7.83	19.0	105.12	65.1	0.0	39.59	20.0	53.41
5.7	8.06	76.61	99.75	40.22	8.08	19.0	105.5	65.28	0.0	39.73	20.0	54.16
5.72	8.45	80.05	101.64	40.42	8.47	19.0	105.88	65.46	0.0	39.93	20.0	55.35
5.74	8.64	84.43	103.78	40.61	8.66	19.0	106.26	65.65	0.0	40.03	20.0	55.92
5.76	8.67	84.67	104.88	40.81	8.69	19.0	106.64	65.83	0.0	40.04	20.0	55.97
5.78	8.59	89.83	106.3	41.01	8.61	19.0	107.02	66.01	0.0	40.0	20.0	55.76
5.8	8.4	99.12	105.67	41.2	8.42	19.0	107.4	66.2	0.0	39.92	20.0	55.28
5.82	8.03	96.84	118.39	41.4	8.05	19.0	107.78	66.38	0.0	39.71	20.0	54.08
5.84	7.97	102.82	106.46	41.59	7.99	18.5	108.15	66.56	0.0	39.68	20.0	53.91
5.86	7.9	110.81	104.01	41.79	7.92	18.5	108.52	66.73	0.0	39.65	20.0	53.73
5.88	7.91	116.05	104.17	41.99	7.93	18.5	108.89	66.9	0.0	39.66	20.0	53.78
5.9	7.99	118.14	105.67	42.18	8.01	18.5	109.26	67.08	0.0	39.7	20.0	54.02
5.92	7.96	118.67	105.43	42.38	7.98	18.5	109.63	67.25	0.0	39.68	20.0	53.88
5.94	7.88	118.99	103.14	42.58	7.91	18.5	110.0	67.42	0.0	39.63	20.0	53.61
5.96	7.71	118.5	102.67	42.77	7.73	18.5	110.37	67.6	0.0	39.52	20.0	53.01
5.98	7.66	117.19	103.22	42.97	7.69	18.5	110.74	67.77	0.0	39.48	20.0	52.81
6.0	7.68	111.0	102.67	43.16	7.7	18.5	111.11	67.95	0.0	39.47	20.0	52.74
6.02	7.49	110.58	99.12	43.36	7.51	18.5	111.48	68.12	0.0	39.36	20.0	52.1
6.04	7.26	109.6	97.61	43.56	7.28	18.5	111.85	68.29	0.0	39.21	20.0	51.29
6.06	6.97	106.48	96.27	43.75	6.99	18.5	112.22	68.47	0.0	39.01	20.0	50.28
6.08	6.71	101.03	95.01	43.95	6.73	18.5	112.59	68.64	0.0	38.83	20.0	49.29
6.1	6.07	93.98	89.72	44.14	6.08	18.5	112.96	68.82	0.0	38.36	20.0	46.93
6.12	4.94	90.0	78.9	44.34	4.95	18.5	113.33	68.99	0.0	37.42	20.0	42.56
6.14	3.8	91.07	74.32	44.54	3.81	18.0	113.69	69.15	0.0	36.22	20.0	37.54
6.16	2.45	98.31	68.95	44.73	2.46	18.0	114.05	69.32	167.66	0.0	20.0	0.0
6.18	1.85	102.94	65.0	44.93	1.87	17.5	114.4	69.47	125.19	0.0	20.0	0.0
6.2	1.3	106.46	63.73	45.13	1.32	17.5	114.75	69.62	85.78	0.0	20.0	0.0
6.22	1.04	107.36	64.37	45.32	1.05	17.5	115.1	69.78	0.0	0.0	20.0	0.0
6.24	0.91	106.86	68.55	45.52	0.92	17.5	115.45	69.93	0.0	0.0	20.0	0.0
6.26	0.82	108.58	71.39	45.71	0.83	17.5	115.8	70.09	0.0	0.0	20.0	0.0
6.28	1.07	99.98	98.96	45.91	1.09	17.5	116.15	70.24	69.59	0.0	20.0	0.0
6.3	2.83	77.32	146.26	46.11	2.86	18.0	116.51	70.4	196.06	0.0	20.0	0.0
6.32	5.29	60.69	165.06	46.3	5.33	18.5	116.88	70.58	0.0	37.6	20.0	43.37
6.34	8.62	42.34	115.78	46.5	8.65	19.0	117.26	70.76	0.0	39.71	20.0	54.06
6.36	9.34	37.18	92.09	46.7	9.36	19.5	117.65	70.95	0.0	40.04	20.0	55.97
6.38	9.63	43.33	92.32	46.89	9.64	19.5	118.04	71.15	0.0	40.19	20.0	56.83
6.4	9.73	49.39	89.4	47.09	9.75	19.5	118.43	71.34	0.0	40.24	20.0	57.18
6.42	9.68	61.52	90.35	47.28	9.7	19.5	118.82	71.54	0.0	40.25	20.0	57.22
6.44	9.72	73.48	97.22	47.48	9.74	19.0	119.2	71.72	0.0	40.29	20.0	57.46
6.46	9.91	81.18	105.2	47.68	9.93	19.0	119.58	71.9	0.0	40.39	20.0	58.04
6.48	10.18	87.04	112.54	47.87	10.2	19.0	119.96	72.09	0.0	40.51	20.0	58.79
6.5	10.42	95.48	117.91	48.07	10.44	19.0	120.34	72.27	0.0	40.62	20.0	59.49
6.52	10.63	103.01	121.39	48.27	10.65	19.0	120.72	72.45	0.0	40.72	20.0	60.08
6.54	10.49	106.25	121.23	48.46	10.52	19.0	121.1	72.64	0.0	40.66	20.0	59.72
6.56	10.29	104.36	118.54	48.66	10.32	19.0	121.48	72.82	0.0	40.56	20.0	59.12
6.58	9.88	98.38	116.73	48.85	9.91	19.0	121.86	73.01	0.0	40.37	20.0	57.91
6.6	9.43	93.88	112.07	49.05	9.45	19.0	122.24	73.19	0.0	40.14	20.0	56.56
6.62	9.15	88.18	108.36	49.25	9.17	19.0	122.62	73.37	0.0	39.99	20.0	55.67
6.64	8.79	83.76	107.96	49.44	8.82	19.0	123.0	73.56	0.0	39.79	20.0	54.55
6.66	8.78	73.72	112.38	49.64	8.8	19.0	123.38	73.74	0.0	39.76	20.0	54.37
6.68	8.77	67.98	114.52	49.83	8.79	19.0	123.76	73.93	0.0	39.74	20.0	54.22
6.7	8.82	60.08	114.83	50.03	8.84	19.0	124.14	74.11	0.0	39.74	20.0	54.24
6.72	8.94	56.92	120.6	50.23	8.97	19.0	124.52	74.29	0.0	39.79	20.0	54.51
6.74	9.05	55.45	122.02	50.42	9.08	19.0	124.9	74.48	0.0	39.83	20.0	54.77
6.76	9.03	56.8	123.05	50.62	9.05	19.0	125.28	74.66	0.0	39.82	20.0	54.68
6.78	8.61	63.43	118.46	50.82	8.64	19.0	125.66	74.84	0.0	39.61	20.0	53.53
6.8	8.28	73.26	116.81	51.01	8.3	19.0	126.04	75.03	0.0	39.45	20.0	52.6

6.82	8.1	78.51	117.52	51.21	8.12	19.0	126.42	75.21	0.0	39.35	20.0	52.08
6.84	8.25	82.08	114.83	51.4	8.28	19.0	126.8	75.4	0.0	39.44	20.0	52.54
6.86	8.62	86.42	118.23	51.6	8.65	19.0	127.18	75.58	0.0	39.63	20.0	53.65
6.88	8.88	89.29	120.2	51.8	8.9	19.0	127.56	75.76	0.0	39.76	20.0	54.37
6.9	8.93	91.21	120.2	51.99	8.96	19.0	127.94	75.95	0.0	39.79	20.0	54.51
6.92	8.96	91.37	120.44	52.19	8.99	19.0	128.32	76.13	0.0	39.8	20.0	54.57
6.94	8.99	90.51	120.6	52.39	9.01	19.0	128.7	76.31	0.0	39.8	20.0	54.6
6.96	8.93	93.21	119.25	52.58	8.95	19.0	129.08	76.5	0.0	39.77	20.0	54.4
6.98	8.76	95.01	117.04	52.78	8.78	19.0	129.46	76.68	0.0	39.68	20.0	53.88
7.0	8.43	101.6	112.15	52.97	8.45	19.0	129.84	76.87	0.0	39.51	20.0	52.93
7.02	7.97	106.23	107.41	53.17	7.99	18.5	130.21	77.04	0.0	39.25	20.0	51.51
7.04	7.41	109.22	103.3	53.37	7.44	18.5	130.58	77.21	0.0	38.92	20.0	49.76
7.06	6.66	111.79	97.06	53.56	6.68	18.5	130.95	77.39	0.0	38.41	20.0	47.19
7.08	5.77	114.99	92.4	53.76	5.79	18.5	131.32	77.56	0.0	37.75	20.0	44.06
7.1	4.75	116.87	86.4	53.96	4.77	18.0	131.68	77.73	0.0	36.86	20.0	40.11
7.12	3.32	128.37	77.63	54.15	3.34	18.0	132.04	77.89	228.94	0.0	20.0	0.0
7.14	2.44	137.71	72.03	54.35	2.45	17.5	132.39	78.04	165.57	0.0	20.0	0.0
7.16	2.26	146.68	79.61	54.54	2.27	17.5	132.74	78.2	152.99	0.0	20.0	0.0
7.18	2.38	156.54	88.93	54.74	2.4	17.5	133.09	78.35	162.01	0.0	20.0	0.0
7.2	5.03	148.84	143.34	54.94	5.05	18.0	133.45	78.51	0.0	37.12	20.0	41.24
7.22	7.91	123.9	181.88	55.13	7.95	18.5	133.82	78.69	0.0	39.18	20.0	51.14
7.24	9.52	97.6	113.57	55.33	9.54	19.0	134.2	78.87	0.0	39.98	20.0	55.6
7.26	10.23	74.58	103.14	55.52	10.25	19.0	134.58	79.06	0.0	40.26	20.0	57.3
7.28	10.53	62.61	99.04	55.72	10.55	19.5	134.97	79.25	0.0	40.37	20.0	57.96
7.3	10.72	57.78	101.33	55.92	10.74	19.5	135.36	79.44	0.0	40.44	20.0	58.36
7.32	10.78	63.35	103.85	56.11	10.8	19.5	135.75	79.64	0.0	40.47	20.0	58.53
7.34	11.13	68.88	117.75	56.31	11.15	19.5	136.14	79.83	0.0	40.62	20.0	59.46
7.36	11.71	68.34	129.21	56.51	11.73	19.5	136.53	80.02	0.0	40.84	20.0	60.88
7.38	11.98	75.22	134.1	56.7	12.01	19.5	136.92	80.22	0.0	40.95	20.0	61.59
7.4	11.92	87.02	133.87	56.9	11.95	19.5	137.31	80.41	0.0	40.94	20.0	61.5
7.42	11.72	104.06	134.1	57.09	11.75	19.0	137.69	80.6	0.0	40.88	20.0	61.1
7.44	11.61	116.51	134.97	57.29	11.64	19.0	138.07	80.78	0.0	40.84	20.0	60.86
7.46	11.63	124.13	137.73	57.49	11.66	19.0	138.45	80.96	0.0	40.85	20.0	60.91
7.48	11.85	128.39	143.26	57.68	11.88	19.0	138.83	81.15	0.0	40.93	20.0	61.46
7.5	12.16	130.8	147.76	57.88	12.19	19.0	139.21	81.33	0.0	41.05	20.0	62.2
7.52	12.22	132.48	147.37	58.08	12.25	19.0	139.59	81.51	0.0	41.06	20.0	62.3
7.54	12.16	133.42	148.48	58.27	12.19	19.0	139.97	81.7	0.0	41.04	20.0	62.13
7.56	12.07	134.24	146.11	58.47	12.1	19.0	140.35	81.88	0.0	41.0	20.0	61.86
7.58	12.03	133.74	148.32	58.66	12.06	19.0	140.73	82.07	0.0	40.97	20.0	61.72
7.6	11.89	133.08	147.92	58.86	11.92	19.0	141.11	82.25	0.0	40.92	20.0	61.34
7.62	11.81	130.91	150.13	59.06	11.84	19.0	141.49	82.43	0.0	40.87	20.0	61.08
7.64	11.63	131.64	147.92	59.25	11.66	19.0	141.87	82.62	0.0	40.79	20.0	60.53
7.66	11.21	126.93	142.63	59.45	11.24	19.0	142.25	82.8	0.0	40.61	20.0	59.42
7.68	10.71	126.15	137.5	59.64	10.73	19.0	142.63	82.99	0.0	40.39	20.0	58.07
7.7	10.12	120.62	133.87	59.84	10.15	19.0	143.01	83.17	0.0	40.12	20.0	56.45
7.72	9.6	113.04	130.23	60.04	9.63	19.0	143.39	83.35	0.0	39.86	20.0	54.95
7.74	8.77	106.77	124.39	60.23	8.8	19.0	143.77	83.54	0.0	39.43	20.0	52.53
7.76	8.01	103.98	119.1	60.43	8.03	18.5	144.14	83.71	0.0	39.0	20.0	50.21
7.78	7.43	103.98	115.7	60.63	7.45	18.5	144.51	83.88	0.0	38.65	20.0	48.38
7.8	6.89	102.97	128.26	60.82	6.92	18.5	144.88	84.06	0.0	38.29	20.0	46.62
7.82	7.05	85.81	113.73	61.02	7.08	18.5	145.25	84.23	0.0	38.38	20.0	47.02
7.84	6.87	77.5	107.64	61.21	6.89	18.5	145.62	84.41	0.0	38.24	20.0	46.34
7.86	6.62	74.27	104.25	61.41	6.65	18.5	145.99	84.58	0.0	38.05	20.0	45.47
7.88	6.04	71.32	97.38	61.61	6.06	18.5	146.36	84.75	0.0	37.61	20.0	43.41
7.9	5.58	70.66	92.32	61.8	5.6	18.5	146.73	84.93	0.0	37.23	20.0	41.73
7.92	4.67	70.5	86.32	62.0	4.69	18.5	147.1	85.1	0.0	36.39	20.0	38.19
7.94	4.17	75.0	79.45	62.2	4.19	18.5	147.47	85.27	0.0	35.85	20.0	36.1
7.96	4.33	80.0	84.43	62.39	4.34	18.5	147.84	85.45	0.0	36.02	20.0	36.76
7.98	5.24	81.27	93.03	62.59	5.26	18.5	148.21	85.62	0.0	36.92	20.0	40.38
8.0	5.6	81.51	78.34	62.78	5.61	18.5	148.58	85.8	0.0	37.22	20.0	41.67
8.02	6.1	75.25	60.34	62.98	6.11	18.5	148.95	85.97	0.0	37.61	20.0	43.4
8.04	6.37	70.33	54.18	63.18	6.38	18.5	149.32	86.14	0.0	37.8	20.0	44.27
8.06	6.37	60.33	49.36	63.37	6.38	19.0	149.7	86.33	0.0	37.78	20.0	44.2
8.08	6.13	49.11	45.96	63.57	6.14	19.0	150.08	86.51	0.0	37.58	20.0	43.26
8.1	5.7	37.27	43.83	63.76	5.71	19.0	150.46	86.7	0.0	37.21	20.0	41.63
8.12	5.31	33.1	45.81	63.96	5.32	19.0	150.84	86.88	0.0	36.86	20.0	40.11
8.14	4.76	37.97	47.39	64.16	4.77	18.5	151.21	87.05	0.0	36.35	20.0	38.02
8.16	4.78	44.73	50.31	64.35	4.79	18.5	151.58	87.23	0.0	36.37	20.0	38.11
8.18	5.69	51.98	65.87	64.55	5.7	19.0	151.96	87.41	0.0	37.2	20.0	41.57
8.2	6.79	58.37	77.08	64.75	6.81	19.0	152.34	87.59	0.0	38.04	20.0	45.39
8.22	8.36	57.47	88.77	64.94	8.38	19.0	152.72	87.78	0.0	39.01	20.0	50.27
8.24	8.97	54.77	84.03	65.14	8.99	19.0	153.1	87.96	0.0	39.33	20.0	51.97
8.26	9.16	49.85	88.53	65.33	9.17	19.5	153.49	88.16	0.0	39.42	20.0	52.44

8.28	8.25	47.64	73.84	65.53	8.27	19.0	153.87	88.34	0.0	38.92	20.0	49.78
8.3	6.75	57.6	66.5	65.73	6.76	19.0	154.25	88.52	0.0	37.97	20.0	45.09
8.32	5.74	60.63	65.39	65.92	5.76	18.5	154.62	88.7	0.0	37.21	20.0	41.61
8.34	4.49	64.11	61.44	66.12	4.5	18.5	154.99	88.87	0.0	36.03	20.0	36.79
8.36	3.27	74.43	54.34	66.32	3.28	18.0	155.35	89.03	223.21	0.0	20.0	0.0
8.38	3.27	92.62	55.28	66.51	3.28	18.0	155.71	89.2	223.2	0.0	20.0	0.0
8.4	2.89	106.83	67.52	66.71	2.9	18.0	156.07	89.36	196.24	0.0	20.0	0.0
8.42	3.47	111.46	77.63	66.9	3.49	18.0	156.43	89.53	238.1	0.0	20.0	0.0
8.44	5.37	93.35	77.32	67.1	5.39	18.5	156.8	89.7	0.0	36.88	20.0	40.2
8.46	7.0	88.76	71.16	67.3	7.01	18.5	157.17	89.87	0.0	38.13	20.0	45.81
8.48	8.4	93.76	80.08	67.49	8.41	19.0	157.55	90.06	0.0	38.98	20.0	50.12
8.5	8.9	76.68	86.08	67.69	8.91	19.0	157.93	90.24	0.0	39.24	20.0	51.48
8.52	9.42	71.15	93.27	67.89	9.44	19.0	158.31	90.42	0.0	39.5	20.0	52.9
8.54	9.86	79.09	100.85	68.08	9.88	19.0	158.69	90.61	0.0	39.72	20.0	54.13
8.56	9.95	90.07	103.78	68.28	9.98	19.0	159.07	90.79	0.0	39.76	20.0	54.38
8.58	9.67	105.88	101.41	68.47	9.69	19.0	159.45	90.98	0.0	39.63	20.0	53.62
8.6	9.32	120.05	99.12	68.67	9.34	19.0	159.83	91.16	0.0	39.46	20.0	52.65
8.62	8.97	127.58	99.12	68.87	8.99	18.5	160.2	91.33	0.0	39.27	20.0	51.64
8.64	8.86	134.55	100.3	69.06	8.88	18.5	160.57	91.51	0.0	39.21	20.0	51.33
8.66	8.99	145.2	104.33	69.26	9.01	18.5	160.94	91.68	0.0	39.28	20.0	51.7
8.68	9.4	150.35	111.28	69.45	9.42	18.5	161.31	91.86	0.0	39.49	20.0	52.81
8.7	9.92	149.37	118.31	69.65	9.95	19.0	161.69	92.04	0.0	39.74	20.0	54.23
8.72	10.19	147.73	119.81	69.85	10.21	19.0	162.07	92.22	0.0	39.86	20.0	54.91
8.74	10.38	141.91	121.78	70.04	10.4	19.0	162.45	92.41	0.0	39.94	20.0	55.36
8.76	10.61	137.89	125.65	70.24	10.63	19.0	162.83	92.59	0.0	40.03	20.0	55.92
8.78	10.52	136.25	122.81	70.44	10.55	19.0	163.21	92.77	0.0	39.99	20.0	55.66
8.8	9.85	136.9	142.0	70.63	9.88	19.0	163.59	92.96	0.0	39.67	20.0	53.85
8.82	9.88	139.4	121.15	70.83	9.9	19.0	163.97	93.14	0.0	39.68	20.0	53.87
8.84	9.61	144.24	115.46	71.02	9.63	18.5	164.34	93.32	0.0	39.54	20.0	53.1
8.86	9.23	150.55	113.49	71.22	9.25	18.5	164.71	93.49	0.0	39.34	20.0	52.04
8.88	8.9	157.39	112.15	71.42	8.93	18.5	165.08	93.66	0.0	39.17	20.0	51.09
8.9	8.86	160.46	114.28	71.61	8.88	18.5	165.45	93.84	0.0	39.14	20.0	50.93
8.92	9.01	162.87	118.78	71.81	9.03	18.5	165.82	94.01	0.0	39.21	20.0	51.32
8.94	9.71	153.36	128.81	72.01	9.73	18.5	166.19	94.18	0.0	39.56	20.0	53.23
8.96	10.09	147.83	131.65	72.2	10.12	19.0	166.57	94.37	0.0	39.74	20.0	54.23
8.98	10.13	146.56	131.1	72.4	10.15	19.0	166.95	94.55	0.0	39.75	20.0	54.29
9.0	10.04	142.25	126.44	72.59	10.07	19.0	167.33	94.74	0.0	39.7	20.0	54.02
9.02	9.98	141.92	123.12	72.79	10.0	19.0	167.71	94.92	0.0	39.66	20.0	53.81
9.04	10.14	142.9	126.6	72.99	10.17	19.0	168.09	95.1	0.0	39.74	20.0	54.22
9.06	10.24	145.15	125.49	73.18	10.26	19.0	168.47	95.29	0.0	39.77	20.0	54.44
9.08	10.4	155.42	129.6	73.38	10.42	19.0	168.85	95.47	0.0	39.84	20.0	54.84
9.1	10.64	160.3	132.84	73.58	10.67	19.0	169.23	95.66	0.0	39.95	20.0	55.45
9.12	10.86	159.14	136.63	73.77	10.89	19.0	169.61	95.84	0.0	40.04	20.0	56.0
9.14	10.97	153.86	136.23	73.97	11.0	19.0	169.99	96.02	0.0	40.08	20.0	56.23
9.16	10.67	152.58	131.34	74.16	10.7	19.0	170.37	96.21	0.0	39.95	20.0	55.42
9.18	10.38	154.01	129.05	74.36	10.41	19.0	170.75	96.39	0.0	39.81	20.0	54.62
9.2	10.17	154.46	129.92	74.56	10.2	19.0	171.13	96.57	0.0	39.7	20.0	54.03
9.22	9.73	155.52	124.78	74.75	9.76	18.5	171.5	96.75	0.0	39.48	20.0	52.81
9.24	9.31	156.29	121.47	74.95	9.33	18.5	171.87	96.92	0.0	39.27	20.0	51.61
9.26	8.64	158.91	114.75	75.14	8.67	18.5	172.24	97.1	0.0	38.9	20.0	49.69
9.28	8.21	159.24	113.81	75.34	8.23	18.5	172.61	97.27	0.0	38.65	20.0	48.37
9.3	7.81	155.83	109.94	75.54	7.83	18.5	172.98	97.44	0.0	38.4	20.0	47.13
9.32	7.54	150.26	109.86	75.73	7.56	18.5	173.35	97.62	0.0	38.22	20.0	46.26
9.34	7.42	144.48	110.49	75.93	7.44	18.5	173.72	97.79	0.0	38.14	20.0	45.87
9.36	7.34	135.26	111.44	76.13	7.37	18.5	174.09	97.96	0.0	38.08	20.0	45.59
9.38	7.25	129.89	112.54	76.32	7.28	18.5	174.46	98.14	0.0	38.01	20.0	45.28
9.4	7.09	122.6	111.83	76.52	7.11	18.5	174.83	98.31	0.0	37.89	20.0	44.71
9.42	6.86	115.43	110.41	76.71	6.88	18.5	175.2	98.49	0.0	37.73	20.0	43.93
9.44	6.62	111.65	108.04	76.91	6.64	18.5	175.57	98.66	0.0	37.55	20.0	43.13
9.46	6.2	106.08	104.72	77.11	6.22	18.5	175.94	98.83	0.0	37.22	20.0	41.68
9.48	5.91	100.39	103.14	77.3	5.93	18.5	176.31	99.01	0.0	36.98	20.0	40.63
9.5	5.07	91.91	95.4	77.5	5.09	18.5	176.68	99.18	0.0	36.22	20.0	37.52
9.52	3.6	95.43	82.93	77.7	3.61	18.0	177.04	99.34	245.48	0.0	20.0	0.0
9.54	2.43	109.56	75.66	77.89	2.45	17.5	177.39	99.5	162.21	0.0	20.0	0.0
9.56	1.81	121.06	73.76	78.09	1.83	17.5	177.74	99.65	117.73	0.0	20.0	0.0
9.58	1.6	122.25	80.71	78.28	1.62	17.5	178.09	99.81	102.98	0.0	20.0	0.0
9.6	2.34	121.43	95.88	78.48	2.36	17.5	178.44	99.96	155.99	0.0	20.0	0.0
9.62	2.51	119.18	131.02	78.68	2.54	17.5	178.79	100.11	168.36	0.0	20.0	0.0
9.64	1.77	108.53	80.24	78.87	1.79	17.5	179.14	100.27	114.91	0.0	20.0	0.0
9.66	1.59	91.98	72.9	79.07	1.6	17.5	179.49	100.42	101.77	0.0	20.0	0.0
9.68	1.61	86.37	102.51	79.26	1.64	17.5	179.84	100.58	103.97	0.0	20.0	0.0
9.7	1.65	65.44	112.62	79.46	1.67	18.0	180.2	100.74	106.31	0.0	20.0	0.0
9.72	1.39	60.98	94.77	79.66	1.41	17.5	180.55	100.89	87.83	0.0	20.0	0.0

9.74	0.98	66.71	83.48	79.85	0.99	17.5	180.9	101.05	58.11	0.0	20.0	0.0
9.76	1.03	61.88	106.22	80.05	1.05	17.5	181.25	101.2	62.05	0.0	20.0	0.0
9.78	1.15	64.75	121.94	80.25	1.17	17.5	181.6	101.35	70.63	0.0	20.0	0.0
9.8	1.31	67.08	246.01	80.44	1.36	17.5	181.95	101.51	84.02	0.0	31.81	0.0
9.82	1.64	61.72	140.66	80.64	1.67	18.0	182.31	101.67	106.46	0.0	20.0	0.0
9.84	4.06	69.17	284.95	80.83	4.11	18.5	182.68	101.85	0.0	35.06	20.0	33.22
9.86	7.48	47.26	174.46	81.03	7.51	19.0	183.06	102.03	0.0	38.03	20.0	45.36
9.88	8.53	41.04	126.99	81.23	8.56	19.0	183.44	102.21	0.0	38.67	20.0	48.47
9.9	9.33	34.4	124.07	81.42	9.36	19.5	183.83	102.41	0.0	39.1	20.0	50.71
9.92	9.54	40.47	127.78	81.62	9.57	19.5	184.22	102.6	0.0	39.2	20.0	51.26
9.94	8.91	47.92	125.26	81.82	8.93	19.0	184.6	102.78	0.0	38.86	20.0	49.46
9.96	8.12	56.28	125.26	82.01	8.15	19.0	184.98	102.97	0.0	38.4	20.0	47.14
9.98	7.4	54.02	124.94	82.21	7.43	19.0	185.36	103.15	0.0	37.94	20.0	44.93
10.0	6.55	57.3	120.83	82.4	6.57	19.0	185.74	103.34	0.0	37.33	20.0	42.15
10.02	4.86	57.96	115.31	82.6	4.88	18.5	186.11	103.51	0.0	35.85	20.0	36.11
10.04	4.86	67.3	113.73	82.8	4.88	18.5	186.48	103.68	0.0	35.84	20.0	36.08
10.06	4.99	68.2	132.21	82.99	5.01	18.5	186.85	103.86	0.0	35.97	20.0	36.54
10.08	6.6	66.15	135.6	83.19	6.63	19.0	187.23	104.04	0.0	37.35	20.0	42.23
10.1	7.4	60.79	128.34	83.38	7.42	19.0	187.61	104.23	0.0	37.9	20.0	44.74
10.12	7.6	59.15	117.52	83.58	7.62	19.0	187.99	104.41	0.0	38.03	20.0	45.33
10.14	7.42	55.67	98.33	83.78	7.44	19.0	188.37	104.59	0.0	37.9	20.0	44.74
10.16	7.12	54.15	107.96	83.97	7.14	19.0	188.75	104.78	0.0	37.7	20.0	43.8
10.18	6.79	53.5	110.96	84.17	6.82	19.0	189.13	104.96	0.0	37.46	20.0	42.72
10.2	6.24	59.84	105.67	84.37	6.26	19.0	189.51	105.14	0.0	37.03	20.0	40.84
10.22	5.77	65.17	109.54	84.56	5.79	18.5	189.88	105.32	0.0	36.64	20.0	39.2
10.24	5.42	72.09	110.96	84.76	5.44	18.5	190.25	105.49	0.0	36.31	20.0	37.89
10.26	5.01	79.38	111.83	84.95	5.04	18.5	190.62	105.67	0.0	35.92	20.0	36.37
10.28	4.69	84.33	113.02	85.15	4.71	18.5	190.99	105.84	0.0	35.57	20.0	35.08
10.3	4.35	88.06	111.59	85.35	4.37	18.5	191.36	106.01	0.0	35.19	20.0	33.7
10.32	4.12	86.05	112.94	85.54	4.14	18.0	191.72	106.18	0.0	34.91	20.0	32.72
10.34	4.17	80.48	116.25	85.74	4.19	18.5	192.09	106.35	0.0	34.97	20.0	32.93
10.36	4.44	78.1	118.7	85.94	4.46	18.5	192.46	106.52	0.0	35.28	20.0	34.0
10.38	4.64	69.42	112.38	86.13	4.66	18.5	192.83	106.7	0.0	35.49	20.0	34.77
10.4	4.46	61.71	106.54	86.33	4.48	18.5	193.2	106.87	0.0	35.29	20.0	34.06
10.42	4.04	54.22	103.7	86.52	4.06	18.5	193.57	107.05	0.0	34.79	20.0	32.3
10.44	3.64	47.78	102.2	86.72	3.66	18.5	193.94	107.22	0.0	34.25	20.0	30.54
10.46	2.99	42.54	99.59	86.92	3.01	18.5	194.31	107.39	0.0	33.25	20.0	27.5
10.48	2.23	45.37	93.59	87.11	2.25	18.0	194.67	107.56	146.95	0.0	20.0	0.0
10.5	1.53	57.57	93.11	87.31	1.55	18.0	195.03	107.72	96.84	0.0	20.0	0.0
10.52	1.1	64.7	96.19	87.51	1.12	17.5	195.38	107.87	66.01	0.0	20.0	0.0
10.54	0.83	77.03	97.14	87.7	0.85	17.5	195.73	108.03	46.64	0.0	20.0	0.0
10.56	0.75	70.02	169.64	87.9	0.78	17.5	196.08	108.18	41.98	0.0	23.94	0.0
10.58	0.75	70.02	169.64	88.09	0.78	17.5	196.43	108.34	41.95	0.0	23.91	0.0
10.6	0.77	52.9	182.59	88.29	0.81	17.5	196.78	108.49	43.76	0.0	24.77	0.0
10.62	0.77	41.64	189.46	88.49	0.81	17.5	197.13	108.64	43.54	0.0	25.03	0.0
10.64	0.76	34.34	202.89	88.68	0.8	17.5	197.48	108.8	42.85	0.0	25.48	0.0
10.66	0.74	32.34	205.73	88.88	0.78	17.5	197.83	108.95	41.62	0.0	25.4	0.0
10.68	1.74	11.94	283.21	89.07	1.8	18.0	198.19	109.12	0.0	30.47	20.0	20.56
10.7	3.63	8.05	220.74	89.27	3.67	19.0	198.57	109.3	0.0	34.24	20.0	30.49
10.72	5.12	15.63	138.05	89.47	5.15	19.0	198.95	109.48	0.0	35.94	20.0	36.43
10.74	5.64	23.62	87.9	89.66	5.66	19.0	199.33	109.67	0.0	36.4	20.0	38.23
10.76	6.01	24.24	93.43	89.86	6.03	19.0	199.71	109.85	0.0	36.71	20.0	39.51
10.78	6.26	28.95	98.01	90.06	6.28	19.0	200.09	110.03	0.0	36.9	20.0	40.31
10.8	6.65	36.6	143.34	90.25	6.68	19.0	200.47	110.22	0.0	37.2	20.0	41.59
10.82	7.41	37.75	140.5	90.45	7.43	19.0	200.85	110.4	0.0	37.73	20.0	43.96
10.84	8.09	46.8	128.49	90.64	8.11	19.0	201.23	110.59	0.0	38.16	20.0	45.96
10.86	8.32	55.57	113.25	90.84	8.34	19.0	201.61	110.77	0.0	38.28	20.0	46.57
10.88	8.07	60.44	95.09	91.04	8.09	19.0	201.99	110.95	0.0	38.12	20.0	45.79
10.9	7.74	66.54	93.75	91.23	7.76	19.0	202.37	111.14	0.0	37.91	20.0	44.77
10.92	7.86	71.17	100.93	91.43	7.88	19.0	202.75	111.32	0.0	37.97	20.0	45.09
10.94	8.64	74.85	120.52	91.63	8.67	19.0	203.13	111.5	0.0	38.44	20.0	47.34
10.96	9.75	80.46	138.92	91.82	9.78	19.0	203.51	111.69	0.0	39.03	20.0	50.38
10.98	10.99	78.5	151.0	92.02	11.02	19.5	203.9	111.88	0.0	39.62	20.0	53.59
11.0	11.32	82.22	153.61	92.21	11.35	19.5	204.29	112.08	0.0	39.77	20.0	54.39
11.02	11.19	84.15	149.9	92.41	11.22	19.5	204.68	112.27	0.0	39.7	20.0	54.03
11.04	10.79	83.77	145.87	92.61	10.82	19.0	205.06	112.45	0.0	39.51	20.0	52.98
11.06	10.47	87.74	145.08	92.8	10.5	19.0	205.44	112.64	0.0	39.36	20.0	52.12
11.08	9.92	97.08	145.08	93.0	9.95	19.0	205.82	112.82	0.0	39.08	20.0	50.6
11.1	9.53	104.12	145.71	93.2	9.55	19.0	206.2	113.01	0.0	38.87	20.0	49.5
11.12	9.2	109.77	146.11	93.39	9.23	19.0	206.58	113.19	0.0	38.69	20.0	48.58
11.14	8.62	116.11	145.0	93.59	8.65	19.0	206.96	113.37	0.0	38.35	20.0	46.9
11.16	8.1	116.48	143.9	93.78	8.12	18.5	207.33	113.55	0.0	38.03	20.0	45.35
11.18	7.56	112.91	141.84	93.98	7.59	18.5	207.7	113.72	0.0	37.68	20.0	43.74

11.2	6.99	107.99	141.13	94.18	7.02	18.5	208.07	113.89	0.0	37.28	20.0	41.94
11.22	6.67	100.94	142.87	94.37	6.7	18.5	208.44	114.07	0.0	37.05	20.0	40.92
11.24	6.7	91.6	147.37	94.57	6.73	18.5	208.81	114.24	0.0	37.07	20.0	41.01
11.26	6.92	79.71	152.9	94.76	6.95	18.5	209.18	114.42	0.0	37.23	20.0	41.72
11.28	7.23	69.22	156.85	94.96	7.26	19.0	209.56	114.6	0.0	37.46	20.0	42.72
11.3	7.5	60.08	157.32	95.16	7.53	19.0	209.94	114.78	0.0	37.64	20.0	43.55
11.32	7.43	58.4	155.98	95.35	7.46	19.0	210.32	114.97	0.0	37.59	20.0	43.33
11.34	7.28	55.81	155.35	95.55	7.31	19.0	210.7	115.15	0.0	37.49	20.0	42.86
11.36	7.05	53.88	153.69	95.75	7.08	19.0	211.08	115.33	0.0	37.32	20.0	42.12
11.38	6.95	55.07	154.56	95.94	6.98	19.0	211.46	115.52	0.0	37.24	20.0	41.77
11.4	6.9	56.3	155.9	96.14	6.93	19.0	211.84	115.7	0.0	37.2	20.0	41.58
11.42	6.94	59.37	157.95	96.33	6.97	19.0	212.22	115.89	0.0	37.22	20.0	41.66
11.44	6.96	59.73	158.66	96.53	6.99	19.0	212.6	116.07	0.0	37.23	20.0	41.72
11.46	7.4	59.28	164.19	96.73	7.43	19.0	212.98	116.25	0.0	37.54	20.0	43.07
11.48	7.58	55.88	166.01	96.92	7.62	19.0	213.36	116.44	0.0	37.66	20.0	43.61
11.5	7.58	53.63	165.93	97.12	7.61	19.0	213.74	116.62	0.0	37.65	20.0	43.58
11.52	7.61	51.49	167.11	97.32	7.65	19.0	214.12	116.8	0.0	37.67	20.0	43.68
11.54	7.55	51.25	166.25	97.51	7.58	19.0	214.5	116.99	0.0	37.62	20.0	43.46
11.56	7.57	49.65	166.88	97.71	7.61	19.0	214.88	117.17	0.0	37.64	20.0	43.52
11.58	7.49	50.39	166.88	97.9	7.52	19.0	215.26	117.36	0.0	37.57	20.0	43.23
11.6	7.45	49.65	167.35	98.1	7.48	19.0	215.64	117.54	0.0	37.54	20.0	43.1
11.62	7.37	46.08	167.11	98.3	7.41	19.0	216.02	117.72	0.0	37.49	20.0	42.85
11.64	7.13	44.57	163.48	98.49	7.16	19.0	216.4	117.91	0.0	37.31	20.0	42.08
11.66	6.7	48.79	159.22	98.69	6.74	19.0	216.78	118.09	0.0	36.99	20.0	40.68
11.68	6.39	50.84	157.01	98.88	6.42	19.0	217.16	118.28	0.0	36.74	20.0	39.6
11.7	5.91	55.38	153.14	99.08	5.94	19.0	217.54	118.46	0.0	36.33	20.0	37.96
11.72	5.41	56.73	148.71	99.28	5.44	18.5	217.91	118.63	0.0	35.87	20.0	36.17
11.74	5.03	61.28	146.58	99.47	5.06	18.5	218.28	118.81	0.0	35.48	20.0	34.73
11.76	5.0	66.69	148.24	99.67	5.03	18.5	218.65	118.98	0.0	35.43	20.0	34.56
11.78	5.19	72.46	151.63	99.87	5.22	18.5	219.02	119.15	0.0	35.61	20.0	35.22
11.8	5.66	72.63	154.95	100.06	5.69	18.5	219.39	119.33	0.0	36.05	20.0	36.88
11.82	6.0	74.72	152.35	100.26	6.04	18.5	219.76	119.5	0.0	36.35	20.0	38.05
11.84	6.78	74.89	148.32	100.45	6.81	19.0	220.14	119.69	0.0	36.96	20.0	40.56
11.86	7.31	75.26	149.58	100.65	7.34	19.0	220.52	119.87	0.0	37.34	20.0	42.21
11.88	7.84	78.94	143.9	100.85	7.87	19.0	220.9	120.05	0.0	37.69	20.0	43.76
11.9	8.1	84.68	133.08	101.04	8.12	19.0	221.28	120.24	0.0	37.84	20.0	44.47
11.92	8.33	91.47	133.79	101.24	8.35	19.0	221.66	120.42	0.0	37.97	20.0	45.08
11.94	8.5	104.78	132.52	101.44	8.53	19.0	222.04	120.6	0.0	38.06	20.0	45.49
11.96	8.64	116.66	136.55	101.63	8.66	19.0	222.42	120.79	0.0	38.13	20.0	45.81
11.98	8.8	125.87	141.76	101.83	8.83	18.5	222.79	120.96	0.0	38.21	20.0	46.22
12.0	8.82	137.09	142.47	102.02	8.85	18.5	223.16	121.14	0.0	38.21	20.0	46.2
12.02	8.91	146.39	143.97	102.22	8.94	18.5	223.53	121.31	0.0	38.25	20.0	46.4
12.04	8.89	151.34	146.58	102.42	8.92	18.5	223.9	121.48	0.0	38.23	20.0	46.31
12.06	8.84	156.46	145.32	102.61	8.87	18.5	224.27	121.66	0.0	38.19	20.0	46.11
12.08	8.78	159.16	147.13	102.81	8.81	18.5	224.64	121.83	0.0	38.15	20.0	45.93
12.1	8.79	157.56	149.9	103.01	8.82	18.5	225.01	122.01	0.0	38.15	20.0	45.92
12.12	8.8	156.65	151.32	103.2	8.83	18.5	225.38	122.18	0.0	38.15	20.0	45.92
12.14	8.7	157.47	151.79	103.4	8.73	18.5	225.75	122.35	0.0	38.09	20.0	45.64
12.16	8.64	155.62	153.06	103.59	8.68	18.5	226.12	122.53	0.0	38.05	20.0	45.45
12.18	8.66	153.24	154.08	103.79	8.69	18.5	226.49	122.7	0.0	38.05	20.0	45.46
12.2	8.59	150.32	155.11	103.99	8.62	18.5	226.86	122.87	0.0	38.01	20.0	45.25
12.22	8.43	149.83	153.21	104.18	8.46	18.5	227.23	123.05	0.0	37.91	20.0	44.78
12.24	8.47	149.78	154.79	104.38	8.5	18.5	227.6	123.22	0.0	37.93	20.0	44.88
12.26	8.47	149.74	157.48	104.57	8.5	18.5	227.97	123.4	0.0	37.92	20.0	44.85
12.28	8.4	151.82	156.06	104.77	8.43	18.5	228.34	123.57	0.0	37.87	20.0	44.6
12.3	8.18	153.5	154.79	104.97	8.21	18.5	228.71	123.74	0.0	37.73	20.0	43.95
12.32	8.07	154.44	153.21	105.16	8.1	18.5	229.08	123.92	0.0	37.65	20.0	43.6
12.34	8.07	154.44	153.21	105.36	8.1	18.5	229.45	124.09	0.0	37.65	20.0	43.57
12.36	8.23	150.78	159.22	105.56	8.26	18.5	229.82	124.26	0.0	37.74	20.0	44.02
12.38	8.27	146.64	160.09	105.75	8.31	18.5	230.19	124.44	0.0	37.77	20.0	44.14
12.4	8.15	145.41	158.82	105.95	8.18	18.5	230.56	124.61	0.0	37.69	20.0	43.77
12.42	7.73	143.85	152.35	106.14	7.76	18.5	230.93	124.79	0.0	37.41	20.0	42.51
12.44	7.24	148.14	147.69	106.34	7.27	18.5	231.3	124.96	0.0	37.06	20.0	40.99
12.46	7.0	148.31	147.53	106.54	7.03	18.5	231.67	125.13	0.0	36.89	20.0	40.24
12.48	6.9	148.67	149.5	106.73	6.93	18.5	232.04	125.31	0.0	36.81	20.0	39.91
12.5	6.91	147.73	151.71	106.93	6.94	18.5	232.41	125.48	0.0	36.81	20.0	39.92
12.52	6.92	144.9	153.77	107.13	6.95	18.5	232.78	125.65	0.0	36.81	20.0	39.92
12.54	6.93	139.65	151.95	107.32	6.96	18.5	233.15	125.83	0.0	36.82	20.0	39.94
12.56	7.08	133.55	155.66	107.52	7.11	18.5	233.52	126.0	0.0	36.93	20.0	40.43
12.58	7.28	125.27	158.66	107.71	7.31	18.5	233.89	126.18	0.0	37.08	20.0	41.05
12.6	7.35	121.87	157.01	107.91	7.38	18.5	234.26	126.35	0.0	37.12	20.0	41.24
12.62	7.41	121.05	154.48	108.11	7.44	18.5	234.63	126.52	0.0	37.16	20.0	41.39
12.64	7.44	122.28	153.85	108.3	7.47	18.5	235.0	126.7	0.0	37.17	20.0	41.46



12.66	7.4	121.74	153.29	108.5	7.43	18.5	235.37	126.87	0.0	37.14	20.0	41.31
12.68	7.4	120.51	152.9	108.69	7.43	18.5	235.74	127.05	0.0	37.14	20.0	41.31
12.7	7.46	125.79	153.21	108.89	7.49	18.5	236.11	127.22	0.0	37.17	20.0	41.44
12.72	7.57	128.95	154.79	109.09	7.6	18.5	236.48	127.39	0.0	37.23	20.0	41.73
12.74	7.71	128.54	159.37	109.28	7.74	18.5	236.85	127.57	0.0	37.33	20.0	42.13
12.76	7.77	127.1	158.51	109.48	7.8	18.5	237.22	127.74	0.0	37.36	20.0	42.29
12.78	7.77	121.98	178.25	109.68	7.81	18.5	237.59	127.91	0.0	37.36	20.0	42.3
12.8	7.85	115.34	163.09	109.87	7.88	18.5	237.96	128.09	0.0	37.42	20.0	42.53
12.82	8.05	118.17	152.35	110.07	8.08	18.5	238.33	128.26	0.0	37.54	20.0	43.07
12.84	8.25	121.65	151.79	110.26	8.28	18.5	238.7	128.44	0.0	37.65	20.0	43.58
12.86	8.34	123.74	152.98	110.46	8.37	18.5	239.07	128.61	0.0	37.7	20.0	43.82
12.88	8.34	128.37	153.53	110.66	8.37	18.5	239.44	128.78	0.0	37.69	20.0	43.77
12.9	8.06	134.51	148.24	110.85	8.09	18.5	239.81	128.96	0.0	37.5	20.0	42.92
12.92	7.7	139.75	144.37	111.05	7.73	18.5	240.18	129.13	0.0	37.26	20.0	41.83
12.94	7.27	145.57	140.34	111.25	7.3	18.5	240.55	129.3	0.0	36.95	20.0	40.49
12.96	6.83	149.91	137.58	111.44	6.85	18.5	240.92	129.48	0.0	36.61	20.0	39.08
12.98	6.59	149.91	137.97	111.64	6.62	18.5	241.29	129.65	0.0	36.42	20.0	38.33
13.0	6.49	146.67	139.31	111.83	6.52	18.5	241.66	129.83	0.0	36.34	20.0	37.98
13.02	6.39	142.9	140.1	112.03	6.42	18.5	242.03	130.0	0.0	36.25	20.0	37.65
13.04	6.35	139.21	138.37	112.23	6.38	18.5	242.4	130.17	0.0	36.22	20.0	37.52
13.06	6.38	129.17	138.05	112.42	6.41	18.5	242.77	130.35	0.0	36.25	20.0	37.63
13.08	6.38	124.82	137.81	112.62	6.41	18.5	243.14	130.52	0.0	36.24	20.0	37.61
13.1	6.42	120.4	137.5	112.82	6.45	18.5	243.51	130.7	0.0	36.28	20.0	37.75
13.12	6.58	114.66	135.21	113.01	6.61	18.5	243.88	130.87	0.0	36.41	20.0	38.27
13.14	6.72	111.75	135.13	113.21	6.75	18.5	244.25	131.04	0.0	36.51	20.0	38.7
13.16	7.12	109.29	140.82	113.4	7.15	18.5	244.62	131.22	0.0	36.81	20.0	39.92
13.18	7.26	106.62	141.13	113.6	7.29	18.5	244.99	131.39	0.0	36.91	20.0	40.35
13.2	7.31	107.11	139.24	113.8	7.34	18.5	245.36	131.56	0.0	36.94	20.0	40.46
13.22	7.28	105.55	136.63	113.99	7.31	18.5	245.73	131.74	0.0	36.92	20.0	40.36
13.24	7.11	107.93	134.1	114.19	7.13	18.5	246.1	131.91	0.0	36.78	20.0	39.8
13.26	6.94	111.33	131.5	114.38	6.97	18.5	246.47	132.09	0.0	36.65	20.0	39.24
13.28	6.66	118.45	130.15	114.58	6.69	18.5	246.84	132.26	0.0	36.42	20.0	38.31
13.3	6.37	120.58	128.57	114.78	6.4	18.5	247.21	132.43	0.0	36.17	20.0	37.35
13.32	6.04	121.4	125.26	114.97	6.06	18.5	247.58	132.61	0.0	35.89	20.0	36.23
13.34	5.66	123.0	123.99	115.17	5.69	18.5	247.95	132.78	0.0	35.54	20.0	34.94
13.36	5.45	122.26	125.41	115.37	5.48	18.0	248.31	132.94	0.0	35.34	20.0	34.21
13.38	5.26	119.64	124.7	115.56	5.28	18.0	248.67	133.11	0.0	35.14	20.0	33.51
13.4	5.06	116.36	122.73	115.76	5.08	18.0	249.03	133.27	0.0	34.93	20.0	32.79
13.42	4.93	110.29	121.7	115.95	4.96	18.0	249.39	133.44	0.0	34.8	20.0	32.34
13.44	4.74	107.59	119.25	116.15	4.77	18.0	249.75	133.6	322.63	0.0	20.0	0.0
13.46	4.66	98.99	115.62	116.35	4.68	18.0	250.11	133.76	0.0	34.5	20.0	31.33
13.48	4.66	92.97	112.38	116.54	4.69	18.5	250.48	133.94	0.0	34.5	20.0	31.35
13.5	4.58	81.99	107.64	116.74	4.6	18.5	250.85	134.11	0.0	34.42	20.0	31.07
13.52	4.47	74.57	103.14	116.94	4.49	18.5	251.22	134.28	0.0	34.29	20.0	30.67
13.54	4.15	63.39	93.98	117.13	4.17	18.5	251.59	134.46	0.0	33.91	20.0	29.47
13.56	3.97	59.75	91.06	117.33	3.99	18.5	251.96	134.63	0.0	33.67	20.0	28.72
13.58	3.32	55.57	87.03	117.52	3.34	18.0	252.32	134.8	220.51	0.0	20.0	0.0
13.6	3.14	61.43	88.22	117.72	3.16	18.0	252.68	134.96	207.33	0.0	20.0	0.0
13.62	3.0	68.23	87.98	117.92	3.02	18.0	253.04	135.12	197.32	0.0	20.0	0.0
13.64	3.03	74.17	86.4	118.11	3.05	18.0	253.4	135.29	199.9	0.0	20.0	0.0
13.66	3.38	78.96	87.03	118.31	3.4	18.0	253.76	135.45	224.8	0.0	20.0	0.0
13.68	3.89	88.26	86.64	118.5	3.9	18.0	254.12	135.62	260.64	0.0	20.0	0.0
13.7	4.05	87.36	83.48	118.7	4.06	18.0	254.48	135.78	272.1	0.0	20.0	0.0
13.72	4.24	82.24	80.4	118.9	4.25	18.5	254.85	135.95	0.0	33.93	20.0	29.51
13.74	4.43	62.58	80.0	119.09	4.45	18.5	255.22	136.13	0.0	34.2	20.0	30.37
13.76	4.7	48.33	83.0	119.29	4.71	18.5	255.59	136.3	0.0	34.54	20.0	31.47
13.78	5.12	53.08	145.95	119.49	5.15	18.5	255.96	136.47	0.0	35.0	20.0	33.02
13.8	5.57	52.84	116.96	119.68	5.6	18.5	256.33	136.65	0.0	35.44	20.0	34.59
13.82	6.14	54.11	115.31	119.88	6.16	19.0	256.71	136.83	0.0	35.96	20.0	36.52
13.84	6.49	60.42	108.28	120.07	6.52	19.0	257.09	137.02	0.0	36.24	20.0	37.6
13.86	6.68	70.9	108.67	120.27	6.71	19.0	257.47	137.2	0.0	36.36	20.0	38.1
13.88	6.87	80.45	108.28	120.47	6.89	18.5	257.84	137.37	0.0	36.47	20.0	38.52
13.9	7.02	89.42	110.01	120.66	7.04	18.5	258.21	137.55	0.0	36.56	20.0	38.9
13.92	7.08	99.7	110.49	120.86	7.1	18.5	258.58	137.72	0.0	36.59	20.0	38.99
13.94	7.23	109.85	115.78	121.06	7.25	18.5	258.95	137.89	0.0	36.68	20.0	39.38
13.96	7.37	120.26	112.78	121.25	7.39	18.5	259.32	138.07	0.0	36.76	20.0	39.72
13.98	7.39	123.69	110.01	121.45	7.41	18.5	259.69	138.24	0.0	36.77	20.0	39.74
14.0	7.32	121.11	106.07	121.64	7.34	18.5	260.06	138.42	0.0	36.71	20.0	39.51
14.02	7.13	115.01	107.09	121.84	7.15	18.5	260.43	138.59	0.0	36.57	20.0	38.94
14.04	6.32	113.37	97.77	122.04	6.34	18.5	260.8	138.76	0.0	35.93	20.0	36.42
14.06	5.01	108.94	89.16	122.23	5.02	18.0	261.16	138.93	0.0	34.68	20.0	31.95
14.08	3.65	111.27	80.79	122.43	3.67	18.0	261.52	139.09	243.3	0.0	20.0	0.0
14.1	3.38	111.93	80.08	122.62	3.39	18.0	261.88	139.26	223.78	0.0	20.0	0.0

14.12	1.55	117.25	89.8	122.82	1.57	17.5	262.23	139.41	93.39	0.0	20.0	0.0
14.14	1.2	122.61	95.64	123.02	1.22	17.5	262.58	139.56	0.0	0.0	20.0	0.0
14.16	0.95	130.84	128.49	123.21	0.98	17.5	262.93	139.72	0.0	0.0	20.0	0.0
14.18	0.95	113.39	230.3	123.41	0.99	17.5	263.28	139.87	0.0	0.0	20.0	0.0
14.2	0.96	85.7	262.36	123.61	1.01	17.5	263.63	140.02	53.53	0.0	24.2	0.0
14.22	0.94	64.6	267.02	123.8	0.99	17.5	263.98	140.18	51.97	0.0	24.23	0.0
14.24	0.79	50.1	262.91	124.0	0.85	17.5	264.33	140.33	41.58	0.0	22.64	0.0
14.26	0.7	37.73	283.84	124.19	0.75	17.5	264.68	140.49	35.01	0.0	22.27	0.0
14.28	0.69	23.51	295.69	124.39	0.75	17.5	265.03	140.64	34.45	0.0	22.72	0.0
14.3	0.71	13.11	309.9	124.59	0.77	18.0	265.39	140.8	36.02	0.0	23.68	0.0
14.32	0.79	10.41	312.19	124.78	0.85	18.0	265.75	140.97	41.59	0.0	24.68	0.0
14.34	0.82	10.94	312.59	124.98	0.89	18.0	266.11	141.13	44.37	0.0	25.06	0.0
14.36	0.92	13.24	312.43	125.18	0.98	18.0	266.47	141.29	50.9	0.0	25.85	0.0
14.38	0.88	15.82	310.54	125.37	0.94	18.0	266.83	141.46	48.16	0.0	25.37	0.0
14.4	0.75	12.38	300.66	125.57	0.81	18.0	267.19	141.62	38.5	0.0	23.69	0.0
14.42	0.63	13.66	305.56	125.76	0.69	18.0	267.55	141.79	30.2	0.0	22.27	0.0
14.44	0.67	15.63	332.81	125.96	0.73	18.0	267.91	141.95	33.14	0.0	23.68	0.0
14.46	0.86	17.27	344.81	126.16	0.93	18.0	268.27	142.11	47.2	0.0	26.1	0.0
14.48	1.21	19.65	328.78	126.35	1.28	18.0	268.63	142.28	71.94	0.0	28.25	0.0
14.5	1.05	19.4	283.84	126.55	1.11	18.0	268.99	142.44	60.16	0.0	25.86	0.0
14.52	0.9	21.0	255.88	126.75	0.95	18.0	269.35	142.6	48.61	0.0	23.49	0.0
14.54	0.79	31.29	324.83	126.94	0.86	17.5	269.7	142.76	41.93	0.0	24.48	0.0
14.56	0.71	27.4	328.38	127.14	0.77	17.5	270.05	142.91	35.83	0.0	23.65	0.0
14.58	0.66	25.36	316.93	127.33	0.72	17.5	270.4	143.07	32.15	0.0	22.62	0.0
14.6	0.67	25.89	331.62	127.53	0.74	17.5	270.75	143.22	33.26	0.0	23.29	0.0
14.62	0.72	24.1	332.65	127.73	0.78	17.5	271.1	143.37	36.68	0.0	23.9	0.0
14.64	0.8	25.98	329.57	127.92	0.86	18.0	271.46	143.54	42.2	0.0	24.62	0.0
14.66	1.31	23.36	344.1	128.12	1.38	18.0	271.82	143.7	78.85	0.0	28.98	0.0
14.68	2.08	19.27	318.51	128.31	2.14	18.5	272.19	143.88	133.7	0.0	31.64	0.0
14.7	2.45	18.66	285.03	128.51	2.5	18.5	272.56	144.05	0.0	30.87	20.0	21.44
14.72	1.72	21.53	255.09	128.71	1.77	18.0	272.92	144.21	107.04	0.0	20.0	0.0
14.74	1.24	35.54	247.35	128.9	1.29	18.0	273.28	144.38	72.81	0.0	25.57	0.0
14.76	1.02	50.94	248.38	129.1	1.07	17.5	273.63	144.53	56.97	0.0	23.75	0.0
14.78	1.21	69.55	250.99	129.3	1.26	17.5	273.98	144.68	70.09	0.0	25.17	0.0
14.8	1.26	68.9	270.26	129.49	1.32	17.5	274.33	144.84	74.52	0.0	26.17	0.0
14.82	2.17	68.82	263.54	129.69	2.22	18.0	274.69	145.0	139.12	0.0	20.0	0.0
14.84	2.64	64.72	240.09	129.88	2.69	18.0	275.05	145.17	172.49	0.0	20.0	0.0
14.86	2.96	45.55	208.81	130.08	3.0	18.0	275.41	145.33	194.77	0.0	20.0	0.0
14.88	2.92	41.33	204.63	130.28	2.96	18.0	275.77	145.49	191.89	0.0	20.0	0.0
14.9	3.12	49.73	207.95	130.47	3.17	18.0	276.13	145.66	206.36	0.0	20.0	0.0
14.92	3.37	46.08	191.99	130.67	3.41	18.5	276.5	145.83	0.0	32.44	20.0	25.27
14.94	2.75	52.51	186.46	130.87	2.78	18.0	276.86	145.99	179.13	0.0	20.0	0.0
14.96	1.83	68.24	177.62	131.06	1.86	18.0	277.22	146.16	113.3	0.0	20.0	0.0
14.98	1.28	74.02	184.49	131.26	1.31	17.5	277.57	146.31	73.96	0.0	20.0	0.0
15.0	1.1	86.43	191.75	131.45	1.14	17.5	277.92	146.47	61.3	0.0	20.0	0.0
15.02	0.94	94.45	211.81	131.65	0.98	17.5	278.27	146.62	50.33	0.0	20.95	0.0
15.04	0.86	91.18	257.46	131.85	0.91	17.5	278.62	146.77	45.4	0.0	21.89	0.0
15.06	0.96	87.24	305.32	132.04	1.02	17.5	278.97	146.93	53.05	0.0	24.46	0.0
15.08	0.92	72.41	305.24	132.24	0.98	17.5	279.32	147.08	49.79	0.0	24.09	0.0
15.1	0.71	52.79	289.61	132.44	0.77	17.5	279.67	147.24	35.07	0.0	21.32	0.0
15.12	0.64	46.56	304.77	132.63	0.7	17.5	280.02	147.39	29.83	0.0	20.81	0.0
15.14	0.63	33.17	321.28	132.83	0.69	17.5	280.37	147.54	29.59	0.0	21.47	0.0
15.16	0.68	21.86	327.44	133.02	0.75	18.0	280.73	147.71	33.5	0.0	22.59	0.0
15.18	0.71	12.89	323.33	133.22	0.77	18.0	281.09	147.87	34.93	0.0	22.89	0.0
15.2	0.67	13.3	324.04	133.42	0.73	18.0	281.45	148.03	32.27	0.0	22.39	0.0
15.22	0.63	15.27	340.39	133.61	0.7	18.0	281.81	148.2	29.99	0.0	22.44	0.0
15.24	0.67	12.77	347.81	133.81	0.74	18.0	282.17	148.36	32.99	0.0	23.28	0.0
15.26	0.7	10.52	350.42	134.0	0.77	18.0	282.53	148.53	34.53	0.0	23.67	0.0
15.28	0.72	9.78	347.97	134.2	0.79	18.0	282.89	148.69	36.42	0.0	23.91	0.0
15.3	0.72	11.46	346.71	134.4	0.79	18.0	283.25	148.85	36.26	0.0	23.77	0.0
15.32	0.66	15.48	348.6	134.59	0.73	18.0	283.61	149.02	31.73	0.0	22.91	0.0
15.34	0.71	15.4	352.16	134.79	0.78	18.0	283.97	149.18	35.66	0.0	23.68	0.0
15.36	0.77	15.64	351.92	134.99	0.84	18.0	284.33	149.34	39.82	0.0	24.31	0.0
15.38	0.8	17.81	341.02	135.18	0.87	18.0	284.69	149.51	41.47	0.0	24.17	0.0
15.4	0.68	20.11	337.86	135.38	0.75	18.0	285.05	149.67	33.29	0.0	22.64	0.0
15.42	0.67	17.45	348.21	135.57	0.74	18.0	285.41	149.84	32.63	0.0	22.89	0.0
15.44	0.72	15.32	354.76	135.77	0.79	18.0	285.77	150.0	35.91	0.0	23.69	0.0
15.46	0.79	14.26	352.47	135.97	0.86	18.0	286.13	150.16	41.15	0.0	24.45	0.0
15.48	0.78	14.14	344.89	136.16	0.85	18.0	286.49	150.33	40.22	0.0	24.07	0.0
15.5	0.73	14.01	335.97	136.36	0.8	18.0	286.85	150.49	36.51	0.0	23.17	0.0
15.52	0.73	15.82	344.89	136.56	0.8	18.0	287.21	150.65	36.37	0.0	23.36	0.0
15.54	0.74	15.29	347.58	136.75	0.81	18.0	287.57	150.82	37.53	0.0	23.62	0.0
15.56	0.75	17.62	346.0	136.95	0.82	18.0	287.93	150.98	37.66	0.0	23.52	0.0

15.58	0.89	18.65	357.37	137.14	0.97	18.0	288.29	151.15	48.36	0.0	25.41	0.0
15.6	1.07	20.13	358.63	137.34	1.14	18.0	288.65	151.31	61.1	0.0	26.89	0.0
15.62	1.57	18.08	349.39	137.54	1.64	18.0	289.01	151.47	96.36	0.0	29.62	0.0
15.64	2.65	21.97	352.24	137.73	2.72	18.5	289.38	151.65	0.0	31.05	20.0	21.84
15.66	3.28	19.68	328.78	137.93	3.34	18.5	289.75	151.82	0.0	32.25	20.0	24.77
15.68	3.84	31.19	330.6	138.12	3.91	18.5	290.12	152.0	0.0	33.06	20.0	26.96
15.7	3.9	39.87	306.19	138.32	3.96	18.5	290.49	152.17	0.0	33.09	20.0	27.04
15.72	3.23	47.7	286.29	138.52	3.28	18.5	290.86	152.34	213.71	0.0	20.0	0.0
15.74	2.1	68.51	265.76	138.71	2.15	18.0	291.22	152.51	132.96	0.0	20.0	0.0
15.76	1.37	86.26	240.48	138.91	1.42	17.5	291.57	152.66	80.41	0.0	20.0	0.0
15.78	1.17	97.77	237.64	139.11	1.22	17.5	291.92	152.81	65.97	0.0	23.05	0.0
15.8	0.85	103.3	267.02	139.3	0.91	17.5	292.27	152.97	0.0	0.0	20.0	0.0
15.82	0.8	96.29	325.07	139.5	0.87	17.5	292.62	153.12	0.0	0.0	20.0	0.0
15.84	0.77	80.61	370.0	139.69	0.84	17.5	292.97	153.28	39.09	0.0	23.42	0.0
15.86	0.76	61.48	372.53	139.89	0.83	17.5	293.32	153.43	38.49	0.0	23.52	0.0
15.88	0.77	47.83	374.35	140.09	0.85	17.5	293.67	153.58	39.54	0.0	23.83	0.0
15.9	0.7	35.34	378.06	140.28	0.78	17.5	294.02	153.74	34.66	0.0	23.3	0.0
15.92	0.7	22.31	393.78	140.48	0.78	18.0	294.38	153.9	34.81	0.0	23.99	0.0
15.94	0.73	15.68	426.55	140.68	0.82	18.0	294.74	154.06	37.3	0.0	25.44	0.0
15.96	0.84	11.58	415.57	140.87	0.92	18.0	295.1	154.23	44.55	0.0	26.24	0.0
15.98	1.03	13.38	398.59	141.07	1.11	18.0	295.46	154.39	58.36	0.0	27.35	0.0
16.0	1.08	15.67	370.79	141.26	1.15	18.0	295.82	154.56	60.97	0.0	26.89	0.0
16.02	0.93	19.4	360.76	141.46	1.0	18.0	296.18	154.72	50.42	0.0	25.26	0.0
16.04	0.84	19.97	365.03	141.66	0.91	18.0	296.54	154.88	43.94	0.0	24.46	0.0
16.06	0.82	18.25	368.11	141.85	0.89	18.0	296.9	155.05	42.58	0.0	24.36	0.0
16.08	0.81	16.78	359.42	142.05	0.88	18.0	297.26	155.21	41.88	0.0	24.03	0.0
16.1	0.89	16.86	376.56	142.25	0.96	18.0	297.62	155.38	47.37	0.0	25.25	0.0
16.12	0.94	18.17	374.66	142.44	1.01	18.0	297.98	155.54	50.92	0.0	25.61	0.0
16.14	0.89	19.89	364.87	142.64	0.96	18.0	298.34	155.7	47.18	0.0	24.81	0.0
16.16	1.3	22.84	390.85	142.83	1.38	18.0	298.7	155.87	77.02	0.0	28.56	0.0
16.18	3.63	25.1	436.98	143.03	3.72	18.5	299.07	156.04	0.0	32.71	20.0	25.98
16.2	6.19	21.45	365.58	143.23	6.27	19.0	299.45	156.22	0.0	35.65	20.0	35.37
16.22	4.94	19.53	273.89	143.42	5.0	19.0	299.83	156.41	0.0	34.41	20.0	31.04
16.24	3.2	22.35	261.73	143.62	3.26	18.5	300.2	156.58	0.0	31.92	20.0	23.93
16.26	2.16	38.41	255.17	143.81	2.21	18.0	300.56	156.75	136.15	0.0	20.0	0.0
16.28	1.7	61.14	251.22	144.01	1.75	18.0	300.92	156.91	103.33	0.0	20.0	0.0
16.3	1.61	66.18	250.04	144.21	1.66	17.5	301.27	157.06	97.35	0.0	20.0	0.0
16.32	1.23	93.13	264.73	144.4	1.28	17.5	301.62	157.22	70.18	0.0	23.87	0.0
16.34	1.19	92.81	324.75	144.6	1.25	17.5	301.97	157.37	67.98	0.0	25.32	0.0
16.36	1.32	80.6	340.15	144.8	1.38	17.5	302.32	157.52	77.29	0.0	26.65	0.0
16.38	1.29	71.06	335.73	144.99	1.36	17.5	302.67	157.68	75.24	0.0	26.4	0.0
16.4	1.14	64.17	333.12	145.19	1.2	17.5	303.02	157.83	64.36	0.0	25.28	0.0
16.42	0.95	48.77	338.34	145.38	1.02	17.5	303.37	157.99	51.21	0.0	23.94	0.0
16.44	0.83	35.95	346.94	145.58	0.9	17.5	303.72	158.14	42.41	0.0	23.02	0.0
16.46	0.8	21.0	362.5	145.78	0.87	18.0	304.08	158.3	40.5	0.0	23.39	0.0
16.48	0.83	16.9	363.69	145.97	0.91	18.0	304.44	158.47	42.96	0.0	23.88	0.0
16.5	0.89	18.46	373.64	146.17	0.96	18.0	304.8	158.63	46.79	0.0	24.65	0.0
16.52	1.38	20.01	379.96	146.37	1.45	18.0	305.16	158.79	82.11	0.0	28.48	0.0
16.54	1.65	22.51	377.98	146.56	1.73	18.0	305.52	158.96	101.39	0.0	29.74	0.0
16.56	1.34	16.74	315.98	146.76	1.4	18.0	305.88	159.12	78.08	0.0	26.65	0.0
16.58	1.1	20.05	309.75	146.95	1.17	18.0	306.24	159.29	61.37	0.0	24.73	0.0
16.6	0.9	28.86	315.91	147.15	0.97	18.0	306.6	159.45	47.19	0.0	22.8	0.0
16.62	0.75	39.3	389.2	147.35	0.83	17.5	306.95	159.6	37.14	0.0	23.13	0.0
16.64	0.72	38.2	407.6	147.54	0.8	17.5	307.3	159.76	35.18	0.0	23.35	0.0
16.66	0.71	38.53	408.86	147.74	0.79	17.5	307.65	159.91	34.62	0.0	23.27	0.0
16.68	0.78	38.9	409.65	147.93	0.87	17.5	308.0	160.07	39.88	0.0	24.07	0.0
16.7	0.76	36.32	410.28	148.13	0.84	17.5	308.35	160.22	38.2	0.0	23.85	0.0
16.72	0.76	29.48	407.28	148.33	0.85	17.5	308.7	160.37	38.41	0.0	23.89	0.0
16.74	0.91	30.4	407.44	148.52	0.99	18.0	309.06	160.54	48.56	0.0	25.27	0.0
16.76	0.82	25.65	442.43	148.72	0.91	18.0	309.42	160.7	43.11	0.0	25.51	0.0
16.78	0.9	23.11	456.96	148.92	0.99	18.0	309.78	160.86	48.85	0.0	26.6	0.0
16.8	1.05	24.13	473.31	149.11	1.14	18.0	310.14	161.03	59.58	0.0	28.07	0.0
16.82	1.06	22.74	356.03	149.31	1.13	18.0	310.5	161.19	58.71	0.0	25.31	0.0
16.84	1.05	24.91	361.4	149.5	1.12	18.0	310.86	161.36	57.93	0.0	25.3	0.0
16.86	1.02	26.88	366.45	149.7	1.09	18.0	311.22	161.52	55.91	0.0	25.12	0.0
16.88	2.82	34.0	419.37	149.9	2.9	18.5	311.59	161.69	184.84	0.0	33.85	0.0
16.9	4.21	36.46	325.46	150.09	4.28	18.5	311.96	161.87	0.0	33.26	20.0	27.53
16.92	4.51	38.96	294.66	150.29	4.57	18.5	312.33	162.04	0.0	33.62	20.0	28.57
16.94	4.87	54.93	266.07	150.49	4.92	18.5	312.7	162.21	0.0	33.97	20.0	29.64
16.96	4.38	60.83	257.15	150.68	4.43	18.5	313.07	162.39	0.0	33.31	20.0	27.69
16.98	3.17	79.96	247.35	150.88	3.22	18.0	313.43	162.55	207.39	0.0	20.0	0.0
17.0	2.37	97.77	245.85	151.07	2.42	18.0	313.79	162.72	150.39	0.0	20.0	0.0
17.02	1.96	119.52	255.17	151.27	2.01	17.5	314.14	162.87	120.92	0.0	20.0	0.0

17.04	2.13	137.34	304.14	151.47	2.19	17.5	314.49	163.02	133.89	0.0	20.0	0.0
17.06	3.02	141.64	407.91	151.66	3.1	18.0	314.85	163.19	198.78	0.0	20.0	0.0
17.08	3.0	114.32	288.66	151.86	3.06	18.0	315.21	163.35	196.03	0.0	20.0	0.0
17.1	2.22	101.62	231.48	152.06	2.27	17.5	315.56	163.51	139.62	0.0	20.0	0.0
17.12	1.77	86.62	226.66	152.25	1.82	17.5	315.91	163.66	107.36	0.0	20.0	0.0
17.14	1.39	87.81	225.4	152.45	1.43	17.5	316.26	163.81	79.81	0.0	20.0	0.0
17.16	1.28	88.09	299.4	152.64	1.34	17.5	316.61	163.97	73.15	0.0	24.41	0.0
17.18	1.31	76.91	299.4	152.84	1.37	17.5	316.96	164.12	75.42	0.0	24.68	0.0
17.2	1.08	63.47	275.08	153.04	1.14	17.5	317.31	164.27	58.66	0.0	22.19	0.0
17.22	0.9	63.47	339.68	153.23	0.97	17.5	317.66	164.43	46.76	0.0	22.36	0.0
17.24	0.89	53.39	339.68	153.43	0.95	17.5	318.01	164.58	45.39	0.0	22.22	0.0
17.26	0.88	51.05	346.63	153.62	0.95	17.5	318.36	164.74	45.25	0.0	22.4	0.0
17.28	1.0	45.39	354.53	153.82	1.07	17.5	318.71	164.89	53.72	0.0	23.87	0.0
17.3	1.35	35.56	365.27	154.02	1.42	18.0	319.07	165.05	78.94	0.0	26.98	0.0
17.32	1.47	33.55	345.68	154.21	1.54	18.0	319.43	165.22	87.16	0.0	27.22	0.0
17.34	1.23	27.7	339.76	154.41	1.3	18.0	319.79	165.38	69.75	0.0	25.6	0.0
17.36	1.01	23.23	261.18	154.61	1.06	18.0	320.15	165.54	52.96	0.0	21.28	0.0
17.38	0.91	29.7	367.56	154.8	0.98	18.0	320.51	165.71	47.38	0.0	23.45	0.0
17.4	1.02	29.95	373.72	155.0	1.1	18.0	320.87	165.87	55.6	0.0	24.69	0.0
17.42	1.63	36.17	397.33	155.19	1.71	18.0	321.23	166.04	99.34	0.0	29.11	0.0
17.44	3.03	35.93	404.75	155.39	3.11	18.5	321.6	166.21	199.05	0.0	20.0	0.0
17.46	3.4	44.36	313.06	155.59	3.47	18.5	321.97	166.38	224.63	0.0	20.0	0.0
17.48	2.37	41.99	223.82	155.78	2.42	18.0	322.33	166.55	149.63	0.0	20.0	0.0
17.5	1.61	45.96	233.61	155.98	1.66	18.0	322.69	166.71	95.42	0.0	20.0	0.0
17.52	1.28	51.9	235.51	156.18	1.33	17.5	323.04	166.86	71.94	0.0	20.0	0.0
17.54	0.94	72.42	246.49	156.37	0.99	17.5	323.39	167.02	47.47	0.0	20.0	0.0
17.56	0.96	78.32	338.49	156.57	1.03	17.5	323.74	167.17	50.57	0.0	22.42	0.0
17.58	1.06	73.69	341.97	156.76	1.13	17.5	324.09	167.33	57.26	0.0	23.44	0.0
17.6	0.95	63.86	325.7	156.96	1.01	17.5	324.44	167.48	49.12	0.0	21.93	0.0
17.62	0.77	52.15	323.57	157.16	0.83	17.5	324.79	167.63	36.33	0.0	20.0	0.0
17.64	0.73	42.07	335.02	157.35	0.79	17.5	325.14	167.79	33.55	0.0	20.0	0.0
17.66	0.7	31.3	339.84	157.55	0.77	17.5	325.49	167.94	31.64	0.0	20.0	0.0
17.68	0.7	18.6	341.73	157.74	0.77	18.0	325.85	168.11	31.77	0.0	20.0	0.0
17.7	0.82	15.2	349.39	157.94	0.89	18.0	326.21	168.27	40.01	0.0	21.79	0.0
17.72	1.17	25.76	380.51	158.14	1.25	18.0	326.57	168.43	66.0	0.0	25.83	0.0
17.74	1.08	25.89	329.09	158.33	1.14	18.0	326.93	168.6	58.2	0.0	23.63	0.0
17.76	0.86	32.89	332.96	158.53	0.92	17.5	327.28	168.75	42.62	0.0	21.3	0.0
17.78	0.85	34.69	355.95	158.73	0.92	17.5	327.63	168.9	42.1	0.0	21.82	0.0
17.8	0.91	33.79	361.0	158.92	0.99	17.5	327.98	169.06	46.99	0.0	22.73	0.0
17.82	0.88	33.38	355.39	159.12	0.95	17.5	328.33	169.21	44.54	0.0	22.18	0.0
17.84	1.17	33.63	372.3	159.31	1.24	18.0	328.69	169.38	65.22	0.0	25.31	0.0
17.86	1.62	33.05	384.54	159.51	1.7	18.0	329.05	169.54	97.73	0.0	28.43	0.0
17.88	1.44	28.18	350.73	159.71	1.51	18.0	329.41	169.7	84.23	0.0	26.71	0.0
17.9	1.04	19.05	343.55	159.9	1.11	18.0	329.77	169.87	55.9	0.0	23.72	0.0
17.92	0.86	15.98	345.68	160.1	0.93	18.0	330.13	170.03	43.06	0.0	21.95	0.0
17.94	0.77	23.06	363.37	160.3	0.84	18.0	330.49	170.19	36.65	0.0	21.12	0.0
17.96	0.78	24.37	370.56	160.49	0.85	18.0	330.85	170.36	37.43	0.0	21.42	0.0
17.98	0.79	24.17	373.72	160.69	0.86	18.0	331.21	170.52	38.01	0.0	21.6	0.0
18.0	0.84	24.41	381.38	160.88	0.92	18.0	331.57	170.69	41.84	0.0	22.44	0.0
18.02	1.03	25.27	391.49	161.08	1.11	18.0	331.93	170.85	55.52	0.0	24.61	0.0
18.04	1.05	22.86	385.72	161.28	1.13	18.0	332.29	171.01	56.94	0.0	24.69	0.0
18.06	0.93	20.48	377.03	161.47	1.0	18.0	332.65	171.18	47.81	0.0	23.28	0.0
18.08	0.75	15.28	377.82	161.67	0.82	18.0	333.01	171.34	34.93	0.0	21.3	0.0
18.1	0.78	10.61	398.36	161.86	0.86	18.0	333.37	171.51	37.4	0.0	22.51	0.0
18.12	1.24	9.1	421.73	162.06	1.32	18.0	333.73	171.67	70.76	0.0	27.38	0.0
18.14	1.51	8.77	385.48	162.26	1.59	18.0	334.09	171.83	89.61	0.0	28.19	0.0
18.16	1.2	14.51	346.39	162.45	1.27	18.0	334.45	172.0	66.66	0.0	25.01	0.0
18.18	0.93	23.56	332.89	162.65	1.0	18.0	334.81	172.16	47.38	0.0	21.83	0.0
18.2	0.95	36.05	386.83	162.85	1.02	17.5	335.16	172.31	49.12	0.0	23.27	0.0
18.22	1.01	35.56	394.41	163.04	1.09	18.0	335.52	172.48	54.06	0.0	24.12	0.0
18.24	1.04	36.34	389.59	163.24	1.12	18.0	335.88	172.64	55.78	0.0	24.19	0.0
18.26	0.94	36.95	390.46	163.43	1.01	17.5	336.23	172.8	48.45	0.0	23.19	0.0
18.28	0.89	33.88	400.57	163.63	0.97	17.5	336.58	172.95	45.26	0.0	23.01	0.0
18.3	0.89	31.75	403.17	163.83	0.97	18.0	336.94	173.11	45.42	0.0	23.12	0.0
18.32	0.9	26.31	407.83	164.02	0.98	18.0	337.3	173.28	45.73	0.0	23.37	0.0
18.34	1.08	16.88	414.07	164.22	1.16	18.0	337.66	173.44	58.64	0.0	25.43	0.0
18.36	1.19	16.47	400.25	164.42	1.27	18.0	338.02	173.6	66.58	0.0	26.05	0.0
18.38	1.06	17.46	372.93	164.61	1.13	18.0	338.38	173.77	56.62	0.0	24.16	0.0
18.4	0.91	27.29	371.35	164.81	0.98	18.0	338.74	173.93	45.94	0.0	22.36	0.0
18.42	0.88	32.08	382.64	165.0	0.96	17.5	339.09	174.09	44.42	0.0	22.31	0.0
18.44	0.92	30.98	385.41	165.2	0.99	18.0	339.45	174.25	46.79	0.0	22.74	0.0
18.46	0.97	31.71	402.23	165.4	1.05	18.0	339.81	174.41	50.61	0.0	23.68	0.0
18.48	0.95	27.7	391.88	165.59	1.03	18.0	340.17	174.58	49.47	0.0	23.33	0.0

18.5	0.85	30.65	386.19	165.79	0.93	17.5	340.52	174.73	41.89	0.0	21.94	0.0
18.52	0.81	28.64	400.57	165.99	0.89	17.5	340.87	174.88	38.89	0.0	21.85	0.0
18.54	0.81	22.62	401.2	166.18	0.89	18.0	341.23	175.05	38.88	0.0	21.98	0.0
18.56	0.97	25.45	411.78	166.38	1.05	18.0	341.59	175.21	50.9	0.0	23.98	0.0
18.58	1.0	25.28	408.23	166.57	1.08	18.0	341.95	175.38	52.76	0.0	24.13	0.0
18.6	0.83	26.1	386.91	166.77	0.91	18.0	342.31	175.54	40.68	0.0	21.75	0.0
18.62	0.74	30.16	400.57	166.97	0.82	17.5	342.66	175.69	33.94	0.0	20.82	0.0
18.64	0.78	25.32	411.31	167.16	0.86	18.0	343.02	175.86	37.12	0.0	21.79	0.0
18.66	0.8	21.11	414.55	167.36	0.89	18.0	343.38	176.02	38.79	0.0	22.25	0.0
18.68	0.76	22.7	407.36	167.55	0.84	18.0	343.74	176.19	35.62	0.0	21.44	0.0
18.7	0.72	31.32	454.59	167.75	0.81	17.5	344.09	176.34	33.57	0.0	22.24	0.0
18.72	0.7	29.47	454.43	167.95	0.79	17.5	344.44	176.49	32.03	0.0	22.01	0.0
18.74	0.69	22.63	453.48	168.14	0.79	18.0	344.8	176.66	31.44	0.0	22.03	0.0
18.76	0.71	20.1	456.09	168.34	0.8	18.0	345.16	176.82	32.3	0.0	22.3	0.0
18.78	0.77	19.89	460.59	168.54	0.86	18.0	345.52	176.98	36.63	0.0	23.08	0.0
18.8	0.91	21.12	464.86	168.73	1.01	18.0	345.88	177.15	47.16	0.0	24.62	0.0
18.82	0.99	16.04	460.83	168.93	1.08	18.0	346.24	177.31	52.46	0.0	25.34	0.0
18.84	0.86	19.03	440.69	169.12	0.95	18.0	346.6	177.48	43.02	0.0	23.48	0.0
18.86	0.88	23.33	450.01	169.32	0.97	18.0	346.96	177.64	44.79	0.0	23.82	0.0
18.88	1.03	20.54	445.51	169.52	1.12	18.0	347.32	177.8	55.34	0.0	25.15	0.0
18.9	1.02	22.67	395.91	169.71	1.1	18.0	347.68	177.97	53.5	0.0	23.7	0.0
18.92	0.87	27.75	375.14	169.91	0.95	18.0	348.04	178.13	42.82	0.0	21.42	0.0
18.94	0.86	32.59	424.58	170.11	0.95	17.5	348.39	178.28	42.96	0.0	22.63	0.0
18.96	1.0	35.05	435.95	170.3	1.09	18.0	348.75	178.45	52.64	0.0	24.21	0.0
18.98	1.81	38.32	468.41	170.5	1.91	18.0	349.11	178.61	111.27	0.0	29.97	0.0
19.0	3.78	32.59	470.07	170.69	3.88	18.5	349.48	178.79	0.0	32.17	20.0	24.55
19.02	4.2	32.26	231.01	170.89	4.24	18.5	349.85	178.96	0.0	32.73	20.0	26.04
19.04	3.23	31.81	205.5	171.09	3.27	18.5	350.22	179.13	0.0	31.14	20.0	22.06
19.06	2.27	37.66	222.79	171.28	2.31	18.0	350.58	179.3	140.28	0.0	20.0	0.0
19.08	1.7	45.28	227.29	171.48	1.74	18.0	350.94	179.46	99.53	0.0	20.0	0.0
19.1	1.53	52.25	227.61	171.68	1.57	18.0	351.3	179.63	87.2	0.0	20.0	0.0
19.12	1.53	83.99	306.9	171.87	1.59	17.5	351.65	179.78	88.31	0.0	24.23	0.0
19.14	1.5	78.17	374.74	172.07	1.57	17.5	352.0	179.93	87.02	0.0	25.81	0.0
19.16	1.69	71.37	380.27	172.26	1.77	17.5	352.35	180.09	101.27	0.0	27.07	0.0
19.18	1.62	65.72	363.13	172.46	1.69	18.0	352.71	180.25	95.43	0.0	26.3	0.0
19.2	1.41	61.46	324.04	172.66	1.47	17.5	353.06	180.4	79.87	0.0	24.06	0.0
19.22	1.37	64.57	357.68	172.85	1.44	17.5	353.41	180.56	77.66	0.0	24.63	0.0
19.24	1.46	54.9	385.96	173.05	1.53	18.0	353.77	180.72	84.36	0.0	25.97	0.0
19.26	2.24	51.38	381.69	173.24	2.31	18.0	354.13	180.89	139.83	0.0	29.51	0.0
19.28	3.45	57.07	375.85	173.44	3.52	18.5	354.5	181.06	226.33	0.0	20.0	0.0
19.3	3.8	47.81	316.46	173.64	3.86	18.5	354.87	181.23	0.0	31.98	20.0	24.09
19.32	3.66	42.85	289.53	173.83	3.72	18.5	355.24	181.41	0.0	31.78	20.0	23.58
19.34	3.41	42.36	292.05	174.03	3.47	18.5	355.61	181.58	222.51	0.0	20.0	0.0
19.36	3.59	42.11	264.73	174.23	3.64	18.5	355.98	181.75	0.0	31.65	20.0	23.25
19.38	3.97	42.72	249.25	174.42	4.02	18.5	356.35	181.93	0.0	32.23	20.0	24.71
19.4	3.79	53.25	212.84	174.62	3.83	18.5	356.72	182.1	248.06	0.0	20.0	0.0
19.42	3.48	48.7	203.36	174.81	3.52	18.5	357.09	182.28	225.97	0.0	20.0	0.0
19.44	3.27	51.24	206.68	175.01	3.31	18.5	357.46	182.45	211.11	0.0	20.0	0.0
19.46	3.02	50.62	206.6	175.21	3.06	18.0	357.82	182.61	192.83	0.0	20.0	0.0
19.48	3.01	47.67	206.44	175.4	3.05	18.0	358.18	182.78	192.18	0.0	20.0	0.0
19.5	2.95	56.35	179.43	175.6	2.99	18.0	358.54	182.94	187.66	0.0	20.0	0.0
19.52	2.7	64.34	168.06	175.8	2.73	18.0	358.9	183.1	169.64	0.0	20.0	0.0
19.54	2.75	71.46	146.11	175.99	2.78	18.0	359.26	183.27	172.57	0.0	20.0	0.0
19.56	2.95	64.13	139.55	176.19	2.97	18.0	359.62	183.43	186.71	0.0	20.0	0.0
19.58	2.64	55.73	150.45	176.38	2.67	18.0	359.98	183.6	164.91	0.0	20.0	0.0
19.6	2.19	48.32	149.9	176.58	2.22	18.0	360.34	183.76	132.5	0.0	20.0	0.0
19.62	1.82	51.02	148.71	176.78	1.85	18.0	360.7	183.92	106.69	0.0	20.0	0.0
19.64	1.67	62.98	146.26	176.97	1.7	18.0	361.06	184.09	95.81	0.0	20.0	0.0
19.66	2.04	72.81	193.73	177.17	2.08	18.0	361.42	184.25	122.41	0.0	20.0	0.0
19.68	2.04	72.81	210.95	177.36	2.08	18.0	361.78	184.42	122.63	0.0	20.0	0.0
19.7	2.47	52.66	190.57	177.56	2.5	18.0	362.14	184.58	153.06	0.0	20.0	0.0
19.72	2.27	45.21	172.17	177.76	2.3	18.0	362.5	184.74	138.54	0.0	20.0	0.0
19.74	1.87	41.69	180.38	177.95	1.91	18.0	362.86	184.91	110.41	0.0	20.0	0.0
19.76	1.71	47.01	178.57	178.15	1.74	18.0	363.22	185.07	98.61	0.0	20.0	0.0
19.78	1.52	51.52	165.85	178.35	1.55	18.0	363.58	185.23	84.98	0.0	20.0	0.0
19.8	1.42	55.9	229.51	178.54	1.47	18.0	363.94	185.4	78.66	0.0	20.0	0.0
19.82	1.66	51.11	237.32	178.74	1.71	18.0	364.3	185.56	95.89	0.0	20.0	0.0
19.84	1.96	54.91	247.59	178.93	2.01	18.0	364.66	185.73	117.84	0.0	20.0	0.0
19.86	3.17	58.07	240.56	179.13	3.22	18.0	365.02	185.89	204.04	0.0	20.0	0.0
19.88	3.83	51.23	226.11	179.33	3.88	18.5	365.39	186.06	250.93	0.0	20.0	0.0
19.9	3.83	46.02	211.42	179.52	3.87	18.5	365.76	186.24	0.0	31.85	20.0	23.75
19.92	3.84	39.59	209.29	179.72	3.88	18.5	366.13	186.41	0.0	31.9	20.0	23.87
19.94	4.01	38.24	213.47	179.92	4.05	18.5	366.5	186.58	0.0	32.15	20.0	24.52

19.96	4.03	42.42	216.24	180.11	4.07	18.5	366.87	186.76	0.0	32.16	20.0	24.53
19.98	3.88	47.09	210.79	180.31	3.92	18.5	367.24	186.93	0.0	31.9	20.0	23.87
20.0	3.83	48.6	203.29	180.5	3.87	18.5	367.61	187.11	250.34	0.0	20.0	0.0
20.02	4.02	54.99	198.47	180.7	4.06	18.5	367.98	187.28	263.98	0.0	20.0	0.0
20.04	4.58	63.63	170.12	180.9	4.62	18.5	368.35	187.45	0.0	32.78	20.0	26.18
20.06	4.85	70.02	171.06	181.09	4.88	18.5	368.72	187.63	0.0	33.08	20.0	27.0
20.08	4.62	69.73	160.95	181.29	4.65	18.5	369.09	187.8	0.0	32.78	20.0	26.19
20.1	4.28	65.68	158.98	181.48	4.31	18.5	369.46	187.98	281.27	0.0	20.0	0.0
20.12	3.38	48.27	151.71	181.68	3.41	18.5	369.83	188.15	216.89	0.0	20.0	0.0
20.14	2.77	46.88	149.82	181.88	2.8	18.0	370.19	188.31	173.73	0.0	20.0	0.0
20.16	2.36	52.32	149.34	182.07	2.39	18.0	370.55	188.48	143.95	0.0	20.0	0.0
20.18	1.87	62.69	146.98	182.27	1.9	18.0	370.91	188.64	109.3	0.0	20.0	0.0
20.2	1.57	73.33	146.5	182.47	1.6	17.5	371.26	188.79	87.8	0.0	20.0	0.0
20.22	1.57	91.56	190.49	182.66	1.61	17.5	371.61	188.95	88.63	0.0	20.0	0.0
20.24	1.67	85.29	209.05	182.86	1.71	17.5	371.96	189.1	95.87	0.0	20.0	0.0
20.26	1.62	76.32	193.97	183.05	1.66	17.5	372.31	189.26	91.83	0.0	20.0	0.0
20.28	1.53	78.89	221.37	183.25	1.57	17.5	372.66	189.41	85.63	0.0	20.0	0.0
20.3	1.52	70.42	207.63	183.45	1.56	17.5	373.01	189.56	84.83	0.0	20.0	0.0
20.32	2.48	73.32	252.72	183.64	2.53	18.0	373.37	189.73	154.25	0.0	20.0	0.0
20.34	3.32	61.11	245.06	183.84	3.37	18.0	373.73	189.89	214.15	0.0	20.0	0.0
20.36	2.69	50.83	219.79	184.04	2.73	18.0	374.09	190.05	168.54	0.0	20.0	0.0
20.38	2.14	44.93	203.6	184.23	2.18	18.0	374.45	190.22	128.81	0.0	20.0	0.0

Tabella 2 - Dati output

Prof.(m)	Rf (%)	FR (%)	Qt1	Qtn	IC	Es (MPa)	M (MPa)	G0 (MPa)	OCR	K0	KSBT
0.02	3.08	3.08	444.0	93.47	2.27	1.99	2.18	2.49	0.0	0.0	1.10E-06
0.04	2.9	2.91	262.96	70.19	2.34	2.56	2.58	3.21	0.0	0.0	6.91E-07
0.06	3.29	3.31	167.38	61.18	2.42	2.71	2.46	3.39	55.23	3.39	3.92E-07
0.08	3.76	3.79	127.98	53.55	2.5	3.06	2.51	3.84	42.23	2.65	2.19E-07
0.1	4.0	4.04	107.74	50.5	2.54	3.38	2.64	4.24	35.55	2.27	1.69E-07
0.12	3.4	3.44	104.37	48.13	2.51	3.76	3.07	4.71	34.44	2.2	2.16E-07
0.14	1.56	1.58	96.32	38.62	2.36	3.35	3.3	4.2	0.0	0.0	6.10E-07
0.16	1.2	1.21	93.14	36.31	2.31	3.5	3.65	4.38	0.0	0.0	8.41E-07
0.18	1.22	1.23	94.94	36.47	2.31	4.03	4.19	5.05	0.0	0.0	8.23E-07
0.2	1.95	1.97	81.32	37.62	2.43	4.41	3.98	5.53	0.0	0.0	3.79E-07
0.22	2.28	2.31	78.22	39.87	2.45	4.81	4.22	6.03	0.0	0.0	3.19E-07
0.24	3.01	3.05	72.92	40.9	2.52	5.36	4.29	6.71	24.06	1.59	1.94E-07
0.26	3.13	3.17	75.7	42.86	2.52	6.0	4.82	7.52	24.98	1.64	1.98E-07
0.28	2.84	2.88	88.03	47.19	2.46	6.97	6.04	8.73	29.05	1.89	3.01E-07
0.3	2.69	2.72	106.56	54.12	2.4	8.37	7.83	10.49	0.0	0.0	4.59E-07
0.32	2.73	2.75	112.82	57.24	2.38	9.31	8.86	11.67	0.0	0.0	5.05E-07
0.34	2.93	2.95	120.56	61.84	2.38	10.56	10.08	13.23	0.0	0.0	5.13E-07
0.36	3.1	3.13	130.72	65.53	2.38	12.12	11.57	15.19	0.0	0.0	5.12E-07
0.38	3.38	3.41	139.78	71.41	2.38	13.71	13.05	17.18	0.0	0.0	5.06E-07
0.4	3.84	3.86	143.06	76.02	2.41	15.18	14.06	19.03	47.21	2.94	4.34E-07
0.42	4.17	4.2	146.47	79.99	2.42	16.59	15.11	20.79	48.34	3.0	3.97E-07
0.44	3.98	4.0	160.7	85.77	2.38	18.23	17.37	22.85	53.03	3.27	5.07E-07
0.46	3.52	3.54	190.57	95.88	2.31	20.64	21.56	25.87	0.0	0.0	8.43E-07
0.48	2.96	2.97	223.23	104.98	2.23	22.74	26.38	28.5	0.0	0.0	1.51E-06
0.5	2.44	2.45	242.13	107.79	2.16	23.51	29.46	29.46	0.0	0.0	2.48E-06
0.52	2.02	2.03	249.21	106.55	2.1	23.44	29.37	29.37	0.0	0.0	3.68E-06
0.54	1.69	1.7	246.96	102.67	2.06	22.82	28.6	28.6	0.0	0.0	5.03E-06
0.56	1.41	1.42	241.74	100.5	2.01	21.82	27.35	27.35	0.0	0.0	7.02E-06
0.58	1.15	1.15	234.62	95.37	1.97	20.79	26.05	26.05	0.0	0.0	9.48E-06
0.6	0.93	0.94	228.87	91.14	1.92	19.93	24.98	24.98	0.0	0.0	1.27E-05
0.62	0.86	0.86	226.71	90.22	1.91	19.97	25.03	25.03	0.0	0.0	1.44E-05
0.64	0.88	0.88	226.23	91.34	1.91	20.64	25.86	25.86	0.0	0.0	1.43E-05
0.66	0.9	0.91	226.91	92.91	1.91	21.41	26.83	26.83	0.0	0.0	1.41E-05
0.68	0.96	0.96	226.05	94.48	1.92	22.27	27.92	27.92	0.0	0.0	1.32E-05
0.7	0.99	0.99	225.46	93.86	1.93	23.24	29.12	29.12	0.0	0.0	1.22E-05
0.72	1.04	1.04	224.69	95.47	1.94	24.08	30.18	30.18	0.0	0.0	1.15E-05
0.74	1.05	1.06	219.58	94.93	1.94	24.39	30.56	30.56	0.0	0.0	1.11E-05
0.76	1.07	1.08	220.57	96.55	1.94	25.17	31.55	31.55	0.0	0.0	1.11E-05
0.78	1.09	1.09	217.35	96.55	1.95	25.58	32.07	32.07	0.0	0.0	1.08E-05
0.8	1.11	1.12	212.49	96.08	1.95	25.93	32.5	32.5	0.0	0.0	1.03E-05
0.82	1.1	1.11	208.57	95.36	1.95	26.11	32.72	32.72	0.0	0.0	1.03E-05
0.84	1.11	1.12	202.43	94.13	1.96	26.25	32.9	32.9	0.0	0.0	9.71E-06
0.86	1.35	1.36	178.42	88.57	2.04	26.03	32.63	32.63	0.0	0.0	5.76E-06
0.88	1.07	1.08	186.91	89.19	1.97	25.66	32.17	32.17	0.0	0.0	9.19E-06
0.9	1.04	1.05	180.36	86.9	1.97	25.34	31.76	31.76	0.0	0.0	9.19E-06
0.92	1.03	1.04	174.72	85.23	1.97	25.24	31.63	31.63	0.0	0.0	8.95E-06
0.94	1.05	1.06	166.26	82.8	1.99	25.06	31.41	31.41	0.0	0.0	7.99E-06
0.96	1.08	1.09	160.27	81.31	2.0	25.12	31.48	31.48	0.0	0.0	7.26E-06
0.98	1.07	1.07	156.01	79.93	2.01	25.03	31.37	31.37	0.0	0.0	7.18E-06
1.0	1.03	1.04	153.66	79.13	2.0	25.01	31.35	31.35	0.0	0.0	7.43E-06
1.02	0.99	1.0	153.38	79.06	1.99	25.12	31.48	31.48	0.0	0.0	8.03E-06
1.04	0.98	0.99	150.47	78.29	1.99	25.19	31.57	31.57	0.0	0.0	7.94E-06
1.06	0.85	0.86	156.4	79.72	1.95	25.26	31.66	31.66	0.0	0.0	1.08E-05
1.08	0.8	0.81	158.63	80.54	1.93	25.49	31.95	31.95	0.0	0.0	1.23E-05
1.1	0.77	0.78	160.65	81.54	1.91	25.86	32.41	32.41	0.0	0.0	1.36E-05
1.12	0.74	0.75	162.6	82.47	1.9	26.18	32.82	32.82	0.0	0.0	1.50E-05
1.14	0.73	0.73	164.73	83.68	1.89	26.64	33.39	33.39	0.0	0.0	1.62E-05
1.16	0.72	0.73	165.18	84.39	1.89	27.06	33.91	33.91	0.0	0.0	1.66E-05
1.18	0.72	0.73	165.48	85.06	1.88	27.47	34.43	34.43	0.0	0.0	1.70E-05
1.2	0.71	0.72	166.86	86.07	1.87	27.92	35.0	35.0	0.0	0.0	1.79E-05
1.22	0.7	0.71	169.73	87.73	1.86	28.53	35.76	35.76	0.0	0.0	1.92E-05
1.24	0.69	0.7	173.9	89.89	1.85	29.23	36.64	36.64	0.0	0.0	2.10E-05
1.26	0.69	0.69	174.16	90.55	1.85	29.63	37.14	37.14	0.0	0.0	2.15E-05
1.28	0.7	0.7	173.75	91.05	1.85	30.06	37.68	37.68	0.0	0.0	2.14E-05
1.3	0.7	0.7	173.02	91.29	1.85	30.38	38.07	38.07	0.0	0.0	2.16E-05
1.32	0.68	0.68	173.95	91.97	1.84	30.66	38.42	38.42	0.0	0.0	2.30E-05
1.34	0.68	0.69	173.98	92.63	1.84	31.12	39.01	39.01	0.0	0.0	2.31E-05
1.36	0.69	0.69	175.28	93.81	1.83	31.69	39.72	39.72	0.0	0.0	2.37E-05
1.38	0.69	0.69	175.61	94.51	1.83	32.11	40.25	40.25	0.0	0.0	2.41E-05
1.4	0.67	0.67	178.73	96.23	1.82	32.66	40.93	40.93	0.0	0.0	2.64E-05

1.42	0.65	0.65	182.66	98.24	1.8	33.22	41.63	41.63	0.0	0.0	2.94E-05
1.44	0.63	0.64	187.67	100.82	1.79	33.95	42.55	42.55	0.0	0.0	3.28E-05
1.46	0.62	0.63	189.21	101.98	1.78	34.41	43.12	43.12	0.0	0.0	3.45E-05
1.48	0.63	0.63	189.64	102.81	1.78	34.88	43.72	43.72	0.0	0.0	3.50E-05
1.5	0.62	0.62	191.02	103.88	1.77	35.3	44.24	44.24	0.0	0.0	3.69E-05
1.52	0.62	0.63	193.29	105.66	1.77	36.06	45.19	45.19	0.0	0.0	3.78E-05
1.54	0.62	0.62	198.29	108.44	1.76	36.9	46.25	46.25	0.0	0.0	4.13E-05
1.56	0.59	0.6	204.17	111.38	1.74	37.61	47.14	47.14	0.0	0.0	4.71E-05
1.58	0.58	0.58	209.07	114.06	1.72	38.35	48.06	48.06	0.0	0.0	5.19E-05
1.6	0.58	0.58	211.35	115.81	1.72	39.04	48.93	48.93	0.0	0.0	5.36E-05
1.62	0.58	0.58	216.5	118.41	1.71	39.7	49.76	49.76	0.0	0.0	5.78E-05
1.64	0.57	0.58	220.96	120.77	1.7	40.35	50.58	50.58	0.0	0.0	6.12E-05
1.66	0.57	0.58	227.04	123.96	1.69	41.24	51.68	51.68	0.0	0.0	6.53E-05
1.68	0.56	0.56	234.17	127.39	1.68	42.01	52.66	52.66	0.0	0.0	7.23E-05
1.7	0.55	0.55	241.12	130.77	1.66	42.79	53.63	53.63	0.0	0.0	7.94E-05
1.72	0.55	0.56	244.71	132.85	1.66	43.41	54.41	54.41	0.0	0.0	8.23E-05
1.74	0.57	0.57	242.12	132.33	1.66	43.63	54.68	54.68	0.0	0.0	7.80E-05
1.76	0.59	0.59	240.58	132.51	1.67	44.16	55.35	55.35	0.0	0.0	7.28E-05
1.78	0.6	0.61	240.67	133.22	1.68	44.67	55.99	55.99	0.0	0.0	7.08E-05
1.8	0.62	0.62	243.44	135.2	1.68	45.48	57.0	57.0	0.0	0.0	7.06E-05
1.82	0.62	0.62	249.58	138.54	1.67	46.42	58.18	58.18	0.0	0.0	7.47E-05
1.84	0.6	0.6	257.72	142.43	1.65	47.21	59.17	59.17	0.0	0.0	8.40E-05
1.86	0.62	0.62	258.94	143.87	1.66	48.01	60.18	60.18	0.0	0.0	8.11E-05
1.88	0.56	0.56	270.58	148.34	1.62	48.16	60.36	60.36	0.0	0.0	1.05E-04
1.9	0.56	0.56	270.05	148.47	1.62	48.3	60.53	60.53	0.0	0.0	1.06E-04
1.92	0.6	0.6	266.39	148.14	1.64	49.08	61.51	61.51	0.0	0.0	9.25E-05
1.94	0.66	0.66	262.44	148.06	1.67	50.23	62.96	62.96	0.0	0.0	7.73E-05
1.96	0.69	0.69	261.1	148.35	1.68	50.86	63.74	63.74	0.0	0.0	7.24E-05
1.98	0.71	0.71	260.17	148.8	1.68	51.51	64.56	64.56	0.0	0.0	6.82E-05
2.0	0.7	0.7	265.98	151.92	1.67	52.29	65.54	65.54	0.0	0.0	7.32E-05
2.02	0.7	0.7	265.82	152.15	1.67	52.44	65.72	65.72	0.0	0.0	7.40E-05
2.04	0.75	0.76	256.42	148.94	1.7	52.67	66.01	66.01	0.0	0.0	6.11E-05
2.06	0.79	0.79	248.22	145.84	1.72	52.61	65.94	65.94	0.0	0.0	5.29E-05
2.08	0.79	0.79	246.93	145.56	1.72	52.71	66.06	66.06	0.0	0.0	5.25E-05
2.1	0.77	0.78	246.66	145.44	1.72	52.54	65.85	65.85	0.0	0.0	5.47E-05
2.12	0.79	0.79	240.56	144.41	1.72	51.98	65.15	65.15	0.0	0.0	5.21E-05
2.14	0.86	0.87	226.21	138.4	1.76	51.77	64.89	64.89	0.0	0.0	3.90E-05
2.16	0.91	0.91	217.78	134.8	1.79	51.59	64.66	64.66	0.0	0.0	3.32E-05
2.18	0.87	0.88	215.39	133.22	1.78	50.77	63.63	63.63	0.0	0.0	3.52E-05
2.2	0.82	0.83	215.59	132.85	1.76	50.08	62.76	62.76	0.0	0.0	3.93E-05
2.22	0.79	0.79	214.36	131.95	1.75	49.49	62.03	62.03	0.0	0.0	4.19E-05
2.24	0.78	0.78	210.31	129.86	1.75	48.9	61.29	61.29	0.0	0.0	4.14E-05
2.26	0.76	0.76	209.27	129.24	1.75	48.56	60.86	60.86	0.0	0.0	4.31E-05
2.28	0.7	0.7	210.59	129.32	1.73	47.82	59.94	59.94	0.0	0.0	5.00E-05
2.3	0.63	0.64	215.7	129.8	1.7	47.52	59.56	59.56	0.0	0.0	6.08E-05
2.32	0.6	0.61	221.26	132.42	1.68	47.76	59.86	59.86	0.0	0.0	7.01E-05
2.34	0.57	0.57	227.7	135.44	1.66	48.03	60.2	60.2	0.0	0.0	8.19E-05
2.36	0.55	0.56	230.04	136.66	1.65	48.16	60.36	60.36	0.0	0.0	8.78E-05
2.38	0.53	0.53	231.94	137.46	1.63	48.02	60.18	60.18	0.0	0.0	9.61E-05
2.4	0.58	0.58	228.69	137.04	1.66	48.88	61.26	61.26	0.0	0.0	8.28E-05
2.42	0.64	0.64	222.51	136.63	1.68	49.52	62.06	62.06	0.0	0.0	6.81E-05
2.44	0.71	0.71	218.44	135.93	1.71	50.73	63.59	63.59	0.0	0.0	5.53E-05
2.46	0.77	0.78	216.37	136.13	1.74	52.04	65.23	65.23	0.0	0.0	4.68E-05
2.48	0.78	0.78	222.15	139.68	1.73	53.18	66.66	66.66	0.0	0.0	4.94E-05
2.5	0.71	0.71	234.95	145.89	1.69	53.72	67.33	67.33	0.0	0.0	6.54E-05
2.52	0.64	0.65	248.79	152.52	1.65	54.25	67.99	67.99	0.0	0.0	8.73E-05
2.54	0.6	0.61	253.88	154.78	1.63	54.09	67.79	67.79	0.0	0.0	1.02E-04
2.56	0.6	0.6	255.58	155.9	1.62	54.35	68.12	68.12	0.0	0.0	1.06E-04
2.58	0.59	0.59	256.58	156.59	1.61	54.44	68.23	68.23	0.0	0.0	1.11E-04
2.6	0.6	0.6	253.78	155.7	1.62	54.65	68.49	68.49	0.0	0.0	1.05E-04
2.62	0.65	0.65	246.57	153.15	1.65	55.26	69.27	69.27	0.0	0.0	8.62E-05
2.64	0.72	0.72	241.84	152.08	1.68	56.48	70.78	70.78	0.0	0.0	7.06E-05
2.66	0.77	0.78	237.03	150.68	1.7	57.35	71.88	71.88	0.0	0.0	5.95E-05
2.68	0.82	0.82	230.86	148.22	1.72	57.69	72.3	72.3	0.0	0.0	5.11E-05
2.7	0.83	0.84	225.28	145.57	1.74	57.43	71.97	71.97	0.0	0.0	4.70E-05
2.72	0.87	0.87	219.55	143.0	1.75	57.41	71.95	71.95	0.0	0.0	4.19E-05
2.74	0.87	0.88	213.88	140.06	1.76	56.85	71.26	71.26	0.0	0.0	3.92E-05
2.76	0.87	0.87	210.14	138.04	1.77	56.3	70.57	70.57	0.0	0.0	3.85E-05
2.78	0.85	0.86	205.08	135.12	1.77	55.37	69.4	69.4	0.0	0.0	3.79E-05
2.8	0.83	0.84	201.1	132.75	1.77	54.49	68.3	68.3	0.0	0.0	3.81E-05
2.82	0.81	0.82	197.66	130.69	1.77	53.7	67.3	67.3	0.0	0.0	3.85E-05
2.84	0.68	0.68	196.56	128.34	1.72	50.75	63.6	63.6	0.0	0.0	5.23E-05
2.86	0.77	0.78	188.37	125.08	1.77	51.64	64.72	64.72	0.0	0.0	3.85E-05



2.88	0.75	0.75	184.84	122.91	1.76	50.76	63.62	63.62	0.0	0.0	3.91E-05
2.9	0.75	0.75	180.97	120.84	1.77	50.32	63.06	63.06	0.0	0.0	3.74E-05
2.92	0.75	0.76	178.14	119.42	1.78	50.11	62.8	62.8	0.0	0.0	3.60E-05
2.94	0.8	0.8	169.45	114.91	1.8	49.65	62.23	62.23	0.0	0.0	2.94E-05
2.96	0.8	0.81	163.76	111.71	1.82	48.93	61.32	61.32	0.0	0.0	2.71E-05
2.98	0.82	0.83	156.57	107.63	1.83	48.03	60.2	60.2	0.0	0.0	2.40E-05
3.0	0.83	0.84	151.04	104.53	1.85	47.39	59.4	59.4	0.0	0.0	2.17E-05
3.02	0.84	0.84	145.57	101.33	1.86	46.58	58.38	58.38	0.0	0.0	1.99E-05
3.04	0.83	0.84	140.87	98.51	1.87	45.76	57.35	57.35	0.0	0.0	1.88E-05
3.06	0.82	0.82	135.43	95.11	1.88	44.6	55.9	55.9	0.0	0.0	1.78E-05
3.08	0.79	0.8	130.82	92.11	1.88	43.38	54.37	54.37	0.0	0.0	1.76E-05
3.1	0.77	0.78	126.26	89.2	1.88	42.3	53.02	53.02	0.0	0.0	1.70E-05
3.12	0.75	0.76	122.16	86.57	1.89	41.3	51.77	51.77	0.0	0.0	1.65E-05
3.14	0.74	0.75	117.08	83.42	1.9	40.33	50.55	50.55	0.0	0.0	1.53E-05
3.16	0.73	0.74	113.83	81.37	1.9	39.63	49.67	49.67	0.0	0.0	1.48E-05
3.18	0.72	0.72	110.13	79.0	1.91	38.76	48.58	48.58	0.0	0.0	1.42E-05
3.2	0.72	0.73	106.06	76.5	1.92	38.06	47.71	47.71	0.0	0.0	1.31E-05
3.22	0.7	0.71	105.96	76.43	1.91	37.94	47.55	47.55	0.0	0.0	1.35E-05
3.24	0.71	0.72	100.21	72.85	1.93	36.95	46.31	46.31	0.0	0.0	1.18E-05
3.26	0.68	0.69	99.12	72.05	1.93	36.43	45.66	45.66	0.0	0.0	1.22E-05
3.28	0.67	0.68	99.03	72.01	1.93	36.36	45.58	45.58	0.0	0.0	1.26E-05
3.3	0.65	0.66	99.21	72.09	1.92	36.21	45.39	45.39	0.0	0.0	1.33E-05
3.32	0.63	0.64	100.43	72.88	1.91	36.35	45.56	45.56	0.0	0.0	1.42E-05
3.34	0.59	0.6	106.76	76.8	1.87	37.17	46.58	46.58	0.0	0.0	1.81E-05
3.36	0.48	0.49	125.26	87.68	1.78	38.72	48.53	48.53	0.0	0.0	3.56E-05
3.38	0.36	0.36	152.47	103.07	1.65	40.5	50.76	50.76	0.0	0.0	8.42E-05
3.4	0.33	0.33	170.51	113.5	1.59	42.21	52.91	52.91	0.0	0.0	1.27E-04
3.42	0.33	0.33	181.56	120.35	1.57	43.95	55.08	55.08	0.0	0.0	1.47E-04
3.44	0.32	0.33	182.48	121.05	1.57	44.08	55.24	55.24	0.0	0.0	1.53E-04
3.46	0.35	0.35	192.46	127.73	1.56	46.37	58.11	58.11	0.0	0.0	1.58E-04
3.48	0.42	0.42	192.22	129.2	1.6	48.73	61.08	61.08	0.0	0.0	1.22E-04
3.5	0.52	0.52	190.64	130.13	1.65	51.52	64.57	64.57	0.0	0.0	8.78E-05
3.52	0.61	0.61	189.24	130.85	1.69	53.9	67.55	67.55	0.0	0.0	6.71E-05
3.54	0.64	0.65	189.12	131.52	1.7	55.02	68.96	68.96	0.0	0.0	6.10E-05
3.56	0.69	0.7	188.61	132.08	1.72	56.35	70.62	70.62	0.0	0.0	5.38E-05
3.58	0.73	0.73	186.29	131.28	1.73	57.0	71.44	71.44	0.0	0.0	4.82E-05
3.6	0.76	0.76	181.21	128.6	1.75	56.98	71.42	71.42	0.0	0.0	4.23E-05
3.62	0.78	0.79	174.31	124.58	1.77	56.33	70.61	70.61	0.0	0.0	3.72E-05
3.64	0.8	0.81	168.55	121.24	1.79	55.83	69.98	69.98	0.0	0.0	3.31E-05
3.66	0.85	0.85	160.67	116.67	1.81	55.34	69.36	69.36	0.0	0.0	2.73E-05
3.68	0.88	0.89	152.59	111.77	1.84	54.49	68.29	68.29	0.0	0.0	2.28E-05
3.7	0.94	0.95	143.11	106.04	1.88	53.65	67.24	67.24	0.0	0.0	1.78E-05
3.72	0.98	0.99	132.37	99.17	1.91	52.01	65.19	65.19	0.0	0.0	1.40E-05
3.74	1.02	1.04	120.25	91.24	1.95	49.94	62.6	62.6	0.0	0.0	1.05E-05
3.76	1.05	1.06	111.77	85.6	1.98	48.33	60.58	60.58	0.0	0.0	8.58E-06
3.78	1.06	1.08	104.4	80.58	2.0	46.68	58.5	58.5	0.0	0.0	7.28E-06
3.8	1.09	1.11	94.87	74.04	2.04	44.56	55.85	55.85	0.0	0.0	5.65E-06
3.82	1.12	1.14	86.97	68.61	2.07	42.84	53.69	53.69	0.0	0.0	4.43E-06
3.84	1.53	1.56	74.14	60.57	2.2	43.02	51.68	53.92	0.0	0.0	1.83E-06
3.86	1.41	1.43	71.37	58.23	2.19	41.07	51.47	51.47	0.0	0.0	1.95E-06
3.88	1.31	1.34	69.46	56.58	2.18	39.61	49.65	49.65	0.0	0.0	2.09E-06
3.9	1.27	1.29	71.85	58.3	2.16	40.15	50.32	50.32	0.0	0.0	2.38E-06
3.92	1.14	1.16	78.14	62.59	2.11	40.95	51.32	51.32	0.0	0.0	3.46E-06
3.94	1.18	1.2	79.15	63.53	2.11	41.83	52.43	52.43	0.0	0.0	3.37E-06
3.96	1.17	1.19	81.87	65.59	2.1	42.77	53.6	53.6	0.0	0.0	3.66E-06
3.98	1.13	1.15	83.93	67.02	2.08	43.06	53.97	53.97	0.0	0.0	4.12E-06
4.0	1.13	1.15	84.54	67.51	2.08	43.31	54.28	54.28	0.0	0.0	4.23E-06
4.02	1.18	1.2	80.13	64.52	2.11	42.64	53.45	53.45	0.0	0.0	3.49E-06
4.04	1.22	1.25	75.81	61.52	2.13	41.87	52.47	52.47	0.0	0.0	2.90E-06
4.06	1.25	1.27	72.62	59.27	2.15	41.17	51.59	51.59	0.0	0.0	2.56E-06
4.08	1.08	1.11	72.26	58.56	2.12	39.45	49.44	49.44	0.0	0.0	3.21E-06
4.1	1.04	1.06	72.26	58.48	2.11	39.06	48.95	48.95	0.0	0.0	3.46E-06
4.12	1.03	1.05	71.97	58.28	2.11	38.96	48.83	48.83	0.0	0.0	3.49E-06
4.14	1.03	1.05	71.72	58.16	2.11	39.0	48.88	48.88	0.0	0.0	3.47E-06
4.16	0.92	0.94	67.12	54.42	2.1	36.37	45.59	45.59	0.0	0.0	3.60E-06
4.18	1.04	1.07	57.87	47.88	2.18	34.73	43.52	43.52	0.0	0.0	2.09E-06
4.2	1.29	1.34	46.49	39.68	2.31	32.71	34.43	41.0	0.0	0.0	8.81E-07
4.22	1.66	1.73	36.74	32.45	2.44	30.83	27.3	38.64	0.0	0.0	3.38E-07
4.24	2.68	2.84	24.62	22.98	2.69	0.0	18.34	35.65	8.12	0.59	5.87E-08
4.26	3.78	4.09	18.34	17.98	2.87	0.0	13.71	33.57	6.05	0.45	1.63E-08
4.28	6.29	7.07	12.06	12.7	3.14	0.0	8.2	31.14	3.98	0.31	2.49E-09
4.3	12.37	14.98	7.07	8.09	3.51	0.0	3.07	29.02	0.0	0.0	4.73E-10
4.32	12.49	15.38	6.48	7.46	3.54	0.0	2.6	27.81	0.0	0.0	4.26E-10

4.34	10.39	12.8	6.47	7.36	3.49	0.0	2.57	26.16	0.0	0.0	4.97E-10
4.36	9.69	12.2	5.78	6.61	3.51	0.0	2.07	24.09	1.91	0.97	4.65E-10
4.38	9.25	12.15	4.79	5.54	3.57	0.0	1.44	21.5	1.58	1.18	3.88E-10
4.4	7.24	9.45	4.93	5.61	3.5	0.0	1.5	20.2	1.63	0.73	4.90E-10
4.42	4.9	6.34	5.14	5.69	3.38	0.0	1.6	18.33	1.7	0.72	6.97E-10
4.44	3.44	4.5	4.89	5.33	3.32	0.0	1.42	16.14	1.61	0.97	8.50E-10
4.46	2.08	2.77	4.57	4.89	3.24	0.0	1.23	13.64	1.51	0.72	1.27E-09
4.48	1.46	1.85	5.71	5.91	3.08	0.0	1.86	13.98	1.89	0.49	3.86E-09
4.5	1.06	1.3	6.86	6.87	2.95	0.0	2.6	14.29	2.26	0.94	9.54E-09
4.52	0.82	0.98	7.93	7.74	2.85	0.0	3.4	14.6	2.62	0.78	1.93E-08
4.54	0.64	0.74	10.13	9.56	2.72	0.0	5.37	15.76	3.34	0.15	4.94E-08
4.56	0.82	0.93	11.15	10.54	2.72	0.0	6.53	17.5	3.68	0.07	4.79E-08
4.58	0.95	1.07	11.91	11.26	2.72	0.0	7.48	18.76	3.93	0.3	4.77E-08
4.6	2.01	2.27	11.89	11.68	2.87	0.0	7.76	22.76	3.92	0.58	1.65E-08
4.62	2.0	2.18	16.77	15.99	2.75	0.0	13.17	27.57	5.54	0.42	3.89E-08
4.64	2.04	2.2	18.51	17.53	2.72	0.0	14.58	29.37	6.11	0.45	4.81E-08
4.66	2.19	2.35	20.84	19.63	2.7	0.0	16.46	32.18	6.88	0.51	5.68E-08
4.68	2.53	2.75	17.57	16.92	2.79	0.0	13.91	30.58	5.8	0.43	2.97E-08
4.7	2.8	3.07	16.24	15.84	2.84	0.0	12.9	30.25	5.36	0.4	2.08E-08
4.72	2.8	3.04	17.99	17.4	2.81	0.0	14.33	32.14	5.94	0.44	2.66E-08
4.74	2.41	2.59	21.13	20.01	2.71	0.0	16.88	33.77	6.97	0.51	5.00E-08
4.76	2.43	2.62	20.74	19.69	2.72	0.0	16.62	33.6	6.84	0.5	4.72E-08
4.78	2.35	2.55	18.07	17.31	2.76	0.0	14.52	30.8	5.96	0.44	3.61E-08
4.8	2.5	2.75	15.28	14.89	2.83	0.0	12.31	28.63	5.04	0.38	2.18E-08
4.82	2.45	2.73	13.83	13.58	2.86	0.0	10.84	27.01	4.56	0.35	1.76E-08
4.84	2.36	2.6	15.4	14.96	2.82	0.0	12.48	28.43	5.08	0.38	2.44E-08
4.86	2.68	2.97	14.32	14.09	2.87	0.0	11.64	28.42	4.73	0.36	1.66E-08
4.88	3.0	3.34	13.94	13.83	2.91	0.0	11.22	29.07	4.6	0.35	1.28E-08
4.9	3.44	3.79	15.25	15.15	2.91	0.0	12.46	31.99	5.03	0.38	1.26E-08
4.92	2.69	2.95	15.95	15.57	2.84	0.0	13.07	30.49	5.26	0.4	2.14E-08
4.94	2.37	2.56	19.55	18.66	2.74	0.0	16.06	33.0	6.45	0.48	4.32E-08
4.96	1.28	1.34	34.74	31.03	2.39	30.4	28.62	38.1	0.0	0.0	4.76E-07
4.98	1.08	1.13	37.31	32.92	2.33	30.24	30.82	37.9	0.0	0.0	7.37E-07
5.0	1.22	1.29	27.31	24.78	2.47	26.34	22.62	33.02	0.0	0.0	2.86E-07
5.02	1.37	1.48	19.93	18.61	2.6	0.0	16.56	28.73	6.58	0.49	1.10E-07
5.04	1.59	1.75	15.86	15.1	2.72	0.0	13.21	26.54	5.23	0.39	4.88E-08
5.06	2.62	2.96	11.84	11.83	2.93	0.0	8.36	26.12	3.91	0.3	1.08E-08
5.08	3.75	4.32	10.33	10.61	3.07	0.0	6.56	27.08	3.41	0.27	4.21E-09
5.1	3.9	4.45	11.15	11.42	3.05	0.0	7.64	28.69	3.68	0.29	4.74E-09
5.12	1.96	2.13	19.07	18.11	2.7	0.0	16.06	31.51	6.29	0.47	5.57E-08
5.14	1.75	1.89	20.25	19.05	2.65	0.0	17.1	31.61	6.68	0.49	7.74E-08
5.16	1.92	2.11	15.93	15.32	2.76	0.0	13.48	28.46	5.26	0.4	3.72E-08
5.18	1.52	1.66	17.09	16.19	2.68	0.0	14.51	27.82	5.64	0.42	6.33E-08
5.2	1.44	1.55	20.49	19.1	2.6	0.0	17.44	30.3	6.76	0.5	1.09E-07
5.22	1.09	1.15	28.6	25.89	2.42	26.9	24.41	33.72	0.0	0.0	3.87E-07
5.24	0.86	0.89	38.4	33.76	2.27	29.75	32.86	37.29	0.0	0.0	1.15E-06
5.26	0.75	0.77	47.45	40.93	2.16	32.32	40.51	40.51	0.0	0.0	2.38E-06
5.28	0.6	0.61	55.48	46.98	2.06	33.3	41.74	41.74	0.0	0.0	4.86E-06
5.3	0.51	0.52	59.96	50.27	2.0	33.51	42.0	42.0	0.0	0.0	7.32E-06
5.32	0.5	0.51	63.62	53.14	1.98	34.51	43.26	43.26	0.0	0.0	8.78E-06
5.34	0.47	0.48	69.57	57.69	1.93	35.77	44.83	44.83	0.0	0.0	1.20E-05
5.36	0.48	0.49	73.96	61.22	1.92	37.34	46.8	46.8	0.0	0.0	1.35E-05
5.38	0.51	0.52	79.54	65.73	1.9	39.54	49.55	49.55	0.0	0.0	1.49E-05
5.4	0.59	0.61	85.3	70.64	1.91	42.8	53.64	53.64	0.0	0.0	1.44E-05
5.42	0.66	0.67	88.33	73.36	1.92	45.02	56.42	56.42	0.0	0.0	1.34E-05
5.44	0.7	0.72	92.0	76.51	1.92	47.05	58.97	58.97	0.0	0.0	1.34E-05
5.46	0.77	0.78	93.84	78.32	1.93	49.0	61.42	61.42	0.0	0.0	1.21E-05
5.48	0.87	0.89	93.68	78.7	1.96	50.96	63.86	63.86	0.0	0.0	9.85E-06
5.5	0.95	0.96	93.24	78.71	1.98	52.23	65.47	65.47	0.0	0.0	8.50E-06
5.52	1.1	1.12	89.96	76.69	2.03	53.86	67.5	67.5	0.0	0.0	5.98E-06
5.54	1.21	1.23	87.39	75.01	2.06	54.72	68.58	68.58	0.0	0.0	4.74E-06
5.56	1.2	1.22	91.87	78.65	2.05	56.27	70.52	70.52	0.0	0.0	5.43E-06
5.58	1.1	1.12	102.32	86.84	1.99	58.52	73.35	73.35	0.0	0.0	8.05E-06
5.6	1.02	1.04	109.99	92.75	1.95	59.71	74.84	74.84	0.0	0.0	1.09E-05
5.62	1.05	1.06	112.96	95.32	1.94	61.35	76.89	76.89	0.0	0.0	1.11E-05
5.64	1.06	1.07	113.5	95.89	1.94	61.84	77.5	77.5	0.0	0.0	1.10E-05
5.66	0.99	1.01	115.65	97.44	1.92	61.36	76.91	76.91	0.0	0.0	1.30E-05
5.68	0.96	0.97	118.71	99.84	1.9	61.79	77.45	77.45	0.0	0.0	1.47E-05
5.7	0.95	0.96	122.2	102.66	1.89	62.75	78.65	78.65	0.0	0.0	1.60E-05
5.72	0.94	0.96	127.83	107.24	1.87	64.53	80.88	80.88	0.0	0.0	1.79E-05
5.74	0.98	0.99	130.28	109.45	1.88	66.12	82.87	82.87	0.0	0.0	1.77E-05
5.76	0.97	0.99	130.37	109.64	1.88	66.29	83.08	83.08	0.0	0.0	1.77E-05
5.78	1.04	1.06	128.77	108.8	1.9	67.51	84.61	84.61	0.0	0.0	1.52E-05

5.8	1.18	1.19	125.63	106.97	1.94	69.5	87.1	87.1	0.0	0.0	1.15E-05
5.82	1.2	1.22	119.72	102.38	1.96	68.16	85.43	85.43	0.0	0.0	9.95E-06
5.84	1.29	1.3	118.39	101.7	1.98	69.5	87.11	87.11	0.0	0.0	8.53E-06
5.86	1.4	1.42	117.02	101.05	2.01	71.25	89.3	89.3	0.0	0.0	7.07E-06
5.88	1.46	1.48	116.87	101.22	2.02	72.51	90.88	90.88	0.0	0.0	6.46E-06
5.9	1.47	1.49	117.84	102.14	2.02	73.23	91.79	91.79	0.0	0.0	6.49E-06
5.92	1.49	1.51	117.06	101.62	2.02	73.32	91.9	91.9	0.0	0.0	6.31E-06
5.94	1.51	1.53	115.62	100.57	2.03	73.25	91.81	91.81	0.0	0.0	6.01E-06
5.96	1.53	1.55	112.75	98.36	2.04	72.77	91.2	91.2	0.0	0.0	5.50E-06
5.98	1.52	1.55	111.76	97.6	2.04	72.4	90.74	90.74	0.0	0.0	5.46E-06
6.0	1.44	1.46	111.64	97.35	2.03	71.07	89.08	89.08	0.0	0.0	6.10E-06
6.02	1.47	1.49	108.65	95.02	2.04	70.57	88.45	88.45	0.0	0.0	5.54E-06
6.04	1.51	1.53	104.92	92.08	2.06	69.81	87.49	87.49	0.0	0.0	4.92E-06
6.06	1.52	1.55	100.48	88.47	2.08	68.41	85.75	85.75	0.0	0.0	4.39E-06
6.08	1.5	1.53	96.38	85.04	2.08	66.52	83.37	83.37	0.0	0.0	4.13E-06
6.1	1.54	1.57	86.76	77.08	2.12	63.19	79.2	79.2	0.0	0.0	3.11E-06
6.12	1.82	1.86	70.14	63.39	2.24	58.99	67.75	73.93	0.0	0.0	1.42E-06
6.14	2.39	2.46	53.48	49.32	2.4	55.39	51.77	69.42	0.0	0.0	4.57E-07
6.16	3.99	4.19	33.86	32.64	2.69	0.0	32.86	63.47	11.17	0.79	6.08E-08
6.18	5.51	5.87	25.23	25.02	2.87	0.0	24.54	59.9	8.33	0.6	1.66E-08
6.2	8.09	8.86	17.25	17.71	3.1	0.0	16.81	55.07	5.69	0.43	3.28E-09
6.22	10.19	11.44	13.45	14.11	3.25	0.0	13.14	51.9	0.0	0.0	1.16E-09
6.24	11.57	13.23	11.55	12.28	3.34	0.0	9.92	49.91	0.0	0.0	8.04E-10
6.26	13.02	15.11	10.25	11.01	3.41	0.0	7.91	48.76	0.0	0.0	6.36E-10
6.28	9.17	10.26	13.87	14.46	3.21	0.0	13.64	51.19	4.58	0.35	1.55E-09
6.3	2.7	2.82	38.99	36.81	2.53	48.69	38.43	61.03	12.87	0.9	1.79E-07
6.32	1.14	1.17	73.81	65.82	2.09	53.0	66.43	66.43	0.0	0.0	3.87E-06
6.34	0.49	0.5	120.52	102.27	1.72	54.32	68.08	68.08	0.0	0.0	5.15E-05
6.36	0.4	0.4	130.3	109.63	1.65	53.69	67.29	67.29	0.0	0.0	8.59E-05
6.38	0.45	0.45	133.89	113.04	1.67	56.45	70.75	70.75	0.0	0.0	7.68E-05
6.4	0.51	0.51	134.95	114.45	1.69	58.79	73.68	73.68	0.0	0.0	6.51E-05
6.42	0.63	0.64	133.97	114.6	1.75	62.74	78.63	78.63	0.0	0.0	4.43E-05
6.44	0.75	0.76	134.2	115.57	1.79	66.49	83.34	83.34	0.0	0.0	3.29E-05
6.46	0.82	0.83	136.48	117.89	1.8	69.09	86.6	86.6	0.0	0.0	2.96E-05
6.48	0.85	0.86	139.83	120.97	1.81	71.26	89.31	89.31	0.0	0.0	2.90E-05
6.5	0.91	0.93	142.8	123.86	1.82	74.03	92.79	92.79	0.0	0.0	2.67E-05
6.52	0.97	0.98	145.31	126.33	1.83	76.44	95.81	95.81	0.0	0.0	2.50E-05
6.54	1.01	1.02	143.12	124.82	1.84	77.07	96.6	96.6	0.0	0.0	2.23E-05
6.56	1.01	1.02	139.99	122.33	1.85	76.26	95.57	95.57	0.0	0.0	2.12E-05
6.58	0.99	1.01	134.04	117.37	1.86	73.97	92.71	92.71	0.0	0.0	2.00E-05
6.6	0.99	1.01	127.5	111.98	1.87	71.95	90.17	90.17	0.0	0.0	1.79E-05
6.62	0.96	0.97	123.37	108.49	1.88	69.92	87.63	87.63	0.0	0.0	1.78E-05
6.64	0.95	0.96	118.17	104.15	1.89	68.04	85.28	85.28	0.0	0.0	1.65E-05
6.66	0.84	0.85	117.73	103.46	1.85	65.23	81.76	81.76	0.0	0.0	2.07E-05
6.68	0.77	0.78	117.21	102.88	1.83	63.55	79.65	79.65	0.0	0.0	2.36E-05
6.7	0.68	0.69	117.65	102.96	1.8	61.25	76.77	76.77	0.0	0.0	3.00E-05
6.72	0.63	0.64	119.01	104.0	1.78	60.5	75.83	75.83	0.0	0.0	3.47E-05
6.74	0.61	0.62	120.2	105.0	1.77	60.26	75.52	75.52	0.0	0.0	3.80E-05
6.76	0.63	0.64	119.55	104.65	1.78	60.69	76.06	76.06	0.0	0.0	3.59E-05
6.78	0.73	0.75	113.72	100.28	1.83	62.06	77.78	77.78	0.0	0.0	2.44E-05
6.8	0.88	0.9	108.95	96.85	1.89	64.37	80.68	80.68	0.0	0.0	1.60E-05
6.82	0.97	0.98	106.29	94.92	1.92	65.53	82.13	82.13	0.0	0.0	1.28E-05
6.84	0.99	1.01	108.1	96.63	1.92	66.88	83.82	83.82	0.0	0.0	1.27E-05
6.86	1.0	1.01	112.72	100.73	1.91	68.87	86.32	86.32	0.0	0.0	1.38E-05
6.88	1.0	1.02	115.78	103.47	1.9	70.2	87.98	87.98	0.0	0.0	1.46E-05
6.9	1.02	1.03	116.25	104.01	1.91	70.87	88.82	88.82	0.0	0.0	1.43E-05
6.92	1.02	1.03	116.37	104.21	1.91	71.02	89.01	89.01	0.0	0.0	1.45E-05
6.94	1.0	1.02	116.44	104.33	1.9	70.88	88.84	88.84	0.0	0.0	1.49E-05
6.96	1.04	1.06	115.33	103.57	1.91	71.52	89.63	89.63	0.0	0.0	1.36E-05
6.98	1.08	1.1	112.83	101.61	1.93	71.68	89.84	89.84	0.0	0.0	1.20E-05
7.0	1.2	1.22	108.3	98.05	1.97	72.72	91.15	91.15	0.0	0.0	8.99E-06
7.02	1.33	1.35	101.99	92.87	2.02	72.86	91.32	91.32	0.0	0.0	6.46E-06
7.04	1.47	1.5	94.6	86.67	2.07	72.31	90.63	90.63	0.0	0.0	4.50E-06
7.06	1.67	1.71	84.61	77.95	2.14	71.09	89.1	89.1	0.0	0.0	2.70E-06
7.08	1.99	2.03	72.97	67.94	2.24	69.31	79.23	86.87	0.0	0.0	1.39E-06
7.1	2.45	2.52	59.67	56.32	2.36	66.41	64.93	83.23	0.0	0.0	5.86E-07
7.12	3.85	4.01	41.15	39.87	2.61	0.0	44.87	78.7	13.58	0.94	1.04E-07
7.14	5.62	5.94	29.7	29.42	2.83	0.0	32.45	74.65	9.8	0.7	2.31E-08
7.16	6.45	6.85	27.39	27.32	2.89	0.0	29.99	75.03	9.04	0.65	1.45E-08
7.18	6.52	6.9	28.95	28.83	2.88	0.0	31.75	78.06	9.55	0.68	1.60E-08
7.2	2.95	3.02	62.67	59.52	2.4	73.94	68.89	92.67	0.0	0.0	4.49E-07
7.22	1.56	1.59	99.28	91.53	2.07	77.34	96.93	96.93	0.0	0.0	4.50E-06
7.24	1.02	1.04	119.29	108.21	1.89	74.39	93.24	93.24	0.0	0.0	1.56E-05

7.26	0.73	0.74	127.91	114.9	1.78	69.22	86.76	86.76	0.0	0.0	3.46E-05
7.28	0.59	0.6	131.47	117.56	1.72	66.02	82.75	82.75	0.0	0.0	5.30E-05
7.3	0.54	0.54	133.51	119.19	1.69	64.76	81.16	81.16	0.0	0.0	6.51E-05
7.32	0.59	0.59	133.91	119.9	1.71	66.73	83.64	83.64	0.0	0.0	5.68E-05
7.34	0.62	0.63	138.03	123.75	1.71	69.12	86.63	86.63	0.0	0.0	5.61E-05
7.36	0.58	0.59	144.93	129.71	1.68	69.89	87.6	87.6	0.0	0.0	7.00E-05
7.38	0.63	0.63	148.03	132.77	1.69	72.53	90.91	90.91	0.0	0.0	6.49E-05
7.4	0.73	0.74	146.87	132.36	1.73	76.03	95.29	95.29	0.0	0.0	4.86E-05
7.42	0.89	0.9	144.1	130.67	1.79	80.54	100.95	100.95	0.0	0.0	3.22E-05
7.44	1.0	1.01	142.34	129.63	1.83	83.68	104.87	104.87	0.0	0.0	2.47E-05
7.46	1.06	1.08	142.26	129.87	1.85	85.69	107.4	107.4	0.0	0.0	2.18E-05
7.48	1.08	1.09	144.69	132.19	1.84	87.2	109.29	109.29	0.0	0.0	2.20E-05
7.5	1.07	1.09	148.19	135.4	1.84	88.4	110.8	110.8	0.0	0.0	2.36E-05
7.52	1.08	1.09	148.53	135.86	1.84	88.96	111.5	111.5	0.0	0.0	2.34E-05
7.54	1.09	1.11	147.49	135.1	1.84	89.14	111.72	111.72	0.0	0.0	2.25E-05
7.56	1.11	1.12	146.01	133.94	1.85	89.21	111.81	111.81	0.0	0.0	2.15E-05
7.58	1.11	1.12	145.19	133.33	1.85	89.06	111.63	111.63	0.0	0.0	2.13E-05
7.6	1.12	1.13	143.21	131.69	1.86	88.7	111.17	111.17	0.0	0.0	2.04E-05
7.62	1.11	1.12	141.87	130.58	1.86	88.06	110.37	110.37	0.0	0.0	2.04E-05
7.64	1.13	1.14	139.37	128.25	1.87	88.03	110.33	110.33	0.0	0.0	1.88E-05
7.66	1.13	1.14	134.04	123.57	1.88	86.13	107.96	107.96	0.0	0.0	1.73E-05
7.68	1.18	1.19	127.64	118.02	1.91	85.02	106.56	106.56	0.0	0.0	1.44E-05
7.7	1.19	1.21	120.33	111.55	1.93	82.55	103.46	103.46	0.0	0.0	1.23E-05
7.72	1.17	1.19	113.8	105.7	1.94	79.64	99.82	99.82	0.0	0.0	1.12E-05
7.74	1.21	1.23	103.59	96.58	1.98	76.37	95.71	95.71	0.0	0.0	8.50E-06
7.76	1.29	1.32	94.21	88.23	2.03	74.01	92.76	92.76	0.0	0.0	6.05E-06
7.78	1.4	1.42	87.11	81.92	2.08	72.69	91.11	91.11	0.0	0.0	4.38E-06
7.8	1.49	1.52	80.58	76.07	2.12	71.17	89.19	89.19	0.0	0.0	3.24E-06
7.82	1.21	1.24	82.3	77.38	2.06	67.19	84.21	84.21	0.0	0.0	5.06E-06
7.84	1.12	1.15	79.93	75.15	2.04	64.51	80.86	80.86	0.0	0.0	5.45E-06
7.86	1.12	1.14	76.84	72.36	2.06	63.05	79.03	79.03	0.0	0.0	5.03E-06
7.88	1.18	1.21	69.77	65.96	2.1	60.82	76.22	76.22	0.0	0.0	3.65E-06
7.9	1.26	1.3	64.22	60.95	2.15	59.48	74.54	74.54	0.0	0.0	2.64E-06
7.92	1.5	1.55	53.35	51.04	2.26	56.86	63.57	71.26	0.0	0.0	1.23E-06
7.94	1.79	1.86	47.37	45.61	2.34	56.47	56.55	70.77	0.0	0.0	6.69E-07
7.96	1.84	1.91	49.1	47.29	2.34	58.3	58.74	73.07	0.0	0.0	6.91E-07
7.98	1.55	1.59	59.67	57.06	2.23	61.52	71.53	77.11	0.0	0.0	1.53E-06
8.0	1.45	1.49	63.69	60.79	2.19	62.63	78.5	78.5	0.0	0.0	2.00E-06
8.02	1.23	1.26	69.34	65.91	2.11	62.29	78.07	78.07	0.0	0.0	3.34E-06
8.04	1.1	1.13	72.32	68.6	2.07	61.6	77.2	77.2	0.0	0.0	4.53E-06
8.06	0.95	0.97	72.2	68.37	2.03	58.64	73.5	73.5	0.0	0.0	5.96E-06
8.08	0.8	0.82	69.24	65.5	2.01	54.49	68.29	68.29	0.0	0.0	7.19E-06
8.1	0.65	0.67	64.13	60.65	1.99	49.33	61.82	61.82	0.0	0.0	8.25E-06
8.12	0.62	0.64	59.45	56.32	2.0	46.84	58.7	58.7	0.0	0.0	7.32E-06
8.14	0.8	0.82	53.06	50.59	2.1	47.34	59.33	59.33	0.0	0.0	3.72E-06
8.16	0.93	0.96	53.17	50.84	2.14	49.78	62.39	62.39	0.0	0.0	2.88E-06
8.18	0.91	0.94	63.48	60.49	2.07	54.56	68.38	68.38	0.0	0.0	4.68E-06
8.2	0.86	0.88	75.95	72.11	1.99	59.21	74.21	74.21	0.0	0.0	8.11E-06
8.22	0.69	0.7	93.76	88.44	1.86	62.15	77.9	77.9	0.0	0.0	2.01E-05
8.24	0.61	0.62	100.41	94.52	1.81	62.37	78.17	78.17	0.0	0.0	2.91E-05
8.26	0.54	0.55	102.32	96.23	1.77	61.0	76.46	76.46	0.0	0.0	3.70E-05
8.28	0.58	0.59	91.86	86.72	1.82	58.63	73.49	73.49	0.0	0.0	2.57E-05
8.3	0.85	0.87	74.65	71.16	1.99	59.04	73.99	73.99	0.0	0.0	7.94E-06
8.32	1.05	1.08	63.16	60.6	2.1	57.66	72.27	72.27	0.0	0.0	3.63E-06
8.34	1.42	1.47	48.93	47.38	2.27	55.25	60.88	69.25	0.0	0.0	1.13E-06
8.36	2.27	2.38	35.1	34.41	2.51	53.71	43.75	67.32	11.58	0.81	2.13E-07
8.38	2.82	2.96	35.03	34.46	2.57	58.03	43.75	72.73	11.56	0.81	1.39E-07
8.4	3.68	3.89	30.74	30.42	2.69	0.0	38.46	74.33	10.15	0.72	6.05E-08
8.42	3.19	3.34	37.23	36.67	2.58	63.07	46.67	79.05	12.29	0.86	1.25E-07
8.44	1.73	1.79	58.3	56.56	2.26	65.84	73.21	82.52	0.0	0.0	1.19E-06
8.46	1.27	1.29	76.3	73.46	2.08	69.02	86.5	86.5	0.0	0.0	4.11E-06
8.48	1.11	1.14	91.65	87.91	1.99	73.54	92.17	92.17	0.0	0.0	8.06E-06
8.5	0.86	0.88	97.03	92.77	1.9	69.7	87.36	87.36	0.0	0.0	1.50E-05
8.52	0.75	0.77	102.62	97.96	1.85	69.0	86.49	86.49	0.0	0.0	2.19E-05
8.54	0.8	0.81	107.33	102.54	1.85	72.29	90.6	90.6	0.0	0.0	2.19E-05
8.56	0.9	0.92	108.11	103.51	1.88	75.73	94.92	94.92	0.0	0.0	1.79E-05
8.58	1.09	1.11	104.74	100.63	1.94	79.6	99.77	99.77	0.0	0.0	1.15E-05
8.6	1.29	1.31	100.67	97.02	2.0	82.59	103.51	103.51	0.0	0.0	7.63E-06
8.62	1.42	1.45	96.63	93.35	2.04	83.72	104.93	104.93	0.0	0.0	5.70E-06
8.64	1.51	1.54	95.3	92.21	2.06	85.19	106.77	106.77	0.0	0.0	4.85E-06
8.66	1.61	1.64	96.57	93.55	2.08	88.0	110.29	110.29	0.0	0.0	4.41E-06
8.68	1.6	1.62	100.78	97.62	2.06	90.13	112.96	112.96	0.0	0.0	4.94E-06
8.7	1.5	1.53	106.31	102.92	2.02	91.12	114.2	114.2	0.0	0.0	6.32E-06

8.72	1.45	1.47	108.99	105.51	2.0	91.35	114.49	114.49	0.0	0.0	7.22E-06
8.74	1.36	1.39	110.82	107.27	1.98	90.42	113.32	113.32	0.0	0.0	8.47E-06
8.76	1.3	1.32	113.06	109.43	1.96	89.95	112.74	112.74	0.0	0.0	9.85E-06
8.78	1.29	1.31	111.94	108.44	1.96	89.44	112.09	112.09	0.0	0.0	9.73E-06
8.8	1.39	1.41	104.55	101.5	2.0	88.28	110.64	110.64	0.0	0.0	7.25E-06
8.82	1.41	1.43	104.56	101.59	2.01	88.96	111.5	111.5	0.0	0.0	7.02E-06
8.84	1.5	1.52	101.43	98.7	2.04	89.56	112.24	112.24	0.0	0.0	5.78E-06
8.86	1.63	1.66	97.23	94.78	2.07	90.21	113.07	113.07	0.0	0.0	4.44E-06
8.88	1.76	1.8	93.54	91.34	2.11	91.02	114.08	114.08	0.0	0.0	3.45E-06
8.9	1.81	1.84	92.89	90.78	2.12	91.63	114.85	114.85	0.0	0.0	3.23E-06
8.92	1.8	1.84	94.3	92.19	2.11	92.56	116.01	116.01	0.0	0.0	3.35E-06
8.94	1.58	1.6	101.57	99.19	2.05	92.1	115.43	115.43	0.0	0.0	5.25E-06
8.96	1.46	1.49	105.44	102.93	2.02	91.7	114.93	114.93	0.0	0.0	6.69E-06
8.98	1.44	1.47	105.61	103.15	2.01	91.52	114.71	114.71	0.0	0.0	6.89E-06
9.0	1.41	1.44	104.51	102.14	2.01	90.37	113.27	113.27	0.0	0.0	7.05E-06
9.02	1.42	1.44	103.6	101.33	2.01	90.2	113.05	113.05	0.0	0.0	6.86E-06
9.04	1.41	1.43	105.13	102.88	2.0	90.82	113.83	113.83	0.0	0.0	7.25E-06
9.06	1.41	1.44	105.93	103.72	2.0	91.6	114.8	114.8	0.0	0.0	7.28E-06
9.08	1.49	1.52	107.4	105.26	2.01	94.38	118.29	118.29	0.0	0.0	6.73E-06
9.1	1.5	1.53	109.73	107.61	2.01	96.05	120.38	120.38	0.0	0.0	6.95E-06
9.12	1.46	1.48	111.88	109.75	1.99	96.3	120.7	120.7	0.0	0.0	7.71E-06
9.14	1.4	1.42	112.77	110.66	1.98	95.33	119.48	119.48	0.0	0.0	8.61E-06
9.16	1.43	1.45	109.45	107.51	1.99	94.47	118.41	118.41	0.0	0.0	7.76E-06
9.18	1.48	1.5	106.19	104.42	2.01	94.25	118.13	118.13	0.0	0.0	6.72E-06
9.2	1.51	1.54	103.82	102.18	2.03	93.96	117.76	117.76	0.0	0.0	6.10E-06
9.22	1.59	1.62	99.07	97.61	2.06	93.29	116.92	116.92	0.0	0.0	4.94E-06
9.24	1.67	1.71	94.52	93.23	2.09	92.56	116.01	116.01	0.0	0.0	4.02E-06
9.26	1.83	1.87	87.49	86.42	2.14	91.61	114.82	114.82	0.0	0.0	2.81E-06
9.28	1.94	1.98	82.83	81.9	2.17	90.64	113.6	113.6	0.0	0.0	2.22E-06
9.3	1.99	2.04	78.57	77.76	2.2	88.91	111.43	111.43	0.0	0.0	1.86E-06
9.32	1.99	2.03	75.65	74.91	2.21	87.02	103.38	109.07	0.0	0.0	1.72E-06
9.34	1.94	1.99	74.32	73.64	2.21	85.48	101.75	107.13	0.0	0.0	1.74E-06
9.36	1.84	1.88	73.41	72.75	2.2	83.24	104.32	104.32	0.0	0.0	1.90E-06
9.38	1.79	1.83	72.36	71.75	2.19	81.8	102.53	102.53	0.0	0.0	1.95E-06
9.4	1.72	1.77	70.52	69.95	2.19	79.69	99.87	99.87	0.0	0.0	1.97E-06
9.42	1.68	1.72	68.05	67.54	2.19	77.39	97.0	97.0	0.0	0.0	1.92E-06
9.44	1.68	1.73	65.55	65.09	2.21	75.89	90.54	95.12	0.0	0.0	1.76E-06
9.46	1.7	1.75	61.18	60.79	2.23	73.42	84.65	92.01	0.0	0.0	1.46E-06
9.48	1.69	1.74	58.11	57.79	2.25	71.21	80.55	89.25	0.0	0.0	1.31E-06
9.5	1.81	1.87	49.49	49.26	2.32	66.61	68.72	83.49	0.0	0.0	7.88E-07
9.52	2.64	2.78	34.59	34.51	2.55	62.3	48.11	78.09	11.42	0.8	1.59E-07
9.54	4.47	4.82	22.82	22.82	2.84	0.0	31.79	74.82	7.53	0.55	2.04E-08
9.56	6.63	7.34	16.54	16.56	3.07	0.0	23.08	72.29	5.46	0.41	4.19E-09
9.58	7.55	8.48	14.45	14.47	3.15	0.0	20.18	70.46	4.77	0.36	2.31E-09
9.6	5.14	5.56	21.85	21.85	2.9	0.0	30.57	77.18	7.21	0.53	1.38E-08
9.62	4.7	5.06	23.54	23.54	2.85	0.0	33.0	78.02	7.77	0.57	1.99E-08
9.64	6.07	6.75	16.04	16.06	3.05	0.0	22.52	69.23	5.29	0.4	4.66E-09
9.66	5.73	6.46	14.19	14.2	3.08	0.0	19.95	63.46	4.68	0.36	3.85E-09
9.68	5.28	5.93	14.47	14.48	3.05	0.0	20.38	62.37	4.78	0.36	4.77E-09
9.7	3.92	4.4	14.77	14.78	2.96	0.0	20.84	56.89	4.88	0.37	8.97E-09
9.72	4.32	4.96	12.19	12.19	3.06	0.0	14.99	53.2	4.02	0.31	4.52E-09
9.74	6.71	8.2	8.05	8.06	3.34	0.0	6.55	50.03	2.66	0.21	8.13E-10
9.76	5.89	7.12	8.58	8.59	3.28	0.0	7.46	49.49	2.83	0.23	9.83E-10
9.78	5.53	6.55	9.76	9.76	3.21	0.0	9.65	51.81	3.22	0.25	1.57E-09
9.8	4.94	5.7	11.59	11.59	3.11	0.0	13.63	54.59	3.82	1.03	3.07E-09
9.82	3.69	4.14	14.66	14.66	2.95	0.0	20.87	55.99	4.84	0.37	9.86E-09
9.84	1.68	1.76	38.59	38.63	2.39	57.93	55.03	72.61	0.0	0.0	4.99E-07
9.86	0.63	0.64	71.83	72.02	1.91	59.34	74.38	74.38	0.0	0.0	1.37E-05
9.88	0.48	0.49	81.93	82.23	1.8	58.89	73.81	73.81	0.0	0.0	2.98E-05
9.9	0.37	0.37	89.59	90.01	1.71	57.51	72.08	72.08	0.0	0.0	5.63E-05
9.92	0.42	0.43	91.48	91.98	1.73	60.41	75.71	75.71	0.0	0.0	4.87E-05
9.94	0.54	0.55	85.11	85.61	1.81	62.3	78.09	78.09	0.0	0.0	2.78E-05
9.96	0.69	0.71	77.31	77.77	1.91	63.97	80.18	80.18	0.0	0.0	1.43E-05
9.98	0.73	0.75	70.22	70.66	1.95	61.82	77.48	77.48	0.0	0.0	1.02E-05
10.0	0.87	0.9	61.79	62.17	2.05	61.17	76.67	76.67	0.0	0.0	5.40E-06
10.02	1.19	1.23	45.4	45.63	2.24	57.23	65.78	71.73	0.0	0.0	1.43E-06
10.04	1.38	1.43	45.31	45.55	2.27	60.14	65.77	75.38	0.0	0.0	1.09E-06
10.06	1.36	1.41	46.47	46.74	2.26	60.82	67.57	76.22	0.0	0.0	1.19E-06
10.08	1.0	1.03	61.91	62.42	2.08	64.33	80.63	80.63	0.0	0.0	4.29E-06
10.1	0.82	0.84	69.4	70.07	1.99	64.32	80.62	80.62	0.0	0.0	8.15E-06
10.12	0.78	0.8	71.17	71.92	1.96	64.2	80.46	80.46	0.0	0.0	9.56E-06
10.14	0.75	0.77	69.29	70.06	1.96	62.66	78.53	78.53	0.0	0.0	9.52E-06
10.16	0.76	0.78	66.37	67.14	1.98	61.57	77.16	77.16	0.0	0.0	8.35E-06

10.18	0.78	0.81	63.14	63.88	2.01	60.68	76.05	76.05	0.0	0.0	6.93E-06
10.2	0.96	0.99	57.72	58.36	2.09	61.64	77.25	77.25	0.0	0.0	3.91E-06
10.22	1.12	1.16	53.21	53.77	2.16	62.26	78.03	78.03	0.0	0.0	2.38E-06
10.24	1.33	1.37	49.74	50.24	2.23	63.47	73.46	79.55	0.0	0.0	1.49E-06
10.26	1.58	1.64	45.87	46.29	2.31	64.46	67.85	80.8	0.0	0.0	8.80E-07
10.28	1.79	1.87	42.69	43.06	2.37	64.85	63.26	81.28	0.0	0.0	5.78E-07
10.3	2.01	2.11	39.45	39.76	2.43	64.76	58.55	81.16	0.0	0.0	3.80E-07
10.32	2.08	2.18	37.18	37.46	2.45	63.45	55.27	79.53	0.0	0.0	3.09E-07
10.34	1.92	2.01	37.63	37.94	2.43	62.21	56.03	77.97	0.0	0.0	3.72E-07
10.36	1.75	1.83	40.08	40.46	2.38	62.5	59.77	78.33	0.0	0.0	5.18E-07
10.38	1.49	1.55	41.86	42.32	2.32	60.68	62.54	76.05	0.0	0.0	7.83E-07
10.4	1.38	1.44	40.15	40.61	2.32	57.86	60.07	72.51	0.0	0.0	8.16E-07
10.42	1.34	1.4	36.11	36.51	2.35	54.2	54.11	67.93	0.0	0.0	6.57E-07
10.44	1.31	1.38	32.3	32.65	2.38	50.8	48.49	63.67	0.0	0.0	5.13E-07
10.46	1.41	1.51	26.24	26.47	2.48	46.75	39.45	58.59	0.0	0.0	2.59E-07
10.48	2.01	2.21	19.13	19.21	2.69	0.0	28.8	55.69	6.31	0.47	6.04E-08
10.5	3.71	4.25	12.59	12.55	3.01	0.0	17.01	54.94	4.15	0.32	6.49E-09
10.52	5.78	7.0	8.57	8.49	3.27	0.0	7.84	52.59	2.83	0.22	9.86E-10
10.54	9.08	11.8	6.04	5.95	3.54	0.0	3.88	51.88	1.99	0.16	4.29E-10
10.56	8.93	11.91	5.43	5.34	3.58	0.0	3.14	49.04	1.79	1.12	3.80E-10
10.58	8.93	11.92	5.42	5.33	3.58	0.0	3.13	49.07	1.79	1.12	3.79E-10
10.6	6.54	8.63	5.65	5.56	3.47	0.0	3.41	44.93	1.86	1.09	5.24E-10
10.62	5.16	6.83	5.61	5.53	3.41	0.0	3.37	41.41	1.85	1.04	6.34E-10
10.64	4.31	5.72	5.51	5.44	3.37	0.0	3.26	38.75	1.82	0.81	7.19E-10
10.66	4.14	5.55	5.35	5.27	3.38	0.0	3.07	37.78	1.76	0.86	7.12E-10
10.68	0.66	0.75	14.66	14.8	2.55	28.88	22.4	36.2	0.0	0.0	1.63E-07
10.7	0.22	0.23	31.78	32.54	2.04	33.15	41.55	41.55	0.0	0.0	5.51E-06
10.72	0.3	0.32	45.21	46.46	1.94	41.52	52.04	52.04	0.0	0.0	1.12E-05
10.74	0.42	0.43	49.79	51.17	1.96	46.8	58.65	58.65	0.0	0.0	9.99E-06
10.76	0.4	0.42	53.08	54.63	1.92	47.92	60.06	60.06	0.0	0.0	1.26E-05
10.78	0.46	0.48	55.25	56.88	1.94	50.65	63.49	63.49	0.0	0.0	1.17E-05
10.8	0.55	0.56	58.78	60.53	1.95	54.81	68.7	68.7	0.0	0.0	1.07E-05
10.82	0.51	0.52	65.52	67.64	1.89	56.8	71.19	71.19	0.0	0.0	1.62E-05
10.84	0.58	0.59	71.55	73.92	1.88	61.71	77.34	77.34	0.0	0.0	1.68E-05
10.86	0.67	0.68	73.49	75.91	1.91	65.44	82.02	82.02	0.0	0.0	1.42E-05
10.88	0.75	0.77	71.1	73.39	1.95	66.73	83.64	83.64	0.0	0.0	1.07E-05
10.9	0.86	0.88	68.03	70.14	2.0	68.2	85.48	85.48	0.0	0.0	7.53E-06
10.92	0.9	0.93	69.0	71.15	2.01	70.0	87.73	87.73	0.0	0.0	7.12E-06
10.94	0.86	0.88	75.91	78.45	1.96	72.76	91.19	91.19	0.0	0.0	9.83E-06
10.96	0.82	0.84	85.74	88.84	1.9	76.62	96.03	96.03	0.0	0.0	1.46E-05
10.98	0.71	0.73	96.66	100.52	1.82	78.09	97.88	97.88	0.0	0.0	2.57E-05
11.0	0.72	0.74	99.48	103.55	1.82	79.88	100.12	100.12	0.0	0.0	2.69E-05
11.02	0.75	0.76	98.16	102.18	1.83	80.33	100.68	100.68	0.0	0.0	2.44E-05
11.04	0.77	0.79	94.38	98.23	1.85	79.59	99.75	99.75	0.0	0.0	2.09E-05
11.06	0.84	0.85	91.4	95.06	1.88	80.35	100.7	100.7	0.0	0.0	1.68E-05
11.08	0.98	1.0	86.33	89.61	1.95	82.24	103.08	103.08	0.0	0.0	1.08E-05
11.1	1.09	1.11	82.72	85.76	1.99	83.59	104.77	104.77	0.0	0.0	7.90E-06
11.12	1.19	1.22	79.75	82.6	2.03	84.59	106.01	106.01	0.0	0.0	6.10E-06
11.14	1.34	1.37	74.49	77.0	2.09	85.14	106.71	106.71	0.0	0.0	4.07E-06
11.16	1.43	1.47	69.73	71.98	2.13	84.11	105.42	105.42	0.0	0.0	3.05E-06
11.18	1.49	1.53	64.94	66.97	2.16	81.98	102.75	102.75	0.0	0.0	2.39E-06
11.2	1.54	1.59	59.78	61.56	2.2	79.32	95.31	99.41	0.0	0.0	1.83E-06
11.22	1.51	1.55	56.91	58.61	2.21	76.68	90.89	96.11	0.0	0.0	1.70E-06
11.24	1.36	1.41	57.06	58.86	2.18	74.2	92.99	92.99	0.0	0.0	2.08E-06
11.26	1.15	1.18	58.89	60.93	2.12	71.26	89.32	89.32	0.0	0.0	3.13E-06
11.28	0.95	0.98	61.53	63.88	2.06	68.69	86.09	86.09	0.0	0.0	4.92E-06
11.3	0.8	0.82	63.75	66.39	2.0	66.19	82.95	82.95	0.0	0.0	7.41E-06
11.32	0.78	0.81	63.06	65.71	2.0	65.49	82.08	82.08	0.0	0.0	7.47E-06
11.34	0.76	0.79	61.68	64.29	2.0	64.31	80.6	80.6	0.0	0.0	7.37E-06
11.36	0.76	0.78	59.58	62.1	2.01	63.17	79.18	79.18	0.0	0.0	6.78E-06
11.38	0.79	0.81	58.59	61.06	2.03	63.42	79.49	79.49	0.0	0.0	6.10E-06
11.4	0.81	0.84	58.07	60.51	2.04	63.79	79.94	79.94	0.0	0.0	5.67E-06
11.42	0.85	0.88	58.3	60.75	2.05	64.98	81.44	81.44	0.0	0.0	5.28E-06
11.44	0.85	0.88	58.43	60.92	2.05	65.2	81.71	81.71	0.0	0.0	5.30E-06
11.46	0.8	0.82	62.12	64.92	2.01	65.98	82.69	82.69	0.0	0.0	7.01E-06
11.48	0.73	0.75	63.57	66.58	1.98	65.16	81.67	81.67	0.0	0.0	8.62E-06
11.5	0.7	0.73	63.42	66.48	1.97	64.35	80.66	80.66	0.0	0.0	9.19E-06
11.52	0.67	0.69	63.63	66.78	1.96	63.66	79.79	79.79	0.0	0.0	1.00E-05
11.54	0.68	0.7	62.96	66.1	1.96	63.47	79.55	79.55	0.0	0.0	9.69E-06
11.56	0.65	0.67	63.08	66.29	1.95	62.95	78.9	78.9	0.0	0.0	1.03E-05
11.58	0.67	0.69	62.25	65.4	1.96	63.09	79.08	79.08	0.0	0.0	9.57E-06
11.6	0.66	0.68	61.84	65.0	1.96	62.77	78.68	78.68	0.0	0.0	9.57E-06
11.62	0.62	0.64	61.07	64.27	1.95	61.28	76.8	76.8	0.0	0.0	1.03E-05

11.64	0.62	0.64	58.89	61.96	1.97	60.23	75.49	75.49	0.0	0.0	9.35E-06
11.66	0.72	0.75	55.2	57.91	2.03	61.03	76.49	76.49	0.0	0.0	6.13E-06
11.68	0.79	0.82	52.43	54.9	2.07	61.15	76.64	76.64	0.0	0.0	4.60E-06
11.7	0.93	0.97	48.35	50.44	2.14	61.75	77.39	77.39	0.0	0.0	2.81E-06
11.72	1.04	1.09	44.04	45.79	2.2	61.01	73.14	76.47	0.0	0.0	1.81E-06
11.74	1.21	1.27	40.75	42.22	2.27	61.56	67.78	77.16	0.0	0.0	1.13E-06
11.76	1.33	1.39	40.41	41.81	2.3	63.24	67.31	79.27	0.0	0.0	9.36E-07
11.78	1.39	1.45	41.94	43.41	2.29	65.61	69.97	82.23	0.0	0.0	9.46E-07
11.8	1.28	1.33	45.82	47.6	2.24	66.97	76.55	83.93	0.0	0.0	1.39E-06
11.82	1.24	1.28	48.67	50.66	2.21	68.54	81.42	85.9	0.0	0.0	1.72E-06
11.84	1.1	1.14	55.03	57.58	2.13	70.47	88.33	88.33	0.0	0.0	2.93E-06
11.86	1.03	1.06	59.39	62.35	2.09	71.81	90.0	90.0	0.0	0.0	4.06E-06
11.88	1.0	1.03	63.68	67.02	2.06	74.12	92.9	92.9	0.0	0.0	5.05E-06
11.9	1.04	1.07	65.72	69.2	2.05	76.48	95.86	95.86	0.0	0.0	5.10E-06
11.92	1.09	1.12	67.54	71.13	2.06	79.06	99.09	99.09	0.0	0.0	4.98E-06
11.94	1.23	1.26	68.85	72.42	2.08	83.34	104.45	104.45	0.0	0.0	4.17E-06
11.96	1.35	1.38	69.88	73.44	2.1	86.96	108.99	108.99	0.0	0.0	3.61E-06
11.98	1.43	1.46	71.18	74.79	2.11	89.82	112.58	112.58	0.0	0.0	3.37E-06
12.0	1.55	1.59	71.2	74.71	2.14	92.79	116.29	116.29	0.0	0.0	2.84E-06
12.02	1.64	1.68	71.86	75.37	2.15	95.36	119.51	119.51	0.0	0.0	2.59E-06
12.04	1.7	1.74	71.6	75.06	2.16	96.56	121.03	121.03	0.0	0.0	2.39E-06
12.06	1.76	1.81	71.03	74.42	2.18	97.71	122.46	122.46	0.0	0.0	2.16E-06
12.08	1.81	1.85	70.5	73.84	2.19	98.27	123.16	123.16	0.0	0.0	2.02E-06
12.1	1.79	1.83	70.42	73.8	2.18	97.94	122.75	122.75	0.0	0.0	2.07E-06
12.12	1.77	1.82	70.4	73.81	2.18	97.79	122.56	122.56	0.0	0.0	2.09E-06
12.14	1.8	1.85	69.54	72.89	2.19	97.81	122.59	122.59	0.0	0.0	1.97E-06
12.16	1.79	1.84	68.96	72.3	2.19	97.27	121.92	121.92	0.0	0.0	1.95E-06
12.18	1.76	1.81	68.95	72.34	2.19	96.77	121.29	121.29	0.0	0.0	2.03E-06
12.2	1.74	1.79	68.29	71.67	2.19	95.95	120.26	120.26	0.0	0.0	2.03E-06
12.22	1.77	1.82	66.9	70.18	2.2	95.5	119.7	119.7	0.0	0.0	1.87E-06
12.24	1.76	1.81	67.17	70.5	2.19	95.64	119.87	119.87	0.0	0.0	1.92E-06
12.26	1.76	1.81	67.05	70.39	2.19	95.66	119.9	119.9	0.0	0.0	1.91E-06
12.28	1.8	1.85	66.34	69.62	2.2	96.03	114.77	120.36	0.0	0.0	1.78E-06
12.3	1.87	1.92	64.51	67.62	2.23	95.96	111.76	120.27	0.0	0.0	1.54E-06
12.32	1.91	1.96	63.51	66.53	2.24	95.94	110.17	120.25	0.0	0.0	1.42E-06
12.34	1.91	1.96	63.42	66.45	2.24	95.99	110.17	120.3	0.0	0.0	1.42E-06
12.36	1.83	1.88	64.6	67.82	2.22	95.55	112.39	119.75	0.0	0.0	1.63E-06
12.38	1.77	1.82	64.89	68.2	2.21	94.7	113.06	118.69	0.0	0.0	1.77E-06
12.4	1.78	1.83	63.81	67.05	2.21	94.14	111.32	117.99	0.0	0.0	1.67E-06
12.42	1.85	1.91	60.32	63.24	2.24	92.76	105.38	116.26	0.0	0.0	1.34E-06
12.44	2.04	2.11	56.3	58.81	2.3	92.57	98.5	116.02	0.0	0.0	9.35E-07
12.46	2.11	2.18	54.34	56.68	2.32	92.01	95.2	115.32	0.0	0.0	8.01E-07
12.48	2.14	2.22	53.47	55.74	2.33	91.86	93.8	115.14	0.0	0.0	7.44E-07
12.5	2.13	2.2	53.49	55.79	2.33	91.72	93.97	114.96	0.0	0.0	7.58E-07
12.52	2.09	2.16	53.45	55.79	2.32	91.11	94.03	114.19	0.0	0.0	7.90E-07
12.54	2.01	2.08	53.43	55.82	2.31	89.91	94.12	112.68	0.0	0.0	8.54E-07
12.56	1.88	1.94	54.61	57.2	2.28	88.87	96.33	111.39	0.0	0.0	1.04E-06
12.58	1.71	1.77	56.11	58.96	2.25	87.33	99.12	109.46	0.0	0.0	1.34E-06
12.6	1.65	1.71	56.56	59.52	2.23	86.66	100.05	108.61	0.0	0.0	1.47E-06
12.62	1.63	1.68	56.94	59.97	2.23	86.62	100.86	108.57	0.0	0.0	1.54E-06
12.64	1.64	1.69	57.12	60.17	2.23	87.07	101.32	109.12	0.0	0.0	1.53E-06
12.66	1.64	1.69	56.71	59.74	2.23	86.86	100.73	108.87	0.0	0.0	1.50E-06
12.68	1.62	1.67	56.67	59.73	2.23	86.59	100.79	108.53	0.0	0.0	1.53E-06
12.7	1.68	1.73	57.03	60.09	2.23	88.15	101.58	110.48	0.0	0.0	1.45E-06
12.72	1.7	1.75	57.81	60.94	2.23	89.27	103.1	111.88	0.0	0.0	1.47E-06
12.74	1.66	1.71	58.85	62.12	2.22	89.55	105.11	112.24	0.0	0.0	1.61E-06
12.76	1.63	1.68	59.24	62.59	2.21	89.36	105.93	112.0	0.0	0.0	1.70E-06
12.78	1.56	1.61	59.18	62.61	2.2	88.07	110.38	110.38	0.0	0.0	1.85E-06
12.8	1.46	1.51	59.7	63.3	2.18	86.5	108.41	108.41	0.0	0.0	2.16E-06
12.82	1.46	1.51	61.17	64.93	2.17	87.76	109.99	109.99	0.0	0.0	2.29E-06
12.84	1.47	1.51	62.58	66.49	2.16	89.17	111.76	111.76	0.0	0.0	2.40E-06
12.86	1.48	1.52	63.22	67.2	2.16	89.98	112.77	112.77	0.0	0.0	2.43E-06
12.88	1.53	1.58	63.11	67.04	2.17	91.24	114.35	114.35	0.0	0.0	2.25E-06
12.9	1.66	1.71	60.88	64.48	2.21	92.23	109.91	115.6	0.0	0.0	1.75E-06
12.92	1.81	1.87	58.01	61.23	2.25	92.73	104.87	116.22	0.0	0.0	1.31E-06
12.94	1.99	2.06	54.6	57.39	2.3	93.1	98.84	116.68	0.0	0.0	9.23E-07
12.96	2.19	2.27	51.08	53.46	2.35	92.96	92.59	116.51	0.0	0.0	6.49E-07
12.98	2.26	2.35	49.22	51.41	2.37	92.34	89.33	115.74	0.0	0.0	5.52E-07
13.0	2.25	2.34	48.34	50.49	2.38	91.32	87.86	114.46	0.0	0.0	5.36E-07
13.02	2.23	2.31	47.51	49.61	2.38	90.18	86.46	113.03	0.0	0.0	5.25E-07
13.04	2.18	2.27	47.15	49.27	2.38	89.23	85.93	111.83	0.0	0.0	5.38E-07
13.06	2.02	2.09	47.31	49.56	2.35	86.89	86.34	108.9	0.0	0.0	6.40E-07
13.08	1.95	2.03	47.22	49.52	2.34	85.82	86.28	107.57	0.0	0.0	6.83E-07

13.1	1.87	1.94	47.48	49.87	2.33	84.84	86.88	106.34	0.0	0.0	7.56E-07
13.12	1.73	1.8	48.65	51.26	2.3	83.81	89.14	105.04	0.0	0.0	9.32E-07
13.14	1.66	1.72	49.65	52.42	2.28	83.43	91.09	104.57	0.0	0.0	1.08E-06
13.16	1.53	1.58	52.59	55.77	2.23	83.78	96.61	105.01	0.0	0.0	1.46E-06
13.18	1.46	1.51	53.62	56.99	2.21	83.42	98.64	104.56	0.0	0.0	1.67E-06
13.2	1.46	1.51	53.9	57.31	2.21	83.71	99.27	104.91	0.0	0.0	1.70E-06
13.22	1.44	1.5	53.6	57.01	2.21	83.23	98.85	104.32	0.0	0.0	1.72E-06
13.24	1.51	1.57	52.21	55.43	2.23	83.52	96.42	104.68	0.0	0.0	1.47E-06
13.26	1.6	1.66	50.87	53.9	2.26	84.09	94.08	105.39	0.0	0.0	1.23E-06
13.28	1.77	1.84	48.7	51.38	2.3	85.33	90.17	106.95	0.0	0.0	9.00E-07
13.3	1.89	1.96	46.43	48.82	2.34	85.14	86.08	106.71	0.0	0.0	7.05E-07
13.32	2.0	2.09	43.85	45.95	2.37	84.45	81.4	105.85	0.0	0.0	5.41E-07
13.34	2.16	2.26	40.97	42.74	2.42	83.79	76.15	105.01	0.0	0.0	3.91E-07
13.36	2.23	2.34	39.35	40.96	2.44	83.0	73.23	104.02	0.0	0.0	3.32E-07
13.38	2.26	2.38	37.83	39.31	2.46	81.75	70.49	102.46	0.0	0.0	2.92E-07
13.4	2.29	2.41	36.27	37.63	2.48	80.31	67.67	100.65	0.0	0.0	2.57E-07
13.42	2.22	2.34	35.28	36.61	2.48	78.38	65.91	98.23	0.0	0.0	2.55E-07
13.44	2.26	2.38	33.81	35.01	2.5	77.07	63.24	96.6	11.16	0.79	2.22E-07
13.46	2.11	2.23	33.13	34.36	2.49	74.54	62.05	93.43	0.0	0.0	2.41E-07
13.48	1.98	2.1	33.12	34.41	2.47	72.94	62.1	91.42	0.0	0.0	2.73E-07
13.5	1.78	1.88	32.44	33.79	2.45	69.56	60.91	87.18	0.0	0.0	3.19E-07
13.52	1.66	1.76	31.58	32.92	2.44	67.01	59.37	83.98	0.0	0.0	3.40E-07
13.54	1.52	1.62	29.16	30.39	2.45	62.46	54.89	78.29	0.0	0.0	3.25E-07
13.56	1.5	1.6	27.75	28.87	2.46	60.68	52.3	76.05	0.0	0.0	2.92E-07
13.58	1.66	1.8	22.9	23.58	2.56	57.02	43.22	71.46	7.56	0.55	1.43E-07
13.6	1.95	2.12	21.51	22.0	2.63	0.0	40.64	73.0	7.1	0.52	9.07E-08
13.62	2.26	2.47	20.44	20.78	2.69	0.0	38.67	74.93	6.75	0.5	5.97E-08
13.64	2.43	2.65	20.69	20.99	2.7	0.0	39.18	77.36	6.83	0.5	5.38E-08
13.66	2.32	2.51	23.23	23.72	2.65	0.0	44.06	80.98	7.67	0.56	7.99E-08
13.68	2.26	2.42	26.91	27.66	2.59	69.23	51.09	86.77	8.88	0.64	1.24E-07
13.7	2.15	2.29	28.06	28.93	2.56	69.61	53.33	87.24	9.26	0.66	1.52E-07
13.72	1.93	2.06	29.41	30.49	2.51	68.84	55.98	86.28	0.0	0.0	2.11E-07
13.74	1.41	1.49	30.79	32.27	2.41	63.36	58.67	79.41	0.0	0.0	4.34E-07
13.76	1.03	1.08	32.7	34.67	2.3	59.07	62.4	74.04	0.0	0.0	8.97E-07
13.78	1.03	1.09	35.84	38.15	2.27	62.05	68.48	77.77	0.0	0.0	1.14E-06
13.8	0.94	0.99	39.08	41.87	2.21	63.13	74.77	79.12	0.0	0.0	1.69E-06
13.82	0.88	0.92	43.15	46.68	2.15	64.88	81.31	81.31	0.0	0.0	2.53E-06
13.84	0.93	0.97	45.68	49.48	2.15	68.03	85.27	85.27	0.0	0.0	2.69E-06
13.86	1.06	1.1	47.01	50.79	2.17	72.17	90.45	90.45	0.0	0.0	2.29E-06
13.88	1.17	1.21	48.29	51.94	2.19	75.87	95.09	95.09	0.0	0.0	2.03E-06
13.9	1.27	1.32	49.3	52.96	2.2	79.07	94.94	99.09	0.0	0.0	1.82E-06
13.92	1.4	1.46	49.67	53.22	2.23	82.33	95.77	103.19	0.0	0.0	1.53E-06
13.94	1.51	1.57	50.72	54.28	2.24	85.65	97.92	107.35	0.0	0.0	1.39E-06
13.96	1.63	1.69	51.66	55.21	2.25	88.9	99.87	111.42	0.0	0.0	1.26E-06
13.98	1.67	1.73	51.76	55.29	2.26	89.92	100.17	112.7	0.0	0.0	1.20E-06
14.0	1.65	1.71	51.14	54.63	2.26	89.08	99.09	111.64	0.0	0.0	1.19E-06
14.02	1.61	1.67	49.7	53.08	2.26	86.98	96.42	109.02	0.0	0.0	1.17E-06
14.04	1.79	1.86	43.82	46.42	2.34	84.5	85.14	105.9	0.0	0.0	6.91E-07
14.06	2.17	2.29	34.28	35.72	2.48	79.45	66.68	99.58	0.0	0.0	2.52E-07
14.08	3.03	3.27	24.49	24.87	2.7	0.0	47.69	94.07	8.08	0.59	5.41E-08
14.1	3.3	3.57	22.5	22.71	2.76	0.0	43.86	92.8	7.42	0.54	3.67E-08
14.12	7.47	8.97	9.38	8.86	3.33	0.0	11.58	79.76	3.1	0.24	8.29E-10
14.14	10.09	12.87	6.83	6.26	3.55	0.0	5.97	76.45	0.0	0.0	4.19E-10
14.16	13.39	18.31	5.11	4.58	3.75	0.0	3.27	74.19	0.0	0.0	2.20E-10
14.18	11.42	15.55	5.21	4.69	3.69	0.0	3.42	70.62	0.0	0.0	2.62E-10
14.2	8.46	11.43	5.35	4.88	3.6	0.0	3.65	64.06	1.77	1.14	3.58E-10
14.22	6.52	8.88	5.19	4.76	3.54	0.0	3.46	57.6	1.71	1.17	4.33E-10
14.24	5.92	8.61	4.15	3.77	3.61	0.0	2.2	50.52	1.37	1.33	3.45E-10
14.26	5.0	7.7	3.49	3.16	3.64	0.0	1.55	44.4	1.15	1.23	3.10E-10
14.28	3.15	4.88	3.43	3.14	3.53	0.0	1.52	38.03	1.13	1.53	4.37E-10
14.3	1.7	2.6	3.58	3.36	3.37	0.0	1.69	32.27	1.18	1.69	7.36E-10
14.32	1.23	1.79	4.13	3.94	3.23	0.0	2.29	31.3	1.36	1.26	1.36E-09
14.34	1.23	1.76	4.4	4.21	3.2	0.0	2.62	32.2	1.45	1.04	1.66E-09
14.36	1.35	1.86	5.04	4.85	3.16	0.0	3.46	34.96	1.66	0.48	2.26E-09
14.38	1.68	2.35	4.77	4.54	3.23	0.0	3.06	36.32	1.57	0.85	1.35E-09
14.4	1.54	2.3	3.81	3.59	3.32	0.0	1.94	32.34	1.26	1.59	8.65E-10
14.42	1.98	3.23	2.98	2.74	3.49	0.0	1.16	31.62	0.98	1.28	4.99E-10
14.44	2.14	3.37	3.27	3.01	3.46	0.0	1.4	33.55	1.08	1.85	5.43E-10
14.46	1.86	2.61	4.65	4.41	3.27	0.0	2.91	37.18	1.53	0.25	1.06E-09
14.48	1.54	1.95	7.08	6.91	3.03	0.0	6.96	42.23	2.34	1.0	5.38E-09
14.5	1.75	2.3	5.91	5.69	3.14	0.0	4.79	40.54	1.95	0.52	2.51E-09
14.52	2.21	3.09	4.77	4.51	3.29	0.0	3.07	39.71	1.57	1.27	9.26E-10
14.54	3.65	5.33	4.11	3.78	3.49	0.0	2.22	43.72	1.36	1.34	5.05E-10



14.56	3.55	5.46	3.51	3.19	3.55	0.0	1.6	40.63	1.16	1.72	4.09E-10
14.58	3.52	5.63	3.15	2.84	3.6	0.0	1.28	38.82	1.04	1.56	3.50E-10
14.6	3.52	5.56	3.25	2.94	3.59	0.0	1.37	39.37	1.07	1.83	3.68E-10
14.62	3.07	4.69	3.58	3.28	3.51	0.0	1.68	39.28	1.18	1.66	4.72E-10
14.64	3.01	4.4	4.12	3.8	3.44	0.0	2.24	41.4	1.36	1.28	5.87E-10
14.66	1.7	2.12	7.68	7.5	3.02	0.0	8.28	45.53	2.53	0.9	5.89E-09
14.68	0.9	1.03	13.01	13.31	2.65	0.0	24.92	48.29	4.29	1.08	7.88E-08
14.7	0.75	0.84	15.49	16.09	2.54	39.74	31.24	49.8	0.0	0.0	1.76E-07
14.72	1.22	1.44	10.39	10.42	2.81	0.0	15.61	47.51	3.43	0.27	2.52E-08
14.74	2.75	3.49	7.06	6.76	3.17	0.0	6.89	51.1	2.33	0.82	2.00E-09
14.76	4.76	6.39	5.52	5.09	3.43	0.0	4.06	54.97	1.82	1.1	6.12E-10
14.78	5.54	7.09	6.78	6.32	3.38	0.0	6.2	63.68	2.24	0.99	7.11E-10
14.8	5.23	6.6	7.2	6.74	3.34	0.0	7.04	64.26	2.38	0.3	8.09E-10
14.82	3.1	3.53	13.43	13.24	2.94	0.0	25.79	72.49	4.43	0.34	1.04E-08
14.84	2.41	2.68	16.64	16.73	2.79	0.0	33.81	74.04	5.49	0.41	3.03E-08
14.86	1.52	1.67	18.76	19.29	2.62	0.0	38.17	67.57	6.19	0.46	9.84E-08
14.88	1.4	1.54	18.46	19.02	2.6	0.0	37.61	65.37	6.09	0.45	1.09E-07
14.9	1.57	1.72	19.83	20.43	2.6	0.0	40.45	70.38	6.55	0.48	1.08E-07
14.92	1.35	1.47	21.5	22.35	2.53	55.73	43.89	69.85	0.0	0.0	1.77E-07
14.94	1.89	2.09	17.18	17.45	2.71	0.0	35.11	69.73	5.67	0.42	5.20E-08
14.96	3.66	4.3	10.85	10.51	3.07	0.0	16.67	69.75	3.58	0.28	4.13E-09
14.98	5.64	7.15	7.08	6.59	3.37	0.0	6.82	66.18	2.34	0.19	7.38E-10
15.0	7.61	10.07	5.86	5.31	3.53	0.0	4.56	67.68	1.93	0.16	4.37E-10
15.02	9.61	13.4	4.81	4.26	3.68	0.0	3.0	67.42	1.59	0.2	2.70E-10
15.04	9.97	14.35	4.33	3.81	3.74	0.0	2.42	65.32	1.43	0.94	2.26E-10
15.06	8.54	11.75	5.06	4.51	3.63	0.0	3.35	66.22	1.67	1.18	3.22E-10
15.08	7.42	10.39	4.74	4.24	3.62	0.0	2.95	61.22	1.56	1.27	3.35E-10
15.1	6.85	10.75	3.34	2.92	3.75	0.0	1.44	51.29	1.1	0.4	2.17E-10
15.12	6.67	11.15	2.83	2.46	3.82	0.0	1.03	47.66	0.94	0.07	1.74E-10
15.14	4.78	8.01	2.81	2.46	3.74	0.0	1.02	42.48	0.93	0.48	2.27E-10
15.16	2.92	4.66	3.18	2.86	3.56	0.0	1.34	38.14	1.05	1.52	4.05E-10
15.18	1.67	2.64	3.31	3.04	3.41	0.0	1.49	32.95	1.09	1.66	6.47E-10
15.2	1.81	2.94	3.05	2.78	3.46	0.0	1.26	32.72	1.01	1.38	5.41E-10
15.22	2.18	3.64	2.83	2.55	3.54	0.0	1.07	33.55	0.93	1.48	4.23E-10
15.24	1.72	2.76	3.11	2.85	3.44	0.0	1.31	32.54	1.03	1.91	5.79E-10
15.26	1.37	2.18	3.25	3.01	3.37	0.0	1.45	31.17	1.07	1.86	7.22E-10
15.28	1.23	1.92	3.43	3.19	3.33	0.0	1.63	30.95	1.13	1.73	8.40E-10
15.3	1.45	2.26	3.41	3.15	3.36	0.0	1.6	32.28	1.13	1.76	7.48E-10
15.32	2.13	3.48	2.98	2.7	3.51	0.0	1.2	34.2	0.98	1.82	4.64E-10
15.34	1.97	3.08	3.35	3.06	3.44	0.0	1.53	35.0	1.1	1.81	5.86E-10
15.36	1.86	2.81	3.73	3.44	3.37	0.0	1.92	35.99	1.23	1.49	7.20E-10
15.38	2.06	3.07	3.88	3.58	3.38	0.0	2.08	37.72	1.28	1.49	7.09E-10
15.4	2.68	4.32	3.11	2.8	3.55	0.0	1.3	37.45	1.03	1.58	4.18E-10
15.42	2.35	3.82	3.05	2.75	3.53	0.0	1.25	35.76	1.01	1.78	4.45E-10
15.44	1.94	3.05	3.35	3.06	3.44	0.0	1.54	35.13	1.11	1.8	5.92E-10
15.46	1.65	2.47	3.84	3.55	3.34	0.0	2.05	35.42	1.27	1.41	8.14E-10
15.48	1.66	2.51	3.75	3.46	3.35	0.0	1.95	35.19	1.24	1.56	7.81E-10
15.5	1.76	2.74	3.4	3.11	3.41	0.0	1.59	34.43	1.12	1.73	6.48E-10
15.52	1.99	3.11	3.38	3.08	3.44	0.0	1.57	35.64	1.12	1.78	5.89E-10
15.54	1.88	2.91	3.48	3.19	3.41	0.0	1.68	35.54	1.15	1.74	6.41E-10
15.56	2.16	3.34	3.49	3.18	3.44	0.0	1.68	37.1	1.15	1.73	5.81E-10
15.58	1.93	2.75	4.48	4.18	3.3	0.0	2.83	39.63	1.48	0.81	9.19E-10
15.6	1.76	2.35	5.65	5.38	3.17	0.0	4.6	42.54	1.87	0.03	2.09E-09
15.62	1.1	1.34	8.91	8.86	2.86	0.0	11.95	45.4	2.94	0.69	1.81E-08
15.64	0.81	0.9	16.01	16.69	2.54	43.32	34.0	54.29	0.0	0.0	1.74E-07
15.66	0.59	0.64	20.12	21.48	2.37	44.27	42.77	55.48	0.0	0.0	5.48E-07
15.68	0.8	0.86	23.8	25.43	2.37	51.97	50.63	65.14	0.0	0.0	5.74E-07
15.7	1.01	1.09	24.11	25.59	2.41	56.05	51.37	70.25	0.0	0.0	4.10E-07
15.72	1.45	1.59	19.64	20.32	2.59	56.94	41.89	71.37	6.48	0.48	1.21E-07
15.74	3.18	3.68	12.21	11.91	2.99	0.0	22.17	73.58	4.03	0.31	7.45E-09
15.76	6.09	7.66	7.37	6.76	3.38	0.0	7.61	72.84	2.43	0.2	7.16E-10
15.78	8.04	10.59	6.04	5.4	3.54	0.0	4.99	73.57	1.99	1.03	4.27E-10
15.8	11.38	16.79	4.02	3.44	3.82	0.0	2.12	69.75	0.0	0.0	1.77E-10
15.82	11.08	16.71	3.76	3.21	3.84	0.0	1.85	67.19	0.0	0.0	1.65E-10
15.84	9.59	14.73	3.57	3.05	3.82	0.0	1.67	62.41	1.18	1.69	1.75E-10
15.86	7.39	11.41	3.51	3.03	3.76	0.0	1.63	56.52	1.16	1.72	2.15E-10
15.88	5.65	8.64	3.6	3.15	3.67	0.0	1.74	52.09	1.19	1.66	2.82E-10
15.9	4.53	7.28	3.16	2.76	3.68	0.0	1.34	45.93	1.04	1.89	2.78E-10
15.92	2.85	4.58	3.17	2.82	3.56	0.0	1.37	39.71	1.05	1.83	4.03E-10
15.94	1.92	3.0	3.39	3.07	3.43	0.0	1.61	36.25	1.12	0.72	6.01E-10
15.96	1.26	1.86	4.04	3.79	3.25	0.0	2.36	34.51	1.33	0.13	1.16E-09
15.98	1.2	1.64	5.29	5.06	3.12	0.0	4.13	38.02	1.75	0.31	3.02E-09
16.0	1.36	1.84	5.52	5.27	3.12	0.0	4.5	40.09	1.82	0.03	2.87E-09

16.02	1.94	2.75	4.56	4.23	3.29	0.0	2.98	41.09	1.51	0.92	9.32E-10
16.04	2.19	3.25	3.97	3.62	3.39	0.0	2.23	40.36	1.31	1.37	6.92E-10
16.06	2.04	3.06	3.84	3.51	3.39	0.0	2.09	39.07	1.27	1.44	6.93E-10
16.08	1.9	2.86	3.78	3.45	3.38	0.0	2.02	38.02	1.25	1.56	7.12E-10
16.1	1.75	2.54	4.27	3.95	3.3	0.0	2.62	39.06	1.41	0.92	9.05E-10
16.12	1.8	2.55	4.58	4.26	3.27	0.0	3.03	40.52	1.51	0.65	9.89E-10
16.14	2.07	3.01	4.24	3.89	3.34	0.0	2.57	41.02	1.4	1.19	7.93E-10
16.16	1.66	2.12	6.92	6.66	3.07	0.0	7.18	47.07	2.28	1.02	4.30E-09
16.18	0.67	0.73	21.92	23.62	2.36	48.84	47.88	61.21	0.0	0.0	5.94E-07
16.2	0.34	0.36	38.2	43.78	1.99	53.02	66.45	66.45	0.0	0.0	8.19E-06
16.22	0.39	0.42	30.05	33.72	2.12	49.16	61.62	61.62	0.0	0.0	3.32E-06
16.24	0.69	0.76	18.88	20.04	2.43	46.08	41.38	57.76	0.0	0.0	3.66E-07
16.26	1.74	2.02	12.16	12.13	2.83	0.0	23.12	61.89	4.01	0.31	2.21E-08
16.28	3.5	4.23	9.22	8.77	3.13	0.0	12.69	68.49	3.04	0.24	2.75E-09
16.3	3.98	4.86	8.68	8.18	3.19	0.0	11.15	69.65	2.86	0.23	1.80E-09
16.32	7.25	9.48	6.25	5.57	3.5	0.0	5.48	74.32	2.06	0.98	4.85E-10
16.34	7.4	9.75	6.05	5.37	3.52	0.0	5.12	73.84	2.0	0.92	4.56E-10
16.36	5.82	7.45	6.87	6.23	3.4	0.0	6.74	71.84	2.27	0.0	6.72E-10
16.38	5.24	6.75	6.68	6.08	3.38	0.0	6.4	68.39	2.2	0.1	7.10E-10
16.4	5.33	7.12	5.71	5.13	3.45	0.0	4.62	64.16	1.88	0.94	5.64E-10
16.42	4.78	6.8	4.54	4.03	3.52	0.0	2.89	56.0	1.5	1.33	4.48E-10
16.44	4.01	6.05	3.75	3.31	3.57	0.0	1.96	48.86	1.24	1.54	3.93E-10
16.46	2.41	3.7	3.58	3.21	3.46	0.0	1.82	40.89	1.18	1.68	5.47E-10
16.48	1.87	2.81	3.79	3.45	3.37	0.0	2.08	38.8	1.25	1.57	7.21E-10
16.5	1.92	2.82	4.13	3.77	3.34	0.0	2.47	40.52	1.36	1.27	8.01E-10
16.52	1.38	1.74	7.24	7.02	3.0	0.0	8.07	46.37	2.39	1.01	6.66E-09
16.54	1.31	1.59	8.93	8.81	2.9	0.0	12.5	50.08	2.95	0.68	1.40E-08
16.56	1.2	1.53	6.87	6.67	3.0	0.0	7.29	43.7	2.27	0.0	6.99E-09
16.58	1.72	2.33	5.39	5.08	3.19	0.0	4.36	43.83	1.78	1.11	1.82E-09
16.6	2.98	4.37	4.14	3.72	3.45	0.0	2.45	46.68	1.37	1.38	5.75E-10
16.62	4.75	7.56	3.26	2.81	3.68	0.0	1.46	49.4	1.08	1.79	2.75E-10
16.64	4.78	7.76	3.08	2.64	3.71	0.0	1.3	48.47	1.02	1.94	2.52E-10
16.66	4.86	7.95	3.03	2.59	3.72	0.0	1.26	48.5	1.0	1.96	2.42E-10
16.68	4.49	6.97	3.49	3.02	3.63	0.0	1.69	49.97	1.15	1.66	3.19E-10
16.7	4.31	6.79	3.34	2.89	3.64	0.0	1.54	48.49	1.1	1.79	3.09E-10
16.72	3.48	5.48	3.35	2.93	3.59	0.0	1.58	45.37	1.11	1.77	3.70E-10
16.74	3.07	4.47	4.23	3.79	3.44	0.0	2.58	47.91	1.4	0.9	5.79E-10
16.76	2.81	4.25	3.76	3.34	3.48	0.0	2.02	44.43	1.24	0.68	5.19E-10
16.78	2.33	3.38	4.25	3.85	3.37	0.0	2.63	44.09	1.4	0.01	7.23E-10
16.8	2.11	2.89	5.18	4.79	3.26	0.0	3.99	46.44	1.71	0.89	1.12E-09
16.82	2.01	2.77	5.1	4.72	3.25	0.0	3.88	45.51	1.68	0.9	1.16E-09
16.84	2.22	3.07	5.03	4.62	3.28	0.0	3.75	46.7	1.66	0.91	9.58E-10
16.86	2.46	3.43	4.85	4.42	3.33	0.0	3.46	47.51	1.6	1.01	8.40E-10
16.88	1.17	1.31	16.0	16.52	2.62	0.0	36.23	64.27	5.28	1.04	9.72E-08
16.9	0.85	0.92	24.51	26.53	2.36	56.85	55.55	71.25	0.0	0.0	5.84E-07
16.92	0.85	0.92	26.26	28.57	2.34	58.79	59.57	73.69	0.0	0.0	7.13E-07
16.94	1.12	1.19	28.42	30.74	2.37	66.44	64.55	83.27	0.0	0.0	5.65E-07
16.96	1.37	1.48	25.34	26.83	2.47	67.41	57.6	84.48	0.0	0.0	2.78E-07
16.98	2.49	2.75	17.86	17.98	2.77	0.0	40.65	87.0	5.89	0.44	3.44E-08
17.0	4.04	4.64	12.94	12.45	3.03	0.0	26.22	88.25	4.27	0.33	5.39E-09
17.02	5.96	7.06	10.39	9.67	3.23	0.0	16.36	91.43	3.43	0.27	1.33E-09
17.04	6.27	7.33	11.5	10.74	3.21	0.0	20.12	98.15	3.79	0.29	1.57E-09
17.06	4.57	5.09	17.05	16.61	2.96	0.0	38.96	106.6	5.63	0.42	8.86E-09
17.08	3.74	4.17	16.8	16.51	2.91	0.0	38.42	98.18	5.54	0.42	1.29E-08
17.1	4.48	5.2	11.95	11.38	3.09	0.0	22.24	88.53	3.95	0.3	3.51E-09
17.12	4.76	5.76	9.18	8.55	3.22	0.0	12.86	79.74	3.03	0.24	1.46E-09
17.14	6.12	7.86	6.82	6.1	3.42	0.0	6.82	76.24	2.25	0.18	6.27E-10
17.16	6.57	8.6	6.25	5.53	3.48	0.0	5.66	75.2	2.06	1.03	5.22E-10
17.18	5.6	7.28	6.43	5.75	3.42	0.0	6.07	72.04	2.12	1.03	6.28E-10
17.2	5.57	7.73	5.0	4.38	3.53	0.0	3.6	64.4	1.65	1.08	4.44E-10
17.22	6.53	9.7	3.98	3.39	3.68	0.0	2.22	61.89	1.31	1.23	2.78E-10
17.24	5.6	8.4	3.86	3.31	3.65	0.0	2.1	58.0	1.27	1.16	3.04E-10
17.26	5.36	8.06	3.85	3.3	3.64	0.0	2.09	57.11	1.27	1.27	3.13E-10
17.28	4.24	6.04	4.56	4.01	3.5	0.0	3.02	56.62	1.51	1.32	4.91E-10
17.3	2.5	3.22	6.7	6.27	3.18	0.0	6.93	55.97	2.21	0.08	1.89E-09
17.32	2.18	2.75	7.39	7.01	3.1	0.0	8.55	56.02	2.44	0.28	3.26E-09
17.34	2.14	2.84	5.9	5.51	3.2	0.0	5.38	50.61	1.95	0.75	1.67E-09
17.36	2.19	3.13	4.48	4.06	3.34	0.0	3.01	45.66	1.48	0.45	8.10E-10
17.38	3.02	4.48	4.0	3.54	3.47	0.0	2.35	48.31	1.32	1.51	5.33E-10
17.4	2.72	3.85	4.69	4.22	3.37	0.0	3.29	49.92	1.55	1.18	7.32E-10
17.42	2.11	2.6	8.38	8.03	3.04	0.0	11.17	58.95	2.76	0.82	5.06E-09
17.44	1.16	1.29	16.77	17.39	2.6	53.61	39.01	67.19	5.53	0.42	1.14E-07
17.46	1.28	1.41	18.9	19.69	2.57	58.56	44.03	73.4	6.24	0.46	1.37E-07

17.48	1.74	2.0	12.58	12.54	2.82	0.0	26.28	66.86	4.15	0.32	2.43E-08
17.5	2.77	3.44	8.01	7.56	3.13	0.0	10.1	63.37	2.64	0.21	2.72E-09
17.52	3.9	5.15	6.04	5.44	3.35	0.0	5.48	62.89	1.99	0.16	7.82E-10
17.54	7.33	10.9	3.98	3.35	3.71	0.0	2.23	65.7	1.31	0.11	2.49E-10
17.56	7.59	11.06	4.24	3.58	3.69	0.0	2.53	68.37	1.4	1.23	2.64E-10
17.58	6.55	9.19	4.79	4.12	3.59	0.0	3.3	68.39	1.58	1.26	3.60E-10
17.6	6.31	9.29	4.11	3.49	3.65	0.0	2.4	63.32	1.35	0.96	2.97E-10
17.62	6.26	10.25	3.03	2.51	3.8	0.0	1.28	55.97	1.0	0.09	1.91E-10
17.64	5.29	8.96	2.8	2.32	3.79	0.0	1.09	51.31	0.92	0.08	1.94E-10
17.66	4.07	7.07	2.64	2.2	3.75	0.0	0.97	46.05	0.87	0.08	2.20E-10
17.68	2.41	4.18	2.65	2.26	3.62	0.0	1.01	39.16	0.87	0.08	3.32E-10
17.7	1.72	2.71	3.33	2.95	3.43	0.0	1.65	38.59	1.1	0.81	6.12E-10
17.72	2.06	2.79	5.49	5.05	3.23	0.0	4.67	49.64	1.81	0.53	1.37E-09
17.74	2.27	3.18	4.83	4.38	3.31	0.0	3.57	48.6	1.59	1.25	8.77E-10
17.76	3.56	5.51	3.54	3.04	3.57	0.0	1.82	49.54	1.17	0.4	3.85E-10
17.78	3.78	5.89	3.49	2.99	3.6	0.0	1.76	50.33	1.15	0.85	3.59E-10
17.8	3.43	5.14	3.89	3.39	3.52	0.0	2.23	50.93	1.28	1.41	4.58E-10
17.82	3.51	5.35	3.68	3.18	3.55	0.0	1.99	50.27	1.22	1.15	4.14E-10
17.84	2.71	3.68	5.39	4.88	3.31	0.0	4.46	54.03	1.78	0.91	8.95E-10
17.86	1.95	2.42	8.07	7.72	3.04	0.0	10.57	57.8	2.66	0.99	5.16E-09
17.88	1.87	2.39	6.95	6.58	3.1	0.0	7.76	53.54	2.29	0.0	3.46E-09
17.9	1.71	2.43	4.61	4.2	3.27	0.0	3.29	44.19	1.52	1.31	1.04E-09
17.92	1.71	2.65	3.55	3.15	3.4	0.0	1.9	39.98	1.17	0.97	6.74E-10
17.94	2.73	4.49	3.01	2.58	3.59	0.0	1.32	43.31	0.99	0.23	3.69E-10
17.96	2.85	4.65	3.08	2.63	3.59	0.0	1.38	44.26	1.01	0.47	3.69E-10
17.98	2.8	4.54	3.12	2.68	3.57	0.0	1.42	44.3	1.03	0.63	3.82E-10
18.0	2.66	4.17	3.43	2.98	3.52	0.0	1.74	45.26	1.13	1.36	4.60E-10
18.02	2.28	3.25	4.55	4.08	3.34	0.0	3.17	48.22	1.5	1.22	7.95E-10
18.04	2.02	2.87	4.66	4.22	3.3	0.0	3.36	47.02	1.54	1.19	9.02E-10
18.06	2.04	3.06	3.91	3.48	3.39	0.0	2.33	44.06	1.29	1.54	6.86E-10
18.08	1.86	3.12	2.85	2.47	3.52	0.0	1.21	38.11	0.94	0.35	4.50E-10
18.1	1.24	2.03	3.05	2.71	3.4	0.0	1.42	34.91	1.01	1.49	6.64E-10
18.12	0.69	0.92	5.77	5.59	2.97	0.0	5.54	38.26	1.9	0.36	8.46E-09
18.14	0.55	0.7	7.3	7.27	2.82	0.0	9.12	40.0	2.41	0.99	2.44E-08
18.16	1.14	1.55	5.43	5.13	3.1	0.0	4.78	42.59	1.79	1.04	3.37E-09
18.18	2.36	3.55	3.85	3.39	3.43	0.0	2.25	46.06	1.27	0.88	6.01E-10
18.2	3.52	5.24	3.99	3.45	3.52	0.0	2.37	53.09	1.32	1.5	4.61E-10
18.22	3.26	4.7	4.39	3.85	3.45	0.0	2.91	53.79	1.45	1.35	5.67E-10
18.24	3.25	4.65	4.52	3.97	3.44	0.0	3.1	54.51	1.49	1.31	5.93E-10
18.26	3.64	5.45	3.93	3.38	3.53	0.0	2.29	53.49	1.3	1.52	4.37E-10
18.28	3.49	5.35	3.66	3.14	3.55	0.0	1.99	51.39	1.21	1.58	4.08E-10
18.3	3.26	4.99	3.67	3.16	3.54	0.0	2.01	50.39	1.21	1.6	4.32E-10
18.32	2.69	4.11	3.69	3.21	3.48	0.0	2.06	47.55	1.22	1.63	5.08E-10
18.34	1.46	2.06	4.73	4.34	3.22	0.0	3.56	43.65	1.56	0.8	1.45E-09
18.36	1.3	1.77	5.37	5.03	3.13	0.0	4.69	44.34	1.77	0.32	2.68E-09
18.38	1.54	2.2	4.56	4.15	3.25	0.0	3.29	43.83	1.51	1.3	1.17E-09
18.4	2.78	4.24	3.7	3.2	3.49	0.0	2.06	48.26	1.22	1.27	4.95E-10
18.42	3.34	5.16	3.57	3.05	3.56	0.0	1.9	50.54	1.18	1.24	4.06E-10
18.44	3.11	4.73	3.76	3.24	3.51	0.0	2.12	50.47	1.24	1.45	4.63E-10
18.46	3.03	4.48	4.06	3.53	3.47	0.0	2.5	51.6	1.34	1.49	5.33E-10
18.48	2.68	4.0	3.97	3.46	3.45	0.0	2.4	49.26	1.31	1.52	5.66E-10
18.5	3.31	5.23	3.36	2.85	3.58	0.0	1.67	49.41	1.11	0.95	3.71E-10
18.52	3.24	5.26	3.11	2.63	3.62	0.0	1.43	47.74	1.03	0.86	3.36E-10
18.54	2.55	4.16	3.11	2.65	3.56	0.0	1.44	44.36	1.03	0.99	4.03E-10
18.56	2.41	3.57	4.07	3.57	3.41	0.0	2.55	48.34	1.34	1.46	6.37E-10
18.58	2.34	3.42	4.21	3.72	3.39	0.0	2.75	48.59	1.39	1.4	6.87E-10
18.6	2.86	4.58	3.24	2.76	3.57	0.0	1.57	46.85	1.07	0.77	3.94E-10
18.62	3.69	6.35	2.7	2.23	3.72	0.0	1.06	47.53	0.89	0.07	2.42E-10
18.64	2.94	4.87	2.95	2.49	3.62	0.0	1.29	45.71	0.98	0.8	3.33E-10
18.66	2.38	3.89	3.09	2.63	3.55	0.0	1.43	43.57	1.02	1.25	4.19E-10
18.68	2.69	4.55	2.83	2.38	3.62	0.0	1.19	43.9	0.93	0.46	3.33E-10
18.7	3.85	6.66	2.66	2.18	3.74	0.0	1.03	48.15	0.88	1.28	2.28E-10
18.72	3.72	6.57	2.54	2.07	3.75	0.0	0.93	46.85	0.84	1.02	2.17E-10
18.74	2.88	5.14	2.49	2.06	3.7	0.0	0.91	42.97	0.82	1.05	2.57E-10
18.76	2.52	4.44	2.56	2.13	3.65	0.0	0.96	41.65	0.84	1.37	2.97E-10
18.78	2.32	3.88	2.9	2.46	3.57	0.0	1.26	42.51	0.96	1.96	3.86E-10
18.8	2.1	3.2	3.73	3.26	3.42	0.0	2.15	45.36	1.23	1.34	6.17E-10
18.82	1.48	2.18	4.14	3.72	3.29	0.0	2.73	42.72	1.37	0.85	9.34E-10
18.84	2.01	3.16	3.39	2.94	3.46	0.0	1.77	43.29	1.12	1.78	5.51E-10
18.86	2.4	3.72	3.53	3.05	3.48	0.0	1.91	46.4	1.16	1.7	5.12E-10
18.88	1.83	2.65	4.36	3.89	3.32	0.0	3.02	46.44	1.44	0.99	8.66E-10
18.9	2.07	3.03	4.21	3.72	3.36	0.0	2.79	47.57	1.39	1.44	7.50E-10
18.92	2.93	4.63	3.37	2.86	3.56	0.0	1.71	48.69	1.11	0.49	4.06E-10

18.94	3.43	5.42	3.37	2.84	3.59	0.0	1.71	51.31	1.11	1.5	3.59E-10
18.96	3.23	4.76	4.13	3.56	3.48	0.0	2.62	54.48	1.36	1.4	5.14E-10
18.98	2.01	2.46	8.72	8.33	3.02	0.0	12.98	63.86	2.88	0.7	6.09E-09
19.0	0.84	0.92	19.73	21.09	2.45	56.48	49.37	70.78	0.0	0.0	3.15E-07
19.02	0.76	0.83	21.76	23.73	2.38	57.24	54.52	71.74	0.0	0.0	5.07E-07
19.04	0.97	1.09	16.3	17.03	2.57	54.15	40.87	67.87	0.0	0.0	1.40E-07
19.06	1.63	1.92	10.95	10.78	2.86	0.0	21.18	66.39	3.61	0.28	1.77E-08
19.08	2.6	3.25	7.76	7.24	3.13	0.0	10.09	66.24	2.56	0.21	2.69E-09
19.1	3.32	4.28	6.8	6.13	3.26	0.0	7.49	68.14	2.24	0.18	1.11E-09
19.12	5.29	6.79	6.88	6.04	3.38	0.0	7.47	80.66	2.27	0.94	7.01E-10
19.14	4.98	6.42	6.77	5.96	3.37	0.0	7.26	78.46	2.23	0.62	7.24E-10
19.16	4.03	5.03	7.87	7.12	3.25	0.0	10.09	77.96	2.6	0.17	1.20E-09
19.18	3.89	4.92	7.41	6.68	3.26	0.0	8.92	75.02	2.45	0.18	1.07E-09
19.2	4.18	5.5	6.2	5.46	3.36	0.0	6.11	71.16	2.05	1.0	7.46E-10
19.22	4.48	5.94	6.02	5.27	3.4	0.0	5.73	72.1	1.99	1.06	6.74E-10
19.24	3.58	4.65	6.54	5.84	3.3	0.0	6.9	69.16	2.16	0.46	9.18E-10
19.26	2.22	2.62	10.82	10.47	2.95	0.0	20.49	73.66	3.57	0.58	9.78E-09
19.28	1.62	1.8	17.5	17.94	2.66	0.0	44.36	83.05	5.78	0.43	7.22E-08
19.3	1.24	1.36	19.36	20.31	2.55	63.77	49.13	79.93	0.0	0.0	1.57E-07
19.32	1.15	1.27	18.55	19.45	2.55	61.19	47.12	76.69	0.0	0.0	1.56E-07
19.34	1.22	1.36	17.16	17.82	2.6	60.15	43.61	75.39	5.66	0.42	1.12E-07
19.36	1.16	1.28	18.09	18.93	2.56	60.66	46.03	76.03	0.0	0.0	1.44E-07
19.38	1.06	1.17	20.15	21.37	2.5	62.18	51.32	77.93	0.0	0.0	2.29E-07
19.4	1.39	1.53	19.07	19.86	2.59	66.03	48.62	82.76	6.29	0.47	1.22E-07
19.42	1.38	1.54	17.36	17.93	2.63	0.0	44.29	79.14	5.73	0.43	9.34E-08
19.44	1.55	1.73	16.2	16.54	2.68	0.0	41.38	79.51	5.35	0.4	6.25E-08
19.46	1.66	1.88	14.78	14.92	2.74	0.0	37.79	77.97	4.88	0.37	4.22E-08
19.48	1.56	1.77	14.72	14.89	2.73	0.0	37.67	76.47	4.86	0.37	4.61E-08
19.5	1.89	2.15	14.36	14.35	2.79	0.0	36.78	80.45	4.74	0.36	3.05E-08
19.52	2.35	2.71	12.97	12.69	2.89	0.0	30.14	82.69	4.28	0.33	1.50E-08
19.54	2.58	2.96	13.18	12.85	2.9	0.0	31.04	86.02	4.35	0.33	1.33E-08
19.56	2.16	2.45	14.25	14.12	2.82	0.0	36.6	84.06	4.7	0.36	2.33E-08
19.58	2.09	2.41	12.57	12.35	2.87	0.0	28.5	78.52	4.15	0.32	1.71E-08
19.6	2.18	2.6	10.09	9.69	2.97	0.0	17.98	72.13	3.33	0.26	8.16E-09
19.62	2.75	3.42	8.12	7.5	3.13	0.0	11.2	70.94	2.68	0.21	2.70E-09
19.64	3.7	4.7	7.29	6.54	3.26	0.0	8.77	74.9	2.4	0.19	1.10E-09
19.66	3.51	4.25	9.3	8.57	3.14	0.0	14.69	82.1	3.07	0.24	2.57E-09
19.68	3.5	4.24	9.31	8.58	3.14	0.0	14.73	82.17	3.07	0.24	2.59E-09
19.7	2.1	2.46	11.61	11.31	2.9	0.0	24.23	76.28	3.83	0.3	1.33E-08
19.72	1.96	2.33	10.5	10.17	2.93	0.0	19.72	71.35	3.46	0.27	1.11E-08
19.74	2.18	2.7	8.36	7.88	3.06	0.0	12.18	66.81	2.76	0.22	4.54E-09
19.76	2.7	3.41	7.46	6.83	3.16	0.0	9.43	68.37	2.46	0.2	2.14E-09
19.78	3.32	4.33	6.42	5.72	3.29	0.0	6.8	68.79	2.12	0.17	9.47E-10
19.8	3.82	5.08	5.94	5.2	3.36	0.0	5.73	69.87	1.96	0.16	7.52E-10
19.82	2.99	3.81	7.23	6.56	3.21	0.0	8.8	70.09	2.39	0.19	1.60E-09
19.84	2.73	3.33	8.88	8.31	3.09	0.0	13.72	74.18	2.93	0.23	3.65E-09
19.86	1.8	2.03	15.37	15.47	2.75	0.0	39.99	83.13	5.07	0.38	4.05E-08
19.88	1.32	1.46	18.88	19.7	2.58	66.05	49.18	82.78	6.23	0.46	1.30E-07
19.9	1.19	1.31	18.82	19.74	2.55	63.85	49.06	80.02	0.0	0.0	1.55E-07
19.92	1.02	1.13	18.86	19.95	2.52	61.03	49.23	76.49	0.0	0.0	2.02E-07
19.94	0.94	1.04	19.74	21.04	2.48	60.93	51.55	76.37	0.0	0.0	2.63E-07
19.96	1.04	1.14	19.84	21.06	2.5	62.97	51.88	78.93	0.0	0.0	2.27E-07
19.98	1.2	1.33	19.01	19.95	2.55	64.59	49.75	80.95	0.0	0.0	1.57E-07
20.0	1.26	1.39	18.73	19.59	2.57	65.11	49.07	81.6	6.18	0.46	1.39E-07
20.02	1.35	1.49	19.73	20.65	2.57	68.4	51.74	85.72	6.51	0.48	1.42E-07
20.04	1.38	1.5	22.66	23.99	2.51	73.54	59.48	92.17	0.0	0.0	2.05E-07
20.06	1.44	1.55	24.04	25.52	2.5	76.74	63.15	96.18	0.0	0.0	2.26E-07
20.08	1.5	1.63	22.79	24.01	2.53	75.98	59.91	95.23	0.0	0.0	1.78E-07
20.1	1.52	1.67	20.95	21.89	2.57	73.45	55.13	92.06	6.91	0.51	1.36E-07
20.12	1.42	1.59	16.14	16.54	2.66	0.0	42.51	79.61	5.33	0.4	7.20E-08
20.14	1.67	1.93	12.92	12.84	2.8	0.0	31.24	75.9	4.26	0.33	2.75E-08
20.16	2.19	2.6	10.69	10.29	2.95	0.0	20.73	76.18	3.53	0.28	9.54E-09
20.18	3.3	4.1	8.11	7.37	3.18	0.0	11.27	77.55	2.68	0.21	1.89E-09
20.2	4.58	5.97	6.51	5.66	3.37	0.0	6.95	79.1	2.15	0.17	7.26E-10
20.22	5.68	7.38	6.57	5.63	3.43	0.0	6.98	85.85	2.17	0.18	6.06E-10
20.24	4.98	6.35	7.1	6.18	3.36	0.0	8.3	84.77	2.34	0.19	7.60E-10
20.26	4.6	5.94	6.79	5.92	3.35	0.0	7.61	80.93	2.24	0.18	7.67E-10
20.28	5.02	6.58	6.33	5.44	3.41	0.0	6.52	81.02	2.09	0.17	6.42E-10
20.3	4.51	5.93	6.26	5.42	3.39	0.0	6.43	77.73	2.07	0.17	6.96E-10
20.32	2.89	3.4	11.38	10.83	3.0	0.0	23.38	86.75	3.76	0.29	6.81E-09
20.34	1.81	2.04	15.79	15.92	2.74	0.0	41.97	86.21	5.21	0.39	4.32E-08
20.36	1.86	2.15	12.42	12.22	2.84	0.0	28.83	77.89	4.1	0.32	2.02E-08
20.38	2.06	2.49	9.48	9.04	2.99	0.0	16.3	71.46	3.13	0.25	7.35E-09

# Ulik\_V2.1

## Report riassuntivo indice potenziale liquefazione

11/10/2022

12:41:10

Committente		Dott. Geol. Maurizio Castellari			
Località		Lago Santo (Fe)			
Via		Lago Santo			
Prova		CPTU1			
Metodo utilizzato	Magnitudo di riferimento	Acc.Max/g	Prof. Preforo	Falda	IPL (Sonmez 2003)
Boulanger e Idriss 2014	6.6	0.123	0.02	2.0	0.002

Tabella 1 - Parametri inseriti e IPL verticale prova penetrometrica

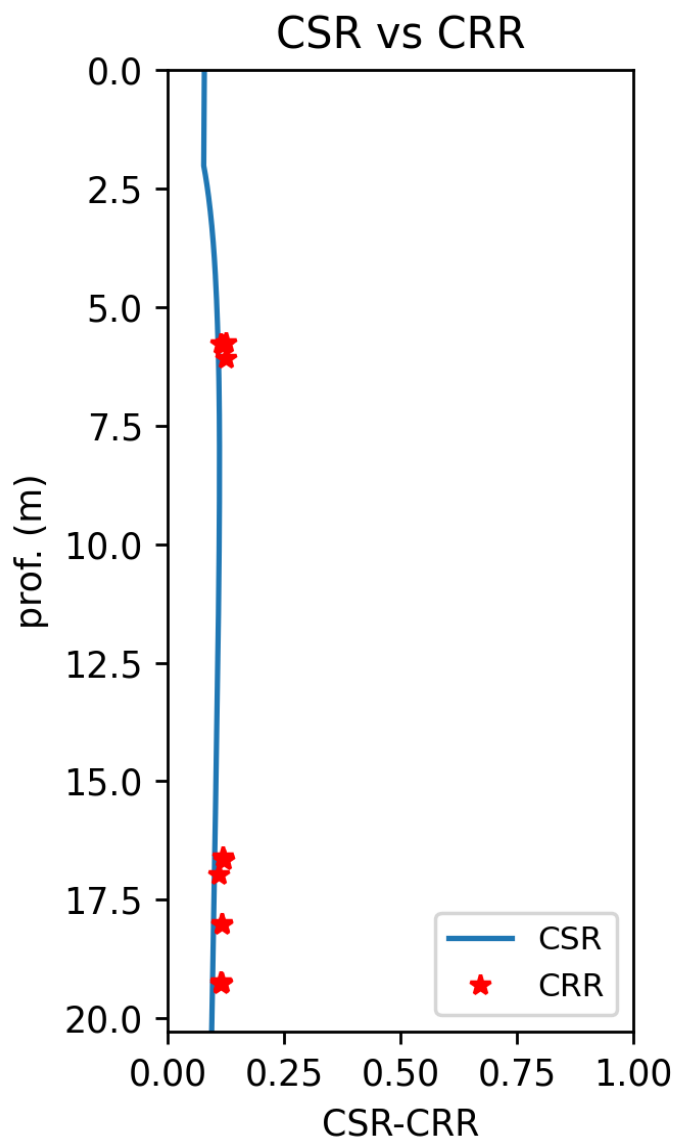


Grafico 1 - CSR vs CRR, i valori di CRR indicati con asterisco rosso che ricadono a sinistra della curva CRR indicano valori con FS < 1 e quindi potenzialmente liquefacibili-

## Report calcolo indice potenziale liquefazione

11/10/2022

12:40:50

Committente		Dott. Geol. Maurizio Castellari				
Località		Lago Santo (Fe)				
Via		Lago Santo				
Prova		CPTU1				
Metodo utilizzato	Magnitudo di riferimento	Acc.Max/g	Prof. Preforo	Falda	IPL (Sonmez 2003)	
Boulangier e Idriss 2014	6.6	0.123	0.02	2.0	0.002	
Profondità (m)	Q (r.p.c.)	FC	CSR	Ic	Fsl	Ipl
0.02	49.915	53.158	0.079	2.377	N.C.	0.0
0.04	51.739	59.309	0.079	2.454	N.C.	0.0
0.06	52.906	63.674	0.079	2.508	N.C.	0.0
0.08	53.408	65.095	0.079	2.526	N.C.	0.0
0.1	53.808	64.841	0.079	2.523	N.C.	0.0
0.12	54.273	66.108	0.079	2.539	N.C.	0.0
0.14	47.318	42.499	0.079	2.244	N.C.	0.0
0.16	45.935	38.121	0.079	2.189	N.C.	0.0
0.18	43.764	34.04	0.079	2.138	N.C.	0.0
0.2	43.177	32.391	0.079	2.117	N.C.	0.0
0.22	41.011	29.341	0.078	2.079	N.C.	0.0
0.24	39.683	27.553	0.078	2.057	N.C.	0.0
0.26	41.077	28.529	0.078	2.069	N.C.	0.0
0.28	42.057	29.796	0.078	2.085	N.C.	0.0
0.3	41.797	29.06	0.078	2.076	N.C.	0.0
0.32	43.873	30.905	0.078	2.099	N.C.	0.0
0.34	41.002	26.837	0.078	2.048	N.C.	0.0
0.36	37.168	21.615	0.078	1.983	N.C.	0.0
0.38	36.987	20.11	0.078	1.964	N.C.	0.0
0.4	22.002	8.791	0.078	1.822	N.C.	0.0
0.42	26.895	-0.643	0.078	1.704	N.C.	0.0
0.44	32.7	4.567	0.078	1.77	N.C.	0.0
0.46	40.182	-8.333	0.078	1.608	N.C.	0.0
0.48	56.215	-10.441	0.078	1.582	N.C.	0.0
0.5	85.247	-13.167	0.078	1.548	N.C.	0.0
0.52	121.234	-16.223	0.078	1.51	N.C.	0.0
0.54	150.577	-18.735	0.078	1.478	N.C.	0.0
0.56	162.082	-19.225	0.078	1.472	N.C.	0.0
0.58	163.068	-18.134	0.078	1.486	N.C.	0.0
0.6	158.209	-16.632	0.078	1.505	N.C.	0.0
0.62	136.987	-13.593	0.078	1.543	N.C.	0.0
0.64	111.446	-10.365	0.078	1.583	N.C.	0.0
0.66	102.249	-7.168	0.078	1.623	N.C.	0.0
0.68	103.058	-5.547	0.078	1.643	N.C.	0.0
0.7	103.058	-4.984	0.078	1.65	N.C.	0.0
0.72	108.456	-3.061	0.078	1.674	N.C.	0.0
0.74	110.371	-2.858	0.078	1.677	N.C.	0.0
0.76	111.413	-1.885	0.078	1.689	N.C.	0.0
0.78	111.933	-1.65	0.078	1.692	N.C.	0.0

0.8	111.756	-0.575	0.078	1.705	N.C.	0.0
0.82	112.799	-0.232	0.078	1.71	N.C.	0.0
0.84	113.145	0.529	0.078	1.719	N.C.	0.0
0.86	114.71	0.272	0.078	1.716	N.C.	0.0
0.88	115.404	0.888	0.078	1.724	N.C.	0.0
0.9	116.447	0.919	0.078	1.724	N.C.	0.0
0.92	116.095	1.538	0.078	1.732	N.C.	0.0
0.94	115.394	2.131	0.078	1.739	N.C.	0.0
0.96	110.159	2.93	0.078	1.749	N.C.	0.0
0.98	111.035	2.14	0.078	1.739	N.C.	0.0
1.0	110.341	3.037	0.078	1.75	N.C.	0.0
1.02	107.418	4.272	0.078	1.766	N.C.	0.0
1.04	106.413	4.612	0.078	1.77	N.C.	0.0
1.06	105.833	5.135	0.078	1.777	N.C.	0.0
1.08	105.887	5.296	0.078	1.779	N.C.	0.0
1.1	99.002	7.747	0.078	1.809	N.C.	0.0
1.12	98.459	8.325	0.078	1.817	N.C.	0.0
1.14	98.386	8.962	0.078	1.825	N.C.	0.0
1.16	97.956	9.008	0.078	1.825	N.C.	0.0
1.18	98.317	8.771	0.078	1.822	N.C.	0.0
1.2	99.171	7.285	0.078	1.804	N.C.	0.0
1.22	102.815	4.98	0.078	1.775	N.C.	0.0
1.24	106.322	3.057	0.078	1.751	N.C.	0.0
1.26	109.631	1.806	0.078	1.735	N.C.	0.0
1.28	109.63	2.376	0.078	1.742	N.C.	0.0
1.3	108.584	2.961	0.078	1.75	N.C.	0.0
1.32	107.72	3.692	0.078	1.759	N.C.	0.0
1.34	107.745	4.214	0.078	1.765	N.C.	0.0
1.36	108.793	4.257	0.078	1.766	N.C.	0.0
1.38	110.682	3.798	0.078	1.76	N.C.	0.0
1.4	113.632	3.048	0.077	1.751	N.C.	0.0
1.42	123.391	-0.74	0.077	1.703	N.C.	0.0
1.44	125.878	-2.59	0.077	1.68	N.C.	0.0
1.46	119.289	-0.361	0.077	1.708	N.C.	0.0
1.48	109.196	3.915	0.077	1.761	N.C.	0.0
1.5	103.766	7.133	0.077	1.802	N.C.	0.0
1.52	105.836	10.644	0.077	1.846	N.C.	0.0
1.54	108.938	12.946	0.077	1.874	N.C.	0.0
1.56	111.431	14.243	0.077	1.891	N.C.	0.0
1.58	110.41	13.848	0.077	1.886	N.C.	0.0
1.6	108.366	13.975	0.077	1.887	N.C.	0.0
1.62	108.035	14.051	0.077	1.888	N.C.	0.0
1.64	106.145	12.581	0.077	1.87	N.C.	0.0
1.66	103.621	9.776	0.077	1.835	N.C.	0.0
1.68	104.73	6.02	0.077	1.788	N.C.	0.0
1.7	113.513	1.894	0.077	1.736	N.C.	0.0
1.72	127.406	-5.651	0.077	1.642	N.C.	0.0
1.74	148.241	-10.999	0.077	1.575	N.C.	0.0
1.76	176.568	-14.075	0.077	1.537	N.C.	0.0
1.78	141.186	-10.079	0.077	1.587	N.C.	0.0
1.8	127.662	-5.513	0.077	1.644	N.C.	0.0
1.82	121.745	0.249	0.077	1.716	N.C.	0.0
1.84	117.661	3.601	0.077	1.758	N.C.	0.0
1.86	117.106	7.529	0.077	1.807	N.C.	0.0

1.88	118.331	8.987	0.077	1.825	N.C.	0.0
1.9	117.527	8.53	0.077	1.819	N.C.	0.0
1.92	115.147	7.047	0.077	1.801	N.C.	0.0
1.94	115.725	3.47	0.077	1.756	N.C.	0.0
1.96	122.586	-1.436	0.077	1.695	N.C.	0.0
1.98	132.891	-6.92	0.077	1.626	N.C.	0.0
2.0	155.846	-11.212	0.077	1.572	N.C.	0.0
2.02	184.487	-13.867	0.077	1.539	N.C.	0.0
2.04	195.627	-14.652	0.078	1.529	N.C.	0.0
2.06	197.522	-14.541	0.078	1.531	N.C.	0.0
2.08	182.938	-12.809	0.078	1.552	N.C.	0.0
2.1	157.607	-9.463	0.079	1.594	N.C.	0.0
2.12	152.358	-7.152	0.079	1.623	N.C.	0.0
2.14	153.877	-6.026	0.08	1.637	N.C.	0.0
2.16	156.642	-6.049	0.08	1.637	N.C.	0.0
2.18	157.825	-6.726	0.08	1.628	N.C.	0.0
2.2	157.932	-6.838	0.081	1.627	N.C.	0.0
2.22	154.514	-6.519	0.081	1.631	N.C.	0.0
2.24	151.635	-5.463	0.081	1.644	N.C.	0.0
2.26	146.204	-3.916	0.082	1.664	N.C.	0.0
2.28	140.243	-1.606	0.082	1.692	N.C.	0.0
2.3	134.722	1.387	0.082	1.73	3.415	0.0
2.32	133.382	2.467	0.083	1.743	3.308	0.0
2.34	135.328	1.385	0.083	1.73	3.427	0.0
2.36	139.944	-1.079	0.083	1.699	N.C.	0.0
2.38	139.939	-2.193	0.084	1.685	N.C.	0.0
2.4	138.454	-2.462	0.084	1.682	N.C.	0.0
2.42	135.941	-2.475	0.084	1.682	N.C.	0.0
2.44	133.145	-2.136	0.084	1.686	N.C.	0.0
2.46	131.539	-1.573	0.085	1.693	N.C.	0.0
2.48	131.262	-1.185	0.085	1.698	N.C.	0.0
2.5	131.574	-0.766	0.085	1.703	N.C.	0.0
2.52	131.154	-0.433	0.086	1.707	N.C.	0.0
2.54	131.32	-0.919	0.086	1.701	N.C.	0.0
2.56	133.381	-2.258	0.086	1.684	N.C.	0.0
2.58	134.416	-2.771	0.086	1.678	N.C.	0.0
2.6	138.19	-4.467	0.087	1.657	N.C.	0.0
2.62	143.388	-6.917	0.087	1.626	N.C.	0.0
2.64	148.345	-8.349	0.087	1.608	N.C.	0.0
2.66	151.641	-9.256	0.088	1.597	N.C.	0.0
2.68	150.736	-9.073	0.088	1.599	N.C.	0.0
2.7	145.986	-7.023	0.088	1.625	N.C.	0.0
2.72	140.15	-4.992	0.088	1.65	N.C.	0.0
2.74	136.792	-2.131	0.089	1.686	N.C.	0.0
2.76	132.258	-0.236	0.089	1.71	N.C.	0.0
2.78	126.937	2.413	0.089	1.743	2.677	0.0
2.8	121.392	8.538	0.089	1.819	2.428	0.0
2.82	124.528	12.566	0.09	1.87	2.55	0.0
2.84	125.928	14.063	0.09	1.888	2.604	0.0
2.86	125.425	14.808	0.09	1.898	2.573	0.0
2.88	122.265	14.122	0.09	1.889	2.432	0.0
2.9	122.0	13.769	0.09	1.885	2.413	0.0
2.92	131.485	17.747	0.091	1.934	2.849	0.0
2.94	116.365	9.203	0.091	1.828	2.197	0.0



2.96	114.801	6.656	0.091	1.796	2.14	0.0
2.98	114.3	6.67	0.091	1.796	2.119	0.0
3.0	114.108	7.453	0.092	1.806	2.107	0.0
3.02	115.711	8.297	0.092	1.816	2.15	0.0
3.04	117.638	9.23	0.092	1.828	2.207	0.0
3.06	121.384	11.603	0.092	1.858	2.334	0.0
3.08	126.628	16.639	0.092	1.92	2.544	0.0
3.1	129.975	20.179	0.093	1.965	2.696	0.0
3.12	131.037	22.805	0.093	1.998	2.744	0.0
3.14	130.806	23.695	0.093	2.009	2.724	0.0
3.16	130.453	23.184	0.093	2.002	2.698	0.0
3.18	130.123	22.782	0.094	1.997	2.674	0.0
3.2	128.309	21.534	0.094	1.982	2.579	0.0
3.22	126.099	20.343	0.094	1.967	2.473	0.0
3.24	122.843	17.862	0.094	1.936	2.333	0.0
3.26	120.55	15.193	0.094	1.902	2.242	0.0
3.28	118.199	13.169	0.095	1.877	2.156	0.0
3.3	118.168	12.073	0.095	1.863	2.149	0.0
3.32	117.548	11.202	0.095	1.853	2.124	0.0
3.34	118.305	11.833	0.095	1.86	2.144	0.0
3.36	119.541	12.285	0.095	1.866	2.18	0.0
3.38	122.663	13.273	0.095	1.878	2.286	0.0
3.4	123.433	12.988	0.096	1.875	2.31	0.0
3.42	123.054	12.087	0.096	1.864	2.29	0.0
3.44	120.981	11.502	0.096	1.856	2.209	0.0
3.46	121.113	12.19	0.096	1.865	2.209	0.0
3.48	120.983	12.346	0.096	1.867	2.199	0.0
3.5	119.527	11.322	0.097	1.854	2.144	0.0
3.52	117.733	9.936	0.097	1.837	2.081	0.0
3.54	117.598	9.605	0.097	1.833	2.073	0.0
3.56	119.542	10.65	0.097	1.846	2.131	0.0
3.58	122.61	12.494	0.097	1.869	2.234	0.0
3.6	125.504	14.663	0.097	1.896	2.34	0.0
3.62	126.439	16.582	0.098	1.92	2.374	0.0
3.64	128.368	18.871	0.098	1.948	2.452	0.0
3.66	129.576	20.748	0.098	1.972	2.502	0.0
3.68	130.113	22.265	0.098	1.991	2.521	0.0
3.7	128.925	23.615	0.098	2.008	2.461	0.0
3.72	127.324	24.432	0.098	2.018	2.386	0.0
3.74	126.455	24.205	0.098	2.015	2.345	0.0
3.76	125.263	21.711	0.099	1.984	2.292	0.0
3.78	121.522	16.934	0.099	1.924	2.15	0.0
3.8	117.999	14.483	0.099	1.894	2.031	0.0
3.82	114.403	11.193	0.099	1.852	1.922	0.0
3.84	112.172	7.877	0.099	1.811	1.86	0.0
3.86	115.501	4.762	0.099	1.772	1.946	0.0
3.88	120.594	2.843	0.099	1.748	2.098	0.0
3.9	125.516	1.858	0.1	1.736	2.272	0.0
3.92	127.555	3.651	0.1	1.758	2.35	0.0
3.94	130.692	2.649	0.1	1.746	2.485	0.0
3.96	130.487	2.702	0.1	1.746	2.471	0.0
3.98	130.929	2.658	0.1	1.746	2.487	0.0
4.0	137.059	4.585	0.1	1.77	2.808	0.0
4.02	136.843	7.253	0.1	1.803	2.79	0.0

4.04	140.032	9.509	0.101	1.831	2.984	0.0
4.06	142.759	10.453	0.101	1.843	3.171	0.0
4.08	143.445	6.711	0.101	1.796	3.217	0.0
4.1	150.212	2.489	0.101	1.744	3.809	0.0
4.12	157.787	-1.175	0.101	1.698	N.C.	0.0
4.14	164.408	-4.619	0.101	1.655	N.C.	0.0
4.16	164.181	-4.569	0.101	1.655	N.C.	0.0
4.18	163.457	-4.343	0.101	1.658	N.C.	0.0
4.2	162.49	-3.063	0.102	1.674	N.C.	0.0
4.22	162.266	-1.438	0.102	1.695	N.C.	0.0
4.24	161.931	0.44	0.102	1.718	5.337	0.0
4.26	166.02	0.863	0.102	1.723	6.128	0.0
4.28	171.961	0.083	0.102	1.714	7.637	0.0
4.3	178.438	-1.419	0.102	1.695	N.C.	0.0
4.32	182.135	-3.439	0.102	1.67	N.C.	0.0
4.34	186.251	-5.376	0.102	1.645	N.C.	0.0
4.36	184.45	-5.4	0.102	1.645	N.C.	0.0
4.38	173.237	0.223	0.103	1.715	7.966	0.0
4.4	162.507	6.481	0.103	1.794	5.369	0.0
4.42	167.008	11.831	0.103	1.86	6.265	0.0
4.44	173.22	16.118	0.103	1.914	7.922	0.0
4.46	174.756	16.469	0.103	1.918	8.418	0.0
4.48	175.398	14.842	0.103	1.898	8.631	0.0
4.5	173.787	13.183	0.103	1.877	8.066	0.0
4.52	168.439	11.88	0.103	1.861	6.548	0.0
4.54	163.983	10.592	0.103	1.845	5.581	0.0
4.56	159.106	8.801	0.104	1.823	4.751	0.0
4.58	157.379	6.278	0.104	1.791	4.498	0.0
4.6	156.974	5.731	0.104	1.784	4.437	0.0
4.62	155.659	8.042	0.104	1.813	4.26	0.0
4.64	158.349	10.333	0.104	1.842	4.613	0.0
4.66	156.874	10.471	0.104	1.843	4.404	0.0
4.68	156.032	8.788	0.104	1.822	4.289	0.0
4.7	156.663	6.785	0.104	1.797	4.364	0.0
4.72	156.576	5.411	0.104	1.78	4.347	0.0
4.74	155.171	6.36	0.104	1.792	4.164	0.0
4.76	153.461	6.282	0.104	1.791	3.959	0.0
4.78	151.453	6.003	0.105	1.788	3.739	0.0
4.8	148.908	7.013	0.105	1.8	3.49	0.0
4.82	147.747	8.546	0.105	1.819	3.382	0.0
4.84	148.961	10.951	0.105	1.849	3.485	0.0
4.86	147.927	12.078	0.105	1.863	3.389	0.0
4.88	144.993	12.674	0.105	1.871	3.146	0.0
4.9	143.161	12.669	0.105	1.871	3.008	0.0
4.92	144.596	14.007	0.105	1.888	3.109	0.0
4.94	141.573	13.026	0.105	1.875	2.893	0.0
4.96	141.574	13.074	0.105	1.876	2.889	0.0
4.98	141.576	13.122	0.105	1.877	2.886	0.0
5.0	133.394	10.773	0.105	1.847	2.424	0.0
5.02	131.108	10.73	0.106	1.847	2.317	0.0
5.04	130.816	12.528	0.106	1.869	2.302	0.0
5.06	133.321	15.008	0.106	1.9	2.412	0.0
5.08	132.458	15.273	0.106	1.903	2.369	0.0
5.1	129.496	15.201	0.106	1.903	2.238	0.0

5.12	128.89	15.936	0.106	1.912	2.212	0.0
5.14	130.961	17.317	0.106	1.929	2.295	0.0
5.16	133.093	18.53	0.106	1.944	2.388	0.0
5.18	133.082	18.58	0.106	1.945	2.385	0.0
5.2	136.297	20.111	0.106	1.964	2.541	0.0
5.22	134.776	17.66	0.106	1.933	2.461	0.0
5.24	133.741	16.673	0.106	1.921	2.408	0.0
5.26	133.74	16.722	0.106	1.922	2.406	0.0
5.28	123.382	9.622	0.107	1.833	1.994	0.0
5.3	123.034	10.32	0.107	1.842	1.981	0.0
5.32	124.502	11.788	0.107	1.86	2.028	0.0
5.34	127.585	13.543	0.107	1.882	2.136	0.0
5.36	128.542	14.991	0.107	1.9	2.17	0.0
5.38	129.061	16.425	0.107	1.918	2.189	0.0
5.4	131.277	19.231	0.107	1.953	2.278	0.0
5.42	131.145	20.602	0.107	1.97	2.27	0.0
5.44	127.194	20.975	0.107	1.975	2.111	0.0
5.46	121.025	19.161	0.107	1.952	1.904	0.0
5.48	116.444	21.103	0.107	1.976	1.775	0.0
5.5	110.141	25.97	0.107	2.037	1.625	0.0
5.52	102.505	33.451	0.107	2.131	1.477	0.0
5.54	94.4	45.923	0.107	2.287	1.349	0.0
5.56	84.414	69.87	0.107	2.586	1.221	0.0
5.58	79.304	86.175	0.108	2.79	N.L.	0.0
5.6	77.737	97.199	0.108	2.927	N.L.	0.0
5.62	81.708	91.756	0.108	2.859	N.L.	0.0
5.64	94.319	66.751	0.108	2.547	1.342	0.0
5.66	103.394	53.593	0.108	2.382	1.483	0.0
5.68	106.797	39.942	0.108	2.212	1.544	0.0
5.7	104.239	30.859	0.108	2.098	1.496	0.0
5.72	94.83	21.873	0.108	1.986	1.345	0.0
5.74	84.734	16.876	0.108	1.923	1.215	0.0
5.76	79.636	15.174	0.108	1.902	1.159	0.0
5.78	69.332	11.787	0.108	1.86	1.058	0.001
5.8	74.078	14.687	0.108	1.896	1.102	0.0
5.82	89.093	24.702	0.108	2.021	1.264	0.0
5.84	92.51	34.804	0.108	2.148	1.307	0.0
5.86	89.785	48.028	0.108	2.313	1.271	0.0
5.88	80.326	80.41	0.108	2.718	N.L.	0.0
5.9	76.296	88.342	0.108	2.817	N.L.	0.0
5.92	72.778	103.898	0.109	3.011	N.L.	0.0
5.94	70.94	114.845	0.109	3.148	N.L.	0.0
5.96	71.525	112.177	0.109	3.115	N.L.	0.0
5.98	73.931	101.056	0.109	2.976	N.L.	0.0
6.0	73.264	102.71	0.109	2.996	N.L.	0.0
6.02	73.486	101.967	0.109	2.987	N.L.	0.0
6.04	73.468	102.044	0.109	2.988	N.L.	0.0
6.06	73.448	102.122	0.109	2.989	N.L.	0.0
6.08	79.734	68.661	0.109	2.571	1.146	0.0
6.1	89.142	53.313	0.109	2.379	1.251	0.0
6.12	93.236	38.657	0.109	2.196	1.303	0.0
6.14	91.448	29.054	0.109	2.076	1.278	0.0
6.16	89.47	25.878	0.109	2.036	1.253	0.0
6.18	89.108	24.767	0.109	2.022	1.247	0.0

6.2	91.103	25.349	0.109	2.029	1.271	0.0
6.22	93.874	26.608	0.109	2.045	1.307	0.0
6.24	95.099	26.484	0.109	2.044	1.323	0.0
6.26	96.98	27.338	0.109	2.054	1.349	0.0
6.28	98.745	28.691	0.109	2.071	1.374	0.0
6.3	99.809	29.19	0.109	2.077	1.39	0.0
6.32	100.033	28.992	0.11	2.075	1.392	0.0
6.34	100.344	28.654	0.11	2.071	1.396	0.0
6.36	100.062	27.055	0.11	2.051	1.391	0.0
6.38	99.907	26.244	0.11	2.041	1.388	0.0
6.4	100.2	26.324	0.11	2.042	1.392	0.0
6.42	100.489	26.588	0.11	2.045	1.395	0.0
6.44	101.208	27.075	0.11	2.051	1.406	0.0
6.46	101.566	26.261	0.11	2.041	1.411	0.0
6.48	101.662	23.94	0.11	2.012	1.412	0.0
6.5	100.994	21.178	0.11	1.977	1.4	0.0
6.52	99.079	17.883	0.11	1.936	1.37	0.0
6.54	97.301	15.594	0.11	1.907	1.343	0.0
6.56	96.15	14.118	0.11	1.889	1.326	0.0
6.58	93.012	11.763	0.11	1.86	1.282	0.0
6.6	93.609	11.483	0.11	1.856	1.289	0.0
6.62	95.982	12.258	0.11	1.866	1.321	0.0
6.64	98.553	12.555	0.11	1.869	1.357	0.0
6.66	99.014	11.965	0.11	1.862	1.364	0.0
6.68	99.359	11.453	0.11	1.856	1.368	0.0
6.7	101.121	12.397	0.11	1.867	1.395	0.0
6.72	105.884	15.423	0.11	1.905	1.474	0.0
6.74	109.528	18.36	0.11	1.942	1.542	0.0
6.76	112.46	22.886	0.11	1.999	1.602	0.0
6.78	112.912	27.317	0.11	2.054	1.611	0.0
6.8	111.39	31.695	0.11	2.109	1.578	0.0
6.82	109.974	33.38	0.11	2.13	1.548	0.0
6.84	109.237	32.312	0.11	2.116	1.532	0.0
6.86	109.291	27.951	0.11	2.062	1.533	0.0
6.88	104.031	19.357	0.11	1.954	1.436	0.0
6.9	98.016	14.74	0.11	1.897	1.341	0.0
6.92	94.231	12.4	0.11	1.868	1.287	0.0
6.94	94.77	12.306	0.11	1.866	1.294	0.0
6.96	97.93	12.714	0.11	1.871	1.338	0.0
6.98	98.079	11.837	0.111	1.86	1.339	0.0
7.0	99.95	11.432	0.111	1.855	1.366	0.0
7.02	102.463	11.707	0.111	1.859	1.405	0.0
7.04	105.327	12.356	0.111	1.867	1.453	0.0
7.06	107.058	12.807	0.111	1.873	1.483	0.0
7.08	108.419	13.585	0.111	1.882	1.508	0.0
7.1	110.532	14.468	0.111	1.893	1.549	0.0
7.12	113.168	15.673	0.111	1.908	1.603	0.0
7.14	114.398	15.892	0.111	1.911	1.63	0.0
7.16	112.68	13.963	0.111	1.887	1.591	0.0
7.18	110.481	11.795	0.111	1.86	1.545	0.0
7.2	108.223	9.723	0.111	1.834	1.5	0.0
7.22	107.381	8.46	0.111	1.818	1.484	0.0
7.24	106.726	7.905	0.111	1.811	1.472	0.0
7.26	106.697	8.45	0.111	1.818	1.47	0.0

7.28	109.063	10.124	0.111	1.839	1.514	0.0
7.3	112.769	11.896	0.111	1.861	1.589	0.0
7.32	112.779	11.936	0.111	1.862	1.588	0.0
7.34	113.382	12.264	0.111	1.866	1.601	0.0
7.36	120.558	14.62	0.111	1.895	1.775	0.0
7.38	120.744	14.423	0.111	1.893	1.779	0.0
7.4	118.025	12.748	0.111	1.872	1.707	0.0
7.42	115.983	11.436	0.111	1.855	1.657	0.0
7.44	114.314	10.188	0.111	1.84	1.618	0.0
7.46	113.839	8.713	0.111	1.821	1.607	0.0
7.48	114.724	6.494	0.111	1.794	1.626	0.0
7.5	116.038	6.222	0.111	1.79	1.656	0.0
7.52	118.493	5.51	0.111	1.781	1.715	0.0
7.54	122.623	3.901	0.111	1.761	1.827	0.0
7.56	127.382	2.296	0.111	1.741	1.976	0.0
7.58	133.165	0.096	0.111	1.714	2.195	0.0
7.6	135.945	-0.657	0.111	1.704	N.C.	0.0
7.62	133.313	1.411	0.111	1.73	2.2	0.0
7.64	127.46	5.232	0.111	1.778	1.976	0.0
7.66	128.534	10.155	0.111	1.839	2.013	0.0
7.68	136.02	14.414	0.111	1.893	2.318	0.0
7.7	141.393	17.972	0.111	1.937	2.597	0.0
7.72	144.151	21.621	0.111	1.983	2.765	0.0
7.74	144.482	23.041	0.111	2.001	2.786	0.0
7.76	142.854	22.597	0.111	1.995	2.681	0.0
7.78	139.196	19.774	0.111	1.96	2.472	0.0
7.8	131.105	14.853	0.111	1.898	2.103	0.0
7.82	121.43	9.216	0.111	1.828	1.784	0.0
7.84	127.324	2.111	0.111	1.739	1.964	0.0
7.86	135.28	-2.568	0.111	1.68	N.C.	0.0
7.88	135.151	-2.534	0.111	1.681	N.C.	0.0
7.9	142.385	-5.264	0.111	1.647	N.C.	0.0
7.92	144.509	-3.513	0.111	1.669	N.C.	0.0
7.94	144.991	-1.314	0.111	1.696	N.C.	0.0
7.96	144.96	0.791	0.111	1.722	2.806	0.0
7.98	144.726	3.141	0.111	1.752	2.789	0.0
8.0	144.583	5.858	0.111	1.786	2.779	0.0
8.02	145.41	6.473	0.111	1.793	2.833	0.0
8.04	145.823	7.126	0.111	1.802	2.86	0.0
8.06	145.731	7.012	0.111	1.8	2.853	0.0
8.08	145.371	7.617	0.111	1.808	2.827	0.0
8.1	145.307	7.649	0.111	1.808	2.822	0.0
8.12	151.455	13.522	0.111	1.882	3.295	0.0
8.14	153.032	15.115	0.111	1.901	3.438	0.0
8.16	155.713	16.713	0.111	1.921	3.706	0.0
8.18	156.941	18.034	0.111	1.938	3.84	0.0
8.2	157.663	18.796	0.111	1.947	3.922	0.0
8.22	152.988	16.701	0.111	1.921	3.429	0.0
8.24	144.692	13.997	0.111	1.887	2.774	0.0
8.26	139.6	12.827	0.111	1.873	2.473	0.0
8.28	134.264	11.897	0.111	1.861	2.216	0.0
8.3	131.968	11.908	0.111	1.861	2.12	0.0
8.32	131.214	11.712	0.111	1.859	2.09	0.0
8.34	128.485	9.953	0.111	1.837	1.989	0.0

8.36	129.622	9.017	0.111	1.825	2.029	0.0
8.38	130.213	8.638	0.111	1.82	2.05	0.0
8.4	132.661	9.586	0.111	1.832	2.145	0.0
8.42	132.458	9.628	0.111	1.833	2.136	0.0
8.44	132.909	9.826	0.111	1.835	2.154	0.0
8.46	132.954	9.81	0.111	1.835	2.155	0.0
8.48	132.966	9.493	0.111	1.831	2.155	0.0
8.5	133.901	9.684	0.111	1.834	2.193	0.0
8.52	133.725	9.554	0.111	1.832	2.185	0.0
8.54	133.233	9.565	0.111	1.832	2.164	0.0
8.56	134.933	10.022	0.111	1.838	2.236	0.0
8.58	134.481	7.242	0.111	1.803	2.216	0.0
8.6	138.147	4.703	0.111	1.771	2.386	0.0
8.62	141.146	4.379	0.111	1.767	2.544	0.0
8.64	143.404	4.329	0.111	1.767	2.676	0.0
8.66	144.081	4.382	0.111	1.767	2.718	0.0
8.68	143.45	4.874	0.111	1.773	2.678	0.0
8.7	142.974	5.693	0.111	1.784	2.648	0.0
8.72	146.15	6.015	0.111	1.788	2.853	0.0
8.74	150.571	6.033	0.111	1.788	3.188	0.0
8.76	156.064	4.014	0.111	1.763	3.708	0.0
8.78	156.641	4.178	0.111	1.765	3.769	0.0
8.8	155.722	6.329	0.111	1.792	3.669	0.0
8.82	159.523	9.447	0.111	1.831	4.108	0.0
8.84	159.53	9.466	0.111	1.831	4.107	0.0
8.86	162.544	12.414	0.111	1.868	4.517	0.0
8.88	165.521	13.824	0.111	1.885	4.986	0.0
8.9	168.549	15.206	0.111	1.903	5.545	0.0
8.92	168.132	15.546	0.111	1.907	5.46	0.0
8.94	165.775	15.178	0.111	1.902	5.026	0.0
8.96	162.318	13.999	0.111	1.887	4.477	0.0
8.98	157.396	12.622	0.111	1.87	3.844	0.0
9.0	153.58	11.263	0.111	1.853	3.445	0.0
9.02	151.426	10.965	0.111	1.85	3.249	0.0
9.04	151.363	11.482	0.111	1.856	3.243	0.0
9.06	150.557	11.856	0.111	1.861	3.174	0.0
9.08	149.807	12.287	0.111	1.866	3.112	0.0
9.1	149.812	13.522	0.111	1.882	3.111	0.0
9.12	150.178	14.657	0.111	1.896	3.14	0.0
9.14	149.701	15.395	0.111	1.905	3.101	0.0
9.16	147.216	15.381	0.111	1.905	2.913	0.0
9.18	142.314	14.947	0.111	1.899	2.595	0.0
9.2	140.225	15.472	0.111	1.906	2.477	0.0
9.22	135.263	15.46	0.111	1.906	2.235	0.0
9.24	134.191	16.452	0.111	1.918	2.188	0.0
9.26	133.624	17.425	0.111	1.93	2.164	0.0
9.28	132.432	18.115	0.111	1.939	2.116	0.0
9.3	131.525	18.743	0.111	1.947	2.08	0.0
9.32	130.819	19.093	0.111	1.951	2.053	0.0
9.34	129.445	18.65	0.111	1.946	2.002	0.0
9.36	129.0	18.431	0.111	1.943	1.986	0.0
9.38	126.779	17.253	0.111	1.928	1.911	0.0
9.4	122.477	14.861	0.111	1.898	1.782	0.0
9.42	121.16	14.171	0.111	1.89	1.745	0.0

9.44	120.491	13.954	0.111	1.887	1.727	0.0
9.46	116.068	9.677	0.111	1.833	1.619	0.0
9.48	117.699	9.331	0.111	1.829	1.657	0.0
9.5	121.783	10.381	0.111	1.842	1.761	0.0
9.52	130.192	14.043	0.111	1.888	2.027	0.0
9.54	138.295	17.907	0.111	1.936	2.371	0.0
9.56	141.094	19.888	0.111	1.961	2.517	0.0
9.58	143.803	21.91	0.111	1.986	2.675	0.0
9.6	144.826	23.502	0.111	2.006	2.738	0.0
9.62	144.302	22.959	0.111	1.999	2.705	0.0
9.64	142.6	21.744	0.111	1.984	2.601	0.0
9.66	138.45	19.916	0.111	1.961	2.376	0.0
9.68	136.89	20.886	0.111	1.974	2.301	0.0
9.7	136.366	21.56	0.111	1.982	2.276	0.0
9.72	137.207	24.063	0.111	2.013	2.315	0.0
9.74	136.542	26.148	0.111	2.039	2.284	0.0
9.76	136.557	28.116	0.111	2.064	2.284	0.0
9.78	135.598	29.451	0.111	2.081	2.241	0.0
9.8	133.809	30.427	0.111	2.093	2.163	0.0
9.82	131.477	31.184	0.111	2.102	2.07	0.0
9.84	131.18	31.559	0.111	2.107	2.059	0.0
9.86	127.964	27.861	0.111	2.061	1.944	0.0
9.88	124.794	24.614	0.111	2.02	1.844	0.0
9.9	121.81	22.298	0.111	1.991	1.758	0.0
9.92	120.013	21.207	0.111	1.978	1.711	0.0
9.94	119.618	21.207	0.111	1.978	1.7	0.0
9.96	118.218	21.09	0.11	1.976	1.666	0.0
9.98	118.86	21.999	0.11	1.987	1.681	0.0
10.0	120.668	22.896	0.11	1.999	1.727	0.0
10.02	124.518	24.13	0.11	2.014	1.834	0.0
10.04	126.17	23.294	0.11	2.004	1.885	0.0
10.06	126.825	20.19	0.11	1.965	1.905	0.0
10.08	122.496	14.558	0.11	1.894	1.776	0.0
10.1	118.045	10.575	0.11	1.845	1.661	0.0
10.12	119.628	9.4	0.11	1.83	1.7	0.0
10.14	123.928	10.679	0.11	1.846	1.816	0.0
10.16	133.711	13.819	0.11	1.885	2.155	0.0
10.18	142.516	17.046	0.11	1.926	2.587	0.0
10.2	150.266	21.422	0.11	1.98	3.118	0.0
10.22	154.805	26.087	0.11	2.039	3.524	0.0
10.24	156.852	32.662	0.11	2.121	3.736	0.0
10.26	157.174	35.251	0.11	2.153	3.771	0.0
10.28	156.361	35.553	0.11	2.157	3.682	0.0
10.3	155.629	35.239	0.11	2.153	3.605	0.0
10.32	154.587	35.19	0.11	2.152	3.5	0.0
10.34	153.763	34.678	0.11	2.146	3.42	0.0
10.36	153.289	33.339	0.11	2.129	3.376	0.0
10.38	153.994	30.857	0.11	2.098	3.441	0.0
10.4	155.619	29.056	0.11	2.076	3.601	0.0
10.42	156.296	27.994	0.11	2.062	3.672	0.0
10.44	156.629	27.341	0.11	2.054	3.707	0.0
10.46	156.872	26.997	0.11	2.05	3.732	0.0
10.48	157.942	26.694	0.11	2.046	3.851	0.0
10.5	158.875	26.772	0.11	2.047	3.96	0.0

10.52	160.711	26.929	0.11	2.049	4.189	0.0
10.54	161.502	26.346	0.11	2.042	4.294	0.0
10.56	161.77	24.98	0.11	2.025	4.33	0.0
10.58	161.701	25.046	0.11	2.026	4.32	0.0
10.6	159.912	25.478	0.11	2.031	4.085	0.0
10.62	158.603	25.951	0.11	2.037	3.925	0.0
10.64	156.98	25.581	0.11	2.032	3.741	0.0
10.66	155.293	24.049	0.11	2.013	3.563	0.0
10.68	153.012	22.434	0.11	1.993	3.345	0.0
10.7	151.612	21.799	0.11	1.985	3.222	0.0
10.72	148.166	22.198	0.11	1.99	2.949	0.0
10.74	144.377	23.166	0.11	2.002	2.693	0.0
10.76	142.709	24.733	0.11	2.022	2.592	0.0
10.78	141.232	27.039	0.11	2.05	2.508	0.0
10.8	139.558	26.784	0.11	2.047	2.419	0.0
10.82	137.503	25.266	0.11	2.028	2.318	0.0
10.84	135.776	22.685	0.11	1.996	2.239	0.0
10.86	129.332	18.985	0.11	1.95	1.985	0.0
10.88	126.037	17.358	0.11	1.929	1.877	0.0
10.9	121.387	16.733	0.11	1.922	1.743	0.0
10.92	118.598	17.013	0.11	1.925	1.672	0.0
10.94	117.672	17.85	0.11	1.936	1.65	0.0
10.96	119.298	19.799	0.11	1.96	1.689	0.0
10.98	120.873	22.905	0.11	1.999	1.729	0.0
11.0	121.876	26.768	0.109	2.047	1.756	0.0
11.02	120.308	31.445	0.109	2.106	1.715	0.0
11.04	117.147	36.851	0.109	2.173	1.638	0.0
11.06	114.815	40.798	0.109	2.222	1.585	0.0
11.08	112.092	44.587	0.109	2.27	1.529	0.0
11.1	110.606	45.051	0.109	2.276	1.5	0.0
11.12	108.738	44.164	0.109	2.265	1.465	0.0
11.14	106.975	42.698	0.109	2.246	1.434	0.0
11.16	105.535	42.029	0.109	2.238	1.41	0.0
11.18	103.494	41.07	0.109	2.226	1.377	0.0
11.2	100.986	39.632	0.109	2.208	1.339	0.0
11.22	98.394	41.653	0.109	2.233	1.303	0.0
11.24	95.77	44.585	0.109	2.27	1.268	0.0
11.26	94.266	47.073	0.109	2.301	1.249	0.0
11.28	94.122	46.837	0.109	2.298	1.247	0.0
11.3	95.762	43.115	0.109	2.251	1.268	0.0
11.32	97.443	37.833	0.109	2.185	1.29	0.0
11.34	99.909	31.01	0.109	2.1	1.324	0.0
11.36	99.84	24.413	0.109	2.018	1.323	0.0
11.38	95.644	16.984	0.109	1.925	1.266	0.0
11.4	93.341	13.341	0.109	1.879	1.238	0.0
11.42	92.469	9.732	0.109	1.834	1.227	0.0
11.44	97.554	5.539	0.109	1.782	1.292	0.0
11.46	110.131	2.499	0.109	1.744	1.492	0.0
11.48	117.112	4.252	0.109	1.766	1.638	0.0
11.5	126.716	9.826	0.109	1.835	1.898	0.0
11.52	140.775	13.621	0.109	1.883	2.481	0.0
11.54	149.582	15.54	0.109	1.907	3.05	0.0
11.56	160.232	17.626	0.109	1.933	4.11	0.0
11.58	166.637	19.072	0.109	1.951	5.064	0.0



11.6	173.48	20.121	0.109	1.964	6.505	0.0
11.62	175.078	20.478	0.109	1.968	6.927	0.0
11.64	174.752	21.593	0.109	1.982	6.837	0.0
11.66	173.88	23.702	0.109	2.009	6.606	0.0
11.68	172.369	25.911	0.109	2.036	6.232	0.0
11.7	170.006	28.908	0.109	2.074	5.706	0.0
11.72	165.954	32.335	0.109	2.117	4.945	0.0
11.74	161.533	35.233	0.109	2.153	4.279	0.0
11.76	155.356	38.791	0.109	2.197	3.559	0.0
11.78	149.322	41.928	0.109	2.237	3.03	0.0
11.8	143.849	44.015	0.108	2.263	2.657	0.0
11.82	143.818	44.043	0.108	2.263	2.655	0.0
11.84	134.434	44.211	0.108	2.265	2.181	0.0
11.86	129.089	45.414	0.108	2.28	1.978	0.0
11.88	124.987	47.027	0.108	2.3	1.846	0.0
11.9	121.936	47.43	0.108	2.305	1.76	0.0
11.92	120.856	45.621	0.108	2.283	1.731	0.0
11.94	119.352	42.41	0.108	2.243	1.693	0.0
11.96	118.25	40.76	0.108	2.222	1.666	0.0
11.98	116.2	40.685	0.108	2.221	1.619	0.0
12.0	111.798	42.433	0.108	2.243	1.527	0.0
12.02	108.04	44.083	0.108	2.264	1.457	0.0
12.04	105.42	44.049	0.108	2.263	1.412	0.0
12.06	105.319	42.599	0.108	2.245	1.411	0.0
12.08	106.347	37.731	0.108	2.184	1.428	0.0
12.1	106.51	33.681	0.108	2.134	1.431	0.0
12.12	106.242	31.174	0.108	2.102	1.426	0.0
12.14	107.654	30.804	0.108	2.098	1.451	0.0
12.16	110.092	29.561	0.108	2.082	1.495	0.0
12.18	112.796	28.868	0.108	2.073	1.548	0.0
12.2	117.387	29.193	0.108	2.077	1.648	0.0
12.22	121.813	30.725	0.108	2.097	1.758	0.0
12.24	125.278	34.347	0.108	2.142	1.857	0.0
12.26	126.843	36.118	0.108	2.164	1.906	0.0
12.28	126.452	40.969	0.108	2.225	1.893	0.0
12.3	122.939	48.221	0.108	2.315	1.79	0.0
12.32	119.926	53.327	0.108	2.379	1.71	0.0
12.34	116.222	58.176	0.108	2.44	1.622	0.0
12.36	113.938	60.616	0.108	2.47	1.572	0.0
12.38	111.457	62.559	0.108	2.494	1.522	0.0
12.4	108.545	64.765	0.108	2.522	1.468	0.0
12.42	105.784	66.244	0.108	2.541	1.421	0.0
12.44	105.075	62.112	0.108	2.489	1.409	0.0
12.46	106.036	57.901	0.108	2.436	1.425	0.0
12.48	107.299	51.886	0.108	2.361	1.447	0.0
12.5	108.09	45.677	0.108	2.283	1.461	0.0
12.52	107.275	40.083	0.108	2.214	1.447	0.0
12.54	105.888	37.437	0.108	2.18	1.423	0.0
12.56	105.269	37.094	0.107	2.176	1.413	0.0
12.58	107.094	35.902	0.107	2.161	1.444	0.0
12.6	112.311	32.805	0.107	2.123	1.541	0.0
12.62	118.806	25.656	0.107	2.033	1.684	0.0
12.64	120.489	19.099	0.107	1.951	1.726	0.0
12.66	119.71	13.93	0.107	1.887	1.707	0.0

12.68	118.91	11.86	0.107	1.861	1.687	0.0
12.7	125.233	13.397	0.107	1.88	1.859	0.0
12.72	140.007	18.936	0.107	1.949	2.446	0.0
12.74	147.369	22.916	0.107	1.999	2.89	0.0
12.76	155.426	26.937	0.107	2.049	3.567	0.0
12.78	160.566	27.92	0.107	2.062	4.15	0.0
12.8	163.893	28.737	0.107	2.072	4.612	0.0
12.82	160.686	27.51	0.107	2.056	4.166	0.0
12.84	160.842	27.328	0.107	2.054	4.186	0.0
12.86	160.649	27.315	0.107	2.054	4.161	0.0
12.88	158.013	36.971	0.107	2.175	3.844	0.0
12.9	151.708	42.948	0.107	2.249	3.226	0.0
12.92	147.614	46.48	0.107	2.294	2.909	0.0
12.94	143.996	48.552	0.107	2.319	2.672	0.0
12.96	138.301	51.874	0.107	2.361	2.362	0.0
12.98	127.892	57.985	0.107	2.437	1.945	0.0
13.0	112.647	71.077	0.107	2.601	N.L.	0.0
13.02	93.973	95.431	0.107	2.905	N.L.	0.0
13.04	80.783	121.168	0.107	3.227	N.L.	0.0
13.06	79.139	124.843	0.107	3.273	N.L.	0.0
13.08	95.675	93.215	0.107	2.878	N.L.	0.0
13.1	120.821	59.64	0.107	2.458	1.739	0.0
13.12	125.31	46.79	0.107	2.297	1.865	0.0
13.14	121.515	40.735	0.107	2.222	1.758	0.0
13.16	114.748	37.303	0.107	2.179	1.596	0.0
13.18	113.625	38.895	0.107	2.199	1.573	0.0
13.2	113.627	41.427	0.107	2.23	1.573	0.0
13.22	114.183	46.393	0.106	2.292	1.585	0.0
13.24	114.282	48.444	0.106	2.318	1.587	0.0
13.26	115.745	50.182	0.106	2.34	1.619	0.0
13.28	117.05	50.875	0.106	2.348	1.649	0.0
13.3	118.316	49.034	0.106	2.325	1.678	0.0
13.32	120.789	46.06	0.106	2.288	1.74	0.0
13.34	122.617	42.524	0.106	2.244	1.789	0.0
13.36	124.323	39.684	0.106	2.209	1.838	0.0
13.38	125.069	38.653	0.106	2.196	1.86	0.0
13.4	124.99	39.882	0.106	2.211	1.858	0.0
13.42	124.186	42.497	0.106	2.244	1.835	0.0
13.44	122.953	45.895	0.106	2.286	1.8	0.0
13.46	121.985	49.386	0.106	2.33	1.774	0.0
13.48	121.95	50.118	0.106	2.339	1.773	0.0
13.5	121.342	51.525	0.106	2.357	1.757	0.0
13.52	121.767	51.127	0.106	2.352	1.768	0.0
13.54	122.05	50.166	0.106	2.34	1.776	0.0
13.56	122.857	48.562	0.106	2.32	1.799	0.0
13.58	123.631	47.221	0.106	2.303	1.821	0.0
13.6	123.878	46.36	0.106	2.292	1.828	0.0
13.62	124.799	45.624	0.106	2.283	1.855	0.0
13.64	125.722	44.736	0.106	2.272	1.883	0.0
13.66	127.061	44.376	0.106	2.267	1.925	0.0
13.68	128.05	43.827	0.106	2.26	1.958	0.0
13.7	129.032	43.459	0.106	2.256	1.991	0.0
13.72	129.953	43.171	0.106	2.252	2.023	0.0
13.74	131.183	42.393	0.106	2.242	2.068	0.0

13.76	132.396	41.017	0.106	2.225	2.115	0.0
13.78	133.894	40.266	0.106	2.216	2.175	0.0
13.8	133.185	38.681	0.106	2.196	2.146	0.0
13.82	132.705	40.476	0.106	2.218	2.127	0.0
13.84	131.861	43.205	0.106	2.253	2.095	0.0
13.86	130.867	45.703	0.105	2.284	2.058	0.0
13.88	130.745	46.944	0.105	2.299	2.054	0.0
13.9	132.336	46.275	0.105	2.291	2.114	0.0
13.92	134.281	44.777	0.105	2.272	2.192	0.0
13.94	135.639	43.13	0.105	2.252	2.251	0.0
13.96	135.835	41.14	0.105	2.227	2.26	0.0
13.98	134.899	38.278	0.105	2.191	2.219	0.0
14.0	134.836	34.773	0.105	2.147	2.217	0.0
14.02	134.499	32.714	0.105	2.121	2.203	0.0
14.04	133.981	31.58	0.105	2.107	2.182	0.0
14.06	132.907	30.474	0.105	2.093	2.139	0.0
14.08	132.615	31.882	0.105	2.111	2.128	0.0
14.1	131.751	37.063	0.105	2.176	2.095	0.0
14.12	130.986	42.701	0.105	2.246	2.066	0.0
14.14	130.891	45.812	0.105	2.285	2.063	0.0
14.16	131.109	46.697	0.105	2.296	2.072	0.0
14.18	131.532	47.407	0.105	2.305	2.088	0.0
14.2	131.448	48.385	0.105	2.317	2.085	0.0
14.22	129.741	49.275	0.105	2.328	2.023	0.0
14.24	126.179	51.552	0.105	2.357	1.905	0.0
14.26	123.719	53.04	0.105	2.376	1.832	0.0
14.28	122.553	53.633	0.105	2.383	1.8	0.0
14.3	122.799	53.026	0.105	2.375	1.807	0.0
14.32	123.837	51.084	0.105	2.351	1.836	0.0
14.34	124.511	49.644	0.105	2.333	1.856	0.0
14.36	125.703	47.255	0.105	2.303	1.892	0.0
14.38	127.395	43.848	0.105	2.261	1.946	0.0
14.4	128.464	41.398	0.105	2.23	1.982	0.0
14.42	130.524	39.763	0.105	2.21	2.054	0.0
14.44	131.149	39.173	0.105	2.202	2.077	0.0
14.46	131.601	39.708	0.104	2.209	2.095	0.0
14.48	132.177	39.876	0.104	2.211	2.117	0.0
14.5	134.822	39.791	0.104	2.21	2.224	0.0
14.52	135.512	39.959	0.104	2.212	2.254	0.0
14.54	135.404	41.161	0.104	2.227	2.25	0.0
14.56	134.711	43.131	0.104	2.252	2.22	0.0
14.58	133.85	44.671	0.104	2.271	2.185	0.0
14.6	133.884	44.46	0.104	2.268	2.187	0.0
14.62	133.854	44.487	0.104	2.269	2.186	0.0
14.64	135.483	43.203	0.104	2.253	2.255	0.0
14.66	135.296	43.144	0.104	2.252	2.247	0.0
14.68	134.922	42.947	0.104	2.249	2.231	0.0
14.7	134.59	42.981	0.104	2.25	2.218	0.0
14.72	134.094	43.073	0.104	2.251	2.197	0.0
14.74	134.281	42.802	0.104	2.248	2.205	0.0
14.76	135.032	41.997	0.104	2.237	2.237	0.0
14.78	134.108	40.002	0.104	2.213	2.199	0.0
14.8	133.818	40.648	0.104	2.221	2.187	0.0
14.82	133.707	42.504	0.104	2.244	2.183	0.0

14.84	133.287	43.692	0.104	2.259	2.166	0.0
14.86	133.829	43.992	0.104	2.262	2.189	0.0
14.88	134.203	43.846	0.104	2.261	2.205	0.0
14.9	134.402	44.085	0.104	2.264	2.213	0.0
14.92	134.624	43.855	0.104	2.261	2.223	0.0
14.94	133.917	43.766	0.104	2.26	2.194	0.0
14.96	131.285	45.243	0.104	2.278	2.091	0.0
14.98	125.738	49.459	0.104	2.331	1.903	0.0
15.0	117.387	57.238	0.104	2.428	1.679	0.0
15.02	100.296	76.608	0.104	2.67	N.L.	0.0
15.04	85.851	100.864	0.103	2.973	N.L.	0.0
15.06	76.65	124.54	0.103	3.269	N.L.	0.0
15.08	71.871	143.655	0.103	3.508	N.L.	0.0
15.1	68.438	164.085	0.103	3.764	N.L.	0.0
15.12	66.121	180.139	0.103	3.964	N.L.	0.0
15.14	65.046	187.897	0.103	4.061	N.L.	0.0
15.16	64.912	188.371	0.103	4.067	N.L.	0.0
15.18	63.398	186.681	0.103	4.046	N.L.	0.0
15.2	62.93	188.064	0.103	4.063	N.L.	0.0
15.22	62.262	188.238	0.103	4.065	N.L.	0.0
15.24	62.192	164.219	0.103	3.765	N.L.	0.0
15.26	62.135	136.17	0.103	3.415	N.L.	0.0
15.28	64.058	89.44	0.103	2.831	N.L.	0.0
15.3	67.204	85.144	0.103	2.777	N.L.	0.0
15.32	67.022	84.289	0.103	2.766	N.L.	0.0
15.34	67.019	84.338	0.103	2.767	N.L.	0.0
15.36	63.081	128.739	0.103	3.322	N.L.	0.0
15.38	62.775	165.605	0.103	3.783	N.L.	0.0
15.4	62.886	172.432	0.103	3.868	N.L.	0.0
15.42	64.069	149.72	0.103	3.584	N.L.	0.0
15.44	65.784	131.004	0.103	3.35	N.L.	0.0
15.46	65.312	134.799	0.103	3.397	N.L.	0.0
15.48	63.423	154.42	0.103	3.643	N.L.	0.0
15.5	62.518	164.039	0.103	3.763	N.L.	0.0
15.52	62.733	146.55	0.103	3.544	N.L.	0.0
15.54	63.454	130.823	0.103	3.348	N.L.	0.0
15.56	62.741	123.196	0.103	3.252	N.L.	0.0
15.58	62.688	156.776	0.103	3.672	N.L.	0.0
15.6	62.814	162.338	0.103	3.742	N.L.	0.0
15.62	62.887	158.125	0.103	3.689	N.L.	0.0
15.64	62.812	165.784	0.103	3.785	N.L.	0.0
15.66	63.462	152.308	0.102	3.616	N.L.	0.0
15.68	64.515	131.915	0.102	3.361	N.L.	0.0
15.7	64.682	129.702	0.102	3.334	N.L.	0.0
15.72	63.731	153.024	0.102	3.625	N.L.	0.0
15.74	63.243	166.794	0.102	3.797	N.L.	0.0
15.76	63.518	174.32	0.102	3.892	N.L.	0.0
15.78	63.248	174.56	0.102	3.895	N.L.	0.0
15.8	63.15	176.699	0.102	3.921	N.L.	0.0
15.82	63.322	173.025	0.102	3.875	N.L.	0.0
15.84	63.227	172.409	0.102	3.868	N.L.	0.0
15.86	62.865	170.308	0.102	3.841	N.L.	0.0
15.88	62.663	170.363	0.102	3.842	N.L.	0.0
15.9	62.647	166.395	0.102	3.792	N.L.	0.0

15.92	62.717	166.005	0.102	3.788	N.L.	0.0
15.94	62.613	165.28	0.102	3.778	N.L.	0.0
15.96	62.542	170.581	0.102	3.845	N.L.	0.0
15.98	62.818	157.034	0.102	3.675	N.L.	0.0
16.0	62.861	143.392	0.102	3.505	N.L.	0.0
16.02	62.952	153.713	0.102	3.634	N.L.	0.0
16.04	63.126	157.933	0.102	3.687	N.L.	0.0
16.06	63.99	140.979	0.102	3.475	N.L.	0.0
16.08	63.54	155.193	0.102	3.652	N.L.	0.0
16.1	63.398	156.726	0.102	3.672	N.L.	0.0
16.12	63.362	159.084	0.102	3.701	N.L.	0.0
16.14	63.315	163.796	0.102	3.76	N.L.	0.0
16.16	63.44	158.702	0.102	3.696	N.L.	0.0
16.18	63.863	145.269	0.102	3.528	N.L.	0.0
16.2	63.962	144.869	0.102	3.523	N.L.	0.0
16.22	63.024	165.97	0.102	3.787	N.L.	0.0
16.24	62.817	170.012	0.101	3.838	N.L.	0.0
16.26	62.766	164.685	0.101	3.771	N.L.	0.0
16.28	62.776	165.4	0.101	3.78	N.L.	0.0
16.3	62.753	164.72	0.101	3.771	N.L.	0.0
16.32	63.371	153.702	0.101	3.634	N.L.	0.0
16.34	64.673	133.098	0.101	3.376	N.L.	0.0
16.36	68.47	101.97	0.101	2.987	N.L.	0.0
16.38	71.119	84.857	0.101	2.773	N.L.	0.0
16.4	69.437	95.996	0.101	2.912	N.L.	0.0
16.42	67.52	111.943	0.101	3.112	N.L.	0.0
16.44	65.997	138.887	0.101	3.449	N.L.	0.0
16.46	64.882	158.73	0.101	3.697	N.L.	0.0
16.48	63.879	177.836	0.101	3.935	N.L.	0.0
16.5	63.789	180.105	0.101	3.964	N.L.	0.0
16.52	64.207	170.615	0.101	3.845	N.L.	0.0
16.54	64.655	159.572	0.101	3.707	N.L.	0.0
16.56	67.606	123.592	0.101	3.257	N.L.	0.0
16.58	73.991	88.6	0.101	2.82	N.L.	0.0
16.6	81.536	62.064	0.101	2.488	1.163	0.0
16.62	92.736	41.764	0.101	2.235	1.286	0.0
16.64	93.607	40.362	0.101	2.217	1.297	0.0
16.66	83.794	69.614	0.101	2.583	1.186	0.0
16.68	74.682	104.46	0.101	3.018	N.L.	0.0
16.7	71.397	123.465	0.101	3.256	N.L.	0.0
16.72	68.698	146.265	0.101	3.541	N.L.	0.0
16.74	66.665	165.247	0.101	3.778	N.L.	0.0
16.76	65.663	174.549	0.101	3.894	N.L.	0.0
16.78	65.069	177.315	0.101	3.929	N.L.	0.0
16.8	64.392	181.53	0.101	3.982	N.L.	0.0
16.82	64.148	179.806	0.1	3.96	N.L.	0.0
16.84	64.046	175.86	0.1	3.911	N.L.	0.0
16.86	63.865	165.283	0.1	3.779	N.L.	0.0
16.88	63.441	154.228	0.1	3.64	N.L.	0.0
16.9	63.138	151.006	0.1	3.6	N.L.	0.0
16.92	65.397	121.191	0.1	3.227	N.L.	0.0
16.94	71.579	82.412	0.1	2.743	N.L.	0.0
16.96	73.017	70.34	0.1	2.592	1.089	0.0
16.98	71.512	80.099	0.1	2.714	N.L.	0.0

17.0	69.207	99.969	0.1	2.962	N.L.	0.0
17.02	67.193	132.774	0.1	3.372	N.L.	0.0
17.04	66.954	141.412	0.1	3.48	N.L.	0.0
17.06	70.277	124.389	0.1	3.267	N.L.	0.0
17.08	74.437	104.754	0.1	3.022	N.L.	0.0
17.1	74.294	106.859	0.1	3.048	N.L.	0.0
17.12	69.823	122.922	0.1	3.249	N.L.	0.0
17.14	67.675	137.173	0.1	3.427	N.L.	0.0
17.16	65.79	157.906	0.1	3.686	N.L.	0.0
17.18	65.026	171.147	0.1	3.852	N.L.	0.0
17.2	66.451	151.868	0.1	3.611	N.L.	0.0
17.22	67.681	139.642	0.1	3.458	N.L.	0.0
17.24	66.458	145.674	0.1	3.533	N.L.	0.0
17.26	67.948	132.205	0.1	3.365	N.L.	0.0
17.28	69.358	121.505	0.1	3.231	N.L.	0.0
17.3	68.793	115.717	0.1	3.159	N.L.	0.0
17.32	66.49	127.597	0.1	3.307	N.L.	0.0
17.34	66.132	144.208	0.1	3.515	N.L.	0.0
17.36	68.895	123.312	0.1	3.254	N.L.	0.0
17.38	70.014	118.562	0.1	3.195	N.L.	0.0
17.4	70.519	115.754	0.099	3.159	N.L.	0.0
17.42	70.604	115.708	0.099	3.159	N.L.	0.0
17.44	68.9	124.38	0.099	3.267	N.L.	0.0
17.46	66.203	150.796	0.099	3.597	N.L.	0.0
17.48	64.955	167.897	0.099	3.811	N.L.	0.0
17.5	65.003	167.531	0.099	3.807	N.L.	0.0
17.52	66.985	143.871	0.099	3.511	N.L.	0.0
17.54	67.822	137.215	0.099	3.428	N.L.	0.0
17.56	67.225	133.827	0.099	3.385	N.L.	0.0
17.58	65.481	150.349	0.099	3.592	N.L.	0.0
17.6	65.159	152.034	0.099	3.613	N.L.	0.0
17.62	66.793	130.857	0.099	3.348	N.L.	0.0
17.64	69.088	109.455	0.099	3.081	N.L.	0.0
17.66	69.738	106.495	0.099	3.044	N.L.	0.0
17.68	68.547	114.859	0.099	3.148	N.L.	0.0
17.7	68.744	118.126	0.099	3.189	N.L.	0.0
17.72	75.134	99.88	0.099	2.961	N.L.	0.0
17.74	70.682	115.103	0.099	3.151	N.L.	0.0
17.76	67.822	134.721	0.099	3.397	N.L.	0.0
17.78	66.361	158.427	0.099	3.693	N.L.	0.0
17.8	65.595	167.444	0.099	3.806	N.L.	0.0
17.82	66.022	162.96	0.099	3.75	N.L.	0.0
17.84	66.231	160.891	0.099	3.724	N.L.	0.0
17.86	67.241	139.708	0.099	3.459	N.L.	0.0
17.88	66.328	147.38	0.099	3.555	N.L.	0.0
17.9	65.129	158.296	0.099	3.691	N.L.	0.0
17.92	64.64	164.139	0.099	3.764	N.L.	0.0
17.94	64.75	159.459	0.099	3.706	N.L.	0.0
17.96	65.453	147.361	0.099	3.555	N.L.	0.0
17.98	73.756	100.739	0.098	2.972	N.L.	0.0
18.0	81.614	67.152	0.098	2.552	1.184	0.0
18.02	81.025	68.184	0.098	2.565	1.179	0.0
18.04	75.571	91.54	0.098	2.857	N.L.	0.0
18.06	71.025	119.022	0.098	3.2	N.L.	0.0

18.08	68.572	140.671	0.098	3.471	N.L.	0.0
18.1	68.385	148.477	0.098	3.568	N.L.	0.0
18.12	73.608	124.555	0.098	3.269	N.L.	0.0
18.14	79.864	103.403	0.098	3.005	N.L.	0.0
18.16	80.214	97.459	0.098	2.931	N.L.	0.0
18.18	75.925	103.849	0.098	3.011	N.L.	0.0
18.2	74.341	108.461	0.098	3.068	N.L.	0.0
18.22	74.539	107.613	0.098	3.058	N.L.	0.0
18.24	77.822	100.973	0.098	2.975	N.L.	0.0
18.26	75.875	104.608	0.098	3.02	N.L.	0.0
18.28	71.709	119.262	0.098	3.203	N.L.	0.0
18.3	68.608	140.149	0.098	3.464	N.L.	0.0
18.32	67.116	157.922	0.098	3.687	N.L.	0.0
18.34	65.613	173.746	0.098	3.884	N.L.	0.0
18.36	66.106	165.856	0.098	3.786	N.L.	0.0
18.38	67.797	145.467	0.098	3.531	N.L.	0.0
18.4	67.793	145.519	0.098	3.531	N.L.	0.0
18.42	66.608	146.849	0.098	3.548	N.L.	0.0
18.44	64.807	164.207	0.098	3.765	N.L.	0.0
18.46	65.362	150.849	0.098	3.598	N.L.	0.0
18.48	66.287	133.206	0.098	3.378	N.L.	0.0
18.5	66.923	122.024	0.098	3.238	N.L.	0.0
18.52	66.013	135.19	0.098	3.402	N.L.	0.0
18.54	64.227	160.833	0.098	3.723	N.L.	0.0
18.56	63.179	186.716	0.097	4.046	N.L.	0.0
18.58	62.927	194.12	0.097	4.139	N.L.	0.0
18.6	62.936	191.06	0.097	4.101	N.L.	0.0
18.62	63.268	182.299	0.097	3.991	N.L.	0.0
18.64	63.966	167.624	0.097	3.808	N.L.	0.0
18.66	63.8	160.77	0.097	3.722	N.L.	0.0
18.68	63.499	173.293	0.097	3.879	N.L.	0.0
18.7	64.121	165.546	0.097	3.782	N.L.	0.0
18.72	63.974	166.648	0.097	3.796	N.L.	0.0
18.74	63.871	169.731	0.097	3.834	N.L.	0.0
18.76	63.402	180.162	0.097	3.965	N.L.	0.0
18.78	63.109	187.571	0.097	4.057	N.L.	0.0
18.8	62.887	185.89	0.097	4.036	N.L.	0.0
18.82	62.825	179.325	0.097	3.954	N.L.	0.0
18.84	63.05	170.841	0.097	3.848	N.L.	0.0
18.86	62.904	172.148	0.097	3.864	N.L.	0.0
18.88	62.801	179.222	0.097	3.953	N.L.	0.0
18.9	62.705	179.258	0.097	3.953	N.L.	0.0
18.92	62.744	177.456	0.097	3.931	N.L.	0.0
18.94	62.735	177.338	0.097	3.929	N.L.	0.0
18.96	62.988	169.885	0.097	3.836	N.L.	0.0
18.98	62.941	175.295	0.097	3.904	N.L.	0.0
19.0	63.224	169.137	0.097	3.827	N.L.	0.0
19.02	63.975	152.9	0.097	3.624	N.L.	0.0
19.04	63.703	159.886	0.097	3.711	N.L.	0.0
19.06	63.703	160.66	0.097	3.721	N.L.	0.0
19.08	63.518	166.184	0.097	3.79	N.L.	0.0
19.1	63.952	161.923	0.097	3.737	N.L.	0.0
19.12	64.937	146.254	0.096	3.541	N.L.	0.0
19.14	64.03	157.215	0.096	3.678	N.L.	0.0

19.16	65.492	145.463	0.096	3.531	N.L.	0.0
19.18	71.07	103.612	0.096	3.008	N.L.	0.0
19.2	75.106	84.12	0.096	2.764	N.L.	0.0
19.22	79.21	67.915	0.096	2.561	1.18	0.0
19.24	80.766	62.537	0.096	2.494	1.196	0.0
19.26	80.355	60.092	0.096	2.464	1.192	0.0
19.28	81.793	59.939	0.096	2.462	1.207	0.0
19.3	90.339	40.5	0.096	2.219	1.301	0.0
19.32	102.594	35.295	0.096	2.154	1.47	0.0
19.34	99.341	28.984	0.096	2.075	1.421	0.0
19.36	99.324	28.979	0.096	2.075	1.421	0.0
19.38	98.331	27.79	0.096	2.06	1.407	0.0
19.4	97.186	26.533	0.096	2.044	1.391	0.0
19.42	97.162	26.83	0.096	2.048	1.392	0.0
19.44	99.639	29.663	0.096	2.083	1.427	0.0
19.46	99.744	30.141	0.096	2.089	1.429	0.0
19.48	105.132	34.91	0.096	2.149	1.515	0.0
19.5	107.765	38.386	0.096	2.192	1.562	0.0
19.52	109.861	39.829	0.096	2.21	1.602	0.0
19.54	113.156	41.665	0.096	2.233	1.669	0.0
19.56	115.245	42.638	0.096	2.245	1.715	0.0
19.58	115.865	44.384	0.096	2.267	1.73	0.0
19.6	115.417	46.479	0.096	2.293	1.72	0.0
19.62	113.741	50.568	0.096	2.345	1.683	0.0
19.64	111.951	54.476	0.095	2.393	1.646	0.0
19.66	112.219	56.994	0.095	2.425	1.652	0.0
19.68	111.728	55.779	0.095	2.41	1.642	0.0
19.7	109.744	59.965	0.095	2.462	1.603	0.0
19.72	102.125	69.808	0.095	2.585	1.471	0.0
19.74	98.195	75.045	0.095	2.651	N.L.	0.0
19.76	99.589	71.783	0.095	2.61	N.L.	0.0
19.78	105.59	62.004	0.095	2.488	1.529	0.0
19.8	106.671	58.865	0.095	2.448	1.549	0.0
19.82	100.059	66.296	0.095	2.541	1.441	0.0
19.84	94.151	72.23	0.095	2.615	N.L.	0.0
19.86	84.476	87.205	0.095	2.803	N.L.	0.0
19.88	85.382	86.856	0.095	2.798	N.L.	0.0
19.9	84.259	96.567	0.095	2.92	N.L.	0.0
19.92	83.447	99.24	0.095	2.953	N.L.	0.0
19.94	83.732	102.856	0.095	2.998	N.L.	0.0
19.96	84.244	100.457	0.095	2.968	N.L.	0.0
19.98	88.239	83.928	0.095	2.762	N.L.	0.0
20.0	81.306	97.155	0.095	2.927	N.L.	0.0
20.02	75.724	114.995	0.095	3.15	N.L.	0.0
20.04	73.245	125.294	0.095	3.279	N.L.	0.0
20.06	72.124	133.522	0.095	3.382	N.L.	0.0
20.08	72.467	131.724	0.095	3.359	N.L.	0.0
20.1	81.796	99.324	0.095	2.954	N.L.	0.0
20.12	96.957	72.158	0.095	2.614	N.L.	0.0
20.14	100.119	61.145	0.095	2.477	1.449	0.0
20.16	94.347	67.748	0.095	2.559	1.368	0.0
20.18	87.412	74.501	0.095	2.644	N.L.	0.0
20.2	86.762	76.552	0.094	2.669	N.L.	0.0
20.22	87.508	81.768	0.094	2.735	N.L.	0.0



20.24	87.562	80.385	0.094	2.717	N.L.	0.0
20.26	83.59	94.542	0.094	2.894	N.L.	0.0
20.28	78.399	107.399	0.094	3.055	N.L.	0.0

# Ulik\_V2.1

## Report riassuntivo indice potenziale liquefazione

11/10/2022

12:47:29

Committente		Dott. Geol. Maurizio Castellari			
Località		Lago Santo (Fe)			
Via		Lago Santo			
Prova		CPTU6			
Metodo utilizzato	Magnitudo di riferimento	Acc.Max/g	Prof. Preforo	Falda	IPL (Sonmez 2003)
Boulanger e Idriss 2014	6.6	0.123	0.02	1.6	0.008

Tabella 1 - Parametri inseriti e IPL verticale prova penetrometrica

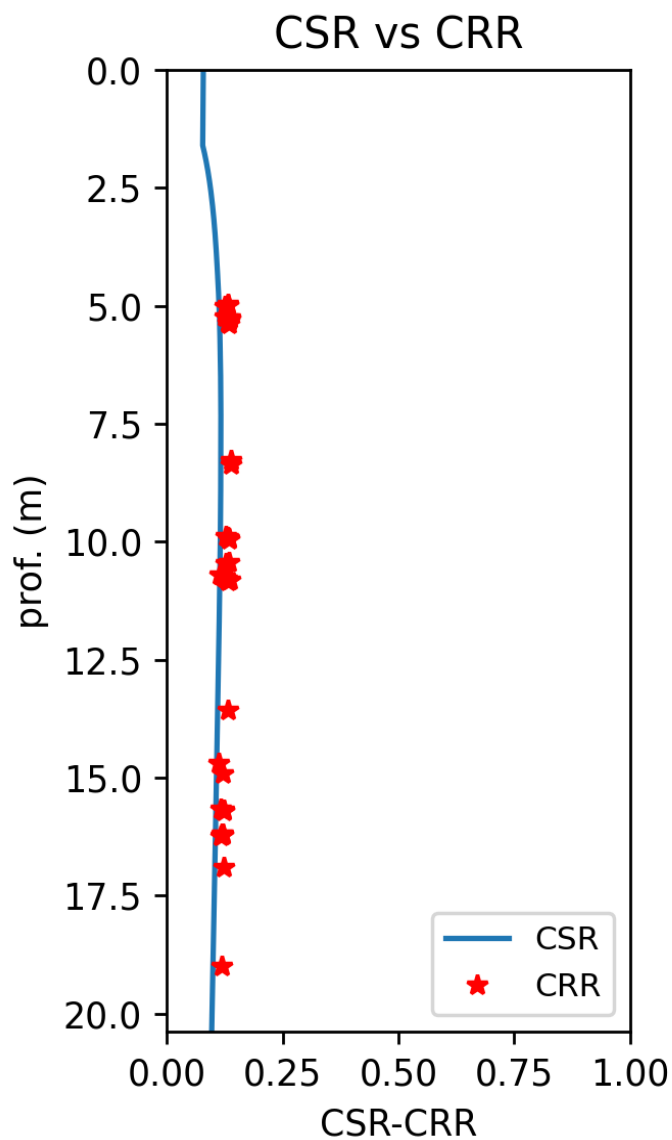


Grafico 1 - CSR vs CRR, i valori di CRR indicati con asterisco rosso che ricadono a sinistra della curva CRR indicano valori con FS < 1 e quindi potenzialmente liquefacibili-

## Report calcolo indice potenziale liquefazione

11/10/2022

12:46:29

Committente		Dott. Geol. Maurizio Castellari				
Località		Lago Santo (Fe)				
Via		Lago Santo				
Prova		CPTU6				
Metodo utilizzato		Magnitudo di riferimento	Acc.Max/g	Prof. Preforo	Falda	IPL (Sonmez 2003)
Boulangier e Idriss 2014		6.6	0.123	0.02	1.6	0.008
Profondità (m)	Q (r.p.c.)	FC	CSR	lc	Fsl	Ipl
0.02	48.449	47.958	0.079	2.312	N.C.	0.0
0.04	50.3	51.504	0.079	2.356	N.C.	0.0
0.06	51.982	58.429	0.079	2.443	N.C.	0.0
0.08	53.387	64.952	0.079	2.524	N.C.	0.0
0.1	54.293	68.713	0.079	2.571	N.C.	0.0
0.12	54.307	65.081	0.079	2.526	N.C.	0.0
0.14	52.217	54.209	0.079	2.39	N.C.	0.0
0.16	51.085	48.55	0.079	2.319	N.C.	0.0
0.18	51.734	47.907	0.079	2.311	N.C.	0.0
0.2	54.266	57.702	0.079	2.434	N.C.	0.0
0.22	55.255	59.931	0.078	2.462	N.C.	0.0
0.24	56.695	66.908	0.078	2.549	N.C.	0.0
0.26	57.343	65.55	0.078	2.532	N.C.	0.0
0.28	58.276	60.4	0.078	2.467	N.C.	0.0
0.3	59.863	55.281	0.078	2.404	N.C.	0.0
0.32	61.126	54.274	0.078	2.391	N.C.	0.0
0.34	63.055	54.043	0.078	2.388	N.C.	0.0
0.36	65.159	52.974	0.078	2.375	N.C.	0.0
0.38	67.655	53.882	0.078	2.386	N.C.	0.0
0.4	69.957	55.552	0.078	2.407	N.C.	0.0
0.42	71.842	56.694	0.078	2.421	N.C.	0.0
0.44	74.547	53.863	0.078	2.386	N.C.	0.0
0.46	79.117	48.168	0.078	2.315	N.C.	0.0
0.48	83.14	40.786	0.078	2.222	N.C.	0.0
0.5	84.882	35.679	0.078	2.158	N.C.	0.0
0.52	84.027	31.074	0.078	2.101	N.C.	0.0
0.54	81.358	27.37	0.078	2.055	N.C.	0.0
0.56	77.579	24.031	0.078	2.013	N.C.	0.0
0.58	72.064	20.538	0.078	1.969	N.C.	0.0
0.6	65.789	17.291	0.078	1.929	N.C.	0.0
0.62	63.308	15.723	0.078	1.909	N.C.	0.0
0.64	64.625	15.638	0.078	1.908	N.C.	0.0
0.66	66.7	15.789	0.078	1.91	N.C.	0.0
0.68	70.215	16.621	0.078	1.92	N.C.	0.0
0.7	72.424	16.989	0.078	1.925	N.C.	0.0
0.72	75.439	17.626	0.078	1.933	N.C.	0.0
0.74	76.839	18.163	0.078	1.94	N.C.	0.0
0.76	78.263	17.93	0.078	1.937	N.C.	0.0
0.78	79.857	18.292	0.078	1.941	N.C.	0.0

0.8	81.666	19.03	0.078	1.95	N.C.	0.0
0.82	81.729	18.877	0.078	1.948	N.C.	0.0
0.84	83.324	19.818	0.078	1.96	N.C.	0.0
0.86	87.018	25.276	0.078	2.028	N.C.	0.0
0.88	82.853	20.449	0.078	1.968	N.C.	0.0
0.9	81.531	20.176	0.078	1.965	N.C.	0.0
0.92	81.837	20.53	0.078	1.969	N.C.	0.0
0.94	83.156	22.095	0.078	1.989	N.C.	0.0
0.96	84.027	23.069	0.078	2.001	N.C.	0.0
0.98	83.699	23.113	0.078	2.001	N.C.	0.0
1.0	83.149	22.546	0.078	1.994	N.C.	0.0
1.02	82.494	21.608	0.078	1.983	N.C.	0.0
1.04	83.246	22.026	0.078	1.988	N.C.	0.0
1.06	79.748	18.558	0.078	1.944	N.C.	0.0
1.08	77.885	16.82	0.078	1.923	N.C.	0.0
1.1	76.454	15.547	0.078	1.907	N.C.	0.0
1.12	75.414	14.419	0.078	1.893	N.C.	0.0
1.14	75.087	13.528	0.078	1.882	N.C.	0.0
1.16	75.887	13.343	0.078	1.879	N.C.	0.0
1.18	76.384	13.048	0.078	1.876	N.C.	0.0
1.2	76.335	12.423	0.078	1.868	N.C.	0.0
1.22	76.525	11.684	0.078	1.859	N.C.	0.0
1.24	76.376	10.523	0.078	1.844	N.C.	0.0
1.26	77.453	10.451	0.078	1.843	N.C.	0.0
1.28	78.572	10.467	0.078	1.843	N.C.	0.0
1.3	79.296	10.468	0.078	1.843	N.C.	0.0
1.32	78.651	9.542	0.078	1.832	N.C.	0.0
1.34	80.124	9.637	0.078	1.833	N.C.	0.0
1.36	81.105	9.366	0.078	1.83	N.C.	0.0
1.38	81.908	9.087	0.078	1.826	N.C.	0.0
1.4	82.313	8.019	0.077	1.813	N.C.	0.0
1.42	83.56	6.739	0.077	1.797	N.C.	0.0
1.44	86.182	5.495	0.077	1.781	N.C.	0.0
1.46	87.949	5.047	0.077	1.776	N.C.	0.0
1.48	89.475	4.869	0.077	1.773	N.C.	0.0
1.5	91.301	4.21	0.077	1.765	N.C.	0.0
1.52	93.552	4.056	0.077	1.763	N.C.	0.0
1.54	97.358	2.846	0.077	1.748	N.C.	0.0
1.56	101.53	1.322	0.077	1.729	N.C.	0.0
1.58	105.357	0.28	0.077	1.716	N.C.	0.0
1.6	107.793	0.057	0.077	1.713	N.C.	0.0
1.62	111.099	-0.893	0.078	1.701	N.C.	0.0
1.64	114.231	-1.549	0.078	1.693	N.C.	0.0
1.66	118.058	-2.28	0.079	1.684	N.C.	0.0
1.68	122.407	-3.472	0.079	1.669	N.C.	0.0
1.7	125.491	-4.58	0.08	1.655	N.C.	0.0
1.72	127.69	-4.832	0.08	1.652	N.C.	0.0
1.74	126.799	-4.139	0.081	1.661	N.C.	0.0
1.76	126.251	-3.155	0.081	1.673	N.C.	0.0
1.78	126.728	-2.778	0.082	1.678	N.C.	0.0
1.8	128.557	-2.731	0.082	1.678	N.C.	0.0
1.82	130.781	-3.496	0.082	1.669	N.C.	0.0
1.84	135.414	-5.012	0.083	1.65	N.C.	0.0
1.86	135.312	-4.562	0.083	1.655	N.C.	0.0

1.88	140.455	-7.454	0.084	1.619	N.C.	0.0
1.9	140.798	-7.561	0.084	1.618	N.C.	0.0
1.92	139.084	-6.106	0.084	1.636	N.C.	0.0
1.94	137.43	-3.718	0.085	1.666	N.C.	0.0
1.96	137.236	-3.295	0.085	1.671	N.C.	0.0
1.98	137.2	-2.518	0.086	1.681	N.C.	0.0
2.0	140.687	-3.424	0.086	1.67	N.C.	0.0
2.02	140.965	-3.547	0.086	1.668	N.C.	0.0
2.04	136.463	-1.036	0.087	1.7	N.C.	0.0
2.06	134.047	0.342	0.087	1.717	3.247	0.0
2.08	133.688	0.488	0.087	1.719	3.207	0.0
2.1	133.974	-0.058	0.088	1.712	N.C.	0.0
2.12	131.076	0.904	0.088	1.724	3.016	0.0
2.14	125.608	4.159	0.088	1.764	2.713	0.0
2.16	122.067	6.261	0.089	1.791	2.541	0.0
2.18	120.602	5.518	0.089	1.781	2.47	0.0
2.2	120.751	4.084	0.089	1.764	2.465	0.0
2.22	121.264	3.331	0.09	1.754	2.475	0.0
2.24	119.34	3.456	0.09	1.756	2.389	0.0
2.26	119.023	2.957	0.09	1.749	2.368	0.0
2.28	120.153	1.482	0.091	1.731	2.401	0.0
2.3	123.355	-1.063	0.091	1.699	N.C.	0.0
2.32	125.794	-2.9	0.091	1.676	N.C.	0.0
2.34	129.738	-4.441	0.092	1.657	N.C.	0.0
2.36	130.386	-5.36	0.092	1.646	N.C.	0.0
2.38	131.789	-6.517	0.092	1.631	N.C.	0.0
2.4	130.231	-4.546	0.093	1.656	N.C.	0.0
2.42	127.136	-2.136	0.093	1.686	N.C.	0.0
2.44	125.133	0.27	0.093	1.716	2.531	0.0
2.46	125.327	2.425	0.093	1.743	2.53	0.0
2.48	129.052	1.715	0.094	1.734	2.697	0.0
2.5	134.625	-1.602	0.094	1.692	N.C.	0.0
2.52	141.288	-4.881	0.094	1.651	N.C.	0.0
2.54	144.6	-6.893	0.094	1.626	N.C.	0.0
2.56	146.188	-7.409	0.095	1.62	N.C.	0.0
2.58	146.194	-7.625	0.095	1.617	N.C.	0.0
2.6	144.755	-6.918	0.095	1.626	N.C.	0.0
2.62	141.028	-4.842	0.096	1.652	N.C.	0.0
2.64	139.992	-2.516	0.096	1.681	N.C.	0.0
2.66	137.614	-0.36	0.096	1.708	N.C.	0.0
2.68	134.36	1.165	0.096	1.727	2.894	0.0
2.7	132.88	2.262	0.096	1.741	2.8	0.0
2.72	129.912	3.47	0.097	1.756	2.635	0.0
2.74	127.868	4.343	0.097	1.767	2.529	0.0
2.76	125.971	4.587	0.097	1.77	2.437	0.0
2.78	123.344	4.79	0.097	1.772	2.322	0.0
2.8	122.356	4.72	0.098	1.771	2.277	0.0
2.82	120.56	4.578	0.098	1.77	2.205	0.0
2.84	120.337	0.942	0.098	1.724	2.191	0.0
2.86	116.538	4.466	0.098	1.768	2.06	0.0
2.88	114.617	4.283	0.099	1.766	1.997	0.0
2.9	112.648	4.808	0.099	1.773	1.936	0.0
2.92	112.161	5.301	0.099	1.779	1.918	0.0
2.94	109.078	7.554	0.099	1.807	1.834	0.0

2.96	107.736	8.649	0.099	1.821	1.797	0.0
2.98	107.381	9.945	0.1	1.837	1.784	0.0
3.0	107.628	11.205	0.1	1.853	1.786	0.0
3.02	106.759	12.034	0.1	1.863	1.761	0.0
3.04	106.119	12.777	0.1	1.872	1.743	0.0
3.06	104.71	13.481	0.1	1.881	1.708	0.0
3.08	103.01	13.663	0.101	1.883	1.668	0.0
3.1	101.291	14.073	0.101	1.888	1.63	0.0
3.12	99.014	14.242	0.101	1.891	1.584	0.0
3.14	98.479	15.195	0.101	1.902	1.571	0.0
3.16	98.261	15.644	0.101	1.908	1.563	0.0
3.18	97.063	16.117	0.102	1.914	1.539	0.0
3.2	96.377	16.929	0.102	1.924	1.524	0.0
3.22	95.32	16.524	0.102	1.919	1.503	0.0
3.24	95.676	18.259	0.102	1.941	1.505	0.0
3.26	94.326	17.76	0.102	1.934	1.48	0.0
3.28	93.628	17.472	0.102	1.931	1.466	0.0
3.3	92.119	16.739	0.103	1.922	1.44	0.0
3.32	90.944	15.91	0.103	1.911	1.419	0.0
3.34	89.136	13.273	0.103	1.878	1.39	0.0
3.36	86.102	5.581	0.103	1.782	1.346	0.0
3.38	102.099	-4.276	0.103	1.659	N.C.	0.0
3.4	115.174	-9.117	0.103	1.599	N.C.	0.0
3.42	131.24	-10.995	0.104	1.575	N.C.	0.0
3.44	135.956	-11.453	0.104	1.569	N.C.	0.0
3.46	143.324	-11.703	0.104	1.566	N.C.	0.0
3.48	127.313	-8.761	0.104	1.603	N.C.	0.0
3.5	124.53	-4.946	0.104	1.651	N.C.	0.0
3.52	123.885	-1.853	0.104	1.689	N.C.	0.0
3.54	124.072	-0.652	0.104	1.704	N.C.	0.0
3.56	124.123	0.645	0.105	1.721	2.147	0.0
3.58	122.792	2.056	0.105	1.738	2.096	0.0
3.6	120.704	3.45	0.105	1.756	2.022	0.0
3.62	116.633	5.049	0.105	1.776	1.895	0.0
3.64	114.555	6.282	0.105	1.791	1.835	0.0
3.66	112.901	8.483	0.105	1.819	1.789	0.0
3.68	112.888	10.597	0.105	1.845	1.786	0.0
3.7	115.21	13.44	0.106	1.881	1.843	0.0
3.72	115.895	16.162	0.106	1.915	1.858	0.0
3.74	115.596	19.471	0.106	1.956	1.847	0.0
3.76	114.379	21.872	0.106	1.986	1.812	0.0
3.78	112.628	23.913	0.106	2.011	1.764	0.0
3.8	110.008	26.64	0.106	2.046	1.699	0.0
3.82	107.41	29.521	0.106	2.082	1.64	0.0
3.84	105.961	39.674	0.107	2.208	1.607	0.0
3.86	103.659	38.934	0.107	2.199	1.56	0.0
3.88	101.707	38.255	0.107	2.191	1.521	0.0
3.9	102.626	36.653	0.107	2.171	1.536	0.0
3.92	104.406	32.477	0.107	2.118	1.567	0.0
3.94	105.743	32.765	0.107	2.122	1.59	0.0
3.96	107.11	31.757	0.107	2.109	1.616	0.0
3.98	107.361	30.281	0.107	2.091	1.618	0.0
4.0	107.627	29.905	0.108	2.086	1.621	0.0
4.02	106.572	32.397	0.108	2.117	1.597	0.0

4.04	105.027	34.406	0.108	2.143	1.564	0.0
4.06	103.728	35.955	0.108	2.162	1.537	0.0
4.08	101.049	33.204	0.108	2.128	1.487	0.0
4.1	100.443	32.514	0.108	2.119	1.475	0.0
4.12	100.199	32.376	0.108	2.117	1.468	0.0
4.14	100.161	32.449	0.108	2.118	1.466	0.0
4.16	96.42	32.027	0.108	2.113	1.403	0.0
4.18	93.626	38.227	0.109	2.19	1.36	0.0
4.2	89.312	48.129	0.109	2.314	1.299	0.0
4.22	84.337	59.174	0.109	2.452	1.235	0.0
4.24	77.038	79.194	0.109	2.702	N.L.	0.0
4.26	72.835	94.069	0.109	2.888	N.L.	0.0
4.28	68.454	115.707	0.109	3.159	N.L.	0.0
4.3	64.81	145.386	0.109	3.53	N.L.	0.0
4.32	64.301	148.368	0.109	3.567	N.L.	0.0
4.34	63.886	146.347	0.109	3.542	N.L.	0.0
4.36	63.196	149.42	0.11	3.58	N.L.	0.0
4.38	62.39	154.233	0.11	3.64	N.L.	0.0
4.4	62.22	150.053	0.11	3.588	N.L.	0.0
4.42	62.209	139.56	0.11	3.457	N.L.	0.0
4.44	61.691	136.115	0.11	3.414	N.L.	0.0
4.46	61.191	129.05	0.11	3.326	N.L.	0.0
4.48	61.586	116.144	0.11	3.164	N.L.	0.0
4.5	61.955	105.569	0.11	3.032	N.L.	0.0
4.52	62.371	96.728	0.111	2.922	N.L.	0.0
4.54	63.179	86.619	0.111	2.795	N.L.	0.0
4.56	64.25	86.197	0.111	2.79	N.L.	0.0
4.58	65.278	83.916	0.111	2.761	N.L.	0.0
4.6	66.451	96.531	0.111	2.919	N.L.	0.0
4.62	70.31	85.609	0.111	2.783	N.L.	0.0
4.64	71.76	82.817	0.111	2.748	N.L.	0.0
4.66	73.838	80.631	0.111	2.72	N.L.	0.0
4.68	71.546	88.173	0.111	2.815	N.L.	0.0
4.7	70.701	92.33	0.111	2.867	N.L.	0.0
4.72	72.141	89.535	0.111	2.832	N.L.	0.0
4.74	74.425	82.156	0.112	2.739	N.L.	0.0
4.76	74.296	82.501	0.112	2.744	N.L.	0.0
4.78	72.047	85.606	0.112	2.783	N.L.	0.0
4.8	69.958	91.741	0.112	2.859	N.L.	0.0
4.82	68.745	94.343	0.112	2.892	N.L.	0.0
4.84	69.915	90.731	0.112	2.847	N.L.	0.0
4.86	69.272	95.234	0.112	2.903	N.L.	0.0
4.88	69.38	97.511	0.112	2.931	N.L.	0.0
4.9	70.463	98.542	0.112	2.944	N.L.	0.0
4.92	70.633	92.455	0.112	2.868	N.L.	0.0
4.94	73.457	83.716	0.112	2.759	N.L.	0.0
4.96	82.924	55.901	0.112	2.411	1.167	0.0
4.98	83.807	50.641	0.113	2.346	1.176	0.0
5.0	77.484	61.743	0.113	2.484	1.108	0.0
5.02	72.522	72.888	0.113	2.624	N.L.	0.0
5.04	69.727	82.375	0.113	2.742	N.L.	0.0
5.06	67.442	100.384	0.113	2.967	N.L.	0.0
5.08	66.655	111.618	0.113	3.108	N.L.	0.0
5.1	67.391	110.169	0.113	3.09	N.L.	0.0

5.12	72.725	81.235	0.113	2.728	N.L.	0.0
5.14	73.335	77.342	0.113	2.679	N.L.	0.0
5.16	70.201	85.802	0.113	2.785	N.L.	0.0
5.18	70.619	79.788	0.113	2.71	N.L.	0.0
5.2	73.156	73.281	0.113	2.629	N.L.	0.0
5.22	78.18	58.516	0.113	2.444	1.104	0.0
5.24	83.237	45.878	0.113	2.286	1.156	0.0
5.26	87.198	37.393	0.114	2.18	1.2	0.0
5.28	87.17	29.109	0.114	2.076	1.198	0.0
5.3	85.02	24.291	0.114	2.016	1.173	0.0
5.32	84.676	22.023	0.114	1.988	1.168	0.0
5.34	83.26	18.529	0.114	1.944	1.152	0.0
5.36	83.851	17.134	0.114	1.927	1.157	0.0
5.38	85.829	15.921	0.114	1.912	1.178	0.0
5.4	91.425	16.381	0.114	1.917	1.245	0.0
5.42	95.948	17.189	0.114	1.927	1.304	0.0
5.44	99.338	17.275	0.114	1.928	1.353	0.0
5.46	103.116	18.269	0.114	1.941	1.412	0.0
5.48	108.255	20.661	0.114	1.971	1.503	0.0
5.5	111.586	22.434	0.114	1.993	1.569	0.0
5.52	115.048	26.471	0.114	2.043	1.645	0.0
5.54	116.538	29.102	0.114	2.076	1.68	0.0
5.56	118.549	27.461	0.114	2.056	1.73	0.0
5.58	120.435	23.046	0.114	2.001	1.779	0.0
5.6	119.803	19.533	0.114	1.957	1.76	0.0
5.62	122.106	19.302	0.114	1.954	1.824	0.0
5.64	122.812	19.367	0.114	1.955	1.844	0.0
5.66	119.799	17.423	0.115	1.93	1.757	0.0
5.68	118.873	16.112	0.115	1.914	1.731	0.0
5.7	118.725	15.015	0.115	1.9	1.726	0.0
5.72	119.78	13.789	0.115	1.885	1.752	0.0
5.74	122.478	13.923	0.115	1.887	1.827	0.0
5.76	122.523	13.864	0.115	1.886	1.827	0.0
5.78	126.666	15.706	0.115	1.909	1.958	0.0
5.8	132.632	18.894	0.115	1.949	2.182	0.0
5.82	131.858	20.658	0.115	1.971	2.149	0.0
5.84	134.623	22.324	0.115	1.992	2.266	0.0
5.86	137.778	24.484	0.115	2.019	2.417	0.0
5.88	139.296	25.565	0.115	2.032	2.495	0.0
5.9	140.217	25.537	0.115	2.032	2.544	0.0
5.92	140.264	25.878	0.115	2.036	2.545	0.0
5.94	140.061	26.492	0.115	2.044	2.532	0.0
5.96	139.045	27.416	0.115	2.055	2.475	0.0
5.98	138.397	27.524	0.115	2.057	2.439	0.0
6.0	136.403	26.153	0.115	2.039	2.337	0.0
6.02	135.585	27.36	0.115	2.055	2.296	0.0
6.04	134.312	28.756	0.115	2.072	2.237	0.0
6.06	132.262	30.063	0.115	2.088	2.147	0.0
6.08	129.411	30.784	0.115	2.097	2.035	0.0
6.1	124.198	34.026	0.115	2.138	1.857	0.0
6.12	115.142	43.083	0.115	2.251	1.615	0.0
6.14	104.375	56.194	0.115	2.415	1.402	0.0
6.16	89.392	79.692	0.115	2.709	N.L.	0.0
6.18	82.05	94.998	0.116	2.9	N.L.	0.0



6.2	75.032	114.103	0.116	3.139	N.L.	0.0
6.22	71.598	126.297	0.116	3.291	N.L.	0.0
6.24	69.915	133.608	0.116	3.383	N.L.	0.0
6.26	68.727	139.907	0.116	3.461	N.L.	0.0
6.28	71.822	123.559	0.116	3.257	N.L.	0.0
6.3	92.47	67.752	0.116	2.559	1.223	0.0
6.32	110.511	31.95	0.116	2.112	1.506	0.0
6.34	99.837	1.743	0.116	1.734	1.322	0.0
6.36	107.633	-4.24	0.116	1.66	N.C.	0.0
6.38	110.83	-2.953	0.116	1.676	N.C.	0.0
6.4	111.838	-1.096	0.116	1.699	N.C.	0.0
6.42	111.113	3.378	0.116	1.755	1.515	0.0
6.44	112.524	6.816	0.116	1.798	1.543	0.0
6.46	116.492	8.057	0.116	1.813	1.631	0.0
6.48	119.558	8.304	0.116	1.816	1.706	0.0
6.5	124.253	9.189	0.116	1.827	1.837	0.0
6.52	128.206	9.969	0.116	1.837	1.965	0.0
6.54	130.594	11.319	0.116	1.854	2.051	0.0
6.56	130.006	11.904	0.116	1.861	2.028	0.0
6.58	127.353	12.618	0.116	1.87	1.933	0.0
6.6	125.834	13.842	0.116	1.886	1.882	0.0
6.62	123.013	13.978	0.116	1.887	1.795	0.0
6.64	121.335	14.877	0.116	1.898	1.747	0.0
6.66	113.139	12.204	0.116	1.865	1.548	0.0
6.68	108.485	10.679	0.116	1.846	1.455	0.0
6.7	102.638	7.967	0.116	1.812	1.355	0.0
6.72	101.637	6.261	0.116	1.791	1.339	0.0
6.74	102.184	5.259	0.116	1.778	1.347	0.0
6.76	102.129	5.89	0.116	1.786	1.345	0.0
6.78	105.369	10.372	0.116	1.842	1.397	0.0
6.8	115.58	15.253	0.116	1.903	1.597	0.0
6.82	120.503	17.822	0.116	1.935	1.718	0.0
6.84	122.274	17.925	0.116	1.937	1.765	0.0
6.86	123.98	16.927	0.116	1.924	1.814	0.0
6.88	124.998	16.22	0.116	1.915	1.844	0.0
6.9	126.189	16.46	0.116	1.918	1.881	0.0
6.92	126.187	16.377	0.116	1.917	1.88	0.0
6.94	125.443	16.043	0.116	1.913	1.856	0.0
6.96	127.411	17.078	0.116	1.926	1.919	0.0
6.98	129.115	18.508	0.116	1.944	1.977	0.0
7.0	132.748	21.892	0.116	1.986	2.114	0.0
7.02	133.941	25.677	0.116	2.033	2.163	0.0
7.04	132.728	29.915	0.116	2.086	2.111	0.0
7.06	128.874	35.725	0.116	2.159	1.965	0.0
7.08	122.612	43.484	0.116	2.256	1.766	0.0
7.1	113.32	53.533	0.116	2.382	1.538	0.0
7.12	98.476	73.686	0.116	2.634	N.L.	0.0
7.14	88.31	91.052	0.116	2.851	N.L.	0.0
7.16	86.193	96.585	0.116	2.92	N.L.	0.0
7.18	87.771	95.551	0.116	2.907	N.L.	0.0
7.2	117.75	56.701	0.117	2.421	1.635	0.0
7.22	138.235	30.034	0.117	2.088	2.35	0.0
7.24	128.345	15.526	0.117	1.907	1.939	0.0
7.26	112.368	6.286	0.117	1.791	1.514	0.0

7.28	114.664	1.386	0.117	1.73	1.562	0.0
7.3	116.593	-0.996	0.117	1.7	N.C.	0.0
7.32	117.103	0.597	0.117	1.72	1.616	0.0
7.34	120.476	0.773	0.117	1.722	1.699	0.0
7.36	126.409	-1.843	0.117	1.689	N.C.	0.0
7.38	129.177	-0.944	0.117	1.701	N.C.	0.0
7.4	128.387	2.388	0.117	1.742	1.935	0.0
7.42	128.01	7.153	0.117	1.802	1.922	0.0
7.44	133.565	10.201	0.117	1.84	2.129	0.0
7.46	138.244	11.631	0.117	1.858	2.34	0.0
7.48	140.054	11.531	0.117	1.857	2.432	0.0
7.5	140.7	10.724	0.117	1.847	2.466	0.0
7.52	141.539	10.818	0.117	1.848	2.512	0.0
7.54	142.227	11.268	0.117	1.853	2.55	0.0
7.56	142.964	11.819	0.117	1.86	2.593	0.0
7.58	142.772	11.933	0.117	1.862	2.58	0.0
7.6	142.698	12.405	0.117	1.868	2.575	0.0
7.62	141.615	12.391	0.117	1.867	2.512	0.0
7.64	142.678	13.323	0.117	1.879	2.572	0.0
7.66	141.212	14.331	0.117	1.892	2.488	0.0
7.68	142.145	16.447	0.117	1.918	2.54	0.0
7.7	140.391	18.26	0.117	1.941	2.441	0.0
7.72	137.095	19.39	0.117	1.955	2.275	0.0
7.74	134.408	22.595	0.117	1.995	2.154	0.0
7.76	131.974	26.515	0.117	2.044	2.055	0.0
7.78	129.82	30.278	0.117	2.091	1.974	0.0
7.8	126.84	33.855	0.117	2.136	1.872	0.0
7.82	122.907	28.695	0.117	2.071	1.753	0.0
7.84	119.45	27.802	0.117	2.06	1.661	0.0
7.86	117.536	28.779	0.117	2.072	1.614	0.0
7.88	114.398	32.501	0.117	2.119	1.543	0.0
7.9	111.961	36.282	0.117	2.166	1.493	0.0
7.92	105.833	45.165	0.117	2.277	1.381	0.0
7.94	102.24	52.231	0.117	2.365	1.323	0.0
7.96	104.14	51.793	0.117	2.36	1.352	0.0
7.98	111.669	42.617	0.117	2.245	1.485	0.0
8.0	114.256	39.387	0.117	2.205	1.538	0.0
8.02	115.728	33.423	0.117	2.13	1.57	0.0
8.04	115.236	29.872	0.117	2.086	1.558	0.0
8.06	111.023	26.736	0.117	2.047	1.472	0.0
8.08	104.749	24.584	0.117	2.02	1.361	0.0
8.1	96.847	23.016	0.117	2.0	1.245	0.0
8.12	94.358	24.419	0.117	2.018	1.213	0.0
8.14	97.309	32.312	0.117	2.116	1.25	0.0
8.16	100.15	35.259	0.117	2.153	1.29	0.0
8.18	105.871	29.618	0.117	2.083	1.378	0.0
8.2	109.888	23.237	0.116	2.003	1.448	0.0
8.22	101.758	12.731	0.116	1.872	1.312	0.0
8.24	96.653	8.378	0.116	1.817	1.241	0.0
8.26	95.167	5.611	0.116	1.783	1.221	0.0
8.28	92.337	9.893	0.116	1.836	1.186	0.0
8.3	109.404	23.47	0.116	2.006	1.438	0.0
8.32	109.216	32.604	0.116	2.12	1.434	0.0
8.34	102.726	46.122	0.116	2.289	1.326	0.0

8.36	93.106	65.503	0.116	2.531	1.195	0.0
8.38	94.072	70.424	0.116	2.593	1.206	0.0
8.4	90.527	80.162	0.116	2.715	N.L.	0.0
8.42	96.835	71.749	0.116	2.609	N.L.	0.0
8.44	113.424	45.49	0.116	2.281	1.514	0.0
8.46	122.736	31.083	0.116	2.101	1.736	0.0
8.48	127.872	23.231	0.116	2.003	1.89	0.0
8.5	116.318	16.05	0.116	1.913	1.575	0.0
8.52	108.722	11.715	0.116	1.859	1.423	0.0
8.54	113.283	11.707	0.116	1.859	1.51	0.0
8.56	121.657	14.084	0.116	1.889	1.705	0.0
8.58	133.023	19.127	0.116	1.952	2.075	0.0
8.6	139.416	23.874	0.116	2.011	2.361	0.0
8.62	140.936	27.241	0.116	2.053	2.44	0.0
8.64	142.289	29.145	0.116	2.077	2.514	0.0
8.66	145.282	30.264	0.116	2.091	2.695	0.0
8.68	148.328	28.905	0.116	2.074	2.904	0.0
8.7	150.085	26.089	0.116	2.039	3.037	0.0
8.72	150.365	24.519	0.116	2.019	3.059	0.0
8.74	148.769	22.67	0.116	1.996	2.935	0.0
8.76	147.409	20.933	0.116	1.974	2.835	0.0
8.78	146.695	21.112	0.116	1.976	2.785	0.0
8.8	145.963	24.561	0.116	2.02	2.736	0.0
8.82	146.839	24.868	0.116	2.023	2.794	0.0
8.84	147.372	27.103	0.116	2.051	2.831	0.0
8.86	147.172	30.19	0.116	2.09	2.816	0.0
8.88	146.593	33.129	0.116	2.127	2.776	0.0
8.9	146.798	33.859	0.116	2.136	2.789	0.0
8.92	148.067	33.416	0.116	2.13	2.878	0.0
8.94	149.832	28.237	0.116	2.065	3.01	0.0
8.96	149.721	25.463	0.116	2.031	3.0	0.0
8.98	149.433	25.095	0.116	2.026	2.978	0.0
9.0	147.869	24.867	0.116	2.023	2.861	0.0
9.02	147.585	25.146	0.116	2.027	2.841	0.0
9.04	148.261	24.551	0.116	2.019	2.889	0.0
9.06	149.176	24.466	0.116	2.018	2.956	0.0
9.08	152.678	25.36	0.116	2.03	3.242	0.0
9.1	154.729	24.999	0.116	2.025	3.431	0.0
9.12	154.937	23.838	0.116	2.01	3.451	0.0
9.14	153.388	22.541	0.116	1.994	3.304	0.0
9.16	152.387	23.76	0.116	2.01	3.214	0.0
9.18	152.067	25.416	0.116	2.03	3.186	0.0
9.2	151.463	26.544	0.116	2.044	3.134	0.0
9.22	149.941	28.982	0.116	2.075	3.011	0.0
9.24	147.99	31.364	0.116	2.105	2.864	0.0
9.26	144.272	35.577	0.116	2.157	2.618	0.0
9.28	141.299	38.251	0.116	2.191	2.446	0.0
9.3	137.807	40.278	0.116	2.216	2.269	0.0
9.32	135.093	41.243	0.116	2.228	2.148	0.0
9.34	133.484	41.157	0.116	2.227	2.081	0.0
9.36	131.675	40.186	0.116	2.215	2.011	0.0
9.38	130.294	39.899	0.116	2.211	1.961	0.0
9.4	128.141	39.721	0.116	2.209	1.887	0.0
9.42	125.414	40.037	0.116	2.213	1.801	0.0

9.44	123.156	41.111	0.116	2.226	1.736	0.0
9.46	119.26	43.323	0.116	2.254	1.635	0.0
9.48	116.338	44.545	0.116	2.269	1.567	0.0
9.5	108.637	50.472	0.116	2.343	1.414	0.0
9.52	95.509	69.111	0.116	2.576	1.219	0.0
9.54	84.021	93.185	0.116	2.877	N.L.	0.0
9.56	77.574	111.692	0.116	3.109	N.L.	0.0
9.58	75.301	118.92	0.116	3.199	N.L.	0.0
9.6	83.184	97.848	0.116	2.936	N.L.	0.0
9.62	84.836	93.744	0.116	2.884	N.L.	0.0
9.64	76.894	110.619	0.116	3.095	N.L.	0.0
9.66	74.756	112.85	0.116	3.123	N.L.	0.0
9.68	74.791	110.903	0.116	3.099	N.L.	0.0
9.7	74.72	103.392	0.116	3.005	N.L.	0.0
9.72	72.015	111.61	0.116	3.108	N.L.	0.0
9.74	68.017	134.49	0.116	3.394	N.L.	0.0
9.76	68.384	129.982	0.116	3.337	N.L.	0.0
9.78	69.582	124.444	0.116	3.268	N.L.	0.0
9.8	70.939	118.18	0.116	3.19	N.L.	0.0
9.82	74.363	102.925	0.116	2.999	N.L.	0.0
9.84	97.045	56.715	0.115	2.421	1.237	0.0
9.86	99.061	17.609	0.115	1.933	1.264	0.0
9.88	85.072	8.47	0.115	1.818	1.1	0.0
9.9	88.911	1.09	0.115	1.726	1.14	0.0
9.92	90.979	2.742	0.115	1.747	1.163	0.0
9.94	90.263	9.224	0.115	1.828	1.155	0.0
9.96	104.165	16.991	0.115	1.925	1.338	0.0
9.98	105.553	20.905	0.115	1.974	1.36	0.0
10.0	108.224	28.293	0.115	2.066	1.405	0.0
10.02	101.554	43.832	0.115	2.26	1.299	0.0
10.04	103.1	46.998	0.115	2.3	1.322	0.0
10.06	104.086	45.998	0.115	2.287	1.337	0.0
10.08	111.951	31.02	0.115	2.1	1.473	0.0
10.1	110.297	23.491	0.115	2.006	1.442	0.0
10.12	108.978	21.653	0.115	1.983	1.418	0.0
10.14	106.913	21.682	0.115	1.984	1.383	0.0
10.16	106.466	23.24	0.115	2.003	1.375	0.0
10.18	106.337	25.406	0.115	2.03	1.373	0.0
10.2	108.46	32.028	0.115	2.113	1.409	0.0
10.22	108.053	37.85	0.115	2.186	1.402	0.0
10.24	107.383	43.253	0.115	2.253	1.391	0.0
10.26	105.492	49.457	0.115	2.331	1.36	0.0
10.28	103.448	54.271	0.115	2.391	1.328	0.0
10.3	100.746	59.214	0.115	2.453	1.288	0.0
10.32	98.571	61.597	0.115	2.482	1.258	0.0
10.34	98.582	59.57	0.115	2.457	1.258	0.0
10.36	100.593	55.628	0.115	2.408	1.286	0.0
10.38	101.227	50.81	0.115	2.348	1.295	0.0
10.4	98.903	50.425	0.115	2.343	1.262	0.0
10.42	94.685	52.892	0.115	2.374	1.208	0.0
10.44	90.877	55.878	0.115	2.411	1.163	0.0
10.46	85.084	63.997	0.115	2.512	1.101	0.0
10.48	78.825	81.162	0.115	2.727	N.L.	0.0
10.5	72.797	107.446	0.115	3.056	N.L.	0.0

10.52	68.782	129.847	0.115	3.336	N.L.	0.0
10.54	66.328	152.057	0.115	3.613	N.L.	0.0
10.56	65.326	157.745	0.115	3.684	N.L.	0.0
10.58	65.321	157.832	0.115	3.685	N.L.	0.0
10.6	65.281	149.997	0.115	3.587	N.L.	0.0
10.62	65.088	145.03	0.115	3.525	N.L.	0.0
10.64	64.824	142.181	0.115	3.49	N.L.	0.0
10.66	64.597	142.97	0.115	3.5	N.L.	0.0
10.68	70.907	72.198	0.115	2.615	N.L.	0.0
10.7	73.857	29.161	0.115	2.077	0.999	0.002
10.72	76.939	20.216	0.114	1.965	1.026	0.001
10.74	84.793	21.328	0.114	1.979	1.099	0.0
10.76	83.239	18.701	0.114	1.946	1.084	0.0
10.78	87.547	19.526	0.114	1.957	1.127	0.0
10.8	93.885	20.547	0.114	1.969	1.199	0.0
10.82	90.161	15.683	0.114	1.909	1.156	0.0
10.84	95.602	15.194	0.114	1.902	1.22	0.0
10.86	103.2	17.03	0.114	1.925	1.325	0.0
10.88	108.653	20.309	0.114	1.966	1.413	0.0
10.9	113.045	24.441	0.114	2.018	1.495	0.0
10.92	115.563	25.075	0.114	2.026	1.548	0.0
10.94	116.906	21.353	0.114	1.979	1.577	0.0
10.96	117.068	16.739	0.114	1.922	1.581	0.0
10.98	109.028	10.139	0.114	1.839	1.421	0.0
11.0	110.75	9.657	0.114	1.833	1.452	0.0
11.02	112.473	10.741	0.114	1.847	1.485	0.0
11.04	114.353	12.547	0.114	1.869	1.523	0.0
11.06	119.138	15.119	0.114	1.901	1.629	0.0
11.08	127.628	20.143	0.114	1.964	1.864	0.0
11.1	131.141	23.812	0.114	2.01	1.984	0.0
11.12	132.682	26.866	0.114	2.048	2.041	0.0
11.14	132.468	31.557	0.114	2.107	2.033	0.0
11.16	130.046	34.892	0.114	2.149	1.945	0.0
11.18	126.384	37.792	0.114	2.185	1.826	0.0
11.2	121.881	40.887	0.114	2.224	1.699	0.0
11.22	118.76	41.804	0.114	2.235	1.621	0.0
11.24	117.5	39.501	0.114	2.206	1.592	0.0
11.26	115.923	34.773	0.114	2.147	1.557	0.0
11.28	113.766	29.535	0.114	2.082	1.512	0.0
11.3	109.617	24.765	0.114	2.022	1.433	0.0
11.32	108.728	24.714	0.114	2.021	1.417	0.0
11.34	107.355	24.889	0.114	2.024	1.394	0.0
11.36	106.336	25.848	0.113	2.036	1.377	0.0
11.38	107.0	27.088	0.113	2.051	1.388	0.0
11.4	107.518	27.911	0.113	2.061	1.397	0.0
11.42	108.9	28.691	0.113	2.071	1.421	0.0
11.44	109.07	28.701	0.113	2.071	1.424	0.0
11.46	109.268	25.532	0.113	2.032	1.428	0.0
11.48	107.032	23.105	0.113	2.001	1.39	0.0
11.5	105.591	22.358	0.113	1.992	1.366	0.0
11.52	103.793	21.433	0.113	1.98	1.338	0.0
11.54	103.784	21.773	0.113	1.985	1.338	0.0
11.56	102.564	21.088	0.113	1.976	1.32	0.0
11.58	103.333	21.923	0.113	1.987	1.332	0.0

11.6	102.909	21.949	0.113	1.987	1.325	0.0
11.62	100.461	21.153	0.113	1.977	1.29	0.0
11.64	100.01	22.219	0.113	1.99	1.284	0.0
11.66	103.366	27.139	0.113	2.052	1.333	0.0
11.68	104.084	30.431	0.113	2.093	1.344	0.0
11.7	104.326	36.23	0.113	2.165	1.348	0.0
11.72	102.372	41.385	0.113	2.23	1.318	0.0
11.74	101.01	46.85	0.113	2.298	1.299	0.0
11.76	101.585	48.99	0.113	2.325	1.307	0.0
11.78	103.605	48.834	0.113	2.323	1.337	0.0
11.8	106.651	44.348	0.113	2.267	1.386	0.0
11.82	109.213	41.914	0.113	2.236	1.43	0.0
11.84	113.195	35.584	0.113	2.157	1.505	0.0
11.86	115.533	31.787	0.113	2.11	1.553	0.0
11.88	118.151	29.185	0.113	2.077	1.612	0.0
11.9	120.964	29.034	0.113	2.075	1.68	0.0
11.92	123.697	29.29	0.113	2.079	1.753	0.0
11.94	128.203	31.236	0.112	2.103	1.889	0.0
11.96	131.555	32.953	0.112	2.124	2.005	0.0
11.98	134.389	33.767	0.112	2.135	2.114	0.0
12.0	136.446	35.729	0.112	2.159	2.201	0.0
12.02	138.298	36.76	0.112	2.172	2.286	0.0
12.04	138.792	37.677	0.112	2.183	2.31	0.0
12.06	139.154	38.885	0.112	2.199	2.327	0.0
12.08	139.018	39.661	0.112	2.208	2.321	0.0
12.1	138.863	39.399	0.112	2.205	2.313	0.0
12.12	138.786	39.238	0.112	2.203	2.31	0.0
12.14	138.165	39.968	0.112	2.212	2.281	0.0
12.16	137.513	40.073	0.112	2.213	2.25	0.0
12.18	137.343	39.628	0.112	2.208	2.243	0.0
12.2	136.501	39.622	0.112	2.208	2.205	0.0
12.22	135.333	40.527	0.112	2.219	2.155	0.0
12.24	135.561	40.311	0.112	2.216	2.165	0.0
12.26	135.515	40.337	0.112	2.217	2.163	0.0
12.28	135.296	41.207	0.112	2.228	2.154	0.0
12.3	133.873	42.837	0.112	2.248	2.096	0.0
12.32	133.189	43.797	0.112	2.26	2.069	0.0
12.34	133.153	43.828	0.112	2.26	2.068	0.0
12.36	133.914	42.312	0.112	2.241	2.098	0.0
12.38	133.673	41.367	0.112	2.23	2.089	0.0
12.4	132.678	41.943	0.112	2.237	2.05	0.0
12.42	129.567	44.524	0.112	2.269	1.938	0.0
12.44	125.838	48.726	0.112	2.322	1.82	0.0
12.46	123.915	50.501	0.112	2.344	1.764	0.0
12.48	123.143	51.438	0.112	2.355	1.743	0.0
12.5	123.124	51.252	0.112	2.353	1.743	0.0
12.52	122.977	50.767	0.112	2.347	1.739	0.0
12.54	122.657	49.877	0.111	2.336	1.73	0.0
12.56	123.233	47.66	0.111	2.308	1.746	0.0
12.58	123.841	44.706	0.111	2.271	1.763	0.0
12.6	123.949	43.634	0.111	2.258	1.767	0.0
12.62	124.244	43.1	0.111	2.251	1.775	0.0
12.64	124.555	43.153	0.111	2.252	1.784	0.0
12.66	124.191	43.359	0.111	2.254	1.774	0.0

12.68	124.024	43.164	0.111	2.252	1.77	0.0
12.7	124.976	43.747	0.111	2.259	1.797	0.0
12.72	126.035	43.595	0.111	2.257	1.829	0.0
12.74	126.914	42.629	0.111	2.245	1.856	0.0
12.76	127.053	41.897	0.111	2.236	1.86	0.0
12.78	126.38	41.021	0.111	2.225	1.84	0.0
12.8	125.912	39.158	0.111	2.202	1.826	0.0
12.82	127.501	38.445	0.111	2.193	1.875	0.0
12.84	129.157	37.879	0.111	2.186	1.929	0.0
12.86	129.956	37.742	0.111	2.184	1.957	0.0
12.88	130.574	38.596	0.111	2.195	1.979	0.0
12.9	129.597	41.507	0.111	2.231	1.945	0.0
12.92	127.7	44.873	0.111	2.273	1.882	0.0
12.94	125.038	48.939	0.111	2.324	1.802	0.0
12.96	121.89	53.012	0.111	2.375	1.715	0.0
12.98	119.575	54.872	0.111	2.398	1.657	0.0
13.0	118.577	55.292	0.111	2.404	1.633	0.0
13.02	117.513	55.523	0.111	2.407	1.609	0.0
13.04	116.949	55.277	0.111	2.403	1.596	0.0
13.06	116.545	53.371	0.111	2.38	1.587	0.0
13.08	116.177	52.519	0.111	2.369	1.58	0.0
13.1	116.138	51.426	0.111	2.355	1.579	0.0
13.12	116.78	48.952	0.11	2.324	1.593	0.0
13.14	117.5	47.344	0.11	2.304	1.61	0.0
13.16	119.825	43.704	0.11	2.259	1.665	0.0
13.18	120.38	42.208	0.11	2.24	1.679	0.0
13.2	120.734	41.99	0.11	2.237	1.688	0.0
13.22	120.32	41.909	0.11	2.236	1.678	0.0
13.24	119.497	43.623	0.11	2.258	1.658	0.0
13.26	118.705	45.561	0.11	2.282	1.639	0.0
13.28	117.466	49.315	0.11	2.329	1.611	0.0
13.3	115.478	52.162	0.11	2.365	1.567	0.0
13.32	112.635	55.217	0.11	2.403	1.509	0.0
13.34	109.705	59.066	0.11	2.451	1.454	0.0
13.36	107.908	60.912	0.11	2.474	1.423	0.0
13.38	105.91	62.462	0.11	2.493	1.39	0.0
13.4	104.07	63.878	0.11	2.511	1.361	0.0
13.42	102.678	64.073	0.11	2.513	1.34	0.0
13.44	100.765	65.767	0.11	2.535	1.312	0.0
13.46	99.672	64.864	0.11	2.523	1.297	0.0
13.48	99.333	63.546	0.11	2.507	1.293	0.0
13.5	97.968	61.615	0.11	2.483	1.275	0.0
13.52	96.589	60.932	0.11	2.474	1.257	0.0
13.54	92.985	61.501	0.11	2.481	1.213	0.0
13.56	91.333	62.656	0.11	2.496	1.194	0.0
13.58	85.905	71.09	0.11	2.601	N.L.	0.0
13.6	84.847	76.385	0.11	2.667	N.L.	0.0
13.62	84.033	81.265	0.11	2.728	N.L.	0.0
13.64	84.499	82.5	0.11	2.744	N.L.	0.0
13.66	87.563	77.872	0.11	2.686	N.L.	0.0
13.68	92.363	72.577	0.109	2.62	N.L.	0.0
13.7	93.6	70.142	0.109	2.589	1.222	0.0
13.72	94.813	66.304	0.109	2.541	1.237	0.0
13.74	94.713	58.034	0.109	2.438	1.236	0.0

13.76	94.591	49.562	0.109	2.332	1.235	0.0
13.78	97.92	46.913	0.109	2.299	1.277	0.0
13.8	100.217	42.288	0.109	2.241	1.309	0.0
13.82	103.246	37.578	0.109	2.182	1.353	0.0
13.84	106.293	36.916	0.109	2.174	1.402	0.0
13.86	109.883	38.636	0.109	2.195	1.464	0.0
13.88	112.624	39.809	0.109	2.21	1.516	0.0
13.9	115.34	41.117	0.109	2.226	1.572	0.0
13.92	117.165	43.136	0.109	2.252	1.613	0.0
13.94	119.289	44.196	0.109	2.265	1.663	0.0
13.96	121.772	45.357	0.109	2.279	1.725	0.0
13.98	122.216	45.87	0.109	2.286	1.737	0.0
14.0	121.465	45.914	0.109	2.286	1.718	0.0
14.02	119.537	46.146	0.109	2.289	1.67	0.0
14.04	113.248	52.391	0.109	2.367	1.531	0.0
14.06	102.382	64.14	0.109	2.514	1.344	0.0
14.08	90.709	82.204	0.109	2.74	N.L.	0.0
14.1	88.402	86.752	0.109	2.797	N.L.	0.0
14.12	71.906	134.269	0.109	3.391	N.L.	0.0
14.14	68.871	152.168	0.109	3.615	N.L.	0.0
14.16	66.621	170.635	0.109	3.845	N.L.	0.0
14.18	66.343	168.334	0.109	3.817	N.L.	0.0
14.2	66.186	161.344	0.109	3.729	N.L.	0.0
14.22	65.826	156.687	0.108	3.671	N.L.	0.0
14.24	64.502	165.112	0.108	3.776	N.L.	0.0
14.26	63.645	170.214	0.108	3.84	N.L.	0.0
14.28	63.277	162.334	0.108	3.742	N.L.	0.0
14.3	63.054	149.159	0.108	3.577	N.L.	0.0
14.32	63.389	135.942	0.108	3.412	N.L.	0.0
14.34	63.601	133.714	0.108	3.384	N.L.	0.0
14.36	64.369	127.886	0.108	3.311	N.L.	0.0
14.38	64.245	134.513	0.108	3.394	N.L.	0.0
14.4	63.266	143.463	0.108	3.506	N.L.	0.0
14.42	62.594	161.953	0.108	3.737	N.L.	0.0
14.44	62.865	159.073	0.108	3.701	N.L.	0.0
14.46	64.118	138.843	0.108	3.448	N.L.	0.0
14.48	66.685	115.583	0.108	3.157	N.L.	0.0
14.5	65.625	124.976	0.108	3.275	N.L.	0.0
14.52	64.698	137.875	0.108	3.436	N.L.	0.0
14.54	64.08	157.394	0.108	3.68	N.L.	0.0
14.56	63.444	164.611	0.108	3.77	N.L.	0.0
14.58	63.058	170.111	0.108	3.839	N.L.	0.0
14.6	63.11	169.45	0.108	3.831	N.L.	0.0
14.62	63.398	161.191	0.108	3.727	N.L.	0.0
14.64	63.983	153.213	0.108	3.628	N.L.	0.0
14.66	67.519	113.913	0.108	3.136	N.L.	0.0
14.68	72.616	81.044	0.108	2.726	N.L.	0.0
14.7	74.886	70.867	0.108	2.598	1.045	0.0
14.72	70.498	94.292	0.108	2.891	N.L.	0.0
14.74	67.588	125.331	0.108	3.279	N.L.	0.0
14.76	66.219	147.047	0.108	3.551	N.L.	0.0
14.78	67.958	141.679	0.107	3.483	N.L.	0.0
14.8	68.313	138.825	0.107	3.448	N.L.	0.0
14.82	75.891	103.702	0.107	3.009	N.L.	0.0



14.84	79.564	90.658	0.107	2.846	N.L.	0.0
14.86	81.303	76.602	0.107	2.67	N.L.	0.0
14.88	80.723	75.544	0.107	2.657	N.L.	0.0
14.9	82.728	75.523	0.107	2.657	N.L.	0.0
14.92	84.234	69.479	0.107	2.581	1.135	0.0
14.94	80.117	83.787	0.107	2.76	N.L.	0.0
14.96	73.129	113.94	0.107	3.137	N.L.	0.0
14.98	68.652	139.255	0.107	3.453	N.L.	0.0
15.0	67.302	153.665	0.107	3.633	N.L.	0.0
15.02	66.029	167.836	0.107	3.81	N.L.	0.0
15.04	65.245	174.793	0.107	3.897	N.L.	0.0
15.06	65.923	165.488	0.107	3.781	N.L.	0.0
15.08	65.494	164.79	0.107	3.772	N.L.	0.0
15.1	63.772	180.362	0.107	3.967	N.L.	0.0
15.12	63.201	188.651	0.107	4.071	N.L.	0.0
15.14	62.963	183.776	0.107	4.01	N.L.	0.0
15.16	63.077	167.628	0.107	3.808	N.L.	0.0
15.18	62.989	153.559	0.107	3.632	N.L.	0.0
15.2	62.768	159.928	0.107	3.712	N.L.	0.0
15.22	62.582	169.5	0.107	3.831	N.L.	0.0
15.24	62.715	160.013	0.107	3.713	N.L.	0.0
15.26	62.778	152.344	0.107	3.617	N.L.	0.0
15.28	62.852	148.384	0.107	3.567	N.L.	0.0
15.3	62.939	151.111	0.107	3.601	N.L.	0.0
15.32	62.744	165.415	0.106	3.78	N.L.	0.0
15.34	63.032	158.084	0.106	3.689	N.L.	0.0
15.36	63.403	150.689	0.106	3.596	N.L.	0.0
15.38	63.685	149.597	0.106	3.582	N.L.	0.0
15.4	63.001	167.377	0.106	3.805	N.L.	0.0
15.42	62.857	166.636	0.106	3.795	N.L.	0.0
15.44	63.079	157.186	0.106	3.677	N.L.	0.0
15.46	63.462	147.171	0.106	3.552	N.L.	0.0
15.48	63.403	148.083	0.106	3.564	N.L.	0.0
15.5	63.111	154.094	0.106	3.639	N.L.	0.0
15.52	63.163	156.575	0.106	3.67	N.L.	0.0
15.54	63.203	154.915	0.106	3.649	N.L.	0.0
15.56	63.34	156.196	0.106	3.665	N.L.	0.0
15.58	64.243	142.231	0.106	3.49	N.L.	0.0
15.6	65.479	129.004	0.106	3.325	N.L.	0.0
15.62	68.754	100.094	0.106	2.964	N.L.	0.0
15.64	76.244	71.513	0.106	2.606	N.L.	0.0
15.66	79.324	57.366	0.106	2.43	1.097	0.0
15.68	84.929	56.518	0.106	2.419	1.152	0.0
15.7	86.5	59.952	0.106	2.462	1.169	0.0
15.72	82.852	74.323	0.106	2.642	N.L.	0.0
15.74	74.845	107.873	0.106	3.061	N.L.	0.0
15.76	69.194	140.916	0.106	3.474	N.L.	0.0
15.78	67.689	155.026	0.106	3.65	N.L.	0.0
15.8	65.085	181.961	0.106	3.987	N.L.	0.0
15.82	64.569	186.682	0.106	4.046	N.L.	0.0
15.84	64.184	186.932	0.106	4.049	N.L.	0.0
15.86	63.981	182.342	0.105	3.992	N.L.	0.0
15.88	63.924	175.748	0.105	3.909	N.L.	0.0
15.9	63.3	179.153	0.105	3.952	N.L.	0.0

15.92	63.061	170.438	0.105	3.843	N.L.	0.0
15.94	63.017	160.188	0.105	3.715	N.L.	0.0
15.96	63.503	141.297	0.105	3.479	N.L.	0.0
15.98	64.77	126.482	0.105	3.294	N.L.	0.0
16.0	65.248	125.249	0.105	3.278	N.L.	0.0
16.02	64.463	140.932	0.105	3.474	N.L.	0.0
16.04	63.901	150.475	0.105	3.593	N.L.	0.0
16.06	63.714	151.064	0.105	3.601	N.L.	0.0
16.08	63.615	150.637	0.105	3.595	N.L.	0.0
16.1	64.088	142.76	0.105	3.497	N.L.	0.0
16.12	64.454	139.515	0.105	3.456	N.L.	0.0
16.14	64.207	145.747	0.105	3.534	N.L.	0.0
16.16	66.986	119.238	0.105	3.203	N.L.	0.0
16.18	82.137	56.894	0.105	2.424	1.131	0.0
16.2	84.632	25.115	0.105	2.026	1.157	0.0
16.22	84.604	35.55	0.105	2.157	1.157	0.0
16.24	79.503	61.605	0.105	2.483	1.107	0.0
16.26	74.097	95.18	0.105	2.902	N.L.	0.0
16.28	71.355	120.09	0.105	3.214	N.L.	0.0
16.3	70.75	125.583	0.105	3.282	N.L.	0.0
16.32	67.922	152.143	0.105	3.614	N.L.	0.0
16.34	67.502	155.123	0.105	3.652	N.L.	0.0
16.36	68.379	144.529	0.104	3.519	N.L.	0.0
16.38	68.05	143.474	0.104	3.506	N.L.	0.0
16.4	66.826	150.294	0.104	3.591	N.L.	0.0
16.42	65.232	159.035	0.104	3.7	N.L.	0.0
16.44	64.153	164.747	0.104	3.772	N.L.	0.0
16.46	63.639	157.934	0.104	3.687	N.L.	0.0
16.48	63.694	150.526	0.104	3.594	N.L.	0.0
16.5	64.099	146.055	0.104	3.538	N.L.	0.0
16.52	67.29	113.461	0.104	3.131	N.L.	0.0
16.54	69.327	103.509	0.104	3.006	N.L.	0.0
16.56	67.031	111.956	0.104	3.112	N.L.	0.0
16.58	65.593	129.634	0.104	3.333	N.L.	0.0
16.6	64.535	153.158	0.104	3.627	N.L.	0.0
16.62	63.601	177.942	0.104	3.937	N.L.	0.0
16.64	63.368	182.281	0.104	3.991	N.L.	0.0
16.66	63.305	184.16	0.104	4.015	N.L.	0.0
16.68	63.762	174.581	0.104	3.895	N.L.	0.0
16.7	63.593	175.814	0.104	3.91	N.L.	0.0
16.72	63.497	171.674	0.104	3.858	N.L.	0.0
16.74	64.486	155.218	0.104	3.653	N.L.	0.0
16.76	63.747	161.99	0.104	3.737	N.L.	0.0
16.78	64.173	151.609	0.104	3.608	N.L.	0.0
16.8	65.145	139.42	0.104	3.455	N.L.	0.0
16.82	65.338	136.341	0.104	3.417	N.L.	0.0
16.84	65.329	138.93	0.104	3.449	N.L.	0.0
16.86	65.176	142.884	0.104	3.499	N.L.	0.0
16.88	77.978	78.503	0.104	2.694	N.L.	0.0
16.9	87.308	56.451	0.103	2.418	1.195	0.0
16.92	89.307	53.661	0.103	2.383	1.218	0.0
16.94	93.903	55.883	0.103	2.411	1.272	0.0
16.96	91.405	64.153	0.103	2.514	1.242	0.0
16.98	83.1	88.852	0.103	2.823	N.L.	0.0

17.0	77.027	111.151	0.103	3.102	N.L.	0.0
17.02	73.993	128.019	0.103	3.313	N.L.	0.0
17.04	75.447	126.341	0.103	3.292	N.L.	0.0
17.06	82.806	105.836	0.103	3.035	N.L.	0.0
17.08	82.432	100.834	0.103	2.973	N.L.	0.0
17.1	75.839	116.38	0.103	3.167	N.L.	0.0
17.12	71.998	127.382	0.103	3.305	N.L.	0.0
17.14	69.064	144.287	0.103	3.516	N.L.	0.0
17.16	68.011	150.942	0.103	3.599	N.L.	0.0
17.18	68.131	146.279	0.103	3.541	N.L.	0.0
17.2	66.319	156.54	0.103	3.669	N.L.	0.0
17.22	64.914	172.703	0.103	3.871	N.L.	0.0
17.24	64.754	170.224	0.103	3.84	N.L.	0.0
17.26	64.598	170.441	0.103	3.843	N.L.	0.0
17.28	65.341	156.82	0.103	3.673	N.L.	0.0
17.3	67.545	128.33	0.103	3.317	N.L.	0.0
17.32	68.43	121.026	0.103	3.225	N.L.	0.0
17.34	66.614	130.133	0.103	3.339	N.L.	0.0
17.36	65.144	141.548	0.103	3.482	N.L.	0.0
17.38	64.437	156.657	0.103	3.671	N.L.	0.0
17.4	65.152	147.207	0.103	3.553	N.L.	0.0
17.42	69.54	115.883	0.102	3.161	N.L.	0.0
17.44	79.326	76.372	0.102	2.667	N.L.	0.0
17.46	82.505	73.49	0.102	2.631	N.L.	0.0
17.48	75.342	93.803	0.102	2.885	N.L.	0.0
17.5	69.919	120.97	0.102	3.225	N.L.	0.0
17.52	67.654	139.779	0.102	3.46	N.L.	0.0
17.54	65.338	172.105	0.102	3.864	N.L.	0.0
17.56	65.371	173.038	0.102	3.875	N.L.	0.0
17.58	66.051	163.49	0.102	3.756	N.L.	0.0
17.6	65.203	169.459	0.102	3.831	N.L.	0.0
17.62	63.875	185.109	0.102	4.026	N.L.	0.0
17.64	63.507	186.667	0.102	4.046	N.L.	0.0
17.66	63.192	185.618	0.102	4.033	N.L.	0.0
17.68	62.965	175.537	0.102	3.907	N.L.	0.0
17.7	63.527	155.161	0.102	3.652	N.L.	0.0
17.72	65.984	134.418	0.102	3.393	N.L.	0.0
17.74	65.472	140.293	0.102	3.466	N.L.	0.0
17.76	64.199	165.04	0.102	3.776	N.L.	0.0
17.78	64.132	167.84	0.102	3.81	N.L.	0.0
17.8	64.496	161.085	0.102	3.726	N.L.	0.0
17.82	64.3	163.904	0.102	3.761	N.L.	0.0
17.84	66.189	140.015	0.102	3.463	N.L.	0.0
17.86	69.27	115.633	0.102	3.158	N.L.	0.0
17.88	67.932	120.622	0.102	3.22	N.L.	0.0
17.9	64.944	138.184	0.102	3.44	N.L.	0.0
17.92	63.759	152.038	0.102	3.613	N.L.	0.0
17.94	63.405	170.521	0.101	3.844	N.L.	0.0
17.96	63.479	170.455	0.101	3.843	N.L.	0.0
17.98	63.531	169.219	0.101	3.828	N.L.	0.0
18.0	63.825	163.424	0.101	3.755	N.L.	0.0
18.02	65.008	145.634	0.101	3.533	N.L.	0.0
18.04	65.066	141.972	0.101	3.487	N.L.	0.0
18.06	64.264	150.41	0.101	3.593	N.L.	0.0

18.08	63.071	166.681	0.101	3.796	N.L.	0.0
18.1	63.03	156.72	0.101	3.672	N.L.	0.0
18.12	65.376	113.442	0.101	3.131	N.L.	0.0
18.14	66.853	98.597	0.101	2.945	N.L.	0.0
18.16	65.648	122.717	0.101	3.246	N.L.	0.0
18.18	64.402	153.047	0.101	3.626	N.L.	0.0
18.2	64.699	160.321	0.101	3.717	N.L.	0.0
18.22	65.07	154.825	0.101	3.648	N.L.	0.0
18.24	65.284	152.727	0.101	3.622	N.L.	0.0
18.26	64.637	162.077	0.101	3.738	N.L.	0.0
18.28	64.254	165.728	0.101	3.784	N.L.	0.0
18.3	64.216	164.64	0.101	3.771	N.L.	0.0
18.32	64.165	159.939	0.101	3.712	N.L.	0.0
18.34	64.956	135.36	0.101	3.405	N.L.	0.0
18.36	65.612	127.019	0.101	3.3	N.L.	0.0
18.38	64.91	137.136	0.101	3.427	N.L.	0.0
18.4	64.285	159.185	0.101	3.702	N.L.	0.0
18.42	64.174	166.029	0.101	3.788	N.L.	0.0
18.44	64.401	161.281	0.1	3.729	N.L.	0.0
18.46	64.703	157.136	0.1	3.677	N.L.	0.0
18.48	64.512	156.377	0.1	3.667	N.L.	0.0
18.5	63.952	168.951	0.1	3.824	N.L.	0.0
18.52	63.657	173.002	0.1	3.875	N.L.	0.0
18.54	63.543	168.551	0.1	3.819	N.L.	0.0
18.56	64.549	153.391	0.1	3.63	N.L.	0.0
18.58	64.73	150.431	0.1	3.593	N.L.	0.0
18.6	63.741	168.604	0.1	3.82	N.L.	0.0
18.62	63.262	184.668	0.1	4.021	N.L.	0.0
18.64	63.405	175.615	0.1	3.908	N.L.	0.0
18.66	63.428	169.427	0.1	3.83	N.L.	0.0
18.68	63.242	176.455	0.1	3.918	N.L.	0.0
18.7	63.087	190.547	0.1	4.094	N.L.	0.0
18.72	62.954	193.225	0.1	4.128	N.L.	0.0
18.74	62.803	190.125	0.1	4.089	N.L.	0.0
18.76	62.857	184.231	0.1	4.015	N.L.	0.0
18.78	63.167	174.203	0.1	3.89	N.L.	0.0
18.8	63.986	157.62	0.1	3.683	N.L.	0.0
18.82	64.29	144.54	0.1	3.519	N.L.	0.0
18.84	63.663	160.853	0.1	3.723	N.L.	0.0
18.86	63.874	162.718	0.1	3.746	N.L.	0.0
18.88	64.699	145.544	0.1	3.532	N.L.	0.0
18.9	64.763	147.55	0.1	3.557	N.L.	0.0
18.92	64.001	166.233	0.1	3.79	N.L.	0.0
18.94	63.955	171.631	0.1	3.858	N.L.	0.0
18.96	64.85	158.826	0.099	3.698	N.L.	0.0
18.98	70.352	114.334	0.099	3.142	N.L.	0.0
19.0	82.911	64.572	0.099	2.52	1.185	0.0
19.02	85.418	57.832	0.099	2.435	1.211	0.0
19.04	79.959	72.764	0.099	2.622	N.L.	0.0
19.06	73.857	98.037	0.099	2.938	N.L.	0.0
19.08	70.12	120.922	0.099	3.224	N.L.	0.0
19.1	69.097	131.555	0.099	3.357	N.L.	0.0
19.12	69.394	142.572	0.099	3.495	N.L.	0.0
19.14	69.003	142.814	0.099	3.498	N.L.	0.0

19.16	70.281	132.435	0.099	3.368	N.L.	0.0
19.18	69.72	133.483	0.099	3.381	N.L.	0.0
19.2	68.233	141.995	0.099	3.487	N.L.	0.0
19.22	67.937	145.591	0.099	3.532	N.L.	0.0
19.24	68.388	137.586	0.099	3.432	N.L.	0.0
19.26	73.849	106.332	0.099	3.042	N.L.	0.0
19.28	82.752	81.412	0.099	2.73	N.L.	0.0
19.3	84.558	71.95	0.099	2.612	N.L.	0.0
19.32	83.334	71.98	0.099	2.612	N.L.	0.0
19.34	81.707	75.914	0.099	2.661	N.L.	0.0
19.36	82.849	72.753	0.099	2.622	N.L.	0.0
19.38	85.215	67.105	0.099	2.551	1.216	0.0
19.4	84.937	74.137	0.099	2.639	N.L.	0.0
19.42	82.666	77.454	0.099	2.681	N.L.	0.0
19.44	81.421	82.292	0.099	2.741	N.L.	0.0
19.46	79.713	86.938	0.099	2.799	N.L.	0.0
19.48	79.506	86.043	0.098	2.788	N.L.	0.0
19.5	79.506	90.649	0.098	2.846	N.L.	0.0
19.52	77.81	98.972	0.098	2.95	N.L.	0.0
19.54	78.372	99.989	0.098	2.962	N.L.	0.0
19.56	79.584	93.525	0.098	2.882	N.L.	0.0
19.58	77.134	97.428	0.098	2.93	N.L.	0.0
19.6	73.635	106.366	0.098	3.042	N.L.	0.0
19.62	71.169	119.853	0.098	3.211	N.L.	0.0
19.64	70.351	130.442	0.098	3.343	N.L.	0.0
19.66	73.067	120.401	0.098	3.218	N.L.	0.0
19.68	73.033	120.503	0.098	3.219	N.L.	0.0
19.7	75.599	101.072	0.098	2.976	N.L.	0.0
19.72	74.004	103.082	0.098	3.001	N.L.	0.0
19.74	71.187	114.256	0.098	3.141	N.L.	0.0
19.76	70.245	122.984	0.098	3.25	N.L.	0.0
19.78	68.922	133.307	0.098	3.379	N.L.	0.0
19.8	68.213	140.587	0.098	3.47	N.L.	0.0
19.82	69.757	127.538	0.098	3.307	N.L.	0.0
19.84	71.857	117.614	0.098	3.183	N.L.	0.0
19.86	80.722	87.798	0.098	2.81	N.L.	0.0
19.88	84.962	73.845	0.098	2.636	N.L.	0.0
19.9	84.581	71.569	0.098	2.607	N.L.	0.0
19.92	84.084	68.483	0.098	2.569	1.214	0.0
19.94	84.911	65.298	0.098	2.529	1.223	0.0
19.96	85.397	66.867	0.098	2.548	1.228	0.0
19.98	84.912	71.306	0.097	2.604	N.L.	0.0
20.0	84.689	72.589	0.097	2.62	N.L.	0.0
20.02	86.316	72.294	0.097	2.616	N.L.	0.0
20.04	90.905	67.833	0.097	2.56	1.292	0.0
20.06	93.054	66.679	0.097	2.546	1.319	0.0
20.08	91.508	69.178	0.097	2.577	1.3	0.0
20.1	89.069	72.523	0.097	2.619	N.L.	0.0
20.12	81.671	80.233	0.097	2.715	N.L.	0.0
20.14	77.415	91.899	0.097	2.861	N.L.	0.0
20.16	74.867	104.423	0.097	3.018	N.L.	0.0
20.18	71.518	123.805	0.097	3.26	N.L.	0.0
20.2	69.585	139.73	0.097	3.459	N.L.	0.0
20.22	69.705	145.192	0.097	3.527	N.L.	0.0

20.24	70.327	139.357	0.097	3.454	N.L.	0.0
20.26	69.894	139.035	0.097	3.45	N.L.	0.0
20.28	69.239	144.048	0.097	3.513	N.L.	0.0
20.3	69.099	142.164	0.097	3.49	N.L.	0.0
20.32	75.956	109.373	0.097	3.08	N.L.	0.0
20.34	81.671	86.99	0.097	2.8	N.L.	0.0
20.36	76.837	96.108	0.097	2.914	N.L.	0.0
20.38	72.834	108.357	0.097	3.067	N.L.	0.0

# **Allegato 3**

## **Report prove HVSR e MASW**



## Report indagini geofisiche

Committente:

Dott. Geol. Maurizio Castellari

Via Emilia, 67 Imola (Bo)

Cantiere:

Indagini geofisiche eseguite in località  
Lagosanto (Fe) SP 32 adiacenze  
cimitero



## SOMMARIO

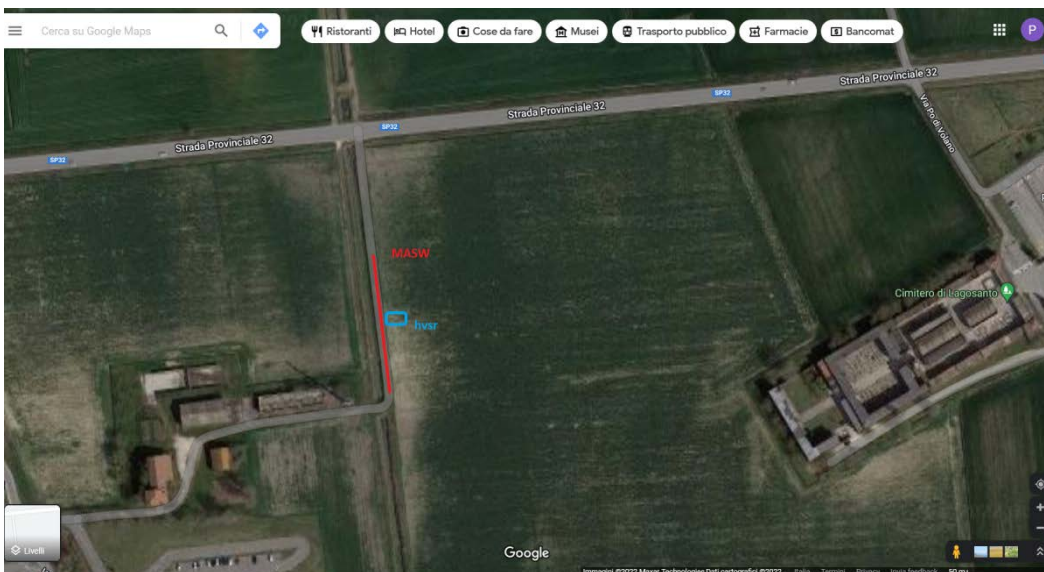
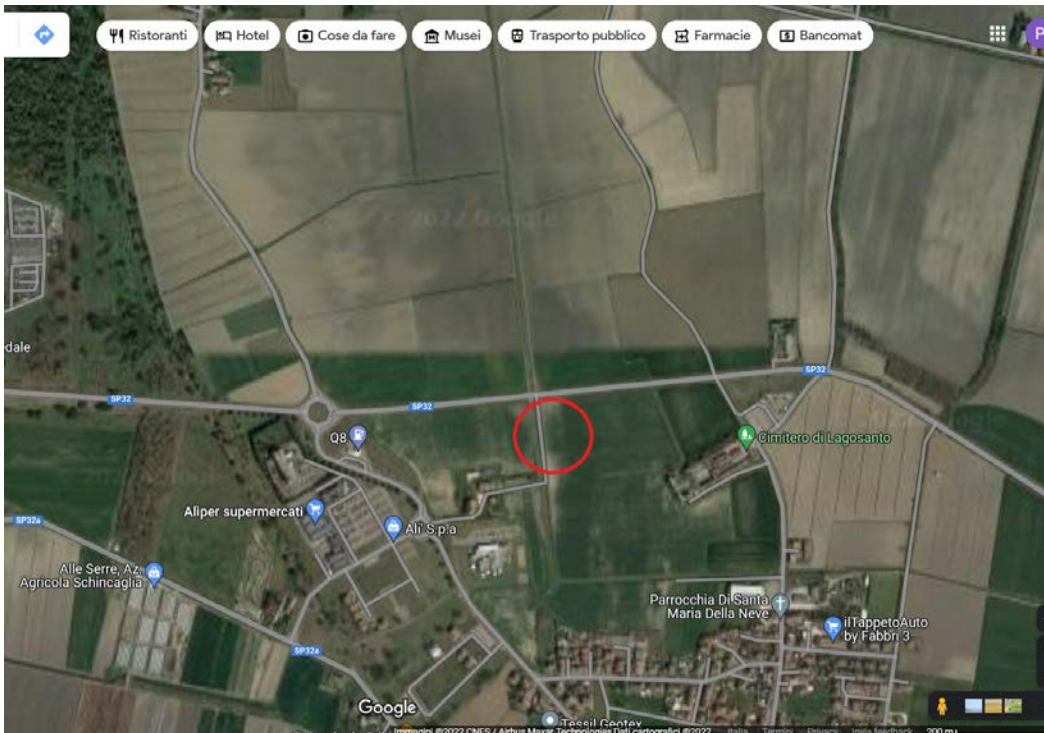
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## PREMESSE

Su incarico del Dott. Maurizio Castellari, sono state eseguite le seguenti prove geofisiche:

- N° 1 Array lineare con acquisizione attiva e passiva
- N°1 letture a stazione singola HVSR

Nelle figure seguenti è ubicato il sito d'indagine e la posizione schematica delle stesse.



**Dati sperimentali e risultati ottenuti**

Inizio registrazione: 15/09/2022 16:53:47    Fine registrazione: 15/09/2022 16:59:26

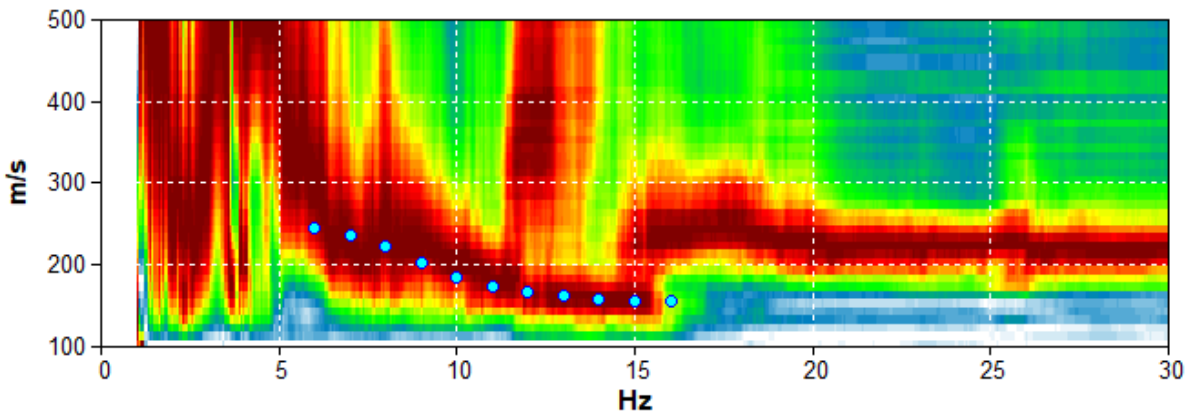
Durata registrazione: 0h05'37".

Freq. campionamento: 256 Hz

Nomi canali: TR1+ TR1- ; TR2+ TR2- ; TR3+ TR3- ; TR4+ TR4- ; TR5+ TR5- ; TR6+ TR6- ; TR7+ TR7- ; TR8+ TR8-

Array geometry (x): 0.0 3.0 6.0 9.0 12.0 15.0 18.0 21.0 m.

MODELLED RAYLEIGH WAVE PHASE VELOCITY DISPERSION CURVE



Depth at the bottom of the layer [m]	Thickness [m]	Vs [m/s]	Poisson ratio
7.60	7.60	158	0.45
inf.	inf.	283	0.42

$Vs_{eq}(0.0-30.0) = 236 \text{ m/s}$

## Dati sperimentali misure HVSR e risultati

Strumento: TZB-0127/01-20

Formato dati: 32 bit

Fondo scala [mV]: 179

Inizio registrazione: 15/09/2022 16:24:08 Fine registrazione: 15/09/2022 16:54:08

Nomi canali: NORTH SOUTH; EAST WEST ; UP DOWN

Dato GPS non disponibile

Durata registrazione: 0h30'00". Analizzato 76% tracciato (selezione manuale)

Freq. campionamento: 128 Hz

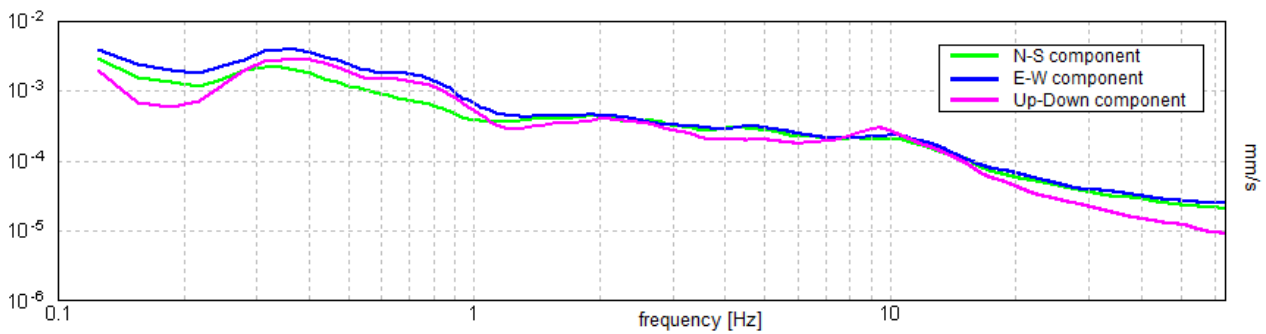
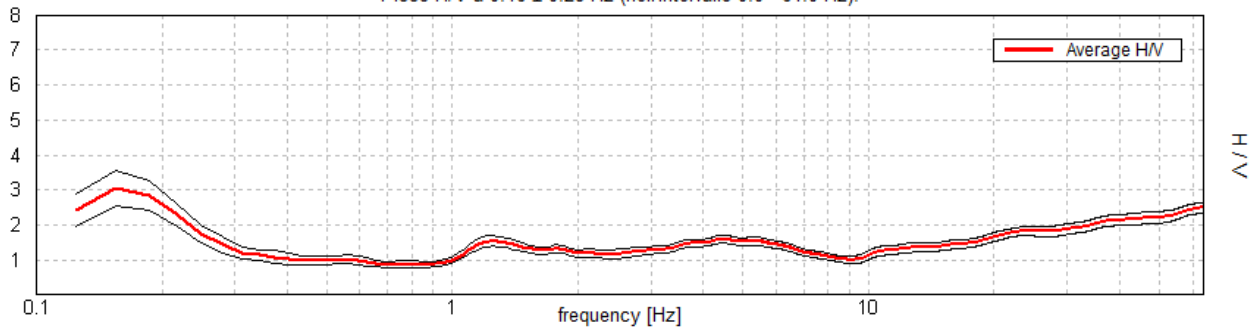
Lunghezza finestre: 20 s

Tipo di lisciamento: Triangular window

Lisciamento: 10%

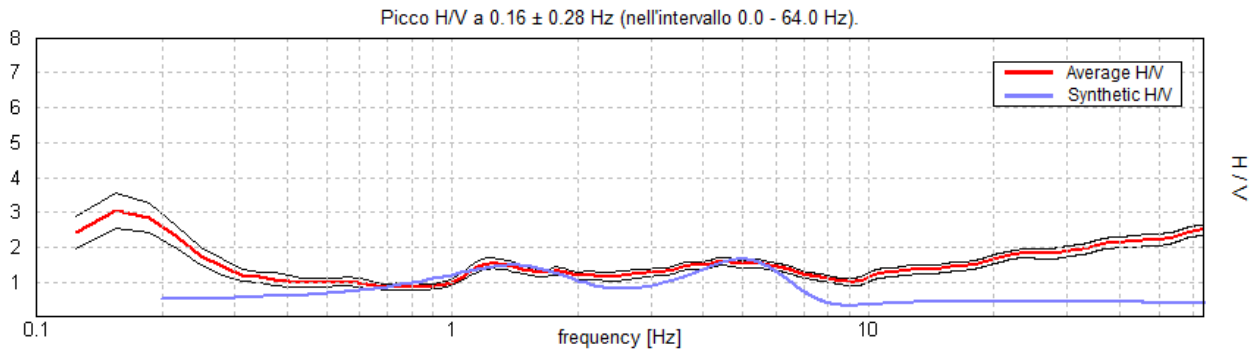
### RAPPORTO SPETTRALE ORIZZONTALE SU VERTICALE

Picco H/V a  $0.16 \pm 0.28$  Hz (nell'intervallo 0.0 - 64.0 Hz).

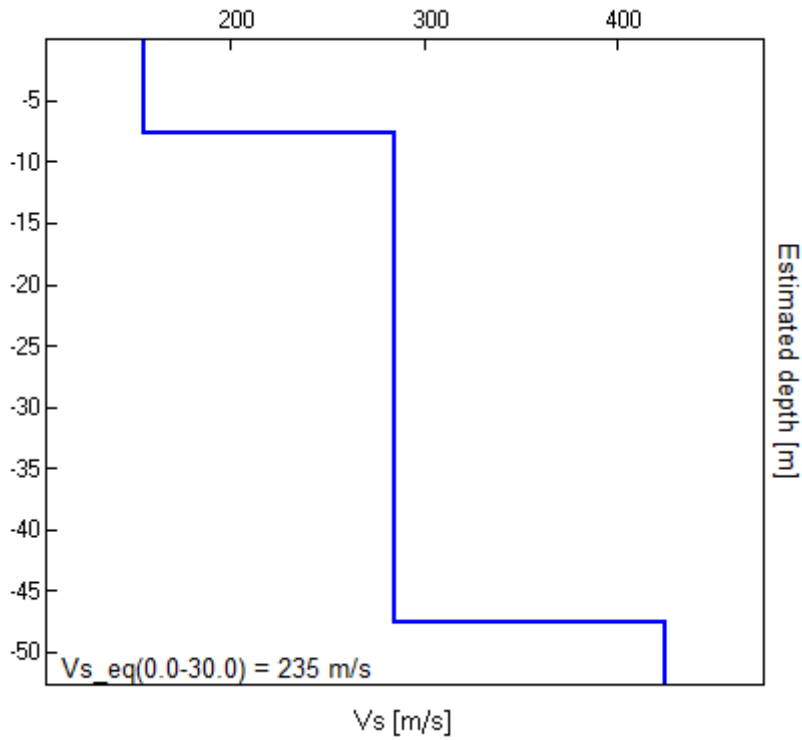


Curva H/V (HVSR) registrata nel sito in esame

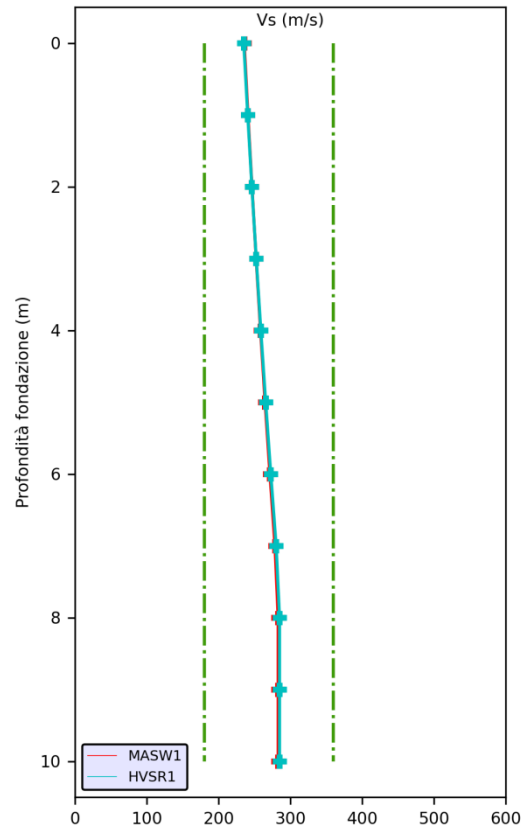
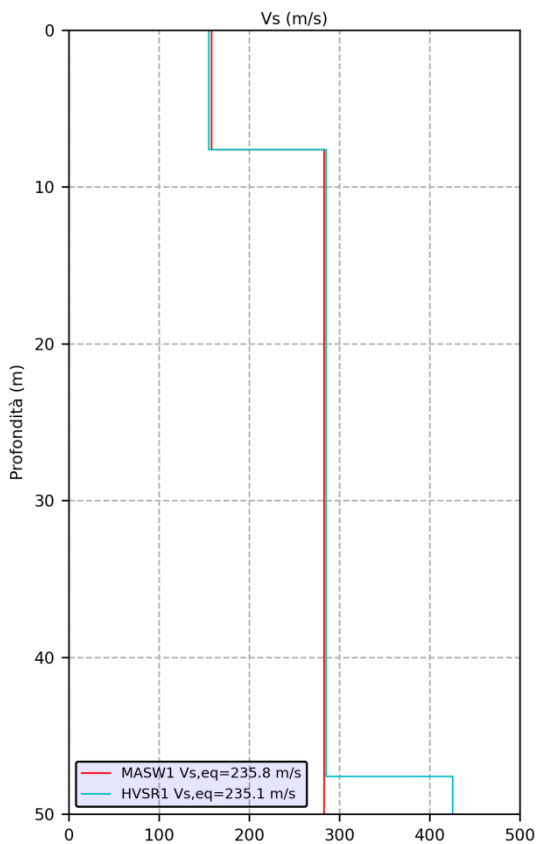
**Modello di sottosuolo**



Profondità alla base dello strato [m]	Spessore [m]	Vs [m/s]	Rapporto di Poisson
7.60	7.60	155	0.45
47.60	40.00	285	0.45
inf.	inf.	425	0.42



Modello di velocità delle onde di taglio S derivato da fit congiunto con acquisizione attiva, passiva e tecnica H/V.



### CONCLUSIONI

L'analisi congiunta delle tecniche di acquisizione utilizzate, ha permesso sia di ricostruire il profilo verticale di velocità delle onde S nel sito in esame, sia di individuare la presenza di contrasti di impedenza-rigidezza nel sottosuolo medesimo.

Il profilo sismico (MASW, REMI) e la relativa elaborazione ha permesso di ricostruire il modello delle velocità delle onde di taglio fino ad una profondità di circa 13 - 20 m dal piano campagna. L'estensione in profondità è stata eseguita utilizzando l'analisi congiunta con le acquisizioni HVS1. La Vs30 [m/s] relativa alla quota del piano campagna è risultata pari a 235 m/s.