0	14/04/2021	PRIMA EMISSIONE	AM-SC	AM-SC	AM-SC
REV.	DATA	DESCRIZIONE REVISIONE	REDATTO	VERIFICATO	APROVATO

Volta Green Energy

REGIONE BASILICATA

Provincia di MATERA

COMUNI DI MONTESCAGLIOSO E BERNALDA

PROGETTO:

PARCO EOLICO LUMELLA

PROGETTO DEFINITIVO

COMMITTENTE:

Volta g.e. green energy

Piazza Manifattura, 1 – 38068 Rovereto (TN)
Tel. +39 0464 625100 - Fax +39 0464 625101 - PEC volta-ge@legalmail.it

PROGETTISTA

gae | studio geology architecture engineering

dott. geol. Alessandro Mascitti
Sede Operativa: Via Turati, 2 - 63074 - San Benedetto del Tronto (AP) - Italy
Sede Fiscale : Via Fileni, 78 63074 - San Benedetto del Tronto (AP) - Italy
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http://gaestudio.altervista.org

ORDINE DEGLI INGEGNERI
DELLA PROV. DI ASCOLI PICENO

ORDINE DEI GEOLOGI DELLE MARCHE
Alessandro MASCITTI
Geologo Specialista
n. 717
ALBO SEZIONE A

OGGETTO DELL'ELABORATO:

A.6 Valutazione previsionale di impatto acustico

N° ELABORATO	SCALA	FOGLIO	FORMATO	CODIFICA COMMITTENTE
06	-	1 di 149	A4-A3	R06

ID ELABORATO:

Volta g.e. green energy

SGS ISO 9001 SGS ISO 14001

SERGIO CIAMPOLILLO
INGEGNERE
Via Turati, 2- San Benedetto del Tronto (AP)
Tel/Fax 0735-656774- Cell. 349-2575234

VALUTAZIONE IMPATTO ACUSTICO

(redatta ai sensi di quanto previsto dalla Legge 447/95, D.P.C.M. 14/11/97, D.M. 16/03/98, D. lgs. 17 febbraio 2017, n. 42)

committente:

Volta Green Energy S.r.l.

relativamente a:

Parco Eolico "Lumella"

San Benedetto del Tronto (AP), 29/04/2021

INDICE

1) PREMESSA

Volta Green Energy, con sede in 38068 Rovereto (TN), Piazza Manifattura n. 1, iscritta alla CCIAA di Trento al n° 02469060228, REA TN – 226969, Codice Fiscale e Partita IVA 02469060228 opera nel settore della produzione di energia elettrica da fonti rinnovabili e nasce dall'esperienza più che decennale di professionisti, con oltre 350 MW di parchi eolici e 16 MW di impianti fotovoltaici sviluppati, costruiti e gestiti.
Volta Green Energy (di seguito anche "VGE"), avvalendosi delle competenze dei propri dipendenti, nonché delle professionalità e manodopera locali, è in grado di gestire tutte le fasi di vita di un progetto: sviluppo, financing, ingegneria, costruzione ed operation.
VGE ha in progetto la realizzazione di un impianto di produzione di energia elettrica da fonte eolica, mediante l'installazione di 7 aerogeneratori di potenza unitaria pari a 5,8 MW, per una potenza complessiva di 40,6 MW, sito in località Lumella, nei Comuni di Montescaglioso e Bernalda, in provincia di Matera (di seguito anche "Parco Eolico Lumella").
Secondo quanto previsto dal preventivo di connessione prot. n. 83268 rilasciato da Terna SpA in data 16/12/2020, e trasmesso da Terna SpA alla VGE in data 23/12/2020, poi accettato da VGE in data 13/04/2021, l'impianto si collegherà alla RTN per la consegna della energia elettrica prodotta attraverso una stazione utente di trasformazione e consegna (di seguito anche "SSEU") da collegare in antenna a 150 kV su una nuova Stazione Elettrica (di seguito anche "SE") di smistamento della RTN a 150 kV da inserire in entra-esce alle linee della RTN a 150 kV "Filatura – Pisticci CP" e "Italcementi – Italcementi Matera".
Il modello tipo di aerogeneratore (di seguito anche 'WTG') scelto, dopo opportune considerazioni tecniche ed economico finanziarie, è il modello tipo Siemens Gamesa SG170 da 5,8 MW con altezza mozzo pari a 115 m, diametro rotore pari a 170 m e altezza massima al top della pala pari a 200 m. Questo modello di aerogeneratore è allo stato attuale quello ritenuto più idoneo per il sito di progetto dell'impianto.
L'area interessata dal posizionamento degli aerogeneratori ricade in località Lumella, nei Comuni di Montescaglioso e Bernalda, in contrada Cermignano, Tre Stelle, Imperatore e Casa Federici, in provincia di Matera, su una superficie a destinazione agricola. I terreni sui quali si intende realizzare l'impianto sono tutti di proprietà privata. Il territorio è caratterizzato da un'orografia prevalentemente collinare, le posizioni delle macchine hanno all'incirca un'altitudine media s.l.m. di 176 m.
L'installazione di questi 7 aerogeneratori permetterà di sfruttare al massimo la buona risorsa eolica presente nel sito di progetto, consentendo una produzione annua stimata di energia elettrica al netto delle perdite per scia indotta tra le macchine e per la densità dell'aria, pari a 109,798 GWh/anno. Il risultato sarà un notevole contributo al risparmio di emissioni di gas ad effetto serra.
Il modello di aerogeneratore (di seguito anche 'WTG') scelto, dopo opportune considerazioni tecniche ed economico finanziarie, è il modello Siemens Gamesa SG170 da 5,8 MW con altezza mozzo pari a 115 m, diametro rotore pari a 170 m e altezza massima al top della pala pari a 200 m. Questo modello di aerogeneratore è allo stato attuale quello ritenuto più idoneo per il sito di progetto dell'impianto.

Il presente studio analizzerà gli aspetti acustici ed in dettaglio caratterizzerà il clima acustico ante operam dell'area attraverso misure e rilievi in possesso dello scrivente eseguiti in loco e in fase successiva si valuterà l'impatto previsionale acustico post operam a seguito dell'entrata in esercizio dell'impianto eolico ed il rispetto dei limiti normativi nazionali, regionali, comunali. Lo studio si basa sul rilievo e censimento di dettaglio di tutti i fabbricati esistenti e registrati al catasto comunale per un raggio di indagine rispetto agli aerogeneratori pari a 10 D cioè pari a 1700m. Il report di dettaglio in forma tabellare e grafica su mappa satellitare google earth è riportato in allegato.

2) NORMATIVA DI RIFERIMENTO

- D.P.C.M. 1° marzo 1991 *<< Limiti massimi di esposizione al rumore negli ambienti abitative nell'ambiente esterno>>*
- Legge 26 ottobre 1995, n.447 *<<Legge quadro sull'inquinamento acustico>>*
- D.P.C.M. 14 novembre 1997 *<<determinazione dei valori delle sorgenti sonore >>*
- D.P.C.M. 5 dicembre 1997 *<<requisiti acustici passivi degli edifici >>*
- D.P.C.M. 31 marzo 1998 *<<Atto di indirizzo e coordinamento recante criteri generali per l'esercizio dell'attività di tecnico competente in acustica, ai sensi dell'art. 3, comma 1, lett b), e dell'art. 2, comm6, 7 e 8, della legge 26 ottobre 1995, n.447>>*

- Decreto Ministero dell'Ambiente 16 marzo 1998 *<<Tecniche di rilevamento e di misurazione dell'inquinamento acustico>>*
- Specifica tecnica UNI/TS 11143-7:2013
- D. lgs. 17 febbraio 2017, n. 42 "Disposizioni in materia di armonizzazione della normativa nazionale in materia di inquinamento acustico, a norma dell'articolo 19, comma 2, lettere a), b), c), d), e), f) e h) della legge 30 ottobre 2014, n. 161

Riferimenti Legislativi Regionali

- DGR Basilicata n. 2337 del 23/12/2003: approvazione DDL "norme di tutela per l'inquinamento da rumore e per la valorizzazione acustica degli ambienti naturali".
- LR Basilicata n. 8 del 27 aprile 2004: Modifiche ed integrazioni alle leggi regionali 4 novembre 1986 n. 23 (Norme per la tutela contro l'Inquinamento Atmosferico e Acustico) e 13 giugno 1994 n. 24 (Modifica e Sostituzione dell'art. 8 della L.R. 4.11.1986 N. 23)".
- LR Basilicata n. 24 del 13 giugno 1994: Modifica e sostituzione dell'art. 8 della LR 4/11/1986, n. 23.

La valutazione dell'immissione sonora in ambiente esterno avviene, al momento attuale, attraverso il confronto dei valori di livello equivalente ponderato A (Leq dB(A)), calcolati e/o misurati con i limiti stabiliti:
- dal D.P.C.M. 1 marzo 1991, se nel Comune di appartenenza del sito in esame non è ancora operativa la "zonizzazione acustica";
- dal D.P.C.M. 14 novembre 1997, se nel Comune di appartenenza del sito in esame è stato approvato il "piano di zonizzazione acustica".

3) DEFINIZIONI

Facendo riferimento alla Legge 26 ottobre 1995, n°447 "legge quadro sull'inquinamento acustico" e al D.M. 16 Marzo 1998 "tecniche di rilevamento e misurazione dell'inquinamento acustico", Allegati A e B, si riportano le seguenti definizioni.

- Valori limite di emissione
  Valore massimo di rumore che può essere emesso da una sorgente sonora, misurato in prossimità della sorgente stessa.
- Valori limite di immissione
  Valore massimo di rumore che può essere immesso da una o più sorgenti sonore nell'ambiente abitativo o nell'ambiente esterno, misurato in prossimità dei ricettori.
- Livello di rumore ambientale (LA)
  E' il livello continuo equivalente di pressione sonora ponderato "A" prodotto da tutte le sorgenti di rumore esistenti in un dato luogo e durante un determinato tempo.
- Tempo di riferimento (TR)
  Rappresenta il periodo della giornata all'interno del quale si eseguono le misure. La durata della giornata è articolata in due tempi di riferimento: quello diurno compreso tra le h 6,00 e le h 22,00 e quello notturno compreso tra le h 22,00 e le h 6,00.

4) ESTENSORE DELLA VALUTAZIONE DELL'IMPATTO ACUSTICO

La relazione in oggetto, volta alla valutazione dell'impatto acustico previsionale per il parco eolico denominato "Lumella", è stata redatta, in conformità a quanto previsto dalla normativa vigente in materia, da: **Ing. Sergio Ciampolillo** iscritto nell'elenco dei tecnici competenti in acustica ambientale della Regione Marche di cui all'art. 2 commi 6, 7 L. 447/95 (Decreto del Dirigente della Posizione di Funzione Tutela delle Risorse Ambientali ed Attività Estrattive N.202/TRA_08 del 04/12/2007); Iscritto all'Albo degli Ingegneri della Provincia di Ascoli Piceno al n. 1604; con Studio in San Benedetto del Tronto (AP), Via Turati, 2.

5) CLIMA ACUSTICO DELL'AREA DI INTERVENTO

La caratterizzazione del clima acustico dell'area in via previsionale è stata effettuata sulla base di una serie di misure effettuate in loco precedenti all'opera eseguite nel periodo maggio-giugno 2020, nelle vicinanze dei significativi ricettori individuati ed ubicati spazialmente. Tali dati caratterizzano in modo rappresentativo il clima

acustico dell'area di intervento ed allo stesso tempo permettono di valutare l'effettiva influenza del parco eolico in progetto.
Tali punti di misura sono stati individuati e selezionati all'interno dell'elenco completo dei possibili ricettori del nuovo progetto, ritenendoli significativi e rappresentativi della situazione ante e post operam.

Tali misurazioni, effettuate in condizioni meteorologiche tali da garantirne la perfetta esecuzione, fanno riferimento ai punti individuati come ricettori dell'eventuale impatto acustico generato dal funzionamento degli aerogeneratori.
Si sono individuati, nella campagna di misurazioni effettuata, quali luoghi di misura rappresentativi e caratterizzanti l'area sia dal punto di vista acustico che in prossimità dei ricettori individuati, i punti localizzati su immagine satellitare google earth con il suffisso r .

Rilievi fonometrici

Tutte le misure sono state eseguite con la strumentazione descritta di seguito, in condizioni meteorologiche normali ed in assenza di precipitazioni atmosferiche con il microfono del fonometro integratore posizionato a metri 1,50 dal piano di calpestio, a metri 1 da pareti ed altri ostacoli interferenti, ed orientato verso le sorgenti di rumore ritenute disturbanti. Il microfono è stato posizionato su cavalletto e collegato al fonometro.
Nelle misurazioni esterne il microfono del fonometro integratore era provvisto di cuffia antivento. Le rilevazioni sono state effettuate in conformità a quanto previsto dal D.M. 16/03/98. I valori della pressione acustica rilevati in Leq (A) sono riportati nella seguente tabella di sintesi con il dettaglio ora inizio e Fabbricati prossimi al punto di rilievo.

Figura 1. Fonometro integratore

Strumentazione utilizzata:

- Analizzatore sonoro modulare di precisione Larson Davis mod. 824, fonometro di precisione di classe 1, CEI ed ANSI;
- Microfono tipo: mod.2541 Larson Davis da ½;
- Calibratore: mod. CAL200 Larson Davis

Rilievi Fonometrici WF Lumella: Rumore residuo/misurato (Clima Acustico Ante Operam)

(note: dati in archivio dello scrivente derivanti da indagini in loco nel periodo Maggio-Giugno 2020)

Rilievo numero	Punto	Ora di inizio	Leq
Diurno			
1	P01	17:16:38	47,2
2	P02	17:38:35	51,1
3	P03	18:00:01	52,0
4	P04	19:09:48	56,4
5	P05	19:34:38	59,7
6	P06	19:57:52	58,6
Notturno			
7	P01	22:11:42	40,4
8	P02	22:26:11	45,2
9	P03	22:39:53	47,8
10	P04	23:15:28	45,3
11	P05	23:40:58	44,5
12	P06	23:45:25	45,1

Tabella 1. Recettore – Fabbricato censito – Leq residio misurato diurno e notturno

N.Recettore	ID Fabbricato	Leq residuo/ misurato diurno	Leq residuo/ misurato notturno
r07	**F1.1**	58,6	45,1
r08	**F1.4**	58,6	45,1
r09	**F1.5**	58,6	45,1
r09	**F1.6**	58,6	45,1
r09	**F1.7**	58,6	45,1
r10	**F1.8**	58,6	45,1
r11	**F1.14**	58,6	45,1
r26	**F1.16**	58,6	45,1
r27	**F1.18**	58,6	45,1
r28	**F1.19**	58,6	45,1
r29	**F1.20**	58,6	45,1
r30	**F1.22**	58,6	45,1
r31	**F1.23**	58,6	45,1
r32	**F1.27**	58,6	45,1
r33	**F1.28**	58,6	45,1
r34	**F1.29**	58,6	45,1
r35	**F1.34**	58,6	45,1
r36	**F1.35**	58,6	45,1
r37	**F1.37**	58,6	45,1
r38	**F1.38**	58,6	45,1
r39	**F1.40**	58,6	45,1
r40	**F1.42**	58,6	45,1
r44	**F1.45**	58,6	45,1
r13	**F3.1**	59,7	44,5
r14	**F3.3**	59,7	44,5
r12	**F3.6**	59,7	44,5
r17	**F3.10**	59,7	44,5
r16	**F3.12**	59,7	44,5
r15	**F3.13**	59,7	44,5
r18	**F3.16**	59,7	44,5
r19	**F3.17**	59,7	44,5
r20	**F3.18**	59,7	44,5
r41	**F4.3**	59,7	44,5
r04	**F4.8**	47,2	40,4
r03	**F4.10**	47,2	40,4
r42	**F4.11**	47,2	40,4
r43	**F4.12**	47,2	40,4
r06	**F4.15**	47,2	40,4
r05	**F4.16**	47,2	40,4
r21	**F5.3**	56,4	45,3
r25	**F6.5**	56,4	45,3
r25	**F6.6**	56,4	45,3
r25	**F6.7**	56,4	45,3
r23	**F6.10**	56,4	45,3
r22	**F6.12**	56,4	45,3
r24	**F6.20**	56,4	45,3
r02	**F7.1**	51,1	45,2
r01	**F7.2**	51,1	45,2
r01	**F7.3**	51,1	45,2

Tabella 2. TABELLA SINTETICA CENSIMENTO FABBRICATI CON INDIVIDUAZIONE RICETTORI SENSIBILI

PARCO EOLICO "Lumella" - Lista Recettori							
ID Recettore	ID Immobile	COMUNE	FOGLIO	PARTICELLA	CATEGORIA CATASTALE	DISTANZA DA WTG PIU' PROSSIMA	WTG
R1	F7.2; F7.3	Montescaglioso	69	134-135-149-150	A4 + D10	1110m	T7
R2	F7.1	Montescaglioso	69	139	D10	385m	T7
R3	F4.10	Montescaglioso	70	293	A3+D10	1087m	T7
R4	F4.8	Montescaglioso	70	319	A2	925m	T5
R5	F4.16	Montescaglioso	71	5-243-317-303	A3+D10	1230m	T4
R6	F4.15	Montescaglioso	71	279	D10	876m	T4
R7	F1.1	Montescaglioso	71	273	A3	630m	T1
R8	F1.4	Montescaglioso	72	578	A2	672m	T1
R9	F1.5; F1.6; F1.7	Montescaglioso	72	418-784-790	A3	640m	T1
R10	F1.8	Montescaglioso	72	569	A3	980m	T1
R11	F1.14	Montescaglioso	72	609	D10	688m	T1
R12	F3.6	Montescaglioso	71	374	D10	755m	T3
R13	F3.1	Montescaglioso	71	326	D10	495m	T3
R14	F3.3	Montescaglioso	71	323	A3	663m	T3
R15	F3.13	Montescaglioso	74	107-108-100-112	A2+A3+A4	1273m	T3
R16	F3.12	Montescaglioso	86	77	A4	1277m	T3
R17	F3.10	Montescaglioso	86	78-81	A4	1245m	T3
R18	F3.16	Montescaglioso	83	137	A2	1335m	T5
R19	F3.17	Montescaglioso	83	138	A3	1221m	T5
R20	F3.18	Montescaglioso	83	111	A3	1044m	T5
R21	F5.3	Montescaglioso	70	312	D10	440m	T5
R22	F6.12	Bernalda	1	337	A3	1237m	T6
R23	F6.10	Bernalda	1	279	A4	1145m	T6
R24	F6.20	Bernalda	1	25	D10	1531m	T6

R25	F6.5; F6.6; F6.7	Montescaglioso	83	141-129-134	A2+D10	755m	T6
R26	F1.16	Montescaglioso	72	617	D10	1103m	T1
R27	F1.18	Montescaglioso	72	596	A4	815m	T1
R28	F1.19	Montescaglioso	72	591	A4	829m	T1
R29	F1.20	Montescaglioso	72	611	D10	875m	T1
R30	F1.22	Montescaglioso	72	448	A4	822m	T1
R31	F1.23	Montescaglioso	72	604	A4+D10	914m	T1
R32	F1.27	Montescaglioso	72	582	A3+D10	860m	T1
R33	F1.28	Montescaglioso	72	584	D10	918m	T1
R34	F1.29	Montescaglioso	72	601	A4	1075m	T1
R35	F1.34	Montescaglioso	68	266	D10	1558m	T1
R36	F1.35	Montescaglioso	67	1077	A4+D10	895m	T1
R37	F1.37	Montescaglioso	67	1080	D10	1020m	T1
R38	F1.38	Montescaglioso	67	1073	D10	1446m	T1
R39	F1.40	Montescaglioso	71	299	A3	1283m	T1
R40	F1.42	Montescaglioso	67	340	A3	1022m	T1
R41	F4.3	Montescaglioso	70	309	A4	399m	T4
R42	F4.11	Montescaglioso	70	284; 285; 286	A3+A4	804m	T4
R43	F4.12	Montescaglioso	70	305	D10	1143m	T4
R44	F1.45	Montescaglioso	67	821-822	Non registrato	1353m	T1

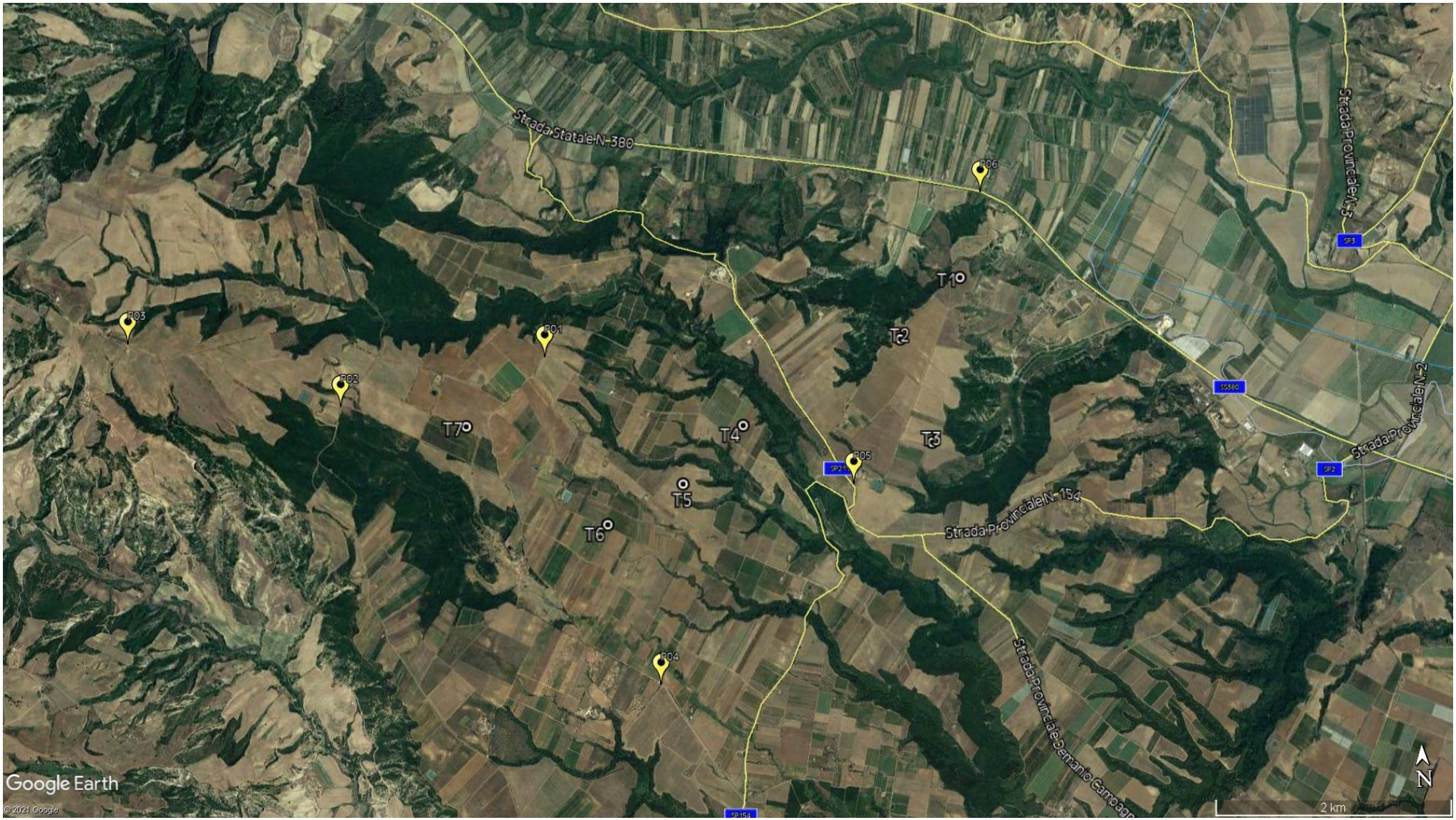

Figura 2. Immagine satellitare Google Earth area impianto e localizzazione dei punti di rilievo fonometrico

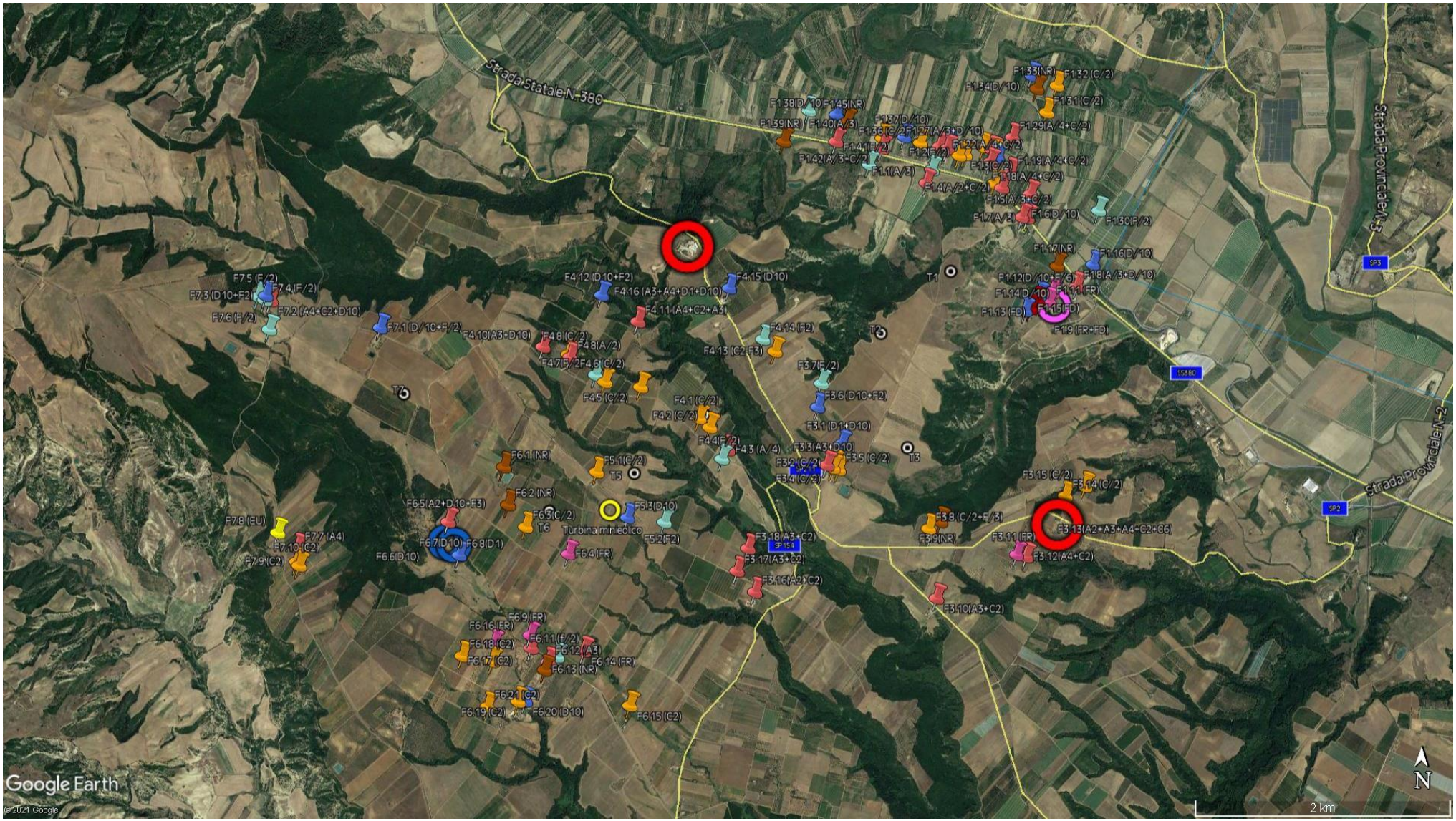

Figura 3. Immagine satellitare Google Earth con dettaglio localizzazione dei ricettori individuati

6) SCOPO ED OBIETTIVI DELLO STUDIO

La finalità di questo studio è l'analisi delle interferenze sonore che potrebbero prodursi a causa del funzionamento dell'impianto di prossima realizzazione.
Si vuole determinare l'apporto di rumore sull'ambiente per effetto della realizzazione dell'impianto eolico "Lumella", costituito da n.7 aerogeneratori del tipo SG 170 da 5,8 MW il cui modello è rappresentato nella figura accanto .
Il modello scelto, dopo opportune considerazioni tecniche ed economico finanziarie, con altezza mozzo pari a 115 m, diametro rotore pari a 170 m e altezza massima al top della pala pari a 200 m, è allo stato attuale quello ritenuto più idoneo per il sito di progetto dell'impianto.

Figura 4. Immagine aerogeneratore SG 170-5,8MW

7) UBICAZIONE

L'area di intervento è ubicata a sud del Comune di Montescaglioso ed a nord rispetto al Comune di Bernalda ricade sul foglio 201 (MATERA) ANNO:1956, RASTER: SERIE 100V, sul foglio 201 III-NE (MASSERIA GAUDELLA) - ANNO:1949, RASTER: SERIE 25V dell'I.G.M..
Sulla Carta Tecnica Regionale edita dalla Regione Basilicata in scala 1:25.000 l'area ricade nelle sezioni 491-II Pisticci Scalo e 492-III Bernalda, mentre in scala 1:10.000, l'area interessata è compresa nella Sezione 492090 "Cermignana" e 491120 "Campo Cervone".

Scheda Emissioni Acustiche

SIEMENS Gamesa RENEWABLE ENERGY

SG 6.0-170 Standard Acoustic Emission, Rev. 0, AM 0, IEC Ed3 2020-02-27
D2311679/004

Standard Acoustic Emission, Rev. 0, Mode AM 0

Typical Sound Power Levels

The sound power levels are presented with reference to the code IEC 61400-11 ed. 3.0 (2012). The sound power levels (L_{WA}) presented are valid for the corresponding wind speeds referenced to the hub height.

Wind speed [m/s]	3	4	5	6	7	8	9	10	11	12	Up tp cut-out
AM 0	92.0	92.0	94.5	98.4	101.8	104.7	106.0	106.0	106.0	106.0	106.0

Table 1: Acoustic emission, L_{WA}[dB(A) re 1 pW](10 Hz to 10kHz)]

Wind speed [m/s]	6	8
AM 0	87.6	93.9

Table 2: Acoustic emission, L_{WA}[dB(A) re 1 pW](10 Hz to 160 Hz)]

Low Noise Operations

The lower sound power level is also available and can be achieved by adjusting the turbines controller settings, i.e. an optimization of rpm and pitch. The noise settings are not static and can be applied to optimize the operational output of the turbine. Noise settings can be tailored to time of day as well as wind direction to offer the most suitable solution for a specific location. This functionality is controlled via the SCADA system and is described further in the white paper on Noise Reduction Operations. Furthermore, tailored power curves can be provided which take wind speed into consideration allowing for management of the turbine output power and noise emission level to comply with site specific noise requirements.Tailored power curves are project and turbine specific and will therefore require Siemens Gamesa Siting involvement to provide the optimal solutions. The lower sound power levels may not be applicable to all tower variants. Please contact Siemens Gamesa for further information.

Typical Sound Power Frequency Distribution

Typical spectra for L_{WA} in dB(A) re 1 pW for the corresponding centre frequencies are tabulated below for 6 and 8 m/s referenced to hub height.

1/1 oct. band center freq.	63	125	250	500	1000	2000	4000	8000
AM 0	79.9	86.7	88.9	89.9	93.1	92.8	88.3	76.5

Table 3: Typical 1/1 octave band spectrum for 63 Hz to 8 kHz at 6 m/s

1/1 oct. band center freq.	63	125	250	500	1000	2000	4000	8000
AM 0	86.2	93.0	95.2	96.2	99.4	99.1	94.6	82.8

Table 4: Typical 1/1 octave band spectrum for 63 Hz to 8 kHz at 8 m/s

1/3 oct. band center freq.	10	12.5	16	20	25	31.5	40	50	63	80	100	125	160
AM 0	43.3	46.3	49.6	52.7	55.7	60.9	63.9	70.1	74.3	77.8	80.1	82.0	83.2

Table 5: Typical 1/3 octave band spectrum for 10 Hz to 160 Hz at 6 m/s

1/3 oct. band center freq.	10	12.5	16	20	25	31.5	40	50	63	80	100	125	160
AM 0	49.6	52.6	55.9	59.0	62.0	67.2	70.2	76.4	80.6	84.1	86.4	88.3	89.5

Table 6: Typical 1/3 octave band spectrum for 10 Hz to 160 Hz at 8 m/s

For a detailed description of Application Mode – AM 0, please refer to Flexible Rating Specification (D2316244).

SGRE and its affiliates reserve the right to change the above specifications without prior notice.

Tabella 3. Dati delle emissioni acustiche

8) INQUADRAMENTO ACUSTICO DELL'AREA

L'area interessata al parco eolico è definibile come una matrice agricola caratterizzata dalla dominanza di seminativi prevalenti con talvolta frutteti e vigneti; tale contesto agricolo risulta integrato con attività antropiche presenti nelle immediate vicinanze dell'impianto in progetto, costituite nello specifico, da ulteriori parchi eolici in esercizio e dalla rete stradale in esercizio di livello locale e provinciale.
In definitiva, nell'area di studio le uniche sorgenti di rumore identificabili, oltre che alla fauna naturale presente, sono legate a:
- Rumori da attività agricola (lavorazioni periodiche, etc…);
- Rumori da parchi eolici in esercizio;
- Viabilità esistente.

In termini di ricettori sensibili al rumore, nell'area di studio sono presenti edifici dismessi e/o abbandonati, depositi agricoli, abitazioni rurali in numero comunque molto limitato e non stabilmente abitate.

NORMATIVA DI RIFERIMENTO

D.P.C.M. 1° Marzo 1991 - Limiti massimi di esposizione al rumore degli ambienti abitativi e nell'ambiente esterno: regola i livelli massimi ammissibili di rumore ambientale LA in base alla zonizzazione acustica redatta dai Comuni (qualora esistente) i quali, sulla base di indicatori di natura urbanistica (densità di popolazione, presenza di attività produttive, presenza di infrastrutture di trasporto…) suddividono il proprio territorio in zone diversamente "sensibili". A queste zone sono associati dei limiti di rumore ambientale diurno e notturno, espressi in termini di livello equivalente continuo (LAeq) misurato in dB(A):

Comuni con zonizzazione acustica del territorio		
FASCIA TERRITORIALE	**DIURNO 6:00-22:00 [dB(A)]**	**NOTTURNO 22:00-6:00 [dB(A)]**
I Aree protette	50	40
II Aree residenziali	55	45
III Aree miste	60	50
IV Aree di intensa attività umana	65	55
V Aree prevalentemente industriali	70	60
VI Aree esclusivamente industriali	70	70
Comuni senza zonizzazione acustica del territorio		
DESTINAZIONE TERRITORIALE	**DIURNO 6:00-22:00 [dB(A)]**	**NOTTURNO 22:00-6:00 [dB(A)]**
Territorio nazionale (anche senza PRG)	70	60
Zona urbanistica A (D.M. 1444/68 -art 2)	65	55
Zona urbanistica B (D.M. 1444/68 -art 2)	60	50
Zona esclusivamente industriale	70	70

Il Comune di Montescaglioso (dove sono ubicate tutte le sorgenti cioè gli aerogeneratori in progetto) non risulta dotato di un piano di zonizzazione acustica basato sui limiti di Legge indicati nel D.P.C.M. 14/11/1997 che indica le soglie limite per le emissioni sonore e quelli delle emissioni sonore assolute, tali da definire la qualità dell'ambiente esterno, in sede di zonizzazione acustica del territorio, ai sensi della L. 447/95 e L.R. 03/2002. Secondo il quadro normativo nazionale vigente ogni comune è obbligato a dotarsi di un piano di zonizzazione acustica, con applicazione dei limiti di cui al predetto D.P.C.M. 14/11/1997. Queste soglie sono definite in sei fasce (classificazione acustica del territorio) che variano da aree particolarmente protette (parchi, scuole, aree di interesse urbanistico), ad aree designate a scopi industriali dove i limiti acustici sono superiori.
Pertanto, si applicano al caso in esame i limiti di cui al DM 1991 ed in particolare i limiti per l'intero territorio nazionale DIURNO 70 Db(A) e NOTTURNO 60 Db(A).

Di seguito si riporta per similitudine la classe di destinazione in cui è ubicata l'attività che risulterebbe caratterizzata da assenza di attività artigianali e/o industriali, con bassa densità di popolazione e caratterizzata dalla presenza di macchine agricole per la lavorazione dei terreni, Classe III di cui alla Tabella A del D.P.C.M. 14/11/1997.

VALORI LIMITE DI EMISSIONE - Leq in dB(A) (art. 2 - D.P.C.M. 14/11/1997)

Classi di destinazione d'uso del territorio		Tempi di riferimento	
		Diurno (06.00-22.00)	Notturno (22.00-06.00)
I	aree particolarmente protette	45	35
II	aree prevalentemente residenziali	50	40
III	aree di tipo misto	55	45
IV	aree di intensa attività umana	60	50
V	aree prevalentemente industriali	65	55
VI	aree esclusivamente industriali	65	65

VALORI LIMITE ASSOLUTI DI IMMISSIONE - Leq in dB(A) (art. 3 - D.P.C.M. 14/11/1997)

Classi di destinazione d'uso del territorio		Tempi di riferimento	
		Diurno (06.00-22.00)	Notturno (22.00-06.00)
I	aree particolarmente protette	50	40
II	aree prevalentemente residenziali	55	45
III	aree di tipo misto	60	50
IV	aree di intensa attività umana	65	55
V	aree prevalentemente industriali	70	60
VI	aree esclusivamente industriali	70	70

Oltre al rispetto dei limiti definiti nelle tabelle sopra indicate è previsto in riferimento alle sorgenti di rumore di tipo fisso che venga effettuata una valutazione d'impatto acustico all'interno degli ambienti residenziali da eseguirsi sulla base di un confronto tra le condizioni del campo acustico preesistenti alle sorgenti in esame con le condizioni di esercizio. È stabilito che si debba calcolare all'interno dei luoghi residenziali la differenza fra il rumore misurato, a sorgente esclusa (rumore residuo) ed il rumore misurato quando la sorgente disturbante è messa in funzione (rumore ambientale).
Gli effetti della sorgente disturbante sono ritenuti tollerabili se il risultato della differenza sopra descritta è contenuto all'interno di quanto espressamente indicato nel comma 1 dell'art.4 del D.P.C.M. del 14/11/1997, che stabilisce tale limite in 5 dBA per il periodo diurno ed in 3 dBA per il periodo notturno.

DIURNO 6:00-22:00	NOTTURNO 22:00-6:00
5 dB	3 dB

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Determinazione dei Valori Limite delle Sorgenti Sonore: stabilisce i valori limite di emissione, i valori limite di immissione riferendoli alle classi di destinazione d'uso del territorio riportate e che corrispondono sostanzialmente alle classi previste dal DPCM 1.3. 1991. Determina inoltre i valori di attenzione e di qualità per territori zonizzati. In particolare:

- i valori limite di emissione sono intesi come valore massimo di rumore che può essere emesso da una sorgente sonora, misurato in prossimità della sorgente stessa, riferiti alle sorgenti fisse e alle sorgenti mobili.
- i valori limite di immissione, riferiti al rumore immesso nell'ambiente esterno dall'insieme di tutte le sorgenti, sono quelli indicati nella Tabella C dello stesso decreto e corrispondono a quelli individuati nel DPCM 1 Marzo 1991. Per le infrastrutture stradali, ferroviarie, marittime, aeroportuali e le altre sorgenti sonore di cui all'art. 11, comma 1, Legge 26 Ottobre 1995, N.447, i limiti suddetti non si applicano all'interno delle rispettive fasce di pertinenza, mentre all'esterno di dette fasce tali sorgenti concorrono al raggiungimento dei limiti assoluti di immissione.
- i valori limite differenziali di immissione, 5 dB per il periodo diurno e 3 dB per il periodo notturno, si misurano all'interno degli ambienti abitativi e non si applicano nelle aree esclusivamente industriali.

Inoltre, il criterio differenziale non si applica: se il rumore ambientale misurato a finestre aperte è inferiore a 50 dB(A) durante il periodo diurno e 40 dB(A) durante il periodo notturno e se il quello misurato a finestre chiuse è inferiore a 35 dB(A) durante il periodo diurno e 25 dB(A) durante quello notturno.

- i valori di attenzione, costituiscono i limiti che, qualora superati producono l'adozione dei piani di risanamento di cui all'art.7 della legge 26 Ottobre 1995, N. 447. I valori di attenzione non si applicano alle fasce territoriali di pertinenza delle infrastrutture stradali, ferroviarie, marittime ed aeroportuali e alle aree esclusivamente industriali.
- valori di qualità, sono i valori di rumore che la norma auspica da conseguire nel breve, nel medio e nel lungo periodo con le tecnologie e le metodiche di risanamento disponibili per realizzare gli obiettivi di tutela previsti dalla Legge Quadro 447/95.

Il DPCM 14.11.1997 stabilisce poi che nel caso in cui il Comune di competenza non abbia adottato idonea Zonizzazione Acustica del territorio ex L. 447/95 si applicano i limiti di cui all'art. 6 c.1, del DPCM 1 marzo 1991.

9) ANALISI DEL CONTESTO INSEDIATIVO ED INDIVIDUAZIONE DEI RICETTORI

Si è verificato che l'area è prevalentemente a destinazione rurale, circondata da alcune strutture rurali ed altre adibite a magazzini, annessi e manufatti utilizzati nelle attività agricole. Risultano in numero ridotto i casi entro un raggio significativamente vasto di insediamenti dei quali si possa fare uso nei termini indicati dal citato DPR n.459 del 18/11/1998 (definizione di ricettori) con categoria catastale A e D.
Si ricorda che la Norma tecnica UNI/TS 11143-7:2013 definisce ricettore qualsiasi edificio adibito ad ambiente abitativo, comprese le relative aree di pertinenza esterne (cfr. 3.1.13).
Ciononostante, in via cautelativa, si è scelto di estendere l'indagine afferente alla possibile sussistenza di un inconveniente igienico sanitario da inquinamento acustico, legato al funzionamento del parco eolico.

10) CARATTERIZZAZIONE DEL RUMORE EMESSO

Nell'impianto che sarà installato le uniche attrezzature/impianti che possono provocare rumore sono le nuove pale eoliche nella fase di esercizio ed i mezzi meccanici nella fase di cantiere.
Secondo quanto dichiarato dalla ditta fornitrice, e secondo quanto riportato nella scheda tecnica allegata, il rumore prodotto dagli aerogeneratori è di 106,0 dB(A), secondo normativa acustica IEC 61400-11, nelle condizioni di maggiore cautela per la valutazione del potenziale impatto acustico conseguente ad una velocità del vento pari a 9 m/s.
Relativamente alla risposta in frequenza dell'aerogeneratore che si andrà ad installare la tab. di riferimento è la n.4 allegata di seguito e contenuta nella scheda tecnica.

1/1 oct. band center freq.	63	125	250	500	1000	2000	4000	8000
AM 0	86.2	93.0	95.2	96.2	99.4	99.1	94.6	82.8

Table 4: Typical 1/1 octave band spectrum for 63 Hz to 8 kHz at 8 m/s

Di seguito si analizzeranno i due scenari della fase di cantiere e di esercizio con la rispettiva valutazione dell'impatto acustico preventivo.

11) VALUTAZIONE DELL'IMPATTO ACUSTICO FASE DI CANTIERE

In termini di realizzazione delle opere, ai fini della valutazione di impatto, risulta necessario definire le principali componenti dell'eventuale inquinamento acustico dovuto alle lavorazioni di cantiere previste dal progetto.
L'esecuzione di tutte le opere atte all'implementazione di un parco eolico costituisce un cantiere di tipo complesso con molteplici operazioni, di cui alcune molto rumorose, che si possono essenzialmente schematizzazione in:
- operazioni di scavo;
- trivellazione per pali di fondazione o opere di fondazione;
- getti di CLS;
- trasporto materiali;
- trasporto e montaggio aerogeneratori

Nei successivi paragrafi, individuate le potenze acustiche attribuibili ad ogni singola fase, e a ciascuna sorgente, vengono presentati i risultati della valutazione previsionale del clima acustico effettuata, cautelativamente, in corrispondenza della fase di cantiere caratterizzata dall'utilizzo contemporaneo dei mezzi aventi maggiore potenza sonora e in corrispondenza dell'aerogeneratore ubicato a minor distanza dai ricettori individuati.
Si sottolinea che ad ogni modo gli impatti prodotti in questa fase, sono di tipo reversibile e temporanei, limitati alla fase di cantiere e che in ogni caso, per il progetto in esame sono state individuate specifiche misure di mitigazione.

Tali operazioni prevedranno l'utilizzo dei seguenti macchinari:

Fase lavorativa	Macchinari utilizzati
Fondazioni aerogeneratori	
Scavo	Autocarro Betoniera

Fase lavorativa	Macchinari utilizzati
Posa del calcestruzzo delle fondazioni	Escavatore Betoniera Pompa
Posa del magrone	Betoniera Pompa
Approvvigionamento e istallazione acciaio	Autocarro
Posa del calcestruzzo	Betoniera Pompa
Reinterro	Escavatore
Piazzole e strade di accesso	
Scavo e livellazione	Pala meccanica cingolata Autocarro
Riporto del terreno	Pala meccanica cingolata Rullo compressore Autocarro
Completamento strati di rivestimento	Miniescavatore
Realizzazione aree di sosta	
Scavo e livellazione	Pala meccanica cingolata Autocarro
Riporto del terreno	Pala meccanica cingolata Rullo compressore Autocarro
Completamento strati di rivestimento	Miniescavatore
Montaggio areogeneratori	
Trasporto e scarico materiali	Automezzo Gru
Montaggio	Gru

Sono stati considerati i dati forniti dalle schede elaborate dall'autorevole istituto CTP di Torino (consultabili sul sito http://www.cpt.to.it/) riconosciute dal Ministero del Lavoro e delle Politiche Sociali con circolare prot. 15/VI/0014878/MA001.A001 dove sono riportati i singoli livelli di potenza sonora suddivisi per macchinari. I valori di potenza sonora utilizzati sono elencati nella seguente tabella.

Macchina	Potenza sonora [dB(A)]
Escavatore	107,4
Autocarro	96,2
Autobetoniera	99,6
Pala Meccanica Cingolata	107,9
Rullo Compressore	113,0
Miniescavatrice	106,9
Gru	101
Pompa	107,9

Al fine di effettuare una valutazione cautelativa riguardo l'attività di cantiere, sono state selezionate le fasi di cantiere che prevedranno l'utilizzo contemporaneo di una maggiore potenza sonora in corrispondenza delle aree destinate all'installazione degli aerogeneratori di progetto, facendo la somma logaritmica delle potenze sonore dei singoli macchinari e considerando più lavorazioni contemporanee anche su più tratti / aree del parco eolico in progetto.
Conformemente a quanto riportato nei precedenti capitoli nella seguente tabella si riporta la potenza sonora complessiva prevedibile per ciascuna fase delle attività di cantiere. La simulazione di cantiere ha ipotizzato in contemporanea n.3 punti di scavi e posa del calcestruzzo delle fondazioni (macc_01, macc_03 e macc_04) e n.1 punto di realizzazione di viabilità di accesso e piazzole con scavi e riporti di terreno (macc_02).

Stima della potenza sonora complessiva per singola fase di cantiere			
Fase lavorativa	**Macchinari utilizzati**	**Potenze sonore [dB(A)]**	**Somma [dB(A)]**
Fondazioni aerogeneratori			
Scavo	Autocarro Betoniera	96,2 99,6	101,2
Posa del calcestruzzo delle fondazioni	Betoniera Pompa	99,6107.9	108,5
Posa del magrone	Betoniera Pompa	99,6 107,9	108,5
Approvvigionamento e istallazione acciaio	Autocarro	96,2	96,2
Posa del calcestruzzo	Betoniera Pompa	99,6 107,9	108,5
Reinterro	Escavatore	107,4	107,4
Piazzole e strade di accesso			
Scavo e livellazione	Pala meccanica cingolata Autocarro	107,9 96,2	108,2
Riporto del terreno	Pala meccanica cingolata Rullo compressore Autocarro	107,9 113,0 96,2	114,2
Completamento strati di rivestimento	Miniescavatore	106,9	106,9
Realizzazione aree di sosta			
Scavo e livellazione	Pala meccanica cingolata Autocarro	107,9 96,2	108,2
Riporto del terreno	Pala meccanica cingolata Rullo compressore Autocarro	107,9 113,0 96,2	114,2
Completamento strati di rivestimento	Miniescavatore	106,9	106,9
Montaggio areogeneratori			
Trasporto e scarico materiali	Automezzo Gru	96,2 101	102,2
Montaggio	Gru	101	101,0

Dall'analisi della tabella sopra riportata si evince come le fasi realizzative, potenzialmente di maggiore impatto siano riconducibili alle fasi di realizzazione di strade, piazzole ed aree di sosta in cui sono potrebbero essere attive le tre apparecchiature:
- Pala meccanica cingolata
- Rullo compressore
- Autocarro.

In termini cautelativi verrà quindi utilizzata tale fase lavorativa, prevedendo l'utilizzo contemporaneo delle macchine utilizzate in corrispondenza delle aree interessate più prossime ai ricettori individuati.

In particolare, quale valutazione di dettaglio si prevede di considerare la seguente condizione rappresentativa del massimo impatto prevedibile:

- Attività di scavi, realizzazione piazzola e fondazione presso la posizione T01;
- Attività di realizzazione della viabilità e piazzole con scavi e riporti prossime alle posizioni T03 e T02;
- Attività di scavi, realizzazione piazzola e fondazione presso la posizione T05;
- Attività di scavi, realizzazione piazzola e fondazione presso la posizione T07.

Nell'ottica di presentare una valutazione conservativa, sulle aree di cantiere selezionate, sono state considerate come attive contemporaneamente tutte e tre le sorgenti, per tutte le ore di attività del cantiere (07.00-19.00).
In fase di dismissione delle attività del parco eolico verranno predisposti specifici cantieri. In termini di impatto acustico provocato in tale fase si ritengono valide le caratteristiche delle sorgenti e le considerazioni effettuate per le attività di cantiere per la realizzazione.
Le attività previste, e le apparecchiature impiegate, non saranno infatti dissimili da quelle già dettagliate.

Risultati applicazione del modello (Cantiere)

I risultati dell'applicazione del modello, nelle condizioni emissive di cantiere descritte, sono mostrati sia mediante curve isofoniche sia in forma numerica, per un confronto diretto con i valori limite applicabili.
A tale scopo, il livello di pressione sonora previsto per le sorgenti temporanee è stato addizionato al livello di pressione sonora ante operam residuo ai ricettori presenti nell'intorno del cantiere attivo considerato. In Appendice (Mappa del rumore ambientale-Cantiere) si riporta la mappa contenenti le curve isofoniche ottenute, in prossimità dell'area interessata dall'intervento in progetto.
Tali curve sono state ottenute dalla simulazione effettuata unicamente per le nuove sorgenti rumorose e non tengono conto del livello di rumore di fondo e delle sorgenti già presenti nell'area (dei quali si è tenuto conto, invece, nella caratterizzazione del clima acustico ante operam e nel successivo confronto con i limiti).

Confronto con i limiti assoluti

La Legge Quadro n° 447/95 ed alcuni decreti attuativi successivi ad essa collegati, introducono il concetto di valore limite di emissione che si configura sostanzialmente come la soglia con la quale confrontare il rumore immesso, in tutte le zone circostanti, ad opera di una singola sorgente sonora. Tali valori sono applicabili quando esiste una zonizzazione acustica definitiva, ai sensi D.P.C.M. 14/11/97. In caso contrario i limiti di riferimento sono definiti ai sensi del DPCM 01/03/1991.

Come visibile nelle mappe riportate in appendice, i valori limite di emissione di 70 dB(A) per il DPCM 01/03/1991 e 60 dB(A) (classe III) DPCM 14/11/1997, per il periodo diurno vengono rispettati presso tutti i ricettori individuabili.
Il limite relativo al periodo notturno non risulta applicabile in quanto le sorgenti legate alle attività di cantiere saranno attive solo nelle ore diurne.

In tabella seguente (n.4) viene mostrato il confronto puntuale tra i valori di pressione sonora calcolati con il modello di simulazione in corrispondenza dei ricettori presenti ed il valore limite applicabile. Come già evidenziato, il confronto mostra il pieno rispetto dei valori limiti applicabili.

Ai ricettori è stato associato il valore residuo calcolato dai rilievi fonometrici eseguiti ed è stato valutato l'impatto dovuto alla sovrapposizione del contributo di rumore derivante dal progetto in esame nella fase di cantiere.
Considerando il differenziale riferito ai ricettori con abbattimento di 5 dB(A) al fine di considerare la situazione all'interno degli stessi sono rispettati in tutti i casi i differenziali di immissione diurni come riportato nella tabella seguente ai sensi del DPCM 1997 (n.5) con ampio delta sotto soglia rispetto ai 5 dBA compatibili di differenziale.

					art.6 del D.P.C.M. 01.03.1991
					LIMITI DI IMMISSIONE
N.Recettore	ID Fabbricato/ Recettore	Leq residuo/misurato diurno	Stima Leq emissione previsionale (Diurno)	Lptot imm. Diurno	Risp. Lim. Diurno imm. (70 dBA)
r07	F1.1	58,60	38,40	58,64	OK
r08	F1.4	58,60	37,30	58,63	OK
r09	F1.5	58,60	37,80	58,64	OK
r09	F1.6	58,60	37,90	58,64	OK
r09	F1.7	58,60	37,90	58,64	OK
r10	F1.8	58,60	35,00	58,62	OK
r11	F1.14	58,60	39,60	58,65	OK
r26	F1.16	58,60	33,60	58,61	OK
r27	F1.18	58,60	35,90	58,62	OK
r28	F1.19	58,60	35,70	58,62	OK
r29	F1.20	58,60	35,30	58,62	OK
r30	F1.22	58,60	34,30	58,62	OK
r31	F1.23	58,60	35,90	58,62	OK
r32	F1.27	58,60	35,50	58,62	OK
r33	F1.28	58,60	35,10	58,62	OK
r34	F1.29	58,60	32,90	58,61	OK
r35	F1.34	58,60	28,60	58,60	OK
r36	F1.35	58,60	34,80	58,62	OK
r37	F1.37	58,60	34,20	58,62	OK
r38	F1.38	58,60	31,60	58,61	OK
r39	F1.40	58,60	33,20	58,61	OK
r40	F1.42	58,60	34,70	58,62	OK
r44	F1.45	58,60	32,30	58,61	OK
r13	F3.1	59,70	43,60	59,81	OK
r14	F3.3	59,70	40,90	59,76	OK
r12	F3.6	59,70	45,60	59,87	OK
r17	F3.10	59,70	31,40	59,71	OK
r16	F3.12	59,70	31,30	59,71	OK
r15	F3.13	59,70	31,70	59,71	OK
r18	F3.16	59,70	31,80	59,71	OK
r19	F3.17	59,70	33,10	59,71	OK
r20	F3.18	59,70	33,90	59,71	OK
r41	F4.3	59,70	38,40	59,73	OK
r04	F4.8	47,20	34,60	47,43	OK
r03	F4.10	47,20	34,00	47,40	OK
r42	F4.11	47,20	33,90	47,40	OK
r43	F4.12	47,20	32,00	47,33	OK
r06	F4.15	47,20	35,90	47,51	OK
r05	F4.16	47,20	32,90	47,36	OK
r21	F5.3	56,40	41,40	56,54	OK
r25	F6.5	56,40	31,80	56,42	OK
r25	F6.6	56,40	31,80	56,42	OK
r25	F6.7	56,40	31,80	56,42	OK
r23	F6.10	56,40	27,50	56,41	OK
r22	F6.12	56,40	27,10	56,41	OK
r24	F6.20	56,40	24,80	56,40	OK
r02	F7.1	51,10	40,20	51,44	OK
r01	F7.2	51,10	29,40	51,13	OK
r01	F7.3	51,10	29,40	51,13	OK

Tabella 4 – Verifica rispetto limiti di immissione diurni ai sensi del DPCM 01/03/1991

N.Recettore	ID Fabbricato/Recettore	Leq residuo/misurato diurno	Stima Leq emissione previsionale (Diurno)	Lptot imm. Diurno	Lptot imm. Diurno* (-5 dB(A)	Diff. Imm. Diurno Lptot*-Leq res	Verifica del limite
r07	F1.1	58,60	38,40	58,64	53,64	0,00	ok
r08	F1.4	58,60	37,30	58,63	53,63	0,00	ok
r09	F1.5	58,60	37,80	58,64	53,64	0,00	ok
r09	F1.6	58,60	37,90	58,64	53,64	0,00	ok
r09	F1.7	58,60	37,90	58,64	53,64	0,00	ok
r10	F1.8	58,60	35,00	58,62	53,62	0,00	ok
r11	F1.14	58,60	39,60	58,65	53,65	0,00	ok
r26	F1.16	58,60	33,60	58,61	53,61	0,00	ok
r27	F1.18	58,60	35,90	58,62	53,62	0,00	ok
r28	F1.19	58,60	35,70	58,62	53,62	0,00	ok
r29	F1.20	58,60	35,30	58,62	53,62	0,00	ok
r30	F1.22	58,60	34,30	58,62	53,62	0,00	ok
r31	F1.23	58,60	35,90	58,62	53,62	0,00	ok
r32	F1.27	58,60	35,50	58,62	53,62	0,00	ok
r33	F1.28	58,60	35,10	58,62	53,62	0,00	ok
r34	F1.29	58,60	32,90	58,61	53,61	0,00	ok
r35	F1.34	58,60	28,60	58,60	53,60	0,00	ok
r36	F1.35	58,60	34,80	58,62	53,62	0,00	ok
r37	F1.37	58,60	34,20	58,62	53,62	0,00	ok
r38	F1.38	58,60	31,60	58,61	53,61	0,00	ok
r39	F1.40	58,60	33,20	58,61	53,61	0,00	ok
r40	F1.42	58,60	34,70	58,62	53,62	0,00	ok
r44	F1.45	58,60	32,30	58,61	53,61	0,00	ok
r13	F3.1	59,70	43,60	59,81	54,81	0,00	ok
r14	F3.3	59,70	40,90	59,76	54,76	0,00	ok
r12	F3.6	59,70	45,60	59,87	54,87	0,00	ok
r17	F3.10	59,70	31,40	59,71	54,71	0,00	ok
r16	F3.12	59,70	31,30	59,71	54,71	0,00	ok
r15	F3.13	59,70	31,70	59,71	54,71	0,00	ok
r18	F3.16	59,70	31,80	59,71	54,71	0,00	ok
r19	F3.17	59,70	33,10	59,71	54,71	0,00	ok
r20	F3.18	59,70	33,90	59,71	54,71	0,00	ok
r41	F4.3	59,70	38,40	59,73	54,73	0,00	ok
r04	F4.8	47,20	34,60	47,43	42,43	0,00	ok
r03	F4.10	47,20	34,00	47,40	42,40	0,00	ok
r42	F4.11	47,20	33,90	47,40	42,40	0,00	ok
r43	F4.12	47,20	32,00	47,33	42,33	0,00	ok
r06	F4.15	47,20	35,90	47,51	42,51	0,00	ok
r05	F4.16	47,20	32,90	47,36	42,36	0,00	ok
r21	F5.3	56,40	41,40	56,54	51,54	0,00	ok
r25	F6.5	56,40	31,80	56,42	51,42	0,00	ok
r25	F6.6	56,40	31,80	56,42	51,42	0,00	ok
r25	F6.7	56,40	31,80	56,42	51,42	0,00	ok
r23	F6.10	56,40	27,50	56,41	51,41	0,00	ok
r22	F6.12	56,40	27,10	56,41	51,41	0,00	ok
r24	F6.20	56,40	24,80	56,40	51,40	0,00	ok
r02	F7.1	51,10	40,20	51,44	46,44	0,00	ok
r01	F7.2	51,10	29,40	51,13	46,13	0,00	ok
r01	F7.3	51,10	29,40	51,13	46,13	0,00	ok

Tabella 5 Verifica del differenziale di immissione diurno

12) VALUTAZIONE DELL'IMPATTO ACUSTICO in ESERCIZIO (POST OPERAM)

La realizzazione dell'impianto in oggetto comporterà l'emissione di rumori derivanti dal funzionamento degli aerogeneratori.
Per la valutazione preventiva dei livelli acustici esiste la raccomandazione ISO 9613-2:
Acoustics - Attenuation of sound during propagation outdoors - Part2: General method of calculations, questa definisce gli algoritmi per la stima dell'attenuazione dei suoni nell'ambiente esterno. Con le condizioni su esposte è stato possibile valutare l'impatto acustico sui vari ricettori, naturalmente si evidenzia la riduzione del gradiente di pressione sonora con l'aumento della distanza secondo una legge matematica non lineare.

Stima del rumore emesso dall'impianto

In campo libero, per una sorgente puntiforme irradiante energia in modo uniforme in tutte le direzioni, la relazione che lega il livello di pressione sonora riscontrabile ad una certa distanza "d" dalla sorgente al livello di potenza sonora della sorgente è:

$$Lp = Lw + DI - 20Log(d) - A - 11$$

dove:
LP: livello di pressione sonoro equivalente in banda d'ottava (dB) generato nel punto p dalla sorgente w alla frequenza f.
LW: livello di potenza sonora in banda d'ottava alla frequenza f (dB) prodotto dalla singola sorgente w relativa ad una potenza sonora di riferimento di un watt di picco.
DI=10log(Q) = indice di direttività della sorgente
Nel caso di sorgente omnidirezionale Q = 1, mentre si ha Q = 2 se la sorgente è posta su un piano perfettamente riflettente, Q = 4 se è posta all'intersezione di due piani e Q = 8 se è posta all'intersezione di tre piani (nel nostro calcolo le sorgenti sono state considerate omnidirezionali).
A: attenuazione sonora in banda d'ottava (dB) alla frequenza f durante la propagazione del suono dalla sorgente w al ricettore p.
Il termine di attenuazione A è espresso dalla seguente equazione:

$$A = Aatm + Agr + Abar + Amisc$$

dove:
. Aatm: attenuazione dovuta all'assorbimento atmosferico;
. Agr: attenuazione dovuta all'effetto del suolo;
. Abar: attenuazione dovuta alle barriere (non considerata nel calcolo eseguito);
. Amisc: attenuazione dovuta ad altri effetti (non considerata nel calcolo eseguito).

Fase di esercizio – determinazione valori di input

Come già detto il rumore prodotto dall'impianto è legato esclusivamente al funzionamento degli aerogeneratori posizionati come negli elaborati di progetto.
Il rumore che sarà immesso all'esterno è dato dal rumore prodotto dal funzionamento contemporaneo delle attrezzature.
Per quanto riguarda la teoria per la determinazione del livello di potenza sonora emesso, ai fini del calcolo dei livelli di pressione sui ricettori sono stati utilizzati come dati di input, per quanto attiene alle sorgenti sonore (aerogeneratori), i dati tecnici più sfavorevoli al fine delle valutazioni acustiche (forniti dai produttori di macchine della stessa tipologia prevista in progetto):

- Altezza del mozzo = 115 mt.
- Potenza sonora emessa dalla macchina Lw = 106,0 dBA

Pertanto, sia per il calcolo della risultante del livello equivalente ambientale nonché per l'applicazione del criterio differenziale sono state applicate le ipotesi sotto riportate:
- Sorgenti tipo sferiche puntiformi non direttive, cioè omnidirezionali, DI=10log(Q) =0;
- Adiv: attenuazione dovuta alla divergenza geometrica: Adiv= 20lg(d) +11 (dB), con d = distanza tra sorgente e ricettore;
- Aatm: attenuazione dovuta all'assorbimento atmosferico: Aatm= (αd)/1000, dove d è la distanza tra la sorgente e il ricevitore (in metri), e α è un valore tabellato in funzione della temperatura e dell'umidità.
- Agr: attenuazione dovuta all'effetto del suolo: Agr= $4.8-2h_m/d*(17+300/d)$, con h_m - altezza media di propagazione e d = distanza tra sorgente e ricettore;

Come sopra descritto i parametri di attenuazione dipendono dalla distanza tra la sorgente ed il ricettore considerato.
L'effettiva distanza della sorgente di rumore (aerogeneratore) dai ricettori individuati deve tener conto delle effettive situazioni geometriche del caso, legate ad esempio al dislivello altimetrico, all'altezza della torre. Per ciascun punto ricettore è stata valutata l'effettiva distanza da considerare nella valutazione dell'impatto acustico (distanze riportate nel documento di verifica dell'interferenza dell'impianto eolico con i fabbricati esistenti).
Per la determinazione della Risultante del Livello di Pressione, sul singolo punto ricettore prodotta dal complesso delle macchine è stato inoltre fatto uso della seguente formula:

$$Lptot = 10 \text{ Log } (10^{(L1/10)} + \ldots\ldots\ldots 10^{(Li/10)})$$

Il livello Lptot rappresenta il livello risultante su di un dato punto d'interesse, noti i singoli apporti Li delle singole sorgenti.
Per descrivere lo stato acustico post operam dei ricettori si è effettuata una elaborazione tramite più fogli elettronici per ottenere "distanze ricettori-aerogeneratori" (operazioni trigonometriche) e "valori risultanti di livello equivalente" (calcoli sulla base della teoria classica della propagazione e medie logaritmiche) e software si calcolo.
Analogamente a quanto fatto per le simulazioni relative alle fasi di cantiere si è proceduto al confronto dei livelli di rumore prodotti dal progetto, con i limiti di emissione previsti dal D.P.C.M. 14/11/97, in funzione della classificazione acustica del territorio, per ciascuno dei recettori individuati.
In tabella seguente viene mostrato il confronto puntuale tra i valori di pressione sonora calcolati con il modello di simulazione in corrispondenza dei ricettori presenti, nell'area interessata dagli aerogeneratori, e i valori limite di emissione applicabili. Come già evidenziato, il confronto mostra il pieno rispetto dei valori limite sia nel periodo diurno che in quello notturno.

Come visibile nelle mappe riportate in appendice, i valori limite di emissione per il periodo diurno e per il periodo notturno vengono ampiamente rispettati a tutti i recettori individuati posti ai limiti del parco eolico in progetto.
Come effettuato per le condizioni di cantiere, si è provveduto alla verifica del rispetto dei limiti di immissione considerando anche il rumore ambientale di fondo residuo ai ricettori. Anche tale confronto è stato effettuato su tutti i ricettori individuati.
Nella seguente tabella (n.6) si riportano i confronti tra i livelli di rumore ante-operam, i livelli sonori stimati negli stessi punti dal modello di simulazione e la previsione dei livelli sonori massimi rilevabili a seguito dell'esercizio del parco eolico (post-operam).
Come visibile dalla tabella riportata di seguito (n.6), il confronto tra i livelli sonori stimati nell'assetto post operam ed i corrispondenti valori limite di cui al DPCM 01/03/1991 mostra il pieno rispetto dei valori limite assoluti.
Considerando il differenziale di immissione diurno e notturno riferito ai ricettori, i valori calcolati risultano in tutti i casi rispettati utilizzando i valori dei rilievi esterni agli edifici. Applicando un abbattimento di 5 dB(A) al fine di considerare la situazione all'interno degli stessi edifici (come da letteratura acustica), sono chiaramente rispettati in tutti i casi i differenziali di immissione diurni e notturni con ampio delta rispetto al differenziale di legge (diurno 5 dBA e notturno 3 dBA) come riportato nella tabella seguente n.7 ai sensi del DPCM 1997.

Risultati applicazione del modello (Dismissione)

Analogamente a quanto riportato per le sorgenti si ritengono valide, anche per le attività di cantiere nella fase di dismissione del parco eolico, le valutazioni ed i risultati ottenuti nel precedente paragrafo 4.7. Rispetto alle apparecchiature utilizzate e alle attività prevedibili tale valutazione si ritiene infatti, cautelativamente, rappresentativa anche delle attività di dismissione.

					art.6 del D.P.C.M. 01.03.1991	
					LIMITI DI IMMISSIONE	
N.Recettore	ID Fabbricato	Lptot imm. diurno	Lptot imm. notturno	Stima Leq emissione previsionale (Notturno/ Diurno)	Risp. Lim. Diurno imm. (70 dBA)	Risp. Lim. Notturno imm. (60 dBA)
r07	F1.1	58,62	45,45	34,40	OK	OK
r08	F1.4	58,61	45,37	33,10	OK	OK
r09	F1.5	58,61	45,39	33,50	OK	OK
r09	F1.6	58,61	45,39	33,50	OK	OK
r09	F1.7	58,61	45,39	33,50	OK	OK
r10	F1.8	58,60	45,21	29,20	OK	OK
r11	F1.14	58,62	45,45	34,30	OK	OK
r26	F1.16	58,60	45,18	27,70	OK	OK
r27	F1.18	58,61	45,28	31,30	OK	OK
r28	F1.19	58,61	45,27	31,10	OK	OK
r29	F1.20	58,61	45,25	30,60	OK	OK
r30	F1.22	58,61	45,21	29,30	OK	OK
r31	F1.23	58,61	45,28	31,30	OK	OK
r32	F1.27	58,61	45,25	30,70	OK	OK
r33	F1.28	58,61	45,24	30,10	OK	OK
r34	F1.29	58,60	45,18	27,60	OK	OK
r35	F1.34	58,60	45,12	22,50	OK	OK
r36	F1.35	58,61	45,23	29,80	OK	OK
r37	F1.37	58,60	45,20	28,70	OK	OK
r38	F1.38	58,60	45,15	25,30	OK	OK
r39	F1.40	58,60	45,17	27,10	OK	OK
r40	F1.42	58,60	45,21	29,20	OK	OK
r44	F1.45	58,60	45,15	26,10	OK	OK
r13	F3.1	59,72	45,14	36,50	OK	OK
r14	F3.3	59,71	44,93	34,70	OK	OK
r12	F3.6	59,72	45,05	35,80	OK	OK
r17	F3.10	59,70	44,56	26,00	OK	OK
r16	F3.12	59,70	44,56	25,60	OK	OK
r15	F3.13	59,70	44,55	25,50	OK	OK
r18	F3.16	59,70	44,59	27,60	OK	OK
r19	F3.17	59,70	44,64	29,50	OK	OK
r20	F3.18	59,70	44,66	30,20	OK	OK
r41	F4.3	59,74	45,60	39,10	OK	OK
r04	F4.8	47,34	41,05	32,50	OK	OK
r03	F4.10	47,31	40,91	31,40	OK	OK
r42	F4.11	47,34	41,05	32,50	OK	OK
r43	F4.12	47,27	40,72	29,20	OK	OK
r06	F4.15	47,31	40,91	31,40	OK	OK
r05	F4.16	47,25	40,64	27,90	OK	OK
r21	F5.3	56,49	46,31	39,50	OK	OK
r25	F6.5	56,42	45,52	32,50	OK	OK
r25	F6.6	56,42	45,52	32,50	OK	OK
r25	F6.7	56,42	45,52	32,50	OK	OK
r23	F6.10	56,41	45,37	27,50	OK	OK
r22	F6.12	56,40	45,36	26,50	OK	OK
r24	F6.20	56,40	45,33	23,30	OK	OK
r02	F7.1	51,25	45,77	36,70	OK	OK
r01	F7.2	51,11	45,24	25,10	OK	OK
r01	F7.3	51,11	45,24	25,10	OK	OK

Tabella 6 Verifica rispetto limiti di immissione diurni ai sensi del DPCM 01/03/1991

N.Recettore	ID Fabbricato	Leq residuo/ misurato diurno	Leq residuo/ misurato notturno	Stima Leq emissione previsionale (Notturno/ Diurno)	Lptot imm. Diurno	Lptot imm. Notturno	Lptot imm. Diurno * (-5 dB(A)	Lptot imm. Notturno* (-5 dB(A)	Diff. Imm. Diurno (5 dB(A)) Lptot*- Leq res	Verifica del Limite	Diff. Imm. Notturno (3 dB(A)) Lptot*- Leq res	Verifica del Limite
r07	F1.1	58,60	45,10	34,40	58,62	45,45	53,62	40,45	0,00	OK	0,00	OK
r08	F1.4	58,60	45,10	33,10	58,61	45,37	53,61	40,37	0,00	OK	0,00	OK
r09	F1.5	58,60	45,10	33,50	58,61	45,39	53,61	40,39	0,00	OK	0,00	OK
r09	F1.6	58,60	45,10	33,50	58,61	45,39	53,61	40,39	0,00	OK	0,00	OK
r09	F1.7	58,60	45,10	33,50	58,61	45,39	53,61	40,39	0,00	OK	0,00	OK
r10	F1.8	58,60	45,10	29,20	58,60	45,21	53,60	40,21	0,00	OK	0,00	OK
r11	F1.14	58,60	45,10	34,30	58,62	45,45	53,62	40,45	0,00	OK	0,00	OK
r26	F1.16	58,60	45,10	27,70	58,60	45,18	53,60	40,18	0,00	OK	0,00	OK
r27	F1.18	58,60	45,10	31,30	58,61	45,28	53,61	40,28	0,00	OK	0,00	OK
r28	F1.19	58,60	45,10	31,10	58,61	45,27	53,61	40,27	0,00	OK	0,00	OK
r29	F1.20	58,60	45,10	30,60	58,61	45,25	53,61	40,25	0,00	OK	0,00	OK
r30	F1.22	58,60	45,10	29,30	58,61	45,21	53,61	40,21	0,00	OK	0,00	OK
r31	F1.23	58,60	45,10	31,30	58,61	45,28	53,61	40,28	0,00	OK	0,00	OK
r32	F1.27	58,60	45,10	30,70	58,61	45,25	53,61	40,25	0,00	OK	0,00	OK
r33	F1.28	58,60	45,10	30,10	58,61	45,24	53,61	40,24	0,00	OK	0,00	OK
r34	F1.29	58,60	45,10	27,60	58,60	45,18	53,60	40,18	0,00	OK	0,00	OK
r35	F1.34	58,60	45,10	22,50	58,60	45,12	53,60	40,12	0,00	OK	0,00	OK
r36	F1.35	58,60	45,10	29,80	58,61	45,23	53,61	40,23	0,00	OK	0,00	OK
r37	F1.37	58,60	45,10	28,70	58,60	45,20	53,60	40,20	0,00	OK	0,00	OK
r38	F1.38	58,60	45,10	25,30	58,60	45,15	53,60	40,15	0,00	OK	0,00	OK
r39	F1.40	58,60	45,10	27,10	58,60	45,17	53,60	40,17	0,00	OK	0,00	OK
r40	F1.42	58,60	45,10	29,20	58,60	45,21	53,60	40,21	0,00	OK	0,00	OK
r44	F1.45	58,60	45,10	26,10	58,60	45,15	53,60	40,15	0,00	OK	0,00	OK
r13	F3.1	59,70	44,50	36,50	59,72	45,14	54,72	40,14	0,00	OK	0,00	OK
r14	F3.3	59,70	44,50	34,70	59,71	44,93	54,71	39,93	0,00	OK	0,00	OK
r12	F3.6	59,70	44,50	35,80	59,72	45,05	54,72	40,05	0,00	OK	0,00	OK
r17	F3.10	59,70	44,50	26,00	59,70	44,56	54,70	39,56	0,00	OK	0,00	OK
r16	F3.12	59,70	44,50	25,60	59,70	44,56	54,70	39,56	0,00	OK	0,00	OK
r15	F3.13	59,70	44,50	25,50	59,70	44,55	54,70	39,55	0,00	OK	0,00	OK
r18	F3.16	59,70	44,50	27,60	59,70	44,59	54,70	39,59	0,00	OK	0,00	OK
r19	F3.17	59,70	44,50	29,50	59,70	44,64	54,70	39,64	0,00	OK	0,00	OK
r20	F3.18	59,70	44,50	30,20	59,70	44,66	54,70	39,66	0,00	OK	0,00	OK
r41	F4.3	59,70	44,50	39,10	59,74	45,60	54,74	40,60	0,00	OK	0,00	OK
r04	F4.8	47,20	40,40	32,50	47,34	41,05	42,34	36,05	0,00	OK	0,00	OK
r03	F4.10	47,20	40,40	31,40	47,31	40,91	42,31	35,91	0,00	OK	0,00	OK
r42	F4.11	47,20	40,40	32,50	47,34	41,05	42,34	36,05	0,00	OK	0,00	OK
r43	F4.12	47,20	40,40	29,20	47,27	40,72	42,27	35,72	0,00	OK	0,00	OK
r06	F4.15	47,20	40,40	31,40	47,31	40,91	42,31	35,91	0,00	OK	0,00	OK
r05	F4.16	47,20	40,40	27,90	47,25	40,64	42,25	35,64	0,00	OK	0,00	OK
r21	F5.3	56,40	45,30	39,50	56,49	46,31	51,49	41,31	0,00	OK	0,00	OK
r25	F6.5	56,40	45,30	32,50	56,42	45,52	51,42	40,52	0,00	OK	0,00	OK
r25	F6.6	56,40	45,30	32,50	56,42	45,52	51,42	40,52	0,00	OK	0,00	OK
r25	F6.7	56,40	45,30	32,50	56,42	45,52	51,42	40,52	0,00	OK	0,00	OK
r23	F6.10	56,40	45,30	27,50	56,41	45,37	51,41	40,37	0,00	OK	0,00	OK
r22	F6.12	56,40	45,30	26,50	56,40	45,36	51,40	40,36	0,00	OK	0,00	OK
r24	F6.20	56,40	45,30	23,30	56,40	45,33	51,40	40,33	0,00	OK	0,00	OK
r02	F7.1	51,10	45,20	36,70	51,25	45,77	46,25	40,77	0,00	OK	0,00	OK
r01	F7.2	51,10	45,20	25,10	51,11	45,24	46,11	40,24	0,00	OK	0,00	OK
r01	F7.3	51,10	45,20	25,10	51,11	45,24	46,11	40,24	0,00	OK	0,00	OK

Tabella 7 Verifica del differenziale di immissione diurno e notturno

13) CONCLUSIONI

La valutazione e la verifica del rispetto dei limiti sono state svolte in accordo ai valori limite, di emissione ed immissione, prescritti dal DPCM 11/03/1991 (da applicare al caso specifico del territorio comunale di Montescaglioso non dotato di Zonizzazione Acustica Comunale e per alcuni recettori nel territorio comunale di Bernalda) e DPCM 14/11/1997, per ciascuno dei recettori individuati in funzione della classificazione acustica del territorio.
I recettori rilevati e censiti, con elemento più prossimo posto ad una distanza di 399m, sulla base del rilievo nell'area definita "di influenza" dalla Norma tecnica UNI/TS 11143-7:2013) ed estesa nella presente valutazione a 1700m (10 D), sono costituiti da edifici rurali (o agglomerati rurali), magazzini, depositi ed edifici residenziali saltuari. La valutazione previsionale acustica è stata svolta in conformità alle "Direttive regionali in materia di inquinamento acustico ambientale" e alla norma tecnica UNI-TS 11143-7-2013 specifica per la valutazione del rumore prodotto dai parchi eolici.
Lo studio effettuato, in accordo con le indicazioni regionali, ha riguardato i seguenti aspetti progettuali:
- Valutazione previsionale del rumore prodotto dalle attività di cantiere (realizzazione del parco e dismissione), considerando le sorgenti temporanee potenzialmente attive contemporaneamente ed effettuando la modellazione delle condizioni più impattanti ipotizzabili;
- Valutazione previsionale del rumore prodotto dal parco eolico durante l'esercizio, considerando il funzionamento continuativo degli aerogeneratori al massimo regime emissivo (Condizioni di ventosità alla quota del rotore costantemente superiori a 9 m/s).
Quale rumore residuo ante operam sono stati utilizzati i dati derivanti da numerosi rilievi fonometrici in loco che ha indagato le aree prossime ai ricettori individuati e le aree prive di ricettori ma interessate dalla realizzazione del parco eolico, simulando quindi l'attività nelle peggiori condizioni sia di cantiere che di esercizio, inferiori ai valori di immissione ed emissione prescritti dalla legge quadro sull'inquinamento acustico.
Anche il livello differenziale di immissione sia diurno che notturno calcolato presso i ricettori censiti rispetta il limite imposto dalla normativa vigente con ampio delta differenziale rispetto alle soglie di 5dBA diurni e 3 dBA notturni applicando la riduzione rispetto alle misure fonometriche esterne di circa 5dBA al fine di considerare il contributo dell'involucro edilizio dei fabbricati al loro interno.
Come si è evidenziato la situazione di progetto, con l'installazione di n.7 aerogeneratori, in riferimento alle disposizioni legislative attualmente in vigore, non produce significativo impatto acustico sui luoghi circostanti sia nella fase di esercizio, che di cantiere così come analogamente risulta compatibile l'impatto acustico nelle fasi di dismissione dello stesso per analogia.

14) ALLEGATI

Si allegano di seguito:
- Immagini satellitari Google Earth con ubicazione ricettori censiti, posizioni aerogeneratori in progetto e punti di rilievo fonometrico;
- Report numerico, Report grafico simulazione fase di cantiere e post operam di esercizio con ricostruzione del modello previsionale acustico, Andamento isolinee acustiche e (Noise Mapping : Sound Level Modelling - MASdBmap version 0.5) su base Google Earth con mappa cromatica;
- Report grafici misure fonometriche eseguite ed utilizzate nel presente studio;
- Schede sorgenti di rumore;
- Certificato di taratura della strumentazione utilizzata nella campagna fonometrica;
- Determina N. 202/TRA_08 DEL 04/12/2007 Regione Marche Riconoscimento tecnico competente in acustica ambientale e inserimento nell'elenco regionale – ing. Ciampolillo Sergio;

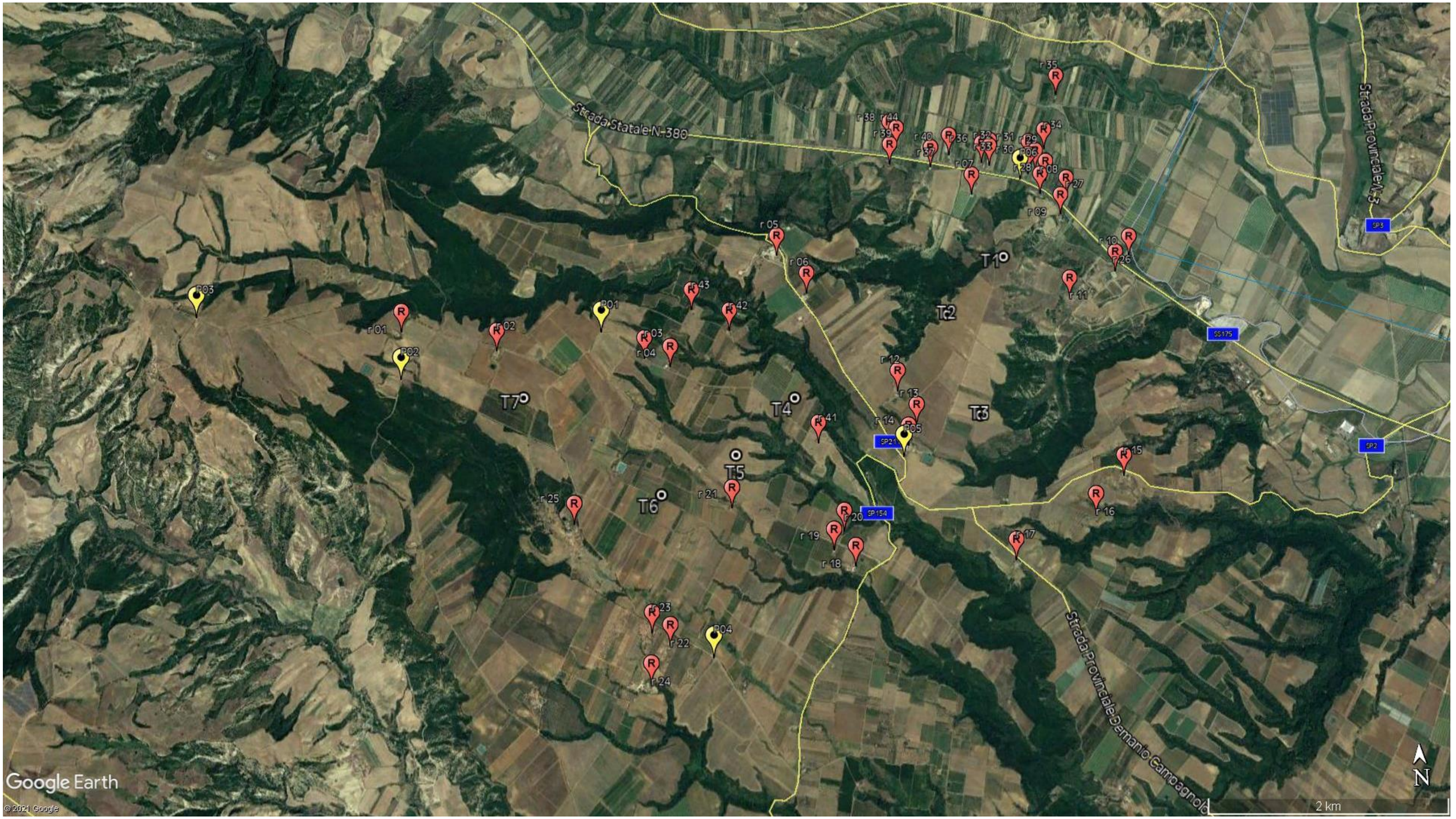

Figura 5. Immagine Google Earth con individuazione ricettori – aerogeneratori in progetto – punti di rilievo fonometrico

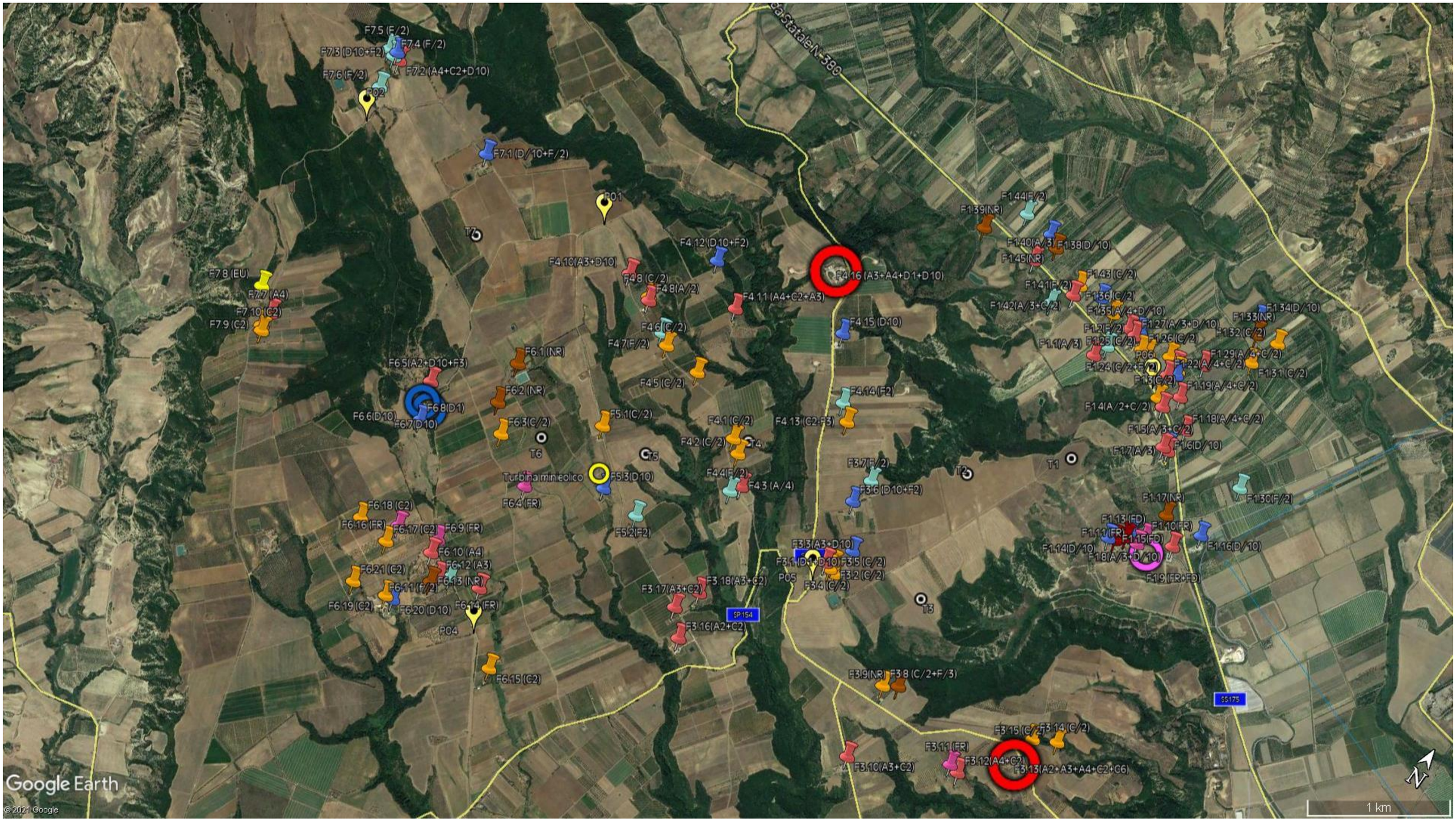

Figura 6. Immagine Google Earth con individuazione fabbricati – aerogeneratori in progetto – punti di rilievo fonometrico

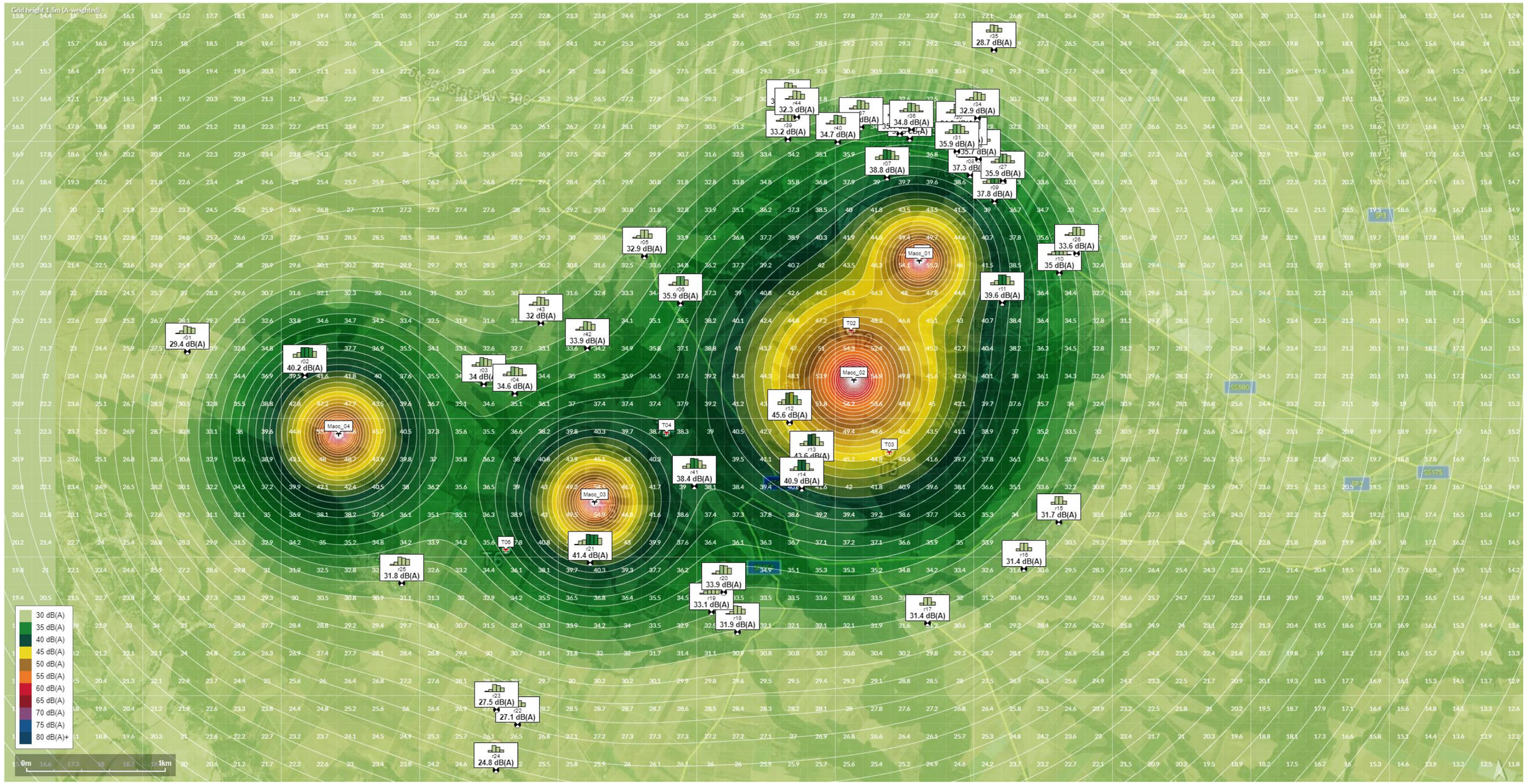

Figura 7. Noise Mapping : Sound Level Modelling - MASdBmap version 0.5 - **FASE DI CANTIERE**

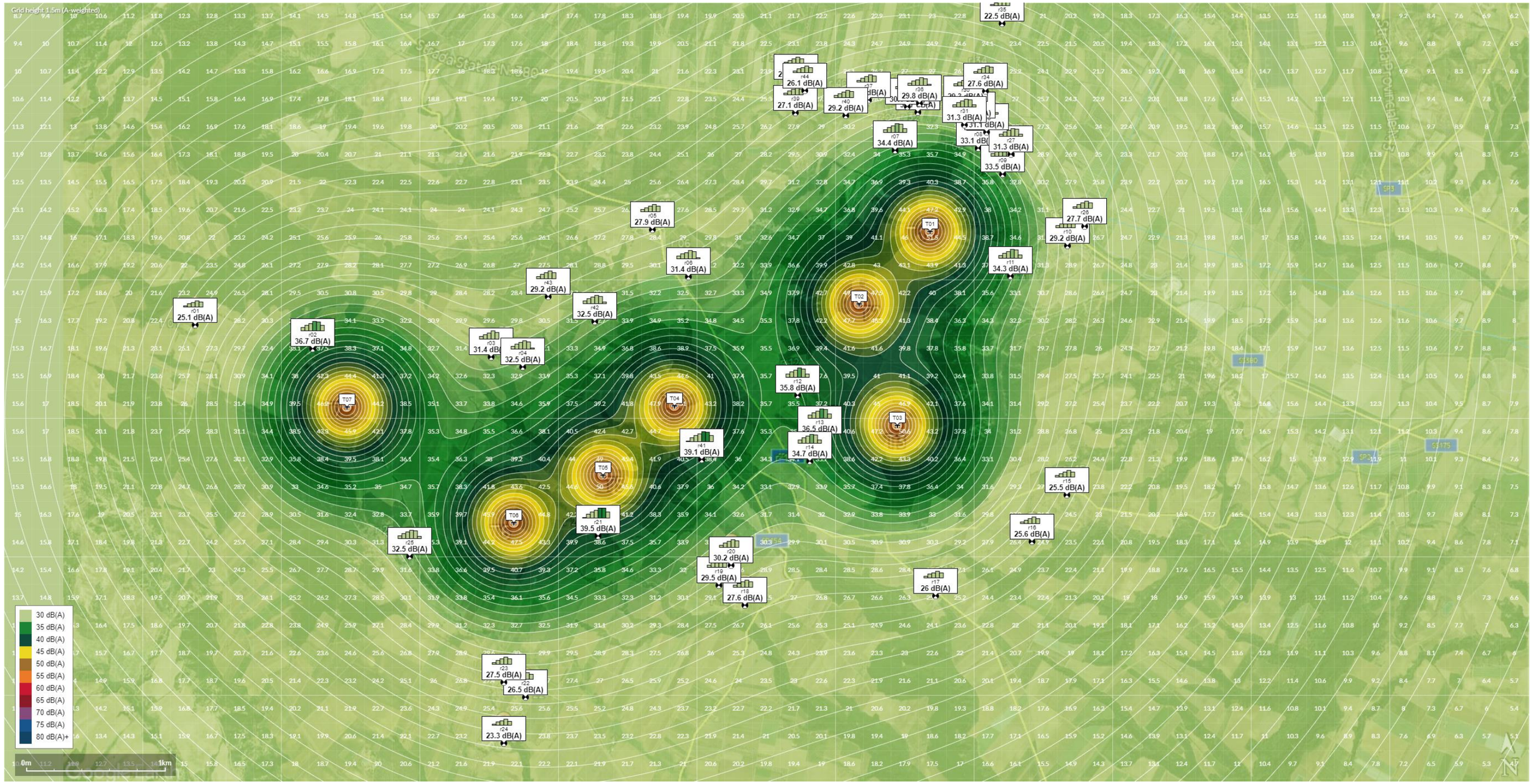

Figura 8. Noise Mapping : Sound Level Modelling - MASdBmap version 0.5 - **FASE DI ESERCIZIO**

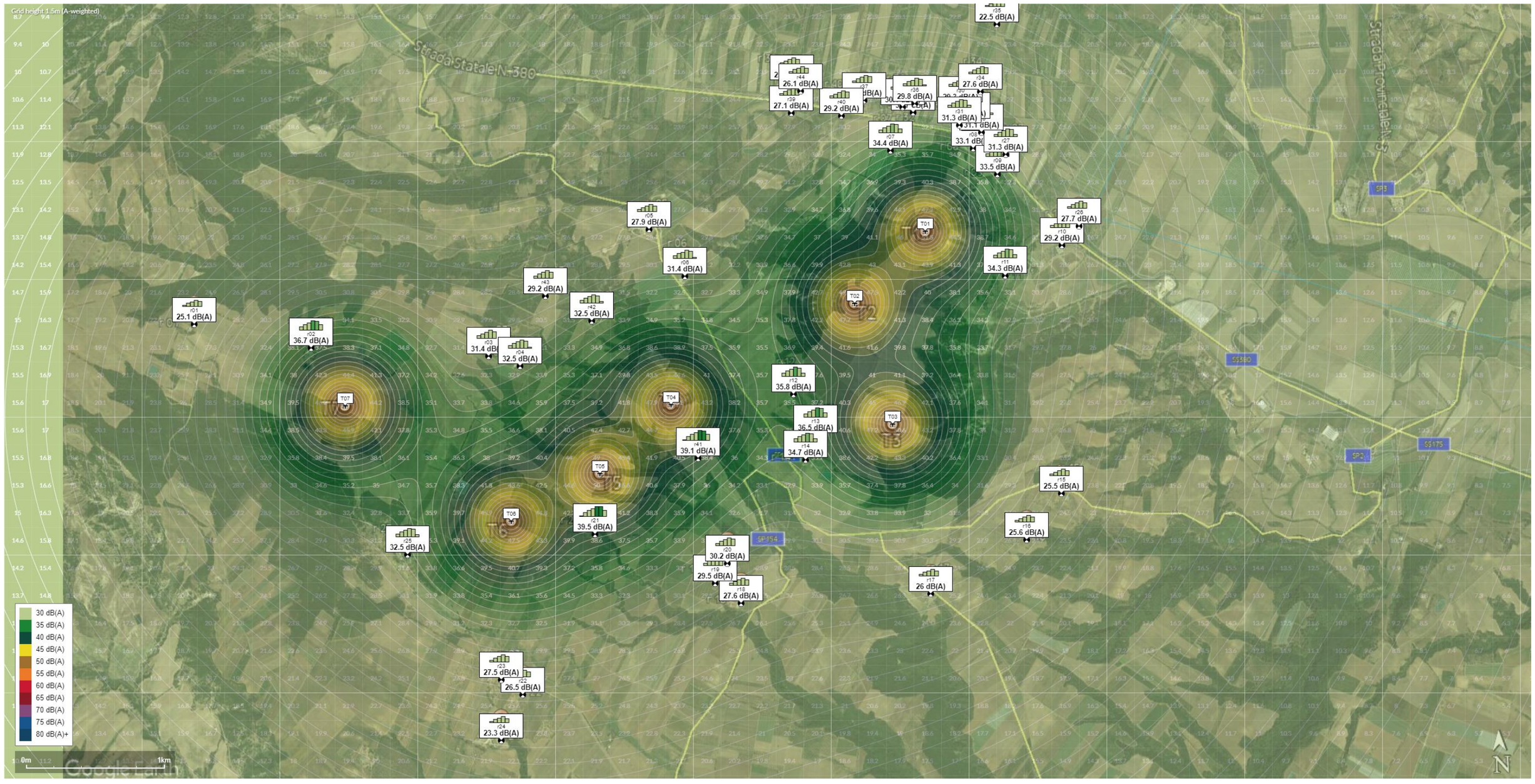

Figura 9. Noise Mapping : Sound Level Modelling - MASdBmap version 0.5 - **FASE DI ESERCIZIO (su base Google Earth)**

Rilievo numero	Punto	Ora di inizio	Leq
Diurno			
1	P01	17:16:38	47,2
2	P02	17:38:35	51,1
3	P03	18:00:01	52,0
4	P04	19:09:48	56,4
5	P05	19:34:38	59,7
6	P06	19:57:52	58,6
Notturno			
7	P01	22:11:42	40,4
8	P02	22:26:11	45,2
9	P03	22:39:53	47,8
10	P04	23:15:28	45,3
11	P05	23:40:58	44,5
12	P06	23:45:25	45,1

Tabella 8. Report grafici misure fonometriche di campo utilizzate

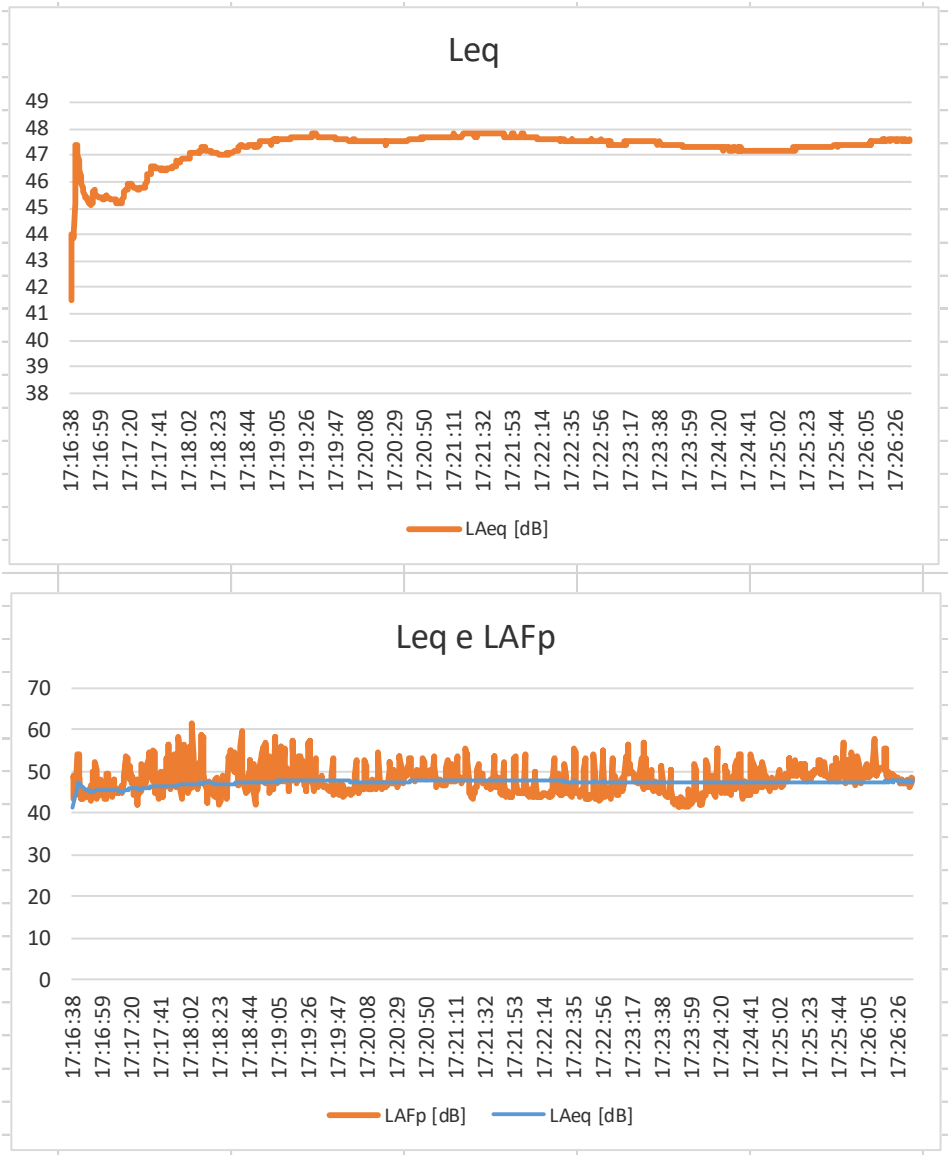

Tabella 9. Rilievo Diurno n.1 – P01

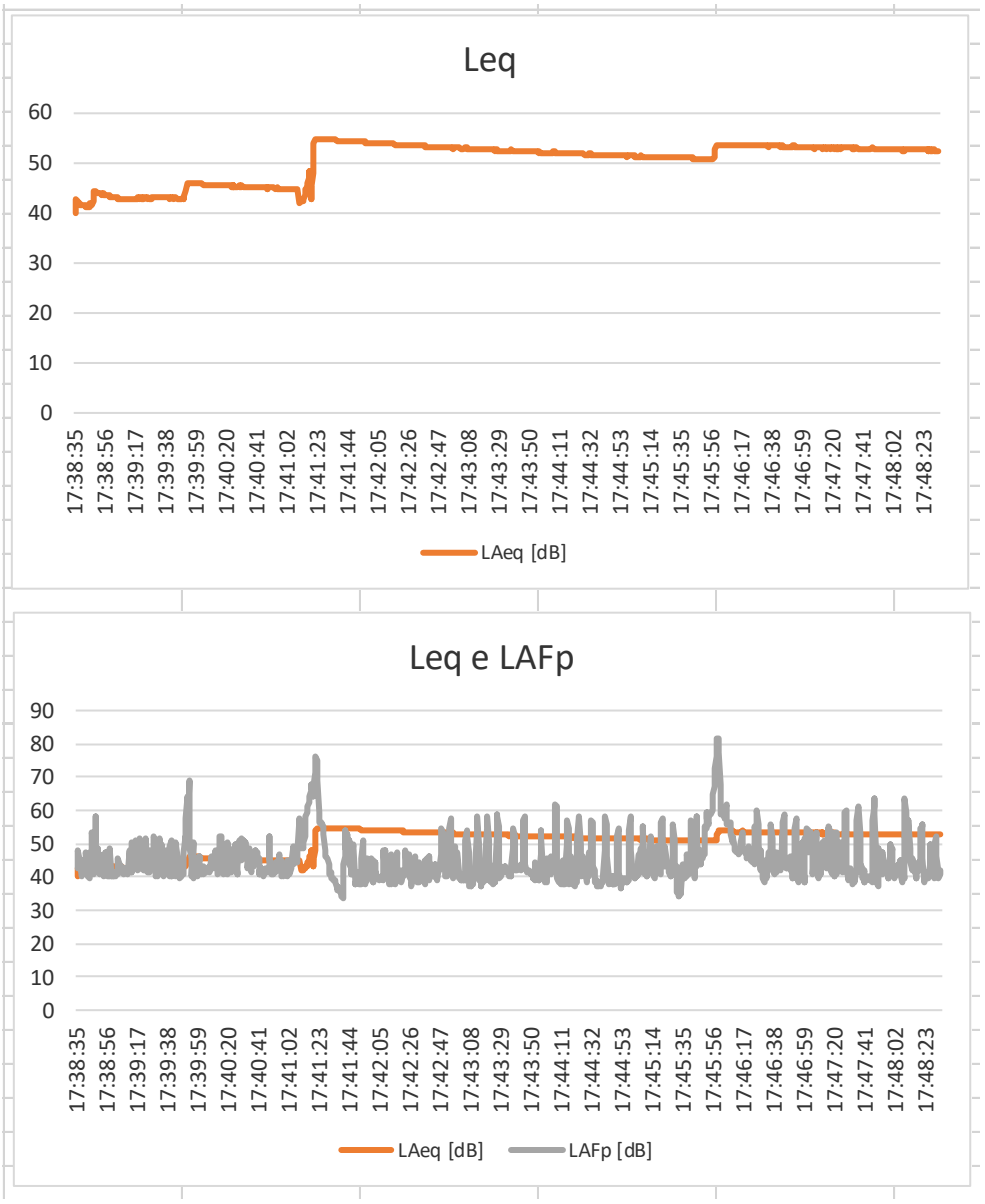

Tabella 10. Rilievo Diurno n.2 – P02

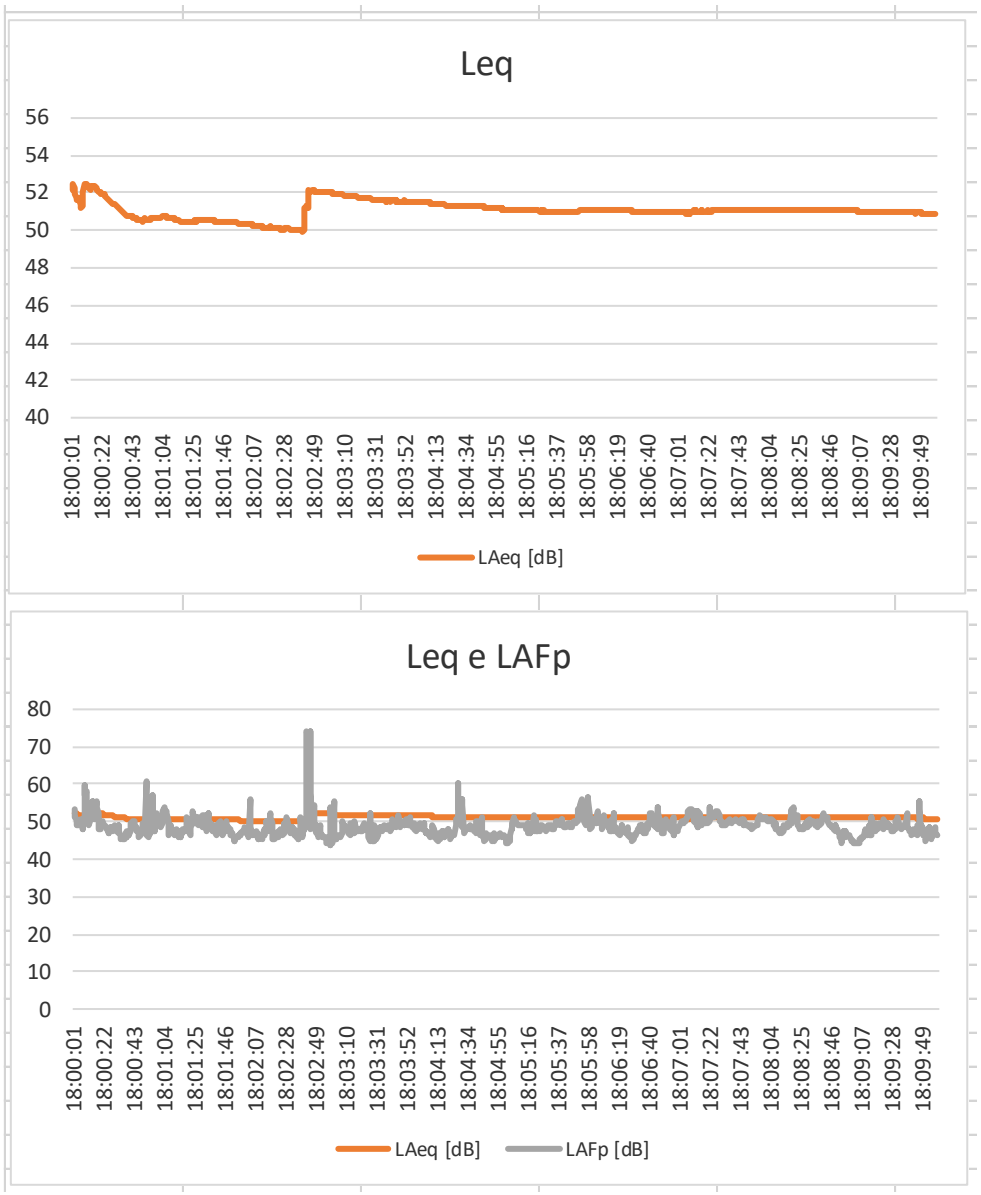

Tabella 11. Rilievo Diurno n.3 – P03

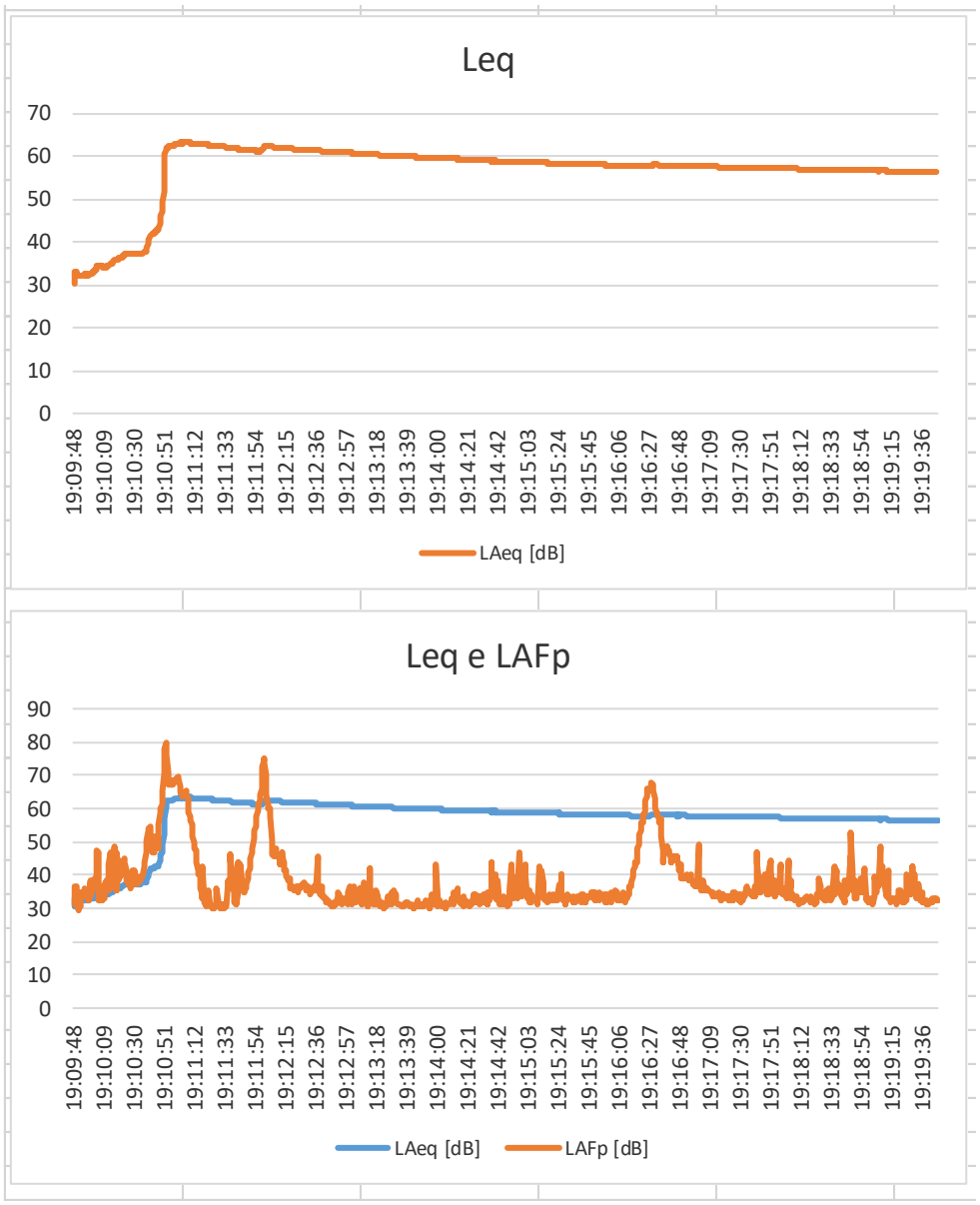

Tabella 12. Rilievo Diurno n.4 – P04

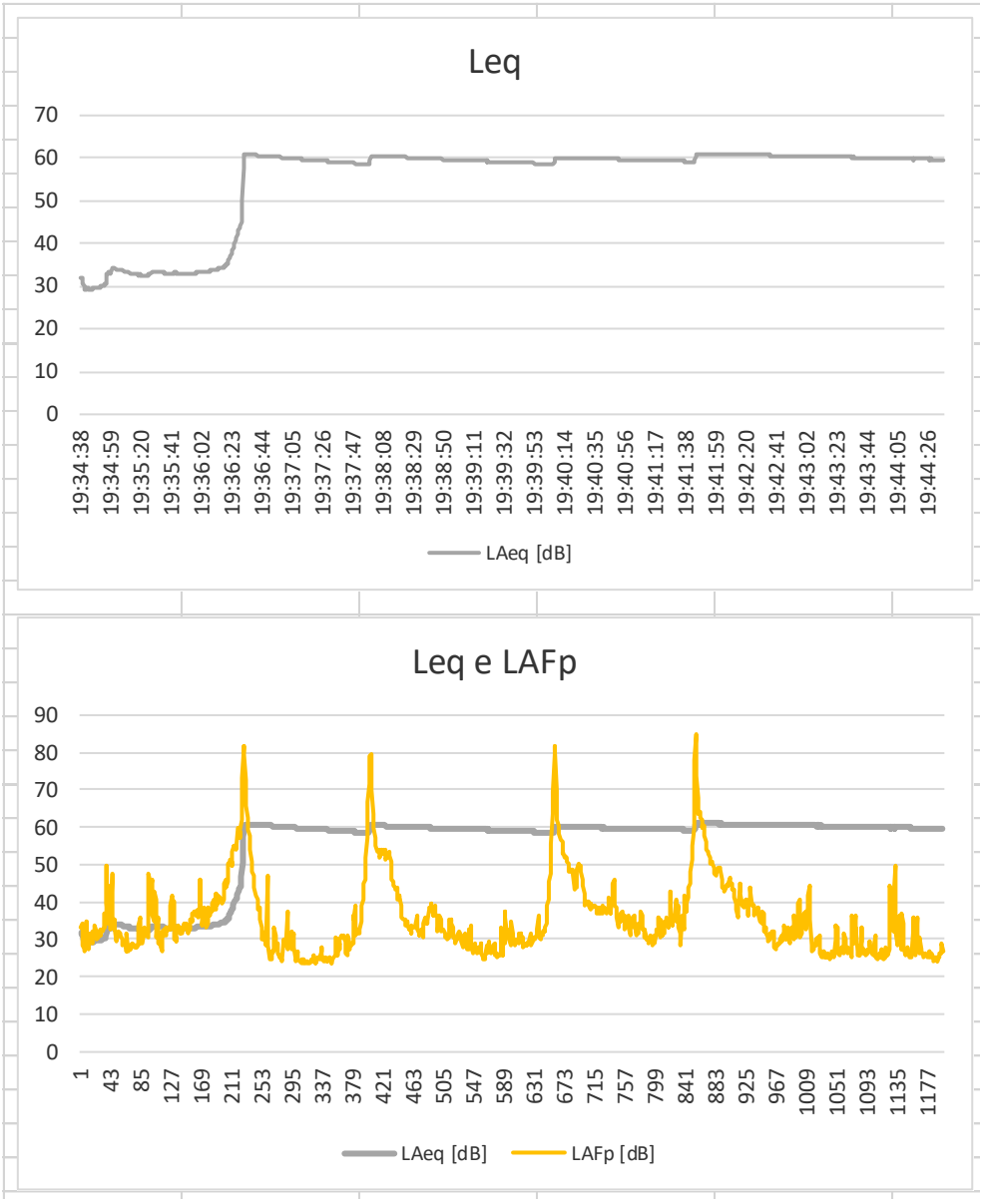

Tabella 13. Rilievo Diurno n.5 – P05

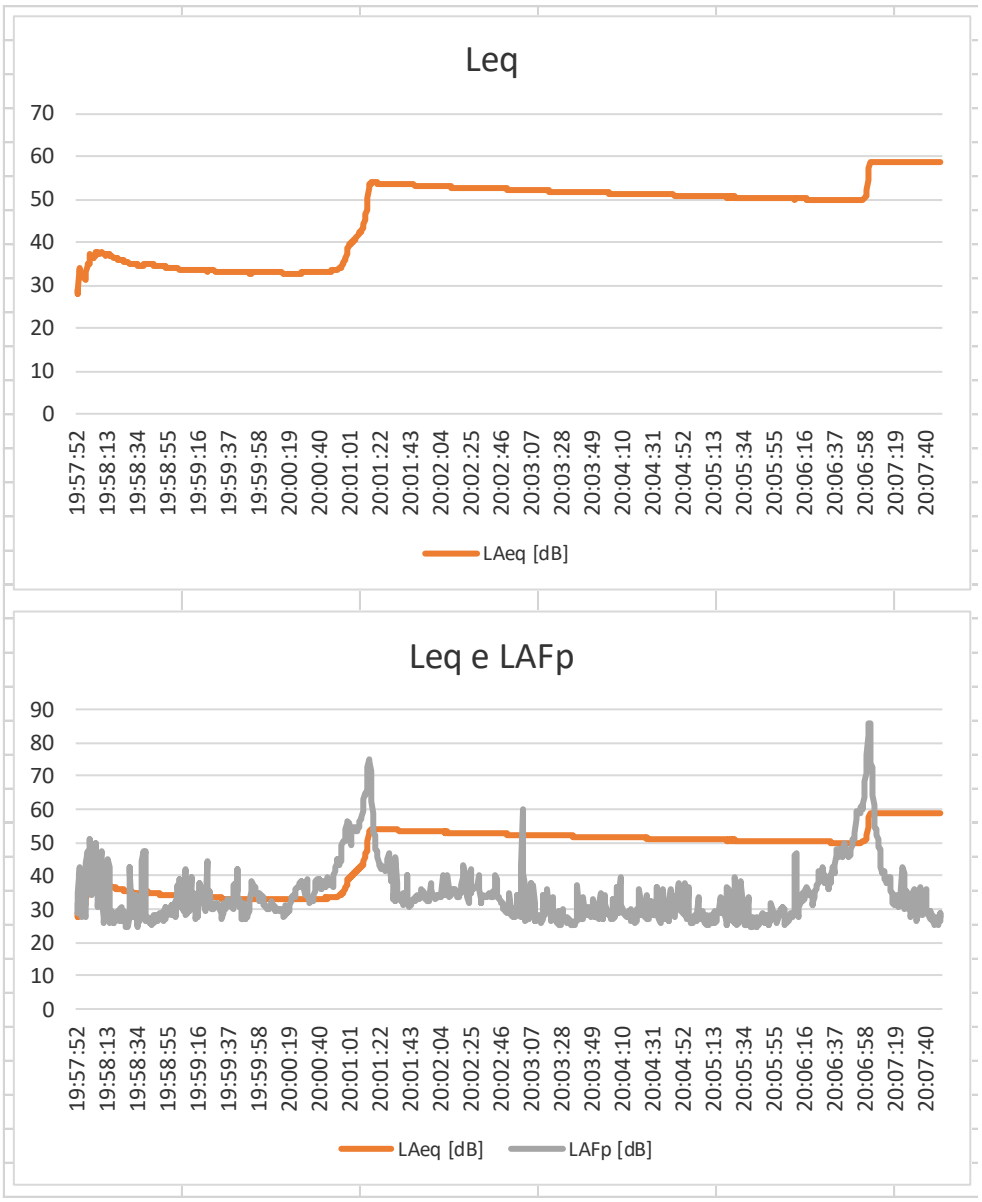

Tabella 14. Rilievo Diurno n.6 – P06

FASE DI CANTIERE

FASE DI CANTIERE **Noise** **Mapping** **Results**

***	Receiver	Results	Summary	***							
Object	**Overall Level dB(A)**	**31.5Hz**	**63Hz**	**125Hz**	**250Hz**	**500Hz**	**1kHz**	**2kHz**	**4kHz**	**8kHz**	**16kHz**
"r01"	29.4	0	20	18.3	17.9	30.3	24.2	18.4	-6.9	-98.6	0
"r02"	40.2	0	27.1	28	26.3	39.8	35.1	32.8	20.2	-22.9	0
"r03"	34	0	23.3	21.8	21.6	34.7	29	23.1	-0.4	-84.4	0
"r04"	34.6	0	23.6	22.3	22	35.2	29.7	24	2.5	-72	0
"r05"	32.9	0	21	19.2	18.6	33.5	29.2	14.9	-20.1	-146.3	0
"r06"	35.9	0	22.4	20.7	20.3	36.1	32.7	19.2	-9.7	-110.4	0
"r07"	38.8	0	25.5	25.2	24.3	38.7	34.5	29.3	13.8	-39.6	0
"r08"	37.3	0	24.5	23.9	23.2	37.4	32.9	27.6	11	-47.1	0
"r09"	37.8	0	24.8	24.3	23.5	37.8	33.4	28.2	11.9	-44.5	0
"r10"	35	0	22.4	20.9	20.6	35.3	31.1	22.5	0.6	-76.5	0
"r11"	39.6	0	25.5	25.1	24.3	39.4	35.9	29	12.8	-42.2	0
"r12"	45.6	0	26.9	27	25.8	44.6	43.2	31.3	17.3	-30.2	0
"r13"	43.6	0	25.5	25	24.3	42.7	41.1	28.7	12.7	-42.5	0
"r14"	40.9	0	24.1	22.9	22.5	40.3	38.2	25.2	5.7	-62	0
"r15"	31.7	0	19	17.1	16.3	32.1	28.2	11.8	-23.9	-152.1	0
"r16"	31.4	0	18.7	16.8	16	31.8	27.9	10.9	-25.2	-155.3	0
"r17"	31.4	0	18.9	17	16.1	31.9	27.9	10.8	-25.3	-155.1	0
"r18"	31.9	0	20.7	18.9	18.4	32.6	27.8	16.7	-11.7	-113.2	0
"r19"	33.1	0	21.7	20.1	19.7	33.8	28.9	20	-4.2	-90.5	0
"r20"	33.9	0	22	20.4	20.1	34.4	29.9	20.6	-3.4	-88.3	0
"r21"	41.4	0	28	29.1	27.2	40.9	36.3	34.1	22.1	-18.1	0
"r22"	27.1	0	18.9	17	16.2	28.5	21.5	12.2	-21.2	-142.2	0
"r23"	27.5	0	19.2	17.3	16.6	28.8	21.9	13	-19.9	-138.3	0
"r24"	24.8	0	17.7	15.7	14.6	26.4	18.9	7.7	-32	-176.4	0
"r25"	31.8	0	21.9	20.3	20	32.7	26.6	20.7	-4.4	-92	0
"r26"	33.6	0	21.5	19.9	19.6	34.1	29.5	20.4	-3.5	-88.5	0
"r27"	35.9	0	23.4	22.4	22	36.1	31.6	25.4	6.8	-58.7	0
"r28"	35.7	0	23.3	22.2	21.8	35.9	31.3	25.1	6.2	-60.2	0
"r29"	35.3	0	23	21.8	21.5	35.6	30.9	24.5	5	-63.8	0
"r30"	34.3	0	22.3	20.9	20.6	34.7	29.9	22.9	1.8	-73	0
"r31"	35.9	0	23.5	22.4	22	36.1	31.5	25.4	6.8	-58.6	0
"r32"	35.5	0	23.1	22	21.6	35.8	31.3	24.6	5.1	-63.5	0
"r33"	35.1	0	22.8	21.5	21.2	35.4	30.8	23.8	3.5	-68.1	0
"r34"	32.9	0	21.4	19.8	19.5	33.5	28.5	20.6	-2.7	-86.1	0
"r35"	28.7	0	18.7	16.9	16.1	29.7	24	13.2	-18.6	-134.2	0
"r36"	34.8	0	22.6	21.3	21	35.2	30.5	23.5	2.9	-69.8	0
"r37"	34.2	0	22.1	20.6	20.3	34.6	30	21.7	-0.8	-80.4	0
"r38"	31.6	0	20.3	18.5	18	32.3	27.6	16	-13.4	-118.6	0
"r39"	33.2	0	21.2	19.5	19.1	33.7	29.3	18.4	-8.4	-103.5	0
"r40"	34.7	0	22.3	20.9	20.5	35.1	30.7	22.1	-0.2	-78.9	0
"r41"	38.4	0	25.1	24.4	23.8	38.4	34.4	27.7	10.7	-47.8	0
"r42"	33.9	0	22.6	21.1	20.7	34.6	29.6	21.1	-2.6	-85.8	0
"r43"	32	0	21.7	20	19.6	32.9	27.3	18.3	-9.8	-108.7	0
"r44"	32.3	0	20.7	18.9	18.5	32.9	28.2	17.2	-10.7	-110.2	0

***	Receiver	Results	Breakdown	***							
Object	Source	Distance	Height	Frequency	Lw	Ad	Aa	Ag	Ab	Ab	A-Wei	Lp
"r01"	"Macc_01"	5325.5	1.5	63	86.2	-85.5	-0.5	5.9	0	0	-26.2	-20.1
0	"Macc_01"	5325.5	1.5	125	93	-85.5	-1.9	-2.2	0	0	-16.1	-12.8
0	"Macc_01"	5325.5	1.5	250	95.2	-85.5	-5.9	-3.5	0	0	-8.6	-8.3
0	"Macc_01"	5325.5	1.5	500	106.5	-85.5	-12.7	-0.6	0	0	-3.2	4.4
0	"Macc_01"	5325.5	1.5	1000	99.5	-85.5	-22	2.6	0	0	0	-5.4
0	"Macc_01"	5325.5	1.5	2000	99.1	-85.5	-45.8	3	0	0	1.2	-28.1
0	"Macc_01"	5325.5	1.5	4000	94.6	-85.5	-135.1	3	0	0	1	-122.1
0	"Macc_01"	5325.5	1.5	8000	82.8	-85.5	-477.6	3	0	0	-1.1	-478.5
0	"Macc_02"	4815.3	1.5	63	86.2	-84.7	-0.5	5.9	0	0	-26.2	-19.2
0	"Macc_02"	4815.3	1.5	125	93	-84.7	-1.7	-2.2	0	0	-16.1	-11.7
0	"Macc_02"	4815.3	1.5	250	95.2	-84.7	-5.3	-3.5	0	0	-8.6	-6.9
0	"Macc_02"	4815.3	1.5	500	112.5	-84.7	-11.5	-0.6	0	0	-3.2	12.5
0	"Macc_02"	4815.3	1.5	1000	109	-84.7	-19.9	2.6	0	0	0	7
0	"Macc_02"	4815.3	1.5	2000	99.1	-84.7	-41.5	3	0	0	1.2	-22.8
0	"Macc_02"	4815.3	1.5	4000	94.6	-84.7	-122.2	3	0	0	1	-108.3
0	"Macc_02"	4815.3	1.5	8000	82.8	-84.7	-431.8	3	0	0	-1.1	-431.8
0	"Macc_03"	3134.6	1.5	63	86.2	-80.9	-0.3	5.9	0	0	-26.2	-15.3
0	"Macc_03"	3134.6	1.5	125	93	-80.9	-1.1	-2.2	0	0	-16.1	-7.4
0	"Macc_03"	3134.6	1.5	250	95.2	-80.9	-3.5	-3.6	0	0	-8.6	-1.3
0	"Macc_03"	3134.6	1.5	500	106.5	-80.9	-7.5	-0.6	0	0	-3.2	14.3
0	"Macc_03"	3134.6	1.5	1000	99.5	-80.9	-12.9	2.6	0	0	0	8.2
0	"Macc_03"	3134.6	1.5	2000	99.1	-80.9	-27	2.9	0	0	1.2	-4.7
0	"Macc_03"	3134.6	1.5	4000	94.6	-80.9	-79.5	2.9	0	0	1	-61.9
0	"Macc_03"	3134.6	1.5	8000	82.8	-80.9	-281.1	2.9	0	0	-1.1	-277.4
0	"Macc_04"	1242.6	1.5	63	86.2	-72.9	-0.1	5.7	0	0	-26.2	-7.3
0	"Macc_04"	1242.6	1.5	125	93	-72.9	-0.4	-2.2	0	0	-16.1	1.3
0	"Macc_04"	1242.6	1.5	250	95.2	-72.9	-1.4	-3.6	0	0	-8.6	8.7
0	"Macc_04"	1242.6	1.5	500	106.5	-72.9	-3	-0.7	0	0	-3.2	26.7
0	"Macc_04"	1242.6	1.5	1000	99.5	-72.9	-5.1	2.5	0	0	0	24
0	"Macc_04"	1242.6	1.5	2000	99.1	-72.9	-10.7	2.9	0	0	1.2	19.6
0	"Macc_04"	1242.6	1.5	4000	94.6	-72.9	-31.5	2.9	0	0	1	-5.9
0	"Macc_04"	1242.6	1.5	8000	82.8	-72.9	-111.4	2.9	0	0	-1.1	-99.7
"r02"	"Macc_01"	4513.2	1.5	63	86.2	-84.1	-0.4	5.9	0	0	-26.2	-18.6
0	"Macc_01"	4513.2	1.5	125	93	-84.1	-1.6	-2.2	0	0	-16.1	-11
0	"Macc_01"	4513.2	1.5	250	95.2	-84.1	-5	-3.5	0	0	-8.6	-6
0	"Macc_01"	4513.2	1.5	500	106.5	-84.1	-10.8	-0.6	0	0	-3.2	7.8
0	"Macc_01"	4513.2	1.5	1000	99.5	-84.1	-18.6	2.6	0	0	0	-0.7
0	"Macc_01"	4513.2	1.5	2000	99.1	-84.1	-38.9	3	0	0	1.2	-19.7
0	"Macc_01"	4513.2	1.5	4000	94.6	-84.1	-114.5	3	0	0	1	-100
0	"Macc_01"	4513.2	1.5	8000	82.8	-84.1	-404.8	3	0	0	-1.1	-404.2
0	"Macc_02"	3963.1	1.5	63	86.2	-83	-0.4	5.9	0	0	-26.2	-17.4
0	"Macc_02"	3963.1	1.5	125	93	-83	-1.4	-2.2	0	0	-16.1	-9.7
0	"Macc_02"	3963.1	1.5	250	95.2	-83	-4.4	-3.6	0	0	-8.6	-4.3
0	"Macc_02"	3963.1	1.5	500	112.5	-83	-9.5	-0.6	0	0	-3.2	16.3

0	"Macc_02"	3963.1	1.5	1000	109	-83	-16.4	2.6	0	0	0	12.2
0	"Macc_02"	3963.1	1.5	2000	99.1	-83	-34.1	3	0	0	1.2	-13.8
0	"Macc_02"	3963.1	1.5	4000	94.6	-83	-100.6	3	0	0	1	-85
0	"Macc_02"	3963.1	1.5	8000	82.8	-83	-355.4	3	0	0	-1.1	-353.7
0	"Macc_03"	2283.8	1.5	63	86.2	-78.2	-0.2	5.9	0	0	-26.2	-12.5
0	"Macc_03"	2283.8	1.5	125	93	-78.2	-0.8	-2.2	0	0	-16.1	-4.3
0	"Macc_03"	2283.8	1.5	250	95.2	-78.2	-2.5	-3.6	0	0	-8.6	2.3
0	"Macc_03"	2283.8	1.5	500	106.5	-78.2	-5.4	-0.7	0	0	-3.2	19
0	"Macc_03"	2283.8	1.5	1000	99.5	-78.2	-9.4	2.5	0	0	0	14.4
0	"Macc_03"	2283.8	1.5	2000	99.1	-78.2	-19.7	2.9	0	0	1.2	5.4
0	"Macc_03"	2283.8	1.5	4000	94.6	-78.2	-57.9	2.9	0	0	1	-37.6
0	"Macc_03"	2283.8	1.5	8000	82.8	-78.2	-204.8	2.9	0	0	-1.1	-198.4
0	"Macc_04"	486.9	1.5	63	86.2	-64.7	0	5.4	0	0	-26.2	0.6
0	"Macc_04"	486.9	1.5	125	93	-64.7	-0.2	-0.3	0	0	-16.1	11.7
0	"Macc_04"	486.9	1.5	250	95.2	-64.7	-0.5	-3.8	0	0	-8.6	17.5
0	"Macc_04"	486.9	1.5	500	106.5	-64.7	-1.2	-0.9	0	0	-3.2	36.5
0	"Macc_04"	486.9	1.5	1000	99.5	-64.7	-2	2.3	0	0	0	35
0	"Macc_04"	486.9	1.5	2000	99.1	-64.7	-4.2	2.7	0	0	1.2	34
0	"Macc_04"	486.9	1.5	4000	94.6	-64.7	-12.4	2.7	0	0	1	21.2
0	"Macc_04"	486.9	1.5	8000	82.8	-64.7	-43.7	2.7	0	0	-1.1	-24
"r03"	"Macc_01"	3269.4	1.5	63	86.2	-81.3	-0.3	5.9	0	0	-26.2	-15.7
0	"Macc_01"	3269.4	1.5	125	93	-81.3	-1.2	-2.2	0	0	-16.1	-7.8
0	"Macc_01"	3269.4	1.5	250	95.2	-81.3	-3.6	-3.6	0	0	-8.6	-1.9
0	"Macc_01"	3269.4	1.5	500	106.5	-81.3	-7.8	-0.6	0	0	-3.2	13.6
0	"Macc_01"	3269.4	1.5	1000	99.5	-81.3	-13.5	2.6	0	0	0	7.3
0	"Macc_01"	3269.4	1.5	2000	99.1	-81.3	-28.1	3	0	0	1.2	-6.2
0	"Macc_01"	3269.4	1.5	4000	94.6	-81.3	-83	3	0	0	1	-65.7
0	"Macc_01"	3269.4	1.5	8000	82.8	-81.3	-293.2	3	0	0	-1.1	-289.8
0	"Macc_02"	2672.2	1.5	63	86.2	-79.5	-0.3	5.9	0	0	-26.2	-13.9
0	"Macc_02"	2672.2	1.5	125	93	-79.5	-1	-2.2	0	0	-16.1	-5.8
0	"Macc_02"	2672.2	1.5	250	95.2	-79.5	-2.9	-3.6	0	0	-8.6	0.5
0	"Macc_02"	2672.2	1.5	500	112.5	-79.5	-6.4	-0.7	0	0	-3.2	22.7
0	"Macc_02"	2672.2	1.5	1000	109	-79.5	-11	2.5	0	0	0	21
0	"Macc_02"	2672.2	1.5	2000	99.1	-79.5	-23	2.9	0	0	1.2	0.7
0	"Macc_02"	2672.2	1.5	4000	94.6	-79.5	-67.8	2.9	0	0	1	-48.8
0	"Macc_02"	2672.2	1.5	8000	82.8	-79.5	-239.6	2.9	0	0	-1.1	-234.5
0	"Macc_03"	1168.9	1.5	63	86.2	-72.4	-0.1	5.7	0	0	-26.2	-6.7
0	"Macc_03"	1168.9	1.5	125	93	-72.4	-0.4	-2.2	0	0	-16.1	1.9
0	"Macc_03"	1168.9	1.5	250	95.2	-72.4	-1.3	-3.6	0	0	-8.6	9.3
0	"Macc_03"	1168.9	1.5	500	106.5	-72.4	-2.8	-0.7	0	0	-3.2	27.4
0	"Macc_03"	1168.9	1.5	1000	99.5	-72.4	-4.8	2.5	0	0	0	24.8
0	"Macc_03"	1168.9	1.5	2000	99.1	-72.4	-10.1	2.9	0	0	1.2	20.7
0	"Macc_03"	1168.9	1.5	4000	94.6	-72.4	-29.7	2.9	0	0	1	-3.5
0	"Macc_03"	1168.9	1.5	8000	82.8	-72.4	-104.8	2.9	0	0	-1.1	-92.6
0	"Macc_04"	1105.6	1.5	63	86.2	-71.9	-0.1	5.7	0	0	-26.2	-6.3
0	"Macc_04"	1105.6	1.5	125	93	-71.9	-0.4	-2.2	0	0	-16.1	2.5
0	"Macc_04"	1105.6	1.5	250	95.2	-71.9	-1.2	-3.7	0	0	-8.6	9.9
0	"Macc_04"	1105.6	1.5	500	106.5	-71.9	-2.6	-0.7	0	0	-3.2	28.1
0	"Macc_04"	1105.6	1.5	1000	99.5	-71.9	-4.6	2.5	0	0	0	25.5
0	"Macc_04"	1105.6	1.5	2000	99.1	-71.9	-9.5	2.9	0	0	1.2	21.8
0	"Macc_04"	1105.6	1.5	4000	94.6	-71.9	-28.1	2.9	0	0	1	-1.5
0	"Macc_04"	1105.6	1.5	8000	82.8	-71.9	-99.1	2.9	0	0	-1.1	-86.5
"r04"	"Macc_01"	3072.4	1.5	63	86.2	-80.7	-0.3	5.9	0	0	-26.2	-15.2
0	"Macc_01"	3072.4	1.5	125	93	-80.7	-1.1	-2.2	0	0	-16.1	-7.2
0	"Macc_01"	3072.4	1.5	250	95.2	-80.7	-3.4	-3.6	0	0	-8.6	-1.1
0	"Macc_01"	3072.4	1.5	500	106.5	-80.7	-7.3	-0.6	0	0	-3.2	14.6
0	"Macc_01"	3072.4	1.5	1000	99.5	-80.7	-12.7	2.6	0	0	0	8.6
0	"Macc_01"	3072.4	1.5	2000	99.1	-80.7	-26.4	2.9	0	0	1.2	-3.9
0	"Macc_01"	3072.4	1.5	4000	94.6	-80.7	-78	2.9	0	0	1	-60.2
0	"Macc_01"	3072.4	1.5	8000	82.8	-80.7	-275.5	2.9	0	0	-1.1	-271.6
0	"Macc_02"	2446.6	1.5	63	86.2	-78.8	-0.2	5.9	0	0	-26.2	-13.1
0	"Macc_02"	2446.6	1.5	125	93	-78.8	-0.9	-2.2	0	0	-16.1	-5
0	"Macc_02"	2446.6	1.5	250	95.2	-78.8	-2.7	-3.6	0	0	-8.6	1.6
0	"Macc_02"	2446.6	1.5	500	112.5	-78.8	-5.8	-0.7	0	0	-3.2	24
0	"Macc_02"	2446.6	1.5	1000	109	-78.8	-10.1	2.5	0	0	0	22.7
0	"Macc_02"	2446.6	1.5	2000	99.1	-78.8	-21.1	2.9	0	0	1.2	3.4
0	"Macc_02"	2446.6	1.5	4000	94.6	-78.8	-62.1	2.9	0	0	1	-42.3
0	"Macc_02"	2446.6	1.5	8000	82.8	-78.8	-219.4	2.9	0	0	-1.1	-213.6
0	"Macc_03"	968.7	1.5	63	86.2	-70.7	-0.1	5.7	0	0	-26.2	-5.1
0	"Macc_03"	968.7	1.5	125	93	-70.7	-0.4	-2	0	0	-16.1	3.8
0	"Macc_03"	968.7	1.5	250	95.2	-70.7	-1.1	-3.7	0	0	-8.6	11.1
0	"Macc_03"	968.7	1.5	500	106.5	-70.7	-2.3	-0.8	0	0	-3.2	29.5
0	"Macc_03"	968.7	1.5	1000	99.5	-70.7	-4	2.4	0	0	0	27.2
0	"Macc_03"	968.7	1.5	2000	99.1	-70.7	-8.3	2.8	0	0	1.2	24.1
0	"Macc_03"	968.7	1.5	4000	94.6	-70.7	-24.6	2.8	0	0	1	3.1
0	"Macc_03"	968.7	1.5	8000	82.8	-70.7	-86.9	2.8	0	0	-1.1	-73.1
0	"Macc_04"	1305.6	1.5	63	86.2	-73.3	-0.1	5.8	0	0	-26.2	-7.7
0	"Macc_04"	1305.6	1.5	125	93	-73.3	-0.5	-2.3	0	0	-16.1	0.9
0	"Macc_04"	1305.6	1.5	250	95.2	-73.3	-1.4	-3.6	0	0	-8.6	8.2
0	"Macc_04"	1305.6	1.5	500	106.5	-73.3	-3.1	-0.7	0	0	-3.2	26.2
0	"Macc_04"	1305.6	1.5	1000	99.5	-73.3	-5.4	2.5	0	0	0	23.3
0	"Macc_04"	1305.6	1.5	2000	99.1	-73.3	-11.2	2.9	0	0	1.2	18.6
0	"Macc_04"	1305.6	1.5	4000	94.6	-73.3	-33.1	2.9	0	0	1	-8
0	"Macc_04"	1305.6	1.5	8000	82.8	-73.3	-117.1	2.9	0	0	-1.1	-105.8
"r05"	"Macc_01"	1985.3	1.5	63	86.2	-77	-0.2	5.8	0	0	-26.2	-11.3
0	"Macc_01"	1985.3	1.5	125	93	-77	-0.7	-2.2	0	0	-16.1	-3
0	"Macc_01"	1985.3	1.5	250	95.2	-77	-2.2	-3.6	0	0	-8.6	3.9
0	"Macc_01"	1985.3	1.5	500	106.5	-77	-4.7	-0.7	0	0	-3.2	20.9
0	"Macc_01"	1985.3	1.5	1000	99.5	-77	-8.2	2.5	0	0	0	16.9
0	"Macc_01"	1985.3	1.5	2000	99.1	-77	-17.1	2.9	0	0	1.2	9.2
0	"Macc_01"	1985.3	1.5	4000	94.6	-77	-50.4	2.9	0	0	1	-28.8
0	"Macc_01"	1985.3	1.5	8000	82.8	-77	-178	2.9	0	0	-1.1	-170.4
0	"Macc_02"	1753.6	1.5	63	86.2	-75.9	-0.2	5.8	0	0	-26.2	-10.2
0	"Macc_02"	1753.6	1.5	125	93	-75.9	-0.6	-2.3	0	0	-16.1	-1.9
0	"Macc_02"	1753.6	1.5	250	95.2	-75.9	-1.9	-3.6	0	0	-8.6	5.2
0	"Macc_02"	1753.6	1.5	500	112.5	-75.9	-4.2	-0.7	0	0	-3.2	28.6
0	"Macc_02"	1753.6	1.5	1000	109	-75.9	-7.2	2.5	0	0	0	28.4

0	"Macc_02"	1753.6	1.5	2000	99.1	-75.9	-15.1	2.9	0	0	1.2	12.2
0	"Macc_02"	1753.6	1.5	4000	94.6	-75.9	-44.5	2.9	0	0	1	-21.9
0	"Macc_02"	1753.6	1.5	8000	82.8	-75.9	-157.3	2.9	0	0	-1.1	-148.5
0	"Macc_03"	1807.9	1.5	63	86.2	-76.1	-0.2	5.8	0	0	-26.2	-10.5
0	"Macc_03"	1807.9	1.5	125	93	-76.1	-0.7	-2.3	0	0	-16.1	-2.2
0	"Macc_03"	1807.9	1.5	250	95.2	-76.1	-2	-3.6	0	0	-8.6	4.9
0	"Macc_03"	1807.9	1.5	500	106.5	-76.1	-4.3	-0.7	0	0	-3.2	22.2
0	"Macc_03"	1807.9	1.5	1000	99.5	-76.1	-7.5	2.5	0	0	0	18.4
0	"Macc_03"	1807.9	1.5	2000	99.1	-76.1	-15.6	2.9	0	0	1.2	11.5
0	"Macc_03"	1807.9	1.5	4000	94.6	-76.1	-45.9	2.9	0	0	1	-23.5
0	"Macc_03"	1807.9	1.5	8000	82.8	-76.1	-162.1	2.9	0	0	-1.1	-153.7
0	"Macc_04"	2550.9	1.5	63	86.2	-79.1	-0.3	5.9	0	0	-26.2	-13.5
0	"Macc_04"	2550.9	1.5	125	93	-79.1	-0.9	-2.2	0	0	-16.1	-5.4
0	"Macc_04"	2550.9	1.5	250	95.2	-79.1	-2.8	-3.6	0	0	-8.6	1.1
0	"Macc_04"	2550.9	1.5	500	106.5	-79.1	-6.1	-0.7	0	0	-3.2	17.4
0	"Macc_04"	2550.9	1.5	1000	99.5	-79.1	-10.5	2.5	0	0	0	12.4
0	"Macc_04"	2550.9	1.5	2000	99.1	-79.1	-22	2.9	0	0	1.2	2.1
0	"Macc_04"	2550.9	1.5	4000	94.6	-79.1	-64.7	2.9	0	0	1	-45.3
0	"Macc_04"	2550.9	1.5	8000	82.8	-79.1	-228.8	2.9	0	0	-1.1	-223.3
"r06"	"Macc_01"	1750.9	1.5	63	86.2	-75.9	-0.2	5.8	0	0	-26.2	-10.2
0	"Macc_01"	1750.9	1.5	125	93	-75.9	-0.6	-2.3	0	0	-16.1	-1.9
0	"Macc_01"	1750.9	1.5	250	95.2	-75.9	-1.9	-3.6	0	0	-8.6	5.2
0	"Macc_01"	1750.9	1.5	500	106.5	-75.9	-4.2	-0.7	0	0	-3.2	22.6
0	"Macc_01"	1750.9	1.5	1000	99.5	-75.9	-7.2	2.5	0	0	0	18.9
0	"Macc_01"	1750.9	1.5	2000	99.1	-75.9	-15.1	2.9	0	0	1.2	12.3
0	"Macc_01"	1750.9	1.5	4000	94.6	-75.9	-44.4	2.9	0	0	1	-21.8
0	"Macc_01"	1750.9	1.5	8000	82.8	-75.9	-157	2.9	0	0	-1.1	-148.3
0	"Macc_02"	1365	1.5	63	86.2	-73.7	-0.1	5.8	0	0	-26.2	-8.1
0	"Macc_02"	1365	1.5	125	93	-73.7	-0.5	-2.3	0	0	-16.1	0.4
0	"Macc_02"	1365	1.5	250	95.2	-73.7	-1.5	-3.6	0	0	-8.6	7.8
0	"Macc_02"	1365	1.5	500	112.5	-73.7	-3.3	-0.7	0	0	-3.2	31.6
0	"Macc_02"	1365	1.5	1000	109	-73.7	-5.6	2.5	0	0	0	32.1
0	"Macc_02"	1365	1.5	2000	99.1	-73.7	-11.8	2.9	0	0	1.2	17.7
0	"Macc_02"	1365	1.5	4000	94.6	-73.7	-34.6	2.9	0	0	1	-9.8
0	"Macc_02"	1365	1.5	8000	82.8	-73.7	-122.4	2.9	0	0	-1.1	-111.5
0	"Macc_03"	1560.1	1.5	63	86.2	-74.9	-0.2	5.8	0	0	-26.2	-9.2
0	"Macc_03"	1560.1	1.5	125	93	-74.9	-0.6	-2.3	0	0	-16.1	-0.8
0	"Macc_03"	1560.1	1.5	250	95.2	-74.9	-1.7	-3.6	0	0	-8.6	6.4
0	"Macc_03"	1560.1	1.5	500	106.5	-74.9	-3.7	-0.7	0	0	-3.2	24
0	"Macc_03"	1560.1	1.5	1000	99.5	-74.9	-6.4	2.5	0	0	0	20.7
0	"Macc_03"	1560.1	1.5	2000	99.1	-74.9	-13.4	2.9	0	0	1.2	14.9
0	"Macc_03"	1560.1	1.5	4000	94.6	-74.9	-39.6	2.9	0	0	1	-15.9
0	"Macc_03"	1560.1	1.5	8000	82.8	-74.9	-139.9	2.9	0	0	-1.1	-130.2
0	"Macc_04"	2641	1.5	63	86.2	-79.4	-0.3	5.9	0	0	-26.2	-13.8
0	"Macc_04"	2641	1.5	125	93	-79.4	-1	-2.2	0	0	-16.1	-5.7
0	"Macc_04"	2641	1.5	250	95.2	-79.4	-2.9	-3.6	0	0	-8.6	0.7
0	"Macc_04"	2641	1.5	500	106.5	-79.4	-6.3	-0.7	0	0	-3.2	16.9
0	"Macc_04"	2641	1.5	1000	99.5	-79.4	-10.9	2.5	0	0	0	11.7
0	"Macc_04"	2641	1.5	2000	99.1	-79.4	-22.7	2.9	0	0	1.2	1.1
0	"Macc_04"	2641	1.5	4000	94.6	-79.4	-67	2.9	0	0	1	-47.9
0	"Macc_04"	2641	1.5	8000	82.8	-79.4	-236.9	2.9	0	0	-1.1	-231.6
"r07"	"Macc_01"	645.9	1.5	63	86.2	-67.2	-0.1	5.5	0	0	-26.2	-1.8
0	"Macc_01"	645.9	1.5	125	93	-67.2	-0.2	-1.1	0	0	-16.1	8.4
0	"Macc_01"	645.9	1.5	250	95.2	-67.2	-0.7	-3.8	0	0	-8.6	14.9
0	"Macc_01"	645.9	1.5	500	106.5	-67.2	-1.5	-0.8	0	0	-3.2	33.7
0	"Macc_01"	645.9	1.5	1000	99.5	-67.2	-2.7	2.4	0	0	0	32
0	"Macc_01"	645.9	1.5	2000	99.1	-67.2	-5.6	2.8	0	0	1.2	30.3
0	"Macc_01"	645.9	1.5	4000	94.6	-67.2	-16.4	2.8	0	0	1	14.8
0	"Macc_01"	645.9	1.5	8000	82.8	-67.2	-57.9	2.8	0	0	-1.1	-40.7
0	"Macc_02"	1480.2	1.5	63	86.2	-74.4	-0.1	5.8	0	0	-26.2	-8.8
0	"Macc_02"	1480.2	1.5	125	93	-74.4	-0.5	-2.3	0	0	-16.1	-0.3
0	"Macc_02"	1480.2	1.5	250	95.2	-74.4	-1.6	-3.6	0	0	-8.6	6.9
0	"Macc_02"	1480.2	1.5	500	112.5	-74.4	-3.5	-0.7	0	0	-3.2	30.7
0	"Macc_02"	1480.2	1.5	1000	109	-74.4	-6.1	2.5	0	0	0	31
0	"Macc_02"	1480.2	1.5	2000	99.1	-74.4	-12.7	2.9	0	0	1.2	16
0	"Macc_02"	1480.2	1.5	4000	94.6	-74.4	-37.6	2.9	0	0	1	-13.5
0	"Macc_02"	1480.2	1.5	8000	82.8	-74.4	-132.7	2.9	0	0	-1.1	-122.6
0	"Macc_03"	3153.3	1.5	63	86.2	-81	-0.3	5.9	0	0	-26.2	-15.4
0	"Macc_03"	3153.3	1.5	125	93	-81	-1.1	-2.2	0	0	-16.1	-7.4
0	"Macc_03"	3153.3	1.5	250	95.2	-81	-3.5	-3.6	0	0	-8.6	-1.4
0	"Macc_03"	3153.3	1.5	500	106.5	-81	-7.5	-0.6	0	0	-3.2	14.2
0	"Macc_03"	3153.3	1.5	1000	99.5	-81	-13	2.6	0	0	0	8.1
0	"Macc_03"	3153.3	1.5	2000	99.1	-81	-27.1	3	0	0	1.2	-4.9
0	"Macc_03"	3153.3	1.5	4000	94.6	-81	-80	3	0	0	1	-62.4
0	"Macc_03"	3153.3	1.5	8000	82.8	-81	-282.8	3	0	0	-1.1	-279.1
0	"Macc_04"	4369.8	1.5	63	86.2	-83.8	-0.4	5.9	0	0	-26.2	-18.3
0	"Macc_04"	4369.8	1.5	125	93	-83.8	-1.6	-2.2	0	0	-16.1	-10.7
0	"Macc_04"	4369.8	1.5	250	95.2	-83.8	-4.8	-3.5	0	0	-8.6	-5.6
0	"Macc_04"	4369.8	1.5	500	106.5	-83.8	-10.4	-0.6	0	0	-3.2	8.4
0	"Macc_04"	4369.8	1.5	1000	99.5	-83.8	-18	2.6	0	0	0	0.2
0	"Macc_04"	4369.8	1.5	2000	99.1	-83.8	-37.6	3	0	0	1.2	-18.2
0	"Macc_04"	4369.8	1.5	4000	94.6	-83.8	-110.9	3	0	0	1	-96.1
0	"Macc_04"	4369.8	1.5	8000	82.8	-83.8	-391.9	3	0	0	-1.1	-391
"r08"	"Macc_01"	720.1	1.5	63	86.2	-68.1	-0.1	5.6	0	0	-26.2	-2.7
0	"Macc_01"	720.1	1.5	125	93	-68.1	-0.3	-1.4	0	0	-16.1	7.1
0	"Macc_01"	720.1	1.5	250	95.2	-68.1	-0.8	-3.7	0	0	-8.6	13.9
0	"Macc_01"	720.1	1.5	500	106.5	-68.1	-1.7	-0.8	0	0	-3.2	32.6
0	"Macc_01"	720.1	1.5	1000	99.5	-68.1	-3	2.4	0	0	0	30.8
0	"Macc_01"	720.1	1.5	2000	99.1	-68.1	-6.2	2.8	0	0	1.2	28.7
0	"Macc_01"	720.1	1.5	4000	94.6	-68.1	-18.3	2.8	0	0	1	12
0	"Macc_01"	720.1	1.5	8000	82.8	-68.1	-64.6	2.8	0	0	-1.1	-48.2
0	"Macc_02"	1700.1	1.5	63	86.2	-75.6	-0.2	5.8	0	0	-26.2	-10
0	"Macc_02"	1700.1	1.5	125	93	-75.6	-0.6	-2.3	0	0	-16.1	-1.6
0	"Macc_02"	1700.1	1.5	250	95.2	-75.6	-1.9	-3.6	0	0	-8.6	5.5
0	"Macc_02"	1700.1	1.5	500	112.5	-75.6	-4.1	-0.7	0	0	-3.2	28.9
0	"Macc_02"	1700.1	1.5	1000	109	-75.6	-7	2.5	0	0	0	28.9
0	"Macc_02"	1700.1	1.5	2000	99.1	-75.6	-14.6	2.9	0	0	1.2	13

0	"Macc_02"	1700.1	1.5	4000	94.6	-75.6	-43.1	2.9	0	0	1	-20.2
0	"Macc_02"	1700.1	1.5	8000	82.8	-75.6	-152.5	2.9	0	0	-1.1	-143.5
0	"Macc_03"	3594.8	1.5	63	86.2	-82.1	-0.4	5.9	0	0	-26.2	-16.6
0	"Macc_03"	3594.8	1.5	125	93	-82.1	-1.3	-2.2	0	0	-16.1	-8.7
0	"Macc_03"	3594.8	1.5	250	95.2	-82.1	-4	-3.6	0	0	-8.6	-3
0	"Macc_03"	3594.8	1.5	500	106.5	-82.1	-8.6	-0.6	0	0	-3.2	12
0	"Macc_03"	3594.8	1.5	1000	99.5	-82.1	-14.8	2.6	0	0	0	5.1
0	"Macc_03"	3594.8	1.5	2000	99.1	-82.1	-30.9	3	0	0	1.2	-9.8
0	"Macc_03"	3594.8	1.5	4000	94.6	-82.1	-91.2	3	0	0	1	-74.8
0	"Macc_03"	3594.8	1.5	8000	82.8	-82.1	-322.4	3	0	0	-1.1	-319.8
0	"Macc_04"	4927.9	1.5	63	86.2	-84.9	-0.5	5.9	0	0	-26.2	-19.4
0	"Macc_04"	4927.9	1.5	125	93	-84.9	-1.8	-2.2	0	0	-16.1	-11.9
0	"Macc_04"	4927.9	1.5	250	95.2	-84.9	-5.4	-3.5	0	0	-8.6	-7.2
0	"Macc_04"	4927.9	1.5	500	106.5	-84.9	-11.8	-0.6	0	0	-3.2	6.1
0	"Macc_04"	4927.9	1.5	1000	99.5	-84.9	-20.4	2.6	0	0	0	-3.1
0	"Macc_04"	4927.9	1.5	2000	99.1	-84.9	-42.4	3	0	0	1.2	-24
0	"Macc_04"	4927.9	1.5	4000	94.6	-84.9	-125	3	0	0	1	-111.3
0	"Macc_04"	4927.9	1.5	8000	82.8	-84.9	-441.9	3	0	0	-1.1	-442.1
"r09"	"Macc_01"	694.5	1.5	63	86.2	-67.8	-0.1	5.5	0	0	-26.2	-2.4
0	"Macc_01"	694.5	1.5	125	93	-67.8	-0.3	-1.3	0	0	-16.1	7.5
0	"Macc_01"	694.5	1.5	250	95.2	-67.8	-0.8	-3.7	0	0	-8.6	14.3
0	"Macc_01"	694.5	1.5	500	106.5	-67.8	-1.7	-0.8	0	0	-3.2	33
0	"Macc_01"	694.5	1.5	1000	99.5	-67.8	-2.9	2.4	0	0	0	31.2
0	"Macc_01"	694.5	1.5	2000	99.1	-67.8	-6	2.8	0	0	1.2	29.3
0	"Macc_01"	694.5	1.5	4000	94.6	-67.8	-17.6	2.8	0	0	1	12.9
0	"Macc_01"	694.5	1.5	8000	82.8	-67.8	-62.3	2.8	0	0	-1.1	-45.6
0	"Macc_02"	1642.7	1.5	63	86.2	-75.3	-0.2	5.8	0	0	-26.2	-9.7
0	"Macc_02"	1642.7	1.5	125	93	-75.3	-0.6	-2.3	0	0	-16.1	-1.3
0	"Macc_02"	1642.7	1.5	250	95.2	-75.3	-1.8	-3.6	0	0	-8.6	5.9
0	"Macc_02"	1642.7	1.5	500	112.5	-75.3	-3.9	-0.7	0	0	-3.2	29.4
0	"Macc_02"	1642.7	1.5	1000	109	-75.3	-6.8	2.5	0	0	0	29.4
0	"Macc_02"	1642.7	1.5	2000	99.1	-75.3	-14.1	2.9	0	0	1.2	13.8
0	"Macc_02"	1642.7	1.5	4000	94.6	-75.3	-41.7	2.9	0	0	1	-18.5
0	"Macc_02"	1642.7	1.5	8000	82.8	-75.3	-147.3	2.9	0	0	-1.1	-138
0	"Macc_03"	3613.4	1.5	63	86.2	-82.2	-0.4	5.9	0	0	-26.2	-16.6
0	"Macc_03"	3613.4	1.5	125	93	-82.2	-1.3	-2.2	0	0	-16.1	-8.8
0	"Macc_03"	3613.4	1.5	250	95.2	-82.2	-4	-3.6	0	0	-8.6	-3.1
0	"Macc_03"	3613.4	1.5	500	106.5	-82.2	-8.6	-0.6	0	0	-3.2	11.9
0	"Macc_03"	3613.4	1.5	1000	99.5	-82.2	-14.9	2.6	0	0	0	5
0	"Macc_03"	3613.4	1.5	2000	99.1	-82.2	-31.1	3	0	0	1.2	-10
0	"Macc_03"	3613.4	1.5	4000	94.6	-82.2	-91.7	3	0	0	1	-75.3
0	"Macc_03"	3613.4	1.5	8000	82.8	-82.2	-324.1	3	0	0	-1.1	-321.6
0	"Macc_04"	5025.4	1.5	63	86.2	-85	-0.5	5.9	0	0	-26.2	-19.6
0	"Macc_04"	5025.4	1.5	125	93	-85	-1.8	-2.2	0	0	-16.1	-12.1
0	"Macc_04"	5025.4	1.5	250	95.2	-85	-5.5	-3.5	0	0	-8.6	-7.5
0	"Macc_04"	5025.4	1.5	500	106.5	-85	-12	-0.6	0	0	-3.2	5.7
0	"Macc_04"	5025.4	1.5	1000	99.5	-85	-20.8	2.6	0	0	0	-3.7
0	"Macc_04"	5025.4	1.5	2000	99.1	-85	-43.3	3	0	0	1.2	-25
0	"Macc_04"	5025.4	1.5	4000	94.6	-85	-127.5	3	0	0	1	-114
0	"Macc_04"	5025.4	1.5	8000	82.8	-85	-450.7	3	0	0	-1.1	-451
"r10"	"Macc_01"	1014.6	1.5	63	86.2	-71.1	-0.1	5.7	0	0	-26.2	-5.5
0	"Macc_01"	1014.6	1.5	125	93	-71.1	-0.4	-2.1	0	0	-16.1	3.3
0	"Macc_01"	1014.6	1.5	250	95.2	-71.1	-1.1	-3.7	0	0	-8.6	10.7
0	"Macc_01"	1014.6	1.5	500	106.5	-71.1	-2.4	-0.8	0	0	-3.2	29
0	"Macc_01"	1014.6	1.5	1000	99.5	-71.1	-4.2	2.4	0	0	0	26.6
0	"Macc_01"	1014.6	1.5	2000	99.1	-71.1	-8.7	2.8	0	0	1.2	23.3
0	"Macc_01"	1014.6	1.5	4000	94.6	-71.1	-25.7	2.8	0	0	1	1.6
0	"Macc_01"	1014.6	1.5	8000	82.8	-71.1	-91	2.8	0	0	-1.1	-77.6
0	"Macc_02"	1673.9	1.5	63	86.2	-75.5	-0.2	5.8	0	0	-26.2	-9.8
0	"Macc_02"	1673.9	1.5	125	93	-75.5	-0.6	-2.3	0	0	-16.1	-1.4
0	"Macc_02"	1673.9	1.5	250	95.2	-75.5	-1.8	-3.6	0	0	-8.6	5.7
0	"Macc_02"	1673.9	1.5	500	112.5	-75.5	-4	-0.7	0	0	-3.2	29.1
0	"Macc_02"	1673.9	1.5	1000	109	-75.5	-6.9	2.5	0	0	0	29.1
0	"Macc_02"	1673.9	1.5	2000	99.1	-75.5	-14.4	2.9	0	0	1.2	13.3
0	"Macc_02"	1673.9	1.5	4000	94.6	-75.5	-42.5	2.9	0	0	1	-19.4
0	"Macc_02"	1673.9	1.5	8000	82.8	-75.5	-150.1	2.9	0	0	-1.1	-141
0	"Macc_03"	3740.7	1.5	63	86.2	-82.5	-0.4	5.9	0	0	-26.2	-16.9
0	"Macc_03"	3740.7	1.5	125	93	-82.5	-1.4	-2.2	0	0	-16.1	-9.1
0	"Macc_03"	3740.7	1.5	250	95.2	-82.5	-4.1	-3.6	0	0	-8.6	-3.5
0	"Macc_03"	3740.7	1.5	500	106.5	-82.5	-8.9	-0.6	0	0	-3.2	11.3
0	"Macc_03"	3740.7	1.5	1000	99.5	-82.5	-15.4	2.6	0	0	0	4.2
0	"Macc_03"	3740.7	1.5	2000	99.1	-82.5	-32.2	3	0	0	1.2	-11.4
0	"Macc_03"	3740.7	1.5	4000	94.6	-82.5	-94.9	3	0	0	1	-78.8
0	"Macc_03"	3740.7	1.5	8000	82.8	-82.5	-335.5	3	0	0	-1.1	-333.3
0	"Macc_04"	5331.2	1.5	63	86.2	-85.5	-0.5	5.9	0	0	-26.2	-20.1
0	"Macc_04"	5331.2	1.5	125	93	-85.5	-1.9	-2.2	0	0	-16.1	-12.8
0	"Macc_04"	5331.2	1.5	250	95.2	-85.5	-5.9	-3.5	0	0	-8.6	-8.4
0	"Macc_04"	5331.2	1.5	500	106.5	-85.5	-12.7	-0.6	0	0	-3.2	4.4
0	"Macc_04"	5331.2	1.5	1000	99.5	-85.5	-22	2.6	0	0	0	-5.5
0	"Macc_04"	5331.2	1.5	2000	99.1	-85.5	-45.9	3	0	0	1.2	-28.2
0	"Macc_04"	5331.2	1.5	4000	94.6	-85.5	-135.3	3	0	0	1	-122.2
0	"Macc_04"	5331.2	1.5	8000	82.8	-85.5	-478.1	3	0	0	-1.1	-479
"r11"	"Macc_01"	671.5	1.5	63	86.2	-67.5	-0.1	5.5	0	0	-26.2	-2.1
0	"Macc_01"	671.5	1.5	125	93	-67.5	-0.2	-1.2	0	0	-16.1	7.9
0	"Macc_01"	671.5	1.5	250	95.2	-67.5	-0.7	-3.7	0	0	-8.6	14.6
0	"Macc_01"	671.5	1.5	500	106.5	-67.5	-1.6	-0.8	0	0	-3.2	33.3
0	"Macc_01"	671.5	1.5	1000	99.5	-67.5	-2.8	2.4	0	0	0	31.6
0	"Macc_01"	671.5	1.5	2000	99.1	-67.5	-5.8	2.8	0	0	1.2	29.7
0	"Macc_01"	671.5	1.5	4000	94.6	-67.5	-17	2.8	0	0	1	13.8
0	"Macc_01"	671.5	1.5	8000	82.8	-67.5	-60.2	2.8	0	0	-1.1	-43.3
0	"Macc_02"	1207.8	1.5	63	86.2	-72.6	-0.1	5.7	0	0	-26.2	-7
0	"Macc_02"	1207.8	1.5	125	93	-72.6	-0.4	-2.2	0	0	-16.1	1.6
0	"Macc_02"	1207.8	1.5	250	95.2	-72.6	-1.3	-3.6	0	0	-8.6	9
0	"Macc_02"	1207.8	1.5	500	112.5	-72.6	-2.9	-0.7	0	0	-3.2	33.1
0	"Macc_02"	1207.8	1.5	1000	109	-72.6	-5	2.5	0	0	0	33.8
0	"Macc_02"	1207.8	1.5	2000	99.1	-72.6	-10.4	2.9	0	0	1.2	20.1
0	"Macc_02"	1207.8	1.5	4000	94.6	-72.6	-30.6	2.9	0	0	1	-4.8

0	"Macc_02"	1207.8	1.5	8000	82.8	-72.6	-108.3	2.9	0	0	-1.1	-96.4
0	"Macc_03"	3274.8	1.5	63	86.2	-81.3	-0.3	5.9	0	0	-26.2	-15.7
0	"Macc_03"	3274.8	1.5	125	93	-81.3	-1.2	-2.2	0	0	-16.1	-7.8
0	"Macc_03"	3274.8	1.5	250	95.2	-81.3	-3.6	-3.6	0	0	-8.6	-1.9
0	"Macc_03"	3274.8	1.5	500	106.5	-81.3	-7.8	-0.6	0	0	-3.2	13.5
0	"Macc_03"	3274.8	1.5	1000	99.5	-81.3	-13.5	2.6	0	0	0	7.2
0	"Macc_03"	3274.8	1.5	2000	99.1	-81.3	-28.2	3	0	0	1.2	-6.2
0	"Macc_03"	3274.8	1.5	4000	94.6	-81.3	-83.1	3	0	0	1	-65.8
0	"Macc_03"	3274.8	1.5	8000	82.8	-81.3	-293.7	3	0	0	-1.1	-290.3
0	"Macc_04"	4883.2	1.5	63	86.2	-84.8	-0.5	5.9	0	0	-26.2	-19.3
0	"Macc_04"	4883.2	1.5	125	93	-84.8	-1.8	-2.2	0	0	-16.1	-11.8
0	"Macc_04"	4883.2	1.5	250	95.2	-84.8	-5.4	-3.5	0	0	-8.6	-7.1
0	"Macc_04"	4883.2	1.5	500	106.5	-84.8	-11.6	-0.6	0	0	-3.2	6.3
0	"Macc_04"	4883.2	1.5	1000	99.5	-84.8	-20.2	2.6	0	0	0	-2.9
0	"Macc_04"	4883.2	1.5	2000	99.1	-84.8	-42	3	0	0	1.2	-23.5
0	"Macc_04"	4883.2	1.5	4000	94.6	-84.8	-123.9	3	0	0	1	-110.1
0	"Macc_04"	4883.2	1.5	8000	82.8	-84.8	-437.9	3	0	0	-1.1	-438
"r12"	"Macc_01"	1495.5	1.5	63	86.2	-74.5	-0.1	5.8	0	0	-26.2	-8.9
0	"Macc_01"	1495.5	1.5	125	93	-74.5	-0.5	-2.3	0	0	-16.1	-0.4
0	"Macc_01"	1495.5	1.5	250	95.2	-74.5	-1.6	-3.6	0	0	-8.6	6.8
0	"Macc_01"	1495.5	1.5	500	106.5	-74.5	-3.6	-0.7	0	0	-3.2	24.5
0	"Macc_01"	1495.5	1.5	1000	99.5	-74.5	-6.2	2.5	0	0	0	21.3
0	"Macc_01"	1495.5	1.5	2000	99.1	-74.5	-12.9	2.9	0	0	1.2	15.8
0	"Macc_01"	1495.5	1.5	4000	94.6	-74.5	-37.9	2.9	0	0	1	-13.9
0	"Macc_01"	1495.5	1.5	8000	82.8	-74.5	-134.1	2.9	0	0	-1.1	-124
0	"Macc_02"	555.9	1.5	63	86.2	-65.9	-0.1	5.4	0	0	-26.2	-0.5
0	"Macc_02"	555.9	1.5	125	93	-65.9	-0.2	-0.6	0	0	-16.1	10.2
0	"Macc_02"	555.9	1.5	250	95.2	-65.9	-0.6	-3.8	0	0	-8.6	16.3
0	"Macc_02"	555.9	1.5	500	112.5	-65.9	-1.3	-0.9	0	0	-3.2	41.2
0	"Macc_02"	555.9	1.5	1000	109	-65.9	-2.3	2.3	0	0	0	43.1
0	"Macc_02"	555.9	1.5	2000	99.1	-65.9	-4.8	2.7	0	0	1.2	32.3
0	"Macc_02"	555.9	1.5	4000	94.6	-65.9	-14.1	2.7	0	0	1	18.3
0	"Macc_02"	555.9	1.5	8000	82.8	-65.9	-49.9	2.7	0	0	-1.1	-31.3
0	"Macc_03"	1519.7	1.5	63	86.2	-74.6	-0.1	5.8	0	0	-26.2	-9
0	"Macc_03"	1519.7	1.5	125	93	-74.6	-0.5	-2.3	0	0	-16.1	-0.6
0	"Macc_03"	1519.7	1.5	250	95.2	-74.6	-1.7	-3.6	0	0	-8.6	6.7
0	"Macc_03"	1519.7	1.5	500	106.5	-74.6	-3.6	-0.7	0	0	-3.2	24.3
0	"Macc_03"	1519.7	1.5	1000	99.5	-74.6	-6.3	2.5	0	0	0	21.1
0	"Macc_03"	1519.7	1.5	2000	99.1	-74.6	-13.1	2.9	0	0	1.2	15.5
0	"Macc_03"	1519.7	1.5	4000	94.6	-74.6	-38.6	2.9	0	0	1	-14.7
0	"Macc_03"	1519.7	1.5	8000	82.8	-74.6	-136.3	2.9	0	0	-1.1	-126.3
0	"Macc_04"	3256.2	1.5	63	86.2	-81.3	-0.3	5.9	0	0	-26.2	-15.7
0	"Macc_04"	3256.2	1.5	125	93	-81.3	-1.2	-2.2	0	0	-16.1	-7.7
0	"Macc_04"	3256.2	1.5	250	95.2	-81.3	-3.6	-3.6	0	0	-8.6	-1.8
0	"Macc_04"	3256.2	1.5	500	106.5	-81.3	-7.8	-0.6	0	0	-3.2	13.6
0	"Macc_04"	3256.2	1.5	1000	99.5	-81.3	-13.4	2.6	0	0	0	7.4
0	"Macc_04"	3256.2	1.5	2000	99.1	-81.3	-28	3	0	0	1.2	-6
0	"Macc_04"	3256.2	1.5	4000	94.6	-81.3	-82.6	3	0	0	1	-65.3
0	"Macc_04"	3256.2	1.5	8000	82.8	-81.3	-292	3	0	0	-1.1	-288.6
"r13"	"Macc_01"	1654.4	1.5	63	86.2	-75.4	-0.2	5.8	0	0	-26.2	-9.7
0	"Macc_01"	1654.4	1.5	125	93	-75.4	-0.6	-2.3	0	0	-16.1	-1.3
0	"Macc_01"	1654.4	1.5	250	95.2	-75.4	-1.8	-3.6	0	0	-8.6	5.8
0	"Macc_01"	1654.4	1.5	500	106.5	-75.4	-3.9	-0.7	0	0	-3.2	23.3
0	"Macc_01"	1654.4	1.5	1000	99.5	-75.4	-6.8	2.5	0	0	0	19.8
0	"Macc_01"	1654.4	1.5	2000	99.1	-75.4	-14.2	2.9	0	0	1.2	13.6
0	"Macc_01"	1654.4	1.5	4000	94.6	-75.4	-42	2.9	0	0	1	-18.8
0	"Macc_01"	1654.4	1.5	8000	82.8	-75.4	-148.4	2.9	0	0	-1.1	-139.1
0	"Macc_02"	674.5	1.5	63	86.2	-67.6	-0.1	5.5	0	0	-26.2	-2.1
0	"Macc_02"	674.5	1.5	125	93	-67.6	-0.2	-1.2	0	0	-16.1	7.9
0	"Macc_02"	674.5	1.5	250	95.2	-67.6	-0.7	-3.7	0	0	-8.6	14.5
0	"Macc_02"	674.5	1.5	500	112.5	-67.6	-1.6	-0.8	0	0	-3.2	39.3
0	"Macc_02"	674.5	1.5	1000	109	-67.6	-2.8	2.4	0	0	0	41
0	"Macc_02"	674.5	1.5	2000	99.1	-67.6	-5.8	2.8	0	0	1.2	29.7
0	"Macc_02"	674.5	1.5	4000	94.6	-67.6	-17.1	2.8	0	0	1	13.7
0	"Macc_02"	674.5	1.5	8000	82.8	-67.6	-60.5	2.8	0	0	-1.1	-43.6
0	"Macc_03"	1593.5	1.5	63	86.2	-75	-0.2	5.8	0	0	-26.2	-9.4
0	"Macc_03"	1593.5	1.5	125	93	-75	-0.6	-2.3	0	0	-16.1	-1
0	"Macc_03"	1593.5	1.5	250	95.2	-75	-1.8	-3.6	0	0	-8.6	6.2
0	"Macc_03"	1593.5	1.5	500	106.5	-75	-3.8	-0.7	0	0	-3.2	23.8
0	"Macc_03"	1593.5	1.5	1000	99.5	-75	-6.6	2.5	0	0	0	20.4
0	"Macc_03"	1593.5	1.5	2000	99.1	-75	-13.7	2.9	0	0	1.2	14.4
0	"Macc_03"	1593.5	1.5	4000	94.6	-75	-40.4	2.9	0	0	1	-17
0	"Macc_03"	1593.5	1.5	8000	82.8	-75	-142.9	2.9	0	0	-1.1	-133.4
0	"Macc_04"	3423.9	1.5	63	86.2	-81.7	-0.3	5.9	0	0	-26.2	-16.1
0	"Macc_04"	3423.9	1.5	125	93	-81.7	-1.2	-2.2	0	0	-16.1	-8.2
0	"Macc_04"	3423.9	1.5	250	95.2	-81.7	-3.8	-3.6	0	0	-8.6	-2.4
0	"Macc_04"	3423.9	1.5	500	106.5	-81.7	-8.2	-0.6	0	0	-3.2	12.8
0	"Macc_04"	3423.9	1.5	1000	99.5	-81.7	-14.1	2.6	0	0	0	6.2
0	"Macc_04"	3423.9	1.5	2000	99.1	-81.7	-29.5	3	0	0	1.2	-7.9
0	"Macc_04"	3423.9	1.5	4000	94.6	-81.7	-86.9	3	0	0	1	-70
0	"Macc_04"	3423.9	1.5	8000	82.8	-81.7	-307.1	3	0	0	-1.1	-304.1
"r14"	"Macc_01"	1847.7	1.5	63	86.2	-76.3	-0.2	5.8	0	0	-26.2	-10.7
0	"Macc_01"	1847.7	1.5	125	93	-76.3	-0.7	-2.3	0	0	-16.1	-2.4
0	"Macc_01"	1847.7	1.5	250	95.2	-76.3	-2	-3.6	0	0	-8.6	4.6
0	"Macc_01"	1847.7	1.5	500	106.5	-76.3	-4.4	-0.7	0	0	-3.2	21.9
0	"Macc_01"	1847.7	1.5	1000	99.5	-76.3	-7.6	2.5	0	0	0	18.1
0	"Macc_01"	1847.7	1.5	2000	99.1	-76.3	-15.9	2.9	0	0	1.2	11
0	"Macc_01"	1847.7	1.5	4000	94.6	-76.3	-46.9	2.9	0	0	1	-24.7
0	"Macc_01"	1847.7	1.5	8000	82.8	-76.3	-165.7	2.9	0	0	-1.1	-157.4
0	"Macc_02"	868.3	1.5	63	86.2	-69.8	-0.1	5.6	0	0	-26.2	-4.2
0	"Macc_02"	868.3	1.5	125	93	-69.8	-0.3	-1.8	0	0	-16.1	5
0	"Macc_02"	868.3	1.5	250	95.2	-69.8	-1	-3.7	0	0	-8.6	12.2
0	"Macc_02"	868.3	1.5	500	112.5	-69.8	-2.1	-0.8	0	0	-3.2	36.7
0	"Macc_02"	868.3	1.5	1000	109	-69.8	-3.6	2.4	0	0	0	38.1
0	"Macc_02"	868.3	1.5	2000	99.1	-69.8	-7.5	2.8	0	0	1.2	25.9
0	"Macc_02"	868.3	1.5	4000	94.6	-69.8	-22	2.8	0	0	1	6.6
0	"Macc_02"	868.3	1.5	8000	82.8	-69.8	-77.9	2.8	0	0	-1.1	-63.1

0	"Macc_03"	1499.2	1.5	63	86.2	-74.5	-0.1	5.8	0	0	-26.2	-8.9
0	"Macc_03"	1499.2	1.5	125	93	-74.5	-0.5	-2.3	0	0	-16.1	-0.4
0	"Macc_03"	1499.2	1.5	250	95.2	-74.5	-1.7	-3.6	0	0	-8.6	6.8
0	"Macc_03"	1499.2	1.5	500	106.5	-74.5	-3.6	-0.7	0	0	-3.2	24.5
0	"Macc_03"	1499.2	1.5	1000	99.5	-74.5	-6.2	2.5	0	0	0	21.3
0	"Macc_03"	1499.2	1.5	2000	99.1	-74.5	-12.9	2.9	0	0	1.2	15.8
0	"Macc_03"	1499.2	1.5	4000	94.6	-74.5	-38	2.9	0	0	1	-14.1
0	"Macc_03"	1499.2	1.5	8000	82.8	-74.5	-134.5	2.9	0	0	-1.1	-124.4
0	"Macc_04"	3367.4	1.5	63	86.2	-81.5	-0.3	5.9	0	0	-26.2	-16
0	"Macc_04"	3367.4	1.5	125	93	-81.5	-1.2	-2.2	0	0	-16.1	-8.1
0	"Macc_04"	3367.4	1.5	250	95.2	-81.5	-3.7	-3.6	0	0	-8.6	-2.2
0	"Macc_04"	3367.4	1.5	500	106.5	-81.5	-8	-0.6	0	0	-3.2	13.1
0	"Macc_04"	3367.4	1.5	1000	99.5	-81.5	-13.9	2.6	0	0	0	6.6
0	"Macc_04"	3367.4	1.5	2000	99.1	-81.5	-29	3	0	0	1.2	-7.3
0	"Macc_04"	3367.4	1.5	4000	94.6	-81.5	-85.4	3	0	0	1	-68.4
0	"Macc_04"	3367.4	1.5	8000	82.8	-81.5	-302	3	0	0	-1.1	-298.9
"r15"	"Macc_01"	2138.1	1.5	63	86.2	-77.6	-0.2	5.9	0	0	-26.2	-12
0	"Macc_01"	2138.1	1.5	125	93	-77.6	-0.8	-2.2	0	0	-16.1	-3.7
0	"Macc_01"	2138.1	1.5	250	95.2	-77.6	-2.4	-3.6	0	0	-8.6	3.1
0	"Macc_01"	2138.1	1.5	500	106.5	-77.6	-5.1	-0.7	0	0	-3.2	19.9
0	"Macc_01"	2138.1	1.5	1000	99.5	-77.6	-8.8	2.5	0	0	0	15.6
0	"Macc_01"	2138.1	1.5	2000	99.1	-77.6	-18.4	2.9	0	0	1.2	7.2
0	"Macc_01"	2138.1	1.5	4000	94.6	-77.6	-54.2	2.9	0	0	1	-33.3
0	"Macc_01"	2138.1	1.5	8000	82.8	-77.6	-191.8	2.9	0	0	-1.1	-184.7
0	"Macc_02"	1803.4	1.5	63	86.2	-76.1	-0.2	5.8	0	0	-26.2	-10.5
0	"Macc_02"	1803.4	1.5	125	93	-76.1	-0.7	-2.3	0	0	-16.1	-2.1
0	"Macc_02"	1803.4	1.5	250	95.2	-76.1	-2	-3.6	0	0	-8.6	4.9
0	"Macc_02"	1803.4	1.5	500	112.5	-76.1	-4.3	-0.7	0	0	-3.2	28.2
0	"Macc_02"	1803.4	1.5	1000	109	-76.1	-7.4	2.5	0	0	0	27.9
0	"Macc_02"	1803.4	1.5	2000	99.1	-76.1	-15.5	2.9	0	0	1.2	11.6
0	"Macc_02"	1803.4	1.5	4000	94.6	-76.1	-45.8	2.9	0	0	1	-23.4
0	"Macc_02"	1803.4	1.5	8000	82.8	-76.1	-161.7	2.9	0	0	-1.1	-153.2
0	"Macc_03"	3355.2	1.5	63	86.2	-81.5	-0.3	5.9	0	0	-26.2	-15.9
0	"Macc_03"	3355.2	1.5	125	93	-81.5	-1.2	-2.2	0	0	-16.1	-8
0	"Macc_03"	3355.2	1.5	250	95.2	-81.5	-3.7	-3.6	0	0	-8.6	-2.2
0	"Macc_03"	3355.2	1.5	500	106.5	-81.5	-8	-0.6	0	0	-3.2	13.1
0	"Macc_03"	3355.2	1.5	1000	99.5	-81.5	-13.9	2.6	0	0	0	6.7
0	"Macc_03"	3355.2	1.5	2000	99.1	-81.5	-28.9	3	0	0	1.2	-7.1
0	"Macc_03"	3355.2	1.5	4000	94.6	-81.5	-85.1	3	0	0	1	-68.1
0	"Macc_03"	3355.2	1.5	8000	82.8	-81.5	-300.9	3	0	0	-1.1	-297.8
0	"Macc_04"	5239.3	1.5	63	86.2	-85.4	-0.5	5.9	0	0	-26.2	-20
0	"Macc_04"	5239.3	1.5	125	93	-85.4	-1.9	-2.2	0	0	-16.1	-12.6
0	"Macc_04"	5239.3	1.5	250	95.2	-85.4	-5.8	-3.5	0	0	-8.6	-8.1
0	"Macc_04"	5239.3	1.5	500	106.5	-85.4	-12.5	-0.6	0	0	-3.2	4.8
0	"Macc_04"	5239.3	1.5	1000	99.5	-85.4	-21.6	2.6	0	0	0	-5
0	"Macc_04"	5239.3	1.5	2000	99.1	-85.4	-45.1	3	0	0	1.2	-27.2
0	"Macc_04"	5239.3	1.5	4000	94.6	-85.4	-132.9	3	0	0	1	-119.7
0	"Macc_04"	5239.3	1.5	8000	82.8	-85.4	-469.9	3	0	0	-1.1	-470.6
"r16"	"Macc_01"	2346.7	1.5	63	86.2	-78.4	-0.2	5.9	0	0	-26.2	-12.8
0	"Macc_01"	2346.7	1.5	125	93	-78.4	-0.8	-2.2	0	0	-16.1	-4.6
0	"Macc_01"	2346.7	1.5	250	95.2	-78.4	-2.6	-3.6	0	0	-8.6	2
0	"Macc_01"	2346.7	1.5	500	106.5	-78.4	-5.6	-0.7	0	0	-3.2	18.6
0	"Macc_01"	2346.7	1.5	1000	99.5	-78.4	-9.7	2.5	0	0	0	13.9
0	"Macc_01"	2346.7	1.5	2000	99.1	-78.4	-20.2	2.9	0	0	1.2	4.6
0	"Macc_01"	2346.7	1.5	4000	94.6	-78.4	-59.5	2.9	0	0	1	-39.4
0	"Macc_01"	2346.7	1.5	8000	82.8	-78.4	-210.5	2.9	0	0	-1.1	-204.2
0	"Macc_02"	1836.4	1.5	63	86.2	-76.3	-0.2	5.8	0	0	-26.2	-10.6
0	"Macc_02"	1836.4	1.5	125	93	-76.3	-0.7	-2.3	0	0	-16.1	-2.3
0	"Macc_02"	1836.4	1.5	250	95.2	-76.3	-2	-3.6	0	0	-8.6	4.7
0	"Macc_02"	1836.4	1.5	500	112.5	-76.3	-4.4	-0.7	0	0	-3.2	28
0	"Macc_02"	1836.4	1.5	1000	109	-76.3	-7.6	2.5	0	0	0	27.7
0	"Macc_02"	1836.4	1.5	2000	99.1	-76.3	-15.8	2.9	0	0	1.2	11.1
0	"Macc_02"	1836.4	1.5	4000	94.6	-76.3	-46.6	2.9	0	0	1	-24.4
0	"Macc_02"	1836.4	1.5	8000	82.8	-76.3	-164.7	2.9	0	0	-1.1	-156.4
0	"Macc_03"	3137.2	1.5	63	86.2	-80.9	-0.3	5.9	0	0	-26.2	-15.3
0	"Macc_03"	3137.2	1.5	125	93	-80.9	-1.1	-2.2	0	0	-16.1	-7.4
0	"Macc_03"	3137.2	1.5	250	95.2	-80.9	-3.5	-3.6	0	0	-8.6	-1.4
0	"Macc_03"	3137.2	1.5	500	106.5	-80.9	-7.5	-0.6	0	0	-3.2	14.2
0	"Macc_03"	3137.2	1.5	1000	99.5	-80.9	-13	2.6	0	0	0	8.2
0	"Macc_03"	3137.2	1.5	2000	99.1	-80.9	-27	2.9	0	0	1.2	-4.7
0	"Macc_03"	3137.2	1.5	4000	94.6	-80.9	-79.6	2.9	0	0	1	-62
0	"Macc_03"	3137.2	1.5	8000	82.8	-80.9	-281.4	2.9	0	0	-1.1	-277.6
0	"Macc_04"	5043.3	1.5	63	86.2	-85.1	-0.5	5.9	0	0	-26.2	-19.6
0	"Macc_04"	5043.3	1.5	125	93	-85.1	-1.8	-2.2	0	0	-16.1	-12.2
0	"Macc_04"	5043.3	1.5	250	95.2	-85.1	-5.6	-3.5	0	0	-8.6	-7.6
0	"Macc_04"	5043.3	1.5	500	106.5	-85.1	-12	-0.6	0	0	-3.2	5.6
0	"Macc_04"	5043.3	1.5	1000	99.5	-85.1	-20.8	2.6	0	0	0	-3.8
0	"Macc_04"	5043.3	1.5	2000	99.1	-85.1	-43.4	3	0	0	1.2	-25.2
0	"Macc_04"	5043.3	1.5	4000	94.6	-85.1	-128	3	0	0	1	-114.4
0	"Macc_04"	5043.3	1.5	8000	82.8	-85.1	-452.3	3	0	0	-1.1	-452.7
"r17"	"Macc_01"	2614.3	1.5	63	86.2	-79.3	-0.3	5.9	0	0	-26.2	-13.7
0	"Macc_01"	2614.3	1.5	125	93	-79.3	-0.9	-2.2	0	0	-16.1	-5.6
0	"Macc_01"	2614.3	1.5	250	95.2	-79.3	-2.9	-3.6	0	0	-8.6	0.8
0	"Macc_01"	2614.3	1.5	500	106.5	-79.3	-6.2	-0.7	0	0	-3.2	17.1
0	"Macc_01"	2614.3	1.5	1000	99.5	-79.3	-10.8	2.5	0	0	0	11.9
0	"Macc_01"	2614.3	1.5	2000	99.1	-79.3	-22.5	2.9	0	0	1.2	1.4
0	"Macc_01"	2614.3	1.5	4000	94.6	-79.3	-66.3	2.9	0	0	1	-47.1
0	"Macc_01"	2614.3	1.5	8000	82.8	-79.3	-234.5	2.9	0	0	-1.1	-229.2
0	"Macc_02"	1835	1.5	63	86.2	-76.3	-0.2	5.8	0	0	-26.2	-10.6
0	"Macc_02"	1835	1.5	125	93	-76.3	-0.7	-2.3	0	0	-16.1	-2.3
0	"Macc_02"	1835	1.5	250	95.2	-76.3	-2	-3.6	0	0	-8.6	4.7
0	"Macc_02"	1835	1.5	500	112.5	-76.3	-4.4	-0.7	0	0	-3.2	28
0	"Macc_02"	1835	1.5	1000	109	-76.3	-7.6	2.5	0	0	0	27.7
0	"Macc_02"	1835	1.5	2000	99.1	-76.3	-15.8	2.9	0	0	1.2	11.1
0	"Macc_02"	1835	1.5	4000	94.6	-76.3	-46.6	2.9	0	0	1	-24.3
0	"Macc_02"	1835	1.5	8000	82.8	-76.3	-164.6	2.9	0	0	-1.1	-156.2
0	"Macc_03"	2557.8	1.5	63	86.2	-79.2	-0.3	5.9	0	0	-26.2	-13.5

0	"Macc_03"	2557.8	1.5	125	93	-79.2	-0.9	-2.2	0	0	-16.1	-5.4
0	"Macc_03"	2557.8	1.5	250	95.2	-79.2	-2.8	-3.6	0	0	-8.6	1
0	"Macc_03"	2557.8	1.5	500	106.5	-79.2	-6.1	-0.7	0	0	-3.2	17.4
0	"Macc_03"	2557.8	1.5	1000	99.5	-79.2	-10.6	2.5	0	0	0	12.3
0	"Macc_03"	2557.8	1.5	2000	99.1	-79.2	-22	2.9	0	0	1.2	2.1
0	"Macc_03"	2557.8	1.5	4000	94.6	-79.2	-64.9	2.9	0	0	1	-45.5
0	"Macc_03"	2557.8	1.5	8000	82.8	-79.2	-229.4	2.9	0	0	-1.1	-223.9
0	"Macc_04"	4466.4	1.5	63	86.2	-84	-0.4	5.9	0	0	-26.2	-18.5
0	"Macc_04"	4466.4	1.5	125	93	-84	-1.6	-2.2	0	0	-16.1	-10.9
0	"Macc_04"	4466.4	1.5	250	95.2	-84	-4.9	-3.5	0	0	-8.6	-5.9
0	"Macc_04"	4466.4	1.5	500	106.5	-84	-10.7	-0.6	0	0	-3.2	8
0	"Macc_04"	4466.4	1.5	1000	99.5	-84	-18.4	2.6	0	0	0	-0.4
0	"Macc_04"	4466.4	1.5	2000	99.1	-84	-38.4	3	0	0	1.2	-19.2
0	"Macc_04"	4466.4	1.5	4000	94.6	-84	-113.3	3	0	0	1	-98.8
0	"Macc_04"	4466.4	1.5	8000	82.8	-84	-400.6	3	0	0	-1.1	-399.9
"r18"	"Macc_01"	2984.4	1.5	63	86.2	-80.5	-0.3	5.9	0	0	-26.2	-14.9
0	"Macc_01"	2984.4	1.5	125	93	-80.5	-1.1	-2.2	0	0	-16.1	-6.9
0	"Macc_01"	2984.4	1.5	250	95.2	-80.5	-3.3	-3.6	0	0	-8.6	-0.8
0	"Macc_01"	2984.4	1.5	500	106.5	-80.5	-7.1	-0.7	0	0	-3.2	15
0	"Macc_01"	2984.4	1.5	1000	99.5	-80.5	-12.3	2.5	0	0	0	9.2
0	"Macc_01"	2984.4	1.5	2000	99.1	-80.5	-25.7	2.9	0	0	1.2	-2.9
0	"Macc_01"	2984.4	1.5	4000	94.6	-80.5	-75.7	2.9	0	0	1	-57.7
0	"Macc_01"	2984.4	1.5	8000	82.8	-80.5	-267.7	2.9	0	0	-1.1	-263.5
0	"Macc_02"	2005.9	1.5	63	86.2	-77	-0.2	5.8	0	0	-26.2	-11.4
0	"Macc_02"	2005.9	1.5	125	93	-77	-0.7	-2.2	0	0	-16.1	-3.1
0	"Macc_02"	2005.9	1.5	250	95.2	-77	-2.2	-3.6	0	0	-8.6	3.8
0	"Macc_02"	2005.9	1.5	500	112.5	-77	-4.8	-0.7	0	0	-3.2	26.8
0	"Macc_02"	2005.9	1.5	1000	109	-77	-8.3	2.5	0	0	0	26.2
0	"Macc_02"	2005.9	1.5	2000	99.1	-77	-17.3	2.9	0	0	1.2	8.9
0	"Macc_02"	2005.9	1.5	4000	94.6	-77	-50.9	2.9	0	0	1	-29.4
0	"Macc_02"	2005.9	1.5	8000	82.8	-77	-179.9	2.9	0	0	-1.1	-172.3
0	"Macc_03"	1394.2	1.5	63	86.2	-73.9	-0.1	5.8	0	0	-26.2	-8.2
0	"Macc_03"	1394.2	1.5	125	93	-73.9	-0.5	-2.3	0	0	-16.1	0.2
0	"Macc_03"	1394.2	1.5	250	95.2	-73.9	-1.5	-3.6	0	0	-8.6	7.6
0	"Macc_03"	1394.2	1.5	500	106.5	-73.9	-3.3	-0.7	0	0	-3.2	25.4
0	"Macc_03"	1394.2	1.5	1000	99.5	-73.9	-5.8	2.5	0	0	0	22.3
0	"Macc_03"	1394.2	1.5	2000	99.1	-73.9	-12	2.9	0	0	1.2	17.3
0	"Macc_03"	1394.2	1.5	4000	94.6	-73.9	-35.4	2.9	0	0	1	-10.8
0	"Macc_03"	1394.2	1.5	8000	82.8	-73.9	-125	2.9	0	0	-1.1	-114.3
0	"Macc_04"	3215	1.5	63	86.2	-81.1	-0.3	5.9	0	0	-26.2	-15.6
0	"Macc_04"	3215	1.5	125	93	-81.1	-1.2	-2.2	0	0	-16.1	-7.6
0	"Macc_04"	3215	1.5	250	95.2	-81.1	-3.5	-3.6	0	0	-8.6	-1.7
0	"Macc_04"	3215	1.5	500	106.5	-81.1	-7.7	-0.6	0	0	-3.2	13.8
0	"Macc_04"	3215	1.5	1000	99.5	-81.1	-13.3	2.6	0	0	0	7.6
0	"Macc_04"	3215	1.5	2000	99.1	-81.1	-27.7	3	0	0	1.2	-5.6
0	"Macc_04"	3215	1.5	4000	94.6	-81.1	-81.6	3	0	0	1	-64.2
0	"Macc_04"	3215	1.5	8000	82.8	-81.1	-288.3	3	0	0	-1.1	-284.8
"r19"	"Macc_01"	2947.1	1.5	63	86.2	-80.4	-0.3	5.9	0	0	-26.2	-14.8
0	"Macc_01"	2947.1	1.5	125	93	-80.4	-1.1	-2.2	0	0	-16.1	-6.8
0	"Macc_01"	2947.1	1.5	250	95.2	-80.4	-3.3	-3.6	0	0	-8.6	-0.6
0	"Macc_01"	2947.1	1.5	500	106.5	-80.4	-7	-0.7	0	0	-3.2	15.2
0	"Macc_01"	2947.1	1.5	1000	99.5	-80.4	-12.2	2.5	0	0	0	9.5
0	"Macc_01"	2947.1	1.5	2000	99.1	-80.4	-25.4	2.9	0	0	1.2	-2.5
0	"Macc_01"	2947.1	1.5	4000	94.6	-80.4	-74.8	2.9	0	0	1	-56.6
0	"Macc_01"	2947.1	1.5	8000	82.8	-80.4	-264.3	2.9	0	0	-1.1	-260
0	"Macc_02"	1967.5	1.5	63	86.2	-76.9	-0.2	5.8	0	0	-26.2	-11.2
0	"Macc_02"	1967.5	1.5	125	93	-76.9	-0.7	-2.3	0	0	-16.1	-2.9
0	"Macc_02"	1967.5	1.5	250	95.2	-76.9	-2.2	-3.6	0	0	-8.6	4
0	"Macc_02"	1967.5	1.5	500	112.5	-76.9	-4.7	-0.7	0	0	-3.2	27.1
0	"Macc_02"	1967.5	1.5	1000	109	-76.9	-8.1	2.5	0	0	0	26.5
0	"Macc_02"	1967.5	1.5	2000	99.1	-76.9	-16.9	2.9	0	0	1.2	9.4
0	"Macc_02"	1967.5	1.5	4000	94.6	-76.9	-49.9	2.9	0	0	1	-28.3
0	"Macc_02"	1967.5	1.5	8000	82.8	-76.9	-176.5	2.9	0	0	-1.1	-168.7
0	"Macc_03"	1158.4	1.5	63	86.2	-72.3	-0.1	5.7	0	0	-26.2	-6.7
0	"Macc_03"	1158.4	1.5	125	93	-72.3	-0.4	-2.2	0	0	-16.1	2
0	"Macc_03"	1158.4	1.5	250	95.2	-72.3	-1.3	-3.6	0	0	-8.6	9.4
0	"Macc_03"	1158.4	1.5	500	106.5	-72.3	-2.8	-0.7	0	0	-3.2	27.5
0	"Macc_03"	1158.4	1.5	1000	99.5	-72.3	-4.8	2.5	0	0	0	24.9
0	"Macc_03"	1158.4	1.5	2000	99.1	-72.3	-10	2.9	0	0	1.2	20.9
0	"Macc_03"	1158.4	1.5	4000	94.6	-72.3	-29.4	2.9	0	0	1	-3.2
0	"Macc_03"	1158.4	1.5	8000	82.8	-72.3	-103.9	2.9	0	0	-1.1	-91.6
0	"Macc_04"	2982.9	1.5	63	86.2	-80.5	-0.3	5.9	0	0	-26.2	-14.9
0	"Macc_04"	2982.9	1.5	125	93	-80.5	-1.1	-2.2	0	0	-16.1	-6.9
0	"Macc_04"	2982.9	1.5	250	95.2	-80.5	-3.3	-3.6	0	0	-8.6	-0.7
0	"Macc_04"	2982.9	1.5	500	106.5	-80.5	-7.1	-0.7	0	0	-3.2	15
0	"Macc_04"	2982.9	1.5	1000	99.5	-80.5	-12.3	2.5	0	0	0	9.2
0	"Macc_04"	2982.9	1.5	2000	99.1	-80.5	-25.7	2.9	0	0	1.2	-2.9
0	"Macc_04"	2982.9	1.5	4000	94.6	-80.5	-75.7	2.9	0	0	1	-57.6
0	"Macc_04"	2982.9	1.5	8000	82.8	-80.5	-267.5	2.9	0	0	-1.1	-263.4
"r20"	"Macc_01"	2778.3	1.5	63	86.2	-79.9	-0.3	5.9	0	0	-26.2	-14.3
0	"Macc_01"	2778.3	1.5	125	93	-79.9	-1	-2.2	0	0	-16.1	-6.2
0	"Macc_01"	2778.3	1.5	250	95.2	-79.9	-3.1	-3.6	0	0	-8.6	0.1
0	"Macc_01"	2778.3	1.5	500	106.5	-79.9	-6.6	-0.7	0	0	-3.2	16.1
0	"Macc_01"	2778.3	1.5	1000	99.5	-79.9	-11.5	2.5	0	0	0	10.7
0	"Macc_01"	2778.3	1.5	2000	99.1	-79.9	-23.9	2.9	0	0	1.2	-0.5
0	"Macc_01"	2778.3	1.5	4000	94.6	-79.9	-70.5	2.9	0	0	1	-51.8
0	"Macc_01"	2778.3	1.5	8000	82.8	-79.9	-249.2	2.9	0	0	-1.1	-244.4
0	"Macc_02"	1798.8	1.5	63	86.2	-76.1	-0.2	5.8	0	0	-26.2	-10.5
0	"Macc_02"	1798.8	1.5	125	93	-76.1	-0.6	-2.3	0	0	-16.1	-2.1
0	"Macc_02"	1798.8	1.5	250	95.2	-76.1	-2	-3.6	0	0	-8.6	4.9
0	"Macc_02"	1798.8	1.5	500	112.5	-76.1	-4.3	-0.7	0	0	-3.2	28.2
0	"Macc_02"	1798.8	1.5	1000	109	-76.1	-7.4	2.5	0	0	0	28
0	"Macc_02"	1798.8	1.5	2000	99.1	-76.1	-15.5	2.9	0	0	1.2	11.6
0	"Macc_02"	1798.8	1.5	4000	94.6	-76.1	-45.6	2.9	0	0	1	-23.2
0	"Macc_02"	1798.8	1.5	8000	82.8	-76.1	-161.3	2.9	0	0	-1.1	-152.8
0	"Macc_03"	1135.6	1.5	63	86.2	-72.1	-0.1	5.7	0	0	-26.2	-6.5
0	"Macc_03"	1135.6	1.5	125	93	-72.1	-0.4	-2.2	0	0	-16.1	2.2

0	"Macc_03"	1135.6	1.5	250	95.2	-72.1	-1.3	-3.7	0	0	-8.6	9.6
0	"Macc_03"	1135.6	1.5	500	106.5	-72.1	-2.7	-0.7	0	0	-3.2	27.8
0	"Macc_03"	1135.6	1.5	1000	99.5	-72.1	-4.7	2.5	0	0	0	25.2
0	"Macc_03"	1135.6	1.5	2000	99.1	-72.1	-9.8	2.9	0	0	1.2	21.3
0	"Macc_03"	1135.6	1.5	4000	94.6	-72.1	-28.8	2.9	0	0	1	-2.5
0	"Macc_03"	1135.6	1.5	8000	82.8	-72.1	-101.8	2.9	0	0	-1.1	-89.4
0	"Macc_04"	3004.7	1.5	63	86.2	-80.6	-0.3	5.9	0	0	-26.2	-15
0	"Macc_04"	3004.7	1.5	125	93	-80.6	-1.1	-2.2	0	0	-16.1	-7
0	"Macc_04"	3004.7	1.5	250	95.2	-80.6	-3.3	-3.6	0	0	-8.6	-0.8
0	"Macc_04"	3004.7	1.5	500	106.5	-80.6	-7.2	-0.7	0	0	-3.2	14.9
0	"Macc_04"	3004.7	1.5	1000	99.5	-80.6	-12.4	2.5	0	0	0	9.1
0	"Macc_04"	3004.7	1.5	2000	99.1	-80.6	-25.9	2.9	0	0	1.2	-3.2
0	"Macc_04"	3004.7	1.5	4000	94.6	-80.6	-76.2	2.9	0	0	1	-58.2
0	"Macc_04"	3004.7	1.5	8000	82.8	-80.6	-269.5	2.9	0	0	-1.1	-265.4
"r21"	"Macc_01"	3224.2	1.5	63	86.2	-81.2	-0.3	5.9	0	0	-26.2	-15.6
0	"Macc_01"	3224.2	1.5	125	93	-81.2	-1.2	-2.2	0	0	-16.1	-7.7
0	"Macc_01"	3224.2	1.5	250	95.2	-81.2	-3.6	-3.6	0	0	-8.6	-1.7
0	"Macc_01"	3224.2	1.5	500	106.5	-81.2	-7.7	-0.6	0	0	-3.2	13.8
0	"Macc_01"	3224.2	1.5	1000	99.5	-81.2	-13.3	2.6	0	0	0	7.6
0	"Macc_01"	3224.2	1.5	2000	99.1	-81.2	-27.8	3	0	0	1.2	-5.7
0	"Macc_01"	3224.2	1.5	4000	94.6	-81.2	-81.8	3	0	0	1	-64.4
0	"Macc_01"	3224.2	1.5	8000	82.8	-81.2	-289.2	3	0	0	-1.1	-285.7
0	"Macc_02"	2315.8	1.5	63	86.2	-78.3	-0.2	5.9	0	0	-26.2	-12.7
0	"Macc_02"	2315.8	1.5	125	93	-78.3	-0.8	-2.2	0	0	-16.1	-4.5
0	"Macc_02"	2315.8	1.5	250	95.2	-78.3	-2.6	-3.6	0	0	-8.6	2.2
0	"Macc_02"	2315.8	1.5	500	112.5	-78.3	-5.5	-0.7	0	0	-3.2	24.8
0	"Macc_02"	2315.8	1.5	1000	109	-78.3	-9.6	2.5	0	0	0	23.7
0	"Macc_02"	2315.8	1.5	2000	99.1	-78.3	-19.9	2.9	0	0	1.2	5
0	"Macc_02"	2315.8	1.5	4000	94.6	-78.3	-58.8	2.9	0	0	1	-38.5
0	"Macc_02"	2315.8	1.5	8000	82.8	-78.3	-207.7	2.9	0	0	-1.1	-201.4
0	"Macc_03"	441.7	1.5	63	86.2	-63.9	0	5.3	0	0	-26.2	1.3
0	"Macc_03"	441.7	1.5	125	93	-63.9	-0.2	0	0	0	-16.1	12.8
0	"Macc_03"	441.7	1.5	250	95.2	-63.9	-0.5	-3.9	0	0	-8.6	18.3
0	"Macc_03"	441.7	1.5	500	106.5	-63.9	-1.1	-1	0	0	-3.2	37.4
0	"Macc_03"	441.7	1.5	1000	99.5	-63.9	-1.8	2.2	0	0	0	36
0	"Macc_03"	441.7	1.5	2000	99.1	-63.9	-3.8	2.6	0	0	1.2	35.2
0	"Macc_03"	441.7	1.5	4000	94.6	-63.9	-11.2	2.6	0	0	1	23.1
0	"Macc_03"	441.7	1.5	8000	82.8	-63.9	-39.6	2.6	0	0	-1.1	-19.2
0	"Macc_04"	2043	1.5	63	86.2	-77.2	-0.2	5.8	0	0	-26.2	-11.6
0	"Macc_04"	2043	1.5	125	93	-77.2	-0.7	-2.2	0	0	-16.1	-3.3
0	"Macc_04"	2043	1.5	250	95.2	-77.2	-2.3	-3.6	0	0	-8.6	3.6
0	"Macc_04"	2043	1.5	500	106.5	-77.2	-4.9	-0.7	0	0	-3.2	20.5
0	"Macc_04"	2043	1.5	1000	99.5	-77.2	-8.4	2.5	0	0	0	16.4
0	"Macc_04"	2043	1.5	2000	99.1	-77.2	-17.6	2.9	0	0	1.2	8.4
0	"Macc_04"	2043	1.5	4000	94.6	-77.2	-51.8	2.9	0	0	1	-30.5
0	"Macc_04"	2043	1.5	8000	82.8	-77.2	-183.2	2.9	0	0	-1.1	-175.8
"r22"	"Macc_01"	4426.9	1.5	63	86.2	-83.9	-0.4	5.9	0	0	-26.2	-18.4
0	"Macc_01"	4426.9	1.5	125	93	-83.9	-1.6	-2.2	0	0	-16.1	-10.8
0	"Macc_01"	4426.9	1.5	250	95.2	-83.9	-4.9	-3.5	0	0	-8.6	-5.8
0	"Macc_01"	4426.9	1.5	500	106.5	-83.9	-10.6	-0.6	0	0	-3.2	8.2
0	"Macc_01"	4426.9	1.5	1000	99.5	-83.9	-18.3	2.6	0	0	0	-0.1
0	"Macc_01"	4426.9	1.5	2000	99.1	-83.9	-38.1	3	0	0	1.2	-18.8
0	"Macc_01"	4426.9	1.5	4000	94.6	-83.9	-112.3	3	0	0	1	-97.7
0	"Macc_01"	4426.9	1.5	8000	82.8	-83.9	-397	3	0	0	-1.1	-396.3
0	"Macc_02"	3474	1.5	63	86.2	-81.8	-0.3	5.9	0	0	-26.2	-16.2
0	"Macc_02"	3474	1.5	125	93	-81.8	-1.3	-2.2	0	0	-16.1	-8.4
0	"Macc_02"	3474	1.5	250	95.2	-81.8	-3.8	-3.6	0	0	-8.6	-2.6
0	"Macc_02"	3474	1.5	500	112.5	-81.8	-8.3	-0.6	0	0	-3.2	18.6
0	"Macc_02"	3474	1.5	1000	109	-81.8	-14.3	2.6	0	0	0	15.4
0	"Macc_02"	3474	1.5	2000	99.1	-81.8	-29.9	3	0	0	1.2	-8.5
0	"Macc_02"	3474	1.5	4000	94.6	-81.8	-88.1	3	0	0	1	-71.4
0	"Macc_02"	3474	1.5	8000	82.8	-81.8	-311.6	3	0	0	-1.1	-308.7
0	"Macc_03"	1698.8	1.5	63	86.2	-75.6	-0.2	5.8	0	0	-26.2	-10
0	"Macc_03"	1698.8	1.5	125	93	-75.6	-0.6	-2.3	0	0	-16.1	-1.6
0	"Macc_03"	1698.8	1.5	250	95.2	-75.6	-1.9	-3.6	0	0	-8.6	5.5
0	"Macc_03"	1698.8	1.5	500	106.5	-75.6	-4.1	-0.7	0	0	-3.2	23
0	"Macc_03"	1698.8	1.5	1000	99.5	-75.6	-7	2.5	0	0	0	19.4
0	"Macc_03"	1698.8	1.5	2000	99.1	-75.6	-14.6	2.9	0	0	1.2	13
0	"Macc_03"	1698.8	1.5	4000	94.6	-75.6	-43.1	2.9	0	0	1	-20.2
0	"Macc_03"	1698.8	1.5	8000	82.8	-75.6	-152.4	2.9	0	0	-1.1	-143.3
0	"Macc_04"	2465.1	1.5	63	86.2	-78.8	-0.2	5.9	0	0	-26.2	-13.2
0	"Macc_04"	2465.1	1.5	125	93	-78.8	-0.9	-2.2	0	0	-16.1	-5.1
0	"Macc_04"	2465.1	1.5	250	95.2	-78.8	-2.7	-3.6	0	0	-8.6	1.5
0	"Macc_04"	2465.1	1.5	500	106.5	-78.8	-5.9	-0.7	0	0	-3.2	17.9
0	"Macc_04"	2465.1	1.5	1000	99.5	-78.8	-10.2	2.5	0	0	0	13
0	"Macc_04"	2465.1	1.5	2000	99.1	-78.8	-21.2	2.9	0	0	1.2	3.2
0	"Macc_04"	2465.1	1.5	4000	94.6	-78.8	-62.5	2.9	0	0	1	-42.8
0	"Macc_04"	2465.1	1.5	8000	82.8	-78.8	-221.1	2.9	0	0	-1.1	-215.3
"r23"	"Macc_01"	4450.4	1.5	63	86.2	-84	-0.4	5.9	0	0	-26.2	-18.5
0	"Macc_01"	4450.4	1.5	125	93	-84	-1.6	-2.2	0	0	-16.1	-10.9
0	"Macc_01"	4450.4	1.5	250	95.2	-84	-4.9	-3.5	0	0	-8.6	-5.8
0	"Macc_01"	4450.4	1.5	500	106.5	-84	-10.6	-0.6	0	0	-3.2	8.1
0	"Macc_01"	4450.4	1.5	1000	99.5	-84	-18.4	2.6	0	0	0	-0.3
0	"Macc_01"	4450.4	1.5	2000	99.1	-84	-38.3	3	0	0	1.2	-19
0	"Macc_01"	4450.4	1.5	4000	94.6	-84	-112.9	3	0	0	1	-98.3
0	"Macc_01"	4450.4	1.5	8000	82.8	-84	-399.1	3	0	0	-1.1	-398.4
0	"Macc_02"	3509.5	1.5	63	86.2	-81.9	-0.3	5.9	0	0	-26.2	-16.3
0	"Macc_02"	3509.5	1.5	125	93	-81.9	-1.3	-2.2	0	0	-16.1	-8.5
0	"Macc_02"	3509.5	1.5	250	95.2	-81.9	-3.9	-3.6	0	0	-8.6	-2.7
0	"Macc_02"	3509.5	1.5	500	112.5	-81.9	-8.4	-0.6	0	0	-3.2	18.4
0	"Macc_02"	3509.5	1.5	1000	109	-81.9	-14.5	2.6	0	0	0	15.2
0	"Macc_02"	3509.5	1.5	2000	99.1	-81.9	-30.2	3	0	0	1.2	-8.9
0	"Macc_02"	3509.5	1.5	4000	94.6	-81.9	-89	3	0	0	1	-72.4
0	"Macc_02"	3509.5	1.5	8000	82.8	-81.9	-314.7	3	0	0	-1.1	-312
0	"Macc_03"	1656.9	1.5	63	86.2	-75.4	-0.2	5.8	0	0	-26.2	-9.7
0	"Macc_03"	1656.9	1.5	125	93	-75.4	-0.6	-2.3	0	0	-16.1	-1.3
0	"Macc_03"	1656.9	1.5	250	95.2	-75.4	-1.8	-3.6	0	0	-8.6	5.8

0	"Macc_03"	1656.9	1.5	500	106.5	-75.4	-4	-0.7	0	0	-3.2	23.3
0	"Macc_03"	1656.9	1.5	1000	99.5	-75.4	-6.8	2.5	0	0	0	19.8
0	"Macc_03"	1656.9	1.5	2000	99.1	-75.4	-14.3	2.9	0	0	1.2	13.6
0	"Macc_03"	1656.9	1.5	4000	94.6	-75.4	-42	2.9	0	0	1	-18.9
0	"Macc_03"	1656.9	1.5	8000	82.8	-75.4	-148.6	2.9	0	0	-1.1	-139.4
0	"Macc_04"	2292.6	1.5	63	86.2	-78.2	-0.2	5.9	0	0	-26.2	-12.6
0	"Macc_04"	2292.6	1.5	125	93	-78.2	-0.8	-2.2	0	0	-16.1	-4.4
0	"Macc_04"	2292.6	1.5	250	95.2	-78.2	-2.5	-3.6	0	0	-8.6	2.3
0	"Macc_04"	2292.6	1.5	500	106.5	-78.2	-5.5	-0.7	0	0	-3.2	19
0	"Macc_04"	2292.6	1.5	1000	99.5	-78.2	-9.5	2.5	0	0	0	14.4
0	"Macc_04"	2292.6	1.5	2000	99.1	-78.2	-19.7	2.9	0	0	1.2	5.3
0	"Macc_04"	2292.6	1.5	4000	94.6	-78.2	-58.2	2.9	0	0	1	-37.8
0	"Macc_04"	2292.6	1.5	8000	82.8	-78.2	-205.6	2.9	0	0	-1.1	-199.2
"r24"	"Macc_01"	4779.6	1.5	63	86.2	-84.6	-0.5	5.9	0	0	-26.2	-19.1
0	"Macc_01"	4779.6	1.5	125	93	-84.6	-1.7	-2.2	0	0	-16.1	-11.6
0	"Macc_01"	4779.6	1.5	250	95.2	-84.6	-5.3	-3.5	0	0	-8.6	-6.8
0	"Macc_01"	4779.6	1.5	500	106.5	-84.6	-11.4	-0.6	0	0	-3.2	6.7
0	"Macc_01"	4779.6	1.5	1000	99.5	-84.6	-19.7	2.6	0	0	0	-2.3
0	"Macc_01"	4779.6	1.5	2000	99.1	-84.6	-41.1	3	0	0	1.2	-22.5
0	"Macc_01"	4779.6	1.5	4000	94.6	-84.6	-121.3	3	0	0	1	-107.3
0	"Macc_01"	4779.6	1.5	8000	82.8	-84.6	-428.6	3	0	0	-1.1	-428.6
0	"Macc_02"	3821.3	1.5	63	86.2	-82.6	-0.4	5.9	0	0	-26.2	-17.1
0	"Macc_02"	3821.3	1.5	125	93	-82.6	-1.4	-2.2	0	0	-16.1	-9.3
0	"Macc_02"	3821.3	1.5	250	95.2	-82.6	-4.2	-3.6	0	0	-8.6	-3.8
0	"Macc_02"	3821.3	1.5	500	112.5	-82.6	-9.1	-0.6	0	0	-3.2	16.9
0	"Macc_02"	3821.3	1.5	1000	109	-82.6	-15.8	2.6	0	0	0	13.1
0	"Macc_02"	3821.3	1.5	2000	99.1	-82.6	-32.9	3	0	0	1.2	-12.3
0	"Macc_02"	3821.3	1.5	4000	94.6	-82.6	-97	3	0	0	1	-81
0	"Macc_02"	3821.3	1.5	8000	82.8	-82.6	-342.7	3	0	0	-1.1	-340.7
0	"Macc_03"	2061.3	1.5	63	86.2	-77.3	-0.2	5.8	0	0	-26.2	-11.6
0	"Macc_03"	2061.3	1.5	125	93	-77.3	-0.7	-2.2	0	0	-16.1	-3.4
0	"Macc_03"	2061.3	1.5	250	95.2	-77.3	-2.3	-3.6	0	0	-8.6	3.5
0	"Macc_03"	2061.3	1.5	500	106.5	-77.3	-4.9	-0.7	0	0	-3.2	20.4
0	"Macc_03"	2061.3	1.5	1000	99.5	-77.3	-8.5	2.5	0	0	0	16.2
0	"Macc_03"	2061.3	1.5	2000	99.1	-77.3	-17.7	2.9	0	0	1.2	8.2
0	"Macc_03"	2061.3	1.5	4000	94.6	-77.3	-52.3	2.9	0	0	1	-31.1
0	"Macc_03"	2061.3	1.5	8000	82.8	-77.3	-184.9	2.9	0	0	-1.1	-177.5
0	"Macc_04"	2679.5	1.5	63	86.2	-79.6	-0.3	5.9	0	0	-26.2	-13.9
0	"Macc_04"	2679.5	1.5	125	93	-79.6	-1	-2.2	0	0	-16.1	-5.9
0	"Macc_04"	2679.5	1.5	250	95.2	-79.6	-3	-3.6	0	0	-8.6	0.5
0	"Macc_04"	2679.5	1.5	500	106.5	-79.6	-6.4	-0.7	0	0	-3.2	16.7
0	"Macc_04"	2679.5	1.5	1000	99.5	-79.6	-11.1	2.5	0	0	0	11.4
0	"Macc_04"	2679.5	1.5	2000	99.1	-79.6	-23.1	2.9	0	0	1.2	0.6
0	"Macc_04"	2679.5	1.5	4000	94.6	-79.6	-68	2.9	0	0	1	-49
0	"Macc_04"	2679.5	1.5	8000	82.8	-79.6	-240.3	2.9	0	0	-1.1	-235.2
"r25"	"Macc_01"	4401.2	1.5	63	86.2	-83.9	-0.4	5.9	0	0	-26.2	-18.4
0	"Macc_01"	4401.2	1.5	125	93	-83.9	-1.6	-2.2	0	0	-16.1	-10.8
0	"Macc_01"	4401.2	1.5	250	95.2	-83.9	-4.9	-3.5	0	0	-8.6	-5.7
0	"Macc_01"	4401.2	1.5	500	106.5	-83.9	-10.5	-0.6	0	0	-3.2	8.3
0	"Macc_01"	4401.2	1.5	1000	99.5	-83.9	-18.2	2.6	0	0	0	0
0	"Macc_01"	4401.2	1.5	2000	99.1	-83.9	-37.9	3	0	0	1.2	-18.5
0	"Macc_01"	4401.2	1.5	4000	94.6	-83.9	-111.7	3	0	0	1	-97
0	"Macc_01"	4401.2	1.5	8000	82.8	-83.9	-394.7	3	0	0	-1.1	-393.9
0	"Macc_02"	3577.1	1.5	63	86.2	-82.1	-0.4	5.9	0	0	-26.2	-16.5
0	"Macc_02"	3577.1	1.5	125	93	-82.1	-1.3	-2.2	0	0	-16.1	-8.7
0	"Macc_02"	3577.1	1.5	250	95.2	-82.1	-3.9	-3.6	0	0	-8.6	-3
0	"Macc_02"	3577.1	1.5	500	112.5	-82.1	-8.5	-0.6	0	0	-3.2	18.1
0	"Macc_02"	3577.1	1.5	1000	109	-82.1	-14.8	2.6	0	0	0	14.7
0	"Macc_02"	3577.1	1.5	2000	99.1	-82.1	-30.8	3	0	0	1.2	-9.6
0	"Macc_02"	3577.1	1.5	4000	94.6	-82.1	-90.8	3	0	0	1	-74.3
0	"Macc_02"	3577.1	1.5	8000	82.8	-82.1	-320.8	3	0	0	-1.1	-318.2
0	"Macc_03"	1510.2	1.5	63	86.2	-74.6	-0.1	5.8	0	0	-26.2	-8.9
0	"Macc_03"	1510.2	1.5	125	93	-74.6	-0.5	-2.3	0	0	-16.1	-0.5
0	"Macc_03"	1510.2	1.5	250	95.2	-74.6	-1.7	-3.6	0	0	-8.6	6.7
0	"Macc_03"	1510.2	1.5	500	106.5	-74.6	-3.6	-0.7	0	0	-3.2	24.4
0	"Macc_03"	1510.2	1.5	1000	99.5	-74.6	-6.2	2.5	0	0	0	21.2
0	"Macc_03"	1510.2	1.5	2000	99.1	-74.6	-13	2.9	0	0	1.2	15.6
0	"Macc_03"	1510.2	1.5	4000	94.6	-74.6	-38.3	2.9	0	0	1	-14.4
0	"Macc_03"	1510.2	1.5	8000	82.8	-74.6	-135.4	2.9	0	0	-1.1	-125.4
0	"Macc_04"	1173.8	1.5	63	86.2	-72.4	-0.1	5.7	0	0	-26.2	-6.8
0	"Macc_04"	1173.8	1.5	125	93	-72.4	-0.4	-2.2	0	0	-16.1	1.9
0	"Macc_04"	1173.8	1.5	250	95.2	-72.4	-1.3	-3.6	0	0	-8.6	9.3
0	"Macc_04"	1173.8	1.5	500	106.5	-72.4	-2.8	-0.7	0	0	-3.2	27.4
0	"Macc_04"	1173.8	1.5	1000	99.5	-72.4	-4.8	2.5	0	0	0	24.7
0	"Macc_04"	1173.8	1.5	2000	99.1	-72.4	-10.1	2.9	0	0	1.2	20.7
0	"Macc_04"	1173.8	1.5	4000	94.6	-72.4	-29.8	2.9	0	0	1	-3.7
0	"Macc_04"	1173.8	1.5	8000	82.8	-72.4	-105.3	2.9	0	0	-1.1	-93.1
"r26"	"Macc_01"	1137.3	1.5	63	86.2	-72.1	-0.1	5.7	0	0	-26.2	-6.5
0	"Macc_01"	1137.3	1.5	125	93	-72.1	-0.4	-2.2	0	0	-16.1	2.2
0	"Macc_01"	1137.3	1.5	250	95.2	-72.1	-1.3	-3.7	0	0	-8.6	9.6
0	"Macc_01"	1137.3	1.5	500	106.5	-72.1	-2.7	-0.7	0	0	-3.2	27.7
0	"Macc_01"	1137.3	1.5	1000	99.5	-72.1	-4.7	2.5	0	0	0	25.1
0	"Macc_01"	1137.3	1.5	2000	99.1	-72.1	-9.8	2.9	0	0	1.2	21.3
0	"Macc_01"	1137.3	1.5	4000	94.6	-72.1	-28.9	2.9	0	0	1	-2.5
0	"Macc_01"	1137.3	1.5	8000	82.8	-72.1	-102	2.9	0	0	-1.1	-89.6
0	"Macc_02"	1850.8	1.5	63	86.2	-76.3	-0.2	5.8	0	0	-26.2	-10.7
0	"Macc_02"	1850.8	1.5	125	93	-76.3	-0.7	-2.3	0	0	-16.1	-2.4
0	"Macc_02"	1850.8	1.5	250	95.2	-76.3	-2	-3.6	0	0	-8.6	4.6
0	"Macc_02"	1850.8	1.5	500	112.5	-76.3	-4.4	-0.7	0	0	-3.2	27.9
0	"Macc_02"	1850.8	1.5	1000	109	-76.3	-7.6	2.5	0	0	0	27.5
0	"Macc_02"	1850.8	1.5	2000	99.1	-76.3	-15.9	2.9	0	0	1.2	10.9
0	"Macc_02"	1850.8	1.5	4000	94.6	-76.3	-47	2.9	0	0	1	-24.8
0	"Macc_02"	1850.8	1.5	8000	82.8	-76.3	-166	2.9	0	0	-1.1	-157.7
0	"Macc_03"	3915.6	1.5	63	86.2	-82.9	-0.4	5.9	0	0	-26.2	-17.3
0	"Macc_03"	3915.6	1.5	125	93	-82.9	-1.4	-2.2	0	0	-16.1	-9.6
0	"Macc_03"	3915.6	1.5	250	95.2	-82.9	-4.3	-3.6	0	0	-8.6	-4.1
0	"Macc_03"	3915.6	1.5	500	106.5	-82.9	-9.3	-0.6	0	0	-3.2	10.5

0	"Macc_03"	3915.6	1.5	1000	99.5	-82.9	-16.2	2.6	0	0	0	3
0	"Macc_03"	3915.6	1.5	2000	99.1	-82.9	-33.7	3	0	0	1.2	-13.3
0	"Macc_03"	3915.6	1.5	4000	94.6	-82.9	-99.3	3	0	0	1	-83.6
0	"Macc_03"	3915.6	1.5	8000	82.8	-82.9	-351.2	3	0	0	-1.1	-349.4
0	"Macc_04"	5484.9	1.5	63	86.2	-85.8	-0.5	5.9	0	0	-26.2	-20.4
0	"Macc_04"	5484.9	1.5	125	93	-85.8	-2	-2.2	0	0	-16.1	-13.1
0	"Macc_04"	5484.9	1.5	250	95.2	-85.8	-6.1	-3.5	0	0	-8.6	-8.8
0	"Macc_04"	5484.9	1.5	500	106.5	-85.8	-13.1	-0.6	0	0	-3.2	3.8
0	"Macc_04"	5484.9	1.5	1000	99.5	-85.8	-22.7	2.6	0	0	0	-6.4
0	"Macc_04"	5484.9	1.5	2000	99.1	-85.8	-47.2	3	0	0	1.2	-29.7
0	"Macc_04"	5484.9	1.5	4000	94.6	-85.8	-139.2	3	0	0	1	-126.4
0	"Macc_04"	5484.9	1.5	8000	82.8	-85.8	-491.9	3	0	0	-1.1	-493
"r27"	"Macc_01"	835.2	1.5	63	86.2	-69.4	-0.1	5.6	0	0	-26.2	-3.9
0	"Macc_01"	835.2	1.5	125	93	-69.4	-0.3	-1.7	0	0	-16.1	5.4
0	"Macc_01"	835.2	1.5	250	95.2	-69.4	-0.9	-3.7	0	0	-8.6	12.5
0	"Macc_01"	835.2	1.5	500	106.5	-69.4	-2	-0.8	0	0	-3.2	31.1
0	"Macc_01"	835.2	1.5	1000	99.5	-69.4	-3.4	2.4	0	0	0	29
0	"Macc_01"	835.2	1.5	2000	99.1	-69.4	-7.2	2.8	0	0	1.2	26.5
0	"Macc_01"	835.2	1.5	4000	94.6	-69.4	-21.2	2.8	0	0	1	7.8
0	"Macc_01"	835.2	1.5	8000	82.8	-69.4	-74.9	2.8	0	0	-1.1	-59.8
0	"Macc_02"	1794.7	1.5	63	86.2	-76.1	-0.2	5.8	0	0	-26.2	-10.4
0	"Macc_02"	1794.7	1.5	125	93	-76.1	-0.6	-2.3	0	0	-16.1	-2.1
0	"Macc_02"	1794.7	1.5	250	95.2	-76.1	-2	-3.6	0	0	-8.6	4.9
0	"Macc_02"	1794.7	1.5	500	112.5	-76.1	-4.3	-0.7	0	0	-3.2	28.3
0	"Macc_02"	1794.7	1.5	1000	109	-76.1	-7.4	2.5	0	0	0	28
0	"Macc_02"	1794.7	1.5	2000	99.1	-76.1	-15.4	2.9	0	0	1.2	11.7
0	"Macc_02"	1794.7	1.5	4000	94.6	-76.1	-45.5	2.9	0	0	1	-23.1
0	"Macc_02"	1794.7	1.5	8000	82.8	-76.1	-161	2.9	0	0	-1.1	-152.4
0	"Macc_03"	3749.5	1.5	63	86.2	-82.5	-0.4	5.9	0	0	-26.2	-16.9
0	"Macc_03"	3749.5	1.5	125	93	-82.5	-1.4	-2.2	0	0	-16.1	-9.1
0	"Macc_03"	3749.5	1.5	250	95.2	-82.5	-4.1	-3.6	0	0	-8.6	-3.6
0	"Macc_03"	3749.5	1.5	500	106.5	-82.5	-8.9	-0.6	0	0	-3.2	11.2
0	"Macc_03"	3749.5	1.5	1000	99.5	-82.5	-15.5	2.6	0	0	0	4.1
0	"Macc_03"	3749.5	1.5	2000	99.1	-82.5	-32.3	3	0	0	1.2	-11.5
0	"Macc_03"	3749.5	1.5	4000	94.6	-82.5	-95.1	3	0	0	1	-79.1
0	"Macc_03"	3749.5	1.5	8000	82.8	-82.5	-336.3	3	0	0	-1.1	-334.1
0	"Macc_04"	5131.3	1.5	63	86.2	-85.2	-0.5	5.9	0	0	-26.2	-19.8
0	"Macc_04"	5131.3	1.5	125	93	-85.2	-1.9	-2.2	0	0	-16.1	-12.4
0	"Macc_04"	5131.3	1.5	250	95.2	-85.2	-5.7	-3.5	0	0	-8.6	-7.8
0	"Macc_04"	5131.3	1.5	500	106.5	-85.2	-12.2	-0.6	0	0	-3.2	5.2
0	"Macc_04"	5131.3	1.5	1000	99.5	-85.2	-21.2	2.6	0	0	0	-4.3
0	"Macc_04"	5131.3	1.5	2000	99.1	-85.2	-44.2	3	0	0	1.2	-26.1
0	"Macc_04"	5131.3	1.5	4000	94.6	-85.2	-130.2	3	0	0	1	-116.8
0	"Macc_04"	5131.3	1.5	8000	82.8	-85.2	-460.2	3	0	0	-1.1	-460.7
"r28"	"Macc_01"	850.4	1.5	63	86.2	-69.6	-0.1	5.6	0	0	-26.2	-4
0	"Macc_01"	850.4	1.5	125	93	-69.6	-0.3	-1.8	0	0	-16.1	5.2
0	"Macc_01"	850.4	1.5	250	95.2	-69.6	-0.9	-3.7	0	0	-8.6	12.4
0	"Macc_01"	850.4	1.5	500	106.5	-69.6	-2	-0.8	0	0	-3.2	30.9
0	"Macc_01"	850.4	1.5	1000	99.5	-69.6	-3.5	2.4	0	0	0	28.8
0	"Macc_01"	850.4	1.5	2000	99.1	-69.6	-7.3	2.8	0	0	1.2	26.2
0	"Macc_01"	850.4	1.5	4000	94.6	-69.6	-21.6	2.8	0	0	1	7.2
0	"Macc_01"	850.4	1.5	8000	82.8	-69.6	-76.3	2.8	0	0	-1.1	-61.3
0	"Macc_02"	1830.6	1.5	63	86.2	-76.3	-0.2	5.8	0	0	-26.2	-10.6
0	"Macc_02"	1830.6	1.5	125	93	-76.3	-0.7	-2.3	0	0	-16.1	-2.3
0	"Macc_02"	1830.6	1.5	250	95.2	-76.3	-2	-3.6	0	0	-8.6	4.7
0	"Macc_02"	1830.6	1.5	500	112.5	-76.3	-4.4	-0.7	0	0	-3.2	28
0	"Macc_02"	1830.6	1.5	1000	109	-76.3	-7.6	2.5	0	0	0	27.7
0	"Macc_02"	1830.6	1.5	2000	99.1	-76.3	-15.8	2.9	0	0	1.2	11.2
0	"Macc_02"	1830.6	1.5	4000	94.6	-76.3	-46.4	2.9	0	0	1	-24.2
0	"Macc_02"	1830.6	1.5	8000	82.8	-76.3	-164.2	2.9	0	0	-1.1	-155.8
0	"Macc_03"	3716.1	1.5	63	86.2	-82.4	-0.4	5.9	0	0	-26.2	-16.9
0	"Macc_03"	3716.1	1.5	125	93	-82.4	-1.3	-2.2	0	0	-16.1	-9.1
0	"Macc_03"	3716.1	1.5	250	95.2	-82.4	-4.1	-3.6	0	0	-8.6	-3.5
0	"Macc_03"	3716.1	1.5	500	106.5	-82.4	-8.9	-0.6	0	0	-3.2	11.4
0	"Macc_03"	3716.1	1.5	1000	99.5	-82.4	-15.3	2.6	0	0	0	4.3
0	"Macc_03"	3716.1	1.5	2000	99.1	-82.4	-32	3	0	0	1.2	-11.1
0	"Macc_03"	3716.1	1.5	4000	94.6	-82.4	-94.3	3	0	0	1	-78.1
0	"Macc_03"	3716.1	1.5	8000	82.8	-82.4	-333.3	3	0	0	-1.1	-331
0	"Macc_04"	5027.3	1.5	63	86.2	-85	-0.5	5.9	0	0	-26.2	-19.6
0	"Macc_04"	5027.3	1.5	125	93	-85	-1.8	-2.2	0	0	-16.1	-12.1
0	"Macc_04"	5027.3	1.5	250	95.2	-85	-5.5	-3.5	0	0	-8.6	-7.5
0	"Macc_04"	5027.3	1.5	500	106.5	-85	-12	-0.6	0	0	-3.2	5.7
0	"Macc_04"	5027.3	1.5	1000	99.5	-85	-20.8	2.6	0	0	0	-3.7
0	"Macc_04"	5027.3	1.5	2000	99.1	-85	-43.3	3	0	0	1.2	-25
0	"Macc_04"	5027.3	1.5	4000	94.6	-85	-127.6	3	0	0	1	-114
0	"Macc_04"	5027.3	1.5	8000	82.8	-85	-450.9	3	0	0	-1.1	-451.2
"r29"	"Macc_01"	886	1.5	63	86.2	-69.9	-0.1	5.6	0	0	-26.2	-4.4
0	"Macc_01"	886	1.5	125	93	-69.9	-0.3	-1.9	0	0	-16.1	4.8
0	"Macc_01"	886	1.5	250	95.2	-69.9	-1	-3.7	0	0	-8.6	12
0	"Macc_01"	886	1.5	500	106.5	-69.9	-2.1	-0.8	0	0	-3.2	30.5
0	"Macc_01"	886	1.5	1000	99.5	-69.9	-3.7	2.4	0	0	0	28.3
0	"Macc_01"	886	1.5	2000	99.1	-69.9	-7.6	2.8	0	0	1.2	25.5
0	"Macc_01"	886	1.5	4000	94.6	-69.9	-22.5	2.8	0	0	1	6
0	"Macc_01"	886	1.5	8000	82.8	-69.9	-79.5	2.8	0	0	-1.1	-64.9
0	"Macc_02"	1862.8	1.5	63	86.2	-76.4	-0.2	5.8	0	0	-26.2	-10.8
0	"Macc_02"	1862.8	1.5	125	93	-76.4	-0.7	-2.3	0	0	-16.1	-2.4
0	"Macc_02"	1862.8	1.5	250	95.2	-76.4	-2.1	-3.6	0	0	-8.6	4.5
0	"Macc_02"	1862.8	1.5	500	112.5	-76.4	-4.4	-0.7	0	0	-3.2	27.8
0	"Macc_02"	1862.8	1.5	1000	109	-76.4	-7.7	2.5	0	0	0	27.4
0	"Macc_02"	1862.8	1.5	2000	99.1	-76.4	-16	2.9	0	0	1.2	10.8
0	"Macc_02"	1862.8	1.5	4000	94.6	-76.4	-47.3	2.9	0	0	1	-25.2
0	"Macc_02"	1862.8	1.5	8000	82.8	-76.4	-167.1	2.9	0	0	-1.1	-158.8
0	"Macc_03"	3703.9	1.5	63	86.2	-82.4	-0.4	5.9	0	0	-26.2	-16.8
0	"Macc_03"	3703.9	1.5	125	93	-82.4	-1.3	-2.2	0	0	-16.1	-9
0	"Macc_03"	3703.9	1.5	250	95.2	-82.4	-4.1	-3.6	0	0	-8.6	-3.4
0	"Macc_03"	3703.9	1.5	500	106.5	-82.4	-8.8	-0.6	0	0	-3.2	11.5
0	"Macc_03"	3703.9	1.5	1000	99.5	-82.4	-15.3	2.6	0	0	0	4.4

0	"Macc_03"	3703.9	1.5	2000	99.1	-82.4	-31.9	3	0	0	1.2	-11
0	"Macc_03"	3703.9	1.5	4000	94.6	-82.4	-94	3	0	0	1	-77.8
0	"Macc_03"	3703.9	1.5	8000	82.8	-82.4	-332.2	3	0	0	-1.1	-329.9
0	"Macc_04"	4973.9	1.5	63	86.2	-84.9	-0.5	5.9	0	0	-26.2	-19.5
0	"Macc_04"	4973.9	1.5	125	93	-84.9	-1.8	-2.2	0	0	-16.1	-12
0	"Macc_04"	4973.9	1.5	250	95.2	-84.9	-5.5	-3.5	0	0	-8.6	-7.4
0	"Macc_04"	4973.9	1.5	500	106.5	-84.9	-11.9	-0.6	0	0	-3.2	5.9
0	"Macc_04"	4973.9	1.5	1000	99.5	-84.9	-20.5	2.6	0	0	0	-3.4
0	"Macc_04"	4973.9	1.5	2000	99.1	-84.9	-42.8	3	0	0	1.2	-24.5
0	"Macc_04"	4973.9	1.5	4000	94.6	-84.9	-126.2	3	0	0	1	-112.6
0	"Macc_04"	4973.9	1.5	8000	82.8	-84.9	-446.1	3	0	0	-1.1	-446.3
"r30"	"Macc_01"	979.2	1.5	63	86.2	-70.8	-0.1	5.7	0	0	-26.2	-5.2
0	"Macc_01"	979.2	1.5	125	93	-70.8	-0.4	-2	0	0	-16.1	3.7
0	"Macc_01"	979.2	1.5	250	95.2	-70.8	-1.1	-3.7	0	0	-8.6	11
0	"Macc_01"	979.2	1.5	500	106.5	-70.8	-2.3	-0.8	0	0	-3.2	29.4
0	"Macc_01"	979.2	1.5	1000	99.5	-70.8	-4	2.4	0	0	0	27.1
0	"Macc_01"	979.2	1.5	2000	99.1	-70.8	-8.4	2.8	0	0	1.2	23.9
0	"Macc_01"	979.2	1.5	4000	94.6	-70.8	-24.8	2.8	0	0	1	2.8
0	"Macc_01"	979.2	1.5	8000	82.8	-70.8	-87.8	2.8	0	0	-1.1	-74.1
0	"Macc_02"	1947.9	1.5	63	86.2	-76.8	-0.2	5.8	0	0	-26.2	-11.1
0	"Macc_02"	1947.9	1.5	125	93	-76.8	-0.7	-2.3	0	0	-16.1	-2.8
0	"Macc_02"	1947.9	1.5	250	95.2	-76.8	-2.1	-3.6	0	0	-8.6	4.1
0	"Macc_02"	1947.9	1.5	500	112.5	-76.8	-4.6	-0.7	0	0	-3.2	27.2
0	"Macc_02"	1947.9	1.5	1000	109	-76.8	-8	2.5	0	0	0	26.7
0	"Macc_02"	1947.9	1.5	2000	99.1	-76.8	-16.8	2.9	0	0	1.2	9.7
0	"Macc_02"	1947.9	1.5	4000	94.6	-76.8	-49.4	2.9	0	0	1	-27.7
0	"Macc_02"	1947.9	1.5	8000	82.8	-76.8	-174.7	2.9	0	0	-1.1	-166.9
0	"Macc_03"	3748.5	1.5	63	86.2	-82.5	-0.4	5.9	0	0	-26.2	-16.9
0	"Macc_03"	3748.5	1.5	125	93	-82.5	-1.4	-2.2	0	0	-16.1	-9.1
0	"Macc_03"	3748.5	1.5	250	95.2	-82.5	-4.1	-3.6	0	0	-8.6	-3.6
0	"Macc_03"	3748.5	1.5	500	106.5	-82.5	-8.9	-0.6	0	0	-3.2	11.2
0	"Macc_03"	3748.5	1.5	1000	99.5	-82.5	-15.5	2.6	0	0	0	4.1
0	"Macc_03"	3748.5	1.5	2000	99.1	-82.5	-32.3	3	0	0	1.2	-11.5
0	"Macc_03"	3748.5	1.5	4000	94.6	-82.5	-95.1	3	0	0	1	-79
0	"Macc_03"	3748.5	1.5	8000	82.8	-82.5	-336.2	3	0	0	-1.1	-334
0	"Macc_04"	4976	1.5	63	86.2	-84.9	-0.5	5.9	0	0	-26.2	-19.5
0	"Macc_04"	4976	1.5	125	93	-84.9	-1.8	-2.2	0	0	-16.1	-12
0	"Macc_04"	4976	1.5	250	95.2	-84.9	-5.5	-3.5	0	0	-8.6	-7.4
0	"Macc_04"	4976	1.5	500	106.5	-84.9	-11.9	-0.6	0	0	-3.2	5.9
0	"Macc_04"	4976	1.5	1000	99.5	-84.9	-20.5	2.6	0	0	0	-3.4
0	"Macc_04"	4976	1.5	2000	99.1	-84.9	-42.8	3	0	0	1.2	-24.5
0	"Macc_04"	4976	1.5	4000	94.6	-84.9	-126.3	3	0	0	1	-112.6
0	"Macc_04"	4976	1.5	8000	82.8	-84.9	-446.3	3	0	0	-1.1	-446.5
"r31"	"Macc_01"	833.8	1.5	63	86.2	-69.4	-0.1	5.6	0	0	-26.2	-3.9
0	"Macc_01"	833.8	1.5	125	93	-69.4	-0.3	-1.7	0	0	-16.1	5.4
0	"Macc_01"	833.8	1.5	250	95.2	-69.4	-0.9	-3.7	0	0	-8.6	12.6
0	"Macc_01"	833.8	1.5	500	106.5	-69.4	-2	-0.8	0	0	-3.2	31.1
0	"Macc_01"	833.8	1.5	1000	99.5	-69.4	-3.4	2.4	0	0	0	29
0	"Macc_01"	833.8	1.5	2000	99.1	-69.4	-7.2	2.8	0	0	1.2	26.5
0	"Macc_01"	833.8	1.5	4000	94.6	-69.4	-21.2	2.8	0	0	1	7.8
0	"Macc_01"	833.8	1.5	8000	82.8	-69.4	-74.8	2.8	0	0	-1.1	-59.7
0	"Macc_02"	1807.2	1.5	63	86.2	-76.1	-0.2	5.8	0	0	-26.2	-10.5
0	"Macc_02"	1807.2	1.5	125	93	-76.1	-0.7	-2.3	0	0	-16.1	-2.1
0	"Macc_02"	1807.2	1.5	250	95.2	-76.1	-2	-3.6	0	0	-8.6	4.9
0	"Macc_02"	1807.2	1.5	500	112.5	-76.1	-4.3	-0.7	0	0	-3.2	28.2
0	"Macc_02"	1807.2	1.5	1000	109	-76.1	-7.5	2.5	0	0	0	27.9
0	"Macc_02"	1807.2	1.5	2000	99.1	-76.1	-15.6	2.9	0	0	1.2	11.5
0	"Macc_02"	1807.2	1.5	4000	94.6	-76.1	-45.9	2.9	0	0	1	-23.5
0	"Macc_02"	1807.2	1.5	8000	82.8	-76.1	-162.1	2.9	0	0	-1.1	-153.6
0	"Macc_03"	3637.1	1.5	63	86.2	-82.2	-0.4	5.9	0	0	-26.2	-16.7
0	"Macc_03"	3637.1	1.5	125	93	-82.2	-1.3	-2.2	0	0	-16.1	-8.8
0	"Macc_03"	3637.1	1.5	250	95.2	-82.2	-4	-3.6	0	0	-8.6	-3.2
0	"Macc_03"	3637.1	1.5	500	106.5	-82.2	-8.7	-0.6	0	0	-3.2	11.8
0	"Macc_03"	3637.1	1.5	1000	99.5	-82.2	-15	2.6	0	0	0	4.8
0	"Macc_03"	3637.1	1.5	2000	99.1	-82.2	-31.3	3	0	0	1.2	-10.3
0	"Macc_03"	3637.1	1.5	4000	94.6	-82.2	-92.3	3	0	0	1	-75.9
0	"Macc_03"	3637.1	1.5	8000	82.8	-82.2	-326.2	3	0	0	-1.1	-323.7
0	"Macc_04"	4904.7	1.5	63	86.2	-84.8	-0.5	5.9	0	0	-26.2	-19.4
0	"Macc_04"	4904.7	1.5	125	93	-84.8	-1.8	-2.2	0	0	-16.1	-11.9
0	"Macc_04"	4904.7	1.5	250	95.2	-84.8	-5.4	-3.5	0	0	-8.6	-7.2
0	"Macc_04"	4904.7	1.5	500	106.5	-84.8	-11.7	-0.6	0	0	-3.2	6.2
0	"Macc_04"	4904.7	1.5	1000	99.5	-84.8	-20.3	2.6	0	0	0	-3
0	"Macc_04"	4904.7	1.5	2000	99.1	-84.8	-42.2	3	0	0	1.2	-23.8
0	"Macc_04"	4904.7	1.5	4000	94.6	-84.8	-124.4	3	0	0	1	-110.7
0	"Macc_04"	4904.7	1.5	8000	82.8	-84.8	-439.9	3	0	0	-1.1	-440
"r32"	"Macc_01"	883.5	1.5	63	86.2	-69.9	-0.1	5.6	0	0	-26.2	-4.4
0	"Macc_01"	883.5	1.5	125	93	-69.9	-0.3	-1.9	0	0	-16.1	4.8
0	"Macc_01"	883.5	1.5	250	95.2	-69.9	-1	-3.7	0	0	-8.6	12
0	"Macc_01"	883.5	1.5	500	106.5	-69.9	-2.1	-0.8	0	0	-3.2	30.5
0	"Macc_01"	883.5	1.5	1000	99.5	-69.9	-3.6	2.4	0	0	0	28.4
0	"Macc_01"	883.5	1.5	2000	99.1	-69.9	-7.6	2.8	0	0	1.2	25.6
0	"Macc_01"	883.5	1.5	4000	94.6	-69.9	-22.4	2.8	0	0	1	6.1
0	"Macc_01"	883.5	1.5	8000	82.8	-69.9	-79.2	2.8	0	0	-1.1	-64.6
0	"Macc_02"	1785.7	1.5	63	86.2	-76	-0.2	5.8	0	0	-26.2	-10.4
0	"Macc_02"	1785.7	1.5	125	93	-76	-0.6	-2.3	0	0	-16.1	-2
0	"Macc_02"	1785.7	1.5	250	95.2	-76	-2	-3.6	0	0	-8.6	5
0	"Macc_02"	1785.7	1.5	500	112.5	-76	-4.3	-0.7	0	0	-3.2	28.3
0	"Macc_02"	1785.7	1.5	1000	109	-76	-7.4	2.5	0	0	0	28.1
0	"Macc_02"	1785.7	1.5	2000	99.1	-76	-15.4	2.9	0	0	1.2	11.8
0	"Macc_02"	1785.7	1.5	4000	94.6	-76	-45.3	2.9	0	0	1	-22.8
0	"Macc_02"	1785.7	1.5	8000	82.8	-76	-160.1	2.9	0	0	-1.1	-151.6
0	"Macc_03"	3471.2	1.5	63	86.2	-81.8	-0.3	5.9	0	0	-26.2	-16.2
0	"Macc_03"	3471.2	1.5	125	93	-81.8	-1.3	-2.2	0	0	-16.1	-8.4
0	"Macc_03"	3471.2	1.5	250	95.2	-81.8	-3.8	-3.6	0	0	-8.6	-2.6
0	"Macc_03"	3471.2	1.5	500	106.5	-81.8	-8.3	-0.6	0	0	-3.2	12.6
0	"Macc_03"	3471.2	1.5	1000	99.5	-81.8	-14.3	2.6	0	0	0	5.9
0	"Macc_03"	3471.2	1.5	2000	99.1	-81.8	-29.9	3	0	0	1.2	-8.4

0	"Macc_03"	3471.2	1.5	4000	94.6	-81.8	-88.1	3	0	0	1	-71.3
0	"Macc_03"	3471.2	1.5	8000	82.8	-81.8	-311.3	3	0	0	-1.1	-308.5
0	"Macc_04"	4640.8	1.5	63	86.2	-84.3	-0.5	5.9	0	0	-26.2	-18.9
0	"Macc_04"	4640.8	1.5	125	93	-84.3	-1.7	-2.2	0	0	-16.1	-11.3
0	"Macc_04"	4640.8	1.5	250	95.2	-84.3	-5.1	-3.5	0	0	-8.6	-6.4
0	"Macc_04"	4640.8	1.5	500	106.5	-84.3	-11.1	-0.6	0	0	-3.2	7.3
0	"Macc_04"	4640.8	1.5	1000	99.5	-84.3	-19.2	2.6	0	0	0	-1.4
0	"Macc_04"	4640.8	1.5	2000	99.1	-84.3	-39.9	3	0	0	1.2	-21
0	"Macc_04"	4640.8	1.5	4000	94.6	-84.3	-117.7	3	0	0	1	-103.5
0	"Macc_04"	4640.8	1.5	8000	82.8	-84.3	-416.2	3	0	0	-1.1	-415.9
"r33"	"Macc_01"	929.8	1.5	63	86.2	-70.4	-0.1	5.7	0	0	-26.2	-4.8
0	"Macc_01"	929.8	1.5	125	93	-70.4	-0.3	-2	0	0	-16.1	4.2
0	"Macc_01"	929.8	1.5	250	95.2	-70.4	-1	-3.7	0	0	-8.6	11.5
0	"Macc_01"	929.8	1.5	500	106.5	-70.4	-2.2	-0.8	0	0	-3.2	29.9
0	"Macc_01"	929.8	1.5	1000	99.5	-70.4	-3.8	2.4	0	0	0	27.7
0	"Macc_01"	929.8	1.5	2000	99.1	-70.4	-8	2.8	0	0	1.2	24.8
0	"Macc_01"	929.8	1.5	4000	94.6	-70.4	-23.6	2.8	0	0	1	4.5
0	"Macc_01"	929.8	1.5	8000	82.8	-70.4	-83.4	2.8	0	0	-1.1	-69.2
0	"Macc_02"	1807.6	1.5	63	86.2	-76.1	-0.2	5.8	0	0	-26.2	-10.5
0	"Macc_02"	1807.6	1.5	125	93	-76.1	-0.7	-2.3	0	0	-16.1	-2.2
0	"Macc_02"	1807.6	1.5	250	95.2	-76.1	-2	-3.6	0	0	-8.6	4.9
0	"Macc_02"	1807.6	1.5	500	112.5	-76.1	-4.3	-0.7	0	0	-3.2	28.2
0	"Macc_02"	1807.6	1.5	1000	109	-76.1	-7.5	2.5	0	0	0	27.9
0	"Macc_02"	1807.6	1.5	2000	99.1	-76.1	-15.6	2.9	0	0	1.2	11.5
0	"Macc_02"	1807.6	1.5	4000	94.6	-76.1	-45.9	2.9	0	0	1	-23.5
0	"Macc_02"	1807.6	1.5	8000	82.8	-76.1	-162.1	2.9	0	0	-1.1	-153.6
0	"Macc_03"	3452.3	1.5	63	86.2	-81.8	-0.3	5.9	0	0	-26.2	-16.2
0	"Macc_03"	3452.3	1.5	125	93	-81.8	-1.2	-2.2	0	0	-16.1	-8.3
0	"Macc_03"	3452.3	1.5	250	95.2	-81.8	-3.8	-3.6	0	0	-8.6	-2.5
0	"Macc_03"	3452.3	1.5	500	106.5	-81.8	-8.2	-0.6	0	0	-3.2	12.7
0	"Macc_03"	3452.3	1.5	1000	99.5	-81.8	-14.3	2.6	0	0	0	6
0	"Macc_03"	3452.3	1.5	2000	99.1	-81.8	-29.7	3	0	0	1.2	-8.2
0	"Macc_03"	3452.3	1.5	4000	94.6	-81.8	-87.6	3	0	0	1	-70.8
0	"Macc_03"	3452.3	1.5	8000	82.8	-81.8	-309.6	3	0	0	-1.1	-306.7
0	"Macc_04"	4593	1.5	63	86.2	-84.2	-0.5	5.9	0	0	-26.2	-18.8
0	"Macc_04"	4593	1.5	125	93	-84.2	-1.7	-2.2	0	0	-16.1	-11.2
0	"Macc_04"	4593	1.5	250	95.2	-84.2	-5.1	-3.5	0	0	-8.6	-6.3
0	"Macc_04"	4593	1.5	500	106.5	-84.2	-11	-0.6	0	0	-3.2	7.5
0	"Macc_04"	4593	1.5	1000	99.5	-84.2	-19	2.6	0	0	0	-1.1
0	"Macc_04"	4593	1.5	2000	99.1	-84.2	-39.5	3	0	0	1.2	-20.5
0	"Macc_04"	4593	1.5	4000	94.6	-84.2	-116.5	3	0	0	1	-102.2
0	"Macc_04"	4593	1.5	8000	82.8	-84.2	-411.9	3	0	0	-1.1	-411.5
"r34"	"Macc_01"	1113.2	1.5	63	86.2	-71.9	-0.1	5.7	0	0	-26.2	-6.3
0	"Macc_01"	1113.2	1.5	125	93	-71.9	-0.4	-2.2	0	0	-16.1	2.4
0	"Macc_01"	1113.2	1.5	250	95.2	-71.9	-1.2	-3.7	0	0	-8.6	9.8
0	"Macc_01"	1113.2	1.5	500	106.5	-71.9	-2.7	-0.7	0	0	-3.2	28
0	"Macc_01"	1113.2	1.5	1000	99.5	-71.9	-4.6	2.5	0	0	0	25.4
0	"Macc_01"	1113.2	1.5	2000	99.1	-71.9	-9.6	2.9	0	0	1.2	21.6
0	"Macc_01"	1113.2	1.5	4000	94.6	-71.9	-28.2	2.9	0	0	1	-1.7
0	"Macc_01"	1113.2	1.5	8000	82.8	-71.9	-99.8	2.9	0	0	-1.1	-87.2
0	"Macc_02"	2089.8	1.5	63	86.2	-77.4	-0.2	5.8	0	0	-26.2	-11.8
0	"Macc_02"	2089.8	1.5	125	93	-77.4	-0.8	-2.2	0	0	-16.1	-3.5
0	"Macc_02"	2089.8	1.5	250	95.2	-77.4	-2.3	-3.6	0	0	-8.6	3.3
0	"Macc_02"	2089.8	1.5	500	112.5	-77.4	-5	-0.7	0	0	-3.2	26.2
0	"Macc_02"	2089.8	1.5	1000	109	-77.4	-8.6	2.5	0	0	0	25.5
0	"Macc_02"	2089.8	1.5	2000	99.1	-77.4	-18	2.9	0	0	1.2	7.8
0	"Macc_02"	2089.8	1.5	4000	94.6	-77.4	-53	2.9	0	0	1	-31.9
0	"Macc_02"	2089.8	1.5	8000	82.8	-77.4	-187.4	2.9	0	0	-1.1	-180.2
0	"Macc_03"	3913.8	1.5	63	86.2	-82.9	-0.4	5.9	0	0	-26.2	-17.3
0	"Macc_03"	3913.8	1.5	125	93	-82.9	-1.4	-2.2	0	0	-16.1	-9.6
0	"Macc_03"	3913.8	1.5	250	95.2	-82.9	-4.3	-3.6	0	0	-8.6	-4.1
0	"Macc_03"	3913.8	1.5	500	106.5	-82.9	-9.3	-0.6	0	0	-3.2	10.5
0	"Macc_03"	3913.8	1.5	1000	99.5	-82.9	-16.2	2.6	0	0	0	3
0	"Macc_03"	3913.8	1.5	2000	99.1	-82.9	-33.7	3	0	0	1.2	-13.3
0	"Macc_03"	3913.8	1.5	4000	94.6	-82.9	-99.3	3	0	0	1	-83.6
0	"Macc_03"	3913.8	1.5	8000	82.8	-82.9	-351	3	0	0	-1.1	-349.2
0	"Macc_04"	5144	1.5	63	86.2	-85.2	-0.5	5.9	0	0	-26.2	-19.8
0	"Macc_04"	5144	1.5	125	93	-85.2	-1.9	-2.2	0	0	-16.1	-12.4
0	"Macc_04"	5144	1.5	250	95.2	-85.2	-5.7	-3.5	0	0	-8.6	-7.8
0	"Macc_04"	5144	1.5	500	106.5	-85.2	-12.3	-0.6	0	0	-3.2	5.2
0	"Macc_04"	5144	1.5	1000	99.5	-85.2	-21.2	2.6	0	0	0	-4.4
0	"Macc_04"	5144	1.5	2000	99.1	-85.2	-44.3	3	0	0	1.2	-26.2
0	"Macc_04"	5144	1.5	4000	94.6	-85.2	-130.5	3	0	0	1	-117.2
0	"Macc_04"	5144	1.5	8000	82.8	-85.2	-461.3	3	0	0	-1.1	-461.9
"r35"	"Macc_01"	1613.9	1.5	63	86.2	-75.2	-0.2	5.8	0	0	-26.2	-9.5
0	"Macc_01"	1613.9	1.5	125	93	-75.2	-0.6	-2.3	0	0	-16.1	-1.1
0	"Macc_01"	1613.9	1.5	250	95.2	-75.2	-1.8	-3.6	0	0	-8.6	6.1
0	"Macc_01"	1613.9	1.5	500	106.5	-75.2	-3.8	-0.7	0	0	-3.2	23.6
0	"Macc_01"	1613.9	1.5	1000	99.5	-75.2	-6.7	2.5	0	0	0	20.2
0	"Macc_01"	1613.9	1.5	2000	99.1	-75.2	-13.9	2.9	0	0	1.2	14.2
0	"Macc_01"	1613.9	1.5	4000	94.6	-75.2	-40.9	2.9	0	0	1	-17.6
0	"Macc_01"	1613.9	1.5	8000	82.8	-75.2	-144.7	2.9	0	0	-1.1	-135.3
0	"Macc_02"	2586	1.5	63	86.2	-79.3	-0.3	5.9	0	0	-26.2	-13.6
0	"Macc_02"	2586	1.5	125	93	-79.3	-0.9	-2.2	0	0	-16.1	-5.5
0	"Macc_02"	2586	1.5	250	95.2	-79.3	-2.9	-3.6	0	0	-8.6	0.9
0	"Macc_02"	2586	1.5	500	112.5	-79.3	-6.2	-0.7	0	0	-3.2	23.2
0	"Macc_02"	2586	1.5	1000	109	-79.3	-10.7	2.5	0	0	0	21.6
0	"Macc_02"	2586	1.5	2000	99.1	-79.3	-22.3	2.9	0	0	1.2	1.7
0	"Macc_02"	2586	1.5	4000	94.6	-79.3	-65.6	2.9	0	0	1	-46.3
0	"Macc_02"	2586	1.5	8000	82.8	-79.3	-231.9	2.9	0	0	-1.1	-226.5
0	"Macc_03"	4353.3	1.5	63	86.2	-83.8	-0.4	5.9	0	0	-26.2	-18.3
0	"Macc_03"	4353.3	1.5	125	93	-83.8	-1.6	-2.2	0	0	-16.1	-10.7
0	"Macc_03"	4353.3	1.5	250	95.2	-83.8	-4.8	-3.5	0	0	-8.6	-5.5
0	"Macc_03"	4353.3	1.5	500	106.5	-83.8	-10.4	-0.6	0	0	-3.2	8.5
0	"Macc_03"	4353.3	1.5	1000	99.5	-83.8	-18	2.6	0	0	0	0.3
0	"Macc_03"	4353.3	1.5	2000	99.1	-83.8	-37.5	3	0	0	1.2	-18
0	"Macc_03"	4353.3	1.5	4000	94.6	-83.8	-110.5	3	0	0	1	-95.7

0	"Macc_03"	4353.3	1.5	8000	82.8	-83.8	-390.4	3	0	0	-1.1	-389.5
0	"Macc_04"	5482.2	1.5	63	86.2	-85.8	-0.5	5.9	0	0	-26.2	-20.4
0	"Macc_04"	5482.2	1.5	125	93	-85.8	-2	-2.2	0	0	-16.1	-13.1
0	"Macc_04"	5482.2	1.5	250	95.2	-85.8	-6	-3.5	0	0	-8.6	-8.8
0	"Macc_04"	5482.2	1.5	500	106.5	-85.8	-13.1	-0.6	0	0	-3.2	3.8
0	"Macc_04"	5482.2	1.5	1000	99.5	-85.8	-22.6	2.6	0	0	0	-6.3
0	"Macc_04"	5482.2	1.5	2000	99.1	-85.8	-47.2	3	0	0	1.2	-29.7
0	"Macc_04"	5482.2	1.5	4000	94.6	-85.8	-139.1	3	0	0	1	-126.3
0	"Macc_04"	5482.2	1.5	8000	82.8	-85.8	-491.7	3	0	0	-1.1	-492.8
"r36"	"Macc_01"	946.6	1.5	63	86.2	-70.5	-0.1	5.7	0	0	-26.2	-4.9
0	"Macc_01"	946.6	1.5	125	93	-70.5	-0.3	-2	0	0	-16.1	4
0	"Macc_01"	946.6	1.5	250	95.2	-70.5	-1	-3.7	0	0	-8.6	11.4
0	"Macc_01"	946.6	1.5	500	106.5	-70.5	-2.3	-0.8	0	0	-3.2	29.8
0	"Macc_01"	946.6	1.5	1000	99.5	-70.5	-3.9	2.4	0	0	0	27.5
0	"Macc_01"	946.6	1.5	2000	99.1	-70.5	-8.1	2.8	0	0	1.2	24.5
0	"Macc_01"	946.6	1.5	4000	94.6	-70.5	-24	2.8	0	0	1	3.9
0	"Macc_01"	946.6	1.5	8000	82.8	-70.5	-84.9	2.8	0	0	-1.1	-70.9
0	"Macc_02"	1850.7	1.5	63	86.2	-76.3	-0.2	5.8	0	0	-26.2	-10.7
0	"Macc_02"	1850.7	1.5	125	93	-76.3	-0.7	-2.3	0	0	-16.1	-2.4
0	"Macc_02"	1850.7	1.5	250	95.2	-76.3	-2	-3.6	0	0	-8.6	4.6
0	"Macc_02"	1850.7	1.5	500	112.5	-76.3	-4.4	-0.7	0	0	-3.2	27.9
0	"Macc_02"	1850.7	1.5	1000	109	-76.3	-7.6	2.5	0	0	0	27.5
0	"Macc_02"	1850.7	1.5	2000	99.1	-76.3	-15.9	2.9	0	0	1.2	10.9
0	"Macc_02"	1850.7	1.5	4000	94.6	-76.3	-47	2.9	0	0	1	-24.8
0	"Macc_02"	1850.7	1.5	8000	82.8	-76.3	-166	2.9	0	0	-1.1	-157.7
0	"Macc_03"	3527.6	1.5	63	86.2	-81.9	-0.3	5.9	0	0	-26.2	-16.4
0	"Macc_03"	3527.6	1.5	125	93	-81.9	-1.3	-2.2	0	0	-16.1	-8.5
0	"Macc_03"	3527.6	1.5	250	95.2	-81.9	-3.9	-3.6	0	0	-8.6	-2.8
0	"Macc_03"	3527.6	1.5	500	106.5	-81.9	-8.4	-0.6	0	0	-3.2	12.3
0	"Macc_03"	3527.6	1.5	1000	99.5	-81.9	-14.6	2.6	0	0	0	5.5
0	"Macc_03"	3527.6	1.5	2000	99.1	-81.9	-30.4	3	0	0	1.2	-9.1
0	"Macc_03"	3527.6	1.5	4000	94.6	-81.9	-89.5	3	0	0	1	-72.9
0	"Macc_03"	3527.6	1.5	8000	82.8	-81.9	-316.4	3	0	0	-1.1	-313.7
0	"Macc_04"	4681.1	1.5	63	86.2	-84.4	-0.5	5.9	0	0	-26.2	-18.9
0	"Macc_04"	4681.1	1.5	125	93	-84.4	-1.7	-2.2	0	0	-16.1	-11.4
0	"Macc_04"	4681.1	1.5	250	95.2	-84.4	-5.2	-3.5	0	0	-8.6	-6.5
0	"Macc_04"	4681.1	1.5	500	106.5	-84.4	-11.2	-0.6	0	0	-3.2	7.1
0	"Macc_04"	4681.1	1.5	1000	99.5	-84.4	-19.3	2.6	0	0	0	-1.7
0	"Macc_04"	4681.1	1.5	2000	99.1	-84.4	-40.3	3	0	0	1.2	-21.4
0	"Macc_04"	4681.1	1.5	4000	94.6	-84.4	-118.8	3	0	0	1	-104.6
0	"Macc_04"	4681.1	1.5	8000	82.8	-84.4	-419.8	3	0	0	-1.1	-419.6
"r37"	"Macc_01"	1055	1.5	63	86.2	-71.5	-0.1	5.7	0	0	-26.2	-5.9
0	"Macc_01"	1055	1.5	125	93	-71.5	-0.4	-2.1	0	0	-16.1	2.9
0	"Macc_01"	1055	1.5	250	95.2	-71.5	-1.2	-3.7	0	0	-8.6	10.3
0	"Macc_01"	1055	1.5	500	106.5	-71.5	-2.5	-0.7	0	0	-3.2	28.6
0	"Macc_01"	1055	1.5	1000	99.5	-71.5	-4.4	2.5	0	0	0	26.1
0	"Macc_01"	1055	1.5	2000	99.1	-71.5	-9.1	2.9	0	0	1.2	22.6
0	"Macc_01"	1055	1.5	4000	94.6	-71.5	-26.8	2.9	0	0	1	0.2
0	"Macc_01"	1055	1.5	8000	82.8	-71.5	-94.6	2.9	0	0	-1.1	-81.5
0	"Macc_02"	1825.6	1.5	63	86.2	-76.2	-0.2	5.8	0	0	-26.2	-10.6
0	"Macc_02"	1825.6	1.5	125	93	-76.2	-0.7	-2.3	0	0	-16.1	-2.2
0	"Macc_02"	1825.6	1.5	250	95.2	-76.2	-2	-3.6	0	0	-8.6	4.8
0	"Macc_02"	1825.6	1.5	500	112.5	-76.2	-4.4	-0.7	0	0	-3.2	28
0	"Macc_02"	1825.6	1.5	1000	109	-76.2	-7.5	2.5	0	0	0	27.7
0	"Macc_02"	1825.6	1.5	2000	99.1	-76.2	-15.7	2.9	0	0	1.2	11.3
0	"Macc_02"	1825.6	1.5	4000	94.6	-76.2	-46.3	2.9	0	0	1	-24
0	"Macc_02"	1825.6	1.5	8000	82.8	-76.2	-163.7	2.9	0	0	-1.1	-155.3
0	"Macc_03"	3319.8	1.5	63	86.2	-81.4	-0.3	5.9	0	0	-26.2	-15.8
0	"Macc_03"	3319.8	1.5	125	93	-81.4	-1.2	-2.2	0	0	-16.1	-7.9
0	"Macc_03"	3319.8	1.5	250	95.2	-81.4	-3.7	-3.6	0	0	-8.6	-2
0	"Macc_03"	3319.8	1.5	500	106.5	-81.4	-7.9	-0.6	0	0	-3.2	13.3
0	"Macc_03"	3319.8	1.5	1000	99.5	-81.4	-13.7	2.6	0	0	0	6.9
0	"Macc_03"	3319.8	1.5	2000	99.1	-81.4	-28.6	3	0	0	1.2	-6.7
0	"Macc_03"	3319.8	1.5	4000	94.6	-81.4	-84.2	3	0	0	1	-67.1
0	"Macc_03"	3319.8	1.5	8000	82.8	-81.4	-297.7	3	0	0	-1.1	-294.5
0	"Macc_04"	4372.2	1.5	63	86.2	-83.8	-0.4	5.9	0	0	-26.2	-18.3
0	"Macc_04"	4372.2	1.5	125	93	-83.8	-1.6	-2.2	0	0	-16.1	-10.7
0	"Macc_04"	4372.2	1.5	250	95.2	-83.8	-4.8	-3.5	0	0	-8.6	-5.6
0	"Macc_04"	4372.2	1.5	500	106.5	-83.8	-10.4	-0.6	0	0	-3.2	8.4
0	"Macc_04"	4372.2	1.5	1000	99.5	-83.8	-18.1	2.6	0	0	0	0.2
0	"Macc_04"	4372.2	1.5	2000	99.1	-83.8	-37.6	3	0	0	1.2	-18.2
0	"Macc_04"	4372.2	1.5	4000	94.6	-83.8	-110.9	3	0	0	1	-96.2
0	"Macc_04"	4372.2	1.5	8000	82.8	-83.8	-392.1	3	0	0	-1.1	-391.3
"r38"	"Macc_01"	1450	1.5	63	86.2	-74.2	-0.1	5.8	0	0	-26.2	-8.6
0	"Macc_01"	1450	1.5	125	93	-74.2	-0.5	-2.3	0	0	-16.1	-0.1
0	"Macc_01"	1450	1.5	250	95.2	-74.2	-1.6	-3.6	0	0	-8.6	7.2
0	"Macc_01"	1450	1.5	500	106.5	-74.2	-3.5	-0.7	0	0	-3.2	24.9
0	"Macc_01"	1450	1.5	1000	99.5	-74.2	-6	2.5	0	0	0	21.8
0	"Macc_01"	1450	1.5	2000	99.1	-74.2	-12.5	2.9	0	0	1.2	16.5
0	"Macc_01"	1450	1.5	4000	94.6	-74.2	-36.8	2.9	0	0	1	-12.5
0	"Macc_01"	1450	1.5	8000	82.8	-74.2	-130	2.9	0	0	-1.1	-119.7
0	"Macc_02"	2013	1.5	63	86.2	-77.1	-0.2	5.8	0	0	-26.2	-11.4
0	"Macc_02"	2013	1.5	125	93	-77.1	-0.7	-2.2	0	0	-16.1	-3.2
0	"Macc_02"	2013	1.5	250	95.2	-77.1	-2.2	-3.6	0	0	-8.6	3.7
0	"Macc_02"	2013	1.5	500	112.5	-77.1	-4.8	-0.7	0	0	-3.2	26.7
0	"Macc_02"	2013	1.5	1000	109	-77.1	-8.3	2.5	0	0	0	26.1
0	"Macc_02"	2013	1.5	2000	99.1	-77.1	-17.3	2.9	0	0	1.2	8.8
0	"Macc_02"	2013	1.5	4000	94.6	-77.1	-51.1	2.9	0	0	1	-29.6
0	"Macc_02"	2013	1.5	8000	82.8	-77.1	-180.5	2.9	0	0	-1.1	-173
0	"Macc_03"	3164.5	1.5	63	86.2	-81	-0.3	5.9	0	0	-26.2	-15.4
0	"Macc_03"	3164.5	1.5	125	93	-81	-1.1	-2.2	0	0	-16.1	-7.5
0	"Macc_03"	3164.5	1.5	250	95.2	-81	-3.5	-3.6	0	0	-8.6	-1.5
0	"Macc_03"	3164.5	1.5	500	106.5	-81	-7.5	-0.6	0	0	-3.2	14.1
0	"Macc_03"	3164.5	1.5	1000	99.5	-81	-13.1	2.6	0	0	0	8
0	"Macc_03"	3164.5	1.5	2000	99.1	-81	-27.2	3	0	0	1.2	-5
0	"Macc_03"	3164.5	1.5	4000	94.6	-81	-80.3	3	0	0	1	-62.7
0	"Macc_03"	3164.5	1.5	8000	82.8	-81	-283.8	3	0	0	-1.1	-280.2

0	"Macc_04"	4005.1	1.5	63	86.2	-83.1	-0.4	5.9	0	0	-26.2	-17.5
0	"Macc_04"	4005.1	1.5	125	93	-83.1	-1.4	-2.2	0	0	-16.1	-9.8
0	"Macc_04"	4005.1	1.5	250	95.2	-83.1	-4.4	-3.6	0	0	-8.6	-4.4
0	"Macc_04"	4005.1	1.5	500	106.5	-83.1	-9.6	-0.6	0	0	-3.2	10.1
0	"Macc_04"	4005.1	1.5	1000	99.5	-83.1	-16.5	2.6	0	0	0	2.5
0	"Macc_04"	4005.1	1.5	2000	99.1	-83.1	-34.5	3	0	0	1.2	-14.3
0	"Macc_04"	4005.1	1.5	4000	94.6	-83.1	-101.6	3	0	0	1	-86.1
0	"Macc_04"	4005.1	1.5	8000	82.8	-83.1	-359.2	3	0	0	-1.1	-357.6
"r39"	"Macc_01"	1292.8	1.5	63	86.2	-73.2	-0.1	5.8	0	0	-26.2	-7.6
0	"Macc_01"	1292.8	1.5	125	93	-73.2	-0.5	-2.3	0	0	-16.1	0.9
0	"Macc_01"	1292.8	1.5	250	95.2	-73.2	-1.4	-3.6	0	0	-8.6	8.3
0	"Macc_01"	1292.8	1.5	500	106.5	-73.2	-3.1	-0.7	0	0	-3.2	26.3
0	"Macc_01"	1292.8	1.5	1000	99.5	-73.2	-5.3	2.5	0	0	0	23.4
0	"Macc_01"	1292.8	1.5	2000	99.1	-73.2	-11.1	2.9	0	0	1.2	18.8
0	"Macc_01"	1292.8	1.5	4000	94.6	-73.2	-32.8	2.9	0	0	1	-7.6
0	"Macc_01"	1292.8	1.5	8000	82.8	-73.2	-115.9	2.9	0	0	-1.1	-104.6
0	"Macc_02"	1799	1.5	63	86.2	-76.1	-0.2	5.8	0	0	-26.2	-10.5
0	"Macc_02"	1799	1.5	125	93	-76.1	-0.7	-2.3	0	0	-16.1	-2.1
0	"Macc_02"	1799	1.5	250	95.2	-76.1	-2	-3.6	0	0	-8.6	4.9
0	"Macc_02"	1799	1.5	500	112.5	-76.1	-4.3	-0.7	0	0	-3.2	28.2
0	"Macc_02"	1799	1.5	1000	109	-76.1	-7.4	2.5	0	0	0	28
0	"Macc_02"	1799	1.5	2000	99.1	-76.1	-15.5	2.9	0	0	1.2	11.6
0	"Macc_02"	1799	1.5	4000	94.6	-76.1	-45.6	2.9	0	0	1	-23.2
0	"Macc_02"	1799	1.5	8000	82.8	-76.1	-161.3	2.9	0	0	-1.1	-152.8
0	"Macc_03"	2965	1.5	63	86.2	-80.4	-0.3	5.9	0	0	-26.2	-14.8
0	"Macc_03"	2965	1.5	125	93	-80.4	-1.1	-2.2	0	0	-16.1	-6.8
0	"Macc_03"	2965	1.5	250	95.2	-80.4	-3.3	-3.6	0	0	-8.6	-0.7
0	"Macc_03"	2965	1.5	500	106.5	-80.4	-7.1	-0.7	0	0	-3.2	15.1
0	"Macc_03"	2965	1.5	1000	99.5	-80.4	-12.2	2.5	0	0	0	9.4
0	"Macc_03"	2965	1.5	2000	99.1	-80.4	-25.5	2.9	0	0	1.2	-2.7
0	"Macc_03"	2965	1.5	4000	94.6	-80.4	-75.2	2.9	0	0	1	-57.1
0	"Macc_03"	2965	1.5	8000	82.8	-80.4	-265.9	2.9	0	0	-1.1	-261.7
0	"Macc_04"	3875.9	1.5	63	86.2	-82.8	-0.4	5.9	0	0	-26.2	-17.2
0	"Macc_04"	3875.9	1.5	125	93	-82.8	-1.4	-2.2	0	0	-16.1	-9.5
0	"Macc_04"	3875.9	1.5	250	95.2	-82.8	-4.3	-3.6	0	0	-8.6	-4
0	"Macc_04"	3875.9	1.5	500	106.5	-82.8	-9.2	-0.6	0	0	-3.2	10.7
0	"Macc_04"	3875.9	1.5	1000	99.5	-82.8	-16	2.6	0	0	0	3.3
0	"Macc_04"	3875.9	1.5	2000	99.1	-82.8	-33.4	3	0	0	1.2	-12.9
0	"Macc_04"	3875.9	1.5	4000	94.6	-82.8	-98.3	3	0	0	1	-82.5
0	"Macc_04"	3875.9	1.5	8000	82.8	-82.8	-347.6	3	0	0	-1.1	-345.7
"r40"	"Macc_01"	1039.2	1.5	63	86.2	-71.3	-0.1	5.7	0	0	-26.2	-5.7
0	"Macc_01"	1039.2	1.5	125	93	-71.3	-0.4	-2.1	0	0	-16.1	3.1
0	"Macc_01"	1039.2	1.5	250	95.2	-71.3	-1.1	-3.7	0	0	-8.6	10.5
0	"Macc_01"	1039.2	1.5	500	106.5	-71.3	-2.5	-0.7	0	0	-3.2	28.7
0	"Macc_01"	1039.2	1.5	1000	99.5	-71.3	-4.3	2.5	0	0	0	26.3
0	"Macc_01"	1039.2	1.5	2000	99.1	-71.3	-8.9	2.8	0	0	1.2	22.9
0	"Macc_01"	1039.2	1.5	4000	94.6	-71.3	-26.4	2.8	0	0	1	0.7
0	"Macc_01"	1039.2	1.5	8000	82.8	-71.3	-93.2	2.8	0	0	-1.1	-80
0	"Macc_02"	1718.7	1.5	63	86.2	-75.7	-0.2	5.8	0	0	-26.2	-10.1
0	"Macc_02"	1718.7	1.5	125	93	-75.7	-0.6	-2.3	0	0	-16.1	-1.7
0	"Macc_02"	1718.7	1.5	250	95.2	-75.7	-1.9	-3.6	0	0	-8.6	5.4
0	"Macc_02"	1718.7	1.5	500	112.5	-75.7	-4.1	-0.7	0	0	-3.2	28.8
0	"Macc_02"	1718.7	1.5	1000	109	-75.7	-7.1	2.5	0	0	0	28.7
0	"Macc_02"	1718.7	1.5	2000	99.1	-75.7	-14.8	2.9	0	0	1.2	12.7
0	"Macc_02"	1718.7	1.5	4000	94.6	-75.7	-43.6	2.9	0	0	1	-20.8
0	"Macc_02"	1718.7	1.5	8000	82.8	-75.7	-154.1	2.9	0	0	-1.1	-145.2
0	"Macc_03"	3134.9	1.5	63	86.2	-80.9	-0.3	5.9	0	0	-26.2	-15.3
0	"Macc_03"	3134.9	1.5	125	93	-80.9	-1.1	-2.2	0	0	-16.1	-7.4
0	"Macc_03"	3134.9	1.5	250	95.2	-80.9	-3.5	-3.6	0	0	-8.6	-1.3
0	"Macc_03"	3134.9	1.5	500	106.5	-80.9	-7.5	-0.6	0	0	-3.2	14.3
0	"Macc_03"	3134.9	1.5	1000	99.5	-80.9	-12.9	2.6	0	0	0	8.2
0	"Macc_03"	3134.9	1.5	2000	99.1	-80.9	-27	2.9	0	0	1.2	-4.7
0	"Macc_03"	3134.9	1.5	4000	94.6	-80.9	-79.5	2.9	0	0	1	-61.9
0	"Macc_03"	3134.9	1.5	8000	82.8	-80.9	-281.1	2.9	0	0	-1.1	-277.4
0	"Macc_04"	4173.3	1.5	63	86.2	-83.4	-0.4	5.9	0	0	-26.2	-17.9
0	"Macc_04"	4173.3	1.5	125	93	-83.4	-1.5	-2.2	0	0	-16.1	-10.2
0	"Macc_04"	4173.3	1.5	250	95.2	-83.4	-4.6	-3.5	0	0	-8.6	-5
0	"Macc_04"	4173.3	1.5	500	106.5	-83.4	-10	-0.6	0	0	-3.2	9.3
0	"Macc_04"	4173.3	1.5	1000	99.5	-83.4	-17.2	2.6	0	0	0	1.4
0	"Macc_04"	4173.3	1.5	2000	99.1	-83.4	-35.9	3	0	0	1.2	-16.1
0	"Macc_04"	4173.3	1.5	4000	94.6	-83.4	-105.9	3	0	0	1	-90.7
0	"Macc_04"	4173.3	1.5	8000	82.8	-83.4	-374.3	3	0	0	-1.1	-373
"r41"	"Macc_01"	2300.3	1.5	63	86.2	-78.2	-0.2	5.9	0	0	-26.2	-12.6
0	"Macc_01"	2300.3	1.5	125	93	-78.2	-0.8	-2.2	0	0	-16.1	-4.4
0	"Macc_01"	2300.3	1.5	250	95.2	-78.2	-2.5	-3.6	0	0	-8.6	2.2
0	"Macc_01"	2300.3	1.5	500	106.5	-78.2	-5.5	-0.7	0	0	-3.2	18.9
0	"Macc_01"	2300.3	1.5	1000	99.5	-78.2	-9.5	2.5	0	0	0	14.3
0	"Macc_01"	2300.3	1.5	2000	99.1	-78.2	-19.8	2.9	0	0	1.2	5.2
0	"Macc_01"	2300.3	1.5	4000	94.6	-78.2	-58.4	2.9	0	0	1	-38.1
0	"Macc_01"	2300.3	1.5	8000	82.8	-78.2	-206.3	2.9	0	0	-1.1	-199.9
0	"Macc_02"	1385.1	1.5	63	86.2	-73.8	-0.1	5.8	0	0	-26.2	-8.2
0	"Macc_02"	1385.1	1.5	125	93	-73.8	-0.5	-2.3	0	0	-16.1	0.3
0	"Macc_02"	1385.1	1.5	250	95.2	-73.8	-1.5	-3.6	0	0	-8.6	7.6
0	"Macc_02"	1385.1	1.5	500	112.5	-73.8	-3.3	-0.7	0	0	-3.2	31.5
0	"Macc_02"	1385.1	1.5	1000	109	-73.8	-5.7	2.5	0	0	0	31.9
0	"Macc_02"	1385.1	1.5	2000	99.1	-73.8	-11.9	2.9	0	0	1.2	17.4
0	"Macc_02"	1385.1	1.5	4000	94.6	-73.8	-35.1	2.9	0	0	1	-10.5
0	"Macc_02"	1385.1	1.5	8000	82.8	-73.8	-124.2	2.9	0	0	-1.1	-113.5
0	"Macc_03"	726.8	1.5	63	86.2	-68.2	-0.1	5.6	0	0	-26.2	-2.7
0	"Macc_03"	726.8	1.5	125	93	-68.2	-0.3	-1.4	0	0	-16.1	7
0	"Macc_03"	726.8	1.5	250	95.2	-68.2	-0.8	-3.7	0	0	-8.6	13.8
0	"Macc_03"	726.8	1.5	500	106.5	-68.2	-1.7	-0.8	0	0	-3.2	32.5
0	"Macc_03"	726.8	1.5	1000	99.5	-68.2	-3	2.4	0	0	0	30.7
0	"Macc_03"	726.8	1.5	2000	99.1	-68.2	-6.3	2.8	0	0	1.2	28.6
0	"Macc_03"	726.8	1.5	4000	94.6	-68.2	-18.4	2.8	0	0	1	11.7
0	"Macc_03"	726.8	1.5	8000	82.8	-68.2	-65.2	2.8	0	0	-1.1	-48.9
0	"Macc_04"	2594.2	1.5	63	86.2	-79.3	-0.3	5.9	0	0	-26.2	-13.7

0	"Macc_04"	2594.2	1.5	125	93	-79.3	-0.9	-2.2	0	0	-16.1	-5.5
0	"Macc_04"	2594.2	1.5	250	95.2	-79.3	-2.9	-3.6	0	0	-8.6	0.9
0	"Macc_04"	2594.2	1.5	500	106.5	-79.3	-6.2	-0.7	0	0	-3.2	17.2
0	"Macc_04"	2594.2	1.5	1000	99.5	-79.3	-10.7	2.5	0	0	0	12
0	"Macc_04"	2594.2	1.5	2000	99.1	-79.3	-22.3	2.9	0	0	1.2	1.6
0	"Macc_04"	2594.2	1.5	4000	94.6	-79.3	-65.8	2.9	0	0	1	-46.6
0	"Macc_04"	2594.2	1.5	8000	82.8	-79.3	-232.7	2.9	0	0	-1.1	-227.3
"r42"	"Macc_01"	2479.7	1.5	63	86.2	-78.9	-0.2	5.9	0	0	-26.2	-13.3
0	"Macc_01"	2479.7	1.5	125	93	-78.9	-0.9	-2.2	0	0	-16.1	-5.1
0	"Macc_01"	2479.7	1.5	250	95.2	-78.9	-2.7	-3.6	0	0	-8.6	1.4
0	"Macc_01"	2479.7	1.5	500	106.5	-78.9	-5.9	-0.7	0	0	-3.2	17.8
0	"Macc_01"	2479.7	1.5	1000	99.5	-78.9	-10.2	2.5	0	0	0	12.9
0	"Macc_01"	2479.7	1.5	2000	99.1	-78.9	-21.3	2.9	0	0	1.2	3
0	"Macc_01"	2479.7	1.5	4000	94.6	-78.9	-62.9	2.9	0	0	1	-43.3
0	"Macc_01"	2479.7	1.5	8000	82.8	-78.9	-222.4	2.9	0	0	-1.1	-216.6
0	"Macc_02"	1937.3	1.5	63	86.2	-76.7	-0.2	5.8	0	0	-26.2	-11.1
0	"Macc_02"	1937.3	1.5	125	93	-76.7	-0.7	-2.3	0	0	-16.1	-2.8
0	"Macc_02"	1937.3	1.5	250	95.2	-76.7	-2.1	-3.6	0	0	-8.6	4.1
0	"Macc_02"	1937.3	1.5	500	112.5	-76.7	-4.6	-0.7	0	0	-3.2	27.3
0	"Macc_02"	1937.3	1.5	1000	109	-76.7	-8	2.5	0	0	0	26.8
0	"Macc_02"	1937.3	1.5	2000	99.1	-76.7	-16.7	2.9	0	0	1.2	9.8
0	"Macc_02"	1937.3	1.5	4000	94.6	-76.7	-49.2	2.9	0	0	1	-27.4
0	"Macc_02"	1937.3	1.5	8000	82.8	-76.7	-173.7	2.9	0	0	-1.1	-165.9
0	"Macc_03"	1110.2	1.5	63	86.2	-71.9	-0.1	5.7	0	0	-26.2	-6.3
0	"Macc_03"	1110.2	1.5	125	93	-71.9	-0.4	-2.2	0	0	-16.1	2.4
0	"Macc_03"	1110.2	1.5	250	95.2	-71.9	-1.2	-3.7	0	0	-8.6	9.8
0	"Macc_03"	1110.2	1.5	500	106.5	-71.9	-2.6	-0.7	0	0	-3.2	28
0	"Macc_03"	1110.2	1.5	1000	99.5	-71.9	-4.6	2.5	0	0	0	25.5
0	"Macc_03"	1110.2	1.5	2000	99.1	-71.9	-9.6	2.9	0	0	1.2	21.7
0	"Macc_03"	1110.2	1.5	4000	94.6	-71.9	-28.2	2.9	0	0	1	-1.6
0	"Macc_03"	1110.2	1.5	8000	82.8	-71.9	-99.6	2.9	0	0	-1.1	-86.9
0	"Macc_04"	1897	1.5	63	86.2	-76.6	-0.2	5.8	0	0	-26.2	-10.9
0	"Macc_04"	1897	1.5	125	93	-76.6	-0.7	-2.3	0	0	-16.1	-2.6
0	"Macc_04"	1897	1.5	250	95.2	-76.6	-2.1	-3.6	0	0	-8.6	4.4
0	"Macc_04"	1897	1.5	500	106.5	-76.6	-4.5	-0.7	0	0	-3.2	21.5
0	"Macc_04"	1897	1.5	1000	99.5	-76.6	-7.8	2.5	0	0	0	17.6
0	"Macc_04"	1897	1.5	2000	99.1	-76.6	-16.3	2.9	0	0	1.2	10.3
0	"Macc_04"	1897	1.5	4000	94.6	-76.6	-48.1	2.9	0	0	1	-26.2
0	"Macc_04"	1897	1.5	8000	82.8	-76.6	-170.1	2.9	0	0	-1.1	-162.1
"r43"	"Macc_01"	2771	1.5	63	86.2	-79.9	-0.3	5.9	0	0	-26.2	-14.2
0	"Macc_01"	2771	1.5	125	93	-79.9	-1	-2.2	0	0	-16.1	-6.2
0	"Macc_01"	2771	1.5	250	95.2	-79.9	-3.1	-3.6	0	0	-8.6	0.1
0	"Macc_01"	2771	1.5	500	106.5	-79.9	-6.6	-0.7	0	0	-3.2	16.2
0	"Macc_01"	2771	1.5	1000	99.5	-79.9	-11.4	2.5	0	0	0	10.7
0	"Macc_01"	2771	1.5	2000	99.1	-79.9	-23.9	2.9	0	0	1.2	-0.5
0	"Macc_01"	2771	1.5	4000	94.6	-79.9	-70.3	2.9	0	0	1	-51.6
0	"Macc_01"	2771	1.5	8000	82.8	-79.9	-248.5	2.9	0	0	-1.1	-243.7
0	"Macc_02"	2296.3	1.5	63	86.2	-78.2	-0.2	5.9	0	0	-26.2	-12.6
0	"Macc_02"	2296.3	1.5	125	93	-78.2	-0.8	-2.2	0	0	-16.1	-4.4
0	"Macc_02"	2296.3	1.5	250	95.2	-78.2	-2.5	-3.6	0	0	-8.6	2.3
0	"Macc_02"	2296.3	1.5	500	112.5	-78.2	-5.5	-0.7	0	0	-3.2	24.9
0	"Macc_02"	2296.3	1.5	1000	109	-78.2	-9.5	2.5	0	0	0	23.8
0	"Macc_02"	2296.3	1.5	2000	99.1	-78.2	-19.8	2.9	0	0	1.2	5.2
0	"Macc_02"	2296.3	1.5	4000	94.6	-78.2	-58.3	2.9	0	0	1	-38
0	"Macc_02"	2296.3	1.5	8000	82.8	-78.2	-205.9	2.9	0	0	-1.1	-199.5
0	"Macc_03"	1346.6	1.5	63	86.2	-73.6	-0.1	5.8	0	0	-26.2	-8
0	"Macc_03"	1346.6	1.5	125	93	-73.6	-0.5	-2.3	0	0	-16.1	0.6
0	"Macc_03"	1346.6	1.5	250	95.2	-73.6	-1.5	-3.6	0	0	-8.6	7.9
0	"Macc_03"	1346.6	1.5	500	106.5	-73.6	-3.2	-0.7	0	0	-3.2	25.8
0	"Macc_03"	1346.6	1.5	1000	99.5	-73.6	-5.6	2.5	0	0	0	22.8
0	"Macc_03"	1346.6	1.5	2000	99.1	-73.6	-11.6	2.9	0	0	1.2	18
0	"Macc_03"	1346.6	1.5	4000	94.6	-73.6	-34.2	2.9	0	0	1	-9.3
0	"Macc_03"	1346.6	1.5	8000	82.8	-73.6	-120.8	2.9	0	0	-1.1	-109.8
0	"Macc_04"	1661.3	1.5	63	86.2	-75.4	-0.2	5.8	0	0	-26.2	-9.8
0	"Macc_04"	1661.3	1.5	125	93	-75.4	-0.6	-2.3	0	0	-16.1	-1.4
0	"Macc_04"	1661.3	1.5	250	95.2	-75.4	-1.8	-3.6	0	0	-8.6	5.8
0	"Macc_04"	1661.3	1.5	500	106.5	-75.4	-4	-0.7	0	0	-3.2	23.2
0	"Macc_04"	1661.3	1.5	1000	99.5	-75.4	-6.9	2.5	0	0	0	19.7
0	"Macc_04"	1661.3	1.5	2000	99.1	-75.4	-14.3	2.9	0	0	1.2	13.5
0	"Macc_04"	1661.3	1.5	4000	94.6	-75.4	-42.2	2.9	0	0	1	-19.1
0	"Macc_04"	1661.3	1.5	8000	82.8	-75.4	-149	2.9	0	0	-1.1	-139.8
"r44"	"Macc_01"	1362.6	1.5	63	86.2	-73.7	-0.1	5.8	0	0	-26.2	-8.1
0	"Macc_01"	1362.6	1.5	125	93	-73.7	-0.5	-2.3	0	0	-16.1	0.5
0	"Macc_01"	1362.6	1.5	250	95.2	-73.7	-1.5	-3.6	0	0	-8.6	7.8
0	"Macc_01"	1362.6	1.5	500	106.5	-73.7	-3.2	-0.7	0	0	-3.2	25.6
0	"Macc_01"	1362.6	1.5	1000	99.5	-73.7	-5.6	2.5	0	0	0	22.7
0	"Macc_01"	1362.6	1.5	2000	99.1	-73.7	-11.7	2.9	0	0	1.2	17.8
0	"Macc_01"	1362.6	1.5	4000	94.6	-73.7	-34.6	2.9	0	0	1	-9.8
0	"Macc_01"	1362.6	1.5	8000	82.8	-73.7	-122.2	2.9	0	0	-1.1	-111.3
0	"Macc_02"	1938.7	1.5	63	86.2	-76.8	-0.2	5.8	0	0	-26.2	-11.1
0	"Macc_02"	1938.7	1.5	125	93	-76.8	-0.7	-2.3	0	0	-16.1	-2.8
0	"Macc_02"	1938.7	1.5	250	95.2	-76.8	-2.1	-3.6	0	0	-8.6	4.1
0	"Macc_02"	1938.7	1.5	500	112.5	-76.8	-4.6	-0.7	0	0	-3.2	27.2
0	"Macc_02"	1938.7	1.5	1000	109	-76.8	-8	2.5	0	0	0	26.8
0	"Macc_02"	1938.7	1.5	2000	99.1	-76.8	-16.7	2.9	0	0	1.2	9.8
0	"Macc_02"	1938.7	1.5	4000	94.6	-76.8	-49.2	2.9	0	0	1	-27.4
0	"Macc_02"	1938.7	1.5	8000	82.8	-76.8	-173.9	2.9	0	0	-1.1	-166
0	"Macc_03"	3137.3	1.5	63	86.2	-80.9	-0.3	5.9	0	0	-26.2	-15.3
0	"Macc_03"	3137.3	1.5	125	93	-80.9	-1.1	-2.2	0	0	-16.1	-7.4
0	"Macc_03"	3137.3	1.5	250	95.2	-80.9	-3.5	-3.6	0	0	-8.6	-1.4
0	"Macc_03"	3137.3	1.5	500	106.5	-80.9	-7.5	-0.6	0	0	-3.2	14.2
0	"Macc_03"	3137.3	1.5	1000	99.5	-80.9	-13	2.6	0	0	0	8.2
0	"Macc_03"	3137.3	1.5	2000	99.1	-80.9	-27	2.9	0	0	1.2	-4.7
0	"Macc_03"	3137.3	1.5	4000	94.6	-80.9	-79.6	2.9	0	0	1	-62
0	"Macc_03"	3137.3	1.5	8000	82.8	-80.9	-281.4	2.9	0	0	-1.1	-277.6
0	"Macc_04"	4020	1.5	63	86.2	-83.1	-0.4	5.9	0	0	-26.2	-17.6
0	"Macc_04"	4020	1.5	125	93	-83.1	-1.5	-2.2	0	0	-16.1	-9.8

0	"Macc_04"	4020	1.5	250	95.2	-83.1	-4.4	-3.6	0	0	-8.6	-4.5
0	"Macc_04"	4020	1.5	500	106.5	-83.1	-9.6	-0.6	0	0	-3.2	10
0	"Macc_04"	4020	1.5	1000	99.5	-83.1	-16.6	2.6	0	0	0	2.4
0	"Macc_04"	4020	1.5	2000	99.1	-83.1	-34.6	3	0	0	1.2	-14.4
0	"Macc_04"	4020	1.5	4000	94.6	-83.1	-102	3	0	0	1	-86.5
0	"Macc_04"	4020	1.5	8000	82.8	-83.1	-360.5	3	0	0	-1.1	-358.9

***	Objects	***	
Receivers	x	y	Height
"r01"	-5524	-737.6	1.5
"r02"	-4676	-567.1	1.5
"r03"	-3385	-503.6	1.5
"r04"	-3157.5	-433.1	1.5
"r05"	-2224	-1425.1	1.5
"r06"	-1962.5	-1084.6	1.5
"r07"	-472	-1995.6	1.5
"r08"	130	-2011.6	1.5
"r09"	306	-1823.6	1.5
"r10"	772	-1307.6	1.5
"r11"	360	-1089.6	1.5
"r12"	-1176	-227.6	1.5
"r13"	-1014	68.4	1.5
"r14"	-1087	248.4	1.5
"r15"	769	492.4	1.5
"r16"	517	828.4	1.5
"r17"	-179	1220.4	1.5
"r18"	-1553	1286.4	1.5
"r19"	-1741	1142.4	1.5
"r20"	-1653	998.4	1.5
"r21"	-2614	787.4	1.5
"r22"	-3138	1952.4	1.5
"r23"	-3293	1843.9	1.5
"r24"	-3296	2280.9	1.5
"r25"	-3974	934.9	1.5
"r26"	897	-1448.1	1.5
"r27"	365	-1970.1	1.5
"r28"	189	-2128.1	1.5
"r29"	92	-2215.1	1.5
"r30"	39	-2332.1	1.5
"r31"	31	-2182.1	1.5
"r32"	-307	-2274.1	1.5
"r33"	-381	-2312.1	1.5
"r34"	181	-2424.1	1.5
"r35"	301	-2914.1	1.5
"r36"	-295	-2338.1	1.5
"r37"	-661	-2360.1	1.5
"r38"	-1185	-2492.1	1.5
"r39"	-1189	-2270.1	1.5
"r40"	-827	-2250.1	1.5
"r41"	-1865	233.9	1.5
"r42"	-2637	-762.1	1.5
"r43"	-2973	-942.1	1.5
"r44"	-1123	-2430.1	1.5

Point	x	y	Height	Lw	Hz
"Macc_01"	-239	-1393.2	2	0	31.5
0	0	0	0	86.2	63
0	0	0	0	93	125
0	0	0	0	95.2	250
0	0	0	0	106.5	500
0	0	0	0	99.5	1000
0	0	0	0	99.1	2000
0	0	0	0	94.6	4000
0	0	0	0	82.8	8000
0	0	0	0	0	16000
"Macc_02"	-713	-535.2	2	0	31.5
0	0	0	0	86.2	63
0	0	0	0	93	125
0	0	0	0	95.2	250
0	0	0	0	112.5	500
0	0	0	0	109	1000
0	0	0	0	99.1	2000
0	0	0	0	94.6	4000
0	0	0	0	82.8	8000
0	0	0	0	0	16000
"Macc_03"	-2583	346.8	2	0	31.5
0	0	0	0	86.2	63
0	0	0	0	93	125
0	0	0	0	95.2	250
0	0	0	0	106.5	500
0	0	0	0	99.5	1000
0	0	0	0	99.1	2000
0	0	0	0	94.6	4000
0	0	0	0	82.8	8000
0	0	0	0	0	16000
"Macc_04"	-4431.2	-146.2	2	0	31.5
0	0	0	0	86.2	63
0	0	0	0	93	125
0	0	0	0	95.2	250
0	0	0	0	106.5	500
0	0	0	0	99.5	1000
0	0	0	0	99.1	2000
0	0	0	0	94.6	4000
0	0	0	0	82.8	8000
0	0	0	0	0	16000

***	Configuration	***					
0.5G	Ground	factor					
16°C	Temperature						
70%	Humidity						
***	Key	***					
Lw	Sound	Power	Level	(dB)			
Ad	Distance	attenuation	aka	"geometrical	divergence"	ISO9613-2	(dB)
Ab	Barrier	attentuation	ISO9613-2	(dB)			
Ag	Ground	effect	ISO9613-2	(dB)			
Aa	Air	absorption	ISO9613-1	(dB)			
x	x-coordinate	(in	meters)				
y	y-coordinate	(in	meters)				
rc	Reflection	Coefficient					

FASE IN ESERCIZIO

IN ESERCIZIO Noise Mapping Results

***	Receiver	Results	Summary	***							
Object	**Overall Level dB(A)**	**31.5Hz**	**63Hz**	**125Hz**	**250Hz**	**500Hz**	**1kHz**	**2kHz**	**4kHz**	**8kHz**	**16kHz**
"r01"	25.1	0	18.4	20.4	20.3	20.1	22.9	17	-8.6	-100.8	0
"r02"	36.7	0	24.9	28.3	28.1	29.3	33.6	31.3	18.3	-25.7	0
"r03"	31.4	0	23	25.3	25.6	26	29.1	23.7	-0.5	-85.8	0
"r04"	32.5	0	23.6	26	26.4	26.8	30.2	25.2	2.8	-73.8	0
"r05"	27.9	0	21.2	23.4	23.4	23.3	25.7	18.7	-9.1	-104.3	0
"r06"	31.4	0	23	25.4	25.6	25.9	29.1	23.8	2.1	-70.8	0
"r07"	34.4	0	23.9	26.8	26.9	27.8	31.7	28.4	12.6	-40.7	0
"r08"	33.1	0	22.9	25.7	25.8	26.6	30.4	26.9	10.4	-46.6	0
"r09"	33.5	0	23.2	26	26.1	26.9	30.8	27.4	11.3	-44	0
"r10"	29.2	0	21	23.3	23.5	23.7	26.9	21.7	-0.3	-76.8	0
"r11"	34.3	0	24	26.8	27	27.8	31.6	28.1	11.6	-43.7	0
"r12"	35.8	0	25.6	28.3	28.6	29.4	33.2	29.4	11.2	-51	0
"r13"	36.5	0	25.8	28.8	28.9	29.8	33.8	30.5	15.5	-33.5	0
"r14"	34.7	0	24.8	27.5	27.7	28.5	32.1	28.3	11	-45.6	0
"r15"	25.5	0	19.3	21.3	21.2	20.9	23.3	16.4	-11.1	-108.5	0
"r16"	25.6	0	19.3	21.4	21.3	20.9	23.4	16.8	-9.9	-104.8	0
"r17"	26	0	19.7	21.8	21.7	21.4	23.8	17.1	-9.2	-102.7	0
"r18"	27.6	0	21	23.2	23.2	23	25.5	18.4	-11.3	-114.7	0
"r19"	29.5	0	22	24.2	24.4	24.5	27.3	21.2	-4.4	-92.1	0
"r20"	30.2	0	22.3	24.6	24.8	25	27.9	22.1	-2.9	-89.4	0
"r21"	39.5	0	27.6	31	30.9	32.1	36.4	34	21.1	-20.8	0
"r22"	26.5	0	19.9	22	21.9	21.7	24.3	17.7	-9	-102.7	0
"r23"	27.5	0	20.3	22.5	22.5	22.5	25.2	19.2	-5.5	-92.1	0
"r24"	23.3	0	18.4	20.3	20	19.3	21.2	13	-19.3	-133.9	0
"r25"	32.5	0	23.1	25.6	25.8	26.4	30	25.8	7.1	-56.2	0
"r26"	27.7	0	20.2	22.4	22.4	22.5	25.4	19.7	-4.3	-88.4	0
"r27"	31.3	0	21.9	24.4	24.6	25.2	28.8	24.7	6.2	-58	0
"r28"	31.1	0	21.8	24.3	24.4	25	28.5	24.4	5.6	-59.6	0
"r29"	30.6	0	21.5	23.9	24.1	24.6	28.1	23.7	4.3	-63.3	0
"r30"	29.3	0	20.9	23.2	23.3	23.6	26.9	22.1	1.1	-72.5	0
"r31"	31.3	0	22	24.5	24.6	25.2	28.8	24.7	6.2	-58.2	0
"r32"	30.7	0	21.7	24.1	24.3	24.8	28.2	23.8	4.2	-63.7	0
"r33"	30.1	0	21.4	23.8	23.9	24.3	27.7	23	2.6	-68.5	0
"r34"	27.6	0	20	22.2	22.2	22.3	25.3	19.9	-3.4	-85.5	0
"r35"	22.5	0	17.6	19.5	19.1	18.4	20.3	12.4	-19.3	-133.6	0
"r36"	29.8	0	21.2	23.6	23.7	24.1	27.4	22.7	2	-69.9	0
"r37"	28.7	0	20.8	23.1	23.2	23.4	26.4	21.1	-1.8	-81.3	0
"r38"	25.3	0	19.4	21.5	21.3	20.9	23.2	15.8	-14.1	-120.1	0
"r39"	27.1	0	20.3	22.4	22.5	22.3	24.9	18.4	-8.9	-105.3	0
"r40"	29.2	0	21.2	23.4	23.6	23.8	26.9	21.6	-1.3	-80.3	0
"r41"	39.1	0	27.4	30.8	30.7	31.8	36.1	33.6	20.9	-20.1	0
"r42"	32.5	0	23.5	26	26.2	26.7	30.1	25.5	5.7	-60.9	0
"r43"	29.2	0	21.9	24.1	24.3	24.3	27.1	20.8	-5.7	-96.6	0
"r44"	26.1	0	19.8	21.9	21.8	21.5	23.9	17	-11.4	-111.7	0

***	Receiver	Results	Breakdown	***							
Object	Source	Distance (m)	Height (m)	Frequency (Hz)	Lw	Ad	Aa	Ag	Ab	Ab	A-Weighting	Lp
"r01"	"T01"	5348.1	1.5	63	86.2	-85.6	-0.5	4	0	0	-26.2	-22.1
0	"T01"	5348.1	1.5	125	93	-85.6	-1.9	-0.7	0	0	-16.1	-11.2
0	"T01"	5348.1	1.5	250	95.2	-85.6	-5.9	-1.5	0	0	-8.6	-6.4
0	"T01"	5348.1	1.5	500	96.2	-85.6	-12.8	-0.5	0	0	-3.2	-5.8
0	"T01"	5348.1	1.5	1000	99.4	-85.6	-22.1	1.7	0	0	0	-6.6
0	"T01"	5348.1	1.5	2000	99.1	-85.6	-46	2	0	0	1.2	-29.3
0	"T01"	5348.1	1.5	4000	94.6	-85.6	-135.7	2	0	0	1	-123.6
0	"T01"	5348.1	1.5	8000	82.8	-85.6	-479.6	2	0	0	-1.1	-481.5
0	"T03"	5120.7	1.5	63	86.2	-85.2	-0.5	4	0	0	-26.2	-21.7
0	"T03"	5120.7	1.5	125	93	-85.2	-1.9	-0.7	0	0	-16.1	-10.8
0	"T03"	5120.7	1.5	250	95.2	-85.2	-5.6	-1.5	0	0	-8.6	-5.8
0	"T03"	5120.7	1.5	500	96.2	-85.2	-12.2	-0.5	0	0	-3.2	-4.9
0	"T03"	5120.7	1.5	1000	99.4	-85.2	-21.1	1.6	0	0	0	-5.3
0	"T03"	5120.7	1.5	2000	99.1	-85.2	-44.1	2	0	0	1.2	-27
0	"T03"	5120.7	1.5	4000	94.6	-85.2	-129.9	2	0	0	1	-117.5
0	"T03"	5120.7	1.5	8000	82.8	-85.2	-459.2	2	0	0	-1.1	-460.7
0	"T02"	4795.8	1.5	63	86.2	-84.6	-0.5	3.8	0	0	-26.2	-21.3
0	"T02"	4795.8	1.5	125	93	-84.6	-1.7	-0.8	0	0	-16.1	-10.2
0	"T02"	4795.8	1.5	250	95.2	-84.6	-5.3	-1.6	0	0	-8.6	-4.9
0	"T02"	4795.8	1.5	500	96.2	-84.6	-11.4	-0.6	0	0	-3.2	-3.6
0	"T02"	4795.8	1.5	1000	99.4	-84.6	-19.8	1.6	0	0	0	-3.4
0	"T02"	4795.8	1.5	2000	99.1	-84.6	-41.3	1.9	0	0	1.2	-23.7
0	"T02"	4795.8	1.5	4000	94.6	-84.6	-121.7	1.9	0	0	1	-108.8
0	"T02"	4795.8	1.5	8000	82.8	-84.6	-430.1	1.9	0	0	-1.1	-431.1
0	"T04"	3510.8	1.5	63	86.2	-81.9	-0.3	3	0	0	-26.2	-19.2
0	"T04"	3510.8	1.5	125	93	-81.9	-1.3	-1.2	0	0	-16.1	-7.4
0	"T04"	3510.8	1.5	250	95.2	-81.9	-3.9	-2	0	0	-8.6	-1.2
0	"T04"	3510.8	1.5	500	96.2	-81.9	-8.4	-1	0	0	-3.2	1.7
0	"T04"	3510.8	1.5	1000	99.4	-81.9	-14.5	1.2	0	0	0	4.2
0	"T04"	3510.8	1.5	2000	99.1	-81.9	-30.2	1.5	0	0	1.2	-10.3
0	"T04"	3510.8	1.5	4000	94.6	-81.9	-89.1	1.5	0	0	1	-73.9
0	"T04"	3510.8	1.5	8000	82.8	-81.9	-314.9	1.5	0	0	-1.1	-313.6
0	"T05"	3139.3	1.5	63	86.2	-80.9	-0.3	3	0	0	-26.2	-18.2
0	"T05"	3139.3	1.5	125	93	-80.9	-1.1	-1.2	0	0	-16.1	-6.3
0	"T05"	3139.3	1.5	250	95.2	-80.9	-3.5	-2	0	0	-8.6	0.2
0	"T05"	3139.3	1.5	500	96.2	-80.9	-7.5	-1	0	0	-3.2	3.6
0	"T05"	3139.3	1.5	1000	99.4	-80.9	-13	1.2	0	0	0	6.7
0	"T05"	3139.3	1.5	2000	99.1	-80.9	-27	1.5	0	0	1.2	-6.2
0	"T05"	3139.3	1.5	4000	94.6	-80.9	-79.7	1.5	0	0	1	-63.5
0	"T05"	3139.3	1.5	8000	82.8	-80.9	-281.5	1.5	0	0	-1.1	-279.3
0	"T06"	2709.6	1.5	63	86.2	-79.7	-0.3	3	0	0	-26.2	-16.9
0	"T06"	2709.6	1.5	125	93	-79.7	-1	-1.2	0	0	-16.1	-4.9
0	"T06"	2709.6	1.5	250	95.2	-79.7	-3	-2	0	0	-8.6	1.9
0	"T06"	2709.6	1.5	500	96.2	-79.7	-6.5	-1	0	0	-3.2	5.9

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0	"T06"	2709.6	1.5	1000	99.4	-79.7	-11.2	1.2	0	0	0	9.7
0	"T06"	2709.6	1.5	2000	99.1	-79.7	-23.3	1.5	0	0	1.2	-1.2
0	"T06"	2709.6	1.5	4000	94.6	-79.7	-68.7	1.5	0	0	1	-51.3
0	"T06"	2709.6	1.5	8000	82.8	-79.7	-243	1.5	0	0	-1.1	-239.5
0	"T07"	1250.8	1.5	63	86.2	-72.9	-0.1	3	0	0	-26.2	-10.1
0	"T07"	1250.8	1.5	125	93	-72.9	-0.5	-1.1	0	0	-16.1	2.4
0	"T07"	1250.8	1.5	250	95.2	-72.9	-1.4	-2	0	0	-8.6	10.3
0	"T07"	1250.8	1.5	500	96.2	-72.9	-3	-1	0	0	-3.2	16.1
0	"T07"	1250.8	1.5	1000	99.4	-72.9	-5.2	1.2	0	0	0	22.5
0	"T07"	1250.8	1.5	2000	99.1	-72.9	-10.8	1.5	0	0	1.2	18.1
0	"T07"	1250.8	1.5	4000	94.6	-72.9	-31.7	1.5	0	0	1	-7.6
0	"T07"	1250.8	1.5	8000	82.8	-72.9	-112.2	1.5	0	0	-1.1	-101.9
"r02"	"T01"	4537.1	1.5	63	86.2	-84.1	-0.4	3.7	0	0	-26.2	-20.9
0	"T01"	4537.1	1.5	125	93	-84.1	-1.6	-0.8	0	0	-16.1	-9.7
0	"T01"	4537.1	1.5	250	95.2	-84.1	-5	-1.7	0	0	-8.6	-4.2
0	"T01"	4537.1	1.5	500	96.2	-84.1	-10.8	-0.6	0	0	-3.2	-2.6
0	"T01"	4537.1	1.5	1000	99.4	-84.1	-18.7	1.5	0	0	0	-2
0	"T01"	4537.1	1.5	2000	99.1	-84.1	-39.1	1.8	0	0	1.2	-21
0	"T01"	4537.1	1.5	4000	94.6	-84.1	-115.1	1.8	0	0	1	-101.8
0	"T01"	4537.1	1.5	8000	82.8	-84.1	-406.9	1.8	0	0	-1.1	-407.5
0	"T03"	4257.7	1.5	63	86.2	-83.6	-0.4	3.5	0	0	-26.2	-20.5
0	"T03"	4257.7	1.5	125	93	-83.6	-1.5	-0.9	0	0	-16.1	-9.1
0	"T03"	4257.7	1.5	250	95.2	-83.6	-4.7	-1.7	0	0	-8.6	-3.4
0	"T03"	4257.7	1.5	500	96.2	-83.6	-10.2	-0.7	0	0	-3.2	-1.5
0	"T03"	4257.7	1.5	1000	99.4	-83.6	-17.6	1.4	0	0	0	-0.3
0	"T03"	4257.7	1.5	2000	99.1	-83.6	-36.7	1.8	0	0	1.2	-18.2
0	"T03"	4257.7	1.5	4000	94.6	-83.6	-108	1.8	0	0	1	-94.2
0	"T03"	4257.7	1.5	8000	82.8	-83.6	-381.8	1.8	0	0	-1.1	-382
0	"T02"	3958.8	1.5	63	86.2	-83	-0.4	3.4	0	0	-26.2	-20
0	"T02"	3958.8	1.5	125	93	-83	-1.4	-1	0	0	-16.1	-8.5
0	"T02"	3958.8	1.5	250	95.2	-83	-4.4	-1.8	0	0	-8.6	-2.6
0	"T02"	3958.8	1.5	500	96.2	-83	-9.4	-0.8	0	0	-3.2	-0.2
0	"T02"	3958.8	1.5	1000	99.4	-83	-16.3	1.3	0	0	0	1.4
0	"T02"	3958.8	1.5	2000	99.1	-83	-34.1	1.7	0	0	1.2	-15.1
0	"T02"	3958.8	1.5	4000	94.6	-83	-100.4	1.7	0	0	1	-86.1
0	"T02"	3958.8	1.5	8000	82.8	-83	-355	1.7	0	0	-1.1	-354.6
0	"T04"	2647	1.5	63	86.2	-79.5	-0.3	3	0	0	-26.2	-16.7
0	"T04"	2647	1.5	125	93	-79.5	-1	-1.2	0	0	-16.1	-4.7
0	"T04"	2647	1.5	250	95.2	-79.5	-2.9	-2	0	0	-8.6	2.2
0	"T04"	2647	1.5	500	96.2	-79.5	-6.3	-1	0	0	-3.2	6.2
0	"T04"	2647	1.5	1000	99.4	-79.5	-10.9	1.2	0	0	0	10.2
0	"T04"	2647	1.5	2000	99.1	-79.5	-22.8	1.5	0	0	1.2	-0.4
0	"T04"	2647	1.5	4000	94.6	-79.5	-67.2	1.5	0	0	1	-49.5
0	"T04"	2647	1.5	8000	82.8	-79.5	-237.4	1.5	0	0	-1.1	-233.6
0	"T05"	2289.2	1.5	63	86.2	-78.2	-0.2	3	0	0	-26.2	-15.4
0	"T05"	2289.2	1.5	125	93	-78.2	-0.8	-1.2	0	0	-16.1	-3.3
0	"T05"	2289.2	1.5	250	95.2	-78.2	-2.5	-2	0	0	-8.6	3.9
0	"T05"	2289.2	1.5	500	96.2	-78.2	-5.5	-1	0	0	-3.2	8.4
0	"T05"	2289.2	1.5	1000	99.4	-78.2	-9.5	1.2	0	0	0	12.9
0	"T05"	2289.2	1.5	2000	99.1	-78.2	-19.7	1.5	0	0	1.2	3.9
0	"T05"	2289.2	1.5	4000	94.6	-78.2	-58.1	1.5	0	0	1	-39.2
0	"T05"	2289.2	1.5	8000	82.8	-78.2	-205.3	1.5	0	0	-1.1	-200.3
0	"T06"	1924.2	1.5	63	86.2	-76.7	-0.2	3	0	0	-26.2	-13.9
0	"T06"	1924.2	1.5	125	93	-76.7	-0.7	-1.2	0	0	-16.1	-1.7
0	"T06"	1924.2	1.5	250	95.2	-76.7	-2.1	-2	0	0	-8.6	5.8
0	"T06"	1924.2	1.5	500	96.2	-76.7	-4.6	-1	0	0	-3.2	10.7
0	"T06"	1924.2	1.5	1000	99.4	-76.7	-7.9	1.2	0	0	0	15.9
0	"T06"	1924.2	1.5	2000	99.1	-76.7	-16.6	1.5	0	0	1.2	8.6
0	"T06"	1924.2	1.5	4000	94.6	-76.7	-48.8	1.5	0	0	1	-28.4
0	"T06"	1924.2	1.5	8000	82.8	-76.7	-172.6	1.5	0	0	-1.1	-166.1
0	"T07"	502	1.5	63	86.2	-65	0	3	0	0	-26.2	-2.1
0	"T07"	502	1.5	125	93	-65	-0.2	0	0	0	-16.1	11.7
0	"T07"	502	1.5	250	95.2	-65	-0.6	-2	0	0	-8.6	19
0	"T07"	502	1.5	500	96.2	-65	-1.2	-1	0	0	-3.2	25.8
0	"T07"	502	1.5	1000	99.4	-65	-2.1	1.2	0	0	0	33.5
0	"T07"	502	1.5	2000	99.1	-65	-4.3	1.5	0	0	1.2	32.5
0	"T07"	502	1.5	4000	94.6	-65	-12.7	1.5	0	0	1	19.3
0	"T07"	502	1.5	8000	82.8	-65	-45	1.5	0	0	-1.1	-26.8
"r03"	"T01"	3295.2	1.5	63	86.2	-81.4	-0.3	3	0	0	-26.2	-18.7
0	"T01"	3295.2	1.5	125	93	-81.4	-1.2	-1.2	0	0	-16.1	-6.8
0	"T01"	3295.2	1.5	250	95.2	-81.4	-3.6	-2	0	0	-8.6	-0.4
0	"T01"	3295.2	1.5	500	96.2	-81.4	-7.9	-1	0	0	-3.2	2.8
0	"T01"	3295.2	1.5	1000	99.4	-81.4	-13.6	1.2	0	0	0	5.6
0	"T01"	3295.2	1.5	2000	99.1	-81.4	-28.4	1.5	0	0	1.2	-7.9
0	"T01"	3295.2	1.5	4000	94.6	-81.4	-83.6	1.5	0	0	1	-67.9
0	"T01"	3295.2	1.5	8000	82.8	-81.4	-295.5	1.5	0	0	-1.1	-293.7
0	"T03"	2971.9	1.5	63	86.2	-80.5	-0.3	3	0	0	-26.2	-17.8
0	"T03"	2971.9	1.5	125	93	-80.5	-1.1	-1.2	0	0	-16.1	-5.8
0	"T03"	2971.9	1.5	250	95.2	-80.5	-3.3	-2	0	0	-8.6	0.8
0	"T03"	2971.9	1.5	500	96.2	-80.5	-7.1	-1	0	0	-3.2	4.5
0	"T03"	2971.9	1.5	1000	99.4	-80.5	-12.3	1.2	0	0	0	7.8
0	"T03"	2971.9	1.5	2000	99.1	-80.5	-25.6	1.5	0	0	1.2	-4.2
0	"T03"	2971.9	1.5	4000	94.6	-80.5	-75.4	1.5	0	0	1	-58.8
0	"T03"	2971.9	1.5	8000	82.8	-80.5	-266.5	1.5	0	0	-1.1	-263.8
0	"T02"	2683.3	1.5	63	86.2	-79.6	-0.3	3	0	0	-26.2	-16.8
0	"T02"	2683.3	1.5	125	93	-79.6	-1	-1.2	0	0	-16.1	-4.8
0	"T02"	2683.3	1.5	250	95.2	-79.6	-3	-2	0	0	-8.6	2.1
0	"T02"	2683.3	1.5	500	96.2	-79.6	-6.4	-1	0	0	-3.2	6
0	"T02"	2683.3	1.5	1000	99.4	-79.6	-11.1	1.2	0	0	0	9.9
0	"T02"	2683.3	1.5	2000	99.1	-79.6	-23.1	1.5	0	0	1.2	-0.9
0	"T02"	2683.3	1.5	4000	94.6	-79.6	-68.1	1.5	0	0	1	-50.6
0	"T02"	2683.3	1.5	8000	82.8	-79.6	-240.6	1.5	0	0	-1.1	-237
0	"T04"	1371.3	1.5	63	86.2	-73.7	-0.1	3	0	0	-26.2	-10.9
0	"T04"	1371.3	1.5	125	93	-73.7	-0.5	-1.2	0	0	-16.1	1.5
0	"T04"	1371.3	1.5	250	95.2	-73.7	-1.5	-2	0	0	-8.6	9.3
0	"T04"	1371.3	1.5	500	96.2	-73.7	-3.3	-1	0	0	-3.2	15
0	"T04"	1371.3	1.5	1000	99.4	-73.7	-5.7	1.2	0	0	0	21.2

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0	"T04"	1371.3	1.5	2000	99.1	-73.7	-11.8	1.5	0	0	1.2	16.3
0	"T04"	1371.3	1.5	4000	94.6	-73.7	-34.8	1.5	0	0	1	-11.4
0	"T04"	1371.3	1.5	8000	82.8	-73.7	-123	1.5	0	0	-1.1	-113.5
0	"T05"	1176.2	1.5	63	86.2	-72.4	-0.1	3	0	0	-26.2	-9.5
0	"T05"	1176.2	1.5	125	93	-72.4	-0.4	-1.1	0	0	-16.1	2.9
0	"T05"	1176.2	1.5	250	95.2	-72.4	-1.3	-2	0	0	-8.6	10.9
0	"T05"	1176.2	1.5	500	96.2	-72.4	-2.8	-1	0	0	-3.2	16.8
0	"T05"	1176.2	1.5	1000	99.4	-72.4	-4.9	1.2	0	0	0	23.3
0	"T05"	1176.2	1.5	2000	99.1	-72.4	-10.1	1.5	0	0	1.2	19.3
0	"T05"	1176.2	1.5	4000	94.6	-72.4	-29.8	1.5	0	0	1	-5.2
0	"T05"	1176.2	1.5	8000	82.8	-72.4	-105.5	1.5	0	0	-1.1	-94.7
0	"T06"	1210.1	1.5	63	86.2	-72.7	-0.1	3	0	0	-26.2	-9.8
0	"T06"	1210.1	1.5	125	93	-72.7	-0.4	-1.1	0	0	-16.1	2.7
0	"T06"	1210.1	1.5	250	95.2	-72.7	-1.3	-2	0	0	-8.6	10.6
0	"T06"	1210.1	1.5	500	96.2	-72.7	-2.9	-1	0	0	-3.2	16.5
0	"T06"	1210.1	1.5	1000	99.4	-72.7	-5	1.2	0	0	0	22.9
0	"T06"	1210.1	1.5	2000	99.1	-72.7	-10.4	1.5	0	0	1.2	18.7
0	"T06"	1210.1	1.5	4000	94.6	-72.7	-30.7	1.5	0	0	1	-6.3
0	"T06"	1210.1	1.5	8000	82.8	-72.7	-108.5	1.5	0	0	-1.1	-98
0	"T07"	1108.6	1.5	63	86.2	-71.9	-0.1	3	0	0	-26.2	-9
0	"T07"	1108.6	1.5	125	93	-71.9	-0.4	-1.1	0	0	-16.1	3.5
0	"T07"	1108.6	1.5	250	95.2	-71.9	-1.2	-2	0	0	-8.6	11.5
0	"T07"	1108.6	1.5	500	96.2	-71.9	-2.6	-1	0	0	-3.2	17.5
0	"T07"	1108.6	1.5	1000	99.4	-71.9	-4.6	1.2	0	0	0	24.1
0	"T07"	1108.6	1.5	2000	99.1	-71.9	-9.5	1.5	0	0	1.2	20.4
0	"T07"	1108.6	1.5	4000	94.6	-71.9	-28.1	1.5	0	0	1	-2.9
0	"T07"	1108.6	1.5	8000	82.8	-71.9	-99.4	1.5	0	0	-1.1	-88.1
"r04"	"T01"	3098.9	1.5	63	86.2	-80.8	-0.3	3	0	0	-26.2	-18.1
0	"T01"	3098.9	1.5	125	93	-80.8	-1.1	-1.2	0	0	-16.1	-6.2
0	"T01"	3098.9	1.5	250	95.2	-80.8	-3.4	-2	0	0	-8.6	0.3
0	"T01"	3098.9	1.5	500	96.2	-80.8	-7.4	-1	0	0	-3.2	3.8
0	"T01"	3098.9	1.5	1000	99.4	-80.8	-12.8	1.2	0	0	0	6.9
0	"T01"	3098.9	1.5	2000	99.1	-80.8	-26.7	1.5	0	0	1.2	-5.7
0	"T01"	3098.9	1.5	4000	94.6	-80.8	-78.6	1.5	0	0	1	-62.4
0	"T01"	3098.9	1.5	8000	82.8	-80.8	-277.9	1.5	0	0	-1.1	-275.5
0	"T03"	2736.2	1.5	63	86.2	-79.7	-0.3	3	0	0	-26.2	-17
0	"T03"	2736.2	1.5	125	93	-79.7	-1	-1.2	0	0	-16.1	-5
0	"T03"	2736.2	1.5	250	95.2	-79.7	-3	-2	0	0	-8.6	1.8
0	"T03"	2736.2	1.5	500	96.2	-79.7	-6.5	-1	0	0	-3.2	5.7
0	"T03"	2736.2	1.5	1000	99.4	-79.7	-11.3	1.2	0	0	0	9.5
0	"T03"	2736.2	1.5	2000	99.1	-79.7	-23.6	1.5	0	0	1.2	-1.5
0	"T03"	2736.2	1.5	4000	94.6	-79.7	-69.4	1.5	0	0	1	-52.1
0	"T03"	2736.2	1.5	8000	82.8	-79.7	-245.4	1.5	0	0	-1.1	-241.9
0	"T02"	2470.7	1.5	63	86.2	-78.9	-0.2	3	0	0	-26.2	-16.1
0	"T02"	2470.7	1.5	125	93	-78.9	-0.9	-1.2	0	0	-16.1	-4
0	"T02"	2470.7	1.5	250	95.2	-78.9	-2.7	-2	0	0	-8.6	3
0	"T02"	2470.7	1.5	500	96.2	-78.9	-5.9	-1	0	0	-3.2	7.3
0	"T02"	2470.7	1.5	1000	99.4	-78.9	-10.2	1.2	0	0	0	11.5
0	"T02"	2470.7	1.5	2000	99.1	-78.9	-21.3	1.5	0	0	1.2	1.7
0	"T02"	2470.7	1.5	4000	94.6	-78.9	-62.7	1.5	0	0	1	-44.4
0	"T02"	2470.7	1.5	8000	82.8	-78.9	-221.6	1.5	0	0	-1.1	-217.2
0	"T04"	1134.3	1.5	63	86.2	-72.1	-0.1	3	0	0	-26.2	-9.2
0	"T04"	1134.3	1.5	125	93	-72.1	-0.4	-1.1	0	0	-16.1	3.3
0	"T04"	1134.3	1.5	250	95.2	-72.1	-1.3	-2	0	0	-8.6	11.2
0	"T04"	1134.3	1.5	500	96.2	-72.1	-2.7	-1	0	0	-3.2	17.2
0	"T04"	1134.3	1.5	1000	99.4	-72.1	-4.7	1.2	0	0	0	23.8
0	"T04"	1134.3	1.5	2000	99.1	-72.1	-9.8	1.5	0	0	1.2	19.9
0	"T04"	1134.3	1.5	4000	94.6	-72.1	-28.8	1.5	0	0	1	-3.8
0	"T04"	1134.3	1.5	8000	82.8	-72.1	-101.7	1.5	0	0	-1.1	-90.6
0	"T05"	976.7	1.5	63	86.2	-70.8	-0.1	3	0	0	-26.2	-7.9
0	"T05"	976.7	1.5	125	93	-70.8	-0.4	-1	0	0	-16.1	4.7
0	"T05"	976.7	1.5	250	95.2	-70.8	-1.1	-2	0	0	-8.6	12.7
0	"T05"	976.7	1.5	500	96.2	-70.8	-2.3	-1	0	0	-3.2	18.9
0	"T05"	976.7	1.5	1000	99.4	-70.8	-4	1.2	0	0	0	25.7
0	"T05"	976.7	1.5	2000	99.1	-70.8	-8.4	1.5	0	0	1.2	22.6
0	"T05"	976.7	1.5	4000	94.6	-70.8	-24.8	1.5	0	0	1	1.5
0	"T05"	976.7	1.5	8000	82.8	-70.8	-87.6	1.5	0	0	-1.1	-75.2
0	"T06"	1131.2	1.5	63	86.2	-72.1	-0.1	3	0	0	-26.2	-9.2
0	"T06"	1131.2	1.5	125	93	-72.1	-0.4	-1.1	0	0	-16.1	3.3
0	"T06"	1131.2	1.5	250	95.2	-72.1	-1.2	-2	0	0	-8.6	11.3
0	"T06"	1131.2	1.5	500	96.2	-72.1	-2.7	-1	0	0	-3.2	17.2
0	"T06"	1131.2	1.5	1000	99.4	-72.1	-4.7	1.2	0	0	0	23.8
0	"T06"	1131.2	1.5	2000	99.1	-72.1	-9.7	1.5	0	0	1.2	20
0	"T06"	1131.2	1.5	4000	94.6	-72.1	-28.7	1.5	0	0	1	-3.7
0	"T06"	1131.2	1.5	8000	82.8	-72.1	-101.4	1.5	0	0	-1.1	-90.3
0	"T07"	1307.6	1.5	63	86.2	-73.3	-0.1	3	0	0	-26.2	-10.5
0	"T07"	1307.6	1.5	125	93	-73.3	-0.5	-1.2	0	0	-16.1	1.9
0	"T07"	1307.6	1.5	250	95.2	-73.3	-1.4	-2	0	0	-8.6	9.8
0	"T07"	1307.6	1.5	500	96.2	-73.3	-3.1	-1	0	0	-3.2	15.6
0	"T07"	1307.6	1.5	1000	99.4	-73.3	-5.4	1.2	0	0	0	21.8
0	"T07"	1307.6	1.5	2000	99.1	-73.3	-11.3	1.5	0	0	1.2	17.2
0	"T07"	1307.6	1.5	4000	94.6	-73.3	-33.2	1.5	0	0	1	-9.4
0	"T07"	1307.6	1.5	8000	82.8	-73.3	-117.3	1.5	0	0	-1.1	-107.4
"r05"	"T01"	2007.2	1.5	63	86.2	-77.1	-0.2	3	0	0	-26.2	-14.2
0	"T01"	2007.2	1.5	125	93	-77.1	-0.7	-1.2	0	0	-16.1	-2
0	"T01"	2007.2	1.5	250	95.2	-77.1	-2.2	-2	0	0	-8.6	5.3
0	"T01"	2007.2	1.5	500	96.2	-77.1	-4.8	-1	0	0	-3.2	10.2
0	"T01"	2007.2	1.5	1000	99.4	-77.1	-8.3	1.2	0	0	0	15.2
0	"T01"	2007.2	1.5	2000	99.1	-77.1	-17.3	1.5	0	0	1.2	7.5
0	"T01"	2007.2	1.5	4000	94.6	-77.1	-50.9	1.5	0	0	1	-30.9
0	"T01"	2007.2	1.5	8000	82.8	-77.1	-180	1.5	0	0	-1.1	-173.9
0	"T03"	2265.2	1.5	63	86.2	-78.1	-0.2	3	0	0	-26.2	-15.3
0	"T03"	2265.2	1.5	125	93	-78.1	-0.8	-1.2	0	0	-16.1	-3.2
0	"T03"	2265.2	1.5	250	95.2	-78.1	-2.5	-2	0	0	-8.6	4
0	"T03"	2265.2	1.5	500	96.2	-78.1	-5.4	-1	0	0	-3.2	8.5
0	"T03"	2265.2	1.5	1000	99.4	-78.1	-9.4	1.2	0	0	0	13.1
0	"T03"	2265.2	1.5	2000	99.1	-78.1	-19.5	1.5	0	0	1.2	4.2

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0	"T03"	2265.2	1.5	4000	94.6	-78.1	-57.5	1.5	0	0	1	-38.5
0	"T03"	2265.2	1.5	8000	82.8	-78.1	-203.1	1.5	0	0	-1.1	-198
0	"T02"	1589.2	1.5	63	86.2	-75	-0.2	3	0	0	-26.2	-12.2
0	"T02"	1589.2	1.5	125	93	-75	-0.6	-1.2	0	0	-16.1	0.1
0	"T02"	1589.2	1.5	250	95.2	-75	-1.8	-2	0	0	-8.6	7.8
0	"T02"	1589.2	1.5	500	96.2	-75	-3.8	-1	0	0	-3.2	13.2
0	"T02"	1589.2	1.5	1000	99.4	-75	-6.6	1.2	0	0	0	19
0	"T02"	1589.2	1.5	2000	99.1	-75	-13.7	1.5	0	0	1.2	13.1
0	"T02"	1589.2	1.5	4000	94.6	-75	-40.3	1.5	0	0	1	-18.2
0	"T02"	1589.2	1.5	8000	82.8	-75	-142.5	1.5	0	0	-1.1	-134.4
0	"T04"	1286.5	1.5	63	86.2	-73.2	-0.1	3	0	0	-26.2	-10.3
0	"T04"	1286.5	1.5	125	93	-73.2	-0.5	-1.1	0	0	-16.1	2.1
0	"T04"	1286.5	1.5	250	95.2	-73.2	-1.4	-2	0	0	-8.6	10
0	"T04"	1286.5	1.5	500	96.2	-73.2	-3.1	-1	0	0	-3.2	15.8
0	"T04"	1286.5	1.5	1000	99.4	-73.2	-5.3	1.2	0	0	0	22.1
0	"T04"	1286.5	1.5	2000	99.1	-73.2	-11.1	1.5	0	0	1.2	17.5
0	"T04"	1286.5	1.5	4000	94.6	-73.2	-32.6	1.5	0	0	1	-8.7
0	"T04"	1286.5	1.5	8000	82.8	-73.2	-115.4	1.5	0	0	-1.1	-105.4
0	"T05"	1810.5	1.5	63	86.2	-76.2	-0.2	3	0	0	-26.2	-13.3
0	"T05"	1810.5	1.5	125	93	-76.2	-0.7	-1.2	0	0	-16.1	-1.1
0	"T05"	1810.5	1.5	250	95.2	-76.2	-2	-2	0	0	-8.6	6.4
0	"T05"	1810.5	1.5	500	96.2	-76.2	-4.3	-1	0	0	-3.2	11.5
0	"T05"	1810.5	1.5	1000	99.4	-76.2	-7.5	1.2	0	0	0	16.9
0	"T05"	1810.5	1.5	2000	99.1	-76.2	-15.6	1.5	0	0	1.2	10.1
0	"T05"	1810.5	1.5	4000	94.6	-76.2	-45.9	1.5	0	0	1	-25
0	"T05"	1810.5	1.5	8000	82.8	-76.2	-162.4	1.5	0	0	-1.1	-155.3
0	"T06"	2342.7	1.5	63	86.2	-78.4	-0.2	3	0	0	-26.2	-15.6
0	"T06"	2342.7	1.5	125	93	-78.4	-0.8	-1.2	0	0	-16.1	-3.5
0	"T06"	2342.7	1.5	250	95.2	-78.4	-2.6	-2	0	0	-8.6	3.6
0	"T06"	2342.7	1.5	500	96.2	-78.4	-5.6	-1	0	0	-3.2	8
0	"T06"	2342.7	1.5	1000	99.4	-78.4	-9.7	1.2	0	0	0	12.5
0	"T06"	2342.7	1.5	2000	99.1	-78.4	-20.2	1.5	0	0	1.2	3.2
0	"T06"	2342.7	1.5	4000	94.6	-78.4	-59.4	1.5	0	0	1	-40.7
0	"T06"	2342.7	1.5	8000	82.8	-78.4	-210.1	1.5	0	0	-1.1	-205.3
0	"T07"	2551	1.5	63	86.2	-79.1	-0.3	3	0	0	-26.2	-16.4
0	"T07"	2551	1.5	125	93	-79.1	-0.9	-1.2	0	0	-16.1	-4.3
0	"T07"	2551	1.5	250	95.2	-79.1	-2.8	-2	0	0	-8.6	2.6
0	"T07"	2551	1.5	500	96.2	-79.1	-6.1	-1	0	0	-3.2	6.8
0	"T07"	2551	1.5	1000	99.4	-79.1	-10.5	1.2	0	0	0	10.9
0	"T07"	2551	1.5	2000	99.1	-79.1	-22	1.5	0	0	1.2	0.7
0	"T07"	2551	1.5	4000	94.6	-79.1	-64.7	1.5	0	0	1	-46.8
0	"T07"	2551	1.5	8000	82.8	-79.1	-228.8	1.5	0	0	-1.1	-224.7
"r06"	"T01"	1776.9	1.5	63	86.2	-76	-0.2	3	0	0	-26.2	-13.2
0	"T01"	1776.9	1.5	125	93	-76	-0.6	-1.2	0	0	-16.1	-0.9
0	"T01"	1776.9	1.5	250	95.2	-76	-2	-2	0	0	-8.6	6.6
0	"T01"	1776.9	1.5	500	96.2	-76	-4.2	-1	0	0	-3.2	11.8
0	"T01"	1776.9	1.5	1000	99.4	-76	-7.3	1.2	0	0	0	17.2
0	"T01"	1776.9	1.5	2000	99.1	-76	-15.3	1.5	0	0	1.2	10.5
0	"T01"	1776.9	1.5	4000	94.6	-76	-45.1	1.5	0	0	1	-24
0	"T01"	1776.9	1.5	8000	82.8	-76	-159.4	1.5	0	0	-1.1	-152.2
0	"T03"	1851.9	1.5	63	86.2	-76.4	-0.2	3	0	0	-26.2	-13.5
0	"T03"	1851.9	1.5	125	93	-76.4	-0.7	-1.2	0	0	-16.1	-1.3
0	"T03"	1851.9	1.5	250	95.2	-76.4	-2	-2	0	0	-8.6	6.2
0	"T03"	1851.9	1.5	500	96.2	-76.4	-4.4	-1	0	0	-3.2	11.2
0	"T03"	1851.9	1.5	1000	99.4	-76.4	-7.6	1.2	0	0	0	16.6
0	"T03"	1851.9	1.5	2000	99.1	-76.4	-15.9	1.5	0	0	1.2	9.5
0	"T03"	1851.9	1.5	4000	94.6	-76.4	-47	1.5	0	0	1	-26.2
0	"T03"	1851.9	1.5	8000	82.8	-76.4	-166.1	1.5	0	0	-1.1	-159.2
0	"T02"	1251	1.5	63	86.2	-72.9	-0.1	3	0	0	-26.2	-10.1
0	"T02"	1251	1.5	125	93	-72.9	-0.5	-1.1	0	0	-16.1	2.4
0	"T02"	1251	1.5	250	95.2	-72.9	-1.4	-2	0	0	-8.6	10.3
0	"T02"	1251	1.5	500	96.2	-72.9	-3	-1	0	0	-3.2	16.1
0	"T02"	1251	1.5	1000	99.4	-72.9	-5.2	1.2	0	0	0	22.5
0	"T02"	1251	1.5	2000	99.1	-72.9	-10.8	1.5	0	0	1.2	18.1
0	"T02"	1251	1.5	4000	94.6	-72.9	-31.7	1.5	0	0	1	-7.6
0	"T02"	1251	1.5	8000	82.8	-72.9	-112.2	1.5	0	0	-1.1	-101.9
0	"T04"	943.4	1.5	63	86.2	-70.5	-0.1	3	0	0	-26.2	-7.6
0	"T04"	943.4	1.5	125	93	-70.5	-0.3	-1	0	0	-16.1	5.1
0	"T04"	943.4	1.5	250	95.2	-70.5	-1	-2	0	0	-8.6	13.1
0	"T04"	943.4	1.5	500	96.2	-70.5	-2.2	-1	0	0	-3.2	19.3
0	"T04"	943.4	1.5	1000	99.4	-70.5	-3.9	1.2	0	0	0	26.2
0	"T04"	943.4	1.5	2000	99.1	-70.5	-8.1	1.5	0	0	1.2	23.2
0	"T04"	943.4	1.5	4000	94.6	-70.5	-23.9	1.5	0	0	1	2.7
0	"T04"	943.4	1.5	8000	82.8	-70.5	-84.6	1.5	0	0	-1.1	-71.9
0	"T05"	1562.7	1.5	63	86.2	-74.9	-0.2	3	0	0	-26.2	-12
0	"T05"	1562.7	1.5	125	93	-74.9	-0.6	-1.2	0	0	-16.1	0.3
0	"T05"	1562.7	1.5	250	95.2	-74.9	-1.7	-2	0	0	-8.6	8
0	"T05"	1562.7	1.5	500	96.2	-74.9	-3.7	-1	0	0	-3.2	13.4
0	"T05"	1562.7	1.5	1000	99.4	-74.9	-6.5	1.2	0	0	0	19.2
0	"T05"	1562.7	1.5	2000	99.1	-74.9	-13.5	1.5	0	0	1.2	13.5
0	"T05"	1562.7	1.5	4000	94.6	-74.9	-39.6	1.5	0	0	1	-17.4
0	"T05"	1562.7	1.5	8000	82.8	-74.9	-140.1	1.5	0	0	-1.1	-131.8
0	"T06"	2180.6	1.5	63	86.2	-77.8	-0.2	3	0	0	-26.2	-15
0	"T06"	2180.6	1.5	125	93	-77.8	-0.8	-1.2	0	0	-16.1	-2.8
0	"T06"	2180.6	1.5	250	95.2	-77.8	-2.4	-2	0	0	-8.6	4.4
0	"T06"	2180.6	1.5	500	96.2	-77.8	-5.2	-1	0	0	-3.2	9
0	"T06"	2180.6	1.5	1000	99.4	-77.8	-9	1.2	0	0	0	13.8
0	"T06"	2180.6	1.5	2000	99.1	-77.8	-18.8	1.5	0	0	1.2	5.3
0	"T06"	2180.6	1.5	4000	94.6	-77.8	-55.3	1.5	0	0	1	-36
0	"T06"	2180.6	1.5	8000	82.8	-77.8	-195.6	1.5	0	0	-1.1	-190.1
0	"T07"	2640.7	1.5	63	86.2	-79.4	-0.3	3	0	0	-26.2	-16.7
0	"T07"	2640.7	1.5	125	93	-79.4	-1	-1.2	0	0	-16.1	-4.7
0	"T07"	2640.7	1.5	250	95.2	-79.4	-2.9	-2	0	0	-8.6	2.2
0	"T07"	2640.7	1.5	500	96.2	-79.4	-6.3	-1	0	0	-3.2	6.3
0	"T07"	2640.7	1.5	1000	99.4	-79.4	-10.9	1.2	0	0	0	10.2
0	"T07"	2640.7	1.5	2000	99.1	-79.4	-22.7	1.5	0	0	1.2	-0.4
0	"T07"	2640.7	1.5	4000	94.6	-79.4	-67	1.5	0	0	1	-49.3

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0	"T07"	2640.7	1.5	8000	82.8	-79.4	-236.8	1.5	0	0	-1.1	-233.1
"r07"	"T01"	644.3	1.5	63	86.2	-67.2	-0.1	3	0	0	-26.2	-4.2
0	"T01"	644.3	1.5	125	93	-67.2	-0.2	-0.4	0	0	-16.1	9.1
0	"T01"	644.3	1.5	250	95.2	-67.2	-0.7	-2	0	0	-8.6	16.7
0	"T01"	644.3	1.5	500	96.2	-67.2	-1.5	-1	0	0	-3.2	23.3
0	"T01"	644.3	1.5	1000	99.4	-67.2	-2.7	1.2	0	0	0	30.7
0	"T01"	644.3	1.5	2000	99.1	-67.2	-5.5	1.5	0	0	1.2	29.1
0	"T01"	644.3	1.5	4000	94.6	-67.2	-16.3	1.5	0	0	1	13.6
0	"T01"	644.3	1.5	8000	82.8	-67.2	-57.8	1.5	0	0	-1.1	-41.8
0	"T03"	1985.3	1.5	63	86.2	-77	-0.2	3	0	0	-26.2	-14.2
0	"T03"	1985.3	1.5	125	93	-77	-0.7	-1.2	0	0	-16.1	-1.9
0	"T03"	1985.3	1.5	250	95.2	-77	-2.2	-2	0	0	-8.6	5.4
0	"T03"	1985.3	1.5	500	96.2	-77	-4.7	-1	0	0	-3.2	10.3
0	"T03"	1985.3	1.5	1000	99.4	-77	-8.2	1.2	0	0	0	15.4
0	"T03"	1985.3	1.5	2000	99.1	-77	-17.1	1.5	0	0	1.2	7.8
0	"T03"	1985.3	1.5	4000	94.6	-77	-50.4	1.5	0	0	1	-30.2
0	"T03"	1985.3	1.5	8000	82.8	-77	-178	1.5	0	0	-1.1	-171.8
0	"T02"	1141.8	1.5	63	86.2	-72.2	-0.1	3	0	0	-26.2	-9.3
0	"T02"	1141.8	1.5	125	93	-72.2	-0.4	-1.1	0	0	-16.1	3.2
0	"T02"	1141.8	1.5	250	95.2	-72.2	-1.3	-2	0	0	-8.6	11.2
0	"T02"	1141.8	1.5	500	96.2	-72.2	-2.7	-1	0	0	-3.2	17.1
0	"T02"	1141.8	1.5	1000	99.4	-72.2	-4.7	1.2	0	0	0	23.7
0	"T02"	1141.8	1.5	2000	99.1	-72.2	-9.8	1.5	0	0	1.2	19.8
0	"T02"	1141.8	1.5	4000	94.6	-72.2	-29	1.5	0	0	1	-4
0	"T02"	1141.8	1.5	8000	82.8	-72.2	-102.4	1.5	0	0	-1.1	-91.4
0	"T04"	2437.3	1.5	63	86.2	-78.7	-0.2	3	0	0	-26.2	-16
0	"T04"	2437.3	1.5	125	93	-78.7	-0.9	-1.2	0	0	-16.1	-3.9
0	"T04"	2437.3	1.5	250	95.2	-78.7	-2.7	-2	0	0	-8.6	3.2
0	"T04"	2437.3	1.5	500	96.2	-78.7	-5.8	-1	0	0	-3.2	7.5
0	"T04"	2437.3	1.5	1000	99.4	-78.7	-10.1	1.2	0	0	0	11.8
0	"T04"	2437.3	1.5	2000	99.1	-78.7	-21	1.5	0	0	1.2	2.1
0	"T04"	2437.3	1.5	4000	94.6	-78.7	-61.8	1.5	0	0	1	-43.5
0	"T04"	2437.3	1.5	8000	82.8	-78.7	-218.6	1.5	0	0	-1.1	-214.1
0	"T05"	3153	1.5	63	86.2	-81	-0.3	3	0	0	-26.2	-18.3
0	"T05"	3153	1.5	125	93	-81	-1.1	-1.2	0	0	-16.1	-6.4
0	"T05"	3153	1.5	250	95.2	-81	-3.5	-2	0	0	-8.6	0.1
0	"T05"	3153	1.5	500	96.2	-81	-7.5	-1	0	0	-3.2	3.5
0	"T05"	3153	1.5	1000	99.4	-81	-13	1.2	0	0	0	6.6
0	"T05"	3153	1.5	2000	99.1	-81	-27.1	1.5	0	0	1.2	-6.3
0	"T05"	3153	1.5	4000	94.6	-81	-80	1.5	0	0	1	-63.9
0	"T05"	3153	1.5	8000	82.8	-81	-282.8	1.5	0	0	-1.1	-280.5
0	"T06"	3847.2	1.5	63	86.2	-82.7	-0.4	3.3	0	0	-26.2	-19.8
0	"T06"	3847.2	1.5	125	93	-82.7	-1.4	-1	0	0	-16.1	-8.2
0	"T06"	3847.2	1.5	250	95.2	-82.7	-4.2	-1.9	0	0	-8.6	-2.2
0	"T06"	3847.2	1.5	500	96.2	-82.7	-9.2	-0.8	0	0	-3.2	0.3
0	"T06"	3847.2	1.5	1000	99.4	-82.7	-15.9	1.3	0	0	0	2.1
0	"T06"	3847.2	1.5	2000	99.1	-82.7	-33.1	1.6	0	0	1.2	-13.9
0	"T06"	3847.2	1.5	4000	94.6	-82.7	-97.6	1.6	0	0	1	-83.1
0	"T06"	3847.2	1.5	8000	82.8	-82.7	-345	1.6	0	0	-1.1	-344.4
0	"T07"	4368.7	1.5	63	86.2	-83.8	-0.4	3.6	0	0	-26.2	-20.6
0	"T07"	4368.7	1.5	125	93	-83.8	-1.6	-0.9	0	0	-16.1	-9.4
0	"T07"	4368.7	1.5	250	95.2	-83.8	-4.8	-1.7	0	0	-8.6	-3.7
0	"T07"	4368.7	1.5	500	96.2	-83.8	-10.4	-0.7	0	0	-3.2	-1.9
0	"T07"	4368.7	1.5	1000	99.4	-83.8	-18	1.5	0	0	0	-1
0	"T07"	4368.7	1.5	2000	99.1	-83.8	-37.6	1.8	0	0	1.2	-19.3
0	"T07"	4368.7	1.5	4000	94.6	-83.8	-110.8	1.8	0	0	1	-97.3
0	"T07"	4368.7	1.5	8000	82.8	-83.8	-391.8	1.8	0	0	-1.1	-392.1
"r08"	"T01"	702.1	1.5	63	86.2	-67.9	-0.1	3	0	0	-26.2	-5
0	"T01"	702.1	1.5	125	93	-67.9	-0.3	-0.6	0	0	-16.1	8.2
0	"T01"	702.1	1.5	250	95.2	-67.9	-0.8	-2	0	0	-8.6	15.9
0	"T01"	702.1	1.5	500	96.2	-67.9	-1.7	-1	0	0	-3.2	22.4
0	"T01"	702.1	1.5	1000	99.4	-67.9	-2.9	1.2	0	0	0	29.7
0	"T01"	702.1	1.5	2000	99.1	-67.9	-6	1.5	0	0	1.2	27.8
0	"T01"	702.1	1.5	4000	94.6	-67.9	-17.8	1.5	0	0	1	11.4
0	"T01"	702.1	1.5	8000	82.8	-67.9	-63	1.5	0	0	-1.1	-47.7
0	"T03"	2085.3	1.5	63	86.2	-77.4	-0.2	3	0	0	-26.2	-14.6
0	"T03"	2085.3	1.5	125	93	-77.4	-0.8	-1.2	0	0	-16.1	-2.4
0	"T03"	2085.3	1.5	250	95.2	-77.4	-2.3	-2	0	0	-8.6	4.9
0	"T03"	2085.3	1.5	500	96.2	-77.4	-5	-1	0	0	-3.2	9.7
0	"T03"	2085.3	1.5	1000	99.4	-77.4	-8.6	1.2	0	0	0	14.6
0	"T03"	2085.3	1.5	2000	99.1	-77.4	-18	1.5	0	0	1.2	6.5
0	"T03"	2085.3	1.5	4000	94.6	-77.4	-52.9	1.5	0	0	1	-33.2
0	"T03"	2085.3	1.5	8000	82.8	-77.4	-187	1.5	0	0	-1.1	-181.2
0	"T02"	1419.4	1.5	63	86.2	-74	-0.1	3	0	0	-26.2	-11.2
0	"T02"	1419.4	1.5	125	93	-74	-0.5	-1.2	0	0	-16.1	1.2
0	"T02"	1419.4	1.5	250	95.2	-74	-1.6	-2	0	0	-8.6	9
0	"T02"	1419.4	1.5	500	96.2	-74	-3.4	-1	0	0	-3.2	14.6
0	"T02"	1419.4	1.5	1000	99.4	-74	-5.9	1.2	0	0	0	20.7
0	"T02"	1419.4	1.5	2000	99.1	-74	-12.2	1.5	0	0	1.2	15.5
0	"T02"	1419.4	1.5	4000	94.6	-74	-36	1.5	0	0	1	-13
0	"T02"	1419.4	1.5	8000	82.8	-74	-127.3	1.5	0	0	-1.1	-118.1
0	"T04"	2877.3	1.5	63	86.2	-80.2	-0.3	3	0	0	-26.2	-17.5
0	"T04"	2877.3	1.5	125	93	-80.2	-1	-1.2	0	0	-16.1	-5.5
0	"T04"	2877.3	1.5	250	95.2	-80.2	-3.2	-2	0	0	-8.6	1.2
0	"T04"	2877.3	1.5	500	96.2	-80.2	-6.9	-1	0	0	-3.2	5
0	"T04"	2877.3	1.5	1000	99.4	-80.2	-11.9	1.2	0	0	0	8.5
0	"T04"	2877.3	1.5	2000	99.1	-80.2	-24.8	1.5	0	0	1.2	-3.1
0	"T04"	2877.3	1.5	4000	94.6	-80.2	-73	1.5	0	0	1	-56.1
0	"T04"	2877.3	1.5	8000	82.8	-80.2	-258	1.5	0	0	-1.1	-255
0	"T05"	3594	1.5	63	86.2	-82.1	-0.4	3.1	0	0	-26.2	-19.4
0	"T05"	3594	1.5	125	93	-82.1	-1.3	-1.1	0	0	-16.1	-7.6
0	"T05"	3594	1.5	250	95.2	-82.1	-4	-2	0	0	-8.6	-1.4
0	"T05"	3594	1.5	500	96.2	-82.1	-8.6	-0.9	0	0	-3.2	1.4
0	"T05"	3594	1.5	1000	99.4	-82.1	-14.8	1.2	0	0	0	3.7
0	"T05"	3594	1.5	2000	99.1	-82.1	-30.9	1.5	0	0	1.2	-11.2
0	"T05"	3594	1.5	4000	94.6	-82.1	-91.2	1.5	0	0	1	-76.2
0	"T05"	3594	1.5	8000	82.8	-82.1	-322.3	1.5	0	0	-1.1	-321.2

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0	"T06"	4308.5	1.5	63	86.2	-83.7	-0.4	3.6	0	0	-26.2	-20.5
0	"T06"	4308.5	1.5	125	93	-83.7	-1.6	-0.9	0	0	-16.1	-9.2
0	"T06"	4308.5	1.5	250	95.2	-83.7	-4.8	-1.7	0	0	-8.6	-3.6
0	"T06"	4308.5	1.5	500	96.2	-83.7	-10.3	-0.7	0	0	-3.2	-1.7
0	"T06"	4308.5	1.5	1000	99.4	-83.7	-17.8	1.5	0	0	0	-0.6
0	"T06"	4308.5	1.5	2000	99.1	-83.7	-37.1	1.8	0	0	1.2	-18.7
0	"T06"	4308.5	1.5	4000	94.6	-83.7	-109.3	1.8	0	0	1	-95.6
0	"T06"	4308.5	1.5	8000	82.8	-83.7	-386.4	1.8	0	0	-1.1	-386.6
0	"T07"	4926.5	1.5	63	86.2	-84.9	-0.5	3.9	0	0	-26.2	-21.5
0	"T07"	4926.5	1.5	125	93	-84.9	-1.8	-0.7	0	0	-16.1	-10.5
0	"T07"	4926.5	1.5	250	95.2	-84.9	-5.4	-1.6	0	0	-8.6	-5.3
0	"T07"	4926.5	1.5	500	96.2	-84.9	-11.7	-0.6	0	0	-3.2	-4.1
0	"T07"	4926.5	1.5	1000	99.4	-84.9	-20.3	1.6	0	0	0	-4.2
0	"T07"	4926.5	1.5	2000	99.1	-84.9	-42.4	1.9	0	0	1.2	-25
0	"T07"	4926.5	1.5	4000	94.6	-84.9	-125	1.9	0	0	1	-112.3
0	"T07"	4926.5	1.5	8000	82.8	-84.9	-441.8	1.9	0	0	-1.1	-443
"r09"	"T01"	676.5	1.5	63	86.2	-67.6	-0.1	3	0	0	-26.2	-4.7
0	"T01"	676.5	1.5	125	93	-67.6	-0.2	-0.5	0	0	-16.1	8.5
0	"T01"	676.5	1.5	250	95.2	-67.6	-0.7	-2	0	0	-8.6	16.2
0	"T01"	676.5	1.5	500	96.2	-67.6	-1.6	-1	0	0	-3.2	22.8
0	"T01"	676.5	1.5	1000	99.4	-67.6	-2.8	1.2	0	0	0	30.2
0	"T01"	676.5	1.5	2000	99.1	-67.6	-5.8	1.5	0	0	1.2	28.4
0	"T01"	676.5	1.5	4000	94.6	-67.6	-17.2	1.5	0	0	1	12.3
0	"T01"	676.5	1.5	8000	82.8	-67.6	-60.7	1.5	0	0	-1.1	-45.1
0	"T03"	1967.1	1.5	63	86.2	-76.9	-0.2	3	0	0	-26.2	-14.1
0	"T03"	1967.1	1.5	125	93	-76.9	-0.7	-1.2	0	0	-16.1	-1.9
0	"T03"	1967.1	1.5	250	95.2	-76.9	-2.2	-2	0	0	-8.6	5.5
0	"T03"	1967.1	1.5	500	96.2	-76.9	-4.7	-1	0	0	-3.2	10.4
0	"T03"	1967.1	1.5	1000	99.4	-76.9	-8.1	1.2	0	0	0	15.6
0	"T03"	1967.1	1.5	2000	99.1	-76.9	-16.9	1.5	0	0	1.2	8
0	"T03"	1967.1	1.5	4000	94.6	-76.9	-49.9	1.5	0	0	1	-29.7
0	"T03"	1967.1	1.5	8000	82.8	-76.9	-176.4	1.5	0	0	-1.1	-170.1
0	"T02"	1401	1.5	63	86.2	-73.9	-0.1	3	0	0	-26.2	-11.1
0	"T02"	1401	1.5	125	93	-73.9	-0.5	-1.2	0	0	-16.1	1.3
0	"T02"	1401	1.5	250	95.2	-73.9	-1.5	-2	0	0	-8.6	9.1
0	"T02"	1401	1.5	500	96.2	-73.9	-3.3	-1	0	0	-3.2	14.7
0	"T02"	1401	1.5	1000	99.4	-73.9	-5.8	1.2	0	0	0	20.9
0	"T02"	1401	1.5	2000	99.1	-73.9	-12.1	1.5	0	0	1.2	15.8
0	"T02"	1401	1.5	4000	94.6	-73.9	-35.5	1.5	0	0	1	-12.4
0	"T02"	1401	1.5	8000	82.8	-73.9	-125.6	1.5	0	0	-1.1	-116.4
0	"T04"	2901.5	1.5	63	86.2	-80.3	-0.3	3	0	0	-26.2	-17.5
0	"T04"	2901.5	1.5	125	93	-80.3	-1	-1.2	0	0	-16.1	-5.6
0	"T04"	2901.5	1.5	250	95.2	-80.3	-3.2	-2	0	0	-8.6	1.1
0	"T04"	2901.5	1.5	500	96.2	-80.3	-6.9	-1	0	0	-3.2	4.8
0	"T04"	2901.5	1.5	1000	99.4	-80.3	-12	1.2	0	0	0	8.3
0	"T04"	2901.5	1.5	2000	99.1	-80.3	-25	1.5	0	0	1.2	-3.4
0	"T04"	2901.5	1.5	4000	94.6	-80.3	-73.6	1.5	0	0	1	-56.8
0	"T04"	2901.5	1.5	8000	82.8	-80.3	-260.2	1.5	0	0	-1.1	-257.3
0	"T05"	3612.6	1.5	63	86.2	-82.2	-0.4	3.1	0	0	-26.2	-19.4
0	"T05"	3612.6	1.5	125	93	-82.2	-1.3	-1.1	0	0	-16.1	-7.7
0	"T05"	3612.6	1.5	250	95.2	-82.2	-4	-2	0	0	-8.6	-1.5
0	"T05"	3612.6	1.5	500	96.2	-82.2	-8.6	-0.9	0	0	-3.2	1.3
0	"T05"	3612.6	1.5	1000	99.4	-82.2	-14.9	1.2	0	0	0	3.5
0	"T05"	3612.6	1.5	2000	99.1	-82.2	-31.1	1.5	0	0	1.2	-11.4
0	"T05"	3612.6	1.5	4000	94.6	-82.2	-91.7	1.5	0	0	1	-76.7
0	"T05"	3612.6	1.5	8000	82.8	-82.2	-324	1.5	0	0	-1.1	-322.9
0	"T06"	4335.2	1.5	63	86.2	-83.7	-0.4	3.6	0	0	-26.2	-20.6
0	"T06"	4335.2	1.5	125	93	-83.7	-1.6	-0.9	0	0	-16.1	-9.3
0	"T06"	4335.2	1.5	250	95.2	-83.7	-4.8	-1.7	0	0	-8.6	-3.6
0	"T06"	4335.2	1.5	500	96.2	-83.7	-10.3	-0.7	0	0	-3.2	-1.8
0	"T06"	4335.2	1.5	1000	99.4	-83.7	-17.9	1.5	0	0	0	-0.8
0	"T06"	4335.2	1.5	2000	99.1	-83.7	-37.3	1.8	0	0	1.2	-19
0	"T06"	4335.2	1.5	4000	94.6	-83.7	-110	1.8	0	0	1	-96.3
0	"T06"	4335.2	1.5	8000	82.8	-83.7	-388.8	1.8	0	0	-1.1	-389
0	"T07"	5023.9	1.5	63	86.2	-85	-0.5	3.9	0	0	-26.2	-21.6
0	"T07"	5023.9	1.5	125	93	-85	-1.8	-0.7	0	0	-16.1	-10.7
0	"T07"	5023.9	1.5	250	95.2	-85	-5.5	-1.6	0	0	-8.6	-5.5
0	"T07"	5023.9	1.5	500	96.2	-85	-12	-0.5	0	0	-3.2	-4.5
0	"T07"	5023.9	1.5	1000	99.4	-85	-20.7	1.6	0	0	0	-4.7
0	"T07"	5023.9	1.5	2000	99.1	-85	-43.2	2	0	0	1.2	-26
0	"T07"	5023.9	1.5	4000	94.6	-85	-127.5	2	0	0	1	-114.9
0	"T07"	5023.9	1.5	8000	82.8	-85	-450.6	2	0	0	-1.1	-451.9
"r10"	"T01"	1004.1	1.5	63	86.2	-71	-0.1	3	0	0	-26.2	-8.1
0	"T01"	1004.1	1.5	125	93	-71	-0.4	-1	0	0	-16.1	4.5
0	"T01"	1004.1	1.5	250	95.2	-71	-1.1	-2	0	0	-8.6	12.4
0	"T01"	1004.1	1.5	500	96.2	-71	-2.4	-1	0	0	-3.2	18.6
0	"T01"	1004.1	1.5	1000	99.4	-71	-4.1	1.2	0	0	0	25.4
0	"T01"	1004.1	1.5	2000	99.1	-71	-8.6	1.5	0	0	1.2	22.1
0	"T01"	1004.1	1.5	4000	94.6	-71	-25.5	1.5	0	0	1	0.6
0	"T01"	1004.1	1.5	8000	82.8	-71	-90	1.5	0	0	-1.1	-77.9
0	"T03"	1787.5	1.5	63	86.2	-76	-0.2	3	0	0	-26.2	-13.2
0	"T03"	1787.5	1.5	125	93	-76	-0.6	-1.2	0	0	-16.1	-1
0	"T03"	1787.5	1.5	250	95.2	-76	-2	-2	0	0	-8.6	6.6
0	"T03"	1787.5	1.5	500	96.2	-76	-4.3	-1	0	0	-3.2	11.7
0	"T03"	1787.5	1.5	1000	99.4	-76	-7.4	1.2	0	0	0	17.1
0	"T03"	1787.5	1.5	2000	99.1	-76	-15.4	1.5	0	0	1.2	10.4
0	"T03"	1787.5	1.5	4000	94.6	-76	-45.4	1.5	0	0	1	-24.3
0	"T03"	1787.5	1.5	8000	82.8	-76	-160.3	1.5	0	0	-1.1	-153.2
0	"T02"	1565.1	1.5	63	86.2	-74.9	-0.2	3	0	0	-26.2	-12
0	"T02"	1565.1	1.5	125	93	-74.9	-0.6	-1.2	0	0	-16.1	0.3
0	"T02"	1565.1	1.5	250	95.2	-74.9	-1.7	-2	0	0	-8.6	8
0	"T02"	1565.1	1.5	500	96.2	-74.9	-3.7	-1	0	0	-3.2	13.4
0	"T02"	1565.1	1.5	1000	99.4	-74.9	-6.5	1.2	0	0	0	19.2
0	"T02"	1565.1	1.5	2000	99.1	-74.9	-13.5	1.5	0	0	1.2	13.4
0	"T02"	1565.1	1.5	4000	94.6	-74.9	-39.7	1.5	0	0	1	-17.5
0	"T02"	1565.1	1.5	8000	82.8	-74.9	-140.4	1.5	0	0	-1.1	-132.1
0	"T04"	3063.9	1.5	63	86.2	-80.7	-0.3	3	0	0	-26.2	-18

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0	"T04"	3063.9	1.5	125	93	-80.7	-1.1	-1.2	0	0	-16.1	-6.1
0	"T04"	3063.9	1.5	250	95.2	-80.7	-3.4	-2	0	0	-8.6	0.5
0	"T04"	3063.9	1.5	500	96.2	-80.7	-7.3	-1	0	0	-3.2	4
0	"T04"	3063.9	1.5	1000	99.4	-80.7	-12.7	1.2	0	0	0	7.2
0	"T04"	3063.9	1.5	2000	99.1	-80.7	-26.4	1.5	0	0	1.2	-5.3
0	"T04"	3063.9	1.5	4000	94.6	-80.7	-77.7	1.5	0	0	1	-61.4
0	"T04"	3063.9	1.5	8000	82.8	-80.7	-274.8	1.5	0	0	-1.1	-272.3
0	"T05"	3739.6	1.5	63	86.2	-82.5	-0.4	3.2	0	0	-26.2	-19.6
0	"T05"	3739.6	1.5	125	93	-82.5	-1.4	-1.1	0	0	-16.1	-8
0	"T05"	3739.6	1.5	250	95.2	-82.5	-4.1	-1.9	0	0	-8.6	-1.9
0	"T05"	3739.6	1.5	500	96.2	-82.5	-8.9	-0.9	0	0	-3.2	0.7
0	"T05"	3739.6	1.5	1000	99.4	-82.5	-15.4	1.3	0	0	0	2.8
0	"T05"	3739.6	1.5	2000	99.1	-82.5	-32.2	1.6	0	0	1.2	-12.8
0	"T05"	3739.6	1.5	4000	94.6	-82.5	-94.9	1.6	0	0	1	-80.1
0	"T05"	3739.6	1.5	8000	82.8	-82.5	-335.4	1.6	0	0	-1.1	-334.5
0	"T06"	4469.1	1.5	63	86.2	-84	-0.4	3.7	0	0	-26.2	-20.8
0	"T06"	4469.1	1.5	125	93	-84	-1.6	-0.8	0	0	-16.1	-9.6
0	"T06"	4469.1	1.5	250	95.2	-84	-4.9	-1.7	0	0	-8.6	-4
0	"T06"	4469.1	1.5	500	96.2	-84	-10.7	-0.7	0	0	-3.2	-2.3
0	"T06"	4469.1	1.5	1000	99.4	-84	-18.5	1.5	0	0	0	-1.6
0	"T06"	4469.1	1.5	2000	99.1	-84	-38.5	1.8	0	0	1.2	-20.3
0	"T06"	4469.1	1.5	4000	94.6	-84	-113.4	1.8	0	0	1	-100
0	"T06"	4469.1	1.5	8000	82.8	-84	-400.8	1.8	0	0	-1.1	-401.3
0	"T07"	5329.5	1.5	63	86.2	-85.5	-0.5	4	0	0	-26.2	-22
0	"T07"	5329.5	1.5	125	93	-85.5	-1.9	-0.7	0	0	-16.1	-11.2
0	"T07"	5329.5	1.5	250	95.2	-85.5	-5.9	-1.5	0	0	-8.6	-6.3
0	"T07"	5329.5	1.5	500	96.2	-85.5	-12.7	-0.5	0	0	-3.2	-5.7
0	"T07"	5329.5	1.5	1000	99.4	-85.5	-22	1.7	0	0	0	-6.5
0	"T07"	5329.5	1.5	2000	99.1	-85.5	-45.9	2	0	0	1.2	-29.1
0	"T07"	5329.5	1.5	4000	94.6	-85.5	-135.2	2	0	0	1	-123.1
0	"T07"	5329.5	1.5	8000	82.8	-85.5	-478	2	0	0	-1.1	-479.8
"r11"	"T01"	674	1.5	63	86.2	-67.6	-0.1	3	0	0	-26.2	-4.6
0	"T01"	674	1.5	125	93	-67.6	-0.2	-0.5	0	0	-16.1	8.6
0	"T01"	674	1.5	250	95.2	-67.6	-0.7	-2	0	0	-8.6	16.3
0	"T01"	674	1.5	500	96.2	-67.6	-1.6	-1	0	0	-3.2	22.8
0	"T01"	674	1.5	1000	99.4	-67.6	-2.8	1.2	0	0	0	30.2
0	"T01"	674	1.5	2000	99.1	-67.6	-5.8	1.5	0	0	1.2	28.4
0	"T01"	674	1.5	4000	94.6	-67.6	-17.1	1.5	0	0	1	12.4
0	"T01"	674	1.5	8000	82.8	-67.6	-60.4	1.5	0	0	-1.1	-44.8
0	"T03"	1355.2	1.5	63	86.2	-73.6	-0.1	3	0	0	-26.2	-10.8
0	"T03"	1355.2	1.5	125	93	-73.6	-0.5	-1.2	0	0	-16.1	1.6
0	"T03"	1355.2	1.5	250	95.2	-73.6	-1.5	-2	0	0	-8.6	9.5
0	"T03"	1355.2	1.5	500	96.2	-73.6	-3.2	-1	0	0	-3.2	15.1
0	"T03"	1355.2	1.5	1000	99.4	-73.6	-5.6	1.2	0	0	0	21.3
0	"T03"	1355.2	1.5	2000	99.1	-73.6	-11.7	1.5	0	0	1.2	16.5
0	"T03"	1355.2	1.5	4000	94.6	-73.6	-34.4	1.5	0	0	1	-10.9
0	"T03"	1355.2	1.5	8000	82.8	-73.6	-121.5	1.5	0	0	-1.1	-112
0	"T02"	1116	1.5	63	86.2	-72	-0.1	3	0	0	-26.2	-9.1
0	"T02"	1116	1.5	125	93	-72	-0.4	-1.1	0	0	-16.1	3.4
0	"T02"	1116	1.5	250	95.2	-72	-1.2	-2	0	0	-8.6	11.4
0	"T02"	1116	1.5	500	96.2	-72	-2.7	-1	0	0	-3.2	17.4
0	"T02"	1116	1.5	1000	99.4	-72	-4.6	1.2	0	0	0	24
0	"T02"	1116	1.5	2000	99.1	-72	-9.6	1.5	0	0	1.2	20.2
0	"T02"	1116	1.5	4000	94.6	-72	-28.3	1.5	0	0	1	-3.2
0	"T02"	1116	1.5	8000	82.8	-72	-100.1	1.5	0	0	-1.1	-88.8
0	"T04"	2600.9	1.5	63	86.2	-79.3	-0.3	3	0	0	-26.2	-16.6
0	"T04"	2600.9	1.5	125	93	-79.3	-0.9	-1.2	0	0	-16.1	-4.5
0	"T04"	2600.9	1.5	250	95.2	-79.3	-2.9	-2	0	0	-8.6	2.4
0	"T04"	2600.9	1.5	500	96.2	-79.3	-6.2	-1	0	0	-3.2	6.5
0	"T04"	2600.9	1.5	1000	99.4	-79.3	-10.7	1.2	0	0	0	10.5
0	"T04"	2600.9	1.5	2000	99.1	-79.3	-22.4	1.5	0	0	1.2	0.1
0	"T04"	2600.9	1.5	4000	94.6	-79.3	-66	1.5	0	0	1	-48.2
0	"T04"	2600.9	1.5	8000	82.8	-79.3	-233.3	1.5	0	0	-1.1	-229.4
0	"T05"	3273.9	1.5	63	86.2	-81.3	-0.3	3	0	0	-26.2	-18.6
0	"T05"	3273.9	1.5	125	93	-81.3	-1.2	-1.2	0	0	-16.1	-6.8
0	"T05"	3273.9	1.5	250	95.2	-81.3	-3.6	-2	0	0	-8.6	-0.3
0	"T05"	3273.9	1.5	500	96.2	-81.3	-7.8	-1	0	0	-3.2	2.9
0	"T05"	3273.9	1.5	1000	99.4	-81.3	-13.5	1.2	0	0	0	5.7
0	"T05"	3273.9	1.5	2000	99.1	-81.3	-28.2	1.5	0	0	1.2	-7.7
0	"T05"	3273.9	1.5	4000	94.6	-81.3	-83.1	1.5	0	0	1	-67.3
0	"T05"	3273.9	1.5	8000	82.8	-81.3	-293.6	1.5	0	0	-1.1	-291.7
0	"T06"	4003.3	1.5	63	86.2	-83	-0.4	3.4	0	0	-26.2	-20.1
0	"T06"	4003.3	1.5	125	93	-83	-1.4	-1	0	0	-16.1	-8.6
0	"T06"	4003.3	1.5	250	95.2	-83	-4.4	-1.8	0	0	-8.6	-2.7
0	"T06"	4003.3	1.5	500	96.2	-83	-9.5	-0.8	0	0	-3.2	-0.4
0	"T06"	4003.3	1.5	1000	99.4	-83	-16.5	1.4	0	0	0	1.2
0	"T06"	4003.3	1.5	2000	99.1	-83	-34.5	1.7	0	0	1.2	-15.5
0	"T06"	4003.3	1.5	4000	94.6	-83	-101.6	1.7	0	0	1	-87.3
0	"T06"	4003.3	1.5	8000	82.8	-83	-359	1.7	0	0	-1.1	-358.7
0	"T07"	4881.5	1.5	63	86.2	-84.8	-0.5	3.9	0	0	-26.2	-21.4
0	"T07"	4881.5	1.5	125	93	-84.8	-1.8	-0.7	0	0	-16.1	-10.4
0	"T07"	4881.5	1.5	250	95.2	-84.8	-5.4	-1.6	0	0	-8.6	-5.1
0	"T07"	4881.5	1.5	500	96.2	-84.8	-11.6	-0.6	0	0	-3.2	-4
0	"T07"	4881.5	1.5	1000	99.4	-84.8	-20.2	1.6	0	0	0	-3.9
0	"T07"	4881.5	1.5	2000	99.1	-84.8	-42	1.9	0	0	1.2	-24.6
0	"T07"	4881.5	1.5	4000	94.6	-84.8	-123.9	1.9	0	0	1	-111.1
0	"T07"	4881.5	1.5	8000	82.8	-84.8	-437.8	1.9	0	0	-1.1	-438.9
"r12"	"T01"	1527.6	1.5	63	86.2	-74.7	-0.2	3	0	0	-26.2	-11.8
0	"T01"	1527.6	1.5	125	93	-74.7	-0.6	-1.2	0	0	-16.1	0.5
0	"T01"	1527.6	1.5	250	95.2	-74.7	-1.7	-2	0	0	-8.6	8.2
0	"T01"	1527.6	1.5	500	96.2	-74.7	-3.6	-1	0	0	-3.2	13.7
0	"T01"	1527.6	1.5	1000	99.4	-74.7	-6.3	1.2	0	0	0	19.6
0	"T01"	1527.6	1.5	2000	99.1	-74.7	-13.1	1.5	0	0	1.2	14
0	"T01"	1527.6	1.5	4000	94.6	-74.7	-38.8	1.5	0	0	1	-16.3
0	"T01"	1527.6	1.5	8000	82.8	-74.7	-137	1.5	0	0	-1.1	-128.5
0	"T03"	759.7	1.5	63	86.2	-68.6	-0.1	3	0	0	-26.2	-5.7
0	"T03"	759.7	1.5	125	93	-68.6	-0.3	-0.7	0	0	-16.1	7.3

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0	"T03"	759.7	1.5	250	95.2	-68.6	-0.8	-2	0	0	-8.6	15.1
0	"T03"	759.7	1.5	500	96.2	-68.6	-1.8	-1	0	0	-3.2	21.6
0	"T03"	759.7	1.5	1000	99.4	-68.6	-3.1	1.2	0	0	0	28.8
0	"T03"	759.7	1.5	2000	99.1	-68.6	-6.5	1.5	0	0	1.2	26.6
0	"T03"	759.7	1.5	4000	94.6	-68.6	-19.3	1.5	0	0	1	9.2
0	"T03"	759.7	1.5	8000	82.8	-68.6	-68.1	1.5	0	0	-1.1	-53.5
0	"T02"	805.1	1.5	63	86.2	-69.1	-0.1	3	0	0	-26.2	-6.2
0	"T02"	805.1	1.5	125	93	-69.1	-0.3	-0.8	0	0	-16.1	6.7
0	"T02"	805.1	1.5	250	95.2	-69.1	-0.9	-2	0	0	-8.6	14.6
0	"T02"	805.1	1.5	500	96.2	-69.1	-1.9	-1	0	0	-3.2	21
0	"T02"	805.1	1.5	1000	99.4	-69.1	-3.3	1.2	0	0	0	28.1
0	"T02"	805.1	1.5	2000	99.1	-69.1	-6.9	1.5	0	0	1.2	25.8
0	"T02"	805.1	1.5	4000	94.6	-69.1	-20.4	1.5	0	0	1	7.6
0	"T02"	805.1	1.5	8000	82.8	-69.1	-72.2	1.5	0	0	-1.1	-58.1
0	"T04"	898.3	1.5	63	86.2	-70.1	-0.1	3	0	0	-26.2	-7.2
0	"T04"	898.3	1.5	125	93	-70.1	-0.3	-0.9	0	0	-16.1	5.6
0	"T04"	898.3	1.5	250	95.2	-70.1	-1	-2	0	0	-8.6	13.5
0	"T04"	898.3	1.5	500	96.2	-70.1	-2.1	-1	0	0	-3.2	19.8
0	"T04"	898.3	1.5	1000	99.4	-70.1	-3.7	1.2	0	0	0	26.8
0	"T04"	898.3	1.5	2000	99.1	-70.1	-7.7	1.5	0	0	1.2	24
0	"T04"	898.3	1.5	4000	94.6	-70.1	-22.8	1.5	0	0	1	4.2
0	"T04"	898.3	1.5	8000	82.8	-70.1	-80.6	1.5	0	0	-1.1	-67.4
0	"T05"	1521	1.5	63	86.2	-74.6	-0.1	3	0	0	-26.2	-11.8
0	"T05"	1521	1.5	125	93	-74.6	-0.5	-1.2	0	0	-16.1	0.5
0	"T05"	1521	1.5	250	95.2	-74.6	-1.7	-2	0	0	-8.6	8.3
0	"T05"	1521	1.5	500	96.2	-74.6	-3.6	-1	0	0	-3.2	13.7
0	"T05"	1521	1.5	1000	99.4	-74.6	-6.3	1.2	0	0	0	19.6
0	"T05"	1521	1.5	2000	99.1	-74.6	-13.1	1.5	0	0	1.2	14.1
0	"T05"	1521	1.5	4000	94.6	-74.6	-38.6	1.5	0	0	1	-16.1
0	"T05"	1521	1.5	8000	82.8	-74.6	-136.4	1.5	0	0	-1.1	-127.9
0	"T06"	2247.2	1.5	63	86.2	-78	-0.2	3	0	0	-26.2	-15.3
0	"T06"	2247.2	1.5	125	93	-78	-0.8	-1.2	0	0	-16.1	-3.1
0	"T06"	2247.2	1.5	250	95.2	-78	-2.5	-2	0	0	-8.6	4.1
0	"T06"	2247.2	1.5	500	96.2	-78	-5.4	-1	0	0	-3.2	8.6
0	"T06"	2247.2	1.5	1000	99.4	-78	-9.3	1.2	0	0	0	13.3
0	"T06"	2247.2	1.5	2000	99.1	-78	-19.3	1.5	0	0	1.2	4.4
0	"T06"	2247.2	1.5	4000	94.6	-78	-57	1.5	0	0	1	-37.9
0	"T06"	2247.2	1.5	8000	82.8	-78	-201.5	1.5	0	0	-1.1	-196.4
0	"T07"	3255	1.5	63	86.2	-81.3	-0.3	3	0	0	-26.2	-18.6
0	"T07"	3255	1.5	125	93	-81.3	-1.2	-1.2	0	0	-16.1	-6.7
0	"T07"	3255	1.5	250	95.2	-81.3	-3.6	-2	0	0	-8.6	-0.3
0	"T07"	3255	1.5	500	96.2	-81.3	-7.8	-1	0	0	-3.2	3
0	"T07"	3255	1.5	1000	99.4	-81.3	-13.4	1.2	0	0	0	5.9
0	"T07"	3255	1.5	2000	99.1	-81.3	-28	1.5	0	0	1.2	-7.5
0	"T07"	3255	1.5	4000	94.6	-81.3	-82.6	1.5	0	0	1	-66.7
0	"T07"	3255	1.5	8000	82.8	-81.3	-291.9	1.5	0	0	-1.1	-290
"r13"	"T01"	1685.1	1.5	63	86.2	-75.5	-0.2	3	0	0	-26.2	-12.7
0	"T01"	1685.1	1.5	125	93	-75.5	-0.6	-1.2	0	0	-16.1	-0.4
0	"T01"	1685.1	1.5	250	95.2	-75.5	-1.9	-2	0	0	-8.6	7.2
0	"T01"	1685.1	1.5	500	96.2	-75.5	-4	-1	0	0	-3.2	12.5
0	"T01"	1685.1	1.5	1000	99.4	-75.5	-7	1.2	0	0	0	18.1
0	"T01"	1685.1	1.5	2000	99.1	-75.5	-14.5	1.5	0	0	1.2	11.8
0	"T01"	1685.1	1.5	4000	94.6	-75.5	-42.8	1.5	0	0	1	-21.2
0	"T01"	1685.1	1.5	8000	82.8	-75.5	-151.1	1.5	0	0	-1.1	-143.5
0	"T03"	575.3	1.5	63	86.2	-66.2	-0.1	3	0	0	-26.2	-3.3
0	"T03"	575.3	1.5	125	93	-66.2	-0.2	-0.2	0	0	-16.1	10.3
0	"T03"	575.3	1.5	250	95.2	-66.2	-0.6	-2	0	0	-8.6	17.8
0	"T03"	575.3	1.5	500	96.2	-66.2	-1.4	-1	0	0	-3.2	24.4
0	"T03"	575.3	1.5	1000	99.4	-66.2	-2.4	1.2	0	0	0	32
0	"T03"	575.3	1.5	2000	99.1	-66.2	-5	1.5	0	0	1.2	30.6
0	"T03"	575.3	1.5	4000	94.6	-66.2	-14.6	1.5	0	0	1	16.3
0	"T03"	575.3	1.5	8000	82.8	-66.2	-51.6	1.5	0	0	-1.1	-34.6
0	"T02"	1005.1	1.5	63	86.2	-71	-0.1	3	0	0	-26.2	-8.1
0	"T02"	1005.1	1.5	125	93	-71	-0.4	-1	0	0	-16.1	4.5
0	"T02"	1005.1	1.5	250	95.2	-71	-1.1	-2	0	0	-8.6	12.4
0	"T02"	1005.1	1.5	500	96.2	-71	-2.4	-1	0	0	-3.2	18.6
0	"T02"	1005.1	1.5	1000	99.4	-71	-4.2	1.2	0	0	0	25.4
0	"T02"	1005.1	1.5	2000	99.1	-71	-8.7	1.5	0	0	1.2	22.1
0	"T02"	1005.1	1.5	4000	94.6	-71	-25.5	1.5	0	0	1	0.6
0	"T02"	1005.1	1.5	8000	82.8	-71	-90.1	1.5	0	0	-1.1	-78
0	"T04"	1079.2	1.5	63	86.2	-71.7	-0.1	3	0	0	-26.2	-8.8
0	"T04"	1079.2	1.5	125	93	-71.7	-0.4	-1.1	0	0	-16.1	3.8
0	"T04"	1079.2	1.5	250	95.2	-71.7	-1.2	-2	0	0	-8.6	11.7
0	"T04"	1079.2	1.5	500	96.2	-71.7	-2.6	-1	0	0	-3.2	17.8
0	"T04"	1079.2	1.5	1000	99.4	-71.7	-4.5	1.2	0	0	0	24.5
0	"T04"	1079.2	1.5	2000	99.1	-71.7	-9.3	1.5	0	0	1.2	20.8
0	"T04"	1079.2	1.5	4000	94.6	-71.7	-27.4	1.5	0	0	1	-1.9
0	"T04"	1079.2	1.5	8000	82.8	-71.7	-96.8	1.5	0	0	-1.1	-85.2
0	"T05"	1594.5	1.5	63	86.2	-75.1	-0.2	3	0	0	-26.2	-12.2
0	"T05"	1594.5	1.5	125	93	-75.1	-0.6	-1.2	0	0	-16.1	0.1
0	"T05"	1594.5	1.5	250	95.2	-75.1	-1.8	-2	0	0	-8.6	7.8
0	"T05"	1594.5	1.5	500	96.2	-75.1	-3.8	-1	0	0	-3.2	13.2
0	"T05"	1594.5	1.5	1000	99.4	-75.1	-6.6	1.2	0	0	0	18.9
0	"T05"	1594.5	1.5	2000	99.1	-75.1	-13.7	1.5	0	0	1.2	13
0	"T05"	1594.5	1.5	4000	94.6	-75.1	-40.5	1.5	0	0	1	-18.4
0	"T05"	1594.5	1.5	8000	82.8	-75.1	-143	1.5	0	0	-1.1	-134.9
0	"T06"	2298.7	1.5	63	86.2	-78.2	-0.2	3	0	0	-26.2	-15.5
0	"T06"	2298.7	1.5	125	93	-78.2	-0.8	-1.2	0	0	-16.1	-3.3
0	"T06"	2298.7	1.5	250	95.2	-78.2	-2.5	-2	0	0	-8.6	3.8
0	"T06"	2298.7	1.5	500	96.2	-78.2	-5.5	-1	0	0	-3.2	8.3
0	"T06"	2298.7	1.5	1000	99.4	-78.2	-9.5	1.2	0	0	0	12.8
0	"T06"	2298.7	1.5	2000	99.1	-78.2	-19.8	1.5	0	0	1.2	3.8
0	"T06"	2298.7	1.5	4000	94.6	-78.2	-58.3	1.5	0	0	1	-39.5
0	"T06"	2298.7	1.5	8000	82.8	-78.2	-206.1	1.5	0	0	-1.1	-201.2
0	"T07"	3422.6	1.5	63	86.2	-81.7	-0.3	3	0	0	-26.2	-19
0	"T07"	3422.6	1.5	125	93	-81.7	-1.2	-1.2	0	0	-16.1	-7.2
0	"T07"	3422.6	1.5	250	95.2	-81.7	-3.8	-2	0	0	-8.6	-0.9

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0	"T07"	3422.6	1.5	500	96.2	-81.7	-8.2	-1	0	0	-3.2	2.2
0	"T07"	3422.6	1.5	1000	99.4	-81.7	-14.1	1.2	0	0	0	4.7
0	"T07"	3422.6	1.5	2000	99.1	-81.7	-29.5	1.5	0	0	1.2	-9.4
0	"T07"	3422.6	1.5	4000	94.6	-81.7	-86.8	1.5	0	0	1	-71.4
0	"T07"	3422.6	1.5	8000	82.8	-81.7	-306.9	1.5	0	0	-1.1	-305.4
"r14"	"T01"	1878	1.5	63	86.2	-76.5	-0.2	3	0	0	-26.2	-13.7
0	"T01"	1878	1.5	125	93	-76.5	-0.7	-1.2	0	0	-16.1	-1.4
0	"T01"	1878	1.5	250	95.2	-76.5	-2.1	-2	0	0	-8.6	6
0	"T01"	1878	1.5	500	96.2	-76.5	-4.5	-1	0	0	-3.2	11.1
0	"T01"	1878	1.5	1000	99.4	-76.5	-7.8	1.2	0	0	0	16.3
0	"T01"	1878	1.5	2000	99.1	-76.5	-16.2	1.5	0	0	1.2	9.2
0	"T01"	1878	1.5	4000	94.6	-76.5	-47.6	1.5	0	0	1	-27
0	"T01"	1878	1.5	8000	82.8	-76.5	-168.4	1.5	0	0	-1.1	-161.7
0	"T03"	692.6	1.5	63	86.2	-67.8	-0.1	3	0	0	-26.2	-4.9
0	"T03"	692.6	1.5	125	93	-67.8	-0.3	-0.5	0	0	-16.1	8.3
0	"T03"	692.6	1.5	250	95.2	-67.8	-0.8	-2	0	0	-8.6	16
0	"T03"	692.6	1.5	500	96.2	-67.8	-1.7	-1	0	0	-3.2	22.6
0	"T03"	692.6	1.5	1000	99.4	-67.8	-2.9	1.2	0	0	0	29.9
0	"T03"	692.6	1.5	2000	99.1	-67.8	-6	1.5	0	0	1.2	28
0	"T03"	692.6	1.5	4000	94.6	-67.8	-17.6	1.5	0	0	1	11.7
0	"T03"	692.6	1.5	8000	82.8	-67.8	-62.1	1.5	0	0	-1.1	-46.7
0	"T02"	1197.5	1.5	63	86.2	-72.6	-0.1	3	0	0	-26.2	-9.7
0	"T02"	1197.5	1.5	125	93	-72.6	-0.4	-1.1	0	0	-16.1	2.8
0	"T02"	1197.5	1.5	250	95.2	-72.6	-1.3	-2	0	0	-8.6	10.7
0	"T02"	1197.5	1.5	500	96.2	-72.6	-2.9	-1	0	0	-3.2	16.6
0	"T02"	1197.5	1.5	1000	99.4	-72.6	-4.9	1.2	0	0	0	23.1
0	"T02"	1197.5	1.5	2000	99.1	-72.6	-10.3	1.5	0	0	1.2	18.9
0	"T02"	1197.5	1.5	4000	94.6	-72.6	-30.4	1.5	0	0	1	-5.8
0	"T02"	1197.5	1.5	8000	82.8	-72.6	-107.4	1.5	0	0	-1.1	-96.8
0	"T04"	1062.6	1.5	63	86.2	-71.5	-0.1	3	0	0	-26.2	-8.6
0	"T04"	1062.6	1.5	125	93	-71.5	-0.4	-1.1	0	0	-16.1	3.9
0	"T04"	1062.6	1.5	250	95.2	-71.5	-1.2	-2	0	0	-8.6	11.9
0	"T04"	1062.6	1.5	500	96.2	-71.5	-2.5	-1	0	0	-3.2	18
0	"T04"	1062.6	1.5	1000	99.4	-71.5	-4.4	1.2	0	0	0	24.7
0	"T04"	1062.6	1.5	2000	99.1	-71.5	-9.1	1.5	0	0	1.2	21.1
0	"T04"	1062.6	1.5	4000	94.6	-71.5	-27	1.5	0	0	1	-1.4
0	"T04"	1062.6	1.5	8000	82.8	-71.5	-95.3	1.5	0	0	-1.1	-83.6
0	"T05"	1500.5	1.5	63	86.2	-74.5	-0.1	3	0	0	-26.2	-11.7
0	"T05"	1500.5	1.5	125	93	-74.5	-0.5	-1.2	0	0	-16.1	0.7
0	"T05"	1500.5	1.5	250	95.2	-74.5	-1.7	-2	0	0	-8.6	8.4
0	"T05"	1500.5	1.5	500	96.2	-74.5	-3.6	-1	0	0	-3.2	13.9
0	"T05"	1500.5	1.5	1000	99.4	-74.5	-6.2	1.2	0	0	0	19.8
0	"T05"	1500.5	1.5	2000	99.1	-74.5	-12.9	1.5	0	0	1.2	14.4
0	"T05"	1500.5	1.5	4000	94.6	-74.5	-38.1	1.5	0	0	1	-15.5
0	"T05"	1500.5	1.5	8000	82.8	-74.5	-134.6	1.5	0	0	-1.1	-125.9
0	"T06"	2185.2	1.5	63	86.2	-77.8	-0.2	3	0	0	-26.2	-15
0	"T06"	2185.2	1.5	125	93	-77.8	-0.8	-1.2	0	0	-16.1	-2.9
0	"T06"	2185.2	1.5	250	95.2	-77.8	-2.4	-2	0	0	-8.6	4.4
0	"T06"	2185.2	1.5	500	96.2	-77.8	-5.2	-1	0	0	-3.2	9
0	"T06"	2185.2	1.5	1000	99.4	-77.8	-9	1.2	0	0	0	13.8
0	"T06"	2185.2	1.5	2000	99.1	-77.8	-18.8	1.5	0	0	1.2	5.2
0	"T06"	2185.2	1.5	4000	94.6	-77.8	-55.4	1.5	0	0	1	-36.1
0	"T06"	2185.2	1.5	8000	82.8	-77.8	-196	1.5	0	0	-1.1	-190.6
0	"T07"	3366.1	1.5	63	86.2	-81.5	-0.3	3	0	0	-26.2	-18.9
0	"T07"	3366.1	1.5	125	93	-81.5	-1.2	-1.2	0	0	-16.1	-7
0	"T07"	3366.1	1.5	250	95.2	-81.5	-3.7	-2	0	0	-8.6	-0.7
0	"T07"	3366.1	1.5	500	96.2	-81.5	-8	-1	0	0	-3.2	2.4
0	"T07"	3366.1	1.5	1000	99.4	-81.5	-13.9	1.2	0	0	0	5.1
0	"T07"	3366.1	1.5	2000	99.1	-81.5	-29	1.5	0	0	1.2	-8.7
0	"T07"	3366.1	1.5	4000	94.6	-81.5	-85.4	1.5	0	0	1	-69.8
0	"T07"	3366.1	1.5	8000	82.8	-81.5	-301.9	1.5	0	0	-1.1	-300.2
"r15"	"T01"	2150.3	1.5	63	86.2	-77.7	-0.2	3	0	0	-26.2	-14.9
0	"T01"	2150.3	1.5	125	93	-77.7	-0.8	-1.2	0	0	-16.1	-2.7
0	"T01"	2150.3	1.5	250	95.2	-77.7	-2.4	-2	0	0	-8.6	4.6
0	"T01"	2150.3	1.5	500	96.2	-77.7	-5.1	-1	0	0	-3.2	9.2
0	"T01"	2150.3	1.5	1000	99.4	-77.7	-8.9	1.2	0	0	0	14
0	"T01"	2150.3	1.5	2000	99.1	-77.7	-18.5	1.5	0	0	1.2	5.6
0	"T01"	2150.3	1.5	4000	94.6	-77.7	-54.6	1.5	0	0	1	-35.1
0	"T01"	2150.3	1.5	8000	82.8	-77.7	-192.8	1.5	0	0	-1.1	-187.3
0	"T03"	1330.2	1.5	63	86.2	-73.5	-0.1	3	0	0	-26.2	-10.6
0	"T03"	1330.2	1.5	125	93	-73.5	-0.5	-1.2	0	0	-16.1	1.8
0	"T03"	1330.2	1.5	250	95.2	-73.5	-1.5	-2	0	0	-8.6	9.6
0	"T03"	1330.2	1.5	500	96.2	-73.5	-3.2	-1	0	0	-3.2	15.4
0	"T03"	1330.2	1.5	1000	99.4	-73.5	-5.5	1.2	0	0	0	21.6
0	"T03"	1330.2	1.5	2000	99.1	-73.5	-11.5	1.5	0	0	1.2	16.9
0	"T03"	1330.2	1.5	4000	94.6	-73.5	-33.8	1.5	0	0	1	-10.1
0	"T03"	1330.2	1.5	8000	82.8	-73.5	-119.3	1.5	0	0	-1.1	-109.6
0	"T02"	2043.5	1.5	63	86.2	-77.2	-0.2	3	0	0	-26.2	-14.4
0	"T02"	2043.5	1.5	125	93	-77.2	-0.7	-1.2	0	0	-16.1	-2.2
0	"T02"	2043.5	1.5	250	95.2	-77.2	-2.3	-2	0	0	-8.6	5.1
0	"T02"	2043.5	1.5	500	96.2	-77.2	-4.9	-1	0	0	-3.2	9.9
0	"T02"	2043.5	1.5	1000	99.4	-77.2	-8.4	1.2	0	0	0	14.9
0	"T02"	2043.5	1.5	2000	99.1	-77.2	-17.6	1.5	0	0	1.2	7
0	"T02"	2043.5	1.5	4000	94.6	-77.2	-51.8	1.5	0	0	1	-32
0	"T02"	2043.5	1.5	8000	82.8	-77.2	-183.3	1.5	0	0	-1.1	-177.3
0	"T04"	2907.9	1.5	63	86.2	-80.3	-0.3	3	0	0	-26.2	-17.6
0	"T04"	2907.9	1.5	125	93	-80.3	-1.1	-1.2	0	0	-16.1	-5.6
0	"T04"	2907.9	1.5	250	95.2	-80.3	-3.2	-2	0	0	-8.6	1.1
0	"T04"	2907.9	1.5	500	96.2	-80.3	-6.9	-1	0	0	-3.2	4.8
0	"T04"	2907.9	1.5	1000	99.4	-80.3	-12	1.2	0	0	0	8.3
0	"T04"	2907.9	1.5	2000	99.1	-80.3	-25	1.5	0	0	1.2	-3.5
0	"T04"	2907.9	1.5	4000	94.6	-80.3	-73.8	1.5	0	0	1	-57
0	"T04"	2907.9	1.5	8000	82.8	-80.3	-260.8	1.5	0	0	-1.1	-257.9
0	"T05"	3354.1	1.5	63	86.2	-81.5	-0.3	3	0	0	-26.2	-18.8
0	"T05"	3354.1	1.5	125	93	-81.5	-1.2	-1.2	0	0	-16.1	-7
0	"T05"	3354.1	1.5	250	95.2	-81.5	-3.7	-2	0	0	-8.6	-0.6
0	"T05"	3354.1	1.5	500	96.2	-81.5	-8	-1	0	0	-3.2	2.5

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0	"T05"	3354.1	1.5	1000	99.4	-81.5	-13.9	1.2	0	0	0	5.2
0	"T05"	3354.1	1.5	2000	99.1	-81.5	-28.9	1.5	0	0	1.2	-8.6
0	"T05"	3354.1	1.5	4000	94.6	-81.5	-85.1	1.5	0	0	1	-69.5
0	"T05"	3354.1	1.5	8000	82.8	-81.5	-300.8	1.5	0	0	-1.1	-299.1
0	"T06"	3999.5	1.5	63	86.2	-83	-0.4	3.4	0	0	-26.2	-20.1
0	"T06"	3999.5	1.5	125	93	-83	-1.4	-1	0	0	-16.1	-8.6
0	"T06"	3999.5	1.5	250	95.2	-83	-4.4	-1.8	0	0	-8.6	-2.7
0	"T06"	3999.5	1.5	500	96.2	-83	-9.5	-0.8	0	0	-3.2	-0.4
0	"T06"	3999.5	1.5	1000	99.4	-83	-16.5	1.4	0	0	0	1.2
0	"T06"	3999.5	1.5	2000	99.1	-83	-34.4	1.7	0	0	1.2	-15.5
0	"T06"	3999.5	1.5	4000	94.6	-83	-101.5	1.7	0	0	1	-87.2
0	"T06"	3999.5	1.5	8000	82.8	-83	-358.7	1.7	0	0	-1.1	-358.3
0	"T07"	5237.2	1.5	63	86.2	-85.4	-0.5	4	0	0	-26.2	-21.9
0	"T07"	5237.2	1.5	125	93	-85.4	-1.9	-0.7	0	0	-16.1	-11
0	"T07"	5237.2	1.5	250	95.2	-85.4	-5.8	-1.5	0	0	-8.6	-6.1
0	"T07"	5237.2	1.5	500	96.2	-85.4	-12.5	-0.5	0	0	-3.2	-5.4
0	"T07"	5237.2	1.5	1000	99.4	-85.4	-21.6	1.7	0	0	0	-5.9
0	"T07"	5237.2	1.5	2000	99.1	-85.4	-45.1	2	0	0	1.2	-28.2
0	"T07"	5237.2	1.5	4000	94.6	-85.4	-132.9	2	0	0	1	-120.7
0	"T07"	5237.2	1.5	8000	82.8	-85.4	-469.7	2	0	0	-1.1	-471.4
"r16"	"T01"	2362.8	1.5	63	86.2	-78.5	-0.2	3	0	0	-26.2	-15.7
0	"T01"	2362.8	1.5	125	93	-78.5	-0.9	-1.2	0	0	-16.1	-3.6
0	"T01"	2362.8	1.5	250	95.2	-78.5	-2.6	-2	0	0	-8.6	3.5
0	"T01"	2362.8	1.5	500	96.2	-78.5	-5.6	-1	0	0	-3.2	7.9
0	"T01"	2362.8	1.5	1000	99.4	-78.5	-9.8	1.2	0	0	0	12.3
0	"T01"	2362.8	1.5	2000	99.1	-78.5	-20.3	1.5	0	0	1.2	3
0	"T01"	2362.8	1.5	4000	94.6	-78.5	-59.9	1.5	0	0	1	-41.3
0	"T01"	2362.8	1.5	8000	82.8	-78.5	-211.9	1.5	0	0	-1.1	-207.2
0	"T03"	1291.7	1.5	63	86.2	-73.2	-0.1	3	0	0	-26.2	-10.4
0	"T03"	1291.7	1.5	125	93	-73.2	-0.5	-1.1	0	0	-16.1	2.1
0	"T03"	1291.7	1.5	250	95.2	-73.2	-1.4	-2	0	0	-8.6	9.9
0	"T03"	1291.7	1.5	500	96.2	-73.2	-3.1	-1	0	0	-3.2	15.7
0	"T03"	1291.7	1.5	1000	99.4	-73.2	-5.3	1.2	0	0	0	22
0	"T03"	1291.7	1.5	2000	99.1	-73.2	-11.1	1.5	0	0	1.2	17.5
0	"T03"	1291.7	1.5	4000	94.6	-73.2	-32.8	1.5	0	0	1	-8.9
0	"T03"	1291.7	1.5	8000	82.8	-73.2	-115.8	1.5	0	0	-1.1	-105.9
0	"T02"	2127.1	1.5	63	86.2	-77.6	-0.2	3	0	0	-26.2	-14.8
0	"T02"	2127.1	1.5	125	93	-77.6	-0.8	-1.2	0	0	-16.1	-2.6
0	"T02"	2127.1	1.5	250	95.2	-77.6	-2.3	-2	0	0	-8.6	4.7
0	"T02"	2127.1	1.5	500	96.2	-77.6	-5.1	-1	0	0	-3.2	9.4
0	"T02"	2127.1	1.5	1000	99.4	-77.6	-8.8	1.2	0	0	0	14.2
0	"T02"	2127.1	1.5	2000	99.1	-77.6	-18.3	1.5	0	0	1.2	5.9
0	"T02"	2127.1	1.5	4000	94.6	-77.6	-54	1.5	0	0	1	-34.4
0	"T02"	2127.1	1.5	8000	82.8	-77.6	-190.8	1.5	0	0	-1.1	-185.1
0	"T04"	2763.8	1.5	63	86.2	-79.8	-0.3	3	0	0	-26.2	-17.1
0	"T04"	2763.8	1.5	125	93	-79.8	-1	-1.2	0	0	-16.1	-5.1
0	"T04"	2763.8	1.5	250	95.2	-79.8	-3	-2	0	0	-8.6	1.7
0	"T04"	2763.8	1.5	500	96.2	-79.8	-6.6	-1	0	0	-3.2	5.6
0	"T04"	2763.8	1.5	1000	99.4	-79.8	-11.4	1.2	0	0	0	9.3
0	"T04"	2763.8	1.5	2000	99.1	-79.8	-23.8	1.5	0	0	1.2	-1.8
0	"T04"	2763.8	1.5	4000	94.6	-79.8	-70.1	1.5	0	0	1	-52.9
0	"T04"	2763.8	1.5	8000	82.8	-79.8	-247.9	1.5	0	0	-1.1	-244.5
0	"T05"	3136.3	1.5	63	86.2	-80.9	-0.3	3	0	0	-26.2	-18.2
0	"T05"	3136.3	1.5	125	93	-80.9	-1.1	-1.2	0	0	-16.1	-6.3
0	"T05"	3136.3	1.5	250	95.2	-80.9	-3.5	-2	0	0	-8.6	0.2
0	"T05"	3136.3	1.5	500	96.2	-80.9	-7.5	-1	0	0	-3.2	3.6
0	"T05"	3136.3	1.5	1000	99.4	-80.9	-13	1.2	0	0	0	6.7
0	"T05"	3136.3	1.5	2000	99.1	-80.9	-27	1.5	0	0	1.2	-6.1
0	"T05"	3136.3	1.5	4000	94.6	-80.9	-79.6	1.5	0	0	1	-63.4
0	"T05"	3136.3	1.5	8000	82.8	-80.9	-281.3	1.5	0	0	-1.1	-279
0	"T06"	3745.3	1.5	63	86.2	-82.5	-0.4	3.2	0	0	-26.2	-19.6
0	"T06"	3745.3	1.5	125	93	-82.5	-1.4	-1.1	0	0	-16.1	-8
0	"T06"	3745.3	1.5	250	95.2	-82.5	-4.1	-1.9	0	0	-8.6	-1.9
0	"T06"	3745.3	1.5	500	96.2	-82.5	-8.9	-0.9	0	0	-3.2	0.7
0	"T06"	3745.3	1.5	1000	99.4	-82.5	-15.5	1.3	0	0	0	2.7
0	"T06"	3745.3	1.5	2000	99.1	-82.5	-32.2	1.6	0	0	1.2	-12.8
0	"T06"	3745.3	1.5	4000	94.6	-82.5	-95	1.6	0	0	1	-80.3
0	"T06"	3745.3	1.5	8000	82.8	-82.5	-335.9	1.6	0	0	-1.1	-335.1
0	"T07"	5041.3	1.5	63	86.2	-85.1	-0.5	3.9	0	0	-26.2	-21.6
0	"T07"	5041.3	1.5	125	93	-85.1	-1.8	-0.7	0	0	-16.1	-10.7
0	"T07"	5041.3	1.5	250	95.2	-85.1	-5.6	-1.6	0	0	-8.6	-5.6
0	"T07"	5041.3	1.5	500	96.2	-85.1	-12	-0.5	0	0	-3.2	-4.6
0	"T07"	5041.3	1.5	1000	99.4	-85.1	-20.8	1.6	0	0	0	-4.8
0	"T07"	5041.3	1.5	2000	99.1	-85.1	-43.4	2	0	0	1.2	-26.2
0	"T07"	5041.3	1.5	4000	94.6	-85.1	-127.9	2	0	0	1	-115.4
0	"T07"	5041.3	1.5	8000	82.8	-85.1	-452.1	2	0	0	-1.1	-453.5
"r17"	"T01"	2636.8	1.5	63	86.2	-79.4	-0.3	3	0	0	-26.2	-16.7
0	"T01"	2636.8	1.5	125	93	-79.4	-1	-1.2	0	0	-16.1	-4.6
0	"T01"	2636.8	1.5	250	95.2	-79.4	-2.9	-2	0	0	-8.6	2.3
0	"T01"	2636.8	1.5	500	96.2	-79.4	-6.3	-1	0	0	-3.2	6.3
0	"T01"	2636.8	1.5	1000	99.4	-79.4	-10.9	1.2	0	0	0	10.3
0	"T01"	2636.8	1.5	2000	99.1	-79.4	-22.7	1.5	0	0	1.2	-0.3
0	"T01"	2636.8	1.5	4000	94.6	-79.4	-66.9	1.5	0	0	1	-49.2
0	"T01"	2636.8	1.5	8000	82.8	-79.4	-236.5	1.5	0	0	-1.1	-232.7
0	"T03"	1269.8	1.5	63	86.2	-73.1	-0.1	3	0	0	-26.2	-10.2
0	"T03"	1269.8	1.5	125	93	-73.1	-0.5	-1.1	0	0	-16.1	2.2
0	"T03"	1269.8	1.5	250	95.2	-73.1	-1.4	-2	0	0	-8.6	10.1
0	"T03"	1269.8	1.5	500	96.2	-73.1	-3	-1	0	0	-3.2	15.9
0	"T03"	1269.8	1.5	1000	99.4	-73.1	-5.2	1.2	0	0	0	22.3
0	"T03"	1269.8	1.5	2000	99.1	-73.1	-10.9	1.5	0	0	1.2	17.8
0	"T03"	1269.8	1.5	4000	94.6	-73.1	-32.2	1.5	0	0	1	-8.2
0	"T03"	1269.8	1.5	8000	82.8	-73.1	-113.9	1.5	0	0	-1.1	-103.8
0	"T02"	2184.2	1.5	63	86.2	-77.8	-0.2	3	0	0	-26.2	-15
0	"T02"	2184.2	1.5	125	93	-77.8	-0.8	-1.2	0	0	-16.1	-2.8
0	"T02"	2184.2	1.5	250	95.2	-77.8	-2.4	-2	0	0	-8.6	4.4
0	"T02"	2184.2	1.5	500	96.2	-77.8	-5.2	-1	0	0	-3.2	9
0	"T02"	2184.2	1.5	1000	99.4	-77.8	-9	1.2	0	0	0	13.8

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0	"T02"	2184.2	1.5	2000	99.1	-77.8	-18.8	1.5	0	0	1.2	5.2
0	"T02"	2184.2	1.5	4000	94.6	-77.8	-55.4	1.5	0	0	1	-36.1
0	"T02"	2184.2	1.5	8000	82.8	-77.8	-195.9	1.5	0	0	-1.1	-190.5
0	"T04"	2335.4	1.5	63	86.2	-78.4	-0.2	3	0	0	-26.2	-15.6
0	"T04"	2335.4	1.5	125	93	-78.4	-0.8	-1.2	0	0	-16.1	-3.5
0	"T04"	2335.4	1.5	250	95.2	-78.4	-2.6	-2	0	0	-8.6	3.6
0	"T04"	2335.4	1.5	500	96.2	-78.4	-5.6	-1	0	0	-3.2	8.1
0	"T04"	2335.4	1.5	1000	99.4	-78.4	-9.6	1.2	0	0	0	12.6
0	"T04"	2335.4	1.5	2000	99.1	-78.4	-20.1	1.5	0	0	1.2	3.3
0	"T04"	2335.4	1.5	4000	94.6	-78.4	-59.3	1.5	0	0	1	-40.5
0	"T04"	2335.4	1.5	8000	82.8	-78.4	-209.4	1.5	0	0	-1.1	-204.6
0	"T05"	2557.6	1.5	63	86.2	-79.2	-0.3	3	0	0	-26.2	-16.4
0	"T05"	2557.6	1.5	125	93	-79.2	-0.9	-1.2	0	0	-16.1	-4.4
0	"T05"	2557.6	1.5	250	95.2	-79.2	-2.8	-2	0	0	-8.6	2.6
0	"T05"	2557.6	1.5	500	96.2	-79.2	-6.1	-1	0	0	-3.2	6.8
0	"T05"	2557.6	1.5	1000	99.4	-79.2	-10.6	1.2	0	0	0	10.9
0	"T05"	2557.6	1.5	2000	99.1	-79.2	-22	1.5	0	0	1.2	0.6
0	"T05"	2557.6	1.5	4000	94.6	-79.2	-64.9	1.5	0	0	1	-47
0	"T05"	2557.6	1.5	8000	82.8	-79.2	-229.4	1.5	0	0	-1.1	-225.3
0	"T06"	3092.9	1.5	63	86.2	-80.8	-0.3	3	0	0	-26.2	-18.1
0	"T06"	3092.9	1.5	125	93	-80.8	-1.1	-1.2	0	0	-16.1	-6.2
0	"T06"	3092.9	1.5	250	95.2	-80.8	-3.4	-2	0	0	-8.6	0.4
0	"T06"	3092.9	1.5	500	96.2	-80.8	-7.4	-1	0	0	-3.2	3.8
0	"T06"	3092.9	1.5	1000	99.4	-80.8	-12.8	1.2	0	0	0	7
0	"T06"	3092.9	1.5	2000	99.1	-80.8	-26.6	1.5	0	0	1.2	-5.6
0	"T06"	3092.9	1.5	4000	94.6	-80.8	-78.5	1.5	0	0	1	-62.2
0	"T06"	3092.9	1.5	8000	82.8	-80.8	-277.4	1.5	0	0	-1.1	-275
0	"T07"	4464.6	1.5	63	86.2	-84	-0.4	3.7	0	0	-26.2	-20.8
0	"T07"	4464.6	1.5	125	93	-84	-1.6	-0.8	0	0	-16.1	-9.6
0	"T07"	4464.6	1.5	250	95.2	-84	-4.9	-1.7	0	0	-8.6	-4
0	"T07"	4464.6	1.5	500	96.2	-84	-10.6	-0.7	0	0	-3.2	-2.3
0	"T07"	4464.6	1.5	1000	99.4	-84	-18.4	1.5	0	0	0	-1.5
0	"T07"	4464.6	1.5	2000	99.1	-84	-38.4	1.8	0	0	1.2	-20.3
0	"T07"	4464.6	1.5	4000	94.6	-84	-113.3	1.8	0	0	1	-99.8
0	"T07"	4464.6	1.5	8000	82.8	-84	-400.4	1.8	0	0	-1.1	-400.9
"r18"	"T01"	3013.3	1.5	63	86.2	-80.6	-0.3	3	0	0	-26.2	-17.9
0	"T01"	3013.3	1.5	125	93	-80.6	-1.1	-1.2	0	0	-16.1	-5.9
0	"T01"	3013.3	1.5	250	95.2	-80.6	-3.3	-2	0	0	-8.6	0.7
0	"T01"	3013.3	1.5	500	96.2	-80.6	-7.2	-1	0	0	-3.2	4.2
0	"T01"	3013.3	1.5	1000	99.4	-80.6	-12.4	1.2	0	0	0	7.5
0	"T01"	3013.3	1.5	2000	99.1	-80.6	-25.9	1.5	0	0	1.2	-4.7
0	"T01"	3013.3	1.5	4000	94.6	-80.6	-76.5	1.5	0	0	1	-59.9
0	"T01"	3013.3	1.5	8000	82.8	-80.6	-270.2	1.5	0	0	-1.1	-267.6
0	"T03"	1704.8	1.5	63	86.2	-75.6	-0.2	3	0	0	-26.2	-12.8
0	"T03"	1704.8	1.5	125	93	-75.6	-0.6	-1.2	0	0	-16.1	-0.5
0	"T03"	1704.8	1.5	250	95.2	-75.6	-1.9	-2	0	0	-8.6	7.1
0	"T03"	1704.8	1.5	500	96.2	-75.6	-4.1	-1	0	0	-3.2	12.3
0	"T03"	1704.8	1.5	1000	99.4	-75.6	-7	1.2	0	0	0	17.9
0	"T03"	1704.8	1.5	2000	99.1	-75.6	-14.7	1.5	0	0	1.2	11.5
0	"T03"	1704.8	1.5	4000	94.6	-75.6	-43.3	1.5	0	0	1	-21.8
0	"T03"	1704.8	1.5	8000	82.8	-75.6	-152.9	1.5	0	0	-1.1	-145.3
0	"T02"	2328.5	1.5	63	86.2	-78.3	-0.2	3	0	0	-26.2	-15.6
0	"T02"	2328.5	1.5	125	93	-78.3	-0.8	-1.2	0	0	-16.1	-3.5
0	"T02"	2328.5	1.5	250	95.2	-78.3	-2.6	-2	0	0	-8.6	3.7
0	"T02"	2328.5	1.5	500	96.2	-78.3	-5.6	-1	0	0	-3.2	8.1
0	"T02"	2328.5	1.5	1000	99.4	-78.3	-9.6	1.2	0	0	0	12.6
0	"T02"	2328.5	1.5	2000	99.1	-78.3	-20	1.5	0	0	1.2	3.4
0	"T02"	2328.5	1.5	4000	94.6	-78.3	-59.1	1.5	0	0	1	-40.3
0	"T02"	2328.5	1.5	8000	82.8	-78.3	-208.8	1.5	0	0	-1.1	-204
0	"T04"	1532.2	1.5	63	86.2	-74.7	-0.2	3	0	0	-26.2	-11.9
0	"T04"	1532.2	1.5	125	93	-74.7	-0.6	-1.2	0	0	-16.1	0.5
0	"T04"	1532.2	1.5	250	95.2	-74.7	-1.7	-2	0	0	-8.6	8.2
0	"T04"	1532.2	1.5	500	96.2	-74.7	-3.7	-1	0	0	-3.2	13.7
0	"T04"	1532.2	1.5	1000	99.4	-74.7	-6.3	1.2	0	0	0	19.5
0	"T04"	1532.2	1.5	2000	99.1	-74.7	-13.2	1.5	0	0	1.2	13.9
0	"T04"	1532.2	1.5	4000	94.6	-74.7	-38.9	1.5	0	0	1	-16.5
0	"T04"	1532.2	1.5	8000	82.8	-74.7	-137.4	1.5	0	0	-1.1	-128.9
0	"T05"	1396.9	1.5	63	86.2	-73.9	-0.1	3	0	0	-26.2	-11
0	"T05"	1396.9	1.5	125	93	-73.9	-0.5	-1.2	0	0	-16.1	1.3
0	"T05"	1396.9	1.5	250	95.2	-73.9	-1.5	-2	0	0	-8.6	9.1
0	"T05"	1396.9	1.5	500	96.2	-73.9	-3.3	-1	0	0	-3.2	14.8
0	"T05"	1396.9	1.5	1000	99.4	-73.9	-5.8	1.2	0	0	0	20.9
0	"T05"	1396.9	1.5	2000	99.1	-73.9	-12	1.5	0	0	1.2	15.9
0	"T05"	1396.9	1.5	4000	94.6	-73.9	-35.4	1.5	0	0	1	-12.2
0	"T05"	1396.9	1.5	8000	82.8	-73.9	-125.3	1.5	0	0	-1.1	-116
0	"T06"	1777.7	1.5	63	86.2	-76	-0.2	3	0	0	-26.2	-13.2
0	"T06"	1777.7	1.5	125	93	-76	-0.6	-1.2	0	0	-16.1	-0.9
0	"T06"	1777.7	1.5	250	95.2	-76	-2	-2	0	0	-8.6	6.6
0	"T06"	1777.7	1.5	500	96.2	-76	-4.2	-1	0	0	-3.2	11.8
0	"T06"	1777.7	1.5	1000	99.4	-76	-7.3	1.2	0	0	0	17.2
0	"T06"	1777.7	1.5	2000	99.1	-76	-15.3	1.5	0	0	1.2	10.5
0	"T06"	1777.7	1.5	4000	94.6	-76	-45.1	1.5	0	0	1	-24
0	"T06"	1777.7	1.5	8000	82.8	-76	-159.4	1.5	0	0	-1.1	-152.2
0	"T07"	3213.9	1.5	63	86.2	-81.1	-0.3	3	0	0	-26.2	-18.5
0	"T07"	3213.9	1.5	125	93	-81.1	-1.2	-1.2	0	0	-16.1	-6.6
0	"T07"	3213.9	1.5	250	95.2	-81.1	-3.5	-2	0	0	-8.6	-0.1
0	"T07"	3213.9	1.5	500	96.2	-81.1	-7.7	-1	0	0	-3.2	3.2
0	"T07"	3213.9	1.5	1000	99.4	-81.1	-13.3	1.2	0	0	0	6.2
0	"T07"	3213.9	1.5	2000	99.1	-81.1	-27.7	1.5	0	0	1.2	-7
0	"T07"	3213.9	1.5	4000	94.6	-81.1	-81.5	1.5	0	0	1	-65.6
0	"T07"	3213.9	1.5	8000	82.8	-81.1	-288.2	1.5	0	0	-1.1	-286.2
"r19"	"T01"	2976.5	1.5	63	86.2	-80.5	-0.3	3	0	0	-26.2	-17.8
0	"T01"	2976.5	1.5	125	93	-80.5	-1.1	-1.2	0	0	-16.1	-5.8
0	"T01"	2976.5	1.5	250	95.2	-80.5	-3.3	-2	0	0	-8.6	0.8
0	"T01"	2976.5	1.5	500	96.2	-80.5	-7.1	-1	0	0	-3.2	4.4
0	"T01"	2976.5	1.5	1000	99.4	-80.5	-12.3	1.2	0	0	0	7.8
0	"T01"	2976.5	1.5	2000	99.1	-80.5	-25.6	1.5	0	0	1.2	-4.3

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0	"T01"	2976.5	1.5	4000	94.6	-80.5	-75.5	1.5	0	0	1	-58.9
0	"T01"	2976.5	1.5	8000	82.8	-80.5	-266.9	1.5	0	0	-1.1	-264.2
0	"T03"	1732.2	1.5	63	86.2	-75.8	-0.2	3	0	0	-26.2	-12.9
0	"T03"	1732.2	1.5	125	93	-75.8	-0.6	-1.2	0	0	-16.1	-0.7
0	"T03"	1732.2	1.5	250	95.2	-75.8	-1.9	-2	0	0	-8.6	6.9
0	"T03"	1732.2	1.5	500	96.2	-75.8	-4.1	-1	0	0	-3.2	12.1
0	"T03"	1732.2	1.5	1000	99.4	-75.8	-7.2	1.2	0	0	0	17.6
0	"T03"	1732.2	1.5	2000	99.1	-75.8	-14.9	1.5	0	0	1.2	11.1
0	"T03"	1732.2	1.5	4000	94.6	-75.8	-43.9	1.5	0	0	1	-22.6
0	"T03"	1732.2	1.5	8000	82.8	-75.8	-155.3	1.5	0	0	-1.1	-147.9
0	"T02"	2271.6	1.5	63	86.2	-78.1	-0.2	3	0	0	-26.2	-15.4
0	"T02"	2271.6	1.5	125	93	-78.1	-0.8	-1.2	0	0	-16.1	-3.2
0	"T02"	2271.6	1.5	250	95.2	-78.1	-2.5	-2	0	0	-8.6	4
0	"T02"	2271.6	1.5	500	96.2	-78.1	-5.4	-1	0	0	-3.2	8.5
0	"T02"	2271.6	1.5	1000	99.4	-78.1	-9.4	1.2	0	0	0	13.1
0	"T02"	2271.6	1.5	2000	99.1	-78.1	-19.6	1.5	0	0	1.2	4.1
0	"T02"	2271.6	1.5	4000	94.6	-78.1	-57.6	1.5	0	0	1	-38.7
0	"T02"	2271.6	1.5	8000	82.8	-78.1	-203.7	1.5	0	0	-1.1	-198.6
0	"T04"	1340.5	1.5	63	86.2	-73.5	-0.1	3	0	0	-26.2	-10.7
0	"T04"	1340.5	1.5	125	93	-73.5	-0.5	-1.2	0	0	-16.1	1.7
0	"T04"	1340.5	1.5	250	95.2	-73.5	-1.5	-2	0	0	-8.6	9.6
0	"T04"	1340.5	1.5	500	96.2	-73.5	-3.2	-1	0	0	-3.2	15.3
0	"T04"	1340.5	1.5	1000	99.4	-73.5	-5.5	1.2	0	0	0	21.5
0	"T04"	1340.5	1.5	2000	99.1	-73.5	-11.5	1.5	0	0	1.2	16.7
0	"T04"	1340.5	1.5	4000	94.6	-73.5	-34	1.5	0	0	1	-10.5
0	"T04"	1340.5	1.5	8000	82.8	-73.5	-120.2	1.5	0	0	-1.1	-110.6
0	"T05"	1162.1	1.5	63	86.2	-72.3	-0.1	3	0	0	-26.2	-9.4
0	"T05"	1162.1	1.5	125	93	-72.3	-0.4	-1.1	0	0	-16.1	3.1
0	"T05"	1162.1	1.5	250	95.2	-72.3	-1.3	-2	0	0	-8.6	11
0	"T05"	1162.1	1.5	500	96.2	-72.3	-2.8	-1	0	0	-3.2	16.9
0	"T05"	1162.1	1.5	1000	99.4	-72.3	-4.8	1.2	0	0	0	23.5
0	"T05"	1162.1	1.5	2000	99.1	-72.3	-10	1.5	0	0	1.2	19.5
0	"T05"	1162.1	1.5	4000	94.6	-72.3	-29.5	1.5	0	0	1	-4.7
0	"T05"	1162.1	1.5	8000	82.8	-72.3	-104.2	1.5	0	0	-1.1	-93.3
0	"T06"	1554.5	1.5	63	86.2	-74.8	-0.2	3	0	0	-26.2	-12
0	"T06"	1554.5	1.5	125	93	-74.8	-0.6	-1.2	0	0	-16.1	0.3
0	"T06"	1554.5	1.5	250	95.2	-74.8	-1.7	-2	0	0	-8.6	8
0	"T06"	1554.5	1.5	500	96.2	-74.8	-3.7	-1	0	0	-3.2	13.5
0	"T06"	1554.5	1.5	1000	99.4	-74.8	-6.4	1.2	0	0	0	19.3
0	"T06"	1554.5	1.5	2000	99.1	-74.8	-13.4	1.5	0	0	1.2	13.6
0	"T06"	1554.5	1.5	4000	94.6	-74.8	-39.4	1.5	0	0	1	-17.2
0	"T06"	1554.5	1.5	8000	82.8	-74.8	-139.4	1.5	0	0	-1.1	-131
0	"T07"	2981.9	1.5	63	86.2	-80.5	-0.3	3	0	0	-26.2	-17.8
0	"T07"	2981.9	1.5	125	93	-80.5	-1.1	-1.2	0	0	-16.1	-5.8
0	"T07"	2981.9	1.5	250	95.2	-80.5	-3.3	-2	0	0	-8.6	0.8
0	"T07"	2981.9	1.5	500	96.2	-80.5	-7.1	-1	0	0	-3.2	4.4
0	"T07"	2981.9	1.5	1000	99.4	-80.5	-12.3	1.2	0	0	0	7.8
0	"T07"	2981.9	1.5	2000	99.1	-80.5	-25.7	1.5	0	0	1.2	-4.4
0	"T07"	2981.9	1.5	4000	94.6	-80.5	-75.7	1.5	0	0	1	-59
0	"T07"	2981.9	1.5	8000	82.8	-80.5	-267.4	1.5	0	0	-1.1	-264.7
"r20"	"T01"	2807.9	1.5	63	86.2	-80	-0.3	3	0	0	-26.2	-17.2
0	"T01"	2807.9	1.5	125	93	-80	-1	-1.2	0	0	-16.1	-5.3
0	"T01"	2807.9	1.5	250	95.2	-80	-3.1	-2	0	0	-8.6	1.5
0	"T01"	2807.9	1.5	500	96.2	-80	-6.7	-1	0	0	-3.2	5.4
0	"T01"	2807.9	1.5	1000	99.4	-80	-11.6	1.2	0	0	0	9
0	"T01"	2807.9	1.5	2000	99.1	-80	-24.2	1.5	0	0	1.2	-2.3
0	"T01"	2807.9	1.5	4000	94.6	-80	-71.2	1.5	0	0	1	-54.1
0	"T01"	2807.9	1.5	8000	82.8	-80	-251.8	1.5	0	0	-1.1	-248.6
0	"T03"	1571.6	1.5	63	86.2	-74.9	-0.2	3	0	0	-26.2	-12.1
0	"T03"	1571.6	1.5	125	93	-74.9	-0.6	-1.2	0	0	-16.1	0.2
0	"T03"	1571.6	1.5	250	95.2	-74.9	-1.7	-2	0	0	-8.6	7.9
0	"T03"	1571.6	1.5	500	96.2	-74.9	-3.7	-1	0	0	-3.2	13.3
0	"T03"	1571.6	1.5	1000	99.4	-74.9	-6.5	1.2	0	0	0	19.2
0	"T03"	1571.6	1.5	2000	99.1	-74.9	-13.5	1.5	0	0	1.2	13.3
0	"T03"	1571.6	1.5	4000	94.6	-74.9	-39.9	1.5	0	0	1	-17.7
0	"T03"	1571.6	1.5	8000	82.8	-74.9	-140.9	1.5	0	0	-1.1	-132.7
0	"T02"	2103.7	1.5	63	86.2	-77.5	-0.2	3	0	0	-26.2	-14.7
0	"T02"	2103.7	1.5	125	93	-77.5	-0.8	-1.2	0	0	-16.1	-2.5
0	"T02"	2103.7	1.5	250	95.2	-77.5	-2.3	-2	0	0	-8.6	4.8
0	"T02"	2103.7	1.5	500	96.2	-77.5	-5	-1	0	0	-3.2	9.5
0	"T02"	2103.7	1.5	1000	99.4	-77.5	-8.7	1.2	0	0	0	14.4
0	"T02"	2103.7	1.5	2000	99.1	-77.5	-18.1	1.5	0	0	1.2	6.2
0	"T02"	2103.7	1.5	4000	94.6	-77.5	-53.4	1.5	0	0	1	-33.7
0	"T02"	2103.7	1.5	8000	82.8	-77.5	-188.7	1.5	0	0	-1.1	-182.9
0	"T04"	1228.4	1.5	63	86.2	-72.8	-0.1	3	0	0	-26.2	-9.9
0	"T04"	1228.4	1.5	125	93	-72.8	-0.4	-1.1	0	0	-16.1	2.5
0	"T04"	1228.4	1.5	250	95.2	-72.8	-1.4	-2	0	0	-8.6	10.4
0	"T04"	1228.4	1.5	500	96.2	-72.8	-2.9	-1	0	0	-3.2	16.3
0	"T04"	1228.4	1.5	1000	99.4	-72.8	-5.1	1.2	0	0	0	22.7
0	"T04"	1228.4	1.5	2000	99.1	-72.8	-10.6	1.5	0	0	1.2	18.4
0	"T04"	1228.4	1.5	4000	94.6	-72.8	-31.2	1.5	0	0	1	-6.9
0	"T04"	1228.4	1.5	8000	82.8	-72.8	-110.2	1.5	0	0	-1.1	-99.8
0	"T05"	1139	1.5	63	86.2	-72.1	-0.1	3	0	0	-26.2	-9.2
0	"T05"	1139	1.5	125	93	-72.1	-0.4	-1.1	0	0	-16.1	3.2
0	"T05"	1139	1.5	250	95.2	-72.1	-1.3	-2	0	0	-8.6	11.2
0	"T05"	1139	1.5	500	96.2	-72.1	-2.7	-1	0	0	-3.2	17.2
0	"T05"	1139	1.5	1000	99.4	-72.1	-4.7	1.2	0	0	0	23.7
0	"T05"	1139	1.5	2000	99.1	-72.1	-9.8	1.5	0	0	1.2	19.9
0	"T05"	1139	1.5	4000	94.6	-72.1	-28.9	1.5	0	0	1	-3.9
0	"T05"	1139	1.5	8000	82.8	-72.1	-102.1	1.5	0	0	-1.1	-91.1
0	"T06"	1604.9	1.5	63	86.2	-75.1	-0.2	3	0	0	-26.2	-12.3
0	"T06"	1604.9	1.5	125	93	-75.1	-0.6	-1.2	0	0	-16.1	0
0	"T06"	1604.9	1.5	250	95.2	-75.1	-1.8	-2	0	0	-8.6	7.7
0	"T06"	1604.9	1.5	500	96.2	-75.1	-3.8	-1	0	0	-3.2	13.1
0	"T06"	1604.9	1.5	1000	99.4	-75.1	-6.6	1.2	0	0	0	18.8
0	"T06"	1604.9	1.5	2000	99.1	-75.1	-13.8	1.5	0	0	1.2	12.9
0	"T06"	1604.9	1.5	4000	94.6	-75.1	-40.7	1.5	0	0	1	-18.7

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0	"T06"	1604.9	1.5	8000	82.8	-75.1	-143.9	1.5	0	0	-1.1	-135.8
0	"T07"	3003.7	1.5	63	86.2	-80.6	-0.3	3	0	0	-26.2	-17.8
0	"T07"	3003.7	1.5	125	93	-80.6	-1.1	-1.2	0	0	-16.1	-5.9
0	"T07"	3003.7	1.5	250	95.2	-80.6	-3.3	-2	0	0	-8.6	0.7
0	"T07"	3003.7	1.5	500	96.2	-80.6	-7.2	-1	0	0	-3.2	4.3
0	"T07"	3003.7	1.5	1000	99.4	-80.6	-12.4	1.2	0	0	0	7.6
0	"T07"	3003.7	1.5	2000	99.1	-80.6	-25.9	1.5	0	0	1.2	-4.6
0	"T07"	3003.7	1.5	4000	94.6	-80.6	-76.2	1.5	0	0	1	-59.7
0	"T07"	3003.7	1.5	8000	82.8	-80.6	-269.4	1.5	0	0	-1.1	-266.7
"r21"	"T01"	3254	1.5	63	86.2	-81.2	-0.3	3	0	0	-26.2	-18.6
0	"T01"	3254	1.5	125	93	-81.2	-1.2	-1.2	0	0	-16.1	-6.7
0	"T01"	3254	1.5	250	95.2	-81.2	-3.6	-2	0	0	-8.6	-0.2
0	"T01"	3254	1.5	500	96.2	-81.2	-7.8	-1	0	0	-3.2	3
0	"T01"	3254	1.5	1000	99.4	-81.2	-13.4	1.2	0	0	0	5.9
0	"T01"	3254	1.5	2000	99.1	-81.2	-28	1.5	0	0	1.2	-7.5
0	"T01"	3254	1.5	4000	94.6	-81.2	-82.6	1.5	0	0	1	-66.7
0	"T01"	3254	1.5	8000	82.8	-81.2	-291.8	1.5	0	0	-1.1	-289.9
0	"T03"	2304.7	1.5	63	86.2	-78.3	-0.2	3	0	0	-26.2	-15.5
0	"T03"	2304.7	1.5	125	93	-78.3	-0.8	-1.2	0	0	-16.1	-3.4
0	"T03"	2304.7	1.5	250	95.2	-78.3	-2.5	-2	0	0	-8.6	3.8
0	"T03"	2304.7	1.5	500	96.2	-78.3	-5.5	-1	0	0	-3.2	8.3
0	"T03"	2304.7	1.5	1000	99.4	-78.3	-9.5	1.2	0	0	0	12.8
0	"T03"	2304.7	1.5	2000	99.1	-78.3	-19.8	1.5	0	0	1.2	3.7
0	"T03"	2304.7	1.5	4000	94.6	-78.3	-58.5	1.5	0	0	1	-39.6
0	"T03"	2304.7	1.5	8000	82.8	-78.3	-206.7	1.5	0	0	-1.1	-201.7
0	"T02"	2523.3	1.5	63	86.2	-79	-0.2	3	0	0	-26.2	-16.3
0	"T02"	2523.3	1.5	125	93	-79	-0.9	-1.2	0	0	-16.1	-4.2
0	"T02"	2523.3	1.5	250	95.2	-79	-2.8	-2	0	0	-8.6	2.8
0	"T02"	2523.3	1.5	500	96.2	-79	-6	-1	0	0	-3.2	7
0	"T02"	2523.3	1.5	1000	99.4	-79	-10.4	1.2	0	0	0	11.1
0	"T02"	2523.3	1.5	2000	99.1	-79	-21.7	1.5	0	0	1.2	1
0	"T02"	2523.3	1.5	4000	94.6	-79	-64	1.5	0	0	1	-46
0	"T02"	2523.3	1.5	8000	82.8	-79	-226.3	1.5	0	0	-1.1	-222.1
0	"T04"	1095.8	1.5	63	86.2	-71.8	-0.1	3	0	0	-26.2	-8.9
0	"T04"	1095.8	1.5	125	93	-71.8	-0.4	-1.1	0	0	-16.1	3.6
0	"T04"	1095.8	1.5	250	95.2	-71.8	-1.2	-2	0	0	-8.6	11.6
0	"T04"	1095.8	1.5	500	96.2	-71.8	-2.6	-1	0	0	-3.2	17.6
0	"T04"	1095.8	1.5	1000	99.4	-71.8	-4.5	1.2	0	0	0	24.2
0	"T04"	1095.8	1.5	2000	99.1	-71.8	-9.4	1.5	0	0	1.2	20.6
0	"T04"	1095.8	1.5	4000	94.6	-71.8	-27.8	1.5	0	0	1	-2.5
0	"T04"	1095.8	1.5	8000	82.8	-71.8	-98.3	1.5	0	0	-1.1	-86.9
0	"T05"	456.6	1.5	63	86.2	-64.2	0	3	0	0	-26.2	-1.2
0	"T05"	456.6	1.5	125	93	-64.2	-0.2	0.2	0	0	-16.1	12.7
0	"T05"	456.6	1.5	250	95.2	-64.2	-0.5	-2	0	0	-8.6	19.9
0	"T05"	456.6	1.5	500	96.2	-64.2	-1.1	-1	0	0	-3.2	26.7
0	"T05"	456.6	1.5	1000	99.4	-64.2	-1.9	1.2	0	0	0	34.5
0	"T05"	456.6	1.5	2000	99.1	-64.2	-3.9	1.5	0	0	1.2	33.7
0	"T05"	456.6	1.5	4000	94.6	-64.2	-11.6	1.5	0	0	1	21.3
0	"T05"	456.6	1.5	8000	82.8	-64.2	-41	1.5	0	0	-1.1	-21.9
0	"T06"	628	1.5	63	86.2	-67	-0.1	3	0	0	-26.2	-4
0	"T06"	628	1.5	125	93	-67	-0.2	-0.4	0	0	-16.1	9.3
0	"T06"	628	1.5	250	95.2	-67	-0.7	-2	0	0	-8.6	16.9
0	"T06"	628	1.5	500	96.2	-67	-1.5	-1	0	0	-3.2	23.6
0	"T06"	628	1.5	1000	99.4	-67	-2.6	1.2	0	0	0	31
0	"T06"	628	1.5	2000	99.1	-67	-5.4	1.5	0	0	1.2	29.4
0	"T06"	628	1.5	4000	94.6	-67	-15.9	1.5	0	0	1	14.2
0	"T06"	628	1.5	8000	82.8	-67	-56.3	1.5	0	0	-1.1	-40.1
0	"T07"	2043	1.5	63	86.2	-77.2	-0.2	3	0	0	-26.2	-14.4
0	"T07"	2043	1.5	125	93	-77.2	-0.7	-1.2	0	0	-16.1	-2.2
0	"T07"	2043	1.5	250	95.2	-77.2	-2.3	-2	0	0	-8.6	5.1
0	"T07"	2043	1.5	500	96.2	-77.2	-4.9	-1	0	0	-3.2	9.9
0	"T07"	2043	1.5	1000	99.4	-77.2	-8.4	1.2	0	0	0	14.9
0	"T07"	2043	1.5	2000	99.1	-77.2	-17.6	1.5	0	0	1.2	7
0	"T07"	2043	1.5	4000	94.6	-77.2	-51.8	1.5	0	0	1	-31.9
0	"T07"	2043	1.5	8000	82.8	-77.2	-183.2	1.5	0	0	-1.1	-177.2
"r22"	"T01"	4456.2	1.5	63	86.2	-84	-0.4	3.6	0	0	-26.2	-20.8
0	"T01"	4456.2	1.5	125	93	-84	-1.6	-0.8	0	0	-16.1	-9.5
0	"T01"	4456.2	1.5	250	95.2	-84	-4.9	-1.7	0	0	-8.6	-4
0	"T01"	4456.2	1.5	500	96.2	-84	-10.6	-0.7	0	0	-3.2	-2.3
0	"T01"	4456.2	1.5	1000	99.4	-84	-18.4	1.5	0	0	0	-1.5
0	"T01"	4456.2	1.5	2000	99.1	-84	-38.4	1.8	0	0	1.2	-20.2
0	"T01"	4456.2	1.5	4000	94.6	-84	-113.1	1.8	0	0	1	-99.6
0	"T01"	4456.2	1.5	8000	82.8	-84	-399.6	1.8	0	0	-1.1	-400.1
0	"T03"	3327.3	1.5	63	86.2	-81.4	-0.3	3	0	0	-26.2	-18.8
0	"T03"	3327.3	1.5	125	93	-81.4	-1.2	-1.2	0	0	-16.1	-6.9
0	"T03"	3327.3	1.5	250	95.2	-81.4	-3.7	-2	0	0	-8.6	-0.5
0	"T03"	3327.3	1.5	500	96.2	-81.4	-7.9	-1	0	0	-3.2	2.6
0	"T03"	3327.3	1.5	1000	99.4	-81.4	-13.7	1.2	0	0	0	5.4
0	"T03"	3327.3	1.5	2000	99.1	-81.4	-28.6	1.5	0	0	1.2	-8.3
0	"T03"	3327.3	1.5	4000	94.6	-81.4	-84.4	1.5	0	0	1	-68.8
0	"T03"	3327.3	1.5	8000	82.8	-81.4	-298.4	1.5	0	0	-1.1	-296.6
0	"T02"	3725.4	1.5	63	86.2	-82.4	-0.4	3.2	0	0	-26.2	-19.6
0	"T02"	3725.4	1.5	125	93	-82.4	-1.3	-1.1	0	0	-16.1	-7.9
0	"T02"	3725.4	1.5	250	95.2	-82.4	-4.1	-1.9	0	0	-8.6	-1.9
0	"T02"	3725.4	1.5	500	96.2	-82.4	-8.9	-0.9	0	0	-3.2	0.8
0	"T02"	3725.4	1.5	1000	99.4	-82.4	-15.4	1.3	0	0	0	2.9
0	"T02"	3725.4	1.5	2000	99.1	-82.4	-32.1	1.6	0	0	1.2	-12.6
0	"T02"	3725.4	1.5	4000	94.6	-82.4	-94.5	1.6	0	0	1	-79.8
0	"T02"	3725.4	1.5	8000	82.8	-82.4	-334.1	1.6	0	0	-1.1	-333.2
0	"T04"	2366.8	1.5	63	86.2	-78.5	-0.2	3	0	0	-26.2	-15.7
0	"T04"	2366.8	1.5	125	93	-78.5	-0.9	-1.2	0	0	-16.1	-3.6
0	"T04"	2366.8	1.5	250	95.2	-78.5	-2.6	-2	0	0	-8.6	3.5
0	"T04"	2366.8	1.5	500	96.2	-78.5	-5.6	-1	0	0	-3.2	7.9
0	"T04"	2366.8	1.5	1000	99.4	-78.5	-9.8	1.2	0	0	0	12.3
0	"T04"	2366.8	1.5	2000	99.1	-78.5	-20.4	1.5	0	0	1.2	2.9
0	"T04"	2366.8	1.5	4000	94.6	-78.5	-60.1	1.5	0	0	1	-41.4
0	"T04"	2366.8	1.5	8000	82.8	-78.5	-212.3	1.5	0	0	-1.1	-207.5

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0	"T05"	1704	1.5	63	86.2	-75.6	-0.2	3	0	0	-26.2	-12.8
0	"T05"	1704	1.5	125	93	-75.6	-0.6	-1.2	0	0	-16.1	-0.5
0	"T05"	1704	1.5	250	95.2	-75.6	-1.9	-2	0	0	-8.6	7.1
0	"T05"	1704	1.5	500	96.2	-75.6	-4.1	-1	0	0	-3.2	12.3
0	"T05"	1704	1.5	1000	99.4	-75.6	-7	1.2	0	0	0	17.9
0	"T05"	1704	1.5	2000	99.1	-75.6	-14.7	1.5	0	0	1.2	11.5
0	"T05"	1704	1.5	4000	94.6	-75.6	-43.2	1.5	0	0	1	-21.8
0	"T05"	1704	1.5	8000	82.8	-75.6	-152.8	1.5	0	0	-1.1	-145.2
0	"T06"	1270	1.5	63	86.2	-73.1	-0.1	3	0	0	-26.2	-10.2
0	"T06"	1270	1.5	125	93	-73.1	-0.5	-1.1	0	0	-16.1	2.2
0	"T06"	1270	1.5	250	95.2	-73.1	-1.4	-2	0	0	-8.6	10.1
0	"T06"	1270	1.5	500	96.2	-73.1	-3	-1	0	0	-3.2	15.9
0	"T06"	1270	1.5	1000	99.4	-73.1	-5.2	1.2	0	0	0	22.2
0	"T06"	1270	1.5	2000	99.1	-73.1	-10.9	1.5	0	0	1.2	17.8
0	"T06"	1270	1.5	4000	94.6	-73.1	-32.2	1.5	0	0	1	-8.2
0	"T06"	1270	1.5	8000	82.8	-73.1	-113.9	1.5	0	0	-1.1	-103.8
0	"T07"	2465.5	1.5	63	86.2	-78.8	-0.2	3	0	0	-26.2	-16.1
0	"T07"	2465.5	1.5	125	93	-78.8	-0.9	-1.2	0	0	-16.1	-4
0	"T07"	2465.5	1.5	250	95.2	-78.8	-2.7	-2	0	0	-8.6	3
0	"T07"	2465.5	1.5	500	96.2	-78.8	-5.9	-1	0	0	-3.2	7.3
0	"T07"	2465.5	1.5	1000	99.4	-78.8	-10.2	1.2	0	0	0	11.6
0	"T07"	2465.5	1.5	2000	99.1	-78.8	-21.2	1.5	0	0	1.2	1.7
0	"T07"	2465.5	1.5	4000	94.6	-78.8	-62.6	1.5	0	0	1	-44.3
0	"T07"	2465.5	1.5	8000	82.8	-78.8	-221.1	1.5	0	0	-1.1	-216.7
"r23"	"T01"	4479.7	1.5	63	86.2	-84	-0.4	3.7	0	0	-26.2	-20.8
0	"T01"	4479.7	1.5	125	93	-84	-1.6	-0.8	0	0	-16.1	-9.6
0	"T01"	4479.7	1.5	250	95.2	-84	-4.9	-1.7	0	0	-8.6	-4
0	"T01"	4479.7	1.5	500	96.2	-84	-10.7	-0.7	0	0	-3.2	-2.4
0	"T01"	4479.7	1.5	1000	99.4	-84	-18.5	1.5	0	0	0	-1.6
0	"T01"	4479.7	1.5	2000	99.1	-84	-38.6	1.8	0	0	1.2	-20.5
0	"T01"	4479.7	1.5	4000	94.6	-84	-113.7	1.8	0	0	1	-100.3
0	"T01"	4479.7	1.5	8000	82.8	-84	-401.7	1.8	0	0	-1.1	-402.2
0	"T03"	3392.9	1.5	63	86.2	-81.6	-0.3	3	0	0	-26.2	-18.9
0	"T03"	3392.9	1.5	125	93	-81.6	-1.2	-1.2	0	0	-16.1	-7.1
0	"T03"	3392.9	1.5	250	95.2	-81.6	-3.7	-2	0	0	-8.6	-0.8
0	"T03"	3392.9	1.5	500	96.2	-81.6	-8.1	-1	0	0	-3.2	2.3
0	"T03"	3392.9	1.5	1000	99.4	-81.6	-14	1.2	0	0	0	4.9
0	"T03"	3392.9	1.5	2000	99.1	-81.6	-29.2	1.5	0	0	1.2	-9
0	"T03"	3392.9	1.5	4000	94.6	-81.6	-86.1	1.5	0	0	1	-70.6
0	"T03"	3392.9	1.5	8000	82.8	-81.6	-304.3	1.5	0	0	-1.1	-302.7
0	"T02"	3747.5	1.5	63	86.2	-82.5	-0.4	3.2	0	0	-26.2	-19.6
0	"T02"	3747.5	1.5	125	93	-82.5	-1.4	-1.1	0	0	-16.1	-8
0	"T02"	3747.5	1.5	250	95.2	-82.5	-4.1	-1.9	0	0	-8.6	-1.9
0	"T02"	3747.5	1.5	500	96.2	-82.5	-8.9	-0.9	0	0	-3.2	0.7
0	"T02"	3747.5	1.5	1000	99.4	-82.5	-15.5	1.3	0	0	0	2.7
0	"T02"	3747.5	1.5	2000	99.1	-82.5	-32.3	1.6	0	0	1.2	-12.8
0	"T02"	3747.5	1.5	4000	94.6	-82.5	-95.1	1.6	0	0	1	-80.4
0	"T02"	3747.5	1.5	8000	82.8	-82.5	-336.1	1.6	0	0	-1.1	-335.3
0	"T04"	2348	1.5	63	86.2	-78.4	-0.2	3	0	0	-26.2	-15.6
0	"T04"	2348	1.5	125	93	-78.4	-0.8	-1.2	0	0	-16.1	-3.5
0	"T04"	2348	1.5	250	95.2	-78.4	-2.6	-2	0	0	-8.6	3.6
0	"T04"	2348	1.5	500	96.2	-78.4	-5.6	-1	0	0	-3.2	8
0	"T04"	2348	1.5	1000	99.4	-78.4	-9.7	1.2	0	0	0	12.5
0	"T04"	2348	1.5	2000	99.1	-78.4	-20.2	1.5	0	0	1.2	3.2
0	"T04"	2348	1.5	4000	94.6	-78.4	-59.6	1.5	0	0	1	-40.9
0	"T04"	2348	1.5	8000	82.8	-78.4	-210.6	1.5	0	0	-1.1	-205.8
0	"T05"	1662.5	1.5	63	86.2	-75.4	-0.2	3	0	0	-26.2	-12.6
0	"T05"	1662.5	1.5	125	93	-75.4	-0.6	-1.2	0	0	-16.1	-0.3
0	"T05"	1662.5	1.5	250	95.2	-75.4	-1.8	-2	0	0	-8.6	7.3
0	"T05"	1662.5	1.5	500	96.2	-75.4	-4	-1	0	0	-3.2	12.6
0	"T05"	1662.5	1.5	1000	99.4	-75.4	-6.9	1.2	0	0	0	18.3
0	"T05"	1662.5	1.5	2000	99.1	-75.4	-14.3	1.5	0	0	1.2	12.1
0	"T05"	1662.5	1.5	4000	94.6	-75.4	-42.2	1.5	0	0	1	-20.5
0	"T05"	1662.5	1.5	8000	82.8	-75.4	-149.1	1.5	0	0	-1.1	-141.3
0	"T06"	1161.1	1.5	63	86.2	-72.3	-0.1	3	0	0	-26.2	-9.4
0	"T06"	1161.1	1.5	125	93	-72.3	-0.4	-1.1	0	0	-16.1	3.1
0	"T06"	1161.1	1.5	250	95.2	-72.3	-1.3	-2	0	0	-8.6	11
0	"T06"	1161.1	1.5	500	96.2	-72.3	-2.8	-1	0	0	-3.2	16.9
0	"T06"	1161.1	1.5	1000	99.4	-72.3	-4.8	1.2	0	0	0	23.5
0	"T06"	1161.1	1.5	2000	99.1	-72.3	-10	1.5	0	0	1.2	19.5
0	"T06"	1161.1	1.5	4000	94.6	-72.3	-29.5	1.5	0	0	1	-4.7
0	"T06"	1161.1	1.5	8000	82.8	-72.3	-104.1	1.5	0	0	-1.1	-93.2
0	"T07"	2293.3	1.5	63	86.2	-78.2	-0.2	3	0	0	-26.2	-15.4
0	"T07"	2293.3	1.5	125	93	-78.2	-0.8	-1.2	0	0	-16.1	-3.3
0	"T07"	2293.3	1.5	250	95.2	-78.2	-2.5	-2	0	0	-8.6	3.8
0	"T07"	2293.3	1.5	500	96.2	-78.2	-5.5	-1	0	0	-3.2	8.3
0	"T07"	2293.3	1.5	1000	99.4	-78.2	-9.5	1.2	0	0	0	12.9
0	"T07"	2293.3	1.5	2000	99.1	-78.2	-19.7	1.5	0	0	1.2	3.8
0	"T07"	2293.3	1.5	4000	94.6	-78.2	-58.2	1.5	0	0	1	-39.3
0	"T07"	2293.3	1.5	8000	82.8	-78.2	-205.7	1.5	0	0	-1.1	-200.7
"r24"	"T01"	4808.7	1.5	63	86.2	-84.6	-0.5	3.8	0	0	-26.2	-21.3
0	"T01"	4808.7	1.5	125	93	-84.6	-1.7	-0.8	0	0	-16.1	-10.2
0	"T01"	4808.7	1.5	250	95.2	-84.6	-5.3	-1.6	0	0	-8.6	-4.9
0	"T01"	4808.7	1.5	500	96.2	-84.6	-11.5	-0.6	0	0	-3.2	-3.7
0	"T01"	4808.7	1.5	1000	99.4	-84.6	-19.9	1.6	0	0	0	-3.5
0	"T01"	4808.7	1.5	2000	99.1	-84.6	-41.4	1.9	0	0	1.2	-23.8
0	"T01"	4808.7	1.5	4000	94.6	-84.6	-122	1.9	0	0	1	-109.1
0	"T01"	4808.7	1.5	8000	82.8	-84.6	-431.3	1.9	0	0	-1.1	-432.3
0	"T03"	3652.8	1.5	63	86.2	-82.3	-0.4	3.1	0	0	-26.2	-19.5
0	"T03"	3652.8	1.5	125	93	-82.3	-1.3	-1.1	0	0	-16.1	-7.8
0	"T03"	3652.8	1.5	250	95.2	-82.3	-4	-1.9	0	0	-8.6	-1.6
0	"T03"	3652.8	1.5	500	96.2	-82.3	-8.7	-0.9	0	0	-3.2	1.1
0	"T03"	3652.8	1.5	1000	99.4	-82.3	-15.1	1.2	0	0	0	3.3
0	"T03"	3652.8	1.5	2000	99.1	-82.3	-31.4	1.6	0	0	1.2	-11.8
0	"T03"	3652.8	1.5	4000	94.6	-82.3	-92.7	1.6	0	0	1	-77.8
0	"T03"	3652.8	1.5	8000	82.8	-82.3	-327.6	1.6	0	0	-1.1	-326.6
0	"T02"	4079.1	1.5	63	86.2	-83.2	-0.4	3.4	0	0	-26.2	-20.2

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0	"T02"	4079.1	1.5	125	93	-83.2	-1.5	-1	0	0	-16.1	-8.7
0	"T02"	4079.1	1.5	250	95.2	-83.2	-4.5	-1.8	0	0	-8.6	-2.9
0	"T02"	4079.1	1.5	500	96.2	-83.2	-9.7	-0.8	0	0	-3.2	-0.7
0	"T02"	4079.1	1.5	1000	99.4	-83.2	-16.8	1.4	0	0	0	0.7
0	"T02"	4079.1	1.5	2000	99.1	-83.2	-35.1	1.7	0	0	1.2	-16.3
0	"T02"	4079.1	1.5	4000	94.6	-83.2	-103.5	1.7	0	0	1	-89.4
0	"T02"	4079.1	1.5	8000	82.8	-83.2	-365.8	1.7	0	0	-1.1	-365.6
0	"T04"	2730.8	1.5	63	86.2	-79.7	-0.3	3	0	0	-26.2	-17
0	"T04"	2730.8	1.5	125	93	-79.7	-1	-1.2	0	0	-16.1	-5
0	"T04"	2730.8	1.5	250	95.2	-79.7	-3	-2	0	0	-8.6	1.8
0	"T04"	2730.8	1.5	500	96.2	-79.7	-6.5	-1	0	0	-3.2	5.8
0	"T04"	2730.8	1.5	1000	99.4	-79.7	-11.3	1.2	0	0	0	9.6
0	"T04"	2730.8	1.5	2000	99.1	-79.7	-23.5	1.5	0	0	1.2	-1.4
0	"T04"	2730.8	1.5	4000	94.6	-79.7	-69.3	1.5	0	0	1	-51.9
0	"T04"	2730.8	1.5	8000	82.8	-79.7	-244.9	1.5	0	0	-1.1	-241.4
0	"T05"	2065.9	1.5	63	86.2	-77.3	-0.2	3	0	0	-26.2	-14.5
0	"T05"	2065.9	1.5	125	93	-77.3	-0.7	-1.2	0	0	-16.1	-2.3
0	"T05"	2065.9	1.5	250	95.2	-77.3	-2.3	-2	0	0	-8.6	5
0	"T05"	2065.9	1.5	500	96.2	-77.3	-4.9	-1	0	0	-3.2	9.8
0	"T05"	2065.9	1.5	1000	99.4	-77.3	-8.5	1.2	0	0	0	14.7
0	"T05"	2065.9	1.5	2000	99.1	-77.3	-17.8	1.5	0	0	1.2	6.7
0	"T05"	2065.9	1.5	4000	94.6	-77.3	-52.4	1.5	0	0	1	-32.6
0	"T05"	2065.9	1.5	8000	82.8	-77.3	-185.3	1.5	0	0	-1.1	-179.4
0	"T06"	1596.2	1.5	63	86.2	-75.1	-0.2	3	0	0	-26.2	-12.2
0	"T06"	1596.2	1.5	125	93	-75.1	-0.6	-1.2	0	0	-16.1	0.1
0	"T06"	1596.2	1.5	250	95.2	-75.1	-1.8	-2	0	0	-8.6	7.8
0	"T06"	1596.2	1.5	500	96.2	-75.1	-3.8	-1	0	0	-3.2	13.1
0	"T06"	1596.2	1.5	1000	99.4	-75.1	-6.6	1.2	0	0	0	18.9
0	"T06"	1596.2	1.5	2000	99.1	-75.1	-13.7	1.5	0	0	1.2	13
0	"T06"	1596.2	1.5	4000	94.6	-75.1	-40.5	1.5	0	0	1	-18.5
0	"T06"	1596.2	1.5	8000	82.8	-75.1	-143.1	1.5	0	0	-1.1	-135
0	"T07"	2680	1.5	63	86.2	-79.6	-0.3	3	0	0	-26.2	-16.8
0	"T07"	2680	1.5	125	93	-79.6	-1	-1.2	0	0	-16.1	-4.8
0	"T07"	2680	1.5	250	95.2	-79.6	-3	-2	0	0	-8.6	2.1
0	"T07"	2680	1.5	500	96.2	-79.6	-6.4	-1	0	0	-3.2	6.1
0	"T07"	2680	1.5	1000	99.4	-79.6	-11.1	1.2	0	0	0	9.9
0	"T07"	2680	1.5	2000	99.1	-79.6	-23.1	1.5	0	0	1.2	-0.8
0	"T07"	2680	1.5	4000	94.6	-79.6	-68	1.5	0	0	1	-50.5
0	"T07"	2680	1.5	8000	82.8	-79.6	-240.3	1.5	0	0	-1.1	-236.7
"r25"	"T01"	4429.5	1.5	63	86.2	-83.9	-0.4	3.6	0	0	-26.2	-20.7
0	"T01"	4429.5	1.5	125	93	-83.9	-1.6	-0.9	0	0	-16.1	-9.5
0	"T01"	4429.5	1.5	250	95.2	-83.9	-4.9	-1.7	0	0	-8.6	-3.9
0	"T01"	4429.5	1.5	500	96.2	-83.9	-10.6	-0.7	0	0	-3.2	-2.2
0	"T01"	4429.5	1.5	1000	99.4	-83.9	-18.3	1.5	0	0	0	-1.3
0	"T01"	4429.5	1.5	2000	99.1	-83.9	-38.1	1.8	0	0	1.2	-19.9
0	"T01"	4429.5	1.5	4000	94.6	-83.9	-112.4	1.8	0	0	1	-98.9
0	"T01"	4429.5	1.5	8000	82.8	-83.9	-397.3	1.8	0	0	-1.1	-397.7
0	"T03"	3645.4	1.5	63	86.2	-82.2	-0.4	3.1	0	0	-26.2	-19.5
0	"T03"	3645.4	1.5	125	93	-82.2	-1.3	-1.1	0	0	-16.1	-7.8
0	"T03"	3645.4	1.5	250	95.2	-82.2	-4	-2	0	0	-8.6	-1.6
0	"T03"	3645.4	1.5	500	96.2	-82.2	-8.7	-0.9	0	0	-3.2	1.1
0	"T03"	3645.4	1.5	1000	99.4	-82.2	-15.1	1.2	0	0	0	3.3
0	"T03"	3645.4	1.5	2000	99.1	-82.2	-31.4	1.6	0	0	1.2	-11.8
0	"T03"	3645.4	1.5	4000	94.6	-82.2	-92.5	1.6	0	0	1	-77.6
0	"T03"	3645.4	1.5	8000	82.8	-82.2	-326.9	1.6	0	0	-1.1	-325.9
0	"T02"	3721.9	1.5	63	86.2	-82.4	-0.4	3.2	0	0	-26.2	-19.6
0	"T02"	3721.9	1.5	125	93	-82.4	-1.3	-1.1	0	0	-16.1	-7.9
0	"T02"	3721.9	1.5	250	95.2	-82.4	-4.1	-1.9	0	0	-8.6	-1.8
0	"T02"	3721.9	1.5	500	96.2	-82.4	-8.9	-0.9	0	0	-3.2	0.8
0	"T02"	3721.9	1.5	1000	99.4	-82.4	-15.4	1.3	0	0	0	2.9
0	"T02"	3721.9	1.5	2000	99.1	-82.4	-32	1.6	0	0	1.2	-12.6
0	"T02"	3721.9	1.5	4000	94.6	-82.4	-94.4	1.6	0	0	1	-79.7
0	"T02"	3721.9	1.5	8000	82.8	-82.4	-333.8	1.6	0	0	-1.1	-332.9
0	"T04"	2201.3	1.5	63	86.2	-77.9	-0.2	3	0	0	-26.2	-15.1
0	"T04"	2201.3	1.5	125	93	-77.9	-0.8	-1.2	0	0	-16.1	-2.9
0	"T04"	2201.3	1.5	250	95.2	-77.9	-2.4	-2	0	0	-8.6	4.3
0	"T04"	2201.3	1.5	500	96.2	-77.9	-5.2	-1	0	0	-3.2	8.9
0	"T04"	2201.3	1.5	1000	99.4	-77.9	-9.1	1.2	0	0	0	13.6
0	"T04"	2201.3	1.5	2000	99.1	-77.9	-18.9	1.5	0	0	1.2	5
0	"T04"	2201.3	1.5	4000	94.6	-77.9	-55.9	1.5	0	0	1	-36.6
0	"T04"	2201.3	1.5	8000	82.8	-77.9	-197.4	1.5	0	0	-1.1	-192.1
0	"T05"	1517.4	1.5	63	86.2	-74.6	-0.1	3	0	0	-26.2	-11.8
0	"T05"	1517.4	1.5	125	93	-74.6	-0.5	-1.2	0	0	-16.1	0.6
0	"T05"	1517.4	1.5	250	95.2	-74.6	-1.7	-2	0	0	-8.6	8.3
0	"T05"	1517.4	1.5	500	96.2	-74.6	-3.6	-1	0	0	-3.2	13.8
0	"T05"	1517.4	1.5	1000	99.4	-74.6	-6.3	1.2	0	0	0	19.7
0	"T05"	1517.4	1.5	2000	99.1	-74.6	-13.1	1.5	0	0	1.2	14.1
0	"T05"	1517.4	1.5	4000	94.6	-74.6	-38.5	1.5	0	0	1	-16
0	"T05"	1517.4	1.5	8000	82.8	-74.6	-136.1	1.5	0	0	-1.1	-127.5
0	"T06"	797	1.5	63	86.2	-69	-0.1	3	0	0	-26.2	-6.1
0	"T06"	797	1.5	125	93	-69	-0.3	-0.8	0	0	-16.1	6.8
0	"T06"	797	1.5	250	95.2	-69	-0.9	-2	0	0	-8.6	14.7
0	"T06"	797	1.5	500	96.2	-69	-1.9	-1	0	0	-3.2	21.1
0	"T06"	797	1.5	1000	99.4	-69	-3.3	1.2	0	0	0	28.2
0	"T06"	797	1.5	2000	99.1	-69	-6.9	1.5	0	0	1.2	25.9
0	"T06"	797	1.5	4000	94.6	-69	-20.2	1.5	0	0	1	7.9
0	"T06"	797	1.5	8000	82.8	-69	-71.5	1.5	0	0	-1.1	-57.3
0	"T07"	1177.5	1.5	63	86.2	-72.4	-0.1	3	0	0	-26.2	-9.5
0	"T07"	1177.5	1.5	125	93	-72.4	-0.4	-1.1	0	0	-16.1	2.9
0	"T07"	1177.5	1.5	250	95.2	-72.4	-1.3	-2	0	0	-8.6	10.9
0	"T07"	1177.5	1.5	500	96.2	-72.4	-2.8	-1	0	0	-3.2	16.8
0	"T07"	1177.5	1.5	1000	99.4	-72.4	-4.9	1.2	0	0	0	23.3
0	"T07"	1177.5	1.5	2000	99.1	-72.4	-10.1	1.5	0	0	1.2	19.2
0	"T07"	1177.5	1.5	4000	94.6	-72.4	-29.9	1.5	0	0	1	-5.2
0	"T07"	1177.5	1.5	8000	82.8	-72.4	-105.6	1.5	0	0	-1.1	-94.8
"r26"	"T01"	1123.3	1.5	63	86.2	-72	-0.1	3	0	0	-26.2	-9.1
0	"T01"	1123.3	1.5	125	93	-72	-0.4	-1.1	0	0	-16.1	3.4

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0	"T01"	1123.3	1.5	250	95.2	-72	-1.2	-2	0	0	-8.6	11.3
0	"T01"	1123.3	1.5	500	96.2	-72	-2.7	-1	0	0	-3.2	17.3
0	"T01"	1123.3	1.5	1000	99.4	-72	-4.6	1.2	0	0	0	23.9
0	"T01"	1123.3	1.5	2000	99.1	-72	-9.7	1.5	0	0	1.2	20.1
0	"T01"	1123.3	1.5	4000	94.6	-72	-28.5	1.5	0	0	1	-3.4
0	"T01"	1123.3	1.5	8000	82.8	-72	-100.7	1.5	0	0	-1.1	-89.5
0	"T03"	1975.2	1.5	63	86.2	-76.9	-0.2	3	0	0	-26.2	-14.1
0	"T03"	1975.2	1.5	125	93	-76.9	-0.7	-1.2	0	0	-16.1	-1.9
0	"T03"	1975.2	1.5	250	95.2	-76.9	-2.2	-2	0	0	-8.6	5.5
0	"T03"	1975.2	1.5	500	96.2	-76.9	-4.7	-1	0	0	-3.2	10.4
0	"T03"	1975.2	1.5	1000	99.4	-76.9	-8.2	1.2	0	0	0	15.5
0	"T03"	1975.2	1.5	2000	99.1	-76.9	-17	1.5	0	0	1.2	7.9
0	"T03"	1975.2	1.5	4000	94.6	-76.9	-50.1	1.5	0	0	1	-29.9
0	"T03"	1975.2	1.5	8000	82.8	-76.9	-177.1	1.5	0	0	-1.1	-170.8
0	"T02"	1725.8	1.5	63	86.2	-75.7	-0.2	3	0	0	-26.2	-12.9
0	"T02"	1725.8	1.5	125	93	-75.7	-0.6	-1.2	0	0	-16.1	-0.6
0	"T02"	1725.8	1.5	250	95.2	-75.7	-1.9	-2	0	0	-8.6	6.9
0	"T02"	1725.8	1.5	500	96.2	-75.7	-4.1	-1	0	0	-3.2	12.2
0	"T02"	1725.8	1.5	1000	99.4	-75.7	-7.1	1.2	0	0	0	17.7
0	"T02"	1725.8	1.5	2000	99.1	-75.7	-14.9	1.5	0	0	1.2	11.2
0	"T02"	1725.8	1.5	4000	94.6	-75.7	-43.8	1.5	0	0	1	-22.4
0	"T02"	1725.8	1.5	8000	82.8	-75.7	-154.8	1.5	0	0	-1.1	-147.3
0	"T04"	3233.6	1.5	63	86.2	-81.2	-0.3	3	0	0	-26.2	-18.5
0	"T04"	3233.6	1.5	125	93	-81.2	-1.2	-1.2	0	0	-16.1	-6.6
0	"T04"	3233.6	1.5	250	95.2	-81.2	-3.6	-2	0	0	-8.6	-0.2
0	"T04"	3233.6	1.5	500	96.2	-81.2	-7.7	-1	0	0	-3.2	3.1
0	"T04"	3233.6	1.5	1000	99.4	-81.2	-13.4	1.2	0	0	0	6
0	"T04"	3233.6	1.5	2000	99.1	-81.2	-27.8	1.5	0	0	1.2	-7.2
0	"T04"	3233.6	1.5	4000	94.6	-81.2	-82	1.5	0	0	1	-66.1
0	"T04"	3233.6	1.5	8000	82.8	-81.2	-290	1.5	0	0	-1.1	-288
0	"T05"	3914.4	1.5	63	86.2	-82.9	-0.4	3.3	0	0	-26.2	-19.9
0	"T05"	3914.4	1.5	125	93	-82.9	-1.4	-1	0	0	-16.1	-8.4
0	"T05"	3914.4	1.5	250	95.2	-82.9	-4.3	-1.9	0	0	-8.6	-2.4
0	"T05"	3914.4	1.5	500	96.2	-82.9	-9.3	-0.8	0	0	-3.2	0
0	"T05"	3914.4	1.5	1000	99.4	-82.9	-16.2	1.3	0	0	0	1.7
0	"T05"	3914.4	1.5	2000	99.1	-82.9	-33.7	1.7	0	0	1.2	-14.6
0	"T05"	3914.4	1.5	4000	94.6	-82.9	-99.3	1.7	0	0	1	-84.9
0	"T05"	3914.4	1.5	8000	82.8	-82.9	-351.1	1.7	0	0	-1.1	-350.5
0	"T06"	4644.2	1.5	63	86.2	-84.3	-0.5	3.7	0	0	-26.2	-21.1
0	"T06"	4644.2	1.5	125	93	-84.3	-1.7	-0.8	0	0	-16.1	-9.9
0	"T06"	4644.2	1.5	250	95.2	-84.3	-5.1	-1.6	0	0	-8.6	-4.5
0	"T06"	4644.2	1.5	500	96.2	-84.3	-11.1	-0.6	0	0	-3.2	-3
0	"T06"	4644.2	1.5	1000	99.4	-84.3	-19.2	1.5	0	0	0	-2.6
0	"T06"	4644.2	1.5	2000	99.1	-84.3	-40	1.9	0	0	1.2	-22.1
0	"T06"	4644.2	1.5	4000	94.6	-84.3	-117.8	1.9	0	0	1	-104.7
0	"T06"	4644.2	1.5	8000	82.8	-84.3	-416.5	1.9	0	0	-1.1	-417.3
0	"T07"	5483.2	1.5	63	86.2	-85.8	-0.5	4.1	0	0	-26.2	-22.2
0	"T07"	5483.2	1.5	125	93	-85.8	-2	-0.6	0	0	-16.1	-11.5
0	"T07"	5483.2	1.5	250	95.2	-85.8	-6	-1.5	0	0	-8.6	-6.7
0	"T07"	5483.2	1.5	500	96.2	-85.8	-13.1	-0.4	0	0	-3.2	-6.3
0	"T07"	5483.2	1.5	1000	99.4	-85.8	-22.6	1.7	0	0	0	-7.3
0	"T07"	5483.2	1.5	2000	99.1	-85.8	-47.2	2	0	0	1.2	-30.6
0	"T07"	5483.2	1.5	4000	94.6	-85.8	-139.1	2	0	0	1	-127.3
0	"T07"	5483.2	1.5	8000	82.8	-85.8	-491.7	2	0	0	-1.1	-493.8
"r27"	"T01"	815.4	1.5	63	86.2	-69.2	-0.1	3	0	0	-26.2	-6.3
0	"T01"	815.4	1.5	125	93	-69.2	-0.3	-0.8	0	0	-16.1	6.6
0	"T01"	815.4	1.5	250	95.2	-69.2	-0.9	-2	0	0	-8.6	14.5
0	"T01"	815.4	1.5	500	96.2	-69.2	-1.9	-1	0	0	-3.2	20.8
0	"T01"	815.4	1.5	1000	99.4	-69.2	-3.4	1.2	0	0	0	28
0	"T01"	815.4	1.5	2000	99.1	-69.2	-7	1.5	0	0	1.2	25.6
0	"T01"	815.4	1.5	4000	94.6	-69.2	-20.7	1.5	0	0	1	7.2
0	"T01"	815.4	1.5	8000	82.8	-69.2	-73.1	1.5	0	0	-1.1	-59.1
0	"T03"	2124.8	1.5	63	86.2	-77.5	-0.2	3	0	0	-26.2	-14.8
0	"T03"	2124.8	1.5	125	93	-77.5	-0.8	-1.2	0	0	-16.1	-2.6
0	"T03"	2124.8	1.5	250	95.2	-77.5	-2.3	-2	0	0	-8.6	4.7
0	"T03"	2124.8	1.5	500	96.2	-77.5	-5.1	-1	0	0	-3.2	9.4
0	"T03"	2124.8	1.5	1000	99.4	-77.5	-8.8	1.2	0	0	0	14.2
0	"T03"	2124.8	1.5	2000	99.1	-77.5	-18.3	1.5	0	0	1.2	6
0	"T03"	2124.8	1.5	4000	94.6	-77.5	-53.9	1.5	0	0	1	-34.4
0	"T03"	2124.8	1.5	8000	82.8	-77.5	-190.6	1.5	0	0	-1.1	-184.9
0	"T02"	1543.9	1.5	63	86.2	-74.8	-0.2	3	0	0	-26.2	-11.9
0	"T02"	1543.9	1.5	125	93	-74.8	-0.6	-1.2	0	0	-16.1	0.4
0	"T02"	1543.9	1.5	250	95.2	-74.8	-1.7	-2	0	0	-8.6	8.1
0	"T02"	1543.9	1.5	500	96.2	-74.8	-3.7	-1	0	0	-3.2	13.6
0	"T02"	1543.9	1.5	1000	99.4	-74.8	-6.4	1.2	0	0	0	19.4
0	"T02"	1543.9	1.5	2000	99.1	-74.8	-13.3	1.5	0	0	1.2	13.7
0	"T02"	1543.9	1.5	4000	94.6	-74.8	-39.2	1.5	0	0	1	-16.8
0	"T02"	1543.9	1.5	8000	82.8	-74.8	-138.5	1.5	0	0	-1.1	-130
0	"T04"	3035.2	1.5	63	86.2	-80.6	-0.3	3	0	0	-26.2	-17.9
0	"T04"	3035.2	1.5	125	93	-80.6	-1.1	-1.2	0	0	-16.1	-6
0	"T04"	3035.2	1.5	250	95.2	-80.6	-3.3	-2	0	0	-8.6	0.6
0	"T04"	3035.2	1.5	500	96.2	-80.6	-7.2	-1	0	0	-3.2	4.1
0	"T04"	3035.2	1.5	1000	99.4	-80.6	-12.5	1.2	0	0	0	7.4
0	"T04"	3035.2	1.5	2000	99.1	-80.6	-26.1	1.5	0	0	1.2	-5
0	"T04"	3035.2	1.5	4000	94.6	-80.6	-77	1.5	0	0	1	-60.6
0	"T04"	3035.2	1.5	8000	82.8	-80.6	-272.2	1.5	0	0	-1.1	-269.7
0	"T05"	3748.6	1.5	63	86.2	-82.5	-0.4	3.2	0	0	-26.2	-19.6
0	"T05"	3748.6	1.5	125	93	-82.5	-1.4	-1.1	0	0	-16.1	-8
0	"T05"	3748.6	1.5	250	95.2	-82.5	-4.1	-1.9	0	0	-8.6	-1.9
0	"T05"	3748.6	1.5	500	96.2	-82.5	-8.9	-0.9	0	0	-3.2	0.7
0	"T05"	3748.6	1.5	1000	99.4	-82.5	-15.5	1.3	0	0	0	2.7
0	"T05"	3748.6	1.5	2000	99.1	-82.5	-32.3	1.6	0	0	1.2	-12.8
0	"T05"	3748.6	1.5	4000	94.6	-82.5	-95.1	1.6	0	0	1	-80.4
0	"T05"	3748.6	1.5	8000	82.8	-82.5	-336.2	1.6	0	0	-1.1	-335.4
0	"T06"	4469	1.5	63	86.2	-84	-0.4	3.7	0	0	-26.2	-20.8
0	"T06"	4469	1.5	125	93	-84	-1.6	-0.8	0	0	-16.1	-9.6
0	"T06"	4469	1.5	250	95.2	-84	-4.9	-1.7	0	0	-8.6	-4

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0	"T06"	4469	1.5	500	96.2	-84	-10.7	-0.7	0	0	-3.2	-2.3
0	"T06"	4469	1.5	1000	99.4	-84	-18.5	1.5	0	0	0	-1.6
0	"T06"	4469	1.5	2000	99.1	-84	-38.5	1.8	0	0	1.2	-20.3
0	"T06"	4469	1.5	4000	94.6	-84	-113.4	1.8	0	0	1	-100
0	"T06"	4469	1.5	8000	82.8	-84	-400.8	1.8	0	0	-1.1	-401.3
0	"T07"	5129.8	1.5	63	86.2	-85.2	-0.5	4	0	0	-26.2	-21.8
0	"T07"	5129.8	1.5	125	93	-85.2	-1.9	-0.7	0	0	-16.1	-10.9
0	"T07"	5129.8	1.5	250	95.2	-85.2	-5.7	-1.5	0	0	-8.6	-5.8
0	"T07"	5129.8	1.5	500	96.2	-85.2	-12.2	-0.5	0	0	-3.2	-4.9
0	"T07"	5129.8	1.5	1000	99.4	-85.2	-21.2	1.6	0	0	0	-5.3
0	"T07"	5129.8	1.5	2000	99.1	-85.2	-44.2	2	0	0	1.2	-27.1
0	"T07"	5129.8	1.5	4000	94.6	-85.2	-130.2	2	0	0	1	-117.8
0	"T07"	5129.8	1.5	8000	82.8	-85.2	-460	2	0	0	-1.1	-461.6
"r28"	"T01"	831.1	1.5	63	86.2	-69.4	-0.1	3	0	0	-26.2	-6.5
0	"T01"	831.1	1.5	125	93	-69.4	-0.3	-0.8	0	0	-16.1	6.4
0	"T01"	831.1	1.5	250	95.2	-69.4	-0.9	-2	0	0	-8.6	14.3
0	"T01"	831.1	1.5	500	96.2	-69.4	-2	-1	0	0	-3.2	20.6
0	"T01"	831.1	1.5	1000	99.4	-69.4	-3.4	1.2	0	0	0	27.7
0	"T01"	831.1	1.5	2000	99.1	-69.4	-7.2	1.5	0	0	1.2	25.3
0	"T01"	831.1	1.5	4000	94.6	-69.4	-21.1	1.5	0	0	1	6.6
0	"T01"	831.1	1.5	8000	82.8	-69.4	-74.5	1.5	0	0	-1.1	-60.7
0	"T03"	2213.6	1.5	63	86.2	-77.9	-0.2	3	0	0	-26.2	-15.1
0	"T03"	2213.6	1.5	125	93	-77.9	-0.8	-1.2	0	0	-16.1	-3
0	"T03"	2213.6	1.5	250	95.2	-77.9	-2.4	-2	0	0	-8.6	4.2
0	"T03"	2213.6	1.5	500	96.2	-77.9	-5.3	-1	0	0	-3.2	8.8
0	"T03"	2213.6	1.5	1000	99.4	-77.9	-9.1	1.2	0	0	0	13.5
0	"T03"	2213.6	1.5	2000	99.1	-77.9	-19.1	1.5	0	0	1.2	4.8
0	"T03"	2213.6	1.5	4000	94.6	-77.9	-56.2	1.5	0	0	1	-37
0	"T03"	2213.6	1.5	8000	82.8	-77.9	-198.5	1.5	0	0	-1.1	-193.2
0	"T02"	1547.6	1.5	63	86.2	-74.8	-0.2	3	0	0	-26.2	-11.9
0	"T02"	1547.6	1.5	125	93	-74.8	-0.6	-1.2	0	0	-16.1	0.4
0	"T02"	1547.6	1.5	250	95.2	-74.8	-1.7	-2	0	0	-8.6	8.1
0	"T02"	1547.6	1.5	500	96.2	-74.8	-3.7	-1	0	0	-3.2	13.5
0	"T02"	1547.6	1.5	1000	99.4	-74.8	-6.4	1.2	0	0	0	19.4
0	"T02"	1547.6	1.5	2000	99.1	-74.8	-13.3	1.5	0	0	1.2	13.7
0	"T02"	1547.6	1.5	4000	94.6	-74.8	-39.3	1.5	0	0	1	-17
0	"T02"	1547.6	1.5	8000	82.8	-74.8	-138.8	1.5	0	0	-1.1	-130.4
0	"T04"	2997.9	1.5	63	86.2	-80.5	-0.3	3	0	0	-26.2	-17.8
0	"T04"	2997.9	1.5	125	93	-80.5	-1.1	-1.2	0	0	-16.1	-5.9
0	"T04"	2997.9	1.5	250	95.2	-80.5	-3.3	-2	0	0	-8.6	0.7
0	"T04"	2997.9	1.5	500	96.2	-80.5	-7.1	-1	0	0	-3.2	4.3
0	"T04"	2997.9	1.5	1000	99.4	-80.5	-12.4	1.2	0	0	0	7.7
0	"T04"	2997.9	1.5	2000	99.1	-80.5	-25.8	1.5	0	0	1.2	-4.5
0	"T04"	2997.9	1.5	4000	94.6	-80.5	-76.1	1.5	0	0	1	-59.5
0	"T04"	2997.9	1.5	8000	82.8	-80.5	-268.9	1.5	0	0	-1.1	-266.2
0	"T05"	3715.3	1.5	63	86.2	-82.4	-0.4	3.2	0	0	-26.2	-19.6
0	"T05"	3715.3	1.5	125	93	-82.4	-1.3	-1.1	0	0	-16.1	-7.9
0	"T05"	3715.3	1.5	250	95.2	-82.4	-4.1	-1.9	0	0	-8.6	-1.8
0	"T05"	3715.3	1.5	500	96.2	-82.4	-8.9	-0.9	0	0	-3.2	0.8
0	"T05"	3715.3	1.5	1000	99.4	-82.4	-15.3	1.3	0	0	0	2.9
0	"T05"	3715.3	1.5	2000	99.1	-82.4	-32	1.6	0	0	1.2	-12.5
0	"T05"	3715.3	1.5	4000	94.6	-82.4	-94.3	1.6	0	0	1	-79.5
0	"T05"	3715.3	1.5	8000	82.8	-82.4	-333.2	1.6	0	0	-1.1	-332.3
0	"T06"	4427.8	1.5	63	86.2	-83.9	-0.4	3.6	0	0	-26.2	-20.7
0	"T06"	4427.8	1.5	125	93	-83.9	-1.6	-0.9	0	0	-16.1	-9.5
0	"T06"	4427.8	1.5	250	95.2	-83.9	-4.9	-1.7	0	0	-8.6	-3.9
0	"T06"	4427.8	1.5	500	96.2	-83.9	-10.6	-0.7	0	0	-3.2	-2.2
0	"T06"	4427.8	1.5	1000	99.4	-83.9	-18.3	1.5	0	0	0	-1.3
0	"T06"	4427.8	1.5	2000	99.1	-83.9	-38.1	1.8	0	0	1.2	-19.9
0	"T06"	4427.8	1.5	4000	94.6	-83.9	-112.3	1.8	0	0	1	-98.9
0	"T06"	4427.8	1.5	8000	82.8	-83.9	-397.1	1.8	0	0	-1.1	-397.5
0	"T07"	5025.9	1.5	63	86.2	-85	-0.5	3.9	0	0	-26.2	-21.6
0	"T07"	5025.9	1.5	125	93	-85	-1.8	-0.7	0	0	-16.1	-10.7
0	"T07"	5025.9	1.5	250	95.2	-85	-5.5	-1.6	0	0	-8.6	-5.5
0	"T07"	5025.9	1.5	500	96.2	-85	-12	-0.5	0	0	-3.2	-4.5
0	"T07"	5025.9	1.5	1000	99.4	-85	-20.8	1.6	0	0	0	-4.8
0	"T07"	5025.9	1.5	2000	99.1	-85	-43.3	2	0	0	1.2	-26
0	"T07"	5025.9	1.5	4000	94.6	-85	-127.5	2	0	0	1	-115
0	"T07"	5025.9	1.5	8000	82.8	-85	-450.7	2	0	0	-1.1	-452.1
"r29"	"T01"	867.5	1.5	63	86.2	-69.8	-0.1	3	0	0	-26.2	-6.9
0	"T01"	867.5	1.5	125	93	-69.8	-0.3	-0.9	0	0	-16.1	5.9
0	"T01"	867.5	1.5	250	95.2	-69.8	-1	-2	0	0	-8.6	13.9
0	"T01"	867.5	1.5	500	96.2	-69.8	-2.1	-1	0	0	-3.2	20.2
0	"T01"	867.5	1.5	1000	99.4	-69.8	-3.6	1.2	0	0	0	27.2
0	"T01"	867.5	1.5	2000	99.1	-69.8	-7.5	1.5	0	0	1.2	24.6
0	"T01"	867.5	1.5	4000	94.6	-69.8	-22	1.5	0	0	1	5.3
0	"T01"	867.5	1.5	8000	82.8	-69.8	-77.8	1.5	0	0	-1.1	-64.4
0	"T03"	2271.5	1.5	63	86.2	-78.1	-0.2	3	0	0	-26.2	-15.4
0	"T03"	2271.5	1.5	125	93	-78.1	-0.8	-1.2	0	0	-16.1	-3.2
0	"T03"	2271.5	1.5	250	95.2	-78.1	-2.5	-2	0	0	-8.6	4
0	"T03"	2271.5	1.5	500	96.2	-78.1	-5.4	-1	0	0	-3.2	8.5
0	"T03"	2271.5	1.5	1000	99.4	-78.1	-9.4	1.2	0	0	0	13.1
0	"T03"	2271.5	1.5	2000	99.1	-78.1	-19.6	1.5	0	0	1.2	4.1
0	"T03"	2271.5	1.5	4000	94.6	-78.1	-57.6	1.5	0	0	1	-38.7
0	"T03"	2271.5	1.5	8000	82.8	-78.1	-203.7	1.5	0	0	-1.1	-198.6
0	"T02"	1564.9	1.5	63	86.2	-74.9	-0.2	3	0	0	-26.2	-12
0	"T02"	1564.9	1.5	125	93	-74.9	-0.6	-1.2	0	0	-16.1	0.3
0	"T02"	1564.9	1.5	250	95.2	-74.9	-1.7	-2	0	0	-8.6	8
0	"T02"	1564.9	1.5	500	96.2	-74.9	-3.7	-1	0	0	-3.2	13.4
0	"T02"	1564.9	1.5	1000	99.4	-74.9	-6.5	1.2	0	0	0	19.2
0	"T02"	1564.9	1.5	2000	99.1	-74.9	-13.5	1.5	0	0	1.2	13.4
0	"T02"	1564.9	1.5	4000	94.6	-74.9	-39.7	1.5	0	0	1	-17.5
0	"T02"	1564.9	1.5	8000	82.8	-74.9	-140.3	1.5	0	0	-1.1	-132
0	"T04"	2985.1	1.5	63	86.2	-80.5	-0.3	3	0	0	-26.2	-17.8
0	"T04"	2985.1	1.5	125	93	-80.5	-1.1	-1.2	0	0	-16.1	-5.9
0	"T04"	2985.1	1.5	250	95.2	-80.5	-3.3	-2	0	0	-8.6	0.8
0	"T04"	2985.1	1.5	500	96.2	-80.5	-7.1	-1	0	0	-3.2	4.4

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0	"T04"	2985.1	1.5	1000	99.4	-80.5	-12.3	1.2	0	0	0	7.7
0	"T04"	2985.1	1.5	2000	99.1	-80.5	-25.7	1.5	0	0	1.2	-4.4
0	"T04"	2985.1	1.5	4000	94.6	-80.5	-75.7	1.5	0	0	1	-59.1
0	"T04"	2985.1	1.5	8000	82.8	-80.5	-267.7	1.5	0	0	-1.1	-265
0	"T05"	3703.2	1.5	63	86.2	-82.4	-0.4	3.2	0	0	-26.2	-19.6
0	"T05"	3703.2	1.5	125	93	-82.4	-1.3	-1.1	0	0	-16.1	-7.9
0	"T05"	3703.2	1.5	250	95.2	-82.4	-4.1	-1.9	0	0	-8.6	-1.8
0	"T05"	3703.2	1.5	500	96.2	-82.4	-8.8	-0.9	0	0	-3.2	0.9
0	"T05"	3703.2	1.5	1000	99.4	-82.4	-15.3	1.3	0	0	0	3
0	"T05"	3703.2	1.5	2000	99.1	-82.4	-31.9	1.6	0	0	1.2	-12.4
0	"T05"	3703.2	1.5	4000	94.6	-82.4	-94	1.6	0	0	1	-79.1
0	"T05"	3703.2	1.5	8000	82.8	-82.4	-332.1	1.6	0	0	-1.1	-331.2
0	"T06"	4410.3	1.5	63	86.2	-83.9	-0.4	3.6	0	0	-26.2	-20.7
0	"T06"	4410.3	1.5	125	93	-83.9	-1.6	-0.9	0	0	-16.1	-9.4
0	"T06"	4410.3	1.5	250	95.2	-83.9	-4.9	-1.7	0	0	-8.6	-3.9
0	"T06"	4410.3	1.5	500	96.2	-83.9	-10.5	-0.7	0	0	-3.2	-2.1
0	"T06"	4410.3	1.5	1000	99.4	-83.9	-18.2	1.5	0	0	0	-1.2
0	"T06"	4410.3	1.5	2000	99.1	-83.9	-38	1.8	0	0	1.2	-19.7
0	"T06"	4410.3	1.5	4000	94.6	-83.9	-111.9	1.8	0	0	1	-98.4
0	"T06"	4410.3	1.5	8000	82.8	-83.9	-395.5	1.8	0	0	-1.1	-395.9
0	"T07"	4972.5	1.5	63	86.2	-84.9	-0.5	3.9	0	0	-26.2	-21.5
0	"T07"	4972.5	1.5	125	93	-84.9	-1.8	-0.7	0	0	-16.1	-10.6
0	"T07"	4972.5	1.5	250	95.2	-84.9	-5.5	-1.6	0	0	-8.6	-5.4
0	"T07"	4972.5	1.5	500	96.2	-84.9	-11.9	-0.5	0	0	-3.2	-4.3
0	"T07"	4972.5	1.5	1000	99.4	-84.9	-20.5	1.6	0	0	0	-4.5
0	"T07"	4972.5	1.5	2000	99.1	-84.9	-42.8	1.9	0	0	1.2	-25.5
0	"T07"	4972.5	1.5	4000	94.6	-84.9	-126.2	1.9	0	0	1	-113.6
0	"T07"	4972.5	1.5	8000	82.8	-84.9	-445.9	1.9	0	0	-1.1	-447.2
"r30"	"T01"	961	1.5	63	86.2	-70.7	-0.1	3	0	0	-26.2	-7.7
0	"T01"	961	1.5	125	93	-70.7	-0.3	-1	0	0	-16.1	4.9
0	"T01"	961	1.5	250	95.2	-70.7	-1.1	-2	0	0	-8.6	12.9
0	"T01"	961	1.5	500	96.2	-70.7	-2.3	-1	0	0	-3.2	19.1
0	"T01"	961	1.5	1000	99.4	-70.7	-4	1.2	0	0	0	25.9
0	"T01"	961	1.5	2000	99.1	-70.7	-8.3	1.5	0	0	1.2	22.9
0	"T01"	961	1.5	4000	94.6	-70.7	-24.4	1.5	0	0	1	2.1
0	"T01"	961	1.5	8000	82.8	-70.7	-86.2	1.5	0	0	-1.1	-73.6
0	"T03"	2373.5	1.5	63	86.2	-78.5	-0.2	3	0	0	-26.2	-15.7
0	"T03"	2373.5	1.5	125	93	-78.5	-0.9	-1.2	0	0	-16.1	-3.6
0	"T03"	2373.5	1.5	250	95.2	-78.5	-2.6	-2	0	0	-8.6	3.5
0	"T03"	2373.5	1.5	500	96.2	-78.5	-5.7	-1	0	0	-3.2	7.8
0	"T03"	2373.5	1.5	1000	99.4	-78.5	-9.8	1.2	0	0	0	12.3
0	"T03"	2373.5	1.5	2000	99.1	-78.5	-20.4	1.5	0	0	1.2	2.9
0	"T03"	2373.5	1.5	4000	94.6	-78.5	-60.2	1.5	0	0	1	-41.6
0	"T03"	2373.5	1.5	8000	82.8	-78.5	-212.9	1.5	0	0	-1.1	-208.2
0	"T02"	1639.6	1.5	63	86.2	-75.3	-0.2	3	0	0	-26.2	-12.5
0	"T02"	1639.6	1.5	125	93	-75.3	-0.6	-1.2	0	0	-16.1	-0.2
0	"T02"	1639.6	1.5	250	95.2	-75.3	-1.8	-2	0	0	-8.6	7.5
0	"T02"	1639.6	1.5	500	96.2	-75.3	-3.9	-1	0	0	-3.2	12.8
0	"T02"	1639.6	1.5	1000	99.4	-75.3	-6.8	1.2	0	0	0	18.5
0	"T02"	1639.6	1.5	2000	99.1	-75.3	-14.1	1.5	0	0	1.2	12.4
0	"T02"	1639.6	1.5	4000	94.6	-75.3	-41.6	1.5	0	0	1	-19.8
0	"T02"	1639.6	1.5	8000	82.8	-75.3	-147	1.5	0	0	-1.1	-139.1
0	"T04"	3030.1	1.5	63	86.2	-80.6	-0.3	3	0	0	-26.2	-17.9
0	"T04"	3030.1	1.5	125	93	-80.6	-1.1	-1.2	0	0	-16.1	-6
0	"T04"	3030.1	1.5	250	95.2	-80.6	-3.3	-2	0	0	-8.6	0.6
0	"T04"	3030.1	1.5	500	96.2	-80.6	-7.2	-1	0	0	-3.2	4.2
0	"T04"	3030.1	1.5	1000	99.4	-80.6	-12.5	1.2	0	0	0	7.4
0	"T04"	3030.1	1.5	2000	99.1	-80.6	-26.1	1.5	0	0	1.2	-4.9
0	"T04"	3030.1	1.5	4000	94.6	-80.6	-76.9	1.5	0	0	1	-60.4
0	"T04"	3030.1	1.5	8000	82.8	-80.6	-271.7	1.5	0	0	-1.1	-269.2
0	"T05"	3747.9	1.5	63	86.2	-82.5	-0.4	3.2	0	0	-26.2	-19.6
0	"T05"	3747.9	1.5	125	93	-82.5	-1.4	-1.1	0	0	-16.1	-8
0	"T05"	3747.9	1.5	250	95.2	-82.5	-4.1	-1.9	0	0	-8.6	-1.9
0	"T05"	3747.9	1.5	500	96.2	-82.5	-8.9	-0.9	0	0	-3.2	0.7
0	"T05"	3747.9	1.5	1000	99.4	-82.5	-15.5	1.3	0	0	0	2.7
0	"T05"	3747.9	1.5	2000	99.1	-82.5	-32.3	1.6	0	0	1.2	-12.8
0	"T05"	3747.9	1.5	4000	94.6	-82.5	-95.1	1.6	0	0	1	-80.4
0	"T05"	3747.9	1.5	8000	82.8	-82.5	-336.1	1.6	0	0	-1.1	-335.3
0	"T06"	4449.2	1.5	63	86.2	-84	-0.4	3.6	0	0	-26.2	-20.8
0	"T06"	4449.2	1.5	125	93	-84	-1.6	-0.9	0	0	-16.1	-9.5
0	"T06"	4449.2	1.5	250	95.2	-84	-4.9	-1.7	0	0	-8.6	-4
0	"T06"	4449.2	1.5	500	96.2	-84	-10.6	-0.7	0	0	-3.2	-2.2
0	"T06"	4449.2	1.5	1000	99.4	-84	-18.4	1.5	0	0	0	-1.4
0	"T06"	4449.2	1.5	2000	99.1	-84	-38.3	1.8	0	0	1.2	-20.1
0	"T06"	4449.2	1.5	4000	94.6	-84	-112.9	1.8	0	0	1	-99.4
0	"T06"	4449.2	1.5	8000	82.8	-84	-399	1.8	0	0	-1.1	-399.5
0	"T07"	4974.7	1.5	63	86.2	-84.9	-0.5	3.9	0	0	-26.2	-21.5
0	"T07"	4974.7	1.5	125	93	-84.9	-1.8	-0.7	0	0	-16.1	-10.6
0	"T07"	4974.7	1.5	250	95.2	-84.9	-5.5	-1.6	0	0	-8.6	-5.4
0	"T07"	4974.7	1.5	500	96.2	-84.9	-11.9	-0.5	0	0	-3.2	-4.3
0	"T07"	4974.7	1.5	1000	99.4	-84.9	-20.5	1.6	0	0	0	-4.5
0	"T07"	4974.7	1.5	2000	99.1	-84.9	-42.8	1.9	0	0	1.2	-25.5
0	"T07"	4974.7	1.5	4000	94.6	-84.9	-126.2	1.9	0	0	1	-113.6
0	"T07"	4974.7	1.5	8000	82.8	-84.9	-446.1	1.9	0	0	-1.1	-447.4
"r31"	"T01"	816.4	1.5	63	86.2	-69.2	-0.1	3	0	0	-26.2	-6.3
0	"T01"	816.4	1.5	125	93	-69.2	-0.3	-0.8	0	0	-16.1	6.6
0	"T01"	816.4	1.5	250	95.2	-69.2	-0.9	-2	0	0	-8.6	14.4
0	"T01"	816.4	1.5	500	96.2	-69.2	-1.9	-1	0	0	-3.2	20.8
0	"T01"	816.4	1.5	1000	99.4	-69.2	-3.4	1.2	0	0	0	28
0	"T01"	816.4	1.5	2000	99.1	-69.2	-7	1.5	0	0	1.2	25.5
0	"T01"	816.4	1.5	4000	94.6	-69.2	-20.7	1.5	0	0	1	7.1
0	"T01"	816.4	1.5	8000	82.8	-69.2	-73.2	1.5	0	0	-1.1	-59.3
0	"T03"	2225.4	1.5	63	86.2	-77.9	-0.2	3	0	0	-26.2	-15.2
0	"T03"	2225.4	1.5	125	93	-77.9	-0.8	-1.2	0	0	-16.1	-3
0	"T03"	2225.4	1.5	250	95.2	-77.9	-2.5	-2	0	0	-8.6	4.2
0	"T03"	2225.4	1.5	500	96.2	-77.9	-5.3	-1	0	0	-3.2	8.8
0	"T03"	2225.4	1.5	1000	99.4	-77.9	-9.2	1.2	0	0	0	13.4

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0	"T03"	2225.4	1.5	2000	99.1	-77.9	-19.2	1.5	0	0	1.2	4.7
0	"T03"	2225.4	1.5	4000	94.6	-77.9	-56.5	1.5	0	0	1	-37.3
0	"T03"	2225.4	1.5	8000	82.8	-77.9	-199.6	1.5	0	0	-1.1	-194.3
0	"T02"	1505.2	1.5	63	86.2	-74.6	-0.1	3	0	0	-26.2	-11.7
0	"T02"	1505.2	1.5	125	93	-74.6	-0.5	-1.2	0	0	-16.1	0.6
0	"T02"	1505.2	1.5	250	95.2	-74.6	-1.7	-2	0	0	-8.6	8.4
0	"T02"	1505.2	1.5	500	96.2	-74.6	-3.6	-1	0	0	-3.2	13.9
0	"T02"	1505.2	1.5	1000	99.4	-74.6	-6.2	1.2	0	0	0	19.8
0	"T02"	1505.2	1.5	2000	99.1	-74.6	-13	1.5	0	0	1.2	14.3
0	"T02"	1505.2	1.5	4000	94.6	-74.6	-38.2	1.5	0	0	1	-15.6
0	"T02"	1505.2	1.5	8000	82.8	-74.6	-135	1.5	0	0	-1.1	-126.3
0	"T04"	2918.3	1.5	63	86.2	-80.3	-0.3	3	0	0	-26.2	-17.6
0	"T04"	2918.3	1.5	125	93	-80.3	-1.1	-1.2	0	0	-16.1	-5.6
0	"T04"	2918.3	1.5	250	95.2	-80.3	-3.2	-2	0	0	-8.6	1.1
0	"T04"	2918.3	1.5	500	96.2	-80.3	-7	-1	0	0	-3.2	4.8
0	"T04"	2918.3	1.5	1000	99.4	-80.3	-12.1	1.2	0	0	0	8.2
0	"T04"	2918.3	1.5	2000	99.1	-80.3	-25.1	1.5	0	0	1.2	-3.6
0	"T04"	2918.3	1.5	4000	94.6	-80.3	-74	1.5	0	0	1	-57.2
0	"T04"	2918.3	1.5	8000	82.8	-80.3	-261.7	1.5	0	0	-1.1	-258.8
0	"T05"	3636.4	1.5	63	86.2	-82.2	-0.4	3.1	0	0	-26.2	-19.5
0	"T05"	3636.4	1.5	125	93	-82.2	-1.3	-1.1	0	0	-16.1	-7.7
0	"T05"	3636.4	1.5	250	95.2	-82.2	-4	-2	0	0	-8.6	-1.6
0	"T05"	3636.4	1.5	500	96.2	-82.2	-8.7	-0.9	0	0	-3.2	1.2
0	"T05"	3636.4	1.5	1000	99.4	-82.2	-15	1.2	0	0	0	3.4
0	"T05"	3636.4	1.5	2000	99.1	-82.2	-31.3	1.6	0	0	1.2	-11.7
0	"T05"	3636.4	1.5	4000	94.6	-82.2	-92.3	1.6	0	0	1	-77.3
0	"T05"	3636.4	1.5	8000	82.8	-82.2	-326.1	1.6	0	0	-1.1	-325.1
0	"T06"	4342.7	1.5	63	86.2	-83.8	-0.4	3.6	0	0	-26.2	-20.6
0	"T06"	4342.7	1.5	125	93	-83.8	-1.6	-0.9	0	0	-16.1	-9.3
0	"T06"	4342.7	1.5	250	95.2	-83.8	-4.8	-1.7	0	0	-8.6	-3.7
0	"T06"	4342.7	1.5	500	96.2	-83.8	-10.4	-0.7	0	0	-3.2	-1.8
0	"T06"	4342.7	1.5	1000	99.4	-83.8	-17.9	1.5	0	0	0	-0.8
0	"T06"	4342.7	1.5	2000	99.1	-83.8	-37.4	1.8	0	0	1.2	-19
0	"T06"	4342.7	1.5	4000	94.6	-83.8	-110.2	1.8	0	0	1	-96.5
0	"T06"	4342.7	1.5	8000	82.8	-83.8	-389.5	1.8	0	0	-1.1	-389.7
0	"T07"	4903.4	1.5	63	86.2	-84.8	-0.5	3.9	0	0	-26.2	-21.4
0	"T07"	4903.4	1.5	125	93	-84.8	-1.8	-0.7	0	0	-16.1	-10.4
0	"T07"	4903.4	1.5	250	95.2	-84.8	-5.4	-1.6	0	0	-8.6	-5.2
0	"T07"	4903.4	1.5	500	96.2	-84.8	-11.7	-0.6	0	0	-3.2	-4.1
0	"T07"	4903.4	1.5	1000	99.4	-84.8	-20.2	1.6	0	0	0	-4.1
0	"T07"	4903.4	1.5	2000	99.1	-84.8	-42.2	1.9	0	0	1.2	-24.8
0	"T07"	4903.4	1.5	4000	94.6	-84.8	-124.4	1.9	0	0	1	-111.7
0	"T07"	4903.4	1.5	8000	82.8	-84.8	-439.7	1.9	0	0	-1.1	-440.9
"r32"	"T01"	872.3	1.5	63	86.2	-69.8	-0.1	3	0	0	-26.2	-6.9
0	"T01"	872.3	1.5	125	93	-69.8	-0.3	-0.9	0	0	-16.1	5.9
0	"T01"	872.3	1.5	250	95.2	-69.8	-1	-2	0	0	-8.6	13.8
0	"T01"	872.3	1.5	500	96.2	-69.8	-2.1	-1	0	0	-3.2	20.1
0	"T01"	872.3	1.5	1000	99.4	-69.8	-3.6	1.2	0	0	0	27.2
0	"T01"	872.3	1.5	2000	99.1	-69.8	-7.5	1.5	0	0	1.2	24.5
0	"T01"	872.3	1.5	4000	94.6	-69.8	-22.1	1.5	0	0	1	5.2
0	"T01"	872.3	1.5	8000	82.8	-69.8	-78.2	1.5	0	0	-1.1	-64.8
0	"T03"	2268.2	1.5	63	86.2	-78.1	-0.2	3	0	0	-26.2	-15.3
0	"T03"	2268.2	1.5	125	93	-78.1	-0.8	-1.2	0	0	-16.1	-3.2
0	"T03"	2268.2	1.5	250	95.2	-78.1	-2.5	-2	0	0	-8.6	4
0	"T03"	2268.2	1.5	500	96.2	-78.1	-5.4	-1	0	0	-3.2	8.5
0	"T03"	2268.2	1.5	1000	99.4	-78.1	-9.4	1.2	0	0	0	13.1
0	"T03"	2268.2	1.5	2000	99.1	-78.1	-19.5	1.5	0	0	1.2	4.2
0	"T03"	2268.2	1.5	4000	94.6	-78.1	-57.6	1.5	0	0	1	-38.6
0	"T03"	2268.2	1.5	8000	82.8	-78.1	-203.4	1.5	0	0	-1.1	-198.3
0	"T02"	1452.7	1.5	63	86.2	-74.2	-0.1	3	0	0	-26.2	-11.4
0	"T02"	1452.7	1.5	125	93	-74.2	-0.5	-1.2	0	0	-16.1	1
0	"T02"	1452.7	1.5	250	95.2	-74.2	-1.6	-2	0	0	-8.6	8.7
0	"T02"	1452.7	1.5	500	96.2	-74.2	-3.5	-1	0	0	-3.2	14.3
0	"T02"	1452.7	1.5	1000	99.4	-74.2	-6	1.2	0	0	0	20.3
0	"T02"	1452.7	1.5	2000	99.1	-74.2	-12.5	1.5	0	0	1.2	15.1
0	"T02"	1452.7	1.5	4000	94.6	-74.2	-36.9	1.5	0	0	1	-14
0	"T02"	1452.7	1.5	8000	82.8	-74.2	-130.3	1.5	0	0	-1.1	-121.3
0	"T04"	2756.2	1.5	63	86.2	-79.8	-0.3	3	0	0	-26.2	-17.1
0	"T04"	2756.2	1.5	125	93	-79.8	-1	-1.2	0	0	-16.1	-5.1
0	"T04"	2756.2	1.5	250	95.2	-79.8	-3	-2	0	0	-8.6	1.7
0	"T04"	2756.2	1.5	500	96.2	-79.8	-6.6	-1	0	0	-3.2	5.6
0	"T04"	2756.2	1.5	1000	99.4	-79.8	-11.4	1.2	0	0	0	9.4
0	"T04"	2756.2	1.5	2000	99.1	-79.8	-23.7	1.5	0	0	1.2	-1.7
0	"T04"	2756.2	1.5	4000	94.6	-79.8	-69.9	1.5	0	0	1	-52.6
0	"T04"	2756.2	1.5	8000	82.8	-79.8	-247.2	1.5	0	0	-1.1	-243.8
0	"T05"	3470.8	1.5	63	86.2	-81.8	-0.3	3	0	0	-26.2	-19.2
0	"T05"	3470.8	1.5	125	93	-81.8	-1.3	-1.2	0	0	-16.1	-7.3
0	"T05"	3470.8	1.5	250	95.2	-81.8	-3.8	-2	0	0	-8.6	-1
0	"T05"	3470.8	1.5	500	96.2	-81.8	-8.3	-1	0	0	-3.2	1.9
0	"T05"	3470.8	1.5	1000	99.4	-81.8	-14.3	1.2	0	0	0	4.4
0	"T05"	3470.8	1.5	2000	99.1	-81.8	-29.9	1.5	0	0	1.2	-9.9
0	"T05"	3470.8	1.5	4000	94.6	-81.8	-88.1	1.5	0	0	1	-72.8
0	"T05"	3470.8	1.5	8000	82.8	-81.8	-311.3	1.5	0	0	-1.1	-309.9
0	"T06"	4160.5	1.5	63	86.2	-83.4	-0.4	3.5	0	0	-26.2	-20.3
0	"T06"	4160.5	1.5	125	93	-83.4	-1.5	-0.9	0	0	-16.1	-8.9
0	"T06"	4160.5	1.5	250	95.2	-83.4	-4.6	-1.8	0	0	-8.6	-3.1
0	"T06"	4160.5	1.5	500	96.2	-83.4	-9.9	-0.7	0	0	-3.2	-1.1
0	"T06"	4160.5	1.5	1000	99.4	-83.4	-17.2	1.4	0	0	0	0.2
0	"T06"	4160.5	1.5	2000	99.1	-83.4	-35.8	1.7	0	0	1.2	-17.2
0	"T06"	4160.5	1.5	4000	94.6	-83.4	-105.6	1.7	0	0	1	-91.6
0	"T06"	4160.5	1.5	8000	82.8	-83.4	-373.1	1.7	0	0	-1.1	-373.1
0	"T07"	4639.6	1.5	63	86.2	-84.3	-0.5	3.7	0	0	-26.2	-21
0	"T07"	4639.6	1.5	125	93	-84.3	-1.7	-0.8	0	0	-16.1	-9.9
0	"T07"	4639.6	1.5	250	95.2	-84.3	-5.1	-1.6	0	0	-8.6	-4.5
0	"T07"	4639.6	1.5	500	96.2	-84.3	-11.1	-0.6	0	0	-3.2	-3
0	"T07"	4639.6	1.5	1000	99.4	-84.3	-19.2	1.5	0	0	0	-2.6
0	"T07"	4639.6	1.5	2000	99.1	-84.3	-39.9	1.9	0	0	1.2	-22.1

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0	"T07"	4639.6	1.5	4000	94.6	-84.3	-117.7	1.9	0	0	1	-104.6
0	"T07"	4639.6	1.5	8000	82.8	-84.3	-416.1	1.9	0	0	-1.1	-416.9
"r33"	"T01"	919.8	1.5	63	86.2	-70.3	-0.1	3	0	0	-26.2	-7.4
0	"T01"	919.8	1.5	125	93	-70.3	-0.3	-0.9	0	0	-16.1	5.3
0	"T01"	919.8	1.5	250	95.2	-70.3	-1	-2	0	0	-8.6	13.3
0	"T01"	919.8	1.5	500	96.2	-70.3	-2.2	-1	0	0	-3.2	19.5
0	"T01"	919.8	1.5	1000	99.4	-70.3	-3.8	1.2	0	0	0	26.5
0	"T01"	919.8	1.5	2000	99.1	-70.3	-7.9	1.5	0	0	1.2	23.6
0	"T01"	919.8	1.5	4000	94.6	-70.3	-23.3	1.5	0	0	1	3.5
0	"T01"	919.8	1.5	8000	82.8	-70.3	-82.5	1.5	0	0	-1.1	-69.6
0	"T03"	2302.5	1.5	63	86.2	-78.2	-0.2	3	0	0	-26.2	-15.5
0	"T03"	2302.5	1.5	125	93	-78.2	-0.8	-1.2	0	0	-16.1	-3.3
0	"T03"	2302.5	1.5	250	95.2	-78.2	-2.5	-2	0	0	-8.6	3.8
0	"T03"	2302.5	1.5	500	96.2	-78.2	-5.5	-1	0	0	-3.2	8.3
0	"T03"	2302.5	1.5	1000	99.4	-78.2	-9.5	1.2	0	0	0	12.8
0	"T03"	2302.5	1.5	2000	99.1	-78.2	-19.8	1.5	0	0	1.2	3.7
0	"T03"	2302.5	1.5	4000	94.6	-78.2	-58.4	1.5	0	0	1	-39.6
0	"T03"	2302.5	1.5	8000	82.8	-78.2	-206.5	1.5	0	0	-1.1	-201.5
0	"T02"	1469.6	1.5	63	86.2	-74.3	-0.1	3	0	0	-26.2	-11.5
0	"T02"	1469.6	1.5	125	93	-74.3	-0.5	-1.2	0	0	-16.1	0.9
0	"T02"	1469.6	1.5	250	95.2	-74.3	-1.6	-2	0	0	-8.6	8.6
0	"T02"	1469.6	1.5	500	96.2	-74.3	-3.5	-1	0	0	-3.2	14.2
0	"T02"	1469.6	1.5	1000	99.4	-74.3	-6.1	1.2	0	0	0	20.2
0	"T02"	1469.6	1.5	2000	99.1	-74.3	-12.7	1.5	0	0	1.2	14.8
0	"T02"	1469.6	1.5	4000	94.6	-74.3	-37.3	1.5	0	0	1	-14.5
0	"T02"	1469.6	1.5	8000	82.8	-74.3	-131.8	1.5	0	0	-1.1	-122.9
0	"T04"	2739.4	1.5	63	86.2	-79.8	-0.3	3	0	0	-26.2	-17
0	"T04"	2739.4	1.5	125	93	-79.8	-1	-1.2	0	0	-16.1	-5
0	"T04"	2739.4	1.5	250	95.2	-79.8	-3	-2	0	0	-8.6	1.8
0	"T04"	2739.4	1.5	500	96.2	-79.8	-6.5	-1	0	0	-3.2	5.7
0	"T04"	2739.4	1.5	1000	99.4	-79.8	-11.3	1.2	0	0	0	9.5
0	"T04"	2739.4	1.5	2000	99.1	-79.8	-23.6	1.5	0	0	1.2	-1.5
0	"T04"	2739.4	1.5	4000	94.6	-79.8	-69.5	1.5	0	0	1	-52.2
0	"T04"	2739.4	1.5	8000	82.8	-79.8	-245.7	1.5	0	0	-1.1	-242.2
0	"T05"	3452	1.5	63	86.2	-81.8	-0.3	3	0	0	-26.2	-19.1
0	"T05"	3452	1.5	125	93	-81.8	-1.2	-1.2	0	0	-16.1	-7.3
0	"T05"	3452	1.5	250	95.2	-81.8	-3.8	-2	0	0	-8.6	-1
0	"T05"	3452	1.5	500	96.2	-81.8	-8.2	-1	0	0	-3.2	2
0	"T05"	3452	1.5	1000	99.4	-81.8	-14.3	1.2	0	0	0	4.6
0	"T05"	3452	1.5	2000	99.1	-81.8	-29.7	1.5	0	0	1.2	-9.7
0	"T05"	3452	1.5	4000	94.6	-81.8	-87.6	1.5	0	0	1	-72.2
0	"T05"	3452	1.5	8000	82.8	-81.8	-309.6	1.5	0	0	-1.1	-308.1
0	"T06"	4136.5	1.5	63	86.2	-83.3	-0.4	3.5	0	0	-26.2	-20.3
0	"T06"	4136.5	1.5	125	93	-83.3	-1.5	-0.9	0	0	-16.1	-8.9
0	"T06"	4136.5	1.5	250	95.2	-83.3	-4.6	-1.8	0	0	-8.6	-3.1
0	"T06"	4136.5	1.5	500	96.2	-83.3	-9.9	-0.8	0	0	-3.2	-1
0	"T06"	4136.5	1.5	1000	99.4	-83.3	-17.1	1.4	0	0	0	0.4
0	"T06"	4136.5	1.5	2000	99.1	-83.3	-35.6	1.7	0	0	1.2	-16.9
0	"T06"	4136.5	1.5	4000	94.6	-83.3	-105	1.7	0	0	1	-91
0	"T06"	4136.5	1.5	8000	82.8	-83.3	-371	1.7	0	0	-1.1	-370.9
0	"T07"	4591.8	1.5	63	86.2	-84.2	-0.5	3.7	0	0	-26.2	-21
0	"T07"	4591.8	1.5	125	93	-84.2	-1.7	-0.8	0	0	-16.1	-9.8
0	"T07"	4591.8	1.5	250	95.2	-84.2	-5.1	-1.7	0	0	-8.6	-4.4
0	"T07"	4591.8	1.5	500	96.2	-84.2	-10.9	-0.6	0	0	-3.2	-2.8
0	"T07"	4591.8	1.5	1000	99.4	-84.2	-19	1.5	0	0	0	-2.3
0	"T07"	4591.8	1.5	2000	99.1	-84.2	-39.5	1.9	0	0	1.2	-21.6
0	"T07"	4591.8	1.5	4000	94.6	-84.2	-116.5	1.9	0	0	1	-103.3
0	"T07"	4591.8	1.5	8000	82.8	-84.2	-411.8	1.9	0	0	-1.1	-412.5
"r34"	"T01"	1093.1	1.5	63	86.2	-71.8	-0.1	3	0	0	-26.2	-8.9
0	"T01"	1093.1	1.5	125	93	-71.8	-0.4	-1.1	0	0	-16.1	3.6
0	"T01"	1093.1	1.5	250	95.2	-71.8	-1.2	-2	0	0	-8.6	11.6
0	"T01"	1093.1	1.5	500	96.2	-71.8	-2.6	-1	0	0	-3.2	17.6
0	"T01"	1093.1	1.5	1000	99.4	-71.8	-4.5	1.2	0	0	0	24.3
0	"T01"	1093.1	1.5	2000	99.1	-71.8	-9.4	1.5	0	0	1.2	20.6
0	"T01"	1093.1	1.5	4000	94.6	-71.8	-27.7	1.5	0	0	1	-2.4
0	"T01"	1093.1	1.5	8000	82.8	-71.8	-98	1.5	0	0	-1.1	-86.6
0	"T03"	2495.8	1.5	63	86.2	-78.9	-0.2	3	0	0	-26.2	-16.2
0	"T03"	2495.8	1.5	125	93	-78.9	-0.9	-1.2	0	0	-16.1	-4.1
0	"T03"	2495.8	1.5	250	95.2	-78.9	-2.8	-2	0	0	-8.6	2.9
0	"T03"	2495.8	1.5	500	96.2	-78.9	-6	-1	0	0	-3.2	7.1
0	"T03"	2495.8	1.5	1000	99.4	-78.9	-10.3	1.2	0	0	0	11.3
0	"T03"	2495.8	1.5	2000	99.1	-78.9	-21.5	1.5	0	0	1.2	1.4
0	"T03"	2495.8	1.5	4000	94.6	-78.9	-63.3	1.5	0	0	1	-45.2
0	"T03"	2495.8	1.5	8000	82.8	-78.9	-223.8	1.5	0	0	-1.1	-219.6
0	"T02"	1789.2	1.5	63	86.2	-76.1	-0.2	3	0	0	-26.2	-13.2
0	"T02"	1789.2	1.5	125	93	-76.1	-0.6	-1.2	0	0	-16.1	-1
0	"T02"	1789.2	1.5	250	95.2	-76.1	-2	-2	0	0	-8.6	6.6
0	"T02"	1789.2	1.5	500	96.2	-76.1	-4.3	-1	0	0	-3.2	11.7
0	"T02"	1789.2	1.5	1000	99.4	-76.1	-7.4	1.2	0	0	0	17.1
0	"T02"	1789.2	1.5	2000	99.1	-76.1	-15.4	1.5	0	0	1.2	10.3
0	"T02"	1789.2	1.5	4000	94.6	-76.1	-45.4	1.5	0	0	1	-24.3
0	"T02"	1789.2	1.5	8000	82.8	-76.1	-160.5	1.5	0	0	-1.1	-153.3
0	"T04"	3195	1.5	63	86.2	-81.1	-0.3	3	0	0	-26.2	-18.4
0	"T04"	3195	1.5	125	93	-81.1	-1.2	-1.2	0	0	-16.1	-6.5
0	"T04"	3195	1.5	250	95.2	-81.1	-3.5	-2	0	0	-8.6	0
0	"T04"	3195	1.5	500	96.2	-81.1	-7.6	-1	0	0	-3.2	3.3
0	"T04"	3195	1.5	1000	99.4	-81.1	-13.2	1.2	0	0	0	6.3
0	"T04"	3195	1.5	2000	99.1	-81.1	-27.5	1.5	0	0	1.2	-6.8
0	"T04"	3195	1.5	4000	94.6	-81.1	-81.1	1.5	0	0	1	-65.1
0	"T04"	3195	1.5	8000	82.8	-81.1	-286.5	1.5	0	0	-1.1	-284.4
0	"T05"	3913	1.5	63	86.2	-82.9	-0.4	3.3	0	0	-26.2	-19.9
0	"T05"	3913	1.5	125	93	-82.9	-1.4	-1	0	0	-16.1	-8.4
0	"T05"	3913	1.5	250	95.2	-82.9	-4.3	-1.9	0	0	-8.6	-2.4
0	"T05"	3913	1.5	500	96.2	-82.9	-9.3	-0.8	0	0	-3.2	0
0	"T05"	3913	1.5	1000	99.4	-82.9	-16.2	1.3	0	0	0	1.7
0	"T05"	3913	1.5	2000	99.1	-82.9	-33.7	1.7	0	0	1.2	-14.6
0	"T05"	3913	1.5	4000	94.6	-82.9	-99.3	1.7	0	0	1	-84.9

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0	"T05"	3913	1.5	8000	82.8	-82.9	-350.9	1.7	0	0	-1.1	-350.4
0	"T06"	4616	1.5	63	86.2	-84.3	-0.5	3.7	0	0	-26.2	-21
0	"T06"	4616	1.5	125	93	-84.3	-1.7	-0.8	0	0	-16.1	-9.9
0	"T06"	4616	1.5	250	95.2	-84.3	-5.1	-1.6	0	0	-8.6	-4.4
0	"T06"	4616	1.5	500	96.2	-84.3	-11	-0.6	0	0	-3.2	-2.9
0	"T06"	4616	1.5	1000	99.4	-84.3	-19.1	1.5	0	0	0	-2.4
0	"T06"	4616	1.5	2000	99.1	-84.3	-39.7	1.9	0	0	1.2	-21.9
0	"T06"	4616	1.5	4000	94.6	-84.3	-117.1	1.9	0	0	1	-103.9
0	"T06"	4616	1.5	8000	82.8	-84.3	-414	1.9	0	0	-1.1	-414.7
0	"T07"	5142.7	1.5	63	86.2	-85.2	-0.5	4	0	0	-26.2	-21.8
0	"T07"	5142.7	1.5	125	93	-85.2	-1.9	-0.7	0	0	-16.1	-10.9
0	"T07"	5142.7	1.5	250	95.2	-85.2	-5.7	-1.5	0	0	-8.6	-5.8
0	"T07"	5142.7	1.5	500	96.2	-85.2	-12.3	-0.5	0	0	-3.2	-5
0	"T07"	5142.7	1.5	1000	99.4	-85.2	-21.2	1.7	0	0	0	-5.4
0	"T07"	5142.7	1.5	2000	99.1	-85.2	-44.3	2	0	0	1.2	-27.2
0	"T07"	5142.7	1.5	4000	94.6	-85.2	-130.5	2	0	0	1	-118.1
0	"T07"	5142.7	1.5	8000	82.8	-85.2	-461.2	2	0	0	-1.1	-462.8
"r35"	"T01"	1592.4	1.5	63	86.2	-75	-0.2	3	0	0	-26.2	-12.2
0	"T01"	1592.4	1.5	125	93	-75	-0.6	-1.2	0	0	-16.1	0.1
0	"T01"	1592.4	1.5	250	95.2	-75	-1.8	-2	0	0	-8.6	7.8
0	"T01"	1592.4	1.5	500	96.2	-75	-3.8	-1	0	0	-3.2	13.2
0	"T01"	1592.4	1.5	1000	99.4	-75	-6.6	1.2	0	0	0	19
0	"T01"	1592.4	1.5	2000	99.1	-75	-13.7	1.5	0	0	1.2	13.1
0	"T01"	1592.4	1.5	4000	94.6	-75	-40.4	1.5	0	0	1	-18.3
0	"T01"	1592.4	1.5	8000	82.8	-75	-142.8	1.5	0	0	-1.1	-134.7
0	"T03"	2999.8	1.5	63	86.2	-80.5	-0.3	3	0	0	-26.2	-17.8
0	"T03"	2999.8	1.5	125	93	-80.5	-1.1	-1.2	0	0	-16.1	-5.9
0	"T03"	2999.8	1.5	250	95.2	-80.5	-3.3	-2	0	0	-8.6	0.7
0	"T03"	2999.8	1.5	500	96.2	-80.5	-7.2	-1	0	0	-3.2	4.3
0	"T03"	2999.8	1.5	1000	99.4	-80.5	-12.4	1.2	0	0	0	7.6
0	"T03"	2999.8	1.5	2000	99.1	-80.5	-25.8	1.5	0	0	1.2	-4.6
0	"T03"	2999.8	1.5	4000	94.6	-80.5	-76.1	1.5	0	0	1	-59.6
0	"T03"	2999.8	1.5	8000	82.8	-80.5	-269	1.5	0	0	-1.1	-266.4
0	"T02"	2275.6	1.5	63	86.2	-78.1	-0.2	3	0	0	-26.2	-15.4
0	"T02"	2275.6	1.5	125	93	-78.1	-0.8	-1.2	0	0	-16.1	-3.2
0	"T02"	2275.6	1.5	250	95.2	-78.1	-2.5	-2	0	0	-8.6	3.9
0	"T02"	2275.6	1.5	500	96.2	-78.1	-5.4	-1	0	0	-3.2	8.4
0	"T02"	2275.6	1.5	1000	99.4	-78.1	-9.4	1.2	0	0	0	13
0	"T02"	2275.6	1.5	2000	99.1	-78.1	-19.6	1.5	0	0	1.2	4.1
0	"T02"	2275.6	1.5	4000	94.6	-78.1	-57.7	1.5	0	0	1	-38.8
0	"T02"	2275.6	1.5	8000	82.8	-78.1	-204.1	1.5	0	0	-1.1	-199
0	"T04"	3636.8	1.5	63	86.2	-82.2	-0.4	3.1	0	0	-26.2	-19.5
0	"T04"	3636.8	1.5	125	93	-82.2	-1.3	-1.1	0	0	-16.1	-7.7
0	"T04"	3636.8	1.5	250	95.2	-82.2	-4	-2	0	0	-8.6	-1.6
0	"T04"	3636.8	1.5	500	96.2	-82.2	-8.7	-0.9	0	0	-3.2	1.2
0	"T04"	3636.8	1.5	1000	99.4	-82.2	-15	1.2	0	0	0	3.4
0	"T04"	3636.8	1.5	2000	99.1	-82.2	-31.3	1.6	0	0	1.2	-11.7
0	"T04"	3636.8	1.5	4000	94.6	-82.2	-92.3	1.6	0	0	1	-77.3
0	"T04"	3636.8	1.5	8000	82.8	-82.2	-326.2	1.6	0	0	-1.1	-325.1
0	"T05"	4352.5	1.5	63	86.2	-83.8	-0.4	3.6	0	0	-26.2	-20.6
0	"T05"	4352.5	1.5	125	93	-83.8	-1.6	-0.9	0	0	-16.1	-9.3
0	"T05"	4352.5	1.5	250	95.2	-83.8	-4.8	-1.7	0	0	-8.6	-3.7
0	"T05"	4352.5	1.5	500	96.2	-83.8	-10.4	-0.7	0	0	-3.2	-1.8
0	"T05"	4352.5	1.5	1000	99.4	-83.8	-18	1.5	0	0	0	-0.9
0	"T05"	4352.5	1.5	2000	99.1	-83.8	-37.5	1.8	0	0	1.2	-19.1
0	"T05"	4352.5	1.5	4000	94.6	-83.8	-110.4	1.8	0	0	1	-96.8
0	"T05"	4352.5	1.5	8000	82.8	-83.8	-390.3	1.8	0	0	-1.1	-390.6
0	"T06"	5042.9	1.5	63	86.2	-85.1	-0.5	3.9	0	0	-26.2	-21.6
0	"T06"	5042.9	1.5	125	93	-85.1	-1.8	-0.7	0	0	-16.1	-10.7
0	"T06"	5042.9	1.5	250	95.2	-85.1	-5.6	-1.6	0	0	-8.6	-5.6
0	"T06"	5042.9	1.5	500	96.2	-85.1	-12	-0.5	0	0	-3.2	-4.6
0	"T06"	5042.9	1.5	1000	99.4	-85.1	-20.8	1.6	0	0	0	-4.8
0	"T06"	5042.9	1.5	2000	99.1	-85.1	-43.4	2	0	0	1.2	-26.2
0	"T06"	5042.9	1.5	4000	94.6	-85.1	-128	2	0	0	1	-115.4
0	"T06"	5042.9	1.5	8000	82.8	-85.1	-452.3	2	0	0	-1.1	-453.7
0	"T07"	5481	1.5	63	86.2	-85.8	-0.5	4.1	0	0	-26.2	-22.2
0	"T07"	5481	1.5	125	93	-85.8	-2	-0.6	0	0	-16.1	-11.5
0	"T07"	5481	1.5	250	95.2	-85.8	-6	-1.5	0	0	-8.6	-6.7
0	"T07"	5481	1.5	500	96.2	-85.8	-13.1	-0.4	0	0	-3.2	-6.3
0	"T07"	5481	1.5	1000	99.4	-85.8	-22.6	1.7	0	0	0	-7.3
0	"T07"	5481	1.5	2000	99.1	-85.8	-47.2	2	0	0	1.2	-30.6
0	"T07"	5481	1.5	4000	94.6	-85.8	-139.1	2	0	0	1	-127.2
0	"T07"	5481	1.5	8000	82.8	-85.8	-491.5	2	0	0	-1.1	-493.6
"r36"	"T01"	934.5	1.5	63	86.2	-70.4	-0.1	3	0	0	-26.2	-7.5
0	"T01"	934.5	1.5	125	93	-70.4	-0.3	-1	0	0	-16.1	5.2
0	"T01"	934.5	1.5	250	95.2	-70.4	-1	-2	0	0	-8.6	13.1
0	"T01"	934.5	1.5	500	96.2	-70.4	-2.2	-1	0	0	-3.2	19.4
0	"T01"	934.5	1.5	1000	99.4	-70.4	-3.9	1.2	0	0	0	26.3
0	"T01"	934.5	1.5	2000	99.1	-70.4	-8	1.5	0	0	1.2	23.3
0	"T01"	934.5	1.5	4000	94.6	-70.4	-23.7	1.5	0	0	1	3
0	"T01"	934.5	1.5	8000	82.8	-70.4	-83.8	1.5	0	0	-1.1	-71
0	"T03"	2332.8	1.5	63	86.2	-78.4	-0.2	3	0	0	-26.2	-15.6
0	"T03"	2332.8	1.5	125	93	-78.4	-0.8	-1.2	0	0	-16.1	-3.5
0	"T03"	2332.8	1.5	250	95.2	-78.4	-2.6	-2	0	0	-8.6	3.7
0	"T03"	2332.8	1.5	500	96.2	-78.4	-5.6	-1	0	0	-3.2	8.1
0	"T03"	2332.8	1.5	1000	99.4	-78.4	-9.6	1.2	0	0	0	12.6
0	"T03"	2332.8	1.5	2000	99.1	-78.4	-20.1	1.5	0	0	1.2	3.4
0	"T03"	2332.8	1.5	4000	94.6	-78.4	-59.2	1.5	0	0	1	-40.4
0	"T03"	2332.8	1.5	8000	82.8	-78.4	-209.2	1.5	0	0	-1.1	-204.4
0	"T02"	1517.2	1.5	63	86.2	-74.6	-0.1	3	0	0	-26.2	-11.8
0	"T02"	1517.2	1.5	125	93	-74.6	-0.5	-1.2	0	0	-16.1	0.6
0	"T02"	1517.2	1.5	250	95.2	-74.6	-1.7	-2	0	0	-8.6	8.3
0	"T02"	1517.2	1.5	500	96.2	-74.6	-3.6	-1	0	0	-3.2	13.8
0	"T02"	1517.2	1.5	1000	99.4	-74.6	-6.3	1.2	0	0	0	19.7
0	"T02"	1517.2	1.5	2000	99.1	-74.6	-13.1	1.5	0	0	1.2	14.1
0	"T02"	1517.2	1.5	4000	94.6	-74.6	-38.5	1.5	0	0	1	-16
0	"T02"	1517.2	1.5	8000	82.8	-74.6	-136.1	1.5	0	0	-1.1	-127.5

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0	"T04"	2813.2	1.5	63	86.2	-80	-0.3	3	0	0	-26.2	-17.3
0	"T04"	2813.2	1.5	125	93	-80	-1	-1.2	0	0	-16.1	-5.3
0	"T04"	2813.2	1.5	250	95.2	-80	-3.1	-2	0	0	-8.6	1.5
0	"T04"	2813.2	1.5	500	96.2	-80	-6.7	-1	0	0	-3.2	5.3
0	"T04"	2813.2	1.5	1000	99.4	-80	-11.6	1.2	0	0	0	9
0	"T04"	2813.2	1.5	2000	99.1	-80	-24.2	1.5	0	0	1.2	-2.4
0	"T04"	2813.2	1.5	4000	94.6	-80	-71.4	1.5	0	0	1	-54.3
0	"T04"	2813.2	1.5	8000	82.8	-80	-252.3	1.5	0	0	-1.1	-249.1
0	"T05"	3527.1	1.5	63	86.2	-81.9	-0.3	3	0	0	-26.2	-19.3
0	"T05"	3527.1	1.5	125	93	-81.9	-1.3	-1.2	0	0	-16.1	-7.5
0	"T05"	3527.1	1.5	250	95.2	-81.9	-3.9	-2	0	0	-8.6	-1.2
0	"T05"	3527.1	1.5	500	96.2	-81.9	-8.4	-1	0	0	-3.2	1.7
0	"T05"	3527.1	1.5	1000	99.4	-81.9	-14.6	1.2	0	0	0	4.1
0	"T05"	3527.1	1.5	2000	99.1	-81.9	-30.4	1.5	0	0	1.2	-10.5
0	"T05"	3527.1	1.5	4000	94.6	-81.9	-89.5	1.5	0	0	1	-74.3
0	"T05"	3527.1	1.5	8000	82.8	-81.9	-316.3	1.5	0	0	-1.1	-315.1
0	"T06"	4214.7	1.5	63	86.2	-83.5	-0.4	3.5	0	0	-26.2	-20.4
0	"T06"	4214.7	1.5	125	93	-83.5	-1.5	-0.9	0	0	-16.1	-9
0	"T06"	4214.7	1.5	250	95.2	-83.5	-4.6	-1.8	0	0	-8.6	-3.3
0	"T06"	4214.7	1.5	500	96.2	-83.5	-10.1	-0.7	0	0	-3.2	-1.3
0	"T06"	4214.7	1.5	1000	99.4	-83.5	-17.4	1.4	0	0	0	-0.1
0	"T06"	4214.7	1.5	2000	99.1	-83.5	-36.3	1.8	0	0	1.2	-17.7
0	"T06"	4214.7	1.5	4000	94.6	-83.5	-106.9	1.8	0	0	1	-93.1
0	"T06"	4214.7	1.5	8000	82.8	-83.5	-378	1.8	0	0	-1.1	-378
0	"T07"	4679.9	1.5	63	86.2	-84.4	-0.5	3.8	0	0	-26.2	-21.1
0	"T07"	4679.9	1.5	125	93	-84.4	-1.7	-0.8	0	0	-16.1	-10
0	"T07"	4679.9	1.5	250	95.2	-84.4	-5.2	-1.6	0	0	-8.6	-4.6
0	"T07"	4679.9	1.5	500	96.2	-84.4	-11.2	-0.6	0	0	-3.2	-3.2
0	"T07"	4679.9	1.5	1000	99.4	-84.4	-19.3	1.5	0	0	0	-2.8
0	"T07"	4679.9	1.5	2000	99.1	-84.4	-40.3	1.9	0	0	1.2	-22.5
0	"T07"	4679.9	1.5	4000	94.6	-84.4	-118.7	1.9	0	0	1	-105.7
0	"T07"	4679.9	1.5	8000	82.8	-84.4	-419.7	1.9	0	0	-1.1	-420.5
"r37"	"T01"	1050.3	1.5	63	86.2	-71.4	-0.1	3	0	0	-26.2	-8.5
0	"T01"	1050.3	1.5	125	93	-71.4	-0.4	-1.1	0	0	-16.1	4
0	"T01"	1050.3	1.5	250	95.2	-71.4	-1.2	-2	0	0	-8.6	12
0	"T01"	1050.3	1.5	500	96.2	-71.4	-2.5	-1	0	0	-3.2	18.1
0	"T01"	1050.3	1.5	1000	99.4	-71.4	-4.3	1.2	0	0	0	24.8
0	"T01"	1050.3	1.5	2000	99.1	-71.4	-9	1.5	0	0	1.2	21.3
0	"T01"	1050.3	1.5	4000	94.6	-71.4	-26.6	1.5	0	0	1	-1
0	"T01"	1050.3	1.5	8000	82.8	-71.4	-94.2	1.5	0	0	-1.1	-82.4
0	"T03"	2358.2	1.5	63	86.2	-78.5	-0.2	3	0	0	-26.2	-15.7
0	"T03"	2358.2	1.5	125	93	-78.5	-0.9	-1.2	0	0	-16.1	-3.6
0	"T03"	2358.2	1.5	250	95.2	-78.5	-2.6	-2	0	0	-8.6	3.5
0	"T03"	2358.2	1.5	500	96.2	-78.5	-5.6	-1	0	0	-3.2	7.9
0	"T03"	2358.2	1.5	1000	99.4	-78.5	-9.7	1.2	0	0	0	12.4
0	"T03"	2358.2	1.5	2000	99.1	-78.5	-20.3	1.5	0	0	1.2	3
0	"T03"	2358.2	1.5	4000	94.6	-78.5	-59.8	1.5	0	0	1	-41.2
0	"T03"	2358.2	1.5	8000	82.8	-78.5	-211.5	1.5	0	0	-1.1	-206.7
0	"T02"	1476.6	1.5	63	86.2	-74.4	-0.1	3	0	0	-26.2	-11.5
0	"T02"	1476.6	1.5	125	93	-74.4	-0.5	-1.2	0	0	-16.1	0.8
0	"T02"	1476.6	1.5	250	95.2	-74.4	-1.6	-2	0	0	-8.6	8.6
0	"T02"	1476.6	1.5	500	96.2	-74.4	-3.5	-1	0	0	-3.2	14.1
0	"T02"	1476.6	1.5	1000	99.4	-74.4	-6.1	1.2	0	0	0	20.1
0	"T02"	1476.6	1.5	2000	99.1	-74.4	-12.7	1.5	0	0	1.2	14.7
0	"T02"	1476.6	1.5	4000	94.6	-74.4	-37.5	1.5	0	0	1	-14.7
0	"T02"	1476.6	1.5	8000	82.8	-74.4	-132.4	1.5	0	0	-1.1	-123.6
0	"T04"	2617.2	1.5	63	86.2	-79.4	-0.3	3	0	0	-26.2	-16.6
0	"T04"	2617.2	1.5	125	93	-79.4	-0.9	-1.2	0	0	-16.1	-4.6
0	"T04"	2617.2	1.5	250	95.2	-79.4	-2.9	-2	0	0	-8.6	2.3
0	"T04"	2617.2	1.5	500	96.2	-79.4	-6.2	-1	0	0	-3.2	6.4
0	"T04"	2617.2	1.5	1000	99.4	-79.4	-10.8	1.2	0	0	0	10.4
0	"T04"	2617.2	1.5	2000	99.1	-79.4	-22.5	1.5	0	0	1.2	-0.1
0	"T04"	2617.2	1.5	4000	94.6	-79.4	-66.4	1.5	0	0	1	-48.7
0	"T04"	2617.2	1.5	8000	82.8	-79.4	-234.7	1.5	0	0	-1.1	-230.9
0	"T05"	3319.7	1.5	63	86.2	-81.4	-0.3	3	0	0	-26.2	-18.7
0	"T05"	3319.7	1.5	125	93	-81.4	-1.2	-1.2	0	0	-16.1	-6.9
0	"T05"	3319.7	1.5	250	95.2	-81.4	-3.7	-2	0	0	-8.6	-0.5
0	"T05"	3319.7	1.5	500	96.2	-81.4	-7.9	-1	0	0	-3.2	2.7
0	"T05"	3319.7	1.5	1000	99.4	-81.4	-13.7	1.2	0	0	0	5.4
0	"T05"	3319.7	1.5	2000	99.1	-81.4	-28.6	1.5	0	0	1.2	-8.2
0	"T05"	3319.7	1.5	4000	94.6	-81.4	-84.2	1.5	0	0	1	-68.6
0	"T05"	3319.7	1.5	8000	82.8	-81.4	-297.7	1.5	0	0	-1.1	-295.9
0	"T06"	3985.9	1.5	63	86.2	-83	-0.4	3.4	0	0	-26.2	-20
0	"T06"	3985.9	1.5	125	93	-83	-1.4	-1	0	0	-16.1	-8.5
0	"T06"	3985.9	1.5	250	95.2	-83	-4.4	-1.8	0	0	-8.6	-2.6
0	"T06"	3985.9	1.5	500	96.2	-83	-9.5	-0.8	0	0	-3.2	-0.3
0	"T06"	3985.9	1.5	1000	99.4	-83	-16.5	1.4	0	0	0	1.3
0	"T06"	3985.9	1.5	2000	99.1	-83	-34.3	1.7	0	0	1.2	-15.3
0	"T06"	3985.9	1.5	4000	94.6	-83	-101.1	1.7	0	0	1	-86.9
0	"T06"	3985.9	1.5	8000	82.8	-83	-357.5	1.7	0	0	-1.1	-357.1
0	"T07"	4371.2	1.5	63	86.2	-83.8	-0.4	3.6	0	0	-26.2	-20.6
0	"T07"	4371.2	1.5	125	93	-83.8	-1.6	-0.9	0	0	-16.1	-9.4
0	"T07"	4371.2	1.5	250	95.2	-83.8	-4.8	-1.7	0	0	-8.6	-3.7
0	"T07"	4371.2	1.5	500	96.2	-83.8	-10.4	-0.7	0	0	-3.2	-1.9
0	"T07"	4371.2	1.5	1000	99.4	-83.8	-18.1	1.5	0	0	0	-1
0	"T07"	4371.2	1.5	2000	99.1	-83.8	-37.6	1.8	0	0	1.2	-19.3
0	"T07"	4371.2	1.5	4000	94.6	-83.8	-110.9	1.8	0	0	1	-97.3
0	"T07"	4371.2	1.5	8000	82.8	-83.8	-392	1.8	0	0	-1.1	-392.3
"r38"	"T01"	1451.6	1.5	63	86.2	-74.2	-0.1	3	0	0	-26.2	-11.4
0	"T01"	1451.6	1.5	125	93	-74.2	-0.5	-1.2	0	0	-16.1	1
0	"T01"	1451.6	1.5	250	95.2	-74.2	-1.6	-2	0	0	-8.6	8.7
0	"T01"	1451.6	1.5	500	96.2	-74.2	-3.5	-1	0	0	-3.2	14.3
0	"T01"	1451.6	1.5	1000	99.4	-74.2	-6	1.2	0	0	0	20.3
0	"T01"	1451.6	1.5	2000	99.1	-74.2	-12.5	1.5	0	0	1.2	15.1
0	"T01"	1451.6	1.5	4000	94.6	-74.2	-36.8	1.5	0	0	1	-14
0	"T01"	1451.6	1.5	8000	82.8	-74.2	-130.2	1.5	0	0	-1.1	-121.2
0	"T03"	2586	1.5	63	86.2	-79.3	-0.3	3	0	0	-26.2	-16.5

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0	"T03"	2586	1.5	125	93	-79.3	-0.9	-1.2	0	0	-16.1	-4.5
0	"T03"	2586	1.5	250	95.2	-79.3	-2.9	-2	0	0	-8.6	2.5
0	"T03"	2586	1.5	500	96.2	-79.3	-6.2	-1	0	0	-3.2	6.6
0	"T03"	2586	1.5	1000	99.4	-79.3	-10.7	1.2	0	0	0	10.6
0	"T03"	2586	1.5	2000	99.1	-79.3	-22.3	1.5	0	0	1.2	0.3
0	"T03"	2586	1.5	4000	94.6	-79.3	-65.6	1.5	0	0	1	-47.8
0	"T03"	2586	1.5	8000	82.8	-79.3	-231.9	1.5	0	0	-1.1	-228
0	"T02"	1669.2	1.5	63	86.2	-75.4	-0.2	3	0	0	-26.2	-12.6
0	"T02"	1669.2	1.5	125	93	-75.4	-0.6	-1.2	0	0	-16.1	-0.3
0	"T02"	1669.2	1.5	250	95.2	-75.4	-1.8	-2	0	0	-8.6	7.3
0	"T02"	1669.2	1.5	500	96.2	-75.4	-4	-1	0	0	-3.2	12.6
0	"T02"	1669.2	1.5	1000	99.4	-75.4	-6.9	1.2	0	0	0	18.2
0	"T02"	1669.2	1.5	2000	99.1	-75.4	-14.4	1.5	0	0	1.2	12
0	"T02"	1669.2	1.5	4000	94.6	-75.4	-42.4	1.5	0	0	1	-20.7
0	"T02"	1669.2	1.5	8000	82.8	-75.4	-149.7	1.5	0	0	-1.1	-141.9
0	"T04"	2500.8	1.5	63	86.2	-79	-0.2	3	0	0	-26.2	-16.2
0	"T04"	2500.8	1.5	125	93	-79	-0.9	-1.2	0	0	-16.1	-4.1
0	"T04"	2500.8	1.5	250	95.2	-79	-2.8	-2	0	0	-8.6	2.9
0	"T04"	2500.8	1.5	500	96.2	-79	-6	-1	0	0	-3.2	7.1
0	"T04"	2500.8	1.5	1000	99.4	-79	-10.3	1.2	0	0	0	11.3
0	"T04"	2500.8	1.5	2000	99.1	-79	-21.5	1.5	0	0	1.2	1.3
0	"T04"	2500.8	1.5	4000	94.6	-79	-63.5	1.5	0	0	1	-45.3
0	"T04"	2500.8	1.5	8000	82.8	-79	-224.3	1.5	0	0	-1.1	-220
0	"T05"	3164.8	1.5	63	86.2	-81	-0.3	3	0	0	-26.2	-18.3
0	"T05"	3164.8	1.5	125	93	-81	-1.1	-1.2	0	0	-16.1	-6.4
0	"T05"	3164.8	1.5	250	95.2	-81	-3.5	-2	0	0	-8.6	0.1
0	"T05"	3164.8	1.5	500	96.2	-81	-7.5	-1	0	0	-3.2	3.5
0	"T05"	3164.8	1.5	1000	99.4	-81	-13.1	1.2	0	0	0	6.5
0	"T05"	3164.8	1.5	2000	99.1	-81	-27.2	1.5	0	0	1.2	-6.5
0	"T05"	3164.8	1.5	4000	94.6	-81	-80.3	1.5	0	0	1	-64.2
0	"T05"	3164.8	1.5	8000	82.8	-81	-283.8	1.5	0	0	-1.1	-281.6
0	"T06"	3781.4	1.5	63	86.2	-82.6	-0.4	3.2	0	0	-26.2	-19.7
0	"T06"	3781.4	1.5	125	93	-82.6	-1.4	-1.1	0	0	-16.1	-8.1
0	"T06"	3781.4	1.5	250	95.2	-82.6	-4.2	-1.9	0	0	-8.6	-2
0	"T06"	3781.4	1.5	500	96.2	-82.6	-9	-0.9	0	0	-3.2	0.6
0	"T06"	3781.4	1.5	1000	99.4	-82.6	-15.6	1.3	0	0	0	2.5
0	"T06"	3781.4	1.5	2000	99.1	-82.6	-32.6	1.6	0	0	1.2	-13.2
0	"T06"	3781.4	1.5	4000	94.6	-82.6	-95.9	1.6	0	0	1	-81.3
0	"T06"	3781.4	1.5	8000	82.8	-82.6	-339.1	1.6	0	0	-1.1	-338.4
0	"T07"	4004.5	1.5	63	86.2	-83.1	-0.4	3.4	0	0	-26.2	-20.1
0	"T07"	4004.5	1.5	125	93	-83.1	-1.4	-1	0	0	-16.1	-8.6
0	"T07"	4004.5	1.5	250	95.2	-83.1	-4.4	-1.8	0	0	-8.6	-2.7
0	"T07"	4004.5	1.5	500	96.2	-83.1	-9.5	-0.8	0	0	-3.2	-0.4
0	"T07"	4004.5	1.5	1000	99.4	-83.1	-16.5	1.4	0	0	0	1.2
0	"T07"	4004.5	1.5	2000	99.1	-83.1	-34.5	1.7	0	0	1.2	-15.5
0	"T07"	4004.5	1.5	4000	94.6	-83.1	-101.6	1.7	0	0	1	-87.4
0	"T07"	4004.5	1.5	8000	82.8	-83.1	-359.1	1.7	0	0	-1.1	-358.8
"r39"	"T01"	1298.2	1.5	63	86.2	-73.3	-0.1	3	0	0	-26.2	-10.4
0	"T01"	1298.2	1.5	125	93	-73.3	-0.5	-1.2	0	0	-16.1	2
0	"T01"	1298.2	1.5	250	95.2	-73.3	-1.4	-2	0	0	-8.6	9.9
0	"T01"	1298.2	1.5	500	96.2	-73.3	-3.1	-1	0	0	-3.2	15.7
0	"T01"	1298.2	1.5	1000	99.4	-73.3	-5.4	1.2	0	0	0	21.9
0	"T01"	1298.2	1.5	2000	99.1	-73.3	-11.2	1.5	0	0	1.2	17.4
0	"T01"	1298.2	1.5	4000	94.6	-73.3	-32.9	1.5	0	0	1	-9.1
0	"T01"	1298.2	1.5	8000	82.8	-73.3	-116.4	1.5	0	0	-1.1	-106.5
0	"T03"	2375.3	1.5	63	86.2	-78.5	-0.2	3	0	0	-26.2	-15.7
0	"T03"	2375.3	1.5	125	93	-78.5	-0.9	-1.2	0	0	-16.1	-3.6
0	"T03"	2375.3	1.5	250	95.2	-78.5	-2.6	-2	0	0	-8.6	3.5
0	"T03"	2375.3	1.5	500	96.2	-78.5	-5.7	-1	0	0	-3.2	7.8
0	"T03"	2375.3	1.5	1000	99.4	-78.5	-9.8	1.2	0	0	0	12.2
0	"T03"	2375.3	1.5	2000	99.1	-78.5	-20.4	1.5	0	0	1.2	2.8
0	"T03"	2375.3	1.5	4000	94.6	-78.5	-60.3	1.5	0	0	1	-41.7
0	"T03"	2375.3	1.5	8000	82.8	-78.5	-213	1.5	0	0	-1.1	-208.3
0	"T02"	1458.6	1.5	63	86.2	-74.3	-0.1	3	0	0	-26.2	-11.4
0	"T02"	1458.6	1.5	125	93	-74.3	-0.5	-1.2	0	0	-16.1	0.9
0	"T02"	1458.6	1.5	250	95.2	-74.3	-1.6	-2	0	0	-8.6	8.7
0	"T02"	1458.6	1.5	500	96.2	-74.3	-3.5	-1	0	0	-3.2	14.3
0	"T02"	1458.6	1.5	1000	99.4	-74.3	-6	1.2	0	0	0	20.3
0	"T02"	1458.6	1.5	2000	99.1	-74.3	-12.6	1.5	0	0	1.2	15
0	"T02"	1458.6	1.5	4000	94.6	-74.3	-37	1.5	0	0	1	-14.2
0	"T02"	1458.6	1.5	8000	82.8	-74.3	-130.8	1.5	0	0	-1.1	-121.9
0	"T04"	2293.1	1.5	63	86.2	-78.2	-0.2	3	0	0	-26.2	-15.4
0	"T04"	2293.1	1.5	125	93	-78.2	-0.8	-1.2	0	0	-16.1	-3.3
0	"T04"	2293.1	1.5	250	95.2	-78.2	-2.5	-2	0	0	-8.6	3.9
0	"T04"	2293.1	1.5	500	96.2	-78.2	-5.5	-1	0	0	-3.2	8.3
0	"T04"	2293.1	1.5	1000	99.4	-78.2	-9.5	1.2	0	0	0	12.9
0	"T04"	2293.1	1.5	2000	99.1	-78.2	-19.7	1.5	0	0	1.2	3.9
0	"T04"	2293.1	1.5	4000	94.6	-78.2	-58.2	1.5	0	0	1	-39.3
0	"T04"	2293.1	1.5	8000	82.8	-78.2	-205.6	1.5	0	0	-1.1	-200.7
0	"T05"	2965.4	1.5	63	86.2	-80.4	-0.3	3	0	0	-26.2	-17.7
0	"T05"	2965.4	1.5	125	93	-80.4	-1.1	-1.2	0	0	-16.1	-5.8
0	"T05"	2965.4	1.5	250	95.2	-80.4	-3.3	-2	0	0	-8.6	0.9
0	"T05"	2965.4	1.5	500	96.2	-80.4	-7.1	-1	0	0	-3.2	4.5
0	"T05"	2965.4	1.5	1000	99.4	-80.4	-12.2	1.2	0	0	0	7.9
0	"T05"	2965.4	1.5	2000	99.1	-80.4	-25.5	1.5	0	0	1.2	-4.2
0	"T05"	2965.4	1.5	4000	94.6	-80.4	-75.2	1.5	0	0	1	-58.6
0	"T05"	2965.4	1.5	8000	82.8	-80.4	-265.9	1.5	0	0	-1.1	-263.2
0	"T06"	3594.3	1.5	63	86.2	-82.1	-0.4	3.1	0	0	-26.2	-19.4
0	"T06"	3594.3	1.5	125	93	-82.1	-1.3	-1.1	0	0	-16.1	-7.6
0	"T06"	3594.3	1.5	250	95.2	-82.1	-4	-2	0	0	-8.6	-1.4
0	"T06"	3594.3	1.5	500	96.2	-82.1	-8.6	-0.9	0	0	-3.2	1.4
0	"T06"	3594.3	1.5	1000	99.4	-82.1	-14.8	1.2	0	0	0	3.7
0	"T06"	3594.3	1.5	2000	99.1	-82.1	-30.9	1.5	0	0	1.2	-11.2
0	"T06"	3594.3	1.5	4000	94.6	-82.1	-91.2	1.5	0	0	1	-76.2
0	"T06"	3594.3	1.5	8000	82.8	-82.1	-322.3	1.5	0	0	-1.1	-321.2
0	"T07"	3875.2	1.5	63	86.2	-82.8	-0.4	3.3	0	0	-26.2	-19.9
0	"T07"	3875.2	1.5	125	93	-82.8	-1.4	-1	0	0	-16.1	-8.3

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0	"T07"	3875.2	1.5	250	95.2	-82.8	-4.3	-1.9	0	0	-8.6	-2.3
0	"T07"	3875.2	1.5	500	96.2	-82.8	-9.2	-0.8	0	0	-3.2	0.2
0	"T07"	3875.2	1.5	1000	99.4	-82.8	-16	1.3	0	0	0	1.9
0	"T07"	3875.2	1.5	2000	99.1	-82.8	-33.4	1.6	0	0	1.2	-14.2
0	"T07"	3875.2	1.5	4000	94.6	-82.8	-98.3	1.6	0	0	1	-83.8
0	"T07"	3875.2	1.5	8000	82.8	-82.8	-347.5	1.6	0	0	-1.1	-347
"r40"	"T01"	1039.7	1.5	63	86.2	-71.3	-0.1	3	0	0	-26.2	-8.4
0	"T01"	1039.7	1.5	125	93	-71.3	-0.4	-1.1	0	0	-16.1	4.1
0	"T01"	1039.7	1.5	250	95.2	-71.3	-1.1	-2	0	0	-8.6	12.1
0	"T01"	1039.7	1.5	500	96.2	-71.3	-2.5	-1	0	0	-3.2	18.2
0	"T01"	1039.7	1.5	1000	99.4	-71.3	-4.3	1.2	0	0	0	24.9
0	"T01"	1039.7	1.5	2000	99.1	-71.3	-9	1.5	0	0	1.2	21.5
0	"T01"	1039.7	1.5	4000	94.6	-71.3	-26.4	1.5	0	0	1	-0.6
0	"T01"	1039.7	1.5	8000	82.8	-71.3	-93.2	1.5	0	0	-1.1	-81.4
0	"T03"	2269.9	1.5	63	86.2	-78.1	-0.2	3	0	0	-26.2	-15.3
0	"T03"	2269.9	1.5	125	93	-78.1	-0.8	-1.2	0	0	-16.1	-3.2
0	"T03"	2269.9	1.5	250	95.2	-78.1	-2.5	-2	0	0	-8.6	4
0	"T03"	2269.9	1.5	500	96.2	-78.1	-5.4	-1	0	0	-3.2	8.5
0	"T03"	2269.9	1.5	1000	99.4	-78.1	-9.4	1.2	0	0	0	13.1
0	"T03"	2269.9	1.5	2000	99.1	-78.1	-19.5	1.5	0	0	1.2	4.1
0	"T03"	2269.9	1.5	4000	94.6	-78.1	-57.6	1.5	0	0	1	-38.6
0	"T03"	2269.9	1.5	8000	82.8	-78.1	-203.6	1.5	0	0	-1.1	-198.5
0	"T02"	1368.5	1.5	63	86.2	-73.7	-0.1	3	0	0	-26.2	-10.9
0	"T02"	1368.5	1.5	125	93	-73.7	-0.5	-1.2	0	0	-16.1	1.5
0	"T02"	1368.5	1.5	250	95.2	-73.7	-1.5	-2	0	0	-8.6	9.4
0	"T02"	1368.5	1.5	500	96.2	-73.7	-3.3	-1	0	0	-3.2	15
0	"T02"	1368.5	1.5	1000	99.4	-73.7	-5.7	1.2	0	0	0	21.2
0	"T02"	1368.5	1.5	2000	99.1	-73.7	-11.8	1.5	0	0	1.2	16.3
0	"T02"	1368.5	1.5	4000	94.6	-73.7	-34.7	1.5	0	0	1	-11.3
0	"T02"	1368.5	1.5	8000	82.8	-73.7	-122.7	1.5	0	0	-1.1	-113.3
0	"T04"	2436.9	1.5	63	86.2	-78.7	-0.2	3	0	0	-26.2	-16
0	"T04"	2436.9	1.5	125	93	-78.7	-0.9	-1.2	0	0	-16.1	-3.9
0	"T04"	2436.9	1.5	250	95.2	-78.7	-2.7	-2	0	0	-8.6	3.2
0	"T04"	2436.9	1.5	500	96.2	-78.7	-5.8	-1	0	0	-3.2	7.5
0	"T04"	2436.9	1.5	1000	99.4	-78.7	-10.1	1.2	0	0	0	11.8
0	"T04"	2436.9	1.5	2000	99.1	-78.7	-21	1.5	0	0	1.2	2.1
0	"T04"	2436.9	1.5	4000	94.6	-78.7	-61.8	1.5	0	0	1	-43.5
0	"T04"	2436.9	1.5	8000	82.8	-78.7	-218.5	1.5	0	0	-1.1	-214.1
0	"T05"	3134.9	1.5	63	86.2	-80.9	-0.3	3	0	0	-26.2	-18.2
0	"T05"	3134.9	1.5	125	93	-80.9	-1.1	-1.2	0	0	-16.1	-6.3
0	"T05"	3134.9	1.5	250	95.2	-80.9	-3.5	-2	0	0	-8.6	0.2
0	"T05"	3134.9	1.5	500	96.2	-80.9	-7.5	-1	0	0	-3.2	3.6
0	"T05"	3134.9	1.5	1000	99.4	-80.9	-12.9	1.2	0	0	0	6.7
0	"T05"	3134.9	1.5	2000	99.1	-80.9	-27	1.5	0	0	1.2	-6.1
0	"T05"	3134.9	1.5	4000	94.6	-80.9	-79.5	1.5	0	0	1	-63.4
0	"T05"	3134.9	1.5	8000	82.8	-80.9	-281.1	1.5	0	0	-1.1	-278.9
0	"T06"	3795.4	1.5	63	86.2	-82.6	-0.4	3.2	0	0	-26.2	-19.7
0	"T06"	3795.4	1.5	125	93	-82.6	-1.4	-1.1	0	0	-16.1	-8.1
0	"T06"	3795.4	1.5	250	95.2	-82.6	-4.2	-1.9	0	0	-8.6	-2.1
0	"T06"	3795.4	1.5	500	96.2	-82.6	-9.1	-0.9	0	0	-3.2	0.5
0	"T06"	3795.4	1.5	1000	99.4	-82.6	-15.7	1.3	0	0	0	2.4
0	"T06"	3795.4	1.5	2000	99.1	-82.6	-32.7	1.6	0	0	1.2	-13.3
0	"T06"	3795.4	1.5	4000	94.6	-82.6	-96.3	1.6	0	0	1	-81.7
0	"T06"	3795.4	1.5	8000	82.8	-82.6	-340.4	1.6	0	0	-1.1	-339.6
0	"T07"	4172.4	1.5	63	86.2	-83.4	-0.4	3.5	0	0	-26.2	-20.3
0	"T07"	4172.4	1.5	125	93	-83.4	-1.5	-0.9	0	0	-16.1	-8.9
0	"T07"	4172.4	1.5	250	95.2	-83.4	-4.6	-1.8	0	0	-8.6	-3.2
0	"T07"	4172.4	1.5	500	96.2	-83.4	-9.9	-0.7	0	0	-3.2	-1.1
0	"T07"	4172.4	1.5	1000	99.4	-83.4	-17.2	1.4	0	0	0	0.2
0	"T07"	4172.4	1.5	2000	99.1	-83.4	-35.9	1.7	0	0	1.2	-17.3
0	"T07"	4172.4	1.5	4000	94.6	-83.4	-105.9	1.7	0	0	1	-91.9
0	"T07"	4172.4	1.5	8000	82.8	-83.4	-374.2	1.7	0	0	-1.1	-374.2
"r41"	"T01"	2330.9	1.5	63	86.2	-78.4	-0.2	3	0	0	-26.2	-15.6
0	"T01"	2330.9	1.5	125	93	-78.4	-0.8	-1.2	0	0	-16.1	-3.5
0	"T01"	2330.9	1.5	250	95.2	-78.4	-2.6	-2	0	0	-8.6	3.7
0	"T01"	2330.9	1.5	500	96.2	-78.4	-5.6	-1	0	0	-3.2	8.1
0	"T01"	2330.9	1.5	1000	99.4	-78.4	-9.6	1.2	0	0	0	12.6
0	"T01"	2330.9	1.5	2000	99.1	-78.4	-20.1	1.5	0	0	1.2	3.4
0	"T01"	2330.9	1.5	4000	94.6	-78.4	-59.1	1.5	0	0	1	-40.4
0	"T01"	2330.9	1.5	8000	82.8	-78.4	-209	1.5	0	0	-1.1	-204.2
0	"T03"	1435.1	1.5	63	86.2	-74.1	-0.1	3	0	0	-26.2	-11.3
0	"T03"	1435.1	1.5	125	93	-74.1	-0.5	-1.2	0	0	-16.1	1.1
0	"T03"	1435.1	1.5	250	95.2	-74.1	-1.6	-2	0	0	-8.6	8.9
0	"T03"	1435.1	1.5	500	96.2	-74.1	-3.4	-1	0	0	-3.2	14.5
0	"T03"	1435.1	1.5	1000	99.4	-74.1	-5.9	1.2	0	0	0	20.5
0	"T03"	1435.1	1.5	2000	99.1	-74.1	-12.4	1.5	0	0	1.2	15.3
0	"T03"	1435.1	1.5	4000	94.6	-74.1	-36.4	1.5	0	0	1	-13.4
0	"T03"	1435.1	1.5	8000	82.8	-74.1	-128.7	1.5	0	0	-1.1	-119.6
0	"T02"	1599.6	1.5	63	86.2	-75.1	-0.2	3	0	0	-26.2	-12.2
0	"T02"	1599.6	1.5	125	93	-75.1	-0.6	-1.2	0	0	-16.1	0.1
0	"T02"	1599.6	1.5	250	95.2	-75.1	-1.8	-2	0	0	-8.6	7.7
0	"T02"	1599.6	1.5	500	96.2	-75.1	-3.8	-1	0	0	-3.2	13.1
0	"T02"	1599.6	1.5	1000	99.4	-75.1	-6.6	1.2	0	0	0	18.9
0	"T02"	1599.6	1.5	2000	99.1	-75.1	-13.8	1.5	0	0	1.2	12.9
0	"T02"	1599.6	1.5	4000	94.6	-75.1	-40.6	1.5	0	0	1	-18.6
0	"T02"	1599.6	1.5	8000	82.8	-75.1	-143.5	1.5	0	0	-1.1	-135.3
0	"T04"	450.2	1.5	63	86.2	-64.1	0	3	0	0	-26.2	-1.1
0	"T04"	450.2	1.5	125	93	-64.1	-0.2	0.2	0	0	-16.1	12.9
0	"T04"	450.2	1.5	250	95.2	-64.1	-0.5	-2	0	0	-8.6	20
0	"T04"	450.2	1.5	500	96.2	-64.1	-1.1	-1	0	0	-3.2	26.9
0	"T04"	450.2	1.5	1000	99.4	-64.1	-1.9	1.2	0	0	0	34.6
0	"T04"	450.2	1.5	2000	99.1	-64.1	-3.9	1.5	0	0	1.2	33.9
0	"T04"	450.2	1.5	4000	94.6	-64.1	-11.4	1.5	0	0	1	21.6
0	"T04"	450.2	1.5	8000	82.8	-64.1	-40.4	1.5	0	0	-1.1	-21.2
0	"T05"	732.6	1.5	63	86.2	-68.3	-0.1	3	0	0	-26.2	-5.4
0	"T05"	732.6	1.5	125	93	-68.3	-0.3	-0.6	0	0	-16.1	7.7
0	"T05"	732.6	1.5	250	95.2	-68.3	-0.8	-2	0	0	-8.6	15.5

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0	"T05"	732.6	1.5	500	96.2	-68.3	-1.7	-1	0	0	-3.2	22
0	"T05"	732.6	1.5	1000	99.4	-68.3	-3	1.2	0	0	0	29.2
0	"T05"	732.6	1.5	2000	99.1	-68.3	-6.3	1.5	0	0	1.2	27.2
0	"T05"	732.6	1.5	4000	94.6	-68.3	-18.6	1.5	0	0	1	10.2
0	"T05"	732.6	1.5	8000	82.8	-68.3	-65.7	1.5	0	0	-1.1	-50.8
0	"T06"	1438.1	1.5	63	86.2	-74.2	-0.1	3	0	0	-26.2	-11.3
0	"T06"	1438.1	1.5	125	93	-74.2	-0.5	-1.2	0	0	-16.1	1.1
0	"T06"	1438.1	1.5	250	95.2	-74.2	-1.6	-2	0	0	-8.6	8.8
0	"T06"	1438.1	1.5	500	96.2	-74.2	-3.4	-1	0	0	-3.2	14.4
0	"T06"	1438.1	1.5	1000	99.4	-74.2	-5.9	1.2	0	0	0	20.5
0	"T06"	1438.1	1.5	2000	99.1	-74.2	-12.4	1.5	0	0	1.2	15.3
0	"T06"	1438.1	1.5	4000	94.6	-74.2	-36.5	1.5	0	0	1	-13.5
0	"T06"	1438.1	1.5	8000	82.8	-74.2	-129	1.5	0	0	-1.1	-119.9
0	"T07"	2593.4	1.5	63	86.2	-79.3	-0.3	3	0	0	-26.2	-16.5
0	"T07"	2593.4	1.5	125	93	-79.3	-0.9	-1.2	0	0	-16.1	-4.5
0	"T07"	2593.4	1.5	250	95.2	-79.3	-2.9	-2	0	0	-8.6	2.4
0	"T07"	2593.4	1.5	500	96.2	-79.3	-6.2	-1	0	0	-3.2	6.6
0	"T07"	2593.4	1.5	1000	99.4	-79.3	-10.7	1.2	0	0	0	10.6
0	"T07"	2593.4	1.5	2000	99.1	-79.3	-22.3	1.5	0	0	1.2	0.2
0	"T07"	2593.4	1.5	4000	94.6	-79.3	-65.8	1.5	0	0	1	-48
0	"T07"	2593.4	1.5	8000	82.8	-79.3	-232.6	1.5	0	0	-1.1	-228.7
"r42"	"T01"	2505.8	1.5	63	86.2	-79	-0.2	3	0	0	-26.2	-16.2
0	"T01"	2505.8	1.5	125	93	-79	-0.9	-1.2	0	0	-16.1	-4.2
0	"T01"	2505.8	1.5	250	95.2	-79	-2.8	-2	0	0	-8.6	2.8
0	"T01"	2505.8	1.5	500	96.2	-79	-6	-1	0	0	-3.2	7.1
0	"T01"	2505.8	1.5	1000	99.4	-79	-10.3	1.2	0	0	0	11.2
0	"T01"	2505.8	1.5	2000	99.1	-79	-21.6	1.5	0	0	1.2	1.2
0	"T01"	2505.8	1.5	4000	94.6	-79	-63.6	1.5	0	0	1	-45.5
0	"T01"	2505.8	1.5	8000	82.8	-79	-224.7	1.5	0	0	-1.1	-220.5
0	"T03"	2308.7	1.5	63	86.2	-78.3	-0.2	3	0	0	-26.2	-15.5
0	"T03"	2308.7	1.5	125	93	-78.3	-0.8	-1.2	0	0	-16.1	-3.4
0	"T03"	2308.7	1.5	250	95.2	-78.3	-2.5	-2	0	0	-8.6	3.8
0	"T03"	2308.7	1.5	500	96.2	-78.3	-5.5	-1	0	0	-3.2	8.2
0	"T03"	2308.7	1.5	1000	99.4	-78.3	-9.5	1.2	0	0	0	12.8
0	"T03"	2308.7	1.5	2000	99.1	-78.3	-19.9	1.5	0	0	1.2	3.7
0	"T03"	2308.7	1.5	4000	94.6	-78.3	-58.6	1.5	0	0	1	-39.7
0	"T03"	2308.7	1.5	8000	82.8	-78.3	-207	1.5	0	0	-1.1	-202.1
0	"T02"	1912.6	1.5	63	86.2	-76.6	-0.2	3	0	0	-26.2	-13.8
0	"T02"	1912.6	1.5	125	93	-76.6	-0.7	-1.2	0	0	-16.1	-1.6
0	"T02"	1912.6	1.5	250	95.2	-76.6	-2.1	-2	0	0	-8.6	5.8
0	"T02"	1912.6	1.5	500	96.2	-76.6	-4.6	-1	0	0	-3.2	10.8
0	"T02"	1912.6	1.5	1000	99.4	-76.6	-7.9	1.2	0	0	0	16
0	"T02"	1912.6	1.5	2000	99.1	-76.6	-16.5	1.5	0	0	1.2	8.7
0	"T02"	1912.6	1.5	4000	94.6	-76.6	-48.5	1.5	0	0	1	-28.1
0	"T02"	1912.6	1.5	8000	82.8	-76.6	-171.5	1.5	0	0	-1.1	-165
0	"T04"	843.5	1.5	63	86.2	-69.5	-0.1	3	0	0	-26.2	-6.6
0	"T04"	843.5	1.5	125	93	-69.5	-0.3	-0.8	0	0	-16.1	6.2
0	"T04"	843.5	1.5	250	95.2	-69.5	-0.9	-2	0	0	-8.6	14.1
0	"T04"	843.5	1.5	500	96.2	-69.5	-2	-1	0	0	-3.2	20.5
0	"T04"	843.5	1.5	1000	99.4	-69.5	-3.5	1.2	0	0	0	27.6
0	"T04"	843.5	1.5	2000	99.1	-69.5	-7.3	1.5	0	0	1.2	25
0	"T04"	843.5	1.5	4000	94.6	-69.5	-21.4	1.5	0	0	1	6.2
0	"T04"	843.5	1.5	8000	82.8	-69.5	-75.6	1.5	0	0	-1.1	-62
0	"T05"	1115.8	1.5	63	86.2	-72	-0.1	3	0	0	-26.2	-9.1
0	"T05"	1115.8	1.5	125	93	-72	-0.4	-1.1	0	0	-16.1	3.4
0	"T05"	1115.8	1.5	250	95.2	-72	-1.2	-2	0	0	-8.6	11.4
0	"T05"	1115.8	1.5	500	96.2	-72	-2.7	-1	0	0	-3.2	17.4
0	"T05"	1115.8	1.5	1000	99.4	-72	-4.6	1.2	0	0	0	24
0	"T05"	1115.8	1.5	2000	99.1	-72	-9.6	1.5	0	0	1.2	20.2
0	"T05"	1115.8	1.5	4000	94.6	-72	-28.3	1.5	0	0	1	-3.2
0	"T05"	1115.8	1.5	8000	82.8	-72	-100.1	1.5	0	0	-1.1	-88.8
0	"T06"	1570.7	1.5	63	86.2	-74.9	-0.2	3	0	0	-26.2	-12.1
0	"T06"	1570.7	1.5	125	93	-74.9	-0.6	-1.2	0	0	-16.1	0.2
0	"T06"	1570.7	1.5	250	95.2	-74.9	-1.7	-2	0	0	-8.6	7.9
0	"T06"	1570.7	1.5	500	96.2	-74.9	-3.7	-1	0	0	-3.2	13.3
0	"T06"	1570.7	1.5	1000	99.4	-74.9	-6.5	1.2	0	0	0	19.2
0	"T06"	1570.7	1.5	2000	99.1	-74.9	-13.5	1.5	0	0	1.2	13.4
0	"T06"	1570.7	1.5	4000	94.6	-74.9	-39.9	1.5	0	0	1	-17.7
0	"T06"	1570.7	1.5	8000	82.8	-74.9	-140.9	1.5	0	0	-1.1	-132.6
0	"T07"	1897.5	1.5	63	86.2	-76.6	-0.2	3	0	0	-26.2	-13.8
0	"T07"	1897.5	1.5	125	93	-76.6	-0.7	-1.2	0	0	-16.1	-1.5
0	"T07"	1897.5	1.5	250	95.2	-76.6	-2.1	-2	0	0	-8.6	5.9
0	"T07"	1897.5	1.5	500	96.2	-76.6	-4.5	-1	0	0	-3.2	10.9
0	"T07"	1897.5	1.5	1000	99.4	-76.6	-7.8	1.2	0	0	0	16.2
0	"T07"	1897.5	1.5	2000	99.1	-76.6	-16.3	1.5	0	0	1.2	8.9
0	"T07"	1897.5	1.5	4000	94.6	-76.6	-48.1	1.5	0	0	1	-27.6
0	"T07"	1897.5	1.5	8000	82.8	-76.6	-170.2	1.5	0	0	-1.1	-163.5
"r43"	"T01"	2795.4	1.5	63	86.2	-79.9	-0.3	3	0	0	-26.2	-17.2
0	"T01"	2795.4	1.5	125	93	-79.9	-1	-1.2	0	0	-16.1	-5.2
0	"T01"	2795.4	1.5	250	95.2	-79.9	-3.1	-2	0	0	-8.6	1.6
0	"T01"	2795.4	1.5	500	96.2	-79.9	-6.7	-1	0	0	-3.2	5.4
0	"T01"	2795.4	1.5	1000	99.4	-79.9	-11.5	1.2	0	0	0	9.1
0	"T01"	2795.4	1.5	2000	99.1	-79.9	-24.1	1.5	0	0	1.2	-2.2
0	"T01"	2795.4	1.5	4000	94.6	-79.9	-70.9	1.5	0	0	1	-53.8
0	"T01"	2795.4	1.5	8000	82.8	-79.9	-250.7	1.5	0	0	-1.1	-247.4
0	"T03"	2685.2	1.5	63	86.2	-79.6	-0.3	3	0	0	-26.2	-16.8
0	"T03"	2685.2	1.5	125	93	-79.6	-1	-1.2	0	0	-16.1	-4.8
0	"T03"	2685.2	1.5	250	95.2	-79.6	-3	-2	0	0	-8.6	2
0	"T03"	2685.2	1.5	500	96.2	-79.6	-6.4	-1	0	0	-3.2	6
0	"T03"	2685.2	1.5	1000	99.4	-79.6	-11.1	1.2	0	0	0	9.9
0	"T03"	2685.2	1.5	2000	99.1	-79.6	-23.1	1.5	0	0	1.2	-0.9
0	"T03"	2685.2	1.5	4000	94.6	-79.6	-68.1	1.5	0	0	1	-50.6
0	"T03"	2685.2	1.5	8000	82.8	-79.6	-240.8	1.5	0	0	-1.1	-237.2
0	"T02"	2244.5	1.5	63	86.2	-78	-0.2	3	0	0	-26.2	-15.2
0	"T02"	2244.5	1.5	125	93	-78	-0.8	-1.2	0	0	-16.1	-3.1
0	"T02"	2244.5	1.5	250	95.2	-78	-2.5	-2	0	0	-8.6	4.1
0	"T02"	2244.5	1.5	500	96.2	-78	-5.4	-1	0	0	-3.2	8.6

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0	"T02"	2244.5	1.5	1000	99.4	-78	-9.3	1.2	0	0	0	13.3
0	"T02"	2244.5	1.5	2000	99.1	-78	-19.3	1.5	0	0	1.2	4.5
0	"T02"	2244.5	1.5	4000	94.6	-78	-56.9	1.5	0	0	1	-37.9
0	"T02"	2244.5	1.5	8000	82.8	-78	-201.3	1.5	0	0	-1.1	-196.1
0	"T04"	1208.7	1.5	63	86.2	-72.6	-0.1	3	0	0	-26.2	-9.8
0	"T04"	1208.7	1.5	125	93	-72.6	-0.4	-1.1	0	0	-16.1	2.7
0	"T04"	1208.7	1.5	250	95.2	-72.6	-1.3	-2	0	0	-8.6	10.6
0	"T04"	1208.7	1.5	500	96.2	-72.6	-2.9	-1	0	0	-3.2	16.5
0	"T04"	1208.7	1.5	1000	99.4	-72.6	-5	1.2	0	0	0	22.9
0	"T04"	1208.7	1.5	2000	99.1	-72.6	-10.4	1.5	0	0	1.2	18.7
0	"T04"	1208.7	1.5	4000	94.6	-72.6	-30.7	1.5	0	0	1	-6.2
0	"T04"	1208.7	1.5	8000	82.8	-72.6	-108.4	1.5	0	0	-1.1	-97.8
0	"T05"	1351.9	1.5	63	86.2	-73.6	-0.1	3	0	0	-26.2	-10.8
0	"T05"	1351.9	1.5	125	93	-73.6	-0.5	-1.2	0	0	-16.1	1.6
0	"T05"	1351.9	1.5	250	95.2	-73.6	-1.5	-2	0	0	-8.6	9.5
0	"T05"	1351.9	1.5	500	96.2	-73.6	-3.2	-1	0	0	-3.2	15.2
0	"T05"	1351.9	1.5	1000	99.4	-73.6	-5.6	1.2	0	0	0	21.4
0	"T05"	1351.9	1.5	2000	99.1	-73.6	-11.6	1.5	0	0	1.2	16.5
0	"T05"	1351.9	1.5	4000	94.6	-73.6	-34.3	1.5	0	0	1	-10.8
0	"T05"	1351.9	1.5	8000	82.8	-73.6	-121.2	1.5	0	0	-1.1	-111.7
0	"T06"	1655.6	1.5	63	86.2	-75.4	-0.2	3	0	0	-26.2	-12.5
0	"T06"	1655.6	1.5	125	93	-75.4	-0.6	-1.2	0	0	-16.1	-0.2
0	"T06"	1655.6	1.5	250	95.2	-75.4	-1.8	-2	0	0	-8.6	7.4
0	"T06"	1655.6	1.5	500	96.2	-75.4	-3.9	-1	0	0	-3.2	12.7
0	"T06"	1655.6	1.5	1000	99.4	-75.4	-6.8	1.2	0	0	0	18.4
0	"T06"	1655.6	1.5	2000	99.1	-75.4	-14.3	1.5	0	0	1.2	12.2
0	"T06"	1655.6	1.5	4000	94.6	-75.4	-42	1.5	0	0	1	-20.3
0	"T06"	1655.6	1.5	8000	82.8	-75.4	-148.5	1.5	0	0	-1.1	-140.7
0	"T07"	1662.6	1.5	63	86.2	-75.4	-0.2	3	0	0	-26.2	-12.6
0	"T07"	1662.6	1.5	125	93	-75.4	-0.6	-1.2	0	0	-16.1	-0.3
0	"T07"	1662.6	1.5	250	95.2	-75.4	-1.8	-2	0	0	-8.6	7.3
0	"T07"	1662.6	1.5	500	96.2	-75.4	-4	-1	0	0	-3.2	12.6
0	"T07"	1662.6	1.5	1000	99.4	-75.4	-6.9	1.2	0	0	0	18.3
0	"T07"	1662.6	1.5	2000	99.1	-75.4	-14.3	1.5	0	0	1.2	12.1
0	"T07"	1662.6	1.5	4000	94.6	-75.4	-42.2	1.5	0	0	1	-20.5
0	"T07"	1662.6	1.5	8000	82.8	-75.4	-149.1	1.5	0	0	-1.1	-141.3
"r44"	"T01"	1364.4	1.5	63	86.2	-73.7	-0.1	3	0	0	-26.2	-10.8
0	"T01"	1364.4	1.5	125	93	-73.7	-0.5	-1.2	0	0	-16.1	1.5
0	"T01"	1364.4	1.5	250	95.2	-73.7	-1.5	-2	0	0	-8.6	9.4
0	"T01"	1364.4	1.5	500	96.2	-73.7	-3.3	-1	0	0	-3.2	15.1
0	"T01"	1364.4	1.5	1000	99.4	-73.7	-5.6	1.2	0	0	0	21.2
0	"T01"	1364.4	1.5	2000	99.1	-73.7	-11.7	1.5	0	0	1.2	16.4
0	"T01"	1364.4	1.5	4000	94.6	-73.7	-34.6	1.5	0	0	1	-11.2
0	"T01"	1364.4	1.5	8000	82.8	-73.7	-122.4	1.5	0	0	-1.1	-112.9
0	"T03"	2509.4	1.5	63	86.2	-79	-0.2	3	0	0	-26.2	-16.2
0	"T03"	2509.4	1.5	125	93	-79	-0.9	-1.2	0	0	-16.1	-4.2
0	"T03"	2509.4	1.5	250	95.2	-79	-2.8	-2	0	0	-8.6	2.8
0	"T03"	2509.4	1.5	500	96.2	-79	-6	-1	0	0	-3.2	7
0	"T03"	2509.4	1.5	1000	99.4	-79	-10.4	1.2	0	0	0	11.2
0	"T03"	2509.4	1.5	2000	99.1	-79	-21.6	1.5	0	0	1.2	1.2
0	"T03"	2509.4	1.5	4000	94.6	-79	-63.7	1.5	0	0	1	-45.6
0	"T03"	2509.4	1.5	8000	82.8	-79	-225.1	1.5	0	0	-1.1	-220.8
0	"T02"	1593.4	1.5	63	86.2	-75	-0.2	3	0	0	-26.2	-12.2
0	"T02"	1593.4	1.5	125	93	-75	-0.6	-1.2	0	0	-16.1	0.1
0	"T02"	1593.4	1.5	250	95.2	-75	-1.8	-2	0	0	-8.6	7.8
0	"T02"	1593.4	1.5	500	96.2	-75	-3.8	-1	0	0	-3.2	13.2
0	"T02"	1593.4	1.5	1000	99.4	-75	-6.6	1.2	0	0	0	18.9
0	"T02"	1593.4	1.5	2000	99.1	-75	-13.7	1.5	0	0	1.2	13
0	"T02"	1593.4	1.5	4000	94.6	-75	-40.4	1.5	0	0	1	-18.4
0	"T02"	1593.4	1.5	8000	82.8	-75	-142.9	1.5	0	0	-1.1	-134.7
0	"T04"	2465.9	1.5	63	86.2	-78.8	-0.2	3	0	0	-26.2	-16.1
0	"T04"	2465.9	1.5	125	93	-78.8	-0.9	-1.2	0	0	-16.1	-4
0	"T04"	2465.9	1.5	250	95.2	-78.8	-2.7	-2	0	0	-8.6	3
0	"T04"	2465.9	1.5	500	96.2	-78.8	-5.9	-1	0	0	-3.2	7.3
0	"T04"	2465.9	1.5	1000	99.4	-78.8	-10.2	1.2	0	0	0	11.5
0	"T04"	2465.9	1.5	2000	99.1	-78.8	-21.2	1.5	0	0	1.2	1.7
0	"T04"	2465.9	1.5	4000	94.6	-78.8	-62.6	1.5	0	0	1	-44.3
0	"T04"	2465.9	1.5	8000	82.8	-78.8	-221.2	1.5	0	0	-1.1	-216.8
0	"T05"	3137.6	1.5	63	86.2	-80.9	-0.3	3	0	0	-26.2	-18.2
0	"T05"	3137.6	1.5	125	93	-80.9	-1.1	-1.2	0	0	-16.1	-6.3
0	"T05"	3137.6	1.5	250	95.2	-80.9	-3.5	-2	0	0	-8.6	0.2
0	"T05"	3137.6	1.5	500	96.2	-80.9	-7.5	-1	0	0	-3.2	3.6
0	"T05"	3137.6	1.5	1000	99.4	-80.9	-13	1.2	0	0	0	6.7
0	"T05"	3137.6	1.5	2000	99.1	-80.9	-27	1.5	0	0	1.2	-6.1
0	"T05"	3137.6	1.5	4000	94.6	-80.9	-79.6	1.5	0	0	1	-63.4
0	"T05"	3137.6	1.5	8000	82.8	-80.9	-281.4	1.5	0	0	-1.1	-279.1
0	"T06"	3763.6	1.5	63	86.2	-82.5	-0.4	3.2	0	0	-26.2	-19.7
0	"T06"	3763.6	1.5	125	93	-82.5	-1.4	-1.1	0	0	-16.1	-8
0	"T06"	3763.6	1.5	250	95.2	-82.5	-4.2	-1.9	0	0	-8.6	-2
0	"T06"	3763.6	1.5	500	96.2	-82.5	-9	-0.9	0	0	-3.2	0.6
0	"T06"	3763.6	1.5	1000	99.4	-82.5	-15.5	1.3	0	0	0	2.6
0	"T06"	3763.6	1.5	2000	99.1	-82.5	-32.4	1.6	0	0	1.2	-13
0	"T06"	3763.6	1.5	4000	94.6	-82.5	-95.5	1.6	0	0	1	-80.8
0	"T06"	3763.6	1.5	8000	82.8	-82.5	-337.5	1.6	0	0	-1.1	-336.7
0	"T07"	4019.3	1.5	63	86.2	-83.1	-0.4	3.4	0	0	-26.2	-20.1
0	"T07"	4019.3	1.5	125	93	-83.1	-1.5	-1	0	0	-16.1	-8.6
0	"T07"	4019.3	1.5	250	95.2	-83.1	-4.4	-1.8	0	0	-8.6	-2.7
0	"T07"	4019.3	1.5	500	96.2	-83.1	-9.6	-0.8	0	0	-3.2	-0.5
0	"T07"	4019.3	1.5	1000	99.4	-83.1	-16.6	1.4	0	0	0	1.1
0	"T07"	4019.3	1.5	2000	99.1	-83.1	-34.6	1.7	0	0	1.2	-15.7
0	"T07"	4019.3	1.5	4000	94.6	-83.1	-102	1.7	0	0	1	-87.8
0	"T07"	4019.3	1.5	8000	82.8	-83.1	-360.5	1.7	0	0	-1.1	-360.1

***	Objects	***	
Receivers	**x**	**y**	**Height**
"r01"	-5524	-737.6	1.5

"r02"	-4676	-567.1	1.5
"r03"	-3385	-503.6	1.5
"r04"	-3157.5	-433.1	1.5
"r05"	-2224	-1425.1	1.5
"r06"	-1962.5	-1084.6	1.5
"r07"	-472	-1995.6	1.5
"r08"	130	-2011.6	1.5
"r09"	306	-1823.6	1.5
"r10"	772	-1307.6	1.5
"r11"	360	-1089.6	1.5
"r12"	-1176	-227.6	1.5
"r13"	-1014	68.4	1.5
"r14"	-1087	248.4	1.5
"r15"	769	492.4	1.5
"r16"	517	828.4	1.5
"r17"	-179	1220.4	1.5
"r18"	-1553	1286.4	1.5
"r19"	-1741	1142.4	1.5
"r20"	-1653	998.4	1.5
"r21"	-2614	787.4	1.5
"r22"	-3138	1952.4	1.5
"r23"	-3293	1843.9	1.5
"r24"	-3296	2280.9	1.5
"r25"	-3974	934.9	1.5
"r26"	897	-1448.1	1.5
"r27"	365	-1970.1	1.5
"r28"	189	-2128.1	1.5
"r29"	92	-2215.1	1.5
"r30"	39	-2332.1	1.5
"r31"	31	-2182.1	1.5
"r32"	-307	-2274.1	1.5
"r33"	-381	-2312.1	1.5
"r34"	181	-2424.1	1.5
"r35"	301	-2914.1	1.5
"r36"	-295	-2338.1	1.5
"r37"	-661	-2360.1	1.5
"r38"	-1185	-2492.1	1.5
"r39"	-1189	-2270.1	1.5
"r40"	-827	-2250.1	1.5
"r41"	-1865	233.9	1.5
"r42"	-2637	-762.1	1.5
"r43"	-2973	-942.1	1.5
"r44"	-1123	-2430.1	1.5

Point	**x**	**y**	**Height**	**Lw**	**Hz**
"T01"	-220	-1413.6	115	0	31.5
0	0	0	0	86.2	63
0	0	0	0	93	125
0	0	0	0	95.2	250
0	0	0	0	96.2	500
0	0	0	0	99.4	1000
0	0	0	0	99.1	2000
0	0	0	0	94.6	4000
0	0	0	0	82.8	8000
0	0	0	0	0	16000
"T03"	-456	-13.6	115	0	31.5
0	0	0	0	86.2	63
0	0	0	0	93	125
0	0	0	0	95.2	250
0	0	0	0	96.2	500
0	0	0	0	99.4	1000
0	0	0	0	99.1	2000
0	0	0	0	94.6	4000
0	0	0	0	82.8	8000
0	0	0	0	0	16000
"T02"	-732	-889.6	115	0	31.5
0	0	0	0	86.2	63
0	0	0	0	93	125
0	0	0	0	95.2	250
0	0	0	0	96.2	500
0	0	0	0	99.4	1000
0	0	0	0	99.1	2000
0	0	0	0	94.6	4000
0	0	0	0	82.8	8000
0	0	0	0	0	16000
"T04"	-2064	-153.6	115	0	31.5
0	0	0	0	86.2	63
0	0	0	0	93	125
0	0	0	0	95.2	250
0	0	0	0	96.2	500
0	0	0	0	99.4	1000
0	0	0	0	99.1	2000
0	0	0	0	94.6	4000
0	0	0	0	82.8	8000
0	0	0	0	0	16000
"T05"	-2580	346.4	115	0	31.5
0	0	0	0	86.2	63
0	0	0	0	93	125
0	0	0	0	95.2	250
0	0	0	0	96.2	500
0	0	0	0	99.4	1000
0	0	0	0	99.1	2000
0	0	0	0	94.6	4000
0	0	0	0	82.8	8000
0	0	0	0	0	16000
"T06"	-3224	690.4	115	0	31.5
0	0	0	0	86.2	63

FASE IN ESERCIZIO

0	0	0	0	93	125
0	0	0	0	95.2	250
0	0	0	0	96.2	500
0	0	0	0	99.4	1000
0	0	0	0	99.1	2000
0	0	0	0	94.6	4000
0	0	0	0	82.8	8000
0	0	0	0	0	16000
"T07"	-4428	-145.6	115	0	31.5
0	0	0	0	86.2	63
0	0	0	0	93	125
0	0	0	0	95.2	250
0	0	0	0	96.2	500
0	0	0	0	99.4	1000
0	0	0	0	99.1	2000
0	0	0	0	94.6	4000
0	0	0	0	82.8	8000
0	0	0	0	0	16000

***	Configuration	***
0.5G	Ground	factor
16°C	Temperature	
70%	Humidity	

***	Key	***				
Lw	Sound	Power	Level	(dB)		
Ad	Distance	attenuation	aka	"geometrical	divergence"	ISO9613-2 (dB)
Ab	Barrier	attentuation	ISO9613-2	(dB)		
Ag	Ground	effect	ISO9613-2	(dB)		
Aa	Air	absorption	ISO9613-1	(dB)		
x	x-coordinate	(in	meters)			
y	y-coordinate	(in	meters)			
rc	Reflection	Coefficient				

Volta Green Energy - Parco Eolico Lumella - Censimento fabbricati
Area di studio: raggio pari a 10*D (1700 m) attorno alle WTG

ID	ID Immobile	Coordinate UTM-WGS84 33N		WTG vicine		Dati catastali								
		X (Est)	Y (Nord)	N° WTG	Distanza	Comune	Foglio	Particella	Sub	Indirizzo	Qualità/ Categoria	Classe	Consistenza - mq/vani -	Specifica categoria
1	F1.1	644411.00	4483040.00	T1	630,00	Montescaglioso (MT)	71	273	1	MONTESCAGLIOSO LOCALITÀ MEZZANO SOPRANO, SNC Piano T	A/3	1	3,5 vani	Abitazione di tipo economico
				T2	1.128,00									
2	F1.2	644449.00	4483144.00	T1	703,00	Montescaglioso (MT)	71	275	1-5	MONTESCAGLIOSO LOCALITÀ MEZZANO SOPRANO, SNC Piano T-1	F/2			Unità collabente
				T2	1.240,00									
3	F1.3	644936.00	4483057.00	T1	673,00	Montescaglioso (MT)	72	578	5	MONTESCAGLIOSO LOCALITÀ CERMIGNANO, SNC Piano T	C/2	5	450	Magazzini e locali di deposito
				T2	1.372,00									
4	F1.4	645000.00	4483027.00	T1	672,00				2	MONTESCAGLIOSO LOCALITÀ CERMIGNANO, SNC Piano T	A/2	2	6 vani	Abitazione di tipo civile
				T2	1.383,00				3		C/2	3	135	Magazzini e locali di deposito
5	F1.5	645169.02	4482810.85	T1	640,00	Montescaglioso (MT)	72	418	2	MONTESCAGLIOSO LOCALITÀ CERMIGNANO, SNC Piano T	A/3	1	5,5 vani	Abitazione di tipo economico
				T2	1.353,00									
6	F1.6	645188.07	4482833.55	T1	670,00	Montescaglioso (MT)	72	784	2	MONTESCAGLIOSO LOCALITÀ CERMIGNANO, SNC Piano T	D/10			Fabbricati per funzioni produttive connesse alle attività agricole
				T2	1.373,00									
7	F1.7	645214.26	4482807.41	T1	676,00	Montescaglioso (MT)	72	790	1	MONTESCAGLIOSO LOCALITÀ CERMIGNANO, SNC Piano T	A/3	1	5,5 vani	Abitazione di tipo economico
				T2	1.383,00									
8	F1.8	645620.65	4482294.26	T1	980,00	Montescaglioso (MT)	72	569	2	MONTESCAGLIOSO LOCALITÀ CERMIGNANO, SNC Piano T-1	D/10			Fabbricati per funzioni produttive connesse alle attività agricole
				T2	1.525,00				3	MONTESCAGLIOSO LOCALITÀ CERMIGNANO, SNC Piano 1	A/3	1	5 vani	Abitazione di tipo economico
9	F1.9	645473.22	4482227.44	T1	860,00	Montescaglioso (MT)	72	552			FABB RURALE		168	Fabbricato rurale
								553			FABB DIRUTO		24	Fabbricato diruto
				T2	1.379,00			554			FABB DIRUTO		42	Fabbricato diruto
				T3	1.590,00			556			FABB RURALE		160	Fabbricato rurale
10	F1.10	645423.00	4482230.00	T1	795,00	Montescaglioso (MT)	72	551			FABB RURALE		630	Fabbricato rurale
				T2	1.332,00									
				T3	1.557,00									

ID	ID Immobile	Coordinate UTM-WGS84 33N		WTG vicine		Dati catastali								
		X (Est)	Y (Nord)	N° WTG	Distanza	Comune	Foglio	Particella	Sub	Indirizzo	Qualità/ Categoria	Classe	Consistenza - mq/vani -	Specifica categoria
11	F1.11	645405.00	4482161.00	T1	819,00	Montescaglioso (MT)	72	224			FABB RURALE		356	Fabbricato rurale
				T2	1.297,00		72	225			FR DIV SUB		104	Fabbricato rurale diviso in subalterni
				T3	1.490,00		72	159			FABB RURALE		680	Fabbricato rurale
12	F1.12	645322.00	4482205.00	T1	726,00	Montescaglioso (MT)	72	616	1	MONTESCAGLIOSO LOCALITÀ CERMIGNANO, SNC Piano T	D/10			Fabbricati per funzioni produttive connesse alle attività agricole
				T2	1.226,00									
				T3	1.468,00									
13	F1.13	645313.00	4482159.00	T1	732,00	Montescaglioso (MT)	72	158			FABB DIRUTO		331	Fabbricato diruto
				T2	1.210,00									
				T3	1.429,00									
14	F1.14	645219.00	4482080.00	T1	688,00	Montescaglioso (MT)	72	609	2	MONTESCAGLIOSO LOCALITÀ CERMIGNANO, SNC Piano T	D/10			Fabbricati per funzioni produttive connesse alle attività agricole
				T2	1.104,00									
				T3	1.307,00									
15	F1.15	645262.00	4482100.00	T1	712,00	Montescaglioso (MT)	72	157			FABB DIRUTO		835	Fabbricato diruto
				T2	1.149,00									
				T3	1.350,00									
16	F1.16	645742.00	4482469.00	T1	1.103,00	Montescaglioso (MT)	72	617	1	MONTESCAGLIOSO LOCALITÀ FIUMICELLO, SNC Piano T	D/10			Fabbricati per funzioni produttive connesse alle attività agricole
				T2	1.700,00									
17	F1.17	645464.00	4482445.00	T1	827,00	Montescaglioso (MT)	72	560			NR			Non registrato in catasto
				T2	1.434,00									
18	F1.18	645230.00	4482995.00	T1	815,00	Montescaglioso (MT)	72	596	2	MONTESCAGLIOSO LOCALITÀ CERMIGNANO, SNC Piano T	A/4	4	3,5 vani	Abitazioni di tipo popolare
				T2	1.533,00				3, 4		C/2	5	52+51	Magazzini e locali di deposito
19	F1.19	645067.00	4483158.00	T1	829,00	Montescaglioso (MT)	72	591	2	MONTESCAGLIOSO LOCALITÀ MEZZANO SOPRANO, SNC Piano T	C/2	3	54	Magazzini e locali di deposito
				T2	1.536,00				3	MONTESCAGLIOSO LOCALITÀ MEZZANO SOPRANO, SNC Piano 1	A/4	2	4 vani	Abitazioni di tipo popolare
20	F1.20	644958.00	4483264.00	T1	875,00	Montescaglioso (MT)	72	611	2	MONTESCAGLIOSO LOCALITÀ CERMIGNANO, Piano T	D/10			Fabbricati per funzioni produttive connesse alle attività agricole
				T2	1.557,00									

ID	ID Immobile	Coordinate UTM-WGS84 33N		WTG vicine		Dati catastali								
		X (Est)	Y (Nord)	N° WTG	Distanza	Comune	Foglio	Particella	Sub	Indirizzo	Qualità/ Categoria	Classe	Consistenza - mq/vani -	Specifica categoria
21	F1.21	644949.00	4483293.00	T1	898,00	Montescaglioso (MT)	72	587	1	MONTESCAGLIOSO LOCALITÀ MEZZANO SOPRANO, SNC Piano T	C/2	2	81	Magazzini e locali di deposito
				T2	1.577,00									
22	F1.22	644906.00	4483227.00	T1	822,00	Montescaglioso (MT)	72	448	2	MONTESCAGLIOSO LOCALITÀ MEZZANO SOPRANO, SNC Piano T	A/4	1	4,5 vani	Abitazioni di tipo popolare
				T2	1.500,00				3, 4		C/2	1	45+37	Magazzini e locali di deposito
23	F1.23	644916.00	4483321.00	T1	914,00	Montescaglioso (MT)	72	604	1	MONTESCAGLIOSO LOCALITÀ CERMIGNANO, Piano T	D/10			Fabbricati per funzioni produttive connesse alle attività agricole
				T2	1.585,00				2		A/4	5	3,5 vani	Abitazioni di tipo popolare
24	F1.24	644845.00	4483341.00	T1	918,00	Montescaglioso (MT)	72	184	3	MONTESCAGLIOSO LOCALITÀ CERMIGNANO, SNC Piano T	F/2			Unità collabente
				T2	1.573,00				10		C/2			Magazzini e locali di deposito
25	F1.25	644705.00	4483275.00	T1	828,00	Montescaglioso (MT)	72	619	1	MONTESCAGLIOSO LOCALITÀ CERMIGNANO, SNC Piano T	C/2	4	70	Magazzini e locali di deposito
				T2	1.449,00				2, 3		C/2	5	58+59	Magazzini e locali di deposito
26	F1.26	644658.00	4483265.00	T1	832,00	Montescaglioso (MT)	72	589	1	MONTESCAGLIOSO LOCALITÀ MEZZANO SOPRANO, SNC Piano T	C/2	3	34	Magazzini e locali di deposito
				T2	1.459,00									
27	F1.27	644563.00	4483316.00	T1	860,00	Montescaglioso (MT)	72	582	1	MONTESCAGLIOSO LOCALITÀ CERMIGNANO, SNC Piano T	A/3	1	3 vani	Abitazione di tipo economico
				T2	1.429,00				2		D/10			Fabbricati per funzioni produttive connesse alle attività agricole
28	F1.28	644577.00	4483360.00	T1	918,00	Montescaglioso (MT)	72	584	1	MONTESCAGLIOSO LOCALITÀ CERMIGNANO, SNC Piano T	D/10			Fabbricati per funzioni produttive connesse alle attività agricole
				T2	1.487,00									
29	F1.29	645069.00	4483429.00	T1	1.075,00	Montescaglioso (MT)	72	601	1	MONTESCAGLIOSO LOCALITÀ CERMIGNANO, SNC Piano T	A/4	4	5 vani	Abitazioni di tipo popolare
									2		C/2	3	120	Magazzini e locali di deposito
30	F1.30	645770.00	4482892.00	T1	1.215,00	Montescaglioso (MT)	68	264	1	MONTESCAGLIOSO LOCALITÀ CERMIGNANO, SNC Piano T	F/2			Unità collabente
31	F1.31	645326.00	4483636.00	T1	1.371,00	Montescaglioso (MT)	68	260	1	MONTESCAGLIOSO LOCALITÀ CERMIGNANO, SNC Piano T	C/2	5	23	Magazzini e locali di deposito
32	F1.32	645397.00	4483847.00	T1	1.592,00	Montescaglioso (MT)	68	263	1	MONTESCAGLIOSO LOCALITÀ CERMIGNANO, SNC Piano T	C/2	5	38	Magazzini e locali di deposito
33	F1.33	645242.00	4483815.00	T1	1.492,00	Montescaglioso (MT)	68	44		MONTESCAGLIOSO LOCALITÀ CERMIGNANO, SNC Piano T	NR			Non registrato in catasto

ID	ID Immobile	Coordinate UTM-WGS84 33N		WTG vicine		Dati catastali								
		X (Est)	Y (Nord)	N° WTG	Distanza	Comune	Foglio	Particella	Sub	Indirizzo	Qualità/ Categoria	Classe	Consistenza - mq/vani -	Specifica categoria
34	F1.34	645195.00	4483911.00	T1	1.558,00	Montescaglioso (MT)	68	266	8	MONTESCAGLIOSO LOCALITÀ CERMIGNANO, SNC Piano T	D/10			Fabbricati per funzioni produttive connesse alle attività agricole
35	F1.35	644502.00	4483330.00	T1	895,00	Montescaglioso (MT)	67	1077	1	MONTESCAGLIOSO LOCALITÀ MEZZANO SOPRANO, SNC Piano T	A/4	4	4 vani	Abitazioni di tipo popolare
				T2	1.429,00				2		D/10			Fabbricati per funzioni produttive connesse alle attività agricole
36	F1.36	644352.00	4483350.00	T1	946,00	Montescaglioso (MT)	67	1003	1	MONTESCAGLIOSO LOCALITÀ MEZZANO SOPRANO, Piano T	C/2	3	109	Magazzini e locali di deposito
				T2	1.417,00									
37	F1.37	644223.00	4483388.00	T1	1.020,00	Montescaglioso (MT)	67	1080	1, 2	MONTESCAGLIOSO LOCALITÀ MEZZANO SOTTANO, Piano T	D/10			Fabbricati per funzioni produttive connesse alle attività agricole
				T2	1.435,00									
38	F1.38	643685.00	4483538.00	T1	1.446,00	Montescaglioso (MT)	67	1073	1	MONTESCAGLIOSO LOCALITÀ MEZZANO SOTTANO, Piano T	D/10			Fabbricati per funzioni produttive connesse alle attività agricole
				T2	1.648,00									
39	F1.39	643285.00	4483308.00	T1	1.602,00	Montescaglioso (MT)	71	249			NR			Non registrato in catasto
				T2	1.594,00									
40	F1.40	643693.00	4483326.00	T1	1.283,00	Montescaglioso (MT)	71	299	1	MONTESCAGLIOSO LOCALITÀ MEZZANO SOTTANO, Piano T	A/3	1	5,5 vani	Abitazione di tipo economico
				T2	1.445,00									
41	F1.41	643958.00	4483157.00	T1	980,00	Montescaglioso (MT)	71	373	1	MONTESCAGLIOSO LOCALITÀ MEZZANO SOTTANO, SNC Piano T-1	F/2			Unità collabente
				T2	1.219,00									
42	F1.42	644056.00	4483292.00	T1	1.022,00	Montescaglioso (MT)	67	340	7	MONTESCAGLIOSO LOCALITÀ VALLE CUPA, SNC Piano T-1	C/2	5	335	Magazzini e locali di deposito
				T2	1.342,00				8	MONTESCAGLIOSO LOCALITÀ VALLE CUPA, SNC Piano 1	A/3	1	4 vani	Abitazione di tipo economico
43	F1.43	644055.44	4483373.42	T1	1.090,00	Montescaglioso (MT)	67	592	1	MONTESCAGLIOSO LOCALITÀ MEZZANO SOPRANO, SNC Piano T	C/2	1	80	Magazzini e locali di deposito
				T2	1.425,00									
44	F1.44	643471.00	4483559.00	T1	1.611,00	Montescaglioso (MT)	67	1043	1	MONTESCAGLIOSO LOCALITA' MEZZANO SOTTANO, Piano T	F/2			Unità collabente
45	F1.45	643771.00	4483486.00	T1	1.353,00	Montescaglioso (MT)	67	821-822			NR			Non registrato in catasto

ID	ID Immobile	Coordinate UTM-WGS84 33N		WTG vicine		Dati catastali								
		X (Est)	Y (Nord)	N° WTG	Distanza	Comune	Foglio	Particella	Sub	Indirizzo	Qualità/ Categoria	Classe	Consistenza - mq/vani -	Specifica categoria
46	F3.1	643830.00	4480989.00	T3	550,00	Montescaglioso (MT)	71	326	1	MONTESCAGLIOSO LOCALITÀ TRE STELLE, SNC Piano T	D/10			Fabbricati per funzioni produttive connesse alle attività agricole
				T2	1.004,00				2	MONTESCAGLIOSO LOCALITÀ TRE STELLE, SNC Piano 1	D/1			Opificio
47	F3.2	643775.00	4480840.00	T3	638,00	Montescaglioso (MT)	71	324	1	MONTESCAGLIOSO LOCALITÀ TRE STELLE, SNC Piano T	C/2	5	286	Magazzini e locali di deposito
				T4	1.062,00	Montescaglioso (MT)	71	325	1	MONTESCAGLIOSO LOCALITÀ TRE STELLE, SNC Piano T	C/2	3	143	Magazzini e locali di deposito
48	F3.3	643726.00	4480823.00	T3	694,00	Montescaglioso (MT)	71	323	1	MONTESCAGLIOSO LOCALITA' TRE STELLE, SNC Piano T-2	D/10			Fabbricati per funzioni produttive connesse alle attività agricole
				T4	1.027,00				2	MONTESCAGLIOSO LOCALITA' TRE STELLE, SNC Piano 1	A/3	3	5 vani	Abitazione di tipo economico
49	F3.4	643773.00	4480804.00	T3	657,00	Montescaglioso (MT)	71	301	1	MONTESCAGLIOSO LOCALITA' TRE STELLE, SNC Piano T	C/2	5	652	Magazzini e locali di deposito
				T4	1.080,00									
50	F3.5	643818.00	4480794.00	T3	626,00	Montescaglioso (MT)	71	302	1	MONTESCAGLIOSO LOCALITA' TRE STELLE, SNC Piano T	C/2	2	218	Magazzini e locali di deposito
				T4	1.121,00									
51	F3.6	643633.00	4481260.00	T3	755,00	Montescaglioso (MT)	71	374	1	MONTESCAGLIOSO LOCALITÀ MEZZANO SOPRANO, SNC Piano T	D/10			Fabbricati per funzioni produttive connesse alle attività agricole
				T4	835,00				2-3-4-5-6	MONTESCAGLIOSO LOCALITÀ MEZZANO SOPRANO, SNC Piano T	F/2			Unità collabente
52	F3.7	643654.00	4481443.00	T3	800,00	Montescaglioso (MT)	71	375		MONTESCAGLIOSO LOCALITÀ MEZZANO SOPRANO, SNC Piano T	F/2			Unità collabente
				T2	687,00									
53	F3.8	644533.00	4480374.00	T3	724,00	Montescaglioso (MT)	73	137	5-7	MONTESCAGLIOSO LOCALITÀ VETRANO, SNC Piano T	C/2		88+100	Magazzini e locali di deposito
				T2	1.622,00				6	MONTESCAGLIOSO LOCALITÀ VETRANO, SNC Piano T	F/3			Unità in corso di costruzione
54	F3.9	644620.00	4480432.00	T3	702,00	Montescaglioso (MT)	73	65			NR			Non registrato in catasto
				T2	1.600,00									
55	F3.10	644619.00	4479845.00	T3	1.257,00	Montescaglioso (MT)	86	78	1-2	MONTESCAGLIOSO LOCALITÀ CAMPAGNUOLO, SNC Piano T	A/4	4	3 vani	Abitazioni di tipo popolare
									3-4		C/2	3	39+47	Magazzini e locali di deposito
								81	1	MONTESCAGLIOSO LOCALITÀ CAMPAGNUOLO, SNC Piano T	C/2	3	120	Magazzini e locali di deposito

ID	ID Immobile	Coordinate UTM-WGS84 33N		WTG vicine		Dati catastali								
		X (Est)	Y (Nord)	N° WTG	Distanza	Comune	Foglio	Particella	Sub	Indirizzo	Qualità/ Categoria	Classe	Consistenza - mq/vani -	Specifica categoria
56	F3.11	645220.00	4480204.00	T3	1.212,00	Montescaglioso (MT)	74	62			FABB RURALE			Fabbricato Rurale
57	F3.12	645297.00	4480191.00	T3	1.281,00	Montescaglioso (MT)	86	77	1	MONTESCAGLIOSO LOCALITÀ VETRANO, SNC Piano T	A/4	4	2,5 vani	Abitazioni di tipo popolare
									2	MONTESCAGLIOSO LOCALITÀ VETRANO, SNC Piano T	C/2	3	125	Magazzini e locali di deposito
58	F3.13	645553.00	4480538.00	T3	1.278,00	Montescaglioso (MT)	74	107	1	MONTESCAGLIOSO LOCALITÀ VETRANO, SNC Piano 1	A/3	1	6,5 vani	Abitazioni di tipo economico
								108	1	MONTESCAGLIOSO LOCALITÀ VETRANO, SNC Piano S1	C/2	4	54	Magazzini e locali di deposito
									2	MONTESCAGLIOSO LOCALITÀ VETRANO, SNC Piano T	C/6	3	64	Stalle, scuderie, rimesse, autorimesse (senza fine di lucro)
									3	MONTESCAGLIOSO LOCALITÀ VETRANO, SNC Piano 1	A/4	4	3,5 vani	Abitazioni di tipo popolare
								110	1	MONTESCAGLIOSO LOCALITÀ VETRANO, SNC Piano T	C/2	2	183	Magazzini e locali di deposito
								103	1	MONTESCAGLIOSO LOCALITÀ VETRANO, SNC Piano T	C/2	2	233	Magazzini e locali di deposito
								102	2	MONTESCAGLIOSO LOCALITÀ VETRANO, SNC Piano T	C/6	1	88	Stalle, scuderie, rimesse, autorimesse (senza fine di lucro)
								101	1	MONTESCAGLIOSO LOCALITÀ VETRANO, SNC Piano T	C/6	2	56	Stalle, scuderie, rimesse, autorimesse (senza fine di lucro)
									2		C/2	5	29	Magazzini e locali di deposito
									3		C/2	5	30	Magazzini e locali di deposito
								100	2	MONTESCAGLIOSO LOCALITÀ VETRANO, SNC Piano T	C/2	5	53	Magazzini e locali di deposito
									3		A/4	4	3,5 vani	Abitazioni di tipo popolare
								112	1	MONTESCAGLIOSO LOCALITÀ VETRANO, SNC Piano T	A/2	1	6 vani	Abitazioni di tipo civile
59	F3.14	645576.00	4480671.00	T3	1.275,00	Montescaglioso (MT)	74	105	1	MONTESCAGLIOSO LOCALITÀ VETRANO, SNC Piano T	C/2	4	95	Magazzini e locali di deposito
60	F3.15	645729.00	4480751.00	T3	1.400,00	Montescaglioso (MT)	74	98	1	MONTESCAGLIOSO LOCALITÀ VETRANO, SNC Piano T	C/2	4	71	Magazzini e locali di deposito
61	F3.16	643222.00	4479832.00	T3	1.700,00	Montescaglioso (MT)	83	121	1	MONTESCAGLIOSO LOCALITÀ IMPERATORE, SNC Piano T	C/2	2	191	Magazzini e locali di deposito
							83	137	1	MONTESCAGLIOSO LOCALITÀ IMPERATORE, SNC Piano T	A/2	1	7 vani	Abitazioni di tipo civile

ID	ID Immobile	Coordinate UTM-WGS84 33N		WTG vicine		Dati catastali								
		X (Est)	Y (Nord)	N° WTG	Distanza	Comune	Foglio	Particella	Sub	Indirizzo	Qualità/ Categoria	Classe	Consistenza - mq/vani -	Specifica categoria
62	F3.17	643078.00	4479986.00	T3	1.700,00	Montescaglioso (MT)	83	138	1 2	MONTESCAGLIOSO LOCALITÀ IMPERATORE, SNC Piano T	A/3 C/2	1 5	4,5 vani 35	Abitazioni di tipo economico Magazzini e locali di deposito
63	F3.18	643154.00	4480162.00	T3	1.524,00	Montescaglioso (MT)	83	111	2-3 4-5-6	MONTESCAGLIOSO LOCALITÀ IMPERATORE, SNC Piano T	A/3 C/2	1 4	5,5+4 vani 73+70+85	Abitazioni di tipo economico Magazzini e locali di deposito
64	F4.1	642734.00	4481133.00	T4	149,00	Montescaglioso (MT)	70	312	1	MONTESCAGLIOSO LOCALITÀ IMPERATORE, SNC Piano T	C/2	5	20	Magazzini e locali di deposito
								313	1	MONTESCAGLIOSO LOCALITÀ IMPERATORE, SNC Piano T	C/2	5	18	Magazzini e locali di deposito
				T5	558,00			315	1	MONTESCAGLIOSO LOCALITÀ IMPERATORE, SNC Piano T	C/2	5	24	Magazzini e locali di deposito
								316	1	MONTESCAGLIOSO LOCALITÀ IMPERATORE, SNC Piano T	C/2	5	40	Magazzini e locali di deposito
65	F4.2	642819.00	4481069.00	T4	197,00	Montescaglioso (MT)	70	301	1	MONTESCAGLIOSO LOCALITÀ IMPERATORE, SNC Piano T	C/2	1	72	Magazzini e locali di deposito
				T5	596,00									
66	F4.3	642965.00	4480905.00	T4	399,00	Montescaglioso (MT)	70	309	1	MONTESCAGLIOSO LOCALITÀ IMPERATORE, SNC Piano T	A/4	4	4,5 vani	Abitazioni di tipo popolare
				T5	684,00									
67	F4.4	642922.00	4480834.00	T4	449,00	Montescaglioso (MT)	70	310	1	MONTESCAGLIOSO LOCALITÀ IMPERATORE, SNC Piano T	F/2			Unità collabente
				T5	634,00									
68	F4.5	642277.00	4481351.00	T4	525,00	Montescaglioso (MT)	70	340	1	MONTESCAGLIOSO LOCALITÀ IMPERATORE, SN Piano T	C/2	4	70	Magazzini e locali di deposito
				T5	557,00			341	1		C/2	4	80	Magazzini e locali di deposito
69	F4.6	642004.00	4481376.00	T4	799,00	Montescaglioso (MT)	70	185	1-2-3	MONTESCAGLIOSO LOCALITÀ IMPERATORE, SNC Piano T	C/2	3-4-3	41-73-35	Magazzini e locali di deposito
				T5	645,00									
70	F4.7	641931.00	4481425.00	T4	880,00	Montescaglioso (MT)	70	323	1	MONTESCAGLIOSO LOCALITÀ IMPERATORE, SNC Piano T	F/2			Unità collabente
				T5	722,00									
71	F4.8	641734.00	4481549.00	T4	1.100,00	Montescaglioso (MT)	70	319		MONTESCAGLIOSO LOCALITÀ IMPERATORE, SNC Piano T-1	A/2	1	6 vani	Abitazioni di tipo civile
				T5	934,00									

ID	ID Immobile	Coordinate UTM-WGS84 33N		WTG vicine		Dati catastali								
		X (Est)	Y (Nord)	N° WTG	Distanza	Comune	Foglio	Particella	Sub	Indirizzo	Qualità/ Categoria	Classe	Consistenza - mq/vani -	Specifica categoria
72	F4.9	641718.00	4481570.00	T4	1.121,00	Montescaglioso (MT)	70	320		MONTESCAGLIOSO LOCALITÀ IMPERATORE, SNC Piano T	C/2	2	227	Magazzini e locali di deposito
				T5	961,00									
73	F4.10	641525.00	4481618.00	T4	1.320,00	Montescaglioso (MT)	70	293	1	MONTESCAGLIOSO LOCALITÀ IMPERATORE, SNC Piano T	A/3	1	3 vani	Abitazioni di tipo economico
				T5	1.121,00				4		D/10			Fabbricati per funzioni produttive connesse alle attività agricole
74	F4.11	642234.00	4481845.00	T4	804,00	Montescaglioso (MT)	70	286	1	MONTESCAGLIOSO LOCALITÀ IMPERATORE, SNC Piano T	C/2	5	30	Magazzini e locali di deposito
									2-3-4-5-6		A/4	4	1,5+1,5+1,5+ 1,5+1,5	Abitazioni di tipo popolare
				T5	1.048,00			285	1-2		C/2	5	48+34	Magazzini e locali di deposito
									3		A/4	4	2 Vani	Abitazioni di tipo popolare
								284			A/3	1	7 vani	Abitazioni di tipo economico
75	F4.12	641948.00	4482029.00	T4	1.143,00	Montescaglioso (MT)	70	305	1	MONTESCAGLIOSO LOCALITÀ IMPERATORE, SNC Piano T	D/10			Fabbricati per funzioni produttive connesse alle attività agricole
				T5	1.279,00				2		F/2			Unità collabente
76	F4.13	643288.00	4481669.00	T4	632,00	Montescaglioso (MT)	71	319	1	MONTESCAGLIOSO LOCALITÀ SAN VITO, SN Piano T	C/2	5	72	Magazzini e locali di deposito
								320	1	MONTESCAGLIOSO LOCALITÀ SAN VITO, SN Piano T	C/2	5	25	Magazzini e locali di deposito
				T2	880,00				2-3-4		F/3			Unità in corso di costruzione
								321	1	MONTESCAGLIOSO LOCALITÀ SAN VITO, SN Piano T	F/3			Unità in corso di costruzione
77	F4.14	643192.00	4481757.00	T4	627,00	Montescaglioso (MT)	71	355	1	MONTESCAGLIOSO LOCALITÀ SAN VITO, SNC Piano T	F/2			Unità collabente
				T2	950,00									
78	F4.15	642916.00	4482131.00	T4	876,00	Montescaglioso (MT)	71	279	1	MONTESCAGLIOSO LOCALITÀ SAN VITO, Piano T-S1	D/10			Fabbricati per funzioni produttive connesse alle attività agricole
				T2	1.216,00									

ID	ID Immobile	Coordinate UTM-WGS84 33N		WTG vicine		Dati catastali									
		X (Est)	Y (Nord)	N° WTG	Distanza	Comune	Foglio	Particella	Sub	Indirizzo	Qualità/ Categoria	Classe	Consistenza - mq/vani -	Specifica categoria
79	F4.16	642612.00	4482521.00	T4	1327	Montescaglioso (MT)	71	5	1-6-7	MONTESCAGLIOSO LOCALITÀ SAN VITO, SNC Piano T-S1	C/2	5-5-5	35+15+30	Magazzini e locali di deposito
									2-14	MONTESCAGLIOSO LOCALITÀ SAN VITO, SN Piano T-1 - 2	A/3	3-1	6+5,5 Vani	Abitazioni di tipo economico
									3	MONTESCAGLIOSO LOCALITÀ SAN VITO, SN Piano S1-T	D/10			Fabbricati per funzioni produttive connesse alle attività agricole
									9	MONTESCAGLIOSO LOCALITÀ SAN VITO, SNC Piano T-1	A/4	5	2 Vani	Abitazioni di tipo popolare
								343	2	MONTESCAGLIOSO LOCALITÀ SAN VITO, SN Piano T-1 - 2	A/3	3	6 Vani	Abitazioni di tipo economico
									3	MONTESCAGLIOSO LOCALITÀ SAN VITO, SN Piano S1-T	D/10			Fabbricati per funzioni produttive connesse alle attività agricole
								303	1	MONTESCAGLIOSO LOCALITÀ SAN VITO, Piano T-1	D/10			Fabbricati per funzioni produttive connesse alle attività agricole
								307	1	MONTESCAGLIOSO LOCALITÀ SAN VITO, Piano T	D/1			Opificio
								305	1	MONTESCAGLIOSO LOCALITÀ SAN VITO, Piano T	D/10			Fabbricati per funzioni produttive connesse alle attività agricole
								317		MONTESCAGLIOSO LOCALITÀ SAN VITO, SNC Piano T	A/3	1	1,5 Vani	Abitazioni di tipo economico
				T2	1.640,00			342	1	MONTESCAGLIOSO LOCALITÀ SAN VITO, Piano T	D/10			Fabbricati per funzioni produttive connesse alle attività agricole
								344	1	MONTESCAGLIOSO LOCALITÀ SAN VITO, Piano T	F/2			Unità collabente
								345	1	MONTESCAGLIOSO LOCALITÀ SAN VITO, SN Piano T	F/2			Unità collabente
								117			FABB DIRUTO		77	Fabbricato diruto
								346	1	MONTESCAGLIOSO LOCALITÀ SAN VITO, SNC Piano T	F/2			Unità collabente
								27			FABB DIRUTO		40	Fabbricato diruto
								347	1	MONTESCAGLIOSO LOCALITÀ SAN VITO, SNC Piano T	F/2			Unità collabente
								116			FABB DIRUTO		40	Fabbricato diruto
							67	1030			Ente Urbano			
80	F5.1	641973.00	4480690.00	T5	329,00	Montescaglioso (MT)	70	294	1	MONTESCAGLIOSO LOCALITÀ IMPERATORE, SNC Piano T	C/2	2	385	Magazzini e locali di deposito
				T6	382,00									

ID	ID Immobile	Coordinate UTM-WGS84 33N		WTG vicine		Dati catastali								
		X (Est)	Y (Nord)	N° WTG	Distanza	Comune	Foglio	Particella	Sub	Indirizzo	Qualità/ Categoria	Classe	Consistenza - mq/vani -	Specifica categoria
81	F5.2	642506.00	4480333.00	T5	507,00	Montescaglioso (MT)	70	317	1	MONTESCAGLIOSO LOCALITÀ IMPERATORE, SNC Piano T	F/2			Unità collabente
				T6	858,00			365	1		F/2			Unità collabente
82	F5.3	642222.00	4480352.00	T5	441,00	Montescaglioso (MT)	70	321	1-2	MONTESCAGLIOSO LOCALITÀ IMPERATORE, SNC Piano T	D/10			Fabbricati per funzioni produttive connesse alle attività agricole
				T6	575,00									
83	F6.1	641271.00	4480697.00	T5	1.022,00	Montescaglioso (MT)	70	307			C/2			Gruppo di fabbricati non registrati
				T6	443,00									
84	F6.2	641316.00	4480412.00	T6	349,00	Montescaglioso (MT)	70	344			NR			Non registrato in catasto
				T5	1.045,00									
85	F6.3	641454.00	4480250.00	T6	305,00	Montescaglioso (MT)	83	144	1	MONTESCAGLIOSO LOCALITÀ IMPERATORE, SNC Piano T	C/2	3	35	Magazzini e locali di deposito
				T5	995,00									
86	F6.4	641785.00	4480056.00	T6	439,00	Montescaglioso (MT)	83	74			FABB RURALE		158	Fabbricato rurale
				T5	894,00									
87	F6.5	640869.00	4480262.00	T6	816,00	Montescaglioso (MT)	83	141	2	MONTESCAGLIOSO LOCALITÀ IMPERATORE, SNC Piano T	A/2	1	8,5 Vani	Abitazioni di tipo civile
				T7	1.115,00				3	MONTESCAGLIOSO LOCALITÀ IMPERATORE, SNC Piano S1	D/10			Fabbricati per funzioni produttive connesse alle attività agricole
									4	MONTESCAGLIOSO LOCALITÀ IMPERATORE, SNC Piano 1	F/3			Unità in corso di costruzione
88	F6.6	640877.00	4480198.00	T6	813,00	Montescaglioso (MT)	83	129	2	MONTESCAGLIOSO LOCALITÀ IMPERATORE, SC Piano T	D/10			Fabbricati per funzioni produttive connesse alle attività agricole
				T7	1.144,00									
89	F6.7	640943.00	4480180.00	T6	756,00	Montescaglioso (MT)	83	134	2	MONTESCAGLIOSO LOCALITÀ IMPERATORE, SC Piano T	D/10			Fabbricati per funzioni produttive connesse alle attività agricole
				T7	1.169,00									
90	F6.8	640955.00	4480008.00	T6	840,00	Montescaglioso (MT)	83	132	1	MONTESCAGLIOSO LOCALITÀ IMPERATORE, SNC	D/1			Opificio
				T7	1.374,00									
91	F6.9	641522.00	4479425.00	T6	1.060,00	Bernalda (MT)	1	315			FABB RURALE		67	Fabbricato rurale
				T5	1.566,00									

ID	ID Immobile	Coordinate UTM-WGS84 33N		WTG vicine		Dati catastali								
		X (Est)	Y (Nord)	N° WTG	Distanza	Comune	Foglio	Particella	Sub	Indirizzo	Qualità/ Categoria	Classe	Consistenza - mq/vani -	Specifica categoria
92	F6.10	641537.00	4479330.00	T6	1.149,00	Bernalda (MT)	1	279	4	BERNALDA CONTRADA GAUDELLO, Piano T - S1	A/4	2	3,5 vani	Abitazioni di tipo popolare
				T5	1.639,00									
93	F6.11	641737.00	4479274.00	T6	1.199,00	Bernalda (MT)	1	347		BERNALDA CONTRADA GAUDELLO, Piano T	F/2			Unità collabente
				T5	1.614,00									
94	F6.12	641674.00	4479230.00	T6	1.244,00	Bernalda (MT)	1	339		BERNALDA CONTRADA GAUDELLO, Piano T	A/3	1	4,5 vani	Abitazioni di tipo economico
				T5	1.678,00									
95	F6.13	641647.00	4479169.00	T6	1.295,00	Bernalda (MT)	1	340			NR			Gruppo di fabbricati non registrati
96	F6.14	641939.00	4479325.00	T6	1.180,00	Montescaglioso (MT)	83	101			FABB RURALE		351	Fabbricato rurale
				T5	1.504,00									
97	F6.15	642307.00	4478924.00	T6	1.675,00	Montescaglioso (MT)	83	146	1	MONTESCAGLIOSO LOCALITÀ IMPERATORE, SNC Piano T	C/2	2	218	Magazzini e locali di deposito
98	F6.16	641252.00	4479351.00	T6	1.197,00	Bernalda (MT)	1	321			FABB RURALE		165	Fabbricato rurale
99	F6.17	641247.00	4479217.00	T6	1.327,00	Bernalda (MT)	1	367	1	BERNALDA CONTRADA GAUDELLO, Piano T	C/2	2	41	Magazzini e locali di deposito
100	F6.18	641018.00	4479250.00	T6	1.381,00	Bernalda (MT)	1	342	1	BERNALDA CONTRADA GAUDELLO, Piano T	C/2	2	31	Magazzini e locali di deposito
101	F6.19	641456.00	4478918.00	T6	1.571,00	Bernalda (MT)	1	280	2	BERNALDA CONTRADA GAUDELLO, SNC Piano T	C/2	1	69	Magazzini e locali di deposito
102	F6.20	641509.00	4478922.00	T6	1.559,00	Bernalda (MT)	1	25	4	BERNALDA CONTRADA GAUDELLO, SNC Piano T	D/10			Fabbricati per funzioni produttive connesse alle attività agricole
103	F6.21	641225.00	4478870.00	T6	1.658,00	Bernalda (MT)	1	343						
104	F7.1	640289.00	4481701.00	T7	445,00	Montescaglioso (MT)	69	139	2	MONTESCAGLIOSO LOCALITÀ CASA FEDERICI, SNC Piano T	D/10			Fabbricati per funzioni produttive connesse alle attività agricole
									3-4	MONTESCAGLIOSO LOCALITÀ CASA FEDERICI, SNC Piano T-1	F/2			Unità collabente

ID	ID Immobile	Coordinate UTM-WGS84 33N		WTG vicine		Dati catastali								
		X (Est)	Y (Nord)	N° WTG	Distanza	Comune	Foglio	Particella	Sub	Indirizzo	Qualità/ Categoria	Classe	Consistenza - mq/vani -	Specifica categoria
105	F7.2	639471.00	4481864.00	T7	1.175,00	Montescaglioso (MT)	69	134	4	MONTESCAGLIOSO LOCALITÀ CASA FEDERICI, SNC Piano S1	C/2	4	78	Magazzini e locali di deposito
									5-6	MONTESCAGLIOSO LOCALITÀ CASA FEDERICI, SNC Piano 1	A4	6	4,5+4,5 Vani	Abitazioni di tipo popolare
									7	MONTESCAGLIOSO LOCALITÀ CASA FEDERICI, SNC Piano T	D/10			Fabbricati per funzioni produttive connesse alle attività agricole
106	F7.3	639435.00	4481897.00	T7	1.219,00	Montescaglioso (MT)	69	135		MONTESCAGLIOSO LOCALITÀ CASA FEDERICI, SNC Piano T	D/10			Fabbricati per funzioni produttive connesse alle attività agricole
								149		MONTESCAGLIOSO LOCALITÀ CASA FEDERICI, SNC Piano T	F/2			Unità collabente
								150		MONTESCAGLIOSO LOCALITÀ CASA FEDERICI, SNC Piano T	F/2			Unità collabente
107	F7.4	639429.00	4481866.00	T7	1.216,00	Montescaglioso (MT)	69	148		MONTESCAGLIOSO LOCALITÀ IMPERATORE, SNC Piano T	F/2			Unità collabente
108	F7.5	639379.00	4481888.00	T7	1.268,00	Montescaglioso (MT)	69	147		MONTESCAGLIOSO LOCALITÀ IMPERATORE, SNC Piano T	F/2			Unità collabente
109	F7.6	639461.00	4481649.00	T7	1.105,00	Montescaglioso (MT)	69	137	1	MONTESCAGLIOSO LOCALITÀ IMPERATORE, SNC Piano T	F/2			Unità collabente
110	F7.7	639742.00	4480011.00	T7	1.509,00	Montescaglioso (MT)	77	140	1	MONTESCAGLIOSO LOCALITÀ LUMELLA, SNC Piano T	A/4	4	3,5 Vani	7,7
111	F7.8	639590.00	4480123.00	T7	1.500,00	Montescaglioso (MT)	77	132			ENTE URBANO			ENTE URBANO
112	F7.9	639757.00	4479886.00	T7	1.610,00	Montescaglioso (MT)	77	134	1	MONTESCAGLIOSO LOCALITÀ LUMELLA, SNC Piano T	C/2	5	28	Magazzini e locali di deposito
113	F7.10	639759.00	4479880.00	T7	1.611,00	Montescaglioso (MT)	77	133	1	MONTESCAGLIOSO LOCALITÀ LUMELLA, SNC Piano T	C/2	5	52	Magazzini e locali di deposito

Dalla tabella precedente si rileva come fino ad una distanza di 1.700 m dalle posizioni delle WTGs, i fabbricati presenti, sono per lo più depositi saltuari di attrezzi agricoli o ruderi abbandonati.
In qualche raro caso, dalle analisi catastali e dai sopralluoghi effettuati in sito, sono stati riscontrati fabbricati di categoria A e D10, ma nessuno è risultato essere utilizzato come residenza abituale o con presenza fissa di operai (D10). Risultano pertanto rispettate le normative regionali per la tutela degli edifici circostanti l'impianto eolico.

Si allegano di seguito gli stralci catastali relativi al censimento degli edifici e fabbricati limitrofi all'area di impianto ed ai rispettivi aerogeneratori di progetto. Negli stralci catastali successivi l'area individuata dai cerchi ha raggio pari a 700 m e centro nella posizione delle WTGs.
Si allegano, altresì, le immagini delle strutture da ortofoto o a livello strada che rappresentano lo stato attuale delle strutture elencate nella tabella sopra riportata.

IDENTIFICATIVO FABBRICATO: F1.1 (Recettore n.7)

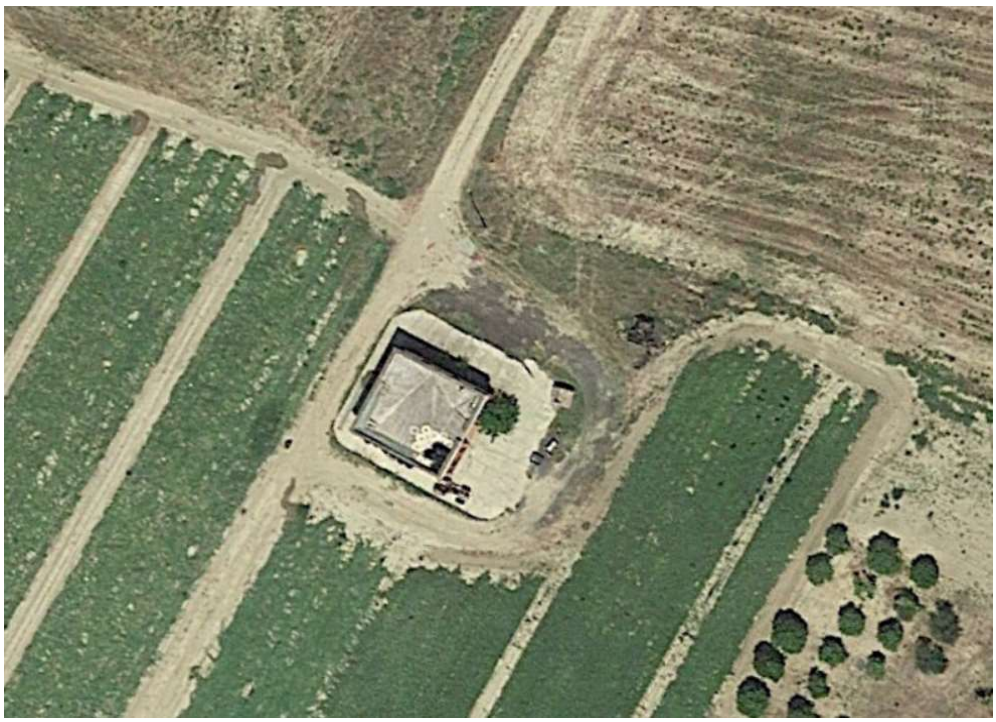
Regione	Basilicata
Provincia	Matera
Comune	Montescaglioso

Foglio	71
Particella	273
Cat. Catast.	A3

Distanza da WTG più prossima	630m da T1

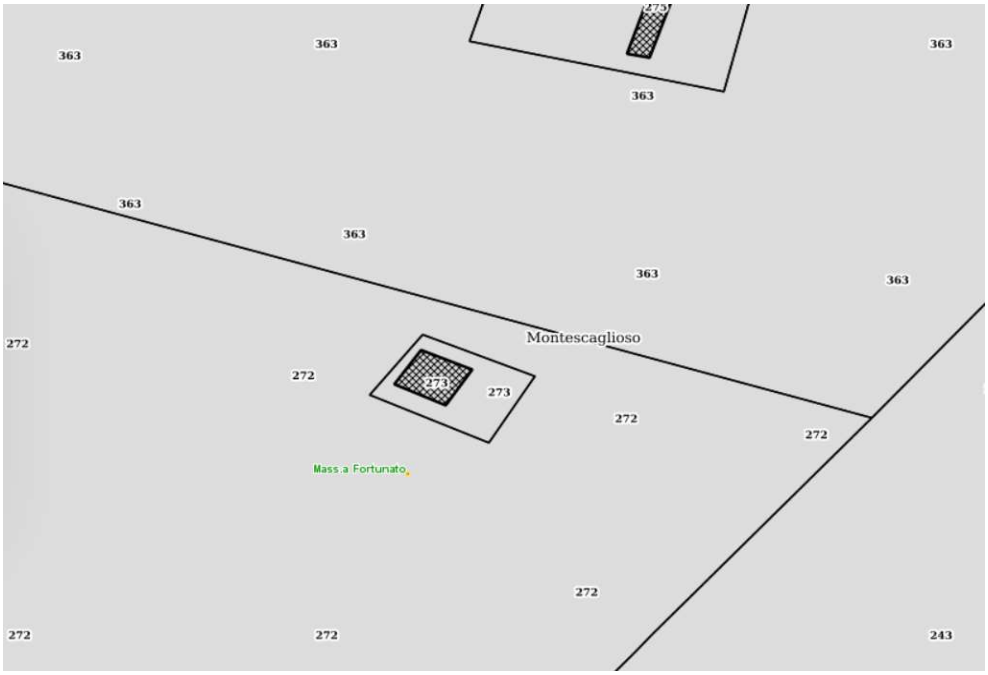
Coordinate UTM-WGS84	
E	644411
N	4483040
Z	48m

Immagine satellitare



Commenti

Situazione Catastale al 13.04.2021

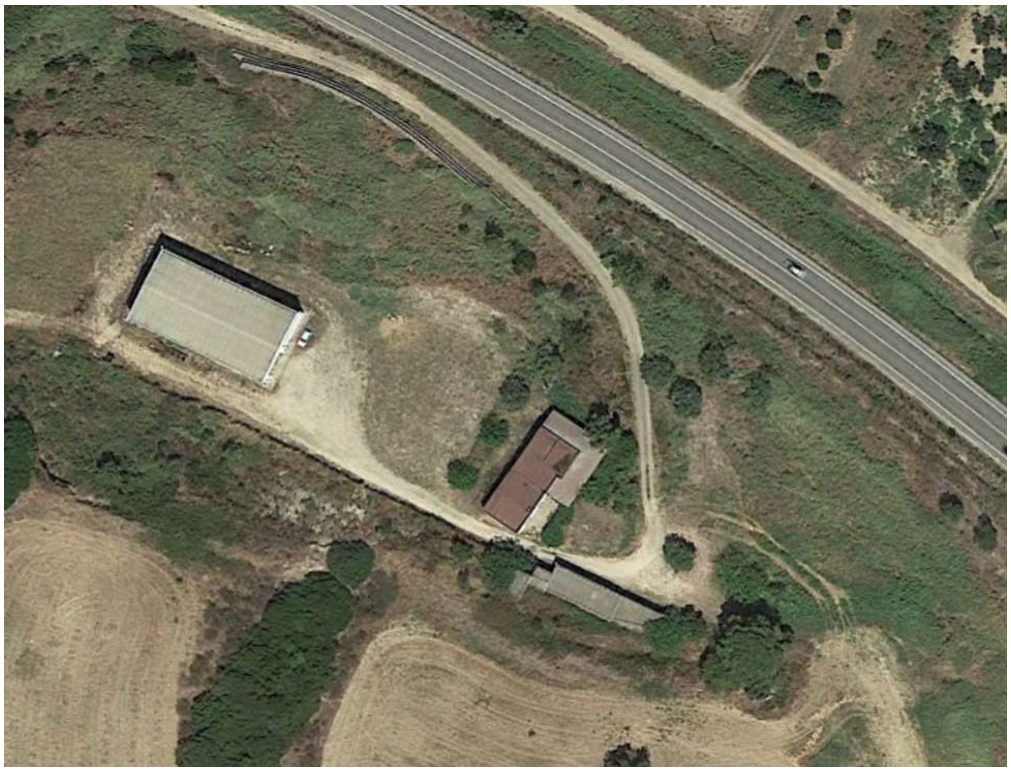


IDENTIFICATIVO FABBRICATO: F1.3 + F1.4 (Recettore n.8)

Regione	Basilicata
Provincia	Matera
Comune	Montescaglioso
Foglio	72
Particella	578
Cat. Catast.	A2
Distanza da WTG più prossima	672m da T1

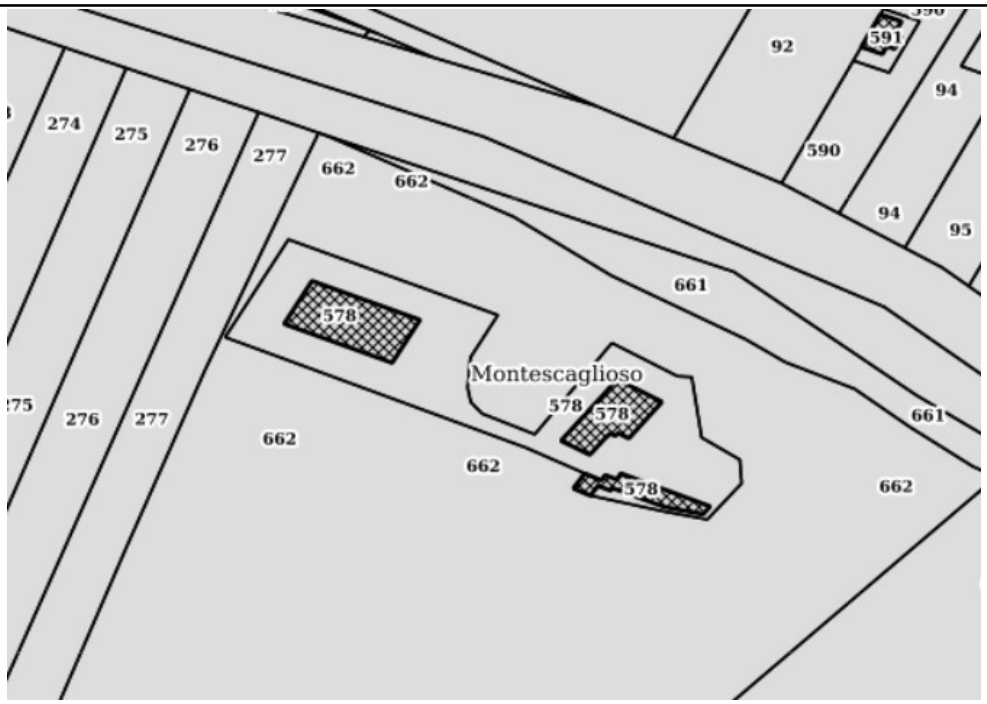
Coordinate UTM-WGS84	
E	645000
N	4483027
Z	55m

Immagine satellitare



Commenti

Situazione Catastale al 13.04.2021



IDENTIFICATIVO FABBRICATO: F1.5 (Recettore n.9)

Regione	Basilicata
Provincia	Matera
Comune	Montescaglioso

Foglio	72
Particella	418
Cat. Catast.	A3

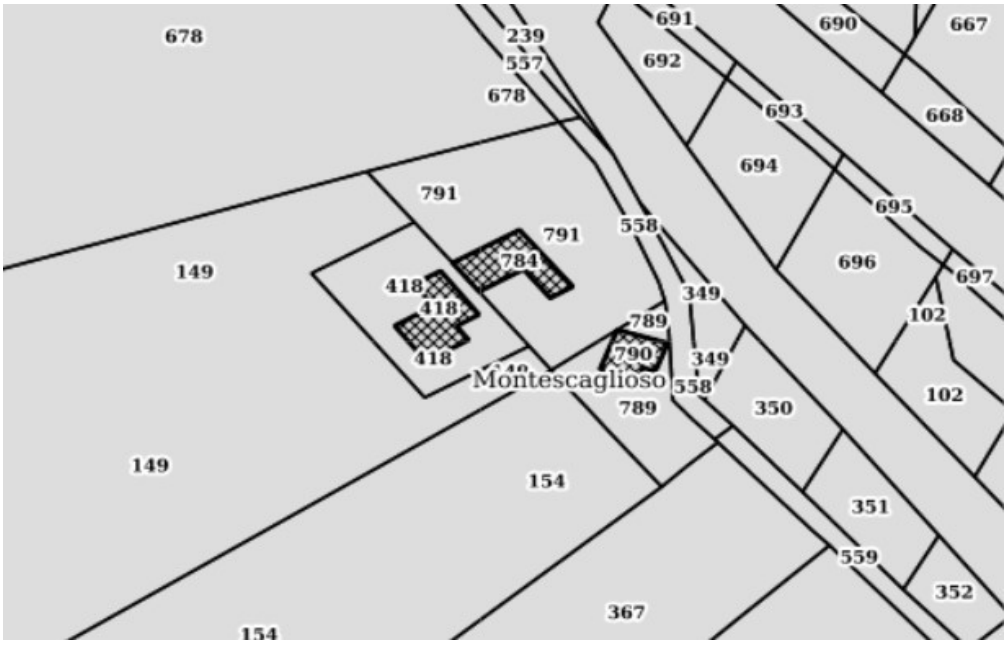
Distanza da WTG più prossima	640m da T1

Coordinate UTM-WGS84	
E	645169
N	4482811
Z	44m

Immagine satellitare

Commenti

Catastale



IDENTIFICATIVO FABBRICATO: F1.6 (Recettore n.9)

Regione	Basilicata
Provincia	Matera
Comune	Montescaglioso

Foglio	72
Particella	784
Cat. Catast.	D10

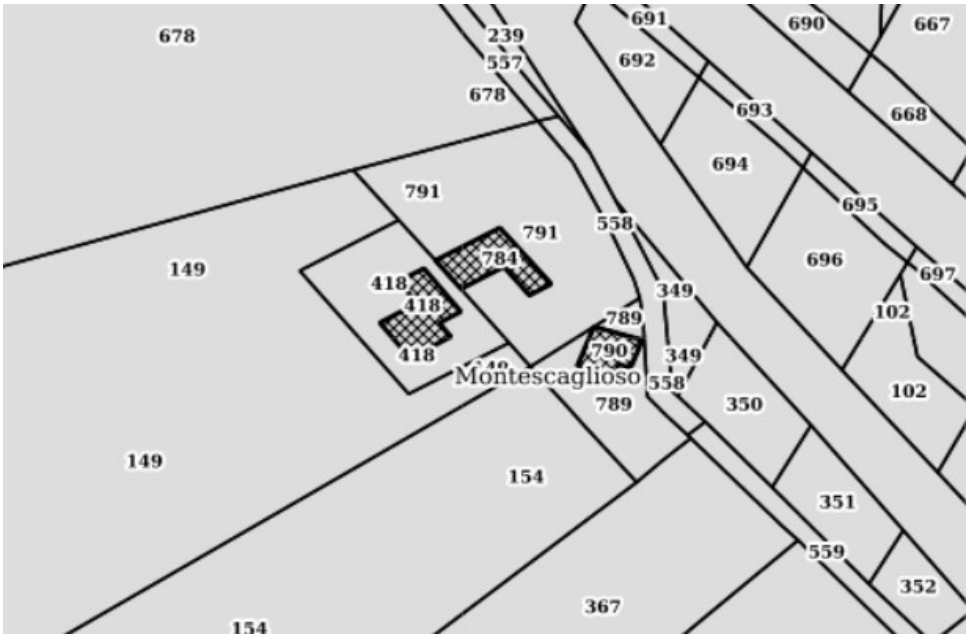
Distanza da WTG più prossima	670m da T1

Coordinate UTM-WGS84	
E	645188
N	4482833
Z	44m

Immagine satellitare

Commenti

Catastale



IDENTIFICATIVO FABBRICATO: F1.7 (Recettore n.9)

Regione	Basilicata
Provincia	Matera
Comune	Montescaglioso

Foglio	72
Particella	790
Cat. Catast.	A/3

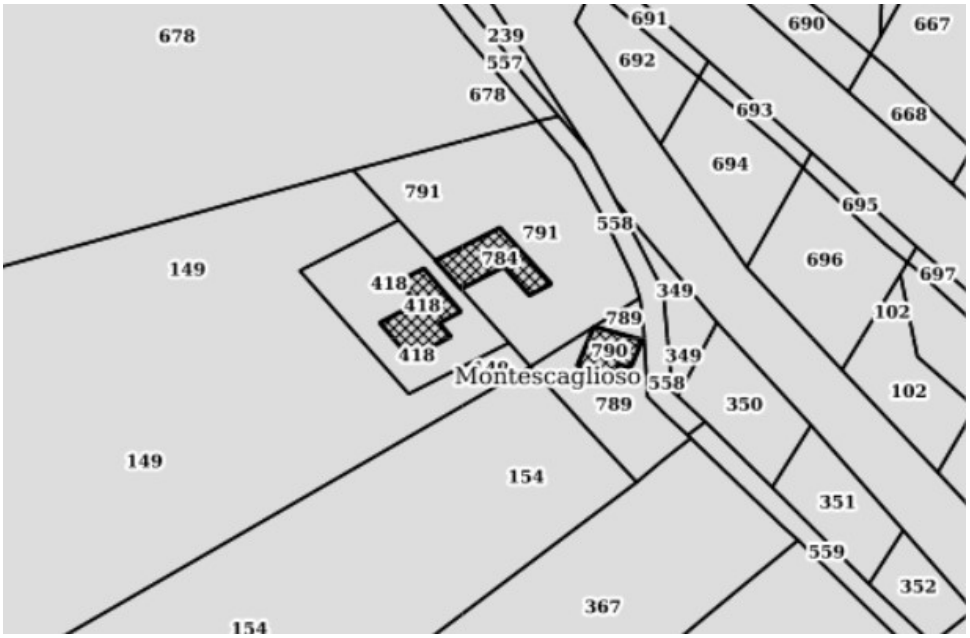
Distanza da WTG più prossima	676m da T1

Coordinate UTM-WGS84	
E	645214
N	4482807
Z	44m

Immagine satellitare

Commenti

Catastale



IDENTIFICATIVO FABBRICATO: F1.14 (Recettore n.11)

Regione	Basilicata
Provincia	Matera
Comune	Montescaglioso

Foglio	72
Particella	690
Cat. Catast.	D10

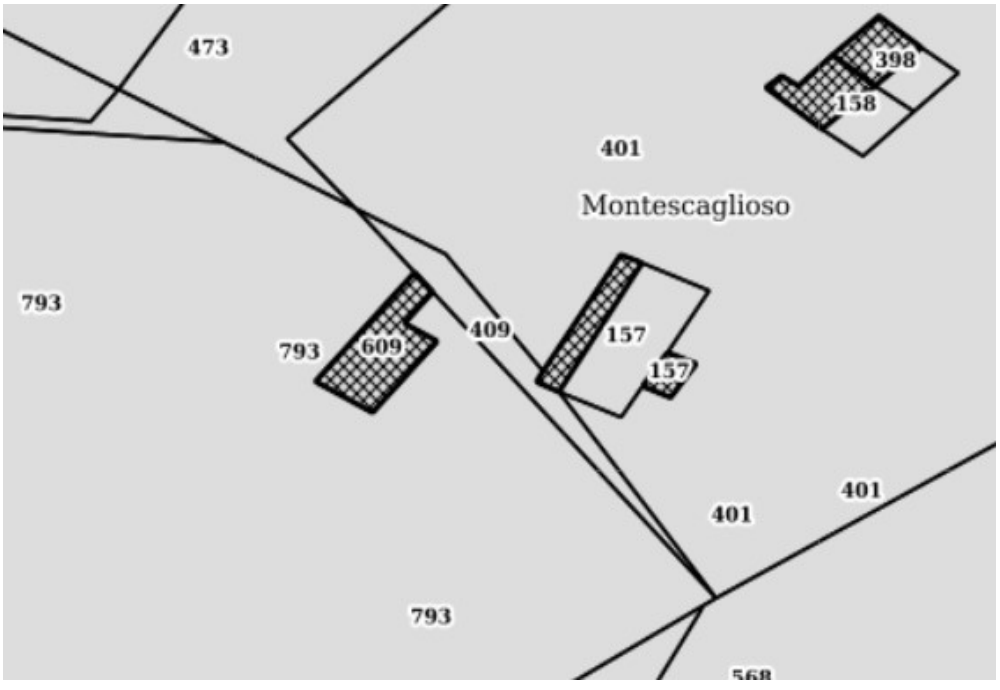
Distanza da WTG più prossima	688m da T1

Coordinate UTM-WGS84	
E	645219
N	4482080
Z	70m

Immagine satellitare

Commenti

Catastale



IDENTIFICATIVO FABBRICATO: F3.1 (Recettore n.13)

Regione	Basilicata
Provincia	Matera
Comune	Montescaglioso
Foglio	71
Particella	326
Cat. Catast.	D1+D10
Distanza da WTG più prossima	495m da T3

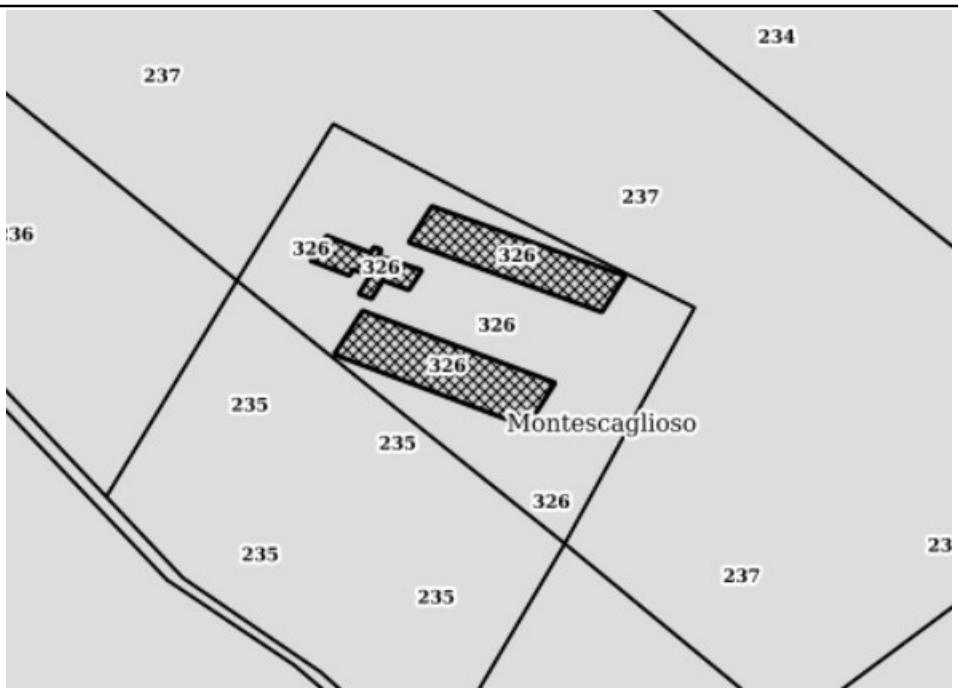
Coordinate UTM-WGS84	
E	643830
N	4480989
Z	164m

Fotografia fabbricato scattata in data 13/04/2021

Commenti

Capannoni a servizio dei terreni circostanti

Situazione Catastale al 13.04.2021



IDENTIFICATIVO FABBRICATO: F3.3 (Recettore n.14)

Regione	Basilicata
Provincia	Matera
Comune	Montescaglioso
Foglio	71
Particella	323
Cat. Catast.	A3+D10
Distanza da WTG più prossima	694m da T3
Coordinate UTM-WGS84	
E	643726
N	4480823
Z	167m

Fotografia fabbricato scattata in data 13/04/2021

Commenti

Catastale

IDENTIFICATIVO FABBRICATI: F3.2 - F3.4 - F3.5

Regione	Basilicata
Provincia	Matera
Comune	Montescaglioso
Foglio	71
Particelle	301-302-324-325-
Cat. Catast.	C2
Distanza da WTG più prossima	610m da T3

Coordinate UTM	
E	643797
N	4480818
Z	163m

Immagine satellitare

Commenti

Altri fabbricati nelle immediate vicinaze del Recettore n.14

Situazione Catastale al 13.04.2021

IDENTIFICATIVO FABBRICATI: F3.9

Regione	Basilicata
Provincia	Matera
Comune	Montescaglioso
Foglio	71
Particella	7
Cat. Catast.	Accatastato in catasto Terreni
Distanza da WTG più prossima	692m da T3

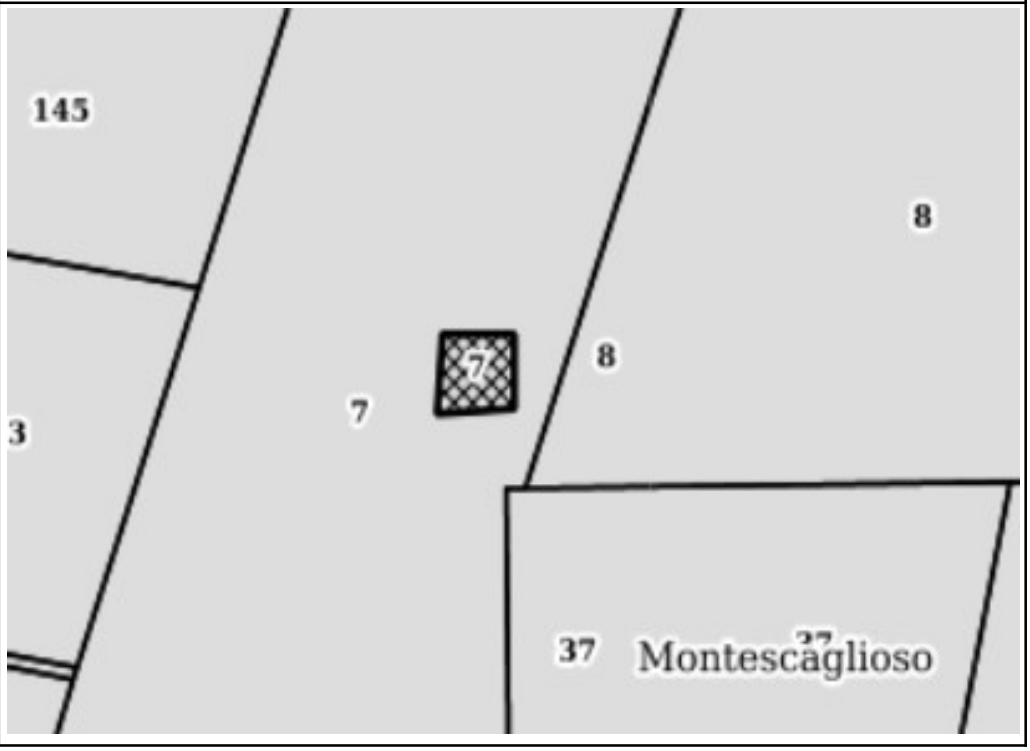
Coordinate UTM	
E	644620
N	4480432
Z	142m

Immagine satellitare

Commenti

Il fabbricato non risulta accatastato all'urbano sebbene evidenziato con una sagoma retinata.

Situazione Catastale al 13.04.2021



IDENTIFICATIVO FABBRICATI: F4.14

Regione	Basilicata
Provincia	Matera
Comune	Montescaglioso
Foglio	71
Particella	355
Cat. Catast.	F2
Distanza da WTG più prossima	627m da T4

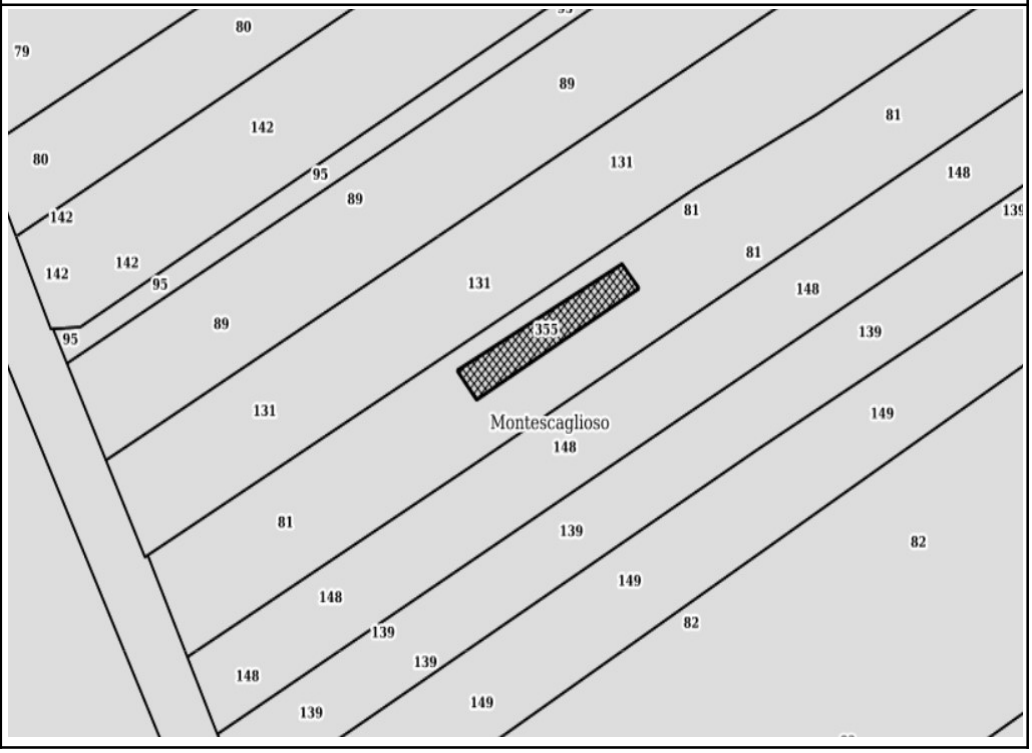
Coordinate UTM	
E	643192
N	4481757
Z	177m

Immagine stato fabbricato

Commenti

Il fabbricato versa in uno stato di totale abbandono

Situazione Catastale al 13.04.2021



IDENTIFICATIVO FABBRICATI: F4.13

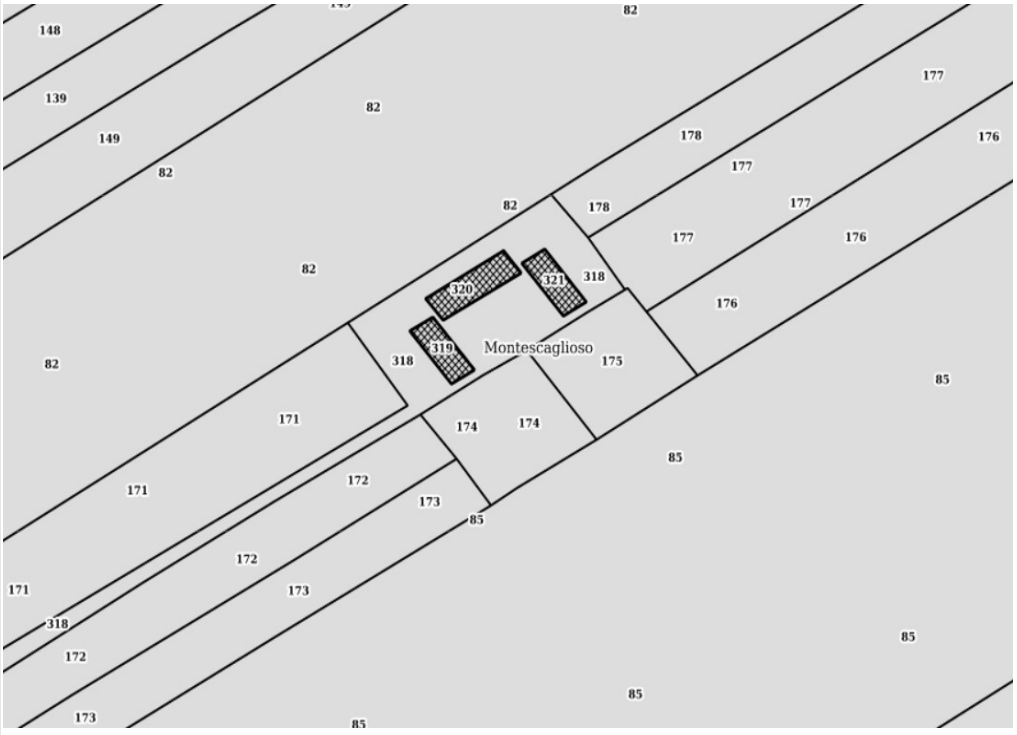
Regione	Basilicata
Provincia	Matera
Comune	Montescaglioso
Foglio	71
Particella	319-320-321
Cat. Catast.	C2
Distanza da WTG più prossima	632m da T4

Coordinate UTM	
E	643288
N	4481669
Z	177m

Immagine stato fabbricato

Commenti

Situazione Catastale al 13.04.2021



IDENTIFICATIVO FABBRICATI: F4.4

Regione	Basilicata
Provincia	Matera
Comune	Montescaglioso

Foglio	70
Particella	310
Cat. Catast.	F2

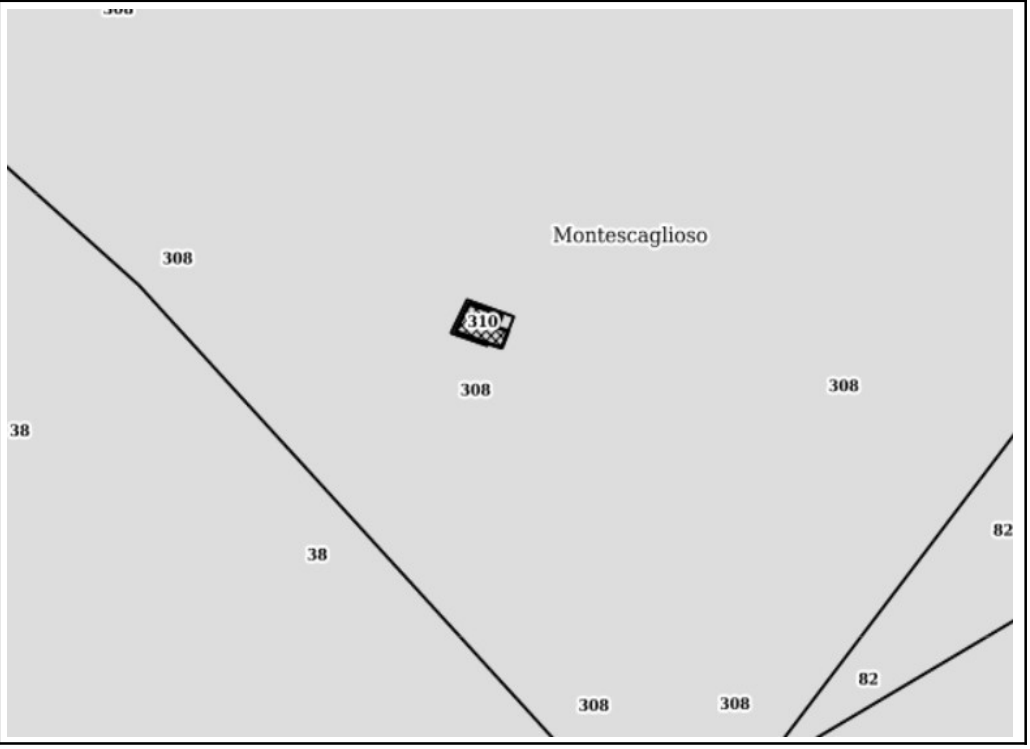
Distanza da WTG più prossima	449m da T4

Coordinate UTM	
E	642922
N	4480834
Z	174m

Immagine satellitare

Commenti

Situazione Catastale al 13.04.2021



IDENTIFICATIVO FABBRICATI: F4.2

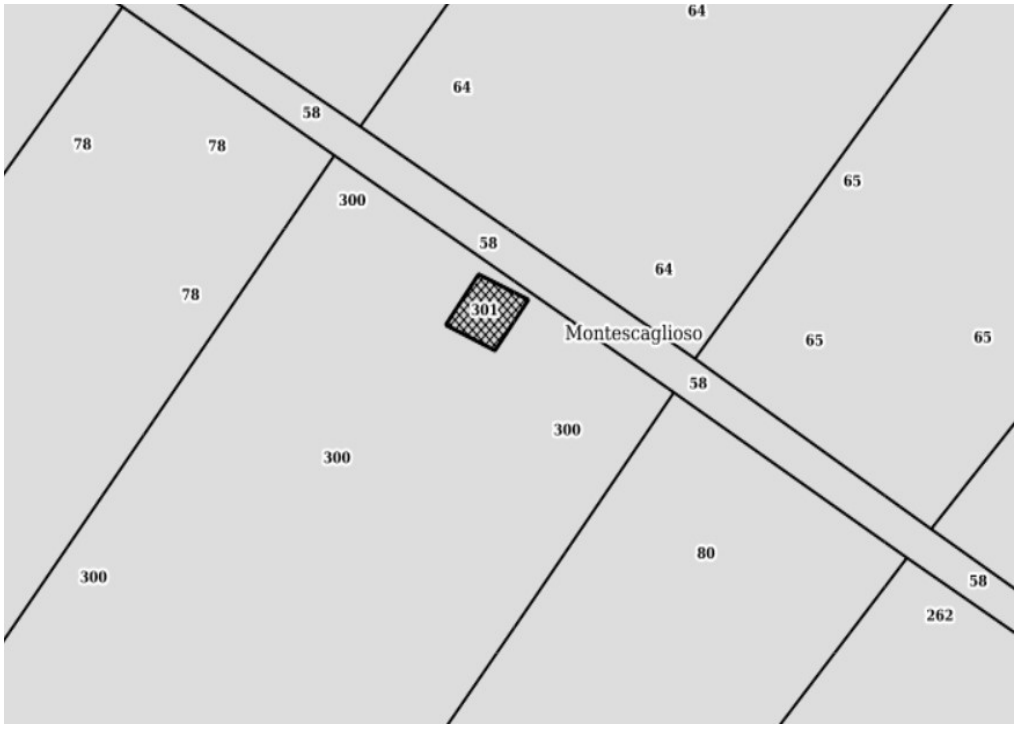
Regione	Basilicata
Provincia	Matera
Comune	Montescaglioso
Foglio	70
Particella	301
Cat. Catast.	C2
Distanza da WTG più prossima	197m da T4

Coordinate UTM	
E	642819
N	4481069
Z	177m

Immagine stato fabbricato

Commenti

Situazione Catastale al 13.04.2021



IDENTIFICATIVO FABBRICATI: F4.1

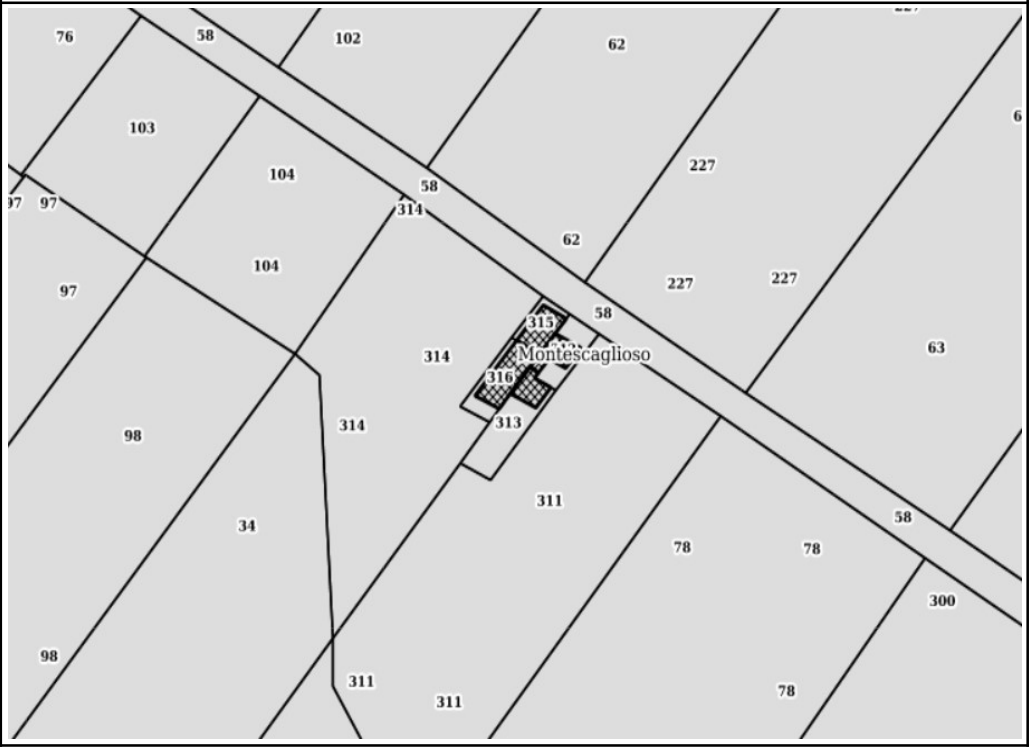
Regione	Basilicata
Provincia	Matera
Comune	Montescaglioso
Foglio	70
Particella	312-313-315-316
Cat. Catast.	C2
Distanza da WTG più prossima	149m da T4

Coordinate UTM	
E	642734
N	4481133
Z	179m

Immagine stato fabbricato

Commenti

Situazione Catastale al 13.04.2021



IDENTIFICATIVO FABBRICATO: F4.3 (Recettore n.41)

Regione	Basilicata
Provincia	Matera
Comune	Montescaglioso

Foglio	70
Particella	309
Cat. Catast.	A4

Distanza da WTG più prossima	391m da T4

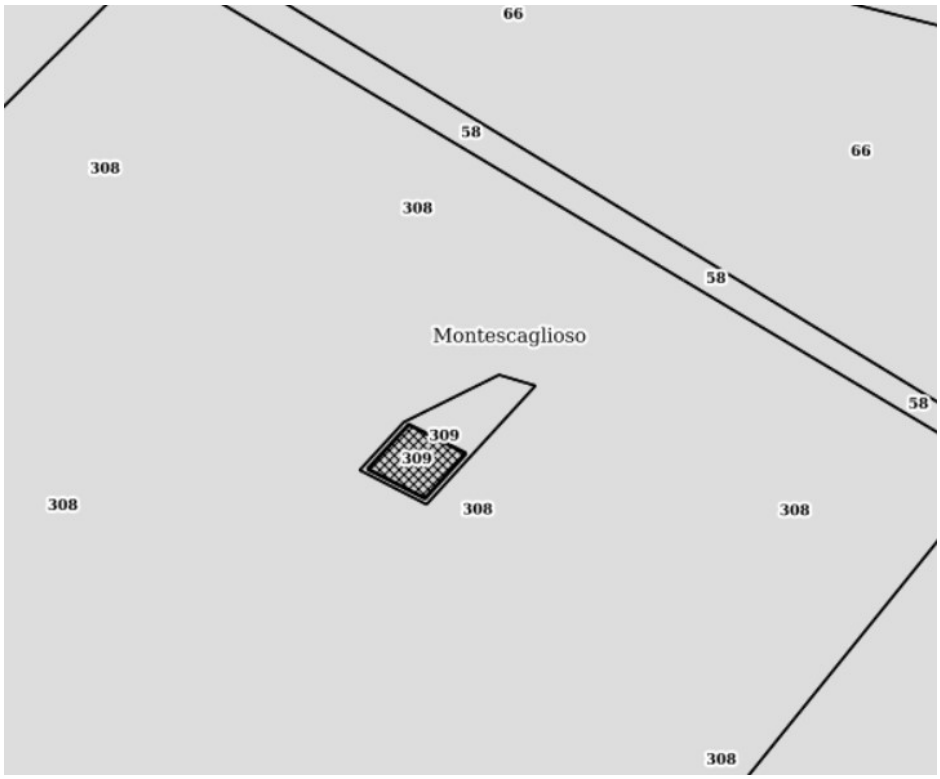
Coordinate UTM-WGS84	
E	642965
N	4480905
Z	174m

Fotografia fabbricato scattata in data 13/04/2021

Commenti

Il fabbricato è verosimilemente adibito a deposito di attrezzi e mezzi agricoli, si esclude la possibilità di eventuale residenza da parte del proprietario

Situazione Catastale al 13.04.2021



IDENTIFICATIVO FABBRICATI: F4.5

Regione	Basilicata
Provincia	Matera
Comune	Montescaglioso

Foglio	70
Particella	340-341
Cat. Catast.	C2

Distanza da WTG più prossima	525m da T4

Coordinate UTM	
E	642277
N	4481351
Z	186m

Immagine stato fabbricato

Commenti

Situazione Catastale al 13.04.2021

IDENTIFICATIVO FABBRICATI: F4.6

Regione	Basilicata
Provincia	Matera
Comune	Montescaglioso

Foglio	70
Particella	185
Cat. Catast.	C2

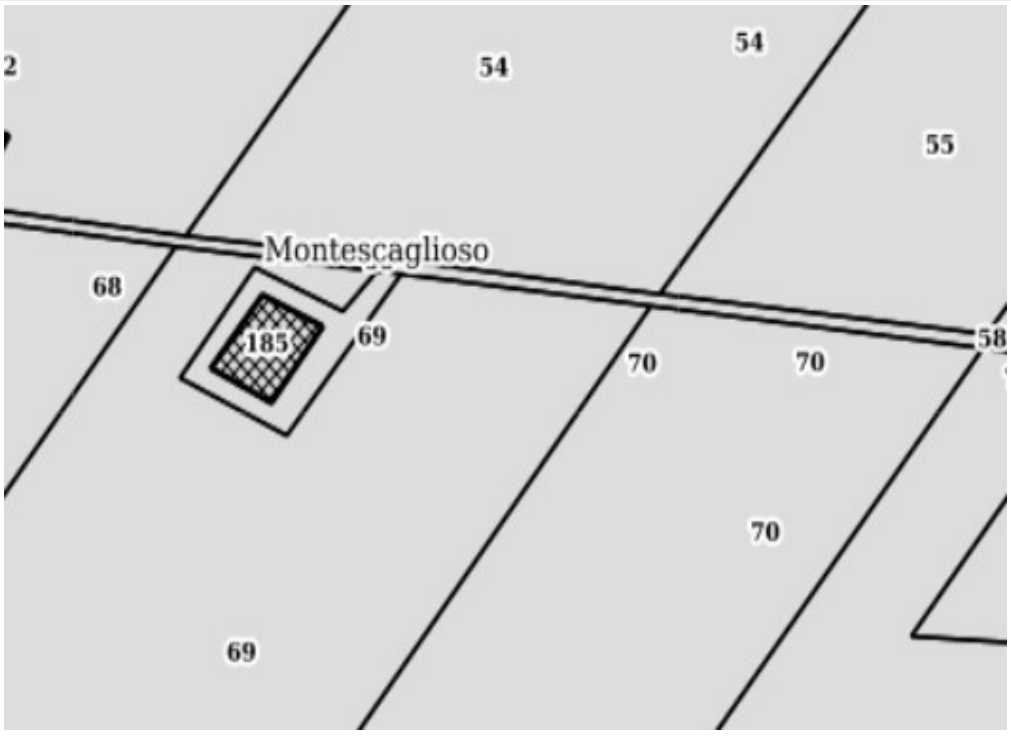
Distanza da WTG più prossima	645m da T5

Coordinate UTM	
E	642004
N	4481376
Z	195m

Immagine stato fabbricato

Commenti

Situazione Catastale al 13.04.2021



IDENTIFICATIVO FABBRICATI: F5.2

Regione	Basilicata
Provincia	Matera
Comune	Montescaglioso

Foglio	70
Particella	317-365
Cat. Catast.	F2

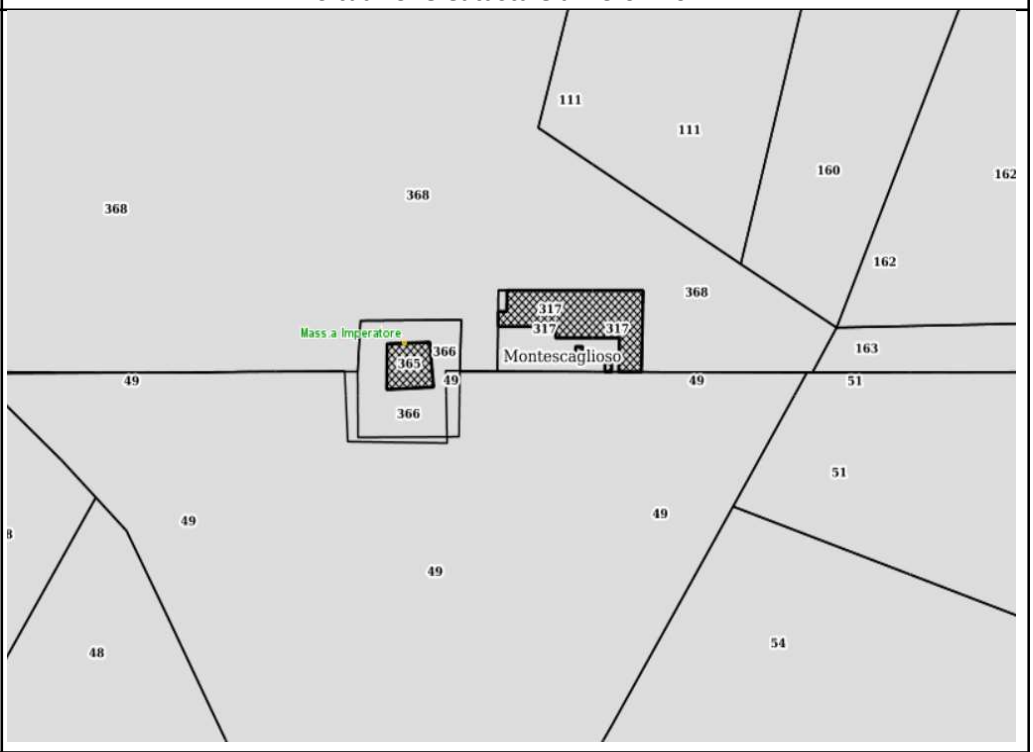
Distanza da WTG più prossima	507m da T5

Coordinate UTM	
E	642506
N	4480333
Z	180m

Immagine stato fabbricati

Commenti

Situazione Catastale al 13.04.2021



IDENTIFICATIVO FABBRICATI: F5.1

Regione	Basilicata
Provincia	Matera
Comune	Montescaglioso

Foglio	70
Particella	294
Cat. Catast.	C2

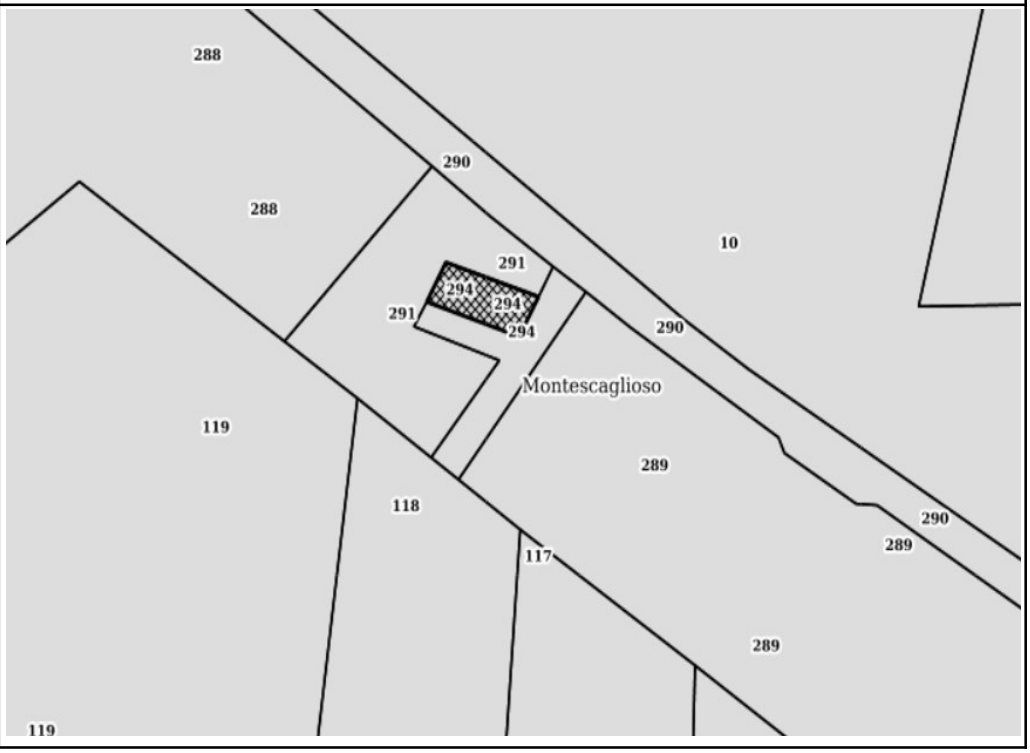
Distanza da WTG più prossima	329m da T5

Coordinate UTM	
E	641973
N	4480690
Z	189m

Immagine stato fabbricato

Commenti

Situazione Catastale al 13.04.2021



IDENTIFICATIVO FABBRICATO: F5.3 (Recettore n.21)

Regione	Basilicata
Provincia	Matera
Comune	Montescaglioso

Foglio	70
Particella	321
Cat. Catast.	D10

Distanza da WTG più prossima	435m da T5

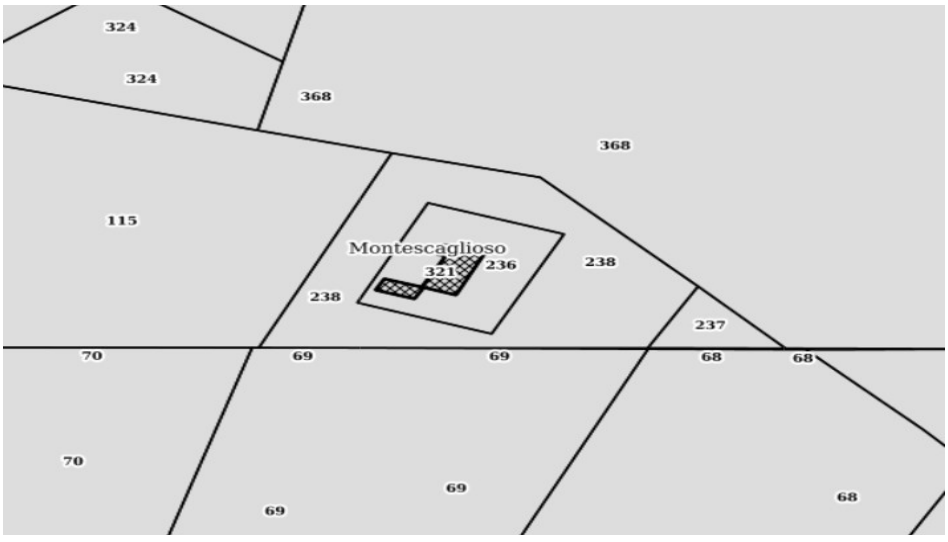
Coordinate UTM-WGS84	
E	642222
N	4480352
Z	182m

Fotografia fabbricato scattata in data 13/04/2021

Commenti

Fabbricato semi-abbandonato

Situazione Catastale al 13.04.2021



IDENTIFICATIVO FABBRICATI: F6.1

Regione	Basilicata
Provincia	Matera
Comune	Montescaglioso

Foglio	70
Particella	307
Cat. Catast.	C2

Distanza da WTG più prossima	443m da T6

Coordinate UTM	
E	641271
N	4480697
Z	210m

Immagine satellitare

Commenti

I fabbricati intorno alla vasca di raccolta acqua risultano non accatastati, solo sulla particella 306 vi è la presenza di un piccolo fabbricato accatastato in categoria C2

Situazione Catastale al 13.04.2021

IDENTIFICATIVO FABBRICATI: F6.2

Regione	Basilicata
Provincia	Matera
Comune	Montescaglioso

Foglio	70
Particella	344
Cat. Catast.	Non accatastato

Distanza da WTG più prossima	349m da T6

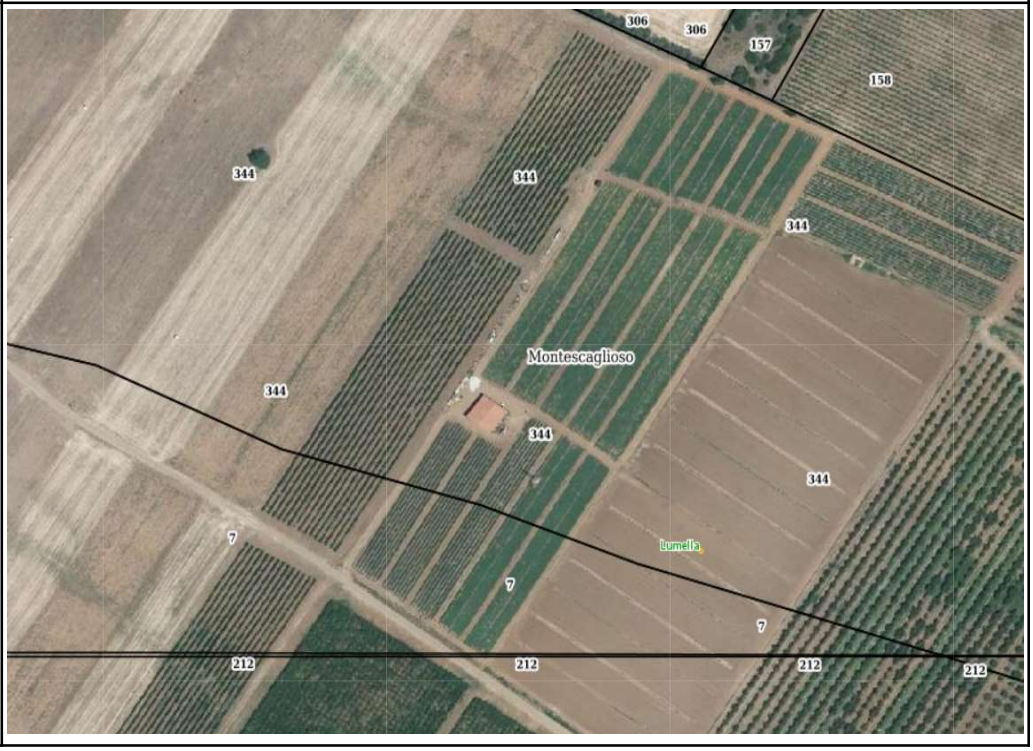
Coordinate UTM	
E	641316
N	4480412
Z	210m

Immagine satellitare

Commenti

Il fabbricato risulta non accatastato all'urbano e insite sulla particella 344 così come rappresenato nell'immagine soprapposta tra ortofoto e catastale

Situazione Catastale al 13.04.2021

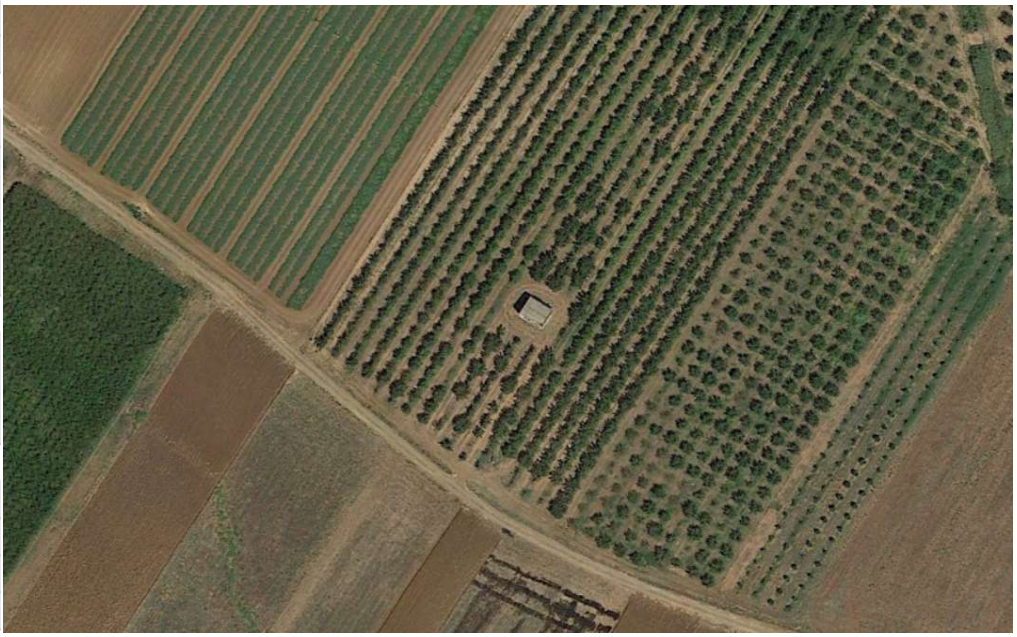


IDENTIFICATIVO FABBRICATI: F6.3

Regione	Basilicata
Provincia	Matera
Comune	Montescaglioso
Foglio	83
Particella	144
Cat. Catast.	C2
Distanza da WTG più prossima	305m da T6

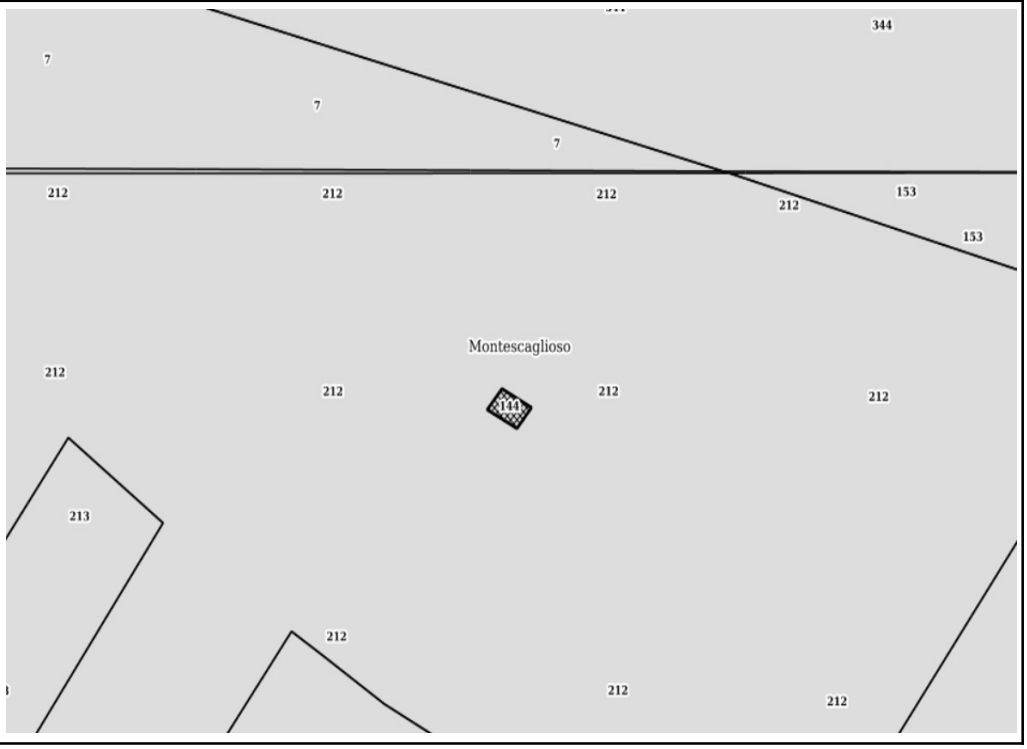
Coordinate UTM	
E	641454
N	4480250
Z	199m

Immagine satellitare



Commenti

Situazione Catastale al 13.04.2021

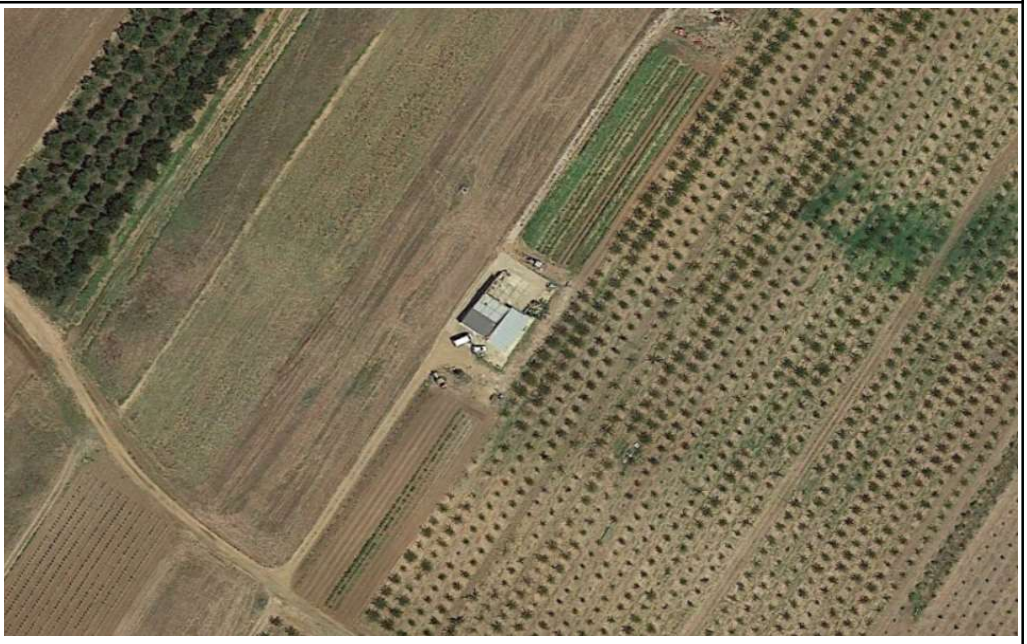


IDENTIFICATIVO FABBRICATI: F6.4

Regione	Basilicata
Provincia	Matera
Comune	Montescaglioso
Foglio	83
Particella	74
Cat. Catast.	Fabbr. Rur
Distanza da WTG più prossima	439m da T6

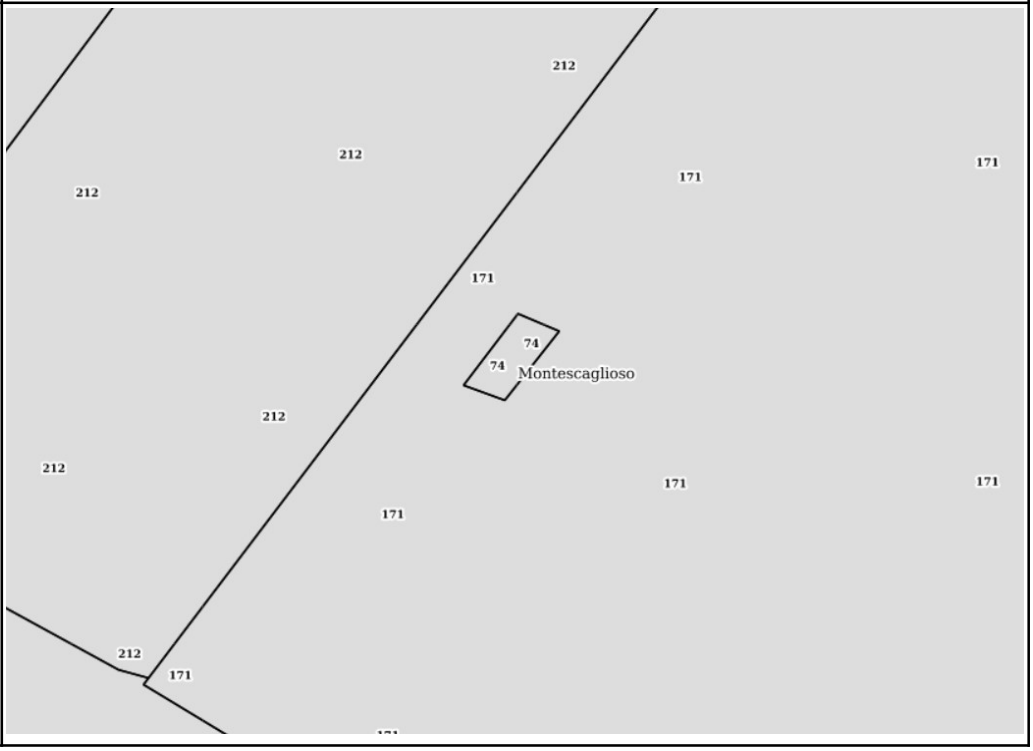
Coordinate UTM	
E	641785
N	4480056
Z	187m

Immagine satellitare



Commenti

Situazione Catastale al 13.04.2021



IDENTIFICATIVO FABBRICATO: F7.1 (Recettore n.2)

Regione	Basilicata
Provincia	Matera
Comune	Montescaglioso

Foglio	69
Particella	139
Cat. Catast.	D10

Distanza da WTG più prossima	439m da T7

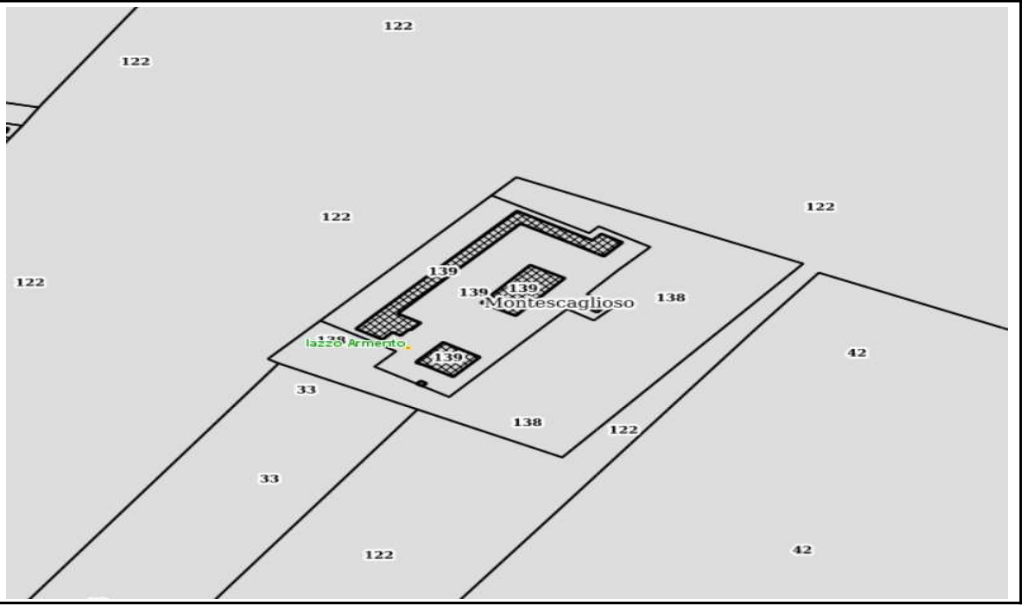
Coordinate UTM-WGS84	
E	640289
N	4481701
Z	233m

Fotografia fabbricato scattata in data 13/04/2021

Commenti

Le strutture risultano per la maggior parte diroccate con un capannone che funge da rimessa per i mezzi agricoli

Situazione Catastale al 13.04.2021



Developer Package
SG 6.0-170

Application of the Developer Package

The Developer Package serves the purpose of informing customers about the latest planned product development from Siemens Gamesa Renewable Energy A/S and its affiliates in the Siemens Gamesa group including Siemens Gamesa Renewable Energy S.A. and its subsidiaries (hereinafter "SGRE"). By sharing information about coming developments, SGRE can ensure that customers are provided with necessary information to make decisions.

Furthermore, the Developer Package can assist in guiding prospective customers with the indicated technical footprint of the SG 6.0-170 in cases where financial institutes, governing bodies, or permitting entities require product specific information in their decision processes.

All technical data contained in the Developer Package is subject to change owing to ongoing technical developments of the wind turbine. Consequently, SGRE and its affiliates reserve the right to change the below specifications without prior notice. Information contained within the Developer Package may not be treated separately or out of the context of the Developer Package.

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Developer Package
SG 6.0-170

Table of content

Introduction

The SG 6.0-170 is a new wind turbine of the next generation Siemens Gamesa Onshore Geared product platform called Siemens Gamesa 5.X, which builds on the Siemens Gamesa design and operational experience in the wind energy market.

With a new 83.5 m blade and an extensive tower portfolio including hub heights ranging from 100 m to 165 m, the SG 6.0-170 aims at becoming a new benchmark in the market for efficiency and profitability.

This Developer Package describes the turbine technical specifications and provides information for the main components and subsystems.

For further information, please contact your regional SGRE Sales Manager.

Technical Description

Rotor-Nacelle
The rotor is a three-bladed construction, mounted upwind of the tower. The power output is controlled by pitch and torque demand regulation. The rotor speed is variable and is designed to maximize the power output while maintaining loads and noise level.

The nacelle has been designed for safe access to all service points during scheduled service. In addition the nacelle has been designed for safe presence of service technicians in the nacelle during Service Test Runs with the wind turbine in full operation. This allows a high quality service of the wind turbine and provides optimum troubleshooting conditions.

Blades
Siemens Gamesa 5.X blades are made up of fiberglass infusion & carbon pultruded-molded components. The blade structure uses aerodynamic shells containing embedded spar-caps, bonded to two main epoxy-fiberglass-balsa/foam-core shear webs. The Siemens Gamesa 5.X blades use a blade design based on SGRE proprietary airfoils.

Rotor Hub
The rotor hub is cast in nodular cast iron and is fitted to the drive train low speed shaft with a flange connection. The hub is sufficiently large to provide room for service technicians during maintenance of blade roots and pitch bearings from inside the structure.

Drive train
The drive train is a 4-points suspension concept: main shaft with two main bearings and the gearbox with two torque arms assembled to the main frame.
The gearbox is in cantilever position; the gearbox planet carrier is assembled to the main shaft by means of a flange bolted joint and supports the gearbox.

Main Shaft
The low speed main shaft is forged and transfers the torque of the rotor to the gearbox and the bending moments to the bedframe via the main bearings and main bearing housings.

Main Bearings
The low speed shaft of the wind turbine is supported by two tapered roller bearings. The bearings are grease lubricated.

Gearbox
The gearbox is 3 stages high speed type (2 planetary + 1 parallel).

Generator
The generator is a doubly-fed asynchronous three phase generator with a wound rotor, connected to a frequency PWM converter. Generator stator and rotor are both made of stacked magnetic laminations and formed windings. Generator is cooled by air.

Mechanical Brake
The mechanical brake is fitted to the non-drive end of the gearbox.

Yaw System
A cast bed frame connects the drive train to the tower. The yaw bearing is an externally geared ring with a friction bearing. A series of electric planetary gear motors drives the yawing.

Nacelle Cover
The weather screen and housing around the machinery in the nacelle is made of fiberglass-reinforced laminated panels.

Tower
The wind turbine is as standard mounted on a tapered tubular steel tower. Other tower technologies are available for higher hub heights. The tower has internal ascent and direct access to the yaw system and nacelle. It is equipped with platforms and internal electric lighting.

Controller
The wind turbine controller is a microprocessor-based industrial controller. The controller is complete with switchgear and protection devices and is self-diagnosing.

Converter
Connected directly with the Rotor, the Frequency Converter is a back to back 4Q conversion system with 2 VSC in a common DC-link. The Frequency Converter allows generator operation at variable speed and voltage, while supplying power at constant frequency and voltage to the MV transformer.

SCADA
The wind turbine provides connection to the SGRE SCADA system. This system offers remote control and a variety of status views and useful reports from a standard internet web browser. The status views present information including electrical and mechanical data, operation and fault status, meteorological data and grid station data.

Turbine Condition Monitoring
In addition to the SGRE SCADA system, the wind turbine can be equipped with the unique SGRE condition monitoring setup. This system monitors the vibration level of the main components and compares the actual vibration spectra with a set of established reference spectra. Review of results, detailed analysis and reprogramming can all be carried out using a standard web browser.

Operation Systems
The wind turbine operates automatically. It is self-starting when the aerodynamic torque reaches a certain value. Below rated wind speed, the wind turbine controller fixes the pitch and torque references for operating in the optimum aerodynamic point (maximum production) taking into account the generator capability. Once rated wind speed is surpassed, the pitch position demand is adjusted to keep a stable power production equal to the nominal value.

If high wind derated mode is enabled, the power production is limited once the wind speed exceeds a threshold value defined by design, until cut-out wind speed is reached and the wind turbine stops producing power.

If the average wind speed exceeds the maximum operational limit, the wind turbine is shut down by pitching of the blades. When the average wind speed drops back below the restart average wind speed, the systems reset automatically.

Technical Specifications

Rotor
Type ..... 3-bladed, horizontal axis
Position ..... Upwind
Diameter ..... 170 m
Swept area ..... 22,698 m²
Power regulation ..... Pitch & torque regulation with variable speed
Rotor tilt ..... 6 degrees

Blade
Type ..... Self-supporting
Blade length ..... 83.5 m
Max chord ..... 4.5 m
Aerodynamic profile ..... Siemens Gamesa proprietary airfoils
Material ..... G (Glassfiber) – CRP (Carbon Reinforced Plastic)
Surface gloss ..... Semi-gloss, < 30 / ISO2813
Surface color ..... Light grey, RAL 7035 or White, RAL 9018

Aerodynamic Brake
Type ..... Full span pitching
Activation ..... Active, hydraulic

Load-Supporting Parts
Hub ..... Nodular cast iron
Main shaft ..... Nodular cast iron
Nacelle bed frame ..... Nodular cast iron

Mechanical Brake
Type ..... Hydraulic disc brake
Position ..... Gearbox rear end

Nacelle Cover
Type ..... Totally enclosed
Surface gloss ..... Semi-gloss, <30 / ISO2813
Color ..... Light Grey, RAL 7035 or White, RAL 9018

Generator
Type ..... Asynchronous, DFIG

Grid Terminals (LV)
Baseline nominal power . 6.0 MW / 6.2 MW
Voltage ..... 690 V
Frequency ..... 50 Hz or 60 Hz

Yaw System
Type ..... Active
Yaw bearing ..... Externally geared
Yaw drive ..... Electric gear motors
Yaw brake ..... Active friction brake

Controller
Type ..... Siemens Integrated Control System (SICS)
SCADA system ..... SGRE SCADA System

Tower
Type ..... Tubular steel / Hybrid

Hub height ..... 100 m to 165 m and site-specific

Corrosion protection ..... Painted
Surface gloss ..... Semi-gloss, <30 / ISO-2813
Color ..... Light grey, RAL 7035 or White, RAL 9018

Operational Data
Cut-in wind speed ..... 3 m/s
Rated wind speed ..... 11.0 m/s (steady wind without turbulence, as defined by IEC61400-1)
Cut-out wind speed ..... 25 m/s
Restart wind speed ..... 22 m/s

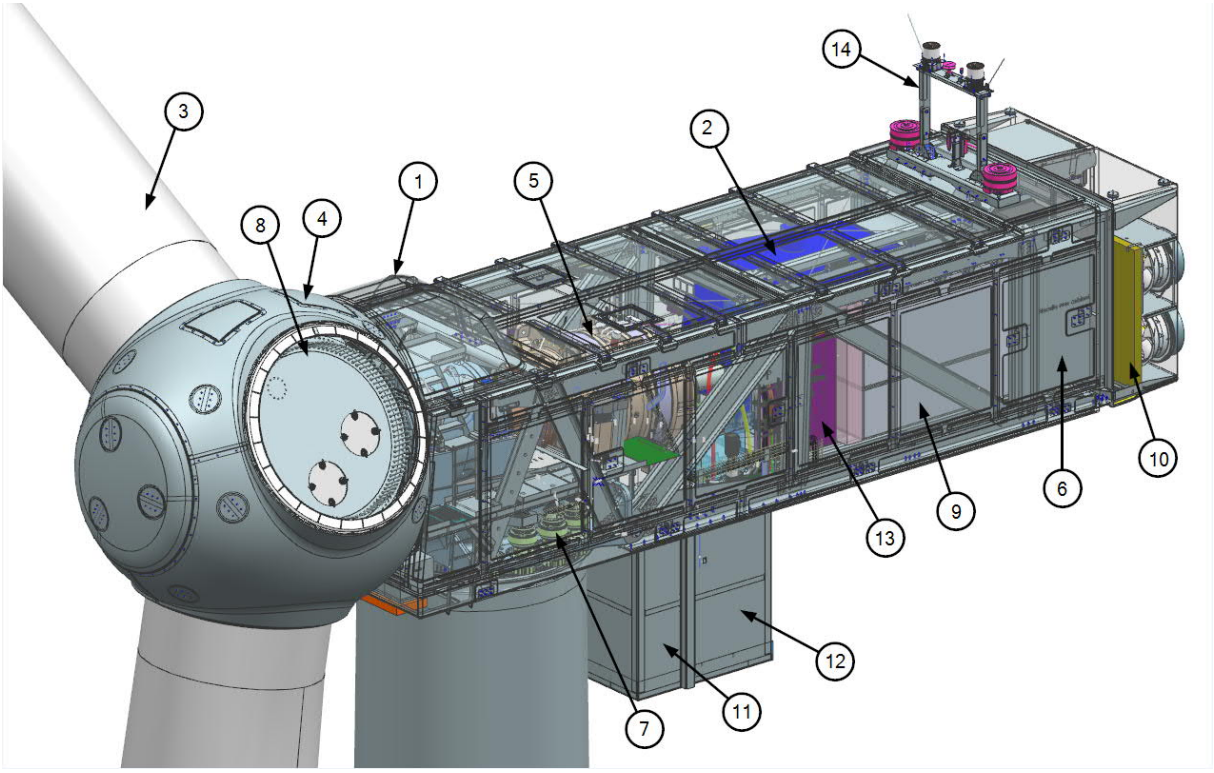
Weight
Modular approach ..... Different modules depending on restriction

Nacelle Arrangement

The design and layout of the nacelle are preliminary and may be subject to changes during the development of the product.

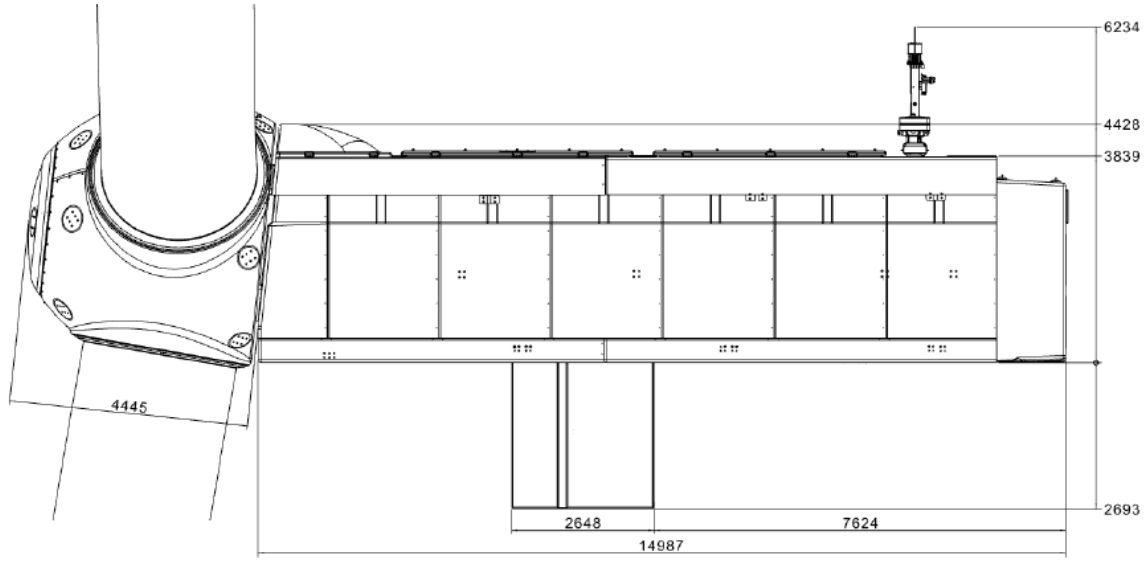
Item	Description
1	Canopy
2	Generator
3	Blades
4	Spinner/hub
5	Gearbox
6	Control panel

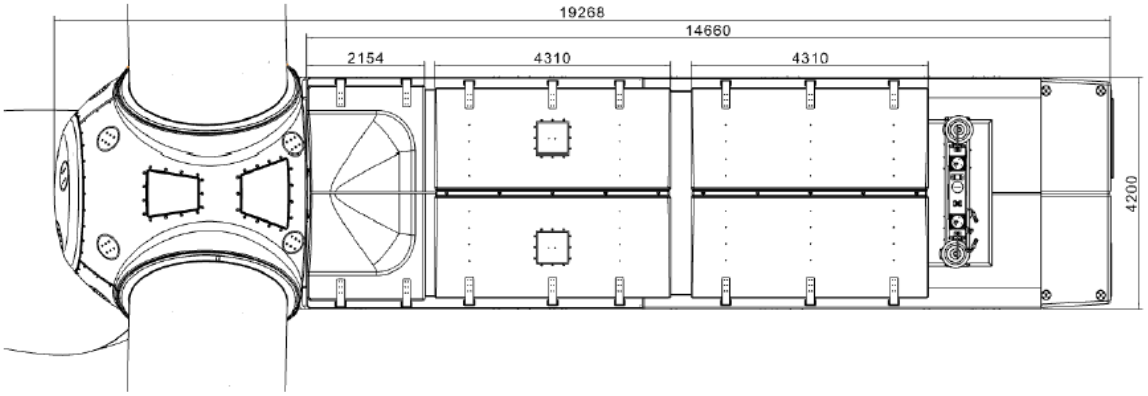
Item	Description
8	Blade bearing
9	Converter
10	Cooling
11	Transformer
12	Stator cabinet.
13	Front Control Cabinet
14	Aviation structure



Nacelle Dimensions

The design and dimensions of the nacelle are preliminary and may be subject to changes during the development phases of the product.



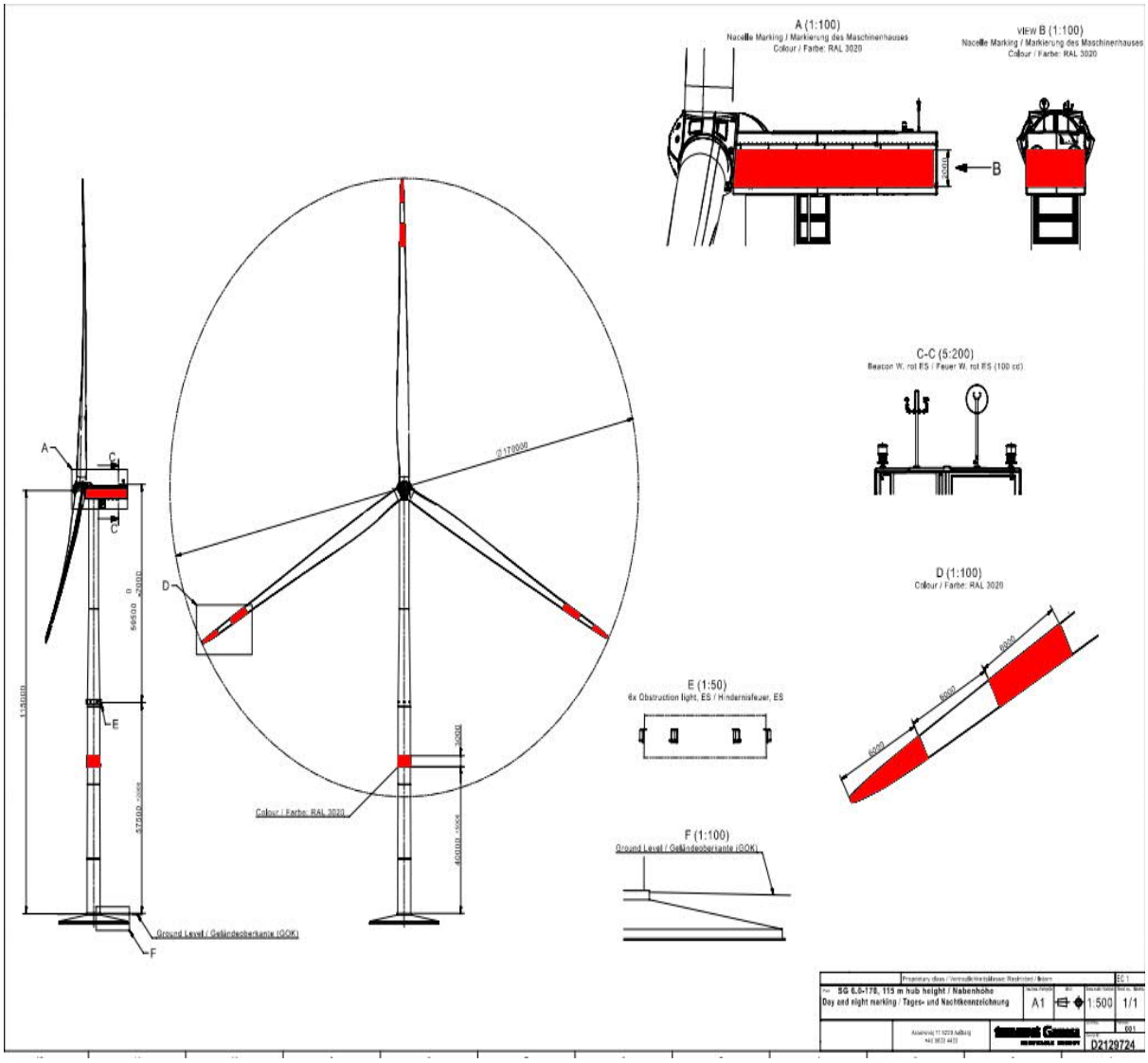


Several modularized solutions are designed to optimize nacelle and hub transportation, subject to project specific conditions.

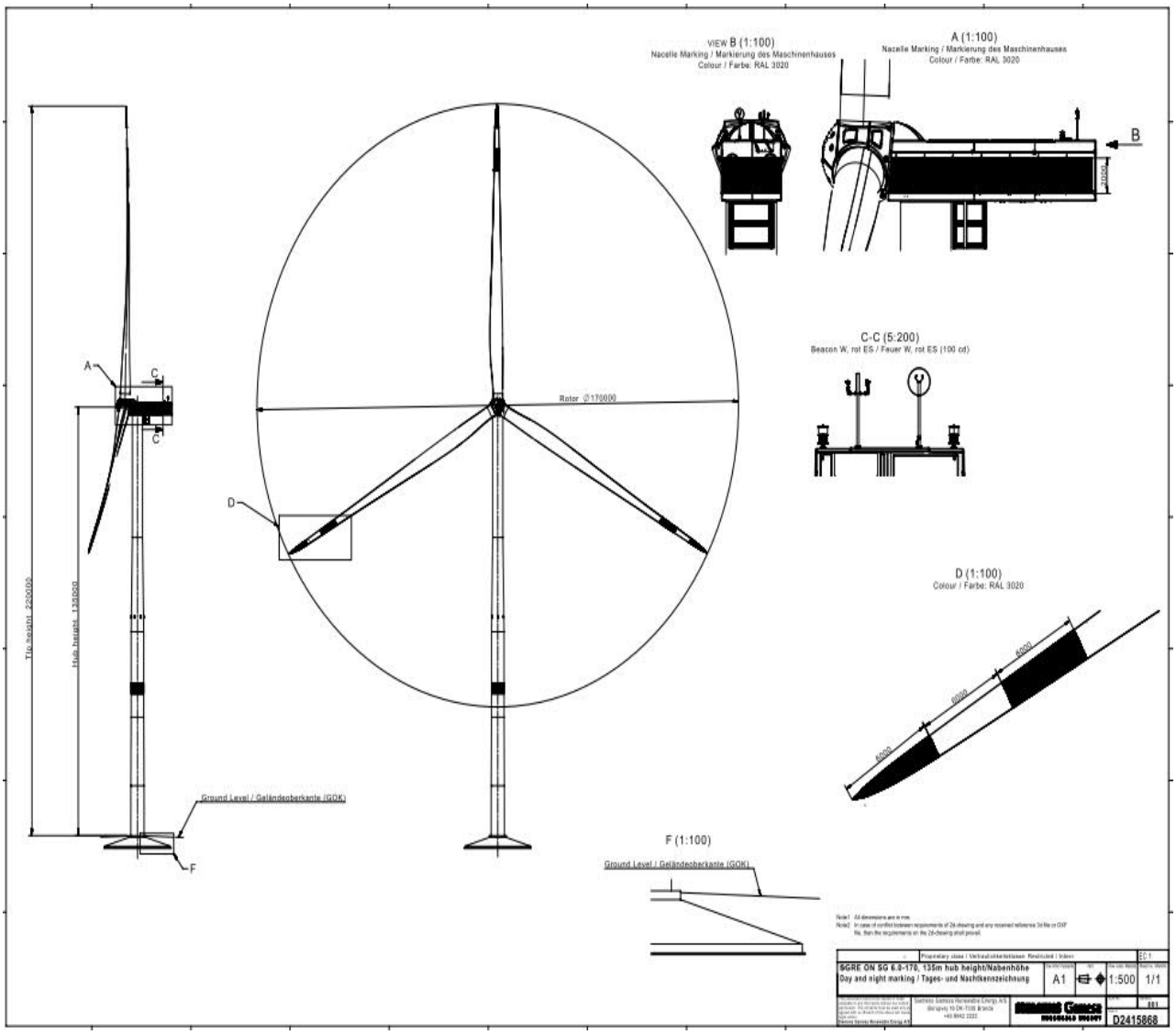
- 3 modules (heaviest module <95t): Hub, nacelle, drive train
- 4 modules (heaviest module <79t): Hub, nacelle, drive train, transformer
- 6 modules (heaviest module <62t): Hub, nacelle, gearbox, main shaft, transformer and generator

Elevation Drawing

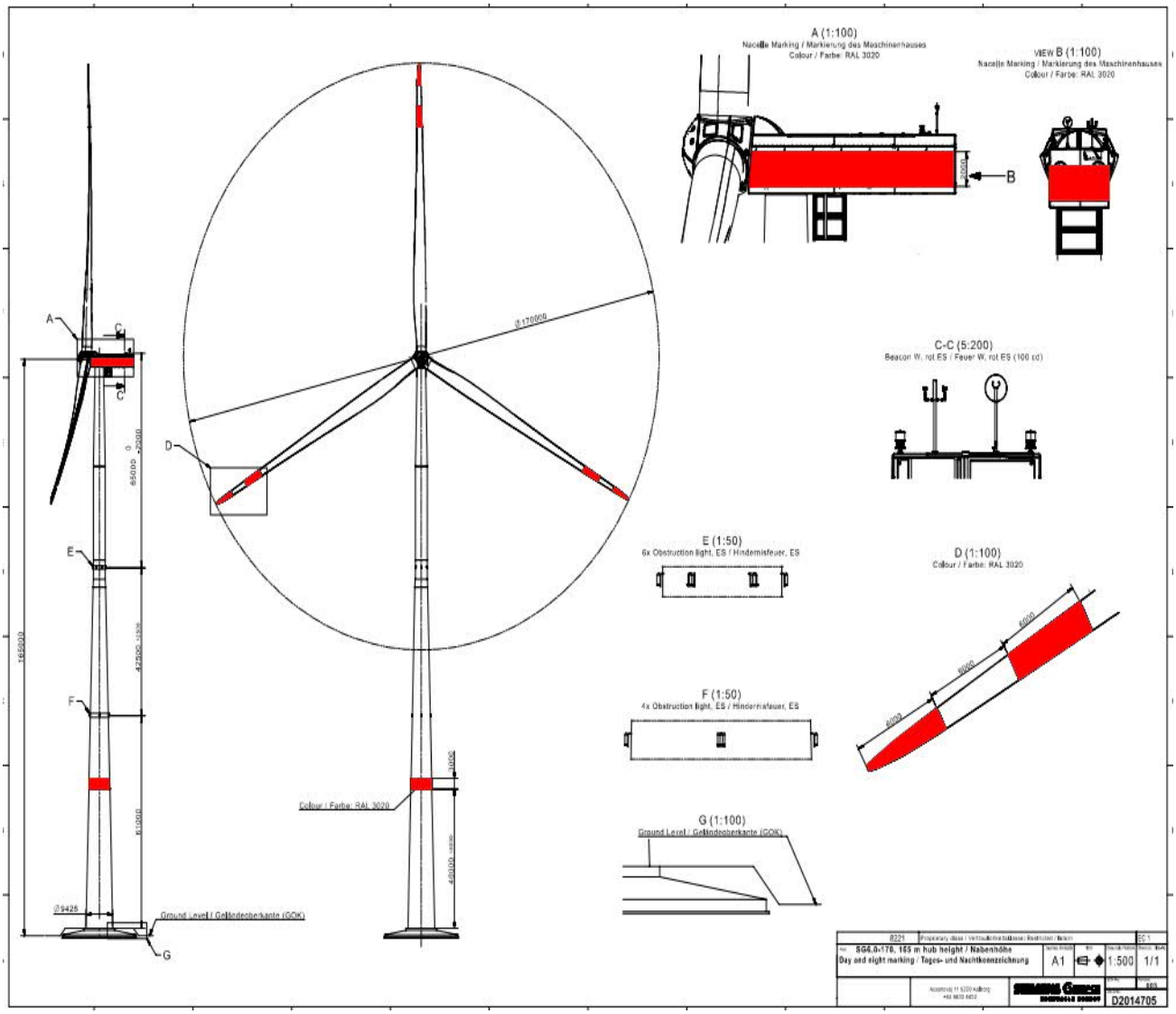
SG 6.0-170 115m



SG 6.0-170 135m



SG 6.0-170 165m



Blade Sales Drawing

Tower dimensions

SG 6.0-170 is offered with an extensive tower portfolio ranging from 100 m - 165 m, including the baseline 115 m and 165 m catalogue towers. All towers are designed in compliance with local logistics requirements.

Preliminary information:

- Tower hub height 115 m IIIA. Tapered tubular steel tower.

	Section 1	Section 2	Section 3	Section 4	Section 5
External diameter upper flange (m)	4.700	4.436	4.427	4.021	3.503
External diameter lower flange (m)	4.700	4.700	4.436	4.427	4.021
Section's height (m)	13.564	18.200	23.800	26.880	29.970
Total weight (T)	84.958	84.328	84.548	71.771	63.863
Volume (CBM)	228	363	470	584	498

- Tower hub height 165 m IIIA. Hybrid design (concrete + steel)

	Concrete Section 1	Steel Section 2	Steel Section 3	Steel Section 4
External diameter upper flange (m)	4.668	4.300	4.300	3.574
External diameter lower flange (m)	7.888	4.300	4.,300	4.300
Section's height (m)	100.29	17.970	21.385	21.531

Information about other tower heights and logistic will be available upon request.

Foundation Dimensions and loads

The SG 6.0-170 estimated foundation design for T115 can be found on the following documents: D2372547.

Foundation loads inputs for T115 m can be found on the following document: D2370721

Detailed information about foundation loads will be available upon request

Design Climatic Conditions

The design climatic conditions are the boundary conditions at which the turbine can be applied without supplementary design review. Applications of the wind turbine in more severe conditions may be possible, depending upon the overall circumstances. A project site-specific review requires that the Employer complete the "Project Climatic Conditions" form.

All references made to standards such as the IEC and ISO are further specified in the document "Codes and Standards". The design lifetime presented in the below table only applies to the fatigue load analysis performed in accordance with the presented IEC code. The term design lifetime and the use thereof do not constitute any express and/or implied warranty for actual lifetime and/or against failures on the wind turbines. Please see document for "design lifetime of wind turbine components" for more information.

Subject	ID	Issue	Unit	Value	
0. Design lifetime	0.0	Design lifetime definition	-	IEC 61400-1[1]	
	0.1	Design lifetime	years	20	25
1. Wind, operation	1.1	Wind definitions	-	IEC 61400-1	
	1.2	IEC class	-	IIIA	IIIB
	1.3	Mean air density, ρ	kg/m^3	1.225	1.225
	1.4	Mean wind speed, V_{ave}	m/s	7.5	7.5
	1.5	Weibull scale parameter, A	m/s	8.46	8.46
	1.6	Weibull shape parameter, k	-	2	2
	1.7	Wind shear exponent, α	-	0.20	0.20
	1.8	Reference turbulence intensity at 15 m/s, I_{ref}	-	0.16	0.14
	1.9	Standard deviation of wind direction	Deg	-	-
	1.10	Maximum flow inclination	Deg	8	8
	1.11	Minimum turbine spacing, in rows	D	-	-
	1.12	Minimum turbine spacing, between rows	D	-	-
2. Wind, extreme	2.1	Wind definitions		IEC 61400-1	
	2.2	Air density, ρ	kg/m^3	1.225	
	2.3	Reference wind speed average over 10 min at hub height, V_{ref}	m/s	37.5	
	2.4	Maximum 3 s gust in hub height, V_{e50}	m/s	52.5	
	2.5	Maximum hub height power law index, α	-	0.11	
	2.6	Storm turbulence	-	N/A	
3. Temperature	3.1	Temperature definitions	-	IEC 61400-1	
	3.2	Minimum temperature, stand-still, $T_{min, s}$	Deg.C	-30	
	3.3	Minimum temperature, operation, $T_{min, o}$	Deg.C	-20	
	3.4	Maximum temperature, operation, $T_{max, o}$	Deg.C	40[2]	
	3.5	Maximum temperature, stand-still, $T_{max, s}$	Deg.C	50	
4. Corrosion	4.1	Atmospheric-corrosivity category definitions	-	ISO 12944-2	
	4.2	Internal nacelle environment (corrosivity category)	-	C3H (std)	
	4.3	Exterior environment (corrosivity category)	-	C3H (std)	
5. Lightning	5.1	Lightning definitions	-	IEC61400-24:2010	
	5.2	Lightning protection level (LPL)	-	LPL 1	
6. Dust	6.1	Dust definitions	-	IEC 60721-3-4:1995	

[1] All mentioning of IEC 61400-1 refers to to IEC 61400-1:2018 Ed4.

[2] Maximum power output may be limited after an extended period of operation with a power output close to nominal power. The limitation depends on air temperature and air density as further described in the High Temperature Ride Through specification.

Subject	ID	Issue	Unit	Value
	6.2	Working environmental conditions	mg/m^3	Average Dust Concentration (95% time) → 0.05 mg/m^3
	6.3	Concentration of particles	mg/m^3	Peak Dust Concentration (95% time) → 0.5 mg/m^3
7. Hail	7.1	Maximum hail diameter	mm	20
	7.2	Maximum hail falling speed	m/s	20
8. Ice	8.1	Ice definitions	-	-
	8.2	Ice conditions	Days/yr	7
9. Solar radiation	9.1	Solar radiation definitions	-	IEC 61400-1
	9.2	Solar radiation intensity	W/m^2	1000
10. Humidity	10.1	Humidity definition	-	IEC 61400-1
	10.2	Relative humidity	%	Up to 95
11. Obstacles	11.1	If the height of obstacles within 500m of any turbine location height exceeds 1/3 of (H – D/2) where H is the hub height and D is the rotor diameter then restrictions may apply. Please contact Siemens Gamesa Renewable Energy for information on the maximum allowable obstacle height with respect to the site and the turbine type.		
12. Precipitation[3]	12.1	Annual precipitation	mm/yr	1100

[3] The specified maximum precipitation considers standard Leading Edge Protection. For sites with higher annual precipitation and/or longer lifetime, it is recommended to consider optional reinforced Leading Edge Protection.

Flexible Rating Specifications

The SG 6.0-170 is offered with various operational modes that are achieved through the flexible operating capacity of the product, enabling the configuration of an optimal power rating that is best suited for each wind farm. The operating modes are broadly divided into two categories: Application Modes and Noise Reduction System Modes[4].

Application Modes

Application Modes ensure optimal turbine performance with maximum power rating allowed by the structural and electrical systems of the turbine. There are multiple Application Modes, offering flexibility of different power ratings. All Application Modes are part of the turbine Certificate.

SG 6.0-170 can offer increased operation flexibility with modes based on AM 0 with reduced power rating. These new modes are created with same noise performance of the corresponding Application Mode 0 but with decreased rating and improved temperature de-rating than the corresponding Application Mode 0. In addition, the turbine's electrical performance is constant for the full set of application modes, as shown on the table below.

The SG 6.0-170 is designed with a base wind class, applicable to AM 0, of IEC IIIA for 20 year lifetime as well as IEC IIIB for 25 year lifetime. All other Application Modes may be analysed for more demanding site conditions.

Full List of Application Modes

Rotor Configuration	Application mode	Rating [MW]	Noise [dB(A)]	Power Curve Document	Acoustic Emission Document	Electrical Performance			Max temperature With Max active power and electrical capabilities[5]
						Cos Phi	Voltage Range	Frequency range	
SG 6.0-170	AM 0	6.2	106	D2075729	D2359593	0.9	[0.95,1.12] Un	±3% Fn	30ºC
SG 6.0-170	AM-1	6.1	106	D2356499	D2359593	0.9	[0.95,1.12] Un	±3% Fn	33ºC
SG 6.0-170	AM-2	6.0	106	D2356509	D2359593	0.9	[0.95,1.12] Un	±3% Fn	35ºC
SG 6.0-170	AM-3	5.9	106	D2356523	D2359593	0.9	[0.95,1.12] Un	±3% Fn	37ºC
SG 6.0-170	AM-4	5.8	106	D2356539	D2359593	0.9	[0.95,1.12] Un	±3% Fn	38ºC
SG 6.0-170	AM-5	5.7	106	D2356376	D2359593	0.9	[0.95,1.12] Un	±3% Fn	39ºC
SG 6.0-170	AM-6	5.6	106	D2356368	D2359593	0.9	[0.95,1.12] Un	±3% Fn	40ºC

4 It should be noted that the definition of various modes as described in this chapter is applicable in combination with standard temperature limits and grid capabilities of the turbine. Please refer to High Temperature Power De-rating Specification and Reactive Power Capability Document for more information

5 Please refer to "High Temperature Power De-rating Specification" for more details'

Noise Reduction System (NRS) Modes

The Noise Reduction System is an optional module available with the basic SCADA configuration and it therefore requires the presence of a SGRE SCADA system to work. NRS Modes are noise curtailed modes enabled by the Noise Reduction System. The purpose of this system is to limit the noise emitted by any of the functioning turbines and thereby comply with local regulations regarding noise emissions.

Noise control is achieved through the reduction of active power and rotational speed of the wind turbine. This reduction is dependent on the wind speed. The Noise Reduction System controls the noise settings of each turbine to the most appropriate level at all times, in order to keep the noise emissions within the limits allowed. Sound Power Levels correspond to the wind turbine configuration equipped with noise reduction add-ons attached to the blade.

The activation of NRS modes depend on the tower type selection. This information can be provided upon request.

Rotor Configuration	NRS Mode	Rating [MW]	Noise [dB(A)]	Power Curve Document	Acoustic Emission Document	Max temperature With Max active power and electrical capabilities[6]
SG 6.0-170	N1	6.00	105.5	D2323420	D2359593	30ºC
SG 6.0-170	N2	5.80	104.5	D2314784	D2359593	30ºC
SG 6.0-170	N3	5.24	103.0	D2314785	D2359593	30ºC
SG 6.0-170	N4	5.12	102.0	D2314786	D2359593	30ºC
SG 6.0-170	N5	4.87	101.0	D2314787	D2359593	30ºC
SG 6.0-170	N6	4.52	100.0	D2314788	D2359593	30ºC
SG 6.0-170	N7	3.60	99.0	D2314789	D2359593	30ºC

Control Strategy

The Application Modes are implemented and controlled in the Wind Turbine Controller. The NRS modes are also handled in the SCADA, however it shall also be possible to deploy custom NRS modes from the SCADA to the Wind Turbine Controller.

6 Please refer to “High Temperature Power De-rating Specification” for more details’.

Standard Ct and Power Curve, Rev. 0, AM 0

Standard Power Curve, Application Mode AM 0

Air density = 1.225 kg/m^3

Validity range:

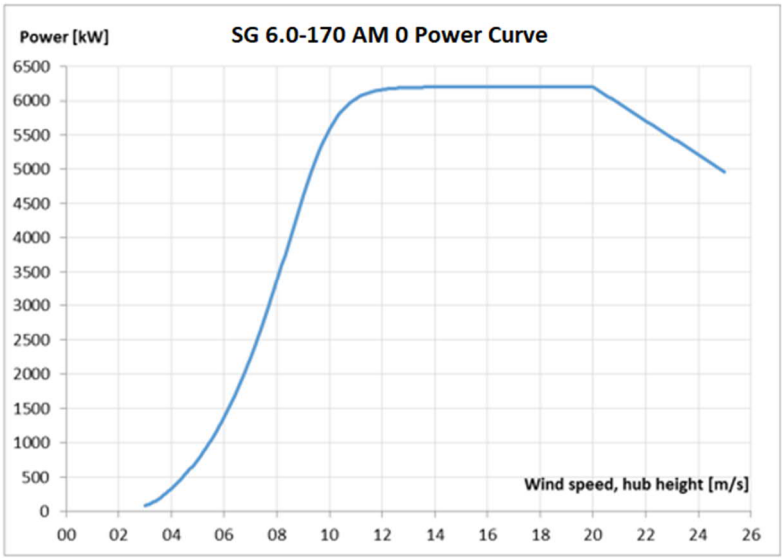
Wind Shear (10min average)	≤ 0.3
Turbulence intensity TI [%] for bin i	$5\%\frac{(0.75v_i+5.6)}{v_i} < TI_i < 12\%\frac{(0.75v_i+5.6)}{v_i}$
Terrain	Not complex according to IEC 61400-12-1
Upflow β [°]	$-2^o \le \beta \le +2^o$
Grid frequency [Hz]	± 0.5 Hz

Other considerations: Clean rotor blades, substantially horizontal, undisturbed air flow, turbine operated within nominal limits according to the Electrical Specification.

Next table shows the electrical power as a function of wind speed in hub height, averaged in ten minutes, for air density = 1.225 kg/m^3. The power curve does not include losses in the transformer and high voltage cables.

For a detailed description of Application Mode – AM 0, please refer to Flexible Rating Specification (D2316244).

SG 6.0-170 Rev 0, AM 0	
Wind Speed [m/s]	**Power [kW]**
3.0	89
3.5	178
4.0	328
4.5	522
5.0	758
5.5	1040
6.0	1376
6.5	1771
7.0	2230
7.5	2758
8.0	3351
8.5	3988
9.0	4617
9.5	5166
10.0	5584
10.5	5862
11.0	6028
11.5	6117
12.0	6161
12.5	6183
13.0	6192
13.5	6197
14.0	6199
14.5	6199
15.0	6200
15.5	6200
16.0	6200
16.5	6200
17.0	6200
17.5	6200
18.0	6200
18.5	6200
19.0	6200
19.5	6200
20.0	6200
20.5	6080
21.0	5956
21.5	5832
22.0	5708
22.5	5584
23.0	5460
23.5	5336
24.0	5212
24.5	5088
25.0	4964



The annual energy production data for different annual mean wind speeds in hub height are calculated from the above power curve assuming a Weibull wind speed distribution, 100 percent availability, and no reductions due to array losses, grid losses, or other external factors affecting the production.

AEP [MWh]		**Annual Average Wind Speed [m/s] at Hub Height**										
		5.0	***5.5***	***6.0***	***6.5***	***7.0***	***7.5***	***8.0***	***8.5***	***9.0***	***9.5***	***10.0***
Weibull K	***1.5***	12624	15003	17272	19392	21337	23092	24653	26018	27192	28185	29009
	2.0	11514	14363	17198	19937	22528	24939	27150	29151	30937	32503	33853
	2.5	10370	13438	16625	19798	22856	25732	28389	30811	32995	34946	36669

Annual Production [MWh] SG 6.0-170 Rev 0, AM 0 wind turbine for the standard version, as a function of the annual mean wind speed at hub height, and for different Weibull parameters. Air density 1.225 kg/m^3

Standard Ct Curve, application mode AM 0

Air density = 1.225 kg/m^3

Validity range:

Wind Shear (10min average)	≤ 0.3
Turbulence intensity TI [%] for bin i	$5\%\frac{(0.75v_i+5.6)}{v_i} < TI_i < 12\%\frac{(0.75v_i+5.6)}{v_i}$
Terrain	Not complex according to IEC 61400-12-1
Upflow β [°]	$-2^o \le \beta \le +2^o$
Grid frequency [Hz]	± 0.5 Hz

Other considerations: Clean rotor blades, substantially horizontal, undisturbed air flow, turbine operated within nominal limits according to the Electrical Specification.

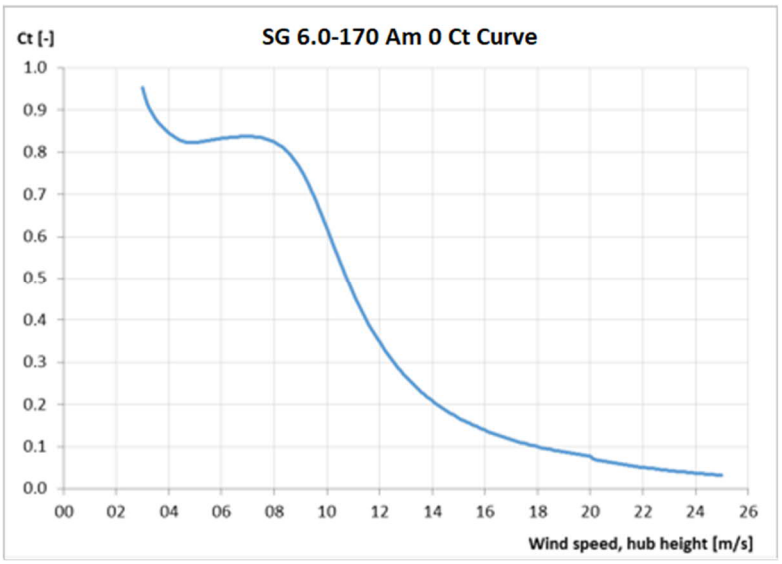
The thrust coefficient Ct is used for the calculation of the wind speed deficit in the wake of a wind turbine.

Ct is defined by the following expression:
$Ct = F / (0.5 * ad * w^2 * A)$

where
F = Rotor force [N]
ad = Air density [kg/m^3]
w = Wind speed [m/s]
A = Swept area of rotor [m^2]

For a detailed description of Application Mode – AM 0, please refer to Flexible Rating Specification (D2316244-003).

SG 6.0-170 Rev 0, AM 0	
Wind Speed [m/s]	**Ct [-]**
3.0	0.953
3.5	0.880
4.0	0.847
4.5	0.828
5.0	0.824
5.5	0.828
6.0	0.833
6.5	0.836
7.0	0.837
7.5	0.835
8.0	0.825
8.5	0.802
9.0	0.759
9.5	0.696
10.0	0.620
10.5	0.541
11.0	0.466
11.5	0.402
12.0	0.347
12.5	0.303
13.0	0.266
13.5	0.235
14.0	0.209
14.5	0.187
15.0	0.169
15.5	0.153
16.0	0.139
16.5	0.127
17.0	0.117
17.5	0.108
18.0	0.100
18.5	0.093
19.0	0.087
19.5	0.082
20.0	0.077
20.5	0.066
21.0	0.060
21.5	0.055
22.0	0.051
22.5	0.047
23.0	0.043
23.5	0.040
24.0	0.037
24.5	0.034
25.0	0.032



Standard Ct and Power Curve, Rev. 0, AM 0 – Air Density

Standard Power Curve, Application Mode – AM 0

Air density = [1.06, 1.27] kg/m^3

Validity range:

Wind Shear (10min average)	≤ 0.3
Turbulence intensity TI [%] for bin i	$5\%\frac{(0.75v_i+5.6)}{v_i} < TI_i < 12\%\frac{(0.75v_i+5.6)}{v_i}$
Terrain	Not complex according to IEC 61400-12-1
Upflow β [°]	$-2^o \le \beta \le +2^o$
Grid frequency [Hz]	± 0.5 Hz

Other considerations: Clean rotor blades, substantially horizontal, undisturbed air flow, turbine operated within nominal limits according to the Electrical Specification.

Next table shows the electrical power as a function of wind speed in hub height, averaged in ten minutes, for air density range = [1.06,1.27] kg/m^3. The power curves do not include losses in the transformer and high voltage cables.

For a detailed description of Application Mode AM 0, please refer to Flexible Rating Specification (D2316244).

SG 6.0-170 Mode AM 0 Power curves [kW]									
Ws hub [m/s]	***Air density [kg/m³]***								
	1.225	***1.06***	***1.09***	***1.12***	***1.15***	***1.18***	***1.21***	***1.24***	***1.27***
3.0	89	75	77	80	82	85	88	90	93
3.5	178	145	151	157	163	169	175	181	187
4.0	328	272	282	292	302	312	323	333	343
4.5	522	439	454	470	485	500	515	530	545
5.0	758	644	665	686	706	727	748	769	789
5.5	1040	888	916	944	971	999	1027	1054	1082
6.0	1376	1179	1215	1250	1286	1322	1358	1394	1430
6.5	1771	1521	1566	1612	1657	1703	1748	1794	1839
7.0	2230	1919	1976	2032	2089	2146	2202	2259	2315
7.5	2758	2377	2446	2516	2585	2654	2723	2793	2862
8.0	3351	2893	2977	3060	3144	3227	3310	3392	3474
8.5	3988	3455	3553	3652	3749	3846	3941	4035	4127
9.0	4617	4033	4145	4255	4363	4467	4568	4664	4756
9.5	5166	4586	4706	4820	4928	5029	5122	5208	5288
10.0	5584	5074	5191	5296	5390	5475	5549	5616	5675
10.5	5862	5466	5567	5652	5725	5786	5839	5884	5922
11.0	6028	5753	5830	5891	5940	5981	6013	6040	6063
11.5	6117	5944	5997	6036	6067	6090	6109	6124	6136
12.0	6161	6061	6094	6117	6135	6148	6157	6165	6171
12.5	6183	6128	6147	6160	6169	6176	6181	6184	6187
13.0	6192	6164	6174	6181	6186	6189	6191	6193	6194
13.5	6197	6182	6188	6191	6194	6195	6196	6197	6198
14.0	6199	6192	6194	6196	6197	6198	6198	6199	6199
14.5	6199	6196	6197	6198	6199	6199	6199	6199	6200
15.0	6200	6198	6199	6199	6199	6200	6200	6200	6200
15.5	6200	6199	6199	6200	6200	6200	6200	6200	6200
16.0	6200	6200	6200	6200	6200	6200	6200	6200	6200
16.5	6200	6200	6200	6200	6200	6200	6200	6200	6200
17.0	6200	6200	6200	6200	6200	6200	6200	6200	6200
17.5	6200	6200	6200	6200	6200	6200	6200	6200	6200
18.0	6200	6200	6200	6200	6200	6200	6200	6200	6200
18.5	6200	6200	6200	6200	6200	6200	6200	6200	6200
19.0	6200	6200	6200	6200	6200	6200	6200	6200	6200
19.5	6200	6200	6200	6200	6200	6200	6200	6200	6200
20.0	6200	6200	6200	6200	6200	6200	6200	6200	6200
20.5	6080	6080	6080	6080	6080	6080	6080	6080	6080
21.0	5956	5956	5956	5956	5956	5956	5956	5956	5956
21.5	5832	5832	5832	5832	5832	5832	5832	5832	5832
22.0	5708	5708	5708	5708	5708	5708	5708	5708	5708
22.5	5584	5584	5584	5584	5584	5584	5584	5584	5584
23.0	5460	5460	5460	5460	5460	5460	5460	5460	5460
23.5	5336	5336	5336	5336	5336	5336	5336	5336	5336
24.0	5212	5212	5212	5212	5212	5212	5212	5212	5212
24.5	5088	5088	5088	5088	5088	5088	5088	5088	5088
25.0	4964	4964	4964	4964	4964	4964	4964	4964	4964

The annual energy production data for different annual mean wind speeds in hub height are calculated from the above power curve assuming a Weibull wind speed distribution with a K-factor of 2.0, 100 percent availability, and no reductions due to array losses, grid losses, or other external factors affecting the production.

AEP [MWh]		**Annual Average Wind Speed [m/s] at Hub Height**										
		5.0	***5.5***	***6.0***	***6.5***	***7.0***	***7.5***	***8.0***	***8.5***	***9.0***	***9.5***	***10.0***
Density [kg/m3]	***1.225***	11514	14363	17198	19937	22528	24939	27150	29151	30937	32503	33853
	1.06	10152	12804	15493	18136	20675	23069	25292	27325	29156	30780	32191
	1.09	10413	13107	15829	18495	21049	23449	25673	27702	29526	31139	32540
	1.12	10667	13401	16151	18838	21403	23808	26030	28054	29871	31474	32862
	1.15	10916	13685	16463	19167	21741	24149	26369	28387	30195	31788	33165
	1.18	11159	13962	16763	19483	22065	24475	26692	28704	30503	32085	33451
	1.21	11397	14231	17055	19788	22376	24787	27000	29005	30795	32367	33722
	1.24	11630	14493	17338	20083	22676	25086	27295	29293	31074	32635	33979
	1.27	11859	14750	17613	20368	22966	25375	27580	29570	31341	32893	34225

Annual Production [MWh] SG 6.0-170 Rev 0, AM 0 wind turbine for the standard version, as a function of the annual mean wind speed at hub height, and for Weibull parameter K=2.0.

Standard Ct Curve, Application Mode – AM 0

Air density = [1.06 – 1.27] kg/m^3

Validity range:

Wind Shear (10min average)	≤ 0.3
Turbulence intensity TI [%] for bin i	$5\% \frac{(0.75v_i + 5.6)}{v_i} < TI_i < 12\% \frac{(0.75v_i + 5.6)}{v_i}$
Terrain	Not complex according to IEC 61400-12-1
Upflow β [°]	$-2^o \leq \beta \leq +2^o$
Grid frequency [Hz]	± 0.5 Hz

Other considerations: Clean rotor blades, substantially horizontal, undisturbed air flow, turbine operated within nominal limits according to the Electrical Specification.

The thrust coefficient Ct is used for the calculation of the wind speed deficit in the wake of a wind turbine.

Ct is defined by the following expression:
Ct = F / (0.5 * ad * w^2 * A)

where
F = Rotor force [N]
ad = Air density [kg/m^3]
w = Wind speed [m/s]
A = Swept area of rotor [m^2]

For a detailed description of Application Mode AM 0, please refer to Flexible Rating Specification (D2316244).

SG 6.0-170 Mode AM 0 Ct curves [-]									
Ws hub [m/s]	***Air density [kg/m³]***								
	1.225	***1.06***	***1.09***	***1.12***	***1.15***	***1.18***	***1.21***	***1.24***	***1.27***
3.0	0.953	0.953	0.953	0.953	0.953	0.953	0.953	0.953	0.953
3.5	0.880	0.880	0.880	0.880	0.880	0.880	0.880	0.880	0.880
4.0	0.847	0.847	0.847	0.847	0.847	0.847	0.847	0.847	0.847
4.5	0.828	0.828	0.828	0.828	0.828	0.828	0.828	0.828	0.828
5.0	0.824	0.824	0.824	0.824	0.824	0.824	0.824	0.824	0.824
5.5	0.828	0.828	0.828	0.828	0.828	0.828	0.828	0.828	0.828
6.0	0.833	0.833	0.833	0.833	0.833	0.833	0.833	0.833	0.833
6.5	0.836	0.836	0.836	0.836	0.836	0.836	0.836	0.836	0.836
7.0	0.837	0.837	0.837	0.837	0.837	0.837	0.837	0.837	0.837
7.5	0.835	0.835	0.835	0.835	0.835	0.835	0.835	0.835	0.835
8.0	0.825	0.825	0.825	0.825	0.825	0.825	0.825	0.825	0.825
8.5	0.802	0.804	0.804	0.804	0.803	0.803	0.802	0.801	0.800
9.0	0.759	0.767	0.767	0.766	0.765	0.763	0.761	0.757	0.753
9.5	0.696	0.716	0.715	0.712	0.709	0.705	0.699	0.693	0.686
10.0	0.620	0.654	0.651	0.646	0.640	0.633	0.625	0.615	0.605
10.5	0.541	0.588	0.582	0.575	0.566	0.556	0.546	0.535	0.524
11.0	0.466	0.521	0.513	0.503	0.493	0.483	0.472	0.461	0.450
11.5	0.402	0.458	0.448	0.438	0.428	0.417	0.407	0.396	0.386
12.0	0.347	0.401	0.391	0.381	0.371	0.361	0.352	0.343	0.334
12.5	0.303	0.351	0.342	0.333	0.324	0.315	0.307	0.299	0.291
13.0	0.266	0.309	0.300	0.292	0.284	0.276	0.269	0.262	0.256
13.5	0.235	0.273	0.265	0.258	0.251	0.244	0.238	0.232	0.226
14.0	0.209	0.243	0.236	0.229	0.223	0.217	0.212	0.207	0.202
14.5	0.187	0.217	0.211	0.205	0.200	0.195	0.190	0.185	0.181
15.0	0.169	0.195	0.190	0.185	0.180	0.175	0.171	0.167	0.163
15.5	0.153	0.176	0.171	0.167	0.163	0.158	0.155	0.151	0.147
16.0	0.139	0.160	0.156	0.152	0.148	0.144	0.141	0.137	0.134
16.5	0.127	0.146	0.142	0.138	0.135	0.132	0.128	0.125	0.123
17.0	0.117	0.134	0.130	0.127	0.124	0.121	0.118	0.115	0.113
17.5	0.108	0.124	0.120	0.117	0.114	0.112	0.109	0.106	0.104
18.0	0.100	0.115	0.112	0.109	0.106	0.104	0.101	0.099	0.097
18.5	0.093	0.107	0.104	0.101	0.099	0.096	0.094	0.092	0.090
19.0	0.087	0.100	0.097	0.095	0.093	0.090	0.088	0.086	0.084
19.5	0.082	0.094	0.091	0.089	0.087	0.085	0.083	0.081	0.079
20.0	0.077	0.088	0.086	0.084	0.082	0.080	0.078	0.076	0.075
20.5	0.066	0.075	0.073	0.071	0.069	0.068	0.066	0.065	0.064
21.0	0.060	0.068	0.067	0.065	0.064	0.062	0.061	0.060	0.058
21.5	0.055	0.063	0.061	0.060	0.058	0.057	0.056	0.055	0.054
22.0	0.051	0.058	0.056	0.055	0.054	0.053	0.051	0.050	0.049
22.5	0.047	0.053	0.052	0.051	0.050	0.048	0.047	0.046	0.046
23.0	0.043	0.049	0.048	0.047	0.046	0.045	0.044	0.043	0.042
23.5	0.040	0.045	0.044	0.043	0.042	0.041	0.040	0.040	0.039
24.0	0.037	0.042	0.041	0.040	0.039	0.038	0.037	0.037	0.036
24.5	0.034	0.039	0.038	0.037	0.036	0.035	0.035	0.034	0.033
25.0	0.032	0.036	0.035	0.034	0.034	0.033	0.032	0.032	0.031

Standard Acoustic Emission, Rev. 0, Mode AM 0

Typical Sound Power Levels

The sound power levels are presented with reference to the code IEC 61400-11 ed. 3.0 (2012). The sound power levels (L_{WA}) presented are valid for the corresponding wind speeds referenced to the hub height.

Wind speed [m/s]	3	4	5	6	7	8	9	10	11	12	Up tp cut-out
AM 0	92.0	92.0	94.5	98.4	101.8	104.7	106.0	106.0	106.0	106.0	106.0

Table 1: Acoustic emission, L_{WA}[dB(A) re 1 pW](10 Hz to 10kHz)]

Wind speed [m/s]	6	8
AM 0	87.6	93.9

Table 2: Acoustic emission, L_{WA}[dB(A) re 1 pW](10 Hz to 160 Hz)]

Low Noise Operations

The lower sound power level is also available and can be achieved by adjusting the turbines controller settings, i.e. an optimization of rpm and pitch. The noise settings are not static and can be applied to optimize the operational output of the turbine. Noise settings can be tailored to time of day as well as wind direction to offer the most suitable solution for a specific location. This functionality is controlled via the SCADA system and is described further in the white paper on Noise Reduction Operations. Furthermore, tailored power curves can be provided which take wind speed into consideration allowing for management of the turbine output power and noise emission level to comply with site specific noise requirements.Tailored power curves are project and turbine specific and will therefore require Siemens Gamesa Siting involvement to provide the optimal solutions. The lower sound power levels may not be applicable to all tower variants. Please contact Siemens Gamesa for further information.

For a detailed description of Application Mode – AM 0, please refer to Flexible Rating Specification (D2316244).

Electrical Specifications

Nominal output and grid conditions

Nominal power	6200 kW
Nominal voltage	690 V
Power factor correction	Frequency converter control
Power factor range	0.9 capacitive to 0.9 inductive at nominal balanced voltage

Generator

Type	DFIG Asynchronous
Maximum power	6350 kW @30°C ext. ambient
Nominal speed	1120 rpm-6p (50Hz) 1344 rpm-6p (60Hz)

Generator Protection

Insulation class	Stator H/H Rotor H/H
Winding temperatures	6 Pt 100 sensors
Bearing temperatures	3 Pt 100
Slip Rings	1 Pt 100
Grounding brush	On side no coupling

Generator Cooling

Cooling system	Air cooling
Internal ventilation	Air
Control parameter	Winding, Air, Bearings temperatures

Frequency Converter

Operation	4Q B2B Partial Load
Switching	PWM
Switching freq., grid side	2.5 kHz
Cooling	Liquid/Air

Main Circuit Protection

Short circuit protection	Circuit breaker
Surge arrester	varistors

Peak Power Levels

10 min average	Limited to nominal

Grid Capabilities Specification

Nominal grid frequency	50 or 60 Hz
Minimum voltage	85 % of nominal
Maximum voltage	113 % of nominal
Minimum frequency	92 % of nominal
Maximum frequency	108 % of nominal
Maximum voltage imbalance (negative sequence of component voltage).	≤5 %
Max short circuit level at controller's grid Terminals (690 V)	82 kA

Power Consumption from Grid (approximately)

At stand-by,No yawing	10 kW
At stand-by, yawing	50 kW

Controller back-up

UPS Controller system	Online UPS, Li battery
Back-up time	1 min
Back-up time Scada	Depend on configuration

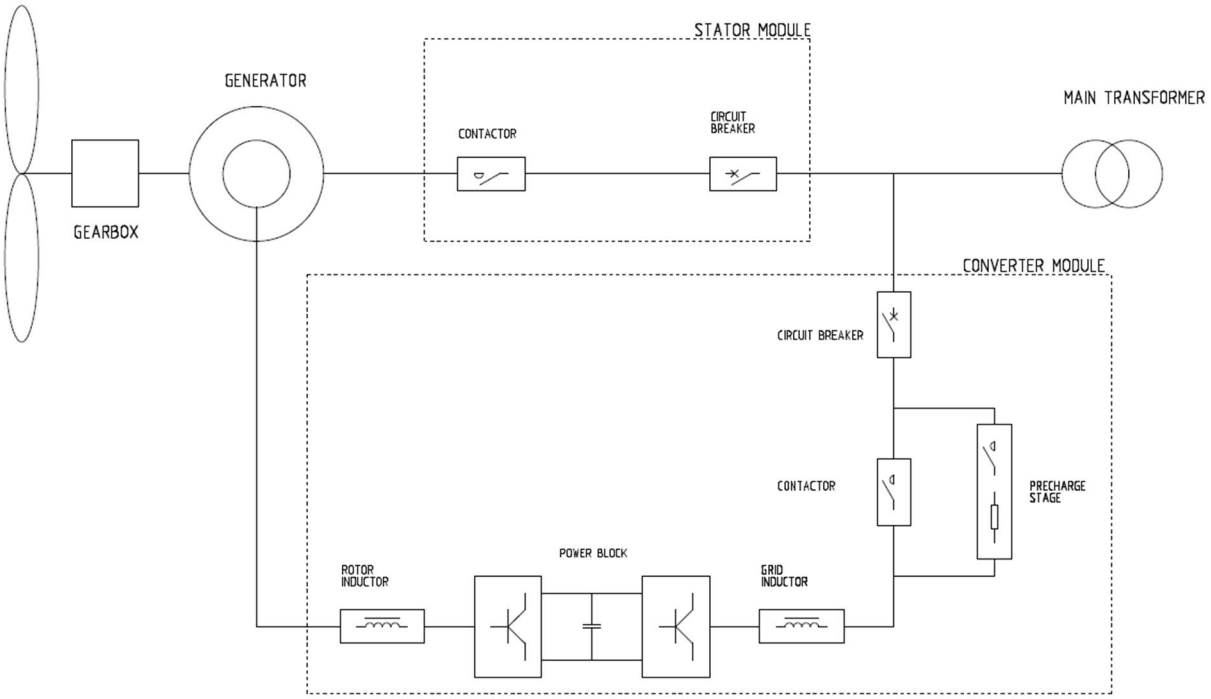
Transformer Specification

Transformer impedance requirement	8.5 % - 10.5%
Secondary voltage	690 V
Vector group	Dyn 11 or Dyn 1 (star point earthed)

Earthing Specification

Earthing system	Acc. to IEC62305-3 ED 1.0:2010
Foundation reinforcement	Must be connected to earth electrodes
Foundation terminals	Acc. to SGRE Standard
HV connection	HV cable shield shall be connected to earthing system

Simplified Single Line Diagram



Transformer Specifications ECO 30 kV

Transformer

Type	Liquid filled
Max Current.....	7.11 kA + harmonics at nominal voltage ± 10 %
Nominal voltage	30/0.69 kV
Frequency	50 Hz
Impedance voltage	9.5% ± 8.3% at ref. 6.5 MVA
Loss (P_0 /$P_{k75°C}$)	4.77/84.24 kW
Vector group	Dyn11
Standard……...	IEC 60076 ECO Design Directive

Transformer Cooling

Cooling type……	KFWF
Liquid inside transformer	K-class liquid
Cooling liquid at heat exchanger	Glysantin

Transformer Monitoring

Top oil temperature……	PT100 sensor
Oil level monitoring sensor…	Digital input
Overpressure relay……..	Digital input

Transformer Earthing

Star point	The star point of the transformer is connected to earth

Switchgear Specifications

The switchgear will be chosen as factory-assembled, type-tested, and maintenance-free high-voltage switchgear with single-busbar system. The device will be metal-enclosed, metal-clad, gas-isolated, and conforms to the stipulations of IEC 62271-200.

The switchgear vessel of the gas-insulated switchgear is classified according to IEC as a “sealed pressure system”. It is gas-tight for life. The switchgear vessel accommodates the busbar system and switching device (such as vacuum circuit breaker, three-position switch disconnecting and earthing).
The vessel is filled with sulphur hexafluoride (SF6) at the factory. This gas is non-toxic, chemically inert, and features a high dielectric strength. Gas work on site is not required, and even in operation it is not necessary to check the gas condition or refill, the vessel is designed for being gas tight for life.

To monitor the gas density, every switchgear vessel is equipped with a ready-for-service indicator at the operating front. This is a mechanical red/green indicator, self-monitoring and independent of temperature and variations of the ambient air pressure.

MV cables connected to the grid cable- and circuit-breaker feeders are connected via cast-resin bushings leading into the switchgear vessel. The bushings are designed as outside-cone system type “C” M16 bolted 630 A connections according to EN 50181. The compartment is accessible from the front. A mechanical interlock ensures that the cable compartment cover can only be removed when the three-position switch is in the earthed position.

The circuit-breaker operates based on vacuum switching technology. The vacuum interrupter unit is installed in the switchgear vessel together with the three-position switch and is thus protected from environmental influences. The operating mechanism of the circuit-breaker is located outside the vessel. Both, the interrupters and the operating mechanisms, are maintenance-free.

Padlock facilities are provided to lock the switchgear from operation in disconnector open and close position, earth switch open and close position, and circuit breaker open position, to prevent improper operation of the equipment.

Capacitive Voltage detection systems are installed both in the grid cable and the circuit breaker feeders. Pluggable indicators can be plugged at the switchgear front to show the voltage status.

The switchgear is equipped with an over-current protection relay with the functions over current, short circuit and earth fault protection. The relay ensures that the transformer is disconnected if a fault occurs in the transformer or the high voltage installation in the wind turbine. The relay is adjustable to obtain selectivity between low voltage main breaker and the circuit breaker in the substation.
The protective system shall cause the circuit breaker opening with a dual powered relay (self-power supply + external auxiliary power supply possibility). It imports its power supply from current transformers, that are already mounted on the bushings inside the circuit breaker panel and is therefore ideal for wind turbine applications.

Trip signals from the transformer auxiliary protection and wind turbine controller can also disconnect the switchgear.

The switchgear consists of two or more feeders*; one circuit breaker feeder for the wind turbine transformer also with earthing switch and one or more grid cable feeders** with load break switch and earthing switch.

The switchgear can be operated local at the front or by use of portable remote control (circuit breaker only) connected to a control box at the wind turbine entrance level.

* Up to four feeders.
** SGRE to be contacted for possible feeder configurations of circuit breaker and grid feeder combinations.

The switchgear is located below the tower structure. The main transformer, LV switchgear and converters are located on the nacelle level above the tower.

Grid cables, from substation and/or between the turbines, must be installed at the bushings in the grid cable feeder cubicles of the switchgear. These bushings are the interface/grid connection point of the turbine. It is possible to connect grid cables in parallel by installing the cables on top of each other. The space in the MV cable compartments of the switchgear allows the installation of two connectors per phase or one connector + surge arrester per phase.

The transformer cables are installed at the bottom of the circuit breaker feeder. The cable compartment is accessible from the front. A mechanical interlock ensures that the cable compartment cover can only be removed when the three-position switch is in the earthed position.

Optionally, the switchgear can be delivered with surge arresters installed in between the switchgear and wind turbine transformer on the outgoing bushings of the circuit breaker feeder.

1. Technical Data for Switchgear

Switchgear	
Make	TBD
Type	TBD
Rated voltage	20-40,5(Um) kV
Operating voltage	20-40,5(Um) kV
Rated current	630 A
Short time withstand current	20 kA/1s
Peak withstand current	50 kA
Power frequency withstand voltage	70 kV
Lightning withstand voltage	170 kV
Insulating medium	SF_6
Switching medium	Vacuum
Consist of	2/3/4 panels
Grid cable feeder	Cable riser or line cubicle
Circuit breaker feeder	Circuit breaker
Degree of protection, vessel	IP65
Internal arc classification IAC:	A FL 20 kA 1s
Pressure relief	Downwards
Standard	IEC 62271
Temperature range	-25°C to +45°C

Grid cable feeder (line cubicle)	
Rated current, Cubicle	630 A
Rated current, load breaker	630 A
Short time withstand current	20 kA/1s
Short circuit making current	50 kA/1s
Three position switch	Closed, open, earthed
Switch mechanism	Spring operated
Control	Local
Voltage detection system	Capacitive

Circuit breaker feeder	
Rated current, Cubicle	630 A
Rated current circuit breaker	630 A
Short time withstand current	20 kA/1s
Short circuit making current	50 kA/1s
Short circuit breaking current	20 kA/1s
Three position switch	Closed, open, earthed
Switch mechanism	Spring operated
Tripping mechanism	Stored energy
Control	Local
Coil for external trip	230V AC
Voltage detection system	Capacitive

Protection	
Over-current relay	Self-powered
Functions	50/51 50N/51N
Power supply	Integrated CT supply

Interface- MV Cables	630 A bushings type C
Grid cable feeder	M16 Max 2 feeder cables
Cable entry	From bottom
Cable clamp size (cable outer diameter) **	26 - 38mm 36 - 52mm 50 - 75mm
Circuit breaker feeder	630 A bushings type C
Cable entry	M16 From bottom

Interface to turbine control	
Breaker status	
SF6 supervision	1 NO contact
External trip	1 NO contact

*Cable clamps are not part of switchgear delivery.

2. Switchgear Configurations

Find onwards the possible optional configuration of each of the parameters determining HV SWITCHGEAR.
The default options of a basic switchgear are highlighted, which are recommended to be used if after requesting the necessary information from the client it is not received:

- **FRECUENCY**
  - Switchgears working Frequency. (50Hz/60Hz)
- **SWITCH GEAR VOLTAGE**
  - Switchgear insulation voltage.
    The normalized value shall be immediately greater than 1.1 times the nominal operating voltage of the MT network.
- **CURRENT RATING (In)** - **[630A]**
  - Switchgears Current Rating.
- **CURRENT SHORT CIRCUIT (Icc)** - **[20 kA]**
  - Switchgear short circuit current.
  - 25kA as option.
  - It will be the normalized value immediately superior to the maximum short circuit intensity that is given in the short circuit study.
- **SWITCHGEAR TYPE** - **[Options including 0L cubicles shall be selected in the lack of specific information]**
  - This will indicate the type of switchgear in this wind turbine (0L+1A, 2L+1A, …). To determine the type of switchgears that go in each WTG it will be necessary the MV network SLD.
- **CUSTOM CHARACTERISTIC**
  - Space to write anything that it is not indicate in other attribute, for example customer requirements not known until this date.
- **NACELLE ALTITUDE** **[0-1000m]**
  - WINDFARM vertical distance above sea level.
  - WINDFARMS´s AEs contain this data.
  - Bearing in mind this value, select the right range among the available values.
  - This information must be sent to the MV switchgear manufacturer.
- **SWITCHGEAR INTERLOCKS** - **[KEYS RINGED UP], [IDENTICAL KEYS] for France**
  - This will indicate the type of keys in the switchgear interlocks.
    - KEY RINGED UP → The interlocking between switchgears is done by ringed keys.
    - EXACTLY THE SAME KEYS → There is only one key that opens the interlocked locks, therefore no keys are ringed. (For France or by specific requirement)
- **ISOLATED OR COMPENSATED NEUTRAL SYSTEM** - **[NO], it could be YES in Northern Europe countries**
  - This will indicate if neutral system is isolated or compensated, or directly grounded.
  - The SLD of the substation must be checked for verification, or directly ask the customer.
  - If YES is selected → the customer's single-phase short-circuit study will be necessary to be able to calculate the settings of functions 59N and 67N.
    - Fulfil the box in which the neutral system is specified (ISOLATED or COMPENSATED)
- **TEMPERATURE SWITCH GEAR -** **[-25ºC>>+40ºC]**
  - Temperature range that Switchgear must endure which could be different from Wind turbine's temperature range.

- **CORROSION SWITCHGEAR - [C3]**
  - Switchgears corrosion type which could be different from Wind turbine corrosion type.
    - C3 → standard protection.
    - C5M-H/C4H → High corrosion protection.
- **SWITCHGEAR FAULT DETECTOR - [NO]**
  - This will indicate if switchgear has fault detector.
- **SWITCHGEAR KEY EXCHANGE BOX - [NO]**
  - This will indicate if switchgear has key exchange box to interlock the substation switchgears with the header switchgear of each circuit.
  - There has to be as many key exchange boxes as substation line switchgears:
    - 2+2 → When a substation switchgear is connected to a single circuit of the MT network
    - 3+3 → When a substation switchgears is connected to two circuits of the MT network
- **SWITCHGEAR REMOTE PENDANT – [NO]**
  - This will indicate if switchgear has remote control to operate the circuit breaker.
- **SWITCHGEAR MONITORIZATION - [NO]**
  - This will indicate if switchgear has monitorization.
- **SWITCHGEAR MOTORIZATION 1A - [NO]**
  - Indicates if circuit breaker panels have motor and which ones carry it.
    - 1AW → Only those circuit breakers that act as a transformer protection position are motor driven.
    - 1AS → Only those circuit breakers that act as the protection position of a circuit or a complete branch have a motor
    - ALL → All circuit breakers in the switchgear have a motor.
  - If 1AW, 1AS or ALL is configured, the 230 V ac power supply available in the Ground cabinet from the auxiliary transformer of the wind turbine must be requested from the platform.
- **SWITCHGEAR MOTORIZATION 1L - [NO]**
  - Indicates if switch-disconnectors panels have motor and which ones carry it.
    - 1LU → Only those disconnectors that act as the arrival position from the substation or an upstream wind turbine are motorized.
    - 1LD → Only those disconnectors that act as an exit position to a wind turbine located downstream are motorized.
    - ALL → All switchgear disconnectors have motor.
  - If 1LU, 1LD or ALL is configured, the 230 V ac power supply available in the Ground cabinet from the auxiliary transformer of the wind turbine must be requested from the platform.
- **SWITCHGEAR SEQUENTIAL CONNECTION - [NO]**
  - It indicates if it has a sequential connection and if it is carried out by what type of panel it will be carried out:
    - 1L
    - 1A → default option
  - If 1L or 1A is configured, the 230 V ac power supply available in the Ground cabinet from the auxiliary transformer of the wind turbine must be requested from the platform.

Grid Performance Specification, 50 Hz

This document describes the grid performance of the Siemens Gamesa 5.X, 50 Hz wind turbine. Siemens Gamesa Renewable Energy (SGRE) will provide wind turbine technical data for the developer to use in the design of the wind power plant and the evaluation of requirements compliance. The developer will be responsible for the evaluation and ensuring that the requirements are met for the wind power plant.

The capabilities described in this document are based on the assumption that the electrical network is designed to be compatible with operation of the wind turbine. SGRE will provide a document with guidance to perform an assessment of the network's compatibility.

Fault Ride Through (FRT) Capability

The wind turbine is capable of operating when voltage transient events occur on the interconnecting transmission system above and below the standard voltage lower limits and time slot according to Figure 1 and Figure 2.

This performance assumes that the installed amount of wind turbines is in the right proportion to the strength of the grid, which means that the short circuit ratio (Sk/Sn) and the X/R ratio of the grid at the wind turbine transformer terminals must be adequate.

Evaluation of the wind turbine's fault ride through capability in a specific system must be based on simulation studies using the specific network model and a dynamic wind turbine model provided by SGRE. This model is a reduced order model, suitable for balanced simulations with time steps between 4-10 ms.

The standard voltage limits for the Siemens Gamesa 5.X, 50 Hz wind turbine are presented in Figure 1 between 0 - 70 seconds.

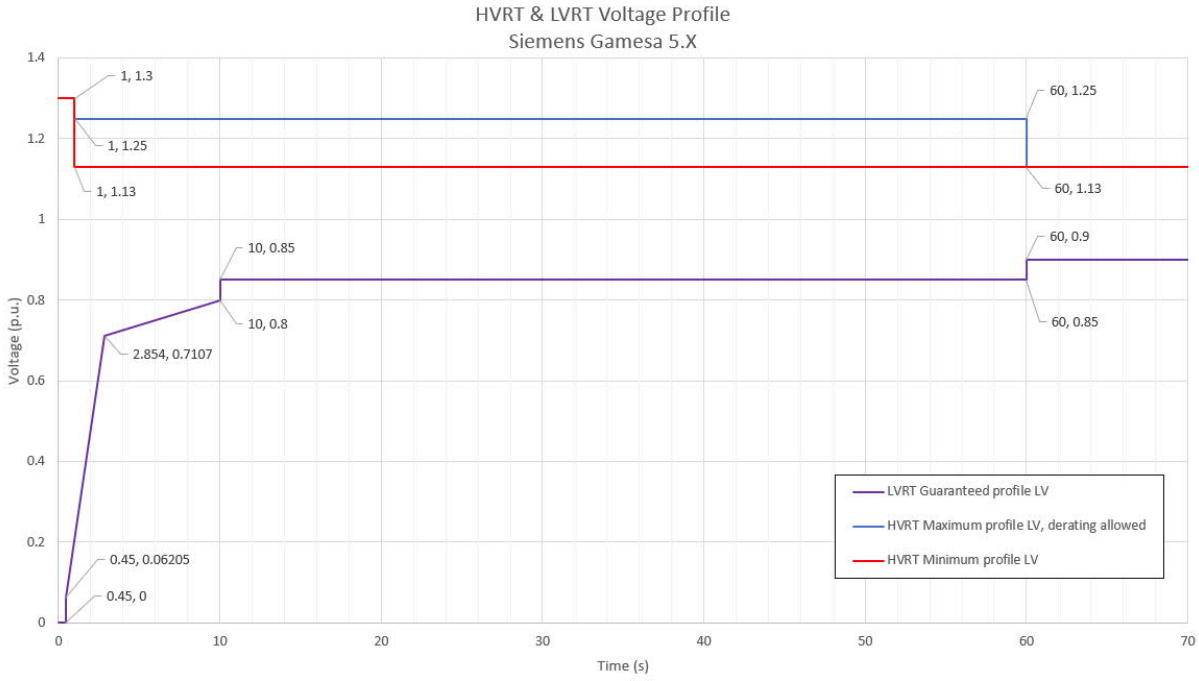


Figure 1. High and Low voltage limits for Siemens Gamesa 5.X, 50 Hz wind turbine in the range of 0-70 seconds. The nominal voltage is 690 V (i.e. 1 p.u.).

Power Factor (Reactive Power) Capability

The wind turbine can operate in a power factor range of 0.9 leading to 0.9 lagging at the low voltage side of the wind turbine transformer, considering a voltage level equal or higher of 0.95pu. Depending on the voltage behaviour (higher or lower, inside maximum permissible margins), the Reactive Power maximum capability is modified accordingly.

The control mode for the wind turbine is with reactive power set-points or Local Voltage Control mode (external set-points of voltage).

Supervisory Control and Data Acquisition (SCADA) Capability

The SGRE SCADA system has the capability to transmit and receive instructions from the transmission system provider for system reliability purposes depending on the configuration of the SCADA system. The project specific SCADA requirements must be specified in detail for design purposes.

Frequency Capability

The wind turbine can operate in the frequency range between 46 Hz and 54 Hz, making a difference between a steady state operation (full simultaneity): ±3%, and transients' events (limited simultaneity): ±8%, over rated frequency.

Simultaneities of main operation parameters shall be considered for evaluating the permitted operation ranges, mainly:

- Active Power level
- Reactive Power provision
- Ambient Temperature
- Voltage level of operation
- Frequency level of operation

And the total time that the turbine is operating under such conditions.

Voltage Capability

The voltage operation range for the wind turbine is between 85% and 113% of nominal voltage at the low voltage side of the wind turbine transformer. The voltage can be up to 130% for 1s, see Figure 1. The wind turbine's target voltage shall stay between 95% and 105% to support the best possible performance by staying within the operation limits.

Beyond ±10% of voltage deviation, automatic voltage support algorithms could execute Reactive Power control, to secure a continuous operation of the Wind Turbine Generator and maximizing the availability, overriding external control and setpoints of Reactive Power.

Flicker and Harmonics

Flicker and Harmonics values will be provided in the power quality measurement report extract in accordance with IEC 61400-21 Edition 2.

Reactive Power -Voltage Control

The power plant controller can operate in two different modes:

- Q Control – In this mode reactive power is controlled at the point of interconnection, according to a reactive power reference

- V Control – Voltage is directly controlled at the point of interconnection, according to a voltage reference

The SCADA system receives feedback/measured values from the Point of Interconnection depending on the control mode it is operating. The wind power plant controller then compares the measured values against the target levels and calculates the reactive power/voltage reference. Finally, references are distributed to each individual wind turbine. The wind turbine's controller responds to the latest reference from the SCADA system and will generate the required response accordingly from the wind turbine.

Frequency Control

The frequency control is managed by the SCADA system together with the wind turbine controller. The wind power plant frequency control is carried out by the SCADA system which distributes active power set-points to each individual wind turbine, to the controllers. The wind turbine controller responds to the latest reference from the SCADA system and will maintain this active power locally.

All data are subject to tolerances in accordance with IE

Grid Performance Specification, 60 Hz

This document describes the grid performance of the Siemens Gamesa 5.X, 60 Hz wind turbine. Siemens Gamesa Renewable Energy (SGRE) will provide wind turbine technical data for the developer to use in the design of the wind power plant and the evaluation of requirements compliance. The developer will be responsible for the evaluation and ensuring that the requirements are met for the wind power plant.

The capabilities described in this document are based on the assumption that the electrical network is designed to be compatible with operation of the wind turbine. SGRE will provide a document with guidance to perform an assessment of the network's compatibility.

Fault Ride Through (FRT) Capability

The wind turbine is capable of operating when voltage transient events occur on the interconnecting transmission system above and below the standard voltage lower limits and time slot according to Figure 1 and Figure 2.

This performance assumes that the installed amount of wind turbines is in the right proportion to the strength of the grid, which means that the short circuit ratio (Sk/Sn) and the X/R ratio of the grid at the wind turbine transformer terminals must be adequate.

Evaluation of the wind turbine's fault ride through capability in a specific system must be based on simulation studies using the specific network model and a dynamic wind turbine model provided by SGRE. This model is a reduced order model, suitable for balanced simulations with time steps between 4-10 ms.

The standard voltage limits for the Siemens Gamesa 5.X, 60 Hz wind turbine are presented in Figure 1 between 0 - 70 seconds.

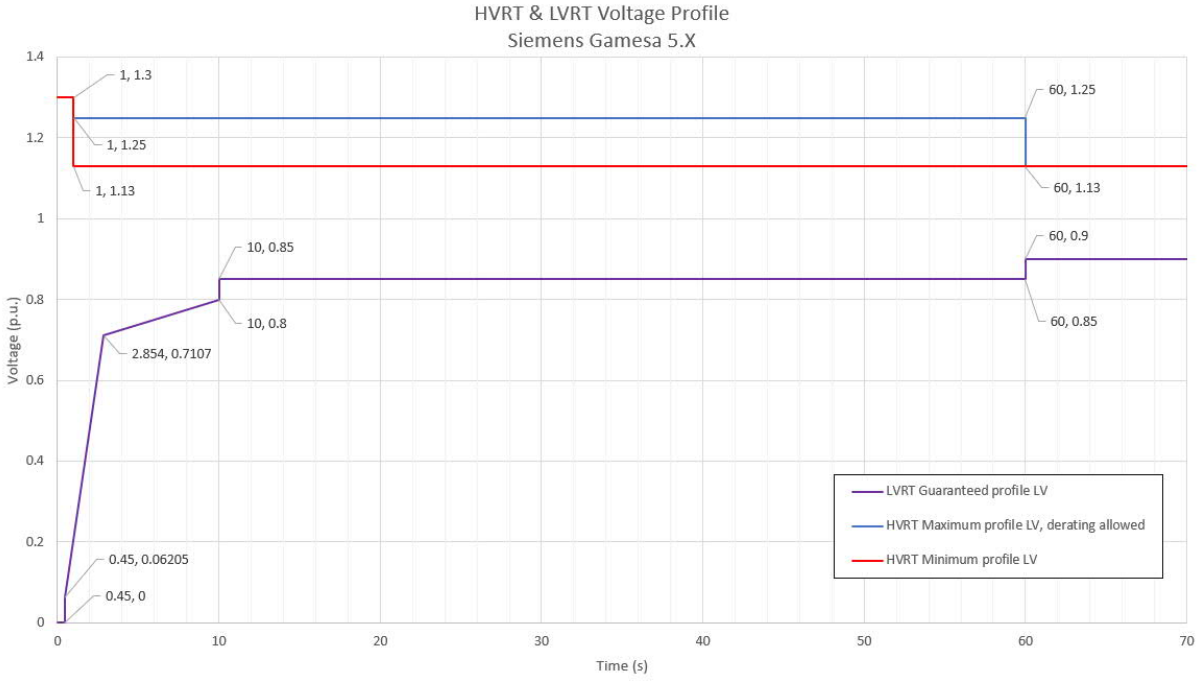


Figure 1. High and Low voltage limits for Sieemns Gamesa 5.X, 60 Hz wind turbine in the range of 0-70 seconds. The nominal voltage is 690 V (i.e. 1 p.u.).

Power Factor (Reactive Power) Capability

The wind turbine can operate in a power factor range of 0.9 leading to 0.9 lagging at the low voltage side of the wind turbine transformer, considering a voltage level equal or higher of 0.95pu. Depending on the voltage behaviour (higher or lower, inside maximum permissible margins), the Reactive Power maximum capability is modified accordingly.

The control mode for the wind turbine is with reactive power set-points or Local Voltage Control mode (external set-points of voltage).

Supervisory Control and Data Acquisition (SCADA) Capability

The SGRE SCADA system has the capability to transmit and receive instructions from the transmission system provider for system reliability purposes depending on the configuration of the SCADA system. The project specific SCADA requirements must be specified in detail for design purposes.

Frequency Capability

The wind turbine can operate in the frequency range between 55.2 Hz and 64.8 Hz, making a difference between a steady state operation (full simultaneity): ±3%, and transients' events (limited simultaneity): ±8%, over rated frequency.

Simultaneities of main operation parameters shall be considered for evaluating the permitted operation ranges, mainly:

- Active Power level
- Reactive Power provision
- Ambient Temperature
- Voltage level of operation
- Frequency level of operation

And the total time that the turbine is operating under such conditions.

Voltage Capability

The voltage operation range for the wind turbine is between 85% and 113% of nominal voltage at the low voltage side of the wind turbine transformer. The voltage can be up to 130% for 1s, see Figure 1. The wind turbine's target voltage shall stay between 95% and 105% to support the best possible performance by staying within the operation limits.

Beyond ±10% of voltage deviation, automatic voltage support algorithms could execute Reactive Power control, to secure a continuous operation of the Wind Turbine Generator and maximizing the availability, overriding external control and setpoints of Reactive Power.

Flicker and Harmonics

Flicker and Harmonics values will be provided in the power quality measurement report extract in accordance with IEC 61400-21 Edition 2.

Reactive Power -Voltage Control

The power plant controller can operate in two different modes:

- Q Control – In this mode reactive power is controlled at the point of interconnection, according to a reactive power reference
- V Control – Voltage is directly controlled at the point of interconnection, according to a voltage reference

The SCADA system receives feedback/measured values from the Point of Interconnection depending on the control mode it is operating. The wind power plant controller then compares the measured values against the target levels and calculates the reactive power/voltage reference. Finally, references are distributed to each individual wind turbine. The wind turbine's controller responds to the latest reference from the SCADA system and will generate the required response accordingly from the wind turbine.

Frequency Control

The frequency control is managed by the SCADA system together with the wind turbine controller. The wind power plant frequency control is carried out by the SCADA system which distributes active power set-points to each individual wind turbine, to the controllers. The wind turbine controller responds to the latest reference from the SCADA system and will maintain this active power locally.

Reactive Power Capability, 50 and 60 Hz

This document describes the reactive power capability of SG 6.0-170, 50/60 Hz wind turbines during active power production. SG 6.0-170 wind turbines are equipped with a B2B Partial load frequency converter which allows the wind turbine to operate in a wide power factor range.

The maximum amount of Reactive Power to be generated or consumed depends on a wide range of parameters, some of them not possible to consider in a general way as they are fully dependent on the site, grid and Wind Turbine operation conditions.

Between others, the Reactive Power Capability at a given Operating Conditions depends on existing Active Power, internal temperature of Wind Turbine components, external ambient temperature, Grid conditions (voltage level, frequency level, etc.) and impact, thermally, in high inertial systems. So, the required operation time in worse conditions is also a parameter to be considered.

Online maximum capabilities estimation is executed by the Reactive Power Controller algorithm, to provide the possibility of maximizing the Capabilities in favorable grid and site conditions.

Reactive Power Capability. Generalities.

The estimated reactive power capability for the wind turbine at the LV side of the wind turbine transformer will be presented in the following Figures and Tables.

Figure 1 shows the reactive power capability depending on the generated Active Power at various voltages at the LV terminals, starting by 90% of rated voltage (PQV curves).

Figure 2 shows the reactive power capability depending on the voltage level (QV curve) at full power operation.

The reference external temperature is set to rated (**SG 6.0-170, AM 0/6.2MW**, **30ºC external Temp**).

Base Value used for Per Unit calculations is **6200kW.**

Other operation modes (AM) for same Turbine variant (Active Power vs External Ambient Temperatures) will secure, at least, the capabilities shown in this document at the specific Active Power Level base values for each variant.

Figure 3 includes reactive power capability at no wind operating conditions (Statcom mode operation).

The SCADA can send voltage references to the wind turbine in the range of 92% to 108% (references of 90% to 110% in specific cases). The wind power plant is recommended to be designed to maintain the wind turbine voltage references between 95% and 105% during steady state operation.

The included capability assume that the phase voltages are balanced (unbalance value below the maximum guaranteed, ≤ 5%) and that the grid operational frequency is nominal.

Given the uncertainties in determining the overall Wind Turbine operation state variables tolerances, the given Reactive Power Capability is subjected to a tolerance up to ± 10 %.

These figures consider Wind Turbine operation around its expected generator speed for each operation condition (P-n operation curve). Extreme speed excursions caused by specific Wind gusts, up and down from standard value, may cause punctual Reactive Power restrictions due to Generator and Converter limits of voltage and currents. All this is also fully dependent on the Grid conditions of voltage level and external setpoint.

Values of Reactive Power for those operational points in between the shown curves can be calculated by means of linear interpolation.

The reactive power capability presented in this document is the net capability and accounts for the contribution from the wind turbine auxiliary system, the reactors and the existing filters.

The reactive power capability described is valid while operating the wind turbine within the limits specified in the Design Climatic Conditions.

Operation below 90% of rated voltage

Standard operation at voltages in between 85% to 90% over rated is considered a special situation where both Reactive Power and Active Power may be de-rated depending on operation conditions of the Wind Turbine Generator.

Usually, depending on specific local regulations, Under Voltage Ride Through (UVRT) support happens in voltage values below 90% of rated voltage, so this operation case is not compatible as during UVRT support, Reactive Power is internally controlled depending on demands from applicable Grid Codes of Operation. This is also applicable during OVRT transients.

Specific studies should be executed in order to determine the operation and the possible values to be reached in such special operation cases, where and when required.

Reactive Power / Voltage limiting function

When Wind Turbine operation is close to voltage limits (under-voltage and over-voltage grid protection configured values), a specific Reactive Power / Voltage limiting function acts causing a so-called *Voltage Saturation*. The intention of this algorithm is to avoid a self-trip due to activation of over or under-voltage protections caused by Reactive Power operation of the turbine.

In the maximum configurable values of the voltage protection parameters (permanent operation, 85% and 113%):

- In case of under-voltage, the negative Reactive Power (Inductive, under-excited) is linearly limited from *No_Limit* to *0*, in the voltage range 90% to 85%.
    - The voltage used for evaluating and executing this Saturation is the minimum of the 3 phase voltages.
- In case of over-voltage, the positive Reactive Power (Capacitive, over-excited) is linearly limited from *No_Limit* to *0*, in the voltage range 112% to 113%.
    - The voltage used for evaluating and executing this Saturation is the maximum of the 3 phase voltages.

All these levels are possible to be set by parameters, depending on necessities, local requirements and as results of stability studies.

Reactive Power capabilities and curves shown in this document are generated having configured the next saturation values (values by default). This can be observed in figure 2. QV diagram.

- Under-Voltage saturation: 91% to 90% of rated voltage.
- Over-Voltage saturation: 112% to 113% of rated voltage.

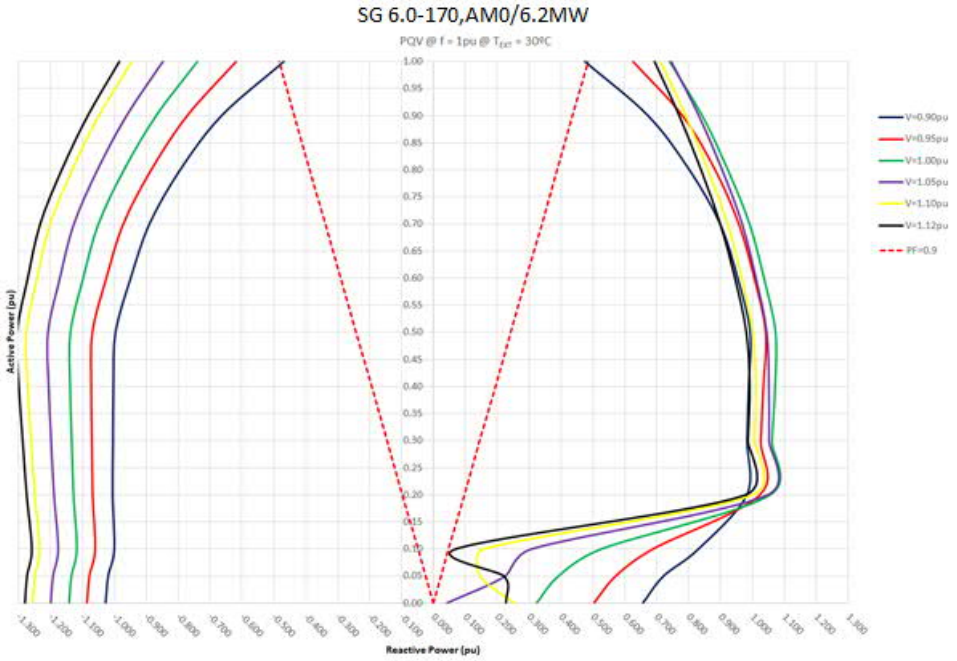


Figure 1: Reactive power capability curves (PQV), 50/60 Hz Wind Turbine, at LV terminals.

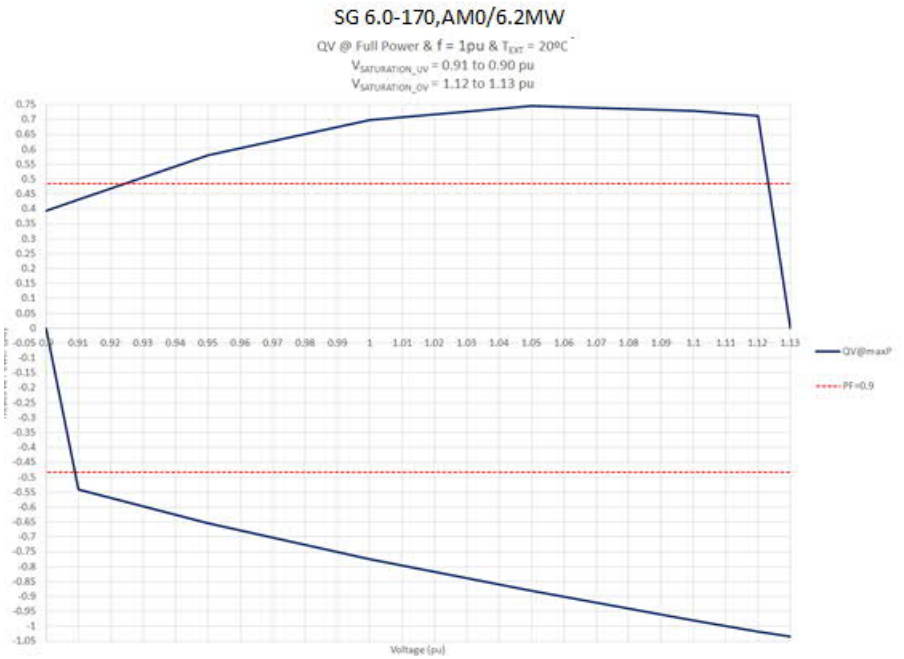


Figure 2: Reactive power capability curves (QV), 50/60 Hz Wind Turbine, at LV terminals, at Full Power operation.

		Voltage (pu)							
		0.9	**0.91**	**0.95**	**1**	**1.05**	**1.1**	**1.12**	**1.13**
Active Power (pu)	**0.0 ***	0.656	0.625	0.504	0.324	0.042	0.253	0.228	0
	0.05	0.720	0.691	0.572	0.393	0.225	0.147	0.222	0
	0.1	0.830	0.802	0.688	0.526	0.307	0.158	0.070	0
	0.2	0.982	0.990	1.023	1.055	1.048	1.000	0.978	0
	0.3	0.983	0.992	1.026	1.061	1.052	1.007	0.986	0
	0.4	0.988	0.997	1.034	1.071	1.052	1.011	0.992	0
	0.5	0.993	1.002	1.041	1.072	1.045	1.001	0.981	0
	0.6	0.954	0.964	1.006	1.036	1.012	0.967	0.946	0
	0.7	0.899	0.910	0.957	0.991	0.968	0.922	0.900	0
	0.8	0.802	0.818	0.883	0.923	0.905	0.861	0.839	0
	0.9	0.672	0.694	0.781	0.842	0.832	0.791	0.771	0
	1.0	0.474	0.504	0.626	0.740	0.746	0.712	0.693	0

Table 1: Reactive power capability values (pu), 50/60 Hz Wind Turbine, at LV terminals. Capacitive / Over-excited operation.

		Voltage (pu)							
		0.9	**0.91**	**0.95**	**1**	**1.05**	**1.1**	**1.12**	**1.13**
Active Power (pu)	**0.0 ***	0	-1.039	-1.085	-1.142	-1.199	-1.257	-1.280	-1.291
	0.05	0	-1.032	-1.077	-1.135	-1.192	-1.250	-1.273	-1.285
	0.1	0	-1.013	-1.060	-1.118	-1.176	-1.235	-1.258	-1.270
	0.2	0	-1.018	-1.067	-1.129	-1.189	-1.250	-1.274	-1.286
	0.3	0	-1.018	-1.070	-1.134	-1.198	-1.261	-1.287	-1.299
	0.4	0	-1.017	-1.072	-1.139	-1.206	-1.272	-1.299	-1.312
	0.5	0	-1.011	-1.068	-1.138	-1.208	-1.277	-1.304	-1.317
	0.6	0	-0.964	-1.024	-1.098	-1.171	-1.243	-1.271	-1.285
	0.7	0	-0.907	-0.971	-1.050	-1.127	-1.202	-1.232	-1.247
	0.8	0	-0.812	-0.884	-0.970	-1.053	-1.133	-1.165	-1.180
	0.9	0	-0.685	-0.771	-0.869	-0.962	-1.049	-1.083	-1.100
	1.0	0	-0.499	-0.618	-0.740	-0.848	-0.946	-0.984	-1.003

Table 2: Reactive power capability values (pu), 50/60 Hz Wind Turbine, at LV terminals. Inductive / Under-excited operation.

* Case of Wind turbine operating with very low wind, but with generator connected to the grid.

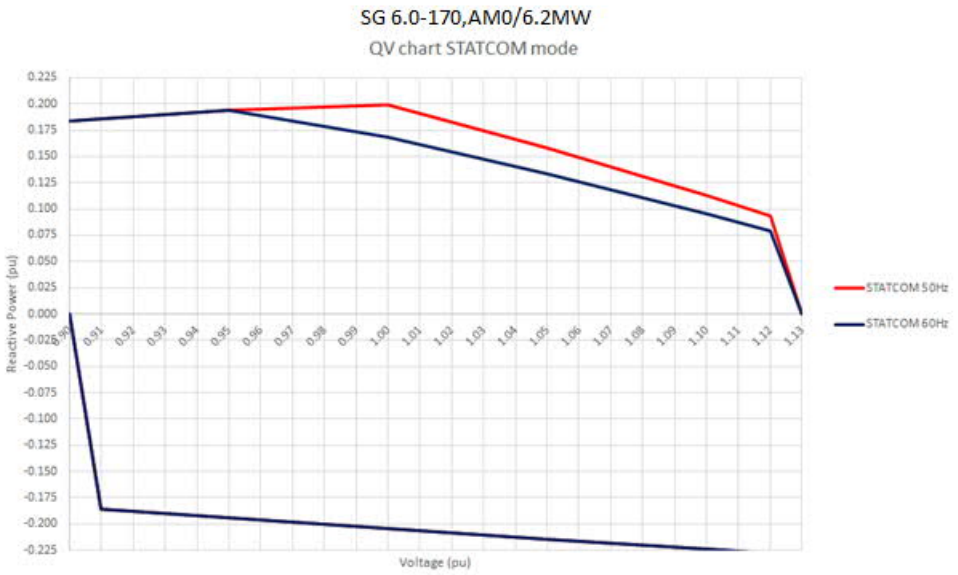


Figure 3: Reactive Power Capability chart (pu) at no wind conditions, at LV terminals, 50/60Hz.
Case of Wind turbine not in operation, with generator stopped or below the connection speed.

SG 6.0-170 6.2MW 50Hz		
V (pu)	**Q+ (pu)**	**Q- (pu)**
0.90	0.183	0
0.91	0.185	-0.185
0.95	0.194	-0.194
1.00	0.199	-0.204
1.05	0.158	-0.214
1.10	0.113	-0.224
1.12	0.093	-0.228
1.13	0	-0.230

SG 6.0-170 6.2MW 60Hz		
V (pu)	**Q+ (pu)**	**Q- (pu)**
0.90	0.183	0
0.91	0.185	-0.185
0.95	0.194	-0.194
1.00	0.168	-0.204
1.05	0.134	-0.214
1.10	0.096	-0.224
1.12	0.079	-0.228
1.13	0	-0.230

Table 3: Reactive Power Capability values (pu) at no wind conditions, at LV terminals, 50/60Hz.
Case of Wind turbine not in operation, with generator stopped or below the connection speed.

SCADA, System Description

The SGRE SCADA system is a system for supervision, data acquisition, control, and reporting for wind farm performance.

Main features
The SCADA system has the following main features:

- On-line supervision and control accessible via secured tunnel over the Internet.
- Data acquisition and storage of data in a historical database.
- Local storage of data at wind turbines if communication is interrupted and transferred to historical database when possible.
- System access from anywhere using a standard web browser. No special client software or licenses are required.
- Users are assigned individual usernames and passwords, and the administrator can assign a user level to each username for added security.
- Email function can be configured for fast alarm response for both turbine and substation alarms.
  Configuration can also support alarm notification via SMS service.
- Interface to power plant control functions for enhanced control of the wind farm and for remote regulation, e.g. MW / Voltage / Frequency / Ramp rate.
- Interface for integration of substation equipment for monitoring and control.
- Interface for monitoring of Reactive compensation equipment, control of this equipment is achieved via the SGRE power plant controller
- Integrated support for environmental control such as noise, shadow/flicker, bat/wildlife and ice.
- Capabilities for monitoring hybrid power plant equipment such as Battery Energy Storage Systems (BESS) and Photo Voltaic (PV) systems. Control of such equipment is achieved via the SGRE power plant controller.
- Power curve plots and efficiency calculations with pressure and temperature correction (pressure and temperature correction available only if SGRE MET system supplied).
- Condition monitoring integrated with the turbine controller using designated server.
- Ethernet-based system with secure compatible interfaces (OPC UA / IEC 60870-5-104) for online data access.
- Legacy protocols like OPC-(XML)-DA or Modbus TCP can be supported on request
- Access to historical - scientific and optional high resolution data via Restfull API.
- Virus Protection Solution.
- Back-up & restore.

Wind turbine hardware
Components within the wind turbine are monitored and controlled by the individual local wind turbine controller (SICS). The SICS can operate the turbine independently of the SCADA system, and turbine operation can continue autonomously in case of, e.g. damage to communication cables.

Data recorded at the turbine is stored at the SICS. In the event that communication to the central server is temporarily interrupted data is kept in the SICS and transferred to the SCADA server when possible.

Communication network in wind farm
The communication network in the wind farm must be established with optical fibers. The optimum network design is typically a function of the wind farm layout. Once the layout is selected, SGRE will define the minimum requirements for the network design.

The supply, installation, and termination of the communication network are typically carried out by the Employer. If specifically agreed the division of responsibility for the communication network can be changed.

SCADA server panel
The central SCADA server panel supplied by SGRE is normally placed at the wind farm substation or control building.The server panel comprises amongst others:

- The server is configured with standard disk redundancy (RAID) to ensure continuous operation in case of disk failure. Network equipment. This includes all necessary switches and media converters.
- UPS back up to ensure safe shut down of servers in case of power outage.

For large sites or as option a virtualized SCADA solution can be supplied.

On the SCADA server the data is presented online as a web-service and simultaneously stored in an SQL database. From this SQL database numerous reports can be generated.

Employer “client” connection to the SCADA system establishing via the internet through a point to point TCP/IP VPN-connection.

Grid measuring station and Wind Farm Controler
The SCADA system includes a grid measuring station located in one / more module panels or in the SCADA server panel. Normally the grid measuring station is placed at the wind farm substation or control building.

The heart of the grid measuring station is a PQ meter. The Wind Farm Control /grid measuring station can be scaled to almost any arrangement of the grid connection. The grid measuring station requires voltage and current signals from VT’s and CT’s fitted at the wind farm PCC to enable the control functions.

The grid measuring station and the Wind Farm Control interfaces to the SGRE SCADA servers and turbines are via a LAN network.

The Wind Farm Control can on request be supplied in a high availability (HA) setup with a redundant server cluster configuration.

Note: In small SGRE SCADA systems (typically <10 turbines) and if the small SGRE SCADA system is placed in a turbine the Wind Farm Control and grid measuring station may be arranged otherwise.

Signal exchange
Online signal exchange and communications with third party systems such as substation control systems, remote control systems, and/or maintenance systems is possible from both the module and/or the SGRE SCADA server panel. For communication with third party equipment OPC UA and IEC 60870-5-104 are supported. Legacy protocols like OPC-(XML)-DA or Modbus TCP can be supported on request

SGRE SCADA software
The normal SGRE SCADA user interface presents online and historical data. The screen displays can be adjusted to meet individual customer requirements.

Historical data are stored in an MS SQL database as statistical values and can be presented directly on the screen or exported for processing in MS Access or via a RESTfull API.

The SGRE SCADA software can also serve as user interface to the Wind Farm Control functions.

Virus protection solution

A virus protection solution can be offered as a part of the Service Agreement (SA). An anti-virus client software will in that case be installed on all MS-Windows based components at the SCADA system and the WTGs.

The virus protection solution is based on a third-party anti-virus product. Updates to the anti-virus client software and pattern files are automatically distributed from central SGRE based servers.

Back-up & restore

For recovery of a defect SCADA system or component, the SGRE SCADA system provides back-up of configuration files and basic production data files. Both configuration and selected production data are backed up automatically on a regular time basis for major components. The back-up files are stored both locally on the site servers and remotely on SGRE back-up storage servers.

Codes and Standards

INTRODUCTION AND SCOPE

This document lists codes and standards according to which turbines are designed, manufactured and tested. The scope of this document is limited to the Siemens Gamesa 5.X platform.

CODES AND STANDARDS

SGRE Onshore geared turbines are designed, manufactured, and tested to SGRE's technical drawings, procedures, and processes that are generally in compliance with the applicable sections of the codes and standards listed herein. This list of codes and standards for design, manufacturing, and testing forms a part of the design basis documentation. The edition of the codes and standards is the version used for the certification process which is conducted by an external certifying body.

GENERAL

- IEC-RE Operational Document: OD-501, Type and Component Certification Scheme*
  - *IEC-RE is the substitute of IEC 61400-22:2010 Ed.1, Wind turbines – Part 22: Conformity testing and certification.

- *IEC 61400-1:2019 Ed.4 Wind turbines –. Part 1: Design requirements*
- *IEC 61400-11:2012 + AMD1:2018, Wind turbine generator systems Part 11: Acoustic noise measurement techniques*
- *IEC 61400-12-1:2017, Ed.1, Wind Turbine Generator Systems Part 12: Power performance measurements of electricity producing wind turbines*
- *IEC 61400-13: 2015 Wind Turbine Generator Systems - Part 13: Measurement of Mechanical Loads*
- *IEC 61400-23 Ed. 1.0 EN :2014 Wind turbines - Part 23: Full-scale structural testing of rotor blades*

- *EN 10025-1:2004, Hot rolled products of structural steels - Part 1: General technical delivery conditions*
- *EN 10025-2:2004, Hot rolled products of structural steels - Part 2: Technical delivery conditions for non-alloy structural steels*
- *EN 10025-3:2004, Hot rolled products of structural steels - Part 3: Technical delivery conditions for normalized/normalized rolled weldable fine grain structural steels*
- *EN 10029:2010, Hot rolled steel plates 3 mm thick or above - Tolerances on dimensions, shape and mass*
- *EN 10083:2006, Quenched and tempered steels - Part 1: Technical delivery conditions for special steels (Main shaft)*
- *EN 1563:2012, Founding - Spheroidal graphite cast irons*
- *EN 1993-1-8:2005/AC:2009: Eurocode 3: Design of steel structures Part 1-8: Joints*
- *EN 1999-1-1-2008 Design of aluminum structures – part 1-1: General structural rules*
- *ISO 16281:2008 Rolling bearings - Methods for calculating the modified reference rating life for universally loaded bearings*
- *ISO 16281:2008 / Cor. 1:2009 Rolling bearings - Methods for calculating the modified reference rating life for universally loaded bearings*
- *ISO 281:2007 Rolling bearings - Dynamic load ratings and rating life - Life modification factor aDIN and calculation of the modified rating life*
- *ISO 76:2006 Rolling bearings - Static load ratings*
- *ISO 898-1:2013, Mechanical properties of fasteners made of carbon steel and alloy steel -- Part 1: Bolts, screws and studs with specified property classes -- Coarse thread and fine pitch thread*

- *VDI 2230 Blatt 1, 2016, Systematic calculation of highly stressed bolted joints - Joints with one cylindrical bolt*

- *ISO 4413:2011 Hydraulic fluid power -- General rules and safety requirements for systems and their components*
- *DIN 51524-3_1990 Pressure fluids - Hydraulic oils - Part 3: HVLP hydraulic oils, Minimum requirements*
- *ISO 16889:2008 Hydraulic fluid power -- Filters -- Multi-pass method for evaluating filtration performance of a filter element*
- *UNE-EN 14359:2008+A1:2011: Gas-loaded accumulators for fluid power applications.*
- *PED 2014/68/EU Pressure Equipment Directive*

- *DNV-DS-J102:2010 Design and Manufacture of Wind Turbine Blades, Offshore and Onshore Wind Turbines*
- DNVGL-ST-0126:2016 *Support structures for wind turbines*

- *DIBt - Richtlinie für Windenergieanlagen - Oktober 2012, korrigierte Fassung März 2015*
- *DIBt* – Richtlinie für Windenergieanlagen:2012, Einwirkungen und Standsicherheitsnachweise für Turm und Gründung.

GEARBOX

- *IEC 61400-4:2012 Wind turbines -- Part 4: Design requirements for wind turbine gearboxes*

ELECTRICAL

- *IEC 61400-21:2008 Wind turbine generator systems - Part 21: Measurement and assessment of power quality characteristics of grid connected wind turbines*
- *IEC 61400-24 Ed. 1.0 (2010) Wind turbines - Part 24: Lightning protection.*
- *IEC* 60076-16:2018 – Power transformers - Part 16: Transformers for wind turbine applications

- *EN 60204-1:2006 (+correct 2010) Safety of machinery - Electrical equipment of machines - Part 1: General requirements*
- *EN 61000-6-2:2005 Electromagnetic compatibility (EMC) - Part 6-2: Generic standards – Immunity for industrial environments.*
- *EN 61000-6-4:2007 Electromagnetic compatibility (EMC) - Part 6-4: Generic standards - Emission standard for industrial environments.*
- *EN 61439-1:2014 Low-voltage switchgear and control gear assemblies. General rules*
- *EN 61439-2:2011 Low-voltage switchgear and control gear assemblies. Power switchgear and control gear assemblies*

- *Low Voltage Directive 2014/35/EU*
- *EMC Directive* 2014/30/EU

QUALITY

- ISO 9001:2015 Quality management systems – Requirements

PERSONAL SAFETY

- 2006/42/EC Machinery Directive
- EN 50308:2004, Wind turbines – Protective measures – Requirements for design, operation and maintenance.
- OSHA 2005 Requirements for clearances at doorways, hatches, and caged.
    - OSHA's Subpart D Walking-Working Surfaces Section 1910.27v
- ISO12100:2011 Safety of machinery – General principles for design – Risk assessment and risk reduction
- ISO 13849-1:2015 – Safety of machinery – Safety-related parts of control systems – Part 1: General principles for design
- ISO 13849-2:2013 - Safety of machinery – Safety-related parts of control systems – Part 2: Validation

CORROSION

- *ISO 12944-1:2017, Paints and varnishes - Corrosion protection of steel structures by protective paint systems – Part 1: General introduction (class C3 to C4)*

Other Performance Features

Siemens Gamesa Renewable Energy (SGRE) offers the following optional performance features for the SG 6.0-170 that can optimize your wind farm by boosting performance, enhancing environmental agility, supporting compliance with legal regulation, and supporting grid stability.

High Wind Derated operational mode

In the case of SG 6.0-170 high wind derated mode, it is enabled as it can be observed on the different power curves included in this document. The power production is limited once wind speed exceeds a threshold value defined by design, until cut-out wind speed is reached and the wind turbine stops producing power. This functionality extends the range of operation in high wind conditions limiting turbine loads dependent of maximum operational wind speed, providing more predictable energy output, minimizing production losses, and improving grid stability by reducing the risk of simultaneous power cut outs.

High Temperature Ride Through (also known as Temperature De-Rating)

Ventilation and cooling systems are designed to allow the WTG operation at rated power up to a certain external nominal temperature and a certain altitude. For sites located beyond 1000m above the sea level, the air density reduction affects the turbine components ventilation capacity, reducing the maximum operational temperature at rated power. However, this maximum ambient temperature can be extended by reducing the delivered power.

Considering the individual components requirements in temperatures at different altitude levels, and their dissipated heat at different power limits, several curves power-temperature will be generated. These curves will define the envelopes inside which SG 6.0-170 could operate assuring the integrity of all components.

High temperature kit could be included in case operating range needs to be extended.

The control system, considering the defined turbine type and altitude above sea level, will dynamically adjust the maximum allowed power as a function of the ambient temperature.

Ice Detection System

Ice Detection System (Default)

The default ice detection method is an integrated part of the Siemens Gamesa Renewable Energy (SGRE) wind turbine controller. It is a software solution that can be used to detect ice on the turbine blades by comparing actual performance data to the turbine nominal power curve. The actual performance is based on 10 minutes average data. If the actual performance is below the low power ice detection power curve, then under certain conditions it is reasonable to assume that the low power production is caused by ice build-up on the blades. This method of ice detection is only available when the turbine is operating.

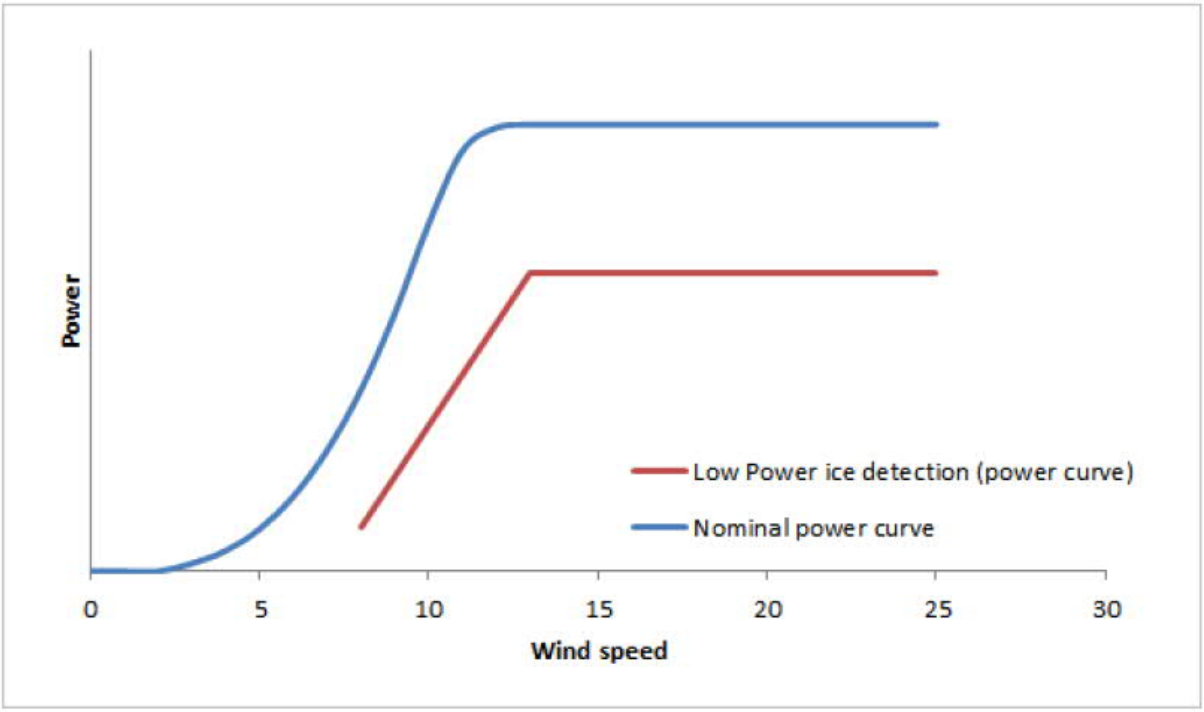


Figure 1: Illustrative comparison of the low power ice detection power curve and the nominal power curve.

Ice Detection Sensors

Nacelle Based Ice Detection Sensor (Optional)

The nacelle ice detection sensor is an optional system intended for installation on wind turbines located in areas where ice can build up on the turbine. The purpose of the ice detector system is to provide the turbine controller information about potential risk for ice on the turbine. The ice detection system can detect in-cloud icing as well as freezing rain.
Depending on requirements, when ice is detected an ice alarm can initiate a turbine stop. This may be followed by a de-icing sequence (if de-icing is installed), or yaw to a predefined position until it is deemed safe to restart.

Certification

The systems can come with a valid certification from accredited institutes.

Improved Ice Detection (Optional)

An improved ice detection function is an optional safety system, which is primarily used on sites exposed to icy conditions, where ice built on the rotor blades is possible. The system will provide information to the wind turbine controller about the potential risk of ice on the rotor blades.
The algorithm is based on an ice probability calculation evaluating performance, temperature, humidity (additional sensor), wind speed and ice sensor (additional sensor). Depending on the site requirements the alarm may cause a turbine stop, a visual and/or acoustic warning on site (optional) and/or – if installed – the rotor blade de-icing is activated. The alarm is active until the site conditions are back to a regular state.

Certification

The systems can come with a valid certification from accredited institutes.

Blade-Based Ice Detection (Optional)

An additional option is to install blade-based ice detection system set, in order to trigger the Ice Operation. Such system includes a set of sensors (accelerometers) on each blade, plus a central monitoring unit. The ice detection is performed by analysis of blade eigenfrequencies with respect to ice accumulation. Therefore, the system shall need a calibration prior to enter into service (varying, and up to 3 months depending on the conditions and WTG configuration).

Ice detection is possible at standstill and during operation. A minimum wind speed of 2 m/s is required. There is no minimum rotation per minute (rpm) required. How-ever, no evaluation is possible during idling since there is usually not enough excitation due to low wind speed.

Certification

The systems can come with a valid certification from accredited institutes.

System Architecture

The system consists of the following parts:

- Sensors including control and evaluation units (Optional)
- Interface to the SGRE wind turbine controller
- Alarm communication to the SGRE SCADA system
- Installation and maintenance according to the valid contract clauses

Integration in SCADA System

SCADA interface for Ice Detection system enables the following:

- Set predefined ice conditions using ice parameters
- Enable or disable automatic stop of turbines
- Enable or disable automatic restart of turbines
- Group turbines for auto stop and auto restart. The SCADA system recommends to group ice sensor installed turbines along with turbines on which ice sensors are not installed.

Default ice parameters are set in SCADA interface. Depending on requirements, default ice parameters can be modified to configure new ice conditions through the SCADA interface.

- Ice Restart Delay: Turbines which are stopped due to ice is restarted only if ice is not reported during the ice restart delay in seconds configured by the user.
- Ice Stop Delay: Turbines are stopped due to ice only if ice is detected on turbines for more than the ice stop delay in seconds configured by the user.
- Ambient Temperature Duration: Duration in seconds when Ice Ambient Temperature configured by the user remains or exceeds, to restart the turbines which are stopped due to ice.
- Ambient Temperature Threshold: The minimum temperature in Celsius configured by the user which sets a condition to restart turbines stopped due to ice formation on blades. The ambient temperature must exceed the Ice Ambient temperature configured by the user for duration in seconds as specified in Ambient Temperature duration. Setting of ice ambient temperature and Ambient temperature duration prevents turbines from rapidly switching between ice start and ice stop operations.
- Activation Time: The Ice Control Start time and Ice Control End time configured by the user in the interface defines the activation time. Turbines are stopped due to ice when current time falls within the time range configured in Ice Control Start Time and Ice Control End time. When the current time falls outside the range specified in Ice Control Start Time and Ice Control End time, the turbines are restarted. SCADA system recommends setting time ranges such that turbines can be stopped during the day and started at night.

Ice build-up on the turbine can possibly cause damage to objects and people in the vicinity. It is the sole responsibility of the owner of the turbine(s) to ensure that the public is protected from ice being thrown from the turbine(s). The Owner must always ensure that the operation of the turbine(s) comply with any restriction applicable to the turbine(s), irrespective of whether such restrictions follows from permits, legislation or otherwise. Siemens Gamesa Renewable Energy accepts no responsibility for any violation of requirements.

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- data di emissione *date of issue*	2016-05-27
- cliente *customer*	AREA SOLUTION S.R.L. 63100 - ASCOLI PICENO (AP)
- destinatario *receiver*	AREA SOLUTION S.R.L. 63100 - ASCOLI PICENO (AP)
- richiesta *application*	232/16
- in data *date*	2016-04-12

Si riferisce a
Referring to

- oggetto *item*	Fonometro
- costruttore *manufacturer*	Larson & Davis
- modello *model*	824
- matricola *serial number*	3655
- data di ricevimento oggetto *date of receipt of item*	2016-05-27
- data delle misure *date of measurements*	2016-05-27
- registro di laboratorio *laboratory reference*	Reg. 03

I risultati di misura riportati nel presente Certificato sono stati ottenuti applicando le procedure di taratura citate alla pagina seguente, dove sono specificati anche i campioni o gli strumenti che garantiscono la catena di riferibilità del Centro e i rispettivi certificati di taratura in corso di validità. Essi si riferiscono esclusivamente all'oggetto in taratura e sono validi nel momento e nelle condizioni di taratura, salvo diversamente specificato.
The measurement results reported in this Certificate were obtained following the calibration procedures given in the following page, where the reference standards or instruments are indicated which guarantee the traceability chain of the laboratory, and the related calibration certificates in the course of validity are indicated as well. They relate only to the calibrated item and they are valid for the time and conditions of calibration, unless otherwise specified.

Le incertezze di misura dichiarate in questo documento sono state determinate conformemente alla Guida ISO/IEC 98 e al documento EA-4/02. Solitamente sono espresse come incertezza estesa ottenuta moltiplicando l'incertezza tipo per il fattore di copertura k corrispondente ad un livello di fiducia di circa il 95 %. Normalmente tale fattore k vale 2.
The measurement uncertainties stated in this document have been determined according to the ISO/IEC Guide 98 and to EA-4/02. Usually, they have been estimated as expanded uncertainty obtained multiplying the standard uncertainty by the coverage factor k corresponding to a confidence level of about 95%. Normally, this factor k is 2.

Il Responsabile del Centro
Head of the Centre

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Di seguito vengono riportate le seguenti informazioni:
- la descrizione dell'oggetto in taratura (se necessaria);
- l'identificazione delle procedure in base alle quali sono state eseguite le tarature;
- gli strumenti/campioni che garantiscono la riferibilità del Centro;
- gli estremi dei certificati di taratura di tali campioni e l'Ente che li ha emessi;
- il luogo di taratura (se effettuata fuori dal Laboratorio);
- le condizioni ambientali e di taratura;
- i risultati delle tarature e la loro incertezza estesa.

In the following, information is reported about:
- *description of the item to be calibrated (if necessary);*
- *technical procedures used for calibration performed;*
- *instruments or measurement standards which guarantee the traceability chain of the Centre;*
- *relevant calibration certificates of those standards with the issuing Body;*
- *site of calibration (if different from Laboratory);*
- *calibration and enviromental conditions;*
- *calibration results and their expanded uncertainty.*

Strumenti sottoposti a verifica
Instrumentation under test

Strumento	Costruttore	Modello	Matricola
Fonometro	Larson & Davis	824	3655
Preamplificatore	PCB Piezotronics	PRM902	3863
Microfono	Larson & Davis	2541	8302

Procedure tecniche, norme di riferimento e campioni di prima linea
Technical procedures, Standards and Traceability

I risultati di misura riportati nel presente Certificato sono stati ottenuti applicando la procedura di taratura N. PR1A Rev. 16.
Le verifiche effettuate sull'oggetto della taratura sono in accordo con quanto previsto dalla norma CEI EN 61672-3:2007-04.
I limiti riportati sono relativi alla classe di appartenenza dello strumento come definito nella norma CEI EN 61672-1.
Nella tabella sottostante vengono riportati gli estremi dei campioni di prima linea dai quali ha inizio la catena della riferibilità del Centro.

Strumento	Matricola	Certificato	Data taratura	Data scadenza
Microfono G.R.A.S. 40AU	81136	INIRM 16-0088-01	2016-02-11	2017-02-11
Pistonofono G.R.A.S. 42AA	31303	INRIM 16-0088-02	2016-02-09	2017-02-09
Multimetro Agilent 34401A	SMY41014993	Aviatronic 44864	2015-12-02	2016-12-02
Analizzatore FFT National Instruments NI 9223	11E862F	RP N°3	2016-01-14	2016-07-14
Barometro Druck RPT410V	1614002	Emit-LAS 1579P15	2015-12-10	2016-12-10
Attuatore elettrostatico G.R.A.S. 14AA	23991	RP N°3	2016-01-14	2016-07-14
Calibratore Multifunzione Brüel & Kjaer 4226	2565233	SKL-0647	2016-03-21	2016-06-21
Attenuatore Audio-technica AT8202	01+02	RP N°3	2016-01-14	2016-07-14
Preamplificatore Insert Voltage G.R.A.S. 26AG	26631	RP N°3	2016-01-14	2016-07-14

Condizioni ambientali durante le misure
Enviromental parameters during measurements

Parametro	Di riferimento	All'inizio delle misure	Alla fine delle misure
Temperatura / °C	23,0	23,8	24,1
Umidità / %	50,0	49,8	47,9
Pressione / hPa	1013,3	995,3	995,2

Nella determinazione dell'incertezza non è stata presa in considerazione la stabilità nel tempo dell'oggetto in taratura.
Sullo strumento in esame sono state eseguite misure sia per via elettrica che per via acustica. Le misure per via elettrica sono state effettuate sostituendo alla capsula microfonica un adattatore capacitivo con impedenza elettrica equivalente a quella del microfono.
Tutti i dati riportati nel presente Certificato sono espressi in Decibel (dB). I valori di pressione sonora assoluta sono riferiti a 20 uPa.
Il numero di decimali riportato in alcune prove può differire dal numero di decimali visualizzati sullo strumento in taratura in quanto i valori riportati nel presente Certificato possono essere ottenuti dalla media di più letture.

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Capacità metrologiche del Centro
Metrological capabilities of the Laboratory

Nella tabella vengono riportate le capacità metrologiche del Centro per le grandezze acustiche e le relative incertezze ad esse associate.

Grandezza	Strumento in taratura	Campo di misura	Condizioni di misura	Incertezza (*)
Livello di pressione acustica (¹)	Pistonofoni	124 dB	250 Hz	0,1 dB
	Calibratori	(94 - 114) dB	250 Hz, 1 kHz	0,12 dB
	Fonometri	124 dB (25 - 140) dB	250 Hz 31,5 Hz - 16 kHz	0,15 dB 0,15 - 1,2 dB (¹)
	Verifica filtri a bande di 1/3 ottava Verifica filtri a bande di ottava		20 Hz < fc < 20 kHz 31,5 Hz < fc < 8 kHz	0,1 - 2,0 dB (¹) 0,1 - 2,0 dB (¹)
Sensibilità alla pressione acustica (¹)	Microfoni a condesatore Campioni da 1/2"	114 dB	250 Hz	0,11 dB
	Working Standard da 1/2"	114 dB	250 Hz	0,15 dB

(*) L'incertezza di misura è dichiarata come incertezza estesa corrispondente al livello di fiducia al 95% ed è ottenuta moltiplicando l'incertezza tipo per il fattore di copertura k specificato.
(¹) L'incertezza dipende dalla frequenza e dalla tipologia della prova.

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1. Documentazione

- La versione del firmware caricato sullo strumento in taratura è: 4.240.
- Manuale di istruzioni LD 824 Technical Reference Manual.
- Campo di misura di riferimento (nominale): 20,0-128,0 dB - Livello di pressione sonora di riferimento: 114,0 dB - Frequenza di verifica 1000 Hz.
- I dati di correzione per calibratore multifunzione sono stati forniti dal costruttore dello strumento
- Lo strumento non è stato sottoposto alle prove di valutazione del modello applicabili della IEC 61672-2:2003.
- Lo strumento sottoposto alle prove ha superato con esito positivo le prove periodiche della classe 1 della IEC 61672-3:2006, per le condizioni ambientali nelle quali esse sono state eseguite. Tuttavia, nessuna dichiarazione o conclusione generale può essere fatta sulla conformità del fonometro a tutte le prescrizioni della IEC 61672-1:2002 poichè non è pubblicamente disponibile la prova, da parte di un'organizzazione di prova indipendente responsabile dell'approvazione dei modelli, per dimostrare che il modello di fonometro è risultato completamente conforme alle prescrizioni della IEC 61672-1:2002 e perchè le prove periodiche della IEC 61672-3:2006 coprono solo una parte limitata delle specifiche della IEC 61672-1:2002.

2. Ispezione preliminare ed elenco prove effettuate

Descrizione: Nelle tabelle sottostanti vengono riportati i risultati dei controlli preliminari e l'elenco delle prove effettuate sulla strumentazione in taratura.

Controllo	Esito
Ispezione visiva iniziale	OK
Integrità meccanica	OK
Integrità funzionale	OK
Equilibrio termico	OK
Alimentazione	OK

Prova	Esito
Rumore autogenerato	Positivo
Ponderazioni di frequenza con segnali acustici	Positivo
Ponderazioni di frequenza con segnali elettrici	Positivo
Ponderazioni di frequenza e temporali a 1 kHz	Positivo
Selettore campo misura	Positivo
Linearità livello campo misura riferimento	Positivo
Treni d'onda	Positivo
Livello sonoro di picco C	Positivo
Indicazione di sovraccarico	Positivo

3. Indicazione alla frequenza di verifica della taratura (Calibrazione)

Descrizione: Prima di avviare la procedura di taratura dello strumento in esame si provvede alla verifica della calibrazione mediante l'applicazione di un idoneo calibratore acustico. Se necessario viene effettuata una nuova calibrazione come specificato dal costruttore.

Impostazioni: Campo di misura di riferimento, funzione calibrazione, se disponibile, altrimenti pesatura di frequenza C e ponderazione temporale Fast o Slow o in alternativa media temporale.

Calibrazione	
Calibratore acustico utilizzato	Larson & Davis CAL200 sn. 5259
Certificato del calibratore utilizzato	LAT 163 14175-A del 2016-05-27
Frequenza nominale del calibratore	1000,0 Hz
Livello atteso	114,1 dB
Livello indicato dallo strumento prima della calibrazione	114,1 dB
Livello indicato dallo strumento dopo la calibrazione	114,0 dB
E' stata effettuata una nuova calibrazione	SI

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4. Rumore autogenerato

Descrizione: Viene verificato il rumore autogenerato dallo strumento. Per la verifica del rumore elettrico, la capacità equivalente di ingresso viene cortocircuitata tramite un apposito adattatore capacitivo di capacità paragonabile a quella del microfono. Per la verifica del rumore acustico devono essere montati anche eventuali accessori.

Impostazioni: Media temporale, campo di misura più sensibile. La verifica del rumore autogenerato con microfono installato viene invece effettuata installando il microfono ed eventuali accessori con lo strumento impostato nel campo di misura più sensibile, media temporale e ponderazione di frequenza A.

Letture: Per ciascuna ponderazione in frequenza di cui è dotato lo strumento, viene rilevato il livello sonoro con media temporale mediato per 30 s, o per un periodo superiore se così richiesto dal manuale di istruzioni.

Ponderazione in frequenza	Tipo di rumore	Rumore dB	Incertezza dB
A	Elettrico	6,6	6,0
C	Elettrico	16,8	6,0
Z	Elettrico	25,0	6,0
A	Acustico	16,1	6,0

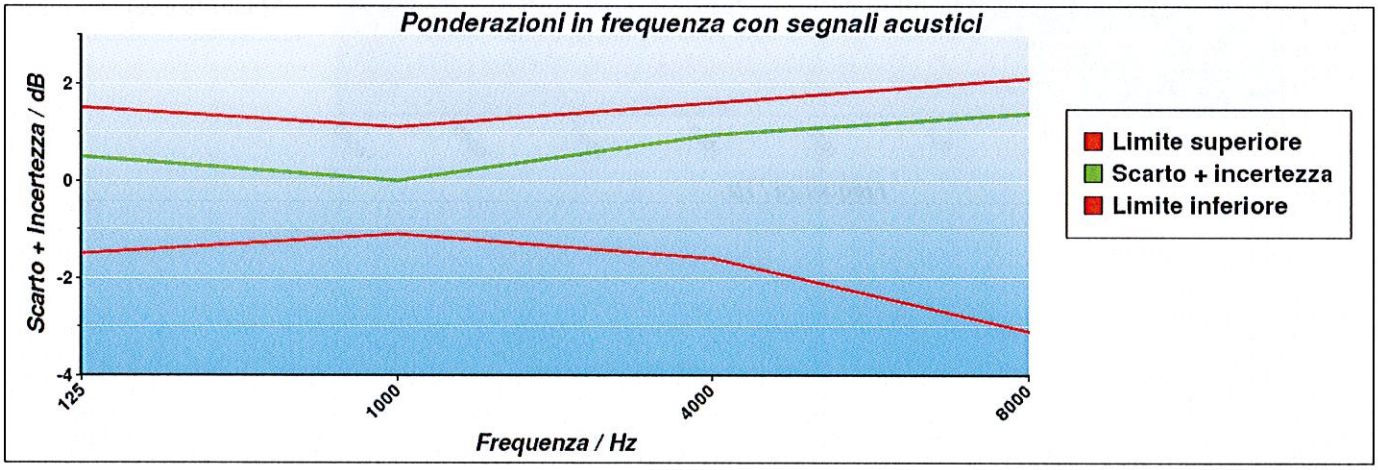
5. Prove di ponderazione di frequenza con segnali acustici

Descrizione: Tramite un calibratore multifrequenza, si inviano al microfono dei segnali acustici sinusoidali con un livello nominale di 114,0 dB alle frequenze di 125 Hz, 1000 Hz e 8000 Hz al fine di verificare la risposta acustica dell'intera catena di misura. Gli scarti riportati nella tabella successiva sono riferiti al valore a 1000 Hz. L'origine delle eventuali correzioni applicate è riportata nel paragrafo "Documentazione".

Impostazioni: Ponderazione di frequenza C, ponderazione temporale Fast, campo di misura di riferimento e indicazione Lp.

Letture: Per ciascuna frequenza di prova, vengono riportati i livelli letti sullo strumento in taratura.

Frequenza nominale Hz	Correzione livello dB	Correzione microfono dB	Correzione accessorio dB	Lettura corretta dB	Ponderazione C rilevata dB	Ponderazione C teorica dB	Incertezza dB	Scarto + incertezza dB	Limite Classe 1 dB
125	-0,01	0,10	0,00	93,91	0,01	-0,20	0,28	0,49	±1,5
1000	0,00	0,00	0,00	93,90	0,00	0,00	0,22	Riferimento	±1,1
4000	0,02	1,30	0,00	93,78	-0,12	-0,80	0,26	0,94	±1,6
8000	-0,08	3,10	0,00	91,78	-2,12	-3,00	0,50	1,38	+2,1/-3,1



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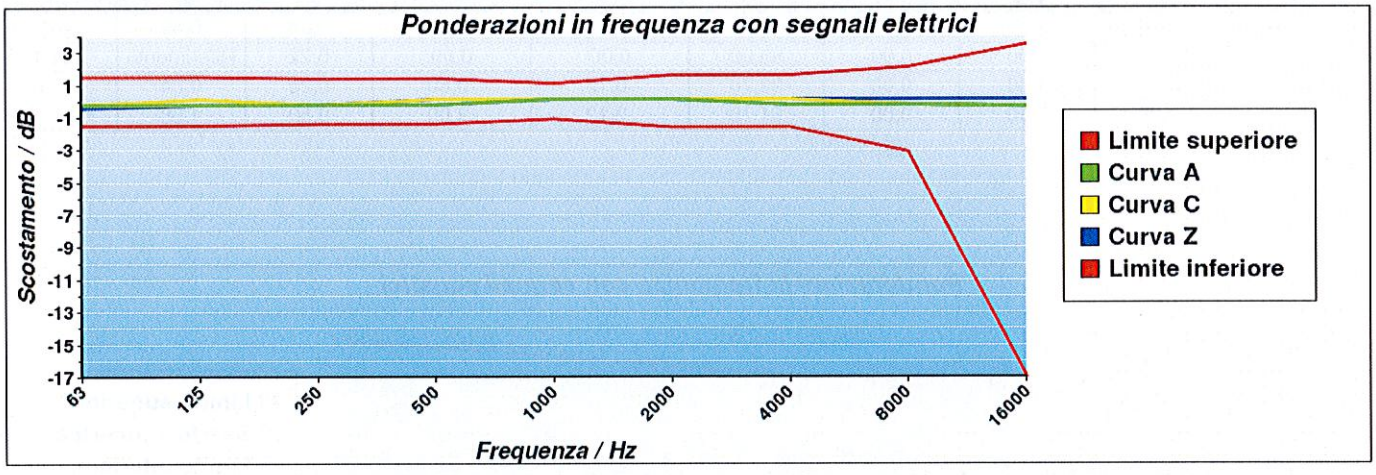
6. Prove delle ponderazioni di frequenza con segnali elettrici

Descrizione: Le ponderazioni di frequenza devono essere determinate in rapporto alla risposta ad 1 kHz utilizzando segnali di ingresso elettrici sinusoidali regolati per fornire una indicazione che sia 45 dB inferiore al limite superiore del campo di misura di riferimento, e per tutte le tre ponderazioni di frequenza tra A, C, Z e Piatta delle quali lo strumento è dotato.

Impostazioni: Ponderazione temporale Fast, campo di misura di riferimento, tutte le ponderazioni di frequenza disponibili tra A, C, Z e Piatta

Letture: Per ciascuna ponderazione in frequenza da verificare, viene rilevata la differenza tra il livello di prova a ciascuna frequenza e il riferimento ad 1 kHz. Eventuali correzioni specificate dal costruttore devono essere considerate.

	Curva A		Curva C		Curva Z			
Frequenza Hz	Scarto medio dB	Scarto + incertezza dB	Scarto medio dB	Scarto + incertezza dB	Scarto medio dB	Scarto + incertezza dB	Incertezza dB	Limite Classe 1 dB
63	-0,10	-0,22	-0,10	-0,22	-0,30	-0,42	0,12	±1,5
125	-0,10	-0,22	0,00	0,12	-0,10	-0,22	0,12	±1,5
250	-0,10	-0,22	-0,10	-0,22	-0,10	-0,22	0,12	±1,4
500	-0,10	-0,22	0,00	0,12	0,00	0,12	0,12	±1,4
1000	0,00	0,12	0,00	0,12	0,00	0,12	0,12	±1,1
2000	0,00	0,12	0,00	0,12	0,00	0,12	0,12	±1,6
4000	-0,10	-0,22	0,00	0,12	0,00	0,12	0,12	±1,6
8000	-0,10	-0,22	-0,10	-0,22	0,00	0,12	0,12	+2,1/-3,1
16000	-0,20	-0,32	-0,20	-0,32	0,00	0,12	0,12	+3,5/-17,0



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7. Ponderazioni di frequenza e temporali a 1 kHz

Descrizione: La prova consiste nella verifica delle differenze tra il livello di calibrazione ad 1 kHz con ponderazione di frequenza A e le ponderazioni di frequenza C, Z e Piatta misurate con ponderazione temporale Fast o media temporale. Inoltre, le indicazioni con la ponderazione di frequenza A devono essere registrate con lo strumento regolato per indicare il livello con ponderazione temporale F, il livello sonoro con ponderazione temporale S e il livello sonoro con media temporale, se disponibili.

Impostazioni: Campo di misura di riferimento, regolazione al livello di 114,0 dB ad 1 kHz con pesatura di frequenza A e temporale Fast; in successione, tutte le pesature di frequenza disponibili tra C, Z e Piatta e le ponderazioni temporali Slow e media temporale con pesatura di frequenza A.

Letture: Per ciascuna ponderazione di frequenza e temporale da verificare viene letta l'indicazione dello strumento.

Ponderazione	Riferimento dB	Scarto dB	Incertezza dB	Scarto + incertezza dB	Limite Classe 1 dB
C	114,00	0,00	0,12	0,12	±0,4
Z	114,00	0,00	0,12	0,12	±0,4
Slow	114,00	0,00	0,12	0,12	±0,3
Leq	114,00	0,00	0,12	0,12	±0,3

8. Linearità di livello comprendente il selettore (comando) del campo di misura

Descrizione: Tramite questa prova vengono verificati gli errori di linearità dei campi di misura non di riferimento e gli errori introdotti dal selettore del campo di misura. La verifica dell'errore introdotto dal selettore viene effettuata con un segnale elettrico sinusoidale ad una frequenza di 1 kHz regolato per fornire l'indicazione del livello di pressione sonora di riferimento, pari a 114,0 dB, nel campo di misura di riferimento. Per la verifica degli errori di linearità si utilizza un segnale elettrico sinusoidale, calcolato a partire dal segnale che produce il livello di riferimento nel campo di misura principale, che dia un'indicazione di 5 dB inferiore al limite superiore, specificato nel manuale di istruzioni, per quel campo di misura ad 1 kHz.

Impostazioni: Ponderazione temporale Fast, ponderazione di frequenza A e tutti i campi di misura non di riferimento.

Letture: Per ciascun campo di misura da verificare, si legge sullo strumento l'indicazione con ponderazione temporale Fast o media temporale.

Campo di misura dB	Livello atteso dB	Lettura media dB	Scarto medio dB	Incertezza dB	Scarto + incertezza dB	Limite Classe 1 dB
19,0-108,0 (Max-5)	103,00	103,00	0,00	0,12	0,12	±1,1

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9. Linearità di livello nel campo di misura di riferimento

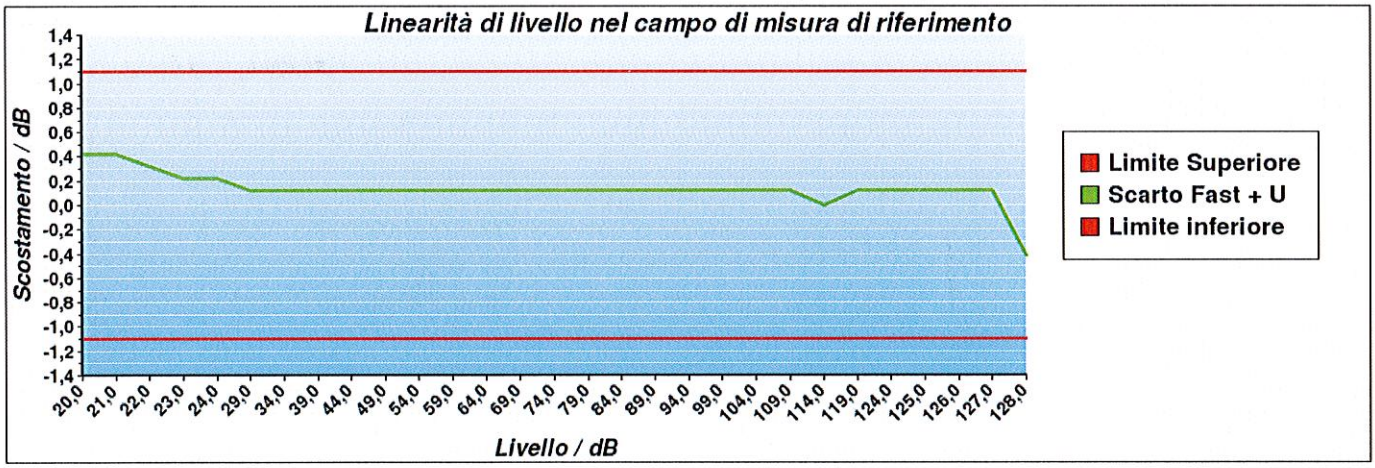
Descrizione: La linearità di livello viene verificata con segnali elettrici sinusoidali stazionari ad una frequenza di 8 kHz. La prova inizia con il segnale di ingresso regolato per indicare 114,0 dB e aumentando il livello del segnale di ingresso di gradini di 5 dB fino a 5 dB dal limite superiore per il campo di funzionamento lineare a 8 kHz, poi aumentando il livello di gradini di 1 dB fino alla prima indicazione di sovraccarico, non inclusa. Successivamente, sempre partendo dal punto di inizio, si diminuisce il livello del segnale di ingresso a gradini di 5 dB fino a 5 dB dal limite inferiore del campo di misura di riferimento, poi diminuendo il livello del segnale di gradini di 1 dB fino alla prima indicazione di livello insufficiente o, se non disponibile, fino al limite inferiore del campo di funzionamento lineare.

Impostazioni: Ponderazione temporale Fast, campo di misura di riferimento e ponderazione di frequenza A.

Letture: Per ciascun livello da verificare, viene rilevata la differenza tra il livello visualizzato sullo strumento e il corrispondente livello sonoro atteso.

Note: Partendo dal livello 127,7 dB, sul display dello strumento è comparsa l'indicazione di sovraccarico.

Livello generato dB	Incertezza dB	Scarto medio dB	Scarto + incertezza dB	Limite Classe 1 dB	Livello generato dB	Incertezza dB	Scarto medio dB	Scarto + incertezza dB	Limite Classe 1 dB
20,0	0,12	0,30	0,42	±1,1	79,0	0,12	0,00	0,12	±1,1
21,0	0,12	0,30	0,42	±1,1	84,0	0,12	0,00	0,12	±1,1
22,0	0,12	0,20	0,32	±1,1	89,0	0,12	0,00	0,12	±1,1
23,0	0,12	0,10	0,22	±1,1	94,0	0,12	0,00	0,12	±1,1
24,0	0,12	0,10	0,22	±1,1	99,0	0,12	0,00	0,12	±1,1
29,0	0,12	0,00	0,12	±1,1	104,0	0,12	0,00	0,12	±1,1
34,0	0,12	0,00	0,12	±1,1	109,0	0,12	0,00	0,12	±1,1
39,0	0,12	0,00	0,12	±1,1	114,0	0,12	Riferimento	--	±1,1
44,0	0,12	0,00	0,12	±1,1	119,0	0,12	0,00	0,12	±1,1
49,0	0,12	0,00	0,12	±1,1	124,0	0,12	0,00	0,12	±1,1
54,0	0,12	0,00	0,12	±1,1	125,0	0,12	0,00	0,12	±1,1
59,0	0,12	0,00	0,12	±1,1	126,0	0,12	0,00	0,12	±1,1
64,0	0,12	0,00	0,12	±1,1	127,0	0,12	0,00	0,12	±1,1
69,0	0,12	0,00	0,12	±1,1	128,0	0,12	-0,30	-0,42	±1,1
74,0	0,12	0,00	0,12	±1,1					



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10. Risposta a treni d'onda

Descrizione: La risposta dello strumento a segnali di breve durata viene verificata attraverso dei treni d'onda di 4 kHz, con durate di 200 ms, 2 ms e 0,25 ms, che iniziano e finiscono sul passaggio per lo zero e sono estratti da segnali di ingresso elettrici sinusoidali di 4 kHz. Il livello di riferimento del segnale sinusoidale continuo è pari a 125,0 dB.

Impostazioni: Campo di misura di riferimento, ponderazione di frequenza A, ponderazioni temporali FAST e SLOW e livello di esposizione sonora (SEL) o, nel caso quest'ultimo non sia disponibile, il livello sonoro con media temporale.

Letture: Per ciascuna pesatura da verificare, viene calcolata la differenza tra il livello sonoro massimo visualizzato sullo strumento e il corrispondente livello sonoro atteso. Per le misure del livello di esposizione sonora viene calcolata la differenza tra il livello di esposizione sonora letto sullo strumento e il corrispondente livello di esposizione sonora atteso.

Ponderazione di frequenza	Durata Burst ms	Livello atteso dB	Lettura media dB	Scarto medio dB	Incertezza dB	Scarto + incertezza dB	Limite Classe 1 dB
Fast	200	124,00	124,00	0,00	0,12	0,12	±0,8
Slow	200	117,60	117,50	-0,10	0,12	-0,22	±0,8
SEL	200	118,00	117,90	-0,10	0,12	-0,22	±0,8
Fast	2	107,00	106,90	-0,10	0,12	-0,22	+1,3/-1,8
Slow	2	98,00	97,90	-0,10	0,12	-0,22	+1,3/-3,3
SEL	2	98,00	98,00	0,00	0,12	0,12	+1,3/-1,8
Fast	0,25	98,00	97,90	-0,10	0,12	-0,22	+1,3/-3,3
SEL	0,25	89,00	88,90	-0,10	0,12	-0,22	+1,3/-3,3

11. Livello sonoro di picco C

Descrizione: Questa prova permette di verificare il funzionamento del rilevatore di picco. Vengono utilizzati tre diversi tipi di segnali: una forma d'onda a 8 kHz, una mezza forma d'onda positiva a 500 Hz e una mezza forma d'onda negativa a 500 Hz. Questi segnali di test vengono estratti rispettivamente da un segnale sinusoidale stazionario alla frequenza di 8 kHz che fornisca sullo strumento un'indicazione pari a 120,0 dB e da un segnale sinusoidale stazionario alla frequenza di 500 Hz che fornisca un'indicazione pari a 120,0 dB.

Impostazioni: Campo di misura meno sensibile, ponderazione di frequenza C, ponderazione temporale Fast e picco.

Letture: Per ciascun tipo di segnale da verificare, viene calcolata la differenza tra il livello sonoro di picco C visualizzato sullo strumento e il corrispondente livello sonoro di picco atteso.

Tipo di segnale	Livello di riferimento dB	Livello atteso dB	Lettura media dB	Scarto medio dB	Incertezza dB	Scarto + incertezza dB	Limite Classe 1 dB
1 ciclo 8 kHz	120,00	123,40	121,20	-2,20	0,12	-2,32	±2,4
½ ciclo 500 Hz +	120,00	122,40	122,30	-0,10	0,12	-0,22	±1,4
½ ciclo 500 Hz -	120,00	122,40	122,30	-0,10	0,12	-0,22	±1,4

12. Indicazione di sovraccarico

Descrizione: Questa prova permette di verificare il funzionamento dell'indicatore di sovraccarico. Dopo aver regolato il livello del segnale elettrico stazionario di ingresso in modo da visualizzare sullo strumento un'indicazione pari a 128,0 dB, vengono inviati segnali elettrici sinusoidali di mezzo ciclo positivo ad una frequenza di 4 kHz incrementando di volta in volta il livello fino alla prima indicazione di sovraccarico. L'operazione viene poi ripetuta con segnali di mezzo ciclo negativo.

Impostazioni: Campo di misura meno sensibile, ponderazione di frequenza A e media temporale.

Letture: Viene calcolata la differenza tra i livelli positivo e negativo che hanno portato all'indicazione di sovraccarico sullo strumento.

Livello di riferimento dB	½ ciclo positivo dB	½ ciclo negativo dB	Differenza dB	Incertezza dB	Differenza + Incertezza dB	Limite Classe 1 dB
128,0	127,4	127,4	0,0	0,12	0,12	±1,8

L'indicatore di sovraccarico è rimasto correttamente memorizzato dopo che si è prodotta una condizione di sovraccarico sullo strumento.

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- data di emissione *date of issue*	2016-05-27
- cliente *customer*	AREA SOLUTION S.R.L. 63100 - ASCOLI PICENO (AP)
- destinatario *receiver*	AREA SOLUTION S.R.L. 63100 - ASCOLI PICENO (AP)
- richiesta *application*	232/16
- in data *date*	2016-04-12

Si riferisce a
Referring to

- oggetto *item*	Calibratore
- costruttore *manufacturer*	Larson & Davis
- modello *model*	CAL200
- matricola *serial number*	5259
- data di ricevimento oggetto *date of receipt of item*	2016-05-27
- data delle misure *date of measurements*	2016-05-27
- registro di laboratorio *laboratory reference*	Reg. 03

Il presente certificato di taratura è emesso in base all'accreditamento LAT N° 163 rilasciato in accordo ai decreti attuativi della legge n. 273/1991 che ha istituito il Sistema Nazionale di Taratura (SNT). ACCREDIA attesta le capacità di misura e di taratura, le competenze metrologiche del Centro e la riferibilità delle tarature eseguite ai campioni nazionali e internazionali delle unità di misura del Sistema Internazionale delle Unità (SI).
Questo certificato non può essere riprodotto in modo parziale, salvo espressa autorizzazione scritta da parte del Centro.

This certificate of calibration is issued in compliance with the accreditation LAT N° 163 granted according to decrees connected with Italian law No. 273/1991 which has established the National Calibration System. ACCREDIA attests the calibration and measurement capability, the metrological competence of the Centre and the traceability of calibration results to the national and international standards of the International System of Units (SI).
This certificate may not be partially reproduced, except with the prior written permission of the issuing Centre.

I risultati di misura riportati nel presente Certificato sono stati ottenuti applicando le procedure di taratura citate alla pagina seguente, dove sono specificati anche i campioni o gli strumenti che garantiscono la catena di riferibilità del Centro e i rispettivi certificati di taratura in corso di validità. Essi si riferiscono esclusivamente all'oggetto in taratura e sono validi nel momento e nelle condizioni di taratura, salvo diversamente specificato.
The measurement results reported in this Certificate were obtained following the calibration procedures given in the following page, where the reference standards or instruments are indicated which guarantee the traceability chain of the laboratory, and the related calibration certificates in the course of validity are indicated as well. They relate only to the calibrated item and they are valid for the time and conditions of calibration, unless otherwise specified.

Le incertezze di misura dichiarate in questo documento sono state determinate conformemente alla Guida ISO/IEC 98 e al documento EA-4/02. Solitamente sono espresse come incertezza estesa ottenuta moltiplicando l'incertezza tipo per il fattore di copertura k corrispondente ad un livello di fiducia di circa il 95 %. Normalmente tale fattore k vale 2.
The measurement uncertainties stated in this document have been determined according to the ISO/IEC Guide 98 and to EA-4/02. Usually, they have been estimated as expanded uncertainty obtained multiplying the standard uncertainty by the coverage factor k corresponding to a confidence level of about 95%. Normally, this factor k is 2.

Il Responsabile del Centro
Head of the Centre

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Di seguito vengono riportate le seguenti informazioni:
- la descrizione dell'oggetto in taratura (se necessaria);
- l'identificazione delle procedure in base alle quali sono state eseguite le tarature;
- gli strumenti/campioni che garantiscono la riferibilità del Centro;
- gli estremi dei certificati di taratura di tali campioni e l'Ente che li ha emessi;
- il luogo di taratura (se effettuata fuori dal Laboratorio);
- le condizioni ambientali e di taratura;
- i risultati delle tarature e la loro incertezza estesa.

In the following, information is reported about:
- *description of the item to be calibrated (if necessary);*
- *technical procedures used for calibration performed;*
- *instruments or measurement standards which guarantee the traceability chain of the Centre;*
- *relevant calibration certificates of those standards with the issuing Body;*
- *site of calibration (if different from Laboratory);*
- *calibration and enviromental conditions;*
- *calibration results and their expanded uncertainty.*

Strumenti sottoposti a verifica
Instrumentation under test

Strumento	Costruttore	Modello	Matricola
Calibratore	Larson & Davis	CAL200	5259

Procedure tecniche, norme di riferimento e campioni di prima linea
Technical procedures, Standards and Traceability

I risultati di misura riportati nel presente Certificato sono stati ottenuti applicando la procedura di taratura N. PR4 Rev. 16.
Le verifiche effettuate sull'oggetto della taratura sono in accordo con quanto previsto dalla norma CEI EN 60942:2004.
Le tolleranze riportate sono relative alla classe di appartenenza dello strumento come definito nella norma CEI EN 60942:2004.
Nella tabella sottostante vengono riportati gli estremi dei campioni di prima linea dai quali ha inizio la catena della riferibilità del Centro.

Strumento	Matricola	Certificato	Data taratura	Data scadenza
Microfono G.R.A.S. 40AU	81136	INIRM 16-0088-01	2016-02-11	2017-02-11
Pistonofono G.R.A.S. 42AA	31303	INRIM 16-0088-02	2016-02-09	2017-02-09
Multimetro Agilent 34401A	SMY41014993	Aviatronic 44864	2015-12-02	2016-12-02
Analizzatore FFT National Instruments NI 9223	11E862F	RP N°3	2016-01-14	2016-07-14
Barometro Druck RPT410V	1614002	Emit-LAS 1579P15	2015-12-10	2016-12-10
Attuatore elettrostatico G.R.A.S. 14AA	23991	RP N°3	2016-01-14	2016-07-14
Calibratore Multifunzione Brüel & Kjaer 4226	2565233	SKL-0647	2016-03-21	2016-06-21
Attenuatore Audio-technica AT8202	01+02	RP N°3	2016-01-14	2016-07-14
Preamplificatore Insert Voltage G.R.A.S. 26AG	26631	RP N°3	2016-01-14	2016-07-14

Condizioni ambientali durante le misure
Enviromental parameters during measurements

Parametro	Di riferimento	All'inizio delle misure	Alla fine delle misure
Temperatura / °C	23,0	23,6	24,1
Umidità / %	50,0	49,8	47,9
Pressione / hPa	1013,3	995,3	995,2

Nella determinazione dell'incertezza non è stata presa in considerazione la stabilità nel tempo dell'oggetto in taratura.

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Capacità metrologiche del Centro
Metrological capabilities of the Laboratory

Nella tabella vengono riportate le capacità metrologiche del Centro per le grandezze acustiche e le relative incertezze ad esse associate.

Grandezza	Strumento in taratura	Campo di misura	Condizioni di misura	Incertezza (*)
Livello di pressione acustica (¹)	Pistonofoni	124 dB	250 Hz	0,1 dB
	Calibratori	(94 - 114) dB	250 Hz, 1 kHz	0,12 dB
	Fonometri	124 dB (25 - 140) dB	250 Hz 31,5 Hz - 16 kHz	0,15 dB 0,15 - 1,2 dB (¹)
	Verifica filtri a bande di 1/3 ottava Verifica filtri a bande di ottava		20 Hz < fc < 20 kHz 31,5 Hz < fc < 8 kHz	0,1 - 2,0 dB (¹) 0,1 - 2,0 dB (¹)
Sensibilità alla pressione acustica (¹)	Microfoni a condesatore Campioni da 1/2"	114 dB	250 Hz	0,11 dB
	Working Standard da 1/2"	114 dB	250 Hz	0,15 dB

(*) L'incertezza di misura è dichiarata come incertezza estesa corrispondente al livello di fiducia al 95% ed è ottenuta moltiplicando l'incertezza tipo per il fattore di copertura k specificato.
(¹) L'incertezza dipende dalla frequenza e dalla tipologia della prova.

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CERTIFICATO DI TARATURA LAT 163 14175-A
Certificate of Calibration LAT 163 14175-A

1. Ispezione preliminare

In questa fase vengono eseguiti i controlli preliminari sulla strumentazione in taratura e i risultati vengono riportati nella tabella sottostante.

Controllo	Esito
Ispezione visiva iniziale	OK
Integrità meccanica	OK
Integrità funzionale	OK
Equilibrio termico	OK
Alimentazione	OK

2. Misurando, modalità e condizioni di misura

Il misurando è il livello di pressione acustica generato, la sua stabilità, frequenza e distorsione totale. Il livello di pressione acustica è calcolato tramite il metodo della tensione di inserzione. I valori riportati sono calcolati alle condizioni di riferimento.

3. Livello sonoro emesso

La misura del livello sonoro emesso dal calibratore acustico viene eseguita attraverso il metodo della tensione di inserzione.

Frequenza specificata Hz	SPL specificato dB re20 uPa	SPL medio misurato dB re20 uPa	Incertezza estesa effettiva di misura dB	Valore assoluto della differenza tra l'SPL misurato e l'SPL specificato, aumentato dall'incertezza estesa effettiva di misura dB	Limiti di tolleranza Tipo 1 dB	Massima incertezza estesa permessa di misura dB
1000,0	94,00	94,05	0,11	0,16	0,40	0,15
1000,0	114,00	114,09	0,11	0,20	0,40	0,15

4. Frequenza del livello generato

In questa prova viene verificata la frequenza del segnale generato.

Frequenza specificata Hz	SPL specificato dB re20 uPa	Frequenza misurata Hz	Incertezza estesa effettiva di misura %	Valore assoluto della differenza percentuale tra la frequenza misurata e la frequenza specificata, aumentato dall'incertezza estesa effettiva di misura %	Limiti di tolleranza Tipo 1 %	Massima incertezza estesa permessa di misura %
1000,0	94,00	1000,45	0,01	0,05	1,00	0,30
1000,0	114,00	1000,45	0,01	0,06	1,00	0,30

5. Distorsione totale del livello generato

In questa prova viene misurata la distorsione totale del segnale generato dal calibratore.

Frequenza specificata Hz	SPL specificato dB re20 uPa	Distorsione misurata %	Incertezza estesa effettiva di misura %	Distorsione misurata aumentata dall'incertezza estesa di misura %	Massima distorsione totale permessa %	Massima incertezza estesa permessa di misura %
1000,0	94,00	0,79	0,12	0,91	3,00	0,50
1000,0	114,00	0,38	0,12	0,50	3,00	0,50

DECRETO DEL DIRIGENTE DELLA P.F.
TUTELA DELLE RISORSE AMBIENTALI ED ATTIVITA' ESTRATTIVE
N. 202/TRA_08 DEL 04/12/2007

Oggetto: Legge 26 ottobre 1995 n. 447 – D.G.R. n. 1408 del 23 novembre 2004 – Riconoscimento tecnico competente in acustica ambientale e inserimento nell'elenco regionale –Ciampolillo Sergio.

IL DIRIGENTE DELLA P.F.
TUTELA DELLE RISORSE AMBIENTALI ED ATTIVITA' ESTRATTIVE

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(omissis)

- D E C R E T A -

-Di riconoscere tecnico competente in acustica ambientale ai sensi dei commi 6 e 7, articolo 2 della legge 26/10/1995 n. 447 il seguente professionista :

Cognome e nome	**Residenza**	**C.Fiscale**
Ciampolillo Sergio	S.Benedetto del Tronto	CMPSRG72A09H926I

Di pubblicare il presente atto per estratto.
Di notificare, tramite A.R., l'avvenuto riconoscimento di tecnico competente in acustica ambientale ai sensi della L. 447/95;
Il presente atto è emanato in 2 (due) originali:
1 conservato agli atti del Servizio.
1 rilasciato all'interessato, quale attestato ai sensi del DPCM 31 marzo 1998, art.1 comma 1, non appena pervenuta apposita marca da bollo.
Di rappresentare, ai sensi dell'art. 3, comma 4 della legge 07/08/1990 n. 241, che contro il presente provvedimento può essere proposto ricorso giurisdizionale al Tribunale Amministrativo Regionale delle Marche entro 60 giorni dalla data di ricevimento del presente atto, oppure, ricorso in opposizione con gli stessi termini, si ricorda, infine, che

può essere proposto ricorso straordinario al Capo di Stato ai sensi del D.P.R. 24/11/1971 n. 1199"

Si attesta inoltre che dal presente decreto non deriva né può derivare un impegno di spesa a carico della Regione.

IL DIRIGENTE DELLA P.F
TUTELA DELLE RISORSE AMBIENTALI
ED ATTIVITA' ESTRATTIVE
Ing. Guido Muzzi