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ANALYSIS OF CLADDING STRAIN DATA FROM
THE LEAD IFR TEST SUBASSEMBLY X425

by

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Paul Betten, ANL

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ABSTRACT

The experimental subassembly X425 is one of the lead IFR test subassemblies irradiated at EBR-II. This report compiles the different irradiation parameters and strain data at the end of three stages of its irradiation. The strain data dependence on the different irradiation parameters is statistically analyzed. The data are used with a simple phenomenological model for irradiation creep in HT9, to investigate the presence of an axially dependent component of clad stress.

1. INTRODUCTION

Fundamental to reactor core safety analysis is the prediction of the integrity of the fuel cladding. A critical parameter for setting operating limits on the core, so as to preclude cladding failure both in steady-state operation and also during transients, is the cladding strain. Thus, for the introduction of a new fuel type, such as the IFR fuel, analysis of the cladding strain during operation is critical to its evaluation.

The experimental subassembly X425 is the lead IFR test subassembly to be irradiated in EBR-II. It is composed of both binary U-Zr and ternary U-Pu-Zr fuel clad in the ferritic steel HT9. The assembly was placed into the EBR-II core in run 138A. It was reconstituted as X425A, X425B, and X425C after reaching peak burnups of ~2.9, 10, and 16 atm. %, respectively. The reconstituted assembly X425C is currently still under irradiation, and will remain so until a burnup of 20 atm. % or cladding breach.*

A postirradiation examination was performed on selected fuel pins from this assembly between each reconstitution. One of the measured parameters was the diametral cladding strain. The analysis of the cladding strain in this report is based on a database¹ which includes assemblies X425, X425A, and X425B, that is data up to a maximum fuel burnup of ~16 atm. %. It is recognized that the analysis would most likely be more robust and of course of great interest if X425C data were included. However, since the peak burnup of 15 atm. % used in core design studies has been exceeded, it is felt both appropriate and timely to present an analysis of the data at this point in the ongoing experiment.

In this report, we are interested in analyzing the clad deformation data (strain data) provided by this experiment, and its dependence on the different irradiation parameters (by the irradiation parameters we mean the thermal and neutronic parameters that affect the cladding deformation during irradiation).

*As of January 1992 the estimated peak burnup is 19.27 atm. %.

The main parameters considered here include the gas pressure (calculated using the postirradiation measurements), cladding temperature (calculated using the thermal-hydraulic code SUPERENERGY-2),² local burnup (calculated using the code RCT),³ cladding irradiation damage as represented by the number of displacements per atom (dpa) and fast fluence (>0.1 MeV) (calculated using the neutronics code system REBUS-3/RCT).⁴ Other local parameters that can be effective only at a certain location of the cladding, such as the clad temperature under the wrap wire and local clad-coolant or fuel-clad chemical interaction, are not considered at this time.

The main objective of the analysis is to investigate the radial dependence of strain on the different irradiation parameters, and to investigate the existence of an axially dependent stress contribution to the cladding deformation. This is done through a simple model for the cladding deformation as a function of stress and dpa. It is found that there exists a statistically significant axially dependent stress contribution to the cladding deformation, which cannot be explained by fission gas pressure alone.

2. SUMMARY OF EXPERIMENT AND DATABASE

2.1 Subassembly Description and Irradiation History

Subassembly X425 was first placed in the reactor in run 138A, and irradiated for 24 cycles, before the last reconstitution as X425C in run 154A. Table I shows its location and total power during each run that it was present in the reactor. In run 142A, X425 was reconstituted as X425A, and in run 149A, X425A was reconstituted as X425B. The three different locations where the subassembly was irradiated in the core are shown in Fig. 1; these do not coincide with the time between reconstitutions.

The subassembly is a 61 pin MK-III type, with 0.23 in. diameter fuel pins and a 0.015 in. thick HT9 cladding, and a pin pitch of 0.273 in. The wrap wire used has a diameter of 0.042 in. and a lead length of 6 in. The as built fuel-to-plenum volume ratio is about unity.

Table I. X425 Run Data

Cycle No.	Name	Run	Position in EBR-II	Power, MW**	Flow, gpm	Power/Flow, MW/gpm	RunTime, d
1	X425	138A	4C3	0.720	79.93	9.007	34
2	X425	139A	4C3	0.707	81.04	8.724	27
3	X425	139B	4C3	0.729	81.04*	8.995	32
4	X425	139C	4C3	0.076	81.04*	0.937	1/2
5	X425	139D	4C3	0.075	81.04*	0.934	1
5	X425	139E	4C3	0.507	81.04*	6.256	4
7	X425	140A	4C3	0.860	81.04*	10.612	1
8	X425	140B	4C3	0.715	80.12	8.924	47
9	X425A	142A	4C1	0.745	86.93	8.570	51
10	X425A	142B	4C1	0.464	86.93*	5.337	4
11	X425A	143A	4C1	0.738	86.47	8.534	53
12	X425A	144A	4C1	0.701	85.43	8.205	97
13	X425A	145A	4C1	0.687	86.21	7.969	66
14	X425A	146A	4C1	0.439	88.04	4.986	11
15	X425A	146B	4C1	0.668	88.04*	7.587	80
16	X425A	147A	4C1	0.631	86.11	7.327	50
17	X425B	149A	4C1	0.659	90.11	7.313	76
18	X425B	150A	4C1	0.429	90.16	4.758	3
19	X425B	150B	4C1	0.655	90.52	7.235	77
20	X425B	151A	4A3	0.688	90.86	7.572	30
21	X425B	151B	4A3	0.668	90.86*	7.352	19
22	X425B	152C	4A3	0.473	92.82	5.095	49
23	X425B	152D	4A3	0.622	92.22	6.744	10
24	X425B	153A	4A3	0.653	92.45	7.063	65

*Flow rates were not reported and it was assumed to be the same as in the previous run.

**Power calculated by REBUS-3/DIF3D at the end of cycle (based on reactor power calculated from the cycle MWd divided by its length).

Fig. 1. The Three Positions of X425 in EBR-II

Postirradiation examination of the irradiated fuel after each reconstitution, provides information about the behavior of the fuel elements during irradiation. The important data obtained from these examinations which are of interest in this analysis are the clad strain and the plenum pressure. The clad diametral strain was measured with contact spiral profilometry. Laser profilometry was used with some of the pins, but none of these pins are considered here since these pins were not reconstituted back into the subassembly (this kind of measurements requires the wire to be removed from the pin). The plenum pressure measurements were performed by trapping the escaping gas from a pin plenum in a calibrated volume after puncturing the pin by laser (at ambient cell temperature). Some of the gas release measurements for X425 are shown in Table II.⁵ More details about the experiment, and its postirradiation examination before the first reconstitution, are provided in Ref. 6.

During each reconstitution some of the fuel pins were replaced with fresh pins and some of the old pins were moved to new positions within the subassembly. Figure 2 shows the pins that were present at the beginning of irradiation and the distribution of pins after each reconstitution. As shown in the figure, 19 pins remained in the same position during the 24 runs, where they achieved the highest burnup. These pins are also shown in Table III, where the location and jacket numbers of all the pins in the subassembly are included. In the first reconstitution, 13 fresh pins were added to X425A. Finally, 18 fresh pins were added to X425B (notice the reconstitution of some of the pins in positions different from their original position).

Table II. Fission Gas Release Measurements for X425

Alloy	Jacket Number	Total Plenum Pressure, Psi	Measurement Temperature, °K	Average Burnup, at.%
U-10Zr	T439	664.0	309.0	10.68
U-8Pu-10Zr	T475	689.0	308.0	10.74
U-19Pu-10Zr	T456	670.0	305.0	10.79

Fig. 2a. Initial Loading of X425

Fig. 2b. Pin Loading of X425A

Fig. 2c. Pin Loading of X425B

Table III. Names and Positions of Each Pin in X425

Pin	Ring	X425	X425A	X425B		Pin	Ring	X425	X425A	X425B
1	5	T400	T400**	F418		32	2	T449	T499	T499**
2	5	T401	T401	B816		33*	3	T425	T425**	T425**
3*	5	T440	T440**	T440**		34	4	T467	T467**	T420
4	5	T402	T402	B814		35	5	T429	T493	T493**
5	5	T417	T417**	B843		36	5	T426	T426	B834
6	5	T404	T404	F355		37*	4	T450	T450**	T450**
7	4	T457	T457**	T401		38	3	T468	T497	T497**
8*	4	T441	T441**	T441**		39	2	T427	T500	T500**
9*	4	T442	T442**	T442**		40*	2	T431	T431**	T431**
10	4	T458	T458**	T402		41	3	T469	T491	T491**
11	5	T405	T405	F427		42*	4	T451	T451**	T451**
12	5	T408	T408	B767		43	5	T432	T432**	B456
13	4	T409	T409**	T404		44	5	T434	T434**	B770
14*	3	T444	T444**	T444**		45	4	T437	T494	T494**
15*	3	T473	T473**	T473**		46	3	T452	T424	T424**
16*	3	T445	T445**	T445**		47*	3	T470	T470**	T470**
17	4	T411	T411**	T405		48*	3	T453	T453**	T453**
18*	5	T413	T413**	T413**		49	4	T439	T439**	T477
19*	5	T414	T414**	T414**		50*	5	T466	T466**	T466**
20*	4	T446	T446**	T446**		51	5	T476	T476**	F370
21	3	T459	T486	T486**		52	4	T474	T436	T436**
22	2	T416	T416	T408		53	4	T454	T454**	T479
23	2	T418	T492	T492**		54*	4	T455	T455**	T455**
24	3	T461	T478	T478**		55	4	T475	T475**	T438
25*	4	T447	T447**	T447**		56	5	T477	T477	F446
26	5	T420	T420	B416		57	5	T435	T435**	B779
27	5	T421	T421	B790		58	5	T479	T479	F393
28	4	T464	T464**	T421		59	5	T456	T456**	F404
29	3	T423	T423**	T426		60*	5	T422	T422**	T422**
30	2	T448	T496	T496**		61	5	T438	T438	F366
31	1	T465	T498	T498**						

*Pins that remained in the same positions during all reconstitutions.

**Pins for which the profilometry measurements were considered in the database.

2.2 Database

The generation of the data in Appendix A required both thermal-hydraulic and neutronics calculations. Details of these calculations and the input data used, are described in Ref. 1. The tables in this appendix show the database constructed for X425 during its irradiation between runs 138A and 153A. Each table contains the irradiation parameters and the strain data taken from selected pins before each new reconstitution.

Before describing the different parameters used in the tables, it is important to mention that the length of each fuel element was assumed to be 14.43 in. The fresh fuel column length is 13.5 in., however, during irradiation the fuel length initially increases with irradiation up to a burnup of ~2%, then it ceases to grow beyond that. Since the neutronics calculations do not take into account the fuel axial expansion during irradiation, these calculations were performed assuming that the fuel length reaches its plateau immediately, and maintains the value of 14.43 in. during irradiation, irrespective of the type of fuel used. This value is the original length (13.5 in.) multiplied by 1.0089 (a factor for thermal expansion), and multiplied by 1.0006 (a factor for axial swelling of the fuel).

The first four columns in the tables identify each data entry by a pin number, a jacket number, a ring number, and a relative axial position (each position corresponds to the midpoint of one of the axial sections into which the pin is divided). Each pin was divided into 10 axial sections, and belongs to one of the five pin rings that form a 61 pin subassembly. Each one of the 10 axial sections shown in the tables is 1.443 in. long. The pin volume (to convert power density to power) used by RCT is 1.1028 in.³.

The next column of data are the tabulated clad deformations which represent an average over the detailed strain data (from digitized profilometry graphs) for the cladding diametral strain for each axial section. The division of the fueled section of the pin into 10 axial sections insures that the local point values of the digitized diametral strain do not deviate much from the average value over each section. In some cases, especially at low burnups, the clad strain can be negative as a result of the variations in the as built outer

diameter of the cladding (it ranged from 0.2295 in. to 0.2305 in.). In this case, the clad strain is set to zero. The pins for which strain data was included in the database for this analysis are shown in Table III. The fuel pins which resided in the core without being reconstituted exhibited no measurable cladding deformation. Thus, the database used contains only the strain data of pins which underwent at least one reconstitution. This results in 19 pins which were irradiated in X425, X425A, and X425B, 17 pins which were irradiated in X425, and X425A, and 13 pins in X425A, and X425B.

The thermal-hydraulic data include the average flow and cladding temperatures over each axial section, and a standard deviation in the cladding temperature calculations. The average temperatures are weighted average temperatures which are based on the temperature history of each pin between the run it was first irradiated in the reactor and the run after which the profilometry measurements were taken. This averaging gives more weight to the long cycles over the short cycles. An example for these average temperatures is shown in Fig. 3 for pin 40, where the temperature history of the top section of the pin during the different cycles is also shown. The standard deviation for the clad temperature is based on a weighted square difference between those average temperatures and the local temperatures during the runs. The 1σ deviation between the calculated and the measured flow temperatures is $\sim 8^\circ\text{C}$, while an overall 1σ uncertainty of $\sim 11^\circ\text{C}$ is expected for the cladding temperature.¹

Notice that the temperatures shown in Fig. 3 can be significantly different from one run to the other. This is a result of using subassembly powers that are based on REBUS-3/DIF3D calculations which are normalized to an average reactor power over the cycle. This average power is equal to the total MWd divided by the length of the cycle. The temperatures calculated using these powers are more appropriate for this database than temperatures based on neutronics calculations that are normalized to a reactor full power of ~ 62.5 MW. This is due to the fact that for very short cycles the fraction of the cycle at 62.5 MW is small. Thus, using this value for the whole cycle would significantly overestimate the effective temperature in this database.

Fig. 3. Top of the Core Midwall Clad Temperature during the Different Cycles for Pin 40 in X425. (The average temperatures shown are weighted by the length of each cycle between reconstitutions).

The data from the neutronics calculations include the local power density and burnup calculated for each pin and axial position using REBUS-3/RCT calculations at the end of the cycle that precede reconstitution. The estimated error in the burnup calculations is within 6%.⁷ The average burnups are also given; these are an average of the local burnup in the previous column over the whole pin. The cladding neutron damage data are represented in the tables by the total fast fluence, dpa, and dpa rate to which the HT9 cladding was exposed during irradiation. The HT9 dpa was calculated using the detailed 9-group energy fluxes from RCT calculations and the corresponding total displacement cross sections for HT9, with interpolation at each axial location. Similar interpolation was performed for the fast fluence. The displacement rates shown are given for the last run before a reconstitution, and were assumed to be constant between reconstitutions.

The plenum pressure was calculated using a linear dependence of plenum pressure on burnup based on experimental measurements of gas pressure in a few pins (shown in Table II) and taking into account the plenum temperature. An incubation period that correspond to about 1 at % was also taken into account. The linear fission gas release behavior in the different types of fuel alloys (U-xPu-10 Zr, where $x = 0, 8, 19$) is shown in Fig. 4.⁸

Finally, the last two columns give the number of times the pin was reconstituted in the reactor including the first time it was presented as fresh fuel, and the status of the pin. The pin could have been included in the new reconstitution as fresh fuel (F), or it could have been old fuel from previous reconstitution (O), or a pin which is placed in a position that is different from its position in the previous reconstitution (R).

3. DEPENDENCE OF CLAD DEFORMATION ON DIFFERENT PARAMETERS

3.1 Axial Dependence of the Irradiation Parameters

The local burnup, the clad temperature, the plenum pressure, the fast fluence and the dpa are the independent parameters in this analysis. These parameters, except for the plenum pressure, depend on the axial location. The

Fig. 4. Dependence of Fission Gas Release on Burnup

dependent parameter, clad strain, depends also on the axial location. The detailed axial description of the parameters in the database of experiment X425 facilitates the statistical analysis of the data. As will be shown later in Section 5, axial dependence can be used in explaining the clad strain dependence on stress.

The axial dependence of clad strain for pin 40 at the end of irradiation of X425, X425A, and X425B, where the profilometry measurements were taken, is shown in Fig. 5. Each point shown represents an average over the axial section in which the point is located. From the axial dependence of the strain data it can be seen that the temperature plays a minimum role in the clad strain, since the clad strain is not peaked at the top of the element where the clad temperature is highest. This is consistent with the thermal creep behavior of HT9, which is not effective in the temperature range shown in the tables for the clad temperature. A quantitative evaluation of this observation will be discussed in the next section.

Figure 6 shows the axial dependence of burnup for the same pin. The peak burnup is slightly skewed to the lower end of the fuel. Here, the average burnup over the fuel column is more important than the local burnup, since it is used in calculating the plenum pressure. The local burnup is more important for events that take place within the fuel, while we are mainly interested in the cladding. It can be important for the cladding damage only if the stress due to fuel cladding interaction is significant, as will be discussed later.

The measure of irradiation damage to the cladding at the different axial positions is illustrated in Figs. 7 and 8 by the dpa and fast fluence axial dependence. The fast fluence is not considered here for use in investigating the clad strain dependence on neutron damage; instead the dpa is used, since it is a more universal parameter than fast fluence.

Finally, the axial dependence of the average flow temperature around the pin and its midwall clad temperature are shown in Figs. 9 and 10, respectively. Again, the average cladding temperature rather than the flow temperature is the parameter of interest (the flow temperatures are used in calculating the clad temperatures and the plenum pressure).

Fig. 5. Axial Variation of Clad Strain for Pin 40

Fig. 6. Axial Variation of Burnup for Pin 40

Fig. 7. Axial Variation of DPA for Pin 40

Fig. 8. Axial Variation of Fast Fluence for Pin 40

Fig. 9. Axial Variation of Flow Temperature for Pin 40

Fig. 10. Axial Variation of Clad Temperature for Pin 40

3.2. Strain Dependence on the Irradiation Parameters

Figures 11 through 13 show the dependence of cladding strain on burnup, dpa and fast fluence, respectively. The data shown in the figures belong to the pins shown in Table III, these remained in the same location within the subassembly during irradiation. The data are plotted for two axial locations, which correspond to the middle and the top of the fuel. As shown in the figures, the data at the top and middle of the cladding were fitted to a second order polynomial, which passes through the origin. It is interesting to see the separation between the fitted curves at the different axial locations. For example, in the case of clad strain versus burnup; for the same burnup, the clad strain is higher in the middle of the fuel than at the top. This can be explained by the differences in dpa between these positions, and also the fact that the points in the figure do not necessarily correspond to the same plenum temperature and the same period of irradiations, i.e., the same plenum pressure. The other factor that might play a role in this behavior is the possibility of the existence of an axially dependent stress component, other than the one associated with the gas loading.

By plotting the strain versus dpa, this axial dependence, i.e. separation between the curves, decreases since the dpa effect (assuming a linear dependence on dpa) is taken into account. But in this figure the stress dependence is not taken into account where the strain data shown does not correspond to the same stresses (plenum pressure). Analysis of the available strain data for this experiment will benefit from this observation as will be discussed in Section 5.

4. STATISTICAL ANALYSIS OF THE STRAIN DATA

The strain data described in the previous chapter are statistically analyzed to test whether these data are samples from the same population or whether there is a bias that is dependent on some features of the populations

Fig. 11. The Dependence of Midplane Clad Strain on Burnup

Fig. 12. The Dependence of Midplane Clad Strain on DPA

Fig. 13. The Dependence of Midplane Clad Strain on Fast Fluence

from which the data were collected. This kind of testing prevents the mixing of strain data that might have been sampled from different populations. A bias that might be present, for example, because of systematic differences in temperature or Pu content of the fuel pins. This analysis is important before applying the data to any model that correlates the strain data to the different irradiation parameters.

Axially, strain can be significantly different from one location to the other, since some irradiation parameters, such as dpa rate and clad temperature, are axially dependent. Thus, the strain data collected at one axial location are considered separately from the data collected at any other axial location. Radially, it is not clear whether the strain data are significantly different due to temperature differences between different rows of pins. To investigate the possibility of such a radial dependence, the distributions of the irradiation parameters and the strain data at one radial location are compared with their distributions at another radial location. This comparison establishes whether irradiation parameters, and consequently the strain data, differ significantly from one radial location to the other.

In the following sections, the nonparametric Mann-Whitney-U test is described and used in the statistical comparison between two distributions. The nonparametric Kruskal and Wallis H-test, which is appropriate for comparing between more than two distributions will also be discussed.

4.1 Mann-Whitney-U Test

This test is a nonparametric test that does not assume a particular distribution for the population, as compared, for example, to the parametric t-test,⁹ which assumes normality. The Mann-Whitney-U test compares the means of two continuous distributions of independent samples and does not require that they have the same variance. It is also appropriate for distributions of small size.

The operational procedure for comparing two samples A and B of size m and n, respectively, is to combine the two samples and doubly index their rank and

the population to which they belong. The lowest rank is assigned to the lowest value datum. The statistical null hypothesis, H_0 , is that the mean of the A sample, m_A , is the same as the mean of the B sample, m_B , that is,

$$H_0: m_A = m_B.$$

The alternative hypothesis, H_A , is that the two samples do not belong to the same population where, for example,

$$H_A: m_A > m_B.$$

The test statistic U is given by $\min(U_A, U_B)$, where

$$U_A = mn + \frac{m(m+1)}{2} - R_A,$$

$$U_B = mn + \frac{n(n+1)}{2} - R_B.$$

R_A and R_B are the sum of the ranks for the A and B samples, respectively, where $m > n$. In all situations, $R_A \leq mn + m(m+1)/2$, the maximum value of R_A which occurs when all the observations of A possess higher ranks than the greatest ranking observation of B. Thus, U_A represents the deviation of R_A from its maximum possible value. The critical value $U_c(m, n; \alpha)$, is the value of U below which U_A is sufficiently larger than U_B , so that the probability of a difference between the means of samples A and B occurring at random is α . The values of U_c are tabulated,⁹ and the above discussion is schematically shown in Fig. 14 for the one tailed test. If the calculated value of U is less than $U_c(m, n; \alpha)$, the null hypothesis H_0 is rejected, and we conclude that the samples A and B do not belong to the same population.

For sample sizes that are not too small ($m > 8, n > 8$), the standard normal approximation of the U distribution is given by

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Fig. 14. Schematic Diagram of the One Tailed U-Test

$$\hat{z} = \frac{|U - \frac{mn}{2}|}{\sqrt{\frac{mn(m+n+1)}{12}}}$$

where $mn/2$ is the mean of the U distribution and $\sqrt{\frac{mn(m+n+1)}{12}}$ is its standard deviation. The value of $\hat{z}$ is compared with the critical z-values of the standard normal distribution.

4.2 Kruskal and Wallis H-Test

This test is a generalization of the Mann-Whitney-U test for comparing between three or more distributions. It tests against the alternate hypothesis that a number of samples $k \geq 3$ do not originate in a common population. If R_i is the sum of the ranks in the i^{th} sample: under the null hypothesis the test statistic

$$\hat{H} = \left\{ \frac{12}{n(n+1)} \right\} \left\{ \sum_{i=1}^k \frac{R_i^2}{n_i} \right\} - 3(n+1)$$

has for large $n = \sum n_i$ ($n_i \geq 5$ and $k \geq 4$), a χ^2 distribution with $k-1$ degrees of freedom; H_0 is rejected whenever $H > \chi_{k-1; \alpha}^2$.

4.3 Testing of the Radial Dependence

In order to investigate the radial dependence of the strain data, the subassembly is divided into two radial regions: an outer region which includes all the pins in the outer row of the subassembly, and an inner region which includes pins from the other rows. The pins in the outer row are usually colder than the pins in the inner rows. The data for the 19 pins in X425B which remained in the core during the 24 runs are considered here. These include 14 pins in the inner region and 5 pins in the outer region. The Mann-Whitney-U test is used to compare between the distributions of the irradiation parameters in these inner and outer regions.

In Table IV the distribution of clad temperatures at the top of the core for the inner region pins is compared to the distribution of clad temperatures at the top of the core for the outer region pins. The temperatures are combined and ranked in Table V, where the temperatures of the 14 pins in the inner region are labeled "I", and the temperatures of the 5 pins in the outer row are labeled "O". Notice that whenever a number of temperatures are equal (tied), the same rank is given to each one. For example, the sixth and seventh temperatures are equal, and their rank = $(6+7)/2=6.5$. On physical grounds we expect the pins in the outer region to have a lower clad temperature than those in the inner region. Thus, the null hypothesis can be expressed as

$$H_0: T_{\text{clad}}(\text{inner}) = T_{\text{clad}}(\text{outer}),$$

and the alternative hypothesis as

$$H_A: T_{\text{clad}}(\text{inner}) > T_{\text{clad}}(\text{outer}).$$

The test statistic in the inner region is $U_1 = 0$, and in the outer region $U_0 = 70$. Then the value of U is the lower of the two values, that is $U = 0$. From the tabulated values of the critical value of U at the 95% confidence level ($\alpha = 0.05$), $U_c(4,15; 0.05) = 16$. Thus, $U < U_c$, and H_0 is rejected, that is, the mean clad temperature in the inner region is significantly higher than the mean clad temperature in the outer region, at a 95% confidence level. This result is summarized in Table VI, where the calculations were also performed

Table IV. Top of the Core Midwall Clad Temperatures for 19 Pins at the End of X425B

$T_p, ^\circ\text{C}$	495	495	499	499	501	503	503	503	503	504	507	509	510	511
$T_o, ^\circ\text{C}$	475	477	480	482	482									

Table V. Ranked Clad Temperatures

$T, ^\circ\text{C}$	Rank	Region
475	1	O
477	2	O
480	3	O
482	4.5	O
482	4.5	O
495	6.5	I
495	6.5	I
499	8.5	I
499	8.5	I
501	10	I
503	12.5	I
503	12.5	I
503	12.5	I
503	12.5	I
504	15	I
507	16	I
509	17	I
510	18	I
511	19	I

Table VI. U-Test for the Clad Temperatures in the Inner and Outer Regions

	R_I	R_O	m	n	U_I	U_O	U_C
Top	175	15	14	5	0	70	16 (one sided, $\alpha = 0.05$)
Middle	175	15	14	5	0	70	16 (one sided, $\alpha = 0.05$)

* R_I = sum of ranks for temperatures in the inner region,

R_O = sum of ranks for temperatures in the outer region,

m = number of temperatures observations in the inner region,

n = number of temperatures observation in the outer regions,

U_I = U-test value in the inner region,

U_O = U-test value in the outer region, and

$U_C = U_C(m,n;\alpha)$.

for another axial location (middle of the core). Thus, the clad strain in the inner and outer regions might be dependent on the radial region as a result of the temperature difference between these regions.

Similar tests were performed on the distributions of the dpa and the gas pressure, which are shown in Tables VII and VIII. The dpa test shows no significant statistical difference between the dpa distributions in the inner and outer regions for the three axial locations. The gas pressure results are not conclusive, since the U-test value is very close to the critical value. Thus, the test was repeated using data at the end of X425A irradiation (data for 27 pins). The results of the test, shown in Table IX show a strong dependence of the gas pressure on subassembly region. This is an expected behavior since gas pressure is a linear function of temperature.

The test was applied to the strain data distributions in the inner and outer regions (for the 19 pins at the end of X425B irradiation), at three axial locations (top and middle of the fuel column) and the results are shown in Table X. No statistically significant difference between the two distributions at each axial location is found. Thus, the temperature difference between the two regions has no effect on the distributions of clad strain in the two regions. This implies that thermal creep is not effective in inducing HT9 cladding deformation in X425, which is an expected result, given the operating clad temperature range of the subassembly ($<600^{\circ}\text{C}$). Also a result of this test is that the strain data from both regions can be mixed and used in correlating strain data to the different irradiation parameters.

4.4 Pu Content Effect

Of the 19 pins considered previously, 13 pins contained U-Pu-Zr fuel, and 6 pins contained U-Zr fuel. The U-test is used to investigate the effect that this difference in fuel composition might have on inducing clad deformation. Table XI shows the Pu content of the different pins, and results of the U-test. The test shows that no statistically significant difference between clad strain of pins with or without Pu.

Table VII. U-Test for the DPA in the Inner and Outer Regions

	R_I	R_O	m	n	U_I	U_O	U_C
Top	133	57	14	5	28	42	16 (one sided, $\alpha = 0.05$)
Middle	133.5	56.5	14	5	28.5	41.5	16 (one sided, $\alpha = 0.05$)
Bottom	131.5	58.5	14	5	26.5	43.5	16 (one sided, $\alpha = 0.05$)

Table VIII. U-Test for the Gas Pressure in the Inner and Outer Regions
(using data at the end of X425B)

R_I	R_O	m	n	U_I	U_O	U_C
160	30	14	5	15	55	16 (one sided, $\alpha = 0.05$)

Table IX. U-Test for the Gas Pressure in the Inner and Outer Regions
(using data at the end of X425A)

R_I	R_O	m	n	U_I	U_O	U_C
538	165	25	12	87	213	98 (one sided, $\alpha = 0.05$)

Table X. U-Test for the Clad Strain in the Inner and Outer Regions

	R_I	R_O	m	n	U_I	U_O	U_C
Top	126.5	63.5	14	5	48.5	21.5	16 (one sided, $\alpha = 0.05$)
Middle	130.5	59.5	14	5	44.5	25.5	16 (one sided, $\alpha = 0.05$)

Table XI. U-Test for the Clad Strain for Pins with and without Pu

	$R_{Pu \neq 0}$	$R_{Pu=0}$	m	n	$U_{Pu \neq 0}$	$U_{Pu=0}$	U_C
Top	121	69	13	6	48	30	16 (two sided, $\alpha = 0.05$)
Middle	111	79	13	6	58	20	16 (two sided, $\alpha = 0.05$)
Bottom	121	69	13	6	48	30	16 (two sided, $\alpha = 0.05$)

5. PHENOMENOLOGICAL MODEL OF CLAD STRAIN

The clad strain rate can be written as:

$$\frac{d\epsilon}{dt} = \dot{\epsilon}(T_c, \sigma, \dot{K}) \quad (1)$$

where, $T_c = T_c(t, z)$ °C is the clad temperature, σ is the total stress in MPa, and $\dot{K}$ is the displacements per atom rate in dpa/s.

Generally, the total stress σ consists of two components: an axially independent component due to the gas loading on the cladding σ_g , and an axially dependent component resulting from the fuel interaction with the cladding σ_f , where

$$\sigma_g = \sigma_g(T_p, \bar{B}(t))$$

and

$$\sigma_f = \sigma_f(T_f(t, z), B(t, z))$$

$\bar{B}(t)$ is the average burnup over the whole pin after irradiation to time t , T_p is the average plenum temperature, $B(t, z)$ is the local burnup at time t and axial position z and T_f is the fuel temperature. In the following a simple model for the clad strain evolution in the case of HT9 is discussed.

5.1 Phenomenological Model for Irradiation Creep in HT9 Cladding

The strain rate functional dependence described above is general. It includes components from thermal creep, irradiation creep, and void swelling. In the case of HT9 clad, not all of these phenomena contribute significantly to the clad strain under the operating conditions of experiment X425. The main advantage of this alloy is the high void swelling resistance that it shows up to high irradiation doses. Within the temperature range of the normal reactor

operating conditions (<600°C) and the applied stresses (<250 MPa), thermal creep plays a small role in increasing the strain of HT9 cladding.

As shown in previous section the strain of the HT9 cladding in X425 in the high temperature inner region was not statistically significantly different from the low temperature region. This eliminates the contribution of thermal creep to the total strain. Thus, we can write

$$\dot{\epsilon} = \dot{\epsilon}(\sigma, \dot{K}) .$$

It is important to mention here that the strain rate is not totally independent of temperature, since the stresses are dependent on the average plenum temperature, i.e., the flow temperature at the top of the fuel column, and the fuel temperature which affects the fuel swelling. Since the total stresses are not directly dependent on the dpa rate, the strain rate can be written as:

$$\dot{\epsilon}(\sigma, \dot{K}) = f(\sigma)\Psi(\dot{K}), \quad (2)$$

where f and Ψ are functions which are dependent on the irradiation creep model used. Thus, ϵ , the total strain after irradiation for time t , is given as

$$\epsilon = \int_0^t \Psi(\dot{K}) f(\sigma) dt' . \quad (3)$$

In general, the stress loading on the cladding is a function of time, since both gas pressure and fuel swelling increase with time. In the mean time, the irradiation dose rate does not change sharply with time, and it can be assumed to be constant during irradiation. This allows us to write the total strain as

$$\epsilon(t, z) = \Psi(\dot{K}(z)) \int_0^t f(\sigma) dt' . \quad (4)$$

Assuming a strain rate behavior described by stress induced preferential absorption theory (SIPA),^{10,11} $f(\sigma) \propto \sigma$ and $\Psi(\dot{K}) \propto \dot{K}$, we have

$$\dot{\epsilon} \propto \dot{K} \sigma.$$

Since

$$\sigma(t, z) = \sigma_g + \sigma_f(t, z),$$

the total strain using the linear dependence of strain rate on both stress and dpa rate is given by

$$\epsilon = C_s \dot{K}(z) \int_0^t (\sigma_g + \sigma_f(t', z)) dt', \quad (5)$$

where C_s is a constant. It is important to mention here that the total strain at this stage is still dependent on the plenum temperature T_p , and the fuel temperature T_f , since the stresses are dependent on these temperatures. These temperatures are not written explicitly in the equation for simplicity, but it should be understood that their effect is still present.

The dependence of stress, due to gas pressure $P(t, T_p)$ on time can be described as follows:

$$\sigma_g(t, T_p) = C_1 P(t, T_p)$$

and

$$\begin{aligned} P(t, T_p) &= 0 & \text{for } \bar{B} \leq \bar{B}_0 \\ &= \tilde{C}_2 (\bar{B}(t) - \bar{B}_0) T_p & \text{for } \bar{B} > \bar{B}_0 \end{aligned}$$

where $\bar{B}_0$ is the average burnup that corresponds to the incubation period (τ_0) for gas pressure, and C_1 is a constant given in terms of the clad outer and inner diameters, D_o and D_i , respectively:

$$C_1 = \frac{D_0^2 + D_i^2}{D_0^2 - D_i^2}.$$

$\tilde{C}_2$ is a constant which is dependent on the experimentally measured gas release. Assuming that the average burnup is linearly dependent on time, we can write

$$\bar{B}(t) = C_B t,$$

where C_B is a constant that can be determined from the average burnup calculations. Thus, we can write

$$\begin{aligned} P(t, T_p) &= 0 & \text{for } t \leq \tau_o \\ &= C_2(t - \tau_o)T_p & \text{for } t > \tau_o \end{aligned} \quad (6)$$

where

$$C_2 = C_B \tilde{C}_2.$$

Assuming that stress is not axially dependent, that is, the gas pressure $P(t, T_p)$ is the only mechanism for inducing stresses on the cladding, then the axially dependent stress component is equal to zero, and Eq. (5) becomes

$$\epsilon = C_s \dot{K}(z) \int_{\tau_o}^t C_1 C_2 (t' - \tau_o) T_p dt' = \frac{C_s C_1}{C_2 T_p} \dot{K}(z) \int_0^P P' dP',$$

which gives the ratio

$$\frac{\frac{\epsilon}{\dot{K}(z)P^2(t)}}{T_p} = \text{CONSTANT} = \frac{C_s C_1}{2C_2}, \quad t > \tau_o \quad (7)$$

Notice that T_p is an average temperature over the cycles up to time t , which is consistent with the average temperatures given in the database. In general, T_p decreases with irradiation, but its variation over the cycles is modest, where $\sigma_{\max}$ (column H in the database table) is about 7°C. Small variation in $P(t, T_p)$ corresponds to this $\sigma_{\max}$, and the assumption that time independence of T_p is applicable.

So far, the irradiation conditions and type of cladding used in X425 agree with the assumptions that were made in order to derive this relation. The only assumption that is not proven quantitatively is the absence of an axially dependent component of the stresses. If this assumption is valid, applying the data collected from X425 will fulfill Eq. (7).

5.2 Application of X425B Data

We shall now consider the data for the 19 pins shown in Fig. 2, at the end of X425B irradiation (achieved the highest burnup). Three sets of data, which correspond to three axial positions (top, middle, and bottom of the fuel column), were applied to Eq. (7). Figure 15 shows these three sets of data, where the strain at each axial location is plotted versus the denominator of Eq. (7). A linear regression line is plotted through each set of data. If all the assumptions that were made in order to derive Eq. (7) are valid, the three regression lines should coincide with a slope equal to the RHS of the equation. But the slopes of the lines are different, and the three regression lines are separate, which suggests that some of the assumptions made previously are not valid. The strain data from low burnup pins were added to the 19 pins data, and plotted versus the denominator of Eq. (7) (shown in Fig. 16). The figure shows a behavior which is similar to the 19 pins data behavior. This

Fig. 15. Strain versus $\dot{K}(z) P^2(t)/T_p$ at Three Axial Locations

Fig. 16. Strain versus $K(z) P^2(t)/T_p$ at Three Axial Locations

additional data from the low burnup pins are not used in our analysis, since the error in the strain data from such low burnup pins could be quite large.

Before discussing this observation, a statistical test is applied to see whether this separation between the lines is significant or whether it lies within the scatter in the data. The distribution of the ratio in the LHS of Eq. (7), at the top of the fuel, was compared to the ratio distribution at the middle and the bottom of the fuel column. Results of the Mann-Whitney-U test are shown in Table XII. The test suggests that the differences between the means of these distributions are statistically significant.

Ruling out the statistical fluctuations in the data that might have caused the observed behavior, it is apparent that the ratio in Eq. (7) is axially dependent. In other words, the model described above did not include all the axial dependencies that might be present. The only explanation for this axial dependence, other than an axially dependent stress, is through the irradiation damage function Ψ and/or the stress function f , as will be described next.

$\Psi(\dot{K}(z))$ could be systematically underestimated at the middle or overestimated at the top and bottom, or both. This might be possible if one or both of the following is true:

a--Error in the DPA calculations

Assuming that $\Psi(\dot{K}(z)) \propto \dot{K}(z)$, a less flat dpa rate axial profile can make up for the difference in the slopes between the regression lines. If this is true, the slope of the middle regression line will decrease and the slopes of the top and bottom regression lines will increase. The error in the dpa calculations due to the error in the neutronics calculations suggests that the actual dpa rate axial profile is less flat than the calculated profile. This is due to the overestimation of the fast flux at the bottom and top of the core. The error in these calculations is estimated to be at most 10%¹². This

Table XIIa. U-Test for the Ratio in Eq. (7) at the Bottom and Middle

R_B	R_M	m	n	U_B	U_T	U_C
190	551	19	19	0	361	113 (one sided, $\alpha = 0.05$)

Table XIIb. U-Test for the Ratio in Eq. (7) at the Middle and Top

R_M	R_T	m	n	U_M	U_T	U_C
551	190	19	19	0	361	113 (one sided, $\alpha = 0.05$)

* R_M = sum of ranks for the ratio at the middle,

R_B = sum of ranks for the ratio at the bottom,

R_T = sum of ranks for the ratio at the top,

U_M = U-test value at the middle,

U_B = U-test value at the bottom, and

U_T = U-test value at the top.

magnitude of error does not explain the large discrepancies between the slopes, which are much more than 10%.

b-- $\Psi(\dot{K})$ as a decreasing function of $\dot{K}(z)$

Another explanation could be in the dependence of $\Psi(\dot{K})$ on $\dot{K}(z)$. If the strain rate decreases with increasing, $\dot{K}(z)$, e.g., $\epsilon \propto \frac{1}{\dot{K}}$, then the gap between the lines can be closed. But according to the existing irradiation creep theories¹⁰ such a dependence of the strain rate on the dpa rate is not expected.

The remaining explanation for the axial dependence, is that $f(\sigma)$ is underestimated at the middle and/or overestimated at the top and bottom, i.e., the total stress σ is axially dependent. An error in the gas pressure calculations could not have caused such discrepancies, since gas pressure induces the same stress at all axial locations. Thus, it seems that ignoring the axial dependence of stress have caused the behavior observed in Fig. 15.

5.3 Axial Shape of Stress

The ratio in Eq. (7), was shown to be axially dependent. The axial variation of the ratio over the fuel element gives an idea of the approximate shape of stress. This axial variation is illustrated in Fig. 17, where the average ratio at each axial location is plotted versus the axial position. The shape is an average shape over the 19 pins in X425B.

To test the significance of a stress component that has this axial shape, the ratios at each axial location were divided by the average ratio at the corresponding location. This is equivalent to assuming that the total stresses have an average axially dependent component. A plot of the strain versus the denominator of Eq. (7) multiplied by the average ratio is shown in Fig. 18 at the previous three axial locations. As shown in the figure, the gap between the three regression lines was closed. Again, the weighted data which include the

Fig. 17. Mean Ratio as a Function of Axial Location

Fig. 18. Strain versus $\dot{K}(z) P^2(t)/T_p * (\text{Average Ratio})$ at Three Axial Locations

additional low burnup pins are shown in Fig. 19. The figure shows a behavior similar to the behavior of the 19 pins data shown in Fig. 18.

Next, the distributions of the weighted ratios at all axial locations are compared to check whether the differences between them are statistically significant. The Kruskal and Wallis H-test was used to compare between the distributions, and the results are shown in Table XIII. The value of $H = 2.165 < \chi^2_{(9;0.05)} = 16.9$ corresponds to a probability that the differences between the distributions is random $P = 0.988 > \alpha = 0.05$. Thus, the null hypothesis, H_0 , that the differences between the distributions is random, is retained. They belong to the same population, at a 95% confidence level. Thus, the differences between the slopes of the regression lines are random, and are statistically insignificant, at a 95% confidence level. This suggests that the average axial dependence of stress, shown in Fig. 16, is representative of the actual axial stress dependence.

6. CONCLUSIONS

In this report, the different irradiation parameters and strain data for the lead IFR experimental subassembly X425 have been compiled at the end of three stages of irradiation. Systematic statistical analysis of the data was used to investigate the radial dependence, within the subassembly, of clad strain on the different irradiation parameters. The analysis showed, as expected for the temperature range of the subassembly, that thermal creep is insignificant in inducing clad deformation in this subassembly.

A simple phenomenological model for irradiation creep in HT-9 was developed. Application of the data to this model showed a statistically significant axially dependent stress component that contribute to the clad deformation. The magnitude and mechanism of this component is to be investigated.

Fig. 19. Strain versus $\dot{K}(z) P^2(t)/T_p * (\text{Average Ratio})$ at Three Axial Locations

Table XIII. Kruskal-Wallis Test for the Weighted Ratios at All Axial Locations

Axial Position	Number of Observations	Sum of Ranks
0.05	19	1970
0.15	19	1889
0.25	19	1884
0.35	19	1893
0.45	19	1885
0.55	19	1835
0.65	19	1780
0.75	19	1589
0.85	19	1663
0.95	19	1757
H=2.165 P=0.988		

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APPENDIX A

X425 DATABASE

Three sets of tables for X425, X425A, and X425B, are given next. The columns in the table are defined as follows:

A	-	pin number
B	-	jacket name
C	-	ring number within the subassembly
D	-	midpoint of each axial section where 0.05 is the midpoint of the bottom section
E	-	strain, %
F	-	average flow temperature, °C
G	-	average midwall clad temperature, °C
H	-	standard deviation in clad temperature, °C
I	-	power density, w/cm ³
J	-	local burnup, at %
K	-	average burnup, at %
L	-	fast fluence, 10 ²² n/cm ²
M	-	dpa
N	-	dpa rate, 10 ⁻⁷ dpa/s
O	-	plenum gas pressure, MPa
P	-	number of reconstitutions (including the first time it was presented as fresh fuel)
Q	-	fuel condition (F ≡ fresh fuel, O ≡ old fuel pin from previous reconstitution, and R ≡ a pin which is placed in a position that is different from its position in the previous reconstitution)

*Notice that the temperatures shown in the tables are averaged over the number of cycles between reconstitutions. Also, the total fuel slug length is taken as 14.43 in., and the pin volume is 1.1028 in.³.

X425

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
1	T400	5	0.05	0.00	380.	393.	0.9	597.6	2.41	2.50	1.80	9.7	7.69	1.7	1	F
1	T400	5	0.15	0.00	389.	403.	1.3	631.4	2.55	2.50	2.02	11.1	8.80	1.7	1	F
1	T400	5	0.25	0.00	399.	414.	1.7	663.6	2.67	2.50	2.24	12.5	9.91	1.7	1	F
1	T400	5	0.35	0.00	409.	424.	2.1	690.3	2.76	2.50	2.39	13.7	10.79	1.7	1	F
1	T400	5	0.45	0.00	420.	435.	2.6	695.0	2.76	2.50	2.33	13.3	10.53	1.7	1	F
1	T400	5	0.55	0.00	430.	445.	3.0	681.8	2.71	2.50	2.28	13.0	10.28	1.7	1	F
1	T400	5	0.65	0.00	440.	454.	3.3	650.5	2.59	2.50	2.22	12.7	10.02	1.7	1	F
1	T400	5	0.75	0.00	449.	462.	3.7	602.2	2.40	2.50	1.98	11.2	8.82	1.7	1	F
1	T400	5	0.85	0.00	457.	469.	3.9	550.5	2.19	2.50	1.70	9.4	7.43	1.7	1	F
1	T400	5	0.95	0.00	465.	475.	4.2	494.8	1.96	2.50	1.42	7.6	6.04	1.7	1	F
2	T401	5	0.05	0.00	381.	395.	1.0	603.7	2.39	2.48	1.80	9.6	7.58	1.7	1	F
2	T401	5	0.15	0.00	391.	407.	1.4	640.0	2.53	2.48	2.01	11.0	8.67	1.7	1	F
2	T401	5	0.25	0.00	402.	419.	1.9	673.5	2.66	2.48	2.23	12.4	9.76	1.7	1	F
2	T401	5	0.35	0.00	414.	431.	2.4	700.3	2.74	2.48	2.38	13.4	10.59	1.7	1	F
2	T401	5	0.45	0.00	425.	443.	2.9	705.0	2.75	2.48	2.32	13.1	10.34	1.7	1	F
2	T401	5	0.55	0.00	437.	454.	3.3	691.7	2.69	2.48	2.27	12.8	10.09	1.7	1	F
2	T401	5	0.65	0.00	448.	464.	3.7	659.5	2.57	2.48	2.21	12.4	9.83	1.7	1	F
2	T401	5	0.75	0.00	458.	473.	4.1	610.2	2.38	2.48	1.97	11.0	8.66	1.7	1	F
2	T401	5	0.85	0.00	467.	481.	4.4	557.3	2.17	2.48	1.69	9.2	7.29	1.7	1	F
2	T401	5	0.95	0.00	475.	487.	4.6	500.0	1.94	2.48	1.41	7.5	5.93	1.7	1	F
3	T440	5	0.05	0.00	381.	395.	1.0	571.0	2.31	2.42	1.79	9.6	7.61	1.7	1	F
3	T440	5	0.15	0.00	391.	407.	1.4	609.7	2.47	2.42	2.01	11.0	8.71	1.7	1	F
3	T440	5	0.25	0.00	402.	419.	1.9	643.8	2.60	2.42	2.22	12.4	9.80	1.7	1	F
3	T440	5	0.35	0.00	414.	431.	2.4	669.4	2.69	2.42	2.37	13.5	10.64	1.7	1	F
3	T440	5	0.45	0.00	425.	443.	2.9	674.1	2.69	2.42	2.31	13.2	10.39	1.7	1	F
3	T440	5	0.55	0.00	437.	454.	3.3	661.3	2.63	2.42	2.26	12.8	10.14	1.7	1	F
3	T440	5	0.65	0.00	448.	464.	3.7	630.1	2.52	2.42	2.20	12.5	9.88	1.7	1	F
3	T440	5	0.75	0.00	459.	474.	4.1	582.4	2.33	2.42	1.96	11.0	8.70	1.7	1	F
3	T440	5	0.85	0.00	468.	482.	4.4	530.2	2.11	2.42	1.68	9.3	7.33	1.7	1	F
3	T440	5	0.95	0.00	477.	488.	4.7	472.6	1.88	2.42	1.41	7.5	5.96	1.7	1	F
4	T402	5	0.05	0.00	381.	395.	1.0	590.4	2.35	2.45	1.78	9.8	7.73	1.7	1	F
4	T402	5	0.15	0.00	391.	407.	1.4	628.3	2.50	2.45	2.00	11.2	8.84	1.7	1	F
4	T402	5	0.25	0.00	402.	419.	1.9	662.3	2.63	2.45	2.21	12.6	9.95	1.7	1	F
4	T402	5	0.35	0.00	414.	431.	2.4	688.2	2.71	2.45	2.35	13.7	10.85	1.7	1	F
4	T402	5	0.45	0.00	425.	443.	2.9	692.8	2.72	2.45	2.30	13.4	10.59	1.7	1	F
4	T402	5	0.55	0.00	437.	454.	3.3	679.7	2.66	2.45	2.25	13.1	10.33	1.7	1	F
4	T402	5	0.65	0.00	448.	465.	3.7	648.2	2.55	2.45	2.19	12.7	10.07	1.7	1	F
4	T402	5	0.75	0.00	459.	474.	4.1	600.2	2.36	2.45	1.95	11.2	8.87	1.7	1	F
4	T402	5	0.85	0.00	468.	482.	4.5	547.5	2.14	2.45	1.67	9.5	7.47	1.7	1	F
4	T402	5	0.95	0.00	477.	488.	4.8	489.8	1.91	2.45	1.40	7.7	6.08	1.7	1	F
5	T417	5	0.05	0.00	380.	392.	0.8	586.6	2.33	2.44	1.77	9.9	7.80	1.7	1	F
5	T417	5	0.15	0.00	389.	403.	1.3	624.8	2.49	2.44	1.99	11.3	8.92	1.7	1	F
5	T417	5	0.25	0.00	399.	413.	1.7	658.9	2.62	2.44	2.20	12.7	10.04	1.7	1	F
5	T417	5	0.35	0.00	409.	425.	2.2	684.7	2.70	2.44	2.35	13.9	10.98	1.7	1	F
5	T417	5	0.45	0.00	420.	436.	2.6	689.2	2.70	2.44	2.29	13.6	10.72	1.7	1	F
5	T417	5	0.55	0.00	431.	446.	3.1	676.2	2.65	2.44	2.24	13.2	10.45	1.7	1	F
5	T417	5	0.65	0.00	442.	456.	3.6	645.3	2.53	2.44	2.18	12.9	10.19	1.7	1	F
5	T417	5	0.75	0.00	452.	465.	4.1	598.3	2.35	2.44	1.94	11.4	8.97	1.7	1	F

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
5	T417	5	0.85	0.00	462.	474.	4.5	545.4	2.13	2.44	1.67	9.6	7.56	1.7	1	F
5	T417	5	0.95	0.00	470.	480.	4.9	487.3	1.90	2.44	1.39	7.8	6.15	1.7	1	F
6	T404	5	0.05	0.00	381.	396.	1.0	609.5	2.44	2.54	1.83	9.8	7.76	1.8	1	F
6	T404	5	0.15	0.00	392.	408.	1.5	644.0	2.58	2.54	2.05	11.2	8.87	1.8	1	F
6	T404	5	0.25	0.00	403.	420.	2.0	676.8	2.71	2.54	2.27	12.6	9.99	1.8	1	F
6	T404	5	0.35	0.00	415.	432.	2.5	704.3	2.80	2.54	2.43	13.8	10.91	1.8	1	F
6	T404	5	0.45	0.00	426.	444.	2.9	709.3	2.81	2.54	2.38	13.5	10.65	1.8	1	F
6	T404	5	0.55	0.00	438.	455.	3.4	695.9	2.75	2.54	2.32	13.1	10.39	1.8	1	F
6	T404	5	0.65	0.00	448.	465.	3.8	664.5	2.63	2.54	2.26	12.8	10.13	1.8	1	F
6	T404	5	0.75	0.00	459.	474.	4.1	616.3	2.44	2.54	2.02	11.3	8.92	1.8	1	F
6	T404	5	0.85	0.00	467.	482.	4.4	562.8	2.22	2.54	1.73	9.5	7.51	1.8	1	F
6	T404	5	0.95	0.00	475.	487.	4.7	504.8	1.99	2.54	1.45	7.7	6.11	1.8	1	F
7	T457	4	0.05	0.00	384.	398.	1.1	591.8	2.42	2.56	1.82	9.7	7.65	1.9	1	F
7	T457	4	0.15	0.00	397.	413.	1.7	635.3	2.60	2.56	2.04	11.1	8.76	1.9	1	F
7	T457	4	0.25	0.00	410.	428.	2.3	672.6	2.75	2.56	2.26	12.5	9.86	1.9	1	F
7	T457	4	0.35	0.00	425.	442.	2.8	700.3	2.84	2.56	2.42	13.6	10.73	1.9	1	F
7	T457	4	0.45	0.00	439.	457.	3.4	705.8	2.85	2.56	2.37	13.3	10.47	1.9	1	F
7	T457	4	0.55	0.00	453.	470.	4.0	692.4	2.79	2.56	2.31	12.9	10.22	1.9	1	F
7	T457	4	0.65	0.00	466.	482.	4.4	659.9	2.66	2.56	2.25	12.6	9.96	1.9	1	F
7	T457	4	0.75	0.00	478.	493.	4.9	610.2	2.46	2.56	2.01	11.1	8.77	1.9	1	F
7	T457	4	0.85	0.00	488.	502.	5.2	553.3	2.23	2.56	1.72	9.4	7.39	1.9	1	F
7	T457	4	0.95	0.00	497.	509.	5.5	489.0	1.96	2.56	1.44	7.6	6.01	1.9	1	F
8	T441	4	0.05	0.00	384.	398.	1.1	579.9	2.34	2.46	1.82	9.5	7.47	1.8	1	F
8	T441	4	0.15	0.00	397.	413.	1.7	619.4	2.51	2.46	2.04	10.8	8.54	1.8	1	F
8	T441	4	0.25	0.00	411.	428.	2.3	654.2	2.64	2.46	2.26	12.2	9.62	1.8	1	F
8	T441	4	0.35	0.04	425.	443.	2.9	680.5	2.73	2.46	2.41	13.1	10.39	1.8	1	F
8	T441	4	0.45	0.04	440.	458.	3.4	685.5	2.73	2.46	2.36	12.8	10.14	1.8	1	F
8	T441	4	0.55	0.00	454.	472.	4.0	672.5	2.68	2.46	2.30	12.5	9.89	1.8	1	F
8	T441	4	0.65	0.00	468.	484.	4.5	641.1	2.56	2.46	2.24	12.2	9.64	1.8	1	F
8	T441	4	0.75	0.00	481.	496.	5.0	593.3	2.37	2.46	2.00	10.7	8.48	1.8	1	F
8	T441	4	0.85	0.02	492.	506.	5.4	539.5	2.15	2.46	1.72	9.1	7.15	1.8	1	F
8	T441	4	0.95	0.00	502.	513.	5.7	479.7	1.90	2.46	1.43	7.4	5.82	1.8	1	F
9	T442	4	0.05	0.00	384.	398.	1.1	581.7	2.33	2.44	1.81	9.5	7.50	1.7	1	F
9	T442	4	0.15	0.00	397.	412.	1.7	622.5	2.49	2.44	2.03	10.9	8.58	1.7	1	F
9	T442	4	0.25	0.00	411.	427.	2.2	657.9	2.63	2.44	2.25	12.2	9.65	1.7	1	F
9	T442	4	0.35	0.01	425.	443.	2.8	684.2	2.71	2.44	2.40	13.2	10.43	1.7	1	F
9	T442	4	0.45	0.02	440.	457.	3.4	689.2	2.72	2.44	2.35	12.9	10.18	1.7	1	F
9	T442	4	0.55	0.04	454.	471.	4.0	676.1	2.66	2.44	2.29	12.6	9.93	1.7	1	F
9	T442	4	0.65	0.04	468.	484.	4.5	644.6	2.54	2.44	2.23	12.3	9.68	1.7	1	F
9	T442	4	0.75	0.00	480.	496.	5.0	596.6	2.35	2.44	1.99	10.8	8.52	1.7	1	F
9	T442	4	0.85	0.00	492.	505.	5.3	542.3	2.13	2.44	1.71	9.1	7.18	1.7	1	F
9	T442	4	0.95	0.00	501.	513.	5.7	481.5	1.89	2.44	1.43	7.4	5.85	1.7	1	F
10	T458	4	0.05	0.00	384.	398.	1.1	583.4	2.37	2.51	1.80	9.5	7.52	1.8	1	F
10	T458	4	0.15	0.00	396.	412.	1.6	629.5	2.56	2.51	2.02	10.9	8.60	1.8	1	F
10	T458	4	0.25	0.00	410.	427.	2.2	667.9	2.71	2.51	2.24	12.2	9.67	1.8	1	F
10	T458	4	0.35	0.00	424.	441.	2.8	694.9	2.79	2.51	2.39	13.3	10.47	1.8	1	F
10	T458	4	0.45	0.00	438.	456.	3.4	700.2	2.80	2.51	2.33	12.9	10.22	1.8	1	F
10	T458	4	0.55	0.00	452.	469.	3.9	686.9	2.74	2.51	2.28	12.6	9.97	1.8	1	F
10	T458	4	0.65	0.00	465.	481.	4.4	654.6	2.62	2.51	2.22	12.3	9.72	1.8	1	F
10	T458	4	0.75	0.00	477.	492.	4.8	605.5	2.42	2.51	1.98	10.8	8.56	1.8	1	F
10	T458	4	0.85	0.00	488.	502.	5.2	548.2	2.19	2.51	1.70	9.1	7.21	1.8	1	F
10	T458	4	0.95	0.00	497.	509.	5.5	482.6	1.92	2.51	1.42	7.4	5.87	1.8	1	F

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
11	T405	5	0.05	0.00	381.	395.	1.0	576.8	2.34	2.46	1.79	9.7	7.63	1.7	1	F
11	T405	5	0.15	0.00	391.	407.	1.4	615.5	2.50	2.46	2.01	11.0	8.73	1.7	1	F
11	T405	5	0.25	0.00	403.	419.	1.9	649.6	2.64	2.46	2.22	12.4	9.82	1.7	1	F
11	T405	5	0.35	0.00	414.	432.	2.4	675.2	2.72	2.46	2.38	13.5	10.69	1.7	1	F
11	T405	5	0.45	0.00	426.	444.	2.9	679.8	2.73	2.46	2.32	13.2	10.43	1.7	1	F
11	T405	5	0.55	0.00	439.	456.	3.4	667.0	2.67	2.46	2.27	12.9	10.18	1.7	1	F
11	T405	5	0.65	0.00	450.	467.	3.9	636.8	2.56	2.46	2.21	12.6	9.92	1.7	1	F
11	T405	5	0.75	0.00	461.	476.	4.4	591.0	2.37	2.46	1.97	11.1	8.74	1.7	1	F
11	T405	5	0.85	0.00	471.	485.	4.8	537.9	2.15	2.46	1.69	9.3	7.37	1.7	1	F
11	T405	5	0.95	0.00	480.	492.	5.1	478.9	1.91	2.46	1.41	7.6	5.99	1.7	1	F
12	T408	5	0.05	0.00	381.	396.	1.0	612.1	2.47	2.57	1.85	9.8	7.75	1.8	1	F
12	T408	5	0.15	0.00	392.	408.	1.5	647.0	2.61	2.57	2.08	11.2	8.86	1.8	1	F
12	T408	5	0.25	0.00	403.	421.	2.0	680.2	2.74	2.57	2.30	12.6	9.97	1.8	1	F
12	T408	5	0.35	0.00	415.	433.	2.5	708.1	2.84	2.57	2.48	13.8	10.90	1.8	1	F
12	T408	5	0.45	0.00	427.	445.	3.0	713.3	2.85	2.57	2.42	13.5	10.64	1.8	1	F
12	T408	5	0.55	0.00	439.	456.	3.4	699.8	2.79	2.57	2.36	13.1	10.38	1.8	1	F
12	T408	5	0.65	0.00	450.	467.	3.8	668.6	2.67	2.57	2.30	12.8	10.12	1.8	1	F
12	T408	5	0.75	0.00	460.	476.	4.2	620.8	2.47	2.57	2.06	11.3	8.91	1.8	1	F
12	T408	5	0.85	0.00	469.	484.	4.5	566.3	2.25	2.57	1.77	9.5	7.51	1.8	1	F
12	T408	5	0.95	0.00	478.	490.	4.8	507.0	2.01	2.57	1.48	7.7	6.11	1.8	1	F
13	T409	4	0.05	0.00	384.	399.	1.1	623.5	2.45	2.55	1.85	9.9	7.83	1.9	1	F
13	T409	4	0.15	0.00	397.	414.	1.7	661.3	2.60	2.55	2.07	11.3	8.96	1.9	1	F
13	T409	4	0.25	0.00	412.	429.	2.3	696.2	2.73	2.55	2.30	12.8	10.09	1.9	1	F
13	T409	4	0.35	0.00	427.	445.	2.9	724.5	2.82	2.55	2.47	14.0	11.04	1.9	1	F
13	T409	4	0.45	0.00	442.	460.	3.5	729.7	2.83	2.55	2.41	13.6	10.78	1.9	1	F
13	T409	4	0.55	0.00	457.	474.	4.1	716.0	2.77	2.55	2.35	13.3	10.52	1.9	1	F
13	T409	4	0.65	0.00	471.	488.	4.6	683.6	2.65	2.55	2.30	13.0	10.25	1.9	1	F
13	T409	4	0.75	0.00	484.	499.	5.1	634.1	2.46	2.55	2.05	11.4	9.03	1.9	1	F
13	T409	4	0.85	0.00	495.	509.	5.5	577.9	2.23	2.55	1.76	9.6	7.61	1.9	1	F
13	T409	4	0.95	0.00	505.	517.	5.8	516.2	1.99	2.55	1.47	7.8	6.18	1.9	1	F
14	T444	3	0.05	0.00	384.	399.	1.1	589.5	2.37	2.49	1.84	10.0	7.90	1.8	1	F
14	T444	3	0.15	0.00	398.	414.	1.7	630.0	2.54	2.49	2.07	11.4	9.03	1.8	1	F
14	T444	3	0.25	0.00	413.	430.	2.3	665.4	2.67	2.49	2.29	12.9	10.17	1.8	1	F
14	T444	3	0.35	0.00	428.	446.	3.0	692.5	2.77	2.49	2.46	14.1	11.16	1.8	1	F
14	T444	3	0.45	0.00	444.	462.	3.6	697.7	2.77	2.49	2.40	13.8	10.89	1.8	1	F
14	T444	3	0.55	0.00	460.	477.	4.2	684.5	2.72	2.49	2.34	13.4	10.62	1.8	1	F
14	T444	3	0.65	0.00	475.	491.	4.8	653.0	2.59	2.49	2.29	13.1	10.36	1.8	1	F
14	T444	3	0.75	0.00	489.	504.	5.3	604.9	2.40	2.49	2.04	11.5	9.12	1.8	1	F
14	T444	3	0.85	0.00	501.	515.	5.7	549.6	2.18	2.49	1.75	9.7	7.68	1.8	1	F
14	T444	3	0.95	0.00	512.	524.	6.1	487.6	1.93	2.49	1.46	7.9	6.24	1.8	1	F
15	T473	3	0.05	0.00	384.	398.	1.1	603.5	2.43	2.58	1.84	9.9	7.85	1.9	1	F
15	T473	3	0.15	0.00	397.	414.	1.7	650.6	2.62	2.58	2.06	11.4	8.98	1.9	1	F
15	T473	3	0.25	0.00	412.	429.	2.3	690.0	2.77	2.58	2.28	12.8	10.11	1.9	1	F
15	T473	3	0.35	0.00	428.	446.	3.0	718.4	2.87	2.58	2.45	14.0	11.08	1.9	1	F
15	T473	3	0.45	0.00	444.	462.	3.6	724.1	2.88	2.58	2.39	13.7	10.82	1.9	1	F
15	T473	3	0.55	0.00	459.	477.	4.2	710.3	2.82	2.58	2.33	13.4	10.55	1.9	1	F
15	T473	3	0.65	0.00	474.	491.	4.8	677.0	2.69	2.58	2.28	13.0	10.29	1.9	1	F
15	T473	3	0.75	0.00	488.	504.	5.3	626.2	2.49	2.58	2.03	11.5	9.06	1.9	1	F
15	T473	3	0.85	0.00	501.	515.	5.7	566.7	2.24	2.58	1.74	9.7	7.63	1.9	1	F
15	T473	3	0.95	0.00	512.	524.	6.1	498.7	1.97	2.58	1.45	7.8	6.20	1.9	1	F
16	T445	3	0.05	0.00	384.	398.	1.1	582.0	2.34	2.47	1.83	9.9	7.80	1.8	1	F
16	T445	3	0.15	0.00	397.	414.	1.7	624.0	2.51	2.47	2.05	11.3	8.93	1.8	1	F

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
16	T445	3	0.25	0.00	412.	429.	2.3	660.1	2.65	2.47	2.27	12.7	10.05	1.8	1	F
16	T445	3	0.35	0.00	428.	445.	3.0	686.6	2.74	2.47	2.43	13.9	11.00	1.8	1	F
16	T445	3	0.45	0.00	443.	461.	3.6	691.7	2.74	2.47	2.38	13.6	10.74	1.8	1	F
16	T445	3	0.55	0.00	459.	476.	4.2	678.6	2.69	2.47	2.32	13.3	10.47	1.8	1	F
16	T445	3	0.65	0.00	474.	490.	4.8	647.3	2.57	2.47	2.26	12.9	10.21	1.8	1	F
16	T445	3	0.75	0.00	488.	503.	5.3	599.7	2.38	2.47	2.02	11.4	8.99	1.8	1	F
16	T445	3	0.85	0.00	500.	514.	5.7	544.3	2.15	2.47	1.73	9.6	7.57	1.8	1	F
16	T445	3	0.95	0.00	511.	523.	6.0	481.7	1.90	2.47	1.45	7.8	6.16	1.8	1	F
17	T411	4	0.05	0.00	384.	398.	1.1	599.0	2.37	2.49	1.82	9.8	7.71	1.8	1	F
17	T411	4	0.15	0.00	397.	413.	1.7	639.8	2.54	2.49	2.04	11.2	8.82	1.8	1	F
17	T411	4	0.25	0.00	411.	428.	2.3	675.5	2.67	2.49	2.26	12.6	9.93	1.8	1	F
17	T411	4	0.35	0.00	426.	443.	2.9	702.2	2.76	2.49	2.42	13.7	10.83	1.8	1	F
17	T411	4	0.45	0.00	441.	458.	3.5	707.2	2.77	2.49	2.36	13.4	10.58	1.8	1	F
17	T411	4	0.55	0.00	455.	473.	4.0	693.8	2.71	2.49	2.31	13.1	10.32	1.8	1	F
17	T411	4	0.65	0.00	469.	486.	4.6	662.3	2.59	2.49	2.25	12.7	10.06	1.8	1	F
17	T411	4	0.75	0.00	482.	497.	5.0	614.6	2.40	2.49	2.01	11.2	8.85	1.8	1	F
17	T411	4	0.85	0.00	493.	507.	5.4	558.9	2.18	2.49	1.72	9.4	7.46	1.8	1	F
17	T411	4	0.95	0.00	503.	515.	5.7	496.5	1.93	2.49	1.44	7.7	6.06	1.8	1	F
18	T413	5	0.05	0.00	381.	395.	1.0	591.4	2.35	2.47	1.80	9.6	7.61	1.7	1	F
18	T413	5	0.15	0.00	391.	408.	1.5	631.9	2.52	2.47	2.02	11.0	8.70	1.7	1	F
18	T413	5	0.25	0.00	403.	420.	1.9	667.3	2.65	2.47	2.24	12.4	9.80	1.7	1	F
18	T413	5	0.35	0.00	415.	433.	2.5	693.6	2.74	2.47	2.40	13.5	10.66	1.7	1	F
18	T413	5	0.45	0.00	427.	445.	3.0	698.5	2.75	2.47	2.35	13.2	10.40	1.7	1	F
18	T413	5	0.55	0.00	440.	457.	3.5	685.3	2.69	2.47	2.29	12.8	10.15	1.7	1	F
18	T413	5	0.65	0.00	451.	468.	4.0	654.5	2.57	2.47	2.24	12.5	9.89	1.7	1	F
18	T413	5	0.75	0.00	463.	478.	4.4	607.8	2.39	2.47	1.99	11.0	8.71	1.7	1	F
18	T413	5	0.85	0.00	473.	486.	4.8	552.6	2.16	2.47	1.71	9.3	7.34	1.7	1	F
18	T413	5	0.95	0.00	482.	493.	5.1	490.6	1.92	2.47	1.43	7.6	5.97	1.7	1	F
19	T414	5	0.05	0.00	382.	396.	1.0	616.6	2.49	2.60	1.88	9.6	7.55	1.9	1	F
19	T414	5	0.15	0.00	392.	409.	1.5	652.7	2.64	2.60	2.11	10.9	8.63	1.9	1	F
19	T414	5	0.25	0.00	404.	421.	2.0	686.6	2.77	2.60	2.33	12.3	9.72	1.9	1	F
19	T414	5	0.35	0.00	416.	434.	2.5	715.0	2.87	2.60	2.52	13.3	10.54	1.9	1	F
19	T414	5	0.45	0.00	428.	446.	3.0	720.5	2.88	2.60	2.46	13.0	10.29	1.9	1	F
19	T414	5	0.55	0.00	440.	458.	3.5	706.9	2.82	2.60	2.40	12.7	10.03	1.9	1	F
19	T414	5	0.65	0.00	451.	468.	3.9	675.4	2.70	2.60	2.34	12.4	9.78	1.9	1	F
19	T414	5	0.75	0.00	462.	478.	4.3	627.4	2.50	2.60	2.09	10.9	8.61	1.9	1	F
19	T414	5	0.85	0.00	471.	485.	4.6	571.7	2.27	2.60	1.80	9.2	7.25	1.9	1	F
19	T414	5	0.95	0.00	479.	492.	4.9	510.6	2.03	2.60	1.50	7.5	5.90	1.9	1	F
20	T446	4	0.05	0.00	384.	399.	1.1	597.9	2.42	2.54	1.88	9.3	7.35	1.9	1	F
20	T446	4	0.15	0.00	398.	414.	1.7	637.9	2.58	2.54	2.10	10.6	8.40	1.9	1	F
20	T446	4	0.25	0.00	412.	430.	2.3	673.4	2.72	2.54	2.33	12.0	9.46	1.9	1	F
20	T446	4	0.35	0.00	428.	446.	3.0	701.3	2.82	2.54	2.51	12.9	10.17	1.9	1	F
20	T446	4	0.45	0.00	443.	461.	3.6	706.9	2.83	2.54	2.45	12.6	9.93	1.9	1	F
20	T446	4	0.55	0.00	458.	476.	4.2	693.5	2.77	2.54	2.39	12.3	9.68	1.9	1	F
20	T446	4	0.65	0.00	472.	489.	4.7	662.0	2.65	2.54	2.34	12.0	9.44	1.9	1	F
20	T446	4	0.75	0.00	485.	501.	5.2	614.1	2.45	2.54	2.08	10.5	8.30	1.9	1	F
20	T446	4	0.85	0.00	497.	511.	5.6	557.8	2.22	2.54	1.79	8.9	7.00	1.9	1	F
20	T446	4	0.95	0.00	507.	519.	5.9	494.7	1.96	2.54	1.49	7.2	5.70	1.9	1	F
21	T459	3	0.05	0.00	384.	399.	1.1	617.4	2.46	2.61	1.87	9.3	7.38	2.0	1	F
21	T459	3	0.15	0.00	398.	415.	1.7	665.0	2.65	2.61	2.10	10.7	8.44	2.0	1	F
21	T459	3	0.25	0.00	413.	431.	2.4	705.0	2.80	2.61	2.32	12.0	9.50	2.0	1	F
21	T459	3	0.35	0.00	429.	448.	3.1	734.5	2.91	2.61	2.50	12.9	10.21	2.0	1	F

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
21	T459	3	0.45	0.00	446.	464.	3.7	740.6	2.92	2.61	2.44	12.6	9.96	2.0	1	F
21	T459	3	0.55	0.00	462.	480.	4.3	726.6	2.86	2.61	2.38	12.3	9.72	2.0	1	F
21	T459	3	0.65	0.00	477.	494.	4.9	692.8	2.73	2.61	2.33	12.0	9.48	2.0	1	F
21	T459	3	0.75	0.00	492.	508.	5.4	641.6	2.52	2.61	2.07	10.5	8.33	2.0	1	F
21	T459	3	0.85	0.00	504.	519.	5.9	580.5	2.27	2.61	1.78	8.9	7.03	2.0	1	F
21	T459	3	0.95	0.00	516.	528.	6.3	510.4	1.99	2.61	1.49	7.2	5.72	2.0	1	F
22	T416	2	0.05	0.00	384.	399.	1.1	606.9	2.44	2.56	1.86	9.4	7.40	1.9	1	F
22	T416	2	0.15	0.00	398.	415.	1.7	647.0	2.60	2.56	2.09	10.7	8.46	1.9	1	F
22	T416	2	0.25	0.00	413.	431.	2.4	682.6	2.74	2.56	2.31	12.1	9.52	1.9	1	F
22	T416	2	0.35	0.00	429.	447.	3.0	710.1	2.83	2.56	2.49	13.0	10.24	1.9	1	F
22	T416	2	0.45	0.00	445.	464.	3.7	715.4	2.84	2.56	2.43	12.7	10.00	1.9	1	F
22	T416	2	0.55	0.00	462.	480.	4.3	701.9	2.78	2.56	2.37	12.3	9.75	1.9	1	F
22	T416	2	0.65	0.00	477.	494.	4.9	669.9	2.66	2.56	2.32	12.0	9.51	1.9	1	F
22	T416	2	0.75	0.00	492.	508.	5.4	621.3	2.46	2.56	2.06	10.6	8.36	1.9	1	F
22	T416	2	0.85	0.00	505.	519.	5.9	565.0	2.23	2.56	1.77	8.9	7.05	1.9	1	F
22	T416	2	0.95	0.00	517.	529.	6.3	502.1	1.98	2.56	1.48	7.3	5.74	1.9	1	F
23	T418	2	0.05	0.00	384.	399.	1.1	608.7	2.42	2.54	1.85	9.4	7.41	1.9	1	F
23	T418	2	0.15	0.00	398.	415.	1.7	649.9	2.58	2.54	2.08	10.7	8.47	1.9	1	F
23	T418	2	0.25	0.00	413.	431.	2.4	686.1	2.72	2.54	2.30	12.1	9.53	1.9	1	F
23	T418	2	0.35	0.00	429.	447.	3.0	713.6	2.81	2.54	2.48	13.0	10.27	1.9	1	F
23	T418	2	0.45	0.00	445.	463.	3.7	718.8	2.82	2.54	2.42	12.7	10.03	1.9	1	F
23	T418	2	0.55	0.00	461.	479.	4.3	705.3	2.77	2.54	2.36	12.4	9.78	1.9	1	F
23	T418	2	0.65	0.00	477.	494.	4.9	673.1	2.64	2.54	2.30	12.1	9.54	1.9	1	F
23	T418	2	0.75	0.00	491.	507.	5.4	624.3	2.45	2.54	2.05	10.6	8.40	1.9	1	F
23	T418	2	0.85	0.00	504.	518.	5.9	567.5	2.22	2.54	1.76	9.0	7.08	1.9	1	F
23	T418	2	0.95	0.00	516.	528.	6.2	503.8	1.97	2.54	1.47	7.3	5.77	1.9	1	F
24	T461	3	0.05	0.00	384.	399.	1.1	598.7	2.41	2.57	1.84	9.5	7.53	1.9	1	F
24	T461	3	0.15	0.00	398.	414.	1.7	647.2	2.61	2.57	2.07	10.9	8.60	1.9	1	F
24	T461	3	0.25	0.00	413.	430.	2.3	687.3	2.76	2.57	2.29	12.3	9.68	1.9	1	F
24	T461	3	0.35	0.00	428.	446.	3.0	715.5	2.86	2.57	2.46	13.3	10.50	1.9	1	F
24	T461	3	0.45	0.00	444.	462.	3.6	721.3	2.87	2.57	2.40	13.0	10.25	1.9	1	F
24	T461	3	0.55	0.00	460.	478.	4.3	707.6	2.81	2.57	2.35	12.7	10.00	1.9	1	F
24	T461	3	0.65	0.00	475.	492.	4.8	674.7	2.68	2.57	2.29	12.3	9.75	1.9	1	F
24	T461	3	0.75	0.00	490.	505.	5.3	624.8	2.48	2.57	2.04	10.9	8.59	1.9	1	F
24	T461	3	0.85	0.00	502.	516.	5.8	564.6	2.23	2.57	1.75	9.2	7.24	1.9	1	F
24	T461	3	0.95	0.00	513.	526.	6.2	495.0	1.95	2.57	1.46	7.5	5.90	1.9	1	F
25	T447	4	0.05	0.00	384.	398.	1.1	590.5	2.38	2.51	1.83	9.7	7.65	1.8	1	F
25	T447	4	0.15	0.00	397.	413.	1.7	634.3	2.55	2.51	2.05	11.1	8.74	1.8	1	F
25	T447	4	0.25	0.00	412.	429.	2.3	671.4	2.70	2.51	2.27	12.4	9.83	1.8	1	F
25	T447	4	0.35	0.00	426.	444.	2.9	698.4	2.79	2.51	2.45	13.6	10.72	1.8	1	F
25	T447	4	0.45	0.00	441.	459.	3.5	703.6	2.80	2.51	2.39	13.2	10.47	1.8	1	F
25	T447	4	0.55	0.00	456.	474.	4.1	690.3	2.74	2.51	2.33	12.9	10.21	1.8	1	F
25	T447	4	0.65	0.00	470.	487.	4.6	658.8	2.62	2.51	2.27	12.6	9.96	1.8	1	F
25	T447	4	0.75	0.00	483.	499.	5.1	611.2	2.43	2.51	2.03	11.1	8.77	1.8	1	F
25	T447	4	0.85	0.00	494.	509.	5.5	554.1	2.19	2.51	1.74	9.4	7.40	1.8	1	F
25	T447	4	0.95	0.00	505.	517.	5.8	489.0	1.93	2.51	1.45	7.6	6.02	1.8	1	F
26	T420	5	0.05	0.00	381.	396.	1.0	591.8	2.36	2.49	1.82	9.8	7.77	1.7	1	F
26	T420	5	0.15	0.00	392.	408.	1.5	632.9	2.53	2.49	2.04	11.2	8.88	1.7	1	F
26	T420	5	0.25	0.00	403.	420.	2.0	668.6	2.67	2.49	2.26	12.6	9.99	1.7	1	F
26	T420	5	0.35	0.00	415.	433.	2.5	695.1	2.76	2.49	2.43	13.8	10.94	1.7	1	F
26	T420	5	0.45	0.00	427.	445.	3.0	700.1	2.77	2.49	2.37	13.5	10.68	1.7	1	F
26	T420	5	0.55	0.00	439.	457.	3.5	686.9	2.71	2.49	2.31	13.2	10.42	1.7	1	F

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
26	T420	5	0.65	0.00	451.	468.	3.9	656.0	2.59	2.49	2.26	12.9	10.16	1.7	1	F
26	T420	5	0.75	0.00	462.	478.	4.3	609.4	2.40	2.49	2.01	11.3	8.95	1.7	1	F
26	T420	5	0.85	0.00	472.	486.	4.7	553.5	2.18	2.49	1.73	9.5	7.54	1.7	1	F
26	T420	5	0.95	0.00	481.	493.	5.0	490.6	1.92	2.49	1.44	7.8	6.14	1.7	1	F
27	T421	5	0.05	0.00	381.	394.	0.9	629.7	2.51	2.63	1.91	10.0	7.86	1.9	1	F
27	T421	5	0.15	0.00	390.	405.	1.4	668.0	2.67	2.63	2.14	11.4	8.99	1.9	1	F
27	T421	5	0.25	0.00	401.	417.	1.8	703.4	2.80	2.63	2.37	12.8	10.12	1.9	1	F
27	T421	5	0.35	0.00	413.	429.	2.4	732.7	2.91	2.63	2.56	14.1	11.10	1.9	1	F
27	T421	5	0.45	0.00	424.	441.	2.9	738.5	2.92	2.63	2.50	13.7	10.84	1.9	1	F
27	T421	5	0.55	0.00	436.	452.	3.4	724.5	2.86	2.63	2.44	13.4	10.57	1.9	1	F
27	T421	5	0.65	0.00	447.	462.	3.9	692.2	2.73	2.63	2.38	13.0	10.31	1.9	1	F
27	T421	5	0.75	0.00	458.	472.	4.4	642.8	2.53	2.63	2.12	11.5	9.08	1.9	1	F
27	T421	5	0.85	0.00	467.	480.	4.9	585.1	2.30	2.63	1.82	9.7	7.65	1.9	1	F
27	T421	5	0.95	0.00	475.	486.	5.2	521.2	2.04	2.63	1.52	7.9	6.22	1.9	1	F
28	T464	4	0.05	0.00	385.	400.	1.1	634.8	2.52	2.67	1.90	10.0	7.94	2.0	1	F
28	T464	4	0.15	0.00	398.	415.	1.8	683.0	2.71	2.67	2.13	11.5	9.08	2.0	1	F
28	T464	4	0.25	0.00	413.	431.	2.4	723.8	2.87	2.67	2.36	12.9	10.22	2.0	1	F
28	T464	4	0.35	0.00	428.	446.	3.0	754.7	2.97	2.67	2.55	14.2	11.23	2.0	1	F
28	T464	4	0.45	0.00	443.	461.	3.6	761.2	2.99	2.67	2.49	13.9	10.96	2.0	1	F
28	T464	4	0.55	0.00	457.	476.	4.2	746.8	2.93	2.67	2.43	13.5	10.69	2.0	1	F
28	T464	4	0.65	0.00	471.	489.	4.7	712.5	2.79	2.67	2.37	13.2	10.42	2.0	1	F
28	T464	4	0.75	0.00	484.	501.	5.2	660.4	2.58	2.67	2.12	11.6	9.18	2.0	1	F
28	T464	4	0.85	0.00	495.	510.	5.6	597.3	2.33	2.67	1.82	9.8	7.73	2.0	1	F
28	T464	4	0.95	0.00	505.	518.	5.9	525.0	2.04	2.67	1.52	8.0	6.28	2.0	1	F
29	T423	3	0.05	0.00	385.	400.	1.1	627.8	2.48	2.60	1.90	10.1	7.99	2.0	1	F
29	T423	3	0.15	0.00	399.	415.	1.8	668.7	2.64	2.60	2.13	11.6	9.14	2.0	1	F
29	T423	3	0.25	0.00	414.	432.	2.4	705.2	2.78	2.60	2.35	13.0	10.29	2.0	1	F
29	T423	3	0.35	0.00	430.	448.	3.1	734.1	2.88	2.60	2.54	14.3	11.32	2.0	1	F
29	T423	3	0.45	0.00	446.	465.	3.7	739.8	2.89	2.60	2.48	14.0	11.05	2.0	1	F
29	T423	3	0.55	0.00	462.	481.	4.4	725.9	2.83	2.60	2.42	13.6	10.78	2.0	1	F
29	T423	3	0.65	0.00	478.	495.	4.9	693.1	2.71	2.60	2.36	13.3	10.51	2.0	1	F
29	T423	3	0.75	0.00	492.	508.	5.5	643.2	2.51	2.60	2.11	11.7	9.25	2.0	1	F
29	T423	3	0.85	0.00	505.	519.	5.9	584.7	2.27	2.60	1.81	9.9	7.79	2.0	1	F
29	T423	3	0.95	0.00	516.	528.	6.3	519.2	2.02	2.60	1.51	8.0	6.33	2.0	1	F
30	T448	2	0.05	0.00	385.	400.	1.1	615.9	2.46	2.59	1.89	10.1	7.94	2.0	1	F
30	T448	2	0.15	0.00	399.	416.	1.8	660.1	2.63	2.59	2.12	11.5	9.09	2.0	1	F
30	T448	2	0.25	0.00	414.	432.	2.4	698.1	2.78	2.59	2.35	12.9	10.23	2.0	1	F
30	T448	2	0.35	0.00	430.	449.	3.1	726.8	2.88	2.59	2.53	14.2	11.24	2.0	1	F
30	T448	2	0.45	0.00	447.	466.	3.8	732.6	2.89	2.59	2.47	13.9	10.97	2.0	1	F
30	T448	2	0.55	0.00	463.	482.	4.4	718.8	2.83	2.59	2.41	13.5	10.70	2.0	1	F
30	T448	2	0.65	0.00	479.	497.	5.0	685.9	2.70	2.59	2.35	13.2	10.43	2.0	1	F
30	T448	2	0.75	0.00	494.	510.	5.5	635.9	2.50	2.59	2.10	11.6	9.18	2.0	1	F
30	T448	2	0.85	0.00	507.	522.	6.0	576.6	2.26	2.59	1.80	9.8	7.73	2.0	1	F
30	T448	2	0.95	0.00	519.	532.	6.4	509.2	1.99	2.59	1.50	8.0	6.29	2.0	1	F
31	T465	1	0.05	0.00	385.	400.	1.1	625.8	2.47	2.63	1.88	10.0	7.89	2.0	1	F
31	T465	1	0.15	0.00	399.	415.	1.8	676.1	2.67	2.63	2.11	11.4	9.03	2.0	1	F
31	T465	1	0.25	0.00	414.	432.	2.4	717.7	2.83	2.63	2.34	12.9	10.16	2.0	1	F
31	T465	1	0.35	0.00	430.	449.	3.1	747.6	2.93	2.63	2.52	14.1	11.15	2.0	1	F
31	T465	1	0.45	0.00	447.	465.	3.7	753.9	2.94	2.63	2.46	13.8	10.88	2.0	1	F
31	T465	1	0.55	0.00	463.	481.	4.4	739.6	2.88	2.63	2.40	13.4	10.62	2.0	1	F
31	T465	1	0.65	0.00	479.	496.	5.0	705.2	2.75	2.63	2.34	13.1	10.35	2.0	1	F
31	T465	1	0.75	0.00	493.	510.	5.5	653.0	2.54	2.63	2.08	11.5	9.11	2.0	1	F

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
31	T465	1	0.85	0.00	507.	521.	6.0	590.0	2.29	2.63	1.79	9.7	7.68	2.0	1	F
31	T465	1	0.95	0.00	519.	531.	6.4	517.1	2.00	2.63	1.49	7.9	6.24	2.0	1	F
32	T449	2	0.05	0.00	384.	399.	1.1	606.0	2.42	2.56	1.87	9.9	7.83	1.9	1	F
32	T449	2	0.15	0.00	398.	415.	1.7	650.8	2.60	2.56	2.10	11.3	8.96	1.9	1	F
32	T449	2	0.25	0.00	413.	431.	2.4	689.0	2.75	2.56	2.32	12.8	10.09	1.9	1	F
32	T449	2	0.35	0.00	429.	448.	3.1	717.0	2.85	2.56	2.50	14.0	11.06	1.9	1	F
32	T449	2	0.45	0.00	446.	464.	3.7	722.6	2.86	2.56	2.44	13.7	10.80	1.9	1	F
32	T449	2	0.55	0.00	462.	480.	4.3	708.9	2.80	2.56	2.38	13.3	10.53	1.9	1	F
32	T449	2	0.65	0.00	478.	495.	4.9	676.4	2.67	2.56	2.33	13.0	10.27	1.9	1	F
32	T449	2	0.75	0.00	492.	508.	5.5	627.2	2.47	2.56	2.07	11.4	9.04	1.9	1	F
32	T449	2	0.85	0.00	505.	520.	5.9	568.3	2.24	2.56	1.78	9.6	7.62	1.9	1	F
32	T449	2	0.95	0.00	517.	529.	6.3	501.1	1.97	2.56	1.48	7.8	6.19	1.9	1	F
33	T425	3	0.05	0.00	384.	399.	1.1	602.3	2.41	2.54	1.86	9.8	7.75	1.9	1	F
33	T425	3	0.15	0.00	398.	414.	1.7	644.4	2.58	2.54	2.08	11.2	8.87	1.9	1	F
33	T425	3	0.25	0.00	413.	430.	2.4	680.8	2.72	2.54	2.31	12.6	9.98	1.9	1	F
33	T425	3	0.35	0.00	429.	447.	3.0	708.1	2.81	2.54	2.48	13.8	10.91	1.9	1	F
33	T425	3	0.45	0.00	445.	463.	3.7	713.3	2.82	2.54	2.43	13.5	10.65	1.9	1	F
33	T425	3	0.55	0.00	461.	478.	4.3	699.9	2.77	2.54	2.37	13.2	10.39	1.9	1	F
33	T425	3	0.65	0.00	476.	493.	4.8	668.2	2.64	2.54	2.31	12.8	10.13	1.9	1	F
33	T425	3	0.75	0.00	490.	506.	5.4	620.2	2.45	2.54	2.06	11.3	8.92	1.9	1	F
33	T425	3	0.85	0.00	502.	517.	5.8	563.1	2.22	2.54	1.77	9.5	7.51	1.9	1	F
33	T425	3	0.95	0.00	514.	526.	6.2	498.5	1.96	2.54	1.48	7.7	6.11	1.9	1	F
34	T467	4	0.05	0.00	384.	398.	1.1	603.1	2.42	2.58	1.84	9.7	7.66	1.9	1	F
34	T467	4	0.15	0.00	397.	413.	1.7	652.6	2.62	2.58	2.07	11.1	8.76	1.9	1	F
34	T467	4	0.25	0.00	411.	428.	2.3	693.3	2.77	2.58	2.29	12.5	9.86	1.9	1	F
34	T467	4	0.35	0.00	425.	443.	2.9	721.8	2.87	2.58	2.46	13.6	10.75	1.9	1	F
34	T467	4	0.45	0.00	440.	458.	3.5	727.7	2.88	2.58	2.41	13.3	10.49	1.9	1	F
34	T467	4	0.55	0.00	454.	472.	4.0	713.9	2.82	2.58	2.35	13.0	10.24	1.9	1	F
34	T467	4	0.65	0.00	468.	484.	4.5	680.9	2.69	2.58	2.29	12.6	9.98	1.9	1	F
34	T467	4	0.75	0.00	480.	496.	5.0	631.0	2.49	2.58	2.04	11.1	8.79	1.9	1	F
34	T467	4	0.85	0.00	491.	505.	5.3	569.8	2.25	2.58	1.75	9.4	7.40	1.9	1	F
34	T467	4	0.95	0.00	500.	512.	5.6	498.8	1.96	2.58	1.46	7.6	6.02	1.9	1	F
35	T429	5	0.05	0.00	380.	393.	0.9	590.2	2.37	2.50	1.83	9.6	7.55	1.7	1	F
35	T429	5	0.15	0.00	389.	403.	1.3	631.6	2.54	2.50	2.05	10.9	8.64	1.7	1	F
35	T429	5	0.25	0.00	400.	414.	1.7	667.4	2.68	2.50	2.27	12.3	9.73	1.7	1	F
35	T429	5	0.35	0.00	410.	426.	2.2	693.9	2.77	2.50	2.44	13.4	10.57	1.7	1	F
35	T429	5	0.45	0.00	421.	437.	2.6	699.0	2.78	2.50	2.39	13.1	10.32	1.7	1	F
35	T429	5	0.55	0.00	432.	448.	3.1	685.8	2.72	2.50	2.33	12.7	10.07	1.7	1	F
35	T429	5	0.65	0.00	443.	458.	3.5	654.9	2.60	2.50	2.27	12.4	9.82	1.7	1	F
35	T429	5	0.75	0.00	453.	467.	3.8	608.2	2.41	2.50	2.02	10.9	8.64	1.7	1	F
35	T429	5	0.85	0.00	462.	475.	4.2	552.3	2.19	2.50	1.74	9.2	7.28	1.7	1	F
35	T429	5	0.95	0.00	471.	481.	4.4	489.0	1.93	2.50	1.45	7.5	5.92	1.7	1	F
36	T426	5	0.05	0.00	382.	397.	1.0	631.4	2.52	2.64	1.93	9.5	7.50	2.0	1	F
36	T426	5	0.15	0.00	393.	410.	1.6	672.5	2.68	2.64	2.16	10.9	8.58	2.0	1	F
36	T426	5	0.25	0.00	406.	424.	2.1	709.3	2.82	2.64	2.39	12.2	9.66	2.0	1	F
36	T426	5	0.35	0.00	419.	438.	2.7	738.8	2.93	2.64	2.59	13.3	10.47	2.0	1	F
36	T426	5	0.45	0.00	433.	452.	3.3	744.8	2.94	2.64	2.53	12.9	10.22	2.0	1	F
36	T426	5	0.55	0.00	446.	465.	4.0	730.7	2.88	2.64	2.47	12.6	9.97	2.0	1	F
36	T426	5	0.65	0.00	459.	477.	4.6	697.8	2.75	2.64	2.41	12.3	9.72	2.0	1	F
36	T426	5	0.75	0.00	471.	488.	5.1	647.8	2.55	2.64	2.15	10.8	8.56	2.0	1	F
36	T426	5	0.85	0.00	482.	497.	5.7	588.6	2.31	2.64	1.84	9.1	7.21	2.0	1	F
36	T426	5	0.95	0.00	492.	504.	6.1	522.1	2.05	2.64	1.54	7.4	5.86	2.0	1	F

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
37	T450	4	0.05	0.00	385.	400.	1.1	624.8	2.50	2.64	1.92	9.4	7.43	2.0	1	F
37	T450	4	0.15	0.00	399.	416.	1.8	669.3	2.68	2.64	2.15	10.8	8.50	2.0	1	F
37	T450	4	0.25	0.00	414.	432.	2.4	707.9	2.82	2.64	2.39	12.1	9.57	2.0	1	F
37	T450	4	0.35	0.00	429.	448.	3.1	737.5	2.93	2.64	2.58	13.1	10.34	2.0	1	F
37	T450	4	0.45	0.00	445.	464.	3.7	743.6	2.94	2.64	2.52	12.8	10.09	2.0	1	F
37	T450	4	0.55	0.00	461.	480.	4.3	729.6	2.88	2.64	2.46	12.5	9.84	2.0	1	F
37	T450	4	0.65	0.00	476.	494.	4.9	696.3	2.75	2.64	2.40	12.1	9.60	2.0	1	F
37	T450	4	0.75	0.00	490.	506.	5.4	645.9	2.55	2.64	2.14	10.7	8.44	2.0	1	F
37	T450	4	0.85	0.00	502.	517.	5.8	585.4	2.30	2.64	1.84	9.0	7.12	2.0	1	F
37	T450	4	0.95	0.00	513.	526.	6.2	516.5	2.03	2.64	1.53	7.3	5.79	2.0	1	F
38	T468	3	0.05	0.00	385.	400.	1.1	622.0	2.51	2.68	1.91	9.1	7.22	2.1	1	F
38	T468	3	0.15	0.00	399.	416.	1.8	671.7	2.72	2.68	2.15	10.5	8.26	2.1	1	F
38	T468	3	0.25	0.00	414.	433.	2.4	713.0	2.88	2.68	2.38	11.8	9.29	2.1	1	F
38	T468	3	0.35	0.00	431.	450.	3.1	743.2	2.98	2.68	2.57	12.6	9.94	2.1	1	F
38	T468	3	0.45	0.00	447.	466.	3.8	749.7	3.00	2.68	2.51	12.3	9.71	2.1	1	F
38	T468	3	0.55	0.00	464.	482.	4.4	735.5	2.93	2.68	2.45	12.0	9.47	2.1	1	F
38	T468	3	0.65	0.00	480.	497.	5.0	701.5	2.80	2.68	2.39	11.7	9.23	2.1	1	F
38	T468	3	0.75	0.00	495.	511.	5.6	649.8	2.59	2.68	2.13	10.3	8.12	2.1	1	F
38	T468	3	0.85	0.00	508.	523.	6.0	586.9	2.33	2.68	1.83	8.7	6.85	2.1	1	F
38	T468	3	0.95	0.00	520.	532.	6.4	514.0	2.04	2.68	1.52	7.1	5.57	2.1	1	F
39	T427	2	0.05	0.00	385.	400.	1.1	625.7	2.47	2.60	1.90	9.2	7.26	2.0	1	F
39	T427	2	0.15	0.00	399.	416.	1.8	668.7	2.64	2.60	2.14	10.5	8.30	2.0	1	F
39	T427	2	0.25	0.00	414.	432.	2.4	706.3	2.79	2.60	2.37	11.8	9.34	2.0	1	F
39	T427	2	0.35	0.00	431.	449.	3.1	735.0	2.89	2.60	2.55	12.6	9.97	2.0	1	F
39	T427	2	0.45	0.00	447.	466.	3.8	740.8	2.90	2.60	2.49	12.3	9.73	2.0	1	F
39	T427	2	0.55	0.00	464.	482.	4.4	726.8	2.84	2.60	2.43	12.0	9.49	2.0	1	F
39	T427	2	0.65	0.00	480.	497.	5.0	693.8	2.71	2.60	2.38	11.7	9.26	2.0	1	F
39	T427	2	0.75	0.00	495.	511.	5.6	643.7	2.51	2.60	2.12	10.3	8.13	2.0	1	F
39	T427	2	0.85	0.00	508.	523.	6.0	584.4	2.27	2.60	1.82	8.7	6.86	2.0	1	F
39	T427	2	0.95	0.00	520.	533.	6.4	517.2	2.01	2.60	1.52	7.1	5.59	2.0	1	F
40	T431	2	0.05	0.00	385.	400.	1.1	609.4	2.45	2.59	1.89	9.2	7.28	2.0	1	F
40	T431	2	0.15	0.00	399.	415.	1.8	651.8	2.63	2.59	2.12	10.5	8.32	2.0	1	F
40	T431	2	0.25	0.00	414.	432.	2.4	688.6	2.77	2.59	2.35	11.9	9.37	2.0	1	F
40	T431	2	0.35	0.00	430.	449.	3.1	716.5	2.87	2.59	2.54	12.7	10.00	2.0	1	F
40	T431	2	0.45	0.00	447.	465.	3.7	722.0	2.88	2.59	2.48	12.4	9.76	2.0	1	F
40	T431	2	0.55	0.00	463.	481.	4.4	708.4	2.82	2.59	2.42	12.1	9.52	2.0	1	F
40	T431	2	0.65	0.00	479.	496.	5.0	676.2	2.69	2.59	2.36	11.8	9.29	2.0	1	F
40	T431	2	0.75	0.00	494.	510.	5.5	627.5	2.49	2.59	2.10	10.3	8.16	2.0	1	F
40	T431	2	0.85	0.00	507.	522.	6.0	569.5	2.26	2.59	1.80	8.7	6.88	2.0	1	F
40	T431	2	0.95	0.00	519.	531.	6.4	503.8	2.00	2.59	1.51	7.1	5.61	2.0	1	F
41	T469	3	0.05	0.00	385.	399.	1.1	611.4	2.46	2.63	1.88	9.2	7.30	2.0	1	F
41	T469	3	0.15	0.00	398.	415.	1.8	661.7	2.67	2.63	2.11	10.6	8.34	2.0	1	F
41	T469	3	0.25	0.00	414.	431.	2.4	702.9	2.83	2.63	2.34	11.9	9.38	2.0	1	F
41	T469	3	0.35	0.00	430.	448.	3.1	732.2	2.93	2.63	2.52	12.7	10.03	2.0	1	F
41	T469	3	0.45	0.00	446.	464.	3.7	738.3	2.94	2.63	2.46	12.4	9.79	2.0	1	F
41	T469	3	0.55	0.00	462.	480.	4.3	724.3	2.88	2.63	2.40	12.1	9.56	2.0	1	F
41	T469	3	0.65	0.00	478.	495.	4.9	690.8	2.75	2.63	2.34	11.8	9.32	2.0	1	F
41	T469	3	0.75	0.00	492.	508.	5.5	640.0	2.54	2.63	2.09	10.4	8.19	2.0	1	F
41	T469	3	0.85	0.00	505.	519.	5.9	577.7	2.29	2.63	1.79	8.7	6.91	2.0	1	F
41	T469	3	0.95	0.00	516.	529.	6.3	505.2	2.00	2.63	1.50	7.1	5.63	2.0	1	F
42	T451	4	0.05	0.00	384.	399.	1.1	598.0	2.41	2.56	1.87	9.2	7.30	1.9	1	F
42	T451	4	0.15	0.00	398.	414.	1.7	643.0	2.60	2.56	2.09	10.6	8.34	1.9	1	F

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
42	T451	4	0.25	0.00	412.	430.	2.3	681.0	2.74	2.56	2.32	11.9	9.38	1.9	1	F
42	T451	4	0.35	0.00	427.	445.	3.0	708.7	2.84	2.56	2.50	12.7	10.07	1.9	1	F
42	T451	4	0.45	0.00	443.	461.	3.6	714.2	2.85	2.56	2.44	12.4	9.83	1.9	1	F
42	T451	4	0.55	0.00	457.	475.	4.2	700.8	2.79	2.56	2.39	12.1	9.59	1.9	1	F
42	T451	4	0.65	0.00	472.	489.	4.7	668.8	2.67	2.56	2.33	11.8	9.35	1.9	1	F
42	T451	4	0.75	0.00	485.	501.	5.2	620.5	2.47	2.56	2.07	10.4	8.23	1.9	1	F
42	T451	4	0.85	0.00	496.	511.	5.6	561.8	2.23	2.56	1.78	8.8	6.94	1.9	1	F
42	T451	4	0.95	0.00	506.	519.	5.9	494.6	1.96	2.56	1.49	7.2	5.66	1.9	1	F
43	T432	5	0.05	0.00	381.	396.	1.0	600.5	2.40	2.53	1.85	9.4	7.41	1.8	1	F
43	T432	5	0.15	0.00	392.	408.	1.5	642.9	2.57	2.53	2.08	10.7	8.47	1.8	1	F
43	T432	5	0.25	0.00	403.	421.	2.0	679.5	2.71	2.53	2.30	12.1	9.52	1.8	1	F
43	T432	5	0.35	0.00	415.	433.	2.5	706.7	2.81	2.53	2.48	13.0	10.30	1.8	1	F
43	T432	5	0.45	0.00	427.	445.	3.0	712.0	2.82	2.53	2.42	12.7	10.05	1.8	1	F
43	T432	5	0.55	0.00	439.	457.	3.4	698.6	2.76	2.53	2.36	12.4	9.81	1.8	1	F
43	T432	5	0.65	0.00	451.	468.	3.9	667.0	2.64	2.53	2.31	12.1	9.56	1.8	1	F
43	T432	5	0.75	0.00	462.	477.	4.2	619.4	2.44	2.53	2.06	10.7	8.43	1.8	1	F
43	T432	5	0.85	0.00	471.	486.	4.6	562.1	2.21	2.53	1.76	9.0	7.11	1.8	1	F
43	T432	5	0.95	0.00	480.	492.	4.8	497.0	1.95	2.53	1.47	7.3	5.79	1.8	1	F
44	T434	5	0.05	0.00	382.	397.	1.0	639.8	2.52	2.66	1.95	9.5	7.52	2.0	1	F
44	T434	5	0.15	0.00	393.	411.	1.6	683.2	2.70	2.66	2.18	10.9	8.60	2.0	1	F
44	T434	5	0.25	0.00	406.	424.	2.1	721.4	2.84	2.66	2.42	12.2	9.67	2.0	1	F
44	T434	5	0.35	0.00	420.	439.	2.7	751.4	2.95	2.66	2.62	13.3	10.52	2.0	1	F
44	T434	5	0.45	0.00	434.	453.	3.4	757.6	2.96	2.66	2.56	13.0	10.27	2.0	1	F
44	T434	5	0.55	0.00	448.	467.	4.1	743.3	2.90	2.66	2.50	12.7	10.02	2.0	1	F
44	T434	5	0.65	0.00	462.	479.	4.7	709.6	2.77	2.66	2.44	12.4	9.77	2.0	1	F
44	T434	5	0.75	0.00	474.	491.	5.4	658.5	2.56	2.66	2.17	10.9	8.62	2.0	1	F
44	T434	5	0.85	0.00	486.	501.	6.0	597.7	2.32	2.66	1.86	9.2	7.27	2.0	1	F
44	T434	5	0.95	0.00	496.	509.	6.5	528.7	2.05	2.66	1.55	7.5	5.92	2.0	1	F
45	T437	4	0.05	0.00	385.	400.	1.1	625.7	2.51	2.65	1.94	9.7	7.64	2.0	1	F
45	T437	4	0.15	0.00	399.	416.	1.8	668.6	2.69	2.65	2.17	11.1	8.74	2.0	1	F
45	T437	4	0.25	0.00	414.	432.	2.4	706.2	2.83	2.65	2.41	12.4	9.83	2.0	1	F
45	T437	4	0.35	0.00	430.	448.	3.1	735.3	2.93	2.65	2.61	13.6	10.74	2.0	1	F
45	T437	4	0.45	0.00	446.	465.	3.7	741.3	2.95	2.65	2.54	13.3	10.49	2.0	1	F
45	T437	4	0.55	0.00	461.	480.	4.3	727.3	2.89	2.65	2.48	13.0	10.23	2.0	1	F
45	T437	4	0.65	0.00	476.	494.	4.9	694.3	2.76	2.65	2.42	12.6	9.98	2.0	1	F
45	T437	4	0.75	0.00	491.	507.	5.4	644.3	2.55	2.65	2.16	11.1	8.80	2.0	1	F
45	T437	4	0.85	0.00	503.	518.	5.9	584.6	2.31	2.65	1.85	9.4	7.42	2.0	1	F
45	T437	4	0.95	0.00	514.	527.	6.2	517.0	2.04	2.65	1.55	7.6	6.04	2.0	1	F
46	T452	3	0.05	0.00	385.	400.	1.2	619.0	2.47	2.62	1.93	9.8	7.77	2.0	1	F
46	T452	3	0.15	0.00	399.	416.	1.8	665.0	2.66	2.62	2.16	11.2	8.88	2.0	1	F
46	T452	3	0.25	0.00	415.	433.	2.5	704.0	2.81	2.62	2.39	12.7	10.00	2.0	1	F
46	T452	3	0.35	0.00	431.	450.	3.1	733.2	2.91	2.62	2.59	13.9	10.96	2.0	1	F
46	T452	3	0.45	0.00	448.	467.	3.8	739.4	2.93	2.62	2.53	13.5	10.70	2.0	1	F
46	T452	3	0.55	0.00	464.	483.	4.4	725.4	2.87	2.62	2.47	13.2	10.44	2.0	1	F
46	T452	3	0.65	0.00	480.	498.	5.0	692.2	2.74	2.62	2.41	12.9	10.18	2.0	1	F
46	T452	3	0.75	0.00	495.	511.	5.6	641.9	2.53	2.62	2.14	11.4	8.98	2.0	1	F
46	T452	3	0.85	0.00	508.	522.	6.0	581.1	2.29	2.62	1.84	9.6	7.56	2.0	1	F
46	T452	3	0.95	0.00	519.	532.	6.4	511.4	2.01	2.62	1.54	7.8	6.15	2.0	1	F
47	T470	3	0.05	0.00	385.	400.	1.1	618.6	2.51	2.68	1.92	10.0	7.89	2.1	1	F
47	T470	3	0.15	0.00	399.	416.	1.8	669.2	2.72	2.68	2.15	11.4	9.02	2.1	1	F
47	T470	3	0.25	0.00	414.	433.	2.4	710.9	2.88	2.68	2.38	12.9	10.15	2.1	1	F
47	T470	3	0.35	0.00	431.	449.	3.1	740.9	2.98	2.68	2.57	14.1	11.15	2.1	1	F

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
47	T470	3	0.45	0.00	447.	466.	3.8	747.3	3.00	2.68	2.51	13.8	10.88	2.1	1	F
47	T470	3	0.55	0.00	464.	482.	4.4	733.2	2.93	2.68	2.45	13.4	10.62	2.1	1	F
47	T470	3	0.65	0.00	480.	497.	5.0	699.2	2.80	2.68	2.39	13.1	10.35	2.1	1	F
47	T470	3	0.75	0.00	494.	511.	5.6	647.7	2.59	2.68	2.13	11.5	9.12	2.1	1	F
47	T470	3	0.85	0.00	507.	522.	6.0	584.5	2.33	2.68	1.83	9.7	7.69	2.1	1	F
47	T470	3	0.95	0.00	519.	532.	6.4	511.0	2.03	2.68	1.53	7.9	6.25	2.1	1	F
48	T453	3	0.05	0.00	385.	400.	1.1	615.5	2.44	2.59	1.90	10.1	7.97	2.0	1	F
48	T453	3	0.15	0.00	399.	416.	1.8	661.7	2.63	2.59	2.14	11.5	9.12	2.0	1	F
48	T453	3	0.25	0.00	414.	432.	2.4	700.8	2.78	2.59	2.37	13.0	10.27	2.0	1	F
48	T453	3	0.35	0.00	430.	449.	3.1	729.6	2.88	2.59	2.56	14.3	11.29	2.0	1	F
48	T453	3	0.45	0.00	447.	465.	3.7	735.6	2.89	2.59	2.50	14.0	11.02	2.0	1	F
48	T453	3	0.55	0.00	463.	481.	4.4	721.7	2.83	2.59	2.44	13.6	10.75	2.0	1	F
48	T453	3	0.65	0.00	478.	496.	5.0	688.7	2.70	2.59	2.38	13.3	10.48	2.0	1	F
48	T453	3	0.75	0.00	493.	509.	5.5	638.7	2.50	2.59	2.12	11.7	9.23	2.0	1	F
48	T453	3	0.85	0.00	506.	520.	5.9	578.2	2.26	2.59	1.82	9.8	7.78	2.0	1	F
48	T453	3	0.95	0.00	517.	530.	6.3	508.6	1.98	2.59	1.52	8.0	6.32	2.0	1	F
49	T439	4	0.05	0.00	384.	399.	1.1	617.9	2.45	2.58	1.89	10.2	8.03	1.9	1	F
49	T439	4	0.15	0.00	398.	415.	1.7	661.5	2.62	2.58	2.12	11.6	9.19	1.9	1	F
49	T439	4	0.25	0.00	413.	430.	2.4	699.2	2.76	2.58	2.35	13.1	10.35	1.9	1	F
49	T439	4	0.35	0.00	428.	446.	3.0	727.4	2.86	2.58	2.54	14.4	11.39	1.9	1	F
49	T439	4	0.45	0.00	443.	462.	3.6	733.0	2.87	2.58	2.48	14.1	11.12	1.9	1	F
49	T439	4	0.55	0.00	458.	477.	4.2	719.2	2.81	2.58	2.42	13.7	10.85	1.9	1	F
49	T439	4	0.65	0.00	473.	490.	4.7	686.7	2.69	2.58	2.36	13.4	10.58	1.9	1	F
49	T439	4	0.75	0.00	486.	502.	5.2	637.5	2.49	2.58	2.10	11.8	9.31	1.9	1	F
49	T439	4	0.85	0.00	498.	512.	5.6	578.2	2.25	2.58	1.80	9.9	7.84	1.9	1	F
49	T439	4	0.95	0.00	508.	520.	5.9	510.9	1.99	2.58	1.51	8.1	6.37	1.9	1	F
50	T466	5	0.05	0.00	381.	396.	1.0	607.9	2.43	2.56	1.88	10.2	8.07	1.8	1	F
50	T466	5	0.15	0.00	392.	409.	1.5	650.9	2.60	2.56	2.10	11.7	9.23	1.8	1	F
50	T466	5	0.25	0.00	404.	421.	2.0	688.0	2.74	2.56	2.33	13.2	10.39	1.8	1	F
50	T466	5	0.35	0.00	416.	434.	2.5	715.7	2.84	2.56	2.52	14.5	11.46	1.8	1	F
50	T466	5	0.45	0.00	428.	447.	3.0	721.2	2.85	2.56	2.46	14.2	11.18	1.8	1	F
50	T466	5	0.55	0.00	440.	458.	3.5	707.6	2.79	2.56	2.40	13.8	10.91	1.8	1	F
50	T466	5	0.65	0.00	452.	469.	3.9	675.7	2.67	2.56	2.34	13.5	10.64	1.8	1	F
50	T466	5	0.75	0.00	463.	479.	4.3	627.4	2.47	2.56	2.08	11.8	9.36	1.8	1	F
50	T466	5	0.85	0.00	473.	487.	4.6	569.1	2.24	2.56	1.79	10.0	7.88	1.8	1	F
50	T466	5	0.95	0.00	482.	494.	4.9	502.8	1.97	2.56	1.49	8.1	6.41	1.8	1	F
51	T476	5	0.05	0.00	382.	397.	1.0	637.7	2.53	2.67	1.96	10.2	8.02	2.0	1	F
51	T476	5	0.15	0.00	393.	411.	1.6	681.9	2.71	2.67	2.20	11.6	9.17	2.0	1	F
51	T476	5	0.25	0.00	406.	425.	2.1	720.4	2.86	2.67	2.43	13.1	10.33	2.0	1	F
51	T476	5	0.35	0.00	420.	439.	2.7	750.3	2.96	2.67	2.64	14.4	11.37	2.0	1	F
51	T476	5	0.45	0.00	434.	453.	3.4	756.5	2.98	2.67	2.58	14.1	11.10	2.0	1	F
51	T476	5	0.55	0.00	448.	467.	4.1	742.3	2.92	2.67	2.52	13.7	10.83	2.0	1	F
51	T476	5	0.65	0.00	462.	480.	4.8	708.6	2.78	2.67	2.45	13.4	10.56	2.0	1	F
51	T476	5	0.75	0.00	475.	492.	5.4	657.5	2.58	2.67	2.18	11.8	9.29	2.0	1	F
51	T476	5	0.85	0.00	487.	502.	6.1	596.3	2.33	2.67	1.87	9.9	7.83	2.0	1	F
51	T476	5	0.95	0.00	497.	510.	6.6	526.7	2.06	2.67	1.56	8.1	6.36	2.0	1	F
52	T474	4	0.05	0.00	385.	400.	1.2	629.1	2.55	2.72	1.95	10.1	7.97	2.1	1	F
52	T474	4	0.15	0.00	398.	416.	1.8	680.5	2.76	2.72	2.19	11.5	9.11	2.1	1	F
52	T474	4	0.25	0.00	413.	432.	2.4	722.8	2.92	2.72	2.42	13.0	10.26	2.1	1	F
52	T474	4	0.35	0.00	429.	448.	3.0	753.7	3.03	2.72	2.62	14.3	11.29	2.1	1	F
52	T474	4	0.45	0.00	444.	463.	3.7	760.6	3.05	2.72	2.56	13.9	11.02	2.1	1	F
52	T474	4	0.55	0.00	459.	478.	4.3	746.2	2.99	2.72	2.50	13.6	10.75	2.1	1	F

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
52	T474	4	0.65	0.00	474.	492.	4.8	711.6	2.85	2.72	2.44	13.3	10.48	2.1	1	F
52	T474	4	0.75	0.00	487.	504.	5.3	659.2	2.63	2.72	2.17	11.7	9.22	2.1	1	F
52	T474	4	0.85	0.00	499.	514.	5.7	594.7	2.37	2.72	1.86	9.8	7.77	2.1	1	F
52	T474	4	0.95	0.00	510.	523.	6.1	519.6	2.07	2.72	1.55	8.0	6.31	2.1	1	F
53	T454	4	0.05	0.00	385.	400.	1.2	629.1	2.48	2.63	1.94	10.0	7.91	2.0	1	F
53	T454	4	0.15	0.00	399.	416.	1.8	676.2	2.67	2.63	2.17	11.5	9.05	2.0	1	F
53	T454	4	0.25	0.00	414.	432.	2.4	716.0	2.82	2.63	2.41	12.9	10.19	2.0	1	F
53	T454	4	0.35	0.00	430.	448.	3.1	745.8	2.93	2.63	2.61	14.2	11.19	2.0	1	F
53	T454	4	0.45	0.00	445.	464.	3.7	752.1	2.94	2.63	2.54	13.8	10.93	2.0	1	F
53	T454	4	0.55	0.00	461.	480.	4.3	737.9	2.88	2.63	2.48	13.5	10.66	2.0	1	F
53	T454	4	0.65	0.00	476.	494.	4.9	704.1	2.75	2.63	2.42	13.2	10.39	2.0	1	F
53	T454	4	0.75	0.00	490.	506.	5.4	653.0	2.54	2.63	2.16	11.6	9.15	2.0	1	F
53	T454	4	0.85	0.00	502.	517.	5.8	591.0	2.30	2.63	1.85	9.8	7.71	2.0	1	F
53	T454	4	0.95	0.00	512.	525.	6.1	519.6	2.02	2.63	1.54	7.9	6.26	2.0	1	F
54	T455	4	0.05	0.00	385.	400.	1.1	626.0	2.47	2.62	1.93	9.9	7.85	2.0	1	F
54	T455	4	0.15	0.00	399.	416.	1.8	672.9	2.66	2.62	2.16	11.4	8.98	2.0	1	F
54	T455	4	0.25	0.00	414.	432.	2.4	712.6	2.81	2.62	2.39	12.8	10.11	2.0	1	F
54	T455	4	0.35	0.00	429.	448.	3.1	742.1	2.91	2.62	2.59	14.0	11.10	2.0	1	F
54	T455	4	0.45	0.00	445.	464.	3.7	748.3	2.92	2.62	2.53	13.7	10.83	2.0	1	F
54	T455	4	0.55	0.00	460.	479.	4.3	734.2	2.86	2.62	2.47	13.4	10.57	2.0	1	F
54	T455	4	0.65	0.00	475.	493.	4.8	700.6	2.73	2.62	2.41	13.0	10.30	2.0	1	F
54	T455	4	0.75	0.00	489.	505.	5.3	649.8	2.53	2.62	2.14	11.5	9.07	2.0	1	F
54	T455	4	0.85	0.00	500.	515.	5.7	588.1	2.28	2.62	1.84	9.7	7.64	2.0	1	F
54	T455	4	0.95	0.00	511.	524.	6.1	517.1	2.01	2.62	1.53	7.9	6.21	2.0	1	F
55	T475	4	0.05	0.00	384.	399.	1.1	609.7	2.50	2.67	1.91	9.8	7.77	2.0	1	F
55	T475	4	0.15	0.00	398.	415.	1.7	659.7	2.71	2.67	2.14	11.3	8.89	2.0	1	F
55	T475	4	0.25	0.00	412.	430.	2.4	700.9	2.87	2.67	2.38	12.7	10.01	2.0	1	F
55	T475	4	0.35	0.00	427.	446.	3.0	730.4	2.98	2.67	2.57	13.9	10.97	2.0	1	F
55	T475	4	0.45	0.00	442.	461.	3.6	736.8	2.99	2.67	2.51	13.5	10.70	2.0	1	F
55	T475	4	0.55	0.00	457.	475.	4.1	722.8	2.93	2.67	2.45	13.2	10.44	2.0	1	F
55	T475	4	0.65	0.00	471.	488.	4.7	689.4	2.79	2.67	2.39	12.9	10.18	2.0	1	F
55	T475	4	0.75	0.00	483.	499.	5.1	638.9	2.58	2.67	2.13	11.3	8.96	2.0	1	F
55	T475	4	0.85	0.00	494.	509.	5.5	576.4	2.33	2.67	1.83	9.6	7.55	2.0	1	F
55	T475	4	0.95	0.00	504.	516.	5.8	503.6	2.03	2.67	1.52	7.8	6.14	2.0	1	F
56	T477	5	0.05	0.00	382.	397.	1.0	610.8	2.45	2.59	1.90	9.7	7.69	1.9	1	F
56	T477	5	0.15	0.00	392.	409.	1.5	653.8	2.63	2.59	2.13	11.1	8.80	1.9	1	F
56	T477	5	0.25	0.00	404.	422.	2.0	691.0	2.77	2.59	2.36	12.5	9.90	1.9	1	F
56	T477	5	0.35	0.00	416.	435.	2.5	718.9	2.87	2.59	2.55	13.7	10.82	1.9	1	F
56	T477	5	0.45	0.00	429.	447.	3.0	724.6	2.88	2.59	2.49	13.4	10.56	1.9	1	F
56	T477	5	0.55	0.00	441.	459.	3.5	710.9	2.83	2.59	2.43	13.0	10.30	1.9	1	F
56	T477	5	0.65	0.00	452.	470.	3.9	678.8	2.70	2.59	2.37	12.7	10.04	1.9	1	F
56	T477	5	0.75	0.00	463.	479.	4.3	630.3	2.50	2.59	2.11	11.2	8.84	1.9	1	F
56	T477	5	0.85	0.00	473.	487.	4.6	571.6	2.26	2.59	1.81	9.4	7.45	1.9	1	F
56	T477	5	0.95	0.00	482.	494.	4.9	504.9	2.00	2.59	1.51	7.7	6.06	1.9	1	F
57	T435	5	0.05	0.00	381.	394.	0.9	642.5	2.54	2.68	1.97	9.6	7.59	2.0	1	F
57	T435	5	0.15	0.00	391.	406.	1.4	687.2	2.72	2.68	2.21	11.0	8.69	2.0	1	F
57	T435	5	0.25	0.00	403.	419.	1.9	726.1	2.87	2.68	2.45	12.4	9.78	2.0	1	F
57	T435	5	0.35	0.00	415.	432.	2.5	756.2	2.98	2.68	2.65	13.5	10.65	2.0	1	F
57	T435	5	0.45	0.00	428.	445.	3.1	762.5	2.99	2.68	2.59	13.2	10.40	2.0	1	F
57	T435	5	0.55	0.00	442.	458.	3.8	748.2	2.93	2.68	2.53	12.8	10.14	2.0	1	F
57	T435	5	0.65	0.00	455.	470.	4.6	714.1	2.80	2.68	2.47	12.5	9.89	2.0	1	F
57	T435	5	0.75	0.00	467.	482.	5.3	662.7	2.59	2.68	2.19	11.0	8.70	2.0	1	F

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
57	T435	5	0.85	0.00	479.	492.	6.0	600.8	2.34	2.68	1.88	9.3	7.33	2.0	1	F
57	T435	5	0.95	0.00	489.	500.	6.8	530.4	2.07	2.68	1.57	7.5	5.96	2.0	1	F
58	T479	5	0.05	0.00	382.	397.	1.1	625.6	2.53	2.67	1.96	9.5	7.49	2.0	1	F
58	T479	5	0.15	0.00	393.	411.	1.6	669.2	2.71	2.67	2.19	10.8	8.56	2.0	1	F
58	T479	5	0.25	0.00	406.	424.	2.1	707.0	2.85	2.67	2.43	12.2	9.64	2.0	1	F
58	T479	5	0.35	0.00	418.	437.	2.6	736.2	2.96	2.67	2.63	13.3	10.47	2.0	1	F
58	T479	5	0.45	0.00	432.	451.	3.2	742.2	2.97	2.67	2.57	12.9	10.22	2.0	1	F
58	T479	5	0.55	0.00	445.	464.	3.7	728.2	2.91	2.67	2.51	12.6	9.97	2.0	1	F
58	T479	5	0.65	0.00	458.	476.	4.2	695.2	2.78	2.67	2.45	12.3	9.72	2.0	1	F
58	T479	5	0.75	0.00	470.	486.	4.7	645.1	2.57	2.67	2.18	10.8	8.55	2.0	1	F
58	T479	5	0.85	0.00	481.	496.	5.2	584.9	2.33	2.67	1.87	9.1	7.21	2.0	1	F
58	T479	5	0.95	0.00	491.	504.	5.7	516.4	2.06	2.67	1.56	7.4	5.86	2.0	1	F
59	T456	5	0.05	0.00	382.	397.	1.1	628.1	2.49	2.64	1.95	9.4	7.44	1.9	1	F
59	T456	5	0.15	0.00	393.	410.	1.6	674.9	2.68	2.64	2.18	10.8	8.51	1.9	1	F
59	T456	5	0.25	0.00	405.	423.	2.1	714.7	2.83	2.64	2.42	12.1	9.58	1.9	1	F
59	T456	5	0.35	0.00	418.	437.	2.6	744.4	2.94	2.64	2.62	13.1	10.39	1.9	1	F
59	T456	5	0.45	0.00	431.	450.	3.1	750.7	2.95	2.64	2.56	12.8	10.14	1.9	1	F
59	T456	5	0.55	0.00	444.	462.	3.6	736.5	2.89	2.64	2.49	12.5	9.89	1.9	1	F
59	T456	5	0.65	0.00	456.	474.	4.1	702.8	2.76	2.64	2.43	12.2	9.64	1.9	1	F
59	T456	5	0.75	0.00	468.	484.	4.5	651.9	2.55	2.64	2.17	10.7	8.49	1.9	1	F
59	T456	5	0.85	0.00	479.	493.	4.9	589.9	2.31	2.64	1.86	9.1	7.15	1.9	1	F
59	T456	5	0.95	0.00	488.	501.	5.3	518.6	2.03	2.64	1.55	7.4	5.82	1.9	1	F
60	T422	5	0.05	0.00	382.	397.	1.1	625.7	2.50	2.64	1.93	9.3	7.38	1.9	1	F
60	T422	5	0.15	0.07	393.	410.	1.6	669.2	2.68	2.64	2.17	10.7	8.44	1.9	1	F
60	T422	5	0.25	0.07	405.	423.	2.1	707.1	2.82	2.64	2.40	12.0	9.50	1.9	1	F
60	T422	5	0.35	0.09	417.	436.	2.6	736.0	2.92	2.64	2.60	13.0	10.28	1.9	1	F
60	T422	5	0.45	0.12	430.	448.	3.1	741.9	2.94	2.64	2.54	12.7	10.03	1.9	1	F
60	T422	5	0.55	0.08	442.	460.	3.6	727.9	2.88	2.64	2.48	12.4	9.79	1.9	1	F
60	T422	5	0.65	0.11	454.	472.	4.0	694.9	2.75	2.64	2.42	12.1	9.54	1.9	1	F
60	T422	5	0.75	0.08	465.	482.	4.4	645.1	2.54	2.64	2.15	10.6	8.40	1.9	1	F
60	T422	5	0.85	0.08	475.	490.	4.7	585.1	2.30	2.64	1.85	9.0	7.08	1.9	1	F
60	T422	5	0.95	0.03	484.	497.	5.0	516.7	2.03	2.64	1.54	7.3	5.76	1.9	1	F
61	T438	5	0.05	0.00	381.	394.	0.9	622.7	2.48	2.62	1.92	9.3	7.31	1.9	1	F
61	T438	5	0.15	0.00	390.	405.	1.4	666.0	2.66	2.62	2.15	10.6	8.36	1.9	1	F
61	T438	5	0.25	0.00	401.	416.	1.8	703.7	2.80	2.62	2.38	11.9	9.41	1.9	1	F
61	T438	5	0.35	0.00	412.	428.	2.3	732.3	2.90	2.62	2.58	12.8	10.13	1.9	1	F
61	T438	5	0.45	0.00	423.	439.	2.7	738.2	2.92	2.62	2.52	12.5	9.89	1.9	1	F
61	T438	5	0.55	0.00	434.	450.	3.1	724.2	2.86	2.62	2.46	12.2	9.65	1.9	1	F
61	T438	5	0.65	0.00	444.	460.	3.5	691.5	2.73	2.62	2.40	11.9	9.41	1.9	1	F
61	T438	5	0.75	0.00	455.	469.	3.9	642.1	2.53	2.62	2.13	10.5	8.27	1.9	1	F
61	T438	5	0.85	0.00	464.	477.	4.2	582.4	2.29	2.62	1.83	8.8	6.98	1.9	1	F
61	T438	5	0.95	0.00	472.	483.	4.5	514.4	2.02	2.62	1.53	7.2	5.68	1.9	1	F

X425A

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
1	T400	5	0.05	0.00	379.	391.	0.5	524.6	8.84	9.15	7.04	37.3	7.75	9.3	2	O
1	T400	5	0.15	0.09	388.	401.	0.8	551.4	9.34	9.15	7.87	42.2	8.73	9.3	2	O
1	T400	5	0.25	0.22	397.	411.	1.0	573.2	9.78	9.15	8.71	47.1	9.70	9.3	2	O
1	T400	5	0.35	0.09	406.	421.	1.3	585.1	10.07	9.15	9.29	50.9	10.47	9.3	2	O
1	T400	5	0.45	0.12	416.	430.	1.6	583.1	10.08	9.15	9.06	49.5	10.17	9.3	2	O
1	T400	5	0.55	0.11	425.	440.	1.8	570.6	9.87	9.15	8.83	48.1	9.86	9.3	2	O
1	T400	5	0.65	0.18	434.	448.	2.1	546.4	9.45	9.15	8.60	46.7	9.55	9.3	2	O
1	T400	5	0.75	0.10	443.	456.	2.3	512.3	8.77	9.15	7.65	41.2	8.43	9.3	2	O
1	T400	5	0.85	0.11	451.	463.	2.5	476.8	8.03	9.15	6.56	34.8	7.14	9.3	2	O
1	T400	5	0.95	0.00	458.	468.	2.6	440.7	7.27	9.15	5.47	28.5	5.85	9.3	2	O
2	T401	5	0.05	0.00	380.	394.	0.6	535.1	8.82	9.13	7.03	36.8	7.63	9.4	2	O
2	T401	5	0.15	0.00	390.	405.	0.9	562.7	9.33	9.13	7.87	41.6	8.59	9.4	2	O
2	T401	5	0.25	0.00	400.	416.	1.2	585.2	9.77	9.13	8.70	46.4	9.56	9.4	2	O
2	T401	5	0.35	0.00	410.	427.	1.5	596.7	10.05	9.13	9.26	49.9	10.26	9.4	2	O
2	T401	5	0.45	0.00	421.	438.	1.8	594.3	10.06	9.13	9.03	48.5	9.96	9.4	2	O
2	T401	5	0.55	0.00	431.	448.	2.1	581.5	9.85	9.13	8.81	47.1	9.66	9.4	2	O
2	T401	5	0.65	0.00	441.	457.	2.4	556.7	9.43	9.13	8.58	45.8	9.36	9.4	2	O
2	T401	5	0.75	0.00	451.	466.	2.6	521.6	8.75	9.13	7.62	40.4	8.26	9.4	2	O
2	T401	5	0.85	0.00	459.	473.	2.8	485.7	8.01	9.13	6.53	34.2	7.00	9.4	2	O
2	T401	5	0.95	0.00	467.	478.	2.9	449.5	7.26	9.13	5.45	27.9	5.74	9.4	2	O
3	T440	5	0.05	0.19	380.	394.	0.6	510.8	8.60	8.95	7.02	36.8	7.63	9.2	2	O
3	T440	5	0.15	0.21	390.	405.	0.9	539.5	9.15	8.95	7.86	41.6	8.60	9.2	2	O
3	T440	5	0.25	0.34	400.	416.	1.2	562.1	9.60	8.95	8.69	46.4	9.56	9.2	2	O
3	T440	5	0.35	0.27	410.	427.	1.5	572.9	9.88	8.95	9.25	50.0	10.26	9.2	2	O
3	T440	5	0.45	0.29	421.	438.	1.8	570.3	9.88	8.95	9.02	48.6	9.96	9.2	2	O
3	T440	5	0.55	0.28	432.	448.	2.1	558.0	9.68	8.95	8.79	47.2	9.66	9.2	2	O
3	T440	5	0.65	0.31	442.	457.	2.3	533.8	9.25	8.95	8.56	45.8	9.36	9.2	2	O
3	T440	5	0.75	0.20	452.	466.	2.6	499.6	8.58	8.95	7.60	40.4	8.26	9.2	2	O
3	T440	5	0.85	0.16	460.	473.	2.8	464.0	7.84	8.95	6.52	34.2	7.00	9.2	2	O
3	T440	5	0.95	0.12	468.	479.	2.9	427.2	7.06	8.95	5.43	28.0	5.74	9.2	2	O
4	T402	5	0.05	0.00	380.	394.	0.6	531.9	8.78	9.10	7.01	37.4	7.75	9.3	2	O
4	T402	5	0.15	0.00	390.	405.	0.9	559.6	9.30	9.10	7.84	42.3	8.73	9.3	2	O
4	T402	5	0.25	0.00	400.	416.	1.2	582.0	9.74	9.10	8.68	47.1	9.70	9.3	2	O
4	T402	5	0.35	0.00	410.	427.	1.5	593.5	10.02	9.10	9.23	51.1	10.49	9.3	2	O
4	T402	5	0.45	0.00	421.	438.	1.8	591.0	10.02	9.10	9.00	49.6	10.18	9.3	2	O
4	T402	5	0.55	0.00	432.	448.	2.1	578.4	9.82	9.10	8.78	48.2	9.87	9.3	2	O
4	T402	5	0.65	0.00	442.	458.	2.4	553.6	9.39	9.10	8.55	46.8	9.56	9.3	2	O
4	T402	5	0.75	0.00	452.	466.	2.6	518.6	8.72	9.10	7.59	41.3	8.44	9.3	2	O
4	T402	5	0.85	0.00	460.	473.	2.8	482.8	7.98	9.10	6.51	34.9	7.15	9.3	2	O
4	T402	5	0.95	0.00	468.	479.	3.0	446.5	7.23	9.10	5.43	28.5	5.86	9.3	2	O
5	T417	5	0.05	0.00	379.	391.	0.5	532.2	8.76	9.09	7.00	37.9	7.86	9.2	2	O
5	T417	5	0.15	0.05	388.	401.	0.7	559.9	9.28	9.09	7.83	42.8	8.85	9.2	2	O
5	T417	5	0.25	0.16	397.	411.	1.0	582.4	9.72	9.09	8.66	47.8	9.85	9.2	2	O
5	T417	5	0.35	0.16	406.	421.	1.3	594.5	10.01	9.09	9.23	51.9	10.68	9.2	2	O
5	T417	5	0.45	0.16	416.	431.	1.6	592.3	10.01	9.09	9.00	50.5	10.37	9.2	2	O
5	T417	5	0.55	0.25	426.	441.	1.9	579.6	9.81	9.09	8.77	49.0	10.06	9.2	2	O
5	T417	5	0.65	0.07	436.	450.	2.2	554.9	9.39	9.09	8.54	47.6	9.74	9.2	2	O
5	T417	5	0.75	0.08	445.	458.	2.5	520.1	8.71	9.09	7.60	41.9	8.59	9.2	2	O

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
5	T417	5	0.85	0.00	454.	465.	2.7	483.7	7.98	9.09	6.51	35.5	7.28	9.2	2	O
5	T417	5	0.95	0.00	462.	472.	2.9	446.5	7.21	9.09	5.43	29.0	5.96	9.2	2	O
6	T404	5	0.05	0.00	380.	394.	0.6	533.5	8.92	9.27	7.15	37.8	7.86	9.5	2	O
6	T404	5	0.15	0.00	390.	406.	0.9	561.4	9.45	9.27	8.00	42.7	8.85	9.5	2	O
6	T404	5	0.25	0.00	400.	417.	1.2	583.9	9.90	9.27	8.85	47.7	9.83	9.5	2	O
6	T404	5	0.35	0.00	411.	428.	1.5	597.3	10.21	9.27	9.48	51.8	10.67	9.5	2	O
6	T404	5	0.45	0.00	422.	439.	1.8	595.9	10.22	9.27	9.24	50.3	10.35	9.5	2	O
6	T404	5	0.55	0.00	432.	449.	2.1	583.0	10.01	9.27	9.01	48.9	10.04	9.5	2	O
6	T404	5	0.65	0.00	443.	458.	2.4	558.4	9.58	9.27	8.78	47.5	9.73	9.5	2	O
6	T404	5	0.75	0.00	452.	467.	2.6	524.0	8.90	9.27	7.81	41.8	8.58	9.5	2	O
6	T404	5	0.85	0.00	460.	474.	2.8	486.3	8.13	9.27	6.70	35.4	7.27	9.5	2	O
6	T404	5	0.95	0.00	468.	480.	2.9	446.5	7.33	9.27	5.58	28.9	5.95	9.5	2	O
7	T457	4	0.05	0.02	383.	396.	0.6	523.3	8.92	9.37	7.14	37.3	7.74	9.9	2	O
7	T457	4	0.15	0.08	394.	410.	1.0	556.2	9.56	9.37	8.00	42.1	8.72	9.9	2	O
7	T457	4	0.25	0.14	407.	423.	1.4	581.2	10.07	9.37	8.85	47.0	9.69	9.9	2	O
7	T457	4	0.35	0.06	420.	437.	1.8	593.9	10.38	9.37	9.46	50.8	10.47	9.9	2	O
7	T457	4	0.45	0.10	433.	450.	2.2	592.0	10.40	9.37	9.22	49.4	10.16	9.9	2	O
7	T457	4	0.55	0.08	446.	462.	2.5	578.9	10.18	9.37	8.99	48.0	9.85	9.9	2	O
7	T457	4	0.65	0.04	458.	474.	2.8	553.6	9.73	9.37	8.76	46.6	9.55	9.9	2	O
7	T457	4	0.75	0.00	469.	483.	3.1	518.5	9.02	9.37	7.79	41.1	8.42	9.9	2	O
7	T457	4	0.85	0.00	478.	492.	3.3	478.6	8.19	9.37	6.68	34.8	7.14	9.9	2	O
7	T457	4	0.95	0.00	487.	498.	3.5	434.3	7.28	9.37	5.56	28.4	5.85	9.9	2	O
8	T441	4	0.05	0.00	383.	396.	0.6	517.3	8.69	9.07	7.14	36.2	7.52	9.6	2	O
8	T441	4	0.15	0.16	395.	410.	1.0	547.0	9.26	9.07	7.99	40.9	8.46	9.6	2	O
8	T441	4	0.25	0.17	407.	424.	1.4	570.2	9.72	9.07	8.84	45.6	9.40	9.6	2	O
8	T441	4	0.35	0.23	421.	437.	1.8	582.4	10.02	9.07	9.44	48.9	10.03	9.6	2	O
8	T441	4	0.45	0.24	434.	451.	2.2	580.4	10.03	9.07	9.21	47.5	9.74	9.6	2	O
8	T441	4	0.55	0.18	447.	464.	2.5	567.7	9.82	9.07	8.97	46.1	9.45	9.6	2	O
8	T441	4	0.65	0.06	460.	476.	2.9	543.1	9.39	9.07	8.74	44.8	9.15	9.6	2	O
8	T441	4	0.75	0.02	472.	486.	3.2	508.8	8.71	9.07	7.77	39.5	8.08	9.6	2	O
8	T441	4	0.85	0.04	482.	495.	3.4	471.3	7.94	9.07	6.66	33.4	6.85	9.6	2	O
8	T441	4	0.95	0.00	491.	502.	3.6	431.2	7.12	9.07	5.55	27.4	5.62	9.6	2	O
9	T442	4	0.05	0.00	383.	396.	0.6	523.0	8.67	9.05	7.13	36.2	7.52	9.6	2	O
9	T442	4	0.15	0.13	395.	410.	1.0	553.2	9.24	9.05	7.97	41.0	8.46	9.6	2	O
9	T442	4	0.25	0.20	408.	424.	1.4	576.7	9.71	9.05	8.82	45.7	9.40	9.6	2	O
9	T442	4	0.35	0.21	421.	438.	1.8	589.0	10.00	9.05	9.42	48.9	10.03	9.6	2	O
9	T442	4	0.45	0.23	434.	451.	2.2	587.0	10.01	9.05	9.19	47.5	9.73	9.6	2	O
9	T442	4	0.55	0.26	447.	464.	2.5	574.2	9.81	9.05	8.96	46.2	9.44	9.6	2	O
9	T442	4	0.65	0.20	460.	476.	2.9	549.3	9.37	9.05	8.72	44.8	9.15	9.6	2	O
9	T442	4	0.75	0.12	472.	486.	3.2	514.5	8.70	9.05	7.75	39.5	8.08	9.6	2	O
9	T442	4	0.85	0.10	482.	495.	3.4	476.6	7.93	9.05	6.65	33.5	6.85	9.6	2	O
9	T442	4	0.95	0.05	491.	503.	3.6	435.8	7.10	9.05	5.54	27.4	5.61	9.6	2	O
10	T458	4	0.05	0.13	383.	396.	0.6	527.7	8.87	9.32	7.11	36.3	7.51	9.8	2	O
10	T458	4	0.15	0.24	394.	410.	1.0	561.4	9.51	9.32	7.96	41.0	8.45	9.8	2	O
10	T458	4	0.25	0.36	407.	423.	1.3	586.8	10.02	9.32	8.81	45.7	9.40	9.8	2	O
10	T458	4	0.35	0.39	420.	437.	1.7	599.6	10.33	9.32	9.41	49.0	10.03	9.8	2	O
10	T458	4	0.45	0.33	433.	450.	2.1	597.7	10.34	9.32	9.18	47.6	9.74	9.8	2	O
10	T458	4	0.55	0.26	446.	462.	2.5	584.4	10.13	9.32	8.94	46.2	9.45	9.8	2	O
10	T458	4	0.65	0.18	458.	473.	2.8	558.7	9.68	9.32	8.71	44.9	9.15	9.8	2	O
10	T458	4	0.75	0.14	469.	484.	3.1	523.1	8.97	9.32	7.75	39.6	8.08	9.8	2	O
10	T458	4	0.85	0.15	478.	492.	3.3	482.7	8.15	9.32	6.64	33.5	6.85	9.8	2	O
10	T458	4	0.95	0.09	487.	499.	3.5	437.5	7.24	9.32	5.54	27.4	5.62	9.8	2	O

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
11	T405	5	0.05	0.00	380.	394.	0.6	525.9	8.83	9.19	7.09	36.8	7.63	9.5	2	O
11	T405	5	0.15	0.00	390.	405.	0.8	554.2	9.37	9.19	7.94	41.6	8.59	9.5	2	O
11	T405	5	0.25	0.00	400.	416.	1.2	576.9	9.82	9.19	8.79	46.4	9.55	9.5	2	O
11	T405	5	0.35	0.00	411.	428.	1.5	590.1	10.12	9.19	9.40	50.1	10.27	9.5	2	O
11	T405	5	0.45	0.00	422.	439.	1.8	588.6	10.14	9.19	9.16	48.7	9.97	9.5	2	O
11	T405	5	0.55	0.00	433.	450.	2.1	575.8	9.93	9.19	8.93	47.3	9.67	9.5	2	O
11	T405	5	0.65	0.00	444.	460.	2.4	551.3	9.50	9.19	8.70	45.9	9.37	9.5	2	O
11	T405	5	0.75	0.00	454.	469.	2.7	517.1	8.83	9.19	7.75	40.5	8.27	9.5	2	O
11	T405	5	0.85	0.00	463.	476.	2.9	479.4	8.06	9.19	6.64	34.3	7.01	9.5	2	O
11	T405	5	0.95	0.00	471.	483.	3.1	439.2	7.25	9.19	5.53	28.0	5.75	9.5	2	O
12	T408	5	0.05	0.00	380.	394.	0.6	534.7	9.00	9.38	7.25	37.4	7.75	9.7	2	O
12	T408	5	0.15	0.00	390.	406.	0.9	563.2	9.55	9.38	8.12	42.3	8.72	9.7	2	O
12	T408	5	0.25	0.00	401.	417.	1.2	586.1	10.01	9.38	8.98	47.1	9.70	9.7	2	O
12	T408	5	0.35	0.00	411.	428.	1.5	600.6	10.34	9.38	9.65	51.2	10.49	9.7	2	O
12	T408	5	0.45	0.00	422.	440.	1.9	599.7	10.36	9.38	9.41	49.7	10.19	9.7	2	O
12	T408	5	0.55	0.00	433.	450.	2.1	586.6	10.15	9.38	9.17	48.3	9.88	9.7	2	O
12	T408	5	0.65	0.00	444.	460.	2.4	561.8	9.71	9.38	8.94	46.9	9.57	9.7	2	O
12	T408	5	0.75	0.00	454.	469.	2.6	527.4	9.02	9.38	7.96	41.4	8.45	9.7	2	O
12	T408	5	0.85	0.00	462.	476.	2.8	488.5	8.23	9.38	6.82	35.0	7.16	9.7	2	O
12	T408	5	0.95	0.00	470.	482.	3.0	446.2	7.38	9.38	5.69	28.6	5.86	9.7	2	O
13	T409	4	0.05	0.04	383.	397.	0.7	549.7	8.99	9.36	7.25	37.9	7.87	10.0	2	O
13	T409	4	0.15	0.15	395.	411.	1.0	579.4	9.55	9.36	8.12	42.9	8.86	10.0	2	O
13	T409	4	0.25	0.29	409.	425.	1.4	603.0	10.01	9.36	8.98	47.8	9.85	10.0	2	O
13	T409	4	0.35	0.28	422.	440.	1.8	617.4	10.32	9.36	9.64	52.0	10.69	10.0	2	O
13	T409	4	0.45	0.23	436.	453.	2.2	616.2	10.34	9.36	9.40	50.6	10.38	10.0	2	O
13	T409	4	0.55	0.21	450.	467.	2.6	602.7	10.13	9.36	9.16	49.1	10.07	10.0	2	O
13	T409	4	0.65	0.17	462.	479.	3.0	577.1	9.69	9.36	8.92	47.7	9.75	10.0	2	O
13	T409	4	0.75	0.08	474.	489.	3.3	541.5	9.00	9.36	7.94	42.1	8.60	10.0	2	O
13	T409	4	0.85	0.05	485.	498.	3.5	501.6	8.21	9.36	6.81	35.6	7.29	10.0	2	O
13	T409	4	0.95	0.02	494.	506.	3.7	458.5	7.37	9.36	5.67	29.1	5.97	10.0	2	O
14	T444	3	0.05	0.00	383.	397.	0.6	524.6	8.78	9.18	7.25	38.4	7.97	9.8	2	O
14	T444	3	0.15	0.11	396.	411.	1.0	555.3	9.37	9.18	8.11	43.4	8.98	9.8	2	O
14	T444	3	0.25	0.19	409.	426.	1.4	579.1	9.84	9.18	8.98	48.4	9.99	9.8	2	O
14	T444	3	0.35	0.24	424.	441.	1.8	592.6	10.15	9.18	9.62	52.8	10.88	9.8	2	O
14	T444	3	0.45	0.33	438.	455.	2.3	591.2	10.17	9.18	9.38	51.4	10.56	9.8	2	O
14	T444	3	0.55	0.25	452.	469.	2.7	578.1	9.96	9.18	9.14	49.9	10.24	9.8	2	O
14	T444	3	0.65	0.15	466.	482.	3.0	553.1	9.52	9.18	8.91	48.4	9.92	9.8	2	O
14	T444	3	0.75	0.09	479.	494.	3.4	518.4	8.83	9.18	7.92	42.7	8.75	9.8	2	O
14	T444	3	0.85	0.01	491.	504.	3.6	479.3	8.04	9.18	6.79	36.1	7.41	9.8	2	O
14	T444	3	0.95	0.00	501.	513.	3.8	436.2	7.18	9.18	5.66	29.5	6.07	9.8	2	O
15	T473	3	0.05	0.00	383.	397.	0.6	541.5	9.05	9.53	7.24	38.3	7.97	10.3	2	O
15	T473	3	0.15	0.00	396.	411.	1.0	576.4	9.71	9.53	8.10	43.3	8.97	10.3	2	O
15	T473	3	0.25	0.00	409.	426.	1.4	602.6	10.24	9.53	8.96	48.3	9.97	10.3	2	O
15	T473	3	0.35	0.00	424.	441.	1.8	616.6	10.56	9.53	9.60	52.7	10.86	10.3	2	O
15	T473	3	0.45	0.00	438.	455.	2.2	615.0	10.58	9.53	9.36	51.2	10.54	10.3	2	O
15	T473	3	0.55	0.00	453.	469.	2.6	601.2	10.36	9.53	9.13	49.8	10.22	10.3	2	O
15	T473	3	0.65	0.00	466.	483.	3.0	574.7	9.90	9.53	8.89	48.3	9.91	10.3	2	O
15	T473	3	0.75	0.00	479.	494.	3.3	538.1	9.18	9.53	7.90	42.5	8.73	10.3	2	O
15	T473	3	0.85	0.00	491.	505.	3.6	495.9	8.33	9.53	6.77	36.0	7.39	10.3	2	O
15	T473	3	0.95	0.00	502.	513.	3.8	448.1	7.38	9.53	5.65	29.4	6.06	10.3	2	O
16	T445	3	0.05	0.00	383.	397.	0.6	526.0	8.74	9.15	7.22	38.2	7.95	9.8	2	O
16	T445	3	0.15	0.06	396.	411.	1.0	557.0	9.33	9.15	8.08	43.2	8.95	9.8	2	O

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
16	T445	3	0.25	0.20	409.	426.	1.4	581.0	9.81	9.15	8.95	48.2	9.95	9.8	2	O
16	T445	3	0.35	0.22	423.	441.	1.8	594.5	10.12	9.15	9.58	52.5	10.84	9.8	2	O
16	T445	3	0.45	0.23	438.	455.	2.2	593.1	10.13	9.15	9.35	51.0	10.52	9.8	2	O
16	T445	3	0.55	0.15	452.	469.	2.6	580.0	9.92	9.15	9.11	49.6	10.20	9.8	2	O
16	T445	3	0.65	0.07	466.	482.	3.0	554.8	9.49	9.15	8.87	48.1	9.88	9.8	2	O
16	T445	3	0.75	0.00	479.	494.	3.3	519.9	8.80	9.15	7.89	42.4	8.71	9.8	2	O
16	T445	3	0.85	0.00	490.	504.	3.6	480.5	8.01	9.15	6.76	35.9	7.38	9.8	2	O
16	T445	3	0.95	0.00	501.	512.	3.8	437.0	7.15	9.15	5.64	29.3	6.04	9.8	2	O
17	T411	4	0.05	0.00	383.	397.	0.6	545.0	8.92	9.29	7.21	37.7	7.84	9.9	2	O
17	T411	4	0.15	0.10	395.	411.	1.0	575.1	9.48	9.29	8.07	42.6	8.83	9.9	2	O
17	T411	4	0.25	0.23	408.	425.	1.4	598.8	9.94	9.29	8.92	47.5	9.82	9.9	2	O
17	T411	4	0.35	0.35	422.	439.	1.8	613.1	10.25	9.29	9.57	51.6	10.65	9.9	2	O
17	T411	4	0.45	0.40	436.	453.	2.1	611.8	10.27	9.29	9.33	50.2	10.34	9.9	2	O
17	T411	4	0.55	0.27	449.	466.	2.5	598.4	10.06	9.29	9.09	48.7	10.02	9.9	2	O
17	T411	4	0.65	0.15	462.	478.	2.9	572.8	9.62	9.29	8.86	47.3	9.71	9.9	2	O
17	T411	4	0.75	0.04	474.	489.	3.1	537.2	8.94	9.29	7.88	41.7	8.57	9.9	2	O
17	T411	4	0.85	0.06	484.	498.	3.4	497.3	8.15	9.29	6.76	35.3	7.26	9.9	2	O
17	T411	4	0.95	0.01	494.	505.	3.6	453.9	7.31	9.29	5.63	28.8	5.95	9.9	2	O
18	T413	5	0.05	0.07	380.	394.	0.6	541.8	8.89	9.27	7.18	37.1	7.73	9.6	2	O
18	T413	5	0.15	0.18	390.	406.	0.9	571.7	9.45	9.27	8.04	42.0	8.70	9.6	2	O
18	T413	5	0.25	0.26	401.	417.	1.2	595.4	9.92	9.27	8.90	46.8	9.68	9.6	2	O
18	T413	5	0.35	0.31	412.	429.	1.5	610.0	10.23	9.27	9.54	50.7	10.46	9.6	2	O
18	T413	5	0.45	0.27	423.	440.	1.8	609.0	10.25	9.27	9.31	49.3	10.15	9.6	2	O
18	T413	5	0.55	0.22	434.	451.	2.1	595.6	10.04	9.27	9.07	47.9	9.84	9.6	2	O
18	T413	5	0.65	0.28	445.	461.	2.4	570.2	9.60	9.27	8.83	46.5	9.54	9.6	2	O
18	T413	5	0.75	0.23	456.	470.	2.7	535.1	8.92	9.27	7.87	41.0	8.42	9.6	2	O
18	T413	5	0.85	0.13	465.	478.	2.9	495.0	8.14	9.27	6.75	34.7	7.13	9.6	2	O
18	T413	5	0.95	0.03	473.	485.	3.1	451.0	7.29	9.27	5.62	28.4	5.85	9.6	2	O
19	T414	5	0.05	0.00	381.	395.	0.6	538.2	9.08	9.47	7.36	36.7	7.63	9.8	2	O
19	T414	5	0.15	0.00	390.	406.	0.9	567.6	9.65	9.47	8.23	41.5	8.59	9.8	2	O
19	T414	5	0.25	0.08	401.	418.	1.2	590.9	10.12	9.47	9.11	46.3	9.55	9.8	2	O
19	T414	5	0.35	0.13	412.	429.	1.6	606.1	10.45	9.47	9.81	49.9	10.26	9.8	2	O
19	T414	5	0.45	0.08	423.	440.	1.9	605.5	10.48	9.47	9.57	48.5	9.96	9.8	2	O
19	T414	5	0.55	0.06	434.	451.	2.2	592.2	10.27	9.47	9.32	47.1	9.66	9.8	2	O
19	T414	5	0.65	0.02	444.	461.	2.5	567.1	9.82	9.47	9.08	45.7	9.36	9.8	2	O
19	T414	5	0.75	0.01	454.	469.	2.7	532.5	9.12	9.47	8.09	40.3	8.26	9.8	2	O
19	T414	5	0.85	0.01	463.	477.	2.9	492.4	8.31	9.47	6.93	34.1	7.00	9.8	2	O
19	T414	5	0.95	0.00	471.	483.	3.1	448.0	7.44	9.47	5.77	27.9	5.74	9.8	2	O
20	T446	4	0.05	0.00	383.	397.	0.7	526.9	8.87	9.30	7.36	35.6	7.39	9.9	2	O
20	T446	4	0.15	0.09	396.	412.	1.0	558.0	9.48	9.30	8.24	40.3	8.32	9.9	2	O
20	T446	4	0.25	0.12	409.	426.	1.4	582.0	9.96	9.30	9.11	44.9	9.25	9.9	2	O
20	T446	4	0.35	0.11	423.	440.	1.9	596.9	10.29	9.30	9.81	47.7	9.79	9.9	2	O
20	T446	4	0.45	0.12	437.	454.	2.3	596.1	10.32	9.30	9.56	46.4	9.51	9.9	2	O
20	T446	4	0.55	0.09	451.	468.	2.7	582.8	10.10	9.30	9.32	45.1	9.22	9.9	2	O
20	T446	4	0.65	0.02	464.	480.	3.0	557.8	9.66	9.30	9.08	43.8	8.94	9.9	2	O
20	T446	4	0.75	0.00	476.	491.	3.3	523.2	8.96	9.30	8.08	38.6	7.90	9.9	2	O
20	T446	4	0.85	0.00	486.	500.	3.6	482.8	8.15	9.30	6.92	32.7	6.69	9.9	2	O
20	T446	4	0.95	0.00	496.	508.	3.7	437.3	7.25	9.30	5.77	26.8	5.49	9.9	2	O
21	T486	3	0.05	0.00	383.	398.	0.8	580.0	6.93	7.32	5.48	26.3	7.39	7.6	1	F
21	T486	3	0.15	0.00	396.	412.	1.3	619.1	7.46	7.32	6.13	29.6	8.32	7.6	1	F
21	T486	3	0.25	0.00	410.	427.	1.8	648.6	7.88	7.32	6.79	32.9	9.25	7.6	1	F
21	T486	3	0.35	0.00	424.	441.	2.3	666.0	8.14	7.32	7.29	34.8	9.77	7.6	1	F

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
21	T486	3	0.45	0.00	438.	456.	2.8	664.9	8.16	7.32	7.11	33.8	9.49	7.6	1	F
21	T486	3	0.55	0.00	453.	470.	3.3	649.5	7.98	7.32	6.92	32.8	9.20	7.6	1	F
21	T486	3	0.65	0.00	467.	483.	3.7	619.8	7.61	7.32	6.74	31.7	8.92	7.6	1	F
21	T486	3	0.75	0.00	480.	495.	4.1	578.8	7.04	7.32	5.99	28.0	7.88	7.6	1	F
21	T486	3	0.85	0.00	491.	505.	4.5	530.8	6.37	7.32	5.13	23.8	6.68	7.6	1	F
21	T486	3	0.95	0.00	502.	514.	4.7	476.2	5.62	7.32	4.27	19.5	5.48	7.6	1	F
22	T416	2	0.05	0.00	384.	398.	0.6	543.0	9.05	9.44	7.34	35.7	7.39	10.2	2	O
22	T416	2	0.15	0.00	396.	413.	1.0	573.2	9.62	9.44	8.22	40.3	8.32	10.2	2	O
22	T416	2	0.25	0.00	411.	428.	1.4	597.0	10.10	9.44	9.10	45.0	9.24	10.2	2	O
22	T416	2	0.35	0.00	425.	443.	1.8	611.6	10.42	9.44	9.77	47.7	9.77	10.2	2	O
22	T416	2	0.45	0.00	441.	458.	2.3	610.5	10.44	9.44	9.53	46.4	9.49	10.2	2	O
22	T416	2	0.55	0.00	456.	473.	2.7	597.0	10.23	9.44	9.29	45.1	9.20	10.2	2	O
22	T416	2	0.65	0.00	470.	487.	3.0	571.4	9.78	9.44	9.05	43.8	8.92	10.2	2	O
22	T416	2	0.75	0.00	484.	499.	3.4	535.9	9.08	9.44	8.05	38.6	7.87	10.2	2	O
22	T416	2	0.85	0.00	496.	510.	3.6	495.7	8.28	9.44	6.90	32.7	6.68	10.2	2	O
22	T416	2	0.95	0.00	507.	519.	3.9	451.5	7.40	9.44	5.74	26.8	5.48	10.2	2	O
23	T492	2	0.05	0.00	383.	398.	0.8	571.0	6.88	7.20	5.48	26.3	7.38	7.5	1	F
23	T492	2	0.15	0.00	396.	412.	1.3	606.2	7.35	7.20	6.13	29.6	8.31	7.5	1	F
23	T492	2	0.25	0.00	410.	427.	1.8	633.7	7.74	7.20	6.78	32.9	9.23	7.5	1	F
23	T492	2	0.35	0.00	424.	442.	2.3	650.2	7.99	7.20	7.28	34.8	9.79	7.5	1	F
23	T492	2	0.45	0.00	439.	457.	2.8	649.0	8.00	7.20	7.09	33.8	9.50	7.5	1	F
23	T492	2	0.55	0.00	453.	471.	3.3	634.1	7.83	7.20	6.91	32.8	9.21	7.5	1	F
23	T492	2	0.65	0.00	468.	484.	3.8	605.5	7.47	7.20	6.72	31.8	8.93	7.5	1	F
23	T492	2	0.75	0.00	481.	496.	4.2	565.7	6.92	7.20	5.98	28.1	7.89	7.5	1	F
23	T492	2	0.85	0.00	492.	507.	4.5	520.4	6.28	7.20	5.12	23.8	6.69	7.5	1	F
23	T492	2	0.95	0.00	503.	515.	4.8	470.1	5.59	7.20	4.26	19.5	5.49	7.5	1	F
24	T478	3	0.05	0.00	383.	397.	0.8	558.8	6.86	7.15	5.47	26.7	7.50	7.4	1	F
24	T478	3	0.15	0.00	395.	411.	1.3	591.1	7.30	7.15	6.12	30.1	8.44	7.4	1	F
24	T478	3	0.25	0.00	409.	426.	1.8	616.8	7.66	7.15	6.77	33.4	9.38	7.4	1	F
24	T478	3	0.35	0.00	423.	441.	2.3	632.9	7.91	7.15	7.27	35.8	10.05	7.4	1	F
24	T478	3	0.45	0.00	438.	455.	2.8	631.9	7.92	7.15	7.08	34.7	9.75	7.4	1	F
24	T478	3	0.55	0.00	452.	469.	3.3	617.5	7.75	7.15	6.90	33.7	9.46	7.4	1	F
24	T478	3	0.65	0.00	466.	482.	3.7	590.0	7.40	7.15	6.72	32.6	9.17	7.4	1	F
24	T478	3	0.75	0.00	479.	494.	4.1	551.6	6.86	7.15	5.97	28.8	8.10	7.4	1	F
24	T478	3	0.85	0.00	490.	504.	4.4	508.4	6.24	7.15	5.12	24.4	6.86	7.4	1	F
24	T478	3	0.95	0.00	501.	513.	4.7	461.1	5.59	7.15	4.26	20.0	5.63	7.4	1	F
25	T447	4	0.05	0.00	383.	397.	0.6	539.8	8.95	9.39	7.29	36.8	7.62	10.0	2	O
25	T447	4	0.15	0.00	395.	411.	1.0	572.1	9.57	9.39	8.16	41.6	8.58	10.0	2	O
25	T447	4	0.25	0.00	409.	425.	1.4	596.9	10.06	9.39	9.03	46.4	9.53	10.0	2	O
25	T447	4	0.35	0.00	423.	440.	1.8	612.0	10.39	9.39	9.70	50.2	10.28	10.0	2	O
25	T447	4	0.45	0.00	436.	454.	2.2	611.1	10.41	9.39	9.46	48.8	9.98	10.0	2	O
25	T447	4	0.55	0.00	450.	467.	2.5	597.5	10.20	9.39	9.22	47.4	9.68	10.0	2	O
25	T447	4	0.65	0.00	463.	479.	2.9	571.7	9.75	9.39	8.98	46.0	9.38	10.0	2	O
25	T447	4	0.75	0.00	475.	490.	3.2	536.1	9.05	9.39	8.00	40.6	8.28	10.0	2	O
25	T447	4	0.85	0.00	486.	500.	3.4	494.4	8.23	9.39	6.85	34.3	7.02	10.0	2	O
25	T447	4	0.95	0.00	495.	507.	3.6	447.4	7.32	9.39	5.71	28.1	5.75	10.0	2	O
26	T420	5	0.05	0.00	381.	395.	0.6	544.8	8.95	9.35	7.26	37.4	7.74	9.7	2	O
26	T420	5	0.15	0.00	390.	406.	0.9	575.4	9.53	9.35	8.13	42.2	8.71	9.7	2	O
26	T420	5	0.25	0.00	401.	418.	1.2	599.4	10.00	9.35	9.00	47.1	9.68	9.7	2	O
26	T420	5	0.35	0.00	412.	430.	1.5	614.8	10.32	9.35	9.67	51.2	10.49	9.7	2	O
26	T420	5	0.45	0.00	424.	441.	1.8	614.0	10.35	9.35	9.43	49.8	10.19	9.7	2	O
26	T420	5	0.55	0.00	435.	452.	2.1	600.5	10.13	9.35	9.19	48.3	9.88	9.7	2	O

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
26	T420	5	0.65	0.00	446.	462.	2.4	574.8	9.69	9.35	8.95	46.9	9.57	9.7	2	O
26	T420	5	0.75	0.00	456.	471.	2.6	539.3	9.01	9.35	7.97	41.4	8.45	9.7	2	O
26	T420	5	0.85	0.00	465.	479.	2.8	498.2	8.20	9.35	6.83	35.0	7.16	9.7	2	O
26	T420	5	0.95	0.00	473.	485.	3.0	452.3	7.33	9.35	5.69	28.6	5.86	9.7	2	O
27	T421	5	0.05	0.00	380.	392.	0.5	549.5	9.15	9.57	7.45	37.9	7.86	9.8	2	O
27	T421	5	0.15	0.00	388.	402.	0.8	580.3	9.74	9.57	8.34	42.9	8.85	9.8	2	O
27	T421	5	0.25	0.00	398.	413.	1.2	604.4	10.23	9.57	9.23	47.9	9.84	9.8	2	O
27	T421	5	0.35	0.00	408.	423.	1.5	620.3	10.57	9.57	9.96	52.1	10.70	9.8	2	O
27	T421	5	0.45	0.00	418.	434.	1.9	619.8	10.59	9.57	9.71	50.7	10.39	9.8	2	O
27	T421	5	0.55	0.00	429.	444.	2.2	606.2	10.38	9.57	9.46	49.2	10.07	9.8	2	O
27	T421	5	0.65	0.00	439.	453.	2.5	580.4	9.92	9.57	9.21	47.8	9.76	9.8	2	O
27	T421	5	0.75	0.00	448.	461.	2.8	544.8	9.21	9.57	8.20	42.1	8.61	9.8	2	O
27	T421	5	0.85	0.00	457.	469.	3.0	503.2	8.39	9.57	7.03	35.6	7.29	9.8	2	O
27	T421	5	0.95	0.00	464.	475.	3.2	456.4	7.49	9.57	5.85	29.1	5.97	9.8	2	O
28	T464	4	0.05	0.12	383.	398.	0.7	559.4	9.25	9.78	7.46	38.4	7.98	10.4	2	O
28	T464	4	0.15	0.20	396.	412.	1.1	596.2	9.95	9.78	8.35	43.5	8.98	10.4	2	O
28	T464	4	0.25	0.32	409.	426.	1.5	623.6	10.49	9.78	9.24	48.5	9.99	10.4	2	O
28	T464	4	0.35	0.31	422.	440.	1.9	640.3	10.85	9.78	9.96	53.0	10.89	10.4	2	O
28	T464	4	0.45	0.28	436.	454.	2.3	639.8	10.88	9.78	9.71	51.5	10.57	10.4	2	O
28	T464	4	0.55	0.30	449.	467.	2.7	625.4	10.66	9.78	9.47	50.0	10.25	10.4	2	O
28	T464	4	0.65	0.18	462.	479.	3.1	598.0	10.18	9.78	9.22	48.6	9.93	10.4	2	O
28	T464	4	0.75	0.13	474.	489.	3.4	560.7	9.44	9.78	8.21	42.8	8.76	10.4	2	O
28	T464	4	0.85	0.11	484.	498.	3.6	515.2	8.55	9.78	7.03	36.2	7.42	10.4	2	O
28	T464	4	0.95	0.11	493.	505.	3.8	462.1	7.53	9.78	5.86	29.6	6.07	10.4	2	O
29	T423	3	0.05	0.00	384.	398.	0.7	556.5	9.14	9.56	7.45	38.9	8.08	10.3	2	O
29	T423	3	0.15	0.00	396.	413.	1.1	587.9	9.74	9.56	8.34	44.0	9.10	10.3	2	O
29	T423	3	0.25	0.02	411.	428.	1.5	612.5	10.22	9.56	9.24	49.0	10.12	10.3	2	O
29	T423	3	0.35	0.15	425.	443.	1.9	628.4	10.56	9.56	9.95	53.7	11.07	10.3	2	O
29	T423	3	0.45	0.18	440.	458.	2.3	627.7	10.59	9.56	9.70	52.2	10.74	10.3	2	O
29	T423	3	0.55	0.14	455.	473.	2.7	613.8	10.37	9.56	9.46	50.7	10.42	10.3	2	O
29	T423	3	0.65	0.03	469.	486.	3.1	587.5	9.91	9.56	9.21	49.2	10.09	10.3	2	O
29	T423	3	0.75	0.00	483.	498.	3.4	551.3	9.20	9.56	8.20	43.4	8.89	10.3	2	O
29	T423	3	0.85	0.00	494.	508.	3.7	509.1	8.38	9.56	7.02	36.7	7.53	10.3	2	O
29	T423	3	0.95	0.00	505.	517.	3.9	461.9	7.47	9.56	5.85	30.0	6.17	10.3	2	O
30	T496	2	0.05	0.00	384.	399.	0.8	582.5	6.94	7.29	5.56	28.7	8.07	7.6	1	F
30	T496	2	0.15	0.00	397.	413.	1.3	619.0	7.44	7.29	6.22	32.4	9.09	7.6	1	F
30	T496	2	0.25	0.00	411.	429.	1.8	647.2	7.83	7.29	6.88	36.0	10.11	7.6	1	F
30	T496	2	0.35	0.00	426.	444.	2.4	664.9	8.09	7.29	7.40	39.3	11.05	7.6	1	F
30	T496	2	0.45	0.00	441.	459.	2.9	664.2	8.11	7.29	7.22	38.2	10.72	7.6	1	F
30	T496	2	0.55	0.00	456.	474.	3.4	648.8	7.93	7.29	7.03	37.0	10.40	7.6	1	F
30	T496	2	0.65	0.00	470.	487.	3.9	619.5	7.57	7.29	6.84	35.9	10.08	7.6	1	F
30	T496	2	0.75	0.00	484.	500.	4.3	579.0	7.01	7.29	6.08	31.6	8.88	7.6	1	F
30	T496	2	0.85	0.00	496.	510.	4.6	531.9	6.35	7.29	5.21	26.8	7.52	7.6	1	F
30	T496	2	0.95	0.00	507.	519.	4.9	479.0	5.64	7.29	4.33	21.9	6.16	7.6	1	F
31	T498	1	0.05	0.00	384.	398.	0.8	590.5	6.94	7.29	5.55	28.7	8.06	7.6	1	F
31	T498	1	0.15	0.00	397.	413.	1.3	627.5	7.43	7.29	6.21	32.3	9.07	7.6	1	F
31	T498	1	0.25	0.00	411.	428.	1.8	656.1	7.83	7.29	6.87	35.9	10.09	7.6	1	F
31	T498	1	0.35	0.00	426.	444.	2.4	673.9	8.09	7.29	7.40	39.2	11.02	7.6	1	F
31	T498	1	0.45	0.00	441.	459.	2.9	673.1	8.10	7.29	7.21	38.1	10.70	7.6	1	F
31	T498	1	0.55	0.00	456.	474.	3.4	657.6	7.93	7.29	7.02	36.9	10.37	7.6	1	F
31	T498	1	0.65	0.00	470.	487.	3.9	627.8	7.57	7.29	6.83	35.8	10.05	7.6	1	F
31	T498	1	0.75	0.00	484.	500.	4.3	586.6	7.00	7.29	6.08	31.5	8.86	7.6	1	F

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
31	T498	1	0.85	0.00	496.	510.	4.6	538.9	6.35	7.29	5.20	26.7	7.50	7.6	1	F
31	T498	1	0.95	0.00	507.	519.	4.9	485.3	5.64	7.29	4.33	21.9	6.14	7.6	1	F
32	T499	2	0.05	0.00	384.	398.	0.8	579.8	6.94	7.28	5.55	28.6	8.04	7.6	1	F
32	T499	2	0.15	0.00	396.	413.	1.3	616.2	7.43	7.28	6.20	32.2	9.05	7.6	1	F
32	T499	2	0.25	0.00	410.	428.	1.8	644.3	7.82	7.28	6.86	35.8	10.06	7.6	1	F
32	T499	2	0.35	0.00	425.	443.	2.3	661.8	8.08	7.28	7.39	39.1	10.98	7.6	1	F
32	T499	2	0.45	0.00	440.	458.	2.9	661.1	8.10	7.28	7.20	38.0	10.66	7.6	1	F
32	T499	2	0.55	0.00	455.	473.	3.4	645.8	7.92	7.28	7.01	36.8	10.34	7.6	1	F
32	T499	2	0.65	0.00	469.	486.	3.8	616.6	7.56	7.28	6.82	35.7	10.02	7.6	1	F
32	T499	2	0.75	0.00	483.	498.	4.2	576.1	7.00	7.28	6.07	31.4	8.83	7.6	1	F
32	T499	2	0.85	0.00	495.	509.	4.6	529.2	6.35	7.28	5.20	26.6	7.48	7.6	1	F
32	T499	2	0.95	0.00	506.	518.	4.8	476.5	5.63	7.28	4.33	21.8	6.12	7.6	1	F
33	T425	3	0.05	0.05	384.	398.	0.6	549.8	9.07	9.48	7.39	38.0	7.93	10.2	2	O
33	T425	3	0.15	0.11	396.	413.	1.0	581.0	9.66	9.48	8.28	43.0	8.93	10.2	2	O
33	T425	3	0.25	0.23	410.	428.	1.4	605.4	10.15	9.48	9.16	48.0	9.93	10.2	2	O
33	T425	3	0.35	0.25	425.	443.	1.8	621.0	10.48	9.48	9.86	52.3	10.80	10.2	2	O
33	T425	3	0.45	0.31	440.	458.	2.2	620.3	10.50	9.48	9.61	50.8	10.49	10.2	2	O
33	T425	3	0.55	0.26	455.	472.	2.6	606.6	10.29	9.48	9.37	49.4	10.17	10.2	2	O
33	T425	3	0.65	0.15	469.	486.	3.0	580.5	9.83	9.48	9.12	47.9	9.86	10.2	2	O
33	T425	3	0.75	0.12	482.	498.	3.3	544.4	9.13	9.48	8.12	42.2	8.69	10.2	2	O
33	T425	3	0.85	0.09	494.	508.	3.6	502.7	8.31	9.48	6.96	35.7	7.36	10.2	2	O
33	T425	3	0.95	0.02	505.	517.	3.8	455.8	7.42	9.48	5.80	29.2	6.03	10.2	2	O
34	T467	4	0.05	0.03	383.	397.	0.6	554.3	9.14	9.67	7.37	37.5	7.82	10.3	2	O
34	T467	4	0.15	0.10	395.	411.	1.0	591.0	9.84	9.67	8.25	42.4	8.81	10.3	2	O
34	T467	4	0.25	0.27	409.	426.	1.4	618.2	10.38	9.67	9.13	47.3	9.79	10.3	2	O
34	T467	4	0.35	0.27	422.	440.	1.7	634.8	10.73	9.67	9.82	51.4	10.62	10.3	2	O
34	T467	4	0.45	0.22	436.	453.	2.1	634.2	10.75	9.67	9.58	50.0	10.31	10.3	2	O
34	T467	4	0.55	0.18	449.	466.	2.5	619.8	10.53	9.67	9.33	48.6	10.00	10.3	2	O
34	T467	4	0.65	0.11	461.	478.	2.8	592.5	10.06	9.67	9.09	47.1	9.69	10.3	2	O
34	T467	4	0.75	0.05	473.	488.	3.0	555.2	9.33	9.67	8.09	41.5	8.55	10.3	2	O
34	T467	4	0.85	0.02	483.	497.	3.3	510.0	8.45	9.67	6.93	35.1	7.24	10.3	2	O
34	T467	4	0.95	0.05	492.	504.	3.4	457.1	7.44	9.67	5.78	28.7	5.93	10.3	2	O
35	T493	5	0.05	0.00	380.	392.	0.6	576.9	6.91	7.24	5.51	27.5	7.71	7.1	1	F
35	T493	5	0.15	0.00	388.	402.	1.0	612.9	7.39	7.24	6.16	30.9	8.68	7.1	1	F
35	T493	5	0.25	0.00	398.	412.	1.3	640.7	7.77	7.24	6.81	34.4	9.65	7.1	1	F
35	T493	5	0.35	0.00	407.	423.	1.7	658.7	8.03	7.24	7.33	37.2	10.44	7.1	1	F
35	T493	5	0.45	0.00	418.	433.	2.0	658.2	8.05	7.24	7.14	36.1	10.13	7.1	1	F
35	T493	5	0.55	0.00	428.	443.	2.3	643.0	7.88	7.24	6.96	35.0	9.83	7.1	1	F
35	T493	5	0.65	0.00	438.	452.	2.6	614.0	7.52	7.24	6.77	33.9	9.52	7.1	1	F
35	T493	5	0.75	0.00	447.	461.	2.9	573.8	6.96	7.24	6.03	29.9	8.40	7.1	1	F
35	T493	5	0.85	0.00	456.	468.	3.1	526.9	6.32	7.24	5.16	25.3	7.12	7.1	1	F
35	T493	5	0.95	0.00	464.	474.	3.2	473.9	5.61	7.24	4.30	20.8	5.84	7.1	1	F
36	T426	5	0.05	0.00	381.	395.	0.6	555.1	9.22	9.66	7.55	36.6	7.62	10.1	2	O
36	T426	5	0.15	0.00	391.	407.	1.0	587.0	9.84	9.66	8.45	41.4	8.58	10.1	2	O
36	T426	5	0.25	0.00	402.	419.	1.4	611.8	10.33	9.66	9.36	46.2	9.53	10.1	2	O
36	T426	5	0.35	0.00	414.	431.	1.8	628.3	10.68	9.66	10.10	49.8	10.26	10.1	2	O
36	T426	5	0.45	0.00	425.	443.	2.2	627.9	10.71	9.66	9.85	48.4	9.96	10.1	2	O
36	T426	5	0.55	0.00	437.	454.	2.6	614.0	10.49	9.66	9.60	47.0	9.66	10.1	2	O
36	T426	5	0.65	0.00	448.	465.	3.0	587.7	10.02	9.66	9.35	45.6	9.36	10.1	2	O
36	T426	5	0.75	0.00	458.	474.	3.4	551.5	9.31	9.66	8.32	40.3	8.27	10.1	2	O
36	T426	5	0.85	0.00	468.	482.	3.7	508.7	8.47	9.66	7.13	34.1	7.01	10.1	2	O
36	T426	5	0.95	0.00	476.	488.	3.9	460.0	7.53	9.66	5.94	27.9	5.74	10.1	2	O

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
37	T450	4	0.05	0.03	384.	398.	0.7	553.4	9.19	9.67	7.55	36.1	7.51	10.4	2	O
37	T450	4	0.15	0.16	396.	413.	1.1	587.3	9.85	9.67	8.45	40.9	8.45	10.4	2	O
37	T450	4	0.25	0.19	410.	428.	1.5	613.0	10.36	9.67	9.36	45.6	9.40	10.4	2	O
37	T450	4	0.35	0.23	425.	443.	1.9	629.6	10.71	9.67	10.10	48.9	10.05	10.4	2	O
37	T450	4	0.45	0.26	439.	457.	2.3	629.2	10.74	9.67	9.85	47.5	9.76	10.4	2	O
37	T450	4	0.55	0.22	454.	471.	2.7	615.2	10.52	9.67	9.60	46.1	9.46	10.4	2	O
37	T450	4	0.65	0.13	467.	484.	3.1	588.5	10.05	9.67	9.35	44.8	9.17	10.4	2	O
37	T450	4	0.75	0.07	480.	495.	3.4	552.0	9.33	9.67	8.32	39.5	8.10	10.4	2	O
37	T450	4	0.85	0.07	491.	505.	3.7	508.3	8.47	9.67	7.12	33.4	6.86	10.4	2	O
37	T450	4	0.95	0.04	501.	513.	3.9	457.8	7.50	9.67	5.93	27.4	5.63	10.4	2	O
38	T497	3	0.05	0.00	384.	399.	0.9	594.1	7.01	7.37	5.63	25.8	7.26	7.7	1	F
38	T497	3	0.15	0.00	397.	414.	1.3	631.8	7.51	7.37	6.30	29.1	8.17	7.7	1	F
38	T497	3	0.25	0.00	411.	429.	1.8	660.9	7.91	7.37	6.97	32.3	9.08	7.7	1	F
38	T497	3	0.35	0.00	426.	445.	2.4	679.7	8.18	7.37	7.52	34.0	9.54	7.7	1	F
38	T497	3	0.45	0.00	441.	460.	2.9	679.3	8.20	7.37	7.33	33.0	9.26	7.7	1	F
38	T497	3	0.55	0.00	456.	474.	3.4	663.6	8.03	7.37	7.14	32.0	8.98	7.7	1	F
38	T497	3	0.65	0.00	471.	488.	3.9	633.5	7.66	7.37	6.95	31.0	8.70	7.7	1	F
38	T497	3	0.75	0.00	484.	500.	4.3	592.1	7.09	7.37	6.17	27.4	7.70	7.7	1	F
38	T497	3	0.85	0.00	496.	511.	4.6	543.3	6.42	7.37	5.29	23.2	6.53	7.7	1	F
38	T497	3	0.95	0.00	507.	519.	4.9	487.8	5.68	7.37	4.40	19.1	5.36	7.7	1	F
39	T500	2	0.05	0.00	384.	399.	0.9	581.3	7.01	7.37	5.63	25.8	7.26	7.7	1	F
39	T500	2	0.15	0.00	397.	414.	1.3	618.2	7.51	7.37	6.29	29.1	8.17	7.7	1	F
39	T500	2	0.25	0.00	411.	429.	1.8	646.6	7.91	7.37	6.96	32.3	9.08	7.7	1	F
39	T500	2	0.35	0.00	426.	444.	2.4	664.9	8.18	7.37	7.51	33.8	9.50	7.7	1	F
39	T500	2	0.45	0.00	441.	460.	2.9	664.5	8.20	7.37	7.32	32.8	9.23	7.7	1	F
39	T500	2	0.55	0.00	456.	475.	3.4	649.1	8.02	7.37	7.13	31.9	8.95	7.7	1	F
39	T500	2	0.65	0.00	471.	488.	3.9	619.6	7.65	7.37	6.94	30.9	8.67	7.7	1	F
39	T500	2	0.75	0.00	485.	501.	4.3	579.0	7.08	7.37	6.17	27.3	7.66	7.7	1	F
39	T500	2	0.85	0.00	497.	512.	4.7	531.3	6.42	7.37	5.28	23.1	6.50	7.7	1	F
39	T500	2	0.95	0.00	508.	521.	4.9	477.1	5.68	7.37	4.39	19.0	5.33	7.7	1	F
40	T431	2	0.05	0.01	384.	398.	0.6	551.5	9.18	9.61	7.51	35.1	7.26	10.5	2	O
40	T431	2	0.15	0.12	397.	413.	1.0	583.2	9.79	9.61	8.41	39.6	8.17	10.5	2	O
40	T431	2	0.25	0.21	411.	429.	1.4	607.8	10.28	9.61	9.31	44.2	9.08	10.5	2	O
40	T431	2	0.35	0.30	427.	445.	1.9	623.9	10.62	9.61	10.04	46.4	9.49	10.5	2	O
40	T431	2	0.45	0.24	442.	460.	2.3	623.3	10.65	9.61	9.79	45.2	9.21	10.5	2	O
40	T431	2	0.55	0.20	457.	475.	2.7	609.5	10.43	9.61	9.54	43.9	8.94	10.5	2	O
40	T431	2	0.65	0.07	472.	489.	3.1	583.2	9.97	9.61	9.29	42.6	8.66	10.5	2	O
40	T431	2	0.75	0.06	486.	502.	3.4	546.8	9.26	9.61	8.26	37.6	7.65	10.5	2	O
40	T431	2	0.85	0.04	498.	513.	3.7	504.5	8.42	9.61	7.08	31.8	6.49	10.5	2	O
40	T431	2	0.95	0.07	510.	522.	3.9	456.7	7.50	9.61	5.90	26.1	5.33	10.5	2	O
41	T491	3	0.05	0.00	383.	398.	0.8	584.5	7.06	7.46	5.61	25.8	7.25	7.8	1	F
41	T491	3	0.15	0.00	396.	413.	1.3	624.9	7.61	7.46	6.28	29.1	8.16	7.8	1	F
41	T491	3	0.25	0.00	410.	428.	1.8	655.2	8.03	7.46	6.94	32.3	9.07	7.8	1	F
41	T491	3	0.35	0.00	425.	443.	2.3	674.1	8.31	7.46	7.48	33.8	9.50	7.8	1	F
41	T491	3	0.45	0.00	440.	458.	2.8	673.7	8.33	7.46	7.30	32.8	9.22	7.8	1	F
41	T491	3	0.55	0.00	454.	472.	3.3	657.9	8.15	7.46	7.11	31.8	8.95	7.8	1	F
41	T491	3	0.65	0.00	469.	485.	3.8	627.6	7.77	7.46	6.92	30.9	8.67	7.8	1	F
41	T491	3	0.75	0.00	482.	497.	4.2	585.9	7.19	7.46	6.15	27.3	7.66	7.8	1	F
41	T491	3	0.85	0.00	493.	508.	4.5	536.1	6.49	7.46	5.27	23.1	6.50	7.8	1	F
41	T491	3	0.95	0.00	504.	516.	4.8	478.3	5.71	7.46	4.38	19.0	5.33	7.8	1	F
42	T451	4	0.05	0.00	383.	398.	0.6	548.6	9.11	9.57	7.47	35.0	7.24	10.3	2	O
42	T451	4	0.15	0.00	396.	412.	1.0	581.9	9.75	9.57	8.36	39.6	8.15	10.3	2	O

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
42	T451	4	0.25	0.00	410.	427.	1.4	607.3	10.26	9.57	9.25	44.1	9.06	10.3	2	O
42	T451	4	0.35	0.03	424.	441.	1.8	623.8	10.60	9.57	9.97	46.7	9.53	10.3	2	O
42	T451	4	0.45	0.05	438.	456.	2.2	623.4	10.63	9.57	9.72	45.4	9.25	10.3	2	O
42	T451	4	0.55	0.00	452.	469.	2.5	609.5	10.41	9.57	9.47	44.1	8.97	10.3	2	O
42	T451	4	0.65	0.00	465.	482.	2.9	582.9	9.95	9.57	9.23	42.8	8.69	10.3	2	O
42	T451	4	0.75	0.00	477.	493.	3.2	546.4	9.23	9.57	8.21	37.8	7.68	10.3	2	O
42	T451	4	0.85	0.00	488.	502.	3.4	503.1	8.38	9.57	7.03	32.0	6.52	10.3	2	O
42	T451	4	0.95	0.00	498.	510.	3.6	453.3	7.43	9.57	5.86	26.2	5.35	10.3	2	O
43	T432	5	0.05	0.00	381.	395.	0.6	554.8	9.10	9.53	7.43	35.6	7.36	9.9	2	O
43	T432	5	0.15	0.01	391.	407.	0.9	586.3	9.71	9.53	8.32	40.2	8.29	9.9	2	O
43	T432	5	0.25	0.09	401.	418.	1.2	611.0	10.19	9.53	9.21	44.8	9.21	9.9	2	O
43	T432	5	0.35	0.14	413.	430.	1.5	627.4	10.53	9.53	9.92	48.0	9.81	9.9	2	O
43	T432	5	0.45	0.22	424.	442.	1.8	627.0	10.55	9.53	9.67	46.6	9.52	9.9	2	O
43	T432	5	0.55	0.09	435.	453.	2.1	613.1	10.34	9.53	9.43	45.3	9.24	9.9	2	O
43	T432	5	0.65	0.08	446.	463.	2.3	586.6	9.88	9.53	9.18	44.0	8.95	9.9	2	O
43	T432	5	0.75	0.00	457.	472.	2.5	550.0	9.18	9.53	8.17	38.8	7.91	9.9	2	O
43	T432	5	0.85	0.00	466.	480.	2.7	507.4	8.35	9.53	7.00	32.9	6.71	9.9	2	O
43	T432	5	0.95	0.00	474.	486.	2.8	459.2	7.44	9.53	5.83	26.9	5.50	9.9	2	O
44	T434	5	0.05	0.00	381.	396.	0.6	566.3	9.29	9.74	7.64	36.2	7.48	10.2	2	O
44	T434	5	0.15	0.17	391.	408.	1.0	599.5	9.92	9.74	8.55	40.9	8.42	10.2	2	O
44	T434	5	0.25	0.21	403.	420.	1.3	625.1	10.43	9.74	9.47	45.6	9.36	10.2	2	O
44	T434	5	0.35	0.26	414.	432.	1.8	642.3	10.78	9.74	10.24	49.1	10.06	10.2	2	O
44	T434	5	0.45	0.21	426.	445.	2.2	642.2	10.81	9.74	9.99	47.8	9.76	10.2	2	O
44	T434	5	0.55	0.19	438.	456.	2.6	627.9	10.59	9.74	9.73	46.4	9.47	10.2	2	O
44	T434	5	0.65	0.16	450.	467.	3.1	600.8	10.12	9.74	9.48	45.0	9.18	10.2	2	O
44	T434	5	0.75	0.04	461.	477.	3.5	563.7	9.39	9.74	8.43	39.8	8.11	10.2	2	O
44	T434	5	0.85	0.11	471.	485.	3.8	519.4	8.54	9.74	7.22	33.7	6.87	10.2	2	O
44	T434	5	0.95	0.00	480.	492.	4.1	468.6	7.58	9.74	6.01	27.5	5.64	10.2	2	O
45	T494	4	0.05	0.00	384.	399.	0.8	586.0	7.07	7.44	5.70	27.1	7.60	7.7	1	F
45	T494	4	0.15	0.00	396.	413.	1.3	623.8	7.58	7.44	6.38	30.5	8.55	7.7	1	F
45	T494	4	0.25	0.00	410.	428.	1.8	652.7	7.99	7.44	7.05	33.9	9.51	7.7	1	F
45	T494	4	0.35	0.00	424.	443.	2.3	671.9	8.27	7.44	7.62	36.6	10.27	7.7	1	F
45	T494	4	0.45	0.00	439.	457.	2.8	671.8	8.29	7.44	7.43	35.5	9.97	7.7	1	F
45	T494	4	0.55	0.00	453.	471.	3.3	656.2	8.11	7.44	7.24	34.4	9.67	7.7	1	F
45	T494	4	0.65	0.00	466.	483.	3.7	626.4	7.74	7.44	7.04	33.4	9.37	7.7	1	F
45	T494	4	0.75	0.00	478.	494.	4.1	585.4	7.16	7.44	6.26	29.5	8.28	7.7	1	F
45	T494	4	0.85	0.00	489.	504.	4.4	536.6	6.48	7.44	5.36	25.0	7.01	7.7	1	F
45	T494	4	0.95	0.00	499.	511.	4.6	480.6	5.73	7.44	4.46	20.5	5.75	7.7	1	F
46	T424	3	0.05	0.00	384.	399.	0.9	587.5	7.05	7.39	5.69	27.5	7.72	7.7	1	F
46	T424	3	0.15	0.00	397.	414.	1.3	622.9	7.53	7.39	6.37	30.9	8.69	7.7	1	F
46	T424	3	0.25	0.00	411.	429.	1.8	650.6	7.92	7.39	7.05	34.4	9.66	7.7	1	F
46	T424	3	0.35	0.00	426.	445.	2.4	669.4	8.19	7.39	7.62	37.3	10.47	7.7	1	F
46	T424	3	0.45	0.00	441.	460.	2.9	669.2	8.21	7.39	7.42	36.2	10.16	7.7	1	F
46	T424	3	0.55	0.00	456.	474.	3.4	653.8	8.03	7.39	7.23	35.1	9.85	7.7	1	F
46	T424	3	0.65	0.00	471.	488.	3.9	624.3	7.67	7.39	7.04	34.0	9.55	7.7	1	F
46	T424	3	0.75	0.00	484.	500.	4.3	583.6	7.10	7.39	6.25	30.0	8.43	7.7	1	F
46	T424	3	0.85	0.00	496.	510.	4.6	536.2	6.44	7.39	5.35	25.4	7.14	7.7	1	F
46	T424	3	0.95	0.00	506.	519.	4.9	482.5	5.72	7.39	4.45	20.8	5.85	7.7	1	F
47	T470	3	0.05	0.00	384.	399.	0.7	559.3	9.37	9.93	7.61	37.9	7.85	10.9	2	O
47	T470	3	0.15	0.06	397.	414.	1.1	597.0	10.10	9.93	8.52	42.9	8.84	10.9	2	O
47	T470	3	0.25	0.14	411.	429.	1.5	624.9	10.67	9.93	9.43	47.8	9.83	10.9	2	O
47	T470	3	0.35	0.15	427.	445.	1.9	642.4	11.03	9.93	10.18	52.2	10.69	10.9	2	O

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
47	T470	3	0.45	0.18	442.	460.	2.3	642.3	11.07	9.93	9.93	50.7	10.37	10.9	2	O
47	T470	3	0.55	0.07	457.	475.	2.7	627.7	10.84	9.93	9.67	49.3	10.06	10.9	2	O
47	T470	3	0.65	0.04	472.	489.	3.1	599.9	10.35	9.93	9.42	47.8	9.75	10.9	2	O
47	T470	3	0.75	0.00	486.	502.	3.5	561.9	9.59	9.93	8.38	42.2	8.60	10.9	2	O
47	T470	3	0.85	0.01	498.	512.	3.7	515.5	8.68	9.93	7.18	35.7	7.28	10.9	2	O
47	T470	3	0.95	0.00	509.	521.	4.0	460.7	7.62	9.93	5.98	29.1	5.97	10.9	2	O
48	T453	3	0.05	0.05	384.	398.	0.7	560.0	9.16	9.65	7.59	38.5	7.97	10.5	2	O
48	T453	3	0.15	0.19	397.	413.	1.0	594.5	9.82	9.65	8.49	43.5	8.98	10.5	2	O
48	T453	3	0.25	0.28	411.	429.	1.5	620.7	10.34	9.65	9.40	48.5	9.98	10.5	2	O
48	T453	3	0.35	0.41	426.	444.	1.9	637.8	10.69	9.65	10.15	53.1	10.89	10.5	2	O
48	T453	3	0.45	0.30	441.	459.	2.3	637.7	10.72	9.65	9.90	51.6	10.57	10.5	2	O
48	T453	3	0.55	0.29	456.	474.	2.7	623.4	10.50	9.65	9.64	50.1	10.25	10.5	2	O
48	T453	3	0.65	0.18	471.	488.	3.1	596.1	10.03	9.65	9.39	48.6	9.93	10.5	2	O
48	T453	3	0.75	0.14	484.	500.	3.4	558.7	9.31	9.65	8.35	42.9	8.76	10.5	2	O
48	T453	3	0.85	0.11	496.	511.	3.7	514.1	8.44	9.65	7.16	36.2	7.42	10.5	2	O
48	T453	3	0.95	0.14	507.	519.	3.9	462.4	7.47	9.65	5.96	29.6	6.07	10.5	2	O
49	T439	4	0.05	0.00	384.	398.	0.6	566.2	9.22	9.66	7.56	38.9	8.08	10.4	2	O
49	T439	4	0.15	0.00	396.	413.	1.0	598.7	9.84	9.66	8.46	44.0	9.10	10.4	2	O
49	T439	4	0.25	0.19	410.	427.	1.4	624.0	10.34	9.66	9.37	49.1	10.12	10.4	2	O
49	T439	4	0.35	0.27	424.	442.	1.8	641.2	10.68	9.66	10.11	53.8	11.08	10.4	2	O
49	T439	4	0.45	0.33	439.	457.	2.2	641.0	10.71	9.66	9.86	52.3	10.75	10.4	2	O
49	T439	4	0.55	0.25	453.	470.	2.6	626.8	10.49	9.66	9.61	50.8	10.43	10.4	2	O
49	T439	4	0.65	0.13	466.	483.	2.9	599.5	10.03	9.66	9.36	49.3	10.10	10.4	2	O
49	T439	4	0.75	0.11	478.	494.	3.2	562.0	9.31	9.66	8.32	43.5	8.90	10.4	2	O
49	T439	4	0.85	0.02	489.	503.	3.5	518.2	8.46	9.66	7.13	36.8	7.54	10.4	2	O
49	T439	4	0.95	0.00	499.	511.	3.6	468.2	7.53	9.66	5.94	30.0	6.17	10.4	2	O
50	T466	5	0.05	0.00	381.	395.	0.6	560.9	9.20	9.63	7.53	39.3	8.18	10.0	2	O
50	T466	5	0.15	0.00	391.	407.	0.9	592.9	9.81	9.63	8.43	44.5	9.21	10.0	2	O
50	T466	5	0.25	0.02	402.	419.	1.2	617.9	10.30	9.63	9.33	49.6	10.24	10.0	2	O
50	T466	5	0.35	0.04	413.	431.	1.5	635.0	10.65	9.63	10.06	54.5	11.24	10.0	2	O
50	T466	5	0.45	0.04	425.	442.	1.8	634.8	10.68	9.63	9.82	53.0	10.91	10.0	2	O
50	T466	5	0.55	0.13	436.	454.	2.1	620.7	10.46	9.63	9.57	51.5	10.58	10.0	2	O
50	T466	5	0.65	0.04	447.	464.	2.4	593.8	9.99	9.63	9.32	49.9	10.25	10.0	2	O
50	T466	5	0.75	0.00	458.	473.	2.6	556.6	9.28	9.63	8.29	44.0	9.03	10.0	2	O
50	T466	5	0.85	0.00	467.	481.	2.8	513.2	8.44	9.63	7.10	37.2	7.64	10.0	2	O
50	T466	5	0.95	0.00	475.	488.	2.9	463.7	7.51	9.63	5.91	30.4	6.26	10.0	2	O
51	T476	5	0.05	0.07	381.	396.	0.6	567.9	9.36	9.83	7.72	39.2	8.17	10.3	2	O
51	T476	5	0.15	0.21	391.	408.	0.9	601.5	10.00	9.83	8.64	44.4	9.21	10.3	2	O
51	T476	5	0.25	0.34	403.	421.	1.3	627.4	10.51	9.83	9.57	49.5	10.24	10.3	2	O
51	T476	5	0.35	0.33	415.	433.	1.7	645.1	10.88	9.83	10.36	54.4	11.22	10.3	2	O
51	T476	5	0.45	0.35	427.	445.	2.2	645.2	10.91	9.83	10.10	52.8	10.89	10.3	2	O
51	T476	5	0.55	0.25	439.	457.	2.6	630.8	10.69	9.83	9.84	51.3	10.57	10.3	2	O
51	T476	5	0.65	0.24	450.	468.	3.1	603.5	10.21	9.83	9.59	49.8	10.24	10.3	2	O
51	T476	5	0.75	0.14	461.	477.	3.5	566.0	9.47	9.83	8.52	43.9	9.01	10.3	2	O
51	T476	5	0.85	0.11	471.	486.	3.9	521.2	8.61	9.83	7.30	37.1	7.63	10.3	2	O
51	T476	5	0.95	0.14	480.	492.	4.2	469.4	7.64	9.83	6.08	30.3	6.25	10.3	2	O
52	T436	4	0.05	0.00	383.	398.	0.8	587.6	7.11	7.46	5.76	29.1	8.16	7.7	1	F
52	T436	4	0.15	0.00	396.	413.	1.3	623.4	7.60	7.46	6.45	32.7	9.19	7.7	1	F
52	T436	4	0.25	0.00	409.	427.	1.8	651.3	7.99	7.46	7.13	36.4	10.22	7.7	1	F
52	T436	4	0.35	0.00	423.	441.	2.3	670.7	8.27	7.46	7.72	39.9	11.20	7.7	1	F
52	T436	4	0.45	0.00	437.	455.	2.7	670.9	8.30	7.46	7.52	38.7	10.87	7.7	1	F
52	T436	4	0.55	0.00	450.	468.	3.2	655.4	8.12	7.46	7.33	37.5	10.54	7.7	1	F

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
52	T436	4	0.65	0.00	463.	480.	3.6	625.7	7.75	7.46	7.13	36.4	10.21	7.7	1	F
52	T436	4	0.75	0.00	474.	490.	3.9	584.8	7.17	7.46	6.33	32.0	8.99	7.7	1	F
52	T436	4	0.85	0.00	485.	499.	4.2	536.8	6.50	7.46	5.42	27.1	7.61	7.7	1	F
52	T436	4	0.95	0.00	494.	506.	4.4	482.1	5.76	7.46	4.51	22.2	6.24	7.7	1	F
53	T454	4	0.05	0.00	384.	399.	0.7	567.7	9.26	9.76	7.69	39.0	8.14	10.5	2	O
53	T454	4	0.15	0.22	397.	413.	1.1	603.2	9.93	9.76	8.61	44.1	9.17	10.5	2	O
53	T454	4	0.25	0.35	411.	428.	1.5	630.0	10.46	9.76	9.54	49.2	10.19	10.5	2	O
53	T454	4	0.35	0.40	425.	444.	1.9	647.9	10.82	9.76	10.31	53.9	11.16	10.5	2	O
53	T454	4	0.45	0.40	440.	458.	2.3	648.0	10.86	9.76	10.06	52.4	10.83	10.5	2	O
53	T454	4	0.55	0.32	454.	472.	2.7	633.5	10.63	9.76	9.80	50.9	10.51	10.5	2	O
53	T454	4	0.65	0.32	468.	485.	3.0	605.7	10.16	9.76	9.55	49.4	10.18	10.5	2	O
53	T454	4	0.75	0.09	480.	496.	3.4	567.7	9.42	9.76	8.49	43.5	8.96	10.5	2	O
53	T454	4	0.85	0.07	492.	506.	3.6	522.0	8.54	9.76	7.27	36.8	7.59	10.5	2	O
53	T454	4	0.95	0.13	502.	514.	3.8	468.5	7.55	9.76	6.05	30.1	6.22	10.5	2	O
54	T455	4	0.05	0.08	384.	398.	0.7	568.6	9.25	9.74	7.67	38.8	8.11	10.5	2	O
54	T455	4	0.15	0.12	396.	413.	1.1	604.0	9.91	9.74	8.59	43.9	9.13	10.5	2	O
54	T455	4	0.25	0.31	410.	428.	1.5	630.7	10.44	9.74	9.51	48.9	10.15	10.5	2	O
54	T455	4	0.35	0.34	425.	443.	1.9	648.7	10.80	9.74	10.28	53.6	11.11	10.5	2	O
54	T455	4	0.45	0.34	439.	458.	2.3	648.7	10.83	9.74	10.03	52.1	10.79	10.5	2	O
54	T455	4	0.55	0.33	453.	471.	2.7	634.2	10.61	9.74	9.77	50.6	10.46	10.5	2	O
54	T455	4	0.65	0.25	467.	484.	3.0	606.3	10.14	9.74	9.52	49.1	10.14	10.5	2	O
54	T455	4	0.75	0.11	479.	495.	3.3	568.2	9.40	9.74	8.46	43.3	8.93	10.5	2	O
54	T455	4	0.85	0.13	490.	505.	3.6	522.5	8.53	9.74	7.25	36.6	7.56	10.5	2	O
54	T455	4	0.95	0.08	500.	513.	3.8	469.2	7.54	9.74	6.04	29.9	6.19	10.5	2	O
55	T475	4	0.05	0.01	383.	398.	0.7	557.8	9.42	9.98	7.65	38.3	8.01	10.7	2	O
55	T475	4	0.15	0.21	396.	412.	1.0	595.3	10.15	9.98	8.56	43.3	9.01	10.7	2	O
55	T475	4	0.25	0.34	409.	427.	1.4	623.0	10.72	9.98	9.48	48.4	10.02	10.7	2	O
55	T475	4	0.35	0.41	423.	441.	1.8	641.1	11.09	9.98	10.25	52.8	10.94	10.7	2	O
55	T475	4	0.45	0.30	437.	455.	2.2	641.3	11.13	9.98	9.99	51.3	10.62	10.7	2	O
55	T475	4	0.55	0.28	451.	468.	2.6	626.7	10.90	9.98	9.74	49.9	10.30	10.7	2	O
55	T475	4	0.65	0.22	463.	480.	2.9	598.9	10.41	9.98	9.48	48.4	9.98	10.7	2	O
55	T475	4	0.75	0.18	475.	491.	3.2	560.8	9.64	9.98	8.43	42.6	8.79	10.7	2	O
55	T475	4	0.85	0.13	485.	500.	3.4	514.3	8.72	9.98	7.22	36.1	7.45	10.7	2	O
55	T475	4	0.95	0.04	494.	507.	3.6	459.2	7.66	9.98	6.02	29.5	6.10	10.7	2	O
56	T477	5	0.05	0.00	381.	395.	0.6	562.6	9.29	9.73	7.62	37.9	7.90	10.1	2	O
56	T477	5	0.15	0.00	391.	407.	0.9	594.9	9.91	9.73	8.53	42.8	8.90	10.1	2	O
56	T477	5	0.25	0.00	402.	419.	1.2	620.0	10.41	9.73	9.44	47.7	9.89	10.1	2	O
56	T477	5	0.35	0.00	413.	431.	1.5	637.6	10.76	9.73	10.20	52.0	10.76	10.1	2	O
56	T477	5	0.45	0.00	425.	443.	1.8	637.7	10.79	9.73	9.95	50.6	10.45	10.1	2	O
56	T477	5	0.55	0.00	436.	454.	2.1	623.5	10.57	9.73	9.70	49.1	10.13	10.1	2	O
56	T477	5	0.65	0.00	447.	464.	2.4	596.3	10.10	9.73	9.44	47.7	9.82	10.1	2	O
56	T477	5	0.75	0.00	457.	473.	2.6	558.9	9.38	9.73	8.40	42.0	8.65	10.1	2	O
56	T477	5	0.85	0.00	466.	481.	2.8	515.1	8.52	9.73	7.20	35.5	7.33	10.1	2	O
56	T477	5	0.95	0.00	475.	487.	2.9	464.9	7.58	9.73	5.99	29.0	6.01	10.1	2	O
57	T435	5	0.05	0.12	380.	393.	0.5	575.4	9.43	9.90	7.79	37.4	7.80	10.3	2	O
57	T435	5	0.15	0.28	389.	404.	0.9	609.7	10.08	9.90	8.72	42.2	8.78	10.3	2	O
57	T435	5	0.25	0.33	399.	415.	1.2	635.9	10.59	9.90	9.65	47.1	9.76	10.3	2	O
57	T435	5	0.35	0.36	410.	426.	1.6	654.3	10.96	9.90	10.46	51.1	10.58	10.3	2	O
57	T435	5	0.45	0.31	421.	437.	2.0	654.6	11.00	9.90	10.20	49.7	10.27	10.3	2	O
57	T435	5	0.55	0.27	432.	448.	2.5	640.0	10.77	9.90	9.94	48.3	9.96	10.3	2	O
57	T435	5	0.65	0.29	443.	458.	3.0	612.1	10.29	9.90	9.68	46.9	9.65	10.3	2	O
57	T435	5	0.75	0.20	453.	467.	3.4	574.0	9.55	9.90	8.60	41.3	8.51	10.3	2	O

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
57	T435	5	0.85	0.20	462.	475.	3.8	528.3	8.67	9.90	7.37	35.0	7.21	10.3	2	O
57	T435	5	0.95	0.11	471.	482.	4.2	475.2	7.69	9.90	6.13	28.6	5.91	10.3	2	O
58	T479	5	0.05	0.00	381.	396.	0.6	563.7	9.42	9.89	7.78	36.8	7.69	10.4	2	O
58	T479	5	0.15	0.00	391.	408.	0.9	597.2	10.06	9.89	8.71	41.6	8.65	10.4	2	O
58	T479	5	0.25	0.00	403.	420.	1.3	622.8	10.58	9.89	9.64	46.5	9.62	10.4	2	O
58	T479	5	0.35	0.00	414.	432.	1.6	640.8	10.94	9.89	10.44	50.3	10.40	10.4	2	O
58	T479	5	0.45	0.00	426.	444.	2.0	641.1	10.98	9.89	10.18	48.9	10.09	10.4	2	O
58	T479	5	0.55	0.00	438.	456.	2.4	626.8	10.76	9.89	9.92	47.5	9.79	10.4	2	O
58	T479	5	0.65	0.00	449.	466.	2.7	599.4	10.28	9.89	9.66	46.1	9.49	10.4	2	O
58	T479	5	0.75	0.00	460.	476.	3.1	562.0	9.53	9.89	8.58	40.6	8.37	10.4	2	O
58	T479	5	0.85	0.00	469.	484.	3.4	517.3	8.66	9.89	7.35	34.4	7.09	10.4	2	O
58	T479	5	0.95	0.00	478.	490.	3.6	465.6	7.68	9.89	6.12	28.1	5.81	10.4	2	O
59	T456	5	0.05	0.15	381.	396.	0.6	569.7	9.33	9.83	7.76	36.5	7.60	10.3	2	O
59	T456	5	0.15	0.25	391.	408.	0.9	605.4	10.00	9.83	8.69	41.2	8.56	10.3	2	O
59	T456	5	0.25	0.30	402.	420.	1.3	632.3	10.53	9.83	9.61	46.0	9.51	10.3	2	O
59	T456	5	0.35	0.36	414.	432.	1.6	650.8	10.90	9.83	10.41	49.7	10.26	10.3	2	O
59	T456	5	0.45	0.35	426.	444.	2.0	651.1	10.94	9.83	10.15	48.3	9.96	10.3	2	O
59	T456	5	0.55	0.29	437.	455.	2.3	636.5	10.72	9.83	9.89	46.9	9.66	10.3	2	O
59	T456	5	0.65	0.28	449.	466.	2.6	608.5	10.23	9.83	9.64	45.5	9.36	10.3	2	O
59	T456	5	0.75	0.26	459.	475.	2.9	570.1	9.49	9.83	8.56	40.2	8.26	10.3	2	O
59	T456	5	0.85	0.14	469.	483.	3.1	524.0	8.60	9.83	7.33	34.0	7.00	10.3	2	O
59	T456	5	0.95	0.14	477.	490.	3.4	469.9	7.60	9.83	6.11	27.8	5.74	10.3	2	O
60	T422	5	0.05	0.13	381.	396.	0.6	571.2	9.39	9.85	7.73	36.0	7.50	10.3	2	O
60	T422	5	0.15	0.28	391.	408.	0.9	604.5	10.03	9.85	8.66	40.7	8.44	10.3	2	O
60	T422	5	0.25	0.33	402.	420.	1.2	630.2	10.54	9.85	9.58	45.4	9.39	10.3	2	O
60	T422	5	0.35	0.42	413.	432.	1.6	648.5	10.90	9.85	10.37	48.9	10.07	10.3	2	O
60	T422	5	0.45	0.42	425.	443.	1.9	648.7	10.94	9.85	10.12	47.5	9.77	10.3	2	O
60	T422	5	0.55	0.39	436.	454.	2.2	634.3	10.71	9.85	9.86	46.1	9.48	10.3	2	O
60	T422	5	0.65	0.33	447.	465.	2.5	606.6	10.23	9.85	9.60	44.8	9.19	10.3	2	O
60	T422	5	0.75	0.28	458.	474.	2.8	568.5	9.49	9.85	8.53	39.5	8.12	10.3	2	O
60	T422	5	0.85	0.27	467.	481.	3.0	523.5	8.63	9.85	7.31	33.5	6.88	10.3	2	O
60	T422	5	0.95	0.18	475.	488.	3.1	471.7	7.66	9.85	6.09	27.4	5.64	10.3	2	O
61	T438	5	0.05	0.00	380.	393.	0.5	572.5	9.37	9.82	7.71	35.5	7.39	10.1	2	O
61	T438	5	0.15	0.00	389.	403.	0.8	605.4	10.00	9.82	8.63	40.2	8.31	10.1	2	O
61	T438	5	0.25	0.00	398.	414.	1.1	631.0	10.50	9.82	9.55	44.8	9.24	10.1	2	O
61	T438	5	0.35	0.00	409.	424.	1.4	649.3	10.87	9.82	10.33	47.8	9.83	10.1	2	O
61	T438	5	0.45	0.00	419.	435.	1.6	649.7	10.90	9.82	10.07	46.5	9.54	10.1	2	O
61	T438	5	0.55	0.00	429.	445.	1.9	635.2	10.68	9.82	9.82	45.2	9.25	10.1	2	O
61	T438	5	0.65	0.00	440.	454.	2.2	607.4	10.20	9.82	9.56	43.8	8.97	10.1	2	O
61	T438	5	0.75	0.00	449.	463.	2.4	569.2	9.47	9.82	8.50	38.7	7.93	10.1	2	O
61	T438	5	0.85	0.00	458.	470.	2.6	524.4	8.61	9.82	7.28	32.8	6.72	10.1	2	O
61	T438	5	0.95	0.00	466.	476.	2.7	472.7	7.65	9.82	6.07	26.8	5.51	10.1	2	O

X425B

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
1	F418	5	0.05	0.00	379.	391.	0.8	625.3	5.14	5.32	4.03	21.0	7.39	4.9	1	F
1	F418	5	0.15	0.00	387.	400.	1.2	659.7	5.43	5.32	4.50	24.0	8.46	4.9	1	F
1	F418	5	0.25	0.00	395.	409.	1.6	690.7	5.68	5.32	4.96	27.1	9.52	4.9	1	F
1	F418	5	0.35	0.00	404.	418.	2.0	714.8	5.86	5.32	5.29	29.5	10.38	4.9	1	F
1	F418	5	0.45	0.00	413.	427.	2.4	719.2	5.87	5.32	5.16	28.9	10.17	4.9	1	F
1	F418	5	0.55	0.00	422.	436.	2.7	706.5	5.75	5.32	5.04	28.3	9.97	4.9	1	F
1	F418	5	0.65	0.00	430.	444.	3.0	676.8	5.50	5.32	4.92	27.7	9.76	4.9	1	F
1	F418	5	0.75	0.00	438.	451.	3.3	630.4	5.10	5.32	4.38	24.5	8.60	4.9	1	F
1	F418	5	0.85	0.00	445.	457.	3.6	574.7	4.66	5.32	3.76	20.6	7.26	4.9	1	F
1	F418	5	0.95	0.00	452.	462.	3.8	511.4	4.21	5.32	3.14	16.8	5.91	4.9	1	F
2	B816	5	0.05	0.00	379.	392.	0.9	627.0	5.16	5.35	4.07	21.2	7.44	4.9	1	F
2	B816	5	0.15	0.00	388.	402.	1.3	663.8	5.46	5.35	4.54	24.2	8.52	4.9	1	F
2	B816	5	0.25	0.00	397.	412.	1.7	696.0	5.72	5.35	5.02	27.3	9.59	4.9	1	F
2	B816	5	0.35	0.00	406.	422.	2.1	720.3	5.89	5.35	5.34	29.7	10.46	4.9	1	F
2	B816	5	0.45	0.00	415.	431.	2.5	724.9	5.90	5.35	5.22	29.1	10.25	4.9	1	F
2	B816	5	0.55	0.00	425.	440.	2.9	712.1	5.79	5.35	5.09	28.5	10.04	4.9	1	F
2	B816	5	0.65	0.00	434.	449.	3.2	681.9	5.53	5.35	4.97	27.9	9.83	4.9	1	F
2	B816	5	0.75	0.00	442.	456.	3.6	634.7	5.13	5.35	4.42	24.6	8.66	4.9	1	F
2	B816	5	0.85	0.00	450.	463.	3.8	577.7	4.68	5.35	3.79	20.8	7.30	4.9	1	F
2	B816	5	0.95	0.00	457.	468.	4.1	512.1	4.22	5.35	3.17	16.9	5.94	4.9	1	F
3	T440	5	0.05	0.40	380.	393.	0.5	516.1	13.08	13.60	11.12	57.7	7.34	14.4	3	O
3	T440	5	0.15	0.60	389.	403.	0.8	546.9	13.88	13.60	12.44	65.5	8.40	14.4	3	O
3	T440	5	0.25	0.78	398.	414.	1.0	571.7	14.54	13.60	13.75	73.3	9.46	14.4	3	O
3	T440	5	0.35	0.75	408.	425.	1.3	589.1	14.94	13.60	14.64	79.3	10.30	14.4	3	O
3	T440	5	0.45	0.90	419.	435.	1.6	593.2	14.95	13.60	14.28	77.3	10.10	14.4	3	O
3	T440	5	0.55	0.85	429.	445.	1.9	584.6	14.67	13.60	13.93	75.3	9.89	14.4	3	O
3	T440	5	0.65	0.60	439.	454.	2.1	563.4	14.05	13.60	13.57	73.4	9.69	14.4	3	O
3	T440	5	0.75	0.49	448.	462.	2.3	530.2	13.08	13.60	12.05	64.7	8.54	14.4	3	O
3	T440	5	0.85	0.30	456.	469.	2.5	486.6	11.98	13.60	10.34	54.7	7.20	14.4	3	O
3	T440	5	0.95	0.17	464.	475.	2.6	432.4	10.80	13.60	8.63	44.7	5.86	14.4	3	O
4	B814	5	0.05	0.00	380.	393.	0.9	644.5	5.21	5.41	4.14	20.7	7.29	5.0	1	F
4	B814	5	0.15	0.00	388.	403.	1.3	685.5	5.53	5.41	4.62	23.7	8.34	5.0	1	F
4	B814	5	0.25	0.00	397.	413.	1.7	720.2	5.79	5.41	5.10	26.7	9.39	5.0	1	F
4	B814	5	0.35	0.00	407.	423.	2.1	745.6	5.97	5.41	5.44	29.1	10.23	5.0	1	F
4	B814	5	0.45	0.00	416.	433.	2.6	750.7	5.98	5.41	5.31	28.5	10.03	5.0	1	F
4	B814	5	0.55	0.00	426.	442.	2.9	737.4	5.86	5.41	5.19	27.9	9.82	5.0	1	F
4	B814	5	0.65	0.00	435.	450.	3.3	705.7	5.60	5.41	5.06	27.3	9.62	5.0	1	F
4	B814	5	0.75	0.00	444.	458.	3.6	656.0	5.19	5.41	4.49	24.1	8.48	5.0	1	F
4	B814	5	0.85	0.00	451.	464.	3.9	595.6	4.73	5.41	3.86	20.3	7.16	5.0	1	F
4	B814	5	0.95	0.00	458.	470.	4.1	525.2	4.25	5.41	3.22	16.6	5.83	5.0	1	F
5	B843	5	0.05	0.00	379.	391.	0.8	644.9	5.23	5.44	4.17	20.9	7.34	5.0	1	F
5	B843	5	0.15	0.00	387.	401.	1.2	686.9	5.55	5.44	4.65	23.9	8.40	5.0	1	F
5	B843	5	0.25	0.00	395.	410.	1.6	722.2	5.83	5.44	5.14	26.9	9.46	5.0	1	F
5	B843	5	0.35	0.00	404.	419.	2.0	747.9	6.01	5.44	5.49	29.3	10.31	5.0	1	F
5	B843	5	0.45	0.00	413.	428.	2.4	753.1	6.02	5.44	5.36	28.7	10.10	5.0	1	F
5	B843	5	0.55	0.00	422.	437.	2.7	739.8	5.90	5.44	5.24	28.1	9.90	5.0	1	F
5	B843	5	0.65	0.00	431.	445.	3.1	707.7	5.64	5.44	5.11	27.6	9.69	5.0	1	F
5	B843	5	0.75	0.00	439.	452.	3.4	657.4	5.22	5.44	4.53	24.3	8.55	5.0	1	F

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
5	B843	5	0.85	0.00	446.	458.	3.7	596.5	4.76	5.44	3.89	20.5	7.21	5.0	1	F
5	B843	5	0.95	0.00	453.	464.	3.9	525.0	4.26	5.44	3.25	16.7	5.87	5.0	1	F
6	F355	5	0.05	0.00	380.	393.	0.9	623.9	5.17	5.34	4.04	21.1	7.42	4.9	1	F
6	F355	5	0.15	0.00	388.	404.	1.4	656.8	5.45	5.34	4.51	24.2	8.50	4.9	1	F
6	F355	5	0.25	0.00	398.	414.	1.8	686.9	5.70	5.34	4.98	27.2	9.57	4.9	1	F
6	F355	5	0.35	0.00	408.	424.	2.3	711.0	5.88	5.34	5.32	29.7	10.44	4.9	1	F
6	F355	5	0.45	0.00	417.	434.	2.7	715.4	5.90	5.34	5.20	29.1	10.23	4.9	1	F
6	F355	5	0.55	0.00	427.	443.	3.1	702.8	5.78	5.34	5.07	28.5	10.02	4.9	1	F
6	F355	5	0.65	0.00	436.	452.	3.4	673.5	5.53	5.34	4.95	27.9	9.81	4.9	1	F
6	F355	5	0.75	0.00	445.	459.	3.7	627.7	5.13	5.34	4.41	24.6	8.65	4.9	1	F
6	F355	5	0.85	0.00	452.	466.	4.0	572.7	4.69	5.34	3.79	20.7	7.30	4.9	1	F
6	F355	5	0.95	0.00	459.	471.	4.2	510.8	4.22	5.34	3.17	16.9	5.94	4.9	1	F
7	T401	4	0.05	0.00	380.	393.	0.5	534.5	13.40	13.86	11.11	58.0	7.47	14.7	3	R
7	T401	4	0.15	0.00	389.	404.	0.8	561.6	14.14	13.86	12.43	65.9	8.56	14.7	3	R
7	T401	4	0.25	0.00	399.	415.	1.0	584.7	14.78	13.86	13.74	73.8	9.64	14.7	3	R
7	T401	4	0.35	0.00	409.	425.	1.3	602.2	15.19	13.86	14.64	79.8	10.51	14.7	3	R
7	T401	4	0.45	0.00	419.	435.	1.6	606.1	15.21	13.86	14.29	77.8	10.30	14.7	3	R
7	T401	4	0.55	0.00	429.	445.	1.8	597.3	14.92	13.86	13.93	75.8	10.09	14.7	3	R
7	T401	4	0.65	0.00	439.	454.	2.0	576.2	14.30	13.86	13.58	73.9	9.88	14.7	3	R
7	T401	4	0.75	0.00	448.	462.	2.2	543.0	13.32	13.86	12.07	65.1	8.71	14.7	3	R
7	T401	4	0.85	0.00	456.	469.	2.4	500.3	12.24	13.86	10.36	55.0	7.34	14.7	3	R
7	T401	4	0.95	0.00	463.	474.	2.5	448.7	11.09	13.86	8.64	44.9	5.98	14.7	3	R
8	T441	4	0.05	0.41	382.	395.	0.6	515.2	13.18	13.73	11.26	57.5	7.50	15.0	3	O
8	T441	4	0.15	0.54	393.	408.	1.0	544.6	14.00	13.73	12.59	65.3	8.58	15.0	3	O
8	T441	4	0.25	0.77	405.	421.	1.4	568.6	14.67	13.73	13.92	73.1	9.67	15.0	3	O
8	T441	4	0.35	0.79	418.	434.	1.7	585.7	15.09	13.73	14.87	78.8	10.54	15.0	3	O
8	T441	4	0.45	0.79	430.	446.	2.1	589.6	15.12	13.73	14.51	76.9	10.33	15.0	3	O
8	T441	4	0.55	0.75	443.	458.	2.5	581.2	14.82	13.73	14.15	74.9	10.12	15.0	3	O
8	T441	4	0.65	0.58	454.	469.	2.8	560.4	14.20	13.73	13.79	72.9	9.91	15.0	3	O
8	T441	4	0.75	0.29	465.	479.	3.1	527.8	13.22	13.73	12.26	64.3	8.72	15.0	3	O
8	T441	4	0.85	0.18	475.	488.	3.3	485.0	12.10	13.73	10.51	54.3	7.35	15.0	3	O
8	T441	4	0.95	0.14	484.	495.	3.5	432.2	10.87	13.73	8.77	44.4	5.98	15.0	3	O
9	T442	4	0.05	0.18	382.	395.	0.6	525.8	13.18	13.74	11.28	57.3	7.39	15.0	3	O
9	T442	4	0.15	0.56	393.	408.	1.0	556.9	14.02	13.74	12.62	65.0	8.47	15.0	3	O
9	T442	4	0.25	0.77	405.	421.	1.3	582.0	14.69	13.74	13.95	72.8	9.54	15.0	3	O
9	T442	4	0.35	0.94	418.	434.	1.7	599.6	15.11	13.74	14.90	78.4	10.38	15.0	3	O
9	T442	4	0.45	0.94	430.	447.	2.1	603.8	15.14	13.74	14.54	76.5	10.17	15.0	3	O
9	T442	4	0.55	0.86	443.	459.	2.4	595.1	14.84	13.74	14.18	74.5	9.97	15.0	3	O
9	T442	4	0.65	0.56	455.	470.	2.7	573.6	14.22	13.74	13.82	72.6	9.76	15.0	3	O
9	T442	4	0.75	0.38	466.	480.	3.0	539.9	13.24	13.74	12.28	64.0	8.59	15.0	3	O
9	T442	4	0.85	0.26	475.	488.	3.2	495.7	12.11	13.74	10.53	54.1	7.25	15.0	3	O
9	T442	4	0.95	0.19	484.	495.	3.4	440.6	10.87	13.74	8.78	44.2	5.90	15.0	3	O
10	T402	4	0.05	0.00	380.	394.	0.5	545.6	13.42	13.91	11.20	58.1	7.28	14.8	3	R
10	T402	4	0.15	0.00	389.	404.	0.7	576.9	14.20	13.91	12.52	65.9	8.33	14.8	3	R
10	T402	4	0.25	0.00	399.	415.	1.0	602.4	14.84	13.91	13.84	73.8	9.39	14.8	3	R
10	T402	4	0.35	0.00	409.	426.	1.3	620.8	15.26	13.91	14.76	80.1	10.21	14.8	3	R
10	T402	4	0.45	0.00	419.	436.	1.5	625.1	15.28	13.91	14.40	78.1	10.01	14.8	3	R
10	T402	4	0.55	0.00	430.	446.	1.8	616.1	14.99	13.91	14.05	76.1	9.80	14.8	3	R
10	T402	4	0.65	0.00	439.	455.	2.0	593.6	14.36	13.91	13.69	74.1	9.60	14.8	3	R
10	T402	4	0.75	0.00	449.	463.	2.2	558.3	13.38	13.91	12.16	65.3	8.46	14.8	3	R
10	T402	4	0.85	0.00	457.	470.	2.4	512.8	12.28	13.91	10.43	55.2	7.13	14.8	3	R
10	T402	4	0.95	0.00	464.	476.	2.6	456.3	11.10	13.91	8.70	45.1	5.81	14.8	3	R

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
11	F427	5	0.05	0.00	380.	393.	0.9	651.4	5.27	5.50	4.22	20.5	7.23	5.1	1	F
11	F427	5	0.15	0.00	388.	403.	1.3	693.5	5.61	5.50	4.71	23.5	8.27	5.1	1	F
11	F427	5	0.25	0.00	397.	413.	1.7	728.9	5.88	5.50	5.20	26.5	9.32	5.1	1	F
11	F427	5	0.35	0.00	407.	423.	2.2	754.9	6.07	5.50	5.58	28.8	10.14	5.1	1	F
11	F427	5	0.45	0.00	417.	433.	2.6	760.3	6.09	5.50	5.45	28.2	9.93	5.1	1	F
11	F427	5	0.55	0.00	426.	442.	3.0	747.0	5.97	5.50	5.32	27.7	9.73	5.1	1	F
11	F427	5	0.65	0.00	435.	451.	3.3	714.5	5.70	5.50	5.19	27.1	9.53	5.1	1	F
11	F427	5	0.75	0.00	444.	459.	3.7	663.7	5.28	5.50	4.61	23.9	8.40	5.1	1	F
11	F427	5	0.85	0.00	452.	465.	4.0	602.3	4.80	5.50	3.95	20.1	7.09	5.1	1	F
11	F427	5	0.95	0.00	459.	471.	4.2	530.3	4.29	5.50	3.30	16.4	5.77	5.1	1	F
12	B767	5	0.05	0.00	379.	393.	0.9	618.7	5.18	5.36	4.06	20.4	7.18	5.0	1	F
12	B767	5	0.15	0.00	388.	403.	1.4	650.2	5.47	5.36	4.53	23.3	8.21	5.0	1	F
12	B767	5	0.25	0.00	397.	412.	1.8	679.5	5.72	5.36	5.00	26.3	9.25	5.0	1	F
12	B767	5	0.35	0.00	407.	423.	2.2	703.2	5.91	5.36	5.35	28.6	10.07	5.0	1	F
12	B767	5	0.45	0.00	416.	432.	2.7	707.6	5.92	5.36	5.23	28.0	9.87	5.0	1	F
12	B767	5	0.55	0.00	426.	442.	3.1	695.1	5.80	5.36	5.10	27.5	9.66	5.0	1	F
12	B767	5	0.65	0.00	435.	450.	3.4	666.5	5.55	5.36	4.98	26.9	9.46	5.0	1	F
12	B767	5	0.75	0.00	444.	458.	3.7	621.5	5.15	5.36	4.44	23.7	8.35	5.0	1	F
12	B767	5	0.85	0.00	452.	465.	4.0	567.5	4.71	5.36	3.82	20.0	7.05	5.0	1	F
12	B767	5	0.95	0.00	459.	470.	4.3	507.0	4.23	5.36	3.19	16.3	5.74	5.0	1	F
13	T404	4	0.05	0.00	380.	394.	0.5	525.4	13.51	14.00	11.25	58.4	7.24	14.9	3	R
13	T404	4	0.15	0.00	389.	405.	0.8	550.7	14.27	14.00	12.57	66.3	8.28	14.9	3	R
13	T404	4	0.25	0.00	399.	416.	1.0	572.8	14.91	14.00	13.90	74.2	9.33	14.9	3	R
13	T404	4	0.35	0.00	410.	426.	1.3	589.7	15.36	14.00	14.89	80.7	10.16	14.9	3	R
13	T404	4	0.45	0.00	420.	437.	1.6	593.4	15.39	14.00	14.53	78.6	9.96	14.9	3	R
13	T404	4	0.55	0.00	430.	447.	1.8	584.8	15.09	14.00	14.17	76.6	9.76	14.9	3	R
13	T404	4	0.65	0.00	440.	456.	2.0	564.4	14.47	14.00	13.80	74.6	9.55	14.9	3	R
13	T404	4	0.75	0.00	449.	464.	2.2	532.4	13.49	14.00	12.30	65.8	8.44	14.9	3	R
13	T404	4	0.85	0.00	457.	471.	2.4	491.2	12.37	14.00	10.55	55.6	7.12	14.9	3	R
13	T404	4	0.95	0.00	465.	476.	2.5	441.7	11.17	14.00	8.80	45.4	5.80	14.9	3	R
14	T444	3	0.05	0.24	382.	395.	0.7	515.0	13.28	13.85	11.38	59.1	7.29	15.3	3	O
14	T444	3	0.15	0.47	394.	409.	1.1	543.0	14.12	13.85	12.73	67.1	8.35	15.3	3	O
14	T444	3	0.25	0.68	407.	422.	1.5	566.3	14.80	13.85	14.08	75.1	9.40	15.3	3	O
14	T444	3	0.35	0.81	420.	436.	1.9	583.2	15.24	13.85	15.08	82.0	10.25	15.3	3	O
14	T444	3	0.45	0.83	433.	450.	2.4	587.1	15.27	13.85	14.72	79.9	10.04	15.3	3	O
14	T444	3	0.55	0.62	447.	463.	2.8	578.7	14.97	13.85	14.35	77.9	9.84	15.3	3	O
14	T444	3	0.65	0.45	459.	475.	3.1	558.3	14.35	13.85	13.98	75.8	9.63	15.3	3	O
14	T444	3	0.75	0.27	471.	486.	3.5	526.3	13.36	13.85	12.44	66.9	8.51	15.3	3	O
14	T444	3	0.85	0.17	482.	495.	3.7	484.2	12.21	13.85	10.67	56.5	7.17	15.3	3	O
14	T444	3	0.95	0.18	492.	503.	4.0	432.6	10.94	13.85	8.90	46.1	5.84	15.3	3	O
15	T473	3	0.05	0.30	382.	395.	0.7	535.5	13.71	14.40	11.41	59.3	7.38	15.9	3	O
15	T473	3	0.15	0.62	394.	409.	1.1	568.9	14.67	14.40	12.76	67.3	8.45	15.9	3	O
15	T473	3	0.25	0.75	407.	422.	1.5	595.3	15.43	14.40	14.11	75.3	9.51	15.9	3	O
15	T473	3	0.35	0.95	420.	436.	1.9	613.4	15.89	14.40	15.11	82.2	10.38	15.9	3	O
15	T473	3	0.45	0.96	433.	450.	2.3	617.9	15.92	14.40	14.75	80.1	10.17	15.9	3	O
15	T473	3	0.55	0.80	447.	463.	2.7	609.1	15.61	14.40	14.38	78.1	9.96	15.9	3	O
15	T473	3	0.65	0.54	460.	475.	3.1	587.3	14.95	14.40	14.01	76.0	9.75	15.9	3	O
15	T473	3	0.75	0.35	472.	486.	3.5	553.1	13.91	14.40	12.46	67.0	8.61	15.9	3	O
15	T473	3	0.85	0.33	483.	496.	3.7	507.3	12.67	14.40	10.69	56.6	7.26	15.9	3	O
15	T473	3	0.95	0.24	492.	504.	4.0	449.7	11.26	14.40	8.91	46.2	5.91	15.9	3	O
16	T445	3	0.05	0.00	382.	396.	0.6	526.2	13.28	13.88	11.43	59.4	7.45	15.3	3	O
16	T445	3	0.15	0.47	394.	409.	1.0	556.8	14.14	13.88	12.78	67.4	8.53	15.3	3	O

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
16	T445	3	0.25	0.74	407.	422.	1.4	581.6	14.83	13.88	14.13	75.5	9.60	15.3	3	O
16	T445	3	0.35	0.92	420.	436.	1.9	599.2	15.27	13.88	15.14	82.3	10.48	15.3	3	O
16	T445	3	0.45	0.83	433.	450.	2.3	603.5	15.31	13.88	14.78	80.2	10.27	15.3	3	O
16	T445	3	0.55	0.62	447.	463.	2.7	594.9	15.01	13.88	14.41	78.2	10.06	15.3	3	O
16	T445	3	0.65	0.38	460.	475.	3.0	573.4	14.38	13.88	14.04	76.1	9.85	15.3	3	O
16	T445	3	0.75	0.16	472.	486.	3.3	539.8	13.39	13.88	12.49	67.1	8.69	15.3	3	O
16	T445	3	0.85	0.09	482.	495.	3.6	495.8	12.23	13.88	10.71	56.7	7.33	15.3	3	O
16	T445	3	0.95	0.05	492.	503.	3.8	441.1	10.94	13.88	8.93	46.3	5.97	15.3	3	O
17	T405	4	0.05	0.00	380.	394.	0.5	537.6	13.50	14.04	11.33	58.1	7.50	15.0	3	R
17	T405	4	0.15	0.00	389.	405.	0.7	567.6	14.31	14.04	12.67	66.0	8.58	15.0	3	R
17	T405	4	0.25	0.00	399.	415.	1.0	592.4	14.97	14.04	14.01	73.9	9.66	15.0	3	R
17	T405	4	0.35	0.00	410.	426.	1.3	610.4	15.41	14.04	15.00	80.1	10.55	15.0	3	R
17	T405	4	0.45	0.00	420.	437.	1.6	614.6	15.44	14.04	14.64	78.1	10.34	15.0	3	R
17	T405	4	0.55	0.00	431.	447.	1.8	605.8	15.14	14.04	14.28	76.1	10.13	15.0	3	R
17	T405	4	0.65	0.00	441.	456.	2.1	583.7	14.52	14.04	13.91	74.1	9.92	15.0	3	R
17	T405	4	0.75	0.00	450.	465.	2.3	549.1	13.53	14.04	12.38	65.4	8.74	15.0	3	R
17	T405	4	0.85	0.00	459.	472.	2.5	504.7	12.39	14.04	10.62	55.2	7.37	15.0	3	R
17	T405	4	0.95	0.00	467.	478.	2.7	449.7	11.15	14.04	8.85	45.1	6.00	15.0	3	R
18	T413	5	0.05	0.47	380.	394.	0.5	553.1	13.58	14.14	11.45	58.6	7.55	15.1	3	O
18	T413	5	0.15	0.70	389.	405.	0.8	584.4	14.41	14.14	12.80	66.6	8.64	15.1	3	O
18	T413	5	0.25	0.81	399.	415.	1.1	610.0	15.08	14.14	14.16	74.5	9.73	15.1	3	O
18	T413	5	0.35	1.04	410.	426.	1.4	628.7	15.54	14.14	15.19	80.9	10.63	15.1	3	O
18	T413	5	0.45	0.93	421.	437.	1.7	633.2	15.58	14.14	14.83	78.9	10.42	15.1	3	O
18	T413	5	0.55	0.81	431.	448.	2.0	624.1	15.28	14.14	14.46	76.9	10.20	15.1	3	O
18	T413	5	0.65	0.68	441.	457.	2.2	601.2	14.64	14.14	14.09	74.9	9.99	15.1	3	O
18	T413	5	0.75	0.47	451.	466.	2.5	565.3	13.65	14.14	12.54	66.0	8.80	15.1	3	O
18	T413	5	0.85	0.20	460.	473.	2.7	519.5	12.48	14.14	10.76	55.8	7.42	15.1	3	O
18	T413	5	0.95	0.18	468.	480.	2.8	462.6	11.20	14.14	8.97	45.5	6.04	15.1	3	O
19	T414	5	0.05	0.34	380.	394.	0.6	512.9	13.65	14.18	11.42	58.1	7.53	15.1	3	O
19	T414	5	0.15	0.62	389.	404.	0.9	534.9	14.44	14.18	12.77	66.0	8.62	15.1	3	O
19	T414	5	0.25	0.84	399.	415.	1.2	555.1	15.10	14.18	14.13	73.9	9.71	15.1	3	O
19	T414	5	0.35	0.90	409.	426.	1.5	571.4	15.57	14.18	15.19	80.0	10.60	15.1	3	O
19	T414	5	0.45	1.00	420.	437.	1.8	574.8	15.61	14.18	14.82	78.0	10.38	15.1	3	O
19	T414	5	0.55	0.97	430.	447.	2.1	566.6	15.31	14.18	14.45	76.0	10.17	15.1	3	O
19	T414	5	0.65	0.73	440.	456.	2.3	547.3	14.67	14.18	14.08	74.0	9.96	15.1	3	O
19	T414	5	0.75	0.62	450.	464.	2.5	517.2	13.69	14.18	12.56	65.2	8.77	15.1	3	O
19	T414	5	0.85	0.53	458.	472.	2.7	478.4	12.53	14.18	10.77	55.1	7.39	15.1	3	O
19	T414	5	0.95	0.23	466.	477.	2.8	432.7	11.27	14.18	8.98	45.0	6.02	15.1	3	O
20	T446	4	0.05	0.35	382.	396.	0.7	505.2	13.36	13.95	11.47	57.1	7.55	15.3	3	O
20	T446	4	0.15	0.61	394.	409.	1.1	530.5	14.21	13.95	12.82	64.8	8.65	15.3	3	O
20	T446	4	0.25	0.70	406.	422.	1.5	552.2	14.89	13.95	14.18	72.6	9.74	15.3	3	O
20	T446	4	0.35	0.81	419.	436.	1.9	568.4	15.35	13.95	15.24	77.9	10.62	15.3	3	O
20	T446	4	0.45	0.79	432.	449.	2.4	572.0	15.39	13.95	14.87	76.0	10.40	15.3	3	O
20	T446	4	0.55	0.67	445.	461.	2.8	563.9	15.09	13.95	14.50	74.1	10.19	15.3	3	O
20	T446	4	0.65	0.48	457.	473.	3.1	544.4	14.46	13.95	14.13	72.1	9.98	15.3	3	O
20	T446	4	0.75	0.30	468.	483.	3.4	514.0	13.48	13.95	12.59	63.6	8.77	15.3	3	O
20	T446	4	0.85	0.29	478.	491.	3.6	474.0	12.31	13.95	10.80	53.7	7.40	15.3	3	O
20	T446	4	0.95	0.13	487.	499.	3.8	425.6	11.01	13.95	9.00	43.9	6.02	15.3	3	O
21	T486	3	0.05	0.20	382.	396.	0.8	559.3	11.76	12.36	9.63	47.5	7.45	13.5	2	O
21	T486	3	0.15	0.46	394.	409.	1.3	593.1	12.59	12.36	10.77	53.9	8.53	13.5	2	O
21	T486	3	0.25	0.53	406.	422.	1.8	620.7	13.25	12.36	11.90	60.2	9.61	13.5	2	O
21	T486	3	0.35	0.64	420.	436.	2.3	640.2	13.67	12.36	12.78	64.5	10.46	13.5	2	O

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
21	T486	3	0.45	0.59	433.	449.	2.8	644.6	13.70	12.36	12.47	62.9	10.25	13.5	2	O
21	T486	3	0.55	0.62	446.	462.	3.3	635.0	13.43	12.36	12.15	61.3	10.04	13.5	2	O
21	T486	3	0.65	0.37	459.	474.	3.7	611.7	12.84	12.36	11.84	59.7	9.83	13.5	2	O
21	T486	3	0.75	0.24	471.	485.	4.1	575.0	11.94	12.36	10.54	52.6	8.65	13.5	2	O
21	T486	3	0.85	0.18	482.	495.	4.4	526.8	10.85	12.36	9.04	44.5	7.29	13.5	2	O
21	T486	3	0.95	0.09	491.	503.	4.6	467.5	9.62	12.36	7.53	36.4	5.94	13.5	2	O
22	T408	2	0.05	0.00	380.	394.	0.5	528.2	13.64	14.18	11.44	58.2	7.34	15.1	3	R
22	T408	2	0.15	0.00	389.	405.	0.8	555.0	14.44	14.18	12.79	66.1	8.40	15.1	3	R
22	T408	2	0.25	0.00	399.	415.	1.1	577.9	15.10	14.18	14.15	74.0	9.46	15.1	3	R
22	T408	2	0.35	0.00	410.	426.	1.4	594.9	15.56	14.18	15.19	80.4	10.29	15.1	3	R
22	T408	2	0.45	0.00	420.	437.	1.7	598.8	15.60	14.18	14.82	78.4	10.08	15.1	3	R
22	T408	2	0.55	0.00	431.	447.	1.9	590.2	15.30	14.18	14.45	76.4	9.87	15.1	3	R
22	T408	2	0.65	0.00	441.	456.	2.2	569.4	14.67	14.18	14.09	74.4	9.67	15.1	3	R
22	T408	2	0.75	0.00	450.	465.	2.4	536.8	13.67	14.18	12.55	65.5	8.51	15.1	3	R
22	T408	2	0.85	0.00	459.	472.	2.5	494.7	12.52	14.18	10.76	55.4	7.18	15.1	3	R
22	T408	2	0.95	0.00	466.	478.	2.6	443.5	11.26	14.18	8.97	45.2	5.84	15.1	3	R
23	T492	2	0.05	0.22	382.	396.	0.8	562.4	11.72	12.25	9.69	46.8	7.21	13.4	2	O
23	T492	2	0.15	0.32	394.	409.	1.2	594.8	12.49	12.25	10.84	53.0	8.25	13.4	2	O
23	T492	2	0.25	0.48	407.	423.	1.7	621.8	13.10	12.25	11.98	59.3	9.30	13.4	2	O
23	T492	2	0.35	0.57	420.	437.	2.2	641.3	13.51	12.25	12.86	63.5	10.10	13.4	2	O
23	T492	2	0.45	0.56	434.	450.	2.7	645.8	13.54	12.25	12.55	61.9	9.90	13.4	2	O
23	T492	2	0.55	0.58	447.	463.	3.2	636.1	13.27	12.25	12.23	60.4	9.69	13.4	2	O
23	T492	2	0.65	0.31	460.	476.	3.6	612.4	12.70	12.25	11.92	58.8	9.49	13.4	2	O
23	T492	2	0.75	0.17	472.	487.	4.0	575.2	11.81	12.25	10.60	51.8	8.36	13.4	2	O
23	T492	2	0.85	0.11	483.	497.	4.3	527.3	10.76	12.25	9.09	43.8	7.05	13.4	2	O
23	T492	2	0.95	0.10	493.	505.	4.6	468.8	9.60	12.25	7.57	35.9	5.74	13.4	2	O
24	T478	3	0.05	0.12	382.	396.	0.8	556.5	11.71	12.19	9.72	47.0	7.16	13.3	2	O
24	T478	3	0.15	0.34	394.	409.	1.2	587.0	12.43	12.19	10.86	53.3	8.19	13.3	2	O
24	T478	3	0.25	0.45	406.	422.	1.7	612.7	13.02	12.19	12.01	59.6	9.22	13.3	2	O
24	T478	3	0.35	0.46	420.	436.	2.1	632.0	13.42	12.19	12.90	64.3	10.02	13.3	2	O
24	T478	3	0.45	0.51	433.	449.	2.6	636.3	13.45	12.19	12.58	62.6	9.82	13.3	2	O
24	T478	3	0.55	0.41	446.	462.	3.1	626.8	13.18	12.19	12.27	61.0	9.62	13.3	2	O
24	T478	3	0.65	0.22	459.	474.	3.5	603.3	12.62	12.19	11.95	59.4	9.42	13.3	2	O
24	T478	3	0.75	0.14	471.	485.	3.8	566.4	11.74	12.19	10.63	52.4	8.31	13.3	2	O
24	T478	3	0.85	0.08	482.	495.	4.1	519.8	10.72	12.19	9.11	44.3	7.01	13.3	2	O
24	T478	3	0.95	0.07	491.	503.	4.4	463.2	9.61	12.19	7.60	36.3	5.71	13.3	2	O
25	T447	4	0.05	0.19	382.	396.	0.6	542.6	13.64	14.27	11.57	57.0	7.11	15.7	3	O
25	T447	4	0.15	0.60	394.	409.	1.0	573.8	14.53	14.27	12.94	64.7	8.13	15.7	3	O
25	T447	4	0.25	0.71	406.	422.	1.4	599.2	15.24	14.27	14.31	72.4	9.16	15.7	3	O
25	T447	4	0.35	0.81	419.	436.	1.8	617.5	15.71	14.27	15.38	78.5	9.96	15.7	3	O
25	T447	4	0.45	0.78	432.	449.	2.1	622.0	15.76	14.27	15.00	76.5	9.76	15.7	3	O
25	T447	4	0.55	0.71	445.	462.	2.5	613.2	15.45	14.27	14.63	74.5	9.56	15.7	3	O
25	T447	4	0.65	0.38	457.	473.	2.8	591.0	14.80	14.27	14.26	72.6	9.36	15.7	3	O
25	T447	4	0.75	0.27	469.	483.	3.1	556.2	13.79	14.27	12.69	64.1	8.26	15.7	3	O
25	T447	4	0.85	0.10	479.	492.	3.4	511.0	12.58	14.27	10.88	54.1	6.97	15.7	3	O
25	T447	4	0.95	0.13	488.	499.	3.5	454.7	11.22	14.27	9.07	44.2	5.68	15.7	3	O
26	B416	5	0.05	0.00	380.	393.	0.9	660.9	5.35	5.58	4.30	20.1	7.06	5.2	1	F
26	B416	5	0.15	0.00	388.	403.	1.4	701.5	5.69	5.58	4.80	23.0	8.08	5.2	1	F
26	B416	5	0.25	0.00	398.	413.	1.8	736.4	5.97	5.58	5.31	25.8	9.09	5.2	1	F
26	B416	5	0.35	0.00	407.	424.	2.2	763.2	6.17	5.58	5.71	28.1	9.89	5.2	1	F
26	B416	5	0.45	0.00	417.	433.	2.6	768.8	6.20	5.58	5.58	27.6	9.69	5.2	1	F
26	B416	5	0.55	0.00	427.	443.	3.1	755.4	6.07	5.58	5.45	27.0	9.50	5.2	1	F

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
26	B416	5	0.65	0.00	436.	451.	3.4	722.6	5.80	5.58	5.31	26.4	9.30	5.2	1	F
26	B416	5	0.75	0.00	445.	459.	3.8	671.2	5.37	5.58	4.72	23.4	8.21	5.2	1	F
26	B416	5	0.85	0.00	452.	466.	4.1	609.7	4.88	5.58	4.05	19.7	6.93	5.2	1	F
26	B416	5	0.95	0.00	460.	471.	4.4	537.8	4.34	5.58	3.38	16.1	5.65	5.2	1	F
27	B790	5	0.05	0.00	379.	390.	0.9	616.3	5.21	5.40	4.08	20.3	7.13	5.0	1	F
27	B790	5	0.15	0.00	386.	400.	1.3	646.5	5.50	5.40	4.56	23.2	8.16	5.0	1	F
27	B790	5	0.25	0.00	395.	409.	1.7	675.1	5.75	5.40	5.03	26.1	9.19	5.0	1	F
27	B790	5	0.35	0.00	404.	418.	2.1	698.7	5.94	5.40	5.40	28.4	10.00	5.0	1	F
27	B790	5	0.45	0.00	413.	427.	2.5	703.0	5.96	5.40	5.27	27.9	9.80	5.0	1	F
27	B790	5	0.55	0.00	422.	436.	2.9	690.6	5.84	5.40	5.15	27.3	9.60	5.0	1	F
27	B790	5	0.65	0.00	430.	444.	3.2	662.5	5.59	5.40	5.02	26.7	9.40	5.0	1	F
27	B790	5	0.75	0.00	439.	451.	3.6	618.7	5.19	5.40	4.49	23.6	8.31	5.0	1	F
27	B790	5	0.85	0.00	446.	458.	3.8	565.4	4.73	5.40	3.85	19.9	7.01	5.0	1	F
27	B790	5	0.95	0.00	453.	463.	4.1	505.9	4.25	5.40	3.22	16.2	5.71	5.0	1	F
28	T421	4	0.05	0.00	379.	391.	0.5	520.9	13.75	14.31	11.58	58.4	7.19	15.2	3	R
28	T421	4	0.15	0.00	388.	401.	0.8	544.1	14.57	14.31	12.95	66.3	8.23	15.2	3	R
28	T421	4	0.25	0.00	397.	411.	1.0	564.9	15.24	14.31	14.32	74.2	9.27	15.2	3	R
28	T421	4	0.35	0.00	406.	421.	1.3	581.3	15.72	14.31	15.42	80.8	10.09	15.2	3	R
28	T421	4	0.45	0.00	416.	431.	1.6	584.8	15.76	14.31	15.04	78.8	9.89	15.2	3	R
28	T421	4	0.55	0.00	426.	441.	1.9	576.5	15.46	14.31	14.67	76.8	9.69	15.2	3	R
28	T421	4	0.65	0.00	436.	450.	2.2	556.9	14.82	14.31	14.29	74.8	9.49	15.2	3	R
28	T421	4	0.75	0.00	445.	458.	2.4	526.3	13.82	14.31	12.73	66.0	8.39	15.2	3	R
28	T421	4	0.85	0.00	453.	465.	2.6	486.6	12.64	14.31	10.92	55.7	7.07	15.2	3	R
28	T421	4	0.95	0.00	460.	470.	2.7	439.4	11.34	14.31	9.10	45.5	5.76	15.2	3	R
29	T426	3	0.05	0.00	381.	395.	0.6	525.6	13.84	14.43	11.71	57.2	7.24	15.5	3	R
29	T426	3	0.15	0.00	390.	406.	0.9	549.9	14.68	14.43	13.10	65.0	8.29	15.5	3	R
29	T426	3	0.25	0.00	401.	417.	1.2	571.3	15.37	14.43	14.49	72.7	9.34	15.5	3	R
29	T426	3	0.35	0.00	411.	429.	1.6	587.8	15.86	14.43	15.62	78.7	10.18	15.5	3	R
29	T426	3	0.45	0.00	422.	440.	1.9	591.4	15.91	14.43	15.24	76.8	9.97	15.5	3	R
29	T426	3	0.55	0.00	433.	450.	2.3	583.0	15.60	14.43	14.86	74.8	9.77	15.5	3	R
29	T426	3	0.65	0.00	444.	460.	2.6	563.2	14.95	14.43	14.48	72.8	9.57	15.5	3	R
29	T426	3	0.75	0.00	454.	469.	2.9	532.0	13.93	14.43	12.89	64.3	8.46	15.5	3	R
29	T426	3	0.85	0.00	462.	476.	3.2	491.5	12.73	14.43	11.05	54.3	7.13	15.5	3	R
29	T426	3	0.95	0.00	470.	482.	3.4	442.8	11.40	14.43	9.21	44.4	5.81	15.5	3	R
30	T496	2	0.05	0.17	383.	397.	0.8	559.9	11.77	12.32	9.76	49.6	7.34	13.5	2	O
30	T496	2	0.15	0.31	395.	410.	1.3	590.3	12.55	12.32	10.91	56.2	8.40	13.5	2	O
30	T496	2	0.25	0.34	408.	424.	1.9	616.1	13.17	12.32	12.06	62.9	9.46	13.5	2	O
30	T496	2	0.35	0.40	421.	438.	2.4	635.2	13.59	12.32	12.97	68.7	10.32	13.5	2	O
30	T496	2	0.45	0.48	435.	452.	2.9	639.4	13.62	12.32	12.65	66.9	10.11	13.5	2	O
30	T496	2	0.55	0.39	449.	466.	3.4	629.9	13.35	12.32	12.33	65.2	9.90	13.5	2	O
30	T496	2	0.65	0.24	462.	478.	3.9	606.9	12.77	12.32	12.01	63.4	9.70	13.5	2	O
30	T496	2	0.75	0.14	474.	489.	4.3	570.9	11.88	12.32	10.69	56.0	8.57	13.5	2	O
30	T496	2	0.85	0.08	485.	499.	4.6	524.2	10.82	12.32	9.17	47.3	7.23	13.5	2	O
30	T496	2	0.95	0.08	496.	507.	4.9	467.8	9.64	12.32	7.64	38.6	5.88	13.5	2	O
31	T498	1	0.05	0.15	383.	397.	0.8	572.9	11.79	12.34	9.78	49.8	7.42	13.6	2	O
31	T498	1	0.15	0.30	395.	410.	1.3	604.8	12.58	12.34	10.94	56.4	8.49	13.6	2	O
31	T498	1	0.25	0.37	408.	424.	1.8	631.6	13.20	12.34	12.09	63.1	9.56	13.6	2	O
31	T498	1	0.35	0.47	421.	438.	2.3	651.3	13.62	12.34	13.01	68.9	10.43	13.6	2	O
31	T498	1	0.45	0.53	435.	452.	2.9	655.8	13.65	12.34	12.69	67.1	10.22	13.6	2	O
31	T498	1	0.55	0.41	449.	466.	3.3	646.0	13.38	12.34	12.37	65.4	10.01	13.6	2	O
31	T498	1	0.65	0.25	462.	478.	3.8	622.2	12.80	12.34	12.05	63.7	9.80	13.6	2	O
31	T498	1	0.75	0.09	475.	490.	4.2	584.9	11.90	12.34	10.72	56.1	8.66	13.6	2	O

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
31	T498	1	0.85	0.07	486.	499.	4.5	536.7	10.84	12.34	9.19	47.4	7.30	13.6	2	O
31	T498	1	0.95	0.01	496.	508.	4.8	478.1	9.66	12.34	7.66	38.8	5.95	13.6	2	O
32	T499	2	0.05	0.21	383.	396.	0.8	568.2	11.81	12.36	9.81	49.8	7.47	13.6	2	O
32	T499	2	0.15	0.35	394.	410.	1.3	600.4	12.60	12.36	10.96	56.5	8.55	13.6	2	O
32	T499	2	0.25	0.41	407.	424.	1.8	627.2	13.22	12.36	12.12	63.2	9.62	13.6	2	O
32	T499	2	0.35	0.50	421.	438.	2.3	646.9	13.64	12.36	13.04	69.0	10.51	13.6	2	O
32	T499	2	0.45	0.51	435.	452.	2.8	651.5	13.68	12.36	12.72	67.2	10.30	13.6	2	O
32	T499	2	0.55	0.46	448.	465.	3.3	641.8	13.40	12.36	12.40	65.5	10.09	13.6	2	O
32	T499	2	0.65	0.27	462.	478.	3.7	618.0	12.82	12.36	12.08	63.8	9.88	13.6	2	O
32	T499	2	0.75	0.20	474.	489.	4.1	580.5	11.92	12.36	10.75	56.2	8.72	13.6	2	O
32	T499	2	0.85	0.12	485.	499.	4.4	592.4	10.86	12.36	9.21	47.5	7.36	13.6	2	O
32	T499	2	0.95	0.11	495.	507.	4.7	473.7	9.67	12.36	7.68	38.8	5.99	13.6	2	O
33	T425	3	0.05	0.39	383.	396.	0.7	545.3	13.78	14.37	11.68	59.4	7.51	16.0	3	O
33	T425	3	0.15	0.67	395.	410.	1.1	573.2	14.63	14.37	13.07	67.4	8.59	16.0	3	O
33	T425	3	0.25	0.91	408.	424.	1.5	596.9	15.33	14.37	14.45	75.5	9.67	16.0	3	O
33	T425	3	0.35	1.01	421.	438.	1.9	614.9	15.80	14.37	15.55	82.3	10.57	16.0	3	O
33	T425	3	0.45	0.95	435.	452.	2.3	619.1	15.84	14.37	15.17	80.3	10.35	16.0	3	O
33	T425	3	0.55	0.78	449.	466.	2.8	610.3	15.54	14.37	14.80	78.2	10.14	16.0	3	O
33	T425	3	0.65	0.41	462.	478.	3.1	588.6	14.89	14.37	14.42	76.1	9.93	16.0	3	O
33	T425	3	0.75	0.24	475.	489.	3.5	554.4	13.87	14.37	12.83	67.1	8.76	16.0	3	O
33	T425	3	0.85	0.19	486.	499.	3.7	510.7	12.68	14.37	11.00	56.7	7.39	16.0	3	O
33	T425	3	0.95	0.14	496.	507.	3.9	457.0	11.34	14.37	9.17	46.3	6.02	16.0	3	O
34	T420	4	0.05	0.00	380.	394.	0.5	552.4	13.69	14.27	11.58	58.8	7.56	15.3	3	R
34	T420	4	0.15	0.00	390.	405.	0.8	581.1	14.53	14.27	12.95	66.8	8.65	15.3	3	R
34	T420	4	0.25	0.00	400.	416.	1.1	605.3	15.22	14.27	14.32	74.8	9.74	15.3	3	R
34	T420	4	0.35	0.00	410.	427.	1.4	623.8	15.69	14.27	15.40	81.4	10.64	15.3	3	R
34	T420	4	0.45	0.00	421.	438.	1.6	628.3	15.73	14.27	15.02	79.4	10.43	15.3	3	R
34	T420	4	0.55	0.00	432.	449.	1.9	619.3	15.42	14.27	14.65	77.4	10.22	15.3	3	R
34	T420	4	0.65	0.00	442.	458.	2.2	597.0	14.78	14.27	14.28	75.4	10.00	15.3	3	R
34	T420	4	0.75	0.00	452.	467.	2.4	561.8	13.78	14.27	12.71	66.4	8.81	15.3	3	R
34	T420	4	0.85	0.00	460.	474.	2.6	517.2	12.60	14.27	10.90	56.1	7.43	15.3	3	R
34	T420	4	0.95	0.00	468.	480.	2.8	462.4	11.28	14.27	9.09	45.8	6.05	15.3	3	R
35	T493	5	0.05	0.32	379.	391.	0.5	583.8	11.85	12.40	9.84	49.1	7.62	13.0	2	O
35	T493	5	0.15	0.48	387.	401.	0.8	617.5	12.63	12.40	11.00	55.7	8.72	13.0	2	O
35	T493	5	0.25	0.53	396.	411.	1.1	645.4	13.26	12.40	12.16	62.3	9.82	13.0	2	O
35	T493	5	0.35	0.56	406.	421.	1.4	666.5	13.68	12.40	13.09	67.7	10.74	13.0	2	O
35	T493	5	0.45	0.59	415.	431.	1.7	671.7	13.72	12.40	12.77	66.0	10.52	13.0	2	O
35	T493	5	0.55	0.60	425.	440.	2.0	661.7	13.45	12.40	12.45	64.3	10.31	13.0	2	O
35	T493	5	0.65	0.50	434.	449.	2.3	636.5	12.87	12.40	12.13	62.6	10.09	13.0	2	O
35	T493	5	0.75	0.48	443.	457.	2.5	596.8	11.96	12.40	10.79	55.2	8.88	13.0	2	O
35	T493	5	0.85	0.35	451.	464.	2.7	546.9	10.89	12.40	9.25	46.6	7.49	13.0	2	O
35	T493	5	0.95	0.28	459.	469.	2.9	485.6	9.69	12.40	7.71	38.1	6.10	13.0	2	O
36	B834	5	0.05	0.00	380.	394.	1.0	618.9	5.25	5.44	4.14	21.6	7.62	5.1	1	F
36	B834	5	0.15	0.00	388.	404.	1.5	650.2	5.55	5.44	4.62	24.8	8.72	5.1	1	F
36	B834	5	0.25	0.00	398.	414.	2.0	679.3	5.81	5.44	5.10	27.9	9.82	5.1	1	F
36	B834	5	0.35	0.00	408.	424.	2.5	702.9	6.00	5.44	5.48	30.5	10.72	5.1	1	F
36	B834	5	0.45	0.00	417.	434.	2.9	707.3	6.02	5.44	5.35	29.9	10.51	5.1	1	F
36	B834	5	0.55	0.00	427.	444.	3.4	694.8	5.90	5.44	5.22	29.3	10.29	5.1	1	F
36	B834	5	0.65	0.00	436.	452.	3.7	666.6	5.64	5.44	5.10	28.7	10.08	5.1	1	F
36	B834	5	0.75	0.00	445.	460.	4.1	622.5	5.24	5.44	4.55	25.2	8.87	5.1	1	F
36	B834	5	0.85	0.00	453.	467.	4.4	568.4	4.77	5.44	3.91	21.3	7.48	5.1	1	F
36	B834	5	0.95	0.00	460.	472.	4.6	507.7	4.27	5.44	3.26	17.3	6.09	5.1	1	F

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
37	T450	4	0.05	0.23	383.	397.	0.7	519.3	13.80	14.45	11.72	57.7	7.59	16.0	3	O
37	T450	4	0.15	0.48	395.	410.	1.1	544.8	14.70	14.45	13.11	65.6	8.69	16.0	3	O
37	T450	4	0.25	0.66	408.	424.	1.5	566.7	15.42	14.45	14.50	73.4	9.79	16.0	3	O
37	T450	4	0.35	0.77	421.	438.	2.0	583.0	15.91	14.45	15.64	79.2	10.68	16.0	3	O
37	T450	4	0.45	0.85	435.	452.	2.4	586.7	15.96	14.45	15.26	77.3	10.47	16.0	3	O
37	T450	4	0.55	0.71	448.	465.	2.8	578.5	15.65	14.45	14.88	75.3	10.25	16.0	3	O
37	T450	4	0.65	0.39	460.	476.	3.2	558.9	14.99	14.45	14.50	73.3	10.04	16.0	3	O
37	T450	4	0.75	0.25	472.	487.	3.5	528.3	13.97	14.45	12.91	64.6	8.83	16.0	3	O
37	T450	4	0.85	0.13	482.	496.	3.8	487.6	12.75	14.45	11.07	54.6	7.44	16.0	3	O
37	T450	4	0.95	0.12	492.	503.	4.0	438.1	11.35	14.45	9.22	44.6	6.06	16.0	3	O
38	T497	3	0.05	0.41	383.	397.	0.9	562.6	11.84	12.40	9.84	47.4	7.60	13.6	2	O
38	T497	3	0.15	0.51	395.	410.	1.4	592.2	12.63	12.40	11.00	53.8	8.70	13.6	2	O
38	T497	3	0.25	0.58	408.	424.	1.9	617.7	13.26	12.40	12.16	60.2	9.80	13.6	2	O
38	T497	3	0.35	0.69	421.	439.	2.4	636.6	13.69	12.40	13.10	64.3	10.68	13.6	2	O
38	T497	3	0.45	0.72	435.	453.	3.0	640.8	13.73	12.40	12.78	62.7	10.46	13.6	2	O
38	T497	3	0.55	0.64	449.	466.	3.5	631.2	13.45	12.40	12.46	61.1	10.25	13.6	2	O
38	T497	3	0.65	0.55	462.	478.	3.9	608.5	12.87	12.40	12.14	59.5	10.04	13.6	2	O
38	T497	3	0.75	0.32	475.	490.	4.3	572.8	11.97	12.40	10.81	52.4	8.81	13.6	2	O
38	T497	3	0.85	0.26	486.	499.	4.7	526.4	10.90	12.40	9.26	44.4	7.43	13.6	2	O
38	T497	3	0.95	0.17	496.	508.	4.9	470.5	9.69	12.40	7.72	36.3	6.05	13.6	2	O
39	T500	2	0.05	0.33	383.	397.	0.9	555.6	11.87	12.43	9.87	47.2	7.50	13.7	2	O
39	T500	2	0.15	0.44	395.	410.	1.4	585.6	12.66	12.43	11.03	53.5	8.59	13.7	2	O
39	T500	2	0.25	0.65	408.	424.	1.9	611.0	13.29	12.43	12.20	59.8	9.68	13.7	2	O
39	T500	2	0.35	0.63	422.	439.	2.4	629.9	13.72	12.43	13.14	63.8	10.53	13.7	2	O
39	T500	2	0.45	0.62	435.	453.	3.0	634.2	13.76	12.43	12.82	62.2	10.32	13.7	2	O
39	T500	2	0.55	0.52	449.	466.	3.5	624.7	13.48	12.43	12.50	60.6	10.11	13.7	2	O
39	T500	2	0.65	0.33	463.	479.	3.9	602.0	12.90	12.43	12.18	59.0	9.90	13.7	2	O
39	T500	2	0.75	0.22	475.	490.	4.3	566.3	11.99	12.43	10.83	52.0	8.70	13.7	2	O
39	T500	2	0.85	0.16	486.	500.	4.7	520.1	10.92	12.43	9.29	44.0	7.33	13.7	2	O
39	T500	2	0.95	0.15	497.	509.	5.0	464.1	9.71	12.43	7.74	36.0	5.97	13.7	2	O
40	T431	2	0.05	0.26	383.	397.	0.7	533.5	13.87	14.48	11.79	56.1	7.39	16.2	3	O
40	T431	2	0.15	0.66	395.	411.	1.1	559.5	14.74	14.48	13.18	63.7	8.46	16.2	3	O
40	T431	2	0.25	0.90	408.	425.	1.6	581.9	15.44	14.48	14.58	71.3	9.54	16.2	3	O
40	T431	2	0.35	1.08	422.	439.	2.0	599.0	15.92	14.48	15.71	75.9	10.36	16.2	3	O
40	T431	2	0.45	1.03	437.	454.	2.5	602.9	15.97	14.48	15.33	74.0	10.16	16.2	3	O
40	T431	2	0.55	0.77	451.	468.	2.9	594.4	15.66	14.48	14.95	72.1	9.95	16.2	3	O
40	T431	2	0.65	0.40	464.	481.	3.4	573.7	15.00	14.48	14.57	70.3	9.74	16.2	3	O
40	T431	2	0.75	0.21	477.	492.	3.7	541.2	13.98	14.48	12.96	61.9	8.57	16.2	3	O
40	T431	2	0.85	0.17	489.	503.	4.0	499.2	12.77	14.48	11.11	52.3	7.22	16.2	3	O
40	T431	2	0.95	0.17	499.	511.	4.3	448.1	11.42	14.48	9.26	42.8	5.88	16.2	3	O
41	T491	3	0.05	0.14	383.	396.	0.8	568.3	11.99	12.65	9.91	46.5	7.27	13.9	2	O
41	T491	3	0.15	0.31	394.	410.	1.3	603.2	12.87	12.65	11.08	52.7	8.32	13.9	2	O
41	T491	3	0.25	0.35	407.	423.	1.8	631.3	13.55	12.65	12.25	58.9	9.38	13.9	2	O
41	T491	3	0.35	0.49	421.	437.	2.3	651.5	14.00	12.65	13.20	62.7	10.18	13.9	2	O
41	T491	3	0.45	0.52	434.	451.	2.8	656.4	14.04	12.65	12.88	61.2	9.97	13.9	2	O
41	T491	3	0.55	0.52	448.	464.	3.3	646.8	13.76	12.65	12.55	59.6	9.77	13.9	2	O
41	T491	3	0.65	0.21	461.	477.	3.7	622.7	13.15	12.65	12.23	58.0	9.57	13.9	2	O
41	T491	3	0.75	0.09	473.	488.	4.1	584.9	12.22	12.65	10.88	51.2	8.42	13.9	2	O
41	T491	3	0.85	0.02	484.	497.	4.4	535.5	11.09	12.65	9.32	43.3	7.10	13.9	2	O
41	T491	3	0.95	0.01	494.	506.	4.7	474.2	9.79	12.65	7.77	35.4	5.78	13.9	2	O
42	T451	4	0.05	0.10	383.	396.	0.6	540.7	13.83	14.49	11.79	55.3	7.13	16.0	3	O
42	T451	4	0.15	0.53	394.	410.	1.0	569.2	14.75	14.49	13.19	62.8	8.16	16.0	3	O

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
42	T451	4	0.25	0.70	407.	423.	1.4	593.1	15.48	14.49	14.58	70.2	9.19	16.0	3	O
42	T451	4	0.35	0.81	420.	437.	1.8	611.2	15.97	14.49	15.72	75.0	9.97	16.0	3	O
42	T451	4	0.45	0.75	434.	451.	2.2	615.6	16.02	14.49	15.33	73.1	9.77	16.0	3	O
42	T451	4	0.55	0.67	447.	463.	2.6	607.0	15.70	14.49	14.95	71.3	9.57	16.0	3	O
42	T451	4	0.65	0.45	459.	475.	2.9	585.4	15.04	14.49	14.57	69.4	9.37	16.0	3	O
42	T451	4	0.75	0.20	471.	485.	3.2	551.5	14.01	14.49	12.97	61.2	8.25	16.0	3	O
42	T451	4	0.85	0.13	481.	494.	3.5	507.7	12.77	14.49	11.12	51.8	6.96	16.0	3	O
42	T451	4	0.95	0.15	490.	501.	3.7	453.6	11.37	14.49	9.27	42.3	5.67	16.0	3	O
43	B456	5	0.05	0.00	380.	393.	0.9	659.5	5.41	5.64	4.35	20.1	7.08	5.3	1	F
43	B456	5	0.15	0.00	388.	404.	1.4	696.4	5.75	5.64	4.85	23.0	8.10	5.3	1	F
43	B456	5	0.25	0.00	398.	414.	1.8	729.3	6.03	5.64	5.36	25.9	9.12	5.3	1	F
43	B456	5	0.35	0.00	407.	424.	2.3	756.0	6.24	5.64	5.78	28.1	9.89	5.3	1	F
43	B456	5	0.45	0.00	417.	434.	2.7	761.7	6.26	5.64	5.64	27.6	9.70	5.3	1	F
43	B456	5	0.55	0.00	427.	443.	3.2	748.3	6.13	5.64	5.51	27.0	9.50	5.3	1	F
43	B456	5	0.65	0.00	436.	451.	3.6	716.2	5.86	5.64	5.37	26.4	9.30	5.3	1	F
43	B456	5	0.75	0.00	445.	459.	3.9	665.8	5.43	5.64	4.78	23.3	8.19	5.3	1	F
43	B456	5	0.85	0.00	452.	466.	4.3	605.9	4.93	5.64	4.10	19.7	6.91	5.3	1	F
43	B456	5	0.95	0.00	460.	471.	4.6	536.7	4.38	5.64	3.42	16.0	5.63	5.3	1	F
44	B770	5	0.05	0.00	380.	394.	1.1	617.9	5.29	5.49	4.19	20.0	7.02	5.1	1	F
44	B770	5	0.15	0.00	389.	405.	1.6	649.7	5.60	5.49	4.67	22.8	8.04	5.1	1	F
44	B770	5	0.25	0.00	398.	415.	2.1	679.0	5.86	5.49	5.16	25.7	9.05	5.1	1	F
44	B770	5	0.35	0.00	408.	425.	2.6	702.5	6.06	5.49	5.56	27.9	9.83	5.1	1	F
44	B770	5	0.45	0.00	418.	435.	3.0	706.9	6.08	5.49	5.43	27.4	9.63	5.1	1	F
44	B770	5	0.55	0.00	428.	445.	3.5	694.5	5.96	5.49	5.30	26.8	9.43	5.1	1	F
44	B770	5	0.65	0.00	438.	454.	3.9	666.2	5.70	5.49	5.16	26.3	9.24	5.1	1	F
44	B770	5	0.75	0.00	447.	462.	4.2	622.0	5.29	5.49	4.61	23.2	8.15	5.1	1	F
44	B770	5	0.85	0.00	455.	469.	4.5	567.8	4.81	5.49	3.96	19.5	6.88	5.1	1	F
44	B770	5	0.95	0.00	462.	474.	4.8	506.6	4.30	5.49	3.30	15.9	5.60	5.1	1	F
45	T494	4	0.05	0.07	383.	397.	0.8	546.6	11.91	12.48	9.92	46.9	6.98	13.6	2	O
45	T494	4	0.15	0.17	395.	410.	1.3	574.7	12.71	12.48	11.09	53.1	7.98	13.6	2	O
45	T494	4	0.25	0.21	407.	424.	1.8	599.0	13.34	12.48	12.26	59.4	8.99	13.6	2	O
45	T494	4	0.35	0.37	421.	438.	2.2	617.2	13.78	12.48	13.23	64.3	9.77	13.6	2	O
45	T494	4	0.45	0.36	434.	451.	2.7	621.2	13.83	12.48	12.90	62.7	9.57	13.6	2	O
45	T494	4	0.55	0.32	447.	464.	3.2	612.0	13.55	12.48	12.58	61.1	9.38	13.6	2	O
45	T494	4	0.65	0.13	459.	475.	3.6	590.1	12.96	12.48	12.25	59.5	9.18	13.6	2	O
45	T494	4	0.75	0.00	471.	486.	3.9	556.0	12.05	12.48	10.91	52.5	8.11	13.6	2	O
45	T494	4	0.85	0.00	481.	495.	4.2	511.3	10.97	12.48	9.35	44.4	6.84	13.6	2	O
45	T494	4	0.95	0.00	490.	502.	4.4	457.7	9.74	12.48	7.79	36.3	5.58	13.6	2	O
46	T424	3	0.05	0.09	383.	397.	0.9	554.5	11.91	12.43	9.95	47.2	6.94	13.6	2	O
46	T424	3	0.15	0.45	395.	410.	1.4	581.3	12.66	12.43	11.13	53.5	7.93	13.6	2	O
46	T424	3	0.25	0.51	408.	424.	1.9	605.0	13.27	12.43	12.30	59.8	8.93	13.6	2	O
46	T424	3	0.35	0.67	422.	439.	2.5	623.3	13.70	12.43	13.27	64.9	9.71	13.6	2	O
46	T424	3	0.45	0.64	435.	453.	3.0	627.2	13.74	12.43	12.95	63.2	9.52	13.6	2	O
46	T424	3	0.55	0.54	449.	466.	3.5	617.9	13.46	12.43	12.62	61.6	9.32	13.6	2	O
46	T424	3	0.65	0.36	462.	478.	3.9	595.7	12.88	12.43	12.29	59.9	9.13	13.6	2	O
46	T424	3	0.75	0.21	475.	490.	4.3	561.0	11.98	12.43	10.94	52.9	8.07	13.6	2	O
46	T424	3	0.85	0.15	486.	499.	4.7	516.5	10.93	12.43	9.38	44.8	6.81	13.6	2	O
46	T424	3	0.95	0.13	496.	507.	4.9	463.5	9.75	12.43	7.81	36.6	5.55	13.6	2	O
47	T470	3	0.05	0.33	383.	397.	0.7	529.9	14.11	14.89	11.89	57.9	7.01	16.7	3	O
47	T470	3	0.15	0.67	395.	411.	1.2	560.2	15.14	14.89	13.30	65.7	8.02	16.7	3	O
47	T470	3	0.25	0.82	408.	425.	1.6	584.7	15.93	14.89	14.71	73.5	9.03	16.7	3	O
47	T470	3	0.35	0.97	422.	439.	2.1	602.0	16.46	14.89	15.88	80.1	9.83	16.7	3	O

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
47	T470	3	0.45	0.90	436.	454.	2.6	606.2	16.51	14.89	15.49	78.1	9.63	16.7	3	O
47	T470	3	0.55	0.72	451.	467.	3.0	597.8	16.19	14.89	15.10	76.1	9.44	16.7	3	O
47	T470	3	0.65	0.44	464.	480.	3.4	577.1	15.49	14.89	14.72	74.1	9.24	16.7	3	O
47	T470	3	0.75	0.33	477.	492.	3.8	544.6	14.43	14.89	13.10	65.4	8.17	16.7	3	O
47	T470	3	0.85	0.28	488.	502.	4.1	500.9	13.11	14.89	11.23	55.2	6.89	16.7	3	O
47	T470	3	0.95	0.20	499.	510.	4.4	446.1	11.57	14.89	9.36	45.1	5.62	16.7	3	O
48	T453	3	0.05	0.33	383.	397.	0.7	537.8	13.84	14.52	11.90	58.6	7.08	16.2	3	O
48	T453	3	0.15	0.66	395.	410.	1.1	565.4	14.77	14.52	13.31	66.5	8.10	16.2	3	O
48	T453	3	0.25	0.94	408.	424.	1.6	588.7	15.50	14.52	14.72	74.5	9.12	16.2	3	O
48	T453	3	0.35	1.10	422.	439.	2.1	606.1	16.00	14.52	15.88	81.3	9.93	16.2	3	O
48	T453	3	0.45	1.09	436.	453.	2.5	610.2	16.05	14.52	15.50	79.2	9.73	16.2	3	O
48	T453	3	0.55	0.92	450.	467.	3.0	601.7	15.74	14.52	15.11	77.2	9.53	16.2	3	O
48	T453	3	0.65	0.61	463.	479.	3.4	580.8	15.07	14.52	14.72	75.2	9.33	16.2	3	O
48	T453	3	0.75	0.34	476.	491.	3.7	547.9	14.04	14.52	13.10	66.3	8.26	16.2	3	O
48	T453	3	0.85	0.31	487.	500.	4.0	504.9	12.79	14.52	11.23	56.0	6.97	16.2	3	O
48	T453	3	0.95	0.30	497.	509.	4.2	452.0	11.37	14.52	9.36	45.8	5.67	16.2	3	O
49	T477	4	0.05	0.00	381.	395.	0.5	541.8	14.03	14.65	11.96	58.1	7.13	15.7	3	R
49	T477	4	0.15	0.00	390.	406.	0.8	567.3	14.91	14.65	13.37	66.0	8.16	15.7	3	R
49	T477	4	0.25	0.00	401.	417.	1.1	589.6	15.61	14.65	14.79	73.9	9.19	15.7	3	R
49	T477	4	0.35	0.00	411.	429.	1.4	607.2	16.11	14.65	15.97	80.5	10.02	15.7	3	R
49	T477	4	0.45	0.00	422.	440.	1.7	611.2	16.17	14.65	15.58	78.5	9.82	15.7	3	R
49	T477	4	0.55	0.00	433.	450.	2.0	602.7	15.85	14.65	15.19	76.4	9.62	15.7	3	R
49	T477	4	0.65	0.00	443.	460.	2.3	581.6	15.19	14.65	14.80	74.4	9.42	15.7	3	R
49	T477	4	0.75	0.00	453.	468.	2.5	548.5	14.15	14.65	13.17	65.7	8.33	15.7	3	R
49	T477	4	0.85	0.00	462.	476.	2.7	506.2	12.92	14.65	11.29	55.5	7.03	15.7	3	R
49	T477	4	0.95	0.00	470.	482.	2.9	454.8	11.53	14.65	9.41	45.3	5.72	15.7	3	R
50	T466	5	0.05	0.32	380.	394.	0.5	551.6	13.97	14.58	11.89	59.7	7.19	15.7	3	O
50	T466	5	0.15	0.57	390.	405.	0.8	577.2	14.84	14.58	13.29	67.8	8.22	15.7	3	O
50	T466	5	0.25	0.68	400.	417.	1.1	599.7	15.54	14.58	14.70	75.9	9.26	15.7	3	O
50	T466	5	0.35	0.79	411.	428.	1.5	618.0	16.03	14.58	15.86	83.2	10.09	15.7	3	O
50	T466	5	0.45	0.80	422.	439.	1.8	622.3	16.09	14.58	15.47	81.1	9.89	15.7	3	O
50	T466	5	0.55	0.73	433.	449.	2.1	613.6	15.77	14.58	15.09	79.0	9.69	15.7	3	O
50	T466	5	0.65	0.60	443.	459.	2.3	591.9	15.11	14.58	14.70	76.9	9.49	15.7	3	O
50	T466	5	0.75	0.33	453.	468.	2.6	557.8	14.08	14.58	13.08	67.8	8.39	15.7	3	O
50	T466	5	0.85	0.17	462.	475.	2.8	514.7	12.86	14.58	11.22	57.3	7.08	15.7	3	O
50	T466	5	0.95	0.16	470.	482.	2.9	462.4	11.48	14.58	9.35	46.8	5.77	15.7	3	O
51	F370	5	0.05	0.00	380.	394.	1.1	625.1	5.32	5.54	4.23	20.7	7.29	5.2	1	F
51	F370	5	0.15	0.00	389.	405.	1.6	657.2	5.64	5.54	4.72	23.7	8.35	5.2	1	F
51	F370	5	0.25	0.00	399.	415.	2.1	686.9	5.91	5.54	5.22	26.7	9.40	5.2	1	F
51	F370	5	0.35	0.00	409.	426.	2.6	710.6	6.12	5.54	5.63	29.1	10.25	5.2	1	F
51	F370	5	0.45	0.00	419.	436.	3.1	715.1	6.14	5.54	5.49	28.6	10.04	5.2	1	F
51	F370	5	0.55	0.00	429.	446.	3.6	702.5	6.02	5.54	5.36	28.0	9.84	5.2	1	F
51	F370	5	0.65	0.00	438.	455.	4.0	673.9	5.75	5.54	5.23	27.4	9.63	5.2	1	F
51	F370	5	0.75	0.00	447.	463.	4.3	629.1	5.33	5.54	4.67	24.2	8.52	5.2	1	F
51	F370	5	0.85	0.00	455.	470.	4.6	574.2	4.85	5.54	4.00	20.4	7.18	5.2	1	F
51	F370	5	0.95	0.00	463.	475.	4.9	512.1	4.32	5.54	3.34	16.6	5.85	5.2	1	F
52	T436	4	0.05	0.26	383.	397.	0.8	546.6	11.97	12.50	10.03	50.0	7.38	13.6	2	O
52	T436	4	0.15	0.31	394.	410.	1.2	572.1	12.73	12.50	11.21	56.7	8.45	13.6	2	O
52	T436	4	0.25	0.43	407.	424.	1.7	595.0	13.35	12.50	12.39	63.4	9.51	13.6	2	O
52	T436	4	0.35	0.50	420.	437.	2.1	612.9	13.79	12.50	13.39	69.4	10.38	13.6	2	O
52	T436	4	0.45	0.55	433.	450.	2.6	616.6	13.83	12.50	13.06	67.6	10.17	13.6	2	O
52	T436	4	0.55	0.43	445.	462.	3.0	607.5	13.55	12.50	12.73	65.9	9.96	13.6	2	O

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
52	T436	4	0.65	0.23	457.	473.	3.3	586.0	12.97	12.50	12.40	64.1	9.76	13.6	2	O
52	T436	4	0.75	0.16	468.	483.	3.6	552.2	12.06	12.50	11.04	56.5	8.62	13.6	2	O
52	T436	4	0.85	0.02	478.	492.	3.9	508.8	10.99	12.50	9.46	47.8	7.27	13.6	2	O
52	T436	4	0.95	0.01	486.	498.	4.1	457.4	9.80	12.50	7.88	39.0	5.92	13.6	2	O
53	T479	4	0.05	0.00	381.	395.	0.6	524.4	14.12	14.76	12.07	58.0	7.44	15.9	3	R
53	T479	4	0.15	0.00	391.	407.	0.9	548.3	15.01	14.76	13.51	65.9	8.52	15.9	3	R
53	T479	4	0.25	0.00	401.	418.	1.2	569.4	15.73	14.76	14.94	73.7	9.59	15.9	3	R
53	T479	4	0.35	0.00	412.	430.	1.5	585.6	16.24	14.76	16.16	80.0	10.47	15.9	3	R
53	T479	4	0.45	0.00	423.	441.	1.8	589.2	16.30	14.76	15.76	78.0	10.26	15.9	3	R
53	T479	4	0.55	0.00	434.	452.	2.2	581.0	15.98	14.76	15.37	76.0	10.06	15.9	3	R
53	T479	4	0.65	0.00	445.	462.	2.5	561.3	15.31	14.76	14.98	74.1	9.85	15.9	3	R
53	T479	4	0.75	0.00	455.	471.	2.8	530.4	14.26	14.76	13.32	65.3	8.69	15.9	3	R
53	T479	4	0.85	0.00	464.	478.	3.0	490.2	13.02	14.76	11.42	55.2	7.33	15.9	3	R
53	T479	4	0.95	0.00	472.	485.	3.2	441.5	11.61	14.76	9.51	45.1	5.97	15.9	3	R
54	T455	4	0.05	0.41	383.	397.	0.7	537.8	13.93	14.62	12.00	60.1	7.48	16.2	3	O
54	T455	4	0.15	0.78	395.	410.	1.1	564.6	14.87	14.62	13.42	68.2	8.56	16.2	3	O
54	T455	4	0.25	1.04	408.	424.	1.6	587.5	15.61	14.62	14.84	76.3	9.64	16.2	3	O
54	T455	4	0.35	1.11	421.	438.	2.0	604.7	16.11	14.62	16.04	83.5	10.53	16.2	3	O
54	T455	4	0.45	1.09	434.	452.	2.4	608.7	16.17	14.62	15.65	81.4	10.32	16.2	3	O
54	T455	4	0.55	0.93	448.	464.	2.8	600.2	15.85	14.62	15.26	79.4	10.11	16.2	3	O
54	T455	4	0.65	0.63	460.	476.	3.2	579.6	15.18	14.62	14.87	77.3	9.90	16.2	3	O
54	T455	4	0.75	0.36	472.	487.	3.5	547.2	14.14	14.62	13.23	68.1	8.74	16.2	3	O
54	T455	4	0.85	0.27	482.	496.	3.8	504.6	12.88	14.62	11.34	57.5	7.37	16.2	3	O
54	T455	4	0.95	0.23	491.	503.	4.0	452.4	11.44	14.62	9.45	47.0	6.01	16.2	3	O
55	T438	4	0.05	0.00	380.	392.	0.5	542.9	14.12	14.75	12.05	56.9	7.50	15.7	3	R
55	T438	4	0.15	0.00	388.	402.	0.7	567.7	15.00	14.75	13.48	64.6	8.58	15.7	3	R
55	T438	4	0.25	0.00	397.	412.	1.0	589.6	15.72	14.75	14.91	72.3	9.66	15.7	3	R
55	T438	4	0.35	0.00	407.	422.	1.3	607.0	16.23	14.75	16.12	77.8	10.57	15.7	3	R
55	T438	4	0.45	0.00	417.	432.	1.5	610.9	16.28	14.75	15.73	75.9	10.36	15.7	3	R
55	T438	4	0.55	0.00	427.	442.	1.8	602.4	15.97	14.75	15.33	74.0	10.14	15.7	3	R
55	T438	4	0.65	0.00	436.	451.	2.0	581.6	15.30	14.75	14.94	72.1	9.93	15.7	3	R
55	T438	4	0.75	0.00	446.	459.	2.2	548.8	14.25	14.75	13.29	63.6	8.76	15.7	3	R
55	T438	4	0.85	0.00	454.	466.	2.4	506.9	13.01	14.75	11.40	53.8	7.39	15.7	3	R
55	T438	4	0.95	0.00	462.	472.	2.5	456.1	11.61	14.75	9.50	43.9	6.02	15.7	3	R
56	F446	5	0.05	0.00	380.	394.	1.0	648.9	5.46	5.68	4.37	21.4	7.55	5.3	1	F
56	F446	5	0.15	0.00	389.	404.	1.5	682.9	5.79	5.68	4.88	24.5	8.63	5.3	1	F
56	F446	5	0.25	0.00	398.	415.	2.0	714.1	6.07	5.68	5.38	27.6	9.72	5.3	1	F
56	F446	5	0.35	0.00	408.	425.	2.4	739.8	6.28	5.68	5.81	30.2	10.63	5.3	1	F
56	F446	5	0.45	0.00	418.	435.	2.9	745.1	6.31	5.68	5.68	29.6	10.42	5.3	1	F
56	F446	5	0.55	0.00	427.	444.	3.3	732.1	6.18	5.68	5.54	29.0	10.20	5.3	1	F
56	F446	5	0.65	0.00	437.	453.	3.7	701.2	5.90	5.68	5.40	28.4	9.99	5.3	1	F
56	F446	5	0.75	0.00	446.	461.	4.1	652.6	5.47	5.68	4.81	25.0	8.80	5.3	1	F
56	F446	5	0.85	0.00	453.	467.	4.4	594.8	4.97	5.68	4.13	21.1	7.43	5.3	1	F
56	F446	5	0.95	0.00	461.	473.	4.7	528.6	4.42	5.68	3.45	17.2	6.05	5.3	1	F
57	B779	5	0.05	0.00	379.	392.	1.0	627.2	5.36	5.59	4.27	21.6	7.61	5.2	1	F
57	B779	5	0.15	0.00	387.	402.	1.5	659.2	5.69	5.59	4.77	24.7	8.70	5.2	1	F
57	B779	5	0.25	0.00	396.	411.	1.9	688.8	5.96	5.59	5.27	27.9	9.80	5.2	1	F
57	B779	5	0.35	0.00	405.	421.	2.4	712.5	6.17	5.59	5.69	30.5	10.72	5.2	1	F
57	B779	5	0.45	0.00	415.	430.	2.8	716.9	6.19	5.59	5.55	29.9	10.51	5.2	1	F
57	B779	5	0.55	0.00	424.	439.	3.3	704.4	6.07	5.59	5.42	29.3	10.29	5.2	1	F
57	B779	5	0.65	0.00	433.	447.	3.6	675.6	5.80	5.59	5.29	28.6	10.08	5.2	1	F
57	B779	5	0.75	0.00	442.	455.	4.0	630.7	5.38	5.59	4.72	25.2	8.87	5.2	1	F

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
57	B779	5	0.85	0.00	449.	462.	4.3	575.7	4.89	5.59	4.05	21.3	7.48	5.2	1	F
57	B779	5	0.95	0.00	456.	467.	4.5	513.5	4.35	5.59	3.38	17.3	6.10	5.2	1	F
58	F393	5	0.05	0.00	380.	394.	1.1	633.4	5.39	5.62	4.31	21.8	7.69	5.3	1	F
58	F393	5	0.15	0.00	389.	405.	1.6	666.3	5.72	5.62	4.81	25.0	8.80	5.3	1	F
58	F393	5	0.25	0.00	399.	416.	2.1	696.6	6.00	5.62	5.31	28.2	9.90	5.3	1	F
58	F393	5	0.35	0.00	409.	426.	2.6	720.7	6.21	5.62	5.73	30.8	10.84	5.3	1	F
58	F393	5	0.45	0.00	419.	436.	3.1	725.3	6.23	5.62	5.60	30.2	10.62	5.3	1	F
58	F393	5	0.55	0.00	429.	446.	3.6	712.6	6.10	5.62	5.46	29.6	10.40	5.3	1	F
58	F393	5	0.65	0.00	439.	455.	4.0	683.3	5.83	5.62	5.33	29.0	10.19	5.3	1	F
58	F393	5	0.75	0.00	448.	463.	4.3	637.3	5.41	5.62	4.75	25.5	8.96	5.3	1	F
58	F393	5	0.85	0.00	456.	470.	4.6	581.4	4.91	5.62	4.08	21.5	7.56	5.3	1	F
58	F393	5	0.95	0.00	463.	475.	4.9	517.9	4.37	5.62	3.40	17.5	6.15	5.3	1	F
59	F404	5	0.05	0.00	380.	394.	1.0	638.9	5.41	5.65	4.34	21.9	7.70	5.3	1	F
59	F404	5	0.15	0.00	389.	404.	1.5	672.4	5.75	5.65	4.84	25.0	8.81	5.3	1	F
59	F404	5	0.25	0.00	398.	415.	2.0	703.0	6.03	5.65	5.35	28.2	9.92	5.3	1	F
59	F404	5	0.35	0.00	408.	425.	2.5	727.6	6.24	5.65	5.77	30.8	10.85	5.3	1	F
59	F404	5	0.45	0.00	418.	435.	3.0	732.3	6.27	5.65	5.64	30.2	10.63	5.3	1	F
59	F404	5	0.55	0.00	428.	445.	3.4	719.5	6.14	5.65	5.50	29.6	10.41	5.3	1	F
59	F404	5	0.65	0.00	438.	454.	3.8	689.7	5.86	5.65	5.37	29.0	10.20	5.3	1	F
59	F404	5	0.75	0.00	447.	462.	4.2	642.9	5.44	5.65	4.78	25.5	8.96	5.3	1	F
59	F404	5	0.85	0.00	455.	469.	4.5	586.3	4.94	5.65	4.10	21.5	7.56	5.3	1	F
59	F404	5	0.95	0.00	462.	474.	4.8	521.7	4.39	5.65	3.43	17.5	6.15	5.3	1	F
60	T422	5	0.05	0.37	380.	395.	0.6	539.0	14.15	14.79	12.09	57.9	7.68	15.9	3	O
60	T422	5	0.15	0.67	390.	406.	0.9	563.0	15.04	14.79	13.53	65.7	8.80	15.9	3	O
60	T422	5	0.25	0.93	400.	417.	1.2	584.4	15.76	14.79	14.96	73.6	9.91	15.9	3	O
60	T422	5	0.35	1.08	411.	429.	1.5	601.3	16.27	14.79	16.18	79.6	10.82	15.9	3	O
60	T422	5	0.45	1.18	422.	440.	1.9	605.2	16.33	14.79	15.79	77.6	10.60	15.9	3	O
60	T422	5	0.55	1.11	433.	450.	2.1	596.8	16.01	14.79	15.39	75.7	10.39	15.9	3	O
60	T422	5	0.65	0.99	443.	460.	2.4	576.3	15.33	14.79	15.00	73.7	10.17	15.9	3	O
60	T422	5	0.75	0.64	453.	468.	2.6	544.2	14.29	14.79	13.34	64.9	8.94	15.9	3	O
60	T422	5	0.85	0.49	462.	476.	2.8	502.9	13.04	14.79	11.44	54.9	7.53	15.9	3	O
60	T422	5	0.95	0.37	470.	482.	3.0	453.0	11.63	14.79	9.53	44.8	6.13	15.9	3	O
61	F366	5	0.05	0.00	379.	391.	0.9	650.1	5.47	5.70	4.38	21.7	7.65	5.3	1	F
61	F366	5	0.15	0.00	387.	401.	1.3	683.6	5.80	5.70	4.89	24.9	8.76	5.3	1	F
61	F366	5	0.25	0.00	395.	410.	1.8	714.5	6.09	5.70	5.40	28.0	9.87	5.3	1	F
61	F366	5	0.35	0.00	404.	419.	2.2	740.0	6.30	5.70	5.83	30.6	10.76	5.3	1	F
61	F366	5	0.45	0.00	413.	428.	2.6	745.1	6.33	5.70	5.70	30.0	10.55	5.3	1	F
61	F366	5	0.55	0.00	422.	437.	3.0	732.1	6.20	5.70	5.56	29.4	10.33	5.3	1	F
61	F366	5	0.65	0.00	431.	445.	3.4	701.4	5.92	5.70	5.42	28.8	10.12	5.3	1	F
61	F366	5	0.75	0.00	440.	453.	3.7	653.1	5.48	5.70	4.83	25.3	8.89	5.3	1	F
61	F366	5	0.85	0.00	447.	459.	4.0	595.5	4.98	5.70	4.14	21.3	7.49	5.3	1	F
61	F366	5	0.95	0.00	454.	465.	4.3	529.8	4.43	5.70	3.46	17.3	6.10	5.3	1	F