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ON THE REDUCTION OF THE CARTE DU CIEL CATALOGUES

Jürgen Stock and Johnny Cova S.

Centro de Investigación de Astronomía, Mérida, Venezuela

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RESUMEN

Con miras a recuperar de la Carte du Ciel (CdC) posiciones útiles para la determinación de movimientos propios utilizando métodos de ajuste de bloques recién desarrollados, un área de la zona de Oxford de la CdC que consiste en 24 placas sobrepuestas y con época relativamente homogénea se reanalizó utilizando las medidas originales contenidas en el catálogo. Se obtuvieron posiciones para el equinoccio 1950.0 y época 1901.2 de 2911 estrellas hasta la magnitud límite del catálogo utilizando independientemente como sistema de referencia tanto el AGK3 como el FK4. Nuestros resultados demuestran que se pueden obtener posiciones precisas hasta 0$''$3 y que el método de ajuste de bloques empleado, es capaz de absorber términos de distorsión que son función lineal de las coordenadas. También se demuestra que no existen otros términos importantes de distorsión en el área escogida.

ABSTRACT

In the hope of retrieving useful positions for proper motion determinations from the Carte du Ciel (CdC) using recently developed block adjustment methods, an area from the Oxford Zone I of the CdC consisting of 24 overlapping plates of relatively homogeneous epoch was reanalized using the original measurements contained in the catalogue. Positions for equinox 1950.0 and epoch 1901.1 were obtained for 2911 stars down to the limiting magnitude of the catalogue using independently both the AGK3 and the FK4 catalogues as reference systems. Our results show that positions accurate to 0$''$3 may be obtained and that the block adjustment method used is capable of absorbing distortion terms which are a linear function of the coordinates. It is also shown that no other important distortion terms are present in the chosen plate material.

Key words: PROPER MOTIONS – STARS-CATALOGS

I. INTRODUCTION

The Carte du Ciel is the oldest practically complete astrophotographic coverage of the sky. The authors were fully aware of the necessity to complete coverage within as short a time span as possible. This, together with atmospheric refraction problems, led to a distribution of the work among a fairly large number of observatories. The consequence of this is a rather inhomogeneous material. Some zones, through subsequent analysis, have become known to be of surprisingly high accurary, while others may possibly never serve their original purpose.

To make full use of the usable part of the Carte du Ciel two additional sources of data are needed: first, a modern epoch of position observation has to be produced. As has been shown by Della Prugna (1981) and by Cova (1981), not necessarily do the new observations have to be made with the same telescopes. A second and far more serious problem is the production of a reference system for the Carte du Ciel plates, unless one is satisfied with relative proper motions. The latter shall not be pursued any further in this paper.

Furthermore, a detailed analysis of the specific characteristics of the telescopes involved is required. Here we refer to systematic errors such as field distortion (radial or asymmetric), color and magnitude dependent distortions, etc. For the telescopes responsible for the modern epoch this constitutes no major problem, since comparisons can be made with error-free data (see for instance Stock 1978). Concerning the Carte du Ciel material, use has to be made of the same old epoch plates since it cannot be assumed that the characteristics of the respective telescopes have remained unchanged for almost a century. As will be shown, the generous plate overlap provided by the Carte du Ciel plan permits an *a posteriori* determination of such errors based on the same plate material.

An extensive and detailed description of the status of the Carte du Ciel project is given by Eichhorn (1974). In some cases, for instance the Oxford zones, the original authors already give expressions which permit the conversion of the measured plane coordinates into equatorial coordinates. More recently, Günther and Kox (972) reanalized one of the Oxford zones and give revised plate constants including color and magnitude terms. Also they refer the positions to the now generally accepted reference system defined by the FK4 Catalogue.

We proposed ourselves to elaborate a pilot project of a reanalysis of a limited section of the Oxford I zone, using the original measurements contained in the catalogue and block adjustment principles. The project shall include an attempt to determine the field distortion of the Oxford astrograph. The AGK3 catalogue will be used as reference system, but it will also be attempted to use the FK4 as the only reference source.

II. THE TEST FIELD

Within a limited portion of the Oxford I catalogue presently available to us we selected as large a block of overlapping plates as possible, imposing the condition of a uniform epoch. The best choice that could be made is a field of 24 plates. Their numbers, epochs, and relative location as shown schematically in Figure 1.

The next step was to identify stars common to two or more plates. For this purpose the plate constants given in the catalogue were used, converting the original X and Y values into equatorial coordinates on a uniform system. These coordinates then were used to establish identities. Figure 2 shows the number of links which exist between the different plates.

III. COORDINATE TRANSFORMATION

Following a procedure proposed by Stock (1981) the measured coordinates X and Y are transformed to cartesian space coordinates u, v, w by

$$\tan r = \frac{(x^2 + y^2)^{1/2}}{F} \tag{1}$$

$$u = x \cos r \quad , \tag{2}$$

$$v = y \cos r \quad , \tag{3}$$

and

$$w = F \cos r \quad . \tag{4}$$

Here it is assumed that tangential projection is applicable to the specific case. It is assumed that the origin of

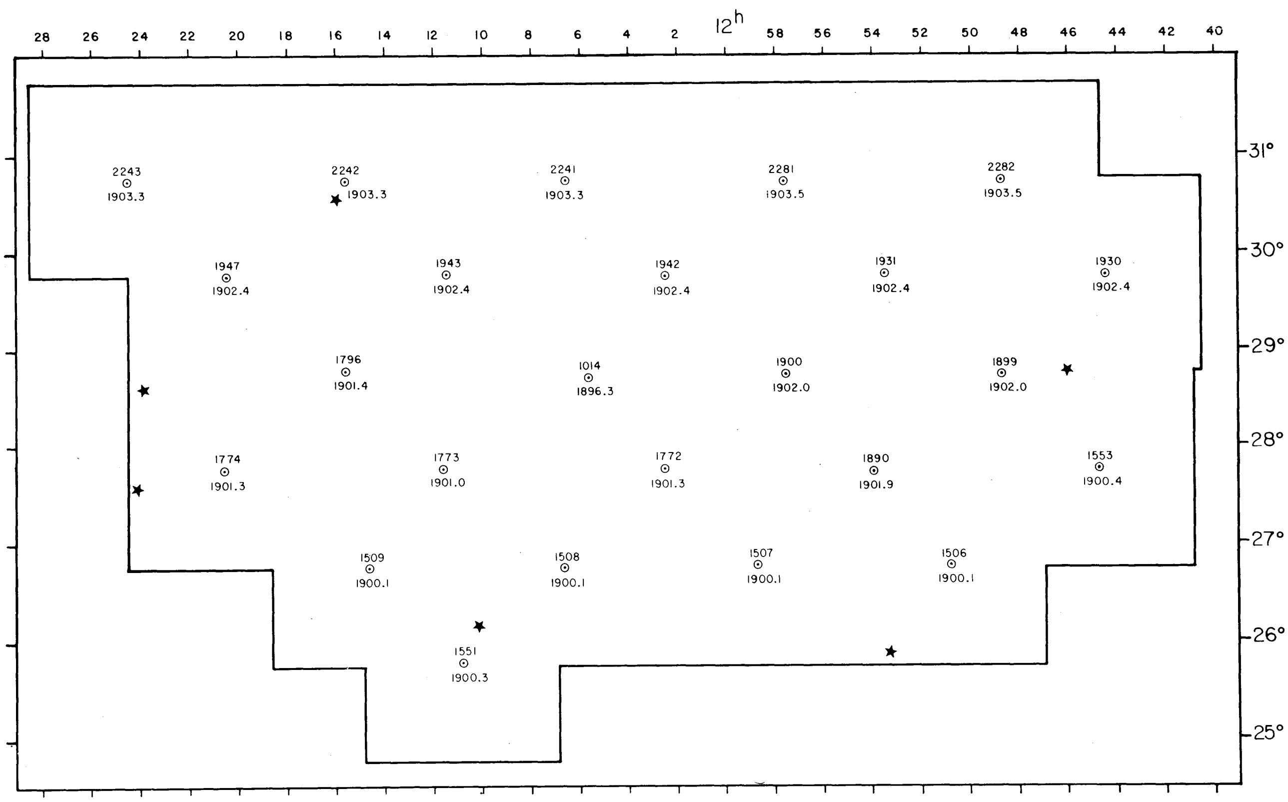

Fig. 1. Relative location, number, and epoch of the Oxford plates used in this paper. Asterisks indicate the location of reference stars contained in the FK4 supplements.

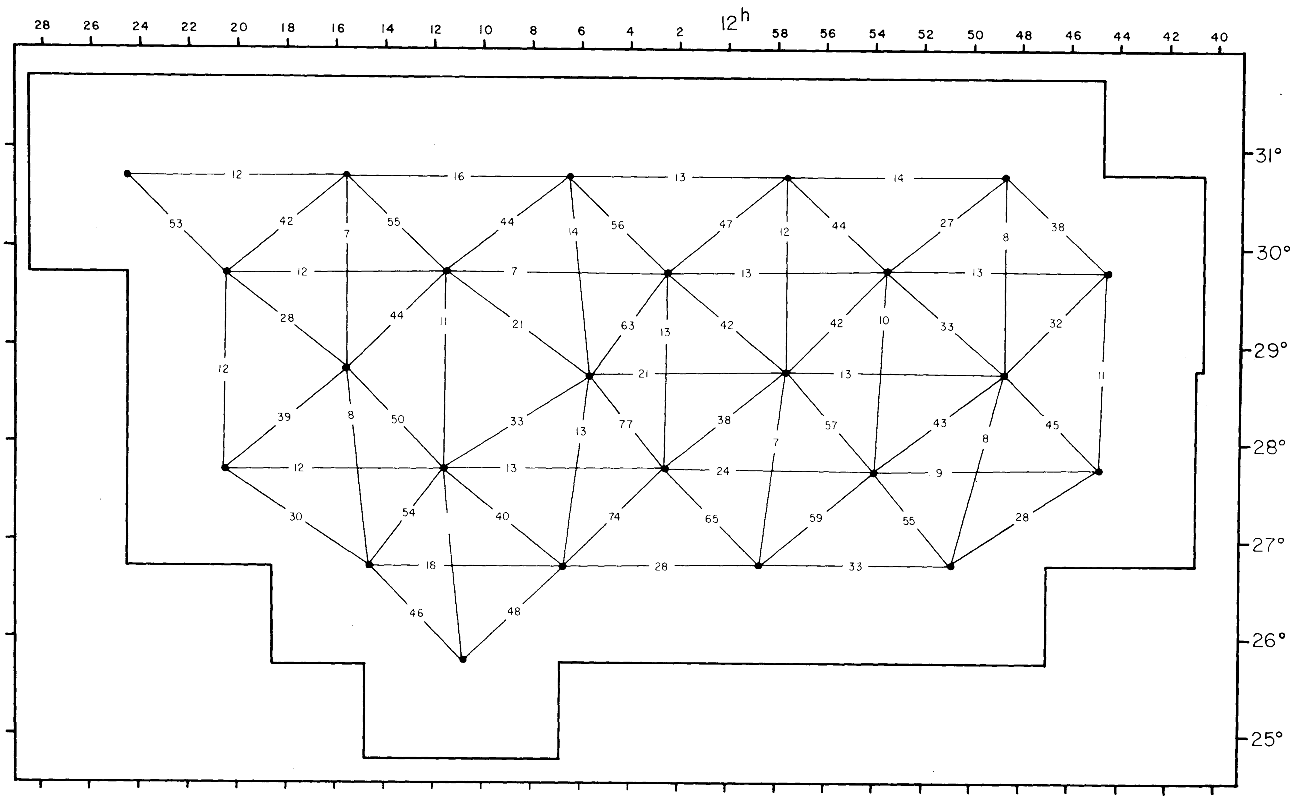

Fig. 2. Schematic representation of stars common to neighboring plates.

the X and Y coordinates coincides with the tangential point. These coordinates are transformed into standard three-dimensional coordinates ξ, η, ζ by

$$\xi = a_{11}\, u + a_{12}\, v + a_{13}\, w \quad , \tag{5}$$

$$\eta = a_{21}\, u + a_{22}\, v + a_{23}\, w \quad , \tag{6}$$

$$\zeta = a_{31}\, u + a_{32}\, v + a_{33}\, w \quad . \tag{7}$$

The latter are related to the equatorial coordinates α and δ by

$$\xi = F \sin\alpha \cos\delta \quad , \tag{8}$$

$$\eta = F \cos\alpha \cos\delta \quad , \tag{9}$$

$$\zeta = F \sin\delta \quad . \tag{10}$$

The matrix a_{ij} in equations (5) to (7) is an orthogonal rotation matrix. The values of the coefficients are determined from stars for which X and Y as well as α and δ are known. If a plate by plate reduction is carried out, a minimum of three reference stars per plate is required. When overlapping plates covering a larger field are available, block adjustment principles may be used. In such a case, a minimum of three reference stars in the entire field is required. Least square methods are applied when the number of equations exceeds the number of unknowns. The equations to be used are

$$a_{m_{11}}\, u_{mi} + a_{m_{12}}\, v_{mi} + a_{m_{13}}\, w_{mi} = \xi_i + \epsilon_{\xi i} \quad , \tag{11}$$

$$a_{m_{21}}\, u_{mi} + a_{m_{22}}\, v_{mi} + a_{m_{23}}\, w_{mi} = \eta_i + \epsilon_{\eta i} \quad , \tag{12}$$

$$a_{m_{31}}\, u_{mi} + a_{m_{32}}\, v_{mi} + a_{m_{33}}\, w_{mi} = \zeta_i + \epsilon_{\zeta i} \quad , \tag{13}$$

in the case of a reference star with the number *i* measured on the plate with the number *m*, the values ξ_i, η_i, ζ_i are calculated from equations (8) to (10). The coefficients

a_{mij} are the rotation matrix corresponding to plate *m*. The errors $\epsilon_{\xi i}$, $\epsilon_{\eta i}$, $\epsilon_{\zeta i}$ are residuals accumulated by errors in the measured coordinates, the coefficients, and the catalogue positions.

For an object *i* measured on plates *m* and *n* the equations

$$a_{m_{11}} u_{mi} + a_{m_{12}} v_{mi} + a_{m_{13}} w_{mi} - a_{n_{11}} u_{ni} - a_{n_{12}} v_{ni} - a_{n_{13}} w_{ni} = \epsilon_{\xi i} \quad , \qquad (14)$$

$$a_{m21} u_{mi} + a_{m22} v_{mi} + a_{m23} w_{mi} - a_{n21} u_{ni} - a_{n22} v_{ni} - a_{n23} w_{ni} = \epsilon_{\eta i} \quad , \qquad (15)$$

$$a_{m31} u_{mi} + a_{m32} v_{mi} + a_{m33} w_{mi} - a_{n31} u_{ni} - a_{n32} v_{ni} - a_{n33} w_{ni} = \epsilon_{\zeta i} \qquad (16)$$

may be used.

Evidently, the distribution of the residuals calculated in the equations (11) to (16) is not necessarily Gaussian, even if the error distribution of the measured data or the catalogue positions are of a Gaussian type. Even so, experience shows that very good approximations for the coefficients a_{mij} can be obtained by imposing

$$\Sigma\ \epsilon^2_{\xi i} = \text{Minimum} \quad ,$$

$$\Sigma\ \epsilon^2_{\eta i} = \text{Minimum} \quad ,$$

$$\Sigma\ \epsilon^2_{\zeta i} = \text{Minimum} \quad .$$

In any case the procedure which we have used leads to an algorithm which is very easy to handle.

The sums of the residuals must include all objects and all plates for which either set of the above equations is applicable. For each object weight factors may be applied to either equations (11) to (13) or equations (14) to (16).

IV. FIELD DISTORTION

When the measured plate coordinates X and Y contain distortion components, then equations (1) to (3) cannot be applied directly. The coordinates have to be corrected first to an undistorted system. However, as was mentioned by Stock (1981), if orthogonality is not imposed on the matrices, then the system worked out in Section III is capable of absorbing distortion terms which are linear functions of the coordinates. This means that, excepting large zenith distances, no correction for differential refraction is required. The same is true for other minor effects, such as for example the aberration of light due to the earth's motion. The principal effect we are concerned with here is due to the optical system. We can distinguish several types of distortions. Some are related to the location of the images, others to their structure. We can also distinguish distortion of radial symmetry which is independent of the position angle on the plate from unsymmetric types which show a position-angle dependence.

Considering the type of optics of the Oxford refractor we may at first instance expect what is usually termed as a "pin cushion" or "barrel" deformation of the field. We shall at this point neglect effects due to either coma or to chromatic aberrations. Thus, the displacement ΔR of an image in the direction of the radius R (distance from tangential point) takes the form

$$\Delta R(R) = \sum_{i=1}^{N} b_i R^{2i} \qquad (17)$$

with

$$R = (X^2 + Y^2)^{1/2} \quad . \qquad (18)$$

For reasons of symmetry only even powers of R are used. The extent of the expansion, i.e., the value of N, has to be determined empirically.

Let us consider the case of two partially overlapping plates, with the measured coordinates X_1, Y_1 and X_2, Y_2 respectively. If no distortion is present, the three dimensional coordinares ξ_1, η_1, ζ_1, and ξ_2, η_2, ζ_2 can be calculated from equations (1) to (4). Between these two sets of coordinates we expect the relation

$$\xi_1 = a_{11}\ \xi_2 + a_{12}\ \eta_2 + a_{13}\ \zeta_2 \quad , \qquad (19)$$

$$\eta_1 = a_{21}\ \xi_2 + a_{22}\ \eta_2 + a_{23}\ \zeta_2 \quad , \qquad (20)$$

$$\zeta_1 = a_{31}\ \xi_2 + a_{32}\ \eta_2 + a_{33}\ \zeta_2 \quad , \qquad (21)$$

Again the matrix a_{ij} is an orthogonal matrix. This time, however, its diagonal elements will be near unity, and the remaining ones near zero.

For the field size under consideration $\xi \sim X$ and $\eta \sim Y$, such that we may use

$$\rho = (\xi^2 + \eta^2)^{1/2} \qquad (22)$$

and

$$\Delta\rho(\rho) = \sum_{i=1}^{N} b_i\ \rho^{2i} \qquad (23)$$

instead of equations (17) and (18).

The components of the distortion in the ξ- and η- direction are

$$\Delta\xi = \frac{\xi}{\rho} \Delta\rho \tag{24}$$

and

$$\Delta\eta = \frac{\eta}{\rho} \Delta\rho \quad . \tag{25}$$

These terms have to be introduced into equations (19) and (20). Considering that these correction terms may be expected to be very small, we shall neglect their products with the matrix elements which are small, and find

$$\xi_1 \left(1 + \frac{\Delta\rho_1}{\rho_1}\right) = a_{11}\ \xi_2 \left(1 + \frac{\Delta\rho_2}{\rho_2}\right) + a_{12}\ \eta_2 + a_{13}\ \zeta_2 \quad , \tag{26}$$

$$\eta_1 \left(1 + \frac{\Delta\rho_1}{\rho_1}\right) = a_{21}\ \xi_2 + a_{22}\ \eta_2 \left(1 + \frac{\Delta\rho_2}{\rho_2}\right) + a_{23}\ \zeta_2 \quad . \tag{27}$$

Each of these two equations contains 3 + N unknowns, of which the b_k-terms are common to both. For a least-square determination of the latter from plate pairs with more than 3 + N stars in common we can either solve the ξ- and η terms separately and check whether both lead to the same b_k coefficients, or we can combine them into one single set of 6 + N equations with an equal number of unknowns, thus imposing equality of the b_k-terms.

For the empirical determination of the b_k-coefficients we selected all plate pairs which had forty or more stars in common, a total of 24 pairs. The effectiveness of the method outlined above was demonstrated accidentally using these plate pairs. Due to an error in the computer program an improper projection geometry was applied to the plates. This error was detected on the basis of the large and consistent coefficients which the test produced, and which corresponded exactly to the difference between the applied and the correct projection. After correcting the error the coefficients became of an erratic nature, amounting to insignificant values if averaged over the 24 plate pairs. The matrix coefficients, on the other hand, deviate significantly and consistently from an orthogonal matrix. This means that the type of field distortion present in the Oxford Refractor, due to the optics, telescope alignment, atmospheric refraction, screw errors of the measuring machine, etc., are effectively absorbed by the matrix if orthogonality is not imposed.

V. REDUCTION WITH THE AGK3 SYSTEM

A total of 335 stars were found to be in common with the AGK3 catalogue, with an average of 25 stars per plate. For each catalogue star the position was calculated for the epoch of 1901.2, the latter being the average epoch of the 24 Oxford plates. The block reduction was then carried out using unit weight for all links and for all reference objects.

From the position obtained for stars occurring on two or more plates their mean errors can be calculated. The mean rms errors ϵ_α and ϵ_δ for a single image are

$$\epsilon_\alpha = 0^s\!.031 \qquad \text{and} \qquad \epsilon_\delta = 0''\!.22 .$$

These correspond to just a little more than half of the last digit of the coordinates in the original Oxford Catalogue. This does not leave much room for color- or magnitude-dependent systematic errors. The latter type of error cannot be absorbed by the matrix elements.

VI. REDUCTION WITH THE FK4 CATALOGUE

Six stars were found in common with the supplements of the FK4 (1963), none with the main catalogue. As may be appreciated in Figure 2, these stars are not "strategically" located in the field covered by the plates under consideration. Again several solutions were calculated with weights for the reference stars ranging from 1.0 to 100.0. Only minor differences were found between the different solutions. However, they produce rather large systematic differences with the AGK3 in the regions away from the reference stars. These differences amount to several seconds of arc at one edge of the field. Evidently more reference stars, or at least a more favorable distribution is needed. We plan to add plates from neighbouring Carte du Ciel zones in order to increase the number of fundamental reference stars.

VII. THE PROPER MOTIONS

Proper motions were calculated by comparing the positions of the AGK2 catalogue with those obtained from the Oxford data. For the latter, naturally, we used the solution based on the AGK3 as reference source. A mean epoch difference of 28.9 years was adopted. Comparisons of these proper motions, i.e., AGK2–Oxford, with the proper motions AGK3–AGK2 is shown in Figure 3. Only stars appearing on two or more Oxford plates were used for the graphs. In this form practically all stars along the edge of the field were eliminated. The remaining stars were plotted in Figure 4. The notorious increase in the scatter is attributed to two sources, namely, (1) the Oxford position has less weight, and (2) most of the stars are located outside of the area where the block adjustment is effective. Thus, positions and proper motions, as given in Table 1 and Table 2, are of full weight only when the position is located within the limits.

$$11^h 45^m < \alpha < 12^h 20^m, \quad 26^\circ\ 45' < \delta < 30^\circ\ 45'.$$

VIII. THE POSITION CATALOGUE

The positions given in Table 1 are for a mean epoch of 1901.2, for the equinox 1950.0. The columns contain the following data:

column 1: Running number
columns 2- 4: Right ascension
column 5: Mean error of right ascension

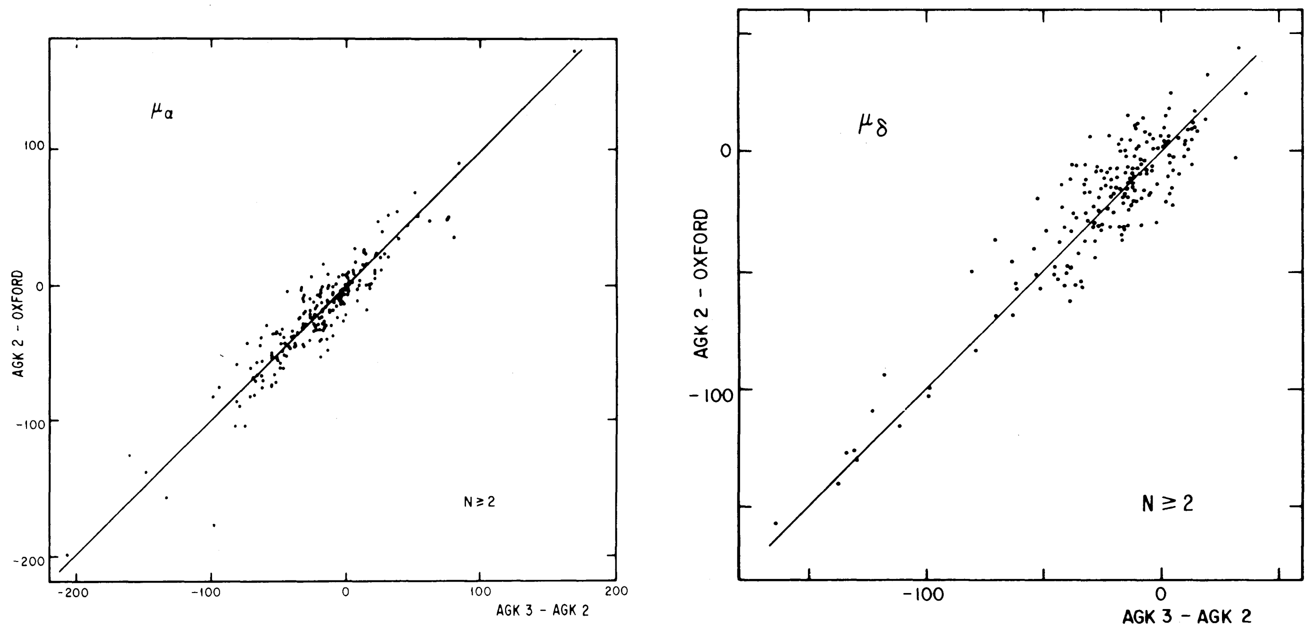

Fig. 3. Comparisons of proper motions AGK3–AGK2 versus AGK2–Oxford for stars which occur on two or more Oxford plates.

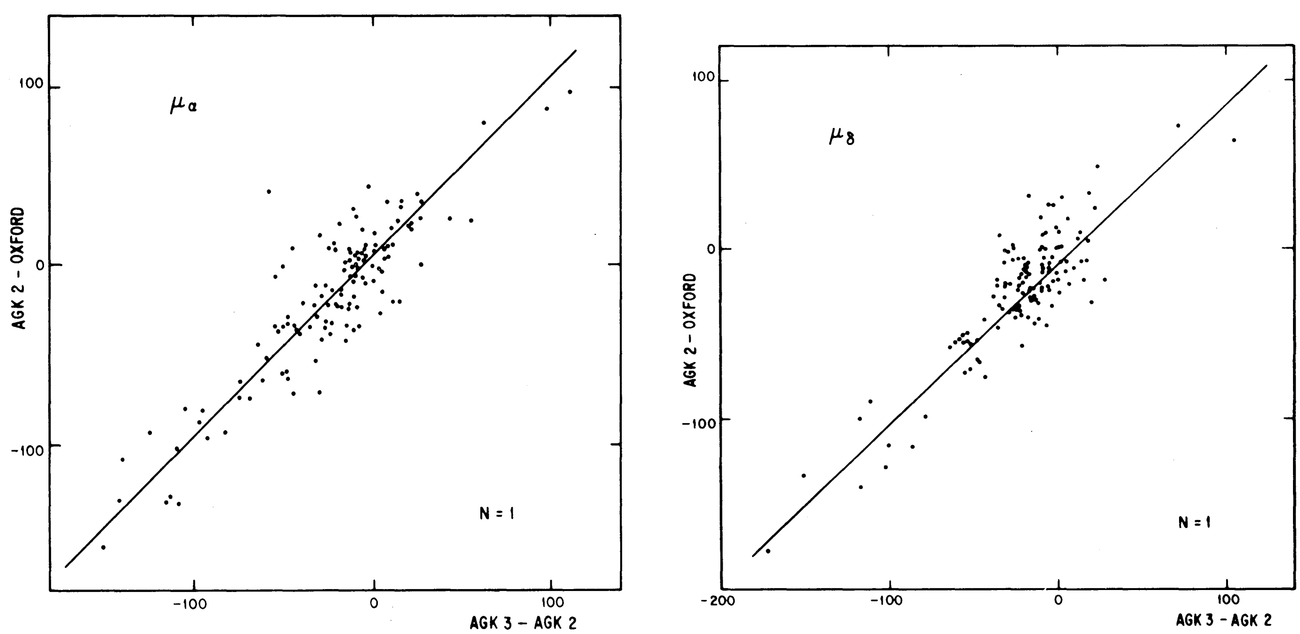

Fig. 4. Comparisons of proper motions AGK3–AGK2 versus AGK2–Oxford for stars which occur on only one Oxford plate.

columns 6- 8: Declination
column 9: Mean error of declination
column 10: Magnitude as given in the Oxford Catalogue
column 11: Number of Oxford plates on which the stars occurs
column 12: 1 indicates that the star appears in the AGK3; 2 indicates that it appears in the FK4-Supplement.

IX. THE CATALOGUE OF PROPER MOTIONS

The proper motions AGK2–Oxford and AGK3–AGK2 are given in Table 2. The columns contain:

column 1: Running number of Table 1
column 2: Right ascension
column 3: Declination
column 4: Magnitude as given in the Oxford Catalogue
column 5: Proper motion in right ascension in 0ʺ001/year from AGK2–Oxford
column 6: Proper motion in declination in 0ʺ001/year from AGK2–Oxford
column 7: Proper motion in right ascension in 0ʺ001/year from AGK3–AGK2
column 8: Proper motion in declination in 0ʺ001/year from AGK3–AGK2.

X. THE CROSS REFERENCE CATALOGUE

For future reference and for other users we give in Table 3 the running number of Table 1 and the corresponding Oxford plate numbers and star numbers. It is important to note that we have used only the last four digits of the star numbers given in the Oxford catalogue.

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TABLE 1

THE POSITION CATALOGUE

No	α	ϵ_α	δ	ϵ_δ	m_p	N	A
1	11 39 44.33		29 57 11.5		8.0	1	1
2	11 39 46.89		30 2 36.7		10.4	1	
3	11 40 1.41		27 58 34.2		9.8	1	
4	11 40 1.94		27 51 46.9		11.6	1	
5	11 40 1.94		26 40 58.9		8.3	1	
6	11 40 2.30		29 20 21.5		11.0	1	
7	11 40 3.13		27 18 54.6		9.6	1	
8	11 40 7.73		27 31 40.8		7.8	1	
9	11 40 9.95		27 0 22.6		9.2	1	
10	11 40 12.86		27 19 24.3		10.6	1	
11	11 40 14.11		28 20 2.6		9.7	1	
12	11 40 16.18		28 27 21.2		12.0	1	
13	11 40 17.34		26 43 11.2		9.3	1	
14	11 40 18.29		27 55 22.7		12.0	1	
15	11 40 19.63	0.04	28 49 19.0	0.4	6.9	2	1
16	11 40 22.63		28 34 55.3		9.4	1	
17	11 40 23.54		30 15 54.8		10.7	1	
18	11 40 25.59		28 31 50.2		11.6	1	
19	11 40 27.69		27 8 27.8		9.8	1	1
20	11 40 27.72		26 50 14.9		12.0	1	
21	11 40 29.58		27 20 29.4		11.8	1	
22	11 40 31.71		29 11 39.1		9.4	1	
23	11 40 33.27		27 6 32.7		10.1	1	
24	11 40 33.62		29 37 8.9		10.7	1	
25	11 40 33.66		26 59 1.9		9.9	1	
26	11 40 34.03		27 47 40.7		11.0	1	
27	11 40 35.26		29 16 8.3		11.2	1	
28	11 40 36.70		29 27 29.5		10.1	1	
29	11 40 36.96		29 15 13.6		9.4	1	
30	11 40 37.47		27 4 19.4		8.9	1	
31	11 40 37.58		28 23 1.8		11.0	1	
32	11 40 38.61		28 1 16.5		11.2	1	
33	11 40 38.91		27 16 58.3		11.3	1	
34	11 40 44.41		30 2 50.4		10.9	1	
35	11 40 46.28		28 19 54.6		6.7	1	1
36	11 40 46.92		27 51 31.6		11.5	1	
37	11 40 51.26		27 50 45.3		8.0	1	1
38	11 40 54.42		30 17 31.0		11.2	1	
39	11 40 55.40		30 48 28.6		10.4	1	
40	11 40 55.59		30 32 21.5		8.9	1	
41	11 40 55.94		27 12 15.6		10.1	1	1
42	11 40 56.18		29 19 19.9		7.7	1	1
43	11 40 57.01		28 37 45.2		10.5	1	
44	11 40 57.54		28 22 52.3		10.6	1	
45	11 40 59.29		30 29 56.0		10.3	1	
46	11 41 1.61		27 35 58.8		10.4	1	
47	11 41 2.55		26 47 1.9		11.2	1	
48	11 41 5.54		28 30 26.1		10.3	1	
49	11 41 5.85		28 1 8.8		11.3	1	
50	11 41 7.57		[illegible] 44 27.5		9.2	1	1
51	11 41 8.97		27 57 27.0		11.3	1	
52	11 41 9.67		26 50 11.9		9.4	1	
53	11 41 9.70		29 27 17.6		10.7	1	
54	11 41 12.53		27 11 59.3		11.6	1	
55	11 41 15.50		28 35 24.3		10.0	1	
56	11 41 17.02		27 28 35.6		11.8	1	
57	11 41 20.99		30 17 5.2		10.7	1	
58	11 41 21.67		29 26 3.0		9.0	1	
59	11 41 25.40		27 20 49.4		12.2	1	
60	11 41 26.04		28 58 7.2		10.9	1	
61	11 41 30.69		29 51 28.2		7.0	1	1
62	11 41 31.20		30 3 1.7		10.1	1	
63	11 41 33.49		29 54 10.7		11.7	1	
64	11 41 34.73		28 35 38.8		11.5	1	
65	11 41 35.29		29 52 11.7		10.1	1	
66	11 41 36.29		30 10 23.9		6.9	1	1
67	11 41 40.10		27 28 42.1		11.0	1	
68	11 41 40.56		28 30 5.2		11.6	1	
69	11 41 42.16		30 27 1.0		10.5	1	
70	11 41 42.19		27 36 28.7		9.6	1	
71	11 41 44.27		27 3 17.0		10.4	1	
72	11 41 45.42		28 42 30.4		11.2	1	
73	11 41 47.52		30 7 7.8		10.7	1	
74	11 41 47.96		30 20 53.8		11.7	1	
75	11 41 51.83		26 41 23.7		9.9	1	
76	11 41 52.04		30 17 35.7		10.7	1	1
77	11 41 55.29		28 17 53.8		11.5	1	

No	α	ϵ_α	δ	ϵ_δ	m_p	N	A
165	11 43 35.72		27 28 17.6		9.6	1	1
166	11 43 36.84		28 32 14.3		11.5	1	
167	11 43 37.68	0.02	29 17 43.0	0.2	10.1	2	1
168	11 43 39.71		28 10 41.1		11.0	1	
169	11 43 40.58		27 35 48.9		11.3	1	
170	11 43 40.85		28 23 29.4		11.5	1	
171	11 43 41.27	0.00	28 30 52.9	0.3	10.1	2	
172	11 43 41.53		28 5 24.7		11.5	1	
173	11 43 44.18	0.00	30 41 46.8	0.2	11.6	2	
174	11 43 44.25		31 5 49.6		11.4	1	
175	11 43 44.85	0.01	29 25 21.6	0.4	10.4	2	
176	11 43 44.99		27 15 45.3		9.9	1	
177	11 43 45.52		31 47 56.9		8.7	1	
178	11 43 47.31		29 45 17.8		11.7	1	
179	11 43 49.68		28 3 34.7		11.6	1	
180	11 43 50.29		27 35 1.4		11.3	1	
181	11 43 52.67		27 7 7.2		11.2	1	
182	11 43 53.08		28 21 16.7		11.5	1	
183	11 43 53.49		27 34 26.0		11.2	1	
184	11 43 53.86	0.00	30 36 33.7	0.2	10.7	2	1
185	11 43 56.66	0.02	28 41 15.3	0.1	11.4	3	
186	11 43 57.16	0.02	29 39 41.7	0.4	11.2	2	
187	11 43 59.77	0.03	30 42 2.5	0.0	8.9	2	1
188	11 44 1.68		27 22 28.6		11.5	1	
189	11 44 2.62	0.01	30 34 32.4	0.1	11.7	2	
190	11 44 4.03		26 49 52.5		11.5	1	
191	11 44 7.08		27 20 16.7		10.6	1	
192	11 44 7.14		27 53 40.2		11.3	1	
193	11 44 9.13		31 8 41.8		10.8	1	
194	11 44 9.38		28 31 24.1		11.3	1	
195	11 44 11.15		31 6 54.8		10.0	1	
196	11 44 12.08	0.00	29 6 54.0	0.3	9.4	2	1
197	11 44 12.91		28 42 36.3		11.5	1	
198	11 44 13.57		28 13 29.1		11.3	1	
199	11 44 16.31		28 42 31.2		11.5	1	
200	11 44 17.48		27 51 17.5		11.5	1	
201	11 44 18.11		26 47 30.5		12.0	1	
202	11 44 19.28		27 19 6.8		8.8	1	1
203	11 44 19.62		30 53 21.3		8.5	1	
204	11 44 19.65		27 34 28.1		11.5	1	
205	11 44 19.81	0.00	28 17 10.9	0.4	9.6	2	
206	11 44 21.42		27 18 2.7		9.3	1	1
207	11 44 22.61		27 9 23.7		10.4	1	
208	11 44 22.83		30 50 10.0		11.2	1	
209	11 44 26.01		27 12 44.7		9.5	1	
210	11 44 28.50		28 32 37.3		11.5	1	
211	11 44 29.30	0.01	28 23 36.6	0.1	11.0	2	
212	11 44 29.96		27 59 42.6		11.3	1	
213	11 44 32.09	0.01	28 50 5.4	0.2	11.4	2	
214	11 44 35.12	0.02	28 28 12.4	0.1	8.9	2	1
215	11 44 35.16		31 33 4.1		10.0	1	
216	11 44 36.71		27 32 59.9		10.7	1	
217	11 44 38.53	0.01	29 48 28.5	0.2	11.7	2	
218	11 44 39.13	0.01	29 2 10.6	0.0	10.7	2	
219	11 44 40.68	0.01	27 43 3.1	0.3	9.5	2	1
220	11 44 44.65	0.05	27 40 33.3	0.6	7.9	2	1
221	11 44 47.06		27 28 18.5		11.5	1	
222	11 44 48.27		27 35 45.7		11.8	1	
223	11 44 49.42		30 45 51.1		11.6	1	
224	11 44 50.23		27 38 12.9		11.2	1	
225	11 44 50.77		27 55 57.4		11.3	1	
226	11 44 53.10		26 41 31.0		9.1	1	1
227	11 44 54.80	0.01	28 33 34.6	0.2	11.2	2	
228	11 44 58.49		30 52 55.8		11.0	1	1
229	11 45 3.59		30 30 58.1		11.6	1	
230	11 45 5.88	0.02	30 23 49.2	0.2	11.2	2	
231	11 45 6.15	0.03	30 47 40.8	0.0	11.6	2	
232	11 45 7.91	0.02	30 31 3.1	0.3	10.7	2	1
233	11 45 9.69	0.04	28 50 8.1	0.5	10.9	2	
234	11 45 10.47		28 17 48.1		11.5	1	
235	11 45 10.88		27 22 35.4		11.6	1	
236	11 45 11.50		31 2 23.6		11.4	1	
237	11 45 11.52	0.01	29 37 53.1	0.0	11.0	2	
238	11 45 12.91		27 4 13.3		11.2	1	
239	11 45 13.78		31 1 32.7		11.2	1	
240	11 45 14.70		31 27 24.4		11.0	1	
241	11 45 16.35		26 50 35.1		11.6	1	

No	α	ϵ_α	δ	ϵ_δ	m_p	N	A
329	11 46 49.39		31 45 36.7		11.0	1	
330	11 46 53.95	0.03	27 15 44.4	0.3	10.7	2	
331	11 46 54.78		26 50 13.5		11.6	1	
332	11 46 54.96		26 43 26.8		11.6	1	
333	11 46 54.99	0.02	27 47 46.8	0.1	10.1	3	
334	11 46 55.55	0.00	29 59 22.0	0.3	11.0	2	
335	11 46 55.63		26 31 0.9		9.7	1	
336	11 46 59.40	0.01	29 46 35.8	0.0	7.8	3	1
337	11 46 59.42		28 49 30.4		12.0	1	
338	11 46 59.95		28 1 56.0		11.2	1	
339	11 46 59.98	0.02	28 48 7.6	0.1	10.3	3	
340	11 47 2.15	0.02	28 39 35.7	0.0	10.1	2	
341	11 47 2.98		30 19 19.7		11.7	1	
342	11 47 3.71	0.02	29 24 52.5	0.0	11.7	2	
343	11 47 4.05		28 40 54.6		11.2	1	
344	11 47 4.42	0.00	28 28 29.5	0.4	11.3	2	
345	11 47 4.90	0.02	30 27 25.8	0.0	10.9	2	
346	11 47 6.32		27 34 5.7		11.8	1	
347	11 47 7.43		31 25 43.5		11.6	1	
348	11 47 8.04		28 22 59.2		11.3	1	
349	11 47 9.04	0.00	29 19 2.6	0.6	9.8	2	
350	11 47 9.62	0.00	26 55 59.2	0.1	11.2	2	
351	11 47 9.95		28 23 29.2		12.4	1	
352	11 47 10.31		26 34 17.2		11.6	1	
353	11 47 11.12	0.01	30 5 9.2	0.0	11.9	2	
354	11 47 12.25		28 16 26.8		11.3	1	
355	11 47 12.44	0.01	30 6 53.3	0.0	10.7	2	1
356	11 47 14.16		27 42 31.9		11.5	1	
357	11 47 14.49	0.01	29 12 6.9	0.0	11.4	2	
358	11 47 14.87		27 5 45.3		11.5	1	
359	11 47 14.90	0.03	29 3 31.7	0.1	10.3	2	
360	11 47 14.99		28 37 12.0		12.0	1	
361	11 47 15.82		28 4 8.0		11.8	1	
362	11 47 17.60		31 33 3.5		11.2	1	
363	11 47 18.09		25 56 50.6		11.3	1	
364	11 47 18.14		28 10 23.1		11.6	1	
365	11 47 19.46		27 45 27.2		11.5	1	
366	11 47 19.54		27 4 29.4		12.2	1	
367	11 47 20.85		27 4 58.2		11.5	1	
368	11 47 22.30		27 50 38.0		11.5	1	
369	11 47 22.83	0.02	27 38 26.4	0.5	11.0	2	
370	11 47 23.26		31 4 2.0		11.2	1	
371	11 47 23.54		31 40 45.2		11.6	1	
372	11 47 24.26	0.00	30 32 28.3	0.0	11.6	2	
373	11 47 24.28		31 1 3.4		11.6	1	
374	11 47 24.64		28 21 50.1		11.5	1	
375	11 47 27.35		31 34 17.2		11.0	1	
376	11 47 28.63	0.02	29 30 34.5	0.3	11.0	2	
377	11 47 29.11		31 22 24.2		11.0	1	
378	11 47 29.26		27 54 26.6		11.5	1	
379	11 47 29.36		30 58 35.3		11.4	1	
380	11 47 29.80	0.02	29 13 46.8	0.7	11.7	2	
381	11 47 32.09		31 29 4.8		11.0	1	
382	11 47 32.73	0.02	27 25 35.2	0.4	10.9	2	
383	11 47 34.71	0.01	27 26 33.4	1.2	11.5	2	
384	11 47 34.81	0.02	27 45 8.9	0.3	10.3	3	
385	11 47 34.85		28 10 32.2		11.8	1	
386	11 47 35.41	0.01	27 56 1.8	0.2	9.7	2	1
387	11 47 36.76	0.00	29 56 31.5	0.3	11.7	2	
388	11 47 36.84	0.02	30 37 56.3	0.6	11.7	2	
389	11 47 37.38		28 48 15.7		11.3	1	
390	11 47 37.45		26 1 48.3		9.9	1	
391	11 47 38.27		27 36 43.6		11.5	1	
392	11 47 39.41		28 47 53.8		11.0	1	
393	11 47 39.66		31 23 12.0		11.6	1	
394	11 47 39.81	0.02	28 40 3.4	0.5	11.2	2	
395	11 47 39.82		31 2 37.2		11.0	1	
396	11 47 40.48		31 38 8.1		11.4	1	
397	11 47 41.03		28 48 4.8		12.0	1	
398	11 47 42.93		25 46 41.5		11.5	1	
399	11 47 47.10		27 48 36.2		11.5	1	
400	11 47 47.23	0.01	26 54 22.7	0.5	11.0	2	
401	11 47 49.59		27 43 57.9		10.6	1	
402	11 47 49.61	0.02	27 43 57.0	0.0	10.1	2	
403	11 47 49.74		28 26 30.8		11.6	1	
404	11 47 50.01		26 12 20.9		12.1	1	
405	11 47 50.45		27 15 59.7		11.6	1	
406	11 47 52.16	0.06	27 6 46.4	0.3	11.2	2	

78	11	41	56.97		27	54	58.5		11.5	1	
79	11	41	57.45		29	25	17.8		10.4	1	
80	11	41	58.41		27	3	58.8		10.1	1	
81	11	41	59.78		27	56	16.3		11.3	1	
82	11	42	0.67		30	3	13.8		11.7	1	
83	11	42	1.12		27	8	56.5		11.5	1	
84	11	42	2.52	0.01	28	42	26.3	0.2	9.6	2	1
85	11	42	2.62		27	8	5.7		11.2	1	
86	11	42	4.20		30	41	11.1		10.7	1	
87	11	42	6.17		28	40	5.8		10.1	1	
88	11	42	6.59		27	37	44.8		10.0	1	
89	11	42	7.56		27	57	58.2		11.8	1	
90	11	42	7.64		28	56	50.7		6.9	1	1
91	11	42	8.10		26	43	48.0		11.0	1	
92	11	42	9.16		26	52	59.1		11.0	1	
93	11	42	10.70		30	34	9.4		11.7	1	
94	11	42	11.33		28	3	46.5		11.5	1	
95	11	42	12.02		27	2	59.8		11.5	1	
96	11	42	14.15	0.02	28	42	24.6	0.5	10.4	2	1
97	11	42	14.31	0.03	28	42	17.3	0.1	10.1	2	1
98	11	42	14.80		28	35	35.8		11.2	1	
99	11	42	17.80		27	12	54.9		11.5	1	
100	11	42	19.12		26	57	58.9		12.0	1	
101	11	42	20.61		27	56	23.6		9.2	1	1
102	11	42	21.83		27	41	19.0		8.0	1	1
103	11	42	23.46		27	16	26.2		11.3	1	
104	11	42	23.97		29	16	11.8		10.7	1	
105	11	42	24.04		27	7	1.3		11.6	1	
106	11	42	28.29		30	3	25.6		11.7	1	
107	11	42	30.25		30	11	29.1		12.2	1	
108	11	42	30.54		26	50	38.5		10.1	1	
109	11	42	34.21		27	9	35.9		11.5	1	
110	11	42	36.87		27	40	31.9		11.5	1	
111	11	42	37.01		28	24	4.2		8.9	1	1
112	11	42	37.02		28	8	19.3		11.8	1	
113	11	42	39.83		28	53	42.7		10.1	1	
114	11	42	39.84		28	3	32.8		11.0	1	
115	11	42	39.97		28	9	53.3		11.5	1	
116	11	42	41.55		29	50	38.8		11.7	1	
117	11	42	42.02		28	55	44.7		11.4	1	
118	11	42	42.19		27	21	15.7		11.6	1	
119	11	42	44.57		26	55	50.3		11.2	1	
120	11	42	46.24		28	37	51.2		11.0	1	
121	11	42	49.03		28	41	5.6		11.5	1	
122	11	42	49.29		27	29	46.7		7.3	1	1
123	11	42	49.47		29	18	55.6		11.7	1	
124	11	42	51.57		26	46	42.5		11.2	1	
125	11	42	53.71		26	57	52.2		10.3	1	
126	11	42	55.02		28	5	5.5		10.7	1	
127	11	42	56.04		28	26	27.2		11.5	1	
128	11	42	56.45		30	46	9.2		8.1	1	1
129	11	42	58.25		28	50	43.8		11.7	1	
130	11	43	0.14		27	20	53.8		11.5	1	
131	11	43	0.15		27	21	42.4		11.2	1	
132	11	43	2.17		28	43	33.2		11.2	1	
133	11	43	2.88		30	3	55.1		11.7	1	
134	11	43	7.62		29	56	4.0		11.7	1	
135	11	43	7.86		28	26	47.1		11.5	1	
136	11	43	8.33		27	29	4.7		11.5	1	
137	11	43	9.85		28	20	11.5		11.8	1	
138	11	43	10.07		28	16	43.0		11.2	1	
139	11	43	10.54		28	40	20.0		11.5	1	
140	11	43	11.07		27	27	30.8		12.2	1	
141	11	43	11.97		28	52	33.6		9.8	1	1
142	11	43	12.52	0.01	28	46	22.2	0.3	11.2	2	
143	11	43	13.35		28	6	12.3		11.3	1	
144	11	43	13.59		27	24	0.4		10.1	1	
145	11	43	14.32		27	27	34.1		11.5	1	
146	11	43	14.89		29	42	22.7		10.4	1	
147	11	43	16.83		29	17	18.4		10.9	1	
148	11	43	17.23		26	40	6.4		11.2	1	
149	11	43	18.30		26	58	40.2		10.1	1	
150	11	43	18.60		28	22	58.1		10.4	1	
151	11	43	18.66		26	49	3.4		10.3	1	
152	11	43	19.52		26	41	17.7		9.8	1	1
153	11	43	20.25		28	29	56.8		11.2	1	
154	11	43	20.34		30	48	33.2		10.1	1	1
155	11	43	21.17		29	19	34.4		11.7	1	
156	11	43	22.58		28	31	3.3		12.0	1	
157	11	43	23.25		28	56	47.5		8.9	1	1
158	11	43	24.44		30	30	31.0		11.6	1	
159	11	43	25.33		29	37	17.9		11.2	1	
160	11	43	25.58		27	18	29.4		9.1	1	
161	11	43	26.11		29	10	32.1		11.2	1	
162	11	43	28.41		27	7	17.8		9.1	1	1
163	11	43	29.38		28	33	11.5		11.2	1	
164	11	43	34.61	0.01	30	48	33.9	0.2	11.4	2	

242	11	45	16.69	0.01	28	8	9.5	0.1	10.1	2	
243	11	45	17.09		26	47	47.5		11.5	1	
244	11	45	17.34		28	46	5.3		11.5	1	
245	11	45	19.08		29	55	59.3		11.6	1	
246	11	45	19.67	0.01	28	17	14.4	0.2	8.9	2	
247	11	45	20.97		27	37	5.3		7.4	1	1
248	11	45	21.02	0.01	29	46	15.9	0.1	11.4	3	
249	11	45	23.85		28	37	12.6		11.6	1	
250	11	45	24.54	0.01	27	40	37.8	0.5	10.0	2	1
251	11	45	26.42		28	45	48.3		11.6	1	
252	11	45	27.01		26	57	47.0		9.7	1	1
253	11	45	27.19		27	36	40.9		11.5	1	
254	11	45	27.33		27	10	28.5		11.3	1	
255	11	45	29.89		28	3	15.2		11.2	1	
256	11	45	31.36		26	48	1.4		11.3	1	
257	11	45	32.94	0.01	28	8	4.7	0.2	10.1	2	
258	11	45	35.10		27	11	34.0		11.3	1	
259	11	45	37.62		26	52	47.5		10.0	1	
260	11	45	38.03		26	59	21.7		11.2	1	
261	11	45	38.85		28	32	59.4		11.5	1	
262	11	45	39.81		27	58	50.0		11.5	1	
263	11	45	40.23	0.02	27	47	48.1	0.1	10.3	2	
264	11	45	40.31	0.00	28	0	33.0	0.3	10.9	2	
265	11	45	43.57	0.04	30	40	5.8	0.0	11.7	2	
266	11	45	44.39		27	4	19.3		11.5	1	
267	11	45	44.69		27	14	42.5		11.6	1	
268	11	45	46.41		30	54	18.4		8.7	1	1
269	11	45	48.00	0.01	28	58	49.2	0.1	11.7	2	
270	11	45	48.50		31	40	3.3		11.0	1	
271	11	45	50.17	0.03	28	41	42.9	0.1	6.9	3	1
272	11	45	50.64	0.04	28	22	54.9	0.4	11.3	2	
273	11	45	51.57		28	18	46.3		11.5	1	
274	11	45	53.17		28	8	20.7		11.8	1	
275	11	45	53.78		28	26	24.5		11.2	1	
276	11	45	55.35		27	15	55.8		10.9	1	
277	11	45	56.57		31	20	32.2		11.4	1	
278	11	45	56.76		31	10	36.4		11.0	1	
279	11	45	59.81		28	24	31.3		11.5	1	
280	11	46	0.31		27	33	9.4		11.8	1	
281	11	46	1.12	0.01	29	4	40.6	0.3	6.4	2	1
282	11	46	1.81		27	11	8.2		11.8	1	
283	11	46	2.01	0.01	28	33	11.7	0.2	9.9	2	
284	11	46	5.18		26	45	54.9		11.3	1	
285	11	46	5.40	0.02	28	47	38.3	0.2	11.2	2	
286	11	46	5.92		28	45	57.1		11.2	1	
287	11	46	6.23		27	27	28.7		12.0	1	
288	11	46	8.34		31	29	1.3		8.2	1	1
289	11	46	9.37	0.03	29	55	57.6	0.5	11.2	2	
290	11	46	9.46	0.00	26	54	13.2	0.0	11.5	2	
291	11	46	12.73		30	10	0.9		11.6	1	
292	11	46	14.24		31	14	32.0		11.6	1	
293	11	46	14.29		28	6	11.1		11.5	1	
294	11	46	15.50	0.02	28	31	15.2	0.3	10.5	2	
295	11	46	17.09	0.02	26	47	32.3	0.4	11.0	2	
296	11	46	21.41	0.01	26	46	39.6	0.1	10.1	2	
297	11	46	21.90		26	40	32.6		12.0	1	
298	11	46	24.56	0.00	30	4	1.4	0.2	11.6	2	
299	11	46	25.39		31	6	42.5		11.0	1	
300	11	46	26.52		28	27	17.2		11.8	1	
301	11	46	26.75		26	54	42.1		11.6	1	
302	11	46	26.94		27	5	48.4		11.6	1	
303	11	46	28.59	0.02	28	27	44.1	0.4	10.4	2	
304	11	46	29.95		31	9	44.2		11.0	1	
305	11	46	30.26	0.00	30	23	4.2	0.1	11.9	2	
306	11	46	30.57		28	38	46.9		11.8	1	
307	11	46	31.16		31	26	54.9		11.6	1	
308	11	46	32.25		29	12	53.2		12.9	1	
309	11	46	32.62	0.02	27	14	43.4	0.1	10.3	2	
310	11	46	33.16		26	51	40.2		11.5	1	
311	11	46	33.24	0.00	26	43	21.3	0.7	11.3	2	
312	11	46	34.35		25	53	36.8		10.6	1	
313	11	46	34.58		28	2	39.3		11.6	1	
314	11	46	35.39	0.02	28	41	37.8	0.2	11.7	3	
315	11	46	36.67	0.03	28	23	57.6	0.3	7.3	2	1
316	11	46	36.97		31	44	6.0		9.4	1	1
317	11	46	37.91		29	46	13.2		11.4	1	
318	11	46	38.38	0.05	28	14	50.4	0.2	11.2	2	
319	11	46	38.40	0.01	29	11	30.0	0.3	11.7	2	
320	11	46	39.00		27	30	3.9		11.2	1	
321	11	46	39.07		28	28	4.8		11.6	1	
322	11	46	40.67	0.00	30	35	44.3	0.2	11.4	2	
323	11	46	41.52		27	0	47.5		11.8	1	
324	11	46	42.42	0.00	30	49	22.7	0.1	11.2	2	
325	11	46	43.69	0.02	28	48	37.8	0.1	10.4	3	
326	11	46	43.94		27	50	28.4		11.3	1	
327	11	46	45.55	0.01	27	21	48.4	0.1	9.8	2	
328	11	46	46.90		30	51	21.0		11.4	1	

407	11	47	59.62	0.00	28	1	8.1	0.2	11.3	2	
408	11	48	0.19	0.03	27	26	53.0	0.3	11.2	2	
409	11	48	0.29		28	48	5.8		11.0	1	
410	11	48	0.59		27	35	51.9		11.3	1	
411	11	48	2.26		27	15	24.4		12.2	1	
412	11	48	3.34		25	40	42.7		11.6	1	
413	11	48	4.25		28	43	37.7		11.2	1	
414	11	48	4.37		28	45	13.0		10.9	1	
415	11	48	4.45	0.01	28	23	45.3	0.2	9.6	2	
416	11	48	8.94	0.03	28	22	28.4	0.1	7.5	2	1
417	11	48	9.01	0.06	30	41	28.9	0.1	11.7	2	
418	11	48	10.04		31	26	58.6		11.0	1	
419	11	48	10.84		26	16	14.4		11.3	1	
420	11	48	11.96		28	41	40.2		11.3	1	
421	11	48	13.29	0.02	30	25	31.7	0.1	11.0	2	
422	11	48	13.81	0.03	26	41	13.5	0.0	11.2	2	
423	11	48	14.26	0.00	30	29	35.1	0.2	11.2	2	
424	11	48	16.35	0.03	27	20	12.4	0.2	10.1	2	
425	11	48	16.81		26	55	35.2		11.5	1	
426	11	48	16.90	0.01	28	21	20.6	0.2	10.1	2	
427	11	48	17.20	0.01	28	8	50.4	0.2	10.4	2	
428	11	48	17.88		27	45	51.6		11.5	1	
429	11	48	19.17	0.03	29	52	53.1	0.2	11.7	2	
430	11	48	20.18		26	13	41.0		9.9	1	
431	11	48	20.70	0.01	27	29	22.0	0.2	9.9	2	1
432	11	48	21.71	0.02	30	5	27.9	0.3	9.6	2	
433	11	48	23.77	0.01	30	1	5.3	0.5	11.7	2	
434	11	48	24.89		27	28	4.3		11.5	1	
435	11	48	26.16		31	11	48.9		11.4	1	
436	11	48	27.71		25	43	40.7		9.9	1	
437	11	48	27.82		26	34	49.1		11.3	1	
438	11	48	27.97	0.02	29	45	38.5	0.2	11.7	3	
439	11	48	29.26		27	46	36.8		12.0	1	
440	11	48	31.66		27	0	38.6		11.2	1	
441	11	48	32.43		26	18	33.2		10.0	1	1
442	11	48	33.59	0.01	28	13	13.8	0.0	10.9	2	
443	11	48	34.42		26	53	12.8		11.3	1	
444	11	48	36.03	0.01	27	3	51.4	0.2	10.0	2	
445	11	48	38.51	0.03	29	14	9.1	0.2	11.6	3	
446	11	48	39.06		28	11	49.3		11.5	1	
447	11	48	40.37		26	49	23.8		11.3	1	
448	11	48	40.48	0.03	27	33	49.0	0.1	11.2	2	
449	11	48	41.04	0.02	28	52	34.2	0.0	10.0	3	
450	11	48	41.99	0.01	29	30	28.9	0.2	10.7	3	
451	11	48	43.01	0.00	30	28	8.0	0.0	9.7	3	
452	11	48	47.07		31	39	36.4		11.6	1	
453	11	48	47.47		26	26	18.4		12.1	1	
454	11	48	47.91		31	46	56.7		11.0	1	
455	11	48	47.96		27	44	32.4		11.5	1	
456	11	48	48.14		[illegible]	37	25.0		10.6	1	1
457	11	48	49.05	0.01	29	12	54.7	0.3	10.4	3	
458	11	48	51.84		28	8	7.8		11.2	1	
459	11	48	52.16	0.02	30	28	35.0	0.1	11.2	3	
460	11	48	52.78		27	56	8.0		11.5	1	
461	11	48	54.07		25	41	44.3		10.0	1	
462	11	48	54.61		31	46	55.8		11.6	1	
463	11	48	56.73		25	56	22.8		11.6	1	
464	11	48	58.31	0.06	26	47	18.4	0.0	9.9	2	
465	11	48	59.03		27	58	45.8		11.2	1	
466	11	49	1.17		31	8	41.4		10.3	1	
467	11	49	4.63		27	39	22.6		11.5	1	
468	11	49	5.22	0.03	29	1	23.4	0.1	10.7	3	
469	11	49	5.23	0.05	26	51	34.5	0.1	11.2	2	
470	11	49	6.85		26	48	35.3		10.5	1	
471	11	49	7.11		31	35	24.4		11.4	1	
472	11	49	7.32		27	50	17.1		11.8	1	
473	11	49	8.28	0.00	29	18	56.9	0.2	10.5	3	1
474	11	49	9.33		27	48	58.4		11.5	1	
475	11	49	11.46	0.01	27	46	25.3	0.1	10.5	4	
476	11	49	12.12	0.04	30	24	25.3	0.8	11.4	2	
477	11	49	12.54		27	19	20.5		11.6	1	
478	11	49	12.94		30	40	14.1		11.4	1	
479	11	49	13.88	0.02	28	40	46.9	0.2	9.4	5	
480	11	49	14.44		27	42	11.8		11.5	1	
481	11	49	14.81	0.02	26	38	38.4	0.9	10.0	2	1
482	11	49	15.29	0.01	29	53	5.2	0.2	9.7	3	
483	11	49	17.66		31	40	32.6		9.5	1	
484	11	49	18.26		25	51	30.9		12.3	1	
485	11	49	18.55	0.01	28	22	37.1	0.2	9.7	3	
486	11	49	19.97	0.01	29	27	36.5	0.1	11.7	3	
487	11	49	20.26		28	16	27.2		10.5	1	
488	11	49	21.04		30	13	23.4		11.2	1	
489	11	49	22.03		27	52	58.0		11.5	1	
490	11	49	22.14		27	28	9.5		11.0	1	
491	11	49	22.14	0.03	29	59	33.6	0.1	10.7	3	
492	11	49	22.51	0.03	27	16	13.3	0.2	10.1	3	
493	11	49	24.41	0.01	28	4	51.0	0.3	9.6	3	

TABLE 1 (CONTINUED)

No	α			ϵ_α	δ			ϵ_δ	m_p	N	A
494	11	49	24.89		26	32	57.9		12.5	1	
495	11	49	25.87	0.01	27	49	46.8	0.2	9.3	4	
496	11	49	26.16		31	31	24.1		11.6	1	
497	11	49	26.95		28	6	16.0		11.5	1	
498	11	49	27.14		26	4	56.7		12.1	1	
499	11	49	27.58	0.05	28	45	18.8	0.8	9.6	2	
500	11	49	30.16		26	0	7.4		9.2	1	
501	11	49	30.28		30	53	21.3		11.0	1	
502	11	49	32.57		25	50	48.6		11.3	1	
503	11	49	33.93	0.01	30	3	27.9	0.2	9.0	3	1
504	11	49	34.85	0.01	27	38	9.5	0.1	11.3	3	
505	11	49	35.24	0.02	27	16	4.7	0.2	9.8	3	
506	11	49	38.87	0.02	27	9	44.9	0.4	10.9	3	
507	11	49	39.41	0.02	29	47	24.3	0.1	11.4	2	
508	11	49	40.50	0.01	26	46	58.2	0.4	11.3	2	
509	11	49	41.42		31	1	7.4		9.4	1	1
510	11	49	41.74		31	18	2.8		11.0	1	
511	11	49	43.67	0.01	29	51	4.0	0.7	11.4	2	
512	11	49	44.43	0.00	28	35	3.6	0.0	10.5	2	
513	11	49	45.43	0.03	27	52	0.7	0.1	11.9	2	
514	11	49	47.26	0.01	29	22	43.4	0.1	10.8	2	
515	11	49	48.47		25	43	14.4		9.2	1	1
516	11	49	50.24		31	13	49.4		11.0	1	1
517	11	49	51.38	0.01	30	14	31.0	0.5	11.0	2	
518	11	49	51.44		26	7	23.1		11.1	1	
519	11	49	53.39		31	10	8.0		11.0	1	1
520	11	49	53.58		31	19	54.5		11.4	1	
521	11	49	55.52		31	37	36.1		11.0	1	
522	11	49	56.09		25	48	2.5		11.5	1	
523	11	49	56.74	0.03	27	8	19.6	0.1	10.9	2	
524	11	49	56.81	0.03	28	0	46.6	0.2	12.4	2	
525	11	49	58.37		26	10	23.8		12.1	1	
526	11	49	58.86		29	47	3.2		11.6	1	
527	11	49	59.20	0.01	27	53	9.6	0.7	12.9	2	
528	11	50	1.06	0.01	30	32	6.0	0.2	11.0	2	
529	11	50	1.53		26	27	38.5		10.0	1	1
530	11	50	3.67	0.01	27	48	8.2	0.7	12.9	2	
531	11	50	4.63		26	19	47.1		11.3	1	
532	11	50	4.88	0.01	27	59	7.3	0.1	11.4	2	
533	11	50	5.21		28	33	30.5		12.3	1	
534	11	50	5.67		25	46	42.8		10.9	1	
535	11	50	8.07	0.06	30	31	11.9	0.2	9.2	2	1
536	11	50	10.49	0.04	28	41	12.7	0.3	8.4	3	1
537	11	50	11.80	0.03	28	28	11.8	0.3	8.5	2	1
538	11	50	17.61		31	6	16.2		8.5	1	1
539	11	50	17.91		31	6	17.7		8.2	1	1
540	11	50	19.23		26	29	38.4		11.9	1	
541	11	50	22.00		27	9	29.8		12.8	1	
542	11	50	22.48	0.02	26	47	28.7	0.5	11.3	2	
543	11	50	22.72	0.01	28	38	2.1	0.1	12.4	2	
544	11	50	24.12		25	50	53.2		11.6	1	
545	11	50	25.39	0.00	28	17	25.9	0.2	10.8	2	
546	11	50	26.84		28	27	46.8		12.7	1	
547	11	50	31.22		30	18	36.2		11.6	1	
548	11	50	31.97	0.01	27	26	4.4	0.0	11.9	2	
549	11	50	34.41	0.01	28	47	36.6	0.1	9.6	3	1
550	11	50	34.53	0.02	26	41	3.6	0.0	9.7	2	1
551	11	50	34.87		31	0	13.5		10.6	1	
552	11	50	35.37	0.05	29	52	38.6	0.2	11.0	2	
553	11	50	36.35	0.01	27	48	32.2	0.0	10.7	3	
554	11	50	37.10		30	58	33.9		10.8	1	1
555	11	50	37.99	0.01	27	0	33.7	0.3	10.0	2	1
556	11	50	38.09		25	52	33.3		9.9	1	1
557	11	50	40.30	0.01	27	42	17.2	0.2	13.1	3	
558	11	50	40.67	0.00	28	27	23.3	0.5	11.6	2	
559	11	50	41.03	0.02	27	35	7.8	0.1	8.8	2	1
560	11	50	41.15		28	13	33.3		12.3	1	
561	11	50	42.00		26	26	55.0		11.6	1	
562	11	50	43.16	0.01	27	40	6.5	0.1	9.4	3	1
563	11	50	46.50		26	9	4.6		11.9	1	
564	11	50	46.76	0.01	28	14	55.4	0.2	12.6	2	
565	11	50	47.46		31	42	11.4		11.0	1	
566	11	50	48.51		27	31	31.9		12.3	1	
567	11	50	48.57		27	31	31.4		11.9	1	
568	11	50	48.62	0.01	29	25	35.8	0.9	10.8	2	
569	11	50	48.68		26	16	28.8		11.9	1	
570	11	50	53.32		26	23	7.5		11.6	1	
571	11	50	53.51		27	26	20.8		12.8	1	
572	11	50	54.92	0.02	28	48	44.4	0.1	12.4	2	
573	11	50	56.75	0.00	27	42	1.4	0.0	12.9	2	
661	11	52	33.80	0.02	29	47	28.6	0.3	11.0	3	
662	11	52	34.73		27	16	51.9		12.8	1	
663	11	52	35.72		27	38	42.3		12.8	1	
664	11	52	36.18		27	49	33.9		13.1	1	
665	11	52	36.44	0.02	29	7	17.9	0.1	12.6	2	
666	11	52	39.01		30	3	55.0		11.0	1	
667	11	52	39.46		26	25	21.6		12.1	1	
668	11	52	41.09	0.01	27	36	23.8	0.0	11.9	2	
669	11	52	41.40	0.01	28	47	55.5	0.1	9.6	4	1
670	11	52	41.45	0.01	28	37	53.2	0.2	12.1	3	
671	11	52	42.95		26	17	10.9		9.7	1	
672	11	52	43.20		28	10	35.9		12.8	1	
673	11	52	43.48		26	36	31.8		11.6	1	
674	11	52	45.50	0.03	31	4	42.7	0.1	11.0	2	
675	11	52	47.48		31	12	10.9		12.1	1	
676	11	52	48.57		25	54	36.0		11.6	1	
677	11	52	48.90		31	14	54.6		11.9	1	
678	11	52	49.54	0.02	29	17	24.5	0.3	12.3	3	
679	11	52	49.85		28	7	38.1		12.8	1	
680	11	52	50.37		25	48	2.9		7.4	1	1
681	11	52	50.48	0.02	27	54	53.2	0.1	11.9	3	
682	11	52	52.26	0.04	27	11	33.8	0.2	12.5	2	
683	11	52	53.98	0.00	27	15	19.8	0.1	11.9	2	
684	11	52	54.16		26	13	42.0		12.1	1	
685	11	52	54.33		26	28	40.3		11.6	1	
686	11	52	55.64	0.04	26	48	59.6	0.2	11.6	2	
687	11	52	55.74	0.01	28	43	43.7	0.2	12.1	4	
688	11	52	57.23	0.03	27	47	28.5	0.4	10.4	4	1
689	11	52	58.72	0.01	30	0	23.7	0.3	11.0	3	
690	11	52	59.71	0.03	28	1	6.6	0.1	11.1	3	
691	11	53	0.47	0.03	31	0	40.7	0.1	11.4	2	
692	11	53	0.52		26	26	44.8		11.5	1	
693	11	53	2.05		27	50	28.4		13.1	1	
694	11	53	3.25	0.01	27	3	6.2	0.0	11.6	2	
695	11	53	3.26		28	26	4.0		12.8	1	
696	11	53	4.27	0.06	30	11	58.0	0.1	11.6	2	
697	11	53	4.88	0.01	30	1	48.3	0.0	11.0	3	
698	11	53	5.73	0.00	30	10	19.3	0.0	11.6	2	
699	11	53	6.10	0.02	29	46	40.5	0.3	11.0	4	
700	11	53	8.09		27	27	28.6		12.8	1	
701	11	53	12.48	0.02	27	18	11.2	0.1	11.1	2	
702	11	53	12.61	0.01	28	45	55.7	0.1	11.2	4	
703	11	53	15.70	0.04	31	41	58.6	0.1	10.1	2	
704	11	53	16.17	0.01	26	45	21.3	0.1	10.2	2	
705	11	53	17.78	0.01	28	42	56.6	0.1	9.6	4	1
706	11	53	18.08	0.04	30	51	28.6	0.5	11.6	2	
707	11	53	20.07	0.03	27	12	27.2	0.2	10.0	2	1
708	11	53	23.18		28	15	20.6		12.8	1	
709	11	53	24.06	0.01	28	16	59.5	0.2	10.8	3	
710	11	53	24.21		26	26	55.1		12.1	1	
711	11	53	24.38	0.03	30	25	52.2	0.3	11.6	3	
712	11	53	24.90	0.53	30	0	23.1	0.0	11.6	2	
713	11	53	25.78	0.02	28	14	18.9	0.1	11.9	3	
714	11	53	26.10	0.02	29	14	55.4	0.2	10.3	3	
715	11	53	26.34		25	46	18.4		7.9	1	
716	11	53	26.52	0.01	31	28	50.2	0.1	8.2	2	1
717	11	53	28.59	0.02	31	18	42.8	0.1	11.2	2	
718	11	53	28.67		31	3	58.3		11.6	1	
719	11	53	28.71		29	43	7.4		11.2	1	
720	11	53	30.79		25	48	28.4		10.4	1	
721	11	53	31.68	0.02	29	23	0.9	0.1	9.3	3	1
722	11	53	31.76	0.03	30	46	38.0	0.2	10.3	3	
723	11	53	31.88		31	7	30.2		11.9	1	
724	11	53	32.53		27	17	36.8		12.8	1	
725	11	53	36.18		28	19	14.8		12.8	1	
726	11	53	36.47		26	11	5.7		11.6	1	
727	11	53	37.08		27	54	33.1		12.3	1	
728	11	53	37.51	0.01	28	14	19.2	0.0	11.6	2	
729	11	53	39.07	0.02	28	42	45.7	0.3	9.5	3	1
730	11	53	40.66		25	58	6.0		9.7	1	
731	11	53	40.98	0.03	29	8	11.7	0.5	6.9	2	1
732	11	53	41.58	0.00	28	3	6.0	0.2	10.9	2	
733	11	53	41.87		27	55	16.1		12.8	1	
734	11	53	42.12	0.01	26	50	52.4	0.2	11.1	2	
735	11	53	43.34	0.01	27	13	33.1	0.5	11.3	2	
736	11	53	43.77		31	21	29.1		9.9	1	
737	11	53	44.58		31	24	1.6		9.0	1	
738	11	53	46.11		28	26	49.1		12.7	1	
739	11	53	46.24		28	39	33.2		12.8	1	
740	11	53	47.21	0.02	26	57	27.1	0.2	6.8	3	1
828	11	55	6.08		31	17	30.4		11.6	1	
829	11	55	6.26	0.03	28	24	25.5	0.2	12.5	2	
830	11	55	6.91	0.06	27	50	52.1	0.0	12.8	2	
831	11	55	7.41	0.04	28	8	27.0	0.7	12.7	2	
832	11	55	7.66	0.01	25	52	31.6	0.1	10.8	2	
833	11	55	7.68		28	7	16.6		12.8	1	
834	11	55	8.07		26	33	44.7		10.8	1	
835	11	55	8.63		28	37	43.1		12.8	1	
836	11	55	8.95		28	5	50.5		12.8	1	
837	11	55	8.96		30	56	8.6		11.9	1	
838	11	55	10.61	0.01	26	6	24.5	0.4	10.0	2	1
839	11	55	11.76	0.01	30	32	4.6	0.4	11.3	2	
840	11	55	12.85	0.01	26	44	7.1	0.2	10.0	3	
841	11	55	13.63		26	37	54.4		11.6	1	
842	11	55	14.17	0.02	30	36	12.9	0.0	11.3	2	
843	11	55	14.26	0.02	28	8	55.1	0.2	10.9	2	
844	11	55	15.02	0.04	29	18	55.0	0.1	11.3	2	
845	11	55	15.37		31	45	29.2		11.6	1	
846	11	55	17.02	0.05	28	23	5.4	0.6	12.8	2	
847	11	55	17.32	0.02	27	56	50.2	0.2	12.3	2	
848	11	55	18.80	0.03	27	41	51.5	0.2	8.8	4	
849	11	55	21.64	0.00	30	47	17.5	0.2	11.1	2	
850	11	55	21.75	0.05	28	24	31.8	0.2	11.6	2	
851	11	55	23.90	0.01	30	39	15.5	0.4	11.6	2	
852	11	55	23.98		31	10	0.0		11.6	1	
853	11	55	24.20		30	24	21.1		11.4	1	
854	11	55	24.74		26	30	10.3		11.0	1	
855	11	55	27.47	0.03	30	2	49.6	0.2	11.6	2	
856	11	55	30.06	0.01	28	43	40.9	0.3	11.5	3	
857	11	55	30.72	0.01	29	23	43.5	0.3	11.6	2	
858	11	55	30.82	0.02	26	32	6.5	0.6	11.9	2	
859	11	55	32.05	0.02	29	14	24.8	0.2	11.5	2	
860	11	55	33.19		28	36	40.1		12.7	1	
861	11	55	33.96	0.01	26	55	7.9	0.1	11.3	3	
862	11	55	34.10		30	50	53.2		11.6	1	
863	11	55	34.74		28	32	47.1		12.8	1	
864	11	55	34.75		28	8	54.5		12.8	1	
865	11	55	34.97	0.01	26	55	23.9	0.6	12.1	3	
866	11	55	36.56		31	46	1.3		11.6	1	
867	11	55	37.34	0.04	27	13	29.3	0.0	12.8	2	
868	11	55	37.36	0.01	30	5	54.7	0.1	8.8	2	1
869	11	55	37.52	0.01	27	11	24.4	0.1	7.9	3	1
870	11	55	37.84	0.02	26	36	40.1	0.3	9.5	2	
871	11	55	39.48		31	11	59.9		11.4	1	
872	11	55	39.78	0.00	29	12	53.1	0.2	11.6	2	
873	11	55	40.01	0.01	27	47	26.7	0.0	12.3	3	
874	11	55	40.20	0.02	29	33	59.7	0.0	11.6	2	
875	11	55	42.03	0.01	30	3	15.3	0.3	9.7	2	1
876	11	55	42.23	0.04	29	19	29.7	0.1	10.9	2	
877	11	55	42.95	0.00	28	53	6.4	0.1	11.1	2	
878	11	55	43.48		30	34	57.8		11.6	1	
879	11	55	46.00	0.03	29	20	4.0	0.1	11.5	2	
880	11	55	47.02		25	43	39.4		11.2	1	
881	11	55	47.51		26	15	0.9		9.7	1	1
882	11	55	48.07	0.05	28	33	54.3	0.1	12.7	2	
883	11	55	48.12		28	18	56.2		12.8	1	
884	11	55	48.42		28	42	13.8		12.8	1	
885	11	55	48.97	0.05	27	28	48.2	0.4	12.1	2	
886	11	55	51.95		25	55	31.3		10.5	1	
887	11	55	52.71	0.02	27	6	56.2	0.4	7.5	2	1
888	11	55	52.80		30	28	53.1		11.6	1	
889	11	55	54.30		25	53	21.7		11.8	1	
890	11	55	54.55	0.01	29	37	21.1	0.4	11.6	2	
891	11	55	55.10	0.03	27	47	8.5	0.1	12.5	3	
892	11	55	56.21	0.01	27	13	11.9	0.0	9.8	2	
893	11	55	56.71	0.03	27	31	56.1	0.6	8.7	2	1
894	11	55	56.81		25	41	53.0		11.0	1	
895	11	55	57.25		31	15	19.4		12.1	1	
896	11	55	57.72		31	36	58.0		8.5	1	1
897	11	55	58.35		25	49	25.2		10.6	1	
898	11	55	58.96	0.04	26	55	22.4	0.1	12.7	2	
899	11	56	0.83		31	9	25.3		12.1	1	
900	11	56	2.13	0.02	27	16	48.0	0.5	12.8	2	
901	11	56	2.41		31	35	23.0		11.4	1	
902	11	56	5.09		25	58	57.4		10.1	1	
903	11	56	8.63	0.02	26	52	14.6	0.1	10.6	2	
904	11	56	9.00	0.00	30	40	19.8	0.4	11.5	2	
905	11	56	9.48		31	41	24.8		10.8	1	
906	11	56	9.69		29	58	31.7		11.9	1	
907	11	56	11.00	0.00	29	51	28.0	0.4	11.3	2	

574	11	50	56.78	0.02	29	40	35.9	0.3	11.6	3	
575	11	50	58.28	0.01	29	36	2.3	0.3	9.6	2	1
576	11	50	59.75		31	37	4.0		11.4	1	
577	11	51	4.30	0.06	30	36	44.5	0.3	11.0	2	
578	11	51	4.42	0.01	26	42	22.5	0.3	9.9	2	1
579	11	51	5.15	0.05	27	3	47.8	0.2	10.2	2	
580	11	51	5.76		29	57	29.9		11.6	1	
581	11	51	5.91		28	11	35.2		12.8	1	
582	11	51	8.02	0.02	27	6	3.6	0.1	11.5	2	
583	11	51	8.72	0.02	27	38	34.3	0.3	11.3	2	
584	11	51	8.79		28	0	2.9		12.8	1	
585	11	51	9.86		31	41	53.6		11.0	1	
586	11	51	11.04		29	55	28.6		11.6	1	
587	11	51	14.80	0.01	27	56	15.5	0.2	11.9	2	
588	11	51	15.09		26	14	44.7		11.5	1	
589	11	51	16.04		31	30	15.2		9.8	1	
590	11	51	18.32	0.02	30	31	42.4	0.3	11.0	2	
591	11	51	19.16		31	18	18.8		9.5	1	
592	11	51	19.30		27	34	44.4		12.8	1	
593	11	51	21.39		31	28	34.6		10.8	1	
594	11	51	22.18		31	13	32.0		11.4	1	
595	11	51	23.09	0.02	30	15	37.3	0.3	11.2	2	
596	11	51	23.39		29	20	1.4		12.4	1	
597	11	51	25.19	0.03	29	3	43.6	0.2	12.6	2	
598	11	51	26.40	0.02	29	50	3.6	0.3	11.0	2	
599	11	51	27.18	0.03	28	14	29.8	0.1	8.5	2	1
600	11	51	28.21	0.01	28	21	16.7	0.2	12.1	2	
601	11	51	28.36		26	25	31.3		11.3	1	
602	11	51	28.43	0.01	28	20	16.0	0.4	12.6	2	
603	11	51	28.53	0.01	27	55	10.5	0.0	12.9	2	
604	11	51	28.90		30	51	49.0		11.0	1	
605	11	51	29.04		25	58	39.8		10.0	1	1
606	11	51	29.48		26	30	38.1		11.9	1	
607	11	51	30.96		25	55	48.5		11.3	1	
608	11	51	31.06		26	27	24.2		11.5	1	
609	11	51	31.30	0.00	26	59	24.5	0.4	12.1	2	
610	11	51	31.67	0.05	29	13	26.9	0.7	12.6	2	
611	11	51	32.51	0.01	26	40	33.5	0.1	9.2	2	1
612	11	51	32.82		25	42	4.1		11.6	1	
613	11	51	33.53	0.02	28	49	7.7	0.1	12.4	2	
614	11	51	35.79	0.02	28	14	52.5	0.2	12.1	2	
615	11	51	37.71		28	53	17.9		13.1	1	
616	11	51	39.55		31	36	40.5		9.7	1	
617	11	51	40.12	0.02	30	8	29.1	0.2	11.4	2	
618	11	51	41.01	0.01	27	6	30.0	0.2	11.6	2	
619	11	51	41.28	0.01	28	59	21.8	0.1	11.9	2	
620	11	51	43.01	0.05	30	29	40.8	0.5	11.2	2	
621	11	51	44.32		28	37	42.0		12.7	1	
622	11	51	45.65		26	35	11.3		10.9	1	
623	11	51	47.69		25	45	28.8		11.3	1	
624	11	51	51.12	0.02	26	48	48.2	0.1	10.6	2	
625	11	51	51.56		28	20	31.3		12.5	1	
626	11	51	52.25		30	37	11.7		11.6	1	
627	11	51	56.55		25	46	30.6		11.9	1	
628	11	51	56.55		26	20	20.5		12.8	1	
629	11	51	56.70		26	33	12.4		11.1	1	
630	11	51	57.15	0.02	26	52	1.8	0.1	10.6	2	
631	11	51	59.58		30	54	7.8		11.0	1	
632	11	52	0.05		31	29	51.7		9.5	1	
633	11	52	0.81	0.03	28	28	22.5	0.1	10.7	2	
634	11	52	1.30		30	18	39.8		11.6	1	
635	11	52	2.23	0.02	28	39	2.4	0.2	12.6	2	
636	11	52	3.78		26	37	32.9		12.1	1	
637	11	52	6.32	0.01	28	31	5.2	0.0	11.0	2	
638	11	52	9.30		26	4	0.9		10.0	1	1
639	11	52	10.95		26	4	57.3		12.5	1	
640	11	52	11.14	0.01	29	47	59.9	0.1	11.4	3	
641	11	52	12.69		27	40	40.0		12.8	1	
642	11	52	16.08	0.01	27	29	29.6	0.4	11.3	2	1
643	11	52	20.38	0.02	28	33	15.7	0.1	12.4	2	
644	11	52	21.25	0.01	29	1	27.1	0.0	10.8	2	
645	11	52	21.51		27	28	39.4		12.8	1	
646	11	52	23.18	0.01	30	11	14.5	0.1	11.0	2	
647	11	52	23.33		31	11	1.6		11.0	1	
648	11	52	23.99	0.02	29	55	34.4	0.2	11.0	2	
649	11	52	25.37		26	2	16.6		9.5	1	1
650	11	52	26.22		29	15	13.9		12.3	1	
651	11	52	26.37	0.02	30	30	12.4	0.7	11.4	2	
652	11	52	26.71		26	59	42.2		12.8	1	
653	11	52	28.21	0.05	27	36	60.0	0.1	11.5	2	
654	11	52	28.95		30	2	57.1		11.6	1	
655	11	52	29.50	0.04	28	52	22.2	0.0	12.4	2	
656	11	52	30.84	0.01	28	39	21.2	0.2	11.1	2	
657	11	52	32.01	0.02	27	16	47.4	0.2	12.5	2	
658	11	52	32.56		26	55	29.6		12.8	1	
659	11	52	33.04	0.02	31	28	7.3	0.3	9.8	2	
660	11	52	33.13	0.02	29	16	17.3	0.2	12.4	2	
741	11	53	48.31	0.01	30	2	22.2	0.2	10.9	2	
742	11	53	49.21		30	55	11.5		9.8	1	
743	11	53	49.59	0.02	30	21	21.3	0.1	11.5	2	
744	11	53	50.05	0.03	30	5	35.0	0.2	11.1	2	
745	11	53	52.43	0.01	26	39	8.6	0.1	11.9	3	
746	11	53	52.59	0.00	26	21	4.8	0.3	9.9	2	
747	11	53	52.78	0.05	30	35	45.8	0.1	11.6	2	
748	11	53	54.21		31	14	25.5		10.6	1	
749	11	53	56.36		28	27	18.6		12.8	1	
750	11	53	56.80	0.00	30	43	49.0	0.3	11.6	2	
751	11	53	58.68	0.02	26	23	57.6	0.0	11.9	2	
752	11	53	58.76	0.04	25	43	18.7	0.0	9.7	2	
753	11	53	59.68	0.03	26	46	24.9	0.1	10.3	3	
754	11	54	0.01	0.02	28	11	0.9	0.1	12.8	2	
755	11	54	1.99		30	12	10.1		11.4	1	
756	11	54	2.03	0.02	26	29	57.1	0.1	11.6	2	
757	11	54	5.06		30	41	1.4		11.6	1	
758	11	54	5.32		31	1	19.5		9.8	1	1
759	11	54	5.47		31	34	54.5		10.6	1	
760	11	54	5.95		30	46	46.7		11.4	1	
761	11	54	6.10	0.02	28	20	44.6	0.2	10.0	2	1
762	11	54	6.26	0.01	29	57	21.0	0.0	11.6	2	
763	11	54	7.40	0.02	26	59	22.4	0.4	12.1	3	
764	11	54	8.55		28	25	54.9		12.8	1	
765	11	54	8.89		31	5	29.3		9.6	1	
766	11	54	12.12		30	46	1.9		11.6	1	
767	11	54	13.68		25	59	28.0		11.0	1	
768	11	54	13.72	0.00	30	46	58.0	0.1	11.6	2	
769	11	54	13.77	0.02	28	49	33.9	0.4	9.7	2	
770	11	54	13.96	0.02	26	2	32.7	0.2	10.0	2	1
771	11	54	14.11		26	56	32.5		12.8	1	
772	11	54	15.08	0.01	27	10	2.5	0.1	11.3	3	
773	11	54	17.79	0.03	25	43	1.9	0.8	10.6	2	
774	11	54	19.30	0.01	28	28	46.8	0.5	11.2	2	
775	11	54	20.87	0.01	26	21	5.7	0.2	12.1	2	
776	11	54	22.50	0.02	26	20	1.3	0.3	12.1	2	
777	11	54	25.61	0.01	26	22	32.4	0.1	11.6	2	
778	11	54	27.29	0.01	29	42	31.5	0.2	11.6	3	
779	11	54	27.34		28	33	38.1		12.8	1	
780	11	54	29.60	0.01	29	55	29.3	0.1	11.6	2	
781	11	54	29.70		27	51	46.4		12.8	1	
782	11	54	31.27		27	4	6.2		12.8	1	
783	11	54	34.80	0.02	27	48	22.8	1.0	12.8	2	
784	11	54	35.16	0.01	27	13	34.7	0.1	10.9	3	
785	11	54	36.22		26	10	44.0		11.2	1	
786	11	54	37.20	0.04	30	21	42.5	0.2	10.0	2	
787	11	54	38.06	0.02	27	26	18.2	0.3	8.3	3	1
788	11	54	38.13	0.02	28	35	42.1	0.1	12.7	2	
789	11	54	38.25	0.00	27	19	37.3	0.2	10.9	3	
790	11	54	39.09		30	58	22.8		11.6	1	
791	11	54	39.47	0.01	26	6	1.9	0.1	8.8	2	1
792	11	54	39.82	0.01	30	17	48.3	0.1	11.6	2	
793	11	54	41.82		31	25	40.0		11.6	1	
794	11	54	42.02		27	49	40.8		12.7	1	
795	11	54	42.32		28	47	36.3		12.8	1	
796	11	54	42.34	0.06	30	21	17.6	0.4	9.9	2	
797	11	54	42.56	0.01	26	20	54.7	0.2	11.9	2	
798	11	54	44.41	0.01	27	59	46.6	0.3	12.7	2	
799	11	54	44.56	0.02	26	35	47.8	0.6	10.0	2	
800	11	54	46.95	0.00	29	3	28.6	0.1	11.6	2	
801	11	54	47.74		31	4	48.3		12.1	1	
802	11	54	48.33	0.01	29	0	15.4	0.1	11.3	2	
803	11	54	50.41		31	4	13.7		11.4	1	
804	11	54	51.25	0.00	27	2	41.1	0.1	7.5	3	1
805	11	54	51.70	0.00	28	32	20.6	0.1	12.8	2	
806	11	54	52.61		28	1	22.9		12.8	1	
807	11	54	53.58	0.00	29	33	9.5	0.3	9.5	2	1
808	11	54	53.91		31	42	34.2		11.4	1	
809	11	54	54.69		31	0	55.5		12.1	1	
810	11	54	54.72	0.00	28	35	5.9	0.2	10.0	2	
811	11	54	55.44		31	13	38.3		9.9	1	
812	11	54	56.44	0.02	26	41	6.2	0.1	11.3	3	
813	11	54	57.33		31	20	34.7		11.6	1	
814	11	54	58.94	0.03	29	57	35.7	0.3	11.6	2	
815	11	54	59.26	0.02	25	53	52.6	0.3	10.3	2	
816	11	55	0.23		28	40	44.4		12.7	1	
817	11	55	1.06	0.02	28	50	0.8	0.5	7.3	2	1
818	11	55	1.46	0.01	29	45	36.4	0.2	10.6	3	1
819	11	55	2.05		31	36	17.6		11.4	1	
820	11	55	2.16	0.02	28	43	0.3	0.1	11.6	3	
821	11	55	3.16	0.01	26	30	22.2	0.3	11.3	2	
822	11	55	4.65	0.05	30	21	53.2	0.0	11.3	2	
823	11	55	5.11		31	16	58.8		11.0	1	
824	11	55	5.15		25	43	46.4		11.3	1	
825	11	55	5.19		31	24	38.9		9.5	1	
826	11	55	5.38	0.05	28	35	11.8	0.0	12.3	2	
827	11	55	5.44		31	7	25.9		11.9	1	
908	11	56	11.68		31	30	41.6		10.8	1	
909	11	56	12.25	0.00	28	25	33.1	0.0	10.2	2	
910	11	56	12.72		25	58	37.4		10.5	1	
911	11	56	13.52	0.04	27	0	48.0	0.2	11.1	2	
912	11	56	14.59	0.03	26	40	53.3	0.2	12.3	2	
913	11	56	14.96	0.01	27	0	1.6	0.1	12.5	2	
914	11	56	16.56		26	25	48.6		9.7	1	
915	11	56	22.94		25	43	56.4		11.3	1	
916	11	56	24.24	0.01	27	32	29.1	0.4	12.3	2	
917	11	56	24.24		31	23	9.0		12.4	1	
918	11	56	24.57		31	4	40.2		9.5	1	1
919	11	56	24.83		31	30	27.8		11.4	1	
920	11	56	25.11	0.01	28	7	35.9	0.0	10.1	2	
921	11	56	27.37		29	57	5.1		11.4	1	
922	11	56	27.59	0.00	26	48	10.3	0.3	9.7	2	1
923	11	56	28.15	0.00	27	35	51.6	0.7	12.0	2	
924	11	56	28.18	0.00	29	17	14.6	0.2	10.0	2	
925	11	56	31.31		31	48	3.2		11.6	1	
926	11	56	31.98	0.01	26	59	44.7	0.4	10.2	2	
927	11	56	32.48	0.00	27	3	44.1	0.3	12.8	2	
928	11	56	35.20		28	28	53.5		12.8	1	
929	11	56	38.45		29	52	8.0		11.4	1	
930	11	56	39.11	0.04	28	34	45.9	0.1	12.1	2	
931	11	56	39.66	0.02	29	56	44.6	0.0	11.6	2	
932	11	56	39.70	0.04	29	2	34.1	0.2	9.7	2	1
933	11	56	41.94	0.00	29	58	9.3	0.2	11.5	2	
934	11	56	44.49		31	1	41.1		11.6	1	
935	11	56	46.40	0.01	27	23	37.9	0.5	8.4	2	1
936	11	56	46.68	0.00	30	2	19.1	0.0	11.3	2	
937	11	56	51.52	0.03	27	45	48.9	0.1	12.8	2	
938	11	56	51.60		25	58	48.4		11.3	1	
939	11	56	52.82	0.00	29	56	45.4	0.0	11.6	2	
940	11	56	54.09	0.00	29	15	36.4	0.3	11.6	2	
941	11	56	55.50	0.02	28	41	1.1	0.1	12.5	2	
942	11	56	57.33	0.02	28	19	38.2	0.0	12.3	2	
943	11	56	58.54		30	9	42.5		12.1	1	
944	11	56	59.03	0.03	28	23	36.3	0.2	11.6	2	
945	11	57	3.03		30	17	37.1		11.6	1	
946	11	57	3.23	0.02	27	40	22.6	0.1	12.8	2	
947	11	57	3.68		28	0	49.3		12.8	1	
948	11	57	3.96		30	43	1.8		12.1	1	
949	11	57	4.02	0.03	29	38	54.3	0.2	11.9	2	
950	11	57	4.04	0.02	27	58	7.6	0.2	10.2	2	
951	11	57	4.10	0.03	26	52	35.1	0.1	12.7	2	
952	11	57	7.08	0.01	27	33	59.1	0.1	12.7	2	
953	11	57	8.07		25	45	3.6		10.5	1	
954	11	57	9.44		25	46	32.0		9.6	1	
955	11	57	10.33		31	9	9.8		11.6	1	
956	11	57	11.93	0.03	27	13	42.7	0.1	11.5	2	
957	11	57	12.10	0.03	28	3	35.2	0.1	11.5	2	
958	11	57	12.47	0.04	30	17	42.6	0.4	10.8	2	
959	11	57	12.69	0.01	27	39	46.5	0.2	10.9	3	1
960	11	57	13.38	0.02	27	8	47.5	0.1	10.9	2	
961	11	57	13.86	0.01	30	16	46.0	0.2	11.6	2	
962	11	57	16.16	0.02	28	50	51.1	0.7	9.9	2	1
963	11	57	16.91		27	56	37.9		12.8	1	
964	11	57	17.33		31	9	31.1		11.9	1	
965	11	57	20.95	0.01	30	50	24.2	0.2	9.7	2	
966	11	57	22.09	0.00	29	18	46.7	0.4	11.6	2	
967	11	57	23.30		25	48	33.7		9.7	1	
968	11	57	24.27	0.04	28	24	0.0	0.6	9.5	2	1
969	11	57	26.46		30	56	3.5		10.8	1	
970	11	57	27.11		31	10	58.7		11.4	1	
971	11	57	28.87	0.03	27	30	56.5	0.1	12.8	2	
972	11	57	29.12		26	7	49.5		11.0	1	
973	11	57	31.69	0.02	26	55	32.7	0.1	10.7	2	1
974	11	57	32.51		26	19	15.9		10.0	1	
975	11	57	32.59	0.02	28	15	1.7	0.1	12.5	2	
976	11	57	34.02		26	19	21.7		8.8	1	1
977	11	57	34.14	0.01	28	42	43.4	0.2	12.7	2	
978	11	57	35.92	0.02	26	49	28.2	0.2	12.8	2	
979	11	57	36.73	0.00	28	32	33.3	0.1	10.9	2	
980	11	57	37.79	0.01	28	17	22.7	0.3	12.3	2	
981	11	57	38.15	0.02	30	0	31.7	0.3	11.6	3	
982	11	57	38.17	0.02	29	41	12.1	0.2	11.3	4	
983	11	57	39.13	0.04	26	53	49.2	0.0	9.2	2	1
984	11	57	39.15	0.01	28	15	15.3	0.1	10.9	3	
985	11	57	39.36		26	11	24.7		9.4	1	
986	11	57	41.76	0.02	27	30	46.7	0.2	12.5	3	
987	11	57	42.60	0.02	27	32	7.5	0.1	12.8	3	
988	11	57	42.94		31	32	33.1		11.6	1	
989	11	57	47.85		25	54	20.7		11.0	1	
990	11	57	48.22	0.00	28	6	9.8	0.1	12.3	3	
991	11	57	49.12	0.05	27	15	25.0	0.3	12.8	2	
992	11	57	49.30	0.04	27	8	23.4	0.1	12.8	2	
993	11	57	49.80	0.02	29	5	3.4	0.2	11.1	3	
994	11	57	51.19	0.00	29	47	18.0	0.1	9.9	4	

TABLE 1 (CONTINUED)

No	α			ϵ_α	δ			ϵ_δ	m_p	N	A
995	11	57	52.23		26	37	29.7		11.8	1	
996	11	57	52.28		31	21	59.7		11.4	1	
997	11	57	52.61		26	20	20.8		10.8	1	
998	11	57	57.72		26	26	6.1		9.9	1	
999	11	57	58.25	0.00	27	58	58.3	0.3	12.8	2	
1000	11	57	58.67	0.01	28	18	43.4	0.4	12.3	3	
1001	11	57	58.84		30	50	30.5		11.4	1	
1002	11	57	59.50		26	29	45.7		9.6	1	
1003	11	58	0.31	0.02	27	52	10.0	0.1	12.7	2	
1004	11	58	0.55	0.01	28	14	14.7	0.2	10.9	3	
1005	11	58	1.43	0.00	29	38	14.9	0.4	10.9	3	
1006	11	58	3.10	0.02	27	53	49.9	0.4	12.8	3	
1007	11	58	3.16		30	13	8.8		11.6	1	
1008	11	58	3.23		26	24	0.2		9.6	1	
1009	11	58	3.77		31	8	55.4		11.4	1	
1010	11	58	6.07	0.00	27	17	33.1	0.1	12.1	3	
1011	11	58	6.53		31	44	39.6		11.4	1	
1012	11	58	7.42		25	48	32.6		9.9	1	
1013	11	58	7.95	0.02	29	21	53.8	0.2	10.0	3	
1014	11	58	7.96	0.02	27	58	59.2	0.3	12.8	3	
1015	11	58	8.06	0.02	26	59	36.7	0.2	12.8	2	
1016	11	58	9.30	0.00	30	5	55.5	0.2	11.5	3	
1017	11	58	10.08	0.01	29	39	53.9	0.3	11.3	4	
1018	11	58	10.29	0.02	28	24	2.3	0.2	12.8	2	
1019	11	58	10.35	0.04	29	28	39.9	0.2	11.9	2	
1020	11	58	10.80		26	38	47.8		10.8	1	
1021	11	58	10.98	0.01	27	8	14.7	0.2	12.8	2	
1022	11	58	12.26		31	36	7.3		11.4	1	
1023	11	58	13.09		27	35	13.7		11.6	1	
1024	11	58	13.74	0.04	29	27	58.8	0.1	7.5	3	1
1025	11	58	15.80		26	27	22.0		10.5	1	
1026	11	58	15.86		25	55	3.9		10.1	1	
1027	11	58	16.95		25	45	8.1		9.6	1	
1028	11	58	18.51	0.00	27	36	5.4	0.1	12.1	3	
1029	11	58	18.74	0.01	27	38	57.4	0.2	12.8	3	
1030	11	58	19.37		31	0	12.3		11.6	1	
1031	11	58	21.22	0.01	29	40	56.8	0.4	11.6	4	
1032	11	58	22.81	0.02	29	1	24.8	0.1	11.1	3	
1033	11	58	23.12		31	24	28.3		9.6	1	
1034	11	58	29.28	0.01	30	18	21.6	0.4	11.6	3	
1035	11	58	30.01		29	56	55.5		11.9	1	
1036	11	58	30.21	0.02	27	3	25.0	0.2	12.5	3	
1037	11	58	31.30	0.01	28	14	28.8	0.2	8.7	3	1
1038	11	58	31.45	0.01	29	41	26.3	0.1	11.6	4	
1039	11	58	32.43	0.02	26	44	6.1	0.0	11.3	2	
1040	11	58	32.65	0.01	27	37	59.4	0.1	10.6	3	
1041	11	58	33.91		26	18	23.7		10.0	1	
1042	11	58	34.18		31	15	26.4		8.3	1	1
1043	11	58	35.80		31	21	42.5		11.9	1	
1044	11	58	37.68	0.02	27	58	24.2	0.3	13.1	2	
1045	11	58	39.52		29	37	7.1		11.9	1	
1046	11	58	40.27		30	55	5.3		7.0	1	1
1047	11	58	40.80	0.01	27	19	0.8	0.2	12.3	3	
1048	11	58	40.90	0.03	26	47	34.9	0.1	11.8	3	
1049	11	58	41.30	0.02	29	2	26.7	0.3	9.8	2	1
1050	11	58	43.19		28	9	10.3		11.6	1	
1051	11	58	43.32	0.04	28	44	39.4	0.3	12.1	3	
1052	11	58	44.58		31	26	16.1		11.0	1	
1053	11	58	44.58	0.00	28	2	39.7	0.1	12.8	3	
1054	11	58	44.89		31	31	38.1		11.0	1	1
1055	11	58	45.91	0.03	26	54	17.4	0.1	11.2	2	
1056	11	58	45.92		26	27	54.5		10.8	1	
1057	11	58	47.30	0.01	27	35	50.9	0.2	9.7	3	
1058	11	58	47.55	0.00	30	22	1.0	0.1	11.4	2	
1059	11	58	47.79	0.00	29	30	16.7	0.0	11.9	2	
1060	11	58	47.88		26	23	40.6		10.3	1	
1061	11	58	49.96		25	59	42.0		9.7	1	1
1062	11	58	50.55		25	52	44.1		10.5	1	
1063	11	58	52.14	0.01	30	7	38.0	0.2	11.4	2	
1064	11	58	53.76		27	16	38.2		12.8	1	
1065	11	58	56.87	0.01	29	56	23.0	0.1	11.4	2	
1066	11	58	58.07		31	5	23.2		12.1	1	
1067	11	58	58.09		31	14	32.5		12.1	1	
1068	11	58	58.10	0.04	30	25	49.8	0.0	10.6	2	1
1069	11	58	58.10		25	40	25.7		10.0	1	
1070	11	58	58.52		27	11	20.9		11.3	1	
1071	11	58	58.75		27	52	41.6		11.3	1	
1072	11	59	0.22	0.04	26	52	44.7	0.2	9.9	2	
1073	11	59	1.72	0.02	27	25	41.7	0.1	11.0	2	
1074	11	59	1.80	0.00	27	12	53.8	0.1	9.6	2	
1075	11	59	3.43		25	53	35.3		9.9	1	

No	α			ϵ_α	δ			ϵ_δ	m_p	N	A
1163	12	0	23.75	0.03	27	16	36.9	0.4	11.0	2	
1164	12	0	24.80	0.00	30	0	1.6	0.0	11.6	2	
1165	12	0	24.93	0.01	26	45	13.2	0.1	9.7	2	1
1166	12	0	25.95	0.02	29	23	27.8	0.3	10.0	2	
1167	12	0	27.84		26	28	37.8		11.0	1	
1168	12	0	28.30		28	46	4.7		11.4	1	
1169	12	0	28.57	0.01	30	7	23.0	0.3	11.4	2	
1170	12	0	28.69	0.02	28	57	44.5	0.3	10.6	2	
1171	12	0	29.07		28	5	4.7		11.9	1	
1172	12	0	29.20		28	37	58.2		11.1	1	
1173	12	0	31.09	0.03	30	21	57.6	0.2	11.4	2	
1174	12	0	31.85	0.02	27	41	38.1	0.0	11.6	2	
1175	12	0	32.13		31	6	40.3		9.9	1	1
1176	12	0	32.63		28	14	21.2		11.6	1	
1177	12	0	33.67		26	6	8.3		10.6	1	
1178	12	0	34.25	0.03	26	51	13.6	0.2	11.2	2	
1179	12	0	34.31	0.01	26	58	57.1	0.3	9.7	2	
1180	12	0	34.35	0.03	28	52	27.5	0.0	11.9	2	
1181	12	0	35.34		31	26	12.3		11.4	1	
1182	12	0	35.46	0.01	27	19	31.9	0.3	10.8	2	
1183	12	0	36.15	0.01	29	59	59.5	0.4	11.4	2	
1184	12	0	36.48	0.01	30	26	47.3	0.1	11.9	2	
1185	12	0	36.62	0.00	28	32	43.2	0.4	11.4	2	
1186	12	0	38.35		31	48	13.6		10.3	1	
1187	12	0	39.36	0.01	28	56	25.2	0.0	11.9	2	
1188	12	0	39.46		30	52	39.4		11.6	1	
1189	12	0	39.85		27	49	59.5		12.1	1	
1190	12	0	39.97		28	48	15.0		11.1	1	
1191	12	0	40.22	0.03	29	17	31.0	0.6	9.4	2	
1192	12	0	40.65	0.03	29	4	13.4	0.1	11.8	2	
1193	12	0	43.59	0.01	29	34	24.0	0.4	11.9	2	
1194	12	0	43.76	0.01	29	50	55.9	0.1	11.4	2	
1195	12	0	44.23	0.01	29	49	16.1	0.0	9.8	2	
1196	12	0	44.65	0.04	28	18	19.8	0.1	11.6	2	
1197	12	0	44.69		25	41	37.8		9.4	1	
1198	12	0	45.05	0.02	29	23	58.1	0.1	9.3	3	1
1199	12	0	45.49		28	25	0.7		11.4	1	
1200	12	0	46.07	0.03	28	20	4.3	0.1	10.5	3	
1201	12	0	46.43		28	25	20.9		12.1	1	
1202	12	0	46.68		26	16	54.3		9.4	1	
1203	12	0	47.77	0.00	29	56	39.5	0.3	9.6	2	1
1204	12	0	48.58	0.03	26	48	42.9	0.0	10.3	2	
1205	12	0	50.46		26	4	26.8		9.7	1	1
1206	12	0	52.32	0.02	27	55	29.9	0.1	11.4	3	
1207	12	0	52.94		25	45	12.4		9.6	1	
1208	12	0	53.49	0.00	30	15	5.0	0.2	11.6	2	
1209	12	0	53.81		25	56	27.4		9.6	1	
1210	12	0	55.64		28	19	26.3		11.9	1	
1211	12	0	55.81	0.02	30	2	27.7	0.3	11.4	2	
1212	12	0	56.56	0.00	27	17	59.8	0.2	10.5	2	
1213	12	0	56.94		25	45	47.8		10.3	1	
1214	12	0	58.41	0.02	30	17	56.0	0.6	11.6	2	
1215	12	0	58.41		27	18	5.8		11.4	1	
1216	12	0	59.78	0.00	29	57	29.1	0.2	7.8	2	1
1217	12	0	59.97	0.01	27	37	53.3	0.7	11.6	2	
1218	12	1	0.16	0.01	30	37	14.5	0.4	11.4	2	
1219	12	1	0.36	0.01	29	54	44.0	0.1	9.9	2	1
1220	12	1	0.65		28	6	50.9		11.6	1	
1221	12	1	2.32		31	16	53.1		11.4	1	
1222	12	1	2.88		31	40	15.5		11.4	1	
1223	12	1	4.22		29	16	20.1		11.6	1	
1224	12	1	4.42	0.02	28	8	46.9	0.1	10.3	3	
1225	12	1	5.58		26	14	45.7		10.3	1	
1226	12	1	5.77		28	10	51.4		12.1	1	
1227	12	1	7.38	0.02	26	53	10.4	0.3	10.0	2	
1228	12	1	10.20	0.03	28	8	3.3	0.1	11.8	3	
1229	12	1	10.43		27	59	8.7		11.6	1	
1230	12	1	10.72		31	7	52.2		11.4	1	
1231	12	1	11.66		31	23	51.0		11.6	1	
1232	12	1	11.97		26	4	13.2		9.7	1	1
1233	12	1	12.66	0.01	30	40	7.8	0.0	11.4	2	
1234	12	1	16.18		27	59	9.1		11.9	1	
1235	12	1	16.19		26	12	43.3		10.1	1	
1236	12	1	17.63		29	49	54.3		12.4	1	
1237	12	1	20.42		26	17	20.0		10.3	1	
1238	12	1	20.68	0.02	28	42	19.6	0.1	11.4	4	
1239	12	1	21.10		28	16	23.8		11.6	1	
1240	12	1	21.30		30	56	39.2		10.4	1	1
1241	12	1	21.33	0.01	28	22	18.8	0.0	10.0	3	
1242	12	1	22.20		27	6	35.6		12.3	1	

No	α			ϵ_α	δ			ϵ_δ	m_p	N	A
1328	12	2	48.48	0.01	26	53	45.6	0.2	9.3	3	
1329	12	2	49.89		31	29	19.3		7.2	1	1
1330	12	2	49.89	0.01	28	19	33.8	0.0	10.2	2	
1331	12	2	49.94	0.00	29	50	54.0	0.1	10.1	2	
1332	12	2	49.98	0.02	29	26	1.7	0.1	11.4	2	
1333	12	2	51.34	0.00	25	50	49.5	0.2	10.0	2	
1334	12	2	52.58	0.03	28	10	33.7	0.6	11.6	2	
1335	12	2	54.27	0.01	28	11	39.7	0.0	9.5	2	
1336	12	2	54.46	0.03	28	28	35.5	0.2	11.4	2	
1337	12	2	57.52	0.02	28	47	2.2	0.3	8.0	3	1
1338	12	2	57.67	0.00	27	55	38.7	0.3	11.4	2	
1339	12	3	0.50	0.00	26	38	22.0	0.2	8.3	2	1
1340	12	3	1.52	0.00	27	5	55.4	0.2	9.7	3	
1341	12	3	1.60		31	32	52.6		10.7	1	
1342	12	3	2.03		30	41	52.6		11.6	1	
1343	12	3	3.89	0.02	28	34	32.5	0.1	8.3	2	1
1344	12	3	4.47		29	19	17.1		11.4	1	
1345	12	3	6.57	0.03	29	55	41.3	0.4	11.4	2	
1346	12	3	12.91	0.00	26	25	59.9	0.1	9.7	2	
1347	12	3	12.99	0.00	29	38	30.1	0.4	9.8	3	
1348	12	3	13.06	0.02	27	19	29.5	0.1	11.4	2	
1349	12	3	14.16	0.04	30	41	23.7	0.0	11.3	2	
1350	12	3	14.19	0.01	30	45	10.1	0.1	11.4	2	
1351	12	3	15.01	0.02	28	29	24.7	0.0	11.9	2	
1352	12	3	15.59	0.01	27	14	58.1	0.2	11.1	2	
1353	12	3	16.32	0.01	26	29	58.2	0.0	10.0	2	
1354	12	3	16.79	0.02	28	46	17.4	0.0	11.4	3	
1355	12	3	17.01	0.01	29	31	51.4	0.3	9.8	2	
1356	12	3	17.02	0.06	25	48	28.9	0.6	10.8	2	
1357	12	3	17.26		27	1	5.7		11.9	1	
1358	12	3	18.33	0.01	30	4	26.4	0.1	10.9	2	
1359	12	3	18.87		30	39	33.6		12.2	1	
1360	12	3	19.30	0.02	29	9	52.9	0.2	11.4	2	
1361	12	3	20.40	0.03	27	45	41.1	0.2	10.6	4	
1362	12	3	21.16	0.02	28	15	24.8	0.2	9.8	2	
1363	12	3	21.47	0.03	30	35	5.9	0.3	11.4	2	
1364	12	3	21.76	0.02	26	44	49.1	0.2	8.2	3	1
1365	12	3	21.80	0.01	26	56	51.6	0.1	9.2	3	1
1366	12	3	22.73	0.01	29	15	38.4	0.3	9.4	2	1
1367	12	3	22.92	0.04	25	56	46.5	0.4	8.9	2	1
1368	12	3	24.11		26	4	50.5		11.0	1	
1369	12	3	24.31	0.04	30	48	47.9	0.1	10.9	2	
1370	12	3	24.62	0.03	26	32	8.2	0.5	10.6	2	
1371	12	3	25.59	0.02	27	20	34.2	0.1	9.6	3	
1372	12	3	26.37	0.02	28	29	59.4	0.2	11.4	2	
1373	12	3	26.47	0.00	28	18	17.1	0.3	11.1	2	
1374	12	3	28.21	0.04	28	26	5.4	0.1	9.8	2	
1375	12	3	32.65		26	2	58.2		9.2	1	1
1376	12	3	34.30	0.02	27	45	55.4	0.1	9.8	3	
1377	12	3	34.31		30	30	55.9		11.4	1	
1378	12	3	34.77		26	50	9.1		11.6	1	
1379	12	3	34.86		31	38	17.1		10.9	1	
1380	12	3	34.89		28	47	55.2		11.9	1	
1381	12	3	35.27	0.02	27	49	37.9	0.1	8.6	2	1
1382	12	3	36.36		26	1	9.0		9.6	1	
1383	12	3	36.62		31	32	36.5		8.9	1	
1384	12	3	37.93	0.01	30	21	58.9	0.6	11.3	2	
1385	12	3	38.05	0.01	27	13	4.1	0.3	11.1	2	
1386	12	3	38.57	0.03	29	5	10.8	0.1	11.1	2	
1387	12	3	38.86	0.01	29	40	51.7	0.1	9.1	3	1
1388	12	3	39.65	0.01	29	10	23.6	0.0	11.4	2	
1389	12	3	40.79	0.01	27	46	36.5	0.2	9.0	3	
1390	12	3	40.99	0.01	27	3	33.5	0.2	10.9	2	
1391	12	3	43.32	0.03	27	15	23.5	0.4	11.9	2	
1392	12	3	44.53		25	54	47.4		9.7	1	
1393	12	3	44.63	0.01	27	41	2.9	0.3	11.4	2	
1394	12	3	46.03		31	31	20.3		12.2	1	
1395	12	3	48.47	0.02	27	29	21.2	0.1	11.6	2	
1396	12	3	48.63	0.00	27	34	44.6	0.2	10.0	2	
1397	12	3	48.79		27	33	40.4		11.3	1	
1398	12	3	49.24	0.02	27	48	18.8	0.3	11.6	2	
1399	12	3	49.38		30	57	40.2		11.2	1	
1400	12	3	49.83	0.01	29	41	39.9	0.1	9.8	3	
1401	12	3	51.48	0.04	27	4	36.0	0.0	11.1	2	
1402	12	3	51.78		26	8	1.9		11.3	1	
1403	12	3	52.45		31	8	40.6		11.6	1	
1404	12	3	53.15		27	0	15.2		11.6	1	
1405	12	3	53.15		31	28	38.3		11.6	1	
1406	12	3	53.20		31	0	49.6		11.6	1	
1407	12	3	53.68	0.02	29	21	46.1	0.4	10.9	2	
1408	12	3	55.77		30	42	22.6		12.5	1	

1076	11	59	3.98	0.02	28	22	30.8	0.2	10.7	2	
1077	11	59	6.46	0.02	28	23	3.9	0.1	11.9	2	
1078	11	59	6.77		30	10	34.4		12.1	1	
1079	11	59	7.11		26	2	0.8		10.6	1	
1080	11	59	7.56		31	16	17.4		11.9	1	
1081	11	59	7.61	0.00	29	2	5.3	0.2	10.6	2	
1082	11	59	7.85		28	10	44.5		11.3	1	
1083	11	59	7.86		25	54	41.5		10.1	1	
1084	11	59	10.37	0.02	29	49	40.8	0.2	8.1	2	1
1085	11	59	10.55	0.01	28	33	11.8	0.3	11.6	2	
1086	11	59	10.88		28	5	0.9		11.6	1	
1087	11	59	10.95		25	41	32.4		9.9	1	
1088	11	59	11.43	0.01	29	27	15.8	0.5	11.8	2	
1089	11	59	12.05		31	10	39.1		8.5	1	1
1090	11	59	13.54		29	52	38.1		12.1	1	
1091	11	59	13.57	0.01	27	38	20.0	0.1	11.0	2	
1092	11	59	13.98	0.01	28	6	32.0	0.2	11.4	2	
1093	11	59	14.09	0.03	27	14	35.6	0.1	10.6	2	
1094	11	59	14.58	0.02	28	47	56.5	0.1	10.7	3	
1095	11	59	16.17	0.00	29	33	28.4	0.4	12.1	2	
1096	11	59	17.65		31	18	19.9		11.4	1	
1097	11	59	18.03		26	32	44.8		10.8	1	
1098	11	59	18.35		27	0	4.2		11.4	1	
1099	11	59	19.49	0.00	27	0	25.8	0.1	10.3	2	
1100	11	59	19.62		29	50	27.8		12.4	1	
1101	11	59	22.48		28	18	17.0		11.4	1	
1102	11	59	23.40	0.02	28	3	45.6	0.6	9.9	2	1
1103	11	59	23.67	0.01	29	40	53.2	0.1	11.4	3	
1104	11	59	24.11	0.02	28	57	45.3	0.1	11.8	2	
1105	11	59	26.21	0.04	30	11	49.8	0.3	11.6	2	
1106	11	59	27.64		26	11	24.5		11.0	1	
1107	11	59	27.94	0.05	29	44	42.4	0.1	11.6	2	
1108	11	59	29.09	0.01	27	54	26.4	0.1	10.0	2	
1109	11	59	29.14		27	42	19.5		11.6	1	
1110	11	59	29.16		27	55	36.7		11.4	1	
1111	11	59	29.35	0.01	27	19	12.8	0.0	10.1	2	1
1112	11	59	30.78	0.02	30	15	15.8	0.1	11.2	2	
1113	11	59	32.16		28	2	22.0		11.6	1	
1114	11	59	32.46	0.02	30	29	5.5	0.2	11.4	2	
1115	11	59	34.25	0.06	27	29	11.8	0.3	9.7	2	
1116	11	59	34.75		31	31	41.3		8.1	1	1
1117	11	59	37.38	0.02	27	47	17.1	0.3	11.4	3	
1118	11	59	38.10		31	12	18.9		11.4	1	
1119	11	59	41.76		26	35	39.3		10.1	1	
1120	11	59	42.92		27	20	53.6		11.9	1	
1121	11	59	44.95	0.02	26	47	7.3	0.2	10.3	2	
1122	11	59	46.15		28	29	6.4		11.4	1	
1123	11	59	47.34		25	53	23.0		11.0	1	
1124	11	59	48.17	0.02	29	27	2.1	0.3	9.9	2	1
1125	11	59	48.43		28	21	54.9		11.9	1	
1126	11	59	48.52		27	56	28.4		11.9	1	
1127	11	59	49.00		25	59	32.7		11.0	1	
1128	11	59	49.26		30	47	6.4		11.9	1	
1129	11	59	49.92	0.02	28	46	7.2	0.0	11.9	3	
1130	11	59	50.38		31	33	59.3		11.2	1	
1131	11	59	50.91		27	59	58.5		11.9	1	
1132	11	59	50.97	0.03	28	39	4.2	0.5	10.2	3	1
1133	11	59	51.58	0.02	29	57	41.3	0.7	11.9	2	
1134	11	59	53.06	0.01	26	44	39.9	0.5	11.0	2	
1135	11	59	53.31	0.01	27	22	8.0	0.1	11.3	2	
1136	11	59	53.77		25	51	16.9		9.7	1	
1137	11	59	53.85	0.00	26	57	32.5	0.4	10.1	2	
1138	11	59	55.75	0.00	26	48	23.8	0.3	9.9	2	
1139	11	59	55.84		27	23	35.6		11.6	1	
1140	11	59	56.38	0.01	29	59	24.4	0.1	11.6	2	
1141	11	59	56.65		25	49	30.5		11.0	1	
1142	11	59	56.91	0.01	29	11	38.6	0.0	11.1	2	
1143	11	59	58.58	0.02	29	46	10.3	0.2	11.9	2	
1144	12	0	1.43		28	26	50.9		11.4	1	
1145	12	0	1.94	0.05	27	3	14.9	0.2	11.2	2	
1146	12	0	2.58	0.01	28	56	53.2	0.2	11.4	2	
1147	12	0	4.27	0.00	27	50	53.6	0.4	11.9	2	
1148	12	0	6.65		29	21	53.3		11.3	1	
1149	12	0	10.12		25	52	50.8		10.5	1	
1150	12	0	10.42		27	14	2.5		11.9	1	
1151	12	0	11.54		31	47	26.4		8.5	1	1
1152	12	0	13.80		31	41	25.6		11.0	1	
1153	12	0	15.26	0.03	29	23	54.2	0.3	10.6	2	
1154	12	0	16.21	0.01	28	57	57.7	0.3	11.1	2	
1155	12	0	16.63	0.01	30	9	26.7	0.1	11.6	2	
1156	12	0	17.09	0.02	27	1	26.0	0.3	9.7	2	
1157	12	0	18.71		26	57	41.7		11.9	1	
1158	12	0	19.27	0.01	29	46	4.0	0.0	11.2	3	
1159	12	0	20.55	0.01	27	24	29.1	0.1	9.9	2	
1160	12	0	21.19		31	3	10.0		11.6	1	
1161	12	0	21.32		31	31	5.4		11.2	1	
1162	12	0	22.47	0.02	27	17	8.2	0.0	8.9	2	1
1243	12	1	24.97	0.01	30	43	24.9	0.1	11.4	2	
1244	12	1	27.67	0.00	30	49	7.9	0.2	11.6	2	
1245	12	1	27.96	0.02	27	6	1.5	0.3	10.1	2	
1246	12	1	28.71	0.00	26	50	9.2	0.1	9.9	2	
1247	12	1	28.90	0.01	28	31	1.8	0.2	11.6	3	
1248	12	1	30.70		25	42	6.9		11.6	1	
1249	12	1	31.94	0.03	28	20	21.0	0.0	7.8	3	1
1250	12	1	32.22	0.02	27	18	44.3	0.1	10.6	2	
1251	12	1	32.86		29	41	56.2		11.4	1	
1252	12	1	34.21	0.01	27	3	38.0	0.2	10.5	2	
1253	12	1	37.45	0.01	28	4	5.4	0.2	11.9	2	
1254	12	1	38.89	0.02	30	17	46.1	0.1	11.4	3	
1255	12	1	39.96	0.01	26	57	59.2	0.2	10.3	2	
1256	12	1	40.15		26	8	51.5		9.1	1	1
1257	12	1	40.52		27	49	45.7		11.4	1	
1258	12	1	40.76	0.01	27	27	32.1	0.4	10.8	2	
1259	12	1	41.60	0.02	27	39	34.4	0.2	11.2	4	
1260	12	1	43.47	0.01	28	26	11.5	0.3	10.6	3	
1261	12	1	45.95	0.02	27	50	27.0	0.1	11.9	3	
1262	12	1	46.04	0.01	29	52	23.5	0.1	11.4	3	
1263	12	1	46.42	0.01	27	18	1.8	0.2	9.6	3	
1264	12	1	47.47		31	22	41.0		11.6	1	
1265	12	1	48.62	0.02	29	38	33.0	0.2	11.4	3	
1266	12	1	49.10	0.01	27	13	58.8	0.1	10.8	3	
1267	12	1	49.38		26	34	49.0		11.8	1	
1268	12	1	49.62		27	37	8.5		11.6	1	
1269	12	1	50.04	0.05	27	0	4.2	0.4	11.2	2	
1270	12	1	50.06	0.01	27	27	56.3	0.2	9.7	3	1
1271	12	1	51.03	0.01	29	8	37.7	0.3	11.1	3	
1272	12	1	51.31	0.02	30	37	40.5	0.4	11.4	3	
1273	12	1	55.33	0.03	29	34	15.1	0.2	11.4	3	
1274	12	1	55.91	0.05	27	52	30.4	0.0	11.4	2	
1275	12	1	56.09	0.01	28	15	40.3	0.3	11.9	3	
1276	12	2	4.41	0.02	27	7	48.3	0.2	10.5	3	
1277	12	2	5.13		30	0	29.9		11.4	1	
1278	12	2	6.32	0.02	26	18	46.5	0.0	9.7	2	
1279	12	2	6.65		31	48	25.3		8.5	1	
1280	12	2	6.90	0.00	31	24	42.0	0.0	9.8	2	1
1281	12	2	7.03		31	28	36.3		11.9	1	
1282	12	2	7.85	0.02	28	9	39.9	0.0	10.0	3	
1283	12	2	9.94	0.02	29	58	33.5	0.4	11.4	2	
1284	12	2	10.59	0.02	29	8	21.9	0.2	11.4	2	
1285	12	2	11.82	0.01	27	53	44.7	0.1	11.4	2	
1286	12	2	11.89		31	18	16.8		11.9	1	
1287	12	2	14.89	0.01	29	2	47.6	0.1	11.4	3	
1288	12	2	16.50	0.01	27	5	5.2	0.1	10.6	3	
1289	12	2	17.17	0.00	27	45	28.9	0.4	11.4	2	
1290	12	2	18.36	0.04	27	29	55.2	0.5	11.2	2	
1291	12	2	18.40		28	22	5.0		11.9	1	
1292	12	2	20.77	0.03	30	55	35.3	0.4	10.8	2	
1293	12	2	22.05	0.01	28	26	43.7	0.1	11.4	3	
1294	12	2	22.32	0.04	25	43	57.4	0.4	9.2	2	
1295	12	2	23.10	0.03	31	18	35.8	0.0	11.6	2	
1296	12	2	23.24	0.02	31	14	39.3	0.3	11.9	2	
1297	12	2	23.97	0.00	29	0	28.5	0.2	11.4	2	
1298	12	2	24.33	0.01	26	27	5.2	0.5	9.9	2	
1299	12	2	25.38	0.01	31	37	50.6	0.3	8.9	2	
1300	12	2	26.04	0.02	27	39	28.2	0.3	9.3	5	1
1301	12	2	26.61	0.01	28	40	13.4	0.1	10.0	4	
1302	12	2	27.13	0.02	27	35	10.2	0.4	11.3	3	
1303	12	2	28.03		27	24	51.7		12.1	1	
1304	12	2	28.08		27	27	24.1		11.3	1	
1305	12	2	28.70	0.02	29	41	25.8	0.3	10.3	5	
1306	12	2	28.94		28	43	49.8		11.6	1	
1307	12	2	29.40		26	38	11.3		9.9	1	
1308	12	2	29.42		26	38	11.2		10.5	1	
1309	12	2	29.70		31	47	20.0		11.2	1	
1310	12	2	31.99	0.02	26	51	19.5	0.1	10.1	3	
1311	12	2	33.09	0.05	31	6	44.7	0.2	7.8	2	1
1312	12	2	34.16	0.02	27	28	17.9	0.1	10.8	3	
1313	12	2	35.72		29	9	27.5		11.4	1	
1314	12	2	35.99	0.02	31	22	9.9	0.0	11.6	2	
1315	12	2	36.93	0.01	30	26	40.7	0.1	11.6	3	
1316	12	2	38.70	0.02	29	23	32.7	0.2	11.6	2	
1317	12	2	40.16		27	10	57.7		12.1	1	
1318	12	2	40.35	0.01	29	1	46.7	0.2	11.4	2	
1319	12	2	40.65		27	36	0.0		11.4	1	
1320	12	2	40.95	0.00	25	52	46.2	0.1	9.2	2	
1321	12	2	41.48	0.01	31	30	6.6	0.4	11.0	2	
1322	12	2	42.75	0.01	27	23	18.1	0.1	9.7	3	
1323	12	2	42.79		27	20	24.4		11.9	1	
1324	12	2	44.41	0.01	29	19	50.6	0.4	11.4	2	
1325	12	2	47.13	0.01	26	12	28.4	0.3	9.6	2	
1326	12	2	47.47		26	43	29.9		11.4	1	
1327	12	2	48.37	0.03	29	9	39.8	0.2	11.4	2	
1409	12	3	59.49	0.02	28	11	28.4	0.5	11.4	2	
1410	12	4	0.59		30	58	48.6		12.5	1	
1411	12	4	1.23		28	42	27.8		11.6	1	
1412	12	4	1.24	0.05	27	2	23.3	0.0	11.1	2	
1413	12	4	1.32	0.01	29	29	53.4	0.0	9.8	2	
1414	12	4	1.53		31	20	32.7		11.4	1	
1415	12	4	3.12		31	23	49.5		11.6	1	
1416	12	4	3.99	0.00	28	33	41.5	0.4	10.1	2	
1417	12	4	4.09	0.01	29	57	33.9	0.1	11.4	2	
1418	12	4	4.72	0.01	27	22	31.6	0.3	10.1	2	
1419	12	4	5.46	0.02	26	55	0.1	0.3	11.1	2	
1420	12	4	6.07	0.02	26	44	36.1	0.9	11.6	2	
1421	12	4	6.60	0.01	30	48	58.3	0.1	10.9	2	
1422	12	4	7.92	0.00	29	47	18.1	0.2	11.1	2	
1423	12	4	7.94	0.02	29	21	19.7	0.1	11.9	2	
1424	12	4	9.45	0.02	29	46	4.6	0.1	8.3	3	1
1425	12	4	9.46	0.01	27	40	33.6	0.3	11.3	3	
1426	12	4	12.78	0.00	29	5	33.9	0.2	11.4	2	
1427	12	4	13.25		31	8	7.3		11.0	1	
1428	12	4	13.47		26	12	33.5		9.4	1	1
1429	12	4	14.18	0.00	30	32	24.8	0.4	8.8	2	1
1430	12	4	14.21	0.00	28	51	38.2	0.3	11.4	2	
1431	12	4	14.21	0.02	26	46	10.8	0.5	10.4	2	
1432	12	4	15.59	0.01	29	43	7.0	0.2	11.4	3	
1433	12	4	15.87	0.00	29	30	16.4	0.1	11.6	2	
1434	12	4	16.42	0.02	29	31	14.6	0.6	11.4	2	
1435	12	4	17.80	0.02	30	41	0.2	0.2	10.6	2	
1436	12	4	17.84	0.01	28	45	37.9	0.3	10.9	3	
1437	12	4	19.45	0.03	26	46	16.6	0.5	11.4	2	
1438	12	4	20.79	0.00	28	36	31.0	0.2	11.4	2	
1439	12	4	20.95	0.00	28	17	45.5	0.0	11.6	2	
1440	12	4	23.32	0.01	28	20	44.2	0.1	11.9	2	
1441	12	4	23.45	0.07	28	54	25.9	0.1	11.4	2	
1442	12	4	25.86		26	12	25.6		10.5	1	
1443	12	4	25.91	0.01	28	4	29.6	0.2	9.5	2	1
1444	12	4	27.94	0.00	27	17	40.1	0.2	9.5	2	1
1445	12	4	29.61	0.00	27	10	9.8	0.5	9.5	2	
1446	12	4	33.11		30	49	48.5		12.0	1	
1447	12	4	33.24	0.01	28	21	37.6	0.0	11.9	2	
1448	12	4	33.54	0.01	30	41	15.1	0.1	10.4	2	
1449	12	4	34.73		27	8	12.2		11.9	1	
1450	12	4	35.47	0.04	27	0	51.3	0.6	11.9	2	
1451	12	4	35.74		27	52	9.1		11.9	1	
1452	12	4	36.28	0.01	28	10	36.0	0.3	11.4	2	
1453	12	4	38.69		25	52	46.2		9.7	1	
1454	12	4	38.84		26	6	51.6		9.6	1	
1455	12	4	38.86	0.01	30	24	49.5	0.1	11.6	2	
1456	12	4	39.02	0.02	30	0	24.3	0.0	9.8	2	1
1457	12	4	39.47	0.01	30	18	52.8	0.1	9.8	2	1
1458	12	4	40.41		28	20	55.4		11.9	1	
1459	12	4	45.52		26	7	55.2		10.0	1	
1460	12	4	45.84	0.01	28	43	0.9	0.1	11.1	3	
1461	12	4	46.15	0.01	27	55	44.1	0.1	11.6	2	
1462	12	4	46.92		31	4	19.2		12.2	1	
1463	12	4	47.59	0.01	27	5	37.3	0.1	10.9	2	
1464	12	4	47.96	0.02	27	49	5.6	0.1	9.5	3	
1465	12	4	49.05	0.02	28	43	54.9	0.1	10.4	3	
1466	12	4	49.33		30	59	37.6		12.0	1	
1467	12	4	49.85	0.04	27	3	37.7	0.1	11.9	2	
1468	12	4	50.61	0.02	29	41	59.0	0.1	10.9	3	
1469	12	4	50.89	0.00	28	26	14.4	0.0	11.4	2	
1470	12	4	52.61	0.00	29	15	42.3	0.3	11.4	2	
1471	12	4	53.11		27	55	46.5		11.4	1	
1472	12	4	53.74		28	1	27.8		11.9	1	
1473	12	4	56.11	0.01	27	43	53.2	0.2	11.6	3	
1474	12	4	56.67	0.02	29	46	20.7	0.2	11.6	3	
1475	12	4	56.72		28	22	39.0		11.6	1	
1476	12	4	57.75	0.00	30	45	39.6	0.2	11.1	2	
1477	12	4	58.29	0.02	28	56	48.9	0.2	9.5	2	1
1478	12	4	59.30		31	4	22.1		12.5	1	
1479	12	5	3.13		26	10	39.8		9.7	1	1
1480	12	5	3.41	0.03	29	47	21.1	0.0	9.8	2	
1481	12	5	5.44	0.04	27	23	56.3	0.1	9.4	2	
1482	12	5	7.60	0.00	28	4	25.9	0.0	11.6	2	
1483	12	5	9.54	0.00	29	19	32.5	0.1	10.0	2	
1484	12	5	9.82	0.01	27	26	2.1	0.3	11.4	2	
1485	12	5	11.25	0.02	29	14	19.1	0.2	11.9	2	
1486	12	5	11.32		29	31	30.8		11.6	1	
1487	12	5	12.12	0.01	27	26	2.4	0.2	9.8	2	
1488	12	5	12.45	0.02	30	41	56.0	0.1	9.1	2	1
1489	12	5	12.73	0.01	30	17	36.8	0.1	9.8	2	
1490	12	5	13.06		26	53	29.2		11.9	1	
1491	12	5	13.84		31	11	19.9		11.8	1	
1492	12	5	14.07	0.02	26	47	3.8	0.1	10.9	2	
1493	12	5	15.92	0.00	27	35	49.3	0.3	10.2	2	1
1494	12	5	16.44		30	30	58.9		11.6	1	
1495	12	5	16.66	0.02	26	52	42.5	0.0	10.7	2	

TABLE 1 (CONTINUED)

No	α			ϵ_α	δ			ϵ_δ	m_p	N	A
.496	12	5	16.71	0.00	29	20	0.1	0.1	11.3	2	
1497	12	5	16.97		31	26	58.3		9.6	1	1
1498	12	5	17.06		26	12	5.2		11.6	1	
1499	12	5	17.79	0.04	29	18	7.8	0.3	11.4	2	
1500	12	5	17.89		31	27	23.1		11.6	1	
1501	12	5	19.09	0.00	26	58	10.8	0.2	11.4	2	
1502	12	5	19.15	0.03	28	23	57.0	0.0	11.4	2	
1503	12	5	19.91	0.02	28	31	56.9	0.1	11.4	2	
1504	12	5	20.39		27	3	35.6		11.9	1	
1505	12	5	21.17		26	12	29.1		9.9	1	
1506	12	5	21.73	0.01	27	1	16.1	0.3	10.7	2	
1507	12	5	24.56	0.01	27	46	42.9	0.2	9.8	3	
1508	12	5	24.96		25	51	54.1		9.7	1	
1509	12	5	28.82		31	10	34.4		12.2	1	
1510	12	5	29.49		31	27	49.0		11.6	1	
1511	12	5	29.61	0.00	28	53	8.0	0.5	9.8	2	
1512	12	5	30.28	0.03	28	45	31.9	0.4	10.7	3	
1513	12	5	32.72		27	18	6.3		11.9	1	
1514	12	5	33.45		31	19	45.0		7.2	1	1
1515	12	5	35.30		26	36	0.2		11.0	1	
1516	12	5	36.20	0.00	29	57	22.9	0.1	11.4	2	
1517	12	5	37.10		31	35	55.3		11.2	1	
1518	12	5	37.46	0.02	30	33	6.4	0.4	11.4	2	
1519	12	5	38.03		28	0	39.1		11.9	1	
1520	12	5	40.27	0.01	30	48	56.4	0.3	10.2	2	
1521	12	5	40.61	0.02	28	16	20.6	0.2	10.9	2	
1522	12	5	42.93	0.06	30	33	14.0	0.0	8.3	2	1
1523	12	5	44.69	0.00	28	30	4.0	0.1	11.4	2	
1524	12	5	45.00		26	0	5.1		10.0	1	
1525	12	5	46.05	0.02	29	45	4.6	0.2	10.4	3	
1526	12	5	46.06	0.01	27	10	58.5	0.5	11.4	2	
1527	12	5	46.73		31	12	36.2		12.0	1	
1528	12	5	47.34		31	12	24.7		9.2	1	1
1529	12	5	47.62	0.01	26	54	22.0	0.3	10.0	2	
1530	12	5	48.58		30	53	12.0		11.8	1	
1531	12	5	49.47	0.02	27	33	43.4	0.0	11.4	2	
1532	12	5	49.48		26	7	49.5		11.0	1	
1533	12	5	50.54		26	12	41.3		10.8	1	
1534	12	5	51.03		25	43	9.8		9.7	1	
1535	12	5	51.24	0.01	29	42	31.8	0.4	11.1	3	
1536	12	5	52.57	0.02	28	15	43.7	0.1	8.8	2	1
1537	12	5	55.34		27	52	22.0		11.6	1	
1538	12	5	55.98	0.00	30	3	9.4	0.0	11.4	2	
1539	12	5	56.21	0.01	29	45	34.7	0.2	10.6	3	
1540	12	5	56.22		30	50	3.5		12.0	1	
1541	12	5	56.66	0.06	30	6	42.0	0.1	11.4	2	
1542	12	5	56.72		25	30	8.3		11.5	1	
1543	12	5	57.65	0.03	28	26	55.8	0.1	8.8	2	1
1544	12	5	57.87	0.01	26	32	7.7	0.4	10.8	2	
1545	12	5	58.05	0.15	28	47	36.6	0.2	10.9	3	
1546	12	5	58.27		28	47	37.0		10.7	1	
1547	12	5	58.47		31	32	42.5		11.4	1	
1548	12	5	59.32		25	4	42.8		8.1	1	1
1549	12	6	1.34	0.02	29	5	36.9	0.1	10.0	2	
1550	12	6	1.62		29	15	52.3		11.4	1	
1551	12	6	1.88	0.00	26	51	37.6	0.2	11.1	2	
1552	12	6	1.89	0.03	29	20	22.4	0.0	11.4	2	
1553	12	6	1.90		31	43	7.6		11.2	1	
1554	12	6	2.19	0.03	28	48	60.0	0.1	10.9	3	
1555	12	6	3.75		31	22	52.4		12.2	1	
1556	12	6	4.15	0.02	26	46	22.8	0.1	7.3	3	1
1557	12	6	5.63	0.00	29	31	46.3	0.1	10.0	2	
1558	12	6	5.89	0.01	29	57	4.4	0.4	11.4	2	
1559	12	6	7.11		27	21	46.5		11.9	1	
1560	12	6	8.49	0.01	26	4	6.4	0.5	10.1	2	
1561	12	6	8.58	0.03	28	52	35.3	0.0	11.4	2	
1562	12	6	9.28	0.01	26	51	19.6	0.6	11.1	2	
1563	12	6	10.16		26	22	54.7		10.8	1	
1564	12	6	12.10	0.05	25	47	28.3	0.6	9.7	2	
1565	12	6	14.36	0.02	27	15	8.3	0.2	11.9	2	
1566	12	6	14.90		31	13	15.4		9.5	1	1
1567	12	6	15.48	0.02	28	29	6.0	0.2	11.6	2	
1568	12	6	15.69	0.03	30	40	14.1	0.4	10.0	2	
1569	12	6	16.72	0.04	26	48	17.3	0.1	11.1	2	
1570	12	6	17.29		30	19	51.9		12.2	1	
1571	12	6	19.64	0.01	27	37	37.6	0.1	10.6	3	
1572	12	6	19.95	0.05	29	51	35.8	0.1	11.4	2	
1573	12	6	20.59	0.02	27	20	13.5	0.6	10.9	2	
1574	12	6	21.28	0.03	26	14	6.3	0.2	9.6	2	1
1575	12	6	21.76		27	38	17.2		11.6	1	

No	α			ϵ_α	δ			ϵ_δ	m_p	N	A
1663	12	7	48.53		31	1	25.2		12.2	1	
1664	12	7	48.57		31	10	21.0		11.2	1	
1665	12	7	48.93		25	21	26.2		10.9	1	1
1666	12	7	49.31	0.00	30	4	16.9	0.1	9.0	2	1
1667	12	7	50.17		25	25	16.6		11.9	1	
1668	12	7	50.22	0.05	27	15	41.8	0.0	10.0	2	
1669	12	7	50.24	0.04	28	31	16.0	0.2	9.8	2	
1670	12	7	50.98		28	15	5.3		12.2	1	
1671	12	7	52.27		25	36	36.9		8.8	1	1
1672	12	7	53.82		31	25	11.5		11.6	1	
1673	12	7	54.55		30	38	25.7		12.0	1	
1674	12	7	54.95		31	42	15.8		12.0	1	
1675	12	7	55.87	0.04	29	20	47.6	0.2	7.6	2	1
1676	12	7	56.80	0.01	26	51	58.9	0.7	11.2	2	
1677	12	7	57.76		29	0	58.1		11.4	1	
1678	12	8	0.86	0.01	25	49	18.1	0.0	10.5	2	
1679	12	8	3.17		27	37	8.5		11.7	1	
1680	12	8	4.09		31	12	41.7		11.2	1	
1681	12	8	4.19		29	49	40.4		12.2	1	
1682	12	8	4.53	0.00	27	45	43.1	0.3	11.0	3	
1683	12	8	8.58		24	55	15.1		12.9	1	
1684	12	8	9.40		29	51	3.7		12.2	1	
1685	12	8	10.09	0.00	30	16	3.0	0.2	10.2	2	
1686	12	8	11.49		26	29	32.0		10.3	1	
1687	12	8	12.77		28	45	10.2		11.4	1	
1688	12	8	13.88	0.01	27	33	36.5	0.1	5.6	2	1
1689	12	8	16.04	0.01	30	4	8.6	0.2	11.4	2	
1690	12	8	16.22		26	16	20.8		10.6	1	
1691	12	8	17.02	0.01	29	52	23.6	0.2	9.9	2	1
1692	12	8	17.57	0.00	27	0	11.3	0.0	10.1	2	
1693	12	8	17.63		30	57	33.3		11.4	1	
1694	12	8	17.88		24	49	35.9		12.1	1	
1695	12	8	18.53		28	12	3.3		12.2	1	
1696	12	8	18.78		27	47	6.1		12.2	1	
1697	12	8	19.81		29	15	38.1		11.4	1	
1698	12	8	19.96		30	49	57.9		11.6	1	
1699	12	8	19.96	0.01	27	44	12.5	0.4	10.1	3	
1700	12	8	21.33		27	13	37.5		11.7	1	
1701	12	8	21.35	0.01	27	34	49.5	0.3	11.0	2	
1702	12	8	21.49	0.01	29	21	20.1	0.3	11.0	2	
1703	12	8	23.03	0.01	28	38	47.2	0.3	11.0	2	
1704	12	8	24.70		31	7	2.1		10.9	1	
1705	12	8	26.32	0.02	25	58	38.7	0.1	10.1	2	
1706	12	8	26.56		27	22	17.4		12.2	1	
1707	12	8	26.78		30	51	7.5		12.0	1	
1708	12	8	28.84		28	11	46.6		9.8	1	1
1709	12	8	28.89		28	11	46.3		9.7	1	
1710	12	8	28.92		31	4	28.4		12.5	1	
1711	12	8	28.93		27	22	54.1		12.2	1	
1712	12	8	29.32	0.01	28	28	44.7	0.0	11.4	2	
1713	12	8	29.67		30	20	52.5		12.2	1	
1714	12	8	30.16		25	33	8.3		12.6	1	
1715	12	8	30.79		29	15	3.4		11.6	1	
1716	12	8	31.76	0.02	26	22	53.6	0.0	11.0	2	
1717	12	8	32.14	0.05	28	3	39.4	0.5	11.0	2	
1718	12	8	32.19	0.01	26	46	27.7	0.2	9.9	3	
1719	12	8	32.56	0.02	30	15	52.6	0.4	12.2	2	
1720	12	8	32.58		28	59	54.2		11.0	1	
1721	12	8	32.86		31	12	27.6		12.0	1	
1722	12	8	33.03		24	56	15.3		11.3	1	
1723	12	8	33.23	0.01	30	14	55.7	0.4	11.2	2	
1724	12	8	33.26		31	36	46.3		11.6	1	
1725	12	8	33.30		31	25	30.9		11.6	1	
1726	12	8	34.40	0.00	27	9	16.1	0.1	10.1	2	
1727	12	8	35.16	0.02	26	16	6.9	0.7	9.4	2	1
1728	12	8	36.54		31	44	39.0		11.4	1	
1729	12	8	38.11	0.00	29	49	29.3	0.1	11.8	2	
1730	12	8	38.44	0.01	30	19	0.2	0.1	12.0	2	
1731	12	8	41.37		27	53	19.7		12.4	1	
1732	12	8	41.84	0.00	29	23	12.4	0.1	8.8	2	1
1733	12	8	43.65		25	1	56.2		6.9	1	1
1734	12	8	46.32		31	44	31.5		11.6	1	
1735	12	8	46.67		27	57	54.1		12.4	1	
1736	12	8	47.07		25	29	28.6		11.7	1	
1737	12	8	47.23	0.01	28	0	38.4	0.0	11.0	2	
1738	12	8	48.65		31	16	16.1		12.0	1	
1739	12	8	50.21		28	8	7.0		12.2	1	
1740	12	8	52.99	0.02	27	56	24.4	0.1	10.7	2	
1741	12	8	53.26	0.04	26	2	0.6	0.2	11.0	2	
1742	12	8	53.52		27	55	29.6		12.2	1	

No	α			ϵ_α	δ			ϵ_δ	m_p	N	A
1830	12	9	57.19	0.00	30	24	59.7	0.2	11.8	2	
1831	12	9	58.05		31	11	7.9		12.0	1	
1832	12	9	58.24		25	11	49.1		12.4	1	
1833	12	9	58.28		25	33	12.4		10.3	1	
1834	12	9	59.20	0.02	27	29	3.0	0.0	9.4	3	
1835	12	9	59.31		28	55	39.7		11.0	1	
1836	12	10	0.06		28	24	57.1		12.2	1	
1837	12	10	0.11		29	3	9.4		11.4	1	
1838	12	10	0.16	0.00	28	39	39.3	0.3	9.8	2	1
1839	12	10	0.30		25	20	9.5		12.1	1	
1840	12	10	0.89	0.03	26	6	44.8	0.3	10.5	2	
1841	12	10	1.21		25	25	25.6		12.8	1	
1842	12	10	3.21		27	15	39.4		11.7	1	
1843	12	10	3.39	0.03	30	40	45.9	0.1	11.6	2	
1844	12	10	4.48		31	45	0.2		11.2	1	1
1845	12	10	6.52	0.01	26	54	55.0	0.4	10.5	2	
1846	12	10	6.96		31	35	58.9		11.2	1	
1847	12	10	9.41	0.01	30	16	38.3	0.3	8.6	2	1
1848	12	10	11.32	0.01	26	34	40.4	0.0	9.9	3	
1849	12	10	12.78		24	55	30.6		12.9	1	
1850	12	10	14.28	0.04	29	23	55.0	0.1	10.1	2	
1851	12	10	15.07		28	28	34.3		12.2	1	
1852	12	10	17.59	0.03	29	21	46.3	0.0	10.7	2	
1853	12	10	19.14	0.03	29	7	54.9	0.2	10.4	2	
1854	12	10	20.37	0.07	27	50	18.2	0.4	9.0	2	1
1855	12	10	21.26	0.01	26	31	43.7	0.1	9.7	3	
1856	12	10	22.23	0.03	28	35	44.3	0.1	11.0	2	
1857	12	10	22.33		30	5	49.8		12.2	1	
1858	12	10	22.79		28	8	51.3		11.9	1	
1859	12	10	23.21		31	4	50.0		12.0	1	
1860	12	10	23.78		31	40	46.6		10.9	1	
1861	12	10	25.02	0.01	30	30	40.2	0.7	12.2	2	
1862	12	10	25.92		24	46	8.6		11.0	1	
1863	12	10	26.51		27	2	34.6		12.2	1	
1864	12	10	27.10	0.01	30	6	3.5	0.0	10.1	2	
1865	12	10	27.16	0.02	25	52	15.0	1.1	11.3	2	
1866	12	10	29.94		25	38	20.5		9.7	1	
1867	12	10	31.27	0.00	28	54	46.1	0.3	8.1	2	1
1868	12	10	32.64	0.01	27	12	52.2	0.1	10.6	3	
1869	12	10	33.84	0.02	26	45	16.4	0.0	11.0	2	
1870	12	10	34.14		26	6	59.4		13.1	1	
1871	12	10	39.17		27	31	50.3		12.4	1	
1872	12	10	39.57		27	45	36.5		12.2	1	
1873	12	10	40.82	0.03	27	23	49.8	0.1	9.2	3	
1874	12	10	42.01		28	37	52.9		11.9	1	
1875	12	10	42.09	0.03	26	56	40.4	0.2	10.5	3	
1876	12	10	42.39		31	6	28.8		11.8	1	
1877	12	10	43.25		27	42	33.0		12.2	1	
1878	12	10	43.81	0.00	29	5	50.1	0.3	11.8	2	
1879	12	10	43.95	0.02	30	29	43.8	0.2	11.4	3	
1880	12	10	43.95	0.01	30	29	51.3	0.0	10.7	3	
1881	12	10	44.29	0.03	27	45	8.9	0.0	10.1	2	
1882	12	10	44.65	0.01	31	40	7.7	0.2	10.5	2	
1883	12	10	45.13	0.02	26	13	50.6	0.3	9.4	3	
1884	12	10	45.77	0.01	30	33	38.2	0.3	7.6	3	1
1885	12	10	46.44		26	28	30.1		13.1	1	
1886	12	10	47.69		29	35	1.9		11.8	1	
1887	12	10	47.96	0.01	29	32	5.0	0.1	9.4	2	1
1888	12	10	49.63	0.01	30	24	25.2	0.1	11.2	3	
1889	12	10	52.16		25	0	45.6		9.7	1	
1890	12	10	55.39		31	31	52.9		12.0	1	
1891	12	10	56.55		28	33	58.4		11.9	1	
1892	12	10	57.86		30	51	33.5		12.5	1	
1893	12	10	58.42		25	15	4.2		12.6	1	
1894	12	10	58.79		28	35	3.2		12.2	1	
1895	12	10	58.83	0.03	30	22	46.4	0.0	10.2	3	1
1896	12	10	59.12	0.01	27	19	16.6	0.1	9.2	3	1
1897	12	10	59.72	0.02	29	6	28.4	0.0	11.8	2	
1898	12	10	59.80	0.01	26	19	30.9	0.3	9.6	3	
1899	12	11	0.91		28	52	8.5		11.8	1	
1900	12	11	1.28		27	51	51.0		11.4	1	
1901	12	11	3.05	0.01	30	50	27.6	0.1	8.0	2	1
1902	12	11	3.82	0.04	31	14	29.1	0.2	8.4	2	1
1903	12	11	4.22	0.01	29	27	0.1	0.1	11.1	2	
1904	12	11	4.26		25	3	55.7		13.1	1	
1905	12	11	5.22	0.02	27	24	34.8	0.1	9.1	3	1
1906	12	11	5.31	0.02	30	42	58.4	0.1	11.6	3	
1907	12	11	6.12		29	19	19.1		12.1	1	
1908	12	11	6.19		24	48	47.3		11.6	1	
1909	12	11	7.01		25	6	36.4		11.5	1	

1576	12	6	22.74	0.02	29	7	53.0	0.4	11.4	2	
1577	12	6	22.79		31	45	38.1		12.0	1	
1578	12	6	23.49	0.01	26	57	18.3	0.2	11.3	2	
1579	12	6	23.76	0.00	28	10	20.0	0.0	11.4	2	
1580	12	6	24.01	0.02	27	16	54.9	0.2	11.1	2	
1581	12	6	24.03		24	58	46.7		8.6	1	
1582	12	6	24.53		31	24	0.5		12.0	1	
1583	12	6	27.88	0.03	28	58	47.9	0.1	9.8	2	
1584	12	6	28.14		30	33	47.9		11.8	1	
1585	12	6	29.06	0.01	25	49	33.7	0.4	9.7	2	
1586	12	6	29.41		31	11	47.2		12.2	1	
1587	12	6	30.05	0.03	29	16	39.2	0.0	11.4	2	
1588	12	6	30.45	0.02	27	15	14.2	0.6	11.9	2	
1589	12	6	30.84	0.02	28	35	35.9	0.6	11.4	2	
1590	12	6	32.26	0.01	30	6	20.8	0.3	11.4	2	
1591	12	6	32.34		27	5	5.6		11.6	1	
1592	12	6	35.05	0.02	27	12	8.3	0.2	11.6	2	
1593	12	6	36.49		30	35	33.4		12.7	1	
1594	12	6	38.83	0.00	27	2	28.8	0.2	11.1	2	
1595	12	6	38.88		31	35	12.7		11.6	1	
1596	12	6	39.35	0.00	26	33	2.2	0.0	10.1	2	
1597	12	6	39.95	0.01	26	56	21.4	0.1	11.1	2	
1598	12	6	40.21		29	30	2.4		11.6	1	
1599	12	6	40.54	0.02	28	38	51.4	0.1	9.8	3	
1600	12	6	40.58		31	18	25.1		9.9	1	1
1601	12	6	40.82	0.02	27	1	19.2	0.1	9.8	2	
1602	12	6	40.94	0.00	29	52	22.3	0.1	9.8	3	
1603	12	6	41.15		31	44	57.6		11.2	1	
1604	12	6	42.70	0.01	26	26	3.7	0.3	9.7	2	
1605	12	6	42.90	0.04	30	47	59.4	0.4	9.8	2	
1606	12	6	43.14	0.02	26	30	1.0	0.1	10.3	2	
1607	12	6	44.66	0.01	29	44	16.2	0.1	11.4	3	
1608	12	6	44.99		31	43	49.1		12.2	1	
1609	12	6	46.57		28	52	3.2		11.4	1	
1610	12	6	47.69		31	1	31.7		12.0	1	
1611	12	6	48.73	0.03	26	39	42.7	0.3	10.9	4	
1612	12	6	49.57	0.01	29	44	19.8	0.1	7.7	4	1
1613	12	6	49.76	0.01	28	8	59.1	0.2	11.4	2	
1614	12	6	49.97	0.04	26	13	45.2	0.5	9.7	2	1
1615	12	6	50.19		30	28	29.7		11.3	1	
1616	12	6	51.25	0.03	26	15	9.8	0.4	9.7	2	
1617	12	6	53.64		24	58	14.8		11.0	1	
1618	12	6	54.82	0.00	29	59	32.9	0.1	10.6	3	
1619	12	6	55.20	0.03	28	29	1.3	0.4	8.9	3	1
1620	12	6	55.48	0.03	27	22	52.3	0.2	11.4	3	
1621	12	6	59.64	0.02	27	13	55.2	0.2	11.1	3	
1622	12	7	0.20	0.01	28	15	37.4	0.1	9.8	3	
1623	12	7	1.11	0.05	30	33	44.7	0.3	11.3	2	
1624	12	7	1.82		31	29	35.4		11.2	1	
1625	12	7	1.98	0.02	26	53	56.0	0.2	11.1	3	
1626	12	7	4.86	0.02	27	24	27.3	0.3	11.4	3	
1627	12	7	6.48	0.02	28	21	4.7	0.1	11.4	3	
1628	12	7	12.15	0.02	25	40	12.5	0.1	9.7	2	
1629	12	7	14.22		31	21	0.9		11.2	1	
1630	12	7	14.93	0.04	28	34	5.7	0.3	11.4	3	
1631	12	7	15.89		31	5	15.3		11.2	1	
1632	12	7	16.92	0.01	27	8	3.3	0.1	11.6	2	
1633	12	7	18.32	0.02	29	12	23.8	0.2	9.1	3	1
1634	12	7	20.96	0.00	28	3	6.3	0.0	11.9	3	
1635	12	7	22.09	0.03	30	8	32.2	0.1	11.1	2	
1636	12	7	22.32	0.02	26	48	17.7	0.2	9.7	4	
1637	12	7	22.87	0.01	25	44	21.4	0.6	9.9	2	
1638	12	7	23.98	0.04	29	10	41.5	0.1	9.8	3	1
1639	12	7	24.19	0.03	27	14	17.0	0.2	11.3	3	
1640	12	7	24.73	0.02	29	59	2.3	0.3	11.4	2	
1641	12	7	29.15	0.03	27	19	31.6	0.2	9.1	2	1
1642	12	7	30.80	0.06	28	25	16.8	0.2	10.7	2	
1643	12	7	30.82	0.01	25	58	23.8	0.0	9.9	2	
1644	12	7	31.05	0.02	30	28	38.2	0.1	9.5	3	
1645	12	7	32.41	0.03	30	40	27.5	0.0	6.6	3	1
1646	12	7	32.66		24	46	56.4		9.4	1	
1647	12	7	32.87		31	28	33.9		12.0	1	
1648	12	7	35.96	0.02	26	10	25.9	0.1	9.4	2	1
1649	12	7	36.32	0.03	30	19	48.8	0.5	11.2	2	
1650	12	7	37.24		30	55	8.0		11.8	1	
1651	12	7	37.85		31	45	54.5		11.6	1	
1652	12	7	38.63		27	10	3.4		11.9	1	
1653	12	7	39.81	0.01	28	1	12.3	0.1	10.4	2	
1654	12	7	41.46	0.03	28	19	31.2	0.1	11.0	2	
1655	12	7	43.63		27	42	36.3		11.4	1	
1656	12	7	45.22		25	30	27.1		10.2	1	1
1657	12	7	45.26	0.03	25	43	57.3	0.2	9.7	2	
1658	12	7	47.20	0.02	30	29	28.4	0.2	11.2	2	
1659	12	7	47.44	0.02	27	36	45.2	0.1	10.3	2	
1660	12	7	47.62	0.02	25	53	47.0	0.1	11.0	2	
1661	12	7	47.98	0.03	28	35	49.7	0.3	9.3	2	
1662	12	7	48.44		31	10	40.0		11.2	1	

1743	12	8	53.96	0.01	29	58	36.0	0.2	11.2	2	1
1744	12	8	54.25	0.00	25	58	32.1	0.4	9.6	2	
1745	12	8	55.61		31	36	23.2		12.2	1	
1746	12	8	55.81	0.01	26	9	9.9	0.3	10.6	2	
1747	12	8	57.14		30	6	57.6		11.4	1	
1748	12	8	57.17		30	6	57.9		11.5	1	
1749	12	8	58.79	0.00	27	38	1.2	0.8	12.2	2	
1750	12	8	59.49	0.02	26	48	39.9	0.2	9.7	3	
1751	12	8	59.87		31	23	55.3		12.2	1	
1752	12	9	1.84	0.01	26	15	26.2	0.2	9.7	2	
1753	12	9	2.37	0.01	26	23	23.4	0.2	10.0	2	
1754	12	9	2.67	0.02	27	48	0.3	0.4	10.7	3	
1755	12	9	3.00		28	20	2.1		12.2	1	
1756	12	9	3.16	0.02	29	39	26.9	0.1	11.2	3	
1757	12	9	3.41		25	3	55.2		9.5	1	1
1758	12	9	3.51		27	31	31.9		12.4	1	
1759	12	9	3.68	0.02	26	0	51.6	0.2	9.7	2	
1760	12	9	4.43		24	57	44.1		12.2	1	
1761	12	9	4.51	0.03	28	13	47.3	0.5	9.8	2	
1762	12	9	6.16	0.00	28	46	27.9	0.1	10.4	3	
1763	12	9	6.44		30	15	4.2		12.5	1	
1764	12	9	7.00		31	31	25.2		12.0	1	
1765	12	9	7.01		30	42	39.5		12.7	1	
1766	12	9	7.34	0.00	30	20	40.8	0.0	11.4	2	
1767	12	9	9.53	0.03	30	6	7.7	0.0	12.2	2	
1768	12	9	10.06		24	54	51.6		12.1	1	
1769	12	9	10.73		25	21	22.7		11.9	1	
1770	12	9	10.76	0.01	26	21	57.3	0.3	10.5	2	
1771	12	9	10.82	0.00	28	17	34.5	0.3	10.5	2	
1772	12	9	10.96		28	2	29.5		12.2	1	
1773	12	9	11.41	0.03	30	2	1.2	0.2	11.4	2	1
1774	12	9	15.58	0.02	29	54	39.7	0.2	12.0	2	
1775	12	9	16.41	0.01	26	52	45.0	0.1	11.0	2	
1776	12	9	16.90		30	55	11.8		12.5	1	
1777	12	9	17.64	0.02	27	51	1.7	0.1	10.5	2	
1778	12	9	19.28	0.02	26	8	57.5	0.4	6.9	2	1
1779	12	9	22.65		27	3	9.1		12.2	1	
1780	12	9	22.70		27	0	9.7		10.8	1	
1781	12	9	22.73		31	7	16.7		12.5	1	
1782	12	9	22.79		24	57	17.3		12.8	1	
1783	12	9	23.11	0.01	26	7	29.8	0.7	10.1	2	
1784	12	9	24.08		25	50	5.8		11.2	1	
1785	12	9	25.57	0.02	30	2	24.8	0.0	12.0	2	
1786	12	9	25.58	0.04	27	32	38.5	0.3	10.6	2	
1787	12	9	25.73	0.01	29	53	56.5	0.1	12.2	2	
1788	12	9	27.73	0.02	26	15	7.4	0.1	9.9	2	
1789	12	9	27.90		31	25	22.3		12.2	1	
1790	12	9	28.51	0.03	28	48	58.3	0.1	6.1	3	1
1791	12	9	29.17	0.01	29	20	41.0	0.4	10.7	2	
1792	12	9	29.67	0.00	27	14	57.5	0.1	10.0	2	
1793	12	9	30.03		27	24	57.1		12.2	1	
1794	12	9	30.52		25	1	40.6		12.4	1	
1795	12	9	31.15		30	23	46.0		12.2	1	
1796	12	9	32.22		31	4	59.4		11.6	1	
1797	12	9	32.48	0.01	29	24	2.0	0.2	11.0	2	
1798	12	9	32.87		28	1	35.6		12.2	1	
1799	12	9	32.99	0.03	28	21	22.9	0.2	10.7	2	
1800	12	9	33.39	0.04	26	35	14.9	0.5	11.2	2	
1801	12	9	35.65	0.00	29	59	6.8	0.0	11.2	2	
1802	12	9	36.02	0.01	29	8	8.4	0.2	11.0	2	
1803	12	9	38.48	0.01	26	10	34.9	0.3	10.6	2	
1804	12	9	38.53	0.01	27	53	50.3	0.0	10.1	2	1
1805	12	9	42.29		30	0	50.1		12.0	1	
1806	12	9	42.98	0.01	29	8	24.8	0.1	10.4	2	
1807	12	9	43.53	0.05	26	18	21.5	0.0	9.1	2	1
1808	12	9	44.39	0.01	30	15	8.1	0.4	12.2	2	
1809	12	9	44.65	0.00	27	32	39.6	0.2	10.3	2	
1810	12	9	45.12	0.01	29	6	13.9	0.2	10.7	2	
1811	12	9	46.56	0.01	30	23	31.9	0.3	10.7	2	
1812	12	9	47.01		28	10	0.5		12.6	1	
1813	12	9	47.08		31	28	22.3		11.6	1	
1814	12	9	47.41		25	28	57.2		11.9	1	
1815	12	9	48.03	0.00	29	7	23.2	0.0	10.4	2	
1816	12	9	48.16		28	37	53.8		11.4	1	
1817	12	9	48.20		28	37	53.2		10.7	1	
1818	12	9	48.52		31	7	42.8		10.5	1	
1819	12	9	48.71		25	33	27.7		12.6	1	
1820	12	9	49.72		31	5	39.2		12.2	1	
1821	12	9	51.77	0.00	28	38	19.9	0.3	10.7	2	
1822	12	9	52.49		28	55	38.9		11.8	1	
1823	12	9	52.94	0.02	27	39	30.5	0.4	7.8	4	1
1824	12	9	52.97	0.04	25	51	9.6	0.3	9.2	3	1
1825	12	9	54.03	0.02	27	14	17.7	0.2	9.7	3	1
1826	12	9	54.11	0.01	29	5	18.8	0.3	11.0	2	
1827	12	9	55.69	0.02	28	38	45.0	0.6	10.4	2	
1828	12	9	55.79		24	47	57.7		12.2	1	
1829	12	9	56.72	0.01	28	47	49.9	0.0	10.8	3	

1910	12	11	8.34		28	18	59.1		11.9	1	
1911	12	11	8.41		25	25	41.7		12.4	1	
1912	12	11	8.51		27	37	21.2		11.4	1	
1913	12	11	10.22		27	50	31.9		11.6	1	
1914	12	11	10.78	0.02	25	51	20.0	0.2	9.3	3	
1915	12	11	11.81	0.01	30	33	54.5	0.2	11.2	3	
1916	12	11	12.77		28	19	36.5		11.7	1	
1917	12	11	13.59	0.04	27	7	39.4	0.2	10.3	3	
1918	12	11	14.30	0.03	28	48	18.8	0.2	15.8	3	
1919	12	11	16.17		27	36	9.4		11.9	1	
1920	12	11	17.28	0.03	25	48	38.2	0.1	12.6	2	
1921	12	11	18.95		25	15	3.0		10.5	1	1
1922	12	11	20.36	0.02	26	48	1.2	0.0	11.6	2	
1923	12	11	20.48		27	5	8.8		12.2	1	
1924	12	11	20.49	0.01	26	47	14.9	0.1	9.6	4	
1925	12	11	21.02	0.01	28	34	21.9	0.2	8.6	2	1
1926	12	11	21.16	0.01	28	54	46.1	0.1	10.8	2	
1927	12	11	21.94	0.03	28	29	11.5	0.1	11.4	2	
1928	12	11	22.98	0.02	30	49	38.3	0.1	11.6	3	
1929	12	11	23.03	0.01	30	41	38.6	0.2	11.2	3	
1930	12	11	25.11		25	21	50.9		12.2	1	
1931	12	11	26.19	0.02	29	14	47.0	0.3	11.8	2	
1932	12	11	26.42	0.02	30	4	25.4	0.1	11.2	3	
1933	12	11	26.79	0.00	28	8	42.1	0.3	10.5	2	
1934	12	11	26.90	0.00	27	10	0.5	0.2	10.6	3	
1935	12	11	27.47		25	34	15.7		12.6	1	
1936	12	11	27.54	0.02	26	2	59.9	0.2	11.0	3	
1937	12	11	27.69	0.03	29	50	20.1	0.4	9.8	3	
1938	12	11	27.97		27	33	7.5		11.4	1	
1939	12	11	28.87	0.03	30	3	25.9	0.1	9.9	3	
1940	12	11	30.80	0.01	30	12	49.5	0.1	10.9	3	
1941	12	11	31.82	0.00	26	58	7.9	0.0	11.4	2	
1942	12	11	32.01	0.00	30	15	47.0	0.0	10.8	2	
1943	12	11	34.12		31	30	9.1		12.2	1	
1944	12	11	34.85	0.01	29	40	58.5	0.2	10.5	3	
1945	12	11	36.20		29	3	18.1		12.1	1	
1946	12	11	36.20		28	46	18.3		11.9	1	
1947	12	11	37.87		31	6	0.6		7.8	1	1
1948	12	11	38.01	0.01	30	48	31.7	0.5	11.8	2	
1949	12	11	39.42	0.01	26	58	0.6	0.0	9.8	2	
1950	12	11	39.48	0.01	29	5	20.3	0.0	11.8	2	
1951	12	11	40.22	0.03	27	3	42.1	0.2	11.6	2	
1952	12	11	40.29		31	29	41.6		11.1	1	
1953	12	11	42.52		31	10	9.6		12.1	1	
1954	12	11	43.50	0.03	26	40	44.9	0.1	11.2	3	
1955	12	11	43.72		25	59	39.0		12.9	1	
1956	12	11	44.02	0.01	29	42	36.2	0.3	12.1	2	
1957	12	11	44.31		28	0	4.4		11.6	1	
1958	12	11	44.68	0.00	29	51	42.2	0.0	11.8	2	
1959	12	11	45.46	0.01	25	39	56.5	0.3	11.7	2	
1960	12	11	46.17	0.01	26	47	0.3	0.2	7.8	3	1
1961	12	11	46.38	0.01	28	8	44.2	0.3	10.1	2	1
1962	12	11	47.56		28	34	7.8		11.6	1	
1963	12	11	48.17	0.01	30	25	11.9	0.2	11.8	2	
1964	12	11	48.43	0.05	26	37	36.1	0.2	9.9	2	
1965	12	11	49.04	0.02	28	5	48.8	0.2	9.2	2	1
1966	12	11	49.47		29	4	33.3		12.5	1	
1967	12	11	49.67	0.01	25	56	50.8	0.5	12.4	2	
1968	12	11	51.87	0.02	26	46	38.8	0.1	11.0	3	
1969	12	11	52.07		31	29	54.2		11.0	1	1
1970	12	11	52.22	0.05	27	1	33.5	0.2	12.6	2	
1971	12	11	53.97		24	52	44.1		12.9	1	
1972	12	11	55.22	0.01	26	31	16.5	0.2	10.4	2	
1973	12	12	1.12	0.01	30	45	27.1	0.1	11.7	2	
1974	12	12	1.16	0.03	30	33	17.1	0.1	11.0	2	
1975	12	12	3.97		28	33	9.5		12.2	1	
1976	12	12	3.99	0.01	28	35	4.1	0.0	11.4	2	
1977	12	12	4.41		25	32	26.2		12.4	1	
1978	12	12	5.67		31	0	29.1		12.5	1	
1979	12	12	5.87	0.00	28	6	15.7	0.5	11.4	2	
1980	12	12	6.34		25	37	52.2		12.6	1	
1981	12	12	8.10		28	7	2.2		11.9	1	
1982	12	12	10.14	0.02	26	46	30.2	0.2	11.0	3	
1983	12	12	10.87	0.01	30	19	17.0	0.1	11.5	2	
1984	12	12	10.88	0.01	28	10	9.5	0.0	9.6	2	
1985	12	12	11.55		25	50	48.5		13.4	1	
1986	12	12	12.48		31	22	24.4		11.9	1	
1987	12	12	13.00	0.01	30	20	39.5	0.1	11.8	2	
1988	12	12	13.56		25	35	29.6		12.1	1	
1989	12	12	13.62	0.00	29	14	13.3	0.1	11.0	2	
1990	12	12	14.06	0.01	30	18	34.9	0.2	10.5	2	
1991	12	12	16.91	0.02	30	12	39.0	0.1	11.8	2	
1992	12	12	17.71	0.00	28	55	36.1	0.2	11.5	2	
1993	12	12	20.32	0.02	28	54	30.3	0.3	9.0	2	1
1994	12	12	22.58	0.01	26	18	35.9	0.4	12.4	2	
1995	12	12	23.44	0.01	28	3	9.6	0.3	10.9	2	
1996	12	12	24.15		25	1	58.3		12.6	1	

TABLE 1 (CONTINUED)

No	α			ϵ_α	δ			ϵ_δ	m_p	N	A
1997	12	12	27.46	0.01	26	28	54.4	0.1	10.2	2	
1998	12	12	29.18		25	16	16.1		11.5	1	
1999	12	12	29.58	0.03	30	48	13.9	0.4	11.5	2	
2000	12	12	30.11	0.00	30	25	8.5	0.2	7.9	2	1
2001	12	12	31.15		31	28	17.5		11.8	1	
2002	12	12	31.81	0.00	30	14	56.6	0.1	11.8	2	
2003	12	12	32.86	0.02	26	1	28.2	0.4	11.6	2	
2004	12	12	33.44		24	43	55.7		12.6	1	
2005	12	12	33.55		28	36	46.3		12.2	1	
2006	12	12	33.57		27	5	41.9		12.2	1	
2007	12	12	34.06		29	16	3.5		12.1	1	
2008	12	12	34.73	0.03	27	32	54.4	0.2	11.4	2	
2009	12	12	36.00	0.01	27	43	12.9	0.1	8.9	3	1
2010	12	12	37.37	0.01	30	31	57.0	0.0	9.8	2	
2011	12	12	38.77	0.01	29	32	19.9	0.3	10.5	2	
2012	12	12	39.05		26	4	51.7		12.9	1	
2013	12	12	41.14		25	28	41.8		11.2	1	1
2014	12	12	41.94	0.00	26	31	9.6	0.2	11.3	2	
2015	12	12	42.76	0.02	26	58	50.3	0.2	11.4	2	
2016	12	12	43.06		28	11	36.7		12.2	1	
2017	12	12	43.82	0.01	29	47	7.4	0.0	11.8	3	
2018	12	12	43.96		26	53	4.8		11.9	1	
2019	12	12	45.24	0.00	30	43	14.3	0.3	10.1	2	
2020	12	12	45.74		31	5	47.3		11.6	1	
2021	12	12	45.83	0.00	26	5	41.6	0.0	12.6	2	
2022	12	12	45.86	0.05	27	24	45.2	0.2	12.2	2	
2023	12	12	46.63	0.01	29	44	24.6	0.3	11.8	2	
2024	12	12	48.27	0.00	29	23	9.1	0.2	9.7	2	
2025	12	12	51.24	0.02	28	52	14.3	0.0	11.8	2	
2026	12	12	51.38		29	19	0.6		11.8	1	
2027	12	12	52.44	0.06	26	20	37.7	0.2	12.6	2	
2028	12	12	53.09		26	41	1.2		11.9	1	
2029	12	12	54.35		28	44	48.6		12.2	1	
2030	12	12	54.41		25	20	1.7		12.6	1	
2031	12	12	55.67		27	59	47.0		11.9	1	
2032	12	12	56.46	0.00	26	7	21.8	0.5	12.1	2	
2033	12	12	59.42	0.01	28	48	30.4	0.3	11.7	3	
2034	12	12	59.77		25	12	33.4		12.6	1	
2035	12	12	59.88	0.01	30	3	55.0	0.0	10.5	2	
2036	12	13	1.34	0.00	29	50	31.4	0.0	11.8	2	
2037	12	13	2.41	0.02	26	32	24.0	0.4	12.2	2	
2038	12	13	6.30		31	14	43.2		12.7	1	
2039	12	13	6.38	0.02	30	5	39.2	0.1	11.8	2	
2040	12	13	6.67		31	32	33.4		11.9	1	
2041	12	13	8.58		25	25	39.7		12.9	1	
2042	12	13	8.95		31	13	36.3		12.7	1	
2043	12	13	8.98	0.02	28	10	28.5	0.1	9.6	2	1
2044	12	13	9.33	0.01	28	44	55.6	0.2	11.0	3	
2045	12	13	11.79		27	14	30.7		12.2	1	
2046	12	13	11.87		30	31	6.4		12.9	1	
2047	12	13	11.92		24	52	37.4		11.9	1	
2048	12	13	14.08	0.00	28	29	7.6	0.5	11.2	2	
2049	12	13	14.39	0.00	26	34	25.9	0.1	9.4	2	1
2050	12	13	18.41	0.02	29	4	35.8	0.2	9.9	2	1
2051	12	13	18.60		30	59	53.3		12.5	1	
2052	12	13	18.69	0.02	30	15	59.9	0.3	11.8	2	
2053	12	13	19.24	0.01	26	39	54.6	0.1	11.0	3	
2054	12	13	20.19		27	59	3.6		11.7	1	
2055	12	13	21.46	0.01	27	49	8.8	0.2	10.0	3	
2056	12	13	22.00		27	3	20.1		12.2	1	
2057	12	13	22.06		28	33	34.3		11.7	1	
2058	12	13	26.09	0.01	28	17	52.2	0.1	11.0	2	
2059	12	13	26.62		29	57	8.8		12.7	1	
2060	12	13	28.81		31	33	3.2		11.9	1	
2061	12	13	31.12		29	21	21.8		12.5	1	
2062	12	13	31.23		31	25	23.8		12.5	1	
2063	12	13	31.24	0.03	28	19	36.0	0.0	7.4	2	1
2064	12	13	31.69	0.01	27	46	33.0	0.3	11.4	3	
2065	12	13	32.82	0.04	30	20	20.1	0.2	11.8	2	
2066	12	13	33.31	0.03	30	44	51.5	0.0	11.7	2	
2067	12	13	33.44	0.04	25	47	54.0	0.1	12.1	2	
2068	12	13	33.83		25	35	5.8		12.8	1	
2069	12	13	34.09		25	34	40.6		12.8	1	
2070	12	13	34.99		30	5	59.8		12.5	1	
2071	12	13	35.20		30	53	21.5		12.5	1	
2072	12	13	36.34		25	23	11.9		12.9	1	
2073	12	13	36.84	0.01	26	2	19.0	0.3	6.8	2	1
2074	12	13	37.00		25	36	46.4		12.8	1	
2075	12	13	37.87	0.01	28	6	4.9	0.4	10.4	2	
2076	12	13	39.02		31	20	42.0		12.7	1	

No	α			ϵ_α	δ			ϵ_δ	m_p	N	A
2164	12	14	39.60		30	50	3.6		12.9	1	
2165	12	14	42.80		25	37	23.6		12.1	1	
2166	12	14	43.08		28	38	56.6		11.9	1	
2167	12	14	43.64	0.01	26	29	3.6	0.1	8.7	2	
2168	12	14	44.64		27	23	13.1		12.2	1	
2169	12	14	45.27		25	38	2.8		12.6	1	
2170	12	14	46.03	0.00	26	22	41.8	0.2	12.1	2	
2171	12	14	47.92		25	36	38.1		11.5	1	
2172	12	14	48.28	0.01	28	12	0.1	0.4	11.6	2	
2173	12	14	48.43	0.03	29	0	13.2	0.3	8.5	2	1
2174	12	14	49.56	0.01	27	42	37.4	0.2	11.2	3	
2175	12	14	50.72	0.01	25	58	57.0	0.3	11.3	2	
2176	12	14	51.13	0.02	29	28	50.2	0.1	11.5	2	
2177	12	14	51.77	0.00	26	16	43.9	0.0	11.5	2	
2178	12	14	52.31		28	18	49.6		11.7	1	
2179	12	14	53.18	0.02	29	54	42.9	0.0	11.5	2	
2180	12	14	54.25	0.02	27	31	12.6	0.4	10.5	2	
2181	12	14	55.75		31	5	33.4		12.9	1	
2182	12	14	56.25		30	46	31.6		12.9	1	
2183	12	14	58.77	0.00	28	6	2.9	0.2	11.4	2	
2184	12	14	59.11	0.03	29	29	35.7	0.0	11.5	2	
2185	12	14	59.74	0.03	29	12	49.9	0.2	5.7	2	1
2186	12	15	0.94		28	38	35.9		11.4	1	
2187	12	15	1.47	0.03	27	1	50.8	0.2	11.4	2	
2188	12	15	2.42	0.01	28	32	54.3	0.3	11.6	2	
2189	12	15	3.69	0.04	28	38	41.2	0.2	10.4	2	
2190	12	15	3.77		31	33	33.5		12.3	1	
2191	12	15	4.69		31	24	40.3		11.6	1	
2192	12	15	4.75	0.00	30	6	37.4	0.3	11.8	2	
2193	12	15	5.63	0.01	27	22	6.8	0.1	11.2	2	
2194	12	15	6.55		31	42	44.9		12.1	1	
2195	12	15	6.76	0.03	26	6	16.9	0.1	12.4	2	
2196	12	15	7.21	0.00	30	39	18.8	0.2	10.8	2	
2197	12	15	8.00		31	36	50.1		12.1	1	
2198	12	15	8.29	0.02	26	25	18.6	0.7	11.6	2	
2199	12	15	9.20	0.01	28	42	60.0	0.4	11.8	2	
2200	12	15	10.68		30	58	47.5		12.1	1	
2201	12	15	11.08		25	9	42.4		13.1	1	
2202	12	15	11.66		27	33	12.6		11.9	1	
2203	12	15	13.41		30	3	14.6		12.9	1	
2204	12	15	13.56	0.01	27	7	38.4	0.3	10.7	2	
2205	12	15	13.73		25	41	18.3		13.6	1	
2206	12	15	13.84		25	2	47.1		11.3	1	
2207	12	15	14.73	0.02	30	6	11.4	0.3	12.1	2	
2208	12	15	16.02		31	10	53.1		12.9	1	
2209	12	15	16.44		25	19	57.5		7.6	1	1
2210	12	15	16.49		31	9	53.1		13.1	1	
2211	12	15	18.79	0.03	26	32	2.4	0.4	11.3	2	
2212	12	15	19.60	0.01	25	50	57.8	0.1	6.3	2	1
2213	12	15	20.45	0.02	29	29	44.0	0.2	11.7	2	
2214	12	15	20.92		28	21	11.7		12.2	1	
2215	12	15	21.14		25	23	30.9		10.2	1	1
2216	12	15	22.96		30	12	3.5		12.9	1	
2217	12	15	23.01		30	45	40.0		12.9	1	
2218	12	15	24.67		26	5	44.5		12.4	1	
2219	12	15	27.64		28	8	5.7		12.2	1	
2220	12	15	29.28		28	32	12.6		12.2	1	
2221	12	15	29.72		29	5	35.4		11.8	1	
2222	12	15	31.09	0.01	27	10	58.6	0.0	11.2	2	
2223	12	15	31.23	0.03	28	55	47.5	0.3	9.1	2	
2224	12	15	32.41	0.02	28	11	17.9	0.1	11.2	2	
2225	12	15	33.39	0.02	26	48	40.2	0.5	10.4	3	
2226	12	15	34.23	0.03	29	18	18.5	0.2	10.2	2	1
2227	12	15	35.31		25	48	24.7		11.0	1	
2228	12	15	36.37		26	33	59.5		11.5	1	
2229	12	15	36.45	0.02	29	29	43.6	0.4	11.5	3	
2230	12	15	36.86		28	5	25.9		11.4	1	
2231	12	15	37.28		28	27	10.1		11.7	1	
2232	12	15	39.50	0.03	27	58	25.2	0.1	11.4	3	
2233	12	15	40.36	0.01	27	34	40.7	0.3	7.0	2	1
2234	12	15	41.58		26	17	45.3		11.5	1	
2235	12	15	41.86		29	20	27.5		12.3	1	
2236	12	15	42.28	0.01	29	51	58.3	0.1	11.8	3	
2237	12	15	43.58		28	34	47.2		11.9	1	
2238	12	15	43.85	0.01	27	47	47.6	0.0	9.8	4	
2239	12	15	43.97		29	29	46.1		11.8	1	
2240	12	15	46.24		29	11	42.0		12.5	1	
2241	12	15	46.42	0.01	27	34	42.1	0.3	9.8	3	
2242	12	15	47.19	0.01	29	14	26.8	0.3	10.4	3	
2243	12	15	48.17		31	4	33.8		12.1	1	

No	α			ϵ_α	δ			ϵ_δ	m_p	N	A
2331	12	17	15.91	0.02	29	47	50.7	0.1	12.1	3	
2332	12	17	17.71		31	30	10.2		12.9	1	
2333	12	17	18.28	0.02	29	57	57.0	0.2	12.7	2	
2334	12	17	18.51	0.01	27	5	51.1	0.7	11.5	2	
2335	12	17	19.98	0.03	28	44	31.9	0.2	5.6	3	1
2336	12	17	22.29		31	3	39.6		12.7	1	
2337	12	17	23.48		26	52	1.1		10.9	1	
2338	12	17	23.57		27	59	1.3		11.4	1	
2339	12	17	24.06		27	17	0.8		11.2	1	
2340	12	17	26.83		27	54	8.3		11.7	1	
2341	12	17	26.87		27	18	26.2		11.4	1	
2342	12	17	28.16	0.01	30	45	50.5	0.6	8.7	2	1
2343	12	17	28.49	0.04	30	32	41.0	0.3	11.1	2	
2344	12	17	28.62	0.02	30	31	54.1	0.4	11.8	2	
2345	12	17	34.45		31	36	43.7		12.3	1	
2346	12	17	34.80		26	11	18.1		11.0	1	
2347	12	17	34.88	0.01	28	11	8.5	0.1	9.8	2	1
2348	12	17	35.56	0.02	27	3	36.9	0.2	12.0	2	
2349	12	17	35.89	0.02	26	44	45.1	0.0	12.4	2	
2350	12	17	36.05		31	36	25.4		12.7	1	
2351	12	17	36.48		25	48	28.5		11.0	1	
2352	12	17	39.09		26	15	44.4		9.8	1	
2353	12	17	39.97		26	28	30.0		9.9	1	
2354	12	17	41.09		26	25	6.0		10.8	1	
2355	12	17	41.90	0.01	30	30	13.8	0.5	11.1	2	
2356	12	17	44.01		27	45	30.4		11.4	1	
2357	12	17	45.25	0.01	30	2	2.4	0.6	12.9	2	
2358	12	17	45.67		28	10	29.5		11.4	1	
2359	12	17	45.99		25	59	39.3		11.2	1	
2360	12	17	47.81		26	16	43.8		6.0	1	1
2361	12	17	49.29	0.02	26	53	59.7	0.1	6.0	2	
2362	12	17	51.13		30	55	59.2		12.3	1	
2363	12	17	52.13	0.03	26	51	33.5	0.1	12.4	2	
2364	12	17	52.94		26	19	24.1		9.9	1	
2365	12	17	52.97		26	7	17.0		11.2	1	
2366	12	17	53.40		26	48	53.5		11.5	1	
2367	12	17	53.50		31	6	33.7		12.7	1	
2368	12	17	54.22		31	28	32.7		12.1	1	
2369	12	17	54.89	0.04	30	16	38.0	0.2	11.9	2	
2370	12	17	55.46		31	44	31.2		10.7	1	
2371	12	17	55.75		26	25	5.1		11.5	1	
2372	12	17	56.21	0.02	27	24	0.6	0.3	12.0	2	
2373	12	17	58.35	0.00	29	57	36.4	0.4	11.8	2	
2374	12	17	59.17		30	53	53.7		12.7	1	
2375	12	18	0.30		27	9	53.1		11.4	1	
2376	12	18	2.42	0.00	27	6	20.4	0.3	10.8	2	
2377	12	18	3.14		31	24	46.1		12.5	1	
2378	12	18	3.63		27	16	21.8		11.7	1	
2379	12	18	3.74	0.01	28	15	36.0	0.1	11.4	2	
2380	12	18	4.20		31	25	10.9		12.9	1	
2381	12	18	4.83	0.01	27	55	24.3	0.5	11.6	2	
2382	12	18	5.89	0.02	30	26	17.6	0.3	10.8	2	
2383	12	18	6.25		30	47	31.2		12.9	1	
2384	12	18	6.60	0.01	30	5	35.7	0.3	12.7	2	
2385	12	18	7.90		25	53	39.2		10.8	1	
2386	12	18	8.95	0.00	28	2	37.6	0.0	11.1	2	
2387	12	18	9.63	0.02	28	29	17.2	0.1	11.4	2	
2388	12	18	9.90	0.01	27	20	2.8	0.6	7.4	2	
2389	12	18	10.42		29	49	33.4		12.9	1	
2390	12	18	10.43	0.02	29	48	38.0	0.2	10.7	3	1
2391	12	18	10.52	0.02	27	20	6.4	0.1	6.7	2	
2392	12	18	10.81		28	35	43.8		11.7	1	
2393	12	18	14.64		26	2	36.3		8.4	1	1
2394	12	18	16.35	0.03	30	22	5.4	0.4	10.8	2	1
2395	12	18	17.04	0.02	28	18	32.3	0.0	11.3	2	
2396	12	18	18.35		28	2	38.6		11.9	1	
2397	12	18	21.44		31	12	19.1		12.9	1	
2398	12	18	22.30		26	12	15.2		7.8	1	1
2399	12	18	24.42	0.03	28	13	6.1	0.2	11.4	2	
2400	12	18	26.32	0.02	30	32	55.2	0.2	12.9	2	
2401	12	18	26.99	0.02	28	38	6.3	0.4	11.3	2	
2402	12	18	28.07	0.03	27	45	54.4	0.9	11.3	3	
2403	12	18	28.51	0.00	28	50	2.6	0.3	11.1	2	
2404	12	18	29.51		28	34	14.3		11.2	1	
2405	12	18	31.54	0.01	27	21	4.0	0.2	11.2	2	
2406	12	18	32.85		31	28	17.6		13.1	1	
2407	12	18	33.14		30	55	41.1		12.3	1	
2408	12	18	33.89	0.03	30	17	12.6	0.0	12.5	2	
2409	12	18	33.98		25	59	53.6		7.7	1	1
2410	12	18	34.05		27	38	57.7		11.2	1	

2077	12	13	41.03	0.01	30	39	36.4	0.2	11.5	2	
2078	12	13	41.31		25	26	32.6		12.8	1	
2079	12	13	41.82		28	27	42.0		11.6	1	
2080	12	13	42.28	0.02	29	21	12.8	0.2	11.8	2	
2081	12	13	43.67		28	48	33.1		11.7	1	
2082	12	13	44.11	0.03	29	6	57.8	0.3	8.8	2	1
2083	12	13	44.41	0.00	27	15	17.2	0.0	9.8	2	1
2084	12	13	45.49	0.01	28	45	50.6	0.2	11.7	3	
2085	12	13	46.16		25	28	35.3		11.3	1	
2086	12	13	47.09	0.01	28	46	4.1	0.0	12.1	3	
2087	12	13	47.38		24	44	32.2		11.3	1	
2088	12	13	47.60	0.02	27	12	18.5	0.3	9.8	2	
2089	12	13	47.65	0.00	27	13	42.2	0.3	10.3	2	
2090	12	13	47.80	0.01	27	57	4.8	0.2	11.4	2	
2091	12	13	47.92	0.02	27	21	9.7	0.3	11.7	2	
2092	12	13	49.23	0.02	30	46	48.4	0.3	11.8	2	
2093	12	13	49.40		30	56	26.8		12.3	1	
2094	12	13	49.56	0.02	27	32	56.7	0.3	11.9	2	
2095	12	13	49.60		26	49	12.8		11.9	1	
2096	12	13	50.36	0.03	29	6	20.6	0.0	11.8	2	
2097	12	13	50.63		26	45	35.1		12.2	1	
2098	12	13	52.64		25	29	56.3		12.8	1	
2099	12	13	52.92		31	27	41.3		11.0	1	1
2100	12	13	53.03	0.01	26	40	50.3	0.2	10.1	3	
2101	12	13	53.31		27	51	50.6		11.9	1	
2102	12	13	55.65	0.01	27	14	17.7	0.9	11.2	2	
2103	12	13	59.15		31	13	15.5		11.6	1	
2104	12	13	59.93		24	54	24.5		11.5	1	
2105	12	14	0.08		31	7	26.5		12.5	1	
2106	12	14	0.15		27	4	16.1		12.4	1	
2107	12	14	0.20		31	3	35.4		13.1	1	
2108	12	14	0.21		25	6	30.1		12.6	1	
2109	12	14	2.19		24	53	15.7		9.4	1	1
2110	12	14	2.54	0.01	29	58	52.2	0.1	10.6	2	
2111	12	14	3.01	0.02	29	29	16.3	0.6	11.7	2	
2112	12	14	3.23	0.02	28	24	26.1	0.0	11.0	2	
2113	12	14	4.06	0.03	27	48	10.6	0.0	11.9	2	
2114	12	14	4.12		30	55	9.1		12.9	1	
2115	12	14	4.25	0.00	27	55	53.0	0.1	9.3	2	1
2116	12	14	5.55	0.01	27	9	51.6	0.1	10.4	2	
2117	12	14	6.48	0.02	29	50	22.5	0.3	11.0	2	
2118	12	14	6.59	0.00	26	28	45.3	0.0	11.2	2	
2119	12	14	7.12	0.03	30	48	20.2	0.2	11.8	2	
2120	12	14	7.70		31	18	41.8		12.1	1	
2121	12	14	7.84	0.01	26	21	37.9	0.2	12.6	2	
2122	12	14	8.94	0.02	28	34	33.6	0.1	9.6	2	
2123	12	14	9.47	0.01	28	10	32.1	0.1	10.7	2	
2124	12	14	11.30	0.02	27	39	4.1	0.1	12.2	2	
2125	12	14	15.06		27	25	1.8		12.2	1	
2126	12	14	15.21	0.00	29	51	52.7	0.0	9.3	2	1
2127	12	14	15.41	0.02	30	20	36.6	0.3	9.3	2	
2128	12	14	15.42	0.01	28	49	44.5	0.2	11.0	2	
2129	12	14	15.62	0.01	28	29	4.6	0.0	11.6	2	
2130	12	14	15.86	0.00	26	32	14.9	0.1	9.9	2	1
2131	12	14	16.24		28	37	25.9		11.6	1	
2132	12	14	17.22	0.02	28	32	22.1	0.2	11.0	2	
2133	12	14	17.34		30	10	7.1		12.9	1	
2134	12	14	17.44	0.01	26	29	22.1	0.1	11.0	2	
2135	12	14	17.74		25	8	11.6		10.4	1	
2136	12	14	18.45	0.03	27	17	18.4	0.0	11.7	2	
2137	12	14	18.70	0.01	29	12	46.2	0.3	12.3	2	
2138	12	14	19.29		28	27	19.6		12.2	1	
2139	12	14	19.82	0.01	26	43	51.3	0.2	10.3	3	
2140	12	14	20.17	0.01	28	45	57.5	0.1	11.8	3	
2141	12	14	20.78		31	23	50.1		12.9	1	
2142	12	14	22.20		25	12	54.4		12.9	1	
2143	12	14	22.39	0.01	26	54	44.5	0.3	10.1	2	1
2144	12	14	25.26	0.02	28	1	3.8	0.0	8.4	2	1
2145	12	14	25.55	0.02	28	14	35.2	0.1	10.3	2	
2146	12	14	25.67		30	57	21.5		12.5	1	
2147	12	14	26.02		29	29	27.6		11.8	1	
2148	12	14	26.28		27	40	54.4		12.4	1	
2149	12	14	28.11	0.00	28	21	43.7	0.3	10.1	2	
2150	12	14	28.14	0.01	25	52	28.0	0.1	12.6	2	
2151	12	14	29.42	0.01	28	1	48.1	0.1	10.5	2	
2152	12	14	29.83	0.02	26	45	35.0	0.2	10.0	3	
2153	12	14	30.57		25	12	22.4		11.0	1	
2154	12	14	31.27		28	41	39.7		11.4	1	
2155	12	14	32.86	0.01	29	53	51.3	0.4	10.8	2	1
2156	12	14	33.47	0.02	29	19	24.2	0.1	11.8	2	
2157	12	14	33.89		27	9	51.6		12.2	1	
2158	12	14	35.81	0.00	28	2	29.9	0.1	9.4	2	
2159	12	14	36.45		27	15	41.9		11.7	1	
2160	12	14	37.46	0.01	29	19	24.2	0.3	12.1	2	
2161	12	14	39.13	0.05	27	51	50.5	0.3	11.6	2	
2162	12	14	39.23		24	54	14.2		8.0	1	1
2163	12	14	39.46	0.02	27	9	57.2	0.2	11.4	2	
2244	12	15	48.42		31	11	55.1		11.6	1	
2245	12	15	50.19		28	26	21.5		11.7	1	
2246	12	15	53.12	0.01	28	6	4.3	0.1	11.4	3	
2247	12	15	54.48	0.01	30	13	58.3	0.4	10.2	3	
2248	12	15	56.28		30	44	11.6		12.9	1	
2249	12	15	58.31		28	47	30.3		12.1	1	
2250	12	15	58.33	0.02	30	16	17.4	0.2	11.8	3	
2251	12	15	58.59		28	48	52.8		11.2	1	
2252	12	15	59.34	0.01	29	23	15.0	0.3	10.5	3	
2253	12	15	59.85	0.02	28	48	23.5	0.2	11.8	4	
2254	12	16	0.32	0.02	30	31	47.2	0.2	5.7	3	1
2255	12	16	2.69		26	25	15.3		12.4	1	
2256	12	16	4.03	0.01	29	29	29.6	0.4	11.8	3	
2257	12	16	6.41	0.01	27	44	18.6	0.2	11.4	4	
2258	12	16	8.88	0.01	27	22	29.2	0.1	11.6	3	
2259	12	16	9.74		31	30	14.8		12.9	1	
2260	12	16	10.05		26	27	58.8		7.0	1	1
2261	12	16	11.69		27	10	29.2		12.4	1	
2262	12	16	11.90		31	37	51.9		12.5	1	
2263	12	16	12.53	0.03	27	38	16.7	0.1	11.7	2	
2264	12	16	13.01		31	2	49.9		12.9	1	
2265	12	16	13.51	0.01	27	56	43.2	0.0	11.2	3	
2266	12	16	15.18	0.01	28	8	27.1	0.2	11.4	3	
2267	12	16	16.32	0.05	26	47	13.0	0.1	10.9	3	
2268	12	16	17.02		31	6	43.0		12.7	1	
2269	12	16	17.63	0.02	29	2	30.5	0.1	11.8	3	
2270	12	16	20.39		26	36	7.9		10.2	1	
2271	12	16	21.28	0.01	29	23	57.4	0.3	11.7	3	
2272	12	16	21.61		25	43	27.0		12.0	1	
2273	12	16	22.65		31	35	6.4		12.9	1	
2274	12	16	24.17	0.02	30	44	46.9	0.3	7.9	3	1
2275	12	16	25.17		26	5	23.2		12.0	1	
2276	12	16	26.18		26	9	51.8		10.8	1	
2277	12	16	26.51	0.01	28	7	28.3	0.2	9.8	3	
2278	12	16	27.61		26	20	11.7		11.2	1	
2279	12	16	27.67	0.04	28	36	31.3	0.2	11.4	2	
2280	12	16	27.82		27	52	11.5		12.2	1	
2281	12	16	29.15		25	42	49.0		10.2	1	
2282	12	16	29.46		31	15	28.1		12.9	1	
2283	12	16	30.11		25	47	15.5		12.0	1	
2284	12	16	30.97		26	17	10.3		5.9	1	1
2285	12	16	31.35	0.01	28	19	44.0	0.1	8.4	2	1
2286	12	16	32.30		25	47	42.0		11.5	1	
2287	12	16	33.31	0.01	27	16	24.3	0.0	12.0	2	
2288	12	16	34.08		26	27	42.6		11.2	1	
2289	12	16	34.49	0.03	30	5	29.0	0.3	12.9	2	
2290	12	16	37.22		30	51	12.9		12.9	1	
2291	12	16	37.69		31	34	51.6		12.1	1	
2292	12	16	38.36		28	12	28.7		11.2	1	
2293	12	16	38.39		27	48	48.7		11.7	1	
2294	12	16	38.57	0.02	30	44	46.6	0.3	12.3	2	
2295	12	16	39.05		26	31	16.6		11.5	1	
2296	12	16	39.56		26	10	36.1		12.0	1	
2297	12	16	41.17	0.01	29	28	39.6	0.1	9.8	2	1
2298	12	16	41.34	0.01	27	44	47.1	0.3	11.1	3	
2299	12	16	43.80		27	54	43.8		11.2	1	
2300	12	16	43.80		28	12	30.8		11.2	1	
2301	12	16	43.81	0.01	27	6	34.6	0.2	11.4	2	
2302	12	16	44.27		30	57	34.0		12.7	1	
2303	12	16	44.47		25	47	7.6		11.4	1	
2304	12	16	44.58		30	28	42.9		12.9	1	
2305	12	16	45.20		25	42	50.9		9.9	1	
2306	12	16	47.76		31	1	13.5		10.5	1	1
2307	12	16	47.94		28	2	26.0		11.4	1	
2308	12	16	48.75		31	32	8.0		13.4	1	
2309	12	16	50.09	0.00	28	12	10.7	0.1	9.5	2	1
2310	12	16	51.15		25	59	14.6		9.4	1	
2311	12	16	54.65	0.04	28	28	31.5	0.2	11.6	2	
2312	12	16	55.73		28	14	36.1		10.9	1	
2313	12	16	57.15	0.05	26	53	11.4	0.2	12.0	2	
2314	12	16	58.06	0.01	28	39	27.8	0.0	11.1	3	
2315	12	16	59.24	0.01	26	53	29.4	0.0	11.0	2	1
2316	12	17	0.20	0.00	28	26	16.1	0.1	5.7	2	1
2317	12	17	0.53		30	39	28.6		12.5	1	
2318	12	17	0.85		27	27	50.5		11.9	1	
2319	12	17	0.89		26	9	26.6		11.4	1	
2320	12	17	0.97	0.02	30	26	43.3	0.1	9.2	2	1
2321	12	17	1.67		28	24	4.8		11.1	1	
2322	12	17	3.12	0.03	27	9	5.3	0.1	11.7	2	
2323	12	17	3.97	0.01	30	6	2.1	0.2	11.9	2	
2324	12	17	4.17		25	54	8.9		11.2	1	
2325	12	17	6.45		28	5	53.6		11.2	1	
2326	12	17	7.12		26	35	51.3		12.4	1	
2327	12	17	11.00	0.02	30	17	2.8	0.5	11.0	2	
2328	12	17	11.18		31	9	45.1		12.5	1	
2329	12	17	12.96	0.02	27	30	40.0	0.1	11.5	2	
2330	12	17	14.68	0.01	28	42	9.5	0.2	11.1	3	
2411	12	18	34.26		31	34	30.5		12.9	1	
2412	12	18	34.45		27	37	16.0		11.7	1	
2413	12	18	36.40	0.05	28	4	0.6	0.2	11.4	2	
2414	12	18	37.37		27	44	49.4		11.9	1	
2415	12	18	37.83		26	29	18.3		11.4	1	
2416	12	18	38.57	0.02	30	20	18.1	0.2	12.9	2	
2417	12	18	38.76	0.06	29	12	32.0	0.5	10.4	2	1
2418	12	18	39.30		28	38	12.3		11.7	1	
2419	12	18	40.03		28	36	59.5		11.2	1	
2420	12	18	40.11		31	34	48.9		9.2	1	1
2421	12	18	40.18		29	30	11.1		12.4	1	
2422	12	18	42.69		26	23	4.7		10.8	1	
2423	12	18	42.71		30	58	56.3		12.7	1	
2424	12	18	43.19		28	29	46.7		11.2	1	
2425	12	18	44.86		26	25	53.4		11.2	1	
2426	12	18	45.42	0.03	27	4	56.0	0.1	11.2	2	
2427	12	18	46.60	0.02	28	10	20.1	0.3	11.4	2	
2428	12	18	46.72		28	16	0.2		11.7	1	
2429	12	18	46.84	0.02	30	35	51.3	0.2	12.9	2	
2430	12	18	47.07	0.03	27	33	1.7	0.0	11.0	2	
2431	12	18	47.58		27	14	51.4		11.7	1	
2432	12	18	49.09		29	15	1.7		12.3	1	
2433	12	18	50.89	0.03	29	58	19.2	0.5	12.3	2	
2434	12	18	51.88		26	12	31.6		8.9	1	
2435	12	18	52.01	0.01	30	18	29.2	0.1	12.9	2	
2436	12	18	52.03		25	57	8.7		9.0	1	
2437	12	18	52.47		28	53	4.3		12.4	1	
2438	12	18	52.59		26	11	13.2		9.5	1	
2439	12	18	53.23		31	24	18.0		12.1	1	
2440	12	18	58.95	0.00	28	20	5.1	0.3	11.6	2	
2441	12	18	59.59		26	45	46.7		11.2	1	
2442	12	19	0.56		28	47	9.2		11.4	1	
2443	12	19	0.56	0.01	28	47	9.6	0.0	12.1	2	
2444	12	19	0.85	0.00	29	39	12.8	0.1	11.0	3	
2445	12	19	1.56	0.01	30	27	39.4	0.1	12.7	2	
2446	12	19	2.25		26	23	31.1		9.9	1	
2447	12	19	2.69	0.02	28	48	40.6	0.1	11.4	2	
2448	12	19	3.42	0.01	28	29	40.9	0.1	11.3	2	
2449	12	19	4.14	0.00	29	12	38.3	0.2	11.3	2	
2450	12	19	4.28	0.00	28	44	35.6	0.2	12.4	2	
2451	12	19	5.54		28	37	10.4		11.7	1	
2452	12	19	6.82	0.02	27	4	9.2	0.2	11.0	2	
2453	12	19	6.83	0.01	28	52	4.5	0.1	11.6	2	
2454	12	19	8.53	0.01	27	12	1.2	0.2	12.0	2	
2455	12	19	8.64	0.00	30	45	27.7	0.5	12.3	2	
2456	12	19	8.78	0.01	28	42	36.3	0.1	11.3	3	
2457	12	19	9.35	0.01	30	40	23.1	0.7	11.0	2	
2458	12	19	11.42		26	19	5.4		10.8	1	
2459	12	19	11.65	0.01	30	13	57.3	0.0	12.1	2	
2460	12	19	11.97	0.03	29	52	36.0	0.0	11.4	2	
2461	12	19	12.70	0.03	27	55	6.9	0.3	11.3	2	
2462	12	19	13.02	0.03	27	53	36.1	0.1	11.4	2	
2463	12	19	13.16	0.01	27	57	59.9	0.0	11.4	2	
2464	12	19	13.58	0.05	26	53	9.0	0.2	7.7	2	
2465	12	19	15.22		28	23	14.5		11.4	1	
2466	12	19	16.47		29	27	37.8		12.4	1	
2467	12	19	18.38	0.01	26	49	35.6	0.3	7.9	2	1
2468	12	19	18.39		28	42	3.6		11.7	1	
2469	12	19	21.29		28	2	14.7		11.7	1	
2470	12	19	21.84	0.00	28	25	39.9	0.2	9.4	2	1
2471	12	19	22.75		25	53	51.5		8.8	1	
2472	12	19	23.94		28	34	36.4		11.9	1	
2473	12	19	23.95	0.03	28	18	15.7	0.2	11.3	2	
2474	12	19	24.30		31	21	25.3		11.4	1	
2475	12	19	25.63	0.03	27	35	13.3	0.5	6.5	2	1
2476	12	19	25.89	0.01	28	49	25.7	0.2	9.5	2	
2477	12	19	27.15	0.01	30	35	45.7	0.3	12.5	2	
2478	12	19	27.19		31	23	19.1		12.3	1	
2479	12	19	29.59	0.03	29	24	34.8	0.4	11.4	2	
2480	12	19	31.84		27	38	48.2		11.4	1	
2481	12	19	32.81		28	20	40.3		11.7	1	
2482	12	19	32.95	0.02	28	58	14.3	0.0	11.4	2	
2483	12	19	34.45		31	32	3.5		12.5	1	
2484	12	19	38.49		27	42	16.6		11.2	1	
2485	12	19	39.96	0.01	28	7	25.3	0.3	11.4	2	
2486	12	19	40.18	0.01	31	18	48.2	0.1	11.1	2	
2487	12	19	43.36		26	57	49.6		11.2	1	
2488	12	19	43.67	0.01	30	31	17.1	0.0	12.9	2	
2489	12	19	45.02	0.02	28	21	5.7	0.2	11.4	2	
2490	12	19	47.64		26	41	34.7		10.9	1	
2491	12	19	49.37		27	10	33.0		11.7	1	
2492	12	19	51.41		26	47	33.1		11.2	1	
2493	12	19	52.85		27	0	44.9		11.7	1	
2494	12	19	54.95	0.01	29	23	59.6	0.4	11.1	2	
2495	12	19	56.51	0.01	31	30	52.1	0.1	11.9	2	
2496	12	19	56.97	0.02	29	25	14.3	0.6	11.3	2	
2497	12	19	58.78	0.01	28	22	57.4	0.2	11.3	2	

TABLE 1 (CONTINUED).

No	α			ϵ_α	δ			ϵ_δ	m_p	N	A
2498	12	19	59.89		29	35	46.8		12.4	1	
2499	12	20	0.01		29	52	59.1		12.4	1	
2500	12	20	0.99		26	54	56.3		10.9	1	
2501	12	20	4.02		26	53	57.9		8.4	1	1
2502	12	20	4.64		28	26	9.4		11.7	1	
2503	12	20	4.68		27	52	58.4		10.5	1	1
2504	12	20	8.00	0.01	28	46	45.4	0.3	11.4	3	
2505	12	20	8.76		27	24	38.6		8.4	1	1
2506	12	20	9.72		27	13	31.4		10.9	1	
2507	12	20	11.24		27	12	50.2		11.1	1	
2508	12	20	11.68	0.04	31	31	34.7	0.5	9.2	2	1
2509	12	20	13.40	0.02	29	53	48.1	0.2	12.1	3	
2510	12	20	15.30	0.01	30	35	20.8	0.1	11.8	3	
2511	12	20	16.12	0.02	31	4	41.3	0.1	9.4	2	1
2512	12	20	17.32	0.03	29	45	48.8	0.5	11.3	4	
2513	12	20	19.10		26	40	57.1		9.9	1	
2514	12	20	20.08	0.02	31	0	23.5	0.1	12.1	2	
2515	12	20	21.52	0.11	28	21	42.0	0.1	11.1	2	
2516	12	20	21.86		26	55	2.7		10.5	1	
2517	12	20	22.16		26	51	8.3		11.4	1	
2518	12	20	23.03	0.04	31	4	38.4	0.3	12.1	2	
2519	12	20	23.90		28	12	51.1		11.2	1	
2520	12	20	25.92		27	19	41.3		9.8	1	
2521	12	20	29.61		28	35	40.3		9.6	1	
2522	12	20	30.13	0.02	29	49	18.1	0.3	9.4	4	1
2523	12	20	30.95	0.01	30	16	39.5	0.3	11.9	3	
2524	12	20	32.18		27	43	53.7		11.4	1	
2525	12	20	35.02	0.01	30	53	14.1	0.2	9.3	2	1
2526	12	20	35.68		27	41	26.1		10.4	1	
2527	12	20	38.44		27	4	8.6		11.2	1	
2528	12	20	40.24	0.01	28	42	8.7	0.2	12.4	2	
2529	12	20	40.97		28	58	48.0		12.1	1	
2530	12	20	41.30		26	49	5.6		9.5	1	
2531	12	20	41.62		31	44	17.6		9.7	1	
2532	12	20	41.87		29	31	38.0		11.6	1	1
2533	12	20	42.05		28	15	55.0		11.2	1	
2534	12	20	44.00		29	38	15.2		12.4	1	
2535	12	20	47.99	0.04	30	23	9.7	0.3	12.1	2	
2536	12	20	48.76		30	49	14.0		11.9	1	
2537	12	20	49.23		29	27	6.5		12.4	1	
2538	12	20	49.27		26	49	58.3		11.4	1	
2539	12	20	50.44		28	53	52.3		11.9	1	
2540	12	20	50.90	0.01	30	21	10.5	0.1	10.5	2	1
2541	12	20	51.97		27	34	26.6		10.5	1	
2542	12	20	52.17	0.03	30	27	9.9	0.2	12.4	2	
2543	12	20	52.40	0.02	30	9	36.7	0.1	12.4	2	
2544	12	20	52.67		27	3	59.5		11.1	1	
2545	12	20	53.68		31	0	31.4		11.5	1	
2546	12	20	54.36		28	12	36.9		11.2	1	
2547	12	20	54.97		28	9	12.9		11.9	1	
2548	12	20	55.24		27	3	28.9		11.2	1	
2549	12	20	55.62		31	39	29.0		10.1	1	
2550	12	20	59.04		31	8	3.7		11.9	1	
2551	12	20	59.23		27	22	51.8		11.1	1	
2552	12	20	59.34		26	50	33.8		8.1	1	1
2553	12	21	1.36		27	39	15.4		11.2	1	
2554	12	21	4.85		26	43	7.6		11.2	1	
2555	12	21	5.44		28	11	13.3		10.9	1	
2556	12	21	10.70		27	15	26.2		7.3	1	1
2557	12	21	11.48		26	52	43.7		8.2	1	1
2558	12	21	13.36		26	52	13.3		10.4	1	
2559	12	21	14.72		27	58	0.5		9.9	1	
2560	12	21	15.48	0.00	29	57	45.7	0.1	11.6	2	
2561	12	21	15.73		28	17	4.8		11.2	1	
2562	12	21	16.37		29	29	41.1		12.4	1	
2563	12	21	16.86		29	7	56.1		12.4	1	
2564	12	21	17.47	0.03	30	43	12.7	0.2	10.5	2	
2565	12	21	18.37		28	21	24.7		11.7	1	
2566	12	21	20.09		26	57	32.3		9.3	1	
2567	12	21	21.04		31	39	23.7		11.7	1	
2568	12	21	21.55	0.00	30	43	9.0	0.6	11.9	2	
2569	12	21	24.77		28	5	26.8		11.4	1	
2570	12	21	27.21		31	17	48.3		11.5	1	
2571	12	21	28.56		31	42	12.0		11.3	1	
2572	12	21	29.48		26	48	52.8		11.7	1	
2573	12	21	30.07		29	3	43.1		10.7	1	
2574	12	21	34.22		28	20	28.4		11.4	1	
2575	12	21	35.30		28	22	53.7		11.1	1	
2576	12	21	38.09		27	22	25.2		9.9	1	
2577	12	21	38.94		29	12	47.8		11.1	1	

No	α			ϵ_α	δ			ϵ_δ	m_p	N	A
2637	12	22	43.85		26	58	18.0		10.5	1	
2638	12	22	44.19	0.00	30	13	43.7	0.2	9.6	2	1
2639	12	22	45.17		31	8	47.1		11.3	1	
2640	12	22	47.01		27	51	45.2		10.5	1	
2641	12	22	47.84		27	50	31.4		11.1	1	
2642	12	22	50.55		26	58	47.2		11.7	1	
2643	12	22	50.95		29	9	4.1		12.4	1	
2644	12	22	51.59		27	49	25.3		11.1	1	
2645	12	22	52.18		31	31	35.6		11.9	1	
2646	12	22	52.87		29	20	13.2		12.4	1	
2647	12	22	53.06		29	29	22.2		11.6	1	
2648	12	22	53.57		27	16	27.3		10.2	1	
2649	12	22	53.79		27	9	36.1		9.9	1	
2650	12	22	53.95		28	54	58.1		10.4	1	1
2651	12	22	55.05		31	27	10.6		10.4	1	
2652	12	22	55.10		27	16	39.7		10.2	1	
2653	12	22	55.51		27	46	19.9		11.2	1	
2654	12	22	55.77		30	51	58.2		9.8	1	1
2655	12	22	55.99		29	1	53.3		12.4	1	
2656	12	22	57.22		27	18	27.5		10.0	1	
2657	12	22	57.84		29	7	3.8		12.4	1	
2658	12	22	57.92		28	16	47.4		11.4	1	
2659	12	23	1.27		27	6	34.9		11.2	1	
2660	12	23	2.05		27	24	14.1		9.5	1	1
2661	12	23	2.72		28	20	49.1		12.1	1	
2662	12	23	2.99		27	59	47.7		11.2	1	
2663	12	23	3.02		27	22	6.3		9.6	1	1
2664	12	23	3.37		29	35	19.5		11.9	1	
2665	12	23	4.31		31	21	49.7		11.9	1	
2666	12	23	5.55		28	19	43.5		11.2	1	
2667	12	23	6.67	0.00	30	40	18.8	0.5	12.3	2	
2668	12	23	8.59		31	33	24.4		9.8	1	
2669	12	23	9.19		28	11	18.9		11.2	1	
2670	12	23	9.47		26	53	45.0		11.2	1	
2671	12	23	11.89	0.04	30	0	2.7	0.0	12.4	2	
2672	12	23	11.94		29	28	24.3		12.3	1	
2673	12	23	12.73		29	32	48.7		12.4	1	
2674	12	23	14.71		27	45	37.8		9.9	1	
2675	12	23	15.10	0.01	28	45	29.0	0.3	12.4	2	
2676	12	23	15.41		31	23	36.7		11.3	1	
2677	12	23	17.04	0.01	30	44	18.5	0.1	11.7	2	
2678	12	23	17.53		27	7	22.1		11.7	1	
2679	12	23	17.99		29	12	59.3		11.9	1	
2680	12	23	18.15		31	7	6.5		11.3	1	
2681	12	23	18.54		26	50	19.8		10.7	1	
2682	12	23	20.03		27	14	5.8		11.4	1	
2683	12	23	20.43		27	13	54.4		11.7	1	
2684	12	23	20.71		29	19	4.7		12.4	1	
2685	12	23	20.88	0.01	28	48	39.7	0.1	11.7	2	
2686	12	23	21.13	0.01	30	5	37.3	0.1	12.4	2	
2687	12	23	21.39		28	6	2.9		11.7	1	
2688	12	23	21.93		[illegible]	3	13.8		7.5	1	1
2689	12	23	22.88	0.01	30	34	2.2	0.5	12.4	2	
2690	12	23	23.09		29	33	25.3		11.4	1	
2691	12	23	23.47		30	51	35.3		9.8	1	
2692	12	23	25.59	0.03	30	36	11.7	0.2	12.4	2	
2693	12	23	25.68		31	29	15.0		11.9	1	
2694	12	23	25.86		27	22	36.2		11.7	1	
2695	12	23	29.13		28	16	51.7		11.9	1	
2696	12	23	30.30		27	58	60.0		11.2	1	
2697	12	23	32.98	0.01	30	24	3.3	0.8	10.1	2	1
2698	12	23	35.26		31	16	49.9		11.9	1	
2699	12	23	35.40		27	1	16.0		9.2	1	1
2700	12	23	35.60		29	30	8.6		10.5	1	1
2701	12	23	37.08		26	50	19.6		11.4	1	
2702	12	23	38.75		29	16	42.6		12.4	1	
2703	12	23	39.32		27	21	10.5		11.7	1	
2704	12	23	42.03		27	1	30.9		12.1	1	
2705	12	23	42.36		31	24	54.7		11.7	1	
2706	12	23	43.77		29	27	57.0		12.4	1	
2707	12	23	43.89		27	1	28.2		9.3	1	
2708	12	23	47.24		28	27	57.1		11.4	1	
2709	12	23	48.77		29	10	55.7		12.4	1	
2710	12	23	49.25		27	5	50.6		11.9	1	
2711	12	23	49.70		27	39	54.5		9.3	1	1
2712	12	23	50.50		28	33	12.4		10.9	1	
2713	12	23	53.19		27	0	18.5		9.1	1	
2714	12	23	54.24		27	32	42.6		4.7	1	1
2715	12	23	57.06	0.01	30	25	8.2	0.0	11.6	2	

No	α			ϵ_α	δ			ϵ_δ	m_p	N	A
2775	12	24	56.39		26	56	17.3		11.1	1	
2776	12	24	57.54		31	30	51.3		11.7	1	
2777	12	24	58.32		27	53	59.6		11.7	1	
2778	12	24	59.49		27	17	8.1		10.4	1	
2779	12	24	59.60		27	12	16.1		11.4	1	
2780	12	24	59.94	0.01	28	45	15.2	0.4	12.1	2	
2781	12	25	1.45		29	20	12.9		12.4	1	
2782	12	25	2.38		31	10	40.6		11.5	1	
2783	12	25	3.21		28	23	10.7		7.6	1	1
2784	12	25	3.49		29	24	55.4		12.1	1	
2785	12	25	3.54		31	25	15.4		11.9	1	
2786	12	25	3.79		28	52	19.8		12.3	1	
2787	12	25	4.27		28	13	42.5		11.2	1	
2788	12	25	4.55		27	56	7.6		11.7	1	
2789	12	25	5.44		27	23	9.0		10.9	1	
2790	12	25	5.82		28	59	5.2		11.6	1	
2791	12	25	6.35		27	48	4.7		11.7	1	
2792	12	25	9.33		29	11	2.7		10.5	1	
2793	12	25	10.20	0.00	29	41	20.4	0.2	12.4	2	
2794	12	25	11.02		27	58	28.9		11.2	1	
2795	12	25	11.81		31	45	56.4		11.9	1	
2796	12	25	12.84	0.05	30	7	13.7	0.2	12.4	2	
2797	12	25	14.93		29	31	3.0		12.1	1	
2798	12	25	15.12		29	32	50.1		12.3	1	
2799	12	25	16.30		26	43	44.3		9.6	1	
2800	12	25	16.55		27	53	9.8		11.4	1	
2801	12	25	16.88		27	41	59.6		10.5	1	
2802	12	25	17.77		26	47	44.2		11.2	1	
2803	12	25	17.85	0.06	30	43	0.5	0.2	11.9	2	
2804	12	25	18.74		28	28	16.7		8.8	1	
2805	12	25	19.02		28	21	23.3		11.1	1	
2806	12	25	19.52		29	34	54.8		12.1	1	
2807	12	25	19.81		27	50	44.4		9.3	1	
2808	12	25	20.38		29	28	56.7		12.4	1	
2809	12	25	22.08	0.03	30	35	5.6	0.5	11.9	2	
2810	12	25	22.72		27	55	40.0		10.9	1	
2811	12	25	23.37		31	26	16.9		11.9	1	
2812	12	25	23.65	0.01	29	40	34.1	0.6	10.5	2	
2813	12	25	23.74		28	8	21.9		11.4	1	
2814	12	25	25.57		31	26	9.6		11.7	1	
2815	12	25	26.43		26	50	0.6		10.9	1	
2816	12	25	27.90		31	30	29.9		10.9	1	
2817	12	25	28.29	0.03	30	6	45.2	0.2	11.9	2	
2818	12	25	29.08		31	26	6.9		11.9	1	
2819	12	25	29.54		29	2	25.8		12.1	1	
2820	12	25	32.64	0.05	29	56	12.7	0.4	12.4	2	
2821	12	25	32.65	0.02	30	36	12.9	0.1	9.1	2	1
2822	12	25	34.50		30	5	37.7		9.1	1	1
2823	12	25	34.79		30	4	23.5		10.6	1	1
2824	12	25	38.16		31	30	35.6		11.9	1	
2825	12	25	38.30		30	28	0.3		11.5	1	
2826	12	25	40.50		30	35	15.3		11.7	1	
2827	12	25	49.10		30	39	55.5		11.3	1	
2828	12	25	50.77		31	34	59.1		11.9	1	
2829	12	25	53.43		31	22	46.7		9.8	1	
2830	12	25	53.78		30	12	44.9		9.7	1	
2831	12	25	55.51		31	9	34.4		11.9	1	
2832	12	25	56.36		30	10	30.8		10.0	1	
2833	12	25	58.33		30	51	18.2		11.7	1	
2834	12	25	58.66		30	9	18.2		9.5	1	
2835	12	26	1.23		30	13	25.9		9.8	1	1
2836	12	26	3.15		31	7	27.3		11.9	1	
2837	12	26	3.66		29	52	0.0		9.7	1	1
2838	12	26	10.59		31	5	4.6		10.3	1	
2839	12	26	18.33		31	24	14.5		11.9	1	
2840	12	26	18.47		31	21	8.8		11.9	1	
2841	12	26	22.92		31	1	51.5		11.7	1	
2842	12	26	33.20		31	16	49.3		11.9	1	
2843	12	26	33.22		30	48	13.3		11.7	1	
2844	12	26	34.48		30	52	11.5		11.9	1	
2845	12	26	37.90		31	40	4.8		7.2	1	1
2846	12	26	39.78		30	37	58.7		11.5	1	
2847	12	26	43.75		31	29	26.2		11.5	1	
2848	12	26	44.41		30	47	19.2		11.3	1	
2849	12	26	49.83		30	37	0.5		11.3	1	
2850	12	26	52.50		29	47	20.2		11.9	1	
2851	12	26	53.14		29	40	31.6		11.9	1	
2852	12	26	54.45		31	33	44.7		11.9	1	
2853	12	26	57.99		30	29	8.8		9.7	1	

2578	12	21	39.85		30	48	26.9		11.9	1	
2579	12	21	40.04		30	56	1.7		11.5	1	
2580	12	21	40.46	0.06	29	45	57.0	0.4	12.4	2	
2581	12	21	42.54		28	41	1.9		10.0	1	1
2582	12	21	42.55		28	41	2.0		9.1	1	
2583	12	21	44.27		27	52	29.7		11.2	1	
2584	12	21	45.68	0.01	30	46	43.7	0.4	12.4	2	
2585	12	21	46.23		27	14	2.4		11.7	1	
2586	12	21	47.79		31	3	24.6		11.3	1	
2587	12	21	48.20	0.00	30	23	32.4	0.3	11.9	2	
2588	12	21	49.55		28	19	40.0		11.7	1	
2589	12	21	49.89		28	36	43.3		9.6	1	1
2590	12	21	53.43		26	51	26.2		11.7	1	
2591	12	21	55.08		27	45	4.4		9.1	1	1
2592	12	21	56.89		29	24	43.7		10.5	1	1
2593	12	21	57.46		29	23	6.2		12.4	1	
2594	12	21	59.39		29	58	17.0		11.9	1	
2595	12	22	0.13		29	8	26.7		12.3	1	
2596	12	22	1.56		29	6	16.5		12.4	1	
2597	12	22	1.69	0.03	30	3	21.2	0.5	12.4	2	
2598	12	22	1.89		31	33	24.4		8.4	1	1
2599	12	22	2.70	0.05	30	21	43.6	0.1	12.1	2	
2600	12	22	4.61		30	53	24.4		10.1	1	
2601	12	22	5.99	0.00	30	45	3.9	0.2	11.9	2	
2602	12	22	8.82		27	51	58.4		11.7	1	
2603	12	22	8.96		28	46	52.7		11.4	1	
2604	12	22	9.86		26	56	24.4		11.2	1	
2605	12	22	12.42		29	24	36.2		12.3	1	
2606	12	22	12.72		27	28	11.9		11.7	1	
2607	12	22	14.20	0.02	30	17	38.1	0.3	12.4	2	
2608	12	22	15.38		28	20	0.9		11.9	1	
2609	12	22	15.46		27	1	21.5		10.4	1	
2610	12	22	16.20		31	35	49.8		8.9	1	
2611	12	22	16.95		31	39	0.9		10.1	1	
2612	12	22	17.31		28	43	1.6		11.2	1	
2613	12	22	17.69		27	28	37.7		10.9	1	
2614	12	22	18.10		31	22	23.3		11.9	1	
2615	12	22	18.16		29	8	6.9		12.4	1	
2616	12	22	19.76		29	12	2.1		12.4	1	
2617	12	22	19.79		31	18	39.1		7.6	1	1
2618	12	22	20.32		28	1	45.4		11.4	1	
2619	12	22	21.17		27	41	13.8		9.6	1	
2620	12	22	21.90		31	18	54.5		11.9	1	
2621	12	22	23.77		27	10	49.0		11.4	1	
2622	12	22	23.84		31	22	32.9		11.3	1	
2623	12	22	25.58		31	36	41.5		11.9	1	
2624	12	22	28.79		31	17	34.1		11.9	1	
2625	12	22	29.72		26	51	7.6		11.1	1	
2626	12	22	31.52	0.01	30	7	2.8	0.3	12.4	2	
2627	12	22	31.64	0.01	30	24	9.7	0.1	12.4	2	
2628	12	22	31.93		26	50	14.3		11.4	1	
2629	12	22	32.08	0.01	29	44	1.4	0.1	12.1	2	
2630	12	22	33.56		31	32	1.1		11.3	1	
2631	12	22	35.89		27	4	3.3		10.9	1	
2632	12	22	36.30		28	31	19.1		11.7	1	
2633	12	22	36.39		28	4	24.4		11.7	1	
2634	12	22	36.87		27	11	14.9		11.4	1	
2635	12	22	40.09		27	56	22.9		10.9	1	
2636	12	22	43.60		27	55	24.8		9.6	1	
2716	12	24	3.16	0.02	29	50	30.7	0.3	11.9	2	
2717	12	24	3.62		31	7	33.4		11.9	1	
2718	12	24	3.71	0.01	29	50	36.9	0.2	12.4	2	
2719	12	24	3.82	0.04	30	34	4.5	0.2	12.4	2	
2720	12	24	5.53		27	3	4.1		11.7	1	
2721	12	24	6.28		31	0	0.4		11.3	1	
2722	12	24	8.71		27	55	3.0		11.4	1	
2723	12	24	10.48	0.04	30	13	8.9	0.5	12.4	2	
2724	12	24	10.57		28	25	38.7		11.4	1	
2725	12	24	11.15		26	45	59.1		10.9	1	
2726	12	24	11.94		31	18	48.1		11.1	1	
2727	12	24	12.86		29	29	24.3		12.4	1	
2728	12	24	15.63		31	35	41.7		11.7	1	
2729	12	24	15.74	0.01	30	6	59.0	0.3	12.4	2	
2730	12	24	16.52	0.02	30	32	17.6	0.2	11.7	2	
2731	12	24	17.83		27	6	9.7		8.4	1	1
2732	12	24	18.64		29	0	27.3		12.4	1	
2733	12	24	19.58		28	29	19.3		11.4	1	
2734	12	24	20.57		27	45	14.5		11.4	1	
2735	12	24	23.66	0.00	30	1	6.7	0.4	12.4	2	
2736	12	24	23.97		28	19	14.7		10.2	1	
2737	12	24	25.27		28	31	45.1		9.8	1	
2738	12	24	27.20		28	32	50.5		5.4	1	1
2739	12	24	27.81		27	31	18.7		11.9	1	
2740	12	24	29.42		27	6	9.8		4.9	1	1
2741	12	24	30.97		30	5	44.4		11.9	1	
2742	12	24	31.39	0.00	29	53	14.3	0.1	11.9	2	
2743	12	24	32.72		29	1	4.3		12.3	1	
2744	12	24	33.38		28	15	48.8		10.9	1	
2745	12	24	35.80		27	3	41.3		9.2	1	
2746	12	24	36.37	0.02	30	44	44.1	0.4	11.7	2	
2747	12	24	36.41		27	7	21.5		9.3	1	
2748	12	24	36.51		27	55	3.4		11.7	1	
2749	12	24	36.55		27	11	50.1		11.2	1	
2750	12	24	36.56		28	5	45.3		11.4	1	
2751	12	24	36.79		27	22	12.5		11.2	1	
2752	12	24	36.94		31	39	5.8		11.9	1	
2753	12	24	37.17	0.02	30	6	45.8	0.2	12.4	2	
2754	12	24	40.40		27	37	17.0		11.7	1	
2755	12	24	41.64		26	51	45.8		10.9	1	
2756	12	24	42.31		26	44	0.0		9.8	1	
2757	12	24	42.76	0.03	30	12	58.4	0.0	12.4	2	
2758	12	24	43.03	0.00	29	46	57.7	0.1	11.9	2	
2759	12	24	43.18		27	18	30.1		8.2	1	1
2760	12	24	43.24	0.02	30	22	56.5	0.1	10.5	2	
2761	12	24	44.20		30	35	29.0		11.9	1	
2762	12	24	44.96		29	35	29.5		12.4	1	
2763	12	24	46.06		31	36	11.0		10.0	1	
2764	12	24	46.67		31	40	18.8		11.3	1	
2765	12	24	46.85		28	53	19.6		12.4	1	
2766	12	24	47.36		30	34	36.0		11.9	1	
2767	12	24	47.53		27	14	40.8		11.7	1	
2768	12	24	48.46	0.01	29	40	1.4	0.0	12.1	2	
2769	12	24	48.99		27	18	25.9		11.4	1	
2770	12	24	49.27		30	56	56.5		11.3	1	
2771	12	24	51.02		27	26	44.9		9.3	1	1
2772	12	24	54.27	0.01	28	46	25.8	0.7	11.9	2	
2773	12	24	55.26		27	12	25.1		9.6	1	
2774	12	24	55.79		28	1	31.0		11.7	1	
2854	12	26	59.57		31	44	46.5		11.5	1	
2855	12	27	0.75		29	46	10.8		8.6	1	1
2856	12	27	0.89		29	47	21.0		8.5	1	1
2857	12	27	4.17		29	50	17.0		11.9	1	
2858	12	27	4.20		30	54	32.9		8.6	1	1
2859	12	27	4.99		30	21	24.8		9.8	1	
2860	12	27	5.78		30	21	28.0		11.9	1	
2861	12	27	7.68		29	55	52.6		11.9	1	
2862	12	27	9.20		30	48	18.6		11.5	1	
2863	12	27	14.55		30	31	46.4		11.9	1	
2864	12	27	14.63		30	17	51.3		8.6	1	1
2865	12	27	18.99		30	44	41.1		11.9	1	
2866	12	27	23.65		30	14	45.2		11.3	1	
2867	12	27	26.11		30	34	15.8		11.3	1	
2868	12	27	30.02		29	45	45.8		11.9	1	
2869	12	27	30.08		29	40	15.2		9.8	1	
2870	12	27	32.83		31	0	17.6		9.8	1	
2871	12	27	33.71		30	43	2.2		11.7	1	
2872	12	27	34.33		30	26	35.4		11.3	1	
2873	12	27	39.34		29	41	16.9		9.7	1	
2874	12	27	43.83		31	46	46.3		11.7	1	
2875	12	27	47.69		29	59	42.8		11.3	1	
2876	12	27	49.19		30	9	57.7		11.9	1	
2877	12	27	49.24		31	16	6.0		8.6	1	1
2878	12	27	49.42		31	18	32.5		11.9	1	
2879	12	27	53.27		29	55	29.3		11.9	1	
2880	12	27	55.24		31	32	6.9		11.3	1	
2881	12	27	56.17		30	13	15.1		11.5	1	
2882	12	27	56.92		31	11	21.6		11.9	1	
2883	12	28	2.34		31	20	2.9		9.3	1	1
2884	12	28	10.25		30	39	20.0		9.8	1	
2885	12	28	12.80		31	3	39.9		11.9	1	
2886	12	28	13.73		30	23	13.5		11.7	1	
2887	12	28	14.86		30	35	23.3		11.5	1	
2888	12	28	22.89		30	10	35.7		10.9	1	
2889	12	28	26.83		31	33	42.0		10.0	1	
2890	12	28	28.75		29	46	4.8		11.9	1	
2891	12	28	31.36		31	14	24.1		11.9	1	
2892	12	28	32.25		31	41	57.5		6.3	1	1
2893	12	28	34.56		30	18	11.8		10.0	1	
2894	12	28	42.16		31	8	0.5		11.9	1	
2895	12	28	43.15		30	7	59.0		11.7	1	
2896	12	28	44.35		31	34	44.9		8.6	1	
2897	12	28	49.01		30	35	38.9		9.8	1	
2898	12	28	49.62		31	12	22.1		11.3	1	
2899	12	28	53.78		30	30	6.4		11.9	1	
2900	12	28	54.03		31	14	53.2		11.1	1	
2901	12	29	0.87		31	6	51.1		10.8	1	
2902	12	29	3.56		31	32	5.1		11.9	1	
2903	12	29	5.80		31	31	5.5		11.3	1	
2904	12	29	6.74		30	54	38.6		9.7	1	
2905	12	29	7.94		30	29	28.1		11.7	1	
2906	12	29	9.71		29	38	53.9		11.5	1	
2907	12	29	11.25		31	17	42.8		9.1	1	1
2908	12	29	22.00		29	48	55.9		11.9	1	
2909	12	29	23.13		30	16	46.9		11.5	1	
2910	12	29	25.66		30	56	56.1		11.9	1	
2911	12	29	27.01		30	44	6.9		10.9	1	

TABLE 2

THE PROPER MOTION CATALOGUE

N_0	α			δ			m_p	AGK2 -Oxf. μ_α	AGK2 -Oxf. μ_δ	AGK3 -AGK2 μ_α	AGK3 -AGK2 μ_δ
1	11	39	44.33	29	57	11.5	8.0	10	-55	-44	-60
15	11	40	19.63	28	49	19.0	6.9	-11	0	-13	-11
19	11	40	27.69	27	8	27.8	9.8	43	-1	0	-26
35	11	40	46.28	28	19	54.6	6.7	4	49	8	25
37	11	40	51.26	27	50	45.3	8.0	-12	1	-9	3
41	11	40	55.94	27	12	15.6	10.1	12	26	-2	-2
42	11	40	56.18	29	19	19.9	7.7	28	-9	-9	-17
50	11	41	7.57	30	44	27.5	9.2	-21	-21	-5	-10
61	11	41	30.69	29	51	28.2	7.0	26	-19	14	1
66	11	41	36.29	30	10	23.9	6.9	24	-32	22	-13
76	11	41	52.04	30	17	35.7	10.7	35	-8	16	6
84	11	42	2.52	28	42	26.3	9.6	-5	-18	-10	-17
90	11	42	7.64	28	56	50.7	6.9	-23	6	-17	13
96	11	42	14.15	28	42	24.6	10.4	-25	-15	-35	5
97	11	42	14.31	28	42	17.3	10.1	-44	4	-32	-13
101	11	42	20.61	27	56	23.6	9.2	-7	-12	-34	-18
102	11	42	21.83	27	41	19.0	8.0	40	-140	51	-136
111	11	42	37.01	28	24	4.2	8.9	36	-8	27	2
122	11	42	49.29	27	29	46.7	7.3	6	-46	-4	-6
128	11	42	56.45	30	46	9.2	8.1	4	-28	-8	-16
141	11	43	11.97	28	52	33.6	9.8	22	41	11	7
152	11	43	19.52	26	41	17.7	9.8	-4	-23	10	-16
154	11	43	20.34	30	48	33.2	10.1	8	-10	-8	-9
157	11	43	23.25	28	56	47.5	8.9	-21	30	-9	3
162	11	43	28.41	27	7	17.8	9.1	9	31	-21	-16
165	11	43	35.72	27	28	17.6	9.6	10	-14	7	5
167	11	43	37.68	29	17	43.0	10.1	8	-4	21	-15
184	11	43	53.86	30	36	33.7	10.7	26	-55	22	-37
187	11	43	59.77	30	42	2.5	8.9	-42	2	-42	-10
196	11	44	12.08	29	6	54.0	9.4	-5	-58	8	-33
202	11	44	19.28	27	19	6.8	8.8	-4	-47	-10	-35
206	11	44	21.42	27	18	2.7	9.3	-23	12	-8	-1
214	11	44	35.12	28	28	12.4	8.9	1	-13	2	-12
219	11	44	40.68	27	43	3.1	9.5	7	-4	5	-19
220	11	44	44.65	27	40	33.3	7.9	-68	-31	-63	-29
226	11	44	53.10	26	41	31.0	9.1	-23	-54	-19	-47
228	11	44	58.49	30	52	55.8	11.0	17	0	-29	2
232	11	45	7.91	30	31	3.1	10.7	-22	-11	-7	-39
247	11	45	20.97	27	37	5.3	7.4	-75	19	-39	8
250	11	45	24.54	27	40	37.8	10.0	-46	7	-31	3
252	11	45	27.01	26	57	47.0	9.7	-8	-18	-12	-8
268	11	45	46.41	30	54	18.4	8.7	-34	-11	-54	-5
271	11	45	50.17	28	41	42.9	6.9	-106	-11	-82	-7
281	11	46	1.12	29	4	40.6	6.4	-41	5	-63	0
288	11	46	8.34	31	29	1.3	8.2	-71	66	-104	106
315	11	46	36.67	28	23	57.6	7.3	-4	4	-3	2
316	11	46	36.97	31	44	6.0	9.4	33	-45	-10	-14
336	11	46	59.40	29	46	35.8	7.8	12	3	6	-6
355	11	47	12.44	30	6	53.3	10.7	-6	10	-1	-12
386	11	47	35.41	27	56	1.8	9.7	-15	-3	-4	10
416	11	48	8.94	28	22	28.4	7.5	-104	8	-75	11
431	11	48	20.70	27	29	22.0	9.9	38	-16	26	-26
441	11	48	32.43	26	18	33.2	10.0	21	-22	22	7
456	11	48	48.14	26	37	25.0	10.6	27	-56	44	-56
473	11	49	8.28	29	18	56.9	10.5	22	-57	13	-51
481	11	49	14.81	26	38	38.4	10.0	-3	-33	15	-17
503	11	49	33.93	30	3	27.9	9.0	-12	12	-10	2
509	11	49	41.42	31	1	7.4	9.4	7	-36	-5	-26
515	11	49	48.47	25	43	14.4	9.2	36	-22	56	-38
516	11	49	50.24	31	13	49.4	11.0	-81	-134	-95	-151
519	11	49	53.39	31	10	8.0	11.0	-23	-25	-13	-23
529	11	50	1.53	26	27	38.5	10.0	-29	-23	-30	-31
535	11	50	8.07	30	31	11.9	9.2	-50	-96	-42	-118
536	11	50	10.49	28	41	12.7	8.4	-38	0	-41	-3
537	11	50	11.80	28	28	11.8	8.5	-26	-9	-18	-4
538	11	50	17.61	31	6	16.2	8.5	-93	-19	-82	16
539	11	50	17.91	31	6	17.7	8.2	-80	1	-64	29
549	11	50	34.41	28	47	36.6	9.6	-41	-3	-39	12
550	11	50	34.53	26	41	3.6	9.7	-77	-51	-62	-45
554	11	50	37.10	30	58	33.9	10.8	3	-32	15	-15
555	11	50	37.99	27	0	33.7	10.0	-4	-19	1	-14
556	11	50	38.09	25	52	33.3	9.9	-2	-42	4	-17
559	11	50	41.03	27	35	7.8	8.8	-82	15	-71	2
562	11	50	43.16	27	40	6.5	9.4	-3	25	1	36
575	11	50	58.28	29	36	2.3	9.6	-45	-17	-45	-15
578	11	51	4.42	26	42	22.5	9.9	-18	-18	-2	-16
599	11	51	27.18	28	14	29.8	8.5	9	5	5	3
605	11	51	29.04	25	58	39.8	10.0	11	-55	9	-57
611	11	51	32.51	26	40	33.5	9.2	19	-19	25	-22
638	11	52	9.30	26	4	0.9	10.0	8	0	-12	4
642	11	52	16.08	27	29	29.6	11.3	-52	-25	-46	-26
649	11	52	25.37	26	2	16.6	9.5	-54	-27	-31	-1
669	11	52	41.40	28	47	55.5	9.6	1	-7	4	-10
680	11	52	50.37	25	48	2.9	7.4	-71	-18	-44	-23
688	11	52	57.23	27	47	28.5	10.4	16	-22	16	5
705	11	53	17.78	28	42	56.6	9.6	-10	-9	-4	7
707	11	53	20.07	27	12	27.2	10.0	-44	33	-64	20
716	11	53	26.52	31	28	50.2	8.2	-5	9	-10	1
721	11	53	31.68	29	23	0.9	9.3	-3	-3	-4	3
729	11	53	39.07	28	42	45.7	9.5	-31	14	-48	-8
731	11	53	40.98	29	8	11.7	6.9	-52	17	-19	3
740	11	53	47.21	26	57	27.1	6.8	-157	24	-133	4
758	11	54	5.32	31	1	19.5	9.8	13	-58	-21	-21
761	11	54	6.10	28	20	44.6	10.0	-18	-5	-10	-38
770	11	54	13.96	26	2	32.7	10.0	-2	-3	-10	3
787	11	54	38.06	27	26	18.2	8.3	0	-26	10	-14
791	11	54	39.47	26	6	1.9	8.8	50	-32	31	-27
804	11	54	51.25	27	2	41.1	7.5	25	-158	13	-164
807	11	54	53.58	29	33	9.5	9.5	-21	-4	-23	-9
817	11	55	1.06	28	50	0.8	7.3	-70	-4	-52	6
818	11	55	1.46	29	45	36.4	10.6	19	-14	-17	-43
838	11	55	10.61	26	6	24.5	10.0	8	-11	-2	-12
868	11	55	37.36	30	5	54.7	8.8	-12	-17	-15	-30
869	11	55	37.52	27	11	24.4	7.9	-9	9	-27	-11
875	11	55	42.03	30	3	15.3	9.7	-38	-15	-38	-2
881	11	55	47.51	26	15	0.9	9.7	36	-37	9	-22
887	11	55	52.71	27	6	56.2	7.5	24	13	15	19
893	11	55	56.71	27	31	56.1	8.7	-29	-8	-60	5
896	11	55	57.72	31	36	58.0	8.5	-132	-42	-115	-10
918	11	56	24.57	31	4	40.2	9.5	41	-66	36	-47
922	11	56	27.59	26	48	10.3	9.7	-32	9	-20	-7
932	11	56	39.70	29	2	34.1	9.7	-10	-11	-14	-32
935	11	56	46.40	27	23	37.9	8.4	0	-6	-1	-14
959	11	57	12.69	27	39	46.5	10.9	-11	5	-9	13
962	11	57	16.16	28	50	51.1	9.9	-4	-20	-3	-16
968	11	57	24.27	28	24	0.0	9.5	-12	-18	-32	-32
973	11	57	31.69	26	55	32.7	10.7	-4	0	-44	5
976	11	57	34.02	26	19	21.7	8.8	-41	-90	-38	-111
983	11	57	39.13	26	53	49.2	9.2	-53	-16	-55	-20
1024	11	58	13.74	29	27	58.8	7.5	38	-30	80	-22
1037	11	58	31.30	28	14	28.8	8.7	5	-27	21	-38
1042	11	58	34.18	31	15	26.4	8.3	-1	-29	-8	-31
1046	11	58	40.27	30	55	5.3	7.0	-129	-59	-113	-63
1049	11	58	41.30	29	2	26.7	9.8	-34	-2	-52	-3
1054	11	58	44.89	31	31	38.1	11.0	11	-25	-3	-5
1061	11	58	49.96	25	59	42.0	9.7	-21	-23	-13	-9
1068	11	58	58.10	30	25	49.8	10.6	68	-10	51	-12
1084	11	59	10.37	29	49	40.8	8.1	-10	-39	-14	-70
1089	11	59	12.05	31	10	39.1	8.5	-51	-12	-59	10
1102	11	59	23.40	28	3	45.6	9.9	-138	-27	-148	-32
1111	11	59	29.35	27	19	12.8	10.1	11	-15	26	-24
1116	11	59	34.75	31	31	41.3	8.1	-64	-34	-61	-3
1124	11	59	48.17	29	27	2.1	9.9	-72	-104	-55	-99
1132	11	59	50.97	28	39	4.2	10.2	-5	-5	-34	4
1151	12	0	11.54	31	47	26.4	8.5	6	-100	-9	-78
1162	12	0	22.47	27	17	8.2	8.9	-50	-46	-55	-63
1165	12	0	24.93	26	45	13.2	9.7	-8	-19	-2	-5
1175	12	0	32.13	31	6	40.3	9.9	35	-53	16	-56
1198	12	0	45.05	29	23	58.1	9.3	-2	-27	18	-20
1203	12	0	47.77	29	56	39.5	9.6	16	9	13	13
1205	12	0	50.46	26	4	26.8	9.7	-37	9	-40	14
1216	12	0	59.78	29	57	29.1	7.8	6	-20	1	-52
1219	12	1	0.36	29	54	44.0	9.9	-23	-32	-20	-41
1232	12	1	11.97	26	4	13.2	9.7	-1	-1	9	-11
1240	12	1	21.30	30	56	39.2	10.4	-55	-15	-40	-5
1249	12	1	31.94	28	20	21.0	7.8	-24	-6	-27	-32
1256	12	1	40.15	26	8	51.5	9.1	42	-41	58	-25
1270	12	1	50.06	27	27	56.3	9.7	5	14	-25	-14
1280	12	2	6.90	31	24	42.0	9.8	4	4	21	-17
1300	12	2	26.04	27	39	28.2	9.3	-60	-19	-71	-27
1311	12	2	33.09	31	6	44.7	7.8	-3	-69	18	-63
1320	12	2	40.95	25	52	46.2	9.2	-43	-4	-49	13
1329	12	2	49.89	31	29	19.3	7.2	-33	-15	-14	-1
1337	12	2	57.52	28	47	2.2	8.0	-7	2	1	-18
1339	12	3	0.50	26	38	22.0	8.3	-29	3	-30	10
1343	12	3	3.89	28	34	32.5	8.3	173	-115	170	-111
1364	12	3	21.76	26	44	49.1	8.2	-89	-55	-79	-62
1365	12	3	21.80	26	56	51.6	9.2	-19	-1	-30	-1
1366	12	3	22.73	29	15	38.4	9.4	21	-100	31	-99
1367	12	3	22.92	25	56	46.5	8.9	48	-138	24	-137
1375	12	3	32.65	26	2	58.2	9.2	-14	-22	6	-36
1381	12	3	35.27	27	49	37.9	8.6	-66	0	-53	-18
1387	12	3	38.86	29	40	51.7	9.1	-41	-17	-18	-20
1424	12	4	9.45	29	46	4.6	8.3	-29	-35	-32	-17
1428	12	4	13.47	26	12	33.5	9.4	5	-6	9	-20
1429	12	4	14.18	30	32	24.8	8.8	7	-20	0	-17
1443	12	4	25.91	28	4	29.6	9.5	-31	-18	-11	4
1444	12	4	27.94	27	17	40.1	9.5	-41	6	-14	-22
1456	12	4	39.02	30	0	24.3	9.8	-53	-14	-55	-22
1457	12	4	39.47	30	18	52.8	9.8	-58	-31	-81	-27
1477	12	4	58.29	28	56	48.9	9.5	-17	-45	-23	-28
1479	12	5	3.13	26	10	39.8	9.7	-3	5	9	-7
1488	12	5	12.45	30	41	56.0	9.1	-9	-19	-19	-16
1493	12	5	15.92	27	35	49.3	10.2	88	-84	84	-79
1497	12	5	16.97	31	26	58.3	9.6	83	-178	61	-172
1514	12	5	33.45	31	19	45.0	7.2	-71	-76	-29	-43
1522	12	5	42.93	30	33	14.0	8.3	-15	-24	-1	-14
1528	12	5	47.34	31	12	24.7	9.2	-36	-117	-53	-86
1536	12	5	52.57	28	15	43.7	8.8	-14	-8	-2	-12
1543	12	5	57.65	28	26	55.8	8.8	0	-56	19	-34
1548	12	5	59.32	25	4	42.8	8.1	-63	-12	-47	-9
1556	12	6	4.15	26	46	22.8	7.3	46	-54	62	-44
1566	12	6	14.90	31	13	15.4	9.5	-32	-32	-47	21
1574	12	6	21.28	26	14	6.3	9.6	-7	-32	-7	-18
1600	12	6	40.58	31	18	25.1	9.9	99	-116	111	-100
1612	12	6	49.57	29	44	19.8	7.7	-46	0	-39	-16
1614	12	6	49.97	26	13	45.2	9.7	-12	-51	-24	-41
1619	12	6	55.20	28	29	1.3	8.9	-14	-16	8	-33
1633	12	7	18.32	29	12	23.8	9.1	-5	-7	-19	-14
1638	12	7	23.98	29	10	41.5	9.8	-32	-21	-33	-12
1641	12	7	29.15	27	19	31.6	9.1	-28	-9	-24	-23
1645	12	7	32.41	30	40	27.5	6.6	-15	-11	-21	-28
1648	12	7	35.96	26	10	25.9	9.4	7	-32	-6	-16
1656	12	7	45.22	25	30	27.1	10.2	-16	-17	-17	-18
1665	12	7	48.93	25	21	26.2	10.9	23	-34	21	-22
1666	12	7	49.31	30	4	16.9	9.0	-4	-8	1	-6

TABLE 2 (CONTINUED)

N_0	α			δ			m_p	AGK2 -Oxf. μ_α	μ_δ	AGK3 -AGK2 μ_α	μ_δ
1671	12	7	52.27	25	36	36.9	8.8	1	-55	27	-58
1675	12	7	55.87	29	20	47.6	7.6	-50	-21	-47	2
1688	12	8	13.88	27	33	36.5	5.6	-18	-31	-18	-26
1691	12	8	17.02	29	52	23.6	9.9	10	-48	11	-45
1708	12	8	28.84	28	11	46.6	9.8	2	-27	1	-23
1727	12	8	35.16	26	16	6.9	9.4	-28	-12	-21	-24
1732	12	8	41.84	29	23	12.4	8.8	-13	-34	-19	-49
1733	12	8	43.65	25	1	56.2	6.9	-133	-29	-109	-16
1743	12	8	53.96	29	58	36.0	11.2	-21	-28	-27	-36
1757	12	9	3.41	25	3	55.2	9.5	4	-38	-12	-29
1773	12	9	11.41	30	2	1.2	11.4	53	-52	38	-53
1778	12	9	19.28	26	8	57.5	6.9	-61	-47	-46	-40
1790	12	9	28.51	28	48	58.3	6.1	48	-69	77	-70
1804	12	9	38.53	27	53	50.3	10.1	23	-48	29	-38
1807	12	9	43.53	26	18	21.5	9.1	-71	-19	-67	-8
1823	12	9	52.94	27	39	30.5	7.8	-7	-8	-31	-4
1824	12	9	52.97	25	51	9.6	9.2	-38	-28	-10	-2
1825	12	9	54.03	27	14	17.7	9.7	50	-31	53	-28
1838	12	10	0.16	28	39	39.3	9.8	-8	4	-19	1
1844	12	10	4.48	31	45	0.2	11.2	-2	-19	-16	-36
1847	12	10	9.41	30	16	38.3	8.6	-127	-127	-161	-130
1854	12	10	20.37	27	50	18.2	9.0	27	-12	6	-21
1867	12	10	31.27	28	54	46.1	8.1	-2	3	-18	-7
1884	12	10	45.77	30	33	38.2	7.6	-88	6	-81	7
1887	12	10	47.96	29	32	5.0	9.4	-62	7	-48	-11
1895	12	10	58.83	30	22	46.4	10.2	-37	17	-54	14
1896	12	10	59.12	27	19	16.6	9.2	-65	-2	-66	4
1901	12	11	3.05	30	50	27.6	8.0	-19	-36	16	-32
1902	12	11	3.82	31	14	29.1	8.4	-63	-10	-48	3
1905	12	11	5.22	27	24	34.8	9.1	-7	5	-21	-30
1921	12	11	18.95	25	15	3.0	10.5	-28	-22	-47	-31
1925	12	11	21.02	28	34	21.9	8.6	-37	-20	-36	-11
1947	12	11	37.87	31	6	0.6	7.8	-131	-129	-142	-102
1960	12	11	46.17	26	47	0.3	7.8	10	-42	1	-35
1961	12	11	46.38	28	8	44.2	10.1	-83	-23	-68	-14
1965	12	11	49.04	28	5	48.8	9.2	-58	-12	-62	-16
1969	12	11	52.07	31	29	54.2	11.0	0	-27	-50	-20
1993	12	12	20.32	28	54	30.3	9.0	-25	-11	-23	-19
2000	12	12	30.11	30	25	8.5	7.9	-14	-2	-9	32
2009	12	12	36.00	27	43	12.9	8.9	2	-15	10	-18
2013	12	12	41.14	25	28	41.8	11.2	-6	24	-54	23
2043	12	13	8.98	28	10	28.5	9.6	0	-9	2	-6
2049	12	13	14.39	26	34	25.9	9.4	0	-23	-13	-23
2050	12	13	18.41	29	4	35.8	9.9	-14	-4	-5	-8
2063	12	13	31.24	28	19	36.0	7.4	-20	-8	-27	-15
2073	12	13	36.84	26	2	19.0	6.8	-20	-37	-23	-28
2082	12	13	44.11	29	6	57.8	8.8	32	-57	40	-61
2083	12	13	44.41	27	15	17.2	9.8	-28	-18	-18	-5
2099	12	13	52.92	31	27	41.3	11.0	-38	1	-23	-9
2109	12	14	2.19	24	53	15.7	9.4	9	-29	-8	-38
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2185	12	14	59.74	29	12	49.9	5.7	-42	44	-40	33
2209	12	15	16.44	25	19	57.5	7.6	-33	-40	-43	-21
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2226	12	15	34.23	29	18	18.5	10.2	-37	-30	-24	-9
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TABLE 3

THE CROSS REFERENCE CATALOGUE

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	2282	7350
	1931	7607
452	2282	7442
453	1506	8361
454	2282	7450
455	1553	3351
456	1506	8379
457	1930	7334
	1899	1904
	1931	7531
458	1553	3408
459	1930	7408
	2282	7357
	1931	7608
460	1553	3385
461	1506	8303
462	2282	7451
463	1506	8325
464	1553	3223
	1506	8396
465	1553	3386
466	2282	7407
467	1553	3342
468	1930	7326
	1899	1893
	1931	7521
469	1553	3237
	1506	8404
470	1553	3224
471	2282	7436
472	1553	3372
473	1930	7344
	1899	1914
	1931	7536
474	1553	3361
475	1553	3362
	1899	1812
	1506	8459
	1890	3709
476	1930	7401
	2282	7351
477	1553	3292
478	2282	7372
479	1930	7307
	1553	3497
	1899	1871
	1931	7501
	1890	3818
480	1553	3352
481	1506	8380
	1890	3601
482	1930	7370
	2282	7315
	1931	7570
483	2282	7443
484	1506	8317
485	1553	3445
	1899	1845
	1890	3776
486	1930	7354
	1899	1920
	1931	7549
487	1553	3425
488	2282	7339
489	1553	3373
490	1553	3320
491	1930	7376
	2282	7327
	1931	7574
492	1553	3293
	1506	8433
	1890	3662
493	1553	3398
	1899	1828
	1890	3748
494	1506	8375
495	1553	3363
	1899	1816
	1506	8460
	1890	3715
496	2282	7429
497	1553	3409
498	1506	8331
499	1553	3512
	1899	1878
500	1506	8326
501	2282	7382
502	1506	8318
503	1930	7387
	2282	7336
	1931	7592
504	1553	3343
	1506	8449
	1890	3699
505	1553	3294
	1506	8434
	1890	3663
506	1553	3271
	1506	8419
	1890	3650
507	2282	7307
	1899	1930
508	1506	8397
	1890	3608
509	2282	7392
510	2282	7411
511	2282	7316
	1931	7571
512	1899	1863

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TABLE 3 (CONTINUED)

No	Oxford	
	1890	3807
513	1899	1817
	1890	3716
514	1899	1915
	1931	7545
515	1506	8304
516	2282	7412
517	2282	7344
	1931	7594
518	1506	8336
519	2282	7408
520	2282	7418
521	2282	7437
522	1506	8316
523	1506	8420
	1890	3651
524	1899	1825
	1890	3738
525	1506	8337
526	2282	7308
527	1899	1818
	1890	3726
528	2282	7358
	1931	7612
529	1506	8362
530	1899	1813
	1890	3717
531	1506	8340
532	1899	1826
	1890	3739
533	1890	3808
534	1506	8311
535	2282	7359
	1931	7613
536	1899	1872
	1931	7502
	1890	3819
537	1899	1852
	1890	3799
538	2282	7400
539	2282	7401
540	1506	8363
541	1890	3652
542	1506	8398
	1890	3609
543	1899	1864
	1890	3809
544	1506	8319
545	1899	1836
	1890	3760
546	1890	3787
547	1931	7596
548	1506	8443
	1890	3676
549	1899	1879
	1931	7508
	1890	3831
550	1506	8389
	1890	3602
551	2282	7393
552	2282	7317
	1931	7572
553	1899	1814
	1506	8461
	1890	3718
554	2282	7394
555	1506	8410
	1890	3630
556	1506	8320
557	1899	1804
	1506	8456
	1890	3700
558	1899	1853
	1890	3788
559	1506	8447
	1890	3690
560	1890	3761
561	1506	8364
562	1899	1805
	1506	8450
	1890	3701
563	1506	8338
564	1899	1837
	1890	3762
565	2282	7444
566	1890	3681
567	1506	8448
568	1899	1921
	1931	7550
569	1506	8349
570	1506	8353
571	1890	3677
572	1899	1887
	1931	7509
573	1899	1806
	1890	3702
574	2282	7302
	1899	1926
	1931	7559
575	1899	1925

No	Oxford	
	1931	7555
576	2282	7438
577	2282	7367
	1931	7616
578	1506	8390
	1890	3603
579	1506	8415
	1890	3642
580	2282	7322
581	1890	3757
582	1506	8421
	1890	3643
583	1506	8451
	1890	3703
584	1890	3740
585	2282	7445
586	2282	7323
587	1899	1820
	1890	3727
588	1506	8343
589	2282	7430
590	2282	7360
	1931	7614
591	2282	7413
592	1890	3691
593	2282	7431
594	2282	7414
595	2282	7345
	1931	7597
596	1899	1916
597	1899	1899
	1931	7522
598	2282	7318
	1931	7564
599	1899	1838
	1890	3763
600	1899	1846
	1890	3777
601	1506	8354
602	1899	1847
	1890	3778
603	1899	1821
	1890	3728
604	2282	7383
605	1506	8327
606	1506	8365
607	1506	8328
608	1506	8366
609	1506	8411
	1890	3631
610	1899	1905
	1931	7532
611	1506	8381
	1890	3604
612	1506	8305
613	1899	1888
	1931	7510
614	1899	1839
	1890	3764
615	1899	1889
616	2282	7439
617	2282	7340
	1931	7590
618	1506	8422
	1890	3644
619	1899	1894
	1931	7519
620	2282	7361
	1931	7609
621	1890	3810
622	1506	8376
623	1506	8306
624	1506	8399
	1890	3615
625	1890	3779
626	1931	7617
627	1506	8312
628	1506	8350
629	1506	8377
630	1506	8405
	1890	3616
631	2282	7386
632	2282	7432
633	1899	1854
	1890	3789
634	1931	7598
635	1899	1873
	1890	3820
636	1506	8382
637	1899	1859
	1890	3800
638	1506	8332
639	1506	8333
640	2282	7309
	1899	1931
	1931	7565
641	1890	3704
642	1506	8444
	1890	3682
643	1899	1860

No	Oxford	
	1890	3801
644	1899	1895
	1931	7523
645	1890	3683
646	2282	7341
	1931	7595
647	2282	7409
648	2282	7324
	1931	7575
649	1506	8334
650	1899	1908
651	2282	7362
	1931	7610
652	1890	3632
653	1506	8452
	1890	3692
654	2282	7328
655	1899	1890
	1931	7516
656	1899	1874
	1890	3821
657	1506	8435
	1890	3664
658	1890	3623
659	2282	7424
	2281	7670
660	1899	1909
	1931	7537
661	2282	7310
	1899	1932
	1931	7566
662	1890	3665
663	1890	3705
664	1890	3719
665	1899	1900
	1931	7528
666	2282	7337
667	1506	8355
668	1506	8453
	1890	3693
669	1899	1880
	1931	7511
	1890	3832
	1900	2080
670	1899	1865
	1890	3811
	1900	2066
671	1506	8351
672	1890	3758
673	1506	8383
674	2282	7402
	2281	7626
675	2281	7638
676	1506	8321
677	2281	7648
678	1899	1910
	1931	7538
	1900	2110
679	1890	3749
680	1506	8313
681	1899	1822
	1890	3729
	1900	2012
682	1506	8425
	1890	3653
683	1506	8426
	1890	3666
684	1506	8344
685	1506	8367
686	1506	8400
	1890	3617
687	1899	1881
	1931	7503
	1890	3833
	1900	2081
688	1899	1815
	1506	8462
	1890	3710
	1900	2005
689	2282	7329
	1931	7583
	2281	7538
690	1899	1827
	1890	3741
	1900	2018
691	2282	7395
	2281	7619
692	1506	8368
693	1890	3720
694	1506	8416
	1890	3633
695	1890	3790
696	2282	7342
	2281	7558
697	2282	7330
	1931	7584
	2281	7539
698	2282	7343
	2281	7559
699	2282	7311

No	Oxford	
	1899	1933
	1931	7567
	2281	7510
700	1890	3678
701	1506	8436
	1890	3667
702	1899	1882
	1931	7512
	1890	3834
	1900	2082
703	2282	7446
	2281	7695
704	1506	8391
	1890	3610
705	1899	1875
	1931	7504
	1890	3822
	1900	2072
706	2282	7384
	2281	7607
707	1506	8427
	1890	3654
708	1890	3765
709	1899	1840
	1890	3766
	1900	2034
710	1506	8369
711	2282	7352
	1931	7611
	2281	7581
712	2282	7331
	2281	7540
713	1899	1841
	1890	3767
	1900	2035
714	1899	1911
	1931	7533
	1900	2111
715	1506	8314
716	2282	7433
	2281	7679
717	2282	7419
	2281	7660
718	2281	7627
719	2282	7312
720	1506	8315
721	1899	1917
	1931	7546
	1900	2116
722	2282	7375
	1931	7623
	2281	7599
723	2281	7628
724	1890	3668
725	1890	3780
726	1506	8345
727	1890	3730
728	1890	3768
	1900	2036
729	1931	7505
	1890	3823
	1900	2073
730	1506	8329
731	1931	7529
	1900	2107
732	1890	3742
	1900	2019
733	1890	3731
734	1506	8406
	1890	3618
735	1506	8428
	1890	3655
736	2281	7661
737	2281	7671
738	1890	3791
739	1890	3824
740	1506	8412
	1890	3624
	1507	8625
741	1931	7585
	2281	7541
742	2281	7613
743	1931	7603
	2281	7575
744	1931	7591
	2281	7553
745	1506	8384
	1890	3605
	1507	8592
746	1506	8358
	1507	8566
747	1931	7618
	2281	7589
748	2281	7649
749	1890	3792
750	1931	7622
	2281	7600
751	1506	8357
	1507	8567
752	1506	8307

No	Oxford	
	1507	8501
753	1506	8401
	1890	3611
	1507	8607
754	1890	3759
	1900	2029
755	2281	7560
756	1506	8370
	1507	8584
757	2281	7594
758	2281	7620
759	2281	7688
760	2281	7601
761	1890	3781
	1900	2044
762	1931	7576
	2281	7525
763	1506	8413
	1890	3634
	1507	8626
764	1890	3793
765	2281	7629
766	2281	7602
767	1507	8534
768	1931	7624
	2281	7603
769	1931	7513
	1900	2087
770	1506	8335
	1507	8544
771	1890	3625
772	1506	8423
	1890	3656
	1507	8655
773	1506	8308
	1507	8502
774	1890	3794
	1900	2060
775	1506	8358
	1507	8568
776	1506	8352
	1507	8569
777	1506	8359
	1507	8570
778	1931	7560
	2281	7501
	1900	2140
779	1890	3802
780	1931	7577
	2281	7526
781	1890	3721
782	1890	3645
783	1890	3711
	1507	8709
784	1506	8429
	1890	3657
	1507	8656
785	1507	8553
786	1931	7604
	2281	7576
787	1506	8445
	1890	3679
	1507	8680
788	1890	3812
	1900	2067
789	1506	8437
	1890	3674
	1507	8674
790	2281	7621
791	1506	8339
	1507	8548
792	1931	7599
	2281	7566
793	2281	7672
794	1890	3722
795	1890	3835
796	1931	7605
	2281	7577
797	1506	8360
	1507	8571
798	1890	3743
	1900	2020
799	1506	8385
	1507	8593
800	1931	7524
	1900	2103
801	2281	7630
802	1931	7520
	1900	2097
803	2281	7631
804	1506	8417
	1890	3635
	1507	8638
805	1890	3803
	1900	2061
806	1890	3744
807	1931	7553
	1900	2130
808	2281	7696
809	2281	7622

No	Oxford	
810	1890	3813
	1900	2068
811	2281	7650
812	1506	8392
	1890	3606
	1507	8601
813	2281	7662
814	1931	7578
	2281	7527
815	1506	8322
	1507	8522
816	1890	3825
817	1931	7514
	1900	2088
818	1931	7568
	2281	7511
	1900	2148
819	2281	7689
820	1931	7506
	1890	3826
	1900	2074
821	1506	8371
	1507	8585
822	1931	7606
	2281	7578
823	2281	7651
824	1507	8503
825	2281	7673
826	1890	3814
	1900	2069
827	2281	7632
828	2281	7652
829	1890	3795
	1900	2053
830	1890	3723
	1900	2009
831	1890	3750
	1900	2030
832	1506	8323
	1507	8523
833	1890	3751
834	1507	8586
835	1890	3815
836	1890	3752
837	2281	7614
838	1506	8340
	1507	8549
839	1931	7615
	2281	7586
840	1506	8393
	1890	3612
	1507	8602
841	1507	8594
842	1931	7619
	2281	7590
843	1890	3753
	1900	2031
844	1931	7539
	1900	2117
845	2281	7700
846	1890	3782
	1900	2045
847	1890	3732
	1900	2013
848	1506	8457
	1890	3706
	1900	2001
	1507	8706
849	1931	7625
	2281	7604
850	1890	3796
	1900	2054
851	1931	7620
	2281	7595
852	2281	7639
853	2281	7582
854	1507	8587
855	1931	7586
	2281	7542
856	1931	7507
	1890	3827
	1900	2083
857	1931	7547
	1900	2123
858	1506	8378
	1507	8588
859	1931	7534
	1900	2112
860	1890	3816
861	1506	8407
	1890	3626
	1507	8627
862	2281	7608
863	1890	3804
864	1890	3754
865	1506	8408
	1890	3627
	1507	8628
866	2281	7701
867	1890	3658

No	Oxford	
	1507	8657
868	1931	7592
	2281	7554
869	1506	8430
	1890	3659
	1507	8658
870	1506	8386
	1507	8595
871	2281	7640
872	1931	7535
	1900	2108
873	1890	3712
	1900	2006
	1507	8710
874	1931	7554
	1900	2133
875	1931	7587
	2281	7543
876	1931	7540
	1900	2118
877	1931	7517
	1900	2089
878	2281	7591
879	1931	7541
	1900	2119
880	1507	8504
881	1507	8559
882	1890	3805
	1900	2070
883	1890	3769
884	1890	3828
885	1890	3680
	1507	8681
886	1507	8535
887	1890	3646
	1507	8648
888	2281	7587
889	1507	8524
890	1931	7556
	1900	2134
891	1890	3713
	1900	2007
	1507	8711
892	1890	3660
	1507	8659
893	1890	3684
	1507	8689
894	1507	8505
895	2281	7653
896	2281	7690
897	1507	8512
898	1890	3628
	1507	8629
899	2281	7641
900	1890	3669
	1507	8664
901	2281	7691
902	1507	8536
903	1890	3619
	1507	8616
904	1931	7621
	2281	7596
905	2281	7697
906	2281	7544
907	1931	7573
	2281	7516
908	2281	7680
909	1890	3797
	1900	2055
910	1507	8537
911	1890	3636
	1507	8639
912	1890	3607
	1507	8603
913	1890	3637
	1507	8640
914	1507	8575
915	1507	8506
916	1890	3685
	1507	8690
917	2281	7663
918	2281	7633
919	2281	7681
920	1890	3755
	1900	2024
921	2281	7528
922	1890	3613
	1507	8608
923	1890	3694
	1507	8695
924	1931	7542
	1900	2113
925	2281	7702
926	1890	3638
	1507	8630
927	1890	3639
	1507	8641
928	1890	3798
929	2281	7517
930	1890	3817

TABLE 3 (CONTINUED)

No	Oxford	
	1900	2071
931	1931	7579
	2281	7529
932	1931	7525
	1900	2098
933	1931	7580
	2281	7530
934	2281	7623
935	1890	3675
	1507	8675
936	1931	7588
	2281	7545
937	1890	3714
	1507	8712
938	1507	8538
939	1931	7581
	2281	7531
940	1931	7543
	1900	2114
941	1890	3829
	1900	2075
942	1890	3783
	1900	2046
943	2281	7561
944	1890	3784
	1900	2056
945	2281	7567
946	1890	3707
	1507	8707
947	1890	3745
948	2281	7597
949	2281	7502
	1900	2141
950	1890	3733
	1900	2014
951	1890	3620
	1507	8617
952	1890	3686
	1507	8691
953	1507	8513
954	1507	8514
955	2281	7642
956	1890	3661
	1507	8660
957	1890	3746
	1900	2021
958	1931	7600
	2281	7568
959	1890	3708
	1900	2002
	1507	8696
960	1890	3647
	1507	8649
961	1931	7601
	2281	7569
962	1931	7518
	1900	2090
963	1890	3734
964	2281	7643
965	1931	7626
	2281	7609
966	1931	7544
	1900	2120
967	1507	8515
968	1890	3785
	1900	2057
969	2281	7615
970	2281	7644
971	1890	3687
	1507	8692
972	1507	8550
973	1890	3629
	1507	8631
974	1507	8560
975	1890	3770
	1900	2037
976	1507	8561
977	1890	3830
	1900	2076
978	1890	3621
	1507	8609
979	1890	3806
	1900	2062
980	1890	3771
	1900	2038
981	1931	7589
	2281	7546
	1942	7827
982	1931	7561
	2281	7503
	1900	2142
	1942	7784
983	1890	3622
	1507	8618
984	1890	3772
	1900	2039
	1772	4105
985	1507	8554
986	1890	3688
	1507	8693

No	Oxford	
	1772	4019
987	1890	3689
	1507	8694
	1772	4020
988	2281	7682
989	1507	8525
990	1890	3756
	1900	2025
	1772	4086
991	1890	3670
	1772	3978
992	1890	3648
	1507	8650
993	1931	7526
	1900	2104
	1942	7732
994	1931	7569
	2281	7512
	1900	2149
	1942	7798
995	1507	8596
996	2281	7664
997	1507	8572
998	1507	8576
999	1890	3735
	1772	4076
1000	1890	3773
	1900	2047
	1772	4106
1001	2281	7610
1002	1507	8577
1003	1890	3724
	1772	4054
1004	1890	3774
	1900	2040
	1772	4107
1005	1931	7557
	1900	2135
	1942	7780
1006	1890	3725
	1900	2015
	1772	4065
1007	2281	7562
1008	1507	8573
1009	2281	7645
1010	1890	3671
	1507	8665
	1772	3979
1011	2281	7703
1012	1507	8516
1013	1931	7548
	1900	2121
	1942	7755
1014	1890	3736
	1900	2022
	1772	4077
1015	1890	3640
	1507	8632
1016	1931	7593
	2281	7555
	1942	7835
1017	1931	7558
	2281	7504
	1900	2143
	1942	7785
1018	1890	3786
	1772	4135
1019	1900	2124
	1942	7770
1020	1507	8597
1021	1890	3649
	1507	8651
1022	2281	7692
1023	1772	4025
1024	1931	7551
	1900	2125
	1942	7766
1025	1507	8578
1026	1507	8539
1027	1507	8517
1028	1890	3695
	1507	8697
	1772	4026
1029	1890	3696
	1507	8698
	1772	4038
1030	2281	7624
1031	1931	7562
	2281	7505
	1900	2144
	1942	7786
1032	1931	7527
	1900	2099
	1942	7726
1033	2281	7674
1034	1931	7602
	2281	7570
	1942	7843
1035	2281	7532
1036	1890	3641

No	Oxford	
	1507	8642
	1772	3941
1037	1890	3775
	1900	2041
	1772	4108
1038	1931	7563
	2281	7506
	1900	2145
	1942	7787
1039	1507	8604
	1772	3903
1040	1890	3697
	1507	8699
	1772	4027
1041	1507	8562
1042	2281	7654
1043	2281	7665
1044	1890	3737
	1772	4066
1045	1900	2136
1046	2281	7616
1047	1890	3672
	1507	8666
	1772	3995
1048	1890	3614
	1507	8610
	1772	3904
1049	1900	2100
	1942	7727
1050	1772	4096
1051	1890	3836
	1900	2084
	1772	4169
1052	2281	7675
1053	1890	3747
	1900	2023
	1772	4078
1054	2281	7683
1055	1507	8619
	1772	3930
1056	1507	8579
1057	1890	3698
	1507	8700
	1772	4028
1058	2281	7579
	1942	7850
1059	1900	2131
	1942	7771
1060	1507	8574
1061	1507	8540
1062	1507	8526
1063	2281	7556
	1942	7836
1064	1890	3673
1065	2281	7533
	1942	7815
1066	2281	7634
1067	2281	7655
1068	2281	7583
	1942	7853
1069	1507	8507
1070	1772	3968
1071	1772	4055
1072	1507	8620
	1772	3918
1073	1507	8682
	1772	4010
1074	1507	8661
	1772	3969
1075	1507	8527
1076	1900	2048
	1772	4120
1077	1900	2049
	1772	4121
1078	2281	7563
1079	1507	8545
1080	2281	7656
1081	1900	2101
	1942	7728
1082	1772	4097
1083	1507	8528
1084	2281	7518
	1942	7808
1085	1900	2063
	1772	4147
1086	1772	4087
1087	1507	8508
1088	1900	2126
	1942	7767
1089	2281	7646
1090	2281	7519
1091	1507	8701
	1772	4029
1092	1900	2026
	1772	4088
1093	1507	8662
	1772	3980
1094	1900	2085
	1942	7706
	1772	4170

No	Oxford	
1095	1900	2132
	1942	7772
1096	2281	7657
1097	1507	8589
1098	1772	3942
1099	1507	8643
	1772	3943
1100	2281	7520
1101	1772	4109
1102	1900	2027
	1772	4079
1103	2281	7507
	1900	2146
	1942	7788
1104	1900	2092
	1942	7719
1105	2281	7564
	1942	7841
1106	1507	8555
1107	2281	7513
	1942	7799
1108	1900	2016
	1772	4067
1109	1772	4039
1110	1772	4068
1111	1507	8667
	1772	3996
1112	2281	7571
	1942	7844
1113	1772	4080
1114	2281	7588
	1942	7859
1115	1507	8683
	1772	4021
1116	2281	7684
1117	1900	2008
	1507	8713
	1772	4046
1118	2281	7647
1119	1507	8598
1120	1772	3997
1121	1507	8611
	1772	3905
1122	1772	4148
1123	1507	8529
1124	1900	2127
	1942	7768
1125	1772	4122
1126	1772	4069
1127	1507	8541
1128	2281	7605
1129	1900	2086
	1942	7707
	1772	4171
1130	2281	7693
1131	1772	4081
1132	1900	2077
	1942	7701
	1772	4162
1133	2281	7534
	1942	7816
1134	1507	8605
	1772	3906
1135	1507	8676
	1772	3998
1136	1507	8530
1137	1507	8633
	1772	3931
1138	1507	8612
	1772	3907
1139	1772	3999
1140	2281	7547
	1942	7828
1141	1507	8518
1142	1900	2109
	1942	7740
1143	2281	7514
	1942	7800
1144	1772	4136
1145	1507	8644
	1772	3944
1146	1900	2093
	1942	7720
1147	1900	2010
	1772	4056
1148	1942	7756
1149	1507	8531
1150	1772	3970
1151	2281	7704
1152	2281	7696
1153	1900	2128
	1942	7757
1154	1900	2074
	1942	7721
1155	2281	7565
	1942	7842
1156	1507	8645
	1772	3945
1157	1772	3932
1158	2281	7515

No	Oxford	
	1900	2150
	1942	7801
1159	1507	8677
	1772	4011
1160	2281	7625
1161	2281	7685
1162	1507	8668
	1772	3981
1163	1507	8669
	1772	3982
1164	2281	7548
	1942	7829
1165	1507	8613
	1772	3908
1166	1900	2122
	1942	7758
1167	1507	8580
1168	1772	4172
1169	2281	7557
	1942	7837
1170	1900	2095
	1942	7722
1171	1772	4089
1172	1772	4156
1173	2281	7580
	1942	7851
1174	1507	8708
	1772	4040
1175	2281	7635
1176	1772	4110
1177	1507	8551
1178	1507	8621
	1772	3919
1179	1507	8634
	1772	3933
1180	1900	2091
	1942	7714
1181	2281	7676
1182	1507	8670
	1772	4000
1183	2281	7549
	1942	7830
1184	2281	7584
	1942	7854
1185	1900	2064
	1772	4149
1186	2281	7705
1187	1900	2096
	1942	7723
1188	2281	7611
1189	1772	4057
1190	1772	4173
1191	1900	2115
	1942	7747
1192	1900	2105
	1942	7733
1193	1900	2137
	1942	7781
1194	2281	7521
	1942	7809
1195	2281	7522
	1942	7810
1196	1900	2042
	1772	4111
1197	1507	8509
1198	1900	2129
	1942	7759
	1014	2358
1199	1772	4137
1200	1900	2050
	1772	4123
	1014	2252
1201	1772	4138
1202	1507	8562
1203	2281	7535
	1942	7817
1204	1507	8614
	1772	3909
1205	1507	8546
1206	1900	2017
	1772	4070
	1014	2222
1207	1507	8519
1208	2281	7572
	1942	7845
1209	1507	8542
1210	1772	4124
1211	2281	7550
	1942	7831
1212	1507	8671
	1772	3983
1213	1507	8520
1214	2281	7573
	1942	7846
1215	1772	3984
1216	2281	7536
	1942	7818
1217	1507	8702
	1772	4030
1218	2281	7592

No	Oxford	
	1942	7866
1219	2281	7537
	1942	7819
1220	1772	4090
1221	2281	7658
1222	2281	7699
1223	1942	7748
1224	1900	2032
	1772	4091
	1014	2235
1225	1507	8556
1226	1772	4098
1227	1507	8622
	1772	3920
1228	1900	2028
	1772	4092
	1014	2236
1229	1772	4071
1230	2281	7636
1231	2281	7677
1232	1507	8547
1233	2281	7598
	1942	7869
1234	1772	4072
1235	1507	8557
1236	2281	7523
1237	1507	8564
1238	1900	2078
	1942	7702
	1772	4163
	1014	2295
1239	1772	4112
1240	2281	7617
1241	1900	2051
	1772	4125
	1014	2263
1242	1772	3958
1243	2281	7606
	1942	7870
1244	2281	7612
	1942	7878
1245	1507	8652
	1772	3959
1246	1507	8615
	1772	3921
1247	1900	2065
	1772	4150
	1014	2271
1248	1507	8510
1249	1900	2052
	1772	4126
	1014	2253
1250	1507	8672
	1772	3985
1251	1942	7789
1252	1507	8646
	1772	3946
1253	1772	4082
	1014	2231
1254	2281	7574
	1942	7847
	2241	7853
1255	1507	8635
	1772	3934
1256	1507	8552
1257	1772	4058
1258	1507	8684
	1772	4012
1259	1900	2003
	1507	8703
	1772	4041
	1014	2201
1260	1900	2058
	1772	4139
	1014	2264
1261	1900	2011
	1772	4059
	1014	2215
1262	2281	7524
	1942	7811
	2241	7817
1263	1507	8673
	1772	3986
	1508	8937
1264	2281	7666
1265	2281	7508
	1900	2138
	1942	7782
1266	1507	8663
	1772	3971
	1508	8926
1267	1507	8590
1268	1772	4031
1269	1507	8636
	1772	3947
1270	1507	8685
	1772	4013
	1508	8957
1271	1900	2106
	1942	7734

No	Oxford	
	1014	2329
1272	2281	7593
	1942	7867
	2241	7884
1273	1900	2139
	1942	7773
	1014	2370
1274	1772	4060
	1014	2223
1275	1900	2043
	1772	4113
	1014	2246
1276	1507	8653
	1772	3960
	1508	8918
1277	2281	7551
1278	1507	8565
	1508	8852
1279	2241	7995
1280	2281	7678
	2241	7961
1281	2281	7686
1282	1900	2033
	1772	4099
	1014	2237
1283	2281	7552
	1942	7820
1284	1942	7735
	1014	2330
1285	1772	4061
	1014	2224
1286	2281	7667
1287	1900	2102
	1942	7729
	1014	2321
1288	1507	8647
	1772	3961
	1508	8919
1289	1772	4047
	1014	2207
1290	1507	8686
	1772	4022
1291	1772	4127
1292	2281	7618
	2241	7916
1293	1900	2059
	1772	4140
	1014	2265
1294	1507	8511
	1508	8801
1295	2281	7668
	2241	7954
1296	2281	7659
	2241	7951
1297	1942	7739
	1014	2317
1298	1507	8581
	1508	8864
1299	2281	7694
	2241	7984
1300	1900	2004
	1507	8704
	1772	4042
	1014	2202
	1508	8976
1301	1900	2079
	1942	7703
	1772	4164
	1014	2288
1302	1507	8705
	1772	4032
	1508	8969
1303	1772	4014
1304	1507	8687
1305	2281	7509
	1900	2147
	1942	7790
	2241	7801
	1014	2376
1306	1772	4165
1307	1508	8875
1308	1507	8599
1309	2281	7706
1310	1507	8623
	1772	3922
	1508	8893
1311	2281	7637
	2241	7926
1312	1507	8688
	1772	4015
	1508	8958
1313	1014	2331
1314	2281	7669
	2241	7955
1315	2281	7585
	1942	7855
	2241	7869
1316	1942	7760
	1014	2359
1317	1772	3972

TABLE 3 (CONTINUED)

No	Oxford	
1318	1942	7731
	1014	2322
1319	1772	4033
1320	1507	8532
	1508	8810
1321	2281	7687
	2241	7971
1322	1507	8678
	1772	4001
	1508	8947
1323	1772	4002
1324	1942	7761
	1014	2348
1325	1507	8556
	1508	8840
1326	1772	3901
1327	1942	7741
	1014	2332
1328	1507	8624
	1772	3923
	1508	8894
1329	2241	7972
1330	1772	4128
	1014	2254
1331	1942	7812
	2241	7818
1332	1942	7769
	1014	2360
1333	1507	8533
	1508	8811
1334	1772	4100
	1014	2238
1335	1772	4101
	1014	2239
1336	1772	4141
	1014	2272
1337	1942	7708
	1772	4174
	1014	2303
1338	1772	4073
	1014	2225
1339	1507	8600
	1508	8876
1340	1507	8654
	1772	3962
	1508	8920
1341	2241	7973
1342	1942	7871
1343	1772	4157
	1014	2281
1344	1014	2349
1345	1942	7821
	2241	7826
1346	1507	8582
	1508	8865
1347	1942	7783
	2241	7802
	1014	2373
1348	1772	4063
	1508	8948
1349	1942	7872
	2241	7890
1350	1942	7879
	2241	7901
1351	1772	4151
	1014	2273
1352	1772	3987
	1508	8938
1353	1507	8583
	1508	8868
1354	1942	7709
	1772	4175
	1014	2276
1355	1942	7774
	1014	2371
1356	1507	8521
	1508	8806
1357	1772	3948
1358	1942	7832
	2241	7841
1359	2241	7891
1360	1942	7742
	1014	2333
1361	1507	8714
	1772	4048
	1014	2208
	1508	8980
1362	1772	4114
	1014	2247
1363	1942	7868
	2241	7885
1364	1507	8606
	1772	3910
	1508	8880
1365	1507	8637
	1772	3935
	1508	8903
1366	1942	7749
	1014	2341
1367	1507	8543
	1508	8819
1368	1508	8831 *
1369	1942	7880
	2241	7905
1370	1507	8591
	1508	8869
1371	1507	8679
	1772	4004
	1508	8949
1372	1772	4152
	1014	2274
1373	1772	4115
	1014	2255
1374	1772	4142
	1014	2266
1375	1508	8824
1376	1772	4049
	1014	2209
	1508	8981
1377	1942	7860
1378	1772	3924
1379	2241	7985
1380	1772	4176
1381	1772	4062
	1014	2216
1382	1508	8825
1383	2241	7974
1384	1942	7852
	2241	7862
1385	1772	3973
	1508	8927
1386	1942	7736
	1014	2323
1387	1942	7791
	2241	7803
	1014	2374
1388	1942	7743
	1014	2334
1389	1772	4050
	1014	2210
	1508	8982
1390	1772	3949
	1508	8909
1391	1772	3988
	1508	8939
1392	1508	8820
1393	1772	4043
	1014	2203
1394	2241	7975
1395	1772	4023
	1508	8959
1396	1772	4034
	1508	8970
1397	1508	8963
1398	1772	4051
	1014	2217
1399	2241	7917
1400	1942	7792
	2241	7804
	1014	2377
1401	1772	3963
	1508	8921
1402	1508	8832
1403	2241	7939
1404	1772	3950
1405	2241	7976
1406	2241	7921
1407	1942	7762
	1014	2361
1408	2241	7892
1409	1772	4102
	1014	2240
1410	2241	7922
1411	1772	4166
1412	1772	3951
	1508	8910
1413	1942	7775
	1014	2366
1414	2241	7956
1415	2241	7962
1416	1772	4153
	1014	2282
1417	1942	7822
	2241	7827
1418	1772	4005
	1508	8950
1419	1772	3936
	1508	8904
1420	1772	3911
	1508	8881
1421	1942	7881
	2241	7906
1422	1942	7802
	2241	7809
1423	1942	7763
	1014	2350
1424	1942	7803
	2241	7810
	1014	2378
1425	1772	4044
	1014	2204
	1508	8977
1426	1942	7737
	1014	2324
1427	2241	7927
1428	1508	8841
1429	1942	7861
	2241	7876
1430	1942	7715
	1014	2304
1431	1772	3912
	1508	8882
1432	1942	7793
	2241	7805
	1014	2379
1433	1942	7776
	1014	2367
1434	1942	7777
	1014	2368
1435	1942	7873
	2241	7893
1436	1942	7710
	1772	4177
	1014	2297
1437	1772	3913
	1508	8883
1438	1772	4158
	1014	2283
1439	1772	4116
	1014	2256
1440	1772	4129
	1014	2257
1441	1942	7716
	1014	2310
1442	1508	8842
1443	1772	4093
	1014	2232
1444	1772	3989
	1508	8940
1445	1772	3974
	1508	8928
1446	2241	7907
1447	1772	4130
	1014	2258
1448	1942	7874
	2241	7894
1449	1772	3964
1450	1772	3952
	1508	8911
1451	1772	4063
1452	1772	4103
	1014	2241
1453	1508	8812
1454	1508	8833
1455	1942	7856
	2241	7870
1456	1942	7833
	2241	7832
1457	1942	7848
	2241	7863
1458	1772	4131
1459	1508	8834
1460	1942	7704
	1772	4167
	1014	2298
1461	1772	4074
	1014	2226
1462	2241	7928
1463	1772	3965
	1508	8922
1464	1772	4052
	1014	2218
	1508	8983
1465	1942	7705
	1772	4168
	1014	2299
1466	2241	7923
1467	1772	3953
	1508	8912
1468	1942	7794
	2241	7806
	1014	2380
1469	1772	4143
	1014	2267
1470	1942	7750
	1014	2342
1471	1772	4075
1472	1772	4083
1473	1772	4045
	1014	2211
	1508	8978
1474	1942	7804
	2241	7811
	1014	2381
1475	1772	4132
1476	1942	7882
	2241	7902
1477	1942	7724
	1014	2311
1478	2241	7929
1479	1508	8843
1480	1942	7805
	2241	7812
1481	1772	4006
	1508	8951
1482	1772	4094
	1014	2233
1483	1942	7751
	1014	2351
1484	1772	4016
	1508	8960
1485	1942	7744
	1014	2343
1486	1942	7778
1487	1772	4017
	1508	8961
1488	1942	7875
	2241	7895
1489	1942	7849
	2241	7854
1490	1772	3925
1491	2241	7940
1492	1772	3914
	1508	8884
1493	1772	4035
	1508	8971
1494	1942	7862
1495	1772	3926
	1508	8895
1496	1942	7764
	1014	2352
1497	2241	7963
1498	1508	8844
1499	1942	7752
	1014	2353
1500	2241	7964
1501	1772	3937
	1508	8905
1502	1772	4133
	1014	2268
1503	1772	4154
	1014	2275
1504	1772	3954
1505	1508	8845
1506	1772	3955
	1508	8913
1507	1772	4053
	1014	2212
	1508	8984
1508	1508	8813
1509	2241	7941
1510	2241	7965
1511	1942	7717
	1014	2312
1512	1942	7711
	1772	4178
	1014	2300
1513	1772	3990
1514	2241	7957
1515	1508	8877
1516	1942	7823
	2241	7828
1517	2241	7986
1518	1942	7863
	2241	7877
1519	1772	4084
1520	1942	7883
	2241	7908
1521	1772	4117
	1014	2248
1522	1942	7864
	2241	7878
1523	1772	4155
	1014	2276
1524	1508	8826
1525	1942	7806
	2241	7813
	1014	2382
1526	1772	3975
	1508	8929
1527	2241	7942
1528	2241	7943
1529	1772	3938
	1508	8896
1530	2241	7909
1531	1772	4024
	1508	8964
1532	1508	8835
1533	1508	8846
1534	1508	8892
1535	1942	7795
	2241	7807
	1014	2383
1536	1772	4118
	1014	2249
1537	1772	4064
1538	1942	7834
	2241	7833
1539	1942	7807
	2241	7814
	1014	2384
1540	2241	7910
1541	1942	7838
	2241	7842
1542	1551	1458
1543	1772	4144
	1014	2269
1544	1508	8870
	1551	1539
1545	1942	7712
	1772	4179
	1014	2305
1546	1014	2306
1547	2241	7977
1548	1551	1428
1549	1942	7738
	1014	2325
1550	1942	7753
1551	1772	3927
	1508	8897
1552	1942	7765
	1014	2354
1553	2241	7991
1554	1942	7713
	1772	4180
	1014	2307
1555	2241	7958
1556	1772	3915
	1508	8885
	1551	1557
1557	1942	7779
	1014	2372
1558	1942	7824
	2241	7829
1559	1772	4007
1560	1508	8827
	1551	1498
1561	1942	7718
	1014	2313
1562	1772	3928
	1508	8898
1563	1508	8860
1564	1508	8807
	1551	1480
1565	1772	3991
	1508	8941
1566	2241	7944
1567	1772	4145
	1014	2277
1568	1942	7876
	2241	7896
1569	1772	3916
	1508	8886
1570	2241	7864
1571	1772	4036
	1014	2205
	1508	8972
1572	1942	7813
	2241	7819
1573	1772	4008
	1508	8952
1574	1508	8847
	1551	1513
1575	1772	4037
1576	1942	7739
	1014	2335
1577	2241	7996
1578	1772	3939
	1508	8906
1579	1772	4104
	1014	2242
1580	1772	3992
	1508	8942
1581	1551	1414
1582	2241	7966
1583	1942	7725
	1014	2318
1584	2241	7886
1585	1508	8808
	1551	1481
1586	2241	7945
1587	1942	7754
	1014	2344
1588	1772	3993
	1508	8943
1589	1772	4159
	1014	2284
1590	1942	7839
	2241	7843
1591	1772	3966
1592	1772	3976
	1508	8930
1593	1943	8050
1594	1772	3956
	1508	8914
1595	2241	7987
1596	1508	8871
	1551	1540
1597	1772	3940
	1508	8907
1598	1014	2369
1599	1772	4160
	1014	2289
	1773	4426
1600	2241	7959
1601	1772	3957
	1508	8915
1602	1942	7814
	2241	7820
	1943	7985
1603	2241	7997
1604	1508	8866
	1551	1532
1605	1942	7884
	2241	7903
1606	1508	8872
	1551	1541
1607	1942	7796
	2241	7815
	1014	2385
1608	2241	7998
1609	1014	2314
1610	2241	7924
1611	1772	3902
	1508	8878
	1773	4201
	1551	1550
1612	1942	7797
	2241	7816
	1014	2386
	1943	7979
1613	1772	4095
	1014	2243
1614	1508	8848
	1551	1514
1615	1942	7857
1616	1508	8853
	1551	1518
1617	1551	1415
1618	1942	7825
	2241	7834
	1943	7997
1619	1772	4146
	1014	2278
	1773	4398
1620	1772	4009
	1508	8953
	1773	4266
1621	1772	3977
	1508	8931
	1773	4256
1622	1772	4119
	1014	2250
	1773	4371
1623	1942	7865
	2241	7887
1624	2241	7978
1625	1772	3929
	1508	8899
	1773	4224
1626	1772	4018
	1508	8954
	1773	4276
1627	1772	4134
	1014	2259
	1773	4378
1628	1508	8803
	1551	1476
1629	2241	7960
1630	1772	4161
	1014	2285
	1773	4407
1631	2241	7930
1632	1772	3967
	1508	8923
1633	1942	7745
	1014	2345
	1943	7939
1634	1772	4085
	1014	2234
	1773	4336
1635	1942	7840
	2241	7852
1636	1772	3917
	1508	8887
	1773	4207
	1551	1558
1637	1508	8804
	1551	1477
1638	1942	7746
	1014	2336
	1943	7940
1639	1772	3994
	1508	8932
	1773	4257
1640	1942	7826
	2241	7835
1641	1508	8944
	1773	4267
1642	1014	2270
	1773	4386
1643	1508	8821
	1551	1492
1644	1942	7858
	2241	7879
	1943	8038
1645	1942	7877
	2241	7897
	1943	8053
1646	1551	1403
1647	2241	7979
1648	1508	8849
	1551	1515
1649	2241	7865
	1943	8018
1650	2241	7918
1651	2241	7999
1652	1773	4243
1653	1014	2229
	1773	4337
1654	1014	2260
	1773	4379
1655	1773	4302
1656	1551	1459
1657	1508	8805
	1551	1478
1658	2241	7880
	1943	8039
1659	1508	8973
	1773	4292
1660	1508	8814
	1551	1485
1661	1014	2286
	1773	4408
1662	2241	7946
1663	2241	7925
1664	2241	7947
1665	1551	1442
1666	2241	7844
	1943	8001
1667	1551	1448
1668	1508	8945
	1773	4258
1669	1014	2279
	1773	4399
1670	1773	4372
1671	1551	1467
1672	2241	7967
1673	2241	7898
1674	2241	7992
1675	1014	2355
	1943	7953
1676	1508	8900
	1773	4221
1677	1014	2319
1678	1508	8809
	1551	1482
1679	1773	4293
1680	2241	7948
1681	2241	7821
1682	1014	2213
	1508	8985
	1773	4309
1683	1551	1416
1684	2241	7822
1685	2241	7855
	1943	8019
1686	1508	8867
1687	1014	2301
1688	1508	8965
	1773	4281
1689	2241	7845
	1943	8002
1690	1508	8854
1691	2241	7823
	1943	7986
1692	1508	8916
	1773	4231
1693	2241	7919
1694	1551	1404
1695	1773	4361
1696	1773	4310
1697	1014	2346
1698	2241	7911
1699	1014	2214
	1508	8979
	1773	4311
1700	1773	4244
1701	1508	8966
	1773	4294
1702	1014	2356
	1943	7954
1703	1014	2290
	1773	4409
1704	2241	7931
1705	1508	8822
	1551	1493
1706	1773	4268
1707	2241	7912
1708	1773	4362

TABLE 3 (CONTINUED)

No	Oxford	
1709	1014	2244
1710	2241	7932
1711	1773	4269
1712	1014	2280
	1773	4387
1713	2241	7866
1714	1551	1460
1715	1014	2347
1716	1508	8861
	1551	1526
1717	1014	2245
	1773	4347
1718	1508	8888
	1773	4208
	1551	1559
1719	2241	7856
	1943	8020
1720	1014	2320
1721	2241	7949
1722	1551	1417
1723	2241	7857
	1943	8021
1724	2241	7988
1725	2241	7968
1726	1508	8924
	1773	4245
1727	1508	8855
	1551	1519
1728	2241	8000
1729	2241	7824
	1943	7983
1730	2241	7867
	1943	8022
1731	1773	4319
1732	1014	2362
	1943	7955
1733	1551	1421
1734	2241	8001
1735	1773	4328
1736	1551	1449
1737	1014	2230
	1773	4338
1738	2241	7952
1739	1773	4348
1740	1014	2227
	1773	4329
1741	1508	8828
	1551	1499
1742	1773	4330
1743	2241	7836
	1943	7998
1744	1508	8823
	1551	1494
1745	2241	7989
1746	1508	8836
	1551	1505
1747	2241	7846
1748	1943	8008
1749	1508	8974
	1773	4295
1750	1508	8889
	1773	4209
	1551	1560
1751	2241	7969
1752	1508	8856
	1551	1520
1753	1508	8862
	1551	1527
1754	1014	2219
	1508	8986
	1773	4312
1755	1773	4380
1756	2241	7808
	1014	2375
	1943	7978
1757	1551	1422
1758	1773	4282
1759	1508	8829
	1551	1500
1760	1551	1418
1761	1014	2251
	1773	4363
1762	1014	2302
	1943	7903
	1773	4430
1763	2241	7858
1764	2241	7980
1765	1943	8054
1766	2241	7868
	1943	8030
1767	2241	7847
	1943	8009
1768	1551	1408
1769	1551	1443
1770	1508	8863
	1551	1528
1771	1014	2261
	1773	4373
1772	1773	4339
1773	2241	7837
	1943	8003
1774	2241	7830
	1943	7987
1775	1508	8901
	1773	4222
1776	2241	7920
1777	1014	2220
	1773	4320
1778	1508	8837
	1551	1506
1779	1773	4232
1780	1508	8917
1781	2241	7933
1782	1551	1419
1783	1508	8838
	1551	1507
1784	1508	8815
1785	2241	7838
	1943	8004
1786	1508	8967
	1773	4283
1787	2241	7831
	1943	7988
1788	1508	8857
	1551	1521
1789	2241	7970
1790	1014	2308
	1943	7904
	1773	4431
1791	1014	2357
	1943	7956
1792	1508	8933
	1773	4259
1793	1773	4277
1794	1551	1423
1795	2241	7871
1796	2241	7934
1797	1014	2363
	1943	7957
1798	1773	4340
1799	1014	2262
	1773	4381
1800	1508	8879
	1551	1551
1801	2241	7839
	1943	7999
1802	1014	2337
	1943	7927
1803	1508	8850
	1551	1516
1804	1014	2228
	1773	4321
1805	2241	7840
1806	1014	2338
	1943	7928
1807	1508	8858
	1551	1522
1808	2241	7859
	1943	8023
1809	1508	8968
	1773	4284
1810	1014	2326
	1943	7929
1811	2241	7872
	1943	8031
1812	1773	4364
1813	2241	7981
1814	1551	1450
1815	1014	2339
	1943	7930
1816	1773	4410
1817	1014	2291
1818	2241	7935
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1820	2241	7936
1821	1014	2292
	1773	4411
1822	1943	7919
1823	1014	2206
	1508	8975
	1773	4303
	1509	9154
1824	1508	8816
	1551	1486
	1509	9012
1825	1508	8934
	1773	4260
	1509	9129
1826	1014	2327
	1943	7931
1827	1014	2293
	1773	4412
1828	1551	1405
1829	1014	2309
	1943	7905
	1773	4432
1830	2241	7873
	1943	8032
1831	2241	7950
1832	1551	1433
1833	1551	1462
1834	1508	8962
	1773	4285
	1509	9144
1835	1014	2315
1836	1773	4388
1837	1014	2328
1838	1014	2294
	1773	4427
1839	1551	1444
1840	1508	8839
	1551	1508
1841	1551	1451
1842	1773	4261
1843	2241	7899
	1943	8055
1844	2241	8002
1845	1508	8902
	1773	4225
1846	2241	7990
1847	2241	7860
	1943	8024
1848	1508	8873
	1551	1542
	1509	9079
1849	1551	1420
1850	1014	2364
	1943	7958
1851	1773	4389
1852	1014	2365
	1943	7959
1853	1014	2340
	1943	7932
1854	1014	2221
	1773	4322
1855	1508	8874
	1551	1543
	1509	9071
1856	1014	2287
	1773	4413
1857	2241	7848
1858	1773	4349
1859	2241	7937
1860	2241	7993
1861	2241	7881
	1943	8044
1862	1551	1406
1863	1773	4233
1864	2241	7849
	1943	8010
1865	1508	8817
	1551	1487
1866	1551	1468
1867	1014	2316
	1943	7914
1868	1508	8935
	1773	4246
	1509	9120
1869	1508	8890
	1773	4210
1870	1551	1509
1871	1773	4286
1872	1773	4313
1873	1508	8955
	1773	4270
	1509	9133
1874	1773	4414
1875	1508	8908
	1773	4226
	1509	9103
1876	2241	7938
1877	1773	4304
1878	1943	7933
	1796	2499
1879	2241	7883
	1943	8041
	2242	8168
1880	2241	7882
	1943	8040
	2242	8167
1881	1508	8987
	1773	4314
1882	2241	7994
	2242	8281
1883	1508	8851
	1551	1517
	1509	9036
1884	2241	7888
	1943	8045
	2242	8178
1885	1551	1533
1886	1943	7975
1887	1943	7976
	1796	2529
1888	2241	7874
	1943	8033
	2242	8161
1889	1551	1424
1890	2241	7982
1891	1773	4400
1892	2241	7913
1893	1551	1434
1894	1773	4415
1895	2241	7875
	1943	8034
	2242	8153
1896	1508	8946
	1773	4271
	1509	9134
1897	1943	7934
	1796	2500
1898	1508	8859
	1551	1523
	1509	9051
1899	1943	7915
1900	1773	4323
1901	2241	7914
	2242	8203
1902	2241	7953
	2242	8243
1903	1943	7966
	1796	2520
1904	1551	1425
1905	1508	8956
	1773	4278
	1509	9142
1906	2241	7904
	1943	8056
	2242	8189
1907	1943	7947
1908	1551	1407
1909	1551	1429
1910	1773	4374
1911	1551	1452
1912	1773	4296
1913	1773	4324
1914	1508	8818
	1551	1488
	1509	9013
1915	2241	7889
	1943	8046
	2242	8179
1916	1773	4382
1917	1508	8925
	1773	4239
	1509	9113
1918	1943	7906
	1773	4433
	1796	2476
1919	1773	4297
1920	1551	1483
	1509	9005
1921	1551	1435
1922	1508	8891
	1773	4211
1923	1773	4240
1924	1508	8892
	1773	4212
	1551	1561
	1509	9089
1925	1773	4416
	1796	2465
1926	1943	7916
	1796	2492
1927	1773	4390
	1796	2457
1928	2241	7915
	1943	8061
	2242	8204
1929	2241	7900
	1943	8057
	2242	8184
1930	1551	1445
1931	1943	7941
	1796	2510
1932	2241	7850
	1943	8005
	2242	8128
1933	1773	4350
	1796	2424
1934	1508	8936
	1773	4247
	1509	9121
1935	1551	1463
1936	1508	8830
	1551	1501
	1509	9024
1937	2241	7825
	1943	7989
	2242	8108
1938	1773	4287
1939	2241	[illegible]
	1943	8006
	2242	8125
1940	2241	7861
	1943	8014
	2242	8139
1941	1773	4227
	1509	9104
1942	1943	8025
	2242	8142
1943	2241	7983
1944	1943	7980
	2242	8101
	1796	2532
1945	1943	7922
1946	1773	4434
1947	2242	8225
1948	1943	8062
	2242	8205
1949	1773	4228
	1509	9105
1950	1943	7935
	1796	2501
1951	1773	4234
	1509	9108
1952	2242	8262
1953	2242	8236
1954	1773	4202
	1551	1554
	1509	9084
1955	1551	1495
1956	1943	7981
	2242	8102
1957	1773	4341
1958	1943	7990
	2242	8109
1959	1551	1469
	1509	9001
1960	1773	4213
	1551	1562
	1509	9090
1961	1773	4351
	1796	2425
1962	1773	4401
1963	1943	8042
	2242	8162
1964	1551	1552
	1509	9080
1965	1773	4352
	1796	2426
1966	1943	7923
1967	1551	1426
	1509	9015
1968	1773	4214
	1551	1563
	1509	9091
1969	2242	8263
1970	1773	4235
	1509	9107
1971	1551	1409
1972	1551	1544
	1509	9072
1973	1943	[illegible]
	2242	8190
1974	1943	8047
	2242	8180
1975	1773	4402
1976	1773	4417
	1796	2469
1977	1551	1464
1978	2242	8218
1979	1773	4353
	1796	2427
1980	1551	1470
1981	1773	4354
1982	1773	4215
	1551	1564
	1509	9092
1983	1943	8026
	2242	8154
1984	1773	4365
	1796	2435
1985	1551	1489
1986	2242	8247
1987	1943	8035
	2242	8155
1988	1551	1471
1989	1943	7942
	1796	2504
1990	1943	8027
	2242	8156
1991	1943	8015
	2242	8139
1992	1943	7920
	1796	2493
1993	1943	7917
	1796	2488
1994	1551	1524
	1509	9043
1995	1773	4342
	1796	2418
1996	1551	1426
1997	1551	1534
	1509	9058
1998	1551	1439
1999	1943	8064
	2242	8206
2000	1943	8043
	2242	8163
2001	2242	8264
2002	1943	8016
	2242	8143
2003	1551	1502
	1509	9025
2004	1551	1401
2005	1773	4418
2006	1773	4241
2007	1943	7948
2008	1773	4288
	1509	9145
2009	1773	4305
	1796	2401
	1509	9155
2010	1943	8048
	2242	8169
2011	1943	7977
	1796	2530
2012	1551	1503
2013	1551	1453
2014	1551	1545
	1509	9073
2015	1773	4229
	1509	9106
2016	1773	4366
2017	1943	7984
	2242	8104
	1796	2533
2018	1773	4223
2019	1943	8058
	2242	8191
2020	2242	8226
2021	1551	1510
	1509	9029
2022	1773	4279
	1509	9143
2023	1943	7982
	2242	8105
2024	1943	7960
	1796	2514
2025	1943	7918
	1796	2489
2026	1943	7949
2027	1551	1529
	1509	9052
2028	1773	4203
2029	1773	4435
2030	1551	1440
2031	1773	4343
2032	1551	1511
	1509	9030
2033	1943	7907
	1773	4436
	1796	2477
2034	1551	1436
2035	1943	8007
	2242	8130
2036	1943	7991
	2242	8110
2037	1551	1546
	1509	9074
2038	2242	8244
2039	1943	8011
	2242	8131
2040	2242	8265
2041	1551	1454
2042	2242	8245
2043	1773	4367
	1796	2436
2044	1943	7901
	1773	4437
	1796	2478
2045	1773	4262
2046	2242	8170
2047	1551	1410
2048	1773	4391
	1796	2458
2049	1551	1547
	1509	9081
2050	1943	7924
	1796	2496
2051	2242	8219
2052	1943	8028
	2242	8144
2053	1773	4204
	1551	1553
	1509	9085
2054	1773	4331
2055	1773	4315
	1796	2405
	1509	9158
2056	1773	4236
2057	1773	4403
2058	1773	4375
	1796	2445
2059	2242	8118
2060	2242	8266
2061	1943	7961
2062	2242	8253
2063	1773	4383
	1796	2446
2064	1773	4316
	1796	2406
	1509	9159
2065	1943	8036
	2242	8157
2066	1943	8059
	2242	8192
2067	1551	1484
	1509	9006
2068	1551	1465
2069	1551	1466
2070	2242	8132
2071	2242	8210
2072	1551	1446
2073	1551	1504
	1509	9026
2074	1551	1472
2075	1773	4355
	1796	2428
2076	2242	8248
2077	1943	8051
	2242	8185
2078	1551	1455
2079	1773	4392
2080	1943	7962
	1796	2515
2081	1773	4438
2082	1943	7936
	1796	2502
2083	1773	4263
	1509	9130
2084	1943	7908
	1773	4439
	1796	2479
2085	1551	1456
2086	1943	7909
	1773	4440
	1796	2480
2087	1551	1402
2088	1773	4248
	1509	9122
2089	1773	4249
	1509	9123
2090	1773	4332
	1796	2411
2091	1773	4272
	1509	9135
2092	1943	8065
	2242	8193
2093	2242	8211
2094	1773	4289
	1509	9146
2095	1773	4216
2096	1943	7937
	1796	2503
2097	1773	4217
2098	1551	1457
2099	2242	8254
2100	1773	4205
	1551	1555
	1509	9086
2101	1773	4325
2102	1773	4250
	1509	9124
2103	2242	8237
2104	1551	1411
2105	2242	8228
2106	1773	4237
2107	2242	8227
2108	1551	1430
2109	1551	1412
2110	1943	8000
	2242	8125
2111	1943	7967
	1796	2521
2112	1773	4393
	1796	2451
2113	1773	4317
	1509	9160
2114	2242	8212
2115	1773	4333
	1796	2412
2116	1773	4251
	1509	9125
2117	1943	7992
	2242	8111
2118	1551	1535
	1509	9059
2119	1943	8066
	2242	8194
2120	2242	8249
2121	1551	1530
	1509	9053
2122	1773	4419
	1796	2466
2123	1773	4368
	1796	2437
2124	1773	4298
	1509	9150

TABLE 3 (CONTINUED)

No	Oxford	
2125	1773	4280
2126	1943	7993
	2242	8112
2127	1943	8037
	2242	8158
2128	1943	7910
	1796	2481
2129	1773	4394
	1796	2459
2130	1551	1548
	1509	9075
2131	1773	4420
2132	1773	4404
	1796	2467
2133	2242	8140
2134	1551	1536
	1509	9060
2135	1551	1431
2136	1773	4264
	1509	9131
2137	1943	7943
	1796	2505
2138	1773	4395
2139	1773	4206
	1551	1556
	1509	9087
2140	1943	7911
	1773	4441
	1796	2482
2141	2242	8255
2142	1551	1437
2143	1773	4230
	1509	9107
2144	1773	4344
	1796	2419
2145	1773	4376
	1796	2438
2146	2242	8213
2147	1943	7968
2148	1773	4306
2149	1773	4384
	1796	2452
2150	1551	1490
	1509	9014
2151	1773	4345
	1796	2420
2152	1773	4218
	1551	1565
	1509	9093
2153	1551	1438
2154	1773	4428
2155	1943	7994
	2242	8119
2156	1943	7950
	1796	2511
2157	1773	4252
2158	1773	4346
	1796	2421
2159	1773	4265
2160	1943	7951
	1796	2512
2161	1773	4326
	1796	2409
2162	1551	1413
2163	1773	4253
	1509	9126
2164	2242	8207
2165	1551	1473
2166	1773	4421
2167	1551	1537
	1509	9061
2168	1773	4273
2169	1551	1474
2170	1551	1531
	1509	9054
2171	1551	1475
2172	1773	4369
	1796	2439
2173	1943	7925
	1796	2497
2174	1773	4307
	1796	2402
	1509	9156
2175	1551	1497
	1509	9020
2176	1943	7969
	1796	2522
2177	1551	1525
	1509	9044
2178	1773	4377
2179	1943	7995
	2242	8120
2180	1773	4290
	1509	9147
2181	2242	8229
2182	2242	8195
2183	1773	4356
	1796	2429
2184	1943	7970
	1796	2523
2185	1943	7944
	1796	2506
2186	1773	4422
2187	1773	4238
	1509	9110
2188	1773	4405
	1796	2468
2189	1773	4423
	1796	2470
2190	2242	8273
2191	2242	8256
2192	1943	8012
	2242	8133
2193	1773	4274
	1509	9136
2194	2242	8283
2195	1551	1512
	1509	9031
2196	1943	8052
	2242	8186
2197	2242	8274
2198	1551	1538
	1509	9062
2199	1943	7902
	1773	4429
2200	2242	8220
2201	1551	1432
2202	1773	4291
2203	2242	8126
2204	1773	4242
	1509	9114
2205	1551	1479
2206	1551	1427
2207	1943	8013
	2242	8134
2208	2242	8238
2209	1551	1441
2210	2242	8239
2211	1551	1549
	1509	9076
2212	1551	1491
	1509	9015
2213	1943	7971
	1796	2524
2214	1773	4385
2215	1551	1447
2216	2242	8141
2217	2242	8196
2218	1509	9032
2219	1773	4357
2220	1773	4406
2221	1943	7938
2222	1773	4254
	1509	9127
2223	1943	7921
	1796	2494
2224	1773	4370
	1796	2440
2225	1773	4219
	1551	1566
	1509	9094
2226	1943	7952
	1796	2513
2227	1509	9007
2228	1509	9077
2229	1943	7972
	1796	2525
	1947	8170
2230	1796	2430
2231	1773	4396
2232	1773	4334
	1796	2413
	1774	4670
2233	1773	4299
	1509	9151
2234	1509	9045
2235	1943	7963
2236	1943	7996
	2242	8113
	1947	8195
2237	1773	4424
2238	1773	4318
	1796	2407
	1509	9161
	1774	4633
2239	1943	7973
2240	1943	7945
2241	1773	4300
	1509	9152
	1774	4619
2242	1943	7946
	1796	2507
	1947	8146
2243	2242	8230
2244	2242	8240
2245	1773	4397
2246	1773	4358
	1796	2431
	1774	4680
2247	1943	8017
	2242	8145
	1947	8221
2248	2242	8197
2249	1943	7912
2250	1943	8029
	2242	8146
	1947	8226
2251	1773	4442
2252	1943	7964
	1796	2516
	1947	8150
2253	1943	7913
	1773	4443
	1796	2483
	1947	8107
2254	1943	8049
	2242	8171
	1947	8247
2255	1509	9063
2256	1943	7974
	1796	2526
	1947	8171
2257	1773	4308
	1796	2403
	1509	9157
	1774	4634
2258	1773	4275
	1509	9137
	1774	4595
2259	2242	8267
2260	1509	9064
2261	1773	4255
2262	2242	8275
2263	1773	4301
	1774	4624
2264	2242	8221
2265	1773	4335
	1796	2414
	1774	4654
2266	1773	4359
	1796	2432
	1774	4690
2267	1773	4220
	1509	9095
	1774	4505
2268	2242	8231
2269	1943	7926
	1796	2498
	1947	8127
2270	1509	9082
2271	1943	7965
	1796	2517
	1947	8151
2272	1509	9002
2273	2242	8276
2274	1943	8060
	2242	8198
	1947	8268
2275	1509	9033
2276	1509	9037
2277	1773	4360
	1796	2433
	1774	4681
2278	1509	9055
2279	1773	4425
	1774	4747
2280	1773	4327
2281	1509	9003
2282	2242	8246
2283	1509	9008
2284	1509	9046
2285	1796	2447
	1774	4713
2286	1509	9009
2287	1509	9132
	1774	4581
2288	1509	9065
2289	2242	8135
	1947	8211
2290	2242	8208
2291	2242	8277
2292	1774	4691
2293	1774	4645
2294	2242	8199
	1947	8269
2295	1509	9078
2296	1509	9038
2297	1796	2527
	1947	8158
2298	1796	2404
	1509	9162
	1774	4635
2299	1774	4655
2300	1774	4692
2301	1509	9115
	1774	4553
2302	2242	8214
2303	1509	9010
2304	2242	8172
2305	1509	9004
2306	2242	8222
2307	1774	4671
2308	2242	8268
2309	1796	2441
	1774	4693
2310	1509	9021
2311	1796	2460
	1774	4738
2312	1774	4704
2313	1509	9098
	1774	4531
2314	1796	2471
	1947	8101
	1774	4757
2315	1509	9099
	1774	4532
2316	1796	2461
	1774	4731
2317	2242	8187
2318	1774	4608
2319	1509	9034
2320	2242	8164
	1947	8242
2321	1774	4732
2322	1509	9116
	1774	4568
2323	2242	8136
	1947	8212
2324	1509	9016
2325	1774	4682
2326	1509	9083
2327	2242	8147
	1947	8227
2328	2242	8241
2329	1509	9148
	1774	4615
2330	1796	2473
	1947	8102
	1774	4758
2331	2242	8106
	1796	2534
	1947	8189
2332	2242	8269
2333	2242	8121
	1947	8202
2334	1509	9117
	1774	4554
2335	1796	2474
	1947	8108
	1774	4764
2336	2242	8232
2337	1774	4512
2338	1774	4672
2339	1774	4582
2340	1774	4656
2341	1774	4596
2342	2242	8200
	1947	8270
2343	2242	8173
	1947	8248
2344	2242	8174
	1947	8249
2345	2242	8278
2346	1509	9039
2347	1796	2442
	1774	4694
2348	1509	9111
	1774	4555
2349	1509	9088
	1774	4506
2350	2242	8279
2351	1509	9011
2352	1509	9047
2353	1509	9066
2354	1509	9067
2355	2242	8175
	1947	8250
2356	1774	4636
2357	2242	8127
	1947	8207
2358	1774	4695
2359	1509	9022
2360	1509	9048
2361	1509	9100
	1774	4533
2362	2242	8215
2363	1509	9101
	1774	4513
2364	1509	9049
2365	1509	9035
2366	1509	9096
2367	2242	8233
2368	2242	8257
2369	2242	8148
	1947	8228
2370	2242	8284
2371	1509	9068
2372	1509	9138
	1774	4609
2373	2242	8122
	1947	8203
2374	2242	8216
2375	1774	4569
2376	1509	9118
	1774	4556
2377	2242	8258
2378	1774	4583
2379	1796	2448
	1774	4705
2380	2242	8259
2381	1796	2415
	1774	4657
2382	2242	8165
	1947	8243
2383	2242	8201
2384	2242	8137
	1947	8213
2385	1509	9017
2386	1796	2422
	1774	4673
2387	1796	2462
	1774	4739
2388	1509	9139
	1774	4597
2389	2242	8115
2390	2242	8114
	1796	2535
	1947	8190
2391	1509	9140
	1774	4598
2392	1774	4748
2393	1509	9027
2394	2242	8159
	1947	8233
2395	1796	2449
	1774	4714
2396	1774	4674
2397	2242	8242
2398	1509	9040
2399	1796	2443
	1774	4696
2400	2242	8176
	1947	8251
2401	1796	2472
	1774	4749
2402	1796	2408
	1509	9163
	1774	4637
2403	1796	2490
	1947	8117
2404	1774	4750
2405	1509	9141
	1774	4599
2406	2242	8260
2407	2242	8217
2408	2242	8149
	1947	8229
2409	1509	9028
2410	1774	4625
2411	2242	8280
2412	1774	4620
2413	1796	2423
	1774	4683
2414	1774	4638
2415	1509	9069
2416	2242	8160
	1947	8234
2417	1796	2508
	1947	8139
2418	1774	4751
2419	1774	4752
2420	2242	8281
2421	1947	8172
2422	1509	9056
2423	2242	8223
2424	1774	4740
2425	1509	9070
2426	1509	9119
	1774	4557
2427	1796	2444
	1774	4697
2428	1774	4706
2429	2242	8181
	1947	8256
2430	1509	9149
	1774	4616
2431	1774	4584
2432	1947	8147
2433	2242	8123
	1947	8204
2434	1509	9041
2435	2242	8150
	1947	8230
2436	1509	9023
2437	1947	8118
2438	1509	9042
2439	2242	8261
2440	1796	2453
	1774	4715
2441	1774	4507
2442	1796	2484
2443	1947	8109
	1774	4765
2444	2242	8103
	1796	2531
	1947	8179
2445	2242	8166
	1947	8244
2446	1509	9057
2447	1796	2485
	1947	8110
2448	1796	2463
	1774	4741
2449	1796	2509
	1947	8140
2450	1947	8103
	1774	4766
2451	1774	4753
2452	1509	9112
	1774	4558
2453	1796	2491
	1947	8119
2454	1509	9128
	1774	4570
2455	2242	8202
	1947	8271
2456	1796	2475
	1947	8104
	1774	4759
2457	2242	8188
	1947	8262
2458	1509	9050
2459	2242	8151
	1947	8222
2460	2242	8116
	1947	8196
2461	1796	2416
	1774	4658
2462	1796	2410
	1774	4659
2463	1796	2417
	1774	4660
2464	1509	9102
	1774	4514
2465	1774	4716
2466	1947	8159
2467	1509	9097
	1774	4515
2468	1774	4760
2469	1774	4675
2470	1796	2464
	1774	4733
2471	1509	9018
2472	1774	4754
2473	1796	2450
	1774	4707
2474	2242	8250
2475	1509	9153
	1774	4621
2476	1796	2486
	1947	8111
2477	2242	8182
	1947	8257
2478	2242	8251
2479	1796	2518
	1947	8152
2480	1774	4626
2481	1774	4717
2482	1796	2495
	1947	8123
2483	2242	8270
2484	1774	4627
2485	1796	2434
	1774	4684
2486	2242	8252
	2243	8452
2487	1774	4534
2488	2242	8177
	1947	8252
2489	1796	2454
	1774	4718
2490	1774	4501
2491	1774	4571
2492	1774	4508
2493	1774	4543
2494	1796	2519
	1947	8153
2495	2242	8271
	2243	8471
2496	1796	2528
	1947	9160
2497	1796	2455
	1774	4719
2498	1947	8180
2499	1947	8197
2500	1774	4535
2501	1774	4536
2502	1774	4734
2503	1774	4646
2504	1796	2487
	1947	8112
	1774	4767
2505	1774	4610
2506	1774	4572
2507	1774	4573
2508	2242	8272
	2243	8472
2509	2242	8124
	1947	8198
	2243	8324
2510	2242	8183
	1947	8258
	2243	8380
2511	2242	8234
	2243	8429
2512	2242	8107
	1796	2536
	1947	8191
	2243	8308
2513	1774	4502
2514	2242	8224
	2243	8423
2515	1796	2456
	1774	4720
2516	1774	4537
2517	1774	4516
2518	2242	8235
	2243	8430
2519	1774	4698
2520	1774	4600
2521	1774	4755
2522	2242	8117
	1796	2537
	1947	8192
	2243	8317
2523	2242	8152
	1947	8231
	2243	8352
2524	1774	4639
2525	2242	8209
	2243	8409
2526	1774	4628
2527	1774	4559
2528	1947	8105
	1774	4761
2529	1947	8124
2530	1774	4517
2531	2243	8501
2532	1947	8173
2533	1774	4708
2534	1947	8181
2535	1947	8235
	2243	8360
2536	2243	8410
2537	1947	8161
2538	1774	4518
2539	1947	8120
2540	1947	8236
	2243	8361
2541	1774	4622
2542	1947	8245
	2243	8367
2543	1947	8214
	2243	8343
2544	1774	4560
2545	2243	8424
2546	1774	4699
2547	1774	4700
2548	1774	4544
2549	2243	8493
2550	2243	8431
2551	1774	4601
2552	1774	4519
2553	1774	4629
2554	1774	4503
2555	1774	4701
2556	1774	4585
2557	1774	4520
2558	1774	4521
2559	1774	4661
2560	1947	8205
	2243	8325
2561	1774	4709
2562	1947	8162
2563	1947	8133
2564	1947	8263
	2243	8394
2565	1774	4721
2566	1774	4538
2567	2243	8494
2568	1947	8264
	2243	8395
2569	1774	4685
2570	2243	8444
2571	2243	8495
2572	1774	4522
2573	1947	8128
2574	1774	4722
2575	1774	4723
2576	1774	4602

TABLE 3 (CONTINUED)

No	Oxford	
2577	1947	8141
2578	2243	8411
2579	2243	8418
2580	1947	8193
	2243	8309
2581	1947	8106
2582	1774	4762
2583	1774	4647
2584	1947	8272
	2243	8401
2585	1774	4586
2586	2243	8425
2587	1947	8237
	2243	8368
2588	1774	4724
2589	1774	4756
2590	1774	4523
2591	1774	4640
2592	1947	8163
2593	1947	8154
2594	2243	8326
2595	1947	8134
2596	1947	8135
2597	1947	8208
	2243	8330
2598	2243	8473
2599	1947	8238
	2243	8362
2600	2243	8412
2601	1947	8273
	2243	8402
2602	1774	4648
2603	1774	4768
2604	1774	4539
2605	1947	8155
2606	1774	4611
2607	1947	8232
	2243	8353
2608	1774	4725
2609	1774	4545
2610	2243	8485
2611	2243	8496
2612	1774	4763
2613	1774	4612
2614	2243	8454
2615	1947	8136
2616	1947	8142
2617	2243	8453
2618	1774	4676
2619	1774	4630
2620	2243	8455
2621	1774	4574
2622	2243	8456
2623	2243	8486

No	Oxford	
2624	2243	8445
2625	1774	4524
2626	1947	8215
	2243	8334
2627	1947	8239
	2243	8369
2628	1774	4525
2629	1947	8185
	2243	8310
2630	2243	8474
2631	1774	4561
2632	1774	4742
2633	1774	4686
2634	1774	4575
2635	1774	4662
2636	1774	4663
2637	1774	4540
2638	1947	8223
	2243	8354
2639	2243	8438
2640	1774	4649
2641	1774	4650
2642	1774	4541
2643	1947	8137
2644	1774	4651
2645	2243	8475
2646	1947	8156
2647	1947	8164
2648	1774	4587
2649	1774	4576
2650	1947	8125
2651	2243	8463
2652	1774	4588
2653	1774	4641
2654	2243	8413
2655	1947	8129
2656	1774	4589
2657	1947	8138
2658	1774	4710
2659	1774	4562
2660	1774	4613
2661	1774	4726
2662	1774	4677
2663	1774	4603
2664	1947	8182
2665	2243	8457
2666	1774	4727
2667	1947	8265
	2243	8396
2668	2243	8476
2669	1774	4702
2670	1774	4526
2671	1947	8209
	2243	8331

No	Oxford	
2672	1947	8165
2673	1947	8174
2674	1774	4642
2675	1947	8113
	1774	4769
2676	2243	8464
2677	1947	8266
	2243	[illegible]
2678	1774	4563
2679	1947	8143
2680	2243	8432
2681	1774	4527
2682	1774	4590
2683	1774	4577
2684	1947	8148
2685	1947	8114
	1774	4770
2686	1947	8216
	2243	8335
2687	1774	4687
2688	1774	4546
2689	1947	8253
	2243	8381
2690	1947	8175
2691	2243	8414
2692	1947	8259
	2243	8382
2693	2243	8477
2694	1774	4604
2695	1774	4711
2696	1774	4678
2697	1947	8240
	2243	8370
2698	2243	8446
2699	1774	4547
2700	1947	8176
2701	1774	4528
2702	1947	8149
2703	1774	4605
2704	1774	4548
2705	2243	8465
2706	1947	8166
2707	1774	4549
2708	1774	4735
2709	1947	8144
2710	1774	4564
2711	1774	4631
2712	1774	4743
2713	1774	4550
2714	1774	4617
2715	1947	8246
	2243	8371
2716	1947	8199
	2243	8318

No	Oxford	
2717	2243	8433
2718	1947	8200
	2243	8319
2719	1947	8254
	2243	8383
2720	1774	4551
2721	2243	8426
2722	1774	4664
2723	1947	8224
	2243	8344
2724	1774	4736
2725	1774	4509
2726	2243	8458
2727	1947	8167
2728	2243	8487
2729	1947	8217
	2243	8336
2730	1947	8255
	2243	8375
2731	1774	4565
2732	1947	8130
2733	1774	4744
2734	1774	4643
2735	1947	8210
	2243	8332
2736	1774	4728
2737	1774	4745
2738	1774	4746
2739	1774	4618
2740	1774	4566
2741	2243	8337
2742	1947	8201
	2243	8320
2743	1947	8131
2744	1774	4712
2745	1774	4552
2746	1947	8274
	2243	8404
2747	1774	4567
2748	1774	4665
2749	1774	4578
2750	1774	4688
2751	1774	4606
2752	2243	8497
2753	1947	8218
	2243	8338
2754	1774	4623
2755	1774	4529
2756	1774	4510
2757	1947	8225
	2243	8345
2758	1947	8194
	2243	8311
2759	1774	4591

No	Oxford	
2760	1947	8241
	2243	8363
2761	2243	8384
2762	1947	8183
2763	2243	8488
2764	2243	8498
2765	1947	8121
2766	2243	8385
2767	1774	4594
2768	1947	8186
	2243	8301
2769	1774	4592
2770	2243	8419
2771	1774	4614
2772	1947	8115
	1774	4771
2773	1774	4579
2774	1774	4679
2775	1774	4542
2776	2243	8478
2777	1774	4666
2778	1774	4593
2779	1774	4580
2780	1947	8116
	1774	4772
2781	1947	8157
2782	2243	8439
2783	1774	4729
2784	1947	8168
2785	2243	8466
2786	1947	8122
2787	1774	4703
2788	1774	4667
2789	1774	4607
2790	1947	8126
2791	1774	4644
2792	1947	8145
2793	1947	8187
	2243	8302
2794	1774	4668
2795	2243	8502
2796	1947	8219
	2243	8339
2797	1947	8177
2798	1947	8178
2799	1774	4504
2800	1774	4652
2801	1774	4632
2802	1774	4511
2803	1947	8267
	2243	8397
2804	1774	4737
2805	1774	4730
2806	1947	8184

No	Oxford	
2807	1774	4653
2808	1947	8169
2809	1947	8260
	2243	8386
2810	1774	4669
2811	2243	8467
2812	1947	8188
	2243	8303
2813	1774	4689
2814	2243	8468
2815	1774	4530
2816	2243	8479
2817	1947	8220
	2243	8340
2818	2243	8469
2819	1947	8132
2820	1947	8206
	2243	8327
2821	1947	8261
	2243	8387
2822	2243	8341
2823	2243	8342
2824	2243	8480
2825	2243	8372
2826	2243	8388
2827	2243	8398
2828	2243	8489
2829	2243	8459
2830	2243	8346
2831	2243	8440
2832	2243	8347
2833	2243	8415
2834	2243	8348
2835	2243	8355
2836	2243	8434
2837	2243	8321
2838	2243	8435
2839	2243	8470
2840	2243	8460
2841	2243	8427
2842	2243	8447
2843	2243	8405
2844	2243	8416
2845	2243	8499
2846	2243	8389
2847	2243	8481
2848	2243	8406
2849	2243	8390
2850	2243	8312
2851	2243	8304
2852	2243	8490
2853	2243	8376
2854	2243	8503
2855	2243	8313

No	Oxford	
2856	2243	8314
2857	2243	8322
2858	2243	8420
2859	2243	8364
2860	2243	8365
2861	2243	8328
2862	2243	8417
2863	2243	8377
2864	2243	8356
2865	2243	8407
2866	2243	8357
2867	2243	8391
2868	2243	8315
2869	2243	8305
2870	2243	8428
2871	2243	8399
2872	2243	8373
2873	2243	8306
2874	2243	8504
2875	2243	8333
2876	2243	8349
2877	2243	8448
2878	2243	8461
2879	2243	8329
2880	2243	8482
2881	2243	8358
2882	2243	8441
2883	2243	8462
2884	2243	8400
2885	2243	8436
2886	2243	8374
2887	2243	8392
2888	2243	8350
2889	2243	8491
2890	2243	8316
2891	2243	8449
2892	2243	8500
2893	2243	8366
2894	2243	8442
2895	2243	8351
2896	2243	8492
2897	2243	8393
2898	2243	8443
2899	2243	8378
2900	2243	8450
2901	2243	8437
2902	2243	8483
2903	2243	8484
2904	2243	8421
2905	2243	8379
2906	2243	8307
2907	2243	8451
2908	2243	8323
2909	2243	8359
2910	2243	8422
2911	2243	8408

Johnny Cova S. and Jurgen Stock: Centro de Investigación de Astronomía "Francisco J. Duarte", Apartado Postal 264, Mérida 5101-A, Venezuela.