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OF

THE ASTRONOMICAL OBSERVATORY OF HARVARD COLLEGE

EDWARD C. PICKERING, DIRECTOR

VOLUME LXIX—PART II

PHOTOMETRIC OBSERVATIONS

MADE WITH THE

FIFTEEN INCH EAST EQUATORIAL

DURING THE YEARS

1903 TO 1912

BY

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ASSISTANT PROFESSOR OF ASTRONOMY

PRINTED FROM FUNDS RESULTING FROM THE WILL OF
JOSIAH QUINCY, JUN.

WHO DIED IN APRIL, 1775, LEAVING A NAME INSEPARABLY CONNECTED WITH THE HISTORY OF THE AMERICAN REVOLUTION

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PHOTOMETRIC OBSERVATIONS MADE WITH THE EAST EQUATORIAL. 1903 TO 1912.

CHAPTER VIII.

OBSERVATIONS OF VARIABLES.

THE death of Oliver Clinton Wendell on November 5, 1912, brought to a close the long series of observations made by him with the 15-inch East Equatorial. A description of the photometers employed, and of the observations of variable stars made during the years 1892 to 1902, are contained in Part I of this volume. The later observations were made in the same way, and are here published in nearly the same form. Some other observations, especially of Asteroids and Eclipses of Jupiter's Satellites are also included. Professor Wendell's health during the last two years of his life prevented the complete reduction of his work, but his observations were continued with great assiduity until within a few days of his death. His last observation was made on October 31, 1912. During the twenty years in which his entire time was devoted to work with the 15-inch Equatorial, he showed the greatest persistence, carrying the work late into the night, when necessary, and often waiting for hours during a partially cloudy evening. The observations show the high degree of accuracy of which the photometers used in these researches are capable. They serve to determine the difference in magnitude between any two stars at a distance apart not exceeding 40'. Owing to this proximity, many ordinary sources of error are eliminated. The average deviation of the separate sets, each consisting of sixteen settings, is about ± 0.03 . When an object is to be measured a comparison star must be selected, which should preferably be within half a degree, and which should not differ more than three or four magnitudes from the object whose light is to be determined.

The form of the tables is nearly the same for all the observations of variable stars, and also like those in Part I. A description is given below

of the successive columns preceded in each case by the heading. Following this is a statement regarding the individual tables showing which of the columns are omitted in each case.

Des. The designation of the variable, giving the hours and minutes of right ascension, and the degree of declination. Southern stars are indicated by *Italics*.

Name. The usual name of the variable.

Yr. The two right hand figures of the year in which the observation was made.

Julian Day. The Julian Day and decimal following Greenwich Mean Noon, omitting the three left hand figures, 241.

Magn. The concluded magnitude. This is found by adding the algebraic difference in magnitude between the object and its comparison star, to the adopted magnitude of the latter. The list of comparison stars with their adopted magnitudes will be found in Table XVI.

A-B. The difference between the measures taken before and after the reversal of the instrument. When the photometer with achromatic prisms was used, this difference would include any inequality in transparency of the two prisms. The large and varying values with both photometers indicate that it is mainly due to complex personal equations.

Residuals. The residuals, expressed in hundredths of a magnitude, negative values being indicated by *Italics*. They are found by subtracting the mean value derived from the individual measures of four settings each, after correcting them by the difference A-B. Accordingly, the first and second residuals and the third and fourth residuals have opposite signs, and are either equal or differ by one hundredth of a magnitude.

E. The number of periods which have elapsed since the date given by the constant term in the formula.

Phase. The phase expressed in days and decimals since the computed time of the last maximum, in the case of long and short period variables, and since the last minimum in the case of Algol stars.

In Table IX, Novae, Table XI, Variables of the U Geminorum type, and Table XII, Irregular Variables, the last two columns are necessarily omitted. In Table X, Variables of Long Period, Table XIII, Variables of Short Period, Table XIV, Variables of the β Lyrae type, and Table XV, Algol Variables, the first two columns are omitted and entered in the heading, which is separate for each object.

TABLE IX.

TEMPORARY STARS, OR NOVAE. CLASS I.

Des.	Name.	Yr.	Julian Day.	Magn.	A-B	Residuals.	Des.	Name.	Yr.	Julian Day.	Magn.	A-B	Residuals.
063730	Nova Gem.,1	03	6203.560	9.00	+ .14	03,04,01,00	063730	Nova Gem.,1	03	6255.565	9.78	+ .26	03,03,01,01
"	"	"	" .567	8.99	+ .10	04,04,02,02	"	"	"	6256.564	10.45	+ .20	05,04,02,01
"	"	"	6205.590	8.87	+ .28	11,10,06,06	"	"	"	" .573	10.37	+ .32	02,03,11,10
"	"	"	" .595	8.90	+ .14	01,00,05,04	"	"	"	6257.576	10.55	+ .40	06,05,10,11
"	"	"	6215.530	9.27	+ .13	00,00,01,00	"	"	"	6258.565	10.53	+ .39	03,03,00,00
"	"	"	" .537	9.23	+ .08	01,00,00,01	"	"	"	" .576	10.54	+ .30	06,05,01,01
"	"	"	6216.668	9.33	+ .12	02,01,01,01	"	"	"	6260.566	10.49	+ .36	01,01,10,09
"	"	"	6222.564	9.45	+ .16	09,09,02,03	"	"	"	" .576	10.51	+ .41	04,04,02,02
"	"	"	" .570	9.46	+ .10	02,01,02,02	"	"	"	6261.566	10.52	+ .46	06,06,01,02
"	"	"	6223.532	9.44	+ .22	01,02,03,04	"	"	"	" .577	10.59	+ .37	01,01,06,06
"	"	"	" .538	9.45	+ .02	05,05,01,01	"	"	"	6262.573	10.63	+ .36	06,06,02,03
"	"	"	6225.531	9.37	+ .11	02,01,02,02	064832	Nova Gem.,2	12	9476.526	3.77	+ .39	32,31,20,20
"	"	"	" .538	9.37	- .05	03,04,01,01	"	"	"	" .533	3.47	+ .28	12,12,04,04
"	"	"	6226.534	9.19	+ .08	05,04,04,04	"	"	"	" .540	3.37	+ .52	08,07,06,05
"	"	"	6229.534	9.76	+ .14	02,02,01,02	"	"	"	9478.515	5.26	+ .34	10,09,01,02
"	"	"	6230.538	10.03	+ .04	04,03,15,16	"	"	"	" .522	5.33	+ .31	12,13,02,02
"	"	"	" .545	10.07	+ .13	01,01,03,03	"	"	"	" .634	5.34	- .66	02,03,00,01
"	"	"	" .616	10.05	+ .17	01,01,03,03	"	"	"	" .642	5.38	- .54	05,05,04,04
"	"	"	" .624	10.08	+ .18	10,10,02,03	"	"	"	9479.519	5.19	+ .12	02,03,02,02
"	"	"	6232.540	10.09	+ .16	01,00,03,03	"	"	"	" .524	5.21	+ .10	03,02,11,12
"	"	"	" .548	10.11	+ .28	00,00,06,06	"	"	"	9481.508	5.27	- .09	06,06,03,03
"	"	"	6233.540	10.17	+ .26	04,04,01,01	"	"	"	" .515	5.19	+ .08	11,10,04,05
"	"	"	" .546	10.20	+ .26	02,01,02,03	"	"	"	9482.507	5.44	+ .34	05,05,02,09
"	"	"	" .557	10.23	+ .22	02,02,02,02	"	"	"	" .514	5.55	+ .32	02,01,09,04
"	"	"	6234.547	9.97	+ .24	02,03,01,01	"	"	"	" .540	5.50	+ .34	02,03,02,02
"	"	"	" .554	10.03	+ .16	04,05,04,05	"	"	"	" .595	5.60	- .06	02,01,13,14
"	"	"	6235.543	10.15	+ .16	01,02,05,04	"	"	"	9484.509	4.96	- .06	03,02,09,10
"	"	"	" .552	10.14	+ .22	03,02,05,04	"	"	"	" .514	4.93	- .21	03,03,01,01
"	"	"	6236.583	9.66	+ .18	05,04,01,01	"	"	"	" .583	4.91	+ .08	16,17,10,10
"	"	"	" .593	9.63	+ .16	00,01,05,05	"	"	"	9485.509	4.86	+ .26	06,07,02,01
"	"	"	6237.558	9.90	+ .26	06,07,02,02	"	"	"	" .514	4.87	+ .04	04,05,00,01
"	"	"	" .569	9.95	+ .32	04,04,01,02	"	"	"	" .555	4.79	+ .20	00,00,14,15
"	"	"	6241.574	9.99	+ .16	04,03,00,00	"	"	"	9487.510	4.91	+ .12	01,02,03,02
"	"	"	6243.551	10.24	+ .26	01,00,05,05	"	"	"	" .514	4.91	+ .24	06,06,01,02
"	"	"	" .563	10.21	+ .32	04,03,03,03	"	"	"	9489.509	6.19	+ .36	03,04,01,00
"	"	"	6244.561	10.17	+ .21	03,02,06,06	"	"	"	" .514	6.15	+ .45	04,04,05,04
"	"	"	" .574	10.15	+ .24	00,01,03,02	"	"	"	" .572	6.23	- .12	05,06,02,03
"	"	"	6246.549	10.27	+ .33	09,08,04,05	"	"	"	9491.543	6.05	- .28	01,02,02,01
"	"	"	" .557	10.29	+ .37	01,01,03,03	"	"	"	9492.512	5.53	+ .03	01,01,06,06
"	"	"	6247.552	10.27	+ .40	01,01,05,05	"	"	"	" .517	5.51	- .04	02,02,04,03
"	"	"	" .560	10.25	+ .29	02,01,06,06	"	"	"	" .579	5.54	+ .16	02,02,00,00
"	"	"	6248.555	10.41	+ .34	00,00,03,03	"	"	"	9496.510	5.75	+ .56	02,03,04,03
"	"	"	" .563	10.45	+ .36	01,00,00,01	"	"	"	" .516	5.75	+ .37	04,04,08,08
"	"	"	6250.557	10.33	+ .19	01,01,02,02	"	"	"	9497.510	6.29	+ .61	09,09,05,04
"	"	"	" .566	10.31	+ .11	10,10,01,02	"	"	"	" .515	6.17	+ .92	04,05,07,06
"	"	"	6255.556	9.82	+ .30	01,01,01,01	"	"	"	" .634	6.31	+ .13	11,11,10,11

Des.	Name.	Yr.	Julian Day.	Magn.	A-B	Residuals.	Des.	Name.	Yr.	Julian Day.	Magn.	A-B	Residuals.
064832	Nova Gem.,2	12	9498.506	5.90	+ .58	00,01,04,03	174406	RS Ophiuchi	04	6670.659	10.76	+ .12	02,02,00,00
"	"	"	" .512	5.91	+ .49	06,07,04,04	"	"	"	" .681	10.84	+ .12	03,04,05,06
"	"	"	9499.414	6.61	- .60	04,05,06,06	"	"	"	6671.633	10.85	+ .06	02,01,01,00
"	"	"	" .521	6.57	- .57	02,02,03,02	"	"	"	" .642	10.90	.00	02,02,08,08
"	"	"	9501.515	6.37	- .71	05,05,00,00	"	"	"	" .659	10.92	+ .18	02,02,09,09
"	"	"	" .525	6.38	- .70	02,02,04,03	"	"	"	" .670	10.90	+ .23	05,05,01,00
"	"	"	9503.514	6.29	- .71	04,04,00,00	"	"	"	6673.580	10.96	+ .22	01,01,06,06
"	"	"	" .521	6.32	- .58	00,01,06,07	"	"	"	" .595	11.08	- .03	05,04,01,01
"	"	"	9506.510	6.52	- .62	06,06,03,03	"	"	"	" .610	10.95	- .02	05,05,14,15
"	"	"	" .516	6.45	- .69	08,08,03,03	"	"	"	" .622	10.84	+ .20	09,08,04,03
"	"	"	9512.519	6.43	- .65	08,09,01,01	"	"	"	" .634	10.88	+ .19	05,04,02,02
"	"	"	" .524	6.43	- .16	00,00,04,04	"	"	"	" .646	10.88	+ .23	04,04,01,00
"	"	"	9513.518	6.65	- .35	00,00,00,00	"	"	"	6674.605	10.90	- .19	01,02,08,08
"	"	"	" .523	6.68	- .40	00,00,04,04	"	"	"	6675.580	11.14	+ .16	00,01,05,04
"	"	"	" .574	6.75	- .39	03,03,08,07	"	"	"	" .596	11.14	+ .19	02,03,01,01
"	"	"	9557.576	7.50	+ .62	11,12,04,03	"	"	"	" .608	11.11	+ .18	02,03,01,01
"	"	"	" .580	7.54	+ .50	01,01,00,01	"	"	"	" .623	11.20	+ .11	02,03,03,03
"	"	"	9559.567	7.48	+ .46	13,12,06,05	"	"	"	" .640	11.20	+ .29	04,03,06,06
"	"	"	" .572	7.52	+ .46	05,05,03,03	"	"	"	" .652	11.22	+ .22	01,01,02,02
174406	RS Ophiuchi	03	6311.668	11.26	- .26	08,08,03,03	"	"	"	" .660	11.25	+ .20	06,06,01,01
"	"	"	" .677	11.19	- .30	07,07,03,04	"	"	"	6676.590	11.02	+ .16	01,00,05,04
"	"	"	6366.603	10.97	+ .22	09,09,03,04	"	"	"	" .602	10.98	+ .04	09,09,05,06
"	"	04	6646.594	11.26	- .04	06,05,03,03	"	"	"	6681.633	10.82	- .08	02,02,01,02
"	"	"	6650.667	10.80	+ .16	00,01,02,01	"	"	"	" .650	10.76	- .04	03,04,06,05
"	"	"	" .672	10.86	+ .05	01,01,02,02	"	"	"	6730.576	10.76	- .07	03,03,02,03
"	"	"	6655.591	11.28	+ .08	08,09,06,07	"	"	"	" .583	10.68	- .13	04,04,03,04
"	"	"	" .604	11.34	+ .09	06,06,11,11	"	"	"	" .598	10.78	- .02	02,02,02,02
"	"	"	" .627	11.20	+ .01	02,03,06,06	185604	Nova Aquil.2	05	7103.579	11.00	- .23	04,04,08,08
"	"	"	6656.604	11.09	+ .22	01,00,04,03	"	"	"	" .592	10.98	- .12	10,11,02,02
"	"	"	" .639	11.10	+ .04	01,00,05,06	"	"	"	7110.616	11.18	- .31	01,00,04,04
"	"	"	" .672	10.98	+ .26	00,00,02,02	"	"	"	7136.527	11.82	- .05	04,04,01,02
"	"	"	6663.618	10.79	+ .10	00,01,04,05	"	"	"	7142.563	11.78	+ .05	01,01,01,00
"	"	"	" .636	10.75	+ .22	04,05,04,05	"	"	"	7145.522	11.96	.00	03,02,02,03
"	"	"	6664.577	10.77	+ .10	09,09,06,06	"	"	"	" .543	11.92	- .07	05,04,04,04
"	"	"	" .587	10.76	+ .07	01,01,01,01	223152	Nova Lacert.	11	9042.556	7.48	- .19	05,05,08,08
"	"	"	" .602	10.79	+ .10	05,06,03,04	"	"	"	9047.556	7.80	- .28	05,05,01,01
"	"	"	" .617	10.74	+ .13	04,04,04,05	"	"	"	9049.576	8.06	- .15	38,38,07,06
"	"	"	" .629	10.75	+ .12	10,10,04,04	"	"	"	9053.534	8.10	- .24	01,00,04,04
"	"	"	" .641	10.70	+ .11	01,01,05,04	"	"	"	" .544	7.97	- .22	19,18,06,05
"	"	"	" .652	10.71	+ .14	01,02,00,01	"	"	"	9054.558	8.33	- .38	04,04,04,05
"	"	"	" .664	10.64	+ .07	03,03,04,03	"	"	"	9055.545	8.24	- .23	04,05,06,06
"	"	"	6670.595	10.71	+ .06	05,05,06,05	"	"	"	9060.524	8.06	- .28	04,04,03,02
"	"	"	" .609	10.58	+ .16	01,01,01,00	"	"	"	" .531	8.12	- .24	06,05,04,04
"	"	"	" .617	10.64	+ .15	07,07,02,01	"	"	"	9065.524	8.26	- .40	03,03,08,07
"	"	"	" .631	10.70	+ .19	00,00,02,03	"	"	"	9067.513	8.26	- .13	05,05,15,15
"	"	"	" .645	10.68	+ .20	08,07,02,02							

TABLE X.

VARIABLE STARS OF LONG PERIOD. CLASS IIa.

Yr.	Julian Day.	Magn.	A-B	Residuals.	Epoch.	Phase.	Yr.	Julian Day.	Magn.	A-B	Residuals.	Epoch.	Phase.
001726. T ANDROMEDAE.							021403. o CETI (continued).						
05	6851.575	8.77	-.10	05,04,09,08	64	280.6	03	6407.677	9.22	+ .10	02,02,01,01	40	180.3
"	" .624	8.72	-.01	00,01,00,00	"	"	"	6426.657	9.39	+ .20	00,01,02,03	"	199.3
"	6853.534	8.75	-.34	05,05,06,07	65	1.5	"	" .665	9.42	+ .18	02,02,01,00	"	"
"	" .544	8.73	-.34	04,04,01,02	"	"	"	6438.667	9.35	+ .18	04,04,04,04	"	211.3
"	6856.515	8.72	+ .16	00,01,03,03	"	4.5	"	" .673	9.34	+ .30	00,01,01,02	"	"
"	" .525	8.65	+ .10	01,01,04,05	"	"	"	6449.676	9.38	+ .30	04,03,10,09	"	222.3
"	6860.529	8.62	+ .11	04,05,02,02	"	8.5	"	" .691	9.43	+ .20	04,03,01,01	"	"
"	" .536	8.66	+ .03	03,03,02,02	"	"	"	6459.665	9.15	+ .16	02,01,02,02	"	232.3
"	6862.580	8.68	+ .21	02,01,02,02	"	10.6	"	" .670	9.15	+ .11	06,05,00,00	"	"
"	" .587	8.65	+ .18	00,00,01,01	"	"	"	6472.624	8.77	+ .08	01,01,07,08	"	245.2
"	6865.573	8.73	+ .02	00,01,02,01	"	13.6	"	" .633	8.77	-.06	03,03, R, A	"	"
"	" .581	8.70	+ .04	03,04,01,00	"	"	04	6481.649	8.53	+ .15	05,04,00,00	"	254.2
"	6866.575	8.74	-.03	00,00,02,03	"	14.6	"	" .656	8.54	+ .10	12,11,06,07	"	"
"	6869.543	8.79	+ .06	00,00,02,02	"	17.5	"	6498.634	7.25	.00	01,02,03,04	"	271.2
"	6874.520	8.90	+ .12	01,01,05,06	"	22.5	"	" .641	7.23	+ .08	00,00,05,05	"	"
"	6880.583	9.08	-.01	06,06,03,03	"	28.6	"	6507.566	5.78	-.14	00,00,05,06	"	280.2
"	" .597	9.10	+ .01	05,05,03,03	"	"	"	" .574	5.70	-.24	00,00,03,03	"	"
"	6891.538	9.48	-.08	03,02,00,01	"	39.5	"	" .582	5.66	-.12	03,03,00,00	"	"
021403. o CETI.							"	6521.614	3.88	-.06	05,05,02,02	"	294.2
							"	6536.522	2.73	+ .08	02,02,09,10	"	309.1
							"	" .531	2.69	-.11	01,01,01,01	"	"
							"	6544.514	2.13	+ .08	01,02,03,02	"	317.1
							"	" .521	2.23	+ .36	06,06,11,11	"	"
							"	" .530	2.33	.00	03,04,02,01	"	"
02	6044.667	8.10	+ .06	04,05,02,02	39	148.9	"	6730.671	8.92	-.02	01,01,03,02	41	171.7
"	" .674	8.09	+ .05	04,04,01,02	"	"	"	6741.663	9.23	-.07	04,03,06,06	"	182.7
"	6061.630	8.67	+ .04	02,02,02,01	"	165.8	"	" .668	9.17	-.15	03,03,00,00	"	"
"	" .640	8.66	-.02	04,04,02,03	"	"	"	6771.632	9.81	+ .01	04,04,08,07	"	212.6
"	6082.670	9.13	-.05	03,02,01,01	"	186.9	"	" .640	9.80	-.10	02,02,01,02	"	"
"	" .676	9.01	+ .23	02,02,04,03	"	"	"	6790.609	9.63	-.11	05,05,03,03	"	231.6
"	6102.635	9.00	-.02	01,00,02,01	"	206.8	"	" .616	9.60	-.18	00,00,01,00	"	"
"	" .645	9.04	-.02	0303,01,02	"	"	"	6803.591	9.31	+ .16	02,02,01,01	"	244.6
03	6125.616	8.77	+ .15	03,04,05,05	"	229.8	"	6818.629	9.22	-.02	01,02,05,04	"	259.6
"	" .625	8.80	+ .14	01,00,03,02	"	"	"	6828.540	8.77	-.08	04,05,02,02	"	269.5
"	6152.543	8.05	.00	01,02,00,01	"	256.7	"	6853.640	5.96	-.02	06,05,02,02	"	294.6
"	" .550	8.11	+ .03	06,05,01,01	"	"	"	6860.577	4.71	+ .04	04,05,00,01	"	301.6
"	6152.560	8.13	+ .08	01,01,06,05	"	256.8	"	6872.639	3.75	-.14	08,08,04,04	"	313.6
"	6347.741	7.63	+ .08	05,04,05,05	40	120.3	"	6877.562	3.75	+ .24	05,06,09,08	"	318.6
"	6361.674	8.05	-.01	05,04,03,03	"	134.3	"	6879.624	3.63	-.05	04,03,05,05	"	320.6
"	" .680	8.09	+ .08	02,01,04,03	"	"	"	6885.566	3.80	+ .02	00,00,05,05	"	326.6
"	6382.663	8.71	+ .05	02,02,02,02	"	155.3	"	6887.529	3.75	+ .11	06,06,02,02	"	328.5
"	" .669	8.78	+ .08	08,08,01,00	"	"	"	6900.531	3.45	+ .33	04,04,08,07	42	9.9
"	6391.678	8.91	+ .07	00,01,00,00	"	164.3	"	" .552	3.53	+ .04	06,05,04,05	"	"
"	" .684	8.88	+ .10	06,05,03,04	"	"	"						
"	6407.670	9.23	+ .13	04,04,05,05	"	180.3	"						

Yr.	Julian Day.	Magn.	A-B	Residuals.	Epoch.	Phase.	Yr.	Julian Day.	Magn.	A-B	Residuals.	Epoch.	Phase.
<i>021403. o CETI (continued).</i>							<i>045514. R LEPORIS.</i>						
05	6904.572	3.52	+10	00,01,00,00	42	14.0	12	9441.569	7.55	-.34	07,07,01,00	40	60.9
"	7111.691	9.69	+12	02,02,04,03	"	221.1	"	" .577	7.44	-.76	08,07,08,07	"	"
"	7175.644	8.43	+12	03,04,00,01	"	285.0	"	9443.515	7.73	-.50	04,05,08,09	"	62.8
06	7471.665	8.48	-.02	00,00,03,02	43	249.5	"	" .524	7.62	-.48	04,04,00,01	"	"
"	7521.684	3.95	-.12	10,11,06,07	"	299.5	060746. ST AURIGAE.						
"	7522.612	3.45	-.15	11,10,04,04	"	300.4	060746. ST AURIGAE.						
"	7522.627	3.56	+18	00,01,07,08	"	300.4	060746. ST AURIGAE.						
"	7523.678	3.33	-.28	04,04,05,06	"	301.5	060746. ST AURIGAE.						
"	7532.596	2.67	+19	00,00,02,02	"	310.4	08	8010.639	11.72	-.04	12,11,00,01	0	166.6
"	7546.591	2.18	-.02	08,07,01,02	"	324.4	"	8061.601	10.98	+11	02,02,08,08	"	217.6
"	7556.618	2.03	+05	05,05,03,02	44	2.8	"	" .623	10.95	+06	04,05, A	"	"
07	7581.625	2.58	+02	07,07,07,07	"	27.8	123961. S URSAE MAJORIS.						
"	7597.541	2.86	-.42	08,09,04,04	"	43.7	123961. S URSAE MAJORIS.						
"	7618.582	3.89	-.06	00,00,05,05	"	64.8	123961. S URSAE MAJORIS.						
"	7653.518	5.67	+03	01,01,02,02	"	99.7	123961. S URSAE MAJORIS.						
"	7853.659	5.31	-.20	02,02,06,07	"	299.9	12	9565.600	7.85	-.22	00,01,06,07	83	195.1
"	7857.645	4.37	+05	07,07,01,01	"	303.8	"	" .609	7.78	-.32	02,01,06,05	"	"
"	7865.587	3.48	+22	03,04,05,06	"	311.8	"	" .624	7.88	-.25	01,01,09,09	"	"
"	" .593	3.51	+16	04,04,01,01	"	"	"	9567.574	7.92	-.12	04,03,02,03	"	197.1
"	7889.529	3.05	+19	06,06,15,15	45	4.1	"	" .581	7.92	-.14	A, R, 04,04	"	"
"	" .538	3.03	+14	10,09,01,02	"	"	"	" .596	7.93	-.30	01,02,02,03	"	"
"	7921.585	4.19	.00	07,08,03,02	"	36.2	"	" .611	7.94	-.07	05,06,01,01	"	"
"	7937.525	4.79	-.01	00,00,07,07	"	52.1	"	9568.579	7.98	-.19	01,01,03,04	"	198.1
08	7959.570	5.51	-.12	14,15,02,03	"	74.2	"	" .587	7.96	-.15	05,06,04,04	"	"
"	7980.543	6.35	+09	05,05,05,04	"	95.1	"	" .597	7.96	-.18	06,06,01,01	"	202.1
"	8001.521	7.33	-.05	00,00,03,04	"	116.1	"	9572.562	8.08	-.27	04,03,02,02	"	"
"	8199.640	3.90	-.02	06,06,00,00	"	314.2	"	" .567	8.09	-.18	08,07,01,02	"	"
"	" .646	3.85	+04	00,01,05,04	"	"	"	9573.567	8.10	-.38	02,02,02,02	"	203.1
"	8227.564	3.65	-.32	12,13,10,10	46	10.6	"	" .574	8.15	-.42	02,01,05,06	"	"
"	" .581	3.68	-.02	02,02,05,06	"	"	"	9574.572	8.14	-.33	01,01,01,01	"	204.1
"	8237.633	3.75	+33	08,08,03,04	"	20.6	"	" .583	8.14	-.32	03,04,01,00	"	"
"	" .638	3.77	+04	04,03,00,01	"	"	"	9576.562	8.18	-.35	05,05,03,02	"	206.1
"	8262.561	4.20	-.06	08,08,01,01	"	45.6	"	" .569	8.19	-.26	01,00,00,01	"	"
"	" .571	4.23	+07	04,05,05,05	"	"	"	9578.567	8.22	-.36	02,02,01,02	"	208.1
"	8281.639	4.47	+04	02,03,06,05	"	64.6	"	" .575	8.24	-.33	03,03,04,04	"	"
"	" .647	4.45	+04	07,08,01,01	"	"	"	9580.564	8.24	-.43	08,08,10,10	"	210.1
"	8307.560	5.57	+08	01,01,01,02	"	90.6	"	" .569	8.33	-.30	00,01,00,01	"	"
"	" .570	5.54	+11	06,06,00,00	"	"	"	" .580	8.23	-.22	06,06,02,02	"	"
"	" .589	5.60	+14	03,04,03,03	"	"	"	9581.566	8.30	-.20	02,03,01,02	"	211.1
"	" .599	5.57	+05	02,02,01,01	"	"	"	" .574	8.36	-.35	00,00,06,07	"	"
09	8346.545	7.19	+36	02,01,01,00	"	129.5	"	9585.600	8.56	-.16	02,02,10,10	"	215.1
"	" .552	7.22	+22	01,01,02,01	"	"	"	" .610	8.50	-.12	03,03,07,06	"	"
"	8360.517	7.70	+30	05,04,04,05	"	143.5	"	9586.572	8.60	-.16	01,00,05,06	"	216.1
"	" .524	7.69	+12	02,03,01,00	"	"	"	" .583	8.52	-.12	02,02,01,00	"	"
							"	" .591	8.54	-.08	00,01,07,08	"	"
							"	9589.569	8.64	-.41	06,06,01,01	"	219.1
							"	" .580	8.64	-.36	01,00,08,09	"	"

OBSERVATIONS OF VARIABLES.

Yr.	Julian Day.	Magn.	A-B	Residuals.	Epoch.	Phase.	Yr.	Julian Day.	Magn.	A-B	Residuals.	Epoch.	Phase.
123961. S URSAE MAJORIS (continued).							194632. χ CYGNI (continued).						
12	9593.580	8.77	-.26	05,04,00,01	83	223.1	03	6438.596	5.29	+.26	03,04,04,04	126	143.6
"	" .588	8.82	-.25	00,01,00,00	"	"	"	6447.609	5.50	+.48	07,08,02,02	"	152.6
"	9606.576	9.29	+.34	01,00,06,05	84	9.6	"	" .622	5.49	+.50	04,04,05,05	"	"
"	" .583	9.28	+.32	03,02,02,01	"	"	"	6453.573	5.64	+.40	00,01,05,04	"	158.6
"	9616.569	9.78	-.24	02,01,07,06	"	19.6	"	" .580	5.67	+.46	03,02,08,07	"	"
"	" .575	9.82	-.37	00,00,02,03	"	"	"	6463.517	5.96	-.36	01,01,03,03	"	168.5
"	9620.576	10.00	-.40	15,15,09,09	"	23.6	"	" .522	5.93	-.20	01,01,03,03	"	"
"	9621.566	10.19	-.06	04,04,02,01	"	24.6	"	6472.544	6.41	+.18	09,09,03,04	"	177.5
"	" .573	10.10	-.13	02,03,04,04	"	"	"	" .553	6.34	+.21	05,04,04,04	"	"
"	9645.535	11.09	-.12	13,13,02,02	"	48.5	04	6484.525	7.14	-.20	04,05,03,02	"	189.5
"	" .541	11.01	-.06	11,11,16,16	"	"	"	" .530	7.12	-.16	06,05,06,06	"	"
"	9652.539	11.44	-.63	03,04,08,08	"	55.5	"	6782.623	8.24	+.28	01,02,07,06	127	81.6
"	" .552	11.48	-.20	02,01,03,03	"	"	"	" .627	8.18	+.21	01,00,03,03	"	81.6
"	9655.556	11.42	-.04	01,01,25,26	"	58.6	"	6794.537	6.43	+.22	05,06,01,00	"	93.5
"	" .565	11.57	-.20	15,16,04,03	"	"	"	" .549	6.42	+.23	01,01,06,05	"	93.5
194632. χ CYGNI.							"	6797.528	6.01	+.10	03,03,02,01	"	96.5
"	"	"	"	"	"	"	"	" .538	5.96	+.11	07,07,00,00	"	96.5
"	"	"	"	"	"	"	"	6803.538	5.46	-.07	02,03,05,05	"	102.5
"	"	"	"	"	"	"	"	" .546	5.48	-.01	00,01,05,05	"	102.5
02	6061.583	5.79	-.18	06,05,00,01	125	172.6	"	6811.535	4.69	+.14	04,03,08,07	"	110.5
"	" .593	5.81	-.18	02,03,04,05	"	172.6	"	" .544	4.64	-.04	10,10,04,03	"	110.5
"	6093.538	7.74	-.04	00,01,02,03	"	204.5	"	6818.566	4.45	+.12	03,03,01,01	"	117.5
"	" .550	7.70	+.05	03,03,06,05	"	204.6	"	" .578	4.47	+.26	08,09,00,01	"	117.5
"	" .560	7.72	-.05	06,06,01,01	"	"	"	6824.528	4.25	+.10	01,02,02,01	"	123.5
03	6125.450	9.30	+.04	03,02,03,02	"	236.4	"	" .536	4.29	-.10	01,02,03,03	"	123.5
"	" .460	9.32	+.08	01,01,02,03	"	236.5	"	6829.555	4.28	+.24	05,05,02,02	"	128.5
"	6319.654	11.44	-.27	05,05,10,09	126	24.6	"	6844.462	4.44	+.08	02,02,03,02	"	143.4
"	6345.764	10.91	-.02	07,06,01,00	"	50.7	"	" .483	4.46	-.01	00,01,02,02	"	143.4
"	" .775	10.91	-.14	01,00,03,03	"	50.8	05	6860.451	5.01	+.10	07,07,04,03	"	159.4
"	6379.660	9.00	+.08	00,01,04,05	"	84.6	"	" .460	5.04	+.07	04,04,05,05	"	159.4
"	" .665	9.02	+.04	02,01,03,02	"	"	"	6880.466	5.74	+.11	01,01,02,02	"	179.4
"	6387.651	7.99	+.06	02,01,02,01	"	92.6	235350. R CASSIOPEIAE.						
"	" .659	7.97	+.14	03,04,02,02	"	"	03	6383.569	11.11	+.18	05,05,07,06	41	314.0
"	6394.649	6.82	+.01	02,03,04,04	"	99.6	"	" .576	11.14	+.09	04,04,06,06	"	314.0
"	" .654	6.82	+.01	05,05,04,03	"	"	"	6384.619	11.13	-.04	03,03,04,04	"	315.0
"	6403.642	5.82	-.17	04,04,03,03	"	108.6	"	6387.539	11.13	+.14	08,07,00,01	"	317.9
"	" .648	5.82	-.19	06,06,02,03	"	"	"	" .549	11.16	+.15	09,08,03,03	"	317.9
"	6409.648	5.34	-.33	01,01,00,00	"	114.6	"	6390.569	11.07	+.18	11,11,06,05	"	321.0
"	" .655	5.36	-.22	04,04,01,01	"	"	"	" .576	11.12	+.16	02,03,01,01	"	321.0
"	6415.631	5.24	-.28	05,05,03,02	"	120.6	"	6391.542	11.09	+.10	04,05,02,01	"	321.9
"	" .637	5.22	-.24	04,04,02,01	"	"	"	" .550	11.06	+.12	01,01,06,07	"	322.0
"	6419.632	5.24	-.27	01,01,01,01	"	124.6	"	6402.535	11.52	-.02	08,08,02,02	"	332.9
"	" .639	5.24	-.26	00,00,03,03	"	"	"	" .552	11.60	-.01	01,01,03,03	"	333.0
"	6428.582	5.06	+.27	03,04,02,02	"	133.6	"	6407.547	11.44	-.20	00,01,01,02	"	337.9
"	" .588	5.11	+.32	01,01,01,01	"	"	"	"	"	"	"	"	"
"	" .599	5.14	+.32	10,10,03,03	"	"	"	"	"	"	"	"	"
"	6438.591	5.31	+.34	07,08,05,06	"	143.6	"	"	"	"	"	"	"

Yr.	Julian Day.	Magn.	A-B	Residuals.	Epoch.	Phase.	Yr.	Julian Day.	Magn.	A-B	Residuals.	Epoch.	Phase.
235350. R CASSIOPEIAE (continued).							235350. R CASSIOPEIAE (continued).						
03	6408.519	11.40	-.01	07,07,00,00	41	338.9	05	6872.597	12.03	-.09	08,09,03,03	42	371.4
"	6409.516	11.38	-.07	01,01,02,01	"	339.9	"	6874.640	11.93	+.04	00,01,01,02	"	373.4
"	6410.519	11.40	.00	04,05,05,05	"	340.9	"	6876.635	11.85	+.11	03,02,03,03	"	375.4
"	6414.517	11.28	-.10	07,07,03,03	"	344.9	"	6900.641	10.81	-.34	09,09,06,05	"	399.4
"	6416.513	11.29	-.26	03,02,05,04	"	346.9							

TABLE XI.

VARIABLE STARS OF LONG PERIOD. CLASS IIB.

Des.	Name.	Yr.	Julian Day.	Magn.	A-B	Residuals.	Des.	Name.	Yr.	Julian Day.	Magn.	A-B	Residuals.
060547	SS Aurigae	09	8652.588	10.63	+.24	08,08,00,01	213843	SS Cygni	03	6381.523	11.59	-.04	03,02,05,04
"	"	"	8656.619	10.60	+.10	00,00,05,05	"	"	"	6382.518	11.52	-.06	07,07,06,05
"	"	"	8661.585	11.19	.00	08,07,05,05	"	"	"	6383.514	11.63	+.04	01,00,06,06
074922	U Gemin.	03	6136.603	9.30	-.24	00,00,01,00	"	"	"	6384.517	11.74	+.10	11,12,03,04
"	"	"	.609	9.33	-.14	01,00,03,02	"	"	"	6386.517	11.77	+.19	08,09,02,02
"	"	"	6138.551	9.48	-.19	07,07,02,02	"	"	"	6387.688	11.51	-.12	01,01,01,02
"	"	"	.558	9.52	-.20	03,02,04,05	"	"	"	.708	11.59	-.10	01,01,00,00
"	"	"	6141.540	10.03	-.22	01,01,09,08	"	"	"	6390.693	11.69	-.04	12,13,02,01
"	"	"	.546	10.01	-.19	02,02,01,00	"	"	"	6402.671	11.52	-.18	07,06,02,02
"	"	"	6145.545	12.69	-.26	01,02,09,08	"	"	"	.679	11.59	-.33	00,00,05,06
"	"	"	.555	12.71	-.12	04,04,00,00	"	"	"	.691	11.51	-.16	04,04,02,02
"	"	"	6459.599	9.44	-.03	09,09,02,03	"	"	"	6414.668	10.21	+.07	01,01,06,07
"	"	"	.606	9.46	+.05	00,00,02,02	"	"	"	.673	10.22	+.20	02,02,00,00
"	"	"	6460.606	9.46	+.11	12,12,00,00	"	"	"	6415.653	10.50	-.06	03,03,01,02
"	"	"	.613	9.47	-.06	07,07,04,03	"	"	"	.659	10.53	+.04	04,04,02,02
"	"	"	6464.591	9.84	+.10	07,07,06,06	"	"	"	6416.614	10.83	-.16	05,06, A
"	"	"	6468.598	11.84	+.05	05,06,05,05	"	"	"	6417.653	11.39	-.19	01,01,07,08
"	"	"	.605	11.78	+.17	04,04,01,00	"	"	"	6438.641	8.75	+.14	05,04,01,00
213843	SS Cygni	03	6255.674	8.77	.00	05,04,01,01	"	"	"	.647	8.73	+.17	05,04,00,00
"	"	"	.688	8.77	+.07	03,03,03,03	"	"	"	6439.622	8.95	+.15	02,01,04,04
"	"	"	6366.556	11.15	+.15	02,02,01,01	"	"	"	.628	8.90	-.10	02,03,01,00
"	"	"	6368.525	8.55	-.03	07,06,05,05	"	"	"	6440.612	9.03	-.12	05,04,01,01
"	"	"	6369.523	8.53	-.04	01,02,02,02	"	"	"	.618	9.01	-.24	04,04,04,03
"	"	"	6370.521	8.75	+.13	02,02,01,01	"	"	"	6443.637	10.06	-.18	03,04,01,00
"	"	"	6372.517	9.13	+.13	04,04,00,00	"	"	"	.650	10.05	-.08	02,03,01,00
"	"	"	6373.517	9.44	+.08	00,00,02,02	"	"	"	6444.636	10.42	-.46	12,12,01,00
"	"	"	6376.538	10.45	+.15	05,05,01,01	"	"	"	.643	10.35	-.28	07,07,03,03
"	"	"	6377.517	10.79	+.05	05,05,03,03	"	"	"	6447.653	11.17	-.19	00,00,02,03
"	"	"	6379.520	11.33	-.12	05,06,01,01	"	"	"	.662	11.12	-.22	01,02,06,06
"	"	"	6380.518	11.45	+.08	05,06,07,06	"	"	04	6780.635	8.51	-.04	02,03,01,00

OBSERVATIONS OF VARIABLES.

Des.	Name.	Yr.	Julian Day.	Magn.	A-B	Residuals.	Des.	Name.	Yr.	Julian Day.	Magn.	A-B	Residuals.
213843	SS Cygni	04	6780.642	8.54	-.06	03,02,02,03	213843	SS Cygni	04	6796.613	11.26	-.02	06,06,07,07
"	"	"	6781.629	8.53	-.08	01,01,00,01	"	"	"	6797.569	11.49	-.09	07,08,03,03
"	"	"	.638	8.56	-.10	04,04,01,02	"	"	"	6799.609	11.80	-.06	06,05,00,01
"	"	"	6782.658	8.33	-.07	01,01,03,02	"	"	"	6800.646	11.75	-.29	01,01,04,04
"	"	"	6783.614	8.40	-.14	06,07,05,06	"	"	05	6851.492	11.50	-.14	03,03,01,00
"	"	"	.621	8.42	-.16	02,02,03,03	"	"	"	.505	11.55	+.04	03,02,00,01
"	"	"	6786.653	8.44	-.10	04,04,01,00	"	"	"	6853.589	10.73	+.06	01,01,07,07
"	"	"	.659	8.46	-.02	01,00,05,06	"	"	"	6860.499	9.05	+.03	08,08,02,02
"	"	"	6787.643	8.47	-.21	04,04,00,00	"	"	"	6862.524	9.61	-.04	05,04,01,02
"	"	"	.654	8.49	-.16	04,04,03,04	"	"	"	.532	9.60	-.08	00,00,02,02
"	"	"	6788.639	8.55	-.17	05,05,04,03	"	"	"	6863.569	10.07	-.03	06,05,01,01
"	"	"	.646	8.58	-.22	01,01,00,01	"	"	"	6865.540	10.92	-.18	06,07,02,03
"	"	"	6790.633	8.77	-.07	02,03,03,04	"	"	"	6869.510	11.60	-.10	08,09,06,06
"	"	"	.639	8.89	-.12	03,02,02,01	"	"	07	7868.615	8.92	+.06	03,04,03,04
"	"	"	.649	8.92	-.10	05,05,03,03	"	"	"	.646	8.83	+.16	05,05,03,03
"	"	"	6793.590	10.00	-.22	06,07,00,00	"	"	"	.659	8.91	+.03	01,01,03,03
"	"	"	.596	9.95	-.11	04,05,00,00	"	"	"	7870.647	8.25	+.05	06,05,01,01
"	"	"	6794.651	10.37	-.16	02,03,01,00							

TABLE XII.

STARS WITH IRREGULAR VARIATION IN LIGHT. CLASS III.

Des.	Name.	Yr.	Julian Day.	Magn.	A-B	Residuals.	Des.	Name.	Yr.	Julian Day.	Magn.	A-B	Residuals.
001249	ST Cassiop.	06	7248.537	9.32	-.12	02,01,03,03	002235	- Androm.	09	8341.591	8.11	+.09	02,03,06,06
"	"	"	7249.531	9.32	-.07	01,01,03,03	"	"	"	8516.644	8.02	-.26	08,07,03,04
"	"	"	7459.628	9.35	-.02	02,03,07,08	011025	Z Piscium	05	7116.631	7.08	+.24	03,02,01,00
"	"	"	7489.543	9.26	+.21	00,00,03,03	"	"	"	7124.566	7.08	+.16	12,12,01,00
"	"	07	7602.616	9.18	-.08	06,06,03,04	"	"	06	7220.621	7.33	+.02	01,00,00,01
"	"	"	7797.599	9.11	-.18	04,04,01,01	"	"	"	7221.582	7.29	-.10	02,01,06,07
"	"	08	7957.627	9.18	-.11	00,00,03,03	"	"	"	7259.532	7.06	+.06	02,02,03,03
"	"	09	8518.621	9.12	-.01	08,08,07,07	"	"	"	7262.523	6.98	+.16	04,03,01,00
"	"	10	8750.552	9.03	-.22	07,06,02,03	"	"	"	7271.562	6.88	-.01	08,08,06,06
002235	- Androm.	06	7252.520	7.77	+.20	00,01,04,04	"	"	"	7275.526	6.84	+.05	04,05,04,04
"	"	"	7458.620	8.05	-.19	02,03,04,04	"	"	"	7460.620	7.06	+.28	04,04,02,01
"	"	"	7461.613	8.13	-.33	01,01,00,01	"	"	"	7462.617	7.17	+.34	01,01,04,04
"	"	"	7486.545	8.13	+.28	06,06,01,02	"	"	"	7482.669	7.20	+.21	01,01,05,06
"	"	07	7606.566	7.94	+.22	01,01,00,01	"	"	07	7602.572	6.98	+.09	02,02,02,03
"	"	"	7783.632	8.05	-.18	04,04,02,02	"	"	"	7845.534	7.02	+.22	02,01,07,07
"	"	"	7929.584	7.83	+.36	06,05,02,02	"	"	"	7929.608	7.03	-.02	00,01,01,02
"	"	08	8194.539	8.23	-.19	04,04,01,00	"	"	08	8193.636	7.00	+.20	00,00,05,04
"	"	09	8313.586	6.95	+.15	01,00,03,03	"	"	"	8285.622	7.14	.00	01,00,02,03
"	"	"	.597	6.90	+.22	05,06,01,02	"	"	09	8609.533	6.84	+.17	05,05,01,01
"	"	"	8314.593	6.97	+.29	05,06,05,05	"	"	"	8609.542	6.86	+.23	05,06,09,09

Des.	Name.	Yr.	Julian Day.	Magn.	A-B	Residuals.	Des.	Name.	Yr.	Julian Day.	Magn.	A-B	Residuals.
011025	Z Piscium	10	8722.561	7.08	+ .21	10,09,01,01	044068	ST Camelop.	03	6187.608	7.75	+ .18	01,00,00,00
020911	V Arietis	05	7136.586	8.90	- .18	03,02,07,08	"	"	"	6188.536	7.88	+ .12	16,17,02,02
"	"	06	7220.653	8.86	+ .10	05,06,06,05	"	"	"	" .544	7.94	+ .20	03,02,05,04
"	"	"	7510.587	8.76	+ .14	01,00,04,05	"	"	"	6362.596	8.02	+ .22	00,00,06,06
"	"	07	7606.603	8.80	+ .10	01,00,04,04	"	"	"	" .600	8.01	+ .18	07,06,01,00
"	"	08	7957.536	8.64	+ .14	08,07,05,05	"	"	"	6369.630	7.58	+ .12	08,07,10,09
"	"	"	8285.594	8.79	+ .20	08,07,00,00	"	"	"	" .636	7.57	+ .22	06,07,01,00
"	"	09	8609.573	8.54	+ .14	03,04,04,03	"	"	"	6370.627	8.05	+ .02	03,03,03,02
033362	U Camelop.	02	6043.616	7.52	- .01	08,08,05,05	"	"	"	" .634	8.08	- .04	03,04,04,05
"	"	"	" .621	7.53	- .02	01,02,05,04	"	"	"	" .652	7.98	+ .23	04,04,00,00
"	"	03	6128.639	7.66	- .01	02,01,02,02	"	"	"	6372.588	8.05	+ .02	06,06,03,04
"	"	"	" .652	7.66	+ .04	02,03,03,03	"	"	"	" .596	7.97	+ .14	06,07,02,02
"	"	"	6153.586	7.56	- .01	02,02,00,00	"	"	"	" .609	7.96	+ .16	03,02,09,08
"	"	"	" .593	7.57	+ .06	02,02,03,02	"	"	"	6373.642	7.98	+ .09	01,01,03,04
034930	X Persei	03	6155.652	6.68	- .24	08,07,03,04	"	"	"	" .651	8.01	+ .14	00,00,03,02
"	"	"	" .659	6.71	- .22	03,03,04,04	"	"	"	6377.612	8.05	- .02	04,05,02,01
"	"	"	6382.576	6.59	+ .10	01,01,05,04	"	"	"	" .622	8.06	- .08	00,01,00,00
"	"	"	" .584	6.65	+ .22	10,10,02,01	"	"	"	6379.585	7.93	- .02	04,04,02,02
"	"	"	6408.662	6.75	+ .02	04,05,01,01	"	"	"	" .591	7.94	- .04	01,02,03,04
"	"	"	" .669	6.73	- .02	07,06,04,03	"	"	"	6380.598	7.96	- .10	00,00,04,04
"	"	04	6796.531	6.70	- .07	00,00,07,07	"	"	"	" .604	7.95	- .14	01,00,01,01
"	"	"	" .543	6.74	+ .01	02,02,00,00	"	"	"	6391.586	7.94	- .01	04,04,04,05
"	"	"	6800.542	6.68	.00	00,01,05,06	"	"	"	" .592	7.92	+ .13	00,00,01,01
"	"	05	7125.576	6.62	+ .15	03,02,02,02	"	"	"	6401.695	7.98	- .16	05,04,05,04
"	"	"	" .594	6.60	+ .07	01,00,04,04	"	"	"	6417.679	8.08	+ .03	01,01,01,02
"	"	06	7319.531	6.30	- .32	01,00,05,04	"	"	"	6418.572	7.98	+ .16	05,06,01,02
035761	+61° 667	05	7117.718	7.81	- .03	01,02,01,01	"	"	"	6428.618	7.96	+ .19	01,02,06,06
"	"	"	7124.603	7.83	+ .16	04,03,02,01	"	"	"	" .623	7.98	+ .16	01,02,01,01
"	"	"	7159.577	7.85	+ .12	04,04,03,02	"	"	"	6433.610	8.01	+ .10	02,01,03,03
"	"	06	7252.658	7.97	- .32	01,02,02,01	"	"	"	" .616	7.99	+ .10	03,02,08,07
"	"	"	7287.585	7.89	- .33	04,04,01,01	"	"	"	6439.602	7.91	+ .10	02,02,01,01
"	"	"	7307.525	7.93	- .34	03,03,03,03	"	"	"	6440.569	7.99	+ .18	04,05,01,00
"	"	"	7335.616	7.80	+ .26	05,04,02,01	"	"	"	" .576	8.01	+ .20	07,06,01,00
"	"	"	7460.580	7.87	+ .35	09,09,01,01	"	"	"	6443.587	8.08	+ .20	02,02,01,02
"	"	"	7488.631	7.83	+ .47	08,07, A	"	"	"	" .595	8.00	+ .12	07,07,03,04
"	"	"	7511.561	7.81	+ .47	05,05,02,02	"	"	"	6444.596	7.97	+ .06	03,03,04,04
"	"	"	7545.565	7.94	- .16	02,02,03,03	"	"	"	" .602	8.02	+ .03	02,02,06,06
"	"	07	7604.651	7.89	+ .28	00,00,04,03	"	"	"	6450.571	7.95	+ .14	01,02,02,02
"	"	08	8013.633	7.92	+ .18	02,03,04,04	"	"	"	" .578	7.96	+ .16	03,02,02,01
"	"	"	8251.594	7.86	+ .14	05,05,03,03	"	"	"	6457.555	7.98	+ .07	03,03,02,01
"	"	09	8608.610	7.52	+ .22	07,06,00,00	"	"	"	" .562	7.94	+ .14	02,02,07,08
"	"	"	" .618	7.50	+ .24	04,04,04,04	"	"	"	6472.585	8.00	+ .08	01,01,03,04
"	"	"	" .628	7.48	+ .24	08,08,00,00	"	"	"	04 6495.664	8.12	+ .08	01,00,02,01
"	"	10	8691.618	7.71	- .25	05,05,01,01	"	"	"	" .671	8.18	+ .01	04,04,01,01
"	"	"	8748.619	7.89	- .25	02,01,03,03	"	"	"	6498.661	8.18	+ .13	00,01,03,03
"	"	11	9377.516	7.83	+ .08	12,11,05,06	"	"	"	" .667	8.17	+ .10	00,00,04,03
"	"	"	9378.515	7.78	+ .10	08,08,03,03	"	"	"	6507.679	8.21	- .10	06,07,02,01
044068	ST Camelop.	03	6159.575	7.78	- .11	06,07,02,02	"	"	"	" .685	8.22	- .08	05,04,03,02
"	"	"	" .581	7.82	- .16	07,06,02,02	"	"	"	6510.657	8.27	- .26	02,03,10,09
"	"	"	6187.601	7.69	+ .22	00,01,00,00	"	"	"	" .663	8.26	- .07	02,01,01,01

OBSERVATIONS OF VARIABLES.

Des.	Name.	Yr.	Julian Day.	Magn.	A-B	Residuals.	Des.	Name.	Yr.	Julian Day.	Magn.	A-B	Residuals.
044068	ST Camelop.	04	6512.656	8.18	-.12	04,04,03,03	044528	TT Tauri	04	6752.663	8.48	-.09	05,05,01,01
"	"	"	" .662	8.21	-.06	03,02,04,03	"	"	"	6758.645	8.58	-.04	04,04,01,01
"	"	"	6514.639	8.32	+.09	02,03,02,02	"	"	"	" .663	8.64	+.24	08,07,04,05
"	"	"	6516.656	8.28	-.05	02,02,02,02	"	"	"	6761.613	8.53	+.18	00,01,03,02
"	"	"	" .663	8.28	.00	02,02,03,03	"	"	"	6775.656	8.43	+.10	05,05,01,00
"	"	"	6519.658	8.36	+.15	03,02,01,01	"	"	"	" .663	8.50	+.12	07,08,03,04
"	"	"	" .664	8.39	+.04	05,05,00,00	"	"	"	6792.552	8.62	+.05	08,09,05,05
"	"	"	6521.655	8.36	-.19	03,03,00,01	"	"	"	6796.594	8.63	+.14	03,03,03,03
"	"	"	" .663	8.32	-.11	03,02,01,01	"	"	"	6806.611	8.52	+.12	03,02,03,03
"	"	"	" .675	8.34	+.03	03,02,01,01	"	"	"	" .623	8.54	+.16	04,03,03,02
"	"	"	6522.649	8.36	-.15	00,00,03,04	"	"	"	6811.622	8.52	+.05	07,08,07,07
"	"	"	" .659	8.38	-.08	06,07,07,06	"	"	05	6893.545	8.78	-.21	00,01,04,04
"	"	"	6528.642	8.44	+.05	01,01,00,01	"	"	"	6906.604	8.71	-.18	01,01,07,08
"	"	"	" .648	8.41	-.04	01,01,01,01	"	"	"	6955.546	8.51	-.22	04,04,03,03
"	"	"	6533.618	8.38	.00	03,04,01,00	045443	ϵ Aurigae	04	6573.646	3.36	-.34	04,04,00,01
"	"	"	" .624	8.40	-.05	02,01,00,00	"	"	"	6802.556	3.04	-.10	03,03,01,01
"	"	"	6544.653	8.53	-.22	04,05,03,04	"	"	"	" .564	3.01	-.03	03,03,04,04
"	"	"	" .660	8.48	-.11	02,02,02,02	"	"	"	6836.541	3.11	+.16	06,05,02,01
"	"	"	" .667	8.48	-.16	02,02,01,02	"	"	"	" .554	3.12	+.10	01,02,04,05
"	"	"	6548.667	8.52	+.03	03,02,02,02	"	"	05	6894.605	3.13	+.24	05,04,04,04
"	"	"	6569.667	8.46	.00	09,09,00,00	"	"	"	" .624	3.17	+.24	00,00,02,01
"	"	"	6570.646	8.46	+.11	03,03,05,05	"	"	"	6927.659	3.22	+.42	02,01,02,03
"	"	"	6573.665	8.46	+.01	01,02,08,08	"	"	"	" .667	3.21	+.37	00,01,02,02
"	"	"	6596.577	8.30	+.16	02,03,01,00	"	"	"	6954.576	3.29	+.35	01,01,01,00
"	"	"	" .583	8.28	+.19	01,01,03,04	"	"	"	7128.633	3.04	+.02	02,03,13,14
"	"	"	6629.561	8.18	+.15	02,01,01,01	"	"	"	" .649	2.99	+.17	04,04,08,08
"	"	"	" .566	8.18	+.09	00,00,01,02	"	"	"	7164.541	3.07	+.20	02,03,03,02
"	"	"	6731.627	8.20	-.06	02,02,05,05	"	"	06	7236.448	3.16	+.20	01,01,02,02
"	"	"	6751.642	8.30	-.07	01,01,05,04	"	"	"	7317.530	3.23	-.40	01,02,01,01
"	"	05	6866.666	8.32	+.19	05,04,02,02	"	"	"	7481.656	3.03	+.13	01,01,05,05
"	"	"	6887.619	8.57	-.08	03,03,02,02	"	"	"	7546.557	3.14	+.30	01,00,01,02
"	"	"	6890.626	8.62	+.16	02,03,02,03	"	"	07	7642.587	3.18	-.34	02,03,00,00
"	"	"	6921.659	8.73	+.04	01,01,03,03	"	"	"	7867.562	3.05	+.27	07,08,04,04
"	"	"	6953.563	8.87	+.22	03,02,02,03	"	"	"	" .568	3.07	+.28	08,09,10,10
"	"	"	6985.561	8.78	+.23	02,02,06,07	"	"	08	8015.611	3.21	+.16	04,05,04,04
044528	TT Tauri	02	6073.632	8.12	+.05	01,00,00,00	"	"	"	" .620	3.17	+.16	07,07,08,09
"	"	"	" .640	8.09	+.02	02,02,01,01	"	"	"	8204.636	3.20	+.16	04,04,03,03
"	"	"	6104.575	8.22	-.15	04,04,01,01	"	"	"	" .643	3.17	+.12	01,02,02,03
"	"	03	6158.632	8.50	-.29	02,02,00,01	"	"	09	8308.529	3.11	+.16	05,06,04,04
"	"	"	" .638	8.49	-.26	03,02,00,00	"	"	"	" .541	3.05	+.20	02,03,03,03
"	"	"	6180.592	8.63	-.30	03,03,04,04	"	"	"	8395.625	3.15	+.36	07,06,09,10
"	"	"	" .598	8.57	-.26	03,02,01,01	"	"	"	" .632	3.18	+.16	06,06,01,01
"	"	"	6185.596	8.64	-.35	04,04,02,03	"	"	"	8584.655	2.91	+.17	06,06,02,02
"	"	"	" .603	8.54	-.23	02,02,02,02	"	"	"	" .661	2.85	+.17	02,02,05,04
"	"	"	" .613	8.58	-.28	02,01,06,05	"	"	"	8585.641	2.95	+.19	01,01,05,05
"	"	"	6408.634	8.38	-.05	02,02,02,02	"	"	"	" .647	2.91	+.17	03,02,09,09
"	"	"	" .640	8.40	-.07	03,03,03,03	"	"	10	8767.608	3.39	+.43	02,03,01,01
"	"	"	6426.633	8.38	+.27	01,02,00,00	"	"	"	" .615	3.35	+.48	02,01,00,01
"	"	"	" .639	8.33	+.18	02,01,00,01	"	"	11	9343.574	3.13	+.24	02,03,04,03
"	"	04	6752.656	8.52	-.01	01,00,02,02	"	"	"	9384.575	3.32	+.26	01,00,07,08

Des.	Name.	Yr.	Julian Day.	Magn.	A-B	Residuals.	Des.	Name.	Yr.	Julian Day.	Magn.	A-B	Residuals.
045443	ϵ Aurigae	11	9390.510	3.23	+ .20	12,11,01,01	052600	δ Orionis	08	8283.633	2.23	+ .04	01,02,01,02
"	"	12	9673.592	3.15	+ .39	14,15,05,05	"	"	"	8284.591	2.29	+ .08	01,00,02,01
"	"	"	9690.579	3.25	+ .35	10,10,10,10	"	"	"	.599	2.27	- .01	02,02,03,04
"	"	"	9704.602	4.67	+ .25	09,09,02,02	"	"	"	.607	2.28	- .10	02,03,01,02
"	"	"	.612	4.61	+ .39	02,02,04,04	"	"	"	8285.534	2.29	+ .01	03,03,00,00
"	"	"	9705.592	4.75	+ .33	04,03,02,02	"	"	"	.542	2.27	+ .04	02,03,04,04
052600	δ Orionis	08	8043.534	2.46	+ .22	20,21,08,07	"	"	"	.549	2.27	+ .08	03,02,00,00
"	"	"	.545	2.39	+ .19	05,06,02,02	"	"	"	8286.590	2.25	.00	03,02,03,04
"	"	"	8045.534	2.45	+ .20	04,03,00,01	"	"	"	.596	2.27	- .03	02,02,03,02
"	"	"	.582	2.43	+ .11	01,01,07,08	"	"	"	.604	2.27	+ .04	00,01,01,00
"	"	"	8046.517	2.33	- .04	03,02,03,02	"	"	"	8828.583	2.29	+ .05	01,01,01,02
"	"	"	.525	2.31	+ .07	01,01,00,00	"	"	"	.589	2.29	+ .03	02,02,02,03
"	"	"	8048.516	2.31	+ .01	03,03,07,08	"	"	"	.595	2.32	+ .02	01,00,01,01
"	"	"	.525	2.37	- .04	04,04,06,07	"	"	"	8291.577	2.26	+ .02	02,01,01,00
"	"	"	8049.525	2.35	+ .07	00,00,04,04	"	"	"	.587	2.26	+ .06	04,04,00,01
"	"	"	.532	2.38	+ .06	01,00,04,03	"	"	"	.596	2.26	+ .06	01,01,01,02
"	"	"	8053.519	2.50	+ .06	04,04,01,01	"	"	"	8292.595	2.21	+ .09	03,02,02,02
"	"	"	.527	2.48	+ .02	01,01,02,03	"	"	"	.601	2.23	+ .05	02,03,02,02
"	"	"	8054.517	2.57	- .04	03,02,03,03	"	"	"	.608	2.23	+ .04	01,01,00,01
"	"	"	.526	2.60	- .03	06,07,02,02	"	"	"	8293.549	2.18	+ .06	02,02,01,01
"	"	"	8056.522	2.49	+ .01	08,08,02,02	"	"	"	.584	2.19	.00	01,00,00,01
"	"	"	8061.523	2.51	+ .05	03,03,01,02	"	"	"	8295.546	2.19	+ .01	01,00,02,02
"	"	"	8063.524	2.35	- .27	12,11,02,02	"	"	"	.553	2.19	+ .04	01,01,05,04
"	"	"	8259.642	2.38	+ .02	04,04,03,02	"	"	"	8297.541	2.24	+ .10	03,03,00,01
"	"	"	.648	2.35	- .01	07,07,09,09	"	"	"	.547	2.24	+ .08	00,00,00,00
"	"	"	8262.646	2.54	+ .02	03,02,03,02	"	"	"	8299.577	2.29	+ .02	02,02,02,02
"	"	"	.652	2.44	+ .06	01,00,09,08	"	"	"	.586	2.27	+ .11	02,02,02,03
"	"	"	8266.650	2.48	+ .06	08,09,02,01	"	"	"	.598	2.27	+ .01	04,04,01,01
"	"	"	.656	2.50	+ .14	08,08,09,08	"	"	"	8302.566	2.22	+ .02	02,03,02,03
"	"	"	8267.645	2.44	+ .12	03,03,08,08	"	"	"	.574	2.23	+ .04	04,03,02,03
"	"	"	.650	2.33	+ .13	02,03,02,02	"	"	"	.582	2.28	+ .04	03,03,02,02
"	"	"	8269.629	2.25	+ .12	02,01,01,02	"	"	"	.594	2.24	+ .06	02,01,05,04
"	"	"	.635	2.22	+ .06	03,04,03,03	"	"	"	8304.564	2.24	- .02	02,03,03,03
"	"	"	8270.627	2.23	- .04	03,03,01,00	"	"	"	8305.556	2.21	+ .08	01,00,03,02
"	"	"	.634	2.19	- .03	02,02,05,05	"	"	"	.563	2.22	- .02	02,01,05,05
"	"	"	8274.629	2.31	+ .03	09,10,02,02	"	"	"	.570	2.22	+ .02	02,02,05,04
"	"	"	.647	2.31	- .05	01,01,03,02	"	"	"	8307.526	2.21	.00	00,01,01,02
"	"	"	8277.629	2.31	+ .03	06,05,02,02	"	"	"	.533	2.22	- .02	01,01,01,00
"	"	"	.637	2.29	- .04	02,02,00,01	"	"	"	.540	2.19	+ .04	03,03,01,00
"	"	"	.649	2.31	.00	02,01,01,01	"	"	09	8308.582	2.13	- .05	02,03,02,02
"	"	"	8278.600	2.25	- .07	01,02,02,02	"	"	"	.603	2.14	+ .02	02,02,01,02
"	"	"	.608	2.27	- .03	00,00,02,02	"	"	"	.608	2.14	- .02	01,00,00,00
"	"	"	8279.597	2.23	.00	01,00,02,03	"	"	"	8309.563	2.14	- .02	03,04,02,03
"	"	"	.604	2.21	+ .01	01,01,01,00	"	"	"	.571	2.13	+ .05	02,02,00,00
"	"	"	8281.587	2.22	+ .02	02,02,01,02	"	"	"	.579	2.12	+ .02	00,01,01,00
"	"	"	.595	2.22	- .02	03,02,02,03	"	"	"	8313.521	2.15	+ .07	02,03,00,00
"	"	"	.602	2.23	+ .05	02,02,02,02	"	"	"	.526	2.13	.00	01,00,01,00
"	"	"	8283.613	2.27	+ .12	01,00,02,03	"	"	"	.534	2.13	+ .08	00,01,01,00
"	"	"	.621	2.25	+ .05	01,02,01,01	"	"	"	8314.518	2.17	.00	02,03,03,03
"	"	"	.627	2.28	+ .12	01,01,01,01	"	"	"	.527	2.19	+ .02	01,01,02,02

OBSERVATIONS OF VARIABLES.

Des.	Name.	Yr.	Julian Day.	Magn.	A-B	Residuals.	Des.	Name.	Yr.	Julian Day.	Magn.	A-B	Residuals.
052600	δ Orionis	09	8314.536	2.18	.00	00,00,01,01	052600	δ Orionis	09	8358.559	2.17	+.03	01,01,01,01
"	"	"	8318.533	2.20	-.02	01,00,02,03	"	"	"	8360.541	2.18	+.02	00,00,01,01
"	"	"	" .539	2.19	+.04	00,00,00,00	"	"	"	" .548	2.21	.00	01,01,03,03
"	"	"	" .544	2.21	-.04	02,01,01,01	"	"	"	" .557	2.21	+.04	01,01,03,03
"	"	"	8322.520	2.15	.00	05,05,00,01	"	"	"	8363.524	2.23	-.03	02,02,02,02
"	"	"	" .526	2.13	-.01	02,02,02,02	"	"	"	" .534	2.20	.00	03,03,03,03
"	"	"	" .534	2.15	+.01	01,01,01,00	"	"	"	" .550	2.23	.00	03,02,00,01
"	"	"	8327.519	2.20	-.10	01,02,04,03	"	"	"	8364.518	2.20	+.10	02,01,01,00
"	"	"	" .525	2.19	+.06	02,02,03,03	"	"	"	" .526	2.20	+.02	00,01,01,01
"	"	"	" .532	2.20	.00	00,00,02,02	"	"	"	" .535	2.21	.00	01,00,01,01
"	"	"	8332.510	2.17	-.05	04,04,02,01	"	"	"	8367.524	2.21	+.08	01,02,00,00
"	"	"	" .516	2.19	+.05	00,00,01,01	"	"	"	" .531	2.20	+.02	02,01,01,02
"	"	"	" .523	2.17	-.04	02,03,01,00	"	"	"	" .547	2.17	+.05	04,03,04,04
"	"	"	" .534	2.15	+.09	04,05,00,00	"	"	"	8371.543	2.20	+.06	02,01,02,03
"	"	"	8333.517	2.18	+.06	01,01,00,00	"	"	"	" .550	2.20	+.10	01,02,01,02
"	"	"	" .524	2.16	-.02	04,03,03,02	"	"	"	" .558	2.19	+.08	03,04,02,03
"	"	"	8335.616	2.23	+.07	05,05,02,02	"	"	"	8372.523	2.20	-.10	01,01,01,01
"	"	"	" .622	2.21	.00	02,03,00,01	"	"	"	" .530	2.21	.00	01,01,02,03
"	"	"	8339.540	2.26	+.06	03,04,03,04	"	"	"	" .539	2.22	+.10	01,01,01,02
"	"	"	" .550	2.27	+.01	01,01,03,02	"	"	"	8374.526	2.24	+.02	03,04,00,00
"	"	"	" .562	2.25	-.01	01,01,02,01	"	"	"	8377.519	2.23	+.04	01,02,03,02
"	"	"	8341.518	2.25	.00	01,02,02,02	"	"	"	" .528	2.24	-.06	03,03,02,03
"	"	"	" .525	2.23	+.05	00,00,00,00	"	"	"	8378.517	2.18	+.06	03,03,02,01
"	"	"	" .535	2.24	+.02	03,02,00,00	"	"	"	" .523	2.21	+.08	03,02,01,00
"	"	"	8342.606	2.22	+.02	02,03,00,01	"	"	"	8383.516	2.20	+.10	02,01,02,01
"	"	"	8344.519	2.20	+.02	01,00,02,01	"	"	"	" .525	2.20	+.10	04,05,02,01
"	"	"	" .530	2.20	+.06	00,00,02,03	"	"	"	8386.530	2.21	+.04	03,03,00,00
"	"	"	" .539	2.17	+.04	01,01,00,00	"	"	"	" .537	2.23	+.05	04,04,03,02
"	"	"	8346.522	2.17	+.03	02,02,03,03	"	"	"	8388.524	2.21	+.06	04,04,00,00
"	"	"	" .529	2.17	+.03	04,04,02,01	"	"	"	" .533	2.19	+.03	03,02,03,03
"	"	"	8349.525	2.15	+.04	03,03,02,01	"	"	"	8389.532	2.23	+.14	02,02,02,02
"	"	"	" .531	2.17	+.05	00,00,04,05	"	"	"	" .539	2.25	+.09	04,04,05,05
"	"	"	8350.547	2.15	+.08	03,03,02,01	"	"	"	8392.570	2.22	+.08	01,01,00,00
"	"	"	" .563	2.16	-.02	02,01,02,01	"	"	"	8395.524	2.21	+.11	04,04,00,01
"	"	"	8351.513	2.24	+.06	01,01,02,01	"	"	"	" .532	2.21	+.13	00,00,01,01
"	"	"	" .519	2.23	+.08	01,01,02,03	"	"	"	8398.520	2.20	+.02	04,04,00,00
"	"	"	" .526	2.25	+.11	03,03,01,01	"	"	"	" .526	2.19	+.08	01,01,02,01
"	"	"	" .618	2.29	+.03	00,00,03,02	"	"	"	8405.511	2.17	-.08	01,02,03,03
"	"	"	" .623	2.27	.00	03,02,00,01	"	"	"	" .516	2.21	+.12	07,08,11,11
"	"	"	" .635	2.29	+.04	01,00,01,01	"	"	"	8656.579	2.19	-.05	07,07,04,03
"	"	"	8355.522	2.23	+.08	01,00,01,01	"	"	"	" .584	2.21	-.04	04,05,01,01
"	"	"	" .530	2.22	+.06	00,00,02,01	"	"	"	8657.567	2.20	-.06	00,01,11,11
"	"	"	" .538	2.26	+.02	02,02,01,02	"	"	"	8662.625	2.23	.00	02,03,04,03
"	"	"	" .556	2.21	+.02	02,02,02,02	"	"	"	8664.626	2.23	-.03	00,00,02,01
"	"	"	" .580	2.23	+.01	01,00,00,00	"	"	"	8665.640	2.19	+.03	04,04,04,04
"	"	"	8356.529	2.18	-.02	02,01,00,01	"	"	"	8668.520	2.25	+.05	01,01,03,03
"	"	"	" .542	2.21	+.08	01,00,03,02	"	"	"	" .532	2.21	+.05	00,00,05,05
"	"	"	" .549	2.21	+.07	00,00,04,04	"	"	"	8669.502	2.25	-.05	01,01, A
"	"	"	8358.524	2.15	+.04	03,02,00,01	"	"	"	8672.595	2.23	+.07	00,01,00,00
"	"	"	" .536	2.16	-.02	02,01,02,03	"	"	10	8676.584	2.22	.00	02,02,03,03

Des.	Name.	Yr.	Julian Day.	Magn.	A-B	Residuals.	Des.	Name.	Year	Julian Day.	Magn.	A-B	Residuals.
052600	δ Orionis	10	8680.616	2.21	-.05	00,00,01,02	054130	— Aurigae	02	6064.676	9.27	+.03	03,02,01,01
"	"	"	8682.621	2.24	+.08	05,05,02,02	"	"	03	6159.625	9.28	-.14	02,03,02,02
"	"	"	8683.645	2.23	-.01	05,05,00,00	"	"	"	.632	9.25	-.11	03,03,00,01
"	"	"	8684.646	2.20	+.02	01,01,03,02	"	"	"	6187.640	9.34	-.22	02,01,01,02
"	"	"	8685.541	2.20	+.06	01,00,02,02	"	"	"	.648	9.35	-.21	04,04,02,01
"	"	"	8687.598	2.28	+.02	03,02,03,03	"	"	06	7304.601	9.33	-.13	03,03,03,03
"	"	"	8698.648	2.23	+.01	01,00,04,04	060426	TU Gemin.	02	6108.644	9.06	-.09	03,04,05,05
"	"	"	8705.585	2.22	+.06	00,01,03,04	"	"	"	.654	9.04	-.07	05,05,01,01
"	"	"	8710.546	2.33	-.04	04,04,05,04	"	"	03	6128.554	8.70	+.20	00,00,04,05
"	"	"	8746.650	2.27	-.04	05,06,01,01	"	"	"	.563	8.68	+.11	01,00,02,02
"	"	"	8993.582	2.39	+.04	04,05,05,05	"	"	"	6174.642	8.58	+.07	02,01,01,01
"	"	"	.590	2.38	+.06	01,02,04,03	"	"	"	.651	8.55	+.10	01,00,03,04
"	"	"	8995.600	2.42	+.02	11,10,04,05	"	"	05	6895.637	8.33	+.10	01,01,03,03
"	"	"	.606	2.35	-.01	13,13,03,04	"	"	"	6897.648	8.32	+.16	05,04,00,01
"	"	"	9002.551	2.33	-.12	07,06,03,02	"	"	"	6955.595	8.12	+.19	02,02,03,03
"	"	"	.558	2.27	-.07	09,09,05,05	060521	TV Gemin.	02	6104.596	7.23	-.09	02,03,06,06
"	"	"	.566	2.44	-.06	05,05,01,01	"	"	"	.603	7.25	-.20	09,10,01,02
"	"	"	.574	2.42	-.02	09,08,07,06	"	"	03	6131.586	7.28	-.26	09,08,01,01
"	"	"	.583	2.41	+.09	03,03,05,05	"	"	"	.628	7.27	-.21	03,02,00,00
"	"	"	9006.555	2.24	-.02	08,08,04,05	"	"	"	6159.658	7.03	-.24	02,01,02,01
"	"	"	.560	2.31	-.05	06,07,02,02	"	"	"	.663	7.07	-.28	02,01,00,01
"	"	"	.568	2.33	+.04	07,07,00,00	"	"	"	6188.592	7.18	-.22	02,02,00,01
"	"	"	9008.583	2.25	+.12	01,02,05,04	"	"	"	.600	7.19	-.25	00,00,03,02
"	"	"	.588	2.31	-.01	01,01,01,02	"	"	"	6456.643	7.07	+.27	07,07,03,03
"	"	"	9009.587	2.25	+.15	04,03,03,03	"	"	04	6570.613	7.33	-.27	05,05,04,04
"	"	"	.593	2.27	+.05	02,02,01,00	"	"	"	6755.642	7.08	-.22	00,01,07,07
"	"	"	9015.534	2.27	+.07	06,07,08,08	"	"	"	6769.670	7.06	-.18	04,04,09,08
"	"	"	.542	2.28	+.04	06,06,02,02	"	"	"	.676	7.11	-.35	05,06,03,03
"	"	"	.552	2.29	-.04	05,04,01,02	"	"	"	6786.598	7.16	-.04	04,04,02,02
"	"	"	9016.521	2.34	-.06	09,08,05,06	"	"	"	.606	7.19	+.03	03,03,00,00
"	"	"	.534	2.31	+.05	00,00,01,02	"	"	"	6794.629	7.23	-.27	08,08,05,06
"	"	"	9018.515	2.32	+.06	00,01,07,06	"	"	"	6800.615	7.27	-.09	04,04,00,00
"	"	"	.521	2.35	+.21	06,07,04,04	"	"	"	6804.610	7.18	-.18	04,05,04,04
"	"	"	.531	2.25	+.14	04,04,00,00	"	"	"	.617	7.16	-.30	01,02,02,03
"	"	"	9022.533	2.43	+.16	04,04,01,00	"	"	"	6811.623	7.29	-.08	05,06,01,01
"	"	"	.539	2.41	.00	01,02,01,02	"	"	"	6816.640	7.29	-.04	07,08,01,00
"	"	"	.552	2.34	+.06	04,05,04,05	"	"	"	6828.637	7.37	+.01	09,08,02,02
"	"	11	9399.555	2.24	+.06	01,00,00,01	"	"	"	6836.654	7.27	-.36	01,02,01,01
"	"	"	9400.547	2.28	-.18	00,01,05,04	"	"	05	6856.606	7.20	-.10	02,02,05,05
"	"	"	.551	2.33	-.07	02,02,06,06	"	"	"	6877.652	7.01	+.04	01,01,03,03
"	"	12	9403.560	2.19	+.03	04,04,01,01	"	"	"	6879.661	6.79	+.01	04,04,03,04
"	"	"	9405.506	2.22	+.06	05,04,05,05	"	"	"	6880.512	7.01	-.07	03,03,04,04
"	"	"	9426.584	2.33	-.19	03,04,00,00	"	"	"	.532	7.00	-.02	01,00,01,01
"	"	"	9427.570	2.21	-.05	07,07,06,05	"	"	"	.653	6.99	-.21	05,04,00,00
"	"	"	9460.563	2.23	-.17	03,04,01,01	"	"	"	.669	6.97	+.13	01,01,02,02
"	"	"	9464.558	2.17	-.04	05,04,02,03	"	"	"	6881.523	6.97	-.04	05,04,01,00
"	"	"	9467.569	2.15	.00	07,07,05,06	"	"	"	.533	6.97	-.05	02,03,01,01
054130	— Aurigae	02	6044.636	8.98	-.18	01,01,01,00	"	"	"	6884.660	6.82	+.18	04,04,05,05
"	"	"	.646	8.97	-.11	00,00,03,02	"	"	"	.666	6.86	+.06	02,01,04,05
"	"	"	6064.668	9.23	+.08	01,00,02,01	"	"	"	6885.612	7.03	-.06	00,00,02,02

Des.	Name.	Yr.	Julian Day.	Magn.	A-B	Residuals.	Des.	Name.	Yr.	Julian Day.	Magn.	A-B	Residuals.
060521	TV Gemin.	05	6887.646	6.90	+ .02	03,02,03,02	062938	UU Aurigae	07	7865.623	5.60	+ .36	04,04,01,02
"	"	"	" .653	6.87	.00	02,01,02,02	"	"	"	7922.579	5.58	+ .12	08,07,01,01
"	"	"	6890.658	6.88	- .22	03,02,01,00	"	"	08	7952.545	5.68	+ .03	03,04,09,09
"	"	"	6898.642	6.77	- .12	03,03,01,01	"	"	"	8013.657	5.77	- .06	00,01,05,04
"	"	"	6906.628	6.67	- .09	01,00,03,03	"	"	"	8039.593	5.92	+ .06	06,06,10,10
"	"	"	6918.663	6.57	- .19	02,02,03,04	"	"	"	8046.634	5.99	+ .10	03,03,00,00
"	"	"	6953.531	6.63	- .27	01,01,02,01	"	"	"	8076.584	6.02	+ .29	01,01,00,00
"	"	"	7174.607	7.09	- .48	06,06,03,02	"	"	"	8250.613	5.54	+ .20	02,03,09,08
"	"	"	7181.636	7.00	- .34	04,05,05,05	"	"	"	8278.569	5.74	+ .13	06,06,01,02
061914	- Orionis	05	7135.684	6.30	+ .28	02,03,02,03	"	"	"	" .580	5.76	+ .19	09,09,03,02
"	"	"	7187.635	6.16	+ .27	03,04,07,07	"	"	09	8309.529	5.78	+ .27	02,01,01,01
"	"	"	7198.606	6.22	+ .32	03,03,04,04	"	"	"	" .541	5.75	+ .18	05,05,02,01
"	"	06	7240.540	6.55	+ .18	05,06,09,08	"	"	"	8371.638	5.70	- .35	02,02,05,04
"	"	"	7244.644	6.51	+ .18	04,05,05,04	"	"	"	8431.620	5.65	+ .02	03,03,05,05
"	"	"	7259.626	6.36	+ .12	01,00,05,05	"	"	"	8605.612	5.84	+ .15	03,03,01,01
"	"	"	7275.612	6.31	+ .14	01,01,01,02	"	"	"	8637.587	5.76	+ .16	04,05,02,01
"	"	"	7283.552	6.40	+ .13	05,05,03,03	"	"	"	8752.618	5.69	+ .14	02,02,02,01
"	"	"	7301.604	6.36	+ .01	01,00,03,03	"	"	12	9427.515	5.95	+ .38	00,00,01,00
"	"	"	7334.602	6.26	+ .28	02,02,01,01	"	"	"	" .521	5.89	+ .36	00,00,01,01
"	"	"	7521.547	6.34	+ .08	03,04,02,03	"	"	"	9436.512	5.86	+ .19	03,03,01,01
"	"	"	7573.567	6.46	+ .60	07,07,02,01	"	"	"	" .519	5.83	+ .30	02,03,00,01
"	"	07	7598.674	6.49	+ .12	00,00,02,02	"	"	"	9438.511	5.85	+ .22	07,06,02,01
"	"	"	7632.550	6.39	+ .06	06,05,05,04	"	"	"	" .517	5.81	+ .18	02,01,02,03
"	"	"	7690.574	6.33	+ .18	02,01,05,06	063531	- Gemin.	05	7136.662	8.78	+ .01	01,02,01,01
"	"	"	7931.643	5.87	+ .36	04,03,01,01	"	"	"	7187.667	8.75	- .18	02,02,01,00
"	"	08	7954.579	5.93	+ .40	06,06,02,02	"	"	06	7290.656	8.61	+ .14	05,05,01,02
"	"	"	7990.625	6.35	- .10	04,04,03,03	"	"	"	7332.616	8.40	+ .44	02,03,04,03
"	"	"	8012.532	6.32	- .01	02,02,00,00	"	"	"	7523.653	8.67	- .02	06,06,04,03
"	"	"	8041.618	6.26	+ .05	03,03,01,02	"	"	07	7664.593	8.56	+ .23	02,02,06,06
"	"	09	8309.652	6.29	+ .22	02,01,03,03	"	"	"	7927.571	8.55	- .14	01,00,06,05
"	"	"	8371.598	6.20	+ .16	00,00,03,03	"	"	08	8015.572	8.61	+ .14	04,05,04,05
"	"	"	8665.591	6.14	+ .31	02,01,04,04	"	"	09	8606.616	8.62	- .08	06,06,00,01
"	"	10	8752.640	5.92	+ .04	04,03,01,02	064804	- Monoc.	06	7284.584	8.81	- .22	05,05,06,05
"	"	12	9427.552	4.73	+ .54	13,13,04,05	"	"	"	7287.665	8.78	- .21	05,05,02,02
062938	UU Aurigae	05	7129.672	5.94	+ .12	00,01,04,05	"	"	07	7633.527	8.58	+ .17	06,05,01,01
"	"	"	7131.617	5.96	+ .16	00,01,06,07	"	"	08	7983.539	8.92	- .12	07,07,01,00
"	"	"	7160.672	6.20	+ .21	01,01,02,02	073102	- Can. Min.	06	7275.577	9.14	+ .04	02,01,02,03
"	"	"	7161.641	6.20	+ .33	02,02,02,02	"	"	"	7276.617	9.08	+ .03	01,01,03,03
"	"	"	7185.647	6.34	+ .27	03,02,02,02	"	"	"	7304.631	8.90	.00	02,02,02,02
"	"	"	7200.591	6.34	+ .27	05,05,02,01	"	"	"	7339.565	8.68	+ .19	02,03,02,02
"	"	06	7259.665	5.80	+ .17	05,06,01,01	"	"	07	7599.632	8.77	+ .24	01,01,05,05
"	"	"	7270.663	5.84	+ .04	04,05,00,01	"	"	"	7628.584	8.86	+ .05	00,01,06,06
"	"	"	7301.640	5.80	+ .11	04,05,03,03	"	"	"	7665.529	8.95	+ .22	01,00,01,00
"	"	"	7331.537	5.84	+ .32	01,01,02,02	"	"	08	7944.640	9.04	+ .09	04,04,02,03
"	"	"	7510.615	5.55	+ .10	04,04,05,04	"	"	"	8010.600	8.81	+ .16	07,07,03,03
"	"	"	7539.623	5.64	+ .08	05,05,06,05	"	"	"	8039.615	8.96	+ .04	03,02,02,01
"	"	"	7573.621	5.81	+ .42	04,03,03,04	"	"	09	8344.571	9.08	+ .25	05,05,03,04
"	"	07	7632.624	6.38	+ .09	02,02,03,03	"	"	"	8372.576	9.02	+ .29	00,00,04,04
"	"	"	7660.621	6.45	+ .14	01,02,05,04	081403	RY Hydrae	03	6127.626	9.68	+ .05	07,07,02,03
"	"	"	7690.594	6.02	+ .24	03,04,09,08	"	"	"	" .636	9.66	+ .11	01,01,07,07

Des.	Name.	Yr.	Julian Day.	Magn.	A-B	Residuals.	Des.	Name.	Yr.	Julian Day.	Magn.	A-B	Residuals.
081403	RY Hydrae	03	6132.668	9.86	-.11	02,02,02,02	103867	-Ursae Maj.	06	7432.618	6.78	+.12	03,02,05,04
"	"	"	" .673	9.84	-.08	04,05,07,08	"	"	"	7457.665	6.59	+.34	04,04,02,02
"	"	"	6158.534	10.04	-.16	06,06,01,02	"	"	"	7488.578	6.52	+.33	01,01,08,07
"	"	"	" .541	9.95	-.14	02,03,01,01	"	"	"	7525.628	6.60	+.13	02,02,04,04
"	"	"	" .552	9.99	-.08	02,02,00,00	"	"	"	7573.598	6.51	-.22	09,09,02,03
"	"	04	6544.619	8.72	.00	02,03,03,03	"	"	07	7602.538	6.52	-.16	04,03,04,03
"	"	"	" .627	8.70	-.13	03,03,01,02	"	"	"	7660.532	6.86	-.08	05,05,04,04
"	"	05	6953.656	9.71	+.34	02,02,00,00	"	"	"	7739.664	6.60	+.05	03,03,02,02
"	"	"	6954.619	9.69	+.22	04,05,02,03	"	"	"	7782.563	6.74	+.20	08,08,02,02
084917	X Cancri	03	6155.548	6.56	+.33	02,03,01,01	"	"	08	7951.628	6.51	+.02	04,04,06,06
"	"	"	" .555	6.52	+.36	05,04,03,03	"	"	"	8015.542	6.66	.00	09,09,03,02
090151	V Ursae Maj.	04	6621.628	10.51	+.12	04,03,05,04	"	"	09	8372.619	6.73	-.10	10,09,05,04
"	"	"	" .635	10.55	+.09	01,01,04,04	"	"	"	8488.604	6.68	+.41	05,04,05,05
"	"	"	6622.579	10.51	+.10	01,01,02,02	"	"	12	9464.538	6.42	-.19	00,01,02,02
"	"	"	" .586	10.55	+.11	07,06,06,06	122001	SS Virginis	03	6176.663	7.66	-.27	03,03,02,02
"	"	"	6625.570	10.67	+.05	02,03,04,04	"	"	"	" .668	7.64	-.24	01,01,02,01
"	"	"	" .584	10.70	+.12	05,05,04,04	"	"	"	6177.628	7.56	-.15	05,05,01,01
"	"	"	6628.567	10.65	+.07	06,06,07,07	"	"	"	" .634	7.58	-.11	02,01,04,04
"	"	"	" .576	10.66	+.02	05,05,02,02	"	"	"	6253.642	7.23	-.24	02,02,01,01
"	"	"	6632.602	10.74	+.14	03,04,01,02	"	"	"	" .649	7.28	-.29	00,01,03,03
"	"	"	6643.580	10.75	+.07	01,00,01,01	"	"	"	6265.637	7.22	-.44	01,00,02,03
"	"	"	" .589	10.75	.00	06,06,04,04	"	"	"	" .644	7.32	-.36	00,01,02,03
"	"	"	6649.592	10.77	+.12	05,06,09,08	"	"	"	" .654	7.30	-.37	01,01,00,00
"	"	"	" .601	10.79	+.19	02,02,04,04	"	"	04	6629.604	7.34	+.33	05,05,02,02
094501	-Sextantis	06	7252.616	9.00	+.12	04,05,03,02	"	"	"	" .608	7.34	+.25	03,02,02,02
"	"	"	7259.583	9.03	+.14	05,04,00,01	"	"	05	6989.665	7.68	-.11	02,02,06,06
"	"	"	7303.643	9.28	+.04	04,03,01,00	124045	60B Can. Ven.	"	7122.572	5.75	+.19	01,01,00,01
"	"	"	7318.654	9.21	+.06	04,05,02,02	"	"	"	7124.523	5.69	+.11	07,08,06,06
"	"	"	7321.618	9.20	+.04	05,04,07,08	"	"	06	7252.571	5.63	-.01	07,07,03,03
"	"	"	7339.595	9.06	+.18	05,05,02,02	"	"	"	7307.601	5.73	+.05	01,00,00,00
"	"	"	7353.556	8.94	+.03	00,00,05,05	"	"	"	7398.621	5.57	+.29	01,01,04,04
"	"	07	7597.634	9.28	+.24	01,01,03,02	"	"	"	7460.542	5.77	+.09	02,02,02,02
"	"	"	7628.612	9.12	-.04	07,06,04,03	"	"	08	7983.606	5.69	+.12	06,05,05,05
"	"	"	7660.576	9.18	+.12	02,02,07,08	"	"	"	8013.607	5.89	+.04	11,11,00,00
"	"	08	7955.657	9.02	+.16	00,01,08,09	"	"	09	8491.606	5.68	+.38	02,02,03,02
"	"	"	8020.648	9.26	.00	01,00,04,05	"	"	10	8750.631	6.16	+.30	05,06,00,00
"	"	"	8027.622	9.34	+.05	02,02,03,03	"	"	"	8844.598	5.87	+.33	01,01,05,05
"	"	"	8046.605	9.24	+.15	02,02,05,05	"	"	"	" .605	5.85	+.17	07,07,01,01
"	"	09	8339.631	9.00	+.05	07,07,02,02	"	"	"	" .615	5.88	+.30	03,02,04,05
"	"	"	8398.583	8.98	+.08	02,03,01,02	"	"	"	" .623	5.85	+.16	01,02,09,08
103867	-Ursae Maj.	06	7245.646	6.63	-.06	05,05,01,01	125438	-Can. Ven.	06	7284.622	9.42	-.22	04,04,04,05
"	"	"	7247.605	6.64	-.08	04,03,00,00	"	"	"	7308.620	9.25	-.11	07,06,03,03
"	"	"	7280.591	6.80	-.05	05,05,02,02	"	"	"	7322.574	9.35	-.36	03,02,04,04
"	"	"	7303.604	6.86	-.20	02,02,00,01	"	"	"	7332.535	9.46	-.38	01,00,03,04
"	"	"	7322.621	6.78	-.40	01,00,04,03	"	"	"	7391.671	9.53	-.17	01,01,05,06
"	"	"	7331.657	6.68	+.41	03,03,01,01	"	"	"	7459.534	9.67	-.20	01,02,03,02
"	"	"	7343.615	6.59	+.18	04,04,02,03	"	"	07	7599.672	9.34	-.26	05,05,05,06
"	"	"	7366.610	6.44	+.32	05,05,02,02	"	"	"	7630.591	9.51	-.17	02,02,02,03
"	"	"	7369.617	6.41	+.30	04,04,05,04	"	"	"	7665.564	9.54	-.34	00,01,05,05
"	"	"	7397.603	6.58	+.17	01,01,02,02	"	"	"	7748.613	9.49	-.17	05,05,08,08

Des.	Name.	Yr.	Julian Day.	Magn.	A-B	Residuals.	Des.	Name.	Yr.	Julian Day.	Magn.	A-B	Residuals.
125438	—Can. Ven.	08	7980.612	9.65	-.12	02,02,04,05	154428	R. Coronae	10	8802.571	8.77	+.16	02,03,00,01
"	"	10	8750.612	9.60	-.24	12,12,02,02	"	"	"	8803.590	8.65	+.29	04,04,03,03
125705	RT Virginis	11	9208.595	8.52	-.07	01,01,04,04	"	"	"	8804.599	8.63	+.40	10,11,01,00
"	"	"	9209.587	8.42	+.32	06,06,10,11	"	"	"	.604	8.61	+.13	00,00,11,10
130802	SW Virginis	03	6268.563	7.10	+.15	02,02,09,10	"	"	"	8806.590	8.57	+.48	06,06,10,11
"	"	"	.571	7.17	+.14	00,01,01,02	"	"	"	.594	8.66	+.50	11,11,02,01
"	"	"	6303.576	7.47	-.26	00,01,02,02	"	"	"	8808.587	8.49	+.33	05,05,02,03
"	"	"	.585	7.59	-.18	02,02,00,01	"	"	"	.593	8.49	+.33	04,04,05,06
"	"	"	.598	7.50	-.27	01,02,06,06	"	"	"	8809.592	8.51	+.20	09,10,02,02
"	"	04	6624.585	7.62	-.01	02,02,03,03	"	"	"	.598	8.43	+.17	05,05,04,04
"	"	"	6659.615	7.28	+.21	04,03,05,05	"	"	"	8810.565	8.41	+.20	02,01,05,06
"	"	"	.623	7.39	+.18	03,07,05,06	"	"	"	.572	8.45	+.08	01,00,02,02
"	"	"	.636	7.32	+.21	00,00,12,12	"	"	"	8844.648	7.85	-.12	01,00,06,06
"	"	05	6985.646	7.14	+.08	03,02,03,04	"	"	"	8845.567	7.88	+.24	07,07,03,03
154428	R. Coronae	03	6200.649	8.92	+.22	01,00,00,00	"	"	"	8846.658	7.73	-.32	06,05,10,10
"	"	"	6208.668	7.83	+.04	01,00,05,04	"	"	"	8847.569	7.73	+.31	04,04,01,01
"	"	"	.673	7.81	+.04	08,08,05,04	"	"	"	8852.649	7.59	-.32	01,01,01,00
"	"	"	6234.630	7.37	+.32	05,05,01,01	"	"	"	.656	7.57	-.48	02,02,06,06
"	"	"	.637	7.29	+.31	01,02,01,01	"	"	"	8858.646	7.37	-.48	07,06,04,05
"	"	"	.646	7.30	+.26	01,01,03,02	"	"	"	.653	7.40	-.46	02,02,01,02
"	"	"	6235.602	7.34	+.34	01,02,03,04	"	"	"	8873.629	7.40	-.22	02,03,03,02
"	"	"	.609	7.34	+.38	01,00,03,04	"	"	"	.636	7.35	-.30	02,02,02,02
"	"	"	6241.616	7.55	+.33	03,03,03,02	"	"	"	8881.617	7.11	-.33	01,00,01,01
"	"	"	.624	7.57	+.28	01,01,01,00	"	"	"	.621	7.17	-.28	08,08,06,05
"	"	"	6243.607	7.53	+.36	04,04,00,01	"	"	"	8882.642	7.10	-.23	06,07,03,03
"	"	"	.613	7.59	+.41	01,02,01,01	"	"	"	.648	7.03	-.13	04,04,05,05
"	"	"	6244.612	7.57	+.33	02,02,02,01	"	"	"	8883.644	7.12	-.26	00,00,02,03
"	"	"	.619	7.56	+.30	03,02,03,04	"	"	"	.649	7.09	-.20	02,01,06,05
"	"	"	6246.595	7.55	+.40	04,03,04,04	163172	R. Ursae Min.	02	6032.547	9.82	+.10	03,02,03,02
"	"	"	.602	7.59	+.39	00,01,01,01	"	"	"	.556	9.81	+.01	00,01,02,02
"	"	"	6247.601	7.53	+.37	06,05,01,01	"	"	"	6054.552	10.00	+.10	01,00,02,03
"	"	"	.608	7.56	+.38	03,02,07,06	"	"	"	.558	9.99	+.12	01,01,05,04
"	"	"	6248.594	7.51	+.43	04,04,05,05	"	"	"	6068.552	10.03	+.16	00,01,03,03
"	"	"	.601	7.55	+.40	01,00,03,02	"	"	"	.563	9.97	+.23	05,05,02,01
"	"	10	8782.570	10.05	+.43	08,09,03,03	"	"	"	6092.607	9.92	+.02	04,04,02,03
"	"	"	.576	10.10	+.26	02,01,16,16	"	"	"	.617	9.92	+.22	00,01,01,00
"	"	"	.586	10.08	+.18	09,10,10,09	"	"	03	6125.533	9.73	+.07	01,01,02,02
"	"	"	8789.578	9.59	+.28	09,08,01,01	"	"	"	.560	9.71	+.12	04,04,01,00
"	"	"	.585	9.59	+.25	08,08,03,02	"	"	"	6158.657	9.57	-.20	01,00,01,01
"	"	"	8790.572	9.54	+.06	07,08,06,06	"	"	"	.665	9.58	-.22	00,00,03,03
"	"	"	.580	9.51	+.23	04,04,02,02	"	"	"	6185.643	9.90	-.22	02,02,05,04
"	"	"	.588	9.49	+.15	03,03,00,01	"	"	"	.650	9.83	-.19	02,02,04,05
"	"	"	8792.584	9.43	+.16	04,05,04,04	"	"	"	6232.651	10.11	-.25	03,03,00,00
"	"	"	.592	9.39	+.18	02,02,03,03	"	"	"	.658	10.07	-.16	08,07,03,03
"	"	"	8797.594	9.05	+.04	06,05,06,05	"	"	"	6247.641	10.11	-.24	01,01,02,03
"	"	"	.598	9.05	+.04	01,01,01,00	"	"	"	.648	10.13	-.24	03,02,01,02
"	"	"	8798.608	9.11	-.17	03,03,03,02	"	"	"	6268.602	10.11	-.31	05,05,00,01
"	"	"	8799.593	8.98	-.20	01,01,01,01	"	"	"	.610	10.13	-.17	00,00,04,05
"	"	"	.604	8.97	-.05	04,03,01,01	182836	T Lyrae	03	6381.635	8.41	+.26	06,07,18,19
"	"	"	8802.564	8.74	+.28	01,01,00,00	"	"	"	.643	8.44	-.04	05,05,03,04

Des.	Name.	Yr.	Julian Day.	Magn.	A-B	Residuals.	Des.	Name.	Yr.	Julian Day.	Magn.	A-B	Residuals.
182836	T Lyrae	04	6625.627	8.89	-.14	06,06,08,07	184408	S Scuti	05	7024.656	6.99	-.21	03,03,04,03
"	"	"	" .632	8.91	-.26	05,06,01,00	"	"	"	7027.648	7.14	-.14	05,05,01,01
"	"	"	6647.570	9.02	-.23	10,10,02,01	"	"	"	7042.639	6.98	-.26	02,01,00,01
"	"	"	" .575	9.03	-.26	01,00,01,00	"	"	"	" .647	7.03	-.25	02,02,03,02
"	"	"	6731.668	8.95	+.06	00,00,03,02	191316	-Sagittarii	05	7131.539	7.12	-.01	07,07,00,01
"	"	"	6741.631	8.84	+.13	06,06,06,05	"	"	"	7135.579	7.16	-.17	00,00,04,03
"	"	"	6778.613	8.27	+.14	08,07,03,03	"	"	"	7160.530	7.25	-.30	02,03,03,03
"	"	"	" .623	8.29	+.02	07,07,02,01	"	"	"	7161.522	7.28	-.37	01,01,01,00
"	"	"	6783.576	8.43	+.18	01,02,03,04	"	"	06	7458.583	7.00	-.11	03,04,00,00
"	"	"	" .584	8.44	-.01	04,04,02,03	"	"	"	7462.579	6.98	+.20	00,00,03,02
"	"	"	6786.628	8.40	-.09	00,00,05,04	"	"	"	7488.539	6.87	-.30	08,07,02,02
"	"	"	" .635	8.38	-.07	06,06,01,01	"	"	09	8491.642	6.91	+.26	05,04,01,01
"	"	08	8048.645	8.74	-.27	06,07,00,00	193411	V Aquilae	03	6297.634	7.87	+.34	01,02,05,04
183936	-Lyrae	05	7122.609	8.26	+.17	02,02,01,01	"	"	"	" .645	7.86	+.35	05,06,03,03
"	"	"	7129.607	8.18	+.08	01,00,04,04	"	"	"	6305.581	7.08	+.32	03,03,02,01
"	"	"	7158.572	8.03	+.14	08,08,01,00	"	"	"	6306.564	7.23	+.34	04,04,00,01
"	"	"	7161.554	8.00	-.17	01,01,04,04	"	"	"	6307.554	7.26	+.28	02,02,03,03
"	"	06	7328.642	8.16	+.23	08,08,01,01	"	"	"	6366.641	7.50	-.11	05,05,05,06
"	"	"	7331.628	8.14	+.24	06,07,02,03	"	"	"	" .646	7.53	-.02	03,04,01,00
"	"	"	7366.572	8.24	+.25	04,03,02,02	"	"	"	6370.591	7.87	+.06	02,02,02,02
"	"	"	7377.566	8.34	-.12	05,05,00,00	"	"	"	" .597	7.90	-.17	01,01,01,00
"	"	"	7388.569	8.40	-.04	01,02,02,02	"	"	"	6372.635	7.66	-.24	01,02,03,02
"	"	"	7458.666	8.32	+.11	01,01,01,00	"	"	"	" .643	7.65	-.22	06,07,03,02
"	"	"	7486.617	8.26	+.16	06,05,03,04	"	"	"	6373.571	7.77	-.14	05,06,02,03
"	"	"	7511.592	8.26	-.01	03,04,07,07	"	"	"	" .580	7.82	-.03	00,00,02,01
"	"	"	7539.570	8.30	+.12	05,06,05,04	"	"	"	6379.549	7.49	-.10	05,04,00,01
"	"	07	7740.569	8.25	+.14	01,00,01,01	"	"	"	" .555	7.44	-.04	01,00,02,01
"	"	"	7838.630	8.16	+.13	00,01,13,13	"	"	"	" .629	7.71	+.02	03,02,03,02
"	"	08	8049.646	8.39	+.02	04,03,09,09	"	"	"	" .635	7.66	-.05	00,00,01,01
"	"	"	8251.565	8.36	-.05	03,03,00,00	"	"	"	6380.551	7.50	-.03	06,06,09,08
"	"	09	8584.615	8.08	+.04	01,02,03,03	"	"	"	" .557	7.48	-.11	01,02,00,00
"	"	"	8605.559	8.03	+.10	02,01,01,02	"	"	"	" .630	7.63	+.04	05,05,05,05
"	"	"	8638.540	7.94	+.18	03,03,03,03	"	"	"	" .636	7.56	+.01	01,01,01,02
"	"	10	8843.632	8.44	-.12	02,03,05,06	"	"	"	" .645	7.68	-.03	01,00,06,06
"	"	12	9673.569	8.47	-.10	11,10,07,07	"	"	04	6625.668	7.78	+.04	01,00,04,04
"	"	"	9692.617	8.44	-.13	08,08,04,04	"	"	"	" .672	7.78	+.09	05,04,02,02
184408	S Scuti	03	6299.675	7.00	-.30	01,02,01,02	"	"	"	6628.661	7.50	-.16	05,04,07,07
"	"	"	" .683	6.92	-.26	02,03,04,03	"	"	"	" .666	7.53	-.06	06,07,01,00
"	"	"	6360.666	7.23	+.12	02,02,06,07	"	"	"	6629.630	7.63	-.08	05,05,02,02
"	"	"	" .675	7.20	+.21	09,10,00,00	"	"	"	" .639	7.62	-.07	10,10,00,00
"	"	"	6365.627	7.20	+.18	07,07,00,00	"	"	"	" .653	7.56	-.14	04,04,03,04
"	"	"	" .634	7.12	+.22	02,02,02,02	"	"	"	6645.651	7.68	-.12	00,01,01,01
"	"	"	" .641	7.13	+.21	13,13,03,02	"	"	"	" .657	7.65	-.14	00,01,01,00
"	"	04	6734.607	7.15	+.27	08,07,01,01	"	"	"	6647.647	7.69	-.10	01,02,03,04
"	"	"	" .613	7.11	+.16	01,01,02,03	"	"	"	" .656	7.72	-.03	03,03,00,01
"	"	"	6741.603	7.11	+.20	02,02,00,00	"	"	"	6655.665	7.64	+.05	04,04,04,05
"	"	"	" .608	7.16	+.10	07,06,05,04	"	"	"	" .671	7.61	+.10	10,09,03,03
"	"	"	6760.584	7.33	-.04	03,04,01,00	"	"	"	6676.657	7.62	-.01	00,01,03,03
"	"	"	" .591	7.31	-.05	05,05,04,04	"	"	"	" .664	7.58	-.03	01,01,00,01
"	"	"	6782.557	7.36	-.02	07,06,03,02	"	"	"	6689.653	7.60	+.04	01,02,02,01

Des.	Name.	Yr.	Julian Day.	Magn.	A-B	Residuals.	Des.	Name.	Yr.	Julian Day.	Magn.	A-B	Residuals.
193411	V Aquilae	04	6689.664	7.72	+ .01	02,01,08,08	213735	-Pegasi	12	9692.597	6.72	+ .04	02,02,01,00
"	"	"	6730.620	7.94	.00	05,06,00,01	"	"	"	9694.623	6.58	.00	08,07,01,02
"	"	05	7012.605	7.58	+ .04	02,02,03,03	"	"	"	9697.612	6.64	+ .09	02,01,06,06
195609	-Aquilae	05	7122.671	8.89	- .04	01,00,05,04	214058	μ Cephei	02	5945.629	4.16	+ .47	01,00,00,00
"	"	"	7125.542	8.86	- .06	00,01,01,00	"	"	"	.635	4.02	+ .17	00,00,02,02
"	"	"	7129.640	8.84	- .14	01,01,07,06	"	"	"	6040.670	4.24	- .15	01,01,02,01
"	"	"	7158.606	8.84	- .16	01,01,04,04	"	"	"	.676	4.24	- .16	01,02,02,01
"	"	06	7411.661	8.99	+ .10	04,04,02,02	"	"	"	6062.581	4.51	- .12	05,05,03,03
"	"	"	7460.664	8.69	- .31	04,04,01,00	"	"	"	.594	4.46	- .16	03,04,03,03
"	"	"	7486.591	8.77	- .47	01,01,03,02	"	"	"	6092.640	4.41	- .02	07,07,02,02
"	"	"	7510.554	8.78	- .14	04,04,01,00	"	"	"	.647	4.46	+ .07	03,04,03,03
"	"	07	7776.582	9.08	- .10	04,04,07,06	"	"	03	6124.619	4.48	- .04	01,01,01,02
"	"	"	7866.595	8.83	- .31	04,04,03,03	"	"	"	.624	4.50	+ .09	01,01, A, R
"	"	08	8194.576	8.97	- .10	02,02,04,04	"	"	"	6153.529	4.31	- .12	02,02,01,01
200036	AA Cygni	03	6422.654	8.99	+ .20	02,01,01,00	"	"	"	.537	4.34	- .13	03,03,01,01
"	"	"	.662	8.95	+ .12	01,01,00,01	"	"	"	6160.530	4.31	- .10	05,04,05,04
"	"	"	6450.618	8.98	+ .30	02,01,00,01	"	"	"	.539	4.30	- .13	01,01,01,01
"	"	"	.626	8.92	+ .30	01,00,00,01	"	"	"	6246.672	4.06	+ .23	02,02,01,00
"	"	04	6785.589	9.54	+ .18	06,06,00,01	"	"	"	.679	4.10	+ .20	02,02,08,09
"	"	"	.599	9.57	+ .19	00,01,02,02	"	"	"	6268.662	4.08	+ .27	01,01,01,01
210116	RS Capric.	04	6734.662	8.69	+ .06	01,01,04,03	"	"	"	.669	4.15	+ .18	01,00,05,04
"	"	"	.668	8.70	- .12	00,01,05,05	"	"	"	6297.673	3.80	+ .32	06,07,01,01
"	"	"	6751.586	8.73	- .26	02,02,02,01	"	"	"	6412.606	4.04	+ .13	01,01,02,02
"	"	"	.592	8.73	- .18	02,02,04,03	"	"	"	.616	4.02	- .16	05,04,02,01
"	"	"	6780.585	8.48	+ .32	02,03,00,05	"	"	"	6439.652	3.98	- .11	02,02,02,02
"	"	"	.601	8.43	+ .29	01,01,03,03	"	"	"	.659	3.96	- .05	07,07,03,02
"	"	"	6782.589	8.39	+ .42	01,02,02,03	"	"	"	6453.650	3.97	- .38	02,02,01,00
"	"	05	7052.664	9.28	- .17	08,08,02,02	"	"	"	.657	3.95	- .38	01,00,04,03
213735	-Pegasi	05	7185.589	6.62	- .15	00,00,06,06	"	"	04	6484.564	4.18	- .12	05,06,06,07
"	"	"	7187.555	6.64	- .18	01,01,03,03	"	"	"	.569	4.21	- .14	07,06,01,02
"	"	"	7207.576	6.56	- .20	01,02,02,03	"	"	"	6507.640	4.11	- .06	00,00,01,01
"	"	06	7220.548	6.54	- .08	04,03,00,01	"	"	"	.649	4.04	- .09	01,00,05,05
"	"	"	7394.608	6.80	+ .11	02,01,02,02	"	"	"	.654	4.07	- .18	01,00,02,02
"	"	"	7422.642	6.88	+ .07	04,05,01,01	"	"	"	6641.600	4.10	- .17	10,09,04,04
"	"	"	7457.567	6.86	+ .08	05,05,06,07	"	"	"	.607	4.28	+ .24	06,06,06,07
"	"	"	7513.588	6.58	- .08	02,02,01,01	"	"	"	.618	4.24	- .12	00,00,06,07
"	"	"	7539.594	6.67	+ .10	02,02,03,03	"	"	"	6674.563	3.97	+ .66	01,00,00,01
"	"	07	7745.607	6.82	+ .04	08,09,06,05	"	"	"	6731.548	3.84	+ .12	09,09,08,09
"	"	"	7885.568	6.77	+ .16	03,03,06,06	"	"	"	6751.660	4.10	- .51	05,05,06,06
"	"	08	8188.545	6.68	- .22	12,12,05,05	"	"	"	6778.665	4.14	- .19	05,05,02,02
"	"	"	8284.539	6.61	- .06	11,10,08,08	"	"	"	.618	4.12	- .20	04,05,02,03
"	"	09	8488.637	6.35	+ .18	05,05,02,02	"	"	"	.624	4.17	- .10	08,07,00,01
"	"	"	8515.587	6.49	+ .22	09,08,01,01	"	"	"	6806.656	4.09	+ .06	03,02,01,02
"	"	"	8605.587	6.42	- .16	02,01,03,04	"	"	05	6895.533	4.24	- .03	05,05,00,00
"	"	"	8638.586	6.39	- .18	02,01,07,06	215363	+62° 2007	08	7971.532	5.78	+ .01	00,00,01,01
"	"	"	8665.552	6.54	- .01	00,00,04,04	"	"	"	.539	5.76	+ .08	06,06,10,11
"	"	11	9286.531	6.50	- .09	07,08,15,15	"	"	"	7976.571	5.74	.00	03,04,01,00
"	"	"	9377.531	6.60	- .01	03,03,01,02	"	"	"	7990.514	5.50	+ .16	06,05,07,06
"	"	"	9378.532	6.66	+ .05	03,03,10,10	"	"	"	.525	5.56	+ .28	01,02,01,00
"	"	12	9607.596	6.54	+ .11	09,09,01,02	"	"	"	7994.523	5.63	.00	06,06,05,05

Des.	Name.	Yr.	Julian Day.	Magn.	A-B	Residuals.	Des.	Name.	Yr.	Julian Day.	Magn.	A-B	Residuals.
215363	+62° 2007	08	7994.534	5.62	+ .13	02,03,05,05	234956	ρ Cassiop.	03	6475.638	4.58	+ .01	02,03,02,02
"	"	"	8001.629	5.68	+ .24	00,00,05,04	"	"	"	.643	4.60	+ .03	00,01,05,05
"	"	"	8010.525	5.71	+ .10	03,03,02,01	"	"	"	6479.630	4.36	+ .11	06,06,01,01
"	"	"	8020.575	5.74	+ .13	07,07,02,02	"	"	"	.635	4.34	+ .05	01,01,01,01
"	"	"	8036.521	5.78	+ .19	03,04,07,07	"	"	04	6481.603	4.34	+ .16	04,05,07,06
220545	+45° 3813	07	7716.659	6.40	- .07	04,04,04,04	"	"	"	.609	4.31	+ .06	02,03,03,02
"	"	"	7730.654	6.08	- .03	01,01,00,00	"	"	"	6484.602	4.54	- .09	06,07,01,01
"	"	"	7734.682	6.05	+ .06	04,05,00,01	"	"	"	.607	4.56	- .15	01,01,02,03
"	"	"	7716.675	6.72	- .17	06,06,05,04	"	"	"	6495.625	4.47	- .10	13,14,03,02
"	"	"	7730.664	6.39	- .10	06,06,03,02	"	"	"	.631	4.53	- .26	02,01,07,08
234102	-Piscium	05	7124.668	5.36	- .31	06,06,06,05	"	"	"	6498.599	4.54	- .08	01,02,00,01
"	"	"	7128.698	5.25	- .33	01,01,05,04	"	"	"	.604	4.48	- .28	09,10,04,07
"	"	"	7161.669	5.08	- .41	01,01,03,02	"	"	"	6507.611	4.38	- .11	03,03,03,02
"	"	"	7187.604	5.24	- .48	02,01,01,00	"	"	"	.617	4.34	- .15	04,04,04,05
"	"	06	7220.573	5.29	- .42	01,00,04,03	"	"	"	6510.541	4.37	- .26	05,04,01,01
"	"	"	7459.666	5.39	- .22	04,05,07,07	"	"	"	.546	4.34	- .01	00,00,07,06
"	"	"	7461.654	5.38	- .27	02,02,05,04	"	"	"	6512.625	4.54	+ .05	01,02,03,03
"	"	"	7486.655	5.09	- .22	07,06,01,02	"	"	"	.632	4.52	+ .08	08,08,01,00
"	"	"	7508.556	5.24	- .44	02,02,02,02	"	"	"	6519.575	4.54	+ .05	00,00,04,04
"	"	"	7518.632	5.44	+ .07	05,06,00,00	"	"	"	.582	4.54	+ .05	01,02,05,05
"	"	"	7549.527	5.68	- .27	06,06,03,03	"	"	"	6520.642	4.67	- .18	08,07,06,06
"	"	07	7606.527	5.26	+ .75	02,02,03,04	"	"	"	.650	4.63	- .02	02,03,01,02
"	"	"	7844.525	5.48	- .51	04,04,01,02	"	"	"	6521.563	4.59	- .10	05,05,06,05
"	"	"	7872.574	5.48	- .27	03,02,07,07	"	"	"	.571	4.56	- .08	01,01,03,03
"	"	08	7955.552	5.54	- .11	08,08,03,03	"	"	"	6522.605	4.47	- .02	00,01,05,06
"	"	"	8284.565	5.39	- .22	03,02,07,06	"	"	"	.611	4.44	- .05	02,02,02,02
"	"	09	8582.616	4.99	- .34	03,03,04,04	"	"	"	6528.557	4.48	- .32	02,02,04,04
"	"	"	8606.578	5.00	- .24	02,01,03,04	"	"	"	.563	4.42	- .24	01,00,03,02
"	"	"	8638.560	5.22	- .36	10,09,03,02	"	"	"	6533.569	4.52	- .16	04,05,05,05
"	"	"	8640.641	5.40	- .25	06,06,03,03	"	"	"	.575	4.46	- .08	02,01,00,01
"	"	"	8641.647	5.42	- .28	06,06,02,01	"	"	"	.584	4.46	- .05	01,01,02,01
"	"	"	8665.528	5.40	- .29	01,01,08,08	"	"	"	6537.628	4.69	- .20	04,04,02,02
"	"	11	9377.548	5.52	- .05	00,00,01,01	"	"	"	6542.538	4.74	.00	00,00,02,01
"	"	"	9378.546	5.50	+ .09	03,04,10,10	"	"	"	6544.570	4.53	- .28	05,05,04,04
"	"	12	9672.597	5.41	- .14	04,03,09,09	"	"	"	.576	4.48	- .04	03,03,02,01
"	"	"	9690.617	5.50	- .48	01,02,09,09	"	"	"	6548.642	4.72	+ .04	01,00,02,03
234956	ρ Cassiop.	03	6360.570	4.30	- .20	00,01,02,02	"	"	"	6570.515	4.85	+ .02	00,00,03,03
"	"	"	.579	4.39	- .22	02,03,00,00	"	"	"	.521	4.84	+ .17	02,02,06,06
"	"	"	6361.539	4.30	+ .09	06,06,04,04	"	"	"	6573.517	4.77	+ .18	04,04,04,03
"	"	"	.544	4.30	- .03	01,01,01,02	"	"	"	.523	4.90	+ .16	02,01,04,05
"	"	"	6382.615	4.36	- .13	05,04,00,00	"	"	"	.535	4.91	+ .24	02,02,07,07
"	"	"	6450.659	4.31	- .18	00,00,02,03	"	"	"	6731.577	4.79	- .10	03,04,03,02
"	"	"	.664	4.28	- .27	04,04,00,01	"	"	"	.589	4.70	- .03	02,03,02,02
"	"	"	6468.653	4.66	- .01	03,03,00,00	"	"	"	.597	4.74	- .03	03,02,01,01
"	"	"	.659	4.70	.00	00,01,00,01	"	"	05	6895.565	4.69	+ .06	01,01,01,01
"	"	"	6470.576	4.75	- .06	04,05,02,01	235659	-Cassiop.	06	7217.647	7.75	- .14	03,04,04,04
"	"	"	6472.656	4.60	- .28	04,05,01,02	"	"	"	7241.650	7.87	- .18	00,01,05,04
"	"	"	.666	4.63	- .14	05,05,00,00	"	"	"	7276.573	7.79	- .26	01,00,01,00
"	"	"	6473.645	4.66	- .40	01,01,04,03	"	"	"	7397.635	8.06	+ .13	06,06,00,01
"	"	"	.659	4.66	- .11	03,04,05,05	"	"	"	7411.693	8.13	+ .06	02,03,01,02

OBSERVATIONS OF VARIABLES.

Des.	Name.	Yr.	Julian Day.	Magn.	A-B	Residuals.	Des.	Name.	Yr.	Julian Day.	Magn.	A-B	Residuals.
235659	- Cassiop.	06	7432.665	8.12	+ .05	04,04,03,02	235659	- Cassiop.	09	8484.608	8.10	+ .28	07,08,05,06
"	"	"	7461.531	8.05	+ .21	05,05,02,02	"	"	"	8512.656	8.34	+ .12	04,04,04,04
"	"	"	7485.547	8.04	+ .16	04,03,04,05	"	"	"	8581.571	7.33	- .10	04,05,00,01
"	"	07	7598.636	7.50	+ .04	01,00,00,01	"	"	"	8581.624	7.35	- .02	04,05,05,04
"	"	"	7629.575	7.53	- .02	04,03,00,01	"	"	"	8582.565	7.26	- .19	00,00,03,02
"	"	"	7751.662	8.20	+ .23	05,05,07,06	"	"	"	.573	7.30	- .24	05,04,00,00
"	"	"	7773.621	8.21	+ .10	04,03,03,02	"	"	"	8606.650	7.30	- .05	02,01,04,04
"	"	"	7838.541	7.90	.00	01,02,01,02	"	"	10	8698.572	7.62	- .09	03,03,02,03
"	"	"	7872.538	7.72	- .39	09,09,06,05	"	"	"	8722.534	7.68	- .16	04,05,00,01
"	"	"	7922.622	7.61	+ .24	05,05,02,02	"	"	11	9286.560	8.44	- .27	01,01,06,06
"	"	08	7955.607	7.70	+ .11	04,05,03,03	"	"	12	9460.546	7.83	- .34	04,03,01,02
"	"	"	8013.529	7.34	+ .02	01,01,02,02	"	"	"	9461.571	7.84	+ .03	07,08,05,05
"	"	"	8106.650	8.14	+ .24	01,01,05,04	"	"	"	9621.600	8.02	+ .20	01,01,06,05
"	"	"	8134.626	8.43	+ .06	03,03,00,01	"	"	"	9650.623	8.48	+ .01	02,01,01,01
"	"	"	8188.524	8.04	+ .13	00,00,02,02	"	"	"	9672.567	8.29	+ .06	08,07,01,02
"	"	"	8284.646	7.65	- .14	01,02,03,04	"	"	"	9692.569	8.29	+ .10	06,07,06,06
"	"	09	8339.604	7.44	- .16	01,01,06,07	"	"	"	9695.542	8.12	- .13	06,06,03,03
"	"	"	8371.521	7.56	- .25	03,02,01,01	"	"	"	9697.565	8.24	- .04	14,14,05,06
"	"	"	8374.597	7.58	- .29	06,05,04,04	"	"	"	9698.562	8.08	+ .41	00,01,07,07

TABLE XIII.

VARIABLE STARS OF SHORT PERIOD. CLASS IV.

Yr.	Julian Day.	Magn.	A-B	Residuals.	Epoch.	Phase.	Yr.	Julian Day.	Magn.	A-B	Residuals.	Epoch.	Phase.
062230. RT AURIGAE.							062230. RT AURIGAE (continued).						
05	7125.631	5.34	+ .04	13,13,01,01	13	0.798	08	8279.534	5.82	.00	04,05,05,06	296	2.687
"	" .637	5.37	+ .06	01,00,04,04	"	0.804	"	" .543	5.85	+ .06	01,00,03,03	"	2.696
"	" .651	5.35	+ .02	05,05,04,03	"	0.818	"	8281.524	5.33	- .10	03,02,00,01	297	0.949
"	" .667	5.35	+ .06	02,03,04,03	"	0.834	"	" .530	5.30	- .13	03,02,01,01	"	0.955
"	" .682	5.36	+ .03	00,00,03,02	"	0.849	"	" .546	5.32	- .13	09,09,02,02	"	0.971
"	" .694	5.33	+ .08	05,05,00,00	"	0.861	"	" .553	5.40	- .08	08,09,08,07	"	0.978
"	" .710	5.34	+ .01	02,02,07,07	"	0.877	"	8283.521	5.80	- .22	00,00,02,01	"	2.946
"	" .722	5.35	+ .02	03,04,04,04	"	0.889	"	" .530	5.76	- .08	01,01,08,07	"	2.955
06	7223.524	5.64	- .31	00,00,01,01	13	1.757	"	8295.524	4.92	+ .09	08,08,04,03	301	0.036
"	7227.549	5.72	- .17	01,01,00,00	14	2.054	"	" .533	5.00	+ .13	09,09,11,10	"	0.045
"	7228.541	5.73	- .02	01,00,04,04	"	3.046	"	8297.511	5.70	- .04	07,06,09,10	"	2.023
"	7229.520	4.98	- .06	05,05,01,01	15	0.297	"	" .519	5.64	- .07	02,02,09,10	"	2.031
"	" .536	5.04	- .23	09,10,06,06	"	0.313	"	8299.527	5.13	- .12	01,01,02,02	302	0.311
"	7230.495	5.50	- .08	02,02,06,05	"	1.272	"	" .540	5.11	- .10	06,06,02,01	"	0.324
"	" .512	5.53	- .14	11,10,01,01	"	1.289	"	8302.523	5.50	- .08	16,17,10,10	"	3.307
"	7235.526	5.78	- .33	03,03,04,04	16	2.575	"	" .534	5.45	- .10	12,11,06,05	"	3.318
"	7236.516	5.04	- .11	02,01,04,04	"	3.565	"	8304.530	5.62	- .09	02,02,07,08	303	1.585
"	7237.540	5.34	- .16	02,01,03,04	17	0.861	"	" .547	5.58	- .23	06,06,04,04	"	1.602

Yr.	Julian Day.	Magn.	A-B	Residuals.	Epoch.	Phase.	Yr.	Julian Day.	Magn.	A-B	Residuals.	Epoch.	Phase.
062230. RT AURIGAE (continued).							192242. RR LYRAE.						
08	8305.514	5.76	-.17	01,01,03,02	303	2.569	03	6417.530	6.95	+.23	05,05,01,01	2754	0.063
"	" .524	5.79	-.14	01,02,02,01	"	2.579	"	" .553	6.98	+.14	07,07,04,03	"	0.086
09	8405.632	5.71	+.22	04,03,01,01	330	2.026	"	" .571	7.03	+.13	05,05,03,03	"	0.104
"	" .638	5.75	+.14	00,00,03,04	"	2.032	"	" .592	7.15	+.31	00,01,02,02	"	0.125
"	8406.618	5.76	+.24	10,10,03,02	"	3.012	"	6418.595	7.40	+.10	01,01,04,05	2755	0.561
"	" .624	5.82	+.28	04,03,09,09	"	3.018	"	" .602	7.30	+.14	07,08,00,01	2756	0.001
"	8407.639	5.05	+.22	03,04,03,02	331	0.305	"	" .609	7.24	+.22	00,01,02,03	"	0.008
"	" .645	5.08	+.19	01,02,15,15	"	0.311	"	6443.514	7.51	+.22	00,00,00,00	2799	0.542
"	8409.630	5.80	+.24	02,01,05,04	"	2.296	"	" .520	7.41	+.36	01,00,05,06	"	0.547
"	" .638	5.80	+.12	02,03,08,07	"	2.304	"	" .526	7.27	+.33	05,06,12,12	"	0.553
"	8414.641	5.11	+.22	15,14,01,02	332	3.579	"	" .532	7.17	+.32	01,01,03,03	"	0.560
"	8423.547	5.52	+.23	00,00,00,01	335	1.300	"	" .538	7.09	+.07	00,01,03,03	"	0.565
"	8425.554	5.52	+.26	15,15,04,04	"	3.307	"	6456.556	7.49	-.28	02,01,06,05	2822	0.547
"	8431.532	5.68	+.37	09,09,00,01	337	1.829	"	" .564	7.37	-.20	01,00,03,02	"	0.554
"	8432.537	5.83	+.42	01,01,01,02	"	2.834	"	" .571	7.21	-.37	06,06,07,07	"	0.562
"	8433.550	4.98	+.37	16,16,02,01	338	0.118	"	" .580	7.17	-.17	04,04,00,00	2823	0.004
"	8435.542	5.79	+.42	02,03,03,03	"	2.110	"	" .590	7.11	-.41	01,02,03,03	"	0.014
"	8437.540	5.34	+.72	04,03,06,06	339	0.380	"	6477.528	7.59	-.12	04,03,01,01	2859	0.547
"	8438.542	5.57	+.34	04,03,05,06	"	1.382	"	" .534	7.45	+.03	02,02,01,00	"	0.553
"	8439.543	5.80	+.21	01,01,03,02	"	2.383	"	" .541	7.41	+.01	06,06,07,08	"	0.559
"	8440.520	5.47	+.18	01,00,07,08	"	3.360	"	" .546	7.17	.00	10,10,01,00	"	0.565
"	" .570	5.37	+.27	02,03,01,01	"	3.410	"	" .554	6.99	-.11	04,05,09,09	2860	0.006
"	" .584	5.34	+.08	02,02,02,02	"	3.424	04	6815.574	7.35	-.08	08,08,02,03	3456	0.213
							"	6831.537	7.45	-.08	04,03,03,02	3484	0.306
							"	" .545	7.49	-.05	03,02,07,07	"	0.314
							"	" .556	7.50	-.14	03,02,01,01	"	0.325
							"	" .566	7.47	-.20	01,01,03,02	"	0.335
							"	" .577	7.51	-.12	03,02,06,07	"	0.346
05	7194.652	6.77	-.26	03,04,01,00	496	1.957	"	" .577	7.51	-.12	03,02,06,07	"	0.346
06	7217.564	6.73	-.26	01,01,00,01	499	1.121	05	6990.647	6.75	-.32	04,03,03,04	3765	0.145
"	" .577	6.73	-.38	01,00,05,04	"	1.134	"	" .657	6.79	-.28	01,00,04,03	"	0.155
"	7240.541	6.70	-.19	10,10,02,02	502	0.350	"	" .664	6.81	-.24	02,01,01,02	"	0.162
"	7241.525	6.71	-.30	01,01,03,03	"	1.334	"	6991.612	7.56	-.30	08,07,05,04	3766	0.543
"	7242.520	6.94	-.37	02,02,00,00	"	2.329	"	" .625	7.42	-.16	03,03,03,03	"	0.556
"	" .566	6.95	-.30	05,06,04,05	"	2.375	"	" .633	7.35	-.31	02,02,07,07	"	0.564
"	7326.567	6.52	+.28	00,01,00,01	512	7.216	"	" .643	7.20	-.24	01,01,01,01	3767	0.007
"	7327.570	6.69	+.38	02,01,05,05	513	0.303	"	" .652	7.09	-.40	02,03,03,03	"	0.017
"	7328.540	6.70	-.27	03,03,03,02	"	1.273	"	" .663	6.98	-.26	01,00,06,06	"	0.028
"	" .584	6.72	-.37	09,09,01,01	"	1.317	"	7000.641	7.65	+.28	03,03,02,01	3782	0.504
"	7329.536	6.92	-.31	03,03,03,03	"	2.269	"	" .650	7.65	+.20	07,08,08,07	"	0.512
"	7334.545	6.54	+.42	01,01,07,07	"	7.278	"	" .657	7.68	+.18	05,05,01,01	"	0.519
"	7342.544	6.51	-.30	01,02,04,03	514	7.361	"	" .667	7.67	+.17	03,03,05,04	"	0.529
"	7564.554	6.51	-.50	05,06,05,06	542	7.722	"	" .675	7.69	+.23	05,05,02,02	"	0.538
"	" .571	6.66	-.26	08,09,09,09	"	7.739	"	" .686	7.58	+.14	04,03,04,03	"	0.548
"	" .596	6.64	-.33	01,01,00,01	"	7.764	"	" .697	7.44	+.14	10,09,01,02	"	0.559
"	" .619	6.62	-.36	05,06,02,03	"	7.787	"	" .708	7.27	-.03	03,02,04,04	3783	0.003
06	7564.651	6.60	-.30	10,10,01,01	542	7.819	"	" .719	7.10	+.18	05,04,09,10	"	0.014
"	" .684	6.60	-.40	01,02,01,01	"	7.852	"	" .729	6.96	+.06	00,01,01,00	"	0.024

Yr.	Julian Day.	Magn.	A-B	Residuals.	Epoch.	Phase.	Yr.	Julian Day.	Magn.	A-B	Residuals.	Epoch.	Phase.
192242. RR LYRAE (continued).							193056. XZ CYGNI (continued).						
07	7844.591	7.70	+ .16	00,00,05,04	5271	0.488	06	7534.641	9.94	+ .09	02,02,02,02	714	0.242
"	" .598	7.65	+ .17	00,01,02,02	"	0.495	"	" .656	9.89	+ .06	02,02,02,03	"	0.257
"	" .607	7.69	+ .24	04,03,03,03	"	0.504	"	" .672	9.88	.00	03,04,05,05	"	0.273
"	" .617	7.65	+ .17	04,03,01,01	"	0.514	"	7538.552	9.50	- .21	01,00,02,02	722	0.420
"	" .627	7.66	+ .22	05,04,05,04	"	0.524	"	" .565	9.10	+ .29	13,13,06,06	"	0.433
"	" .638	7.71	+ .20	01,00,03,03	"	0.535	"	" .580	8.79	+ .06	01,00,01,02	"	0.448
"	" .655	7.73	+ .21	01,01,03,02	"	0.552	"	" .590	8.86	+ .04	02,02,06,05	"	0.458
"	" .669	7.68	+ .20	01,01,02,02	"	0.566	"	" .603	8.90	+ .11	07,08,03,03	723	0.004
"	" .679	7.64	+ .20	03,03,03,02	5272	0.009	"	" .627	9.06	+ .01	02,02,03,03	"	0.028
"	" .690	7.53	+ .24	01,02,03,04	"	0.020	"	" .646	9.18	+ .15	03,03,03,02	"	0.047
"	" .699	7.31	+ .15	01,01,08,09	"	0.029	"	" .673	9.40	+ .08	02,01,01,00	"	0.074
"	" .706	7.20	+ .30	06,05,03,02	"	0.036	"	7563.584	9.84	+ .08	06,06,08,08	776	0.256
"	" .717	7.04	+ .18	01,00,01,01	"	0.047	"	" .604	9.90	+ .09	00,00,02,02	"	0.276
"	" .724	6.85	+ .16	02,03,01,02	"	0.054	"	" .620	9.94	+ .11	06,06,00,01	"	0.292
193056. XZ CYGNI.							"	" .634	9.95	+ .06	06,05,00,01	"	0.306
							"	" .656	9.88	.00	05,04,03,04	"	0.328
							07	7707.617	9.60	+ .07	03,03,06,05	1085	0.113
							"	" .628	9.62	+ .16	02,03,05,05	"	0.124
							"	" .639	9.66	+ .16	04,04,01,00	"	0.135
							"	" .654	9.71	+ .18	04,04,02,02	"	0.150
							"	" .667	9.73	+ .10	01,00,02,01	"	0.163
							"	" .676	9.77	+ .10	03,03,01,01	"	0.172
							"	7709.569	9.87	+ .30	01,02,04,03	1089	0.198
							"	" .583	9.92	+ .32	00,01,09,08	"	0.212
							"	" .596	9.90	+ .27	06,06,02,02	"	0.225
							"	" .611	9.94	+ .27	02,03,00,00	"	0.240
							"	" .621	9.98	+ .13	03,02,05,05	"	0.250
							"	" .633	9.94	+ .24	04,04,04,03	"	0.262
							"	" .645	9.89	+ .10	04,03,04,03	"	0.274
							"	" .660	9.91	+ .18	07,06,03,02	"	0.289
							"	" .678	9.95	+ .06	06,06,03,02	"	0.307
							"	7710.596	9.91	+ .14	00,01,10,09	1091	0.292
							"	" .614	9.90	+ .19	09,08,03,03	"	0.310
							"	" .633	10.00	+ .23	07,07,03,04	"	0.329
							"	" .648	9.90	+ .12	08,09,04,03	"	0.344
							"	" .661	9.96	+ .17	05,06,02,02	"	0.357
							"	" .671	10.01	+ .13	07,07,03,03	"	0.367
							"	" .685	10.01	+ .14	07,06,02,03	"	0.381
							203226. V VULPECULAE.						
							05	6997.651	8.72	- .13	00,01,04,04	15	19.401
							"	" .662	8.73	- .04	01,01,03,03	"	19.412
							"	6998.670	8.78	- .01	05,04,03,03	"	20.420
							"	7012.650	9.32	- .19	01,01,01,02	"	34.400
							"	" .660	9.36	- .21	02,02,02,01	"	34.410
06	7462.650	9.64	- .24	02,01,02,02	560	0.105							
"	" .663	9.68	- .19	04,04,05,05	"	0.118							
"	" .681	9.70	- .25	04,04,01,02	"	0.136							
"	7507.646	9.94	+ .05	00,01,07,07	656	0.309							
"	7528.636	9.90	.00	10,09,05,04	701	0.302							
"	" .647	9.94	- .03	01,00,06,06	"	0.313							
"	" .661	9.90	- .04	06,05,02,01	"	0.327							
"	" .672	9.97	- .10	01,02,00,01	"	0.338							
"	" .682	9.98	.00	02,03,04,03	"	0.348							
"	7529.590	9.88	- .03	03,03,00,00	703	0.323							
"	" .606	9.87	- .06	02,02,03,02	"	0.339							
"	" .619	9.93	+ .02	05,04,04,04	"	0.352							
"	" .636	9.96	+ .10	03,03,01,01	"	0.369							
"	" .654	9.93	+ .10	02,01,03,04	"	0.387							
"	" .672	9.82	+ .17	05,05,03,02	"	0.405							
"	7531.577	8.86	- .04	05,04,00,00	707	0.444							
"	" .588	8.84	- .13	05,05,04,03	"	0.455							
"	" .602	8.90	+ .03	02,03,01,01	708	0.002							
"	" .612	8.94	- .16	01,01,06,06	"	0.012							
"	" .624	9.04	- .01	08,07,03,03	"	0.024							
"	" .644	9.18	- .15	01,02,01,01	"	0.044							
"	" .660	9.32	- .01	01,02,01,01	"	0.060							
"	" .675	9.40	- .08	07,07,02,03	"	0.075							
"	7534.562	9.76	+ .08	04,05,03,03	714	0.163							
"	" .573	9.80	.00	02,01,02,02	"	0.174							
"	" .584	9.82	+ .11	03,03,03,03	"	0.185							
"	" .600	9.90	+ .05	09,09,01,01	"	0.201							
"	" .611	9.88	+ .11	01,00,01,01	"	0.212							
"	" .628	9.94	+ .16	04,05,02,01	"	0.229							

Yr.	Julian Day.	Magn.	A-B	Residuals.	Epoch.	Phase.	Yr.	Julian Day.	Magn.	A-B	Residuals.	Epoch.	Phase.
203226. V VULPECULAE (continued).							203226. V VULPECULAE (continued).						
05	7021.593	9.22	-.17	07,06,02,02	16	5.553	06	7216.525	8.34	-.13	00,01,00,00	21	11.535
"	" .602	9.24	-.17	03,03,03,03	"	5.562	"	7217.518	8.38	-.21	03,03,01,00	"	12.528
"	7039.621	8.56	-.24	06,05,01,00	"	23.581	"	7221.509	8.48	+.03	04,04,00,01	"	16.519
"	7040.601	8.63	-.18	00,01,03,02	"	24.561	"	7227.518	8.68	-.20	11,11,04,05	"	22.528
"	" .609	8.59	-.02	01,02,03,03	"	24.569	"	7228.518	8.70	-.22	01,01,03,03	"	23.528
"	7042.588	8.62	-.13	02,01,00,00	"	26.548	"	7236.483	9.05	-.10	01,01,00,01	"	31.493
"	" .595	8.62	-.08	03,02,03,04	"	26.555	205230. UY CYGNI.						
"	7045.573	8.72	-.32	08,07,00,00	"	29.533							
"	" .582	8.70	-.30	00,00,03,03	"	29.542							
"	7048.566	8.96	-.11	02,01,01,01	"	32.526	06	7406.646	10.85	-.22	03,02,05,04	3674	0.203
"	" .576	8.90	-.07	01,01,01,00	"	32.536	"	7411.620	10.70	-.24	01,01,02,01	3683	0.131
"	7052.559	9.12	-.28	09,08,03,02	"	36.519	07	7772.582	10.40	+.21	02,01,01,01	4326	0.556
"	" .570	9.08	-.24	03,04,02,01	"	36.530	"	" .593	10.42	+.54	01,00,03,04	4327	0.006
"	7114.704	8.65	-.18	04,04,04,05	18	23.084	"	" .603	10.40	+.34	01,01,00,01	"	0.016
"	7136.624	8.62	+.17	00,00,01,02	19	7.214	"	" .614	10.48	+.23	01,01,03,03	"	0.027
"	7142.650	8.54	+.23	01,01,01,01	"	13.240	"	" .624	10.61	+.22	02,03,06,06	"	0.037
"	" .671	8.60	+.12	03,02,05,04	"	13.261	"	" .634	10.59	+.25	02,02,00,01	"	0.047
"	7145.655	8.57	+.14	04,04,01,02	"	16.245	"	" .645	10.65	+.19	02,03,00,00	"	0.058
"	7149.661	8.62	+.04	02,03,01,00	"	20.251	205515. RV CAPRICORNI.						
"	7151.643	8.67	+.14	06,05,03,03	"	22.233							
"	" .659	8.68	+.11	06,06,01,00	"	22.249							
"	7154.669	8.80	+.31	01,01,03,02	"	25.259							
"	7158.629	8.80	+.25	03,03,03,04	"	29.219	07	7857.559	11.71	-.10	00,00,07,07	939	0.393
"	" .649	8.82	+.24	04,03,03,03	"	29.239	"	7858.529	11.68	.00	08,08,02,03	942	0.020
"	7159.610	8.84	-.12	00,01,04,05	"	30.200	"	" .539	11.73	.00	07,07,12,13	"	0.030
"	7160.561	8.78	-.12	01,02,02,03	"	31.151	"	" .550	11.68	-.03	00,01,05,05	"	0.041
"	" .621	8.80	-.04	02,01,01,01	"	31.211	"	" .565	11.69	-.09	03,03,07,07	"	0.056
"	7161.599	8.79	-.18	02,01,05,06	"	32.189	"	" .582	11.66	-.07	02,03,00,00	"	0.073
"	7168.629	8.70	+.01	02,02,05,04	20	1.429	"	" .597	11.65	+.04	06,06,03,03	"	0.088
"	7174.520	8.52	-.33	01,01,01,00	"	7.320	"	" .610	11.41	-.24	00,00,08,07	"	0.101
"	" .547	8.53	-.30	05,05,00,01	"	7.347	"	" .627	10.80	+.36	09,10,04,04	"	0.118
"	7175.562	8.52	-.12	04,04,00,01	"	8.362	"	" .654	10.32	-.12	00,00,01,02	"	0.145
"	7181.580	8.54	-.12	00,01,04,05	"	14.380	"	7859.531	10.43	+.10	01,02,06,06	944	0.127
"	7185.520	8.58	-.19	01,01,01,00	"	18.320	"	" .542	10.28	+.03	03,03,02,02	"	0.138
"	7187.522	8.64	-.27	03,02,06,06	"	20.322	"	" .554	10.40	+.04	04,03,06,05	"	0.150
"	7188.531	8.67	-.26	00,01,04,05	"	21.331	"	" .568	10.52	+.12	05,06,01,00	"	0.164
"	7194.529	8.79	-.14	01,00,02,02	"	27.329	"	" .582	10.65	.00	04,04,02,02	"	0.178
"	" .546	8.76	-.18	03,03,10,10	"	27.346	"	" .596	10.78	+.12	00,01,09,09	"	0.192
"	7198.520	8.95	-.18	01,02,00,01	"	31.320	"	" .613	10.91	+.04	06,05,03,03	"	0.209
"	7200.545	9.00	-.20	04,03,02,03	"	33.345	"	" .630	11.12	+.29	03,04,04,04	"	0.226
"	7205.483	9.04	-.20	01,00,03,03	21	0.493	"	7860.535	11.08	-.17	03,04,06,07	946	0.235
"	7206.521	9.06	-.28	00,01,02,03	"	1.531	"	" .566	11.26	-.05	01,00,02,02	"	0.266
"	7207.552	8.98	-.24	01,02,03,03	"	2.562	"	" .582	11.33	-.09	05,06,07,06	"	0.282
"	7208.519	8.87	-.32	06,06,01,01	"	3.529	"	" .593	11.39	+.02	02,01,05,06	"	0.293
"	7210.519	8.66	-.15	00,00,04,03	"	5.529	"	" .615	11.49	-.16	02,02,06,06	"	0.315
06	7212.520	8.45	-.18	03,04,08,08	"	7.530	"	" .631	11.52	-.15	05,04,01,01	"	0.331
"	" .541	8.47	-.22	02,02,10,09	"	7.551	"	"					

Yr.	Julian Day.	Magn.	A-B	Residuals.	Epoch.	Phase.	Yr.	Julian Day.	Magn.	A-B	Residuals.	Epoch.	Phase.
222557. δ CEPHEI.							222557. δ CEPHEI (continued).						
08	8134.648	4.45	+ .04	04,04,07,06	886	3.520	11	9243.559	4.36	- .38	05,05,07,07	1093	1.567
"	8143.652	4.39	- .02	06,06,05,05	888	2.791	"	9244.549	4.44	+ .02	00,00,01,02	"	2.557
11	9231.560	4.01	+ .04	00,00,03,04	1091	0.301	"	" .553	4.48	- .06	02,01,07,06	"	2.561
"	9237.536	4.24	- .22	06,06,03,02	1092	0.911	"	9249.614	4.45	- .03	02,03,05,05	1094	2.256
"	9240.533	4.32	+ .02	10,14,02,01	"	3.908							

TABLE XIV.

VARIABLE STARS OF SHORT PERIOD. CLASS IVb.

Yr.	Julian Day.	Magn.	A-B	Residuals.	Epoch.	Phase.	Yr.	Julian Day.	Magn.	A-B	Residuals.	Epoch.	Phase.
050239. TT AURIGAE.							171333. u HERCULIS (continued).						
10	8944.569	8.80	+ .12	04,03,01,02	1347	0.609	03	6246.631	4.82	- .35	01,01,00,00	3045	1.339
"	" .576	8.84	+ .08	05,04,04,03	"	0.616	"	" .637	4.78	- .29	04,04,01,01	"	1.345
"	" .583	8.88	+ .07	05,05,05,05	"	0.623	"	6248.633	4.90	- .28	05,04,06,05	3046	1.290
"	" .591	9.01	+ .14	04,05,00,00	"	0.631	"	" .639	4.86	- .25	01,01,00,01	"	1.296
"	" .600	9.06	+ .20	05,06,06,06	"	0.640	"	6254.659	4.78	- .28	04,04,00,01	3049	1.163
"	" .608	9.15	+ .10	05,04,03,02	"	0.648	"	" .665	4.74	- .29	03,03,02,03	"	1.169
"	" .613	9.22	+ .10	06,06,02,02	"	0.653	"	6256.652	4.84	- .21	05,05,01,00	3050	1.105
"	" .619	9.26	+ .13	12,12,01,01	"	0.659	"	" .659	4.80	- .15	00,00,00,00	"	1.112
"	" .625	9.36	+ .20	07,06,07,07	"	0.665	"	6267.542	5.10	- .33	04,03,00,00	3055	1.740
							"	" .548	5.08	- .32	07,06,01,01	"	1.746
							"	6360.626	4.64	+ .40	04,03,04,03	3101	0.475
							"	6361.627	4.64	+ .45	04,04,00,00	"	1.476
							"	" .633	4.64	+ .49	05,05,06,06	"	1.482
							"	6362.622	4.54	+ .17	00,00,01,00	3102	0.420
							"	" .627	4.62	+ .14	04,05,07,07	"	0.425
							"	" .636	4.54	+ .16	02,01,03,02	"	0.434
02	5903.621	4.79	- .38	02,01,06,06	2878	0.846	"	6365.668	4.70	+ .29	03,03,04,04	3103	1.415
"	6008.608	4.62	- .33	00,00,07,07	2929	1.228	"	" .673	4.70	+ .25	05,05,03,03	"	1.420
"	" .615	4.73	- .36	06,06,03,03	"	1.235	"	6366.665	4.58	+ .39	03,02,02,02	3104	0.361
"	" .623	4.66	- .20	02,01,01,01	"	1.243	"	" .670	4.64	+ .27	05,04,05,05	"	0.366
03	6230.667	5.04	- .16	01,01,02,03	3037	1.783	"	6369.660	4.68	+ .28	06,06,02,03	3105	1.305
"	" .672	5.03	- .22	03,03,01,02	"	1.788	"	" .666	4.70	+ .28	00,01,01,00	"	1.311
"	6235.641	4.70	- .55	10,10,03,03	3040	0.604	"	6370.668	4.59	+ .06	00,01,05,05	3106	0.262
"	" .647	4.70	- .35	06,07,04,04	"	0.610	"	" .673	4.58	+ .15	04,04,01,00	"	0.267
"	6236.638	4.72	- .03	03,03,04,04	"	1.601	"	6380.667	4.80	+ .08	03,03,06,05	3111	0.005
"	" .645	4.70	- .08	02,03,02,03	"	1.608	"	" .673	4.76	+ .01	01,00,04,04	"	0.011
"	6241.653	4.74	- .32	01,00,02,01	3043	0.463	"	6390.619	4.80	+ .15	03,03,00,01	3115	1.753
"	" .660	4.75	- .30	01,00,01,02	"	0.470	"	" .625	4.82	+ .21	07,06,02,02	"	1.759
"	6243.638	4.91	- .30	03,04,02,01	3044	0.397							
"	" .644	4.80	- .29	04,04,02,03	"	0.403							
"	" .659	4.77	- .26	02,01,01,00	"	0.418							

Yr.	Julian Day.	Magn.	A-B	Residuals.	Epoch.	Phase.	Yr.	Julian Day.	Magn.	A-B	Residuals.	Epoch.	Phase.
171333. u HERCULIS (continued).							171333. u HERCULIS (continued).						
03	6409.560	4.65	+1.10	00,01,02,02	3125	0.183	03	6439.569	4.54	+0.01	02,02,00,00	3139	1.477
"	" .567	4.64	.00	07,07,01,00	"	0.190	"	6440.515	4.54	-.04	01,00,01,00	3140	0.372
"	6412.569	4.48	-.12	03,03,02,02	3126	1.141	"	" .522	4.54	+0.04	02,03,03,04	"	0.379
"	6415.595	4.68	+0.03	08,08,08,08	3128	0.065	"	6444.514	4.64	-.20	06,07,01,02	3142	0.269
"	6417.617	4.68	+0.08	03,03,05,05	3129	0.035	"	" .520	4.64	-.12	03,03,02,02	"	0.275
"	6418.545	4.72	.00	05,04,06,07	"	0.963	"	" .534	4.59	-.06	03,04,00,01	"	0.289
"	" .550	4.74	+0.04	05,06,07,06	"	0.968	"	" .542	4.51	.00	03,03,02,02	"	0.297
"	6419.534	5.06	+0.19	10,10,03,03	"	1.952	"	6447.516	4.54	-.04	00,01,01,01	3143	1.220
"	" .540	5.10	+0.12	01,00,04,03	"	1.958	"	" .523	4.57	-.10	07,07,03,02	"	1.227
"	" .568	4.94	+0.13	07,06,03,03	"	1.986	"	" .532	4.52	+0.01	02,02,02,02	"	1.236
"	" .575	4.94	+0.05	08,09,04,04	"	1.993	04	6596.611	4.67	-.38	03,03,02,02	3216	0.598
"	" .597	4.86	+0.16	04,03,01,01	"	2.015	"	" .617	4.68	-.35	00,00,04,04	"	0.604
"	6422.515	4.76	+0.11	08,08,01,00	3131	0.831	"	6734.563	4.59	+0.16	02,02,04,04	3283	1.130
"	" .525	4.79	+0.14	06,06,01,02	"	0.841	"	6778.569	4.75	+0.02	02,01,03,04	3305	0.012
"	" .542	4.82	+0.17	01,01,01,02	"	0.858	"	" .577	4.79	-.02	08,08,03,04	"	0.020
"	" .548	4.76	+0.12	00,00,01,02	"	0.864	08	8053.604	4.54	-.09	01,01,06,05	3926	1.380
"	" .556	4.82	+0.16	02,02,04,03	"	0.872	"	" .619	4.64	.00	07,08,05,05	"	1.395
"	" .562	4.85	+0.10	01,01,04,05	"	0.878	"	" .640	4.57	-.06	06,07,02,01	"	1.416
"	" .575	4.86	+0.12	01,00,00,00	"	0.891	"	8054.634	4.62	-.03	09,09,03,02	3927	0.359
"	" .581	4.84	+0.08	04,03,01,01	"	0.897	"	" .644	4.55	-.14	04,04,04,03	"	0.369
"	" .591	4.84	+0.05	02,02,04,03	"	0.907	"	8055.615	4.55	-.10	01,02,05,06	"	1.340
"	6423.513	5.01	+0.02	02,01,06,05	"	1.829	"	" .631	5.06	-.29	00,00,03,03	"	1.356
"	" .518	5.02	+0.09	03,03,05,06	"	1.834	"	" .650	4.53	-.30	10,10,05,05	"	1.375
"	" .556	5.12	+0.08	01,00,05,04	"	1.872	"	8056.622	4.58	-.08	09,09,01,01	3928	0.296
"	" .563	5.17	+0.10	03,03,01,00	"	1.879	"	" .636	5.05	-.18	13,12,03,03	"	0.310
"	" .594	5.17	+0.02	02,01,03,03	"	1.910	"	8071.664	4.72	-.03	02,03,06,06	3935	0.982
"	6426.570	4.76	+0.04	01,01,03,03	3133	0.784	"	8073.545	4.76	-.08	07,08,04,05	3936	0.812
"	" .584	4.72	+0.07	00,00,01,00	"	0.798	"	8074.598	5.05	-.14	01,02,01,00	"	1.865
"	6428.483	4.60	+0.07	09,09,05,05	3134	0.646	"	8076.546	4.70	-.19	05,06,01,01	3937	1.762
"	" .491	4.57	+0.12	05,05,04,04	"	0.654	"	" .554	4.74	-.15	01,01,09,09	"	1.770
"	" .511	4.63	+0.06	00,01,01,00	"	0.674	"	8077.541	4.60	-.05	02,02,00,00	3938	1.706
"	" .518	4.60	+0.07	03,02,03,03	"	0.681	"	" .551	4.62	-.11	01,01,03,02	"	1.716
"	" .535	4.64	+0.15	04,04,01,02	"	0.698	"	8078.539	4.72	-.13	07,07,03,03	"	1.704
"	" .543	4.60	.00	04,04,03,02	"	0.706	"	" .547	4.68	-.13	05,04,01,01	"	1.712
"	6431.574	4.67	-.06	04,05,04,04	3135	1.686	"	8080.553	4.66	-.09	07,07,01,01	3939	1.667
"	" .581	4.64	+0.09	00,00,01,02	"	1.693	"	" .561	4.69	-.10	06,06,04,05	"	1.675
"	6433.516	4.58	+0.09	02,02,01,02	3136	1.577	"	8081.548	4.65	-.10	00,00,02,01	3940	0.611
"	" .524	4.65	-.10	02,03,07,07	"	1.585	"	8085.546	4.64	-.09	06,06,02,03	3942	0.507
"	" .534	4.64	-.05	03,02,01,01	"	1.595	"	8089.547	4.64	-.15	09,09,04,03	3944	0.407
"	" .567	4.61	.00	02,02,03,03	"	1.628	"	8091.547	4.67	-.02	02,03,05,06	3945	0.355
"	" .573	4.66	+0.05	03,03,05,05	"	1.634	"	8095.551	4.67	-.18	05,05,06,05	3947	0.257
"	6438.517	4.52	+0.03	02,02,02,02	3139	0.425	"	8097.549	4.72	-.15	04,04,01,01	3948	0.204
"	" .522	4.52	+0.04	06,06,02,01	"	0.430	"	" .560	4.66	-.17	00,00,01,01	"	0.215
"	" .550	4.54	+0.05	04,04,02,01	"	0.458	"	8098.559	4.64	-.05	07,07,00,00	"	1.214
"	" .556	4.54	-.07	02,02,02,01	"	0.464	"	8099.548	4.64	-.16	01,02,09,08	3949	0.152
"	6439.552	4.58	+0.01	05,05,01,01	"	1.460	"	8102.550	4.70	-.24	06,05,05,06	3950	1.103
"	" .558	4.51	-.06	03,02,03,02	"	1.466	"	8109.552	5.22	.00	05,05,03,04	3953	1.952

Yr.	Julian Day.	Magn.	A-B	Residuals.	Epoch.	Phase.	Yr.	Julian Day.	Magn.	A-B	Residuals	Epoch.	Phase.
171333. u HERCULIS (continued).							171333. u HERCULIS (continued).						
08	8109.569	5.18	-.23	08,08,01,00	3953	1.969	08	8124.562	4.63	-.06	03,03,03,03	3961	0.554
"	" .592	5.07	-.14	09,08,01,01	"	1.992	"	8126.564	4.57	+.02	03,03,04,03	3962	0.505
"	" .610	4.92	-.15	00,00,01,02	"	2.010	"	" .581	4.62	-.02	01,01,05,05	"	0.522
"	" .626	4.90	-.03	02,02,01,01	"	2.026	"	8129.547	4.68	+.04	04,03,10,09	3963	1.437
"	8110.562	4.90	-.09	01,01,01,01	3954	0.911	"	" .553	4.62	-.05	04,04,00,00	"	1.443
"	" .575	4.80	-.16	05,04,03,02	"	0.924	"	8131.554	4.64	-.05	02,02,03,04	3964	1.393
"	" .590	4.79	+.02	00,01,01,02	"	0.939	"	" .564	4.64	-.09	19,20,01,01	"	1.403
"	" .609	4.70	-.12	03,02,01,01	"	0.958	"	8132.550	4.59	-.06	04,03,03,04	3965	0.338
"	" .623	4.70	+.08	07,08,08,07	"	0.972	"	" .558	4.60	+.09	01,01,03,03	"	0.346
"	8111.552	5.18	+.16	03,03,06,05	"	1.901	"	8133.564	4.58	+.19	04,04,07,07	"	1.352
"	" .562	5.16	-.08	09,09,06,07	"	1.911	"	8134.550	4.57	+.18	02,03,02,02	3966	0.287
"	" .578	5.11	-.04	05,05,02,03	"	1.927	"	8136.544	4.69	-.13	00,01,04,04	3967	0.230
"	" .596	5.16	-.14	02,02,04,04	"	1.945	"	" .557	4.64	-.16	04,05,01,01	"	0.243
"	" .617	5.11	-.14	07,06,04,03	"	1.966	"	8138.546	4.61	-.10	13,13,05,04	3968	0.181
"	" .631	5.06	-.18	06,06,01,01	"	1.980	"	" .552	4.65	-.14	05,05,10,09	"	0.187
"	8112.555	4.87	+.10	03,03,03,04	3955	0.853	"	8139.545	4.61	-.43	22,22,06,07	"	1.180
"	" .568	4.84	-.10	01,01,00,00	"	0.866	"	8141.547	4.72	-.20	03,02,07,07	3969	1.130
"	" .580	4.79	+.02	01,00,02,02	"	0.878	"	" .554	4.69	+.02	09,10,06,07	"	1.137
"	" .595	4.80	-.04	02,02,03,03	"	0.893	"	8143.544	4.72	+.05	12,11,05,05	3970	1.076
"	" .610	4.80	+.03	01,02,01,01	"	0.908	"	8144.535	4.89	-.14	08,09,10,09	3971	0.016
"	" .628	4.79	-.06	00,00,03,02	"	0.926	"	" .541	4.81	-.06	03,03,01,02	"	0.022
"	8113.556	5.13	+.06	08,07,07,06	"	1.854	"	" .547	4.78	-.12	02,01,06,06	"	0.028
"	" .564	5.12	-.08	00,00,01,02	"	1.862	"	8145.547	4.79	-.14	04,03,05,04	"	1.028
"	" .579	5.18	+.04	00,01,07,06	"	1.877	"	8146.545	5.01	-.10	05,06,00,00	"	2.026
"	" .589	5.17	-.06	01,02,06,05	"	1.887	"	" .554	4.94	-.04	02,01,03,04	"	2.035
"	" .599	5.22	+.01	01,01,03,03	"	1.897	"	8150.534	5.33	-.18	05,06,06,07	3973	1.913
"	" .607	5.26	-.08	02,02,03,02	"	1.905	"	" .540	5.32	-.05	01,01,08,07	"	1.919
"	" .620	5.24	+.04	11,11,06,06	"	1.918	"	8151.533	4.92	-.13	05,05,01,02	3974	0.861
"	8115.551	4.86	-.05	09,09,11,11	3956	1.798	"	" .539	4.89	-.10	04,03,08,07	"	0.867
"	" .558	4.88	-.12	00,00,03,03	"	1.805	"	8152.534	5.09	-.18	01,02,06,07	"	1.862
"	8116.560	4.74	-.08	10,09,01,02	3957	0.756	"	8153.532	4.74	-.03	12,11,01,01	3975	0.809
"	" .566	4.76	-.09	08,07,06,06	"	0.762	09	8419.617	4.98	-.13	07,07,01,01	4105	0.264
"	8118.553	4.70	-.20	02,03,03,02	3958	0.698	"	" .625	4.94	-.19	04,05,02,02	"	0.272
"	" .560	4.65	+.02	01,01,01,02	"	0.705	"	8420.576	4.96	-.29	07,07,04,04	"	1.223
"	8119.552	4.71	-.26	03,02,06,06	"	1.697	"	" .584	5.10	-.28	03,02,09,08	"	1.231
"	" .561	4.70	-.07	01,02,04,04	"	1.706	"	" .600	4.61	-.18	05,04,04,03	"	1.247
"	8120.562	4.64	-.05	07,06,03,03	3959	0.656	"	" .605	4.59	-.14	01,02,09,10	"	1.252
"	8122.553	4.70	-.15	02,03,07,07	3960	0.596	"	8421.618	4.68	-.15	06,06,03,03	4106	0.214
"	" .562	4.66	-.07	01,01,01,01	"	0.605	"	" .629	4.65	-.20	01,02,02,01	"	0.225
"	8123.550	5.02	+.27	08,07,05,05	"	1.593	"	8423.572	4.89	+.02	01,02,02,01	4107	0.118
"	" .556	4.99	+.26	03,04,06,06	"	1.599	"	" .578	4.94	-.24	00,00,02,02	"	0.124
"	" .568	4.96	+.28	04,04,01,00	"	1.611	"	8425.617	4.74	-.16	09,08,06,07	4108	0.112
"	" .576	4.94	+.34	02,02,05,05	"	1.619	"	" .623	4.78	-.08	01,02,07,06	"	0.118
"	" .583	4.89	+.38	00,00,04,05	"	1.626	"	8431.523	5.37	-.14	07,06,00,01	4110	1.916
"	" .594	4.93	+.26	06,05,10,11	"	1.637	"	" .571	5.42	-.26	00,01,08,09	"	1.964
"	" .603	4.84	+.19	08,08,06,06	"	1.646	"	8432.564	4.95	-.30	02,01,03,02	4111	0.906
"	8124.554	4.58	-.07	02,03,03,03	3961	0.546	"	" .572	4.88	-.24	03,04,02,01	"	0.914

Yr.	Julian Day.	Magn.	A-B	Residuals.	Epoch.	Phase.	Year.	Julian Day.	Magn.	A-B	Residuals.	Epoch.	Phase.
171333. u HERCULIS (continued).							172907. RV OPHIUCHI (continued).						
09	8432.581	4.86	-.16	03,02,01,02	4111	0.923	04	6605.656	9.40	+.01	00,01,06,06	0	0.920
"	" .637	4.85	-.10	00,01,00,01	"	0.979	"	6607.655	9.39	-.06	01,01,00,00	"	2.919
"	" .646	4.94	-.22	02,02,04,04	"	0.988	"	" .662	9.44	-.09	03,03,05,06	"	2.926
"	8433.571	5.32	-.08	10,11,04,03	"	1.913	"	6608.589	9.52	.00	01,02,03,02	1	0.166
"	" .589	5.32	-.21	02,02,03,03	"	1.931	"	" .596	9.42	-.01	03,03,05,04	"	0.173
"	" .604	5.38	-.33	02,02,11,10	"	1.946	"	" .606	9.38	-.01	00,00,04,04	"	0.183
"	" .617	5.43	-.18	04,04,05,04	"	1.959	"	" .614	9.40	-.07	01,01,02,02	"	0.191
"	" .628	5.37	-.34	01,00,01,02	"	1.970	"	" .632	9.37	+.08	00,00,02,02	"	0.209
"	8435.563	5.02	-.19	01,01,06,06	4112	1.854	"	" .642	9.42	.00	03,02,01,00	"	0.219
"	" .576	5.12	-.20	05,04,04,04	"	1.867	"	6622.663	9.48	+.04	02,01,04,05	4	3.179
"	" .591	5.20	-.21	04,03,03,03	"	1.882	"	" .670	9.44	-.05	03,03,04,03	"	3.186
"	" .604	5.24	-.17	03,04,04,04	"	1.895	"	6635.603	9.46	-.04	02,02,02,02	8	1.371
"	" .617	5.33	-.08	00,00,02,02	"	1.908	"	6641.641	10.50	+.21	01,01,09,08	10	0.035
"	8438.574	4.73	-.34	09,08,05,04	4114	0.763	"	" .648	10.38	-.08	05,04,02,03	"	0.042
"	" .581	4.72	-.29	08,07,04,04	"	0.770	"	" .657	10.28	-.03	04,05,11,11	"	0.051
"	8439.574	4.80	-.40	03,03,01,00	"	1.763	"	" .664	10.16	-.05	01,01,02,01	"	0.058
"	" .581	4.82	-.25	01,01,03,03	"	1.770	"	" .673	10.00	+.03	00,01,01,01	"	0.067
"	8442.553	4.76	-.31	04,04,05,05	4116	0.640	"	" .681	9.88	+.03	02,02,02,02	"	0.075
"	8447.577	4.65	-.06	01,02,01,02	4118	1.562	"	" .696	9.73	+.03	02,02,02,01	"	0.090
"	8452.635	4.64	-.06	10,10,01,01	4121	0.467	"	" .703	9.72	-.01	01,00,05,05	"	0.097
"	8458.547	5.02	+.03	07,08,00,00	4124	0.226	"	" .711	9.59	+.02	03,04,08,09	"	0.105
"	" .553	4.96	+.15	03,02,01,01	"	0.232	"	" .740	9.50	-.06	02,02,03,03	"	0.134
"	8459.545	4.83	-.10	04,03,00,01	"	1.224	"	" .747	9.45	+.06	01,02,01,02	"	0.141
"	8460.557	4.67	-.18	13,13,06,05	4125	0.185	"	6645.611	9.45	+.10	01,01,01,02	11	0.317
"	8466.548	5.07	-.14	04,05,01,01	4128	0.023	"	" .618	9.47	+.02	01,01,01,01	"	0.324
"	8472.552	5.46	+.31	04,05,04,04	4130	1.925	"	6646.633	9.42	+.08	01,00,01,02	"	1.339
"	8474.547	5.38	-.20	03,02,03,02	4131	1.869	"	" .643	9.44	-.07	05,05,03,03	"	1.349
"	8480.545	5.00	+.08	09,08,02,02	4134	1.714	"	6647.613	9.46	-.07	01,01,00,01	"	2.319
"	8481.547	5.03	-.26	02,01,05,05	4135	0.665	"	" .621	9.48	.00	01,01,03,04	"	2.327
10	8757.672	5.28	-.24	01,01,04,03	4269	1.954	"	6649.672	9.40	-.08	02,03,01,00	12	0.691
"	" .682	5.30	-.35	06,07,01,01	"	1.964	"	" .678	9.44	-.16	01,01,02,03	"	0.697
"	" .690	5.19	-.26	02,01,01,02	"	1.972	"	" .689	9.40	-.08	01,00,01,00	"	0.708
"	" .699	5.28	-.17	03,02,04,04	"	1.981	"	6650.592	9.50	-.08	02,02,02,03	"	1.611
"	" .707	5.32	-.21	01,01,06,06	"	1.989	"	" .608	9.46	+.01	03,02,01,01	"	1.627
172907. RV OPHIUCHI.							"	" .619	9.48	-.04	04,04,01,01	"	1.638
							05	6997.584	9.52	+.05	06,05,04,04	106	2.006
							"	" .594	9.53	+.02	01,02,01,00	"	2.016
							"	6998.645	9.46	+.08	05,06,11,11	"	3.067
04	6603.613	9.44	-.03	00,01,04,04	1	2.565	08	8119.620	9.50	+.12	04,04,02,01	410	3.133
"	" .619	9.45	+.06	02,03,02,03	"	2.571	"	" .627	9.56	.00	04,03, R	"	3.140
"	6604.606	10.04	.00	02,01,03,03	"	3.558	"	" .635	9.52	.00	01,02,04,04	"	3.148
"	" .612	10.24	-.07	01,01,02,02	"	3.564	"	" .645	9.56	-.04	05,06,02,03	"	3.158
"	" .626	10.36	+.13	09,08,01,01	"	3.578	"	" .653	9.53	+.06	05,04,01,01	"	3.166
"	" .633	10.46	+.12	06,07,00,01	"	3.585	"	8138.606	10.66	-.02	05,05,01,01	415	3.683
"	" .646	10.72	+.13	00,01,07,07	"	3.598	"	" .615	10.54	-.28	03,03,04,05	416	0.005
"	" .655	10.98	.00	08,07,10,09	"	3.607	"	" .625	10.37	-.02	04,05,04,04	"	0.015
"	6605.651	9.36	-.07	02,02,05,05	0	0.915	"	" .634	10.17	-.26	03,03,01,01	"	0.024

Yr.	Julian Day.	Magn.	A-B	Residuals.	Epoch.	Phase.	Yr.	Julian Day.	Magn.	A-B	Residuals.	Epoch.	Phase.
172907. RV OPHIUCHI (continued).							181115. V SERPENTIS (continued).						
08	8138.642	10.12	-.05	02,02,06,06	416	0.032	05	7111.552	9.64	-.03	06,06,00,01	2058	1.614
"	" .649	10.00	-.16	09,09,04,04	"	0.039	"	" .570	9.68	-.11	03,04,00,00	"	1.632
							"	" .584	9.74	+.05	00,01,02,02	"	1.646
							"	" .595	9.78	.00	00,00,01,00	"	1.657
							"	" .612	9.80	-.04	00,01,02,01	"	1.674
181115. V SERPENTIS.							06	7389.604	10.03	-.14	00,00,00,00	2138	3.393
04	6751.531	9.51	-.10	02,02,07,07	1954	0.754	"	" .620	10.12	-.15	04,04,03,02	"	3.409
"	" .538	9.48	-.08	04,04,01,00	"	0.761	"	" .635	10.21	.00	03,03,00,00	"	3.424
"	6752.507	9.70	+.13	04,03,03,03	"	1.730	"	" .648	10.33	-.02	03,02,03,04	"	3.437
"	" .513	9.82	+.12	00,01,00,01	"	1.736	"	" .664	10.38	-.01	01,01,06,06	2139	0.000
"	" .524	9.81	+.10	01,02,03,04	"	1.747	"	" .678	10.48	-.09	01,01,05,04	"	0.014
"	" .538	9.86	+.13	00,00,05,05	"	1.761	"	" .689	10.46	-.05	02,01,00,00	"	0.025
"	" .554	9.82	+.17	03,03,09,09	"	1.777	"	7472.534	10.16	-.24	05,04,01,02	2162	3.434
"	" .571	9.83	+.10	02,03,01,00	"	1.794	"	" .546	10.31	-.22	00,01,03,04	"	3.446
"	6754.584	9.58	-.13	02,03,01,01	1955	0.353	"	" .561	10.38	-.20	05,05,01,00	2163	0.008
"	" .594	9.59	-.26	03,04,03,02	"	0.363	"	" .577	10.47	-.18	08,07,03,02	"	0.024
"	6755.525	9.47	-.18	03,02,10,10	"	1.294	08	8214.553	9.54	-.12	06,07,00,01	2377	2.954
"	" .534	9.50	-.12	02,03,01,01	"	1.303	"	" .562	9.53	-.10	03,03,03,02	"	2.963
"	6758.530	9.53	+.14	00,01,03,03	1956	0.845	"	" .582	9.55	-.18	02,01,06,06	"	2.983
"	" .546	9.50	+.08	02,03,06,07	"	0.861	"	8227.522	9.58	+.04	07,06,02,02	2381	2.108
"	6759.502	9.68	+.12	11,10,01,01	"	1.817	"	" .530	9.56	-.16	10,10,09,10	"	2.116
"	" .512	9.72	+.20	03,04,07,06	"	1.827	"	8229.523	9.54	-.16	01,02,02,01	2382	0.655
"	6760.520	9.52	+.15	04,03,01,01	"	2.835	"	" .532	9.53	-.22	04,05,01,00	"	0.664
"	" .533	9.50	+.15	00,01,00,00	"	2.848	09	8501.598	9.82	-.25	06,05,01,01	2460	3.366
"	6761.529	9.59	+.14	04,03,02,02	1957	0.390	"	" .606	9.86	-.25	03,03,02,01	"	3.374
"	" .540	9.52	+.07	14,14,02,03	"	0.401	"	" .613	9.96	-.23	08,08,01,02	"	3.381
"	" .560	9.60	+.07	01,01,05,05	"	0.421	"	" .639	10.08	-.08	03,04,00,01	"	3.407
"	6769.528	9.61	+.18	09,10,03,03	1959	1.482	"	" .646	10.13	-.06	01,01,07,07	"	3.414
"	" .537	9.63	+.06	02,02,08,08	"	1.491	"	" .656	10.22	-.05	01,01,05,05	"	3.424
"	6771.485	10.34	-.19	07,07,05,05	"	3.439	"	" .665	10.18	-.05	02,02,02,01	"	3.433
"	" .494	10.42	-.03	01,00,02,02	"	3.448	"	8509.570	9.52	+.04	04,05,03,03	2463	0.977
"	" .504	10.44	-.16	05,06,06,06	1960	0.004	"	" .583	9.52	.00	08,09,05,04	"	0.990
"	" .521	10.44	-.23	01,01,06,07	"	0.021	"	" .597	9.56	-.08	02,02,04,05	"	1.004
"	" .536	10.40	-.19	05,04,02,02	"	0.036	"	" .607	9.56	-.09	04,04,03,03	"	1.014
05	7048.641	9.49	-.14	04,03,04,04	2040	0.870	"	" .620	9.53	-.14	02,01,05,04	"	1.027
"	7049.571	9.76	-.28	03,03,04,03	"	1.800	"	" .630	9.52	-.12	02,01,01,00	"	1.037
"	" .583	9.74	-.19	04,04,05,05	"	1.812	"	8510.570	9.62	-.10	01,01,00,00	"	1.977
"	" .597	9.77	-.18	03,02,05,05	"	1.826	"	" .597	9.66	-.08	01,00,02,03	"	2.004
"	" .619	9.70	-.12	04,03,01,00	"	1.848	"	" .610	9.63	-.14	07,08,05,05	"	2.017
"	" .642	9.68	-.12	02,02,05,04	"	1.871	"	8512.619	9.58	-.13	04,04,00,01	2464	0.572
"	" .658	9.59	-.14	00,01,03,04	"	1.887	"	" .628	9.58	-.05	08,08,07,06	"	0.581
"	7052.615	9.50	-.08	02,01,02,02	2041	1.390	"	8553.543	10.35	-.26	08,07,04,05	2476	0.052
"	7110.539	9.53	-.02	03,03,01,02	2058	0.601	"	" .551	10.32	-.17	04,04,01,01	"	0.060
"	" .549	9.54	.00	01,00,02,01	"	0.611	"	" .563	10.34	-.18	07,07,03,03	"	0.072
"	" .563	9.52	-.04	03,04,01,00	"	0.625	"	" .572	10.31	-.12	08,08,02,02	"	0.081
"	" .573	9.52	-.01	02,02,00,01	"	0.635	"	" .583	10.27	-.06	05,05,00,01	"	0.092
"	7111.541	9.64	-.08	03,02,02,01	"	1.603							

Yr.	Julian Day.	Magn.	A-B	Residuals.	Epoch.	Phase.	Yr.	Julian Day.	Magn.	A-B	Residuals.	Epoch.	Phase.
182158. RZ DRACONIS.							182158. RZ DRACONIS (continued).						
08	8245.528	10.06	-.16	06,05,06,07	1036	0.468	08	8266.596	10.15	-.10	00,00,04,03	1075	0.052
"	" .534	10.02	-.20	04,03,04,04	"	0.474	"	" .610	10.06	-.11	00,01,04,04	"	0.066
"	" .548	10.18	-.09	06,06,02,03	"	0.488	"	8267.522	9.90	-.05	07,06,01,01	1076	0.426
"	" .558	10.16	-.09	00,00,02,01	"	0.498	"	" .530	9.94	-.08	01,01,03,02	"	0.434
"	" .569	10.30	-.16	05,06,04,03	"	0.509	"	" .538	10.00	-.04	03,03,02,02	"	0.442
"	" .577	10.36	.00	06,06,04,03	"	0.517	"	" .546	10.01	-.06	02,03,03,04	"	0.450
"	8246.522	10.04	-.12	02,02,06,05	1038	0.361	"	" .555	10.07	-.10	01,01,01,01	"	0.459
"	" .529	9.96	+.06	06,06,06,06	"	0.368	"	" .563	10.10	-.04	05,04,01,01	"	0.467
"	" .545	9.98	-.08	07,06,01,00	"	0.384	"	" .574	10.15	-.10	03,03,02,02	"	0.478
"	" .553	9.96	-.01	05,05,03,02	"	0.392	"	" .590	10.25	-.14	01,01,07,06	"	0.494
"	" .590	9.98	-.03	00,00,04,05	"	0.429	"	" .601	10.38	-.03	00,00,01,00	"	0.505
"	" .607	10.02	-.11	02,03,03,03	"	0.446	"	" .610	10.48	-.19	07,07,02,01	"	0.514
"	" .615	10.01	-.06	04,04,02,03	"	0.454	"	" .621	10.70	-.20	03,04,02,01	"	0.525
"	8258.516	10.12	-.03	00,00,04,03	1060	0.235	"	8270.519	9.98	-.15	00,00,02,01	1082	0.118
"	" .523	10.10	-.04	01,00,00,00	"	0.242	"	" .527	9.92	-.11	04,05,01,01	"	0.126
"	" .532	10.12	-.11	01,01,05,06	"	0.251	"	" .538	9.98	-.13	04,05,07,07	"	0.137
"	" .541	10.18	+.01	05,05,01,01	"	0.260	"	" .548	9.94	-.12	09,09,00,01	"	0.147
"	" .550	10.18	.00	05,05,02,01	"	0.269	"	" .556	9.98	-.11	05,05,03,02	"	0.155
"	8259.517	9.96	-.05	01,02,03,03	1062	0.134	"	" .565	10.01	-.10	02,01,00,01	"	0.164
"	" .527	10.00	+.04	02,01,04,03	"	0.144	"	" .576	10.03	-.10	03,03,03,03	"	0.175
"	" .541	9.97	-.10	03,04,01,02	"	0.158	"	" .585	10.08	-.18	02,02,03,03	"	0.184
"	" .550	9.94	.00	04,03,03,02	"	0.167	"	" .596	10.11	-.02	01,02,01,02	"	0.195
"	" .559	9.95	-.06	03,03,01,01	"	0.176	"	8277.519	10.33	+.06	06,07,02,03	1094	0.507
"	" .573	10.02	-.04	01,01,02,03	"	0.190	"	" .528	10.50	-.19	05,05,06,06	"	0.516
"	" .589	10.04	-.03	01,00,02,02	"	0.206	"	" .544	10.78	-.03	03,03,03,03	"	0.532
"	" .609	10.10	-.04	04,04,04,03	"	0.226	"	" .558	10.77	+.02	10,10,03,02	"	0.546
"	8262.595	10.05	-.20	02,02,07,07	1067	0.458	"	" .570	10.70	-.07	06,06,02,02	1095	0.007
"	" .602	10.03	-.20	03,03,01,01	"	0.465	"	" .582	10.48	-.02	00,00,02,02	"	0.019
"	" .611	10.13	-.18	03,02,06,05	"	0.474	"	" .597	10.26	-.12	03,02,01,01	"	0.034
"	" .624	10.18	-.15	00,00,03,03	"	0.487	"	" .607	10.13	-.06	03,04,03,03	"	0.044
"	" .632	10.26	-.17	03,03,03,03	"	0.495	"	8288.536	10.27	-.10	09,09,04,03	1114	0.507
"	8263.520	10.22	-.08	04,03,01,00	1069	0.281	"	" .547	10.46	+.04	02,03,03,03	"	0.518
"	" .528	10.15	+.02	01,01,07,08	"	0.289	09	8466.598	10.01	+.18	10,10,01,01	1438	0.086
"	" .538	10.18	-.03	02,02,02,02	"	0.299	"	" .609	10.05	+.28	09,09,04,04	"	0.097
"	" .549	10.14	+.04	06,07,03,04	"	0.310	"	" .620	10.02	+.17	08,08,08,07	"	0.108
"	" .560	10.10	-.07	04,03,00,00	"	0.321	"	" .629	9.96	+.12	04,03,03,04	"	0.117
"	" .573	10.01	+.02	01,00,03,02	"	0.334	"	" .636	10.03	+.14	03,04,02,01	"	0.124
"	" .584	9.99	+.02	03,02,04,03	"	0.345	"	8469.584	10.14	-.04	03,03,13,14	1443	0.317
"	" .593	9.97	+.02	01,01,01,01	"	0.354	"	" .594	10.14	-.05	05,04,08,08	"	0.327
"	8266.521	10.65	-.02	02,01,04,04	1074	0.527	"	" .604	10.04	+.05	04,03,04,04	"	0.337
"	" .530	10.73	+.02	01,02,02,01	"	0.536	"	" .621	10.05	+.10	00,00,01,01	"	0.354
"	" .538	10.71	-.06	01,02,02,01	"	0.544	"	" .629	9.98	-.17	02,02,04,04	"	0.362
"	" .546	10.78	.00	04,05,00,00	1075	0.002	"	" .637	10.05	-.02	01,02,06,05	"	0.370
"	" .556	10.67	-.22	11,10,03,02	"	0.012	"	8470.593	10.08	+.21	01,01,00,01	1445	0.224
"	" .565	10.46	+.05	05,05,02,03	"	0.021	"	" .602	10.10	+.07	03,03,00,01	"	0.233
"	" .574	10.30	-.07	03,03,03,02	"	0.030	"	" .613	10.14	-.04	06,07,06,05	"	0.244
"	" .586	10.18	-.01	01,00,01,01	"	0.042	"	" .624	10.17	+.09	00,00,01,00	"	0.255

Yr.	Julian Day.	Magn.	A-B	Residuals.	Epoch.	Phase.	Yr.	Julian Day.	Magn.	A-B	Residuals.	Epoch.	Phase.
182158. RZ DRACONIS (continued).							182158. RZ DRACONIS (continued).						
09	8470.633	10.18	+ .21	02,01,02,02	1445	0.264	09	3641.525	9.96	-.29	03,03,00,00	1755	0.382
"	8472.599	10.36	-.05	05,05,02,02	1449	0.027	"	" .536	9.98	-.23	05,05,00,00	"	0.393
"	" .611	10.22	+ .05	01,01,04,05	"	0.039	"	" .547	9.98	-.11	08,08,01,00	"	0.404
"	8473.626	10.28	+ .17	07,06,00,00	1450	0.503	"	" .557	10.02	-.07	04,05,01,01	"	0.414
"	" .635	10.32	-.15	07,07,04,04	"	0.512	"	" .574	10.08	-.24	08,07,03,02	"	0.431
"	8474.592	10.00	.00	03,02,02,02	1452	0.367	"	" .584	10.08	-.28	06,06,06,05	"	0.441
"	" .600	9.99	-.06	05,06,01,00	"	0.375	"	" .598	10.11	-.18	03,04,00,00	"	0.455
"	" .609	9.94	+ .04	06,05,01,00	"	0.384	"	" .612	10.16	.00	06,06,02,03	"	0.469
"	" .619	9.97	-.02	04,03,07,06	"	0.394	"	8645.534	10.79	-.18	09,08,05,04	1762	0.534
"	" .632	10.00	+ .12	00,01,03,04	"	0.407	"	" .546	10.77	-.14	02,03,03,03	"	0.546
"	8476.609	9.98	+ .29	05,05,01,00	1456	0.181	"	" .554	10.74	-.24	06,06,00,00	1763	0.004
"	" .618	10.06	+ .12	02,02,01,00	"	0.190	"	" .565	10.52	-.09	00,00,04,05	"	0.015
"	" .628	10.09	+ .22	01,02,03,02	"	0.200	"	" .576	10.38	-.15	02,01,07,07	"	0.026
"	" .637	10.06	+ .13	05,05,06,06	"	0.209	"	8647.515	10.15	-.26	02,01,01,02	1766	0.312
"	" .644	10.14	+ .17	03,02,15,15	"	0.216	"	" .522	10.08	-.08	01,00,01,02	"	0.319
"	8480.585	10.17	+ .11	06,06,08,07	1463	0.301	"	" .533	10.05	-.16	01,02,01,01	"	0.330
"	" .592	10.17	+ .28	01,01,03,03	"	0.308	"	" .544	9.94	-.12	03,03,01,02	"	0.341
"	8612.532	10.35	-.14	05,06,01,00	1703	0.035	"	" .553	9.94	+ .01	07,06,00,00	"	0.350
"	" .538	10.21	-.04	03,03,07,07	"	0.041	"	8649.606	10.06	-.04	11,10,04,04	1770	0.199
"	" .545	10.12	-.20	00,01,11,10	"	0.048	"	" .613	10.10	-.37	02,01,08,08	"	0.206
"	" .552	10.10	-.16	01,01,03,04	"	0.055	"	" .624	10.18	-.23	09,09,01,02	"	0.217
"	" .557	10.04	-.13	05,06,01,01	"	0.060	"	" .637	10.20	-.22	02,02,03,03	"	0.230
"	8615.607	10.04	-.17	05,05,00,00	1708	0.356	"	8650.602	9.98	-.16	03,03,01,02	1772	0.094
"	" .613	10.00	-.14	02,02,03,03	"	0.362	"	" .616	9.99	-.10	01,00,01,02	"	0.108
"	8616.606	10.23	-.18	02,03,04,05	1710	0.253	"	" .632	10.00	-.12	01,01,06,07	"	0.124
"	" .619	10.22	.00	04,04,00,01	"	0.266	"	8651.571	10.48	-.03	03,02,00,00	1773	0.512
"	" .631	10.22	-.19	01,01,02,01	"	0.278	"	" .579	10.64	-.24	02,02,03,04	"	0.520
"	" .643	10.18	-.16	06,05,08,08	"	0.290	"	" .589	10.82	-.06	03,03,00,00	"	0.530
"	" .655	10.13	-.18	07,07,02,02	"	0.302	"	" .599	10.76	-.19	05,05,00,00	"	0.540
"	8622.588	10.03	-.22	09,08,00,01	1721	0.176	"	" .610	10.72	-.20	04,03,00,00	1774	0.000
"	8626.560	10.23	-.32	05,05,09,09	1728	0.291	"	8652.524	10.01	-.37	10,10,01,01	1775	0.363
"	" .568	10.20	-.25	01,02,05,05	"	0.299	"	" .534	9.96	-.24	01,01,02,02	"	0.373
"	" .583	10.13	-.10	01,02,03,03	"	0.314	"	" .544	9.98	-.20	02,01,01,01	"	0.383
"	8629.566	10.82	+ .01	00,00,02,02	1733	0.542	"	8661.527	10.76	-.05	11,11,05,06	1792	0.001
"	" .580	10.74	-.08	07,07,05,05	1734	0.005	"	" .534	10.66	-.13	05,06,03,03	"	0.008
"	" .589	10.54	-.08	01,00,10,11	"	0.014	"	" .543	10.54	-.28	05,04,06,05	"	0.017
"	8640.512	10.09	-.30	01,01,00,00	1753	0.470	"	" .551	10.34	-.08	16,15,04,03	"	0.025
"	" .521	10.08	-.23	01,01,01,01	"	0.479	"	" .562	10.23	+ .06	04,03,05,06	"	0.036
"	" .531	10.20	-.08	02,03,07,08	1753	0.489	"	8662.563	10.19	-.26	04,03,07,06	1793	0.486
"	" .544	10.36	-.15	05,05,01,02	"	0.502	"	" .573	10.24	-.23	08,08,00,00	"	0.496
"	" .553	10.52	-.09	01,01,04,04	"	0.511	10	8683.519	10.37	-.22	05,04,03,03	1831	0.509
"	" .563	10.66	-.19	03,02,05,05	"	0.521	"	" .528	10.50	-.04	02,03,01,02	"	0.518
"	" .572	10.80	+ .12	01,02,00,00	"	0.530	"	" .538	10.71	+ .02	02,03,05,04	"	0.528
"	" .582	10.88	-.09	06,06,02,02	"	0.540	"	" .548	10.84	-.19	07,07,02,02	"	0.538
"	" .591	10.84	-.12	07,07,02,01	"	0.549	"	" .557	10.80	-.08	00,00,01,02	"	0.547
"	" .602	10.62	-.04	04,03,09,09	1754	0.009	"	8691.544	10.22	-.20	02,03,08,07	1846	0.271
"	8641.516	9.99	-.18	09,08,07,07	1755	0.373	"	" .551	10.25	-.06	06,05,09,09	"	0.278

Yr.	Julian Day.	Magn.	A-B	Residuals.	Epoch.	Phase.	Yr.	Julian Day.	Magn.	A-B	Residuals.	Epoch.	Phase.
182158. RZ DRACONIS (continued).							184633. β_2 LYRAE (continued).						
10	8691.559	10.27	-.18	05,05,03,03	1846	0.286	09	8488.554	3.91	+.02	01,00,02,01	1540	11.162
"	8867.567	10.54	+.04	04,05,02,02	2166	0.012	"	8497.550	4.32	-.11	01,01,01,01	1541	7.409
"	" .572	10.44	+.08	13,12,03,02	"	0.017	"	8505.553	3.97	-.06	07,07,02,01	1542	2.496
"	" .583	10.28	+.20	02,02,03,03	2166	0.028	"	8507.542	3.82	-.03	00,00,02,03	"	3.485
"	" .590	10.18	+.15	06,06,02,01	"	0.035	"	8509.533	4.14	-.08	01,01,01,01	"	6.476
"	" .597	10.12	+.06	01,01,06,06	"	0.042	"	8510.538	4.32	-.19	00,01,01,01	"	7.481
"	9008.535	10.24	+.07	08,08,20,19	2421	0.506	"	8512.535	3.96	-.11	02,01,01,01	"	9.478
"	" .542	10.52	-.09	08,07,10,10	"	0.513	"	8515.527	4.14	+.12	04,04,04,05	"	12.470
"	" .550	10.68	+.05	01,01,04,03	"	0.521	11	9334.549	4.02	+.05	07,07,04,04	1606	4.865
"	" .558	10.80	-.16	09,09,01,02	"	0.529	"	" .554	3.93	-.04	03,03,08,08	"	4.870
"	" .565	10.81	-.02	04,05,01,00	"	0.536	"	9335.550	4.07	-.02	02,02,01,02	"	5.866
184633. β LYRAE.							184812. U SCUTI.						
03	6449.525	4.11	.00	01,00,01,01	1383	0.107	09	8500.624	10.02	-.43	02,02,05,04	2985	0.406
"	" .531	4.11	+.14	04,04,04,04	"	0.113	"	8565.540	10.06	-.04	23,22,00,00	3053	0.412
"	" .562	4.15	+.12	01,00,01,02	"	0.144	"	8567.530	10.58	-.40	03,03,05,04	3055	0.494
"	" .570	4.12	-.12	02,02,12,12	"	0.152	"	" .538	10.48	-.27	07,07,00,01	"	0.502
"	" .585	4.17	+.05	04,05,01,01	"	0.167	"	" .549	10.44	-.15	02,01,01,01	"	0.513
"	" .592	4.15	-.01	02,01,09,09	"	0.174	"	" .561	10.32	-.33	05,05,01,00	"	0.525
"	6450.525	3.80	+.06	01,02,00,01	"	1.107	"	" .573	10.16	-.21	03,03,03,02	"	0.537
"	" .533	3.75	+.04	04,04,02,02	"	1.115	"	" .586	10.02	-.45	02,02,03,02	"	0.550
"	6453.518	3.23	+.11	02,03,04,04	"	4.099	"	" .600	9.94	-.29	01,01,02,03	"	0.564
"	" .524	3.25	+.04	05,05,00,01	"	4.105	"	" .615	9.85	-.26	04,03,01,00	"	0.579
"	" .531	3.26	+.06	03,03,05,06	"	4.112	"	8588.528	10.46	-.30	06,06,04,04	3077	0.490
"	" .538	3.27	+.04	01,00,01,02	"	4.119	"	" .536	10.55	-.40	10,10,01,01	"	0.498
"	6459.531	3.13	+.12	03,04,05,04	"	10.112	"	" .544	10.64	-.39	02,03,00,00	"	0.506
"	" .540	3.17	+.13	05,05,02,01	"	10.121	"	" .552	10.52	-.27	06,06,01,01	"	0.514
"	6460.520	3.33	.00	02,01,00,01	"	11.101	"	" .560	10.45	-.14	04,03,06,06	"	0.522
"	" .529	3.27	+.05	01,01,00,00	"	11.110	10	8883.578	10.04	-.36	08,08,03,04	3386	0.605
"	6464.524	3.35	-.03	03,03,04,04	1384	2.189	"	" .587	10.19	-.18	05,04,01,00	"	0.614
"	" .531	3.31	-.13	00,01,04,04	"	2.196	"	" .598	10.32	-.40	06,05,02,03	"	0.625
"	6465.526	3.23	-.11	01,01,07,07	"	3.191	"	" .606	10.42	-.25	04,04,06,05	"	0.633
"	" .534	3.24	-.06	03,02,00,01	"	3.199	"	" .615	10.48	-.51	06,06,10,10	"	0.642
"	6467.524	3.30	+.14	06,05,07,07	"	5.189	"	" .630	10.70	-.29	06,06,01,02	"	0.657
"	" .532	3.29	+.27	05,05,06,06	"	5.197	204834. Y CYGNI.						
"	6468.517	3.51	+.24	02,03,01,01	"	6.182	05	7030.666	7.17	-.12	01,02,02,01	2262	2.246
"	" .524	3.57	+.44	03,04,00,01	"	6.189	"	" .673	7.15	-.03	05,05,05,04	"	2.253
"	6475.514	4.05	-.01	05,05,02,03	1385	0.263	"	7035.585	7.65	-.25	03,03,00,00	2264	1.172
"	" .520	4.00	-.22	02,02,02,01	"	0.269							
07	7896.527	4.02	-.10	05,06,04,03	1495	0.517							
"	" .538	3.95	-.15	03,02,02,02	"	0.528							
"	" .553	3.95	-.15	01,02,00,00	"	0.543							
"	" .567	4.05	-.32	01,01,05,05	"	0.557							
08	8088.615	4.31	+.10	07,08,03,03	1509	11.785							
09	8487.549	3.88	+.01	05,06,03,03	1540	10.324							

Yr.	Julian Day.	Magn.	A-B	Residuals.	Epoch.	Phase.	Yr.	Julian Day.	Magn.	A-B	Residuals.	Epoch.	Phase.
204834. Y CYGNI (continued).							204834. Y CYGNI (continued).						
05	7035.594	7.69	-.29	02,02, R	2264	1.181	05	7053.629	7.41	-.14	02,02,06,06	2270	1.238
"	" .610	7.69	-.22	01,01,03,03	"	1.197	"	" .649	7.25	-.12	00,01,02,01	"	1.258
"	" .619	7.63	-.29	02,02,02,02	"	1.206	"	" .661	7.22	+.06	08,07,04,04	"	1.270
"	7039.581	7.17	-.29	00,01,03,03	2265	2.172	"	" .677	7.14	-.14	05,04,02,02	"	1.286
"	7040.560	7.11	+.29	02,02,00,00	2266	0.155	"	7151.621	7.10	-.02	02,01,01,02	2303	0.345
"	" .572	7.16	+.26	05,05,01,01	"	0.167	06	7405.596	7.29	-.20	01,02,04,03	2387	2.622
"	7042.562	7.15	-.23	01,01,02,02	"	2.157	"	" .608	7.33	-.12	01,00,03,02	"	2.634
"	7044.554	7.68	-.38	03,02,02,01	2267	1.152	"	" .619	7.37	-.15	01,01,06,06	"	2.645
"	" .564	7.67	-.33	03,03,01,02	"	1.162	"	" .632	7.42	-.14	04,05,02,02	"	2.658
"	" .576	7.73	-.33	01,01,02,03	"	1.174	"	" .642	7.49	-.03	05,06,00,00	"	2.668
"	" .589	7.71	-.20	02,02,02,01	"	1.187	"	" .656	7.49	-.03	03,03,04,04	"	2.682
"	" .603	7.63	-.24	00,00,01,00	"	1.201	"	" .674	7.53	-.01	01,00,00,00	"	2.700
"	" .613	7.57	-.16	02,01,04,05	"	1.211	"	" .688	7.49	-.04	05,05,01,00	"	2.714
"	" .624	7.43	-.24	05,04,00,00	"	1.222	"	7406.576	7.16	-.18	02,01,04,04	2388	0.605
"	" .642	7.20	-.02	03,03,11,10	"	1.240	10	9014.541	6.87	-.08	01,00,07,08	2924	2.475
"	7046.636	7.14	-.14	02,02,02,01	2268	0.238	"	" .552	6.97	-.47	06,06,16,16	"	2.486
"	7047.569	7.75	-.31	01,01,01,00	"	1.171	"	" .564	6.95	+.01	02,02,06,06	"	2.498
"	7053.581	7.71	-.24	02,03,05,04	2270	1.190	"	" .573	7.07	-.05	03,03,05,05	"	2.507
"	" .606	7.53	-.13	03,03,05,04	"	1.215	"	" .584	7.01	-.23	02,02,05,04	"	2.518
"	" .617	7.49	.00	02,02,04,03	"	1.226	"	" .593	6.99	-.09	03,04,04,04	"	2.527

TABLE XV.

STARS OF THE ALGOL TYPE.

Yr.	Julian Day.	Magn.	A-B	Residuals.	Epoch.	Phase.	Yr.	Julian Day.	Magn.	A-B	Residuals.	Epoch.	Phase.
005381. U CEPHEI.							005381. U CEPHEI (continued).						
03	6136.643	7.55	-.16	02,02,02,01	3307	2.377	03	6156.622	8.31	-.04	03,02,02,02	3315	2.412
"	" .650	7.73	-.07	02,01,04,04	"	2.384	"	" .628	8.47	-.24	02,03,07,07	"	2.418
"	" .656	7.81	-.33	00,00,00,00	"	2.390	"	" .636	8.71	.00	06,07,05,04	"	2.426
"	" .663	7.95	-.12	02,01,02,01	"	2.397	"	" .641	8.91	-.24	05,05,01,00	"	2.431
"	" .669	8.09	-.19	01,01,05,04	"	2.403	"	" .648	9.03	-.08	06,07,01,00	"	2.438
"	" .674	8.24	-.06	01,00,03,03	"	2.408	"	6226.560	8.91	-.08	01,02,06,05	3344	0.053
"	" .680	8.41	-.23	06,06,04,05	"	2.414	"	" .566	8.67	+.13	04,03,02,02	"	0.059
"	6151.619	7.88	-.06	07,06,12,12	3313	2.395	"	" .573	8.51	+.09	08,08,11,12	"	0.066
"	" .626	8.03	-.11	09,08,01,01	"	2.402	"	" .581	8.32	+.02	01,00,10,11	"	0.074
"	" .631	8.15	-.20	02,03,04,04	"	2.407	"	" .588	8.01	-.03	04,04,09,10	"	0.081
"	" .639	8.35	+.04	04,03,02,02	"	2.415	"	6236.532	8.84	+.14	04,04,04,04	3348	0.054
"	" .645	8.59	-.24	06,06,00,01	"	2.421	"	" .538	8.65	+.33	10,10,07,07	"	0.060
"	" .656	8.95	-.03	00,00,03,03	"	2.432	"	" .544	8.40	+.10	02,02,01,00	"	0.066

Yr.	Julian Day.	Magn.	A-B	Residuals.	Epoch.	Phase.	Yr.	Julian Day.	Magn.	A-B	Residuals.	Epoch.	Phase.
005381. U CEPHEI (continued).							005381. U CEPHEI (continued).						
03	6236.550	8.24	+ .22	02,02,00,01	3348	0.072	03	6430.517	6.82	+ .26	02,03,00,01	3425	2.091
"	" .556	8.09	+ .09	03,02,01,01	"	0.078	"	" .524	6.82	+ .26	01,01,01,01	"	2.098
"	6323.633	7.88	+ .18	04,03,05,05	3382	2.397	"	6431.516	6.77	+ .24	00,00,05,05	3426	0.597
"	" .642	8.07	+ .32	00,01,02,03	"	2.406	"	" .523	6.77	+ .15	02,01,03,03	"	0.604
"	" .649	8.39	+ .19	00,01,06,06	"	2.413	"	" .532	6.81	+ .29	04,03,01,01	"	0.613
"	" .658	8.62	+ .34	05,05,01,02	"	2.422	04	6510.618	8.57	+ .12	15,15,04,05	3457	2.419
"	" .667	8.85	- .01	01,01,04,03	"	2.431	"	" .624	8.81	+ .03	01,00,09,09	"	2.425
"	6383.603	9.02	- .02	05,05,04,03	3407	0.047	"	" .630	8.97	+ .16	07,06,02,02	"	2.431
"	" .610	8.85	- .05	03,03,00,00	"	0.054	"	" .638	9.14	+ .02	03,03,03,02	"	2.439
"	" .616	8.65	+ .08	04,04,01,00	"	0.060	"	6520.558	7.71	- .11	02,02,02,02	3461	2.387
"	" .623	8.41	- .16	06,06,07,06	"	0.067	"	" .566	7.93	+ .05	04,04,04,04	"	2.395
"	" .629	8.21	+ .04	03,02,01,02	"	0.073	"	" .575	8.09	- .18	01,01,00,00	"	2.404
"	" .636	8.03	- .11	05,05,02,01	"	0.080	"	" .585	8.40	+ .06	11,10,04,03	"	2.414
"	" .494	9.13	+ .19	04,04,03,02	3408	2.446	"	" .593	8.67	- .21	06,06,01,02	"	2.422
"	" .500	9.12	+ .12	04,04,02,02	"	2.452	"	" .604	8.97	+ .04	07,08,00,00	"	2.433
"	" .508	9.11	+ .07	01,01,00,01	"	2.460	"	6682.589	7.55	+ .16	00,00,05,06	3526	2.378
"	" .522	9.12	+ .08	04,03,01,00	"	2.474	"	" .598	7.67	+ .09	01,01,06,06	"	2.387
"	" .534	9.11	+ .09	00,01,01,01	"	2.486	"	" .603	7.79	- .16	07,07,02,01	"	2.392
"	" .546	9.13	+ .01	02,02,03,02	3409	0.005	"	" .610	7.97	+ .05	01,01,03,03	"	2.399
"	" .556	9.13	+ .09	01,01,02,01	"	0.015	"	" .619	8.18	- .06	01,00,01,00	"	2.408
"	" .589	9.05	- .20	03,04,04,03	"	0.048	"	" .628	8.39	+ .17	04,03,01,01	"	2.417
"	" .595	8.81	+ .04	00,00,06,07	"	0.054	"	" .639	8.72	- .06	01,00,00,01	"	2.428
"	" .600	8.68	- .10	03,03,03,02	"	0.059	"	" .648	8.97	+ .09	01,01,02,01	"	2.437
"	" .606	8.51	+ .09	02,02,07,08	"	0.065	"	" .655	9.13	- .16	02,01,01,01	"	2.444
"	" .611	8.29	- .19	01,01,00,00	"	0.070	"	6697.562	7.95	+ .11	00,00,00,00	3532	2.394
"	" .618	8.15	+ .03	00,01,02,02	"	0.077	"	" .592	8.71	- .04	01,00,02,02	"	2.424
"	6403.547	8.96	+ .06	08,07,06,05	3415	0.049	"	" .598	8.83	+ .12	05,06,02,01	"	2.430
"	" .555	8.66	- .22	03,03,05,04	"	0.057	"	" .603	9.04	- .06	06,06,01,01	"	2.435
"	" .563	8.36	+ .06	01,00,03,04	"	0.065	"	" .608	9.11	+ .04	02,01,01,02	"	2.440
"	" .573	8.05	- .28	03,02,09,08	"	0.075	"	6844.630	7.82	- .02	05,05,06,06	3591	2.385
"	" .580	7.89	- .05	05,06,04,04	"	0.082	"	" .638	7.97	+ .07	04,04,02,01	"	2.393
"	6408.533	8.89	+ .04	07,08,01,01	3417	0.050	"	" .646	8.13	- .04	00,01,03,03	"	2.401
"	" .539	8.65	- .28	04,05,01,02	"	0.056	"	" .656	8.39	+ .20	03,02,01,00	"	2.411
"	" .545	8.43	+ .07	03,04,16,16	"	0.062	"	" .663	8.63	- .22	04,04,05,05	"	2.418
"	" .552	8.25	- .21	05,05,03,02	"	0.069	"	" .674	8.92	+ .14	00,01,00,00	"	2.429
"	" .559	8.11	+ .01	11,10,01,01	"	0.076	05	6869.573	7.91	- .16	05,05,03,04	3601	2.399
"	6418.481	9.14	- .22	02,02,06,07	3421	0.026	"	" .582	8.15	+ .09	00,00,02,02	"	2.408
"	" .489	9.03	- .22	02,01,03,03	"	0.034	"	" .590	8.37	- .08	04,04,04,03	"	2.416
"	6423.443	9.09	- .16	04,05,02,02	3423	0.003	"	" .599	8.64	+ .10	04,05,04,04	"	2.425
"	" .450	9.09	- .11	04,04,02,02	"	0.010	"	" .608	8.95	- .20	06,06,05,05	"	2.434
"	" .460	9.07	- .16	08,09,00,00	"	0.020	"	6874.555	7.81	- .15	03,03,06,07	3603	2.395
"	" .467	9.11	- .11	03,03,01,02	"	0.027	"	" .564	8.04	+ .14	05,06,02,03	"	2.404
"	6428.431	9.11	+ .17	04,04,04,03	3425	0.005	"	" .572	8.27	- .13	06,06,03,03	"	2.412
"	" .439	9.13	+ .16	02,01,01,02	"	0.013	"	" .581	8.55	+ .17	04,05,05,05	"	2.421
"	6429.555	6.77	+ .36	08,07,06,05	"	1.129	"	" .590	8.82	- .14	04,04,03,04	"	2.430
"	" .562	6.81	+ .32	02,01,09,08	"	1.136	"	" .599	9.07	.00	03,04,02,03	"	2.439
"	" .575	6.81	+ .19	01,01,03,03	"	1.149	"	6879.549	8.11	- .11	07,07,01,01	3605	2.403

Yr.	Julian Day.	Magn.	A-B	Residuals.	Epoch.	Phase.	Yr.	Julian Day.	Magn.	A-B	Residuals.	Epoch.	Phase.
005381. U CEPHEI (continued).							005381. U CEPHEI (continued).						
05	6879.557	8.31	+ .13	00,01,05,05	3605	2.411	06	7258.637	8.06	+ .02	04,03,02,02	3758	0.079
"	" .567	8.62	- .26	02,02,04,04	"	2.421	"	" .650	7.83	+ .24	05,05,00,01	"	0.092
"	" .578	8.94	+ .06	04,05,03,03	"	2.432	"	7552.622	7.89	- .04	01,00,01,00	3875	2.398
"	" .588	9.07	- .01	07,07,02,03	"	2.442	"	" .630	8.08	- .34	03,04,07,07	"	2.406
"	6904.610	9.12	+ .02	00,01,02,02	3616	0.041	"	" .639	8.34	- .06	07,06,02,03	"	2.415
"	" .618	8.99	+ .17	02,02,04,03	"	0.049	"	" .648	8.57	- .29	10,11,06,06	"	2.424
"	" .626	8.75	- .12	04,05,01,01	"	0.057	"	" .656	8.81	- .03	03,02,04,04	"	2.432
"	" .636	8.43	+ .28	03,02,01,01	"	0.067	07	7587.516	7.88	- .30	06,06,03,02	3889	2.391
"	" .646	8.18	- .18	05,06,05,04	"	0.077	"	" .524	7.95	- .21	00,00,07,07	"	2.399
"	" .656	7.85	+ .15	02,01,00,00	"	0.087	"	" .532	8.15	- .36	03,02,00,01	"	2.407
"	6909.601	9.05	- .08	06,05,02,02	3618	0.046	"	" .540	8.43	- .24	02,03,00,01	"	2.415
"	" .609	8.81	+ .15	00,01,05,05	"	0.054	"	" .547	8.61	- .36	03,03,04,04	"	2.422
"	" .617	8.57	- .06	03,03,03,03	"	0.062	"	7632.537	9.06	+ .02	08,09,02,02	3908	0.046
"	" .626	8.26	+ .25	03,03,09,09	"	0.071	"	" .545	8.86	+ .24	02,02,08,08	"	0.054
"	" .635	8.01	- .13	02,03,01,01	"	0.080	"	" .555	8.52	+ .02	00,01,02,03	"	0.064
"	" .644	7.84	+ .14	02,02,03,02	"	0.089	"	" .565	8.31	- .04	04,05,25,25	"	0.074
"	7046.555	7.56	+ .43	05,05,07,07	3672	2.382	"	" .572	8.05	.00	02,03,02,02	"	0.081
"	" .562	7.72	+ .34	01,02,03,03	"	2.389	"	" .580	7.96	+ .14	02,03,04,04	"	0.089
"	" .569	7.90	+ .46	01,02,02,02	"	2.396	"	7642.510	9.09	- .19	07,07,05,05	3912	0.047
"	" .577	8.07	+ .29	08,08,05,06	"	2.404	"	" .519	8.85	- .32	04,04,03,02	"	0.056
"	" .585	8.24	+ .37	11,11,01,01	"	2.412	"	" .530	8.47	- .04	05,04,05,06	"	0.067
"	" .595	8.61	+ .04	04,03,05,04	"	2.422	"	" .539	8.21	- .24	04,05,07,06	"	0.076
"	7198.633	8.01	+ .32	07,06,00,01	3733	2.399	"	" .547	7.97	- .04	02,02,00,00	"	0.084
"	" .640	8.11	+ .16	11,10,01,00	"	2.406	"	" .555	7.81	- .20	02,03,06,05	"	0.092
"	" .649	8.38	- .38	07,06,02,03	"	2.415	"	7734.604	7.84	- .18	02,01,06,05	3948	2.395
"	" .658	8.67	- .09	00,00,06,06	"	2.424	"	" .612	8.01	- .01	06,06,02,01	"	2.403
"	" .667	8.93	- .39	06,06,02,02	"	2.433	"	" .619	8.19	- .28	00,00,00,01	"	2.410
"	7208.602	7.82	- .38	10,09,00,00	3737	2.396	"	" .628	8.42	+ .06	10,09,04,04	"	2.419
"	" .609	8.03	- .15	03,04,02,02	"	2.403	"	" .639	8.69	+ .32	05,04,10,11	"	2.429
"	" .617	8.20	- .34	02,02,02,01	"	2.411	"	" .647	8.93	+ .05	02,02,06,07	"	2.438
"	" .625	8.41	- .16	02,02,01,01	"	2.419	"	7739.588	7.77	+ .24	04,03,12,11	3950	2.391
"	" .633	8.65	- .40	04,04,05,06	"	2.427	"	" .596	7.95	+ .39	06,06,03,02	"	2.401
"	" .643	8.95	- .12	03,04,00,01	"	2.437	"	" .605	8.21	+ .21	05,05,07,06	"	2.400
06	7223.561	7.93	- .53	05,05,04,05	3743	2.397	"	" .614	8.39	+ .47	05,06,01,01	"	2.419
"	" .570	8.11	- .21	07,07,07,07	"	2.406	"	" .623	8.81	+ .03	02,02,07,06	"	2.428
"	" .578	8.34	- .14	07,06,02,01	"	2.414	"	" .634	9.02	+ .26	02,02,02,02	"	2.439
"	" .587	8.62	- .22	01,00,08,07	"	2.423	"	7769.651	9.06	+ .24	03,03,02,01	3963	0.049
"	" .596	8.87	- .37	05,04,04,04	"	2.432	"	" .659	8.78	+ .07	05,05,06,07	"	0.057
"	7238.515	7.87	- .40	05,06,03,03	3749	2.394	"	" .667	8.59	+ .25	08,08,03,03	"	0.065
"	" .524	8.10	- .24	00,00,06,06	"	2.403	"	" .677	8.29	- .02	02,02,04,03	"	0.075
"	" .532	8.31	- .48	01,01,05,06	"	2.411	"	" .684	7.98	.00	19,19,01,02	"	0.082
"	" .542	8.61	- .16	04,05,04,05	"	2.421	"	7784.609	9.00	+ .23	07,07,08,07	3969	0.050
"	" .553	8.90	- .46	06,07,02,03	"	2.432	"	" .617	8.83	- .01	09,10,07,07	"	0.058
"	7258.601	9.02	+ .14	02,01,03,02	3758	0.043	"	" .626	8.52	+ .25	02,01,01,01	"	0.067
"	" .610	8.81	+ .31	02,02,03,04	"	0.052	"	" .636	8.21	- .07	02,03,06,06	"	0.077
"	" .618	8.65	+ .03	05,04,05,05	"	0.060	"	" .645	7.95	+ .25	02,02,01,00	"	0.086
"	" .627	8.35	+ .02	06,07,00,00	"	0.069	"	7794.582	8.96	+ .57	07,08,04,03	3973	0.052

Yr.	Julian Day.	Magn.	A-B	Residuals.	Epoch.	Phase.	Yr.	Julian Day.	Magn.	A-B	Residuals.	Epoch.	Phase.
005381. U CEPHEI (continued).							005381. U CEPHEI (continued).						
06	7794.590	8.71	+18	02,02,06,07	3973	0.060	09	8335.536	8.89	-.39	03,03,04,04	4190	0.052
"	" .598	8.50	+38	05,04,04,05	"	0.068	"	" .542	8.81	-.01	02,02,02,02	"	0.058
"	" .607	8.19	+15	05,05,00,00	"	0.077	"	" .550	8.64	-.40	02,02,01,01	"	0.066
"	" .617	7.94	+34	01,02,01,00	"	0.087	"	" .557	8.39	-.11	05,05,02,01	"	0.073
"	7921.578	7.94	-.22	03,02,01,00	4023	2.408	"	" .563	8.23	-.28	02,02,03,03	"	0.079
"	" .583	8.01	-.04	01,01,05,05	"	2.413	"	" .572	7.99	-.07	04,03,01,01	"	0.088
"	" .590	8.27	-.29	03,02,03,03	"	2.420	"	8340.522	8.92	-.22	02,02,00,00	4192	0.053
"	" .596	8.41	.00	01,02,04,05	"	2.426	"	8442.568	7.49	+16	00,01,01,01	4232	2.379
"	" .604	8.71	-.16	02,01,04,05	"	2.434	"	" .597	7.98	+14	06,05,07,06	"	2.408
"	" .612	8.85	-.07	05,05,08,09	"	2.442	"	" .603	8.15	+21	06,07,10,10	"	2.414
"	7931.543	7.91	-.17	02,03,00,00	4027	2.401	"	" .609	8.34	+02	08,07,03,03	"	2.420
"	" .549	8.07	-.04	04,05,04,04	"	2.407	"	" .619	8.59	+32	04,04,02,01	"	2.430
"	" .557	8.31	-.35	00,00,06,06	"	2.415	"	" .625	8.81	+08	08,09,05,06	"	2.436
"	" .566	8.58	-.12	04,04,03,02	"	2.424	"	8452.580	8.18	+36	02,02,04,04	4236	2.420
"	" .574	8.75	-.20	00,01,06,06	"	2.432	"	" .587	8.51	+07	05,05,02,02	"	2.427
"	" .582	9.01	-.04	02,02,00,00	"	2.440	"	" .593	8.66	+30	14,15,07,07	"	2.433
"	7936.527	7.89	-.22	05,05,03,03	4029	2.399	"	" .599	8.83	+03	05,05,01,02	"	2.439
"	" .535	8.05	-.05	01,01,00,01	"	2.407	"	" .606	9.07	+29	04,04,03,03	"	2.446
"	" .547	8.39	-.20	05,04,02,03	"	2.419	"	8487.638	8.30	+18	04,03, R	4251	0.085
"	" .554	8.59	+01	03,02,06,06	"	2.426	"	" .650	7.97	+46	03,03,06,06	"	0.097
"	" .564	8.87	-.25	03,03,04,04	"	2.436	"	" .656	7.73	-.19	06,06,03,04	"	0.103
"	" .572	9.09	-.03	03,02,03,03	"	2.444	"	8497.583	9.03	+37	08,08,07,08	4255	0.059
08	7961.607	8.84	+14	00,00,06,07	4040	0.057	"	" .589	8.86	+10	05,04,06,07	"	0.065
"	" .614	8.58	-.06	01,02,05,05	"	0.064	"	" .597	8.59	+25	02,02,07,07	"	0.073
"	" .621	8.37	+12	02,03,02,03	"	0.071	"	" .605	8.31	+07	02,02,05,05	"	0.081
"	" .629	8.14	-.14	02,03,07,07	"	0.079	"	" .615	8.05	+16	01,02,05,06	"	0.091
"	" .636	7.95	+02	01,01,03,03	"	0.086	"	" .623	7.90	+14	05,05,04,05	"	0.099
"	" .644	7.75	-.13	01,02,01,01	"	0.094	"	8609.598	7.61	-.08	07,06,03,02	4299	2.391
"	7966.594	8.73	+04	04,03,01,01	4042	0.058	"	" .605	7.75	-.11	00,00,03,02	"	2.398
"	" .602	8.51	-.23	01,01,02,03	"	0.066	"	" .612	7.83	+01	09,10,01,01	"	2.405
"	" .609	8.31	-.01	04,04,05,04	"	0.073	"	" .623	8.07	-.12	04,05,06,05	"	2.416
"	" .617	8.12	-.14	01,02,03,04	"	0.081	"	" .631	8.27	.00	01,00,01,02	"	2.424
"	" .625	7.94	+02	04,03,08,08	"	0.089	"	" .641	8.61	-.25	08,08,02,03	"	2.434
"	" .634	7.75	.00	01,01,02,01	"	0.098	"	" .649	8.85	+03	02,02,04,04	"	2.442
"	8290.518	7.83	-.20	01,02,01,02	4171	2.401	"	8614.600	7.83	-.05	04,04,01,02	4301	2.407
"	" .524	8.09	+15	03,03,02,03	"	2.407	"	" .609	8.05	-.19	05,05,02,02	"	2.416
"	" .531	8.19	+04	02,01,15,16	"	2.414	"	" .617	8.21	-.04	06,05,07,08	"	2.424
"	" .538	8.48	+06	05,05,07,07	"	2.421	"	" .625	8.51	-.35	01,00,02,02	"	2.432
"	" .547	8.88	-.24	03,03,10,10	"	2.430	"	" .635	8.81	+01	01,01,07,06	"	2.442
09	8325.562	9.02	-.22	03,02,06,07	4186	0.051	10	8679.521	9.05	-.23	07,07,05,04	4328	0.021
"	" .570	8.87	-.29	05,05,03,02	"	0.059	"	" .529	9.03	-.21	09,09,06,05	"	0.029
"	" .577	8.75	-.11	01,01,03,03	"	0.066	"	" .538	9.03	-.32	10,09,00,01	"	0.038
"	" .583	8.56	-.14	02,02,02,02	"	0.072	"	" .548	9.03	-.36	08,07,00,01	"	0.048
"	" .591	8.24	-.10	02,03,01,01	"	0.080	"	" .555	9.03	-.28	00,01,11,12	"	0.055
"	" .600	8.06	-.26	03,04,01,01	"	0.089	"	" .568	8.88	-.26	01,00,03,04	"	0.068
"	" .609	7.91	-.11	00,01,06,06	"	0.098	"	" .575	8.69	+03	03,03,00,00	"	0.075
"	8335.529	9.03	-.23	03,03,03,03	4190	0.045	"	" .585	8.35	-.39	02,02,00,00	"	0.085

Yr.	Julian Day.	Magn.	A-B	Residuals.	Epoch.	Phase.	Yr.	Julian Day.	Magn.	A-B	Residuals.	Epoch.	Phase.
005381. U CEPHEI (continued).							005381. U CEPHEI (continued).						
10	8679.592	8.16	-.18	01,00,03,04	4328	0.092	12	9405.551	6.87	-.30	03,03,05,05	4619	0.621
"	" .601	7.96	-.30	00,00,02,01	"	0.101	"	9408.531	6.86	-.26	07,06,13,13	4620	1.108
"	" .609	7.79	-.19	04,04,01,02	"	0.109	"	" .537	6.82	-.22	00,00,08,09	"	1.114
"	8684.529	9.13	-.16	00,01,03,04	4330	0.043	"	" .544	6.83	-.35	03,03,06,05	"	1.121
"	" .537	9.08	-.22	02,01,02,01	"	0.051	"	9412.519	7.80	-.18	00,01,02,01	4622	0.110
"	" .548	8.99	-.23	03,03,03,03	"	0.062	"	" .525	7.75	-.28	07,08,01,01	"	0.116
"	" .556	8.77	-.23	06,05,09,09	"	0.070	"	" .532	7.66	-.26	04,03,03,02	"	0.123
"	" .565	8.57	-.08	01,01,04,05	"	0.079	"	" .539	7.55	-.20	04,05,07,06	"	0.130
"	" .573	8.31	-.28	06,05,02,01	"	0.087	"	" .546	7.40	-.38	01,02,03,03	"	0.137
"	" .581	8.11	-.12	06,06,07,06	"	0.095	"	9415.513	6.89	-.28	05,05,00,01	4623	0.612
"	" .589	7.91	-.23	01,00,04,04	"	0.103	"	" .519	6.83	+0.09	02,03,01,00	"	0.618
"	8988.525	7.50	+0.22	04,03,06,07	4451	2.400	"	9429.508	6.89	-.36	03,03,01,01	4628	2.142
"	" .532	7.79	+0.29	05,05,03,04	"	2.407	"	" .514	6.99	-.23	02,02,04,04	"	2.148
"	" .541	7.86	+0.30	03,03,05,04	"	2.416	"	" .520	6.93	-.27	09,09,01,02	"	2.154
"	" .549	8.09	+0.36	01,02,05,06	"	2.424	"	" .525	6.97	-.21	03,03,05,06	"	2.159
"	8993.513	7.68	+0.14	01,00,01,02	4453	2.402	"	9436.533	6.76	-.30	04,04,06,06	4631	1.688
"	" .521	7.85	+0.21	05,05,00,00	"	2.410	"	" .539	6.85	-.16	05,05,07,08	"	1.694
"	" .528	7.97	+0.27	04,04,02,02	"	2.417	"	" .545	6.85	-.21	05,05,06,06	"	1.700
"	" .537	8.15	+0.27	01,01,04,05	"	2.426	"	" .552	6.86	-.14	06,06,01,00	"	1.707
"	" .545	8.36	+0.10	02,02,00,00	"	2.434	"	9441.934	6.86	+0.08	00,00,05,05	4633	2.103
"	9018.574	9.25	-.12	12,13,09,09	4464	0.042	"	" .943	6.90	-.02	02,03,04,04	"	2.112
"	" .582	9.09	+0.01	06,06,07,06	"	0.050	"	9443.554	6.87	-.39	06,06,05,04	4634	1.230
"	" .589	9.08	+0.02	12,11,07,06	"	0.057	"	" .560	6.92	-.30	03,02,04,04	"	1.236
"	" .596	8.91	+0.01	05,05,00,00	"	0.064	"	9453.507	6.97	-.32	02,03,09,09	4638	1.211
"	" .604	8.85	-.08	01,01,03,04	"	0.072	"	" .512	6.98	-.26	02,03,03,02	"	1.216
"	9023.573	9.21	-.28	07,06,04,04	4466	0.055	"	" .524	6.90	-.16	20,20,00,00	"	1.228
"	9028.538	9.19	-.63	07,08,03,03	4468	0.034	"	" .532	6.85	-.20	03,03,09,08	"	1.236
"	" .547	9.07	-.24	06,05,02,01	"	0.043	"	" .537	6.88	-.14	02,02,03,02	"	1.241
"	" .554	9.10	-.42	04,05,00,01	"	0.050	"	9463.512	6.88	-.38	10,10,01,00	4642	1.244
"	" .561	9.06	-.26	03,02,03,02	"	0.057	"	" .581	6.87	-.36	01,02,05,06	"	1.313
"	" .567	9.11	-.37	02,02,01,01	"	0.063	"	9671.568	7.47	-.03	03,03,02,02	4725	2.391
"	" .574	8.89	-.20	01,00,14,13	"	0.070	"	" .575	7.61	-.12	03,03,02,02	"	2.398
"	" .580	8.65	-.28	03,03,06,06	"	0.076	"	" .583	7.79	+0.06	04,04,02,02	"	2.406
"	9033.542	9.15	-.08	01,02,05,05	4470	0.052	"	" .591	7.95	-.06	01,01,04,04	"	2.414
"	" .551	9.13	-.07	04,04,07,06	"	0.061	"	" .599	8.09	+0.09	02,03,02,02	"	2.422
"	" .563	8.86	-.26	04,04,03,02	"	0.073	023341. Z PERSEI.						
"	" .571	8.66	+0.10	04,03,06,05	"	0.081							
"	" .580	8.38	-.26	16,15,05,05	"	0.090							
12	9403.517	6.85	-.32	01,00,04,04	4618	1.080							
"	" .524	6.94	-.42	03,02,03,02	"	1.087	02	6052.544	12.07	-.03	05,05,03,04	14	0.065
"	" .534	6.90	-.54	02,01,01,02	"	1.097	"	" .552	11.91	-.45	01,01,15,15	"	0.073
"	" .540	6.85	-.36	00,00,04,03	"	1.103	"	" .570	11.34	-.02	01,00,03,03	"	0.091
"	" .545	6.85	-.36	03,03,05,06	"	1.108	"	" .581	11.12	-.30	01,02,05,04	"	0.102
"	9405.526	6.88	-.38	09,09,07,06	4619	0.596	"	" .593	10.87	-.09	02,03,01,01	"	0.114
"	" .532	6.87	-.27	00,01,02,02	"	0.602	"	" .606	10.69	-.25	02,02,01,00	"	0.127
"	" .538	6.87	-.26	01,01,10,10	"	0.608	"	" .619	10.47	-.03	04,05,04,04	"	0.140
"	" .545	6.85	-.29	01,01,00,00	"	0.615	"	" .631	10.35	-.13	03,03,05,06	"	0.152

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Yr.	Julian Day.	Magn.	A-B	Residuals.	Epoch.	Phase.	Yr.	Julian Day.	Magn.	A-B	Residuals.	Epoch.	Phase.
023341. Z PERSEI (continued).							023341. Z PERSEI (continued).						
02	6064.581	10.42	-.26	00,01,00,01	17	2.933	07	7669.534	10.10	+.04	11,11,04,04	543	0.190
"	" .593	10.54	-.18	05,05,01,01	"	2.945	"	7892.532	11.76	+.22	05,05,04,04	616	0.077
"	" .602	10.62	-.30	07,08,04,05	"	2.954	"	" .540	11.49	+.04	04,04,12,11	"	0.085
"	" .613	10.73	-.08	03,02,01,00	"	2.965	"	" .549	11.32	+.26	02,02,00,00	"	0.094
04	6816.564	12.27	+.16	06,07,02,01	263	3.031	"	" .559	10.98	+.02	03,04,08,08	"	0.104
"	" .581	12.48	+.10	08,09,06,06	"	3.048	"	" .572	10.76	+.18	04,05,08,07	"	0.117
"	" .595	12.56	+.02	09,09,12,13	264	0.006	"	" .585	10.56	-.06	03,03,05,05	"	0.130
05	6902.612	9.87	+.04	01,00,06,06	292	0.437	09	8381.549	12.21	-.13	09,09,11,10	776	0.055
"	" .621	9.87	+.09	02,02,07,07	"	0.446	"	" .557	11.85	+.26	18,18,04,04	"	0.063
"	6907.596	9.93	+.02	03,03,00,00	293	2.364	"	" .566	11.60	+.02	04,04,07,08	"	0.072
"	6909.579	9.87	-.11	05,04,03,03	294	1.290	"	" .575	11.41	+.23	02,02,04,04	"	0.081
"	6911.625	9.87	+.04	02,03,05,04	295	0.280	"	" .583	11.20	+.10	03,03,03,03	"	0.089
"	6915.593	9.85	+.11	02,03,02,02	296	1.191	"	" .596	10.91	+.21	02,02,07,06	"	0.102
"	6916.648	9.83	+.12	05,04,04,03	"	2.246	"	8386.620	9.85	+.17	05,05,01,02	777	2.070
"	6958.555	9.87	.00	06,05,08,09	310	1.360	"	8389.589	9.81	+.22	03,03,01,01	778	1.982
"	7206.656	9.81	+.18	01,01,03,03	391	1.898	10	8708.560	12.45	-.11	01,01,09,08	883	0.030
06	7241.564	10.76	+.18	02,03,06,05	403	0.126	"	" .568	12.39	+.04	08,07,12,11	"	0.038
"	" .574	10.58	+.24	10,10,05,06	"	0.136	"	" .578	12.18	+.08	03,03,11,11	"	0.048
"	" .584	10.45	+.16	06,07,04,03	"	0.146	"	" .591	11.87	+.35	07,07,04,04	"	0.061
"	" .598	10.35	+.18	01,01,01,01	"	0.160	"	" .602	11.63	+.03	02,02,03,03	"	0.072
"	7257.560	9.83	+.12	01,02,03,04	408	0.838	"	" .611	11.25	+.12	03,02,01,01	"	0.081
"	7262.602	9.83	+.19	01,01,01,01	409	2.823	"	" .622	11.07	-.04	12,13,03,02	"	0.092
"	7264.523	9.81	+.29	12,11,05,05	410	1.688	"	" .630	11.01	+.13	00,00,04,04	"	0.100
"	" .591	9.83	+.15	07,06,02,02	"	1.756	"	" .636	10.89	.00	02,01,01,01	"	0.106
"	7270.533	9.89	+.03	01,01,03,03	412	1.585	"	8763.531	12.43	+.23	05,05,03,03	900	3.038
"	7271.529	9.81	+.13	02,02,05,06	"	2.581	"	" .543	12.32	+.30	08,07,14,14	"	3.050
"	7290.575	9.89	+.04	03,03,01,00	419	0.230	"	" .556	12.20	+.14	03,04,04,04	901	0.006
"	7293.508	11.07	+.01	04,04,03,04	420	0.106	"	8925.587	11.97	+.28	03,02,01,02	954	0.052
"	" .517	10.89	+.16	00,01,03,02	"	0.115	"	" .599	11.71	-.05	09,10,05,05	"	0.064
"	" .528	10.70	+.04	02,02,02,02	"	0.126	"	" .607	11.40	+.06	09,09,04,05	"	0.072
"	" .541	10.57	+.24	00,01,03,02	"	0.139	"	" .617	11.19	-.08	14,14,08,07	"	0.082
"	" .552	10.36	+.06	05,05,01,02	"	0.150	"	" .626	10.94	+.10	00,01,02,02	"	0.091
"	" .567	10.23	+.05	02,02,02,02	"	0.165	"	" .635	10.76	-.06	09,08,03,03	"	0.100
"	" .579	10.15	+.07	04,04,05,05	"	0.177	"	" .645	10.65	+.04	06,07,00,01	"	0.110
"	" .596	10.06	+.10	01,00,00,00	"	0.194	11	9338.520	9.75	+.15	01,01,15,15	1089	0.368
"	" .614	9.99	-.04	07,07,01,01	"	0.212	"	" .525	9.74	+.22	01,01,00,01	"	0.373
"	" .628	9.92	-.02	02,02,02,03	"	0.226	"	" .530	9.93	+.13	08,07,04,04	"	0.378
07	7614.523	10.13	+.16	05,04,01,01	525	0.199	"	9343.519	9.75	+.24	02,01,06,05	1090	2.311
"	" .537	10.02	+.18	04,03,01,02	"	0.213	"	" .525	9.77	+.20	01,02,07,08	"	2.317
"	" .554	9.87	+.13	00,01,02,02	"	0.230	"	" .530	9.77	+.28	09,09,02,02	"	2.322
"	7620.541	11.13	+.21	07,06,09,09	527	0.103	"	9344.516	9.81	+.24	04,03,02,01	1091	0.252
"	" .549	10.94	+.10	04,04,01,01	"	0.111	"	" .523	9.72	+.28	05,05,08,08	"	0.259
"	" .557	10.83	+.04	00,01,08,08	"	0.119	023947. RY PERSEI.						
"	" .568	10.65	+.20	09,09,06,06	"	0.130	09	8606.538	8.69	+.28	04,03,02,01	157	5.476
"	" .578	10.48	+.07	05,06,04,05	"	0.140	"	" .545	8.68	+.16	04,04,00,00	"	5.483
"	" .587	10.41	+.11	06,06,04,03	"	0.149							
"	7622.547	9.85	+.12	00,00,04,03	"	2.109							

Yr.	Julian Day.	Magn.	A-B	Residuals.	Epoch.	Phase.	Yr.	Julian Day.	Magn.	A-B	Residuals.	Epoch.	Phase.
023969. RZ CASSIOPEIAE.							023969. RZ CASSIOPEIAE (continued).						
07	7643.589	6.27	+ .22	04,04,01,01	241	0.111	07	7894.548	6.50	+ .12	00,01,01,01	451	0.069
"	7653.552	6.28	+ .24	01,02,01,01	249	0.511	"	" .559	6.39	+ .06	00,00,02,02	"	0.080
"	7717.590	7.81	+ .06	07,06,03,03	303	0.002	"	" .572	6.28	- .08	02,03,03,02	"	0.093
"	" .603	7.62	- .11	02,02,07,08	"	0.015	08	7963.585	6.28	- .22	04,04,00,00	508	0.975
"	" .617	7.22	+ .32	08,08,02,02	"	0.029	"	" .593	6.30	- .14	03,03,10,10	"	0.983
"	" .631	6.93	- .06	01,02,05,05	"	0.043	"	" .606	6.27	- .10	05,05,01,02	"	0.996
"	" .643	6.72	+ .13	01,01,06,05	"	0.055	"	" .620	6.23	+ .10	00,01,05,04	"	1.010
"	" .659	6.48	+ .07	03,03,02,02	"	0.071	"	7968.521	6.54	- .17	16,15,01,01	512	1.130
"	" .671	6.36	+ .17	03,03,04,04	"	0.083	"	" .529	6.71	+ .06	04,03,03,02	"	1.138
"	" .684	6.24	+ .16	01,02,02,01	"	0.096	"	" .536	6.76	- .12	02,01,05,05	"	1.145
"	7742.583	6.24	+ .20	02,02,02,01	323	1.090	"	" .544	6.88	- .04	01,02,01,01	"	1.153
"	" .593	6.28	+ .25	03,02,02,02	"	1.100	"	" .552	7.02	- .14	04,04,08,08	"	1.161
"	" .603	6.32	+ .20	04,04,03,02	"	1.110	"	8001.550	6.32	+ .03	03,03,08,08	540	0.689
"	" .613	6.45	+ .30	09,09,01,00	"	1.120	"	" .574	6.38	+ .13	05,05,03,02	"	0.713
"	" .624	6.56	+ .19	05,06,07,07	"	1.131	"	" .589	6.34	+ .19	04,04,06,06	"	0.728
"	" .635	6.80	+ .37	08,07,06,06	"	1.142	"	8004.515	6.54	+ .07	05,05,03,03	543	0.068
"	" .647	7.02	+ .19	05,06,03,03	"	1.154	"	" .525	6.43	- .02	08,09,02,03	"	0.078
"	" .661	7.30	+ .36	03,04,12,11	"	1.168	"	" .536	6.35	+ .14	01,00,03,02	"	0.089
"	" .675	7.67	+ .22	08,08,09,09	"	1.182	"	" .553	6.26	- .07	08,08,05,04	"	0.106
"	7853.613	6.31	- .57	02,02,04,03	416	0.967	"	" .574	6.28	+ .01	07,07,13,12	"	0.127
"	7864.520	6.45	- .15	06,07,02,02	425	1.117	"	8011.532	6.38	+ .13	03,03,07,07	548	1.109
"	" .529	6.48	- .31	00,00,03,03	"	1.126	"	" .546	6.50	- .08	03,02,04,04	"	1.123
"	" .540	6.65	- .13	09,08,04,05	"	1.137	"	" .557	6.64	+ .12	03,03,03,02	"	1.134
"	" .553	6.89	- .22	02,02,03,02	"	1.150	"	" .567	6.73	- .06	07,06,03,04	"	1.144
"	" .563	7.10	- .06	01,02,01,01	"	1.160	"	" .581	7.11	+ .14	00,01,02,01	"	1.158
"	" .574	7.41	- .12	03,03,03,02	"	1.171	"	" .595	7.44	- .21	05,05,04,05	"	1.172
"	" .585	7.64	+ .08	01,02,04,03	"	1.182	"	8022.524	6.27	- .06	03,02,01,01	558	0.147
"	" .596	7.74	- .05	03,03,05,06	"	1.193	"	8035.538	7.71	- .22	06,05,03,02	569	0.013
"	" .608	7.65	- .10	01,00,06,06	426	0.010	"	" .545	7.54	+ .08	05,04,04,03	"	0.020
"	" .619	7.41	+ .13	00,01,06,06	"	0.021	"	" .552	7.39	- .10	04,03,01,01	"	0.027
"	" .633	7.04	- .05	05,05,05,05	"	0.035	"	" .560	7.18	+ .08	02,02,01,00	"	0.035
"	" .645	6.82	+ .11	03,04,00,00	"	0.047	"	" .568	7.01	+ .18	01,00,03,03	"	0.043
"	7865.531	6.27	- .14	02,03,02,02	"	0.933	"	" .576	6.79	+ .02	00,01,01,02	"	0.051
"	7866.522	6.28	- .26	03,03,06,06	427	0.729	"	8041.523	7.50	+ .03	02,02,04,04	574	0.021
"	7867.524	6.24	- .08	06,06,01,02	428	0.536	"	" .531	7.32	+ .18	07,07,01,01	"	0.029
"	7870.523	6.71	+ .10	17,18,02,03	430	1.144	"	" .539	7.07	- .02	08,07,02,03	"	0.037
"	" .532	6.94	- .27	07,07,02,03	"	1.153	"	" .547	6.98	+ .19	03,03,08,07	"	0.045
"	" .544	7.22	+ .04	. . . , A, 03,03	"	1.165	"	" .555	6.76	+ .11	01,01,01,01	"	0.053
"	" .556	7.48	- .15	07,07,03,03	"	1.177	"	" .564	6.65	+ .06	05,04,09,08	"	0.062
"	" .568	7.76	- .14	03,03,03,03	"	1.189	"	8054.568	6.40	+ .08	12,12,01,02	584	1.113
"	7871.530	6.22	+ .09	06,06,04,04	431	0.956	"	" .580	6.57	- .06	13,12,05,05	"	1.125
"	7888.532	7.21	- .18	09,08,03,02	446	0.030	"	" .592	6.72	+ .06	00,00,00,00	"	1.137
"	" .540	7.00	+ .13	04,03,01,01	"	0.038	"	" .603	6.94	- .01	01,00,02,02	"	1.148
"	" .552	6.75	- .18	03,02,04,03	"	0.050	"	" .616	7.15	+ .10	02,02,07,08	"	1.161
"	7894.522	6.93	+ .06	03,03,09,08	451	0.043	"	8207.609	7.20	- .08	09,09,01,02	712	1.165
"	" .530	6.74	+ .16	00,00,05,05	"	0.051	"	" .617	7.36	- .31	10,10,01,00	"	1.173
"	" .539	6.60	+ .05	01,01,02,01	"	0.060	"	" .628	7.62	+ .08	06,07,06,05	"	1.184

Yr.	Julian Day.	Magn.	A-B	Residuals.	Epoch.	Phase.	Yr.	Julian Day.	Magn.	A-B	Residuals.	Epoch.	Phase.
023969. RZ CASSIOPEIAE (continued).							023969. RZ CASSIOPEIAE (continued).						
08	8207.634	7.75	-.14	06,07,05,06	712	1.190	09	8507.646	7.83	+.20	02,02,08,08	963	1.188
"	" .641	7.79	-.18	03,03,04,03	713	0.002	"	8592.529	7.54	+.28	03,04,04,04	1035	0.017
"	8208.534	6.25	+.26	03,04,05,05	"	0.895	"	" .537	7.32	+.04	02,01,12,12	"	0.025
"	" .542	6.30	+.20	04,04,00,01	"	0.903	"	" .546	7.04	+.20	05,04,02,01	"	0.034
"	8232.520	6.28	+.21	05,05,06,06	733	0.977	"	" .556	6.88	+.09	00,00,04,05	"	0.044
"	" .526	6.22	+.19	02,02,01,00	"	0.983	"	" .568	6.62	+.23	04,04,04,05	"	0.056
"	8237.516	7.76	-.07	04,04,00,01	737	1.192	10	8721.554	6.90	-.24	04,04,08,08	1142	1.147
"	" .523	7.74	-.15	09,08,02,02	738	0.004	"	" .562	7.10	-.08	07,07,05,05	"	1.155
"	" .531	7.57	-.10	00,00,03,02	"	0.012	"	" .574	7.43	-.30	00,01,01,01	"	1.167
"	" .540	7.33	+.06	03,02,03,04	"	0.021	"	" .584	7.68	+.03	05,06,01,01	"	1.177
"	" .550	7.18	-.14	01,01,01,01	"	0.031	"	" .598	7.87	-.10	06,07,05,06	"	1.191
"	" .559	6.90	+.16	00,00,08,07	"	0.040	"	" .605	7.85	-.06	02,02,00,00	1143	0.003
"	" .571	6.74	-.04	01,01,04,03	"	0.052	"	" .632	7.20	-.05	06,06,04,05	"	0.030
"	" .582	6.55	+.14	01,00,07,07	"	0.063	"	" .638	7.02	-.08	02,01,07,07	"	0.036
"	" .594	6.43	+.02	06,07,04,05	"	0.075	"	8764.582	6.96	+.28	02,03,03,02	1178	1.144
"	" .606	6.28	+.05	00,00,04,03	"	0.087	"	" .595	7.14	-.07	07,07,03,02	"	1.157
"	" .614	6.22	.00	06,05,07,07	"	0.095	"	" .604	7.42	+.21	00,00,03,02	"	1.166
"	8251.518	6.20	+.12	04,04,01,01	749	0.852	"	" .614	7.63	+.02	01,05,05,06	"	1.176
"	" .527	6.20	+.15	08,09,08,08	"	0.861	"	" .626	7.81	+.18	02,01,01,01	"	1.188
"	8253.515	6.23	-.06	04,04,03,03	751	0.458	"	8776.606	7.45	+.18	01,02,06,05	1189	0.019
"	8269.541	6.30	-.03	04,04,05,05	764	0.946	"	" .613	7.24	+.21	06,07,02,02	"	0.026
"	" .573	6.27	+.04	00,01,03,03	"	0.978	"	" .621	7.06	-.01	02,02,04,05	"	0.034
"	" .581	6.32	-.09	01,02,02,02	"	0.986	"	8941.554	7.18	+.07	05,05,00,00	1327	0.026
"	8292.556	6.77	-.02	06,06,03,04	784	0.056	11	9106.519	6.81	-.34	04,04,02,01	1465	0.042
"	" .563	6.63	-.02	05,06,02,02	"	0.063	"	" .527	6.75	-.42	05,04,08,07	"	0.050
09	8384.528	7.71	+.26	02,02,06,06	860	1.183	"	" .535	6.53	-.14	01,01,11,11	"	0.058
"	" .538	7.80	+.21	05,05,02,01	"	1.193	"	" .543	6.48	-.28	02,03,02,03	"	0.066
"	" .549	7.73	+.10	01,00,02,03	861	0.009	"	" .551	6.41	-.20	09,09,01,01	"	0.074
"	" .559	7.48	+.24	05,06,07,06	"	0.019	"	9317.547	6.32	+.31	00,00,10,09	1641	0.708
"	" .568	7.27	+.02	04,04,02,03	"	0.028	"	" .554	6.24	+.25	08,08,14,15	"	0.715
"	" .578	6.99	+.26	00,00,05,05	"	0.038	"	" .560	6.27	+.22	03,03,05,04	"	0.721
"	" .587	6.81	-.02	02,02,00,01	"	0.047	"	" .568	6.35	+.22	03,02,02,01	"	0.729
"	" .597	6.63	+.14	02,01,01,02	"	0.057	"	" .575	6.38	+.11	04,04,14,15	"	0.736
"	8390.520	7.77	+.26	03,03,01,01	866	0.003	"	9319.545	6.18	+.32	00,01,11,11	1643	0.315
"	" .528	7.68	+.29	01,01,00,00	"	0.011	"	" .552	6.18	+.35	08,08,09,09	"	0.323
"	" .536	7.54	+.01	05,05,03,02	"	0.019	"	" .558	6.07	+.26	01,00,07,07	"	0.329
"	" .544	7.30	+.36	02,02,02,02	"	0.027	"	" .564	6.21	+.22	02,01,01,02	"	0.335
"	" .552	7.08	+.07	04,04,07,07	"	0.035	"	" .571	6.23	+.06	03,02,07,06	"	0.342
"	8421.544	6.86	+.28	06,06,03,02	891	1.144	"	9320.526	6.42	+.21	05,05,11,11	1644	0.102
"	" .553	7.06	+.09	03,03,04,05	"	1.153	"	" .532	6.23	+.34	07,07,03,04	"	0.108
"	" .562	7.38	+.05	R, A, 03,03	"	1.162	"	" .538	6.35	+.22	02,03,01,00	"	0.114
"	" .575	7.58	-.08	03,03,02,03	"	1.175	"	" .545	6.36	+.20	08,09,03,02	"	0.121
"	" .584	7.80	+.15	02,03,03,03	"	1.184	"	" .556	6.28	+.15	03,03,07,07	"	0.132
"	8507.613	7.04	+.41	05,05,07,06	963	1.155	"	" .571	6.36	+.19	09,09,09,09	"	0.147
"	" .620	7.29	+.14	04,04,05,04	"	1.162	"	" .576	6.33	+.28	04,05,07,07	"	0.152
"	" .627	7.44	+.36	08,07,04,05	"	1.169	"	" .582	6.31	+.06	02,03,01,01	"	0.158
"	" .639	7.74	+.05	01,01,00,00	"	1.181	"	9322.536	6.26	+.20	05,05,03,03	1645	0.916

Yr.	Julian Day.	Magn.	A-B	Residuals.	Epoch.	Phase.	Yr.	Julian Day.	Magn.	A-B	Residuals.	Epoch.	Phase.
023969. RZ CASSIOPEIAE (continued).							023969. RZ CASSIOPEIAE (continued).						
11	9322.541	6.34	+ .20	06,05,03,04	1645	0.921	11	9363.508	6.60	- .14	00,00,00,00	1680	0.055
"	" .547	6.34	+ .27	05,04,00,00	"	0.927	"	" .514	6.60	- .08	01,00,03,04	"	0.061
"	" .552	6.38	+ .17	00,00,03,02	"	0.932	12	9445.540	6.38	- .27	11,10,00,00	1748	0.807
"	" .557	6.35	+ .22	07,08,04,03	"	0.937	"	" .547	6.43	- .16	07,07,02,02	"	0.814
"	9323.516	6.36	+ .34	21,21,01,01	1646	0.701	"	9446.552	6.35	- .34	09,10,05,04	1749	0.623
"	" .523	6.34	+ .11	04,04,07,07	"	0.708	"	" .559	6.32	- .32	04,04,02,01	"	0.630
"	" .530	6.44	+ .25	17,17,04,04	"	0.715	"	9453.522	6.32	+ .44	00,01,04,05	1755	0.422
"	" .537	6.29	+ .10	01,01,00,01	"	0.722	"	" .528	6.31	+ .49	03,03,04,04	"	0.428
"	" .544	6.34	+ .08	05,05,00,00	"	0.729	"	9456.565	6.46	+ .48	06,06,00,01	1757	1.073
"	9324.521	6.32	+ .13	07,08,02,02	1647	0.511	"	" .571	6.41	+ .34	00,01,08,08	"	1.079
"	" .527	6.31	+ .18	00,00,06,06	"	0.517	"	9460.507	6.38	- .43	01,00,04,04	1761	0.234
"	" .533	6.36	+ .17	06,06,04,05	"	0.523	"	" .512	6.32	- .47	08,08,08,09	"	0.239
"	" .538	6.38	+ .08	07,06,06,07	"	0.528	"	" .519	6.38	- .44	03,03,04,03	"	0.246
"	" .543	6.32	+ .08	03,02,11,12	"	0.533	"	9461.516	6.74	- .16	09,08,01,00	1762	0.048
"	9326.513	6.28	+ .25	06,07,12,12	1649	0.112	"	" .524	6.52	- .27	01,01,05,05	"	0.056
"	" .519	6.27	+ .28	04,04,04,04	"	0.118	"	" .534	6.38	- .06	01,01,05,05	"	0.066
"	" .526	6.20	+ .04	11,10,09,08	"	0.125	"	" .545	6.39	- .26	04,03,07,07	"	0.077
"	" .534	6.32	+ .20	01,01,05,05	"	0.133	"	" .555	6.33	- .10	04,03,01,01	"	0.087
"	" .541	6.30	+ .29	01,02,12,12	"	0.140	"	9462.513	6.36	- .21	16,16,03,02	"	1.045
"	9333.513	6.88	+ .04	07,07,05,06	1654	1.136	"	" .518	6.34	- .19	06,05,07,07	"	1.050
"	" .519	6.94	+ .16	02,01,04,05	"	1.142	"	" .525	6.36	- .11	03,03,10,10	"	1.057
"	" .525	7.10	+ .12	04,03,03,02	"	1.148	"	" .532	6.36	- .08	02,02,05,04	"	1.064
"	" .530	7.20	+ .12	05,05,08,08	"	1.153	"	" .539	6.42	- .15	01,01,03,04	"	1.071
"	" .535	7.36	- .05	05,05,04,04	"	1.158	"	" .545	6.42	- .04	01,00,03,02	"	1.077
"	9334.510	6.33	+ .14	11,11,05,04	1655	0.938	"	" .552	6.49	- .18	02,01,06,07	"	1.084
"	" .515	6.32	+ .07	03,03,02,03	"	0.943	"	" .558	6.44	- .06	04,04,02,02	"	1.090
"	" .520	6.32	- .04	03,04,04,05	"	0.948	"	9464.512	6.42	- .31	00,01,04,04	1764	0.653
"	" .525	6.25	- .22	07,07,16,17	"	0.953	"	" .518	6.36	- .24	03,03,06,05	"	0.659
"	" .530	6.34	+ .01	01,01,04,04	"	0.958	"	9467.507	6.55	+ .06	09,08,02,01	1767	0.063
"	9335.513	6.34	+ .17	15,15,09,09	1656	0.745	"	" .515	6.50	+ .13	14,13,02,02	"	0.071
"	" .521	6.38	+ .09	06,06,00,01	"	0.753	"	" .525	6.36	+ .18	08,08,01,01	"	0.081
"	" .526	6.38	+ .05	04,04,05,04	"	0.758	"	" .535	6.33	+ .16	13,13,10,10	"	0.091
"	" .531	6.38	+ .11	02,03,00,00	"	0.763	"	" .543	6.28	+ .23	08,08,00,01	"	0.099
"	" .537	6.34	+ .22	02,02,03,03	"	0.769	"	" .550	6.29	+ .06	01,00,04,05	"	0.106
"	9336.512	6.26	- .09	01,01,07,06	1657	0.549	"	" .556	6.32	+ .04	06,06,02,03	"	0.112
"	" .517	6.34	- .01	05,06,08,08	"	0.554	"	9473.544	6.35	+ .34	02,02,00,00	1772	0.122
"	" .523	6.34	+ .01	03,03,01,00	"	0.560	"	" .551	6.32	+ .37	07,07,02,02	"	0.129
"	" .529	6.37	- .10	02,01,01,02	"	0.566	"	9478.606	6.32	+ .63	04,04,15,16	1776	0.403
"	9338.542	6.30	+ .05	04,04,00,01	1659	0.190	"	" .613	6.26	+ .18	00,00,09,09	"	0.410
"	" .548	6.24	+ .11	01,01,02,01	"	0.196	"	9492.539	7.76	+ .07	05,04,02,02	1787	1.187
"	" .554	6.34	- .03	00,00,02,02	"	0.202	"	" .546	7.75	+ .06	03,04,12,11	1788	1.194
"	9340.515	6.21	- .02	08,07,08,08	1660	0.967	"	" .552	7.53	+ .06	04,04,02,02	"	0.005
"	" .520	6.26	- .06	00,00,03,03	"	0.972	"	" .560	7.34	+ .20	02,01,02,01	"	0.013
"	9344.533	6.32	- .25	04,04,08,07	1664	0.204	"	" .567	7.11	- .06	06,07,01,01	"	0.020
"	" .538	6.34	- .05	05,05,03,02	"	0.209	"	9496.568	6.23	+ .42	06,07,03,04	1791	0.435
"	9345.523	7.66	- .13	01,01,11,11	"	1.194	"	9506.560	6.36	+ .20	17,18,01,00	1799	0.864
"	" .528	7.60	- .04	04,04,05,06	1665	0.004	"	" .566	6.35	+ .22	00,00,00,00	"	0.870

Yr.	Julian Day.	Magn.	A-B	Residuals.	Epoch.	Phase.	Yr.	Julian Day.	Magn.	A-B	Residuals.	Epoch.	Phase.
023969. RZ CASSIOPEIAE (continued).							025867. RX CASSIOPEIAE (continued).						
12	9513.542	6.43	+ .12	10,10,06,06	1805	0.675	09	8616.581	8.56	- .14	04,05,00,01	73	6.690
"	" .547	6.38	+ .09	04,04,07,06	"	0.680	"	8620.607	8.53	- .12	04,03,02,01	"	10.716
"	" .552	6.33	+ .10	04,05,09,10	"	0.685	"	" .617	8.57	- .03	01,00,06,06	"	10.726
"	" .556	6.40	+ .24	02,01,06,06	"	0.689	10	8728.587	8.88	- .18	05,04,04,03	76	21.748
"	" .561	6.40	+ .08	02,03,05,04	"	0.694	"	" .601	8.83	+ .08	00,00,04,05	"	21.762
"	9662.601	6.19	+ .34	06,07,06,07	1930	0.330	"	" .608	8.83	+ .06	03,04,00,01	"	21.769
"	" .606	6.32	+ .23	04,04,05,06	"	0.335	"	" .615	8.86	+ .06	02,01,01,02	"	21.776
"	9663.535	6.32	+ .11	01,00,07,07	1931	0.069	"	" .624	8.87	+ .04	02,03,04,03	"	21.785
"	" .541	6.32	+ .09	06,06,03,03	"	0.075	"	8734.583	8.75	+ .04	06,06,02,01	"	27.743
"	" .547	6.34	+ .29	06,06,02,01	"	0.081	"	" .591	8.68	+ .02	00,01,04,04	"	27.751
"	" .555	6.25	+ .06	02,02,03,04	"	0.089	"	" .605	8.72	+ .02	06,05,03,03	"	27.765
"	" .566	6.28	+ .05	02,02,02,01	"	0.100	"	" .611	8.74	+ .06	08,08,00,01	"	27.771
"	" .588	6.27	+ .02	04,05,09,08	"	0.122	"	" .620	8.79	- .07	05,05,00,00	"	27.780
"	9694.554	7.16	- .07	02,02,03,02	1957	0.013	"	8735.570	8.79	- .12	06,07,11,10	"	28.730
"	" .562	7.04	+ .12	07,08,05,04	"	0.021	"	" .575	8.79	- .13	02,02,01,01	"	28.735
"	" .571	6.86	.00	03,02,00,00	"	0.030	"	8739.602	9.32	- .02	01,00,05,04	77	0.446
"	" .583	6.58	+ .11	00,01,04,04	"	0.042	"	" .611	9.23	- .11	02,03,01,01	"	0.455
"	" .595	6.54	+ .10	08,08,00,00	"	0.054	"	" .618	9.31	- .12	02,01,06,06	"	0.462
"	9697.581	6.31	+ .22	05,05,03,04	1959	0.650	"	" .627	9.20	- .06	03,02,02,01	"	0.471
"	" .587	6.33	+ .08	01,01,04,04	"	0.656	"	" .634	9.20	- .02	02,03,02,03	"	0.478
"	9702.548	6.27	- .02	10,11,04,04	1963	0.836	"	8740.568	8.92	- .02	05,04,02,01	"	1.412
"	9704.543	6.30	+ .12	10,09,13,14	1965	0.441	"	" .575	8.81	- .04	02,03,02,01	"	1.419
"	" .547	6.33	- .02	01,02,02,03	"	0.445	"	" .585	8.89	- .05	10,10,04,03	"	1.429
12	9705.564	6.34	+ .19	05,05,02,01	1966	0.267	"	" .611	8.87	- .12	07,07,01,02	"	1.455
"	" .574	6.29	+ .10	02,02,08,07	"	0.277	"	" .618	8.85	- .08	07,07,05,06	"	1.462
"	9706.547	6.61	- .02	01,02,01,02	1967	0.055	"	8742.557	8.77	- .08	00,01,06,07	"	3.401
"	" .551	6.45	+ .10	08,07,00,01	"	0.059	"	" .563	8.82	+ .06	01,00,15,15	"	3.407
"	" .558	6.45	+ .14	04,04,04,04	"	0.066	"	" .569	8.70	- .04	03,03,01,01	"	3.413
"	" .567	6.40	- .11	01,01,05,05	"	0.075	"	8745.599	8.72	- .04	07,07,01,01	"	6.443
"	" .576	6.36	+ .01	07,08,01,01	"	0.084	"	" .607	8.69	+ .05	01,01,02,01	"	6.451
025338. ST PERSEI.							"	" .613	8.66	- .06	05,04,00,01	"	6.457
025867. RX CASSIOPEIAE.							"	" .619	8.65	+ .03	02,03,02,02	"	6.463
09	8397.547	10.72	- .09	03,03,03,03	107	2.647	"	8746.569	8.65	- .01	03,03,01,01	"	7.413
"	" .557	10.61	- .06	08,09,07,06	106	0.009	"	" .575	8.61	.00	03,04,08,07	"	7.419
025867. RX CASSIOPEIAE.							"	" .583	8.61	- .03	05,06,06,06	"	7.427
025867. RX CASSIOPEIAE.							"	" .593	8.62	- .06	09,09,06,07	"	7.437
025867. RX CASSIOPEIAE.							"	" .602	8.69	- .13	03,03,04,04	"	7.446
025867. RX CASSIOPEIAE.							"	8747.606	8.65	- .01	01,01,04,03	"	8.450
025867. RX CASSIOPEIAE.							"	" .612	8.63	- .08	00,01,02,02	"	8.456
025867. RX CASSIOPEIAE.							"	8748.587	8.68	- .06	03,02,03,02	"	9.431
025867. RX CASSIOPEIAE.							"	" .593	8.61	- .08	10,09,04,04	"	9.437
09	8610.547	9.21	- .08	02,02,05,05	73	0.655	"	8752.558	8.91	+ .04	10,10,05,04	"	13.401
"	" .560	9.22	- .04	03,03,05,05	"	0.668	"	" .572	8.93	- .05	03,03,01,00	"	13.415
"	" .570	9.22	- .14	02,03,04,05	"	0.678	"	" .583	8.88	- .10	03,02,01,00	"	13.426
"	" .582	9.18	- .10	04,04,00,00	"	0.690	"	8753.551	9.09	.00	02,02,08,07	"	14.394
"	" .593	9.20	- .16	04,04,01,01	"	0.701	"	" .561	9.07	- .16	03,04,01,01	"	14.404
"	8615.572	8.59	- .15	06,05,05,05	"	5.680	"	8754.537	9.16	- .06	05,05,01,02	"	15.380
"	" .585	8.55	- .32	01,00,03,03	"	5.693	"						

Yr.	Julian Day.	Magn.	A-B	Residuals.	Epoch.	Phase.	Yr.	Julian Day.	Magn.	A-B	Residuals.	Epoch.	Phase.
025867. RX CASSIOPEIAE (continued).							025867. RX CASSIOPEIAE (continued).						
10	8754.546	9.08	-.10	05,06,02,02	77	15.389	10	8798.564	8.79	+.24	03,02,00,00	78	27.090
"	" .560	9.09	+.01	05,05,03,02	"	15.403	"	8799.552	8.86	+.18	11,11,07,06	"	27.098
"	" .576	9.11	-.02	06,06,02,02	"	15.419	"	" .561	8.77	+.31	03,03,06,07	"	27.107
"	" .588	9.12	-.06	01,01,04,05	"	15.431	"	8803.548	9.47	+.11	04,04,06,07	"	32.074
"	8756.549	9.00	-.06	02,01,04,04	"	17.392	"	" .558	9.44	+.02	05,04,07,08	"	32.084
"	" .555	8.96	+.02	05,04,02,01	"	17.398	"	8804.558	9.19	.00	09,08,02,03	79	0.769
"	" .560	9.00	+.06	05,06,01,02	"	17.403	"	" .566	9.15	+.05	04,04,02,02	"	0.777
"	8757.608	8.91	-.02	02,02,00,00	"	18.451	"	8808.557	8.75	+.03	01,00,02,02	"	4.768
"	" .615	8.90	+.06	02,02,01,00	"	18.458	"	" .564	8.78	-.06	03,04,00,01	"	4.775
"	" .624	8.91	+.01	01,01,02,02	"	18.467	"	8809.552	8.70	-.14	03,03,12,11	"	5.763
"	8763.593	8.72	-.02	01,02,01,00	"	24.436	"	" .559	8.67	+.04	01,02,02,03	"	5.770
"	" .602	8.69	.00	04,05,09,09	"	24.445	12	9704.577	8.79	-.08	04,05,02,03	106	28.290
"	" .611	8.67	+.04	05,05,05,04	"	24.454	"	" .581	8.73	+.05	00,01,01,01	"	28.294
"	" .618	8.68	-.14	04,03,04,05	"	24.461	"	" .585	8.70	-.06	03,02,03,02	"	28.298
"	" .625	8.69	-.09	08,08,00,00	"	24.468	"	9705.546	8.78	-.14	04,05,00,00	"	29.259
"	8764.543	8.73	-.12	01,00,02,02	"	25.386	"	" .552	8.74	-.22	02,03,00,01	"	29.265
"	" .550	8.66	-.02	10,09,01,02	"	25.393	"	9706.587	8.81	-.15	04,04,02,02	"	30.300
"	" .557	8.70	-.10	03,03,06,06	"	25.400	"	9707.528	9.45	+.02	09,09,02,02	"	31.241
"	8767.536	8.74	-.10	01,00,01,01	"	28.379	"	" .534	9.24	-.06	02,01,00,00	"	31.247
"	" .557	8.78	-.06	03,02,09,10	"	28.400	"	" .544	9.26	-.22	15,16,14,13	"	31.257
"	" .568	8.79	-.11	04,04,02,02	"	28.411	"	" .549	9.46	-.06	15,14,03,03	"	31.262
"	8769.570	8.97	+.01	08,07,01,01	"	30.412	"	" .554	9.24	-.18	08,08,07,08	"	31.267
"	8774.520	8.84	+.02	08,07,02,01	78	3.047							
"	" .529	8.85	-.08	07,06,01,00	"	3.056							
"	" .541	8.85	-.13	09,09,10,10	"	3.068							
"	" .545	8.78	+.10	04,03,02,01	"	3.072	031646. RT PERSEI.						
"	" .613	8.81	.00	04,03,00,01	"	3.140	04	6769.603	10.63	-.02	05,06,04,03	33	0.333
"	8775.516	8.75	-.16	00,01,00,01	"	4.043	"	" .614	10.62	+.23	05,05,02,01	"	0.344
"	" .523	8.66	+.02	02,02,01,01	"	4.050	"	6771.582	10.64	+.12	02,03,04,05	35	0.613
"	8776.531	8.71	-.08	02,02,03,04	"	5.058	"	" .591	10.70	+.16	00,00,01,00	"	0.622
"	" .538	8.69	-.10	05,05,01,01	"	5.065	"	6772.568	10.65	+.12	02,02, A	36	0.750
"	8777.562	8.69	-.17	08,08,02,02	"	6.089	"	6774.541	10.61	+.18	08,07,00,01	39	0.175
"	8778.549	8.68	-.06	04,04,01,02	"	7.076	"	" .558	10.66	+.04	07,08,02,02	"	0.192
"	8782.528	8.80	-.18	02,02,01,00	"	11.055	"	6775.539	10.64	+.09	02,02,07,07	40	0.323
"	" .534	8.73	-.09	00,00,02,02	"	11.061	"	" .556	10.68	+.08	03,03,04,04	"	0.340
"	8783.527	8.83	.00	03,03,05,04	"	12.054	"	6781.600	10.71	+.06	03,02,01,01	47	0.439
"	" .534	8.80	-.02	05,05,02,02	"	12.061	"	6782.522	10.60	-.05	00,00,00,01	48	0.511
"	8789.539	8.91	-.01	03,03,02,01	"	18.066	"	" .531	10.63	-.02	04,03,01,00	"	0.520
"	" .545	8.92	-.08	03,03,04,04	"	18.072	"	6783.528	10.62	+.09	02,02,00,00	49	0.668
"	8790.534	8.85	-.08	01,02,07,06	"	19.061	"	" .539	10.60	.00	02,02,03,02	"	0.679
"	" .541	8.84	-.02	05,05,01,00	"	19.068	"	6785.541	10.62	+.08	03,02,01,02	52	0.133
"	" .553	8.81	.00	01,02,01,00	"	19.080	"	6786.543	10.60	-.15	02,03,01,01	53	0.285
"	8792.539	8.79	+.09	00,01,05,05	"	21.065	"	6787.524	10.77	-.06	09,10,09,10	54	0.417
"	" .547	8.84	+.02	05,06,06,05	"	21.073	"	" .534	10.73	-.06	04,03,01,00	"	0.427
"	" .563	8.82	+.02	06,05,00,01	"	21.089	"	" .546	10.70	-.04	03,02,00,01	"	0.439
"	8797.552	8.81	+.04	03,03,02,02	"	26.078	"	" .560	10.68	-.01	05,06,04,04	"	0.453
"	" .559	8.79	+.05	02,02,06,06	"	26.085	"	" .577	10.64	-.01	05,04,02,02	"	0.470

Yr.	Julian Day.	Magn.	A-B	Residuals.	Epoch.	Phase.	Yr.	Julian Day.	Magn.	A-B	Residuals.	Epoch.	Phase.
031646. RT PERSEI (continued).							031646. RT PERSEI (continued).						
04	6790.509	11.87	-.06	02,01,00,01	58	0.004	06	7291.586	10.63	+ .14	02,01,02,03	647	0.765
"	" .520	11.62	-.45	05,05,01,02	"	0.015	"	" .596	10.66	+ .11	03,03,04,04	"	0.775
"	" .533	11.18	-.04	04,04,02,03	"	0.028	"	" .606	10.71	+ .14	03,03,03,02	"	0.785
"	" .544	10.96	-.29	04,05,06,06	"	0.039	"	" .618	10.82	-.01	02,02,01,00	"	0.797
"	" .554	10.80	-.09	05,05,07,06	"	0.049	"	" .628	10.99	+ .08	02,02,00,00	"	0.807
"	" .566	10.62	-.16	08,09,01,01	"	0.061	"	" .641	11.26	-.17	08,08,07,07	"	0.820
"	" .578	10.62	-.25	02,03,01,01	"	0.073	"	7301.570	10.62	+ .09	04,03,01,01	659	0.555
"	6792.594	10.71	-.06	02,03,02,02	60	0.391	"	7314.537	10.64	+ .23	03,04,01,01	674	0.780
"	" .612	10.81	-.06	03,04,03,02	"	0.409	"	" .549	10.78	+ .08	02,03,01,01	"	0.792
"	" .631	10.86	-.04	03,03,00,01	"	0.428	"	" .564	10.98	+ .27	04,05,05,05	"	0.807
"	" .647	10.74	-.18	06,06,02,02	"	0.444	"	" .579	11.29	-.02	05,05,07,07	"	0.822
"	6793.465	10.74	-.16	06,07,00,01	61	0.412	"	7469.592	10.75	+ .26	00,01,03,02	857	0.397
"	" .479	10.80	-.04	05,04,05,06	"	0.426	"	" .610	10.78	+ .25	02,02,02,02	"	0.415
"	" .497	10.70	-.09	01,01,01,02	"	0.444	"	" .629	10.76	+ .32	02,03,03,02	"	0.434
"	" .515	10.65	-.02	02,01,00,01	"	0.462	"	" .645	10.74	+ .26	04,04,06,06	"	0.450
"	" .530	10.62	-.04	02,03,04,04	"	0.477	"	" .665	10.72	+ .31	04,04,01,01	"	0.470
"	" .552	10.60	-.04	01,00,00,01	"	0.499	"	" .683	10.60	+ .21	01,01,06,06	"	0.488
05	6908.580	11.98	-.12	08,09,00,01	197	0.000	07	7625.532	10.98	-.43	08,07,02,02	1041	0.042
"	" .590	11.78	-.23	06,06,06,06	"	0.010	"	" .542	10.77	-.10	05,06,00,01	"	0.052
"	" .601	11.45	+ .02	03,04,10,11	"	0.021	"	" .552	10.69	-.18	01,00,05,04	"	0.062
"	" .611	11.19	-.14	05,04,02,02	"	0.031	"	" .561	10.62	-.23	08,07,02,02	"	0.071
"	6911.657	10.71	+ .02	00,01,02,02	200	0.528	"	" .576	10.62	-.13	03,03,03,03	"	0.086
"	6915.629	10.64	+ .13	00,01,00,00	205	0.253	"	7641.558	10.66	-.20	03,04,01,02	1059	0.777
"	6916.606	10.70	+ .11	02,02,01,00	206	0.380	"	" .566	10.71	-.10	04,04,10,09	"	0.785
"	" .626	10.78	+ .04	00,01,03,02	"	0.400	"	" .577	10.80	-.20	03,03,05,05	"	0.796
"	6928.589	10.66	+ .13	05,04,01,01	220	0.470	"	" .589	11.00	-.07	04,04,04,04	"	0.808
06	7229.639	11.51	+ .38	04,04,09,10	574	0.831	"	" .601	11.27	-.22	03,03,04,03	"	0.820
"	" .649	11.84	+ .07	03,03,05,05	"	0.841	"	" .614	11.62	+ .11	02,02,07,07	"	0.833
"	" .660	11.98	+ .25	03,03,04,04	575	0.003	"	" .627	12.00	-.12	08,07,05,06	"	0.846
"	" .671	11.64	+ .40	01,02,07,07	"	0.014	"	7669.573	10.62	.00	01,02,06,07	1092	0.759
"	" .683	11.29	+ .08	11,11,07,07	"	0.026	"	7856.576	10.84	+ .75	05,04,00,00	1313	0.047
"	" .693	11.10	+ .28	06,06,01,02	"	0.036	"	7861.560	10.65	+ .30	03,04,03,02	1318	0.784
"	" .702	10.92	+ .07	02,03,04,03	"	0.045	"	" .572	10.74	+ .32	00,01,05,06	"	0.796
"	7235.606	11.97	-.07	04,05,01,00	582	0.002	"	" .582	10.90	+ .11	04,04,03,03	"	0.806
"	" .615	11.76	-.37	03,04,00,00	"	0.011	"	" .594	11.15	+ .34	02,01,01,00	"	0.818
"	" .625	11.39	-.02	02,02,05,04	"	0.021	"	" .606	11.44	-.06	05,05,01,01	"	0.830
"	" .637	11.11	-.30	03,03,04,04	"	0.033	"	" .617	11.76	+ .41	02,03,05,05	"	0.841
"	" .650	10.84	-.12	02,03,06,05	"	0.046	"	" .628	11.94	+ .17	09,08,01,01	"	0.002
"	7236.605	10.59	-.14	04,04,02,03	583	0.152	"	" .640	11.61	+ .08	02,01,12,12	"	0.014
"	7257.616	10.63	+ .20	04,04,01,01	607	0.775	"	" .650	11.40	+ .19	06,06,01,01	"	0.024
"	" .627	10.72	+ .04	03,04,01,01	"	0.786	"	7873.533	11.55	+ .46	06,07,03,03	1333	0.016
"	" .640	10.89	+ .14	05,04,00,01	"	0.799	"	" .543	11.26	.00	05,04,08,09	"	0.026
"	7270.603	10.62	+ .11	05,05,01,00	623	0.171	"	" .552	11.07	+ .22	06,07,10,10	"	0.035
"	7271.609	10.60	+ .16	05,04,02,03	624	0.326	"	" .563	10.78	+ .11	05,05,05,04	"	0.046
"	7284.537	10.60	-.17	02,02,03,02	639	0.512	"	" .573	10.64	+ .21	03,02,03,03	"	0.056
"	7287.533	10.62	-.24	03,03,03,02	643	0.110	09	8589.579	11.87	+ .50	08,08,03,03	2176	0.000
"	7290.606	10.60	+ .19	04,05,00,00	646	0.634	"	" .586	11.70	+ .27	07,06,09,09	"	0.007

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Yr.	Julian Day.	Magn.	A-B	Residuals.	Epoch.	Phase.	Yr.	Julian Day.	Magn.	A-B	Residuals.	Epoch.	Phase.
031646. RT PERSEI (continued).							035727. RW TAURI (continued).						
09	8589.593	11.52	+47	08,08,02,01	2176	0.014	05	7123.581	9.63	+34	02,01,07,06	2571	2.685
"	" .608	11.06	+17	00,00,06,06	"	0.029	"	" .595	10.24	-.24	02,01, A, R	"	2.699
"	" .617	10.93	+38	01,02,01,00	"	0.038	"	" .622	11.59	+10	00,01,06,06	"	2.726
"	" .627	10.73	+26	02,02,01,02	"	0.048	"	" .644	11.68	+20	03,04,01,02	"	2.748
"	" .637	10.58	+32	02,02,01,01	"	0.058	"	" .688	10.31	+46	14,14,05,04	2572	0.024
"	8600.609	11.63	-.02	04,03,00,01	2188	0.837	"	7126.544	8.33	+06	05,06,04,03	2573	0.111
"	" .618	11.90	+34	05,05,08,00	"	0.846	"	" .560	8.19	+22	00,01,05,06	"	0.127
"	" .629	11.76	+16	02,01,01,02	2189	0.008	"	" .577	8.17	+18	00,00,12,13	"	0.144
"	" .640	11.42	.00	04,05,07,08	"	0.019	"	" .594	8.06	+05	01,00,10,10	"	0.161
"	" .650	11.16	+36	00,00,01,01	"	0.029	"	" .613	8.01	+02	04,05,02,02	"	0.180
10	8707.647	11.84	-.24	07,08,12,13	2314	0.845	"	7145.613	8.04	+07	05,06,01,01	2579	2.568
"	" .655	11.73	-.30	05,06,02,02	2315	0.004	"	7146.530	8.06	+05	02,01,02,02	2580	0.716
"	" .661	11.58	-.08	04,03,04,05	"	0.010	"	7149.529	8.05	+08	14,14,01,01	2581	0.946
"	8713.581	11.68	-.31	02,02,02,02	2321	0.833	"	" .525	8.09	+26	02,02,07,06	2582	0.174
"	" .588	11.84	-.13	04,03,08,08	"	0.840	"	" .547	8.02	+19	08,08,01,02	"	0.196
"	" .597	11.88	-.20	00,00,03,02	2322	0.000	"	7154.533	8.02	+25	01,00,01,01	2583	0.413
"	" .607	11.65	-.30	06,05,14,14	"	0.010	"	7170.562	8.28	+21	07,07,01,02	2588	2.598
"	" .614	11.41	-.22	00,01,01,00	"	0.017	"	" .581	8.44	+11	00,01,01,01	"	2.617
"	" .622	11.24	-.17	03,03,04,04	"	0.025	"	" .602	8.62	+29	07,06,02,02	"	2.638
"	8995.546	10.70	-.03	12,13,03,03	2653	0.794	"	" .610	8.78	+15	02,02,01,01	"	2.646
"	" .553	10.90	-.07	01,01,06,05	"	0.801	"	" .619	8.88	+31	00,00,08,08	"	2.655
"	" .560	10.84	-.20	03,02,00,01	"	0.808	"	" .636	9.22	.00	06,05,04,03	"	2.672
"	" .567	11.09	-.02	00,01,02,02	"	0.815	"	" .646	9.49	+30	04,03,11,12	"	2.682
"	" .574	11.24	-.27	01,01,04,04	"	0.822	"	7173.443	10.68	+85	03,03,16,16	2589	2.710
035727. RW TAURI.							"	" .457	11.52	+13	06,05,06,06	"	2.724
							"	" .471	11.68	+20	00,01,02,02	"	2.738
							"	" .484	11.60	+34	03,03,03,03	"	2.751
							"	" .496	11.62	+20	07,07,06,06	"	2.763
05	7103.648	7.98	+12	06,06,03,04	2564	2.133	"	" .507	11.56	+39	00,00,07,07	2590	0.005
"	" .656	8.05	+02	03,02,04,03	"	2.141	"	" .518	10.88	-.11	10,10,12,12	"	0.016
"	7110.640	7.98	+19	01,02,01,01	2567	0.819	"	" .528	10.22	+44	10,10,07,08	"	0.026
"	7111.642	8.01	+18	04,05,06,05	"	1.821	"	" .537	9.73	+06	04,04,02,03	"	0.035
"	7112.596	8.84	.00	03,02,04,04	2568	0.006	"	" .548	9.44	+36	06,05,01,00	"	0.046
"	" .606	9.57	+38	09,09,10,11	"	0.016	"	" .559	9.15	+18	06,06,04,05	"	0.057
"	" .615	10.21	-.14	10,09,05,06	"	0.025	"	" .569	8.94	+40	01,02,02,03	"	0.067
"	" .626	9.74	+27	08,07,01,01	"	0.036	06	7271.646	8.02	+20	01,01,00,01	2625	1.228
"	" .641	9.31	+02	11,11,00,01	"	0.051	"	7292.527	11.50	-.45	04,04,09,09	2632	2.725
"	" .650	9.19	+10	01,02,01,00	"	0.060	"	" .540	11.57	-.22	06,05,06,06	"	2.738
"	" .657	9.00	-.04	00,01,04,03	"	0.067	"	" .552	11.53	-.10	01,00,08,07	"	2.750
"	" .664	8.84	+13	01,00,04,04	"	0.074	"	" .563	11.58	-.27	03,02,01,01	"	2.761
"	" .674	8.70	.00	04,03,03,02	"	0.084	"	" .577	11.52	-.16	04,05,01,02	2633	0.006
"	" .688	8.46	+09	00,00,00,01	"	0.098	"	" .591	10.72	-.69	12,12,06,06	"	0.020
"	" .700	8.34	+04	07,06,03,02	"	0.110	"	" .611	9.63	+14	02,03,05,06	"	0.040
"	7115.644	8.08	+08	02,03,00,01	2569	0.286	"	" .625	9.24	-.29	01,01,10,10	"	0.054
"	7117.663	8.03	+06	03,03,10,10	"	0.305	"	7303.521	8.63	-.34	02,03,00,00	2636	2.642
"	7123.548	8.71	+22	12,11,02,02	2571	2.652	07	7616.567	9.83	-.54	06,07,03,03	2750	0.043
"	" .566	9.15	-.08	08,08,09,09	"	2.670	"	" .577	9.50	-.04	06,05,08,08	"	0.053

Yr.	Julian Day.	Magn.	A-B	Residuals.	Epoch.	Phase.	Yr.	Julian Day.	Magn.	A-B	Residuals.	Epoch.	Phase.
035727. RW TAURI (continued).							035727. RW TAURI (continued).						
07	7616.588	9.19	-.32	03,03,06,06	2750	0.064	10	8705.614	8.06	-.23	02,02,03,03	3143	0.929
"	" .598	8.93	-.06	03,04,22,21	"	0.074	"	" .621	8.06	-.21	10,09,03,03	"	0.936
"	" .618	8.65	-.34	14,15,00,01	"	0.094	"	" .631	8.11	-.26	04,05,04,05	"	0.946
"	" .629	8.48	-.10	03,03,00,00	"	0.105	11	9363.541	8.28	+.31	01,01,02,01	3380	2.640
"	" .639	8.36	-.22	02,02,01,01	"	0.115	"	" .547	8.36	+.32	05,04,00,01	"	2.646
"	7641.530	8.84	-.08	02,03,02,01	2759	0.085	"	" .554	8.42	+.37	00,00,01,01	"	2.653
"	7879.590	10.92	+.21	12,12,04,05	2845	0.028	"	" .561	8.60	+.32	01,03,06,06	"	2.660
"	" .598	10.30	-.12	09,10,09,08	"	0.036	"	" .570	8.64	+.37	05,05,01,01	"	2.669
"	" .608	9.84	+.27	03,03,00,01	"	0.046	"	9372.519	8.13	+.14	25,24,05,04	3384	0.543
"	" .616	9.60	-.19	00,01,06,06	"	0.054	"	" .528	8.22	-.16	10,09,05,06	"	0.552
"	" .626	9.26	+.27	08,08,01,01	"	0.064	"	" .539	8.10	+.52	07,08,05,06	"	0.563
"	" .636	9.04	+.03	00,00,02,02	"	0.074	"	9373.514	8.08	+.20	16,15,05,06	"	1.538
08	8034.534	8.95	-.34	02,03,02,01	2900	2.677	"	" .522	8.11	+.18	08,08,17,17	"	1.546
"	" .545	9.15	-.16	01,01,10,10	"	2.688	"	" .529	8.02	+.51	01,00,04,04	"	1.553
"	" .554	9.40	-.25	04,04,04,04	"	2.697	"	9384.518	8.13	+.22	00,01,01,02	3388	1.466
"	" .562	9.68	-.07	03,03,04,04	"	2.705	"	" .523	8.08	+.15	03,03,08,08	"	1.471
"	" .569	9.91	-.30	01,02,01,01	"	2.712	"	" .528	8.10	+.13	07,07,02,02	"	1.476
"	" .577	10.24	-.03	09,10,06,06	"	2.720	"	" .534	8.10	+.15	01,01,02,02	"	1.482
"	8214.641	10.24	+.23	02,03,05,05	2966	0.045	"	" .540	8.18	+.16	01,01,07,06	"	1.488
"	" .647	9.97	-.06	16,15,00,01	"	0.051	"	9390.531	8.05	+.30	02,03,07,06	3390	1.941
"	" .655	9.64	+.27	06,06,00,00	"	0.059	"	" .538	8.05	+.34	05,06,04,05	"	1.948
"	8250.540	10.12	+.40	06,06,09,09	2978	2.720	"	" .545	8.06	+.19	03,03,08,08	"	1.955
"	" .551	10.90	-.21	17,17,14,14	"	2.731	"	9391.518	8.42	+.15	09,10,10,10	3391	0.159
"	" .560	11.44	+.35	10,11,03,03	"	2.740	"	" .524	8.28	+.33	04,03,05,05	"	0.165
"	8286.532	9.93	-.06	09,08,03,02	2991	2.718	"	" .531	8.24	+.32	11,12,03,04	"	0.172
"	" .540	10.32	+.30	07,07,13,13	"	2.726	"	" .537	8.23	+.30	01,00,04,03	"	0.178
09	8405.545	8.59	-.26	09,08,06,06	3034	2.660	"	" .544	8.22	+.20	05,05,02,03	"	0.185
"	" .551	8.72	-.25	10,10,01,02	"	2.666	"	9399.512	8.16	+.42	08,08,07,07	3393	2.615
"	" .557	8.86	-.43	06,05,00,00	"	2.672	"	" .518	8.20	+.36	01,02,12,11	"	2.621
"	" .563	8.99	-.10	00,01,03,03	"	2.678	"	" .523	8.18	+.59	10,10,13,14	"	2.626
"	" .570	9.13	-.30	08,09,01,01	"	2.685	"	" .529	8.22	+.40	01,02,01,02	"	2.632
"	" .583	9.40	-.20	04,05,04,04	"	2.698	"	" .535	8.28	+.40	02,02,03,04	"	2.638
"	8419.544	10.41	-.02	24,25,12,12	3040	0.045	"	9400.509	8.04	+.24	11,11,02,03	3394	0.843
"	" .553	9.86	-.31	04,03,01,01	"	0.054	"	" .514	7.94	+.52	13,12,02,02	"	0.848
"	" .561	9.63	-.14	04,05,09,09	"	0.062	"	" .520	8.19	+.20	07,07,00,00	"	0.854
"	8585.580	10.13	+.06	07,07,01,00	3099	2.727	"	" .525	8.07	+.50	05,04,14,15	"	0.859
"	" .588	10.64	+.53	01,01,08,08	"	2.735	"	9401.511	8.16	+.56	03,02,06,05	"	1.845
"	" .599	11.34	+.05	08,08,02,03	"	2.746	"	" .518	8.12	+.51	00,01,03,04	"	1.852
"	" .613	11.57	+.26	02,02,01,00	"	2.760	"	" .525	8.04	+.53	02,02,05,04	"	1.859
10	8687.634	8.11	-.18	04,05,00,00	3136	2.333	040433. RV PERSEI.						
"	" .640	8.09	-.18	04,04,07,07	"	2.339							
"	8704.617	9.17	-.22	04,05,05,06	3142	2.701							
"	" .625	9.52	-.11	08,08,03,03	"	2.709							
"	" .631	9.67	-.42	02,02,02,02	"	2.715							
"	" .641	10.08	-.04	03,04,01,01	"	2.725	09	8406.538	12.38	+.12	07,06,03,04	220	0.016
"	" .649	10.46	-.39	01,02,05,05	"	2.733	"	" .551	12.18	+.36	07,08,04,05	"	0.029
"	8705.607	8.05	-.26	04,04,03,04	3143	0.922	"	" .561	11.88	+.09	04,03,08,08	"	0.039

Yr.	Julian Day.	Magn.	A-B	Residuals.	Epoch.	Phase.	Yr.	Julian Day.	Magn.	A-B	Residuals.	Epoch.	Phase.
040433. RV PERSEI (continued).							044880. RS CEPHEI (continued).						
09	8406.571	11.66	+ .31	04,04,05,05	220	0.049	05	7152.573	11.22	+ .11	00,01,04,04	574	12.095
"	" .581	11.52	+ .12	01,00,04,04	"	0.059	"	" .586	11.33	+ .18	02,03,01,02	"	12.108
041342. RW PERSEI.							"	" .602	11.54	+ .13	03,03,01,01	"	12.124
06	7294.644	9.87	+ .27	03,04,02,02	2	8.636	"	" .619	11.66	+ .24	01,02,01,02	"	12.141
"	7298.528	10.01	+ .29	05,05,00,00	"	12.519	"	" .638	11.77	+ .18	04,04,01,00	"	12.160
"	" .610	10.05	+ .28	01,02,01,01	"	12.601	"	" .654	11.89	+ .22	01,01,01,01	"	12.176
"	7301.536	9.87	+ .24	02,02,02,01	1	2.325	"	" .677	12.01	+ .14	03,02,03,02	"	12.199
"	7312.547	11.35	+ .29	08,08,04,04	0	0.133	"	" .692	12.04	+ .23	02,03,06,06	"	12.214
"	" .560	11.27	+ .28	10,10,07,07	"	0.146	"	7168.578	10.11	- .11	02,03,02,02	576	3.261
"	7317.565	9.87	+ .40	01,00,03,03	"	5.151	"	" .600	10.18	- .03	04,04,03,03	"	3.283
"	" .583	9.89	+ .38	01,01,01,01	"	5.169	"	7171.535	10.28	- .23	08,08,04,05	"	6.218
"	" .597	9.90	+ .30	00,00,02,01	"	5.183	"	" .555	10.19	- .10	03,04,01,02	"	6.238
"	7319.557	9.89	+ .41	02,02,03,03	"	7.143	"	" .567	10.22	- .04	03,04,01,02	"	6.250
"	7321.562	9.86	+ .22	03,04,03,02	"	9.148	"	" .575	10.21	- .06	03,02,01,02	"	6.258
"	7326.536	9.89	+ .32	03,02,00,01	1	0.920	"	7174.574	10.20	- .20	02,03,03,02	"	9.257
07	7643.540	9.92	+ .34	06,05,04,04	2	4.725	"	7175.526	10.11	- .22	01,00,02,01	"	10.209
08	8236.556	10.68	- .28	03,03,03,03	70	0.010	"	7177.523	11.80	- .25	02,02,04,05	"	12.206
"	" .567	10.59	- .17	04,04,03,02	"	0.021	"	" .536	11.87	- .26	03,02,04,03	"	12.219
"	" .577	10.50	- .26	01,02,04,03	"	0.031	"	" .550	11.86	- .16	05,05,05,06	"	12.233
"	" .593	10.41	- .08	06,05,00,01	"	0.047	"	" .567	11.88	- .16	09,08,04,04	"	12.250
"	" .610	10.31	- .24	06,05,07,07	"	0.064	"	" .579	11.84	- .16	04,05,02,01	"	12.262
044880. RS CEPHEI.							"	" .593	11.81	- .04	00,00,01,01	"	12.276
05	7140.551	11.96	+ .09	03,03,01,00	574	0.073	"	" .610	11.92	- .11	05,05,04,03	"	12.293
"	" .565	12.06	- .01	02,02,01,00	"	0.087	"	7181.547	10.16	- .16	06,06,00,00	577	3.810
"	" .580	11.96	+ .03	05,05,02,02	"	0.102	"	7206.587	10.14	.00	02,01,02,03	579	4.010
"	" .599	11.95	+ .02	02,02,04,04	"	0.121	"	7210.553	10.16	- .16	10,09,02,02	"	7.976
"	" .616	11.96	+ .04	03,03,01,01	"	0.138	"	" .562	10.18	- .07	00,00,01,00	"	7.985
"	" .630	12.00	- .05	02,02,00,00	"	0.152	06	7215.602	10.24	- .32	03,02,02,01	580	0.605
"	" .681	12.02	- .05	04,04,02,02	"	0.203	"	" .622	10.20	- .29	01,00,03,03	"	0.625
"	" .691	11.99	+ .14	02,01,06,05	"	0.213	"	" .644	10.17	- .30	02,03,04,05	"	0.647
"	7142.614	10.26	+ .05	07,08,04,04	"	2.136	"	7236.551	10.14	- .15	00,00,06,05	581	9.133
"	7144.673	10.24	.00	05,06,01,02	"	4.195	"	7240.574	10.24	- .13	00,01,02,02	582	0.736
"	7145.580	10.22	+ .06	01,01,00,00	"	5.102	"	" .605	10.20	- .08	07,07,02,01	"	0.767
"	7146.568	10.31	+ .02	02,02,03,04	"	6.090	"	" .630	10.17	- .18	02,01,07,07	"	0.792
"	" .593	10.36	+ .03	01,01,00,00	"	6.115	"	7287.630	10.17	- .08	01,01,02,02	585	10.530
"	" .611	10.32	+ .01	05,05,00,00	"	6.133	"	7291.554	10.17	- .14	05,05,04,03	586	2.034
"	7149.565	10.22	.00	05,04,00,00	"	9.087	"	7314.627	11.82	- .23	01,01,05,04	588	0.265
"	7151.578	10.24	+ .08	03,02,01,00	"	11.100	"	7326.619	11.85	+ .26	07,07,04,05	"	12.257
"	7152.528	10.90	+ .16	03,03,01,01	"	12.050	"	" .631	11.83	+ .14	03,03,05,04	"	12.269
"	" .542	11.01	+ .14	02,03,01,01	"	12.064	"	" .658	11.86	+ .12	05,04,03,03	"	12.296
"	" .555	11.08	+ .19	01,01,07,06	"	12.077	"	7327.630	10.22	+ .17	06,05,03,03	589	0.848
							"	7341.641	10.18	+ .15	04,04,03,03	590	2.438
							"	7342.614	10.18	+ .12	02,01,03,02	"	3.411
							"	7345.623	10.24	+ .13	07,07,05,04	"	6.420
							07	7579.540	10.40	- .01	00,01,04,04	609	4.362
							"	7699.582	11.74	+ .11	04,04,08,08	619	0.200
							08	8258.589	11.61	- .18	06,06,08,08	664	0.312

Yr.	Julian Day.	Magn.	A-B	Residuals.	Epoch.	Phase.	Yr.	Julian Day.	Magn.	A-B	Residuals.	Epoch.	Phase.
044880. RS CEPHEI (continued).							064333. RX GEMINORUM.						
08	8258.599	11.45	+0.6	02,01,00,00	664	0.322	09	8409.551	10.48	+0.32	04,03,00,00	36	0.051
"	" .612	11.34	+0.7	01,01,01,01	"	0.335	"	" .558	10.46	+0.23	10,10,03,04	"	0.058
"	" .629	11.12	+0.9	03,03,02,02	"	0.352	"	" .566	10.38	+0.19	01,01,06,07	"	0.066
"	" .648	10.99	+1.0	02,02,07,07	"	0.371	"	" .575	10.38	+0.24	06,05,02,02	"	0.075
09	8556.563	11.78	+0.34	07,07,04,04	688	0.202	"	" .594	10.25	+0.30	03,03,00,00	"	0.094
"	" .573	11.72	+0.35	03,04,05,05	"	0.212	"	" .604	10.20	+0.32	03,03,01,00	"	0.104
"	" .595	11.80	+0.23	03,02,03,03	"	0.234	064907. RU MONOCEROTIS.						
"	" .609	11.74	+0.21	03,03,09,09	"	0.248							
"	" .619	11.80	+0.47	09,09,09,09	"	0.258							
"	" .631	11.78	+0.24	05,04,03,03	"	0.270							
"	8557.587	10.12	+0.23	05,05,01,01	"	1.226	07	7597.596	10.53	+0.30	04,04,08,09	374	0.089
"	" .633	10.13	+0.06	02,01,04,03	"	1.272	"	7646.542	10.48	+0.29	00,00,01,01	428	0.640
"	" .641	10.12	+0.18	02,02,11,11	"	1.280	"	7653.592	10.06	+0.45	06,06, A	436	0.520
"	8568.545	11.64	+0.15	01,01,04,05	"	12.185	"	7655.529	10.47	+0.18	02,03,03,03	438	0.665
"	" .556	11.70	+0.20	01,00,01,00	"	12.196	09	8355.610	10.87	+0.38	02,02,02,03	1219	0.852
"	" .567	11.84	+0.20	02,03,02,03	"	12.207	"	" .619	11.01	+0.42	00,01,01,01	"	0.861
"	" .586	11.81	+0.18	03,02,06,05	"	12.226	"	" .628	11.09	+0.36	05,05,03,03	"	0.870
"	" .598	11.84	+0.21	05,05,00,00	"	12.238	"	" .637	11.13	+0.34	06,05,03,02	"	0.879
"	" .613	11.86	+0.23	03,03,10,10	"	12.253	"	" .645	11.18	+0.26	10,10,04,04	"	0.887
"	" .623	11.90	+0.12	01,01,02,01	"	12.263	"	8356.576	11.24	+0.20	06,07,10,11	1221	0.026
"	8593.541	11.82	+0.12	00,01,09,08	690	12.342	"	" .586	11.22	+0.09	06,06,00,00	"	0.036
"	" .550	11.79	+0.26	05,04,03,04	"	12.351	"	" .596	11.07	+0.34	03,03,02,02	"	0.046
"	" .560	11.74	+0.07	03,03,01,00	"	12.361	"	8364.565	10.50	+0.49	09,09,04,03	1229	0.846
"	" .570	11.74	+0.08	03,02,09,09	"	12.371	"	" .575	10.46	+0.36	01,01,02,01	"	0.856
"	" .581	11.73	+0.16	01,01,10,10	"	12.382	"	" .589	10.45	+0.38	05,04,06,06	"	0.870
"	" .600	11.87	+0.10	03,04,11,11	"	12.401	"	" .597	10.39	+0.34	05,05,05,06	"	0.878
"	8599.621	10.33	+0.18	03,02,00,01	691	6.003	"	" .608	10.42	+0.35	05,06,01,01	"	0.889
"	" .627	10.26	+0.03	03,02,03,03	"	6.009	"	8377.552	10.52	+0.37	05,05,08,08	1244	0.389
10	8717.600	11.74	-0.09	09,09,04,04	700	12.202	"	8383.588	10.52	+0.15	03,03,01,01	1251	0.151
"	" .608	11.69	-0.18	06,06,06,05	"	12.210	"	" .597	10.44	+0.37	02,02,05,04	"	0.160
"	" .616	11.82	-0.16	09,10,02,02	"	12.218	"	" .606	10.54	+0.36	02,03,09,08	"	0.169
"	" .625	11.82	-0.12	08,07,05,05	"	12.227	"	" .615	10.52	+0.39	11,11,03,03	"	0.178
"	" .635	11.82	-0.16	06,05,04,03	"	12.237	"	" .623	10.51	+0.14	04,03,02,01	"	0.186
"	8742.625	11.78	-0.25	03,02,05,05	702	12.385	"	8386.588	10.46	+0.15	01,02,00,00	1254	0.463
"	" .638	11.74	-0.20	08,09,02,03	"	12.398	"	8389.559	10.44	+0.33	07,06,04,04	1257	0.745
062908. RW MONOCEROTIS.							"	" .554	10.57	+0.22	02,01,03,03	1267	0.778
							"	8420.540	10.48	+0.36	07,08,07,06	1292	0.358
09	8414.544	11.01	+0.18	03,04,10,10	247	0.056	10	8735.601	10.92	+0.36	03,04,06,05	1643	0.873
"	" .552	10.73	+0.22	03,02,00,01	"	0.064	"	" .608	10.98	+0.27	01,01,09,08	"	0.880
"	" .560	10.58	+0.03	09,10,01,01	"	0.072	"	" .616	11.12	+0.40	02,02,04,05	"	0.888
"	" .570	10.16	+0.32	00,01,09,08	"	0.082	"	" .622	11.11	+0.30	05,04,03,04	"	0.894
"	" .581	10.02	+0.19	07,07,02,02	"	0.093	"	" .629	11.12	+0.36	08,09,02,01	1644	0.005
"	" .598	9.72	+0.27	01,01,00,00	"	0.110	"	8736.571	11.13	+0.30	. . . , R . . . , R	1645	0.052
							"	" .589	10.95	+0.22	03,02,12,11	"	0.070
							"	8739.528	10.47	+0.18	04,03,02,02	1648	0.319
							"	" .550	10.52	+0.29	03,03,05,05	"	0.341
							"	" .557	10.47	+0.30	07,07,01,00	"	0.348

Yr.	Julian Day.	Magn.	A-B	Residuals.	Epoch.	Phase.	Yr.	Julian Day.	Magn.	A-B	Residuals.	Epoch.	Phase.
064907. RU MONOCEROTIS (continued).							072776. Y CAMELOPARDALIS (continued).						
10	8739.565	10.46	+ .35	06,05,07,07	1648	0.356	05	7208.579	10.70	- .16	02,02,01,00	272	3.073
"	" .572	10.46	+ .25	01,01,02,02	"	0.363	06	7229.596	10.61	- .12	03,03,01,01	279	0.950
"	8740.543	10.50	+ .15	13,12,04,04	1649	0.438	"	7235.566	10.64	- .08	02,02,01,00	281	0.309
"	" .549	10.48	+ .20	04,03,01,00	"	0.444	"	7238.595	11.98	- .16	04,05,01,00	282	0.032
"	8742.529	10.50	+ .39	03,02,02,02	1651	0.632	"	" .606	11.86	- .04	03,02,08,07	"	0.043
"	" .534	10.46	+ .35	02,02,07,07	"	0.637	"	" .617	11.66	- .20	05,06,04,03	"	0.054
"	8745.521	10.52	+ .28	06,05,05,05	1655	0.039	"	" .626	11.39	- .02	05,04,04,03	"	0.063
"	" .528	10.45	+ .18	04,04,01,00	"	0.046	"	7258.527	11.05	+ .06	00,00,06,07	"	0.130
"	" .535	10.50	+ .28	05,05,00,00	"	0.053	"	" .540	10.98	+ .13	00,00,02,02	"	0.143
"	" .544	10.50	+ .31	02,01,01,01	"	0.062	"	" .553	10.83	+ .14	05,06,01,02	"	0.156
"	" .558	10.48	+ .25	03,03,01,01	"	0.076	"	" .572	10.72	+ .05	03,03,00,01	"	0.175
"	8746.524	10.52	+ .32	02,02,11,10	1656	0.146	"	7284.662	10.86	- .19	06,06,00,00	295	3.125
"	" .532	10.48	+ .24	08,07,06,07	"	0.154	"	" .682	10.96	- .09	02,02,05,06	"	3.145
"	8747.533	10.50	+ .33	06,05,06,05	1657	0.259	"	7552.539	12.03	+ .22	04,05,06,05	376	3.251
"	" .543	10.48	+ .31	05,04,04,04	"	0.269	07	7585.533	11.44	+ .08	02,03,05,05	386	3.189
"	" .555	10.51	+ .22	09,09,02,01	"	0.281	"	" .545	11.47	- .02	04,04,01,00	"	3.201
"	8748.529	10.50	+ .35	04,04,01,02	1658	0.359	"	" .565	11.72	+ .07	10,10,01,01	"	3.221
"	" .535	10.51	+ .18	04,04,10,10	"	0.365	"	" .579	11.92	- .04	01,01,00,00	"	3.235
071416. R CANIS MAJORIS.							"	" .596	12.08	+ .19	03,03,00,00	"	3.252
							"	" .615	12.30	+ .16	02,03,03,04	"	3.271
							"	" .633	12.33	+ .02	14,13,01,02	"	3.289
							"	" .650	12.21	+ .14	03,03,01,01	"	3.306
11	9096.529	6.07	+ .14	06,07,11,12	7693	0.038	"	" .673	11.92	- .11	01,01,00,00	387	0.023
"	" .538	6.00	+ .04	12,12,00,00	"	0.047	"	7615.525	11.05	+ .04	06,06,09,09	396	0.125
"	" .550	5.87	+ .14	02,03,12,12	"	0.059	"	" .537	10.98	- .12	10,09,02,03	"	0.137
"	" .562	5.78	- .01	09,09,14,14	"	0.071	"	" .553	10.87	+ .06	01,00,00,01	"	0.153
"	" .573	5.58	+ .07	01,01,09,09	"	0.082	"	" .572	10.78	- .05	09,08,08,08	"	0.172
							"	" .600	10.63	- .14	01,01,04,05	"	0.200
							"	7628.542	11.69	+ .06	01,00,10,09	399	3.224
							"	7853.546	10.81	+ .58	02,02,03,03	468	0.140
							"	" .558	10.73	+ .69	04,04,06,07	"	0.152
							"	" .573	10.69	+ .71	00,00,00,00	"	0.167
04	6843.586	10.69	- .02	05,04,00,01	162	1.696	"	8038.585	11.38	- .21	10,09,04,04	524	0.066
"	" .596	10.66	- .05	02,02,05,05	"	1.706	"	" .602	11.20	- .13	02,03,04,04	"	0.083
"	6844.532	10.60	+ .01	02,02,06,05	"	2.642	"	" .610	11.04	- .24	04,03,06,06	"	0.091
"	6845.527	10.60	+ .12	00,00,01,02	163	0.331	"	" .619	10.98	- .13	02,03,08,08	"	0.100
05	6881.586	12.06	+ .01	06,06,08,08	174	0.028	"	8656.639	12.03	+ .30	01,01,01,02	710	3.282
"	" .597	11.92	+ .32	07,06,19,19	"	0.039	"	" .647	11.86	+ .21	03,03,09,09	"	3.290
"	" .609	11.77	+ .02	04,05,02,03	"	0.051	"	8851.637	12.22	+ .28	05,05,07,08	769	3.243
"	" .623	11.63	+ .18	05,04,03,04	"	0.065	"	" .649	12.16	+ .15	02,02,08,08	"	3.255
"	" .636	11.42	+ .07	06,06,02,01	"	0.078	"	9411.541	10.56	+ .24	06,06,00,00	939	1.203
"	6890.569	10.57	.00	02,02,06,06	176	2.399	"	" .546	10.56	+ .12	02,01,01,01	"	1.208
"	" .581	10.60	- .08	01,01,01,00	"	2.411	"	" .551	10.54	+ .19	03,03,06,06	"	1.213
"	6898.545	10.62	- .15	03,03,02,02	179	0.458	"	9412.559	10.62	+ .10	01,01,07,07	"	2.221
"	6902.660	10.60	- .11	06,06,00,01	180	1.267	"	" .564	10.65	+ .18	05,04,06,06	"	2.226
"	6906.660	10.60	- .17	04,04,03,03	181	1.961	"	9415.555	10.54	+ .13	04,04,07,06	940	1.912
"	6918.636	10.61	- .10	01,00,02,01	185	0.714	"	" .9438.536	10.54	- .13	08,07,05,05	947	1.753
"	6958.626	10.60	- .31	06,05,01,01	197	1.037	"						

Yr.	Julian Day.	Magn.	A-B	Residuals.	Epoch.	Phase.	Yr.	Julian Day.	Magn.	A-B	Residuals.	Epoch.	Phase.
072776. Y CAMELOPARDALIS (continued).							113972. Z DRACONIS (continued).						
12	9438.542	10.58	-.06	05,05,06,06	947	1.759	03	6200.513	11.18	+.11	01,01,07,07	17	0.040
"	9441.515	10.60	-.16	01,00,09,10	948	1.427	"	" .524	10.91	-.16	02,03,01,00	"	0.051
"	" .521	10.65	+.06	07,08,07,08	"	1.433	"	" .531	10.76	+.09	01,01,01,00	"	0.058
"	9445.512	10.68	-.28	07,08,10,09	949	2.118	"	" .541	10.56	-.08	02,03,07,07	"	0.068
"	" .519	10.55	-.34	03,04,03,02	"	2.125	"	" .548	10.43	+.10	01,01,02,03	"	0.075
"	9446.512	11.20	+.05	24,23,00,00	"	3.118	"	" .558	10.38	-.13	02,01,00,00	"	0.085
"	" .520	11.23	-.06	06,06,13,14	"	3.126	"	" .564	10.33	-.06	02,01,03,03	"	0.091
"	" .533	11.42	-.16	09,10,08,07	"	3.139	"	" .575	10.21	-.06	03,04,05,06	"	0.102
"	9449.512	10.66	-.12	16,16,09,08	950	2.812	"	" .581	10.27	-.06	02,02,02,01	"	0.108
"	" .518	10.68	-.21	05,05,05,06	"	2.818	"	" .599	10.21	-.10	02,03,02,01	"	0.126
"	9456.511	12.14	-.25	02,03,02,02	952	3.200	"	" .607	10.21	-.08	02,02,06,06	"	0.134
"	" .519	11.98	-.06	05,05,21,21	"	3.208	"	6205.535	10.19	-.18	00,00,03,03	20	0.989
"	" .545	12.27	-.20	05,05,02,02	"	3.234	"	" .541	10.19	-.20	02,02,10,10	"	0.995
093126. Y LEONIS.							"	6206.532	10.22	-.16	04,03,00,01	21	0.628
10	8789.619	10.35	-.17	03,03,02,02	436	0.057	"	" .547	10.26	-.09	03,03,01,01	"	0.643
"	" .625	10.26	-.32	00,01,00,01	"	0.063	"	" .557	10.29	-.10	00,01,02,01	"	0.653
"	" .631	10.12	-.18	02,03,00,00	"	0.069	"	" .569	10.26	-.04	01,02,04,04	"	0.665
113972. Z DRACONIS.							"	" .581	10.34	-.12	01,02,00,01	"	0.677
03	6193.542	10.28	-.25	01,01,01,01	11	1.213	"	" .593	10.32	-.08	04,03,05,05	"	0.689
"	" .548	10.25	-.18	00,01,01,02	"	1.219	"	" .606	10.31	-.10	01,01,01,00	"	0.702
"	" .560	10.20	-.27	01,02,04,04	"	1.231	"	" .621	10.31	-.02	08,08,02,03	"	0.717
"	" .567	10.18	-.11	05,04,05,05	"	1.238	"	" .635	10.31	-.10	01,01,01,02	"	0.731
"	" .578	10.20	-.20	02,02,04,05	"	1.249	"	" .647	10.27	-.06	00,01,02,02	"	0.743
"	" .586	10.30	-.22	05,05,05,05	"	1.257	"	" .661	10.23	-.10	01,00,01,02	"	0.757
"	" .601	10.47	-.26	02,01,01,02	"	1.272	04	6261.620	10.72	+.29	08,07,01,01	62	0.061
"	" .608	10.56	-.17	01,01,00,00	"	1.279	"	" .630	10.59	+.42	02,03,02,02	"	0.071
"	" .623	10.69	-.22	01,00,03,03	"	1.294	"	" .643	10.44	+.20	07,07,06,07	"	0.084
"	" .633	10.85	-.14	08,07,08,09	"	1.304	"	" .653	10.31	+.38	02,03,08,07	"	0.094
"	" .647	11.33	-.30	08,09,03,03	"	1.318	"	" .669	10.19	+.38	12,13,07,08	"	0.110
"	" .657	11.76	+.01	09,09,03,03	"	1.328	"	" .678	10.23	+.26	01,00,04,04	"	0.119
"	" .678	12.64	-.37	01,02,07,07	"	1.349	"	6817.654	10.21	.00	01,01,05,05	471	0.917
"	" .699	12.38	-.55	08,08,08,09	12	0.013	"	6823.567	11.10	-.01	02,03,05,04	476	0.043
"	" .714	11.61	+.02	10,11,05,05	"	0.028	"	" .578	10.90	+.09	04,04,02,02	"	0.054
"	6194.533	10.19	-.06	02,02,01,02	"	0.847	"	" .589	10.56	-.15	00,01,00,00	"	0.065
"	" .541	10.21	-.18	01,01,00,00	"	0.855	"	" .598	10.46	+.08	05,04,03,00	"	0.074
"	6199.531	10.20	-.17	08,08,03,02	16	0.415	"	" .607	10.32	-.09	07,07,03,04	"	0.083
"	" .537	10.17	-.14	00,01,04,04	"	0.421	"	" .644	10.17	+.06	07,07,02,01	"	0.120
"	" .637	10.20	-.13	03,04,02,02	"	0.521	"	" .654	10.14	.00	01,01,01,00	"	0.130
"	" .646	10.16	-.12	01,00,04,03	"	0.530	05	6829.602	10.32	+.06	03,03,08,08	480	0.648
"	" .663	10.20	-.08	01,01,03,02	"	0.547	"	" .615	10.29	+.06	03,04,01,01	"	0.661
"	6200.507	11.37	-.06	04,03,05,04	17	0.034	"	" .628	10.31	+.04	01,01,00,00	"	0.674
"							"	" .641	10.32	+.04	04,03,04,03	"	0.687
"							"	" .652	10.32	+.04	01,01,02,01	"	0.698
"							"	6845.585	10.19	+.02	00,00,03,03	492	0.343
"							"	6850.522	10.34	+.12	00,01,02,01	495	1.208
"							"	" .534	10.28	+.06	06,05,03,02	"	1.220
"							"	" .547	10.32	-.08	03,04,01,02	"	1.233

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OBSERVATIONS OF VARIABLES.

Yr.	Julian Day.	Magn.	A-B	Residuals.	Epoch.	Phase.	Yr.	Julian Day.	Magn.	A-B	Residuals.	Epoch.	Phase.
113972. Z DRACONIS (continued).							113972. Z DRACONIS (continued).						
05	6850.622	11.00	+ .19	03,03,02,02	495	1.308	07	7265.663	10.35	+ .14	00,00,04,05	1170	0.091
"	" .630	11.06	- .15	07,07,10,10	"	1.316	"	7769.580	10.59	+ .22	02,02,01,01	1172	1.293
"	" .639	11.52	+ .16	05,05,08,07	"	1.325	"	" .590	10.67	+ .31	01,01,16,15	"	1.303
"	" .650	12.10	- .31	09,09,15,15	"	1.336	"	" .599	10.97	+ .22	05,05,08,08	"	1.312
"	6884.543	10.62	- .19	01,02,09,09	520	1.294	"	" .611	11.26	+ .33	07,06,03,03	"	1.324
"	" .553	10.80	- .05	00,00,01,01	"	1.304	"	" .622	11.71	+ .02	04,05,03,02	"	1.335
"	" .561	11.06	- .08	00,01,00,00	"	1.312	"	7788.586	10.62	+ .23	03,03,01,02	1186	1.296
"	" .570	11.30	+ .20	02,03,08,07	"	1.321	"	" .595	10.76	+ .27	06,05,07,08	"	1.305
"	" .577	11.59	- .10	02,01,08,08	"	1.328	"	7845.593	10.68	+ .08	01,00,01,00	1228	1.293
"	" .587	12.08	+ .29	01,01,00,01	"	1.338	"	" .601	10.76	- .19	01,01,05,05	"	1.301
"	" .597	12.57	- .34	09,10,02,02	"	1.348	"	" .609	10.80	+ .03	01,01,00,00	"	1.309
"	6888.524	10.15	- .06	04,03,01,01	523	1.203	"	" .618	11.03	- .26	02,03,04,05	"	1.318
"	" .535	10.25	- .06	01,00,02,03	"	1.214	"	" .627	11.39	+ .06	03,04,05,06	"	1.327
"	" .546	10.24	- .09	01,02,02,02	"	1.225	08	7979.530	10.21	- .06	04,03,02,03	1327	0.851
"	" .559	10.29	- .10	01,02,04,03	"	1.238	"	" .536	10.28	- .01	08,08,05,05	"	0.857
"	" .570	10.22	+ .05	01,01,17,17	"	1.249	"	" .544	10.18	- .04	06,06,04,05	"	0.865
"	" .581	10.31	- .02	01,00,02,03	"	1.260	"	" .551	10.20	- .04	01,00,01,01	"	0.872
"	" .593	10.38	- .12	01,00,03,02	"	1.272	"	" .558	10.20	- .06	09,09,03,03	"	0.879
"	6898.593	10.19	- .10	05,04,00,01	531	0.412	"	" .584	10.26	+ .09	02,02,06,07	"	0.905
"	6907.628	10.72	- .03	00,01,00,00	537	1.302	"	8031.534	10.35	- .06	04,04,06,05	1365	1.271
"	" .637	10.90	- .21	07,06,15,15	"	1.311	"	" .550	10.40	+ .16	03,02,08,09	"	1.287
"	" .645	11.17	+ .18	01,00,02,02	"	1.319	"	" .561	10.58	- .11	05,05,13,14	"	1.298
"	" .655	11.61	- .22	05,06,10,10	"	1.329	"	" .571	10.72	+ .12	04,05,05,06	"	1.308
"	" .665	12.08	+ .25	06,07,13,14	"	1.339	"	" .583	11.02	- .01	04,04,13,14	"	1.320
"	7021.655	10.84	+ .17	03,03,00,01	621	1.302	09	8407.549	10.19	+ .06	02,03,07,08	1642	1.284
"	" .663	10.94	+ .28	03,03,01,01	"	1.310	"	" .557	10.38	+ .03	01,01,01,01	"	1.292
"	" .671	11.24	+ .01	05,05,01,02	"	1.318	"	" .570	10.55	+ .06	03,04,03,02	"	1.305
"	" .680	11.56	+ .44	04,04,11,12	"	1.327	"	" .577	10.73	+ .02	06,05,03,02	"	1.312
"	" .692	11.98	- .13	07,07,03,03	"	1.339	"	" .584	10.92	+ .36	01,00,02,02	"	1.319
"	7237.569	11.34	- .01	09,09,00,00	781	0.036	"	" .593	11.10	- .03	04,05,05,05	"	1.328
"	" .581	10.98	- .33	02,01,06,06	"	0.048	"	" .600	11.35	+ .22	12,12,06,06	"	1.335
"	" .593	10.71	- .18	00,01,03,04	"	0.060	"	8498.602	12.02	+ .45	14,14,10,10	1710	0.029
"	" .606	10.52	- .23	01,01,01,02	"	0.073	"	" .618	11.44	+ .01	22,22,06,06	"	0.045
"	" .617	10.35	- .06	04,05,03,04	"	0.084	11	9041.561	12.20	- .29	03,04,26,26	2110	0.030
"	" .630	10.22	- .22	01,01,02,02	"	0.097	"	" .569	11.78	+ .08	07,07,11,11	"	0.038
"	" .649	10.12	- .12	01,00,01,00	"	0.116	"	" .577	11.56	.00	03,03,01,00	"	0.046
"	" .660	10.14	- .05	04,03,03,03	"	0.127	"	" .587	11.18	+ .07	16,15,00,00	"	0.056
"	7294.517	11.45	- .46	07,07,04,03	822	1.329	"	" .597	10.90	- .25	08,08,06,07	"	0.066
"	" .530	12.02	+ .23	03,03,09,09	"	1.342	"	9113.524	11.44	+ .20	09,10,04,03	2163	0.049
"	" .543	12.58	- .20	10,09,01,02	"	1.355	145508. δ LIBRAE.						
"	" .561	12.24	- .52	08,09,08,08	823	0.016	08	8118.593	5.60	+ .26	05,04,08,08	2085	0.691
"	" .578	11.40	+ .32	03,02,07,07	"	0.033	"	" .602	5.41	+ .08	07,07,01,01	"	0.700
"	" .594	10.90	- .21	05,05,02,01	"	0.049	"	" .611	5.35	+ .12	05,06,03,04	"	0.709
07	7765.623	11.00	+ .24	14,14,05,04	1170	0.051	"	" .623	5.33	+ .04	07,07,00,00	"	0.721
"	" .631	10.89	+ .03	03,03,14,14	"	0.059	"	"	"	"	"	"	"
"	" .640	10.68	+ .24	02,02,03,03	"	0.068	"	"	"	"	"	"	"
"	" .653	10.46	- .11	01,02,00,00	"	0.081	"	"	"	"	"	"	"

Yr.	Julian Day.	Magn.	A-B	Residuals.	Epoch.	Phase.	Yr.	Julian Day.	Magn.	A-B	Residuals.	Epoch.	Phase.
145508. δ LIBRAE (continued).							171101. U OPHIUCHI (continued).						
08	8118.630	5.27	+ .08	04,03,06,05	2085	0.728	06	7377.615	6.07	+ .13	01,00,00,00	10847	0.768
"	" .648	5.13	+ .01	02,02,05,05	"	0.746	"	" .625	5.99	+ .08	05,04,02,01	"	0.778
161106. SW OPHIUCHI.							"	" .641	5.89	.00	05,04,04,03	"	0.794
10	8853.605	10.21	+ .12	04,03,07,08	3619	0.012	"	" .651	5.85	+ .21	00,01,03,03	"	0.804
"	" .614	10.23	+ .04	04,05,02,03	"	0.021	"	" .665	5.81	+ .12	04,03,04,04	"	0.818
"	" .624	10.17	+ .19	01,01,08,08	"	0.031	"	" .678	5.73	+ .15	00,01,05,05	"	0.831
"	" .635	10.23	+ .23	02,02,03,02	"	0.042	"	7381.558	5.71	+ .31	03,03,02,02	10852	0.517
"	" .645	10.21	+ .07	03,04,01,01	"	0.052	"	7383.559	5.73	+ .23	00,00,04,03	10855	0.002
"	8860.577	9.33	+ .12	03,02,05,06	3621	2.092	"	7389.556	5.67	+ .35	00,01,05,05	10862	0.128
"	" .585	9.32	+ .06	04,03,04,04	"	2.100	"	7391.561	5.68	+ .36	03,02,02,03	10864	0.456
"	8861.574	9.26	- .02	07,06,01,00	3622	0.643	"	7397.554	5.72	+ .30	02,02,00,00	10871	0.578
"	" .582	9.31	+ .08	11,12,02,01	"	0.651	"	7403.561	6.29	+ .32	02,03,02,01	10878	0.714
"	" .599	9.31	+ .04	02,03,06,07	"	0.568	"	" .572	6.22	+ .30	03,03,01,01	"	0.725
"	" .607	9.35	- .17	01,01,00,01	"	0.676	"	" .584	6.23	+ .19	02,02,01,01	"	0.737
"	" .616	9.30	- .18	05,04,09,09	"	0.685	"	" .600	6.12	+ .22	00,01,00,01	"	0.753
"	8866.570	9.31	- .05	02,02,06,06	3624	0.747	"	7404.558	5.73	+ .36	03,03,03,02	10880	0.034
"	" .582	9.30	- .14	05,05,01,01	"	0.659	"	7405.553	5.70	+ .30	02,01,03,02	10881	0.189
"	" .593	9.26	- .14	01,00,07,06	"	0.670	"	7406.549	5.70	+ .34	01,02,02,02	10882	0.346
"	" .600	9.26	- .10	00,00,06,05	"	0.777	"	7408.552	6.05	+ .35	04,04,01,00	10884	0.672
"	8867.629	9.29	+ .19	10,10,03,04	"	1.806	"	" .562	6.12	+ .34	00,01,01,00	"	0.682
"	" .636	9.31	+ .03	05,05,04,03	"	1.813	"	" .577	6.25	+ .20	02,02,04,03	"	0.697
"	8880.575	10.13	- .11	07,06,01,01	3630	0.077	"	" .591	6.29	+ .17	03,03,03,04	"	0.711
"	" .580	10.10	+ .21	00,01,03,04	"	0.082	"	" .604	6.28	+ .30	01,01,00,00	"	0.724
"	" .616	9.86	- .06	06,05,08,09	"	0.118	"	" .620	6.15	+ .13	01,00,01,01	"	0.740
"	" .621	9.79	.00	16,15,10,09	"	0.123	"	" .632	6.14	+ .10	00,01,03,03	"	0.752
"	" .627	9.75	- .07	09,09,04,04	"	0.129	"	7410.558	5.72	+ .30	05,05,01,00	10887	0.162
"	8882.581	9.32	- .24	02,02,00,00	"	2.083	"	7465.533	5.90	+ .18	03,04,01,00	10952	0.618
"	" .589	9.31	- .09	04,04,02,03	"	2.091	"	" .547	6.00	+ .10	01,02,03,04	"	0.632
"	" .597	9.33	- .07	01,02,08,08	"	2.099	"	" .561	6.05	+ .13	08,09,01,01	"	0.646
"	" .608	9.33	- .04	01,01,04,03	"	2.110	"	" .577	6.13	+ .01	02,03,03,03	"	0.662
"	" .623	9.31	- .04	05,05,07,08	"	2.125	"	" .591	6.19	+ .07	02,01,02,02	"	0.676
"	8924.563	10.35	- .08	07,06,06,07	3648	0.034	"	" .602	6.19	.00	01,02,06,05	"	0.687
"	" .570	10.34	- .06	03,03,08,07	"	0.041	"	" .612	6.34	+ .22	02,01,02,01	"	0.697
"	" .580	10.27	- .16	03,04,02,01	"	0.051	"	7466.546	5.96	+ .26	03,03,03,02	10953	0.793
"	" .588	10.27	+ .05	06,06,05,06	"	0.059	"	" .558	5.90	+ .14	02,02,01,01	"	0.805
171101. U OPHIUCHI.							"	" .569	5.83	+ .14	00,00,03,03	"	0.816
06	7373.687	5.86	+ .22	01,00,05,04	10843	0.194	"	7471.522	6.31	+ .17	01,00,04,04	10959	0.736
"	" .700	5.81	+ .13	04,04,09,09	"	0.207	"	" .540	6.14	+ .18	07,07,02,01	"	0.754
"	7374.663	5.74	+ .22	03,04,02,02	10844	0.332	"	" .555	6.05	+ .24	01,01,03,04	"	0.769
"	" .675	5.71	+ .23	01,00,05,05	"	0.344	"	" .573	5.97	+ .23	00,00,00,01	"	0.787
"	7377.601	6.11	+ .16	00,01,02,01	10847	0.754	"	" .592	5.87	+ .16	08,08,05,06	"	0.806
"							"	" .609	5.82	+ .02	02,02,03,04	"	0.823
"							"	7481.535	6.23	+ .24	07,07,00,00	10971	0.684
"							"	" .547	6.34	+ .34	04,03,01,01	"	0.696
"							"	" .563	6.37	+ .32	02,01,04,03	"	0.712
"							"	" .578	6.35	+ .25	03,04,03,03	"	0.727
"							"	" .598	6.24	+ .22	02,02,05,04	"	0.747

Yr.	Julian Day.	Magn.	A-B	Residuals.	Epoch.	Phase.	Yr.	Julian Day.	Magn.	A-B	Residuals.	Epoch.	Phase.
171101. U OPHIUCHI (continued).							171101. U OPHIUCHI (continued).						
06	7481.611	6.13	+ .12	01,01,05,06	10971	0.760	09	8516.577	5.89	+ .11	03,02,01,01	12205	0.792
07	7735.602	6.02	+ .22	02,02,00,01	11274	0.635	"	" .588	5.93	+ .11	03,03,03,03	"	0.803
"	7762.565	6.11	+ .24	05,05,01,00	11306	0.760	"	" .598	5.77	+ .20	07,06,04,05	"	0.813
"	" .576	6.08	+ .27	01,01,00,01	"	0.771	"	" .608	5.66	+ .10	03,04,02,03	"	0.823
"	" .593	6.01	+ .25	12,13,04,03	"	0.788	"	8552.580	6.21	+ .25	05,04,00,00	12248	0.728
"	" .605	5.91	+ .18	10,10,05,06	"	0.800	"	" .589	6.19	+ .16	02,02,02,01	"	0.737
"	" .627	5.77	+ .09	08,07,05,05	"	0.822	"	" .601	6.06	+ .14	08,08,02,01	"	0.749
"	" .642	5.71	+ .20	02,03,01,00	"	0.837	"	" .615	5.98	+ .09	01,01,04,03	"	0.763
"	" .659	5.72	+ .12	06,07,02,01	11307	0.015	"	" .626	5.93	+ .29	05,05,07,06	"	0.774
"	7766.583	5.81	+ .12	03,03,06,07	11311	0.585	"	8557.537	6.15	+ .15	09,09,03,03	12254	0.651
"	" .602	5.83	+ .22	02,03,05,05	"	0.604	"	" .548	6.21	+ .08	01,01,00,01	"	0.662
"	" .618	5.89	- .01	03,03,01,01	"	0.620	"	" .561	6.29	+ .21	02,01,09,09	"	0.675
"	" .635	6.07	+ .16	09,09,01,01	"	0.637	"	" .577	6.39	+ .17	02,02,02,03	"	0.691
"	7787.558	5.78	+ .30	01,01,01,01	11336	0.591	"	" .585	6.35	- .01	03,03,05,05	"	0.699
"	" .575	5.84	+ .14	03,02,07,06	"	0.608	10	8848.617	6.35	+ .23	01,01,01,01	12601	0.713
"	" .589	5.97	+ .01	03,03,00,01	"	0.622	"	" .624	6.31	+ .36	02,03,10,10	"	0.720
"	" .601	6.05	+ .05	06,06,00,01	"	0.634	"	" .630	6.21	+ .25	00,00,03,03	"	0.726
"	" .616	6.13	+ .04	11,10,03,03	"	0.649	"	" .636	6.14	+ .22	06,06,07,06	"	0.732
"	" .629	6.21	+ .12	03,03,01,02	"	0.662	"	" .643	6.09	+ .19	02,03,00,00	"	0.739
"	" .647	6.29	+ .11	01,01,03,03	"	0.680	"	8859.564	6.03	+ .17	03,04,05,05	12614	0.757
08	8116.600	5.65	+ .09	08,07,02,02	11729	0.031	"	" .574	5.97	+ .20	02,03,03,04	"	0.767
"	8152.601	5.92	+ .02	05,04,00,00	11771	0.806	"	" .581	5.89	+ .23	07,07,02,01	"	0.774
"	" .610	5.88	+ .10	08,08,00,01	"	0.815	"	" .588	5.85	+ .16	00,01,05,05	"	0.781
"	" .619	5.85	.00	06,07,04,03	"	0.824	"	" .600	5.83	+ .28	02,03,11,10	"	0.793
"	" .633	5.78	- .02	06,05,08,08	"	0.838	"	" .616	5.79	+ .36	01,00,05,06	"	0.809
"	" .645	5.73	+ .03	07,07,09,09	11772	0.011	"	" .633	5.76	+ .21	09,10,06,06	"	0.826
"	8188.542	6.25	+ .05	07,07,00,00	11814	0.680	"	" .641	5.75	+ .11	02,02,12,13	"	0.834
"	" .550	6.28	+ .06	01,00,03,04	"	0.688	"	" .658	5.75	+ .12	10,09,04,05	12615	0.012
"	" .557	6.35	- .03	03,04,05,05	"	0.695	"	8864.561	6.34	+ .26	02,01,11,10	12620	0.721
"	" .565	6.38	+ .06	04,05,07,06	"	0.703	"	" .569	6.21	+ .24	02,03,04,05	"	0.729
"	" .578	6.43	+ .05	01,01,00,01	"	0.716	"	" .580	6.13	+ .32	05,05,09,08	"	0.740
"	8193.522	5.94	+ .02	09,10,03,04	11820	0.627	"	" .588	6.06	+ .26	02,02,04,04	"	0.748
"	" .531	5.98	- .10	08,08,04,03	"	0.636	"	" .602	5.99	+ .13	02,02,07,08	"	0.762
"	" .548	6.13	+ .03	03,03,03,03	"	0.653	"	" .612	5.91	+ .21	02,02,02,02	"	0.772
"	" .557	6.17	+ .05	02,02,06,06	"	0.662	"	" .623	5.86	+ .22	06,06,01,00	"	0.783
"	" .575	6.28	- .02	09,09,06,07	"	0.680	"	" .635	5.80	- .06	00,01,02,03	"	0.795
"	8199.524	6.17	+ .08	03,04,01,00	11827	0.758	"	" .649	5.77	+ .09	04,05,03,03	"	0.809
"	" .532	6.07	+ .19	06,06,00,01	"	0.766	"	8874.555	6.02	+ .34	02,02,01,00	12632	0.650
"	" .544	6.03	+ .13	R, A, 04,05	"	0.778	"	" .561	6.13	+ .31	01,02,01,01	"	0.656
"	" .555	5.95	+ .07	02,01,01,01	"	0.789	"	" .567	6.25	+ .32	01,02,03,04	"	0.662
"	" .568	5.88	+ .22	02,03,02,03	"	0.802	"	8879.565	5.93	+ .35	06,06,00,01	12638	0.628
09	8505.608	6.27	+ .12	00,01,00,00	12192	0.725	"	" .575	6.03	+ .42	03,03,06,06	"	0.638
"	" .617	6.17	- .36	01,00,09,09	"	0.734	"	" .585	6.16	+ .30	01,01,05,04	"	0.648
"	" .627	6.11	+ .12	03,03,02,02	"	0.744	"	" .597	6.27	+ .31	05,04,05,05	"	0.660
"	" .638	6.02	+ .14	00,01,07,07	"	0.755	"	" .608	6.31	+ .23	03,03,06,05	"	0.671
"	" .657	5.89	+ .13	03,02,03,03	"	0.774	"	" .620	6.33	+ .08	05,04,04,05	"	0.683
"	8516.562	5.84	+ .24	06,06,02,02	12205	0.777	"	8937.539	6.40	+ .26	04,05,02,03	12707	0.728

Yr.	Julian Day.	Magn.	A-B	Residuals.	Epoch.	Phase.	Yr.	Julian Day.	Magn.	A-B	Residuals.	Epoch.	Phase.
171101. U OPHIUCHI (continued).							171101. U OPHIUCHI (continued).						
10	8937.552	6.17	+ .21	03,03,07,06	12707	0.741	12	9655.593	5.73	+ .20	01,02,06,06	13564	0.028
"	" .562	6.08	+ .10	04,05,05,05	"	0.751	"	" .599	5.80	+ .22	14,13,06,06	"	0.034
"	" .572	6.02	+ .20	01,01,04,04	"	0.761	"	" .603	5.91	+ .34	01,01,11,11	"	0.038
"	" .585	5.93	+ .09	05,06,05,05	"	0.774	"	9656.542	5.79	+ .32	14,13,04,04	13565	0.138
12	9589.610	5.82	+ .42	09,10,04,04	13485	0.306	"	" .547	5.79	+ .19	05,04,05,05	"	0.143
"	9593.610	5.79	+ .31	06,06,05,05	13490	0.113	"	" .556	5.80	+ .34	04,05,01,00	"	0.152
"	9596.570	5.83	+ .41	04,04,10,09	13493	0.557	"	" .561	5.92	+ .30	04,04,09,08	"	0.157
"	" .577	5.87	+ .40	03,04,01,00	"	0.564	"	9658.581	5.71	+ .29	07,06,02,02	13567	0.500
"	" .584	5.85	+ .35	07,07,00,00	"	0.571	"	" .586	5.71	+ .31	08,07,03,03	"	0.505
"	" .591	5.97	+ .40	02,02,01,01	"	0.578	"	" .592	5.78	+ .34	02,02,05,06	"	0.511
"	" .598	5.99	+ .44	02,03,05,04	"	0.585	"	" .605	5.84	+ .32	04,04,05,05	"	0.524
"	9606.604	5.81	+ .41	04,04,03,03	13505	0.525	"	9662.562	5.70	+ .34	04,03,03,02	13572	0.286
"	9607.546	6.09	+ .52	02,02,05,04	13506	0.629	"	" .572	5.90	+ .16	07,07,02,02	"	0.296
"	9608.544	5.91	+ .43	05,05,02,02	13507	0.788	"	9671.546	5.81	+ .33	04,04,00,01	13583	0.545
"	" .554	5.89	+ .40	00,01,05,04	"	0.798	"	" .551	5.80	+ .38	02,03,02,02	"	0.550
"	" .564	5.92	+ .38	00,01,01,02	"	0.808	"	9672.525	5.72	+ .42	07,07,06,07	13584	0.185
"	" .572	5.87	+ .36	05,06,03,03	"	0.816	"	" .531	5.75	+ .32	08,09,01,00	"	0.191
"	" .583	5.85	+ .33	07,06,05,05	"	0.827	"	" .541	5.79	+ .31	04,04,03,03	"	0.201
"	" .587	5.89	+ .44	01,00,01,00	"	0.831	"	" .549	5.88	+ .24	05,05,09,09	"	0.209
"	9610.544	5.77	+ .29	01,01,03,03	13510	0.272	"	9673.530	5.75	+ .36	09,10,02,01	13585	0.352
"	" .553	5.75	+ .43	04,04,01,01	"	0.281	"	" .535	5.73	+ .23	01,02,02,02	"	0.357
"	" .561	5.89	+ .08	00,00,21,20	"	0.289	"	" .544	5.90	+ .14	22,21,03,03	"	0.366
"	" .574	5.81	+ .28	04,04,06,06	"	0.302	"	9690.535	6.04	+ .74	02,01,03,04	13605	0.581
"	" .591	5.85	+ .28	10,09,00,01	"	0.319	"	" .540	6.12	+ .46	18,19,02,01	"	0.586
"	9615.558	5.84	+ .30	07,06,01,02	13516	0.253	"	" .545	6.11	+ .44	06,07,08,08	"	0.591
"	" .566	5.82	+ .50	05,06,01,00	"	0.261	"	9691.511	6.32	+ .54	02,02,05,04	13606	0.718
"	" .572	5.89	+ .40	08,07,01,02	"	0.267	"	" .521	6.27	+ .48	05,05,06,06	"	0.728
"	" .577	5.83	+ .32	03,02,07,06	"	0.272	"	" .531	6.17	+ .23	06,05,02,02	"	0.738
"	" .582	5.84	+ .34	02,02,01,00	"	0.277	"	" .545	6.08	+ .36	12,12,02,02	"	0.752
"	9616.538	5.86	+ .22	01,01,01,01	13517	0.394	"	" .558	6.11	+ .44	01,00,11,10	"	0.765
"	" .543	5.84	+ .30	05,05,01,02	"	0.399	"	9692.532	5.85	+ .30	03,03,01,01	13608	0.062
"	" .548	5.85	+ .33	01,00,00,00	"	0.404	"	" .537	5.88	+ .42	01,02,09,08	"	0.067
"	9617.571	5.94	+ .74	07,08,08,07	13518	0.589	"	" .544	5.83	+ .31	01,00,01,01	"	0.074
"	9620.535	5.77	+ .63	06,05,03,03	13522	0.198	"	9694.525	5.85	+ .12	04,04,05,06	13610	0.377
"	" .541	5.81	+ .43	01,00,01,01	"	0.204	"	" .530	5.79	+ .09	03,04,09,09	"	0.382
"	9621.540	5.83	+ .45	10,10,03,03	13523	0.364	"	9697.545	5.89	+ .01	11,11, A	13614	0.043
"	" .545	5.79	+ .41	03,03,01,01	"	0.369	"	9698.541	5.87	+ .40	05,05,34,34	13615	0.200
"	9650.564	5.89	+ .12	00,00,04,05	13558	0.032	"	9704.524	5.82	+ .10	09,10,05,04	13622	0.311
"	" .570	5.73	+ .32	00,01,03,04	"	0.038	"	9706.505	6.01	+ .47	06,06,02,03	13624	0.615
"	" .576	5.83	+ .20	12,11,01,00	"	0.044	"	" .512	6.07	+ .23	06,06,02,03	"	0.622
"	" .583	5.83	+ .31	02,02,01,01	"	0.051	"	" .521	6.15	+ .21	02,02,19,19	"	0.631
"	" .588	5.87	+ .29	05,05,02,03	"	0.056	"	" .531	6.27	.00	07,07,03,02	"	0.644
"	9652.580	5.80	+ .42	00,01,05,04	13560	0.370	175315. Z HERCULIS.						
"	" .585	5.83	+ .38	03,03,06,06	"	0.375							
"	" .591	5.83	+ .36	01,02,12,12	"	0.381							
"	" .596	5.89	+ .29	07,07,04,05	"	0.386							
"	9655.588	5.77	+ .31	00,01,01,01	13564	0.023	03	6293.566	7.28	- .29	02,02,04,04	803	1.021

Yr.	Julian Day.	Magn.	A-B	Residuals.	Epoch.	Phase.	Yr.	Julian Day.	Magn.	A-B	Residuals.	Epoch.	Phase.
175315. Z HERCULIS (continued).							175315. Z HERCULIS (continued).						
03	6293.573	7.26	-.32	06,06,02,03	803	1.028	06	7382.623	7.89	-.10	01,00,01,01	1076	0.056
"	" .586	7.23	-.34	02,03,06,05	"	1.041	"	" .637	7.85	-.06	03,03,01,02	"	0.070
"	" .598	7.22	-.32	01,02,03,04	"	1.053	"	" .653	7.76	-.13	07,06,01,01	"	0.086
"	" .613	7.20	-.25	01,00,04,04	"	1.068	"	" .667	7.66	-.09	05,05,01,01	"	0.100
"	" .626	7.20	-.16	02,03,04,05	"	1.081	"	" .680	7.56	-.13	03,03,02,02	"	0.113
"	" .640	7.26	-.16	02,02,01,02	"	1.095	"	7384.573	7.44	-.23	05,05,01,00	"	2.006
"	6298.564	7.36	-.11	07,07,05,05	804	2.026	"	" .584	7.46	-.15	06,05,03,03	"	2.017
"	" .579	7.38	-.20	03,03,07,08	"	2.041	"	" .595	7.46	-.19	03,03,04,05	"	2.028
"	" .596	7.34	-.10	09,09,10,10	"	2.058	"	" .609	7.43	-.10	01,02,04,04	"	2.042
"	" .608	7.34	-.27	05,05,02,02	"	2.070	"	" .624	7.42	-.12	05,04,05,05	"	2.057
"	" .620	7.28	-.16	05,04,03,02	"	2.082	"	" .637	7.39	-.18	00,00,01,00	"	2.070
"	" .636	7.34	-.25	06,07,01,01	"	2.098	"	" .653	7.38	-.20	01,02,01,00	"	2.086
"	" .658	7.27	-.22	00,01,00,01	"	2.120	"	" .666	7.27	-.02	00,01,07,07	"	2.099
"	6299.582	7.28	-.31	01,01,03,03	"	3.044	"	" .683	7.26	-.24	04,00,02,03	"	2.116
"	" .593	7.24	-.36	03,03,00,00	"	3.055	181134. RS SAGITTARI.						
"	6302.563	7.40	-.20	01,02,02,03	805	2.032	11	9231.580	6.14	+.15	11,11,00,00	1825	0.349
"	" .577	7.44	-.16	11,11,07,08	"	2.046	"	" .586	6.16	+.05	01,02,24,24	"	0.355
"	" .596	7.38	-.16	04,04,01,01	"	2.065	"	9237.593	6.08	-.08	11,10,10,11	1827	1.530
"	" .612	7.32	-.20	02,03,00,01	"	2.081	"	" .598	6.12	+.04	06,05,01,01	"	1.535
"	" .627	7.26	-.23	04,03,02,02	"	2.096	"	9240.580	6.12	-.05	06,06,01,01	1828	2.102
06	7360.572	7.42	-.09	01,00,02,02	1070	1.962	"	" .586	6.25	-.10	02,01,00,01	"	2.108
"	" .585	7.40	-.15	07,06,03,03	"	1.975	"	" .596	6.12	-.07	02,03,04,04	"	2.118
"	" .596	7.46	-.11	02,01,03,03	"	1.986	"	9243.573	6.19	+.04	02,02,01,01	1830	0.263
"	" .611	7.42	-.04	00,01,03,03	"	2.001	"	" .579	6.22	+.04	02,02,01,01	"	0.269
"	" .627	7.42	-.13	02,02,00,00	"	2.017	"	9244.579	6.16	-.05	03,04,02,02	"	1.269
"	" .644	7.43	+.06	03,03,01,02	"	2.034	"	" .586	6.22	-.04	04,04,10,09	"	1.276
"	" .659	7.38	-.04	06,06,04,04	"	2.049	"	9293.569	6.16	+.08	01,02,04,03	1850	1.941
"	" .670	7.36	-.04	01,01,03,04	"	2.060	"	" .577	6.16	+.07	00,00,01,01	"	1.949
"	" .683	7.37	-.10	02,02,04,05	"	2.073	"	" .584	6.17	+.02	01,01,01,01	"	1.956
"	7373.600	7.24	-.08	05,06,02,03	1073	3.012	"	" .591	6.17	+.02	04,04,03,03	"	1.963
"	7374.590	7.92	+.08	01,02,03,03	1074	0.009	"	9294.513	6.16	+.07	00,00,01,01	1851	0.470
"	" .606	7.94	-.15	02,02,05,05	"	0.025	"	" .522	6.14	+.05	10,10,05,05	"	0.479
"	7376.572	7.50	+.07	01,01,13,14	"	1.991	"	" .529	6.20	+.21	06,06,04,05	"	0.486
"	" .581	7.46	-.20	02,01,00,00	"	2.000	"	" .538	6.16	+.20	03,02,04,04	"	0.495
"	" .596	7.38	-.04	01,01,01,01	"	2.015	"	" .544	6.19	-.06	04,03,02,03	"	0.501
"	" .609	7.44	-.06	04,04,07,07	"	2.028	"	" .550	6.16	+.13	01,00,04,04	"	0.507
"	" .622	7.42	-.03	01,01,01,01	"	2.041	"	9299.518	6.14	-.17	06,05,02,02	1853	0.643
"	" .634	7.43	-.02	02,01,04,04	"	2.053	"	" .525	6.20	-.12	05,04,00,00	"	0.650
"	" .647	7.36	-.05	02,03,02,02	"	2.066	"	" .533	6.10	-.19	02,02,04,04	"	0.658
"	" .662	7.34	-.08	01,02,01,00	"	2.081	"	" .540	6.16	-.13	05,06,05,05	"	0.665
"	" .677	7.32	-.05	02,01,05,05	"	2.096	"	" .547	6.21	+.02	06,05,04,04	"	0.672
"	" .692	7.28	-.11	02,03,01,01	"	2.111	"	9300.510	6.14	+.05	05,05,07,06	"	1.635
"	7381.596	7.22	-.15	02,02,02,02	1075	3.022	"	" .518	6.18	+.16	01,00,02,02	"	1.643
"	7382.573	7.84	-.07	04,05,09,09	1076	0.006	"	" .525	6.10	+.11	07,07,04,05	"	1.650
"	" .584	7.94	-.20	03,02,04,04	"	0.017	"						
"	" .595	7.90	-.09	01,01,02,03	"	0.028	"						
"	" .610	7.92	-.04	04,04,02,02	"	0.043	"						

Yr.	Julian Day.	Magn.	A-B	Residuals.	Epoch.	Phase.	Yr.	Julian Day.	Magn.	A-B	Residuals.	Epoch.	Phase.
181134. RS SAGITTARII (continued).							182612. RX HERCULIS (continued).						
11	9300.534	6.06	-.01	15,15,01,02	1853	1.659	06	7352.658	7.46	+.32	04,05,03,02	3132	0.875
"	" .540	6.08	+.09	01,02,06,06	"	1.665	"	" .674	7.56	+.05	01,02,07,07	3133	0.002
"	9302.508	6.31	+.02	04,05,02,03	1854	1.217	"	" .690	7.50	+.15	00,00,01,01	"	0.018
"	" .513	6.42	-.07	00,00,09,09	"	1.222	"	7373.644	7.04	+.18	01,01,02,02	3156	0.519
"	" .520	6.36	-.11	01,01,00,00	"	1.229	"	7374.639	7.06	+.09	01,01,03,02	3157	0.624
"	" .526	6.32	-.03	01,01,03,03	"	1.235	"	7375.654	7.01	+.14	05,05,01,02	3158	0.750
"	" .533	6.30	-.05	00,01,01,01	"	1.242	"	7381.622	7.06	+.16	04,05,10,09	3165	0.493
"	9303.512	6.34	+.04	02,03,01,02	"	2.221	"	7401.579	7.62	+.28	01,01,03,03	3187	0.886
"	" .518	6.38	+.17	01,01,07,08	"	2.227	"	" .589	7.52	+.20	05,06,00,00	3188	0.007
"	" .525	6.40	+.04	01,01,01,01	"	2.234	"	" .602	7.49	+.12	01,00,02,01	"	0.020
"	" .534	6.44	+.12	03,04,05,06	"	2.243	"	" .614	7.36	+.05	01,01,01,01	"	0.032
"	" .541	6.48	+.16	03,03,01,02	"	2.250	"	7410.581	7.16	+.11	01,01,06,06	3198	0.106
"	9306.510	6.17	-.10	07,06,02,01	1856	0.387	"	7411.589	7.07	+.14	03,04,03,02	3199	0.224
"	" .516	6.08	-.05	03,03,01,01	"	0.393	"	7472.626	7.10	-.32	06,05,02,01	3267	0.786
"	" .522	6.09	+.06	06,05,02,01	"	0.399	"	" .635	7.16	-.24	06,07,01,00	"	0.795
"	" .527	6.16	-.09	00,00,01,02	"	0.404	"	" .648	7.22	-.23	00,00,07,08	"	0.808
"	" .533	6.14	-.09	02,02,02,02	"	0.410	"	7473.542	7.22	+.12	01,01,01,01	3268	0.813
"	9308.510	6.95	+.10	02,02,14,13	"	2.387	"	" .573	7.41	+.26	02,02,01,02	"	0.844
"	" .518	6.94	+.05	02,02,01,02	"	2.395	"	" .603	7.50	+.31	00,01,02,02	"	0.874
"	" .525	6.82	+.12	06,07,12,13	"	2.402	"	" .616	7.54	+.16	04,05,05,05	"	0.887
"	" .531	6.87	+.22	01,02,01,00	"	2.408	"	" .629	7.40	+.13	01,01,03,03	3269	0.011
"	" .539	6.84	+.03	01,01,02,02	1857	0.001	"	7482.535	7.40	+.23	03,03,00,00	3279	0.023
"	9310.509	6.11	-.14	05,05,02,01	"	1.971	"	" .546	7.37	+.14	03,03,05,06	"	0.034
"	" .516	6.11	+.14	02,02,16,17	"	1.978	"	" .562	7.29	+.10	00,01,02,02	"	0.050
"	" .521	6.08	+.21	07,06,04,04	"	1.983	"	" .584	7.19	+.22	02,02,02,01	"	0.072
"	" .526	6.10	+.10	00,00,03,03	"	1.988	"	" .600	7.14	+.21	02,01,00,00	"	0.088
"	" .532	6.12	+.23	09,08, A, R	"	1.994	"	" .617	7.08	+.15	01,01,02,03	"	0.105
"	9323.471	6.10	+.05	04,04,04,03	1863	0.436	07	7738.573	7.34	+.19	06,05,02,02	3566	0.840
"	" .477	6.10	.00	06,06,01,01	"	0.442	"	" .585	7.46	+.24	05,04,06,06	"	0.852
"	" .483	6.03	+.18	04,05,04,04	"	0.448	"	" .599	7.57	+.22	06,07,03,02	"	0.866
"	" .488	6.14	+.05	00,01,02,02	"	0.453	"	" .615	7.56	+.15	01,00,01,01	"	0.882
"	" .493	6.16	-.01	03,03,03,03	"	0.458	"	" .626	7.53	+.22	02,02,04,04	3567	0.003
"	9326.469	6.18	+.11	07,07,04,04	1864	1.019	"	" .637	7.48	+.03	02,02,00,00	"	0.014
"	" .476	6.26	-.03	19,18,00,00	"	1.026	"	" .650	7.36	+.19	02,01,03,03	"	0.027
"	" .487	6.26	-.01	09,10, A	"	1.037	"	" .665	7.24	+.15	01,01,04,05	"	0.042
182612. RX HERCULIS.							"	" .677	7.20	+.17	10,10,00,01	"	0.054
							"	" .688	7.09	+.10	03,02,01,02	"	0.065
							"	7746.574	7.39	+.36	02,02,06,06	3575	0.837
							"	" .583	7.44	+.33	05,04,01,01	"	0.846
06	7342.663	7.06	+.28	03,02,01,02	3121	0.662	"	" .595	7.58	+.24	01,00,01,02	"	0.858
"	7345.651	7.12	+.12	02,02,03,02	3125	0.093	"	" .607	7.62	+.24	05,05,01,01	"	0.870
"	7349.634	7.08	+.24	06,05,06,06	3129	0.519	"	" .612	7.69	+.18	02,01,04,03	"	0.875
"	7352.582	7.14	+.12	06,06,02,03	3132	0.799	"	" .638	7.48	+.07	04,03,01,01	3576	0.012
"	" .595	7.18	+.29	02,03,02,02	"	0.812	"	" .649	7.45	+.20	02,02,02,02	"	0.023
"	" .608	7.28	+.21	03,03,04,04	"	0.825	"	" .667	7.30	+.01	07,06,02,02	"	0.041
"	" .623	7.32	+.19	02,03,01,01	"	0.840	"	" .677	7.22	+.06	01,01,02,02	"	0.051
"	" .639	7.38	+.17	04,05,00,00	"	0.856	"	7754.570	7.32	+.03	08,09,06,06	3584	0.830

Yr.	Julian Day.	Magn.	A-B	Residuals.	Epoch.	Phase.	Yr.	Julian Day.	Magn.	A-B	Residuals.	Epoch.	Phase.
182612. RX HERCULIS (continued).							182612. RX HERCULIS (continued).						
07	7754.582	7.28	+ .17	03,03,00,01	3584	0.842	08	8204.572	7.52	+ .25	09,09,03,04	4090	0.848
"	" .594	7.45	+ .02	00,01,02,01	"	0.854	"	8204.586	7.62	+ .16	02,03,04,05	"	0.862
"	" .604	7.55	+ .02	01,01,01,01	"	0.864	"	" .595	7.64	+ .15	02,03,02,02	"	0.071
"	" .614	7.48	+ .07	01,01,06,06	"	0.874	09	8486.567	7.28	+ .19	01,00,04,04	4408	0.054
"	" .625	7.44	+ .08	01,01,01,01	"	0.885	"	" .576	7.24	+ .16	10,11,04,04	"	0.063
"	" .637	7.45	+ .06	02,01,02,03	3585	0.007	"	" .584	7.12	+ .11	03,03,06,06	"	0.071
"	" .651	7.35	+ .02	02,03,02,02	"	0.021	"	" .594	7.12	- .01	03,02,06,06	"	0.081
"	" .668	7.30	+ .01	03,03,05,05	"	0.038	"	" .607	7.02	+ .11	07,07,10,09	"	0.094
"	7755.571	7.26	+ .08	15,15,05,06	3586	0.052	"	8558.555	7.56	+ .28	04,04,06,07	4489	0.006
"	" .582	7.20	+ .15	03,03,02,02	"	0.063	"	" .591	7.33	+ .16	03,03,01,01	"	0.042
"	" .595	7.16	+ .04	03,03,06,05	"	0.076	"	" .598	7.24	+ .20	04,03,02,01	"	0.049
"	" .610	7.06	+ .19	05,04,02,02	"	0.091	"	" .610	7.19	+ .26	02,02,02,01	"	0.061
"	7770.567	7.25	+ .14	02,02,03,02	3602	0.819	"	" .626	7.06	- .07	04,04,02,03	"	0.077
"	" .577	7.31	- .02	06,07,06,07	"	0.829	10	8873.557	7.09	+ .14	05,06,04,04	4843	0.202
"	" .590	7.38	+ .11	04,05,01,01	"	0.842	"	" .576	7.10	+ .08	01,02,02,02	"	0.221
"	" .610	7.45	- .10	01,01,04,05	"	0.862	"	" .583	7.10	- .06	03,03,01,01	"	0.228
"	" .624	7.56	- .04	01,01,01,02	"	0.876	"	" .593	7.16	+ .01	06,07,11,11	"	0.238
"	" .638	7.42	+ .06	01,01,01,01	3603	0.001	"	" .601	7.17	- .02	07,07,10,09	"	0.246
"	" .648	7.38	- .03	03,02,00,00	"	0.011	"	8943.554	7.42	- .13	06,06,03,04	4921	0.831
08	8101.570	7.08	+ .15	06,07,00,00	3975	0.118	"	" .564	7.48	- .07	05,06,02,02	"	0.841
"	" .581	7.04	+ .16	01,01,08,08	"	0.129	"	" .575	7.64	- .20	07,08,00,01	"	0.852
"	" .591	7.04	+ .43	04,03,02,02	"	0.139	"	" .586	7.73	.00	00,00,03,03	"	0.863
"	" .606	7.01	+ .16	01,01,01,01	"	0.154	"	" .597	7.74	- .08	02,01,01,00	"	0.874
"	" .621	7.08	+ .20	03,02,01,01	"	0.169	"	" .606	7.72	- .03	01,02,02,02	"	0.883
"	8122.602	7.13	+ .02	05,06,04,03	3998	0.696	"	" .614	7.64	- .05	04,05,03,03	"	0.891
"	" .610	7.02	- .01	01,01,10,10	"	0.704	184007. RZ OPHIUCHI.						
"	" .618	7.12	- .03	03,03,02,03	"	0.712	09	8584.571	9.44	+ .15	06,06,03,03	2	216.3
"	" .632	7.05	- .02	05,04,04,04	"	0.726	"	" .578	9.50	+ .20	06,06,03,03	"	216.3
"	" .643	7.02	- .23	08,09,10,10	"	0.737	"	8589.550	9.49	- .26	05,05,06,07	"	221.2
"	8124.600	7.35	+ .02	06,07,02,02	4001	0.027	"	8599.591	9.50	- .12	05,06,01,00	"	231.3
"	" .608	7.32	.00	01,01,02,01	"	0.035	"	8600.541	9.53	- .14	00,01,05,06	"	232.2
"	" .617	7.29	- .10	04,03,03,03	"	0.044	"	" .547	9.50	- .13	02,02,01,02	"	232.2
"	" .625	7.24	- .05	05,05,01,01	"	0.052	"	8614.513	9.50	+ .28	01,00,07,07	"	246.2
"	" .631	7.21	- .06	07,07,04,03	"	0.058	"	" .519	9.50	+ .24	02,03,02,01	"	246.2
"	" .638	7.18	- .16	02,02,03,02	"	0.065	"	8615.516	9.54	+ .24	03,03,04,03	"	247.2
"	8131.615	7.24	- .23	01,02,05,05	4008	0.817	"	" .524	9.50	+ .21	01,01,02,03	"	247.2
"	" .622	7.28	- .31	07,07,04,04	"	0.824	"	" .538	9.50	+ .17	01,01,03,03	"	247.2
"	" .632	7.35	- .30	A, R, 01,01	"	0.834	"	8616.515	9.50	+ .04	00,01,00,00	"	248.2
"	" .640	7.44	- .21	01,01,07,07	"	0.842	"	" .522	9.52	+ .07	00,00,03,03	"	248.2
"	" .649	7.52	- .18	01,01,06,06	"	0.851	"	8620.519	9.50	+ .20	01,00,03,03	"	252.2
"	8132.605	7.44	- .28	10,09,06,06	4010	0.028	"	8621.525	9.50	+ .25	01,01,05,05	"	253.2
"	" .612	7.38	- .11	07,07,02,02	"	0.035	"	8622.514	9.50	+ .43	05,05,04,05	"	254.2
"	" .620	7.32	- .27	00,00,02,01	"	0.043	"	" .526	9.53	+ .16	01,01,00,00	"	254.2
"	" .630	7.20	- .32	04,03,02,02	"	0.053	"	" .580	9.46	+ .16	01,02,01,00	"	254.3
"	" .640	7.14	- .35	00,01,03,03	"	0.063	"						
"	8204.547	7.32	+ .23	06,06,03,02	4090	0.823							
"	" .561	7.43	+ .18	02,03,02,02	"	0.837							

Yr.	Julian Day.	Magn.	A-B	Residuals.	Epoch.	Phase.	Yr.	Julian Day.	Magn.	A-B	Residuals.	Epoch.	Phase.
184007. RZ OPHIUCHI (continued).							184062. RR DRACONIS (continued).						
09	8624.471	9.50	+ .33	01,01,01,00	2	256.2	06	7383.581	9.72	+ .24	01,02,01,00	126	0.183
"	8625.505	9.85	+ .38	01,02,14,15	"	257.2	"	" .602	9.66	+ .12	08,07,03,04	"	0.204
"	" .530	9.94	+ .21	09,08,00,00	"	257.2	07	7700.576	10.49	+ .02	06,06,09,09	238	0.097
"	8626.513	10.22	+ .16	00,01,01,02	"	258.2	"	" .587	10.33	+ .16	07,07,02,02	"	0.108
"	" .521	10.26	+ .05	03,03,00,01	"	258.2	"	" .599	10.13	+ .06	04,03,04,05	"	0.120
"	" .533	10.24	+ .17	06,07,03,03	"	258.2	"	" .613	10.00	+ .15	03,03,02,03	"	0.134
"	8628.513	10.25	+ .14	02,02,05,04	"	260.2	"	" .628	9.84	+ .06	02,02,02,02	"	0.149
"	" .521	10.30	+ .12	12,12,06,05	"	260.2	"	" .642	9.74	+ .04	01,01,03,04	"	0.163
"	8629.514	10.27	+ .18	12,13,06,07	"	261.2	"	" .658	9.68	+ .16	00,01,01,01	"	0.179
"	" .531	10.28	+ .11	09,09,01,02	"	261.2	"	7881.580	10.72	- .09	05,05,03,04	301	2.743
"	8638.494	9.50	+ .33	A, R, 06,06	3	8.4	"	" .587	10.86	- .08	06,06,04,04	"	2.750
184062. RR DRACONIS.							"	7881.594	11.00	- .33	09,09,03,03	"	2.757
05	7168.538	9.62	- .29	02,02,01,01	50	0.302	"	" .602	11.22	+ .05	04,04,03,04	"	2.765
"	7170.537	9.61	- .18	02,03,01,00	"	2.301	"	" .610	11.50	- .24	08,07,03,02	"	2.773
"	7175.600	9.68	- .25	00,00,02,02	52	1.702	"	" .619	11.80	+ .12	01,02,04,04	"	2.782
"	" .614	9.62	- .28	02,02,01,01	"	1.716	"	" .629	12.27	- .30	12,11,19,20	"	2.792
06	7317.658	9.66	+ .17	05,05,02,02	102	2.206	"	7884.533	12.44	+ .19	11,12,03,03	303	0.034
"	7318.617	9.65	+ .18	03,03,04,03	103	0.334	"	" .543	11.92	- .17	08,08,04,03	"	0.044
"	7319.600	9.66	+ .09	06,05,04,04	"	1.317	"	" .551	11.58	+ .09	01,01,01,02	"	0.052
"	7321.592	9.66	+ .19	06,05,05,05	104	0.478	"	" .560	11.30	- .28	01,02,02,03	"	0.061
"	7328.614	9.66	+ .15	04,04,00,00	106	1.838	"	" .570	10.98	+ .12	01,02,10,11	"	0.071
"	7329.565	12.12	+ .45	02,01,14,14	"	2.789	"	" .581	10.71	- .22	08,08,08,07	"	0.082
"	" .582	12.83	- .10	06,05,00,01	"	2.806	"	" .592	10.47	+ .08	08,08,01,01	"	0.093
"	" .604	12.81	+ .18	01,02,03,03	"	2.828	08	" .616	10.18	- .19	06,07,07,07	"	0.117
"	" .653	12.04	+ .44	18,17,02,03	107	0.046	"	" .630	10.04	+ .05	07,08,04,04	"	0.131
"	" .664	11.56	+ .05	08,08,07,07	"	0.057	"	8235.525	12.56	- .13	11,10,16,16	426	2.803
"	7341.601	9.62	+ .20	01,01,05,04	111	0.669	"	" .537	12.66	+ .01	05,05,07,08	"	2.815
"	7345.588	9.68	+ .20	02,03,02,03	112	1.825	"	" .548	12.64	.00	00,01,07,08	"	2.826
"	7346.566	12.77	+ .54	17,16,07,07	"	2.803	"	8235.559	12.48	+ .03	06,06,06,05	427	0.006
"	" .584	12.94	+ .07	08,08,02,03	"	2.821	"	" .569	12.48	- .16	04,03,09,09	"	0.016
"	" .601	13.27	+ .30	13,13,19,20	113	0.007	"	" .582	12.35	+ .22	08,09,00,00	"	0.029
"	" .616	13.02	+ .31	11,11,13,14	"	0.022	"	" .606	11.37	- .06	11,12,03,02	"	0.053
"	" .632	12.46	- .17	11,11,10,10	"	0.038	"	" .613	11.20	- .05	05,06,07,07	"	0.060
"	" .645	11.73	+ .42	06,05,05,05	"	0.051	"	" .620	11.00	- .25	06,07,07,07	"	0.067
"	" .656	11.32	- .09	02,02,01,01	"	0.062	"	" .628	10.76	- .09	02,02,09,09	"	0.075
"	" .667	11.01	+ .38	05,05,02,03	"	0.073	"	" .636	10.57	- .18	06,05,06,05	"	0.083
"	" .677	10.70	+ .12	06,05,03,03	"	0.083	190158. RX DRACONIS.						
"	7349.586	9.81	+ .20	02,02,04,04	114	0.161	08	8087.608	10.02	- .20	04,03,02,01	309	0.206
"	" .605	9.72	+ .32	01,00,01,01	"	0.180	"	" .618	9.98	- .11	04,05,04,04	"	0.216
"	7350.564	9.63	+ .22	03,03,05,06	"	1.139	"	" .627	10.05	- .14	03,03,03,02	"	0.225
"	7352.558	9.64	+ .12	01,01,03,03	115	0.302	"	" .635	10.02	- .08	00,00,05,05	"	0.233
"	7373.570	9.68	+ .12	06,07,01,02	122	1.496	"	" .644	9.96	- .09	01,01,06,05	"	0.242
"	7374.561	9.65	+ .16	00,00,04,04	"	2.487	"	8088.567	10.00	- .15	02,02,05,05	"	1.165
"	7381.650	9.70	+ .16	03,04,01,02	125	1.083	"	8089.584	10.01	- .26	03,04,10,09	310	0.289

Yr.	Julian Day.	Magn.	A-B	Residuals.	Epoch.	Phase.	Yr.	Julian Day.	Magn.	A-B	Residuals.	Epoch.	Phase.
190158. RX DRACONIS (continued).							191419. U SAGITTAE (continued).						
08	8091.596	10.01	-.18	00,01,02,01	311	0.408	08	8188.644	7.64	+23	05,04,06,06	739	0.053
"	8095.591	10.04	-.12	01,02,05,06	313	0.616	"	" .654	7.50	+08	01,00,01,01	"	0.063
"	8098.592	10.06	-.25	02,03,04,04	314	1.724	"	8215.531	8.78	+08	05,05,01,01	746	3.273
"	8099.579	10.02	-.25	02,03,00,00	315	0.819	"	" .539	9.04	+25	02,02,03,03	"	3.281
"	" .594	10.00	-.09	03,03,01,01	"	0.834	"	" .546	9.23	+06	04,05,03,04	"	3.288
"	8102.576	10.27	-.34	03,02,01,02	317	0.030	09	8482.588	8.43	-.10	09,08,02,01	825	3.261
"	" .592	10.20	-.32	13,12,07,08	"	0.046	"	" .596	8.74	-.35	00,00,06,06	"	3.269
"	" .605	10.20	-.13	07,07,00,01	"	0.059	"	" .604	8.95	-.10	01,01,03,02	"	3.277
"	" .622	10.10	-.25	03,03,00,01	"	0.076	"	" .611	9.18	-.33	02,02,03,02	"	3.284
"	" .640	10.00	-.17	06,06,03,02	"	0.094	"	" .620	9.28	-.22	03,03,01,01	"	3.293
09	8587.626	9.97	+18	01,02,07,06	573	0.427	"	8512.565	6.50	-.34	07,07,05,05	834	2.811
"	" .634	10.03	+26	02,03,00,01	"	0.435	"	" .573	6.56	-.03	08,08,02,03	"	2.819
"	" .644	10.03	+36	00,00,02,02	"	0.445	"	" .584	6.54	-.16	01,01,05,06	"	2.830
"	" .651	10.03	+30	11,10,05,04	"	0.452	"	8570.604	8.86	+48	05,04,00,01	851	3.376
"	" .659	10.09	+38	01,01,03,02	"	0.460	"	" .611	8.54	+21	10,10,04,03	852	0.062
"	8588.610	10.06	+29	01,01,02,02	"	1.411	"	" .620	8.25	+46	05,05,07,07	"	0.011
"	" .616	10.04	+24	03,02,08,08	"	1.417	"	" .629	8.00	+25	05,05,00,01	"	0.020
"	8659.609	10.05	+42	08,07,00,00	611	0.467	"	" .639	7.84	+52	02,03,07,07	"	0.030
"	" .616	9.96	+32	04,05,03,02	"	0.474	10	8881.544	9.26	-.33	15,14,03,03	943	3.296
"	" .626	10.00	+39	07,06,01,01	"	0.484	"	" .577	9.20	-.31	02,03,02,02	"	3.329
"	" .635	10.01	+18	06,06,00,01	"	0.493	"	" .587	9.15	-.32	01,01,00,00	"	3.339
191232. RV LYRAE.							200346. SW CYGNI.						
05	7000.603	11.87	+22	09,08,05,05	370	3.358	04	6817.537	10.08	+05	05,05,01,01	1197	0.122
"	" .615	11.95	+30	01,02,02,03	"	3.359	"	" .546	9.96	+04	01,00,02,03	"	0.131
191419. U SAGITTAE.							"	" .555	9.85	-.06	00,01,03,04	"	0.140
"	6391.635	6.46	+20	02,02,02,03	207	1.561	"	" .565	9.72	+08	04,03,02,02	"	0.150
"	" .640	6.48	+12	00,01,02,01	"	1.566	"	" .574	9.64	-.01	02,01,01,01	"	0.159
05	7025.629	9.25	-.06	10,11,00,01	394	3.372	09	8495.584	11.70	-.20	06,06,01,02	1563	4.476
"	" .635	9.26	-.26	00,00,03,03	"	3.378	"	" .591	11.67	-.14	08,08,08,08	"	4.483
"	" .644	9.32	-.11	06,06,03,03	395	0.066	"	" .607	11.77	+06	02,02,00,00	"	4.499
"	" .653	9.11	+14	02,03,02,01	"	0.015	"	" .615	11.74	-.05	02,02,01,02	"	4.507
"	" .661	8.82	-.32	05,04,01,00	"	0.023	"	" .624	11.86	-.16	01,01,00,00	"	4.516
06	7391.607	6.45	-.22	05,05,03,04	503	0.004	201942. UW CYGNI.						
08	8144.598	9.36	-.13	04,04,07,07	725	3.338	04	6822.555	11.32	-.04	02,01,04,04	344	0.005
"	" .605	9.28	-.05	07,07,03,04	"	3.345	"	" .565	11.21	+12	00,00,02,02	"	0.015
"	" .613	9.30	-.19	03,04,04,04	"	3.353	"	" .578	11.10	-.01	04,03,03,03	"	0.028
"	" .631	9.17	-.02	07,08,07,07	"	3.371	"	" .591	10.92	+12	02,02,03,02	"	0.041
"	8188.620	8.04	+16	01,02,05,04	739	0.029	"	" .601	10.84	-.03	07,07,06,05	"	0.051
"	" .628	7.86	+04	03,02,04,04	"	0.037	"	6824.595	10.54	+01	00,01,00,00	"	2.045
"	" .635	7.71	+12	05,05,07,07	"	0.044	"	" .606	10.52	+04	01,02,04,05	"	2.056

Yr.	Julian Day.	Magn.	A-B	Residuals.	Epoch.	Phase.	Yr.	Julian Day.	Magn.	A-B	Residuals.	Epoch.	Phase.
203317. W DELPHINI.							203317. W DELPHINI (continued).						
04	6813.544	11.97	-.28	02,03,05,04	1001	0.039	10	8971.552	10.55	+.13	03,02,03,03	1450	0.111
"	" .560	11.90	-.22	11,10,02,02	"	0.055	"	" .564	10.29	+.16	04,03,02,02	"	0.123
"	" .574	11.84	-.22	05,05,04,04	"	0.069	"	" .579	10.17	+.07	05,04,05,05	"	0.138
"	" .585	11.47	-.40	01,02,08,09	"	0.080	"	" .586	10.09	+.16	11,11,03,04	"	0.145
"	" .604	11.09	-.07	07,08,09,09	"	0.099	12	9587.583	9.39	-.21	08,08,01,01	1578	0.964
"	" .621	10.73	-.37	06,06,03,03	"	0.116	"	" .592	9.51	-.25	11,10,04,04	"	0.973
05	7154.589	10.20	-.06	01,02,01,01	1071	4.658	"	" .602	9.49	-.25	01,02,04,04	"	0.983
"	" .598	10.29	-.23	04,03,10,10	"	4.667	"	" .614	9.47	-.24	00,01,07,07	"	0.995
"	" .609	10.43	-.08	07,06,03,03	"	4.678	"	" .624	9.37	-.01	01,00,22,22	"	1.005
"	" .621	10.60	-.14	00,01,03,02	"	4.690	203813. RR DELPHINI.						
"	7207.521	11.01	-.02	08,08,04,04	1082	4.720							
"	" .530	11.19	-.31	04,04,14,15	"	4.729							
07	7875.546	10.78	+.06	04,03,07,07	1221	4.702	07	7758.666	9.74	-.10	03,02,07,06	72	3.006
"	" .554	10.93	+.12	02,03,04,04	"	4.710	"	7759.679	9.84	+.16	02,01,02,02	"	4.019
"	" .563	11.05	-.04	01,01,08,07	"	4.719	09	8512.588	11.04	-.12	07,08,06,06	236	2.644
"	" .572	11.26	+.10	00,00,05,06	"	4.728	205027. RR VULPECULAE.						
"	" .580	11.39	-.15	13,13,06,07	"	4.736							
"	" .589	11.63	+.13	01,01,01,00	"	4.745							
"	" .600	11.82	-.12	04,04,07,07	"	4.756							
"	7880.529	11.46	-.26	01,02,04,03	1223	0.073	10	9009.543	R	-.04	03,02,21,21	223	0.030
"	" .536	11.27	+.17	15,15,02,02	"	0.080	"	" .549	R	+.11	04,04,03,04	"	0.036
"	" .544	11.17	-.05	01,01,04,04	"	0.088	"	" .556	R	-.22	19,19,04,04	"	0.043
"	" .553	10.94	+.14	02,01,04,04	"	0.097	"	" .562	R	.00	00,00,04,05	"	0.049
"	" .564	10.78	-.10	03,02,07,06	"	0.108	215543. UZ CYGNI.						
"	" .576	10.55	+.12	03,02,05,04	"	0.120							
"	" .592	10.35	+.02	01,01,04,04	"	0.136							
08	8245.606	10.74	-.02	01,01,03,03	1298	4.692	03	6243.746	10.73	-.18	01,00,07,06	198	30.502
"	" .614	10.92	+.02	06,06,01,02	"	4.700	"	" .762	10.73	-.22	11,12,01,01	"	30.518
"	" .624	11.13	-.12	00,00,02,03	"	4.710	"	6431.634	10.87	-.06	05,04,03,02	204	30.570
"	" .633	11.27	-.03	02,03,02,02	"	4.719	"	" .645	10.81	-.06	01,01,01,01	"	30.581
"	" .643	11.45	+.08	02,03,05,04	"	4.729	"	6433.649	10.38	-.12	02,03,01,00	205	1.281
09	8596.522	11.93	+.20	09,08,01,00	1371	4.764	"	" .659	10.39	-.16	04,04,03,03	"	1.291
"	" .529	11.92	-.14	11,10,04,03	"	4.771	"	6463.575	12.02	+.12	01,01,07,06	"	31.205
"	" .537	12.01	+.07	00,00,03,03	"	4.779	"	" .587	12.17	+.18	02,01,02,03	"	31.217
"	" .546	12.08	-.03	07,07,01,00	"	4.788	"	" .612	12.14	-.04	01,00,03,04	"	31.242
"	" .556	12.06	-.18	00,00,02,01	"	4.798	"	6464.611	10.85	+.02	02,02,07,07	206	0.937
"	" .631	11.31	+.09	11,11,08,08	1372	0.067	"	" .619	10.80	-.03	03,04,01,01	"	0.945
"	" .638	11.19	+.20	10,09,03,03	"	0.074	04	6603.685	10.33	+.06	05,05,02,02	210	14.793
"	" .645	11.09	-.04	04,03,10,11	"	0.081	"	" .696	10.32	+.08	03,03,06,06	"	14.804
"	" .654	10.91	-.21	09,09,02,02	"	0.090	"	" .708	10.34	+.07	02,02,01,02	"	14.816
"	" .662	10.75	-.03	01,01,01,00	"	0.098	"	6605.678	10.28	-.12	05,05,09,09	"	16.786
"	8620.544	11.81	.00	07,07,01,00	1376	4.753	"	" .687	10.27	-.18	09,10,02,02	"	16.795
"	" .552	11.81	+.17	10,10,03,03	"	4.761	"	6635.656	10.28	-.04	01,02,01,01	211	15.461
"	" .561	11.97	.00	02,03,11,11	"	4.770	"	" .676	10.26	-.08	03,02,01,01	"	15.481
"	" .569	11.96	+.06	04,03,02,02	"	4.778	"	" .682	10.27	-.14	02,02, A	"	15.487
10	8971.535	10.81	+.03	13,13,07,08	1450	0.094	"	6683.590	11.28	-.12	02,03,04,04	213	0.790
"	" .544	10.62	+.18	08,09,03,04	"	0.103	"	" .600	11.22	-.05	06,05,08,08	"	0.800

REMARKS.

TABLES X TO XV.

- Page 107. On J. D. 6472.633, third set, readings, 263.8, 265.2, 72.1, and 166.0, rejected.
- Page 108. On J. D. 9567.581, the letters A and B should be reversed. First set, readings, 2.2, 73.0, 102.0, and 244.2, rejected.
- Pages 120 and 121. V Aquilae. For 193411, read 185905.
- Page 121. On J. D. 6124.624, fourth set not taken, owing to trouble with photometer.
- Page 122. +45° 3813. For 220545 read 220445.
- Page 130. On J. D. 8119.627, fourth set, readings, 186.8, 252.4, 253.0, and 80.5, rejected.
- Page 135. J. D. 7035.594. Stopped by clouds. Fourth set not taken.
- Page 138. J. D. 8487.638. Stopped by clouds. Fourth set not taken.
- Page 141. On J. D. 7870.544, first set, readings 193.0, 241.8, 23.3, and 203.9, rejected.
- Page 142. On J. D. 8421.562, first set, readings, 79.6, 99.9, 268.2, and 289.9, rejected.
- Page 147. On J. D. 7123.595, fourth set, readings, 325.2, 61.0, 129.8, and 249.7, rejected.
- Page 150. J. D. 8736.571. Magnitude derived from two sets only.
- Page 155. On J. D. 8199.544, first set, readings 205.6, 287.4, 38.0, and 22.9, rejected.
- Page 158. On J. D. 9310.532, third set, readings, 135.3, 152.4, 297.5, and 337.0, rejected.
- Page 159. On J. D. 8131.632, second set, readings, 57.0, 185.5, 246.5, and 274.4, rejected.
- Page 160. J. D. 8638.494. The second set was omitted, and when attempt was made to take it later, the variable was too low.
- Page 162. It is uncertain what comparison star was used in observing RR Vulpeculae. The differences in magnitude are 2.92, 2.84, 2.92, and 2.82.

A summary of the results of the preceding tables is given in Table XVI. The results given in Table VIII, which has a similar form, are here repeated. The class of the variable, its name, the right ascension for 1900, and the declination for 1900 are given in the first four columns. The epoch and period are given in the fifth and sixth columns. The number of observations in Part I and in Part II of the present volume are given in the seventh and eighth columns, and the pages on which these observations will be found, in the ninth and tenth columns. The number of the comparison star in the Durchmusterung, its difference in right ascension from the variable, and its difference in declination, are given in the eleventh, twelfth, and thirteenth columns. When the comparison star precedes or is south of the variable, the corresponding difference is placed in *Italics*. The last column gives the adopted magnitude of the comparison star, taken from H.A. 50, 54, 70 or 74.

TABLE XVI.

RESULTS OF PRECEDING TABLES.

Cl.	Name.	R. A. 1900.	Dec. 1900.	Epoch.	Period.	1.No.	2.No.	1.p.	2.p.	Comp. Star.	$\Delta\alpha$	$\Delta\delta$	Magn.
I	Nova Persei, 2	<i>h. m. s.</i> 3 24 24	<i>° ' "</i> +43 33.7	....	...	107	..	8	..	+43° 732	<i>s. ' "</i> 156 9.7	7.25
	Nova Aurigae	5 25 34	+30 22.2	....	...	100	..	9	..	..	3 1.3	11.00
	Nova Gem., 1	6 37 49	+30 2.7	....	...	..	57	..	105	+30° 1316	49 9.1	9.65
	Nova Gem., 2	6 48 26	+32 15.9	....	...	..	54	..	105	+32° 1433	49 22.3	6.89
	RS Ophiuchi	17 44 51	- 6 40.1	....	...	..	54	..	106	- 6° 4664	46 12.1	9.52
	Nova Sagitt.	18 56 13	-13 18.3	....	...	17	..	11	..	-13° 5200	62 0.1	9.38
	Nova Aquil., 2	18 56 48	- 4 35.2	....	...	..	7	..	106	- 4° 4665	43 13.7	9.28
	Nova Aquil., 1	19 15 16	- 0 19.2	....	...	4	..	11	..	- 0° 3709	4 17.2	9.99
	Nova Lacert.	22 31 45	+52 11.9	....	...	..	11	..	106	+51° 3420	7 1.5	8.86

Cl.	Name.	R. A. 1900.	Dec. 1900.	Epoch.	Period.	1.No.	2.No.	1.p.	2.p.	Comp. Star.	$\Delta\alpha$	$\Delta\delta$	Magn.
		<i>h. m. s.</i>	<i>° ' "</i>		<i>d.</i>						<i>s. ' "</i>		
IIa	T Androm.	0 17 10	+26 26.4	2398587	281.	135	18	14	107	+26° 40	52	2.7	8.08
	T Cassiop.	0 17 49	+55 14.3	2404515	445.	13	..	16	..	+54° 49	11	0.3	7.95
	o Ceti	2 14 18	- 3 25.7	2402963.4	331.6	713	108	16	107	- 3° 355	10	0.1	9.19
	R Leporis	4 55 2	-14 57.6	2401936.7	436.1	..	4	..	108	-15° 910	59	1.4	7.50
	ST Aurigae	6 7 22	+46 48.8	2418438	297.	..	3	..	108	+47° 1268	42	66.2	9.7
	S Ursae Maj.	12 39 33	+61 38.5	2400571	226.5	..	47	..	108	+61° 1311	116	13.1	8.84
	R Camelop.	14 25 6	+84 17.1	2403939	269.5	21	..	25	..	+84° 326	460	7.3	8.94
	S Ursae Min.	15 33 27	+78 58.3	2411615	328.	28	..	25	..	+79° 467	1	1.2	10.65
	X Herculis	15 59 39	+47 30.8	2411553	92.5	39	..	25	..	+47° 2292	9	30.4	8.38
	χ Cygni	19 46 44	+32 39.7	2365136.5	406.02	205	59	27	109	+32° 3589	32	16.4	8.10
	S Cephei	21 36 28	+78 10.3	2402409	484.	109	..	30	..	+78° 759	89	26.5	9.10
	R Cassiop.	23 53 19	+50 49.9	2398374	431.6	..	21	..	109	+51° 3750	30	26.3	8.82
IIb	SS Aurigae	6 5 49	+47 45.9	....	...	..	3	..	110	...	0	2.0	10.77
	U Gemin.	7 49 10	+22 15.8	....	...	20	15	32	110	+22° 1808	5	20.1	8.46
	SS Cygni	21 38 47	+43 7.6	....	...	148	77	32	110	+43° 4030	100	13.2	8.93
III	ST Cassiop.	0 12 14	+49 44.1	....	...	..	9	..	111	+49° 38	68	2.7	9.04
	- Androm.	0 22 14	+35 1.9	....	...	..	13	..	111	+34° 59	45	18.7	8.71
	Z Piscium	1 10 38	+25 14.6	....	...	..	19	..	111	+25° 207	41	16.0	9.44
	V Arietis	2 9 36	+11 46.3	....	...	..	7	..	112	+11° 309	86	9.4	7.97
	T Persei	2 12 12	+58 29.5	....	...	42	8	35	..	+57° 543	74	21.9	9.73
	U Camelop.	3 33 12	+62 19.4	....	Irr.	128	6	35	112	+62° 594	6	3.3	9.14
	X Persei	3 49 8	+30 45.1	....	...	21	12	37	112	+30° 586	106	17.1	9.12
	+61° 667	3 57 14	+61 30.8	....	...	..	21	..	112	+61° 666	10	23.2	8.89
	ST Camelop.	4 40 56	+67 59.0	....	...	..	88	..	112	+67° 353	151	3.2	7.42
	TT Tauri	4 45 16	+28 21.3	....	...	..	29	..	113	+28° 704	39	11.4	7.72
	ϵ Aurigae	4 54 48	+43 40.5	....	...	..	42	..	113	+44° 1077	34	34.5	7.21
	δ Orionis	5 26 55	- 0 22.4	....	...	..	241	..	114	...	0	0.9	6.87
	- Aurigae	5 41 42	+30 35.4	....	...	..	9	..	116	+30° 1004	91	3.0	9.51
	TU Gemin.	6 4 40	+26 2.7	....	...	..	9	..	116	+26° 1125	52	2.1	9.30
	TV Gemin.	6 5 51	+21 53.7	....	...	..	44	..	116	+21° 1143	32	18.5	7.51
	- Orionis	6 19 46	+14 47.4	....	...	..	25	..	117	+15° 1191	31	25.1	7.04
	UU Aurigae	6 29 41	+38 31.6	....	...	..	39	..	117	+38° 1540	9	21.0	8.78
	S Monoc.	6 35 28	+ 9 59.3	....	...	25	..	37	..	+ 9° 1344	12	25.2	7.02
	- Gemin.	6 35 42	+31 32.9	....	...	..	9	..	117	+31° 1392	85	4.6	8.16
	- Monoc.	6 48 14	- 4 27.3	....	...	..	4	..	117	- 4° 1698	72	7.0	9.90
	- Canis Min.	7 31 16	+ 2 17.6	....	...	..	12	..	117	+ 2° 1718	24	14.3	7.92
	RY Hydrae	8 14 53	+ 3 4.7	....	...	..	11	..	117	+ 3° 1960	36	6.3	7.40
	X Cancri	8 49 45	+17 36.7	....	...	66	2	37	118	+18° 2082	28	26.5	8.60
	V Ursae Maj.	9 1 9	+51 30.9	....	...	..	13	..	118	+51° 1486	147	3.9	9.37
	- Sextantis	9 45 53	- 1 33.2	....	...	..	16	..	118	- 1° 2314	20	10.9	7.38
	- Ursae Maj.	10 38 3	+67 56.0	....	...	..	24	..	118	+68° 618	163	10.7	9.30
	SS Virginis	12 20 8	+ 1 20.2	....	...	..	12	..	118	+ 1° 2691	58	3.6	9.44
	Y Can. Ven.	12 40 26	+45 58.4	....	...	..	14	..	118	+46° 1819	97	5.0	9.39
	- Can. Ven.	12 54 41	+38 20.8	....	...	..	12	..	118	+38° 2388	35	20.3	10.35
	RT Virginis	12 57 34	+ 5 43.3	....	...	..	2	..	119	+ 5° 2709	50	17.1	8.58
	SW Virginis	13 8 56	- 2 16.5	....	...	..	10	..	119	- 1° 2786	48	14.7	7.60
	Y Bootis	14 17 22	+20 15.8	....	...	27	..	38	..	+20° 2968	19	26.1	8.60
	R Coronae	15 44 27	+28 27.8	....	Irr.	7	64	38	119	+28° 2475	53	18.8	7.43
	R Ursae Min.	16 31 18	+72 28.7	....	Irr.	158	20	26	119	+72° 737	232	18.1	8.75
	d Serpentis	18 22 6	+ 0 8.2	....	...	20	..	39	..	+ 0° 3940	37	0.5	7.83

Cl.	Name.	R. A. 1900.	Dec. 1900.	Epoch.	Period.	1.No.	2.No.	1.p.	2.p.	Comp. Star.	$\Delta\alpha$	$\Delta\delta$	Magn.	
		<i>h. m. s.</i>	<i>° ' "</i>		<i>d.</i>						<i>s. ' "</i>			
III	T Lyrae	18 28 53	+36 54.9	....	...	..	15	..	119	+36° 3170	6	19.3	8.78
	— Lyrae	18 39 22	+36 51.9	....	...	..	23	..	120	+36° 3237	37	5.9	9.04
	S Scuti	18 44 54	- 8 1.2	....	...	..	18	..	120	- 8° 4732	52	1.8	8.17
	R Lyrae	18 52 17	+43 48.8	2410559.3	46.4	32	..	39	..	+44° 3017	39	16.9	6.94	
	V Aquilae	18 59 4	- 5 49.7	....	...	..	41	..	120	- 5° 4848	66	7.7	7.10
	Y Aquilae	19 2 16	+10 55.0	....	...	..	30	..	39	+10° 3784	64	8.1	8.41
	— Sagitt.	19 13 27	-16 5.5	....	...	..	8	..	120	-16° 5260	53	4.9	8.44
	— Aquilae	19 56 16	+ 9 14.2	....	...	..	11	..	121	+ 9° 4360	50	2.5	9.67
	AA Cygni	20 0 46	+36 32.3	....	...	..	6	..	121	+36° 3848	19	21.8	8.03
	RS Capric.	21 1 41	-16 49.5	....	...	..	8	..	121	-17° 6189	58	18.2	8.28
	— Pegasi	21 37 48	+35 3.2	....	...	..	25	..	121	+34° 4496	40	4.1	8.80
	μ Cephei	21 40 29	+58 19.3	....	...	..	41	..	121	+58° 2314	41	29.5	6.14
	+62° 2007	21 53 49	+63 8.7	....	...	..	11	..	121	+62° 2012	140	21.6	8.9
	+45° 3813	22 4 39	+45 15.0	....	...	..	5	..	122	+45° 3816	60	2.1	9.4
	— Piscium	23 41 18	+ 2 55.8	....	...	..	26	..	122	+ 2° 4710	55	35.9	8.24
	ρ Cassiop.	23 49 24	+56 56.2	....	...	..	59	..	122	+56° 3115	66	3.3	6.00
	— Cassiop.	23 56 10	+59 48.1	....	...	..	43	..	122	+59° 2803	90	2.7	8.20
	IVa	T Monoc.	6 19 49	+ 7 8.4	2409633.63	27.0122	200	..	42	..	+ 7° 1267	58	1.0	8.50
RT Aurigae		6 22 9	+30 33.6	2417173.3	3.7282	..	59	..	123	+30° 1245	103	2.5	8.52	
W Gemin.		6 29 14	+15 24.8	2413266.344	7.91603	..	20	..	124	+15° 1251	42	21.2	8.92	
S Antliae		9 27 56	-28 11.2	2410741.5264	0.3241667	34	..	44	..	-28° 7347	45	4.2	8.32	
W Virginis		13 20 52	- 2 51.5	2402708.2666	17.2711	90	..	44	..	- 2° 3684	6	16.7	7.29	
RR Lyrae		19 22 17	+42 35.5	2414856.5000	0.5668	241	61	45	124	+42° 3342	57	15.8	9.29	
XZ Cygni		19 30 25	+56 10.4	2417201.25417	0.46659	..	67	..	125	+56° 2260	80	15.2	9.72	
U Vulpeculae		19 32 16	+20 6.6	2414200.47	8.000	93	..	48	..	+20° 4204	25	11.2	9.56	
SU Cygni		19 40 48	+29 1.3	2414202.66	3.844	82	..	49	..	+28° 3467	63	6.3	9.04	
V Vulpeculae		20 32 17	+26 15.4	2416411.4	37.79	..	58	..	125	+25° 4301	4	12.1	8.78	
UY Cygni		20 52 16	+30 2.8	2415346.3933	0.5607103	..	9	..	126	+30° 4244	..	..	9.33
RV Capric.		20 55 55	-15 37.1	2417436.87	0.4476	..	24	..	126	-15° 5867	55	11.4	10.28	
δ Cephei		22 25 29	+57 54.7	2393376.4151	5.366493	..	9	..	127	...	1	0.7	6.61	
IVb		TT Aurigae	5 2 48	+39 27.4	2418046.37	0.666364	..	9	..	127	+39° 1184	70	22.7	9.6
		u Herculis	17 13 38	+33 12.5	2410000.000	2.0510	..	265	..	127	+33° 2871	89	14.0	7.32
	RV Ophiuchi	17 29 45	+ 7 18.9	2416604.7396	3.6872	..	58	..	130	+ 7° 3399	65	3.9	8.98	
	V Serpentis	18 11 5	-15 33.2	2410002.677	3.45348	..	87	..	131	-15° 4908	26	11.7	9.04	
	RZ Draconis	18 21 49	+58 50.1	2417674.348	0.55088	..	199	..	132	+58° 1806	108	2.1	8.64	
	β Lyrae	18 46 23	+33 14.8	2398586.588	12.916	221	47	50	134	+33° 3224	2	1.1	7.78	
	U Scuti	18 48 52	-12 43.7	2415651.0410	0.9545	73	21	53	134	-12° 5198	67	1.9	9.34	
	Y Cygni	20 48 4	+34 16.9	2410250.4799	2.996438	..	43	..	134	+34° 4190	36	7.6	9.19	
	U Pegasi	23 52 53	+15 23.7	2413514.6157	0.37478	204	..	53	..	+15° 4916	53	6.7	8.92	
	V	U Cephei	0 53 24	+81 20.3	2407890.3007	2.4928840	691	390	58	135	+81° 27	77	13.7	8.41
Z Persei		2 33 40	+41 46.1	2416009.6934	3.05644	..	97	..	139	+41° 507	17	17.3	9.09	
RY Persei		2 38 59	+47 43.3	2417523.480	6.863614	..	2	..	140	+47° 691	5	22.3	9.93	
RZ Cassiop.		2 39 54	+69 12.8	2417355.420	1.19526	..	312	..	141	+69° 181	66	15.2	9.2	
ST Persei		2 53 43	+38 47.5	2418678.272	2.648382	..	2	..	144	+38° 611	46	4.5	8.1	
RX Cassiop.		2 58 48	+67 11.4	2416250.9	32.315	..	123	..	144	+66° 242	51	10.3	7.75	
β Persei		3 1 40	+40 34.2	2410640.3411	2.86731	81	..	65	..	+40° 664	165	22.7	6.13	
RT Persei		3 16 45	+46 13.1	2416741.24310	0.849421	..	139	..	145	+46° 739	9	18.6	9.58	
RW Tauri		3 57 45	+27 51.0	2410002.16	2.76886	..	152	..	147	...	58	6.6	10.20	
RV Persei		4 4 11	+34 0.2	2417972.3438	1.973517	..	5	..	148	+34° 828	62	9.0	9.58	
RW Persei	4 13 20	+42 4.3	2417312.410	13.202	..	18	..	149	+41° 856	57	12.1	9.65		

Cl.	Name.	R. A. 1900.		Dec. 1900.		Epoch.	Period.	1.No.	2.No.	1.p.	2.p.	Comp. Star.	$\Delta\alpha$		Magn.	
		<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>°</i>								<i>'</i>	<i>s.</i>		<i>'</i>
V	RS Cephei	4	48	34	+80	5.9	2410011.4	12.42	..	101	..	149	+80° 160	1	13.1	10.06
	RW Monoc.	6	29	18	+ 8	54.2	2417943.687	1.90607	..	6	..	150	+ 9° 1284	23	15.5	7.9
	RX Gemin.	6	43	38	+33	21.5	2417970.00	12.2083	..	6	..	150	+33° 1417	85	3.1	8.2
	RU Monoc.	6	49	22	- 7	28.3	2417262.3507	0.896153	..	55	..	150	- 7° 1629	59	10.2	9.7
	R Canis Maj.	7	14	56	-16	12.4	2410357.6375	1.1359491	313	5	66	151	-15° 1774	75	15.4	8.96
	Y Camelop.	7	27	46	+76	17.9	2416306.388	3.305594	..	76	..	151	+76° 285	62	14.9	9.94
	S Cancrī	8	38	14	+19	23.6	2403210.5853	9.4845485	407	..	70	..	+19° 2088	49	2.4	9.30
	Y Leonis	9	31	5	+26	40.8	2418054.4214	1.686105	..	3	..	152	+26° 1977	82	5.8	9.33
	Z Draconis	11	39	50	+72	48.3	2416177.399	1.35741	..	156	..	152	+72° 545	27	10.9	8.78
	δ Librae	14	55	38	- 8	7.2	2403265.3872	2.3273473	180	6	74	153	- 7° 3943	66	10.5	6.85
	U Coronae	15	14	7	+32	0.8	2404147.4434	3.4522269	121	..	76	..	+32° 2570	7	16.4	9.45
	SW Ophiuchi	16	11	6	- 6	43.8	2410002.320	2.44578	..	32	..	154	- 6° 4392	24	23.3	9.57
	U Ophiuchi	17	11	27	+ 1	19.3	2408279.6146	0.8386870	28	235	77	154	+ 1° 3411	67	31.7	6.71
	Z Herculis	17	53	36	+15	8.8	2413086.368	3.992754	380	62	78	156	+15° 3316	63	4.7	9.84
	RS Sagitt.	18	10	59	-34	8.5	2414822.5836	2.4157	14	64	82	157	-34° 12675	584	1.6	8.70
	RX Herculis	18	26	1	+12	32.6	2414566.5369	0.889288	..	127	..	158	+12° 3548	58	19.8	9.04
	RR Draconis	18	40	54	+62	34.5	2417026.682	2.831079	..	68	..	160	+62° 1639	154	0.3	9.48
	RZ Ophiuchi	18	40	55	+ 7	6.9	2417844.7	261.8	..	29	..	159	+ 7° 3826	34	19.6	9.16
	RX Draconis	19	1	8	+58	35.2	2417502.411	1.893175	..	28	..	160	+58° 1865	144	0.8	9.10
	RV Lyrae	19	12	31	+32	14.6	2415665.3897	3.599013	..	2	..	161	+32° 3374	29	21.1	9.50
	U Sagittae	19	14	26	+19	25.9	2415690.276	3.380674	92	36	82	161	+19° 3978	72	13.5	8.42
	SW Cygni	20	3	50	+46	0.5	2411343.605	4.57294	192	10	83	161	+45° 3067	71	2.1	9.46
	UW Cygni	20	19	36	+42	54.9	2415635.405	3.451	55	7	85	161	...	47	8.6	9.98
	W Delphini	20	33	7	+17	55.9	2412002.5971	4.8061	500	56	86	162	+17° 4368	5	11.7	9.31
	RR Delphini	20	38	52	+13	35.1	2417424.514	4.5993	..	3	..	162	+13° 4504	9	7.2	10.1
	Y Cygni	20	48	4	+34	17.0	2410250.4799	2.996438	70	..	91	..	+33° 4062	0	14.6	9.15
	RR Vulpec.	20	50	32	+27	32.3	2417883.25	5.0505	..	4	..	162	...	..	..	..
	UZ Cygni	21	55	14	+43	52.1	2410015.05	31.304	42	21	92	162	+43° 4105	47	9.1	9.44

REMARKS.

IIa. R Cassiopeiae. In 1905, the comparison star was +50° 4199, magn. 9.27, which precedes the variable 14^s, south 21'.1.

III. +45° 3813. The comparison star for the last two observations was +45° 3819, magn. 9.12, which follows the variable 79^s, north 7'.0.

IVa. UY Cygni. In 1906, the comparison star was

+29° 4241, magn. 9.82, which follows the variable 4^s, south 13'.3.

IVb. α Herculis. On J. D. 8419.617, 8419.625, 8420.576, and 8420.584, the comparison star was +32° 2886, magn. 8.9, which follows the variable 54^s, south 24'.1.

IVb. β Lyrae. In 1903, 1907, 1908, and 1909, the comparison star was +32° 3227, magn. 5.77, which precedes 21^s, south 33'.5.

CHAPTER IX.

OBSERVATIONS OF MISCELLANEOUS STARS.

NUMEROUS measures were made of stars which do not appear to vary in light. Some of these were suspected variables whose variation was not confirmed, others were stars whose magnitude was desired but which had not been measured with the meridian photometer. A large number of stars whose spectra are of the fourth type, or Class N, were measured, as many such objects are known to be variable. In general, when the variation in the measures exceeded a quarter of a magnitude, it seemed probable that the changes were real, and exceeded a tenth of a magnitude. These stars are included in Table XII. The measures of the other stars are contained in Table XVII. These stars do not appear to vary although names have been assigned to them in several cases.

The first seven columns of Table XVII give the number in the Bonn Durchmusterung of the object observed, its right ascension for 1900, its declination for 1900, the Durchmusterung number of the comparison star, its assumed magnitude, and the difference in right ascension and declination between the two stars. The numbers of the stars at $4^h 43^m.8$ and $5^h 31^m.7$ are taken from the Cordoba Durchmusterung. Positive signs denote that the comparison star follows and is north of the object measured. The eighth column gives the year, omitting the two left hand figures, 19, the number of the month, and the day of observation. The ninth column gives the Julian Day and decimal following Greenwich Mean Noon, omitting the three left hand figures, 241. The last four columns give the concluded magnitude, the difference between the mean of the first and second sets and the mean of the third and fourth, the residuals of the four sets, and the residual found by subtracting the mean of all the measures of the star from the observed magnitude. These last columns have the same form as in the preceding tables.

TABLE XVII.

MISCELLANEOUS STARS.

DM. No.	R.A. 1900.	Dec. 1900.	Comp. Star. DM. No.	Assumed Magn.	$\Delta\alpha$	$\Delta\delta$	Date.	Julian Day.	Magn.	A-B	Residuals.	Resid.
+30° 42	h. m. 0 15.2	° ' " +30 23	+30° 36	8.71	s. -10.5	' " - 7.7	y. m. d. 05 10 13	7132.469	5.99	-.03	02,02,06,05	04
"	"	"	"	"	"	"	" " "	" .481	6.01	-.13	03,03,06,06	02
"	"	"	"	"	"	"	" " "	" .493	6.04	+.08	01,01,01,01	01
"	"	"	"	"	"	"	" " "	" .507	6.06	-.02	01,00,01,01	03
"	"	"	"	"	"	"	" " "	" .518	6.05	.00	03,03,01,01	02
"	"	"	"	"	"	"	" 10 14	7133.464	6.05	+.05	01,00,02,02	02
"	"	"	"	"	"	"	" " "	" .474	6.03	+.03	00,01,08,08	00
"	"	"	"	"	"	"	" " "	" .485	6.08	+.10	02,01,05,04	05
"	"	"	"	"	"	"	" " "	" .495	6.03	+.04	01,00,02,02	00
"	"	"	"	"	"	"	" " "	" .507	6.08	+.02	01,01,01,02	05
"	"	"	"	"	"	"	" " "	" .517	6.01	+.07	01,01,00,00	02
"	"	"	"	"	"	"	" " "	" .531	6.02	+.02	03,03,04,03	01
"	"	"	"	"	"	"	" " "	" .540	6.02	-.02	01,00,03,04	01
"	"	"	"	"	"	"	" " "	" .552	6.00	-.06	03,03,01,01	03
"	"	"	"	"	"	"	" " "	" .564	6.03	-.11	00,00,09,09	00
"	"	"	"	"	"	"	" " "	" .578	5.99	-.08	03,02,03,03	04
+53° 66	0 19.1	+53 44	+53° 61	9.17	-51.6	+ 8.6	06 2 6	7248.594	9.71	-.12	01,00,01,01	08
"	"	"	"	"	"	"	" 2 7	7249.566	9.71	-.07	04,04,01,01	08
"	"	"	"	"	"	"	" 9 5	7459.573	9.69	+.07	02,02,01,00	10
"	"	"	"	"	"	"	07 1 28	7604.627	9.87	+.01	01,00,02,02	08
"	"	"	"	"	"	"	" 7 26	7783.601	9.97	-.01	03,03,03,03	18
"	"	"	"	"	"	"	08 1 6	7947.649	9.73	-.04	01,01,03,02	06
"	"	"	"	"	"	"	10 1 26	8698.546	9.85	-.21	02,02,00,01	06
+81° 26	0 54.4	+81 26	+81° 27	8.41	+20	+ 8.7	08 12 21	8297.593	7.87	-.21	01,01,01,01	00
"	"	"	"	"	"	"	" " "	" .601	7.83	-.16	02,02,04,04	04
"	"	"	"	"	"	"	09 1 15	8322.578	7.84	-.34	04,04,02,03	03
"	"	"	"	"	"	"	" " "	" .586	7.88	-.14	03,03,05,06	01
"	"	"	"	"	"	"	" 2 25	8363.585	7.85	-.24	05,05,03,02	02
"	"	"	"	"	"	"	" " "	" .593	7.87	-.20	02,03,03,04	00
"	"	"	"	"	"	"	" 3 29	8395.562	7.85	-.15	05,05,01,01	02
"	"	"	"	"	"	"	" " "	" .587	7.89	-.13	01,01,01,02	02
"	"	"	"	"	"	"	" 6 25	8483.602	7.90	.00	01,01,07,07	03
"	"	"	"	"	"	"	" 10 7	8587.562	7.95	-.01	04,05,03,03	08
"	"	"	"	"	"	"	" " "	" .570	7.92	+.10	04,03,01,02	05
"	"	"	"	"	"	"	" 11 26	8637.636	7.87	-.20	04,04,00,01	00
"	"	"	"	"	"	"	" " "	" .648	7.85	-.16	03,04,03,03	02
"	"	"	"	"	"	"	10 2 4	8707.566	7.85	-.16	01,01,06,06	02
"	"	"	"	"	"	"	" 4 5	8767.586	7.84	+.22	06,07,06,05	03
"	"	"	"	"	"	"	11 11 2	9343.546	7.87	-.04	06,05,02,01	00
"	"	"	"	"	"	"	" " "	" .551	7.83	-.16	05,06,01,00	04
"	"	"	"	"	"	"	12 1 9	9411.509	7.79	-.13	02,02,04,03	08
"	"	"	"	"	"	"	" " "	" .515	7.89	-.20	02,03,04,04	02
"	"	"	"	"	"	"	" 2 5	9438.559	7.85	-.19	06,05,06,06	02
"	"	"	"	"	"	"	" 9 10	9656.597	7.95	+.20	02,02,04,04	08
"	"	"	"	"	"	"	" " "	" .602	7.93	+.16	05,04,05,04	06
"	"	"	"	"	"	"	" 9 12	9658.539	7.81	+.17	06,06,14,14	06

DM. No.	R.A. 1900.	Dec. 1900.	Comp. Star. DM. No.	Assumed Magn.	$\Delta\alpha$	$\Delta\delta$	Date.	Julian Day.	Magn.	A-B	Residuals.	Resid.
	<i>h. m.</i>	<i>° ' "</i>			<i>s.</i>	<i>' "</i>	<i>y. m. d.</i>					
+81° 26	0 54.4	+81 26	+81° 27	8.41	+20	+ 8.7	12 9 12	9658.544	7.83	+.20	01,00,01,00	04
+64° 127	1 5.2	+64 29	+63° 156	7.96	+48	-22.3	04 11 25	6810.568	5.52	-.07	03,03,02,01	02
"	"	"	"	"	"	"	" " "	" .578	5.50	-.13	05,05,01,02	04
"	"	"	"	"	"	"	" " "	" .587	5.56	-.07	12,12,01,01	02
"	"	"	"	"	"	"	" " "	" .600	5.42	-.16	01,02,06,05	12
"	"	"	"	"	"	"	" " "	" .615	5.55	-.10	05,05,04,04	01
"	"	"	"	"	"	"	" " "	" .637	5.54	-.11	02,03,03,03	00
"	"	"	"	"	"	"	06 3 6	7276.535	5.57	+.36	03,03,02,02	03
"	"	"	"	"	"	"	" " "	" .653	5.58	+.16	03,02,03,04	04
"	"	"	"	"	"	"	" 3 10	7280.522	5.63	+.26	02,02,00,01	09
"	"	"	"	"	"	"	" " "	" .537	5.58	+.25	02,02,04,04	04
"	"	"	"	"	"	"	" " "	" .650	5.54	+.16	04,05,01,00	00
+58° 439	2 12.2	+58 30	+57° 543	9.73	+74.2	-21.9	03 10 26	6414.565	8.54	+.06	00,00,01,00	07
"	"	"	"	"	"	"	" " "	" .571	8.59	+.03	02,02,01,01	12
"	"	"	"	"	"	"	04 2 8	6519.631	8.45	-.04	04,05,00,01	02
"	"	"	"	"	"	"	" " "	" .637	8.45	.00	04,03,02,03	02
"	"	"	"	"	"	"	" 8 15	6708.588	8.45	-.21	04,04,01,01	02
"	"	"	"	"	"	"	" " "	" .597	8.47	+.01	06,05,06,06	00
"	"	"	"	"	"	"	06 4 3	7304.535	8.41	+.28	02,02,02,01	06
"	"	"	"	"	"	"	" " "	" .550	8.41	+.33	02,01,02,02	06
+66° 242	2 57.9	+67 1	+66° 243	9.76	+1.30	+ 4.8	10 2 25	8728.634	7.90	.00	01,01,05,04	05
"	"	"	"	"	"	"	" 3 3	8734.628	7.85	+.18	02,02,03,04	00
"	"	"	"	"	"	"	" 3 11	8742.595	7.84	+.16	04,04,16,16	01
"	"	"	"	"	"	"	" 3 14	8745.626	7.92	+.12	09,10,04,05	07
"	"	"	"	"	"	"	" 3 15	8746.611	7.78	+.27	03,03,11,10	07
"	"	"	"	"	"	"	" " "	" .630	7.77	+.22	11,10,03,02	08
"	"	"	"	"	"	"	" 3 16	8747.570	7.87	+.12	02,02,04,04	02
"	"	"	"	"	"	"	" " "	" .577	7.86	+.04	03,04,04,03	01
"	"	"	"	"	"	"	" 3 17	8748.559	7.94	+.19	04,03,02,02	09
"	"	"	"	"	"	"	" " "	" .573	7.84	+.17	04,04,04,04	01
"	"	"	"	"	"	"	" 3 19	8750.578	7.78	+.39	03,04,01,01	07
"	"	"	"	"	"	"	" 3 21	8752.546	7.84	+.24	04,04,03,02	01
"	"	"	"	"	"	"	" 4 14	8776.551	7.86	+.17	02,03,10,10	01
"	"	"	"	"	"	"	" " "	" .557	7.89	+.18	01,02,04,04	04
"	"	"	"	"	"	"	" 5 5	8797.575	7.89	+.06	06,06,02,02	04
"	"	"	"	"	"	"	" " "	" .580	7.87	+.18	05,06,04,04	02
"	"	"	"	"	"	"	" 5 11	8803.572	7.80	+.13	08,08,06,05	05
"	"	"	"	"	"	"	" 5 12	8804.577	7.78	+.28	05,06,02,01	07
+51° 762	3 34.1	+51 11	+50° 801	9.40	+12.1	-14.1	02 10 17	6040.607	9.26	-.27	05,05,06,06	00
"	"	"	"	"	"	"	" " "	" .614	9.30	-.08	03,03,06,07	04
"	"	"	"	"	"	"	03 1 17	6132.631	9.18	+.09	04,03,07,07	08
"	"	"	"	"	"	"	" " "	" .638	9.21	+.14	04,04,03,03	05
"	"	"	"	"	"	"	" 2 7	6153.617	9.26	.00	05,05,04,04	00
"	"	"	"	"	"	"	" " "	" .624	9.26	+.04	04,04,05,05	00
"	"	"	"	"	"	"	" 2 12	6158.596	9.16	+.31	01,02,03,03	10
"	"	"	"	"	"	"	" " "	" .604	9.17	+.26	04,05,06,07	09
"	"	"	"	"	"	"	" 3 13	6187.551	9.22	+.12	04,03,02,02	04
"	"	"	"	"	"	"	" " "	" .561	9.19	+.22	04,05,06,07	07
"	"	"	"	"	"	"	" 11 10	6429.632	9.22	+.04	04,03,03,04	04
"	"	"	"	"	"	"	" " "	" .639	9.24	+.05	01,01,01,00	02

DM. No.	R.A. 1900.	Dec. 1900.	Comp. Star. DM. No.	Assumed Magn.	$\Delta\alpha$	$\Delta\delta$	Date.	Julian Day.	Magn.	A-B	Residuals.	Resid.
	<i>h. m.</i>	<i>° ' "</i>			<i>s.</i>	<i>' "</i>	<i>y. m. d.</i>					
+51° 762	3 34.1	+51 11	+50° 801	9.40	+ 12.1	-14.1	04 2 17	6528.611	9.26	- .16	01,02,01,02	00
"	"	"	"	"	"	"	" " "	.617	9.29	+ .02	04,04,1,111	03
"	"	"	"	"	"	"	" 9 6	6730.653	9.29	- .14	01,01,02,02	03
"	"	"	"	"	"	"	" 10 1	6755.587	9.35	- .02	03,04,02,01	09
"	"	"	"	"	"	"	" " "	.593	9.34	+ .01	02,02,01,00	08
"	"	"	"	"	"	"	" 11 14	6799.558	9.33	+ .02	00,01,03,02	07
"	"	"	"	"	"	"	" " "	.572	9.33	+ .10	00,01,06,06	07
"	"	"	"	"	"	"	05 2 16	6893.588	9.36	- .04	02,02,03,04	10
+37° 811	3 34.6	+37 16	+37° 814	7.76	+ 34.3	0.0	07 4 16	7682.539	5.60	+ .17	01,01,07,08	01
"	"	"	"	"	"	"	" " "	.550	5.61	+ .14	01,00,05,05	02
"	"	"	"	"	"	"	" 4 17	7683.550	5.60	+ .16	02,03,04,05	01
"	"	"	"	"	"	"	" " "	.559	5.58	+ .11	05,05,00,01	01
"	"	"	"	"	"	"	" " "	.569	5.58	+ .13	03,03,05,06	01
"	"	"	"	"	"	"	" " "	.580	5.56	+ .12	05,04,03,04	03
+23° 507	3 39.0	+23 48	+24° 578	7.26	+333.1	+24.0	98 12 13	4637.572	3.56	- .11	03,04,12,12	06
"	"	"	"	"	"	"	" " "	.578	3.50	+ .32	01,01,03,04	00
"	"	"	"	"	"	"	" 12 14	4638.509	3.48	+ .14	01,01,04,04	02
"	"	"	"	"	"	"	" " "	.513	3.44	- .05	06,06,09,09	06
+24° 567	3 41.5	+24 21	+23° 540	6.81	+ 5.0	-21.7	02 11 29	6083.569	8.61	- .20	02,01,03,04	00
"	"	"	"	"	"	"	" " "	.579	8.62	- .30	02,01,01,00	01
"	"	"	"	"	"	"	" 12 6	6090.583	8.63	- .15	00,01,01,01	02
"	"	"	"	"	"	"	" " "	.593	8.57	- .20	01,00,02,01	04
+23° 540	3 41.5	+24 0	R	6.81	0.0	0.0	02 11 20	6074.620	6.68	+ .02	04,03,03,02	02
"	"	"	"	"	"	"	" " "	.629	6.68	+ .02	00,01,06,05	02
"	"	"	"	"	"	"	" 12 5	6089.615	6.64	+ .06	01,01,08,07	02
"	"	"	"	"	"	"	" " "	.624	6.65	+ .04	02,01,03,03	01
+23° 541	3 41.5	+23 48	+23° 540	6.81	- 0.6	+11.5	02 11 20	6074.537	2.81	+ .01	03,03,04,04	03
"	"	"	"	"	"	"	" " "	.547	2.81	- .04	05,04,02,03	03
"	"	"	"	"	"	"	" 12 8	6092.543	2.75	+ .03	05,04,04,04	03
"	"	"	"	"	"	"	" " "	.554	2.74	- .10	05,06,02,02	04
+23° 552	3 42.5	+23 45	+23° 540	6.81	- 56.7	+14.5	02 11 28	6082.625	9.93	- .01	00,00,04,04	03
"	"	"	"	"	"	"	" " "	.635	9.87	.00	05,06,05,04	03
"	"	"	"	"	"	"	" 12 5	6089.587	9.94	+ .10	08,09,03,04	04
"	"	"	"	"	"	"	" " "	.597	9.86	+ .06	01,01,03,04	04
+23° 557	3 43.2	+23 45	+23° 540	6.81	-101.5	+14.7	02 11 20	6074.573	3.41	+ .24	04,03,01,01	07
"	"	"	"	"	"	"	" " "	.583	3.45	+ .37	08,08,01,00	03
"	"	"	"	"	"	"	" 12 6	6090.621	3.52	- .20	00,00,06,06	04
"	"	"	"	"	"	"	" " "	.629	3.55	- .04	04,03,04,03	07
+23° 558	3 43.3	+23 51	+24° 578	7.26	+ 73.4	+21.5	98 12 13	4637.592	4.90	+ .29	01,00,01,01	04
"	"	"	"	"	"	"	" " "	.597	4.83	+ .22	02,03,01,02	03
"	"	"	"	"	"	"	" 12 14	4638.494	4.81	+ .02	02,01,01,00	05
"	"	"	"	"	"	"	" " "	.502	4.87	- .02	05,06,02,01	01
"	"	"	+23° 540	6.81	-104.0	+ 9.2	02 11 20	6074.597	4.87	+ .32	04,05,00,01	01
"	"	"	"	"	"	"	" " "	.605	4.77	+ .16	00,01,01,00	09
"	"	"	"	"	"	"	" 12 06	6090.639	4.90	+ .06	02,02,03,02	04
"	"	"	"	"	"	"	" " "	.647	4.97	- .04	05,04,01,01	11
"	3 43.5	+24 0	+24° 578	7.26	+ 59.6	+11.1	98 12 13	4637.478	12.54	+ .33	19,18,10,10	10
"	"	"	"	"	"	"	" " "	.483	12.44	- .20	05,06,15,14	00
"	"	"	"	"	"	"	" 12 14	4638.585	12.49	+ .02	04,03,09,09	05
"	"	"	"	"	"	"	" " "	.590	12.64	+ .16	11,11,06,07	20

DM. No.	R.A. 1900.	Dec. 1900.	Comp. Star. DM. No.	Assumed Magn.	$\Delta\alpha$	$\Delta\delta$	Date.	Julian Day.	Magn.	A-B	Residuals.	Resid.
	<i>h. m.</i>	<i>° ' "</i>			<i>s.</i>	<i>' "</i>	<i>y. m. d.</i>					
..	3 43.5	+24 0	+23° 540	6.81	-118.0	- 1.6	02 11 29	6083.527	12.41	+ .11	07,07,14,14	03
"	"	"	"	"	"	"	" " "	.540	12.45	+ .12	06,05,05,04	01
"	"	"	"	"	"	"	" 12 6	6090.526	12.21	- .05	07,07,12,13	23
"	"	"	"	"	"	"	" " "	.540	12.37	- .04	05,04,00,01	07
+23° 562	3 43.5	+23 57	+24° 578	7.26	+ 61.4	+14.9	98 12 13	4637.558	7.84	+ .24	01,00,02,02	04
"	"	"	"	"	"	"	" " "	.564	7.85	+ .10	04,05,05,04	05
"	"	"	"	"	"	"	" 12 14	4638.481	7.70	+ .04	00,01,02,02	10
"	"	"	"	"	"	"	" " "	.486	7.76	+ .03	04,04,03,04	04
"	"	"	+23° 540	6.81	-116.0	+ 2.6	02 11 28	6082.534	7.82	- .02	03,04,03,04	02
"	"	"	"	"	"	"	" " "	.542	7.79	+ .03	01,00,01,01	01
"	"	"	"	"	"	"	" 12 1	6085.592	7.83	+ .11	00,01,01,01	03
"	"	"	"	"	"	"	" " "	.600	7.82	+ .10	04,04,02,03	02
..	3 43.6	+24 0	+24° 578	7.26	+ 51.6	+11.9	98 12 13	4637.487	11.47	+ .18	03,03,01,01	01
"	"	"	"	"	"	"	" " "	.491	11.49	+ .10	04,04,03,04	03
"	"	"	"	"	"	"	" 12 14	4638.570	11.46	+ .04	02,03,01,02	00
"	"	"	"	"	"	"	" " "	.576	11.51	+ .10	08,07,04,05	05
"	"	"	+23° 540	6.81	-126.0	- 0.8	02 11 28	6082.601	11.61	+ .08	13,12,16,16	15
"	"	"	"	"	"	"	" " "	.610	11.39	- .09	01,01,00,01	07
"	"	"	"	"	"	"	" 12 6	6090.555	11.40	+ .02	02,01,00,00	06
"	"	"	"	"	"	"	" " "	.567	11.39	+ .13	06,06,07,06	07
+23° 564	3 43.9	+23 57	+24° 578	7.26	+ 41.7	+14.8	98 12 13	4637.496	9.67	+ .18	03,02,04,03	02
"	"	"	"	"	"	"	" " "	.500	9.68	+ .04	05,04,01,00	01
"	"	"	"	"	"	"	" 12 14	4638.601	9.76	+ .13	05,05,03,02	07
"	"	"	"	"	"	"	" " "	.604	9.73	- .02	05,05,04,03	04
"	"	"	+23° 540	6.81	-135.7	+ 2.5	02 11 28	6082.573	9.63	- .01	01,01,09,09	06
"	"	"	"	"	"	"	" " "	.580	9.69	+ .04	03,04,01,01	00
"	"	"	"	"	"	"	" 12 1	6085.637	9.66	+ .22	04,03,03,04	03
"	"	"	"	"	"	"	" " "	.651	9.69	+ .11	06,05,01,01	00
"	"	"	"	"	"	"	" 12 5	6089.555	9.75	- .04	02,03,01,01	06
"	"	"	"	"	"	"	" " "	.566	9.66	+ .02	03,03,02,02	03
+23° 565	3 44.0	+23 55	+24° 578	7.26	+ 32.3	+16.6	98 12 13	4637.506	8.96	+ .19	01,01,01,02	02
"	"	"	"	"	"	"	" " "	.509	9.00	+ .04	03,02,07,07	02
"	"	"	"	"	"	"	" 12 14	4638.612	9.00	- .07	05,05,01,00	02
"	"	"	"	"	"	"	" " "	.619	8.95	- .14	03,02,07,06	03
"	"	"	+23° 540	6.81	-145.1	+ 4.3	02 11 28	6082.553	8.96	- .02	05,04,04,03	02
"	"	"	"	"	"	"	" " "	.564	8.95	.00	04,03,07,08	03
"	"	"	"	"	"	"	" 12 1	6085.615	9.01	+ .09	06,06,02,03	03
"	"	"	"	"	"	"	" " "	.627	8.97	+ .09	04,03,02,02	01
+23° 567	3 44.0	+24 3	+24° 578	7.26	+ 31.1	+ 8.9	98 12 13	4637.513	7.35	+ .07	01,00,07,06	05
"	"	"	"	"	"	"	" " "	.517	7.43	+ .26	00,01,05,06	03
"	"	"	"	"	"	"	" 12 14	4638.627	7.34	.00	02,01,00,01	06
"	"	"	"	"	"	"	" " "	.634	7.34	+ .03	02,02,03,04	06
"	"	"	+23° 540	6.81	-146.3	- 3.4	02 11 20	6074.662	7.49	+ .17	00,00,00,00	09
"	"	"	"	"	"	"	" " "	.674	7.43	+ .13	04,03,02,02	03
"	"	"	"	"	"	"	" 12 5	6089.633	7.42	+ .06	09,08,02,02	02
"	"	"	"	"	"	"	" " "	.643	7.39	+ .04	08,08,05,06	01
+24° 578	3 44.5	+24 12	+23° 540	6.81	-177.4	-12.3	02 11 20	6074.643	7.25	+ .03	02,01,01,01	00
"	"	"	"	"	"	"	" " "	.655	7.25	+ .09	03,03,02,01	00
"	"	"	"	"	"	"	" 12 5	6089.657	7.24	+ .02	04,03,03,03	01
"	"	"	"	"	"	"	" " "	.668	7.25	+ .07	03,03,03,02	00

DM. No.	R.A. 1900.	Dec. 1900.	Comp. Star. DM. No.	Assumed Magn.	$\Delta\alpha$	$\Delta\delta$	Date.	Julian Day.	Magn.	A-B	Residuals.	Resid.
	<i>h. m.</i>	<i>° ' "</i>			<i>s.</i>	<i>' "</i>	<i>y. m. d.</i>					
..	4 22.8	+39 38	+39° 1011	9.02	+61	- 2	03 2 9	6155.610	10.66	+.07	07,07,04,05	00
"	"	"	"	"	"	"	" " "	" .618	10.65	+.02	06,06,05,04	01
-36° 1884	4 43.8	-36 23	-36° 1894	9.7	+80.4	+11.4	06 2 2	7244.550	8.66	+.27	01,00,01,01	01
"	"	"	"	"	"	"	" 2 3	7245.545	8.68	+.33	06,06,04,03	01
R	5 30.4	- 5 27	- 5° 1315	5.36	+ 0.3	- 0.3	12 3 11	9473.515	8.08	-.10	04,04,01,01	05
"	"	"	"	"	"	"	" " "	" .522	8.14	+.03	01,00,01,01	01
"	"	"	"	"	"	"	" " "	" .529	8.15	-.06	02,02,00,00	02
"	"	"	"	"	"	"	" 3 16	9478.543	8.16	+.23	12,12,02,03	03
"	"	"	"	"	"	"	" " "	" .550	8.18	-.03	06,06,03,04	05
"	"	"	"	"	"	"	" 3 27	9489.546	8.09	-.02	00,01,01,00	04
"	"	"	"	"	"	"	" " "	" .552	8.08	-.07	04,04,01,01	05
"	"	"	"	"	"	"	" 4 3	9496.538	8.14	+.23	01,01,01,02	01
"	"	"	"	"	"	"	" " "	" .546	8.14	+.08	00,00,02,02	01
-25° 2539	5 31.7	-25 48	-25° 2545	8.57	+48.3	- 5.0	06 2 2	7244.602	7.93	-.13	01,00,00,00	06
"	"	"	"	"	"	"	" 2 3	7245.590	7.83	.00	01,02,03,03	04
"	"	"	"	"	"	"	" 2 5	7247.559	7.85	-.10	06,06,01,01	02
+17° 979	5 35.5	+17 29	+17° 978	8.10	-32.5	-12.1	05 12 8	7188.573	7.22	-.23	01,00,03,03	01
"	"	"	"	"	"	"	" 12 14	7194.604	7.27	-.22	00,01,01,01	06
"	"	"	"	"	"	"	06 2 7	7249.654	7.12	-.03	01,02,04,04	09
"	"	"	"	"	"	"	" 3 5	7275.643	7.19	-.10	03,03,03,02	02
"	"	"	"	"	"	"	" 4 2	7303.571	7.20	-.01	03,02,01,01	01
"	"	"	"	"	"	"	" 11 8	7523.596	7.22	-.03	01,01,01,01	01
"	"	"	"	"	"	"	07 1 30	7606.655	7.26	-.09	00,00,04,05	05
"	"	"	"	"	"	"	" 12 28	7938.618	7.34	-.21	03,02,05,05	13
"	"	"	"	"	"	"	09 11 26	8637.613	7.08	-.39	01,00,01,01	13
..	7 9.8	+17 42	+17° 1533	9.01	+85	-11.0	04 4 4	6575.577	9.69	+.40	02,03,03,03	02
"	"	"	"	"	"	"	" " "	" .583	9.66	+.30	02,03,03,04	01
"	"	"	"	"	"	"	" " "	" .592	9.67	+.28	01,02,02,03	00
"	"	"	"	"	"	"	" " "	" .600	9.64	+.42	00,01,02,01	03
"	"	"	"	"	"	"	" " "	" .615	9.68	+.30	00,01,01,01	01
"	"	"	"	"	"	"	" " "	" .632	9.67	+.25	04,04,01,01	00
+24° 1686	7 25.8	+24 44	+24° 1689	9.70	+42.3	-24.0	05 12 8	7188.606	8.67	-.42	01,01,02,03	13
"	"	"	"	"	"	"	" 12 22	7202.598	8.53	-.34	03,04,08,07	01
"	"	"	"	"	"	"	" " "	" .609	8.54	-.27	05,05,02,03	00
"	"	"	"	"	"	"	06 3 10	7280.629	8.49	-.18	02,01,04,04	05
"	"	"	"	"	"	"	" 4 3	7304.671	8.46	-.28	02,01,01,00	08
"	"	"	"	"	"	"	" 5 1	7332.575	8.47	-.42	05,04,00,01	07
"	"	"	"	"	"	"	07 4 29	7695.535	8.58	-.43	03,03,02,02	04
"	"	"	"	"	"	"	08 1 20	7961.558	8.42	-.27	07,06,02,02	12
"	"	"	"	"	"	"	09 1 11	8318.604	8.69	-.30	02,02,01,00	15
..	7 29.1	+ 7 8	+ 6° 1714	8.34	-48.5	-16.5	03 12 13	6462.772	9.22	+.15	05,06,01,01	05
"	"	"	"	"	"	"	" 12 14	6463.748	9.10	-.11	05,06,01,01	07
"	"	"	"	"	"	"	" 12 19	6468.624	9.18	-.01	05,05,01,01	01
"	"	"	"	"	"	"	" " "	" .630	9.17	-.02	01,00,00,00	00
-17° 2442	8 15.2	-17 57	-18° 2277	7.72	-26.9	-11.7	06 3 28	7298.586	9.13	-.02	04,05,01,02	05
"	"	"	"	"	"	"	" 4 7	7308.536	9.07	-.14	03,04,03,03	01
"	"	"	"	"	"	"	07 2 27	7634.535	9.08	-.13	06,06,01,01	00
"	"	"	"	"	"	"	10 1 19	8691.643	9.03	-.18	08,09,03,02	05
+14° 2048	9 8.3	+14 37	+14° 2054	9.80	+81.7	- 1.3	06 2 20	7262.556	8.77	-.14	01,00,01,01	01
"	"	"	"	"	"	"	" 4 6	7307.657	8.81	+.38	02,02,01,01	05

DM. No.	R.A. 1900.	Dec. 1900.	Comp. Star. DM. No.	Assumed Magn.	$\Delta\alpha$	$\Delta\delta$	Date.	Julian Day.	Magn.	A-B	Residuals.	Resid.
	<i>h. m.</i>	<i>° ' "</i>			<i>s.</i>	<i>' "</i>	<i>y. m. d.</i>					
+14° 2048	9 8.3	+14 37	+14° 2054	9.80	+81.7	-1.3	06 5 4	7335.651	8.67	+0.34	05,04,05,04	09
"	"	"	"	"	"	"	07 2 22	7629.544	8.76	-0.01	08,08,05,05	00
"	"	"	"	"	"	"	08 3 12	8013.572	8.77	-0.10	05,06,02,01	01
+60° 1246	10 8.3	+60 31	+60° 1244	9.27	-52.3	-5.7	11 6 14	9202.580	6.39	-0.01	28,28,00,01	05
"	"	"	"	"	"	"	" 6 16	9204.622	6.50	+0.18	11,12,09,09	06
+18° 2346	10 13.7	+18 40	+18° 2349	10.26	+73.9	-16.2	04 3 12	6552.567	11.14	+0.11	11,10,04,04	04
"	"	"	"	"	"	"	" " "	" .581	11.21	+0.14	07,08,03,04	03
+70° 644	10 56.6	+69 47	+70° 643	8.44	-146	+20.2	06 2 5	7247.641	8.94	+0.28	05,05,00,01	02
"	"	"	"	"	"	"	" 2 7	7249.616	8.92	+0.25	03,03,03,02	04
"	"	"	"	"	"	"	" 4 30	7331.590	9.00	-0.12	01,01,00,00	04
"	"	"	"	"	"	"	" 5 3	7334.638	8.95	-0.26	04,03,01,01	01
"	"	"	"	"	"	"	" 6 4	7366.645	8.96	-0.47	04,04,01,02	00
"	"	"	"	"	"	"	" 7 6	7398.593	8.94	-0.33	02,03,00,00	02
"	"	"	"	"	"	"	" 8 8	7431.615	8.96	-0.33	01,00,04,04	00
"	"	"	"	"	"	"	07 1 23	7599.585	9.00	+0.16	01,00,05,04	04
"	"	"	"	"	"	"	08 1 16	7957.652	8.94	+0.24	04,03,01,00	02
"	"	"	"	"	"	"	10 1 26	8698.612	8.95	+0.26	07,08,01,00	01
+62° 1161	10 57.6	+62 17	+62° 1160	7.12	-23	-4.8	08 6 2	8095.639	1.59	-0.30	06,05,06,07	06
"	"	"	"	"	"	"	" 6 3	8096.649	1.71	+0.02	12,13,01,02	06
-13° 3407	11 30.7	-14 2	-13° 3406	9.05	-4.3	+7.7	06 6 13	7375.563	8.87	+0.03	01,02,01,01	03
"	"	"	"	"	"	"	07 3 25	7660.656	8.99	-0.13	01,01,08,09	15
"	"	"	"	"	"	"	08 3 21	8022.671	8.76	-0.18	09,08,05,06	08
"	"	"	"	"	"	"	" 4 9	8041.639	8.73	-0.13	11,12,14,14	11
+ 9° 2573a	11 56.7	+ 9 38	+ 9° 2575	9.66	+ 1.6	-14.3	02 5 28	5898.584	11.14	+0.16	05,05,00,00	02
"	"	"	"	"	"	"	" " "	" .594	11.11	+0.10	01,00,03,03	01
"	12 58.0	+ 5 48	+ 5° 2709	8.58	+22	-21.5	07 2 15	7622.863	11.24	-0.29	03,03,02,01	A
+ 6° 2693	12 58.6	+ 5 46	"	"	-11.2	-20.4	" " "	" .854	10.42	-0.23	03,03,01,00	A
+ 5° 2710	12 59.1	+ 5 43	"	"	-38.1	-17.2	" " "	" .846	8.68	-0.27	00,00,03,03	A
+ 5° 2712	13 0.0	+ 5 29	"	"	-94.3	-2.4	" " "	" .836	9.95	+0.14	05,05,10,11	A
+38° 2412	13 8.5	+37 55	+37° 2380	9.66	-6.0	-12.9	03 2 7	6153.662	9.86	-0.08	01,00,03,02	00
"	"	"	"	"	"	"	" " "	" .669	9.91	-0.10	03,04,06,07	05
"	"	"	"	"	"	"	" 7 9	6305.677	9.84	-0.33	03,03,05,06	02
"	"	"	"	"	"	"	" 9 11	6369.575	9.85	-0.02	05,04,05,05	01
"	"	"	"	"	"	"	" " "	" .582	9.88	-0.09	03,03,04,04	02
"	"	"	"	"	"	"	04 6 27	6659.672	9.82	-0.09	04,03,01,01	04
"	"	"	"	"	"	"	06 6 19	7381.687	9.86	-0.08	01,00,04,05	00
+26° 2563	14 19.7	+26 10	+26° 2559	8.41	-99.9	-11.3	03 2 14	6160.662	7.85	+0.03	00,00,06,06	05
"	"	"	"	"	"	"	" " "	" .668	7.85	+0.08	04,04,03,02	05
"	"	"	"	"	"	"	" 2 17	6163.653	7.91	+0.04	01,02,06,05	01
"	"	"	"	"	"	"	" " "	" .660	7.93	+0.07	07,07,04,04	03
"	"	"	"	"	"	"	" 2 24	6170.659	7.91	+0.17	01,01,03,04	01
"	"	"	"	"	"	"	" " "	" .665	7.94	+0.06	04,05,10,10	04
+27° 2413	14 39.0	+26 57	+27° 2411	9.87	-1.6	+13.1	03 3 6	6180.637	5.23	+0.25	03,03,03,03	03
"	"	"	"	"	"	"	" " "	" .642	5.29	+0.29	00,00,06,06	03
"	"	"	"	"	"	"	" 4 3	6208.634	5.30	+0.10	02,02,03,04	04
"	"	"	"	"	"	"	" " "	" .640	5.24	+0.16	06,06,07,07	02
+19° 2870	14 46.8	+19 31	+19° 2881	5.98	+128.0	+2.2	08 7 8	8131.591	4.54	+0.25	09,10,03,03	00
"	"	"	"	"	"	"	" 7 9	8132.589	4.52	+0.10	03,03,04,04	02
"	"	"	"	"	"	"	" 7 10	8133.616	4.52	-0.40	07,07,05,04	02
"	"	"	"	"	"	"	" 7 11	8134.591	4.56	+0.29	01,01,06,07	02

DM. No.	R.A. 1900.	Dec. 1900.	Comp. Star. DM. No.	Assumed Magn.	$\Delta\alpha$	$\Delta\delta$	Date.	Julian Day.	Magn.	A-B	Residuals.	Resid.
	<i>h. m.</i>	<i>° ' "</i>			<i>s.</i>	<i>' "</i>	<i>y. m. d.</i>					
+19° 2870	14 46.8	+19 31	+19° 2881	5.98	+128.0	+ 2.2	08 7 27	8150.580	4.58	+ .12	03,02,08,07	04
-19° 4047	15 6.5	-19 25	-19° 4055	6.05	+ 65.4	+ 8.5	03 6 30	6296.642	4.53	+ .26	06,05,03,04	04
"	"	"	"	"	"	"	" " "	" .647	4.48	+ .34	01,01,01,02	01
"	"	"	"	"	"	"	" 7 3	6299.633	4.57	+ .43	02,02,00,00	08
"	"	"	"	"	"	"	" " "	" .657	4.49	+ .29	05,05,01,02	00
"	"	"	"	"	"	"	" 7 17	6313.643	4.59	+ .53	04,05,08,08	10
"	"	"	"	"	"	"	" " "	" .651	4.58	+ .34	02,03,02,01	09
"	"	"	"	"	"	"	04 5 21	6622.629	4.49	+ .17	06,06,07,08	00
"	"	"	"	"	"	"	" " "	" .637	4.53	+ .08	03,04,04,03	04
"	"	"	"	"	"	"	" 5 23	6624.605	4.45	+ .25	06,06,00,00	04
"	"	"	"	"	"	"	" 6 3	6635.553	4.51	+ .16	01,02,07,08	02
"	"	"	"	"	"	"	" " "	" .558	4.56	+ .26	04,03,01,00	07
"	"	"	"	"	"	"	" 6 10	6642.547	4.45	+ .24	05,05,00,00	04
"	"	"	"	"	"	"	" " "	" .553	4.54	+ .30	01,00,00,00	05
"	"	"	"	"	"	"	" " "	" .562	4.43	+ .29	05,05,01,01	06
"	"	"	"	"	"	"	" 6 18	6650.552	4.44	+ .30	12,13,01,00	05
"	"	"	"	"	"	"	" " "	" .558	4.49	+ .35	02,02,06,06	00
"	"	"	"	"	"	"	" 6 23	6655.550	4.50	+ .50	00,01,02,03	01
"	"	"	"	"	"	"	" " "	" .557	4.45	+ .56	02,03,02,01	04
"	"	"	"	"	"	"	" 6 24	6656.555	4.47	+ .44	00,01,04,05	02
"	"	"	"	"	"	"	" " "	" .561	4.39	+ .29	02,02,02,03	10
"	"	"	"	"	"	"	" 6 27	6659.561	4.53	+ .17	00,01,03,03	04
"	"	"	"	"	"	"	" " "	" .569	4.55	+ .37	01,01,06,07	06
"	"	"	"	"	"	"	" 7 1	6663.556	4.57	+ .19	03,04,03,03	08
"	"	"	"	"	"	"	" " "	" .566	4.49	+ .03	02,01,04,04	00
"	"	"	"	"	"	"	" " "	" .580	4.50	+ .02	06,05,00,01	01
"	"	"	"	"	"	"	" 7 6	6668.589	4.37	+ .08	04,04,04,05	12
"	"	"	"	"	"	"	" 7 8	6670.554	4.43	+ .25	03,03,05,05	06
"	"	"	"	"	"	"	" " "	" .559	4.43	+ .25	05,05,02,03	06
"	"	"	"	"	"	"	" 7 9	6671.615	4.42	+ .24	06,05,01,00	07
"	"	"	"	"	"	"	05 4 22	6958.675	4.45	+ .29	07,07,05,06	04
"	"	"	"	"	"	"	" 5 11	6977.596	4.64	+ .14	03,04,03,04	15
"	"	"	"	"	"	"	" " "	" .616	4.55	+ .20	04,03,02,01	06
"	"	"	"	"	"	"	" 5 20	6986.592	4.46	+ .22	09,08,03,03	03
"	"	"	"	"	"	"	" " "	" .606	4.51	+ .17	00,00,00,01	02
"	"	"	"	"	"	"	" 6 24	7021.560	4.43	+ .28	00,00,06,05	06
"	"	"	"	"	"	"	06 6 29	7391.638	4.45	+ .24	04,04,06,07	04
"	"	"	"	"	"	"	08 6 13	8106.562	4.47	+ .46	01,01,10,10	02
+32° 2886	17 14.6	+32 48	+32° 2884	9.3	- 18.5	-13.2	09 5 20	8447.608	8.65	- .26	01,01,02,03	02
"	"	"	"	"	"	"	" 5 25	8452.625	8.63	- .30	04,03,03,04	00
"	"	"	"	"	"	"	" 5 26	8453.564	8.62	- .15	01,01,04,04	01
"	"	"	"	"	"	"	" 5 31	8458.592	8.66	- .31	00,01,06,06	03
"	"	"	"	"	"	"	" 6 1	8459.575	8.69	- .06	03,02,07,06	06
"	"	"	"	"	"	"	" 6 2	8460.595	8.70	- .23	12,12,00,00	07
"	"	"	"	"	"	"	" 6 11	8469.565	8.58	- .27	03,03,04,04	05
"	"	"	"	"	"	"	" 6 12	8470.575	8.60	- .13	03,03,03,03	03
"	"	"	"	"	"	"	" 6 14	8472.575	8.60	- .16	02,01,02,02	03
"	"	"	"	"	"	"	" 6 15	8473.605	8.62	- .04	09,09, R, A	01
"	"	"	"	"	"	"	" 6 16	8474.569	8.59	- .02	04,03,05,06	04
"	"	"	"	"	"	"	" 6 22	8480.565	8.57	- .10	03,04,02,01	06

1913AnHar...69...99W

DM. No.	R.A. 1900.	Dec. 1900.	Comp. Star. DM. No.	Assumed Magn.	$\Delta\alpha$	$\Delta\delta$	Date.	Julian Day.	Magn.	A-B	Residuals.	Resid.
	<i>h. m.</i>	<i>° ' "</i>			<i>s.</i>	<i>' "</i>	<i>y. m. d.</i>					
+33° 2871	17 15.1	+32 58	+32° 2886	8.90	-34.9	-10.1	09 4 22	8419.634	7.71	-.18	08,08,04,03	02
"	"	"	"	"	"	"	" " "	".644	7.63	-.14	08,07,01,00	06
"	"	"	"	"	"	"	" 4 23	8420.617	7.68	-.28	06,06,01,00	01
"	"	"	"	"	"	"	" " "	".664	7.66	-.11	03,02,01,01	03
"	"	"	"	"	"	"	" 4 24	8421.641	7.69	-.30	01,00,00,00	00
"	"	"	"	"	"	"	" " "	".646	7.74	-.25	00,00,05,05	05
"	"	"	"	"	"	"	" 4 26	8423.591	7.76	-.25	10,09,03,03	07
"	"	"	"	"	"	"	" " "	".598	7.76	-.27	05,06,07,07	07
"	"	"	"	"	"	"	" " "	".611	7.72	-.19	01,01,01,01	03
"	"	"	"	"	"	"	" 4 28	8425.647	7.77	-.02	01,01,04,04	08
"	"	"	"	"	"	"	" " "	".654	7.79	-.18	02,01,02,03	10
"	"	"	"	"	"	"	" 5 4	8431.589	7.71	-.26	04,03,02,03	02
"	"	"	"	"	"	"	" " "	".595	7.69	-.22	06,06,02,02	00
"	"	"	"	"	"	"	" 5 6	8433.637	7.62	-.19	05,05,00,00	07
"	"	"	"	"	"	"	" 5 8	8435.635	7.62	-.28	08,07,01,01	07
"	"	"	"	"	"	"	" 5 11	8438.564	7.58	-.25	05,05,01,01	11
"	"	"	"	"	"	"	" " "	".605	7.58	-.28	02,01,04,03	11
"	"	"	"	"	"	"	" 5 12	8439.563	7.58	-.16	01,01,01,02	11
"	"	"	"	"	"	"	" " "	".594	7.56	-.33	00,01,01,01	13
"	"	"	"	"	"	"	" 5 13	8440.625	7.56	-.26	04,04,01,01	13
"	"	"	"	"	"	"	" 5 15	8442.545	7.58	-.25	08,08,01,01	11
"	"	"	"	"	"	"	" 5 18	8445.557	7.70	-.28	10,09,04,05	01
"	"	"	"	"	"	"	" " "	".595	7.73	+.03	00,01, A	04
"	"	"	"	"	"	"	" 5 20	8447.545	7.76	-.27	01,01,03,03	07
"	"	"	"	"	"	"	" " "	".555	7.70	-.20	03,03,07,06	01
"	"	"	"	"	"	"	" " "	".565	7.75	-.14	00,01,03,03	06
"	"	"	"	"	"	"	" 5 24	8451.541	7.76	-.26	02,02,09,09	07
"	"	"	"	"	"	"	" " "	".548	7.73	-.34	02,02,10,09	04
"	"	"	"	"	"	"	" 5 25	8452.556	7.78	-.23	07,07,08,08	09
"	"	"	"	"	"	"	" " "	".563	7.74	-.24	05,04,06,06	05
"	"	"	"	"	"	"	" 5 26	8453.556	7.62	-.31	02,02,01,01	07
"	"	"	"	"	"	"	" " "	".581	7.71	-.22	00,01,05,05	02
"	"	"	"	"	"	"	" " "	".592	7.68	-.19	06,06,02,03	01
"	"	"	"	"	"	"	" 5 31	8458.569	7.69	-.26	03,04,01,01	00
"	"	"	"	"	"	"	" " "	".574	7.64	-.24	05,05,02,02	05
"	"	"	"	"	"	"	" 6 1	8459.562	7.60	-.22	07,07,04,04	09
"	"	"	"	"	"	"	" 6 2	8460.575	7.59	-.06	03,03,10,10	01
"	"	"	"	"	"	"	" 6 8	8466.560	7.68	-.25	07,07,00,10	01
"	"	"	"	"	"	"	" 6 11	8469.556	7.73	-.26	05,06,06,06	04
"	"	"	"	"	"	"	" 6 12	8470.564	7.72	-.15	06,06,07,06	03
"	"	"	"	"	"	"	" 6 14	8472.563	7.66	-.23	06,06,02,02	03
"	"	"	"	"	"	"	" 6 15	8473.596	7.74	-.07	03,02,01,01	05
"	"	"	"	"	"	"	" 6 16	8474.558	7.74	-.24	09,09,04,03	05
"	"	"	"	"	"	"	" 6 22	8480.556	7.82	-.09	01,01,03,03	13
"	"	"	"	"	"	"	" 6 23	8481.561	7.71	-.14	04,05,05,04	02
+ 9° 3576	18 4.0	+ 9 26	+ 93° 578	9.15	+ 4.9	-23.2	05 10 10	7129.555	9.83	-.08	04,04,00,00	01
"	"	"	"	"	"	"	" 10 12	7131.574	9.85	+.08	00,01,01,01	01
"	"	"	"	"	"	"	06 9 4	7458.546	9.81	-.03	06,06,00,01	03
"	"	"	"	"	"	"	07 7 26	7783.566	9.89	+.04	04,05,00,01	05
+30° 3144	18 7.6	+30 6	+29° 3198	7.38	- 4.0	-13.0	03 5 27	6262.654	8.44	-.31	01,02,02,02	04

DM. No.	R.A. 1900.	Dec. 1900.	Comp. Star. DM. No.	Assumed Magn.	$\Delta\alpha$	$\Delta\delta$	Date.	Julian Day.	Magn.	A-B	Residuals.	Resid.
+30° 3144	<i>h. m.</i> 18 7.6	<i>° '</i> +30 6	+29° 3198	7.38	+ 4.0	-13.0	<i>y. m. d.</i> 03 5 30	6265.601	8.48	-.45	03,03,02,01	00
"	"	"	"	"	"	"	" " "	.608	8.50	-.44	04,03,01,01	02
"	"	"	"	"	"	"	" 6 1	6267.591	8.49	-.30	05,04,02,01	01
-15° 4923	18 13.6	-15 39	-15° 4927	5.71	+45.6	-13.6	03 9 3	6361.586	8.74	+.22	02,02,01,00	07
"	"	"	"	"	"	"	" " "	.591	8.77	+.24	05,06,07,07	04
"	"	"	"	"	"	"	05 6 27	7024.603	8.87	-.04	01,00,06,06	06
"	"	"	"	"	"	"	" 7 13	7040.657	8.87	-.13	08,07,02,02	06
-16° 5360	19 28.5	-16 35	-16° 5363	10.35	+34.4	+14.8	05 6 29	7026.689	7.52	+.34	06,07,05,04	02
"	"	"	"	"	"	"	" 7 18	7045.649	7.47	+.03	00,00,07,06	03
- 5° 5023	19 32.0	- 5 22	- 5° 5020	8.77	-42.1	+22.1	04 9 30	6754.640	8.33	-.02	01,01,00,00	02
"	"	"	"	"	"	"	" " "	.646	8.31	+.06	01,01,01,01	00
"	"	"	"	"	"	"	" " "	.663	8.29	+.03	00,01,02,02	02
"	"	"	"	"	"	"	" " "	.670	8.32	-.06	02,02,02,03	01
+47° 3031	20 6.5	+47 35	+47° 3037	6.64	+69.5	+22.9	04 5 27	6628.638	9.02	+.20	02,01,01,00	A
+47° 3038	20 7.8	+47 31	+47° 3037	6.64	-13.2	+25.3	03 9 25	6383.668	7.97	-.02	01,02,00,00	02
"	"	"	"	"	"	"	" " "	.673	7.95	-.14	01,00,02,01	00
"	"	"	"	"	"	"	" 9 26	6384.662	7.92	+.03	10,10,03,06	03
"	"	"	"	"	"	"	" " "	.668	7.87	-.02	04,03,02,01	08
"	"	"	"	"	"	"	" 10 14	6402.611	8.01	-.04	06,06,04,04	06
"	"	"	"	"	"	"	" " "	.616	8.04	-.04	01,01,07,07	09
"	"	"	"	"	"	"	" 10 24	6412.646	7.95	+.10	03,04,04,05	00
"	"	"	"	"	"	"	" " "	.655	7.90	+.07	07,07,09,08	05
"	"	"	"	"	"	"	" 11 21	6440.643	7.92	+.16	00,01,04,03	03
"	"	"	"	"	"	"	" " "	.650	7.90	+.08	02,02,05,04	05
"	"	"	"	"	"	"	" 11 30	6449.631	8.02	+.04	05,05,03,04	07
"	"	"	"	"	"	"	" " "	.636	7.96	+.04	01,01,03,02	01
"	"	"	"	"	"	"	04 4 25	6596.653	7.96	+.47	02,02,02,02	01
"	"	"	"	"	"	"	" " "	.659	7.94	+.37	01,00,01,01	01
"	"	"	"	"	"	"	" 5 27	6628.632	7.97	+.10	00,01,06,06	02
+37° 3876	20 14.8	+37 8	+37° 3875	9.41	- 5.6	0.0	03 10 6	6394.592	11.24	-.06	02,02,03,03	20
"	"	"	"	"	"	"	" 10 13	6401.616	11.33	.00	05,04,02,03	11
"	"	"	"	"	"	"	" " "	.622	11.32	-.02	03,02,06,05	12
"	"	"	"	"	"	"	" 10 19	6408.606	11.54	-.05	01,01,02,03	10
"	"	"	"	"	"	"	" " "	.614	11.61	-.03	02,02,06,07	17
"	"	"	"	"	"	"	" " "	.623	11.59	.00	00,01,02,01	15
+40° 4210	20 27.4	+40 11	+39° 4213	8.68	-68.5	- 9.1	05 10 7	7126.682	8.62	+.13	03,03,03,03	09
"	"	"	"	"	"	"	" 10 12	7131.660	8.66	+.16	01,02,03,04	05
"	"	"	"	"	"	"	" 12 5	7185.555	8.72	+.04	05,06,07,08	01
"	"	"	"	"	"	"	06 5 1	7332.674	8.77	-.10	01,02,01,00	06
"	"	"	"	"	"	"	" 6 7	7369.639	8.80	-.11	01,01,02,01	09
+33° 4028	20 43.2	+34 0	+33° 4027	7.83	- 8.1	-20.5	02 7 7	5938.583	5.14	-.30	04,04,03,03	04
"	"	"	"	"	"	"	" " "	.599	5.11	-.34	03,04,03,03	07
"	"	"	"	"	"	"	" 7 31	5962.545	5.18	-.20	05,05,00,00	00
"	"	"	"	"	"	"	" " "	.551	5.19	-.16	01,00,04,05	01
"	"	"	"	"	"	"	" 10 17	6040.640	5.03	+.08	00,01,05,04	15
"	"	"	"	"	"	"	" " "	.646	5.03	+.09	01,01,04,04	15
"	"	"	"	"	"	"	" 11 14	6068.643	5.11	-.09	03,03,06,05	07
"	"	"	"	"	"	"	" " "	.657	5.15	+.15	02,02,03,04	03
"	"	"	"	"	"	"	" 12 12	6096.540	5.15	-.05	03,03,01,01	03
"	"	"	"	"	"	"	03 1 13	6128.493	5.45	+.06	02,02,03,03	27

1913AnHar...69...99W

DM. No.	R.A. 1900.	Dec. 1900.	Comp. Star. DM. No.	Assumed Magn.	$\Delta\alpha$	$\Delta\delta$	Date.	Julian Day.	Magn.	A-B	Residuals.	Resid.
	<i>h. m.</i>	<i>° ' "</i>			<i>s.</i>	<i>' "</i>	<i>y. m. d.</i>					
+33° 4028	20 43.2	+34 0	+33° 4027	7.83	- 8.1	-20.5	03 1 13	6128.498	5.44	+.10	03,04,02,02	26
"	"	"	"	"	"	"	" 5 9	6244.647	5.15	-.28	05,06,06,05	03
"	"	"	"	"	"	"	" " "	".655	5.19	-.28	02,03,01,01	01
"	"	"	"	"	"	"	" 5 22	6257.659	5.17	-.28	10,09,02,02	01
"	"	"	"	"	"	"	" " "	".666	5.16	-.38	02,03,04,05	02
"	"	"	"	"	"	"	" 6 1	6267.640	5.19	-.33	01,01,04,04	01
"	"	"	"	"	"	"	" " "	".647	5.19	-.31	01,01,00,00	01
"	"	"	"	"	"	"	" 6 13	6279.667	5.21	-.29	03,03,00,00	03
"	"	"	"	"	"	"	" " "	".673	5.17	+.32	03,03,02,01	01
"	"	"	"	"	"	"	" 6 30	6296.676	5.29	.00	04,03,01,01	11
"	"	"	"	"	"	"	" " "	".681	5.35	+.04	03,04,01,01	17
"	"	"	"	"	"	"	" 9 19	6377.665	5.22	+.10	07,07,00,01	04
"	"	"	"	"	"	"	" " "	".671	5.19	+.06	07,07,03,03	01
"	"	"	"	"	"	"	" 10 22	6410.638	5.23	-.20	01,02,03,04	05
"	"	"	"	"	"	"	" " "	".645	5.29	-.23	04,04,03,02	11
"	"	"	"	"	"	"	" " 31	6419.657	5.16	-.22	00,01,03,02	02
"	"	"	"	"	"	"	" " "	".662	5.11	-.13	03,03,08,08	07
"	"	"	"	"	"	"	04 6 13	6645.564	5.19	-.15	04,04,03,03	01
"	"	"	"	"	"	"	" " "	".569	5.27	-.07	05,04,05,05	09
"	"	"	"	"	"	"	" " "	".578	5.24	-.18	02,01,03,04	06
"	"	"	"	"	"	"	" 7 11	6673.554	5.21	-.31	02,01,00,00	03
"	"	"	"	"	"	"	" 7 13	6675.560	5.15	+.12	01,00,02,03	03
"	"	"	"	"	"	"	" 9 26	6750.658	4.91	-.08	00,00,05,05	27
"	"	"	"	"	"	"	" " "	".665	5.03	.00	01,02,03,03	15
"	"	"	"	"	"	"	" " "	".672	4.98	-.04	00,00,00,00	20
"	"	"	"	"	"	"	" 10 22	6776.592	5.06	+.04	02,02,05,05	12
"	"	"	"	"	"	"	" " "	".599	5.07	+.08	03,03,00,01	11
"	"	"	"	"	"	"	" 11 2	6787.627	5.23	+.15	00,00,06,06	05
"	"	"	"	"	"	"	" 11 3	6788.589	5.19	+.19	07,07,05,05	01
"	"	"	"	"	"	"	" 11 12	6797.612	5.25	+.08	04,03,07,06	07
"	"	"	"	"	"	"	" 11 19	6804.531	5.16	+.14	03,02,00,01	02
+42° 4172	21 35.6	+42 49	+42° 4169	8.82	- 37.3	+ 9.7	03 9 4	6362.542	9.90	+.31	01,01,02,03	03
"	"	"	"	"	"	"	" " "	".549	9.85	+.30	02,02,00,01	02
"	"	"	"	"	"	"	" 9 7	6365.577	9.92	+.44	04,04,02,03	05
"	"	"	"	"	"	"	" 9 8	6366.531	9.77	+.18	04,04,06,07	10
"	"	"	"	"	"	"	" " "	".538	9.82	+.20	00,01,00,00	05
"	"	"	"	"	"	"	" 9 11	6369.534	9.86	+.12	01,01,02,01	01
"	"	"	"	"	"	"	" " "	".540	9.85	+.06	02,02,00,01	02
"	"	"	"	"	"	"	" 9 12	6370.533	9.83	+.18	01,00,08,08	04
"	"	"	"	"	"	"	" " "	".540	9.91	+.06	03,03,03,02	04
"	"	"	"	"	"	"	" 9 14	6372.531	9.92	+.10	03,04,02,01	05
"	"	"	"	"	"	"	" 9 15	6373.530	9.88	+.08	04,03,04,03	01
"	"	"	"	"	"	"	" 9 19	6377.529	9.84	+.09	03,02,03,03	03
"	"	"	"	"	"	"	" 10 14	6402.647	9.90	+.07	03,02,01,01	03
"	"	"	"	"	"	"	" " "	".654	9.89	+.08	03,03,01,01	02
"	22 21.0	+29 58	+29° 4652	9.13	- 64	- 3	04 10 6	6760.638	10.41	+.05	06,05,02,02	03
"	"	"	"	"	"	"	" 10 7	6761.651	10.48	-.02	03,04,03,04	04
+29° 4659	22 21.3	+30 0	+29° 4652	9.13	- 77.8	- 5.0	04 10 6	6760.681	9.49	-.03	02,02,01,02	03
"	"	"	"	"	"	"	" 10 7	6761.654	9.55	-.03	01,01,04,05	03
+82° 743	23 51.7	+82 38	+82° 748	7.20	+339	-13.0	04 10 20	6774.607	6.50	-.04	02,03,04,05	01

DM. No.	R.A. 1900.	Dec. 1900.	Comp. Star. DM. No.	Assumed Magn.	$\Delta\alpha$	$\Delta\delta$	Date.	Julian Day.	Magn.	A-B	Residuals.	Resid.
+82° 743	^{h. m.} 23 51.7	^{° ' "} +82 38	+82° 748	7.20	^{s.} +339	-13.0	^{y. m. d.} 04 10 20	6774.615	6.49	.00	00,01,04,04	02
"	"	"	"	"	"	"	" 10 21	6775.596	6.55	+38	00,01,03,02	04
"	"	"	"	"	"	"	" " "	" .603	6.52	+31	07,07,00,00	01
"	"	"	"	"	"	"	" " "	" .620	6.58	-.03	00,01,01,01	07
"	"	"	"	"	"	"	" " "	" .629	6.50	-.04	01,01,03,03	01
"	"	"	"	"	"	"	" 10 22	6776.546	6.53	-.10	01,01,01,01	02
"	"	"	"	"	"	"	" " "	" .562	6.55	-.06	05,05,01,00	04
"	"	"	"	"	"	"	" 11 17	6802.624	6.48	-.17	03,04,00,00	03
"	"	"	"	"	"	"	" " "	" .634	6.50	-.08	02,01,02,02	01
"	"	"	"	"	"	"	" 11 18	6803.612	6.48	+08	06,05,05,04	03
"	"	"	"	"	"	"	" 12 16	6831.638	6.54	+08	03,02,04,04	03
"	"	"	"	"	"	"	" " "	" .649	6.50	-.01	03,03,01,00	01
"	"	"	"	"	"	"	" " "	" .616	6.52	+24	01,01,00,01	01
"	"	"	"	"	"	"	05 1 5	6851.630	6.50	-.04	05,04,02,02	01
"	"	"	"	"	"	"	" " "	" .640	6.50	.00	01,01,06,05	01
"	"	"	"	"	"	"	" 1 19	6865.661	6.49	+16	03,03,03,03	02
"	"	"	"	"	"	"	" 2 14	6891.631	6.48	+29	01,01,05,04	03
"	"	"	"	"	"	"	" 3 22	6927.617	6.46	-.08	05,04,02,03	05
"	"	"	"	"	"	"	" 4 18	6954.529	6.51	-.22	05,05,02,01	00
"	"	"	"	"	"	"	" 5 13	6979.552	6.51	-.18	01,02,06,07	00
"	"	"	"	"	"	"	" " "	" .573	6.48	-.11	03,03,06,06	03
"	"	"	"	"	"	"	" 5 20	6986.658	6.50	.00	06,06,00,01	01
"	"	"	"	"	"	"	" 7 12	7039.654	6.48	-.48	04,04,02,02	03
"	"	"	"	"	"	"	" 10 9	7128.590	6.50	+01	02,02,01,01	01
"	"	"	"	"	"	"	" 11 14	7164.567	6.51	+16	04,04,03,03	00
+50° 4201	23 53.3	+50 50	+50° 4199	9.27	-14.0	-21.7	05 2 14	6891.575	10.84	-.18	06,07,01,01	A
+42° 4827	23 59.4	+43 0	+43° 4620	9.18	-18.5	+14.8	06 1 5	7216.589	8.64	+21	01,00,01,01	06
"	"	"	"	"	"	"	" 1 6	7217.608	8.62	+16	02,03,03,02	04
"	"	"	"	"	"	"	" 3 12	7282.536	8.66	+19	04,04,01,01	08
"	"	"	"	"	"	"	" 7 5	7397.665	8.56	+37	01,01,01,01	02
"	"	"	"	"	"	"	" 8 14	7437.630	8.52	+40	01,02,02,03	06
"	"	"	"	"	"	"	" 9 7	7461.564	8.53	+22	06,05,03,04	05
"	"	"	"	"	"	"	08 1 14	7955.583	8.47	-.06	01,02,04,05	11
"	"	"	"	"	"	"	09 7 30	8518.626	8.68	+27	01,02,03,03	10

REMARKS.

0 54.4. RX Cephei.

1 5.2. 32 Cassiopeiae. This star has been called RU Cassiopeiae.

2 12.2. T Persei.

3 41.5b + 23°540. There is uncertainty regarding these comparisons. In the other measures made on these evenings the comparison star was +23°540, but with Photometer T, a star cannot be compared with itself.

4 43.8. The comparison star has not been measured with the photometer. The magnitude given is taken from the Cordoba Durchmusterung, corrected by H.A. 72, No. 7.

5 30.4. θ Orionis. The faintest star in the trapezium

was suspected of variation, and is here compared with the brightest of the four stars. The instrument used was Photometer R, with the movable double image prism, described on page 1.

10 8.3. U Ursae Majoris.

11 56.7. X Virginis.

13 8.5. S Canum Venaticorum.

14 39.0. W Bootis.

17 14.6. The comparison star has not been measured with the meridian photometer. The magnitude given is taken from the Bonn Durchmusterung, corrected by H.A. 72, No. 6. On J. D. 8473.605, third set, readings 240.6, 326.0, 27.3, and 135.0, rejected.

19 20.5. The third and fourth measures were made as

	a test of a photometer constructed for the Halsted Observatory.	21 35.6. UU Cygni.
20 6.5.	SV Cygni.	22 21.0. RV Pegasi. See 20 ^a 14 ^s .8.
20 7.8.	RX Cygni.	23 51.7. V Cephei. See H.A. 55, 67. The apparent variation is probably due to systematic error in visual estimates.
20 14.8.	WX Cygni. This star is a variable of long period and should have been included in Table X.	23 53.3. Comparison star r for R Cassiopeiae.
20 43.2.	T Cygni.	

The results of Table XVII are contained in Table XVIII. The successive columns give the number in the Durchmusterung, the name, if any, the right ascension for 1900, the declination for 1900, the number of measures, the concluded magnitude, and the average deviation.

TABLE XVIII.
RESULTS OF TABLE XVII.

DM. No.	Name.	R.A. 1900.	Dec. 1900.	Meas.	Corr. Magn.	A.D.	DM. No.	Name.	R.A. 1900.	Dec. 1900.	Meas.	Corr. Magn.	A.D.
		<i>h. m.</i>	<i>° ' "</i>						<i>h. m.</i>	<i>° ' "</i>			
+30° 42	..	0 15.2	+30 23	16	6.03	.02	+ 5° 2710	..	12 59.1	+ 5 43	1	8.68	A
+53° 66	..	19.1	+53 44	7	9.79	.09	+ 5° 2712	..	13 0.0	+ 5 29	1	9.95	A
+81° 26	RX Cephei	54.4	+81 26	24	7.87	.03	+38° 2412	S Can. Ven.	8.5	+37 55	7	9.86	.02
+64° 127	RU Cassiop.	1 5.2	+64 29	11	5.54	.04	+26° 2563	..	14 19.7	+26 10	6	7.90	.03
+58° 439	T Persei	2 12.2	+58 30	8	8.47	.05	+27° 2413	W Bootis	39.0	+26 57	4	5.26	.03
+66° 242	..	57.9	+67 1	18	7.85	.04	+19° 2870	ξ Bootis	46.8	+19 31	5	4.54	.02
+51° 762	..	3 34.1	+51 11	20	9.26	.05	-19° 4047	ι Librae	15 6.5	-19 25	37	4.49	.05
+37° 811	..	34.6	+37 16	6	5.59	.02	+32° 2886	..	14.6	+32 48	12	8.63	.03
..	..	4 22.8	+39 38	2	10.66	.00	+33° 2871	..	17 15.1	+32 58	45	7.69	.06
-36° 1884	..	43.8	-36 23	2	8.67	.01	+ 9° 3576	..	18 4.0	+ 9 26	4	9.84	.02
..	θ Orionis, d.	5 30.4	- 5 27	9	8.13	.03	+30° 3144	..	7.6	+30 6	4	8.48	.02
-25° 2539	..	31.7	-25 48	3	7.87	.04	-15° 4923	..	13.6	-15 39	4	8.81	.06
+17° 979	..	35.5	+17 29	9	7.21	.06	-16° 5363	..	19 28.5	-16 35	2	7.50	.02
..	..	7 9.8	+17 42	6	9.67	.01	- 5° 5023	..	32.0	- 5 22	4	8.31	.01
+24° 1686	..	25.8	+24 44	9	8.54	.07	+47° 3031	SV Cygni	20 6.5	+47 35	1	9.02	A
..	..	29.1	+ 7 8	4	9.17	.03	+47° 3038	RX Cygni	7.8	+47 31	15	7.95	.04
-17° 2442	..	8 15.2	-17 57	4	9.08	.03	+37° 3876	WX Cygni	14.8	+37 8	6	11.44	.14
+14° 2048	..	9 8.3	+14 37	5	8.76	.03	+40° 4210	..	27.4	+40 11	5	8.71	.06
+60° 1246	U Urs. Maj.	10 8.3	+60 31	2	6.44	.06	+33° 4028	T Cygni	43.2	+34 0	41	5.18	.07
+ 8° 2346	..	13.7	+18 40	2	11.18	.04	+42° 4172	UU Cygni	21 35.6	+42 49	14	9.87	.04
+70° 644	..	56.6	+69 47	10	8.96	.02	..	RV Pegasi	22 21.0	+29 58	2	10.44	.04
+62° 1161	α Urs. Maj.	57.6	+62 17	2	1.65	.06	+29° 4659	..	21.3	+30 0	2	9.52	.03
-13° 3407	..	11 30.7	-14 2	4	8.84	.09	+82° 743	V Cephei	23 51.7	+82 38	27	6.51	.02
+9° 2573a	X Virginis	56.7	+ 9 38	2	11.12	.02	+50° 4201	..	53.3	+50 50	1	10.84	A
..	..	12 58.0	+ 5 48	1	11.24	A	+42° 4827	..	59.4	+43 0	8	8.58	.06
+ 6° 2693	..	58.6	+ 5 46	1	10.42	A							

The total number of measures in Table XVII is 7,120, and the mean of the average deviations given in the last column of Table XVIII is ≈ 0.040 .

CHAPTER X.

OBSERVATIONS OF DOUBLE STARS.

THE differences in magnitude between the components of a large number of double stars are given in Table XIX. The measurements were made with Photometer R, in almost all cases. The number in the Durchmusterung of the brighter component, its number in the Revised Harvard Photometry, its right ascension for 1900, its declination for 1900, and the Julian Day of observation, omitting the three left hand figures 241, are given in the first five columns. The observed difference in brightness between the two components, the value of A-B, the residuals of the four sets of measures and the residual from the mean of all the measures, are given in the remaining four columns. The letter A is inserted when only one measure was made. In general, the brighter component is that which is indicated by the position angle in Table I of H.A. 56, 231. It is usually the same as that in Burnham's General Catalogue of Double Stars. When the measures indicate that the other component is the brighter, attention is called to it in the Remarks following the table. Thus, in the case of the double star at R. A. $1^h 19^m.9$, Burnham 747, the position angle is 105° , which denotes that he regarded the south preceding component as the brighter. The mean of the measures makes it the fainter as shown by the remark on page 198. A similar remark is made in all cases where the difference is 0.25, or less.

The mean difference in brightness for any of these doubles may be found by subtracting the residual in the last column from the observed difference in the sixth column. It is not given with the position angle and distance in another table, since a large portion of this material has already appeared in H.A. 64, No. 6, and later in H.A. 56, No. 7.

TABLE XIX.

OBSERVATIONS OF DOUBLE STARS.

DM.	H. R.	R.A. 1900.	Dec. 1900.	J. D.	Diff.	A-B	Residuals.	Res.	DM.	H. R.	R.A. 1900.	Dec. 1900.	J. D.	Diff.	A-B	Residuals.	Res.		
4704	8	0	1.4	+28 29	7866	4.16	+ .05	04,04,01,02	A	156	310	1	0.4	+20 56	5383	0.22	- .11	03,03,00,00	02
	4	15	3.2	+28 32	7951	8.23	+ .09	09,09,03,03	A	180	..		0.7	+31 39	7922	4.30	+ .07	15,15,07,07	A
	44	..	12.4	+43 27	8602	3.02	+ .21	01,01,06,05	02	175	313		0.7	+ 4 22	2852	0.92	+ .05	02,04,06,07,	03
	"	..	"	"	8605	2.98	+ .12	00,01,03,02	02									03,10	
	42	..	14.8	+37 41	7865	3.21	+ .14	03,03,04,04	A	"	"	"	"	3164	0.80	+ .19	00,08,07,04,	09	
	25	86	17.2	+12 57	7873	4.42	+ .26	01,02,08,09	A									05,08	
	69	..	25.6	+15 28	7947	3.54	- .03	10,09,02,02	A	"	"	"	"	3560	0.88	- .12	02,02,02,03	01	
	64	132	27.3	+ 6 25	3908	3.60	+ .07	06,06,06,07	02	"	"	"	"	4212	0.97	+ .02	09,09,06,05	08	
	"	"	"	"	3911	3.60	- .08	00,01,03,03	02	223	321		1.6	+54 26	7634	5.93	- .06	00,00,09,08	05
	"	"	"	"	3940	3.52	+ .11	09,09,00,00	10	"	"	"	"	7893	6.02	- .23	04,04,04,04	04	
	"	"	"	"	5754	3.76	+ .03	09,08,04,04	14	190	330		3.2	+ 5 7	7571	5.32	+ .07	04,04,00,01	04
	105	..	30.7	+29 28	7943	3.68	+ .36	30,30,05,06	A	"	"	"	"	7573	5.39	- .18	06,05,01,00	03	
	105	..	30.7	+29 28	7972	0.80	- .12	02,01,09,08	A	236	343		5.0	+54 37	7634	6.67	.00	02,02,02,02	A
	101	154	31.5	+33 10	5760	4.24	- .07	05,05,01,02	02	158	360		8.3	+24 3	7959	4.68	+ .19	22,22,13,14	A
	"	"	"	"	5770	4.21	- .02	05,04,01,01	05	174	361		8.5	+ 7 3	2821	0.84	- .13	06,02,04,05,	03
	"	"	"	"	5784	4.32	- .09	00,00,01,01	06									06,00	
	85	166	34.2	+20 43	7934	5.16	- .21	01,01,08,08	A	"	"	"	"	2827	0.86	+ .06	03,09,06,09,	01	
	87	167	34.6	+20 54	3943	3.14	+ .08	11,10,03,03	08									00,09	
	"	"	"	"	5036	3.32	+ .11	06,06,07,07	10	"	"	"	"	3084	0.92	- .02	09,03,11,05,	05	
	"	"	"	"	5389	3.20	- .01	03,04,00,00	02									02,03	
	139	168	34.8	+55 59	5751	6.84	+ .07	25,25,01,01	43	216	366		9.4	- 8 28	2825	2.50	- .12	05,00,06,08,	07
	"	"	"	"	6359	6.24	+ .08	16,15,06,05	17									07,01	
	"	"	"	"	7580	6.14	- .17	15,15,11,10	27	"	"	"	"	3004	2.47	- .18	06,02,04,02,	10	
	39	..	36.4	+70 50	8230	0.26	- .07	09,09,00,01	A									01,03	
	113	..	41.0	+30 24	2821	0.01	+ .07	17,27,11,03,	10	"	"	"	"	3441	2.46	- .07	02,01,02,04,	11	
	"	..	"	"	3560	0.15	- .18	01,00,02,01	04	"	"	"	"	3933	2.86	- .44	08,09,26,26	29	
	"	..	"	"	3908	0.18	- .13	02,01,00,00	07	"	"	"	"	5394	2.57	+ .06	02,01,02,01	00	
	150	219	43.0	+57 17	4270	3.50	+ .08	09,09,01,01	14	123	399		18.9	+67 36	3084	4.75	- .08	06,06,01,19,	20
	"	"	"	"	5389	3.90	+ .07	10,09,03,03	26									03,16	
	"	"	"	"	5680	3.52	- .05	00,00,02,02	12	"	"	"	"	3911	4.39	+ .06	03,02,05,06	16	
	131	230	44.5	+27 10	5746	0.04	- .11	03,03,02,01	04	"	"	"	"	3913	4.51	+ .14	03,03,00,00	04	
	"	"	"	"	5775	0.04	+ .04	06,06,00,01	04	218	..		19.9	+31 2	8200	0.00	.00	06,07,01,02	01
	175	269	51.2	+37 57	7943	7.35	+ .58	17,17,30,31	A	"	..	"	"	8207	0.07	- .10	06,07,02,02	08	
	159	..	54.3	+ 0 15	7556	0.50	- .28	03,02,16,16	40	"	..	"	"	8682	0.07	+ .10	03,04,06,05	06	
	"	..	"	"	7571	1.02	+ .20	01,02,02,03	12	"	..	"	"	8685	0.04	+ .12	09,10,09,10	03	
	"	..	"	"	7889	1.19	+ .14	02,02,15,14	29	229	..		21.9	- 0 40	7889	2.35	- .18	05,05,05,06	A
	193	283	54.4	+44 10	3908	0.76	- .04	05,06,01,00	04	8	424		22.6	+88 46	5759	6.66	- .13	15,15,02,01	12
	"	"	"	"	4207	0.76	+ .04	03,03,02,01	04	"	"	"	"	5760	6.90	- .20	08,09,02,02	12	
	"	"	"	"	5731	0.85	- .06	02,02,02,03	05	194	434		24.9	+ 5 38	7853	7.26	+ .03	06,05,00,00	02
	"	"	"	"	5754	0.81	+ .02	02,02,04,03	01	"	"	"	"	7854	7.29	+ .06	01,02,06,05	01	
	156	310	1	0.4	+20 56	2821	0.28	+ .03	07,00,08,02,	04	271	..	26.6	+60 10	5753	2.36	+ .05	06,06,10,10	07
	"	"	"	"	3084	0.17	.04	04,13,08,04,	07	167	..	"	"	7966	2.22	+ .25	10,11,15,15	07	
	"	"	"	"				01,03		332	458		26.6	+16 28	7936	3.05	+ .14	03,04,05,05	A
	"	"	"	"	3560	0.27	+ .06	10,10,02,02	03	"	"	"	30.9	+40 54	7566	5.69	- .34	08,07,05,05	09
	"	"	"	"						"	"	"	"	7580	5.86	.00	15,15,16,15	08	

1913AnHar..69...99W

DM.	H. R.	R.A. 1900.	Dec. 1900.	J. D.	Diff.	A-B	Residuals.	Res.	DM.	H. R.	R.A. 1900.	Dec. 1900.	J. D.	Diff.	A-B	Residuals.	Res.
253	..	1 34.5	+14 45	7894	0.17	-.06	04,03,03,03	A	443	782	2 34.8	+26 38	3208	3.90	+.21	50,20,30,09,	05
276	484	35.7	+25 14	5751	4.38	-.08	02,03,13,13	17								00,09	
"	"	"	"	5753	4.04	.00	07,07,11,10	17	"	"	"	"	3216	3.98	+.17	15,10,04,02,	13
279	493	37.1	+19 47	7937	6.18	.00	10,10,11,10	A								03,05	
243	546	48.0	+18 49	4164	0.26	-.05	07,05,13,02,	04	746	799	37.4	+48 48	3936	5.80	-.02	00,00,06,06	18
"	"	"	"				08,10		"	"	"	"	3937	5.67	+.14	14,14,03,04	05
"	"	"	"	3913	0.13	+.02	03,03,03,02	09	"	"	"	"	3944	5.60	+.11	11,11,08,08	02
"	"	"	"	3943	0.26	-.08	07,06,03,03	04	"	"	"	"	7836	5.42	-.01	07,06,02,02	20
354	556	50.2	+36 46	3911	0.26	+.16	03,03,04,05	10	"	"	37.4	+48 48	7947	7.25	-.18	03,04,27,26	A
"	"	"	"	3913	0.11	+.02	04,03,04,04	05	714	834	43.4	+55 29	2851	4.70	+.05	13,01,12,01,	10
"	"	"	"	3933	0.14	+.11	04,04,04,05	02	"	"	"	"				08,10	
"	"	"	"	3936	0.09	-.02	03,02,07,06	07	"	"	"	"	3493	4.78	-.09	12,18,06,02,	02
"	"	"	"	3937	0.16	-.12	03,02,03,04	00	"	"	"	"				03,04	
"	"	"	"	6164	0.18	-.15	05,05,01,01	02	"	"	"	"	3936	4.81	+.08	02,01,04,04	01
238	569	52.4	+23 7	5392	2.48	+.03	01,01,01,01	03	"	"	"	"	7867	4.76	-.07	07,08,01,01	04
"	"	"	"	5417	2.50	+.06	01,01,02,02	01	"	"	"	"	7868	4.94	-.05	03,02,06,06	14
"	"	"	"	5418	2.51	+.02	03,03,01,01	00	471	838	44.1	+26 51	8010	7.26	-.21	14,14,04,03	A
"	"	"	"	6484	2.56	-.01	06,06,03,04	05	"	"	44.1	+26 51	5417	6.66	-.08	00,01,05,04	R
395	603	57.8	+41 51	3936	2.74	-.15	02,02,02,03	02	"	"	"	"	5681	4.90	+.08	00,00,03,02	13
"	"	"	"	3937	2.74	-.05	08,07,08,08	02	"	"	"	"	5682	4.95	-.04	02,02,06,06	08
"	"	"	"	3943	2.74	-.19	01,02,08,08	02	"	"	"	"	7867	5.24	+.13	16,16,00,00	21
"	"	"	"	3944	2.83	+.02	02,01,01,01	07	"	"	44.1	+26 51	7971	7.32	-.31	28,28,08,09	A
63	..	2 1.4	+79 13	8153	0.70	.00	07,07,04,03	00	646	840	44.2	+37 55	7644	6.10	-.08	09,09,01,02	A
"	..	"	"	8211	0.76	-.05	02,02,08,09	06	655	855	47.4	+37 56	3495	3.86	-.01	21,13,07,04,	13
"	..	"	"	8722	0.64	+.06	08,08,01,01	06								17,21	
425	628	4.8	+38 34	7963	0.66	+.16	06,05,05,04	A	"	"	"	"	4207	4.12	+.19	01,01,03,03	13
481	645	7.0	+50 36	7644	4.98	+.15	10,09,04,04	A	582	..	53.1	+59 17	9121	0.72	+.15	02,02,04,05	A
336	650	7.7	- 2 52	2824	2.00	-.01	00,01,01,04,	11	665	890	53.7	+51 57	3122	1.23	+.05	07,08,02,03,	14
"	"	"	"				07,02		"	"	"	"				06,10	
"	"	"	"	2848	1.84	+.07	03,02,01,01,	05	"	"	"	"	3943	1.30	+.12	01,01,00,00	07
"	"	"	"				07,05		"	"	"	"	3944	1.49	+.06	02,01,08,07	12
"	"	"	"	2852	1.84	-.02	16,04,11,03,	05	"	"	"	"	4212	1.46	+.15	00,00,01,01	09
"	"	"	"				05,09		486	..	3 3.9	+ 7 5	3943	0.17	-.08	00,00,02,02	00
376	..	8.9	+29 57	8248	0.05	-.06	02,01,05,04	A	"	..	"	"	3944	0.18	-.15	05,05,02,02	01
471	654	9.9	+56 36	9121	0.78	+.01	01,01,05,05	A	551	..	14.0	+62 22	4300	0.16	-.05	00,01,01,01	08
467	..	12.5	+59 35	9121	0.10	+.08	01,01,01,00	A	"	..	"	"	9128	0.01	-.02	05,04,08,08	07
519	748	29.4	+36 53	3936	5.02	-.40	04,04,04,03	A	518	996	14.1	+ 3 0	7556	3.85	+.14	19,18,08,09	03
819	749	29.5	-28 40	5682	2.60	+.12	00,01,02,01	06	"	"	"	"	7563	3.96	-.17	17,17,11,11	08
"	"	"	"	5686	2.58	+.17	06,05,01,01	08	"	"	"	"	7630	3.82	+.19	01,01,04,05	06
"	"	"	"	5721	2.81	-.02	02,01,07,07	15	684	1046	22.4	+55 7	3495	4.44	+.10	10,01,12,35,	01
418	754	30.6	+ 5 9	4298	4.60	-.32	30,29,06,07	19	"	"	"	"				12,48	
"	"	"	"	5036	4.90	+.11	06,06,08,09	11	"	"	"	"	3589	4.52	-.04	04,03,05,06	07
"	"	"	"	5681	4.73	+.26	01,01,04,03	06	"	"	"	"	3944	4.40	+.28	20,21,01,00	05
"	"	"	"	5682	4.94	+.04	10,10,03,04	15	514	..	25.0	+27 23	8194	0.40	+.04	01,02,04,03	02
443	782	34.8	+26 38	2848	3.72	+.02	02,11,10,16,	13	"	..	"	"	8228	0.45	-.02	01,01,06,07	03
"	"	"	"				18,35		"	..	"	"	9086	0.48	+.03	00,00,09,08	06
"	"	"	"	2851	3.89	+.04	03,15,12,07,	04	"	..	"	"	9091	0.38	+.08	01,01,05,05	04
"	"	"	"				04,10		"	..	"	"	9107	0.42	.00	02,03,08,07	00
"	"	"	"	2852	3.74	-.02	08,03,05,04,	11	"	..	"	"	"	0.47	+.04	01,01,05,05	05
"	"	"	"				01,04		"	..	"	"	"	0.38	+.03	03,03,06,05	04

DM.	H. R.	R.A. 1900.	Dec. 1900.	J. D.	Diff.	A-B	Residuals.	Res.	DM.	H. R.	R.A. 1900.	Dec. 1900.	J. D.	Diff.	A-B	Residuals.	Res.
514	..	h. m. 3 25.0	+27 23	9109	0.39	-.14	02,01,00,01	03	631 1212	3 49.2	- 3 14	5681	1.44	+ .12	06,07,04,03	05	
"	..	"	"	"	0.45	+ .10	04,04,04,05	03	"	"	"	"	5759	1.31	+ .10	02,02,06,07	08
515	1065	25.3	+27 14	2852	0.28	-.03	10,02,12,03,03	03	895 1220	51.1	+39 43	3999	5.06	-.07	00,01,01,01	07	
"	"	"	"	3140	0.27	-.04	02,05,03,01,04	04	"	"	"	"	4182	4.89	+ .34	03,02,07,07	10
"	"	"	"	3262	0.24	-.03	01,02,00,02,07	07	"	"	"	"	5680	5.24	+ .16	03,04,03,04	25
"	"	"	"	4309	0.46	+ .16	02,01,10,10	15	"	"	"	"	5801	4.76	+ .15	11,10,20,20	23
504	..	27.5	+23 1	9120	0.34	+ .03	03,03,10,10	A	"	"	"	"	3262	0.01	+ .05	02,03,05,04,02	02
473	1086	28.5	+24 7	7646	3.68	+ .11	08,08,03,03	A	"	"	"	"	"	"	"	00,04	"
437	..	31.2	+63 33	8193	1.34	-.07	03,04,02,02	03	"	"	"	"	3264	0.06	+ .09	02,03,02,10,09	09
"	..	"	"	8208	1.36	+ .28	10,09,00,00	05	"	"	"	"	"	"	"	01,10	"
"	..	"	"	8231	1.30	+ .13	01,01,01,00	01	"	"	"	"	3484	0.26	-.11	04,06,02,03,23	23
"	..	"	"	9107	1.36	+ .27	02,02,01,01	05	"	"	"	"	"	"	"	05,02	"
"	..	"	"	"	1.44	+ .16	17,16,00,00	13	587 1262	59.4	+21 44	7630	1.94	-.01	04,04,01,01	A	
"	..	"	"	"	1.18	+ .43	32,32,07,07	13	878 ..	4 1.0	+37 49	7644	1.29	-.14	05,04,02,02	A	
"	..	"	"	9109	1.33	+ .06	01,01,01,00	02	737 ..	9.6	+31 27	9124	1.10	+ .01	07,07,03,02	01	
"	..	"	"	"	1.29	+ .10	02,02,05,06	02	"	..	"	"	9137	1.12	.00	00,00,01,02	01
"	..	"	"	"	1.22	+ .04	06,06,03,03	09	"	..	9.6	+31 27	9124	2.21	-.06	04,04,07,07	03
616	1099	31.7	+0 16	5739	2.96	+ .39	07,07,01,02	24	"	..	"	"	9137	2.16	+ .12	10,09,05,05	02
"	"	"	"	5746	2.83	+ .10	09,08,01,02	11	867 1318	9.6	-10 30	8006	2.44	+ .12	01,01,03,02	A	
"	"	"	"	5749	2.36	+ .20	18,18,04,05	36	905 ..	10.1	+45 57	8194	0.86	-.11	03,03,04,03	02	
562	..	34.5	+28 27	8351	0.47	-.06	02,03,04,03	01	"	..	"	"	8230	0.88	-.03	03,03,04,05	04
"	..	"	"	8358	0.50	.00	05,04,01,00	02	"	..	"	"	9111	0.79	-.08	05,05,12,12	05
571	..	35.3	+ 4 49	2851	2.98	+ .02	04,04,08,09,01	01	"	..	"	"	"	0.84	+ .04	04,03,01,02	00
"	..	"	"	3122	3.00	+ .13	07,12,06,08,10,02	01	"	..	"	"	"	0.84	+ .21	00,00,01,02	00
"	..	"	"	3122	3.00	+ .13	07,12,06,08,10,02	01	"	..	"	"	"	0.82	-.08	01,00,04,05	02
"	..	35.3	+ 4 49	3122	3.45	-.02	00,06,06,05,03,09	A	780 1325	10.7	- 7 49	3972	4.74	-.24	01,01,02,03	01	
698	1123	36.0	+33 39	2550	4.95	-.30	05,04,18,17	04	"	"	"	"	5036	4.71	-.10	03,04,02,03	02
"	"	"	"	2552	4.94	+ .16	00,00,02,03	05	"	"	"	"	5390	4.86	-.12	01,01,06,05	13
"	"	"	"	2554	5.08	-.09	02,03,09,08	09	868 ..	13.0	+55 18	9128	0.11	-.02	05,05,07,08	A	
556	..	38.5	+27 35	9120	0.09	+ .06	14,15,02,03	A	655 1348	14.2	+27 7	7629	3.42	-.04	04,03,08,09	A	
750	..	40.1	+41 10	8579	0.56	+ .03	06,05,02,02	02	707 1369	16.5	+25 23	2749	3.09	+ .14	14,05,18,05,29	29	
"	..	"	"	8580	0.52	+ .05	04,04,08,08	02	"	..	"	"	"	"	"	12,08	"
541	1165	41.5	+23 48	3612	3.34	-.13	02,02,07,08	02	"	"	"	"	2860	2.54	-.14	62,39,23,18,26	26
"	"	"	"	3640	3.23	+ .42	02,02,02,03	09	"	"	"	"	"	"	"	05,12	"
"	"	"	"	3643	3.41	+ .02	06,07,07,08	09	"	"	"	"	2908	2.73	-.10	13,09,03,06,07	07
"	"	"	"	5681	3.28	+ .06	05,05,03,03	04	"	"	"	"	"	"	"	04,10	"
486	1174	42.8	+10 50	5392	4.04	-.04	02,03,02,02	02	"	"	"	"	3612	2.80	-.24	11,10,04,04	00
"	"	"	"	5397	3.98	-.09	01,01,02,02	04	"	"	"	"	4212	2.86	-.07	00,01,07,07	06
"	"	"	"	5774	4.08	-.21	06,05,01,01	06	851 ..	17.9	+34 5	2908	1.15	+ .04	24,25,02,20,19,39	01	
"	"	"	"	5788	4.00	+ .01	03,03,00,01	02	"	..	"	"	3131	1.25	+ .16	21,09,13,07,09	09
561	..	43.4	+24 5	9120	0.92	-.35	03,03,09,08	A	"	..	"	"	"	"	"	09,03	"
1297	1190	44.9	-37 55	5760	0.46	+ .04	04,03,04,03	A	"	..	"	"	3143	1.08	.00	04,06,03,01,08	08
666	1203	47.8	+31 35	3999	6.52	-.23	17,17,04,04	A	"	..	"	"	"	"	"	04,06	"
860	1210	49.2	+50 24	7644	5.08	+ .08	00,01,13,13	A	"	..	"	"	"	"	"	"	"
631	1212	49.2	- 3 14	4000	1.42	+ .01	05,06,06,05	03	"	..	"	"	3145	1.10	.00	00,08,07,08,06	06

DM.	H. R.	R.A. 1900.	Dec. 1900.	J. D.	Diff.	A-B	Residuals.	Res.	DM.	H. R.	R.A. 1900.	Dec. 1900.	J. D.	Diff.	A-B	Residuals.	Res.
851	..	h. m. 4 17.9	+34 5				10,02		723	..	h. m. 4 54.2	+62 57	8194	0.38	+ .23	01,00,02,02	06
"	..	"	"	3598	1.24	-.02	06,06,01,01	08	"	..	"	"	8207	0.30	+ .24	00,01,04,05	02
642	1387	19.4	+22 4	3972	0.86	-.51	07,06,05,05	07	"	..	"	"	8767	0.34	+ .05	04,04,02,02	02
"	"	"	"	3999	0.90	-.45	06,06,00,01	03	"	..	"	"	8778	0.28	+ .07	04,03,01,01	04
"	"	"	"	4000	1.04	-.20	01,01,03,02	11	737	1610	55.3	+ 3 28	3122	0.34	+ .01	14,07,07,00,	02
665	1406	22.5	+30 9	3589	1.60	+ .43	06,05,11,11	08	"	"	"	"	3140	0.30	-.02	07,07,00,08,	02
"	"	"	"	3640	1.66	-.01	05,05,00,00	02	"	"	"	"	3143	0.26	-.02	10,02,09,01,	06
"	"	"	"	3643	1.62	-.12	03,04,02,02	06	"	"	"	"				05,04	
"	"	"	"	3647	1.86	.00	07,06,06,07	18	"	"	"	"				01,01	
632	1412	22.9	+15 39	3972	0.68	+ .54	04,05,05,04	21	"	"	"	"	6901	0.37	+ .12	05,05,03,03	05
"	"	"	"	3999	0.49	+ .66	06,05,13,14	02	775	..	55.6	+26 32	3492	1.36	+ .03	19,19,10,00,	08
"	"	"	"	4000	0.21	+ .38	07,06,03,03	26	"	..	"	"	3493	1.05	-.40	03,03,01,11,	23
"	"	"	"	5709	0.48	+ .03	07,07,00,00	01	"	..	"	"				11,01	
"	"	"	"	6108	0.47	-.02	07,07,01,01	00	"	..	"	"	3495	1.20	+ .07	29,18,12,15,	08
779	1417	24.1	+53 42	2908	1.00	-.21	05,05,01,03,	02	"	..	"	"				02,13	
"	"	"	"	3262	0.92	+ .05	04,02,01,02,	06	"	..	"	"	3647	1.37	+ .13	00,00,00,01	09
"	"	"	"	3504	1.02	-.02	05,03,08,05,	04	"	..	"	"	5680	1.42	-.03	10,10,05,05	14
							11,15		804	1622	57.4	+58 50	2550	0.46	+ .08	02,01,01,00	14
1013	1424	24.6	+39 48	2908	0.41	+ .02	06,07,02,01,	04	"	"	"	"	2552	0.57	+ .14	01,01,04,04	03
"	"	"	"	3262	0.40	+ .03	08,06		"	"	"	"	2554	0.66	+ .25	05,05,05,04	06
"	"	"	"	3264	0.30	+ .05	09,00,10,01,	03	"	"	"	"	3647	0.69	+ .22	03,02,02,02	09
"	"	"	"	3264	0.30	+ .05	00,00		736	1662	5 2.2	+ 9 21	7651	1.90	+ .25	01,00,01,01	A
							04,10		"	"	2.2	+ 9 21	7937	3.43	+ .18	04,04,02,01	A
607	1458	30.2	+ 9 57	2550	3.10	+ .16	06,06,01,01	06	169	1686	6.1	+79 7	2550	3.41	+ .06	09,08,04,04	00
"	"	"	"	2552	3.19	+ .50	05,06,07,06	03	"	"	"	"	2552	3.34	+ .15	10,10,07,08	07
"	"	"	"	2554	3.20	+ .08	00,00,03,03	04	"	"	"	"	2554	3.46	+ .13	12,12,04,04	05
959	1460	30.5	- 9 57	5383	1.00	+ .07	00,00,02,02	03	"	"	"	"	3492	3.55	+ .06	07,11,04,46,	14
"	"	"	"	5386	0.96	+ .04	01,02,01,02	01	"	"	"	"				24,22	
"	"	"	"	5388	0.96	+ .04	03,02,01,00	01	"	"	"	"	7664	3.31	+ .10	04,04,00,00	10
800	..	32.3	+ 0 22	9119	0.02	+ .06	04,04,00,00	A	1095	1696	7.7	-11 59	5388	5.15	-.06	04,05,06,05	A
937	..	33.4	-13 14	8278	0.53	+ .02	04,03,04,03	08	888	1698	8.1	+ 2 45	2559	3.48	-.18	01,01,05,05	21
"	..	"	"	8307	0.50	-.01	00,00,03,03	05	"	"	"	"	3.86	-.19	13,13,05,05	17	
"	..	"	"	9086	0.42	+ .04	03,02,02,01	03	"	"	"	"	3643	3.72	-.25	02,02,06,05	03
"	..	"	"	9111	0.34	+ .04	01,00,08,07	11	922	1706	8.8	+32 35	2548	2.71	-.01	05,07,02,07,	11
739	1497	36.2	+22 46	2550	2.75	-.16	09,09,02,02	02	"	"	"	"	2554	2.76	-.11	01,01,05,05	06
"	"	"	"	2552	2.72	+ .16	04,04,05,04	05	"	"	"	"	2573	2.96	-.37	08,08,05,04	14
"	"	"	"	2554	2.84	+ .14	12,12,01,01	07	"	"	"	"	5844	2.87	+ .02	09,08,03,03	05
969	1506	38.8	- 8 59	3139	0.09	-.02	28,19,10,18,	17	"	"	"	"				08,14	
"	"	"	"	3208	0.12	+ .11	12,30		1063	1713	9.7	- 8 19	6128	6.58	+ .01	04,04,01,01	16
"	"	"	"				04,01		"	"	"	"	6156	6.27	+ .02	06,05,09,10	15
"	"	"	"	5361	0.22	+ .07	01,02,04,04	14	1248	1729	12.1	+40 1	3640	4.97	+ .10	11,10,04,05	14
762	1543	44.4	+ 6 47	7655	7.70	+ .01	08,08,09,10	A	"	"	"	"	3643	5.00	+ .44	10,11,32,31	17
829	1568	49.3	+53 35	8006	5.68	.00	10,09,14,15	A	"	"	"	"	3647	4.70	-.09	09,09,07,06	13
1005	1592	52.5	+37 44	2550	2.65	+ .06	12,11,00,00	07	"	"	"	"	5801	4.84	-.41	08,08,01,00	01
"	"	"	"	2552	2.70	+ .03	05,04,12,12	02	"	"	"	"	7643	4.62	+ .08	02,03,09,10	21
"	"	"	"	2554	2.82	+ .29	01,01,08,08	10	1153	..	14.7	-10 51	8288	0.15	+ .02	01,01,02,01	02
"	"	"	"						"	..	"	"	8346	0.19	+ .06	06,05,05,04	02

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DM.	H. R.	R.A. 1900.	Dec. 1900.	J. D.	Diff.	A-B	Residuals.	Res.	DM.	H. R.	R.A. 1900.	Dec. 1900.	J. D.	Diff.	A-B	Residuals.	Res.
		<i>h. m.</i>	<i>° ' "</i>								<i>h. m.</i>	<i>° ' "</i>					
1153	..	5 14.7	-10 51	9083	0.12	+ .08	08,08,04,05	05	963	1914	5 32.2	+30 26	2554	2.98	+ .03	06,06,01,01	02
"	..	"	"	9095	0.20	+ .00	08,07,02,01	03	"	"	"	"	2578	2.90	+ .05	01,01,06,06	06
"	..	"	"	9097	0.18	+ .03	05,04,02,02	01	"	"	"	"	3504	3.08	- .05	07,03,05,01,	12
"	..	"	"	"	0.20	+ .12	02,02,02,02	03	"	"	"	"	"	"	"	07,09	"
"	..	"	"	"	0.14	+ .03	02,02,01,01	03	"	"	"	"	4032	2.90	+ .07	02,02,03,02	06
1055	1753	14.9	-18 37	8297	0.06	- .04	02,01,00,00	04	1326	1931	33.7	- 2 39	5840	2.29	+ .06	14,15,11,11	00
"	"	"	"	8313	0.15	+ .02	01,01,02,02	05	"	"	"	"	5843	2.32	+ .08	05,05,05,05	03
871	1770	17.6	+ 3 27	3135	2.15	- .16	18,05,13,06	05	"	"	"	"	5855	2.26	+ .29	01,00,06,06	03
"	"	"	"	3139	2.14	- .11	02,01,02,07,	04	"	"	33.7	- 2 39	5444	2.87	- .02	03,02,07,08	01
"	"	"	"	"	"	"	06,01	"	"	"	"	"	5831	2.92	+ .01	01,01,03,03	06
"	"	"	"	3143	2.01	- .04	00,01,02,02,	09	"	"	"	"	5834	2.78	+ .09	10,10,06,06	08
"	"	"	"	"	"	"	02,05	"	"	"	"	"	5835	2.86	.00	00,00,03,02	00
3023	1771	17.7	-24 52	6510	1.50	+ .24	05,05,05,04	28	"	"	"	"	8322	3.06	- .05	00,01,06,06	20
"	"	"	"	6514	0.93	+ .38	14,15,05,04	29	"	"	"	"	8327	2.99	+ .02	00,01,00,00	13
920	1780	18.6	+17 17	7578	3.42	- .04	05,04,04,03	A	"	"	"	"	9060	2.82	- .20	03,04,19,20	04
839	1821	23.1	+25 4	4000	0.84	+ .19	11,10,07,07	07	"	"	"	"	9084	2.77	- .02	03,03,03,02	09
"	"	"	"	4001	0.74	+ .09	05,05,04,03	03	"	"	"	"	9089	2.78	- .12	00,00,01,02	08
"	"	"	"	5813	0.72	+ .09	09,09,08,08	05	"	"	33.7	- 2 39	9117	2.79	+ .10	08,07,04,04	07
1322	1825	23.8	+39 46	9120	1.40	- .23	01,01,01,02	A	"	"	"	"	5444	2.84	+ .01	06,06,04,04	04
863	..	24.0	+18 20	8299	0.54	- .01	03,03,02,03	04	"	"	"	"	5813	2.69	- .06	00,00,07,06	11
"	..	"	"	8676	0.46	.00	03,04,02,01	04	"	"	"	"	5831	2.81	+ .02	01,02,03,04	01
1364	..	24.6	+49 19	8230	0.11	+ .02	05,04,07,08	02	"	"	"	"	8322	2.88	- .05	03,03,01,02	08
"	..	"	"	8595	0.15	- .02	01,01,03,03	02	"	"	"	"	8325	2.81	- .10	10,10,02,02	01
794	1847	26.4	+16 59	3262	0.38	+ .05	03,04,06,02,	01	"	"	"	"	9060	2.72	- .15	00,00,05,05	08
"	"	"	"	"	"	"	04,02	"	"	"	"	"	9079	2.84	- .01	01,01,03,03	04
"	"	"	"	3967	0.35	.00	03,03,00,00	02	"	"	"	"	9083	2.78	- .13	02,02,04,03	02
"	"	"	"	3997	0.39	+ .02	12,12,03,03	02	"	"	"	"	9084	2.80	- .21	00,00,02,02	00
983	1852	26.9	- 0 22	2559	4.36	+ .13	06,07,08,08	05	"	"	"	"	9089	2.84	- .29	01,00,04,04	04
"	"	"	"	2573	4.28	+ .21	07,07,02,02	13	"	"	"	"	9091	2.80	- .01	02,01,04,04	00
"	"	"	"	3139	4.59	.00	04,00,03,14,	18	"	"	"	"	"	2.85	+ .02	01,01,00,01	05
"	"	"	"	"	"	"	12,01	"	"	"	"	"	9093	2.80	- .12	01,01,04,05	00
879	1879	29.6	+ 9 52	4000	2.01	- .06	08,07,01,01	11	"	"	"	"	9110	2.78	- .05	06,05,01,01	02
"	"	"	"	4001	1.78	+ .05	04,04,05,04	12	"	"	"	"	9117	2.79	- .02	01,02,01,00	01
1234	1887	30.1	- 6 5	8292	0.94	+ .01	01,01,01,02	06	1327	1932	33.8	- 2 39	8333	0.19	+ .02	01,00,03,02	06
"	"	"	"	8313	0.92	- .04	01,02,03,02	04	"	"	"	"	8655	0.31	+ .14	03,02,04,03	06
"	"	"	"	9016	0.86	- .03	05,05,01,01	02	953	1945	35.0	+29 26	2908	0.67	- .02	00,03,02,04,	01
"	"	"	"	9022	0.88	+ .03	01,02,01,01	00	"	"	"	"	"	"	"	07,02	"
"	"	"	"	9053	0.83	+ .01	04,03,03,02	05	"	"	"	"	3495	0.68	+ .09	00,02,02,03,	00
"	"	"	"	9055	0.84	- .01	02,02,01,01	04	"	"	"	"	"	"	"	01,02	"
"	"	"	"	9083	0.87	+ .12	01,01,04,04	01	"	"	"	"	3499	0.68	- .07	07,01,07,02,	00
"	"	"	"	9084	0.86	- .04	03,03,01,00	02	"	"	"	"	"	"	"	02,04	"
1319	1897	30.5	- 5 29	3252	0.76	+ .11	03,06,03,06,	R	"	"	"	"	3504	0.68	- .06	05,02,06,08,	00
"	"	"	"	"	"	"	00,07	"	"	"	"	"	"	"	"	02,09	"
"	"	30.5	- 5 29	3967	1.41	- .10	02,02,03,02	06	1211	1983	40.3	-22 29	5787	2.48	- .16	05,05,04,03	01
"	"	"	"	4318	1.31	- .06	02,01,00,01	04	"	"	"	"	5788	2.49	+ .02	02,01,03,03	00
"	"	"	"	5065	1.34	- .07	06,06,05,05	01	"	"	"	"	5791	2.50	.00	02,02,01,01	01
1241	1899	30.5	- 5 59	3643	4.28	- .32	08,08,12,12	06	963	..	41.8	+24 39	9120	0.67	- .20	03,03,03,03	02
"	"	"	"	5361	4.37	.00	01,01,00,00	03	"	"	"	"	9121	0.71	- .10	06,07,08,07	02
"	"	"	"	5388	4.36	- .05	06,07,06,06	02	1036	2067	50.3	+13 56	7646	1.70	+ .01	11,11,02,01	A
"	"	"	"	"	"	"	"	"	1089	..	52.0	+14 55	8045	0.41	- .14	06,06,03,03	A

DM.	H. R.	R.A. 1900.	Dec. 1900.	J. D.	Diff.	A-B	Residuals.	Res.	DM.	H. R.	R.A. 1900.	Dec. 1900.	J. D.	Diff.	A-B	Residuals.	Res.
		<i>h. m.</i>	<i>° ' "</i>								<i>h. m.</i>	<i>° ' "</i>					
1380	2095	5 52.9	+37 12	7646	7.37	-.02	08,09,02,01	A	1386	..	6 28.1	+22 12	8389	0.30	+ .19	00,00,02,02	03
	..	52.9	+37 12	8004	7.84	+.53	24,24,03,04	A	893	2394	28.6	+61 34	7646	2.60	+ .13	05,05,09,08	A
1163	..	53.8	+19 55	8043	0.64	+.07	00,00,05,06	A	"	"	28.6	+61 34	7686	1.10	+ .31	02,02,08,07	A
1139	2174	6 3.8	+ 2 31	3143	1.12	+.08	06,02,09,12,02		1696	..	37.3	+40 44	7651	2.24	-.08	14,15,04,03	A
"	"	"	"				01,11		1015	2470	37.4	+59 33	8211	2.08	-.10	14,14,06,06	01
"	"	"	"	3997	1.08	-.11	06,06,05,04	06	"	"	"	"	8605	2.06	-.05	01,00,09,09	01
"	"	"	"	3999	1.21	-.14	01,00,02,01	07	1406	2473	37.8	+25 14	2554	6.42	-.39	25,25,03,03	23
"	"	"	"	5800	1.17	+.02	03,04,05,05	03	"	"	"	"	2559	6.13	-.42	05,06,13,14	06
1352	2176	3.9	+48 44	4001	0.60	+.05	07,06,07,07	12	"	"	"	"	2578	6.03	+ .10	13,09,05,18,16	
"	"	"	"	5441	0.82	-.04	03,02,04,05	10								26,08	
"	"	"	"	5729	0.83	+.10	02,03,01,02	11	1595	2483	39.5	+43 41	7643	3.01	-.14	05,05,06,06	A
"	"	"	"	5752	0.61	+.06	03,03,02,02	11	1122	2486	39.9	+55 49	5526	0.06	-.01	02,02,01,01	01
1168	..	8.1	+24 2	9121	0.26	.00	06,06,08,07	08	"	"	"	"	5527	0.04	+ .04	03,03,01,00	01
"	..	"	"	9126	0.40	.00	01,02,03,02	06	"	"	"	"	5536	0.04	+ .05	03,02,01,01	01
"	..	"	"	9155	0.39	+.10	01,02,04,05	05	982	2560	48.6	+58 33	7656	6.18	-.04	05,05,02,01	A
"	..	"	"	9156	0.31	+.22	03,04,08,07	03	1462	2564	49.0	+13 18	5765	2.65	-.10	06,05,03,03	06
1211	..	8.6	+14 31	9128	0.78	.00	05,04,05,05	A	"	"	"	"	5800	2.78	-.16	16,16,01,00	07
1388	2217	8.9	+36 12	3499	0.60	.00	09,11,01,06,05	05	"	"	"	"	5821	2.67	-.10	00,00,02,01	04
"	"	"	"				05,02		"	"	"	"	5824	2.74	+ .07	23,23,06,07	03
"	"	"	"	3614	0.50	+.01	02,02,00,00	05	1716	..	49.2	- 9 54	8046	0.22	-.01	03,04,03,03	A
"	"	"	"	3997	0.54	+.19	06,05,00,00	01	1512	..	52.5	+14 21	9126	0.02	+ .19	07,08,00,00	06
1076	..	8.9	+11 50	9126	0.59	+.10	00,00,04,04	A	"	..	"	"	9145	0.10	+ .13	04,03,03,03	06
1199	..	13.8	+13 29	9126	0.62	-.08	01,00,07,08	A	1628	..	52.7	+37 14	8250	0.36	.00	03,03,06,06	00
3915	..	15.2	-24 57	9137	0.92	-.15	02,02,04,04	A	"	..	"	"	8279	0.36	.00	03,02,02,01	00
"	..	15.2	-24 57	9137	0.25	-.42	06,05,01,02	A	3911	2640	57.0	-25 4	5506	3.71	+ .02	01,00,11,10	02
969	..	15.8	+59 43	9130	0.12	+.15	01,01,06,06	05	"	"	"	"	5508	3.75	-.06	02,02,07,06	02
"	..	"	"	9155	0.00	+.12	02,03,01,02	07	1665	2654	59.1	+ 1 38	9126	1.02	+ .17	03,03,04,04	02
"	..	"	"	9167	0.08	+.14	02,02,02,02	01	"	"	"	"	9145	1.05	-.04	04,04,02,02	01
"	..	"	"	9170	0.08	-.16	01,01,05,04	01	1594	..	7 3.5	+25 54	9137	0.56	-.12	04,04,00,01	07
1236	2298	18.5	+ 4 39	2559	2.00	-.21	00,00,04,03	02	"	..	"	"	9142	0.64	-.08	07,07,03,02	01
"	"	"	"	2573	1.90	+.03	03,03,16,16	03	"	..	"	"	9151	0.68	+ .13	05,05,09,06	05
"	"	"	"	2907	2.03	+.02	08,03,05,08,05	05	1609	..	6.1	+22 27	9137	0.15	-.06	01,01,03,03	01
							07,01		"	..	"	"	9138	0.18	+ .01	10,10,12,11	02
1418	..	21.6	+ 0 31	9126	1.02	-.07	04,04,03,03	A	1443	2763	12.3	+16 43	2563	6.17	-.26	21,22,15,15	A
1427	..	21.8	+20 52	7578	1.36	-.03	11,12,03,03	A	5189	2764	12.4	-23 8	9134	0.84	+ .01	03,04,02,02	R
932	2331	22.1	+58 14	7642	3.42	-.10	03,03,02,02	A	"	"	"	"	9145	1.42	+ .11	04,04,04,05	01
1574	2356	24.0	- 6 58	4001	0.03	+.07	03,02,07,08	01	"	"	"	"	9148	1.43	-.04	11,11,00,00	02
"	"	"	"	5800	0.02	+.03	03,03,01,01	00	"	"	"	"	9151	1.38	+ .01	09,09,04,04	03
1314	..	24.5	+ 7 11	8045	0.80	+.08	01,02,06,06	06	1645	2777	14.2	+22 10	2572	4.57	-.30	04,05,00,00	06
"	..	"	"	8049	0.91	-.14	02,02,02,03	05	"	"	"	"	2578	4.46	+ .23	05,07,02,14,05	
1204	2370	25.6	+11 19	3614	2.88	+.24	28,29,15,14	08								03,17	
"	"	"	"	3999	2.73	-.06	09,09,02,02	07	"	"	"	"	2580	4.51	-.02	22,15,06,03,00	
1286	..	26.5	+17 51	2907	0.58	+.05	05,02,04,09,04									16,20	
"	..	"	"				03,11		375	..	14.5	+73 16	8078	0.46	-.05	03,03,01,00	00
"	..	"	"	2908	0.58	-.08	07,04,03,01,04		"	..	"	"	8230	0.50	-.09	06,06,09,09	04
"	..	"	"				04,06		"	..	"	"	9167	0.44	-.01	01,01,01,02	02
"	..	"	"	3153	0.46	+.05	07,01,07,05,08		"	..	"	"	9170	0.44	-.02	05,05,04,04	00
							15,10		1420	..	14.6	+50 20	2960	0.14	+ .08	02,06,05,02,04	
1386	..	28.1	+22 12	8250	0.16	-.04	03,03,13,12	11								07,08	
"	..	"	"	8388	0.34	.00	05,04,01,00	07	"	..	"	"	3567	0.11	-.02	06,06,02,01	01

DM.	H. R.	R.A. 1900.	Dec. 1900.	J. D.	Diff.	A-B	Residuals.	Res.	DM.	H. R.	R.A. 1900.	Dec. 1900.	J. D.	Diff.	A-B	Residuals.	Res.
		<i>h. m.</i>	<i>° ' "</i>								<i>h. m.</i>	<i>° ' "</i>					
1420	..	7 14.6	+50 20	3934	0.06	-.03	00,00,09,09	04	2049	3026	7 43.1	-15 44	5513	0.09	+.04	01,01,01,01	03
"	..	"	"	6188	0.08	+.04	01,01,05,04	02	1676	..	44.7	+31 52	9140	0.85	-.02	09,08,03,04	00
1192	2784	14.7	+55 28	2960	0.98	+.02	14,02,12,05,03,09	06	"	..	"	"	9142	0.76	+.01	01,01,05,06	09
"	"	"	"	3176	0.86	-.03	03,16,20,01,13,15	06	"	..	"	"	9151	0.95	-.14	11,10,03,04	10
"	"	"	"	3295	0.97	-.05	16,08,07,03,01,03	05	2222	3174	8 1.6	- 8 57	3176	1.53	+.06	15,09,06,04	03
"	"	"	"	4001	0.88	-.06	07,07,01,01	04	"	"	"	"	3183	1.48	+.01	06,04,01,00,06,05	02
1208	..	17.2	+56 44	9138	0.12	+.23	04,03,07,07	01	"	"	"	"	3643	1.37	+.10	03,03,01,02	13
"	..	"	"	9155	0.10	+.04	03,02,06,06	01	"	"	"	"	3990	1.62	+.08	02,03,01,02	12
"	..	"	"	9167	0.04	-.05	05,06,02,02	07	2450	3188	3.6	- 2 41	7655	4.22	+.27	05,05,05,05	A
"	..	"	"	9170	0.17	-.30	06,07,04,03	06	"	"	3.6	- 2 41	7951	5.25	-.06	21,21,12,11	19
4590	2870	25.1	-31 38	6922	0.57	+.02	09,08,01,02	01	"	"	"	"	7968	5.62	-.39	06,07,11,11	18
"	"	"	"	6927	0.58	.00	10,10,04,04	00	2260	..	4.0	-19 34	9128	0.29	-.02	13,13,13,14	12
1581	2891	28.2	+32 6	2573	0.99	-.22	07,06,09,09	09	"	..	"	"	9145	0.53	+.02	02,01,03,02	12
"	"	"	"	2578	0.92	-.08	16,13,04,08,00,08	02	1695	..	5.5	+32 47	7669	3.72	+.04	04,03,06,07	A
"	"	"	"	2579	0.94	+.18	01,05,05,04,04,01	04	1867	3208	6.5	+17 56	2579	0.98	+.17	02,12,14,01,01,01	06
"	"	"	"	2589	0.92	-.11	01,09,11,06,02,04	02	"	"	"	"	2593	0.87	-.04	00,02,03,00,19,18	05
"	"	"	"	2592	0.75	-.14	03,11,09,04,11,06	15	1154	..	8.8	+59 30	7684	2.72	-.13	08,08,01,02	A
"	"	28.2	+32 6	7587	0.94	+.13	11,11,03,04	A	409	3236	9.6	+72 43	3327	3.54	+.21	15,08,08,00,06,07	02
"	"	28.2	+32 6	2578	7.32	+.75	18,01,18,24,05,18	15	"	"	"	"	3492	3.58	+.06	04,01,04,06,03,03	02
"	"	"	"	2579	7.13	+.06	59,38,21,41,38,79	04	"	"	"	"	3643	3.63	+.10	02,01,06,06	07
"	"	"	"	7566	7.06	-.23	15,15,10,10	11	"	"	"	"	3673	3.58	-.11	05,06,08,07	02
5709	2909	30.1	-23 15	6603	0.25	-.22	01,01,09,08	10	"	"	"	"	3677	3.70	+.15	09,09,03,02	14
"	"	"	"	6604	0.05	-.08	02,02,06,06	10	"	"	"	"	3680	3.60	+.07	06,06,10,09	04
1745	..	31.9	+42 40	9140	0.14	+.04	05,04,04,05	00	"	"	"	"	3688	3.51	-.10	03,02,03,03	05
"	..	"	"	9148	0.16	+.03	10,10,05,05	02	"	"	"	"	7686	3.44	.00	04,03,06,05	12
"	..	"	"	9151	0.11	-.10	04,05,07,07	03	4358	3240	10.2	-36 1	6922	0.92	-.04	06,07,00,01	01
"	..	"	"	9152	0.13	-.22	01,00,02,03	01	"	"	"	"	6927	0.90	-.24	06,05,05,05	01
2021	..	32.0	-14 16	8344	0.22	-.04	05,06,05,04	01	1802	..	13.1	+35 22	9152	1.02	+.14	04,04,02,02	01
"	..	"	"	8672	0.24	-.04	00,01,00,00	01	"	..	"	"	9153	1.08	.00	02,03,03,04	05
4707	2948	34.7	-26 34	5775	0.26	-.01	04,04,02,02	03	"	..	"	"	9163	0.99	-.14	05,04,01,02	04
"	"	"	"	5788	0.20	-.04	04,03,05,05	03	1565	..	13.9	+47 44	9152	0.28	+.03	00,00,04,04	02
"	"	"	"	5791	0.22	.00	01,02,05,05	01	"	..	"	"	9153	0.33	-.02	07,08,00,01	03
592	..	36.4	+65 24	8078	0.05	-.02	03,04,02,03	03	"	..	"	"	9163	0.29	+.06	01,00,04,03	01
"	..	"	"	8318	0.02	-.03	03,03,02,01	04	"	..	13.9	+47 44	9153	1.43	-.02	05,06,04,05	A
2194	3010	40.9	-14 27	4000	0.69	+.06	01,01,04,03	05	1859	3287	18.0	+42 20	7578	2.10	+.01	01,01,03,02	04
"	"	"	"	5054	0.72	+.04	03,04,03,03	02	"	"	"	"	7592	2.04	.00	04,03,08,09	02
"	"	"	"	5057	0.80	+.01	03,03,01,02	06	"	"	"	"	7596	2.04	+.01	11,11,01,01	02
"	"	"	"	5793	0.74	+.01	00,00,00,01	00	1612	3311	20.7	+27 16	3961	0.01	-.26	03,03,03,07	01
1585	3013	41.1	+33 40	2573	5.56	-.63	03,03,04,04	A	"	"	"	"	4038	0.02	-.12	07,07,09,08	00
2049	3026	43.1	-15 44	5504	0.05	+.06	06,07,03,03	01	1920	3312	20.7	+24 52	4000	0.60	+.16	05,04,01,02	06
"	"	"	"	5506	0.04	-.01	06,06,03,02	02	"	"	"	"	5866	0.49	+.22	06,06,05,04	05

DM.	H. R.	R.A. 1900.	Dec. 1900.	J. D.	Diff.	A-B	Residuals.	Res.	DM.	H. R.	R.A. 1900.	Dec. 1900.	J. D.	Diff.	A-B	Residuals.	Res.
1997	3395	8 30.5	+ 6 58	2942	1.16	-.32	22,12,10,04, 01,06	05	1509	3743	9 22.1	+46 2	7592	2.22	-.01	04,04,09,09	02
"	"	"	"	2959	1.00	-.07	11,05,06,07, 03,03	11	"	"	22.1	+46 2	7686	5.22	+.12	02,02,01,00	03
"	"	"	"	3176	1.11	+.08	14,08,05,07, 02,05	00	845	3757	23.7	+63 30	2579	5.59	+.29	03,04,08,09	A
"	"	"	"	3999	1.18	-.33	02,02,01,02	07	"	"	"	"	2592	5.52	+.44	13,19,05,31, 23,54	25
2152	..	34.2	+19 55	9138	0.13	+.14	05,05,02,01	13	"	"	"	"	2593	5.31	+.20	23,08,14,26	18
"	..	"	"	9139	0.04	-.09	03,03,03,04	04	"	"	"	"	7695	5.19	+.02	01,26	
"	..	"	"	9168	0.16	+.08	03,03,02,03	16	"	"	"	"	7961	5.08	+.03	42,12,30,03, 07,05	03
"	..	34.2	+19 55	9138	0.78	+.08	01,01,07,08	03	"	"	"	"	7976	4.84	+.06	16,15,07,06	15
"	..	"	"	9139	0.72	-.12	10,09,02,01	03	"	"	"	"	"	4.84	-.01	00,01,05,05	26
"	..	"	"	9168	0.76	-.28	06,07,02,01	01	"	"	"	"	"	4.84	-.01	10,09,06,05	00
2166	3428	34.6	+20 1	9139	1.29	-.04	04,04,08,08	03	597	..	26.0	+67 14	8089	0.06	-.05	26,27,10,10	00
"	"	"	"	9140	1.24	-.16	05,05,04,05	02	"	..	"	"	8332	0.04	-.05	05,06,01,01	01
"	"	"	"	9168	1.26	-.15	09,09,04,03	00	2014	3779	26.5	+10 9	7655	4.17	+.14	01,01,00,01	01
"	"	34.6	+20 1	9139	2.81	+.34	02,02,18,18	07	"	"	"	"	7664	3.94	+.21	06,05,08,07	11
"	"	"	"	9140	2.74	+.09	02,01,18,18	00	7355	3781	26.5	-31 27	6601	0.76	-.36	05,05,09,08	12
"	"	"	"	9168	2.66	-.16	03,03,01,01	08	"	"	"	"	6603	0.86	+.05	01,01,07,08	05
2171	3429	34.7	+19 54	9137	1.30	+.03	03,03,04,04	05	2077	3818	30.5	+14 49	7656	3.34	+.08	07,08,02,02	05
"	"	"	"	9142	1.21	-.24	10,10,15,15	04	2248	..	48.9	+ 5 25	7653	1.56	+.04	10,10,03,02	A
"	"	"	"	9148	1.23	+.02	02,01,01,01	02	"	..	"	"	7693	1.75	+.04	01,01,09,08	10
1759	..	36.3	+49 15	8078	0.30	-.04	00,01,01,00	04	3047	3963	59.3	-17 37	8372	0.88	-.16	00,00,02,02	09
"	..	"	"	8431	0.23	+.06	05,04,03,02	03	"	"	"	"	8374	0.90	-.15	03,02,00,01	07
2027	3461	39.0	+18 31	7996	7.08	-.04	15,14,19,18	A	"	"	"	"	9156	0.65	+.02	04,05,04,04	09
1824	3474	40.6	+29 8	2550	2.22	-.08	01,02,00,01	07	2149	3982	10 3.0	+12 27	2572	6.23	-.18	09,09,02,02	16
"	"	"	"	2552	2.40	+.01	05,05,08,08	11	"	"	"	"	2573	5.83	+.62	19,18,05,06	04
"	"	"	"	2554	2.23	+.18	04,04,03,03	06	"	"	"	"	2578	6.50	+.27	12,12,16,16	44
"	"	"	"	3961	2.28	+.24	01,01,13,12	01	"	"	"	"	"	6.50	+.27	84,69,16,07, 05,12	23
"	"	"	"	4428	2.07	+.02	16,16,09,08	22	"	"	"	"	6149	6.74	+.31	07,07,07,07	47
"	"	"	"	4675	2.52	-.05	05,05,06,05	23	"	"	"	"	7976	6.11	+.58	02,02,13,14	16
7480	..	46.8	-24 59	8048	0.28	-.07	08,07,06,06	A	"	"	"	"	7996	6.22	+.41	11,12,05,05	05
2661	3552	50.6	- 7 36	6601	0.24	-.15	09,10,02,02	00	534	4021	9.8	+71 34	3677	0.62	+.16	08,02,13,14	16
"	"	"	"	6604	0.24	-.04	01,01,17,17	00	"	"	"	"	3941	0.56	+.03	07,07,07,07	02
1956	3579	54.2	+42 11	7640	6.32	+.09	19,19,17,16	A	"	"	"	"	3990	0.62	-.16	03,03,06,07	08
"	"	54.2	+42 11	7640	0.71	-.10	02,03,09,09	A	"	"	"	"	4282	0.68	+.09	01,00,07,07	08
2048	3617	9 1.7	+23 23	8078	0.32	.00	00,01,01,00	A	"	"	"	"	8080	0.62	.00	04,03,05,05	02
1715	3626	3.0	+27 3	7690	3.96	+.35	03,02,07,07	03	"	"	"	"	8318	0.72	+.08	02,02,05,05	04
"	"	"	"	7944	4.02	-.12	07,07,03,04	03	2467	4057	14.5	+20 21	7656	7.69	+.24	00,03,04,01,00	08
1054	..	4.8	+62 3	8076	0.39	+.02	05,04,01,02	01	"	"	"	"	7686	0.90	+.09	00,01,01,02	08
"	..	"	"	8286	0.42	.00	03,04,01,00	04	2301	4079	14.5	+20 21	7656	3.70	+.07	04,04,00,00	A
"	..	"	"	9170	0.32	.00	01,00,14,15	06	2124	..	18.1	+ 6 12	9130	0.06	-.08	03,03,04,03	A
7194	3644	5.7	-29 57	6603	4.32	-.15	01,00,07,08	02	2358	4085	19.1	+ 2 52	9128	0.16	-.02	08,09,05,06	A
"	"	"	"	6922	4.28	+.05	01,00,02,02	02	"	"	"	"	9145	0.19	-.26	03,03,03,03	04
1320	..	7.7	+53 7	8076	0.08	+.05	02,02,02,01	03	"	"	"	"	9151	0.26	+.15	00,01,01,00	01
"	..	"	"	8333	0.14	.00	00,00,04,01	03	"	"	"	"	9152	0.20	-.08	00,01,01,00	00
2167	3665	9.2	+ 2 44	7983	7.57	-.30	19,19,23,24	A	8333	4118	25.0	-30 5	6601	3.95	+.30	02,01,01,00	00
2063	..	9.4	+23 47	7685	1.38	+.07	01,00,08,08	A	1657	4191	37.7	+46 44	9130	1.60	+.41	09,08,19,18	A
1979	3705	15.0	+34 49	7668	5.62	+.31	02,02,03,03	A	"	"	"	"	9184	2.06	-.49	05,05,05,04	23
"	"	15.0	+34 49	7668	1.78	-.08	08,08,04,05	A	2314	4259	50.2	+25 17	2616	1.61	+.12	10,09,05,05	23

DM.	H. R.	R.A. 1900.	Dec. 1900.	J. D.	Diff.	A-B	Residuals.	Res.	DM.	H. R.	R.A. 1900.	Dec. 1900.	J. D.	Diff.	A-B	Residuals.	Res.
2314	4259	10 50.2	+25 17				14,19		2358	4527	11 42.8	+20 46				02,05	
"	"	"	"	2644	1.68	+ .12	04,02,02,04,02,07	00	2489	4540	45.5	+ 2 20	7685	7.90	-.26	36,37,43,42	A
"	"	"	"	2645	1.74	-.03	02,04,01,14,13,26	06	"	"	"	"	8358	0.18	-.05	02,02,01,02	01
1338	..	53.7	+59 28	2652	1.60	-.03	00,06,07,00,00,01	10	1568	..	12 3.2	+56 1	8133	0.40	-.01	04,05,01,01	02
"	..	"	"	2961	1.64	+ .11	08,10,01,01,04,04	06	2246	..	6.5	+36 39	7949	0.86	+ .12	09,08,09,08	A
"	..	"	"	3677	1.72	+ .15	04,04,03,04	02	2205	..	9.1	+33 20	3941	1.86	-.04	00,00,02,03	03
"	..	"	"	6163	1.84	+ .01	04,03,01,01	14	"	..	"	"	3969	1.84	.00	05,04,03,04	01
704	..	11 5.3	+66 33	7592	0.23	+ .10	04,04,09,10	01	2284	4666	11.1	+41 13	2652	2.98	+ .11	07,07,01,03,10	10
"	..	"	"	7596	0.24	+ .15	13,13,04,04	00	"	"	"	"	"	"	"	24,21	
2162	4345	7.1	+36 21	9130	0.51	+ .02	11,12,10,09	07	"	"	"	"	3941	3.00	+ .09	28,27,04,04	08
"	"	"	"	9140	0.63	-.04	01,01,09,09	05	"	"	"	"	3969	3.25	-.18	01,01,07,06	17
"	"	"	"	9142	0.60	+ .15	04,04,05,05	02	381	..	11.9	+80 41	3969	0.54	-.10	00,00,02,02	07
2572	..	8.5	+20 41	7618	3.72	+ .01	04,04,01,02	04	"	..	"	"	4106	0.49	+ .10	13,14,01,01	02
"	..	"	"	7628	3.64	+ .24	06,05,04,05	04	"	..	"	"	5518	0.38	+ .13	04,04,04,05	09
456	..	8.7	+74 1	7695	0.29	+ .10	13,13,01,02	06	3263	4678	13.0	- 3 23	2970	0.32	-.07	12,06,07,11,03,08	00
"	..	"	"	8106	0.40	+ .17	06,06,02,01	05	"	"	"	"	2995	0.30	-.04	05,06,03,02	02
"	..	"	"	8154	0.36	.00	00,00,09,10	01	"	"	"	"	5540	0.35	+ .02	06,07,01,02	03
2356	4408	20.4	+17 1	7971	5.44	-.13	03,04,06,06	A	"	"	"	"	9152	0.02	+ .21	01,01,00,00	06
2502	4414	21.7	+ 3 33	2572	0.96	-.25	03,02,02,02	09	2115	4698	15.7	+27 37	9153	0.10	-.03	02,02,01,00	06
"	"	"	"	2594	0.94	+ .12	22,13,10,25,04,29	11	"	"	"	"	7618	3.49	-.16	14,14,09,09	A
"	"	"	"	2595	1.12	+ .14	18,18,01,01,09,09	07	2337	4707	17.5	+26 24	8151	0.58	-.01	00,00,01,01	03
"	"	"	"	6152	1.18	-.05	00,01,01,01	13	2038	..	23.3	+45 21	8377	0.52	+ .24	01,01,03,02	03
2504	4418	22.8	+ 3 24	2594	2.47	-.04	05,17,23,25,20,46	07	2354	4752	23.9	+26 28	2622	1.32	-.15	04,04,07,12,01,10	01
"	"	"	"	2595	2.41	-.24	07,14,07,00,02,03	01	"	"	"	"	2641	1.32	-.13	09,04,13,13,01,12	01
"	"	"	"	2622	2.34	-.03	12,07,04,06,09,16	06	"	"	"	"	2645	1.28	+ .09	18,18,01,09,08,00	03
"	"	"	"	4039	2.36	-.04	03,04,08,08	04	3482	4757	24.7	-15 58	5856	5.07	+ .06	03,04,04,04	13
2433	4422	23.7	+39 54	5564	3.12	-.03	16,16,01,01	02	"	"	"	"	5859	4.86	+ .13	03,03,01,00	08
"	"	"	"	5565	3.17	-.06	08,08,05,06	03	2621	..	30.0	+ 8 0	5875	4.88	+ .15	10,10,00,01	06
8928	4444	27.3	-28 43	6601	0.06	.00	04,04,05,05	A	2584	4792	30.1	+18 56	7697	1.02	-.04	01,01,06,05	A
2546	4484	33.3	- 1 53	3707	0.74	-.07	05,05,02,02	A	"	"	"	"	2622	1.34	-.44	A, . . . , 10, 10	09
1947	4486	33.5	+45 40	2651	1.62	+ .01	02,14,12,17,19,03	01	"	"	"	"	2635	1.52	+ .09	10,01,10,01,04,03	09
"	"	"	"	3941	1.70	-.11	01,01,11,10	07	"	"	"	"	2641	1.62	+ .11	14,04,19,08,06,13	19
"	"	"	"	3966	1.56	+ .32	04,03,09,09	07	"	"	"	"	2645	1.28	+ .09	18,18,01,09,15,08,00	15
2270	4496	35.7	+34 46	7949	6.49	+ .42	02,01,04,03	A	"	"	"	"	7752	1.39	+ .10	06,06,01,00	04
2179	4501	36.4	+32 18	7633	3.95	-.02	04,03,05,06	A	"	"	"	"	5557	0.06	+ .07	05,06,03,03	04
2358	4527	42.8	+20 46	2608	4.31	-.28	10,01,10,17,16,32	16	3676	4822	36.1	-12 28	5569	0.20	+ .03	06,06,01,02	10
"	"	"	"	2616	4.12	+ .47	18,03,16,01,16,14	03	"	"	"	"	5863	0.05	-.10	08,09,02,03	05
"	"	"	"	2644	4.02	+ .34	12,10,02,06,13	13	2601	4825	36.6	- 0 54	7653	5.76	+ .10	06,06,01,00	A

DM.	H. R.	R.A. 1900.	Dec. 1900.	J. D.	Diff.	A-B	Residuals.	Res.	DM.	H. R.	R.A. 1900.	Dec. 1900.	J. D.	Diff.	A-B	Residuals.	Res.	
2504	..	h. m. 12 40.5	° ' +14 55	3637	0.44	+14	03,02,03,04	19	1598	5054	h. m. 13 19.9	° ' +55 27	6340	1.23	+06	03,04,06,06	07	
"	..	"	"	4100	0.94	+01	11,11,01,01	31	"	"	"	"	"	1.33	+18	04,03,08,09	03	
"	..	"	"	5576	0.40	+07	07,06,02,02	23	"	"	"	"	6342	1.18	-24	03,04,13,14	12	
"	..	"	"	7698	0.68	-03	01,01,01,02	05	"	"	"	"	"	1.22	-24	04,04,09,09	08	
"	..	"	"	7704	0.67	-10	12,13,03,02	04	"	"	"	"	6351	1.08	.00	06,06,14,13	22	
2468	4849	41.3	+10 6	7685	2.76	-08	00,01,02,03	03	"	"	"	"	"	1.12	+12	07,06,04,05	18	
"	"	"	"	7698	2.82	+03	04,04,03,02	03	"	"	"	"	6359	1.39	+06	01,02,01,02	09	
3569	4877	46.2	- 9 47	8001	3.12	.00	02,02,01,02	A	"	"	"	"	"	1.38	+19	00,00,01,00	08	
2613	..	47.0	+19 42	8081	0.55	-18	00,01,01,00	07	"	"	"	"	7990	1.40	+05	02,02,04,04	10	
"	..	"	"	8377	0.42	+11	03,03,02,01	06	"	"	"	"	"	1.41	+10	02,02,00,00	11	
"	..	"	"	8381	0.47	-06	08,07,07,06	01	2621	5072	23.5	+14 19	7710	3.73	-34	01,02,06,07	00	
2551	4884	47.2	+17 37	3637	0.30	-09	03,03,06,07	24	"	"	"	"	7718	3.73	-46	03,04,03,04	00	
"	"	"	"	3990	0.53	-10	03,04,04,04	01	3706	5088	25.2	- 5 57	8033	4.31	+32	09,09,02,02	A	
"	"	"	"	4106	0.46	+03	04,03,09,09	08	9676	5210	46.0	-32 30	6601	1.36	-01	09,09,01,02	09	
"	"	"	"	5868	0.90	.00	05,05,03,03	36	"	"	"	"	6608	1.44	+01	02,03,08,08	01	
"	"	"	"	8056	0.50	-12	00,01,01,02	04	"	"	"	"	6613	1.55	+14	13,13,16,17	10	
2580	4915	51.4	+38 52	2641	2.40	+10	13,03,09,01	02	2725	5235	49.9	+18 54	7994	7.70	+65	07,07,19,19	A	
"	"	"	"	2644	2.54	-01	19,16,03,03,	12	1782	5329	14 9.9	+52 16	2645	1.88	.00	05,02,07,08,	03	
"	"	"	"				06,08										01,06	
"	"	"	"	2645	2.46	+13	06,02,09,06,	04	"	"	"	"	2646	1.90	+13	07,01,07,07,	01	
"	"	"	"				10,04										04,03	
"	"	"	"	3637	2.27	-26	01,00,11,11	15	"	"	"	"	3741	2.00	+12	01,02,02,01	09	
3430	4963	13 4.8	- 5 0	5539	3.84	-08	02,02,02,01	05	"	"	"	"	5866	1.80	+05	03,03,00,01	11	
"	"	"	"	5540	3.81	-06	02,02,02,02	02	"	"	"	"	6354	1.83	+06	12,11,06,05	08	
"	"	"	"	5541	3.73	-14	08,07,02,02	06	"	"	"	"	"	2.04	+01	05,05,19,19	13	
2611	4967	5.1	+39 4	4115	0.06	+12	03,02,01,01	16	1784	5350	12.6	+51 50	5856	3.36	+12	06,05,02,03	14	
"	"	"	"	5562	0.12	+09	08,09,01,01	10	"	"	"	"	5859	3.26	+01	02,02,02,03	24	
"	"	"	"	5576	0.13	+30	03,04,05,06	09	"	"	"	"	5863	3.42	+05	04,04,00,01	08	
"	"	"	"	5856	0.31	-18	03,04,07,06	09	"	"	"	"	7698	3.84	+19	04,05,02,02	34	
"	"	"	"	5857	0.50	-11	01,01,04,04	28	"	"	"	"	7707	3.62	+24	15,14,07,07	12	
2697	4968	5.1	+18 4	7755	6.96	-10	07,08,05,04	A	3834	..	17.3	- 7 19	5547	0.04	-01	06,06,02,02	00	
2193	4983	7.2	+28 23	7994	8.16	+20	27,26,02,01	A	"	..	"	"	5569	0.04	-05	01,01,01,02	00	
3562	4990	8.1	-18 18	6601	0.36	+13	05,04,02,02	01	2882	5386	18.5	+ 8 54	4004	1.51	-14	05,04,06,07	02	
"	"	"	"	6607	0.34	+02	10,10,01,01	01	"	"	"	"	4115	1.53	-08	00,00,01,01	00	
717	..	9.6	+67 52	4115	0.42	+17	03,03,00,01	04	"	"	"	"	5555	1.55	+02	01,00,02,01	02	
"	..	"	"	4129	0.47	+30	05,04,00,00	01	2673	..	19.3	+11 42	8139	0.34	-08	00,01,03,02	A	
"	..	"	"	5856	0.49	+18	06,06,01,01	03	3880	5397	19.9	-19 31	8089	0.59	+22	08,08,01,02	11	
"	..	"	"	6153	0.46	+09	05,05,07,06	00	"	"	"	"	8404	0.42	-08	02,03,03,02	06	
3635	..	9.7	-10 50	7700	1.03	-12	03,03,01,01	00	"	"	"	"	8438	0.42	-03	08,08,04,03	06	
"	..	"	"	7709	1.03	-02	14,13,05,06	00	2733	..	21.0	+24 7	8582	0.24	-03	05,05,00,00	05	
720	..	10.1	+67 49	9130	0.45	-14	03,04,06,05	01	"	..	"	"	"	0.14	+11	02,02,06,06	05	
"	..	"	"	9138	0.52	-13	04,04,00,00	06	1804	5404	21.8	+52 19	7980	7.54	+18	19,19,21,21	A	
"	..	"	"	9142	0.42	+05	04,04,11,11	04	2332	5415	24.2	+28 44	2713	0.50	+01	07,07,13,06,	00	
2765	..	18.6	+ 3 14	8076	0.21	-02	01,01,00,01	09								06,13		
"	..	"	"	8384	0.32	-07	03,03,02,02	02	"	"	"	"	3637	0.55	+18	07,08,04,05	05	
"	..	"	"	8386	0.38	+01	01,01,00,00	08	"	"	"	"	3640	0.46	-15	06,06,03,03	04	
1598	5054	19.9	+55 27	6337	1.58	+12	32,31,19,18	28	2536	5447	30.3	+30 11	7710	5.86	-16	11,10,04,04	A	
"	"	"	"	"	1.32	+02	09,09,12,12	02	"	"	"	"	7795	5.88	-17	12,12,18,18	A	
"	"	"	"	6339	1.21	-06	10,09,10,09	09	2768	5475	36.0	+16 51	4009	0.87	+30	03,02,01,01	05	
"	"	"	"	"	1.32	-09	17,18,23,28	02	"	"	"	"	4122	0.80	.00	07,06,00,00	02	

DM.	H. R.	R.A. 1900.	Dec. 1900.	J. D.	Diff.	A-B	Residuals.	Res.	DM.	H. R.	R.A. 1900.	Dec. 1900.	J. D.	Diff.	A-B	Residuals.	Res.				
2768	5475	14 36.0	+16 51	5542	0.80	.00	00,01,04,05	02	2636	5733	15 20.7	+37 44				05,11					
11661	5497	40.2	-25 1	5506	1.70	-.11	07,07,03,03	03	"	"	"	"	2595	2.02	+.53	18,06,12,09,	06				
"	"	"	"	5513	1.81	+.02	02,02,03,02	08	"	"	"	"	"	"	"	08,00	"				
"	"	"	"	5526	1.67	-.02	02,02,01,02	06	"	"	"	"	5508	2.04	-.03	03,03,01,00	08				
3966	5531	45.3	-15 38	2596	2.26	+.02	05,02,08,15,	01	"	"	"	"	5879	1.92	+.01	02,02,03,02	04				
"	"	"	"				00,14		3981	..	22.7	- 9 0	8088	0.63	+.10	00,01,02,02	02				
"	"	"	"	5544	2.18	-.11	03,03,01,02	07	"	..	"	"	8438	0.69	-.06	02,03,02,02	04				
"	"	"	"	5546	2.18	.00	05,04,00,01	07	"	..	"	"	8872	0.64	-.17	00,00,02,02	01				
"	"	"	"	5863	2.30	+.05	00,01,00,00	05	12155	5765	27.3	-24 9	6617	0.06	-.03	04,04,10,09	04				
"	"	"	"	7012	2.32	+.17	04,04,05,06	07	"	"	"	"	6621	0.14	.00	04,03,00,01	04				
2870	5544	46.8	+19 31	4114	2.00	-.08	08,07,10,09	A	4031	5816	33.2	- 8 28	2711	0.01	-.24	15,12,03,03,	06				
3265	..	48.7	+ 0 0	9163	0.61	+.26	07,06,00,01	01	"	"	"	"	4038	0.11	+.02	01,01,03,04	04				
"	..	"	"	9167	0.64	-.29	05,05,03,02	02	"	"	"	"	4065	0.08	-.04	02,02,01,01	15				
"	..	"	"	9174	0.65	+.10	01,01,05,05	03	"	"	"	"	5900	0.23	-.02	03,02,04,03	16				
"	"	"	"	9177	0.66	-.32	14,14,03,04	04	"	"	"	"	6997	0.10	+.06	00,00,01,01	03				
"	"	"	"	9184	0.56	-.04	04,03,02,01	06	"	"	"	"	7000	0.08	+.05	03,02,03,03	01				
"	"	"	"	9212	0.66	+.08	02,02,00,00	04	"	"	"	"	7005	0.06	.00	02,01,05,06	01				
"	"	"	"	9217	0.56	-.25	11,11,04,05	06	"	"	"	"	8077	0.04	-.05	02,02,01,01	06				
4125	5568	51.6	-20 58	6601	2.22	-.08	04,04,01,01	04	2626	..	34.5	+36 34	8398	0.02	.00	04,05,05,04	00				
"	"	"	"	6607	2.14	+.02	03,03,02,03	04	"	..	"	"	9175	0.08	+.08	03,03,02,03	06				
1724	..	56.6	+54 15	8077	0.66	+.03	02,02,01,02	04	"	..	"	"	480	5829	35.1	+80 47	3294	0.59	+.06	10,00,09,08,	09
"	..	"	"	8363	0.72	-.12	00,01,00,01	02	"	"	"	"	"	"	"	04,03	"				
"	..	"	"	8374	0.70	-.07	03,02,03,03	00	"	"	"	"	3295	0.70	-.05	03,00,03,15,	02				
"	..	"	"	9117	0.73	+.08	02,02,10,10	03	"	"	"	"	"	"	"	08,07	"				
2983	5610	59.2	+ 5 52	4106	0.30	+.20	03,04,02,03	02	"	"	"	"	3694	0.72	-.14	06,07,01,01	04				
"	"	"	"	4121	0.27	+.22	00,00,09,08	01	"	"	"	"	4038	0.63	+.14	06,05,01,00	05				
"	"	"	"	4122	0.39	-.18	11,11,01,02	11	"	"	"	"	5866	0.74	+.01	01,01,03,04	06				
"	"	"	"	5901	0.14	-.04	05,05,03,03	14	"	"	"	"	3828	1.03	+.10	07,06,02,02	06				
2259	5618	15 0.5	+48 3	8563	0.56	+.31	07,07,08,08	A	2665	5834	35.6	+36 58	4038	0.86	+.01	10,10,00,00	11				
2845	..	8.1	+39 3	8048	0.10	+.05	01,01,01,01	11	"	"	"	"	5542	0.76	+.09	02,02,02,02	21				
"	..	"	"	8052	0.09	-.02	01,01,02,01	12	"	"	"	"	6335	1.00	+.11	16,16,07,07	03				
"	..	"	"	8150	0.28	-.03	09,09,06,06	07	"	"	"	"	"	1.20	+.11	02,01,00,00	23				
"	..	"	"	8570	0.26	-.12	00,00,01,00	05	"	"	"	"	2911	5867	41.6	+15 44	4038	6.32	+.03	19,19,11,11	07
"	..	"	"	9153	0.35	.00	07,07,07,07	14	"	"	"	"	4121	6.18	-.19	04,04,03,02	07				
"	..	"	"	9167	0.18	-.05	03,03,08,08	03	"	"	"	"	3024	5911	48.5	+13 31	7760	6.50	+.08	08,07,04,05	A
2939	5659	8.3	+19 40	2713	0.76	+.09	09,15,05,18,	04	2849	5933	51.8	+15 59	8039	8.21	-.30	18,17,00,00	A				
"	"	"	"				01,18		4275	..	53.3	-19 39	8439	0.38	-.16	03,02,05,04	A				
"	"	"	"	3640	0.90	-.12	06,05,03,02	10	2946	..	55.3	+17 40	7749	0.22	+.13	09,10,02,02	A				
"	"	"	"	3828	0.67	-.18	08,08,00,01	13	2767	..	56.9	+26 27	7733	3.16	-.09	09,09,05,04	A				
"	"	"	"	4065	0.88	+.21	05,05,05,05	08	2663	5968	57.2	+33 37	7699	5.04	-.23	09,08,04,04	A				
"	"	"	"	5892	0.73	+.04	01,02,01,00	07	11456	6006	16 3.2	-32 23	6676	0.68	+.03	02,02,01,01	00				
"	"	"	"	6986	0.82	+.08	02,03,10,11	02	"	"	"	"	6681	0.67	+.02	00,00,02,01	01				
"	"	"	"	6991	0.82	+.01	02,02,01,01	02	"	"	"	"	2964	6008	3.6	+17 19	6335	1.18	+.52	07,07,05,05	01
2561	5681	11.5	+33 41	2596	4.26	-.27	06,15,09,21	12	"	"	"	"	"	"	1.01	+.26	08,08,04,03	16			
"	"	"	"				04,16		"	"	"	"	6337	1.10	+.29	07,07,04,04	07				
"	"	"	"	3640	4.08	-.08	04,05,09,09	06	"	"	"	"	"	"	0.98	+.04	13,13,09,08	19			
"	"	"	"	3692	4.10	+.31	10,10,02,02	04	"	"	"	"	6340	1.40	+.25	04,05,17,17	23				
"	"	"	"	3696	4.10	+.31	01,01,07,07	04	"	"	"	"	"	"	1.21	+.10	01,02,14,14	04			
"	"	"	"	4170	4.14	+.20	06,05,12,13	00	"	"	"	"	"	"	"	"	"	"			
2636	5733	20.7	+37 44	2594	1.88	+.41	15,10,06,06,	08	"	"	"	"	6342	1.27	+.14	11,11,05,05	10				

DM.	H. R.	R.A. 1900.	Dec. 1900.	J. D.	Diff.	A-B	Residuals.	Res.	DM.	H. R.	R.A. 1900.	Dec. 1900.	J. D.	Diff.	A-B	Residuals.	Res.					
2964	6008	16 3.6	+17 19	6342	1.23	+ .22	00,01,12,11	06	3271	6228	16 41.0	+ 8 46	5553	4.20	-.09	02,02,04,05	24					
4333	6027	6.2	-19 12	5903	2.18	+ .03	03,02,01,01	01	"	"	"	"	5554	4.20	+ .15	03,03,04,05	24					
"	"	"	"	5928	2.16	+ .09	04,04,09,10	01	"	"	"	"	5555	3.90	-.08	06,06,02,01	06					
3091	..	8.6	+13 48	4177	0.10	+ .16	03,03,02,02	02	"	"	"	"	5557	4.03	+ .02	03,02,02,02	07					
"	..	"	"	4181	0.07	+ .02	01,02,03,02	01	"	"	"	"	5563	4.04	+ .24	02,01,01,00	08					
"	..	8.6	+13 48	7716	4.00	-.69	09,09,07,07	04	"	"	"	"	6359	3.97	+ .46	06,05,08,09	01					
"	..	"	"	"	4.09	-.66	12,13,03,04	05	"	"	"	"	7733	3.65	+ .20	02,02,08,08	31					
11453	6054	8.8	-25 13	6682	3.52	+ .13	05,05,05,05	A	3175	6232	42.2	+ 2 14	2711	3.16	+ .09	16,05,12,02,	06					
2750	6063	10.9	+34 7	5856	1.09	+ .02	01,00,06,05	15	"	"	"	"	3826	3.34	-.03	05,05,01,02	12					
"	"	"	"	5859	0.80	+ .01	01,01,05,05	14	"	"	"	"	4121	3.16	+ .44	00,01,11,10	06					
"	"	10.9	+34 7	8006	5.40	-.03	04,04,08,09	A	"	"	"	"	7844	3.20	+ .15	14,13,10,10	02					
13041	6077	13.2	-30 40	6681	1.42	+ .22	07,07,01,02	06	"	"	"	"	3233	6246	45.0	+13 26	4177	3.89	+ .18	02,02,01,00	A	
"	"	"	"	6687	1.30	+ .08	01,02,03,03	06	2415	..	55.2	+47 30	9153	0.28	-.01	03,03,02,02	05					
4359	..	14.2	-19 49	8439	0.67	-.06	02,01,01,00	04	"	..	"	"	9175	0.18	+ .08	07,07,03,03	03					
"	"	"	"	8481	0.59	+ .22	03,03,05,04	04	"	..	"	"	9177	0.21	-.10	02,01,02,01	02					
11687	6097	17.5	-32 58	6687	0.64	-.13	02,02,11,10	00	"	..	"	"	9189	0.24	-.03	01,01,08,07	01					
"	"	"	"	6692	0.64	-.12	05,04,00,01	00	"	..	"	"	3095	6326	57.0	+15 5	4176	4.60	+ .07	00,00,13,13	19	
12513	6106	18.4	-29 29	6681	0.60	+ .12	07,07,10,10	05	"	"	"	"	4182	4.22	+ .25	02,02,14,15	19					
"	"	"	"	6683	0.70	+ .14	02,02,03,03	05	3292	6341	59.1	+13 44	4181	0.36	..	01,00, R	11					
2773	6107	18.6	+34 2	5883	0.33	+ .18	06,06,07,06	05	"	"	"	"	4182	0.33	-.06	02,02,00,01	08					
"	"	"	"	5885	0.32	+ .39	03,03,02,03	04	"	"	"	"	5574	0.22	+ .17	06,07,06,06	03					
"	"	"	"	5890	0.16	+ .31	02,03,02,02	12	"	"	"	"	5898	0.12	-.08	03,02,06,07	13					
"	"	"	"	5891	0.29	+ .36	00,00,00,00	01	"	"	"	"	5899	0.21	+ .02	04,05,00,00	04					
2716	6110	19.1	+32 34	7838	2.88	-.07	15,14,07,07	A	"	"	"	"	2661	..	17 0.8	+28 14	7838	1.96	+ .12	08,08,04,03	A	
2422	6162	28.8	+45 50	2711	3.02	-.45	05,01,03,21,	08	1857	6370	3.2	+54 36	4177	0.01	+ .02	04,04,03,04	04					
"	"	"	"	3703	3.00	+ .25	06,06,01,01	06	"	"	"	"	4182	0.07	-.08	05,05,05,05	04					
"	"	"	"	3716	2.80	+ .12	02,02,00,00	14	3207	6406	10.1	+14 30	4176	1.64	-.11	09,09,01,01	27					
1876	6185	33.9	+53 8	2602	0.09	-.36	14,10,03,01,	07	"	"	"	"	4182	1.70	+ .23	01,01,01,01	21					
"	"	"	"	"	"	"	09,09	"	"	"	"	"	4204	1.69	+ .12	04,04,07,07	22					
"	"	"	"	2711	0.22	-.08	01,02,03,12,	06	"	"	"	"	4452	2.12	+ .13	02,01,04,04	21					
"	"	"	"	"	"	"	08,05	"	"	"	"	"	5554	2.40	-.12	02,03,07,06	49					
"	"	33.9	+53 8	5859	0.28	+ .01	04,04,03,02	A	4722	6446	15.2	-12 45	5536	4.40	+ .18	06,06,01,01	25					
"	"	33.9	+53 8	2602	1.04	+ .25	19,09,10,13	06	"	"	"	"	5557	4.86	+ .05	03,03,02,02	21					
"	"	"	"	"	"	"	19,06	"	"	"	"	"	5578	4.70	-.08	03,02,01,02	05					
"	"	"	"	3852	0.86	-.07	02,02,06,07	12	2896	6458	16.9	+32 36	7836	5.02	+ .07	01,01,02,02	A					
"	"	"	"	4177	1.04	-.04	06,05,00,00	06	2878	6485	20.2	+37 14	3855	0.99	-.06	05,04,00,00	10					
3235	6195	35.6	+ 4 25	2728	1.12	+ .17	06,01,06,05,	00	"	"	"	"	4176	1.31	-.11	04,04,09,09	22					
"	"	"	"	"	"	"	06,12	"	"	"	"	"	4177	0.97	-.02	06,05,02,01	12					
"	"	"	"	3677	1.21	-.10	06,06,02,01	09	3184	..	23.2	+11 29	3712	1.86	+ .20	05,05,03,07	41					
"	"	"	"	4038	1.12	+ .17	07,07,02,02	00	"	..	"	"	3715	1.38	-.10	01,01,02,02	07					
"	"	"	"	4091	1.10	-.01	04,05,04,04	02	"	..	"	"	3720	1.20	-.05	06,06,02,01	25					
"	"	"	"	4178	1.03	+ .16	05,05,05,05	09	"	..	"	"	3721	1.37	-.02	02,01,04,04	08					
2531	6200	36.0	+49 7	3843	5.34	+ .03	07,07,04,03	04	3424	6548	29.9	+ 9 39	2981	1.76	+ .29	07,11,03,01,	06					
"	"	"	"	4182	5.42	-.24	02,02,02,02	04	"	"	"	"	2984	1.80	+ .13	09,01,09,01,	02					
3288	..	40.1	+ 6 17	7716	3.56	+ .03	05,04,07,07	00	"	"	"	"	3709	1.85	+ .18	00,01,01,02	03					
"	..	"	"	7718	3.57	-.06	01,01,19,20	01	"	"	"	"	3721	1.86	+ .35	06,06,01,01	04					
"	..	40.1	+ 6 17	7720	3.78	+ .04	06,05,02,01	A	"	"	"	"	1945	6555	30.3	+55 14	2593	0.18	-.21	17,05,21,08,	05	
3271	6228	41.0	+ 8 46	5546	3.84	-.13	11,11,09,09	12	"	"	"	"	"	"	"	"	"	"	"	"	"	"
"	"	"	"	5547	3.83	-.14	01,01,06,06	13	"	"	"	"	"	"	"	"	"	"	"	"	"	"

DM.	H. R.	R.A. 1900.	Dec. 1900.	J. D.	Diff.	A-B	Residuals.	Res.	DM.	H. R.	R.A. 1900.	Dec. 1900.	J. D.	Diff.	A-B	Residuals.	Res.
1945	6555	h. m. 17 30.3	+55 14				02,11		1237	..	h. m. 17 58.7	+64 9	9184	0.37	-.20	05,05,03,03	03
"	"	"	"	2602	0.02	-.03	09,04,04,06,11	11	"	..	"	"	9186	0.45	-.10	00,01,11,10	11
"	"	"	"	2604	0.18	-.23	04,10		2061	..	18 1.1	+56 26	8091	0.32	+.07	00,01,01,01	04
"	"	"	"	2604	0.18	-.23	16,03,19,07,05	05	"	..	"	"	9177	0.22	-.10	03,03,08,08	06
"	"	"	"	2608	0.13	-.14	03,09		"	..	"	"	9190	0.35	+.02	03,04,04,04	07
"	"	"	"	2608	0.13	-.14	17,18,02,01,00	00	"	..	"	"	9191	0.21	-.02	03,03,03,04	07
"	"	"	"				05,03		3383	6758	1.1	+12 0	2987	0.32	-.07	03,04,01,01,04	04
3157	6559	31.7	+21 4	3826	3.30	+.10	08,08,06,06	03								02,03	
"	"	"	"	3852	3.32	+.08	03,03,03,02	01	"	"	"	"	4182	0.40	+.02	00,00,05,05	04
"	"	"	"	3855	3.38	-.16	05,06,04,03	05	"	"	"	"	4196	0.37	+.18	04,04,06,05	01
3076	6591	36.9	+31 22	9175	1.35	+.14	07,06,01,00	07	3178	6781	3.8	+26 5	2726	0.03	-.10	01,01,03,04,03	03
"	"	"	"	9177	1.45	+.02	01,02,02,03	03	"	"	"	"	2993	0.02	-.03	00,02,01,04,02	02
"	"	"	"	9184	1.46	-.20	14,15,08,07	04	"	"	"	"	2995	0.02	-.03	03,00,04,02,02	02
"	"	36.9	+31 22	9186	0.26	+.04	04,04,03,03	A	"	"	"	"	2995	0.02	-.03	03,00,04,02,02	02
3390	6609	39.5	+ 2 37	2984	0.36	-.13	07,10,04,08,02	02	"	"	"	"	2995	0.02	-.03	03,00,04,02,02	02
"	"	"	"	2993	0.36	+.11	02,04,03,01,02	02	1252	6850	13.3	+64 22	7929	5.38	-.09	04,04,02,01	A
"	"	"	"				02,04		1253	..	13.8	+64 43	7734	1.76	-.24	07,07,05,04	A
"	"	"	"	5910	0.41	+.02	03,03,05,06	03	4599	6869	16.1	- 2 55	7755	7.59	-.18	02,01,01,02	A
4745	..	40.7	-13 16	8150	0.09	+.02	02,03,01,02	03	3411	6895	19.4	+21 43	7871	7.06	+.23	08,08,10,10	A
"	..	"	"	8484	0.02	-.01	02,02,07,06	04	1809	6923	22.5	+58 45	4177	2.82	+.07	02,02,06,07	A
2888	6623	42.5	+27 47	3855	6.30	.00	05,05,05,04	11	"	"	22.5	+58 45	3720	2.81	-.46	04,03,09,10	11
"	"	"	"	4176	6.08	+.03	01,01,07,07	11	"	"	"	"	3723	2.68	-.17	00,00,01,02	02
804	6636	43.7	+72 12	2613	1.18	+.03	09,01,08,01,02	02	"	"	"	"	3727	2.64	+.08	19,18,09,10	06
"	"	"	"				03,03		"	"	"	"	3729	2.67	+.02	07,08,11,10	03
"	"	"	"	2615	1.28	-.17	04,01,04,13,12	12	4713	6946	25.9	-10 52	5939	3.10	+.52	11,11,01,01	A
"	"	"	"				01,13		3213	..	29.5	+38 46	9184	0.69	-.06	00,01,04,03	21
"	"	"	"	2616	1.12	-.07	04,03,06,09,04	04	"	..	"	"	9186	1.12	+.08	00,00,03,03	22
"	"	"	"				12,03		3801	..	30.6	+ 4 51	2762	2.76	-.05	03,01,05,10,20	20
"	"	"	"	4179	1.12	-.19	02,02,03,02	04	"	..	"	"	2994	3.06	-.01	05,04	
"	"	"	"	6998	1.19	+.06	00,01,02,01	03	"	..	"	"	2994	3.06	-.01	11,03,14,05,10	10
"	"	"	"	7704	1.08	+.12	04,04,03,02	08	"	..	"	"				09,03	
"	"	"	"	7769	1.15	-.06	01,01,02,02	01	"	..	"	"	3013	3.06	-.22	18,08,10,02,10	10
"	"	43.7	+72 12	8035	5.21	+.18	07,06,16,17	A	"	..	"	"				05,02	
15035	6693	52.7	-30 14	6687	1.88	+.13	11,11,06,07	05	2238	6983	31.6	+52 16	3731	3.36	-.24	07,06,06,07	01
"	"	"	"	6689	1.78	+.16	08,09,02,02	05	"	"	"	"	3734	3.18	-.01	05,05,15,16	17
1586	..	55.5	+62 37	8215	0.26	+.15	06,06,05,06	05	"	"	"	"	3737	3.40	-.32	09,08,06,07	05
"	..	"	"	8553	0.10	.00	05,04,06,05	11	"	"	"	"	3738	3.28	-.17	02,02,06,07	07
"	..	"	"	9175	0.15	+.06	12,13,09,09	06	"	"	"	"	4424	3.55	-.02	06,05,01,02	20
"	..	"	"	9186	0.34	+.20	05,04,05,04	13	3154	6997	32.9	+33 23	4211	4.48	+.31	00,00,06,06	A
3458	6714	55.6	+ 2 56	7719	3.80	-.07	17,17,05,06	10	3509	7051	41.0	+39 34	5574	0.14	+.09	01,01, A	02
"	"	"	"	7766	4.00	-.07	02,03,04,03	10	"	"	"	"	5578	0.07	+.10	01,00,02,03	05
3280	6730	57.2	+21 36	2630	0.09	+.04	02,00,01,13,02	02	"	"	"	"	5581	0.16	+.21	03,02,02,02	04
"	"	"	"				07,21		3222	7056	41.3	+37 30	2596	1.31	-.06	17,14,04,12,02	02
"	"	"	"	2995	0.12	-.11	03,02,00,07,01	01	"	"	"	"	2604	1.33	-.10	05,08	
"	"	"	"				04,02		"	"	"	"	2604	1.33	-.10	11,02,08,13,04	04
"	"	"	"	4176	0.16	+.08	04,05,00,01	05	"	"	"	"	2615	1.26	-.17	03,10	
"	"	"	"	4450	0.06	-.07	01,01,01,00	05	"	"	"	"	2615	1.26	-.17	08,07,01,12,03	03
1237	..	58.7	+64 9	8229	0.28	+.03	03,04,01,01	06	"	"	"	"				05,06	
"	..	"	"	9175	0.28	-.07	06,07,04,04	06	"	"	"	"	2996	1.26	+.03	03,02,01,07,03	03

DM.	H. R.	R.A. 1900.	Dec. 1900.	J. D.	Diff.	A-B	Residuals.	Res.	DM.	H. R.	R.A. 1900.	Dec. 1900.	J. D.	Diff.	A-B	Residuals.	Res.	
3222	7056	18 41.3	+37 30				14,21		3490	7298	19 10.4	+38 58	3826	3.88	-.32	08,09,06,06	05	
3559	7059	41.3	- 1 3	2761	1.56	+.04	02,05,02,04, 16		3528	..	16.0	+26 29	8123	0.22	+.35	03,04,10,10	15	
"	"	"	"	2996	1.46	-.27	06,00,05,17, 06		"	..	"	"	8487	0.08	.00	04,05,04,03	15	
"	"	"	"	3002	1.33	+.08	00,05,06,06, 07		3839	7369	19.8	+16 45	5590	0.66	-.24	08,07, A	20	
"	"	"	"	3008	1.38	+.04	02,06,03,22, 02		"	"	"	"	5591	1.06	+.68	01,00,01,02	20	
"	"	"	"	8139	1.19	+.10	04,04,07,06 21		3833	7373	20.2	+11 44	7720	3.13	-.06	08,08,07,07	05	
"	"	"	"	8861	1.42	-.07	09,08,04,04 02		"	"	"	"	7773	3.23	+.30	02,03,00,00	05	
"	"	"	"	8862	1.46	-.03	02,02,00,01 06		4017	7391	22.1	+19 41	4211	4.80	+.01	07,07,14,14	14	
1915	..	41.8	+59 29	8579	0.72	+.04	09,10,04,03 04		"	"	"	"	7871	4.53	+.18	06,05,05,05	13	
"	..	"	"	8580	0.65	+.06	01,00,01,01 03		4139	..	22.5	+20 57	8232	0.12	+.03	00,01,03,03	A	
3685	7099	46.0	+10 52	3741	1.05	-.14	03,02,01,01 A		3759	..	24.5	+24 28	7758	1.31	-.02	08,07,22,21	A	
3228	7102	46.2	+32 26	7870	5.79	+.42	18,17,07,07 A		3904	7412	25.2	+ 2 41	5569	5.11	+.12	02,02,07,07	A	
3814	..	49.5	+ 1 47	9225	0.03	+.14	02,02,01,02 02		3410	7417	26.7	+27 45	2995	2.19	.00	03,06,09,08, 16		
"	..	"	"	9226	0.03	+.26	00,01,07,07 02		"	"	"	"	"	"	"	"	07,14	
"	..	"	"	9237	0.03	+.14	05,06,06,05 04		"	"	"	"	3834	1.93	-.18	03,03,03,03	10	
1925	7125	49.7	+59 16	2634	3.49	-.10	21,03,18,01, 15		"	"	"	"	5929	2.10	-.20	00,01,01,00	07	
"	"	"	"	3731	3.44	-.25	13,12,04,04 10		"	"	"	"	7759	2.01	+.42	01,01,01,01	02	
"	"	"	"	3733	3.32	-.15	09,08,01,01 02		2060	7448	31.7	+59 57	3733	1.64	-.04	05,04,03,02	06	
"	"	"	"	3734	3.23	+.10	09,08,02,03 11		"	"	"	"	3741	1.67	+.34	01,00,01,00	03	
"	"	"	"	7704	3.24	+.16	05,05,02,01 10		"	"	"	"	3742	1.77	-.06	01,00,01,02	07	
"	"	"	"	7765	3.34	-.05	08,08,07,06 00		"	"	"	"	5558	1.70	+.03	01,01,02,01	00	
3257	7140	51.2	+33 51	8088	1.42	-.04	13,12,14,13 30		1053	7462	32.6	+69 29	7891	6.62	+.21	01,02,14,14	A	
"	"	"	"	8459	1.76	-.04	00,00,02,01 04		3918	7463	32.8	+16 14	5596	2.66	-.05	02,02,03,03	03	
"	"	"	"	8482	1.84	-.15	00,00,01,01 12		"	"	"	"	5668	2.60	-.12	01,02,02,03	03	
"	"	"	"	8488	1.79	-.02	01,01,02,01 07		"	"	"	"	5686	2.62	+.08	02,01,01,02	01	
"	"	"	"	8498	1.80	+.05	03,03,01,02 08		5078	..	37.7	- 8 33	3826	0.36	+.12	07,07,02,01	05	
3841	7172	54.5	+13 30	2996	3.80	-.16	29,18,11,33, 12		"	..	"	"	4117	0.42	+.09	02,02,01,01	01	
"	"	"	"	3829	4.19	+.22	09,08,04,03 27		"	..	"	"	5555	0.44	+.01	04,05,00,00	03	
"	"	"	"	5567	3.76	+.07	03,04,01,01 16		2847	7503	39.1	+50 18	3145	0.24	+.01	01,01,01,05, 05,01	08	
1669	7191	56.3	+62 16	7885	2.65	-.02	02,01,07,06 A		"	"	"	"	3365	0.04	-.09	17,01,19,15, 12		
683	7199	56.9	+75 39	8608	0.62	-.01	03,03,03,03 A		"	"	"	"	3370	0.08	-.13	02,00,01,11, 01,15		
4684	7225	59.7	- 4 11	8139	1.36	+.08	03,02,02,01 06		"	"	"	"	"	"	"	05,07		
"	"	"	"	8484	1.48	+.04	01,00,03,03 06		"	"	"	"	5567	0.11	-.06	03,02,02,03	05	
3775	7285	19 8.1	+16 40	9219	1.31	+.26	02,01,06,05 09		"	"	"	"	7745	0.34	+.16	06,07,06,06	18	
"	"	"	"	9225	1.16	+.11	01,01,01,01 06		3577	..	39.2	+37 27	8091	0.06	+.01	06,05,02,02	27	
"	"	"	"	9226	1.19	+.10	09,09,07,08 03		"	..	"	"	"	0.19	+.22	03,03,02,02	14	
2959	7294	9.5	+49 39	3738	0.33	+.10	05,04,05,05 11		"	..	"	"	8491	0.54	-.10	03,03,05,05	21	
"	"	"	"	3742	0.27	-.02	03,04,08,09 05		"	..	"	"	8501	0.52	-.04	05,04,01,02	19	
"	"	"	"	3751	0.18	.00	01,01,13,12 04		3786	7529	42.0	+35 51	8113	0.34	+.18	09,09,17,17	16	
"	"	"	"	4217	0.11	-.02	04,05,04,04 11		"	"	"	"	8251	0.53	+.06	03,03,03,03	03	
3490	7298	10.4	+38 58	2634	4.17	+.08	15,14,02,18, 24		"	"	"	"	9195	0.50	+.09	03,03,02,02	00	
"	"	"	"	3737	3.80	+.03	07,07,03,03 13		"	"	"	"	9196	0.61	-.10	04,04,07,08	11	
"	"	"	"	3742	3.86	-.28	04,05,09,09 07		"	"	"	"	9203	0.53	+.02	06,07,00,00	03	
									3587	7534	42.6	+33 30	2995	3.28	+.14	00,09,09,10, 07		

DM.	H. R.	R.A. 1900.	Dec. 1900.	J. D.	Diff.	A-B	Residuals.	Res.	DM.	H. R.	R.A. 1900.	Dec. 1900.	J. D.	Diff.	A-B	Residuals.	Res.
3587	7534	19 42.6	+33 30				00,09		2882	7735	20 10.5	+46 26	5590	0.91	-.22	05,06,08,07	26
"	"	"	"	2998	3.16	+.12	16,23,07,28,05		"	"	"	"	7749	1.43	+.26	07,08,03,04	26
"	"	"	"	3145	3.11	+.08	06,34		764	7750	12.3	+77 25	3755	3.70	-.03	02,03,08,08	00
"	"	"	"	4217	3.30	+.01	04,05,09,03,10		"	"	"	"	3762	3.74	+.04	05,05,05,05	04
"	"	"	"	7739	4.19	+.02	09,05		"	"	"	"	3859	3.67	+.10	07,07,01,00	03
"	"	"	"	7776	4.08	-.07	04,04,01,02	09	16981	7764	14.3	-29 30	5644	0.98	+.09	00,00,01,02	02
4254	7546	44.5	+18 53	3012	3.58	+.04	01,01,12,12	05	"	"	"	"	5649	0.87	+.06	00,01,05,04	09
"	"	"	"	3752	3.80	-.14	06,06,04,04	06	"	"	"	"	5651	1.02	+.05	03,03,03,03	06
"	"	"	"	3880	3.83	-.14	26,23,02,04,16		5626	7775	15.2	-15 6	5567	2.92	.00	04,04,02,03	03
4195	..	49.0	+20 5	2674	0.22	+.13	05,10		"	"	"	"	5569	3.08	+.03	16,16,04,03	13
"	..	"	"	2994	0.28	+.08	09,09,07,08	06	"	"	"	"	5596	2.85	+.06	03,04,01,02	10
"	..	"	"	3013	0.15	-.08	05,05,18,18	09	5283	..	22.3	- 2 26	8129	0.70	+.20	09,08,02,03	03
"	..	"	"	3019	0.22	-.10	06,08,01,05,00		"	..	"	"	8936	0.76	+.08	03,04,07,06	03
5154	7593	49.3	- 8 29	2994	0.88	+.03	04,01		"	..	"	"	8938	0.74	-.08	10,10,04,05	01
"	"	"	"	3013	0.15	-.08	02,01,02,06,06	06	5831	7830	24.1	-18 55	6691	0.64	+.01	05,05,06,06	02
"	"	"	"	3029	0.81	-.04	01,07		"	"	"	"	6692	0.61	+.08	03,03,11,11	01
"	"	"	"	5925	0.68	+.16	05,20,14,02,07		3148	..	27.8	+48 52	7891	2.95	.00	10,10,07,07	A
3744	..	53.8	+26 59	9225	0.39	-.10	01,02		3154	7851	28.2	+48 53	7788	4.72	+.04	04,04,06,06	02
"	..	"	"	9226	0.42	-.23	12,06,06,01,00		"	"	"	"	7854	4.77	.00	01,01,05,05	03
"	..	"	"	9237	0.46	+.04	05,05		4159	7885	33.4	+31 13	3852	0.06	+.01	00,00,00,00	06
"	..	"	"	9240	0.38	+.12	00,02,01,01,13		"	"	"	"	3861	0.06	-.12	00,01,08,08	06
3158	7660	58.5	+49 49	5561	3.62	-.08	13,11		"	"	"	"	3878	0.20	.00	01,00,01,01	08
"	"	"	"	5562	3.66	-.08	15,10,05,02,11		"	"	"	"	5684	0.18	-.04	05,06,02,03	06
"	"	"	"	5563	3.55	-.10	15,18		"	"	"	"	5919	0.10	-.16	11,10,01,01	02
4121	7672	59.7	+16 48	7759	1.11	-.03	06,04,03,02,06	06	4172	..	34.9	+38 17	7866	1.96	+.04	04,05,03,04	A
"	"	"	"	7868	1.16	-.12	00,01		4167	7942	41.6	+30 21	3878	4.76	-.05	13,13,23,22	26
"	"	"	"	7759	3.39	-.18	10,09,00,00	07	"	"	"	"	3880	4.89	-.02	06,06,09,10	13
"	"	"	"	7759	2.36	+.47	06,07,02,01	02	"	"	"	"	5684	5.34	+.15	30,31,10,10	32
4453	7705	20 5.5	+20 37	3015	2.03	+.02	03,02,03,03	01	"	"	"	"	5686	5.09	-.24	08,08,14,14	07
"	"	"	"	3029	2.12	+.07	07,07,10,11	05	4255	7948	42.0	+15 46	3002	1.10	-.10	07,04,02,03,13	
"	"	"	"	3145	2.06	+.01	03,02,02,02	03	"	"	"	"	3013	0.93	+.08	00,06,05,01,04	
4480	..	9.3	+ 6 17	8126	0.13	+.30	00,01,04,05	01	"	"	"	"	3015	0.96	-.02	04,06,01,02,01	
"	..	"	"	8936	0.31	+.14	14,13,02,02	05	"	"	"	"	3019	0.88	+.10	11,11	
2882	7735	10.5	+46 26	5585	1.23	-.22	01,02,03,03	06	"	"	"	"	3019	0.88	+.10	09,10	
"	"	"	"	5588	1.28	-.22	00,01,08,07	A	4267	7963	43.5	+36 7	7751	4.92	-.05	03,03,00,00	09
"	"	"	"	5589	0.99	-.26	13,12,18,18	A	"	"	"	"	7875	5.10	-.03	05,05,02,02	09
				3015	2.03	+.02	04,04,00,02,10		3739	7984	46.6	+43 41	7891	7.16	+.01	14,14,03,02	A
				3029	2.12	+.07	06,01,06,12,01		2178	..	46.9	+58 22	9189	0.94	-.02	09,09,02,02	03
				3145	2.06	+.01	01,02,00,49,07		"	..	"	"	9190	1.05	-.32	07,07,06,06	08
				4217	2.32	-.20	03,02,01,02	19	"	..	"	"	9191	0.97	-.12	04,04, A	00
				8126	0.13	+.30	07,07,06,06	22	"	..	"	"	9195	0.93	-.06	08,09,01,00	04
				8936	0.31	+.14	01,01,03,02	22	"	..	"	"	9204	0.94	.00	06,05,08,08	03
				5585	1.23	-.22	13,12,07,06	06	"	..	"	"	9217	0.98	+.16	05,06,18,17	01
				5588	1.28	-.22	05,05,09,09	11	4473	8034	54.1	+ 3 55	8146	1.48	+.16	09,09,05,04	16
				5589	0.99	-.26	03,02,02,02	18	"	"	"	"	8928	1.79	-.10	05,04,03,03	15
									"	"	"	"	8936	1.62	+.03	06,06,08,09	02
									"	"	"	"	8944	1.68	+.09	03,02,01,01	04

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DM.	H. R.	R.A. 1900.	Dec. 1900.	J. D.	Diff.	A-B	Residuals.	Res.	DM.	H. R.	R.A. 1900.	Dec. 1900.	J. D.	Diff.	A-B	Residuals.	Res.	
3133	8047	h. m. 20 56.4	+47 8	3320	4.22	-.10	05,03,01,02, 11		5549	..	h. m. 21 18.6	- 7 1	8510	0.64	+.05	03,03,01,01	12	
"	"	"	"	3320	4.36	+.01	14,15		"	..	"	"	8974	0.48	-.16	04,03,03,02	04	
"	"	"	"	3320	4.36	+.01	12,11,01,20, 03		"	..	"	"	8983	0.50	+.12	10,10,06,07	02	
"	"	"	"	3321	4.16	+.08	10,10		4537	8189	19.3	+36 58	R	0.17	-.10	01,00,04,04	A	
"	"	"	"	3321	4.16	+.08	03,07,09,20, 17		1173	8238	27.4	+70 7	2793	4.54	+.12	00,06,05,07, 01		
"	"	"	"	3362	4.36	+.03	07,27		"	"	"	"	3023	4.42	-.10	01,05		
"	"	"	"	3362	4.36	+.03	05,00,05,03, 03		"	"	"	"	3023	4.42	-.10	29,05,25,15, 13		
"	"	"	"	3387	4.56	-.09	03,06		"	"	"	"	3734	4.69	-.18	07,23		
"	"	"	"	3387	4.56	-.09	13,11,01,06, 23		"	"	"	"	3734	4.69	-.18	05,04,02,02	14	
"	"	"	"	3387	4.56	-.09	02,03		1415	..	32.3	+66 17	3852	0.23	+.10	03,03,00,01	11	
4444	..	58.0	+21 16	7922	3.80	-.11	08,08,00,01	R	"	..	"	"	3855	0.14	+.02	01,01,05,05	02	
"	..	58.0	+21 16	9240	0.08	+.11	00,00,08,09	A	"	..	"	"	"	0.10	-.08	09,08,03,03	02	
5664	8059	58.7	- 6 13	6745	1.45	+.10	12,11,13,14	03	"	..	"	"	3861	0.22	+.05	04,03,01,01	10	
"	"	"	"	6746	1.40	+.13	02,02,11,11	02	"	..	"	"	4241	0.13	-.06	00,00,02,03	01	
4343	8085	21 2.4	+38 15	7751	0.74	+.13	02,02,02,02	12	"	..	"	"	5564	0.04	+.19	04,03,04,04	08	
"	"	"	"	7776	0.50	-.05	02,02,06,06	12	"	..	"	"	5565	0.03	+.18	00,00,05,04	09	
"	"	"	"	7782	0.54	+.12	05,06,03,03	08	"	..	"	"	5927	0.11	+.06	00,00,02,03	01	
"	"	"	"	7786	0.52	-.07	03,03,05,04	10	4180	8263	32.4	- 0 50	3381	2.56	+.19	07,05,11,02, 37		
"	"	"	"	7895	0.79	+.10	01,00,01,02	17	"	"	"	"	3502	3.08	-.07	01,01		
"	"	2.4	+38 15	7891	3.62	+.04	04,05,09,09	A	"	"	"	"	3502	3.08	-.07	06,01,07,07, 15		
4324	8094	4.4	+29 48	4112	2.14	+.13	02,02,10,10	A	"	"	"	"	3852	3.14	+.01	05,03		
4486	8101	6.0	+22 3	6692	0.98	+.14	13,13,04,04	00	"	"	"	"	3852	3.14	+.01	00,00,05,05	21	
"	"	"	"	6743	0.97	+.14	12,12,10,10	01	4830	8265	32.7	+ 6 10	3021	1.27	+.06	07,02,09,07, 03		
3322	8107	7.1	+47 17	9189	0.68	+.07	02,01,04,04	05	"	"	"	"	3145	1.26	-.05	05,01		
"	"	"	"	9190	0.70	-.04	14,14,00,01	03	"	"	"	"	3145	1.26	-.05	06,09,03,01, 04		
"	"	"	"	9191	0.62	-.17	03,03,02,03	11	"	"	"	"	5593	1.38	-.05	02,01		
"	"	"	"	9207	0.92	-.16	08,08,02,03	19	"	"	"	"	5593	1.38	-.05	01,01,06,05	08	
4746	8123	9.6	+ 9 36	5691	5.88	-.08	04,03,03,02	20	4891	8308	39.3	+ 9 25	5751	6.08	.00	04,04,13,13	02	
"	"	"	"	5698	5.84	-.16	05,06,04,05	16	"	"	"	"	5960	6.05	+.14	03,02,09,10	01	
"	"	"	"	7872	5.49	+.30	17,16,17,18	19	4169	8309	39.6	+28 18	3861	1.25	-.02	05,05,03,03	04	
"	"	"	"	7874	5.49	+.34	14,13,13,12	19	"	"	"	"	3880	1.17	-.10	07,07,00,01	04	
4203	..	10.3	+33 53	9226	0.62	-.18	03,03,04,04	04	"	"	"	"	7773	2.00	+.11	01,01,05,05	02	
"	..	"	"	9237	0.46	-.07	04,03,05,05	12	"	"	"	"	7786	1.97	+.12	03,03,02,02	01	
"	..	"	"	9244	0.66	+.07	05,05,02,03	08	2639	8357	48.8	+55 20	2792	0.90	+.12	05,02,03,02, 09		
4240	8130	10.8	+37 37	7762	6.05	+.15	08,07,02,02	A	"	"	"	"	2793	0.92	-.08	02,04		
2112	..	16.7	+61 25	8098	3.24	+.20	01,01,01,01	06	"	"	"	"	2793	0.92	-.08	08,09,00,02, 11		
"	..	"	"	8515	3.37	-.10	01,00,11,11	07	"	"	"	"	3090	0.94	+.02	01,00		
2916	..	16.7	+52 33	8608	0.19	+.02	08,07,01,02	02	"	"	"	"	3090	0.94	+.02	04,04,01,10, 13		
"	..	"	"	8622	0.15	-.10	03,03,04,03	02	"	"	"	"	3795	0.77	+.14	04,06		
"	..	"	"	8626	0.17	-.02	04,04,02,03	00	"	"	"	"	3795	0.77	+.14	08,07,01,01	04	
4691	8173	17.5	+19 23	2762	4.64	+.11	09,14,05,10, 21		"	"	"	"	"	0.72	+.01	10,09,05,05	09	
"	"	"	"	3021	4.73	-.20	06,03		"	"	"	"	"	0.72	+.01	07,06,05,04	10	
"	"	"	"	3021	4.73	-.20	15,00,15,00, 12		"	"	"	"	"	9190	0.76	+.04	04,03,02,02	05
"	"	"	"	3033	4.96	-.31	09,09		"	"	"	"	"	9191	0.81	+.06	04,04,19,20	00
"	"	"	"	3033	4.96	-.31	13,07,07,28, 11		"	"	"	"	"	9195	0.77	+.02	03,02,06,06	04
"	"	"	"	3033	4.96	-.31	12,39		5329	8363	49.4	- 3 46	3416	3.28	+.28	06,41,34,04, 03		
"	"	"	"	3398	4.98	-.12	06,01,06,06, 13		"	"	"	"	"	3880	3.35	+.02	06,09	
"	"	"	"	3398	4.98	-.12	03,02		"	"	"	"	"	3880	3.35	+.02	05,05,02,01	04
"	"	"	"	7758	4.93	+.31	01,02,04,04	08	"	"	"	"	4239	3.48	+.16	02,01,03,02	17	
5549	..	18.6	- 7 1	8153	0.45	-.06	01,01,05,06	07	"	"	"	"	5596	3.12	-.04	07,06,01,01	19	

DM.	H. R.	R.A. 1900.	Dec. 1900.	J. D.	Diff.	A-B	Residuals.	Res.	DM.	H. R.	R.A. 1900.	Dec. 1900.	J. D.	Diff.	A-B	Residuals.	Res.
5329	8363	h. 21 49.4	m. - 3 46	7856	3.34	-.12	03,04,05,05	03	6346	8673	h. 22 42.4	m. - 14 35	5684	3.71	.00	08,08,04,04	15
4910	..	53.1	+ 5 29	8200	0.40	-.16	11,11,05,05	04	"	"	"	"	5686	3.96	-.13	07,08,04,04	10
"	..	"	"	8211	0.32	+.08	10,09,03,02	04	"	"	"	"	5687	3.91	-.06	04,05,00,01	05
6422	8396	57.0	-17 27	6745	0.06	-.04	06,05,01,01	04	1475	..	49.2	+67 26	9217	0.52	.00	02,01,01,00	01
"	"	"	"	6746	0.03	+.06	02,03,02,03	05	"	..	"	"	9218	0.55	+.14	03,03,00,01	02
2456	..	22 0.6	+59 19	7774	3.12	-.09	10,09,06,06	02	"	..	"	"	9219	0.54	+.09	00,00,02,02	01
"	..	"	"	7776	3.16	-.05	05,06,13,13	02	"	..	"	"	9225	0.52	.00	01,02,04,04	01
"	..	0.6	+59 19	9207	0.74	+.17	10,10,35,34	08	"	..	"	"	9249	0.51	-.02	10,11,05,06	02
"	..	"	"	9208	0.84	-.01	03,03,04,05	02	4949	8725	51.9	+41 4	3387	3.60	+.06	03,00,04,00	06
"	..	"	"	9209	0.77	+.12	02,02,01,01	05	"	"	"	"	3943	3.70	+.19	09,10,04,04	04
"	..	"	"	9212	0.91	-.06	06,07,01,01	09	"	"	"	"	4247	3.86	+.08	06,06,13,12	20
2461	..	0.6	+59 19	9208	0.76	-.01	01,02,02,02	04	"	"	"	"	5960	3.70	-.10	04,04,04,04	04
"	..	"	"	9209	0.82	+.08	04,04,01,01	02	"	"	"	"	7797	3.54	+.01	08,07,13,12	12
"	..	"	"	9212	0.82	+.01	04,04,07,07	02	"	"	"	"	7896	3.58	+.05	06,06,10,11	08
2459	..	0.6	+59 19	9208	1.10	+.09	06,05,02,02	09	"	"	"	"	7934	4.24	-.28	10,11,05,05	A
"	..	"	"	9209	0.98	+.15	13,14,06,06	03	4973	8737	53.5	+ 8 50	5751	1.89	+.22	03,02,07,07	04
"	..	"	"	9212	0.96	.00	01,02,00,01	05	6018	8782	59.9	- 8 14	5770	1.81	+.02	00,00,00,00	04
1802	8417	0.9	+64 8	3040	1.76	+.03	08,09,01,07,06	06	"	"	"	"	5698	5.49	-.10	06,07,02,02	11
"	"	"	"	3887	1.88	.00	04,04,04,04	06	4981	8815	23 4.5	+ 8 8	5725	5.52	-.11	06,05,03,03	14
673	8423	1.9	+82 23	3392	0.35	+.12	00,00, A	10	"	"	"	"	7934	5.12	+.24	08,07,15,16	26
"	"	"	"	3734	0.16	-.12	01,01,01,00	09	4580	8827	6.9	+26 18	7580	3.12	+.03	01,01,02,02	02
"	"	"	"	3738	0.25	+.10	03,04,01,02	00	"	"	"	"	7893	3.09	+.06	08,07,06,07	03
5139	8532	18.8	+20 20	7795	2.25	.00	09,09,08,09	05	2966	8832	8.5	+56 37	7921	4.08	+.03	06,06,06,06	A
"	"	"	"	7797	2.16	+.02	11,11,06,05	04	6156	8841	10.7	- 9 38	3441	4.79	-.04	06,11,18,04,22	05,00
6521	8545	21.2	-17 15	6692	0.22	+.11	02,02,01,02	00	"	"	"	"	5716	4.92	+.22	00,00,06,06	35
"	"	"	"	6743	0.22	+.12	04,03,02,02	00	"	"	"	"	5688	4.98	+.15	05,04,05,05	41
4365	8559	23.7	- 0 32	4239	0.16	-.04	06,06,01,02	A	"	"	"	"	5770	4.52	-.04	15,16,03,03	05
2783	..	24.5	+57 12	8579	0.79	-.02	00,00,02,03	01	"	"	"	"	7552	3.98	-.09	11,11,16,16	59
"	..	"	"	8580	0.80	-.04	08,08,01,02	00	"	"	"	"	7571	4.26	+.05	01,01,03,03	31
4808	8603	31.4	+39 7	2790	0.76	+.01	06,07,01,01,04	04	"	"	"	"	3145	2.08	+.01	16,14,03,07,10	06,00
"	"	"	"	3023	0.72	+.09	19,16,04,16,00	00	6448	8866	13.8	-14 0	3441	2.09	+.08	13,12,00,01,09	03,04
"	"	"	"	3028	0.76	+.16	02,02,00,03,04	04	"	"	"	"	5754	2.37	+.14	03,02,06,07	19
"	"	"	"	3038	0.66	+.49	04,18,21,20,06	06	..	..	30.4	+59 53	3913	0.17	+.20	04,04,00,00	05
"	"	"	"	8143	0.74	+.32	11,11,00,01	00	..	..	"	"	3936	0.35	-.02	00,01,01,01	13
"	"	"	"	8211	0.69	+.14	05,05,06,05	05	..	..	"	"	3943	0.31	+.02	04,04,04,05	09
"	"	"	"	9231	0.75	-.02	02,01,03,03	01	..	..	"	"	5949	0.19	-.12	06,06,03,03	03
"	"	"	"	9240	0.79	+.10	02,03,03,02	05	4283	8961	32.7	+45 55	6039	0.06	+.11	05,04,00,00	16
1050	..	33.6	+72 22	8153	0.48	-.07	01,01,01,01	28	4989	..	42.8	+16 32	7845	7.30	.00	01,02,18,17	A
"	..	"	"	8515	0.82	-.03	05,05,05,04	06	"	..	"	"	7580	0.14	-.04	01,00,00,00	04
"	..	"	"	9037	0.80	-.08	01,01,06,07	04	5068	..	47.9	+11 22	7581	0.07	-.18	00,01,08,09	03
"	..	"	"	9218	0.76	+.08	11,11,00,01	00	"	..	"	"	8200	0.68	-.01	04,03,01,01	01
"	..	"	"	9219	0.82	-.24	01,02,05,04	06	16479	9044	49.2	-27 36	8207	0.66	-.11	01,01,01,01	01
"	..	"	"	9225	0.85	-.22	08,09,01,00	09	"	"	"	"	6745	0.38	+.16	01,00,01,01	01
4826	8622	34.8	+38 32	7896	5.14	+.08	15,14,05,06	03	4747	9074	54.4	+33 11	6746	0.40	+.13	04,04,02,03	01
"	"	"	"	7905	5.08	-.08	06,06,06,07	03	1418	..	56.0	+69 1	9130	0.58	-.03	21,20,13,13	05

DM.	H. R.	R.A. 1900.	Dec. 1900.	J. D.	Diff.	A-B	Residuals.	Res.	DM.	H. R.	R.A. 1900.	Dec. 1900.	J. D.	Diff.	A-B	Residuals.	Res.
1418	..	<i>h. m.</i> 23 56.0	<i>° ' "</i> +69 1	9218	0.67	+ .10	10,09,00,00	04	1987	9094	<i>h. m.</i> 23 57.5	<i>° ' "</i> +65 33				11,04	
"	..	"	"	9219	0.64	- .03	00,00,01,02	01	"	"	"	"	3888	1.46	+ .03	01,01,03,03	01
4734	9088	56.8	+26 34	7797	3.93	+ .07	04,04,03,02	A	"	"	"	"	3913	1.40	+ .11	04,03,14,14	05
1987	9094	57.5	+65 33	3038	1.49	- .36	15,08,06,15,04		"	"	"	"	3937	1.46	.00	02,01,01,02	01

REMARKS.

h. m.

- 0 1.4. See 0^h 3^m.2.
 0 3.2. α Andromedae. The difference in brightness between this star and its companion is so large, that an independent determination was made by comparing the component with +28° 4704. The magnitude derived from +28° 4704 is $6.20 + 4.16 = 10.36$, that derived from α Andromedae is $2.15 + 8.23 = 10.38$.
 0 30.7. The measures relate to the components at 202° and 28°, respectively.
 0 41.0. The south preceding component is the brighter.
 0 44.5. In the first measures, the south following, and in the second, the north preceding component appeared to be the brighter.
 1 0.4. The north preceding component is the brighter.
 1 18.9. Using Burnham's notation, AB is here compared with CD.
 1 19.9. The north preceding component is the brighter.
 1 34.5. The southern component is the brighter.
 1 48.0. The southern component is the brighter.
 1 50.2. The south following component is the brighter.
 2 8.9. The north following component is the brighter.
 2 12.5. The north following component is the brighter.
 2 37.4. The measures relate to the components at 299° and 224°, respectively.
 2 44.1. The measures relate to the components at 272°, 231°, and 208°, respectively. The measures on J. D. 5417 are rejected for discordance.
 3 3.9. The north preceding component is the brighter.
 3 14.1. The south following component is the brighter.
 3 35.3. The measures relate to the components at 55° and 302°, respectively.
 3 38.5. The south preceding component is the brighter.
 3 59.1. The north preceding component is the brighter.
 4 9.6. The measures relate to the components at 42° and 213°, respectively.
 4 13.0. The north preceding component is the brighter.
 4 32.3. The northern component is the brighter.
 4 38.8. The south following component is the brighter.
 4 49.3. Using Burnham's notation, the combined light of A and B is compared with C.
 5 2.2. The measures relate to the components at 264° and 268°, respectively.
 5 14.7. The following component is the brighter.
 5 14.9. The north following component is the brighter.

h. m.

- 5 24.6. The south preceding component is the brighter.
 5 26.9. δ Orionis. These observations should precede those of the same object on page 114.
 5 30.5. ϵ^2 Orionis. The measures on J. D. 3252 are rejected. They relate, perhaps, to some other object, as the position angle was estimated as 230°, instead of 93°.
 5 33.7. σ Orionis. Using Burnham's notation, the four sets of measures relate to C and E, AB and D, AB and E, and E and D, respectively. E is -2° 1327.
 5 52.9. The measures relate to the components at 350° and 294°, respectively.
 6 15.2. The measures relate to the components at 5° and 242°, respectively.
 6 15.8. The south following component is the brighter.
 6 24.0. 11 Monocerotis. Using Burnham's notation, component A, which is slightly brighter, is compared with the combined light of B and C.
 6 28.6. The measures relate to the components at 80° and 94°, respectively.
 6 37.4. The measures relate to the component at 304°.
 6 39.9. The south preceding component is the brighter.
 6 49.2. The north following component is the brighter.
 6 52.5. The south preceding component is the brighter.
 7 6.1. The south preceding component is the brighter.
 7 12.4. The measures on J. D. 9134 are rejected.
 7 14.6. The north following component is the brighter.
 7 17.2. The south following component is the brighter.
 7 28.2. α Geminorum. The first six measures relate to the component at 224°, the next two to that at 164°, and in the last measures the component at 164° was compared with the combined light of the other two.
 7 30.1. The north preceding component is the brighter.
 7 31.9. The southern component is the brighter.
 7 32.0. The south following component is the brighter.
 7 34.7. The south following component is the brighter.
 7 36.4. The northern component is the brighter.
 7 43.1. The north preceding component is the brighter.
 8 3.6. The measures relate to the components at 245° and 105°, respectively.
 8 4.0. The south preceding component is the brighter.
 8 13.9. The measures relate to the components at 98° and 167°, respectively.
 8 20.7a. The north following component is the brighter.

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| <p>h. m.
8 34.2. The measures relate to the components at 157° and 242°, respectively.
8 34.6. The measures relate to the components at 342° and 44°, respectively.
8 50.6. The south preceding component is the brighter.
8 54.2. The first measure relates to the component at 200°, the second, to the fainter component at 109°, which is compared with the first component.
9 7.7. The south preceding component is the brighter.
9 15.0. The first measure relates to the component at 36°, the second, to the fainter component at 32°, which is compared with the first component.
9 22.1. The measures relate to the components at 162° and 79°, respectively.
9 23.7. The measures on J.D. 7976 are rejected. Seeing very poor owing to cold (+4°F.) and high wind.
9 26.0. The north following component is the brighter.
10 14.5. The first measure relates to the component at 291°, the second to the fainter component at 302°, which is compared with the first component.
10 19.1. The south preceding component is the brighter.
11 5.3. The south preceding component is the brighter.
11 27.3. The south preceding component is the brighter.
11 55.0. The south following component is the brighter.
12 15.7. The north following component is the brighter.
12 36.1. The south following component is the brighter.
13 5.1. The north preceding component is the brighter.
14 17.3. The north preceding component is the brighter.
14 21.0. The south preceding component is the brighter.
15 8.1. The north preceding component is the brighter.
15 27.3. The north preceding component is the brighter.
15 33.2. The north following component is the brighter.
15 34.5. The south preceding component is the brighter.
15 55.3. The south preceding component is the brighter.
16 8.6. Using Burnham's notation, the first two measures relate to the components A and B, the last two, to the combined light of AB and C.
16 33.9. The first three measures relate to a comparison of 16 with 17 Draconis, position angle 15°, the last three to the two components of 17 Draconis, position angle 116°.
16 40.1. The measures relate to the components at 191° and 245°, respectively.
16 55.2. The north following component is the brighter.
16 59.1. The north preceding component is the brighter. On J. D. 4181, stopped by clouds.
17 3.2. The north preceding component is the brighter.
17 10.1. The discordance of the measures perhaps indicates that the suspected variability is real.</p> | <p>h. m.
17 30.3. The south following component is the brighter.
17 40.7. The south preceding component is the brighter.
17 43.7. The first measures relate to the component at 16°, the last measure to the component at 122° which is here compared with the first component.
17 55.5. The north following component is the brighter.
17 57.2. The north following component is the brighter.
18 1.1. The south preceding component is the brighter. In the Bonn Durchmusterung, +56° 2060 should follow +56° 2061.
18 3.8. The north following component is the brighter.
18 41.0. The south following component is the brighter.
18 49.5. The north preceding component is the brighter.
19 9.5. The north following component is the brighter.
19 16.0. The southern component is the brighter.
19 39.1. The north preceding component is the brighter.
19 49.0. The north preceding component is the brighter.
19 59.7. The first and second measures relate to the component at 317°, the third to that at 274°, and the fourth to that at 253°.
20 9.3. The north following component is the brighter.
20 10.5. The discordance is perhaps due to the distance of the components, which are 338" apart.
20 33.4. The north preceding component is the brighter.
20 56.4. The measures on J. D. 7922 are rejected.
20 58.0. The south preceding component is the brighter.
21 2.4. The first five measures relate to the component at 125°, the last to that at 197°.
21 16.7b. The north preceding component is the brighter.
21 18.6. The north preceding component is the brighter.
21 19.3. The Julian Day is uncertain.
21 32.3. The south preceding component is the brighter.
21 39.6. The first two measures relate to the component at 128°, the last two to that at 54°.
21 57.0. The south preceding component is the brighter.
22 0.6. Using Burnham's notation, the four sets of measures relate to A and E, A and D, D and E, and E and F, respectively. Component D is +59° 2461, and E is +59° 2459.
22 1.9. The south preceding component is the brighter.
22 21.2. The south following component is the brighter.
22 23.7. The south following component is the brighter.
23 10.7. The residuals perhaps indicate that the companion is variable.
23 30.4. The north following component is the brighter.
23 42.8. The north following component is the brighter.
23 54.4. The north following component is the brighter.</p> |
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CHAPTER XI.

OBSERVATIONS OF ASTEROIDS.

A LARGE number of observations of the asteroids have been made, and the results are given in Table XX. The number of the asteroid, enclosed in parenthesis, and its name are given in the first column. The next four columns give the number in the Durchmusterung of the comparison star, its right ascension for 1900, its declination for 1900, and its adopted magnitude. When the latter is not contained in H.A. 50, 54, 70, or 74, the Durchmusterung magnitude is reduced to the photometric scale by the tables in H.A. 72, No. 6. The result is then given to tenths of a unit only. The next seven columns give the year, the Julian Day and decimal, the concluded magnitude of the asteroid, the value of A-B, the residuals for the four sets, and the logarithm of the distance of the asteroid from the Sun and from the Earth. The last column gives the magnitude corrected for distance of the Sun and Earth, assuming that both these distances are unity. The first set of the observations of (7) Iris, on J.D. 6583.569, was rejected. Readings, $51^{\circ}.0$, $136^{\circ}.0$, $218^{\circ}.9$, and $306^{\circ}.6$. The photometric magnitudes of the comparison star for (167) Urda on J.D. 7114.617 and for (433) Eros on J.D. 5308.610 and 5308.620 have not been determined. The asteroids were 1.64 magn. fainter, 1.35 magn. brighter and 1.34 magn. brighter than these stars, respectively.

TABLE XX.

OBSERVATIONS OF ASTEROIDS.

Name.	DM. No.	R. A. 1900.	Dec. 1900.	Adopt. Magn.	Yr.	Julian Day.	Magn.	A-B	Residuals.	log r	log Δ	<i>g.</i>	<i>Phase angle</i>
		<i>h. m. s.</i>	<i>° ' "</i>										
(1) Ceres	-22° 4173	16 25 39	-22 35.3	8.70	04	6678.632	8.14	-.41	06,07,02,02	0.453	0.307	4.34	146
"	" "	" "	" "	" "	"	" .667	8.17	-.10	04,04,01,00	"	"	4.37	
"	" "	" "	" "	" "	"	6687.567	8.26	-.05	05,05,06,06	0.454	0.327	4.36	167
"	" "	" "	" "	" "	"	" .578	8.26	-.08	00,00,02,02	"	"	4.36	
"	" "	" "	" "	" "	"	" .594	8.26	-.12	00,00,02,02	"	"	4.36	
"	" "	" "	" "	" "	"	6688.555	8.30	+.12	05,05,05,04	0.454	0.330	4.38	169
"	" "	" "	" "	" "	"	" .562	8.28	+.07	01,01,05,06	"	"	4.36	
"	" "	" "	" "	" "	"	" .578	8.32	+.12	01,02,00,00	"	"	4.40	
"	" "	" "	" "	" "	"	6689.563	8.32	+.07	01,01,02,02	0.454	0.332	4.39	170
"	" "	" "	" "	" "	"	" .575	8.32	.00	02,01,00,01	"	"	4.39	
"	" "	" "	" "	" "	"	6691.553	8.32	-.04	01,02,02,01	0.454	0.337	4.36	176
"	" "	" "	" "	" "	"	" .562	8.33	-.10	04,04,01,02	"	"	4.37	
"	" "	" "	" "	" "	"	" .580	8.29	-.06	01,02,01,00	"	"	4.33	
"	" "	" "	" "	" "	"	" .597	8.32	-.17	01,01,02,01	"	"	4.36	

1913AnHar..69...99W

Phase Angle

Name.	DM. No.	R. A. 1900.	Dec. 1900.	Adopt. Magn.	Yr.	Julian Day.	Magn.	A-B	Residuals.	log r	log Δ	g.
(1) Ceres	-22° 4173	<i>h. m. s.</i> 16 25 39	<i>° ' "</i> -22 35.3	8.70	04	6691.615	8.28	-.12	02,02,02,02	0.454	0.337	4.32
"	"	"	"	"	"	" .634	8.30	-.16	03,03,01,00	"	"	4.34
(2) Pallas	+17° 2945	15 55 15	+17 38.0	8.55	"	6592.660	8.59	+.17	04,04,04,03	0.460	0.331	4.63
"	"	"	"	"	"	" .665	8.50	+.18	01,00,00,01	"	"	4.54
"	"	"	"	"	"	" .672	8.53	+.25	04,04,00,01	"	"	4.57
"	"	"	"	"	"	" .676	8.53	+.09	03,04,01,01	"	"	4.57
"	"	"	"	"	"	" .682	8.53	+.13	00,00,04,04	"	"	4.57
"	"	"	"	"	"	6593.603	8.51	-.13	03,04,05,05	0.460	0.331	4.55
"	"	"	"	"	"	" .608	8.56	-.10	01,00,03,04	"	"	4.60
"	"	"	"	"	"	" .621	8.53	-.12	04,05,02,01	"	"	4.57
"	"	"	"	"	"	" .628	8.58	-.18	01,02,02,03	"	"	4.62
"	"	"	"	"	"	" .644	8.55	-.07	00,00,05,04	"	"	4.59
"	"	"	"	"	"	" .650	8.53	-.16	00,01,05,06	"	"	4.57
"	"	"	"	"	"	" .662	8.57	-.08	00,00,00,00	"	"	4.61
"	"	"	"	"	"	" .669	8.59	-.16	01,01,01,02	"	"	4.63
"	"	"	"	"	"	6594.601	8.51	-.37	05,05,01,01	0.460	0.330	4.56
"	"	"	"	"	"	" .610	8.61	-.31	03,02,05,05	"	"	4.66
"	"	"	"	"	"	" .624	8.56	-.26	00,01,03,04	"	"	4.61
"	"	"	"	"	"	" .632	8.57	-.24	02,01,12,11	"	"	4.62
"	"	"	"	"	"	" .642	8.56	-.32	02,02,03,03	"	"	4.61
"	"	"	"	"	"	" .650	8.57	-.32	00,01,04,03	"	"	4.62
"	"	"	"	"	"	" .662	8.57	-.32	02,02,02,01	"	"	4.62
"	"	"	"	"	"	" .669	8.55	-.33	04,04,04,04	"	"	4.60
(4) Vesta	+24° 1999	8 46 16	+24 41.0	8.49	01	5437.594	6.72	-.18	05,05,02,02	0.386	0.177	3.90
"	"	"	"	"	"	" .604	6.65	-.23	01,00,02,02	"	"	3.83
"	"	"	"	"	"	5440.577	6.61	-.19	02,02,02,02	0.385	0.181	3.78
"	"	"	"	"	"	" .592	6.55	-.09	03,02,01,01	"	"	3.72
"	+25° 1997	8 44 23	+24 57.3	9.06	"	" .606	6.60	-.02	03,03,03,04	"	"	3.77
"	"	"	"	"	"	" .617	6.59	-.14	01,00,02,01	"	"	3.76
"	+24° 1999	8 46 16	+24 41.0	8.49	"	5442.567	6.63	-.09	02,02,02,01	0.385	0.184	3.79
"	"	"	"	"	"	" .581	6.68	-.02	00,01,02,01	"	"	3.84
"	+25° 1997	8 44 23	+24 57.3	9.06	"	5443.542	6.74	-.04	01,00,03,03	0.385	0.186	3.88
"	"	"	"	"	"	" .553	6.73	-.10	01,01,01,02	"	"	3.87
"	"	"	"	"	"	5444.533	6.70	-.12	02,01,07,06	0.385	0.187	3.84
"	"	"	"	"	"	" .544	6.71	-.06	03,04,02,01	"	"	3.85
"	.. ..	4 0 17	+17 47.4	10.0	04	6536.569	8.28	+.24	06,05,08,08	0.410	0.388	4.29
"	.. ..	"	"	"	"	" .578	8.30	+.23	01,01,03,04	"	"	4.31
"	.. ..	"	"	"	"	" .593	8.30	+.21	07,08,07,07	"	"	4.31
"	.. ..	"	"	"	"	" .603	8.26	+.08	01,00,00,01	"	"	4.27
"	.. ..	"	"	"	"	" .626	8.28	+.15	01,00,03,03	"	"	4.29
"	.. ..	"	"	"	"	" .635	8.27	+.14	02,01,04,04	"	"	4.28
"	.. ..	"	"	"	"	" .649	8.32	+.18	00,01,03,04	"	"	4.33
"	.. ..	"	"	"	"	" .657	8.34	+.13	05,06,01,01	"	"	4.35
"	.. ..	"	"	"	"	6537.569	8.38	-.04	00,01,00,01	0.410	0.391	4.38
"	.. ..	"	"	"	"	" .581	8.38	-.01	04,04,01,00	"	"	4.38
"	.. ..	"	"	"	"	" .606	8.39	-.06	04,05,04,04	"	"	4.39
"	+20° 808	4 37 11	+20 27.1	8.50	"	6569.559	8.21	-.22	07,07,02,02	0.408	0.456	3.89
"	"	"	"	"	"	" .566	8.27	-.24	05,05,02,02	"	"	3.95
"	"	"	"	"	"	" .573	8.23	-.26	05,04,03,02	"	"	3.91
"	"	"	"	"	"	" .578	8.19	-.14	01,02,01,02	"	"	3.87

176
15.6
15.6
15.6
15.6
10.0
10.4
10.7
10.9
11.0
22.6
22.5
20.3

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Name.	DM. No.	R. A. 1900.	Dec. 1900.	Adopt. Magn.	Yr.	Julian Day.	Magn.	A-B	Residuals.	log r	log Δ	σ.
(4) Vesta	+20° 808	<i>h. m. s.</i> 4 37 11	<i>° ' "</i> +20 27.1	8.50	04	6569.587	8.19	-.18	05,04,02,03	0.408	0.456	3.87
"	"	"	"	"	"	.592	8.26	-.28	08,07,06,05	"	"	3.94
"	"	"	"	"	"	.607	8.25	-.30	07,07,02,01	"	"	3.93
"	"	"	"	"	"	.615	8.18	-.09	02,03,16,16	"	"	3.86
"	"	"	"	"	"	.631	8.21	-.02	07,06, A	"	"	3.89
(7) Iris	+18° 1576	7 14 33	+18 42.2	8.88	03	6475.606	8.09	+.06	03,02,08,07	0.305	0.020	6.47
"	"	"	"	"	"	.612	8.02	+.07	01,02,05,05	"	"	6.40
"	"	"	"	"	"	.658	7.87	+.10	05,06,04,04	"	"	6.25
"	"	"	"	"	"	.665	7.86	.00	05,04,00,01	"	"	6.24
"	+18° 1553	7 11 28	+18 32.4	8.83	"	6477.645	7.87	-.21	01,01,01,01	0.306	0.020	6.24
"	"	"	"	"	"	.651	7.93	-.20	00,01,02,02	"	"	6.30
"	"	"	"	"	"	.662	7.97	-.13	01,00,02,02	"	"	6.34
"	+18° 1538	7 9 2	+18 44.1	7.80	"	6479.603	7.92	+.22	02,02,00,00	0.307	0.020	6.28
"	"	"	"	"	"	.611	7.91	+.10	00,01,02,02	"	"	6.27
"	"	"	"	"	"	.656	7.78	+.20	02,03,01,00	"	"	6.14
"	"	"	"	"	"	.664	7.73	+.14	03,03,01,01	"	"	6.09
"	"	"	"	"	"	6480.552	7.72	+.43	00,00,01,01	0.307	0.021	6.08
"	"	"	"	"	"	.558	7.67	+.18	01,00,01,00	"	"	6.03
"	"	"	"	"	"	.586	7.73	+.28	01,01,05,05	"	"	6.09
"	"	"	"	"	"	.612	7.73	+.22	02,01,01,02	"	"	6.09
"	"	"	"	"	"	.621	7.76	+.33	05,05,01,02	"	"	6.09
"	+18° 1496	7 2 34	+18 26.5	9.55	04	6485.565	7.89	-.05	05,05,03,03	0.309	0.025	6.22
"	"	"	"	"	"	.570	7.87	-.05	08,08,00,00	"	"	6.20
"	"	"	"	"	"	.601	7.72	-.06	01,00,01,02	"	"	6.05
"	"	"	"	"	"	.606	7.64	-.02	04,03,08,08	"	"	5.97
"	"	"	"	"	"	.624	7.67	+.03	05,04,01,01	"	"	6.00
"	"	"	"	"	"	.631	7.65	+.04	05,05,04,04	"	"	5.98
"	"	"	"	"	"	.651	7.69	-.08	02,02,01,00	"	"	6.02
"	"	"	"	"	"	.660	7.72	-.10	00,01,03,04	"	"	6.05
"	+18° 1495	7 2 27	+18 9.5	9.22	"	6487.540	7.54	-.08	05,06,02,02	0.310	0.027	5.86
"	"	"	"	"	"	.546	7.50	-.05	00,01,04,04	"	"	5.82
"	"	"	"	"	"	.568	7.46	-.08	04,05,01,01	"	"	5.78
"	"	"	"	"	"	.576	7.46	-.16	01,01,07,06	"	"	5.78
"	"	"	"	"	"	.599	7.49	-.06	05,04,01,01	"	"	5.81
"	"	"	"	"	"	.606	7.47	-.02	05,06,00,01	"	"	5.79
"	"	"	"	"	"	.627	7.58	-.08	01,00,00,01	"	"	5.90
"	"	"	"	"	"	.636	7.63	-.04	06,06,03,03	"	"	5.95
"	"	"	"	"	"	.656	7.54	+.12	00,00,06,07	"	"	5.86
"	"	"	"	"	"	.664	7.51	-.02	04,03,01,01	"	"	5.83
"	+18° 1419	6 51 36	+18 14.3	8.94	"	6495.567	7.94	+.07	02,02,00,01	0.315	0.040	6.16
"	"	"	"	"	"	.574	7.92	+.05	02,02,02,01	"	"	6.14
"	+18° 1391	6 48 5	+18 5.5	9.89	"	6498.543	7.90	+.06	01,01,04,04	0.317	0.046	6.08
"	"	"	"	"	"	.551	7.85	+.09	03,02,01,01	"	"	6.03
"	"	"	"	"	"	6499.524	8.07	-.05	05,05,02,01	0.317	0.048	6.25
"	"	"	"	"	"	.530	8.07	+.05	00,01,03,03	"	"	6.25
"	"	"	"	"	"	.546	8.09	-.07	02,03,06,06	"	"	6.27
"	"	"	"	"	"	.552	8.07	-.08	00,01,01,00	"	"	6.25
"	"	"	"	"	"	.578	7.93	-.09	03,03,02,02	"	"	6.11
"	"	"	"	"	"	.585	7.92	-.18	02,01,02,02	"	"	6.10
"	"	"	"	"	"	.603	7.88	-.02	02,02,09,08	"	"	6.06

Phase Angle

203

6.4

3.5

3.1

30

28

30

5.4

6.6

7.0

1913AnHar..69...99W

Name.	DM. No.	R. A. 1900.	Dec. 1900.	Adopt. Magn.	Yr.	Julian Day.	Magn.	A-B	Residuals.	log r	log Δ	σ.
(7) Iris	+18° 1391	h. m. s.	° ' "	9.89	04	6499.610	7.81	-.17	01,00,04,04	0.317	0.048	5.99
"	"	"	"	"	"	" .630	7.86	-.24	02,02,07,06	"	"	6.04
"	"	"	"	"	"	" .660	7.93	-.27	01,02,05,05	"	"	6.11
"	+17° 1404	6 43 14	+17 32.1	8.57	"	6505.539	8.05	-.08	02,03,01,02	0.321	0.063	6.13
"	"	"	"	"	"	" .546	8.01	-.11	00,00,02,02	"	"	6.09
"	"	"	"	"	"	" .562	7.98	-.02	03,02,01,01	"	"	6.06
"	"	"	"	"	"	" .569	7.97	-.02	02,02,03,03	"	"	6.05
"	"	"	"	"	"	" .585	7.99	+.04	02,01,01,01	"	"	6.07
"	"	"	"	"	"	" .592	8.01	-.03	04,04,02,03	"	"	6.09
"	"	"	"	"	"	" .610	8.13	+.08	01,01,01,00	"	"	6.21
"	"	"	"	"	"	" .619	8.20	-.02	03,04,00,00	"	"	6.28
"	"	"	"	"	"	" .636	8.29	+.12	07,08,04,04	"	"	6.37
"	"	"	"	"	"	" .645	8.23	+.16	03,02,02,02	"	"	6.31
"	"	"	"	"	"	" .656	8.19	-.01	01,01,01,01	"	"	6.27
"	"	"	"	"	"	" .662	8.11	+.12	01,00,06,06	"	"	6.19
"	+17° 1368	6 38 2	+17 57.3	9.79	"	6514.600	8.39	-.29	01,01,08,09	0.325	0.090	6.31
"	"	"	"	"	"	" .611	8.38	-.18	02,01,02,03	"	"	6.30
"	"	"	"	"	"	6515.533	8.36	-.06	01,01,03,04	0.326	0.092	6.27
"	"	"	"	"	"	" .540	8.35	-.04	03,02,02,02	"	"	6.26
"	"	"	"	"	"	" .558	8.41	.00	01,02,03,02	"	"	6.32
"	"	"	"	"	"	" .566	8.41	-.04	02,02,00,01	"	"	6.32
"	"	"	"	"	"	" .583	8.44	-.02	00,00,02,02	"	"	6.35
"	"	"	"	"	"	" .592	8.49	-.12	00,01,02,02	"	"	6.40
"	"	"	"	"	"	" .613	8.49	-.09	01,02,02,02	"	"	6.40
"	"	"	"	"	"	" .624	8.51	-.12	02,03,02,01	"	"	6.42
"	"	"	"	"	"	" .644	8.41	-.09	02,01,02,01	"	"	6.32
"	"	"	"	"	"	" .653	8.33	-.21	02,03,02,02	"	"	6.24
"	"	"	"	"	"	6516.528	8.39	+.08	04,05,00,01	0.326	0.096	6.28
"	"	"	"	"	"	" .537	8.35	.00	06,05,03,02	"	"	6.24
"	"	"	"	"	"	" .558	8.29	-.04	00,01,00,00	"	"	6.18
"	"	"	"	"	"	" .568	8.34	-.02	01,02,00,00	"	"	6.23
"	"	"	"	"	"	" .585	8.31	+.01	02,02,01,02	"	"	6.20
"	"	"	"	"	"	" .595	8.34	+.02	01,02,01,00	"	"	6.23
"	+17° 1451	6 51 29	+17 25.9	9.03	"	6556.669	9.40	-.10	02,01,04,05	0.347	0.239	6.47
"	"	"	"	"	"	" .675	9.32	-.02	02,02,06,06	"	"	6.39
"	"	"	"	"	"	6563.583	9.31	-.17	01,02,04,04	0.350	0.262	6.25
"	"	"	"	"	"	" .590	9.38	-.22	02,02,02,01	"	"	6.32
"	"	"	"	"	"	" .603	9.43	-.29	05,05,10,10	"	"	6.37
"	"	"	"	"	"	" .612	9.45	-.20	03,03,03,03	"	"	6.39
"	"	"	"	"	"	" .626	9.57	-.27	02,02,03,03	"	"	6.51
"	"	"	"	"	"	" .637	9.63	-.18	03,03,02,02	"	"	6.57
"	"	"	"	"	"	" .651	9.61	-.23	02,02,01,02	"	"	6.55
"	"	"	"	"	"	" .658	9.57	-.30	03,03,01,01	"	"	6.51
"	"	"	"	"	"	" .666	9.53	-.15	05,04,06,06	"	"	6.47
"	"	"	"	"	"	6564.535	9.67	-.48	02,01,04,03	0.351	0.265	6.59
"	"	"	"	"	"	" .546	9.75	-.44	06,05,02,03	"	"	6.67
"	"	"	"	"	"	" .558	9.49	-.28	03,02,07,08	"	"	6.41
"	"	"	"	"	"	" .578	9.49	-.40	08,07,06,06	"	"	6.41
"	"	"	"	"	"	" .598	9.39	-.52	04,04,04,03	"	"	6.31
"	"	"	"	"	"	" .612	9.38	-.38	01,02,01,01	"	"	6.30

Phase Angle

7.0

10.0

14.9

15.5

16.1

25.6

26.0

26.0

Name.	DM. No.	R. A. 1900.	Dec. 1900.	Adopt. Magn.	Yr.	Julian Day.	Magn.	A-B	Residuals.	log r	log Δ	σ.
(7) Iris	+17° 1451	<i>h. m. s.</i> 6 51 29	<i>° '</i> +17 25.9	9.03	04	6564.630	9.42	-.48	05,05,00,00	0.351	0.265	6.34
"	"	"	"	"	"	" .640	9.48	-.46	04,04,02,02	"	"	6.40
"	"	"	"	"	"	" .656	9.61	-.41	09,09,05,06	"	"	6.53
"	+17° 1541	7 13 26	+17 4.8	9.45	"	6576.549	10.07	+1.19	09,09,03,02	0.358	0.305	6.75
"	"	"	"	"	"	" .556	10.05	+2.22	02,02,01,01	"	"	6.73
"	"	"	"	"	"	" .568	10.12	+2.26	03,02,01,01	"	"	6.80
"	"	"	"	"	"	" .574	10.12	+1.18	05,05,02,01	"	"	6.80
"	"	"	"	"	"	" .592	10.13	+1.11	01,01,02,02	"	"	6.81
"	"	"	"	"	"	" .622	10.05	-.32	05,04,01,01	"	"	6.73
"	"	"	"	"	"	" .632	10.02	-.26	04,03,01,01	"	"	6.70
"	"	"	"	"	"	" .645	9.95	-.28	03,03,00,01	"	"	6.63
"	"	"	"	"	"	" .656	9.91	-.25	01,00,01,01	"	"	6.59
"	"	"	"	"	"	" .664	9.94	-.22	08,08,00,01	"	"	6.62
"	+17° 1584	7 23 19	+17 15.7	9.61	"	6583.551	10.17	+1.17	04,04,04,03	0.361	0.325	6.74
"	"	"	"	"	"	" .558	10.14	+1.16	02,02,00,00	"	"	6.71
"	"	"	"	"	"	" .569	10.24	+3.32	R, A, 02,02	"	"	6.81
"	"	"	"	"	"	" .576	10.27	+1.17	04,04,01,02	"	"	6.84
"	"	"	"	"	"	" .589	10.26	+1.18	04,05,02,01	"	"	6.83
"	"	"	"	"	"	" .602	10.19	+1.12	03,02,02,01	"	"	6.76
"	"	"	"	"	"	" .612	10.09	+1.17	03,03,01,00	"	"	6.66
"	"	"	"	"	"	" .619	10.15	+1.17	04,03,02,02	"	"	6.72
"	"	"	"	"	"	" .635	10.01	.00	01,00,02,02	"	"	6.58
"	"	"	"	"	"	" .642	10.05	+0.07	02,01,03,03	"	"	6.62
"	"	"	"	"	"	" .651	10.13	+0.08	03,04,06,05	"	"	6.70
"	"	"	"	"	"	" .658	10.12	+1.10	03,02,01,01	"	"	6.69
"	"	"	"	"	"	6584.547	10.16	-.02	03,04,01,02	0.361	0.329	6.71
"	"	"	"	"	"	" .556	10.19	-.04	02,02,00,00	"	"	6.74
"	"	"	"	"	"	" .570	10.14	-.02	03,03,01,02	"	"	6.69
"	"	"	"	"	"	" .579	10.23	+1.13	00,01,09,09	"	"	6.78
"	"	"	"	"	"	" .595	10.25	+0.07	01,01,04,05	"	"	6.80
"	"	"	"	"	"	" .603	10.27	+1.15	01,01,00,01	"	"	6.82
"	"	"	"	"	"	" .623	10.25	.00	06,05,03,02	"	"	6.80
"	"	"	"	"	"	" .632	10.19	-.07	02,02,03,03	"	"	6.74
"	"	"	"	"	"	" .649	10.11	+0.01	06,06,01,01	"	"	6.66
"	"	"	"	"	"	" .656	10.03	-.11	04,03,02,02	"	"	6.58
"	"	"	"	"	"	" .666	10.09	-.08	01,00,02,03	"	"	6.64
"	+16° 1495	7 25 20	+16 49.7	8.42	"	6585.564	9.99	-.02	05,04,01,02	0.362	0.332	6.52
"	"	"	"	"	"	" .574	9.90	+0.05	02,01,01,01	"	"	6.43
"	"	"	"	"	"	" .587	9.94	-.01	01,00,01,01	"	"	6.47
"	"	"	"	"	"	" .594	9.90	-.08	01,00,03,03	"	"	6.43
"	"	"	"	"	"	" .606	9.92	+0.05	03,02,02,02	"	"	6.45
"	"	"	"	"	"	" .614	9.91	-.06	00,00,02,02	"	"	6.44
"	"	"	"	"	"	" .631	9.99	-.02	02,03,05,05	"	"	6.52
"	"	"	"	"	"	" .640	10.03	+0.02	06,07,00,01	"	"	6.56
"	"	"	"	"	"	" .656	10.17	-.12	03,03,03,03	"	"	6.70
"	"	"	"	"	"	" .663	10.22	-.04	02,01,02,01	"	"	6.75
"	+17° 1598	7 27 14	+17 16.3	8.92	"	6587.579	10.28	-.20	02,02,00,01	0.363	0.338	6.78
"	"	"	"	"	"	" .587	10.34	-.19	01,01,06,06	"	"	6.84
"	"	"	"	"	"	" .595	10.37	-.06	11,11,03,03	"	"	6.87
"	"	"	"	"	"	" .606	10.28	-.25	01,00,00,00	"	"	6.78

Phase Angle

260

260

257

257

256

255

1913AnHar..69...99W

Name.	DM. No.	R. A. 1900.	Dec. 1900.	Adopt. Magn.	Yr.	Julian Day.	Magn.	A-B	Residuals.	log r	log Δ	σ.
(7) Iris	+17° 1598	^{h. m. s.} 7 27 14	^{° ' "} +17 16.3	8.92	04	6587.622	10.25	-.14	08,09,05,04	0.363	0.338	6.75
"	"	"	"	"	"	.631	10.16	-.15	02,03,01,01	"	"	6.66
"	"	"	"	"	"	.644	10.14	-.23	04,03,05,05	"	"	6.64
"	"	"	"	"	"	.651	10.10	-.20	02,02,02,02	"	"	6.60
"	"	"	"	"	"	.660	10.13	-.30	07,07,01,01	"	"	6.63
"	"	"	"	"	"	.668	10.14	-.19	02,02,05,05	"	"	6.64
"	+15° 1781	8 7 3	+15 11.8	9.52	"	6613.579	10.28	+.16	01,00,00,00	0.375	0.407	6.37
"	"	"	"	"	"	.586	10.28	+.09	09,09,04,04	"	"	6.37
"	"	"	"	"	"	.597	10.36	+.13	02,02,02,02	"	"	6.45
"	"	"	"	"	"	.606	10.42	+.16	05,05,02,02	"	"	6.51
"	"	"	"	"	"	.619	10.49	+.04	01,01,01,01	"	"	6.58
"	"	"	"	"	"	.630	10.46	+.20	01,00,01,00	"	"	6.55
"	"	"	"	"	"	6614.567	10.44	+.08	07,07,06,07	0.375	0.409	6.52
"	"	"	"	"	"	.575	10.39	-.02	02,01,00,00	"	"	6.47
"	+15° 1795	8 13 30	+15 25.6	10.60	"	6617.567	10.35	-.04	10,10,03,03	0.376	0.415	6.39
"	"	"	"	"	"	.576	10.37	-.18	06,06,04,04	"	"	6.41
"	"	"	"	"	"	.597	10.27	-.02	02,02,07,06	"	"	6.31
"	"	"	"	"	"	.615	10.46	-.09	08,08,00,00	"	"	6.50
"	-17° 3954	13 48 32	-17 27.0	9.8	05	6974.605	9.58	-.36	02,02,02,03	0.467	0.290	5.80
"	"	"	"	"	"	.621	9.62	-.32	04,03,01,00	"	"	5.84
"	"	"	"	"	"	.638	9.59	-.34	00,01,02,01	"	"	5.81
"	"	"	"	"	"	.654	9.62	-.35	03,02,00,00	"	"	5.84
"	"	"	"	"	"	.679	9.57	-.26	06,05,05,06	"	"	5.79
"	"	"	"	"	"	.694	9.55	-.38	02,01,03,03	"	"	5.77
"	"	"	"	"	"	.709	9.58	-.33	01,01,02,02	"	"	5.80
"	"	"	"	"	"	.725	9.52	-.29	04,04,04,03	"	"	5.74
"	"	"	"	"	"	.738	9.52	-.30	01,01,00,00	"	"	5.74
"	"	"	"	"	"	6976.588	9.61	-.18	06,05,04,03	0.467	0.291	5.82
"	"	"	"	"	"	.603	9.62	-.12	02,01,03,03	"	"	5.83
"	"	"	"	"	"	.620	9.60	-.04	03,02,01,02	"	"	5.81
"	"	"	"	"	"	.639	9.62	-.04	03,03,03,02	"	"	5.83
"	-14° 3745	13 29 9	-14 25.1	9.1	"	7005.596	9.68	-.24	08,09,06,07	0.468	0.346	5.61
"	"	"	"	"	"	.607	9.68	-.20	00,01,01,00	"	"	5.61
"	"	"	"	"	"	.619	9.64	-.17	00,00,01,01	"	"	5.57
"	"	"	"	"	"	.633	9.60	-.24	03,02,03,04	"	"	5.53
"	"	"	"	"	"	.645	9.62	-.21	00,01,05,05	"	"	5.55
"	"	"	"	"	"	.655	9.60	-.21	04,04,05,05	"	"	5.53
"	"	"	"	"	"	.669	9.57	-.18	04,05,01,01	"	"	5.50
"	"	"	"	"	"	7006.577	9.70	-.40	04,04,00,00	0.468	0.350	5.61
"	"	"	"	"	"	.591	9.75	-.20	08,08,02,02	"	"	5.66
"	"	"	"	"	"	.605	9.68	-.09	03,02,00,00	"	"	5.59
"	"	"	"	"	"	.621	9.74	-.16	00,01,02,02	"	"	5.65
"	"	"	"	"	"	.642	9.78	-.16	05,04,00,00	"	"	5.69
"	-13° 3742	13 33 36	-13 47.4	9.6	"	7026.663	10.54	-.48	08,07,06,06	0.468	0.392	6.24
"	-13° 3755	13 36 55	-13 38.6	9.1	"	7030.599	10.22	+.45	05,06,00,00	0.468	0.399	5.88
"	"	"	"	"	"	7033.581	10.34	+.17	06,05,00,00	0.467	0.403	5.99
"	"	"	"	"	"	.593	10.34	+.17	03,04,04,04	"	"	5.99
"	"	"	"	"	"	7034.570	10.30	+.15	00,00,04,04	0.467	0.404	5.94
"	"	"	"	"	"	.582	10.37	+.10	01,00,05,06	"	"	6.01
"	"	"	"	"	"	.593	10.38	+.20	00,01,01,01	"	"	6.02

Phase Angle

25.5

23.4

23.3

23.0

5.5

5.9

16.1

16.3

19.3

19.6

19.7

19.8

1913AnHar..69...99W

Name.	DM. No.	R. A. 1900.	Dec. 1900.	Adopt. Magn.	Yr.	Julian Day.	Magn.	A-B	Residuals.	log r	log Δ	σ.
(7) Iris	-13° 3755	^{h. m. s.} 23 36 55	-13 38.6	9.1	05	7034.608	10.38	+ .29	06,06,04,03	0.467	0.404	6.02
"	" "	" "	" "	" "	" "	" .622	10.39	+ .26	02,02,03,07	"	"	6.03
"	-11° 5397	20 36 38	-11 35.7	10.06	06	7417.630	8.60	- .12	02,01,00,00	0.366	0.118	6.18
"	" "	" "	" "	" "	" "	" .641	8.60	- .12	02,03,00,01	"	"	6.18
"	" "	" "	" "	" "	" "	" .655	8.56	- .04	05,05,03,03	"	"	6.14
"	" "	" "	" "	" "	" "	" .671	8.54	- .08	03,03,01,00	"	"	6.12
"	" "	" "	" "	" "	" "	" .685	8.49	- .02	01,02,06,06	"	"	6.07
"	" "	" "	" "	" "	" "	" .699	8.48	- .08	03,04,00,01	"	"	6.06
"	" "	" "	" "	" "	" "	" .713	8.46	- .01	02,02,01,01	"	"	6.04
"	" "	" "	" "	" "	" "	" .729	8.51	- .06	03,04,00,00	"	"	6.09
"	" "	" "	" "	" "	" "	" .744	8.55	- .06	02,03,02,02	"	"	6.13
"	" "	" "	" "	" "	" "	" .758	8.56	- .08	05,06,01,01	"	"	6.14
"	" "	" "	" "	" "	" "	" .771	8.56	- .11	01,00,01,01	"	"	6.14
"	-12° 5706	20 17 19	-12 2.4	9.66	"	7436.571	8.56	- .11	01,00,06,06	0.356	0.109	6.24
"	" "	" "	" "	" "	" "	" .585	8.50	- .15	02,02,03,02	"	"	6.18
"	" "	" "	" "	" "	" "	" .598	8.52	- .06	02,02,03,03	"	"	6.20
"	" "	" "	" "	" "	" "	" .614	8.52	- .11	02,03,04,04	"	"	6.20
"	" "	" "	" "	" "	" "	" .631	8.62	- .03	02,02,01,01	"	"	6.30
"	" "	" "	" "	" "	" "	" .652	8.59	- .06	03,02,05,05	"	"	6.27
"	-13° 5573	20 0 41	-13 9.5	9.93	"	7475.544	9.20	+ .26	06,06,06,06	0.336	0.166	6.69
"	" "	" "	" "	" "	" "	" .559	9.17	+ .19	01,01,00,01	"	"	6.66
"	" "	" "	" "	" "	" "	7478.526	9.24	- .02	05,05,02,01	0.334	0.174	6.70
"	" "	" "	" "	" "	" "	" .538	9.15	- .04	01,02,02,03	"	"	6.61
"	" "	" "	" "	" "	" "	" .555	9.23	- .21	05,04,04,04	"	"	6.69
"	" "	" "	" "	" "	" "	" .569	9.35	- .13	01,01,01,01	"	"	6.81
"	" "	" "	" "	" "	" "	" .613	9.31	- .15	01,02,02,02	"	"	6.77
"	" "	" "	" "	" "	" "	" .631	9.34	- .10	01,01,04,03	"	"	6.80
"	" "	" "	" "	" "	" "	" .646	9.30	- .10	02,03,04,04	"	"	6.76
"	" "	" "	" "	" "	" "	" .664	9.30	- .18	01,02,02,03	"	"	6.76
"	" "	" "	" "	" "	" "	7479.538	9.30	- .02	04,04,04,03	0.334	0.176	6.75
"	" "	" "	" "	" "	" "	" .554	9.22	- .04	02,02,01,01	"	"	6.67
"	" "	" "	" "	" "	" "	" .568	9.17	- .03	05,05,00,01	"	"	6.62
"	" "	" "	" "	" "	" "	" .586	9.15	- .05	01,02,04,04	"	"	6.60
"	" "	" "	" "	" "	" "	" .608	9.23	- .05	04,04,00,01	"	"	6.68
"	" "	" "	" "	" "	" "	" .631	9.30	- .06	00,00,03,02	"	"	6.75
"	" "	" "	" "	" "	" "	" .657	9.35	.00	01,01,01,00	"	"	6.80
"	-13° 5618	20 9 14	-13 29.0	10.04	"	7492.535	9.51	- .26	00,01,05,05	0.328	0.206	6.84
"	" "	" "	" "	" "	" "	" .550	9.56	- .25	04,04,04,04	"	"	6.89
"	" "	" "	" "	" "	" "	" .562	9.62	- .13	02,01,01,01	"	"	6.95
"	" "	" "	" "	" "	" "	" .578	9.68	- .16	00,01,01,01	"	"	7.01
"	" "	" "	" "	" "	" "	" .594	9.64	- .11	03,03,01,00	"	"	6.97
"	" "	" "	" "	" "	" "	" .610	9.58	- .15	02,02,05,05	"	"	6.91
"	" "	" "	" "	" "	" "	" .624	9.58	- .25	01,01,09,09	"	"	6.91
"	" "	" "	" "	" "	" "	7494.531	9.58	- .23	04,04,10,09	0.326	0.211	6.90
"	" "	" "	" "	" "	" "	" .543	9.59	- .18	01,02,03,04	"	"	6.91
"	" "	" "	" "	" "	" "	" .556	9.60	- .01	01,00,08,08	"	"	6.92
"	" "	" "	" "	" "	" "	" .594	9.56	- .04	02,03,03,03	"	"	6.88
"	" "	" "	" "	" "	" "	" .621	9.54	- .01	02,02,00,01	"	"	6.86
"	" "	" "	" "	" "	" "	" .643	9.51	- .02	05,04,01,02	"	"	6.83
"	" "	" "	" "	" "	" "	7495.528	9.60	- .17	03,02,03,03	0.326	0.213	6.90

Phase Angle
198
3.9
7.7
23.3
24.2
24.4
26.5
26.9
27.0

Phase Angle

Name.	DM. No.	R. A. 1900.	Dec. 1900.	Adopt. Magn.	Yr.	Julian Day.	Magn.	A-B	Residuals.	log r	log Δ	g.
(7) Iris	-13° 5618	^{h. m. s.} 20 9 14	^{° ' "} -13 29.0	10.04	06	7495.544	9.63	-18	01,00,05,04	0.326	0.213	6.93
"	"	"	"	"	"	" .559	9.66	-.04	01,00,00,01	"	"	6.96
"	"	"	"	"	"	" .579	9.64	-.07	05,05,01,00	"	"	6.94
"	"	"	"	"	"	" .595	9.59	-.06	04,03,01,02	"	"	6.89
"	"	"	"	"	"	" .609	9.54	-.08	01,01,00,01	"	"	6.84
"	"	"	"	"	"	" .626	9.52	-.07	02,02,05,04	"	"	6.82
"	"	"	"	"	"	" .643	9.52	-.08	01,02,13,13	"	"	6.82
"	-13° 5626	20 11 8.5	-13 3.3	10.38	"	7496.537	9.40	+01	01,00,03,03	0.325	0.215	6.70
"	"	"	"	"	"	" .551	9.48	+03	08,07,04,04	"	"	6.78
"	"	"	"	"	"	" .564	9.54	+04	04,04,02,01	"	"	6.84
"	"	"	"	"	"	" .582	9.52	+01	04,03,01,01	"	"	6.82
"	"	"	"	"	"	" .599	9.56	+19	00,00,02,02	"	"	6.86
"	"	"	"	"	"	" .615	9.55	+14	04,03,03,02	"	"	6.85
"	"	"	"	"	"	" .627	9.59	-.02	05,04,02,03	"	"	6.89
"	"	"	"	"	"	" .642	9.61	+06	01,02,01,02	"	"	6.91
"	"	"	"	"	"	7497.530	9.58	+13	00,01,05,05	0.325	0.218	6.86
"	"	"	"	"	"	" .543	9.64	+08	03,02,09,10	"	"	6.92
"	"	"	"	"	"	" .557	9.50	+03	02,02,03,04	"	"	6.78
"	"	"	"	"	"	" .573	9.50	+24	04,03,01,00	"	"	6.78
"	"	"	"	"	"	" .590	9.54	+17	00,01,04,04	"	"	6.82
"	"	"	"	"	"	" .607	9.61	+18	01,02,04,03	"	"	6.89
"	"	"	"	"	"	" .624	9.65	+14	02,01,02,02	"	"	6.93
(8) Flora	+18° 2349	10 14 51	+18 23.0	10.26	04	6549.5843	9.37	-.34	01,01,04,04	0.372	0.147	6.77
"	"	"	"	"	"	" .5908	9.43	-.26	03,04,00,01	"	"	6.83
"	"	"	"	"	"	" .6008	9.40	-.16	03,03,03,03	"	"	6.80
"	"	"	"	"	"	" .6078	9.42	-.24	00,00,04,04	"	"	6.82
"	"	"	"	"	"	" .6291	9.41	-.22	00,01,02,03	"	"	6.81
"	"	"	"	"	"	" .6396	9.44	-.20	03,03,04,03	"	"	6.84
"	"	"	"	"	"	" .6549	9.42	-.29	04,04,00,00	"	"	6.82
"	"	"	"	"	"	" .6621	9.40	-.20	01,01,02,01	"	"	6.80
"	"	"	"	"	"	6550.5280	9.42	-.24	05,04,01,01	0.372	0.149	6.82
"	+18° 2346	10 13 38	+18 39.2	11.24	"	6552.5445	9.64	.00	02,01,01,01	0.373	0.153	7.01
"	"	"	"	"	"	" .5503	9.62	-.15	00,01,00,00	"	"	6.99
"	"	"	"	"	"	" .6128	9.60	.00	01,00,03,04	"	"	6.97
"	"	"	"	"	"	" .6196	9.64	-.06	05,05,02,02	"	"	7.01
"	"	"	"	"	"	" .6330	9.64	-.09	01,01,03,03	"	"	7.01
"	"	"	"	"	"	" .6405	9.60	.00	02,01,02,01	"	"	6.97
"	"	"	"	"	"	" .6548	9.56	-.09	05,05,03,03	"	"	6.93
"	"	"	"	"	"	" .6623	9.64	-.23	05,05,06,06	"	"	7.01
(15) Eunomia	+13° 1875	8 10 24	+13 9.9	8.68	05	6920.661	9.60	+01	02,02,01,01	0.437	0.304	5.90
"	"	"	"	"	"	" .670	9.74	+32	02,03,02,03	"	"	6.04
"	"	"	"	"	"	6921.608	9.50	-.29	03,03,01,01	0.437	0.307	5.78
"	"	"	"	"	"	6928.655	9.91	-.02	01,01,03,04	0.439	0.327	6.08
"	"	"	"	"	"	" .667	10.02	-.16	00,01,04,03	"	"	6.19
"	"	"	"	"	"	" .678	9.94	-.10	02,02,04,04	"	"	6.11
"	"	"	"	"	"	6932.578	9.87	+02	02,02,09,08	0.440	0.337	5.99
"	"	"	"	"	"	" .591	9.99	+08	01,01,01,01	"	"	6.11
"	"	"	"	"	"	" .606	9.99	+02	03,04,02,02	"	"	6.11
"	"	"	"	"	"	" .620	9.84	+12	02,02,00,01	"	"	5.96
"	"	"	"	"	"	" .633	9.71	+18	02,02,05,05	"	"	5.83

27.0

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Name.	DM. No.	R. A. 1900.	Dec. 1900.	Adopt. Magn.	Yr.	Julian Day.	Magn.	A-B	Residuals.	log r	log Δ	σ.
191 (15) Eunomia	+13° 1875	^{h. m. s.} 8 10 24	+13 9.9	8.68	05	6932.648	9.65	+22	04,03,00,00	0.440	0.337	5.77
"	"	"	"	"	"	.659	9.60	+13	02,02,01,02	"	"	5.72
194	"	"	"	"	"	6934.542	9.73	+06	01,02,10,09	0.441	0.343	5.81
"	"	"	"	"	"	.555	9.70	+12	01,00,02,01	"	"	5.78
"	"	"	"	"	"	.568	9.72	+12	01,00,06,07	"	"	5.80
"	"	"	"	"	"	.583	9.78	-01	01,02,01,01	"	"	5.86
"	"	"	"	"	"	.603	9.97	+22	05,05,03,04	"	"	6.05
"	"	"	"	"	"	.617	10.07	+04	03,03,03,03	"	"	6.15
"	"	"	"	"	"	.631	10.09	+10	02,03,03,03	"	"	6.17
198	"	"	"	"	"	.651	9.85	+22	02,03,01,02	"	"	5.93
"	"	"	"	"	"	6936.536	10.08	+12	02,01,01,00	0.442	0.348	6.13
"	"	"	"	"	"	.548	9.98	+28	01,00,05,04	"	"	6.03
"	"	"	"	"	"	.562	9.83	+06	01,00,04,04	"	"	5.88
"	"	"	"	"	"	.575	9.76	+17	01,01,06,05	"	"	5.81
200	"	"	"	"	"	.589	9.70	+16	04,03,01,00	"	"	5.75
"	"	"	"	"	"	6937.524	10.16	+39	01,01,05,05	0.442	0.351	6.20
"	"	"	"	"	"	.536	10.17	+38	01,00,07,07	"	"	6.21
"	"	"	"	"	"	.553	10.07	+38	04,05,04,05	"	"	6.11
"	"	"	"	"	"	.569	9.96	+51	00,00,03,02	"	"	6.00
"	"	"	"	"	"	.587	9.82	+25	02,03,01,01	"	"	5.86
"	"	"	"	"	"	.604	9.78	+35	00,01,01,01	"	"	5.82
"	"	"	"	"	"	.625	9.84	+41	01,01,03,02	"	"	5.88
"	"	"	"	"	"	.638	9.94	+28	04,03,04,04	"	"	5.98
"	"	"	"	"	"	.648	10.06	+47	12,12,00,01	"	"	6.10
"	"	"	"	"	"	.661	10.18	+39	04,03,03,03	"	"	6.22
203	+12° 1820	8 14 55	+12 50.3	9.97	"	6939.593	9.96	+38	01,01,05,04	0.443	0.357	5.96
"	"	"	"	"	"	.606	9.84	+18	05,05,02,01	"	"	5.84
"	"	"	"	"	"	.622	9.79	+23	02,02,02,02	"	"	5.79
206	"	"	"	"	"	6942.535	9.84	+06	04,03,04,05	0.444	0.366	5.79
"	"	"	"	"	"	.549	9.85	+03	03,02,05,05	"	"	5.80
"	"	"	"	"	"	.567	10.00	+30	02,02,07,07	"	"	5.95
"	"	"	"	"	"	.580	10.11	-01	02,02,06,05	"	"	6.06
"	"	"	"	"	"	.596	10.19	+10	01,01,02,02	"	"	6.14
"	"	"	"	"	"	.615	10.14	+18	02,01,02,01	"	"	6.09
"	"	"	"	"	"	.629	10.01	+04	03,02,01,00	"	"	5.96
"	"	"	"	"	"	.646	9.86	+14	01,02,03,02	"	"	5.81
207	"	"	"	"	"	.665	9.83	+03	00,00,01,00	"	"	5.78
"	"	"	"	"	"	6943.532	9.89	+08	06,05,03,02	0.444	0.368	5.83
"	"	"	"	"	"	.545	9.86	+10	05,05,05,06	"	"	5.80
"	"	"	"	"	"	.560	9.81	+04	03,04,08,08	"	"	5.75
"	"	"	"	"	"	.575	9.91	-04	01,00,01,01	"	"	5.85
"	"	"	"	"	"	.590	10.03	+09	02,02,01,01	"	"	5.97
"	"	"	"	"	"	.604	10.21	+03	02,02,03,02	"	"	6.15
"	"	"	"	"	"	.622	10.20	+04	01,01,01,01	"	"	6.14
"	"	"	"	"	"	.638	10.12	+06	02,02,03,04	"	"	6.06
"	"	"	"	"	"	.652	9.95	-03	00,00,02,02	"	"	5.89
208	"	"	"	"	"	6944.536	10.06	-02	01,00,01,02	0.444	0.371	5.98
"	"	"	"	"	"	.565	9.80	+18	05,06,07,06	"	"	5.72
"	"	"	"	"	"	.579	9.82	+14	01,02,02,03	"	"	5.74
"	"	"	"	"	"	.593	9.93	+03	01,00,01,01	"	"	5.85

E. J. ...

*Plan
Angle*

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Name.	DM. No.	R. A. 1900.	Dec. 1900.	Adopt. Magn.	Yr.	Julian Day.	Magn.	A-B	Residuals.	log r	log Δ	g.
(15) Eunomia	+12° 1820	^{h. m. s.} 8 14 55	+12 50.3	9.97	05	6944.611	10.15	+13	00,00,08,08	0.444	0.371	6.07
"	" "	" "	" "	"	"	" .627	10.27	+10	00,00,01,01	"	"	6.19
"	+11° 1864	8 27 1	+11 45.9	9.42	"	6961.544	10.46	-20	00,00,01,02	0.449	0.415	6.14
"	" "	" "	" "	"	"	" .556	10.44	-17	01,01,04,03	"	"	6.12
"	" "	" "	" "	"	"	" .573	10.55	-14	02,01,02,02	"	"	6.23
"	" "	" "	" "	"	"	" .587	10.78	-27	03,03,05,06	"	"	6.46
"	" "	" "	" "	"	"	" .604	11.00	-04	01,00,07,07	"	"	6.68
"	" "	" "	" "	"	"	" .620	10.85	-22	02,03,01,02	"	"	6.53
"	" "	" "	" "	"	"	" .632	10.74	-32	04,04,04,03	"	"	6.42
"	" "	" "	" "	"	"	" .647	10.66	-09	02,02,01,00	"	"	6.34
"	" "	" "	" "	"	"	" .668	10.51	-26	01,02,02,01	"	"	6.19
"	" "	" "	" "	"	"	6963.559	10.56	-33	08,07,03,03	0.449	0.420	6.22
"	" "	" "	" "	"	"	" .581	10.45	-06	01,00,04,03	"	"	6.11
"	" "	" "	" "	"	"	" .604	10.62	-03	05,05,00,00	"	"	6.28
"	" "	" "	" "	"	"	6964.564	10.62	-23	04,04,08,08	0.450	0.422	6.26
"	" "	" "	" "	"	"	" .581	10.54	-29	04,04,05,04	"	"	6.18
"	" "	" "	" "	"	"	" .596	10.51	-30	06,05,03,04	"	"	6.15
"	+11° 1887	8 32 50	+11 43.8	10.48	"	6967.557	10.71	+14	06,05,07,08	0.450	0.430	6.31
"	" "	" "	" "	"	"	" .571	10.78	+15	03,03,05,05	"	"	6.38
"	" "	" "	" "	"	"	" .588	10.68	+20	05,05,03,04	"	"	6.28
"	" "	" "	" "	"	"	" .602	10.49	+10	07,06,07,06	"	"	6.09
"	" "	" "	" "	"	"	" .619	10.34	+19	05,04,02,02	"	"	5.94
"	" "	" "	" "	"	"	" .634	10.28	+20	02,01,02,01	"	"	5.88
"	" "	" "	" "	"	"	" .646	10.36	+21	00,00,01,01	"	"	5.96
"	" "	" "	" "	"	"	" .663	10.55	+30	01,00,00,01	"	"	6.15
"	" "	" "	" "	"	"	6969.554	10.56	+04	04,05,06,05	0.451	0.435	6.13
"	" "	" "	" "	"	"	" .580	10.72	-05	01,01,02,03	"	"	6.29
"	" "	" "	" "	"	"	" .597	10.81	+16	04,04,08,08	"	"	6.38
"	" "	" "	" "	"	"	" .618	10.76	+21	06,06,04,05	"	"	6.33
"	" "	" "	" "	"	"	6970.556	10.42	+25	06,05,04,04	0.451	0.437	5.99
"	" "	" "	" "	"	"	" .573	10.54	-11	02,02,00,01	"	"	6.11
"	" "	" "	" "	"	"	" .589	10.72	-35	02,02,04,03	"	"	6.29
"	" "	" "	" "	"	"	" .616	10.77	-38	03,03,01,00	"	"	6.34
"	" "	" "	" "	"	"	" .637	10.59	-20	08,08,03,03	"	"	6.16
"	" "	" "	" "	"	"	" .651	10.48	-32	00,01,06,06	"	"	6.05
"	+11° 1904	8 39 47	+11 12.2	10.56	"	6975.566	11.02	+40	04,04,03,02	0.452	0.449	6.52
"	" "	" "	" "	"	"	" .581	10.89	+34	03,02,00,01	"	"	6.39
"	" "	" "	" "	"	"	" .595	10.78	+23	01,01,05,05	"	"	6.28
(37) Fides	+22° 1938	8 23 58	+22 15.2	9.78	04	6558.602	11.37	-10	01,00,04,05	0.389	0.240	8.23
"	" "	" "	" "	"	"	" .608	11.46	.00	02,02,05,05	"	"	8.32
"	" "	" "	" "	"	"	" .626	11.43	-06	02,01,06,05	"	"	8.29
"	" "	" "	" "	"	"	" .639	11.36	+03	03,04,04,04	"	"	8.22
"	" "	" "	" "	"	"	" .648	11.44	-10	01,01,00,00	"	"	8.30
"	" "	" "	" "	"	"	" .655	11.38	.00	01,00,04,04	"	"	8.24
"	" "	" "	" "	"	"	" .663	11.28	+01	05,04,03,03	"	"	8.14
(167) Urda	.. ..	22 13 58	-10 48.5	R	05	7114.617	R	-11	05,05,01,02	0.446	0.272	R
"	.. ..	22 14 7	-10 29.8	11.57	"	7115.580	13.86	+36	07,07,01,01	0.446	0.274	10.26
"	.. ..	" "	" "	"	"	7117.582	13.89	+38	10,10,06,06	0.446	0.277	10.27
(313) Chaldea	.. ..	9 15 46	+ 3 12.1	10.77	04	6531.595	10.79	-20	02,03,06,05	0.291	9.994	9.37
"	.. ..	" "	" "	"	"	" .605	10.81	-10	04,04,01,01	"	"	9.39

2042
2058
226 124
227 007
023
040
057
073
145
160
121
242 007
243 007
030
103
120
051 004
274 051
069
086
140
117
271 006
272 007
025
051
058
080
282 013
030
045
072
092
104
082
097
111

Name.	DM. No.	R. A. 1900.	Dec. 1900.	Adopt. Magn.	Yr.	Julian Day.	Magn.	A-B	Residuals.	log r	log Δ	σ.
(313) Chaldea	.. ..	^{h. m. s.} 9 15 46	^{° ' "} + 3 12.1	10.77	04	6531.629	10.93	-.15	05,05,05,04	0.291	9.994	9.51
"	.. ..	" "	" "	"	"	" .638	10.97	-.13	02,02,03,03	"	"	9.55
"	.. ..	" "	" "	"	"	" .655	10.95	-.20	04,03,01,02	"	"	9.53
"	.. ..	" "	" "	"	"	" .665	11.00	-.14	02,02,03,03	"	"	9.58
"	+ 3° 2190	9 14 51	+ 3 47.2	10.62	"	6533.660	10.87	+0.06	02,01,06,07	0.292	9.996	9.43
(345) Tercidina	- 2° 3462	12 1 16	- 3 0.4	10.98	01	5519.564	12.98	+0.21	06,06,01,01	0.379	0.213	10.02
"	" "	" "	" "	"	"	" .592	13.02	+0.17	01,02,06,06	"	"	10.06
"	" "	" "	" "	"	"	" .608	12.97	+0.22	05,05,05,04	"	"	10.01
"	" "	" "	" "	"	"	" .634	12.97	+0.18	01,01,04,05	"	"	10.01
"	- 3° 3231	11 59 48	- 3 15.4	10.92	"	5520.575	13.14	-.40	05,04,12,11	0.379	0.215	10.17
"	" "	" "	" "	"	"	" .588	13.15	-.26	04,05,01,00	"	"	10.18
"	" "	" "	" "	"	"	" .604	13.20	-.23	04,03,05,05	"	"	10.23
"	" "	" "	" "	"	"	" .637	13.18	-.23	04,05,01,01	"	"	10.21
"	" "	" "	" "	"	"	" .653	13.18	-.13	04,03,01,01	"	"	10.21
"	" "	" "	" "	"	"	5521.579	13.05	-.04	01,01,07,07	0.379	0.218	10.07
"	" "	" "	" "	"	"	" .592	13.13	-.18	01,02,01,00	"	"	10.15
"	" "	" "	" "	"	"	" .611	13.19	-.22	00,01,01,01	"	"	10.21
"	" "	" "	" "	"	"	" .631	13.31	-.06	06,06,03,04	"	"	10.33
"	" "	" "	" "	"	"	" .651	13.34	-.14	01,01,02,02	"	"	10.36
"	+ 6° 1665	7 21 16	+ 6 7.2	10.62	03	6467.639	12.16	-.21	03,04,04,04	0.341	0.107	9.92
"	" "	" "	" "	"	"	" .665	12.06	+0.04	00,00,03,04	"	"	9.82
"	" "	" "	" "	"	"	" .676	12.05	+0.02	04,03,02,01	"	"	9.81
"	" "	" "	" "	"	"	" .696	12.08	-.02	05,05,04,04	"	"	9.84
"	" "	" "	" "	"	"	" .706	12.04	-.01	01,01,05,05	"	"	9.80
"	" "	" "	" "	"	"	" .732	12.10	+0.04	01,02,02,01	"	"	9.86
"	" "	" "	" "	"	"	" .742	12.11	+0.10	05,06,07,08	"	"	9.87
"	" "	" "	" "	"	"	" .757	12.14	+0.08	01,00,05,05	"	"	9.90
"	" "	" "	" "	"	"	" .765	12.18	+0.08	07,08,04,03	"	"	9.94
"	" "	" "	" "	"	"	" .781	12.12	+0.01	00,00,04,05	"	"	9.88
"	" "	" "	" "	"	"	" .790	12.17	+0.22	08,09,05,05	"	"	9.93
"	+ 6° 1656	7 19 37	+ 5 56.7	11.08	"	6471.627	12.15	+0.10	03,02,01,01	0.341	0.102	9.91
"	" "	" "	" "	"	"	" .637	12.10	+0.08	06,06,02,02	"	"	9.88
"	" "	" "	" "	"	"	" .651	12.16	+0.04	00,01,01,00	"	"	9.94
"	" "	" "	" "	"	"	" .669	12.12	+0.20	10,09,00,00	"	"	9.90
"	" "	" "	" "	"	"	" .680	12.12	+0.11	01,00,03,03	"	"	9.90
"	" "	" "	" "	"	"	" .690	12.09	+0.06	02,03,06,05	"	"	9.87
"	" "	" "	" "	"	"	" .717	12.12	+0.08	01,02,05,06	"	"	9.90
"	" "	" "	" "	"	"	" .726	12.08	+0.08	02,01,03,04	"	"	9.86
"	" "	" "	" "	"	"	" .737	12.18	+0.15	06,05,05,04	"	"	9.96
"	" "	" "	" "	"	"	" .752	12.19	+0.14	04,04,03,03	"	"	9.97
"	" "	" "	" "	"	"	" .776	12.20	+0.01	04,04,01,00	"	"	9.98
"	" "	" "	" "	"	"	" .783	12.10	+0.16	01,02,00,01	"	"	9.88
(387) Aquitania	+ 4° 3281	16 48 52	+ 4 53.2	10.98	04	6642.636	10.45	-.10	09,08,03,03	0.330	0.075	8.43
"	" "	" "	" "	"	"	" .643	10.44	+0.03	08,07,07,07	"	"	8.42
"	" "	" "	" "	"	"	" .675	10.42	-.01	07,07,01,01	"	"	8.40
"	" "	" "	" "	"	"	6643.629	10.49	-.02	01,00,03,02	0.330	0.075	8.47
"	" "	" "	" "	"	"	" .637	10.46	+0.02	01,01,03,03	"	"	8.44
"	" "	" "	" "	"	"	" .650	10.51	-.02	03,02,03,03	"	"	8.49
"	" "	" "	" "	"	"	" .658	10.47	-.06	03,04,08,08	"	"	8.45
"	" "	" "	" "	"	"	" .669	10.48	-.03	09,09,01,02	"	"	8.46

Phase Angle
2
60
194
197
200
15.6
13.3
120
120

Name.	DM. No.	R. A. 1900.	Dec. 1900.	Adopt. Magn.	Yr.	Julian Day.	Magn.	A-B	Residuals.	log r	log Δ	σ.
(433) Eros	+48° 757	h. m. s. ° ' "	+48 39.3	8.00	00	5304.659	10.58	+ .08	02,03,03,03	0.146	9.705	11.32
"	+49° 755	2 37 49	+49 47.3	8.63	"	5308.596	10.29	+ .27	00,01,02,02	0.141	9.685	11.16
"	" "	" "	" "	"	"	" .601	10.25	+ .18	01,01,02,02	"	"	11.12
"	" "	2 37 51	+49 54.8	"	"	" .610	R	+ .30	03,04,03,03	"	"	R
"	" "	" "	" "	"	"	" .620	R	+ .30	01,01,03,03	"	"	R
"	+50° 613	2 36 39	+51 6.9	8.82	"	5312.540	10.38	- .27	01,01,03,02	0.137	9.665	11.37
"	" "	" "	" "	"	"	" .548	10.36	- .23	01,01,00,01	"	"	11.35
"	" "	2 36 47	+50 58.7	10.89	"	" .557	10.59	- .25	01,01,00,01	"	"	11.58
"	" "	" "	" "	"	"	" .566	10.63	- .29	02,03,02,02	"	"	11.62
"	+50° 602	2 34 15	+51 5.0	9.26	"	5313.548	9.87	- .18	04,03,07,07	0.136	9.661	10.89
"	" "	" "	" "	"	"	" .554	9.90	- .13	04,04,01,00	"	"	10.92
"	+52° 595	2 27 17	+52 24.2	8.24	"	5317.612	9.98	+ .23	00,00,03,03	0.132	9.643	11.10
"	" "	" "	" "	"	"	" .618	10.10	+ .18	01,01,03,03	"	"	11.22
"	+52° 596	2 27 18	+52 20.3	9.72	"	" .626	10.39	+ .14	09,09,01,01	"	"	11.51
"	" "	" "	" "	"	"	" .632	10.41	+ .14	06,05,01,00	"	"	11.53
"	+53° 493	2 11 1	+54 6.4	8.53	"	5326.548	10.03	+ .27	03,02,03,03	0.123	9.603	11.40
"	" "	" "	" "	"	"	" .553	10.03	+ .32	01,00,02,02	"	"	11.40
"	+53° 492	2 11 22	+54 9.5	9.90	"	" .559	10.02	+ .36	01,01,03,04	"	"	11.39
"	" "	" "	" "	"	"	" .566	10.01	+ .38	00,01,01,02	"	"	11.38
"	+53° 470	2 4 59	+54 4.9	8.40	"	5330.560	9.88	- .16	08,07,03,04	0.119	9.588	11.34
"	" "	" "	" "	"	"	" .569	9.93	- .30	03,03,01,02	"	"	11.39
"	+54° 452	1 57 59	+54 17.0	8.00	"	5334.539	10.06	- .16	05,05,03,04	0.114	9.574	11.62
"	" "	" "	" "	"	"	" .547	10.12	- .21	00,00,02,03	"	"	11.68
"	+54° 438	1 55 17	+54 18.6	8.90	"	5336.542	10.18	- .23	02,02,02,02	0.112	9.567	11.78
"	" "	" "	" "	"	"	" .549	10.14	- .21	02,01,04,04	"	"	11.74
"	+53° 420	1 49 2	+53 50.3	8.40	"	5338.538	9.84	- .15	00,00,03,02	0.110	9.561	11.48
"	" "	" "	" "	"	"	" .545	9.83	- .26	01,00,00,01	"	"	11.47
"	" "	" "	" "	"	"	5339.558	9.73	- .18	01,00,02,01	0.109	9.558	11.39
"	" "	" "	" "	"	"	" .566	9.71	- .22	02,01,02,02	"	"	11.37
"	+52° 424	1 37 57	+52 41.5	8.02	"	5345.541	9.96	- .35	10,09,04,04	0.103	9.541	11.74
"	" "	1 33 31	+52 24.1	10.08	"	5347.680	9.57	+ .06	03,02,02,03	0.101	9.536	11.39
"	" "	" "	" "	"	"	" .686	9.58	- .08	10,09,03,03	"	"	11.40
"	+51° 334	1 28 32	+51 38.6	8.85	"	5352.680	9.82	- .26	02,03,02,02	0.096	9.525	11.72
"	" "	" "	" "	"	"	" .685	9.81	- .28	02,02,00,01	"	"	11.71
"	+48° 463	1 27 16	+48 29.8	8.36	"	5361.652	9.72	- .24	06,05,01,00	0.087	9.511	11.73
"	" "	" "	" "	"	"	" .658	9.76	- .28	03,03,03,03	"	"	11.77
"	+47° 448	1 27 56	+48 3.8	8.64	"	5362.658	9.76	- .33	02,03,01,01	0.086	9.510	11.78
"	" "	" "	" "	"	"	" .665	9.83	- .26	02,02,01,02	"	"	11.85
"	+46° 385	1 28 47	+46 25.7	9.00	"	5365.651	9.64	+ .37	03,03,02,01	0.084	9.506	11.69
"	" "	" "	" "	"	"	" .658	9.60	+ .31	03,03,01,01	"	"	11.65
"	+45° 405	1 33 34	+45 31.7	8.88	"	5368.657	9.52	+ .13	03,03,01,02	0.081	9.503	11.60
"	" "	" "	" "	"	"	" .664	9.52	+ .13	01,01,02,02	"	"	11.60
"	+44° 347	1 34 49	+44 30.2	8.13	"	5371.660	10.04	- .34	00,01,05,05	0.078	9.502	12.14
"	" "	" "	" "	"	"	" .667	10.13	- .21	03,02,00,00	"	"	12.23
"	+43° 357	1 38 54	+43 22.9	8.96	"	5374.667	9.63	- .18	06,06,03,04	0.076	9.500	11.75
"	" "	" "	" "	"	"	" .673	9.60	- .20	00,00,00,01	"	"	11.72
"	+42° 379	1 42 9	+42 21.7	10.44	"	5376.648	11.00	- .28	00,00,02,02	0.075	9.499	13.13
"	" "	" "	" "	"	"	" .654	11.00	- .28	01,01,01,00	"	"	13.13
"	+40° 409	1 51 54	+40 28.6	8.24	"	5380.674	10.13	+ .14	01,01,02,02	0.072	9.499	12.27
"	" "	" "	" "	"	"	" .680	10.11	+ .16	01,01,01,01	"	"	12.25

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Name.	DM. No.	R. A. 1900.	Dec. 1900.	Adopt. Magn.	Yr.	Julian Day.	Magn.	A-B	Residuals.	log r	log Δ	α.
(433) Eros	+39° 452	h. m. s.	° ' "									
"	" "	1 54 49	+39 46.6	9.60	00	5382.656	10.16	-.41	03,03,00,01	0.071	9.499	12.31
"	" "	" "	" "	" "	"	" .664	10.14	-.48	03,04,03,03	"	"	12.29
"	+38° 401	1 58 19	+38 55.3	8.70	"	5383.661	9.94	+.17	04,04,02,02	0.069	9.499	12.10
"	" "	" "	" "	" "	"	" .669	9.84	+.24	03,04,01,00	"	"	12.00
"	+37° 490	2 3 55	+38 11.2	9.12	01	5386.658	9.84	-.20	03,03,01,01	0.067	9.500	12.00
"	" "	" "	" "	" "	"	" .666	9.80	-.21	04,05,01,01	"	"	11.96
"	+37° 504	2 7 49	+37 37.4	9.10	"	5387.656	9.79	+.30	06,07,02,01	0.067	9.501	11.95
"	" "	" "	" "	" "	"	" .666	9.86	+.23	02,02,03,04	"	"	12.02
"	+36° 451	2 10 30	+36 38.3	8.50	"	5389.670	10.14	-.28	08,07,07,08	0.066	9.502	12.30
"	" "	" "	" "	" "	"	" .678	10.12	-.44	00,01,01,01	"	"	12.28
"	+34° 440	2 21 45	+34 57.2	8.34	"	5392.661	9.80	+.16	01,00,05,06	0.064	9.503	11.96
"	" "	" "	" "	" "	"	" .676	9.70	+.13	00,01,03,03	"	"	11.86
"	+30° 461	2 48 10	+31 3.4	10.43	"	5401.666	10.35	+.13	01,01,03,03	0.059	9.511	12.50
"	+30° 478	2 54 51	+30 21.2	9.19	"	5403.661	9.86	+.26	04,05,02,01	0.058	9.514	12.00
"	" "	" "	" "	" "	"	" .670	9.84	+.18	00,01,00,00	"	"	11.98
"	+29° 519	2 59 40	+30 7.7	8.38	"	5404.649	10.00	+.07	03,03,00,01	0.058	9.516	12.13
"	" "	" "	" "	" "	"	" .658	10.02	+.06	00,00,02,02	"	"	12.15
"	+25° 584	3 33 28	+25 49.3	8.96	"	5414.626	10.34	+.28	04,05,00,00	0.055	9.532	12.40
"	" "	" "	" "	" "	"	" .639	10.28	+.13	01,01,01,00	"	"	12.34
"	+24° 585	3 45 50	+24 47.9	8.85	"	5417.684	10.65	+.40	03,04,01,00	0.055	9.537	12.69
"	+24° 589	3 46 55	+24 23.8	9.21	"	5418.697	10.10	-.02	01,02,01,00	0.054	9.540	12.13
"	+23° 621	4 2 26	+23 7.5	8.88	"	5422.651	10.09	-.22	01,01,02,03	0.054	9.548	12.08
"	" "	" "	" "	" "	"	" .663	10.05	-.18	02,01,03,03	"	"	12.04
"	+22° 654	4 8 3	+22 27.6	8.12	"	5423.652	10.56	+.11	03,03,00,00	0.054	9.551	12.54
"	" "	" "	" "	" "	"	" .663	10.60	+.08	01,01,01,02	"	"	12.58
"	+21° 610	4 9 17	+21 50.3	8.59	"	5424.658	10.65	+.04	06,05,03,03	0.054	9.553	12.61
"	" "	" "	" "	" "	"	" .669	10.98	-.34	05,04,06,06	"	"	12.94
"	+20° 760	4 22 45	+20 37.0	8.58	"	5427.626	10.72	+.07	06,06,08,09	0.054	9.561	12.64
"	+17° 820	4 52 56	+17 50.3	8.97	"	5435.614	10.51	+.16	01,01,03,04	0.056	9.582	12.32
"	" "	" "	" "	" "	"	" .624	10.56	+.18	00,01,02,01	"	"	12.37
"	+14° 915	5 22 4	+14 59.4	8.45	"	5443.652	11.01	+.06	01,01,04,04	0.058	9.607	12.69
"	" "	" "	" "	" "	"	" .663	11.17	-.04	04,04,03,03	"	"	12.85
"	+12° 925	5 46 38	+12 51.2	8.44	"	5450.626	11.04	-.12	05,04,01,00	0.061	9.630	12.58
"	" "	" "	" "	" "	"	" .634	10.84	-.35	02,02,06,05	"	"	12.38
"	" "	" "	" "	" "	"	" .659	10.66	-.16	01,01,02,02	"	"	12.20
"	+11° 1071	6 8 26	+11 0.9	9.44	"	5456.573	11.10	+.03	03,02,02,02	0.064	9.652	12.52
"	" "	" "	" "	" "	"	" .586	10.97	+.12	01,01,00,00	"	"	12.39
"	" "	" "	" "	" "	"	" .597	10.94	+.09	01,00,02,02	"	"	12.36
"	" "	" "	" "	" "	"	" .610	11.25	-.18	13,13,02,01	"	"	12.67
"	" "	" "	" "	" "	"	" .623	11.58	+.23	07,07,05,05	"	"	13.00
"	" "	" "	" "	" "	"	" .637	11.98	-.13	05,04,02,02	"	"	13.40
"	" "	" "	" "	" "	"	" .649	11.79	+.14	02,01,03,02	"	"	13.21
"	" "	" "	" "	" "	"	" .660	11.50	+.25	03,03,05,05	"	"	12.92
"	" "	" "	" "	" "	"	" .671	11.16	+.01	01,01,04,05	"	"	12.58
"	" "	" "	" "	" "	"	" .681	10.91	+.26	07,07,07,07	"	"	12.33
"	" "	" "	" "	" "	"	" .692	10.85	+.14	00,00,00,01	"	"	12.27
"	+ 8° 1439	6 35 11	+ 8 35.6	8.86	"	5463.586	11.14	+.24	02,03,00,00	0.069	9.677	12.41
"	" "	" "	" "	" "	"	" .594	10.96	+.07	06,06,03,03	"	"	12.23
"	" "	" "	" "	" "	"	" .602	10.90	+.08	05,06,03,02	"	"	12.17
"	" "	" "	" "	" "	"	" .611	10.81	+.10	02,01,01,00	"	"	12.08

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Name.	DM. No.	R. A. 1900.	Dec. 1900.	Adopt. Magn.	Yr.	Julian Day.	Magn.	A-B	Residuals.	log r	log Δ	σ.
(433) Eros	+ 8° 1439	h. m. s. 6 35 11	° ' " + 8 35.6	8.86	01	5463.621	10.83	+ .10	02,03,01,01	0.069	9.677	12.10
"	" "	" "	" "	"	"	" .634	11.06	+ .28	03,04,00,01	"	"	12.33
"	" "	" "	" "	"	"	" .645	11.38	- .15	03,02,10,10	"	"	12.65
"	+ 2° 1841	7 54 23	+ 2 44.0	10.41	"	5487.552	11.69	+ .27	06,05,00,00	0.090	9.769	12.39
"	" "	" "	" "	"	"	" .558	11.77	+ .27	03,03,01,02	"	"	12.47
"	" "	" "	" "	"	"	" .566	11.75	+ .16	01,00,03,03	"	"	12.45
"	" "	" "	" "	"	"	" .574	11.91	+ .15	01,01,03,03	"	"	12.61
"	" "	" "	" "	"	"	" .581	11.97	+ .23	03,03,04,04	"	"	12.67
"	" "	" "	" "	"	"	" .590	12.00	+ .22	01,01,01,01	"	"	12.70
"	" "	" "	" "	"	"	" .599	12.09	+ .30	01,01,03,03	"	"	12.79
"	" "	" "	" "	"	"	" .610	12.05	+ .32	03,03,04,03	"	"	12.75
"	" "	" "	" "	"	"	" .620	11.90	+ .14	02,03,02,02	"	"	12.60
"	" "	" "	" "	"	"	" .631	11.77	+ .25	01,02,01,01	"	"	12.47
"	" "	" "	" "	"	"	" .642	11.67	+ .07	04,04,03,02	"	"	12.37
"	" "	" "	" "	"	"	" .654	11.68	+ .26	01,02,01,00	"	"	12.38
"	" "	" "	" "	"	"	" .666	11.69	+ .21	02,02,00,01	"	"	12.39
"	" "	" "	" "	"	"	" .677	11.79	+ .21	06,05,09,09	"	"	12.49
"	" "	" "	" "	"	"	" .689	11.87	+ .28	01,00,03,04	"	"	12.57
"	- 2° 2823	9 9 23	- 2 30.4	9.62	"	5511.549	12.04	- .05	00,00,00,01	0.113	9.864	12.16
"	" "	" "	" "	"	"	" .557	12.02	- .17	00,00,02,01	"	"	12.14
"	" "	" "	" "	"	"	" .567	12.04	- .03	03,04,00,00	"	"	12.16
"	" "	" "	" "	"	"	" .577	12.00	- .21	01,02,02,02	"	"	12.12
"	" "	" "	" "	"	"	" .590	12.00	- .04	01,01,03,04	"	"	12.12
"	" "	" "	" "	"	"	" .600	12.08	- .12	02,02,00,01	"	"	12.20
"	" "	" "	" "	"	"	" .610	12.00	.00	00,01,03,02	"	"	12.12
"	" "	" "	" "	"	"	" .625	12.00	- .07	09,10,00,00	"	"	12.12
"	- 2° 2840	9 13 49	- 2 43.6	9.16	"	5512.549	12.08	+ .07	02,01,03,03	0.114	9.868	12.17
"	" "	" "	" "	"	"	" .559	12.00	+ .15	02,01,00,00	"	"	12.09
"	" "	" "	" "	"	"	" .570	12.10	+ .13	03,03,02,03	"	"	12.19
"	" "	" "	" "	"	"	" .580	12.05	+ .18	11,11,03,03	"	"	12.14
"	" "	" "	" "	"	"	" .591	11.98	+ .20	07,07,01,02	"	"	12.07
"	" "	" "	" "	"	"	" .605	12.05	+ .10	02,01,03,03	"	"	12.14
"	" "	" "	" "	"	"	" .616	12.03	+ .14	03,04,01,02	"	"	12.12
"	" "	" "	" "	"	"	" .629	12.00	+ .16	07,06,00,01	"	"	12.09
"	- 4° 2732	9 45 3	- 5 0.7	9.70	"	5522.574	12.24	+ .23	03,03,04,03	0.124	9.907	12.08
"	" "	" "	" "	"	"	" .584	12.29	+ .32	05,05,02,02	"	"	12.13
"	" "	" "	" "	"	"	" .594	12.26	+ .27	02,02,05,05	"	"	12.10
"	- 9° 3157	10 47 0	- 9 25.4	9.35	"	5544.586	12.21	- .33	04,04,03,03	0.145	9.989	11.54
"	" "	" "	" "	"	"	" .595	12.16	- .42	05,04,06,06	"	"	11.49
"	" "	" "	" "	"	"	" .608	12.29	- .17	02,03,06,06	"	"	11.62
"	" "	" "	" "	"	"	" .623	12.31	- .25	05,05,04,03	"	"	11.64
"	- 14° 5977	21 10 34	- 13 52.6	9.38	05	7054.661	11.66	- .31	10,09,02,02	0.250	9.888	10.97
"	" "	" "	" "	"	"	" .680	11.53	- .38	01,02,09,09	"	"	10.84
"	" "	" "	" "	"	"	" .702	11.62	- .20	05,06, A	"	"	10.93
"	" "	" "	" "	"	"	" .798	11.57	- .18	05,06,04,04	"	"	10.88
"	" "	" "	" "	"	"	" .811	11.60	- .08	00,00,07,06	"	"	10.91
"	" "	" "	" "	"	"	" .826	11.84	- .31	06,05,04,04	"	"	11.15
"	- 13° 5841	20 59 26	- 13 33.3	9.37	"	7060.675	11.89	- .20	01,00,07,08	0.249	9.882	11.23
"	" "	" "	" "	"	"	" .783	11.75	- .21	03,02,09,09	"	"	11.09
"	" "	" "	" "	"	"	" .816	11.39	- .21	04,04,06,05	"	"	10.73

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OBSERVATIONS OF ASTEROIDS.

Name.	DM. No.	R. A. 1900.	Dec. 1900.	Adopt. Magn.	Yr.	Julian Day.	Magn.	A-B	Residuals.	log r	log Δ	ρ.
(433) Eros	-13° 5841	20 59 26	-13 33.3	9.37	05	7060.827	11.32	-.26	03,04,01,01	0.249	9.882	10.66
"	"	"	"	"	"	" .840	11.27	-.24	04,05,02,03	"	"	10.61
"	"	"	"	"	"	7061.596	11.41	-.20	06,06,09,08	0.249	9.881	10.76
"	"	"	"	"	"	" .608	11.35	-.12	05,05,04,04	"	"	10.70
"	"	"	"	"	"	" .623	11.56	-.02	03,02,03,03	"	"	10.91
"	"	"	"	"	"	" .642	11.71	-.15	00,01,08,08	"	"	11.06
"	"	"	"	"	"	" .663	11.81	-.28	06,05,10,10	"	"	11.16
"	"	"	"	"	"	" .684	11.50	-.02	04,04,09,09	"	"	10.85
"	"	"	"	"	"	" .707	11.29	-.16	06,05,02,03	"	"	10.64
"	"	"	"	"	"	" .730	11.41	-.21	02,02,01,01	"	"	10.76
"	"	"	"	"	"	" .758	11.61	-.11	07,07,05,04	"	"	10.96
"	.. ..	1 12 28	+30 31.5	10.95	07	7825.681	11.67	+.44	02,03,05,05	0.193	9.849	11.46
"	.. ..	"	"	"	"	" .692	11.59	-.04	06,07,24,24	"	"	11.38
"	+32° 217	1 9 31	+32 19.1	9.80	"	7831.595	11.16	+.33	05,06,07,07	0.188	9.821	11.12
"	"	"	"	"	"	" .606	11.14	+.35	11,12,04,04	"	"	11.10
"	"	"	"	"	"	" .618	11.15	+.26	03,03,05,04	"	"	11.11
"	"	"	"	"	"	" .629	11.21	+.26	06,05,03,02	"	"	11.17
"	"	"	"	"	"	" .642	11.18	+.31	04,04,07,07	"	"	11.14
"	"	"	"	"	"	" .655	11.16	+.28	06,05,03,03	"	"	11.12
"	"	"	"	"	"	" .672	11.14	+.43	05,05,06,05	"	"	11.10
"	"	"	"	"	"	" .683	11.08	+.27	02,02,06,05	"	"	11.04
"	"	"	"	"	"	7832.564	11.07	+.27	05,05,14,14	0.187	9.816	11.05
"	"	"	"	"	"	" .580	11.10	+.21	02,02,02,02	"	"	11.08
"	"	"	"	"	"	" .596	11.18	+.32	05,06,03,04	"	"	11.16
"	"	"	"	"	"	" .608	11.19	+.09	06,06,01,00	"	"	11.17
"	"	"	"	"	"	" .623	11.23	+.20	03,03,04,04	"	"	11.21
"	"	"	"	"	"	" .636	11.22	+.16	04,03,05,05	"	"	11.20
"	"	"	"	"	"	" .651	11.16	+.10	08,08,04,04	"	"	11.14
"	"	"	"	"	"	" .663	11.14	+.15	01,01,02,03	"	"	11.12
"	"	"	"	"	"	" .678	11.15	+.06	01,00,04,03	"	"	11.13
"	"	"	"	"	"	7833.562	11.02	-.41	00,00,00,00	0.186	9.811	11.04
"	+36° 149	0 47 29	+36 39.2	9.51	"	7849.594	10.71	+.26	02,02,07,07	0.172	9.742	11.14
"	"	"	"	"	"	" .604	10.69	+.37	08,07,03,03	"	"	11.12
"	"	"	"	"	"	" .614	10.80	+.28	04,04,06,06	"	"	11.23
"	"	"	"	"	"	" .626	10.74	+.14	02,01,02,01	"	"	11.17
"	"	"	"	"	"	" .637	10.74	+.18	04,04,04,03	"	"	11.17
"	"	"	"	"	"	" .643	10.69	+.05	04,03, A	"	"	11.12
"	"	"	"	"	"	7850.534	10.67	-.21	02,01,03,03	0.171	9.738	11.13
"	"	"	"	"	"	" .543	10.63	-.19	03,03,00,01	"	"	11.09
"	"	"	"	"	"	" .554	10.62	-.14	07,06,03,04	"	"	11.08
"	"	"	"	"	"	" .562	10.65	-.17	02,02,02,02	"	"	11.11
"	"	"	"	"	"	" .574	10.59	-.16	07,06,02,03	"	"	11.05
"	"	"	"	"	"	" .586	10.62	-.22	05,05,09,09	"	"	11.08
"	"	"	"	"	"	" .596	10.56	-.14	02,02,00,01	"	"	11.02
"	"	"	"	"	"	" .605	10.61	-.05	02,01,01,01	"	"	11.07
"	"	"	"	"	"	" .618	10.64	-.22	04,03,03,03	"	"	11.10
"	"	"	"	"	"	" .631	10.62	-.20	04,04,05,05	"	"	11.08
"	"	"	"	"	"	" .640	10.64	-.06	00,00,09,10	"	"	11.10
"	"	"	"	"	"	" .650	10.59	-.08	01,00,05,04	"	"	11.05
"	+36° 143	0 46 58	+36 50.9	10.10	"	7851.567	10.76	-.05	03,02,06,06	0.171	9.734	11.24

Phone L

3.5
0.8
0.45
0.58
1.53
1.67
1.22
2.02
0.29
0.46
0.69
0.98

29.6

280

27.8

27.5

23.0

22.7

22.5

1913AnHar..69...99W

Name.	DM. No.	R. A. 1900.	Dec. 1900.	Adopt. Magn.	Yr.	Julian Day.	Magn.	A-B	Residuals.	log r	log Δ	σ.
(433) Eros	+36° 143	h. m. s. 0 46 58	° ' " +36 50.9	10.10	07	7851.578	10.76	-.17	04,04,03,02	0.171	9.734	11.24
"	" "	" "	" "	" "	"	" .588	10.74	-.19	01,02,00,00	"	"	11.22
"	" "	" "	" "	" "	"	" .599	10.79	-.07	03,03,02,02	"	"	11.27
"	" "	" "	" "	" "	"	" .612	10.82	-.15	01,00,01,02	"	"	11.30
"	" "	" "	" "	" "	"	" .625	10.86	-.21	01,02,03,03	"	"	11.34
"	" "	" "	" "	" "	"	" .636	10.81	-.14	01,00,04,04	"	"	11.29
"	+29° 4997	23 42 18	+29 52.8	10.00	"	" .644	10.65	-.10	00,01,01,00	"	"	11.13
"	" "	" "	" "	" "	"	7907.582	10.66	-.13	02,01,02,02	0.114	9.685	11.66
"	" "	" "	" "	" "	"	" .590	10.68	-.16	06,05,10,11	"	"	11.68
"	" "	" "	" "	" "	"	" .598	10.68	-.07	04,03,03,03	"	"	11.68
"	" "	" "	" "	" "	"	" .609	10.60	-.04	04,03,10,09	"	"	11.60
"	" "	" "	" "	" "	"	" .624	10.65	-.14	02,01,00,00	"	"	11.65
"	" "	" "	" "	" "	"	" .643	10.63	-.06	03,04,02,01	"	"	11.63
"	" "	" "	" "	" "	"	" .653	10.70	+.01	04,04,01,02	"	"	11.70
"	+28° 4650	23 45 4	+28 56.7	10.12	"	7910.555	10.80	.00	10,11,06,07	0.111	9.688	11.80
"	" "	" "	" "	" "	"	" .563	10.86	.00	01,01,00,00	"	"	11.86
"	" "	" "	" "	" "	"	" .572	10.90	+.05	04,04,01,00	"	"	11.90
"	" "	" "	" "	" "	"	" .580	10.86	+.08	02,01,01,00	"	"	11.86
"	+27° 4644	23 50 52	+27 58.4	9.49	"	7915.557	10.91	.00	09,09,00,00	0.106	9.695	11.91
"	" "	" "	" "	" "	"	" .569	11.00	-.26	02,03,10,09	"	"	12.00
"	" "	" "	" "	" "	"	" .582	11.08	-.06	08,07,03,04	"	"	12.08
"	" "	" "	" "	" "	"	" .595	10.97	.00	00,00,05,06	"	"	11.97
"	" "	" "	" "	" "	"	" .617	10.93	-.07	02,02,04,05	"	"	11.93
"	" "	" "	" "	" "	"	" .628	10.95	+.03	02,01,04,04	"	"	11.95
"	" "	" "	" "	" "	"	" .642	10.85	-.11	03,03,01,00	"	"	11.85
"	" "	" "	" "	" "	"	" .651	10.90	+.02	06,06,01,02	"	"	11.90
"	+27° 4652	23 52 8	+27 51.9	9.32	"	7917.559	11.05	-.06	01,01,10,09	0.104	9.698	12.04
"	" "	" "	" "	" "	"	" .568	11.00	-.16	02,02,08,08	"	"	11.99
"	" "	" "	" "	" "	"	" .578	10.98	+.05	01,01,02,02	"	"	11.97
"	" "	" "	" "	" "	"	" .594	10.98	-.11	06,06,02,02	"	"	11.97
"	" "	" "	" "	" "	"	" .609	11.02	-.14	01,01,07,07	"	"	12.01
"	" "	" "	" "	" "	"	" .623	11.00	-.15	03,03,01,02	"	"	11.99
"	" "	" "	" "	" "	"	" .637	10.98	-.12	01,02,05,04	"	"	11.97
"	" "	0 44 0	+24 46.6	10.54	"	7941.553	11.32	+.13	03,03,06,06	0.081	9.729	12.27
"	" "	" "	" "	" "	"	" .564	11.34	+.12	01,01,01,00	"	"	12.29
"	" "	" "	" "	" "	"	" .584	11.31	+.06	01,00,02,03	"	"	12.26
"	" "	" "	" "	" "	"	" .596	11.33	+.06	02,02,01,00	"	"	12.28
"	" "	" "	" "	" "	"	" .610	11.34	+.07	00,00,03,02	"	"	12.29
"	" "	" "	" "	" "	"	" .625	11.30	+.03	01,01,01,01	"	"	12.25
"	" "	" "	" "	" "	"	" .638	11.30	+.03	01,00,01,01	"	"	12.25
"	" "	" "	" "	" "	"	" .648	11.29	+.02	00,01,00,01	"	"	12.24
"	" "	" "	" "	" "	08	7942.551	11.33	+.02	02,01,07,07	0.080	9.731	12.27
"	" "	" "	" "	" "	"	" .564	11.40	-.13	01,00,07,07	"	"	12.34
"	" "	" "	" "	" "	"	" .576	11.34	-.04	02,03,03,03	"	"	12.28
"	" "	" "	" "	" "	"	" .588	11.32	.00	02,01,01,00	"	"	12.26
"	" "	" "	" "	" "	"	" .601	11.27	.00	01,01,02,02	"	"	12.21
"	" "	" "	" "	" "	"	" .615	11.29	-.02	01,00,01,01	"	"	12.23
"	" "	" "	" "	" "	"	" .630	11.28	-.04	02,01,00,01	"	"	12.22
"	" "	" "	" "	" "	"	" .645	11.30	+.04	03,02,01,02	"	"	12.24
"	" "	" "	" "	" "	"	" .658	11.33	-.02	04,03,03,03	"	"	12.27

Phase L
22.5
40.8
42.2
44.3
45.0
53.2
53.6

OBSERVATIONS OF ASTEROIDS.

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Name.	DM. No.	R. A. 1900.	Dec. 1900.	Adopt. Magn.	Yr.	Julian Day.	Magn.	A-B	Residuals.	log r	log Δ	σ.
(488) Kreusa	+18° 2580	^{h. m. s.} 12 9 58	+18 36.3	10.7	07	7672.599	11.76	+04	01,00,04,03	0.432	0.250	8.35
"	" "	" "	" "	"	"	" .616	11.78	+23	07,07,08,09	"	"	8.37
"	" "	" "	" "	"	"	" .643	11.67	+30	00,00,04,05	"	"	8.26
"	+18° 2573	12 3 4	+18 22.7	10.7	"	7677.563	11.51	+22	04,03,00,00	0.433	0.260	8.05
"	" "	" "	" "	"	"	" .579	11.53	+34	01,00,08,07	"	"	8.07
"	" "	" "	" "	"	"	" .597	11.64	+32	03,04,07,07	"	"	8.18
"	" "	" "	" "	"	"	" .614	11.56	+31	03,03,00,00	"	"	8.10
"	" "	" "	" "	"	"	" .633	11.53	+26	07,06,03,02	"	"	8.07
"	" "	" "	" "	"	"	" .653	11.58	+24	07,07,06,05	"	"	8.12
"	" "	" "	" "	"	"	" .697	11.60	-36	02,01,05,06	"	"	8.14
"	" "	" "	" "	"	"	" .711	11.59	-22	07,07,06,06	"	"	8.13
"	" "	" "	" "	"	"	" .726	11.44	-25	02,02,07,08	"	"	7.98
"	+18° 2574	12 4 51	+18 23.6	10.7	"	7681.553	11.75	-22	06,06,04,05	0.433	0.264	8.27
"	" "	" "	" "	"	"	" .566	11.70	-07	06,06,02,02	"	"	8.22
"	" "	" "	" "	"	"	" .583	11.79	-14	02,01,02,02	"	"	8.31
"	" "	" "	" "	"	"	" .598	11.76	-17	03,02,04,04	"	"	8.28
"	" "	" "	" "	"	"	" .616	11.74	-23	01,01,02,03	"	"	8.26
"	" "	" "	" "	"	"	" .632	11.64	-31	01,01,01,02	"	"	8.16
"	" "	" "	" "	"	"	" .649	11.60	-32	05,04,06,05	"	"	8.12
"	" "	" "	" "	"	"	" .676	11.64	+29	03,03,09,08	"	"	8.16
"	" "	" "	" "	"	"	" .696	11.75	+34	07,06,01,02	"	"	8.27
"	" "	" "	" "	"	"	" .717	11.78	+49	02,02,12,11	"	"	8.30
"	+18° 2573	12 3 4	+18 22.7	10.7	"	7683.650	11.67	+18	05,06,02,03	0.433	0.267	8.17
"	" "	" "	" "	"	"	" .672	11.62	+10	08,08,03,03	"	"	8.12

Phase
L

13.4

13.5

13.5

13.3

CHAPTER XII.

OBSERVATIONS OF SATELLITES OF SATURN.

A LARGE number of measures were made of the eighth satellite of Saturn, Iapetus, to determine the nature of its well known variability. Owing to the motion of Saturn, it was necessary to select a different comparison star every few days. To reduce the results, the magnitude of the comparison star must be measured. This was generally done by the Director with the Meridian Photometer. The magnitude of Iapetus was then corrected for the distance of the Sun and Earth. Small errors due to phase, or the angle between the Sun and Earth as seen from the satellite, and to the equation of light were regarded as insensible.

The period of variation is equal to the sidereal time of revolution of the satellite around Saturn. This is regarded as proving that Iapetus is darker on one side than on the other, and that, like the Moon, its time of rotation is the same as that of revolution. The sidereal period of revolution of Iapetus is about $79^d.33$, but, owing to the varying position both of the Sun and Earth, this period is increased to about 80^d during the time of opposition when the greater portion of the observations were made.

The problem is much more simple if Iapetus is compared directly with another satellite, since the correction for the distances of the Sun and Earth, phase angle, and equation of light, are then practically the same for both. Accordingly, numerous measures were made by comparing Iapetus and Titan with the same star. The results proved much less accordant than might be expected. A probable explanation was that Titan might also be variable, and an examination proved that this was the case. This is announced in Harvard Bulletin 538, and it is hoped to make a fuller discussion later.

The measures of Iapetus are contained in Table XXI. The Durchmusterung number of the comparison star, its right ascension for 1900, its declination for 1900, its adopted magnitude, the year, and the Julian Day and decimal, are given in the first six columns. The concluded magnitude of Iapetus, found by adding the observed difference in magnitude to the magnitude of the

comparison star, is given in the seventh column. The value of A-B and the residuals of the four sets of measures are given in the eighth and ninth columns. The logarithms of the distances of Saturn from the Sun and Earth are given in the tenth and eleventh columns. These distances are regarded as sensibly the same as those of the satellite. The magnitude corrected for these distances is given in the twelfth column, reduced to m_0 , the distance of mean opposition. The formula J.D. 2,410,000 + 80° E serves to determine the phase in days which is then multiplied by 4.5 to reduce it to degrees. This value is given in the thirteenth column.

TABLE XXI.
OBSERVATIONS OF IAPETUS.

DM. No.	R. A. 1900.	Dec. 1900.	Adopt. Magn.	Yr.	Julian Day.	Magn.	A-B	Residuals.	log r	log Δ	Magn.	Phase.
-14° 4118	<i>h. m. s.</i> 15 1 25	<i>° ' "</i> -14 16.5	9.62	96	3665.719	10.88	+ .52	09,09,04,03	0.995	0.951	10.70	296
" "	" " "	" " "	"	"	" .734	10.96	+ .52	00,01,04,05	"	"	10.78	"
" "	" " "	" " "	"	"	3672.697	10.57	+ .34	02,02,01,01	0.995	0.950	10.40	327
" "	" " "	" " "	"	"	" .710	10.52	- .04	07,07,01,02	"	"	10.35	"
" "	" " "	" " "	"	"	3674.716	10.44	+ .16	02,02,01,01	0.995	0.949	10.27	336
" "	" " "	" " "	"	"	" .730	10.37	- .06	01,01,03,04	"	"	10.20	"
-14° 4095	14 57 8	-14 24.1	8.78	"	3680.697	10.14	- .12	05,04,04,05	0.995	0.949	9.97	3
" "	" " "	" " "	"	"	" .701	10.16	+ .12	04,05,01,01	"	"	9.99	"
" "	" " "	" " "	"	"	3687.698	10.10	- .17	01,00,04,04	0.995	0.949	9.93	35
" "	" " "	" " "	"	"	" .703	10.02	- .09	01,02,12,12	"	"	9.85	"
-14° 4085	14 54 42	-14 20.0	8.83	"	" .714	10.23	+ .12	07,07,06,07	"	"	10.06	"
" "	" " "	" " "	"	"	" .719	10.23	+ .09	10,11,02,02	"	"	10.06	"
" "	" " "	" " "	"	"	3691.719	10.23	+ .04	05,04,02,03	0.995	0.949	10.06	53
" "	" " "	" " "	"	"	" .725	10.27	+ .12	03,02,05,06	"	"	10.10	"
-13° 4022	14 51 11	-13 44.1	8.48	"	3696.664	10.22	.00	03,02,02,03	0.995	0.949	10.05	75
" "	" " "	" " "	"	"	" .669	10.23	- .18	01,02,03,04	"	"	10.06	"
" "	" " "	" " "	"	"	3709.603	11.07	+ .24	00,00,03,03	0.995	0.953	10.88	133
" "	" " "	" " "	"	"	" .612	11.09	+ .14	06,05,02,03	"	"	10.90	"
-13° 4003	14 46 59	-13 34.7	9.22	"	3715.669	11.84	- .24	03,04,10,10	0.995	0.955	11.64	161
" "	" " "	" " "	"	"	" .677	11.86	- .21	01,02,04,04	"	"	11.66	"
-13° 3994	14 45 47	-13 11.5	7.82	"	3721.616	12.06	+ .22	03,03,01,01	0.996	0.958	11.84	187
" "	" " "	" " "	"	"	" .622	12.00	- .04	02,02,03,02	"	"	11.78	"
" "	" " "	" " "	"	"	3729.702	12.11	+ .02	07,06,03,02	0.996	0.962	11.87	224
" "	" " "	" " "	"	"	" .716	11.96	.00	01,01,03,03	"	"	11.72	"
-12° 4141	14 44 32	-13 5.5	7.82	"	3741.613	11.50	- .12	07,06,04,03	0.996	0.969	11.23	277
" "	" " "	" " "	"	"	" .622	11.54	- .17	03,03,03,03	"	"	11.27	"
" "	" " "	" " "	"	"	3750.608	10.98	+ .24	03,04,03,02	0.996	0.975	10.67	318
" "	" " "	" " "	"	"	" .612	11.01	+ .14	06,06,01,01	"	"	10.70	"
-13° 3986	14 43 50	-13 43.9	5.38	"	3762.585	10.72	+ .29	03,03,09,09	0.996	0.984	10.37	12
" "	" " "	" " "	"	"	" .592	10.70	- .01	13,13,08,08	"	"	10.35	"
" "	" " "	" " "	"	"	3771.566	10.78	+ .21	02,03,01,01	0.996	0.990	10.40	52
" "	" " "	" " "	"	"	" .573	10.98	- .27	02,01,03,03	"	"	10.60	"
" "	" " "	" " "	"	"	" .587	10.96	- .08	06,06,05,04	"	"	10.58	"

DM. No.	R. A. 1900.	Dec. 1900.	Adopt. Magn.	Yr.	Julian Day.	Magn.	A-B	Residuals.	log r	log Δ	Magn.	Phase.
-13° 3986	<i>h. m. s.</i> 14 43 50	<i>° ' "</i> -13 43.9	5.38	96	3771.592	10.92	+ .16	04,03,00,01	0.996	0.990	10.54	52
" "	" " "	" " "	"	"	3772.559	10.84	+ .09	03,03,10,11	0.996	0.991	10.45	57
" "	" " "	" " "	"	"	" .565	10.84	+ .27	07,06,00,00	"	"	10.45	"
-12° 4141	14 44 32	-13 5.5	7.82	"	" .581	10.64	- .19	03,04,02,02	"	"	10.25	"
" "	" " "	" " "	"	"	" .586	10.63	- .18	01,02,03,03	"	"	10.24	"
-13° 3986	14 43 50	-13 43.9	5.38	"	" .596	10.83	+ .22	05,06,06,06	"	"	10.44	"
" "	" " "	" " "	"	"	" .601	10.86	+ .03	01,02,02,01	"	"	10.47	"
-17° 4413	15 39 9	-17 23.2	9.64	97	4074.699	10.61	- .02	01,00,03,03	0.999	0.953	10.40	336
" "	" " "	" " "	"	"	" .706	10.54	.00	05,05,06,06	"	"	10.33	"
-16° 4138	15 35 15	-16 58.6	9.42	"	4090.612	10.59	+ .06	12,12,15,15	0.999	0.957	10.36	48
" "	" " "	" " "	"	"	" .619	10.60	- .11	13,12,10,10	"	"	10.37	"
-17° 4395	15 34 37	-17 11.9	9.42	"	4091.602	10.46	- .15	00,00,05,04	0.999	0.958	10.23	52
" "	" " "	" " "	"	"	" .608	10.43	- .02	01,02,00,00	"	"	10.20	"
-16° 4138	15 35 15	-16 55.3	9.42	"	4092.630	10.51	+ .18	03,02,02,02	0.999	0.958	10.28	57
" "	" " "	" " "	"	"	" .635	10.48	- .01	01,01,02,01	"	"	10.25	"
-16° 4129	15 33 21	-16 44.6	9.42	"	4094.690	10.66	- .17	02,02,04,03	0.999	0.959	10.42	66
" "	" " "	" " "	"	"	" .697	10.58	.00	02,03,03,02	"	"	10.34	"
" "	" " "	" " "	"	"	" .702	10.50	- .17	04,03,00,00	"	"	10.26	"
-16° 4122	15 31 33	-16 54.9	9.26	"	4097.598	10.54	+ .01	02,02,03,03	0.999	0.960	10.29	79
" "	" " "	" " "	"	"	" .603	10.64	+ .16	03,02,01,01	"	"	10.39	"
" "	" " "	" " "	"	"	4098.656	10.75	+ .02	04,05,03,03	0.999	0.961	10.50	84
" "	" " "	" " "	"	"	" .662	10.70	- .09	00,01,01,01	"	"	10.45	"
" "	" " "	" " "	"	"	4099.679	10.80	- .03	01,02,07,07	0.999	0.961	10.55	89
" "	" " "	" " "	"	"	" .685	10.74	- .25	02,03,04,04	"	"	10.49	"
" "	" " "	" " "	"	"	4100.606	10.76	- .07	02,02,06,05	0.999	0.962	10.51	93
" "	" " "	" " "	"	"	" .624	10.82	+ .08	05,04,01,02	"	"	10.57	"
" "	" " "	" " "	"	"	4101.680	10.86	+ .03	06,07,04,04	0.999	0.962	10.61	98
" "	" " "	" " "	"	"	" .686	10.88	.00	04,04,04,03	"	"	10.63	"
" "	" " "	" " "	"	"	4102.686	10.99	+ .06	02,02,08,08	0.999	0.963	10.73	102
" "	" " "	" " "	"	"	" .692	10.94	- .22	06,06,00,00	"	"	10.68	"
-16° 4120	15 30 58	-16 40.9	7.62	"	4112.599	11.51	- .30	01,00,13,12	0.999	0.968	11.22	147
" "	" " "	" " "	"	"	" .605	11.62	- .33	03,02,04,04	"	"	11.33	"
" "	" " "	" " "	"	"	4113.665	11.82	+ .16	06,05,02,03	0.999	0.969	11.53	151
" "	" " "	" " "	"	"	" .672	11.84	+ .11	02,02,09,10	"	"	11.55	152
" "	" " "	" " "	"	"	4114.580	12.02	- .12	02,02,00,01	0.999	0.970	11.73	156
" "	" " "	" " "	"	"	" .587	12.00	.00	06,07,00,01	"	"	11.71	"
-16° 4116	15 29 48	-17 4.3	8.78	"	" .612	12.04	- .20	10,09,05,04	"	"	11.75	"
" "	" " "	" " "	"	"	4122.588	12.30	- .39	08,08,04,03	0.999	0.975	11.98	192
" "	" " "	" " "	"	"	" .608	12.20	- .24	03,04,10,09	"	"	11.88	"
" "	" " "	" " "	"	"	4127.593	12.33	- .14	10,10,10,11	0.999	0.978	12.00	214
" "	" " "	" " "	"	"	" .603	12.40	+ .16	12,11,04,04	"	"	12.07	"
" "	" " "	" " "	"	"	4137.611	11.89	- .02	03,02,02,01	0.999	0.985	11.52	259
" "	" " "	" " "	"	"	" .617	11.77	+ .02	01,00,01,02	"	"	11.40	"
" "	" " "	" " "	"	"	" .632	11.84	+ .16	06,07,05,04	"	"	11.47	"
-16° 4120	15 30 58	-16 40.9	7.62	"	4150.558	11.14	- .05	03,03,06,06	0.999	0.995	10.72	318
" "	" " "	" " "	"	"	" .562	11.09	+ .22	05,06,10,10	"	"	10.67	"
" "	" " "	" " "	"	"	" .566	11.10	+ .07	05,05,01,01	"	"	10.68	"
-17° 4388	15 32 59	-17 20.2	7.16	"	4170.528	10.78	- .12	07,07,07,08	0.999	1.009	10.29	47
" "	" " "	" " "	"	"	" .535	10.89	- .06	04,03,02,03	"	"	10.40	"
" "	" " "	" " "	"	"	4171.540	10.79	- .02	05,05,02,01	0.999	1.010	10.30	52

DM. No.	R. A. 1900.	Dec. 1900.	Adopt. Magn.	Yr.	Julian Day.	Magn.	A-B	Residuals.	log r	log Δ	Magn.	Phase.
-17° 4388	<i>h. m. s.</i> 15 32 59	° ' " -17 20.2	7.16	97	4171.548	10.85	-.22	03,03,10,10	0.999	1.010	10.36	52
" "	" " "	" " "	"	"	4174.519	10.91	-.14	06,05,02,03	0.999	1.012	10.40	65
" "	" " "	" " "	"	"	" .530	10.93	-.02	04,05,00,01	"	"	10.42	"
" "	" " "	" " "	"	"	4177.524	10.96	-.08	06,07,02,01	0.999	1.014	10.45	79
-16° 4144	15 36 31	-17 3.3	9.14	"	4183.512	11.28	-.04	09,10,06,06	0.999	1.017	10.75	106
" "	" " "	" " "	"	"	" .519	11.26	+.11	05,05,05,05	"	"	10.73	"
-17° 4413	15 39 9	-17 23.2	9.64	"	4185.503	11.57	+.30	02,03,01,02	0.999	1.019	11.03	115
-19° 4399	16 32 1	-19 58.6	10.84	98	4431.683	11.48	-.19	01,01,10,10	1.001	0.955	11.25	143
" "	" " "	" " "	"	"	" .692	11.48	-.19	07,07,06,06	"	"	11.25	"
-19° 4375	16 26 41	-19 52.5	9.51	"	4455.690	11.69	+.27	03,04,04,04	1.001	0.956	11.46	251
" "	" " "	" " "	"	"	" .696	11.67	+.26	02,02,01,01	"	"	11.44	"
" "	" " "	" " "	"	"	4456.690	11.67	+.24	00,01,05,06	1.001	0.957	11.43	255
" "	" " "	" " "	"	"	" .695	11.61	+.05	01,02,02,02	"	"	11.37	"
-19° 4374	16 25 25	-19 47.5	11.22	"	4462.703	11.45	+.42	06,06,02,01	1.001	0.958	11.20	282
" "	" " "	" " "	"	"	" .731	11.44	+.44	02,01,01,02	"	"	11.19	"
" "	" " "	" " "	"	"	4463.676	12.80	+.20	00,00,03,04	1.001	0.959	12.55	287
" "	" " "	" " "	"	"	" .680	12.73	+.30	03,04,02,01	"	"	12.48	"
-19° 4368	16 19 36	-19 36.6	8.74	"	4477.673	10.48	+.19	03,03,02,02	1.001	0.964	10.21	350
" "	" " "	" " "	"	"	" .678	10.47	+.30	01,00,00,01	"	"	10.20	"
" "	" " "	" " "	"	"	4486.665	10.36	+.36	00,00,05,04	1.001	0.969	10.06	30
" "	" " "	" " "	"	"	" .672	10.36	+.29	02,01,04,04	"	"	10.06	"
" "	" " "	" " "	"	"	4487.684	10.42	+.33	01,01,01,01	1.001	0.970	10.11	35
" "	" " "	" " "	"	"	" .690	10.43	+.42	02,02,02,01	"	"	10.12	"
" "	" " "	" " "	"	"	4491.684	10.52	+.49	07,07,02,03	1.001	0.972	10.21	53
" "	" " "	" " "	"	"	" .690	10.38	+.40	01,01,02,01	"	"	10.07	"
-19° 4362	16 15 18	-19 41.8	8.52	"	4493.701	10.54	-.13	00,00,04,03	1.001	0.973	10.22	62
" "	" " "	" " "	"	"	" .707	10.47	-.10	03,02,00,00	"	"	10.15	"
-21° 4648	17 28 21	-21 45.9	9.84	99	4790.672	10.98	-.05	06,06,09,09	1.002	0.961	10.71	318
" "	" " "	" " "	"	"	" .690	10.88	+.09	08,08,08,08	"	"	10.61	"
-21° 4641	17 27 10	-21 40.8	9.39	"	4792.676	10.63	-.48	05,05,22,21	1.002	0.960	10.37	327
-21° 4605	17 20 23	-21 18.1	10.10	"	4805.684	10.32	+.40	07,07,01,00	1.002	0.957	10.07	26
" "	" " "	" " "	"	"	" .690	10.30	+.28	04,05,03,04	"	"	10.05	"
" "	" " "	" " "	"	"	4807.685	10.30	+.05	03,03,05,04	1.002	0.957	10.05	35
" "	" " "	" " "	"	"	4812.685	10.27	+.06	04,03,03,02	1.002	0.956	10.03	57
" "	" " "	" " "	"	"	" .689	10.23	+.18	00,00,07,08	"	"	9.99	"
" "	" " "	" " "	"	"	4816.674	10.30	+.16	08,07,05,05	1.002	0.956	10.06	75
-21° 4594	17 17 37	-21 37.1	8.02	"	4819.658	10.55	+.06	04,03,00,00	1.002	0.956	10.31	89
" "	" " "	" " "	"	"	" .665	10.50	-.05	01,00,01,01	"	"	10.26	"
" "	" " "	" " "	"	"	4822.643	10.80	-.01	09,08,06,07	1.002	0.956	10.56	102
" "	" " "	" " "	"	"	" .649	10.74	-.08	04,04,05,05	"	"	10.50	"
" "	" " "	" " "	"	"	4825.679	10.96	+.35	06,06,01,01	1.002	0.957	10.71	116
" "	" " "	" " "	"	"	" .688	10.94	+.32	02,02,05,04	"	"	10.69	"
-21° 4564	17 12 24	-21 20.5	10.05	"	4833.676	11.65	+.28	02,01,02,03	1.003	0.958	11.40	152
" "	" " "	" " "	"	"	" .681	11.61	+.25	00,00,01,01	"	"	11.36	"
" "	" " "	" " "	"	"	4835.643	11.82	-.02	02,01,02,02	1.003	0.959	11.56	160
" "	" " "	" " "	"	"	" .650	11.79	+.07	05,05,02,01	"	"	11.53	"
" "	" " "	" " "	"	"	4836.672	11.94	+.06	03,04,01,02	1.003	0.959	11.68	165
" "	" " "	" " "	"	"	" .678	11.93	-.08	04,04,02,02	"	"	11.67	"
" "	" " "	" " "	"	"	4839.658	12.08	-.02	00,00,02,03	1.003	0.960	11.81	179
" "	" " "	" " "	"	"	" .667	12.09	-.07	00,00,03,03	"	"	11.82	"

DM. No.	R. A. 1900.	Dec. 1900.	Adopt. Magn.	Yr.	Julian Day.	Magn.	A-B.	Residuals.	log r	log Δ	Magn.	Phase.
-21° 4554	h. m. s. 17 9 6	° ' " -21 48.8	9.00	99	4846.707	12.24	-.25	01,02,30,30	1.003	0.962	11.97	210
" "	" " "	" " "	" "	" "	" .714	12.27	-.18	04,03,04,05	"	"	12.00	"
" "	" " "	" " "	" "	" "	4847.656	12.09	-.12	03,03,02,02	1.003	0.963	11.81	215
" "	" " "	" " "	" "	" "	" .667	12.03	-.38	05,06,01,00	"	"	11.75	"
" "	" " "	" " "	" "	" "	4849.666	12.04	-.32	02,02,03,02	1.003	0.963	11.76	224
" "	" " "	" " "	" "	" "	" .697	12.06	-.32	01,02,07,06	"	"	11.78	"
" "	" " "	" " "	" "	" "	4850.654	12.10	-.24	04,04,02,03	1.003	0.964	11.81	228
" "	" " "	" " "	" "	" "	" .664	11.97	-.06	02,03,03,02	"	"	11.68	"
" "	" " "	" " "	" "	" "	4851.653	12.00	-.20	11,11,04,04	1.003	0.964	11.71	233
" "	" " "	" " "	" "	" "	" .662	11.88	+ .30	01,01,06,06	"	"	11.59	"
" "	" " "	" " "	" "	" "	4854.587	11.85	+ .06	03,03,01,00	1.003	0.966	11.56	246
" "	" " "	" " "	" "	" "	" .601	11.86	-.01	01,01,00,01	"	"	11.57	"
-21° 4540	17 5 26	-21 46.1	8.74	"	4862.658	11.04	-.04	08,08,03,02	1.003	0.970	10.73	282
" "	" " "	" " "	" "	" "	" .669	11.00	-.15	04,05,01,01	"	"	10.69	"
-21° 4539	17 5 20	-21 14.5	8.80	"	4863.642	11.22	+ .25	01,00,03,03	1.003	0.970	10.91	286
" "	" " "	" " "	" "	" "	" .653	11.19	+ .34	02,02,01,00	"	"	10.88	287
" "	" " "	" " "	" "	" "	4864.667	11.11	+ .18	00,01,00,00	1.003	0.971	10.79	291
" "	" " "	" " "	" "	" "	" .682	11.12	+ .15	00,00,09,09	"	"	10.80	"
" "	" " "	" " "	" "	" "	4867.600	10.90	-.24	03,03,08,08	1.003	0.973	10.57	304
" "	" " "	" " "	" "	" "	" .604	10.96	-.15	06,06,04,03	"	"	10.63	"
-21° 4540	17 5 26	-21 46.1	8.74	"	4875.594	10.66	-.08	02,03,02,03	1.003	0.978	10.31	340
" "	" " "	" " "	" "	" "	" .601	10.64	-.09	00,00,01,01	"	"	10.29	"
" "	" " "	" " "	" "	" "	4881.546	10.47	+ .02	01,01,08,07	1.003	0.982	10.10	7
" "	" " "	" " "	" "	" "	" .567	10.42	-.01	02,02,01,02	"	"	10.05	"
" "	" " "	" " "	" "	" "	4884.539	10.47	-.32	04,04,04,04	1.003	0.984	10.08	20
" "	" " "	" " "	" "	" "	" .551	10.44	-.27	02,03,01,01	"	"	10.05	21
" "	" " "	" " "	" "	" "	4902.521	11.20	-.24	02,03,04,05	1.003	0.997	10.75	101
" "	" " "	" " "	" "	" "	" .530	11.19	+ .10	01,01,04,04	"	"	10.74	"
" "	" " "	" " "	" "	" "	4903.542	11.44	-.12	09,10,03,03	1.003	0.997	10.99	106
" "	" " "	" " "	" "	" "	" .551	11.42	-.12	03,02,05,04	"	"	10.97	"
" "	" " "	" " "	" "	" "	4904.528	11.79	+ .22	03,04,02,03	1.003	0.998	11.34	110
" "	" " "	" " "	" "	" "	" .542	11.66	+ .17	04,04,01,00	"	"	11.21	"
" "	" " "	" " "	" "	" "	4905.525	11.70	-.03	08,07,02,02	1.003	0.999	11.24	115
" "	" " "	" " "	" "	" "	" .553	11.74	+ .04	01,02,01,00	"	"	11.28	"
" "	" " "	" " "	" "	" "	4911.533	11.90	-.28	05,04,12,13	1.003	1.003	11.42	142
-22° 4722	18 20 32	-22 15.2	9.78	00	5147.745	11.90	+ .20	05,04,12,13	1.003	0.971	11.58	125
" "	" " "	" " "	" "	" "	" .758	12.00	+ .40	04,03,07,07	"	"	11.68	"
-22° 4702	18 17 1	-22 39.6	9.36	"	5162.731	12.32	-.01	01,02,07,07	1.003	0.964	12.03	192
" "	" " "	" " "	" "	" "	" .742	12.36	-.07	05,04,04,04	"	"	12.07	"
-22° 4655	18 11 55	-22 22.5	7.94	"	5175.719	11.82	.00	05,04,08,07	1.003	0.959	11.56	251
" "	" " "	" " "	" "	" "	" .728	11.82	-.03	08,08,05,04	"	"	11.56	"
-22° 4648	18 11 7	-22 12.1	8.45	"	5180.687	11.49	+ .05	01,01,05,05	1.003	0.958	11.24	273
" "	" " "	" " "	" "	" "	" .697	11.53	+ .21	07,07,01,01	"	"	11.28	"
-22° 4613	18 6 52	-22 28.9	8.88	"	5191.666	10.65	-.30	00,01,04,05	1.003	0.957	10.40	323
" "	" " "	" " "	" "	" "	" .676	10.64	-.23	02,02,06,06	"	"	10.39	"
-22° 4619	18 7 22	-22 44.6	8.51	"	5194.683	10.60	-.16	02,02,07,07	1.003	0.957	10.35	336
" "	" " "	" " "	" "	" "	" .690	10.59	-.11	07,07,04,03	"	"	10.34	"
-22° 4597	18 4 42	-22 15.5	7.84	"	5201.762	10.34	+ .09	02,02,04,05	1.003	0.957	10.09	8
" "	" " "	" " "	" "	" "	" .768	10.38	+ .16	02,01,02,01	"	"	10.13	"
-22° 4581	18 2 43	-22 10.2	7.78	"	5206.610	10.38	+ .29	01,01,01,01	1.003	0.958	10.13	30

DM. No.	R. A. 1900.	Dec. 1900.	Adopt. Magn.	Yr.	Julian Day.	Magn.	A-B.	Residuals.	log r	log Δ	Magn.	Phase.
-22°4581	<i>h. m. s.</i> 18 2 43	<i>° '</i> -22 10.2	7.78	00	5208.758	10.62	+19	03,02,00,00	1.003	0.958	10.37	40
" "	" " "	" "	"	"	" .764	10.55	+18	01,01,01,01	"	"	10.30	"
-22°4555	17 59 49	-22 12.8	8.82	"	5214.678	10.68	+07	05,05,06,07	1.003	0.960	10.41	66
" "	" " "	" "	"	"	" .686	10.61	+18	02,03,02,03	"	"	10.34	"
" "	" " "	" "	"	"	5220.676	10.99	+38	02,03,07,06	1.003	0.962	10.72	93
" "	" " "	" "	"	"	" .692	11.03	+26	08,08,09,09	"	"	10.76	"
-22°4511	17 56 31	-22 46.3	8.96	"	5228.690	11.34	-12	03,04,00,01	1.003	0.965	11.05	129
" "	" " "	" "	"	"	" .695	11.26	-03	03,03,03,03	"	"	10.97	"
" "	" " "	" "	"	"	5231.624	11.86	-43	04,03,02,02	1.003	0.966	11.57	142
" "	" " "	" "	"	"	" .631	11.82	-37	05,05,03,03	"	"	11.53	"
-22°4480	17 53 37	-22 56.6	9.14	"	5275.559	10.84	-40	02,03,04,05	1.003	0.994	10.41	340
" "	" " "	" "	"	"	" .566	10.77	-26	04,03,02,01	"	"	10.34	"
" "	" " "	" "	"	"	5285.526	10.77	-34	09,08,03,04	1.003	1.001	10.30	25
" "	" " "	" "	"	"	" .534	10.76	-21	02,02,07,08	"	"	10.29	"

The observations of Titan are given in Table XXII, in the same form as those of Iapetus in Table XXI. The phase is computed by subtracting the time of the preceding eastern elongation from the time of observation, and multiplying by 22.6 to reduce from days to degrees.

TABLE XXII.
OBSERVATIONS OF TITAN.

DM No.	R. A. 1900.	Dec. 1900.	Adopt. Magn.	Yr.	Julian Day.	Magn.	A-B	Residuals.	log r	log Δ	Magn.	Phase.
-14°4118	<i>h. m. s.</i> 15 1 25	<i>° '</i> -14 16.5	9.62	96	3672.730	8.42	+24	06,06,01,01	0.995	0.950	8.25	56
" "	" " "	" "	"	"	" .742	8.33	+10	01,02,02,03	"	"	8.16	"
-14°4095	14 57 8	-14 24.1	8.78	"	3680.712	8.46	-13	01,01,00,01	0.995	0.949	8.29	237
" "	" " "	" "	"	"	" .715	8.45	-14	04,04,03,02	"	"	8.28	"
-14°4085	14 54 42	-14 20.0	8.83	"	3691.744	8.63	-01	00,00,06,06	0.995	0.949	8.46	127
" "	" " "	" "	"	"	" .749	8.57	+08	04,03,07,08	"	"	8.40	"
-13°3994	14 45 47	-13 11.5	7.82	"	3721.660	8.56	+14	03,03,04,04	0.996	0.958	8.34	88
" "	" " "	" "	"	"	" .665	8.54	-20	02,02,06,06	"	"	8.32	"
-17°4395	15 34 37	-17 11.9	9.42	97	4091.620	8.69	-02	03,02,02,01	0.999	0.958	8.46	145
" "	" " "	" "	"	"	" .625	8.62	+05	01,01,05,05	"	"	8.39	"
-16°4122	15 31 33	-16 54.9	9.26	"	4099.690	8.58	-19	00,00,02,02	0.999	0.961	8.33	328
" "	" " "	" "	"	"	" .696	8.56	-05	05,05,04,04	"	"	8.31	"
-16°4120	15 30 58	-16 40.9	7.62	"	4150.570	8.85	+18	04,04,08,09	0.999	0.995	8.43	287
" "	" " "	" "	"	"	" .576	8.83	-14	00,01,00,01	"	"	8.41	"
-19°4381	16 28 55	-19 44.1	8.85	98	4448.672	8.51	+56	03,04,01,01	1.001	0.955	8.28	269
" "	" " "	" "	"	"	" .678	8.49	+63	08,08,03,04	"	"	8.26	"
-19°4375	16 26 41	-19 51.5	9.51	"	4455.702	8.59	+49	05,05,01,01	1.001	0.956	8.36	70
" "	" " "	" "	"	"	" .707	8.55	+44	07,07,01,00	"	"	8.32	"
" "	" " "	" "	"	"	4456.703	8.50	+18	04,05,00,01	1.001	0.957	8.26	93
" "	" " "	" "	"	"	" .725	8.54	+26	04,04,07,06	"	"	8.30	"

DM. No.	R. A. 1900.	Dec. 1900.	Adopt. Magn.	Yr.	Julian Day.	Magn.	A-B	Residuals.	log r	log Δ	Magn.	Phase.
-19°4374	h. m. s. 16 25 25	° ' " -19 47.5	11.22	98	4462.719	8.92	+ .40	02,02,00,01	1.001	0.958	8.67	228
" "	" " "	" " "	" "	" "	" .724	8.91	+ .22	01,00,02,01	"	"	8.66	"
-19°4368	16 19 36	-19 36.6	8.74	"	4486.678	8.52	+ .20	03,02,03,02	1.001	0.969	8.22	230
" "	" " "	" " "	" "	" "	" .683	8.58	+ .32	03,02,02,01	"	"	8.28	"
" "	" " "	" " "	" "	" "	4487.696	8.58	+ .25	02,01,11,11	1.001	0.970	8.27	253
" "	" " "	" " "	" "	" "	" .701	8.46	+ .17	01,01,01,01	"	"	8.15	"
-21°4648	17 28 21	-21 45.9	9.84	99	4790.683	8.78	+ .08	01,02,02,03	1.002	0.961	8.51	56
" "	" " "	" " "	" "	" "	" .702	8.84	+ .19	03,03,05,06	"	"	8.57	"
-21°4641	17 27 10	-21 40.8	9.39	"	4792.660	8.62	- .24	04,04,09,10	1.002	0.960	8.36	102
" "	" " "	" " "	" "	" "	" .667	8.62	- .18	02,03,05,05	"	"	8.36	"
-21°4605	17 20 23	-21 18.1	10.10	"	4805.697	8.54	+ .21	02,02,04,05	1.002	0.957	8.29	36
" "	" " "	" " "	" "	" "	" .702	8.70	+ .20	00,00,00,01	"	"	8.45	"
" "	" " "	" " "	" "	" "	4807.670	8.52	+ .18	00,00,06,06	1.002	0.957	8.27	81
" "	" " "	" " "	" "	" "	" .676	8.56	+ .11	01,01,01,01	"	"	8.31	"
" "	" " "	" " "	" "	" "	4812.698	8.92	- .28	03,03,03,02	1.002	0.956	8.68	194
" "	" " "	" " "	" "	" "	" .703	8.68	- .12	11,10,03,02	"	"	8.44	"
-21°4594	17 17 37	-21 37.1	8.02	"	4819.631	8.46	- .23	04,05,04,04	1.002	0.956	8.22	14
" "	" " "	" " "	" "	" "	" .642	8.54	+ .04	03,04,06,06	"	"	8.30	"
" "	" " "	" " "	" "	" "	4822.656	8.51	+ .12	01,01,08,08	1.002	0.956	8.27	61
" "	" " "	" " "	" "	" "	" .660	8.50	+ .07	03,03,03,02	"	"	8.26	"
" "	" " "	" " "	" "	" "	4825.696	8.51	+ .10	04,04,01,01	1.002	0.957	8.26	129
" "	" " "	" " "	" "	" "	" .701	8.48	+ .08	02,01,02,03	"	"	8.23	"
" "	" " "	" " "	" "	" "	4827.640	8.60	- .36	02,03,01,00	1.002	0.957	8.35	172
" "	" " "	" " "	" "	" "	" .647	8.45	- .22	06,05,08,09	"	"	8.20	"
-21°4564	17 12 24	-21 20.5	10.05	"	4833.687	8.65	+ .20	08,08, A	1.003	0.958	8.40	310
" "	" " "	" " "	" "	" "	4835.656	8.67	- .03	06,06,00,00	1.003	0.959	8.41	355
" "	" " "	" " "	" "	" "	" .662	8.76	- .20	01,01,01,01	"	"	8.50	"
" "	" " "	" " "	" "	" "	4836.683	8.59	+ .16	00,01,05,05	1.003	0.959	8.33	18
" "	" " "	" " "	" "	" "	" .688	8.65	+ .16	06,05,02,03	"	"	8.39	"
" "	" " "	" " "	" "	" "	4837.644	8.65	+ .35	14,13,07,07	1.003	0.959	8.39	38
" "	" " "	" " "	" "	" "	" .653	8.67	+ .07	05,04,02,02	"	"	8.41	"
" "	" " "	" " "	" "	" "	4839.678	8.70	+ .18	02,03,05,05	1.003	0.960	8.43	86
" "	" " "	" " "	" "	" "	" .683	8.63	+ .30	03,03,07,06	"	"	8.36	"
-21°4554	17 9 6	-21 48.8	9.00	"	4846.722	8.66	+ .04	08,09,01,01	1.003	0.962	8.39	244
" "	" " "	" " "	" "	" "	" .727	8.68	+ .05	03,03,00,00	"	"	8.41	"
" "	" " "	" " "	" "	" "	4847.678	8.58	+ .07	02,02,13,13	1.003	0.963	8.30	267
" "	" " "	" " "	" "	" "	" .685	8.65	+ .08	02,02,04,04	"	"	8.37	"
" "	" " "	" " "	" "	" "	4849.681	8.54	- .17	06,05,01,01	1.003	0.963	8.26	312
" "	" " "	" " "	" "	" "	" .687	8.58	- .17	12,12,11,12	"	"	8.30	"
" "	" " "	" " "	" "	" "	4850.678	8.65	- .06	01,01,07,06	1.003	0.964	8.36	334
" "	" " "	" " "	" "	" "	" .686	8.59	- .18	02,01,01,02	"	"	8.30	"
" "	" " "	" " "	" "	" "	4851.672	8.56	+ .11	04,04,08,09	1.003	0.964	8.27	357
" "	" " "	" " "	" "	" "	" .681	8.62	- .09	03,02,03,03	"	"	8.33	"
" "	" " "	" " "	" "	" "	4854.616	8.66	- .04	02,02,01,01	1.003	0.966	8.37	63
" "	" " "	" " "	" "	" "	" .624	8.60	.00	02,01,05,05	"	"	8.31	"
-21°4540	17 5 26	-21 46.1	8.74	"	4862.680	8.51	- .22	00,01,00,00	1.003	0.970	8.20	246
" "	" " "	" " "	" "	" "	" .685	8.52	+ .05	02,03,10,10	"	"	8.21	"
-21°4539	17 5 20	-21 14.5	8.80	"	4863.667	8.52	+ .27	00,01,01,01	1.003	0.970	8.21	269
" "	" " "	" " "	" "	" "	" .674	8.56	+ .19	01,02,02,02	"	"	8.25	"
" "	" " "	" " "	" "	" "	4864.692	8.49	- .18	07,06,01,02	1.003	0.971	8.17	292

OBSERVATIONS OF SATELLITES OF SATURN.

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DM. No.	R. A. 1900.	Dec. 1900.	Adopt. Magn.	Yr.	Julian Day.	Magn.	A-B	Residuals.	log r	log Δ	Magn.	Phase.
-21°4539	h. m. s. 17 5 20	° ' " -21 14.5	8.80	99	4864.697	8.55	-.10	03,02,02,01	1.003	0.971	8.23	292
" "	" " "	" " "	"	"	4867.612	8.66	-.32	00,00,01,02	1.003	0.973	8.33	357
" "	" " "	" " "	"	"	" .619	8.55	-.38	01,01,06,07	"	"	8.22	"
-21°4540	17 5 26	-21 46.1	8.74	"	4875.608	8.53	-.02	14,14,00,00	1.003	0.978	8.18	201
" "	" " "	" " "	"	"	" .617	8.58	-.24	04,04,03,02	"	"	8.23	"
" "	" " "	" " "	"	"	4881.578	8.56	+.05	04,04,03,02	1.003	0.982	8.19	337
" "	" " "	" " "	"	"	" .586	8.52	-.05	03,03,01,01	"	"	8.15	"
" "	" " "	" " "	"	"	4884.567	8.58	-.16	04,03,03,02	1.003	0.984	8.19	23
" "	" " "	" " "	"	"	" .577	8.61	-.14	03,02,03,02	"	"	8.22	"
" "	" " "	" " "	"	"	4902.542	8.65	-.16	01,01,02,02	1.003	0.997	8.20	66
" "	" " "	" " "	"	"	" .550	8.66	-.12	00,01,04,05	"	"	8.21	68
" "	" " "	" " "	"	"	4903.560	8.69	+.02	14,14,02,02	1.003	0.997	8.24	90
" "	" " "	" " "	"	"	" .567	8.71	-.14	05,06,01,01	"	"	8.26	"
" "	" " "	" " "	"	"	4904.556	8.67	-.06	03,03,03,02	1.003	0.998	8.22	113
" "	" " "	" " "	"	"	" .562	8.69	-.10	01,01,00,01	"	"	8.24	"
" "	" " "	" " "	"	"	4905.542	8.66	-.19	02,01,04,04	1.003	0.999	8.20	133
" "	" " "	" " "	"	"	" .575	8.70	+.01	00,01,02,02	"	"	8.24	136
" "	" " "	" " "	"	"	4911.543	8.68	.00	04,05,02,03	1.003	1.003	8.20	269
" "	" " "	" " "	"	"	" .549	8.65	-.06	05,05,03,02	"	"	8.17	"
-22°4722	18 20 32	-22 15.2	9.78	00	5147.725	9.09	+.42	00,01,03,04	1.003	0.971	8.77	183
" "	" " "	" " "	"	"	" .731	9.07	+.38	01,00,01,02	"	"	8.75	"
-22°4702	18 17 1	-22 39.6	9.36	"	5162.710	8.97	+.20	03,03,03,03	1.003	0.964	8.68	163
" "	" " "	" " "	"	"	" .719	8.98	+.25	07,06,02,02	"	"	8.69	"
-22°4655	18 11 55	-22 22.5	7.94	"	5175.704	8.84	-.13	08,09,04,04	1.003	0.959	8.58	97
" "	" " "	" " "	"	"	" .710	8.84	-.35	00,00,01,01	"	"	8.58	"
-22°4648	18 11 7	-22 12.1	8.45	"	5180.705	8.73	+.03	04,03,00,00	1.003	0.958	8.48	210
" "	" " "	" " "	"	"	" .712	8.67	+.13	04,04,02,01	"	"	8.42	"
-22°4613	18 6 52	-22 28.9	8.88	"	5191.685	8.60	-.08	07,06,05,04	1.003	0.957	8.35	99
" "	" " "	" " "	"	"	" .690	8.62	-.24	00,00,09,08	"	"	8.37	"
-22°4619	18 7 22	-22 44.6	8.51	"	5194.708	8.93	+.04	03,02,01,01	1.003	0.957	8.68	167
" "	" " "	" " "	"	"	" .715	8.90	-.06	02,02,07,06	"	"	8.65	"
-22°4597	18 4 42	-22 15.5	7.84	"	5201.747	8.62	+.27	02,01,01,01	1.003	0.957	8.37	325
" "	" " "	" " "	"	"	" .754	8.60	+.30	04,04,02,02	"	"	8.35	"
-22°4581	18 2 43	-22 10.2	7.78	"	5206.631	8.52	+.27	01,01,11,11	1.003	0.958	8.27	122
" "	" " "	" " "	"	"	5208.772	8.70	+.37	06,06,00,01	1.003	0.958	8.45	127
" "	" " "	" " "	"	"	" .780	8.68	+.32	01,02,10,10	"	"	8.43	"
-22°4555	17 59 49	-22 12.8	8.82	"	5214.695	8.60	+.16	01,00,01,02	1.003	0.960	8.33	260
" "	" " "	" " "	"	"	" .702	8.62	+.19	02,02,04,04	"	"	8.35	"
" "	" " "	" " "	"	"	5220.706	8.50	+.28	09,10,19,18	1.003	0.962	8.23	36
" "	" " "	" " "	"	"	" .719	8.71	-.18	04,04,00,01	"	"	8.44	"
-22°4511	17 56 31	-22 46.3	8.96	"	5228.707	8.66	-.20	07,08,03,04	1.003	0.965	8.37	217
" "	" " "	" " "	"	"	" .716	8.70	-.26	04,04,11,11	"	"	8.41	"
" "	" " "	" " "	"	"	5231.656	8.60	-.17	09,09,09,09	1.003	0.966	8.31	285
" "	" " "	" " "	"	"	" .664	8.54	-.24	02,02,07,08	"	"	8.25	"
-22°4480	17 53 37	-22 56.6	9.14	"	5275.572	9.02	+.01	04,04,07,08	1.003	0.994	8.59	197
" "	" " "	" " "	"	"	" .578	8.88	-.11	07,07,05,04	"	"	8.45	"
" "	" " "	" " "	"	"	5285.542	8.80	-.16	00,00,03,02	1.003	1.001	8.33	59
" "	" " "	" " "	"	"	" .549	8.90	-.16	06,07,04,04	"	"	8.43	"

CHAPTER XIII.

OBSERVATIONS OF ECLIPSES OF JUPITER'S SATELLITES.

THE observations of the Eclipses of Jupiter's Satellites described in H.A. 52, Part I, were continued by Professor Wendell until a few weeks before his death. The times and corresponding magnitudes are given in Table XXIII, in the same form as the corresponding columns of Table X in H.A. 52, 22. The first column gives the interval in seconds found by subtracting the computed time of the eclipse, as given in the British Nautical Almanac, from the time of observation. The letter a indicates that the mean of the times of four settings is used, the letter l that four settings were made reducing the light of the satellite to the limit of visibility. In other cases, the mean of the times of the preceding and following settings is given. Italics indicate that the observed time precedes the computed time. The second column gives the diminution in light of the satellite, or the difference found by subtracting the mean of the readings at full brightness from the observed magnitude. Italics indicate negative values, and denote that the measured brightness exceeds that derived from the mean. The letter s denotes that the satellite was suspected, and c that it was certainly seen. The additional columns given in H.A. 52 are here omitted, since in the discussion in Part II, Professor Sampson preferred to make his own reduction of the observations. The deviation of the final results from theory is much greater than the accordance of the observations would indicate. It is probable that these deviations are real and due to some unknown cause and not to errors in the photometric measurements.

On February 25, 1909, Satellite I disappeared behind the limb of Jupiter, 61° after the computed time of eclipse.

Time.	M.	Time.	M.	Time.	M.	Time.	M.	Time.	M.	Time.	M.	Time.	M.
1904, 10, 1. II. D.		1904, 10, 27. I. R.		1904, 11, 27. II. R.		1904, 12, 28. I. R.		1905, 1, 4. I. R.		1905, 1, 16. II. R.		1905, 1, 20. I. R.	
s. 6	0.9	s. 212 l	2.9	s. 412a	0.0	s. 299 l	3.2	s. 266 l	1.5	s. 122	1.2	s. 288a	0.0
19	0.9	33	c	492a	0.1	6	s	38	c	113	1.1	343a	0.0
34	1.0	66	1.4	572a	0.0	16	c	54	1.2	102	1.2	406a	0.0
46	1.3	87	1.5	887a	0.1	28	2.0	65	1.1	92	0.9	482a	0.0
57	1.6	112	1.1			38	1.7	75	1.0	82	0.6	581a	0.0
68	1.8	129	0.8	1904, 12, 19. I. R.		49	1.6	86	0.7	73	0.6	710a	0.0
78	2.1	142	0.7			58	1.5	96	0.6	64	0.6	814a	0.0
90	2.5	158	0.5			67	1.2	106	0.5	54	0.4	876a	0.1
103	2.8	175	0.4	s.		78	1.1	115	0.4	42	0.5	1112 l	1.9
124	3.3	191	0.3	5	c	89	0.8	124	0.3	26	0.4	1905, 1, 27. I. R.	
204 l	3.3	210	0.2	24	2.3	100	0.6	133	0.2	10	0.3		
1904, 10, 26. II. R.		285a	0.1	35	1.6	126	0.6	150	0.1	2	0.2		
		378a	0.1	46	1.3	150	0.4	166	0.0	33a	0.0		
		448a	0.2	58	1.3	163	0.3	175	0.2	74a	0.1		
		519a	0.1	70	1.2	236a	0.1	186	0.2	117a	0.0	s.	
		618a	0.0	82	1.0	288a	0.0	198	0.2	166a	0.0	29	c
s.		737a	0.1	96	0.9	348a	0.1	211	0.1	215a	0.0	102	1.0
449 l	2.9	896a	0.0	112	0.9	399a	0.0	221	0.1	264a	0.0	122	0.5
56	1.1	973a	0.1	124	0.8	457a	0.0	246	0.0	301a	0.0	135	0.4
42	1.1			134	0.6	513a	0.1	297a	0.0	375a	0.1	168	0.4
26	0.9			144	0.6	642a	0.0	348a	0.0	462a	0.0	198	0.3
5	0.5	1904, 11, 27. II. R.		156	0.4	778a	0.0	392a	0.1	681a	0.1	212	0.2
14	0.4			168	0.3	180	0.2	1904, 12, 29. II. D.		442a	0.1	1905, 1, 20. I. R.		227	0.1
25	0.3	194	0.1	231a	0.1	488a	0.0			488a	0.0			243	0.1
36	0.3	s.		291a	0.0	542a	0.0	542a	0.0	259	0.0	259	0.0
48	0.2	258 l	3.1	355a	0.0	1905, 1, 16. II. R.		601a	0.0	1905, 1, 20. I. R.		300a	0.0
64	0.0	66	c	430a	0.0			636a	0.0			601a	0.0	366a	0.0
79	0.0	51	1.8	480a	0.0	s.		684a	0.1	s.		469a	0.0
94	0.0	36	1.5	548a	0.0	338a	0.0	782a	0.0	32	s	535a	0.1
109	0.1	23	1.1	630a	0.0	228a	0.0	1905, 1, 16. II. R.		74	1.0	607a	0.0
130	0.1	12	1.0	706a	0.0	134a	0.0			782a	0.0	83	0.8	687a	0.0
198a	0.1	0	0.8	786a	0.0	72	0.1	1905, 1, 16. II. R.		94	0.7	756a	0.0
286a	0.1	12	0.6	852a	0.0	48	0.1			684a	0.1	106	0.6	894a	0.0
369a	0.0	23	0.5	1059a	0.0	21	0.2	1905, 1, 16. II. R.		118	0.6	1905, 1, 31. III. D.	
422a	0.1	35	0.2	1278 l	3.1	4	0.3			134	0.6		
507a	0.0	50	0.2			27	0.3	s.		156	0.5	1625a	0.1
564a	0.0	76	0.2			52	0.5	469 l	2.1	174	0.4	1533a	0.1
638a	0.0	102	0.2			72	1.0	187	c	186	0.3	1396a	0.0
797a	0.0	145a	0.1			88	1.2	164	2.0	196	0.2	1240a	0.0
		200a	0.0			107	1.3	156	2.2	208	0.0		
		280a	0.1			233 l	1.0	148	1.8	226	0.0		
		340a	0.0					140	1.7	247	0.0		
								131	1.5				

Time.	M.	Time.	M.	Time.	M.	Time.	M.	Time.	M.	Time.	M.	Time.	M.
1905, 1, 31. III. D.		1905, 1, 31. III. R.		1905, 9, 21. I. D.		1905, 9, 25. II. D.		1905, 9, 28. I. D.		1905, 10, 16. III. R.		1905, 10, 23. I. D.	
<i>s.</i> 1134a	0.0	<i>s.</i> 72	1.0	<i>s.</i> 44	1.8	<i>s.</i> 98	2.3	<i>s.</i> 12	3.9	<i>s.</i> 208	3.9	<i>s.</i> 941a	0.1
1042a	0.0	122	1.0	30	2.0	108	2.6	671	4.1	196	3.4	862a	0.1
982a	0.0	219a	0.9	22	2.3	117	2.9	1905, 10, 16. III. D.		185	3.4	791a	0.0
919a	0.1	317a	0.3	12	2.7	127	3.3			160	3.5	739a	0.0
842a	0.2	416a	0.5	2	3.3	137	3.7	<i>s.</i> 1273a		136	3.1	632a	0.0
784a	0.4	508a	0.3	56 l	3.3	204 l	3.7			126	3.1	540a	0.1
723a	0.4	593a	0.2	1905, 9, 25. II. D.		1905, 9, 28. I. D.		107	2.9	116	3.0	444a	0.1
658a	0.7	688a	0.0	<i>s.</i> 1138a		<i>s.</i> 1364a		1203a	0.0	107	2.9	342a	0.0
604a	0.8	774a	0.1					1144a	0.1	87	2.7	98	2.9	230a	0.0
521a	1.0	846a	0.1	<i>s.</i> 1080a		<i>s.</i> 1275a		1064a	0.1	87	2.7	182	0.0
467a	1.3	919a	0.1					969a	0.1	1219a	0.0	76	2.9	167	0.1
411a	1.5	1001	0.1	882a	0.1	1124a	0.0	986a	0.1	64	2.7	156	0.1
351a	1.7	1081	0.1	800a	0.1	1041a	0.0	908a	0.1	52	2.6	144	0.2
281a	1.7	1233	0.1	716a	0.1	887a	0.0	820a	0.0	39	2.5	134	0.3
216a	2.0	1905, 9, 21. I. D.		602a	0.1	813a	0.0	723a	0.2	25	2.4	123	0.3
181	2.4	<i>s.</i> 1055a	0.0	522a	0.1	733a	0.0	648a	0.3	60a	2.2	112	0.4
168	2.4	962a	0.1	451a	0.1	601a	0.1	584a	0.5	131a	1.7	102	0.6
154	2.5	865a	0.1	400a	0.1	523a	0.0	519a	0.7	209a	1.2	93	0.7
137	2.5	756a	0.1	344a	0.2	425a	0.0	467a	1.0	284a	1.0	84	0.8
117	2.7	661a	0.0	292a	0.2	349a	0.1	389a	1.1	347a	0.5	74	0.9
100	2.8	559a	0.0	240a	0.2	271a	0.1	309a	1.3	427a	0.3	66	1.1
86	2.9	475a	0.0	190a	0.3	207a	0.1	260a	1.7	520a	0.2	56	1.3
72	3.2	388a	0.1	133a	0.2	168	0.2	213a	2.0	603a	0.1	46	1.8
55	3.2	319a	0.0	72a	0.2	158	0.2	170	2.2	694a	0.0	36	1.8
32	3.3	211a	0.1	38	0.5	146	0.2	158	2.4	748a	0.1	25	1.9
19	3.8	161	0.1	24	0.6	134	0.3	147	2.3	833a	0.1	12	2.3
103 l	3.7	150	0.4	16	0.6	124	0.4	127	2.4	928a	0.0	80 l	2.3
1905, 1, 31. III. R.		137	0.5	8	0.7	114	0.5	108	2.5	1019a	0.0	1905, 10, 23. III. D.	
<i>s.</i> 303 l	2.6	126	0.6	2	0.9	102	0.7	94	2.7	1181a	0.1	<i>s.</i> 1683a	0.2
169	c	118	0.8	12	0.7	84	1.0	81	2.7	1291a	0.2	1600a	0.2
138	2.2	110	0.9	20	0.7	68	1.1	65	2.8	1393a	0.0	1523a	0.2
107	2.2	102	0.9	30	1.0	57	1.2	46	3.0	1463a	0.0	1448a	0.1
84	2.0	94	1.1	39	1.1	49	1.4	31	3.2	1537a	0.0	1319a	0.3
62	1.8	86	1.2	48	1.2	40	1.9	17	3.5	1718a	0.0	1231a	0.3
33	1.7	78	1.2	58	1.3	29	2.2	95 l	3.6	1778a	0.0	1075a	0.3
9	1.7	66	1.3	68	1.6	16	2.6	1905, 10, 16. III. R.		1844a	0.0	986a	0.2
31	1.2	56	1.6	78	1.9	6	3.0			2013 l	3.7	898a	0.0
				89	2.1	4	3.6	<i>s.</i> 238	c				

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Time.	M.	Time.	M.	Time.	M.	Time.	M.	Time.	M.	Time.	M.	Time.	M.
1905, 10, 23. III. D.		1905, 10, 23. III. R.		1905, 10, 30. I. D.		1905, 11, 6. I. D.		1905, 11, 21. II. D.		1905, 12, 5. III. R.		1905, 12, 8. I. R.	
<i>s.</i> 836a	0.2	<i>s.</i> 14	1.8	<i>s.</i> 102	0.7	<i>s.</i> 44	1.5	<i>s.</i> 864a	0.0	<i>s.</i> 62	1.5	<i>s.</i> 209a	0.2
754a	0.3	75a	1.5	93	0.7	36	1.9	775a	0.1	76	1.5	250a	0.1
676a	0.2	154a	1.2	84	0.9	28	2.1	722a	0.0	92	1.4	297a	0.0
612a	0.4	257a	0.8	74	0.9	20	2.6	662a	0.0	136a	1.1	340a	0.0
558a	0.5	324a	0.5	64	1.2	54 l	3.2	581a	0.1	201a	0.9	385a	0.0
498a	0.6	402a	0.3	54	1.3			517a	0.0	269a	0.7	439a	0.0
446a	0.9	482a	0.2	46	1.4	1905, 11, 14. II. D.		437a	0.1	328a	0.5	508a	0.1
382a	1.0	553a	0.1	36	1.7			340a	0.0	392a	0.4	562a	0.0
331a	1.1	630a	0.1	26	2.2			257a	0.1	451a	0.3	664a	0.1
265a	1.3	722a	0.0	61 l	2.9			168a	0.1	512a	0.1	829 l	2.8
195a	1.6	821a	0.1			<i>s.</i> 1201a	0.1	115a	0.1	570a	0.1		
134a	2.1	909a	0.1	1905, 11, 6. I. D.		1129a	0.1	71	0.0	642a	0.0	1905, 12, 30. II. R.	
87a	2.6	1000a	0.1			1011a	0.0	57	0.1	699a	0.0		
48	2.9	1075a	0.1			921a	0.0	46	0.2	763a	0.1		
36	3.0	1146a	0.1	<i>s.</i> 1253a	0.0	842a	0.1	35	0.3	841a	0.1	<i>s.</i> 256 l	2.7
20	3.0	1306a	0.1	1179a	0.0	671a	0.0	17	0.3	917a	0.1	40	1.4
6	3.1			1113a	0.0	550a	0.0	6	0.4	980a	0.1	28	1.2
5	3.2	1905, 10, 30. I. D.		962a	0.0	464a	0.1	22	0.4	1105 l	3.1	14	0.9
18	3.2			883a	0.0	388a	0.0	37	0.4			7	0.8
34	3.5			808a	0.1	314a	0.1	51	0.6	1905, 12, 8. I. R.		11	0.8
52	3.8	<i>s.</i> 1032a	0.1	723a	0.1	259a	0.2	66	0.7			21	0.6
72	3.7	955a	0.1	616a	0.1	198a	0.1	82	0.8			34	0.5
90	3.7	883a	0.1	468a	0.1	125a	0.1	151 l	0.7			46	0.4
106	3.9	818a	0.1	370a	0.1	88	0.2			<i>s.</i> 9	<i>c</i> 2.7	58	0.4
194 l	4.1	730a	0.1	292a	0.1	76	0.2	1905, 12, 5. III. R.		8	2.7	72	0.4
		653a	0.0	210	0.0	62	0.2			22	2.1	86	0.3
		546a	0.0	198	0.1	48	0.2			36	1.7	98	0.2
		462a	0.0	184	0.3	34	0.4	<i>s.</i> 132	<i>c</i> 2.6	45	1.5	110	0.1
		389a	0.0	170	0.3	20	0.3	119	2.6	54	1.4	122	0.0
		295a	0.0	156	0.1	7	0.4	106	2.6	65	1.1	135	0.0
		230	0.1	144	0.1	10	0.6	90	2.4	74	0.9	172a	0.0
		206	0.1	132	0.1	24	0.7	72	2.4	82	0.8	222a	0.1
		190	0.1	119	0.2	44	0.9	50	2.3	91	0.7	272a	0.0
		175	0.1	109	0.4	64	1.3	27	2.0	100	0.5	329a	0.0
		160	0.2	98	0.6	80	1.4	12	2.0	110	0.5	392a	0.0
		148	0.3	88	0.7	177 l	1.1	1	1.8	120	0.4	446a	0.0
		140	0.4	81	0.9			13	1.7	133	0.3	499a	0.0
		131	0.4	71	1.1			24	1.7	145	0.3	551a	0.0
		122	0.5	62	1.2			36	1.6	155	0.3	608a	0.0
		112	0.7	54	1.4			50	1.5	164	0.2	739a	0.0
										176	0.2		

Time.	M.	Time.	M.	Time.	M.	Time.	M.	Time.	M.	Time.	M.	Time.	M.
1906, 1, 7. I. R.		1906, 1, 9. I. R.		1906, 1, 10. II. R.		1906, 1, 10. III. R.		1906, 1, 16. I. R.		1906, 1, 17. II. R.		1906, 1, 24. II. R.	
<i>s.</i> 21	<i>c</i> 2.6	<i>s.</i> 119	0.4	<i>s.</i> 996 l	2.5	<i>s.</i> 78	2.4	<i>s.</i> 82	0.7	<i>s.</i> 382a	0.0	<i>s.</i> 83	0.2
6	1.9	130	0.4	1906, 1, 10. III. D.		66	2.3	98	0.5	433a	0.0	94	0.2
8	1.5	144	0.3			52	2.1	112	0.2	510a	0.0	108	0.2
28	1.3	159	0.2	<i>s.</i> 1415a 0.4		38	2.1	124	0.3	572a	0.0	124	0.0
45	0.9	171	0.1			26	1.9	140	0.2	645a	0.0	140	0.0
55	0.5	184	0.1	9	1.8	158	0.1	807 l	2.8	156	0.1	156	0.1
67	0.4	196	0.1	8	1.8	172	0.1	1906, 1, 17. III. D.		213a	0.0	213a	0.0
82	0.2	234a	0.1	20	1.6	221a	0.1			287a	0.0	287a	0.0
95	0.2	307a	0.1	36	1.5	278a	0.0	<i>s.</i> 489a 0.4		370a	0.1	370a	0.1
105	0.2	377a	0.0	52	1.5	356a	0.0			456a	0.0	456a	0.0
116	0.2	451a	0.0	65	1.4	419a	0.0	540a	0.0	540a	0.0	540a	0.0
130	0.1	507a	0.0	80	1.4	483a	0.0	613a	0.0	613a	0.0	613a	0.0
146	0.1	652a	0.0	128a	1.1	554a	0.0	682a	0.0	682a	0.0	682a	0.0
159	0.0	725a	0.0	190a	0.9	643a	0.0	812a	0.0	812a	0.0	812a	0.0
168	0.1	792a	0.0	262a	0.6	831a	0.0	982 l	1.4	982 l	1.4	982 l	1.4
176	0.2	916 l	2.4	344a	0.5	935 l	3.4	1906, 1, 17. II. R.		204a	1.5	1906, 2, 15. I. R.	
212a	0.1	1906, 1, 10. II. R.		517a	0.5	451a	0.3			162	1.8		
306a	0.0			443a	0.7	538a	0.2	1906, 1, 17. II. R.		150	1.9	174 l	3.2
372a	0.0	377a	1.1	597a	0.1	<i>s.</i> 77	<i>c</i> 2.5			137	2.0	8	<i>c</i> 1.3
428a	0.0	294a	1.3	658a	0.1	64	2.3	124	2.2	40	1.0		
480a	0.0	242	2.4	726a	0.0	54	2.8	110	2.2	54	1.0		
549a	0.0	222	2.4	794a	0.0	45	1.9	90	2.2	66	0.9		
609a	0.0	193	1.8	878a	0.1	36	1.5	72	2.5	79	0.5		
805a	0.0	164	2.2	946a	0.0	27	1.2	54	2.8	91	0.6		
1002a	0.1	145	2.5	1005a	0.0	14	1.1	36	2.9	101	0.4		
1103a	0.1	130	2.6	1075a	0.1	0	0.9	20	3.1	114	0.1		
1262 l	3.1	115	3.2	1407 l	3.5	10	0.7	4	3.3	128	0.3		
1906, 1, 9. I. R.		10	1.0	94	3.4	1906, 1, 16. I. R.		93 l	3.6	138	0.1	154	0.0
		4	0.8	73	2.9			110	2.2	170	0.0	170	0.0
1906, 1, 9. I. R.		20	0.6	73	2.9	<i>s.</i> 20	<i>c</i> 2.6	1906, 1, 24. II. R.		180	0.1	180	0.1
		33	0.5	54	3.1	10	0.7			48	1.0	196	0.0
1906, 1, 9. I. R.		48	0.4	31	3.2	20	0.7	8	0.9	244a	0.1	244a	0.1
		62	0.3	87 l	3.6	32	0.6	10	0.9	312a	0.0	312a	0.0
<i>s.</i> 11	<i>c</i> 1.9	76	0.2	1906, 1, 10. III. R.		45	0.6	23	0.7	380a	0.0	380a	0.0
26	1.8	135a	0.1			56	0.6	32	0.5	44	0.4	443a	0.0
37	1.5	209a	0.0	68	0.4	45	0.6	44	0.4	500a	0.0	500a	0.0
47	1.1	279a	0.1	80	0.4	56	0.6	55	0.3	582a	0.0	582a	0.0
62	0.9	356a	0.0	92	0.3	68	0.4	69	0.3				
76	0.8	436a	0.0	141a	0.1	80	0.4						
88	0.6	549a	0.1	196a	0.0	80	0.4						
99	0.5	714a	0.1	272a	0.0	92	0.3						
110	0.5	884a	0.0	329a	0.1	92	0.3						

Time.	M.	Time.	M.	Time.	M.	Time.	M.	Time.	M.	Time.	M.	Time.	M.
1906, 2, 17. I. R.		1906, 2, 22. III. R.		1906, 2, 24. I. R.		1906, 4, 6. III. D.		1906, 10, 2. III. D.		1906, 10, 26. I. D.		1906, 11, 7. III. R.	
<i>s.</i> 718a	0.0	<i>s.</i> 195	s	<i>s.</i> 73	0.5	<i>s.</i> 176	2.0	<i>s.</i> 1356a	0.0	<i>s.</i> 152	0.1	<i>s.</i> 469a	0.2
834a	0.0	190	c	84	0.4	160	2.1	1248a	0.0	135	0.3	534a	0.1
9581	2.0	166	3.6	93	0.3	149	2.2	1096a	0.1	120	0.4	635a	0.0
1906, 2, 22. III. D.		152	3.2	104	0.4	132	2.4	1012a	0.1	105	0.5	708a	0.1
		136	3.1	117	0.3	111	2.5	937a	0.0	88	0.8	773a	0.0
<i>s.</i> 1189a	0.1	76	2.4	164	0.2	1906, 9, 24. I. D.		665a	0.3	43	1.4	1054a	0.0
1107a	0.1	62	2.2	186	0.1	<i>s.</i> 1097a	0.1	571a	0.2	34	1.5	1113a	0.0
1029a	0.0	50	2.1	210	0.0	846a	0.0	458a	0.3	24	1.9	12501	2.8
962a	0.0	40	2.0	252a	0.0	765a	0.0	344a	0.5	14	2.3	1906, 11, 14. III. D.	
910a	0.1	28	1.9	322a	0.1	681a	0.0	256a	1.0	4	2.5		
857a	0.0	12	1.9	401a	0.1	610a	0.0	198	1.4	6	2.7	1906, 11, 7. III. R.	
795a	0.2	5	1.8	519a	0.1	483a	0.1	178	1.4	1021	2.8		
744a	0.2	18	1.6	644a	0.0	394a	0.0	159	1.5	<i>s.</i> 65		<i>s.</i> 732a	0.0
687a	0.3	28	1.5	699a	0.0	312a	0.0	138	1.5			45	c	636a	0.0
624a	0.4	61a	1.3	761a	0.0	242	0.1	116	1.6	29	2.8	558a	0.1
566a	0.5	131a	1.0	828a	0.1	225	0.1	93	1.9	16	2.6	474a	0.2
508a	0.6	185a	0.8	11691	2.9	190	0.1	66	2.0	0	2.3	399a	0.3
445a	0.9	246a	0.7	1906, 4, 6. III. D.		155	0.0	44	2.3	17	2.1	327a	0.5
385a	1.2	293a	0.5	<i>s.</i>		142	0.1	18	2.7	28	1.9	256a	0.8
338a	1.4	347a	0.4	1245a	0.1	132	0.2	611	2.4	38	1.8	175a	1.2
284a	1.6	400a	0.3	1165a	0.1	124	0.4	1906, 10, 26. I. D.		0	2.3	134	1.6
245	1.9	457a	0.2	1076a	0.1	116	0.5	<i>s.</i> 984a	0.1	17	2.1	118	1.8
230	2.0	521a	0.2	930a	0.1	106	0.6	906a	0.1	28	1.9	102	1.8
218	2.2	586a	0.0	865a	0.0	96	0.7	838a	0.1	38	1.8	84	1.8
208	2.3	658a	0.0	791a	0.0	76	1.7	774a	0.1	52	1.7	68	2.1
188	2.2	721a	0.0	719a	0.1	50	1.3	708a	0.1	66	1.6	58	2.4
168	2.5	824a	0.1	646a	0.2	28	1.7	639a	0.1	78	1.6	40	2.6
158	2.7	929a	0.1	584a	0.4	19	1.8	566a	0.1	88	1.3	22	2.6
149	2.8	996a	0.1	505a	0.5	9	2.4	510a	0.1	110	1.1	6	2.9
138	2.8	10811	3.6	434a	0.6	2	3.1	397a	0.0	132	1.1	51	c
119	2.9	1906, 2, 24. I. R.		348a	1.0	17	s	333a	0.0	143	1.0	62	s
100	3.0	<i>s.</i>	c	286a	1.2	1131	3.3	271a	0.2	156	0.9	1441	3.1
84	3.3	0		232	1.5			218a	0.1	170	0.9		
64	3.4	29	1.7	216	1.7			218a	0.1	218a	0.7		
30	c	50	0.9	198	1.9			174	0.2	277a	0.4		
16	s									330a	0.4		
121	3.9									400a	0.2		

Time.	M.	Time.	M.	Time.	M.	Time.	M.	Time.	M.	Time.	M.	Time.	M.
1906, 12, 4. I. D.		1907, 1, 5. I. R.		1907, 1, 11. II. R.		1907, 1, 21. I. R.		1907, 1, 24. IV. D.		1907, 1, 28. I. R.		1907, 2, 8. III. D.	
<i>s.</i> 1049a	0.1	<i>s.</i> 5	<i>c</i> 1.4	<i>s.</i> 122	0.4	<i>s.</i> 503a	0.0	<i>s.</i> 780	2.4	<i>s.</i> 7	1.9	<i>s.</i> 529a	0.1
919a	0.2	18	1.4	133	0.3	558a	0.0	836	2.3	5	1.5	447a	0.3
693a	0.0	40	0.9	144	0.3	691a	0.0	886	2.5	20	1.2	355a	0.5
595a	0.0	56	0.7	152	0.2	929 l	1.7	921	2.8	33	1.0	266a	0.9
447a	0.1	72	0.6	160	0.1			1104 l	2.6	43	0.8	203	1.2
258	0.1	86	0.6	172	0.1	1907, 1, 24. IV. D.				52	0.7	180	1.2
225	0.2	106	0.5	203a	0.0			1907, 1, 24. IV. R.		61	0.5	153	1.4
200	0.1	127	0.4	235a	0.0					78	0.4	130	1.7
186	0.1	142	0.3	267a	0.0					96	0.3	110	1.9
162	0.1	168	0.2	307a	0.0	<i>s.</i> 2473a	0.2	<i>s.</i> 429	<i>c</i> 0.7	110	0.3	94	2.0
136	0.2	199	0.1	347a	0.0	2369a	0.0	326	0.7	122	0.2	77	2.1
110	0.4	225	0.1	396a	0.0	2270a	0.0	303	0.8	138	0.1	62	2.2
57	0.6	300a	0.1	444a	0.0	2190a	0.0	277	0.8	172a	0.0	39	2.3
36	<i>c</i>	364a	0.0	479a	0.0	2120a	0.1	251	0.7	228a	0.0	13	2.9
		411a	0.0	634 l	2.2	2010a	0.0	230	0.6	285a	0.0	6	3.2
		462a	0.0			1907a	0.1	207	0.7	338a	0.0	105 l	2.9
1906, 12, 18. I. D.		511a	0.0	1907, 1, 21. I. R.		1768a	0.1	178	0.7	390a	0.0	1907, 2, 12. II. R.	
<i>s.</i> 1227a	0.1	573a	0.0	<i>s.</i> 11	<i>c</i> 1.0	1658a	0.1	178	0.7	441a	0.0	<i>s.</i> 14	<i>s</i>
1099a	0.1	682a	0.0	22	0.8	1552a	0.2	135	0.7	488a	0.0	4	<i>c</i>
979a	0.1	732a	0.1	33	0.7	1442a	0.2	95	0.6	554a	0.0	24	2.3
838a	0.0	831 l	2.3	44	0.6	1358a	0.2	8a	0.6	653a	0.0	43	1.6
696a	0.0			54	0.5	1273a	0.1	117a	0.4	702a	0.0	58	1.0
534a	0.1	1907, 1, 11. II. R.		66	0.4	1155a	0.1	260a	0.5	754a	0.0	69	1.0
405a	0.1	<i>s.</i> 41	<i>s</i> 1.9	76	0.2	1059a	0.0	461a	0.3	798a	0.0	82	1.0
313a	0.1	36	<i>c</i> 1.7	83	0.2	978a	0.2	647a	0.1	846a	0.0	95	0.7
240	0.1	12	1.9	95	0.2	892a	0.1	777a	0.1	968 l	3.4	109	0.5
206	0.1	24	1.7	108	0.2	803a	0.1	925a	0.0			122	0.5
173	0.2	32	1.6	122	0.2	711a	0.1	1076a	0.0	1907, 2, 8. III. D.		135	0.4
146	0.4	40	1.4	134	0.1	616a	0.1	1312a	0.0	<i>s.</i> 1568a	0.1	148	0.2
128	0.5	48	1.2	147	0.1	524a	0.1	1411a	0.0	1445a	0.0	162	0.3
109	0.6	55	1.1	160	0.1	441a	0.0	1517a	0.0	1339a	0.0	176	0.2
72	1.2	62	1.0	175	0.1	355a	0.0	1623a	0.0	1213a	0.0	188	0.1
56	1.6	70	0.7	188	0.0	289a	0.1	1762a	0.0	1088a	0.0	230a	0.1
38	2.3	80	0.7	221a	0.1	35a	0.2	2261 l	1.9	1000a	0.0	282a	0.1
19	2.9	89	0.6	278a	0.0	99a	0.4			931a	0.0	346a	0.1
70 l	2.7	97	0.6	334a	0.0	185a	0.6	1907, 1, 28. I. R.		864a	0.0	402a	0.0
		106	0.5	393a	0.0	294a	0.8	<i>s.</i> 45	<i>c</i> 2.6	671a	0.0	451a	0.0
		113	0.4	447a	0.0	452a	1.1	24		603a	0.1		
						617a	1.5						
						744	2.1						

Time.	M.	Time.	M.	Time.	M.	Time.	M.	Time.	M.	Time.	M.	Time.	M.
1907, 2, 12. II. R.		1907, 3, 9. III. R.		1907, 3, 15. I. R.		1907, 3, 16. III. R.		1907, 4, 17. II. R.		1907, 4, 24. II. R.		1907, 10, 24. III. R.	
<i>s.</i> 504a	0.0	<i>s.</i> 15	2.8	<i>s.</i> 190	0.0	<i>s.</i> 82	<i>c</i>	<i>s.</i> 61	1.4	<i>s.</i> 486a	0.0	80	0.7
557a	0.0	2	2.6	206	0.0	62	3.5	77	1.1	548a	0.0	54	0.7
641a	0.0	9	2.3	224	0.1	45	3.3	94	1.0	655a	0.0	38	0.6
713a	0.0	23	2.0	267a	0.1	28	3.0	108	0.9	726a	0.0	16	0.7
969a	2.4	39	1.9	331a	0.0	12	2.9	122	0.7	789a	0.1	4	0.6
		52	1.7	403a	0.0	2	2.8	136	0.5	843a	0.0	21	0.7
		66	1.5	493a	0.0	14	2.8	150	0.5	900a	0.0	41	0.6
1907, 2, 27. I. R.		83	1.4	606a	0.0	27	2.5	162	0.4			72	0.4
		102	1.3	683a	0.0	43	2.1	175	0.3			102	0.3
		116	1.1			58	1.8	188	0.2	1907, 10, 22. II. D.		150a	0.1
<i>s.</i> 16	<i>s</i>	128	1.0	1907, 3, 16. III. D.		68	1.6	202	0.2			220a	0.2
10	<i>c</i>	144	1.0			79	1.5	246a	0.1	<i>s.</i> 1039a	0.0	302a	0.0
13	2.0	160	0.8			93	1.4	295a	0.0	964a	0.1	364a	0.1
30	1.3	174	0.6	<i>s.</i> 2250a	0.1	112	1.3	354a	0.0	864a	0.1	436a	0.2
42	1.1	222a	0.5	2010a	0.0	182a	0.7	405a	0.0	764a	0.1	540a	0.3
53	0.9	295a	0.3	1875a	0.0	257a	0.5	458a	0.0	686a	0.0	648a	0.3
65	0.7	372a	0.2	1601a	0.0	315a	0.3	517a	0.0	602a	0.0	768a	0.2
82	0.5	446a	0.1	1442a	0.0	379a	0.3	572a	0.0	527a	0.0	1009a	0.0
100	0.4	527a	0.1	1368a	0.0	453a	0.1	651a	0.0	465a	0.0	1175a	0.2
116	0.3	599a	0.0	1301a	0.0	514a	0.0	763 l	2.9	400a	0.0	1253a	0.1
132	0.3	678a	0.0	1211a	0.0	577a	0.0			330a	0.1	1350a	0.1
144	0.1	800a	0.0	1147a	0.0	639a	0.0	1907, 4, 24. II. R.		259a	0.1	1551a	0.1
158	0.0	860a	0.0	1081a	0.0	691a	0.0			198a	0.0	1757 l	2.5
205a	0.0	1033a	0.0	1004a	0.1	747a	0.0			150	0.1		
274a	0.0	1098a	0.1	938a	0.0	811a	0.0	<i>s.</i> 268 l	2.0	125	0.2	1907, 10, 31. III. D.	
351a	0.0	1164a	0.0	847a	0.2	884a	0.1	45	<i>s</i>	107	0.5		
423a	0.0	1228a	0.0	771a	0.3	1052a	0.0	54	<i>c</i>	96	0.6	<i>s.</i> 1640a	0.2
498a	0.0	1300a	0.0	652a	0.3	1160a	0.0	78	1.2	86	0.7	1559a	0.1
567a	0.0	1393 l	3.8	516a	0.4	1241a	0.0	91	1.1	74	0.6	1433a	0.2
642a	0.0			362a	0.5	1320a	0.0	105	1.1	62	0.7	1346a	0.2
768a	0.1	1907, 3, 15. I. R.		273a	0.9	1478 l	3.3	120	0.8	48	0.9	1223a	0.1
825a	0.0			188	1.3			133	0.6	33	1.0	1105a	0.1
956 l	2.0			158	1.5	1907, 4, 17. II. R.		148	0.5	17	1.1	1015a	0.0
		<i>s.</i> 15	<i>c</i>	94	2.0			170	0.2	1	1.5	941a	0.1
1907, 3, 9. III. R.		68	0.8	44	2.2			190	0.1	17	1.8	859a	0.2
		106	0.4			<i>s.</i> 15	<i>s</i>	208	0.0	31	2.3	782a	0.2
		126	0.2			3	<i>c</i>	228	0.1	121	2.6	716a	0.1
<i>s.</i> 88	<i>s</i>	146	0.1			26	2.4	254	0.1			649a	0.1
83	<i>c</i>	164	0.1			44	1.9	313a	0.1			589a	0.1
33	3.0	176	0.1					413a	0.0				

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Time.	M.	Time.	M.	Time.	M.	Time.	M.	Time.	M.	Time.	M.	Time.	M.
1907, 10, 31. III. D.		1907, 11, 14. I. D.		1907, 12, 8. IV. D.		1907, 12, 25. IV. R.		1908, 1, 8. I. D.		1908, 2, 27. II. R.		1908, 3, 10. I. R.	
<i>s.</i> 526a	0.1	<i>s.</i> 4	1.9	<i>s.</i> 928a	0.1	<i>s.</i> 56	0.9	<i>s.</i> 45	1.3	<i>s.</i> 27	s	<i>s.</i> 122	0.3
450a	0.3	21	2.4	863a	0.1	74	0.9	32	1.7	44	1.7	138	0.1
382a	0.3	99l	2.4	800a	0.1	94	0.8	18	1.8	60	1.2	160	0.1
324a	0.4			842a	0.1	110	0.6	2	2.1	71	1.0	180	0.0
270a	0.5	1907, 12, 7. I. D.		675a	0.1	126	0.6	33l	2.6	82	0.8	248a	0.0
204a	0.7			593a	0.2	187a	0.5			94	0.7	331a	0.0
145a	1.1			508a	0.2	268a	0.4	1908, 1, 18. III. D.		106	0.6	378a	0.1
101	1.5	<i>s.</i> 552a	0.3	447a	0.1	329a	0.4	<i>s.</i> 1313a	0.0	118	0.5	430a	0.1
86	1.5	474a	0.1	387a	0.2	387a	0.1	1214a	0.0	130	0.3	485a	0.1
68	1.6	413a	0.0	329a	0.2	470a	0.2	1057a	0.1	141	0.3	537a	0.1
49	1.9	358a	0.1	258a	0.3	547a	0.1	957a	0.0	152	0.2	587a	0.0
33	2.2	307a	0.0	172a	0.2	612a	0.1	853a	0.0	162	0.1	633a	0.0
20	2.5	256a	0.0	116a	0.5	686a	0.0	702a	0.0	178	0.0	737a	0.0
5	2.7	192a	0.1	63a	0.7	769a	0.1	631a	0.1	193	0.0	854l	2.4
9	2.9	146	0.5	8a	1.1	837a	0.0	561a	0.0	203	0.0		
24	3.3	134	0.4	53a	1.4	883a	0.1	469a	0.1	214	0.0	1908, 3, 24. I. R.	
40	3.7	122	0.4	105a	1.5	939a	0.1	402a	0.0	255a	0.0		
58	4.3	109	0.5	158	2.0	1001a	0.0	335a	0.1	304a	0.0		
144l	4.3	94	0.7	172	2.2	1055a	0.0	256a	0.3	351a	0.0	<i>s.</i> 318l	2.1
		80	0.8	191	2.3	1111a	0.0	188a	0.7	392a	0.0	s	
1907, 11, 14. I. D.		67	0.9	210	2.6	1165a	0.0	121a	1.0	433a	0.0	10	s
<i>s.</i> 788a	0.1	54	1.2	222	2.9	1214a	0.0	72	1.3	480a	0.0	57	0.5
686a	0.0	41	1.4	235	3.1	1328a	0.0	52	1.4	522a	0.0	101	0.3
609a	0.1	26	1.6	250	3.2	1490l	2.6	37	1.5	617a	0.0	116	0.2
530a	0.1	12	2.2	270	3.6			20	1.6	725l	2.4	129	0.3
444a	0.0	1	2.5	290	4.2	1908, 1, 8. I. D.		72	1.3			143	0.3
363a	0.0	13	2.8	306	4.7	<i>s.</i> 492a	0.1	52	1.4	1908, 3, 10. I. R.		156	0.1
293a	0.1	101l	2.8	384l	4.1	414a	0.1	37	1.5	<i>s.</i> 30	s	170	0.0
229a	0.2			1907, 12, 25 IV. R.		342a	0.0	20	1.6	18	c	181	0.1
129	0.5			<i>s.</i> 84	2.4	268a	0.0	14	2.1	8	2.5	192	0.1
116	0.5	<i>s.</i> 1468a	0.2	65	2.3	196a	0.2	34	2.4	26	1.7	202	0.0
100	0.6	1391a	0.2	48	1.9	153	0.4	58	2.8	38	1.3	237a	0.1
82	0.6	1322a	0.1	30	1.8	138	0.5	81	3.2	49	1.2	281a	0.1
66	0.7	1246a	0.1	13	1.7	122	0.6	112	s	76	0.9	336a	0.1
52	1.0	1109a	0.1	4	1.5	105	0.7	224l	3.5	86	0.7	381a	0.0
38	1.2	1048a	0.0	22	1.2	72	1.0			98	0.6	436a	0.1
26	1.4	986a	0.1	40	1.0	60	1.0			110	0.4	490a	0.1
12	1.6											540a	0.1
												581a	0.0

Time.	M.	Time.	M.	Time.	M.	Time.	M.	Time.	M.	Time.	M.	Time.	M.
1908, 4, 2. I. R.		1908, 4, 6. III. R.		1908, 4, 9. I. R.		1908, 4, 13. III. D.		1908, 4, 17. II. R.		1908, 5, 11. I. R.		1908, 5, 19. II. R.	
s. 86	0.7	s. 395a	0.0	s. 347a	0.1	s. 22	1.8	s. 576a	0.0	s. 568a	0.0	s. 122	0.4
112	0.6	447a	0.1	395a	0.0	4	1.9	629a	0.0	646a	0.0	134	0.3
134	0.2	498a	0.1	438a	0.0	14	2.1	728a	0.0	707a	0.0	149	0.2
155	0.1	549a	0.1	490a	0.0	26	2.3	852 l	3.0	864a	0.0	162	0.2
171	0.1	594a	0.1	535a	0.0	39	2.6			1032a	0.0	174	0.2
187	0.0	641a	0.0	615a	0.0	49	3.1					188	0.1
202	0.1	693a	0.1	714 l	2.6	60	3.5	1908, 4, 20. IV. D.		1908, 5, 18. I. R.		204	0.0
216	0.4	742a	0.1			76	3.9					242a	0.0
232	0.3	789a	0.0	1908, 4, 13. III. D.		104	c	s. 1200a	0.1	s. 157 l	1.8	299a	0.1
283a	0.2	837a	0.0			122	s	1114a	0.1	4	c	363a	0.0
346a	0.1	944a	0.0			204 l	3.7	1031a	0.0	27	1.6	414a	0.0
395a	0.1	1057a	0.0					944a	0.0	42	1.1	500a	0.1
454a	0.1	1110a	0.0			1908, 4, 17. II. R.		868a	0.0	58	0.8	557a	0.1
562a	0.0	1207 l	4.2			s. 29	s	782a	0.0	84	0.7	604a	0.1
668a	0.0	1908, 4, 9. I. R.				9	c	699a	0.0	110	0.4	706a	0.0
876a	0.1	s. 20	s			25	1.7	582a	0.0	134	0.3	1908, 6, 3. I. R.	
1076a	0.1	13	c			36	1.6	264	0.0	161	0.3	s. 15	c
793 l	2.8	0	1.8			47	1.4	184	0.4	183	0.2	44	1.1
1908, 4, 6. III. R.		13	1.6			58	1.2	133	0.5	203	0.0	58	0.9
s. 13	s	25	1.4			68	1.0	80	0.7	243a	0.1	72	0.8
3	c	36	1.1			79	1.0	54	c	333a	0.1	84	0.7
16	3.5	46	0.8			88	0.8	66	s	404a	0.1	96	0.6
34	2.9	58	0.6			98	0.7	1908, 5, 11. I. R.		484a	0.1	96	0.6
52	2.4	71	0.4			109	0.5			560a	0.1	114	0.6
63	2.2	84	0.3			120	0.4			654a	0.1	132	0.4
74	1.9	94	0.3			133	0.4			828a	0.0	147	0.5
86	1.8	104	0.3			145	0.4	s. 10	s	1908, 5, 19. II. R.		166	0.4
98	1.5	115	0.3			156	0.3	5	c			182	0.1
110	1.4	127	0.2			166	0.2	20	1.0			194	0.1
122	1.3	138	0.3			177	0.1	35	0.7			207	0.0
134	1.2	150	0.2			188	0.1	48	0.5	s. 351 l	2.7	220	0.0
146	1.2	161	0.2			200	0.1	58	0.3	34	s	265a	0.0
158	1.1	171	0.2			234a	0.0	72	0.2	36	1.5	352a	0.1
171	0.9	180	0.1			283a	0.0	86	0.0	54	1.3	419a	0.1
216a	0.5	214a	0.1			343a	0.0	99	0.0	68	0.9	504a	0.1
282a	0.3	259a	0.1			406a	0.0	357a	0.0	80	0.7	599a	0.0
341a	0.1	299a	0.1			443a	0.0	421a	0.0	96	0.6	1257a	0.0
						522a	0.0	489a	0.1	110	0.4	1353a	0.0

Time.	M.	Time.	M.	Time.	M.	Time.	M.	Time.	M.	Time.	M.	Time.	M.
1908, 6, 3. I. R.		1909, 1, 26. I. D.		1909, 1, 26. II. D.		1909, 2, 2. I. D.		1909, 2, 11. I. D.		1909, 2, 13. II. D.		1909, 2, 20. II. D.	
. 1442a	0.0	. 679a	0.1	. 62	0.3	. 4	1.9	. 186	0.2	. 2	1.0	. 2215a	0.1
1624 l	1.7	610a	0.1	50	0.4	10	2.2	168	0.0	12	1.1	2086a	0.1
1909, 1, 8. I. D.		517a	0.0	38	0.5	24	2.3	152	0.0	25	1.3	1982a	0.1
		421a	0.1	28	0.7	119 l	2.2	136	0.2	40	1.5	1916a	0.1
. 520a		341a	0.0	18	0.7	1909, 2, 8. III. D.		118	0.4	56	1.9	1680a	0.1
		269a	0.0	7	0.7			103	0.5	70	2.4	1600a	0.1
432a	0.1	207a	0.1	7	1.0	58	0.9	82	0.5	199 l	2.6	1450a	0.0
353a	0.1	163	0.2	22	1.4	42	1.3	1909, 2, 13. II. D.		1909, 2, 18. I. D.		1324a	0.0
298a	0.1	150	0.2	34	1.5	24	1.6					1111a	0.0
243a	0.0	132	0.2	48	1.7	2231a	0.0	84 l	1.5	959a	0.0	862a	0.0
190a	0.0	112	0.3	61	1.9	2136a	0.0	1909, 2, 13. II. D.		. 1428a	0.1	766a	0.0
154	0.3	93	0.5	72	2.1	1969a	0.0			1344a	0.1	679a	0.0
143	0.3	78	0.7	82	2.6	1890a	0.0	1185a	0.2	602a	0.0	536a	0.0
134	0.3	62	0.8	129 l	2.7	1800a	0.0	1085a	0.1	456a	0.0	378a	0.0
122	0.3	44	1.1	1909, 2, 2. I. D.		1452a	0.0	. 1435a	0.0	1000a	0.1	314a	0.1
109	0.5	27	1.4			1364a	0.1	1295a	0.0	1351a	0.0	798a	0.1	251a	0.1
95	0.5	13	1.7	. 1138a	0.1	1225a	0.0	1290a	0.0	731a	0.1	175a	0.1
78	0.7	1	2.2	1074a	0.1	1125a	0.1	1205a	0.0	658a	0.0	112	0.1
60	0.9	86 l	2.3	1001a	0.1	1054	0.1	1146a	0.0	551a	0.0	98	0.2
1909, 1, 26. II. D.		919a	0.1	824	0.1	956	0.2	1057a	0.0	453a	0.1	83	0.2
		. 985a	0.0	842a	0.0	856	0.2	993a	0.0	380a	0.1	68	0.3
3	1.8	709a	0.0	709a	0.0	1909, 2, 11. I. D.		851a	0.0	309a	0.0	56	0.4
8	2.2	637a	0.0	637a	0.0			781a	0.0	228a	0.2	45	0.5
20	2.5	572a	0.0	572a	0.0	713a	0.0	180	0.2	34	0.6		
31	2.6	434a	0.0	434a	0.0	. 1356a	0.2	166	0.3	22	0.7		
114 l	2.6	353a	0.0	353a	0.0	1237a	0.0	153	0.3	11	0.8		
1909, 1, 26. I. D.		245a	0.0	245a	0.0	1159a	0.1	421a	0.1	4	0.8		
		590a	0.0	162	0.2	1081a	0.1	337a	0.0	18	1.0		
. 1243a	0.0	147	0.2	1000a	0.0	819a	0.0	213a	0.1	32	1.3		
1156a	0.0	136	0.3	819a	0.0	705a	0.1	155a	0.2	48	1.4		
1162a	0.1	125	0.4	705a	0.1	1159a	0.1	110	0.3	60	1.9		
975a	0.1	112	0.4	606a	0.0	1081a	0.1	96	0.3	66	2.3		
905a	0.0	96	0.6	525a	0.0	1000a	0.0	81	0.3	87	s		
835a	0.0	84	0.6	425a	0.0	819a	0.0	67	0.4	375 l	2.0		
762a	0.0	70	0.8	317a	0.0	705a	0.1	50	0.4				
		54	1.1	256a	0.0	606a	0.0	34	0.5				
		36	1.3	203	0.1	525a	0.0	20	0.8				
		18	1.5			425a	0.0						

Time.	M.	Time.	M.	Time.	M.	Time.	M.	Time.	M.	Time.	M.	Time.	M.
1909, 2, 25. I. D.		1909, 3, 15. I. R.		1909, 3, 17. II. R.		1909, 3, 22. I. R.		1909, 3, 23. III. R.		1909, 3, 29. I. R.		1909, 4, 7. IV. R.	
<i>s.</i> 842a	0.1	<i>s.</i> 34	s	<i>s.</i> 191	0.1	<i>s.</i> 78	0.5	<i>s.</i> 367a	0.4	<i>s.</i> 419a	0.0	<i>s.</i> 1231a	0.0
754a	0.1	75	c	232a	0.0	91	0.4	424a	0.2	475a	0.0	1275a	0.0
640a	0.0	93	0.9	283a	0.0	103	0.3	483a	0.1	539a	0.0	1330a	0.0
540a	0.1	112	0.7	357a	0.0	116	0.2	546a	0.0	597a	0.0	1378a	0.0
429a	0.1	127	0.6	435a	0.0	134	0.1	605a	0.0	660a	0.0	1420a	0.0
298	0.3	143	0.5	500a	0.0	150	0.0	661a	0.0	722a	0.0	1468a	0.0
266	0.4	160	0.4	570a	0.0	164	0.1	720a	0.0	790a	0.0	1558 l	2.0
240	0.2	180	0.3	631a	0.0	180	0.0	769a	0.0	891 l	2.1		
196	0.1	200	0.3	690a	0.0	194	0.1	818a	0.0				
148	0.2	226	0.1	801 l	1.9	207	0.0	869a	0.1			1909, 4, 28. III. R.	
118	0.4	250	0.1			222	0.0	914a	0.0	1909, 4, 7. IV. R.			
95	0.8	304a	0.0	1909, 3, 21. IV. D.		273a	0.0	968a	0.0			<i>s.</i> 35	s
61	R	368a	0.0			337a	0.0	1019a	0.0			31	c
		462a	0.1			400a	0.0	1064a	0.0	<i>s.</i> 19	s	102	2.8
1909, 3, 6. I. R.		526a	0.0			453a	0.0	1114a	0.1	99	c	116	2.2
		579a	0.1			528a	0.0	1270 l	3.4	192	2.2	130	1.9
		642a	0.0			579a	0.0			210	1.9	143	2.1
		732a	0.1			663a	0.0	1909, 3, 29. I. R.		227	1.5	158	1.9
<i>s.</i> 242a	1.8	796a	0.1			731a	0.0			242	1.4	172	1.6
48	s	916 l	1.1			845 l	2.0			259	1.4	186	1.5
51	c							<i>s.</i> 24	s	274	1.3	200	1.5
66	1.6	1909, 3, 17. II. R.				1909, 3, 23. III. R.		19	c	290	1.2	214	1.4
82	0.9							23	1.7	308	1.2	230	1.6
100	0.3							37	1.5	322	1.1	250	1.4
114	0.2	<i>s.</i> 12	s					48	1.1	338	1.1	264	0.9
130	0.1	4	c					58	1.0	352	1.0	280	0.8
147	0.1	12	1.5					68	0.9	393a	0.6	326a	0.5
163	0.2	24	1.2					88	0.6	454a	0.5	381a	0.3
180	0.1	24	1.2					110	0.4	531a	0.4	432a	0.2
198	0.1	36	1.1					120	0.3	595a	0.4	494a	0.0
218	0.1	48	1.0					130	0.2	649a	0.2	550a	0.0
246	0.1	59	0.9					140	0.0	705a	0.1	608a	0.0
304a	0.2	70	0.8	1909, 3, 22. I. R.				149	0.0	764a	0.1	664a	0.1
369a	0.1	82	0.7					164	1.8	820a	0.0	722a	0.0
425a	0.1	94	0.6					176	1.6	874a	0.0	776a	0.0
483a	0.0	110	0.3					188	1.4	88	0.6	832a	0.0
543a	0.0	127	0.2					202	1.3	164	0.0	895a	0.0
587a	0.0	142	0.2					218	1.1	184	0.0	964a	0.1
636a	0.0	158	0.1					234	1.1	198	0.1	1025a	0.0
684a	0.0	169	0.0					247	1.1	207	0.2	1099a	0.0
		180	0.1					259	0.9	248a	0.0		
								301a	0.0	301a	0.0		
								308a	0.7	361a	0.0		

Time.	M.	Time.	M.	Time.	M.	Time.	M.	Time.	M.	Time.	M.	Time.	M.
1909, 4, 28. III. R.		1909, 6, 15. I. R.		1910, 2, 14. I. D.		1910, 3, 9. III. D.		1910, 3, 18. II. D.		1910, 3, 25. I. D.		1910, 4, 10. I. R.	
s. 1163a	0.0	s. 256 l	3.1	s. 89	0.8	s. 1008a	0.0	s. 943a	0.2	s. 209a	0.1	s. 40	1.0
1258 l	3.7	1	c	76	1.0	922a	0.0	835a	0.1	137	0.1	87	0.5
1909, 5, 5. III. D.		38	1.1	64	1.2	834a	0.0	724a	0.0	112	0.1	137	0.0
		54	0.9	54	1.2	731a	0.0	652a	0.0	88	0.2	311a	0.0
s. 1430a		66	0.8	42	1.5	643a	0.0	586a	0.2	68	0.6	551a	0.1
		78	0.6	30	1.8	557a	0.0	514a	0.2	50	0.8	788a	0.0
1430a	0.1	90	0.5	19	1.6	467a	0.1	443a	0.2	32	1.4	1910, 4, 12. II. R.	
1344a	0.1	108	0.5	6	2.0	367a	0.1	380a	0.1	14	1.8		
1240a	0.1	126	0.3	7	2.5	265a	0.5	300a	0.0	8	1.7	s.	s.
1140a	0.1	138	0.2	19	3.0	175a	0.8	225a	0.0	34	1.8	44	2.3
1025a	0.1	150	0.2	35	3.2	69a	1.2	154a	0.1	113 l	1.6	26	1.7
933a	0.0	163	0.1	113 l	3.1	19	1.5	95a	0.4	1910, 3, 25. II. D.		12	1.3
859a	0.0	178	0.0	1910, 3, 9. I. D.		47	1.8	40	0.7			20	1.1	2	1.3
785a	0.0	194	0.1			s.	70	2.0	9	0.9	s.	56	0.6	1774a	0.1
715a	0.1	206	0.1	698a	0.1	90	2.1	9	1.0	1688a	0.1	110	0.5
634a	0.2	244a	0.1	589a	0.1	114	2.5	26	1.1	1061a	0.1	150	0.4
565a	0.1	301a	0.0	531a	0.0	136	2.9	40	1.2	928a	0.0	217a	0.0
490a	0.2	355a	0.0	465a	0.1	170	3.0	52	1.4	767a	0.0	295a	0.1
419a	0.2	411a	0.0	391a	0.1	315 l	2.8	64	1.6	692a	0.0	433a	0.0
341a	0.2	466a	0.0	323a	0.2	1910, 3, 18. I. D.		76	1.7	569a	0.1	507a	0.1
268a	0.2	538a	0.0	262a	0.0			s.	90	2.1	409a	0.1	567a	0.0
202a	0.3	672a	0.1	196a	0.1	923a	0.3	108	2.2	317a	0.1	625a	0.0
134a	0.7	808a	0.1	150	0.2	787a	0.1	126	2.5	233a	0.0	672a	0.0
72a	1.0	1910, 2, 14. I. D.		132	0.1	705a	0.1	138	3.5	164a	0.1	884a	0.0
10a	1.4			s.	116	0.2	601a	0.0	154	3.4	98a	0.2	942a	0.0
38	1.9	1075a	0.1	104	0.3	490a	0.1	239 l	3.3	36	0.1	999a	0.0
53	2.0	981a	0.0	92	0.4	406a	0.1	1910, 3, 25. I. D.		19	0.4	1100 l	2.6
68	2.1	889a	0.1	78	0.6	325a	0.0			s.	2	0.6	1910, 4, 14. III. R.
82	2.3	734a	0.1	66	0.6	213a	0.1	1322a	0.0	22	0.8	s.			3.7
96	2.5	642a	0.0	56	0.8	130	0.0	1256a	0.0	37	0.9	36	3.3
114	2.7	572a	0.0	42	1.1	94	0.1	1171a	0.0	60	1.0	60	2.9
130	3.0	500a	0.1	20	1.3	56	0.7	1078a	0.1	85	1.1	74	2.6
146	3.4	427a	0.1	0	1.5	31	1.2	915a	0.0	106	1.3	88	2.6
160	3.5	335a	0.0	15	1.8	12	1.8	841a	0.1	131	1.3	98	2.4
174	3.6	235a	0.1	28	2.3	8	2.5	713a	0.1	206 l	1.2	s. 36 49 60 74 88 98	
187	3.8	170a	0.2	40	2.6	28	2.6	609a	0.0	s. 36 49 60 74 88 98			
216	s	120	0.3	54	3.4	119 l	2.6	440a	0.1				
351 l	4.5	104	0.5	123 l	2.6			310a	0.1				

Time.	M.	Time.	M.	Time.	M.	Time.	M.	Time.	M.	Time.	M.	Time.	M.
1910, 4, 14. III. R.		1910, 5, 14. II. R.		1910, 5, 19. I. R.		1910, 6, 2. I. R.		1910, 7, 9. III. D.		1911, 5, 15. II. R.		1911, 5, 22. I. R.	
s.		s.		s.		s.		s.		s.		s.	
108	2.2	72	0.4	205a	0.1	40	s	76	2.2	256 l	0.0	585a	3.1
118	2.1	86	0.2	254a	0.0	56	c	104	2.5	231	0.4	3	c
130	2.1	98	0.1	306a	0.1	74	1.4	127	2.9	261	0.4	10	2.0
143	1.9	109	0.1	378a	0.1	90	1.2	150	3.1	298	0.0	24	1.5
154	1.7	121	0.2	432a	0.1	104	1.1	180	3.3	324	0.1	38	0.8
166	1.7	134	0.2	476a	0.1	118	1.0	302 l	3.1	341	0.2	51	0.3
180	1.7	146	0.2	521a	0.1	130	0.8			358	0.3	68	0.1
193	1.6	177a	0.1	581a	0.0	144	0.7	1911, 5, 6. III. R.		375	0.3	93	0.2
205	1.4	215a	0.0	876a	0.1	157	0.6			462a	0.3	119	0.3
243a	1.1	258a	0.0	943a	0.2	176	0.5			524a	0.1	143	0.2
301a	0.9	320a	0.0	1058 l	3.2	196	0.4	s.		667a	0.1	157	0.1
362a	0.7	372a	0.0			211	0.5	742 l	3.0	750a	0.1	169	0.2
431a	0.6	444a	0.1	1910, 5, 26. I. R.		227	0.4	269	c	838a	0.0	188	0.1
497a	0.4	520a	0.1			242	0.2	290	1.5	933a	0.0	1036a	0.1	238a	0.1
562a	0.3	560a	0.0	s.		257	0.1	322	1.3			303a	0.1
612a	0.2	594a	0.1	17	c	324a	0.0	347	1.2	1911, 5, 15. I. R.		381a	0.0
694a	0.2	624a	0.0	14	1.8	468a	0.0	362	1.1			447a	0.1
742a	0.2	702 l	2.3	40	1.1	609a	0.1	382	1.1	516a	0.1		
792a	0.0			60	0.5	1910, 7, 9. III. D.		405	0.9	591a	0.0		
835a	0.0	1910, 5, 19. I. R.		76	0.4			424	0.9	494a	0.8	785a	0.0
882a	0.0			s.		92	0.4	557a	0.6	57a	0.6	1911, 6, 7. I. R.	
927a	0.0	24	c	108	0.4	s.		628a	0.6	169	0.5		
968a	0.1	3	2.6	146	0.2	1207a	0.1	681a	0.3	184	0.2		
1017a	0.0	9	2.1	166	0.1	1133a	0.0	727a	0.3	200	0.1		
1130a	3.3	20	1.7	222a	0.0	1051a	0.0	773a	0.2	218	0.0		
1910, 5, 14. II. R.		31	1.4	298a	0.0	970a	0.0	819a	0.2	242	0.0	8	c
		40	1.0	376a	0.0	849a	0.0	871a	0.1	266	0.0	45	1.5
s.		48	0.9	491a	0.1	730a	0.0	938a	0.2	280	0.2	63	1.3
57	c	60	0.7	632a	0.0	643a	0.0	990a	0.1	330a	0.0	76	0.8
44	1.9	72	0.7	805a	0.0	564a	0.2	1050a	0.1	404a	0.0	94	0.6
28	1.5	84	0.5	951a	0.0	485a	0.3	1100a	0.1	538a	0.0	112	0.6
12	1.2	96	0.2	1002a	0.0	397a	0.4	1152a	0.1	645a	0.0	136	0.4
2	1.2	108	0.2	1085 l	2.8	314a	0.5	1208a	0.0	716a	0.1	160	0.3
9	0.9	119	0.2	1910, 6, 2. I. R.		241a	0.7	1274a	0.0	799a	0.0	174	0.3
18	0.9	130	0.2			171a	1.0	72a	1.5	1478a	0.1	873a	0.1	189	0.2
27	0.7	139	0.2			6	1.9			941a	0.0	204	0.2
38	0.6	150	0.2	s.		21	2.0					239a	0.1
50	0.5	160	0.2	323 l	2.1	36	2.1					291a	0.1
62	0.4	170	0.2			53	2.3					353a	0.2
												396a	0.1
												463a	0.1

Time.	M.	Time.	M.	Time.	M.	Time.	M.	Time.	M.	Time.	M.	Time.	M.
1911, 6, 7. I. R.		1911, 6, 23. I. R.		1911, 6, 30. I. R.		1911, 7, 18. II. R.		1911, 7, 31. III. R.		1911, 9, 12. III. D.		1912, 7, 16. III. D.	
^{s.} 545a	0.0	^{s.} 56	0.8	^{s.} 412a	0.1	^{s.} 688 l	1.5	^{s.} 760a	0.2	^{s.} 40	2.1	^{s.} 1543a	0.1
598a	0.0	70	0.7	488a	0.0	4	c	823a	0.1	24	2.2	1466a	0.1
736a	0.0	85	0.6	535a	0.1	30	1.4	892a	0.1	7	2.6	1352a	0.1
892 l	2.2	99	0.4	739a	0.1	44	1.3	968a	0.1	11	2.6	1254a	0.0
		118	0.4			57	1.0	1078a	0.1	28	2.6	1135a	0.0
1911, 6, 16. II. R.		128	0.2	1911, 7, 16. I. R.		70	0.8	1136a	0.1	45	2.6	1019a	0.1
		144	0.2			84	0.6	1190a	0.1	62	2.7	935a	0.1
		160	0.1			95	0.7	1244a	0.1	80	3.1	374	0.8
		177	0.0			106	0.5	1352a	0.0	159 l	2.8	359	0.8
^{s.} 394 l	3.1	227a	0.1	^{s.} 463 l	3.5	118	0.3	1407a	0.0	1912, 6, 18. I. R.		344	0.9
34	c	294a	0.1	33	c	129	0.2					328	0.9
18	2.3	363a	0.1	14	2.8	140	0.0	1911, 9, 12. III. D.				306	0.9
4	2.0	445a	0.0	2	2.2	154	0.1						
8	2.0	509a	0.1	8	1.7	170	0.1						
23	1.7	566a	0.0	18	1.5	182	0.0	^{s.} 2070a	0.2	^{s.} 7	c	1912, 9, 13. II. R.	
38	1.4	634a	0.0	27	1.4	191	0.0	1989a	0.1	12	2.6		
49	1.2	841a	0.0	36	1.4	202	0.0	1876a	0.3	26	2.0	^{s.} 90	2.0
64	1.0			45	1.3	231a	0.1	1752a	0.1	38	1.5	104	1.7
80	0.9	1911, 6, 30. I. R.		53	1.1	272a	0.1	1659a	0.2	51	1.2	120	1.3
96	0.7	^{s.} 458 l	3.3	62	1.0	317a	0.0	1559a	0.1	62	1.1	134	1.1
111	0.3	27	c	72	0.9	368a	0.0	1420a	0.1	71	0.9	148	0.9
126	0.2	6	2.2	81	0.7	427a	0.0	1249a	0.0	82	0.6	161	0.7
143	0.2	6	1.9	92	0.6	470a	0.1	1130a	0.2	92	0.5	176	0.7
158	0.1	18	1.7	102	0.5	509a	0.0	1050a	0.1	104	0.5	192	0.6
211a	0.0	28	1.6	112	0.5	554a	0.1	944a	0.0	116	0.5	206	0.4
281a	0.1	38	1.5	120	0.4	1911, 7, 31. III. R.		873a	0.0	128	0.4	220	0.3
330a	0.0	50	1.2	129	0.2			789a	0.3	142	0.1	233	0.1
383a	0.1	64	1.0	138	0.3	^{s.} 502 l	1.4	720a	0.2	156	0.0	247	0.1
436a	0.1	80	0.9	146	0.3	227	s	652a	0.3	171	0.0	270	0.2
501a	0.0	96	0.8	155	0.2	241	c	588a	0.5	193	0.0	326a	0.1
617a	0.0	108	0.8	181a	0.1	282	2.6	525a	0.5	234a	0.0	326a	0.1
728a	0.1	118	0.3	224a	0.0	332	1.9	454a	0.6	282a	0.1	402a	0.1
		133	0.1	266a	0.1	372	1.2	388a	0.8	331a	0.0	464a	0.1
1911, 6, 23. I. R.		148	0.2	314a	0.0	400	1.4	328a	1.0	386a	0.0	529a	0.0
		190a	0.0	366a	0.1	424	1.5	272a	1.2	428a	0.0	590a	0.0
^{s.} 523 l	1.4	245a	0.2	422a	0.1	488a	1.2	216a	1.3	472a	0.0	679a	0.1
10	c	302a	0.0	473a	0.0	578a	0.9	148a	1.5	515a	0.0	903a	0.0
24	1.2	347a	0.1	655a	0.1	684a	0.3	102	1.9	551a	0.0	978a	0.1
42	1.0							84	1.8	688a	0.0	1067 l	1.6
								58	2.0	729a	0.0		
								800 l	2.6	800 l	2.6		

1913AnHar...69...99W

Time.	M.	Time.	M.	Time.	M.	Time.	M.	Time.	M.	Time.	M.	Time.	M.
1912, 9, 27 I. R.		1912, 9, 27. I. R.		1912, 9, 27. I. R.		1912, 9, 27. I. R.		1912, 9, 27. I. R.		1912, 9, 27. I. R.		1912, 9, 27. I. R.	
^{s.} 656 l	2.4	^{s.} 54	1.0	^{s.} 97	0.4	^{s.} 140	0.1	^{s.} 181	0.0	^{s.} 329a	0.0	^{s.} 486a	0.1
8	1.8	69	0.6	108	0.2	154	0.1	221a	0.2	373a	0.0	528a	0.0
30	1.4	84	0.4	122	0.1	167	0.1	286a	0.0	425a	0.0	662a	0.0
44	1.1												

A catalogue of the eclipses is given in Table XXIV in nearly the same form as the first portion of Table XI of H.A. 52, 133. The year, month, and day are given in the first column, and the number of the satellite undergoing eclipse, in the second column, followed by the letter D to indicate a disappearance, or by R for a reappearance. The comparison satellite is given in the third column, and the photometer used, indicated by the letters R and W, in the fourth. The fifth column gives the total number of settings and the sixth the total number of lines having magnitudes in Table XXIII not marked a. The seventh column gives the number of sets taken while the satellite was at full brightness. The eighth column gives the concluded difference in brightness between the two satellites. As the object of this work was to determine the change in light while the satellites were entering the shadow the images could not be reversed. Accordingly, the results of this column cannot be used with safety to determine the variation of light, if any, of the satellites. The ninth column gives the average deviation of the individual sets. One of the prisms was removed from Photometer R on October 24 and 31, 1907, June 16, July 16 and 18, and August 12, 1911.

TABLE XXIV.
CATALOGUE OF ECLIPSES.

Date.	Eclipse.	Comp.	Phot.	All.	No.	No.	Const.	A.D.	Date.	Eclipse.	Comp.	Phot.	All.	No.	No.	Const.	A.D.
y. m. d.									y. m. d.								
1904 1 25	I R	III	R	51	16	8	-0.14	.04	1904 10 1	II D	I	R	34	14	4	+1.08	.08
" 6 23	I D	III	R	42	14	6	+0.70	.10	" " 26	II R	I	R	50	14	8	+0.36	.04
" 7 14	III D	I	R	60	12	8	-0.49	.21	" " 27	I R	II	R	46	10	8	+0.24	.09
" " 29	II D	III	R	41	14	6	+1.00	.13	" 11 27	II R	I	R	48	12	8	+0.30	.05
" 8 23	II D	IV?	R	107	14	23	+0.80	.13	" 12 19	I R	III	R	64	16	11	+0.21	.01
" " 24	I D	III	R	87	22	16	+0.48	.09	" " 28	I R	II	R	48	12	8	-0.36	.04
" 9 16	I D	III	R	52	16	8	-0.24	.06	" " 29	II D	I	R	26	10	3	0.00	.00
" 10 1	III D	II	R	70	14	6	-1.03	.17	1905 1 4	I R	II	R	62	18	10	-0.23	.03

Date.			Eclipse.	Comp.	Phot.	All.	No.	No.	Const.	A.D.	Date.			Eclipse.	Comp.	Phot.	All.	No.	No.	Const.	A.D.
y.	m.	d.									y.	m.	d.								
1905	1	16	II R	III	R	62	18	10	+0.63	.03	1907	3	9	III R	II	W	76	16	9	-0.39	.01
"	"	20	I R	II	R	50	14	8	-0.22	.01	"	"	15	I R	IV	R	34	9	6	-0.82	.02
"	"	27	I R	III	R	42	10	8	+0.51	.01	"	"	16	III D	I	R	77	4	14	-0.76	.05
"	"	31	III D	I	R	92	12	7	-0.37	.03	"	"	"	III R	II	R	86	14	11	-0.61	.01
"	"	"	III R	I	R	62	10	9	-0.41	.12	"	"	4	II R	I	R	50	14	8	+0.11	.01
"	9	21	ID	II	R	62	18	10	-0.53	.05	"	"	24	II R	I	R	52	12	9	+0.20	.02
"	"	25	II D	III	R	88	20	16	+0.94	.14	"	"	10	II D	III	R	66	14	12	+0.52	.04
"	"	28	ID	II	R	78	18	14	-0.58	.05	"	"	24	III R	II	R	66	10	8	-0.44	.16
"	10	16	III D	II	R	80	12	9	-0.79	.10	"	"	31	III D	I	R	96	12	13	-0.21	.13
"	"	"	III R	II	R	104	16	16	-0.67	.07	"	"	11	ID	IV	R	48	11	8	-0.68	.08
"	"	23	ID	III	R	58	18	9	+0.40	.04	"	"	12	ID	II	R	46	14	7	-0.33	.09
"	"	"	III D	II	R	104	12	14	-0.51	.24	"	"	8	IV D	II	R	111	11	12	+0.89	.11
"	"	"	III R	II	R	72	12	10	-0.72	.10	"	"	25	IV R	III	R	90	14	9	+1.02	.02
"	"	30	ID	III	R	64	20	10	+0.45	.05	1908	1	8	ID	III	R	36	12	5	+0.10	.08
"	11	6	ID	III	R	68	20	11	+0.26	.05	"	"	18	III D	II	R	74	10	9	-0.40	.02
"	"	14	II D	III	R	69	13	13	+0.84	.07	"	"	27	II R	I	R	52	16	8	+0.40	.00
"	"	21	II D	III	R	60	12	11	+0.78	.05	"	"	3	I R	II	R	54	14	9	-0.26	.04
"	12	5	III R	I	W	76	16	8	-0.12	.08	"	"	24	I R	II	R	48	11	8	+0.25	.08
"	"	8	I R	III	W	58	18	9	+0.41	.06	"	"	4	I R	II	R	46	10	8	-0.84	.09
"	"	30	II R	I	W	60	16	10	+0.21	.01	"	"	6	III R	I	R	82	14	8	-0.02	.02
1906	1	7	I R	II	R	60	16	10	-0.02	.02	"	"	9	I R	II	R	58	18	9	-0.26	.04
"	"	9	I R	II	R	52	16	8	-0.88	.02	"	"	13	III D	I	R	108	16	16	-0.38	.04
"	"	10	II R	I	R	48	12	8	+0.08	.05	"	"	17	II R	III	R	57	18	9	+0.50	.00
"	"	"	III D	II	R	72	12	9	-0.33	.12	"	"	20	IV D	I	R	38	5	3	+1.10	.07
"	"	"	III R	IV	R	76	16	9	-1.18	.07	"	"	5	I R	III	R	40	7	8	+0.41	.01
"	"	16	I R	II	R	52	16	8	-0.21	.01	"	"	18	I R	III	R	42	10	7	+0.13	.09
"	"	17	II R	I	R	56	16	9	+0.40	.02	"	"	19	II R	I	R	50	14	8	+0.32	.05
"	"	"	III D	II	R	36	12	0	..	..	"	"	6	I R	III	R	49	14	8	+0.36	.04
"	"	24	II R	I	R	50	14	8	+0.01	.01	1909	1	8	ID	III	W	44	16	6	-0.35	.05
"	2	15	I R	III	W	54	14	7	+0.69	..	"	"	26	ID	II	W	73	12	14	-0.23	.04
"	"	22	III D	II	W	81	14	8	-0.36	.09	"	"	"	II D	III	R	80	16	15	+0.49	.07
"	"	"	III R	II	W	80	16	8	-0.29	.09	"	"	2	ID	II	W	63	15	11	-0.34	.04
"	"	24	I R	III	R	50	14	8	+0.35	.05	"	"	8	III D	II	W	45	4	6	-0.60	.00
"	4	6	III D	I	W	61	9	7	-0.14	.07	"	"	11	ID	II	W	64	12	12	-0.04	.04
"	9	24	ID	III	R	54	18	8	+0.20	.02	"	"	13	II D	I	W	90	14	18	+0.44	.04
"	10	2	III D	II	W	65	10	9	-0.60	.07	"	"	18	ID	II	W	69	12	14	+0.64	.09
"	"	26	ID	II	R	68	16	12	+0.28	.09	"	"	20	II D	I	W	100	16	20	+0.38	.04
"	11	7	III R	I	R	76	16	8	-0.79	.01	"	"	25	ID	II	W	28	7	5	+0.60	.08
"	"	14	III D	I	R	46	10	2	-0.50	.00	"	"	3	I R	II	W	48	11	8	-0.65	.05
"	12	4	ID	IV	R	29	8	5	-1.26	.08	"	"	15	I R	II	W	46	10	8	-0.35	.05
"	"	18	ID	II	R	48	12	8	-0.10	.08	"	"	17	II R	I	W	52	16	8	+0.50	.00
1907	1	5	I R	II	W	48	12	8	-0.38	.02	"	"	21	IV D	II	W	38	8	2	+1.10	.10
"	"	11	II R	I	W	56	20	8	0.00	.00	"	"	22	I R	II	W	52	16	8	0.00	.00
"	"	21	I R	III	W	52	16	8	+0.09	.01	"	"	23	III R	I	W	82	14	9	-0.42	.02
"	"	24	IV D	I	W	134	6	26	+0.65	.10	"	"	29	I R	II	W	60	16	10	0.00	.00
"	"	"	IV R	I	R	66	10	9	+0.32	.02	"	"	4	IV R	II	W	100	12	8	+0.70	.00
"	"	28	I R	III	W	70	14	13	+0.20	.00	"	"	28	III R	I	W	78	14	9	-0.80	.02
"	2	8	III D	I	W	72	12	9	-0.29	.01	"	"	5	III D	I	W	94	12	12	-0.49	.09
"	"	12	II R	III	W	54	14	9	+0.63	.03	"	"	6	I R	II	W	46	14	8	-0.11	.04
"	"	27	I R	III	R	52	12	9	+0.39	.01	1910	2	14	ID	III	R	62	14	11	+0.25	.07

Date.			Eclipse.	Comp.	Phot.	All.	No.	No.	Const.	A.D.	Date.			Eclipse.	Comp.	Phot.	All.	No.	No.	Comp.	A.D.
y.	m.	d.									y.	m.	d.								
1910	3	9	I D	III	R	52	16	8	+0.39	.09	1911	5	15	II R	III	R	40	8	7	+0.76	.10
"	"	9	III D	IV	R	57	8	7	-1.19	.01	"	"	"	I R	III	R	42	9	8	+0.58	.02
"	"	18	I D	IV	R	45	8	8	-1.10	.10	"	"	22	I R	III	R	45	12	7	+0.63	.06
"	"	"	II D	IV	R	63	14	12	-1.14	.12	"	6	7	I R	IV	R	47	11	8	+0.02	.08
"	"	25	I D	II	R	58	10	11	-0.64	.05	"	"	16	II R	I	R	50	14	8	+0.32	.05
"	"	"	II D	IV	R	62	10	12	-0.58	.08	"	"	23	I R	III	R	48	12	8	+0.05	.05
"	4	10	I R	III	R	16	3	3	+0.33	.03	"	"	30	I R	III	R	50	14	8	+0.05	.08
"	"	12	II R	I	R	52	8	10	-0.02	.02	"	7	16	I R	III	R	56	20	8	+0.39	.06
"	"	14	III R	I	W	80	16	8	-0.36	.06	"	"	18	II R	I	R	52	16	8	+0.18	.05
"	5	14	II R	I	W	62	18	10	+0.34	.04	"	"	31	III R	II	R	62	6	8	-0.72	.08
"	"	19	I R	II	W	62	18	10	-0.50	.09	"	"	9 12	III D	IV	R	108	12	16	-1.11	.17
"	"	26	I R	II	..	46	10	8	-0.01	.01	1912	6	18	I R	III	W	60	16	10	+0.49	.01
"	6	2	I R	II	W	32	14	3	-0.57	.03	"	7	16	III D	..	..	34	5	7	-0.51	.07
"	7	9	III D	I	W	67	10	9	-0.76	.07	"	9	13	II R	III	R	50	14	8	+0.44	.06
1911	5	6	III R	I	R	77	8	8	-0.31	.09	"	"	27	I R	III	R	47	14	8	+0.42	.04

The principal results of the photometric measures made with the 15-inch East Equatorial, during the years 1892 to 1912, are here published, to place them promptly in the hands of astronomers. It is hoped to make the conclusions to be derived from them the subject of a separate memoir.

END OF VOLUME LXIX.