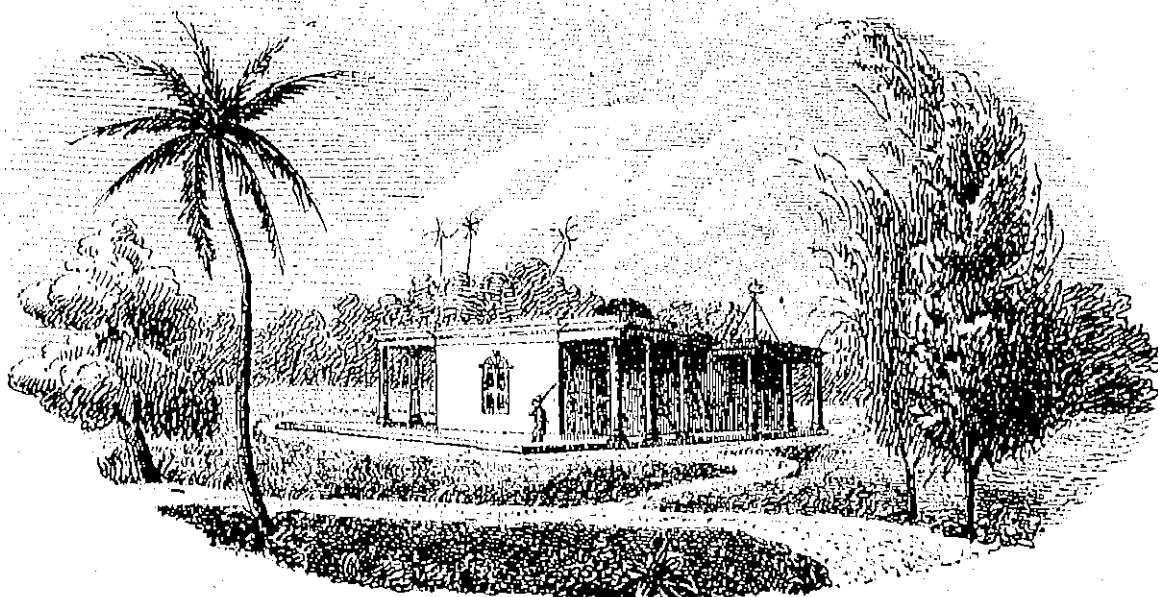


RESULT
OF
ASTRONOMICAL OBSERVATIONS
MADE AT
THE HONORABLE,
THE EAST INDIA COMPANY'S OBSERVATORY
AT MADRAS.

BY
THOMAS GLANVILLE TAYLOR Esq.
ASTRONOMER TO THE HONORABLE COMPANY.

VOL. V.
FOR THE YEARS 1838 AND 1839.

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P R E F A C E

The present volume it will be observed, differs from those which have preceded it in one or two essential points, which circumstance and the cause, it is necessary here to explain. The printing of the Catalogue now given was commenced about the middle of the year 1830, when the stars situated near to 0 hours of Right Ascension had been observed, and towards the end of November, the printing of the Catalogue as well as the Observations contained in it were together completed. On proceeding with the reductions of the observations of the Sun and the usual comparison with the Nautical Almanac, the same want of accordance between the errors of the tables from day to day as had hitherto been met with—continued to occur. The distances of the Planet Mars too, from stars situated in his neighbourhood, were as ill accordant as ever, and the distances of fixed Stars from one another, separated by a degree or two only of space—when compared with similar observations at other Observatories, occasionally exhibited discrepancies to the amount of several seconds of space! In fact it was evident--either that the Observations made by myself or those made by other observers were in error, or, that the fault lay with the instruments with which the observations had been made. I had already, on two occasions, determined that the errors of division of every fifth degree of the Madras Mural Circle were of small amount, and had ascertained in the usual way, that several promiscuous divisions were situated within a trifling and insignificant amount of 180° from those which should be opposite to them, but hitherto no systematic examination had been carried beyond this. Thus circumstanced, I resolved to examine rigidly the errors of each single degree, *not* as had been done hitherto—by comparing the several divisions with those at 90° or 180° distance, but by comparing strictly each pair of opposite divisions with those joining the divisions 0° and 180° . The result of this examination has shewn, that in addition to casual errors, there exists a uniform and systematic amount of error—that nearly every division on the circle is situated in advance of its proper place relative to the diameter 0° — 180° , and that in some cases, the combined errors amount to nearly ten seconds! I now proceeded to the examination of the divisions at 15, 30, & 45 minutes, and eventually extended it to each 5 minutes of the circle, as is fully explained in the proper place. The time occupied in this investigation (which has been gone twice over), and the nature of the result arrived at, has necessarily prevented me from proceeding with the reductions of the observations of the Sun and Planets, and now that I am somewhat at liberty to proceed with these, the appearance of an un-

unexpected visitor (the Comet) added to the circumstance of my approaching departure for England, renders it unavoidable—but that the present volume should be given as far it goes, leaving it to my successor to give in a future volume what is omitted in the present one.

But to return to the subject of error of Division—the correction of from sixty to eighty thousand observations which have already been made with the Circle, is a work which I almost despair of seeing accomplished speedily,—in which case, with a view to repair the existing errors to a serviceable extent, I have given a table of corrections to be applied to any given result (depending upon the division employed) on the supposition of the Index Error being subject throughout to an average error, a condition to which it necessarily must approximate—and for the observations which may hereafter be made, the present known errors of each division, will without doubt—render the results which may be arrived at, fully as accurate as if the best attainable division had been trusted to—and, considering the difficulty of effecting division to ultimate accuracy, will it not in future be much the best and safest plan, to trust to ordinary engine dividing, and let every Astronomer find the errors of division of his own Instrument before using it?

T G TAYLOR,
H C ASTRONOMER

MADRAS OBSERVATORY, }
20th January 1840 }

ON THE OBSERVATIONS OF THE FIXED STARS IN 1838-1839

The observations of the fixed Stars in 1838 and 1839, have been particularly and solely directed to those situated in the Southern Hemisphere a step I was induced to follow, in consequence of the recommendation of Sir J F W Herschel to that effect, and further—from the consideration that the catalogue of stars which had lately been published from Sir Thomas Brisbane's observations at Paramatta, (the only modern catalogue of Southern Stars) had been derived principally from a single observation only, whereby it must be expected that error had occasionally intruded, added to which, the determinations of A R exhibited a general and not very regular series of *minus* errors, which rendered a re observation of this extensive catalogue highly desirable On examination, I found that the Madras Catalogues given in Vol II—IV already contained several of these stars, and several others were situated too near to the South Pole, or passed the meridian too near to the horizon to be visible, added to which the uncertainty of refraction at altitude below 15° render observations of Declination within this limit, of comparatively little worth, hence I determined to re observe the Brisbane Catalogue with the exception of those stars situated within 28° of the South Pole, and of those whose places had, already been given in the former Volumes of the Madras Observations The Catalogue thus selected was a formidable one (containing above 5000 stars), which, as it was my intention to bestow two years only on its observation, it was evident could not be readily accomplished, I therefore struck out several stars of the 8th and 8 9 Magnitude, and began to observe in the first instance always the brighter stars the result of these alterations have eventually reduced the Catalogue to its present extent (3455 Stars)

It had been my intention, to make these observations of each star, a plan which has on the whole been pretty nearly accomplished, but the unusual extent of cloudy weather during the months June —November, has rendered the Catalogue in the hours XVI and XVII less complete than I could have hoped for In the column "No obs", is exhibited the number of observations made at the Circle *as well as* at the Transit Instrument—the observations having in each case been made simultaneously at either instrument As this circumstance is perhaps new, I may as well mention now it was effected, thus, the Transit Observer in the act of setting the instrument, repeated aloud the N P D of the Star he was about to observe, and the exclamation, "entering the field" "near the first wire" &c—or if three or four stars were visible—"North proceeding" or "South following" &c—rendered it next to impossible but that the same star should be observed at both Instruments

The names have been principally derived from a Cary's celestial globe, and express in most cases, simply the constellation in which the star occurs.

The magnitudes, are the mean of the estimations from both Instruments in a generally way they exhibit numbers agreeing pretty well with those set down in the Brisbane Catalogue, down to 30° o

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altitude, below which, the magnitudes observed at Madras are smaller (as might be expected) than those observed at Paramatta

The reductions have been effected as heretofore, by the values A, B, C, D, as furnished in the Nautical almanacs, in conjunction with those of a , b , c , d , &c which are here given these latter values have been computed for the year 1845 by applying 20 times the amount of annual variation to the place for 1825 as given in the Brisbane catalogue the formulae employed are as follow

$$\begin{array}{ll} a = + \cos \alpha \sec \delta & a' = + \tan \alpha \cos \delta - \sin \alpha \sin \delta \\ b = + \sin \alpha \sec \delta & b' = + \cos \alpha \sin \delta \\ c = + 48'', 025 + 20'', 041 \sin \alpha \tan \delta & c' = + 20'', 041 \cos \alpha \\ d = + \cos \alpha \tan \delta & d' = - \sin \alpha \end{array}$$

The table of refractions employed, is that given by Mr Atkinson in the III Vol of the Royal Astronomical Society's Memoirs I have already explained, that my choice in this respect, was decided on comparing the observations of stars at low altitudes at Greenwich as reduced by employing the tables of Ivory, Young, Brinkley, Bradley and Groombridge, when, the table by Mr Atkinson gave results more accordant than either of the above

Accompanying the Greenwich observations for 1836 is a table of refractions from formulae furnished by Professor Bessel, which of course would not have been selected by the Astronomer Royal in preference to all others, had they not on a theoretical or practical examination evinced their claims to superior merit, be this as it may, I have thought it would not be amiss here to shew, how nearly the refractions computed from the formulae of Bessel or Atkinson agree, thus, if B represent the refraction computed under any circumstances from Bessel's formulae, and A, that derived from Atkinson, we get as follows

Barometer 29,60 Inches

Z D	Fahrenheit Thermometer				
	50° B-A	60° B-A	70° B-A	80° B-A	90° B-A
°	"	"	"	"	"
10	- 0,03	- 0,00	+ 0,03	+ 0,07	+ 0,14
20	- 0,06	- 0,01	+ 0,08	+ 0,14	+ 0,21
30	- 0,09	- 0,01	+ 0,11	+ 0,22	+ 0,33
40	- 0,15	- 0,00	+ 0,14	+ 0,31	+ 0,48
50	- 0,20	- 0,02	+ 0,21	+ 0,45	+ 0,68
60	- 0,33	- 0,05	+ 0,27	+ 0,61	+ 0,95
65	- 0,44	- 0,14	+ 0,32	+ 0,73	+ 1,14
70	- 0,56	- 0,19	+ 0,34	+ 0,86	+ 1,37
75	- 0,84	- 0,29	+ 0,32	+ 0,97	+ 1,65
80	- 1,31	- 0,61	+ 0,16	+ 1,02	+ 1,90

ON THE REDUCTION OF THE OBSERVATIONS OF THE FIXED STARS IN 1838 & 1839 3

Barometer 30,00 Inches

Z D	Fahrenheit Thermometer				
	60° B - A	60° B - A	70° B - A	80° B - A	90° B - A
0	"	"	"	"	"
10	- 0,03	- 0,01	+ 0,04	+ 0,07	+ 0,10
20	- 0,06	- 0,02	+ 0,07	+ 0,14	+ 0,21
30	- 0,10	- 0,03	+ 0,11	+ 0,22	+ 0,34
40	- 0,15	- 0,05	+ 0,17	+ 0,31	+ 0,48
50	- 0,21	- 0,07	+ 0,24	+ 0,45	+ 0,69
60	- 0,32	- 0,12	+ 0,31	+ 0,61	+ 0,96
65	- 0,42	- 0,18	+ 0,37	+ 0,74	+ 1,16
70	- 0,56	- 0,27	+ 0,37	+ 0,80	+ 1,39
75	- 0,85	- 0,49	+ 0,38	+ 0,98	+ 1,67
80	- 1,31	- 0,60	+ 0,27	+ 1,04	+ 1,94

Here we perceive that the difference between the two tables is independant of the Barometer, and is dependant perhaps altogether upon the Thermometer, inasmuch as, at a temperature of 65° Fahrenheit it matters not which table of refractions be employed. Now the Madras observations, having been directed to the observation of a numerous catalogue of Stars, it necessarily follows, that few stars have been frequently observed, whereby we could compare observations at extreme temperatures, indeed, on examination, I find that one star only (Polaris S P.) has been observed under different temperatures, a sufficient number of times to render a result at all worthy of notice, thus,

POLARIS (*Sub Polo*)
At Temperatures not exceeding 75°

	Barom	Therm		Observed N P D	Aber and Precession	Index Error	Declination		
		In	Out				0	1	2
1833 Dec 30	30,122	74,4	71,0	358 31 30 8	+ 25,43	- 1 26,89	88 30	29,37	
1834 Jan 1	102	75,0	72,0	31 29 4	+ 25 30	- 1 29,35		25,35	
	3	024	71,0	68,0	31 38,3	+ 25,14	- 1 28 61	32,83	
1835 Dec 26	130	69,2	67,9	32 57,0	- 15 38	- 2 10,31		31,31	
	27	138	70,8	65,8	33 0,6	- 15,51	- 2 10,31	34,78	
	29	104	69,8	67,9	32 67,1	- 15 73	- 2 10,28	31,09	
	30	152	70,8	67,3	32 59 1	- 15 85	- 2 10 28	32,97	
1836 Jan 1	100	73,0	67,9	32 58 8	- 16,68	- 2 11,26		30,86	
	2	116	74,0	72,6	32 56 2	- 16,17	- 2 11,26	28,77	
	24	196	69,9	64,7	33 1,3	- 16,50	- 2 9,19	35,61	
1837 Jan 6	30 020	72,2	72,0	31 56 4	- 37 91	- 0 41,00		34,49	
	17	29,986	70,4	66,2	31 51 2	- 38 13	- 0 44,07	29,00	
	23	906	73,2	68,2	31 49,9	- 37,93	- 0 44,02	27,95	
	24	898	74,2	71,9	31 49 2	- 37 88	- 0 43,79	27,53	
Feb 26	800	74,4	71,2	31 42,7	- 32,75	- 0 41,17		28,78	
1838 Dec 20	30,116	73,8	72,0	30 39,3	- 119,27	+ 1 3,78		29,81	
	30,001	72,2	69,2	Mean of 16 observations					

And further we have,

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POLARIS (*Sub Polo*)

At Temperatures above 75° and below 85°

		Barom	Therm			Observed	Aber and	Index error	Declination
			In	Out		N P D	Precession		Jan 1 1836
1831	Feb 20	30 000	80 7	79,8	358	30 46 4	+126,00	- 1 47,46	88 30 24 94
	Apr 20	29,930	83 5	82 1	29	45,6	42,98	1 5 00	23,48
	22	870	83,3	83 1		40 8	43 66	1 5 00	19,36
	23	940	84 0	83,9		41 1	43,84	4 38	20,56
	24	937	83,5	84,1		41 5	44 12	4 38	21,24
	25	917	83,2	83 9		40 0	44 40	3 80	20,60
	26	860	83 0	84 7		38 7	44,68	3 80	19 58
	27	830	84,8	84 0		37,6	44,95	0 89	21 66
	30	788	84 7	85 8		38 2	45 76	0 89	23 07
	May 8	865	84,5	84 8		31,5	47,65	0 57,37	21 78
	18	826	84 0	85 0		12,1	49,68	0 43 82	18 06
1833	Mar 30	30,016	81,0	78,0	32	34,4	+118 67	3 28 36	24,71
	31	012	80,1	76,5	30	33 3	18 97	28 57	23 70
	Apr 1	032	78 2	75 1	32	34,9	19 27	28,13	26,04
	2	042	78,9	77 2		32 0	19 57	28 13	23 44
	4	29,982	80,4	77,9		31,2	20 19	27 61	23 78
	5	952	79,0	78,0		28,5	20 60	27 61	21 39
	6	952	80 2	79 4		28,5	20 81	27 61	21 70
	7	928	81 2	80 5		26 8	21,12	27 61	19,11
	10	30,114	81,5	79,5		32,1	22,08	27,61	26,57
1833	Jan 6	714	76,2	75 2		47,2	44 57	3 4,66	27,21
	10	182	76 2	73,9		49 8	44 37	4,56	29 61
	Apr 18	29 980	84 1	83,0	30	49 9	1 5 14	1 33 24	21,80
	Nov 28	30,130	79 6	80 0	31	14,6	0 31,02	24 30	21,92
	Dec 1	160	77 0	77,5		18,3	30 93	24 30	24,98
	2	107	76,4	76 3		19 5	30 65	24 30	25,85
	4	062	79,3	79,0		20 6	30,12	24,85	25 87
	5	060	80,2	80 0		19 1	29 87	24 85	24,12
	6	060	80,2	80 0		19,2	29 62	25 62	23,30
	8	100	78,2	77,5		23,7	29 14	26 67	26,27
	9	100	78,2	76 9		23 6	28 91	26,00	25 61
	10	060	76,1	73,5		25 8	28 69	27 75	26 21
	11	056	75 8	74,0		25,0	28,48	27 75	25 73
	12	038	76,7	76,1		24 7	28 28	27 75	25,23
	18	048	78 4	77,0		23 1	27 15	25 86	24,39
	24	050	76 4	72,3		30,8	26 22	27 98	29 04
	25	050	77,3	74,3		29 1	26,08	27,98	27,20
	26	092	75 9	72,2		30,4	25,94	27,08	28,36
1834	Jan 5	30,032	76,9	72,5		32 6	25 04	28 92	28,72
	13	044	77,1	77 0		30,3	24,77	29,90	25,17
	14	066	77,8	75,1		34 0	24,76	30 40	28,36
1836	Apr 24	29,962	83 4	82,0	32	15 6	+ 5 15	2 1,72	19 03
	26	988	84,4	82 3		16,9	5,68	1,72	19,86
	27	30 020	82,8	81,3		15 8	5,95	1,72	20,03
	28	29,970	83,8	81 7		14,1	6,21	1,72	18,59
	29	946	84,0	82,0		15 2	6,47	1,72	19,95
	30	916	84 0	81,8		14,8	6,71	1,72	19,79
	May 1	960	84,0	81,6		15,2	6,96	1,72	20,44
		30,007	79,9	79,0		Mean of 48 observations			19,49

And further we have

ON THE REPRODUCTIONS OF THE OBSERVATIONS OF THE FIXED STARS IN 1838 & 1839 5

POLARIS (*Sub Polo*)

At Temperatures above 85°

	Bairn	Therm In Out		Observed N P D			Aber ann Precession	Index error	Declination Jan 1 1836 uncor for ref
1833 April 28	29 804	85.2	85.9	358.29	38.9	+ 1	45.42	- 1	0.89 88 30 23.43
May 4	750	86.6	86.6	37.1	46.66	1	0.01	23.75	
5	826	86.2	86.2	34.1	46.90	1	0.01	20.99	
9	803	86.0	85.0	28.5	47.86	0	67.37	18.99	
14	813	86.5	85.0	27.5	48.90	0	66.96	19.45	
15	830	85.3	85.0	27.7	49.10	0	66.96	19.85	
16	890	86.3	81.7	15.2	49.30	0	45.65	18.05	
20	804	89.0	89.0	13.0	60.10	0	49.82	20.18	
21	812	89.2	88.0	8.3	60.29	0	49.82	14.77	
23	777	91.3	90.0	6.0	60.62	0	41.51	15.11	
24	790	90.2	88.8	7.9	60.82	0	41.51	17.21	
25	800	89.7	89.2	6.2	61.00	0	39.36	17.84	
26	820	89.7	89.9	6.2	61.16	0	39.36	17.99	
28	760	89.7	89.7	36.1	51.39	1	10.41	17.08	
June 3	668	91.2	92.8	37.4	52.17	1	11.25	18.32	
30	7.0	88.7	87.1	37.8	53.15	1	9.71	21.21	
1835 June 28	830	89.5	89.7	5.6	35.05	2	22.38	18.27	
29	840	87.0	85.0	4.8	35.02	2	24.91	14.91	
July 1	851	81.0	86.0	9.9	34.93	2	22.82	22.01	
1836 May 5	926	86.0	84.0	9.8	7.92	2	0.88	16.84	
8	902	90.6	87.5	10.9	8.03	2	0.88	18.85	
9	874	92.0	87.8	11.5	8.81	2	2.27	18.07	
11	898	91.8	87.3	11.6	9.28	2	2.27	18.61	
15	884	89.1	85.0	9.4	10.08	2	2.21	17.27	
16	922	88.0	85.2	9.9	10.28	2	2.21	17.97	
18	908	88.7	87.6	9.2	10.66	2	1.06	18.80	
20	908	89.4	87.9	7.9	11.00	2	1.76	17.15	
22	930	87.6	85.9	10.6	11.34	2	1.86	20.08	
23	938	88.5	87.0	9.0	11.50	2	1.80	18.61	
June 17	850	88.7	87.8	1.4	13.83	1	59.19	16.01	
18	816	88.3	87.3	0.2	13.65	1	69.20	11.58	
	29 836	88.2	87.2					18.49	

Putting r , r' , r'' to represent the refractions which in these three cases apply, and taking the means, we get as follows

Barometer	Thermometer		No obs	Declination of Polaris January 1 1836
	In	out		
Inches	o	o		
30,061	72.2	69.2	16	88 30 30.28 + 1'
30,007	79.0	79.0	48	28.42 + 1''
29,830	68.2	87.2	31	18.19 + 1''

If we now compute the values of r , r' &c from the tables given by Atkinson and Bessel we get as follows

	employing THERMOMETER IN		employing THERMOMETER OUT	
	ATKINSON	BESSEL	ATKINSON	BESSEL
,	-4 24.92	-1 25.38	-4 26.76	-4 27.00
,	19.80	20.87	20.34	21.34
r''	13.38	15.18	13.97	16.67

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whence we get as follows —

FROM OBSERVATION	ATKINSON <i>Thermometer</i>	BESSEL <i>Thermometer</i>		
	IN	OUT	IN	OUT
$r - r'$	6.86	5",12	6",42	4",51
$s - r''$	11.79	11",54	12",79	10",20
$r' - r''$	4.93	6",42	6",87	5",69

If we now subtract the tabular values of $r = 1$, &c from those observed, we get

ATKINSON'S TABLES			BESSEI'S TABLES			
	errors " "	squared		errors " "	squared	
Thermometer in	{ 1,74 0,25 1,49	{ 3,0276 0,0625 2,2201	5,310	2,35 1,69 0,76	{ 5,6226 2,5281 0,5776	8,628
Thermometer out	{ 0,44 1,00 1,44	{ 0,1936 1,0000 2,0736	3,267	1,20 0,44 0,74	{ 1,4400 0,1936 0,1760	2,181

Exhibiting—as far as the correction for temperature is concerned, that Bessel's refraction (Thermometer Out) better satisfies observations at low altitudes and high temperatures than does Atkinson's and, that when Atkinson's table is employed, the out door Thermometer should be used

If we now apply the above values for λ , λ' &c to the unreduced places, we obtain

	Mean Declination of Polaris			
	January 1	1836	"	"
Employing Atkinson's tables — Thermometer in	+	88	26	4,41
— — — — — out	—	—	—	3,63
Bessel's — — — — in	—	—	—	3,19
— — — — — out	—	—	—	2,53
From the Greenwich Observations				4,60

In which point of view Atkinson's refractions—Thermometer IN (as I have always employed) appears to claim a preference, be this as it may, I hope to have shown, that, if not the best—at least a very accurate table of refractions has been employed

The errors of the clock for the A.R., and the Index Errors for the Declination, have been computed as heretofore, with reference to the places of known stars given in Vol II

The computations, have for the most part been performed in duplicate, (those for the values of a , b , c , d , have been strictly so), and the remainder have undergone a strict examination previously to being trusted, with which precautions, the errors are I apprehend very few in number and of trifling amount.

A
SUBSIDIARY CATALOGUE
OF
THE FIXED STARS
IN THE
SOUTHERN HEMISPHERE

REDUCED TO JANUARY 1, 1840,

together with the annual precessions, and Logarithmic values of a, b, c, d computed for 1845

&c

Mean A R and Declination of Stars

No	Names	Mag	No Obs	Right Ascen Jan 1, 1840	Annual Piecesn	Logarithms of			
						a	b	c	d
1	Phœnix	7	3	0 0 56,89	+3,059	9,0639	+6,7829	+0,4856	-8,9765
2	—	7 9	3	1 50,68	3,056	8,9785	6,9636	,4851	8,8920
3	^o App Sculp	6	3	3 35,60	3,052	8,9159	7,1355	,4846	8,6861
4	Phœnix	7	3	3 52,70	3,044	8,9509	7,2161	,4834	8,7940
5	Tucanæ	7 8	3	4 5,40	3,024	9,1169	7,3868	,4806	9,0517
6	Phœnix	7	3	5 44,88	3,028	+9,0117	+7,4249	+0,4812	-8,8930
7	—	8	3	5 54,53	3,011	9,0979	,5205	,4787	9,0257
8	App Sculp	7	3	6 53,25	3,039	8,9145	,4036	,4827	8,6812
9	—	7	2	8 38,80	3,034	8,9027	,4905	,4820	8,6452
10	^x —	7	3	10 17,09	3,022	8,9226	,6822	,4803	8,7037
11	App Sculp	7 8	3	12 56,33	3,004	+8,9396	+7,6982	+0,4777	-8,7485
12	^w —	7	3	15 12,09	3,013	8,8940	,7220	,4790	,6170
13	Phœnix	7	3	16 48,67	2,942	9,0324	,9035	,4686	,9283
14	^μ App Sculp	6	3	19 59,27	2,990	8,9030	,8493	,4767	,6490
15	—	6 7	3	20 32,71	2,964	8,9428	,9005	,4719	,7577
16	Phœnix	7 8	2	20 34,40	2,916	9,0278	+7,9869	+0,4648	-8,9213
17	—	6 7	1	20 57,85	2,914	9,0268	7,9928	,4615	,9196
18	—	7 8	3	21 22,82	2,910	9,0275	8,0031	,4639	,9209
19	App Sculp	7	3	21 32,41	2,956	8,9176	7,9259	,4707	,7690
20	—	8 9	3	22 7,28	2,957	8,9462	7,9244	,4708	,7657
21	App Sculp	7	3	22 38,17	2,957	+8,9399	+7,9327	+0,4708	-8,7613
22	Phœnix	7	3	22 40,79	2,917	9,0055	8,0058	,4649	,8837
23	App Sculp	6	3	25 46,02	2,980	8,8854	7,9486	,4742	,5898
24	—	7	3	25 53,02	2,957	8,9121	7,9766	,4708	,6796
25	Phœnix	7	3	25 59,41	2,841	9,0756	8,1345	,4555	,9961
26	Phœnix	7	3	26 33,31	2,921	+8,9588	+8,0288	+0,4655	-8,7949
27	—	6	3	26 50,20	2,858	9,0436	,1168	,4561	,9472
28	App Sculp	8	3	26 50,96	2,939	8,9294	,0101	,4682	,7268
29	^N Phœnix	7	3	28 2,69	2,880	9,0024	,0946	,4594	,8791
30	—	6 7	3	28 4,41	2,827	9,0693	,1626	,4513	,9662
31	Phœnix	7 8	3	29 50,45	2,817	+9,0643	+8,1837	+0,4601	-8,9790
32	—	—	—	30 2,872	2,872	8,9903	,1201	,4582	,8579
33	—	7	3	32 14,01	2,875	8,9750	,1292	,4586	,8291
34	App Sculp	7 8	3	33 13,50	2,897	8,9440	,1115	,4619	,7643
35	Phœnix	7 8	3	34 19,87	2,874	8,9619	,1433	,4565	,8035
36	Phœnix	7 8	3	37 0,43	2,863	+8,9572	+8,1714	+0,4568	-8,7972
37	—	6 7	3	37 22,93	2,861	8,9576	,1765	,4555	,7955
38	—	6	3	37 37,54	2,760	9,0547	,2760	,4409	,9668
39	—	8	3	37 62,94	2,808	9,0070	,2314	,4484	,8892
40	—	7	3	38 14,73	2,817	8,9957	,2239	,4498	,8694
41	Phœnix	9 10	3	39 27,63	2,765	+9,0365	+8,2790	+0,4417	-8,9380
42	—	7	3	41 31,08	2,804	8,9874	,2618	,4478	,8554
43	—	7	3	42 33,52	2,827	8,9611	,2367	,4613	,8047
44	—	6	3	43 23,67	2,747	9,0251	,3090	,4369	,9206
45	App Sculp	8	3	46 22,52	2,894	8,8920	,2107	,4616	,6302

No	Declination (South) Jan 1 1840	Annual Precession	Logarithms of				Difference from the Brisbane Catalogue			
			<i>a'</i>	<i>b'</i>	<i>c'</i>	<i>d</i>	No	T	M C	Decln
1	44 53 40,37	+20,042	+9,4048	-9,9126	+1,3019	-7,7190	1	-2,37	-3,93	-0,92
2	45 33 30,06	20,040	,4914	,8535	,3019	7,9551	4	-0,47	—	-2,81
3	36 1 44 71	20,037	,5575	,7692	,3019	8,2196	8	-3,08	—	-0,06
4	43 3 33,35	20,037	,5185	,8340	,3018	8,2661	9	—	—	+9,73
5	59 24 31,30	20,037	,0747	,9347	,3018	8,2699	10	-2,23	—	-3,36
6	49 34 25,20	20,034	+9,4786	-9,8812	+1,3018	-8,4131	13	-1,83	-3,27	-4,99
7	57 55 26,98	20,034	,4031	,9276	,3018	,4276	14	-2,60	—	+12,56
8	35 47 39,65	20,032	,5682	,7666	,3017	,4890	17	-2,11	-3,28	-7,09
9	33 31 27,66	20,027	,5832	,7421	,3016	,5875	21	-0,86	-3,16	+9,35
10	37 22 52,84	20,021	,5717	,7810	,3015	,6695	24	-2,63	-3,05	—
11	40 7 41,13	20,007	+9,5670	-9,8085	+1,3012	-8,7579	27	-2,40	—	-7,26
12	31 55 23,81	19,995	,6053	,7220	,3009	,8270	31	-2,35	—	-1,68
13	51 55 8,85	19,979	,5132	,8947	,3006	,8699	35	-3,99	—	-4,68
14	33 53 24,06	19,967	,6117	,7414	,3002	,9446	46	-0,09	—	+0,54
15	40 47 57,39	19,958	,5888	,8131	,3001	,9559	46	-4,24	—	+1,07
16	51 30 40,10	19,958	+9,5315	-9,8916	+1,3001	-8,9673	47	+1,68	—	+0,77
17	51 25 4,78	19,957	,5310	,8910	,3001	,9642	49	-3,05	—	+0,82
18	51 29 23,44	19,953	,5266	,8011	,3999	,9736	51	+1,20	—	+6,82
19	41 32 59,76	19,951	,5877	,8194	,3000	,9763	52	-3,49	—	+2,02
20	41 20 50,06	19,951	,5888	,8176	,5000	,9760	53	—	-38,25	—
21	40 21 2,58	19,945	+9,5955	-9,8093	+1,2998	-8,9980	55	—	—	-2,67
22	49 0 43,30	19,945	,5527	,8761	,2998	8,9983	56	—	—	+4,51
23	30 26 27,39	19,913	,6345	,7016	,2991	9,0527	62	—	-3,54	-1,73
24	35 51 45,70	19,908	,6222	,7646	,2990	9,0615	63	—	—	-9,92
25	55 12 42,86	19,911	,5263	,9167	,2991	9,0561	61	-1,07	—	-1,67
26	43 18 53,12	19,904	+9,5977	-9,8331	+1,2949	-9,0670	65	+0,02	—	+4,36
27	63 15 25,26	19,903	,5490	,9006	,2989	,0702	67	—	-3,27	—
28	38 52 43,75	19,897	,6169	,7943	,2988	,0776	68	—	—	+7,66
29	48 52 38,72	19,890	,5775	,8736	,2986	,0890	69	-3,27	—	+4,57
30	55 42 7,91	19,889	,5403	,9135	,2986	,0900	70	-2,78	—	-2,40
31	55 16 32,36	19,869	+9,5490	-9,9109	+1,2982	-9,1157	77	-2,29	—	-5,54
32	47 32 19,859	,5933	,8637	,2979	,1289	78	—	—	—	—
33	45 40 37,50	19,841	,6064	,8500	,2975	,1498	79	-1,10	-3,31	-1,30
34	41 24 37,03	19,827	,6253	,8156	,2973	,1629	82	+2,00	-3,09	+4,86
35	44 0 8,85	19,814	,6191	,8367	,2970	,1764	86	—	-2,99	+2,45
36	43 28 30,99	19,777	+9,6294	-9,8317	+1,2962	-9,2084	95	-2,34	—	+3,15
37	43 32 52,68	19,772	,6301	,8321	,2960	,2130	96	-2,43	—	+0,89
38	54 35 31,44	19,769	,5866	,9051	,2960	,2153	97	-3,29	—	-1,46
39	49 42 17,60	19,766	,6096	,8762	,2959	,2184	99	-1,82	—	+4,84
40	48 25 50,02	19,760	,6169	,8676	,2958	,2221	100	—	—	+2,91
41	52 52 44,64	19,744	+9,6100	-9,8950	+1,2964	-9,2361	103	—	—	+12,56
42	47 34 18,43	19,711	,6294	,8608	,2947	,2572	106	-2,49	-3,04	-0,78
43	44 16 3,65	19,694	,6434	,8360	,2943	,2681	107	—	-2,62	+0,44
44	51 51 39,08	19,680	,6191	,8877	,2940	,2760	109	—	-2,71	-0,88
45	33 12 13,68	19,620	,6767	,7290	,2927	,3095	117	+26,41	—	-1,21

Mean A R and Declination of Stars

No	Names	Mag	No Obs	Right Ascen Jan 1, 1840	Annual Precessn	Logarithms of			
						a	b	c	d
46	Phœnixis	7	3	H M S 0 48 47,18	+ 2,677	+9,0450	+8,3817	+0,4276	-8,9532
47	—	7 8	3	53 32,43	2,576	9,0849	,4624	,4109	9,0122
48	Electri	7	3	54 6,30	2,814	8,9214	,3040	,4493	8,7208
49	App Sculp	6	3	54 47,79	2,867	8,8847	,2733	,4574	8,6135
50	Phœnixis	6 7	3	55 16,40	2,659	9,0848	,4773	,4081	9,0125
51	Electri	6 7	3	55 39 36	2,879	+8,8749	+8,2706	+0,4592	-8,5784
52	Phœnixis	7 8	3	56 18,75	2,720	8,9791	,3737	,4346	8,8448
53	Electri	7	3	58 56,59	2,816	8,9040	,3265	,4496	8,6782
54	Phœnixis	7 8	3	1 0 11,47	2,749	8,9415	,3721	,4392	8,7717
55	v —	6	3	0 29,02	2,749	8,9305	,3741	,4392	8,7677
57	Phœnixis	7 8	3	2 42,12	2,602	+9,0762	+8,5250	+0,3983	-9,0018
57	—	7	3	3 36,29	2,473	9,0892	,5419	,3932	9,0201
58	—	7 8	4	3 41,36	2,487	9,0788	,5353	,3957	9,0057
59	φ Electri	7	3	4 49,69	2,840	8,8762	,3375	,4533	8,6958
60	App Sculp	7	3	5 20,75	2,794	8,8982	,3660	,4462	8,6677
61	Phœnixis	6	3	5 22,92	2,767	+8,9134	+8,3821	+0,4420	-8,7093
62	v —	6	3	7 57,64	2,658	,9656	,4518	,4245	,8262
63	Electri	9	3	8 41,31	2,793	,8906	,3790	,4461	,6487
64	—	7 8	3	10 6,15	2,752	,9072	,4072	,4393	,6973
65	Phœnixis	—	1	11 38,65	2,668	,9464	,4669	,4262	,7893
66	Electri	7	3	14 52,57	2,732	+8,9026	+8,4359	+0,4362	-8,6907
67	Phœnixis	7	3	15 20,97	2,645	,9461	,4790	,4224	,7912
68	γ Electri	7	3	15 25,62	2,737	,8998	,4843	,4373	,6832
69	—	6 7	3	16 4,18	2,800	,8698	,4044	,4472	,5909
70	Phœnixis	7	3	16 34,15	2,676	,9264	,4679	,4275	,7600
71	Fornaxis	7	3	16 45,42	2,788	+8,8736	+8,4166	+0,4453	-8,6052
72	Phœnixis	7	3	17 44,73	2,617	,9514	,5001	,4178	,8033
73	—	7 8	3	20 44,20	2,387	9,0474	,6136	,3778	,9654
74	Electri	7	3	22 50,60	2,826	8,8447	,4254	,4512	,5020
75	—	7	2	24 4,37	2,862	8,8598	,4465	,3544	9,0188
76	Electri	7	2	24 19,42	2,778	+8,8610	+8,4482	+0,4437	-8,6739
77	Phœnixis	7 8	3	24 42,26	2,477	,9918	,5808	,3939	,8804
78	—	6 7	3	24 51,23	2,059	,9545	,5447	,4081	,8143
79	App Sculp	6 7	3	25 46,57	2,688	,8941	,4894	,4294	,6802
80	Phœnixis	7	3	26 2,84	2,472	,9891	,5858	,3930	,8766
81	Phœnixis	—	—	26	2,548	+8,9546	+8,5b30	+0,4062	-8,8154
82	Electri	7	3	27 32,73	2,748	8,8681	,4711	,4390	8,5985
83	Phœnixis	7	3	27 33,90	2,542	8,9533	,5583	,4052	8,8138
84	Eridani	7	3	28 11,30	2,270	9,0642	,6724	,3560	8,9917
85	—	7	3	28 16,10	2,227	9,0781	,6866	,3477	9,0108
86	x App Sculp	7	3	28 44,79	2,768	+8,8560	+8,4671	+0,4422	-8,6640
87	Phœnixis	7	3	30 16,44	2,465	8,9776	,5966	,3918	8,8593
88	Electri	7	3	30 28,13	2,654	8,8983	,5174	,4239	8,6966
89	Eridani	6 7	2	30 53,02	2,206	9,0777	,7003	,3436	9,0111
90	App Sculp	7	3	31 20,84	2,673	8,8879	,5126	,4270	8,6706

No	Declination (South) Jan 1 1840	Annual Precession	Logarithms of				No	Difference from the Brisbane Catalogue		
			a	b'	c'	d'		Right Ascension from T M C	Declin	
46	54 3 26,17	+19,585	+0,6301	-9,8981	+1,2919	-9,3267	121	- 2 08	- 2,77	+ 2,12
47	57 47 32,86	19,491	,6304	,9153	,2899	,3655	130	- 3,45	—	+ 3,51
48	39 4 22 56	19,182	,6857	,7870	,2896	,3703	132	- 2,61	- 2,89	+ 0,66
49	32 24 52 86	19,467	,69,7	,7161	,2893	,3760	133	- 1,46	—	+ 3,27
50	57 51 50,94	19,467	,6375	,9148	,2801	,3796	136	- 2,16	- 4,39	+ 1,56
51	30 23 11,90	19,449	+0,6964	-9,6905	+1,2889	-9,3827	138	- 2,10	- 3,15	- 7,50
52	45 6 14,36	19,451	,6739	,8628	,2889	,3816	137	*	*	
53	36 31 2,97	19,378	,6998	,7596	,2873	,4068	144	- 1,69	- 3,99	+ 0,61
54	12 55 59,44	19,351	,6955	,8150	,2867	,4153	149	- 2,77	- 3,86	- 0,25
55	12 20 37,10	19,338	,6972	,8127	,2864	,4191	153	—	+11,81	- 3,18
56	57 26 54,83	19,293	+0,6646	-9,0091	+1,2854	-9,4323	158	- 4,40	- 3,38	- 0,16
57	68 32 31,60	19,290	,6628	,9140	,2851	,4369	162	—	—	+ 2,23
58	57 42 44,93	19,267	,6665	,9098	,2848	,4305	163	- 2,57	—	+ 1,31
59	31 39 1,22	19,252	,7126	,7021	,2845	,4438	166	- 31,71	—	- 1,99
60	36 3 21,97	19,229	,7135	,7518	,2859	,4490	167	—	- 4,55	+ 0,53
61	38 42 17,49	19,226	+0,7118	-9,7779	+1,2839	-9,4507	168	—	—	+ 6,34
62	46 23 14,58	19,162	,7084	,8401	,2824	,4668	172	- 4,06	- 3,32	+ 3,91
63	34 59 45,91	19,153	,7193	,7384	,2822	,4688	174	—	—	- 60,93
64	38 6 50,10	19,108	,7226	,7694	,2812	,4703	177	—	- 2,91	+ 2,60
65	41 10 33,47	19,066	,7210	,8213	,2802	,4888	181	- 2,51	- 2,64	+ 3,28
66	37 53 22,52	18,967	+0,7332	-9,7641	+1,2780	-9,5003	186	—	—	- 3,94
67	44 26 33,53	18,967	,7292	,8211	,2780	,5090	188	—	—	+ 3,66
68	37 26 1,43	18,961	,7340	,7594	,2778	,5101	190	- 2,90	—	- 0,94
69	31 46 51,24	18,943	,7316	,6966	,2771	,5141	187	—	—	- 4,10
70	41 47 20,16	18,928	,7348	,7987	,2771	,5167	195	—	- 2,98	+ 1,54
71	32 38 42,10	18,921	+0,7332	-9,7066	+1,2760	-9,5181	192	—	—	- 3,70
72	45 21 49,46	18,895	,7340	,8264	,2763	,5231	201	- 2,27	- 2,62	- 2,45
73	55 64 43,75	18,807	,7235	,8904	,2713	,5345	208	- 5,17	—	- 1,92
74	27 2 8,82	18,729	,7396	,6279	,2725	,5514	210	—	—	0,00
75	30 48 48,49	18,702	,7469	,6790	,2719	,5556	214	- 1,61	—	- 7,63
76	31 6 29,58	18,697	+0,7466	-9,6826	+1,2717	-9,5569	216	+ 0,38	—	- 3,81
77	50 43 37,37	18,682	,7443	,8682	,2714	,5586	217	- 3,00	—	- 2,01
78	46 21 2,98	18,677	,7497	,8291	,2713	,5596	219	- 1,91	- 3,05	+ 5,86
79	57 41 17,68	18,647	,7601	,7548	,2706	,5641	220	—	—	- 0,74
80	50 32 56,17	18,640	,7474	,8500	,2701	,5650	221	- 3,45	- 2,78	- 2,88
81		18,630	+0,7536	-9,8291	+1,2702	-9,5666	222	—	—	
82	32 42 40,53	18,590	,7636	,6998	,2693	,5723	224	- 2,57	- 3,13	- 0,15
83	46 30 57,21	18,590	,7559	,8278	,2693	,5723	226	- 2,36	- 2,28	+ 1,52
84	57 49 20,50	18,571	,7404	,8944	,2688	,5751	226	- 2,06	- 4,27	+ 3,54
85	58 57 24,79	18,569	,7396	,8952	,2688	,5754	229	—	—	+ 4,56
86	30 43 43,24	18,553	+0,7536	-9,6745	+1,2684	-9,5776	227	- 5,69	- 2,72	+ 3,03
87	49 37 23,23	18,504	,7681	,8470	,2673	,5844	233	—	—	- 3,82
88	38 57 9,14	18,504	,7627	,7636	,2673	,5844	234	—	—	- 4,47
89	50 5 17,41	18,483	,7443	,8982	,2667	,5874	235	- 3,23	—	+ 2,60
90	37 20 18,53	18,468	,7634	,7471	,2664	,5892	237	—	—	- 5,03

Mean A R and Declination of Stars

No	Names	Mag	No Obs	Right Ascen Jan 1, 1840	Annual Progress	Logarithms of			
						a	b	c	d
91	Phœnix	7 8	3	II 31 22 21	+2,514	+8,9535	+8,5785	+0,4001	-8,8167
92	—	7	3	31 41,46	2,570	8,9290	,562	,4099	,7686
93	—	7	,	32 36,35	2,338	9,0204	,621	,3698	,9295
94	Eridani	7 8	3	33 5,18	2,247	9,0534	,6875	,3616	,9780
95	p —	6	3	33 43,01	2,240	9,0502	,6874	,3620	,9737
96	ψ Phœnix	7 8	3	34 26,02	2,636	+8,8950	+8,5350	+0,4209	-8,6931
97	π App Sculp	6 7	3	34 55,33	2,716	8,8621	,5065	,4339	,6995
98	—	6	3	34 59 82	2,663	8,8860	,5307	,4237	,6722
99	Phœnix	7	3	35 17,02	2,405	8,9845	,6304	,3811	,8759
100	q Luidani	6 7	o	36 19,40	2,302	9,0205	,6714	,3621	,9312
101	Phœnix	8	4	38 21,42	2,360	+8,9912	+8,6520	+0,3729	-8,8865
102	—	6 7	3	39 49,07	2,356	8,9879	,6562	,3722	,8819
103	q Eridani	6	3	40 0,36	2,282	9,0151	,6841	,3585	,9247
104	Phœnix	6 7	o	40 30,03	2,547	8,9132	,6852	,4060	,7411
105	—	7	3	40 48,79	2,624	8,8834	,6570	,4190	,6721
106	Phœnix	6 7	3	41 28,09	2,551	+8,9115	+8,5834	+0,4067	-8,7303
107	—	7	3	42 51,64	2,595	8,8891	,6727	,4141	,6896
108	—	6 7	3	43 54,85	2,403	8,9569	,6455	,3807	,8320
109	Luidani	8	4	44 9,89	2,222	9,0213	,7107	,3467	,9359
110	Phœnix	6 7	2	44 41,92	2,342	8,9776	,6697	,3696	,8679
111	Eridani	7 8	3	45 2,31	2,221	+9,0184	+8,7123	+0,3465	-8,9320
112	Phœnix	6	4	45 36,01	2,421	8,9454	,6410	,3846	,8124
113	—	5 6	5	47 18,84	2,419	8,9411	,6445	,3836	,8057
114	Eridani	8 9	2	47 33,69	2,230	9,0050	,7109	,3493	,9130
115	x —	4	3	49 43,47	2,268	8,9864	,7022	,3656	,8862
116	Phœnix	var	2	50 49,32	2,374	+8,9470	+8,6678	+0,3755	-8,8189
117	—	6 7	3	50 53,67	2,254	8,9867	,7087	,3629	,8864
118	ψ —	7	3	52 46,15	2,510	8,8943	,6244	,3997	,7154
119	Arietis	7	4	54 17,07	2,868	8,7868	,5264	,4576	,2605
120	Eridani	8	4	59 4,95	2,264	8,9680	,7162	,3549	,8448
121	Horologu	7	3	59 17,89	1,958	+9,0513	+8,8101	+0,2918	-8,9687
122	Eridani	7	3	2 0 56,24	2,076	9,0107	,7767	,3172	,89283
123	Horologu	8	4	2 20,40	1,802	9,0834	,8553	,2557	,9,0262
124	Eridani	7	3	3 55,47	2,174	8,9721	,7512	,3373	,8,8714
125	—	6	3	3 57,83	2,199	8,9639	,7429	,3422	,8,8581
126	Phœnix	7 8	4	5 5,76	2,316	+8,9245	+8,7084	+0,3647	-8,7910
127	Horologu	8 9	3	5 32,21	1,771	9,0815	,8657	,2482	,9,0268
128	Phœnix	7 8	3	6 13,24	2,303	8,9250	,7137	,3623	,8,7930
129	Horologu	10	3	6 47,52	2,019	9,0083	,7993	,3051	,8,9279
130	—	8	3	8 26,16	1,927	9,0286	,8265	,2849	,8,9573
131	Eridani	7 8	3	9 39,23	2,164	+8,9571	+8,7601	+0,3353	-8,8512
132	Fornacis	6 7	3	10 33,11	2,530	8,8452	,6521	,4031	,6216
133	—	7	3	11 48,57	2,701	8,7961	,6103	,4315	,4492
134	Phœnix,	8	3	12 51,51	2,460	8,8599	,6768	,3909	,6651
135	Eridani	6 7	2	13 2,16	2,394	8,8789	,6961	,3791	,7092

No	Declination (South) Jan 1 1840	Annual Precession	Logarithms of				Difference from the Brisbane Catalogue			
			a	b	c'	d	No	T	M C	Decln
91	46 53 59,71	+18,466	+9,7642	-9,8276	+1,2064	-9,5895	236	-4,07	—	+ 2,69
92	45 44 28,57	18,453	,7664	,8037	,2660	,5913	238	-3,93	- 2,53	+ 4,41
93	54 15 2,78	18,423	,7581	,8726	,2653	,5951	240	-2,58	- 3,75	+ 0,58
94	57 15 30,53	18,407	,7556	,8477	,2650	,5972	241	-4,61	—	- 1,68
95	57 0 29,45	18,387	,7559	,8461	,2643	,5998	243	-4,18	- 0,94	+ 0,31
96	38 56 43,51	18,308	+9,7701	-9,7602	+1,2640	-9,6021	245	—	—	+ 0,27
97	33 8 5,59	18,339	,7664	,6990	,2634	,6056	246	—	—	+ 1,29
98	37 39 29,28	18,339	,7708	,7471	,2634	,6056	247	-2,36	—	- 0,59
99	50 50 53,32	18,327	,7694	,8505	,2631	,6070	248	—	- 3,09	+ 0,15
100	54 32 44,67	18,293	,7672	,7111	,2622	,6113	249	-1,12	- 2,88	- 5,13
101	51 49 33,31	18,217	+9,7745	-9,8039	+1,2605	-9,6199	251	-2,61	—	+ 1,31
102	51 37 3,57	18,166	,7781	,9514	,2692	,6257	253	-3,81	- 2,97	- 1,74
103	54 19 36,51	18,161	,7752	,8668	,2691	,6262	254	-2,96	- 3,15	+ 0,33
104	42 33 43,96	18,138	,7832	,7860	,2586	,6286	255	-2,84	—	+ 3,82
105	37 57 35,86	18,127	,7810	,7451	,2583	,6300	257	-2,22	- 2,41	- 1,42
106	42 18 5,34	18,139	+9,7832	-9,7846	+1,2586	-9,6286	256	-59,81	—	+ 5,66
107	39 12 42,11	18,048	,7860	,7551	,2561	,6382	260	-3,21	- 4,49	+ 3,90
108	48 36 47,68	18,010	,7896	,8280	,2555	,6421	263	-3,28	- 0,43	+ 0,55
109	55 15 33,81	18,003	,7849	,8640	,2553	,6429	264	-2,41	—	- 9,52
110	50 59 59,20	17,982	,7903	,8492	,2548	,6449	266	-2,09	- 2,20	- 0,11
111	55 4 22,90	17,907	+9,7867	-9,8002	+1,2545	-9,0465	267	+0,47	—	- 3,87
112	47 25 57,26	17,916	,7938	,8190	,2540	,6485	269	-2,79	—	+ 3,14
113	47 5 15,93	17,880	,7970	,8150	,2524	,6548	272	-0,96	- 1,89	- 1,34
114	54 2 17,51	17,870	,7938	,6582	,2520	,6560	273	-2,20	—	- 3,42
115	52 24 26,23	17,783	,7993	,8468	,2500	,6639	278	-3,22	- 3,47	+ 3,15
116	49 10 8,49	17,737	+9,8035	-9,8191	+1,2489	-9,6080	281	—	- 3,67	+ 3,25
117	52 33 36,28	17,727	,8021	,8465	,2487	,6687	282	-3,55	- 3,89	+ 4,50
118	41 30 16,72	17,657	,8048	,7861	,2469	,6749	283	-1,00	- 3,97	- 5,21
119	17 20 36,95	17,567	,7459	,4465	,2447	,6824	290	—	+32,47	—
120	50 27 5,21	17,388	,8195	,8252	,2402	,6965	298	-2,19	—	- 7,75
121	59 6 46,01	17,382	+9,8129	-9,8716	+1,2401	-9,6970	299	-2,23	—	- 0,22
122	55 50 55,53	17,308	,8195	,8010	,2383	,7024	301	-1,84	—	- 6,47
123	61 44 59,68	17,250	,8182	,8797	,2368	,7067	306	-2,80	—	+ 3,21
124	52 29 26,82	17,176	,8280	,8823	,2349	,7120	312	-1,74	—	+ 4,03
125	51 36 40,88	17,176	,8280	,8272	,2349	,7120	311	-6,15	—	+ 5,74
126	47 20 23,11	17,124	+9,8300	-9,7982	+1,2936	-9,7156	313	-3,69	—	+ 6,69
127	61 51 9,99	17,121	,8227	,8769	,2335	,7168	314	—	- 2,40	- 0,70
128	47 33 54,59	17,073	,8325	,7983	,2323	,7191	316	-3,05	—	+ 6,31
129	56 13 36,61	17,048	,8312	,8403	,2317	,7207	317	-3,12	—	-11,81
130	58 5 32,70	16,971	,8325	,8566	,2297	,7258	319	-1,34	—	+ 2,06
131	51 37 50,70	16,915	+9,8382	-9,8205	+1,2283	-9,7294	322	—	- 2,16	- 6,84
132	56 43 39,62	16,871	,8267	,7018	,2271	,7322	326	-3,13	- 3,30	+ 1,14
133	26 42 18,51	16,789	,8395	,5762	,2250	,7873	331	—	—	+12,57
134	39 42 68,58	16,700	,8351	,7275	,2242	,7399	333	-2,02	—	-19,25
135	42 35 13,02	16,784	,8395	,7524	,2241	,7394	334	-2,26	- 2,71	+ 3,68

Mean A.R. and Declination of Stars

No	Names	Mag	No Obs	Right Ascen Jun 1, 1840	Annual Progress	Logarithms of			
						a	b	c	d
136	Phœnix	8	3	II 11 7,49	+ 2,336	+ 8,8954	+ 8,7153	+ 0,3685	- 8,7411
137	Horologii	8 9	3	14 36,42	1,935	9,0061	,8296	,2867	,9289
138	—	6	3	14 41,27	1,939	9,0011	,8289	,2876	,9253
139	—	8	6	15 5,96	1,931	9,0053	,8310	,2458	,9279
140	—	7	3	15 19,89	1,899	9,0129	,8307	,2785	,9390
141	Phœnix	7 8	2	16 5,53	2,437	+ 8,8587	+ 8,6888	+ 0,3869	- 8,6680
142	Fornax	6 7	3	16 15,24	2,676	,7918	,6251	,4275	,4621
143	—	7 8	—	16 15,50	2,625	,8070	,6376	,4191	,5136
144	—	6 7	2	16 50,90	2,476	,8469	,6783	,3937	,6369
145	Lindam	7	3	17 17,22	2,109	,9496	,7843	,3241	,8450
146	Horologii	9	—	18 6,71	1,891	+ 9,0066	+ 8,8410	+ 0,2767	- 8,9315
147	—	9	3	18 19,48	1,891	9,0065	,8452	,2767	,9314
148	—	8	3	18 23,08	1,877	9,0099	,8476	,2735	,8361
149	Phœnix	7 8	3	18 35,04	2,363	8,8739	,7140	,3735	,7066
150	λ Horologii	6 6	3	20 25,65	1,681	9,0511	,8982	,2256	,9929
151	* Fridam	4	3	21 7,19	2,198	+ 8,9136	+ 8,7639	+ 0,3420	- 8,7875
152	Fornax	6 7	3	21 38,70	2,483	,8537	,6852	,3950	,6125
153	—	6	3	21 42,01	2,568	,8805	,6540	,4130	,5273
154	Phœnix	8	2	22 30,77	2,883	,8,868	,7127	,3780	,6749
155	* Fornax	6	3	25 59,36	2,467	8,8277	,6961	,3922	,6083
156	Lindam	7	1	26 19,10	2,226	+ 8,8910	+ 8,7625	+ 0,3475	- 8,7520
157	—	9	3	27 59,49	2,140	8,9098	,7872	,3504	,8,7880
158	Horologii	6 7	3	28 27,60	2,011	8,9339	,8151	,3105	,8,8290
159	Fornax	7	3	28 42,56	2,426	8,8316	,7118	,3849	,8,6251
160	* Horologii	7	3	29 38,86	1,456	9,0707	,9546	,1632	,9,0216
161	Lindam	8	—	31 2,89	2,346	+ 8,8168	+ 8,7362	+ 0,3703	- 8,6675
162	Fornax	6	4	31 58,15	2,409	,8277	,7210	,3818	,6235
163	* Horologii	6 7	3	32 8,03	1,966	,9129	,8365	,2936	,8105
164	Lindam	7	—	32 33,08	2,201	,8730	,7664	,3485	,7255
165	—	7 8	3	32 34,44	2,231	,8729	,7683	,3185	,7253
166	Fornax	7	3	33 12,30	2,564	+ 8,7867	+ 8,6849	+ 0,4089	- 8,5023
167	—	7	4	33 42,77	2,546	,7899	,6900	,4059	,5160
168	* Horologii	5 6	4	35 41,23	1,859	,9586	,8659	,2693	,8731
169	Fornax	7	3	36 16,78	2,517	,7843	,6940	,4060	,5051
170	Lindam	5 6	4	36 22,86	2,158	,8816	,7917	,3810	,7467
171	Horologii	7 8	3	36 52,35	1,768	+ 8,9765	+ 8,8885	+ 0,2470	- 8,8099
172	—	6 7	3	37 7,06	2,005	,9170	,8314	,5021	,8112
173	Fornax	6 7	3	37 8,13	2,651	,7593	,6728	,4234	,4037
174	* Horologii	6 7	3	39 3,05	1,924	,9324	,8529	,2842	,8361
175	Fornax	7	3	39 6,50	2,551	,7769	,6979	,4067	,4904
176	Fornax	7	3	39 17,69	2,379	+ 8,8175	+ 8,7390	+ 0,3764	- 8,6146
177	Lindam	6 7	3	39 32,09	2,254	,8479	,7707	,3629	,6856
178	—	7	3	39 32,35	2,151	,8746	,7969	,3326	,7384
179	Fornax	—	—	42	2,655	,7682	,7027	,4074	,4732
180	Lindam	7 8	3	43 10,92	2,132	,8692	,8053	,3286	,7333

in the Southern Hemisphere, &c &c

ix

No	Declination (South) Jan 1 1840	Annual Precession	Logarithms of				Difference from the Brisbane Catalogue				
			a	b'	c'	d	No	M	C	T	
136	44 47 43,94	+16,699	+9,8432	-9,7685	+1,2227	-9,7426	335	—	—	1,08	- 2,89
137	55 51 10,85	16,680	,8467	,8430	,2222	,7438	336	—	4,58	—	- 9,04
138	56 40 53,02	16,657	,8470	,8415	,2216	,7451	337	—	5,20	—	- 2,56
139	56 49 59,02	16,653	,8476	,8423	,2215	,7453	339	—	0,17	—	- 4,56
140	57 31 4,58	16,641	,8470	,8453	,2212	,7461	340	—	1,44	—	- 0,82
141	40 8 43,83	16,602	+ 9,8407	-9,7275	+1,2201	-9,7483	342	—	1,41	—	- 4,13
142	27 43 20,69	16,595	,8096	,6854	,2200	,7487	343	—	1,10	—	+ 3,77
143	30 35 44,14	16,595	,8182	,6248	,2200	,7487	344	—	1,98	—	- 5,48
144	38 18 16,08	16,585	,8363	,7099	,2197	,7492	345	—	3,03	—	- 0,42
145	51 49 28,26	16,546	,8519	,8122	,2187	,7515	346	—	2,50	—	+ 1,01
146	57 16 28,85	16,514	+9,8500	-9,8407	+1,2178	-9,7533	347	—	8,43	—	-15,51
147	57 16 36,41	16,510	,8619	,8406	,2177	,7535	348	—	16,70	—	-31,43
148	57 32 33,23	16,510	,8488	,8420	,2177	,7535	349	—	20,32	—	- 1,64
149	42 53 7,80	16,480	,8476	,7477	,2169	,7551	350	—	2,01	—	+ 1,07
150	61 1 40,98	16,393	,8631	,8646	,2147	,7598	352	—	1,85	—	+ 6,62
151	48 25 24,18	16,362	+9,8573	-9,7856	+1,2136	-9,7620	353	—	2,21	—	+ 3,17
152	37 3 37,20	16,326	,8420	,6908	,2129	,7034	356	—	2,31	—	- 2,60
153	31 49 13,69	16,325	,8293	,6327	,2129	,7034	356	—	2,41	+ 0,35	+ 0,15
154	41 9 5,57	16,282	,8519	,7279	,2117	,7057	359	—	1,41	—	- 1,71
155	37 8 12,16	16,121	,8482	,6861	,2074	,7739	364	—	2,15	—	- 0,66
156	46 34 42,20	16,078	+9,8639	-9,7654	+1,2062	-9,7769	367	—	—	—	+ 6,13
157	49 5 39,95	16,002	,8686	,7805	,2042	,7796	369	—	2,72	—	- 5,49
158	51 47 48,57	16,977	,8704	,7967	,2036	,7808	370	—	3,38	—	- 2,62
159	38 30 26,44	16,963	,8649	,6953	,2031	,7815	371	—	3,57	—	- 4,35
160	63 17 22,53	16,913	,8681	,8507	,2018	,7838	373	—	2,89	—	+ 3,47
161	41 26 26,87	16,839	+9,8633	-9,7185	+1,1997	-9,7872	375	—	2,77	—	- 2,47
162	38 40 55,66	16,785	,8591	,6921	,1982	,7897	377	—	2,90	—	- 5,18
163	53 14 13,64	16,782	,8768	,7998	,1982	,7899	378	—	4,38	+ 5,08	+ 1,85
164	45 25 42,07	16,757	,8716	,7480	,1975	,7909	379	—	3,43	—	+ 0,91
165	45 24 4,98	16,757	,8722	,7479	,1975	,7909	380	—	3,58	—	+ 4,21
166	31 19 17,54	16,717	+9,8407	-9,6100	+1,1964	-9,7927	381	—	—	+ 1,03	+ 5,16
167	32 9 23,99	16,691	,8439	,6198	,1957	,7938	382	—	2,95	—	+ 0,66
168	55 14 15,62	16,689	,8831	,8054	,1928	,7942	388	—	2,85	-	- 6,92
169	31 45 3,86	16,652	,8161	,6108	,1918	,7998	389	—	2,24	—	+ 3,39
170	47 12 16,13	16,645	,8791	,7551	,1916	,8001	392	—	1,65	—	- 3,10
171	56 58 51,90	16,523	+9,8842	-9,8126	+1,1910	-9,8010	393	—	2,81	—	- 2,85
172	51 29 33,76	16,501	,8842	,7818	,1904	,8020	397	—	—	—	+ 4,56
173	26 10 43,60	15,501	,8248	,5329	,1904	,8020	394	—	—	+ 1,08	+ 3,81
174	53 14 51,42	15,401	,8876	,7893	,1875	,8061	403	—	2,96	-	- 2,15
175	31 9 20,00	16,393	,8463	,5989	,1873	,8064	402	—	3,08	—	- 0,67
176	38 50 42,16	15,386	+9,8692	-9,6823	+1,1871	-9,8067	404	—	2,91	—	+ 2,16
177	43 30 38,71	15,368	,8791	,7223	,1866	,8075	406	—	—	—	+ 4,25
178	46 57 46,14	15,375	,8831	,7487	,1868	,8072	405	—	3,69	—	+ 4,60
179	30 29	15,194	,8476	,5848	,1817	,8143	416	—	—	—	—
180	47 0 53,49	15,171	,8848	,7432	,1810	,8155	418	—	—	—	+ 4,99

Mean A.R. and Declination of Stars

No	Names	Mag	No Obs	Right Ascen Jan 1, 1840	Annual Piecesn	Logarithms of			
						a	b	c	d
181	Horologu	—	—	2 46	+1,655	+8,9918	+8,9184	+0,2188	-8,9115
182	Eridani	6 7	4	46 40,15	2,267	,8262	,7760	,3554	,6520
183	Horologu	6 7	3	46 41,65	1,654	,9707	,9208	,2185	,8983
184	Fornacis	7	3	48 15,69	2,460	,7763	,7328	,3909	,5258
185	Eridani	6	3	49 37,32	2,331	,8032	,7643	,3675	,6048
186	Fornacis	7	3	50 12,24	2,635	+8,7358	+8,6991	+0,4208	-8,3714
187	—	6 7	4	50 22,73	2,411	,7826	,7467	,3822	,5619
188	—	7	3	50 30,29	2,388	,7878	,7521	,3781	,5666
189	—	7	3	50 50,85	2,383	,7878	,7537	,3771	,5680
190	—	7 8	3	51 45,41	2,459	,7686	,7377	,3907	,5137
191	Fornacis	6 7	3	52 17,99	2,554	+8,7476	+8,7192	+0,4072	-8,4404
192	Eridani	7	3	52 18,72	2,339	,7944	,7658	,3690	,5896
193	Horologu	7 8	4	52 58,83	1,729	,9346	,9081	,2378	,9512
194	Eridani	7	3	54 11,72	2,224	,8102	,7948	,3471	,6459
195	Fornacis	6 7	3	54 30,27	2,462	,7635	,7430	,3895	,5080
196	Horologu	7	3	54 50,60	1,772	+8,9192	+8,9000	+0,2485	-8,8301
197	Eridani	8	3	55 5,90	2,286	,8110	,7928	,3495	,6362
198	Horologu	7 8	3	56 19,54	1,430	,9869	,9732	,1553	,9263
199	Eridani	8	3	56 29,17	2,028	,8658	,8420	,3071	,7281
200	Fornacis	8	3	57 57,70	2,288	,7914	,7841	,3595	,5975
201	Horologu	8	5	58 50,11	1,868	+8,8883	+8,8804	+0,2714	-8,7850
202	—	—	—	58	1,866	,8852	,8819	,2709	,7814
203	—	7	1	59 19,56	1,337	,9949	,9927	,1261	,9386
204	—	8	5	59 32,89	1,864	,8842	,8826	,2704	,7803
205	Fornacis	7	1	59 39,16	2,332	,7769	,7762	,3677	,5668
206	Horologu	5 6	2	60 51,18	1,109	+8,9792	+8,9789	+0,1489	-8,9182
207	Fornacis	7	3	60 58,12	2,509	,7382	,7387	,3995	,4447
208	Horologu	7 8	2	3 0 13,99	1,329	,9934	,9947	,1235	,9371
209	—	7	3	0 35,95	1,311	,9968	,9983	,1176	,9404
210	Fornacis	7 8	5	1 56,91	2,271	,7845	,7924	,3562	,5917
211	Fornacis	6 7	5	2 22,72	2,373	+8,7608	+8,7704	+0,3753	-8,5303
212	Tridant	8	3	2 40,19	2,209	,7968	,8072	,3442	,6217
213	Fornacis	7 8	3	2 57,66	2,473	,7384	,7500	,3932	,4608
214	Horologu	8 9	3	3	1,886	,8701	,8797	,2755	,7609
215	—	7	3	4 10,88	1,940	,8532	,8691	,2878	,7346
216	Horologu	8	3	4 11,56	1,942	+8,8525	+8,8686	+0,2882	-8,7334
217	Fornacis	7	3	4 39,76	2,269	,7777	,87956	,3558	,6824
218	Horologu	7	3	4 41,88	1,274	,9891	,90070	,1052	,9340
219	—	—	—	4	1,944	,8490	,88690	,2887	,7289
220	o —	7	8	5 15,73	1,943	,8490	,88692	,2885	,7290
221	Horologu	8	4	5 25,76	1,629	+8,9158	+8,9372	+0,2119	-8,8348
222	Fornacis	7	5	5 48,50	2,266	,7752	,7977	,3663	,6798
223	—	7	3	6 1,99	2,469	,7317	,7549	,3925	,4525
224	Horologu	6 7	5	6 40,01	1,487	,9408	,9666	,1723	,8711
225	Fornacis	6	5	6 57,75	2,496	,7238	,7508	,3972	,4281

No	Declination (South) Jan 1 1840	Annual Precession	Logarithms of				Difference from the Brisbane Catalogue			
			a	b'	c	d'	No	Right Ascension from M C	T	Declin
181	59 17	15,163	+9,943	-9,8085	+1,1808	-9,8155	419	—	—	"
182	42 2 51,08	14,963	,8854	,6989	,1750	,8230	428	- 3,00	- 3,57	+ 2,56
183	57 51 7,20	14,960	,8998	,8006	,1749	,8231	429	+ 4,60	—	- 0,91
184	34 10 40,66	14,862	,8669	,6196	,1721	,8266	431	- 2,52	—	+ 5,26
185	39 18 1,49	14,792	,8825	,6696	,1700	,8291	436	- 2,14	—	+ 2,01
186	25 36 52,77	14,756	+9,8344	-9,5026	+1,1690	-9,8304	437	- 2,60	—	+ 3,83
187	36 1 31,94	14,744	,8745	,6359	,1686	,8308	438	- 2,15	- 1,29	+ 5,46
188	36 56 37,39	14,740	,8774	,6454	,1686	,8309	440	- 4,05	—	+ 2,20
189	37 4 44,99	14,716	,8779	,6460	,1678	,8317	441	- 1,83	—	+ 2,11
190	33 47 41,35	14,655	,8692	,6095	,1663	,8336	445	- 2,91	—	- 7,93
191	29 32 48,60	14,626	+9,8525	-9,5560	+1,1651	-9,8349	442	—	—	- 5,35
192	38 38 3,33	14,629	,8842	,6586	,1652	,8347	448	- 2,62	—	+ 3,47
193	55 39 31,73	14,593	,9090	,7789	,1641	,8369	452	- 0,63	—	- 6,13
194	42 30 40,94	14,517	,8954	,6596	,1619	,8385	455	- 3,27	—	- 2,34
195	33 44 46,03	14,501	,8710	,6040	,1614	,8391	456	- 2,91	—	+ 2,11
196	54 32 49,41	14,481	+9,9112	-9,7697	+1,1608	-9,8397	458	- 1,47	—	- 1,38
197	41 59 10,88	14,465	,8949	,6836	,1603	,8402	459	- 2,64	—	+ 1,42
198	60 27 18,91	14,393	,9127	,7956	,1681	,8425	464	- 0,28	- 3,57	+ 0,62
199	48 11 26,09	14,380	,9079	,7281	,1577	,8129	463	- 2,18	—	- 0,86
200	39 47 57,07	14,290	,8932	,6502	,1550	,8458	468	- 1,72	—	- 1,64
201	52 2 21,03	14,208	-9,9138	-0,7501	+1,1553	-9,8455	467	- 0,92	—	- 5,56
202	51 57	—	,9154	,7473	,1530	,8478	470	—	—	—
203	61 26 30,06	14,208	,9164	,7942	,1525	,8483	472	+ 0,27	—	- 1,18
204	51 66 58,49	14,196	,9154	,7464	,1522	,8487	473	- 2,01	—	+ 1,16
205	37 57 41,47	14,183	,8899	,6387	,1518	,8491	474	—	- 1,15	+ 1,74
206	60 21 40,65	14,176	+9,9185	-9,7887	+1,1515	-9,8494	476	- 2,06	- 2,40	- 3,24
207	30 36 25,43	14,163	,8651	,6558	,1511	,8497	475	- 2,85	—	- 2,21
208	61 27 58,51	14,150	,9186	,7925	,1508	,8501	477	+ 0,68	—	+ 4,70
209	61 40 13,97	14,130	,9196	,7928	,1501	,8507	478	+ 0,45	—	+ 10,39
210	39 54 48,80	14,042	,8971	,6527	,1474	,8534	480	- 2,54	—	- 2,38
211	36 2 33,87	14,013	+9,8876	-9,6142	+1,1465	-9,8542	481	- 1,84	- 3,30	- 1,67
212	41 57 9,86	13,997	,9036	,6692	,1460	,8547	484	- 3,01	—	+ 5,04
213	31 52 0,79	13,980	,8727	,5600	,1455	,8562	486	- 2,50	—	+ 1,39
214	51 4	—	,9185	,7354	,1466	,8542	483	—	—	—
215	49 36 29,56	13,877	,9185	,7227	,1423	,8573	488	- 6,98	—	- 2,25
216	49 34 28,17	13,905	+9,9185	-9,7222	+1,1432	-9,8574	489	- 3,53	—	*
217	39 39 40,68	13,876	,9004	,6451	,1422	,8583	490	- 2,77	—	- 3,32
218	61 45 46,20	13,876	,9248	,7852	,1422	,8583	491	- 0,04	—	+ 2,20
219	49 20	13,842	,9196	,7191	,1412	,8592	494	—	—	—
220	49 20 26,98	13,837	,9201	,7191	,1411	,8594	495	- 2,66	- 3,39	- 2,38
221	56 5 45,76	13,817	+9,9258	-9,7675	+1,1404	-9,8600	496	+ 7,52	—	- 4,29
222	39 37 39,09	13,799	,9015	,6426	,1399	,8604	497	- 2,76	—	- 2,94
223	31 43 58,60	13,787	,8761	,5583	,1395	,8608	498	- 2,37	—	+ 1,04
224	58 24 53,72	13,744	,9284	,7666	,1381	,8620	503	—	—	+ 3,90
225	30 24 19,34	13,723	,8704	,5397	,1376	,8626	502	—	—	+ 5,38

Mean A R and Declination of Stars

No	Names	Mag	No Obs	Right Ascen Jan 1, 1840	Annual Precess	Logarithms of			
						a	b	c	d
226	Reticuli	9	3	II 3 7 2,20	+1,162	+9,0014	+9,0285	+0,0652	-8,9510
227	Horologii	7 8	3	7 4,11	2,021	8,8261	8,8634	,3056	,0907
228	Eridani	7	3	7 2,06	2,191	8,7873	8,8159	,3406	,6126
229	—	7	4	7 47,91	2,256	8,7698	8,7997	,3653	,5725
230	Horologii	6 7	3	8 30,60	1,507	8,9310	8,9637	,1781	,8590
231	Fornacis	8	3	9 5,51	2,412	+8,7352	+8,7704	+0,3824	-8,4799
232	Eridani	7	2	9 23,02	2,254	,7677	,8038	,3529	,6719
233	—	8	5	9 25,95	2,188	,7822	,8184	,3400	,6062
234	Fornacis	7	3	9 35,84	2,168	,7282	,7696	,3928	,4400
235	Eridani	6 7	3	9 41,83	2,039	,8142	,8514	,3094	,6730
236	Eridani	7 8	3	9 57,28	2,121	+8,7954	+8,8339	+0,3265	-8,6361
237	—	8	3	10 55,00	2,182	,7793	,8213	,3388	,6036
238	Horologii	7 8	3	11 15,24	1,347	,9531	,9959	,1294	,8910
239	Eridani	7 8	5	12 7,86	2,264	,7676	,8051	,3549	,6659
240	Horologii	6	3	12 14,01	1,951	,8259	,8727	,2903	,6991
241	Fornacis	7 8	3	12 23,91	2,355	+8,7389	+8,7865	+0,3716	-8,5063
242	Eridani	7 8	4	12 32,70	2,266	,7567	,8048	,3553	,6543
243	—	6 7	3	12 36,67	2,610	,6896	,7377	,4166	,3104
244	Fornacis	6	3	13 0,62	2,354	,7367	,7866	,3718	,6014
245	Eridani	7 8	3	13 49,63	2,130	,7818	,8353	,3284	,6167
246	Fornacis	7	4	13 53,76	2,562	+8,6942	+8,7482	+0,4086	-8,3492
247	—	6 7	3	13 55,56	2,556	,6957	,7493	,4074	,3662
248	Eridani	5 6	2	14 24,45	2,617	,6840	,7392	,4178	,2967
249	Fornacis	5 6	3	15 23,93	2,574	,7889	,7477	,4106	,3811
250	Horologii	7	3	16 23,27	1,039	,8156	,8785	,2876	,6878
251	Eridani	7 8	2	16 41,65	2,248	+8,7487	+8,8126	+0,3518	-8,5477
252	—	7 8	4	17 9,78	2,162	,7656	,8313	,3349	,5895
253	Fornacis	6	3	17 19,40	2,403	,7154	,7818	,3807	,4546
254	Eridani	7	4	18 21,30	2,159	,7629	,8332	,3342	,5865
255	—	7	3	18 35,30	2,470	,6990	,7704	,3927	,4032
256	Eridani	8	3	19 33,72	2,244	+8,7414	+8,8163	+0,3510	-8,5390
257	Fornacis	6	3	19 37,73	2,627	,6860	,7614	,4026	,3657
258	—	7	2	19 48,42	2,311	,7268	,8030	,3638	,5012
259	Horologii	6 7	2	19 51,50	1,776	,8391	,9150	,2494	,7333
260	Eridani	8	5	20 45,07	2,172	,7628	,8326	,3369	,5708
261	Fornacis	6 7	3	22 35,14	2,866	+8,7082	+8,7949	+0,3740	-8,4580
262	Eridani	8	3	24 54,55	2,173	,7402	,8360	,3371	,5541
263	Fornacis	7 8	3	25 6,09	2,362	,7016	,7982	,3703	,4501
264	Horologii	6 7	3	25 29,38	1,912	,7927	,8905	,2815	,6630
265	—	6	3	27 49,21	1,773	,8136	,9205	,2487	,7035
266	Eridani	8	6	27 52,01	2,228	+8,7199	+8,8274	+0,3479	-8,5147
267	Fornacis	6	3	28 8,79	2,399	,6801	,7943	,3800	,4151
268	—	6	6	30 35,57	2,343	,6895	,8074	,3698	,4404
269	—	6 7	3	30 37,32	2,446	,6705	,7884	,3885	,3741
270	Eridani	6 7	3	31 0,60	2,272	,7019	,8216	,3564	,4793

in the Southern Hemisphere, &c &c

xii

No	Declination (South) Jan 1 1840	Annual Precession	Logarithms of				Difference from the Brisbane Catalogue			
			a'	b	c'	d'	No	M	C	T
226	62 57 27,30	+18,723	+9,9279	-9,7852	+1,1375	-9,8626	506	+ 3,01	—	- 1,89
227	47 5 24,83	13,719	,9186	,7000	,1373	,8627	505	- 2,29	—	- 2,92
228	41 58 49,46	13,698	,9085	,6600	,1366	,8633	507	- 2,64	—	- 3,50
229	39 24 25,80	13,677	,9025	,6365	,1360	,8639	508	- 3,88	- 3,38	+ 0,02
230	57 55 16,78	13,629	,9304	,7605	,1345	,8668	511	+ 0,35	- 1,65	+ 6,91
231	33 46 7,62	13,585	+9,8870	-9,5759	+1,1331	-9,8663	512	- 2,25	—	+ 8,52
232	39 36 49,84	13,570	,9047	,6149	,1326	,8668	513	- 1,46	—	- 0,64
233	41 49 33,61	13,570	,9101	,6546	,1326	,8668	514	- 2,60	—	+ 5,35
234	31 26 17,45	13,565	,8768	,5474	,1324	,8669	515	—	—	- 0,75
235	46 15 56,15	13,563	,9201	,6889	,1320	,8673	516	- 1,82	—	+ 5,39
236	43 53 44,39	13,531	+9,9159	-9,6701	+1,1313	-9,8679	517	+ 2,84	—	- 0,43
237	41 51 39,28	13,471	,9122	,6037	,1294	,8695	519	+ 0,24	—	+ 1,47
238	60 6 26,66	13,458	,9335	,7649	,1290	,8698	521	- 2,45	- 2,81	+ 0,03
239	38 57 54,03	13,376	,9063	,6'28	,1263	,8720	522	+13,82	—	+ 7,28
240	48 20 25,96	13,388	,9258	,6981	,1207	,8716	523	- 1,98	- 0,94	+ 0,77
241	35 45 12,19	13,376	+9,8960	-9,5908	+1,1263	-9,8720	524	- 3,49	—	+ 0,20
242	38 53 18,30	13,367	,9058	,6217	,1260	,8722	527	- 2,50	—	+ 7,46
243	21 42 24,84	13,369	,8488	,4449	,1260	,8722	526	—	—	- 0,66
244	35 35 14,06	13,336	,8960	,6878	,1250	,8730	528	- 3,19	—	+ 2,34
245	43 9 13,93	13,275	,9185	,6560	,1230	,8740	533	+ 3,51	—	+ 2,35
246	26 52 27,60	13,271	+9,8603	-9,4758	+1,1229	-9,8746	531	—	—	+ 4,46
247	27 11 17,70	13,271	,8621	,4805	,1229	,8746	532	—	—	+ 2,23
248	24 12 45,42	13,245	,8482	,4,28	,1220	,8753	534	—	—	+ 4,48
249	26 9 48 64	13,183	,8585	,4623	,1200	,8769	538	—	—	+ 4,27
250	48 21 2,35	13,113	,9301	,6880	,1177	,8787	539	—	+ 0,64	- 9 48,00
251	39 1 56,66	13,095	+9,0101	-9,6142	+1,1171	-9,8701	541	- 2,70	—	+ 1,20
252	41 50 9,13	13,065	,9185	,6380	,1161	,8798	542	- 2,83	—	*
253	33 16 39,22	13,051	,8921	,5529	,1156	,8802	543	- 2,36	- 1,89	+ 2,31
254	41 47 55,58	12,986	,9196	,6352	,1134	,8818	544	- 2,50	—	- 2,38
255	30 24 39,19	12,966	,8808	,6151	,1128	,8822	545	- 2,66	- 3,09	- 3,31
256	38 51 39,62	12,904	+9,0127	-9,6064	+1,1107	-9,8837	547	- 3,37	—	+ 4,88
257	27 62 58 02	12,896	,8704	,4782	,1104	,8839	548	- 2,11	- 2,83	- 5,69
258	36 31 20,26	12,882	,9058	,5825	,1100	,8842	550	—	—	- 0,19
259	51 37 43,80	12,887	,9390	,7025	,1101	,8841	551	- 1,89	- 1,69	+ 0,00
260	41 7 55,70	12,819	,9201	,6289	,1078	,8857	553	- 1,17	—	+ 0,94
261	34 12 37,46	12,698	+9,5098	-9,5516	+1,1037	-9,8685	558	- 3,20	—	- 2,22
262	40 39 45,19	12,539	,9'27	,6102	,0933	,8921	562	- 2,53	—	+ 0,17
263	34 5 40,17	12,527	,9009	,6444	,0978	,8924	563	- 3,13	—	+ 9 58,08
264	47 55 23,02	12,503	,9400	,6656	,0970	,8929	565	- 2,50	- 4,28	+ 4,72
265	50 55 27,37	12,343	,9469	,6794	,0914	,8934	567	- 2,18	- 3,05	+ 0,24
266	38 31 24,35	12,333	+9,9191	-9,5840	+1,0911	-9,8966	568	+ 3,61	—	+ 7,21
267	32 24 48,52	12,320	,8971	,6177	,0906	,8969	569	- 2,61	—	- 3,57
268	34 18 13,06	12,149	,9063	,6335	,0815	,9005	574	- 3,38	—	+ 2,40
269	30 21 3,56	12,149	,8904	,4862	,0845	,9006	576	- 1,99	- 3,19	- 1,60
270	36 49 20,50	12,117	,9164	,5549	,0934	,9012	576	- 0,90	—	- 3,90

Mean A R and Declination of Stars

No	Names	Mag	No Obs	Right Ascen Jan 1, 1840	Annual Precessn	Logarithms of			
						a	b	c	d
271	Reticuli	8	6	3 31 3,52	+ 2,340	+ 8,6888	+ 8,8085	+ 0,3692	- 8,4406
272	—	9	1	32 49,69	2,385	,6848	8,8116	,3679	,4377
273	—	7	3	34 29,74	2,385	,6700	8,8034	,3775	,3988
274	—	—	—	34	1,169	,9028	9,0371	,0678	,8422
275	—	7 8	2	34 59,23	1,179	,9003	9,0353	,0716	,8391
276	Horologii	6 7	3	35 27,20	1,613	+ 8,8182	+ 8,9564	+ 0,2076	- 8,7229
277	—	7	3	37 1,97	1,927	,7619	,8952	,2849	,6121
278	Eridani	6	3	38 26,74	2,119	,7095	,8686	,3261	,5277
279	—	7	3	38 57,82	2 175	,6984	,8475	,3378	,4982
280	Fornaxis	7 8	4	39 27,92	2,359	,6598	,8130	,3727	,3955
281	Horologii	6 7	6	39 56,91	1,828	+ 8,7615	+ 8,9165	+ 0,2020	- 8,6363
282	Eridani	7	5	40 2,04	2,178	,6925	,8476	,3381	,4925
283	Horologii	6 7	3	40 13,64	1 603	,8227	,9788	,1770	,7359
284	—	6	3	40 18,01	1,858	,7548	,9109	,2690	,6249
285	π —	6	3	40 29,71	1,616	,8199	,9769	,1807	,7321
286	Horologii	—	—	40	1,817	+ 8,7615	+ 8,9193	+ 0,2693	- 8,6378
287	Fornaxis	7 8	3	43 56,82	2,338	,6506	,8219	,3679	,3934
288	Eridani	7	4	44 24,92	2,026	,7073	,8804	,3066	,5427
289	Horologii	7	3	46 48,80	1,845	,7264	,9094	,2753	,6879
290	—	6 7	3	47 41,15	2,469	,6150	,8019	,3925	,2885
291	Eridani	6 7	3	47 54,99	2,070	+ 8,6868	+ 8,8743	+ 0,3160	- 8,5096
292	Horologii	6	3	48 36,25	1 849	,7271	,9174	,2669	,5937
293	—	6	3	49 38,67	1,866	,7201	,9148	,2709	,5892
294	—	6	3	50 22,27	1,661	,7728	,9720	,1942	,6794
295	—	7	5	51 18,43	1,802	,7262	,9279	,2557	,5988
296	Doradus	6 7	3	53 40,57	1,709	+ 8,7354	+ 8,9467	+ 0,2327	- 8,6200
297	α Fornaxis	5 6	3	54 17,94	2,385	,6072	8,8218	,3775	,3182
298	Reticuli	9	3	54 25,68	1,207	,8070	9,0216	,1129	,7316
299	Eridani	8	5	54 42,84	2,131	,6512	8,8675	,3286	,4556
300	Reticuli	9	4	54 59,18	1,287	,8063	9,0255	,1096	,7314
301	Reticuli	6	3	55 18,26	1,968	+ 8,8074	+ 9,0269	+ 0,1031	- 8,7337
302	Horologii	7 8	2	55 58,55	1,927	,6852	8,9067	,02849	,6338
303	Reticuli	6 7	3	56 6,78	1,409	,7982	9,0200	,01169	,7214
304	—	5 6	3	56 14,34	0 928	,8611	9 0832	,99675	,8064
305	Horologii	7	5	56 50,49	2,144	,6410	8,8665	,03312	,4381
306	Doradus	7 8	3	57 0,46	1,442	+ 8,7713	+ 8,9971	+ 0,1590	- 8,6834
307	—	7	3	57 8,54	1,437	,7716	,9979	,1575	,6840
308	—	7 8	3	57 12,09	1,487	,7713	,9980	,1575	,6838
309	—	7	2	57 31,18	1,650	,7313	,9594	,2175	,6215
310	Horologii	7	3	57 39,68	1,928	,6787	,9074	,2651	,5262
311	Horologii	7	1	57 50,88	1,924	+ 8,6787	+ 8,9083	+ 0,2542	- 8,5268
312	—	7	4	58 39,48	1,908	,6788	8,9118	,02806	,5290
313	Reticuli	6 7	3	58 43,99	0,942	,8486	9,0816	,99740	,7936
314	Horologii	7 8	3	59 42,03	1,908	,6748	8,9125	,02806	,5251
315	Reticuli	7 8	5	59 51,36	0,911	,8489	9,0868	,9,9695	,7940

No	Declination (South) Jan 1 1840	Annual Precession	Logarithms of				Difference from the Brisbane Catalogue			
			a'	b'	c'	d'	No	Right Ascension from M C	T	Decln
271	34 23 22,20	+12 119	+0,9074	-9,5333	+1,0854	-9,9012	577	- 0,30	—	+12,59
272	34 29 23,83	11,991	,9096	,5339	,0789	,9038	581	- 0,62	—	+20,00
273	32 23 12,39	11,873	,9015	,5015	,0746	,9061	584	- 5,84	—	- 2,39
274	60 28	11,860	,9614	,7116	,0741	,9064	585	—	—	—
275	60 18 3,82	11,846	,9611	,7104	,0736	,9067	586	- 3,08	- 3,99	+ 0,13
276	53 2 47,04	11,789	+9,9581	-9,6743	+1,0715	-9,9078	588	—	0,26	+ 0,26
277	46 28 14,05	11,699	,9489	,6264	,0692	,9095	592	- 2,52	- 2,67	- 1,62
278	41 9 46,89	11,697	,9356	,5806	,0643	,9115	594	—	—	- 4,20
279	39 19 33,14	11,560	,9309	,5628	,0629	,9122	595	—	—	- 3,98
280	32 58 58,46	11,523	,9079	,4954	,0616	,9128	596	- 3,07	—	+10,79
281	48 33 36,52	11,400	+9,9547	-9,6332	+1,0603	-9,9134	600	—	1,39	+ 7,34
282	39 5 3,16	11,490	,9609	,6584	,0603	,9134	599	-10,71	—	- 4,75
283	54 59 17,76	11,472	,9643	,6709	,0596	,9138	605	+29,39	—	- 2,65
284	47 51 37,25	11,472	,9538	,6277	,0596	,9138	601	—	3,88	+ 0,20
285	51 46 51,65	11,457	,9608	,6693	,0591	,9141	602	—	2,74	- 1,49
286	48 46	11,443	+9,9557	-9,6328	+1,0585	-9,9143	604	—	—	—
287	33 36 4,12	11,202	,9138	,4902	,0493	,9187	613	- 2,80	—	+10,73
288	43 12 52,69	11,168	,9464	,5815	,0480	,9192	615	—	2,89	+ 7,89
289	16 38 37,76	10,993	,9571	,6007	,0413	,922,	619	—	1,12	+ 2,79
290	28 8 48,21	10,926	,8910	,4100	,0384	,9234	621	- 1,55	- 2,45	- 3,48
291	41 42 6,02	10,915	+9,9614	-9,6093	+1,0380	-9,9206	622	—	—	+ 2,73
292	47 22 0,33	10,867	,9600	,6007	,0361	,9244	624	- 2,32	- 2,52	+ 0,47
293	46 53 16,38	10,787	,9600	,6942	,0329	,9207	627	- 2,54	- 1,29	- 0,92
294	53 9 29,10	10,767	,9708	,63 4	,0321	,9260	628	—	—	+ 0,37
295	48 14 0,60	10,666	,9638	,5986	,0279	,9277	631	—	1,22	+ 9,80
296	50 4 15,97	10,496	+9,9694	-9,6037	+1,0210	-9,9304	633	- 1,87	- 2,17	+ 0,44
297	30 56 41,85	10,487	,9095	,4267	,0186	,9310	635	—	2,05	- 0,67
298	57 13 33,34	10,437	,9791	,6413	,0186	,9313	636	- 2,14	—	- 5,64
299	39 23 42,97	10,407	,9430	,5178	,0173	,9318	637	- 1,75	—	- 6,63
300	57 20 15,69	10,392	,9800	,6399	,0167	,9320	638	- 0,20	—	-18,69
301	57 33 24,37	10,352	+9,9800	-9,6394	+1,0150	-9,9326	639	- 1,83	—	+ 4,75
302	44 53 56,46	10,317	,9605	,5602	,0135	,9331	640	- 2,08	—	- 0,50
303	56 55 40,63	10,312	,9800	,6346	,0133	,9332	641	- 2,19	—	- 4,23
304	61 51 12,91	10,307	,9927	,6565	,0131	,9333	642	- 3,49	- 2,14	+ 2,40
305	38 49 55,20	10,247	,9430	,5058	,0106	,9342	643	- 1,21	—	+ 5,84
306	54 46 27,36	10,242	+9,9786	-9,6206	+1,0104	-9,9343	644	- 4,49	—	- 2,17
307	54 50 31,68	10,232	,9791	,6205	,0099	,9344	645	- 2,66	—	+ 2,62
308	54 51 20,76	10,227	,9791	,6203	,0097	,9345	646	- 0,61	—	- 4,36
309	50 57 21,85	10,206	,9736	,5969	,0087	,9349	647	—	0,74	+ 3,44
310	44 44 37,01	10,192	,9609	,5538	,0082	,9350	648	- 2,86	—	+ 3,74
311	44 49 59,40	10,176	+9,9614	-9,5538	+1,0076	-9,9863	650	- 2,32	—	- 5,52
312	45 10 32,86	10,117	,9628	,5538	,0050	,9361	652	- 2,17	—	- 3,97
313	61 31 40,53	10,117	,9854	,6471	,0050	,9361	654	- 2,25	- 2,85	+ 4,13
314	40 6 25,40	10,036	,9617	,5499	,0015	,9373	655	- 2,72	—	+ 1,86
315	61 48 0,82	10,031	,9859	,6446	,0013	,9374	656	- 4,21	—	+10,99

Mean A R and Declination of Stars

No	Names	Mag	No Obs	Right Ascen Jan 1, 1840	Annual Procesn	Logarithms of			
						α	b	c	d
316	Horologii	8	6	H 4 1 9,87	+1,994	+8,6530	+8,8972	+0,2997	-8,4861
317	Reticuli	8	3	I 1 1 '00	1,104	,8095	9,0566	,0430	,7443
318	Horologii	6 7	3	2 9,0	1,970	,6536	8,9021	,2945	,4901
319	—	6 7	5	2 21,03	1,678	,7071	8,9565	,2218	,6916
320	—	7	4	2 55,83	1,970	,6504	8,9026	,2945	,4864
321	Reticuli	8	3	3 26,25	1,022	+8,8163	+9,0702	+0,0094	-8,7551
322	Horologii	6 7	3	3 37,31	1,847	,6711	8,9268	,9665	,5301
323	—	7 8	5	4 42,65	2,001	,6877	8,8979	,3012	,4660
324	Eridani	6 7	3	1 49,20	2,227	,6966	8,8570	,3477	,625
325	Cæli Sculp	7	5	5 0,92	2,062	,6271	8,8888	,3122	,4430
326	Eridani	7	2	7 12,83	2,374	+8,5605	+8,8345	+0,3755	-8,2600
327	Cæli Sculp	6	3	8 6,92	2,061	,6151	8,8907	,3120	,4290
328	—	6 7	3	8 10,33	2,105	,5944	8,8702	,3355	,3780
329	Horologii	7	3	9 16,12	1,820	,6530	8,9335	,2601	,5137
330	Doradus	7	2	10 36,63	1,138	,7670	9,0533	,0561	,6974
331	Horologii	7	3	10 53,09	2,097	+8,5955	+8,8840	+0,3216	-8,3969
332	Cæli Sculp	8	3	11 38,65	2,096	,5926	8,8845	,0314	,3937
333	γ Doradus	5	3	11 50,64	1,051	,6907	8,9843	,0,1906	,5866
334	Reticuli	7	5	13 57,30	0,882	,7932	9,0945	,9,9466	,7,064
335	Doradus	7 8	5	14 16,83	1,463	,6953	8,9995	,0,1652	,6993
336	Cæli Sculp	7	3	14 29,22	1,977	+8,6021	+8,9075	+0,2960	-8,4304
337	Doradus	7 8	3	14 43,05	1,462	,6936	8,9999	,1649	,5075
338	—	6 7	3	14 43,67	1,465	,6933	8,9993	,1658	,5909
339	—	8	2	15 6,94	1,459	,6926	9,0006	,1641	,5967
340	Cæli Sculp	6 7	3	18 45,91	2,039	,5729	8,8987	,3094	,3849
341	Cæli Sculp	7	3	19 28,49	1,884	+8,6974	+8,9267	+0,2701	-8,4421
342	Horologii	7	3	19 32,30	1,770	,6174	8,9471	,2480	,4815
343	Cæli Sculp	7	5	19 32,41	2,183	,6415	8,8755	,3891	,3111
344	—	7	3	20 47,48	2,088	,6551	8,8911	,3197	,8534
345	Horologii	7	3	20 50,29	1,846	,6973	8,9342	,2662	,4482
346	Doradus	7	3	21 5,59	1,170	+8,7138	+9,0510	+0,0685	-8,6394
347	○ Cæli Sculp	6 7	3	21 14,28	2,017	,5658	8,9038	,3047	,3818
348	Eridani	8	1	22 16,45	2,360	,6026	8,8462	,3729	,2029
349	Cæli Sculp	6	3	22 24,03	1,750	,6079	8,9519	,2430	,4741
350	—	7	2	22 47,42	2,118	,6412	8,8868	,3269	,3000
351	Reticuli	6 7	3	22 53,36	0,817	+8,7602	+9,1062	+9,9122	-8,7045
352	Cæli Sculp	6 7	3	22 55,41	1,958	,6883	8,9149	,0,2918	,3064
353	—	7	3	23 44,84	2,070	,6434	8,8941	,0,3178	,3424
354	Cæli Sculp	7	3	24 36,46	1,763	,6956	8,9505	,0,2402	,4107
355	—	7	3	25 10,49	2,139	,6261	8,8846	,0,3302	,3080
356	Cæli Sculp	7	3	27 8,24	2,175	+8,6113	+8,8796	+0,3275	-8,2808
357	—	7	3	27 26,72	2,087	,6217	8,8948	,0,3195	,3200
358	Doradus	7	3	28 53,43	0,926	,7142	9,0910	,9,9606	,6622
359	α —	5 6	3	30 32,90	1,279	,6494	9,0304	,0,1069	,5647
360	Cæli Sculp.	7	5	30 49,01	2,097	,6067	8,8945	,0,3216	,2974

No	Declination (South) Jan 1 1840	Annual Precession	Logarithms of				Difference from the Brisbane Catalogue			
			a	b	c'	d'	No	Right Ascension from M C	T	Declin
316	o 42 47 49,67	+9,924	+9,9581	-9,5268	+0,9967	-9,0389	657	- 3,78	s	+ 8,43
317	59 23 31,74	9,873	,9868	,6274	,9945	,9396	658	- 2,22	—	+ 2,30
318	43 20 45,23	9,818	,9609	,5279	,9934	,9400	659	- 1,70	- 1,02	- 0,43
319	50 3 37,55	9,833	,9763	,5753	,9927	,9402	661	- 1,92	—	- 6,37
320	43 16 50,85	9,787	,9614	,5247	,9907	,9408	662	- 2,10	—	1 2,22
321	60 18 24,01	9,757	+9,9886	-9,6262	+0,9893	-9,0113	664	—	- 0,02	+ 2,14
322	46 17 24,73	9,742	,9694	,5457	,9886	,9415	663	- 3,57	—	+ 1,63
323	42 20 18,90	9,650	,9595	,5109	,9845	,9427	665	- 1,21	—	+ 6,62
324	35 41 30,21	9,644	,9360	,4183	,9843	,9428	666	—	- 2,71	+ 2,53
325	40 57 17,01	9,624	,9557	,4978	,9844	,9431	667	- 0,86	—	- 12,16
326	30 31 19,35	9,450	+9,9143	-9,3774	+0,9738	-9,0459	670	—	—	- 4,82
327	40 46 1,36	9,388	,9571	,4854	,9726	,9462	672	- 2,36	—	+ 2,78
328	37 26 14,16	9,383	,9465	,4040	,9723	,9463	673	- 1,87	—	- 1,98
329	46 31 59,93	9,305	,9736	,5275	,9687	,9473	675	- 1,53	—	- 0,18
330	58 25 39,34	9,207	,9926	,6926	,9641	,9485	677	- 2,93	—	+ 1,40
331	39 16 43,85	9,171	+9,9537	-9,4619	+0,9624	-9,0489	678	- 1,51	—	+ 0,53
332	39 14 23,39	9,114	,9538	,4588	,9597	,9497	680	- 1,46	—	- 0,23
333	51 53 32,62	9,101	,9863	,5531	,9592	,9498	682	- 2,71	- 3,19	+ 1,11
334	61 20 31,90	8,958	,9965	,5935	,9522	,9516	686	- 13,26	—	+ 7,64
335	53 17 38,70	8,911	,9899	,5520	,9499	,9522	688	- 0,13	—	- 4,61
336	42 20 33,19	8,890	+9,9657	-9,4753	+0,9489	-9,0524	689	- 0,46	—	+ 1,19
337	53 17 43,09	8,874	,9908	,5602	,9481	,9526	692	+ 2,31	—	- 3,66
338	53 15 4,61	8,880	,9903	,5601	,9184	,9525	691	—	- 3,34	+ 0,10
339	53 19 50,79	8,818	,9908	,5491	,9469	,9529	693	- 1,80	—	- 0,47
340	40 20 30,36	8,560	,9624	,4425	,9324	,9563	700	- 1,77	—	- 3,06
341	44 23 24,71	8,501	+9,9745	-9,4723	+0,9295	-9,0569	703	+ 0,30	—	+ 4,50
342	47 0 50,51	8,494	,9814	,4914	,9291	,9570	704	- 2,72	- 3,00	- 0,91
343	36 2 22,73	8,459	,9474	,3950	,9273	,9594	705	+ 27,04	—	- 0,63
344	38 57 0,13	8,396	,9686	,4204	,9240	,9581	709	- 1,16	—	- 1,97
345	45 13 10,76	8,380	,9777	,4723	,9232	,9583	710	—	—	- 3,76
346	57 26 7,39	8,375	+9,9996	-9,5467	+0,9230	-9,0583	713	—	—	+ 3,36
347	40 53 34,34	8,364	,9657	,4364	,9224	,9584	712	- 2,63	- 3,71	+ 0,60
348	30 6 57,48	8,274	,9212	,3161	,9177	,9594	721	—	—	+ 0,63
349	47 17 42,55	8,268	,9836	,4820	,9174	,9595	714	- 2,14	—	- 1,97
350	37 57 45,31	8,242	,9552	,4030	,9160	,9598	716	- 2,68	—	+ 2,84
351	61 36 3,56	8,236	+0,0035	-9,5581	+0,9157	-9,0598	718	- 2,91	- 2,18	- 3,72
352	42 19 1,29	8,226	,99708	,4414	,9152	,9599	717	- 2,30	—	- 2,46
353	39 2 5,34	8,162	,9600	,4089	,9118	,9606	719	- 1,16	—	- 1,97
354	46 52 5,73	8,066	,9845	,4678	,9067	,9616	722	—	—	+ 1,92
355	37 13 24,37	8,045	,9642	,3852	,9056	,9618	724	- 3,22	—	+ 3,69
356	36 2 25,67	7,890	+9,9504	-9,0647	+0,9971	-9,0634	731	- 1,01	—	- 0,62
357	38 37 25,23	7,803	,99605	,3889	,8956	,9637	734	- 0,43	—	+ 1,59
358	60 6 28,97	7,761	0,0065	,5260	,8899	,9647	779	- 2,73	—	- 0,24
359	55 22 40,23	7,621	0,0056	,4954	,8820	,9661	714	- 2,25	- 2,32	- 0,37
360	38 8 58,68	7,594	,99605	,3693	,8805	,9663	745	- 1,09	—	- 4,99

No	Names	Mag	No Obs	Right Ascen Jan 1, 1840	Annual Piecesn	Logarithms of			
						a	b	c	d
361	Cæli Sculp	7	2	4 31 11,90	+2,171	+8,4923	+8,8822	+0,3367	-8,2608
362	Equ Pict	9	5	33 50,45	1,406	,6029	9,0067	,1632	,0016
363	^t Cæli Sculp	6 7	3	34 44,72	2,056	,4940	8,9034	,3130	,2940
364	Equ Pict	6	3	35 6 93	1,475	,5927	9,0010	,1688	,4891
365	— —	7	3	36 10,76	1,641	,5589	8,9758	,2151	,4355
366	Cæli Sculp	7 8	3	36 12,22	2,111	+8,4770	+8,8947	+0,3245	-8,2613
367	Equ Pict	6 7	3	37 24,01	1,073	,5461	8,9706	,2236	,1179
368	Eridani	6 7	3	37 49,41	2,407	,4221	8,8490	,3815	,0918
369	^x Equ Pict	5	3	38 40,71	1 502	,5636	8 9951	,1853	,4528
370	Cæli Sculp	7 8	3	38 41,71	2,152	,4600	8,8923	,3988	,2370
371	Equ Pict	6 7	5	39 25,58	1,643	+8,5406	+8,9761	+0,2156	-8,4160
372	— —	7	3	39 53,90	1,429	,5744	9,0120	,1530	,4741
373	Cæli Sculp	7	3	40 56,11	2,095	,4544	8,8995	,3212	,3411
374	— —	7	3	41 30,18	2,064	,4561	8,9050	,3147	,2611
375	— —	7	3	42 53,21	1,723	,5115	8,9635	,2363	,3716
376	Cæli Sculp	7	5	44 38,04	1,020	+8,4696	+8,9297	+0,2814	-8,2891
377	— —	6	3	44 36,57	0,928	,6267	9,0934	9,9675	,5616
378	— —	6 7	3	44 59,50	2,051	,4382	8,9081	0,3120	,2348
379	Doradus	8	3	45 26,04	0,712	,6032	9 1254	9,8525	,5982
380	^y Cæli Sculp	6 7	3	46 1,10	2,197	,4086	8,8850	0,3418	,1608
381	^e Equ Pict	6	5	47 21,14	1,338	+8,5458	+9,0297	+0,1265	-8,4522
382	^e — —	7	5	47 22,63	1,338	,5464	9,0297	,1265	,4519
383	— —	7	3	47 29,18	1,700	,4834	8,9690	,2304	,3483
384	— —	6 7	3	47 55,25	1,443	,5267	9,0124	,1593	,4231
385	Cæli Sculp	7	3	48 17,08	2,155	,4014	8,8926	,3384	,1671
386	Cæli Sculp	7	3	48 57,63	2,448	+8,3635	+8,8491	+0,3888	-7,9051
387	Equ Pict	8	3	49 9,96	1,278	,5445	9,0397	,1065	,4557
388	Cæli Sculp	7	3	49 11,49	2,024	,4181	8,9146	,3002	8,2202
389	— —	6 7	3	50 44,51	2,028	,4074	8,9146	,3071	8,2080
390	Equ Pict	7	3	51 45,29	1,266	,5299	9,0132	,1024	8,4406
391	Doradus	6 7	3	52 16,32	0,957	+8,5734	+9,0903	+0,9809	-8,5066
392	Equ Pict	7	3	53 18,94	1,250	,5209	9,0461	0,0969	,4334
393	Cæli Sculp	7	3	54 13,65	2,107	,3720	8,9027	0,3237	,1501
394	Doradus	6 7	3	54 27,75	0,991	,5539	9,0856	9,9961	,4838
395	— —	7	3	55 17,82	0,999	,6473	9,0846	0,0000	,4766
396	Equ Pict	7	3	55 19,49	1,566	+8,4573	+8,9955	+0,1920	-8,3395
397	Doradus	7	3	55 24,17	0,978	,5491	9,0878	9,9903	,4796
398	Cæli Sculp	7	3	56 18,69	2,093	,3699	8,9058	0,3208	,1414
399	^o —	5 6	3	56 19,91	2,265	,3327	8,8786	0,3661	,0669
400	Doradus	8	3	57 23,13	0,919	,5401	9,0923	9,9773	,4720
401	Cæli Sculp	7	3	57 50,03	1,916	+8,3790	+8,9356	+0,2824	-8,2032
402	Equ Pict	6 7	3	58 38,26	1,566	,4320	8,9946	0,1948	,3113
403	^y — —	7	3	58 50,42	1,636	,4362	8,9996	0,1864	,3200
404	Doradus	8	3	59 3,12	0,943	,5289	9,0931	9,9863	,4609
405	E Equ Pict	7	2	59 7,32	1,547	,4321	8,9978	0,1895	,3148

No	Declination (South) Jan 1 1840	Annual Precession	Logarithms of				Difference from the Brisbane Catalogue			
			<i>a</i>	<i>b'</i>	<i>c'</i>	<i>d</i>	Right Ascension from		Declin	
							No	M C		
	o' / "								"	
361	35 36 50,27	+ 7,561	+9,9518	-9,3452	+0,8786	-9,9666	746	- 3,23	—	- 0,74
362	52 22 27,95	7,556	0,0019	,4634	,8666	,9686	753	- 5,57	—	+ 8,15
363	39 7 11,52	7,274	9,9661	,3598	,8618	,9693	755	- 1,69	—	+ 0,27
364	51 59 19,92	7,247	0,0009	,4547	,8602	,9696	756	- 4,38	- 3,17	- 2,02
365	48 50 56,22	7,166	9,9952	,4800	,8553	,9703	761	- 3,68	—	+ 3,19
366	37 29 51,20	7,155	+9,5600	-9,3370	+0,8646	-9,9701	760	- 3,11	—	- 1,07
367	49 7 45,88	7,057	9,9043	,4185	,8486	,9713	766	- 1,38	—	+ 0,80
368	27 52 37,36	7,024	9,9159	,2144	,8466	,9716	769	- 2,77	—	+ 5,19
369	50 47 7,87	6,958	0,0004	,4293	,8426	,9721	772	- 2,06	- 2,56	- 2,66
370	36 45 9,64	6,947	9,9590	,3168	,8418	,9722	771	+ 0,12	—	- 3,19
371	48 38 12,33	6,898	+9,9961	-9,4122	+0,8387	-9,9726	774	- 2,96	—	+ 7,53
372	52 33 47,79	6,860	0,0043	,4312	,8363	,9729	777	- 2,15	—	+ 1,23
373	37 44 46,37	6,768	9,9638	,3153	,8306	,9737	780	- 3,56	—	+ 1,18
374	38 35 50,89	6,717	9,9671	,3199	,8272	,9741	782	- 1,30	—	- 1,08
375	46 52 53,62	6,673	9,9934	,3856	,8243	,9745	785	- 47,02	—	+ 3,78
376	42 7 57,21	6,470	+9,9809	-9,3356	+0,8109	-9,9761	796	—	- 2,90	- 8,66
377	59 25 13,84	6,475	0,0154	,4413	,8112	,9761	797	- 2,68	—	+ 3,41
378	38 50 26,14	6,420	9,9694	,3032	,8075	,9765	798	- 1,35	—	+ 0,96
379	61 45 19,74	6,403	0,0166	,4494	,8064	,9766	803	—	- 2,31	- 3,47
380	34 30 39,53	6,348	9,9613	,2538	,8026	,9770	806	—	- 2,97	+ 1,67
381	53 44 6,06	6,248	+0,0099	-9,4003	10,7958	-9,9778	810	- 1,89	- 1,90	+ 10,69
382	53 44 0,02	6,243	0,0099	,3909	,7954	,9778	811	- 1,79	—	+ 6,98
383	47 7 14,99	6,226	9,9965	,3573	,7942	,9780	812	- 2,26	- 2,51	+ 4,41
384	51 59 44,94	6,226	0,0069	,3887	,7912	,9780	815	- 2,86	- 2,92	+ 1,34
385	30 40 33,54	6,164	9,9581	,2530	,7892	,9785	816	- 1,42	—	+ 1,45
386	25 50 18,57	6,099	+9,9069	-9,1249	+0,7852	-9,9789	817	- 2,93	- 2,67	+ 1,97
387	54 36 26,10	6,104	0,0116	,3948	,7856	,9789	824	- 11,88	—	- 4,20
388	39 21 4,12	6,088	9,9727	,2846	,7844	,9790	823	—	- 3,11	- 4,34
389	39 11 40,74	5,954	9,9731	,2735	,7748	,9799	826	- 2,19	—	- 2,68
390	54 41 0,38	5,876	0,0133	,3788	,7691	,9805	830	- 2,26	—	- 2,91
391	58 48 25,59	5,831	+0,0183	-9,3960	+0,7658	-9,9808	833	- 2,62	- 2,65	- 3,51
392	54 51 43,49	5,742	0,0141	,3697	,7591	,9814	836	- 2,32	—	- 1,85
393	30 51 53,85	5,664	9,9647	,2293	,7531	,9819	840	- 2,09	—	+ 1,15
394	58 19 11,88	5,653	0,0187	,3802	,7523	,9820	842	- 5,86	—	+ 4,68
395	58 12 35,11	5,586	0,0191	,3745	,7471	,9824	845	- 3,84	—	- 1,22
396	49 41 55,52	5,574	+0,0056	-9,3265	+0,7462	-9,9825	843	- 2,42	—	- 1,22
397	58 26 58,86	5,560	0,0196	,3744	,7458	,9825	847	- 2,01	—	+ 3,66
398	37 12 36,60	5,485	9,9671	,2187	,7392	,9831	850	- 1,49	—	+ 0,45
399	32 0 24,76	5,485	9,9435	,1614	,7392	,9831	848	- 2,76	- 3,19	- 3,52
400	58 44 4,77	5,412	0,0204	,3633	,7333	,9806	866	- 5,08	—	- 5,52
401	41 50 15,50	5,361	+9,9845	-9,2514	+0,7293	-9,9839	857	- 3,10	—	- 0,03
402	49 22 58,34	5,294	0,0065	,3020	,7238	,9843	861	—	- 2,23	- 8,19
403	49 56 5,36	5,283	0,0073	,3048	,7228	,9841	863	- 3,16	—	- 3,18
404	58 44 50,94	5,271	0,0203	,3619	,7219	,9841	866	- 5,18	—	+ 2,91
405	49 43 9,42	5,260	0,0073	,3015	,7210	,9845	865	- 3,21	- 0,66	+ 4,66

Mean A.R. and Declination of Stars

No	Names	Mag	No Obs	Right Ascen Jan 1, 1840	Annual Placesn	Logarithms of			
						a	b	c	d
406	Equ. Pict	8	2	H 0 16,78	+1,638	+8,4245	+8,9995	+0,1870	-8,3077
407	Doradus	8	3	0 57,14	1,946	,5142	9,0963	,2891	8,4458
408	Equ. Pict	6	3	1 40,21	1,247	,4622	9,0470	,0959	8,3735
409	Cæli Sculp	6	3	2 33,12	2,130	,3092	8,9018	,3284	8,0775
410	— —	6	7	3 22,52	1,925	,8367	8,9357	,2844	8,1574
411	Equ. Pict	7	3	4 22,21	1,202	+8,4471	+9,0546	+0,0821	-8,3616
412	— —	7	7	5 1,32	1,565	,3835	8,9960	,1915	8,2625
413	Cæli Sculp	7	6	5 20,31	2,307	,2601	8,8758	,3630	7,9644
414	Equ. Pict	—	—	6 —	1,572	,3781	8,9949	,1964	8,2561
415	— —	8	5	7 53,49	1,557	,3618	8,9978	,1923	8,2412
416	Equ. Pict	7	8	9 10,03	1,615	+8,3414	+8,9885	+0,2082	-8,2131
417	— —	6	7	10 10,66	1,385	,3698	9,0264	,1414	8,2697
418	— —	6	7	10 21,72	1,152	,4054	9,0633	,0614	8,3227
419	Columbae	—	—	10 —	1,201	,3972	9,0556	,0795	8,3108
420	— —	7	5	10 26,21	2,230	,2232	8,8890	,3483	7,9558
421	Columbae	7	6	10 56,47	2,269	+8,2174	+8,8831	+0,3558	-7,9550
422	Equ. Pict	7	3	11 43,05	1,572	,3255	8,9961	,1964	8,2024
423	— —	7	3	11 58,03	1,373	,3554	9,0286	,1377	8,2541
424	— —	7	3	12 35,32	1,573	,3173	8,9960	,1967	8,1938
425	— —	7	8	12 42,97	1,523	,3238	9,0046	,1827	8,2066
426	Equ. Pict	7	4	14 18,77	1,516	+8,3102	+9,0057	+0,1807	-8,1934
427	— —	7	5	14 27,92	1,223	,3567	9,0527	,0874	8,2681
428	Cæli Sculp	6	7	15 21,38	1,971	,2249	8,9309	,2947	8,0322
429	Equ. Pict	6	6	15 26,90	1,462	,3081	9,0148	,1649	8,1973
430	— —	6	7	15 35,51	1,652	,2756	8,9836	,2180	8,1411
431	Equ. Pict	7	3	15 45,96	1,815	+8,2467	+8,9567	+0,2589	-8,0861
432	— —	7	8	16 3,41	1,377	,3165	9,0285	,1389	8,2142
433	Equ. Pict	7	3	16 45,64	1,777	,2430	8,9632	,2497	8,0889
434	Columbae	6	5	16 46,67	2,403	,1442	8,8658	,3807	7,7993
435	Equ. Pict	7	2	16 62,56	1,508	,2866	9,0075	,1784	8,1706
436	Equ. Pict	6	2	17 37,15	1,403	+8,2960	+9,0245	+0,1471	-8,1910
437	— —	7	8	18 9,00	1,487	,2706	9,0112	,01723	8,1566
438	Columbae	7	3	18 21,31	2,163	,1641	8,9011	,0351	7,9180
439	Doradus	7	8	18 21,76	1,089	,3376	9,0739	,0370	8,2683
440	— —	7	2	18 35,08	0,704	,3926	9,1303	,9,8476	8,3341
441	Equ. Pict	7	8	18 37,72	1,231	+8,3135	+9,0519	+0,0903	-8,2238
442	— —	7	8	19 21,89	1,527	,2577	9,0048	,01838	8,1390
443	Doradus	8	4	20 39,54	0,808	,3538	9,1157	9,9074	8,2904
444	Columbae	6	7	20 59,25	2,405	,1002	8,8667	,03811	7,7531
445	Equ. Pict	7	3	21 39,98	1,331	,2632	9,0365	,01242	8,1645
446	Columbae	6	7	21 53,91	2,227	+8,1157	+8,8921	+0,3477	-7,8465
447	Equ. Pict	6	7	22 25,67	1,750	,1875	8,9685	,02430	8,0370
448	Columbae	5	6	22 44,72	2,061	,1313	8,9179	,03141	7,9145
449	Equ. Pict	6	7	25 26,43	1,641	,1673	8,9868	,02161	8,0329
450	Doradus	7	3	26 45,30	0,730	,3051	9,1271	,9,8633	8,2449

No	Declination (South) Jan 1 1840	Annual Precession	Logarithms of				Difference from the Brisbane Catalogue			
			a	b'	c'	d'	No	M	C	T
406	49 50 11.07	+ 5,153	+0,0077	-9,2933	+0,7121	-9,9851	869	- 0,67	—	- 1,19
407	53 40 5.21	5,108	0,0220	,3379	,7083	,9854	873	- 3,69	—	+ 1,47
408	54 57 34,42	5,046	0,0170	,3123	,7029	,9858	874	- 2,54	—	+ 0,05
409	35 55 43,65	4,961	9,9638	,1620	,6956	,9863	876	- 2,26	—	- 1,73
410	41 26 5,46	4,894	9,9859	,2084	,6896	,9866	881	- 3,23	—	+ 7,04
411	55 12 2 02	4,801	+0,0191	-9,2940	+0,6815	-9,9871	885	- 2,37	—	- 2,06
412	49 10 57,80	4,752	0,0082	,2539	,6769	,9874	888	- 2,43	—	+ 3,08
413	30 25 31,40	4,718	9,9870	,0762	,6738	,9876	882	—	—	- 6,51
414	49 10	4,707	0,0077	,2488	,6727	,9877	890	—	—	—
415	49 16 7,73	4,514	0,0090	,2320	,6645	,9887	896	- 2,66	—	+ 6,20
416	48 3 48,08	4,406	+0,0069	-9,2139	+0,6440	-9,9892	902	- 3,50	—	+ 7,61
417	52 12 55,23	4,315	0,0162	,2309	,6550	,9897	906	- 2,88	—	+ 0,97
418	55 46 2,77	4,303	0,0216	,2492	,6838	,9897	908	- 2,42	—	- 1,17
419	55 2	4,298	0,0966	,2450	,6832	,9892	909	—	—	—
420	32 41 30,34	4,230	9,9504	,0070	,6263	,9901	910	—	—	+ 22,86
421	31 27 40,84	4,229	+9,9445	-9,0420	+0,6263	-9,9901	911	—	—	+ 12,62
422	48 51 48,57	4,184	0,0094	,1966	,6216	,9903	915	- 2,70	—	- 0,21
423	52 21 41,03	4,161	0,0170	,2160	,6192	,9904	916	- 3,38	—	+ 2,07
424	48 48 49,06	4,110	0,0094	,1885	,6138	,9907	918	- 2,94	—	+ 2,97
425	49 46 28,00	4,093	0,0111	,1929	,6120	,9908	917	- 27,38	—	+ 5,53
426	49 49 27,93	3,961	+0,0124	-9,1791	+0,5978	-9,9913	923	- 2,80	—	+ 27,32
427	54 38 38,38	3,956	0,0216	,2067	,5972	,9914	925	- 3,88	—	- 5,05
428	39 55 8,26	3,870	0,0836	,0931	,5877	,9917	928	- 2,10	—	+ 1,34
429	50 46 52,45	3,864	0,0145	,1743	,5870	,9918	930	- 2,36	—	- 3,08
430	47 12 42,67	3,853	0,0056	,1494	,5858	,9918	931	- 2,37	—	- 2,92
431	43 40 40,78	3,835	+9,9965	-9,1213	+0,5838	-9,9919	933	- 2,45	- 3,33	+ 70,30
432	52 12 9,84	3,818	0,0183	0,1777	,6819	,9920	934	- 4,43	—	- 5,01
433	44 31 56,11	3,760	9,9991	9,1180	,5740	,9923	937	- 2,09	- 2,84	- 0,50
434	26 51 36,89	3,748	9,9196	8,9258	,6726	,9923	936	+ 0,75	—	+ 10,41
435	49 56 52,78	3,744	0,0133	9,1552	,5733	,9923	938	- 2,74	—	+ 2,08
436	51 43 58,75	3,681	+0,0174	-9,1590	+0,5659	-9,9925	942	- 2,15	—	+ 2,71
437	50 10 53,61	3,653	0,0141	9,1383	,5643	,9929	944	- 2,00	—	+ 3,96
438	54 34 5,67	3,612	9,9614	9,0097	,5577	,9928	945	- 2,48	- 2,72	- 1,22
439	56 24 8,20	3,618	0,0249	9,1772	,5684	,9926	946	- 1,46	—	+ 6,60
440	60 56 15,64	3,606	0,0298	9,1967	,5671	,9928	949	- 4,20	- 3,49	+ 2,57
441	52 25 41,29	3,600	+0,0224	-9,1647	+0,5564	-9,9929	948	- 4,07	—	- 1,00
442	49 51 27,64	3,41	0,0128	9,1273	,6480	,9931	954	- 3,28	—	- 1,24
443	59 47 1,39	3,417	0,0290	0,1683	,6336	,9936	960	+ 0,31	—	- 0,51
444	26 43 16,23	3,382	9,9196	8,8801	,6292	,9947	959	- 2,76	- 1,99	+ 8,72
445	52 49 7,42	3,381	0,0204	9,1219	,5225	,9939	964	- 1,38	—	+ 0,54
446	32 38 5,35	3,307	+9,9528	-8,9484	+0,5195	-9,9940	963	- 2,95	- 2,97	+ 3,81
447	45 0 3,40	3,273	0,0017	9,0625	,5150	,9941	965	—	- 2,99	- 1,47
448	37 22 3,01	3,233	9,9745	8,9908	,5096	,9943	966	—	- 2,96	+ 3,77
449	47 12 3,05	3,003	0,0086	9,0411	,4775	,9951	972	- 2,47	- 2,76	+ 1,31
450	60 32 26,34	2,986	0,0310	9,1120	,4750	,9951	970	- 3,49	—	- 1,87

Mean A R and Declination of Stars

No	Names	Mag	No Obs	Right Ascen Jan 1, 1840	Annual Preciso	Logarithms of			
						a	b	c	d
451	Equ Pict	5 6	3	5 25 45,84	+ 1,642	+8,1638	+8,9868	+0,2164	-8,0293
452	Doradus	8 9	3	26 8,14	0,704	8 2036	9,0309	9,8476	,8,446
453	Equ Pict	7	3	26 11,45	1,860	8,1211	8,4510	0,2696	7,9501
454	— —	6 7	3	27 3,82	1,694	8,1377	8,9782	0,2289	7,9957
455	Doradus	10	3	27 40,96	0,578	8,3026	9,1484	9,7619	8,2486
456	Doradus	7 8	3	27 47,29	0,586	+8,3005	+9,1472	+0,7679	-8,2462
457	Columba	6	5	29 22,36	2,202	8,0245	8,8973	0,3128	7,7624
458	— —	7	6	29 35,62	2,195	8,0217	8,8984	0,3414	7,7623
459	— —	7	6	29 55,00	2,339	7,9961	8,8776	0,3690	7,6791
460	Doradus	6 7	3	29 56,94	0,613	8,2640	9,1436	9,7875	8,2085
461	Equ Pict	7	3	30 34,55	1,174	+8,1726	+9,0619	+0,0697	-8,0859
462	Columbae	7	3	30 54,24	2,134	8,0125	8,9079	0,3292	7,7729
463	— —	6	6	31 24,19	2,342	7,9739	8,8775	0,3696	7,6556
464	Equ Pict	5 6	3	31 42,63	1,625	8,0825	8,9902	0,2108	7,9496
465	Columbae	7	3	31 56,76	2,027	8,0129	8,9248	0,3068	7,8034
466	Doradus	6	3	33 13,02	0,648	+8,2090	+9,1390	+0,8116	-8,1519
467	— —	8 9	3	33 17,66	0,675	8,2040	9,1351	8,8293	,8,1457
468	Equ Pict	7	4	33 52,08	1,604	8,0517	8,9939	0,2052	7,9214
469	Columbae	7	2	34 22,14	1,924	7,9906	8,9419	0,2842	7,8055
470	Equ Pict	7	5	35 18,88	1,168	8,0968	9,0632	0,0674	8,0103
471	Doradus	8 9	3	36 19,03	0,616	+8,1506	+9,1441	+0,7896	-8,1038
472	— —	8	3	36 42,55	0,616	8,1488	9,1395	9,8102	8,0917
473	Equ Pict	7 8	4	37 59,25	1,205	8,0419	9,0675	0,0810	7,9627
474	— —	6	4	39 9,32	1,695	7,9372	8,9796	0,2292	7,7934
475	— —	8	3	39 9,78	1,705	7,9357	8,9780	0,2317	7,7904
476	Equ Pict	7 8	5	39 12,92	1,699	+7,9366	+8,9789	+0,9302	-7,7922
477	— —	7	3	39 28,35	1,487	,9654	9,0134	0,1723	,8491
478	Columbae	7	3	40 7,86	1,976	,8717	8,9342	0,2956	,6741
479	Equ Pict	7	3	41 15,36	1,111	,9857	9,0723	0,0457	,9031
480	— —	5 6	3	42 2,31	1,656	,8772	8,9661	0,2191	,7390
481	Equ Pict	7 8	2	42 17,84	1,107	+7,9625	+9,0730	+0,0441	-7,8801
482	Columbae	6 7	3	42 29,84	2,186	,7827	8,9015	0,3396	,5246
483	Equ Pict	7	4	42 31,46	1,126	,9546	9,0701	0,0515	,8708
484	Columbae	6 7	3	42 27,31	1,570	,8609	9,0022	0,1969	,7344
485	Doradus	10	2	43 22,30	0,667	,9974	9,1367	9,8241	,9391
486	Equ Pict	7	2	43 27,70	1,092	+7,9052	+9,0754	+0,0382	-7,8238
487	β — —	5 6	3	43 29,69	1,414	,8823	9,0252	0,1604	,7737
488	Doradus	6 7	5	43 38,40	0,685	,9897	9,1343	9,8357	,9306
489	Columbae	7	3	43 48,93	2,278	,7347	8,8883	0,3675	,4423
490	Doradus	6 7	2	44 18,64	0,635	,9804	9,1412	9,8028	,9234
491	Doradus	7 8	5	44 19,11	0,635	+7,9652	+9,1413	+0,9028	-7,9085
492	Equ Pict	7	5	44 28,18	1,670	,8139	8,9840	0,2227	,6735
493	Columbae	7	3	44 55,48	1,739	,7893	8,9729	0,2403	,6382
494	Equ Pict	9	6	46 25,89	0,637	,9170	9,1410	9,8041	,8599
495	Columbae	6 7	3	46 50,38	1,902	,7029	8,9464	0,2792	,6211

No	Declination (South) Jan 1 1840	Annual Precession	Logarithms of				Difference from the Brisbane Catalogue			
			a'	b	c'	d'	No	Right Ascension from M C	T	Dclm
451	47 11 42,98	+2,977	+0,0086	-9,0376	+0,1741	-9,9951	973	- 2,43	- 2,62	+ 2,02
452	60 48 18,21	2,951	0,0314	9,1090	,4099	,9952	977	- 2,22	—	+ 2,69
453	42 25 20,61	2,933	9,9948	8,9944	,4074	,9953	976	- 1,62	- 2,63	+ 3,02
454	46 2 44,32	2,864	0 0060	9,0125	,4670	,9955	978	- 2,70	- 3,38	+ 1,41
455	62 2 34,20	2,930	0,0322	9,0059	,4617	,9956	981	-12,88	—	- 5,06
456	61 56 42,77	2,821	+0,0376	-9,0916	+0,4508	-9,9956	982	-13,57	—	- 0,89
457	33 11 28,02	2,662	9,9666	8,8613	,4262	,9961	986	- 2,51	- 3,41	*
458	33 22 44,92	2,639	9,9581	8,801	,4214	,9962	987	- 0,84	—	+ 13,59
459	28 48 39,82	2,610	9,9355	8,7978	,4167	,9963	990	—	- 2,61	+ 11,13
460	61 39 17,48	2,622	0,0326	9,0612	,4186	,9962	992	- 3,34	—	- 1,20
461	55 0 43,41	2,664	+0,0257	-9,0204	+0,4089	-9,9964	994	- 2,79	- 2,52	- 4,50
462	35 9 58,56	2,529	9,9606	8,8614	,4030	,9965	995	- 2,65	- 3,37	- 2,71
463	28 43 26,24	2,483	9,9335	8,7747	,3950	,9966	997	- 0,28	—	- 7,10
464	47 24 51,34	2,460	0 0107	8,9560	,3909	,9967	999	- 3,08	- 2,72	+ 4,10
465	38 7 17,22	2,436	9,9791	8,8753	,3868	,9968	1000	- 1,86	—	+ 1,56
466	61 16 30,86	2,338	+0,0334	-9,0100	+0,3689	-9,9970	1006	- 0,92	—	- 1,00
467	60 59 35,15	2,332	0,0330	9,0076	,3678	,9970	1006	- 6,15	—	- 0,30
468	47 48 24,37	2,275	0,0120	8,9247	,3669	,9972	1012	- 4,37	—	- 1,16
469	40 46 27,55	2,228	9,9903	8,8609	,3479	,9973	1013	- 1,62	- 2,61	+ 2,69
470	55 2 40,66	2,153	0,0269	8,9446	,3330	,9975	1014	- 3,82	—	- 4,37
471	61 34 57,82	2,066	+0,0338	-8,9574	+0,3151	-9,9977	1020	- 2,47	—	+ 3,97
472	61 15 17,37	2,037	0 0334	9,499	,3090	,9977	1021	- 2,04	—	+ 3,53
473	54 32 31,75	1,921	0,0257	,8924	,2835	,9972	1024	- 4,70	—	+ 0,79
474	45 54 33,10	1,810	0,0074	,8121	,2678	,9982	1029	- 2,64	- 3,35	+ 2,72
475	45 41 39,36	1,811	0,0069	,8106	,2678	,9982	1028	- 3,13	—	- 1,45
476	45 48 46,36	1,811	+0,0069	-8,6115	+0,2578	-9,9982	1031	- 3,76	—	- 2,57
477	49 54 58,40	1,783	0,0174	,8340	,2622	,9983	1033	- 1,79	—	- 4,34
478	39 22 51,61	1,729	9,9854	,7384	,2379	,9982	1036	- 3,32	- 2,89	+ 0,23
479	55 45 52,59	1,636	0,0286	,8293	,2130	,9986	1042	- 4,31	—	+ 2,74
480	46 39 29,83	1,561	0,0098	,7816	,1933	,9987	1043	- 3,47	- 3,10	+ 4,66
481	55 47 13,90	1,549	+0,0290	-8,8058	+0,1901	-9,9987	1045	- 3,97	—	*
482	53 28 43,21	1,590	9,9600	,6218	,1819	,9987	1044	- 1,65	- 2,89	+ 29,19
483	55 38 25,11	1,532	0,0282	,7996	,1862	,9987	1046	- 5,70	—	*
484	41 38 51,91	1,450	0,0141	,7330	,1615	,9989	1048	+53,02	+52,77	+ 1,01
485	60 58 41,66	1,450	0,0342	,8012	,1616	,9989	1052	- 3,00	—	- 4,06
486	55 59 42,98	1,361	+0,0294	-8,7474	+0,1308	-9,9990	1058	+58,17	—	+ 3,60
487	51 7 37,26	1,439	0,0208	,7474	,1680	,9989	1051	- 1,85	- 2,37	+ 2,89
488	60 46 56,79	1,433	0,0342	,7952	,1662	,9989	1054	- 3,81	—	+ 12,94
489	30 40 21,40	1,404	0,9456	,6530	,1473	,9989	1063	- 2,59	—	- 1,49
490	61 17 19,19	1,381	0,0346	,7811	,1400	,9990	1066	- 2,11	—	- 0,43
491	61 17 16,34	1,334	+0,0346	-8,7662	+0,1262	-9,9990	1062	+21,70	—	+14,74
492	46 22 3,68	1,351	0,0090	,6885	,1308	,9990	1055	- 2,45	—	+ 4,61
493	44 50 35,41	1,311	0,0047	,6644	,1175	,9991	1061	- 0,58	—	+ 1,20
494	61 15 12,30	1,194	0,0350	,7181	,0771	,9992	1066	- 7,07	—	+ 8,93
495	41 8 47,98	1,142	9,9930	,5740	,0677	,9993	1067	- 1,84	—	+ 2,18

Mean A R and Declination of Stars

No	Names	Mag	No Obs	Right Ascen Jan 1, 1840	Annual Piscesn	Logarithms of			
						a	b	c	d
496	γ Equ Pict	5 6	3	5 40 56,66	+1,075	+7,8343	+9 0779	+0,0314	-7,7539
497	— —	6	3	40 58,86	1,309	,7961	,0419	0,1169	,6974
498	— —	5	3	47 16,24	1,361	,7783	,0864	0 1307	,6757
499	— —	7	5	47 45,81	0,689	,8652	,1339	9,8382	,8058
500	— —	8 9	1	47 58,32	0,676	,8675	,1357	9,8299	,7987
501	Equ Pict	7 8	5	48 55,44	1,587	+7,6793	+8,9978	+0,2006	-7,5503
502	Columbae	8	3	49 2,97	1,892	,6244	8,9482	0,2769	,4447
503	Doradus	10	5	49 16,34	0,613	,8179	9,1443	9,7875	,7616
504	Equ Pict	7 8	3	49 29,13	1,051	,7416	9,0816	0,0216	,6026
505	— —	8 9	3	49 31,89	0,497	,8144	9,1600	9,6964	,7626
506	Equ Pict	6	3	49 39,61	0,998	+7,7439	+9,0895	+9,9991	-7,6683
507	Columbae	6 7	3	49 58,89	2,248	,5258	8,8931	0,8518	,2447
508	Equ Pict	6 7	3	50 41,37	1,497	,6162	9,0123	0,1752	,4982
509	Columbae	6 7	3	50 51,10	2,234	,4894	8,8962	0,3491	,2136
510	Equ Pict	6 7	3	51 19,13	1,316	,6188	9,0410	0,1193	,5194
511	Equ Pict	7	3	51 42,85	0,571	+7,7075	+9,1501	+9,7666	-7,6528
512	— —	9 10	3	51 46,44	0,616	,7014	0,1440	9,7896	,0450
513	— —	7 8	3	53 2,99	1,047	,6628	9,0824	0,0199	,4846
514	— —	8	3	53 8,07	1,044	,5095	9,0628	0,0187	,4110
515	— —	8	6	54 16,82	1,318	,4340	9,0408	0,1199	,3444
516	Equ Pict	7 8	3	54 29,94	0,610	+7,5063	+9,1449	+9,7853	-7,4,01
517	— —	7 8	3	55 11,63	1,308	,5635	9,0123	0,1166	,2647
518	— —	7 8	6	55 15,77	1,017	,3561	9,0410	0,1196	,2565
519	— —	7	3	55 16,78	1,405	,3300	9,0274	0,1477	,2280
520	— —	7	6	55 33,09	1,777	,2437	8,9670	0,2497	,0866
521	Equ Pict	—	—	56 4,40	1,777	+7,2017	+8,9670	+0 2497	-7,0436
522	— —	7	4	57 4,40	1,405	,1140	9,0270	0,1177	,7,0059
523	— —	8	2	57 27,12	1,154	,0981	9,0662	0,0622	,7,0119
524	— —	8	6	57 46,49	0,708	,1391	9,1,13	9,5800	,7 0768
525	— —	7	4	57 48,13	1,163	,0336	9,0648	0,0656	6,9467
526	Can Maj	8	4	57 56,12	2,317	+6,7944	+8,8835	+0,8649	-6,1845
527	Equ Pict	—	—	58	0,923	7,0116	9,1007	9,9652	,9404
528	— —	8	2	58 33,80	0,706	,68740	9,1316	9,8488	,8137
529	— —	—	—	58	0,875	,6,6854	9 1077	9,9420	,6168
530	— —	7	10	59 20,76	0,708	,6,5951	9,2313	9,8500	,5347
531	Γqu Pict	7	3	59 26,26	1,257	+6,4172	+9,0504	+0,0993	-6,3228
532	Columbae	6	3	59 56,11	2,304	-5,0490	8,8803	0,3625	+5,0447
533	— —	6	3	6 0 4,68	1,728	-5,7398	8,9751	0,2876	,5,6899
534	Equ Pict	6	4	6 0 9,58	0,744	-5,8910	9,1263	9,8716	,5 8290
535	— —	7	3	6 0 18,64	1,412	-6,0918	9,0260	0,1498	,5,9829
536	Equ Pict	—	—	0	1,305	-6,2056	+9,0429	+0,1156	+6,1071
537	— —	8	3	0 30,81	1,309	,4602	,0423	0,1169	,3613
538	— —	6	4	0 38,36	1,560	,5073	,0022	0,1931	,3814
539	— —	7 8	5	0 43,34	1,302	,5862	,0433	0,1146	,4879
540	— —	9	3	1 6,20	0,693	,8624	,1334	9,8407	,7926

in the Southern Hemisphere, &c &c

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No	Declination (South) Jan 1 1840	Annual Precession	Logarithms of				Differences from the Brisbane Catalogue			
			<i>a</i>	<i>b'</i>	<i>c'</i>	<i>d</i>	No	M	C	T
496	° 12 31,44	+1,142	-0,098	-8,6753	+0,0577	-9,9993	1071	-3,40	-4,10	+ 0,43
497	62 48 42,76	1,136	,0241	,6548	,0564	,9993	1072	-2,51	-2,99	+ 3,27
498	62 8 01,76	1,107	,0228	,6397	,0442	,9993	1074	-0 41	—	+ 1,15
499	60 43 17 48	1,078	,0342	,6713	,0326	,9994	1077	-7,20	—	+ 1,30
500	60 51 6,98	1,055	,0316	,6624	,0231	,9994	1078	-5,89	—	-2,63
501	47 59 22,86	0,961	+0,0137	-8,6520	+9,9830	-9,9995	1080	-3,00	—	+ 5,88
502	41 22 52,83	0,960	9,9939	,4960	,9777	,999,	1081	-2,15	—	-4,44
503	61 27 51,17	0,945	0,0350	,6168	,9750	,9995	1084	-3,57	—	+ 16,34
504	56 29 53,28	0,915	0,0302	,5806	,9614	,9995	1096	-3,27	—	-5,03
505	52 32 51,39	0,903	0,0362	,6021	,9558	,9990	1087	+ 1,64	—	+ 1,19
506	57 11 15,39	0,903	+0,0314	-8,6784	+9,9558	-9,9996	1088	-2,69	-3,22	- 0,42
507	31 33 30,57	0,860	9,9008	,3513	,9343	,9996	1043	—	—	- 0,57
508	49 39 20,44	0,804	0 0179	,4855	,9054	,9996	1093	-1,09	-2,48	- 0,76
509	32 0 1,14	0 787	9 9528	,3182	,8959	,9997	1092	-1,82	—	+ 4,71
510	52 40 22,54	0,758	0,0240	,4781	,8795	,9997	1095	-2,74	-0,77	+ 3,34
511	61 52 6,84	0,723	+0,0364	-8,6024	+9,8590	-9,9997	1099	-2,07	—	+ 0,15
512	61 26 52,48	0,723	,0364	,5007	,8590	,9997	1100	-4,97	—	+ 3,01
513	56 32 46,53	0,606	,0306	,4020	,7826	,9998	1101	-4,12	—	- 1,42
514	56 34 37,81	0,600	,0306	,3940	,7784	,9998	1103	-4,56	—	+ 1,01
515	52 38 59,02	0,490	,0245	,2934	,6950	,9999	1108	-2,44	—	+ 4,39
516	61 28 2,91	0,459	-0,0354	-8,8051	+9,6032	-9,9999	1109	-7,22	—	+ 4,39
517	52 48 12,71	0,420	,0245	,2222	,6229	,9999	1110	-3,29	—	+ 4,69
518	52 39 55,63	0,414	,0245	,2151	,6169	,9999	1111	-4,31	—	+ 0,73
519	61 14 4,20	0,408	,0216	,2007	,6107	,9999	1112	-4,07	-3,48	- 3,31
520	44 0 15,23	0,379	,0030	,1185	,5785	,9999	1114	—	-2,66	- 3,34
521	41 0	0,344	+0,0030	-8,0765	+9,5365	-9,9999	1115	—	—	—
522	61 13 27,27	0,245	,0216	7,9788	,3889	0,0000	1118	—	-2,74	+ 0,18
523	55 5 38,21	0,216	,0286	7,9457	,3388	0,0000	1119	-1,99	—	-12,81
524	60 29 22,29	0,204	,0350	7,9474	,3097	,0000	1121	-8,06	—	- 5,71
525	54 57 21,46	0,166	,0286	7,8820	,2708	,0000	1122	-3,65	—	- 0,62
526	29 20 6,04	0,163	+0,9590	-7,6010	+9,2128	-0,0000	1120	-0,15	—	- 7,27
527	58 4	0,163	0,0326	,8397	,92128	,0000	1123	—	—	—
528	60 29 32,60	0,111	0 0360	,6821	,90444	,0000	1125	+ 9,03	—	+ 7,80
529	58 38	0,076	0,0334	,5091	,8796	,0000	1126	—	—	—
530	60 29 6,73	0,058	0,0360	,4033	,87656	,0000	1129	-2,14	—	+ 0,81
531	53 34 40,44	+0,047	+0,0265	-7,2725	+8,6687	-0,0000	1128	—	-2,49	+ 4,16
532	29 44 49,65	-0,006	9,9410	+6,1594	-7,7666	,0000	1130	-2,47	-2,76	- 1,10
533	46 4 54,99	0,012	0,0060	,6149	,8,0667	,0000	1132	-4,83	—	- 2,09
534	60 5 36,15	0,012	0,0346	,6,7027	,8,0667	,0000	1134	-2,82	—	+ 1,08
535	51 5 25,06	0,023	0,0212	,6,9569	,8,3677	,0000	1133	-3,32	—	- 1,26
536	52 01	0,029	+0,0249	+7,0642	-8,4646	- 0,0000	1135	—	—	—
537	52 47 6,76	0,052	,0245	,3191	,8,7199	,0000	1136	-1,60	—	- 2,44
538	48 26 43,26	0,064	,0154	,3792	,8,8070	,0000	1137	-1,26	—	+ 8,54
539	52 53 1,77	0,070	,0245	,4446	,8,8448	,0000	1138	-2,24	—	- 1,08
540	60 39 10,08	0,105	,0350	,6593	,9,0209	,0000	1142	+ 1,38	—	- 1,70

Mean A R and Declination of Stars

No	Names	Mag	No Obs	Right Ascen Jan 1, 1840	Annual Piecesn	Logarithms of			
						a	b	c	d
541	Equ Pict	—	—	0 1 s	+0,74	-6,8204	+9,1262	+9,8722	+6,7574
542	—	7	3	1 12,14	1,203	6,7777	9,0587	0,0803	,6878
543	—	7	3	1 39,63	1,694	6,8593	8,9806	0,2280	,7147
544	—	—	—	1	0,771	7,0012	9,1215	9,8870	,9380
545	—	7	3	2 2,71	1,202	7,0140	9,0589	0,0799	,9241
546	Columba	6 7	3	2 32,74	1,676	-7,0384	+8,9835	+0,2159	+6,8966
547	Equ Pict	10	3	2 38,83	0,697	,1987	9,1329	9,8432	7,1388
548	—	7	3	2 43,75	1,10	,1244	9,0375	0,1271	7,0227
549	Columba	7 8	3	3 14,81	1,757	,1381	8,9704	0,9118	6,9785
550	Can Maj	—	—	4	2,22	,1781	8,8967	0,8471	6,9008
551	Equ Pict	7	3	4 10,16	0,593	-7,4116	+9,1484	+9,7657	+7,564
552	Argus	7	3	4 41,31	1,867	,2613	8,9024	0,2711	7,0861
553	Equ Pict	8 9	3	4 44,61	1,201	,3679	9,0690	0,0705	7,2781
554	Can Maj	6	3	4 48,62	2,404	,2018	8,4719	0,3809	6,4536
555	Columba	6	3	4 49,04	2,140	,2123	8,9093	0,3304	6,9986
556	Equ Pict	7 8	4	4 49,38	1,278	-7,3742	+9,0470	+0,1065	+7,2780
557	Columba	8	3	5 27,65	,17	,2924	8,9044	0,3871	,0341
558	Can Maj	—	—	5	,230	,3235	8,8959	0,3481	,0491
559	Equ Pict	6	4	6 31,42	1,310	,5011	9,0419	0,1173	,4024
560	Columba	6 7	3	6 56,11	2,079	,4079	8,9187	0,3178	,1826
561	Equ Pict	7 6	3	7 11,19	1,166	-7,5657	1 9 0644	+0,0667	+7,1787
562	Argus	8	4	7 59,70	1,821	,4876	8,9593	0,2610	,3212
563	Equ Pict	8	3	8 42,71	0,777	,7061	9,1216	9,8904	,6120
564	—	8	3	9 15,19	0,613	,7611	9,1444	9,7575	,6083
565	—	7 8	3	9 22,11	0,711	,7319	9,1218	9,8774	,6725
566	Columba	8	3	9 45,12	1,81	-7,5919	+8,9607	+0,2999	+7,4302
567	Can Maj	6	3	9 47,90	2,305	,5250	8,5819	0,6227	,2206
568	Argus	6 7	4	10 0 39	1,38	,671	9,0504	0,1408	,5677
569	Equ Pict	7	3	10 18,3	0,736	,7817	9,1271	9,4669	,7'02
570	Argus	9	2	10 50,86	1,347	,6925	9,0298	0,1421	,5863
571	Equ Pict	8	3	10 10,91	0,757	-7,7957	+9,1271	+9,8675	+7,7337
572	Columba	7 8	3	10 41,80	1,918	,6338	8,9602	0,2696	,4687
573	Equ Pict	7	7	10 58,84	0,618	,8607	9,1437	9,7910	,8044
574	—	7	3	10 56,66	1,023	,7673	9,0807	0,0099	,6902
575	Can Maj	6 7	3	11 48,30	2,968	,6070	8,8900	0,3666	,3182
576	Columba	7	3	13 16,04	1,995	-7,6969	+8,9316	+0,2999	+7,4942
577	Equ Pict	9	4	14 1,38	0,535	,8996	9,1132	9,9217	,8,34
578	—	8	5	14 2,76	1,138	,8669	9,0683	0,0561	,7721
579	—	—	—	14	0,838	,9013	9,1127	9,9232	,4349
580	—	7	4	14 6,02	0,835	,9038	9,1131	9,9217	,8375
581	Argus	6 7	6	14 20,48	1,320	-7,8370	+9,0403	+0,1206	+7,7374
582	—	7	3	14 52,62	1,462	,8322	9,0176	0,1619	,7184
583	—	6	3	16 53,75	1,603	,8458	9,0030	0,1912	,7214
584	—	8 9	4	16 31,46	1,750	,8316	8,9709	0,2430	,6787
585	Can Maj.	7	3	17 15,52	2,245	,7707	8,8929	0,3612	,4914

in the Southern Hemisphere &c &c

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No	Declination (South) Jan 1 1810	Annual Precession	Logarithms of				Difference from the Brisbane Catalogue			
			a	b'	c'	d'	No	Right Ascension from M C	T	Declin
541	60 6	- 0,091	+0,022	+7,6321	-8,9961	-0,0000	1141	s	s	"
542	54 22 25,26	0,105	0,0278	,6290	9,0209	,0000	1140	- 3,32	—	- 3,07
543	45 47 52,21	0,151	0,0082	,7341	9,1806	,0000	1143	- 3,35	- 3,39	- 3,28
544	59 48	0,152	0,0342	,8124	9,1806	,0000	1146	—	—	—
545	54 23 40,67	0,181	0,0278	,8652	9,2570	,0000	1148	- 2,90	—	- 2,44
546	46 11 8 04	0,227	+0 0090	+7,9130	-9,3567	-0,0000	1151	- 2,84	—	- 2 04
547	60 35 20 05	0,233	0,0360	8,0059	,3677	0,0000	1155	- 1,61	—	+25,66
548	52 18 15,50	0,216	0,0287	7,9953	,3889	0,0000	1152	- 1,37	—	- 2,89
549	41 27 25,18	0,291	0,0043	8,0081	,4646	0,9999	1157	- 3 28	—	+ 7,92
550	32 16	0,379	9,9547	8,0040	,6785	9,9999	1160	—	—	—
551	61 43 45,33	0,567	+0 0358	+8,2079	-9,5650	-9,9999	1162	- 2,39	—	+ 8,69
552	41 57 11,12	0,408	9,9961	8,1339	,6107	,9999	1164	—	—	+ 2,93
553	54 24 57,51	0,408	0,0273	8,2190	,6107	,9999	1168	- 7,84	—	- 0,43
554	26 27 4,74	0,411	9,9206	7,9817	,6348	,9999	1163	—	- 2,34	+ 0,89
555	34 47 17,20	0,431	9,9666	8,0892	,6348	,9999	1167	- 0,10	—	- 0,85
556	63 15 35,20	0,425	+0,0253	+8,2309	-9,6289	-9,9999	1169	- 2 02	—	+ 4,82
557	33 50 15,12	0,490	9,9624	,13,6	,6899	,9999	1170	- 0,06	—	- 1,36
558	32 6	0,516	9,9538	,1531	,7291	,9998	1171	—	—	—
559	52 16 4,60	0,577	0,0249	,6603	,7612	,9999	1175	- 2,24	—	+ 5,26
560	36 51 3,25	0,618	9,9750	,2637	,7909	,9998	1176	- 2,06	—	+ 5,45
561	51 56 8,37	0,61	+0,0782	+8,4141	-9,8030	-9,9998	1177	- 2,74	- 3 07	- 2,29
562	42 58 0 28	0,677	9,9991	,3016	,8500	,8097	1178	- 3 31	—	+ 4,50
563	59 46 4,87	0,770	0,018	,5907	,8861	,9997	1180	+ 2 11	—	- 2,82
564	61 27 13,54	0,810	0,0114	,5510	,9116	,9996	1182	+ 0 32	—	- 2,49
565	59 1 9,56	0,816	0,0042	,473	,9116	,9996	1181	- 4 66	—	- 35,79
566	43 11 29,69	0,802	+0,0000	+8,4691	-9,9358	-9,9996	1184	- 1 81	—	- 3,84
567	29 41 21,19	0,974	9,9413	,3353	,9416	,9996	1183	+ 0,85	—	+ 1,37
568	51 37 10,88	0,890	0,0220	,5368	,9145	,9996	1186	- 2,05	—	+ 0,94
569	60 12 49,51	0,903	0,0342	,5924	,9558	,9996	1189	+ 0,88	—	+ 5,81
570	51 32 18,67	0,921	0,0220	,5561	,9641	,9995	1188	- 4,06	—	+ 16,40
571	60 11 27 74	0,933	+0,0346	+8,6061	-9,9896	-9,9995	1192	- 4 66	—	+ 7,25
572	43 7 31,79	0,944	0,0000	,5079	,9760	,9995	1190	- 1,48	—	+ 12,81
573	61 20 41,04	1,043	0,0350	,6600	0,0183	,9994	1200	+ 58,73	+ 58,23	+ 11,18
574	56 52 10 80	0,961	0,0306	,6040	9,9830	,9995	1193	- 3,00	- 3,36	- 0,20
575	30 57 4,80	1,043	9,9474	,4276	0,0183	,9994	1198	- 2,32	—	- 8,46
576	38 49 33 59	1,165	+0,0279	+8,4718	-9,0664	-0,9998	1203	- 2,21	—	+ 2,73
577	59 9 3,19	1,213	0,0330	,7194	,8876	,9992	1210	- 4,89	—	- 9,51
578	55 21 10,66	1,220	0,0262	,7029	,8987	,9992	1208	- 0,33	—	- 13,01
579	59 6	1,229	0,0330	,7213	,8987	,9992	1211	—	—	—
580	59 8 23 38	1,235	0,0330	,7235	,0917	,9992	1212	- 1,37	—	- 0,88
581	52 40 12,05	1,253	+0,0237	+8,6963	-9,0978	-9,9991	1213	- 3,77	—	- 0,74
582	60 17 42,29	1,305	0,0191	,6998	,1166	,9991	1215	- 3,95	- 3,59	+ 8,39
583	19 39 29,02	1,395	0,0154	,7173	,1437	,9949	1219	- 3,61	- 3,17	- 0,20
584	44 41 10,25	1,450	0,0039	,7066	,1616	,9989	1222	- 3,61	—	- 7,94
585	31 42 39,96	1,503	9,9608	,6973	,1786	,9988	1225	—	—	+ 9,10

Mean A.R. and Declination of Stars

No	Names	Mag	No Obs	Right Ascen Jan 1, 1840	Annual Precessn	Logarithms of			
						a	b	c	d
586	Argus	7	3	6 17 53,12	+1,327	-7,9333	+9,0390	+0,1229	+7,8333
587	—	6	4	18 14,18	2,067	7,8264	8,9198	0,0103	7,6042
588	Equ Pict	8	3	18 18,49	0,639	8,0446	9,1406	9,8055	7,9876
589	Argus	8	3	18 48,95	1,966	7,8553	8,9357	0,2936	7,6600
590	—	7	2	20 0,54	1,358	7,9773	9,0339	0,1329	7,8744
591	Argus	—	—	20	1,327	-7,9822	+9,0388	+0,1229	+7,8822
592	Can Maj	7	3	20 45,02	2,426	7,8280	8,8675	0,3449	7,4659
593	Argus	7	4	21 16,94	1,321	8,0099	9,0397	0,1209	7,9106
594	Equ Pict	6	3	21 22,65	0,900	8,0760	9,1035	9,9542	8,0050
595	—	6	3	22 15,05	0,746	8,1157	9,1254	0,8727	8,0541
596	Argus	7	8	22 33,95	1,331	-8,0333	+9,0380	+0,1248	+7,9332
597	—	8	9	23 41,36	1,314	8,0573	9,0406	0,1186	7,9588
598	—	8	9	23 51,15	1,176	8,0800	9,0621	0,0704	7,9910
599	Columbus	7	8	23 55,58	1,942	7,9618	8,9390	0,2882	7,7723
600	—	7	8	24 1,32	1,942	7,9631	8,9391	0,2882	7,7737
601	Argus	6	3	24 32,88	0,961	-8,1281	+9,0960	+9,9782	+8,0564
602	Columbus	6	4	25 29,84	1,940	7,9902	8,9892	0,2878	7,8014
603	Can Maj	6	3	25 31,54	2,133	7,9596	8,9046	0,3297	7,7198
604	Argus	9	3	25 47,82	1,113	8,1248	9,0715	0,0465	8,0424
605	—	6	3	26 42,15	1,044	8,1508	9,0819	0,0187	8,0731
606	Argus	6	3	27 34,40	1,388	-8,1125	+9,0287	+0,1424	+8,0071
607	Equ Pict	—	—	27	0,891	,1853	9,1046	9,9499	8,1167
608	Argus	7	3	27 41,75	1,734	,0598	8,9727	0,2390	7,9108
609	Equ Pict	6	7	27 44,54	0,818	,2000	9,1150	9,9127	8,1352
610	Argus	6	3	27 47,67	2,012	,0153	8,9272	0,3036	7,8096
611	Argus	9	3	28 54,82	1,468	-8,1191	+9,0155	+0,1667	+8,0055
612	—	7	3	29 9,88	1,875	,0577	8,9492	0,2730	7,8831
613	—	6	7	29 17,59	2,143	,0182	8,9065	0,3310	7,7761
614	—	8	3	29 30,45	1,138	,1791	9,0676	0,0561	8,0963
615	Equ Pict	6	6	29 35,37	0,601	,2689	9,1454	9,7789	8,2039
616	Equ Pict	6	7	29 35,72	0,893	-8,2176	+9,1041	+9,9508	+8,1490
617	Argus	8	3	29 49,22	1,359	,1504	9,0330	0,1332	8,0483
618	Equ Pict	8	3	29 56,71	0,556	,2711	9,1517	9,7451	8,2179
619	Argus	7	3	30 28,52	1,635	,1155	8,9883	0,2135	7,9814
620	Equ Pict	6	7	31 9,84	0,608	,2809	9,1442	9,7839	8,2257
621	Argus	5	6	31 27,02	1,321	-8,1802	+9,0388	+0,1209	+8,0816
622	—	6	7	31 37,22	1,482	,1564	9,0132	0,1708	8,0417
623	—	7	9	32 28,49	1,821	,1127	8,9576	0,2603	7,9491
624	—	7	3	32 29,77	1,480	,1666	9,0133	0,1703	8,0621
625	—	—	—	32	2,037	,0812	8,9224	0,3090	7,8699
626	Argus	8	3	32 47,33	1,164	-8,2227	+9,0632	+0,0659	+8,1373
627	Equ Pict	7	2	32 50,00	0,643	,2985	9,1389	9,8082	8,2418
628	Argus	7	8	32 56,47	1,100	,2343	9,0729	0,0414	8,1534
629	—	—	—	33	1,822	,1266	8,9570	0,2605	7,9630
630	—	7	3	33 29,40	1,363	,2012	9,0320	0,1345	8,0990

No	Declination (South) Jan 1 1840	Annual Precession	Logarithms of				Differences from the Brisbane Catalogue			
			a	b'	c	d'	No	M	O	T
586	52 36 7,99	- 1,567	+0,0237	+8,7930	-0,1949	-9,9987	1226	- 3,33	—	- 1,73
587	36 55 57,85	1,607	9,9759	,6830	,2061	,9986	1227	—	—	+ 7,30
588	61 15 28,95	1,601	0,0246	,8455	,2045	,9986	1231	- 1,16	—	- 0,49
589	39 37 13,86	1,660	9,9863	,7227	,2200	,9985	1232	—	—	+ 3,10
590	52 5 43,83	1,752	0,0224	,8389	2437	,9983	1238	- 3,11	—	+ 3,40
591	52 34	1,752	+0,0232	+8,8418	-0,2437	-9,9983	1239	—	—	—
592	25 45 13,46	1,822	9,9159	,5966	,2606	,9982	1242	- 2,14	—	+ 0,32
593	52 42 58,26	1 863	0,0232	,8690	,2702	,9981	1244	- 2,78	—	+ 4,98
594	58 27 24 08	1,869	0,0298	,9002	,2716	,9981	1246	- 2,34	—	+ 0,90
595	60 11 35 26	1,950	0,0326	,9266	,2901	,9979	1248	—	—	+ 1,95
596	52 33 35,13	1,973	+0,0228	+8,8931	-0,2951	-9,9979	1250	- 3,57	—	+ 3,03
697	52 50 23,04	2,072	0,0232	,9159	,3163	,9977	1263	- 3,69	—	+ 10,81
598	54 56 12,44	2,077	0,0269	,9285	,3176	,9976	1265	- 7,67	—	- 0,56
599	40 16 15,37	2,101	9,9881	,8309	,3223	,9976	1264	- 1,80	—	- 3,08
600	40 16 39,83	2,106	9,9886	,8322	,3235	,9976	1266	- 2,03	—	- 2,74
601	57 54 2,83	2,146	+0,0306	+8,9579	-0,3318	-9,9975	1260	- 0,97	- 3,07	+ 1,58
602	40 20 24,10	2,240	9,9886	,8695	,3502	,9973	1263	- 4,58	- 4,09	- 0,68
603	35 8 59,54	2,240	9,9671	,8085	,3502	,9973	1264	- 2,24	—	- 1,64
604	55 48 43,68	2,251	0,0278	,9681	,3524	,9972	1266	- 3 59	—	+ 1,56
605	56 44 40,91	2,332	0,0266	,9882	,3878	,9970	1273	- 2,39	- 3,12	+ 1,41
606	51 42 57,58	2,413	+0,0204	+8,9766	-0,3826	-9,9968	1276	- 1,80	- 2,82	+ 3,22
607	58 38	2,396	0,0110	9,0090	,3795	,9969	1277	—	—	—
608	46 11 36,64	2,481	0,0043	8,9348	,3858	,9968	1284	—	—	+ 4,05
609	59 28 43,40	2,419	0,0314	9,0170	,3897	,9968	1279	- 1,45	—	- 2,14
610	38 30 10,61	2,487	9,9809	8,8792	,3868	,9968	1278	- 1,84	- 2,47	+ 1,19
611	50 21 15,86	2,523	+0,0174	+8,9865	-0,4020	-9,9965	1286	- 5,59	—	+ 3,31
612	41 58 26,07	2,502	9,9939	8,9304	,4069	,9964	1288	- 2,59	—	+ 2,93
613	34 55 32,94	2,670	9,9657	8,8659	,4099	,9964	1287	—	—	+ 2,67
614	56 31 30,28	2,670	0,0269	9,0241	,4099	,9964	1290	- 5,09	—	- 4,66
615	61 45 40,04	2,522	0,0330	0,0549	,4118	,9964	1293	- 2,55	- 0,21	+ 3,78
616	58 38 0,03	2,670	+0,0306	+9,0414	-0,4118	-9,9964	1292	- 3,03	- 2,85	+ 5,70
617	52 12 31,11	2,604	,0212	9,0116	,4157	,9963	1294	- 3,47	—	- 4,01
618	62 13 11,25	2,616	,0330	9,0625	,4176	,9963	1295	- 0,93	—	+ 1,44
619	47 14 54,99	2,662	,0099	8,9492	,4262	,9961	1297	- 2,87	—	+ 6,65
620	61 42 16,26	2,720	,026	9,0774	,4346	,9960	1301	+ 0,10	- 2,07	+ 8,02
621	62 50 47,33	2,749	+0,0216	+9,0387	-0,4381	-9,9959	1302	- 1,60	—	+ 4,17
622	60 10 3,77	2,760	0,0166	9,043	,4410	,9958	1305	- 2,15	—	- 4,69
623	43 19 55,66	2,835	9,9978	8,9870	,4526	,9956	1307	- 3,33	—	- 7,14
624	60 11 47,97	2,824	0,0166	0 0344	,4508	,9956	1309	- 2,72	—	+ 2,24
625	37 56	2,859	9,9768	8,9429	,4561	,9955	1308	—	—	—
626	55 12 54,72	2,864	+0,0257	+9,0696	-0,4570	-9,9955	1312	- 2,80	—	+ 0,11
627	61 22 0,01	2,864	0,0326	,0984	,4670	,9955	1299	- 0,54	—	+ 5,12
628	56 5 43,14	2,876	0,0265	,0759	,4687	,9955	1313	- 2,71	—	- 2,70
629	43 18 58,44	2,928	9,9978	,0009	,4665	,9953	1310	—	—	- 2,80
630	52 12 34,73	2,928	0,0204	,0624	,4665	,9953	1318	—	—	+ 0,20

Mean A R and Declination of Stars

No	Names	Mag.	No Obs	Right Ascen Jan 1, 1810	Annual Pecessn	Logarithms of			
						a	b	c	d
631	Argus	8	3	06 03 34,78	+ 1,626	-8,1759	+9,0058	+0,1835	+8,0563
632	—	7	3	03 15,80	1,000	,2,99	9,0480	,0000	8,1855
633	—	8	2	34 21,09	1,597	,1747	8,9942	,2033	8,0403
634	—	7	3	34 29,68	1,166	,2441	9,0627	,0667	8,1580
635	—	6 7	1	04 34,00	1,821	,1399	8,9668	,2610	7,9759
636	Argus	7	3	04 50,70	1,328	-8,2230	+9,0374	+0,1232	+8,1242
637	—	7	2	31 54,80	1,825	,1439	8,9566	,2613	7,9798
638	—	6	3	36 17,0	1,953	,1368	8,9355	,2407	7,9467
639	—	7 8	3	36 5,15	1,950	,1373	8,9352	,2911	7,9467
640	—	7	3	36 15,66	1,298	,2158	9,0420	,1183	8,1493
641	Equ Pict	6 7	3	36 17,33	0,660	-8,3507	+9,1381	+9,8129	+8,2942
642	Argus	6 7	1	36 26,60	1,629	,1918	8,9850	,02119	8,0623
643	—	7	2	36 28,91	1,627	,1962	8,9890	,02114	8,0630
644	—	8	3	36 34,78	0,890	,3098	9,1027	9,9639	8,2414
645	—	8	4	37 38,16	2,007	,1477	8,9265	,03025	7,9400
646	Argus	7 8	4	38 2,03	0,877	-8,3'02	+9,1058	+9,9430	+8,2632
647	—	7	3	38 51,72	1,482	,2466	9,0123	,01704	8,1328
648	—	7 8	4	39 43,77	1,191	,3025	9,0584	,0770	8,2167
649	—	7 8	3	39 50,46	1,127	,3131	9,0682	,0619	8,2310
650	—	7 8	3	39 54,75	2,088	,1601	8,9131	,3197	7,9364
651	Equ Pict	8	3	10 36,08	0,687	-8,3855	+9,1326	+9,8370	+8,3277
652	Argus	7	3	40 44,92	1,989	,1817	8,9288	,02986	7,9871
653	—	0 7	4	40 45,68	1,655	,2395	8,9837	,02188	8,1041
654	—	7 8	3	40 45,87	1,673	,2366	8,9808	,02235	8,0986
655	Equ Pict.	7 8	3	40 47,85	0,636	,3918	9,1397	9,8034	8,3301
656	Argus	6 7	4	40 55,16	1,220	-8,3102	+9,0537	+0,0864	+8,2213
657	—	6 7	3	40 67,86	1,223	,310b	9,0508	,0678	8,2215
658	—	7 8	3	41 5,91	2,097	,1715	8,9119	,3217	7,9152
659	Can Maj	8	5	41 10,12	2,367	,1334	8,8726	,3724	7,8108
660	Argus	6	3	42 14,55	1,372	,3910	9,0296	,1373	8,1900
661	Argus	6 7	2	42 24,04	1,629	-8,2606	+8,9877	+0,2119	+8,1290
662	—	8	3	42 42,84	1,986	,2059	8,9287	,02980	,0094
663	Equ Pict	6 7	3	42 54,16	0,693	,4093	9,1316	9,8407	,3614
664	Argus	7	3	43 16,13	1,604	,2653	8,9834	,02186	,1303
665	—	7	6	43 26,62	1,226	,3357	9,0524	,0885	,2465
666	Argus	7	3	43 27,34	1,817	-8,2403	+8,9564	+0,2593	+8,0792
667	Can Maj	7	3	43 42,13	2,395	,1540	8,8667	,0793	7,8135
668	Argus	7	3	43 52,20	1,817	,2449	8,9563	,2593	8,0838
669	—	6	3	44 11,90	1,170	,3525	9,0612	,0682	8,2678
670	—	8	4	44 24,45	1,224	,3460	9,0526	,0878	8,2571
671	x Argus	6	4	45 21,21	1,690	-8,2804	+8,9771	+0,2279	+8,1406
672	—	6 9	4	45 30,29	1,027	,3868	9,0829	,0116	,3119
673	—	7 8	3	45 34,85	1,013	,3894	9,0848	,0056	,3158
674	Argus	7	3	46 3,79	1,888	,2645	8,9441	,2760	,0801
675	—	7 8	3	46 4,74	0,950	,4040	9,0943	,9,9777	,3388

No	Declination (South) Jan 1 1840	Annual Precession	Logarithms of				Difference from the Brisbane Catalogue			
			a	b	c'	d'	No	Right Ascension from M C	T	Decln
631	49 23 28,91	- 2,931	+0 9908	+0,0458	-0,4674	-0,9950	1317	- 2,72	—	- 1,71
632	57 24 19,83	2,945	0,0282	,0928	,4691	,9953	1319	- 2,03	—	+ 2,82
633	18 4 31,81	3,093	0,0111	,0172	,4775	,9951	1320	- 1,81	—	+ 5,01
634	55 12 21,41	3,008	0,0219	,0909	,4780	,9960	1324	- 1,88	—	- 2,65
635	43 17 0,29	3,020	9,9974	,0141	,4800	,9950	1328	- 2,74	—	+ 0,34
636	62 47 27,79	3,087	+0,0208	+0,0817	-0,4825	-0,9949	1326	- 3,34	—	+ 5,86
637	43 15 30,81	3,049	0,9969	,0181	,4841	,9949	1325	- 2,97	—	- 1,53
638	40 12 0,28	3,147	9,9859	,0058	,4978	,9946	1328	- 2 60	—	- 6,97
639	10 8 36,91	3,152	9,9860	,0061	,4986	,9946	1329	- 4,07	—	+ 5,64
640	53 18 12,10	3,164	0,0216	,1023	,5002	,9940	1330	- 2,32	—	+ 1,53
641	61 23 52,72	3,227	+0,0314	+0,1504	-0,5088	-0,9943	1333	- 2,63	—	+ 8,64
642	47 28 20,47	3,181	0,0090	,0682	,5026	,9945	1331	- 3,09	—	- 1,68
643	47 31 26,10	3,181	0,0090	,0685	,5026	,9945	1332	- 3,34	—	- 0,46
644	58 41 18,96	3,187	0,0286	,1031	,5034	,9944	1334	- 1,07	—	+ 2,06
645	38 48 29,49	3,291	9,9805	,0126	,5173	,9941	1336	- 0,02	—	+ 7,44
646	58 58 17,76	3,313	+0,0290	+0,1513	-0,5203	-0,9940	1339	- 2,88	—	- 6,57
647	50 17 42,62	3,388	0,0149	,1142	,5300	,9937	1340	- 1,46	—	- 2,37
648	54 67 25,68	3,460	0,0232	,1607	,5304	,9934	1343	- 0,88	—	- 6,91
649	65 61 25,12	3,460	0,0245	,1561	,5401	,9934	1344	- 1,33	—	- 0,41
650	36 41 3,00	3,486	9,9713	,0166	,5423	,9933	1342	- 0,13	—	- 5,99
651	61 4 16,57	3,531	+0,0302	+0,1882	-0,5480	-0,9931	1350	- 3,71	—	+ 3,32
652	39 22 21,09	3,555	9,9818	,0513	,5608	,9931	1346	- 1,12	—	- 0,49
653	47 3 29 38	3,555	0,0005	,1135	,5609	,9021	1349	- 2,76	—	+ 6,32
654	46 41 12,33	3,550	0,0060	,1100	,5608	,9931	1348	- 3,16	—	+ 7,26
655	61 35 41,83	3,549	0,0302	,1926	,5601	,9931	1355	- 2,38	—	+ 0,37
656	54 34 2,58	3,560	+0 0228	+0,1606	-0,5515	-0,9930	1362	- 3,78	—	- 2,55
657	64 31 50 09	3,566	0,0214	9,1611	,5622	,9930	1354	- 3,92	—	+ 0,46
658	36 25 47 32	3,589	9,9703	9,0268	,5650	,9929	1351	- 3,14	—	- 3,80
659	28 23 12,38	3,595	0 9289	8,9310	,5657	,9929	1353	- 0,82	—	+ 8,44
660	52 14 23 71	3,681	0,0183	9,1620	,5660	,9925	1360	- 2,01	—	- 11,94
661	47 37 55,47	3,692	+0,0077	+0,1338	-0,5673	-0,9925	1361	- 1,05	—	+ 7,18
662	39 30 52,48	3,727	9,9823	,0720	,5713	,9924	1362	- 4,68	—	- 64,46
663	61 3 18 62	3,731	0,0290	,2122	,5722	,9023	1363	- 2,18	—	+ 2,38
664	47 7 20 33	3,767	0 0061	,1301	,5760	,9922	1366	- 3 41	—	+ 1,68
665	61 31 19,74	3,778	0,0220	,1802	,5773	,9921	1370	- 2,93	—	- 3,61
666	43 37 27,99	3,784	- 0 9961	+0,1140	-0,5770	-0,9921	1368	- 1,70	- 3,17	+ 2,45
667	27 9 11,82	3,813	9,9212	8,9398	,5812	,9920	1369	- 1,80	—	- 0,64
668	43 37 19 71	3,824	9,9961	9,1196	,5825	,9919	1372	- 1,06	- 2,15	+ 6,57
669	55 21 54,82	3,847	0,0224	9,1985	,5861	,9918	1376	- 2,73	- 1,64	- 3,65
670	54 34 29 16	3,861	0,0216	9,1963	,5870	,9918	1377	- 2,55	—	+ 1,31
671	46 26 49 25	3,900	+0,0048	+0,1549	-0,5906	-0,9914	1379	- 1,93	—	+ 10,56
672	57 18 9 34	3,956	0 0249	,2201	,5972	,9914	1380	- 0,96	—	+ 4,86
673	57 28 35,01	3,961	0,0249	,2219	,5978	,9913	1381	- 2,71	—	+ 1,49
674	42 1 1 00	4 013	9,9903	,1272	,6034	,9911	1384	- 2,31	—	+ 0,49
675	58 17 2,76	4,007	0,0257	,2306	,6028	,9911	1386	- 2,34	—	+ 0,50

Mean A.R. and Declination of Stars

No	Names	Mag	No Obs	Right Ascen Jan 1, 1840	Annual Piecesn	Logarithm of				d
						a	b	c	-	
676	Argus	8	3	6 46 10,39	+ 2,044	-8,2207	1 8,9187	+ 0,3105	+ 8,0191	
677	B Argus	5	3	6 46 22,40	,003	,3530	9 0400	0,1119	,2579	
678	a Equ Pict	4	4	6 46 32,59	0,629	,4518	9,1402	9,7986	,3949	
679	Argus	7 8	4	6 46 59,04	1,148	,3828	9,0611	0,0599	,3000	
680	—	7	3	6 47 17,77	1,508	,3205	8,9986	0,1926	,1900	
681	Argus	7	3	47 39,20	1,878	-8,2705	+ 8,9455	+ 0,2737	+ 8,0987	
682	—	7 8	3	48 0,02	1,874	,2748	8,9160	0,2729	,1038	
683	—	—	—	48	2,071	,2457	8,9139	0,162	,0288	
684	—	7 8	4	48 59,57	0,968	,4286	9,0913	9,9459	,1576	
685	—	6 7	3	49 23,18	1,278	,3838	9,0430	0,1066	,2112	
686	Argus	7	3	49 41,15	2,035	-8,2632	+ 8,9192	+ 0,3085	+ 8,0661	
687	—	7	3	49 43,86	2,201	,2381	8,8885	0,3426	7,9808	
688	—	6 7	3	50 4,92	1,489	,3563	9,0093	0,1729	8,2132	
689	—	6 7	3	50 25,54	0 885	,4533	9,1033	9,9469	8,3870	
690	—	7 8	3	50 48,89	2,075	,2666	8,9126	0,3170	8,0192	
691	Argus	7	3	51 1,13	2,160	-8,2567	+ 8,9004	+ 0,3321	+ 8,0168	
692	—	7	3	51 36,06	2,098	,2690	8,9086	0,218	,0159	
693	—	9 10	2	51 37,80	0,825	,4725	9,1121	9,9161	,4095	
694	—	8	3	51 39,81	1 203	,4152	9,0517	0,0810	,3288	
695	—	8	4	51 40,38	0,811	,4701	9,1097	0,9218	,1063	
696	Argus	6	4	52 0,72	1,596	-8,3565	1 8,9915	+ 0,2030	+ 8,2311	
697	—	7	3	52 38,60	1,830	,1220	8,9523	,9621	,1605	
698	—	6 7	3	52 50,98	1,472	,3830	9,0116	,1070	,2721	
699	—	8	3	52 51,23	1,487	,3803	9,0092	,1728	,2683	
700	—	7 8	4	53 0,77	1,083	,4458	9,0733	,0346	,3688	
701	Argus	7 8	3	53 50,95	1,224	-8,4306	+ 9,0514	+ 0,0878	+ 8,3491	
702	—	7	3	54 21,56	1,150	,4466	9,0629	0,0607	,3616	
703	—	6 7	3	54 38,23	1,948	,0193	8,9323	0,2896	,1415	
704	—	9	6	55 25,13	0,761	,5127	9,1208	0,8811	,4630	
705	—	6 7	3	55 32,01	1,180	,4516	9,0581	0,0719	,3677	
706	Argus	6 7	3	55 36,46	1,132	-8,4595	+ 9,0650	+ 0,055	+ 8,3790	
707	—	8	4	56 34,21	0,789	,5169	9,1239	9,8686	,1682	
708	—	6 7	5	56 50,43	1,957	,3276	8,9303	0,2916	,1409	
709	—	7	3	56 10,52	1,581	,3919	8,9930	0,1989	,2692	
710	—	6 7	4	56 39,01	1,954	,3828	8,9306	0,2009	,1469	
711	Argus	8	6	56 34,59	0,742	-8,5245	+ 9,1234	+ 0,9692	+ 8,4658	
712	—	7	3	57 6,00	0,767	,5251	9,1197	0,8818	,4665	
713	—	6 7	3	57 16,29	1,512	,4118	9,0044	0,1795	,2976	
714	—	7	4	57 18,72	1,885	,3499	8,9419	0,2753	,1780	
715	—	7	3	58 4,47	1,616	,4170	9,0036	0,1807	,3027	
716	Argus	8	4	58 15,07	,0769	-8,5341	+ 9,1194	+ 0,8859	+ 8,4745	
717	—	6 7	4	58 36,21	0,939	,5122	,0943	9,9727	,4140	
718	—	8	3	58 40,41	1,300	,4664	,0386	0,119	,0634	
719	—	7 8	4	58 44,67	0,743	,5406	,1298	9,8710	,4821	
720	—	7 8	4	58 59,06	1,208	,4730	,0581	0,0821	,3876	

in the Southern Hemisphere &c &c

XXXIII

No	Declination (South) Jan 1 1840	Annual Precession	Logarithms of				Difference from the Brisbane Catalogue			
			a'	b	c'	d'	No	Right Ascension from M C	T	Declin
676	34 1 33,29	- 4,018	+9,9759	+9,0918	-0,6040	-9,9911	1385	- 1,28	—	+ 2,93
677	53 26 11,83	4,018	0,0191	,2089	,6059	,9910	1388	- 1,34	—	+ 2,01
678	61 46 11,22	4,041	0,0286	,2496	,6065	,9910	1389	- 1,17	—	+ 8,09
679	55 42 58,86	4,087	0,0224	,2267	,6114	,9908	1391	- 1,86	—	+ 8,76
680	49 6 9,82	4,118	0,0103	,1910	,6144	,9906	1394	- 0,57	—	+ 1,34
681	42 18 37,62	4,114	+9,9912	+9,1436	-0,6174	-9,9905	1395	- 2,04	—	- 0,48
682	42 25 57,69	4,178	9,9912	,1481	,6210	,9903	1397	- 1,64	—	+ 2,50
683	37 21	4,207	9,9723	,1051	,6239	,9902	1398	—	—	—
684	58 8 1,22	4,268	0,0249	,2663	,6292	,9900	1399	- 2,83	—	+ 6,77
685	53 53 33,87	4,286	0,0191	,2876	,6321	,9898	1401	- 3,34	—	+ 6,37
686	38 21 12,04	4,321	+9,9759	+9,1266	-0,6355	-9,9897	1402	- 1,65	—	+ 8,31
687	38 36 11,22	4,326	9,9912	,0774	,6361	,9896	1403	- 1,15	—	+ 3,96
688	50 25 16,58	4,349	0,0120	,2285	,6384	,9491	1406	- 2,30	- 3,00	+ 3,74
689	59 8 30,29	4,377	0,0253	,2731	,6412	,9891	1408	- 2,68	—	+ 0,58
690	37 18 58,35	4,417	9,9717	,1209	,6402	,9892	1409	- 2,36	—	+ 4,61
691	35 8 6,66	4,440	+9,9624	+9,1055	-0,6474	-9,9891	1411	- 2,18	- 2,58	- 3,66
692	36 40 39,45	4,481	9,9045	,1261	,6118	,9888	1413	- 1,41	- 2,84	+ 1,61
693	59 51 23,88	4,480	0,0217	,2861	,6613	,9889	1415	- 1,33	—	- 8,15
694	55 2 51,75	4,480	0,0404	,2630	,6513	,9889	1414	- 2,91	—	+ 8,34
695	59 40 42,88	4,480	0,0103	,2855	,6613	,9889	1417	- 1,67	—	- 7,30
696	46 30 43,61	4,514	+0,0073	+9,1283	-0,6566	-9,9887	1418	- 2,94	- 2,31	+ 5,86
697	43 34 0,77	4,525	9,9904	,1161	,6601	,9840	1422	- 2,95	- 2,66	+ 2,46
698	50 48 17,45	4,588	0,0120	,1190	,6616	,9883	1421	- 1,00	—	+ 1,96
699	50 32 45 27	4,588	0,0110	,2474	,6616	,9883	1423	- 1,12	—	- 3,60
700	56 15 35,94	4,599	0,0220	,2832	,6621	,9882	1425	- 3,01	—	+ 6,77
701	54 50 5,56	4,667	+0,0191	+9,2796	-0,6690	-9,9879	1429	- 2,54	—	+ 1,12
702	55 53 16,08	4,712	0,0 01	,2894	,6702	,9876	1433	- 3,21	—	+ 0,14
703	40 47 4,44	4,746	9,9816	,1896	,6704	,9875	1431	- 2,26	—	+ 1,07
704	50 35 7,53	4,797	0,0249	,3194	,6810	,9871	1438	- 3,50	—	+ 0,72
705	55 30 22,10	4,814	0,0195	,2967	,6825	,9871	1439	- 1,75	—	+ 0,67
706	56 10 22,96	1,820	+ 0,0199	+9,3006	-0,6820	-9,9871	1440	- 2,09	—	+ 4,07
707	50 52 36,94	4,809	0,0249	,8214	,6920	,9871	1441	- 6,10	—	- 1,38
708	40 34 13,76	4,854	9,9827	,1971	,6861	,9869	1443	+ 3,94	—	+ 4,88
709	48 54 30,80	4,871	0,0069	,2829	,6876	,9868	1446	- 1,92	—	+ 7,79
710	40 40 12,91	4,905	0,9827	,2029	,6908	,9866	1448	- 3,70	—	- 0,90
711	60 52 38,74	4,888	+ 0,0216	+9,3290	-0,6891	-9,9866	1450	- 6,94	—	+ 0,40
712	60 37 7,40	4,939	0,0246	,1320	,6936	,9864	1455	- 4,47	—	+ 3,11
713	60 14 24,01	4,961	0,0004	,2796	,6956	,9863	1460	- 2,90	—	- 6,52
714	42 24 9,91	4,967	9,9881	,2232	,6961	,9862	1464	- 1,47	—	+ 6,11
715	50 11 57,84	5,029	0,0094	,2861	,7015	,9859	1468	- 2,03	—	- 4,41
716	60 38 8,19	5,040	+0,0241	+9,3409	-0,7026	-9,9868	1459	- 2,68	—	+ 1,76
717	58 42 54,44	5,074	,0220	,3363	,7054	,9866	1461	- 1,97	—	+ 10,95
718	53 49 46,08	5,074	,0158	,3105	,7054	,9866	1460	- 4,37	—	+ 4,11
719	60 54 47,47	5,074	,0287	,3449	,7054	,9856	1463	- 4,51	—	- 2,81
720	55 12 34,48	5,097	,0174	,3199	,7073	,9865	1466	- 6,43	—	- 9,24

Mean A.R. and Declination of Stars

No	Names	Mag	No Obs	Right Ascen Jan 1, 1840	Annual Precessn	Logarithms of				d	
						a	b	c	d		
721	H Argus	6	4	6 59 44,14	-1,564	-8,4218	+8,9952	+0,1912	+8,1019		
722	—	6 7	3	7 0 17,18	1,970	,3581	8,9271	0,2911	,1699		
723	—	8	3	0 21,29	1,176	,4890	9,0579	0,0701	,1061		
724	—	6 7	3	0 32,57	2,055	,3469	8,9129	0,128	,1,67		
725	—	9 10	6	0 46,19	0,758	,6542	9,1206	9,8797	,4951		
726	Argus	6	3	0 47,45	0,927	-8,5300	+9,0960	+9,9671	+8,1629		
727	—	6	3	1 18,34	1,10	,5045	9,0868	0,0492	,4257		
728	—	7	4	1 24,38	1,851	,3861	8,9466	0,2671	,2228		
729	—	7 8	3	1 65,31	1,978	,3681	8,9265	0 2962	,1789		
730	—	8	2	2 1,32	1,304	,4813	9,0372	0,1103	,3886		
731	Argus	8 9	3	2 58,88	0,788	-8,5634	+9,1161	+9,9665	+8,5011		
732	—	7 8	3	3 5,92	0,850	,6582	,1069	9,9294	,4963		
733	—	—	—	—	0,400	,6204	,1696	9,6021	,6110		
734	P	7 8	3	3 9,37	0,749	,5738	,1216	9,9042	,5168		
735	—	7	3	3 23,77	1,438	,4683	,0152	0,1578	,3013		
736	Argus	8	4	3 51,56	0,733	-8,5765	+9,1238	+9,861	+8,5140		
737	—	7	3	3 40,74	1,426	,4778	9,0172	0,1638	,6911		
738	—	7	3	4 15,70	0,867	,6642	9,1013	9,980	,60001		
739	—	6 7	3	4 53,90	0,893	,6616	9,1003	9,9608	,41991		
740	—	8	3	5 0,67	1,968	,3882	8,9226	0,2064	,1973		
741	Argus	6 7	3	5 12,10	1,088	-8,6387	+9,0704	+0,066	+8,4627		
742	—	6	3	5 51,91	2,312	,3426	8,8715	,3640	,0187		
743	—	6 7	3	5 56,87	2,036	,3860	8,9142	,6048	,1817		
744	—	7 8	3	6 8,35	1,162	,5321	9,0691	,0062	,4512		
745	—	7 8	2	6 11,39	1,162	,5321	9,0591	,0062	,4512		
746	Argus	8 9	4	6 43,87	1,163	-8,5856	+9,0588	+0,0656	+8,4116		
747	—	6	3	6 46,01	2,129	,3764	8,8988	0,0282	,1485		
748	—	7 8	3	6 56,99	0,822	,5846	9,1106	9,9140	,5276		
749	—	6 7	3	7 10,08	1,218	,6299	9,0500	0,0856	,1150		
750	—	6 7	3	7 11,78	0,840	,5872	9,1078	9,9243	,5263		
751	I	Argus	4 5	2	8 0,17	1,721	-8,4524	+8,9667	+0,2358	+8,3110	
752	—	7	3	8 26,48	2,320	,3586	8,8683	0,3656	,0628		
753	—	7	4	8 40,19	2,000	,4101	8,9194	0,3010	,2176		
754	—	—	—	9	0,711	,6222	9,1266	9,8519	,60004		
755	—	8	3	9 47,18	0,897	,5965	9,0991	9,9528	,6321		
756	Argus	6 7	3	10 4,05	1,351	-8,5274	+9,0278	+0,1307	+8,4321		
757	—	6 6	4	10 10,70	1,723	,4666	8,9660	0,2860	,3277		
758	—	7 8	3	10 28,11	0,760	,6213	9,1190	9,8808	,5638		
759	—	7	3	11 38,96	1,728	,4745	8,9645	0,1376	,3351		
760	—	7	4	11 58,06	2,018	,4222	8,9100	0,3113	,2188		
761	Argus	7	4	11 58,31	2,053	-8,4219	+8,9093	+0,3124	+8,2173		
762	—	—	—	12	1,033	,5126	8,9974	0,1856	,3993		
763	—	7	3	12 19,01	0,796	,6275	9,1186	9,9099	,5685		
764	Can Maj	7	3	12 22,19	2,320	,3817	8,8665	0,3655	,0874		
765	Argus	7	4	12 37,48	1,536	,6465	9,0300	0,1258	,4532		

No	Declination (South) Jan 1 1840	Annual Precession	Logarithms of				Difference from the Brisbane Catalogue			
			a	b'	c'	d'	No	M	C	T
721	49 21 8 38	-5,170	+0,0060	.9918	-0,7135	-9,9850	1467	-2,90	—	+ 7,85
722	40 24 7,18	5,221	9,9806	,2276	,7177	,9847	1469	-1,66	—	- 2,42
723	55 42 43,93	5,221	0,0179	,3129	,7177	,9847	1471	-3,86	—	- 0,50
724	38 8 23,16	5,243	9,9717	,2085	,7196	,9846	1470	-2,20	—	- 1,71
725	60 49 31,33	5,249	0,0228	,3593	,7201	,9846	1474	-4,84	—	+ 1,50
726	58 56 25,81	5,254	+0,0216	+9,3514	-0,7205	-9,9845	1475	-2,36	—	- 0,25
727	56 30 29,08	5,000	0,0183	,3435	,7242	,9843	1477	-1,01	—	+ 5,92
728	43 21 55,65	5,316	9,9899	,2604	,7256	,9841	1476	-3,66	-4,66	+ 8,42
729	40 17 26 10	5,350	0,9791	,2873	,7284	,9839	1482	+59,30	—	- 0,89
730	53 52 30,58	5,367	0,0145	,3351	,7297	,9838	1480	-0,51	—	- 8,39
731	60 33 41,10	5,406	+0,0216	+9,3710	-0,7329	-9,9836	1481	-7,38	—	+ 6,34
732	69 54 39,13	5,451	,0212	,3717	,7365	,9833	1485	-3,46	—	- 5,45
733	61 14	5,445	,0232	,3887	,7360	,9833	1487	—	—	—
734	60 58 49,41	5,462	,0216	,3773	,7374	,9832	1490	-3,86	—	+ 13,10
735	51 4, 9,16	5,474	,0103	,3313	,7383	,9832	1488	-3,16	—	+ 3,09
736	61 9 2,90	5,468	+0,0220	+9,3784	-0,7378	-9,9832	1491	-13,57	—	+ 8,41
737	51 57 10,29	5,001	0,0103	,3349	,7406	,9830	1492	-2,19	—	+ 0,22
738	59 44 14,53	5,552	0,0208	,3790	,7444	,9827	1494	-0,40	—	- 3,03
739	53 27 47,71	5,602	0,0190	,3416	,7484	,9823	1496	-2,68	—	- 0,15
740	40 6 30,17	5,621	9,9777	,2669	,7497	,9822	1495	-2,32	—	+ 2,23
741	57 4 36,20	5,647	+0,0171	+9,3739	-0,7618	-9,9820	1497	-0,31	—	+ 1,36
742	30 33 29,61	5,698	9,9350	,1599	,7567	,9817	1498	-1,49	—	- 7,53
743	38 50 26,84	5,698	9,9727	,2512	,7557	,9817	1499	-3,30	—	+ 2,13
744	56 6 3,14	5,709	0,0166	,3737	,7665	,9916	1500	-1,54	—	- 5,16
745	56 6 29,75	5,709	0,0162	,3737	,7665	,9816	1501	-3,94	—	- 84,64
746	56 6 36,81	5,754	+0,0168	+9,3771	-0,7590	-9,9813	1503	-5,05	—	+ 22,06
747	36 16 40,90	5,765	9,9661	,2411	,7608	,9812	1502	-1,56	—	+ 1,08
748	60 19 3 99	5,770	0,0199	,3983	,7612	,9812	1505	-2,66	—	+ 3,95
749	55 19 27,77	5,793	0,0140	,3761	,7629	,9811	1507	-2,19	—	- 1,09
750	60 7 18,27	5,787	0,0195	,3986	,7624	,9811	1508	-4,39	—	+ 1,24
751	16 29 40,13	5,865	+0,9969	+9,3269	-0,7683	-9,9806	1512	-2,49	-0,34	+ 8,84
752	30 23 1,95	5,921	9,9380	,1746	,7724	,9802	1513	—	—	- 0,48
753	39 56 22,39	5,926	9,9759	,2783	,7728	,9801	1519	-2,29	—	+ 2,42
754	61 36	5,988	0,0189	,4197	,7773	,9797	1531	—	—	—
755	59 34 3,86	6,010	0,0183	,4126	,7789	,9799	1526	-2,23	—	+ 13,44
756	53 24 32,16	6,038	+0,0103	+9,3836	-0,7809	-9,9793	1527	-2,28	—	+ 4,91
757	46 34 18,52	6,049	9,9956	,3409	,7817	,9793	1528	-1,82	—	+ 5,94
758	61 6 23,71	6,071	0,0183	,4236	,7832	,9791	1532	-0,80	—	+ 3,00
759	46 29 34,20	6,170	9,9052	,3490	,7903	,9784	1538	-2,01	—	+ 3,44
760	38 44 20,25	6,199	9,9699	,2869	,7923	,9782	1539	-2,51	—	+ 7,05
761	38 37 46,81	6,204	+0,9609	+9,2162	-0,7927	--9,9781	1540	-2,30	—	+ 9,22
762	50 22	6,237	0,0039	,3799	,7960	,9779	1543	—	—	—
763	60 47 23,94	6,221	0,0179	,4329	,7934	,9780	1545	-2,63	—	+ 1,32
764	30 30 41,21	6,237	9,9326	,1988	,7950	,9779	1542	-1,65	-1,13	- 4,81
765	53 40 27,10	6,265	0,0094	,4009	,7962	,9777	1547	-1,08	—	+ 7,14

Mean A R and Declination of Stars

No	Names	Mag	No Obs	Right Ascen Jan 1, 1840	Annual Precessn	Logarithms of			
						a	b	c	d
766	Argus	7 8	4	8 12 44,99	+1,324	-8 ,6488	+9,0319	+0,1219	+8,4665
767	—	7	3	12 47,75	1,016	,6976	9,0807	0,0069	,5272
768	—	7	4	12 54,90	1,720	,4837	8,9666	0,235	,3460
769	—	7 8	3	13 1,31	0,990	,6020	9,0838	9,9978	,5329
770	—	6 7	3	13 16,43	2,230	,4006	8,8799	0,3483	,1419
771	Argus	7	3	13 34,47	2,087	-8,4259	+8,9030	+0,3195	+8,2128
772	—	9	3	13 56,66	0,852	,6301	9,1051	9,9304	,5187
773	—	7 8	4	14 9,54	1,517	,5255	8,9997	0,1810	,4145
774	—	7	3	14 11,41	1,801	,4775	8,9513	0,2655	,3271
775	—	7	3	14 36,85	1,760	,4870	8,9583	0,2455	,3435
776	Argus	7	2	14 46,61	2,272	-8,4035	+8,8727	+0,3564	+8,1299
777	—	8	4	14 52,89	1,713	,4964	8,9661	0,2338	,1602
778	—	7	3	15 4,77	1,577	,5214	8,9893	0,1978	,4037
779	—	7 8	3	15 5,93	0,964	,6197	9,0881	9,9841	,5027
780	—	7	3	16 2,12	1,436	,6503	9,0130	0,1568	,4485
781	Argus	7	2	16 4,46	2,270	-8,4106	+8,8724	+0,3560	+8,1382
782	—	6 7	3	16 7,58	1,218	,6865	9,0483	0,0856	,5035
783	—	—	—	16	1,460	,6494	9,0103	0,1614	,4461
784	—	7	3	16 26,93	1,665	,5158	8,9765	0,2188	,3883
785	—	—	—	16	1,458	,5488	9,0090	0,1638	,4447
786	Argus	7	2	16 27,05	1,065	-8,6123	-9,0724	+0,0273	+8,5997
787	—	7 8	3	16 27,40	2,067	,4473	8,9006	,3182	,2129
788	—	7 8	10	16 30,28	1,451	,5508	9,0102	,1617	,4175
789	—	8	3	16 46,91	2,063	,4461	8,9062	,3145	,2410
790	—	6 7	3	16 57,31	1,666	,5188	8,9753	,2191	,3915
791	Argus	7 8	3	16 57,87	1,655	-8,5190	+8,9755	+0,2188	+8,3918
792	—	6 7	3	17 12,15	1,199	,5959	9,0612	0,0788	,5146
793	—	7 8	3	17 24,41	0,804	,6566	9,1110	9,9074	,5977
794	Can Maj	7	4	17 26,90	2,336	,4084	8,8816	0,3685	,1093
795	—	6 7	3	17 39,00	2,343	,4084	8,8605	0,3698	,1063
796	Argus	7	3	17 42,13	2,065	-8,4550	+8,9066	-0,3128	+8,2520
797	—	7	3	17 56,65	1,022	,6275	9,0788	0,0094	,5577
798	—	7	3	18 24,50	2,040	,4617	8,9088	0,3096	,2629
799	—	8	3	19 32,96	0,735	,6797	9,1214	9,8663	,6241
800	—	7	3	19 37,77	1,255	,6007	9,0416	0,0986	,5156
801	Argus	7 8	3	19 45,13	0,740	-8,6800	+9,1205	+9,8692	+8,6245
802	—	7	4	19 40,91	1,390	,5831	,0192	0,1450	,4870
803	—	7	4	20 2,46	1,380	,5826	,0211	0,1399	,4470
804	—	9	3	20 8,60	1,010	,6120	,0802	0,0043	,5733
805	—	7	3	21 13,59	0,715	,6924	,1239	9,8543	,6382
806	Argus	8	3	21 21,59	1,416	-8,5830	+9,0146	+0,1511	+8,4852
807	—	7	3	21 23,92	1,048	,6437	9,0741	0,0204	,5731
808	—	8	3	21 41,00	0,862	,6763	9,1037	9,9304	,6152
809	—	6 7	3	22 15,95	1,539	,5684	8,9937	0,1874	,4572
810	—	8 9	3	22 28,02	1,279	,6129	9,0371	0,1068	,5265

in the Southern Hemisphere &c &c

XXXVII

No	Declination (South) Jan 1 1840	Annual Precession	Logarithms of				Difference from the Brisbane Catalogue			
			a'	b'	c'	d'	No	Right Ascension from M C	T	Decln
766	53 56 32,03	- 6,260	+0,0099	+9,4023	-0,7965	-9,9777	1549	- 2,56	—	+ 9,61
767	58 15 32,08	6,260	0,0154	,4243	,7966	,9777	1551	- 1,71	—	- 3,12
768	46 43 3,88	6,276	9,9948	,3580	,7977	,9776	1550	- 1,71	—	+11,80
769	58 31 14,88	6,276	0,0164	,4267	,7977	,9776	1555	- 3,37	—	- 0,66
770	33 26 6,60	6,310	9,9469	,2394	,8000	,9773	1554	- 2,51	—	- 3,09
771	37 44 51,00	6,337	+0,9657	+9,2869	-0,8019	-9,9771	1556	- 2,09	—	- 0,15
772	60 14 30,53	6,365	0,0162	,4405	,8038	,9769	1560	+ 3,10	—	- 6,32
773	50 45 11,15	6,375	0,0035	,3917	,8045	,9768	1569	- 2,79	—	+ 1,19
774	45 0 39,97	6,381	9,9899	,3526	,8049	,9768	1557	- 1,81	- 2,26	- 1,93
775	45 56 24,98	6,414	9,9926	,3618	,8071	,9765	1562	- 1,57	—	+ 2,83
776	32 10 47,35	6,442	+9,9400	+9,2335	-0,8090	-9,9763	1563	+ 2,21	—	+ 1,64
777	46 55 37,33	6,436	9,9948	,3705	,8086	,9764	1564	—	- 2,56	- 6,31
778	49 41 21,72	6,468	0,0013	,3905	,8101	,9762	1565	- 2,00	—	- 0,83
779	58 58 17,51	6,454	0,0149	,1408	,8098	,9762	1566	- 1,07	—	+ 1,69
780	52 16 5,89	6,560	0,0056	,4113	,8149	,9756	1571	- 1,95	—	+ 2,22
781	32 17 8,92	6,542	+9,9405	+9,2414	-0,8157	-9,9755	1570	- 1,66	—	-63,12
782	65 40 33,55	6,542	0,0111	,4307	,8157	,9755	1572	- 2,14	—	- 0,99
783	52 1 1	6,553	0,0052	,4112	,8164	,9754	1574	—	—	—
784	48 12 48,85	6,560	9,9969	,3881	,8175	,9753	1576	- 3,35	—	- 2,28
785	51 63	6,563	0,0052	,4111	,8171	,9754	1577	—	—	—
786	57 45 23,96	6,563	+0,0128	+9,4428	-0,8171	-9,9754	1579	- 2,97	—	+ 64,82
787	38 38 6,27	6,574	0,9685	,3116	,8179	,9755	1567	- 10,67	—	+ 5,07
788	52 1 7,64	6,571	0,0052	,4127	,8178	,9753	1578	- 1,67	—	+ 2,07
789	38 34 15,15	6,563	0,9675	,3101	,8171	,9754	1573	- 28,10	—	+ 2,24
790	48 13 31,14	6,613	9,9969	,3011	,8204	,9750	1583	- 0,96	—	+ 5,21
791	48 13 53,65	6,613	+9,9969	+9,3912	-0,8204	-9,9750	1582	- 1,52	—	+ 9,55
792	55 59 48,42	6,620	0,0103	,4381	,8215	,9748	1588	- 1,19	—	+ 4,99
793	60 50 44,86	6,640	0,0149	,4616	,8222	,9747	1592	- 2,18	- 1,76	+ 3,18
794	30 8 39,37	6,657	9,9289	,2223	,8233	,9746	1584	- 2,60	—	- 8,79
795	29 54 38,31	6,673	9,9274	,2203	,8243	,9745	1590	- 3,19	—	- 1,69
796	38 47 5,46	6,679	+9,9680	+9,3198	-0,8247	-9,9744	1594	+ 1,04	—	+ 1,98
797	58 22 14,73	6,684	0,0133	,4534	,8251	,9744	1595	- 3,66	—	- 0,11
798	39 13 41,18	6,739	9,9694	,3279	,8286	,9739	1597	—	—	- 4,04
799	61 41 10,08	6,816	0,0145	,1763	,8335	,9738	1603	- 3,29	—	+ 10,69
800	55 16 24,02	6,672	0,0080	,4470	,8342	,9732	1602	- 2,40	—	- 2,14
801	61 38 39,97	6,832	+0,0141	+9,4772	-0,8346	-9,9732	1604	- 3,16	—	+ 5,33
802	53 11 51,70	6,898	,0052	,4403	,8387	,9720	1608	+ 46,84	—	+ 3,74
803	53 21 30,45	6,858	,0056	,4388	,8362	,9729	1605	- 2,89	—	+ 10,37
804	58 36 13,12	6,865	,0120	,4660	,8367	,9729	1606	- 2,83	—	- 1,57
805	61 57 36,16	6,958	,0137	,4804	,8425	,9721	1615	- 1,48	—	+ 2,89
806	52 47 55,63	6,969	+0,0038	+9,4426	-0,8432	-9,9720	1613	- 1,87	- 2,28	+ 4,76
807	58 10 56,95	6,975	,0111	,4710	,8435	,9720	1616	- 2,32	—	+ 4,83
808	60 31 27,15	7,002	,0124	,4831	,8452	,9717	1617	+ 2,84	—	- 3,76
809	50 41 64,56	7,040	,0000	,4348	,8479	,9713	1619	- 2,25	—	+ 3,43
810	55 2 36,82	7,062	,0069	,4606	,8489	,9712	1623	- 1,81	—	- 5,43

Mean A R and Declination of Stars

No	Names	Mag	No Obs	Right Ascen Jan 1, 1840	Annual Precessn	Logarithms of			
						a	b	c	d
811	Argus	7 8	3	7 23 17,90	+ 1,289	-8,6156	+ 9,0362	+ 0,1102	+ 8,5286
812	—	7	4	23 27,64	1,522	,5778	8,9963	,01824	,4082
813	—	8	4	24 11,36	1,281	,6220	9,0361	,01075	,5359
814	—	8	3	24 25,74	0,971	,6717	9,0853	,9,9872	,6060
815	—	8	3	25 8,87	2,207	,4693	8,8780	,0438	,2215
816	Argus	7	3	25 17,42	1,095	-8,6675	+ 9,0658	+ 0,0894	+ 8,5848
817	—	8	4	25 51,33	1,539	,5877	8,9927	,1871	,1775
818	—	7 8	3	26 4,22	1,294	,6299	9,0387	,1119	,5431
819	—	6 7	3	26 7 24	1,458	,6029	9,0063	,1698	,5011
820	—	6 7	3	26 17,35	1,572	,5814	8,9808	,1961	,4701
821	Argus	6	3	26 28,46	2,505	-8,4314	+ 8,9327	+ 0,0884	+ 8,0472
822	—	7	3	26 44,00	1,544	,5914	8,9916	,01866	,1800
823	—	—	—	26	1,597	,5822	8,9821	,02053	,1654
824	—	6 7	3	26 54,71	1,365	,6244	9,0235	,01319	,0128
825	—	7	3	27 42,90	0,839	,7092	9,1046	,9,9227	,0507
826	Argus	6 7	3	28 5,51	1,924	-8,6320	+ 8,9250	+ 0,2812	+ 8,3043
827	—	7	3	28 27,94	1,116	,6708	9,0619	,0177	,6971
828	—	6 7	3	28 42,51	1,923	,5556	8,9248	,2840	,0076
829	—	7	3	29 0,89	1,414	,6265	9,0129	,1404	,6291
830	—	7	3	29 8,90	1,966	,5301	8,9171	,2936	,5415
831	Argus	6 7	3	29 14,63	1,682	-8,5979	+ 8,9824	+ 0,1992	+ 8,4837
832	—	8	3	29 29,79	1,315	,6442	9,0295	,1189	,5567
833	—	7	4	29 48,75	2,177	,4975	8,8407	,3369	,2000
834	—	7	3	29 50,75	1,878	,5491	8,9323	,2757	,3005
835	—	(7)	1	30 30,19	2,464	,4079	8,8371	,3916	,1060
836	Argus	7	3	30 45,40	1,027	-8,6969	+ 9,0754	+ 0,0116	+ 8,6203
837	—	7	4	31 17,26	1,853	,5607	8,9360	,2679	,4073
838	—	7	4	31 41,33	1,863	,5628	8,9360	,2679	,4006
839	Q	5 6	5	31 42,52	1,482	,6264	9,0007	,104	,6241
840	—	8	3	31 43,50	1,677	,5936	8,9668	,2245	,4681
841	Argus	8	3	31 58,93	1,851	-8,5642	+ 8,9360	,02674	+ 8,4113
842	—	7 8	3	32 7,88	2,143	,5077	8,8785	,3390	,2715
843	—	6	3	32 15,56	1,680	,5959	8,9663	,2253	,4702
844	Y ¹	7 8	3	32 29,20	1,410	,6437	9,0127	,1492	,5487
845	—	6 7	3	32 37,80	1,277	,6662	9,0348	,1082	,5824
846	Argus	6 7	4	32 53,68	2,457	-8,4687	+ 8,8852	+ 0,3904	+ 8,1170
847	—	7	3	32 53,89	2,387	,4791	8,8453	,3778	,1049
848	—	7	3	32 54,82	1,181	,6832	9,005	,0722	,6006
849	—	7	3	32 55,61	2,051	,5340	8,9006	,3120	,3380
850	—	7	2	32 56,73	2,004	,5266	8,8981	,3210	,3201
851	Argus	8	4	32 56,98	2,451	-8,4693	+ 8,8855	+ 0,3800	+ 8,1198
852	Y ²	8	3	33 47,04	1,864	,5707	8,9830	,2704	,4102
853	—	6	3	33 47,30	1,896	,6006	8,9630	,2392	,4734
854	—	6	6	34 5,01	2,116	,5281	8,8887	,3265	,3159
855	—	8 9	3	34 24,83	1,193	,6893	9,0482	,0766	,0122

No	Declination (South) Jan 1 1840	Annual Precession	Logarithms of				Difference from the Brisbane Catalogue				
			a'	b	c'	d'	No	M	C	T	
811	54 55 21,18	"	- 7,127	+0,0060	+9,4640	-0,8529	-9,9706	1627	- 2,04	"	- 3,67
812	51 4 39,82	"	7,144	0 0000	,4430	,8039	,9705	1629	- 1,60	"	+ 1,24
813	55 5 0,70	"	7,205	0,0056	,4695	,8,76	,9700	1633	+ 0,89	"	+ 28,35
814	59 15 12,80	"	7,216	0,0103	,4906	,8682	,9699	1635	- 4,31	"	+ 4,47
815	34 39 3,93	"	7,285	9,9479	,3155	,8024	,9692	1637	- 2,61	"	+ 0,48
816	57 44 35,83	7 292	+0,0082	+9,4881	-0,8628	-9,9692	1638	- 2,41	"	"	- 0,76
817	50 52 20 0,0	7,340	9,9983	,4505	,8667	,9687	1639	- 1,34	"	"	- 1,69
818	54 58 23,71	7,356	0,0047	,4780	,8666	,9686	1641	- 0,81	"	"	- 5,70
819	52 19 9,82	7,362	0,0004	,4655	,8670	,9695	1640	- 3,20	"	"	+ 3,68
820	50 16 31,32	7,378	9,9965	,4520	,8679	,9684	1643	- 2,67	- 2,77	"	- 0,71
821	24 22 14,65	7,395	+9,8915	+9,1827	-0,8689	-9,9682	1642	- 4,57	"	"	+ 1,05
822	50 49 16,41	7,410	9,9974	,4574	,8698	,9681	1644	- 3,05	"	"	+ 0,43
823	49 49	7,410	9,9956	,4511	,8698	,9681	1646	"	"	"	"
824	54 3 49,42	7,427	0,0026	,4773	,8708	,9679	1647	- 2,88	"	"	+ 3,97
825	60 54 37,26	7,430	0,0094	,5135	,8739	,9674	1662	- 4,20	"	"	- 4,22
826	42 44 27,79	7,524	+9,9768	+9,4062	-0,8761	-9,9670	1654	- 1,89	"	"	+ 1,28
827	57 35 59,03	7,546	0,0060	,5023	,8777	,9668	1655	- 3,03	"	"	+ 2,09
828	42 46 3,64	7,572	9,9768	,4098	,8792	,9665	1656	- 1,38	"	"	+ 2,48
829	53 12 38,12	7,600	0,0004	,4824	,8804	,9663	1659	- 2,06	"	"	+ 1,55
830	41 43 31,96	7,611	9,9727	,4026	,8814	,9662	1668	- 2,23	"	"	+ 6,67
831	50 14 21,04	7,616	+9,9952	+9,4656	-0,8817	-9,9661	1660	- 3,25	"	"	+ 2,07
832	54 49 13,32	7,632	0,0026	,4932	,8826	,9660	1661	- 2,61	"	"	- 0,60
833	35 48 45,51	7,663	9,9508	,3500	,8844	,9657	1662	- 1,85	"	"	+ 62,01
834	43 56 46 57	7,663	9,9791	,4239	,8844	,9657	1665	- 3,22	"	"	+ 4,70
835	26 27 31,67	7,723	0,9051	,2340	,8878	,9651	1664	- 1,09	"	"	+ 4,58
836	58 50 54,53	7,734	+0,00n0	+9,5189	-0,8884	-9,9650	1667	- 0,59	"	"	+ 5,45
837	44 36 11,06	7,783	9,9805	,4357	,8911	,9646	1668	- 2,71	"	"	+ 1,29
838	44 37 58,59	7,816	9,9805	,4378	,8929	,9612	1672	- 2,50	"	"	+ 4,04
839	52 10 43,30	7,799	9,9974	,4877	,8920	,9643	1674	- 2,72	"	"	+ 4,32
840	48 29 27,16	7,816	9,9899	,4654	,8929	,9642	1673	- 2,28	"	"	+ 6,52
841	44 40 21,61	7,837	+9,9800	+9,4392	-0,8941	-9,9640	1676	- 3,43	"	"	- 2,55
842	35 45 11,38	7,853	9,9489	,3694	,8950	,9648	1678	- 1,42	"	"	+ 2,26
843	48 24 19,86	7,858	9,9899	,4677	,8953	,9638	1681	- 1,67	"	"	+ 6,51
844	53 27 49,06	7,880	9,9987	,4995	,8965	,9635	1682	- 1,01	"	"	- 3,26
845	55 31 56,49	7,885	0,0013	,6111	,8969	,9635	1684	- 2,31	"	"	- 4,44
846	26 29 58,17	7,916	+9,9020	+9,2159	-0,8945	-9,9632	1683	- 0,64	"	"	+ 1,37
847	26 25	7,922	9,9164	,2827	,8988	,9631	1685	- 0,83	"	"	"
848	56 56 30 18	7,905	0,0030	,5194	,8979	,9643	1690	- 2,82	"	"	- 0,19
849	39 37 52,35	7,916	9,9638	,4015	,8985	,9632	1689	- 2,51	"	"	- 0,26
850	38 25 2,84	7,916	9,9595	,3901	,8945	,9632	1688	- 3,98	"	"	- 8,26
851	26 33 26,23	7,922	+9,9025	+9,2474	-0,8988	-9,9631	1686	+ 0,03	"	"	- 2,41
852	44 27 59,61	7,980	9,9791	,4456	,9020	,9625	1693	- 2,37	"	"	+ 2,86
853	48 14 17,29	7,980	9,9981	,4729	,9070	,9625	1694	- 2,58	- 4,09	"	+ 4,48
854	37 46 26,57	8,008	9,9566	,3894	,9035	,9622	1696	- 0,70	"	"	"
855	56 51 15,47	8,034	0,0017	,5259	,9049	,9620	1701	+ 1,76	"	"	+ 5,84

Mean A R and Declination of Stars

No	Names	Mag	No Obs	Right Ascen Jan 1, 1840	Annual Precessn	Logarithms of			
						a	b	c	d
856	Argus	9	3	7 34 30,17	+ 1,265	-8,6775	+9,0364	+0,1021	+8,6952
857		7	3	34 48,44	1,676	,6091	8,9660	,2243	,4849
858		6	3	35 0,86	1,451	,6604	9,0048	,1617	,6522
859		7 8	3	35 16,78	1,264	,6815	9,0363	,1017	,5995
860		—	—	36	2,500	,4773	8,8270	,3979	,1030
861	Argus	7 8	3	36 10,65	0,930	-8,7388	+9,0892	+9,9686	+8,6776
862		6 7	3	36 21,04	1,879	,5802	8,9293	0,2739	,4241
863		9	3	36 27,48	1,869	,5821	8,9311	0,2716	,1279
864		7	3	37 13,30	1,371	,6730	9,0180	0,1370	,5829
865		8	3	37 35,40	1,463	,6591	9,0021	0,1652	,5605
866	Argus	7 8	4	38 25,80	1,271	-8,6954	+9,0344	+0,1041	+8,6138
867		7 8	4	38 37,20	1,346	,6838	9,0218	0,1290	,6962
868		7	4	38 39,31	0,996	,7406	9,0786	0,9983	,6766
869		6 7	4	38 52,91	2,135	,5467	8,9830	0,8294	,3818
870		7 8	3	38 59,70	1,284	,6960	9,0320	0,1086	,6105
871	Argus	6 7	3	39 14,10	1,107	-8,7269	+9,0609	+0,0441	+8,6566
872		8	4	39 16,62	1,340	,6880	9,0226	,1271	,6011
873		7	3	39 23,01	2,137	,5483	8,8923	,3298	,3329
874		7	3	39 25 02	1,105	,7273	9,0613	,0434	,6572
875		6	3	39 37,28	2,253	,5299	8,8625	,3528	,2767
876	Argus	7	3	39 41,79	1,491	-8,6640	+8,9966	+0,1735	+8,5633
877		6	3	39 52,61	1,140	,7243	9,0553	,0569	,6521
878		6	3	39 54,33	1,786	,6111	8,9444	,2619	,4746
879		6 7	3	39 55,64	1,620	,6130	8,9740	,2095	,6279
880		7 8	3	39 59,64	1,620	,6430	8,9740	,2095	,6279
881	Argus	7	3	40 24,54	1,879	-8,5988	+8,9275	+0,2739	+8,4444
882		7	2	40 28,74	2,138	,5531	,8815	,3300	,3881
883		7	3	40 50,90	2,144	,5536	,8803	,3312	,3370
884		7	3	40 52,61	1,685	,5998	,9262	,2753	,4446
885		7 8	4	40 55,86	1,489	,6706	,9966	,1729	,5705
886	Argus	6 7	3	41 2,89	2,066	-8,5682	+8,8939	+0,3151	+8,5734
887		8	4	41 18,64	1,255	,7117	9,0361	,0986	,6320
888		7 8	5	41 22,66	1,870	,6049	8,9287	,2718	,4627
889		7	3	41 44,90	2,015	,5806	8,9025	,3043	,3983
890		7 8	3	41 46,31	2,015	,5803	8,9025	,3043	,3983
891	S Argus	7	3	41 57,06	1,670	-8,6603	+8,9821	+0,1909	+8,5518
892		7	3	42 5,31	1,742	,6309	8,9516	,2410	,5002
893		6	3	42 14,15	1,257	,7156	9,0366	,0993	,6360
894		6 7	3	42 18,76	2,518	,6008	8,8201	,4011	,1191
895		7	4	42 40,28	2,048	,5785	8,8961	,3113	,3890
896	Argus	7 8	3	42 47,94	1,794	-8,6248	+8,9418	+0,2538	+8,4863
897		7 8	3	42 50,85	1,791	,6252	,9422	,2531	,4871
898	Q	7	3	43 27,79	1,476	,6840	,9980	,1691	,5860
899		5	3	43 34,87	1,793	,6281	,9415	,2636	,4900
900		6 7	3	43 46,11	2,019	,5833	,8954	,3115	,3842

No	Declination (South) Jan 1 1840	Annual Precession	Logarithms of				Difference from the Brisbane Catalogue			
			a'	b'	c'	d'	No	Right Ascension from M C	T	Declin
856	55 40 00	- 8,031	+0,0009	+9,5207	-0,9049	-9,9620	1700	- 3,25	—	+ 3,31
857	48 41 34	8,067	9,9886	,4805	,9067	,9616	1702	- 1,67	- 2,91	+ 7,43
858	52 54 24,43	8,104	0,9961	,5083	,9087	,9612	1705	+ 4,30	—	+ 4,48
859	55 51 52,07	8,099	0,0000	,5244	,9084	,9613	1708	- 2,72	—	- 2,44
860	24 58	8,177	9,8910	,2364	,9126	,9604	1710	—	—	—
861	60 15 51,33	8,168	+0,0035	+9,5480	-0,9121	-9,9606	1713	- 1,93	—	+ 0,15
862	44 15 33 44	8,180	9,9788	,4551	,9132	,9603	1711	- 2,91	—	+ 5,90
863	14 30 00,87	,190	0,9708	,4671	,9132	,9603	1712	- 6,77	—	+ 1,23
864	51 20 5 10	8,203	9,9969	,5216	,9166	,9596	1719	- 1,90	—	- 0,12
865	52 49 9,47	8,286	9,9943	,5177	,9183	,9593	1720	- 1,75	—	+ 6,76
866	55 56 20,36	8,348	+0,9983	+9,5380	-0,9216	-9,9586	1721	- 2,06	—	- 8,40
867	54 48 5,88	8,361	9,9969	,5329	,9224	,9584	1725	- 3,13	—	+ 2,26
868	59 37 34,12	8,364	0,0013	,6564	,9224	,9584	1727	- 1,85	—	- 7,38
869	37 33 30,78	8,391	9,9533	,4070	,9238	,9582	1726	- 2,31	—	+ 6,25
870	55 40 2,22	8,390	9,9974	,5396	,9240	,9581	1728	- 2,39	—	+ 1,36
871	58 15 3,90	8,412	-0,0000	+9,5526	-0,9249	-9,9579	1732	—	- 2,83	+ 1,71
872	54 55 54 26	8,417	9,9965	,6363	,9251	,9579	1733	- 0,86	—	+ 3,71
873	37 30 12,75	8,427	9,9533	,4084	,9257	,9577	1730	- 2,59	—	- 4,01
874	58 17 22,21	8,427	0,0000	,5537	,9257	,9577	1737	- 2,77	—	- 0,64
875	30 01 41,88	8,448	0,9375	,3717	,9268	,9575	1736	—	- 2,69	—
876	52 27 24,32	8,448	+0,9925	+9,5241	-0,9268	-9,9576	1738	- 2,71	—	+ 18,99
877	57 50 57,61	8,475	,9941	,5540	,9281	,9572	1742	—	—	+ 5,21
878	46 37 25,98	8,470	,9809	,4876	,9279	,9573	1739	- 1,42	- 2,39	+ 1,71
879	50 4 47,38	8,491	,9881	,5111	,9281	,9572	1740	- 1,55	—	+ 3,20
880	50 5 24,06	8,470	,9881	,5111	,9281	,9572	1741	- 2,04	—	+ 10,98
881	44 29 45,26	8,507	+0,9752	+9,4738	-0,9300	-9,9568	1749	- 2,70	—	- 1,25
882	37 32 44,67	8,517	,9023	,4133	,9303	,9567	1744	- 2,89	—	+ 0,46
883	37 22 53,26	8,541	,9513	,4132	,9316	,9564	1745	- 2,98	—	- 6,19
884	44 22 10,06	8,519	,9745	,4747	,9319	,9564	1746	- 2,57	—	+ 0,81
885	52 34 7,67	8,554	,9921	,6302	,9322	,9563	1749	+ 0,11	—	+ 7,35
886	39 40 13,40	8,559	+0,9795	+9,4357	-0,9324	-9,9563	1748	- 3,18	—	- 4,89
887	56 19 17,65	8,580	,9969	,6519	,9335	,9560	1762	- 2,22	—	- 0,62
888	44 46	8,591	,9750	,4800	,9340	,9559	1761	+ 1,53	—	—
889	41 6 43,38	8,620	,9643	,4614	,9354	,9556	1763	- 1,41	—	- 0,20
890	41 7 31,99	8,617	,9643	,4614	,9354	,9556	1764	- 0,83	—	+ 5,90
891	51 9 38,37	8,622	+0,9890	+9,6252	-0,9366	-9,9556	1766	- 7,56	—	+ 2,60
892	47 43 12,00	8,641	,9818	,6040	,9367	,9553	1769	+ 0,11	—	+ 3,61
893	56 19 56,70	8,624	,9961	,6566	,9372	,9552	1762	- 1,33	—	+ 1,47
894	24 30 59,12	8,665	,8859	,2641	,9377	,9551	1760	- 1,27	- 2,31	+ 2,28
895	40 15 22,94	8,691	,9605	,4476	,9391	,9548	1764	- 2,44	—	- 5,90
896	46 37 3,79	8,701	+0,9791	+9,4092	-0,9396	-9,9546	1766	- 1,55	—	+ 5,15
897	46 40 33,71	8,701	,9791	,4995	,9398	,9546	1767	- 2,41	—	+ 4,46
898	52 56 10,77	8,719	,9908	,5421	,9419	,9541	1771	- 1,07	—	+ 6,54
899	46 40 34,95	8,759	,9786	,5044	,9425	,9540	1772	- 1,84	- 3,10	+ 3,37
900	40 18 9,90	8,760	,9600	,4525	,9436	,9537	1773	- 2,06	—	- 0,16

Mean A R and Declination of Stars

No	Names	Mag	No Obs	Right Ascen Jan 1, 1840	Annual Precess	Logarithms of			
						a	b	c	d
901	P Argus	5 6	3	7 44 21,70	+1,826	-8,6241	+8,9355	+0,7615	+8,1812
902	—	6	2	44 23,40	1,806	,6293	,6080	,2067	,1803
903	—	—	—	44	1,288	,7214	9 0'97	1099	,6101
904	—	7	9	44 56,02	1,285	,7227	9,0301	,1089	,6111
905	—	7	3	45 38,03	1,905	,6168	8,4204	,2799	,1630
906	Argus	7	5	45 41,09	1,358	-8,7140	+9,0175	+0,1920	+8,6274
907	—	7 6	3	45 44,52	1,406	,7061	9,0093	,1180	,6111
908	—	7	3	45 56,52	1,399	,7073	9,0105	,1468	,6111
909	—	8	4	45 48,36	1,390	,7091	9,0120	,1150	,6109
910	—	8	3	45 58,90	1,381	,7126	9,0144	,1103	,6231
911	Argus	7 8	3	46 1 66	1,809	-8,6360	+8,9376	+0,2671	+8,1904
912	—	6 7	3	46 2,80	1,697	,6669	8,9686	,2110	,5519
913	—	6 7	3	46 26,81	1,706	,6402	8,9399	,2111	,5030
914	—	6 7	3	46 35,97	1,008	,7759	9,0717	,0056	,7140
915	—	7 8	3	48 1,87	2,543	,6203	8,8123	,1011	,1265
916	Argus	7 8	3	48 7 08	1,068	-8,7730	+9,0649	+0,0266	+8,7074
917	—	8	3	48 13,17	1,360	,7266	9,0182	,1303	,6116
918	—	6 7	3	48 27,10	1,641	,6761	8,9661	,2159	,5611
919	—	6	3	48 33,06	1,690	,6681	8,9581	,2279	,5176
920	—	7	3	48 34,62	2,350	,6610	8,8107	,3711	,2015
921	R Argus	6 6	3	48 36,10	1,762	-8,6656	+8,7461	+0,2460	+8,6217
922	—	6 7	3	48 40,41	1,433	,7143	9,0037	,1662	,6221
923	—	7 8	4	49 22,02	1,077	,7768	9,0681	,0522	,7105
924	—	9	3	49 29,06	1,086	,7760	9,0617	,0358	,7015
925	—	7	3	49 36,88	1,925	,6300	8,9148	,2811	,4711
926	Argus	7	3	50 0,60	2,387	-8,5508	1 8,8337	10,778	+8,2162
927	—	7	3	50 25,93	1,650	,6835	8,9040	,2175	,5687
928	—	7	3	50 35,18	1,803	,6557	8,9067	,2560	,5101
929	—	8	3	51 11,91	1,528	,7084	8,9861	,1811	,6079
930	—	8 9	3	51 10,79	1,428	,7264	9,0037	,1517	,6356
931	Argus	8	3	51 20,98	1,806	-8,6688	+8,9359	+0,2567	+8,6222
932	—	7	3	51 69,97	1,802	,6633	8,9361	,2557	,5478
933	—	8	3	52 23,58	1,449	,7274	8,9996	,1611	,6351
934	—	7	4	52 24,42	1,720	,6788	8,9510	,2365	,5565
935	X	4 5	4	52 42,60	1,630	,7146	8,9854	,1817	,6141
936	Argus	—	—	52	2,417	-8,6596	+8,8263	+0,3318	+8,2152
937	—	6	3	53 35,97	1,023	,8040	9,0707	,0009	,7420
938	—	7 8	3	53 36,27	1,326	,7610	9,0208	,1222	,5727
939	—	6 6	4	53 39,02	1,724	,6832	8,9497	,2365	,5599
940	—	7	3	54 10,76	1,828	,6674	8,9314	,2005	,5295
941	Argus	7	3	54 21,73	1,257	-8,7689	+9,0320	+0,0903	+8,6928
942	—	7	3	54 30,79	2,522	,4476	8,8093	,4017	,1732
943	—	—	—	54	1,444	,7361	8,9998	,1596	,6449
944	Can Maj	7	1	54 37,18	1,748	,6226	8,9449	,2425	,5663
945	Argus	7 8	4	54 39,86	1,446	,7375	8,9994	,1602	,6462

No	Declination (South) Jan 1 1840	Annual Precession	Logarithms of				Difference from the Brisbane Catalogue				
			a	b'	c'	a	No	M	C	T	
901	45 58 22,42	—	8,796	+9,9763	+9,4992	-0,9443	-9,9536	1778	—	— 2,16	+ 5,26
902	16 27 26,75		8,822	,9773	,5038	,9456	,9532	1780	— 1 14	—	+ 4,58
903	56 0 —		8,813	,9939	,5634	,9466	,9530	1782	—	—	—
904	56 4 17,71		8,869	,9959	,5644	,9474	,9528	1784	— 4 02	— 2,94	+ 1,77
905	41 10 55,37		8,921	,9708	,4917	,9504	,9520	1787	— 3,89	—	+ 1,39
906	56 0 29,59	8,921	+9,9921	+9,5620	-0,9504	-9,9520	1788	— 3,17	—	—	+ 1,82
907	51 24 21,05	8,927	,9912	,5581	,9507	,9520	1789	— 2,93	—	—	+ 1,80
908	51 21 —	8,927	,9917	,5587	,9507	,9520	1791	— 14 02	—	—	—
909	54 30 4,61	8,932	,9917	,5598	,9509	,9519	1792	— 0,99	—	—	+ 12,54
910	54 40 35,77	8,947	,9917	,6614	,9517	,9517	1793	— 2,71	—	—	- 4,62
911	46 27 50,72	8,963	+9,9768	+9,5105	-0,9519	-9,9517	1794	— 0,84	—	—	+ 6,36
912	50 6 11,80	8,938	,9841	,5350	,9519	,9517	1796	— 1,33	—	—	- 4,98
913	46 48 31,19	8,984	,9773	,6144	,9535	,9513	1798	— 1,38	—	—	+ 6,05
914	59 53 11,87	9,000	,9961	,5894	,9542	,9511	1800	—	—	—	+ 4,33
915	23 48 —	9,114	,8791	,2640	,9697	,9497	1804	+ 1,05	—	—	—
916	50 14 10,86	9,114	+9,9943	+9,5920	-0,9697	-9,9497	1806	— 1,44	—	—	+ 5,08
917	55 17 32,76	9,119	,9908	,5730	,9600	,9496	1807	— 2,09	—	—	- 1,59
918	50 6 33,18	9,140	,9827	,6441	,9609	,9494	1809	— 0,99	—	—	+ 50,65
919	49 11 55,09	9,150	,9809	,5397	,9614	,9192	1813	— 1,49	— 0,39	—	+ 3,78
920	31 7 2,33	9,150	,9146	,3730	,9614	,9192	1808	— 4,59	—	—	- 2,43
921	47 41 15,03	9,155	19,9777	+9,5288	-0,9617	-9,9492	1812	—	—	—	+ 5,92
922	53 57 11,70	9,155	,9886	,5676	,9617	,9492	1814	—	—	—	+ 13,11
923	59 11 56,83	9,207	,9934	,5962	,9641	,9485	1816	— 2,96	—	—	- 19,06
924	69 4 43,25	9,217	,9934	,5962	,9646	,9484	1818	— 1,72	—	—	+ 6,65
925	43 56 10,97	9,233	,9675	,5048	,9653	,9482	1817	— 1,99	—	—	+ 7,86
926	29 51 44,49	9,264	+9,9127	+9,3623	-0,9668	-9,9478	1819	— 1,80	—	—	- 3,18
927	50 8 46,08	9,295	,9814	,5515	,9683	,9471	1822	— 1,29	—	—	- 4,93
928	46 53 26,60	9,295	,9750	,5298	,9683	,9474	1821	— 12,68	—	—	+ 2,84
929	52 28 53,91	9,352	,9850	,5685	,9709	,9467	1826	— 1,53	—	—	- 3,69
930	54 13 9,42	9,357	,9872	,5766	,9711	,9466	1828	— 3,75	—	—	- 0,79
931	46 53 28,70	9,362	+9,9741	+9,5320	-0,9714	-9,9465	1827	— 4,08	—	—	- 0,17
932	47 2 91,28	9,434	,9738	,5373	,9747	,9456	1832	+ 10,88	—	—	+ 7,50
933	58 56 14,92	9,445	,9859	,5809	,9752	,9465	1834	— 3,70	—	—	+ 3,39
934	48 50 11,05	9,445	,9777	,5499	,9752	,9465	1833	— 2,41	—	—	+ 5,46
935	52 33 17,05	9,470	,9841	,5743	,9764	,9451	1835	— 2,02	— 1,99	—	+ 6,26
936	28 55 —	9,557	19,9058	+9,3631	-0,9794	-9,9442	1837	—	—	—	—
937	60 5 56,47	9,537	,9908	,6165	,9794	,9442	1842	+ 0,74	—	—	- 0,94
938	57 0 4,70	9,537	,9872	,5962	,9794	,9442	1840	— 3,28	—	—	- 1,56
939	48 48 43,02	9,542	,9768	,6644	,9796	,9412	1839	— 2,70	—	—	+ 6,41
940	46 42 23,09	9,583	,9717	,5417	,9815	,9436	1843	— 2,48	—	—	+ 2,64
941	57 2 49,76	9,599	+9,9881	+9,6042	-0,9822	-9,9434	1846	— 0,74	—	—	- 2,92
942	24 68 35,45	9,614	,8825	,3067	,9829	,9432	1844	— 3,34	—	—	- 1,82
943	54 7 —	9,688	,9850	,5886	,9817	,9435	1845	—	—	—	—
944	48 10 33,19	9,614	,9750	,6646	,9829	,9432	1847	— 4,15	—	—	—
945	54 7 58,20	9,619	,9845	,5900	,9831	,9431	1849	— 2,55	—	—	- 0,44

No	Names	Mag	No Obs	Right Ascen Jan 1, 1840	Annual Progress	Logarithms of			
						a	b	c	d
946	Argus	6 7	4	7 54 41,41	+ 1,693	-8,6932	+8,9549	+0,2287	+8,5746
947	—	8	1	54 42,62	1,693	,6932	8,9549	,2287	,5716
948	—	7 8	2	54 47,61	1,749	,6935	8,9446	,2428	,5572
949	—	6	3	54 49,03	1,048	,8053	9,0663	,0204	,7423
950	—	6 7	3	54 49,40	1,818	,6715	8,9520	,2596	,5048
951	Aigus	7 8	3	55 12,38	1,064	-8,7190	+8,9782	+0,1942	+8,6162
952	—	8	8	55 13,61	1,449	,7391	,9987	,1011	,6478
953	—	7 8	3	55 26,58	1,716	,6862	,9449	,2420	,5606
954	—	—	—	55	1,451	,7896	,9983	,1617	,6182
955	—	—	—	55	1,011	,8149	9,0727	,0047	,7542
956	Argus	7	3	55 36,22	1,743	-8,6876	+8,9454	+0,2413	+8,5626
957	—	7	3	55 46,82	2,192	,6060	8,8626	,3408	,3840
958	—	8	1	56 10,47	1,012	,8165	9,0718	,0052	,7557
959	—	6 7	2	56 49,22	1,749	,6876	8,9441	,2424	,5617
960	—	7 8	3	56 14,03	2,200	,6061	8,8609	,3424	,3817
961	Aigus	7	3	56 37,90	1,935	-8,6565	8,9092	+0,2867	+8,1996
962	—	7	3	56 45,36	1,718	,6971	8,9495	,2350	,5,61
963	—	6 7	3	56 50,28	1,066	,8106	9,0630	,0278	,7472
964	—	6	3	56 53,00	1,034	,8157	9,0680	,0145	,7509
965	—	6 7	3	56 56,68	1,480	,7409	8,9924	,1703	,6473
966	Aigus	10	2	56 53,06	1,042	-8,8148	9,0669	+0,0179	+8,7527
967	—	6 7	3	57 14,93	2,060	,8356	8,8858	,3139	,4514
968	—	6 7	3	57 17,67	1,934	,6500	8,9090	,2863	,5026
969	—	6	4	57 30,05	1,461	,7466	8,9957	,1646	,6550
970	—	8	4	57 31,80	1,161	,7466	8,9957	,1646	,6553
971	Argus	—	—	58	1,406	-8,7574	+9,0049	+0,1480	+8,6722
972	—	6 7	6	58 7,75	1,165	,7506	8,9965	,1629	,6598
973	—	7	3	58 8,23	1,705	,7047	8,9509	,2,20	,6859
974	—	7	3	58 9 13	2,002	,6494	8,8959	,3016	,4792
975	—	6 7	3	58 53,11	1,730	,7032	8,8 182	,2380	,5814
976	Aigus	6 7	3	58 53,38	2,311	-8,9009	+8,8396	+0,3638	+8,8348
977	—	—	—	58	2,309	,5988	,8194	,3634	,8174
978	—	6 7	4	59 34,68	1,312	,5991	,8348	,3640	,3867
979	—	6 7	3	59 13,56	1,683	,7173	,0644	,2261	,6026
980	—	6 7	3	59 19,06	1,475	,7653	,9921	,1688	,6635
981	Argus	6 7	3	60 24,63	1,849	-8,6871	-8,9263	+0,2669	+8,5479
982	—	—	—	60	1,448	,7016	,9978	,1699	,6727
983	—	7 8	6	60 32,98	1,446	,7619	,9972	,1602	,6728
984	—	6 7	4	60 39,10	1,769	,7029	,9382	,2477	,6,64
985	—	6	3	60 54,71	1,654	,7414	,9775	,1917	,6588
986	Argus	7 8	5	1 0,72	1,448	-8,7632	+8,9968	+0,1608	+8,6741
987	—	6	3	1 32,84	1,973	,6774	,9087	,2440	,6255
988	—	7 8	3	1 57,08	2,269	,8150	,8445	,358	,3710
989	—	7	3	2 40,63	1,623	,7376	,9643	,2103	,6811
990	—	6 7	3	2 58,81	1,767	,7121	,9878	,2472	,5380

No	Declination (South) Jan 1 1840	Annual Precession	Logarithms of				Difference from the Brisbane Catalogue			
			a'	b	c'	d'	No	Right Ascension from M C	T	Declin
946	49 32 30,54	— 9,624	+0,9773	+9,5628	—0,9834	—9,9481	1848	— 1,17	—	— 2,27
947	49 32 18,46	9,624	,9773	,5628	,9834	,9431	1848	—	—	—
948	48 30 55,89	9,634	,9750	,5,66	,9438	,9429	1850	—	—1,77	—
949	59 52 33,57	9,634	,9899	,6189	,9838	,9429	1852	— 3,35	—4,41	+ 5,98
950	46 52 0,82	9,644	,9713	,5457	,9843	,9428	1851	— 1,94	—	+ 4,09
951	52 6 26,89	9,665	+0,9803	+9,5803	—0,9952	—9,9425	1853	— 0,58	—	— 5,50
952	54 6 39,06	9,660	,9841	,5917	,9860	,9426	1854	— 2,97	—	+ 4,13
953	48 28 0,03	9,675	,9760	,5581	,9857	,9424	1856	— 3,62	—	+ 9,65
954	64 6	9,675	,9856	,5923	,9857	,9424	1857	—	—	—
955	60 22	9,691	,9886	,6238	,9864	,9422	1862	—	—	—
956	48 32 37,95	9,691	+0,9745	+9,5893	—0,9863	—9,9422	1858	— 2,47	—2,37	+10,06
957	36 50 33,00	9,711	,9400	,4633	,9873	,9419	1859	— 2,25	—	— 2,66
958	60 23 19,32	9,731	,9886	,6253	,9882	,9416	1863	— 2,79	—2,37	— 2,78
959	48 25 55,32	9,711	,9745	,5595	,9873	,9419	1860	— 3,95	—	+ 6,40
960	36 36 27,49	9,742	,9390	,4823	,9886	,9415	1861	— 2,32	—	+ 5,77
961	44 9 22,78	9,777	+0,9633	+9,5314	—0,9902	—9,9410	1865	+ 2,15	—	+ 7,36
962	49 10 40,99	9,782	,9750	,6675	,9904	,9409	1867	— 1,36	—	+ 1,37
963	59 46 6,99	9,782	,9477	,6251	,9904	,9409	1868	— 3,06	—	+ 1,59
964	60 8 55,90	9,782	,9831	,6208	,9904	,9409	1869	— 3,40	—	+ 0,42
965	53 42 31,49	9,798	,9823	,5956	,9911	,9407	1870	+ 3,99	—	+ 5,64
966	60 4 1,36	9,787	+0,9877	+9,6266	—0,9907	—9,9408	1871	— 0,21	—	— 6,48
967	40 51 54,65	9,818	,9513	,6060	,9920	,9404	1872	—	—	+ 0,13
968	44 13 19,01	9,823	,933	,5330	,9922	,9403	1873	— 2,14	—	+ 3,22
969	54 4 17,91	9,838	,9819	,5994	,9929	,9401	1875	— 2,38	—	+ 2,60
970	54 5 6,86	9,838	,9818	,5994	,9929	,9401	1875	—	—	—
971	55 0	9,889	+0,9823	+9,6067	—0,9952	—9,9394	1877	—	—	—
972	54 13 8,11	9,894	,9823	,6028	,9954	,9393	1881	+ 4,30	—	— 2,16
973	49 30 19,50	9,889	,9745	,5744	,9951	,9394	1880	— 0,79	—	— 1,22
974	42 29 57,87	9,884	,9581	,5228	,9949	,9395	1879	—	—4,45	+ 0,67
975	49 2 58,68	9,945	,9731	,5739	,9976	,9386	1886	—	—1,65	+ 2,43
976	33 8 21,27	9,950	+0,9232	+9,4337	—0,9978	—9,9386	1884	— 1,32	—3,97	— 2,22
977	33 3	9,950	,9232	,4346	,9978	,9385	1886	—	—	—
978	33 6 47,94	10,000	,9227	,4357	1,0000	,9378	1887	— 1,58	—3,63	+ 8,09
979	50 8 15,63	10,046	,9740	,5853	1,0020	,9372	1888	— 3,07	—4,70	+ 0,89
980	54 1 19,39	10,051	,9600	,6084	1,0022	,9371	1889	— 2,05	—	+ 1,53
981	46 31 24,97	10,061	+0,9671	+9,5615	—1,0026	—9,9369	1890	— 1,86	—	+ 4,10
982	54 32	10,071	,9800	,6122	,0031	,9368	1893	—	—	—
983	54 32 32,19	10,076	,9805	,6123	,0033	,9367	1895	+ 5 60	—	— 2,25
984	48 21 0,28	10,076	,9703	,5749	,0033	,9367	1894	— 2,55	—	+ 7,97
985	52 39 5,26	10,096	,9777	,6027	,0042	,9364	1896	—	—2,52	—
986	54 32 12,10	10,107	+0,9800	+9,6136	—1,0045	—9,9363	1897	— 1,71	—	— 2,48
987	44 48 28,43	10,146	,9619	,5526	,0063	,9357	1898	— 1,62	—0,31	+ 1,54
988	34 44 57,11	10,177	,9284	,4617	,0076	,9352	1901	—	—3,90	— 0,42
989	51 24 42,62	10,227	,9745	,6014	,0097	,9343	1907	— 2 21	—	+ 0,78
990	48 32 46,54	10,222	,9689	,5838	,0108	,9341	1908	— 1,95	—	+ 0,30

Mean A R and Declination of Stars

No	Names	Mag	No Obs	Right Ascen Jan 1, 1840	Annual Precessn	Logarithms of			
						a	b	c	d
991	Argus	7 8	3	8 3 7,75	+ 2,262	-8,6204	+ 8,8444	+ 0,3545	+ 8,3792
992	—	8	3	8 47,88	1,468	,7701	,9919	,1667	,6802
993	—	7	3	4 14,36	1,092	,7493	,9688	,2019	,6468
994	—	5 6	3	4 23,06	1,787	,7133	,9330	,2621	,5859
995	γ^1	6 7	3	4 34,06	1,847	,7031	,9215	,2665	,5664
996	Argus	6 7	3	4 34 48	2,356	-8,6092	+ 8,8273	+ 0,3722	+ 8,3324
997	γ^2	6 6	3	4 36,51	1,847	,7033	,9214	,2665	,5666
998	γ^3	7 8	3	4 39,65	1,847	,7035	,9215	,2665	,5669
999	—	7 8	3	4 50,60	1,678	,7358	,9330	,2248	,6236
1000	—	6	4	4 51,53	1,822	,7089	,9260	,2605	,5764
1001	Argus	7	4	5 15 75	1,601	-8,7517	+ 8,9672	+ 0,2044	+ 8,6489
1002	—	7 8	3	5 25,07	2,229	,6344	,8,8491	,3430	,4071
1003	—	6 7	4	5 37,76	1,767	,7223	,8,9362	,2472	,5987
1004	—	7	4	5 48,90	1,770	,7222	,8,9354	,2480	,5981
1005	—	6 7	3	5 49,66	1,401	,7899	,9,0032	,1464	,7006
1006	Argus	6 7	3	6 17,77	2,426	-8,6035	+ 8,8143	+ 0,3849	+ 8,2964
1007	B	5 6	3	6 20,60	1,029	,8554	,9,0664	,0124	,7966
1008	—	5 6	3	6 21,94	1,805	,7178	,8,9285	,2665	,5887
1009	—	7	3	6 31,23	2,296	,6391	,8,8489	,3476	,4138
1010	—	7	4	7 18,30	2,248	,6378	,8,8443	,3618	,4066
1011	Argus	6 7	3	7 22,43	2,248	-8,6079	+ 8,8441	+ 0,3618	+ 8,4066
1012	—	5 6	2	7 27,24	2,260	,6360	,8419	,3541	,3996
1013	—	5 6	3	7 57,85	2,250	,6396	,8438	,3522	,4071
1014	—	6 7	3	7 58,11	2,249	,6999	,8436	,3520	,4079
1015	—	7	8	8 28,80	1,528	,7772	,9,92	,1641	,6834
1016	Argus	7	3	8 43,06	1,894	-8,7097	+ 8,9105	+ 0,2774	+ 8,6675
1017	—	7 8	3	9 24,09	1,780	,7834	,8,9317	,2504	,1096
1018	—	8	3	9 14,77	1,147	,8475	,9,0461	,0596	,7601
1019	—	8	5	9 30,30	1,789	,7322	,8,9300	,2526	,6072
1020	—	7 8	6	9 30,77	2,425	,6144	,8,8116	,3847	,8096
1021	Argus	7 8	5	10 30,98	1,788	-8,7364	+ 8,9297	+ 0,2624	+ 8,6122
1022	—	7 8	3	10 43,23	1,793	,7369	,9244	,2586	,6110
1023	—	7 8	3	10 45,21	2,624	,6022	,7947	,4021	,2416
1024	—	—	—	10	1,176	,7196	,9318	,0704	,6173
1025	—	7	3	10 47,40	1,911	,7155	,9057	,2813	,5691
1026	Argus	7 8	3	10 58,24	1,786	-8,7387	+ 8,9297	+ 0,2619	+ 8,6160
1027	—	7 8	6	11 16,58	1,790	,7885	,9288	,2528	,6143
1028	—	7	4	11 28,01	2,433	,6192	,8084	,3861	,3118
1029	—	8	3	11 36,30	2,025	,051	,7937	,4023	,2448
1030	—	7	3	11 48,46	2,057	,6891	,8768	,3132	,5160
1031	Argus	7 8	2	11 51,30	1,936	-8,7126	+ 8,9012	+ 0,2469	+ 8,5641
1032	—	—	—	11	2,990	,6166	,8,427	,1548	,4030
1033	—	6 7	2	12 23,27	1,450	,7113	,8,916	,2612	,6986
1034	—	7 8	3	12 28,41	1,600	,8251	,9,081	,135	,7466
1035	—	8	3	12 40,62	1,165	,8578	,9,0422	,0656	,7934

No	Declination (South) Jan 1 1840	Annual Precession	Logarithms of				Difference from the Brisbane Catalogue			
			a'	b'	c'	d'	No	Right Ascension from M C	T	Declin
991	34 59 26,02	-10,272	+9,9289	+9,4684	-1,0117	-9,9338	1902	—	—	+ 1,58
992	54 21 42,23	10,312	,9777	,6215	,0183	,9332	1911	- 2,66	—	- 2,38
993	52 9 7,48	10,352	,9750	,6106	,0160	,9326	1909	- 44,27	—	+ 3,97
994	48 12 54,38	10,347	,9675	,5855	,0148	,9327	1913	- 11,96	—	+ 1,19
995	46 52 33,80	10,372	,9647	,5772	,0158	,9323	1916	- 2,97	- 3,13	+ 0,75
996	31 54 37,08	10,377	+0,0374	+9,6429	-1,0161	-9,9322	1915	- 3,23	—	- 3,61
997	46 52 5,26	10,377	9,9643	,5774	,0161	,9322	1917	- 2 30	- 2,91	- 2,35
998	46 53 0,18	10,377	9,9643	,5776	,0161	,9322	1918	- 2,66	—	- 3,81
999	60 32 40,52	10,392	9,9713	,6026	,0167	,9320	1921	- 3,99	—	+ 0,41
1000	47 28 1,66	10,392	9,9652	,5823	,0167	,9320	1920	- 2,83	- 2,46	+ 7,64
1001	52 6 14,05	10,422	+9,9731	+9,6132	-1,0179	-9,9315	1923	- 3,53	—	+ 6,01
1002	36 19 36,39	10,437	,9325	,4993	,0186	,9613	1924	- 1,30	—	+ 1,87
1003	48 45 50,69	10,452	,9675	,6936	,0192	,9311	1926	- 1,89	—	+ 7,79
1004	48 41 25,85	10,462	,9671	,6936	,0196	,9309	1927	- 2,26	—	+ 18,03
1005	55 36 57,84	10,462	,9773	,6344	,0196	,9309	1928	- 2,16	—	- 3,09
1006	29 26 4,85	10,506	-1 9,9009	+9,4113	-1,0214	-9,9302	1932	—	—	+ 5,16
1007	60 49 5,68	10,501	,9810	,6604	,0212	,9303	1934	- 1,89	- 1,99	- 2,37
1008	47 59 7,46	10,506	,9652	,5905	,0214	,9302	1931	- 2,06	—	+ 5,74
1009	36 30 45,01	10,520	,9326	,4949	,0221	,9300	1933	- 2,49	—	+ 1,87
1010	35 51 44,86	10,581	,9294	,4904	,0245	,9290	1936	- 1,94	—	- 14,39
1011	35 49 49 40	10,585	+9,9289	+9,4904	-1,0247	-9,9290	1937	- 2,76	—	+ 0,12
1012	35 20 12,94	10,590	,9274	,4866	,0249	,9289	1938	- 3,77	—	—
1013	35 60 27,98	10,630	,9284	,4921	,0266	,9283	1941	- 3,06	—	+ 0,32
1014	56 51 33,98	10,630	,9284	,4926	,0265	,9283	1942	- 1,54	- 2,87	+ 2,09
1015	53 39 59,24	10,659	,9727	,6320	,0277	,9278	1944	- 1,42	—	+ 3,36
1016	46 6 44,17	10,679	+9,9585	+9,5844	-1,0285	-9,9276	1945	- 2,79	—	+ 2,83
1017	48 44 50 02	10,724	,9643	,6047	,0303	,9267	1949	- 6,50	—	+ 14,98
1018	59 33 30,10	10,719	,9768	,6638	,0301	,9268	1951	- 2,44	—	- 3,30
1019	48 33 48,50	10,733	,9638	,6038	,0307	,9266	1952	- 6,57	—	+ 2,11
1020	29 41 49,36	10,743	,9004	,4244	,0311	,9264	1960	- 2,99	—	- 4,46
1021	48 41 23,77	10,812	+9,9628	+9,6078	-1,0339	-9,9253	1955	- 4,08	—	+ 8,90
1022	48 33 34 63	10,827	,9628	,6076	,0345	,9261	1957	- 2,49	—	+ 10,20
1023	25 48 33,58	10,827	,8791	,3713	,0345	,9261	1956	- 3,48	- 1,81	- 0,19
1024	48 57	10,832	,9633	,6104	,0347	,9260	1958	—	—	—
1025	40 49 27,41	10,832	,9566	,6854	,0347	,9260	1959	- 1,73	—	+ 5,60
1026	48 46 26 37	10,852	+9,9628	+9,6099	-1,0355	-9,9246	1960	+ 0,20	—	- 3,81
1027	48 41 33,88	10,860	,9624	,6099	,0361	,9244	1961	- 4,86	—	+ 0,61
1028	29 30 37,70	10,860	,8981	,4275	,0369	,9241	1962	- 1,37	—	- 4,03
1029	25 50 51,49	10,866	,8785	,3751	,0372	,9239	1963	- 2,07	—	- 6,07
1030	42 1 41,13	10,910	,9464	,6618	,0378	,9237	1964	- 3,15	—	+ 0,16
1031	45 15 36,84	10,910	+0,9647	+0,6875	-1,0378	-9,9237	1965	- 1,37	—	+ 2,64
1032	31 47	10,939	,9212	,4936	,0390	,9232	1966	—	—	—
1033	47 25 31,24	10,944	,9595	,6048	,0396	,9229	1967	- 1,60	- 2,11	- 0,56
1034	50 46 34,71	10,951	,9723	,6004	,0398	,9228	1969	- 1,28	—	- 2,84
1035	59 33 58,03	10,969	,9740	,6739	,0402	,9227	1970	- 1,81	—	+ 1,08

No	Names	Mag	No Obs	Right Ascen Jan 1, 1840	Annual Precessn	Logarithms of			
						a	b	c	d
1036	Argus	7	3	8 13 38,80	+ 1,971	-8,7124	+8,8924	+0,2947	+8,5581
1037	—	7	3	13 46,88	2,449	,6240	,8035	,3800	,4101
1038	—	6 7	3	13 57,08	1,885	,7300	,9090	,2753	,6924
1039	—	7	3	14 1,08	1,927	,7441	,9007	,2849	,5708
1040	—	7	3	14 10,40	1,843	,7387	,9168	,2655	,0078
1041	Argus	6 7	3	14 39,12	1,240	-8,8519	+9,0284	+0,0934	+8,7835
1042	—	7	3	14 59,29	1,788	,7523	,89272	,2624	,6301
1043	—	7 8	3	15 1,00	1,157	,8677	,90426	,0650	,8015
1044	—	7	3	15 13,85	2,005	,7109	,8847	,3021	,5509
1045	—	6	2	15 18,51	2,262	,6620	,8352	,3515	,4112
1046	Argus	7 8	3	15 18,80	1,160	-8,8690	+9,0419	+0,0645	+8,8058
1047	—	6 7	3	15 29,95	1,676	,7757	,89484	,2243	,6690
1048	—	6 7	3	15 37,34	2,167	,6810	,88631	,3539	,4811
1049	—	7	3	15 44,75	2,164	,6820	,88536	,3353	,4801
1050	—	7	3	16 8,80	1,980	,7190	,88889	,2967	,5616
1051	Argus	9	3	16 12,05	2,059	-8,7037	+8,8734	+0,3137	+8,5592
1052	—	7	3	16 21,18	2,401	,6402	,8094	,3804	,3535
1053	—	6 7	5	16 38,88	1,588	,7937	,9652	,2008	,6972
1054	—	7	3	16 21,38	1,981	,7198	,8887	,2969	,56 6
1055	—	7	3	16 31,91	1,666	,7814	,9497	,2217	,6761
1056	Argus	6 7	3	16 35,90	1,182	-8,8694	+9,0377	+0,0726	+8,8052
1057	—	7	3	16 46,16	1,648	,7853	,89531	,2170	,6825
1058	—	7	3	16 53,39	2,497	,6261	,7924	,3974	,2880
1059	—	7	3	17 12,65	2,434	,6574	,8027	,3863	,3961
1060	—	7	3	17 12,80	1,873	,7437	,9093	,2726	,6098
1061	Argus	7	3	17 18,26	1,988	-8,7214	+8,8864	+0,2984	+8,5060
1062	—	7	3	17 38,41	1,338	,8459	,90098	,1265	,7718
1063	—	8 9	4	17 43,90	1,857	,7488	,89122	,2688	,6179
1064	—	7 8	3	17 45,63	1,821	,7568	,80192	,2603	,6306
1065	—	7 8	3	18 2,04	1,988	,7239	,88862	,2984	,5094
1066	Argus	8	4	18 13,54	1,963	-8,7200	+8,8910	+0,2929	+8,5794
1067	—	6 7	3	18 26,53	1,678	,7866	,9463	,2248	,6800
1068	—	6 7	3	19 25,67	2,072	,7122	,8686	,3164	,6000
1069	—	7 8	3	19 40,64	1,516	,8210	,9766	,1807	,7384
1070	—	6 7	3	20 15,14	2,469	,6406	,7937	,3926	,3228
1071	Argus	6 7	3	20 39,24	1,516	-8,8244	+8,9769	+0,1807	+8,7371
1072	—	6 7	3	20 54,62	2,574	,6260	,7764	,4106	,2417
1073	—	6 7	3	21 6,44	2,645	,6308	,7805	,4057	,2667
1074	—	7	3	21 6,52	2,086	,7148	,8646	,3193	,6401
1075	—	6 7	4	21 7,91	1,513	,8208	,9766	,1798	,7409
1076	Argus	8	3	21 10,64	1,860	-8,7598	+8,9095	+0,2695	+8,6306
1077	—	7 8	3	21 29,26	1,874	,7677	,9066	,2728	,6262
1078	—	—	—	21 —	1,514	,8277	,9763	,1801	,7409
1079	—	7 8	2	21 42,96	2,028	,7284	,8767	,3071	,6078
1080	—	8	3	21 45,25	1,817	,7702	,9178	,2693	,6479

No	Declination (South) Jan 1 1840	Annual Precession	Logarithms of				Differences from the Brisbane Catalogue			
			a	b'	c'	d'	No	Right Ascension from M C	T	Declin
1036	44 32 13,78	-11,047	+9,9513	+9,5874	-1,0432	-9,9214	1973	- 1,42	- 1,49	+ 1,66
1037	29 2 21,57	11,057	,8943	,4279	,0436	,9212	1974	- 2 19	—	- 3,45
1038	46 42 38,56	11,067	,9562	,6043	,0440	,9210	1975	- 2,45	—	+ 5,21
1039	45 42 18,40	11,072	,9638	,5970	,0142	,9209	1976	- 2,38	—	+ 2,15
1040	47 41 48,80	11,081	,9581	,6118	,0446	,9208	1977	- 1,69	- 2,71	+ 4,21
1041	57 39 55,40	11,110	+9,9713	+9,6754	-1,0457	-9,9203	1978	- 2,39	- 2,46	+ 3,64
1042	49 2 17,78	11,139	,9600	,6230	,0468	,9198	1980	- 1,65	—	+ 3,26
1043	59 48 53,58	11,139	,9713	,6817	,0168	,9198	1981	- 3,03	—	- 5,23
1044	43 44 59,43	11,158	,9482	,6856	,0176	,9194	1982	- 1,43	—	+ 4,65
1045	35 58 42,00	11,168	,9238	,6153	,0480	,9192	1983	- 1,96	- 1,35	+ 0,70
1046	69 48 40,29	11,173	+9,9713	+9,6830	-1,0482	-9,9193	1987	+ 7,71	—	+ 7,17
1047	51 26 23,15	11,178	,9633	,6397	,0484	,9191	1985	- 1,45	—	+ 5,18
1048	39 6 49,80	11,187	,9350	,5469	,0487	,9189	1984	- 2,55	- 2,57	+ 3,44
1049	39 12 30,90	11,197	,9345	,5482	,0491	,9187	1986	- 3,30	—	+ 5,47
1050	14 28 58,61	11,226	,9499	,5940	,0502	,9182	1989	- 2,56	—	+ 0,65
1051	42 19 41,70	11,231	+9,9440	+9,5769	-1,0504	-9,9181	1990	- 2,13	—	+ 3,00
1052	31 5 51,60	11,241	,9025	,4622	,0508	,9180	1991	- 3,32	- 2,58	- 2,06
1053	53 11 1,42	11,198	,9652	,6507	,0491	,9187	1992	—	—	- 1,23
1054	44 29 44,44	11,246	,9489	,5948	,0510	,9179	1993	- 2,14	—	+ 9,86
1055	51 43 17,05	11,255	,9628	,6441	,0513	,9177	1991	- 6,09	—	+ 6,62
1056	69 35 51,54	11,265	+9,9699	+9,6853	-1,0513	-9,9177	1996	- 2,30	—	- 6,47
1057	52 4 42,81	11,265	,9628	,6469	,0517	,9175	1995	- 5,58	—	+ 0,19
1058	27 18 29,82	11,289	,8937	,4127	,0526	,9171	1997	—	—	+ 1,05
1059	29 52 50,87	11,308	,8960	,4491	,0534	,9168	1999	- 0,71	—	+ 5,60
1060	47 16 23,77	11,304	,9547	,6174	,0532	,9169	2000	- 3,09	—	+ 1,56
1061	44 21 19,34	11,313	+9,9484	+9,6964	-1,0636	-9,9167	2001	- 1,89	—	+ 3,91
1062	57 27 49,11	11,332	,9675	,6783	,0643	,9163	2005	- 0,95	- 1,90	- 0,33
1063	47 41 54,35	11,312	,9552	,6219	,0547	,9162	2004	- 2,48	—	+ 2,06
1064	48 23 25,26	11,342	,9568	,6275	,0547	,9162	2006	- 0,54	—	+ 2,61
1065	44 27 6,74	11,361	,9479	,6989	,0564	,9158	2009	- 2,68	—	+ 2,89
1066	45 5 59,97	11,366	+9,9489	+9,6040	-1,0556	-9,9157	2010	—	- 3,62	- 7,06
1067	51 36 39,47	11,390	,9609	,6489	,0565	,9153	2011	- 2 02	—	+ 5,64
1068	42 16 7,70	11,466	,9405	,5852	,0594	,9139	2013	- 1,56	—	+ 0,05
1069	54 48 11,99	11,481	,9633	,6703	,0600	,9136	2014	+ 2,92	—	- 3,44
1070	28 41 31,85	11,524	,8887	,4113	,0616	,9128	2016	- 1,08	—	+ 3,20
1071	54 50 46,72	11,548	+9,9628	+9,6732	-1,0626	-9,9124	2021	- 2,22	- 0,02	+ 0,42
1072	24 21 56,53	11,571	,8645	,3772	,0634	,9119	2020	- 2,23	- 3,21	- 4,60
1073	25 36 26,37	11,586	,8716	,3978	,0639	,9117	2024	- 1,04	—	- 5,08
1074	41 59 59,47	11,581	,9385	,5876	,0617	,9117	2025	- 2,44	- 3,51	+ 2,80
1075	54 57 9,03	11,581	,9624	,6750	,0637	,9117	2027	- 1,60	—	+ 0,88
1076	47 54 37,82	11,586	+9,9529	+9,6326	-1,0639	-9,9117	2026	- 2,57	—	+ 6,20
1077	47 34 32,81	11,600	,9518	,6310	,0644	,9114	2028	- 1,50	—	+ 60,15
1078	54 57	11,605	,9619	,6759	,0646	,9113	2029	—	—	—
1079	43 42 22,81	11,628	,9430	,6050	,0655	,9109	2030	+ 0,68	—	+ 1,21
1080	48 58 18,90	11,624	,9542	,6411	,0653	,9110	2031	- 3,62	—	+ 8,93

Mean A R and Declination of Stars

No	Names	Mag	No Obs	Right Ascen Jan 1, 1810	Annual Precessn	Logarithms of			
						a	b	c	d
1081	Argus	7 8	3	8 21 54,78	+1,362	-8,8592	+9,0060	+0,1310	+9,7859
1082		6	3	22 0,73	1,661	,8018	,89480	,2204	,7001
1083		7	3	22 20,16	2,137	,7094	,8545	,3200	,5210
1084		7	3	22 2,07	1,745	,7867	,915	,1467	,6748
1085		7 8	3	22 27,08	1,728	,7901	,9347	,2375	,6801
1086	Argus	6	4	22 32,83	1,668	-8,8022	+8,9463	+0,2222	+8,6999
1087		7 8	3	22 32,64	1,670	,8022	,9460	,2227	,6969
1088		7	6	22 43,34	1,528	,8206	,9731	,1841	,7421
1089		7 8	3	22 46,75	2,031	,7312	,8744	,3077	,5107
1090		7 8	8	22 54,22	1,528	,8296	,9731	,1841	,7421
1091	Argus	—	—	22	1,528	-8,8303	+8,9700	+0,1841	+8,7429
1092		7 8	3	22 56,11	2,137	,7107	,8602	,3298	,5247
1093		7	3	23 17,61	2,091	,7209	,8601	,3203	,5470
1094		7	3	23 19,92	1,560	,8276	,9687	,1903	,7383
1095		7	—	23	1,521	,8328	,9736	,1830	,7460
1096	Argus	6	3	23 41,22	2 0,6	-9,7,31	+8,8727	+0,3088	+8,5721
1097		7 9	3	23 40,80	1 7,8	,7943	,9841	,2375	,6853
1098		6	3	24 1,23	1 8,1	,7631	,9013	,2769	,6802
1099		6	2	24 4,07	2,017	,7381	,8763	,3047	,5818
1100		7 8	3	25 28,86	1,45	,8383	,9699	,1689	,7442
1101	Argus	7	2	24 40,89	1 591	-8,7657	+8,9012	+0,2787	+8,6334
1102		7	3	24 48,26	2,164	,7113	,8463	,3077	,6194
1103		7	3	24 52,31	2,155	,7115	,8160	,3356	,6195
1104		7	1	25 16,43	2 020	,7409	,8749	,3053	,6844
1105		7	3	26 12,39	2,211	,7034	,8367	,3446	,4977
1106	G Argus	7	3	25 19,64	1,602	-8,8241	+8,9578	+0,2047	+8,7304
1107		6 7	4	26 28,74	1,651	,8349	,9676	,2176	,7465
1108		6 7	4	26 30,78	2 211	,7042	,8363	,3446	,6961
1109		7 8	3	25 34,14	1 767	,7937	,9251	,2472	,6807
1110		7	5	26 49,11	1,573	,8319	,9632	,1967	,7415
1111	Argus	7 8	4	26 2,99	2,213	-8,7066	+8,8356	+0,3450	+8,6002
1112		6 7	3	26 5,93	1,903	,7679	,8979	,2794	,6346
1113		7	3	26 19,34	1,986	,7619	,8811	,2978	,6034
1114	Pixid Naut	6 7	3	26 37,04	2,424	,6673	,7950	,3845	,3794
1115		7	2	26 43,40	2,343	,6826	,8099	,3698	,4314
1116	Argus	7 8	3	27 29,38	1,835	-8,7861	+8,9106	+0,2636	+8,6645
1117		6 7	3	27 38,31	1,666	,8204	,9441	,2217	,7210
1118		6	3	27 42,61	2,224	,7082	,8319	,3471	,6006
1119		7 8	5	27 43,26	1,992	,7653	,8787	,2993	,6066
1120		7 8	3	27 46,74	1,920	,7099	,8933	,2433	,6046
1121	Argus	7	3	28 6,84	2,083	-8,6982	+8,8200	+0,3617	+8,4714
1122		7 8	3	28 15,64	1,976	,7004	,8817	,2966	,6152
1123		7	3	28 25,00	1,669	,8418	,9616	,1966	,7660
1124		6 7	2	28 26,83	2,261	,7005	,8250	,3643	,4608
1125		7	3	28 33,24	1,550	,8457	,9663	,1903	,7678

in the Southern Hemisphere, &c &c

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No	Declination (South) Jan 1 1840	Annual Precession	Logarithms of				Difference from the Brisbane Catalogue			
			a'	b'	c'	d'	No	M	C	T
1081	57 36 35,06	-11,638	+9,9638	+9,6906	-1,0659	-0,9107	2033	-	1,61	-
1082	52 16 58,81	11,647	,9580	,6626	,0682	,9105	2034	-	2,43	-
1083	40 48 7,00	11,866	,9345	,6796	,0669	,9101	2035	-	3,69	-
1084	50 36 11,59	11,671	,9557	,6333	,0671	,9100	2036	-	2,29	-
1085	50 56 54,41	11,67	,9562	,6557	,0673	,9100	2037	-	1,35	-
1086	52 10 33,95	11,685	-1 9,9581	+9,6634	-1,0676	-9,9098	2039	-	0,97	-
1087	52 9 36,14	11,70	,9 81	,6632	,0678	,9097	2040	+	4 99	-
1088	54 50 16,17	11,695	,9609	,6785	,0680	,9096	2042	-	1,42	-
1089	43 41 36,72	11,700	,9420	,6008	,0682	,9095	2041	-	1,67	-
1090	54 48 25,64	11,695	,9609	,6785	,0680	,9096	2044	-	3,75	-
1091	54 49	11,709	+9,9600	+9,6792	-1,0685	-9,9093	2045	-	-	-
1092	40 38 45,68	11,714	,9736	,6808	,0687	,9092	2043	-	3,58	-
1093	42 3 26,01	11,737	,9370	,6937	,0696	,9088	2046	-	2,51	-
1094	54 29 0,99	11,737	,9600	,6783	,0696	,9088	2049	-	3,17	-
1095	54 57	11,742	,9601	,6810	,0697	,9087	2050	-	-	-
1096	43 37 40,59	11,766	-1 9,9410	+9,6077	-1,0706	-9,9082	2051	-	3,07	-
1097	51 14 24,66	11,761	,9557	,6695	,0704	,9083	2052	-	3,12	-
1098	47 23 48,71	11,789	,9489	,6366	,0715	,9078	2056	-	2,13	-
1099	44 11 31,27	11,789	,9410	,6130	,0716	,9078	2054	-	3,44	-
1100	51 39 21,48	11,818	,9690	,6823	,0725	,9072	2059	+	61,11	-
1101	47 29 31,74	11,836	+9,9444	+9,6390	-1,0732	-9,9068	2060	-	1,94	-
1102	39 68 40,87	11,846	,9294	,5797	,0706	,9067	2061	-	2,16	-
1103	39 67 56,15	11,855	,9294	,5799	,0739	,9065	2062	-	2,76	-
1104	44 12 2,17	11,860	,9410	,6168	,0742	,9063	2063	-	13,55	-
1105	38 31 26,32	11,874	,9263	,6671	,0716	,9061	2064	-	3,18	-
1106	53 40 37,19	11,869	-1 9,9571	+9,6788	-1,0744	-9,9062	2065	-	2,57	-
1107	54 39 23,90	11,888	,9081	,6848	,0761	,9058	2067	-	3,01	-
1108	38 31 32,51	11,897	,9248	,5682	,0754	,9066	2066	-	1,55	-
1109	50 26 8,20	11,902	,9623	,6608	,0756	,9055	2069	-	-	-
1110	54 17 28,78	11,912	,9571	,6836	,0760	,9054	2070	-	5,07	-
1111	38 31 35,87	11,935	+9,9243	+9,6695	-1,0768	-9,9049	2071	-	2,72	-
1112	47 19 41,40	11,935	,9469	,6415	,0768	,9049	2072	-	1,63	-
1113	45 14 46,61	11,949	,9420	,6269	,0773	,9046	2074	-	3,70	-
1114	30 69 34,21	11,977	,8919	,4885	,0783	,9040	2076	-	0,38	-
1115	34 5 30,68	11,982	,9074	,6255	,0786	,9040	2077	-	1,40	-
1116	49 3 29,55	12,033	+9,9484	+9,6568	-1,0804	-9,9029	2080	-	2,63	-
1117	52 40 10,78	12,047	,9538	,6796	,0809	,9026	2083	-	-	-
1118	38 18 13,09	12,047	,9222	,5714	,0809	,9026	2081	-	3,38	-
1119	46 12 38,12	12,073	,9410	,6104	,0810	,9025	2082	-	1,70	-
1120	47 3 42,58	12,053	,9445	,6438	,0810	,9025	2084	-	2,87	-
1121	36 21 45,52	12,079	-1 9,9149	+9,5583	-1,0820	-9,9020	2085	-	-	-
1122	45 42 11,38	12,089	,9416	,6353	,0824	,9018	2086	-	1,83	-
1123	55 34 51,85	12,098	,9547	,6920	,0827	,9016	2089	-	1,93	-
1124	37 3 52,55	12,073	,9180	,5587	,0804	,9029	2079	-	03,26	-
1125	55 56 35,83	12,103	,9547	,6941	,0829	,9015	2091	-	3,37	-

In
Mean A.R. and Declination of Stars

No	Names	Mag	No Obs	Right Ascen Jan 1, 1840	Annual Precessn	Logarithms of			
						a	b	c	d
1126	Argus	7 8	3	8 28 51,35	+ 2,000	-8,7570	+8,8762	+0,3010	+8,6072
1127	—	7	3	29 7,07	2,051	,7475	,8657	,3120	,5872
1128	—	6 7	3	29 20,11	2,195	,7192	,8963	,3414	,5221
1129	—	6 7	3	29 40 25	1,684	,8236	,9396	,2263	7282
1130	—	6 7	3	29 44,16	1,779	,8051	,9207	,2502	,6930
1131	C Argus	6	3	29 50,88	1,830	-8,7949	+8,9101	+0,2624	+8,6754
1132	—	7 8	3	30 17,55	1,931	,7758	,8803	,2859	,6402
1133	—	8	3	30 42,49	1,749	,8141	,9260	,2428	,7064
1134	—	7 8	3	30 45,99	1,972	,7685	,8801	,2956	,6251
1135	E —	6	3	31 5,50	1,790	,8072	,9175	,2628	,6942
1136	Argus	7 8	3	31 16,68	1,584	-8,8481	+8,9584	+0,1998	+8,7691
1137	—	7	2	31 30,66	2,061	,7523	,8011	,3149	,5908
1138	—	7 8	3	31 30,98	1,939	,7782	,8870	,2876	,6421
1139	e ¹ —	6	3	31 32,56	1,401	,8843	,9930	,1464	,8112
1140	e ² —	6	3	31 33,16	1,414	,8819	,9906	,1504	,8078
1141	Argus	7	3	31 36,29	1,919	-8,7826	+8,8909	+0,2831	+8,6526
1142	—	—	—	31	1,443	,8764	,9851	,1593	,8000
1143	—	7 8	4	32 11,85	1,863	,7919	,9021	,2702	,6729
1144	Pixid Naut	7	3	33 0,72	2,498	,6724	,7749	,3976	,3516
1145	Argus	7 8	3	33 2,54	1,829	,8037	,9066	,2646	,6860
1146	Pixid Naut	7	3	33 15,04	2,305	-8,7090	+8,8108	+0,3627	+8,4789
1147	Argus	7 8	3	33 26,38	1,602	,9526	,9537	,2047	,7629
1148	—	6 7	3	34 12,13	1,704	,8347	,9331	,2315	,7346
1149	—	8 9	2	34 39,21	2,136	,7476	,8439	,3293	,5716
1150	—	7	3	34 39,99	2,134	,7479	,8441	,3292	,5721
1151	Argus	6 7	3	34 64,10	1,091	-8,8400	+8,9356	+0,2281	+8,7417
1152	—	8	3	35 0,91	2,137	,7483	,8433	,3298	,5721
1153	—	7	3	35 6,76	1,916	,7945	,8893	,2824	,6649
1154	—	6	3	35 8,18	2,040	,7688	,8636	,3096	,6166
1155	—	—	—	35	1,711	,8369	,9311	,2332	,7365
1156	Argus	5 6	5	35 28,94	1,712	-8,8371	+8,9308	+0,2335	+8,7365
1157	—	7 8	3	35 26,48	1,765	,8266	,9200	,2467	,7195
1158	—	7	3	35 35,50	1,673	,8466	,9385	,2235	,7496
1159	—	5 6	4	35 42,68	1,720	,8366	,9290	,2355	,7852
1160	—	6	3	35 49,20	1,716	,8375	,9209	,2345	,7368
1161	Pixid Naut	7	2	35 43,82	2,427	-8,8926	+8,7847	+0,3851	+8,4129
1162	Argus	7	3	35 44,70	1,927	,7943	,8866	,2849	,6632
1163	—	6 7	3	35 49,28	1,285	,9204	,90126	,1089	,8570
1164	—	7 8	2	35 52,09	1,034	,7931	,8850	,2866	,6608
1165	—	6 7	3	35 58,64	1,964	,7873	,8,8788	,2931	,6497
1166	Argus	6	3	36 1,04	1,900	-8,8005	+8,8919	+0,2787	+8,6741
1167	—	7	3	36 3,31	1,964	,7894	,8806	,2909	,6637
1168	—	7	2	36 6,32	2,051	,7695	,8604	,3120	,6147
1169	—	5 6	3	36 30,87	2,017	,7740	,8828	,2090	,6225
1170	—	6 7	3	36 49,00	1,474	,8887	,9770	,1685	,8123

in the Southern Hemisphere, &c &c

III

No	Declination (South) Jan 1 1840	Annual Precession	Logarithms of				No	Difference from the Brisbane Catalogue			
			a'	b'	c'	d'		M	C	T	Decln
1126	45 5 19,80	-12,126	+9,9390	+9,6320	-1,0387	-9,9010	2092	-3,24	—	—	+ 5,72
1127	43 43 11,80	12,145	,9,65	,6221	,0844	,9006	2093	-3,63	—	—	- 1,33
1128	39 25 25,17	12,163	,9243	,6860	,0851	,9002	2094	-2,84	- 0,26	—	- 0,82
1129	62 31 2,80	12,182	,9015	,6834	,0857	,8998	2095	-1,83	—	—	+ 4,16
1130	50 32 41,00	12,191	,9489	,6719	,0860	,8997	2097	-0,76	—	—	+ 2,12
1131	49 23 41,36	12,196	+9,9164	+9,6648	-1,0862	-9,8996	2099	-1,60	- 2,10	—	+ 0,64
1132	47 1 12,62	12,223	,9425	,6498	,0873	,8949	2101	-2,14	—	—	+ 3,78
1133	61 16 10,81	12,256	,9184	,6786	,0483	,8983	2103	-2,85	—	—	+ 2,30
1134	45 56 55,35	12,261	,9400	,6433	,0885	,8942	2104	-2,63	—	—	+ 4,18
1135	50 25 2,23	12,283	,9169	,6744	,0893	,8977	2106	-2,69	- 3,65	—	- 1,14
1136	64 33 0,28	12,283	+9,9523	+9,6984	-1,0893	-9,8977	2107	-9,37	—	—	+ 0,46
1137	43 33 30,76	12,311	,9335	,6268	,0903	,8971	2108	-3,30	—	—	+ 1,20
1138	46 56 40,80	12,311	,9110	,6523	,0903	,8971	2109	-3,60	—	—	+ 3,79
1139	67 40 17,31	12,311	,95,8	,7153	,0903	,8971	2113	-2,42	- 3,54	—	+ 1,19
1140	57 27 21,44	12,311	,9033	,7143	,0903	,8971	2112	-3,77	- 3,14	—	+ 3,17
1141	47 26 34,91	12,316	+9,9415	+9,6559	-1,0904	-9,8970	2110	-2,31	—	—	+ 3,60
1142	66 59	12,311	,9533	,7130	,0903	,8971	2111	—	—	—	—
1143	49 52 3,61	12,357	,9435	,6670	,0919	,8961	2115	-3,86	—	—	+ 9,60
1144	28 31 7,70	12,421	,8779	,4714	,0942	,8947	2120	-0,63	+ 1,59	—	+ 3,96
1145	49 31 20,17	12,417	,9410	,6783	,0940	,8948	2121	-1,52	—	—	+ 1,14
1146	36 2 49,86	12,436	+9,9096	+9,5626	-1,0946	-9,8944	2128	-2,12	- 3,66	—	- 0,33
1147	54 26 6,74	12,444	,9491	,7034	,0949	,8942	2126	-1,62	—	—	- 3,28
1148	52 1 42,19	12,494	,9469	,6945	,0967	,8941	2130	-1,31	—	—	+ 1,97
1149	41 47 17,46	12,531	,9458	,6200	,0980	,8923	2133	-2,68	—	—	- 0,53
1150	41 19 31,04	12,631	,9263	,6203	,0980	,8923	2134	-2,20	- 3,84	—	- 2,12
1151	52 52 32,90	12,644	+9,9464	+9,6983	-1,0984	-9,8920	2138	-2,61	—	—	+ 2,85
1152	41 46 28,68	12,653	,9258	,6207	,0988	,8918	2137	-3,58	—	—	+ 3,90
1153	47 52 46,36	12,654	,9390	,6674	,0969	,8917	2139	-2,54	—	—	+ 3,95
1154	44 37 30,06	12,558	,9330	,6438	,0989	,8917	2140	-2,67	—	—	+ 1,17
1155	52 29	12,667	,9166	,6969	,0992	,8915	2142	—	—	—	—
1156	52 29 21,30	12,576	+9,9455	+9,6971	-1,0995	-9,8913	2143	-1,50	—	—	+ 1,47
1157	51 22 32,14	12,681	,9440	,6907	,0997	,8912	2144	-2,12	—	—	+ 6,35
1158	53 17 2,85	12,790	,9460	,7021	,1000	,8910	2146	-1,85	—	—	+ 2,52
1159	52 21 19,94	12,599	,9450	,6971	,1003	,8908	2148	-2,39	- 2,04	—	+ 6,23
1160	52 26 67,29	12,599	,9450	,6977	,1003	,8908	2149	-1,26	- 1,47	—	+ 3,61
1161	31 39 39,56	12,603	+9,8904	+9,5189	-1,1005	-9,8907	2146	-1,63	—	—	- 4,16
1162	47 39 24,42	12,603	,9380	,6675	,1006	,8907	2147	-2,02	—	—	+ 2,67
1163	59 45 11,73	12,603	,9499	,7361	,1006	,8907	2151	-2,62	—	—	- 2,61
1164	47 29 54,60	12,608	,9376	,6665	,1006	,8906	2152	-2,62	—	—	+ 6,99
1165	46 44 54,71	12,617	,9360	,6615	,1009	,8904	2154	-1,58	- 2,99	—	+ 3,60
1166	48 21 12,38	12,617	+9,9390	+9,6726	-1,1009	-9,8904	2155	-3,48	—	—	+ 4,26
1167	47 0 21,29	12,621	,9365	,6634	,1011	,8903	2156	-2,42	—	—	+ 1,01
1168	44 25 22,34	12,626	,9315	,6445	,1013	,8902	2157	-3,05	—	—	+ 2,96
1169	44 50 27,62	12,662	,9320	,6490	,1026	,8994	2158	+ 4,97	—	—	+ 1,45
1170	56 58 36,96	12,671	,9474	,7245	,1028	,8892	2159	-3,51	- 3,18	—	+ 1,47

Mean A R and Declination of Stars

No	Names	Mag	No Obs	Right Ascen Jan 1, 1810	Annual Progress	Logarithms of			
						a	b	c	d
1171	d Argus	6	3	8 37 4,60	+ 1,332	-8,9163	+9,0036	+ 0,1245	+ 8,8,04
1172	E —	6	3	87 5,00	1,037	,7961	,8834	,2871	,6641
1173	—	7 8	2	87 11,93	1,720	,8414	,89282	,2355	,7410
1174	—	7 8	3	87 24,77	1,937	,7975	,8832	,2871	,6655
1175	—	7	3	87 30,30	1,990	,7867	,8,8721	,2988	,6455
1176	Argus	7 8	2	87 38,69	1,727	-8,8414	+ 8,9266	+ 0,2373	+ 8,7404
1177	—	7	3	87 41,18	2,036	,7775	,8621	,3088	,6270
1178	—	6 7	4	87 44,08	1,721	,8430	,9277	,2368	,7428
1179	—	6 7	3	87 50,62	1,721	,8435	,9276	,2358	,7433
1180	—	7 8	3	88 4,02	1,920	,7958	,8795	,2907	,6617
1181	Argus	7 8	3	88 11,87	2,293	-8,7256	+ 8,8082	+ 0,3604	+ 8,6018
1182	—	7 8	3	88 22,53	1,693	,8509	,9380	,2287	,7543
1183	—	9	3	88 25,50	1,970	,7935	,8756	,2945	,6566
1184	—	8	3	88 28,24	1,994	,6889	,8704	,2997	,6475
1185	D	6 7	3	88 38,07	2,433	,6992	,7803	,3861	,4195
1186	Argus	6	3	88 39,93	1,871	-8,8145	+ 8,8956	+ 0,2728	+ 8,6910
1187	—	7 8	3	88 40,03	1,768	,8364	,9174	,2475	,7308
1188	—	6 7	4	88 42,05	2,305	,7245	,8053	,3627	,4998
1189	—	7 8	3	88 49,03	1,778	,8348	,9153	,2499	,7280
1190	—	7 8	3	89 2,77	1,706	,8001	,9298	,2320	,7522
1191	Pixid Naut	7	3	89 18,85	2,567	-8,6773	+ 8,7654	+ 0,4094	+ 8,3200
1192	Argus	8	3	89 19,17	1,952	,8004	,8786	,2905	,6675
1193	Pixid Naut	6 7	3	89 26,22	2,437	,7008	,7785	,3869	,1201
1194	Argus	—	—	89	1,956	,8023	,8775	,2911	,6695
1195	—	8	3	40 11,86	1,735	,8483	,9235	,2993	,7479
1196	Pixid Naut	7	3	40 28,29	2,378	-8,7150	+ 8,7889	+ 0,3762	+ 8,1631
1197	Argus	6 7	3	40 32,66	2,191	,7529	,8265	,3412	,6660
1198	—	6	3	40 36,93	2,030	,7878	,8612	,3075	,6410
1199	—	7 8	3	40 48,87	2,150	,7630	,8356	,3324	,5885
1200	—	7 8	3	41 2,96	1,976	,8007	,8723	,2958	,6648
1201	Argus	7 8	3	41 4,57	1,745	-8,8492	+ 8,9208	+ 0,9418	+ 8,7481
1202	—	6 7	3	41 4,68	2,036	,7878	,8594	,3088	,6400
1203	—	7 8	3	41 18,16	1,427	,9128	,9838	,1544	,8420
1204	Pixid Naut	7	3	41 24,93	2,111	,7112	,7812	,3829	,4463
1205	Argus	7	2	41 28,89	1,699	,8802	,9603	,2038	,7952
1206	Argus	6 7	5	41 41,60	2,156	-8,7641	+ 8,8334	+ 0,3336	+ 8,5887
1207	—	—	—	41	2,156	,7647	,8334	,3336	,5845
1208	—	6 7	3	41 53,50	2,031	,7914	,8599	,3077	,6463
1209	—	8	3	42 13,27	2,130	,7717	,8387	,3284	,5037
1210	+	6 7	5	42 23,24	2,159	,7660	,8322	,3342	,5907
1211	Argus	7 8	3	42 26,76	1,800	-8,8420	+ 8,9085	+ 0,2553	+ 8,7347
1212	f —	6	3	42 34,28	1,554	,8926	,9586	,1914	,8122
1213	—	7 8	3	42 44,78	2,162	,7660	,8312	,3349	,5904
1214	Pixid Naut	7 8	4	42 52,23	2,475	,7027	,7673	,3936	,4062
1215	Argus —	7	3	43 18,60	1,761	,8630	,9161	,2458	,7512

in the Southern Hemisphere &c &c

iv

No	Declination (South) Jan 1 1840	Annual Precession	Logarithms of				Difference from the Brisbane Catalogue			
			a'	b	c'	d'	No	Right Ascension from M C	T	Declin
1171	59 11 28,48	-12,689	+9,9479	+9,7356	-1,1034	-9,8887	2163	s	s	+ 5,53
1172	47 31 35,22	12,689	,9365	,6695	,1034	,8887	2161	- 4,29	—	+ 4,62
1173	52 29 29,84	12,698	,9435	,7014	,1037	,8885	2162	- 3,43	—	+ 6,43
1174	47 35 25,50	12,716	,9360	,6708	,1044	,8881	2164	- 2,48	—	+ 1,97
1175	46 14 12,25	12,721	,9335	,6613	,1045	,8880	2165	- 2,29	—	+ 4,61
1176	52 23 45,94	12,725	+ 9,9480	+ 9,7017	-1,1047	-9,8879	2166	- 1,32	—	+ 2,92
1177	44 59 16,48	12,734	,9309	,6525	,1050	,8877	2167	- 2,36	—	+ 1,66
1178	52 31 39,75	12,734	,9430	,7028	,1050	,8877	2168	- 2,76	- 2,12	+ 3,18
1179	52 32 28,82	12,743	,9430	,7032	,1053	,8875	2169	- 2,04	- 1,47	+ 5,93
1180	47 13 04,96	12,752	,9360	,6695	,1066	,8873	2170	- 7,33	—	+ 1,40
1181	56 56 59,16	12,770	+ 9,9085	+ 9,5834	-1,1062	-9,8869	2172	- 2,81	- 1,40	+ 1,27
1182	53 10 30,78	12,779	,9430	,7080	,1065	,8867	2174	- 2,60	—	-12,59
1183	46 49 35,00	12,779	,9340	,6676	,1065	,8867	2173	- 1,39	—	+ 6,99
1184	46 13 20 64	12,788	,9325	,6635	,1063	,8865	2175	- 2,49	—	+ 3,11
1185	51 40 0,83	12,797	,8882	,5255	,1071	,8863	2176	- 3,29	—	- 6,19
1186	49 14 44,77	12,797	+ 9,9375	+ 9,6847	-1,1071	-9,8863	2180	- 3,19	- 3,40	+ 3,26
1187	51 38 1,08	12,801	,9405	,6996	,1071	,8863	2181	- 2,64	—	+ 7,08
1188	36 34 7,78	12,801	,9063	,5806	,1073	,8861	2178	- 2,81	- 2,31	+ 3,95
1189	51 25 42,56	12,806	,9405	,6987	,1074	,8860	2183	- 2,99	—	+ 1,76
1190	52 56 44,89	12,820	,9115	,7081	,1079	,8857	2185	- 5,09	—	+ 2,53
1191	26 1 54,86	12,851	+ 9,8615	+ 9,4496	-1,1089	-9,8850	2190	—	—	- 2,80
1192	47 24 25 01	12,847	,9340	,6740	,1088	,8851	2189	- 1,74	—	-22,41
1193	31 34 59 13	12,955	,8876	,6965	,1091	,8849	2198	- 2,66	—	+ 0,24
1194	47 25	12,900	,9335	,6758	,1106	,8838	2191	—	—	—
1195	52 29 55,98	12,900	,9400	,7082	,1106	,8838	2192	- 1,57	—	- 0,25
1196	34 2 19,76	12,922	+ 9,8965	+ 9,5575	-1,1113	-9,8833	2193	- 3,19	—	+ 3,22
1197	40 32 35,48	12,927	,9176	,6227	,1115	,8832	2197	—	- 3,12	- 0,09
1198	45 27 33,08	12,931	,9289	,6628	,1116	,8831	2198	- 2,95	- 2,97	+ 0,40
1199	41 58 57,32	12,945	,9206	,6857	,1121	,8828	2199	- 2,53	—	- 3,85
1200	46 57 57,41	12,962	,9309	,6748	,1127	,8823	2201	- 2,27	—	+ 1,63
1201	52 23 19,91	12,962	+ 9,9390	+ 9,7096	-1,1127	-9,8823	2203	- 1,79	—	- 1,89
1202	45 19 43,83	12,962	,9279	,6629	,1127	,8823	2200	- 4,11	- 2,14	+ 3,63
1203	58 8 27,17	12,971	,9430	,7403	,1130	,8821	2206	- 3,97	3,42	+ 1,47
1204	32 48 39,83	12,989	,8910	,5458	,1136	,8817	2204	—	—	+ 8,46
1205	55 16 36,60	12,989	,9410	,7266	,1136	,8817	2207	- 1,00	—	- 7,16
1206	41 51 58,78	13,002	+ 9,9196	+ 9,6366	-1,1140	-9,8814	2208	- 3,17	—	+ 2,56
1207	41 53	13,011	,9196	,6372	,1143	,8811	2210	—	—	—
1208	45 34 9,02	13,015	,9279	,6864	,1145	,8810	2212	- 2,01	—	+ 3,06
1209	42 46 1,46	13,038	,9217	,6454	,1152	,8806	2213	- 2,22	- 1,36	+ 6,25
1210	41 52 30,87	13,055	,9191	,6385	,1168	,8801	2214	+ 1,33	—	+ 0,84
1211	51 19 57 07	13,051	+ 9,9365	+ 9,7064	-1,1156	-9,8802	2215	- 3,43	—	- 2,02
1212	56 11 0,49	13,060	,9100	,7336	,1159	,8800	2217	- 2,06	- 2,76	+ 2,11
1213	41 48 40,21	13,078	,9180	,6387	,1165	,8795	2220	+ 0,34	—	+ 1,74
1214	30 20 31,37	13,082	,8791	,5183	,1167	,8794	2219	- 3,58	—	-15,70
1215	52 16 40,85	13,103	,9360	,7138	,1175	,8788	2225	- 1,88	—	+ 0,69

Mean A R and Declination of Stars

No	Names	Mag	No Obs	Right Ascen J in 1, 1840	Annual Piecesn	Logarithms of			
						a	b	c	d
1216	Argus	7	4	B 43 38,02	s	-8,7750	+8,8364	10,3202	+8,0072
1217	—	7 8	3	43 50,41	2,134	,7477	,8085	,0619	,5425
1218	—	7 8	3	43 56,68	2,264	,7715	,8323	,0328	,5941
1219	—	7 8	3	44 48,61	2,162	,7869	,8444	,3200	,6298
1220	—	7 8	3	44 47,96	2,092	,7769	,8341	,3304	,6085
1221	Argus	7 8	3	45 8,29	2,283	-8,7474	+8,8083	+0,3586	+8,6972
1222	Pixid Naut	8	3	45 9,85	2,555	,6941	,7499	,4074	,2511
1223	—	—	—	45	1,705	,6703	,9268	,2317	,7762
1224	Argus	8	3	45 36,92	1,817	,8486	,9080	,2593	,7410
1225	—	6 7	3	46 0,74	2,217	,7688	,8164	,3408	,5764
1226	Argus	—	—	46	1,704	-8,8735	+8,9264	+0,2315	+8,7801
1227	—	6 7	3	46 23,13	2,343	,7382	,7693	,3698	,5070
1228	—	8 9	3	46 41,65	2,163	,7771	,8270	,3651	,6040
1229	—	7 8	3	46 41,66	2,285	,7514	,8013	,3580	,6422
1230	—	7	3	47 23,25	1,971	,8210	,8686	,2947	,6906
1231	Argus	6 7	3	47 26,36	2,008	-8,8152	+8,8605	+0,3028	+8,6760
1232	—	6	3	47 31,51	1,534	,9182	,9600	,1858	,8370
1233	—	7	3	47 50,41	1,818	,8557	,9018	,2696	,7496
1234	—	7	3	47 51,03	2,234	,7613	,8009	,3600	,5712
1235	—	6	3	48 29,24	2,008	,8164	,8596	,3028	,6800
1236	Pixid Naut	7 8	3	48 35,17	2,412	-8,7301	+8,7729	+0,3824	+8,4726
1237	Argus	7	3	48 48,62	1,598	,9046	,9466	,2086	,8235
1238	—	8	3	49 12,96	1,843	,8644	,8919	,2655	,7456
1239	—	7	3	49 42,49	2,102	,7995	,8379	,3226	,6446
1240	—	7	3	50 7,58	2,339	,7491	,7661	,3690	,5239
1241	Argus	6 7	3	50 8,89	1,380	-8,9524	+8,9888	+0,1299	+8,6889
1242	—	9	1	50 51,45	2,104	,7893	,8282	,3863	,6204
1243	—	6 7	3	50 51,41	1,518	,9272	,9614	,1813	,8540
1244	—	7 8	3	50 53,14	1,866	,8569	,8909	,2686	,7473
1245	O	5 6	3	51 25,03	1,368	,9588	,9907	,1861	,8900
1246	II Argus	6	3	51 29,44	1,810	-8,8688	+8,9007	+0,2576	+8,7661
1247	—	8	3	51 46,87	2,135	,7981	,8289	,3294	,6372
1248	—	7 8	3	51 47,68	1,940	,8112	,8702	,2878	,7195
1249	—	8 9	3	52 1,54	1,333	,9671	,9971	,1248	,9072
1250	Pixid Naut	6 7	3	52 28,37	2,646	,7189	,7417	,4059	,3884
1251	Argus	6	3	52 37,68	1,987	-8,8335	+8,8611	+0,2982	+8,7046
1252	—	6 7	3	53 3,50	1,472	,9436	,9696	,1679	,8749
1253	—	8	3	53 8,47	1,473	,9437	,9605	,1682	,8761
1254	—	7 8	3	53 23,53	1,925	,8494	,8742	,2844	,7314
1255	—	5 6	3	53 26,98	2,040	,8240	,8486	,3096	,6866
1256	Argus	7 8	3	54 1,30	2,004	-8,8938	+8,8561	+0,3019	+8,7027
1257	—	8 9	3	54 18,71	1,735	,8936	,9149	,2393	,8018
1258	—	6 7	3	54 30,61	2,118	,7653	,7858	,3651	,6619
1259	—	7	3	54 33,26	2,180	,7959	,8161	,3386	,6261
1260	—	7 8	3	54 45,09	1,880	,8606	,8831	,2742	,7533

No	Declination (South) Jan 1 1840	Annual Precession	Logarithms of				No	Difference from the Brisbane Catalogue			
			a'	b'	c'	d'		M	C	T	Decln
1216	° ' "	"	-13,139	+9,9196	+9,6488	-1,1186	-9,8780	2229	+ 1,01	"	+ 5,80
1217	42 46 44,09	13,148	,9079	,6117	,1189	,8778	2230	- 1,18	"	+ 3,08	
1218	38 32 58,61	13,148	,9180	,6445	,1189	,8778	2231	- 4,00	"	- 0,41	
1219	42 13 51,18	13,205	,9217	,6618	,1207	,8763	2236	- 0,67	"	- 0,46	
1220	44 7 34,76	13,210	,9185	,6506	,1209	,8762	2237	- 0,35	"	+ 11,91	
1221	42 43 1,97	13,232	+9,9058	+9,6095	-1,1216	-9,8757	2239	"	- 3,17	+ 6,74	
1222	38 2 7,41	13,232	,8621	,4778	,1217	,8756	2238	- 2,41	- 3,51	- 2,14	
1223	27 2 37,02	13,236	,9355	,7253	,1213	,8759	2240	"	"	"	
1224	53 36 0,59	13,258	,9325	,7130	,1225	,8760	2242	- 2,39	"	+ 3,20	
1225	51 18 0,59	13,288	,9112	,6332	,1235	,8742	2244	- 3,95	"	- 4,69	
1226	40 23 17,51	13,288	+9,9350	+9,7280	-1,1233	-9,8743	2245	"	"	"	
1227	53 44 10,70	13,284	,8976	,5913	,1243	,8736	2247	- 2,86	- 3,05	- 1,62	
1228	35 66 40,70	13,314	,9159	,6500	,1250	,8730	2246	- 3,07	"	- 3,00	
1229	42 9 3,84	13,316	,9042	,6139	,1250	,8730	2249	- 2,28	- 2,44	+ 3,89	
1230	38 7 21,50	13,336	,9253	,6940	,1263	,8720	2252	- 3,15	- 3,39	+ 4,05	
1231	47 45 22,85	13,376	+9,9213	+9,6874	-1,1264	-9,8719	2253	- 1,30	"	+ 5,37	
1232	53 1 58,99	13,388	,9345	,7486	,1267	,8716	2256	- 1,88	- 2,07	+ 3,10	
1233	51 31 34,35	13,410	,9304	,7193	,1274	,8711	2259	- 1,28	"	+ 3,67	
1234	39 50 38,96	13,410	,9079	,6324	,1274	,8711	2258	- 2,98	- 2,82	- 0,01	
1235	46 54 51,57	13,449	,9227	,6904	,1287	,8700	2262	- 2,75	- 3,40	+ 1,12	
1236	33 31 55,74	13,458	+9,8870	+9,5695	-1,1290	-9,8698	2261	- 3,82	- 0,59	+ 2,93	
1237	56 2 46,17	13,471	,9326	,7464	,1294	,8695	2265	- 2,65	- 2,25	+ 1,38	
1238	51 5 35,45	13,496	,9279	,7195	,1302	,8688	2266	- 2,65	"	+ 3,48	
1239	44 25 57,17	13,531	,9170	,6744	,1313	,8679	2272	- 3,25	"	+ 2,18	
1240	36 30 39,28	13,557	,8960	,6050	,1321	,8672	2273	- 2,43	"	- 2,14	
1241	59 44 48,20	13,565	+9,9320	+9,7670	-1,1324	-9,8669	2274	- 2,63	- 2,52	- 4,23	
1242	42 38 30,52	13,608	,9117	,6629	,1333	,8658	2277	+ 1,40	"	+ 3,01	
1243	57 37 45,69	13,604	,9309	,7585	,1387	,8659	2279	- 4,10	- 1,69	+ 2,86	
1244	50 58 36,45	13,604	,9263	,7222	,1387	,8659	2278	- 3,16	"	- 5,02	
1245	60 2 8,61	13,634	,9304	,7704	,1346	,8651	2281	+ 3,00	- 2,20	+ 0,89	
1246	52 6 39,59	13,642	+9,9263	+9,7303	-1,1349	-9,8648	2280	- 1,67	- 2,36	- 0,86	
1247	43 38 58,72	13,669	,9133	,6726	,1354	,8644	2282	+ 3,63	"	+ 4,44	
1248	49 3 57,18	13,659	,9227	,7118	,1354	,8644	2285	- 1,90	"	+ 1,04	
1249	60 35 36,66	13,672	,9294	,7741	,1358	,8640	2288	- 3,26	"	- 10,89	
1250	28 11 14,20	13,710	,8615	,6096	,1370	,8629	2289	- 1,08	- 3,72	+ 4,27	
1251	47 57 19,26	13,715	+9,9206	+9,7060	-1,1372	-9,8628	2291	- 2,42	"	+ 4,62	
1252	58 36 45,13	13,740	,9284	,7674	,1380	,8621	2293	- 2,31	- 3,24	+ 7,72	
1253	58 36 33,08	13,745	,9284	,7676	,1381	,8620	2294	- 0,99	- 3,91	+ 0,03	
1254	49 37 57,64	13,761	,9217	,7187	,1387	,8615	2295	- 4,26	- 3,26	- 2,92	
1255	46 37 1,21	13,766	,9170	,6984	,1388	,8614	2296	- 2,42	- 2,38	+ 3,28	
1256	47 40 8,80	13,804	+9,9180	+9,7070	-1,1400	-9,8603	2299	- 2,75	- 4,17	+ 1,10	
1257	51 0 50,46	13,821	,9248	,7467	,1405	,8598	2303	- 1,49	"	+ 0,19	
1258	37 47 44,58	13,833	,8960	,6266	,1409	,8595	2304	"	- 3,00	+ 7,56	
1259	42 33 0,98	13,838	,9079	,6094	,1411	,8594	2305	- 2,33	- 3,20	+ 4,22	
1260	50 52 58,25	13,850	,9212	,7294	,1416	,8590	2306	- 2,42	"	- 1,91	

No	Names	Mag	No Obs	Right Ascen Jan 1, 1840	Annual Precessn	Logarithms of			
						a	b	c	d
1261	Argus	7	3	8 54 47,21	1,959	-8,8461	+8,8655	+0,2920	+8,7236
1262	—	6 7	4	55 20,07	2,223	,7487	,8057	,0469	,6080
1263	b	6 7	3	55 28,59	1,496	,9467	,9638	,1719	,8774
1264	—	7 8	3	55 37,18	1,882	,8658	,8820	,2746	,7560
1265	—	8	3	55 46,29	1,929	,8567	,8716	,2853	,7389
1266	Argus	7 8	3	55 58,87	2,296	--8,7741	+8,7890	+0,3610	+8,5711
1267	Pixid Naut	7	3	56 8,65	2,622	,7046	,7227	,4186	,3329
1268	Argus	7 8	3	56 16,80	1,969	8486	,8621	,2942	,7255
1269	—	7	4	56 16,47	1,965	,8493	,8629	,2934	,7268
1270	—	7 8	3	56 42,40	2,205	,7969	,8090	,0430	,6232
1271	Argus	6 7	3	56 47,23	1,861	-8,8740	+8,8959	+0,2697	+8,7681
1272	—	6 7	3	57 5,12	1,089	,9738	,9842	,1427	,9129
1273	—	7	3	57 50,24	1,968	,8538	,8609	,2910	,7517
1274	C	6	3	58 38,82	2,067	,8330	,8378	,3153	,6935
1275	—	7	3	59 16,87	2,080	,8319	,8344	,3181	,6903
1276	Argus	7 8	3	59 31,23	1,862	-8,8822	+8,8837	+0,2700	+8,7780
1277	—	8	3	59 44,79	1,310	,9976	,9984	,1173	,9425
1278	—	8	3	9 0 3,88	1,683	,9220	,9224	,2261	,8400
1279	—	—	—	0	1,381	,9838	,9846	,1402	,9245
1280	—	8 9	3	0 17,75	1,963	,8619	,8601	,2929	,7432
1281	Argus	8 9	3	0 28,45	1,959	--8,8633	+8,8613	+0,2918	+8,7455
1282	—	7	3	0 32,10	1,604	,9412	,9389	,2052	,8659
1283	—	7 8	3	1 6,19	2,049	,8443	,8398	,3115	,7106
1284	—	8	3	1 44,26	1,873	,8866	,8795	,2725	,7826
1285	Pixid Naut	7	3	1 46,01	2,608	,7239	,7166	,4163	,3681
1286	Argus	7	3	1 47,73	2,369	-8,7732	+8,7658	+0,3746	+8,5499
1287	—	7	3	1 56,01	2,163	,8203	,8128	,3351	,6622
1288	—	8	3	2 17,34	1,537	,9607	,9619	,1867	,8919
1289	—	7 8	3	2 55,68	1,477	,9758	,9639	,1694	,9112
1290	—	6 7	5	2 56,37	1,642	,9110	,9296	,2238	,8637
1291	Argus	7	3	3 6,04	1,928	-8,8768	+8,8643	+0,2851	+8,7647
1292	—	7 8	3	3 17,93	1,648	,9617	,9491	,1898	,8926
1293	—	8	3	3 33,70	1,548	,9626	,9490	,1898	,8936
1294	—	7 8	3	3 14,59	1,804	,9075	,8933	,2562	,8148
1295	—	7	3	4 22,62	2,010	,8630	,8461	,3032	,7395
1296	Argus	6 7	3	4 42,95	2,016	-8,8625	+8,8443	+0,3045	+8,7380
1297	—	—	—	4	1,901	,8890	,8707	,2790	,7810
1298	—	7 8	3	5 1,90	2,218	,8182	,7967	,3460	,6470
1299	—	8	3	5 12,00	2,218	,8186	,7966	,3460	,6475
1300	—	6	3	5 27,56	2,331	,7910	,7698	,3675	,6864
1301	Argus	6 7	4	5 54,03	2,117	--8,8423	+8,8196	+0,3267	+8,6989
1302	Pixid. Naut	—	—	6	1,698	,9387	,9157	,2299	,8581
1303	Argus	7	4	6 8,03	1,654	,9686	,9448	,1914	,9000
1304	Pixid. Naut.	7	3	6 10,99	2,628	,7494	,7254	,4028	,4641
1305	Argus	6 7	3	6 30,85	2,144	,8377	,8127	,3312	,6888

No	Declination (South) Jan 1 1840	Annual Precession	Logarithms of				No	Difference from the Brisbane Catalogue		
			a'	b'	c'	d'		Right Ascension from M O	T	Declin
1261	48 56 5,00	-13 830	+9,9191	+9,7170	-1,1413	-9,8590	2307	s — 2,12	s —	+ 1,67
1262	41 14 18,90	13,892	,9036	,6601	,1428	,8578	2309	— 1,82	— 3,24	+ 2,51
1263	53 28 20,67	13,892	,9248	,7716	,1428	,8578	2311	— 1,94	— 2,47	+ 8,60
1264	50 55 50,74	13,905	,9201	,7314	,1432	,8574	2312	— 2,59	—	+ 1,82
1265	49 48 42,68	13,909	,9191	,7246	,1433	,8573	2313	— 4,78	—	— 1,00
1266	38 46 31 88	13,926	+9,8965	+9,6389	-1,1438	-9,8568	2314	— 4 14	— 1,41	+ 3,78
1267	24 52 32,29	13,938	,8432	,4666	,1442	,8584	2315	— 2,04	— 3,64	— 5,51
1268	48 57 4,00	13,947	,9170	,7196	,1445	,8562	2316	— 1,86	—	-4,54,12
1269	48 57 5,85	13,947	,9175	,7201	,1445	,8562	2317	— 0,62	—	-1,06
1270	42 4 38,25	13,972	,9047	,6697	,1453	,8556	2319	— 2,10	—	— 0,79
1271	51 33 39,60	13,976	+9,9201	+9,7375	-1,1454	-9,8553	2320	— 3,82	— 3,14	+ 1,08
1272	60 20 15,90	14,001	,9227	,7833	,1462	,8548	2322	— 3,26	— 2,73	— 0,40
1273	49 3 54,62	14,047	,9154	,7240	,1476	,8532	2323	— 2,19	—	+ 4,02
1274	46 27 46,02	14,093	,9112	,7075	,1490	,8519	2326	— 3,12	— 1,71	+ 5,09
1275	46 10 51,66	14,130	,9096	,7066	,1501	,8507	2328	— 4,66	—	+ 9,39
1276	51 52 15,00	14,147	+9,9164	+9,7446	-1,1506	-9,8602	2329	— 2,76	—	— 4,08
1277	61 43 9,65	14,159	,9181	,7910	,1510	,8499	2332	— 1,87	—	+ 3,69
1278	55 42 19,50	14,179	,9180	,7669	,1517	,8492	2333	— 2,67	—	— 0,73
1279	60 43	14,159	,9145	,7898	,1510	,8499	2331	—	—	—
1280	49 33 56,90	14,196	,9183	,7316	,1522	,8487	2335	— 1,64	—	— 2,59
1281	49 30 22,86	14,204	+9,9133	+9,7326	-1,1524	-9,8485	2336	— 2,91	—	— 3,10
1282	57 12 58,32	14,208	,9180	,7753	,1526	,8483	2337	— 2,81	—	— 3,81
1283	47 16 45,14	14,215	,9090	,7180	,1537	,8472	2340	— 2,41	—	+ 0,84
1284	51 13 19 60	14,286	,9138	,7489	,1549	,8459	2344	+ 0 64	—	+ 0,05
1285	26 7 24,91	14,200	,8439	,4973	,1560	,8458	2342	— 2,10	—	+ 0,79
1286	36 42 55,93	14,290	+9,8818	+9,6299	-1,1550	-9,8458	2343	— 0,82	— 3,19	— 1,54
1287	43 59 19,20	14,294	,9026	,6951	,1552	,8457	2345	— 3,01	— 3,60	+ 3,31
1288	58 33 48,49	14,316	,9154	,7850	,1558	,8450	2349	— 2,65	—	+ 5,57
1289	59 37 6,26	14,356	,9143	,7910	,1570	,8437	2354	— 1,56	—	— 3,61
1290	56 49 18,98	14,356	,9143	,7779	,1570	,8437	2353	— 1,71	—	+ 3,05
1291	50 34 12,05	14,372	+9,9117	+9,7435	-1,1575	-9,8432	2347	-61,67	—	— 2,13
1292	58 30 16,97	14,376	,9143	,7865	,1576	,8431	2359	-4,53	—	- 5,04
1293	58 32 21,07	14,392	,9138	,7872	,1581	,8425	2361	-3,11	—	+ 0,42
1294	53 33 47,75	14,410	,9117	,7632	,1585	,8418	2363	—	+ 36,18	—
1295	48 46 20,64	14,415	,9069	,7342	,1697	,8408	2366	- 1,18	- 2,44	+ 3,96
1296	48 38 21,29	14,485	+9,9069	+9,7340	-1,1603	-9,8402	2370	— 2,41	— 2,69	+ 10,20
1297	51 36	14,477	,9090	,7530	,1607	,8398	2371	—	—	—
1298	42 36 48 30	14,186	,8960	,6898	,1609	,8395	2372	— 2,38	—	+ 3,85
1299	42 37 3,54	14,493	,8960	,6902	,1612	,8393	2373	— 3,49	—	+ 57,82
1300	38 36 19,01	14,513	,8859	,6553	,1618	,8386	2378	— 2,89	— 2,86	+ 2,30
1301	45 55 49,14	14,537	+9,9015	+9,7171	-1,1625	-9,8378	2380	— 3,21	—	+ 6,22
1302	56 7	14,541	,9101	,7800	,1626	,8377	2383	—	—	—
1303	58 37 15,02	14,554	,9117	,7925	,1630	,8373	2377	-68,01	—	+ 3,11
1304	30 24 39,35	14,557	,8085	,6658	,1631	,8371	2382	- 3,01	—	- 2,71
1305	45 11 36,00	14,573	,8993	,7128	,1636	,8360	2385	- 3,05	—	- 0,30

Mean A R and Declination of Stars

No	Names	Mag	No Obs	Right Ascen Jan 1, 1840	Annual Precessn	Logarithms of			
						a	b	c	d
1306	Argus	6 7	3	9 6 35,61	+2,214	-8,8215	+8,7960	+0,3459	+8,6552
1307	—	6 7	3	9 10,16	1,642	8,9545	,9270	,2154	,8798
1308	—	6	3	9 10,99	2,256	8,8134	,7853	,3533	,6358
1309	e	5 6	3	9 38,53	1,374	9,0114	,9826	,1380	,9560
1310	—	7	3	9 58,11	2,101	8,8519	,8213	,3224	,7139
1311	Argus	7 8	3	8 10,02	1,866	-8,9077	+8,8763	+0,2709	+8,8093
1312	—	6 7	3	8 16,15	2,205	,8981	,7964	,3435	,6659
1313	—	7	3	8 18,18	2 424	,7772	,7451	,3845	,5392
1314	—	6	3	8 41,17	1,570	,9749	,9415	,1959	,9070
1315	—	7	3	8 47,09	2,227	,8244	,7905	,3477	,6568
1316	Pixid Naut	6 7	3	8 56,04	2,487	-8,7648	+8,7303	+0,3957	+8,4972
1317	—	7 8	4	9 14,39	2,582	,7157	,7098	,4120	,4208
1318	Argus	7	3	9 27,67	2,166	,8406	,8044	,3357	,6895
1319	—	6	3	9 33,77	1,779	,9315	,8951	,2502	,8445
1320	—	6 7	3	10 28,75	2,210	,8329	,7926	,3444	,6716
1321	Argus	6 7	3	10 41,11	2,346	-8,8009	+8,7599	+0,3703	+8,5974
1322	—	6 7	3	10 54,78	1,643	,9660	,9243	,2166	,8933
1323	—	7	3	11 4,33	1,689	,9666	,9143	,2276	,8798
1324	—	7	3	11 6,86	2,190	,8394	,7969	,3401	,6840
1325	—	7	3	11 13,02	2,039	,8763	,8333	,3094	,7637
1326	g Argus	5 6	3	11 41,15	1,695	-8,9573	+8,9127	+0,2292	+8,8803
1327	—	7	3	12 11,25	2,175	,8458	,7992	,3375	,6952
1328	K	6 7	3	12 46,61	1,992	,8920	,8432	,2993	,7788
1329	l	3 4	3	12 48,53	1,608	,9800	,9312	,2063	,9114
1330	Pixid Naut	7 8	3	13 10,68	2,481	,7759	,7251	,3946	,5171
1331	Argus	8	3	13 26,30	2,106	-8,8664	+8,8150	+0,3235	+8,7327
1332	—	6 7	1	14 4,37	2,403	,7960	,7420	,3807	,6748
1333	—	7 8	3	14 17,47	2,143	,8696	,8049	,3310	,7187
1334	—	7	3	14 21,98	2,200	,8460	,7910	,3421	,6918
1335	—	7	3	14 40,00	1,830	,9360	,8800	,2624	,8469
1336	Argus	8	3	15 14,14	1,830	-8,9377	+8,8794	+0,2624	+8,8489
1337	—	6 7	3	15 42,60	2,291	,8,8271	,7671	,3600	,6487
1338	—	8 9	3	16 32,54	1,831	,8,9414	,8782	,2627	,8534
1339	—	6 7	3	16 33,94	2,182	,8,8562	,7928	,3388	,7086
1340	—	7 8	3	16 37,76	1,471	,9,0219	,9583	,1676	,9651
1341	k Argus	6 7	3	16 58,86	1,829	-8,9434	+8,8785	+0,2622	+8,8561
1342	—	6	3	17 6,37	1,447	9,0285	,9631	,1605	,9734
1343	—	7	3	17 19,75	2,410	8,8023	,7358	,3820	,5828
1344	—	8	3	17 26,74	1,550	9,0076	,9409	,1903	,9460
1345	—	6 7	3	17 46,09	2,116	8,8760	,8080	,3255	,7445
1346	Argus	6 7	3	17 53,12	2,162	-8,8652	+8,7966	+0,3349	+8,7239
1347	—	7 8	3	17 56,08	2,371	,8131	,7444	,3749	,6098
1348	—	—	—	18	1,952	,9173	,8483	,2905	,8147
1349	—	8	3	18 22,01	2,255	,8432	,7727	,3631	,6788
1350	Pixid Naut	8	3	18 22,04	2,602	,7614	,6906	,3932	,4375

No	Declination (South) Jan 1 1840	Annual Precession	Logarithms of				No	Difference from the Brisbane Catalogue			
			a'	b	c	d		M	C	T	Decln
1306	42 57 25,21	-14,582	+0,8949	+0,6956	-1,1638	-9,8363	2387	-	2,43	-	+ 4,96
1307	57 18 49,02	14,613	,9085	,7890	,1647	,8353	2391	-	2,39	-	- 0,45
1308	41 37 4,00	14,621	,8910	,6855	,1650	,8350	2390	-	1,56	-	- 0,40
1309	61 39 39,21	14,637	,9069	,8042	,1605	,8345	2394	-	2,79	-	+ 5,13
1310	46 40 44,98	14,661	,8998	,7262	,1662	,8336	2395	-	1,82	-	+ 2,47
1311	52 50 44,42	14,673	+0,9058	+0,7662	-1,1665	-9,8332	2398	-	2,06	-	- 1,16
1312	43 29 7,10	14,677	,8938	,7026	,1666	,8331	2397	-	3,74	-	- 1,23
1313	35 18 7,78	14,686	,8733	,6269	,1669	,8328	2399	-	1,63	-	- 1,59
1314	58 45 15,52	14,705	,9063	,7976	,1675	,8321	2404	-	2,00	-	+ 7,33
1315	42 48 16,23	14,713	,8915	,6982	,1677	,8319	2403	-	2,04	-	+ 1,72
1316	32 39 32,52	14,724	+0,8639	+0,5984	-1,1680	-9,8315	2405	-	-	-	+ 3,07
1317	28 13 18,28	14,745	,8463	,5418	,1686	,8308	2406	-	-	-	+ 11,06
1318	44 53 35,61	14,748	,8949	,7157	,1687	,8306	2409	-	2,95	-	- 1,47
1319	54 54 34,96	14,752	,9047	,7799	,1688	,8306	2410	-	4,01	-	- 0,49
1320	43 35 56,45	14,811	,8915	,7074	,1706	,8284	2416	-	1,04	-	+ 5,33
1321	38 43 55,75	14,823	+0,8804	+0,6655	-1,1709	-9,8280	2417	-	1,90	-	+ 2,77
1322	57 43 21,62	14,835	,9031	,7966	,1713	,8276	2418	-	2,46	-	+ 1,80
1323	56 54 42,19	14,843	,9031	,7928	,1715	,8273	2420	-	2,33	-	+ 0,36
1324	44 20 39,65	14,846	,8921	,7143	,1716	,8272	2419	-	3,85	-	+ 2,74
1325	48 54 38,82	14,854	,8982	,7473	,1718	,8269	2421	-	1,85	-	+ 2,12
1326	56 52 23,76	14,978	+0,9020	+0,7937	-1,1725	-9,8261	2424	-	1,87	-	+ 0,22
1327	44 58 2,26	14,909	,8921	,7211	,1734	,8249	2426	-	3,98	-	- 11,20
1328	50 22 52,42	14,944	,8976	,7693	,1745	,8237	2428	-	2,52	-	- 0,89
1329	58 36 17,51	14,944	,9004	,8039	,1745	,8237	2429	-	2,50	-	+ 5,44
1330	33 25 42,37	14,971	,8621	,6146	,1752	,8227	2430	-	2,90	-	+ 2,42
1331	47 18 12,89	14,983	+0,8932	+0,7400	-1,1756	-9,8223	2431	-	1,36	-	+ 2,30
1332	36 54 13,48	15,023	,8722	,6636	,1767	,8208	2434	-	2,11	-	+ 0,11
1333	46 16 31,08	15,033	,8910	,7342	,1770	,8204	2435	-	2,79	-	- 1,85
1334	44 29 60,64	15,037	,8876	,7210	,1772	,8203	2437	-	4,41	-	+ 3,22
1335	54 30 42,63	15,062	,8976	,7805	,1776	,8197	2440	-	2,84	-	- 3,46
1336	54 34 39,03	15,087	+0,8965	+0,7879	-1,1786	-9,8184	2443	-	2,98	-	+ 0,52
1337	58 30 45,64	15,114	,8508	,6990	,1794	,8174	2446	-	3,34	-	+ 3,29
1338	54 43 19,71	15,163	,8943	,7908	,1807	,8166	2455	-	3,73	-	- 0,65
1339	45 22 3,11	15,160	,8865	,7312	,1808	,8155	2454	-	2,30	-	+ 2,47
1340	61 18 49,29	15,167	,8926	,8222	,1809	,8163	2456	-	1,68	-	+ 6,27
1341	51 50 15,16	15,186	+0,8938	+0,7922	-1,1814	-9,8146	2457	-	2,79	-	- 0,01
1342	61 43 25,63	15,195	,8916	,8247	,1817	,8143	2461	-	1,67	-	+ 3,49
1343	37 4 24,96	15,209	,8686	,6606	,1821	,8137	2460	-	2,37	-	- 0,58
1344	60 8 59,27	15,213	,8926	,8186	,1822	,8136	2463	-	2,60	-	- 6,55
1345	47 36 7,77	15,232	,8882	,7493	,1827	,8128	2464	-	2,93	-	+ 5,54
1346	46 13 25,64	15,240	+0,8869	+0,7398	-1,1830	-9,8125	2466	-	2,49	-	+ 4,68
1347	38 44 17,19	15,243	,8716	,6778	,1831	,8124	2465	-	2,49	-	+ 1,23
1348	52 8	15,247	,8910	,7787	,1832	,8122	2468	-	-	-	-
1349	43 11 47,51	15,269	,8808	,7174	,1838	,8114	2472	-	0,93	-	+ 6,41
1350	28 17 28,41	15,277	,8382	,5582	,1840	,8111	2473	+	8,47	-	+ 12,85

No	Names	Mag	No Obs	Right Ascen Jan 1, 1840	Annual Precessn	Logarithms of			
						a	b	c	d
1351	Argus	6.7	3	9 18 38.68	+ 1,998	-8.9079	+8.8966	+0.3006	+8.7088
1352	—	7	3	19 6.63	2,255	8.8451	.7717	,3631	,6815
1353	Pixid Naut	7	3	19 16.97	2,543	8.7670	.6929	,4121	,4076
1354	—	6.7	3	19 46.94	2,609	8.7826	.6867	,4165	,4069
1355	—	7.8	3	19 53.86	2,506	8.7858	.7094	,3988	,5216
1356	Argus	7	3	20 2.36	1,525	-9.0213	+8.9449	+0.1833	+8.9627
1357	—	6.7	3	20 2.55	1,521	9.0228	.9459	,1821	,9613
1358	—	7	3	20 14.52	2,307	8.8349	.7572	,3630	,6569
1359	—	7	3	20 15.61	1,897	8.9374	.8599	,2781	,8412
1360	—	7	3	20 24.57	2,147	8.8759	.7977	,3318	,7406
1361	Argus	7.8	3	20 39.19	2,254	-8.8493	-8.7701	+0.3529	+8.6877
1362	—	7.8	3	20 49.09	1,926	8.9381	.8522	,2846	,8351
1363	Antl Pneum	7	3	21 0.52	2,485	8.7951	.7125	,3953	,6444
1364	Argus	7.8	3	21 2.21	2,032	8.9064	.8259	,3079	,7949
1365	—	6	3	21 6.10	1,947	8.9278	.8469	,2894	,8285
1366	Argus	7.8	5	21 19.67	2,121	-8.8851	+8.8033	+0.3265	+8.7663
1367	—	7	3	21 28.14	1,513	9.0289	.9468	,1798	,0719
1368	—	7	3	21 47.56	1,911	8.9386	.8652	,2813	,8118
1369	—	—	—	21	1,970	8.9253	.8404	,2945	,8236
1370	—	7	4	22 21.31	1,662	8.9988	.9134	,2206	,9011
1371	Argus	8	3	22 37.09	2,227	-8.8616	+8.7749	+0.3177	+8.7097
1372	—	8	3	22 42.70	2,227	8.8018	.7748	,3177	,7100
1373	—	7.8	3	22 44.92	1,961	8.9316	.8446	,2903	,8331
1374	—	—	—	22	2,129	8.8878	.7896	,3302	,7591
1375	—	7	3	23 46.12	2,276	8.8522	.7608	,3672	,6883
1376	Argus	8	4	23 51.54	2,133	-8.8892	+8.7975	+0.3200	+8.7605
1377	—	7	3	24 35.06	2,234	8.8653	.7708	,3491	,7140
1378	—	6.7	3	24 38.01	2,040	8.9152	.8206	,3096	,8010
1379	—	6.7	6	24 45.79	1,520	9.0384	.9436	,1818	,9827
1380	Pixid Naut	6.7	3	25 18.55	2,626	8.7706	.6731	,4191	,4416
1381	Argus	6.7	7	25 32.18	1,521	-9.0408	+8.9429	+0.1821	+8.9854
1382	—	7.8	3	25 32.29	2,166	8.8853	.7872	,3357	,7610
1383	—	7	3	25 34.32	2,411	8.8219	.7237	,3822	,6137
1384	—	—	—	25	1,629	9.0400	.9411	,1844	,9843
1385	—	8	3	26 15.02	2,162	8.8881	.7877	,3349	,7662
1386	Argus	6	4	26 21.63	1,822	-8.9746	+8.8733	+0.2005	+8.4949
1387	—	—	—	26	1,631	9.0425	.9402	,1850	,9871
1388	—	8	3	27 0.92	1,829	8.9750	.8712	,2622	,8961
1389	—	7	3	27 32.32	1,928	8.9523	.8464	,2620	,8611
1390	—	7.8	4	27 53.96	1,828	8.9778	.8706	,2620	,8986
1391	Argus	—	—	27	1,815	-8.9764	+8.8699	+0.2036	+8.8905
1392	—	8.9	3	27 59.66	2,120	8.9042	.7967	,3263	,7824
1393	—	7.8	3	28 7.85	1,656	9.0195	.9112	,2191	,9568
1394	Antl Pneum	7	3	28 13.07	2,621	8.8068	.6921	,4033	,6448
1395	Argus	6.7	3	28 36.84	2,072	8.9186	.8086	,8164	,8064

No	Declination (South) Jan 1 1840	Annual Precession	Logarithms of				No	Difference from the Brisbane Catalogue		
			a	b'	c'	d'		M	C	T
1351	51 3 512	-15,281	+9,8899	+9,7731	-1,1941	-9,8109	2474	-2,41	-2 31	+ 1,46
1352	43 17 22,78	15,310	,8797	,7194	,1800	,8097	2475	-1,58	—	+ 2,37
1353	29 20 41,57	15,322	,8414	,5739	,1853	,8093	2478	-2,38	—	+ 2,37
1354	28 5 45,41	15,349	,8363	,5574	,1861	,8042	2479	-2,50	-3,80	+ 1,94
1355	33 12 15,46	15,357	,8543	,6232	,1803	,8079	2480	-1,86	—	+ 1,62
1356	60 57 30,28	15,357	+9,8876	+9,8258	-1,1833	-9,8079	2484	-2,08	—	-4 69,91
1357	60 57 30,83	15,360	,8876	,8262	,1864	,8075	2485	-1,19	—	-1,88
1358	41 33 35,12	15,375	,8756	,7069	,1864	,8072	2486	—	-1,34	+ 0,39
1359	53 48 24,26	15,371	,8887	,7916	,1867	,8073	2487	-3,21	—	-0,39
1360	47 4 4,03	15,382	,8831	,7498	,1870	,8069	2488	-1,98	—	+ 4,13
1361	43 32 60,28	15,397	+9,8779	+9,7239	-1,1874	-9,8062	2490	+ 0,49	—	+ 6,21
1362	53 8 53,85	15,401	,8876	,7889	,1875	,8061	2492	-2,92	-2,71	+ 3,79
1363	34 18 47,46	15,417	,8501	,6373	,1890	,8052	2493	-2,86	-4,11	-0,66
1364	60 29 0,76	15,417	,8819	,7735	,1880	,8055	2494	-4,12	-0,26	-4,13
1365	52 41 10,97	15,420	,8870	,7689	,1881	,8053	2495	-3,09	-3,20	+ 4,29
1366	49 0 0,20	15,435	+9,8831	+9,7578	-1,1885	-9,8047	2496	-2,18	—	+ 7,34
1367	61 15 40,99	15,438	,8448	,8297	,1888	,8046	2498	-1,60	—	+ 2,78
1368	63 39 28,02	15,457	,8855	,7934	,1891	,8038	2499	-2,70	—	-1,07
1369	62 16 0	15,479	,8848	,7861	,1897	,8029	2502	—	—	—
1370	68 33 3,94	15,487	,8848	,8208	,1899	,8026	2503	-2,28	—	+ 3,80
1371	44 48 7,70	15,505	+9,8774	+9,7366	-1,1905	-9,801°	2505	-2,50	—	-0,89
1372	44 48 16,95	15,508	,8774	,7369	,1908	,8017	2507	-2 13	—	-3,77
1373	52 49 12,92	15,508	,8848	,7901	,1906	,9017	2509	-2,70	—	-1,04
1374	48 0 0	15,527	,8808	,7605	,1912	,8019	2510	—	—	—
1375	43 15 32,38	15,571	,8739	,7265	,1923	,7900	2514	-0,38	—	+ 0,60
1376	48 0 49,73	15,575	+9,8797	+9,7618	-1,1924	-9,7989	2516	-2 06	—	+ 7,91
1377	44 52 17,92	15,612	,8745	,7403	,1935	,7971	2520	-1 97	—	+ 0,32
1378	50 49 0 91	15,616	,8808	,7811	,1935	,7971	2523	-2 06	-2,66	+ 2,50
1379	61 34 29,35	15,619	,8791	,8360	,1986	,7970	2524	-2,32	—	+ 1,73
1380	27 55 29,20	15,659	,8299	,5638	,1948	,7953	2525	—	—	+ 4,91
1381	61 39 34,55	15,662	+9,8779	+9,8376	-1,1949	-9,7951	2530	-2,58	—	+ 2,46
1382	47 14 54,70	15,666	,8762	,7590	,1950	,7949	2527	-3,02	—	+ 0,82
1383	39 14 1,18	15,666	,8615	,6848	,1950	,7949	2526	-3,55	—	-2,47
1384	61 34 0	15,676	,8774	,8376	,1953	,7945	2533	—	—	—
1385	47 29 22,17	15,713	,8756	,7618	,1960	,7933	2534	-3,22	—	+ 6,82
1386	56 19 47,75	15,710	+9,8791	+9,8148	-1,1962	-9,7930	2535	-2,19	-2,58	+ 2,29
1387	61 39 0	15,719	,8762	,8393	,1964	,7924	2538	—	—	—
1388	56 16 68,59	15,746	,8785	,8103	,1973	,7914	2539	-1,62	-0,93	+ 8,00
1389	54 7 24,71	15,773	,8774	,8048	,1980	,7901	2542	-1,38	—	-3,22
1390	56 23 11,33	15,793	,8768	,8173	,1984	,7893	2545	-2,06	—	+ 2,16
1391	56 17 0	15,796	+9,8768	+9,8167	-1,1985	-9,7892	2548	—	—	—
1392	48 2 47,61	15,797	,8715	,7749	,1985	,7932	2544	-4,35	—	+ 4,49
1393	59 48 68,51	15,807	,8745	,8338	,1989	,7887	2550	+ 0,21	—	-2,98
1394	33 39 19,98	15,814	,8463	,6411	,1990	,7881	2549	+ 2,22	—	+ 1,05
1395	50 32 44,94	15,832	,8745	,7854	,1993	,7876	2555	-2,23	-2,91	+ 1,61

Right Ascension and Declination of Stars

No	Names	Mag.	No Obs	Right Ascen Jan 1, 1810	Annual Precsn	Logarithms of			
						a	b	c	d
1396	Argus	—	—	0 28	—	—8,8980	+8,7872	-0,3 30	+8,7704
1397	Pixid Naut	7 8	3	28 57 97	2,655	8,7716	,6100	,1241	,4261
1398	Argus	8 9	5	29 15 48	2,155	8,8980	,7162	,3394	,7710
1399	—	7 8	3	29 19 35	1 658	9,0227	,9100	,2196	,9599
1400	—	8 9	6	29 31,72	2,147	8,9008	,7881	,3318	,7749
1401	Argus	7 8	3	29 33 77	2,294	—8,8624	+8,7484	+0,3606	+8,7002
1402	—	5 6	3	29 48,26	1,738	9,0056	,8908	,2400	,9365
1403	Antl Pneum	7 8	3	30 15,90	2,609	8,7844	,6676	,4165	,4770
1404	—	7	3	30 29,61	2,617	8,7829	,6603	,4178	,4699
1405	Argus	7	3	30 38,07	2,167	8,8995	,7816	,3359	,7710
1406	Argus	8	3	30 45 55	2,076	—8,9241	+8,8055	+0,3172	+8,8135
1407	Antl Pneum	7	3	30 49,20	2,493	8,8136	,6946	,3967	,5765
1408	Argus	5 6	3	31 0,31	2,150	8,9054	,7864	,3824	,7809
1409	—	7 8	3	31 51,95	2,002	8,9465	,8286	,3015	,8436
1410	—	7	3	32 13,00	2,420	8,8357	,7115	,3838	,6338
1411	Argus	8	3	32 18,17	2,175	—8,9020	+8,7775	+0,3375	+8,7737
1412	—	7 8	3	32 21,70	1,404	9,0892	,9646	,1474	9,0439
1413	Antl Pneum	7	3	33 19,74	2,604	8,7918	,6631	,4138	8 4936
1414	Argus	7	3	33 48,39	2,200	8,8996	,7691	,3424	8,7674
1415	—	7 8	3	33 55,68	2,042	8,9423	,8112	,3101	8,8403
1416	Argus	7	3	34 9,07	1,974	—8,9608	+8,8289	+0,2953	+8,8690
1417	—	7 8	3	34 13,86	1,819	9,0003	,8682	,2698	,9268
1418	Antl Pneum	7	3	34 34,23	2,560	8,8050	,6714	,4082	,5376
1419	—	6 7	3	34 52,70	2,619	8,7912	,6664	,4181	,4849
1420	Argus	5 6	3	34 55,14	1,664	9,0399	,9052	,2211	,9802
1421	Argus	7 8	3	34 55,78	1,464	—9,0863	+8,9505	+0,1655	+9,0381
1422	—	7	3	35 40,06	1,975	8,9654	,8272	,2956	8,8749
1423	—	6	3	35 47,21	1,845	8,9989	,8607	,2660	8,9239
1424	Antl Pneum	7	3	35 57,00	2,523	8,8175	,6785	,4019	8,5740
1425	Argus	—	—	36	2,112	8,9305	,7899	,3247	8,8190
1426	Argus	—	—	36	2,280	—8,8848	+8,7434	+0,3579	+8,7358
1427	—	8	3	36 29,82	2,009	,9546	,8175	,3030	,8840
1428	—	7	3	36 32,32	1,971	,9690	,8276	,2947	,8798
1429	—	7 8	3	37 30,75	1,962	,9769	,8318	,2905	,8910
1430	—	7	3	37 46,57	2,126	,9311	,7849	,3276	,8186
1431	Argus	7 8	3	37 48,61	2 024	—8,9588	+8,8123	+0,3062	+8,8632
1432	—	6 7	3	38 16,89	2,034	,9575	,8092	,3083	,8609
1433	Antl Pneum	7 8	3	38 20,58	2,630	,7956	,6467	,4200	,4879
1434	Argus	7 8	3	38 41,96	2,216	,9088	,7588	,3456	,7787
1435	Antl Pneum	7	3	39 11,94	2,683	,7849	,6326	,4286	,4365
1436	Argus	7 8	3	39 30,85	2,294	—8,8888	+8,7356	+0,3606	+8,7398
1437	—	7 8	3	39 38,30	2,353	,8726	,7187	,3716	,7062
1438	—	7	3	39 49,49	1,894	,9993	,8448	,2774	,9222
1439	—	7 8	3	39 52,06	2,031	,9632	,8084	,3077	,8686
1440	—	7 8	3	40 0,63	2,298	,8895	,7342	,3613	,7405

No	Declination (South) Jan 1 1840	Annual Precession	Logarithms of				No	Right Ascension from M C		Difference from the Brisbane Catalogue	
			a'	b'	c'	d'		s	T	Declin	
1396	48 10	-16,843	+9,8722	+9,7703	-1,1998	-9,7871	2556	—	—	—	
1397	26 48 32,76	15,853	,8215	,5528	,2001	,7866	2557	— 2,06	—	+ 4,61	
1398	48 10 35,24	15,864	,8716	,7709	,2004	,7861	2558	— 3 20	—	+ 3,88	
1399	51 55 0,4	15,864	,8727	,8358	,2005	,7859	2562	— 2,92	—	- 3,48	
1400	48 25 2,56	15,868	,8722	,7727	,2005	,7859	2560	-17,89	—	+ 43,49	
1401	43 28 28,27	15,886	+9,8663	+9,7369	-1,2010	-9,7861	2563	- 1,77	- 0,90	+ 1,24	
1402	58 31 1,00	15,896	,8722	,8303	,2013	,7846	2565	- 1,62	- 1,97	+ 4,93	
1403	29 29 31,87	15,924	,8306	,5927	,2021	,7833	2567	- 0,33	—	- 2,35	
1404	29 5 5 16	15,935	,8287	,5874	,2023	,7828	2569	- 2,56	—	+ 2,44	
1405	48 2 1,91	15,939	,8698	,7721	,2024	,7826	2570	- 2,85	—	+ 7,64	
1406	50 47 55,22	15,949	+9,8710	+9,7902	-1,2027	-9,7821	2571	+ 1,34	—	- 1,49	
1407	35 22 48,39	15,958	,8482	,6638	,2028	,7820	2572	- 1,99	—	- 3,54	
1408	48 38 19,83	15,967	,8608	,7769	,2032	,7813	2577	- 1,45	- 3,14	+ 7,29	
1409	62 56 58,00	16,006	,8693	,8045	,2043	,7795	2581	- 2,25	- 2,91	+ 3,15	
1410	39 53 26,20	16,023	,8545	,7009	,2047	,7786	2583	- 1,88	- 2,92	+ 4,48	
1411	48 3 7,13	16,027	+9,8075	+9,7746	-1,2048	-9,7784	2585	- 3,10	—	+ 2,74	
1412	64 14 5,23	16,030	,8627	,8575	,2049	,7783	2588	+ 1,28	- 4,22	+ 8,06	
1413	30 12 0,51	16,082	,8293	,6062	,2063	,7757	2593	- 2 49	—	- 6,98	
1414	47 30 52,94	16,107	,8645	,7729	,2070	,7746	2595	- 2,03	—	+ 2,01	
1415	52 13 16,15	16,114	,8619	,8033	,2072	,7742	2596	- 2,27	—	+ 0,94	
1416	54 1 49,35	16,194	+9,8660	+9,8138	-1,2070	-9,7737	2598	- 1,89	—	+ 3,30	
1417	57 33 27,51	16,127	,8617	,8321	,2076	,7735	2599	- 2,21	—	+ 7,50	
1418	32 40 12,39	16,148	,8357	,6 88	,2081	,7726	2601	+ 0,06	—	0 04	
1419	29 34 40,47	16,162	,8151	,6002	,2084	,7718	2603	- 2,97	—	- 4,34	
1420	60 36 19,27	16,162	,8621	,8468	,2090	,7718	2607	- 2,18	- 3,00	+ 2,11	
1421	63 45 59,48	16,162	+9,8585	+9,8594	-1,2085	-9,7718	2608	- 2,46	—	+ 6,73	
1422	54 16 26,03	16,207	,8639	,8173	,2097	,7696	2613	+ 2,66	—	- 2,65	
1423	57 15 27,46	16,207	,8627	,8327	,2097	,7696	2615	- 3,92	- 4,98	- 0,20	
1424	34 46 27,16	16,217	,8395	,6645	,2100	,7690	2614	- 1,6	—	- 6,06	
1425	60 38	16,238	,8621	,7970	,2105	,7680	2618	—	—	—	
1426	45 10	16,248	+9,8579	+9,7599	-1,2108	-9,7675	2621	—	—	—	
1427	53 29 19,47	16,241	,8627	,8141	,2107	,7670	2623	- 2,57	—	+ 3,00	
1428	54 29 10,16	16,248	,8027	,8196	,2108	,7675	2625	- 1,16	—	+ 0,37	
1429	55 6 19,39	16,295	,8609	,8242	,2121	,7660	2631	- 2,04	—	- 6,74	
1430	60 30 0,67	16,309	,8597	,7980	,2124	,7643	2633	- 2,92	- 3,17	- 0,43	
1431	53 20 38,78	16,313	+9,8603	+9,8160	-1,2125	-9,7641	2634	- 2,60	—	+ 9,91	
1432	53 9 35,36	16,336	,8597	,8146	,2131	,7629	2637	- 2,51	- 2,06	+ 4,00	
1433	29 28 8,73	16,343	,8215	,6937	,2133	,7625	2638	- 0,52	—	+ 0,62	
1434	47 48 5,60	16,356	,8567	,7817	,2137	,7618	2641	- 1,24	—	+ 5,73	
1435	26 32 12,22	16,387	,8096	,6681	,2140	,7602	2646	- 1,45	—	- 2,74	
1436	45 10 37,88	16,397	+9,8537	+9,7638	-1,2147	-9,7597	2649	- 4,24	—	- 10,65	
1437	42 56 33,14	16,407	,8506	,7466	,2150	,7591	2650	- 2,26	—	+ 2,20	
1438	66 49 55,01	16,414	,8055	,8161	,2152	,7584	2663	- 2,57	—	+ 1,12	
1439	53 30 41,21	16,416	,8 67	,8147	,2153	,7586	2654	- 2,30	—	+ 2,64	
1440	46 10 55,12	16,433	,8531	,7646	,2155	,7582	2665	- 3,06	- 1,97	- 3,78	

No	Names	Mag	No Obs	Right Ascen Jan 1, 1840	Annual Piecesn	Logarithms of			
						a	b	c	d
1441	Antl Pneum	7	3	9 40 4,62	+2,616	-8,8024	+8,6469	+0,4176	+8,3085
1442	— —	8 9	3	40 14,71	2,458	8,8449	,6885	,3906	,6400
1443	Argus	7	3	41 2,15	1,846	9,0156	,8062	,2662	,9444
1444	— —	8	3	41 8,26	1,835	9,0187	,8591	,2636	,9487
1445	— —	6 7	3	42 48,27	2,373	8,8750	,7087	,3708	,7072
1446	Antl Pneum	7	3	43 5,74	2,532	-8,8311	+8,6631	+0,4035	+8,5956
1447	Argus	7	3	43 25,37	1,969	8,9909	,8221	,2942	,0079
1448	— —	7 8	3	43 28,38	2,452	8,8542	,6849	,3895	,6673
1449	Antl Pneum	8	3	43 45,93	2,535	8,8819	,6611	,4010	,5963
1450	Argus	8 9	3	43 55,64	1,804	9,0359	,8649	,2662	,9709
1451	Antl Pneum	8	3	44 8,18	2,621	-8,8037	+8,6369	+0,4180	+8,5178
1452	Argus	8	3	44 12,50	2,183	8,9339	,7616	,3390	,8176
1453	— —	7 8	4	44 15,16	2,214	8,9252	,7525	,3452	,8023
1454	— —	7	3	44 54,40	2,292	8,9033	,7295	,3602	,7618
1455	— —	8 9	3	44 49,81	1,806	9,0380	,8638	,2667	,9741
1456	Argus	6 7	3	45 8,57	2,315	-8,8982	+8,7220	+0,3645	+8,7513
1457	— —	7 8	3	45 28,98	2,308	8,9010	,7235	,3632	,7564
1458	— —	6	3	45 30,76	2,308	8,9014	,7235	,3632	,7570
1459	Antl Pneum	7	3	45 48,86	2,699	8,7936	,6144	,4312	,4446
1460	Argus	7 8	3	45 49,66	1,801	9,0433	,8644	,2555	,9800
1461	Argus	8	3	46 10,89	2,030	-8,9832	+8,8028	+0,3075	+8,8948
1462	— —	7	3	46 11,26	2,058	8,9764	,7951	,3134	,8,8830
1463	— —	7	3	46 13,03	1,868	9,0298	,8492	,2690	,8,9615
1464	— —	6,7	3	46 25,47	1,685	9,0744	,8929	,2266	,9,0203
1465	— —	7 8	3	46 53,55	2,311	8,9043	,7207	,3638	,8,7610
1466	Antl Pneum	6 7	3	46 54,04	2,691	-8,7975	+8,6139	+0,4299	+8,4685
1467	— —	5 6	3	46 57,84	2,724	8,7899	,6060	,4352	,4190
1468	— —	7 8	3	46 58,80	2,605	8,8201	,6365	,4158	,5506
1469	Argus	7 8	3	47 9,02	2,419	8,8728	,6881	,3836	,6948
1470	— —	8 9	3	47 13,41	2,035	8,9852	,8005	,3086	,8972
1471	Argus	7 8	3	47 14,83	2,430	-8,8697	+8,6849	+0,3856	+8,6870
1472	— —	7	3	47 32,70	2,040	8,9847	,7986	,3096	,8962
1473	— —	6 7	3	47 58,80	2,188	8,9433	,7555	,3400	,8302
1474	— —	7 8	5	48 11,50	2,319	8,9054	,7165	,3660	,7616
1475	Antl Pneum	7 8	4	48 14,42	2,598	8,8243	,6349	,4146	,6000
1476	Antl Pneum	7 8	3	48 15,20	2,605	-8,8226	+8,6335	+0,4158	+8,5544
1477	Argus	9	3	48 27,18	1,727	9,0712	,8812	,2373	,9,0156
1478	— —	6 7	3	48 54,91	2,221	8,9363	,7447	,3465	,8,8175
1479	— —	8	3	48 54,96	2,468	8,8628	,6708	,3923	,8,6683
1480	λ Antl Pneum	7	2	49 11,20	2,646	8,8131	,6201	,4226	,8,5167
1481	Argus	8 9	3	49 18,98	1,747	-9,0689	+8,8766	+0,2423	+9,0123
1482	— —	6 7	3	49 24,20	1,930	9,0213	,8275	,2866	,8,9482
1483	π Antl Pneum	6 7	3	49 38,99	2,607	8,8245	,6298	,4161	,8,5569
1484	— —	6 7	3	49 41,08	2,707	8,7988	,6035	,4325	,8,4516
1485	Argus	8 9	3	49 44,98	1,904	9,294	,8342	,2797	,8,9693

No	Declination (South) Jan 1 1840	Annual Precession	Logarithms of				Difference from the Brisbane Catalogue			
			a'	b'	c'	d'	No	Right Ascension from M C	T	Declin
1441	30 31 51,68	-16,427	+9,8228	+9,6197	-1,2155	-9,7580	2656	- 2,22	—	- 1,64
1442	38 31 59,97	16,437	,8426	,7090	,2168	,7575	2658	- 2,08	—	+ 4,82
1443	59 3 30,31	16,473	,8525	,8437	,2168	,7555	2665	- 3,30	—	+ 5,31
1444	58 18 37,95	16,477	,8525	,8449	,2169	,7553	2668	- 3,62	—	+ 1,14
1445	42 44 22,61	16,563	,8467	,7491	,2191	,7505	2679	- 1,66	—	+ 3,02
1446	36 31 30,66	16,579	+9,8325	+9,6821	-1,2195	-9,7496	2681	- 2,42	—	- 4,34
1447	56 40 11,88	16,589	,8500	,8349	,2200	,7491	2686	- 3,36	- 3,85	- 2,69
1448	39 25 30,43	16,595	,8395	,7211	,2200	,7487	2684	- 2,87	- 4,65	- 4,07
1449	35 31 3,19	16,612	,8312	,6828	,2204	,7477	2687	- 2,06	—	- 0,28
1450	59 23 26,21	16,616	,8463	,8535	,2205	,7476	2690	- 3,51	—	- 4,73
1451	30 45 51,81	16,625	+9,8189	+9,6279	-1,2207	-9,7470	2689	- 2,71	—	- 3,02
1452	49 52 41,68	16,631	,8488	,8026	,2209	,7466	2691	- 3,14	—	- 3,92
1453	48 52 16,93	16,635	,8482	,7962	,2210	,7464	2692	- 1,50	—	+ 4,57
1454	46 11 17,41	16,617	,8463	,7779	,2213	,7157	2696	- 2,74	—	+ 4,62
1455	59 31 0,92	16,660	,8445	,8552	,2217	,7449	2698	- 1,67	—	+ 4,53
1456	45 26 52,86	16,676	+9,8445	+9,7732	-1,2221	-9,7440	2702	- 1,99	—	- 0,31
1457	45 45 52,40	16,693	,8451	,7759	,2225	,7430	2703	- 1,55	- 2,03	- 2,90
1458	45 47 58,52	16,696	,8439	,7763	,2226	,7428	2704	- 0,47	—	+ 2,53
1459	26 35 8,70	16,712	,8028	,6721	,2230	,7419	2705	- 2,09	—	- 1,60
1460	59 48 53,94	16,709	,8420	,8577	,2229	,7421	2706	- 1,08	—	- 6,44
1461	54 38 8,25	16,725	+9,8451	+9,8330	-1,2234	-9,7411	2707	- 2,06	—	- 0,74
1462	53 51 14,48	16,725	,8451	,8290	,2234	,7411	2708	- 1,84	—	- 0,14
1463	58 40 27,17	16,728	,8426	,8532	,2234	,7409	2709	- 1,15	—	+ 2,30
1464	61 59 44,53	16,738	,8388	,8678	,2237	,7404	2710	- 2,27	- 4,01	+ 3,18
1465	45 56 7,81	16,763	,8426	,7791	,2244	,7388	2717	- 0,98	—	+ 9,93
1466	27 14 45,99	16,763	+9,8041	+9,5834	-1,2244	-9,7388	2712	- 2,08	—	- 4,10
1467	20 10 58,52	16,767	,7966	,6517	,2244	,7386	2715	- 2,73	—	- 2,90
1468	32 28 57,87	16,767	,8196	,6527	,2244	,7386	2716	- 2,66	—	+ 6,07
1469	41 33 23,31	16,776	,8376	,7447	,2247	,7380	2719	+ 0,41	—	- 3,79
1470	54 42 11,17	16,776	,8439	,8347	,2247	,7380	2721	- 1,54	—	+ 4,81
1471	41 5 43,31	16,776	+9,8370	+9,7407	-1,2247	-9,7380	2718	- 7,77	—	- 3,84
1472	54 37 18,64	16,792	,8126	,8347	,2251	,7371	2722	- 1,73	—	+ 2,48
1473	50 23 37,52	16,811	,8420	,8105	,2256	,7359	2724	- 2,03	- 3,04	+ 1,38
1474	45 52 59,86	16,824	,8401	,7802	,2259	,7351	2726	- 2,13	—	+ 2,41
1475	32 56 6,67	16,830	,8189	,6599	,2261	,7347	2727	+ 0,53	—	+ 6,11
1476	32 36 21,71	16,827	+9,8182	+9,6559	-1,2260	-9,7349	2720	- 2,44	—	+ 1,96
1477	61 34 55,18	16,838	,8344	,8687	,2262	,7343	2730	+ 1,04	—	+ 10,94
1478	49 29 19,12	16,855	,8407	,8060	,2267	,7332	2732	- 2,28	- 2,53	+ 3,16
1479	39 40 47,30	16,859	,8319	,7304	,2268	,7330	2731	+ 0,34	- 4,35	+ 46,73
1480	30 20 6,24	16,871	,8116	,6287	,2271	,7322	2733	- 2,71	- 3,74	- 2,74
1481	61 21 48,00	16,874	+9,8391	+9,8687	-1,2272	-9,7320	2736	- 2,46	- 2,71	+ 0,49
1482	57 39 54,63	16,880	,8370	,8524	,2274	,7316	2737	- 2,15	—	- 0,89
1483	32 39 39,75	16,890	,8169	,6581	,2276	,7310	2738	- 3,19	—	+ 2,88
1484	26 43 2,60	16,896	,7993	,5787	,2278	,7306	2789	- 2,03	—	+ 1,59
1485	58 17 42,43	16,898	,8357	,8568	,2278	,7306	2740	- 1,47	—	+ 1,28

No	Names	Mag	No Obs	Right Ascen Jan 1, 1840	Annual Precessn	Logarithms of			
						a	b	c	d
1486	Antl Pneum	7 8	3	9 50 4,39	+2,083	-8,8321	+8,6350	+0,4121	+8,5808
1487	Argus	—	—	50	1,756	9,0700	,8728	,4382	9,0156
1488	—	7 8	3	50 21,58	1,924	9,0264	,8283	,2842	8,9548
1489	—	7	3	50 28,83	2,197	8,9480	,7499	,3418	8,8360
1490	—	7 8	3	50 36,13	1,908	9,0310	,8324	,2806	8,9611
1491	Antl Pneum	7	3	50 54,31	2,746	-8,7918	+8,5016	+0,4385	+8,4079
1492	Argus	8	3	51 10,87	2,076	8,9859	,7848	,3172	,8955
1493	—	7 8	3	51 12,29	2 246	8,9358	,7342	,3514	,8144
1494	—	6	3	51 15,26	2,095	9,9806	,7796	,3212	,8476
1495	—	7 8	3	51 19,79	2,265	8,9333	,7813	,3531	,8100
1496	Argus	7	3	51 23,76	2,162	-8,9615	+8,7092	+0,3348	+8,8574
1497	Antl Pneum	7	3	51 33,54	2,642	8,8084	,6053	,4235	,4840
1498	Argus	6 7	3	51 35,11	2,280	8,9238	,7208	,3596	,7927
1499	—	9	3	52 13,83	2,016	9,0067	,8010	,3045	,7250
1500	Antl Pneum	8	3	52 50,53	2,663	8,8188	,6102	,4237	,5268
1501	Argus	7 8	3	53 2,75	1,791	-9,0708	+8,8618	+0,2531	+9,0133
1502	—	7 8	3	53 9,35	2,365	8,8984	,6891	,3775	8,7419
1503	Antl Pneum	8 9	3	53 20,20	2,720	8,8020	,6913	,4346	8 4,03
1504	Argus	7 8	3	53 25,49	1,759	9,0 01	,8697	,2453	9,0257
1505	—	8	3	53 55,72	1,979	9,0231	,8104	,8962	8,9480
1506	Argus	—	—	54	1,779	-9,0772	+8,8613	+0,2499	+9,0215
1507	—	8 9	4	54 12,86	1,781	9,0776	,8637	,2507	9,0217
1508	Antl Pneum	7 8	3	54 31,93	2,408	8,8642	,6487	,3993	8,6620
1509	Argus	7 8	3	54 56,94	2,250	8,9404	,7282	,4445	8,8280
1510	—	7 8	3	54 57,66	1,881	9,0637	,8304	,2744	8,9901
1511	Antl Pneum	7	3	55 2,32	2,611	-8,8346	+8,6168	+0,4168	+8,5757
1512	Argus	7	3	55 9,16	2,036	9,0108	,7927	,3086	,9304
1513	—	6 7	3	55 39,67	2,071	9,0019	,7818	,3162	,9171
1514	Antl Pneum	7	3	55 40,85	2,673	8,8186	,6979	,4270	,6153
1515	Argus	8	3	55 49,54	1,901	9,0113	,8301	,2790	,9865
1516	Argus	7	3	55 52,63	2,167	-8,9737	+8,7525	+0,3358	+8,8738
1517	—	8 9	3	55 58,87	1,498	9,0122	,8309	,2783	,9877
1518	—	8	3	55 16,82	2,115	8,9908	,7679	,3263	,9002
1519	Antl Pneum	7 8	3	55 21,51	2,632	8,8310	,6079	,4203	,5616
1520	—	7 8	3	55 22,18	2,731	8,8045	,5810	,4369	,4490
1521	Argus	8 9	3	55 24,84	2,116	-8,9908	+8,7673	+0,3255	+8,9000
1522	—	7 8	3	55 32,74	2,030	9,0170	,7929	,3076	8,9388
1523	—	—	—	56	2,004	8,9330	,7095	,3625	8,8049
1524	—	8 9	4	55 42,97	1,429	9,0 20	,8494	,2622	9,0189
1525	—	6 7	4	55 56,10	1,901	9,0548	,8293	,2700	8,9909
1526	Argus	6 7	3	57 1,36	2,364	-8,9150	+8,6895	+0,3736	+8,7716
1527	—	8	3	57 1,78	2,078	9,0055	,7780	,3176	,9215
1528	—	9	3	57 16,70	2,218	8,9655	,7352	,3459	,8648
1529	Antl Pneum *	6 7	3	57 34,00	2,715	8,8107	,5823	,4338	,4741
1530	Argus	9	2	57 37,71	1,977	9,0557	,8072	,2960	,9645

No	Declination (South) Jan 1 1840	Annual Precession	Logarithms of				Difference from the Brisbane Catalogue			
			a'	b'	c'	d'	No	M	C	T
1486	34 4 0,33	-16,912	+9,8195	+9,6749	-1,2282	-9,7296	2742	-	3,95	-
1487	61 21	16,918	,8319	,8698	,2283	,7292	2743	-	-	-
1488	57 58 56,29	16,927	,8351	,8551	,2286	,7286	2744	-	1,56	-
1489	50 34 39,75	16,927	,8382	,8147	,2286	,7286	2745	-	1,31	- 0,36
1490	58 20 53,72	16,934	,8344	,8570	,2287	,7282	2746	-	2,26	- 2,97
1491	24 22 12,57	16,962	+9,7889	+9,6434	-1,2292	-9,7270	2747	-	3,37	- 2,44
1492	54 19 22,62	16,962	,8363	,8374	,2295	,7264	2750	-	3,42	- 2,35
1493	49 6 36,94	16,965	,8370	,8063	,2295	,7262	2751	-	1,78	- 2,56
1494	53 48 25,09	16,965	,8363	,8347	,2295	,7262	2752	-	2,41	- 5,24
1495	48 47 41,80	16,971	,8363	,8045	,2297	,7268	2753	-	2,60	- 2,77
1496	51 52 42,41	16,974	+9,8363	+9,8238	-1,2298	-9,7256	2764	-	2,09	- 2,68
1497	28 32 30,66	16,983	,8028	,6077	,2300	,7250	2765	-	2,57	- 4,05
1498	47 39 6,27	16,983	,8357	,7970	,2300	,7260	2768	-	2,09	- 0,53
1499	56 6 9,81	16,986	,8331	,8481	,2,07	,7232	2763	-	2,14	- 0,21
1500	30 35 8,98	17,046	,8069	,6367	,2316	,7210	2764	-	-	- 6,34
1501	61 10 11,27	17,048	+9,8261	+9,8724	-1,2317	-9,7207	2767	-	2,30	-
1502	44 11 26,13	17,051	,8306	,7713	,2317	,7205	2768	-	2,80	- 4,14
1503	26 23 22,64	17,066	,7938	,6785	,2321	,7196	2768	-	0,78	- 1,93
1504	81 49 18,65	17,066	,8241	,8755	,2321	,7196	2769	-	2,33	- 2,62
1505	57 21 47,81	17,088	,8287	,8562	,2327	,7181	2773	-	1,74	- 0,82
1506	61 33	17,098	+9,8228	+9,8751	-1,2327	-9,7181	2774	-	-	-
1507	61 43 8,26	17,100	,8228	,8763	,2330	,7173	2776	-	3,34	- 7,55
1508	38 40 57,53	17,118	,8222	,7293	,2335	,7160	2777	-	1,50	- 10,65
1509	49 42 37,10	17,137	,8299	,8145	,2339	,7148	2783	-	2,16	- 3,79
1510	69 43 43,34	17,137	,8241	,8684	,2339	,7147	2784	-	1,68	- 5,02
1511	33 24 18,03	17,142	+9,8109	+9,6733	-1,2341	-9,7143	2782	-	2,51	-
1512	56 10 46,41	17,146	,8267	,8618	,2341	,7141	2786	-	3,22	- 0,00
1513	55 19 43,32	17,166	,8267	,8480	,2347	,7127	2789	-	2,97	- 2,66
1514	29 48 32,53	17,172	,8007	,6297	,2348	,7123	2788	-	2,09	- 4,19
1515	59 27 29,54	17,179	,8222	,8683	,2350	,7118	2791	-	0,19	- 2,82
1516	52 35 38,94	17,179	+9,8274	+9,8382	-1,2360	-9,7118	2790	-	2,36	- 3,43
1517	59 31 30,90	17,179	,8222	,8686	,2360	,7118	2792	-	5,04	- 8,53
1518	54 14 0,42	17,197	,8267	,8428	,2354	,7106	2796	-	1,83	- 3,56
1519	32 27 58,67	17,202	,8069	,6637	,2356	,7101	2794	-	3,14	- 1,86
1520	26 8 17,40	17,202	,7889	,5781	,2356	,7101	2795	-	2,10	- 3,88
1521	54 12 39,05	17,202	+9,8261	+9,8429	-1,2356	-9,7101	2800	-	1,82	- 1,65
1522	56 34 48,05	17,208	,8241	,8554	,2367	,7097	2801	-	3,39	- 3,12
1523	48 6	17,202	,8274	,8055	,2356	,7101	2798	-	-	-
1524	60 69 45,98	17,193	,8189	,8763	,2364	,7108	2797	-	29,83	- 1,41
1525	59 39 4,04	17,223	,8195	,8703	,2361	,7087	2806	-	2,31	- 2,41
1526	45 51 49,74	17,229	+9,8254	+9,7904	-1,2363	-9,7082	2805	-	2,28	- 0,72
1527	55 29 9,22	17,244	,8236	,807	,2366	,7072	2808	-	17,48	- 6,01
1528	51 16 32,97	17,241	,8264	,8270	,2366	,7074	2807	-	2,06	- 2,08
1529	27 24 51,80	17,233	,7917	,5984	,2369	,7066	2809	-	4,16	- 5,61
1530	58 3 22,99	17,253	,8202	,8638	,2369	,7065	2810	-	3,47	- 1,70

Mean A R and Declination of Stars

No	Names	Mag	No Obs	Right Ascen Jan 1, 1840	Annual Procesn	Logarithms of			
						a	b	c	d
1531	Argus	7 8	6	9 57 51,52	+ 1,920	-9,0528	+ 8,8233	- 0,2833	+ 8,9879
1532	—	—	—	57	1,924	9,0518	,8222	,2842	8,9864
1533	—	7	3	57 56,21	1,826	9,0792	,8491	,3927	9,0227
1534	Antl Pneum	7	3	57 56,65	2,716	8,6112	,6808	,4339	8,4749
1535	Argus	7	3	58 7,98	2,524	8,9316	,7005	,3662	8,8005
1536	Antl Pneum	6 7	3	58 20,96	2 584	-8,8499	+ 8,6177	+ 0,4123	+ 8,6152
1537	Argus	7 8	1	58 30 33	1,926	9,0538	,8213	,2844	8,9869
1538	Antl Pneum	7	3	58 30,51	2,636	8,8346	,6018	,4209	8,5664
1539	Argus	7	1	58 29,88	2,233	8,9616	,7288	,3489	8,8524
1540	—	7	2	58 35,02	2,473	8,8850	,6522	,3932	8,7056
1541	o Antl Pneum	7	3	58 36,46	2,677	-8,8233	+ 8,5894	+ 0,4276	+ 8,5240
1542	Argus	6 7	1	58 38,41	1,845	9,0763	,8433	,4619	9,0187
1543	—	6 7	3	58 56,21	2,229	8,9640	,7296	,3481	8,8562
1544	—	7	3	59 0,62	2,260	8,9576	,7228	,3522	8,8454
1545	—	7 8	2	59 3,51	2,136	8,9934	,7584	,3296	8,9026
1546	Argus	6 7	3	59 20,66	2,070	-9,0149	+ 8,7781	+ 0,3160	+ 8,9342
1547	—	6 7	3	10 0 9,98	2,232	8,9669	,7272	,3487	8,8601
1548	—	7	3	0 47,95	2,268	8,9074	,7148	,3556	8,8438
1549	Antl Pneum	7	3	1 8,08	2,577	8,8581	,6140	,4111	8,6333
1550	Argus	8	0	1 13,33	2,226	8,9723	,7276	,3475	8,8681
1551	Argus	6 7	3	1 18,93	2,347	-8,9333	+ 8,6883	+ 0,3705	+ 8,8010
1552	Antl Pneum	7 8	3	1 23,33	2,618	8,8458	,6005	,4180	8,5962
1553	—	7 8	3	2 28,07	2,658	8,8363	,5860	,4245	8,5615
1554	—	6 7	3	2 38,76	2,608	8,8514	,6014	,4163	8,6111
1555	Argus	7	3	2 48,41	2,354	8,9353	,6838	,3718	8,8033
1556	Argus	7	3	2 49,75	2,046	-9,0336	+ 8,7821	+ 0,3109	+ 8,9593
1557	Q —	5 6	3	2 53,07	2,261	8,9661	,7143	,3543	8,8568
1558	—	7	3	2 57,04	1,668	9,0855	,8387	,2714	9,0293
1559	—	7	3	3 26,31	2,379	8,9289	,6747	,3764	8,7908
1560	—	8	6	3 36,67	2,068	9,0327	,7776	,3134	8,9576
1561	Antl Pneum	6 7	3	3 51,51	2,559	-8,8701	+ 8,6138	+ 0,4081	+ 8,6609
1562	Argus	8	2	3 54,26	1,962	9,0622	,8059	,2927	8,9982
1563	—	7	3	3 54,61	2,308	8,9338	,6776	,3744	8,7096
1564	—	—	—	3	2,061	9,0331	,7762	,3141	8,9681
1565	Antl Pneum	7	3	4 44,15	2,641	8,8459	,5867	,4218	8,6885
1566	Antl Pneum	6 7	3	4 45,50	2,728	-8,8202	+ 8,5597	+ 0,4353	+ 8,4896
1567	—	7	3	4 52,32	2,625	8,8511	,6904	,4191	8,6050
1568	—	8	3	5 8,58	2,644	8,8780	,6161	,4006	8,6790
1569	—	8	3	5 32,66	2,718	8,8246	,6606	,4342	8,6065
1570	—	6	2	5 58,39	2,754	8,8153	,5494	,4399	8,4612
1571	Argus	8 9	3	6 6,42	1,920	-9,0824	+ 8,8163	+ 0,2833	+ 9,0243
1572	—	7 8	3	6 7,44	2,185	9,0011	,7347	,3394	8,9103
1573	—	6 7	3	6 13,06	2,078	9,0366	,7688	,3176	8,9606
1574	Antl Pneum.	7	3	6 21,56	2,667	8,8412	,6735	,4260	8,5680
1575	Argus	8	3	6 39,43	1,935	9,0800	,8116	,2867	9,0209

No	Declination (South) Jan 1 1840	Annual Precession	Logarithms of				No	Difference from the Brisbane Catalogue		
			a	b'	c'	d''		Right Ascension from M C	T	Decln
1531	59 24 20,08	-17,265	+9,8176	+9,8703	-1,2372	-9,7057	2815	- 1,77	—	- 1,41
1532	59 19	17,265	,8182	,8699	,2372	,7057	2814	—	—	—
1533	61 23 1,83	17,271	,8149	,8789	,2372	,7055	2816	- 1,31	- 2,64	+ 0,50
1534	27 25 19,28	17,274	,7917	,6991	,2374	,7050	2813	- 2,09	—	+ 1,11
1535	47 40 21,46	17,280	,8241	,8046	,2375	,7046	2818	- 2,12	—	+ 3,06
1536	30 36 32,70	17,291	+9,8109	+9,7013	-1,2378	-9,7037	2819	- 2,57	—	- 3,46
1537	59 25 29,54	17,295	,8169	,8711	,2379	,7055	2827	- 1,83	—	+ 7,77
1538	32 36 52,45	17,297	,8041	,6679	,2380	,7033	2822	- 1,93	—	- 3,39
1539	51 1	17,297	,8235	,8269	,2380	,7033	2824	- 1,61	—	—
1540	41 23 46,91	17,298	,8189	,7566	,2380	,7033	2825	- 5,38	- 3,33	+ 0,23
1541	30 6 55,26	17,310	+9,7980	+9,6371	-1,2383	-9,7024	2823	- 2,88	—	- 3,34
1542	61 6 35,88	17,301	,8136	,8785	,2381	,7031	2831	- 2,28	- 2,85	+ 0,22
1543	51 15 0,14	17,315	,8222	,8266	,2384	,7020	2833	- 3,14	—	- 0,94
1544	50 32 20,56	17,317	,8228	,8244	,2385	,7018	2834	- 2,10	—	+ 4,16
1545	54 10 29,20	17,321	,8209	,8457	,2386	,7016	2835	- 1,70	—	+ 1,75
1546	56 7 19,86	17,339	+9,8182	+9,8563	-1,2390	-9,7003	2837	- 2,72	—	- 57,61
1547	51 24 39,01	17,368	,8202	,8310	,2397	,6981	2840	- 2,63	—	+ 3,98
1548	50 17 58,94	17,397	,8189	,8249	,2400	,6959	2844	- 1,28	- 3,72	+ 6,66
1549	36 33 10,89	17,411	,8082	,7141	,2108	,6948	2845	- 1,49	—	- 3,39
1550	51 45 20,83	17,417	,8176	,8348	,2410	,6943	2847	+ 0,01	—	+ 5,11,30
1551	47 28 48,86	17,420	+9,8176	+9,8087	-1,2110	-9,6941	2849	- 2,36	—	+ 3,69
1552	34 18 56,70	17,423	,8041	,6895	,2411	,6939	2850	- 2,21	—	- 0,44
1553	32 3 53,54	17,471	,7980	,6656	,2423	,6901	2855	- 1,19	—	+ 6,71
1554	35 4 30,59	17,469	,8041	,7000	,2423	,6903	2857	- 2,75	—	- 6,70
1555	47 31 27,03	17,483	,8156	,8087	,2426	,6892	2859	- 2,39	—	+ 4,30
1556	57 94 55,39	17,483	+9,8102	+9,8664	-1,2426	-9,6892	2861	- 2,18	—	+ 0,18
1557	51 1 43,05	17,486	,8149	,8316	,2427	,6890	2860	- 2,31	- 1,88	+ 0,93
1558	61 26 19,17	17,486	,8034	,8845	,2427	,6890	2862	- 3,50	—	+ 3,99
1559	46 39 42,86	17,609	,8142	,8032	,2432	,6872	2863	—	- 3,06	+ 0,85
1560	57 16 24,82	17,517	,8089	,8665	,2435	,6865	2864	- 2,85	—	- 4,66
1561	38 7 29,60	17,528	+9,8089	+9,7328	-1,2437	-9,6856	2865	- 2,93	—	+ 2,35
1562	59 37 54,79	17,529	,8041	,8778	,2437	,6856	2867	- 0,67	—	- 0,22
1563	47 13 41,52	17,529	,8136	,8076	,2437	,6856	2866	- 2,88	—	- 0,21
1564	57 15	17,534	,8069	,8669	,2439	,6851	2868	—	—	—
1565	33 32 38,62	17,565	,7980	,6854	,2446	,6826	2872	- 3,16	—	+ 3,17
1566	27 49 2,63	17,567	+9,7846	+9,6122	-1,2447	-9,6824	2873	- 2,45	—	- 0,12
1567	34 32 16,47	17,570	,7993	,6967	,2448	,6821	2874	- 2,90	—	- 4,69
1568	39 13 22,15	17,582	,8055	,7442	,2451	,6912	2876	- 1,87	—	- 1,266
1569	28 42 36,37	17,601	,7860	,6255	,2455	,6796	2877	- 2,09	—	+ 4,76
1570	26 14 24,36	17,618	,7781	,5900	,2460	,6782	2881	- 1,61	—	+ 0,91
1571	60 58 48,01	17,621	+9,7973	+9,8859	-1,2460	-9,6780	2886	- 1,84	—	+ 0,46
1572	54 11 44,36	17,624	,8062	,8633	,2461	,6777	2885	- 2,14	—	+ 2,70
1573	57 16 20,14	17,626	,8021	,8693	,2462	,6775	2887	- 2,70	—	- 2,03
1574	32 14 39,96	17,635	,7931	,6719	,2464	,6768	2888	- 2,15	- 3,77	+ 0,08
1575	60 45 8,46	17,643	,7966	,8855	,2466	,6761	2891	- 2,75	—	+ 5,44

Mean A R and Declination of Stars

No	Names	Mag	No Obs	Right Ascen Jan 1, 1840	Annual Precessn	Logarithms of			
						a	b	c	d
1576	Argus	7.8	3	10 6 41.43	+ 2,386	-8.9361	+8.6672	+0.3775	+8.8012
1577	Antl Pneum	7.8	3	6 55.11	2,516	8.8421	,6117	,4059	,6864
1578	—	7.8	3	7 7.85	2,547	8.8820	,6110	,4060	,6480
1579	Argus	6	3	7 13.17	2 304	8.9653	,6941	,3625	,8625
1580	—	7	3	7 20.79	2,291	8.9703	,6984	,3600	,8607
1581	Argus	6.7	3	7 37.11	2,016	-9.0596	+8.7865	+0.3045	+8.9934
1582	—	7	3	7 38.24	2,143	9.0200	,7466	,3310	,89377
1583	—	7	3	7 39.75	2,601	8.8989	,6262	,3979	,87247
1584	—	7	3	8 9.22	1,944	9.0582	,8076	,2887	,90246
1585	—	7	3	8 10.36	2,612	8.8966	,6207	,4000	,87188
1586	Argus	8	4	8 19.79	2,295	-8.9719	+8.6954	+0.3608	+8.8627
1587	Antl Pneum	6.7	3	8 21.15	2,618	8.8610	,6843	,4180	,6276
1588	Argus	7	3	9 21.43	2,108	9.0041	,7234	,3440	,9132
1589	—	7.8	3	9 31.12	2,346	8.9680	,6763	,3703	,8384
1590	—	7	3	10 35.71	2,041	9.0623	,7767	,3098	,9960
1591	Argus	6.7	4	10 49.66	2,433	-8.9315	+8.6436	+0.3861	+8.7889
1592	—	7.8	3	11 12.78	2,399	8.9447	,6650	,3800	,8134
1593	Antl Pneum	6.7	3	11 36.79	2,626	8.8668	,5739	,4193	,6364
1594	Argus	7	3	11 40.21	2,542	8.8952	,6083	,4062	,7112
1595	Antl Pneum	7	3	12 3.96	2,662	8.8546	,5609	,4252	,6005
1596	Argus	8.9	3	12 20.74	2,823	-8.9751	+8.6800	+0.3660	+8.8653
1597	—	—	—	12 21.97	2,197	9.0196	,7230	,3418	,9347
1598	—	7	3	12 44.54	2,363	8.9660	,6688	,3710	,8498
1599	—	7	5	12 48.89	2,198	9.0197	,7225	,3420	,9348
1600	—	8	3	12 52.42	2,469	8.9243	,6267	,3925	,7727
1601	Argus	8.9	3	12 54.54	2,201	-9.0189	+8.7213	+0.3426	+8.9336
1602	Antl Pneum	7	2	13 2.66	2,688	8.8482	,5497	,4294	,6760
1603	Argus	7.8	3	13 8.78	2,203	9.0191	,7203	,3430	,9338
1604	—	8	3	13 8.74	2,203	9.0191	,7203	,3430	,9338
1605	Antl Pneum	6.7	3	13 21.46	2,708	8.6423	,5423	,4326	,5546
1606	Argus	6.7	3	13 22.30	2,422	-8.9420	+8.6432	+0.3842	+8.8083
1607	—	7.8	3	13 37.32	2,335	8.9747	,6787	,3683	,8640
1608	—	6.7	3	13 36.68	2,238	9.0088	,7078	,3409	,9182
1609	—	6.7	3	13 46.12	2,430	8.9412	,6392	,3856	,8047
1610	—	—	—	13	2,208	9.0197	,7181	,3440	,9344
1611	Antl Pneum.	7	3	13 53.41	2,795	-8.8171	+8.6146	+0.4464	+8.4366
1612	Argus	7.8	3	14 4.93	2,161	9.0367	,7335	,3346	,9590
1613	Antl Pneum	8	3	14 14.12	2,737	8.8360	,6308	,4373	,5228
1614	Argus	7	3	14 16.36	2,456	8.9405	,6364	,3867	,8031
1615	—	—	—	14	2,077	9.0657	,7606	,3174	,9992
1616	Argus	8	3	14 47.00	2,178	-9.0336	+8.7268	+0.4725	+8.9541
1617	—	7	4	14 36.69	2,087	9.0631	,7578	,3195	,9166
1618	Antl Pneum.	7	3	15 2.00	2,744	8.8341	,6268	,4384	,5167
1619	Argus	8	3	15 24.70	2,188	9.0493	,7397	,3300	,9763
1620	—	—	—	15	2,093	9.0651	,7548	,3208	,9980

No	Declination (South) Jan 1 1840	Annual Precession	Logarithms of				Difference from the Brisbane Catalogue			
			a'	b'	c'	d'	No	M O	T	Decln
1576	47 7 44,32	-17,646	+9,8082	+9,8099	-1,2466	-9,6759	2890	-2,44	-	+ 3,66
1577	39 33 20,09	17,660	,8028	,7493	,2470	,6747	2892	-3,17	- 2,80	- 0,47
1578	39 31 9,19	17,665	,8034	,7492	,2471	,6742	2894	-3,09	-	- 0,57
1579	50 26 30,25	17,668	,8062	,8325	,2472	,6740	2895	-2,66	- 3,27	+ 4,26
1580	50 57 54,95	17,673	,8055	,8358	,2473	,6735	2896	-2,67	-	+ 2,80
1581	59 7 34,86	17,684	+9,7966	+9,8794	-1,2476	-9,6726	2899	-2,25	- 2,65	+ 3,32
1582	55 47 43,36	17,687	,8014	,8634	,2476	,6723	2900	-1,33	-	- 0,76
1583	42 0 56,91	17,687	,8041	,7716	,2476	,6723	2898	-2,01	-	+ 1,46
1584	60 52 1,26	17,706	,7917	,8976	,2481	,6707	2909	-3,04	-	- 1,72
1585	41 36 23,44	17,709	,8028	,7685	,2482	,6704	2906	-2,17	-	- 1,14
1586	51 1 16,95	17,714	+9,8041	+9,8372	-1,2483	-9,6899	2911	-2,39	-	+ 3,17
1587	35 43 28,76	17,717	,7909	,7131	,2484	,6697	2910	-1,83	-	- 5,17
1588	54 10 45,83	17,752	,7998	,8564	,2492	,6866	2920	-4,92	-	+ 8,19
1589	49 22 52,63	17,760	,8021	,8279	,2494	,6689	2921	-3,34	- 2,50	+ 2,11
1590	59 6 24,21	17,803	,7903	,8822	,2505	,6620	2926	-5,68	-	- 3,84
1591	46 2 13,00	17,814	+9,8000	+9,8063	-1,2608	-9,6610	2928	-2,14	- 3,22	+ 1,82
1592	47 37 9,59	17,830	,7986	,8179	,2511	,6595	2931	-1,72	-	+ 4,27
1593	36 0 20,62	17,849	,7910	,7193	,2518	,6578	2932	-1,83	-	- 0,84
1594	40 52 9,83	17,849	,7968	,7668	,2516	,6578	2933	-3,33	- 2,68	- 1,83
1595	33 48 59,67	17,866	,7867	,6959	,2520	,6563	2936	-2,51	-	+ 6,57
1596	50 56 46,02	17,875	+9,7952	+9,8406	-1,2522	-9,6553	2937	-1,35	-	+ 6,54
1597	55 18	17,888	,7910	,8658	,2526	,6541	2939	-	-	-
1598	49 64 58,71	17,894	,7952	,8346	,2527	,6636	2941	-2,43	-	- 2,21
1599	55 18 57,21	17,894	,7896	,8659	,2527	,6536	2943	-1,20	-	- 4,66
1600	44 50 46,31	17,896	,7969	,7993	,2528	,6533	2942	-2,46	-	+ 2,64
1601	55 13 53,21	17,896	+9,7903	+9,8656	-1,2528	-9,6533	2944	-3,90	-	- 3,68
1602	32 19 35,64	17,904	,7832	,6795	,2529	,6625	2945	-3,37	-	+ 6,97
1603	55 13 17,17	17,907	,7896	,8658	,2530	,6623	2946	-2,25	-	- 1,34
1604	55 13 18,08	17,907	,7896	,8658	,2530	,6523	2947	-2,12	-	+ 66,36
1605	31 0 47,08	17,917	,7803	,6636	,2533	,6513	2948	-1,41	-	- 3,36
1606	47 9 30,51	17,915	+9,7952	+9,8166	-1,2532	-9,6514	2949	-3,01	-	- 0,06
1607	50 46 58,69	17,925	,7931	,8408	,2535	,6505	2951	-2,62	-	- 0,08
1608	54 13 36,08	17,925	,7903	,8609	,2535	,6506	2952	-1,82	- 2,64	+ 8,62
1609	46 53 45,95	17,933	,7938	,8153	,2536	,6498	2954	-2,90	- 3,75	+ 4,44
1610	55 13	17,933	,7882	,8063	,2536	,6500	2957	-	-	-
1611	24 34 10,01	17,988	+9,7642	+9,5712	-1,2538	-9,6493	2956	-2,11	-	- 3,42
1612	55 42 15,99	17,943	,7853	,8742	,2539	,6488	2959	-33,00	-	+ 1,78
1613	28 8 12,63	17,951	,7752	,6400	,2541	,6480	2960	-2,34	- 3,87	+ 6,07
1614	46 46 42,73	17,961	,7931	,8148	,2541	,6480	2963	-2,12	-	+ 1,94
1615	59 4	17,969	,7810	,8859	,2543	,6472	2965	-	-	-
1616	56 21 55,22	17,972	+9,7846	+9,8733	-1,2646	-9,6460	2968	-3,15	-	+ 2,47
1617	58 51 4,44	17,987	,7803	,8851	,2545	,6465	2966	-2,71	-	- 1,14
1618	28 46 5,21	17,982	,7723	,6355	,2548	,6449	2970	-2,24	-	+ 2,16
1619	57 40 40,40	17,995	,7810	,8802	,2551	,6436	2975	-2,16	-	- 0,64
1620	58 56	18,006	,7781	,8864	,2554	,6428	2977	-	-	-

Mean A R and Declination of Stars

No	Names	Mag	No Obs	Right Ascen Jan 1, 1840	Annual Precessn	Logarithms of			
						a	b	c	d
1621	Antl Pneum	6 7	3	10 16 53,73	+2,738	-8,8374	+8,5253	+0,4374	+8,5282
1622	—	—	—	16	2,747	8,4367	,5210	,4389	8,5195
1623	Argus	9	5	16 43,88	2,016	9,0935	,7785	,3043	0 0360
1624	—	9	6	16 43,47	2,101	9,0863	,7503	,3224	8,9193
1625	—	8 9	3	16 44,00	2,017	9,0937	,7777	,3047	9,0358
1626	Argus	8 9	3	17 14,26	2,011	-9,0973	+8,7791	+0,3034	+9,0104
1627	—	7 8	3	16 24,85	2,162	9,0486	,7293	,3310	8,9711
1628	—	9	3	17 56,30	2,035	9,0931	,7706	,3086	9,0346
1629	—	8	3	18 0,30	2,133	9,0607	,7382	,3290	8,9912
1630	—	7 8	3	18 1,19	2,178	9,0454	,7232	,3381	8,9698
1631	Antl Pneum	7	4	18 1,79	2,757	-8,8353	+8,5129	+0,4104	+8,6128
1632	Argus	9	3	18 13,66	2,124	9,0645	,7414	,3271	8,9964
1633	—	6	3	18 25,88	2,559	8,9067	,5823	,4081	8,7295
1634	—	7 8	3	18 0,79	2,294	9,0059	,6812	,3606	8,9113
1635	—	7	3	18 39,34	2,404	8,9659	,6406	,3809	8,8468
1636	Argus	7 8	3	18 47,18	2,104	-9,0735	+8,7474	+0,3930	+9,0084
1637	—	7 8	2	18 53,33	2,050	9,0915	,7651	,3117	9,0324
1638	—	6 7	3	19 12,60	2,166	9,0510	,7259	,3357	8,9814
1639	Antl Pneum	7	3	19 25,59	2,616	8,8878	,5584	,4176	8,4627
1640	Argus	7	2	19 29,96	2,158	9,0576	,7283	,3340	8,9864
1641	Argus	7 8	4	19 39,76	2,284	-9,0139	+8,6835	+0,3587	+8,9229
1642	—	7	3	20 2,80	2,317	9,0029	,6706	,3649	9,0558
1643	—	7	3	20 7,17	2,467	8,9166	,6139	,3922	8,097
1644	—	6 7	3	20 39,69	2,294	9,0116	,6782	,3606	9,2119
1645	—	7	3	20 53,74	2,637	8,9219	,6863	,4043	,7601
1646	Argus	7 8	3	20 59,84	2,214	-9,0439	+8,7070	+0,3452	+8,9660
1647	—	—	—	21	2,336	9,0002	,6623	,3653	,9014
1648	—	8 9	3	21 26,58	2,440	8,9012	,6219	,3874	,8356
1649	—	6	3	21 28,07	2,216	9,0447	,7054	,3466	,9678
1650	P	6 7	3	21 29,80	2,437	8,9624	,6227	,3869	,8376
1651	Argus	8	3	21 41,96	2,057	-9,1004	+8,7601	+0,3132	+9,0432
1652	—	5	5	22 1,12	2,184	9,0582	,7163	,3392	8,9864
1653	Antl Pneum	7	3	22 1,67	2,647	8,8824	,6401	,4227	8,6647
1654	Argus	7	3	22 47 63	2,241	9,0411	,6961	,504	8,9818
1655	—	7 8	3	23 8,41	2,116	9,0864	,7387	,3266	9,0243
1656	Argus	9	3	23 17,71	2,165	-9,0700	+8,7213	+0,3366	+9,0093
1657	—	8 9	3	23 19,87	2,051	9,1092	,601	,3120	9,0641
1658	Antl Pneum	7 8	3	23 29,11	2,805	8,8295	,4804	,4479	8,4636
1659	Argus	8	3	23 42,26	2,314	9,0172	,6805	,3041	8,9962
1660	—	7	3	24 7,14	2,553	8,9243	,5720	,4070	8,7631
1661	Argus	7 8	3	24 10,39	2,590	-8,9101	+8,5566	+0,4133	+8,7308
1662	—	7	3	24 17,24	2,590	8,9100	,6669	,4138	8,7307
1663	Antl-Pneum	7	3	24 17,36	2,689	8,8682	,6141	,4848	8,6196
1664	Argus	7	3	24 53,44	2,654	8,9263	,6694	,4070	8,7658
1665	—	—	—	24	2,555	8,9265	,6686	,4074	8,7657

No	Declination (South) Jan 1 1840	Annual Precession	Logarithms of				Difference from the Brisbane Catalogue			
			a'	b'	c'	d'	No	Right Ascension from M C	T	Declin
1621	29 21 17,17	-18,015	+9,7730	+9,6445	-1,2566	-9,6416	2978	- 3,12	s	- 2,10
1622	28 50	18,035	,7708	,6379	,2561	,6395	2979	—	—	—
1623	61 2 31,52	18,038	,7716	,8964	,2562	,6392	2983	-13,62	—	- 3,70
1624	58 56 50,93	18,046	,7760	,8874	,2664	,6385	2985	- 2,36	—	+ 6,80
1625	61 2 31,63	18,046	,7716	,8966	,2564	,6386	2986	- 2,66	—	- 4,00
1626	61 15 55,86	18,064	+9,7694	+9,8979	-1,2568	-9,6366	2988	- 3,04	—	+ 5,67
1627	57 27 35,06	18,071	,7760	,8810	,2570	,6358	2990	+57,73	—	- 2,33
1628	60 54 29,29	18,096	,7686	,8972	,2576	,6332	2996	+ 4,82	—	+ 3,30
1629	58 23 50,38	18,096	,7730	,8862	,2576	,6332	2994	- 2,03	—	+ 8,55
1630	57 8 40,89	18,094	,7762	,8800	,2575	,6334	2993	- 2,52	—	- 5,23
1631	28 22 57 20	18,096	+9,7679	+9,6332	-1,2576	-9,6332	2992	- 2,68	—	+ 2,40
1632	58 42 10,47	18,101	,7723	,8876	,2577	,6327	2997	- 3,22	—	- 0,90
1633	41 39 18,97	18,111	,7846	,7789	,2579	,6316	3000	- 2,67	-2,43	+ 1,39
1634	53 30 40,51	18,114	,7796	,8615	,2680	,6313	3001	- 2,84	—	- 0,68
1635	49 17 39,93	18,119	,7832	,8361	,2581	,6308	3002	- 3,40	—	+ 1,46
1636	59 22 52,56	18,124	+9,7694	+9,8912	-1,2582	-9,6303	3003	- 1,69	—	- 2,86
1637	60 41 31,93	18,126	,7864	,8972	,2583	,6300	3004	- 2,79	—	- 2,17
1638	57 45 52,22	18,139	,7716	,8841	,2580	,6286	3007	- 2,32	—	+ 3,12
1639	38 32 64,93	18,148	,7810	,7519	,2588	,6276	3008	- 3,12	—	+ 6,07
1640	58 3 35,84	18,148	,7708	,8857	,2588	,6276	3009	- 3,46	—	- 1,77
1641	54 10 44,45	18,156	+9,7760	+9,8661	-1,2590	-9,6208	3010	- 2,53	—	+ 1,33
1642	53 4 40,87	18,171	,7767	,8604	,2594	,6251	3013	- 1,96	—	+ 0,42
1643	46 50 37,25	18,173	,7818	,8207	,2594	,6249	3016	- 3,72	—	+ 2,95
1644	54 3 50,65	18,193	,7738	,8664	,2699	,6227	3017	- 2,13	—	- 0,52
1645	43 31 35,58	18,203	,7803	,7964	,2601	,6216	3018	- 2,19	- 3,26	+ 5,44
1646	56 47 30,77	18,205	+9,7694	+9,8810	-1,2602	-9,6213	3019	- 2,29	- 4,66	+ 4,34
1647	52 41	18,212	,7752	,8592	,2604	,6205	3020	—	—	—
1648	48 27 11,15	18,222	,7781	,8330	,2606	,6194	3021	- 1,59	—	- 10,78
1649	56 49 25,32	18,222	,7872	,8815	,2606	,6194	3023	- 2,65	- 4,24	+ 2,35
1650	48 35 13,15	18,224	,7781	,8840	,2606	,6191	3022	- 1,08	—	+ 5,83
1651	61 12 0,12	18,230	+9,7681	+9,9016	-1,2608	-9,6186	3026	- 1,85	—	+ 4,61
1652	57 55 22,58	18,242	,7642	,8873	,2611	,6172	3031	- 2,32	- 3,03	+ 1,20
1653	37 14 32,26	18,244	,7752	,7416	,2611	,6169	3029	- 1,06	—	+ 26,71
1654	56 24 56,99	18,270	,7649	,8806	,2617	,6138	3035	—	- 2,29	- 13,97
1655	60 4 40,83	18,283	,7574	,8981	,2620	,6124	3036	- 3,47	—	+ 1,45
1656	58 47 35,53	18,289	+9,7597	+9,8926	-1,2622	-9,6116	3038	- 2,47	—	+ 1,84
1657	61 43 54,03	18,293	,7489	,9053	,2623	,6113	3039	- 5,90	—	- 4,46
1658	45 39 56,07	18,292	,7643	,5975	,2623	,6113	3037	- 1,98	—	+ 0,39
1659	54 9 31,72	18,304	,7664	,8696	,2625	,6099	3043	- 2,22	—	+ 6,46
1660	43 32 51,62	18,318	,7738	,7993	,2629	,6082	3046	- 2,62	—	+ 0,77
1661	41 24 1,21	18,323	+9,7731	+9,7818	-1,2630	-9,6076	3047	—	—	+ 0,94
1662	41 24 30,64	18,318	,7731	,7817	,2629	,6079	3048	—	—	- 2,27
1663	34 18 18,05	18,327	,7679	,7125	,2631	,6070	3049	+ 1,00	—	- 9,75
1664	43 39 46,67	18,346	,7723	,8009	,2635	,6047	3052	+ 3,41	—	- 5,03
1665	43 39	18,353	,7716	,8011	,2687	,6039	3056	—	—	—

No.	Names	Mag	No. Obs	Right Ascen Jan 1, 1840			Annual Precessn	Logarithms of			
				H	M	s		a	b	c	d
1666	Argus	7 8	3	10	24	58,58	+2,115	-9,0942	+8,7370	+0,3253	+9,0342
1667	—	8	3	10	29	9,42	2,233	9,0627	,6948	,3189	8,9776
1668	—	7	3	10	29	9,86	2,358	9,0056	,6474	,3725	8,9076
1669	—	8	3	10	29	22,77	2,220	9,0587	,6994	,3463	8,9859
1670	—	6 7	3	10	29	42,74	2,566	8,9279	,5609	,4076	8,7683
1671	Argus	6 7	3	11	49	06	2,219	-9,0604	+8,6991	+0,3402	+8,9882
1672	—	8	3	11	52	96	2,574	8,9211	,5590	,4106	8,7535
1673	Antl Pneum	8	3	11	21	95	2,806	8,8351	,4707	,4479	8,4854
1674	Argus	7	3	11	27	51	2,633	8,8900	,5342	,4204	8,7019
1675	—	9	3	11	36	16	2,186	9,0759	,7104	,3396	9,0000
1676	Argus	—	—	12	26	—	2,498	-8,9548	+8,5880	+0,3976	+8,8202
1677	—	7	3	12	49	96	2,227	9,0612	,6944	,3477	8,9890
1678	Antl Pneum	6 7	2	12	6	70	2,678	8,8826	,5143	,4278	8,6679
1679	Argus	8	3	12	7	02	2,182	9,0795	,7112	,3388	9,0140
1680	—	7	3	12	28	53	2,243	9,0527	,6888	,3608	8,9813
1681	Antl Pneum	7	3	12	25	51	2,768	-8,8625	+8,4822	+0,4409	+8,5584
1682	Argus	8	3	12	30	03	2,209	9,0710	,7006	,3442	9,0033
1683	Antl Pneum	6	3	12	7	20	2,660	8,8962	,5227	,4778	8,6929
1684	Argus	8 9	3	12	15	57	2,546	8,9395	,5653	,4059	8,7898
1685	—	6 7	3	12	25	04	2,162	9,0918	,7168	,3348	9,0301
1686	Argus	—	—	13	28	—	2,439	-8,9859	+8,6092	+0,3872	+8,8738
1687	—	7	3	13	58	51	2,277	9,0514	,6732	,3574	8,9744
1688	Antl Pneum	7	2	13	7	23	2,795	8,8420	,4837	,4404	8,6141
1689	Argus	7	3	13	11	72	2,487	8,9672	,5870	,3957	8,8412
1690	Antl. Pneum	7	3	13	16	04	2,741	8,8629	,4830	,4379	8,5927
1691	Argus	—	—	14	29	—	2,384	-9,0506	+8,6699	+0,3587	+8,9731
1692	—	7	3	14	37	04	2,967	9,0577	,6764	,3664	,9832
1693	—	7	2	14	44	40	2,267	9,0582	,6761	,3664	,9838
1694	Antl Pneum	7	3	14	49	97	2,761	8,8564	,4732	,4411	,5678
1695	Argus	7 8	3	14	56	83	2,631	8,9514	,5679	,4033	,8116
1696	Argus	7 8	3	15	26	15	2,599	-8,9239	+8,5379	+0,4148	+8,7553
1697	Antl Pneum	7	3	15	26	35	2,713	8,8762	,4902	,4384	8,6839
1698	Argus	7	3	15	22	10	2,280	9,0762	,6895	,3488	9,0072
1699	—	—	—	15	29	—	2,274	9,0583	,6725	,3608	8,9846
1700	—	8	3	15	31	93	2,243	9,0705	,6842	,3604	9,0007
1701	Argus	8	3	15	39	00	2,245	-9,0704	+8,6863	+0,3612	+8,0006
1702	—	6 7	3	15	50	39	2,395	9,0113	,6232	,3971	8,9140
1703	—	6 7	3	16	22	60	2,965	9,0667	,6746	,3651	8,9938
1704	—	6 7	3	16	49	58	2,918	8,9197	,6261	,4180	8,7448
1705	—	6 7	3	16	50	42	2,313	9,0486	,6650	,3642	8,9695
1706	Antl Pneum	7	3	16	1	70	2,707	-8,8826	+8,4879	+0,4325	+8,6504
1707	Argus	7 8	3	16	24	11	2,122	9,1234	,7269	,3267	9,0704
1708	—	—	—	16	32	—	2,269	9,0729	,6756	,3839	9,0084
1709	—	5 6	3	16	40	53	2,263	9,0722	,6739	,6547	9,0024
1710	—	7 8	4	16	41	40	2,260	9,0730	,6747	,3641	9,0035

No	Declination (South) Jan 1 1840	Annual Precession	Logarithms of				Difference from the Brisbane Catalogue			
			a'	b'	c'	d	No	M	C	T
1666	60 32 15,27	-18,349	+9,7505	+9,9017	-1,2636	-9,6045	3057	-	3,52	-
1667	57 13 44,53	18,353	,7681	,8867	,2637	,6039	3061	-	4,86	-
1668	52 54 10,85	18,356	,7649	,8638	,2638	,6036	3062	-	2,23	- 2,04
1669	57 43 21,57	18,362	,7566	,8892	,2639	,6027	3063	+69,19	-	- 0,86
1670	43 47 39,42	18,374	,7701	,8026	,2642	,6013	3064	-	2,80	-
1671	57 50 34,90	18,376	+9,7551	+9,8901	-1,2643	-9,6010	3066	+57,92	-	- 2,58
1672	42 48 18,12	18,381	,7701	,7949	,2644	,6004	3066	-	2,69	-
1673	26 31 29,53	18,398	,7520	,6131	,2648	,6984	3070	-	2,94	-
1674	39 24 49,48	18,400	,7686	,7658	,2648	,6981	3071	-	2,01	-
1675	59 2 32,28	18,404	,7497	,8964	,2649	,6976	3076	-	1,86	-
1676	47 9	18,414	+9,7672	+9,8286	-1,2651	-9,5963	3077	-	-	-
1677	57 50 34,47	18,414	,7528	,8909	,2651	,5963	3076	-	12,32	-
1678	36 33 45,64	18,423	,7657	,7387	,2653	,5961	3079	-	2,31	-
1679	59 17 24,01	18,428	,7482	,8979	,2653	,5961	3080	-	1,82	-
1680	57 21 57,01	18,414	,7628	,8888	,2651	,5963	3078	-	32,82	-
1681	30 31 5,30	18,437	+9,7589	+9,6696	-1,2657	-9,5934	3081	-	-	-32,38
1682	58 35 37,81	18,437	,7489	,8951	,2657	,5934	3084	+ 0,03	-	- 0,71
1683	38 44 10,93	18,457	,7649	,7809	,2662	,5907	3085	-	2,37	-
1684	45 4 19,61	18,462	,7649	,8146	,2663	,5901	3087	-	1,98	-
1685	60 9 46,70	18,466	,7427	,9028	,2664	,5895	3089	-	3,64	-
1686	50 33	18,477	+9,7597	+9,8526	-1,2666	-9,5880	3090	-	-	-
1687	56 50 57,81	18,486	,7482	,8879	,2668	,5868	3093	-	1,54	-
1688	27 56 37,55	18,493	,7513	,6362	,2670	,5859	3094	-	2,00	-
1689	48 24 11,14	18,493	,7604	,8391	,2670	,5859	3096	-	2,12	-
1690	32 26 35,84	18,497	,7581	,6950	,2671	,5863	3097	-	1,52	-
1691	56 46	18,502	+9,7474	+9,8878	-1,2672	-9,5847	3100	-	-	-
1692	57 21 57,24	18,507	,7459	,8909	,2673	,5841	3105	-	2,94	-
1693	57 23 48,25	18,511	,7469	,8911	,2674	,5834	3107	-	1,89	-
1694	30 56 5,29	18,518	,7551	,6771	,2676	,5825	3106	-	2,00	-
1695	46 25 34,48	18,520	,7604	,8259	,2676	,5822	3108	-	1,85	-
1696	42 41 38,36	18,535	+9,7612	+9,7976	-1,2680	-9,5801	3111	+ 3,51	-	-
1697	34 53 29,26	18,535	,8287	,7238	,2680	,5801	3110	-	2,82	-
1698	58 43 59,08	18,633	,7404	,8980	,2679	,5804	3112	+ 1,86	-	- 2,97
1699	57 24	18,638	,7435	,8918	,2681	,5798	3115	-	-	-
1700	58 21 39,09	18,638	,7419	,8964	,2681	,5798	3116	-	1,35	-
1701	58 20 17,64	18,642	+9,7411	+9,8964	-1,2682	-9,5792	3117	-	1,39	-
1702	53 1 30,32	18,649	,7513	,8690	,2683	,5782	3119	-	1,52	-
1703	57 54 9,86	18,607	,7396	,8949	,2687	,5758	3121	-	2,61	-
1704	41 55 17,45	18,682	,7589	,7923	,2691	,5786	3122	-	2,62	- 3,01
1705	56 25 32,92	18,682	,7419	,8880	,2691	,5736	3123	-	1,87	-
1706	35 50 47,91	18,688	+9,7386	+9,7351	-1,2692	-9,5726	3124	+ 2,44	-	- 3,68
1707	62 13 25,78	18,599	,7259	,9145	,2695	,6711	3125	+ 2,12	-	- 2,10
1708	58 26	18,603	,7358	,8982	,2696	,6704	3126	-	-	-
1709	58 21 2,13	18,610	,7356	,8980	,2697	,6695	3127	-	1,77	- 3,82
1710	58 25 47,32	18,611	,7348	,8983	,2697	,6695	3128	-	1,91	-

No	Names	Mag	No Obs	Right Ascen Jan 1, 1840	Annual Precessn	Logarithms of			
						a	b	c	d
1711	Argus	8.9	3	10 32 52,96	+ 2,261	-9,0733	+8,8743	+0,3543	+9,0039
1712	—	7	3	32 64,36	2,276	9,0679	,6684	,3672	8,9964
1713	X —	5.6	3	32 57,56	2,307	9,0312	,6314	,3712	8,9435
1714	—	7.8	3	33 3,37	2,368	9,0312	,6311	,3744	8,9435
1715	—	7.8	3	33 24,10	2,450	8,9979	,5950	,3892	8,8914
1716	Argus	7.8	3	33 24,86	2,552	-8,9532	+8,5512	+0,4069	+8,8127
1717	—	8.9	2	33 33,41	2,210	9,0958	,6930	,3444	9,0341
1718	Antl Pneum	7	3	33 34,11	2,725	8,8787	,4756	,4854	8,6365
1719	Argus	—	—	34	2,245	9,0862	,6791	,3512	9,0198
1720	Antl Pneum	7	3	34 12,18	2,728	8,8790	,4726	,4358	8,6367
1721	Argus	9.10	2	34 28,95	2,268	-9,0777	+8,6694	+0,3556	+9,0094
1722	—	7	3	34 39,96	2,317	9,0586	,6496	,3649	8,9829
1723	Antl Pneum	—	—	34	2,677	8,9021	,4919	,476	8,6999
1724	Argus	7.8	2	35 8,27	2,260	9,0838	,6718	,3541	9,0177
1725	Antl Pneum	7.8	6	35 11,60	2,270	9,0800	,6680	,3562	9,0125
1726	Argus	7.8	3	35 29,59	2,563	-8,9553	+8,5414	+0,4087	+8,8128
1727	—	7	3	34 46,97	2,589	8,9443	,6288	,4131	8,7935
1728	Antl Pneum	7	3	35 60,97	2,781	8,8608	,4446	,4442	8,5720
1729	Argus	7.8	3	36 21,62	2,361	9,0476	,6288	,3731	8,9665
1730	Antl Pneum	7.8	3	36 23,19	2,693	8,8995	,4802	,4302	8,6912
1731	Argus	8	2	36 30,21	2,293	-9,0762	+8,6686	+0,3604	+9,0069
1732	—	6.7	3	36 30,52	2,296	9,0762	,6556	,3610	9,0056
1733	—	—	—	36	2,217	9,0753	,6549	,3612	9,0056
1734	Antl Pneum.	8.9	1	36 58,94	2,724	8,8870	,4847	,4362	8,6504
1735	Argus	7.8	3	37 2,72	2,243	9,0983	,6700	,3508	9,0367
1736	Argus	7.8	3	37 9 33	2,239	-9,1006	+8,6776	+0,3500	+9,0397
1737	Antl Pneum	7	4	37 20,43	2,726	8,8879	,4633	,4364	8,6583
1738	—	8	2	37 24,36	2,709	8,8947	,4701	,4328	8,6775
1739	Argus	5.6	2	37 27,68	2,261	9,0929	,6683	,5548	8,9204
1740	—	9	3	37 43,33	2,400	9,0364	,6100	,3802	8,9496
1741	E Argus	7.8	3	37 45,06	2,279	-9,0874	+8,6609	+0,3577	+9,0218
1742	—	8	3	37 47,60	2,397	9,0803	,6534	,3585	9,0121
1743	—	8.9	3	37 58,95	2,298	9,0808	,6528	,3613	9,0128
1744	—	7.8	3	38 18,82	2,247	9,0803	,6567	,3593	9,0202
1745	—	7	3	38 46,20	2,578	8,9595	,5260	,4113	8,8212
1746	Argus	7.8	3	39 1,72	2,410	-9,0376	+8,6038	+0,3820	+8,9508
1747	Antl Pneum	6.7	3	39 7,92	2,852	8,8402	,4036	,4551	8,4699
1748	Argus	8.9	3	39 30,79	2,317	9,0798	,6428	,3649	9,0110
1749	—	8	3	39 37,66	2,316	9,0307	,6430	,3647	9,0123
1750	—	7.8	3	39 52,23	2,621	8,9911	,6517	,4014	8,8768
1751	Argus	8.9	3	39 59,40	2,322	-9,0788	+8,6399	+0,3649	+9,0096
1752	—	7	3	40 9,40	2,288	9,0968	,6548	,3591	9,0319
1753	—	8.9	3	40 11,64	2,242	9,1133	,6728	,3506	9,0157
1754	—	6	3	40 31,62	2,398	9,0490	,6062	,3798	8,9673
1755	—	7.8	3	40 54,54	2,388	9,0657	,6100	,3777	8,4768

No	Declination (South) Jan 1 1840	Annual Precession	Logarithms of				Difference from the Brisbane Catalogue			
			a'	b'	c'	d'	No	Right Ascension from M C	T	Declin
1711	58 26 11,12	-18,616	+9,7438	+9,8086	-1,2693	-9,5699	3134	- 0,69	-	" 0,58
1712	57 59 5,01	18,617	,7353	,8936	,2803	,5685	3133	- 2,01	- 2,82	+ 3,74
1713	51 46 24,23	18,619	,7413	,8303	,2699	,5642	3135	- 3,04	- 3,58	- 7,20
1714	51 46 37,45	18,621	,7419	,8304	,2700	,5679	3133	- 1,75	-	- 8,36
1715	51 27 4,37	18,632	,7466	,8618	,2702	,5663	3140	- 1,91	-	- 0,50
1716	40 19 36,83	18,632	+9,7528	+9,8273	-1,2702	-9,5663	3139	- 2,41	-	+ 6,63
1717	60 9 14,33	18,636	,7283	,9058	,2703	,5657	3143	- 3,19	-	- 3,21
1718	31 54 34,22	18,633	,7528	,7233	,2704	,5654	3141	- 3,10	-	- 8,31
1719	59 18	18,625	,7293	,9354	,2703	,5628	3151	-	-	-
1720	34 53 49,94	18,657	,7620	,7266	,2708	,5625	3148	- 3,14	-	- 4,43
1721	58 42 30,37	18,668	+9,7292	+9,9003	-1,2711	-9,5698	3152	- 1,49	-	+ 9,62
1722	57 6 1,47	18,672	,7332	,8935	,2712	,5602	3151	- 3,01	-	+ 0,31
1723	38 51	18,678	,7628	,7672	,2713	,5592	3155	-	-	-
1724	53 8 16,31	18,689	,7259	,9032	,2713	,5576	3159	- 0,74	-	- 0,79
1725	58 50 26,22	18,689	,7237	,9021	,2716	,5576	3162	- 1,81	- 2,19	+ 4,71
1726	40 22 59,53	18,700	+9,7482	+9,8219	-1,2718	-9,5560	3163	- 2,11	-	+ 4,62
1727	44 56 10,12	18,708	,7482	,8193	,2720	,5547	3168	- 60,95	-	- 1,12
1728	30 55 1,95	18,712	,7451	,8314	,2721	,5540	3161	- 1,67	-	- 4,23
1729	56 2 26,56	18,727	,7308	,8891	,2723	,5517	3173	- 2,74	-	- 0,09
1730	38 13 14,18	18,729	,7489	,7623	,2723	,5514	3172	- 1,48	-	+ 0,79
1731	58 28	18,731	+9,7243	+9,9013	-1,2726	-9,5610	3174	- 2,88	-	-
1732	58 22 41,00	18,731	,7243	,9003	,2726	,5510	3175	- 1,95	-	+ 4,30
1733	58 22	18,733	,7233	,9010	,2718	,5504	3177	-	-	-
1734	35 59 19,41	18,742	,7474	,7401	,2723	,5437	3179	- 3,65	-	- 2,23
1735	60 9 0,75	18,745	,7183	,9093	,2729	,5487	3180	- 3,74	-	- 8,16
1736	60 19 51,50	18,750	+9,7177	+9,9101	-1,2730	-9,5481	3181	- 2,43	-	- 0,15
1737	36 5 26,92	18,758	,7466	,7417	,2732	,5467	3182	- 2,64	-	- 3,81
1738	37 18 14,20	18,768	,7466	,7541	,2732	,5467	3183	- 3,84	-	- 8,36
1739	59 43 45,99	18,768	,7185	,9077	,2732	,5466	3185	-	- 2,86	- 1,59
1740	51 56 58,21	18,768	,7292	,8847	,2734	,5450	3186	- 2,76	-	- 8,49
1741	59 16 43,84	18,763	+9,7177	+9,9059	-1,2734	-9,5450	3197	- 2,60	- 4,06	+ 1,28
1742	58 42 27,03	18,770	,7201	,9034	,2735	,5447	3188	- 3,30	-	+ 7,00
1743	58 44 12,40	18,776	,7193	,9037	,2736	,5436	3191	- 3,45	-	+ 0,82
1744	59 9 12,82	18,784	,7163	,9038	,2738	,5421	3193	- 5,54	-	+ 2,04
1745	46 37 7,41	18,800	,7412	,8339	,2742	,5398	3197	- 2,43	-	+ 6,29
1746	54 57 8,64	18,808	+9,7259	+9,8957	-1,2743	-9,5382	3199	- 2,41	-	- 6,22
1747	23 12 36,37	18,820	,7308	,6024	,2745	,5361	3200	- 2,19	-	- 4,60
1748	58 33 57,78	18,822	,7152	,9040	,2747	,5368	3202	- 3,33	-	+ 1,90
1749	58 34 47,94	18,827	,7152	,9044	,2748	,5351	3204	- 2,03	-	+ 5,15
1750	50 12 38,23	18,836	,7324	,8688	,2750	,5337	3205	-	-	- 4,38
1751	58 28 40,83	18,832	+9,7152	+9,9037	-1,2749	-9,5340	3207	- 3,80	-	- 3,89
1752	59 4, 42,01	18,840	,7101	,9197	,2751	,5327	3208	- 3,46	-	- 1,49
1753	61 5 58,13	18,840	,7067	,9155	,2751	,5327	3209	- 3,59	-	+ 0,79
1754	55 54 54,52	18,852	,7193	,8917	,2754	,5316	3211	- 3,41	- 3,43	- 1,74
1755	58 23 57,53	18,864	,7177	,8948	,2766	,5285	3217	- 1,76	-	- 4,66

Mean A R and Declination of Stars

No	Names	Mag	No Obs	Right Ascen Jan 1, 1840	Annual Precessn.	Logarithms of			
						a	b	c	d
1756	Argus	7	4	H M S 10 41 13,70	+ 2,385	-9,0577	+8,6104	+0,3775	+8,9795
1757	Antl Pneum	7	3	41 22,63	2,838	8,8485	,4004	,4530	8,5070
1758	Argus	9	2	41 28,35	2,299	9,0964	,6476	,3615	9,0331
1759	—	7 8	3	41 30,46	2,321	9,0868	,6380	,3657	9,0201
1760	—	7	3	41 45,73	2,690	8,9639	,5134	,4133	8,8275
1761	Argus	6 7	3	41 50,93	2,323	-9,0877	+8,6368	+0,3660	+9,0212
1762	Antl Pneum	7 8	3	42 5,20	2,717	8,9041	,4612	,4341	8,6968
1763	Argus	7	3	42 13,29	2,389	9,0607	,6074	,3782	8,9835
1764	—	7 8	3	42 16,41	2,676	8,9244	,4708	,4273	8,7461
1765	—	7 8	3	42 21,16	2,319	9,0919	,6978	,3653	9,0267
1766	Argus	8 9	3	42 37,33	2,343	-9,0823	+8,6270	+0,3698	+9,0137
1767	—	7 8	3	43 5,31	2,361	9,0810	,6226	,3712	9,0117
1768	—	7 8	3	44 40,00	2,348	9,0899	,6920	,3707	9,0236
1769	—	6 7	3	44 55,96	2,586	8,9776	,6079	,4126	8,8509
1770	—	8 9	3	45 0,83	2,357	9,0874	,6174	,3724	9,0201
1771	Argus	6 7	3	45 16,91	2,425	-9,0576	+8,5869	+0,3847	+8,9783
1772	—	—	—	45	2,475	9,0345	,5619	,3936	8,9441
1773	—	7	6	45 20,74	2,474	9,0347	,5621	,3934	8,9444
1774	—	8 9	3	45 29,39	2,936	8,9542	,4808	,4209	8,8067
1775	—	7 8	3	45 30,02	2,397	9,0716	,5986	,3797	8,9981
1776	Antl Pneum	6 7	4	45 35,70	2,774	-8,8856	+8,4114	+0,4481	+8,6406
1777	Argus	7 8	3	45 57,14	2,404	9,0699	,5940	,3809	8,9966
1778	—	6	8	45 58,96	2,430	9,0581	,5818	,3856	8,9788
1779	Antl Pneum	7 8	3	46 16,54	2,810	8,8704	,3920	,4487	8,5885
1780	Hydræ	7 8	3	46 19,23	2,863	8,8472	,3684	,4668	8,4878
1781	Antl Pneum	6 7	3	46 33,76	2,767	-8,8914	+8,4112	+0,4420	+8,6567
1782	Argus	7 8	3	46 37,74	2,422	9,0653	,5847	,3842	8,9888
1783	—	7 8	2	46 49,60	2,560	8,9981	,5167	,4082	8,8866
1784	—	—	—	46	2,392	9,0781	,5959	,3791	9,0069
1785	—	—	—	46	2,373	9,0902	,6071	,3751	9,0234
1786	Antl Pneum	7	3	47 14,69	2,744	-8,9048	+8,4204	+0,4384	+8,6935
1787	Argus	8 9	3	47 52,76	2,317	9,1196	,6309	,3649	9,0623
1788	—	7	3	47 56,22	2,483	9,0414	,5627	,3950	8,9537
1789	—	7	3	47 57,68	2,606	9,0302	,5411	,3990	8,9367
1790	—	6 7	3	48 13,93	2,327	9,1167	,6264	,3668	9,0586
1791	Centauri	7 8	3	48 13,93	2,696	-8,9327	+8,4418	+0,4307	+8,7698
1792	Antl Pneum	6 7	4	48 18,23	2,823	8,8692	,3779	,4006	8,5806
1793	Argus	8	2	48 27,39	2,647	9,0115	,6194	,4060	8,9071
1794	—	7 8	3	48 39,64	2,621	9,0267	,5823	,4016	8,9294
1795	—	6 7	3	48 55,06	2,372	9,0999	,6047	,3761	9,0361
1796	Argus	7	3	49 8,66	2,629	-8,9713	+8,4744	+0,4198	+8,8373
1797	—	7	3	49 42,30	2,443	9,0697	,5693	,3879	8,9943
1798	—	7 8	2	49 47,54	2,381	9,0995	,5987	,3768	9,0366
1799	Antl Pneum	7 8	3	50 5,40	2,766	8,9012	,3982	,4418	8,6809
1800	Argus	8	3	50 16,47	2,351	9,1164	,6126	,3712	9,0527

No	Declination (South) Jan 1 1840	Annual Precession	Logarithms of				Difference from the Brisbane Catalogue				
			<i>a'</i>	<i>b'</i>	<i>c'</i>	<i>d'</i>	No	M	C	Γ	Declin
1756	56 37 26,78	-18,874	+9,7180	+9,8958	-1,2759	-9,5267	3220	-	2,94	-	- 1,27
1757	27 4 25,42	18,878	,7816	,6326	,2769	,6260	3221	-	2,36	-	- 1,17
1758	59 46 30,55	18,882	,7058	,9108	,2760	,5253	3224	-	0,86	-	- 2,42
1759	59 1 52,36	18,882	,7076	,9074	,2760	,5253	3225	-	1,34	-	- 0,73
1760	46 54 23,50	18,890	,7824	,9380	,2762	,5238	3227	-	2,65	-	+ 3,15
1761	59 4 28,41	18,892	+9,7067	+9,9079	-1,2763	-9,5285	3229	-	1,82	-	+ 2,77
1762	38 19 32,47	18,903	,7372	,7673	,2765	,5217	3231	-	-	-	+ 7,03
1763	56 49 41,49	18,905	,7118	,8975	,2765	,5213	3233	-	2,22	-	- 0,03
1764	41 31 24,51	18,905	,7364	,7903	,2766	,5210	3234	-	0,81	-	- 0,54
1765	59 22 44,94	18,907	,7041	,9096	,2766	,5206	3236	-	2,88	-	+ 1,01
1766	58 36 4,06	18,913	+9,7067	+9,9062	-1,2768	-9,5195	3238	-	1,90	-	- 0,04
1767	58 28 37,73	18,926	,7050	,9059	,2771	,5167	3239	-	1,81	-	+ 1,29
1768	59 6 38,52	18,972	,6990	,9099	,2781	,5082	3248	-	2,25	-	+ 0,99
1769	48 18 24,37	18,979	,7245	,8497	,2783	,5067	3249	-	2,80	-	+ 2,16
1770	58 63 43,12	18,981	,6981	,9091	,2783	,5063	3251	-	2,99	-	+ 0,12
1771	56 26 25,69	18,988	-9,7041	+9,8973	-1,2785	-9,5049	3253	-	2,09	-	+ 0,93
1772	54 17 23,62	18,992	,7093	,8863	,2786	,5041	3254	-	-	-	-
1773	51 17 23,62	18,993	,7093	,8863	,2786	,5041	3255	-	1,40	-	+ 1,77
1774	45 22 8,00	18,996	,7259	,8292	,2787	,5034	3256	-	2,90	-	- 2,51 + 1,95
1775	57 33 59,58	18,994	,6998	,9032	,2786	,5037	3257	-	4,84	-	- 0,83
1776	34 38 24,77	19,000	+9,7308	+9,7318	-1,2787	-9,5026	3268	-	0,30	-	- 3,07
1777	57 24 10,87	19,007	,6998	,9027	,2789	,5011	3262	-	3,81	-	- 2,92
1778	56 23 28,34	19,009	,7024	,8977	,2790	,5007	3263	-	1,16	-	+ 0,42
1779	31 28 34 12	19,018	,7283	,8953	,2792	,4988	3265	-	2,65	-	- 4,75
1780	25 53 47,12	19,020	,7296	,6178	,2792	,4984	3267	-	2,35	-	- 3,64
1781	35 36 25,83	19,026	-9,7292	+9,7428	-1,2793	-9,4973	3268	-	2,79	-	- 3,04
1782	56 58 21,84	19,027	,6981	,9010	,2794	,4969	3270	-	2,40	-	- 2,91
1783	50 38 56,92	19,031	,7143	,8650	,2795	,4961	3271	-	3,26	-	- 10,0,31
1784	58 1	19,035	,6955	,9064	,2795	,4954	3272	-	-	-	-
1785	69 0	19,038	,6902	,9109	,2796	,4946	3276	-	-	-	-
1786	37 54 11,76	19,044	+9,7267	+9,7665	-1,2797	-9,4935	3278	-	3,03	-	+ 0,01
1787	61 11 26,21	19,062	,6812	,9210	,2802	,4890	3282	-	2,34	-	+ 6,25
1788	54 46 6,02	19,062	,7007	,8905	,2802	,4896	3281	-	3,92	-	- 5,76
1789	53 42 28,15	19,064	,7041	,8848	,2802	,4892	3283	-	1,37	-	+ 2,94
1790	60 58 28,28	19,069	,6803	,9202	,2803	,4880	3286	-	2,79	-	+ 4,31
1791	42 10 8,33	19,071	+9,7218	+9,8056	-1,2804	-9,4876	3284	-	1,95	-	+ 0,10
1792	30 56 2,31	19,073	,7243	,6899	,2804	,4872	3285	-	3,08	-	- 3,08
1793	51 48 3,39	19,076	,7067	,8741	,2805	,4865	3287	-	2,90	-	+ 1,58
1794	53 13 36,14	19,082	,7033	,8825	,2806	,4868	3289	-	3,08	-	+ 2,12
1795	69 40 8,54	19,089	,6830	,9151	,2808	,4837	3291	-	2,27	-	- 2,67
1796	47 14 16,68	19,096	+9,7143	+9,8450	-1,2809	-9,4821	3292	-	2,12	-	- 0,51
1797	57 11 63,62	19,110	,6884	,9040	,2813	,4789	3294	-	2,64	-	- 3,17
1798	59 35 58,56	19,112	,6803	,9153	,2813	,4785	3296	-	2,29	-	+ 1,98
1799	36 69 17,98	19,121	,7210	,7692	,2815	,4765	3297	-	2,74	-	+ 6,06
1800	60 51 18,04	19,124	,6739	,9210	,2816	,4767	3299	-	2,67	-	+ 2,38

No	Names	Mag	No Obs	Right Ascen Jan 1, 1840	Annual Precessn	Logarithms of			
						a	b	c	d
1801	Centauri	7.8	3	10 50 28.96	+2,671	-8,9546	+8,4489	+0,4267	+8,9045
1802	—	7.8	9	50 41.24	2,720	8,9274	,4209	,4346	8,7463
1803	Antl Pneum	7.8	3	51 11.79	2,767	8,9039	,3933	,4490	8,6870
1804	Argus	7	3	51 18.59	2,416	9,0911	,5800	,3831	9 0237
1805	—	7.8	3	51 20.46	2,507	9,0451	,6340	,3991	8,9582
1806	Antl Pneum	8	2	51 34.10	2,803	-8,8860	+8,3732	+0,4476	+8,6341
1807	Argus	7.8	3	51 57.05	2,464	9,0704	,6549	,3916	8,9948
1808	—	6.7	9	52 13.49	2,508	9,0224	,5051	,4079	8,4232
1809	Antl Pneum	7	3	52 17.11	2,803	8,8878	,3700	,4476	8,6389
1810	Argus	8	3	52 22.18	2,441	9,0847	,5655	,3876	9,0147
1811	Centauri	6.7	3	52 44.07	2,709	-8,9407	+8,4202	+0,4329	+8,7744
1812	Argus	7	3	52 49.14	2,387	9,1125	,6915	,3778	9,0521
1813	—	7.8	3	52 63.32	2,560	9,0241	,5022	,4082	8,9256
1814	—	—	—	52 —	2,563	9,0228	,5009	,4087	8,9235
1815	—	7	3	53 11.10	2,595	9,0062	,4826	,4141	8,8966
1816	Argus	7.8	2	53 17.01	2,359	-9,1287	+8,6045	+0,3727	+9,0733
1817	Antl Pneum	7	4	53 31.78	2,752	8,9190	,3929	,4396	8,7239
1818	Argus	7.8	2	53 35.22	2,696	9,0077	,4812	,4143	8,8989
1819	—	7	3	53 42.11	2,570	9,0190	,4915	,4109	8,9172
1820	—	8.9	3	53 47.19	2,456	9,0832	,5557	,3902	9,0123
1821	Argus	7.8	3	53 51.97	2,596	-9,0092	+8,4803	+0,4143	+8,9012
1822	—	8	3	54 04.45	2,513	9,0576	,5240	,4002	8,9760
1823	Centauri	8	3	54 51.67	2,736	8,9329	,3970	,4371	8,7556
1824	Argus	7	3	55 04.46	2,417	9,1102	,5729	,3833	9,0187
1825	Hydræ	7	3	55 34.59	2,882	8,8555	,3145	,4597	8,6078
1826	Antl Pneum	7.8	3	55 39.64	2,845	-8,8742	+8,3327	+0,4541	+8,5877
1827	Argus	9	3	55 50.47	2,550	9,0440	,5015	,4065	8,9553
1828	Antl Pneum	7	3	56 17.80	2,834	8,8815	,3357	,4524	8,6131
1829	Argus	7.8	3	56 31.30	2,435	9,1078	,5620	,3865	9,0453
1830	—	7	3	56 32.99	2,434	9,1095	,5622	,3863	9,0474
1831	Argus	—	—	56 —	2,410	-9,1215	+8,5742	+0,3820	+9,0634
1832	—	7.8	2	56 42.74	2,627	9,0039	,4551	,4195	8,8914
1833	Antl Pneum.	7.8	3	56 46.22	2,805	8,8986	,3494	,4479	8,6666
1834	Argus	8	3	56 46.97	2,632	9,0010	,4518	,4203	8,8865
1835	Centauri	7	3	57 2.24	2,743	8,9352	,3855	,4382	8,7594
1836	Argus	7	3	57 6.40	2,582	-9,0317	+8,4800	+0,4120	+8,9361
1837	—	7.8	1	57 11.02	2,492	9,0824	,5303	,3965	9,0106
1838	—	6	3	57 15.40	2,611	9,0728	,5201	,3998	8,9969
1839	Centauri	6	3	57 20.75	2,684	8,9725	,4194	,4288	8,8356
1840	* Antl Pneum	6	9	57 21.63	2,817	8,8940	,3404	,4498	8,6523
1841	Argus	7.8	3	57 29.69	2,604	-9,0210	+8,4669	+0,4156	+8,9192
1842	Antl Pneum	7	2	57 32.64	2,864	8,8684	,3134	,4570	8,5621
1843	Centauri	7	3	58 28.44	2,771	8,9308	,3689	,4411	8,7483
1844	—	7	3	58 31.92	2,695	8,9712	,4088	,4306	8,8325
1845	Hydræ	7	2	58 56.66	2,883	8,8619	,2964	,4598	8,6319

No	Declination (South) Jan 1 1840	Annual Precession	Logarithms of				Difference from the Brisbane Catalogue			
			a'	b'	c'	d'	No	Right Ascension from M C	T	Decln
1801	° / ' / "	"								
1801	45 1 20,90	-19,131	+9,7135	+9,8297	-1,2817	-9,4741	3300	- 2,20		- 4,41
1802	41 11 2,36	19,134	,7177	,7987	,2818	,4733	3302		- 2,90	+ 8,51
1803	37 20 49,27	19,150	,7193	,7634	,2822	,4696	3305	- 1 79		+ 0,91
1804	58 52 35,56	19,152	,6776	,9829	,2822	,4692	3307	- 3,20		+ 2,86
1805	54 50 46,03	19,152	,6902	,8934	,2822	,4692	3308	- 2,50		- 3,38
1806	34 1 10,47	19,158	+9,7202	+9,7286	-1,2824	-9,4676	3309	- 1,66		+ 2,94
1807	57 8 9,35	19,160	,6812	,9051	,2826	,4651	3316	- 2,80		- 0,58
1808	52 40 59,21	19,176	,6937	,8815	,2827	,4634	3317	- 1,94		+ 4,27
1809	34 17 10,31	19,177	,7168	,7320	,2828	,4630	3318	- 1 23		+ 2,27
1810	58 18 42,88	19,182	,6758	,9110	,2829	,4618	3319	- 2,66		- 2,69
1811	42 56 58,69	19,187	+9,7110	+9,8147	-1,2830	-9,4605	3321	- 3,19	- 2,96	+ 4,77
1812	60 27 51,69	19,189	,6674	,9207	,2830	,4601	3324	- 2,25		+ 1,20
1813	52 49 51,95	19,192	,6920	,8827	,2831	,4693	3325	- 2,17		+ 1,89
1814	52 41	19,192	,6920	,8819	,2831	,4593	3326			
1815	50 57 37,01	19,199	,6955	,8718	,2833	,4576	3329	- 2,51		+ 3,75
1816	61 37 34,65	19,201	+9,6609	+9,9259	-1,2833	-9,4572	3330	- 2,90		+ 3,72
1817	39 38 27,23	19,207	,7126	,7864	,2835	,4555	3331	- 2,72	- 3,43	- 1,97
1818	51 5 20,39	19,209	,6937	,8728	,2835	,4550	3333	- 2,80		+ 3,92
1819	52 15 16,43	19,212	,6911	,8799	,2836	,4542	3334	- 2,08		+ 1,62
1820	58 7 29,32	19,212	,6730	,9108	,2836	,4542	3335	- 4,67		- 3,27
1821	51 12 59,84	19,217	+9,6928	+9,8738	-1,2837	-9,4529	3336	- 1,86		+ 4,47
1822	55 54 29,61	19,234	,6776	,9003	,2841	,4486	3341	- 2,41		- 0,54
1823	41 38 16,79	19,242	,7076	,8050	,2842	,4465	3343	- 0,82		+ 5,68
1824	60 11 25,97	19,247	,6599	,9209	,2844	,4451	3345	- 1,62		+ 3,41
1825	26 39 26,03	19,260	,7093	,6350	,2846	,4417	3348	- 2,46		- 2,28
1826	31 5 57,80	19,262	+9,7110	+9,6963	-1,2847	-9,4412	3350	- 2,02		- 0,04
1827	64 35 9,74	19,265	,6776	,8942	,2848	,4403	3352	- 1 35		- 2,99
1828	32 34 54,44	19,276	,7093	,7147	,2850	,4372	3354	- 2,32		- 0,64
1829	59 57 55,01	19,276	,6571	,9205	,2850	,4372	3356	- 13,63		- 3,90
1830	60 3 3,30	19,281	,6551	,9212	,2851	,4359	3359	- 2,29		+ 0,09
1831	60 58	19,281	+9,6522	+9,9250	-1,2851	-9,4369	3357			
1832	60 29 34,50	19,285	,6866	,8708	,2852	,4346	3361	- 2,19	- 3,25	+ 0,95
1833	36 51 40,20	19,287	,7084	,7513	,2853	,4341	3362	- 1,80		+ 0,76
1834	60 10 11,25	19,287	,6875	,8689	,2853	,4341	3363	- 1,87		- 2,06
1835	41 48 55,89	19,289	,7024	,8076	,2853	,4337	3365	- 13,35		+ 7,50
1836	53 20 8,19	19,295	+9,6776	+9,8879	-1,2854	-9,4319	3368	- 2,09	- 3,19	+ 0,99
1837	57 54 14,31	19,297	,6618	,9117	,2855	,4314	3369	- 3,60		+ 14,10
1838	59 5 38,35	19,299	,6656	,9077	,2855	,4310	3370	- 2,34		- 2,42
1839	46 49 6,00	19,300	,6937	,8457	,2855	,4305	3371	- 4,06		+ 2,97
1840	34 56 38,67	19,301	,7076	,7419	,2856	,4301	3372	- 2,65	- 3,42	- 4,10
1841	52 14 50,98	19,303	+9,6803	+9,8819	-1,2856	-9,4296	3373	- 6,29		+ 3,64
1842	29 34 26,29	19,306	,7076	,6774	,2857	,4287	3374	- 2,72	- 3,71	+ 0,54
1843	41 2 40,60	19,328	,6990	,8018	,2862	,4223	3386	- 2,01		+ 6,98
1844	46 34 42,59	19,329	,6902	,8456	,2862	,4219	3387	- 3,56		+ 4,90
1845	27 51 42,48	19,338	,7050	,6544	,2864	,4190	3389	- 3,02	- 4,18	+ 0,14

No	Names	Mag	No Obs	Right Ascen Jan 1, 1840	Annual Placesn	Logarithms of			
						a	b	c	d
1846	Antl Pneum	7	3	10 59 12,00	+2,869	-8,8698	+8,3021	+0,4577	+8,5650
1847	Centauri	7	3	59 21,11	2,651	9,0016	,4336	,1234	8,8866
1848	Argus	8	3	59 27,84	2,016	9,0236	,4512	,4176	8,9226
1849	—	9 10	3	59 29,50	2,622	9,0205	,4501	,4186	8,9178
1850	—	7	3	59 43,11	2,517	9,0826	,5116	,4009	9,0102
1851	Argus	—	—	59	2,617	-9,0236	+8,4632	+0,4176	+8,9227
1852	Z ¹	6	3	11 0 1,76	2,430	9,1814	,5585	,3866	9,0757
1853	Antl Pneum	—	—	0	2,875	8,9687	,2927	,4680	8,5653
1854	Centauri	7	3	0 20,92	2,690	8,9819	,4059	,4297	8,8316
1855	Antl Pneum	7	3	0 33,41	2,878	8,8680	,2904	,4591	8,5553
1856	Hydræ	7	2	0 57,24	2,881	-8,8672	+8,2866	+0,4595	+8,5517
1857	Aigus	7	3	1 8,34	2,641	9,0160	,4343	,4226	8,9097
1858	Z ²	6	2	1 46,85	2,529	9,0872	,5004	,4029	9,0163
1859	—	7 8	3	1 48,48	2,568	9,0049	,4776	,4096	8,9847
1860	x —	6 7	3	1 55,99	2,462	9,1269	,5880	,3913	9,0682
1861	Aigus	8	3	2 9,87	2,475	-9,1206	+8,5306	+0,3936	+9,0612
1862	Hydræ	6	3	2 16,16	2,681	8,8080	,2770	,4600	8,5520
1863	Aigus	7	3	2 39,27	2,616	9,0308	,4462	,4176	8,9471
1864	Antl Pneum	7	3	2 46,19	2,835	8,8963	,3036	,4525	8,6095
1865	Aigus	8	3	2 50,76	2,542	9,0861	,4909	,4052	9,0146
1866	Centauri	7	3	3 24,70	2,696	-8,9921	+8,3921	+0,4307	+8,8686
1867	Antl Pneum	7 8	3	3 26,16	2,837	8,8993	,2993	,4629	8,6620
1868	Aigus	8	3	3 54,90	2,619	9,1060	,5026	,4012	9,0416
1869	—	7	3	4 1,76	2,560	9,0840	,4777	,4092	9,0086
1870	Hydræ	6 7	3	4 10,42	2,910	8,8570	,2543	,4639	8,4983
1871	Centauri	8	3	4 10,85	2,693	-8,9970	+8,3905	+0,4306	+8,8769
1872	Aigus	8	3	4 16,09	2,631	9,0389	,4319	,4201	8,9463
1873	Antl Pneum	7	3	4 33,18	2,872	8,8809	,2717	,4582	8,6002
1874	Argus	—	—	4	2,620	9,1048	,5015	,4014	9,0413
1875	Hydræ	7	3	4 34,66	2,892	8,8691	,2594	,4612	8,5687
1876	Centauri	6 7	8	4 48,76	2,746	-8,9651	+8,3037	+0,4387	+8,8178
1877	Argus	7	6	5 9,10	2,571	9,0822	,4681	,4101	9,0086
1878	—	—	—	5	2,530	9,1070	,4929	,4031	9,0427
1879	Centauri	6	3	5 16,86	2,715	8,9882	,3730	,4338	8,8611
1880	Hydre	7	8	5 24,18	2,917	8,8565	,2402	,4649	8,4928
1881	Centauri	6 7	3	5 39,13	2,710	-8,9939	+8,3753	+0,4330	+8,8710
1882	Hydræ	—	—	5	2,895	8,8696	,2605	,4616	8,5543
1883	Aigus	—	—	5	2,616	9,1191	,5006	,4007	9,0387
1884	—	6	2	5 45,27	2,689	9,1058	,4867	,4017	9,0110
1885	Centauri	7	4	6 1,59	2,707	8,9974	,3706	,4326	8,8770
1886	Argus	7	3	6 29,30	2,668	-9,0264	+8,4012	+0,4262	+8,9252
1887	Centauri	7 8	3	6 34,61	2,689	9,0128	,3864	,4206	8,9030
1888	Aigus	6 7	2	6 36,90	2,561	9,0975	,4712	,4084	9,0296
1889	—	7	3	6 39,60	2,671	9,0229	,3960	,4265	8,9196
1890	Centauri	7	3	6 45,49	2,731	8,9845	,3570	,4363	8,8539

No	Declination (South) Jan 1 1840	Annual Precession	Logarithms of				Difference from the Brisbane Catalogue				
			a'	b'	c'	d	No.	M	C	T	Declin
1846	29 41 21,39	-19,345	+9,7060	+9,6799	-1,2866	-9,4172	3391	-2,56	—	—	- 6,47
1847	50 6 40,90	19,346	,6794	,8697	,2866	,4167	3393	-2,89	—	—	- 6,21
1848	52 24 26,98	19,350	,6730	,8838	,2867	,4163	3394	-0,44	—	—	+ 3,16
1849	52 6 11,73	19,354	,6730	,8921	,2868	,4144	3398	-1,70	—	—	- 4,03
1850	57 48 38,12	19,355	,6642	,9126	,2868	,4139	3399	-3,63	—	—	+ 3,08
1851	52 24	19,354	+9,6730	+9,8839	-1,2868	-9,4144	3397	—	—	—	—
1852	61 33 35,51	19,361	,6375	,9292	,2869	,4120	3402	-3,04	—	5,81	- 0,02
1853	29 18	19,370	,7024	,6753	,2871	,4092	3405	—	—	—	—
1854	47 46 31,87	19,370	,6830	,8549	,2871	,4092	3407	-2,42	—	4,41	+ 4,06
1855	29 6 21,01	19,374	,7016	,6727	,2872	,4078	3408	-2,49	—	—	+ 4,07
1856	28 52 48,12	19,383	+9,7016	+9,6699	-1,2874	-9,4049	3410	-2,68	—	3,14	+ 7,95
1857	51 31 29,49	19,387	,6703	,8795	,2875	,4039	3412	-3,40	—	—	+ 9,16
1858	58 6 31,28	19,401	,6454	,9150	,2878	,3991	3416	-2,21	—	3,18	+ 2,41
1859	56 11 59,36	19,403	,6622	,9057	,2879	,3986	3417	-1,69	—	—	- 0,17
1860	61 4 51,46	19,404	,6324	,9283	,2879	,3981	3419	-2,47	—	3,29	+ 1,96
1861	60 41 35,91	19,410	+9,6326	+9,9267	-1,2880	-9,3901	3423	-0,29	—	—	- 0,80
1862	28 55 36,21	19,413	,6990	,6711	,2881	,3952	3421	-2,70	—	—	+ 7,81
1863	53 50 49,29	19,420	,6680	,8936	,2882	,3927	3427	-2,41	—	—	+ 5,78
1864	35 13 46,00	19,423	,6955	,7477	,2883	,3917	3428	-4,32	—	—	—
1865	57 68 13,37	19,426	,6415	,9148	,2883	,3912	3429	-2,06	—	—	+ 0,76
1866	48 47 4,65	19,437	+9,6712	+9,8633	-1,2886	-9,5867	3433	-2,50	—	—	+ 5,05
1867	35 21 28,84	19,457	,6946	,7494	,2886	,3867	3432	-2,45	—	—	- 5,64
1868	59 31 0,55	19,447	,6314	,9225	,2889	,3832	3437	-2,04	—	—	- 9,86
1869	55 34 58,25	19,449	,6395	,9156	,2889	,3827	3439	-3,54	—	—	+ 18,44
1870	25 56 18,72	19,414	,6955	,6282	,2888	,3842	3436	-29,92	—	—	+ 6,67
1871	49 18 3,25	19,454	+9,6674	+9,8670	-1,2890	-9,3806	3440	-0,99	—	—	+ 11,82
1872	53 41 17,02	19,465	,6332	,8934	,2890	,3801	3441	-1,94	—	—	+ 5,18
1873	31 33 54,97	19,461	,6946	,7066	,2892	,3781	3443	-3,05	—	4,19	+ 0,27
1874	59 30	19,449	,6314	,9224	,2889	,3827	3458	—	—	—	—
1875	28 54 46,62	19,463	,6946	,6719	,2892	,3776	3444	-1,95	—	—	- 4,26
1876	46 23 54,93	19,467	+9,6758	+9,8401	-1,2893	-9,3760	3446	-0,31	—	3,94	+ 0,75
1877	57 33 14,09	19,474	,6955	,9140	,2894	,3734	3450	-2,42	—	—	+ 5,88
1878	69 33	19,474	,6263	,9232	,2894	,3734	3451	—	—	—	—
1879	48 13 55,84	19,476	,6674	,8605	,2895	,3724	3452	-2,86	—	2,41	+ 6,16
1880	25 35 47,83	19,479	,6928	,6235	,2896	,713	3454	-1,23	—	—	+ 2,43
1881	48 51 56,05	19,485	+9,6637	+9,8619	-1,2897	-9,5692	3467	-1,41	—	—	- 1,85
1882	29 54	19,486	,6928	,6726	,897	,3687	3468	—	—	—	—
1883	60 27	19,485	,6212	,9274	,2897	,3692	3460	—	—	—	—
1884	69 26 52,12	19,486	,6243	,930	,2897	,3687	3462	-1,84	—	—	- 0,17
1885	49 15 8,34	19,491	,6618	,8676	,2898	,3666	3466	-2,42	—	—	+ 5,28
1886	52 21 46,86	19,501	+9,6513	+9,8869	-1,2900	-9,3629	3470	-2,33	—	3,46	+ 2,70
1887	60 55 54,36	19,503	,6551	,8784	,2901	,3618	3472	-0,46	—	—	- 5,86
1888	58 44 52 49	19,503	,6268	,9203	,2901	,3618	3473	-1,04	—	3,24	+ 3,81
1889	51 58 54,03	19,505	,66 5	,8848	,2901	,3613	3474	—	—	—	+ 2,40
1890	47 43 46,62	19,506	,6646	,8676	,2902	,3607	3476	-2,83	—	—	+ 4,43

Mean A.R. and Declination of Stars

No.	Names	Mag.	No Obs.	Right Ascen. Jan 1, 1840	Annual Precessn	Logarithms of			
						a	b	c	d
1891	Antl Pneum	7	3	H 7 21 75	+ 2,875	-8,8863	1 8,2537	+ 0,4586	1 8,6161
1892	Centauri	7 8	5	7 56,41	2,814	8,9294	,2920	,4493	8,7394
1893	—	—	—	7	2,815	8,9293	,2915	,4495	8,7393
1894	—	7 8	3	8 2,56	2,801	8,9401	,3017	,4170	8,7446
1895	Argus	8	2	8 6,43	2,601	9,0816	,4420	,4151	9,0072
1896	Argus	8	3	8 16,40	2,604	-9,0804	-1 8,4398	+ 0,4091	+ 0,0040
1897	Centauri	6 7	6	8 34,39	2,818	8,9299	,2868	,1199	8,7000
1898	Antl Pneum	7	3	8 39,05	2,870	8,8935	,2193	,4579	8,6390
1899	Argus	7 8	3	8 40,34	2,621	9,0713	,4271	,4156	8,9912
1900	—	7 8	4	8 42,28	2,610	9,0787	,4040	,4166	9,0000
1901	Hydre	7 8	3	8 44,48	2,916	-8,8643	+ 8,2180	+ 0,4618	+ 8,6255
1902	Argus	7 8	2	8 50,41	2,657	9,0477	,4018	,4214	8,9577
1903	—	8	2	8 58,12	2,662	9,0449	,3984	,4252	8,9534
1904	Centauri	6 7	2	9 2,65	2,774	8,9639	,3168	,4414	8,8117
1905	Antl Pneum	7	3	9 16,04	2,843	8,9141	,2646	,4538	8,6090
1906	Antl Pneum	8 9	—	9	2,849	-8,9110	+ 8,2592	+ 0,1547	1 8,6905
1907	Argus	7	3	9 47,87	2,671	9,0436	,3893	,4267	8,9112
1908	Antl Pneum	7	—	9 54,46	2,683	8,8884	,2335	,4598	8,6204
1909	—	7 8	3	9 57,30	2,874	8,9943	,2988	,4685	8,6104
1910	Argus	—	—	10	2,574	9,1136	,4557	,4106	9,0508
1911	Argus	7	2	10 16,59	2,593	-9,1008	+ 8,4425	+ 0,4138	1 9,0115
1912	—	7 8	3	10 47,86	2,609	9,0942	,4297	,4105	9,0214
1913	—	7 8	3	10 53,30	2,603	9,0947	,4295	,4165	9,0250
1914	Centauri	7	3	10 56,59	2,702	8,9880	,3229	,1401	8,8048
1915	Antl Pneum	7	3	11 33,91	2,837	8,9277	,2577	,4519	8,7320
1916	Hydre	7	3	11 37,08	2,922	-8,8668	+ 8,1962	+ 0,4657	+ 8,6832
1917	Argus	7 8	4	11 39,42	2,688	9,0820	,1114	,4204	9,0071
1918	—	—	—	11	2,636	9,0817	,4098	,4208	9,0068
1919	Hydrae	6 7	2	11 58,45	2,920	8,8658	,1920	,4661	8,5278
1920	—	6 7	3	12 31,59	2,920	8,8667	,1872	,4661	8,5308
1921	Antl Pneum	7 8	3	12 44,83	2,903	-8,8828	+ 8,2016	+ 0,4628	1 8,6972
1922	Argus	8	6	12 48,46	2,641	9,0821	,4008	,4223	9,0072
1923	—	7 8	3	12 56,43	2,628	9,0946	,4116	,4196	9,0246
1924	Centauri	7	3	12 58,74	2,798	8,9644	,2812	,4468	8,8140
1925	Antl Pneum	7 8	3	13 26,06	2,882	8,8999	,2116	,4597	8,6551
1926	Centauri	8	3	13 35,44	2,800	-8,9658	+ 8,2768	+ 0,4172	1 8,8155
1927	Argus	7	3	14 34,48	2,607	9,1215	,4228	,4161	9,0007
1928	Centauri	6 7	3	14 50,08	2,818	8,9071	,2558	,4499	8,7973
1929	—	6	1	15 5,19	2,658	9,0879	,3840	,4216	9,0160
1930	—	7 8	4	15 5,70	2,661	9,0868	,3818	,4250	9,0119
1931	Centauri	7 8	2	15 37,41	2,667	-9,0852	+ 8,3758	+ 0,4260	+ 9,0110
1932	—	6 7	2	15 53,43	2,692	9,0676	,3655	,4301	8,9854
1933	Hydrae	7 8	3	16 0,78	2,914	8,8627	,1493	,4689	8,5003
1934	Centauri	9 10	2	16 6,98	2,664	9,0910	,3762	,4255	9,0191
1935	—	7 8	4	16 26,99	2,675	9,0849	,3674	,4273	9,0103

No	Declination (South) Jan 1 1840	Annual Precession	Logarithms of				Difference from the Brisbane Catalogue			
			a	b'	c'	d'	No	Right Ascension from M O	T	Declin
1891	32 26 54,47	-19,518	+9,6484	+9,7185	-1,2904	-9,3659	3479	- 2,87	—	- 0,86
1892	40 11 12,71	19,529	,6776	,7948	,2907	,3515	3481	- 3,75	—	- 7,22
1893	40 6	19,530	,6785	,7980	,2907	,3510	3482	—	—	—
1894	41 44 43,15	19,531	,6749	,8123	,2907	,3504	3483	- 3,68	—	- 1,43
1895	57 23 16,16	19,534	,6203	,9145	,2908	,3493	3486	+ 0,03	—	- 2,29
1896	57 18 35,92	19,537	+9,6170	+9,9141	-1,2908	-9,3482	3487	- 2,03	—	- 1,40,21
1897	40 9 0,11	19,542	,6767	,7988	,2910	,3460	3489	- 2,76	- 2,95	- 4,74
1898	33 47 42,30	19,544	,6848	,7346	,2910	,3449	3490	- 3,05	—	+ 1,95
1899	56 29 0,83	19,543	,6232	,9103	,2910	,3449	3493	- 2,96	—	+ 1,00
1900	57 7 9,31	19,544	,6243	,9131	,2910	,3449	3495	- 2,16	—	- 3,58
1901	27 15 29,98	19,547	+9,6878	+9,6604	-1,2911	-9,3438	3496	+ 0,36	—	+ 4,05
1902	54 20 12,73	19,549	,6855	,8991	,2911	,3432	3499	- 0,97	—	+ 1,46
1903	54 4 43,15	19,549	,6355	,8977	,2911	,3427	3500	- 3,41	—	+ 6,96
1904	45 0 40,52	19,551	,6646	,8390	,2912	,3421	3501	- 2,54	- 3,39	- 0,95
1905	37 31 37,65	19,556	,6785	,7743	,2913	,3399	3502	- 2,46	—	- 1,17
1906	36 58	19,561	+9,6794	+9,7689	-1,2914	-9,3376	3505	—	—	—
1907	53 54 1,57	19,566	,6345	,8973	,2915	,3363	3507	- 2,74	—	+ 2,38
1908	32 39 29,63	19,567	,6330	,7225	,2915	,3418	3509	- 3,47	—	- 4,97
1909	33 61 47,10	19,569	,6812	,7357	,2916	,3342	3510	- 1,87	—	+ 6,48
1910	59 63	19,574	,6064	,9289	,2917	,3319	3512	—	—	—
1911	58 53 45,35	19,575	+9,6107	+9,9225	-1,2917	-9,3315	3513	- 0,55	—	+ 3,56
1912	58 20 1,47	19,587	,6107	,9202	,2920	,3255	3518	+ 7,64	—	+ 5,03
1913	58 21 43,91	19,592	,6107	,9204	,2921	,3249	3519	+ 6,70	—	+ 12,27
1914	47 54 40,51	19,587	,6513	,8608	,2920	,3249	3517	- 2,34	—	+ 6,07
1915	39 37 35,35	19,598	,6093	,7962	,2922	,3202	3521	- 2,81	+ 4,51	- 1,71
1916	27 36 0,31	19,600	+9,6912	+9,6587	-1,2922	-9,3197	3523	- 1,96	—	- 2,65
1917	57 18 44,91	19,609	,6128	,9155	,2922	,3197	3524	- 3,05	—	- 2,55
1918	57 16	19,602	,6117	,9154	,2923	,3185	3526	—	—	—
1919	27 18 46,36	19,606	,6821	,6524	,2924	,3167	3527	- 2,75	—	- 1,21
1920	27 27 27,49	19,616	,6803	,6549	,2926	,3113	3529	- 0,90	—	- 2,18
1921	31 13 38,06	19,620	+9,6785	+9,7068	-1,2927	-9,3096	3531	- 2,17	—	0,00
1922	57 16 47,07	19,620	,6075	,9158	,2927	,3095	3532	- 3,32	—	- 4,88
1923	58 18 43,94	19,622	,6031	,9208	,2927	,3076	3535	- 2,85	—	+ 6,28
1924	44 51 11,59	19,623	,6532	,8394	,2928	,3076	3533	- 3,06	—	- 7,47
1925	34 30 0,29	19,633	,6730	,7462	,2930	,3027	3539	- 1,51	—	+ 4,85
1926	45 0 39,75	19,634	+9,6322	+9,8408	-1,2930	-9,3021	3540	- 3,57	—	- 1,97
1927	60 21 8,16	19,631	,6855	,9307	,2934	,2928	3549	- 4,31	—	- 0,81
1928	43 45 59,67	19,656	,6013	,8318	,2936	,2902	3550	- 3,28	- 3,76	+ 2,74
1929	57 41	19,660	,6974	,9187	,2938	,2877	3552	—	- 1,78	—
1930	57 30 23,50	19,660	,6988	,9179	,2936	,2877	3553	- 2,14	—	0,00
1931	57 26 18,73	19,669	+9,5968	+9,9177	-1,2938	-9,2825	3555	- 2,22	—	- 2,41
1932	55 54 9,31	19,674	,6031	,9102	,2939	,2799	3557	- 2,39	—	- 1,91
1933	26 4 53,65	19,676	,6749	,8367	,2939	,2786	3558	- 1,61	—	- 0,84
1934	57 54 33,85	19,678	,6911	,9202	,2940	,2773	3559	- 2,06	—	+ 9,31
1935	57 23 17,87	19,683	,6944	,9178	,2941	,2747	3561	- 2,88	—	- 0,34

Mean A R and Declination of Stars

No	Names	Mag	No Obs	Right Ascen Jan 1, 1840	Annual Preeesn	Logarithms of			
						a	b	c	d
1936	Centauri	7	3	H 16 48,89	+ 2,845	-8,9139	+ 8,2230	+ 0,4541	+ 8,7678
1937	Hydræ	7 8	3	16 44,43	2,903	8,8918	,1739	,4628	8,6359
1938	Centaui	8	3	17 52,37	2,845	8,9459	,2217	,4641	8,7679
1939	—	8 9	3	17 12,54	2,683	9,0842	,3684	,4286	9,0094
1940	Hydræ	7	3	17 49,27	2,885	8,9137	,1816	,4601	8,6921
1941	Centaui	7 8	2	18 6,83	2,826	-8,9674	+ 8,2326	+ 0,4512	+ 8,8172
1942	—	—	—	18	2,679	9,0988	,3575	,4280	9,0296
1943	—	8 9	6	18 48,58	2,679	9,0988	,3568	,4280	9,0296
1944	—	9 10	3	18 59,01	2,703	9,0817	,3363	,4318	9,0066
1945	—	6 7	3	19 21,44	2,764	9,0308	,2823	,4415	8,9292
1946	Centaui	6 7	6	19 25,84	2,658	-9,1217	+ 8,3724	+ 0,4245	+ 9,0604
1947	Hydræ	7	2	19 43,29	2,900	8,8600	,1078	,4713	8,4862
1948	Centaui	7 8	3	19 49,75	2,667	9,1251	,3712	,4214	9,0649
1949	—	—	—	19	2,661	9,1219	,3667	,4254	9,0605
1950	Hydræ	7 8	3	20 22,04	2,900	8,9108	,1511	,4624	8,6824
1951	Centaui	8	3	20 26,85	2,678	-9,1139	+ 8,3528	+ 0,4278	+ 9,0499
1952	—	7	3	20 33,88	2,706	9,0918	,3294	,4323	9,0189
1953	—	7 8	3	20 45,90	2,786	9,0206	,2572	,4450	8,9123
1954	—	7 8	2	20 47,89	2,812	8,9674	,2023	,4536	8,8163
1955	—	7	1	20 53,80	2,866	8,9453	,1796	,4573	8,7692
1956	Centaui	7	3	21 12,53	2,769	-9,0488	+ 8,2794	+ 0,4407	+ 8,9570
1957	—	7 8	3	21 15,06	2,719	9,0849	,3155	,4344	9,0099
1958	—	9 10	3	21 26,09	2,717	9,0879	,3177	,4341	9,0141
1959	Hydræ	6 7	2	21 42,98	2,965	8,8687	,0931	,4706	8,6285
1960	Centaui	7	3	21 46,07	2,716	9,0929	,3172	,4338	9,0210
1961	Antl Pneum	6 7	3	21 55,41	2,839	-8,9191	+ 8,1411	+ 0,4622	+ 8,7045
1962	Centaui	7 8	3	21 69,79	2,730	9,0816	,3029	,4362	9,0052
1963	—	7 8	5	22 20,18	2,459	8,9599	,1773	,4662	8,8004
1964	—	7 8	3	22 22,00	2,801	9,0175	,2349	,4473	8,9069
1965	—	8	3	22 32,68	2,766	8,0581	,2681	,4418	8,9633
1966	Centaui	7 8	3	23 12,39	2,881	-8,9110	+ 8,1480	+ 0,4598	+ 8,7585
1967	—	7 8	3	23 24,65	2,730	9,0938	,2984	,4362	9,0221
1968	—	7 8	2	23 28,99	2,865	8,9621	,1637	,4289	8,8061
1969	—	7 8	2	23 42,79	2,867	8,9600	,1605	,4574	8,8001
1970	—	7 8	2	23 53,58	2,867	8,9608	,1596	,4574	8,8016
1971	Centaui	7	5	23 57,80	2,701	-9,1253	+ 8,3234	+ 0,4315	+ 9,0647
1972	—	—	—	23	2,703	9,1275	,3206	,4318	9,0675
1973	—	6	5	24 23,86	2,732	9,1017	,2939	,4655	9,0328
1974	Hydræ	7	3	24 27,39	2,969	8,8647	,0662	,4726	8,6050
1975	Centaui	8	3	24 28,44	2,717	9,1165	,3079	,4311	9,0529
1976	Centaui	—	—	25	2,736	-9,1044	+ 8,2874	+ 0,4371	+ 9,0364
1977	—	—	—	25	2,736	9,1064	,2886	,4310	9,0379
1978	—	7 8	3	25 33,95	2,709	9,0443	,2228	,4170	8,9493
1979	—	8 9	3	26 12,06	2,70	9,0806	,3499	,4425	9,0081
1980	—	7 8	3	26 43,53	2,750	9,1054	,2683	,4393	9,0377

No	Declination (South) Jan 1 1840	Annual Precession	Logarithms of				Difference from the Brisbane Catalogue			
			a'	b'	c	d'	No	M	C	T
1936	41 47 26,59	-19,689	+9,6513	+9,8162	-1,2942	-9,2714	3564	-8,84	—	+ 0,40
1937	33 24 24,29	19,689	,6674	,7334	,2942	,2714	3563	-2,67	—	- 2,60
1938	41 47 36,41	19,690	,6503	,8163	,2942	,2701	3569	-69,75	—	+ 1,44
1939	57 18 11,38	19,690	,6899	,9177	,2941	,2667	3570	-2,60	—	- 1,36
1940	36 52 5,40	19,706	,6690	,7711	,2946	,2806	3573	-2,40	- 2,95	- 1,83
1941	45 0 6,48	19,710	+9,6085	+9,8425	-1,2947	-9,2579	3576	-2,87	- 0,10	- 5,13
1942	58	19,719	,5786	,9237	,2949	,2517	3577	—	—	—
1943	58 28 21,70	19,720	,6786	,9238	,2949	,2610	3578	-2,58	—	+ 5,69
1944	57 2 46 02	19,725	,6855	,9170	,2950	,2182	3580	-1,38	—	- 4,22
1945	52 16 52,67	19,730	,6064	,8916	,2951	,2447	3582	-2,60	- 2,76	+ 1,12
1946	60 14 9,71	19,731	+9,5847	+9,9319	-1,2951	-9,2439	3584	-2,86	—	+ 1,86
1947	24 58 59,63	19,735	,6702	,6195	,2952	,2411	3685	-2,29	- 3,48	- 3,52
1948	60 29 23,62	19,736	,5623	,9331	,2952	,2404	3586	-2,42	—	- 3,56
1949	60 14 9,64	19,739	,5623	,9321	,2953	,2382	3587	—	—	+ 0,46
1950	36 12 19,63	19,745	,6542	,7652	,2951	,2339	3588	-2,11	—	- 8,76
1951	59 36 59,05	19,747	+9,6635	+9,9296	-1,2955	-9,2324	3690	-3,05	—	- 5,62
1952	57 47 49,34	19,748	,6740	,9212	,2955	,2317	3691	-1,46	—	+ 5,40
1953	51 10 14,40	19,750	,6084	,8854	,2956	,2302	3692	-5,74	—	+ 3,46
1954	44 53 42,19	19,751	,6304	,8425	,2956	,2296	3693	-2,17	—	+ 0,66
1955	41 47 36,19	19,752	,6395	,8177	,2966	,2280	3695	-2,03	- 2,44	+ 1,29
1956	54 0 4,81	19,757	+9,5922	+9,9019	-1,2957	-9,2243	3696	-2,11	—	+ 1,45
1957	57 15 41,62	19,757	,6752	,9189	,2957	,2243	3597	-1,97	—	- 4,25
1958	57 30 45,60	19,758	,6729	,9200	,2957	,2236	3698	-8,96	—	- 7,11
1959	27 8 56,28	19,765	,6637	,6537	,2959	,2184	3600	-1,77	—	+ 1,99
1960	57 54 36,06	19,765	,5682	,9221	,2959	,2184	3601	-3,46	—	+ 5,22
1961	37 34 30,32	19,768	+9,6474	+9,7795	-1,2960	-9,2161	3603	-2,65	- 3,42	- 1,71
1962	56 57 4,16	19,768	,5729	,9175	,2960	,2153	3605	-2,50	—	+ 1,69
1963	43 48 31,94	19,774	,6294	,8348	,2961	,2115	3607	-2,34	—	+ 3,46
1964	50 47 9,62	19,774	,6021	,8836	,2961	,2115	3608	-2,63	—	+ 1,09
1965	54 22 52,44	19,777	,6855	,9044	,2961	,2092	3611	-2,11	—	- 7,60
1966	41 2 37,33	19,786	+9,6345	+9,8120	-1,2964	-9,2014	3613	-2,61	—	+ 1,85
1967	57 55 41,82	19,789	,6611	,9228	,2964	,1991	3617	-1,80	—	+ 7,72
1968	44 5 6,37	19,792	,6243	,8373	,2965	,1969	3623	+ 6,89	—	- 2,39
1969	43 44 42,43	19,793	,6243	,8347	,2965	,1951	3624	-2,14	—	+ 8,97
1970	43 51 21,35	19,795	,6243	,8355	,2966	,1935	3626	-2,43	—	+ 3,38
1971	60 23 48,09	19,796	+9,5441	+9,9341	-1,2966	-9,1927	3627	-3,20	- 3,13	+ 2,27
1972	60 33	19,802	,5403	,9348	,2967	,1879	3630	—	—	—
1973	58 33 30,92	19,802	,5627	,9269	,2967	,1871	3631	-2,32	- 2,44	+ 4,03
1974	25 51 55,22	19,803	,6699	,6351	,2967	,1863	3632	-0,88	—	- 1,77
1975	59 43 27,32	19,803	,5465	,9312	,2967	,1863	3634	-1,12	—	- 2,24
1976	58 45	19,812	+9,5490	+9,9271	-1,2969	-9,1781	3642	—	—	—
1977	58 50	19,812	,5478	,9276	,2969	,1781	3643	—	—	—
1978	58 26 26,92	19,818	,5775	,9001	,2970	,1731	3647	-2,05	—	- 4,03
1979	56 45 40,20	19,826	,5663	,9178	,2972	,1646	3650	-2,28	—	- 6,79
1980	58 47 49,00	19,832	,5416	,9277	,2974	,1686	3653	-3,07	—	+ 4,11

Mean A.R. and Declination of Stars

No	Names	Mag	No Obs	Right Ascen Jan 1, 1840	Annual Piecesn	Logarithms of			
						a	b	c	d
1981	Centaui	8.9	3	H 26 51.87	+2,776	-9,0806	+8,2110	0,4131	19,0030
1982	Hydriæ	7.8	3	27 8.33	2,979	8,8814	,0382	,4711	8,5786
1983	A Centauri	6	3	27 11.91	2,913	9,0443	,2002	,4492	8,9490
1984	—	7.8	3	27 27.44	2,824	9,0340	,1872	,1509	8,9327
1985	C —	6.7	2	27 31.65	2,871	8,9819	,1331	,4580	8,8126
1986	Centaui	8	3	27 52.94	2,746	-9,1211	+8,2050	+0,4387	19,0588
1987	—	9	3	27 59.00	2,818	9,0101	,1564	,4545	8,8938
1988	—	6	3	28 11.80	2,873	8,9842	,1965	,4583	8,8468
1989	—	8	3	28 18.92	2,861	9,0107	,1521	,4550	8,8942
1990	—	6	2	28 18.14	2,745	9,1266	,2679	,4380	9,0660
1991	Centaui	8	3	28 21.00	2,741	-9,1304	+8,2708	+0,4541	+9,0710
1992	—	7.8	3	28 23.49	2,870	8,9890	,1280	,4579	8,8557
1993	E —	—	—	28 —	2,745	9,1303	,2662	,4355	9,0711
1994	Hydriæ	7.8	3	29 41.89	2,940	8,9080	,0127	,4683	8,6304
1995	Centaui	6.7	3	28 56.64	2,754	9,1286	,2565	,4400	9,0620
1996	Centaui	7.8	2	29 2.65	2,748	-9,1017	+8,2617	0,4390	+9,0727
1997	—	7	4	29 6.85	2,978	8,9240	,0641	,1673	8,7114
1998	—	8	2	29 12.28	2,928	8,9243	,0631	,4666	8,7119
1999	—	6	2	29 38.80	2,759	9,1269	,2192	,4407	9,0660
2000	—	7.8	3	29 47.32	2,851	8,9819	,1024	,4600	8,8121
2001	Centaui	8	2	29 46.47	2,937	-9,0395	+8,1599	+0,1529	+8,9412
2002	C ² —	7	3	29 50.75	2,882	8,9855	,1039	,4507	8,8188
2003	—	7	2	30 4.36	2,775	9,1148	,2003	,4433	9,0501
2004	—	7.8	2	30 5.32	2,761	9,1297	,2452	,4411	9,0700
2005	—	7.8	3	30 10.24	2,768	9,1231	,2966	,4422	9,0612
2006	Centaui	—	—	30 —	2,933	-8,9268	+8,0344	0,4673	+8,7210
2007	—	6	3	30 40.83	2,763	9,1044	,2109	,4114	9,0760
2008	—	7.8	3	30 55.93	2,930	8,9327	,0352	,4669	8,7358
2009	—	8	3	31 2.63	2,889	8,9867	,0872	,4609	8,8508
2010	—	7.8	3	31 30.26	2,817	9,0831	,1764	,4498	9,0062
2011	Centaui	8.9	3	31 40.41	2,869	-9,0177	+8,1090	0,4577	+8,9060
2012	—	8	3	32 5.16	2,778	9,1342	,2192	,4437	9,0758
2013	—	7.8	3	32 9.65	2,879	9,0094	,0943	,4592	8,8913
2014	—	10	3	32 18.49	2,901	8,9685	,0524	,4637	8,8152
2015	—	7	3	33 0.63	2,860	9,0426	,1126	,4564	8,9157
2016	Hydriæ	7.8	3	33 12.00	2,985	-8,8765	+7,0420	+0,4616	+8,5530
2017	Centaui	7.8	3	33 18.55	2,868	9,0485	8,1140	,4561	8,9547
2018	—	6	3	33 21.79	2,788	9,1386	,2031	,4468	9,0814
2019	Hydriæ	7	3	33 26.93	2,962	8,9063	7,9686	,4716	8,6622
2020	Centaui	7.8	3	33 30.37	2,969	8,9377	7,9989	,4682	8,7472
2021	Centaui	7.8	3	34 17.95	2,817	-9,1110	+8,1628	+0,4498	+9,0487
2022	—	7.8	3	34 37.08	2,845	9,0817	8,1247	,4541	9,0038
2023	—	8	3	35 0.78	2,822	9,1167	8,1527	,4606	9,0524
2024	Hydriæ	6	3	35 30.24	2,961	8,9154	7,9418	,4719	8,6880
2025	Centaui	7.8	3	35 47.00	2,890	9,0290	8,0527	,4609	8,9251

No	Declination (South) Jan 1 1840	Annual Precession	Logarithms of				Difference from the Brisbane Catalogue			
			a'	b'	c'	d'	No	Right Ascension from M C	T	Declin
1981	56 44 33,92	-19,834	+9,5839	+9,9179	-1,2974	-9,1560	3651	-2,32	—	+ 2,82
1982	29 50 20,76	19,838	,6503	,6928	,2970	,1524	3650	-2,52	—	+ 4,13
1983	53 22 48,24	19,839	,5717	,9000	,2975	,1516	3657	-1,90	-3,00	+ 0,96
1984	52 21 30,77	19,841	,5762	,8914	,2970	,1489	3658	-3,42	—	+ 0,68
1985	46 29 16,96	19,840	,6031	,8564	,2970	,1471	3660	-1,41	-2,52	+ 2,90
1986	60 0 36,70	19,847	+9,5276	+9,9334	-1,2977	-9,1426	3661	-1,72	—	+ 1,04
1987	49 50 22,47	19,848	,6868	,8792	,2977	,1417	3662	-3,39	—	+ 0,87
1988	46 40 15,52	19,851	,6948	,8084	,2978	,1081	3663	-1,60	-3,76	+ 2,26
1989	49 51 32,62	19,852	,5456	,8794	,2978	,1372	3664	-3,78	-3,97	+ 1,48
1990	60 24 7,71	19,852	,5224	,9363	,2978	,1372	3665	-2,86	—	+ 6,40
1991	60 41 36,48	19,852	+9,5198	+9,9365	-1,2978	-9,1363	3666	-2,32	—	-11,15
1992	47 20 40,84	19,853	,6906	,8626	,2978	,1354	3667	—	-2,37	-3,31
1993	60 41 10,56	10,556	,5195	,9366	,2979	,1317	3672	—	—	—
1994	35 14 15,03	19,857	,6356	,7575	,2979	,1308	3671	-1,08	—	-8,16
1995	60 10 7,93	19,859	,5211	,9344	,2979	,1289	3675	-3,43	—	+ 0,69
1996	60 46 48,14	19,861	+9,5172	+9,9370	-1,2980	-9,1261	3679	-0,69	—	-0,39
1997	38 4 22,93	19,861	,6263	,7861	,2980	,1261	3678	-2,38	—	+ 2,12
1998	38 6 19,66	19,862	,6263	,7867	,2980	,1262	3680	-4,36	—	—
1999	60 23 44,97	19,867	,6159	,9356	,2981	,1183	3681	-2,57	-3,88	+ 11,48
2000	46 20 8,67	19,869	,5965	,8564	,2982	,1167	3682	-3,26	—	-8,66
2001	52 51 5,21	19,869	+9,5630	+9,8979	-1,2982	-9,1167	3683	-1,97	—	+ 0,76
2002	46 51 46,95	19,870	,6933	,8590	,2982	,1147	3684	-2,97	-3,86	-0,88
2003	59 28 45,77	19,872	,6199	,9316	,2982	,1118	3685	-2,50	—	-5,26
2004	60 35 58,14	19,872	,5132	,9366	,2982	,1118	3686	-2,16	—	-3,73
2005	60 5 63,41	19,874	,5109	,9345	,2983	,1099	3687	+ 0,84	—	+ 8,43
2006	38 28	19,878	+9,6222	+9,7906	-1,2984	-9,1040	3688	—	—	—
2007	60 56 27,98	19,879	,6079	,9382	,2984	,1030	3689	-1,92	-1,76	+ 2,34
2008	39 26 0,66	19,882	,6180	,7996	,2985	,0991	3692	-2,28	-3,12	-3,30
2009	46 57 52,51	19,884	,6988	,8607	,2985	,0971	3691	-1,89	—	+ 3,87
2010	56 51 10,73	19,889	,5310	,9197	,2986	,0890	3696	-1,07	—	+ 3,14
2011	60 32 20,92	19,890	+9,5682	+9,8845	-1,2986	-9,0879	3697	-0,89	—	+ 3,16
2012	60 54 46,29	19,894	,4997	,9383	,2987	,0818	3701	-3,66	—	-5,65
2013	49 36 1,27	19,895	,5717	,8787	,2987	,0807	3702	-3,01	—	+ 0,59
2014	44 41 36,00	19,895	,6965	,8435	,2987	,0807	3704	-10,09	—	-5,37,44
2015	53 4 47,85	19,904	,5478	,9000	,2989	,0670	3709	-2,60	—	-2,91
2016	28 19 6,33	19,907	+9,6405	+9,6736	-1,2990	-0,0626	3712	+ 1,44	—	-5,59
2017	53 39 39,16	19,907	,6441	,9033	,2990	,0626	3714	-2,20	—	+ 0,49
2018	61 12 10,23	19,908	,4914	,9399	,2990	,0615	3715	-2,25	-3,08	+ 2,72
2019	34 43 2,60	19,909	,6263	,7630	,2990	,0694	3716	-2,22	—	-5,43
2020	40 7 37,11	19,910	,6086	,8066	,2991	,0583	3718	-1,07	-3,11	-9,44
2021	59 20 36,36	19,917	+9,5011	+9,9320	-1,2992	-0,0460	3724	-3,68	—	-2,46
2022	56 40 39,96	19,920	,5185	,9195	,2993	,0403	3726	-2,44	—	+ 4,20
2023	69 32 2,88	19,924	,4956	,9331	,2994	,0334	3731	-0,74	—	-6,07
2024	36 18 5,22	19,929	,6159	,7702	,2995	,0240	3734	-2,34	-3,82	-2,75
2025	51 43 56,01	19,931	,6463	,5927	,2995	,0204	3736	-3,50	—	+ 2,10

Mean A, R and Declination of Stars

No	Names	Mag	No Obs	Right Ascen J in 1, 1840	Annual Precessn	Logarithms of			
						a	b	c	d
2026	Centauri	7	3	H 35 51,70	2,874	-9,0558	+8,0762	+0,4585	+8,9656
2027	—	6	2	36 55,39	2,811	9,1147	8,1639	,4188	9,0692
2028	—	7	2	36 16,79	2,810	9,1502	8,1033	,4487	9,0962
2029	—	6 7	0	36 47,22	2,917	8,9986	8,0041	,4649	8,8716
2030	—	8	2	37 6,52	2,882	9,0589	8,0555	,4597	8,9701
2031	Centauri	7	2	37 8,42	2,907	-9,0203	+8,0169	+0,4634	+8,9090
2032	—	6	3	37 21,74	2,922	8,9981	7,9909	,4637	8,8707
2033	—	8	0	37 49,95	2,921	9,0018	7,9861	,4655	8,8825
2034	—	9	3	37 56,15	2,906	9,0310	8,0119	,4633	8,9265
2035	—	7 8	3	38 1,96	2,921	9,0057	7,9460	,4655	8,8410
2036	Hydriæ	7	2	38 19,30	3,004	-8,8725	+7,8440	+0,4777	+8,6310
2037	Centauri	—	—	38	2,839	9,1474	8,1120	,4632	9,0924
2038	—	5 6	2	38 49,52	2,851	9,1273	8,0905	,4551	9,0662
2039	—	10	3	38 18,11	2,862	9,1149	8,0782	,4567	9,0496
2040	—	8	2	38 55,58	2,846	9,1395	8,1011	,4542	9,0822
2041	Centauri	7	3	39 51,45	2,907	-8,9357	+7,8963	+0,4723	+8,7408
2042	—	7	2	39 0,00	2,845	9,1425	8,1030	,4541	9,0861
2043	Hydriæ	7	3	39 24,20	2,998	8,8861	7,8370	,4764	8,5906
2044	Centauri	6 7	2	39 32,08	2,887	9,0812	8,0319	,4601	9,0069
2045	Hydriæ	7 8	1	40 1,55	2,990	8,9056	7,8417	,4757	8,6573
2046	Centauri	9	3	41 18,13	2,950	-8,9757	+7,8841	+0,4711	+8,8278
2047	—	7 8	3	41 24,09	2,901	9,0845	7,9900	,4630	9,0072
2048	—	—	—	41	2,875	9,1367	8,0128	,4585	9,0785
2049	—	6 7	3	41 31,31	2,961	8,9747	7,8771	,4714	8,6268
2050	—	7 8	3	41 37,01	2,888	9,1179	8,0171	,4606	9,0536
2051	Centauri	8	3	41 59,56	2,983	-8,9347	+7,8258	+0,4746	+8,7374
2052	—	6 7	3	42 9,82	2,942	9,0222	7,9100	,4686	8,9117
2053	Hydriæ	7	3	42 33,21	3,019	8,8706	7,7484	,4798	8,6188
2054	Centauri	6 7	3	42 39,08	2,882	9,1480	8,0226	,4697	9,0981
2055	—	9	3	42 52,39	2,916	9,0862	7,9556	,4648	9,0096
2056	Centauri	6 7	3	43 13,84	2,978	-8,9590	+7,8179	+0,4730	+8,7932
2057	—	7	2	43 25,14	2,896	9,1370	7,9924	,4618	9,0787
2058	Hydriæ	6	3	43 37,10	3,014	8,8851	7,7352	,4791	8,5837
2059	Centauri	7 8	2	43 40,18	2,991	8,9351	7,7834	,4758	8,7382
2060	—	8	3	44 6,88	2,943	9,0490	7,8863	,4688	8,9545
2061	Centauri	9	3	44 10,55	2,920	-9,0858	+7,9194	+0,4667	+9,0090
2062	—	5 6	3	44 17,62	2,933	9,0768	7,9086	,4673	8,9961
2063	—	7 8	2	44 20,13	2,959	9,0188	7,8487	,4711	8,9058
2064	—	6 7	3	46 14,22	2,948	9,0818	7,8557	,4695	9,0032
2065	—	7	3	46 25,66	3,010	8,9202	7,6854	,4633	8,6984
2066	Centauri	7 8	3	46 26,96	3,000	-8,9466	+7,7118	+0,4771	+8,7651
2067	Hydriæ	7	3	46 34,56	3,032	8,8654	7,6263	,4817	8,4889
2068	Centauri	7	3	46 58,01	2,960	9,0668	7,8165	,4713	8,9812
2069	—	7 8	2	47 28,31	2,974	9,0377	7,7690	,4733	8,9365
2070	—	7	3	47 48,89	3,012	8,9318	7,6512	,4788	8,7291

No	Declination (South) Jan 1 1840	Annual Precession	Logarithms of				Difference from the Brisbane Catalogue			
			a'	b'	c'	d'	No	Right Ascension from M C	T	Decln
2026	04 18 29,72	-19,941	+9,6289	+9,9074	-1,2996	-9,0180	3738	-4,36	—	+ 4,21
2027	61 36 3,61	19,934	,4728	,9421	,2996	,0168	3739	-1,75	- 1,94	+ 2,83
2028	61 59 20,68	19,935	,4683	,9437	,2996	,0107	3740	-2,39	- 3,30	+ 4,41
2029	48 15 15,04	19,940	,5611	,8708	,2997	,0033	3743	-7,24	—	+ 4,71
2030	51 31 27,10	19,943	,5198	,9091	,2998	8,9945	3747	-0,32	—	- 0,89
2031	50 40 59,57	19,943	+9,5453	+9,8866	-1,2998	-8,9945	3748	-3,50	—	+ 3,42
2032	48 10 50,09	19,945	,6587	,8705	,2998	,9907	3748	-3,34	—	+ 7,95
2033	48 57 38,17	19,949	,5527	,8757	,2999	,9803	3751	+ 1,07	—	-18,39
2034	51 48 4,03	19,950	,6353	,8936	,2999	,9789	3752	-3,14	—	+ 2,97
2035	49 3 33,78	19,950	,5514	,8763	,2999	,9789	3753	-8,43	—	+ 1,12
2036	27 4 28,98	19,953	-9,6314	+9,6566	-1,3000	-8,9696	3758	—	—	+ 0,56
2037	61 45	19,957	,4664	,9432	,3001	,9628	3762	—	—	—
2038	60 17 22,42	19,957	,4683	,9371	,3001	,9614	3763	-2,15	- 3,37	- 6,22
2039	59 20 1,38	19,958	,4757	,9329	,3001	,9614	3764	-1,41	—	- 3,48
2040	61 11 25,89	19,968	,4609	,9401	,3001	,9600	3765	-1,74	—	+ 4,13
2041	39 37 49,46	19,958	+9,5933	+9,8032	-1,3001	-8,9587	3768	-0,30	—	+ 2,56
2042	61 24 23,36	19,958	,4679	,9418	,3001	,9587	3767	-5,35	—	- 0,04
2043	30 21 58,67	19,962	,6221	,7026	,3002	,9489	3770	-2,15	—	- 0,29
2044	56 48 29,62	19,963	,4928	,9211	,3002	,9160	3771	-2,35	- 2,21	+ 0,89
2045	34 19 58 81	19,967	,6095	,7500	,3003	,9345	3773	-2,41	—	- 0,36
2046	45 20 2,14	19,976	+9,6587	+9,8507	-1,3005	-8,9073	3782	-3,37	—	-17,74
2047	56 48 7,49	19,977	,4829	,9214	,3005	,9042	3783	-2,52	- 2,57	+ 0,23
2048	60 57	19,977	,4472	,9403	,3005	,9042	3784	—	—	—
2049	45 10 44,80	19,977	,5687	,8497	,3005	,9010	3785	-1,62	—	+ 7,23
2050	59 32 13,64	19,978	,4594	,9343	,3005	,8978	3786	-0,66	—	- 3,66
2051	39 23 14,21	19,981	+9,5843	-9,8014	-1,3006	-8,8898	3789	-2,62	—	- 1,43
2052	50 48 40,36	19,982	,5224	,8882	,3006	,8866	3790	-2,58	—	- 0,47
2053	26 23 17,13	19,984	,6253	,6470	,3007	,8766	3793	-2,65	—	+ 1,31
2054	61 45 33,96	19,985	,4330	,9438	,3007	,8732	3794	-2,54	—	- 0,01
2055	56 56 29,00	19,986	,4757	,9222	,3007	,8682	3795	-1,40	—	- 3,83
2056	43 2 30,56	19,989	+9,5635	+9,8331	-1,3008	-8,8578	3799	-2,58	—	+ 5,34
2057	60 57 23,49	19,990	,4362	,9406	,3008	,8543	3800	-0,11	—	- 3,09
2058	29 55 58,13	19,991	,6138	,6974	,3008	,8490	3802	-2,44	—	- 6,90
2059	39 25 0,89	19,992	,6798	,8020	,3008	,8472	3803	-2,40	—	+ 0,81
2060	53 31 7,67	19,994	,4955	,9044	,3009	,8363	3805	-2,77	—	+ 0,09
2061	56 54 36,43	19,995	+9,4683	+9,9222	-1,3009	-8,8326	3806	-6,23	—	- 4,66
2062	56 5 55,06	19,995	,4742	,9182	,3009	,8307	3807	-1,76	- 2,16	+ 0,63
2063	50 25 27,69	19,995	,5169	,8860	,3009	,8289	3808	-2,10	—	- 4,40
2064	56 31 10,46	20,006	,4694	,9208	,3011	,7731	3819	-2,39	- 3,11	+ 0,99
2065	36 51 40,56	20,007	,5821	,7775	,3012	,7645	3820	-2,18	- 3,37	+ 2,01
2066	41 9 17,11	20,007	+9,5623	+9,8178	-1,3012	-8,7845	3821	-3,05	—	-10,04
2067	24 49 39,27	20,008	,6212	,6228	,3012	,7601	3822	-2,18	- 3,35	- 2,90
2068	55 11 52,57	20,009	,4683	,9137	,3012	,7490	3826	-3,13	—	- 7,36
2069	52 20 53,17	20,012	,4885	,8982	,3013	,7307	3831	-1,87	—	+ 1,49
2070	38 47 49,30	20,014	,5694	,7967	,3013	,7188	3834	-0,91	- 3,04	+ 3,37

Mean A R and Declination of Stars

No	Names	Mag	No Obs	Right Ascen Jan 1, 1840	Annual Precessn	Logarithms of			
						a	b	c	d
2071	Hydræ	—	—	11 48	+ 8,029	-8,8922	+ 7,5815	+ 0,4813	+ 8,6090
2072	Centauri	7	2	48 41,62	8,000	8,9833	,6891	,4771	8,8418
2073	Hydræ	7	3	48 57,13	8,028	8,8971	,5734	,4812	8,6208
2074	Centauri	7 8	3	49 0,32	2,989	9,0267	,7003	,4755	8,9187
2075	Hydræ	7 8	3	49 23,31	3,038	8,8705	,5276	,4826	8,6109
2076	Centauri	7 8	3	49 24,29	3,021	-8,9248	+ 7,5819	+ 0,4801	+ 8,7106
2077	—	7	3	49 40,09	2,969	9,1460	,7918	,4711	9,0902
2078	—	7 8	3	49 45,94	2,968	9,1191	,7621	,4724	9,0518
2079	—	7 8	3	49 57,63	2,983	9,0769	,7102	,4746	8,9046
2080	—	6	3	50 11,69	2,986	9,0698	,6922	,4751	8,9856
2081	Centauri	7	1	50 14,04	3,021	-8,9398	+ 7,5821	+ 0,4801	+ 8,7486
2082	—	9	3	50 34,60	3,000	9,0332	,6371	,4771	8,9292
2083	Hydræ	7 8	3	50 45,96	3,043	8,8665	,4840	,4883	8,4032
2084	Centauri	6	3	51 5,64	3,006	9,0232	,6044	,4780	8,9126
2085	Hydræ	7 8	3	51 13,73	3,040	8,8826	,4571	,4829	8,6709
2086	Centauri	7	2	51 19,67	2,994	-9,0794	+ 7,6472	+ 0,4762	+ 8,9095
2087	Hydræ	7 8	3	51 23,83	3,034	8,9074	,4717	,4820	8,6699
2088	Centauri	7	3	51 22,64	2,976	9,1515	,7158	,4736	9,0071
2089	—	7 8	2	51 27,69	3,018	8,9800	,6408	,4797	8,8352
2090	Cruois	8	3	51 37,03	2,986	9,1238	,6741	,4751	9,0610
2091	Centauri	7	3	52 2,28	3,024	-8,9673	+ 7,4957	+ 0,4806	+ 8,8098
2092	—	7 8	3	52 40,63	3,021	9,0041	,4974	,4801	8,8799
2093	—	7	3	53 22,58	3,011	9,0834	,5295	,4787	9,0058
2094	—	7	3	53 35,16	3,036	8,9457	,3781	,4823	8,7624
2095	—	7	3	53 38,87	3,044	8,9041	,3260	,4834	8,0492
2096	Centauri	8	3	54 6,69	3,026	-9,0312	+ 7,4214	+ 0,4809	+ 8,9258
2097	Crucis	7 8	3	54 16,37	3,009	9,1458	,5287	,4784	9,0899
2098	Centauri	8	2	54 22,08	3,022	9,0720	,4462	,4803	8,9899
2099	Crucis	8	3	54 47,31	3,014	9,1426	,4811	,4791	9,0857
2100	Hydræ	8	3	54 50,98	3,051	8,8900	,2230	,4844	8,6997
2101	Centauri	—	—	54	3,023	-9,0024	+ 7,4254	+ 0,4804	+ 9,0170
2102	—	7	3	54 51,37	3,024	9,0808	,4138	,4806	9,0014
2103	—	7 8	3	54 53,90	3,036	9,0060	,3821	,4823	8,8813
2104	—	7	8	54 58,02	3,037	8,9927	,3199	,4834	8,8698
2105	—	8	2	55 36,18	3,030	9,0864	,3563	,4814	9,0004
2106	Centauri	7 8	3	55 36,94	3,034	-9,0531	+ 7,3162	+ 0,4820	+ 8,9602
2107	—	7	3	56 4,45	3,035	9,0820	,2989	,4822	9,0031
2108	Crucis	7	3	56 33,41	3,037	9,1043	,2683	,4824	9,0348
2109	Centauri	7 8	3	57 7,56	3,060	9,0104	,0768	,4843	8,8908
2110	—	8	3	57 8,46	3,050	8,9996	,0634	,4843	8,8717
2111	Centauri	7	3	57 46,85	3,053	-9,0485	+ 6,9893	+ 0,4846	+ 8,9531
2112	—	7	3	57 53,68	3,061	8,8969	,8068	,4869	8,6211
2113	—	7 8	3	58 25,66	3,062	8,9215	,7076	,4860	8,7010
2114	—	7 8	3	59 8,61	3,064	8,9555	,4192	,4863	8,7842
2115	—	7 8	3	59 18,71	3,065	8,9723	,2811	,4864	8,8190

in the Southern Hemisphere, &c &c

XCV

No	Declination (South) Jan. 1 1840	Annual Precession	Logarithms of				Difference from the Brisbane Catalogue			
			a'	b'	c'	d'	No	M	O	T
2071	31 22	-20,018	+0,5966	+9,7163	-1,3014	-8,6889	3836	—	—	—
2072	46 10 50,40	20,018	,6250	,8580	,3014	,6863	3838	—	2,51	— 2,49 + 4,05
2073	32 25 28,97	20,019	,6922	,7291	,3014	,6757	3839	—	2,91	— 3,29 — 1,72
2074	51 12 30,29	20,019	,4899	,8914	,3014	,6731	3840	—	2,90	— + 2,37
2075	26 9 43,43	20,020	,6117	,6442	,3015	,6667	3843	—	2,81	— + 0,46
2076	37 36 19,43	20,020	+0,5705	+9,7853	-1,3015	-8,6567	3844	—	2,38	— + 1,45
2077	61 33 24,47	20,021	,3892	,9438	,3015	,6454	3845	—	2,20	— + 3,74
2078	69 33 40,10	20,022	,4116	,9853	,3015	,6426	3846	—	2,34	— 3,58 — 1,09
2079	55 58 26,56	20,023	,4456	,9182	,3015	,6338	3847	—	3,70	— + 0,57
2080	55 25 37,30	20,024	,4472	,9163	,3015	,6220	3849	—	1,69	— 1,29 — 5,26
2081	40 3 30,18	20,024	+0,5551	+9,8084	-1,3015	-8,6220	3850	—	2,80	— — 6,94
2082	51 52 35,97	20,025	,4771	,8956	,3016	,6035	3852	—	0,69	— + 2,88
2083	25 1 5,54	20,025	,6128	,6264	,3016	,5971	3853	—	2,07	— 3,56 — 2,87
2084	50 48 21,46	20,027	,4914	,8892	,3016	,5809	3856	—	2,55	— 2,82 — 1,68
2085	29 10 10,02	20,027	,5988	,6880	,3016	,5748	3858	—	1,72	— + 1,68
2086	56 16 34,82	20,027	+0,4346	+9,9198	-1,3016	-8,5674	3860	—	2,39	— — 2,62
2087	34 25 3,58	20,028	,5786	,7523	,3016	,5640	3860	—	2,75	— + 10,44
2088	61 56 22,44	20,028	,3729	,9455	,3016	,5640	3861	—	0,36	— + 0,68
2089	45 44 29,66	20,028	,5172	,8549	,3016	,5605	3862	—	3,46	— + 1,97
2090	59 54 46,62	20,029	,3944	,9370	,3016	,5600	3864	—	1,01	— + 5,60
2091	46 58 8,37	20,030	+0,5263	+9,8422	-1,3017	-8,5281	3869	—	2,45	— + 5,76
2092	48 40 35,14	20,031	,4899	,8756	,3017	,4930	3873	—	2,24	— + 10,03
2093	56 36 41,33	20,033	,4183	,9216	,3017	,4459	3874	—	2,25	— — 1,53
2094	40 56 14,46	20,034	,5391	,8165	,3018	,4322	3875	—	2,65	— + 1,06
2095	39 45 36,60	20,034	,6762	,7450	,3018	,4227	3876	—	2,89	— + 2,92
2096	51 38 17,96	20,035	+0,4504	+9,8944	-1,3018	-8,3931	3879	—	1,41	— — 0,23
2097	61 31 19,75	20,035	,3579	,9440	,3018	,3828	3880	—	2,74	— + 3,78
2098	55 40 10,90	20,036	,4216	,9169	,3018	,3722	3882	—	2,15	— — 6,16
2099	61 17 4,31	20,036	,3560	,9430	,3018	,3387	3887	—	2,72	— — 1,36
2100	30 48 1,08	20,036	,6848	,7096	,3018	,3329	3888	—	1,85	— — 6,83
2101	57 22	20,036	+0,4014	+9,9264	-1,3018	-8,3329	3889	—	—	— —
2102	56 22 8,36	20,036	,4116	,9205	,3018	,3329	3890	—	2,26	— — 1,61
2103	48 45 41,66	20,036	,4800	,8762	,3018	,3270	3891	—	2,06	— — 3,30
2104	47 18 11,50	20,036	,4914	,8694	,3018	,3270	3893	—	1,07	— + 0,96
2105	56 51 3,04	20,038	,4031	,9229	,3018	,2699	3895	—	4,91	— + 4,04
2106	53 49 11,35	20,038	+0,4330	+9,9071	-1,3018	-8,2630	3897	—	1,56	— 2,77 + 2,63
2107	56 28 20,75	20,038	,4048	,9210	,3019	,2119	3900	—	2,73	— — 0,26
2108	58 21 39,48	20,039	,3802	,9302	,3019	,1539	3903	—	3,87	— + 2,53
2109	49 22 44,93	20,040	,4639	,8804	,3019	,0658	3910	—	1,76	— + 3,38
2110	48 6 51,98	20,040	,4742	,8721	,3019	,0658	3911	—	1,73	— + 3,44
2111	53 22 0,85	20,041	+0,4249	+9,9046	-1,3019	-7,9408	3916	—	2,16	— 3,67 + 1,57
2112	32 3 39,15	20,041	,6705	,7262	,3019	,9109	3918	—	2,37	— — 0,82
2113	36 58 7,22	20,041	,5453	,7794	,3019	,7859	3922	—	4,22	— — 3,08
2114	48 21 20,09	20,041	,5092	,8287	,3019	,4637	3925	—	2,12	— + 0,36
2115	44 41 28,34	20,041	,4899	,8473	,3019	,3088	3926	—	2,89	— 3,15 — 3,49

Mean A R and Declination of Stars

No	Names	Mag	No Obs	Right Ascen Jan 1, 1840	Annual Piecesn	Logarithms of			
						a	b	c	d
2116	Centaui	7 8	3	11 59 49,52	+ 3,067	-9,0149	1 5,9558	-1 0,1867	1 8,8986
2117	—	6	3	59 49,72	3,068	9,0140	-5,4778	,4809	8,8970
2118	E	7	3	59 59,36	3,069	8,9970	5,9378	,4870	8,8669
2119	Crucis	7 8	2	12 0 5,86	3,071	9,1247	6,1906	,4873	9,0622
2120	o Centauri	6	3	0 5,78	3,070	9,0146	6,1773	,4871	8,8980
2121	Crucis	7 8	2	0 7,17	3,073	-9,1247	-6,4915	1 0,4876	1 9,0622
2122	Centaui	6	2	0 38,82	3,077	8,9681	,5408	,4881	8,8006
2123	—	6	—	0 39,58	3,072	8,0120	,5197	,4874	8,7501
2124	—	6	2	1 28,88	3,080	9,0242	,8682	,4885	8,9142
2125	—	6 7	3	2 17,18	3,079	8,9216	,9651	,4884	8,7010
2126	Centaui	8	3	2 20,84	3,079	-8,9157	-0,9503	1 0,4881	1 8,6846
2127	Hydræ	7	3	2 57,76	3,076	8,8748	6,9720	,4880	8,6348
2128	Centaui	7	2	2 45,20	3,085	8,9701	7,0783	,4893	8,8173
2129	Crucis	7	3	2 45,13	3,098	9,1304	7,2376	,4911	9,0698
2130	Centaui	6	3	3 8,37	3,087	8,9627	7,1254	,4895	8,7998
2131	Centaui	7 8	3	3 14,80	3,092	-9,0203	-7,2001	1 0,4902	1 8,9078
2132	Crucis	7 8	3	4 2,80	3,109	9,1145	,3845	,4926	9,0485
2133	—	8	3	4 27,60	3,112	9,1093	,4181	,4930	9,0411
2134	Centaui	8	3	4 30,27	3,088	8,9196	,2316	,4897	8,6957
2135	—	7 8	3	5 7,27	3,092	8,9276	,2946	,4902	8,7176
2136	Hydræ	8	3	5 21,96	3,084	-8,8719	-7,2651	+ 0,4891	1 8,5209
2137	Centaui	7 8	3	5 37,43	3,115	9,0611	,4644	,4935	8,9721
2138	Crucis	8	3	5 48,11	3,124	9,0997	,5178	,4947	9,0282
2139	Centaui	7 8	3	5 51,55	3,115	9,0448	,4677	,4936	8,9174
2140	—	7 8	3	6 41,89	3,102	8,9412	,4220	,4916	8,7510
2141	Hydræ	7	3	6 46,80	3,090	-8,8703	-7,3043	1 0,4900	1 8,5561
2142	Centaui	7	3	7 14,27	3,103	8,9462	,4593	,4921	8,7636
2143	—	7	3	7 29,84	3,127	9,0462	,5708	,4951	8,9491
2144	—	7 8	3	9 10,74	3,129	8,9987	,6119	,4954	8,8704
2145	Crucis	7 8	3	9 24,05	3,104	9,0872	,7090	,4989	9,0107
2146	Centaui	7	3	9 27,42	3,107	-8,9114	-7,6367	+ 0,4923	+ 8,6725
2147	Crucis	8	3	9 32,93	3,169	9,1320	,7638	,5009	9,0726
2148	Centaui	7 8	3	9 43,17	3,140	9,0289	,6661	,4969	8,9221
2149	—	7	3	10 29,77	3,155	9,0572	,7280	,4990	8,9667
2150	—	7 8	3	11 11,88	3,109	8,8937	,6908	,4926	8,6146
2151	Crucis	8	3	11 14,49	3,194	-9,1518	-7,8514	+ 0,5043	1 9,0977
2152	Centaui	7	3	11 44,20	3,120	8,9206	,6376	,4941	8,6994
2153	—	8	2	12 26,95	3,146	8,9862	,7292	,4978	8,8475
2154	Hydræ	—	—	12	3,105	8,8728	,6203	,4921	8,5279
2155	Crucis	7 8	3	12 40,28	3,206	9,1434	,8931	,6060	9,0869
2156	Centaui	7	3	12 41,00	3,134	-8,9501	-7,6998	+ 0,4961	+ 8,7731
2157	—	8	3	13 17,13	3,159	9,0069	,7787	,4995	8,8853
2158	—	—	—	13	3,183	9,0702	,8441	,6028	8,9863
2159	Crucis	6	3	14 11,96	3,196	9,0848	,8816	,6046	9,0075
2160	—	—	—	14	3,201	9,0844	,8989	,5053	9,0069

No	Declination (South) Jan 1 1840	Annual Precession	Logarithms of				Difference from the Brisbane Catalogue			
			a'	b'	c'	d'	No	Right Ascension from M C	T	Declin
2116	49 52 22,69	-20,041	1 9,4472	+ 9,8836	- 1,3019	- 6,9408	3928	- 16,84	—	- 1,94
2117	49 46 13,26	20,041	,4472	,8830	,3019	+ 6,4657	3930	- 2,49	- 3,00	+ 0,69
2118	47 48 0,78	20,041	,4639	,8699	,3019	6,9408	3932	- 0,82	- 1,49	+ 3,67
2119	59 57 24,14	20,041	,3344	,9375	,3019	7,0658	3933	- 3,57	—	- 1,49
2120	49 49 52,84	20,041	,4455	,8834	,3019	7,1627	3934	- 2,82	- 2,36	- 1,69
2121	59 57 25,54	20,041	+ 9,3324	+ 9,9375	- 1,3019	+ 7,3668	3937	+ 7,54	—	- 0,19
2122	43 25 56,22	20,041	,4983	,8376	,3019	7,5777	3938	- 2,92	—	+ 2,23
2123	40 20 27,36	20,041	,6172	,8114	,3019	7,5777	3939	- 2,54	- 3,74	- 2,01
2124	50 53 34,85	20,041	,4297	,8900	,3019	7,8439	3942	- 8,59	—	+ 6,70
2125	36 58 40,21	20,040	,5815	,7794	,3019	8,0435	3945	- 2,28	- 2,41	+ 1,74
2126	35 56 40,19	20,040	+ 9,5378	+ 9,7688	- 1,3019	+ 8,0435	3946	- 2,22	—	+ 1,56
2127	27 10 34 61	20,040	,6798	,6600	,3019	,0972	3947	- 1,66	—	+ 3,26
2128	44 31 56,75	20,039	,4471	,8461	,3019	,1072	3948	- 2,39	—	+ 0,29
2129	60 23 10,23	20,039	,3075	,9399	,3019	,1072	3949	- 2,04	—	+ 0,81
2130	43 23 19,49	20,039	,4848	,8371	,3019	,1627	3951	- 2,68	—	+ 4,35
2131	60 27 59,37	20,039	+ 9,4233	+ 9,8874	- 1,3019	+ 8,1797	3952	+ 2,16	+ 1,69	- 2,23
2132	69 10 36,23	20,037	,9139	,9339	,3018	,2099	3957	- 2,97	—	- 1,88
2133	58 45 49,32	20,037	,3181	,9320	,3018	,3088	3960	- 2,07	—	+ 0,68
2134	36 38 10,64	20,037	,6250	,7760	,3018	,3149	3961	- 0,81	—	- 2,83
2135	38 2 14,36	20,036	,5169	,7899	,3018	,3608	3963	- 2,91	- 3,35	+ 1,95
2136	26 26 51,49	20,035	+ 9,5775	+ 9,8489	- 1,3018	+ 8,3931	3964	- 1,41	—	+ 18,51
2137	54 36 29,94	20,035	,2636	,9112	,3018	,1032	3966	- 3,29	—	- 4,04
2138	67 59 8,42	20,034	,3181	,9283	,3018	,4179	3970	- 2,90	- 2,38	- 3,33
2139	53 1 54,99	20,034	,8802	,9026	,3018	,4227	3971	- 1,20	—	- 5,91
2140	40 14 46,99	20,032	,4941	,8103	,3017	,4807	3976	- 0,36	—	- 3,34
2141	28 20 41,79	20,032	+ 9,5658	+ 9,6766	- 1,3017	+ 8,4818	3977	- 0,69	—	+ 2,76
2142	41 0 54,09	20,030	,4857	,8171	,3017	,5129	3979	- 1,19	—	- 3,15
2143	53 9 54,16	20,030	,3674	,9032	,3017	,5243	3981	- 3,27	—	+ 4,78
2144	48 1 57,56	20,024	,4160	,8713	,3016	,6128	3987	- 2,31	—	+ 61,39
2145	56 57 38,04	20,024	,3032	,9231	,3016	,6220	3989	- 3,01	—	- 3,01
2146	35 12 18,73	20,023	+ 9,6185	+ 9,7607	- 1,3015	+ 8,6250	3990	- 2,48	- 2,52	- 4,49
2147	60 34 47,95	20,023	,2455	,9397	,3015	,6309	3991	- 2,85	—	- 0,82
2148	51 24 59,75	20,022	,3747	,8928	,3015	,6368	3992	- 3,01	—	+ 1,18
2149	54 15 10,10	20,019	,8824	,9090	,3014	,6704	3995	- 1,87	- 2,39	- 3,61
2150	31 42 0,12	20,016	,6353	,7204	,3014	,6965	3997	- 3,52	—	- 3,07
2151	61 57 53,34	20,016	+ 9,2041	+ 9,9454	- 1,3014	+ 8,6991	3998	- 2,61	—	- 1,40
2152	36 53 28,82	20,014	,4997	,7782	,3013	,7104	4006	- 1,89	- 1,79	- 0,90
2153	46 33 56,86	20,011	,4116	,8606	,3013	,7424	4009	- 1,49	—	- 0,21
2154	26 49	20,010	,5687	,6544	,3012	,7468	4011	—	—	—
2155	61 23 33,86	20,009	,2014	,9429	,3012	,7490	4012	- 2,58	—	+ 0,69
2156	41 40 20,23	20,009	+ 9,4579	+ 9,8223	- 1,3012	+ 8,7490	4013	- 1,63	—	+ 2,12
2157	49 3 35,21	20,008	,3802	,8776	,3012	,7710	4016	- 3,06	—	+ 5,71
2158	35 25	20,006	,2967	,9153	,3011	,7781	4020	—	—	—
2159	56 47 12,93	20,001	,2695	,9218	,3011	,7979	4023	- 2,53	- 3,06	+ 0,91
2160	56 45	19,999	,2648	,9216	,3010	,8187	4026	—	—	—

Mean A.R. and Declination of Stars

No	Names	Mag	No Obs	Right Ascen Jan 1, 1810	Annual Progress	Logarithms of			
						a	b	c	d
2161	Crucis	7	3	12 14 53,98	3,225	-9,1312	-7,9516	1 0 ,085	1 9,0760
2162	Centauri	8	3	14 58,37	,114	8,9401	,7671	,4975	8,7619
2163	—	7	6	15 10,94	3,139	8,9291	,7051	,4968	8,7228
2164	—	6,7	2	15 19,08	3,138	8,9267	,7581	,1966	8,7165
2165	Hydæ	7	3	16 25,60	3,119	8,8831	,7107	,1940	8,6749
2166	Centauri	7,8	3	15 50,48	3,106	-8,9853	-7,9516	+ 0 5006	1 8,8458
2167	Crucis	—	—	15	,111	9,0840	,9 23	,5066	9,0064
2168	Centauri	7,8	3	16 35,83	3,176	8,9926	,8003	,5017	8,8549
2169	—	7	3	16 42,21	3,156	8,9193	,8186	,4990	8,7738
2170	G	6,7	3	17 55,56	,196	9,0198	,9190	,5046	8,9077
2171	Centauri	7,8	3	18 22,13	3,006	-9,0317	-7,9420	+ 0 5060	1 8,9273
2172	—	7,8	3	18 23,05	3,188	8,9971	,7077	,5036	8,8688
2173	Crucis	7,8	3	18 35,06	,221	9,0627	,7070	,5080	8,9751
2174	—	7	3	18 43,78	3,241	9,0916	8 0096	,5107	9,0174
2175	—	7,8	3	19 23,90	3,270	9,1351	8,0686	,5119	9,0769
2176	Centauri	5,6	3	19 25,66	3,201	-9,0086	-7,9117	+ 0 5053	1 8,8888
2177	Crucis	7,8	3	19 34,62	3,276	9,1358	8,0 34	,5162	9,0771
2178	Centauri	—	—	19	,171	8,9602	,78923	,5016	8,7876
2179	Virginis	7,8	2	19 43,22	3,083	8,8263	7,7664	,4890	7,9 39
2180	Crucis	7	3	19 53,14	,190	9,0193	8,0113	,5101	8,0850
2181	Crucis	8	3	20 2,67	3,281	-9,1360	-8 0816	+ 0 5160	1 9,0784
2182	Centauri	8	3	20 21,96	3,210	9,0121	,79670	,5065	8,8930
2183	—	7,8	3	20 40,71	3,149	8,9034	7,8630	,4982	8,6608
2184	Crucis	8,9	2	20 54,83	4,266	9,0909	8,0659	,5140	9,0291
2185	—	7	3	21 7,45	3,250	9,0707	8,0100	,5119	8,9876
2186	Centauri	6,7	3	21 25,43	3,177	-8,9431	-7,9200	+ 0 5020	1 8,7893
2187	Crucis	7	3	21 26,30	3,288	9,1248	,81017	,5150	9,0629
2188	Centauri	7,8	3	21 27,67	3,182	8,9 13	7,9282	,5027	8,7771
2189	Musæ	—	—	21	3,294	9,1209	8,1119	,5177	9,0577
2190	Crucis	7	3	22 47,06	3,288	9,1041	8,1087	,5169	9,0355
2191	Centauri	7,8	3	22 46,11	3,180	-8,9116	-7,9117	+ 0 5028	1 8,7655
2192	Crucis	7,8	2	23 4,74	3,270	9,0906	8,0099	,5157	9,0163
2193	—	—	—	23	,264	9,0650	8,0756	,5137	8,9201
2194	—	7,8	4	23 20,49	3,265	9,0639	8,0790	,5139	8,9807
2195	Centauri	7	3	23 25,23	3,184	8,9086	7,9511	,5030	8,7486
2196	Hydæ	7,8	3	23 45,11	3,138	-8,8706	-7,8910	+ 0 4066	1 8,6234
2197	Crucis	7,8	2	24 27,68	3,288	9,0897	8,1173	,5160	9,0067
2198	Centauri	8	3	24 31,07	3,238	9,0115	8,0463	,5103	8,8946
2199	—	8	3	24 31,61	3,267	9,0536	8,0883	,5111	8,9022
2200	—	7,8	3	24 54,27	3,193	8,9406	7,9824	,5012	8,7636
2201	Crucis	8	2	25 9,83	3,282	-9,0655	-8,1131	+ 0 5161	1 8,9803
2202	Centaui	5,6	3	26 4,86	3,214	8,9627	,0238	,6070	8,8028
2203	Crucis	7	3	26 26,68	3,346	9,1148	,2016	,5216	9,0761
2204	—	7	3	26 31,80	3,348	9,1351	,2040	,5218	9,0769
2205	Centauri	—	—	27	3,205	8,9406	,0201	,6058	8,7641

No	Declination (South) Jan 1 1840	Annual Precession	Logarithms of				No	Difference from the Brisbane Catalogue		
			a'	b'	c'	d'		M C	T	Declin
2161	60 44 27,23	-19,998	+9,1903	+9,9399	-1,3010	+8,8194	4030	- 2,31	—	+ 1,14
2162	40 57 30,42	19,997	,4548	,8158	,3010	,8213	4033	- 2 16	—	- 2,04
2163	38 24 46,77	19,996	,4757	,7927	,3010	,8270	4034	- 2,53	—	+ 5,70
2164	38 1 22,52	19,995	,4786	,7888	,3009	,8307	4036	- 3,06	—	- 5,07
2165	29 26 49,74	19,994	,5378	,6909	,3009	,8326	4038	- 1,60	—	- 1,29
2166	46 20 5,34	19,992	+9,3962	+9,8596	-1,3008	+8,8454	4039	- 2,71	—	+ 0,67
2167	56 45	19,992	,2553	,9214	,3008	,8472	4040	—	—	—
2168	47 25 16,24	19,987	,3784	,8661	,3007	,8664	4044	- 0,88	—	+ 4,61
2169	41 37 30,82	19,986	,4393	,8214	,3007	,8682	4045	- 2,85	—	+ 0,91
2170	50 33 48,79	19,979	,3324	,8806	,3006	,8978	4052	- 3,04	- 3,25	- 4,06
2171	51 48 56,05	19,976	+9,3117	+9,8942	-1,3005	+8,9088	4054	- 2,94	—	- 0,66
2172	48 1 17,93	19,976	,3617	,8700	,3005	,9088	4055	- 1,82	- 2,09	+ 3,86
2173	54 60 56,55	19,976	,2648	,9113	,3005	,9150	4058	—	—	+ 0,29
2174	57 25 49,75	19,973	,2148	,9243	,3004	,9165	4059	- 2,44	—	- 2,11
2175	60 52 22,30	19,968	,1367	,9398	,3003	,9316	4060	- 4,19	—	- 9,52
2176	49 20 35,22	19,968	+9,3404	+9,8786	-1,3003	+8,9315	4062	- 3,34	- 3,83	+ 4,15
2177	60 54 30,93	19,967	,1335	,9399	,3003	,9359	4064	- 3,75	—	- 1,88
2178	42 41	19,967	,4166	,8299	,3003	,9345	4065	—	—	—
2179	7 47 22,44	19,965	,6222	,1319	,3003	,9388	4066	- 1,54	—	- 0,40
2180	55 30 41,02	19,964	,2405	,9145	,3002	,9432	4067	- 1,43	—	- 8,20
2181	60 59 4,87	19,963	+9,1238	+9,9402	-1,3002	+8,9460	4069	- 1,68	—	- 0,26
2182	49 45 43,47	19,960	,3263	,8811	,3002	,9531	4070	- 1,39	—	- 2,61
2183	33 66 47,93	19,958	,4914	,7456	,3001	,9587	4071	- 1,86	—	+ 3,70
2184	58 8 10,37	19,956	,1791	,9274	,3001	,9642	4072	- 1,42	—	+ 6,13
2185	55 38 24,17	19,954	,2263	,9160	,3000	,9682	4073	- 2,45	—	- 2,48
2186	40 50 58,37	19,952	+9,4265	+9,8140	-1,3000	+8,9750	4077	- 2,08	- 3,91	- 1,71
2187	60 6 17,90	19,952	,1303	,9362	,3000	,9750	4075	- 2,22	—	- 6,74
2188	42 2 36,07	19,952	,4138	,8241	,3000	,9760	4078	- 3,06	—	+ 3,07
2189	69 48	19,944	,1238	,9348	,2998	,9919	4079	—	—	—
2190	58 32 16,36	19,941	,1492	,9289	,2997	9,0021	4083	- 1,74	- 1,26	+ 3,48
2191	40 37 12,89	19,940	+9,4216	+9,8117	-1,2997	+9,0008	4084	- 1,05	—	+ 7,15
2192	67 24 20,95	19,937	,1732	,9234	,2997	,0070	4087	- 2,85	—	- 1,40
2193	56 9	19,936	,2175	,9121	,2997	,0083	4088	—	—	—
2194	65 14 48,01	19,936	,2122	,9126	,2996	,0107	4090	- 2,70	—	- 7,89
2195	40 10 13,61	19,934	,4249	,8075	,2996	,0132	4092	- 1,75	—	- 6,71
2196	26 40 54,04	19,932	19,5340	+9,6504	-1,2995	+9,0180	4093	- 2,06	—	+ 1,92
2197	56 49 55,16	19,926	,1703	,9204	,2994	,0811	4095	- 3,24	—	- 2,99
2198	49 46 6,54	19,926	,2967	,8804	,2994	,0323	4096	- 2,23	—	- 2,09
2199	54 5 46,88	19,924	,2227	,9062	,2994	,0323	4098	- 1,56	—	+ 3,37
2200	40 31 47,09	19,920	,4133	,8104	,2993	,0892	4099	- 2,10	—	+ 1,21
2201	55 14 43,87	19,917	+9,1931	+9,9121	-1,2992	+9,0449	4100	+ 0,50	—	+ 0,49
2202	43 46 44,49	19,910	,3692	,8873	,2991	,0583	4105	- 3,35	- 3,97	+ 1,85
2203	60 51 24,01	19,906	,0414	,9384	,2990	,0648	4106	- 2,80	—	- 2,83
2204	60 57 15,39	19,904	,0374	,9388	,2990	,0659	4107	- 2,79	—	+ 1,89
2205	40 35	19,898	,4014	,8105	,2988	,0765	4111	—	—	—

Mean A R and Declination of Stars

No	Names	Mag	No Obs	Right Ascen J in 1, 1840	Annual Precessn	Logarithms of			
						a	b	c	d
2206	Centaui	7 8	3	H M S 12 27 23,54	+3,270	-9,0272	-9,1101	+0,5145	+8,9212
2207	—	7	3	28 0,07	3,260	9,0079	,1002	,5132	8,8889
2208	—	7	3	28 2,83	3,198	8,9268	,0201	,5049	8,7207
2209	Crucis	8	—	28 35,11	3,898	9,0871	,1886	,5222	9,0118
2210	—	7 8	3	28 52,20	3,628	9,0845	,1900	,5222	9,0082
2211	Crucis	7 8	3	29 11,30	3,812	-9,0626	-8,1732	+0,6190	+8,9704
2212	Centaui	8 9	3	29 32,39	3,249	8,9806	,0061	,6117	8,8394
2213	—	7 8	3	30 4,82	3,208	8,9268	,0501	,5062	8,7212
2214	—	—	—	30	3,170	8,8806	,0116	,5011	8,5708
2215	Hydræ	6 7	3	30 55,04	3,166	8,8767	,0125	,5005	8,5580
2216	Centaui	7 8	3	32 26,93	3,246	-8,071	-8,1110	+0,5113	+8,7929
2217	Hydræ	7 8	3	32 44,95	3,167	8,8697	,0102	,5006	8,5275
2218	Crucis	6 6	3	32 47,62	3,385	9,2054	,2677	,5296	9,0377
2219	—	—	—	32	3,387	9,1054	,2694	,5298	9,0377
2220	Centaui	7 8	3	33 6,94	3,334	9,0492	,2150	,5230	8,9507
2221	Centauri	7 8	3	33 6,95	3,275	-8,9834	-8,1510	+0,5152	+8,8468
2222	Crucis	7 8	3	33 14,93	3,407	9,1125	,2900	,5324	9,0607
2223	Centaui	7 8	3	33 39,74	3,386	9,0466	,2194	,5282	8,9598
2224	—	6 6	3	33 46,12	3,287	8,9938	,1678	,5168	8,8642
2225	—	6 7	3	33 47,38	3,351	9,0616	,2361	,5252	8,9705
2226	Crucis	6 7	2	34 5,90	3,356	-9,0639	-8,2427	+0,5253	+8,9789
2227	—	7	3	34 19,78	3,390	9,0063	,2775	,5302	9,0240
2228	Centaui	7	2	34 44,43	3,233	8,9506	,1177	,5096	8,7025
2229	—	7	3	35 12,23	3,223	8,9154	,1102	,5083	8,6931
2230	—	7	3	35 20,69	3,215	8,9080	,1027	,5072	8,6719
2231	Crucis	7 8	3	35 27,89	3,380	-9,0760	-8,2716	+0,5289	+8,0067
2232	Centaui	7 8	3	35 39,30	3,347	9,0416	,2995	,5247	8,9461
2233	—	8	2	35 52,30	3,384	9,0282	,2879	,5230	8,9242
2234	Crucis	7 8	3	35 62,05	3,419	9,1091	,3099	,5339	9,0435
2235	—	6 7	3	36 17,24	3,437	9,1212	,3274	,5362	9,0693
2236	Centaui	7 8	2	37 1,70	3,362	-9,0465	-8,2007	+0,5266	+8,9512
2237	Ot	6 7	3	37 14,18	3,386	9,0664	,2838	,5297	8,9831
2238	—	8 9	3	37 50,19	3,300	8,9795	,2039	,5185	8,8396
2239	Crucis	7 8	3	38 16,52	3,443	9,1089	,3379	,5369	9,0430
2240	—	8	3	38 43,69	3,441	9,1050	,3374	,5367	9,0651
2241	Centaui	7 8	3	39 26,09	3,289	-8,9595	-8,2021	+0,5171	+8,8002
2242	Hydræ	6 7	3	39 55,35	3,185	8,8664	,1142	,5031	8,6197
2243	Centaui	7	3	40 34,16	3,376	9,0327	,2878	,5284	8,9323
2244	—	7 8	3	40 35,89	3,206	8,9823	,1874	,5140	8,7398
2245	Muscae	7 8	3	40 43,03	3,511	9,1425	,3990	,5454	9,0876
2246	Crucis	7 8	3	40 47,58	3,473	-9,1121	-8,3701	+0,6407	+0,0476
2247	—	7 8	3	41 21,48	3,444	9,0843	,3480	,5371	9,0095
2248	Centaui	7 8	3	41 29,86	3,322	8,9779	,2431	,5214	8,8370
2249	Crucis	—	—	41	3,487	9,1145	,3839	,5424	9,0510
2250	—	6	3	41 52,43	3,482	9,1108	,3802	,5418	9,0461

in the Southern Hemisphere &c &c

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No	Declination (South) Jan 1 1840	Annual Precession	Logarithms of				Difference from the Brisbane Catalogue			
			a	b'	c'	d''	No	Right Ascension from M C	T	Declin
2206	51 32 3,95	-19,896	+9,2456	+9,8908	-1,2984	+9,0797	4112	- 2,53	—	+ 2,94
2207	49 27 7,36	19,890	,2765	,8776	,2986	,0890	4114	- 3,54	—	+ 3,34
2208	38 26 35,52	19,889	,4216	,7905	,2986	,0900	4115	- 2,61	—	+ 1,66
2209	55 12 24,61	19,884	,1139	,9213	,2956	,0981	4117	- 1,74	—	- 9,82
2210	56 59 3,48	19,880	,1139	,9202	,2984	,1020	4118	- 2,72	—	- 7,42
2211	55 3 2,11	19,877	+9,1653	+9,9102	-1,2983	+9,1070	4122	- 2,48	—	- 11,41
2212	46 13 59,47	19,872	,3160	,8053	,2982	,1118	4127	- 2,50	—	+ 8,27
2213	38 30 38,16	19,866	,4099	,7907	,2981	,1195	4130	- 2,17	—	+ 1,49
2214	29 32 19,861	19,861	,4938	,6893	,2980	,1271	4133	—	—	—
2215	28 39 18,05	19,857	,4997	,6772	,2979	,1317	4134	- 1,50	—	+ 9,25
2216	43 13 14,74	19,838	+9,3404	+9,8314	-1,2975	+9,1524	4144	- 2,15	—	+ 2,80
2217	27 1 41,76	19,834	,5079	,6533	,2974	,1560	4149	- 2,81	—	- 2,60
2218	58 48 17,72	19,833	,0086	,9278	,2974	,1577	4148	- 2,68	- 2,29	+ 5,06
2219	58 48 19,831	19,831	,0086	,9277	,2973	,1591	4152	—	—	—
2220	53 52 63,62	19,830	,1430	,9029	,2973	,1612	4153	- 3,04	—	- 0,80
2221	46 43 35,03	19,827	+9,2810	+9,8677	-1,2973	+9,1629	4155	+ 3,99	—	- 2,68
2222	60 8 23,26	19,827	8,9542	,9336	,2973	,1629	4154	- 2,33	—	+ 5,06
2223	53 39 32,26	19,821	9,1399	,9014	,2972	,1680	4158	- 4,31	—	- 0,23
2224	47 55 55,65	19,821	9,2577	,8660	,2971	,1697	4161	- 1,72	- 2,36	+ 2,45
2225	55 4 7,78	19,821	9,1038	,9091	,2971	,1697	4160	- 2,73	- 1,34	- 4,20
2226	55 17 54,11	19,817	+9,0934	+9,9101	-1,2970	+9,1739	4163	- 2,77	- 2,30	- 6,37
2227	58 1 23,42	19,813	,0086	,9237	,2969	,1772	4164	- 2,32	—	+ 3,88
2228	39 17 55,45	19,813	,3820	,7970	,2969	,1822	4165	—	—	- 2,04
2229	36 49 14,14	19,802	,4065	,7727	,2967	,1895	4167	- 1,78	—	- 4,92
2230	35 28 20,18	19,801	,4216	,7687	,2967	,1895	4169	—	—	- 5,39
2231	56 24 29,66	19,799	+9,0453	+9,9165	-1,2966	+9,1903	4171	- 2,76	—	+ 1,32
2232	53 12 26,08	19,796	9,1303	,8983	,2966	,1927	4173	- 2,13	—	+ 0,76
2233	51 52 41,28	19,794	9,1614	,8906	,2965	,1943	4175	- 7,66	—	+ 3,43
2234	50 11 42,57	19,793	8,9395	,9288	,2965	,1961	4176	- 2,56	—	+ 6,03
2235	60 6 7,15	19,787	8,8921	,9326	,2964	,2007	4178	- 2,42	- 3,15	- 2,03
2236	53 44 4,49	19,778	+9,1038	+9,9009	-1,2962	+9,2084	4180	- 4,86	—	+ 3,08
2237	55 36 43,60	19,774	9,0453	,9109	,2961	,2115	4182	- 2,36	- 2,20	- 1,98
2238	46 24 13,70	19,766	9,2528	,8641	,2959	,2181	4185	- 2,98	—	- 1,24
2239	59 12 18,52	19,759	8,8921	,9280	,2958	,2229	4188	- 1,59	—	- 4,13
2240	58 43 0,90	19,753	8,9031	,9268	,2950	,2280	4192	- 4,01	—	+ 1,59,40
2241	43 50 34,70	19,752	+9,2878	+9,8342	-1,2954	+9,2361	4196	- 3,13	—	+ 6,13
2242	26 43 11,78	19,734	9,4914	,6167	,2952	,2411	4198	- 1,64	—	- 0,37
2243	52 29 15,74	19,725	9,0934	,8926	,2950	,2482	4201	- 2,49	—	- 2,06
2244	39 54 11,22	19,725	9,3404	,8005	,2950	,2482	4202	- 2,80	—	- 3,14
2245	61 46 6,06	19,722	8,6812	,9382	,2950	,2496	4203	- 1,41	—	+ 2,69
2246	59 31 33,10	19,720	+8,8196	+9,9286	-1,2949	+9,2610	4204	- 2,07	—	- 0,58
2247	57 17 40,33	19,712	8,9138	,9179	,2947	,2665	4206	- 1,06	—	- 0,08
2248	40 20 51,08	19,710	9,2263	,8525	,2947	,2579	4207	- 2,89	—	+ 3,97
2249	59 47 19,704	8,7781	,9291	,2946	,2620	4208	—	—	—	—
2250	59 27 22,49	19,703	8,7993	,9279	,2946	,2620	4209	- 2,54	- 2,94	+ 0,27

Mean A R and Declination of Stars

No	Names	Mag	No Obs	Right Ascen Jan 1, 1840	Annual Precess	Logarithms of			
						a	b	c	d
2251	Centaui	7	o	12 41 51,66	+ 3,379	-9,0266	- 8,2959	+ 0,5288	+ 8,9227
2252	—	7	3	43 6,72	3,340	8,9844	,2662	,5237	8,8502
2253	—	7	3	43 9,77	3,270	8,9246	,071	,5145	8,7219
2254	—	6 7	3	43 20,91	3,191	8,8620	,1466	,5089	8,5023
2255	—	8	3	43 40,62	3,390	9,0235	,3115	,5302	8,9181
2256	Centaui	7	3	43 51,67	3,421	-9,0477	- 8,3370	+ 0,0341	+ 8,9562
2257	Crucis	8	1	43 53,88	3,506	9,1138	,4031	,5418	9,0503
2258	—	7 8	3	43 53,09	,602	9,1101	,4001	,5443	9,0454
2259	Centauri	6	3	44 6,97	3,354	8,9011	,2831	,5256	8,8628
2260	Crucis	7	2	44 9,15	3,195	9,1104	,4038	,5434	9,0458
2261	Crucis	7	1	44 10,46	3,507	-9,1106	- 8,4053	+ 0,5449	+ 9,0461
2262	—	—	—	44	3,513	9,1136	,4096	,5457	9,0501
2263	—	8 9	3	44 30,62	3,508	9,1099	,4059	,5451	9,0451
2264	Centauri	8	o	44 41,24	3,304	8,9460	,2440	,5190	8,7735
2265	Crucis	7	3	44 57,47	3,479	9,0862	,3856	,5414	9,0127
2266	Centauri	8	3	45 4,97	3,387	-9,0120	- 8,3139	+ 0,5298	+ 8,8995
2267	—	6	o	45 14,95	3,463	9,0710	,3748	,5394	8,9918
2268	—	6 7	3	45 16,24	3,463	9,0715	,3748	,5391	8,9918
2269	—	6	3	46 5,62	3,371	8,9030	,2647	,5213	8,7802
2270	—	7	2	46 31,93	3,470	9,0672	,3834	,5403	8,9808
2271	Centaui	10	1	46 58,92	3,451	-9,0530	- 8,3729	+ 0,5383	+ 8,9648
2272	—	10	1	47 22,13	3,460	9,0552	,3783	,5391	8,9682
2273	—	7	3	47 36,80	3,363	8,9794	,3050	,5287	8,8425
2274	—	7	3	47 54,14	3,404	9,0094	,3381	,5220	8,8058
2275	Hydræ	7	1	47 54,59	3,202	8,8592	,1885	,5054	8,4961
2276	Centaui	7	2	48 51,59	3,449	-9,0380	- 8,3753	+ 0,5377	+ 8,9123
2277	—	7 8	3	49 7,43	3,366	8,9738	,3142	,5271	8,8824
2278	—	7	2	49 10,91	3,292	8,9177	,2680	,5176	8,7078
2279	—	8	3	49 14,13	3,417	9,0117	,3527	,5336	8,9002
2280	—	7	2	49 55,27	3,274	8,9024	,2194	,5151	8,6067
2281	Centauri	7	3	50 1,87	3,297	-8,9184	- 8,2666	+ 0,6181	+ 8,7103
2282	—	—	—	50	3,487	9,0554	,4065	,5424	8,9691
2283	—	—	—	50	3,551	9,0982	,4499	,5503	9,0301
2284	—	8	1	50 23,40	3,488	9,0555	,4072	,5426	8,9693
2285	—	—	—	50	3,566	9,1082	,4599	,5622	9,0186
2286	Centaui	8	2	50 32,06	3,466	-9,0991	- 8,3920	+ 0,6397	+ 8,9445
2287	—	8	2	51 4,22	3,322	8,9322	,2492	,5214	8,7452
2288	—	7	2	51 7,94	3,395	8,9864	,3480	,5308	8,8549
2289	—	7	3	51 14,54	3,279	8,9014	,2601	,5157	8,6637
2290	—	8	3	53 3,38	3,599	9,1118	,4860	,5662	9,0489
2291	Centaui	—	—	53	3,579	-9,0989	- 8,4737	+ 0,5538	+ 9,0315
2292	—	7 8	3	53 43,58	3,228	8,8638	,2397	,5089	8,5275
2293	—	8	3	54 4,88	3,530	9,0620	,4461	,5478	8,9796
2294	—	6	3	54 20,46	3,427	8,9919	,3772	,5349	8,8677
2295	—	7 8	3	54 49,61	3,335	8,9271	,3163	,5231	8,7353

in the Southern Hemisphere, &c &c.

cm

No	Declination (South) Jan 1 1840	Annual Precession	Logarithms of				Difference from the Brisbane Catalogue			
			<i>a'</i>	<i>b'</i>	<i>c'</i>	<i>d'</i>	No	M	C	T
2251	01 54 49,01	-19,704	+9,0934	+9,8888	-1,2946	+9,2620	4210	-	2,82	- 3,07
2252	47 13 20,45	19,684	9,1959	,8681	,2941	,2740	4216	-	3,39	+ 2,23
2253	38 48 23,23	19,683	9,3424	,7895	,2941	,2747	4217	-	2,10	+ 4,82
2254	25 52 4,85	19,680	9,4885	,6324	,2940	,2767	4219	-	2,52	+ 1,34
2255	51 39 31,85	19,674	9,0792	,8866	,2939	,2799	4220	-	2,65	- 2,21
2256	54 4 51,71	19,672	+8,9956	+9,9004	-1,2938	+9,2812	4222	-	2,78	-
2257	59 44 13,18	19,672	8,7324	,9284	,2938	,2812	4221	-	3,82	+ 3,82
2258	59 27 26,81	19,671	8,7404	,9271	,2938	,2819	4223	-	2,36	- 1,62
2259	48 4 11,06	19,667	9,1673	,8636	,2937	,2838	4226	-	0,59	- 0,76
2260	59 29 8,62	19,668	8,7634	,9272	,2937	,2861	4224	-	2,93	- 2,68
2261	59 30 17,60	19,663	+8,7243	+9,9272	-1,2936	+9,2864	4227	-	2,04	-
2262	59 44	19,661	8,6990	,9282	,2936	,2877	4229	-		-
2263	59 27 53,73	19,661	8,7243	,9269	,2936	,2877	4231	-	2,01	- 3,11
2264	42 12 17,25	19,667	9,2787	,8191	,2935	,2896	4233	-	2,85	- 4,38
2265	57 38 33,56	19,665	8,8326	,9180	,2935	,2909	4234	-	2,55	- 1,75
2266	50 29 47,36	19,650	+9,0934	+9,8790	-1,2934	+9,2934	4235	-	2,14	-
2267	56 18 24,71	19,648	8,8865	,9117	,2933	,2947	4237	-	2,60	- 3,61
2268	56 17 51,81	19,648	8,8865	,9117	,2933	,2947	4238	-	2,02	- 2,98
2269	43 16 16,90	19,633	9,2604	,8273	,2930	,3027	4240	-	1,83	- 1,59
2270	55 08 1,06	19,625	8,8761	,9094	,2928	,3070	4244	-	2,75	- 2,11
2271	54 41 35,30	19,617	+8,9245	+9,9026	-1,2926	+9,3107	4246	-	2,62	-
2272	54 44	19,612	8,9031	,9036	,2925	,3137	4248	-	6,74	-
2273	46 49 2,90	19,607	9,1643	,8635	,2924	,3161	4251	-	2,09	+ 0,42
2274	50 19 52,46	19,601	9,0682	,8768	,2923	,3191	4254	-	3,00	- 2,34
2275	25 36 26,47	19,601	9,4786	,8262	,2923	,3197	4265	-		+ 3,95
2276	53 19 4 57	19,584	+8,9494	+9,8943	-1,2919	+9,3273	4258	-	3,87	-
2277	46 11 49,09	19,577	9,1643	,8485	,2917	,3302	4262	-	1,79	-
2278	38 2 58,04	19,577	9,3222	,7800	,2917	,3302	4263	-	2,93	-
2279	50 38 36 22	19,576	9,0374	,8782	,2917	,3307	4264	-	1,10	- 3,05
2280	35 24 35,04	19,566	9,3579	,7628	,2915	,3365	4266	-		- 4,26
2281	38 14 17,15	19,561	+9,3139	+9,7814	-1,2914	+9,3376	4267	-	1,73	-
2282	55 1	19,558	8,8451	,9030	,2912	,3404	4268	-		-
2283	58 43	19,554	8,6798	,9212	,2912	,3410	4270	-		-
2284	55 2 56,66	19,554	8,8326	,9031	,2912	,3410	4271	-	1,47	- 3,00
2285	59 30	19,554	8,4914	,9248	,2912	,3410	4272	-		-
2286	53 30 41,29	19,551	+8,9085	+9,8946	-1,2912	+9,3421	4273	-	1,58	-
2287	40 31 32,67	19,542	9,2646	,8020	,2910	,3460	4278	-	1,88	- 0,60
2288	47 44 16,74	19,540	9,1072	,8685	,2909	,3466	4279	-	2,62	- 0,99
2289	36 19 1,16	19,538	9,3522	,7513	,2908	,3477	4282	-	1,73	- 6,16
2290	59 62 51,43	19,502	8,2787	,9252	,2901	,3624	4291	-	3,51	- 2,72
2291	58 52	19,501	+8,4314	+9,9227	-1,2900	+9,3629	4292	-		-
2292	27 25 26,30	19,498	9,4440	,6517	,2900	,3639	4295	-	31,96	- 3,33
2293	55 46 59,17	19,481	8,6990	,9053	,2896	,3708	4296	-	2,63	+ 0,61
2294	48 39 48,57	19,475	9,0374	,8633	,2895	,3729	4299	-	1,97	- 2,03
2295	39 50 22,61	19,465	9,2528	,7956	,2893	,3765	4300	-	2,30	- 1,87

Mean A R and Declination of Stars

No	Names	Mag	No Obs	Right Ascen Jan 1, 1840	Annual Precessn	Logarithms of			
						a	b	c	d
2296	Centauri	7.8	3	12 55 18.34	+ 3,415	-8.9797	-8.3727	+ 0.5324	1 8,8159
2297	—	8	3	55 42.11	3,455	9.0016	,4008	,5384	8,8901
2298	—	7	3	55 49.15	3,343	8.9289	,3202	,5211	8,7402
2299	—	7	2	55 56.65	3,407	8.9712	,3095	,5324	8,8402
2300	—	7	3	56 9.71	3,474	9.0144	,4144	,5408	6,9066
2301	Centauri	7	2	56 42.94	3,033	-9.0494	-8.4537	+ 0.5181	1 8,9616
2302	—	6	3	57 2.72	3,431	8.9816	,3985	,5361	8,8502
2303	—	7	3	57 36.18	3,624	9.0985	,5101	,5592	9,0117
2304	—	6	3	57 33.40	3,355	8.9305	,3416	,5267	8,7451
2305	—	6.7	3	58 1.38	3,304	8.8965	,3113	,5190	8,6551
2306	Centauri	8	2	58 1.49	3,499	-9.0201	-8.4359	+ 0.5419	1 8,9166
2307	—	7	2	58 10.70	3,609	9.0265	,4423	,542	8,9104
2308	—	7	3	58 23.71	3,561	9.0570	,4738	,5513	8,9703
2309	—	7	2	59 29.77	3,311	8.8969	,3229	,5200	8,6580
2310	—	7.8	3	13 0 10.18	3,450	8.9806	,4117	,5378	8,4100
2311	Virgo	7.8	3	1 13.79	3,167	-8.8246	-8.2636	+ 0.5006	1 8,2505
2312	Centauri	7.8	3	1 19.68	3,524	9.0195	,4598	,5169	8,9100
2313	—	7.8	3	1 29.46	3,519	9.0160	,4571	,5464	8,9110
2314	—	8	2	1 38.91	3,617	9.0707	,5146	,5583	8,9935
2315	—	7.8	2	1 52.63	3,601	9.0611	,5055	,5604	8,9801
2316	Centauri	7	3	2 4.09	3,384	-8.9325	-8.3775	+ 0.5294	1 8,7530
2317	—	6	3	2 22.17	3,671	9.0969	,5448	,5648	9,0501
2318	—	9	2	2 27.27	3,661	9.0923	,5406	,5636	9,0212
2319	—	9	2	2 35.05	3,687	9.1049	,5638	,5667	9,0113
2320	—	7	2	2 42.96	3,488	8.9924	,4422	,5426	8,8717
2321	Centauri	7	3	2 58.55	3,243	-8.8526	-8.3029	+ 0.5109	1 8,4903
2322	—	7	2	2 59.40	3,673	9.0951	,5469	,5650	9,0281
2323	—	7	2	3 56.97	3,506	8.9974	,4663	,5448	8,8808
2324	—	8	2	4 13.11	3,268	8.8617	,3225	,5143	8,6373
2325	—	7.8	2	4 19.46	3,659	9.0806	,5419	,5634	9,0084
2326	Centauri	6	3	4 23.98	3,669	-9.0854	-8.5477	+ 0.5645	+ 0.0151
2327	—	7.8	3	4 39.54	3,433	8.9520	,4166	,5357	8,7906
2328	—	7.8	2	4 49.76	3,409	8.9373	,4023	,5326	8,7651
2329	—	6.7	3	5 21.14	3,489	8.9815	,4503	,5427	8,8646
2330	—	7.8	2	6 16.60	3,640	9.0604	,5357	,5611	8,9802
2331	Centauri	—	—	6	3,711	-9.0964	-8.5722	+ 0.5695	1 9,0305
2332	—	8	3	6 37.68	3,553	9.0120	,4896	,5600	8,9061
2333	—	7.8	3	7 59.29	3,435	8.9414	,4261	,5159	8,7766
2334	—	8	3	8 3.41	3,292	8.8668	,3534	,5175	8,5617
2335	—	8	2	8 21.79	3,487	8.9685	,4579	,5424	8,8310
2336	Centauri	7.8	2	8 24.36	3,663	-9.0620	-8.5519	+ 0.5638	+ 6,9831
2337	—	—	—	8	3,480	8.9638	,4550	,5418	8,8222
2338	—	7	3	8 50.06	3,440	8.9414	,4339	,5306	8,7771
2339	—	7.8	3	9 0.69	3,660	8.9999	,4938	,5402	8,8871
2340	Virgo	7	3	9 2.60	3,173	8.8181	,3142	,5016	8,2235

in the Southern Hemisphere &c &c

cv

No	Declination (South) Jan 1 1840	Annual Precession	Logarithms of				Difference from the Brisbane Catalogue			
			a'	b'	c'	d'	No	Right Ascension from M C T	Decln	
2296	47 16 18,49	-19,465	+9,0719	+0,8534	-1,2890	-0,3801	4304	- 2,47	—	+ 0,20
2297	50 10 50,18	19,448	8,9638	,8725	,2889	,3832	4308	- 2,24	—	- 3,40
2298	40 20 11,06	19,144	9,2405	,7982	,2888	,3842	4310	- 2,23	—	- 6,42
2299	46 15 16,44	19,442	9,0969	,8458	,2887	,3852	4311	- 2,18	—	+ 1,45
2300	51 15 21,17	19,437	8,9086	,8789	,2886	,3867	4312	- 3,54	—	- 8,13
2301	54 45 11,40	19,426	+8,6902	+0,8987	-1,2884	+0,3907	4314	- 3,03	—	- 4,23
2302	47 36 9,09	19,419	9,0374	,8548	,2882	,3932	4316	- 2,68	- 2,60	+ 1,86
2303	59 0 4,29	19,406	7,9542	,9192	,2879	,3976	4319	- 2,96	—	+ 2,01
2304	40 43 45,30	19,407	9,2201	,8018	,2880	,3971	4320	- 1,41	- 2,28	- 9,22
2305	30 0 4,44	19,397	9,3243	,7448	,2877	,4005	4324	- 1,60	- 2,08	- 6,31
2306	51 53 30,55	19,394	+8,8825	+0,8822	-1,2877	+0,1015	4326	—	+ 6,66	+4,424
2307	52 36 2,31	19,394	8,7993	,8860	,2877	,4015	4325	- 2,62	- 1,18	+ 2,08
2308	55 31 40,87	19,391	8,5798	,9020	,2876	,4025	4329	- 1,70	—	- 5,86
2309	35 22 9,44	19,364	9,3117	,7462	,2870	,4111	4333	- 3,08	—	- 10,6,70
2310	47 40 7,07	19,349	8,9956	,8537	,2867	,4158	4336	- 2,85	—	- 1,26
2311	15 39 38,85	19,326	+9,5403	+0,4161	-1,2861	+0,4292	4343	- 1,86	—	- 1,31
2312	52 3 12,79	19,320	8,7559	,8411	,2860	,4246	4345	+ 3,50	—	- 2,50
2313	51 42 43,24	19,318	8,7781	,8790	,2860	,4251	4346	- 2,03	- 2,75	- 2,06
2314	56 53 17,38	19,309	8,1139	,9070	,2858	,4278	4347	—	+ 10,41	+ 0,78
2315	56 3 19,73	19,307	8,3010	,9028	,2867	,4283	4350	+ 2,40	- 1,05	- 3,53
2316	41 22 39,47	19,306	+9,1732	+0,8042	-1,2857	+0,1287	4351	- 2,86	—	+ 2,10
2317	59 3 58,69	19,297	-7,9542	,9171	,2865	,4314	4354	- 2,42	- 2,92	+ 0,31
2318	58 43 18,55	19,298	-7,7781	,9154	,2855	,4319	4355	—	- 7,39	- 54,16
2319	59 42 29,70	19,294	-8,1761	,9198	,2851	,4323	4356	- 4,48	—	- 0,57
2320	49 12 46,54	19,290	-8,8921	,8627	,2863	,4332	4358	- 2,17	—	- 0,30
2321	25 41 56,39	19,289	+9,4362	+0,6210	-1,2853	+0,4937	4369	- 12,64	—	- 0,09
2322	68 57 32,67	19,284	-7,9542	,9163	,2852	,4350	4360	- 4,10	—	+ 0,67
2323	49 50 54,33	19,260	+8 8388	,8661	,2846	,4417	4363	- 2,78	- 1,63	- 1,82
2324	28 14 50,39	19,254	+9 3997	,6582	,2845	,4434	4365	- 1,59	—	+ 4,60
2325	67 49 54,82	19,262	-7,6031	,9103	,2845	,4438	4364	- 1,18	—	+ 0,67
2326	58 14 40,56	19,249	-7,9542	+0,9123	-1,2844	+0,4447	4370	- 0,99	- 1,23	+ 0,40
2327	44 19 47,41	19,240	+0,0669	,8269	,2842	,4469	4372	- 1,54	—	- 6,43
2328	42 17 22,84	19,239	+0,1206	,8104	,2842	,4473	4373	- 2,41	—	- 0,15
2329	48 6 6,76	19,226	+8,9031	,8539	,2839	,4508	4374	- 2,64	- 3,12	+ 4,16
2330	56 12 46,63	19,203	+7,4771	,9012	,2834	,4567	4378	- 1,83	—	- 2,05
2331	59 13	19,201	-8,3802	+0,9156	-1,2833	+0,4572	4379	—	—	—
2332	51 33 56,78	19,194	+8,6,32	,8754	,2832	,4588	4381	- 2,93	—	+ 0,77
2333	43 7 52,66	19,180	+0,0645	,8156	,2824	,4672	4385	- 1,80	—	+ 2,65
2334	29 44 43,77	19,157	+0,93636	,6763	,2823	,4690	4387	- 0,90	—	- 1,41
2335	46 44 36,01	19,150	+8,9138	,8427	,2822	,4700	4389	- 2,61	—	+ 0,43
2336	56 27 14,64	19,148	-7,7781	+0,9012	-1,2821	+0,4700	4388	- 2,82	—	- 1,40
2337	46 10	19,143	+8,9345	,8385	,2820	,4713	4391	—	—	—
2338	43 12 28,86	19,138	+0,0631	,8156	,2819	,4725	4393	- 1,39	—	+ 1,61
2339	50 26 25,91	19,132	+8,6628	,8670	,2818	,4737	4394	- 1,76	—	- 4,81
2340	14 42 0,07	19,121	+0,9366	,3850	,2816	,4757	4396	- 2,09	—	- 0,50

Mean A.R. and Declination of Stars

No.	Names	Mag.	No Obs.	Right Ascen. Jan 1, 1840 •	Annual Places	Logarithms of			
						a	b	c	d
2341	Centaui	8	2	H 9 13,02	+3,528	-8,9872	-8,4829	+0,5475	+ 8,8654
2342	—	8.9	2	9 27,20	3,719	9,0846	,6815	,5701	9,0160
2343	—	7	3	10 28,04	3,742	9,0904	,6940	,5731	9,0233
2344	—	7	2	10 52,10	3,415	8,9207	,4269	,5334	8,7321
2345	—	7	2	10 56,62	3,651	9,0438	,5601	,5621	8,9571
2346	Centauri	7	3	10 57,18	3,539	-9,0126	-8,5192	+0,5550	+ 8,9088
2347	—	6.7	3	11 34,37	3,495	8,9610	,4715	,5434	8,8181
2348	—	7.8	3	11 55,48	3,767	9,0948	,6079	,5760	9,0295
2349	—	8	2	11 57,50	3,650	9,0391	,5522	,5623	8,9303
2350	Zt	7.8	3	12 19,42	3,793	9,1047	,6204	,5790	9,0120
2351	Centauri	7.8	2	12 19,55	3,572	-8,9979	-8,5136	+0,5529	+ 8,8851
2352	Z	7	2	12 21,67	3,794	9,1019	,6210	,5791	9,0432
2353	—	7	2	12 35,06	3,691	9,0062	,5235	,5552	8,8080
2354	—	8	2	12 50,09	3,395	8,9051	,4237	,5308	8,6048
2355	—	7.8	3	13 22,75	3,622	8,9684	,4904	,5468	8,8336
2356	Centauri	—	—	13	3,695	-9,0542	-8,5767	+0,5676	+ 8,9732
2357	—	7	2	13 31,53	3,533	8,9734	,4963	,5481	8,8128
2358	—	7.8	2	14 13,68	3,411	8,9049	,4364	,5329	8,7001
2359	—	7	3	14 17,68	3,559	8,9837	,5116	,5513	8,8616
2360	—	8.9	3	14 23,18	3,527	8,9674	,4958	,5474	8,8321
2361	Centauri	7.8	2	14 32,71	3,640	-9,0227	-8,5523	+0,5611	+ 8,9261
2362	—	—	—	14	3,640	9,0226	,5521	,5611	8,9259
2363	—	7.8	3	14 43,84	3,099	9,0020	,5324	,5562	8,8020
2364	—	7.8	2	14 47,00	3,640	9,0218	,5525	,5611	8,9247
2365	—	7.8	3	14 55,20	3,694	8,9984	,5307	,5556	8,8871
2366	Centauri	7.8	3	15 15,63	3,396	-8,8988	-8,4825	+0,5310	+ 8,6805
2367	—	7.8	2	15 29,71	3,601	9,0012	,5365	,5568	8,8019
2368	—	7.8	3	15 37,90	3,606	9,0016	,5877	,5570	8,8026
2369	—	7.8	2	15 47,90	3,576	8,8784	,1154	,5268	8,6201
2370	—	8	2	16 13,51	3,637	8,9656	,6056	,5486	8,8200
2371	Centauri	7.8	3	16 20,11	3,603	-8,9972	-8,5379	+0,5507	+ 8,8657
2372	—	—	—	16	3,556	8,9732	,5159	,5110	8,8440
2373	—	9	2	16 52,00	3,892	9,1248	,6688	,5902	9,0701
2374	—	7	2	16 55,24	3,369	8,8816	,4259	,5275	8,6321
2375	—	9	3	17 15,52	3,685	8,9609	,5069	,5484	8,8216
2376	Centauri	—	—	17	3,536	-8,9608	-8,5076	+0,5485	+ 8,8215
2377	—	7	2	17 26,65	3,359	8,8759	,4230	,5262	8,6113
2378	—	7	2	17 29,68	3,667	8,9757	,5213	,5523	8,8491
2379	—	8	2	17 35,79	3,847	9,1027	,6510	,5851	9,0113
2380	—	6	1	17 39,27	3,451	8,9185	,4668	,5379	8,7327
2381	—	8	1	17 42,62	3,573	-8,9777	-8,5265	+0,5530	+ 8,8528
2382	—	8	2	18 21,99	3,709	9,0389	,5916	,5693	8,9521
2383	—	9	2	18 39,35	3,852	9,1002	,6546	,5857	9,0383
2384	—	8	1	18 56,41	3,574	8,9733	,6300	,5581	8,8405
2385	Hydæ	7	2	19 13,37	3,286	8,8421	,4000	,5167	8,4777

No	Declination (South) Jan 1 1840	Annual Precession	Logarithms of				Difference from the Brisbane Catalogue			
			a'	b'	c'	d'	No	M	C	T
2341	49 1 64,98	-19,126	+8,7708	+9,8584	-1,2821	+9,4763	4397	-	1,62	-
2342	58 23 48,80	19,121	-8,4472	,9100	,2815	,4765	4399	-	1,99	-
2343	58 55 41,49	19,094	-8 5,63	,9118	,2809	,4825	4408	-	,43	-
2344	40 20 54,42	19,084	+9,12,8	,7901	,2807	,4849	4412	-	2,15	-
2345	54 57 17,74	19,082	-7,0000	,8920	,2806	,4853	4413	-	2,47	-
2346	51 64 13,21	19,082	+8,4314	+9,8748	-1,2806	+9,4954	4414	-	1,98	-
2347	46 2 14,47	19,066	+8,8976	,8367	,2803	,4888	4416	-	2,50	-
2348	59 20 34,90	19,050	-8,6628	,9128	,2800	,4911	4418	-	1,12	-
2349	54 34 33,82	19,053	-7,3010	,8893	,2800	,4911	4419	-	1,63	-
2350	60 7 54,43	19,044	-8,7324	,9160	,2797	,4935	4420	-	2,98	-
2351	50 26 27,36	19,044	+8,5663	+9,8650	-1,2797	+9,4935	4422	-	0,87	-
2352	60 8 52,58	19,042	-8,7324	,9160	,2797	,4938	4421	-	1,54	-
2353	51 20 30,59	19,037	+8,4314	,8704	,2796	,4950	4425	-	2,39	-
2354	38 0 37,36	19,031	+9,1784	,7672	,2795	,4961	4426	-	3,26	-
2355	47 6 12,95	19,016	+8,8062	,8423	,2791	,4992	4429	-	2,72	-
2356	56 2	19,013	-8,3040	+9,8960	-1,2790	+9,4996	4430	-	-	-
2357	47 43 20,46	19,011	+8,7634	,8465	,2790	,5000	4431	-	2,71	-
2358	38 47 13,39	18,992	9,1899	,7738	,2786	,5041	4433	-	1,78	-
2359	48 68 54,84	18,991	8,6434	,8645	,2785	,5046	4434	-	2,46	-
2360	47 3 2,94	18,987	8,7924	,8113	,2785	,5049	4436	-	2,01	-
2361	53 9 37,63	18,983	+7,4771	+9,8798	-1,2784	+9,5060	4439	-	2,68	-
2362	53 8	18,971	7,4771	,8797	,2784	,5060	4440	-	-	-
2363	51 2 16,28	18,979	8,3617	,8673	,2783	,5067	4441	-	2,75	-
2364	53 4 34,91	18,978	7,6021	,8792	,2782	,5071	4442	-	3,54	-
2365	50 39 58,32	18,972	8,4150	,8648	,2781	,5082	4443	-	1,55	-
2366	37 11 45,96	18,962	+9,1761	+9,7576	-1,2779	+9,5097	4444	-	2,82	-
2367	51 0 19,85	18,957	8,3424	,8665	,2778	,5112	4446	-	3,04	-
2368	51 3 8,14	18,953	8,3010	,8670	,2777	,5119	4447	-	2,62	-
2369	33 27 6,37	18,947	9 2601	,7174	,2776	,5126	4448	-	3,73	-
2370	46 58 56,06	18,940	8,7059	,8396	,2773	,5152	4450	-	1,90	-
2371	50 38 37,77	18,932	+8,8222	+9,8637	-1,2772	+9,5159	4452	-	1,86	-
2372	47 56	18,933	+8,6628	,8459	,2770	,5177	4454	-	-	-
2373	61 48 49,96	18,916	-8,9346	,9202	,2764	,5188	4456	-	2,95	-
2374	34 14 24,11	18,915	+9,2380	,7254	,2768	,5192	4459	-	1,98	-
2375	46 29 36,93	18,905	+8,7634	,8364	,2766	,5206	4462	-	3,84	-
2376	46 29	18,903	+9,7634	+9,8353	-1,2765	+9,5213	4463	-	-	-
2377	33 10 0,17	18,901	+9,2677	,7180	,2765	,5217	4464	-	2,56	-
2378	48 18 29,26	18,899	+8,6021	,8478	,2764	,5221	4466	-	2,41	-
2379	60 19 45,66	18,897	-8 8692	,9131	,2764	,5228	4468	-	2,01	-
2380	40 39 50,43	18,896	+9,0464	,7886	,2764	,5228	4467	-	2,20	-
2381	48 32 46,45	18,893	+8,5682	+9,8494	-1,2763	+9,5231	4468	-	1,85	-
2382	54 56 47,97	18,874	-8,4150	,8871	,2759	,5267	4470	-	3,52	-
2383	60 5 28,57	18,864	-8,8865	,9118	,2757	,5281	4471	-	4,99	-
2384	48 8 16,20	18,854	+8,5563	,8457	,2754	,5302	4473	-	1,20	-
2385	25 34 13,55	18,848	+9,3874	,6090	,2753	,5313	4476	-	1,93	-

Mean A R and Declination of Stars

No	Names	Mag	No Obs	Right Ascen Jan 1, 1840	Annual Precessn	Logarithms of			
						a	b	c	d
2386	K Centauri	6	3	H M S 13 19 39,44	+3,619	-8,9922	-8,5699	+0,5686	1 8,8788
2387	—	7 8	3	19 43,35	3 297	8,8155	,4062	,5151	8,1966
2388	—	7	1	19 44,11	3 821	9,0817	,6431	,5822	0,0156
2389	—	7	2	19 47,25	3 521	8,9453	,5068	,5167	8,7028
2390	—	7	1	19 47,98	3,652	9,0070	,5685	,5655	8,9033
2391	Centauri	7 8	3	20 1,10	3,561	-8,9630	-8,5261	+0,5516	+8,8281
2392	—	—	—	20	3,370	8,8769	,1410	,5285	8,6217
2393	—	7 8	1	20 9,78	3,799	9,0707	,6346	,5797	8,0985
2394	—	9	2	20 38,86	3,13	8,9386	,5071	,5457	8,7290
2395	—	8	2	20 59,32	3,897	9,1075	,6760	,5907	9,0484
2396	Centauri	—	—	22	3 567	-8,9628	-8,5313	+0,5523	+8,8274
2397	—	8	2	21 52,50	3,933	9,1174	,6909	,5917	9,0615
2398	—	8 9	3	21 57,55	3,578	8,9644	,5383	,5536	8,8310
2399	—	—	—	22	3,500	8,9284	,5051	,5441	8,7591
2400	—	8	2	22 9,49	3,474	8,9160	,4911	,5108	8,7310
2401	Centauri	7 8	3	22 34,97	3 355	-8,8634	-8,4407	+0,5257	+8,5704
2402	Virginis	7	3	22 44,48	3,174	8,8055	,3836	,6016	,1169
2403	Centauri	7	2	22 49,09	3,667	8,9567	,6355	,5823	,8170
2404	—	7	3	22 51,00	3,433	8,8959	,4747	,5307	,6813
2405	—	7 8	2	23 10,72	3,622	8,9360	,5158	,6468	,7710
2406	Centauri	—	—	23	3,578	-8,9603	-8,5419	+0,5536	+8,8242
2407	—	7	2	23 28,41	3,579	8,9602	,5129	,5638	,8241
2408	—	9	3	23 28,65	3,815	9,0632	,6159	,5815	,0889
2409	—	6 7	2	23 42,43	3,321	8,8477	,4115	,5213	,5176
2410	—	7 8	3	23 43,92	3,457	8,9045	,4886	,5387	,7018
2411	Hydræ	7	1	24 3,98	3,300	-8,8391	-8,4254	+0,5185	+8,4778
2412	Centauri	7 8	2	24 4,46	3 510	8,9270	,5131	,5453	8,7570
2413	—	7 8	3	24 5,18	3,868	9,0782	,6643	,5804	0,0000
2414	—	8	3	24 20,11	3,480	8,9127	,5002	,5416	8,7254
2415	—	7 8	3	24 24,55	3,969	9,1196	,7075	,5987	9,0648
2416	Centauri	7 8	3	24 30,21	3,461	-8,9039	-8,4923	+0,6302	+8,7012
2417	—	7	1	24 47,70	3,596	8,9633	,5635	,5558	8,8307
2418	—	(7 8)	1	24 59,90	3,647	8,9951	,5764	,5619	8,9603
2419	—	8	3	25 46,79	3,973	9,1146	,7107	,5901	0,0586
2420	—	7 8	3	25 54,86	3,608	8,9646	,5611	,5573	8,8317
2421	Centauri	—	—	25	3 611	-8,9659	-8,5626	+0,5676	1 8,8362
2422	—	—	—	25	3,608	8,9645	,5617	,5573	8,8330
2423	—	7 8	1	26 14,42	3,846	9,0644	,6624	,6850	8,0914
2424	—	—	—	26	3,919	9,0918	,6909	,6932	0,0289
2425	—	6 7	1	26 26,49	3,954	9,1049	,7040	,5970	9,0463
2426	Centauri	8	2	26 28,41	3,617	-8,9667	-8,6661	+0,5583	+8,8379
2427	—	7	1	27 0,17	3,509	8,9180	,5200	,5152	,7403
2428	—	8	1	27 33,78	3,849	9,0600	,6613	,5853	,9856
2429	—	6 7	2	27 34,89	3,539	8,9296	,6349	,5489	,7682
2430	—	7	1	27 40,87	3,518	8,9199	,6260	,5463	,7453

in the Southern Hemisphere &c &c

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No	Declination (South) Jan 1 1840	Annual Precession	Logarithms of				Difference from the Brisbane Catalogue			
			a'	b'	c'	d'	No	Right Ascension from M C	T	Declin
2386	50 20 4,01	-18,834	+8,1461	+9,8696	-1,2749	+9,5337	4476	- 1,63	- 1,42	- 2,30
2387	26 34 9,88	18,834	+9,8711	,6241	,2749	,5337	4480	- 1,57	—	+ 9,78
2388	58 41 47,49	18,830	-8,8325	,9048	,2749	,5344	4477	- 1,11	—	+ 1,09
2389	44 42 26,87	18,830	+8,8261	,8204	,2749	,5344	4481	- 1,65	—	- 1,82
2390	01 55 34,59	18,830	-7,4771	,8692	,2749	,5344	4478	- 3,32	—	+ 1,96
2391	47 2 38,00	18,824	+8,6632	+9,8374	-1,2747	+9,5354	4484	- 3,03	—	+ 2,56
2392	33 44	18,817	+9,2504	,7175	,2745	,5368	4486	—	—	—
2393	57 50 2,18	18,818	-8,7781	,9004	,2746	,5365	4485	- 1,96	—	- 2,68
2394	48 52 50,94	18,804	+8,8633	,8132	,2743	,5389	4489	- 0,08	—	+ 0,72
2395	60 46 16,69	18,794	-8,9690	,9130	,2740	,5406	4491	- 1,31	—	- 3,45
2396	47 3	18,794	+8,6232	+9,8367	-1,2740	+9,5406	4493	13,20	—	—
2397	61 30 57,24	18,768	-9,0043	,9156	,2734	,5450	4496	- 2,10	—	+ 0,46
2398	47 19 26,12	18,766	+8,5563	,8360	,2734	,5453	4498	- 1,70	—	+ 0,46
2399	42 35	18,762	+8,9085	,8020	,2733	,5460	4501	—	—	—
2400	40 45 25,98	18,769	+8,8966	,7863	,2732	,5463	4503	- 2,62	—	- 0,43
2401	31 18 45,63	18,747	+9,2718	+9,6870	-1,2729	+9,5484	4509	- 3,15	—	- 5,17
2402	12 37 14,26	18,743	9,6391	,8113	,2728	,5490	4511	- 2,40	—	+ 7,83
2403	46 26 18,63	18,739	8,6232	,8311	,2727	,5497	4510	- 2,36	—	+ 2,64
2404	37 34 12,14	18,737	9,1072	,7563	,2727	,5497	4512	- 1,05	—	- 2,62
2405	48 37 20,05	18,727	8,8325	,8096	,2725	,5514	4514	- 1,82	—	- 2,06
2406	46 56	18,722	+8,5441	+9,8344	-1,2724	+9,5520	4516	—	—	—
2407	46 56 42,44	18,718	+8,5441	,8342	,2723	,5530	4518	- 1,33	—	+ 5,81
2408	57 24 8,00	18,718	-8,8261	,8060	,2723	,5530	4517	- 1,43	—	- 4,93
2409	27 51 51,01	18,712	+9,3366	,6401	,2721	,5540	4521	- 0,83	—	- 0,49
2410	39 8 42,69	18,712	+9,0453	,7706	,2721	,5543	4520	—	- 2,03	- 1,2717
2411	26 45 43,36	18,700	+9,3711	+9,6084	-1,2718	+9,6660	4525	- 1,17	—	- 0,61
2412	42 36 47,60	18,700	+8,5761	,8006	,2718	,5660	4524	- 2,83	—	+ 2,09
2413	58 40 43,03	18,697	-8,9138	,9016	,2718	,5660	4522	- 1,82	—	+ 1,05
2414	40 29 40,56	18,691	+8,9823	,7824	,2716	,5673	4527	- 2,69	—	- 0,22
2415	61 48 21,05	18,689	-9,0531	,9149	,2716	,5676	4526	- 1,63	—	- 0,48
2416	39 7 14,12	18,687	+9,0374	+9,7699	-1,2716	+9,5579	4529	- 2,33	—	+ 2,88
2417	47 26 51,40	18,676	+8,4160	,8368	,2713	,5596	4532	- 1,71	—	+ 1,42
2418	49 58 8,10	18,670	+7,0000	,8636	,2711	,5605	4533	- 1,45	—	+ 0,33
2419	61 31 24,20	18,642	-9,0646	,9127	,2705	,5647	4535	+ 0,19	—	- 0,43
2420	47 41 43,18	18,640	+8,3010	,8877	,2704	,5660	4537	- 2,07	—	+ 2,48
2421	47 41	18,640	+8,2787	+9,8389	-1,2704	+9,5650	4530	—	—	—
2422	47 41	18,636	+8,3010	,8876	,2703	,5657	4538	—	—	—
2423	57 40 32,35	18,629	-8,8976	,8963	,2702	,5683	4569	- 3,16	—	+ 1,41
2424	59 52	18,626	-9,0043	,9063	,2701	,5673	4543	—	—	—
2425	60 51 56,87	18,623	-9,0492	,9096	,2701	,5678	4544	- 3,48	—	- 1,98
2426	47 68 44,87	18,623	+8,2041	+9,8898	-1,2700	+9,5676	4545	- 1,62	—	+ 16,66
2427	41 36 40,70	18,605	+8,8865	,7900	,2697	,5698	4547	- 3,66	—	- 1,31
2428	57 23 26,75	18,686	-8,9085	,6929	,2692	,5726	4549	- 1,81	—	- 14,98
2429	43 19 20,87	18,680	+8,7708	,8039	,2692	,5726	4550	- 1,78	- 3,83	+ 0,86
2430	41 57 38,84	18,684	+8,8633	,7926	,2691	,5733	4553	- 1,70	—	+ 0,72

Mean A R and Declination of Stars

No	Names	Mag	No Obs	Right Ascen Jan 1, 1840	Annual Precessn	Logarithms of			
						a	b	c	d
2431	Centauri	7	1	13 27 42,16	+ 3,856	-9,0623	-8,0683	+0,5861	+8,0869
2432	—	6 7	2	27 45,17	3,580	8,9464	,5528	,5539	,8007
2433	—	8 9	1	27 59,63	3,856	9,0608	,6687	,6861	,9870
2434	—	7 8	1	28 4,62	3,662	8,9809	,6892	,6637	,8639
2435	—	7	2	28 18,11	3,658	8,9786	,5879	,6632	,8609
2436	Centauri	7 8	2	28 25,78	3,839	-9,0625	-8,6626	+0,5842	+8,0763
2437	—	8	2	28 25,29	3,412	8,8733	,4837	,6330	,6238
2438	—	7 8	1	28 34,73	3,522	8,9192	,6299	,6468	,7444
2439	—	8	2	28 39,13	3,412	8,8731	,4845	,6330	,6231
2440	—	7 8	1	29 0,68	3,615	8,9705	,5838	,6017	,8460
2441	Centauri	—	—	29	3,752	-9,0139	-8,0290	+0,5743	+8,9163
2442	—	7 8	2	29 24,02	3,561	8,8482	,4633	,6252	,5345
2443	—	7 8	3	29 37,90	3,756	9,0139	,6304	,6740	,9183
2444	—	7 8	2	29 44,55	3 391	8,8627	,4795	,6303	,6007
2445	—	—	—	29	3,851	9,0514	,6693	,6856	,9711
2446	Centauri	7	2	30 9,58	3,662	-8,9737	-8,5931	+0,5637	+8,8626
2447	—	6 7	2	30 19,25	3,484	8,8983	,5184	,5421	,6907
2448	—	8	2	31 28,62	3,585	8,9371	,6636	,6615	,7801
2449	—	8	2	31 33,34	3,593	8,9404	,6672	,6655	,7916
2450	—	9	2	31 46,15	3,899	9,0617	,6899	,6909	,6890
2451	Centauri	7 8	3	31 48 43	4,008	-9,1016	-8,7298	+0,6029	+9,0172
2452	—	7 8	3	31 51,09	3,972	9,1036	,7322	,5990	,9,0269
2453	—	7	3	31 57,18	3,686	8,9360	,6649	,5546	,8,7832
2454	—	8 9	3	32 1,31	3,38	8,8457	,4749	,5261	,8,5806
2455	—	8	3	32 22,36	4,013	9,1007	,7320	,6036	,9,0422
2456	Centauri	7 8	3	32 29,05	3,548	-8,9188	-8,5605	+0,5500	+8,7474
2457	Hydræ	7 8	3	32 32,77	3,322	8,8328	,4646	,6214	,4707
2458	Centauri	7	3	32 31,98	3,848	9,0395	,6716	,6852	,0680
2459	—	7	2	32 56,06	3,698	8,9789	,6130	,6680	,8031
2460	—	7 8	3	33 13,63	3,569	8,9266	,6610	,6626	,7626
2461	Centauri	7 8	3	33 18,89	3,932	-9,0679	-8,7042	+0,6946	+8,9985
2462	—	8 9	2	33 23,79	3,933	9,0679	,7044	,6947	,9981
2463	—	6 7	3	33 27,38	3,523	8,9063	,6429	,5469	,7109
2464	—	8	3	33 28,00	3,586	8,9114	,5483	,5486	,7318
2465	—	—	—	33	3,526	8,9069	,6449	,6473	,7195
2466	Centauri	7 8	3	34 9,54	3,638	-8,9101	-8,5604	+0,5488	+8,7295
2467	—	8	2	34 10,77	3,597	8,9358	,6745	,6569	,7806
2468	—	7	3	34 16,16	3,712	8,9799	,8210	,5096	,8660
2469	—	7 8	1	34 24,54	3,508	8,8977	,6395	,5451	,7003
2470	—	8	3	35 4,63	3,914	9,0546	,6998	,6926	,9808
2471	Centauri	10	2	35 15,87	4,071	-9,1087	-8,7549	+0,6097	+9,0533
2472	—	—	—	35	8,717	8,9792	,6244	,5702	,8,8650
2473	—	7 8	3	35 36,42	3,671	8,9594	,6073	,5048	,8,8306
2474	—	7	2	35 56,69	3,415	9,0142	,6638	,5815	,8,9216
2475	—	7	2	36 6,12	4,086	9,1101	,7607	,6113	,9,0533

in the Southern Hemisphere, &c &c

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No	Declination (South) Jan 1 1840	Annual Precession	Logarithms of				Difference from the Brisbane Catalogue			
			a'	b'	c'	d'	No	M	C	T
2431	57 35 38,57	-18,584	-8,9243	+9,8938	-1,2691	+9,5733	4551	-	2,95	-
2432	45 30 28,39	18,582	+8,5441	,8214	,2691	,5736	4554	-	2,77	-
2433	67 29 34,01	18,573	-8,9243	,8931	,2689	,5748	4555	-	3,29	-
2434	49 46 52,26	18,571	-7,8451	,8499	,2688	,5751	4557	-	2,54	-
2435	49 31 50,75	18,566	-7,6990	,8481	,2687	,5761	4558	-	2,32	-
2436	56 48 16,71	18,558	-8,8976	+9,8894	-1,2686	+9,5767	4559	-	1,86	-
2437	34 13 46,31	18,558	+9,1643	,7171	,2685	,5770	4560	+	0,90	-
2438	41 66 48,34	18,557	+8,8451	,7918	,2685	,5773	4561	-	2,01	-
2439	34 14 43,51	18,551	+9,1643	,7168	,2684	,5779	4562	-	0,89	-
2440	48 40 34 06	18,544	+7,0000	,8420	,2681	,5795	4564	-	2,06	-
2441	53 19	18,529	-8,6721	+9,8703	-1,2678	+9,5810	4566	-	-	-
2442	29 1 19,41	18,515	+9,2878	,6522	,2678	,5810	4567	-	2,04	-
2443	53 19 61,23	18,520	-8,6812	,8701	,2676	,8522	4568	-	2,33	-
2444	32 17 40,89	18,518	+9,2122	,6937	,2676	,6425	4572	-	2,23	-
2445	56 47	18,509	-8,9243	,8883	,2674	,5834	4573	-	-	-
2446	49 8 3,31	18,502	-7,8451	+9,8442	-1,2672	+9,5817	4574	-	2,95	-
2447	38 56 60,24	18,495	+8,9823	,7636	,2671	,5863	4575	-	2,71	-
2448	44 46 32,07	18,467	+8,5185	,8122	,2662	,6907	4581	-	2,35	-
2449	46 12 52,82	18,463	+8 4624	,8154	,2661	,6910	4583	-	1,69	-
2450	57 48 19,76	18,446	-9,0000	,8916	,2659	,5922	4584	-	1,68	-
2451	60 55 31,79	18,444	-9,1173	+9,9056	-1,2659	+9,5922	4585	-	2,36	-
2452	61 4 48,32	18,444	-9,1238	,9062	,2659	,5926	4586	-	1,93	-
2453	44 40 48,37	18,441	+8,5186	,8111	,2658	,6928	4587	-	4,26	-
2454	28 55 0,20	18,439	-9,2787	,8487	,2657	,6931	4589	-	1,76	-
2455	60 63 52,40	18,426	-9,1238	,9010	,2664	,5948	4590	-	2,24	-
2456	42 20 4,68	18,423	+8,7482	+9,7920	-1,2653	+9,5951	4592	-	3,24	-
2457	26 43 9,36	18,421	+9,3424	,6014	,2653	,5951	4593	-	3,24	-
2458	65 67 22,73	18,421	-9,1919	,8819	,2663	,6954	4591	-	2,40	-
2459	49 58 46,72	18,407	-8,3802	,8473	,2650	,6972	4594	-	1,39	-
2460	43 22 43,79	18,398	+8,6355	,7998	,2648	,6984	4596	-	2,65	-
2461	58 25 28,70	18,393	-9,0453	+9,8038	-1,2646	+9,6089	4597	-	1,47	-
2462	58 25 28,28	18,391	-9,0492	,8932	,2646	,5992	4598	-	1,99	-
2463	40 32 21,92	18,388	+8 8451	,7762	,2646	,6992	4599	-	2,49	-
2464	41 22 8,80	18,384	+8,7993	,7830	,2645	,6995	4600	-	1,87	-
2465	40 36	18,374	+8,8388	,7759	,2642	,6013	4601	-	-	-
2466	41 15 28,50	18,365	+8,7924	+9,7815	-1,2640	+9,6024	4602	-	3,38	-
2467	44 37 30,14	18,362	+8,4314	,8088	,2639	,6027	4603	-	1,92	-
2468	50 12 12,89	18,360	-8,4771	,8477	,2639	,6030	4601	-	2,04	-
2469	39 22 5,81	18,356	+8,9031	,7644	,2638	,6036	4605	-	2,23	-
2470	57 26 3,40	18,352	-9,0334	,8872	,2632	,6066	4607	-	2,67	-
2471	61 38 42,48	18,325	-9,1761	+9,9057	-1,2630	+9,6073	4609	-	3,19	-
2472	60 12	18,325	-8,5185	,8470	,2632	,6065	4609	-	-	-
2473	47 59 6,66	18,313	-8 0792	,8820	,2628	,6087	4613	-	2,72	-
2474	63 52 33,67	18,301	-8 8633	,8680	,2625	,6102	4615	-	2,00	-
2475	61 47 2,26	18,294	-9,1903	,9056	,2623	,6110	4617	-	2,88	-

No	Names	Mag	No Obs	Right Ascen Jan 1, 1840	Annual Progress	Logarithms of			
						a	b	c	d
2476	Centaui	6 7	2	18 36 34,17	+ 3,736	-8,9818	-8,6345	10,5724	1 8,8702
2477	—	8	2	36 50,72	+ 3,784	8,9992	,6636	,5779	8,8987
2478	—	7 8	2	37 2,57	+ 3,760	8,9894	,6417	,5752	8,8849
2479	—	8	3	37 39,80	+ 3,713	8,9691	,6275	,5697	8,8192
2480	—	9	3	38 10,14	+ 4,080	9,1015	,7020	,6113	9,0448
2481	Centaui	9 10	4	38 10,21	+ 4,060	-9,1015	-8,7626	+ 10,6113	1 9,0448
2482	—	—	—	38	+ 4,090	9,1027	,7637	,6117	9,0463
2483	—	8 9	6	38 50,77	+ 4,100	9,1033	,7677	,6128	9,0472
2484	—	7 8	3	38 50,62	+ 3,652	8,9418	,6058	,5626	8,8002
2485	—	7 8	3	39 3,08	+ 3,648	8,0399	,6050	,5620	8,7967
2486	Centaui	7 8	3	39 20,03	+ 3,482	-8,8756	-8,5419	10,5418	1 8,6484
2487	—	7	3	39 44,09	+ 3,462	8,8674	,6360	,5593	8,6251
2488	—	7 8	2	39 47,04	+ 3,530	8,8953	,5643	,5188	8,7011
2489	—	7 9	2	39 51,41	+ 3,508	8,8952	,5642	,5468	8,7008
2490	—	—	—	39	+ 4,110	9,1023	,7720	,6138	9,0462
2491	Centauri	8	3	40 6,09	+ 3,934	-9,0424	-8,7130	+ 0,5946	1 8,9050
2492	—	8	3	40 29,75	+ 3,933	9,0409	,7132	,5917	9,030
2493	Hydræ	7	2	40 0,85	+ 3,307	8,8326	,5077	,5272	4,983
2494	Centaui	—	—	41	+ 3,801	8,9909	,6667	,5799	,8876
2495	—	7 8	3	41 47,21	+ 3,805	8,9903	,6691	,5803	,8870
2496	Centaui	6 7	5	41 49,31	+ 3,806	-8,9903	-8,6694	+ 0,6805	1 8,8870
2497	—	6	1	41 54,63	+ 3,668	8,9385	,6180	,6044	,7964
2498	—	7	1	42 7,24	+ 3,689	8,9461	,6265	,5669	,8109
2499	—	6	1	42 16,72	+ 3,483	8,8690	,6501	,5419	,6340
2500	—	6 7	1	42 33,53	+ 3,410	8,8436	,6283	,5327	,5196
2501	Centauri	7 8	1	42 37,94	+ 3,763	-8,9719	-8,6546	+ 0,0755	1 8,8071
2502	—	7 8	1	42 51,35	+ 3,413	8,8419	,5286	,5331	,5518
2503	—	6 7	1	43 23,00	+ 3,832	8,9914	,6810	,5834	,8045
2504	—	7	2	43 57,67	+ 3,865	9,0045	,6937	,5871	,9105
2505	—	7 8	3	44 2,10	+ 3,684	8,9384	,6282	,5663	,7980
2506	Centauri	7 8	3	44 43,99	+ 3,710	-8,9159	-8,6388	+ 0,5094	1 8,8120
2507	—	7 8	3	44 56,05	+ 3,810	8,9813	,6753	,5809	,8715
2508	—	7 8	2	45 12,80	+ 3,690	8,9370	,6326	,5670	,7964
2509	—	7	3	45 21,45	+ 3,466	8,8567	,6526	,5398	,6023
2510	—	8	3	45 42,21	+ 3,775	8,9668	,6642	,5760	,8601
2511	Centauri	7	2	45 53,06	+ 3,871	-8,9998	-8,6984	10,6878	1 8,9042
2512	—	8	1	46 1,98	+ 3,735	8,4511	,6501	,5723	,8250
2513	—	7	2	46 3,10	+ 3,889	9,0055	,7048	,5698	,9131
2514	—	6 7	1	46 4,36	+ 3,992	8,8991	,6985	,5553	,7181
2515	—	8	3	46 9,70	+ 3,814	8,9790	,6786	,6814	,8711
2516	Centauri	7 8	2	46 9,72	+ 3,616	-8,9072	-8,6009	+ 0,5582	1 8,7364
2517	—	7 8	2	47 18,28	+ 3,632	8,8752	,5795	,5480	,6601
2518	—	8	2	47 20,54	+ 3,534	8,8756	,5808	,6183	,6612
2519	Hydræ	7 8	3	47 28,06	+ 3,875	8,8237	,6296	,6283	,4790
2520	Centaui	7	3	47 41,56	+ 3,748	8,9606	,6574	,5738	,8235

No	Declination (South) Jan 1 1840	Annual Precession	Logarithms of				Difference from the Brisbane Catalogue			
			<i>a'</i>	<i>b</i>	<i>c'</i>	<i>d'</i>	No	Right Ascension		Declin
								s	t	
	o' n'	n'								"
2476	50 37 37,24	-18,280	-9,6232	+9,8484	-1,2620	+9,6127	4618	-1,92	-1,92	-2,37
2477	52 28 43,04	18,068	-8,794	,8592	,2617	,6141	4621	-2,21	—	-3,73
2478	51 27 52,92	18,261	-8,7160	,8531	,2615	,6149	4622	-0,28	—	+0,47
2479	49 19 16,36	18,239	-9,4914	,8391	,2610	,6174	4626	-3,19	—	+0,78
2480	61 18 2,05	18,220	-9,1969	,9018	,2605	,6197	4629	-3,15	-1,98	+4,87
2481	61 17 55,75	18,220	-9,1969	+9,9018	-1,2605	+9,6197	4630	-1,22	—	-1,03
2482	61 23	18,220	-9,1947	,9022	,2605	,6197	4631	—	—	—
2483	61 28 28,50	18,196	-9,2069	,9019	,2600	,6224	4633	-4,45	—	-1,13
2484	46 10 17,60	18,198	-7,3010	,8165	,2600	,6221	4634	-2,15	—	+0,51
2485	46 07 40,69	18,190	-6,0000	,8147	,2598	,6230	4636	-3,80	—	+0,22
2486	36 19 33,89	18,181	+9,0043	+9,7305	-1,2596	+9,6240	4638	-3,82	—	+1,45
2487	34 51 48,74	18,104	+9,0569	,7150	,2592	,6259	4640	-1,66	—	-6,42
2488	39 43 2,74	18,161	+8,8062	,7630	,2591	,6262	4612	-1,88	-2,83	-4,44
2489	39 42 59,57	18,161	+8,8062	,7629	,2591	,6263	4643	-3,09	-2,60	-9,03
2490	61 28	18,166	-9,2175	,9010	,2590	,6268	1641	—	—	—
2491	56 46 55,38	18,149	-9,0682	+9,8795	-1,2588	+9,6276	4646	-2,37	—	-7,43
2492	56 40 29,68	18,136	-9,0 19	,8787	,2585	,6289	4648	-4,08	—	+4,58
2493	27 33 50,89	18,114	+9,2718	,6219	,2580	,6313	4651	+62,21	—	+10,83
2494	52 0	18,109	-8,4513	,8527	,2579	,6319	4652	—	—	—
2495	52 0 49,02	18,086	-8,8633	,8522	,2573	,6342	4655	-2,12	-1,73	-2,96
2496	52 0 51,03	18,084	-8,8633	+9,8521	-1,2573	+9,6345	4656	-1,72	-1,40	-1,90
2497	46 6 6,05	18,082	-8,0000	,8132	,2572	,6344	4657	-2,18	-0,71	+3,01
2498	47 4 7,33	18,071	-8,344	,8199	,2570	,6356	4668	-2,73	—	+4,04
2499	35 37 54,95	18,069	+9,0013	,7205	,2569	,6361	4659	-1,33	-1,58	-5,80
2500	30 31 18,83	18,066	+9,1903	,6608	,2566	,6374	1661	-1,46	—	-8,53
2501	50 7 35,03	18,056	-8,7404	+9,8399	-1,2566	+9,6374	4660	-2,60	—	-2,75
2502	30 49 22,41	18,046	+9,1790	,6617	,2564	,6380	4663	—	—	-3,68
2503	52 31 42,45	18,026	-8,9191	,8540	,2559	,6406	4665	-2,40	-1,20	+1,11
2504	53 37 10,48	18,006	-8,9368	,8595	,2554	,6426	4667	-2,26	—	-1,53
2505	46 20 6,92	18,000	-8,2787	,8129	,2553	,6431	4668	-2,04	-1,98	+6,67
2506	47 20 32,41	17,974	-8,4914	+9,8194	-1,2516	+9,6457	1676	-2,82	—	+1,67
2507	51 22 10,76	17,966	-8,871	,8455	,2545	,6466	4677	-2,52	-1,99	+0,92
2508	46 18 3,11	17,965	-8,3222	,8116	,2511	,6477	4680	-2,01	—	+2,64
2509	33 48 10,75	17,951	+9,0,81	,6978	,2541	,6480	1682	-2,41	—	+6,97
2510	49 62 19,08	17,938	-8,78,9	,8355	,2538	,6493	4684	-2,13	—	-2,35
2511	53 20 31,69	17,928	-8,9956	+9,8560	-1,2535	+9,6503	4695	-2,14	-2,64	+1,76
2512	48 6 2,58	17,926	8,603	,8236	,2536	,6505	4698	-2,37	—	+7,16
2513	53 51 22,24	17,928	-9,0294	,8591	,2531	,6508	1690	-1,17	-1,51	+1,71
2514	41 12 21,35	17,923	+8,4914	,7704	,2534	,6508	1690	-1,04	—	-4,75
2515	51 14 51,25	17,920	-8,8860	,8436	,2533	,6510	4691	-2,82	—	-0,48
2516	42 24 34,71	17,920	+8 2653	+9,7805	-1,2533	+9,6510	1692	-2,69	—	+0,33
2517	37 31 50,09	17,841	+8,8388	,7354	,2524	,6548	1693	-5,68	—	-0,26
2518	37 36 37,31	17,873	+8,8325	,7360	,2522	,6556	4697	-1,9	—	-0,17
2519	26 51 4,48	17,867	+9,2601	,6054	,2521	,6560	4699	-1,89	—	-7,03
2520	48 13 65,17	17,869	-8,6990	,8228	,2519	,6568	4700	-3,49	—	+5,50

Mean A R and Declination of Stars

No	Names	Mag	No Obs	Right Ascen Jan 1, 1840	Annual Precess	Logarithms of			
						a	b	c	d
2521	Hydræ	8	3	13 17 60,70	3,376	-8,9235	-8,5309	+0,5284	+8,4790
2522	Centauri	7	2	48 25 02	3,238	8,9401	,6554	,5726	,8141
2523	—	8	3	48 45,70	3,408	8,8603	,621	,5101	,5889
2524	—	7 8	3	49 1,69	3,405	8,9303	,6440	,5126	,5169
2525	—	6 7	2	49 3,66	3,789	8,9610	,6744	,5785	,5428
2526	Centauri	7 8	2	49 23,63	3,471	-8,8496	-8,5646	+0,5401	+8,6883
2527	—	7 8	2	50 22,04	3,696	8,9215	,6438	,5677	,7768
2528	—	8	3	51 18,59	3,660	8,9003	,6328	,5685	,7465
2529	Hydræ	7 8	3	51 34,53	3,367	8,8145	,6395	,5272	,4185
2530	Centauri	8 9	3	51 45,87	4,136	9,0658	,7909	,6166	,0016
2531	Centauri	7 8	2	51 37,56	3,535	-8,8660	-9,5911	+0,5184	+8,6426
2532	—	6 7	2	51 41,20	3,684	8,8823	,6077	,5244	,685
2533	—	7 8	3	51 52,48	3,534	8,8660	,5913	,6183	,6402
2534	—	7 8	3	52 33,58	3,709	8,9228	,6222	,5693	,7756
2535	—	7 8	3	52 41,01	3,986	9,0166	,7451	,6005	,9313
2536	Centauri	7 8	2	53 6,60	3,860	-8,9726	-8,7016	+0,5866	+8,8650
2537	Hydræ	7 8	3	53 31,78	3,380	8,4117	,5186	,6289	,4581
2538	Centauri	6 7	3	53 41,23	3,616	8,8878	,6226	,6342	,7010
2539	—	6	2	53 45,96	3,450	8,8341	,6095	,5878	,5451
2540	—	—	—	54	3,006	8,8831	,6215	,5573	,6918
2541	Centauri	6 7	1	55 2,79	3,953	-8,9963	-8,7873	+0,5969	+8,9038
2542	—	6 7	2	55 7,16	3,056	8,9971	,7182	,6971	,9051
2543	—	7	2	55 11,92	4,140	9,0 40	,7951	,6170	,9869
2544	—	8 9	1	55 26,05	4,146	9,0514	,7909	,6175	,9876
2545	—	9	2	56 0,37	4,182	9,0629	,8084	,6214	,9992
2546	Centauri	7 8	1	56 19,44	3,095	-8,9079	-8,638	+0,6676	+8,7491
2547	—	7 8	3	56 50,07	3,765	8,9296	,671	,5758	,7927
2548	—	7 8	3	57 1,50	3,512	8,8166	,5962	,5455	,5938
2549	—	7 8	5	57 2,02	3,826	8,9182	,6091	,6827	,8268
2550	—	7	5	57 27,86	3,796	8,9381	,6895	,5793	,8089
2551	Centauri	7 8	2	57 40,57	3,521	-8,8490	-8,6013	+0,5470	+8,6049
2552	—	7 8	2	57 43,22	4,143	9,0159	,7046	,6173	,9769
2553	—	7	3	58 20,87	3,517	8,8151	,6007	,5462	,5952
2554	—	9	2	58 21,12	4,206	9,0017	,8173	,6239	,9985
2555	—	—	—	58	3,019	8,8151	,6021	,5104	,6953
2556	Centauri	7 8	3	59 57,94	3,691	-8,8963	-8,6542	+0,6660	+8,7279
2557	—	7	3	59 7,30	3,842	8,9610	,7198	,5891	,8501
2558	R	6 7	2	59 19,17	3,912	8,9794	,7891	,6957	,8800
2559	—	8	5	59 58,41	3,522	8,8134	,6057	,6468	,6927
2560	—	7 8	1	14 0 0,53	3,742	8,9130	,6769	,6731	,7638
2561	Centauri	7 8	2	0 27,86	4,051	-9,0092	-8,7738	+0,6076	+8,9259
2562	—	7	2	0 46,31	3,817	8,9352	,7013	,6817	,8066
2563	Lupi	8	3	0 49,48	3,770	8,9197	,6803	,5765	,7778
2564	—	7 8	2	1 9,37	3,836	8,9403	,7079	,6839	,8161
2565	Centauri	8	3	1 43,08	4,027	8,9979	,7681	,6060	,9100

No	Declination (South) Jan 1 1840	Annual Precession	Logarithms of				Difference from the Brisbane Catalogue			
			a'	b'	c'	d'	No	M	C	R
2521	26 52 30,03	-17,854	+9,2601	+9,6054	-1,2517	+9,6673	4702	-	3,52	-
2522	47 40 38,00	17,830	-8,6628	,8182	,2511	,6595	4703	+	8,01	-
2523	35 11 32,48	17,817	+9,0492	,8875	,2508	,6607	4706	-	1,53	-
2524	28 57 29,74	17,803	+9,1987	,6339	,2506	,6620	4710	-	0 26	-
2525	49 35 10,28	17,803	-8,8388	,8304	,2505	,6620	4709	-	1,94	-
2526	38 11 15,63	17,790	+9,0463	+9,6869	-1,2602	+9,6652	4711	-	1,33	-
2527	45 20 50,98	17,752	-8,3979	,7996	,2492	,6606	4716	-	2,40	-
2528	43 24 58,26	17,735	-7,8161	,7857	,2483	,6699	4720	-	2,68	-
2529	26 28 50,32	17,701	+9,2787	,6800	,2480	,6711	4726	-	1,40	-
2530	59 34 4,43	17,701	-9,2672	,8818	,2480	,6711	4721	-	-10,07	-
2531	36 41 22,87	17,701	-8,8325	+9,7227	-1,2480	+9,6711	4727	-	1,28	-
2532	39 26 37,46	17,698	+8,6682	,7492	,2479	,6714	4728	-	1,31	-
2533	36 33 11,07	17,690	+8,8325	,7210	,2477	,6721	4730	-	0,76	-
2534	45 24 31,45	17,662	-8,6051	,7979	,2470	,6744	4734	-	2,04	-
2535	55 26 16,35	17,660	-9,1563	,8609	,2470	,6747	4735	-	2,10	-
2536	51 17 3,16	17,637	-9,0000	+9,8369	-1,2164	+9,6766	4737	-	2,04	-
2537	26 4 19,74	17,621	+9,2563	,5875	,2460	,6780	4739	-	3,53	-
2538	40 38 54,95	17,612	+8,2304	,7679	,2458	,6787	4740	-	1,58	-
2539	30 51 44,64	17,610	+9,1038	,6540	,2458	,6789	4741	-	2,79	-
2540	40 2	17,617	+8,3617	,7617	,2450	,6814	4744	-	-	-
2541	53 53 49,19	17,554	-9,1271	+9,8499	-1,2444	+9,6835	4746	-	1,08	-
2542	55 53 47,09	17,554	-9,1303	,8604	,2444	,6835	4747	-	2,41	-
2543	58 60 44,68	17,551	-9,2787	,8753	,2443	,6837	4748	-	2,42	-
2544	68 69 3,68	17,540	-9,2833	,8762	,2440	,6847	4752	-	2,15	-
2545	69 42 9,33	17,511	-9,3032	,8778	,2433	,6869	4754	-	1,90	-
2546	43 65 4,14	17,509	-8,4150	+9,7827	-1,2432	+9,6872	4756	-	2,73	-
2547	46 49 12,37	17,483	-8,7781	,8037	,2428	,6892	4760	-	2,65	-
2548	34 7 48,51	17,472	+8,9242	,6896	,2423	,6901	4764	-	2,62	-
2549	49 6 18,71	17,457	-8,9395	,8187	,2420	,6912	4767	-	1,26	-
2550	47 56 6,82	17,454	-8,8692	,8108	,2419	,6914	4768	-	3,67	-
2551	34 43 32,03	17,446	+8,8866	+9,6966	-1,2417	+9,6928	4770	-	2,51	-
2552	58 30 36,45	17,443	-9,2856	,8706	,2416	,6923	4769	-	1,28	-
2553	34 11 0,76	17,417	+8,9085	,6888	,2410	,6943	4775	-	2,35	-
2554	59 49 3,80	17,414	-9,3222	,8768	,2409	,6948	4774	-	1,68	-
2555	34 12	17,397	+8,9031	,6887	,2406	,6969	4776	-	-	-
2556	42 42 20,61	17,391	-8,2563	+9,7700	-1,2403	+9,6963	4777	-	2,43	-
2557	50 44 29,01	17,382	-9,0463	,8272	,2401	,6970	4778	-	2,74	-
2558	52 40 17,49	17,374	-9,1238	,8386	,2399	,6976	4779	-	2,10	-
2559	34 7 4,72	17,347	+8,8921	,6865	,2392	,6998	4782	-	1,62	-
2560	45 9 8,88	17,345	-8,6990	,7880	,2392	,7001	4783	-	2,03	-
2561	55 37 18,52	17,324	-9,2304	+9,8635	-1,2386	+9,7014	4785	-	1,21	-
2562	48 1 5,20	17,309	8,9294	,8078	,2383	,7024	4787	-	2,68	-
2563	46 9 2,15	17,303	8,7993	,7944	,2381	,7029	4789	+	1,98	-
2564	48 40 26,93	17,295	8,9731	,8118	,2379	,7035	4792	-	2,10	-
2565	54 43 13,90	17,268	8,2148	,8473	,2372	,7065	4793	-	1,60	-

Mean A R and Declination of Stars

No	Names	Mag	No Obs	Right Ascen Jan 1, 1840	Annual Precessn	Logarithme of			
						<i>a</i>	<i>b</i>	<i>c</i>	<i>d</i>
2566	Centaui	—	—	II 2	+4,051	-9,0034	-8,7755	+0,6076	+8,9183
2567	—	7	3	2 33,60	3,971	8,9781	,7520	,5989	,8801
2568	—	7 8	2	2 51,13	4,006	8,9877	,7627	,6027	,8951
2569	—	—	—	2	4,011	8,9983	,7733	,6065	,9111
2570	—	7 8	3	3 3,28	3,661	8,8794	,6551	,5636	,6957
2571	Centaui	7 8	3	3 7,37	3,645	-8,8740	-8,6502	+0,5617	+8,6830
2572	Lupi	7 8	3	3 30,80	3,761	8,9097	,6873	,5753	,7611
2573	Centauri	7 8	2	3 39,47	3,900	8,9629	,7312	,5911	,8399
2574	X —	5 6	2	3 62,31	4,103	9,0131	,7928	,6131	,9333
2575	Librae	6	3	4 6,36	3,403	8,8025	,6827	,5119	,4425
2576	Centauri	7 8	2	4 36,81	3,980	-8,9743	-8,7570	+0,5999	+8,8754
2577	—	—	—	4	4,150	9,0238	,8069	,6180	,9181
2578	—	7 8	1	5 11,92	3,655	8,8721	,6571	,5629	,6817
2579	—	7 8	1	5 23,14	4,123	9,0130	,7998	,6112	,9154
2580	—	7	2	5 30,11	3,640	8,8667	,6520	,5611	,6690
2581	Centaui	7	2	5 31,40	3,747	-8,8999	-8,6864	+0,5737	+8,7438
2582	—	6	1	5 47,01	3,449	8,5109	,5985	,5377	,4903
2583	—	7 8	0	6 25,66	4,071	8,9956	,7860	,6097	,9091
2584	—	8	3	6 55,73	4,130	9,0108	,8052	,6169	,9117
2585	—	7 8	2	6 55,89	3,407	8,8217	,6111	,5467	,6377
2586	Centaui	7 8	2	7 30,44	4,198	-9,0280	-8,8220	+0,6230	+8,9162
2587	—	8 9	1	7 39,56	4,021	8,9770	,7723	,6043	,8816
2588	—	7	3	7 47,44	4,230	9,0365	,8319	,6263	,9068
2589	—	7 8	1	7 48,31	3,665	8,8088	,6649	,5641	,6781
2590	—	7 8	3	8 0,84	4,088	8,9961	,7925	,6115	,9090
2591	Centaui	—	—	8	4,285	-9,0193	-8,8477	+0,6310	+8,9857
2592	—	—	—	8	3,691	8,8746	,6711	,5671	,6950
2593	—	8	3	8 43,16	4,142	9,0086	,8083	,6172	,9290
2594	V —	6	1	9 11,71	4,116	8,9992	,8014	,6145	,9161
2595	—	7 8	3	9 11,75	4,092	8,9927	,7917	,6119	,9064
2596	Centaui	8	3	9 12,63	4,204	-9,0239	-8,8261	+0,6237	+8,9513
2597	Lupi	7	1	9 18,40	3,793	8,9039	,7064	,5790	,7562
2598	Centauri	6 7	1	9 45,15	3,595	8,8133	,6479	,5587	,6166
2599	—	7	2	10 5,09	3,593	8,8423	,6179	,5515	,6129
2600	Lupi	8	1	10 27,04	3,888	8,9291	,7303	,6897	,8045
2601	Lupi	6	2	10 32,50	3,776	-8,8955	-8,7030	+0,5770	+8,7409
2602	Centauri	7 8	3	10 40,85	4,205	9,0193	,8277	,6238	,9457
2603	—	7 8	2	10 61,20	3,713	8,8758	,6840	,5696	,6986
2604	—	—	—	10	3,596	8,8415	,6501	,5558	,6123
2605	—	7 8	2	11 4,63	3,656	8,8206	,6393	,5510	,5768
2606	Y Centauri	5 6	3	11 18,84	4,217	-9,0208	-8,8814	+0,6250	+8,9481
2607	—	6 7	1	11 39,16	4,096	8,9859	,7992	,6124	,8978
2608	—	8 9	1	11 44,88	4,117	8,9916	,8041	,6146	,9063
2609	Lupi	9 10	1	11 54,74	3,770	8,8899	,7083	,5763	,7313
2610	Centauri	8	3	12 2,40	3,637	8,8504	,6643	,5607	,6394

in the Southern Hemisphere, &c &c

CXVII

No	Declination (South) Jan 1 1840	Annual Precession	Logarithms of				Difference from the Brisbane Catalogue			
			a'	b'	c'	a	No	M	C	T
2566	55 16	-17,247	-9,2355	+0,8497	-1,2367	+9,7070	4794	—	—	—
2567	52 54 31,51	17,230	9,1643	,8363	,2363	,7082	4798	-3,13	-3,74	+1,25
2568	50 52 10,11	17,218	9,1959	,8415	,2360	,7091	4800	-2,14	—	+0,74
2569	54 52	17,218	9,2279	,8469	,2360	,7091	4801	—	—	—
2570	40 53 13,45	17,211	7,8451	,7501	,2358	,7095	4802	-2,22	—	+0,12
2571	40 4 43,39	17,206	+7,3010	+0,7427	-1,2367	+9,7099	4803	-1,41	—	-5,77
2572	45 13 58,43	17,191	-8,7708	,7847	,2353	,7110	4805	-2,16	—	-1,16
2573	50 24 32,18	17,182	-9,0828	,8201	,2351	,7116	4808	-0,80	—	-3,72
2574	56 19 55,89	17,170	-9,2765	,8532	,2348	,7125	4810	-1,97	-1,89	+0,75
2575	25 51 28,00	17,164	+9,2175	,6727	,2346	,7129	4812	-2,85	—	-1,74
2576	52 45 29,74	17,157	-9,1790	+9,8331	-1,2339	+9,7148	4815	-0,04	—	-2,32
2577	57 17	17,128	-9,3075	,8669	,2337	,7154	4817	—	—	—
2578	40 9 1,68	17,112	-7,6021	,7409	,2333	,7164	4819	-2,17	—	-5,61
2579	56 32 50,40	17,103	-9,2923	,8626	,2331	,7170	4820	-2,41	—	-3,08
2580	39 20 52,63	17,100	+7,6990	,7333	,2330	,7178	4821	-2,83	—	-4,30
2581	44 14 37,48	17,097	-8,7243	+0,7748	-1,2329	+9,7175	4822	-1,81	—	+2,24
2582	28 31 47,72	17,085	+9,1173	,6100	,2326	,7183	4824	-0,61	—	-1,13
2583	55 1 7,62	17,054	-9,2577	,8434	,2318	,7200	4825	-2,27	—	+7,89
2584	56 25 37,79	17,033	-9,2988	,8602	,2313	,7218	4828	-3,59	—	+4,25
2585	31 18 32,86	17,033	+8,9868	,6454	,2313	,7218	4829	-1,11	—	-2,63
2586	57 66 23,83	17,006	-9,3404	+9,8569	-1,2300	+9,7236	4830	-2,09	—	-1,65
2587	53 22 57,79	16,999	9,2201	,8331	,2304	,7240	4832	-3,02	—	+3,99
2588	58 35 51,80	16,990	9,560	,8590	,2302	,7246	4833	-1,39	—	-8,81
2589	40 6 57,99	16,993	8 0000	,7376	,2303	,7244	4834	-1,60	—	-4,35
2590	55 8 21,16	16,978	9,9742	,8423	,2299	,7254	4836	-1,90	—	-7,11
2591	59 42	16,975	-9,3802	+9,8642	-1,2298	+9,7206	4837	—	—	—
2592	41 8	16,956	8,1802	,7458	,2293	,7268	4841	—	—	—
2593	56 21 52,33	16,953	9,3096	,8481	,2292	,7270	4839	-3,88	—	+2,84
2594	55 38 41,84	16,924	9,2945	,8434	,2285	,7288	4847	-1,14	-0,60	-1,64
2595	55 3 7,99	16,928	9,2810	,8404	,2286	,7286	4846	-2,26	—	-6,18
2596	57 46 24,86	16,924	-9,3463	+9,8541	-1,2285	+9,7288	4844	-2,87	—	+4,95
2597	45 21 28,15	16,921	-8,8808	,7789	,2284	,7290	4849	-2,61	—	-5,13
2598	36 15 29,90	16,900	+8,6051	,6981	,2279	,7304	4861	-0,10	—	-2,24
2599	36 6 58,03	16,887	+8,6185	,6962	,2275	,7312	4857	-1,63	—	+0,69
2600	48 37 32,25	16,868	-9,0710	,8006	,2271	,7324	4858	-2,30	—	+8,76
2601	44 26 37,44	16,865	-8,8325	+9,7705	-1,2270	+9,7326	4869	-2,74	—	+3,70
2602	57 33 8,60	16,856	-9,3602	,8512	,2267	,7332	4860	-2,82	—	-1,52
2603	41 41 6 36	16,856	-8,6563	,7478	,2267	,7332	4861	-7,09	—	-1,80
2604	36 7	16,852	+8,4914	,6955	,2266	,7334	4862	—	—	—
2605	33 66 17,84	16,840	+8,7559	,6710	,2263	,7342	4866	-2,36	—	+6,99
2606	57 43 22,20	16,830	-9,3560	+9,8514	-1,2261	+9,7347	4864	-2,54	—	-0,21
2607	64 41 43,78	16,815	-9,2856	,6355	,2257	,7369	4867	-0,94	—	-6,84
2608	55 13 37,35	16,808	-9,3010	,8383	,2256	,7361	4868	-2,74	—	+4,95
2609	43 66 14,25	16,798	-8,8195	,7647	,2253	,7367	4870	-1,23	—	0,00
2610	37 66 33,83	16,792	+7,7781	,7122	,2251	,7371	4871	-0,49	—	+0,61

Mean A.R. and Declination of Stars

No.	Names	Mag.	No Obs.	Right Ascen. Jan 1, 1840	Annual Progress	Logarithms of			
						a	b	c	d
2611	Lupi	7	1	11 12 13,56	+ 3,867	-8,9181	-8,7325	+ 0,5874	+ 8,7864
2612	Centauri	9 10	2	12 17,77	4,113	,9971	,8121	,6173	,9148
2613	Hydræ	8	1	12 28,54	3,434	,7922	,6107	,5358	,4462
2614	Lupi	7 8	1	12 42,90	3,913	,9388	,7555	,5958	,8235
2615	Centauri	7	3	13 16,46	3,719	,8711	,6902	,5701	,6929
2616	Centauri	8	3	14 18,07	4,098	-8,9782	-8,8014	+ 0,6126	+ 8,8878
2617	—	8	1	14 34,04	4,176	,9088	,8221	,6208	,9185
2618	Lupi	7	1	14 36,36	3,831	,9007	,7251	,5839	,7563
2619	Hydræ	8	2	14 36,10	3,478	,8020	,6761	,5113	,1872
2620	Centauri	7 8	2	14 48,63	3,692	,8697	,6849	,6673	,6682
2621	Centauri	7	3	15 17,09	3,824	-8,8393	-8,6064	+ 0,5592	+ 8,6162
2622	—	7 8	4	15 22,48	4,286	9,0252	,8529	,6320	,9562
2623	Hydræ	7 8	3	16 8,56	3,409	8,7968	,0274	,5102	,4710
2624	Centauri	7 8	2	16 12,48	3,732	8,8682	,6991	,5719	,6905
2625	Lupi	—	—	16	3,783	8,8822	,7134	,5778	,7211
2626	Centauri	—	—	16	4,294	-9,0240	-8,8557	+ 0,6329	+ 8,9549
2627	—	7	1	16 45,90	3,673	8,8496	,6826	,5650	,6167
2628	Lupi	6 7	1	16 56,08	3,832	8,8918	,7286	,5804	,7476
2629	Centauri	6 7	1	16 56,28	3,681	8,8515	,6855	,6600	,6519
2630	—	7 8	3	17 6,39	4,298	9,0226	,8573	,0503	,9531
2631	Centauri	8	3	17 32,67	4,129	-8,9763	-8,8120	+ 0,6168	+ 8,8871
2632	Lupi	7 8	5	17 34,30	3,789	,8805	,7171	,5785	,7193
2633	Centauri	8	2	17 46,27	4,167	,9860	,8234	,6194	,9016
2634	—	7	1	17 52,09	3,593	,8250	,6027	,5555	,5809
2635	—	7 8	2	17 8,48	3,664	,8437	,6825	,5640	,6345
2636	Lupi	7	2	18 23,81	3,892	-8,9077	-8,7475	+ 0,5902	+ 8,7739
2637	Centauri	8	2	18 42,19	4,173	,9847	,8259	,6204	,9004
2638	Lupi	8	1	18 43,66	3,957	,9262	,7667	,5971	,8057
2639	—	6	2	19 43,80	3,944	,9187	,7640	,6959	,7953
2640	—	7 8	2	19 58,86	3,788	,8740	,7203	,5784	,7091
2641	Lupi	7 8	3	20 51,80	3,879	-8,8970	-8,7408	+ 0,5880	+ 8,7567
2642	—	7 8	2	20 59,93	3,898	,9021	,7527	,5908	,7606
2643	Centauri	7 8	2	21 8,43	4,223	,9900	,8411	,6246	,9096
2644	—	8	3	21 16,76	4,164	,9740	,8257	,6195	,8861
2645	—	6 7	3	21 18,43	3,676	,8398	,6912	,5654	,6309
2646	Lupi	7	1	21 30,90	3,820	-8,8787	-8,7314	+ 0,5821	+ 8,7214
2647	—	7 8	2	21 36,15	4,036	8,9386	,7913	,6058	,8308
2648	Centauri	7 8	2	21 36,04	3,591	,8,8161	,6688	,5552	,5635
2649	—	8	2	21 66,91	4,315	9,0122	,8649	,6350	,9112
2650	Lupi	5 6	2	21 62,74	3,986	8,9242	,7780	,6005	,8070
2651	Lupi	6 7	2	22 32,16	4,065	-8,9440	-8,8005	+ 0,6091	+ 8,8404
2652	Centauri	8	3	22 50,19	3,764	8,8601	,7177	,5756	,0833
2653	—	7 8	3	23 24,48	4,390	9,0246	,8848	,6425	,9592
2654	Lupi	7 8	3	23 26,64	3,874	8,8888	,7490	,5882	,7441
2655	—	9	3	23 36,90	3,874	8,8888	,7490	,5882	,7441

No	Declination (South) Jan 1 1840	Annual Precession	Logarithms of				Difference from the Brisbane Catalogue			
			<i>a'</i>	<i>b'</i>	<i>c'</i>	<i>d'</i>	No	Right Ascension		Declin
								<i>s</i>	<i>t</i>	
2611	47 35 1,26	-16,786	-9 0414	+9,7913	-1,2249	+9,7375	4873	-2 33	-2,79	+ 3,21
2612	55 47 55,21	16 779	-9,3181	,8406	,2448	,7378	4872	-3,49	—	+ 1,01
2613	26 35 3,50	16,773	+9,1563	,6737	,2946	,7382	4877	-0,81	—	+ 0,61
2614	50 2 21,22	16,760	-9,1492	,8070	,2243	,7390	4878	-2,04	—	- 3,31
2615	11 31 7,87	16,739	-8,6021	,7432	,2936	,7405	4884	-2,54	—	- 4,27
2616	54 17 12,26	16,683	-9,2945	+9,8298	-1,2223	+9,7416	4890	-2,23	—	- 3,79
2617	58 11 35,82	16,670	-9,3424	,8397	,2219	,7444	4891	-3,30	—	- 3,12
2618	46 47 64,44	16,670	-8,9829	,7756	,2219	,7444	4894	-2,83	—	+ 1,22
2619	28 56 38,89	16,673	+9,0453	,6052	,2220	,7442	4895	-3,28	—	- 0,86
2620	40 1 28,44	16,660	-8,4151	,7283	,2317	,7449	4897	-2,53	—	- 4,05
2621	36 42 57,74	16 638	+8 1761	+9,6961	-1,2211	+9,7462	4900	-0,84	—	+ 54,08
2622	58 30 33,89	16 631	-9,3962	,8499	,2209	,7466	4898	-1,46	—	- 0,19
2623	28 9 49,70	16 595	+9,0719	,5923	,2200	,7487	4905	-1,53	—	- 0,61
2624	41 36 19,39	16 592	-8,6812	,7402	,2199	,7489	4904	-2,34	—	- 1,82
2625	43 36	16,589	-8,8633	,7568	,2198	,7491	4906	—	—	—
2626	58 30	16,582	-9,4014	+9,8486	-1,2196	+9,7494	4907	—	—	—
2627	38 47 43,25	16,566	-8,1761	,7144	,2192	,7504	4908	-2,68	—	+ 6,10
2628	45 24 21,90	16,556	-9,9823	,7698	,2189	,7509	4909	-2,30	—	- 2,37
2629	39 8 49,19	16,556	-8,8010	,7175	,2189	,7509	4911	-1,78	—	+ 1,33
2630	58 28 24,13	16,546	-9,4048	,8475	,2187	,7515	4912	-2,20	—	0,00
2631	51 29 53,02	16,523	-9,3201	+9,8269	-1,2181	+9,7529	4915	-1,91	—	- 2,31
2632	43 36 11,37	16,523	-8,8808	,7550	,2181	,7528	4916	-1,44	-2,15	- 0,05
2633	55 21 57,19	16,513	-9,7444	,8316	,2178	,7533	4917	-2,85	—	- 8,03
2634	34 43 18,79	16,510	+8,5316	,6717	,2177	,7535	4919	-2,34	—	- 2,76
2635	38 7 28,74	16,497	-8,0000	,7063	,2174	,7542	4921	+67,71	—	- 7,11
2636	47 16 10,26	16,483	-9,0934	+9,7814	-1,2170	+9,7650	4922	-1,20	—	+ 0,69
2637	55 24 41,41	16,467	-9,3483	,8303	,2166	,7559	4923	-2,34	—	- 7,15
2638	49 23 18,89	16,464	-9,1790	,7951	,2185	,7560	4924	+ 1,28	—	- 3,12
2639	48 47 51,70	16,417	-9 1643	,7899	,2153	,7586	4928	-2,92	-2,90	+ 2,48
2640	43 8 37,56	16,403	-8,8808	,7481	,2149	,7593	4931	-2,92	—	+ 1,82
2641	46 21 18,29	16,360	-9,0756	+9,7716	-1,2138	+9,7616	4935	-1,97	—	+ 3,09
2642	47 1 1,79	16,350	9,1038	,7761	,2135	,7622	4936	-0,72	—	+ 6,07
2643	56 10 21,42	16,343	9,3802	,8310	,2133	,7625	4937	-1,49	—	- 1,22
2644	54 44 68,83	16,336	9,3483	,8233	,2131	,7629	4938	-2,10	—	- 0,24
2645	38 9 16,18	16,339	8,2304	,7024	,2132	,7627	4940	-3,08	—	+ 0,27
2646	44 5 27,61	16,323	-8,9638	+9,7535	-1,2128	+9,7636	4942	+ 1,64	—	+ 1,51
2647	51 15 23,18	16,323	-9,2601	,8031	,2128	,7636	4941	-3,39	—	+ 1,07
2648	33 57 53,02	16,323	+8,5563	,6582	,2128	,7636	4943	-1,85	—	+ 6,45
2649	58 6 25,16	16,323	-9,4216	,8399	,2128	,7636	4944	-3,09	—	+ 3,86
2650	49 44 36,01	16,309	-9,2148	,7933	,2124	,7643	4945	-2,28	—	+ 0,40
2651	51 57 59,32	16,275	-9,2866	+9,8060	-1,2115	+9,7601	4950	-3,67	—	+ 1,43
2652	41 41 31,23	16,262	8,8129	,7323	,2112	,7668	4951	-2,37	—	- 2,94
2653	59 18 20,68	16,227	9,4533	,8429	,2102	,7085	4953	-1,57	—	- 3,39
2654	46 46 11,65	16,227	9,0682	,7637	,2102	,7685	4955	-2,90	—	- 1,22
2655	45 43 26,33	16,227	9,0682	,7637	,2102	,7685	4956	-12,07	—	- 8,33

Mean A R and Declination of Stars

No	Names	Mag	No Obs	Right Ascen Jan 1, 1810	Annual Progress	Logarithms of .			
						a	b	c	d
2656	Centaui	7	1	14 23 44,08	+ 4,228	-8,9829	-8,8444	+ 0,6261	+ 8,9009
2657	Lupi	8	3	24 8,80	3,873	,8865	,7496	,5880	,7406
2658	Centaui	7 8	2	25 7,46	3,654	,8248	,6917	,5628	,5994
2659	Lupi	7 8	2	25 21,49	3,893	,8889	,7665	,5903	,7468
2660	Centaui	8	3	25 22,66	3,859	,8796	,7474	,5865	,7285
2661	Lupi	6 7	3	26 8,90	4,102	-8,9428	-8,8139	+ 0,6130	+ 8,8416
2662	Centaui	7	2	26 26,05	3,712	,88370	,7092	,5696	,6961
2663	—	7 8.	3	27 12,60	4,374	9,0082	,8835	,6409	,9387
2664	Lupi	7	3	27 18,90	3,989	8,8959	,7714	,5964	,7623
2665	Centaui	7	2	27 23,37	3,802	8,8586	,7844	,6800	,6878
2666	Lupi	7	2	27 31,83	3,998	-8,9115	-8,7878	+ 0,6019	+ 8,7907
2667	Centaui	6 7	2	26 43,54	3,731	,8394	,7155	,5718	,6433
2668	Lupi	7	3	27 46,48	3,878	,8782	,7556	,5886	,7292
2669	Centaui	7	2	28 21 81	3,701	,8294	,7094	,6683	,6198
2670	—	7	2	28 41,44	3,620	,8093	,6904	,5594	,5636
2671	Lupi	7	2	28 44,47	3,978	-8,9026	-8,7836	+ 0,5997	+ 8,7762
2672	—	—	—	28	3,977	,9021	,7882	,5996	,7755
2673	—	7 8	1	29 7,77	3,697	,8796	,7622	,5907	,7338
2674	Centaui	7 8	2	29 11,02	3,634	,8103	,6932	,6604	,5681
2675	Lupi	7	3	29 52,22	3,886	,8746	,7601	,5894	,7249
2676	Centaui	6 7	1	30 5,86	4,370	-8,9980	-8,8845	+ 0,6405	+ 8,9262
2677	Lupi	—	—	30	3,903	,8776	,7657	,5914	,7318
2678	Centaui	7 8	2	30 12,61	3,760	,8380	,7288	,5752	,6176
2679	Lupi	7	1	31 13,84	3,936	,8841	,7751	,5951	,7454
2680	—	4	3	31 19,39	3,939	,8849	,7762	,5954	,7471
2681	Centaui	7 8	2	30 26,28	3,755	-8,8362	-8,7279	+ 0,5746	+ 8,6435
2682	—	7	3	31 64,26	3,812	,8490	,7435	,5811	,6764
2683	—	7 8	2	32 18,93	3,926	,7780	,6729	,5473	,4640
2684	—	7	1	32 20,27	3,650	,7838	,6784	,5502	,4859
2685	Lupi	—	—	32	3,921	,8766	,7728	,5934	,7328
2686	Lupi	7 8	2	32 56,99	3,952	-8,8845	-8,7809	+ 0,5968	+ 8,7479
2687	Centaui	7 8	2	33 5,46	4,385	,9919	,8902	,6420	,9196
2688	—	7 8	2	33 42,05	4,253	,9581	,8587	,6287	,8711
2689	—	9	2	33 49,68	4,254	,9581	,8592	,6288	,8712
2690	Librae	7	3	33 59,70	3,445	,7576	,6589	,5372	,3726
2691	Centaui	7	2	35 31,04	3,880	-8,8502	-8,7668	+ 0,5894	+ 8,7026
2692	Lupi	8	1	35 47,45	4,189	,9360	,8446	,6221	,8390
2693	—	6 7	2	35 49,09	3,963	,8787	,7875	,5980	,7413
2694	—	7	2	35 53,50	4,134	,9221	,8310	,6164	,8170
2695	Centaui	6 7	1	37 4,24	3,721	,8137	,7272	,5707	,5994
2696	Centaui	7	2	37 9,93	3,855	-8,8473	-8,7614	+ 0,5860	+ 8,6803
2697	—	6 7	1	37 11,14	4,465	,9971	,9114	,6498	,9290
2698	—	7	2	37 27,94	4,327	,9648	,8796	,6362	,8829
2699	—	7 8	2	37 41,01	3,762	,8226	,7384	,6754	,6239
2700	—	7	2	38 40,78	3,670	,7974	,7178	,5847	,5579

No.	Declination (South) Jan 1 1840	Annual Precession	Logarithms of				Difference from the Brisbane Catalogue			
			a'	b'	c'	d	No.	M	C	R
2666	55 51 15,14	-16,211	-9,3874	+9,8258	-1,2098	+9,7694	4957	-2,15	—	-1,68
2667	46 35 45,34	16,190	-9,0682	,7614	,2092	,7704	4961	+,0,07	—	0,07
2668	36 29 51,68	16,111	-7,6021	,6806	,2079	,7728	4965	-2,78	—	3,17
2669	46 6 35,36	16,131	-9,1038	,7636	,2077	,7734	4966	+,2,70	—	2,70
2670	44 54 44,76	16,127	-9,0492	,7546	,2076	,7735	4967	-2,94	—	2,22
2671	52 21 21,63	16,086	-9,3160	+9,8033	-1,2064	+9,7756	4972	-1,02	—	+0,30
2672	38 53 30,09	16,072	-8,6682	,7022	,2061	,7783	4973	-1,82	—	0,40
2673	58 26 8,90	16,030	-9,4533	,8336	,2049	,7783	4975	-2,95	—	1,34
2674	47 19 20,31	16,027	-9,1703	,7695	,2048	,7784	4977	-2,00	—	0,08
2675	42 24 38,71	16,023	-8,9294	,7319	,2047	,7786	4978	-3,38	—	1,36
2676	49 11 59,27	16,016	-9,2355	+9,7818	-1,2045	+9,7790	4979	-3,22	—	+6,69
2677	39 30 29,80	16,020	-8,6721	,7065	,2046	,7788	4981	—	—	-4,90
2678	45 10 13,92	16,002	-9,0828	,7532	,2042	,7796	4982	-2,54	—	+0,83
2679	38 5 36,31	16,967	-8,6051	,6918	,2032	,7813	4985	—	—	+3,63
2680	34 34 37,23	16,983	+8,1139	,6551	,2028	,7820	4992	+,0,93	—	-4,45
2681	48 21 5,80	15,953	-9,2148	+9,7746	-1,2028	+9,7920	4989	-1,64	—	+5,19
2682	48 19	15,953	-9,2122	,7742	,2028	,7820	4988	—	—	—
2683	46 36 9,93	15,931	-9,1173	,7546	,2023	,7830	4993	-3,00	—	+8,77
2684	34 53 41,96	15,928	+7,9542	,6579	,2022	,7831	4994	-2,35	—	-6,82
2685	45 5 55,73	15,893	-9,1003	,7496	,2012	,7848	4998	-2,97	—	-1,61
2686	57 55 15,91	15,878	-9,4579	+9,8271	-1,2008	+9,7854	4999	-1,49	—	-0,94
2687	45 36	15,887	-9,1271	,7525	,2002	,7864	5003	—	—	—
2688	40 8 49,81	15,821	-8,8062	,7069	,1992	,7880	5006	+56,45	—	-4,47
2689	46 34 57,84	15,818	-9,1703	,7586	,1991	,7882	5005	-2,73	—	-3,60
2690	46 41 46,32	15,814	-9,1732	,7592	,1990	,7884	5007	-2,76	—	+2,53
2691	39 54 53,21	15,807	-8,7924	+9,7044	-1,1988	+9,7887	5008	+59,61	—	-18,50
2692	42 5 52,25	15,782	-8,9590	,7827	,1982	,7898	5010	-2,27	—	-4,28
2693	29 0 21,40	15,764	+8,8976	,5818	,1977	,7906	5013	-3,63	—	+4,84
2694	30 14 36,56	15,760	+8,8062	,5983	,1976	,7908	5014	-2,99	—	-3,82
2695	45 53	15,746	+9,1623	,7514	,1972	,7914	5017	—	—	—
2696	46 52 55,79	15,742	-9,1903	+9,7586	-1,1971	+9,7916	5016	-1,74	—	+1,12
2697	57 47 24,08	15,717	-9,4683	,8220	,1964	,7927	5021	-1,56	—	+1,17
2698	54 55 6,89	15,684	-9,4150	,8065	,1965	,7941	5024	-2,21	-0,61	-6,16
2699	54 55 28,18	15,677	-9,4168	,8064	,1953	,7945	5026	-1,94	—	-3,13
2700	24 18 39,23	15,674	+9,1399	,5082	,1952	,7946	5031	-3,04	—	+0,44
2701	44 11 4,11	15,586	-9,1018	+9,7341	-1,1927	+9,7984	5041	-8,07	—	-1,83
2702	53 5 35,93	15,571	-9,3877	,7934	,1928	,7990	5043	-2,74	—	-0,58
2703	46 45 36,84	15,568	+9,2095	,7529	,1922	,7992	5045	-1,46	—	+2,55
2704	51 41 59,90	15,568	+9,9522	,7851	,1992	,7992	5044	-3,50	-2,08	+0,94
2705	37 36 32,51	15,501	-8,6335	,6742	,1904	,8020	5052	-1,78	—	-3,07
2706	42 52 44,28	15,494	-9,0569	+9,7212	-1,1902	+9,8023	5053	-1,95	—	+4,90
2707	58 43 51,48	15,490	-9,5011	,8200	,1900	,8024	5051	-2,66	—	+4,66
2708	55 59 19,49	15,476	-9,4538	,8064	,1896	,8030	5057	-2,00	-0,54	-7,76
2709	39 14 56,66	15,468	-8,8195	,6889	,1894	,8034	5058	-2,24	—	+5,18
2710	36 10 9,45	15,409	-8,1139	,6464	,1878	,8058	5062	-1,17	—	-8,19

Mean A R and Declination of Stars

No	Names	Mag	No Obs	Right Ascen Jan 1, 1840	Annual Precessn	Logarithms of			
						a	b	c	d *
2701	Centaui	7	1	14 38 14,02	+3,688	-8,8017	-8,7217	+0,6068	+8,5707
2702	Lupi	8	2	38 57,55	4,018	,8837	,8047	,6010	,7546
2703	Centaui	8	2	39 10,72	3,666	,7951	,7160	,6641	,5576
2704	Lupi	7	0	40 38,00	3,860	,8363	,7613	,5455	,6639
2705	—	—	—	40	3,856	,8380	,7654	,5860	,6664
2706	Centaui	—	—	40	3,823	-8,8300	-8,7574	+0,5824	+8,6184
2707	Lupi	7	3	41 42,94	3,970	,8611	,7956	,5938	,7219
2708	—	9 10	1	42	3,912	,8441	,7897	,5957	,7010
2709	—	7 8	3	42 45,38	3,917	,8554	,7910	,5963	,7065
2710	Centaui	6 7	3	42 50,41	3,730	,8017	,7576	,5717	,5828
2711	Lupi	6 7	2	43 2,41	3,571	-8,7651	-8,7014	+0,6528	+8,4632
2712	Circini	6 7	3	43 18,51	4,55	,9963	,9342	,6282	,9815
2713	Lupi	8	3	44 1,60	3,639	,7779	,7181	,5610	,5116
2714	—	8	3	44 7,57	3,638	,7774	,7181	,5609	,5115
2715	Circini	—	—	44	3,948	,8608	,7952	,5964	,7003
2716	Lupi	7	1	44 37,95	3,651	-8,7791	-8,7216	+0,5624	+8,5210
2717	Hydras	6	1	44 63,40	3,631	,7627	,6962	,6479	,4203
2718	Lupi	6 7	1	44 67,06	4,204	,9120	,8560	,6287	,8096
2719	—	8	1	45 22,33	4,544	,9434	,8689	,6870	,8583
2720	—	6 7	2	45 42,53	4,025	,8667	,8133	,6048	,7826
2721	c Lupi	7	1	45 51,34	4,154	-8,8976	-8,8449	+0,6185	+8,7869
2722	—	7	2	46 26,85	3,782	,8063	,7549	,6777	,6021
2723	—	7	2	46 47,35	3,624	,7681	,7190	,6592	,4924
2724	—	7 8	2	47 12,18	4,066	,8721	,8248	,6092	,7446
2725	—	—	—	48	4,133	,8869	,8116	,6163	,7698
2726	Lupi	7	3	48 5,12	4,172	-8,8950	-8,8509	+0,6203	+8,7852
2727	—	7 8	3	48 13,43	4,070	,8702	,8267	,6096	,7427
2728	Centaui	7 8	3	48 51,00	3,902	,8279	,7806	,5913	,6601
2729	Lupi	7	4	49 9,57	3,752	,7917	,7514	,5743	,5736
2730	—	7	4	49 16,10	3,913	,8291	,7899	,5926	,6647
2731	Lupi	7	2	49 47,37	4,389	-8,9307	-8,9022	+0,6124	+8,8663
2732	—	7	3	49 51,43	3,691	,7541	,7167	,5762	,4542
2733	—	9 10	2	48 62,27	3,818	,8097	,7728	,5841	,6218
2734	—	8	2	50 38,39	4,199	,8940	,8598	,6231	,7863
2735	—	7	3	51 6,31	3,763	,7892	,7566	,5756	,5730
2736	Circini	—	—	52	4,471	-8,9498	-8,9320	+0,6504	+8,8730
2737	—	7	4	52 24,00	4,481	,9616	,9210	,6214	,8766
2738	Lupi	7 8	2	52 29,44	4,489	,9424	,9151	,6473	,8626
2739	—	7 8	3	53 35,70	3,720	,7731	,7497	,5705	,5363
2740	—	6 7	3	54 69,51	4,105	,8589	,8110	,6133	,7318
2741	Hydras	7 8	3	55 0,94	3,653	-8,7350	-8,7170	+0,5506	+8,4020
2742	Circini	7 8	3	55 12,79	4,70b	,9896	,9726	,6726	,9293
2743	Lupi	7	3	55 31,78	4,291	,8661	,8705	,6264	,7792
2744	—	7 8	2	55 53,89	3,603	,7428	,7282	,5567	,4412
2745	Circini	7 8	2	55 54,46	4,747	,9962	,9811	,6764	,9372

No	Declination (South) Jan 1 1840	Annual Precession	Logarithms of				Difference from the Brisbane Catalogue			
			<i>a'</i>	<i>b'</i>	<i>c'</i>	<i>d'</i>	No	Right Ascension from M O T		Decln
								<i>s</i>	<i>s</i>	<i>n</i>
2701	36 57 34,07	-15,408	-8,9979	+9,619	-1,1878	+9,4058	5063	- 1,26	—	- 4,41
2702	47 57 47,56	15,394	-9,2645	,7564	,1873	,8064	5064	- 1,97	—	- 0,75
2703	34 52 39,67	15,382	-8 0414	,6126	,1470	,8069	5066	- 1,70	—	- 7,49
2704	42 9 11,69	15,301	-9 0493	,7098	,1847	,8102	5074	- 1,60	—	+ 0,06
2705	42 19	15,300	-9,0569	,7112	,1847	,8102	5075	—	—	—
2706	41 9	15,300	-8,9912	+9,7011	-1,1847	+9,8102	5076	—	—	—
2707	46 5 41,01	15,210	-9,2227	,7388	,1810	,8123	5082	- 2,22	—	+ 4,87
2708	46 1	15,179	-9,1903	,7202	,1812	,8149	5088	—	—	—
2709	45 11 39,65	15,179	-9,1959	,7304	,1812	,8149	6089	- 1,82	—	- 0,45
2710	37 8 24,10	15,175	-8,6902	,6603	,1811	,8160	6090	- 1,94	—	- 3,26
2711	29 64 50,06	15,167	+8,6990	+9,5771	-1,1803	+9,8153	5091	- 1,58	—	- 3,05
2712	59 27 1,62	15,144	-9,5366	,8136	,1802	,8162	5092	- 1,58	- 0,26	- 0,97
2713	33 1 55,49	15,110	+7,7781	,6140	,1793	,8175	6098	- 1,95	—	+ 1,48
2714	32 58 54,31	15,102	+7,7781	,6152	,1791	,8178	6099	- 0,93	—	+ 8,86
2715	44 68	15,075	-9,2014	,7268	,1783	,8188	6100	—	—	—
2716	33 28 57,12	15,075	-7,3010	+9,6182	-1,1783	+9,8188	6102	- 3,44	—	+ 2,06
2717	27 41 22,10	15,060	+8,8863	,5434	,1778	,8194	6103	- 2,54	—	+ 0,78
2718	52 9 16,19	15,062	-9,4082	,7738	,1776	,8197	6103	- 2,24	- 1,34	+ 0,12
2719	55 15 29,97	15,029	-9,4728	,7899	,1761	,8206	6110	- 2,05	—	- 1,88
2720	47 13 26,02	15,014	-9,2810	,7405	,1760	,8211	6112	- 4,94	—	- 0,81
2721	50 47 35,85	15,002	-9,3802	+9,7636	-1,1761	+9,8215	6113	- 2,86	—	+ 1,30
2722	38 45 40,29	14,967	-8,8976	,6701	,1751	,8228	5118	- 2,51	—	+ 5,63
2723	31 58 57,95	14,948	+8,1761	,5969	,1746	,8235	5120	- 1,79	—	- 1,95
2724	48 11 51,48	14,921	-9,3201	,7444	,1738	,8246	5122	- 1,24	—	- 4,72
2725	49 55	14,874	-9,3692	,7544	,1724	,8262	5127	—	—	—
2726	50 55 42,37	14,870	-9,3944	+9,7606	-1,1723	+9,8203	5128	- 0,69	—	- 0,20
2727	48 10 29,14	14,862	-9,3248	,7426	,1721	,8206	5130	- 2,35	—	+ 4,03
2728	42 49 26,57	14,827	-9,1461	,7017	,1710	,8279	5134	- 2,70	—	- 0,67
2729	37 14 4,51	14,811	-8,7993	,6006	,1706	,8284	5136	- 2,04	—	- 2,18
2730	43 9 36,77	14,799	-9,1614	,7036	,1703	,8288	5138	- 0,67	—	+ 1,94
2731	55 36 57,56	14,768	-9,4955	+9,7941	-1,1693	+9,8300	5139	- 0,65	—	+ 2,43
2732	30 4 0,97	14,768	+8,0682	,5672	,1613	,8301	5141	- 2,19	—	- 5,67
2733	40 26 19,15	14,760	-9,0374	,6793	,1641	,8312	5142	—	+63,81	- 1,02
2734	51 16 39,41	14,724	-9,4116	,7584	,1680	,8315	5144	- 7,50	—	+ 6,32
2735	37 24 57,81	14,693	-8,8320	,6490	,1671	,8326	5148	- 2,16	—	- 0,10
2736	66 53	14,617	-9,5263	+9,7861	-1,1649	+9,831	5154	—	—	—
2737	67 3 49,00	14,613	-9,5289	,7863	,1647	,8313	5155	- 1,90	—	- 1,97
2738	56 16 53,95	14,609	-9,5172	,7828	,1646	,8354	5156	- 0,17	—	+ 4,93
2739	35 18 38,17	14,545	-8,6434	,6290	,1627	,8375	5155	- 2,50	—	- 0,28
2740	48 10 11,93	14,461	-9,3679	,7311	,1602	,8403	5170	- 2,13	—	- 4,63
2741	27 39 59,10	14,461	+8,7924	+9,6253	-1,1602	+9,8403	5173	- 1,54	—	- 2,52
2742	60 30 11,07	14,445	-9,6888	,7976	,1597	,8408	5172	- 3,14	—	- 1,42
2743	51 24 8,22	14,425	-9,1346	,7602	,1591	,8415	5174	- 1,82	—	+ 1,14
2744	29 55 39,30	14,108	+8,4624	,5550	,1586	,8420	5177	- 2,16	—	+ 0,47
2745	61 0 35,03	14,400	-9,5999	,7984	,1584	,8423	5176	- 0,56	—	+ 2,55

No	Names	Mag	No Obs	Right Ascen Jan 1, 1840	Annual Precessn	Logarithms of			
						a	b	c	d
2746	Lupi	7	2	14 56 12,60	+3,736	-8,7701	-8,7567	+0,6723	+8,5357
2747	—	6 7	2	66 19 88	4,119	,8583	,8464	,6148	,7327
2748	Circini	7 8	3	66 30,15	4,690	,9616	,9497	,6618	,8926
2749	Lupi	7 8	2	67 26,62	3,943	,8145	,8056	,6958	,6492
2750	—	9 10	1	58 22,46	4,486	,9354	,9283	,6619	,8566
2751	Lupi	6 7	2	57 51,43	3,864	-8,7925	-8,7855	+0,6869	+8,6005
2752	—	7	3	58 7,33	3,921	,8072	,8011	,6934	,6349
2753	—	7 8	2	58 33,71	3,776	,7732	,7687	,6770	,6625
2754	—	7 8	2	58 56,33	3,748	,7660	,7630	,6798	,6336
2755	—	6	2	59 23,14	4,403	,9126	,9116	,6487	,8246
2756	Circini	7 8	3	15 0 4,63	4,783	-8,9900	-8,9898	+0,6797	+8,9324
2757	Lupi	9	2	0 3,45	3,961	,8096	,8108	,6970	,6444
2758	—	8	3	0 42,75	4,282	,8775	,8813	,6296	,7711
2759	—	8	4	0 45,06	4,047	,8194	,8237	,6028	,6664
2760	x ¹	7	1	0 52,63	4,128	,8469	,8014	,6157	,7190
2761	Circini	7	1	1 5,65	4,766	-8,9816	-8,9872	+0,6781	+8,9224
2762	Lupi	7 8	3	0 48,49	4,008	,8189	,8242	,6029	,6659
2763	—	7 8	1	1 27,56	4,112	,8414	,8482	,6140	,7099
2764	—	7 8	2	1 51,81	3,668	,7460	,7540	,6863	,4827
2765	—	6 7	2	3 3,87	3,752	,7563	,7689	,6743	,5203
2766	δ ¹ Circini	6 7	3	3 45,59	4,765	-8,9706	-8,9863	+0,6771	+8,9096
2767	Lupi	7 8	3	3 52,56	3,969	,7997	,8157	,6976	,6319
2768	δ ² Circini	—	—	4	4,766	,9698	,9866	,6772	,9087
2769	—	6	3	4 4,94	4,762	,9710	,9877	,6778	,9102
2770	Librae	6	2	4 25,76	3,630	,7092	,7269	,6478	,8448
2771	Lupi	8	2	4 36,97	3,986	-8,8038	-8,8226	-0,6005	+8,6421
2772	—	7 8	3	4 47,94	4,121	,8336	,8631	,6150	,7011
2773	—	7 8	3	5 11,69	4,122	,8328	,8636	,6161	,7002
2774	—	6 7	1	5 31,06	3,968	,7973	,8193	,6946	,6303
2775	—	8	2	5 39,44	3,787	,7670	,7795	,6783	,5321
2776	Lupi	7	3	6 44,16	4,001	-8,8042	-8,8269	+0,6022	+8,6453
2777	—	7 8	2	5 48,08	4,118	,8801	,8531	,6147	,6962
2778	Circini	7	2	6 0,99	4,744	,9609	,9851	,6761	,8980
2779	Lupi	7 8	2	6 2,71	3,985	,7885	,8125	,6949	,6122
2780	Circini	8	3	6 23,93	4,722	,9054	,9810	,6741	,8910
2781	Circini	—	—	6	4,724	-8,9549	-8,9814	+0,6743	+8,8004
2782	Lupi	7	2	6 54,82	4,398	,8877	,9153	,6433	,7945
2783	—	7 8	2	7 3,92	4,126	,8280	,8658	,6154	,6944
2784	—	7 8	1	7 28,40	4,126	,8269	,8662	,6155	,6981
2785	—	6 7	2	7 39,97	3,902	,7767	,8068	,5913	,5891
2786	Lupi	8	2	7 48,62	3,913	-8,7785	-8,8004	+0,5926	+8,6940
2787	Circini	7	1	8 34,87	4,499	,9034	,9373	,6531	,8197
2788	—	7	2	9 21,26	3,793	,7492	,7859	,6793	,6237
2789	—	8	2	9 21,93	4,408	,8821	,9188	,6442	,7885
2790	Circini	8	2	9 42,32	4,561	,9125	,9607	,6591	,8340

No	Declination (South) Jan 1 1840	Annual Precession	Logarithms of				Difference from the Brisbane Catalogue			
			<i>a'</i>	<i>b'</i>	<i>c'</i>	<i>d'</i>	Right Ascension from			Declin
							No	M	C	
2746	35 38 17,96	-14,388	-8,7243	+9,6216	-1,1680	+9,8427	5178	-	1,96	- 6,47
2747	48 27 49,74	14,380	9,3692	,7302	,1677	,8429	5179	-	2,23	+ 2,39
2748	58 31 3,68	14,364	9,6653	,7863	,1673	,8435	5180	-	1,58	+ 4,91
2749	43 5 14,62	14,315	9,2018	,6886	,1658	,8450	5182	-	2,96	+ 4,60
2750	56 29 52,03	14,286	9,5378	,7743	,1549	,8469	5183	-	36,24	+ 56,39
2751	39 57 41,78	14,286	-9,0719	+ 9,6609	-1,1649	+9,8459	5184	-	1,81	- 5,88
2752	42 14 46,64	14,270	9,1790	,6802	,1544	,8464	5186	-	2,71	- 0,25
2753	36 58 3,38	14,245	8,9808	,6310	,1537	,8472	5188	-	1,88	- 0,54
2754	35 48 60,82	14,221	8,7781	,6185	,1529	,8480	5191	-	2,12	- 4,81
2755	54 43 54,45	14,188	9,5145	,7620	,1519	,8490	5193	-	2,42	- 7,28
2756	61 7 52,29	14,175	-9,6128	+9,7921	-1,1515	+9,8494	5194	-	31,90	- 3,67
2757	43 6 30,62	14,151	,2227	,6837	,1508	,8501	5201	-	1,14	+ 5,88
2758	51 29 28,25	14,109	,4504	,7412	,1495	,8514	5203	-	2,30	- 2,33
2759	44 39 53,22	14,101	,2810	,6944	,1492	,8516	5206	-	2,19	+ 3,27
2760	48 7 42,53	14,097	,3784	,7193	,1491	,8517	5207	-	2,37	+ 5,53
2761	60 44 0,66	14,080	-9,6117	+9,7874	-1,1483	+9,8522	5209	-	2,56	- 1,82
2762	44 39 56,15	14,085	9,2810	,6939	,1487	,8521	5211	-	17,49	- 0,32
2763	44 36 21,57	14,059	9,3692	,7146	,1480	,8529	5215	-	0,58	+ 2,42
2764	33 1 39,32	14,038	8,3979	,6821	,1473	,8536	5218	-	3,02	- 3,12
2765	35 29 2,07	13,903	8,8062	,6070	,1460	,8557	5221	-	1,62	- 5,43
2766	60 18 9,96	13,913	-9,6128	+9,7804	-1,1434	+9,8572	5225	-	2,56	- 2,98
2767	42 46 53,04	13,909	-9,2330	,6736	,1438	,8573	5230	-	1,61	+ 5,67
2768	60 16	13,897	-9,6138	,7798	,1429	,8577	5228	-		
2769	60 21 24,13	13,897	-9,6149	,7802	,1429	,8577	5229	-	2,76	- 3,16
2770	25 36 19,31	13,880	+8,8976	,4760	,1424	,8581	5233	-	1,77	+ 0,26
2771	43 32 43,20	13,863	-9,2648	+9,6783	-1,1418	+9,8586	5234	-	2,38	+ 4,43
2772	47 28 18,18	13,850	9,3802	,7070	,1416	,8590	5235	-	0,13	- 30,73
2773	47 26 37,40	13,829	9,3802	,7063	,1408	,8596	5238	-	2,05	- 2,09
2774	42 53 1,07	13,808	9,2430	,6712	,1401	,8602	5241	-	1,84	+ 4,09
2775	36 32 52,25	13,799	8,9191	,6180	,1399	,8604	5244	-	2,72	+ 5,39
2776	43 34 10,26	13,795	-9,2787	+9,6789	-1,1397	+9,8606	5245	-	2,39	+ 1,42
2777	47 15 56,40	13,791	,3784	,7038	,1396	,8607	5248	-	2,03	+ 0,84
2778	59 64 5,68	13,770	,6138	,7742	,1389	,8613	5249	-	1,45	- 3,59
2779	41 40 14,01	13,774	,2041	,6608	,1391	,8612	5250	-	1,70	+ 0,66
2780	59 32 24,24	13,749	,6095	,7719	,1383	,8619	5251	-	3,38	- 2,50
2781	69 32	13,732	-9,6107	+9,7713	-1,1377	+9,8623	5253	-		
2782	53 46 12,37	13,715	,6211	,7420	,1372	,8628	5254	-	1,49	+ 0,33
2783	47 18 22,50	13,710	,3838	,7016	,1370	,8629	5257	-	1,64	+ 2,92
2784	47 17 3,93	13,685	,3856	,7006	,1362	,8637	5261	-	2,99	- 0,28
2785	40 28 6,92	13,672	,1614	,6463	,1368	,8640	5262	-	2,89	- 2,73
2786	40 49 20,75	13,659	-9,1761	+9,6490	-1,1354	+9,8644	5264	-	0,68	- 2,05
2787	55 32 39,03	13,608	9,6663	,7482	,1338	,8658	5267	-	2,62	- 4,00
2788	36 30 5,20	13,581	8,9494	,6049	,1323	,8670	5273	-	1,09	- 1,93
2789	63 42 10,87	13,561	9,5264	,7367	,1323	,8670	5271	-	1,95	+ 0,98
2790	66 33 33,39	13,535	9,5763	,7611	,1315	,8677	5275	-	2,06	+ 1,53

Mean A R and Declination of Stars

No.	Names	Mag	No Obs	Right Ascen Jan 1, 1840	Annual Precessn	Logarithms of			
						a	b	c	d
2791	Lupi	7 8	1	15 9 56,76	+ 4,132	-8,8209	-8,8596	+0,6162	+ 8,6863
2792	_____	7 8	2	10 27,50	4,381	,8728	,9138	,6416	,7753
2793	Circini	6 7	2	10 41,85	4,699	,9364	,9784	,6720	,8683
2794	Lupi	7	2	11 3,21	4,160	,8231	,8663	,6191	,6924
2795	_____	7	2	11 6,11	3,905	,7676	,8109	,5916	,5773
2796	Lupi	7	4	11 29,44	4,682	-8,9110	-8,9558	+0,6011	+ 8,8335
2797	_____	7	2	11 34,69	4,301	,8522	,8976	,6336	,7438
2798	_____	—	—	11	4,583	,9106	,9562	,6611	,8330
2799	_____	7	1	12 16,91	3,681	,7184	,7665	,5600	,4382
2800	Librae	7 8	2	13 3,01	3,616	,7039	,7515	,5582	,3804
2801	Lupi	7	2	13 57,61	4,374	-8,8601	-8,9144	+0,6409	+ 8,7596
2802	_____	6 7	1	14 5,26	4,130	,8078	,8626	,6169	,8696
2803	Librae	8	2	14 27,62	3,574	,6929	,7486	,5531	,3462
2804	Lupi	7 8	2	14 32,90	3,780	,7320	,7883	,5775	,4946
2805	_____	8	2	15 20,33	3,790	,7318	,7912	,5786	,4974
2806	Tui Aust	—	—	15	5,266	-9,0209	-9,0817	+0,7215	+ 8,9796
2807	Lupi	8	2	15 39,55	3,894	,87526	,8131	,6904	,6545
2808	_____	7 8	2	15 44,01	4,076	,87911	,8619	,6101	,6403
2809	_____	7 8	2	15 52,74	4,224	8,8229	8,8810	,6257	,7000
2810	_____	7	2	16 4,02	3,803	,8734	,87946	,5801	,5022
2811	Lupi	—	—	16	3,793	-8,7297	-8,7928	+0,5790	+ 8,4952
2812	_____	8 9	3	17 50,08	4,062	,7818	,8,08	,0087	,6263
2813	_____	8	2	17 56,94	4,288	,8293	,8991	,6322	,7147
2814	_____	8	2	18 2,71	3,728	,7123	,7818	,6715	,4484
2815	_____	7	2	18 3,56	3,837	,7338	,8036	,6840	,5141
2816	Lupi	6	2	18 17,93	4,129	-8,7948	-8,8656	+0,6168	+ 8,6531
2817	_____	7	2	18 55,49	4,415	,8525	,9259	,6449	,7539
2818	_____	6 7	4	18 56,83	3,868	,7376	,8109	,5875	,5277
2819	Librae	7	2	19 16,07	3,618	,6884	,7628	,5585	,3612
2820	Lupi	—	—	19	3,869	,7365	,8117	,5876	,6267
2821	Lupi	7	2	19 41,75	3,970	-8,7569	-8,8328	+0,5988	+ 8,5772
2822	_____	6 7	1	19 44,62	4,181	,8012	,8776	,6213	,6680
2823	_____	8	2	20 37,38	3,736	,7066	,7861	,5724	,4431
2824	_____	8	2	20 49,14	4,298	,8224	,9029	,6333	,7074
2825	_____	7	2	21 16,02	3,744	,7063	,7884	,5733	,4457
2826	Lupi	7 8	3	21 15,60	4,081	-8,7755	-8,8576	+0,6108	+ 8,6214
2827	_____	7	1	21 40,45	3,876	,7815	,8152	,5884	,5217
2828	_____	7	3	22 49,71	3,935	,7402	,8285	,5949	,5478
2829	_____	7 8	2	23 52,38	3,904	,7308	,8230	,5915	,5280
2830	Librae	8	2	24 25,81	3,546	,6628	,7670	,6497	,2833
2831	Lupi	6 7	2	25 16,27	4,071	-8,7613	-8,8588	+0,6097	+ 8,6020
2832	Normæ	7	2	25 54,28	4,008	,8484	,9486	,6540	,7663
2833	Lupi	7	2	26 5,50	3,963	,7363	,8372	,5980	,5491
2834	_____	7	3	26 32,30	3,963	,7351	,8376	,6980	,5476
2835	_____	—	—	26	3,968	,7359	,8387	,6986	,5498

No	Declination (South) Jan 1 1840	Annual Precession	Logarithms of				No	Right Ascension from		Difference from the Brisbane Catalogue
			a'	b'	c'	d'		M	C	
2791	47 10 25,24	-13,527	-9,3909	+9,6947	-1,1312	+9,8680	5279	-	2,26	- 1,79
2792	53 0 59,48	13,488	-9,5185	,7306	,1299	,8690	5282	-	1,09	+ 3,46
2793	58 44 11,41	13,471	-9,6107	,7694	,1294	,8695	5283	-	2,16	+ 4,65
2794	47 43 19,15	13,449	-9,4116	,6961	,1287	,8700	5288	-	-	+ 7,09
2795	40 9 57,59	13,449	-9,1643	,6365	,1287	,8700	5287	-	1,44	- 7,47
2796	56 45 2,49	13,423	-9,5832	+9,7484	-1,1278	+9,8707	5289	-	2,94	- 1,25
2797	61 9 17,26	13,414	-9,4871	,7172	,1276	,8710	5290	-	1,42	+ 1,43
2798	56 45	13,410	-9,6843	,7479	,1274	,8711	5292	-	-	-
2799	31 36 27,68	13,383	-8,3222	,6444	,1266	,8717	5295	-	1,47	+ 1,06
2800	28 45 41,39	13,323	+8,3010	,5053	,1246	,8733	6300	-	1,15	+ 2,47
2801	52 29 4,78	13,282	-9,5198	+9,7202	-1,1226	+9,8749	6305	-	3,13	- 0,37
2802	46 38 35,69	13,253	-9,3944	,6822	,1223	,8751	6307	-	2,70	+ 1,45
2803	26 43 40,91	13,287	+8,6990	,4731	,1217	,8756	6309	-	3,22	- 3,40
2804	35 20 36,44	13,227	-8,9086	,5821	,1215	,8758	6310	-	2,28	- 0,99
2805	35 37 38,60	13,174	-8,9345	,5813	,1197	,8771	6316	-	2,02	- 1,47
2806	65 21	13,148	-9,7033	+9,7755	-1,1189	+9,8778	5314	-	-	-
2807	39 19 7,23	13,153	-9,1623	,6191	,1190	,8777	5320	-	0,96	- 1,09
2808	44 56 39,49	13,148	-9,3541	,6662	,1189	,8778	5321	-	1,95	- 4,47
2809	48 52 59,60	13,142	-9,4633	,6939	,1187	,8779	5322	-	2,95	+ 10,60
2810	36 1 39,89	13,127	-8,9731	,5859	,1181	,8783	5323	-	2,28	- 1,56
2811	35 37	13,108	-8,9445	+9,6812	-1,1176	+9,8788	5327	-	-	-
2812	44 19 47,22	13,008	-9,3463	,6567	,1142	,8813	5337	-	1,83	- 0,80
2813	50 10 26,64	12,993	-9,4871	,6972	,1137	,8816	5340	+	1,06	- 2,77
2814	32 58 45,17	12,998	-8,6990	,5481	,1139	,8815	5342	-	3,03	+ 0,91
2815	37 3 58,24	12,993	-9,0531	,5921	,1137	,8816	5343	-	1,86	- 2,19
2816	46 10 15,43	12,982	-9,3979	+9,6695	-1,1131	+9,8820	5344	-	2,03	+ 5,03
2817	52 48 51,67	12,932	-9,5403	,7111	,1116	,8831	5345	-	0,64	- 3,19
2818	38 4 14,97	12,932	-9,1106	,5999	,1116	,8831	5346	-	0,73	+ 0,10
2819	28 18 12,08	12,913	+8,2787	,4862	,1110	,8835	5349	-	1,60	- 2,17
2820	38 4	12,900	-9,1139	,5988	,1106	,8838	5350	-	-	-
2821	41 21 34,82	12,887	-9,2553	+9,6285	-1,1101	+9,8841	5351	-	2,86	+ 0,56
2822	47 21 47,73	12,878	-9,4314	,6747	,1098	,8844	5352	-	1,24	+ 0,87
2823	33 1 22,16	12,823	-8,7404	,5426	,1080	,8856	5351	-	2,07	- 1,90
2824	50 6 22,07	12,807	-9,4941	,6905	,1074	,8860	5362	-	2,80	- 10,20
2825	33 15 51,22	12,779	-8,7781	,6440	,1065	,8867	5365	-	3,11	+ 3,46
2826	44 30 56,04	12,779	-9,3630	+9,6505	-1,1065	+9,8867	5363	-	1,80	- 4,57
2827	38 4 2,57	12,752	-9,1271	,5938	,1068	,8873	5369	-	1,22	- 3,02
2828	39 56 27,86	12,671	-9,2148	,6085	,1028	,8892	5376	-	2,32	- 5,65
2829	38 48 6,01	12,603	-9,1732	,6957	,1006	,8907	5379	-	1,98	+ 4,28
2830	24 33 55,97	12,567	+8,8388	,4178	,0992	,8915	5382	-	1,04	+ 4,67,30
2831	43 51 12,86	12,508	-9,3579	+9,6360	-1,0972	+9,8928	5388	-	1,90	+ 2,75
2832	53 59 1,45	12,462	-9,5787	,7016	,0956	,8938	5389	-	2,16	+ 4,66
2833	40 31 22,23	12,448	-9,2528	,6060	,0951	,8941	5390	+	1,51	- 8,61
2834	40 28 57,40	12,422	-9,2653	,6048	,0942	,8947	5392	+	2,46	- 6,00
2835	40 37	12,417	-9,2601	,6059	,0940	,8948	5393	-	-	-

Mean A R and Declination of Stars

No	Names	Mag	No Obs	Right Ascen Jan 1, 1810	Annual Precess	Logarithms of			
						a	b	c	d
2836	Normæ	6	2	16 26 58,43	+ 4,405	-8,8242	-8,9286	-0,6439	+8,7199
2837	—	7	2	27 16,70	4,665	,8547	,9604	,6594	,7676
2838	—	7	1	27 38,96	4,663	,8702	,9774	,6877	,7908
2839	—	7,8	1	29 28,88	4,488	,8282	,9425	,6501	,7299
2840	—	7	2	29 39,03	4,813	,7766	,8914	,6246	,6424
2841	Librae	7,8	3	29 55,68	3,611	-8,6585	-8,7743	+0,5576	+8,3175
2842	—	7	2	30 21,15	3,699	,6724	8,7898	,6881	,3805
2843	Normæ	7	2	30 55,78	4,280	,7860	8,9067	,6314	,6619
2844	—	6,7	2	31 5,13	4,292	,7878	8,9083	,6327	,6655
2845	Circini	7,8	2	31 45,59	4,978	,9149	9,0381	,6970	,8659
2846	Scorpii	7,8	2	31 15,44	3,865	-8,6605	-8,7837	+0,6620	+8,3434
2847	Normæ	—	—	31 —	4,401	,8078	,9312	,6438	,7006
2848	Scorpii	7,8	2	31 50,66	3,652	,6601	,7832	,6625	,3413
2849	Lupi	8	1	31 67,72	4,158	,7672	,8817	,6189	,6109
2850	Normæ	7	2	32 12,10	4,407	,8069	,9319	,6441	,6999
2851	Lupi	—	—	33 —	4,011	-8,7233	-8,8530	+0,6032	+8,5430
2852	—	6,7	4	33 36,59	4,012	,7228	,8633	,6034	,6426
2853	—	7	2	34 6,20	3,717	,6847	,7970	,5702	,378
2854	Normæ	7	2	34 52,35	4,491	,8027	,9379	,6466	,6971
2855	—	7	1	35 10,87	4,277	,7712	,9077	,6311	,6439
2856	Normæ	8	2	36 32,69	4,655	-8,8208	-8,9030	+0,6545	+8,7283
2857	Lupi	7	2	36 48,94	3,968	,7042	,8472	,5903	,6096
2858	Normæ	7,8	2	36 51,43	4,464	,8001	,9437	,6487	,6964
2859	Lupi	8	2	37 16,68	4,112	,7310	,8761	,6140	,5717
2860	Normæ	8	2	37 16,85	4,445	,7970	,9421	,6480	,6919
2861	Scorpii	7	2	38 35,47	3,855	-8,6408	-8,7910	+0,6629	+8,3167
2862	Lupi	7	2	39 5,47	4,157	,7340	8,8864	,6188	,6829
2863	Normæ	7	2	39 50,84	4,861	,8649	9,0205	,6867	,7901
2864	—	7	1	40 25,85	4,563	,8089	8,9666	,6594	,7165
2865	Lupi	7,8	2	42 3,71	4,985	,8727	,9,0377	,6950	,8089
2866	Normæ	6,7	2	42 10,50	3,802	-8,6568	-8,8200	+0,5800	+8,3994
2867	Scorpii	7	2	42 21,25	3,690	,6353	,8006	,6670	,3265
2868	Normæ	8	2	42 38,88	4,420	,7734	,9401	,6454	,6625
2869	—	7,8	1	42 44,50	4,535	,7948	,9621	,6506	,6972
2870	—	7	2	43 4,74	4,379	,7639	,9324	,6414	,6173
2871	Normæ	7,8	3	44 19,58	4,970	-8,8671	-9,0409	+0,6064	+8,8035
2872	—	8	1	44 20,00	4,099	,7052	8,8788	,6127	,6385
2873	Scorpii	—	—	44 —	8,586	,6116	8,7861	,6545	,2387
2874	Normæ	7,8	1	47 8,18	4,749	,8180	9,0032	,6766	,7383
2875	Lupi	7	2	47 18,68	4,186	,7013	8,8874	,6165	,6400
2876	Normæ	7,8	2	47 33,76	4,586	-8,7867	-8,9736	+0,6614	+8,6923
2877	Lupi	5,6	2	48 37,76	4,055	,6815	8,8728	,6080	,6010
2878	Normæ	7,8	2	48 40,84	4,682	,7893	8,9809	,6648	,6979
2879	Lupi	6,7	2	49 11,61	3,787	,6300	8,8236	,5783	,3610
2880	Normæ	7	1	49 42,13	4,764	,8111	9,0067	,6785	,7317

No	Declination (South) Jan 1 1840	Annual Precession	Logarithms of				Difference from the Brisbane Catalogue				
			a'	b'	c'	a'	No	M	C	T	
2836	° ' "	"	-9,5441	+9,6867	-1,0930	+9,8954	6396	-	2,96	- 3,63	+ 2,57
2837	51 50 15,67	-12,388	-9,5966	,7032	,0922	,8959	5397	-	3,15	—	- 1,96
2838	54 03 42,70	12,367	-9,6191	,7099	,0913	,8965	5401	-	2,04	—	+ 3,66
2839	56 22 55,61	12,338	-9,5682	,6866	,0869	,8992	5408	-	1,72	—	+ 2,79
2840	52 51 53,33	12,215	-9,4579	,6604	,0865	,8994	5409	-	2,12	—	+ 0,26
2841	47 12 30,26	12,205	+8,3802	+9,4430	-1,0859	+9,8998	5414	-	0,34	—	- 1,22
2842	27 6 57,57	12,187	-8,5185	,4910	,0849	,9003	5417	-	2,21	—	- 6,87
2843	30 41 14,41	12,158	-9,4965	,6574	,0834	,9012	5422	-	2,24	—	+ 8,33
2844	48 41 38,87	12,117	-9,6011	,6586	,0829	,9015	5124	-	1,56	—	+ 8,19
2845	48 57 57,13	12,103	-9,6857	,7203	,0812	,9024	5126	-	3,95	—	- 1,76
2846	60 46 37,92	12,057	-7,6990	+9,4621	-1,0812	+9,9024	5431	-	0,76	—	+ 1,85
2847	51 21	12,052	-9,5478	,6720	,0810	,9025	5427	—	—	—	—
2848	28 39 46,32	12,057	-7,3010	,4605	,0812	,9024	5432	-	2,52	—	+ 1,26
2849	46 33 32,68	12,033	-9,4265	,6122	,0804	,9029	5433	-	7,40	—	- 3,20
2850	51 23 13,61	12,025	-9,5490	,6711	,0800	,9031	5434	-	1,29	—	+ 1,46
2851	41 18	11,940	-9,3096	+9,5948	-1,0770	+9,9048	5447	—	—	—	—
2852	41 18 11,79	11,925	-9,3017	,6942	,0786	,9061	5449	-	1,66	—	- 2,66
2853	31 5 8,26	11,893	-8,6434	,4865	,0753	,9057	5452	-	1,17	—	- 2,39
2854	51 38 16,99	11,842	-9,5611	,6659	,0734	,9068	5454	-	4,16	—	+ 6,72
2855	48 13 37,87	11,818	-9,4965	,6434	,0726	,9072	5456	-	2,21	—	+ 4,63
2856	53 53 24,97	11,718	-9,6010	+9,6744	-1,0640	+9,9091	5465	-	1,07	—	+ 11,74
2857	39 41 17,81	11,704	-9,2048	,6718	,0688	,9094	5475	-	2,47	—	- 6,95
2858	51 56 11,04	11,695	-9,5705	,6623	,0680	,9096	5474	-	2,08	—	- 6,28
2859	43 50 54,96	11,667	-9,3879	,6057	,0669	,9101	5480	-	2,16	—	+ 6,31
2860	51 42 53,78	11,667	-9,5670	,6699	,0669	,9101	5479	-	3,20	—	- 5,86
2861	28 17 15,18	11,677	-7,6990	+9,4375	-1,0636	+9,9118	5488	-	1,79	—	- 2,48
2862	44 54 17,58	11,638	-9,4314	,6091	,0621	,9126	5489	-	0,49	—	- 3,13
2863	68 33 58,51	11,481	-9,6749	,6892	,0600	,9136	5492	-	2,21	—	+ 2,45
2864	53 46 2,16	11,442	-9,6085	,6633	,0585	,9143	5496	-	3,78	—	+ 4,61
2865	33 37 43,30	11,328	-8,9823	,4968	,0541	,9164	5509	-	2,74	—	+ 0,24
2866	59 41 31,73	11,313	-9,6937	+9,6878	-1,0536	+9,9167	5507	-	2,97	- 2,75	- 3,89
2867	29 23 41,62	11,308	-8,4114	,4427	,054	,9168	5511	-	2,53	—	- 4,43
2868	50 46 14,61	11,283	-9,5635	,6396	,0626	,9172	5512	-	2,40	—	+ 0,46
2869	53 0 1,01	11,274	-9,5999	,6526	,0621	,9174	5513	-	2,56	—	+ 0,98
2870	49 51 16,12	11,260	-9,6478	,6326	,0612	,9178	5515	-	1,33	—	- 3,13
2871	59 43 14,93	11,158	-9,6981	+9,6820	-1,0176	+9,9194	5520	-	2,75	—	0,00
2872	42 54 44,51	11,163	-9,3927	,6791	,0478	,9193	5522	-	2,04	—	+ 3,48
2873	24 55	11,144	+8,6'36	,3702	,0470	,9197	5526	—	—	—	—
2874	56 20 34,42	10,954	-9,6699	,8580	,0396	,9220	5527	-	3,28	—	- 0,80
2875	43 36 32,50	10,940	-9,4216	,6768	,0390	,9232	5541	+	0,54	—	+ 0,21
2876	53 33 12,91	10,925	-9,6191	+9,6420	-1,0384	+9,9234	5542	-	1,80	—	- 1,97
2877	41 16 41,73	10,846	-9,3698	,5529	,0568	,9247	5548	-	1,26	—	+ 1,62
2878	54 6 47,36	10,843	-9,6314	,6418	,0351	,9248	5547	-	1,91	—	+ 7,65
2879	32 32 46,43	10,507	-8,9395	,4628	,0337	,9254	5550	-	3,67	—	- 0,18
2880	56 23 22,52	10,768	-9,6646	,6608	,0321	,9260	5553	-	3,21	—	+ 1,01

Mean A, R and Declination of Stars

No	Names	Mag	No Obs	Right Ascen Jan 1, 1840	Annual Precessn	Logarithms of			
						a	b	c	d
2881	Lupi	7 8	2	15 49 51,96	+3,738	-8,6194	-8,8157	+0,6726	+8,3276
2882	Normæ	6 7	1	50 8,03	4,446	,7509	8,0487	,6480	,6395
2883	Tui Aust.	8	1	50 11,70	5,025	,8542	9,0523	,7012	,7920
2884	Normæ	7	2	51 11,15	4,096	,6804	8,8823	,6124	,6080
2885	—	8	2	52 0,42	4,688	,7703	8,9769	,6616	,6742
2886	Normæ	7 8	2	52 29,32	4,746	-8,7968	-9,0047	+0,6763	+8,7149
2887	Lupi	7 8	2	52 53,27	3,916	,6406	8,8496	,6927	,4170
2888	Normæ	8	2	53 6,04	4 404	,7320	8,9422	,6488	,6136
2889	Lupi	7 8	2	54 2,79	3,991	,6505	8,8646	,6011	,4493
2890	Normæ	7	2	54 37,72	4,747	,7887	9,0057	,6764	,7061
2891	Scorpi	8	2	54 37,82	3,688	-8,5954	-8,8118	+0,6688	+8,2741
2892	Lupi	7	2	55 42,59	4,030	,6516	,8728	,6063	,4598
2893	Normæ	7 8	2	55 45,01	4 340	,7100	,9315	,6375	,5811
2894	—	7	2	55 54,13	4,569	,7522	,9742	,8698	,6225
2895	Lupi	5 6	2	56 6,41	3,912	,6285	,8515	,5921	,4016
2896	Normæ	5 6	1	56 12,31	4,808	-8,8038	-9,0274	+0,6873	+8,7299
2897	—	7 8	1	56 18,08	4,260	,6929	8,9167	,6294	,5505
2898	—	7	1	56 22,82	4,746	,7818	9,0062	,6763	,6985
2899	Lupi	7	2	56 46,33	3,912	,6303	8,8521	,5924	,3989
2900	Normæ	8	1	56 54,37	4,771	,7843	9,0113	,6789	,7031
2901	Normæ	7 8	2	57 59,92	4,764	-8,7768	-9,0081	+0,6771	+8,6936
2902	—	7 8	2	59 3,26	3,780	,5961	8,8307	,5775	,8152
2903	—	7	2	59 17,06	4,452	,7173	8,9641	,6486	,8024
2904	—	7	2	59 21,61	3,797	,5969	8,8837	,5794	,83239
2905	—	7	3	59 22,38	4,028	,6379	8,8700	,6051	,9,1434
2906	Normæ	6 7	2	59 27,03	4,655	-8,7536	-8,9913	+0,6679	+8,6612
2907	—	6 7	1	59 38,09	3,823	,6002	8,8384	,5824	,3378
2908	—	—	—	59	4,895	,7934	9,0311	,6897	,7200
2909	—	8	1	16 0 24,93	4,065	,6407	8,8825	,6091	,4550
2910	—	7 8	2	0 31,50	4,661	,7503	8,9926	,6685	,6580
2911	Normæ	—	—	0	4,890	-8,7896	-9,0325	+0,6893	+8,7157
2912	—	8	3	0 53,07	4,900	,7901	9,0342	,6902	,7167
2913	—	6	1	0 55,12	4,678	,7520	8,9958	,6701	,6611
2914	—	7,8	2	1 18,87	4,428	,7047	8 9506	,6462	,6866
2915	—	7	2	2 20,96	4,386	,6930	8,9433	,6421	,6877
2916	Normæ	6 7	4	2 39,21	4,898	-8,7827	-9,0344	+0,6900	+8,7087
2917	—	6	2	3 40,03	4,920	,6767	8,9316	,6355	,6395
2918	—	—	—	4	4,908	,7783	9,0366	,6909	,7045
2919	—	7 8	2	4 10,68	4,023	,6188	8,8772	,6045	,4199
2920	—	6 7	2	4 14,10	4,645	,7322	8,9911	,6670	,6369
2921	Normæ	6 7	2	4 17,85	4,140	-8,6398	-8,8987	+0,6170	+8,4695
2922	—	—	—	4	4,137	,6392	8,8981	,6167	,4682
2923	—	7	2	4 31,87	4,689	,7298	8,9903	,6064	,6339
2924	—	8	4	4 40,95	4,908	,7760	9,0367	,6909	,7021
2925	—	7	2	5 0,93	4,151	,6889	8,9011	,6181	,4705

No	Declination (South) Jan 1 1840	Annual Precession	Logarithms of				Difference from the Brisbane Catalogue			
			<i>a'</i>	<i>b'</i>	<i>c'</i>	<i>d'</i>	No	Right Ascension		Declin
								<i>s</i>	<i>t</i>	
	<i>o</i> <i>m</i> <i>s</i>	<i>o</i> <i>m</i> <i>s</i>								
2881	30 42 16,99	-10,758	-8,7634	+9,4381	-1,0317	+9,9262	5556	-3,95	—	-4,09
2882	50 39 43,27	10,731	-9,6775	,6174	,0307	,9266	5558	-2,01	—	-0,08
2883	69 2 35,50	10,728	-9,7118	,6664	,0305	,9267	5567	-2,57	3,52	-3,29
2884	42 14 9,20	10,659	-9,7944	,5534	,0277	,9275	5561	-1,77	—	-1,96
2885	53 15 24,83	10,595	-9,6232	,6271	,0261	,9288	5568	—	1,95	+1,69
2886	55 53 26,88	10,566	-9,6637	+9,6396	-1,0235	+9,9294	5568	-1,60	—	-1,78
2887	36 40 52,26	10,538	-9,2041	,4972	,0227	,9297	5573	-3,23	—	-10,09
2888	49 33 55,12	10,510	-9,6647	,6015	,0218	,9301	5574	-3,18	—	+0,57
2889	38 59 7,31	10,446	-9,8010	,5159	,0190	,9311	5575	-2,04	—	+0,26
2890	55 44 55,85	10,397	-9,6646	,6324	,0169	,9319	5577	-2,13	—	-3,01
2891	28 28 58,50	10,407	-8,4314	+9,3940	-1,0173	+9,9318	5579	-1,96	—	+4,15
2892	40 0 32,11	10,322	-9,3885	,5201	,0138	,9331	5587	-2,79	—	-6,99
2893	47 58 60,68	10,317	-9,5403	,5827	,0135	,9331	5585	-1,48	—	+5,74
2894	52 38 21,86	10,307	-9,6222	,6116	,0131	,9333	5588	-2,91	—	+5,10
2895	36 21 37,51	10,292	-9,4041	,1836	,0125	,9335	5591	-2,08	3,37	-0,85
2896	57 29 40,56	10,282	-9,6911	+9,6362	-1,0121	+9,9337	5590	-2,04	—	-1,89
2897	46 5 3,68	10,278	-9,5024	,5676	,0119	,9337	5595	-1,76	—	-1,26
2898	65 37 28,16	10,268	-9,6661	,6262	,0114	,9339	5594	-1,81	—	-5,61
2899	36 18 52,97	10,242	-9,2011	,4411	,0101	,9343	5598	-0,28	—	-0,72
2900	56 1 38,51	10,222	-9,6730	,6263	,0095	,9346	5597	+0,94	—	+3,09
2901	65 38 28,69	10,147	-9,6693	+9,6312	-1,0063	+9,9357	5602	-2,58	—	-1,94
2902	31 39 17,04	10,071	-8,9294	,4213	,0031	,9368	5608	-1,34	—	-6,29
2903	50 6 59,66	10,060	-9,5866	,5564	,0022	,9371	5609	-2,04	—	-1,71
2904	32 12 58,97	10,050	-8,9731	,4273	,0128	,9371	5613	-2,28	3,05	+0,90
2905	39 41 54,30	10,046	-9,3404	,5055	,0020	,9372	5612	-3,14	—	-1,63
2906	63 66 29,30	10,037	-9,6484	+9,6072	-1,0015	+9,9373	5610	-2,40	—	+5,30
2907	37 6 51,81	10,026	-9,0414	,4 68	1,0011	,9375	5614	-2,91	—	-1,84
2908	57 87	10,000	-9,6990	,6248	1,0000	,9378	5615	—	—	—
2909	40 41 20,58	9,966	-9,3747	,5109	0,9985	,9383	5621	-2,38	3,10	-3,75
2910	63 56 12,96	9,955	-9,6503	,6038	0,9980	,9385	5619	-2,10	—	-2,69
2911	67 29	9,945	-9,6981	+9,6218	-0,9976	+9,9386	5622	—	—	—
2912	67 37 9,10	9,924	-9,7007	,6215	,9907	,9349	5626	-2,83	—	-4,29
2913	54 13 28,41	9,929	-9,6544	,6041	,9969	,9388	5627	-3,61	—	+1,96
2914	49 27 47,06	9,894	-9,5786	,5744	,9954	,9393	5630	-1,72	—	+0,06
2915	48 30 60,26	9,818	-9,6635	,6648	,9920	,9404	5633	-2,02	—	+4,15
2916	57 29 44,82	9,792	-9,7007	+9,6160	-0,9909	+9,9408	5634	-2,49	—	-1,88
2917	48 57 21,15	9,721	-9,5363	,5497	,9877	,9417	5637	-2,34	2,42	-3,86
2918	57 29	9,640	-9,7041	,6102	,9859	,9423	5639	—	—	—
2919	39 12 48,04	9,680	-9,3385	,4850	,9859	,9423	5645	-2,77	—	-0,18
2920	53 24 0,36	9,670	-9,6474	,5882	,9854	,9424	5643	-1,93	—	+5,00
2921	42 29 12,49	9,670	-9,4346	+9,5182	-0,9854	+9,9424	5646	-2,69	2,76	+4,97
2922	42 21	9,670	-9,4330	,5125	,9864	,9424	5647	—	—	—
2923	53 16 51,54	9,645	-9,6474	,6854	,9843	,9428	5648	-0,39	—	-0,84
2924	57 29 61,11	9,640	-9,7041	,6082	,9840	,9429	5649	-3,51	—	-2,68
2925	42 42 63,36	9,614	-9,4409	,6126	,9829	,9432	5650	-0,16	—	+5,40

Mean A R and Declination of Stars

No	Names	Mag	No Obs	Right Ascen Jan 1, 1840	Annual Precess	Logarithms of			
						a	b	c	d
2926	Normæ	7	2	H 5 21,45	+4,634	-8,7257	-8,9897	+0,6660	+8,6290
2927	—	7 8	2	5 39,13	4,912	,7725	9,0378	,6913	,6987
2928	—	7 8	2	6 41,20	4,694	,7311	9,0008	,6715	,6397
2929	—	—	—	6	4,423	,6823	8,9320	,6457	,5601
2930	—	8 9	1	8 16,71	4,726	,7298	9,0068	,6745	,6406
2931	Scorpi	5 6	2	8 22,78	3,702	-8,5481	-8,8254	+0,6684	+8,2228
2932	Normæ	6 7	2	8 52,55	4,687	,7027	8,9825	,6615	,6997
2933	—	7	1	9 5,77	4,769	,7335	9,0145	,6784	,6477
2934	—	6 7	1	9 42,71	4,376	,6613	8,9448	,6411	,6311
2935	—	6	2	10 32,20	4,444	,6700	8,9575	,6478	,6490
2936	Normæ	7 8	3	10 42,90	4,123	-8,6110	-8,8991	+0,6152	+8,4332
2937	—	6	2	11 14,02	4,198	,6224	8,9130	,6230	,4604
2938	—	8 9	1	11 29,40	4,758	,7212	9,0134	,6774	,6388
2939	—	9	2	11 40,46	4,732	,7117	9,0092	,6750	,6215
2940	—	7 8	2	12 30,28	3,969	,6754	8,8726	,5987	,3063
2941	Normæ	7	2	13 28,21	4,263	-8,6246	-8,9259	+0,6297	+8,4739
2942	—	6 7	1	13 48,68	4,964	,7454	9,0487	,6958	,6727
2943	—	6 7	2	13 52,45	3,976	,6717	8,8716	,5994	,3382
2944	—	6 7	1	14 47,97	5,004	,7476	9,0555	,6993	,6770
2945	—	7	1	15 4,13	4,385	,6899	8,9188	,6420	,5088
2946	Scorpi	7	2	15 24,56	3,810	-8,5573	-8,8475	+0,5800	+8,2580
2947	Normæ	6	2	15 28,45	4,364	,6814	8,9462	,6399	,4999
2948	—	7	2	16 26,02	4,309	,6203	8,9357	,6844	,4765
2949	—	7	2	16 26,77	4,949	,7312	9,0469	,6945	,6568
2950	—	7 8	1	17 26,56	4,261	,6056	8,9257	,6285	,4509
2951	Normæ	6	1	17 35,28	3,971	-8,5561	-8,8700	+0,5989	+8,3329
2952	—	7	2	17 52,23	4,616	,6686	8,9910	,6643	,6666
2953	—	6 7	4	18 7,46	4,314	,6135	8,9873	,6349	,4697
2954	—	6 7	2	18 39,30	4,110	,6746	8,9010	,6138	,3895
2955	—	7	2	21 3,44	4,672	,6633	9,0016	,6695	,5649
2956	Normæ	7 8	2	22 20,30	4,490	-8,6267	-8,9704	+0,6522	+8,5063
2957	—	7 8	1	22 42,79	4,704	,6809	9,0076	,6725	,5661
2958	—	—	—	23	4,475	,6180	8,9680	,6608	,4962
2959	—	7	1	23 39,26	4,285	,5834	8,9346	,6319	,4323
2960	—	6 7	1	23 49,42	4,671	,6330	8,9851	,6600	,5230
2961	Normæ	8 9	1	24 37,70	4 204	-8,5643	-8,9205	+0,6287	+8,3971
2962	Ara	7 8	2	25 39,12	6,023	,6994	9,0011	,7010	,6274
2963	Normæ	5 6	1	26 51,32	3,924	,6103	8,8727	,6937	,2682
2964	—	7 8	2	26 7,06	3,945	,6126	8,8704	,6900	,2776
2965	—	7 8	2	27 51,64	4,750	,6438	9,0170	,6767	,5507
2966	Normæ	7	2	28 8,21	4,410	-8,6837	-8,9683	+0,6444	+8,4511
2967	—	6 7	2	28 23,96	3,993	,6096	,8866	,6013	,2880
2968	—	7 8	2	28 24,10	4,598	,6162	,9912	,6626	,5067
2969	—	8	2	28 57,89	4,696	,6117	,9909	,6823	,6027
2970	—	7	3	28 47,21	4,459	,6875	,9674	,6492	,4616

No	Declination (South) Jan 1 1840	Annual Precession	Logarithms of				Difference from the Brisbane Catalogue			
			a'	b'	c'	d'	No	Right Ascension from M C	T	Declin
2926	55 8 51,60	—	9,593	-9,6464	+9,5829	-0,9815	+9,9436	5659	— 1,36	— 0,93
2927	57 29 44,18	0 563	,7059	,6048	,9806	,9439	5662	— 2,96	- 3,40	+ 0,24
2928	51 6 26,97	9,486	,6628	,6837	,9771	,9449	5664	— 8,03	—	+ 0,55
2929	49 0	9,486	,5798	,5580	,9771	,9449	5665	—	—	—
2930	54 31 4,53	9,362	,6702	,5803	,9714	,9465	5679	— 2,45	—	- 2,79
2931	28 12 32,01	9,357	-8,5563	+ 9,3439	-0,9711	+ 9,9466	5681	— 0,49	—	— 0,07
2932	52 4 30,06	9,316	9,6345	,5643	,9692	,9471	5682	— 1,63	—	+ 0,17
2933	55 9 30,80	9,296	,6803	,5800	,9683	,9474	5684	— 2,40	—	- 6,12
2934	47 47 40,20	9,264	,5635	,5342	,9603	,9479	5687	— 1,72	- 2,47	+ 4,02
2935	49 10 53,61	9,187	,6899	,5403	,9632	,9488	5692	— 2,16	- 2,93	+ 3,96
2936	41 36 44,33	9,176	-9,4249	+ 9,4830	-0,9627	+ 9,9489	5694	— 2,88	—	+ 2,70
2937	43 31 22,06	9,135	,4742	,4969	,9607	,9494	5699	— 0,86	—	+ 4,77
2938	54 50 0,68	9,109	,6794	,5701	,9595	,9498	5700	— 2,26	—	+ 5,14
2939	54 20 31,28	9,021	,6749	,5632	,9552	,9508	5704	+ 57,78	—	- 1,35
2940	37 2 17,63	9,020	,2833	,4335	,9558	,9508	5705	+ 6,01	—	- 4,48
2941	44 58 14,44	8,958	-9,5119	+ 9,4996	-0,9522	+ 9,9516	5713	— 2,35	- 1,73	— 5,63
2942	57 44 36,94	8,927	,7202	,5760	,9507	,9520	5715	— 1,51	—	+ 2,67
2943	37 11 8,60	8,932	,2900	,4306	,9509	,9619	5718	— 1,75	- 2,83	- 1,67
2944	58 13 31,84	8,848	,7283	,5745	,9469	,9629	5720	— 2,31	- 2,96	+ 3,66
2945	47 40 9,79	8,832	,6705	,5131	,9461	,9531	5722	— 2,82	—	+ 4,59
2946	31 41 59,46	8,812	-9,0128	+ 9,3639	-0,9450	+ 9,9533	5724	— 0,91	—	- 0,22
2947	47 10 55,56	8,801	,5611	,5082	,9446	,9535	5723	— 2,24	- 2,47	- 0,88
2948	46 52 49,17	8,729	,5366	,4952	,9409	,9543	5730	— 2,07	—	+ 4,17
2949	57 23 26,22	8,722	,7193	,5643	,9408	,9644	5728	— 2,38	—	- 3,30
2950	44 26 49,93	8,619	,5079	,4804	,9370	,9562	5734	— 3,01	—	+ 0,81
2951	36 48 44,96	8,688	-9,2856	+ 9,4123	-0,9364	+ 9,9564	5736	— 0,89	—	+ 0,34
2952	62 4 42,65	8,612	,6484	,5302	,9351	,9557	5737	— 2,19	—	+ 0,24
2953	46 52 50,01	8,591	,5403	,4883	,9340	,9659	5738	— 1,40	—	+ 2,32
2954	40 44 54,56	8,549	,4183	,4449	,9319	,9564	5739	— 0,26	—	- 0,40
2955	52 50 48,80	8,339	,6846	,5218	,9221	,9585	5746	— 1,47	—	+ 0,71
2956	40 25 21,52	8,268	-9,6128	+ 9,4955	-0,9169	+ 9,9696	5750	— 0,58	—	- 0,07
2957	63 18 6,93	8,228	,6739	,6174	,9152	,9600	5751	— 3,53	—	+ 7,06
2958	49	8,173	,6186	,4887	,9124	,9605	5753	—	—	—
2959	44 53 57,30	8,167	,6289	,4685	,9116	,9607	5754	— 2,43	- 3,51	- 2,42
2960	50 63 53,35	8,141	,6386	,4987	,9107	,9608	5755	— 2,00	—	- 0,94
2961	42 52 14,48	8,077	-9,4843	+ 9,4381	-0,9072	+ 9,9616	5758	— 3,24	—	+ 5,36
2962	67 54 42,51	7,991	,7372	,5287	,9026	,9624	5763	— 1,62	—	- 1,44
2963	34 55 11,03	7,981	,2279	,3680	,9020	,9626	5767	— 3,31	- 1,44	- 6,47
2964	36 34 52,73	7,960	,2077	,3638	,9009	,9627	5769	— 1,28	—	- 4,38
2965	53 48 38,06	7,816	,8875	,4979	,8929	,9642	5778	— 4,79	—	+ 5,00
2966	47 27 15,38	7,793	-9,5866	+ 9,4572	-0,8917	+ 9,9614	5781	+ 0,26	—	+ 5,68
2967	36 53 16,02	7,772	,3139	,3670	,8905	,9646	5783	— 1,13	—	+ 2,21
2968	51 0 32,91	7,772	,6192	,4801	,8905	,9646	5782	— 3,07	- 3,55	+ 2,21
2969	51 4 28,65	7,723	,6484	,4769	,8878	,9651	5785	— 1,92	—	- 1,48
2970	48 26 53,35	7,712	,6053	,4594	,8872	,9652	5789	+ 17,90	—	+ 8,97

Mean A.R. and Declination of Stars

No.	Names	Mag.	No Obs.	Right Ascen. Jan 1, 1840	Annual Pieces n	Logarithms of			
						a	b	c	d
2971	Normæ	7	3	16 29 16,08	-4,411	-8,5783	-8,9590	+0,6445	+8,4456
2972	—	6	3	29 23,44	4,460	,5863	8,9676	,6493	,1604
2973	—	7	1	29 35,41	4,505	,5932	8,9756	,6537	,4732
2974	Arae	7	2	29 36,60	4,759	,6365	9,0189	,6776	,5437
2975	Normæ	7.8	2	30 16,34	4,806	,6549	8,9409	,6341	,4047
2976	Normæ	7	2	31 25,69	4,840	-8,5551	-8,9473	+0,6375	+8,4103
2977	—	7	1	31 47,74	3,994	,4935	8,8874	,6014	,2706
2978	Y Arae	7	1	32 2,71	4,704	,6146	9,0104	,6725	,5161
2979	Scorpi	6	1	32 40,94	4,140	,5138	8,9129	,6170	,3291
2980	Arae	6.7	1	32 44,73	5,070	,6704	9,0702	,7050	,6907
2981	Scorpi	6	1	32 49,10	4,140	-8,5131	-8,9130	+0,6170	+8,3285
2982	Arae	6.7	2	33 44,03	5,062	,6641	9,0690	,7043	,5927
2983	Normæ	7	2	34 24,12	4,367	,5445	8,9532	,6402	,4011
2984	Scorpi	7	2	35 24,96	4,164	,5039	8,9182	,6196	,3236
2985	—	9	2	35 32,94	3,746	,4352	8,8503	,5736	,1146
2986	Z Arae	5.6	2	36 0,27	5,125	-8,6613	-9,0794	+0,7091	+8,6932
2987	Scorpi	7	2	36 5,05	4,088	,4873	8,9054	,6115	,2885
2988	—	7	2	36 12,87	4,173	,5013	8,9201	,6204	,3227
2989	Arae	7	1	36 17,10	4,704	,5920	9,0116	,6726	,4923
2990	Normæ	7	2	36 26,72	4,345	,5301	8,9501	,6380	,3844
2991	Scorpi	7	1	37 20,55	3,997	-8,4646	-8,8907	+0,6017	+8,2400
2992	Normæ	7	1	38 24,68	4,549	,5543	8,9858	,6679	,4371
2993	Arae	8	2	40 24,46	4,938	,6077	9,0610	,6936	,6268
2994	Scorpi	5.6	2	40 25,36	4,159	,4760	8,9198	,6190	,2925
2995	—	6.7	1	41 6,83	4,184	,4767	8,9239	,6216	,2987
2996	Arae	7.8	2	41 8,42	4,811	-8,5828	-9,0304	+0,6822	+8,4916
2997	Scorpi	6.7	2	41 12,66	4,230	,4838	8,9318	,6263	,3162
2998	—	7	2	41 22,24	4,141	,4678	8,9167	,6171	,2799
2999	—	7.8	1	41 34,99	4,183	,4738	8,9238	,6215	,2952
3000	Arae	8	2	41 49,68	4,921	,5963	9,0484	,6920	,5138
3001	Scorpi	7	2	41 48,94	4,029	-8,4463	-8,8979	+0,6052	+8,2290
3002	Arae	6.7	1	42 21,44	4,642	,6308	8,9857	,6572	,4115
3003	Scorpi	6	2	42 22,11	4,235	,4782	8,9330	,6268	,3102
3004	Arae	7.8	—	42 —	5,242	,6374	9,0984	,7195	,6743
3005	—	6.7	1	43 49,98	4,696	,6315	8,9964	,6624	,4184
3006	Scorpi	—	—	43 —	4,138	-8,4633	-8,9171	+0,6168	+8,2637
3007	—	6	2	44 12,77	4,249	,4695	8,9362	,6283	,3037
3008	—	6.7	2	45 0,60	4,146	,4467	8,9188	,6176	,2683
3009	—	7	3	45 40,78	4,141	,4420	8,9183	,6171	,2623
3010	Arae	6	1	45 58,47	4,600	,5189	8,9965	,6628	,4056
3011	Arae	7	2	45 59,77	6,183	-8,6123	-9,0901	+0,7146	+8,5459
3012	—	7.8	1	46 53,22	4,091	,4272	8,9103	,6118	,3248
3013	—	7	1	47 0,67	4,610	,4976	8,9816	,6542	,3730
3014	—	7	1	47 46,64	4,975	,6687	9,0583	,6968	,4880
3015	—	7.8	1	48 2,26	6,160	,5965	9,0869	,7126	,5288

No	Declination (South) Jan 1 1840	Annual Precession	Logarithms of				Difference from the Brisbane Catalogue			
			<i>a'</i>	<i>b'</i>	<i>c'</i>	<i>d'</i>	Right Ascension		Decln	
							No	M C	T	
	° ′ ″	"							"	
2971	47 25 23,35	- 7,702	- 9,5866	+ 9,4518	- 0,8866	+ 9,9653	5790	- 1,82	—	+ 1,96
2972	48 26 25,74	7,691	,6053	,4582	,8860	,9654	5792	- 2,35	—	+ 3,25
2973	49 19 48,15	7,675	,6212	,4632	,8861	,9656	5794	- 2,93	- 1,80	+ 5,80
2974	53 51 11,58	7,675	,6902	,4904	,8861	,9656	5793	- 2,42	—	+ 5,70
2975	45 2 46,95	7,621	,5403	,4299	,8820	,9661	5799	- 1,99	—	- 4,56
2976	45 45 19,34	7,529	- 0,5575	+ 9,4300	- 0,8767	+ 9,9670	5805	- 2,75	—	- 0,64
2977	36 45 36,09	7,502	,3160	,3504	,8762	,9672	5807	- 1,79	—	- 3,58
2978	52 50 25,42	7,475	,6785	,4732	,8736	,9675	5808	- 2,83	- 4,53	+ 0,94
2979	40 48 24,06	7,426	,4456	,3842	,8708	,9679	5812	- 2,10	—	- 3,51
2980	58 11	7,416	,7482	,4976	,8701	,9680	5811	- 2,19	—	
2981	40 48 0,29	7,416	- 9,4456	+ 9,3836	- 0,8701	+ 9,9680	5813	- 1,90	—	+ 1,79
2982	68 2 11,70	7,339	9,7474	,4924	,8657	,9687	5815	- 2,88	- 4,45	+ 4,95
2983	46 13 34,77	7,285	,65717	,4192	,8624	,9692	5822	- 1,43	—	+ 1,12
2984	41 18 33,46	7,204	9,4624	,3753	,8676	,9700	5824	- 1,04	—	- 0,16
2985	28 32 12,20	7,193	8,8129	,2343	,8569	,9700	5827	- 1,08	—	+ 1,76
2986	58 44 40,11	7,149	- 9,7589	+ 9,4843	- 0,8543	+ 9,9704	5828	- 2,36	- 2,61	+ 3,75
2987	39 14 0,83	7,149	,4065	,3535	,8543	,9704	5831	- 2,69	—	- 1,36
2988	41 30 37,34	7,138	,4683	,3731	,8536	,9705	5834	- 1,82	—	- 4,20
2989	52 38 39,29	7,127	,6812	,4614	,8529	,9706	5833	- 1,68	—	+ 1,55
2990	45 38 51,59	7,122	,5623	,4050	,8526	,9707	5837	- 2,18	—	+ 0,11
2991	36 35 21,46	7,035	- 9,3222	+ 9,3207	- 0,8473	+ 9,9714	5841	- 2,19	—	+ 1,80
2992	49 45 23,96	6,958	,6395	,4233	,8426	,9721	5844	- 1,82	—	- 2,45
2993	56 5 35,41	6,793	,7316	,4493	,8321	,9735	5854	- 2,70	—	+ 2,12
2994	40 56 52,23	6,793	,4594	,3467	,8321	,9735	5857	- 2,23	—	- 2,47
2995	41 34 25,69	6,739	,4771	,3487	,8286	,9739	5861	- 2,09	—	+ 3,42
2996	54 9 36,74	6,734	- 9,7067	+ 9,4352	- 0,8283	+ 9,9740	5859	- 2,36	—	+ 0,46
2997	42 42 37,93	6,728	,6051	,3574	,8279	,9740	5862	- 1,89	—	+ 5,01
2998	40 26 38,38	6,717	,4487	,3374	,8272	,9741	5863	- 2,65	—	- 4,27
2999	41 30 24,86	6,701	,4771	,3456	,8261	,9743	5865	- 3,87	—	+ 1,32
3000	55 46 19,95	6,673	,7292	,4399	,8243	,9745	5866	- 2,20	- 2,62	- 1,18
3001	37 19 10,44	6,678	- 9,3560	+ 9,3056	- 0,8247	+ 9,9744	5867	- 0,86	—	- 3,46
3002	49 26 11,13	6,635	,6385	,4006	,8218	,9748	5870	- 2,03	—	- 0,79
3003	42 46 26,23	6,635	,5079	,3519	,8218	,9748	5871	- 0,81	—	+ 0,70
3004	59 50	6,552	,7774	,4513	,8164	,9754	5877	—	—	
3005	50 24 26,03	6,514	,6661	,3988	,8138	,9758	5882	- 2,81	- 1,14	- 4,31
3006	40 15	6,014	- 9,4472	+ 9,3224	- 0,8188	+ 9,9768	5883	—	—	
3007	43 2 47,08	6,475	,6172	,3435	,8112	,9761	5887	+ 3,77	—	- 0,12
3008	40 29 42,80	6,403	,4633	,3161	,8064	,9766	5891	- 1,95	—	- 4,10
3009	40 15 1,13	6,348	,4502	,3110	,8026	,9770	5896	- 1,72	—	- 3,07
3010	50 22 47,87	6,331	,6580	,3863	,8015	,9772	5897	- 1,81	- 3,03	- 2,87
3011	59 3 59,42	6,391	- 9,7723	+ 9,4329	- 0,8015	+ 9,9772	5895	- 2,56	—	+ 1,61
3012	48 51 21,19	6,260	,4116	,2922	,7965	,9777	5903	- 2,62	—	+ 1,10
3013	48 37 3,68	6,248	,6294	,3692	,7968	,9778	5904	- 2,12	—	+ 2,87
3014	56 18 6,57	6,176	,7404	,4090	,7907	,9783	5909	—	—	+ 4,66
3015	58 47 48,31	6,165	,7701	,4198	,7896	,9784	5911	- 2,49	—	+ 4,90

Mean A R and Declination of Stars

No	Names	Mag	No Obs	Right Ascen Jun 1, 1840	Annual Precessn	Logarithms of			
						a	b	c	d
3016	Scorpi	6 7	2	II 48 8,49	+ 4,039	-8,4113	-8,9021	+ 0,6063	+ 8,1944
3017	Aries	8 9	2	49 7,07	4,987	,5626	9,0604	,6978	,4837
3018	Scorpi	7 8	2	49 36,01	4,053	,4041	8,9050	,6078	,1906
3019	Aries	6	1	50 23,34	4,761	,5182	9,0243	,6777	,4205
3020	—	7	1	51 12,18	4,491	,1681	8,9796	,6623	,3398
3021	Scorpi	7	1	51 13,13	4,328	-8,4401	-8,9519	+ 0,6363	+ 8,2869
3022	—	—	—	51	4,328	,4399	,9519	,6363	,2865
3023	—	7	2	52 10,54	4 048	,3874	,9052	,6072	,1717
3024	—	7 8	2	52 24,79	4,299	,4277	,9174	,6834	,2688
3025	—	6	2	53 6,57	4,054	,3827	,9065	,6079	,1683
3026	Aries	8 9	2	53 10,92	4,429	-8,4448	-8,9695	+ 0,6463	+ 8,3072
3027	Normæ	6 7	1	53 26,40	4,361	,4316	8,9682	,6393	,2832
3028	Aries	8	1	53 28,16	6,238	,5720	9,0995	,7192	,5071
3029	Scorpi	6	2	54 17,23	4,301	,4156	8,9482	,6336	,2565
3030	—	7	1	54 58,01	4,018	,3640	8,9013	,6040	,1385
3031	Scorpi	7	2	55 8,79	4,013	-8,3618	-8,9005	+ 0,6035	+ 8,1348
3032	Aries	7 8	1	56 30,03	4,429	,4291	,9702	,6463	,2908
3033	—	7	1	56 46,02	4,420	,4253	,9687	,6454	,2856
3034	Scorpi	7	1	56 48,02	4,319	,4081	,9516	,6354	,2017
3035	—	7 8	1	56 24,86	4,267	,3940	,9413	,6291	,2209
3036	Scorpi	7 8	2	57 6,46	4,179	-8,3764	-8,9285	+ 0,6211	+ 8,1917
3037	Aries	7 8	2	58 29,59	4,426	,4126	8,9703	,6460	,2732
3038	—	7 8	2	57 59,84	4,410	,4102	8,9727	,6474	,2761
3039	Scorpi	5 6	2	59 7,51	4,329	,3863	8,9542	,6304	,2308
3040	Aræ	7	2	59 10,06	6,165	,5209	9,0802	,7131	,4512
3041	Aræ	7 8	1	59 24,97	4,701	-8,4605	-9,0310	+ 0,6804	+ 8,3638
3042	—	7 8	1	59 31,04	4,103	,3964	8,9668	,6437	,2532
3043	—	9	1	59 57,41	4,883	,1722	9,0467	,6491	,3837
3044	—	7 8	1	17 0 26,98	5,078	,4905	9,0645	,7014	,4121
3045	—	6 7	1	0 44,41	5,035	,4892	9,0098	,7020	,4113
3046	Scorpi	6 7	2	1 13,73	4,126	-8,3873	-8,9210	+ 0,6155	+ 8,1389
3047	Aries	7 8	1	1 36,19	4,462	,3003	8,9771	,6195	,2554
3048	Scorpi	6 7	2	4 40,93	4,096	,3067	8,9170	,6124	,0987
3049	—	6 7	1	5 27,46	4,349	,8417	8,9591	,6384	,1881
3050	Aræ	6 7	1	9 9,09	5,142	,4372	9,0873	,7111	,3649
3051	Aræ	6 7	2	9 39,89	5,029	-8,4163	-9,0701	+ 0,7016	+ 8,3357
3052	—	7	1	9 54,77	5,376	,4643	9,1215	,7305	,4040
3053	—	6	2	11 16,04	4 484	,8140	8,9828	,6117	,1802
3054	Scorpi	7	2	11 45,35	4,076	,2126	8,9157	,6102	,0285
3055	—	7	1	13 2,30	4,370	,2791	8,9642	,6405	,1275
3056	Scorpi	7 8	—	13	4,078	-8,2261	-8,9164	+ 0,6104	+ 8,0119
3057	Aræ	7	1	14 16,39	4,733	,3267	9,0240	,6761	,2220
3058	—	7	1	14 45,17	4,657	,3100	9,0118	,6681	,1971
3059	—	7 8	1	15 0,87	5,240	,3970	9,1023	,7193	,3295
3060	—	7	1	15 5,62	4,473	,2764	8,9817	,6506	,1404

No	Declination (South) Jan 1 1840	Annual Precession	Logarithms of				Difference from the Brisbane Catalogue			
			a'	b	c'	d'	No	Right Ascension from M C	T	Declin
3016	37 21 49,91	— 6,160	—9,3658	+9,2707	—0,7896	—9,9784	5913	— 0,82	—	— 3,87
3017	58 25 40,57	6,019	,745	,4021	,7832	,9791	5917	— 2,00	—	— 3,04
3018	37 41 11,91	6,032	,3801	,2650	,7805	,9794	5920	— 2,77	—	+ 1,97
3019	52 59 14,61	5,966	,6998	,3761	,7757	,9798	5921	— 2,14	—	+ 00,9
3020	48 6 43,75	6,808	,6243	,3406	,7707	,9803	5926	— 2,46	—	+ 6,39
3021	44 36 40,96	5,898	—9,5587	+9,3154	—0,7707	+9,9803	5927	— 2,33	—	+ 5,22
3022	44 36	5,894	,5,87	,3160	,7703	,9804	5929	—	—	—
3023	37 28 45,35	5,820	,3706	,2473	,7649	,9809	5937	— 2,85	—	— 6,21
3024	43 54 37,66	5,798	,5465	,3036	,7633	,9809	5939	— 3,15	—	+ 4,04
3025	37 36 28,46	5,748	,3820	,2432	,7595	,9814	5942	— 2,29	—	+ 1,02
3026	46 44 8,92	5,737	—9,6031	+9,3191	—0,7587	+9,9814	5941	— 2,15	—	+ 2,00
3027	45 16 3,61	5,714	,6702	,3067	,7670	,9816	5945	— 1,47	—	— 0,33
3028	59 26 13,18	5,703	,7818	,3893	,7661	,9817	5944	— 1,38	—	+ 1,70
3029	43 62 29,36	5,642	,5465	,2903	,7614	,9821	5949	— 2,72	—	+ 3,98
3030	36 29 38,67	6,685	,3463	,2197	,7471	,9821	5953	— 2,98	—	— 5,94
3031	36 21 35,57	5,669	—9,3444	+9,2169	—0,7458	+9,9825	5956	— 1,83	—	— 6,90
3032	46 39 49,16	5,641	,6081	,3034	,7436	,9827	5958	— 4,16	—	+ 2,50
3033	46 27 17,76	5,513	,5999	,2998	,7414	,9829	5959	— 1,07	—	+ 9,46
3034	44 13 56,16	5,613	,5663	,2830	,7414	,9829	5960	— 1,74	—	-51,87
3035	42 45 11,66	5,468	,5237	,2678	,7378	,9832	5961	— 3,68	—	— 0,89
3036	40 48 14,11	5,412	—9,4786	+9,2468	—0,7333	+9,9836	5964	— 3,93	—	+ 5,96
3037	46 91 25,98	5,345	,8021	,2868	,7279	,9840	5968	— 10,74	—	+ 3,36
3038	46 48 54,11	5,327	,6085	,2874	,7266	,9841	5969	— 1,54	—	+ 2,62
3039	44 20 34,08	5,232	,6623	,2612	,7187	,9847	5976	— 1,94	—	+ 1,01
3040	58 23 0,76	5,226	,7746	,3468	,7182	,9847	5973	— 3,60	—	+ 4,57
3041	53 9 59,69	5,204	—9,7101	+9,3177	—0,7163	+9,9848	5977	— 2,16	—	+ 3,83
3042	46 68 18,68	5,204	,6933	,2712	,7163	,9848	5978	— 2,58	—	+ 1,66
3043	54 38 42,13	5,159	,7300	,3221	,7126	,9451	5980	— 2,64	—	— 9,45
3044	56 35 49,96	5,119	,7643	,3289	,7092	,9853	5983	— 2,11	—	+ 2,92
3045	56 41 7,26	5,091	,7650	,3270	,7068	,9855	5984	— 1,94	—	+ 3,54
3046	39 17 54,34	5,057	—9,4425	+9,2037	—0,7039	+9,9857	5990	— 2,15	—	— 0,65
3047	47 6 56,80	5,024	,6170	,2842	,7010	,9859	5992	— 2,09	—	+ 6,39
3048	38 22 59,61	4,763	,4910	,1690	,6779	,9874	6005	— 2,07	—	— 5,28
3049	44 35 20,07	4,701	,5740	,2167	,6722	,9877	6010	— 3,03	—	— 0,09
3050	57 60 19,47	4,377	,7745	,2670	,6412	,9894	6035	— 2,56	—	+ 6,44
3051	56 21 25,62	4,392	—9,7581	+9,2542	—0,6967	+9,9996	6037	— 1,57	—	— 0,22
3052	60 30	4,309	,8035	,2722	,6344	,9897	6038	— 2,48	—	— 4,05
3053	47 18 0,58	4,201	,6284	,1877	,6233	,9902	6046	— 2,36	—	— 2,83
3054	37 38 10,90	4,161	,4031	,1032	,6192	,9904	6049	— 1,53	—	— 0,68
3055	44 61 3,95	4,053	,5843	,1841	,6077	,9910	6057	— 1,92	—	+ 1,90
3056	37 37	4,007	—9,4048	+9,0866	—0,6028	+9,9911	6061	—	—	—
3057	51 47 45,72	3,944	,7007	,1894	,5959	,9914	6063	— 3,26	—	+ 1,47
3058	50 28 44,57	3,904	,6830	,1769	,5915	,9916	6067	— 2,77	—	+ 1,98
3059	58 63 1,46	3,875	,7896	,2189	,5888	,9917	6069	— 1,93	—	+ 1,20
3060	46 69 7,36	3,876	,6243	,1504	,6888	,9917	6073	— 2,09	—	+ 2,79

No.	Names	Mag.	No Obs.	Right Ascension Jan 1, 1840	Annual Piecesn	Logarithms of			
						a	b	c	d
3061	Scorpius	7	2	17 17 26,33	+4,320	-8,2291	-8,9583	+0,6364	+8,0646
3062	—	6 7	2	18 7,12	4,045	,1760	8,9123	,6069	7,9517
3063	Arae	6 7	2	19 59,56	4,427	,2176	8,9749	,6461	8,0709
3064	—	7 8	2	20 6,01	4,429	,2172	8,9754	,6463	8,0739
3065	—	7	1	21 20,17	5,326	,3421	9,1154	,7264	8,2784
3066	Scorpius	6 7	2	21 51,10	4,216	-8,1626	-8,9405	+0,6219	+7,9799
3067	Arae	6 7	2	22 6,98	4,553	,2151	8,9961	,6583	8,0890
3068	—	10	2	22 24,60	4,833	,2552	9,0410	,6842	8,1589
3069	Scorpius	7 8	2	23 0,81	4,211	,1477	8,9399	,6244	7,9634
3070	σ Arae	6 7	2	23 45,42	4,453	,1787	8,9798	,6486	8,0381
3071	Telescopii	5 6	2	24 15,45	3,908	-8,0856	-8,8926	+0,5919	+7,8154
3072	π Arae	6	1	24 68,16	4,912	,2568	9,0537	,6913	8,1468
3073	Scorpius	5 6	2	25 31,70	4,120	,1027	8,9256	,6149	7,8970
3074	λ Arae	7	2	28 3,09	4,607	,1479	9,0056	,6634	8,0277
3075	—	7	2	29 17,52	4,480	,1102	8,9849	,6513	7,9731
3076	Arae	8	2	30 26,06	5,053	-8,1824	-9,0758	+0,7035	+8,1033
3077	μ —	6 7	2	31 27,17	4,749	,1210	9,0247	,6766	8,0169
3078	—	7 8	2	31 46,98	4,436	,0661	8,9780	,6170	7,9222
3079	—	6 7	1	32 47,67	5 37	,1908	9,1209	,7291	8,1280
3080	Scorpius	6 7	2	33 15,98	4,291	,0189	8,9544	,6826	7,8498
3081	Arae	10	2	35 6,18	5,530	-8,1749	-9,1149	+0,7427	+8,1194
3082	—	6 7	2	35 18,04	4,989	,0941	9,0665	,6980	8,0093
3083	—	7	2	37 12,59	5,381	,1156	9,1242	,7309	8,0686
3084	ν¹ —	7	2	37 28,27	4,868	,0865	9,0480	,6873	7,9410
3085	ν² —	7	1	38 15,45	4,849	,0149	9,0434	,6847	7,9177
3086	Arae	7 8	1	38 24,35	4,885	-8,0193	-9,0506	+0,6888	+7,9261
3087	x —	6 7	2	39 54,67	4,425	,79131	8,9770	,6459	,7067
3088	y Scorpius	6 7	2	41 27,10	4,264	,78534	8,9610	,6298	,6783
3089	Telescopii	7	1	41 33,95	3,992	,78071	8,9079	,6012	,6629
3090	Scorpius	—	—	42	4,265	,78273	8,9512	,6299	,6513
3091	Telescopii	6 7	2	42 43,28	3,996	-7,7779	-8,9086	+0,6016	+7,5349
3092	—	6	2	43 43,02	3,995	,7532	8,9086	,6015	,6100
3093	—	7 8	1	43 49,08	3,982	,7475	8,9065	,6001	,4999
3094	Arae	6 7	2	44 3,32	5,110	,9189	9,0852	,7084	,8418
3095	σ Telescopii	7	2	44 18,82	4,062	,7454	8,9174	,6077	,5191
3096	Telescopii	—	—	45	4,001	-7,7242	-8,9096	+0,6022	+7,4828
3097	—	—	—	45	4,370	,7712	,9684	,6405	,6154
3098	—	7	3	45 26,58	4,002	,7045	,9098	,6023	,4633
3099	—	7	2	45 46,86	4,267	,7340	,9517	,6301	,5591
3100	—	7 8	3	46 35,74	4,206	,7080	,9616	,6300	,6328
3101	Arae	7 8	1	47 20,38	4,537	-7,7270	-8,9957	+0,6,68	+7,5963
3102	Telescopii	6	2	48 3,77	4,067	,6247	8,9200	,6093	,4025
3103	—	6 7	1	48 42,21	4,038	,5970	8,9154	,6162	,8662
3104	—	7	2	50 59,64	4,051	,4966	8,9177	,6076	,2686
3105	—	6 7	2	52 27,83	5,203	,5997	9,1064	,7204	,5308

No	Declination (South) Jan 1 1840	Annual Precession	Logarithms of				Difference from the Brisbane Catalogue			
			a'	b'	c'	d'	No	M	C	T
3061	43 49 47,69	- 3,675	-9,5658	+9,1038	-0,5653	+9,9926	6086	- 1,74	—	+ 6,69
3062	36 38 11,02	3,618	,3784	,0323	,5684	,9928	6088	- 2,89	- 3,27	- 2,03
3063	46 54 15,36	3,451	,6076	,0924	,5380	,9935	6099	- 2,42	—	+ 1,75
3064	46 57 34,06	3,446	,6086	,0920	,6373	,9906	6100	- 3,10	—	+ 4,94
3065	59 43 25,19	3,331	,8007	,1670	,5225	,9939	6105	- 2,55	- 2,64	+ 0,14
3066	41 2 46,98	3,297	-9,5065	+9,0335	-0,6180	+9,9940	6109	- 2,38	—	- 0,42
3067	48 24 17,89	3,274	,6632	,0870	,5151	,9941	6111	- 4,09	- 3,09	+ 2,40
3068	53 13 52,93	3,239	,7243	,1121	,5104	,9942	6114	- 1,41	—	- 0,58
3069	40 54 14,22	3,193	,6024	,0183	,6041	,9944	6118	- 1,92	—	- 1,57
3070	46 23 11,90	3,129	,6191	,0632	,4954	,9946	6121	- 2,54	- 3,09	+ 0,06
3071	32 27 45,36	3,069	-9,2148	+8,9177	-0,4898	+9,9948	6126	—	- 3,12	+ 1,65
3072	64 23 0,68	3,020	,7411	9,0881	,4800	,9960	6127	- 3,59	- 2,16	- 4,85
3073	36 30 46,48	2,940	,4409	8,9665	,4741	,9951	6133	- 2,50	- 2,16	+ 1,70
3074	49 18 26,07	2,756	,6702	9,0180	,4400	,9959	6146	- 2,63	- 2,96	- 1,00
3075	46 49 28,92	2,651	,8294	8,9814	,4233	,9962	6153	- 2,19	- 3,18	+ 2,87
3076	66 16 55,99	2,546	-9,7664	+9,0239	-0,4059	+9,9965	6161	- 2,40	—	- 0,52
3077	51 44 20,31	2,400	,7076	8,9839	,3909	,9967	6166	- 2,28	- 2,18	- 3,69
3078	45 63 4,38	2,436	,6138	8,9409	,3868	,9968	6172	- 2,08	—	+ 1,27
3079	59 64 64,56	2,338	,8069	9,0041	,3689	,9970	6175	- 1,60	- 3,07	+ 0,32
3080	42 38 51,96	2,309	,6490	8,8926	,3635	,9971	6180	- 3,37	- 3,08	+ 1,84
3081	61 38 46,61	2,135	-9,8254	+8,9721	-0,3295	+9,9975	6190	- 2,32	—	+ 3,89
3082	65 20 1,41	2,124	,7668	,9403	,8271	,9975	6193	- 2,08	- 2,69	- 3,06
3083	60 6 12,16	1,955	,8109	,9273	,2913	,9979	6200	- 2,62	- 3,43	- 3,62
3084	63 33 7,90	1,938	,7948	,8909	,2874	,9980	6204	+ 2,29	- 2,01	- 8,71
3085	53 4 12,08	1,869	,7283	,8724	,2715	,9981	6208	—	- 2,22	—
3086	53 46 36,64	1,857	-9,7340	+8,8736	-0,2688	+9,9981	6209	- 3,22	—	- 3,85
3087	46 32 43,71	1,713	,6096	,7881	,2364	,9984	6220	- 1,56	- 1,83	- 2,59
3088	41 56 16,55	1,696	,6353	,7260	,2029	,9986	6227	- 2,81	- 3,50	- 2,06
3089	34 44 64,94	1,584	,6343	,6637	,1998	,9986	6228	- 1,67	- 3,43	- 4,24
3090	41 56	1,603	,6353	,6999	,1789	,9988	6233	—	—	—
3091	34 50 59,40	1,480	-9,3304	+8,6251	-0,1701	+9,9988	6238	- 1,97	- 3,51	- 8,30
3092	34 50 12,89	1,398	,8304	,6004	,1456	,9989	6243	- 3,24	—	- 4,10
3093	34 26 30,61	1,386	,3139	,6923	,1419	,9990	6246	- 1,82	—	- 1,38
3094	56 51 34,20	1,363	,7767	,7655	,1346	,9990	6246	- 2,20	—	- 0,98
3095	36 26 7,14	1,346	,8874	,6007	,1289	,9990	6249	- 2,42	- 3,34	- 0,93
3096	34 59	1,305	-9,3365	+8,5723	-0,1156	+9,9991	6260	—	—	—
3097	44 18	1,270	,5868	,6461	,1038	,9991	6263	—	—	—
3098	35 0 49,06	1,247	,8186	,55 6	,0958	,9992	6265	- 1,29	—	- 6,38
3099	41 56 41,69	1,112	,6366	,6066	,0434	,9992	6266	- 2,30	—	+ 0,30
3100	41 54 40,06	1,142	,6366	,5808	,0577	,9993	6269	- 1,20	—	+ 6,66
3101	47 44 48,46	1,078	-9,6503	+8,6000	-0,0326	+9,9994	6262	- 3,15	—	+ 2,86
3102	6 50 0,88	1,014	,4014	,4819	,0060	,9994	6265	- 0,76	—	- 6,17
3103	36 59 53,02	0,961	,3720	,4503	,9,9830	,9996	6269	- 1,53	—	- 2,00
3104	36 21 46,02	0,757	,3474	,3506	,9,8795	,9997	6281	+ 0,17	—	+ 3,64
3105	68 34 4,27	0,623	,7973	,4241	,9,7949	,9998	6288	- 2,88	—	+ 3,36

Mean A R and Declination of Stars

No	Names	Mag	No Obs	Right Ascen Jan 1, 1840	Annual Precessn	Logarithms of			
						a	b	c	d
3106	Telescopu	6 7	2	17 54 4,44	+4,036	-7,3085	-8,9163	+0,6058	+7,0767
3107	—	7 8	2	54 44,95	4,065	,2472	,89200	,6091	,0241
3108	—	8	2	54 54,66	4,099	,2341	,89191	,6084	,0094
3109	Pavonia	7	2	55 33,98	5,584	,3946	,91629	,7469	,3407
3110	Telescopu	7	1	55 60,26	5,296	,3247	,91126	,7238	,2579
3111	Telescopu	6 7	2	55 35,44	4,039	-7,1721	-8,9160	+0,6063	+6,9416
3112	—	—	—	56	4,061	,70733	,9103	,6080	,8489
3113	—	8	1	58 3,39	4,418	,8766	,9815	,6482	,7329
3114	—	6 7	2	58 31,76	4,063	,6139	,9197	,6088	,3902
3115	—	7	1	58 59,77	4,528	,4582	,9946	,6559	,3261
3116	Ares	7	2	18 0 24,82	4,694	+6,5263	-9,0212	+0,6715	-6,4142
3117	Telescopu	7 8	2	0 59,60	4,006	,66383	,89108	,6026	,6124
3118	—	6	3	3 38,61	5,053	,73189	,90770	,7036	,7,2379
3119	—	7	3	4 24,99	4,724	,73411	,90260	,6743	,7,2323
3120	—	7 8	3	5 0,98	4,061	,72862	,8,9193	,6086	,7,0817
3121	Pavonia	6 7	3	8 28,78	5,632	+7,7367	-9,1456	+0,7429	-7,6808
3122	—	8	3	8 32,28	5,458	,7266	,9,1366	,7,70	,6076
3123	Telescopu	8	2	9 49,23	4,067	,5660	,8,9202	,6093	,3438
3124	—	9	3	11 23,27	4,977	,7770	,9,0649	,6970	,6905
3125	Sagittarii	6	1	12 2,76	4,064	,6460	,8,9194	,6089	,4228
3126	Telescopu	—	—	12	5,136	+7,8388	-9,0891	+0,7105	-7,7633
3127	—	—	—	12	4,885	,8097	,9,0510	,6889	,7161
3128	—	7	2	16 0,58	5,169	,9546	,9,0939	,7134	,8812
3129	—	6 7	2	17 23,31	4,150	,8205	,8,9326	,6180	,6204
3130	—	6 6	2	17 53,92	4,612	,8921	,8,9013	,6644	,7585
3131	Pavonia	8	2	17 58,05	6,114	+8,1263	-9,2198	+0,7863	-8,0474
3132	Telescopu	7 8	3	19 18,95	4,516	,7,9265	,8,9919	,6547	,7,7936
3133	—	8	2	19 27,80	5,266	,8,0470	,9,1079	,7215	,7,9791
3134	—	8	2	21 21,16	4,912	,8,0317	,9,0548	,6913	,7,9108
3135	—	7 8	1	21 39,29	4,838	,8,0247	,9,0426	,6842	,7,9271
3136	Telescopu	7 8	2	22 6,09	4,800	+8,0222	-9,0873	+0,6812	-7,9215
3137	—	9 10	1	22 55,62	5,254	,1163	,1000	,7205	,8,0470
3138	—	7	1	23 12,89	5,064	,0921	,0778	,7045	,8,0123
3139	Pavonia	9	2	23 27,25	5,915	,2169	,1963	,7719	,8,1741
3140	Telescopu	7 8	2	25 11,51	5,292	,1427	,1115	,7286	,8,0765
3141	Telescopu	7 8	3	27 7,74	4,643	+8,0763	-8,9965	+0,6573	-7,9476
3142	—	7	3	29 23,70	4,561	,1121	,8,9966	,6681	,7,9846
3143	—	7	3	33 24,86	4,701	,1915	,9,0205	,6722	,8,0821
3144	—	7 8	3	33 29,10	4,558	,1691	,8,9972	,6,68	,8,0430
3145	—	6 7	3	34 34,73	4,656	,1987	,9,0131	,6880	,8,0846
3146	Telescopu	—	—	34	4,630	,19,1077	-9,0088	+0,6666	-8,0806
3147	—	—	—	34	4,630	,1945	,9,0087	,6986	,0814
3148	—	7 8	3	35 5,01	1,629	,2010	,9,0087	,6985	,0848
3149	K ₁	6	2	39 57,65	4,700	,2406	,9,0306	,6784	,1788
3150	Cor Austr	7 8	2	40 71,10	4,370	,2212	,8,9663	,6405	,0886

in the Southern Hemisphere, &c &c

exh

No	Declination (South) Jan 1 1840	Annual Precession	Logarithms of				Difference from the Brisbane Catalogue			
			a'	b'	c'	d'	No	M	C	T
3106	36 53 53,37	- 0,495	-9,3692	+8,1613	-9,6950	+9,9999	6297	- 2,29	—	- 3,68
3107	36 45 12,48	0,425	,3980	,1040	,0289	,9999	6299	+ 1,05	—	- 4,94
3108	36 34 47,28	0,414	,3944	,0902	,8169	,9999	6300	- 0,64	—	+ 3,88
3109	32 1 24,38	0,350	,8325	,1879	,5438	,9999	6303	- 2,51	- 1,69	+ 7,09
3110	59 3 3,37	0,326	,8021	,1462	,6138	,9999	6305	- 1,34	—	+ 0,10
3111	36 1 28,74	0,361	-9,3747	+8,0265	-9,6680	+9,9999	6306	- 2,37	—	- 1,83
3112	38 37	0,286	,3944	,79295	,9,4658	0,0000	6309	—	—	—
3113	44 55	0,139	,6191	,7,7003	,9,1459	0,0000	6314	—	—	—
3114	36 41 14,30	0,099	,3962	,7,4704	,8,9961	0,0000	6322	- 0,62	—	- 6,08
3115	47 31 52,14	0,058	,6484	,7,3316	,8,7656	0,0000	6326	- 3,15	- 3,10	- 0,31
3116	50 34 53,04	+ 0,064	-9,6964	-7,3930	+8,8070	+0,0000	6334	- 2,31	- 3,08	- 1,73
3117	35 3 3,84	0,110	,3404	,7,5016	,9,0444	0,0000	6336	- 1,04	—	- 10,24
3118	56 3 47,42	0,350	,7094	,8,1608	,9,5438	,9,9999	6347	- 2,59	- 2,32	- 1,63
3119	61 6 34,67	0,414	,7042	,8,2062	,9,0169	,9,9999	6360	- 4,25	—	+ 1,21
3120	38 36 60,96	0,466	,3944	,8,1424	,9,0687	,9,9999	6355	- 1,86	- 3,05	- 7,52
3121	61 33 18,55	0,781	-9,8274	-8,5348	+9,8926	+9,9997	6366	- 2,90	- 2,85	+ 3,81
3122	60 48 37,76	0,781	,8195	,6318	,9,8926	,9997	6368	—	- 3,67	- 1,69
3123	36 60 4,86	0,887	,4024	,4232	,9,9479	,9996	6372	- 1,18	—	- 8,16
3124	55 1 41,46	1,031	,761	,6249	0,0134	,0994	6378	- 0,92	—	- 10,07
3126	36 44 12,11	1,067	,3962	,6027	0,0279	,9994	6382	- 3,42	—	+ 0,28
3120	57 10	1,126	-9,7810	-8,6736	+0,0510	+9,9993	6383	—	—	—
3127	53 43	1,148	,7388	,6643	,0599	,9993	6385	—	—	—
3128	57 36 40,84	1,460	,7853	,7861	,1616	,9989	6399	- 0,26	—	- 1,08
3129	39 5 0,76	1,544	,4639	,6862	,1885	,0087	6406	- 2,42	—	- 0,16
3130	47 18 46,61	1,590	,6425	,7658	,2013	,9986	6411	- 2,39	- 3,32	+ 0,33
3131	66 22 44,69	1,607	-9,8686	-8,8662	+0,2061	+9,9986	6409	—	- 2,10	+ 2,83
3132	47 24 39,03	1,718	,6434	,8001	,2349	,9984	6417	- 1,69	—	+ 6,62
3133	58 48 21,55	1,735	,7973	,8695	,2393	,9984	6416	- 1,71	- 0,02	+ 0,84
3134	54 11 39,04	1,892	,7427	,8840	,2769	,9981	6422	—	- 3,69	+ 2,24
3135	52 59 63,00	1,916	,7275	,8826	,2822	,9980	6424	—	- 7,56	+ 4,77
3136	52 29 40,94	1,967	-9,7202	-8,8913	+0,2939	+9,9979	6426	—	—	- 3,72
3137	58 42 5,81	2,037	,7959	,9387	,3090	,9977	6431	- 2,46	—	- 2,04
3138	56 20 19,72	2,060	,7686	,9322	,3139	,9977	6434	- 2,12	—	+ 0,30
3139	64 59 8,01	2,095	,8561	,9764	,3211	,9970	6436	+ 2,83	—	- 8,71
3140	59 14 31,01	2,141	,7993	,9625	,3307	,9976	6437	- 3,87	—	- 4,68,88
3141	48 2 17,16	2,396	-9,6513	-8,9489	+0,3795	+9,9969	6448	- 2,32	—	+ 3,63
3142	48 13 34,34	2,593	,6532	,8,9844	,4138	,9963	6459	- 1,47	—	+ 1,66
3143	51 1 31,94	2,939	,6955	,9,0569	,4682	,9953	6471	- 2,91	—	+ 2,59
3144	48 24 58,94	2,945	,6651	,9,0411	,4691	,9953	6472	- 5,99	—	+ 4,43
3145	50 15 4,67	3,037	,6830	,9,0664	,4826	,9949	6474	—	- 2,74	- 8,18
3146	49 47	3,060	-9,6767	-9,0667	+0,4857	+9,9949	6476	—	—	+ 7,27
3147	49 47*	3,066	,6767	,0675	,4866	,9949	6476	—	—	+ 7,27
3148	49 47 21,46	3,083	,6758	,0700	,4890	,9948	6477	- 2,46	—	+ 1,47
3149	52 16 57,79	3,509	,7110	,1414	,5452	,9932	6502	- 2,98	- 1,60	- 6,18
3150	44 42 55,28	3,516	,5855	,0962	,5808	,9931	6507	- 2,87	—	- 4,88

Mean A., R., and Declination of Stars

No	Names	Mag	No Obs	Right Ascen Jan 1, 1840	Annual Precess	Logarithms of			
						a	b	c	d
3151	κ° Telescopii	7	3	18 40 32,19	+4,757	+8,2844	-9,0386	+0,6773	-8,1815
3152	—	6,7	2	40 54,85	4,565	,2560	8,9958	,6585	,1307
3153	Cor Aust.	6,7	3	40 53,42	4,247	,2044	8,9450	,6281	,0289
3154	Telescopii	7	3	42 12,32	4,637	,2825	9,0089	,6662	,1672
3155	α Pavonis	6	3	44 22,19	5,375	,4186	9,1219	,7304	,3578
3156	Telescopii	7,8	3	44 20,19	4,586	+8,2956	-9,0003	+0,6614	-8,1746
3157	Cor Aust.	7	3	44 32,04	4,076	,2132	8,9165	,6102	,7,9983
3158	π —	6,7	2	45 40,97	4,338	,2669	8,9590	,6373	,8,1095
3159	λ Telescopii	6,7	3	45 39,12	4,814	,3464	9,0370	,6825	,8,2485
3160	Cor Aust	6	3	45 49,36	4,074	,2249	8,9168	,6100	,8,0097
3161	Telescopii	7,8	1	46 46,93	4,408	+8,2899	-8,9705	+0,6442	-8,1446
3162	—	7,8	2	47 7,77	4,951	,3802	9,0583	,6947	,2947
3163	—	8	2	47 48,85	4,696	,3295	9,0014	,6624	,2104
3164	α Cor Aust	6	2	47 65,76	4,065	,2432	8,9139	,6096	,0262
3165	β —	—	—	47	4,062	,2427	8,9134	,6087	,0249
3166	Sagittarii	7,8	3	48 33,97	4,543	+8,3280	-8,9925	+0,6573	-8,2024
3167	Telescopii	8	2	49 38,33	5,168	,4280	9,0913	,7133	,3571
3168	—	—	—	50	5,166	,4425	9,0908	,7131	,3716
3169	—	7,8	3	50 17,04	5,168	,4427	9,0910	,7133	,3719
3170	Cor Aust	7	2	50 14,63	4,060	,2630	8,9124	,6086	,0451
3171	Sagittarii	7	2	51 4,58	4,650	+8,3684	-9,0097	+0,6674	-8,2560
3172	—	7	2	51 15,41	4,478	,3411	8,9812	,6511	,2071
3173	δ Telescopii	6,7	3	53 39,33	4,766	,4083	9,0279	,6781	,3082
3174	Sagittarii	7	3	54 33,85	4,645	,3963	9,0083	,6670	,2841
3175	α Sagittarii	7	2	54 51,65	4,636	,3805	8,9902	,6567	,2552
3176	σ Sagittarii	6,6	2	55 6,86	3,591	+8,2352	-8,8439	+0,6552	-7,8082
3177	Pavonis	8,9	3	55 35,38	5,601	,5353	9,1385	,7404	,8,4810
3178	Telescopii	6,7	3	55 36,48	4,986	,4600	9,0627	,6977	,8,3783
3179	α Cor Aust	6	3	58 34,93	4,082	,3335	8,9136	,6109	,8,1242
3180	Sagittarii	7	4	19 0 24,39	4,645	,4407	9,0071	,6670	,8,3296
3181	Telescopii	7,8	2	1 6,12	5,150	+8,5260	-9,0869	+0,7118	-8,4556
3182	β Sagittarii	6,7	3	4 42,67	4,384	,4282	8,9622	,6419	,2839
3183	Telescopii	—	—	4	4,999	,5297	9,0632	,6989	,4504
3184	Sagittarii	8	3	7 8,48	4,695	,4956	9,0139	,6716	,3911
3185	Telescopii	6	3	9 55,38	4,807	,5418	9,0413	,6873	,4536
3186	χ Telescopii	7	3	10 12,22	4,670	+8,5112	-9,0090	+0,6693	-8,4049
3187	—	7,8	3	10 46,46	4,834	,5420	9,0369	,6843	,8,4513
3188	Sagittarii	6,7	2	11 3,12	3,600	,3445	8,8375	,5563	,7,9307
3189	Telescopii	7,8	2	11 16,23	4,966	,5659	9,0567	,6459	,8,4863
3190	Sagittarii	—	—	11	3,590	,3470	8,8373	,5551	,7,9334
3191	Telescopii	7	3	12 47,81	4,667	+8,5253	-9,0063	+0,6681	-8,4183
3192	—	7	3	14 56,09	4,850	,5703	,0875	,6857	,4817
3193	μ Telescopii	7	3	17 31,00	4,506	,6000	,0442	,6897	,5080
3194	Pavonis	8	3	18 0,43	5,300	,6590	,1067	,7243	,6991
3195	Telescopii	7,8	3	19 8,42	4,829	,5910	,0331	,6839	,6016

No	Declination (South) Jan 1 1840	Annual Precession	Logarithms of				Difference from the Brisbane Catalogue			
			<i>a'</i>	<i>b'</i>	<i>c'</i>	<i>d'</i>	Right Ascension		Declin	
							No	M C	T	"
	<i>s</i> <i>r</i> <i>"</i>	"								
3151	52 6 46,56	+ 3,555	-9,7076	-9,1460	+0,5508	+9,9931	6508	- 2,53	- 2,02	- 1,77
3152	48 32 19,36	3,589	,6532	,1277	,5550	,9929	6509	- 2,20	—	+ 1,29
3153	41 53 14,40	3,583	,5237	,0769	,5543	,9929	6511	- 0,07	—	- 6,45
3154	50 3 55,99	3,698	,6767	,1507	,5680	,9926	6516	- 2,39	- 4,46	- 4,27
3155	60 24 1,37	3,893	,8055	,2276	,5902	,9916	6522	- 2,23	- 2,68	+ 4,48
3156	49 11 5,79	3,881	-9,6609	-9,1660	+0,5890	+9,9917	6523	- 2,14	—	+ 0,40
3157	37 34 46,68	3,893	,4048	,0784	,5902	,9916	6524	- 2,66	- 4,02	- 6,45
3158	44 6 48,07	3,990	,5682	,1417	,6009	,9912	6530	- 2,51	- 2,80	+ 2,79
3159	53 8 23,47	3,995	,7193	,2028	,6016	,9912	6528	- 1,86	- 3,04	- 1,85
3160	37 32 22,95	4,001	,4031	,0851	,6022	,9912	6532	—	- 3,77	- 0,16
3161	48 42 29,43	4,093	-9,5999	-9,1648	+0,6120	+9,9907	6536	- 2,69	—	+ 3,82
3162	55 13 31,32	4,115	,7451	,2270	,6144	,9906	6536	- 8,78	—	- 12,37
3163	49 28 46,63	4,172	,6637	,1993	,6204	,9904	6539	- 3,05	—	+ 1,85
3164	37 18 32,26	4,184	,3944	,1026	,6216	,9903	6542	- 2,62	- 2,19	- 2,96
3165	37 16	4,184	,5927	,1018	,6216	,9903	6543	—	—	—
3166	48 29 34,65	4,241	-9,6474	-9,1999	+0,6274	+9,9900	6547	- 2,99	—	+ 1,16
3167	58 8 19,21	4,252	,7789	,2557	,6286	,9900	6545	- 62,21	—	- 14,10
3168	58 8	4,395	,7781	,2701	,6429	,9893	6553	—	—	—
3169	58 10 46,23	4,395	,7781	,2702	,6429	,9893	6550	- 2,42	—	- 2,12
3170	37 16 28,41	4,383	,3909	,1220	,6418	,9894	6556	- 1,58	- 3,08	- 1,65
3171	50 32 11,26	4,403	-9,6776	-9,2353	+0,6496	+9,9890	6559	- 0,15	—	- 6,02
3172	47 16 56,82	4,474	,6243	,2148	,6507	,9889	6560	- 2,14	—	+ 1,03
3173	52 33 56,43	4,678	,7069	,2680	,6701	,9878	6667	- 3,96	- 2,00	+ 3,07
3174	50 33 19,72	4,753	,6758	,2632	,5774	,9874	6668	- 1,04	- 2,86	- 3,36
3175	48 31 53,03	4,780	,6444	,2592	,5795	,9873	6569	- 2,26	—	+ 4,03
3176	21 58 4,94	4,792	+8,6021	-8,9615	+0,6806	+9,9872	6570	- 2,62	—	+ 3,78
3177	61 57 28,26	4,848	-9,8142	9,3294	,6866	,9869	6572	- 1,39	—	+ 2,20
3178	55 57 15,06	4,864	,7489	,3025	,6861	,9869	6573	+ 1,02	—	- 7,38
3179	38 8 42,75	5,097	,4082	,1960	,7073	,9855	6586	- 2,09	- 3,35	- 0,01
3180	60 44 24,66	5,249	,6739	,3070	,7201	,9846	6593	- 1,63	—	- 2,87
3181	58 15 20,26	5,311	-9,7723	-9,3628	+0,7262	+9,9842	6696	- 1,99	- 3,14	+ 2,67
3182	45 44 11,37	5,626	,5843	,3032	,7501	,9822	6607	- 1,60	—	+ 1,21
3183	50 25	5,830	,7474	,3693	,7505	,9821	6608	—	—	—
3184	61 51 4,02	5,815	,6848	,3582	,7645	,9809	6619	- 1,69	—	- 6,70
3185	54 42 46,03	6,040	,7218	,3915	,7817	,9793	6629	- 2,11	—	- 11,19
3186	61 31 23,00	6,071	-9,6776	-9,3750	+0,7832	+9,9791	6632	- 2,46	- 2,45	- 3,97
3187	54 14 24,11	6,121	,9,7152	,3941	,7868	,9787	6639	- 2,08	—	+ 3,45
3188	29 41 33,99	6,182	+8,6186	,0719	,7876	,9786	6642	- 2,59	—	+ 7,47
3189	56 11 2,69	6,160	-9,7388	,4071	,7896	,9784	6640	- 2,20	—	- 3,50
3190	22 41	6,165	+8,6185	,0745	,7899	,9784	6643	—	—	—
3191	51 24 6,70	6,287	-9,6730	-9,3895	+0,7986	+9,9775	6649	- 2,73	—	- 4,46
3192	54 38 10,98	6,470	,7168	,4204	,8109	,9761	6656	- 2,41	—	- 4,10
3193	56 25 46,84	6,694	,7243	,4387	,8261	,9744	6666	- 2,19	- 2,63	- 2,10
3194	60 35 28,29	6,734	,7832	,4664	,8283	,9740	6669	—	- 2,70	+ 7,69
3195	54 29 20,41	6,810	,7101	,4419	,8832	,9738	6670	- 2,35	—	- 2,62

No	Names	Mag	No Obs	Right Ascen Jan 1, 1840	Annual Placesn	Logarithms of			
						a	b	c	d
3196	Telescopii	6 7	3	19 20 14,71	+ 4,763	+ 8,586 7	- 9,0221	+ 0,6779	- 8,1919
3197	D Sagittarii	6	4	23 19,81	4,475	,5547	8,9725	,6504	,1285
3198	Telescopii	7 8	3	24 56,87	5,084	,6644	9,0727	,7062	,5913
3199	—	/ 8	2	27 30,47	4,823	,6367	9,0501	,6833	,5179
3200	—	7,8	3	27 57,13	4,807	,6353	9,0274	,6819	,5162
3201	Telescopii	6	3	34 55,68	4,931	+ 8,6909	- 9,0160	+ 0,6929	- 8,6132
3202	Pavonis	8	3	36 25,57	5,148	,7329	9,0802	,7116	,6088
3203	λ —	6 7	0	37 8,05	5,139	,7351	9,0787	,7109	,6707
3204	Sagittarii	6 7	3	38 52,08	4,413	,6191	8,9561	,6417	,4898
3205	Telescopii	6 7	0	39 51,75	4,819	,6909	9,0262	,6830	,6111
3206	Indi	7	3	40 40,09	5,300	+ 8,7764	- 9,1023	+ 0,7243	- 8,7206
3207	Telescopii	8	2	42 54,91	4,745	,6973	,0127	,6762	,6072
3208	Indi	7	3	43 37,77	5,090	,7577	,0695	,7067	,6921
3209	—	7	3	43 41,86	5,014	,7457	,0572	,7002	,6756
3210	λ —	7	4	48 14,01	5,111	,7816	,0716	,7080	,7182
3211	Sagittarii	7 8	3	53 42,65	4,306	+ 8,6650	- 8,9303	+ 0,6841	- 8,5268
3212	Telescopii	—	—	54	4,648	,7288	8,9919	,6766	,6334
3213	—	6 7	3	54 57,20	4,708	,7535	9,0127	,6783	,6692
3214	—	6	3	55 6,18	4,639	,7314	8,9900	,6664	,6355
3215	—	7 8	0	55 55,68	4,619	,7311	8,9861	,6646	,6335
3216	Indi	7 8	5	58 5,66	4,924	+ 8,7932	- 9,0385	+ 0,6923	- 8,7215
3217	—	6 7	3	20 2 9,60	4,589	,7506	8,9782	,6617	,6521
3218	—	7 8	3	5 41,47	4,646	,7564	8,9691	,6676	,6552
3219	—	7	3	7 26,15	4,336	,7220	8,9288	,6371	,6953
3220	Pavonis	7 8	6	7 30,10	4,970	,8384	9,0432	,6964	,7724
3221	Pavonis	—	—	7	4,969	+ 8,8388	- 9,0430	+ 0,6903	- 8,7728
3222	Indi	7	6	8 3,61	4,717	,7964	8,9992	,6737	,7125
3223	—	—	—	8	4,718	,7967	8,9993	,6738	,7130
3224	—	7	3	9 16,87	4,436	,7491	8,9469	,6170	,6368
3225	—	6 7	3	10 2,21	4,432	,7615	8,9456	,6466	,6387
3226	Sagittarii	7 8	2	11 3,05	4,052	+ 8,6818	- 8,8721	+ 0,6077	- 8,5008
3227	—	—	—	12	4,077	,6936	8,8756	,6103	,6201
3228	—	6 7	3	15 5,67	4,043	,6938	8,8676	,6067	,5133
3229	Pavonis	8 9	3	16 45,61	4,926	,8664	9,0328	,6926	,8007
3230	ψ —	6	2	22 17,48	5,038	,9054	9,0495	,7023	,8277
3231	ψ Pavonis	6	3	26 44,35	5,004	+ 8,9165	- 9,0428	+ 0,6993	- 8,8586
3232	Indi	7 8	3	29 11,31	4,222	,7763	8,8934	,6265	,6429
3233	η —	5 6	3	32 16,47	4,436	,8299	8,9818	,6470	,7292
3234	Microscopii	6 7	3	32 23,48	3,952	,7312	8,8358	,6908	,5402
3235	Indi	7	4	36 22,80	4,156	,7860	8,8748	,6187	,6460
3236	Microscopii	8	3	37 65,44	4,082	+ 8,7750	- 8,8681	+ 0,6109	- 8,6211
3237	ε Indi	6	2	38 27,26	4,162	,7942	,8744	,6193	,6669
3238	—	6	3	39 54,31	4,385	,8402	,9201	,6420	,7428
3239	Microscopii	6	3	40 43,28	3,879	,7406	,8129	,6887	,6346
3240	μ —	7	3	47 3,72	4,052	,7960	,8441	,6077	,6430

No	Declination (South) Jan 1 1840	Annual Precession	Logarithms of				No	Difference from the Brisbane Catalogue			
			a'	b'	c'	d'		M	O	T	Declin
3196	• 53 30 52,15	+ 6,904	-9,6964	-9,4423	+0,8391	+9,9726	6672	- 1,78	- 5,24	- 4,19	"
3197	48 26 7,12	7,155	,6138	,4267	,8546	,9704	6689	- 1,37	—	+ 1,74	
3198	58 19 34,75	7,291	,7520	,4908	,8628	,9692	6698	- 3,15	- 6,07	+ 2,28	
3199	54 46 24,32	7,497	,7050	,4851	,8749	,9673	6707	- 2,97	- 4,21	- 6,89	
3200	54 34 0,11	7,529	,7016	,4858	,8767	,9670	6708	- 2,62	- 4,87	- 4,50	
3201	56 44 16,56	8,093	-9,7218	-9,5284	+0,9081	+9,9613	6726	- 2,36	- 2,73	- 1,54	
3202	59 39 7,06	8,215	,7643	,5486	,9146	,9600	6731	- 3,67	- 2,49	- 4,33	
3203	59 35 2,57	8,274	,7630	,5514	,9177	,9594	6733	- 3,29	- 2,66	+ 0,45	
3204	47 56 52,09	8,380	,6832	,4919	,9232	,9683	6738	- 3,08	—	+ 2,32	
3205	56 22 14,24	8,486	,8972	,5420	,9287	,9671	6745	- 4,62	—	- 5,72	
3206	61 34 27,14	8,554	-9,7694	-9,5744	+0,9322	+9,9563	6747	- 3,30	—	- 1,55	
3207	54 21 20,67	8,728	,6794	,5488	,9409	,9543	6757	- 1,57	—	- 3,84	
3208	59 18 46,05	8,785	,7411	,5763	,9438	,9537	6759	- 3,57	- 3,07	+ 2,63	
3209	58 20 9,67	8,791	,7300	,5720	,9440	,9536	6760	- 3,03	—	- 3,55	
3210	59 48 16,28	9,146	,7411	,5969	,9612	,9493	6775	- 3,04	- 4,28	- 0,51	
3211	46 32 22,31	9,563	-9,5302	-9,6395	+0,9806	+9,9439	6790	- 1,91	—	+ 1,90	
3212	53 24	9,599	,6493	,6449	,9822	,9435	6791	—	—	—	
3213	56 28 3,91	9,666	,8767	,6990	,9862	,9426	6793	- 1,73	- 2,67	- 0,42	
3214	53 19 50,36	9,675	,6464	,6879	,9867	,9424	6794	- 2,61	—	+ 0,04	
3215	53 1 49,68	9,736	,8405	,5889	,9884	,9415	6799	- 2,87	—	- 6,43	
3216	57 58 59,10	9,904	-9,7050	-9,6222	+0,9968	+9,9392	6803	- 1,84	- 2,70	+ 1,61	
3217	52 54 56,26	10,212	,6274	,6090	1,0091	,9317	6814	- 2,57	- 1,79	+ 0,05	
3218	52 28 57,96	10,472	,6128	,6169	,0200	,9308	6821	- 2,73	—	- 4,42	
3219	48 11 55,49	10,591	,6366	,5963	,0249	,9289	6826	- 12,12	—	+ 1,03	
3220	59 13 12,70	10,610	,7050	,6578	,0267	,9286	6828	- 1,66	—	+ 1,74	
3221	59 13	10,620	-9,6628	-9,6583	+1,0261	+9,9284	6827	—	—	—	
3222	56 32 33,91	10,646	,6551	,6414	,0271	,9280	6829	- 4,20	—	- 5,55	
3223	55 32	10,650	,6561	,6417	,0273	,9279	6830	—	—	—	
3224	60 30 42,89	10,738	,5740	,6164	,0309	,9265	6836	- 2,76	- 4,63	- 2,88	
3225	50 29 12,19	10,797	,5729	,6186	,0383	,9255	6837	- 1,66	- 3,23	- 7,10	
3226	41 15 21,18	10,866	-9,3579	-9,5531	+1,0361	+9,9244	6841	- 2,90	—	- 0,59	
3227	42 8	11,013	,3766	,5665	,0419	,9219	6848	—	—	—	
3228	41 18 17,34	11,158	,3483	,5652	,0476	,9194	6851	- 2,40	—	- 2,99	
3229	59 17 35,23	11,289	,6884	,6821	,0526	,9171	6855	- 1,33	—	+ 2,63	
3230	61 6 44,96	11,685	,6998	,7080	,0676	,9098	6873	—	- 4,22	+ 6,74	
3231	61 4 32,36	12,000	-9,6911	-9,7194	+1,0792	+9,9036	6886	- 3,44	- 4,28	- 4,15	
3232	47 22 50,60	12,153	,4639	,6498	,0850	,9002	6891	- 2,53	—	+ 0,62	
3233	52 29 7,42	12,380	,5663	,6901	,0927	,8956	6904	- 1,60	- 2,40	- 0,68	
3234	40 7 30,36	12,384	,2405	,5999	,0929	,8965	6905	- 2,83	- 4,65	- 1,87	
3235	46 26 55,87	12,662	,4183	,6605	,1025	,8894	6912	- 1,59	—	+ 6,37	
3236	44 33 59,02	12,781	-9,3655	-9,6500	+1,1059	+9,8871	6916	- 4,33	—	+ 8,09	
3237	46 48 43,33	12,802	,4216	,6684	,1073	,8859	6919	- 4,07	- 4,64	+ 2,66	
3238	52 11 52,15	12,904	,6289	,7084	,1107	,8837	6921	+ 1,21	- 1,66	- 3,07	
3239	38 30 7,41	12,949	,1303	,6043	,1122*	,8827	6924	- 3,70	—	- 1,66	
3240	44 41 42,02	13,367	,3324	,6710	,1260	,8722	6946	- 2,91	- 0,50	- 14,61	

No	Names	Mag	No Obs	Right Ascen Jan 1, 1840	Annual Precessn	Logarithms of			
						a	b	c	d
3241	σ Indi	6.7	3	H 20 48 56,31	+4,327	+8,8614	-8,9022	+0,6362	-8,7572
3242	—	6.7	3	48 68,80	4,444	,8865	,9270	,6478	,7903
3243	Microscopii	7	2	49 19,92	4,008	,8902	,8324	,6029	,6319
3244	—	—	—	50	4,002	,7955	,8302	,6023	,6341
3245	Indi	7.8	3	52 6,14	4,726	,9536	,9822	,6745	,8891
3246	ν Microscopii	7	2	52 10,33	3,861	+8,7690	-8,7975	+0,6867	-8,5091
3247	μ Indi	6.7	3	53 26,82	4,471	,9084	,9299	,6504	,8216
3248	—	7	3	54 50,59	4,780	,9730	,9914	,6794	,9131
3249	—	7	3	55 9,16	4,430	,9062	,9190	,6464	,8187
3250	—	7	3	55 48,41	4,190	,8559	,8666	,6222	,7373
3251	Piscis Aust	7	3	56 37,13	3,688	+8,7440	-8,7549	+0,6068	-8,4790
3252	ρ Microscopii	6.7	3	56 59,30	4,058	,8264	,8367	,6083	,6813
3253	σ Indi	7	3	57 58,41	4,718	,9717	,9780	,6737	,9093
3254	—	7.8	3	58 41,21	4,433	,9151	,9189	,6407	,8295
3255	—	7	3	59 36,79	4,531	,9387	,9390	,6602	,8030
3256	Microscopii	7	3	59 37,16	3,981	+8,8163	-8,8168	+0,5999	-8,0641
3257	—	6.7	3	21 1 56,07	3,878	,7990	,7906	,5886	,6149
3258	Indi	7	3	3 37,95	4,669	,9599	,9447	,6598	,8896
3259	—	7	3	3 0,75	4,645	,9770	,9603	,6670	,9126
3260	—	6.7	3	4 17,98	4,337	,9117	,8942	,6372	,8181
3261	Indi	—	—	4	4,689	+8,9877	-8,9690	+0,6711	-8,9267
3262	Microscopii	—	—	4	3,847	,7997	,7800	,5861	,6081
3263	Indi	7.8	2	6 56,90	4,133	,8729	,8463	,6163	,7329
3264	θ —	6.6	3	8 25,30	4,322	,9212	,8880	,6357	,8207
3265	Microscopii	7	4	8 34,69	4,066	,8615	,8279	,6594	,7305
3266	Indi	8	3	12 56,28	4,485	+8,9719	-8,9215	+0,6618	-8,8999
3267	σ Microscopii	7.8	3	13 40,80	4,026	,8668	,8136	,6049	,7328
3268	—	7.8	3	16 2,06	8,998	,8663	,8042	,6018	,7486
3269	λ Piscis Aust	6.7	3	16 21,98	3,763	,8092	,7458	,6755	,6084
3270	Indi	7.8	2	17 0,94	4,222	,9241	,8681	,6256	,8202
3271	Indi	6.7	3	17 41,38	4,279	+8,9396	-8,8711	+0,6313	-8,8496
3272	—	8	3	19 10,00	4,565	,9095	,9352	,6594	,8474
3273	—	—	—	19	4,422	,9781	,9036	,6456	,8045
3274	—	8	3	20 57,97	4,569	,9164	,9860	,6598	,8666
3275	—	8	3	26 41,87	4,114	,89235	,8241	,6143	,8171
3276	Indi	7.8	8	26 43,99	4,135	+8,9290	-8,8294	+0,6165	-8,8260
3277	—	6.7	7	28 31,96	4,386	,9991	,8886	,6420	,8282
3278	—	—	—	28	4,376	,9971	,8865	,6411	,8264
3279	—	7.8	3	28 47,47	4,125	,9864	,8237	,6154	,8165
3280	—	7	3	29 1,48	4,373	,9978	,8864	,6408	,8260
3281	Indi	8	3	29 4,02	4,082	+8,9263	-8,8127	+0,6109	-8,8170
3282	—	6.7	3	29 18,46	4,297	,8980	,8669	,6332	,8008
3283	—	8.9	2	30 47,38	4,378	,9047	,8862	,6413	,8046
3284	—	7.8	2	31 37,94	4,064	,89264	,8028	,6079	,8147
3285	—	6.7	3	32 17,37	1,361	0,0037	,8785	,6188	,9324

No	Declination (South) Jan 1 1840	Annual Precession	Logarithms of				Difference from the Brisbane Catalogue				
			a'	b'	c'	d'	No	M	C	T	
3241	51 53 10,51	+13,492	-9,4969	-9,7239	+1,1301	+9,8689	6949	-	1,21	- 1,74	+ 1,72
3242	54 21 14,30	13,496	,5403	,7381	,1302	,8688	6950	-	1,81	—	- 3,60
3243	43 37 49,16	13,618	,2900	,6377	,1309	,8682	6953	-	0,91	—	- 4,77
3244	43 37	13,695	,2856	,6701	,1334	,8661	6954	—	—	—	—
3245	69 33 26,27	13,698	,6117	,7702	,1366	,8638	6960	+	1,11	—	+ 9,48
3246	39 8 44,14	13,698	-9,0934	-9,6348	+1,1966	+9,8633	6961	—	2,68	—	- 4,66
3247	55 21 16,92	13,783	,5441	,7525	,1393	,8609	6964	—	2,85	- 2,06	- 5,30
3248	60 37 27,06	13,867	,6191	,7802	,1420	,8686	6965	—	—	3,87	—
3249	54 30 58,74	13,951	,5276	,7552	,1446	,8661	6971	—	2,15	—	- 4,71
3250	49 34 29,69	13,997	,4210	,7256	,1460	,8547	6973	—	0,49	—	- 6,82
3251	32 59 30,92	13,993	-8,3979	-9,5795	+1,1459	+9,8548	6975	—	—	+14,72	+ 5,91
3252	46 0 56,68	14,001	9,3304	,7012	,1462	,8546	6974	—	4,18	—	+ 2,45
3253	60 2 57,65	14,068	9,6021	,7840	,1482	,8526	6978	—	1,06	- 2,76	+ 0,10
3254	55 12 58,17	14,109	9,5250	,7620	,1495	,8514	6980	—	3,98	—	- 5,61
3255	57 9 41,70	14,167	9,5539	,7736	,1513	,8496	6981	—	0,49	- 2,77	- 6,33
3256	44 1 28,01	14,167	-9,2528	-9,6911	+1,1513	+9,8496	6982	—	2,28	- 0,28	+ 6,89
3257	40 54 32,00	14,306	,1139	,6695	,1556	,8453	6986	—	2,38	- 4,65	- 2,19
3258	58 17 10,09	14,416	,6599	,7866	,1588	,8418	6989	—	2,51	- 2,54	+ 1,76
3259	59 34 59,23	14,440	,6775	,7938	,1696	,8410	6990	+69,00	—	—	+ 3,78
3260	53 55 7,27	14,463	,4829	,7654	,1699	,8406	6992	—	2,74	—	+ 2,08
3261	60 20	14,473	-9,5866	-9,7975	+1,1605	+9,8399	6993	—	—	—	—
3262	40 9	14,489	,0531	,6686	,1610	,8394	6995	—	—	—	—
3263	49 22 38,58	14,613	,3729	,7429	,1647	,8353	6999	—	0,11	—	- 3,67
3264	54 6 49,64	14,701	,4728	,7739	,1673	,8323	7003	—	1,65	+ 0,03	- 1,65
3265	47 43 9,31	14,709	,3222	,7347	,1676	,8320	7004	—	2,53	—	- 3,14
3266	57 56 0,69	14,967	-9,5237	-9,8012	+1,1761	+9,8228	7013	—	1,91	—	+ 4,69
3267	47 17 38,18	15,010	9,2856	,7405	,1764	,8218	7015	—	1,59	—	+ 3,88
3268	46 44 51,50	15,144	9,2553	,7406	,1802	,8162	7019	—	0,62	—	+ 0,65
3269	38 30 51,69	15,163	8,8261	,6730	,1808	,8156	7020	—	0,93	- 0,71	+ 2,56
3270	53 59 26,41	15,201	9,4133	,7821	,1819	,8140	7022	—	1,32	—	- 0,07
3271	54 23 45,07	15,239	-9,4393	-9,7910	+1,1830	+9,8125	7024	—	2,86	+ 0,22	- 3,91
3272	50 6 8,82	15,326	,5340	,8214	,1854	,8091	7027	—	0,10	—	- 0,61
3273	57 34	15,330	,4928	,8100	,1856	,8090	7028	—	—	—	—
3274	60 23 57,02	15,427	,6327	,8255	,1883	,8060	7031	—	2,06	—	- 2,71
3275	51 32 48,86	15,684	,3365	,7872	,1956	,7941	7045	—	2,41	—	- 5,62
3276	52 6 36,13	15,688	-9,3502	-9,7907	+1,1956	+9,7940	7046	—	2,08	—	- 5,92
3277	58 2 20,69	15,839	,4639	,8269	,1997	,7872	7049	—	3,32	—	- 0,02
3278	58 0	15,839	,4809	,8261	,1997	,7872	7050	—	—	—	—
3279	52 17 19 58	15,853	,3385	,7963	,2001	,7866	7051	—	2,72	—	- 1,06
3280	53 4 81,82	15,864	,4894	,8267	,2004	,7861	7052	—	1,60	—	+ 3,40
3281	51 18 23,66	15,868	-9,3096	-9,7902	+1,2005	+9,7859	7053	—	2,28	—	- 2,61
3282	56 27 22,87	15,875	,4298	,8196	,2007	,7856	7054	—	2,02	- 1,03	- 2,00
3283	58 20 6,27	15,960	,4564	,8810	,2080	,7816	7056	—	1,19	—	+ 10,97
3284	50 49 1,83	16,002	,2866	,7916	,2043	,7796	7058	—	1,44	—	- 8,98
3285	58 5 28,84	16,037	,4466	,8819	,2051	,7779	7061	—	2,45	- 2,97	- 1,80

Mean A R and Declination of Stars

No	Names	Mag	No Obs	Right Ascen Jan 1, 1840	Annual Precessn	Logarithms of			
						a	b	c	d
3286	Indi	7	3	21 32 34,11	+4,850	+9,0037	-8,8774	-1 0,6386	-8,9323
3287	—	7	3	32 35,75	4,847	9,0032	,8766	,6382	,9316
3288	—	8	2	32 49,79	4,241	8,9775	,8501	,6275	,8948
3289	Gruis	6	2	32 48,44	3,845	8,8723	,7452	,5849	,7156
3290	Indi	7	2	32 47 07	4,217	8,9714	,8441	,6146	,8859
3291	Indi	7	2	33 3 38,5	4,258	+8,9826	-8,8541	-1 0,6292	-8,9020
3292	Gruis	7	3	36 49,18	3,940	8,9082	,7670	,6955	,7800
3293	Indi	6	3	37 40,57	4,309	9,0102	,8634	,6344	,9386
3294	Gruis	6	3	37 40,91	3,929	8,9093	,7620	,5943	,7803
3295	—	8	3	38 9,31	3,942	8,9138	,7652	,5957	,7882
3296	Gruis	7	3	39 25,97	3,901	+8,9059	-8,7522	+0,6912	-8,7723
3297	—	7	3	39 38,12	3,938	8,9166	,7610	,6947	,7896
3298	Indi	7	3	40 53,68	4,169	8,9843	,8246	,6200	,8996
3299	—	8	3	41 58,85	3,978	8,9349	,7710	,5996	,8211
3300	π	7	3	44 57,36	4,284	9,0277	,8516	,6318	,9590
3301	Indi	7	3	45 21,10	4,056	+8,9672	-8,7893	+0,6081	-8,9706
3302	K ^a	6	3	47 8,71	4,321	9,0446	,8595	,6366	,9810
3303	Gruis	8	3	47 21,93	3,648	8,8534	,6673	,5620	,6474
3304	—	7	2	47 38,86	3,647	8,8639	,6667	,5619	,6480
3305	Indi	6	3	49 26,78	4,159	9,0091	,8142	,6181	,9308
3306	Indi	7	3	50 56,11	4,041	+8,9803	-8,7794	+0,6065	-8,8872
3307	—	5	3	51 3,76	4,181	9,0201	,8189	,6213	,8,9466
3308	—	7	3	52 46,14	4,139	9,0141	,8067	,6169	,8,9804
3309	K ^a	6	3	54 33,40	4,289	9,0618	,8454	,6324	9,0010
3310	—	9	4	55 47,97	4,253	9,0566	,8348	,6287	8,9916
3311	Indi	7	3	56 32,36	4,256	+9,0599	-8,8349	+0,6290	-8,9977
3312	—	8	5	57 34,39	4,245	9,0605	,8313	,6279	,9982
3313	Piscis Aust	6	3	59 3,38	3,533	8,8466	,6096	,5481	,6028
3314	Indi	8	3	22 0 3,72	4,063	9,0166	,7702	,6038	,9362
3315	Piscis Aust.	6	3	0 52,31	3,436	8,8211	,5775	,5360	,5073
3316	Gruis	7	3	2 12,66	4,066	+9,0248	-8,7751	+0,6092	-8,9470
3317	Piscis Aust	7	3	2 22,48	3,415	8,8179	,5682	,5334	,4883
3318	—	7	3	3 33,44	3,411	8,8190	,5636	,5329	,4884
3319	Aquari	6	3	4 44,68	3,382	8,8129	,5623	,5202	,4640
3320	Gruis	7	3	4 55,26	3,934	8,8922	,7806	,5948	,8972
3321	Gruis	7	3	6 45,23	3,973	+9,0112	-8,7411	+0,5991	-8,9250
3322	—	7	3	12 5,14	3,996	9,0374	,7426	,6016	,9606
3323	—	6	8	12 65,64	3,705	8,9389	,6404	,6688	,8010
3324	—	6	3	13 16,58	3,703	8,9390	,6390	,6685	,8010
3325	Piscis	6	3	14 16,76	4,039	9,0689	,7541	,6063	,9900
3326	Tucanæ	8	3	16 46,53	4,025	+9,0640	-8,7470	+0,6048	-8,9961
3327	Orius	7	3	17 2,21	3,760	8,9722	,624	,5751	,8,8573
3328	Fuchsiæ	8	3	18 20,84	4,061	9,0813	,7605	,6081	,90188
3329	Piscis Austr.	6	2	18 19,37	3,511	8,8053	,6645	,6406	,8,7021
3330	Gruis	7	4	22 10,33	3,690	8,9272	,5812	,5682	8,7093

No	Declination (South) Jan 1 1840	Annual Precession	Logarithms of				Difference from the Brisbane Catalogue			
			a'	b'	c'	d'	No	Right Ascension from M C	T	Decln
3286	58 2 50,92	+16,061	-9,4440	-9,8322	+1,2056	+9,7773	7061	-2,76	-1,88	+3,50
3287	58 0 21,13	16,055	,4425	,8320	,2056	,7771	7065	-3,03	-1,93	+3,07
3288	55 46 51,40	16,066	,3979	,8212	,2059	,7766	7066	-1,61	—	-6,59
3289	44 12 59,13	16,061	,0253	,7472	,2058	,7768	7068	-2,18	-2,96	+8,28
3290	55 13 33,84	16,066	,3856	,8184	,2059	,7766	7067	+1,67	—	-4,72
3291	56 11 55,22	16,079	-9,4048	-9,8237	+1,2062	+9,7759	7069	-0,41	—	-10,61
3292	48 8 3,85	16,244	,1643	,7806	,2107	,7676	7076	+28,55	—	+6,63
3293	57 0 38,61	16,316	,4183	,8390	,2126	,7639	7079	-2,91	-3,42	+3,06
3294	48 1 35,06	16,323	,1492	,7819	,2128	,7636	7080	-1,85	-1,77	-2,15
3295	48 30 43,03	16,339	,1643	,7856	,2132	,7627	7081	-1,77	—	+6,34
3296	47 20 57,26	16,403	-9,1072	-9,7795	+1,2149	+9,7693	7083	-1,31	—	-1,48
3297	48 27 52,36	16,414	,1492	,7874	,2152	,7588	7084	-1,83	—	+8,78
3298	55 23 41,79	16,477	,3444	,8302	,2169	,7563	7087	-0,61	-1,35	-0,96
3299	50 19 59,55	16,530	,1987	,8025	,2183	,7524	7090	-1,64	—	-5,98
3300	58 39 6,53	16,676	,3927	,8516	,2221	,7440	7095	-2,88	+0,18	+2,12
3301	53 12 51,71	16,696	-9,2624	-9,8242	+1,2226	+9,7428	7097	-3,43	-3,78	-0,01
3302	59 46 15,23	16,779	-9,4031	,8593	,2248	,7378	7101	—	-3,42	+2,88
3303	38 30 8,21	16,792	+7,0000	,7172	,2251	,7371	7103	-0,38	+0,98	+8,03
3304	38 30 50,01	16,805	+7,0000	,7177	,2254	,7363	7104	-2,53	—	+10,68
3305	66 38 38,30	16,893	-9,3222	,8475	,2277	,7308	7106	—	-1,01	+1,21
3306	53 50 4,07	16,959	-9,2405	-9,8344	+1,2294	+9,7266	7111	-2,64	-4,06	+3,62
3307	57 26 13,84	16,962	-9,3324	,8531	,2295	,7264	7110	-9,40	-10,95	-41,95
3308	56 14 25,51	17,047	-9,3053	,8619	,2316	,7212	7114	-3,22	-1,78	+0,89
3309	60 24 22,65	17,127	-9,3747	,8710	,2387	,7154	7117	-2,88	-4,31	-3,13
3310	69 54 18,13	17,185	-9,3560	,8702	,2351	,7114	7121	-2,50	—	+16,90
3311	60 5 31,82	17,918	-9,3541	-9,8719	+1,2360	+9,7091	7125	-1,55	—	-2,50
3312	60 3 48,61	17,262	-9,3483	,8728	,2371	,7059	7127	-2,24	—	+0,02
3313	34 49 17,40	17,341	+8,8451	,6934	,2391	,7001	7132	—	—	-1,20,03
3314	66 13 58,90	17,374	-9,2380	,8576	,2399	,6976	7138	-1,70	—	+3,73
3315	29 4 29,01	17,405	+9,1399	,6250	,2407	,6952	7136	-1,60	—	+7,87
3316	56 43 48,14	17,466	-9,2355	-9,8625	+1,2422	+9,6906	7139	-2,26	—	-2,47
3317	27 66 4,22	17,466	+9,1875	,6107	,2423	,6906	7140	-6,61	—	+4,72
3318	27 52 11,55	17,520	+9,1969	,6111	,2435	,6862	7141	—	-3,13	—
3319	21 58 13,51	17,570	+9,2653	,5839	,2448	,6821	7142	-2,85	—	+4,76
3320	59 29 27,27	17,579	-9,1072	,8481	,2450	,6814	7143	-2,72	—	-8,07
3321	55 6 54,89	17,667	-9,1430	-9,8588	+1,2469	+9,6749	7147	-2,63	—	-3,51
3322	50 67 16,33	17,873	-9,1523	,8736	,2622	,6556	7156	-0,70	—	+1,05
3323	48 45 3,20	17,904	-8,4624	,8131	,2529	,6525	7158	-0,75	-1,09	-7,31
3324	46 43 47,11	17,917	-8,4472	,8133	,2533	,6513	7159	-0,72	-1,38	+2,75
3325	58 35 17,70	17,966	-9,1847	,8834	,2542	,6475	7161	-2,11	-4,01	-1,96
3326	58 48 38,42	18,059	-9,1643	-9,8867	+1,2566	+9,6377	7166	-3,30	—	+3,88
3327	50 9 47,87	18,076	-8,7243	,8409	,2571	,6353	7166	-2,05	-4,07	-9,67
3328	60 2 41,40	18,111	-9,1875	,8937	,2580	,6313	7168	-1,35	—	3,36
3329	59 54 10,14	18,124	+8,7781	,7633	,2584	,6297	7169	-2,39	—	8,71
3330	44 4 56,01	18,270	+8,4150	,8020	,2617	,6138	7177	-1,23	—	-0,98

d

Mean A R and Declination of Stars

No	Names	Mag	No Obs	Right Ascen Jan 1, 1840	Annual Places	Logarithms of			
						a	b	c	d
3331	Tucanæ	7 8	3	22 23 9,61	1 3,978	+9,0726	-8,7239	+0,5997	-9,0057
3332	Gruis	8	3	24 10,61	3,843	9,0275	,6737	,5847	8,9414
3333	Tucanæ	7	3	25 28,37	3,945	9,0703	,7097	,5960	9,0019
3334	Gruis	7	3	25 38,00	3,761	9,0008	,6995	,5763	8,8997
3335	—	7	3	26 55,77	3,675	8,9713	,6030	,5653	8,8497
3336	Gruis	6 7	2	29 12,72	3,763	+9,0147	-8,6348	+0,5755	-8,9199
3337	—	7 8	3	30 22,50	3,682	8,9856	,5993	,5661	,8724
3338	Tucanæ	7 8	3	30 31,30	3,880	9,0688	,6814	,5085	,9983
3339	Piscis Aust	7	3	30 40,23	3,850	8,8491	,4606	,5250	,5365
3340	—	7	3	30 51,54	3,850	8,8492	,4603	,5250	,5368
3341	Gruis	6 7	3	33 2,16	3,615	+8,9667	-8,5650	+0,5681	-8,8377
3342	—	7	3	33 17,22	3,562	8,9133	,5412	,5617	,7912
3343	—	5 6	3	35 46,57	3,735	9,0285	,6127	,5723	,9344
3344	—	6 7	3	36 12,44	3,685	8,9636	,6461	,5646	,8908
3345	—	7 8	3	36 29,32	3,630	8,9846	,5640	,5599	,8674
3346	Gruis	7	3	36 40,52	3,611	+8,9012	-8,5689	+0,5612	-8,8785
3347	—	6 7	3	37 13,84	3,686	8,9675	,5433	,5646	8,8369
3348	—	7	3	38 40,59	3,443	8,9058	,4732	,5869	8,7060
3349	Tucanæ	7 8	2	41 37,02	3,863	9,1086	,6681	,6869	9,0491
3350	r ¹ Gruis	6 7	3	44 8,20	3,673	8,9866	,5211	,5530	8,8671
3351	r ² Gruis	7	2	46 55,58	3,659	+8,9867	-8,5099	+0,5513	-8,8664
3352	—	7	3	46 56,11	3,560	8,9868	,6101	,5514	,8667
3353	—	7 8	3	46 26,00	3,661	8,9890	,6093	,5516	,8703
3354	r ¹ Piscis Aust	7	3	49 39,93	3,864	8,8973	,3964	,5269	,6701
3355	—	6 7	3	50 50,19	3,298	8,8678	,3690	,5182	,6707
3356	Tucanæ	7 8	3	51 11,21	3,732	+9,0958	-8,5839	+0,5719	-9,0301
3357	Gruis	7 8	1	51 35,44	3,530	8,9943	,4806	,5478	8,8770
3358	—	6	3	51 41,51	3,564	9,0180	,4988	,5619	8,9083
3359	Tucanæ	7 8	3	54 23,69	3,637	9,0645	,5319	,5607	8,9857
3360	r ¹ Piscis Aust	—	—	54	3,336	8,8969	,3614	,5232	8,8607
3361	Gruis	7	3	54 58,14	3,407	+8,9374	-8,4006	+0,5321	-8,7656
3362	—	7	2	57 54,29	3,490	9,0039	,4459	,5439	,8910
3363	—	7 8	3	57 58,37	3,512	9,0140	,4550	,5455	,9076
3364	—	6 7	3	23 1 3,37	3,391	8,9501	,3682	,6303	,7898
3365	Piscis Aust	6 7	3	1 5,66	3,256	8,8674	,2863	,5125	,5521
3366	Gruis	6 7	3	1 15,03	3,366	+8,9847	-8,3516	+0,5271	-8,7654
3367	—	5	3	1 16,37	3,418	8,9685	,3848	,5338	,8260
3368	—	8	3	1 20,61	3,389	8,9498	,3656	,5301	,7884
3369	—	7 8	3	3 37,09	3,632	9,0629	,4607	,5480	,9666
3370	—	7 8	3	4 6,81	3,457	9,0072	,4007	,5387	,8944
3371	Gruis	7 8	3	4 39,05	3,853	+8,9387	-8,3279	+0,5253	-8,7624
3372	Tucanæ	6 7	3	6 0,74	3,656	9,0820	,4602	,5510	9,0082
3373	Gruis	6 7	2	6 5,17	3,846	8,9405	,3180	,5245	8,7656
3374	Tucanæ	7	3	7 6,96	3,626	9,0689	,4380	,5472	8,9894
3375	—	—	—	7	3,675	9,1016	,4096	,5533	9,0351

in the Southern Hemisphere, &c &c

ch

No	Declination (South) Jan 1 1840	Annual Precession	Logarithms of				Difference from the Brisbane Catalogue			
			a'	b'	c'	d'	No	M	C	T
3331	59 2 3,37	+18,290	-9,1038	-9,8934	+1,2822	+9,6116	7178	-0,40	—	+ 6,59
3332	56 7 18,77	18,325	8,9243	,8750	,2830	,6073	7179	-2,49	—	- 3,43
3333	58 42 28,78	18,372	9,0607	,8958	,2641	,6016	7180	-2,39	- 1,14	+ 4,65
3334	52 25 30,47	18,376	8,7076	,8012	,2643	,6010	7181	-1,53	- 2,81	+ 1,77
3335	49 7 49,50	18,423	8,1461	,8419	,2853	,6951	7182	+ 0,54	—	+ 0,84
3336	53 31 11,63	18,497	-8,7076	-9,8704	+1,2671	+9,5853	7187	-3,04	- 3,07	+ 3,57
3337	50 25 36,25	18,538	-8,2041	,8629	,2681	,5798	7188	-0,18	—	- 8,07
3338	53 15 9,42	18,544	-8,9731	,8958	,2682	,5788	7189	-2,44	- 0,83	+ 3,99
3339	20 9 15,30	18,551	+9,2000	,6538	,2684	,5779	7190	—	- 0,60	- 2,74
3340	29 10 34,36	18,553	+9,2900	,6541	,2684	,5776	7191	—	- 0,81	—
3341	48 1 44,86	18,629	+8,2041	-9,8393	+1,2702	+9,5666	7195	+10,41	—	+ 5,41
3342	45 5 6,42	18,632	+8,6628	,8183	,2702	,5663	7196	—	- 2,93	+ 4,85
3343	54 20 21,97	18,710	+8,6798	,8800	,2721	,5643	7203	-2,38	- 2,12	- 1,60
3344	47 23 5,48	19,725	+8,5051	,8372	,2724	,5620	7204	-2,37	- 2,56	+ 3,68
3345	49 48 57,81	18,733	+7,9542	,8535	,2726	,5507	7205	-3,03	- 3,56	+ 3,12
3346	50 30 49,38	18,746	+7,4771	-9,8583	+1,2729	+9,5487	7207	+ 0,25	—	-14,42
3347	47 46 44,75	18,756	+8,4914	,8406	,2781	,5470	7208	-4,23	—	+ 1,45
3348	39 3 35,86	18,800	+9,0755	,7714	,2742	,5896	7211	-2,53	- 1,06	+ 2,55
3349	60 43 37,95	18,890	-8,8076	,9148	,2762	,5238	7213	+ 0,33	—	+ 1,94
3350	49 26 34,80	18,961	+8,5563	,8564	,2778	,5104	7219	-2,11	- 3,04	- 4,81
3351	49 19 3,89	19,011	+8,6335	-9,8568	+1,2790	+9,5003	7220	-0,98	- 1,87	+ 3,44
3352	49 20 38,89	19,011	+8,6335	,8069	,2790	,5003	7221	-0,48	- 1,09	+ 3,34
3353	49 33 21,03	19,024	+8,6335	,8586	,2793	,4977	7222	-2,00	—	- 1,00
3354	36 22 20,56	19,112	+9,2355	,7622	,2813	,4785	7226	-1,26	—	- 4,18
3355	30 19 9,26	19,143	+9,3560	,6830	,2820	,4713	7227	—	—	+ 1,34
3356	59 17 35,46	19,155	-8,4941	-9,9146	+1,2823	+9,4684	7228	+ 9,24	—	+ 7,05
3357	49 47 57,77	19,162	+8,7482	,8693	,2824	,4668	7230	-0,87	—	- 4,74
3358	51 48 24,28	19,164	+8,5798	,8758	,2825	,4663	7231	-2,11	—	+ 1,92
3359	56 33 19,11	19,231	+7,6021	,9033	,2840	,4495	7235	-6,96	- 3,74	+ 5,87
3360	35 37	19,237	+9,2787	,7471	,2841	,4478	7237	—	—	—
3361	42 20 31,85	19,245	+9,1238	-9,8106	+1,2843	+9,4466	7238	-0,69	—	- 0,52
3362	50 28 18,15	19,315	8,8451	,8711	,2859	,4260	7246	-1,43	—	- 4,47
3363	51 32 53,78	19,319	8,4314	,8777	,2860	,4251	7246	—	—	- 0,02
3364	43 43 29,07	19,388	9,1430	,8250	,2876	,4034	7249	-0,96	- 2,90	+ 7,21
3365	28 57 14,15	19,388	9,4116	,3703	,2876	,4034	7250	-0,88	—	+ 4,63
3366	41 27 18,96	19,391	+9,1987	-9,8064	+1,2876	+9,4026	7261	-2,68	- 4,00	+ 3,91
3367	46 6 40,73	19,392	9,0756	,8432	,2876	,4020	7262	-1,16	- 2,83	+ 2,72
3368	43 37 8,35	19,394	9,1461	,8243	,2877	,4015	7263	-1,17	—	+ 9,97
3369	55 3 20,14	19,443	8,6902	,9006	,2888	,3847	7265	-2,52	—	+ 2,06
3370	50 29 15,39	19,454	8,9590	,8743	,2890	,3806	7267	-1,67	- 1,97	- 2,68
3371	41 48 16,39	19,465	+9,2175	-9,8110	+1,2893	+9,3765	7260	-1,95	- 2,83	+ 4,08
3372	57 33 35,37	19,493	8,5682	,9141	,2899	,3661	7261	-2,02	- 2,94	+ 4,45
3373	41 58 18,48	19,494	9,2253	,8131	,2899	,3655	7262	—	- 2,52	- 1,10
3374	53 23 52,96	19,500	8,6990	,9089	,2903	,3675	7264	-1,79	—	+ 9,02
3375	69 6	19,517	8,4472	,9219	,2904	,3564	7265	—	—	—

Mean A. R. and Declination of Stars

No	Names	Mag	No Obs	Right Ascen Jan 1, 1840	Annual Piecesn	Logarithms of			
						a	b	c	d
3376	γ Tucanæ	5 6	6	11 8 3,19	+ 3,567	1 9,1020	-8,4625	+0,5523	-9,0351
3377	—	8	3	9 11,18	3,567	9,1033	,4538	,5511	9,0371
3378	ϕ Grus	6 7	3	9 19,23	3,327	8,9100	,2893	,5220	8,7627
3379	—	7 8	3	9 47,75	3,395	8,9902	,3395	,6308	8,8632
3380	γ App Sculp	5 6	3	10 10,45	3,257	8,8920	,2341	,5128	8,6326
3381	Grus	7 8	3	11 4,77	3,385	+ 8,9918	-8,3260	+0,5295	-8,8054
3382	—	6 7	2	11 48,96	3,412	9,0169	,3437	,5330	8,9083
3383	Tucanæ	7	2	14 14,48	3,465	9,0722	,3762	,5397	8,9928
3384	Grus	7	3	14 83,08	3,307	8,9174	,2481	,5194	8,7707
3385	—	7 8	3	11 48,12	3,436	9,0633	,3519	,5359	8,9651
3386	Grus	7	3	14 57,79	3,318	+ 8,9585	-8,2652	+0,5209	-8,8001
3387	—	6 7	3	15 13,47	3,407	9,0355	,3276	,5324	8,9313
3388	App Sculp	7 8	3	15 46,95	3,268	8,9196	,2083	,5143	8,7094
3389	Tucanæ	5 6	2	16 9,48	3,465	9,0883	,3701	,5397	9,0153
3390	Grus	6	3	17 37,56	3,390	9,0430	,3124	,5311	8,9180
3391	Tucanæ	6 7	3	18 4,80	3,476	+ 9,1091	-8,3785	+0,5409	-9,0437
3392	Grus	8	3	18 16,02	3,368	9,0191	,2814	,5271	8,9105
3393	—	6 7	4	18 15,23	3,065	9,0180	,3803	,5271	8,9086
3394	—	7 8	4	19 57,95	3,362	9,0200	,2751	,5266	8,9117
3395	Phœnix	6 7	3	20 16,34	3,300	8,9706	,2110	,5185	8,8227
3396	Grus	7 8	3	20 19,10	3,399	+ 9,0627	-8,3030	+0,5314	-8,9770
3397	—	7	3	21 55,25	3,271	8,9522	,1742	,5147	8,7811
3398	Phœnix	6 7	3	22 44,11	3,288	8,9741	,1869	,5169	8,8288
3399	Grus	7	3	23 12,90	3,263	8,9514	,1576	,5136	8,7819
3400	β App Sculp	5 6	3	24 22,74	3,232	8,9262	,1185	,5095	8,7219
3401	Tucanæ	7 8	3	26 9,42	3,376	1 9,0912	-8,2605	+0,5284	-9,0181
3402	Phœnix	7	3	26 12,04	3,255	8,9589	,1273	,5123	8,7970
3403	App Sculp	8	3	27 11,70	3,225	8,9340	,0891	,5086	8,7102
3404	Phœnix	7 8	3	29 13,91	3,205	8,9817	,1098	,5125	8,8118
3405	—	6	3	29 15,20	3,261	8,9810	,1091	,5124	8,8103
3406	Grus	7 8	2	29 29,49	3,230	+ 8,9517	-8,0751	+0,5092	-8,7806
3407	Phœnix	6 7	3	30 18,86	3,248	8,9822	,0938	,5116	,8125
3408	α —	7	3	30 51,23	3,262	8,9908	,0943	,5121	,8584
3409	δ —	—	—	30 —	3,251	8,9908	,0948	,5120	,8575
3410	—	6	3	32 14,00	3,172	8,9068	,9786	,5013	,6322
3411	App Sculp	7 8	3	32 42,12	3,170	+ 8,8969	-7,9712	+0,5011	-8,6323
3412	Phœnix	7 8	3	33 26,13	3,211	8,9579	8,0201	,5066	,7927
3413	—	7 8	3	35 22,42	3,217	8,9822	8,0122	,5074	,8114
3414	Grus	7	3	37 31,01	3,180	8,9443	7,9318	,5024	,7615
3415	σ Phœnix	6 7	3	38 45,35	3,220	9,0240	7,9886	,5079	,9150
3416	δ App. Sculp	6 6	3	40 85,28	3,130	+ 8,8805	-7,8061	+0,4955	-8,6058
3417	Phœnix	7 8	3	42 5,63	3,202	9,0388	7,9267	,5054	,9387
3418	—	7 8	3	42 10,30	3,183	8,9991	7,8853	,6028	,8717
3419	Grus	7	3	43 4,18	3,157	8,9560	7,8202	,4993	,7868
3420	App Sculp	7,8	4	43 18,85	3,136	8,9124	7,7695	,4964	,0769

In the Southern Hemisphere &c &c

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No	Declination (South) Jah 1 1840	Annual Precession	Logarithms of				Difference from the Brisbane Catalogue			
			a'	b'	c'	d''	No	Right Ascension from M C	T	Declin
3376	59 6 38,57	+19,534	+8,4914	-9,9223	+1,2908	+9,3493	7287	-0,76	-2,30	+8,95
3377	59 10 18,02	19,556	8,6441	,9231	,2913	,3899	7270	+0,09	-1,48	-2,14
3378	41 41 28,45	19,558	9,2528	,8121	,2913	,3387	7271	—	+0,19	-0,13
3379	48 18 27,55	19,558	9,1004	,8624	,2913	,3387	7273	—	—	+11,42
3380	33 24 5,48	19,575	9,3874	,7803	,2917	,3319	7274	-1,18	-3,01	+3,78
3381	48 24 48,73	19,590	+9,1139	-9,8638	+1,2920	+9,3244	7275	-3,30	—	+9,69
3382	51 10 39,63	19,604	9,0414	,8818	,2923	,3173	7276	-1,85	-3,34	+4,08
3383	60 26 45,42	19,647	8,8808	,9120	,2933	,2953	7278	-4,17	—	+2,35
3384	42 28 41,12	19,652	9,2742	,8208	,2934	,2921	7279	-2,65	-2,69	+2,74
3385	54 41 28,67	19,656	8,9638	,9032	,2935	,2896	7280	—	-2,42	-9,67
3386	44 0 3,04	19,659	+9,2480	-9,8333	+1,2936	+9,2883	7282	-2,63	-4,42	+7,65
3387	52 46 58,87	19,664	9,0374	,8926	,2937	,2858	7283	-1,86	—	+4,64
3388	38 4 37,68	19,673	9,3502	,7818	,2939	,2806	7284	—	-2,78	-4,12
3389	57 43 29,97	19,684	8,8633	,9192	,2941	,2740	7285	—	—	+10,27
3390	53 36 20,00	19,704	9,0463	,8983	,2945	,2620	7287	-2,04	-2,82	+2,80
3391	59 21 30,61	19,711	+8,8195	-9,9273	+1,2947	+9,2572	7288	-2,19	-2,78	+4,87
3392	51 9 24,69	19,714	9,1206	,8842	,2948	,2561	7290	-2,69	—	+4,00
3393	51 2 11,90	19,714	9,1206	,8834	,2948	,2561	7291	-0,96	-1,80	-2,27
3394	51 13 22,57	19,725	9,1271	,8848	,2950	,2482	7292	-1,16	—	+2,60
3395	45 22 43,43	19,745	9,2824	,8456	,2954	,2339	7294	-1,13	-4,32	+0,96
3396	55 22 59,01	19,745	+9,0253	-9,9087	+1,2954	+9,2339	7295	-1,46	—	+0,24
3397	42 51 67,18	19,768	9,3160	,8269	,2960	,2161	7296	-2,84	-2,91	+0,13
3398	45 43 30,51	19,781	9,3075	,8490	,2962	,2061	7297	-2,01	-3,16	+2,62
3399	42 38 2,13	19,787	9,3203	,8249	,2964	,2007	7298	-1,79	-3,26	+4,29
3400	38 42 4,32	19,803	9,3856	,7906	,2967	,1871	7300	-0,97	-2,40	+3,65
3401	57 42 27,57	19,826	+9,0374	-9,9292	+1,2972	+9,1848	7302	-1,78	-3,28	+5,04
3402	43 34 1,91	19,827	9,8324	,8384	,2972	,1687	7303	-2,92	-3,42	-1,82
3403	39 50 16,73	19,840	9,3850	,8019	,2975	,1607	7305	—	-2,60	-10,73
3404	46 27 9,72	19,863	9,3075	,8632	,2980	,1242	7308	-8,11	—	+4,22
3405	46 22 34,63	19,863	9,3096	,8656	,2980	,1242	7309	-4,70	-3,24	+7,81
3406	42 27 0,42	19,864	+9,0655	-9,8250	+1,2981	+9,1198	7310	—	-3,18	—
3407	46 29 46,41	19,876	9,3160	,8687	,2983	,1679	7313	-1,12	-3,06	+4,43
3408	47 31 28,49	19,881	9,3010	,8642	,2984	,1000	7314	—	-2,92	+3,28
3409	47 31	19,881	9,3032	,8042	,2981	,1001	7315	—	—	—
3410	42 57 22,15	19,897	9,4757	,7322	,2988	,0786	7316	-2,03	-2,86	+3,48
3411	32 57 30,66	19,902	+9,4771	-9,7323	+1,2989	+9,0712	7317	-1,42	—	-0,31
3412	43 9 10,30	19,909	9,3784	,8320	,2990	,0504	7318	-1,65	—	+2,33
3413	46 20 47,90	19,927	9,3483	,8668	,2994	,0276	7322	—	-3,89	-8,64
3414	41 4 8,56	19,947	9,4216	,8152	,2999	,8,9855	7324	-2,24	-1,43	+0,19
3415	51 6 49,79	19,957	9,3075	,8892	,3001	,9628	7326	-2,53	-2,83	-0,29
3416	29 0 49,79	19,970	+9,5215	-9,6838	+1,3004	+8,9841	7330	—	-3,66	+8,68
3417	52 35 23,12	19,982	9,3075	,8986	,3006	,8865	7332	-0,68	—	0,11
3418	48 18 0,10	19,982	9,3655	,8714	,3006	,8849	7333	-1,94	-3,22	+3,61
3419	42 39 40,95	19,988	9,4314	,8296	,3008	,8630	7336	—	-3,97	+3,17
3420	35 34 50,27	19,990	9,4941	,7684	,3008	,8580	7337	—	-2,11	-6,37

Mean A R and Declination of Stars

No	Names	Mag	No Obs	Right Ascen Jan 1, 1840	Annual Precessn	Logarithms of			
						a	b	c	d
3421	Phœnix	7 8	3	23 44 42,04	+ 3,194	+ 9,0669	- 7,8854	+ 0,5043	- 8,9816
3422	—	7 8	3	45 0,01	3,170	9,0131	,8238	,5011	,8961
3423	App Sculp	7 8	3	46 5,13	3,110	8,8768	,6549	,4927	,8470
3424	—	7	3	46 14,49	3,136	8,9465	,7188	,4964	,7649
3425	—	6 7	3	46 59,83	3,116	8,8987	,6461	,4936	,6321
3426	App Sculp	7	3	46 59,81	3,116	+ 8,8984	- 7,6459	+ 0,4936	- 8,6316
3427	Phœnix	7 8	3	47 2,67	3,169	9,0242	,7694	,4995	8,9146
3428	—	—	—	47	3,147	9,0033	,7261	,4979	8,8788
3429	Tucanæ	6	2	48 20,65	3,176	9,1010	,8006	,6019	9,0301
3430	Phœnix	7 8	3	48 23,29	3,130	8,9596	,6392	,4953	8,7938
3431	Phœnix	8	3	49 56,66	3,157	+ 9,0246	- 7,6689	+ 0,4993	- 9,0151
3432	Tucanæ	7	3	50 11,20	3,157	9,0999	,7223	,4993	9,0286
3433	π Phœnix	7	3	50 37,18	3,140	9,0504	,610	,4969	8,9502
3434	App Sculp	6 7	3	51 14,25	3,097	8,8876	,4588	,4909	8,6911
3435	Phœnix	7	3	51 29,68	3,129	9,0330	,5903	,4954	8,9287
3436	Phœnix	8	3	51 62,07	3,126	+ 9,0317	- 7,5712	+ 0,4950	- 8,9267
3437	App Sculp	7 8	3	51 58,40	3,107	8,9462	,4783	,4923	8,7636
3438	Phœnix	7 8	3	52 34,42	3,119	9,0278	,5211	,4940	8,9202
3439	—	6	3	52 50,07	3,115	9,0126	,4935	,4935	8,8948
3440	—	7	3	53 6,46	3,115	9,0267	,4882	,4935	,8,9185
3441	App Sculp	7	3	53 27,94	3,100	+ 8,9461	- 7,3876	+ 0,4914	- 8,7632
3442	—	7 8	3	53 42,76	3,095	8,9278	,3507	,4907	8,7181
3443	—	6	3	54 7,59	3,087	8,8888	,2821	,4895	8,6954
3444	Tucanæ	9	4	54 30,68	3,118	9,1057	,4671	,4939	9,0365
3445	—	8 9	4	55 39,50	3,112	9,1080	,4106	,4930	9,0396
3446	App Sculp	7 8	2	55 13,88	3,088	+ 8,9221	- 7,2184	+ 0,4897	- 8,7028
3447	Tucanæ	7 8	3	56 33,47	3,097	9,0960	,2110	,4903	9,0230
3448	App Sculp	7 8	2	56 49,82	3,090	8,9209	,0281	,4885	8,8991
3449	Phœnix	7 8	3	56 59,61	3,089	9,0444	,1314	,4898	8,9408
3450	Tucanæ	7 8	3	57 11,74	3,092	9,0974	,1523	,4903	9,0250
3451	App Sculp	7 8	3	58 44,36	3,073	+ 8,9380	- 6,6038	+ 0,4376	- 8,7436
3452	—	7 8	3	59 7,83	3,071	8,9,80	,6,4217	,4873	8,7818
3453	Tucanæ	7 8	4	59 15,18	3,072	9,0901	,6,4029	,4474	9,0231
3454	—	7 8	3	59 20,49	3,071	9,0864	,6 243	,4873	9,0006
3455	App Sculp	6 7	3	59 55,04	3,068	8,9074	,56722	,4863	8,6571

It will be proper to mention, that the places in the Brisbane Catalogue for 1823, have been brought up to 1840 for the sake of comparison by applying 15 times the annual variation there given when corrected by the tables at pages CXIII and CXIV of Vol IV. I am ignorant of the source from which the coefficient of recession there employed was derived, but from the character for care and accuracy of the party to whom the reduction of the Brisbane observations was entrusted, and the circumstance of my having arrived at a coefficient agreeing almost to identity with that which he has employed, (see note at page CXIX Vol IV) there can I think be little doubt of its accuracy.

No	Declination (South) Jan 1 1840	Annual Precession	Logarithms of				Difference from the Brisbane Catalogue
			a'	b'	c'	d'	
No	M C						
3421	55 15 29,41	+19,998	-9,9137	+1,3010	+8,8175	7339	- 1,98 - 3,48 - 11,24
3422	49 49 33,88	,3036	,8621	,3010	,8098	7340	- 3,75 + 8,26
3423	27 55 57,00	20,006	,6694	,3011	,7773	7342	- 2,78
3424	41 11 20,66	20,006	,8176	,3012	,7710	7343	- 2,81
3425	32 48 41,33	20,010	,6260	,3012	,7468	7344	- 2,27
3426	32 46 27,14	20,010	+9,6260	-9,7326	+1,3012	7346	- 1,76
3427	61 0 15,83	,3617	,8897	,3013	,7445	7346	- 1,11
3428	48 40 20,03	,3944	,8749	,3013	,7212	7347	
3429	68 2 15,02	,3718	,9280	,3014	,6991	7348	
3430	43 4 57,93	,4533	,8338	,3014	,6991	7349	
3431	51 1 12,76	20,023	+9,3784	-9,901	+1,3016	+8,6332	7353 - 1,24 0,00*
3432	58 10 12,01	,2900	,9283	,3015	,6220	7354	- 4,64
3433	63 38 17,88	,3522	,9010	,3016	,6001	7356	- 1,08 - 2,92
3434	30 22 36,92	20,027	,5627	,7038	,6708	7358	- 2,71
3435	61 53 15,57	20,028	,3802	,8955	,5570	7359	- 1,02
3436	51 45 32,08	20,019	+9,3868	-9,8947	+1,3017	+8,6302	7361 - 1,46
3437	41 4 53,76	,4843	,8171	,3017	,5318	7362	- 2,87
3438	51 20 17,67	20,031	,3927	,8922	,4970	7364	- 1,92
3439	49 42 3,17	,6687	,8119	,3017	,4807	7365	- 1,17
3440	51 13 43,09	20,033	,3970	,8016	,4683	7366	+ 3,02
3441	41 2 1,36	20,033	+9,4900	-9,8169	+1,3017	+8,4414	7368 - 2,41
3442	38 7 5,72	,5132	,7902	,3018	,4227	7369	- 1,65
3443	30 36 43,79	,6687	,7064	,3018	,3931	7370	
3444	59 31 23,77	20,036	,3181	,9316	,3018	,3818	- 2,34
3445	58 43 4,39	,3201	,9316	,3018	,3026	7372	- 30,35
3446	37 8 33,02	20,037	+9,5250	-9,7805	+1,3018	+8,2062	7373 - 1,72 - 4,69
3447	57 43 68,40	,3444	,9269	,3019	,1449	7375	+ 0,72
3448	36 64 3,76	,6312	,7782	,3019	,1072	7376	- 2,05
3449	59 2 10,89	,4024	,9023	,3019	,0870	7377	- 3,17
3450	67 50 42,72	,3464	,9276	,3019	,0648	7378	- 1,00
3451	39 46 10,38	20,041	+9,5211	- 9,8056	+1,3019	+7,6678	7379 - 2,95
3452	42 40 49,84	,5124	,8317	,3019	,74637	7380	
3453	67 43 35,65	,3636	,9270	,3019	,73668	7381	- 1,39
3454	66 54 10,94	,3729	,9231	,3019	,72419	7382	- 1,61
3455	34 20 1,95	,5539	,7620	,3019	,67648	7383	- 1,57

On inspecting the column "Difference from the Brisbane Catalogue"—it will be observed that a great number of blanks occur—so far, as I have found—arising from the place not having been given in the Brisbane Catalogue, there are several other blanks however, which arise from other causes, such as the star not being visible, or the difference being moderately large &c &c, in all these cases I have gone back to the original observations, and after bestowing considerable pains in endeavouring to account for the one or the other, have come to the following conclusions.

civ REMARKS AND MEMORANDA WITH REGARD TO THE FOREGOING CATALOGUE

- 24 The Declination differs $9' 55'',64$ —The Brisbane Catalogue appears to be $10'$ in error (see errata)
- 53 In the Brisbane Catalogue, the A R of No 52 has probably been observed
- 78 If there is a star here, it must be a very faint one—one not visible at Madras
- 117 Apparently an error of 30 seconds in the A R set down in the Brisbane Catalogue
- 137 No star nearer to the place assigned in the Brisbane Catalogue than that here given
- 163 Exhibits a large difference in the A R. This star was inserted in the present catalogue through inadvertence, as its place had already been given from former observations in Vol IV thus
 Vol IV No 126, from 2 observations reduced to January 1, 1840 the A R = $1h\ 0m\ 28,67s$
~~V No 163, — 3 —————— = 29,02~~
- 166 Apparently an error of 30 seconds in the A R set down in the Brisbane Catalogue
- 174 The N P D in the Brisbane Catalogue appears to be $1'$ in error
- 222 No star here
- 256 The A R in the Brisbane Catalogue appears to be one minute in error
- 290 Probably an error of 30 seconds in the Brisbane Catalogue, as there is no other star
- 347 Both of these stars were observed on the same evening, the large differences—both in A R and Declination,
 348 are no doubt due to proper motion i e No 348 exhibits an A P. M in A R of nearly 4 seconds of space
- 349 Is this the result of P M?—If not, the Brisbane Catalogue is probably 20 seconds in error
- 416 No star here
- 429 Has been looked for repeatedly No star here probably 420 has been observed, and the Declination registered 10 degrees wrong
- 467 The A R in the B catalogue is no doubt one minute in error
- 470 There is no Star in the place assigned by B, there is however another star, near to 473—whose place has been observed as follows
 from 3 obs 8 mag { A R Jan 1 1840 { Declination Jan. 1 1840
 2h 59m 37,03s } —51° 56' 47,07"
- 483 Is one of a cluster of stars in selecting the most conspicuous one for observation, it appears I have not hit upon the one observed by B thus
 from 3 obs 8 mag A R = $3h\ 3m\ 8,07s$ Declin — $51^{\circ}\ 2' 41'',09.$
- 489 Differs— $4' 57'',32$ in Declination B is probably $5'$ in error
- 494 No star here —same as 495
- 525 No star here —probably the A. R given by B is 15 seconds in error
- 539 No star here —probably the Declin given by B is 10 minutes in error
- 542 Differs— $1' 26'',89$ in Declination from the B place Have I observed a wrong star with the circle?
- 563 The Declination in the B catalogue appears to be $10'$ in error
- 585 No star here The nearest star is situated as follows
 from 4 obs 9 mag { A R Jan 1 1840 { Declin Jan 1 1840
 3h 36m 16,55s } — $60^{\circ}\ 36' 8'',86$
- 605 The A R in the B catalogue appears to be 30 seconds in error
- 604 No star here, The nearest star is situated as follows
 from 4 obs 7 mag. { A R Jan 1 1840 { Declin Jan 1 1840
 3h 39m 56,71s } — $48^{\circ}\ 33' 37'',74$
- 686 The A R in the B catalogue is probably 10 seconds in error
- 705 The A R in the B catalogue is probably 30 seconds in error

REMARKS AND MEMORANDA WITH REGARD TO THE FOREGOING CATALOGUE clvii

- 721 Two stars have been observed here —that set down, differs in A R about two minutes from the B catalogue one or other is no doubt wrong —The other star is situated as follows

	A R Jan 1 1840	Declin Jan 1 1840
From 3 obs	7 mag 4 ^h 25 ^m 10,04 ^s	—30° 7' 27",53
Differs from B	—56,49	—29 ,43

- 785 The A R in the B catalogue appears to be 45 seconds in error

- 824 The A R in the B catalogue appears to be 10 seconds in error

- 890 No star here The nearest star is situated as follows

	A R Jan 1 1840	Declin Jan 1 1840
From 2 obs	10 mag 5 ^h 5m 39,39 ^s	—49° 10'

- 909 Was not observed in consequence of an error in the observing catalogue

- 917 The re observation of this star does not exhibit proper motion, hence I conclude the B catalogue to be in error

- 981 The B catalogue appears to be 10 seconds in error

- 986 Differs +10' 7",14 from the B catalogue

- 1045 Differs +1' 58",71 from the B catalogue

- 1046 Differs —5' 1",89 from the B catalogue re observation exhibits no proper motion

- 1058 The B catalogue appears to be one minute in error in the A R

- 1062 It appears that I have inadvertently re observed 1056 I rather suspect that there is no star here

- 1116 The nearest star to the place assigned by B is as follows

	A R Jan 1 1840	Declin Jan 1 1840
From 2 obs	6 7 mag 5 ^h 56 ^m 19,32 ^s	—43° 54' 29,"67
Differs from B	—25,54	+ 6 25, 15

- 1121 This large difference in the A R I suspect arises from proper motion

- 1123 } I had selected the first of these for observation, but have inadvertently observed the second thus
1124 }

	A R Jan 1 1840	Declin Jan 1 1840
From 6 obs	6 7 mag 5 ^h 58 ^m 8,34 ^s	—58° 6' 18,"93
Differs from B	M 0 —2,88 T —3,61	+ 6, 93

- 1126 No star here

- 1135 There is a star here, but being of the 11th magnitude, it could not with any degree of accuracy be observed

- 1141 No star here —probably B has re observed 1134 with an error of one minute in the A R.

- 1146 No star here —two stars near to the place assigned by B have been observed, thus

	A R Jan 1 1840	Declin Jan 1 1840
From 2 obs	8 9 mag 6 ^h 2 ^m 13,62 ^s	—69° 48' 34",31
— 2 obs	9 mag 2 27,33	—69 46 56 ,31
— B catalogue	1 40,85	—69 48 43 ,60

- 1160 No star here:—two stars in the neighbourhood have been observed, thus

	A R Jan 1 1840	Declin Jan 1 1840
From 1 obs	9 10 ^{mag} 6 ^h 3 ^m 25,17 ^s	—32° 23' 19",68
— 2 obs	8 — 4 27,53	—32 24 16 ,77
— B catalogue	4 9,18	—32 16 20 ,95

clviii REMARKS AND MEMENTO WITH REGARD TO THE FOREGOING CATALOGUE

1171 No star here —The nearest star is situated as follows

From 2 obs	7 8 mag	$\left\{ \begin{array}{l} \text{A R Jan 1 1840} \\ 6h 5m 45,25s \end{array} \right.$	$\left\{ \begin{array}{l} \text{Decln Jan 1 1840} \\ -31^\circ 56' 27,36'' \end{array} \right.$
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1200 The B catalogue appears to be one minute in error in the A R

1211 Has been overlooked

1239 Is probably too faint for observation at Madrid

1277 There is a star of the 11th mag. in or near to the place assigned by B

From 1 obs	6 mag	$\left\{ \begin{array}{l} \text{A R Jan 1 1840} \\ 6h 32m 36,07s \end{array} \right.$	$\left\{ \begin{array}{l} \text{Decln Jan 1 1840} \\ -38^\circ 0' 53,92'' \end{array} \right.$
		Differs from B	— 4 50 ,34

1315 No star here —The Declination set down refers to No 1307, which has been reobserved for 1315. This appears to be an error of 1 minute in A R in the B catalogue

1321 Same as 1320

1353 A star of the 9th mag. follows this at 1,17s and 51",1 to the North

1362 The Declination set down in the B catalogue appears to be 1' in error

1398 No star here —The nearest stars to the place assigned in the B catalogue are situated as follows

From 2 obs	7 8 mag	$\left\{ \begin{array}{l} \text{A R Jan 1 1840} \\ 6h 49m 37,04s \end{array} \right.$	$\left\{ \begin{array}{l} \text{Decln Jan 1 1840} \\ -37^\circ 17' 55,37'' \end{array} \right.$
— 4 obs	8 —	49 32,21	— 37 24 13 ,14
		— B catalogue	— 37 21 40 ,16

1441 No star here —same as 1460

1482 The A R in the B catalogue appears to be 1 minute in error

1487 Was inserted in the catalogue through inadvertence

1491 The A R in the B catalogue appears to be 10 seconds in error

1501 The Declination of this star as set down in the B catalogue appears to be 1' in error

1531 No star here —probably the same as 1532, save that an error of 30' in the Declination and 1 minute in A R exists in the place set down in the B catalogue

1543 No star here —the nearest star to the place assigned in the B catalogue is as follows

From 2 obs	7 mag	$\left\{ \begin{array}{l} \text{A R Jan 1 1840} \\ 7h 11m 32,11s \end{array} \right.$	$\left\{ \begin{array}{l} \text{Decln Jan 1 1840} \\ -50^\circ 13' 9,32'' \end{array} \right.$
		Differs from B	+ 52,97 + 9 28 ,22

1574 I hesitated to insert the place of this star in the catalogue, in consequence of some doubt relative to the observed A R, but with this by way of caution, and after a careful examination, I may now give the results

From 3 obs	6 7 mag	$\left\{ \begin{array}{l} \text{A R Jan 1 1840} \\ 7h 16m 45,84s \end{array} \right.$	$\left\{ \begin{array}{l} \text{Decln Jan 1 1840} \\ -52^\circ 1' 7,98'' \end{array} \right.$
		Differs from B	— 34,48 — 0 ,05

1577 The place of this star was not inserted in the catalogue, from my fears that the A R of 1578 had been by mistake observed, with this doubt still on my mind I will give the results

From 2 obs	7 mag.	$\left\{ \begin{array}{l} \text{A R Jan 1 1840} \\ 7h 16m 30,22s \end{array} \right.$	$\left\{ \begin{array}{l} \text{Decln Jan 1 1840} \\ -51^\circ 53' 52,90'' \end{array} \right.$
		Differs from B	— 8,75 + 4 ,06

- 1667 The A R in the B catalogue appears to be 1 minute in error (see errata)
- 1673 The A R in the B catalogue appears to be in error
- 1608 The A R of this star as set down in the B catalogue appears to be about 50 seconds in error
- 1645 No star here —probably 1644 with 1° error of Declination
- 1662 The Declination in the B catalogue appears to be 1' in error
- 1685 This star has not been observed, the A R as set down—is a re observation of No 1683
- 1696 The Declination from the B catalogue Differs 3' 59,"36, our result appears correct
- 1710 A very faint star,—one that could not be accurately observed
- 1761 The Declination differs —4' 17,"16 from that deduced from the B catalogue, and the A R too,—exhibits a plus instead of a minus difference has this star a large proper motion?
- 1782 Has been looked for but not observed, I suspect the place given in the B catalogue to be incorrect
- 1791 It would appear that I have not observed the star intended by B, in which case it will be as well to set down all I have observed thus

	A R Jan 1 1840	Declin Jan 1 1840
From 3 obs	7 mag	7 ^h 44 ^m 32,12 ^s
— 3 obs	7 —	45 56,52
—B catalogue		45 42,50

- 1809 The Declination from the B catalogue appears to be 1' in error
- 1821 The A R from the B catalogue appears to be 10 seconds in error
- 1832 The A R from the B catalogue, appears to be 10 seconds in error
- | | A R Jan 1, 1840 | Declin Jan 1, 1840 |
|-----------------|-----------------|---|
| 1837 From 3 obs | 7 8 mag | 7 ^h 52 ^m 55,99 ^s |
| | Differs from B | — 28 ^o 55' 1",73 |
| | | + 4 7 ,54 |
| | | — |
- Have I observed the right star?
- 1845 Not observed,—Is this the same as 1849?
- 1848 Was by mistake inserted twice in the catalogue, previously to being re-examined to discover which was the right star: the cause for this re examination, was, that I had observed this star four times as being double, whereas B had not noticed this circumstance (see errata)
- 1857 Same as 1854
- 1862 There are so many stars here of the 6 7 magnitude that it is almost impossible to identify any single one
- 1875 Is a double star as mentioned by B who it would appear has observed the first
- 1877 Was inserted in the catalogue by mistake, it not having been observed
- 1886 The A R in the B catalogue appears to be 30 seconds in error
- 1893 If there is any star here it must be a faint one, has not 1895 been re observed by B?
- 1909 The A R from the B catalogue appears to be 40 seconds in error
- 1913 The A R from the B catalogue appears to be 10 seconds in error
- 1958 No star here B says 'it forms one of a group'

clx REMARKS AND MEMORANDA WITH REGARD TO THE FOREGOING CATALOGUE

1966 Plenty stars here I have it appears not observed the star selected by B but have observed two other stars,

		A R Jan 1 1840	Declin Jan 1 1840
From 3 obs	7 mag	8h 11m 23,78s	-34° 40' 46,80"
— 2 obs	7 8 —	13 37,34	-34 48 53,66

1987 The A R from the B catalogue appears to be 10 seconds in error

1992 The A R of this star was accidentally omitted in the catalogue, thus
From 5 obs A R Jan 1 1840 = 8h 15m 45,38s Diff = +20,58s
or it would appear the A R from the B catalogue is 20 seconds in error

2028 The Declination from the B catalogue appears to be 1' in error

2029 No star here —probably the same as 2027

2040 The large differences here met with probably arise from proper motion

2045 Same as 2044

2050 No star here

2052 The Declination from the B catalogue appears to be 10' in error

2079 The A R from the B catalogue appears to be one minute in error

2111 No star here two stars near to this have been observed as follows

		A R Jan 1 1840	Declin Jan 1 1840
From 3 obs	9 mag	8h 40m 32,80s	-56° 59' 29",12
— 2 obs	9 —	8 31 6,02	-56 59 29 ,72

2142 Has been repeatedly overlooked, is not this the same as 2143?

2191 No star here Three stars near to this place been observed thus

		A R Jan 1 1840	Declin Jan 1 1840
From 1 obs	7 8 mag	8h 39m 19,33s	-47° 24' 25",76
— 1 —	8 —	8 40 27,40	-47 20 50 ,25
— 1 —	8 —	8 41 8,85	-47 19 36 ,95

2210 Other stars have been observed

2240 No star here, two other stars have been observed as follows

		A R Jan 1 1840	Declin Jan 1 1840
From 1 obs	7 8 mag	8h 44m 23,48s	-63° 40' 46",02
— 2 obs	8 —	8 46 13,18	-34 48 ,77

2245 No star here

2246 The A R from the B catalogue appears to be 30 seconds in error (see errata)

2316 The Declination from the B catalogue appears to be 50' in error

2381 The nearest star to the place indicated by B is situated as follows

		A R Jan 1 1840	Declin Jan 1 1840
From 2 obs	10 mag	9h 0m 11,46s	-60° 38' 53",63

2347 The A R from the B catalogue appears to be one minute in error

2363 I have probably observed a different star from that noticed by B

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2371 The nearest star to the place indicated by B is situated as follows

	A R Jan 1 1840	Declin Jan 1 1840
From 5 obs 9 mag	9 ^h 4 ^m 23,80 ^s	—51° 36' 39",93
Differs from B	+ 27,24	— 33 ,68

2383 I have observed another star

2377 The A R from the B catalogue appears to be 1 minute in error

2468 The nearest stars to the place indicated by B are situated as follows

	A R Jan 1 1840	Declin Jan 1 1840
From 3 obs 7 8 mag	9 ^h 17 ^m 55,69 ^s	—52° 12' 5",40
— 2 — 8 —	9 18 4,34	—52 3 49 ,48

2473 The A R from the B catalogue appears to be 10 seconds in error

2484 The Declination from the B catalogue appears to be 6' in error.

2502 The nearest stars to the place indicated by B are situated as follows

	A R Jan 1 1840	Declin Jan 1 1840
From 2 obs	10 mag 9 ^h 21 ^m 7,81 ^s	—52° 17' 9",60
— 2 —	9 — 9 23 47,11	—52 21 28 ,75

2510 No star here The nearest star to the place indicated by B is situated as follows

	A R Jan 1 1840	Declin Jan 1 1840
From 3 obs 7 8 mag	9 ^h 22 ^m 56,70 ^s	—47° 46' 48",14

2533 No star here — same as 2524

2538 No star here — same as 2530

2548 No star here — same as 2539

2566 No star here — same as 2568 with 30 seconds error of A R

2560 This star is probably affected with a large proper motion

2618 No star here

2731 This star is probably affected with a large proper motion

2743 Not seen — probably same as 2736 with 1m error in A R

2774 No star here — same as 2776

2798 Was inserted in the catalogue through inadvertence, as it had not been looked for

2797 The A R from the B catalogue appears to be 30 seconds in error

2808 The A R from the B catalogue appears to be 20 seconds in error

2814 Same as 2815 with an error of 5' in Declination

2824 Not observed with the circle through a mistake of 1° in the N P D

2837 The Declination from the B catalogue appears to be 1' in error

2847 The Declination from the B catalogue appears to be 5' in error

2868 No star here : probably same as 2864,

2876 The Declination from the B catalogue appears to be 1' in error

2939 No star here — same as 2943

2947 This star is probably affected with a large P M

2957 No star here

2959 The A R from the B catalogue appears to be 30 seconds in error

2965

2966 } The occurrence of several stars in the field has given rise to some confusion and the omission from the cata-
2967 } logue of 2966 and 2967 The following will I believe be found correct
2971 }

	No	obs	mag	A R Jan 1 1840	Declin Jan 1 1840	Diffs from B cat
2965	From	3	7	10 ^h 11 ^m s ^{x*}	-59° 4' 51",16	s— —3",88
2966	—	4	7	11 34,75	-58 51 4 ,27	-0,87 -0 ,97
2967	—	6	7.8	14 36,89	**	-2,01
2971	—	3	7	14 56,47	-58 49 50,67	-2,23 +4 ,12

* Other stars observed

2977 No star here — probably the same as 2985

2979 No star here — probably the same as 2981

2983 The A, R from the B catalogue appears to be 10 seconds in error

2990 The A, R from the B catalogue appears to be one minute in error

3020 No star here — I have observed a small star near to this as follows

	A R Jan 1 1840	Declin Jan 1 1840
From 2 obs 9 10 mag	10 ^h 20 ^m 15,63s	-52° 37' 22",00

3029 Is probably affected with P M in Declination

3056 No star here probably the same as 3052

3061 The Declination from the B catalogue appears to be 1' in error

3063 } The A R from the B catalogue appears to be one minute in error
3066 }

3077 The place of this star was not inserted in the catalogue in consequence of a large difference in the Declination from that assigned by B my observations give as follows

	A R Jan 1 1840	Declin Jan 1 1840
From 3 obs 7 8 mag	10 ^h 26 ^m 45,81s	-47° 2' 5",43
Difference from B	— 1,70	+ 7 7 ,39

3076 The result here given is a re observation of 3066, save that the A R is one second in error There is I believe no star here

3078 Several stars here I either have observed the wrong one, or the A R from the B catalogue is 30 seconds in error

3081 Has this star any P M in Declination ?

3090 I have observed a star near to this as follows

	A R Jan 1 1840	Declin Jan 1 1840
From 3 obs. 7 8 mag	10 ^h 29 ^m 18,04s	-50° 36' 8",56
Difference from B	— 37,93	+ 2 47 ,94

3100 No star here, probably the same as 3099

3116 I have observed two stars here, neither of which agrees with B thus

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		A R Jan 1 1840	Decln Jan 1 1840	Diff from B Cat
From 2 obs	7 8 mag	10 ^h 29 ^m 44,34 ^s	—57° 23' 47",08	+ 44,45 + 0' 6",27
— 1 —	8 —	30 11,90	—57 26 54 ,75	+ 16 ,89 — 3 2 ,40

- 3126 Is not this the same as 3128 with 10 seconds error in A R ?
 3150 No star here probably the same as 3159 with 1^m error in A R and 10' error in Declination
 3155 The place of this star was not inserted in the catalogue on account of a large difference in the A R from that assigned to it in the B catalogue, thus

	A R Jan 1 1840	Declination
From 2 obs	mag	10 ^h 35 ^m 1,78
Difference from B		— 16,77

- 3168 The A R from the B catalogue appears to be one minute in error
 3177 Three observations at either instrument intended for this star, turn out to be a re observation of No 3175 and no mention of another star being visible is made —what has become of 3177?
 3254 No star here same as 3255
 3271 The Declination from the B catalogue appears to be 10' in error
 3272 Was inserted in the catalogue by mistake as it had not been looked for
 3275 No star here probably a re-observation of 3274 with 1° error in Declination
 3326 I have re observed 3317 for this star is there such a star as 3326?
 3356 The A R from the B catalogue appears to be 10 seconds in error
 3365 The A R from the B catalogue appears to be 10 seconds in error
 3397 No star here same as 3394 I have observed a small star near to place indicated by B as follows

	A R Jan 1 1840	Decln Jan 1 1840
From 3 obs	9 mag	10 ^h 59 ^m 46,81 ^s
Difference from B		— 9,70

- 3409 I had committed an error in the observing catalogue by which this star has not really been looked for
 3435 The A R from the B catalogue appears to be 30 seconds in error
 3438 If this star really existed as it appears in the B catalogue—so near to 3437,—would it not have been marked double? It is I think more than probable, that the place in the B catalogue is in error My observations give as follows

	A R Jan 1 1840	Decln Jan 1 1840
From 3 obs	9 mag	11 ^h 4 ^m 34,31 ^s
Difference from B		— 37,80

- 3451 I have observed No 3447 instead of this, whereas it appears from the B catalogue that the former is the bright star Is not the place in the B catalogue a re observation of 3450 with 2° error in the Declination?
 3458 I have observed a star near to this, as follows

	A R Jan 1 1840	Decln Jan 1 1840
From 3 obs	9 mag	11 ^h 5 ^m 26,71 ^s
Difference from B		— 16,73

- 3460 There is a star situated in the neighbourhood of the place assigned by B thus

	A R Jan 1 1840	Decln Jan 1 1840
From 3 obs	10 mag	{ 11 ^h 6 ^m 8,41 ^s + 30,96 }

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3482 No star here same as 3481

3487 Is this large difference of Declination the result of proper motion?

3505 I have observed two stars here, neither of which agree with B thus

	A R Jan 1 1840	Declin Jan 1 1840
From 2 obs	11 ^h 8 ^m 35,58 ^s	—36° 57' 15",92
— 2 —	11 10 18,95	—36 54 30 ,99
whereas, from B catalogue	11 9 32,35	—36 58 29 ,89

3512 No star here perhaps a re observation of 3513 with 1° error in Declination

3518 } The B right ascension of each of these, appears to be 10 seconds in error
 3519 }

3526 No star here same as 3532

3552 I have once observed a star near to this, but the observation being marked Doubtful, it will be better not to give it I think however, that the B place of this star is erroneous

3569 The A R from the B Catalogue appears to be one minute in error

3577 No star here same as 3578

3587 No star here same as 3584 The declination set down, is a re observation of 3584

3623 The A R from the B Catalogue appears to be 10 seconds in error

3630 No star here

3642 } Nos 3631 and 3633 have been inadvertently observed instead of these
 3643 }

3672 B says "A prodigious number of small stars here &c" Why was not the same remark made with reference to 3666? I think there must be some mistake in the B place No star here

3688 The A R from the B Catalogue which was determined with the transit Instrument, probably pertains to another star,
 I have observed as follows

	A R Jan 1 1840	Declin Jan 1 1840
From 3 obs 7 8 mag	11 ^h 29 ^m 40,89 ^s	—38° 28' 20",19
— the B Catalogue	30 34,47	—38 28 30 ,20

3704 Have I observed a different star from that intended by B or is this a case of large P M?

3762 The most conspicuous star and indeed the only observable one in this neighbourhood, is situated as follows

	A R Jan 1 1840,	Declin Jan 1 1840
From 2 obs 9 10 mag	11 ^h 39 ^m 33,95 ^s	—61° 44' 14",58
— the B Catalogue	M O 38 — Γ 45,90	—61 45 38 ,52

3784 No star here probably B has re observed 3800 with an error of two minutes in the A R

3836 B says "Double, unequal" I have observed as follows

	A R Jan 1 1840	Declin Jan 1 1840
From 1 obs, * 9 mag	11 ^h 48 ^m 37,19 ^s	—31° 22' 47",38
— 1 obs * 9 mag	48 38,72	—31 22 47 ,36
— the B Catalogue	48 35,87	—31 22 43 ,05

* Haze,—not to be depended upon in consequence

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3869 No other star in the neighbourhood —The declination from the B Catalogue is no doubt five minutes in error

3889 No star here same as 3890

3928 On examining the transit observations of this star, at first I felt disposed to admit—that I might through inadvertence have observed 3930 instead of 3928, but on further search, I find that both of these stars were observed on the same evening, the former at the three first wires, and the latter at the other two The A R. from the B Catalogue is no doubt erroneous.

3937 The A R. from the B Catalogue appears to be 10 seconds in error

3952 See errata

4011 The nearest star to the place assigned by B is situated as follows

	A R Jan 1 1840	Declin Jan 1 1840
From 3 obs 8 mag	12 ^h 12 ^m 17,47 ^s	—26° 55' 26,29
— the B Catalogue	12 34,22	—26 50 49,75

4020 The observing N P D was taken out wrong

4026 Was inserted through inadvertence, as 4023 had been re observed instead of it Is there any star here?

4040 The nearest star to the place assigned by B is situated as follows

	A R Jan 1 1840	Declin Jan 1 1840
From 3 obs 10 mag	12 ^h 16 ^m 33,76 ^s	—56° 45' 43",94
— the B Catalogue	15 51,92	—56 44 30 ,31

4065 No star here

4079 No star here

4088 No star here

4111 No star here

4133 The observing N P D was taken out wrong

4152 No star here same as 4148

4208 I have observed as follows

	A R Jan 1 1840	Declin Jan 1 1840
From 1 obs 9 mag	12 ^h 41 ^m 3,24 ^s	—59° 47' 24",37
— the B Catalogue	41 49,92	—59 44 19 ,66

4229 I have observed as follows

	A R Jan 1 1840	Declin Jan 1 1840
From 3 obs 8 9 mag	12 ^h 45 ^m 58,66 ^s	—59° 46' 50",07
— the B Catalogue	44 28,18	—59 44 17 ,92

4268 Has been inserted in the Catalogue through inadvertence

4272 I have observed 4275 instead of this:—does 4272 exist?

4292 No star here perhaps B has re observed 4291 with an error of 1° in declination

4295 The place of this star in the B Catalogue is probably wrong, from a typographical error

4326 There is another star here, but I have some doubts about the accuracy of the observations.

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- 4333 The declination from the B Catalogue appears to be $10'$ in error
- 4347 The A. R. from the B Catalogue appears to be 10 seconds in error
- 4356 These large differences are perhaps due to proper motion
- 4359 The A. R. from the B Catalogue appears to be 10 seconds in error
- 4379 No star here
- 4391 I have observed as follows

From 3 obs	8.9 mag	A. R. Jan 1 1840	Declin Jan 1 1840
		$13^h\ 9m\ 0.83s$	$-46^\circ\ 15' 25'',42$
		$8\ 35.97$	$10\ 18 ,85$

- 4430 No star here
- 4440 No star here same as 4439.
- 4455 The observing N. P. D. was taken out wrong
- 4463 No star here same as 4462
- 4486 No star within 10 or 15 minutes of this
- 4493 I have observed as follows

From 2 obs	7.8 mag	A. R. Jan 1 1840	Declin Jan 1 1840
		$13^h\ 22m\ 2.45s$	$-47^\circ\ 0' 45'',76$
		$20\ 59.25$	$-47\ 2\ 43 ,81$

- 4501 No star here probably B has re observed 4524 with 2 minutes error in A. R.
- 4516 No star here same as 4518
- 4520 The S. P. D. set down in the B Catalogue pertains to No 4529,
- 4536 }
 4537 } Only one star here, namely 4537
 4538 }
- 4543 No star here probably B has re observed 4544 with 1° error in declination
- 4562 The declination from the B Catalogue appears to be $1'$ in error
- 4565 No star here probably B has re observed 4568, with an error of 20 seconds in the A. R.
- 4573 No star here
- 4601 No star here probably B has re observed 4699 with 20 or 30 seconds error in the A. R.
- 4609 No star here same as 4604, with 1 minute error in the A. R.
- 4631 No star here same as 4629, with $5'$ error in declination
- 4641 No star here same as 4633, with 1 minute error in the A. R.
- 4661 The A. R. from the B Catalogue appears to be 1 minute in error
- 4652 No star here same as 4656
- 4703 See errata.
- 4721 No star here: same as 4722.

4744 No star here probably B has re observed 4743, with an error of 1° in the declination

4776 This star was inserted in the catalogue through inadvertence as it had not been observed

4794 I have observed another star, thus

	A R Jan 1 1840	Declin Jan 1 1840
From 3 obs. 8 mag	14h 3m 7,16s	$-55^{\circ} 18' 32'',14$
— the B catalogue	2 11,13	$-55 16 38 ,37$

4801 No star here probably B has re observed 4800, committing an error of 1° in the declination

4817 No star here probably B has re observed 4818, committing an error of 10° in the declination

4837 No star here

4841 No star here

4862 I have observed as follows

	A R Jan 1 1840	Declination Jan 1 1840
From 1 obs 10 mag	14h 10m 19,26s	$-36^{\circ} 6' 53'',09$
— the B catalogue	10 46,87	$-36 7 40 ,33$

4900 The declination from the B Catalogue appears to be $1'$ in error

4906 I have re-observed 4916 is there any other star?

4907 No star here same as 4898 with one minute error in the A R

4921 The A R from the B Catalogue appears to be one minute in error

4956 See errata This star was observed on the same evening with 4955 according to the B catalogue these two constituted a pretty close double star—is there another star?

4988 No star here — same as 4989

5003 No star here same as 5009 with an error of one minute in the A R

5006 The A R from the B Catalogue appears to be one minute in error

5008 The A R from the B Catalogue appears to be one minute in error

5017 I have observed as follows

	A R Jan 1 1840	Declin Jan 1 1840
From 1 obs 9 mag	14h 31m 55,12s	$-45^{\circ} 56' 2'',66$
— the B	32 34,99	$-45 53 2 ,20$

Has not B re observed 5016 with an error of 1° in the declination?

5076 No star here same as 5074

5076 No star here same as 5074

5088 No star here :—same as 5089 with an error of $10'$ in declination?

5100 No star here — perhaps B has re-observed 5101, with an error of 1° in declination

5126 } Only one star here:—namely 5128
5128 }

5127 No star here perhaps B has re observed 5128, with an error of 1° in the declination

5142 The A R from the B Catalogue appears to be one minute in error.

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5154 No star here probably B has re observed 5105 with an error of 10' in declination

5183 Do these differences arise from error in the B Catalogue or from proper motion?

5194 The A R from the B Catalogue appears to be 30 seconds in error

5201 This is a double star In the catalogue, the 1st in order of A R is given, the second is situated thus

	A R Jan 1 1840	Declin Jan 1 1840
From 2 obs 9 mag	16 ^h 0m 5,25s	-43° 5' 45",87

5211 This star has been observed by me as the companion to 5206, which B notes as "double unequal" The B Catalogue appears to be 20 seconds in error

5228 No star here same as 5229 with an error of 5' in the declination

5235 Is the large difference of Declination here found due to proper motion?

5253 No star here — probably the same as 5251.

5292 No star here —probably the same as 5289, with an error of 10 seconds in the A R

5314 No star here This star was introduced into the catalogue through inadvertence, as its declination exceeds the limits to which I had intended to observe probably B has re observed 5311 which has been observed

5327 No star here —probably B has re observed 5316, with an error of one minute in the A R

5350 No star here probably B has re observed 5346, with an error of thirty seconds in the A R

5382 The Declination from the B Catalogue appears to be 5' in error

5393 This star—if it exists, has been overlooked, and 5392 re observed instead of it

5427 No star here probably B has re-observed 5428 with an error of 15' in the declination

5433 The A R from the B catalogue is probably ten seconds in error

5447 No star here same as 5449

5515 This is a double star In the catalogue, the first in order of A R is given, the second is situated thus

	A R Jan 1 1840	Declin Jan 1 1840
From 2 obs 8 mag	16 ^h 43m 5,12s	-49° 51' 5",17

5526 No 5521 has inadvertently been observed instead of this

5613 This is a close double star —B "says double unequal" In the catalogue, the first star in order of A R is given, the second is situated thus

	A R Jan 1 1840	Declin Jan 1 1840
From 1 obs 7 8 mag	15 ^h 59m 22,34s	-32° 12' 58",97

5616 No star here —B has probably re observed 5626, with an error of one minute in the A R

5622 This star has only once been looked for, when it was not seen It is B re-observed 5634 with two minutes error of A. R?

5639 This star has been overlooked, and 5649 re observed instead of it

5647 No star here same as 5646

5665 No star here, same as 5670

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5704 The A R from the B Catalogue appears to be one minute in error

5763 This star has been observed as follows

	A R Jan 1 1840	Declin Jan 1 1840
From 2 obs	7 8 mag 16 ^h 22 ^m 46, ^s 30	—49° 2' 56", ⁰⁵
— the B Catalogue	23 22,48	3 1 ,89

5789 The A R from the B Catalogue appears to be twenty seconds in error

5792 Preceding this—is a star of the 8th magnitude, I" 3 to the north, and following it, at 6 seconds—is a star of the 8 9 mag 30" to the north B does not mention this as being double

5877 No star here — probably the same as 5869, with an error of one minute in the A R

5883 This star has only been looked for once, when a different one from that set down in the B catalogue was observed The assistant noted "plenty stars here"

5887 Has this star a large P M in A R ?

5929 No star here —same as 5927

5960 Only one observation—Either Brisbane or myself have probably committed an error of 1' in the Declin

5968 The B Catalogue appears to be 40 seconds in error in the A R

6038 A wrong star has been observed at the circle

6061 A Star has been observed for this as follows

	A R Jan 1 1840	Declin Jan 1 1840
From 1 obs	7 8 mag 17 ^h 12 ^m 46, ^s 43	—37° 38' 19", ⁴⁷
Differs from B	+ 46,13	— 24 ,10

6233 No star here —same as 6227

6260 The nearest star to the place indicated by B is situated as follows

	A R Jan 1 1840	Declin Jan 1 1840
From 2 obs	mag 8 17 ^h 44 ^m 12, ^s 66	—36° 2' 39", ⁰⁹
Differs from B	+ 33,50	— 2 53 ,44

Has not B re-observed No 6265 with an error of 40 seconds in A R and 1' in Declination?

6253 This star was inserted through inadvertence, as it had not been looked for

6309 A Star has been observed near to this as follows

	A R Jan 1 1840	Declin Jan 1 1840
From 2 obs	8 9 mag 17 ^h 56 ^m 13, ^s 44	—36° 36' 47", ⁶⁹
Differs from B	+ 8,47	+ 21 ,05

6314 The same as 6317 Another star has been observed near to this as follows

	A R Jan 1 1840	Declin Jan 1 1840
From 1 obs	8 mag 17 ^h 58 ^m 3, ^s 39	—44° 57' 39", ⁶⁶
Differs from B	— 10,95	— 2 30 ,26

6383 No star here

6385 A Star has been observed for this as follows

	A R Jan 1 1840	Declin Jan 1 1840
From 2 obs	8 9 mag. 18 ^h 13 ^m 4 ^s ,19	—68° 42' 29", ⁴⁶
Differs from B	— 1 6,05	+ 31 ,02

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6437 The Brisbane Catalogue appears to be 5' in error in the Declination

6475 }
 6476 } Only one Star here, viz No 6477
 6477 }

6543 Is marked *double* in the B Catalogue. It is strange that two stars should exist so close to one another as 6542 and 6543—both of the 6th magnitude,—and that the double Star should have been overlooked by Pinza as well as myself. Is not the Brisbane Catalogue in error?

6545 The Brisbane Catalogue appears to be one minute in error in the A. R.

6553 Same as 6555 with 1' error in the Declination set down in the Brisbane Catalogue

6608 No star here — same as 6612

6643 No star here; same as 6642

6791 No star here same as 6794

6825 The A. R. from the Brisbane Catalogue appears to be 10 seconds in error

6827 No star here — same as 6826

6830 No Star here — same as 6829

6848 The nearest bright star to this,—one of the 6 7 mag — is situated 9' 57" to the South

6954 No star at the place assigned by B two stars have been observed in the neighbourhood as follows

	A. R. Jan 1 1840	Declin Jan 1 1840
From 2 obs	6 7 mag	20 ^h 61 ^m 35,30 ^s
— 4 —	6 —	51 40,69
— B Catalogue		50 33,06

It would appear that B has observed the A. R. one minute too small

6975 The Brisbane Catalogue appears to be several seconds in error

6990 The A. R. in the Brisbane Catalogue appears to be one minute in error

6993 No star here — probably 6994 has been re observed by B with an error of 5° in the Declination

6995 No star here

7028 Nebulous —several stars of the 8 9 magnitude, among which the two following were selected as being the brightest.

	A. R. Jan 1 1840	Declin Jan 1 1840
From 2 obs	8 mag	21 ^h 19 ^m 21,67 ^s
— 2 —	8 —	19 28,78
— B Catalogue	} M. C —19 14,34	— 34 55 ,79
	T. —19 17,31	—————

7050 No star here — same as 7049

7067 Further observation of the A. R. of this star does not alter the Madras result

7076 The A. R. from the Brisbane Catalogue appears to be 30 seconds in error

7110 This star is probably affected with a large proper motion, both in A. R. and Declination

7132 I have observed this star as 5 6 or 6th magnitude. B says 7th will proper motion explain the large disagreement in the Declination?

- 7195 The A R from the Brisbane Catalogue appears to be 10 seconds in error
 7228 Further observation of the A R of this star confirms the Madras result Has this star a large proper motion in A R?
 7237 This star was inserted in the catalogue through inadvertence, as it had not been looked for
 7255 The Declination from the Brisbane catalogue appears to be 2' in error
 7265 No star here — same as 7267
 7308 The annual variation of this star in A R as set down in the Brisbane Catalogue, being erroneous, the A R itself is probably so too
 7314 } 7315 } The Madras Instruments failed to separate these two stars

- 7347 No star here brighter than the 12th magnitude, the nearest star is situated as follows

	A R Jan 1 1840	Declin Jan 1 1840
From 2 obs 8 9 mag	23 ^h 47 ^m 40,97 ^s	-48° 50' 35",94
Differs from B	+ 1,27	- 10 5 ,63

- 7348 } There are three stars here B has observed the A R of the first and third, opposite to which he has set the
 7354 } S P D of the third and second respectively, the three stars are situated thus

	A R Jan 1 1840	Declin Jan 1 1840
7348 From 3 obs 7 mag	23 ^h 48 ^m 20,66 ^s	-58° 2' 15",32
— 1 — 7 8 —	49 49,91	- 58 5 14 ,71
7354 — 4 — 7 —	50 11,55	-58 10 11 ,79

I suspect the relative magnitudes to be variable, but am unable to particularize either

REMARKS UPON THE FOREGOING CATALOGUE CONTINUED

Having now accounted for the several blanks which occur in the columns of Differences, it will not be amiss—to offer a few remarks relative to the differences themselves Those for the A R, it will be observed are almost all affected with the sign *minus*, exhibiting—that in addition to the incidental errors of observation, an error of a general nature exists in the Brisbane Catalogue throughout In the appendix to the Brisbane Catalogue (Page 273) a similar conclusion had been arrived at, by comparing, the Brisbane places with those from Lieutenant Johnson's Catalogue (Observed

at the St Helena Observatory) it will then at least be interesting to compare the values of the correction now found necessary, with those which the St Helena Catalogue has pointed out, thus

Declination	cor for obs with M C			cor for obs with I		
	J-B	T-B	Diff	J-B	T-B	Diff
from 25 to 30	+2,12	+1,00	-0,22	+1,52	+2,41	+0,89
30 to 35	2,03	2,18	+0,15	1,89	2,61	+0,72
35 to 40	2,16	2,15	-0,01	2,67	2,63	-0,04
40 to 45	2,12	2,07	-0,05	2,61	2,93	+0,32
45 to 50	2,20	2,29	+0,09	2,39	2,61	+0,22
50 to 55	2,26	2,20	-0,06	2,53	2,76	+0,23
55 to 60	2,10	2,35	+0,25	2,59	2,66	+0,07
above 60	2,31	2,33	+0,03	2,42	2,78	+0,36
Mean			+0,02			+0,34

Here it appears with reference to the Brisbane Catalogue,—that as far as the transits observed with the *Mutual Cycle* are concerned, the Madras observations attribute to them as near as need be, the same amounts of error as do those made at St. Helena, and with regard to the observations made with the *Transit Instrument*—when compared with the Madras observations they exhibit a general error of from 3 to 4 tenths *larger* than has been assigned to them by the St Helena Catalogue. Now the former result, from the large number of comparisons which the Catalogue affords, is entitled to a considerable degree of credit, whereas the latter (from the few observations made with the transit instrument at Parramatta) is little to be relied upon. Since writing the above with a view of examining how nearly the single results of the present Catalogue agreed with the St Helena determinations, I have gone over the Madras Catalogue, and found the several cases for comparison which now follow whilst thus occupied, I have discovered that several stars have crept into the present catalogue whose places had been given in the former Volumes of this work, thus affording a comparison of the present catalogue with former observations, and a few other Stars have been met with, whose places had been observed, but had been overlooked in the construction of the catalogue if we put T to represent the Madras determination from observations in 1838 and 1839, and T' the same from former observations; B the Brisbane place, and J that from Lieutenant Johnson's Catalogue, we get as follows.

REMARKS AND MEMORANDA WITH REGARD TO THE FOREGOING CATALOGUE clxxiii

No in the B cat	Reference to former Obs	No obs	A R Jan 1 1840	T - B			T - J	T - I'	Declination Jan 1 1840 (South)	T - B	T - J	T - T'		
				M	C	T.								
89	No 34 of III	3	0 35 0 90	—	—	—	—	,54	39 20 27,84	— 2 70	—	+ 1,3		
93	38 of III	3	0 36 27 71	—	—	—	—	,01	39 18 14 74	+ 0,48	—	+ 1,3		
216	167 of II	3	1 24 35 21	—	2 97	—	—	,24	49 54 23 75	+ 1 25	—	+ 3,0		
278	210 of II	3	1 49 43,47	—	3 22	—	+ 37	,19	52 24 26 23	+ 3 15	+ 3 5	— 0,8		
287	219 of II	2	1 53 43,59	—	3,13	—	—	,07	62 21 0,53	+ 0,72	—	— 2,7		
327	241 of II	4	2 10 47 86	—	2 65	—	—	,31	52 16 18 09	— 1,48	—	+ 6,0		
363	256 of II	3	2 21 7 19	—	2 21	—	—	,00	+ ,03	48 25 24,18	+ 3 17	+ 3,2	+ 0,8	
519	327 of III	3	3 19 45 10	—	—	—	—	,03	36 29 6 46	— 5 74	—	— 1,6		
612	450 of II	3	3 56 13 82	—	2 98	—	1 63	+ ,09	61 51 12,91	+ 2 40	— 1 1	— 0,4		
668	419 of III	1	4 5 27,97	—	2,33	—	—	,72	42 24 51,00	+ 0,15	—	+ 0,2		
682	483 of II	3	4 11 50 64	—	2,74	—	3,19	+ ,18	+ ,10	51 53 32,62	+ 1 11	+ 2,3	+ 3,9	
732	462 of III	1	4 27 14 21	—	0,71	—	—	,11	30 5 39,04	— 8,43	—	+ 2,0		
741	538 of II	3	4 30 32 90	—	2,35	—	2,32	+ ,11	,10	55 22 40,23	— 0 37	— 4 2	+ 4,6	
1007	611 of III	1	5 33 35 42	—	2 42	—	2 56	—	+ ,03	40 47 57 72	+ 4 20	—	+ 6,4	
1090	654 of III	3	5 50 20 03	—	1,70	—	—	,05	31 24 30,65	+ 3,67	—	— 1,5		
1124	—	6	5 58 8 34	—	2 83	—	3 61	—	—	58 0 18 93	+ 6 91	—	—	
1131	677 of III	3	5 50 52 85	—	2 98	—	1 51	—	,21	45 2 22 82	+ 1,38	—	+ 3,2	
1158	—	2	6 3 52 33	—	2 84	—	3 00	—	—	44 19 55,44	+ 1,98	—	—	
1241	807 of II	3	6 20 24 35	—	2,59	—	2 77	—	,17	52 36 36 47	+ 2,36	—	— 0,1	
1389	856 of II	4	6 46 32,69	—	1,17	—	—	,37	61 46 11,22	+ 8,09	+ 34	+ 5,4		
1465	511 of IV	1	6 59 4,71	—	3 04	—	4,25	—	,00	43 23	—	—	—	
1664	—	1	7 30 30,20	—	0,53	—	—	—	26 27 31 07	+ 4 58	—	—		
1679	934 of III	1	7 32 15 97	—	—	—	2,56	—	,38	26 26 29 33	+ 1 02	—	+ 1,0	
1697	941 of III	3	7 34 9 56	—	1 68	—	—	—	,22	77 53 39,68	+ 11 29	—	+ 1,1	
1735	957 of II	2	7 39 33,57	—	2,10	—	3 62	—	,20	37 34 56,57	+ 3,77	—	+ 1,7	
1763	961 of II	2	7 42 33 95	—	2 12	—	1 83	—	,16	24 27 44,32	+ 2,48	—	+ 0,8	
1778	965 of II	3	7 44 21 70	—	2 46	—	2,4	—	,30	45 58 22 42	+ 5 26	+ 0 6	+ 1,1	
1812	971 of II	3	7 48 36 10	—	—	—	3 54	—	,06	47 41 15 03	+ 5 92	+ 4,6	— 1,1	
1835	982 of II	4	7 52 42,60	—	2 02	—	1,99	—	,07	+ ,22	62 33 17 05	+ 6 26	+ 2 8	+ 2,4
1916	1002 of II	3	8 4 34 06	—	2,97	—	3,13	+ ,41	+ ,41	46 52 33,80	+ 0,75	+ 1,8	— 0,2	
1917	1003 of II	3	8 4 36 51	—	2 30	—	2 91	+ ,29	+ ,44	46 52 5,26	— 2 95	— 0,8	+ 4,4	
1946	—	1	8 8 41 28	—	2,03	—	—	—	59 35 52,02	+ 3,57	—	—		
2148	1067 of II	4	8 35 42 58	—	2 39	—	2 04	—	,07	52 21 19,94	+ 5 23	+ 0 2	+ 2,7	
2163	1071 of II	3	8 37 4,60	—	—	—	1,36	—	,08	59 11 28 48	+ 5 53	+ 1,8	— 2 3	
2293	1101 of II	3	8 53 3,50	—	2,31	—	3,24	+ ,08	—	58 36 45,13	+ 7,72	+ 1,8	+ 1,6	
2311	1102 of II	3	8 55 28,59	—	1,94	—	2 47	—	,17	58 28 20 67	+ 8,60	+ 3 2	+ 2 3	
2326	1105 of II	3	8 58 38 82	—	3 12	—	1 71	+ ,16	+ ,30	48 27 46,02	+ 5 09	+ 3 3	+ 2 3	
2352	1115 of II	1	9 3 10,01	—	2,94	—	1 45	—	,06	29 42 56,85	+ 1,74	—	+ 1,4	
2394	1124 of II	3	9 7 38 53	—	2,79	—	2,93	—	,26	61 39 39 21	+ 5 13	+ 4,3	+ 0 5	
2400	1120 of III	2	9 8 26,82	—	—	—	1,58	—	,04	42 33 58,77	+ 3,98	—	+ 2,3	
2429	1137 of II	3	9 12 48,53	—	2,50	—	4,09	,00	— ,16	58 36 17,51	+ 5,44	+ 2,5	+ 1,9	
2521	1156 of III	2	9 24 41 96	—	2 94	—	2 71	—	,21	31 10 8 98	+ 1,62	—	+ 0 6	
2535	1160 of II	4	9 26 21 63	—	2 19	—	2,68	—	,39	66 19 47,75	+ 2 29	+ 2 8	+ 2,9	
2546	—	3	9 28 1 07	—	2 01	—	3 61	—	—	48 17 44 00	+ 7 23	—	—	
2547	—	3	9 28 5,82	—	4,42	—	3,34	—	—	49 0 55,39	+ 6,83	—	—	
2565	1167 of II	3	9 29 48 26	—	1 52	—	1 97	—	,09	58 31 1 00	+ 4 93	+ 2,0	+ 2,2	
2587	—	2	9 32 37,60	—	5 28	—	—	—	—	38 48 24 66	— 2 56	—	—	
2638	—	2	9 38 22 01	—	2 54	—	—	—	—	60 38 6 40	+ 4,01	—	—	
2652	—	1	9 39 31 80	+ 15,	—	—	—	—	—	30 32 23 16	— 3,42	—	—	
2752	1196 of II	3	9 51 15,26	—	2,41	—	2,79	—	,06	53 48 25,09	+ 5,24	+ 3,4	+ 1,7	

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No in the B cat	Reference to former Obs	No obs	A R Jan	T-B			T-J	T-T	Declination	T-B	T-J	T-T'
			1 1840	M	C	T			Jan 1 1840 (south)		"	"
2802	—	2	9 66 34,64	—	0 95	—	—	—	59 20 32,44	+ 5 38	—	—
2882	—	2	10 6 50,10	—	2 08	—	—	—	57 15 23 34	+ 1 80	—	—
2971	—	3	10 14 56 47	—	2,23	—	—	—	58 49 50 67	+ 4,12	—	—
2972	1234 of II	1	10 14 58 57	—	2,19	—	3 05	—	56 14 27,21	— 6 02	—	2 6
2981	—	3	10 16 34,50	—	1,99	—	2,14	—	28 50 24,21	+ 7,18	—	—
2998	—	1	10 18 14,36	—	3,36	—	—	—	60 45 37,93	+ 2 85	—	—
3032	1261 of II	3	10 22 14,05	—	1,35	—	0 38	—	29 47 26 40	— 0,04	—	1 0
3095	727 of IV	3	10 29 12 03	—	1 11	—	—	—	36 49 42 58	+ 2 97	—	+ 1,0
3099	—	3	10 29 27 60	—	2 33	—	1 52	—	56 43 48 69	+ 0 83	—	—
3201	1293 of III	3	10 39 30,99	—	—	—	2,33	—	52 20 55,52	+ 1,51	—	1,9
3244	—	1	10 44 8,65	—	2 54	—	—	—	59 8 8 56	+ 0 41	—	—
3390	—	3	10 58 59,20	—	2 8	—	—	—	50 20 55 44	- 9,68	—	—
3447	—	3	11 4 50,81	—	3,09	—	—	—	59 34 29 91	+ 0 07	—	—
3448	—	2	11 4 51,75	—	2 08	—	—	—	59 26 28,87	- 5 29	—	—
3596	1382 of III	1	11 20 53,80	—	2,03	—	2,44	—	41 47 36,19	+ 1,29	—	1 0
3633	—	3	11 24 26,69	—	1,22	—	2 70	—	48 37 55 71	+ 4 54	—	—
3705	1411 of III	3	11 32 17,01	—	1 16	—	2,82	—	43 51 26 28	+ 5 44	—	0 6
3760	1423 of III	3	11 37 50,42	—	—	—	3 17	—	44 48 7 30	- 0 39	—	0,4
3832	1381 of II	3	11 47 32,81	—	3 44	—	—	—	27 35 6 70	- 1 35	—	3 3
3931	—	1	11 59 63,38	—	3,59	—	—	—	59 33 35,38	- 13,13	—	—
3934	1395 of II	3	12 0 5 78	—	2,82	—	2 36	—	49 49 52,84	- 1,69	—	+ 1 8
3938	1469 of III	2	12 0 38,82	—	2,92	—	—	—	43 25 56 22	+ 2 23	—	- 1 0
3959	—	1	12 4 17 70	—	1,99	—	—	—	59 8 55,88	+ 2,27	—	—
4237	1485 of II	3	12 46 14 90	—	2 00	—	3,61	—	56 18 24 71	+ 0,43	+ 0 9	— 0 0
4275	—	3	12 50 51,63	—	1,85	—	—	—	59 30 33,60	- 4,96	—	—
4285	1597 of III	2	12 51 48,43	+	0,42	—	—	—	32 38 11,62	- 0,68	—	+ 0,2
4671	1709 of III	2	13 44 13 05	—	1 73	—	1,91	—	34 52 19 15	- 6 59	—	- 0,2
4733	—	2	13 52 34,83	—	0,92	—	1,45	—	59 35 49 86	- 0 83	—	1 2
4848	1622 of II	1	14 9 12,19	—	3,13	—	3 53	—	45 19 0 35	- 3 35	—	- 1 5
4880	—	1	14 12 54,17	—	1 54	—	—	—	46 40 56,07	+ 4,39	—	—
4902	1634 of II	1	14 15 54,00	—	2 19	—	3 08	—	44 29 34 82	+ 0 49	—	+ 0 9
4903	1635 of II	1	14 15 55,35	—	3 49	—	3 59	—	44 39 6 13	+ 0 27	—	+ 3 2
4945	1642 of II	2	14 21 52,74	—	2 28	—	1 82	—	49 44 36 01	+ 0 10	—	- 0 6
4964	952 of IV	2	14 21 44 11	—	2 02	—	—	—	15 45 16 14	+ 1 63	—	- 0 4
4971	1814 of III	1	14 25 32,78	—	2,20	—	—	—	45 32 31,89	+ 1 56	—	- 1,1
4974	1815 of III	1	14 26 53,62	—	2,67	—	3 54	—	45 25 53 92	+ 1 14	—	- 0 1
5007	1657 of II	3	14 31 19 39	—	2 78	—	—	—	46 41 45 32	+ 2 53	—	+ 0 5
5018	—	1	14 32 37,29	—	2 36	—	—	—	32 4 28 80	+ 2,78	—	—
5068	—	2	14 39 32,62	—	1 98	—	—	—	52 41 55 31	+ 5 50	—	—
5069	—	3	14 40 52,78	—	2,43	—	—	—	41 10 33 41	+ 2 10	—	—
5223	—	3	15 3 17,28	—	0,88	—	—	—	49 41 57 13	+ 3,08	—	—
5269	—	1	15 5 22,52	—	2,12	—	—	—	59 29 50 86	- 0 77	—	—
5345	1899 of III	1	15 6 34,15	—	1 57	—	—	—	40 53 30 00	- 2 98	—	- 4 2
5311	—	2	15 10 0 82	—	5 55	—	—	—	65 19 21,15	- 0 16	—	—
5330	—	2	15 16 58 44	—	3,38	—	—	—	65 23 0 57	- 0 78	—	—
6380	1700 6320	2	15 24 30 30	—	1 38	—	1 85	—	40 376 23 33	- 1 86	—	- 4 0
6128	—	1	15 31 10 0	—	1	—	—	—	51 50 38 16	- 0 81	—	—
6214	1803 11 11	2	15 31 0 0	—	—	—	1 35	—	24 21 39,60	- 3 11	—	- 0 1
6101	183 11 11	2	15 31 0 11	—	0 3	—	1 37	+	36 18 37 61	- 0,81	-	- 0 8
5335	188 of III	2	15 31 46 3	—	0 8	—	—	—	30 18 52 97	- 0,72	—	- 2 2

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No in the B cat	Reference to former Obs	No obs	A R Jan 1 1840	T-B		T-J	T-T'	Declination Jan 1 1840 (south)	T-B	T-J	T-T'
				M	C						
5614	No 1994 of III	1	15 59 38.09	-	2.91	-	-	+ .14	33 6 51.81	- 1.84	-
5652	—	1	16 4 69.41	-	3.00	-	-	-	52 40 31.32	+ 0.90	-
5667	—	1	16 6 47.08	-	3.02	-	-	-	59 0 38.86	+ 4.89	-
5670	—	1	16 7 10.08	-	2.52	-	-	-	69 0 10.46	+ 3.09	-
5731	—	2	16 16 42.70	-	2.18	-	-	-	43 67 6.21	- 1.10	-
5747	1889 of II	1	16 20 56.03	-	1.43	- 2.69	+ .61	+ .51	34 20 57.01	- 1.65	+ 0.4
5766	—	1	16 25 42.93	-	2.00	-	-	-	59 53 23.89	-	0.0
5767	2012 of III	1	16 25 51.32	-	3.31	- 1.44	- .22	- .18	34 55 11.03	- 6.47	- 3.3
5828	1910 of II	2	16 36 0.27	-	2.36	- 2.61	+ .16	- .11	58 44 40.11	+ 3.75	+ 5.3
5861	2089 of III	1	16 41 0.83	-	2.09	-	-	+ .07	41 34 25.69	+ 3.42	- 1.9
5865	1087 of IV	1	16 41 34.99	-	3.87	-	-	+ .41	41 30 24.85	+ 1.32	-
5869	—	1	16 42 13.35	-	2.18	-	-	-	59 53 23.89	-	3.1
5913	1100 of IV	2	16 48 3.49	-	0.82	-	-	+ .25	37 21 49.81	- 3.87	+ 0.4
5975	2135 of III	2	16 59 7.51	-	1.94	-	-	- .68	44 20 34.08	+ 1.01	-
6012	—	1	17 5 63.27	-	5.84	-	-	-	44 35 27.73	+ 1.16	-
6177	—	1	17 32 51.99	-	3.03	-	-	-	45 67 34.76	+ 5.17	- 1.3
6228	2229 of III	1	17 41 33.95	-	1.57	- 3.43	-	-	34 44 54.94	- 4.24	- 1.2
6238	{ 2234 of III } { p cu of IV }	2	17 42 43.28	-	1.97	- 3.51	-	- .20	34 50 59.40	- 8.30	-
6268	—	1	17 48 23.16	+ 2.45	-	-	-	-	36 0 28.54	- 2.69	+ 5.4
6360	2101 of II	1	18 6 48.09	- 2.08	- 2.07	+ .21	+ .16	-	36 48 7.06	- 6.68	- 1.8
6382	2296 of III	1	18 12 2.76	-	3.42	-	-	+ .37	36 44 12.11	+ 0.23	-
6396	—	2	18 14 17.26	-	3.34	-	-	-	53 42 42.42	+ 3.29	- 3.4
6542	2307 of III	2	18 47 55.76	-	2.62	- 2.19	-	- .03	37 18 32.76	- 2.96	-
6550	—	1	18 49 37.98	-	2.41	-	-	-	58 8 16.07	+ 2.36	- 1.0
6585	2216 of II	3	18 58 34.93	-	2.09	- 3.35	+ .09	- .11	38 8 42.76	- 0.01	+ 1.8
6612	—	3	19 5 26.16	-	2.03	-	-	-	56 25 9.96	- 0.07	-
6634	—	2	19 10 26.04	-	3.03	-	-	-	56 13 33.39	- 3.71	+ 0.6
6914	2598 of III	1	20 37 37.27	-	3.41	- 5.16	-	- .51	44 33 55.79	- 0.97	-
6985	—	3	21 2 3.61	-	1.49	-	-	-	60 21 43.67	- 1.29	-
6987	2654 of III	1	21 2 47.48	-	1.58	- 2.37	-	- .14	40 4 22.00	- 8.11	- 0.2
7171	2808 of III	3	22 19 15.60	-	2.34	+ 3.39	-	- .29	39 56 22.74	- 9.13	- 0.2
7203	2717 of II	3	22 35 46.57	-	2.38	- 2.12	+ .00	+ .38	54 20 21.97	- 1.50	+ 0.8
7252	2765 of II	3	23 1 16.37	-	1.16	- 2.83	- .14	- .26	46 6 40.73	+ 2.72	+ 1.3
7207	2771 of II	6	23 8 3.19	-	0.75	- 2.30	+ .15	+ .06	59 6 38.57	+ 8.95	+ 3.3
7271	2779 of II	3	23 10 10.45	-	1.18	- 3.01	+ .15	- .04	33 24 5.18	+ 3.78	+ 6.9
7281	—	3	23 11 49.48	-	2.06	-	-	-	54 41 6.09	+ 0.30	-
7300	2938 of III	3	23 24 22.71	-	0.97	- 2.40	+ .22	+ .34	38 42 4.32	+ 8.65	+ 3.8
7304	2813 of II	2	23 26 27.23	-	2.04	- 2.98	- .28	- .49	43 29 52.99	+ 4.62	+ 1.4
7315	2821 of II	3	23 30 51.23	-	2.92	+ .11	- .02	- .07	47 31 28.49	+ 8.28	+ 0.8
7330	2814 of II	3	23 40 35.28	-	3.66	+ .28	+ .21	- .29	0 49.79	+ 3.68	+ 3.4
											- 0.4

In examining these differences as well as those in the catalogue, it must be kept in mind that they are each affected by the amount of fifteen times the annual proper motion which may attach to the star under consideration, for the A R, the effect of this circumstance is lost sight of—in the larger

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amounts of error of the Brisbane Catalogue, but with those for Declination,—it is probable that a great many of the large differences which are met with, may thus be explained as the differences now stand, about one half of the whole number are less than three seconds, and about five sixths of the whole are below six seconds, or more correctly thus

Difference below	3"	—	1632
Between	3 and 6"	—	1024
Above	6	—	535
Large Differences	—	—	46
Not observed by B	—	—	218
		—	—
Total		3455	

ERROR OF DIVISION OF THE MADRAS MURAL CIRCLE

In the earlier volumes of the Madras Observations, I have stated with regard to the Mural Circle—that the error of division of every fifth degree had been examined, when the largest error did not exceed two seconds. The method by which this examination had been conducted, was contrived for this express purpose and put in force in the year 1831, and the result of the examination of every 5° , was printed in the Journal of the Asiatic Society of Calcutta in the following year *. In the Autumn of 1838, I availed myself of the assistance of Mr Caldecott (the Astronomer at the Trivandrum Observatory,) to repeat these examinations, when the results although not near so satisfactory as the method itself under better arrangements† is capable of,—still, will I hope be considered not altogether undeserving of credit.

The examination was conducted as follows. The telescope was unclamped from the circle, whereby, turning on its own axis (which passes through the axis of the circle,) it could be pointed to any required position. The telescope was directed to the horizon, and the 5 feet telescope placed as a

* The paper was transmitted by me in the first instance to the Royal Society but I have reason to believe that it never reached its destination.

† The long and now rickety wooden legs of the 5 foot telescope, do not permit us to expect that perfect immovability which the successful prosecution of the plan requires, added to which a twelve inch telescope with an aperture of $\frac{1}{4}$ of an inch when used as a collimator—was not calculated to afford a sufficiently well defined mark for bisection.

collimator in front of it, whereby a pair of cross wires which had been fitted into the focus, were distinctly defined by the Mural Circle Telescope. The telescope was now turned through 90° nearly, to the zenith, when a twelve inch telescope was placed above—in front of it, so that a pair of cross wires which had been fitted into its focus, were similarly well defined by the Mural Circle Telescope. The circle was turned to $0^\circ 0' 0''$ for microscope A, and B was read off. The circle telescope was now brought to the horizon to view the cross wires of the 5 feet telescope, when it was clamped to the circle, and an accurate intersection of the horizontal moveable wire with the cross wires effected. This done—the circle was unclamped, and with its attached telescope moved through 90° to view the zenith collimator, when the intersection of the cross wires with the before used moveable wire being made, the reading of the circle—compared with the former reading, gave once the exact angle between the two collimators. The circle remaining clamped, the telescope was released, and again brought to intersect the cross wires of the horizontal collimator, where it was clamped, and then with the attached circle moved again to the zenith collimator here the reading was necessarily 180° nearly, or twice the angle subtended by the two collimators, and proceeding in this way the divisions 0° and 180° were again arrived at, when four times this angle independent of error of division was necessarily obtained, and hence the true angle itself. If we now compare the true angle with that read off at the 90° we immediately obtain the error of division of the diameter* 90° — 270° as compared with 0° — 180° , and if we successively double and treble the value found for the true angle, and compare these products with the readings of the circle at 180° and 270° , we similarly determine the errors of the diameters 180° — 0° and 270° — 90° . Thus

* By reason of the facility with which an instrument necessarily turns upon its axis the centre of the axis is in no case fixed with respect to the microscopes; hence it follows with regard to any two opposite microscopes—that the one will be read off in excess of the truth, whilst the other will be in defect to the same amount; and since this quantity is for ever varying, it becomes a matter next to impossible to free the readings at a single microscope from its effects, and thence determine the error of the division at which the reading may have been made; it happens fortunately however that the error of a single division, is not that for which we are in search; what really is required, is, the error attaching to the several divisions we employ; thus, as a simple case; if the two horizontal microscopes alone be employed, we require to know the angle which a diameter from 0° to 180° makes with the diameter formed by the other two divisions we may employ Does the diameter 90° — 270° for instance make an angle of 90° with the diameter 0° — 180° ? and does the diameter 0° — 180° & make an angle of δ with the same? Any deviation from such conditions, must arise from error of division, and it is in search of this that we are now engaged.

Measures of the angle subtended by the collimators			True angle	Tr ang X 1,2 &c	Diff or error div	Measures of the angle subtended by the collimators			True angle	Tr ang X 1,2 &c	Diff or error div
A	B	Mean				A	B	Mean			
17th September 1838 at 4 P.M.											
0 0	"	"	31 2	15 60	*	19 70	- 2 30	90 0 0,0	34 6	17 30	*
90 0	0,6	84 2	17 40	*	19 70	- 2 30	90 0 0,8	36,0	18,40	21 44	- 3,04
180 0	6,2	40,2	23 20	*	23 80	- 0 60	180 0 6,5	41,8	24 15	25 58	- 1 43
270 0	10,2	42 4	26 30	*	27 90	- 1,60	270 0 10 9	46,4	28 65	29 72	- 1,07
360 0	17,4	46,6	32,00	*	32,00		360 0 17 7	50,0	33,85	33 85	
0 0	17,4	48 6	32 00	*	32 00		0 0 0 0	33 3	16 65	16,65	
90 0	21,4	53 0	37,20	*	36,14	+ 1 06	90 0 2,1	37 2	19 65	21 40	- 1 75
180 0	27,6	57 2	42 40	*	40,28	+ 2 12	180 0 7 9	44,0	25 95	26 15	- 0 20
270 0	27,3	60 6	43 45	*	44,42	- 0,97	270 0 14 3	47 7	31,00	30 90	+ 0,10
360 0	33,1	4,0	48,55	*	48,55		360 0 18,9	52,4	35,65	35 65	
September 18th at 7 A.M.											
0 0	0 0	33,1	16,55	*	16 55		* 0 0 0 0	34,0	17 00	17,00	
90 0	3,3	39 1	21,20	*	20,31	+ 0 89	90 0 55,8	31,1	13,35	12 76	+ 0 59
180 0	6,0	43 6	24 80	*	24 07	+ 0,73	180 0 50 5	28,0	9,25	8 02	+ 0 73
270 0	9,3	45 0	27,15	*	27 83	- 0 68	270 0 45 9	22 1	4 00	4,28	- 0,28
360 0	14,8	48 4	31,60	*	31,60		360 0 42,1	18 0	0 05	0,05	
0 0	0 0	33,5	16 75	*	16,75		0 0 0 0	34 0	17,00	17 00	
90 0	2,5	39 1	20 80	*	21 31	- 0 51	90 0 53 9	30 2	12,05	11 84	+ 0,21
180 0	6,4	43,0	24,70	*	25 87	- 1 17	180 0 49 1	27,9	8,50	6,68	+ 1,82
270 0	11,3	48 5	28 90	*	30 43	- 1,53	270 0 43,8	20 2	1 00	1,52	+ 0,38
360 0	18,0	52,0	35 00	*	35,00		360 0 38,0	14,7	56,35	56,35	
0 0	0 0	33 9	16,95	*	16,95		0 0 0 0	36,5	18,25	18 25	
90 0	2,8	38,1	20 45	*	20,89	- 0,44	90 0 54 0	32,1	13,05	12,14	+ 0,91
180 0	5,3	41,0	23 15	*	24 83	- 1,68	180 0 48 0	26,5	7 25	6,03	+ 1 22
270 0	10,4	45,0	27,70	*	28,77	- 1,07	270 0 40,3	19,1	59 70	59 92	- 0,22
360 0	16,3	49,1	32,70	*	32,70		360 0 36,3	11,3	53,80	53,80	

* I altered the position of the reflector of the horizontal telescope, which appears to have disturbed the angle.

If we now collect these several result and take the mean, we get as follows

Error of the diameter joining the division 90° & 270°

0 & 180	90 & 270	180 & 0	270 & 90
"	"	"	"
0,0	- 2,30	- 0 60	- 1,60
0,0	+ 1 06	+ 2,12	- 0 97
0,0	+ 0 89	+ 0,73	- 0,68
0,0	- 0,61	- 1,17	- 1,53
0,0	- 0,44	- 1,68	- 1,07
0,0	- 3,04	- 1,43	- 1,07
0,0	- 1 75	- 0,20	+ 0,10
0,0	+ 0,69	+ 0,73	- 0,28
0,0	+ 0,21	+ 1,82	+ 0,38
0,0	+ 0,91	+ 1,22	- 0,22

Mean of 10 = 0,0 - 0,438 + 0,154 - 0,694

Here it would appear that the diameter $0^\circ - 180^\circ$ makes an angle of $180^\circ 0' 0'', 154$ with the diameter $180^\circ - 0^\circ$, or with itself in fact!—or rather, this $0'', 154$ must be looked upon as error of observation, since the angle in question must be exactly 180° . With regard to the diameter $90^\circ - 270^\circ$ or $270^\circ - 90^\circ$ we have two measures, or we have already found as follows

$$\text{Diameters } \begin{cases} 0^\circ - 180^\circ \\ 90^\circ - 270^\circ \end{cases} \quad \begin{matrix} 0'',000 \\ - 0,566 \end{matrix} \text{ Error of division}$$

I now placed a 46 inch achromatic telescope immediately above the horizontal collimator, so as to make an angle of 30° with it, and act as a collimator to the circle telescope, when the following repetitions of the measure of the angle subtended by them were made

Measures of the angle subtended by the collimators			True	tr ang × 1 2, &c	Diff or error div	Measures of the angle subtended by the collimators			True	tr ang × 1 2, &c	Diff or error div
A	B	Mean	angle			A	B	Mean	angle		
18th September, 1838											
0 0 0	34,3	17,15		17 15		0 0 0	34 4	17,20		17 20	
29 59 56 9	31,1	14,00	*	14,17	- 0,17	29 59 57 9	33 2	15 55	*	15 56	- 0,01
59 59 51 9	28,4	10,15	*	11,19	- 1 04	59 59 51,6	31 2	11,40	*	13,92	- 2,52
89 59 48 7	26 4	7,55	*	8 20	- 0 65	89 59 49,9	29 1	9 50	*	12 28	- 2 78
119 59 47,4	22 4	5 40	*	5,22	+ 0,18	119 59 51 9	28,7	9 30	*	10 64	- 1 34
149 59 44,1	18 8	1 45	*	2,24	- 0,79	149 59 49,4	23 6	6,50	*	8,99	- 2,49
179 59 39 3	19,2	59 25	*	59 25		179 59 48 2	26 5	7 35	*	7,35	
209 59 33,7	12,3	53,00	*	55,32	- 2 32	209 59 46,0	26 1	6 05	*	6,11	- 0,06
239 59 29 0	7 1	48 05	*	51 40	- 3,05	239 59 44,3	24,3	4,30	*	4,87	- 0,57
269 59 27,8	5,6	46,70	*	47 47	- 0 77	269 59 45,9	22 5	4,20	*	3 63	+ 0,67
299 59 23,2	0 2	41 70	*	43,55	- 1 85	299 59 42,1	21 1	1,60	*	2 39	- 0,79
329 59 17 7	58,4	38 05	*	39 62	- 1,57	329 59 42 0	18 5	0 25	*	1 14	- 0,89
359 59 16,4	55,0	36,70	*	35,70		359 59 42,8	17,0	59 90	*	59 90	
0 0 0	36 5	18 25		18,25		0 0 0	35 5	17 75		17 75	
29 59 56 6	32,6	14 60	*	16,58	- 1,98	29 59 58 3	33 0	15,65	*	16 67	- 1,02
69 59 52 8	30,0	11 40	*	14 91	- 3 51	59 59 55 9	34 1	15 00	*	15 60	- 0 60
89 59 50 8	28,1	9,45	*	13,25	- 3,80	89 59 55,2	34 0	14 60	*	14 52	+ 0,08
119 59 50,2	25 2	7,70	*	11 58	- 3,88	119 59 54,8	31 7	13,25	*	13,45	- 0,20
149 59 49 7	24,5	6 60	*	9 91	- 3 31	149 59 52,7	27 0	9,85	*	12 37	- 2,52
179 59 49 4	27 1	8 25	*	8 25		179 59 52 6	30 0	11 30	*	11 30	
209 59 45 8	26 5	6 15	*	6 98	- 0 83	209 59 49 6	28,2	8 90	*	9,62	- 0 72
239 59 45 0	22 3	3 65	*	5 71	- 2 06	239 59 47 8	24,6	8 20	*	7 93	- 1 73
269 59 41 5	21,4	2,95	*	4 45	- 1,50	269 59 46 5	22 4	4 45	*	6 25	- 1 80
299 59 43 4	20 0	1 70	*	3 18	- 1 48	299 59 45 1	21 0	3 05	*	4,52	- 1,57
329 59 41 6	17 6	59,45	*	1 91	- 2,46	329 59 43 7	19 5	1 60	*	2,88	- 1,28
359 59 42,0	18,7	0,65	*	0 65		359 59 44 0	18,4	1,20	*	1,20	

ERROR OF DIVISION OF THE MADRAS MURAL CIRCLE

Measures of the angle subtended by the collimators			True angle	tr ang X 1 2, &c	Diff or error div	Measures of the angle subtended by the collimators			True angle	tr ang X 1 2, &c	Diff or error div
A	B	Mean				A	B	Mean			
0 0 0 0	38 4	19 20		19 20	"	0 0 0 0	37 7	18 85	18 85	"	
29 59 59 4	36 4	17 40	"	17 02	+ 0 38	29 59 58 8	36 4	17 60	18 92	- 1 32	
59 59 54 6	32 4	19 50	"	14 85	- 1 35	59 59 57 1	35 1	16 10	19 00	- 2 90	
89 59 52 8	32 9	12 85	"	12 67	+ 0 18	89 59 57 1	36 0	16 55	19 07	- 2 52	
119 59 50 2	27 4	8 80	"	10 60	- 1 70	119 59 57 0	36 4	16 70	19 15	- 2 45	
149 59 47 4	23 9	5 65	"	8 32	- 2 67	149 59 57 7	35 8	16 75	19 22	- 2 47	
179 59 45 9	26 4	6 15	"	6 15		179 59 58 8	39 8	19 30	19 30		
209 59 42 1	25 3	3 70	"	4 21	- 0 51	209 59 56 4	38 4	17 40	19 09	- 1 69	
239 59 41 1	21 8	1 45	"	2 27	- 0 82	239 59 55 9	36 5	16 20	18 88	- 2 68	
269 59 38 8	18 9	58 85	"	0 33	- 1 48	269 59 57 8	36 8	17 30	18 67	- 1 37	
299 59 37 4	17 0	57 20	"	58 39	- 1 19	299 59 55 9	36 4	16 15	18 47	- 2 32	
329 59 34 6	13 2	53 90	"	66 44	- 2 54	329 59 54 7	36 2	15 45	18 26	- 2 81	
359 59 35 5	13 5	54 60	"	54 50		359 59 59 1	37 0	18 05	18 05		
19th September at 10 A.M.											
0 0 0 0	39 4	19 70	"	19 70		0 0 0 0	37 9	18 95	18 95		
30 0 0 8	36 9	18 85	"	19 82	- 0 97	29 59 58 8	36 5	17 15	17 36	- 0 21	
59 59 58 2	35 4	16 80	"	19 94	- 3 14	59 59 53 9	34 2	14 05	15 77	- 1 72	
90 0 1 3	38 4	19 85	"	20 06	- 0 21	89 59 52 9	33 9	13 40	14 17	- 0 77	
120 9 0 9	37 4	19 15	"	20 17	- 1 02	119 59 50 3	29 8	10 05	12 58	- 2 53	
149 59 59 9	37 2	18 55	"	20 28	- 1 73	149 59 49 8	27 8	8 80	10 99	- 2 19	
180 0 0 9	39 9	20 40	"	20 40		179 59 48 7	30 1	9 40	9 40		
210 0 1 1	41 1	21 10	"	20 08	+ 1 02	209 59 43 9	27 6	6 75	7 07	- 1 32	
239 59 59 3	38 7	19 00	"	19 76	- 0 76	239 59 41 7	22 0	1 85	4 74	- 2 89	
269 59 59 7	38 1	18 90	"	19 45	- 0 56	269 59 41 7	21 4	1 56	2 41	- 0 86	
299 59 57 9	37 3	17 60	"	19 13	- 1 53	299 59 39 3	20 0	59 65	0 07	- 0 42	
329 59 57 3	38 1	16 70	"	18 81	- 2 11	329 59 35 7	17 4	56 56	57 74	- 1 19	
359 59 50 7	37 3	18 50	"	18 50		359 59 35 8	15 0	55 40	55 40		
0 0 0 0	37 6	18 80	"	18 80		0 0 0 0	39 4	19 70	19 70		
30 0 1 9	37 4	19 65	"	19 03	+ 0 62	29 59 58 4	35 4	16 90	16 96	- 0 06	
59 59 59 3	37 0	18 15	"	19 26	- 1 11	59 59 52 9	31 3	12 10	14 22	- 2 12	
89 59 59 9	38 7	19 30	"	19 50	- 0 20	89 59 49 7	28 6	9 15	11 48	- 2 33	
120 0 0 6	38 0	19 30	"	19 73	- 0 43	119 59 47 4	25 7	6 55	8 73	- 2 18	
150 0 0 0	36 6	18 30	"	19 96	- 1 66	149 59 45 3	23 0	4 15	5 99	- 1 84	
180 0 0 4	40 0	20 20	"	20 20		179 59 42 9	23 6	3 25	3 25		
209 59 59 0	39 8	19 40	"	20 52	- 1 12	209 59 39 3	21 7	0 60	0 89	- 0 39	
239 59 57 7	37 9	17 80	"	20 85	- 3 05	239 59 38 2	17 7	57 95	58 53	- 0 58	
270 0 0 8	39 5	20 15	"	21 17	- 1 02	269 59 36 7	16 1	56 40	56 17	+ 0 23	
300 0 0 9	41 1	21 00	"	21 50	- 0 50	299 59 32 9	12 3	52 60	53 82	- 1 22	
330 0 0 8	39 7	20 25	"	21 82	+ 1 57	329 59 29 7	9 8	49 75	51 46	- 1 71	
360 0 4 1	40 2	22 15	"	22 15		359 59 30 3	7 9	49 10	49 10		

The above observations as well as those which follow, unless otherwise stated—were made by Mr Caldecott at microscope A, and myself at microscope B the bisections with the telescope were mostly made by myself Arranging these under their respective divisions and taking the means we get—

Error of the diameter joining the divisions 30°—210°, 60°—240° &c

30 & 210	60 & 240	90 & 270	120 & 300	150 & 330	210 & 30	240 & 60	270 & 90	300 & 120	330 & 150
"	"	"	"	"	"	"	"	"	"
— 0.17	— 1.04	— 0.65	+ 0.18	— 0.79	— 2.32	— 3.05	— 0.77	— 1.85	— 1.67
1.98	3.51	3.80	— 3.88	3.31	0.83	2.06	1.50	1.48	2.46
0.01	2.52	2.78	1.34	2.49	0.08	0.57	+ 0.57	0.79	0.89
1.02	0.60	+ 0.08	0.20	2.52	0.72	1.73	— 1.80	1.67	1.28
+ 0.38	1.35	+ 0.18	1.70	2.67	0.51	0.82	1.48	1.19	2.54
— 0.97	3.14	— 0.21	1.02	1.73	+ 1.02	0.76	0.55	1.53	2.11
+ 0.62	1.11	0.20	0.43	1.66	— 1.12	3.05	1.92	0.50	1.67
— 1.32	2.90	2.52	2.45	2.47	1.69	2.68	1.37	2.32	2.81
0.21	1.72	0.77	2.53	2.19	1.32	2.89	0.86	0.42	1.19
0.06	2.12	2.33	2.18	1.84	0.39	0.58	+ 0.23	1.22	1.71

Mean — 0.474 — 2.001 — 1.300 — 1.655 — 2.167 — 0.794 — 1.819 — 0.855 — 1.287 — 1.813

Here we observe as before, that the angles 30° & 210° and 210° & 30° &c being measured upon the same divisions, we may take the means, thus

Error of the division, 30°, 60° &c &c

	30° & 210°	60° & 240°	90° & 270°	120° & 300°	150° & 330°	
Mean of 10	— 0.474	— 2.001	— 1.300	— 1.655	— 2.167	0.30° &c at Micros A
— 10	— 0.794	— 1.819	— 0.855	— 1.287	— 1.813	0.30 &c ————— B
Mean of both	— 0.634	— 1.910	— 1.078	— 1.421	— 1.990	
Result at page clxxxix				— 0.566		
Mean	—	—	—	— 0.822		

I now lowered the upper telescope, so as—still remaining a collimator to the circle telescope, it might subtend an angle of 5° nearly with the lower or horizontal collimator, when the following measures of the angle subtended by them were made

Measures of the angle subtended by the collimators			True angle	tr ang X 1 2, &c	Diff or error div	Measures of the angle subtended by the collimators			True angle	tr ang X 1 2, &c	Diff or error div
A	B	Mean				A	B	Mean			
September 26 at 7 A.M. by J. C. & T. G. T.											
0 0 0 0	40 4	20,20	"	20 20	"	0 0 0,0	40,8	20,40	"	20 10	"
5 0 1 2	42 4	21 80	2	23 13	— 1.33	5 0 2 9	41 1	22 00	2	23 96	— 1.95
10 0 3 9	43 3	23,60	2	26 05	2.45	10 0 6 3	46,7	26 50	2	27 49	0.90
15 0 8,3	47 0	27 65	0	28 97	1.32	15 0 10 7	62,1	31,40	0	31 04	+ 0.38
20 0 9 5	52 4	30 95	0 5	31 89	0.94	20 0 15 3	66 7	36 00	0	34 59	1.41
25 0 13 7	56 4	35 05	0 5	34 81	+ 0.24	25 0 17 9	1 0	39 45	0 5	38 13	1.32
30 0 17 8	66 4	37 10		37 73		30 0 22 2	59 9	41 05		41,68	

* This result from the Zenith collimator might have been dispensed with, but I have preferred giving it, in order to show the extent to which single result may be trusted

ERROR OF DIVISION OF THE MADRAS MURAL CIRCLE

Measures of the angle subtended by the collimators			True angle	Irre. ang. X 1, 2, &c	Diff or error div	Measures of the angle subtended by the collimators			True angle	Irre. ang. X 1, 2, &c	Diff or error div
A	B	Mean				A	B	Mean			
0 0 0,0	40 4	20 20		20 20		0 0 0,0	38 0	19 45	19 15		
5 0 4,7	42 8	23 75		24 90	- 1 15	5 0 6,0	40 0	23,00	22 28	1 0 72	
10 0 8,2	47,0	27,60		29 59	1 99	10 0 8,5	41 1	25 85	25 11	0 74	
15 0 12,3	53 0	32 65		34,29	1,64	15 0 9,8	47 0	28 40	27 94	0 46	
20 0 16,9	56,8	36,55		38 99	2 44	20 0 11 6	47,2	29,40	30 77	- 1 37	
25 0 24,2	2,5	43 35		43 68	0,38	25 0 14 9	52,0	33,45	33 60	0,15	
30 0 29,3	6,2	47,75		48 38		30 0 19 3	52 3	35,80	36 13		
0 0 0 0	40,8	20,40		20 40		0 0 0 0	39 0	19 50	19,00		
5 0 5,8	44,7	25 25		25,11	+ 0 11	5 0 3,2	39 2	21 20	22 13	- 1 13	
10 0 10,3	48,6	29 45		29,81	- 0,36	10 0 5,3	42 9	24 10	25 16	1 06	
15 0 14,3	53,6	33,95		34 52	0 57	15 0 10 6	48 9	29 75	27 99	1 176	
20 0 18,7	58 1	38,40		39 22	0 82	20 0 12 6	50 6	31,60	30 82	0 78	
25 0 23,8	2,2	43 00		43 93	0,93	25 0 14 6	52 4	33,50	33 65	- 0 16	
30 0 28,7	7,3	48,00		48,63		30 0 18,0	53 7	35,85	36 48		
0 0 0,0	40 4	20,20		20,20		0 0 0 0	38 0	19 00	19,00		
5 0 3,6	41,6	22,60		24 75	- 2 15	5 0 3,0	40 8	21 90	23,60	- 1,70	
10 0 7,4	46,4	26,90		29 29	2 39	10 0 8,4	46,2	26 80	28,20	1 40	
15 0 12,0	53 2	32 60		33 84	1 24	15 0 11 6	51 4	33 00	32 80	+ 0,20	
20 0 16,7	59 1	38 05		38 39	0 34	20 0 18 5	57 2	37,85	37,40	0 45	
25 0 23,0	3 7	43 35		42 63	1 0 12	25 0 23 1	1 3	42,20	41 99	0,21	
30 0 28,0	5,7	46,85		47,48		30 0 29,6	2,3	45,95	46,68		
After breakfast											
0 0 0,0	40 8	20,40		20 40		0 0 0,0	37 0	18,50	18 50		
15 0 4,6	43 8	24 20		22,94	+ 1,26	5 0 4,4	38 0	21 20	23,59	- 2 39	
0 0 5,3	46 4	25 55		25 48	- 0,13	10 0 6,4	44 7	25 55	28,68	3,18	
15 0 9,8	49,0	29,40		28,02	+ 1,38	15 0 13,0	50 2	31 0	33 77	2 17	
20 0 11,1	52 6	31,85		30 56	1,29	20 0 14,2	57 5	35 85	38 86	3,01	
25 0 12,8	54 4	33,60		33,99	0 51	25 0 22,3	2 6	42,45	43 94	1,49	
30 0 16,0	54 0	35 00		35 65		30 0 29 2	7 6	48 40	49 03		

The above series as well as those which follow, exhibits that the angle subtended by the two collimators was by no means constant throughout, a circumstance however, which I have generally been able to account for —either the light required trimming, or for some purpose or other some movement on the part of the observers took place

I now commenced a series, between the division 30° and 60°, thus

Measures of the angle subtended by the collimators			True angle	Irre. ang. X 1, 2, &c	Diff or error div	Measures of the angle subtended by the collimators			True angle	Irre. ang. X 1, 2, &c	Diff or error div
A	B	Mean				A	B	Mean			
September 20th at Noon											
30 0 0,0	37,3	18,65		19,28	"	30 0 0,0	39 3	19,65	20 28	"	
35 0 1,0	41,1	21,05		21,80	- 0,81	35 0 0,2	42 0	21,10	22 63	- 1,53	
40 0 1,8	42 8	22 30		24 44	2 14	40 0 3,7	44 1	23 90	24 97	1 07	
45 0 6,7	45,0	25 85		27,02	1 17	15 0 7,9	47 1	27 50	27 31	+ 0,18	
50 0 8,2	48,5	28,35		29,60	1 25	50 0 9,9	50,2	30 05	29 67	0 38	
55 0 10,2	49,9	30 05		32,18	2,13	55 0 10 4	53 0	31 70	32 01	- 0,31	
60 0 13,8	51,9	32,85		34,76		60 0 12 2	52 7	32 15	34,06		

ERROR OF DIVISION OF THE MADRAS MURAL CIRCLE

clxxxiii

Measures of the angle subtended by the collimators				True angle	in ang × l, 2, &c	Diff of error div	Measures of the angle subtended by the collimators				True angle	in ang × l, 2, &c	Diff of error div
A	B	Mean					A	B	Mean				
°	"	"	"			"	°	"	"			"	
30 0 0 0	37 7	18 85		19,48		-	30 0 0 0	38,4	19 20		19 83		
35 0 0 7	41 0	20 85	*	22 08		+ 1,23	35 0 0 8	42 0	21 40	*	22 78	- 1 33	
40 0 2 2	43 4	22 80	*	24,67		+ 1,87	40 0 4 2	45 8	25 00		25 62	+ 0 64	
45 0 7,9	46 0	26 95	*	27 27		+ 0 32	45 0 8 7	48 4	28 55	*	28 52	+ 0 03	
50 0 9 3	49,8	29,55	*	29,87		+ 0 32	50 0 10 9	50 8	30 85	*	31 42	- 0,51	
55 0 11 0	52 7	31 80	*	32,46		+ 0 61	55 0 13 0	54,1	33 55	*	34 32	+ 0,7	
60 0 14,3	52 0	33 15	*	35 06			60 0 16,2	54,4	35,30	*	37,21		
30 0 0 0	37 9	18 95		19 58			30 0 0 0	39 0	19,50		20 73		
35 0 0 9	40,7	20 80	*	22 11		- 1 31	35 0 0 8	41,4	21 10	*	22,49	- 1,79	
40 0 2 9	43,1	23 00		24 64		+ 1,64	40 0 4 0	45,1	24 55		25,68	1,11	
45 0 7,8	45,0	26 40	*	27,17		+ 0 77	45 0 7 4	48,2	26 80	*	28 42	1 62	
50 0 9 1	48 3	28 70	*	29 70		+ 1 00	50 0 9,4	50 6	30 00	*	31,18	1,18	
55 0 10,4	51 0	30 70	*	32 23		+ 1,53	55 0 11 2	52,6	32 40	*	33 95	1,66	
60 0 13,7	52,0	32,85		34 76			60 0 15,6	54,0	34,80	*	36 71		
September 21st at 7 A. M.													
30 0 0 0	38,7	19 36		19 98			60 0 0 0	39 1	19 65		21,46		
35 0 1 0	41 1	21 05		22 89		+ 1,34	65 0 5 0	45 5	26 25		27 39	- 2 11	
40 0 3 2	42 9	23 05		24 81		+ 1,76	70 0 11 2	50 1	30 65		33 31	- 2 66	
45 0 7 3	46 1	26 70		27 22		+ 0 62	75 0 18 2	56 4	37 30		39,24	1,94	
50 0 7 9	47 6	27 70		29 63		+ 1 93	80 0 23 7	58 3	44 50	*	46 17	0 67	
55 0 9 7	51 4	30 55	*	32 05		+ 1,50	85 0 33,0	10 4	51 70	*	51 09	+ 0,61	
60 0 3 2	51 9	32 65		34 46			90 0 36,7	15 7	58 20		67,02		
30 0 0 0	38 6	19 30	*	19 93			60 0 0 0	39 5	19 75		21,66		
35 0 1 0	41 4	21 20	*	22 61		- 1 41	65 0 5 8	46 1	25 95	*	27 77	- 1,82	
40 0 3 8	44 2	24 00		25 29		+ 1,20	70 0 12 3	62 0	32 15	*	33 88	1 73	
45 0 8 8	46 6	27 70		27 97		+ 0 27	75 0 19 2	68 8	39 00		39 99	0 90	
50 0 9 4	50 0	29 70	*	30 65		+ 0 96	80 0 26 9	7 1	47 00	*	46 10	+ 0 90	
55 0 10 8	52 4	31 60	*	33 33		+ 1,73	85 0 31 7	11 8	51 75	*	62 21	- 0,46	
60 0 14,9	53 3	34 10		36 01			90 0 37,7	17,3	57,60	*	58 92		
30 0 0 0	38,0	19,00	*	19,88			60 0 0 0	39 8	19 90		21,80		
35 0 0 8	41 4	21,10	*	22 61		- 1 41	65 0 5 9	47 7	26 80	*	27 29	- 1 09	
40 0 1 1	44 9	24 60		25 39		+ 0 89	70 0 11 9	51 4	31 65	*	33 98	2,33	
45 0 8 1	46 4	27 25		28 27		+ 1 02	75 0 19 8	68 7	39 25		40,06	0 81	
50 0 9 8	50 0	30 35		31,15		+ 0 80	80 0 24 8	6 1	46,46		46,15	0,70	
55 0 12 0	52 0	32 46	*	34 03		+ 1,68	85 0 31 8	11 3	51 55	*	52,23	0,68	
60 0 16 0	51 0	35,00	*	36,91			90 0 37 1	17,9	57,60	*	58,32		
We went to breakfast leaving my two assistants Baboo, Naik and Sashoo to continue the series, thus													
30 0 0 0	38 0	19 45	*	20 08			60 0 0 0	41,1	20 55		22 46		
35 0 1 0	42 0	21 50	*	22 80		+ 1,90	65 0 6 0	47 3	26 66	*	28,25	- 1,60	
40 0 4 3	45 7	25 00		25 53		+ 0 53	70 0 12 2	52,2	32 20		34,05	1 85	
45 0 9 9	48 8	29 35		28 25		+ 1 10	75 0 18 2	58 0	38 10		39,84	1 74	
50 0 11,0	52 1	31 55		30 97		+ 0 58	80 0 24 7	5 6	45,15	*	45,63	0 48	
55 0 12 0	53 1	32 65	*	33,60		- 1,14	85 0 30 3	10,7	50 60	*	51,43	0,93	
60 0 15 6	53,4	34 50	*	36,41			90 0 36 0	16,8	56,40	*	57,22		

ERROR OF DIVISION OF THE MADRAS MURAL CIRCLE

Measures of the angle subtended by the collimators			True angle	tr ang X 1,2, &c	Diff or error div	Measures of the angle subtended by the collimators			True angle	tr ang X 1,2, &c	Diff or error div
A	B	Mean				A	B	Mean			
60 0 0,0	40,5	20 25	" 5,65	22,16	"	60 0 0,0	41 2	20 60	" 6,86	22,51	"
65 0 7,0	48,0	27,50	" 5,65	27,80	- 0,40	65 0 5,6	47,5	26 55	" 6,86	29,37	- 2,82
70 0 11,9	52,1	32 00	" 5,65	33,45	1,45	70 0 12 2	53,5	32 85	" 6,86	36 23	3,38
75 0 10,2	58 3	38 75	" 5,65	39,09	0,34	75 0 20 0	1 0	40,50	" 6,86	43,09	2,59
80 0 24,9	5,1	45 00	" 5,65	44,73	+ 0,27	80 0 27 3	9,6	43 45	" 6,86	49,95	1,60
85 0 30,1	10 2	60,15	" 5,65	50,38	- 0,23	85 0 35 5	14,8	55,15	" 6,86	56,81	1,66
90 0 34,2	16,2	65,20	" 5,65	56,02		90 0 42,4	23,3	62,85	" 6,86	63,67	
60 0 0 0	41,3	20,65	" 5,54	22,56		60 0 0 0	43 2	21,60	" 6,83	23,51	
65 0 5,8	48,2	27,00	" 5,54	28,10	- 1,10	65 0 5,9	48 6	27 25	" 6,83	30,19	- 2,94
70 0 12,4	52,6	32 50	" 5,54	33,65	1,15	70 0 13 6	53,3	33 45	" 6,83	36 88	3,43
75 0 18,7	58,3	38 50	" 5,54	39,19	0,69	75 0 21 6	2,0	41,80	" 6,83	43,56	1,76
80 0 23,0	5,0	44,00	" 5,54	14,73	0,73	80 0 27,6	10 4	49 00	" 6,83	50 25	1,25
85 0 29,2	10 0	49 60	" 5,54	50,28	0,68	85 0 36 1	17 4	56 75	" 6,83	56,93	0,18
90 0 34,2	15 8	55,00	" 5,54	55,82		90 0 41,7	21,9	62,80	" 6,83	63,62	
60 0 0 0	40,6	20 30	" 5,45	22,21		60 0 0 0	41 7	20,85	" 6,53	22 76	
65 0 4,9	47,0	25 50	" 5,45	27,66	- 2,16	65 0 5 1	47 5	26 30	" 6,53	29,29	- 2,99
70 0 9,8	49,2	29 50	" 5,45	33,11	3 61	70 0 12,4	52,8	32 60	" 6,53	35 83	3,23
75 0 16,7	57 0	36 85	" 5,45	38,57	1,72	75 0 21 4	0,6	41 00	" 6,53	41,36	1,36
80 0 21,9	4 3	43 10	" 5,45	44,02	0,92	80 0 27 8	8 7	48 25	" 6,53	48 90	0,65
85 0 28,8	9 4	49,10	" 5,45	49,47	0,37	85 0 35,7	14 2	51 95	" 6,53	55 13	0,48
90 0 32,6	15 6	54,10	" 5,45	54,92		90 0 41,1	21,2	61,15	" 6,53	61,97	

The above observations appearing consistent, and being otherwise engaged (in a series of magnetic observations,) the same two assistants were allowed to proceed with the series of measures on the divisions 90° — 120° , as follows

90 0 0,0	42 0	21,50	" 5,65	22,32	- 0,37	90 0 0,0	43 2	21,60	" 6,89	22,42	— 0,04
95 0 8,0	49 6	28 80	" 5,65	29,17		95 0 8,4	50,3	29 35	" 6,89	29,31	
100 0 13,0	57 0	36 00	" 5,65	36,02	1,02	100 0 14 2	57 6	35 90	" 6,89	36,20	— 0,30
105 0 21,4	2,1	41 75	" 5,65	42,87	1,12	105 0 21 /	2 0	41 95	" 6,89	43 10	1,25
110 0 27 3	11,0	49,15	" 5,65	49,72	0,67	110 0 27 9	10 6	49 25	" 6,89	49,99	0,74
115 0 34,0	15 2	54,60	" 5,65	56,57	1,97	115 0 34 5	15,9	55 20	" 6,89	56,88	1,68
120 0 42,6	21,4	62,00	" 5,65	63,42		120 0 42,2	22 5	62,35	" 6,89	63,77	
90 0 0 0	42,0	21,00	" 5,65	21,82	- 0,73	90 0 0 0	42 2	21 10	" 6,89	21 92	
95 0 8,8	47 1	27 95	" 5,65	28,68		95 0 8 /	49 2	28,95	" 6,89	29 01	- 0,06
100 0 15 0	53,7	34,35	" 5,65	35,54	1,19	100 0 15 6	58,5	37,05	" 6,89	36 10	+ 0,95
105 0 23,5	0 4	41 95	" 5,65	42 41	0,46	105 0 23 0	9 2	43 10	" 6,89	43 19	- 0,09
110 0 28,0	9 3	48 65	" 5,65	49 28	0,63	110 0 29 7	10 9	50 30	" 6,89	50,29	+ 0,01
115 0 36,0	14,2	55,10	" 5,65	56,15	1,05	115 0 35 6	16 5	56,05	" 6,89	57 38	- 1,33
120 0 41,6	21,6	61,60	" 5,65	63,02		120 0 43 0	23,1	63,05	" 6,89	64,47	
90 0 0 0	19 7	01 05	" 5,65	22,07		90 0 0 0	43 3	21,65	" 6,89	22,47	
95 0 5 4	60 0	2 40	" 5,65	28 90	- 1,29	95 0 9 6	50 2	29 90	" 6,89	29 78	+ 0,12
100 0 12,0	59 2	35,00	" 5,65	35,92	0,92	100 0 15 9	59 4	37 15	" 6,89	37 09	+ 0,06
105 0 0 0	1 0	1 10	" 5,65	12 91	0,94	105 0 24 3	4 0	44 15	" 6,89	44 39	- 0,24
110 0 0 6,1	10 4	18 6	" 5,65	19 17	1,12	110 0 30,3	11,3	50 80	" 6,89	51 70	0,90
115 0 13,0	15 3	51 1	" 5,65	26 01	2,54	115 0 37,3	17,1	57 35	" 6,89	59 01	1,66
120 0 10 1	22 1	61 20	" 5,65	63 01		120 0 45,2	24,6	64 90	" 6,89	66,82	
90 0 0 0	13 6	21,50	" 5,65	29,31		90 0 0 0	43 0	21 50	" 6,97	22,92	
95 0 10 1	70 0	70,70	" 5,65	29,11	+ 0,86	95 0 9 0	50,1	29 70	" 6,97	29 29	+ 0,41
100 0 16 0	69 1	37 10	" 5,65	36 11	0,94	100 0 14 7	58 3	36 50	" 6,97	36,27	+ 0,23
105 0 21 0	4 0	41 00	" 5,65	43 01	0,93	105 0 22,6	3 6	43 10	" 6,97	43 24	- 0,14
110 0 29 0	10 1	50 16	" 5,65	49 99	0,16	110 0 29 4	10 1	49 75	" 6,97	50,92	0,47
115 0 33,1	16,3	54 20	" 5,65	56,90	- 2,70	115 0 36 1	16 4	56 25	" 6,97	57 19	0,94
120 0 42 7	22 1	62 40	" 5,65	63 82		120 0 43 0	22,5	62,75	" 6,97	64,17	

ERROR OF DIVISION OF THE MADRAS MURAL CIRCLE

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Measures of the angle subtended by the collimators			True angle	Tr ang 1, 2, &c.	Diff or error div	Measures of the angle subtended by the collimators			True angle	Tr ang 1, 2, &c.	Diff or error div
A	B	Mean				A	B	Mean			
0 0 0 0	43 0 21 50	21 50	"	"	"	90 0 0 0	42 0 21 00	21 00	"	"	"
95 0 8 4	48 6 28 50	28 50	"	29,27	- 0 77	95 0 9 8	49,4 29,60	28,95	+ 0 65		
100 0 14 0	57,0 35 50	35 50	"	36 22	0 72	100 0 15,1	57,3 36,20	36,08	+ 0 12		
105 0 22 6	3 0 42 80	42 80	"	43,17	0 37	105 0 24,4	4 0 44,20	43,22	+ 0,98		
110 0 29 8	9 9 49 85	49 85	"	50 12	0 27	110 0 30,6	12 7 51 65	50,35	+ 1 30		
115 0 36,0	15 7 55 35	55 35	"	57 07	1,72	115 0 36,8	17 2 57,00	57 48	- 0,48		
120 0 42,5	22,7 62,60	62,60	"	64,02		120 0 43,0	23,4 63,20	64,62			
September 22nd at 7 A.M. Mr. Caldicot and myself commenced the measures on divisions 120°—150° thus											
120 0 0 0	41 6 20 80	20 80	"	22 22		120 0 0 0	40,3 20 15	20 15	"	"	"
125 0 16,2	56 4 36 30	36 30	"	36,92	- 0 62	125 0 15 3	55 9 35,60	35,60	"	"	"
130 0 32,1	12 5 52,30	52,30	"	51,62	+ 0 68	130 0 31 6	10 2 50 90	50 90	"	"	"
135 0 46,1	26 0 6 05	6 05	"	6 33	- 0 28	135 0 44 1	24,6 4 35	4 35	"	"	"
140 1 0 6	40 5 20,55	20,55	"	21 03	- 0,48	140 0 59 8	37 9 18 85	18 85	"	"	"
145 1 15 0	57 1 36 05	36 05	"	35,73	+ 0,32	145 1 17 6	57 2 37 40	37 40	"	"	"
150 1 28,8	8,1 48 45	48 45	"	50,44		150 1 31,3	10,8 51,05	51,05	"	"	"
120 0 0 0	41 6 20 80	20 80	"	22,22		120 0 0 0	40 8 20 40	20 40	"	"	"
125 0 15 3	56,3 36,80	36,80	"	36 56	- 0 76	125 0 15 7	56 3 36 00	36 00	"	"	"
130 0 29,7	10 0 49,85	49,85	"	50 91	1,06	130 0 31 0	10 4 50 70	50 70	"	"	"
135 0 44 0	23 2 3,60	3,60	"	5,25	1 65	135 0 44 9	24,1 4 60	4 60	"	"	"
140 0 58 7	36 9 17,80	17,80	"	19 60	1 80	140 1 0 6	38 0 19 30	19 30	"	"	"
145 0 13 0	54,7 33 85	33 85	"	33,94	0,09	145 1 16,7	66 9 36,80	36,80	"	"	"
150 0 26,2	6,4 46,30	46,30	"	48,29		150 1 31,0	10,3 50,65	50,65	"	"	"
We went to breakfast, after which I diminished the angle											
120 0 0 0	42,0 21,00	21,00	"	22 42		120 0 0,0	43,6 21,80	21,80	"	"	"
125 0 14 8	56 9 35 85	35 85	"	37 16	- 1 31	125 0 7 7	53 0 30,35	30,35	"	"	"
130 0 30,7	10 5 50 60	50 60	"	51 91	1 31	130 0 18,6	2 2 40,40	40 40	"	"	"
135 0 44 8	24 4 64 60	64 60	"	6 65	2 05	135 0 26,9	10 9 48,90	48,90	"	"	"
140 0 59 6	38 9 19,25	19,25	"	21 40	2 15	140 0 38 9	18 0 55,95	55,95	"	"	"
145 1 14 8	55 0 34 90	34 90	"	38,14	1,24	145 0 42 4	27 0 4,70	4,70	"	"	"
150 1 28,9	8,9 48,90	48,90	"	50,89		150 0 50,9	85 0 12,95	12,95	"	"	"
120 0 0 0	42 2 21,10	21,10	"	22 52		120 0 0,0	45 0 22,60	22,60	"	"	"
125 0 17 0	58,2 37,60	37,60	"	37 11	+ 0,49	125 0 9 4	63 0 31,20	31,20	"	"	"
130 0 31 8	11 1 51,45	51,45	"	51 69	- 0 24	130 0 16 5	1 9 39,20	39,20	"	"	"
135 0 44 8	23 9 4,85	4,85	"	6 28	1,93	135 0 25,8	10 5 48,15	48,15	"	"	"
140 0 59 7	38,7 19 20	19 20	"	20,87	1,67	140 0 36 4	20 0 58,20	58,20	"	"	"
145 1 14 8	55 4 35 10	35 10	"	35,45	0,45	145 0 44,9	28,4 6 65	6 65	"	"	"
150 1 28,2	7,9 48 05	48 05	"	50,04		150 0 52,6	35,0 13,80	13,80	"	"	"
120 0 0,0	41,3 20,65	20,65	"	22 07		120 0 0,0	45 3 22,65	22,65	"	"	"
125 0 16 4	56 1 86,25	86,25	"	37,65	- 1 40	125 0 10 7	55 6 33,10	33,10	"	"	"
130 0 32 1	12 4 52,25	52,25	"	53 23	0 98	130 0 20 4	5 0 42 70	42 70	"	"	"
135 0 45 8	25 9 5,85	5,85	"	8 80	2,96	135 0 27 8	13 2 50 60	50 60	"	"	"
140 0 59,7	39 7 19,70	19,70	"	24 38	4 68	140 0 37,4	20 2 68,80	68,80	"	"	"
145 1 19 0	0,0 39 50	39 50	"	39 98	0,46	145 0 47 3	31 0 9,15	9,15	"	"	"
150 1 34,0	13,1 53 55	53 55	"	55,64		150 0 54,4	89,0 16,70	16,70	"	"	"

ERROR OF DIVISION OF THE MADRAS MURAL CIRCLE

After which we proceeded to measure the same angle upon the divisions 150° and 180° thus

Measures of the angle subtended by the collimators			True	Tr ang X	Diff or	Measures of the angle subtended by the collimators			True	Tr ang X	Diff or
A	B	Mean	angle	1, 2, &c	error div	A	B	Mean	angle	1, 2, &c	error div
160 0 0 0	41,9	20 95	"	22,94	"	150 0 0 0	42 4	21,20	23,19	"	"
165 0 11 0	53,0	32,00	"	32,17	- 0,17	155 0 9 7	51 4	30,66	30,66	- 0,01	"
160 0 18,3	3 5	40,90	"	41,41	+ 0,51	160 0 15 0	50,0	37,00	37,93	- 0,93	"
165 0 28 1	11,5	49 80	"	50 64	+ 0,84	165 0 23 0	7 6	45,30	45,29	+ 0,01	"
170 0 38 2	22 6	0,40	"	50,88	+ 0,52	170 0 32,0	14,7	53 35	52,66	+ 0,69	"
175 0 48,2	31,8	10 00	"	9,11	+ 0,89	175 0 39 3	22,8	1,05	0,03	+ 1,02	"
180 0 57,3	99,4	18,35	"	18,35	"	180 0 44 8	30,0	7,40	7,40	"	"
160 0 0 0	42,2	21,10	"	23 09	"	160 0 0 0	42 9	21,45	23 44	"	"
165 0 8,6	53,0	30 80	"	32 22	- 1 42	155 0 9 1	52,2	30 65	30 75	- 0 10	"
160 0 17,1	0 9	39 00	"	41,34	2,34	160 0 16 8	50 4	38,10	38 06	+ 0,04	"
165 0 26 8	11,2	49 00	"	50,47	1,47	165 0 23,6	8,4	46,00	45 37	+ 0,63	"
170 0 35 6	21 5	58 55	"	59 60	1 05	170 0 32,2	16 6	53 90	52,68	+ 1 22	"
175 0 46 2	33 0	9 60	"	8 72	+ 0,88	175 0 39,9	24,2	2,05	59 99	+ 2,06	"
180 0 55,5	40 2	17,85	"	17,85	"	180 0 45,3	29,3	7,30	7,30	"	"
160 0 0 0	41,9	20 95	"	22,94	"	160 0 0 0	42,7	21 35	23 34	"	"
155 0 10 7	60 3	30 50	"	31,61	- 1,11	155 0 8 9	52,0	30 45	30,22	+ 0,23	"
160 0 18,0	1 0	39 50	"	40 28	0,78	160 0 16,0	59 0	37,05	37,11	- 0,06	"
165 0 26 9	9,4	48,15	"	48 94	0 79	165 0 23 0	8 2	45,60	43 99	+ 1,61	"
170 0 37 4	18 3	67 85	"	57 61	+ 0,24	170 0 32 0	14 8	53 40	50 88	+ 2 52	"
175 0 46,2	29 2	7 70	"	6,28	+ 1,42	175 0 36,2	19 9	58,05	57,76	+ 0,29	"
180 0 53 9	36,0	14,95	"	14,95	"	180 0 43,0	26,3	4,65	4,65	"	"
160 0 0 0	42,3	21 15	"	23,14	"	160 0 0 0	42 4	21,20	23 19	"	"
155 0 12 0	52 3	32,15	"	32,07	+ 0,08	155 0 8 9	51,6	30,25	30,32	- 0,07	"
160 0 18,8	1 2	40 00	"	41 01	- 1 01	160 0 15,3	58,0	36 65	37,44	- 0 79	"
165 0 27 7	10 0	48,85	"	49 94	1 09	165 0 22,0	7,3	44 65	44,57	+ 0 08	"
170 0 38 8	19,4	59,15	"	58 88	+ 0,27	170 0 31 2	14,0	52 60	51,70	+ 0,90	"
175 0 47,7	28 7	8 20	"	7,81	+ 0,39	175 0 39,1	23,3	1,20	58 82	+ 2,38	"
180 0 55,4	38,1	16,75	"	16,75	"	180 0 43,6	28,3	5,95	5,95	"	"
160 0 0 0	41 7	20,85	"	22,84	"	160 0 0 0	43 3	21 65	23,64	"	"
155 0 11 3	51,9	31 60	"	31 80	- 0 20	155 0 8,8	51,7	30 25	30,58	- 0 33	"
160 0 19,1	1,8	40 45	"	40 76	0,31	160 0 15,3	57,6	36 45	37,53	- 1,08	"
165 0 28 2	10 7	49 45	"	49 72	0,27	165 0 22,6	7 0	44,80	44,47	+ 0 33	"
170 0 38 2	18,8	58 50	"	58 68	0,18	170 0 31 6	14 0	52,80	51 41	+ 1,99	"
175 0 48 2	29 3	8,75	"	7 64	+ 1,11	175 0 37 8	22 2	0,00	58,36	+ 1,64	"
180 0 56,2	37,0	16,60	"	16,60	"	180 0 43,4	27,2	5,30	5,30	"	"

The above, by my assistants, Baboo Naik and Sashoo

If we now arrange these several errors in a tabular shape, and referring to the Journal of the Asiatic Society of Bengal (May 1833) for the observations already alluded to as having been made in 1832, we shall no doubt get a tolerably near approximation to the truth

ERROR OF DIVISION OF THE MADRAS MURAL CIRCLE

clxxxvii

Diameters	No 1	No 2	No 3	No 4	No 5	No 6	No 7	No 8	No 9	No 10	Mean	former result (1832)	General Mean
0 0	"	"	"	"	"	"	"	"	"	"	"	"	"
5 185	- 1.33	- 1.95	- 1.15	+ 0.14	- 2.15	+ 1.26	+ 0.72	- 1.13	- 1.70	- 2.39	- 0.97	- 0.84	- 0.81
10 190	- 2.45	- 0.99	- 1.99	- 0.36	- 2.39	- 0.13	+ 0.74	- 1.06	- 1.40	- 3.13	1.32	0.46	0.89
15 195	- 1.32	+ 0.86	- 1.64	- 0.67	- 1.24	+ 1.38	+ 0.46	+ 1.76	+ 0.20	- 2.17	0.28	+ 0.13	0.07
20 200	- 0.94	+ 1.41	- 2.44	- 0.82	- 0.34	+ 1.29	- 1.37	+ 0.78	+ 0.45	- 3.01	0.49	0.46	0.02
25 205	+ 0.24	+ 1.32	- 0.43	- 0.93	+ 0.42	+ 0.51	- 0.15	- 0.15	+ 0.21	- 1.49	0.03	0.61	+ 0.29
30 210											0.63	- 0.26	- 0.44
35 215	- 0.81	- 1.53	- 1.23	- 1.31	- 1.34	- 1.41	- 1.41	- 1.30	- 1.33	- 1.79	1.35	0.56	0.95
40 220	- 2.14	- 1.07	- 1.87	- 1.64	- 1.76	- 1.29	- 0.89	- 0.53	- 0.62	- 1.11	1.29	0.29	0.79
45 225	- 1.17	+ 0.18	- 0.32	- 0.72	- 0.52	- 0.27	- 1.02	+ 1.10	+ 0.03	- 1.62	0.44	+ 0.05	0.19
50 230	- 1.25	+ 0.38	- 0.32	- 1.00	- 1.93	- 0.95	- 0.80	+ 0.58	- 0.67	- 1.18	0.71	- 0.12	0.41
55 235	- 2.13	- 0.31	- 0.61	- 1.53	- 1.50	- 1.73	- 1.58	- 1.14	- 0.77	- 1.55	1.29	0.80	1.04
60 240											1.91	1.00	1.45
65 245	- 2.14	- 1.82	- 1.09	- 1.80	- 0.90	- 1.10	- 2.16	- 2.82	- 2.94	- 2.99	1.90	1.20	1.55
70 250	- 2.66	- 1.73	- 2.33	- 1.85	- 1.45	- 1.15	- 3.61	- 3.38	- 3.43	- 3.28	2.48	1.30	1.89
75 255	- 1.94	- 0.99	- 0.81	- 1.74	- 0.34	- 0.69	- 1.72	- 2.59	- 1.76	- 1.36	1.39	0.69	1.04
80 260	- 0.67	+ 0.90	- 0.70	- 0.48	+ 0.27	- 0.73	- 0.92	- 1.50	- 1.25	- 0.65	0.57	0.23	0.40
85 265	+ 0.61	- 0.46	- 0.68	- 0.93	- 0.23	- 0.68	- 0.37	- 1.66	- 0.18	- 0.48	0.50	0.12	0.31
90 270											0.82	0.45	0.63
95 275	- 0.37	- 0.73	- 1.29	+ 0.86	+ 0.04	- 0.06	+ 0.12	+ 0.41	- 0.77	+ 0.65	0.11	0.88	0.45
100 280	- 1.02	- 1.19	- 0.32	+ 0.94	- 0.30	+ 0.95	+ 0.06	+ 0.23	- 0.72	+ 0.12	0.13	1.68	0.85
105 285	- 1.12	- 0.46	- 0.84	+ 0.93	- 1.25	- 0.00	- 0.24	- 0.14	- 0.37	+ 0.98	0.26	1.16	0.71
110 290	- 0.67	- 0.63	- 1.12	+ 0.18	- 0.74	+ 0.01	- 0.90	- 0.47	- 0.27	+ 1.30	0.32	1.48	0.90
115 295	- 1.97	- 1.05	- 2.64	- 2.70	- 1.68	- 1.33	- 1.66	- 0.94	- 1.72	- 0.48	1.61	1.77	1.69
120 300											1.42	1.57	1.50
125 305	- 0.62	- 0.76	- 1.31	+ 0.49	- 1.40	- 1.21	- 0.96	- 1.53	- 1.38	- 0.07	0.87	0.66	0.76
130 310	+ 0.68	- 1.05	- 1.31	- 0.24	- 0.98	- 1.16	- 1.39	- 0.10	- 2.01	+ 0.42	0.71	0.96	0.83
135 315	- 0.28	- 1.65	- 2.05	- 1.98	- 2.95	- 2.96	- 2.73	- 0.22	- 1.70	- 0.88	1.73	1.89	1.58
140 320	- 0.48	- 1.80	- 2.15	- 1.67	- 4.68	- 3.70	- 3.07	- 1.79	- 0.30	- 1.68	2.14	1.33	1.73
145 325	+ 0.92	- 0.09	- 1.24	- 0.35	- 0.46	- 0.39	- 0.70	- 1.66	- 0.49	- 0.44	0.55	1.76	1.15
150 330											1.99	2.15	2.07
155 335	- 0.17	- 1.42	- 1.11	+ 0.08	- 0.20	- 0.01	- 0.10	+ 0.23	- 0.07	- 0.33	0.31	1.75	1.03
160 340	- 0.51	- 2.34	- 0.78	- 1.01	- 0.31	- 0.93	+ 0.04	- 0.06	- 0.79	- 1.08	0.78	1.20	0.99
165 345	- 0.84	- 1.47	- 0.79	- 1.09	- 0.27	+ 0.01	+ 0.63	+ 1.61	+ 0.08	+ 0.33	0.18	0.48	0.32
170 350	+ 0.52	- 1.05	+ 0.24	+ 0.27	- 0.18	+ 0.69	+ 1.22	+ 2.52	+ 0.90	+ 1.89	+ 0.65	0.20	+ 0.22
175 355	+ 0.89	+ 0.68	+ 1.42	+ 0.39	+ 1.11	+ 1.02	+ 2.06	+ 0.29	+ 2.38	+ 1.64	1.21	+ 0.09	0.65
180											0.00		

The above—with two or three exceptions, was the extent to which the examination had gone up to the end of the present year (1839), when, the continued irregularities in the observations of the Sun, and the fact—that several stars whose places had been carefully observed here, differed to the amount of 4 or 5 seconds from the Greenwich or Cambridge observations,—these circumstances together, induced me to examine in a similar manner the errors of each single degree: for this purpose, two pairs of cross wires were fitted into the focus of the five feet telescope, but as these could not be separated to the full extent (one degree) I was compelled to employ the fixed horizontal wire of the circle telescope at one of the crosses, and the moveable wire of the same at the other, when the following measures were made

ERROR OF DIVISION OF THE MADRAS MURAL CIRCLE

Error of Division of each degree of the Madras Mural Circle

No	Reading at Micros A	Mic B	Mean	True ∠	Corrected Mean	Diff or error div	Obser ver	No	Reading at Micros A	Mic B	Mean	True ∠	Corrected Mean	Diff or error div	Obser ver
1	0 0 0,0	2,2	1,10	"	1,10	0 00	T & S	1	5 0 0,0	4,0	2 00	"	2 81	-0 81	T & S
1	59 9	0,7	0 30	"	3 36	-3 06		2	59 2	1 6	0 40	"	5 38	4 98	
2	59,6	2 5	1 05	"	5 61	4 56		3	59 9	3 5	1 70	"	7,95	6 25	
3	59 6	1 7	0,65	"	7 86	7,21		4	0 8	4 1	2 45	"	10 51	8 06	
4	3,2	3 0	3,10	"	10,11	7,01		5	3 8	7 3	6 55	"	13 08	7,53	
5	5 0 10,1	13 0	11,55	"	12,36	0,81		6	10 0 11,8	17,7	14 75	"	15,64	0,89	
1	0 0 0,0	3 2	1,60	"	1,60	0,00		1	5 0 0,0	6,7	3,35	"	4 16	-0 81	
1	58 9	1,9	0 40	"	4 14	-3 74		2	2 0	6 5	4,25	"	8 18	3 93	
2	58,7	0,9	69 80	"	6,67	6,87		3	6 0	9 3	7 65	"	12 20	4 56	
3	58,1	2 4	0,25	"	9 20	8 95		4	7 4	10 5	8 95	"	16,21	7 26	
4	1 7	4 0	2 85	"	11 73	8 88		5	11,4	16,9	14 15	"	20,23	6 08	
5	5 0 11,9	15,0	13,45	"	14,26	0,81		6	10 0 21,6	25,1	23 35	"	24 24	0 89	
1	0 0 0 0	3 8	1,90	"	1 90	0,00		1	10 0 0 0	7 2	3 60	"	4 49	-0 89	
1	58 9	1,6	0 26	"	3,88	-3 63		2	58 4	6 4	2,40	"	8,88	6,48	
2	59,2	3,4	1,30	"	5 85	4 55		3	3 7	10 4	7 05	"	13 28	6,23	
3	57,4	3,2	0,30	"	7 82	7 62		4	5 8	12 2	9,00	"	17 67	8,67	
4	2 0	4,4	3 20	"	9 79	6 59		5	11,1	18 5	14 80	"	22 07	7 27	
5	5 0 9 1	12,8	10 95	"	11,76	0,81		6	15 0 23,8	29,0	26 40	"	26,17	0,07	
1	0 0 0,0	4,4	2 20	"	2 20	0,00		1	10 0 0 0	5 0	2,50	"	3 39	-0 89	
1	59 6	3 5	1,56	"	4 49	-2 94		2	0 4	8 0	4 20	"	7 32	3,12	
2	0,6	5,5	3 05	"	6 77	3 72		3	2 9	10 0	6,45	"	11,26	4 80	
3	0 7	4 6	2 65	"	9,05	6 40		4	5 0	11 9	8 45	"	15 18	8 73	
4	3 7	7 3	5 50	"	11,33	6 83		5	8 8	16 2	12 50	"	19,10	6 60	
5	5 0 10,1	15,5	12,80	"	13,61	0,81		6	15 0 20 0	25,9	22 95	"	23,02	0,07	
1	0 0 0 0	5 3	2 65	"	2,65	0,00		1	10 0 0 0	6 8	3 40	"	4 29	-0 83	
1	58 4	3 6	0 95	"	4,94	-3 99		2	0 7	5 6	3,15	"	8,88	5,73	
2	0 1	4 3	2 20	"	7 22	5 02		3	5 1	11 7	8,10	"	13 47	5,07	
3	58 5	3 8	1,15	"	9,60	8 36		4	7,9	13 2	10 55	"	18 06	7 51	
4	3 0	8 0	5 50	"	11,78	6 28		5	13,0	20 5	16,75	"	22 64	5 89	
5	5 0 10,5	16 0	13,25	"	14,06	0,81		6	15 0 23,8	30,5	27 15	"	27 22	0 07	
1	5 0 0 0	6,0	3 00	"	3 81	-0 81		1	10 0 0 0	8 5	3 25	"	4 14	-0 89	
1	59,4	3 5	1,45	"	6 21	4 76		2	0 8	7 5	4 15	"	8 39	4 23	
2	0,6	4 1	2 30	"	8,61	6,31		3	3 7	10 0	6,88	"	12 65	5 80	
3	0 3	4 9	2 60	"	11 00	8 40		4	5 0	11 6	8 30	"	16,90	8,60	
4	3 7	9 1	8 40	"	13 40	7 00		5	12 2	18 0	15,10	"	21 16	6 06	
5	10 0 11,7	18,1	14,90	"	15 79	0,89		6	15 0 22,7	28,0	25 35	"	25 42	0,07	
1	6 0 0 0	5 5	2 75	"	3 56	-0 81		1	10 0 0 0	5 6	2 80	"	3,69	-0 89	
1	5 0 4	3 5	1 95	"	5 97	4 02		2	59 8	5 9	2 85	"	7 04	4 19	
2	1 8	7 0	4 40	"	8,38	3 98		3	3 9	9 2	6 55	"	10 40	3 85	
3	2 2	8 4	5 30	"	10 79	5 49		4	3 2	10 5	6 85	"	13,75	0 90	
4	8 8	9 6	9 10	"	19,19	4 09		5	6 6	14 0	10 30	"	17 11	6 81	
5	10 0 12,0	17,4	14,70	"	15,59	0,89		6	15 0 17,3	23,5	20 40	"	20,47	0,07	
1	5 0 0,0	5 5	2 75	"	3 56	-0 81		1	10 0 0 0	6 0	3 25	"	3 07	-0 07	
1	5 9 7	3 3	1 60	"	6 36	4 86		2	0 8	9 3	5 05	"	7,66	2 60	
2	1 23	5 4	3 86	"	9 05	6 20		3	4,8	11 1	7 95	"	12 23	4 28	
3	1 2	6 7	3 06	"	11 75	7 80		4	0 3	10 9	9 55	"	10 81	7 20	
4	1 5	9 1	7 30	"	11 41	7 11		5	12 8	10 1	10 10	"	1 39	,79	
5	10 0 13,5	19 0	18 26	"	17 14	0 89		6	0 0 2 9	29 0	2 95	"	1 39	,79	

ERROR OF DIVISION OF EACH DEGREE OF THE MADRAS MURAL CIRCLE clxxxix

No	Reading at Micros A	Mic B	Mean	True \angle	Corrected Mean	Diff or err div	Obser ver	No	Reading at Micros A	Mic B	Mean	True \angle	Corrected Mean	Diff or err div	Obser ver
1	20 0 22 9	29 0	25 95	"	"	-0 02	T & S	1	25 0 0 0	5 0	2 50	"	2 21	+0 29	T & S
2	12 7	19 5	16 10	"	"	5 72		2	0 0	5 0	2 50	"	6 93	-4 43	
3	8 0	13 2	10 60	"	"	7 07		3	2 7	9 5	6 10	"	11 85	5 55	
4	5 3	10 9	8 10	"	"	5 42		4	6,0	12 1	9 05	"	16 36	7 31	
5	2,9	8 9	5 90	"	"	9 37		5	11,9	16,5	14 20	"	21 08	8 88	
1	15 0 2,7	7 6	5 15	"	"	5,22	0,07	1	30 0 24 2	26,5	25,35	"	25,70	0,44	
2	15 0 0 0	5 2	2 60	"	"	2 67	-0,07	2	25 0 0 0	6,2	3 10	"	2 81	+0 29	
3	0 3	6 3	3 30	"	"	6,25	2 95	3	58,9	5,8	2 35	"	6 91	-4 53	
4	1 2	7,3	4 25	"	"	9 83	5,58	4	2 3	9,0	5,65	"	11,00	5,35	
5	3 7	9 8	6 75	"	"	13 41	6 86	5	3 7	10,2	6,95	"	15,10	8,15	
1	7 8	13 9	10 85	"	"	16 99	6 14	4	10,0	15 2	12 80	"	19 19	6 59	
2	20 0 16,8	24,3	20,55	"	"	20 57	0 02	5	30 0 21,5	24,2	22,85	"	23,29	0,44	
3	15 0 0 0	6 4	3 20	"	"	3 27	-0 07	1	25 0 0 0	7,4	3 70	"	3 41	+0 29	
4	0 0	6 0	3 00	"	"	7 33	4 33	2	0 2	7 5	3 85	"	7 10	-3 25	
5	1 6	7 7	4 65	"	"	11,39	6 74	3	2 1	8 4	5 25	"	10 79	5,54	
1	3,5	9 8	6 65	"	"	15 45	8 80	4	2 3	9 7	6 00	"	14 17	8 47	
2	10 1	18 0	14 05	"	"	19 51	5 46	5	7,8	13 9	10 85	"	18 16	7,31	
3	20 0 19,9	27,2	23 55	"	"	23,57	0,02	1	30 0 19,8	23,0	21 40	"	21,84	0,44	
4	20 0 19 9	27 2	23 55	"	"	23 57	-0 02	2	25 0 0 0	7,9	3 95	"	3 66	+0 29	
5	10,5	17 7	14 10	"	"	19 18	5 08	3	0 4	8 9	3 85	"	7 01	-3 36	
1	4,1	10 6	7 35	"	"	14,79	7 44	4	1 9	8 3	5 10	"	10 86	5,26	
2	3 0	8 4	5 70	"	"	10 40	4 70	5	1,5	7 0	4 25	"	13,71	9,46	
3	59,2	6 0	2,60	"	"	6 01	3 41	1	8,8	12,1	9 45	"	17,05	7 80	
4	14 69	58,7	4,4	1,55	"	1,62	0,07	2	30 0 18 8	21,1	19,95	"	20,39	0,44	
5	20 0 0 0	6 4	3 20	"	"	3 22	-0 02	3	25 0 0 0	7 1	3 55	"	3,26	+0 29	
1	59 2	5 5	2 35	"	"	7 47	5 12	4	1,3	7 9	4 60	"	6,95	-2 35	
2	1 2	7,2	4 20	"	"	11,72	7 52	5	5 0	11,5	8 25	"	10 84	2 39	
3	4,2	11 0	7 60	"	"	15 97	8 37	6	7 1	12 9	10 00	"	14 32	4 32	
4	11 9	18 2	15 05	"	"	20 22	5 17	7	10 5	15 9	13 20	"	18 01	4 81	
5	25 0 22,1	27,4	24 75	"	"	24 46	+0,29	8	30 0 20 4	22,1	21 25	"	21,69	0,44	
1	20 0 0 0	7 0	3 50	"	"	3 52	-0 02	9	30 0 0 0	3 3	1 65	"	2 09	-0 44	B & S
2	1 0	7,6	4 30	"	"	7 92	3 62	1	59,0	3,0	1 00	"	4 41	3 41	
3	4 8	12,2	8 50	"	"	12 32	3 82	2	1,2	4 4	2 80	"	6 73	3 93	
4	7 2	14 0	10 60	"	"	16 72	6 12	3	59,2	4 8	2 00	"	9 06	7 06	
5	13 0	20 0	16 50	"	"	21 12	4 62	4	1,8	6 8	4 30	"	11 38	7 08	
1	25 0 23,3	28 3	26 80	"	"	26 61	+0,29	5	35 0 9,0	16,4	12,75	"	13,70	0,95	
2	20 0 0 0	6 0	3 00	"	"	3 02	-0 02	6	30 0 0 0	2 8	1 40	"	1 84	-0 44	
3	0 8	8,1	4 45	"	"	7 45	3 00	7	58,2	1 4	59 80	"	4 45	4 66	
4	5 8	11 0	8 40	"	"	11 88	3 48	8	59 2	3 2	1 20	"	7 00	5 86	
5	6 9	12 0	9 45	"	"	16 31	6 86	9	59 2	4 0	1 60	"	9 68	8 08	
1	13,3	19 2	16 25	"	"	20 74	4 49	10	3 3	8 7	6 00	"	12,29	6 29	
2	25 0 22,7	28,2	25 45	"	"	25 16	+0,29	11	35 0 10,8	17 1	13,96	"	14 90	0 95	
3	20 0 0 0	5 5	2 75	"	"	2 77	-0 02	12	30 0 0 0	2 9	1 45	"	1 89	-0 41	
4	1,1	7,2	4 15	"	"	6 94	2 79	13	58,6	2 2	0 40	"	4 17	3 77	
5	4 2	11 0	7 60	"	"	11 11	3 51	14	1 3	4 9	3 10	"	6 46	3 36	
1	3 2	11 2	7 20	"	"	15 28	8 08	15	0 2	6 1	3 15	"	8 74	5 60	
2	11 2	17 6	14 40	"	"	19 44	5 04	16	3 2	8 3	5 75	"	11 02	5 27	
3	25 0 21,0	26,8	23 90	"	"	23 61	+0,29	17	35 0 8,8	15,9	12,35	"	13,30	0 95	
4	20 0 0 0	5 4	2 70	"	"	2 72	-0 02	18	30 0 0 0	3 4	1 70	"	2 14	-0 44	
5	59 7	5 6	2 65	"	"	7 19	4 54	19	0,2	3 9	2 05	"	4 63	2 68	
1	3 7	8,2	5 95	"	"	11 68	5 71	20	0,2	4 9	2 55	"	7 12	4 57	
2	5,0	11 2	8 10	"	"	16 13	8 03	21	0	6 3	3 15	"	9 62	6 47	
3	11 3	18 1	13 70	"	"	20 60	6 90	22	3 2	9 1	6 15	"	12 11	6 96	
4	25 0 22,3	28 4	25 85	"	"	25 06	+0,29	23	35 0 10,8	16,6	13,85	"	14,60	0 95	

ERROR OF DIVISION OF EACH DIGRLE OF THE MADRAS MURAL CIRCLL

No	Reading at Micros A	Mic B	Mean	True ✓	Corrected Mean	Diff or err div	Obser ver	No	Reading at Micros A	Mic B	Mean	True ✓	Corrected Mean	Diff or err div	Obser ver
1	30 0 0,0 58 6 1,7 69 6 4 4 25 0 10,0	2 9 2,1 4 4 5 3 9 4 17,4	1,45 0 35 3 05 2 45 6,90 14,15	" " " " " "	1,89 1 53 7,17 9 82 12 46 16,10	-0 44 4,18 4 12 7 37 5 56 0,95	B & S	1	40 0 0,0 2,0 5 9 7 9 12,7 45 0 22,7	7 3 5 4 10 4 12,2 16,5 25,5	3,65 3 70 8 15 10,05 14 60 24,10	" " " " " "	4,44 8 41 12,38 16,15 20 32 24 29	-0 79 4,71 4,28 6 30 5,72 0,19	R & B
2								2							
3								3							
4								4							
5								5							
1	35 0 0 0 2 3 3,9 3,8 8,8 40 0 17,7	9,3 9,4 10,8 9,6 15 4 23,0	4,65 5,85 7,35 6,45 12,10 20,35	" " " " " " " " "	5 60 8 71 11,82 14 92 18,03 21,11	-0 95 2 86 4,47 8,47 5 93 0,79		1	40 0 0,0 0,2 4 1 4,3 11 3 45 22 6	5 0 3,9 7,2 9,8 15,9 25,1	2 50 2 05 5 65 7,05 13,60 23,85	" " " " " " " " "	3,29 7 41 11,59 15 74 19,89 21,04	-0,79 5,39 5 91 8 69 6 29 0,19	
2								2							
3								3							
4								4							
5								5							
1	35 0 0,0 0 3 2,4 2,9 7,1 40 0 16,5	7,6 3 90 10 7 10 0 14 0 21,7	3 90 3 90 6,55 6 45 10 55 19,10	" " " " " " " " "	4 85 7 86 10,87 13 87 16,88 19,89	-0 95 3,96 4,32 7 42 6,33 0,79		1	45 0 0 0 0 0 2 5 2,0 8 7 50 0 17,9	5 3 5 7 10 2 8,8 16,0 24,0	2 65 2 85 6 35 5 40 12 35 20 95	" " " " " " " " "	2,84 6,54 10,25 13 95 17 66 21,36	-0 19 3,69 3,90 8 55 5 31 0,11	B & S
2								2							
3								3							
4								4							
5								5							
1	35 0 0,0 59 2 58 9 59 7 50 40 0 12,9	7,4 6 3 6 8 6 9 11,3 19,4	3 70 2,75 2 85 3 30 8,15 16,15	" " " " " " " " "	4 65 7 11 9 57 12 02 14 48 16,94	-0 95 1 36 6 72 8 72 6 33 0,79	T & B	1	45 0 0 0 57,2 2 2 3 0 7 6 50 0 17,1	3 3 3 8 7,0 7 05 16 0 24 5	1 65 0 50 4 60 7 05 11 80 20 80	" " " " " " " " "	1,84 5,71 9 59 13 46 17 34 21,21	-0,19 5,21 4,99 6,41 5,54 0,11	
2								2							
3								3							
4								4							
5								5							
1	35 0 0,0 1 0 1 7 2,1 5,3 40 0 15,1	9,9 8 2 9,0 8 7 12,4 20 9	4,95 4 60 5 35 5 40 8 85 18,00	" " " " " " " " "	5,90 8 48 11,06 13,68 16 21 18 79	-0 95 3,88 5,71 8,23 7,36 0,79		1	45 0 0 0 58 2 2 4 2 3 8 3 50 0 18,2	3,8 4 8 7 3 9 6 16 5 25,0	1 90 1 50 4 85 5 95 12 40 21,60	" " " " " " " " "	2,09 6 07 10,06 14 04 18 03 22,01	-0,10 4,57 5 21 8 09 5 63 0,41	
2								2							
3								3							
4								4							
5								5							
1	35 0 0,0 59 2 0 2 58,9 3,8 40 0 12,7	7,5 6 6 6 9 6,1 2,50 11,0 7,10 19,4	3 75 2,90 3 55 9 61 2,50 7,10 16,05	" " " " " " " " " " "	4,70 7 13 9 56 11 98 14 11 16,84	-0 95 4 23 6 01 9 48 7 61 0,79		1	45 0 0 0 59 2 2 1 3 2 9 8 60 0 21,3	4 9 6 0 8 3 8 8 17,4 27,2	2 45 2 50 5,35 6 00 13 60 21 25	" " " " " " " " "	2 61 7,01 11 45 15 85 20 26 24 66	-0 19 4 41 6,10 9 85 6 66 0 41	
2								2							
3								3							
4								4							
5								5							
1	40 0 0 0 59 7 3 2 4,6 9,4 45 0 19,2	7 0 5 4 6 0 7 7 17 0 22,8	3 50 2,55 4,60 6 15 10 20 21,00	" " " " " " " " "	4 29 7 67 11 05 14 43 17 81 21,19	-0 79 6 12 6,15 8,28 4 61 0,19		1	45 0 0 0 57 9 0 4 0,9 7 2 50 0 18,6	3 6 3 2 8 3 8 3 15 0 24,4	1 80 1 50 4 45 4 60 11 10 21,50	" " " " " " " " "	1 99 5 97 9 96 13 94 17 93 21,91	-0 19 5 42 6 51 9 34 6 83 0 41	
2								2							
3								3							
4								4							
5								5							
1	40 0 0 0 1 8 6 2 8 3 12 1 45 0 22,9	6 1 8 0 7 0 11 1 18 1 26,0	3 05 1 90 7 0 6 8 16 10 21,10	" " " " " " " " "	3 84 9 00 12 16 16 30 20 18 21 04	-0 79 1 10 6 11 6 17 5 24 0 19		1	50 0 0 0 58 3 2 1 3 2 11 1 55 0 21,7	6 7 7 2 8 15 8 85 19 0 29,0	3 35 2 75 8 15 8 85 15 05 25,35	" " " " " " " " "	3 76 8 29 12 81 17 34 21 86 26,39	-0 41 5 54 4 66 8 49 6 81 1 04	R & B
2								2							
3								3							
4								4							
5								5							
1	40 0 0 0 1 2 5 6 8 3 13 7 45 0 25,1	6 4 6 0 7 1 11 2 19 2 28 1	3 00 3 10 6 60 11 20 16 15 16 90	" " " " " " " " "	3 00 8 37 5 65 17 73 22 41 27 09	-0 79 5 7 6 65 6 18 5 96 0 19		1	50 0 0 0 59 9 5 3 5 2 10 4 55 0 21,2	7 0 8 4 11 8 12 8 18 4 28 6	3 50 4 15 8 55 9 00 14 40 24 85	" " " " " " " " "	3 91 8 31 12 70 17 10 21 49 25 89	-0 41 4 16 4 15 8 10 7 09 1 04	
2								2							
3								3							
4								4							
5								5							

ERROR OF DIVISION OF EACH DEGREE OF THE MADRAS MURAL CIRCLE

excl

No	Reading at Micros A	Micro B	Mean	True ∠	Corrected Mean	Diff or err div	Obser ver	No	Reading at Micros A	Micro B	Mean	True ∠	Corrected Mean	Diff or err div	Obser ver
1	50 0 00	6 3	3,15	"	3,56	-0,41	T & B	1	60 0 00	3,8	1,90	"	3,35	-1,45	T & V
2	58 5	8 0	3,25	"	7,53	4,28		2	59 2	4,4	1,80	"	7,55	5,75	
3	3 8	10 0	6,90	"	11,49	4,69		3	3 2	9,4	6,30	"	11,76	6,45	
4	4 2	10,6	7,40	"	15,46	8,06		4	4 9	10,7	7,80	"	15,96	8,15	
5	9 0	16 4	12,70	"	19 42	6,72		5	9 9	16 0	12,95	"	20 15	7,20	
1	55 0 18,5	26,2	22,36	"	23 39	1,04		6	65 19 2	26,4	22,80	"	24,35	1,56	
2	50 0 00	6 8	2,90	"	3 31	-0,41		7	60 0 00	4 5	2,25	"	3 70	-1,45	
3	57 1	6 3	1,70	"	7 35	5,65		8	59 2	4 9	2,05	"	8,30	6,25	
4	4 9	10,7	7,80	"	11 18	3,58		9	3 9	9,3	6,60	"	12,90	6,30	
5	4,9	12 0	8,45	"	15 42	6,97		10	6 0	11,6	8,80	"	17,50	8,70	
1	9 0	17,9	13,45	"	19 15	6,00		11	11 3	18 0	14,65	"	22,10	7,45	
2	55 18,6	26,3	22,45	"	23,49	1,04		12	65 22,0	28,3	25,15	"	26,70	1,56	
3	50 0 0,0	6 9	3,45	"	3 86	-0,41		13	60 0 0,0	4 0	2,00	"	3,45	-1,45	
4	59 3	7 7	3,50	"	8 48	4,98		14	0,5	6 1	3,30	"	8,06	4,76	
5	4 2	10 9	7,55	"	13 09	5,54		15	4,8	9 9	7,35	"	12,67	5,32	
1	6 3	12 9	9,60	"	17 71	8,11		16	6,1	12,4	9,25	"	17,28	8,03	
2	11 0	19 4	15,20	"	22 32	7,12		17	12,0	18,1	15,05	"	21,89	6,84	
3	22,3	29,5	26,90	"	26,94	1,04		18	65 0 22,0	27,9	24,95	"	26,50	1,56	
4	55 0 0,0	7 3	3,65	"	4 69	-1,04	V & S	19	60 0 0,0	4 6	2,30	"	3,76	-1,45	
5	1 8	8 4	5,10	"	9 39	4,29		20	69 7	5,4	2,55	"	8,26	5,71	
1	6 3	13 0	9,66	"	14 09	4,44		21	3 8	8,5	6,15	"	12,77	6,62	
2	7 4	13 2	10,30	"	18 79	8,49		22	7 3	12 1	9,70	"	17,28	7,68	
3	13 9	20 3	17,10	"	23 50	6,40		23	11,3	17 7	14,50	"	21,79	7,20	
4	60 0 24,3	29 2	26,75	"	28 20	1,46		24	65 21,8	27,7	24,75	"	26,30	1,56	
5	55 0 0,0	7 8	3,90	"	4 91	-1,04		25	65 0 0,0	6,7	3,35	"	3,76	-1,45	
1	59 6	7 2	3,10	"	8 15	5,05		26	58 9	10,7	4,80	"	9,66	4,86	
2	3 9	10 0	8,95	"	11 90	5,01		27	3 9	12,4	8,15	"	11,42	6,27	
3	4 0	9,2	6,60	"	15 47	8,87		28	5 9	14,4	10,15	"	19,17	9,02	
4	7 9	14,2	11,05	"	18 90	7,94		29	11,1	19,2	15,15	"	23,03	8,78	
5	60 18,5	23 6	21,05	"	22 50	1,45		30	70 0 24 2	29,4	26,80	"	28,69	1,89	
1	55 0 0,0	7,4	3,70	"	4 74	-1,04		31	65 0 0,0	7,4	3,70	"	5,26	-1,55	
2	1 6	8 3	4,95	"	9 08	4,13		32	57,6	9 5	3,50	"	10,40	6,90	
3	7 2	12 1	9,65	"	13 42	3,77		33	3 9	14,0	8,95	"	15,65	6,60	
4	7 9	13 8	10,95	"	17 76	6,91		34	6 7	15 8	11,25	"	20,69	9,41	
5	60 0 22,7	27,3	25,00	"	22 11	7,46		35	14 8	21 7	18,25	"	25,84	7,59	
1	55 0 0,0	6 9	3,45	"	26,45	1,45		36	70 0 27 2	31 0	29 10	"	30,00	1,89	
2	59 7	6 6	3,15	"	4 19	-1,04		37	65 0 0,0	7 3	3,65	"	5,20	-1,55	
3	4 0	10 2	7,10	"	8 85	5,70		38	57 8	9 1	3,45	"	10,63	7,18	
4	4,7	10 5	7,60	"	13 21	6,11		39	4 4	12,6	8,50	"	16,06	7,56	
5	12 3	18 8	15,50	"	17 57	9,97		40	6 8	15,7	11,25	"	21,48	10,23	
1	60 22,7	27 0	24,85	"	21 94	6,44		41	15 7	23,4	19,55	"	26,91	7,36	
2	55 0 0,0	7,2	3,60	"	26,30	1,45		42	70 0 28,8	32,1	30,46	"	32,84	1,89	
3	0,5	6 5	3,50	"	4,64	-1,04		43	65 0 0,0	7,5	3,75	"	5,30	-1,55	
4	3,7	9 8	6,75	"	8,31	4,81		44	57 8	9 8	3,80	"	10,53	6,73	
5	4 2	9 0	6,60	"	11 98	5,23		45	4 0	12,1	8,05	"	15,76	7,71	
1	9,6	14 8	12,20	"	15 66	9,06		46	6 0	15 1	10,55	"	20,98	10,43	
2	60 0 19,4	23 7	21,55	"	19 38	7,13		47	14 4	21 4	17,90	"	26,21	8,31	
3	6 0	19 0	16,05	"	23,00	1,45		48	70 0 27,3	31,8	29,65	"	31,44	1,89	
4	60 0 0,0	4 3	2,15	"	3 60	-1,45	T & V	49	65 0 0,0	7 9	3,95	"	5,50	-1,55	
5	0,1	4 0	2,05	"	8,52	6,47		50	59 7	9,9	4,80	"	11,21	6,41	
1	3 9	8 9	6,40	"	13,44	7,04		51	6 2	14,9	10,55	"	16,92	6,37	
2	7 3	12 3	9,80	"	18,16	8,66		52	9 0	17 8	13,40	"	22,61	6,22	
3	13,1	19 0	16,05	"	23 28	7,23		53	17 2	24 1	20,65	"	28,88	7,68	
4	65	23,8	29,5	"	28 20	1,55		54	70 0 30,6	33,7	32,15	"	34,04	1,89	

EXCHI ERROR OF DIVISION OF EACH DEGREE OF THE MADRAS MURAL CIRCLE

No	Reading at Micros A	Mic B	Mean	True ✓	Corrected Mean	Diff or err div	Obser ver	No	Reading at Micros	Mic B	Mean	True ✓	Corrected Mean	Diff or err div	Obser ver	
1	70 0 0 0	4 6	2,30	"	4 19	- 1,89	T & S	1	76 0 0 0	4,3	2 16	"	3,19	- 1 0 1	V & S	
2	1 1	6 9	4,00	"	9,52	5,62		2	59,1	6 3	2 70	"	8,88	6 18		
3	7 8	11,4	9,60	"	14 85	5,25		3	52	12 1	8 65	"	14,67	5 92		
4	8 6	14 7	11 65	"	20,18	8,53		3	8,3	15,2	11 75	"	20 27	8 52		
5	14 7	20 0	17 35	"	25 51	8 16		3	15 8	22 1	18,95	"	25 96	7,01		
	75 0 27,9	31,7	29,80	"	30 84	1,04		5	80 0 27,9	34,6	31,25	"	31,65	0 40		
1	70 0 0 0,0	5,9	2,95	"	4,84	- 1 89		1	80 0 0 0	7,8	3,90	"	4 30	- 0 40	F & B	
2	0,8	7,3	4 05	"	10 22	6,17		2	58,7	7,1	2 90	"	9,56	6,66		
3	7,2	11,7	9,45	"	15 60	6 15		3	6,9	12 4	9,65	"	14 82	5,17		
4	8,2	14 4	11 30	"	20 98	9 68		4	7,9	15 7	11,80	"	20,08	8 28		
5	16 2	20,7	17 95	"	26,16	8 41		5	14,7	21,0	17 85	"	25,35	7 50		
	75 0 28,2	33,2	30,70	"	31,74	1,04		5	85	28,1	32,5	30,30	"	30,61	0,31	
1	70 0 0 0,0	6,9	3,45	"	5,34	- 1 89		1	80 0 0 0	8,5	4 25	"	4 65	- 0 40		
2	1 9	8,7	5 30	"	10 28	1 98		2	2,5	9,5	6 00	"	10,52	4 52		
3	6,8	11,3	9 05	"	15,22	6,17		3	8,8	14 2	11,50	"	16 39	4 89		
4	8,8	14,8	11 80	"	20 16	8 36		4	10 1	17 4	13 75	"	22,27	8 52		
5	14 5	19 3	16 90	"	25 10	8 20		4	18 3	25,1	21 70	"	28,14	6,44		
	75 0 28,8	31,2	29,00	"	30,04	1,04		5	85 0 31,4	36,0	33,70	"	34,01	0,31		
1	70 0 0 0,0	7,1	3 55	"	5 44	- 1 89		1	80 0 0 0	8 0	4 00	"	4 40	- 0 40		
2	1 7	8 2	4 95	"	10 77	5 82		2	2 7	9 3	6 00	"	9,94	3 94		
3	7,3	11 7	9 50	"	16 10	6 60		3	8 2	13 8	11 00	"	15,48	4,48		
4	8 2	14 1	11 15	"	21 43	10 28		4	9 8	17 3	13,55	"	21,03	7,48		
5	16,1	21 9	19 00	"	26,76	7,76		5	16 0	23,2	19,60	"	26,57	6,97		
	75 0 28,2	33,9	31,06	"	32,09	1,04		5	85 0 29,3	34,3	31,80	"	32,11	0,31		
1	70 0 0 0,0	5 0	2,50	"	4,39	- 1 89		1	80 0 0 0	8,4	4 20	"	4 40	- 0 40		
2	1 9	8,0	4,95	"	9 84	4,89		2	1 2	7 6	4,40	"	9,65	5 25		
3	7,8	12,0	9 90	"	15 29	5 39		3	6,4	12 7	9 55	"	14 70	5,15		
4	9,2	14,5	11 85	"	20 74	8 89		3	7 7	15 3	11 50	"	19 76	8 26		
5	15,0	20,7	17 85	"	26,19	8,34		4	13,9	21 0	17 45	"	24 81	7,36		
	75 0 28,1	33,1	30,60	"	31,64	1,04		5	85 0 26,3	32,8	29,50	"	29,86	0,31		
1	76 0 0 0	6,1	3 05	"	4,09	- 1,04	V & S	1	80 0 0 0	8 2	4 10	"	4 50	- 0 40		
2	0,0	8 0	4 00	"	9 40	5 40		2	0,9	9 0	4 95	"	9,58	4 63		
3	5,2	12,4	8,80	"	14 71	5,91		2	6,8	13 1	9,95	"	14 66	4,71		
4	8,2	14 2	11 20	"	20 03	8 63		3	7,7	15 0	11 35	"	19 74	8,39		
5	14,6	22,3	18 45	"	25 31	6,89		4	14 1	21 3	17 70	"	24 83	7,13		
	80 0 26,9	33,6	30,26	"	30,65	0,40		5	85 0 26,8	32 4	29 60	"	29,91	0,31		
1	75 0 0 0	6 4	3 20	"	4,24	- 1,04		1	85 0 0 0	6,5	3 25	"	3,56	- 0,31		
2	0 8	6 4	4,60	"	9 60	5 09		1	0 8	7 4	4,10	"	8,49	4,39		
3	6 0	11 0	8 45	"	15,14	6,69		2	5,7	11 0	8 35	"	13 43	5 08		
4	8 2	13 5	10 85	"	20 60	9,75		3	7,0	15 1	11 05	"	18 36	7,31		
5	15 2	21 4	18 30	"	26,05	7 76		4	14,2	20 4	17 90	"	23,30	6 00		
	80 0 27,7	34,5	31,10	"	31,60	0 40		5	90 0 26,2	30,0	27 60	"	28,23	0 63		
1	75 0 0 0	7 7	4 00	"	1 80	1 01		1	85 0 0 0	5 4	2 70	"	3 01	- 0 31		
2	2 1	9 2	4 02	"	9 08	1 03		1	1 8	8 2	5 00	"	8,12	1 12		
3	6 7	11 4	10 06	"	16 12	0 12		2	6,2	11 1	8,66	"	13 24	4 59		
4	10 7	17 0	13 06	"	21,97	2 62		3	8 2	14 9	11 56	"	18 35	6 80		
5	18 1	21 4	21 22	"	27 06	5 81		4	13,2	20 0	16 60	"	23 47	6 87		
	80 0 28 0	36 0	19 45	"	32 86	0 10		5	90 0 26,2	30,7	27 95	"	28,58	0 63		
1	76 0 0 0	6,1	2 70	"	7 74	1 01		1	86 0 0 0	5 7	2 85	"	3 16	- 0 31		
2	0 3	7 7	4 00	"	9 10	5 19		1	1 0	7 0	4 00	"	7 94	3 94		
3	4 0	12 2	8 60	"	14,64	6 01		2	5,2	11,1	8 15	"	12,73	4 58		
4	8 7	15 3	12 00	"	20 10	8 10		3	6,2	13 4	9 80	"	17,51	7 71		
5	16 3	19 4	18 50	"	26,56	7 05		4	11,2	17 8	14 50	"	22,30	7 80		
	80 0 26 8	31 4	30 00	"	31 00	0 40		5	90 0 23 9	28 0	26 45	"	27,08	0 63		

ERROR OF DIVISION OF EACH DEGREE OF THE MADRAS MURAL CIRCLE

EXCHI

No	Reading at Micros A	Mic B,	Mean	True \angle	Corrected Mean	Diff or err div	Obser ver	No	Reading at Micros	Mic B	Mean	True \angle	Corrected Mean	Diff or err div	Obser ver
1	85 0 0 0	6 3	3,15	"	3,46	-0,31	T, & B	1	95 0 0 0	3 8	1,90	"	2,35	-0,45	
2	16	8 3	4,95	"	8,46	3,51		2	0 7	6 3	3,50	"	7,39	3,89	
3	6 6	12 0	9,30	"	13,47	4,17		3	4,1	11 4	7,75	"	12,43	4,68	
4	6 2	14 0	10,10	"	18,47	8,37		4	6 2	11,4	8,80	"	17,47	8,67	
5	11,8	19 5	15,65	"	23,48	7,83		6	12 8	17 5	16,15	"	22,51	7,36	
	90 0 25,3	30 4	27,85	"	28,48	0,63			100 0 25,0	28,4	26,70	"	27,56	0,86	
1	85 0 0 0	6 1	3,05	"	3,36	-0,31		1	95 0 0 0	2 8	1,40	"	1,85	-0,45	T & B
2	0,0	6 4	3,20	"	8,33	5,13		2	58,9	8,0	1,95	"	7,52	5,57	
3	5,4	11,2	8,30	"	13,31	5,01		3	6 5	10,4	8,45	"	13,19	4,74	
4	6,9	12 9	9,90	"	18,28	8,38		4	9 8	15,7	12,75	"	18,86	6,11	
5	13,2	19 3	16,25	"	23,26	7,01		5	17 8	23 5	20,65	"	24,63	3,88	
	90 0 25,2	30,0	27,60	"	28,23	0,63			100 0 26,7	32 0	29,35	"	30,20	,0,85	
1	90 0 0,0	6 9	3,45	"	4,08	-0,63		1	95 0 0,0	3 8	1,90	"	2,35	-0,45	
2	2,0	8 4	6,20	"	9,35	4,15		2	2 8	7 1	4,95	"	8,17	3,42	
3	6,9	12 9	9,90	"	14,62	4,72		3	8 8	13,6	11,20	"	13,99	2,79	
4	8,7	15,5	12,10	"	19,90	7,80		4	10,5	15,9	13,20	"	19,81	6,61	
5	16,0	21,5	18,25	"	25,18	6,93		5	17 3	22 0	19,65	"	25,03	5,98	
	95 0 28,2	31,8	30,00	"	30,45	0,16			100 0 28,9	32 3	30,60	"	31,45	0,85	
1	90 0 0 0	6 5	3,25	"	3,88	-0,63		1	100 0 0 0	6 6	3,30	"	4,15	-0,85	
2	1 9	7,6	4,70	"	9,35	4,65		2	1 9	8 0	4,95	"	9,98	5,03	
3	6 0	11 6	8,80	"	14,82	6,02		3	6,3	13,5	9,90	"	15,81	5,91	
4	7,7	14,0	10,85	"	20,30	9,15		4	8 4	16,5	12,45	"	21,65	9,20	
5	14,6	20,7	17,65	"	26,78	8,13		5	14,9	26,0	20,45	"	27,48	7,03	
	95 0 29,0	32,6	30,80	"	31,25	0,46			105 0 28,0	37,2	32,60	"	33,31	0,71	
1	90 0 0 0	6 1	3,05	"	3,68	-0,63		1	100 0 0 0	5 4	2,70	"	3,55	-0,85	
2	0,8	7,8	4,30	"	9,05	4,75		2	57,5	6 0	1,75	"	6,20	4,45	
3	6,2	12,8	9,50	"	14,42	4,92		3	0 8	6,9	3,85	"	8,85	5,00	
4	7,1	14,3	10,70	"	19,80	9,10		4	0 0	5 5	2,75	"	11,61	8,76	
5	13,7	20,6	17,15	"	26,18	8,03		5	2 0	11,3	6,65	"	14,16	7,51	
	95 0 27,8	32,4	30,10	"	30,65	0,46			105 0 11,8	20 4	16,10	"	16,81	0,71	
1	90 0 0 0	7,6	3,75	"	4,38	-0,63		1	100 0 0 0	4 0	2,00	"	2,85	-0,85	
2	1,2	7,1	4,15	"	9,59	5,44		2	68,2	3,0	0,60	"	5,52	4,92	
3	4,6	11 4	8,00	"	14,81	6,81		3	0,8	6,1	2,95	"	8,19	5,24	
4	6,7	13,6	10,15	"	20,02	9,87		4	0 0	4,5	2,25	"	10,86	8,61	
5	13,7	20 1	16,90	"	25,24	8,34		5	2 4	9 0	5,70	"	13,64	7,84	
	95 0 28,9	31,1	30,00	"	30,46	0,46			105 0 13,0	18 0	15,60	"	16,21	0,71	
1	90 0 0 0	6 7	3,35	"	3,98	-0,63		1	100 0 0 0	6 1	3,05	"	3,90	-0,85	
2	1,9	8,5	6,20	"	9,14	3,94		2	58,3	4 2	1,25	"	7,09	5,84	
3	4,9	12,1	8,50	"	14,31	5,81		3	0 8	6 0	3,40	"	10,28	6,88	
4	6,9	13 8	10,35	"	19,47	9,12		4	69,5	6 8	3,15	"	13,48	10,33	
5	15,2	20,7	17,95	"	24,64	6,69		5	4,2	10 1	7,15	"	16,67	9,62	
	95 0 27,7	31,0	29,35	"	29,80	0,46			105 0 16,3	22 0	19,15	"	19,86	0,71	
1	95 0 0,0	4 5	2,25	"	2,70	-0,45	S & V	1	100 0 0 0	8 4	4,20	"	6,05	-0,85	T & S
2	1,2	6,4	3,80	"	8 14	4,34		2	68,9	6,4	2,65	"	6,77	3,12	
3	5,7	11,4	8,55	"	13,58	5,03		3	69,2	5,5	2,85	"	6,49	4,14	
4	8,2	14,9	11,55	"	19,02	7,47		4	55,0	1,7	58,35	"	7,22	8,87	
5	16,2	22,3	19,25	"	24,48	5,21		5	56,7	5 0	0,85	"	7,94	7,09	
	100 0 28,7	31,4	29,05	"	29,90	0,85			105 0 5,2	10 7	7,95	"	8,66	0,71	
1	95 0 0,0	4,4	2,20	"	2,65	-0,45		1	105 0 0 0	5 0	2,50	"	3,21	-0,71	
2	1,3	6,8	4,05	"	8,03	3,98		2	55,3	2,2	58,75	"	3,85	6,10	
3	6,7	11 3	9,00	"	13,41	4,41		3	56,2	4 0	59,60	"	4,49	4,89	
4	8,1	13,9	11,00	"	18,79	7,79		4	52,2	1,2	6,70	"	6,12	8,12	
5	14,8	20,0	17,40	"	24,17	6,77		5	53,2	0	7,60	"	7,70	8,16	
	100 0 26,2	31,2	28,70	"	29,55	0,85			110 0 1 7	9,3	6,50	"	16,40	,0,10	

* diminished the angle

exclv

ERROR OF DIVISION OF EACH DEGREE OF THE MADRAS MURAL CIRCLE

No	Reading at Micros A	Micro B	Mean	True \angle	Connected Mean	Diff of err div	Observer	No	Reading at Micros A	Micro B	Mean	True \angle	Connected Mean	Diff of err div	Observer
1	105 0 0,0	5,2	2,60	"	3 31	-0,71	T & S	1	115 0 0,0	5 4	2,70	"	1,39	-1,69	T & S
2	55,3	2,0	58,6	"	4 22	6,67		2	17	4,7	3,20	"	6,90	3,00	
3	55,8	1,4	58,60	"	5 13	6,53		3	2,0	4,7	3,36	"	8,01	4,66	
4	53,2	2,0	57,60	"	6 03	8,13		4	57,9	2 6	0,26	"	9,82	9,57	
5	56,7	3,2	59,95	"	6 94	6,99		5	59,8	6 8	3,30	"	11,64	8,34	
	110 0 2,9	11,0	6 95	"	7,85	0,90			120 0 9,9	14,0	11,95	"	13,45	1,50	
1	105 0 0,0	5,5	2,75	"	3 46	-0,71		1	115 0 0,0	6 2	3,10	"	4,79	-1,69	
2	54,2	3,6	58,90	"	4 57	6,67		2	59,1	3 0	1,06	"	6,70	5,66	
3	55,0	3,2	59,10	"	5 68	6,58		3	1,7	4,2	2,95	"	8,61	6,66	
4	54,3	2,0	58,16	"	6 78	8,63		4	56,0	3 5	0,20	"	10,52	10,32	
5	56,8	4,5	0,85	"	7 89	7,24		5	17	7 0	4,35	"	12,44	8,09	
	110 0 4,7	11,5	8 10	"	9,00	0,90			120 0 11,7	14,0	12,85	"	14,36	1,50	
1	105 0 0,0	5,0	2,50	"	3 21	-0,71		1	115 0 0,0	5,1	2,55	"	4,24	-1,69	
2	54,2	2,0	58,10	"	3 97	5,87		2	59,3	3 1	1,20	"	6,23	5,03	
3	55,6	3,2	59,40	"	4,73	5,33		3	1,0	3,7	2,35	"	8,22	5,87	
4	52,9	0,3	56,60	"	5,18	8,82		4	56,7	4,0	0,35	"	10,22	9,87	
5	54,7	2,0	59,65	"	6,21	7,69		5	28	7 6	5,20	"	12,21	7,01	
	110 0 2,2	10,0	6 10	"	7 00	0,90			120 0 10,5	14,9	12,70	"	14,20	1,50	
1	105 0 0,0	3,8	1,90	"	2 81	-0,71		1	115 0 0,0	6 9	3,45	"	5,14	-1,69	B & S
2	54,7	59,4	57,06	"	3 78	6,73		2	0 2	4,4	2,30	"	7,08	4,78	
3	56,7	0,9	58,80	"	4,95	6,16		3	1,1	5 3	3,20	"	9,02	6,82	
4	54,2	0,9	57,55	"	6 11	8,56		4	67,9	3,7	0,80	"	10,97	10,17	
5	56,0	2,2	59,55	"	7 28	7,73		5	120 0 10,0	16,7	13,35	"	12,91	8,16	
	110 0 4,9	10,2	7,65	"	8 45	0,90									1,50
1	110 0 0,0	8,2	4,10	"	5,00	-0,90		1	115 0 0,0	6,0	3,00	"	4,69	-1,69	
2	55,4	3,0	69,20	"	5 96	6,76		2	0,0	3,7	1,86	"	6,94	5,09	
3	56,7	2,6	69,65	"	6,92	7,27		3	1,2	4,8	3,00	"	9,19	6,19	
4	54,7	2,0	68,36	"	7 87	9,52		4	59,2	6,2	2,20	"	11,44	9,24	
5	58,7	2,4	0,56	"	8,83	8,28		5	0,7	8,4	4,55	"	13,70	9,15	
	110 0 5,8	10,4	8,10	"	9,79	1,69			120 0 11,8	17,1	14,45	"	16,96	1,50	
1	110 0 0,0	6,5	3,25	"	4 15	-0,90	V & S	1	120 0 0,0	4 5	2,25	"	3,75	-1,50	
2	57,0	3,1	0,05	"	5 63	5,58		2	59,8	3 8	1,80	"	6,12	4,32	
3	57,8	3,0	0,40	"	7 11	6,71		3	0 8	5,7	3,25	"	8,49	5,24	
4	55,0	1,2	58,10	"	8,58	10,48		4	69,7	4,1	1,90	"	10,86	8,96	
5	56,9	3,5	0,20	"	10,06	9,86		5	3,0	8 0	5,50	"	13,21	7,73	
	110 0 6,7	13,0	9,85	"	11,54	1,69			125 0 12,9	16,8	14,85	"	15,61	0,76	
1	110 0 0,0	7,0	3,50	"	4,40	-0,90		1	120 0 0,0	3 9	1,95	"	3,45	-1,50	
2	57,3	3,1	0,20	"	5,93	5,73		2	0 2	4,4	2,30	"	6,47	4,17	
3	58,8	4,8	1,80	"	7 46	5,60		3	1,7	7,0	4,35	"	9,49	5,14	
4	55,7	2,4	59,05	"	8,98	9,93		4	2,2	6,4	4,30	"	12,51	8,22	
5	58,8	5,0	1,90	"	10,61	8,61		5	4,8	10,0	7,40	"	15,54	8,14	
	110 0 7,7	13,0	10,35	"	12,04	1,69			125 0 15,7	19,9	17,80	"	18,66	0,76	
1	110 0 0,0	7,1	3,75	"	4 16	0,90		1	120 0 0,0	4 8	2,40	"	3,90	-1,50	
2	57,3	4,2	0,70	"	6 1	5 1		2	0 1	1 8	2,66	"	6,68	4,03	
3	59,0	4,4	1,76	"	8 0	6,15		3	1 1	0 8	3,75	"	9,26	6,61	
4	60,2	4,1	58,76	"	0 81	11,00		4	0 1	1 2	2,80	"	11,95	9,65	
5	0,0	0,4	2,70	"	11,64	8,91		5	1 1	0 8	6,75	"	14,63	7,88	
	110 0 0,3	14,2	11,71	"	13,11	1,03			125 0 14,2	18,8	16,65	"	17,31	0,76	
1	110 0 0,0	0,0	3,05	"	4 03	-0,90		1	120 0 0,0	4 5	2,25	"	3,75	-1,50	
2	58,7	1,0	0,90	"	5 61	5,20		2	0,2	6,3	2,75	"	6,68	3,93	
3	59,7	1,0	1,86	"	7 17	5,12		3	2,1	7 1	4,75	"	9,61	4,86	
4	55,0	2,9	58,95	"	8 72	9,77		4	2,2	6 0	4,10	"	12,65	8,45	
5	58,2	1,1	1,30	"	10,28	8,98		5	6,2	10,1	8,30	"	15,48	7,18	
	110 0 8,2	12,1	10,15	"	11,84	1,60			125 0 15,2	20,1	17,65	"	18,41	0,76	

ERROR OF DIVISION OF EACH DEGREE OF THE MADRAS MURAL CIRCLE

xxv

No.	Reading at Micros A	Micro B	Mean	True \angle	Corrected Mean	Diff or err div	Observer	No.	Reading at Micros A	Micro B	Mean	True \angle	Corrected Mean	Diff or err div	Observer
1	120 0 0 0	3,9	1,95	"	3,45	-1,50	B & S	1	130 0 0 0	5,4	2,70	"	3,58	-0,83	T & B
2	0 3	1,2	2,25	"	6,97	4,72		2	3,2	4,0	3,60	"	7,67	4,07	
3	2 8	6,3	4,55	"	10,49	5,94		3	2,7	8,1	1,40	"	11,80	7,40	
4	1 9	7,9	4,90	"	14,02	9,12		4	5,1	18,1	6,60	"	16,94	9,34	
5	8 4	12,2	10,30	"	17,54	7,24		5	11,7	14,8	13,25	"	20,07	6,82	
6	125 0 18,6	22,0	20,30	"	21,06	0,76		6	24,6	22,65	"	"	24,21	1,66	
1	125 0 0 0	4,7	2,35	"	3,11	-0,76		1	130 0 0 0	4,0	2,00	"	2,82	-0,83	
2	58,7	3,6	1,15	"	6,26	6,10		2	0 7	2,0	1,35	"	6,65	5,30	
3	2 7	7,3	5,00	"	9,40	4,40		3	2,2	5,3	3,75	"	10,46	6,71	
4	2 2	7,9	5,05	"	12,54	7,49		4	2,8	7,0	4,90	"	14,28	9,38	
5	6,0	11,8	8,90	"	15,68	6,78		5	8,2	11,7	9,95	"	18,09	8,14	
6	130 0 16,3	19,7	18,00	"	18,83	0,83		6	135 0 18,3	22,1	20,35	"	21,91	1,56	
1	125 0 0 0	4,2	2,10	"	2,86	-0,76		1	135 0 0 0	4,2	2,10	"	3,60	-1,66	
2	58,2	3,8	1,00	"	5,94	4,94		2	0 9	2,0	1,45	"	8,05	6,60	
3	2 1	6,4	4,25	"	9,03	4,78		3	4,5	6,7	5,60	"	12,45	6,85	
4	2,2	8,0	5,10	"	12,11	7,01		4	6,3	8,8	7,55	"	16,84	0,29	
5	5,3	11,4	8,35	"	15,20	6,85		5	11,3	13,0	12,15	"	21,24	9,09	
6	130 0 15,7	19,2	17,45	"	18,28	0,83		6	140 0 22,8	26,0	23,90	"	26,63	1,73	
1	125 0 0 0	5,1	2,65	"	3,31	+0,76	I & B	1	135 0 0 0	5,0	2,50	"	4,06	-1,56	
2	59,2	4,2	1,70	"	6,70	6,00		2	1,0	4,5	2,75	"	8,24	5,49	
3	2,8	8,2	5,50	"	10,10	4,60		3	5,1	6,3	5,70	"	12,43	6,73	
4	3,7	9,1	6,40	"	13,49	7,09		4	5,8	8,9	7,35	"	16,61	9,26	
5	8,3	13,8	11,05	"	16,89	5,84		5	12,1	14,1	13,10	"	20,80	7,70	
6	130 0 17,7	21,2	19,45	"	20,28	0,83		6	140 0 21,7	24,8	23,25	"	24,98	1,73	
1	125 0 0 0	3,8	1,90	"	2,68	-0,76		1	135 0 0 0	6,0	3,00	"	4,50	-1,56	
2	59,0	2,7	0,85	"	6,40	5,55		2	3,8	4,1	3,70	"	9,18	5,48	
3	2,2	7,7	4,95	"	10,15	5,20		3	5,1	8,4	6,75	"	13,81	7,06	
4	3,1	9,0	6,05	"	13,89	7,84		4	7,2	8,9	8,05	"	18,43	10,38	
5	8,9	13,9	11,40	"	17,64	6,24		5	13,8	16,0	14,90	"	23,06	8,16	
6	130 0 19,0	22,1	20,55	"	21,38	0,83		6	140 0 24,0	27,9	25,95	"	27,68	1,73	
1	125 0 0 0	4,0	2,00	"	2,76	-0,76		1	135 0 0 0	5,0	2,50	"	4,06	-1,56	
2	69,7	3,9	1,80	"	6,49	4,69		2	1,2	4,3	2,75	"	8,23	5,48	
3	3 7	8,9	6,30	"	10,23	3,93		3	3,9	6,4	5,15	"	12,41	7,26	
4	4 0	10,1	7,05	"	13,96	6,91		4	5,8	8,2	7,00	"	16,58	9,58	
5	9,2	14,4	11,80	"	17,70	6,90		5	12,2	14,8	13,50	"	20,76	7,26	
6	130 0 18,2	23,0	20,60	"	21,43	0,83		6	140 0 21,0	25,4	23,20	"	24,93	1,73	
1	130 0 0,0	4,6	2,30	"	3,13	-0,83		1	135 0 0 0	4,8	2,40	"	3,96	-1,56	
2	0,1	2,1	1,10	"	6,86	6,76		2	1,0	3,3	2,15	"	7,96	6,81	
3	3,9	7,0	5,45	"	10,58	5,13		3	4,2	6,0	5,10	"	11,97	6,87	
4	3,8	6,9	4,85	"	14,31	9,46		4	4,3	7,5	5,90	"	15,97	10,07	
5	9,2	12,0	10,60	"	18,03	7,43		5	10,1	13,3	11,70	"	19,98	8,28	
6	135 0 17,7	22,7	20,20	"	21,76	1,66		6	140 0 20,5	24,0	22,25	"	23,98	1,73	
1	130 0 0,0	4,3	2,15	"	2,98	+0,83		1	140 0 0,0	4,6	2,30	"	4,08	-1,73	B & B
2	1,1	1,1	1,10	"	6,80	6,70		2	158,7	1,1	1,90	"	7,05	5,15	
3	4,2	7,9	6,05	"	10,61	4,56		3	1,3	7,9	4,60	"	10,08	54,8	
4	4,9	8,1	6,50	"	14,46	7,93		4	2,1	8,0	5,05	"	13,10	8,05	
5	10,2	13,5	11,85	"	18,24	6,39		4	6,3	13,7	10,00	"	16,13	6,13	
6	135 0 18,7	22,3	20,50	"	22,06	1,66		5	145 0 15,0	21,0	18,00	"	19,15	0,95	
1	130 0 0,0	4,5	2,25	"	3,08	+0,83		1	140 0 0 0	5,1	2,55	"	4,28	-1,73	
2	59,8	1,1	0,45	"	6,60	6,15		2	59,7	6,1	2,40	"	7,22	4,82	
3	2,6	5,9	4,25	"	10,11	5,86		3	0,9	7,6	4,05	"	10,14	7,02	
4	1,6	6,3	3,95	"	13,63	9,68		4	1,3	7,4	4,16	"	14,40	8,0	
5	8,8	11,0	8,90	"	17,14	8,24		5	6,3	12,5	9,16	"	16,00	6,11	
6	135 0 16,9	21,3	19,10	"	20,66	1,66		6	145 0 15,2	20,5	17,8	"	16,00	1,73	

EXCVI ERROR OF DIVISION OF EACH DEGREE OF THE MADRAS MURAL CIRCLE

No	Reading at Micros A	Mic B	Mean	True \angle	Corrected Mean	Diff or err div	Obser ver	No	Reading at Micros A	Mic B	Mean	True \angle	Corrected Mean	Diff or err div	Obser ver
1	140 0 0 0	4 5	2,25	"	3 98	-1 73	B & S	1	150 0 0 0	3,4	1,70	"	3 77	-2,07	I & S
2	58,3	3 1	0 70	"	6 86	6,16		2		1,7	5 5	3 60	7,08	3,48	
3	0,7	6,9	3 80	"	9,75	5,95		3		3 8	8,0	5,90	10 40	4,90	
4	1,1	8,0	1,55	"	12 63	8,08		4		7,3	4 0	5,65	13 71	8 06	
5	5 2	13,3	9 25	"	15,52	6,27		5	155 0 17,3	21,3	19,30	"	17 02	7,72	
	145 0 14,8	19,7	17,25	"	18,40	1,15						20,33	1,03		
1	140 0 0 0	4 5	2,25	"	3,98	-1 73	T & S	1	150 0 0 0	3,6	1,80	"	3,87	-2,07	
2	59,7	5 8	2 75	"	7,43	4,68		2		69,7	4 7	2 20	7 53	5 33	
3	0,0	8 4	4 20	"	10 89	6 69		3		1,2	6 4	3 80	11 19	7 39	
4	1,5	8,5	5,00	"	14,34	9,34		4		4,0	6,8	5 40	14,85	9 45	
5	8,8	15 1	11 95	"	17 80	6 85		6	155 0 19,2	23,1	21,15	"	18 52	8,72	
	145 0 17 9	22 3	20,10	"	21,25	1,15						22,18	1,03		
1	140 0 0,0	5 2	2 60	"	4 33	-1 73		1	150 0 0 0	3 9	1 95	"	4,02	-2,07	
2	0,8	6 3	3 55	"	8 64	5 09		2		69,9	4 5	1 90	7 56	5 66	
3	3,7	10 3	7 00	"	12 96	5 96		3		2 3	6 6	4 45	11 10	6 65	
4	6,0	12,0	9 00	"	17 27	8,27		4		3,1	6,7	4 90	14,85	9 75	
5	11 4	18 2	14 80	"	21 68	6 78		5	155 0 18,7	22,7	20,70	"	18 19	8 81	
	145 0 22,0	27 5	24,75	"	25 90	1,15						21 73	1,03		
1	145 0 0 0	6 0	3,00	"	4,15	-1,15		1	150 0 0 0	3,5	1 75	"	3,82	-2,07	
2	59,8	6 6	2 70	"	7,65	4,85		2		59,2	4 3	1 75	7 41	5 66	
3	3 0	6 9	1,95	"	10 96	6 01		3		1,2	7 0	4 10	11 00	6 00	
4	4,0	7 7	5 85	"	14 36	8,51		4		3 0	5 8	4 40	14,60	10,20	
5	7 3	11 7	9 60	"	17 77	8 27		5	155 0 19,2	22,3	20,75	"	18 29	8 49	
	150 0 17,3	20 9	19,10	"	21 17	2,07						21 78	1,03		
1	145 0 0,0	5 7	2 85	"	4 00	-1 15		1	155 0 0 0	3 4	1 70	"	2,73	-1,03	T & V
2	0,0	1 4	2 20	"	7,15	5 25		2		58 4	3 0	0 70	5 38	1 68	
3	4,2	8 0	6 10	"	10 91	4 81		3		59,1	4 1	1 60	8 03	6 43	
4	3 1	7 9	5 50	"	14 36	8,86		4		59 4	5 1	2 25	10 69	8 11	
5	7,1	12 5	9 80	"	17 82	8 02		5	160 0 12,0	18 0	15,00	"	13 34	7 74	
	150 0 18,0	20,1	19,20	"	21 27	2,07						15 99	0 99		
1	145 0 0 0	3 3	1 65	"	2 80	-1 15		1	155 0 0 0	4 1	2 05	"	3 08	-1 03	
2	50,3	4 1	1 85	"	6 17	1 32		2		58,5	2 0	0 25	5 84	6 59	
3	1 7	6 3	4 00	"	9 56	5 55		3		0 0	3 5	1 76	8 60	6 8	
4	1,7	6 1	4 05	"	12 92	8 87		4		0 3	5 5	2 90	11 36	8 46	
5	6,7	11 7	9 20	"	16 30	7 10		5	160 0 12,0	18 9	15,90	"	11 13	7 98	
	150 0 16,2	19 0	17 60	"	19 67	2,07						16 89	0 99		
1	145 0 0 0	5 7	2 85	"	4 00	-1 15		1	155 0 0 0	4 5	2 25	"	3 28	-1 03	
2	0,7	4 8	2 75	"	7,33	1 58		2		58 7	3 2	0 95	6 21	5 26	
3	3 9	7 9	5 90	"	10 66	4 76		3		0 0	5 0	2 60	9 14	6 61	
4	6,2	9 9	8 05	"	14 00	6 95		4		1 0	6 2	3 60	12 08	8 48	
5	10,7	14 4	12 55	"	17 33	4 79		5	160 0 13,3	20,9	16,95	"	15 01	7 81	
	150 0 17,3	19 9	18 60	"	20 67	2,07						17 94	0 99		
1	145 0 0 0	5 5	2 75	"	3 90	-1 15		1	155 0 0 0	3 8	1 90	"	2 93	-1 03	
2	59,3	4 3	1 80	"	7 30	5 50		2		58 3	1 8	0 05	5 57	5 82	
3	3 0	6 7	4 85	"	10 71	5 86		3		69,7	4 8	2 25	8 21	5 96	
4	3,2	7 3	6 25	"	14 11	8 86		4		0 6	6 4	3 50	10 85	7 30	
5	8,2	12 6	10 40	"	17 62	7 12		5	160 0 11,9	18 1	15 15	"	13 50	7 20	
	150 0 17,2	20 0	18 85	"	20 92	2,07						16 14	0 99		
1	150 0 0 0	4 8	2 40	"	4 47	-2 07		1	155 0 0 0	5 5	2 75	"	3 78	-1 03	
2	0 8	4 4	2 60	"	7 80	5 20		2		58 6	3 2	0 90	6 29	5 39	
3	3,7	6 4	5 05	"	11 14	6 09		3		69,0	5 3	2 15	8 81	6 66	
4	3,7	7 4	5 55	"	14 47	8 92		4		59 4	5 5	2 45	11 32	8 87	
5	6,2	10 4	8 30	"	17 80	9 50		5	160 0 11,1	19 6	15 35	"	13 83	7 23	
	155 0 18,1	22 1	20 10	"	21 18	1 03						16 34	0 99		

ERROR OF DIVISION OF EACH DEGREE OF THE MADRAS MURAL CIRCLE

EXCVII

No	Reading at Micros A	Mic B	Mean	True \angle	Corrected Mean	Diff or err div	Obser ver	No	Reading at Micros A	Mic B	Mean	True \angle	Corrected Mean	Diff or err div	Obser ver
1	160 0 0,0	5 9	2,95	" 0 2,35	3,94	-0,99		1	165 0 0,0	7,0	3,50	" 0 2,06	3,82	-0,32	
2	58,7	4 0	0,85	" 1 0	6,29	5,94		2	56,3	4,9	0,60	" 1 0	5,88	5,28	
3	0 0	6 4	3,20	" 1 0	8,63	5,43		3	58,4	7,5	2,95	" 1 0	7,94	4,98	
4	0 2	6 1	3,15	" 1 0	10,98	7,83		4	57,8	4,9	1,35	" 1 0	10,01	8,66	
5	2 7	10 0	6,35	" 1 0	13,32	6,97		5	1 8	9 2	5,50	" 1 0	12,07	6,57	
	165 0 12 7	18 0	15,35	" 1 0	15,67	0,32		5	170 0 11,0	17 7	14,35	" 1 0	14,13	+0,22	
1	160 0 0 0	5 7	2,85	" 1 0 1,86	3,84	-0,99		1	170 0 0 0	7 9	3,95	" 1 0 1,88	3,73	+0,22	
2	58,1	3 9	1,00	" 1 0 1,86	5,70	4,70		2	57,2	3 7	0,45	" 1 0	5,61	-5,16	
3	59,7	7 7	3,70	" 1 0 1,86	7,57	3,87		3	58,0	5,2	1,60	" 1 0	7,49	5,89	
4	58,3	5 2	1,75	" 1 0 1,86	9,43	7,68		4	58,0	4,3	1,15	" 1 0	9,38	8,23	
5	1 0	10 3	5,65	" 1 0 1,86	11,28	5,63		5	2 0	7 7	4,85	" 1 0	11,27	6,42	
	165 0 9 6	18 0	12,80	" 1 0 1,86	13,12	0,32		5	175 0 10,7	16,9	13,80	" 1 0	13,15	+0,65	
1	160 0 0,0	5 3	2,65	" 1 0 2,08	3,64	-0,99		1	170 0 0,0	7,3	3,65	" 1 0 2,33	3,43	+0,22	
2	56,2	5 2	0,70	" 1 0 2,08	5,72	5,02		2	68,3	5,0	1,65	" 1 0	5,76	-4,11	
3	0 1	7 1	3,80	" 1 0 2,08	7,80	4,20		3	0 3	6,7	3,50	" 1 0	8,09	4,59	
4	59,0	6 0	1,50	" 1 0 2,08	9,88	8,38		4	0 4	5,8	3,10	" 1 0	10,43	7,33	
5	1 7	9 2	5,45	" 1 0 2,08	11,95	6,50		5	4 2	11 5	7,85	" 1 0	12,76	4,91	
	165 0 10 4	17 0	13,70	" 1 0 2,08	14,02	0,32		5	175 0 12,7	18,8	15,76	" 1 0	15,10	+0,65	
1	160 0 0 0	5 4	2,70	" 1 0 2,42	3,69	-0,99		1	170 0 0 0	8 9	4,45	" 1 0 2,15	4,23	+0,22	
2	57,0	4 0	0,50	" 1 0 2,42	6,11	6,61		2	58,4	4 9	1,65	" 1 0	6,18	-4,73	
3	59,8	6 2	3,00	" 1 0 2,42	8,52	5,52		3	1 3	7 4	4,35	" 1 0	8,54	4,19	
4	59,3	6,4	2,85	" 1 0 2,42	10,94	8,09		4	1 2	5,4	3,30	" 1 0	10,69	7,39	
5	2 8	9 8	6,30	" 1 0 2,42	13,35	7,05		4	4 3	11 4	7,80	" 1 0	12,85	5,00	
	165 0 12 2	18,7	15,45	" 1 0 2,42	15,77	0,32		5	175 0 12 9	18 4	15,65	" 1 0	16,00	+0,65	
1	160 0 0 0	5 5	2,75	" 1 0 2,48	3,74	-0,99		1	170 0 0 0	8,3	4,15	" 1 0 2,08	3,93	+0,22	
2	57,4	4 5	0,95	" 1 0 2,48	6,22	5,27		2	68,8	6 1	2,45	" 1 0	6,01	-3,56	
3	0 5	7 2	3,85	" 1 0 2,48	8,69	4,84		3	0 0	7,4	3,70	" 1 0	8,10	4,10	
4	0 5	6,8	3,65	" 1 0 2,48	11,17	7,52		3	59,8	6 3	3,05	" 1 0	10,18	7,13	
5	3 7	10,3	7,00	" 1 0 2,48	13,64	6,64		4	3 1	9 8	6,45	" 1 0	12,27	5,82	
	165 0 13 1	18,5	15,80	" 1 0 2,48	16,12	0,32		5	175 0 11,6	18,4	15,00	" 1 0	14,35	+0,65	
1	165 0 0 0	4 2	2,10	" 1 0 0,85	2,42	-0,32		1	170 0 0 0	7 3	3,65	" 1 0 1,86	3,43	+0,22	
2	53,7	0,5	57,10	" 1 0 0,85	3,27	6,17		1	57,7	4,0	0,85	" 1 0	6,29	-4,44	
3	55,7	1,0	58,80	" 1 0 0,85	4,12	5,32		2	0 2	7 1	3,65	" 1 0	7,16	3,51	
4	53,7	59,7	56,70	" 1 0 0,85	4,98	8,28		3	58,7	6,0	2,35	" 1 0	9,02	6,67	
5	55,2	1,7	58,45	" 1 0 0,85	5,83	7,38		4	1 0	8 5	4,75	" 1 0	10,89	6,14	
	170 0 3,0	10,8	6,90	" 1 0 0,85	6,68	+0,22		5	175 0 9 7	17,1	13,40	" 1 0	12,75	+0,65	
1	165 0 0 0	6 0	3,00	" 1 0 0,81	3,92	-0,32		1	175 0 0,0	6 2	3,10	" 1 0 1,80	2,45	+0,65	
2	58,7	4 0	0,35	" 1 0 0,81	4,13	3,78		2	57,4	4 5	0,95	" 1 0 1 0	4,25	-3,30	
3	57,0	3 2	0,10	" 1 0 0,81	4,94	4,84		2	59,8	7 9	3,85	" 1 0 1 0	6,05	2,20	
4	55,0	0 9	57,95	" 1 0 0,81	5,76	7,81		3	59,4	7 5	3,45	" 1 0 1 0	7,86	4,40	
5	66,7	3 0	59,85	" 1 0 0,81	6,57	6,72		4	2 2	9,3	5,75	" 1 0 1 0	9,65	3,90	
	170 0 3 9	11,3	7,60	" 1 0 0,81	7,38	+0,22		5	180 0 8,0	14 9	11,45	" 1 0 1 0	11,45	0,00	
1	165 0 0 0	5 0	2,50	" 1 0 0,71	2,82	-0,32		1	175 0 0,0	7 2	3,60	" 1 0 1 0	2,95	+0,65	
2	58,4	2 6	59,50	" 1 0 0,71	3,53	4,03		1	58,3	4 9	1,60	" 1 0 1 0	4,66	-3,06	
3	56,7	2 3	59,50	" 1 0 0,71	4,24	4,74		2	69,7	6 3	3,00	" 1 0 1 0	6,37	3,37	
4	54,7	0 1	57,40	" 1 0 0,71	4,96	7,56		3	57,6	5 2	1,40	" 1 0 1 0	8,08	6,88	
5	55,9	1 9	58,90	" 1 0 0,71	5,67	6,77		4	0 7	7 0	3,85	" 1 0 1 0	9,79	6,94	
	170 0 3 3	9,9	6,60	" 1 0 0,71	6,38	+0,22		5	180 0 6,7	16 3	11,50	" 1 0 1 0	11,50	0,00	
1	165 0 0 0	7 1	3,55	" 1 0 1 20	3,87	-0,32		1	175 0 0,0	7 4	3,70	" 1 0 1 69	3,05	+0,65	
2	58,7	6 9	2,80	" 1 0 1 20	5,07	2,27		1	58,7	5 6	2,15	" 1 0 1 69	4,74	-2,69	
3	0 0	6,5	3,25	" 1 0 1 20	6,27	3,02		2	0	7 1	3,55	" 1 0 1 69	6,43	2,88	
4	57,8	3 2	0,50	" 1 0 1 20	7,48	6,98		3	57,3	5 3	1,30	" 1 0 1 69	8,12	6,82	
5	59,6	5 7	2,65	" 1 0 1 20	8,68	6,03		4	1 4	8,4	4,90	" 1 0 1 69	9,81	4,91	
	170 0 7 0	13 2	10,10	" 1 0 1 20	9,88	+0,22		5	180 0 7,8	15,2	11,50	" 1 0 1 69	11,50	0,00	

CXCVIII **ERROR OF DIVISION OF EACH DEGREE OF THE MADRAS ALTIMETER**

No.	Reading at Micros A	Mic B	Mean	True \angle	Corrected Mean	Diff. or err. div.	Observer	No.	Reading at Micros A	Mic B	Mean	True \angle	Corrected Mean	Diff. or err. div.	Observer	
1	175 0 0 0	7 0	3 50	2 95	2 95	-0 65		1	175 0 0 0	7 0	3 50	2 85	2 85	-0 65		
2	58 7	5 8	2 25	1 94	1 94	-2 54		2	56 2	3 9	0 06	4 19	4 19	-1 27		
3	0 3	7 4	3 85	2 0	2 0	2 08		3	58 8	5 5	2 15	5 99	5 99	3 81		
4	58 9	6 0	2 15	1 0	1 0	8 67		4	55 7	4 0	5 85	7 66	7 66	7 71		
5	1,6	8 7	5 15	1 1	1 1	10 61		5	180 0 7 1	14 3	10 70	1 0 13	1 0 13	4 98		
	180 0 8 7	16 1	12 55	1 2	1 2	12 00	0 00						16 70	16 70	0 00	

Arranging these several values in a tabular form, we get as follows—

Diameter	Measurement					Mean Error	Diameter	Measurement					Mean Error
	No 1	No 2	No 3	No 4	No 5			No 1	No 2	No 3	No 4	No 5	
0 0	"	"	"	"	"	"	0 0	-0 79	-0 79	-0 79	-0 79	-0 79	-0 70
0-180	0 00	0 00	0 00	0 00	0 00	0 00	40-220	-0 41	-0 41	-0 41	-0 41	-0 41	-0 41
1-181	-3 06	-3 74	-3 63	-2 91	-3 99	-3 47	41-221	5 12	3 10	5 27	4 71	5 39	4 72
2-182	4 56	0 87	4 55	3 72	5 02	4 01	42-222	6 45	5 11	6 55	4 23	5 91	5 66
3-183	7 21	8 96	7 52	6 40	8 35	7 69	43-223	8 28	6 17	6 48	6 30	8 69	7 21
4-184	7 01	8 88	6 59	5 88	6 28	6 92	44-224	4 61	5 23	5 96	5 72	6 29	5 56
5-185	-0 81	-0 81	-0 81	-0 81	-0 81	-0 81	45-225	-0 19	-0 19	-0 19	-0 19	-0 19	-0 19
6-186	1 76	4 02	4 86	4 98	3 93	4 51	46-226	3 69	5 21	4 57	4 41	5 12	4 67
7-187	6 91	7 98	5 20	6 25	1 55	5 26	47-227	3 90	4 99	5 21	6 10	6 51	5 31
8-188	8 10	5 19	7 80	8 06	7 26	7 40	48-228	8 05	6 41	8 09	9 85	9 34	8 45
9-189	7 00	1 09	7 14	7 53	6 08	6 37	49-229	5 31	5 54	5 63	6 66	6 83	5 99
10-190	-0 89	-0 89	-0 89	-0 89	-0 89	-0 89	50-230	-0 41	-0 41	-0 41	-0 41	-0 41	-0 41
11-191	6 19	3 12	7 73	4 21	1 19	4 75	51-231	5 54	4 16	4 28	5 65	4 98	4 92
12-192	6 23	1 90	5 07	5 80	3 85	5 15	52-232	4 66	4 15	4 59	3 58	5 54	4 60
13-193	8 67	6 73	7 61	8 60	6 90	7 08	53-233	8 49	8 10	8 06	6 97	8 11	7 95
14-194	7 27	6 00	5 89	6 06	6 81	6 53	54-234	6 81	7 09	6 72	6 00	7 12	6 75
15-195	-0 07	-0 07	-0 07	-0 07	-0 07	-0 07	55-235	-1 04	-1 04	-1 04	-1 04	-1 04	-1 04
16-196	2 60	3 17	2 95	4 33	3 41	3 35	56-236	4 29	5 05	4 13	6 70	4 81	1 80
17-197	4 28	5 42	5 58	6 74	4 70	5 31	57-237	4 44	5 01	3 77	6 11	5 23	4 11
18-198	7 26	7 07	6 68	8 80	7 44	7 15	58-238	8 49	8 87	6 91	9 97	9 05	8 66
19-199	5 29	5 72	6 14	5 16	6 08	5 51	59-239	6 40	7 94	7 16	6 41	7 13	7 07
20-200	-0 02	-0 02	-0 02	-0 02	-0 02	-0 02	60-240	-1 45	-1 45	-1 45	-1 45	-1 45	-1 45
21-201	5 12	3 62	3 00	2 79	1 51	3 81	61-241	6 17	5 75	6 25	4 76	6 71	6 79
22-202	7 62	3 82	3 48	3 51	5 71	4 81	62-242	7 04	5 45	6 30	5 32	6 62	6 16
23-203	8 37	6 12	6 86	8 08	8 03	7 19	63-243	8 56	8 15	8 70	8 03	7 53	8 70
24-204	6 17	4 62	4 19	6 01	6 90	5 21	64-244	7 23	7 20	7 45	6 84	7 29	7 20
25-205	1 029	1 029	1 029	1 029	1 029	1 029	65-245	-1 55	-1 55	-1 55	-1 55	-1 55	-1 55
26-206	-4 13	-4 56	-3 25	-9 36	2 35	-3 50	66-246	1 86	6 90	7 18	6 73	6 41	6 12
27-207	5 65	5 15	5 54	5 26	2 39	4 82	67-247	6 27	6 80	7 56	7 71	6 37	6 90
28-208	7 31	8 16	8 17	9 46	4 32	7 51	68-248	9 02	9 44	10 23	10 43	9 22	9 67
29-209	6 88	6 59	7 31	7 60	4 81	6 64	69-249	8 78	7 59	7 36	8 31	7 68	7 01
30-210	-0 44	-0 44	-0 44	-0 44	-0 44	-0 44	70-250	-1 89	-1 89	-1 89	-1 89	-1 89	-1 89
31-211	3 41	4 65	3 77	2 58	4 18	3 72	71-251	5 52	6 17	4 98	5 82	4 89	5 48
32-212	3 93	6 86	3 36	4 67	4 12	4 37	72-252	5 25	6 15	6 17	6 60	5 89	5 91
33-213	7 06	8 08	5 69	6 47	7 37	6 91	73-253	8 53	9 68	8 36	10 28	8 89	9 16
34-214	7 08	6 29	6 27	5 90	5 56	6 03	74-254	8 16	8 41	8 20	7 76	8 31	8 17
35-215	-0 95	-0 95	-0 95	-0 95	-0 95	-0 95	75-255	-1 04	-1 04	-1 04	-1 04	-1 04	-1 04
36-216	2 86	3 96	4 36	3 88	4 23	3 86	76-256	5 40	5 09	4 03	5 19	6 18	5 18
37-217	4 47	4 32	6 72	5 71	6 01	5 45	77-257	5 91	6 69	5 42	6 04	5 92	6 00
38-218	8 47	7 42	8 72	8 23	9 48	8 46	78-258	8 83	9 75	7 62	8 10	8 52	8 66
39-219	5 93	6 38	6 38	7 36	7 61	6 71	79-259	6 89	7 75	6 81	7 05	7 01	6 90

ERROR OF DIVISION OF EACH DEGREES OF THE MADRAS MURAL CIRCLE

VOL IX

Diameter	Measurement					Mean Error	Diameter	Measurement					Mean Error	
	No 1	No 2	No 3	No 4	No 5			No 1	No 2	No 3	No 4	No 5		
0—0	"	"	"	"	"	"	0—0	130—310	—0.83	—0.83	—0.83	—0.83	—0.83	
80—260	—0.40	—0.40	—0.40	—0.40	—0.40	—0.40	80—260	131—311	5.76	5.70	6.15	4.07	5.30	5.40
81—261	6.66	4.52	3.94	5.25	4.63	5.00	81—261	132—312	5.13	4.56	5.86	7.40	6.71	5.93
82—262	5.17	4.89	4.48	5.15	4.71	4.88	82—262	133—313	9.46	7.93	9.68	9.34	9.38	9.16
83—263	8.28	8.52	7.48	8.26	8.39	8.19	83—263	134—314	7.43	6.39	8.24	6.82	8.14	7.40
84—264	7.50	6.41	6.97	7.36	7.13	7.08	84—264	135—315	—1.66	—1.66	—1.66	—1.66	—1.66	—1.66
85—265	—0.31	—0.31	—0.31	—0.31	—0.31	—0.31	85—265	136—316	—1.66	—1.66	—1.66	—1.66	—1.66	—1.66
66—266	4.39	3.12	3.94	3.61	5.13	4.02	66—266	136—316	6.80	5.49	5.18	5.48	5.81	5.77
97—267	5.08	4.59	4.58	4.17	5.01	4.69	97—267	137—317	6.86	6.73	7.06	7.16	8.87	6.95
98—268	7.31	6.80	7.71	8.37	8.38	7.71	98—268	138—318	9.29	9.26	10.38	9.58	10.07	9.72
89—269	6.00	6.87	7.80	7.83	7.01	7.10	89—269	139—319	9.09	7.70	8.16	7.26	8.28	8.10
90—270	—0.63	—0.63	—0.63	—0.63	—0.63	—0.63	90—270	140—320	—1.73	—1.73	—1.73	—1.73	—1.73	—1.73
91—271	4.15	4.65	4.75	5.44	3.94	4.59	91—271	141—321	5.15	4.83	6.16	4.68	5.09	5.18
92—272	4.72	6.02	4.92	6.91	5.81	5.68	92—272	142—322	5.18	6.92	5.95	6.69	5.96	6.00
93—273	7.80	9.16	9.10	9.87	9.12	9.07	93—273	143—323	8.05	8.76	8.08	9.34	8.27	8.50
94—274	6.93	8.13	8.03	8.31	6.69	7.62	94—274	144—324	6.13	6.66	6.27	5.85	6.78	6.34
95—275	—0.45	—0.45	—0.45	—0.45	—0.45	—0.15	95—275	145—325	—1.15	—1.15	—1.15	—1.15	—1.15	—1.15
96—276	4.34	3.98	3.89	5.57	3.42	1.24	96—276	146—326	4.86	5.25	4.32	4.58	5.50	4.00
97—277	5.03	4.41	4.68	4.74	2.79	4.33	97—277	147—327	6.01	4.81	5.55	4.76	5.86	5.40
98—278	7.47	7.79	8.67	6.11	6.61	7.33	98—278	148—328	8.51	8.86	8.87	5.95	8.86	8.21
99—279	5.21	6.77	7.86	3.88	5.98	5.84	99—279	149—329	8.27	8.02	7.10	4.78	7.12	7.06
100—280	—0.85	—0.85	—0.85	—0.85	—0.85	—0.85	100—280	150—330	—2.07	—2.07	—2.07	—2.07	—2.07	—2.07
101—281	5.03	4.45	4.92	5.81	3.12	4.07	101—281	151—331	5.20	3.48	5.33	5.66	5.66	5.07
102—282	5.91	6.00	5.24	6.88	4.14	5.43	102—282	152—332	6.09	4.90	7.39	6.65	6.90	6.39
103—283	9.20	8.76	8.61	10.33	8.87	9.15	103—283	153—333	8.92	8.08	9.45	9.75	10.20	9.28
104—284	7.03	7.51	7.84	9.52	7.09	7.80	104—284	154—334	9.50	7.72	8.72	8.84	8.49	8.65
105—285	—0.71	—0.71	—0.71	—0.71	—0.71	—0.71	105—285	155—335	—1.03	—1.03	—1.03	—1.04	—1.00	—1.03
106—286	6.10	5.57	5.47	6.87	6.73	5.79	106—286	156—336	4.68	5.50	5.26	5.52	5.39	5.20
107—287	4.89	6.53	6.58	6.33	6.15	5.90	107—287	157—337	6.43	6.85	6.64	6.96	6.66	6.51
108—288	8.42	8.43	8.63	8.98	8.56	8.58	108—288	158—338	8.44	8.46	8.48	7.35	8.87	8.32
109—289	8.16	6.99	7.24	7.69	7.73	7.51	109—289	159—339	7.74	7.98	7.81	7.20	7.23	7.59
110—290	—0.90	—0.90	—0.90	—0.90	—0.90	—0.90	110—290	160—340	—0.99	—0.99	—0.99	—0.99	—0.99	—0.99
111—291	6.76	5.58	5.73	5.55	5.26	5.78	111—291	161—341	5.91	4.70	5.02	5.61	5.27	5.31
112—292	7.27	6.71	5.66	6.35	5.32	6.26	112—292	162—342	6.43	3.87	4.20	5.52	4.84	4.77
113—293	9.52	10.48	9.93	11.09	9.77	10.16	113—293	163—343	7.83	7.68	8.38	8.09	7.52	7.90
114—294	8.28	9.86	8.61	8.94	8.98	8.93	114—294	164—344	6.97	5.63	6.50	7.05	6.64	6.56
115—295	—1.69	—1.69	—1.69	—1.69	—1.69	—1.69	115—295	165—345	—0.32	—0.32	—0.32	—0.32	—0.32	—0.32
116—296	3.00	5.65	5.03	4.78	5.09	4.71	116—296	166—346	6.17	3.78	4.03	2.27	5.28	4.31
117—297	4.66	5.66	5.87	5.82	6.19	5.64	117—297	167—347	5.32	4.81	4.71	3.02	4.99	4.58
118—298	9.57	10.32	9.87	10.17	9.24	9.83	118—298	168—348	8.28	7.81	7.56	6.98	8.66	7.86
119—299	8.34	8.09	7.01	8.16	9.15	8.16	119—299	169—349	7.38	6.72	6.77	6.03	6.57	6.69
120—300	—1.50	—1.50	—1.50	—1.50	—1.50	—1.50	120—300	170—350	+0.22	+0.22	+0.22	+0.22	+0.22	+0.22
121—301	4.32	4.17	4.03	3.93	4.72	4.23	121—301	171—351	—5.16	—4.11	—4.73	—3.56	—4.44	—4.40
122—302	5.24	5.14	5.51	4.86	5.94	5.34	122—302	172—352	5.89	4.59	4.19	4.40	3.51	4.72
123—303	8.96	8.92	9.05	8.45	9.12	8.88	123—303	173—353	8.23	7.33	7.39	7.13	6.67	7.35
124—304	7.73	8.14	7.88	7.18	7.24	7.63	124—304	174—354	6.42	4.91	5.00	5.82	6.14	6.66
125—305	—0.76	—0.76	—0.76	—0.76	—0.76	—0.76	125—305	175—355	+0.65	+0.65	+0.65	+0.65	+0.65	+0.65
126—306	5.10	4.94	5.00	5.55	4.69	5.06	126—306	176—356	—3.30	—3.06	—2.59	—2.54	—4.87	—3.17
127—307	4.40	4.78	4.60	5.20	3.93	4.68	127—307	177—357	2.20	3.37	2.88	2.88	3.84	3.04
128—308	7.49	7.01	7.09	7.84	6.91	7.27	128—308	178—358	4.40	6.68	6.82	6.22	7.71	6.37
129—309	6.78	6.85	5.84	6.24	5.90	6.32	129—309	179—359	3.90	5.94	4.01	5.46	4.98	5.04

cc ERROR OF DIVISION OF EACH DEGREE OF THE MADRAS MURAL CIRCLE

A mere glance at the above table renders the conviction certain, —that in addition to the unavoidable (casual) errors to which dividing must necessarily be subject from flexure in the cutting tools and apparatus &c —there exists in the Madras Mural Circle a regular and systematic amount of error! That errors of such large amount should exist at all under any circumstances—will be looked upon with astonishment if not discredit by those Gentlemen who were as well as myself invited to inspect the divisions of this instrument in Mr Dollond's work shop in 1826 previously to its being despatched to Madras I recollect meeting the late Captain Kater about this time in London, who asserted 'that the errors of division of the Mural Circle constructed for the Madras Observatory, in no case exceeded one second,' and from a careful examination of several promiscuous divisions —I then had entertained the same opinion but let it be recollect, *how* the examination in question was conducted! the division to be examined was brought to microscope A, and the cross wires of microscope B brought to intersect the opposite division; the circle was now turned through 180° , until the division which before was employed at microscope B was brought to intersect the cross wires of microscope A, when, half the difference between the present and first reading of microscope B, shewed the error of the division at B with respect to that at A Let the same mode of examination be now had recourse to, and precisely the same result will obtain! But instead of employing any given division and the one immediately opposite to it, let the division 0° for instance, be brought to microscope A, and let another microscope be placed opposite to the division 178° or 179° , and then inverting the instrument, the error of division will be sufficiently obvious With a view of satisfying myself of the correctness of the errors above found, I brought 0° to microscope A, and placed a microscope opposite to 181° whereby I might view a division which I knew to be coincident with respect to that which stood at microscope A, thus

Micrscope A	Other Microscope
\circ / "	\circ / "
359 59 46,9	181 0 0,0

Turned the Instrument through 181° , when the readings were

178 69 33,1	180 0 0,0
Difference 181 0 12,8	181 0 0,0

$$\text{err div at } 179^\circ + \text{err div at } 181^\circ = 12,8$$

I then removed the microscope to 182° , when the following wa. read off

\circ / "	\circ / "
359 59 25,7	182 0 0,0

Turned the Instrument through 182° , when the readings were

177 59 9,1	360 0 0,0
Difference 182 0 16,6	182 0 0,0

$$\text{err div at } 178^\circ + \text{err div at } 182^\circ = 16,6$$

agreing in both cases as nearly with the errors set down in the table, as can be expected from a single reading, and that too encumbered with error of excentricity.

ERROR OF EACH DIVISION OF THE MADRAS MURAL CIRCLE

cc1

Mr Dollond has not I believe made public the means he employed for effecting the division of this Instrument, but it appears more than probable, that this systematic error—which is as follows,

<i>For the Diameters</i>	<i>Error of Division</i>
° ° ° °	"
0—180, 5—185, &c	— 0,78
1—181, 6—186, &c	— 4,72
2—182, 7—187, &c	— 5,33
3—183, 8—188, &c	— 8,25
4—184, 9—189, &c	— 6,91

has arisen from the employment of a tangent screw for setting off the divisions intermediate between $0^\circ - 5^\circ$, $5^\circ - 10^\circ$ &c in which—an improper allowance has been made for the difference between the length of the tangent and the arc had such a method been employed, it is reasonable to suppose, that the centre of the screw would be set opposite to the centre of the divisions nearly, in which case the difference between the tangent of $2^\circ 30'$ and the arc of the same ($= 5'',8$), would enter, but as the errors arrive at a maximum at about $3^\circ 20'$, $8^\circ 20'$, &c in which a much larger difference is found, this single circumstance alone would not fully account for the discrepancies met with

I now placed two pairs of cross wires in the 5 feet Achromatic, at a distance of 15 minutes apart, and employing the errors found for each degree as set down in the table, (in a manner similar to that already practised for the larger divisions) found the errors of the divisions terminating the diameters $0^\circ 15 - 180^\circ 15'$, $0^\circ 30' - 180^\circ 30'$, &c as set down in the following table (column "No 1"), but these readings commencing at 0° and terminating at 360° necessarily pass twice over the same divisions, hence the column "No 2" On comparing these two columns, a tolerable degree of accuracy in most cases appeared to have been attained, but occasionally—discrepancies occurring beyond the probable limits of error of bisecting and reading, I was induced in these cases to institute a re examination, as set down in column "No 3,"—and hence the column "Mean" was eventually obtained

I now placed the two horizontal wires of the circle telescope nearly 5' apart, and with reference to a pair of cross lines in the five feet collimator, repeated the measures of their distance on every division of the circle twice over, when—employing the errors at $0^\circ 15' - 180^\circ 15'$, $0^\circ 30' - 180^\circ 30'$, &c just arrived at, the errors the intermediate diameters were at length obtained, in a few cases a re examination has been thought necessary and occasionally a result has been rejected, but due notice of this is given in the table

ERROR OF EACH DIVISION OF THE MADRAS MURAI CIRCLE

Diam	No 1	No 2	No 3	Mean	Diam	No 1	No 2	No 3	Mean	Diam	No 1	No 2	No 3	Mean	
0	0,00	0,00	0,00	0,00	4	181	0	0	0	8	185	0	0	0	-7,10
5	-0,20	-0,25	-0,22	-0,22	5	-7,09	-7,82	-7,45	-7,08	5	-7,08	-6,35	-6,71	6,55	
10	-0,50	-0,51	-0,45	-0,45	10	7,11	7,03	7,07	6,46	10	6,46	6,65	6,55	6,10	
15	+1,27	-1,07	+0,01	-0,07	15	5,97	6,99	6,18	6,83	15	6,83	6,59	-5,79	6,11	
20	-0,61	1,07	-0,79	-0,79	20	5,70	5,20	5,15	5,42	20	5,42	6,87	6,12	6,12	
25	0,76	1,38	1,07	1,07	25	4,93	4,63	4,73	5,39	25	5,39	6,84	6,52	6,52	
30	1,06	2,19	1,09	1,15	30	4,26	3,27	3,76	5,81	30	5,81	7,61	6,13	6,80	
35	1,59	3,29	1,55	2,14	35	3,38	3,11	3,26	7,61	35	7,61	7,91	7,87	7,87	
40	0,92	2,67	1,85	1,81	40	2,99	2,27	2,63	7,98	40	7,98	7,98	7,92	7,92	
45	2,29	2,15	2,05	2,26	45	1,91	1,49	1,70	8,31	45	8,31	8,39	7,03	7,26	
50	2,23	2,68	2,15	2,15	50	0,69	1,08	0,83	7,33	50	7,33	7,30	7,35	7,35	
55	2,85	3,46	3,15	3,15	55	0,43	0,67	0,55	7,17	55	7,17	7,32	7,32	7,32	
1	181	0	181	0	5	185	0	9	189	0	9	189	0	6,37	
5	-3,88	-4,08	-3,47	-3,47	5	-0,94	-0,97	0,95	5	-6,14	-6,14	-6,23	-6,18	5,67	
10	4,61	3,94	4,29	4,29	10	2,02	1,79	1,90	10	5,90	5,90	5,45	5,67	4,29	
15	5,20	4,00	4,60	4,60	15	3,00	3,12	-3,33	15	5,39	5,39	5,85	-5,76	4,51	
20	6,10	4,77	4,93	4,93	20	2,92	3,08	3,00	20	3,60	3,60	3,62	3,62	4,16	
25	4,61	4,20	4,45	4,45	25	3,31	3,86	3,59	25	4,38	5,08	4,16	4,51	4,15	
30	5,58	4,55	5,06	5,06	30	2,83	3,11	3,61	3,19	30	4,15	1,78	4,53	4,15	
35	5,41	5,09	5,26	5,26	35	3,47	3,18	3,32	36	3,71	3,71	3,35	3,51	3,51	
40	5,38	4,83	5,11	5,11	40	3,95	2,83	3,10	10	2,88	2,88	2,61	2,74	2,74	
45	5,26	4,67	4,96	4,96	45	1,67	4,15	4,08	45	1,12	2,96	2,13	2,17	2,17	
50	1,97	5,08	5,02	5,02	50	1,61	4,20	4,10	50	1,03	1,92	1,11	1,11	1,33	
55	4,93	4,76	4,84	4,84	55	1,16	3,84	4,00	5	1,18	1,48				
2	182	0	182	0	6	186	0	10	190	0	10	190	0	-0,89	
5	-4,45	-4,11	-4,04	-4,04	5	-5,13	-6,14	-6,14	6	-1,28	-1,28	-1,06	-1,17		
10	3,67	3,87	3,77	3,77	10	6,00	6,37	6,18	10	1,51	1,51	1,83	1,67		
15	4,03	4,04	4,03	4,03	15	6,62	4,68	-5,53	15	1,39	1,39	0,71	1,03		
20	4,41	5,42	4,93	4,93	20	6,07	6,05	6,06	20	1,53	1,53	2,22	1,87		
25	4,69	5,71	5,20	5,20	25	6,97	6,64	6,30	25	2,07	2,13	2,25	2,25		
30	6,31	6,29	6,10	6,10	30	5,53	5,96	6,59	30	1,61	1,61	2,77	3,20		
35	5,69	7,02	6,15	6,15	35	5,81	6,32	6,08	35	3,50	3,50	4,51	4,01		
40	5,78	6,50	6,11	6,11	40	5,50	6,31	6,90	40	3,00	3,00	3,02	3,01		
45	6,30	5,74	6,02	6,02	45	6,30	5,08	5,76	45	2,55	2,55	3,33	2,91		
50	7,01	*8,96	-7,16	7,08	50	5,59	5,11	5,36	50	3,46	3,46	3,39	3,12		
55	8,50	7,75	6,90	7,72	55	5,17	5,53	5,35	55	4,07	4,16	4,11			
3	183	0	183	0	7	187	0	11	191	0	11	191	0	-4,75	
5	-7,19	-7,33	-7,69	-7,69	5	-4,91	-5,20	-5,26	5	-6,04	-6,04	-4,33	4,68		
10	6,54	6,61	6,28	6,28	10	6,46	4,73	5,10	10	4,88	4,88	4,62	4,15		
15	6,21	6,58	6,39	6,39	15	4,62	4,61	4,61	15	4,80	4,80	4,66	-5,20	4,91	
20	6,64	6,10	6,17	6,17	20	5,10	5,25	5,17	20	5,03	5,03	4,89	4,96		
25	5,61	5,72	5,68	5,68	25	5,71	5,70	5,75	25	4,70	4,70	5,22	4,96		
30	7,08	5,98	6,53	6,53	30	5,48	6,55	6,02	30	4,77	5,27	5,92	5,32		
35	7,11	7,14	7,13	7,13	35	5,86	5,51	5,68	35	5,78	5,78	5,91	5,84		
40	7,34	6,76	7,05	7,05	40	6,05	6,60	6,32	40	5,89	5,89	5,89	5,89		
45	8,75	7,77	8,26	8,26	45	5,19	5,70	5,44	45	5,95	5,95	5,19	5,76		
50	8,41	7,01	8,17	8,17	50	6,86	6,62	6,71	50	4,84	4,84	5,63	5,23		
55	7,80	7,06	7,43	7,43	55	6,18	6,25	6,36	55	4,77	5,34	5,34	5,05		
4	184	0	184	0	8	188	0	12	192	0	12	192	0	5,15	

* Omitted

ERROR OF EACH DIVISION OF THE MADRAS MURAL CIRCLE

ccml

Diam	No 1	No 2	No 3	Mean	Diam	No 1	No 2	No 3	Mean	Diam	No 1	No 2	No 3	Mean	
12 } 0		"	"	"	16 }	0	"	"	"	20 }	"	"	"	"	
192 } 0	-5 15	196 } 0				-3 35	200 } 0							-0 02	
5	-1 48	-4 41	4 41	5	5	-3 05	-4 59	3 82	5	+0 86	+0 07	+0 46			
10	4 20	4 83	4 04	10	10	3 85	3 99	3 92	10	+0 44	+0 26	+0 35			
15	4 64	4 34	4 49	15	15	3 37	3 52	3 14	15	+1 11	-0 48	-0 32	+0 10		
20	4 52	4 57	4 60	20	116	3 69		3 92	20	-0 64	1 04		-0 84		
25	5 03	5 25	5 15	25	4 33	3 94		± 13	25	1 08	0 78		0 93		
30	5 58	5 58	5 58	30	4 50	4 39		4 49	30	1 66	2 21	1 72	1 87		
35	6 30	6 57	5 93	35	5 21	5 19		6 36	35	2 13	1 49		1 81		
40	6 62	5 86	6 24	40	5 38	5 84		5 61	40	2 79	2 52		2 65		
45	5 87	6 72	6 29	45	6 22	5 27		5 71	45	1 50	1 85	1 96	1 80		
50	6 63	7 68	7 15	50	5 37	5 61		5 49	50	2 00	3 07	1 52	2 20		
55	6 72	7 37	7 05	55	4 85	5 13		4 99	55	2 21	3 92	3 59	3 21		
13 } 0					17 }	0				21 }					
193 } 0	-7 68	197 } 0				-5 34	201 } 0							-3 81	
5	-7 63	-6 79	7 16	5	-5 74	-5 04	-6 37	5 72	5	-4 01	-4 80		4 40		
10	6 91	7 52	7 21	10	3 51†	4 70	5 68	5 23	10	4 16	1 08		4 12		
15	6 35	6 75	6 55	15	3 86†	5 53	5 95	5 74	15	3 71	4 73		4 22		
20	6 67	5 64	6 15	20	6 11	5 34		5 72	20	4 13	4 12		4 13		
25	6 79	6 62	6 65	25	6 63	6 25		6 44	25	4 94	4 96		4 96		
30	7 19	7 24	7 21	30	5 49	7 57	6 01	6 36	30	4 01	5 01		4 51		
35	7 10	7 78	7 44	35	6 06	8 01	6 38	6 82	35	5 60	5 43		5 61		
40	6 79	7 10	7 01	40	5 81	7 56	6 64	6 67	40	5 59	5 95		5 77		
45	7 79	7 14	7 16	45	5 91	7 96	6 57	6 81	45	5 96	5 58		5 77		
50	7 00	7 41	7 20	50	7 44	6 82		7 13	50	5 23	6 14		5 68		
55	6 69	6 61	6 65	55	6 77	6 79		6 78	55	4 74	6 85		6 20		
11 } 0					18 }	0				22 }					
194 } 0	-6 53	198 } 0				-7 45	202 } 0							-4 81	
5	-6 77	-5 92	6 34	5	-6 50	-7 33	6 91	5	-3 41	-4 39		3 90			
10	5 26	5 41	5 33	10	6 65	7 61	7 13	10	3 77	4 18		3 97			
15	4 89	5 82	5 35	15	6 31	5 98	6 14	15	2 90†	4 68	-4 56	4 62			
20	3 91	4 36	4 13	20	5 91	6 21	6 06	20	4 46	3 77		4 11			
25	3 63	3 33	3 48	25	6 73	6 17	6 45	25	4 45	3 72		4 08			
30	2 45	2 86	2 65	30	6 29	6 70	6 49	30	4 50	5 50		6 30	5 43		
35	1 66	1 73	1 70	35	7 19	6 89	7 04	35	6 87	7 25	6 31	6 81			
40	0 58	1 61	1 10	40	6 40	6 44	6 46	40	5 86	6 57	6 00	6 14			
45	0 56	1 31	0 95	45	6 56	5 92	6 24	45	6 94	5 62	5 20	5 59			
50	0 97	0 12	0 61	50	6 31	6 04	6 17	50	6 84	6 21		6 52			
55	1 19	+0 01	0 59	55	5 18	4 94	5 06	55	7 04	6 62		6 78			
15 } 0					19 }	0				23 }					
195 } 0	-0 07	199 } 0				-5 54	203 } 0							-7 49	
5	-0 02	+0 69	+0 33	5	-4 10	-5 48	4 70	5	-7 66	-7 23		7 44			
10	1 03	-0 05	-0 01	10	4 46	4 92	4 69	10	7 31	6 97		7 14			
15	-0 03	+1 00	-0 15*	15	1 53	4 09	4 31	15	7 31	6 18		6 75			
20	1 02	1 019†	1 00	-1 01	20	4 68	3 98	4 33	20	6 67	6 70		6 68		
25	1 97	1 024†	1 08	1 97	25	3 00	3 11	3 06	25	6 64	6 86		6 65		
30	3 98	-1 83	3 26*	3 16	30	3 03	2 14	2 68	30	5 89	6 05		5 97		
35	3 88	3 13	3 51	35	1 94	1 56	1 75	35	6 38	6 67		6 62			
40	3 25	3 00	3 12	40	2 20	1 39	1 79	40	6 99	6 98		6 68			
45	3 69	1 87	2 62*	45	1 22	1 53	1 37	45	6 46	6 42		6 44			
50	2 80	3 32	3 06	50	2 02	0 98	1 50	50	5 94	7 46	-6 69	6 70			
55	2 08	3 26	3 12	55	0 42	0 55	0 49	55	5 14	5 88	6 19	5 74			
16 } 0					20 }	0				24 }				6 24	
196 } 0					200 }	0				204 }					

* Mean of 5 measures

† Omitted

ERROR OF EACH DIVISION OF THE MADRAS MURAL CIRCLE

Diam	No 1	No 2	No 3	Mean	Diam	No 1	No 2	No 3	Mean	Diam	No 1	No 2	No 3	Mean
24 } 0				"	28 } 0				"	32 } 0				"
204 } 0	-5.18	-4.72		-5.21	208 } 0	5	-7.68	-7.26	7.47	32 } 0	-4.30	-4.32		-4.37
5	4.07	4.11		4.09	10	7.32	6.69	7.01	10	4.28	4.01		4.15	
10	3.94	2.59	-3.77	3.40	15	6.66	7.66	7.16	15	4.32	3.70		4.01	
15	2.82	3.87		3.15	20	7.87	6.70	7.28	20	5.05	4.68		4.81	
20	3.11	2.69		2.91	25	8.13	7.34	7.74	25	4.53	4.39		4.46	
25	2.60	0.40	2.40	1.80	30	8.01	7.93	7.98	30	5.84	5.08		5.21	
30	1.29	1.97		1.61	35	8.06	8.62	8.34	35	5.20	5.89		5.54	
35	1.03	0.70		0.91	40	7.49	8.35	7.92	40	4.93	5.82		5.37	
40	0.85	0.40	0.88	0.71	45	7.81	7.66	7.68	45	6.80	5.42		5.86	
45	0.02	0.16		0.24	50	8.64	7.81	8.22	50	6.71	6.13		6.12	
50	1.36	0.51		0.07	55	7.36	7.09	7.22	55	6.46	6.04		6.25	
25 } 0				"	29 } 0				"	33 } 0				"
205 } 0	+0.88	-0.22		+0.29	209 } 0	5	-6.36	-5.53	5.94	33 } 0	-6.38	-6.63		-6.91
5	+0.07	-1.27		+0.33	10	6.73	6.27	6.50	10	5.75	5.49		5.61	
10	-1.07	+0.22	-0.45	0.43	15	4.48	5.53	5.01	15	6.39	4.51	-5.39	5.41	
15	+0.30	-1.10		0.40	20	4.22	4.76	4.49	20	6.04	5.82		5.93	
20	-0.92	1.27		1.09	25	3.62	4.47	4.05	25	6.01	5.93		5.97	
25	2.37	0.45	1.20	1.34	30	3.16	3.61	3.38	30	6.90	6.16	6.57	6.54	
30	1.52	2.87	2.56	2.32	35	2.52	2.66	2.59	35	6.74	7.29		7.01	
35	1.70	2.20	2.12	2.01	40	2.32	1.68	2.00	40	7.19	6.70		6.99	
40	1.68	2.57	1.70	1.98	45	1.90	1.00	1.46	45	7.66	6.42	8.25	7.41	
45	2.25	2.73		2.49	50	1.20	0.50	0.85	50	8.00	7.61		7.75	
50	2.07	3.28		2.67	55	0.89	0.29	0.59	55	6.81	6.42		6.61	
26 } 0				"	30 } 0				"	34 } 0				"
206 } 0	-3.77	-4.65		-3.59	210 } 0	5	-0.02	-0.25	0.13	34 } 0	-5.61	-5.77		-6.03
5	3.90	4.31		4.21	10	0.40	0.26	0.38	10	5.59	5.36		5.47	
10	3.77	4.28		4.02	15	0.45	0.40	0.42	15	4.40	5.58	-5.35	5.11	
15	4.83	4.31		4.57	20	0.78	1.13	0.95	20	4.27	3.50		3.88	
20	4.49	4.00		4.25	25	1.09	1.79	1.41	25	4.13	3.19		3.66	
25	4.17	4.51		4.34	30	0.81	1.90	1.36	30	2.07	3.68	2.12	2.69	
30	5.09	4.97		5.03	35	1.64	1.61	1.64	35	2.44	2.66		2.60	
35	4.48	5.15		4.81	40	1.58	1.94	1.76	40	1.24	2.08		1.66	
40	4.08	5.39		4.73	45	1.46	1.01	1.23	45	2.13	1.94	1.63	1.90	
45	5.28	4.86		5.07	50	1.88	1.74	1.81	50	2.35	1.07		1.71	
50	4.37	4.39		4.38	55	2.89	2.54	2.71	55	1.05	1.48		1.26	
27 } 0				"	31 } 0				"	35 } 0				"
207 } 0	-4.66	-3.61	-4.14	4.14	211 } 0	5	-4.17	-3.76	3.96	35 } 0	-1.42	-0.82	-1.34	-0.95
5	3.65	3.56	3.81	3.67	10	3.91	4.03	3.97	10	2.05	0.39	1.13	1.19	
10	4.13	4.06		4.09	15	2.90	4.76	-4.18	4.05	15	0.88	1.78		1.33
15	3.52	3.44	5.25	4.07	20	3.54	4.44	3.99	20	2.18	2.03		2.10	
20	4.05	4.83	4.91	4.60	25	3.83	3.39	3.61	25	2.28	1.43		1.85	
25	6.41	5.82		6.12	30	3.24	4.40	3.98	30	1.71	2.86		2.28	
30	6.01	6.12		6.06	35	3.70	3.82	3.76	35	1.92	3.53	3.33	2.93	
35	5.80	6.38		5.56	40	3.58	3.42	3.50	40	3.10	2.03	3.18	2.77	
40	4.90	6.58		5.24	45	3.88	3.58	5.01	4.16	4.5	2.93	3.84	3.38	
45	5.94	6.69		6.31	50	5.11	4.21	4.66	50	3.09	2.57	3.12	2.93	
50	5.94	6.69		7.54	55	4.76	4.01	4.38	55	4.10	3.71	4.62	4.14	
28 } 0				"	32 } 0				"	36 } 0				"
208 } 0				"	212 } 0				"	216 } 0				"

ERROR OF EACH DIVISION OF THE MADRAS MORAL CYCLE

xxv

Diam	No 1	No 2	No 3	Mean	Diam	No 1	No 2	No 3	Mean	Diam	No 1	No 2	No 3	Mean
36} 0 216}	—3,95	—4,11		—3,86	40} 0 220}	—0,12	—1,30	—0,80	—0,79	41} 0 224}	—5,70	—5,30		—5,60
5	5,20	4,97		4,04	5	—0,78	0,77	0,67	0,72	5	5,55	4,85		5,53
10	3,88	6,23		4,61	10	+0,63	0,96	0,60	0,76	10	4,60	5,10		5,10
15	1,28	5,08		4,08	20	0,99	1,14		1,07	20	1,36	4,23		4,30
20	4,86	5,96		5,41	25	1,30	1,10		1,35	25	3,53	3,95		3,73
25	5,75	6,23		5,90	30	2,05	2,88	1,86	2,26	30	2,25	3,00	3,38	2,88
30	5,73	5,96		5,84	35	2,96	3,40		3,18	35	*0,16	1,80	2,65	2,22
35	5,12	5,68		5,66	40	4,00	3,26		3,62	10	1,64	2,33	2,13	2,10
40	6,83	5,79		6,31	45	3,64	3,00	4,12	3,59	45	0,69	1,71	1,66	1,26
45	1,61	5,71	—5,83	5,36	50	4,60	3,28		3,04	50	0,91	1,43		1,17
50	5,25	5,26	5,01	5,66	55	5,06	4,13		4,69	55	1,20	1,26		1,23
55	4,61													
37} 0 217}	—4,54	—5,11		—5,45	41} 0 221}	—4,67	—4,30		—4,72	45} 0 225}	+0,31	—0,01		—0,19
5	4,97	5,10		4,97	5	5,41	5,53		4,48	5	0,47	0,52		+0,16
10	4,97	5,23		5,10	10	5,41	5,53		5,47	10	—0,47	0,52		—0,40
15	4,68	4,12		4,55	15	4,84	5,28	—6,52	5,55	15	0,17	0,81	—1,20	0,73
20	5,49	5,38		5,44	20	6,46	6,13		6,70	20	1,34	1,72		1,63
25	6,27	5,91		6,09	25	6,12	6,71		6,91	25	1,84	2,00		1,92
30	6,96	5,64		6,30	30	6,21	6,14	6,66	6,44	30	1,85	3,48	1,38	2,24
35	6,30	6,15		6,42	35	5,94	6,09		6,01	35	3,02	2,88		2,95
40	7,26	7,68		7,17	40	6,08	6,20		6,11	40	2,95	2,78		2,86
45	7,16	6,67		7,07	45	5,48	6,45	6,81	6,08	45	2,94	4,80	2,66	3,47
50	8,41	8,14		8,27	50	4,99	5,69		5,44	50	3,72	4,46		4,00
55	8,51	7,60		8,01	55	3,25	5,52		5,38	55	4,87	4,79		4,58
38} 0 218}	—7,52	—7,49		—8,46	42} 0 222}	—5,55	—4,84		—5,66	46} 0 226}	—5,06	—5,18		—4,07
5	7,50	7,60		7,60	5	5,55	5,32		5,10	5	—5,06	—5,18		5,09
10	6,44	7,32		6,88	10	4,90	5,32		6,11	10	5,35	5,48		5,11
15	6,91	7,52		7,21	15	4,02	4,97	—3,61	4,20	15	5,37	6,90	—6,14	6,14
20	7,31	*6,22	—7,52	7,41	20	3,38	4,80	4,49	4,92	20	6,06	5,78	5,09	5,94
25	7,41	*5,63	7,58	7,50	25	4,11	4,68	5,68	4,78	25	4,74	5,42	5,45	5,20
30	7,81	7,88		7,69	30	6,68	4,93	3,16	4,92	30	5,48	6,03	6,01	5,71
35	8,42	8,22		8,32	35	6,15	5,16		5,66	35	0,71	5,33		6,02
40	7,70	7,80		7,75	40	5,24	5,24		5,24	40	5,97	6,20		6,08
45	6,96	8,20		7,68	45	6,09	5,33	4,40	6,27	45	6,83	5,96	6,03	6,27
50	7,63	7,37		7,60	50	*4,55	6,05	6,64	6,84	50	5,78	5,57		5,67
55	6,73	6,42		6,57	55	*5,72	6,18	6,81	6,49	55	6,13	4,58		4,85
39} 0 219}	—6,80	—6,50		—6,71	43} 0 223}	—6,08	—6,41		—7,24	47} 0 227}	—4,98	—5,10		—5,34
5	6,70	6,70		6,18	5	6,08	6,41		6,70	10	4,52	5,30		4,94
10	5,02	5,38	—5,62	5,31	10	6,01	5,85		6,38	15	4,89	5,39	—4,07	4,76
15	4,92	1,51		4,71	20	5,69	6,11		6,09	20	5,48	5,13		5,30
20	4,46	4,38		4,43	25	5,35	5,43		5,90	25	5,66	4,95		5,30
25	3,63	5,80	4,08	4,50	30	5,53	5,20		5,39	30	5,14	6,80	6,00	6,38
30	2,97	2,98		2,97	35	6,95	6,51		5,86	35	0,76	6,44	6,88	6,36
35	2,25	2,30		2,27	40	6,53	7,21		6,73	40	7,89	7,80	6,87	7,42
40	2,38	2,97	1,64	2,33	45	7,40	7,13		6,87	45	6,40	5,52	6,83	6,92
45	0,77	1,78	0,49	1,01	50	6,77	6,91		7,20	50	7,57	7,86	6,83	7,71
50	0,16	2,19	0,86	1,10	55	6,84	6,11		6,84	55	6,76	7,33		7,04
40} 0 220}			0,79		44} 0 224}				6,47	48} 6 228}				8,45
									5,66					

* Omitted

ERROR OF EACH DIVISION OF THE MADRAS MURAL CIRCLE

Diam	No 1	No 2	No 3	Mean	Diam	No 1	No 2	No 3	Mean	Diam	No 1	No 2	No 3	Mean
48} 0 228} 0	'				52} 0 232} 0	'				56} 0 236} 0	'			
5	-8.32	-7.35		-8.45	5	-3.93	-4.15		-4.50	5	-4.53	-5.02		-4.80
10	7.45	7.21		7.33	10	3.15	3.65		3.40	10	4.87	5.34		4.77
15	7.65	6.96		7.31	15	4.01	3.73	-3.80	3.83	15	4.03	4.53	-4.83	4.16
20	7.45	7.18		7.31	20	4.71	4.47	4.19	4.57	20	4.66	4.81		4.73
25	7.21	6.61		6.92	25	1.84	4.40	4.93	4.71	25	3.67	4.12		4.14
30	7.25	7.52		7.38	30	6.53	6.07	6.05	6.22	30	3.56	4.51	4.77	4.38
35	7.27	7.13		7.35	35	6.75	7.00		6.87	35	4.15	4.16		4.30
40	7.60	7.38		7.49	40	6.62	6.72		6.67	40	4.88	4.39		4.63
45	7.60	7.88		7.71	45	5.79	7.21	7.26	6.75	45	4.19	4.53	4.96	4.66
50	6.90	7.19		7.04	50	7.80	7.51		7.65	50	5.17	4.39		4.78
55	6.61	6.91		6.29	55	7.60	7.73		7.65	55	4.44	4.12		4.28
49} 0 229} 0	'				53} 0 233} 0	'			-7.95	57} 0 237} 0	'			-4.51
5	-6.13	-6.39		-5.29	5	7.69	-7.72		7.70	5	-5.46	-3.26	-4.03	4.25
10	1.96	5.69		5.32	10	7.51	8.41		7.97	10	4.87	3.41	3.20	3.83
15	2.96	5.08	-4.88	4.14	15	7.00	6.83	-8.55	7.16	15	3.77	2.49	4.75	3.67
20	3.66	3.90		3.76	20	7.15	8.15		7.40	20	5.37	5.36	4.31	5.01
25	3.11	3.20		3.17	25	7.18	8.13		7.80	25	5.17	5.85	5.09	5.44
30	2.58	1.62	2.73	2.31	30	6.35	8.77	8.90	8.01	30	5.08	4.63	7.33	5.68
35	1.97	1.96		1.97	35	8.30	8.16		8.38	35	8.30	6.84		6.57
40	2.08	1.51		1.70	40	8.33	9.11		8.72	40	6.07	4.80		6.78
45	1.70	1.17	0.87	1.26	45	7.20	8.91	9.16	8.12	45	5.90	7.82	7.02	6.91
50	1.40	0.10		0.90	50	7.63	8.20		7.91	50	7.59	7.09		7.34
55	1.20	0.30		0.75	55	7.21	7.01		7.12	55	7.97	7.17		7.57
50} 0 230} 0	'				54} 0 234} 0	'			-6.75	58} 0 238} 0	'			-8.66
5	-0.88	-0.96		-0.41	5	6.42	-6.08		6.25	5	-7.12	-7.86		7.19
10	1.45	1.76		1.60	10	5.88	0.08		5.97	10	7.29	7.21		7.25
15	2.22	1.42	-1.21	1.62	15	5.16	6.33	-6.32	6.04	15	6.96	8.34	-6.63	7.31
20	2.57	2.38		2.47	20	6.31	6.64		5.97	20	7.14	7.52		7.33
25	2.60	2.39		2.50	25	4.63	4.79		4.71	25	7.88	7.18		7.53
30	3.41	1.78	2.16	2.56	30	3.12	4.91	1.20	3.94	30	7.27	7.75	7.41	7.18
35	3.19	3.09		3.20	35	2.86	9.95		2.90	35	7.71	8.09		7.00
40	3.72	2.77		3.21	40	2.12	3.21		2.81	10	7.84	8.46		8.15
45	4.25	2.10	3.36	3.21	45	1.78	3.10	2.87	2.69	15	8.57	7.64	7.89	8.03
50	3.76	3.03		4.60	50	1.7	1.85		1.19	50	7.37	8.48		7.92
55	4.74	1.39		4.80	55	1.16	1.57		1.51	55	7.02	7.38		7.20
51} 0 231} 0	'				55} 0 235} 0	'			-1.04	59} 0 239} 0	'			-7.07
5	-3.89	-1.62		-4.02	5	-2.27	-0.17	-0.91	1.13	5	-6.18	-6.79		6.48
10	4.20	4.77		4.25	10	2.65	0.68	0.91	1.41	10	5.63	5.91		5.77
15	5.21	1.32	-5.26	4.93	15	1.82	0.95	1.41	1.23	15	4.03	5.94	-4.64	4.88
20	5.29	1.90		5.09	20	2.22	1.23	1.11	1.52	20	4.79	4.01		4.40
25	1.66	5.13		4.89	25	1.85	2.23	1.10	1.86	25	4.06	8.29		3.67
30	4.56	5.62	5.16	5.11	30	1.00	1.35	3.13	1.83	30	2.74	4.26	2.21	3.07
35	1.91	5.39		5.16	35	3.31	3.81	2.05	3.07	35	2.28	2.19		2.24
40	5.21	1.71		4.96	40	2.92	2.73	3.00	2.83	40	2.34	1.32		1.83
45	5.76	1.96	3.95	1.89	45	3.18	3.00	3.71	3.40	45	0.65	1.78	1.78	1.10
50	1.54	4.01		4.27	50	3.85	4.28		4.06	50	1.39	1.45		1.12
55	1.61	1.78		4.71	55	4.10	4.27		4.18	55	0.76	1.75		1.26
52} 0 232} 0	'				56} 0 236} 0	'			4.80	60} 0 240} 0	'			1.45

ERROR OF EACH DIVISION OF THE MADRAS MURAL CIRCLE

CCVII

Diam	No 1	No 2	No 3	Mean	Diam	No 1	No 2	No 3	Mean	Diam	No 1	No 2	No 3	Mean
60} 0 240} 0					64} 0 244} 0					68} 0 248} 0				
5	-2.57	-1.30		-1.45	5	-7.52	-7.20		-7.21	5	-7.70	-8.58	-7.62	-9.67
10	2.54	1.70		1.94	10	6.74	6.76		7.36	10	6.98	8.60	8.67	8.08
15	2.58	1.80		2.12	15	5.85	5.26	-6.77	6.76	15	8.52	8.86	8.60	8.66
20	4.16	2.96	-3.42	3.51	20	5.67	5.98		5.32	20	7.37	6.71	7.39	7.16
25	3.50	2.86	3.13	3.16	25	5.48	5.00		5.24	25	7.79	8.41	8.12	8.11
30	4.12	4.09		4.10	30	4.95	3.82	6.56	4.77	30	9.18	7.81	8.98	8.66
35	4.84	4.61		4.72	35	4.19	4.24		4.21	35	9.46	9.44		9.45
40	3.93	4.47		4.20	40	3.76	3.86		3.81	40	9.46	9.22		9.34
45	4.95	4.09		4.52	45	2.90	2.28	3.62	3.03	45	10.48	8.11	9.76	9.45
50	5.74	4.21	5.19	5.05	50	3.62	2.52		3.07	50	9.10	10.13		9.61
55	6.96	4.80	4.97	5.24	55	2.46	1.81		2.13	55	8.19	9.01		8.60
61} 0 241} 0					65} 0 245} 0					69} 0 249} 0				
5	5.95	5.50		5.72	5	-2.11	-2.20		2.16	5	-7.48	-7.91		7.70
10	5.60	6.31		5.95	10	1.97	1.19		1.58	10	7.07	7.88		7.47
15	6.19	5.45		5.82	15	1.08	2.18		1.63	15	7.00	6.95		6.97
20	6.90	6.28		6.59	20	2.46	1.99		2.23	20	5.99	7.57	-5.49	6.35
25	6.03	6.65		6.34	25	3.99	2.60		3.30	25	5.17	5.76	4.51	5.15
30	6.90	6.15		6.52	30	4.21	4.21		4.21	30	5.07	5.04		5.05
35	7.06	7.57		7.31	35	4.03	4.38		4.21	35	3.76	2.88	2.98	3.21
40	6.41	7.67		7.05	40	4.01	4.81		4.41	40	3.82	2.40	2.58	2.95
45	6.70	5.85		6.27	45	3.79	5.29		4.54	45	4.33	3.09		3.73
50	6.26	6.96		6.61	50	4.87	5.05		4.96	50	3.05	4.33		3.89
55	5.66	6.31		5.98	55	3.26	6.26		5.75	55	1.73	2.89		2.30
62} 0 242} 0					60} 0 240} 0					70} 0 250} 0				
5	5.95	-5.41		5.68	5	-6.44	-7.54		6.99	5	-1.06	-2.08		1.82
10	4.79	5.27		5.03	10	7.16	7.51		7.33	10	2.04	3.27		2.66
15	5.29	5.08		5.18	15	6.81	7.46		7.13	15	2.12	3.11	-2.59	2.62
20	5.58	6.44		6.01	20	7.84	7.94	-6.21	7.33	20	3.40	3.72		3.66
25	5.67	6.65		6.11	25	6.80	7.20	6.38	6.63	25	3.37	3.91		3.64
30	5.82	7.31		6.56	30	7.56	7.56		7.56	30	4.01	3.63	5.14	1.26
35	6.36	5.92		6.14	35	7.38	6.88		7.13	35	4.22	4.16		4.19
40	6.96	6.64		6.80	40	7.10	7.05		7.07	40	4.71	4.81		4.78
45	6.56	6.63		6.60	45	7.40	7.25		7.32	45	4.56	5.13	4.89	4.86
50	7.40	6.90		7.15	50	6.04	6.42		6.68	50	5.51	5.89		5.70
55	7.30	6.95		7.13	55	7.37	7.81		7.09	55	5.77	6.41		6.09
63} 0 243} 0					67} 0 247} 0					71} 0 251} 0				
5	-7.99	-7.77		7.88	5	-4.91	-6.13	-6.21	5.75	5	-7.32	-7.25	-6.48	7.02
10	7.98	7.49		7.73	10	5.62	4.61	6.38	5.54	10	7.41	7.17	5.88	6.75
15	8.25	8.12	-6.65	7.67	15	6.35	6.04	5.40	6.19	15	6.45	7.72	5.90	6.69
20	7.21	8.64		7.92	20	6.60	7.16		6.88	20	6.06	6.34		6.20
25	7.40	7.37		7.38	25	8.32	7.35		7.84	25	6.78	6.69		6.73
30	8.15	7.18	7.45	7.59	30	9.51	8.99	8.80	9.13	30	6.67	6.92	6.07	6.55
35	8.42	7.98		8.20	35	7.49	9.43	8.84	8.59	35	6.81	6.29		6.30
40	8.20	8.38		8.29	40	8.15	9.37	8.91	8.68	40	5.83	6.73		6.28
45	9.10	7.49	9.00	8.58	45	8.61	8.08	8.98	8.32	45	6.49	7.21	6.69	6.76
50	7.98	7.66		7.82	50	9.62	8.74		9.18	50	6.98	6.48		6.73
55	7.09	7.08		7.09	55	9.20	8.60		8.90	55	6.69	6.15		6.42
64} 0 244} 0				7.20	68} 0 248} 0				9.67	72} 0 252} 0				5.91

ERROR OF EACH DIVISION OF THE MADRAS MURAL CIRCLE

Diam	No 1	No 2	No 3	Mean	Diam	No 1	No 2	No 3	Mean	Diam	No 1	No 2	No 3	Mean
72} 0 262} 0	—5.67	—6.10	—5.94	—5.91	76} 0 256} 0	—4.99	—4.72		—5.18	80} 0 260} 0	+0.52	+0.25		—0.40
5	4.28	1.77	5.07	5.93	5	5.46	6.01	5.73	5.85	5	+0.09	0.03		+0.38
10	5.02	1.77		4.90	10	4.63	5.07	—6.41	5.37	15	1.34	0.73		—0.40
15	5.53	5.91		5.72	20	6.41	6.40		6.41	20	1.77	1.79		1.78
20	6.12	6.03		6.07	25	6.11	5.83		5.97	25	1.17	1.75		1.36
25	7.33	6.78		7.05	30	5.79	6.06	6.79	6.21	30	2.58	2.37		2.47
30	7.72	7.61		7.68	35	7.20	6.36		6.78	35	3.89	3.54		3.71
35	7.31	7.38		7.36	40	6.48	6.06		6.27	40	3.31	3.81		3.56
40	7.64	6.69		7.16	45	1.69	5.36	6.47	5.51	45	3.87	3.61		3.71
45	8.52	8.19		8.36	50	5.28	5.52	5.97	5.39	50	4.45	4.69		4.57
50	7.89	7.72		7.80	55	1.19	5.13	5.69	5.20	55	4.70	4.35		4.52
73} 0 253} 0	—9.15				77} 0 257} 0	—6.08	—4.03	—4.53	—6.00	81} 0 261} 0	—5.02	—6.30		—5.00
5	7.81	8.71		8.29	5	5.01	5.36	4.36	4.91	10	5.03	5.10		5.16
10	8.35	8.31		8.34	10	3.90	5.14	4.67	4.53	15	4.86	5.83		5.35
15	7.65	7.96	—7.20	7.63	20	5.65	5.14		5.39	20	4.90	5.14		5.02
20	7.12	7.48	7.58	7.39	25	5.53	5.20		5.36	25	4.41	5.29		4.85
25	6.76	8.30	6.98	7.35	30	6.61	7.43	6.69	6.91	30	5.77	5.72		5.71
30	8.71	8.08	7.01	7.94	35	7.00	7.56		7.27	35	5.77	5.00		5.43
35	8.14	9.32		8.73	40	7.44	7.99		7.06	40	6.06	1.94		5.50
40	8.60	8.91		8.76	45	7.21	6.97	6.90	7.03	45	6.37	5.70		6.03
45	10.80	9.56	8.58	9.60	50	8.27	7.91		8.09	50	5.78	6.35		6.06
50	9.17	9.90		9.53	55	8.32	7.61		7.03	55	4.98	4.87		4.93
74} 0 251} 0	—8.17				78} 0 258} 0	—7.87	—7.32		—8.56	82} 0 262} 0	—4.07	—3.91		—4.88
5	7.93	—7.89	—7.35	7.72	10	7.21	6.47		7.60	10	4.33	4.30		4.32
10	6.80	5.81	7.11	6.58	15	6.97	6.78		6.84	15	4.10	4.39		3.91
15	7.30	6.08	7.69	7.02	20	6.95	6.52		6.87	20	4.18	3.75		3.96
20	6.87	5.31	4.94	5.71	25	6.94	7.17		7.05	25	5.02	4.10		4.68
25	5.82	5.50	5.96	5.76	30	7.83	7.71		7.77	30	6.89	5.34		4.41
30	5.43	4.49	5.01	4.98	35	0.30	7.81	—8.21	8.11	35	6.18	6.16		6.32
35	1.21	2.77	3.76	3.58	40	8.37	*6.80	8.55	8.46	10	6.11	6.91		6.53
40	3.74	2.12	2.89	3.02	45	8.19	8.38		8.44	15	7.27	6.14		6.42
45	3.16	2.58	2.53	2.96	50	9.06	8.3		8.79	50	6.92	6.59		6.90
50	2.00	2.51		2.27	55	7.13	7.47		7.45	55	7.13	7.36		7.10
75} 0 255} 0	—1.04				79} 0 259} 0	—6.90			—6.90	81} 0 263} 0	—7.01	—7.80		—8.19
5	0.80	—2.48	—1.18	1.49	10	6.86	5.98		6.42	10	7.46	8.20		7.11
10	1.16	2.37	1.13	1.65	15	6.07	6.66		6.96	15	7.96	7.00		7.81
15	1.02	1.63	1.17	1.37	20	6.07	1.27	—6.84	5.73	20	7.06	7.70		7.95
20	2.45	1.22		1.83	25	6.37	5.61		5.49	25	7.32	8.35		7.84
25	2.33	2.39		2.36	30	4.26	4.60		4.47	30	8.51	7.61		8.11
30	2.06	1.98	3.10	2.38	35	1.10	2.60	4.73	3.81	35	8.33	8.91		8.63
35	3.10	2.08		2.59	40	3.39	3.79		3.59	40	8.71	9.09		8.90
40	3.25	3.19		3.37	45	2.88	3.73		2.27	45	8.92	7.87		8.49
45	3.34	2.88	3.39	3.20	50	2.22	1.92	2.66	1.78	50	8.54	7.67		8.10
50	4.75	3.56		4.16	55	1.28	2.28		1.49	55	7.79	7.95		7.87
55	4.94	4.47		4.70	60	1.29	1.69		0.40	60	84} 0 264} 0			7.08
76} 0 256} 0	—5.18				80} 0 260} 0									

* Omitted

ERROR OF EACH DIVISION OF THE MADRAS MURAL CIRCLE

CCIX

Diam	No 1	No 2	No 3	Mean	Diam	No 1	No 2	No 3	Mean	Diam	No 1	No 2	No 3	Mean
84 } 0	"	"	"	"	88 } 0	"	"	"	"	92 } 0	"	"	"	"
264 } 0	-7.38	-6.29	6.83	-7.08	268 } 0	5	-7.17	-7.50	-7.71	272 } 0	-6.20	-5.53	-5.55	6.86
5	6.39	5.09	5.74	5.90	10	6.29	7.05	6.67	7.33	10	5.96	5.01	5.48	
10	6.80	5.81	5.80	5.80	15	7.09	7.49	-6.12	6.90	15	6.50	6.70	6.80	
15	6.49	4.68	5.08	5.08	20	6.23	7.48	6.86	6.77	20	6.61	6.77	-5.17	5.52
20	5.02	4.61	4.81	4.81	25	6.60	7.04	6.83	7.13	30	7.49	6.94	6.40	6.81
25	4.92	3.59	4.25	4.25	30	8.28	7.18	6.83	7.48	35	7.46	8.01	7.73	
30	2.90	3.83	3.36	3.36	35	7.25	7.71	8.42	8.42	40	6.96	6.92	6.94	
35	2.54	3.21	2.87	2.87	40	8.26	8.59	8.30	8.30	50	7.39	8.44	8.51	8.11
40	1.89	2.88	2.38	2.38	45	8.96	7.21	9.00	7.22	55	7.73	9.18	8.81	8.57
45	2.40	1.39	1.90	1.90	50	8.27	8.83							
50	1.48	1.05	1.26	1.26	55	7.11	7.34							
85 } 0					89 } 0					93 } 0				-9.07
265 } 0	-0.31	269 } 0	-0.31	-0.31	5	-6.68	-8.67	-7.10	-7.10	6	-8.70	-8.35	8.52	
5	-0.64	+0.40	0.07	0.07	10	6.13	6.24	6.19	6.19	10	8.48	8.23	8.35	
10	1.17	-0.66	0.91	0.91	15	5.84	5.17	5.26	5.26	15	7.28	6.58	-7.76	7.21
15	0.66	2.37	-1.77	1.60	20	5.22	4.98	5.11	5.11	20	7.01	8.05	7.63	
20	1.59	1.93	1.76	1.76	25	3.99	4.13	4.21	4.21	25	7.51	8.79	8.15	
25	1.54	2.11	1.83	1.83	30	4.69	3.91	4.81	4.81	30	8.65	7.20	8.85	8.23
30	1.37	2.63	2.48	2.13	35	4.08	3.44	3.76	3.76	35	8.24	8.13	8.19	
35	3.24	2.26	2.75	2.75	40	4.05	2.73	3.89	3.89	40	8.36	7.83	8.10	
40	2.09	2.19	2.14	2.14	45	2.68	1.86	2.22	2.22	45	8.91	7.00	9.14	8.37
45	2.82	3.90	3.15	3.29	50	2.10	2.31	2.21	2.21	50	9.22	8.30	8.76	
50	3.62	2.79	3.21	3.21	55	1.29	1.95	1.62	1.62	55	7.92	7.94	7.93	
86 } 0					90 } 0					94 } 0				-7.02
266 } 0	-1.02	270 } 0	-1.02	-1.02	5	-0.82	-0.59	-0.61	-0.61	5	-7.09	-6.27	6.68	
5	-5.28	-5.92	5.60	5.60	10	0.21	0.10	0.30	0.30	10	6.26	5.67	5.98	
10	4.59	4.61	4.60	4.60	15	0.47	0.94	0.70	0.70	15	6.11	5.86	5.98	
15	5.00	4.49	4.75	4.75	20	*3.63	1.17	-1.66	1.41	20	6.05	4.89	5.47	
20	5.32	4.96	5.11	5.11	25	3.20	1.47	0.67	1.78	25	4.88	4.95	4.90	
25	5.79	4.67	5.23	5.23	30	2.26	2.50	2.38	2.38	30	4.41	3.94	4.17	
30	4.33	5.00	4.67	4.67	35	3.57	1.90	2.45	2.84	35	4.05	3.33	3.69	
35	5.59	4.79	5.19	5.19	40	2.45	2.78	2.86	2.60	40	3.82	2.58	3.20	
40	4.41	4.11	4.41	4.41	45	2.80	3.17	2.98	2.98	45	2.60	1.87	2.24	
45	4.71	5.37	5.01	5.01	50	3.80	4.01	3.91	3.91	50	1.90	3.02	-1.81	2.28
50	5.14	5.30	5.22	5.22	55	4.82	1.70	4.76	5.5	1.30	*3.11	1.24	1.27	
87 } 0					91 } 0					95 } 0				-0.46
267 } 0	-1.60	97 } 0	-1.60	-1.60	5	-5.16	-4.53	-4.59	-4.59	5	-1.76	-0.95	1.36	
5	-4.18	-3.64	4.01	4.01	10	4.29	4.52	4.41	4.41	10	0.93	1.20	1.06	
10	3.18	3.54	3.51	3.51	15	4.23	4.19	4.21	4.21	15	1.65	0.92	-1.27	1.25
15	3.62	4.15	4.03	4.03	20	4.64	1.51	-5.15	4.77	20	2.76	1.03	2.19	
20	4.10	4.57	4.33	4.33	25	3.62	5.10	4.30	4.34	25	2.28	2.81	2.66	
25	4.53	5.92	5.92	5.92	30	5.73	5.05	5.39	5.39	30	3.16	1.90	2.29	2.46
30	5.90	6.02	6.90	6.90	35	5.50	5.76	5.63	5.63	35	3.69	2.90	3.24	
35	6.25	5.48	6.30	6.30	40	5.20	5.93	5.66	5.66	40	3.49	2.75	3.12	
40	5.60	6.90	5.75	5.75	45	5.67	6.06	5.86	5.86	45	3.69	2.07	2.01	2.89
45	6.73	5.74	5.74	5.74	50	6.46	5.84	6.15	6.15	50	3.84	3.30	3.67	
50	6.54	7.13	6.83	6.83	55	6.21	5.87	6.04	6.04	55	3.69	4.50	4.00	
55	7.04	7.15	7.10	7.10	60	7.71	02 } 0	6.66	6.66	60	272 } 0		4.24	
88 } 0					272 } 0									

* Omitted

ERROR OF EACH DIVISION OF THE MADRAS MURAL CIRCLE

Diam	No 1	No 2	No 3	Mean	Diam	No 1	No 2	No 3	Mean	Diam	No 1	No 2	No 3	Mean	
96	"	"	"	"	100	"	"	"	"	104	"	"	"	"	
276	0	-4.24	280	0	5	-1.89	-1.12	-2.37	1.79	5	-8.07	-7.90	-7.98	-7.80	
5	-4.71	-5.29	6.00	5	10	1.98	0.29	1.89	1.39	10	7.24	6.81	7.02	7.98	
10	3.68	4.09	4.31	10	15	0.43	0.40	0.41	0.41	15	6.71	6.41	6.56	6.56	
15	6.05	4.22	4.61	15	20	1.10	-1.018	0.89	0.60	20	5.24	4.11	4.07	4.07	
20	3.83	5.16	4.50	20	25	1.64	-0.277	2.41	2.03	25	4.82	3.45	4.14	4.14	
25	1.77	5.13	4.95	25	30	2.26	-2.21	2.24	2.24	30	4.03	4.08	4.05	4.05	
30	5.41	4.51	4.96	30	35	2.72	2.20	2.46	2.46	35	3.51	4.00	3.75	3.75	
35	5.00	6.00	5.30	35	40	3.24	2.56	2.90	2.90	40	2.86	3.86	3.36	3.36	
40	4.49	5.34	4.91	40	45	3.39	3.46	3.42	3.42	45	2.99	3.64	3.31	3.31	
45	5.07	3.89	4.48	45	50	4.14	4.66	4.40	4.40	50	2.57	2.91	2.74	2.74	
50	4.03	4.20	4.12	50	55	4.14	4.66	4.80	4.80	55	2.54	2.56	2.55	2.55	
55	3.53	4.06	3.80	55	4.86	4.74									
97	"	"	"	"	101	"	"	"	"	105	"	"	"	"	
277	0	-4.33	281	0	5	-5.07	-5.15	6.11	5	-1.33	-0.71	-0.71	-0.71	-0.71	
5	-3.77	-3.47	3.62	5	10	5.17	4.49	4.83	10	1.25	0.87	1.06	1.06	1.06	
10	3.22	3.82	3.62	10	15	4.55	4.10	-5.46	15	1.17	1.38	1.27	1.27	1.27	
15	3.64	4.57	4.11	15	20	4.19	5.13	4.66	20	2.46	1.93	-3.38	2.59	2.59	
20	4.38	4.60	4.49	20	25	4.81	6.03	5.42	25	2.66	1.29	3.09	2.36	2.36	
25	5.00	4.83	4.92	25	30	5.33	5.93	5.65	30	2.99	1.61	3.30	3.30	3.30	
30	5.46	5.96	5.71	30	35	6.00	6.00	5.80	35	3.82	3.00	3.41	3.41	3.41	
35	5.79	5.11	5.66	35	40	6.62	5.87	5.75	40	4.89	4.51	4.70	4.70	4.70	
40	5.03	5.32	5.17	40	45	6.60	4.81	4.74	45	5.20	3.73	4.46	4.46	4.46	
45	5.02	5.40	5.21	45	50	5.18	6.31	5.75	50	5.19	4.47	4.83	4.83	4.83	
50	5.82	5.47	5.61	50	55	5.18	6.31	5.54	55	5.02	4.13	4.57	4.57	4.57	
55	6.02	5.87	5.95	55	6.23	6.05									
98	"	"	"	"	102	"	"	"	"	106	"	"	"	"	
278	0	-7.33	282	0	5	-5.10	-4.15	-5.43	5	-5.33	-6.58	-6.58	-5.79	-5.79	
5	-6.17	-7.34	6.75	5	10	4.82	3.51	4.62	10	5.52	6.57	6.04	5.95	5.95	
10	6.02	7.05	6.62	10	15	5.18	4.42	-4.00	15	5.27	5.24	5.26	5.26	5.26	
15	5.88	6.69	-7.66	6.71	20	5.11	5.61	5.36	20	6.28	*4.69	-6.38	6.33	6.33	
20	7.73	6.65	7.19	20	25	5.31	5.14	5.24	25	6.30	*4.88	5.80	5.80	5.80	
25	6.78	7.03	6.91	25	30	*8.34	5.92	6.52	30	6.88	6.23	6.66	6.66	6.66	
30	*4.99	6.31	7.34	6.82	35	6.66	6.09	6.37	35	6.21	5.97	6.00	6.00	6.00	
35	6.63	7.38	7.00	35	40	7.20	6.97	7.08	40	6.86	5.49	6.17	6.17	6.17	
40	6.74	7.33	7.03	40	45	7.89	6.31	6.46	45	6.19	6.01	6.10	6.10	6.10	
45	7.09	7.42	8.12	7.54	50	7.21	8.34	7.77	50	6.45	5.78	6.11	6.11	6.11	
50	8.34	6.94	7.64	50	55	7.93	8.30	8.11	55	6.00	5.42	5.71	5.71	5.71	
55	7.49	6.29	6.89	55	7.93	8.30									
99	"	"	"	"	103	"	"	"	"	107	"	"	"	"	
279	0	-5.84	283	0	5	-8.85	-8.88	-9.15	5	-4.60	-5.37	-5.37	-5.90	-5.90	
5	-7.11	-5.73	-7.33	6.72	10	8.05	8.27	8.86	10	4.70	4.53	4.61	4.98	4.98	
10	5.08	4.41	6.76	5.42	15	7.81	8.65	7.95	15	4.57	4.62	4.60			
15	4.38	4.42	3.81	4.20	20	8.10	8.36	8.23	20	4.56	3.38	-5.95	4.63	4.63	
20	3.33	3.48	3.41	2.78	25	7.62	8.16	7.89	25	4.82	5.71	5.19	5.17	5.17	
25	3.10	2.46	2.88	30	9.63	8.10	7.08	8.47	30	6.74	6.14	6.44			
30	2.07	3.70	2.88	2.88	35	8.41	8.86	8.63	35	6.93	7.23	7.08			
35	1.99	1.64	1.76	35	40	8.50	9.00	8.75	40	7.03	7.22	7.12			
40	2.16	2.16	2.15	2.15	45	9.31	7.70	8.19	8.40	45	7.01	6.51	6.76		
45	1.51	2.68	1.84	2.01	50	8.53	8.62	8.52	50	7.72	8.28	7.63	7.88		
50	1.82	1.69	1.75	55	7.87	7.23				55	6.68	8.71	7.26	7.52	
55	0.48	1.47	0.98	0.85	104	0				7.80	108	0		8.68	
100	0				284					288					
280															

* Omitted

ERROR OF EACH DIVISION OF THE MADRAS MURAL CIRCLE

ccxi

Diam	No 1	No 2	No 3	Mean	Diam	No 1	No 2	No 3	Mean	Diam	No 1	No 2	No 3	Mean
108 } 0	"	"	"	"	112 } 0	"	"	"	"	116 } 0	"	"	"	-4.71
288 } 0	-8.58	292 } 0	-8.58	292 } 0	5	6.14	6.44	6.26	6.26	5	-5.07	5.06	5.06	5.06
5	-7.92	-8.17	8.05	7.66	10	6.48	5.87	6.29	6.16	10	5.72	5.22	5.47	5.47
10	7.16	8.16	7.66	7.65	15	6.91	5.47	6.19	5.38	15	5.38	5.67	-5.39	5.48
15	7.87	7.57	-7.52	7.65	20	5.66	5.69	-6.64	6.00	20	5.42	6.16	5.79	5.79
20	7.04	7.50	7.27	7.27	25	7.82	6.65	7.50	7.32	25	5.16	5.79	5.47	5.47
25	8.13	8.56	8.34	8.71	30	7.61	8.09	7.85	8.03	30	5.15	6.73	5.77	5.88
30	9.61	7.96	8.56	9.11	35	7.62	8.44	8.03	8.63	35	6.63	5.43	6.03	6.03
35	9.11	8.81	8.81	9.11	40	8.40	9.03	8.71	8.88	40	6.94	6.68	6.81	6.81
40	9.06	8.67	8.86	9.05	45	9.36	8.40	9.52	9.33	45	6.37	6.99	6.40	6.59
45	8.70	8.10	9.05	8.62	50	9.44	9.02	50	9.33	50	5.90	6.17	6.03	6.03
50	9.03	8.36	8.70	8.70	55	8.15	9.42	8.57	8.71	55	6.07	5.80	5.93	5.93
55	8.09	7.05	7.57	7.57	113 } 0	"	"	"	"	117 } 0	"	"	"	-5.64
109 } 0	"	"	"	"	293 } 0	-7.54	293 } 0	-10.16	-10.16	297 } 0	-5.80	-5.21	5.51	5.51
289 } 0	-6.90	-7.45	7.17	7.17	5	-10.06	-10.41	10.23	10.23	5	5.55	5.83	5.69	5.69
5	7.06	7.26	7.16	7.16	10	9.30	10.16	9.72	10	5.55	5.83	-7.21	5.91	5.91
10	6.48	6.35	6.41	6.41	15	11.41	10.29	10.85	10.85	15	5.42	5.09	7.16	6.99
15	5.98	6.19	6.08	6.08	20	10.66	9.76	-10.67	10.37	20	7.36	6.63	7.16	7.16
20	5.35	5.93	5.64	5.64	25	10.12	8.56	10.80	9.83	25	7.26	7.05	8.89	8.36
25	4.87	4.67	4.77	4.77	30	9.47	9.97	9.72	9.72	30	7.70	8.49	9.10	8.67
30	4.02	4.40	4.21	4.21	35	9.08	9.15	9.11	9.28	35	7.62	9.54	8.28	8.28
35	3.32	3.24	3.28	3.28	40	9.33	9.02	9.17	9.11	40	9.11	7.97	9.16	9.37
40	3.31	2.83	3.07	3.07	45	9.62	10.60	10.11	4.74	45	8.24	8.31	8.92	9.26
45	2.10	2.45	2.27	2.27	50	9.82	9.81	9.81	50	50	9.58	9.16	8.72	8.39
50	1.93	1.27	1.60	1.60	55	9.47	9.49	9.48	55	55	9.23	9.29	8.92	8.92
110 } 0	"	"	"	"	294 } 0	114 } 0	"	"	"	298 } 0	-8.93	-10.36	9.68	-9.83
290 } 0	-1.30	-1.43	1.36	1.36	5	9.03	8.36	8.69	8.69	5	9.02	-8.81	9.21	8.39
5	0.90	2.36	1.63	1.63	10	8.03	8.27	8.15	8.15	10	8.95	8.17	8.27	8.08
10	0.93	2.13	-1.86	1.64	15	7.58	7.88	7.73	7.73	15	8.19	8.23	8.04	8.21
15	2.77	2.49	2.63	2.63	20	6.90	6.43	6.66	6.66	20	8.31	8.47	8.21	8.30
20	2.90	3.19	3.04	3.04	25	6.27	6.08	6.17	6.17	25	7.69	8.47	8.08	8.08
25	3.07	4.17	3.02	3.09	30	5.74	5.34	-5.56	5.54	30	8.71	7.87	8.04	8.21
30	3.75	2.87	3.31	3.31	35	4.62	5.39	5.19	5.19	35	7.93	8.67	8.30	9.26
35	3.58	3.40	3.48	3.48	40	3.21	4.99	4.12	4.11	40	9.09	9.44	8.92	8.80
40	4.05	4.40	3.72	4.06	45	3.64	3.34	3.49	3.49	45	8.93	8.56	8.92	8.72
45	3.85	4.69	4.22	4.22	50	2.78	3.52	3.16	3.16	50	8.98	8.47	8.58	8.39
50	5.07	6.13	5.10	5.10	55	2.36	2.90	2.63	2.63	55	8.21	8.58	8.21	8.39
111 } 0	"	"	"	"	295 } 0	115 } 0	"	"	"	299 } 0	-1.69	-8.18	9.19	-8.15
291 } 0	-5.78	-6.53	6.15	6.15	5	1.60	1.07	1.33	1.33	5	6.51	6.59	-6.80	8.68
5	5.98	6.03	6.00	6.00	10	1.81	0.65	1.32	1.32	10	7.41	7.78	7.60	7.60
10	6.16	6.70	6.43	6.43	15	1.01	1.63	1.90	1.90	15	6.51	6.99	6.80	6.63
15	7.16	6.18	6.67	6.67	20	1.19	2.62	2.08	2.08	20	5.72	6.99	6.35	6.35
20	6.39	6.43	6.41	6.41	25	1.65	2.51	2.61	2.61	25	5.06	4.20	4.63	4.63
25	6.00	6.77	6.38	6.38	30	2.48	2.73	3.21	3.21	30	4.87	4.28	3.45	4.20
30	7.06	7.63	7.35	7.35	35	2.60	3.82	3.61	3.61	35	2.21	3.42	3.69	3.11
35	8.04	7.18	7.61	7.61	40	3.74	3.47	3.48	3.48	40	2.42	4.04	3.33	3.26
40	7.18	7.59	7.38	7.38	45	3.85	3.12	3.55	3.55	45	2.68	2.07	2.15	2.30
45	6.51	6.42	6.46	6.46	50	3.27	3.82	4.49	4.49	50	1.45	1.02	1.23	1.23
50	5.88	6.47	6.17	6.17	55	4.32	4.66	4.71	4.71	55	1.08	1.63	1.35	1.35
55	0.26	116 } 0	296 } 0	296 } 0	"	"	"	"	"	300 } 0	"	"	"	"

* Omitted

ERROR OF EACH DIVISION OF THE MADRAS MURAL CIRCLE

Diam	No 1	No 2	No 3	Mean	Diam	No 1	No 2	No 3	Mean	Diam	No 1	No 2	No 3	Mean	
120 } 0					124 } 0					128 } 0					
5	-1.84	-2.56			2.20	5	-7.15	-8.18	7.66	5	-6.72	-7.43		-7.27	
10	2.28	2.68			2.17	10	6.72	6.78	6.75	10	6.04	6.54		6.29	
15	1.64	2.96	-1.46	2.02	1.6	6.29	6.60		6.44	16	5.99	6.04	-6.12	6.05	
20	2.75	3.70			3.22	20	5.43	6.12	5.77	20	6.78	6.53	5.71	6.34	
25	2.72	3.47			3.09	25	4.51	4.91	4.71	25	7.16	5.56	5.17	5.96	
30	2.97	3.62	3.47	3.35	30	4.25	4.32		4.29	30	6.67	6.62	6.32	6.54	
35	3.77	4.80			4.28	35	4.27	3.46	3.86	35	6.78	7.93	6.56	7.09	
40	3.89	4.66			4.27	40	3.12	3.13	3.12	40	6.09	6.47	7.58	6.71	
45	3.35	2.33	3.68	3.12	45	1.80	2.89		2.34	45	5.90	*9.31	6.52	6.26	
50	3.49	3.18			3.33	50	1.88	1.85	1.86	50	7.20	6.68		6.94	
55	4.36	4.13			4.24	55	1.12	1.21	1.16	55	6.69	6.65		6.67	
121 } 0					125 } 0					129 } 0					
5	-6.36	-5.58			-4.23	305 } 0			-0.76	300 } 0				-6.32	
10	5.29	5.28			5.97	9	-0.46	+1.04	+0.91	+0.51	5	-6.85	-6.38	6.61	
15	4.94	5.02	-5.09	5.02	5.28	10	0.21	+0.64	+0.28	+0.21	10	5.23	5.51	5.38	
20	5.30	4.82			6.06	15	0.05	+0.52		+0.23	15	6.00	4.92	5.16	
25	6.88	6.33			6.60	20	1.38	0.88	-1.13	20	4.26	4.37	5.31		
30	5.51	5.60	4.76	5.31	30	1.89	-1.51		0.94	25	3.12	4.18	3.66		
35	6.34	5.93			6.14	35	3.18	*0.36	-2.58	1.70	30	3.58	3.78	3.68	
40	6.06	6.86			6.45	40	2.55	*0.37	-2.80	2.88	35	4.28	3.05	3.67	
45	5.37	6.85	5.26	5.83	45	2.33	2.93		2.67	40	2.59	2.77	2.68		
50	5.66	5.45			5.56	50	3.21	3.34	3.28	50	2.28	1.65		1.96	
55	4.95	5.67			5.26	55	4.59	4.65	4.62	55	1.73	0.66		1.20	
122 } 0					126 } 0					130 } 0					
5	-4.77	-4.62	-4.16	4.51	5	-5.18	-4.24		-5.06	310 } 0				-0.83	
10	5.35	3.85	4.51	4.40	10	5.21	4.82		4.71	5	-1.99	-1.61		1.80	
15	4.82	3.44	4.69	4.32	15	4.13	5.96	-5.81	5.02	10	2.60	2.39		2.49	
20	5.26	5.12			5.19	20	5.46	5.20	5.30	15	2.51	2.16	-1.67	2.11	
25	5.99	6.02			6.00	25	5.18	5.10	5.33	20	3.88	2.91		3.40	
30	7.81	5.19	5.50	6.27	30	4.15	*47	6.94	5.11	25	2.91	3.91		3.42	
35	6.56	6.70			6.63	35	4.88	4.29	5.15	30	4.39	2.84	3.17	3.47	
40	7.52	6.78			7.15	40	5.41	5.04	4.58	35	4.94	2.85	4.96	4.25	
45	6.99	6.19	8.01	7.17	45	4.72	5.42	5.71	5.22	40	5.07	4.08	*4.30	4.38	
50	7.88	7.31			7.60	50	5.52	5.24	5.28	45	5.42	4.27	4.40	4.70	
55	7.88	8.21			8.06	55	5.35	3.91	4.63	55	4.78	4.91		4.84	
123 } 0					127 } 0					131 } 0					
5	-7.73	-8.12			-8.88	307 } 0			-1.68	311 } 0				-5.40	
10	7.99	8.51			7.92	5	-3.37	-4.71	4.04	5	-5.29	-5.21		5.26	
15	8.27	6.87	-7.35	7.50	8.25	10	9.21	4.68	3.94	10	5.38	5.37		5.37	
20	*9.07	7.17	7.52	7.35	15	3.41	2.33	-3.13	2.96	15	5.06	5.01		6.03	
25	7.51	8.09	6.39	7.34	25	3.38	4.91	4.82	4.37	25	6.29	6.24		6.26	
30	7.36	7.24	8.52	7.71	30	5.15	5.93	5.13	5.40	30	5.97	6.77		6.37	
35	7.83	8.36			8.09	35	5.43	6.14	5.73	35	7.25	7.03		7.14	
40	7.69	8.26			7.97	40	5.71	5.78	5.40	5.63	40	6.52	6.69		6.60
45	8.25	7.96			8.40	45	5.28	5.78	5.82	5.63	45	7.48	7.13		7.30
50	7.66	7.79			7.71	50	5.88	6.26	6.78	6.81	50	7.33	7.96		7.64
55	7.77	7.63			7.70	55	6.87	6.79	7.20	6.95	55	6.20	6.72		6.46
124 } 0					-7.68	128 } 0			7.27	132 } 0				5.93	
304 } 0					308 }				312 }						

* Omitted.

ERROR OF EACH DIVISION OF THE MADRAS MURAL CIRCLE

ccxiiii

Diam	No 1	No 2	No 3	Mean	Diam	No 1	No 2	No 3	Mean	Diam	No 1	No 2	No 3	Mean
0	"	"	"	"	136	"	"	"	"	140	"	"	"	"
132 } 0	—5.93	—5.58	5.10	5.26	—6.38	5.81	5	—1.50	—0.43	—1.73	1.01			
312 } 0	5	—4.63	5.78	5.20	10	7.23	7.49	7.36	7.30	10	1.05	1.08	1.06	
5	10	4.63	5.61	5.33	15	7.38	6.56	—6.46	6.80	15	1.48	1.52	—0.37	1.12
10	15	5.05	5.61	5.44	20	7.43	6.86		7.14	20	0.91	1.61		1.26
15	20	5.13	5.76	5.44	25	6.75	6.36		6.50	25	1.85	2.69		2.27
20	25	7.53	6.50	7.01	30	8.39	6.91	6.06	7.12	30	3.73	2.71	2.31	2.78
25	30	7.97	7.30	7.63	35	8.10	6.86	7.08	7.35	35	3.73	3.20		3.48
30	35	8.16	7.54	7.85	40	8.42	6.86	7.24	7.51	40	3.78	3.82		3.80
35	40	7.74	6.70	7.22	45	7.60	7.26	6.76	7.20	45	3.63	6.00	3.19	3.94
40	45	7.51	6.98	7.26	50	6.86	6.38		6.62	50	4.54	4.48		4.51
45	50	8.28	8.43	8.35	55	6.48	7.06		6.77	55	4.54	4.38		4.46
50	55	8.85	7.81	8.34										
133 } 0	—9.16	—8.95	9.25	9.00	—5.97	8.95	5	—5.19	—6.34	—5.18	5.76			
313 } 0	5	—9.66	8.23	8.40	10	6.40	6.99	6.20	6.05	10	5.98	5.51		
5	10	8.66	9.58	—9.19	15	5.54	5.55	*—4.85	5.05	15	4.98	6.08	5.52	
10	15	6.93	9.02	8.57	20	6.88	6.55		6.71	20	6.70	6.81		6.66
15	20	8.45	7.88	8.03	25	6.36	7.35		6.86	25	5.88	6.16		6.02
20	25	8.19	7.88	8.03	30	7.39	8.31	8.26	7.99	30	6.04	7.09		6.56
25	30	7.26	9.46	8.42	35	7.78	8.29		7.99	35	6.77	6.04		6.41
30	35	9.74	9.34	9.54	40	7.28	7.95		7.61	40	6.29	6.27		6.28
35	40	8.96	9.36	9.6	45	7.33	8.01	8.11	7.98	45	6.72	6.19		6.95
40	45	8.93	9.88	9.78	50	9.62	9.64		9.03	50	6.52	5.66		6.08
45	50	8.70	8.66	8.66	55	8.60	8.71		8.65	55	5.82	5.35		6.58
50	55	8.56	7.96	8.26										
134 } 0	—7.40	—8.41	8.29	5	—10.64	—9.59	10.06	5	—4.73	—3.81	—6.00			
314 } 0	5	—8.18	7.28	7.54	10	9.61	8.80	9.20	10	5.16	4.63	4.27		
5	10	7.81	7.00	6.19	15	7.88	9.40	—9.55	8.88	15	5.67	6.01		5.34
10	15	5.98	6.65	—5.76	20	8.88	9.04		8.96	20	6.00	6.11		6.16
15	20	6.46	6.65	6.22	25	8.68	8.06		8.67	25	5.65	6.04		6.84
20	25	4.02	4.97	5.37	30	9.09	8.19	8.39	8.72	30	7.70	6.63		7.18
25	30	4.46	5.21	4.83	35	9.48	9.64		9.56	35	6.87	7.00		6.88
30	35	9.00	9.02	4.29	40	9.23	9.96		9.60	40	7.59	6.72		7.16
35	40	3.22	1.46	3.34	4.28	8.85	8.92	8.72	8.83	45	6.72	6.59		6.65
40	45	2.24	2.36	2.30	45	8.74	8.30		8.62	50	8.62	7.97		7.30
45	50	0.69	1.87	3.00	50	9.19	7.82		8.50	55	7.93	8.08		
50	55	0.87	1.20	2.20	55									
135 } 0	—1.66	—1.70	2.08	5	—7.14	—8.00	—8.10	5	—6.53	—7.96	—8.80			
315 } 0	5	—2.46	2.63	2.47	10	7.23	7.81	7.75	7.52	10	6.96	7.76	7.13	
5	10	2.34	2.40	2.87	15	8.71	7.17	—6.68	7.62	15	6.66	7.03	6.74	6.15
10	15	3.36	2.88	2.96	20	5.6	6.69		6.62	20	7.88	6.90		6.84
15	20	3.04	2.88	3.30	25	4.94	5.01		4.98	25	7.28	7.51		7.39
20	25	3.05	3.55	4.16	30	6.37	4.71	4.71	5.27	30	8.02	8.52		8.27
25	30	3.74	4.59	4.89	35	4.08	4.14		4.11	35	7.45	7.95		7.70
30	35	4.66	5.12	4.53	40	4.66	4.78		4.71	40	8.03	7.43		7.23
35	40	4.39	4.68	4.53	45	4.18	3.06	3.54	3.59	45	7.93	8.10		8.01
40	45	5.43	4.93	5.18	50	2.55	3.17		2.86	50	6.84	6.92	7.32	7.69
45	50	4.63	5.68	5.15	55	2.86	2.00		2.43	55	5.51	7.36	6.63	6.50
50	55	5.23	5.98	5.60	55	2.86	2.00		1.73	144 } 0				6.34
55	60			5.77	140 } 0				324 }					
60	65			320 }										

* Omitted

ERROR OF EACH DIVISION OF THE MADRA, MURAI CIRCLE

Diam	No 1	No 2	No 3	Mean	Diam	No 1	No 2	No 3	Mean	Diam	No 1	No 2	No 3	Mean
144 } 0				"	148 }				"	152 }				"
321 } 5	-5.50	-6.42		-6.34	328 } 0	5.96	5	-7.70	-8.60	8.15	5	-5.11	-5.42	-6.39
10	5.92	5.50		6.71	10	7.79	7.59		7.69	10	4.94	5.20		5.26
15	4.78	4.65	-5.06	4.83	15	6.07	7.35	-7.23	6.88	15	5.47	5.01	-1.95	5.07
20	3.68	4.71		4.20	20	7.65	7.33		7.51	20	4.78	4.40		4.59
25	3.78	3.05		3.11	25	8.07	7.48		7.77	25	5.71	5.84		5.77
30	1.47	3.02	3.41	2.63	30	6.29	8.39	7.87	7.52	30	6.86	7.01	7.51	7.13
35	1.75	1.80		1.77	35	8.21	7.61		7.91	35	6.61	7.49		7.06
40	2.17	1.67		1.92	40	8.60	7.70		8.15	40	6.74	7.04		6.89
45	1.06	1.63	1.03	1.24	45	8.05	9.51	8.14	8.24	45	6.34	6.44	7.32	6.70
50	0.71	0.71		0.71	50	9.13	7.38	8.63	8.98	50	8.89	7.35	8.46	8.23
55	0.33	0.98		0.65	55	8.12	6.72	6.87	7.24	55	8.54	8.01	8.52	8.36
145 }				149 }						163 }				"
326 } 0				-1.15	329 } 0				-7.06	339 } 0				-9.28
5	-1.03	-1.14		1.08	5	-7.29	-6.80		7.04	5	-8.04	-8.19		8.26
10	0.65	1.34		1.00	10	6.82	6.05		6.43	10	8.46	7.10		7.78
15	0.81	0.85		0.83	15	6.42	6.37		6.40	15	8.46	7.58		8.02
20	1.22	1.61		1.36	20	5.49	5.70		5.60	20	7.85	8.84	-7.65	8.11
25	1.82	1.73		1.78	25	4.57	5.46		5.02	25	7.68	9.36	7.78	8.27
30	1.83	2.60		2.21	30	3.74	4.39		4.06	30	8.59	7.94		8.26
35	2.74	2.85		2.79	35	2.61	4.30	-2.64	3.18	35	8.97	8.21		8.59
40	2.61	2.36		2.18	40	2.82	3.18	3.08	1.09	40	8.89	9.11		9.00
45	3.34	3.15		3.21	45	2.16	3.20		2.67	45	8.37	9.04		8.70
50	4.36	3.69		4.02	50	1.67	2.97		2.32	50	8.95	9.35		9.15
55	4.48	3.54		4.01	55	1.52	2.92		1.87	55	8.20	8.26		8.22
146 }				150 }						154 }				"
326 } 0				-4.90	330 } 0				-2.07	334 } 0				-8.65
5	-0.32	-6.37		5.84	5	-1.90	-1.48		1.69	5	-8.13	-9.11		8.62
10	5.72	6.79		5.75	10	2.33	2.45		2.39	10	7.46	8.32		7.89
15	5.49	5.51		5.50	15	1.92	1.61		1.76	15	6.44	7.86	-6.96	7.09
20	5.35	6.20		5.77	20	2.51	0.74	-3.23	2.17	20	5.73	6.35		6.04
25	6.34	6.45		6.40	25	3.63	2.27	3.84	3.08	25	4.58	5.26		4.92
30	7.53	6.25		6.80	30	3.92	3.70		3.81	30	4.79	3.12	4.31	4.07
35	6.30	6.74		6.52	35	4.31	4.02		4.16	35	3.31	2.78		3.04
40	6.40	6.05		6.22	40	5.20	4.89		5.04	40	2.25	1.58		1.91
45	6.76	6.57		6.66	45	4.87	3.64		4.20	45	3.08	0.78	1.07	1.61
50	6.82	6.54		6.68	50	3.41	4.43		3.92	50	2.09	1.49		1.79
55	6.19	6.42		6.30	55	1.71	5.40		5.05	55	1.33	1.04		1.18
147 }				151 }					-5.07	155 }				"
327 } 0				-5.40	331 } 0					335 } 0				-1.03
5	-4.73	-4.61		4.67	5	-5.32	-6.22		5.77	5	-1.08	-1.46		1.27
10	4.26	4.08		4.17	10	5.26	5.27		5.26	10	1.87	1.24		1.56
15	4.49	4.43	-4.84	4.59	15	4.95	5.46		5.21	15	2.61	1.43		2.02
20	5.13	5.63		5.33	20	5.37	4.28		4.82	20	1.19	1.74		1.61
25	6.26	7.01		6.63	25	5.43	4.79		5.11	25	2.80	1.55		2.17
30	7.83	8.21	7.96	8.00	30	5.23	5.66		5.14	30	2.79	1.94		2.37
35	7.61	8.96		8.28	35	6.09	6.27		6.18	35	3.71	3.32		3.51
40	7.97	8.32		8.14	40	5.88	5.80		5.84	40	3.49	3.07		3.28
45	6.42	8.24	7.17	7.28	45	5.46	6.40		6.93	45	3.52	3.74		3.63
50	8.31	8.19		8.25	50	6.15	7.43		6.79	50	4.28	4.22		4.22
55	7.83	7.36		7.59	55	5.97	7.13		6.55	55	5.49	6.11		5.80
148 } 0				8.21	152 } 0				6.39	156 } 0				5.29
328 } 5					332 } 5					336 } 5				

ERROR OF EACH DIVISION OF THE MADRAS MURAL CIRCLE

cccv

Diam	No 1	No 2	No 3	Mean	Diam	No 1	No 2	No 3	Mean	Diam	No 1	No 2	No 3	Mean
156 } 0	"	"	"	"	160 }	"	"	"	"	164 }	"	"	"	"
336 } 0	—5.44	—5.62		—5.29	340 }	0	5	—0.34	—1.69	344 }	0	—5.31	—6.04	—6.56
5	—6.18	6.75		5.53	5	10	0.50	0.99	1.01	5	—6.31	5.67	5.67	
10	6.18	6.75		6.46	10	15	0.31	0.88	0.74	10	4.95	5.22	5.08	
15	*7.74	5.83	—5.82	5.83	15	20	0.98	0.98	0.60	15	4.89	4.52	4.70	
20	5.42	5.62		5.52	20	25	1.60	1.66	0.98	20	4.33	3.65	3.99	
25	5.12	5.72		5.42	25	30	1.63	2.71	1.58	25	3.70	4.04	3.87	
30	*7.40	5.93	5.10	5.51	30	35	3.84	3.19	2.18	30	3.82	2.54	3.18	
35	4.78	6.78	5.61	5.72	35	40	4.01	3.26	3.51	35	2.24	2.04	2.14	
40	5.26	6.60	6.76	6.20	40	45	3.80	4.05	3.63	40	2.19	1.80	2.00	
45	7.25	6.57	5.88	6.57	45	50	4.48	3.20	3.67	45	1.90	1.70	1.80	
50	8.28	6.25	6.49	7.01	50	55	4.70	6.08	3.84	50	1.14	0.91	1.02	
55	6.60	5.83	6.31	6.25	55	65	4.70	6.08	4.89	55	0.83	0.38	0.61	
157 } 0					161 }					165 }				
337 } 0					341 }	0				345 }	0			—0.32
5	—6.61	—5.71		5.66	5	—5.27	—5.72	5.49	5	—0.56	—1.44	1.00	1.00	
10	1.57	5.71		5.14	10	5.88	5.63	5.75	10	1.54	1.36	1.45	1.45	
15	4.20	5.19	—4.32	4.57	15	5.37	5.61	5.49	15	0.93	1.00	—0.85	0.93	
20	5.37	4.87		5.12	20	5.09	5.39	5.24	20	1.14	1.25	1.20	1.20	
25	6.38	6.23		5.30	25	5.60	4.94	5.27	25	0.91	1.38	1.14	1.14	
30	6.61	7.32	7.28	7.08	30	5.44	5.67	5.60	30	2.70	1.44	1.23	1.82	
35	7.46	7.30		7.38	35	6.82	6.22	6.02	35	3.18	2.17	2.65	2.65	
40	7.66	7.22		7.44	40	5.99	5.79	6.89	40	2.60	2.32	2.41	2.41	
45	6.08	7.20	7.20	6.83	45	5.40	5.52	5.46	45	2.65	1.62	2.37	2.21	
50	8.24	7.89		8.06	50	4.81	6.68	6.24	50	3.43	3.28	3.35	3.35	
55	7.11	7.76		7.43	55	4.37	6.65	5.01	55	3.88	3.80	3.84	3.84	
158 } 0					162 }					166 }				
338 } 0					342 }	0				346 }	0			—4.31
5	—7.59	—8.81		8.32	5	—3.57	—4.51	4.04	5	—4.96	—5.08	5.02	5.02	
10	7.42	7.66		7.53	10	3.77	4.64	4.21	10	4.92	5.45	5.18	5.18	
15	7.06	7.82		7.44	15	4.08	3.95	4.02	15	4.74	6.05	—5.01	5.27	
20	6.18	7.49		6.98	20	4.13	4.53	4.33	20	5.11	5.40	5.25	5.25	
25	6.71	7.41		7.08	25	5.60	5.99	5.80	25	5.41	5.48	5.44	5.44	
30	8.11	7.28		7.70	30	6.54	6.68	6.11	30	4.22	5.10	5.52	4.95	
35	7.83	7.81		7.82	35	5.99	6.79	6.39	35	4.57	4.65	4.61	4.61	
40	8.31	8.93		8.62	40	5.98	7.13	6.55	40	4.08	4.85	4.44	4.44	
45	9.05	8.13		8.59	45	6.30	6.82	6.06	45	4.66	4.69	5.07	4.80	
50	9.31	10.47	—10.42	10.07	50	7.34	7.51	7.42	50	3.96	4.31	4.14	4.14	
55	7.82	9.30	8.90	8.67	55	6.72	7.41	7.08	55	3.82	3.52	3.67	3.67	
159 } 0					163 }					167 }				
339 } 0					343 }	0				347 }	0			—4.58
5	—7.30	—8.47	—8.30	7.59	5	—7.27	—7.25	7.26	5	—3.94	—4.71	3.97	3.97	
10	7.26	8.60	6.86	7.61	10	7.14	6.91	7.02	10	3.16	3.29	3.22	3.22	
15	6.88	6.36		6.62	15	6.88	6.79	6.81	15	3.74	3.06	—3.90	3.57	
20	6.27	6.39		5.81	20	6.81	6.64	6.73	20	3.99	4.10	4.04	4.04	
25	4.67	5.00		4.87	25	7.10	6.82	7.11	25	5.33	4.97	5.15	5.15	
30	5.16	4.89		5.02	30	7.21	7.48	7.36	30	5.05	4.45	6.67	5.39	
35	3.76	3.30		3.57	35	6.87	7.22	7.05	35	6.85	6.00	5.42	5.42	
40	3.19	3.66		3.42	40	7.53	7.89	7.71	40	6.70	6.40	6.66	6.66	
45	2.60	1.76		2.18	45	7.74	7.07	7.40	45	5.61	7.23	7.14	7.40	
50	0.93	1.78		1.36	50	7.72	7.99	7.85	50	7.23	7.57	7.40	7.40	
55	1.24	1.48		1.36	55	6.69	7.12	6.90	55	6.99	6.95	6.97	6.97	
160 } 0				0.99	164 }	0				168 }	0			7.86
340 } 0					344 }	0				348 }				

* Omitted.

ERROR OF EACH DIVISION OF THE MADRAS MURAL CIRCLE

Diam	No 1	No 2	No 3	Mean	Diam	No 1	No 2	No 3	Mean	Diam	No 1	No 2	No 3	Mean	
168 } 348 } 0	-7,80	-7,35	-6,74	-7,86	172 } 0	7,30	5	4,26	3,21	176 } 0	3,75	5	-3,67	-3,52	-3,17
5	8,50	8,59	7,01	7,37	352 } 0	10	3,94	3,61	3,77	356 } 0	10	4,03	3,53	3,60	3,78
10	6,92	6,37	7,53	6,94	15	2,80	4,49	-3,50	3,63	15	2,85	4,97	-3,37	3,73	4,73
15	6,59	6,58	6,58	6,58	20	4,03	4,44	4,24	20	4,88	4,00	4,54	4,54	4,54	4,54
20	7,50	7,32	7,41	7,41	25	4,72	5,41	5,06	25	4,14	4,97	4,65	4,65	4,65	4,65
25	7,33	8,33	6,85	7,50	30	5,69	4,66	5,96	5,47	30	3,3	4,3	4,37	4,14	4,14
30	7,11	7,61	7,51	7,51	35	4,91	4,67	4,80	35	5,28	4,06	4,67	4,67	4,67	4,67
35	7,47	7,46	7,46	7,46	40	4,96	3,92	4,44	40	5,01	4,08	4,54	4,54	4,54	4,54
40	6,94	8,48	6,87	7,43	45	6,27	4,48	6,08	5,28	45	2,56	3,38	3,82	3,25	3,25
45	7,75	6,96	7,35	7,35	50	6,14	6,95	6,54	50	2,56	3,34	2,95	2,95	2,95	2,95
50	7,07	7,02	7,04	7,04	55	6,59	7,18	6,68	55	2,92	2,59	2,75	2,75	2,75	2,75
169 } 349 } 0	-6,69	-6,69	173 } 0	368 } 0	-	-	-	-	7,95	177 } 0	-	-	-	-	-3,03
5	-6,47	-6,85	6,66	6,66	5	6,54	6,81	6,67	5	-1,96	1,73	1,84	1,84	1,84	1,84
10	5,64	5,86	5,76	5,76	10	6,34	6,37	6,95	10	2,34	2,27	2,30	2,30	2,30	2,30
15	4,25	5,39	4,82	4,82	15	5,63	5,76	-5,80	5,73	15	2,41	2,49	-2,51	2,47	2,47
20	4,87	3,54	4,20	4,20	20	4,89	4,85	4,87	20	3,53	3,50	3,51	3,51	3,51	3,51
25	4,22	3,31	3,76	3,76	25	6,09	6,62	6,36	25	3,94	3,57	3,75	3,75	3,75	3,75
30	2,61	3,64	3,12	3,12	30	5,81	*4,23	5,80	5,80	30	3,80	3,60	5,04	4,15	4,15
35	2,83	2,40	2,61	2,61	35	7,02	7,25	6,59	6,95	35	3,93	4,75	4,34	4,34	4,34
40	2,14	1,93	2,04	2,04	40	5,31	7,75	5,18	6,09	40	5,27	5,25	5,26	5,26	5,26
45	1,22	1,89	1,65	1,65	45	6,04	6,09	6,81	6,31	45	6,18	*3,91	5,72	5,45	5,45
50	1,14	1,47	1,30	1,30	50	6,19	6,34	6,26	60	5,92	6,20	6,08	6,08	6,08	6,08
55	0,89	0,84	0,86	0,86	55	4,98	5,38	5,18	55	5,75	5,76	5,75	5,75	5,75	5,75
170 } 350 } 0	+0,22	+0,22	174 } 0	354 } 0	-	-	-	-	6,66	178 } 0	-	-	-	-	-6,37
5	+0,61	+0,65	+0,58	+0,58	5	4,53	5,66	-6,36	5,52	5	-5,79	-5,41	-5,60	-5,60	-5,60
10	+0,25	+0,27	+0,26	+0,26	10	2,84	4,26	6,86	4,82	10	5,26	4,94	5,10	5,10	5,10
15	-0,32	+0,30	-0,01	-0,01	15	3,66	4,17	3,91	15	5,92	4,89	-5,49	5,43	5,43	5,43
20	1,03	-0,19	0,61	0,61	20	4,06	3,51	3,78	20	5,79	4,47	5,88	5,38	5,38	5,38
25	0,79	1,18	0,99	0,99	25	2,97	2,72	2,84	25	5,91	4,72	5,17	5,37	5,37	5,37
30	3,35	1,97	2,66	2,66	30	1,71	2,13	2,07	30	5,60	4,71	5,81	5,37	5,37	5,37
35	2,47	3,85	3,16	3,16	35	1,059	1,63	0,63	0,56	35	6,30	5,87	6,08	6,08	6,08
40	3,49	3,95	1,72	1,72	40	0,01	0,09	1,29	0,46	40	5,78	6,26	6,02	6,02	6,02
45	3,51	2,69	3,10	3,10	45	+0,24	0,64	0,20	45	6,53	5,23	6,87	6,21	6,21	6,21
50	3,93	3,27	3,60	3,60	50	1,45	+0,62	+0,55	+0,87	50	5,09	4,75	6,06	4,97	4,97
55	3,7	3,98	3,88	3,88	55	-0,10	+1,63	-0,66	+0,29	55	3,71	5,25	3,65	4,20	4,20
171 } 351 } 0	-4,40	-4,40	175 } 0	355 } 0	-	-	-	-	+0,65	179 } 0	-	-	-	-	-5,04
5	-4,15	-5,08	4,61	4,61	5	+0,96	1,91	+1,13	5	-5,19	-6,10	-4,66	5,26	5,26	5,26
10	4,89	5,71	5,30	5,30	10	+0,27	+1,31	+0,79	10	4,56	5,80	4,60	4,99	4,99	4,99
15	5,25	5,63	5,14	5,14	15	+0,52	+0,32	+0,12	15	4,10	4,09	4,10	4,10	4,10	4,10
20	6,08	5,33	-5,95	5,79	20	-0,68	-0,59	+0,63	20	3,09	3,49	3,29	3,29	3,29	3,29
25	5,07	3,77	4,85	4,56	25	0,65	0,51	0,58	25	2,89	2,59	2,74	2,74	2,74	2,74
30	4,86	5,66	5,11	5,11	30	0,96	1,46	1,21	30	2,67	2,20	2,41	2,41	2,41	2,41
35	5,49	6,14	5,31	5,31	35	1,64	2,77	2,20	35	1,72	1,83	1,77	1,77	1,77	1,77
40	6,02	4,97	5,49	5,49	40	1,93	2,26	2,09	40	1,05	+0,07	0,49	0,49	0,49	0,49
45	5,26	5,74	5,50	5,50	45	1,69	2,14	1,91	45	1,08	-0,80	0,94	0,94	0,94	0,94
50	5,92	5,89	6,80	6,80	50	2,05	2,20	2,12	50	0,99	1,11	+0,17	0,44	0,44	0,44
55	5,20	4,98	5,09	5,09	55	2,53	2,08	2,31	55	0,05	*2,23	-0,42	0,23	0,23	0,23
172 } 0	4,72	176 } 0	356 } 0	-	-	-	-	3,17	180 } 0	-	-	-	-	-	0,00
352 }	-	-	-	-	-	-	-	-	360 }	-	-	-	-	-	-

* Omitted.

ERROR OF EACH DIVISION OF THE MADRAS MURAL CIRCLE

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If we now combine the errors for the diameters 0° — 180° , $0^{\circ} 5'$ — $180^{\circ} 5'$ &c with those for 90° — 270° , and $90^{\circ} 5'$ — $270^{\circ} 5'$ &c we obtain

A table of corrections for error of Division to be applied to the mean of the four microscopes

Diameters	0	5'	10'	15'	20'	25'	30'	35'	40'	45'	50'	55'	Diameters
0 0	"	"	"	"	"	"	"	"	"	"	"	"	0 0
0 180	-0.31	-0.46	-0.32	-0.33	-1.10	-1.42	-1.91	-2.39	-2.25	-2.62	-3.18	-3.95	90—270
1 181	4.03	4.41	4.36	4.40	4.85	4.40	5.22	6.44	5.33	5.41	5.58	5.44	91 271
2 182	5.30	5.07	4.62	4.81	5.22	5.50	6.76	7.04	6.54	6.61	7.60	8.14	92 272
3 183	8.38	7.89	7.46	6.80	7.00	6.91	7.38	7.66	7.57	8.31	8.46	7.68	93 273
4 184	7.27	7.06	6.51	6.23	5.46	4.81	3.96	3.47	2.91	1.97	1.68	0.91	94 274
5 195	0.63	1.15	1.48	2.20	2.60	3.07	2.82	3.28	3.25	3.43	3.98	4.04	95 275
6 186	4.37	5.39	5.26	5.12	5.28	5.62	5.60	5.79	5.41	5.12	4.74	4.67	96 276
7 187	4.80	4.33	4.31	4.36	4.83	5.33	5.86	5.62	5.75	5.33	6.19	6.16	97 277
8 188	7.36	6.73	6.53	6.55	6.66	6.51	6.67	7.40	7.45	7.73	7.45	7.12	98 278
9 189	6.10	6.45	5.55	4.93	3.85	3.66	3.51	2.65	2.44	2.00	1.81	1.16	99 279
10 190	0.87	1.48	1.53	0.73	1.93	2.14	2.72	3.23	2.96	3.18	3.91	4.45	100 280
11 191	4.71	4.90	4.79	4.80	4.81	5.19	5.48	5.82	5.82	5.57	5.49	5.30	101 281
12 192	5.29	4.63	4.10	4.51	4.98	5.20	5.90	6.15	6.66	6.59	7.46	7.58	102 282
13 193	8.41	8.01	7.68	7.26	7.19	7.22	7.84	8.04	7.88	7.93	7.86	7.10	103 283
14 194	7.16	7.16	6.17	5.95	4.40	3.81	3.35	2.72	2.23	2.13	1.64	1.57	104 284
15 195	0.39	0.35	0.53	0.62	1.80	2.16	3.23	3.46	3.91	3.56	3.05	3.85	105 285
16 196	4.57	4.88	4.98	4.35	5.12	4.96	5.53	5.72	5.89	5.92	5.80	5.85	106 286
17 197	5.62	5.16	4.92	5.17	5.18	5.80	6.40	6.95	6.00	6.78	7.60	7.15	107 287
18 198	8.01	7.43	7.40	6.90	6.66	7.40	7.60	8.07	7.60	7.43	7.43	6.31	108 288
19 199	6.54	5.98	5.92	5.36	5.21	4.36	3.67	2.98	2.54	2.22	1.88	1.05	109 289
20 200	0.46	0.45	0.64	0.77	1.73	1.98	2.48	2.56	3.06	2.93	3.21	4.17	110 290
21 201	4.80	5.27	5.06	5.32	5.40	5.68	5.44	6.43	6.69	6.57	6.07	5.68	111 291
22 202	5.53	5.10	5.06	5.40	5.05	5.70	6.64	7.42	7.42	7.24	7.92	7.75	112 292
23 203	8.82	8.83	8.43	8.80	8.52	8.24	7.85	7.81	7.92	8.27	8.25	7.61	113 293
24 204	7.08	6.82	6.12	5.57	5.01	4.54	3.67	3.40	2.51	2.10	1.70	1.35	114 294
25 205	0.70	0.50	0.91	0.87	1.15	1.58	1.97	2.77	2.81	2.73	3.02	3.58	115 295
26 206	4.15	4.63	4.79	4.75	5.18	4.86	5.11	5.53	5.81	5.66	5.65	5.15	116 296
27 207	5.23	4.82	4.68	5.00	5.53	5.88	7.24	7.38	7.21	6.78	7.78	7.78	117 297
28 208	8.68	8.67	8.11	7.78	7.77	7.91	8.10	8.32	8.59	8.24	8.47	7.80	118 298
29 209	7.10	7.31	7.06	5.82	5.42	4.34	3.79	2.85	2.63	1.88	1.04	0.97	119 299
30 210	0.97	1.16	1.40	1.22	2.08	2.26	2.35	2.96	3.01	2.18	2.57	3.47	120 300
31 211	3.97	4.96	4.62	4.53	4.52	4.60	4.64	4.95	4.97	5.00	5.11	4.82	121 301
32 212	4.85	4.41	4.27	4.16	5.00	5.23	5.74	6.08	6.26	6.61	7.01	7.15	122 302
33 213	7.90	7.21	6.93	6.46	6.64	6.65	7.12	7.65	7.48	7.82	7.73	7.15	123 303
34 214	6.83	6.67	6.11	5.77	4.82	4.18	3.49	3.18	2.39	2.12	1.79	1.21	124 304
35 215	0.86	0.34	0.47	0.55	1.62	1.39	1.99	2.90	2.72	3.00	3.11	4.38	125 305
36 216	4.46	4.37	4.81	4.92	5.00	5.27	5.57	5.21	5.48	5.80	5.36	4.82	126 306
37 217	5.01	4.50	4.52	3.75	4.72	5.23	5.85	6.10	6.55	6.35	7.29	7.48	127 307
38 218	7.88	7.29	6.68	6.63	6.87	6.73	7.06	7.70	7.23	8.02	7.22	6.62	128 308
39 219	6.51	6.38	5.79	5.40	5.01	4.03	4.09	8.32	2.47	2.44	1.48	1.15	129 309
40 220	0.81	1.27	1.60	1.20	2.23	2.39	2.86	3.71	4.00	4.14	4.18	4.71	130 310
41 221	5.06	4.86	5.42	5.29	6.16	6.08	6.40	6.67	6.87	6.69	6.54	5.92	131 311
42 222	5.79	5.14	5.16	4.76	4.83	5.90	6.27	6.75	6.23	6.26	7.34	7.41	132 312
43 223	8.20	7.97	7.39	7.33	7.31	6.71	7.12	8.13	8.01	8.39	7.75	7.37	133 313
44 224	6.48	6.91	6.32	5.80	5.26	4.26	3.85	2.98	2.69	1.78	1.50	1.34	134 314

Diameters	0'	5'	10'	15'	20	25'	30'	35'	40'	45'	50'	55'	Diameters
° °	"	"	"	"	"	"	"	"	"	"	"	"	° °
45-225	-0.87	-0.96	-1.48	-1.80	-2.25	-2.61	-3.20	-3.92	-3.70	-4.32	-4.62	-5.09	135-315
46 226	4.92	5.45	6.39	6.47	6.51	5.88	6.41	6.69	6.80	6.73	6.14	5.81	136 316
47 227	6.14	5.36	5.56	5.16	6.00	6.08	7.19	7.18	7.51	7.45	8.67	7.84	137 317
48 228	9.08	8.94	8.26	8.09	8.13	7.80	8.05	8.45	8.54	8.28	7.78	7.40	138 318
49 229	6.70	7.01	6.42	5.83	4.70	4.07	3.79	3.04	3.25	2.42	1.88	1.59	139 319
50 230	1.07	0.96	1.13	1.37	1.86	2.38	2.67	3.37	3.02	3.59	4.10	4.51	140 320
51 231	5.05	5.01	5.01	5.22	5.87	5.45	5.83	5.79	5.12	5.42	5.17	5.11	141 321
52 232	5.25	4.16	4.15	4.60	5.36	5.29	6.69	6.87	6.92	6.70	7.47	7.83	142 322
53 233	8.22	7.41	7.56	7.16	7.60	7.60	8.14	8.04	8.22	8.21	7.81	6.81	113 323
54 234	6.54	6.10	5.84	5.43	5.08	4.06	3.28	2.33	2.36	1.96	1.25	1.08	144 324
55 235	1.10	1.10	1.20	1.03	1.41	1.82	2.02	2.93	2.65	3.32	4.04	4.09	145 325
56 236	4.45	5.10	5.42	4.98	5.25	5.27	5.58	5.41	5.42	5.61	5.73	5.29	146 326
57 237	4.95	4.16	4.00	4.13	5.19	6.03	6.84	7.42	7.43	7.09	7.80	7.58	147 327
58 238	8.43	7.82	7.47	7.09	7.42	7.65	7.60	7.90	8.15	8.13	8.15	7.22	148 328
59 239	7.06	6.76	6.10	6.64	5.00	4.34	3.56	2.71	2.46	2.03	1.87	1.56	149 329
60 240	1.76	1.81	2.26	1.96	2.84	3.12	3.95	4.44	4.62	4.36	4.48	5.14	160 330
61 241	5.43	5.74	5.60	5.51	5.70	5.72	5.98	6.24	6.45	6.10	6.70	6.26	151 331
62 242	6.27	5.47	5.05	5.17	5.30	5.94	6.84	6.60	6.85	6.65	7.69	7.74	152 332
63 243	8.74	8.07	7.76	7.85	8.02	7.82	7.92	8.40	8.64	8.61	8.48	7.65	153 333
64 244	7.92	7.99	7.32	6.52	5.68	5.08	4.42	3.62	2.86	2.78	2.43	1.65	154 334
65 245	1.29	1.71	1.57	1.82	1.92	2.73	3.29	3.86	3.84	4.08	4.59	5.77	165 335
66 246	5.85	6.76	6.90	6.48	6.42	6.02	6.53	6.42	6.63	6.94	6.84	6.92	156 336
67 247	6.70	5.70	6.34	5.35	6.00	6.57	8.11	7.98	8.01	7.57	8.62	8.16	157 337
68 248	9.00	8.08	7.80	8.05	7.07	7.58	8.18	8.63	8.98	9.02	9.84	8.63	158 338
69 249	7.76	7.86	7.49	6.80	6.09	5.01	5.03	3.39	3.18	2.95	2.52	1.83	159 339
70 250	1.44	1.29	1.70	1.61	2.27	2.61	3.22	3.85	4.20	4.26	4.77	5.49	160 340
71 251	5.40	6.25	6.25	6.09	5.72	6.00	6.02	6.16	6.09	6.11	6.98	5.71	161 341
72 252	5.34	4.98	4.46	4.46	5.02	5.93	6.58	7.03	6.95	6.61	7.88	7.43	162 342
73 253	8.52	7.77	7.68	7.22	7.06	7.23	7.64	7.89	8.23	8.45	8.69	7.68	163 343
74 254	7.37	6.70	5.83	5.86	4.85	4.81	4.08	2.86	2.51	2.38	1.65	1.03	164 344
75 255	0.68	1.24	1.60	1.15	1.51	1.76	2.09	2.62	2.89	2.71	3.75	4.27	165 345
76 256	4.74	1.93	5.45	5.32	5.83	5.71	5.58	5.70	5.15	5.15	4.76	4.43	166 346
77 257	6.29	4.26	4.07	4.05	4.71	5.25	6.15	6.35	7.10	6.85	7.74	7.47	167 347
78 258	8.21	7.15	7.11	6.99	6.65	7.23	7.63	7.97	7.96	7.93	8.07	7.24	168 348
79 259	6.80	6.54	6.86	5.26	4.84	4.11	3.46	3.10	2.67	1.91	1.54	1.17	169 349
80 260	0.09	+0.48	0.07	0.52	1.19	1.23	2.56	3.43	3.04	3.42	4.08	4.20	170 350
81 261	4.70	-6.13	5.23	5.39	6.40	5.71	5.42	5.37	6.49	5.76	5.93	5.01	171 351
82 262	4.80	3.87	4.04	3.78	4.10	4.81	5.52	5.56	5.49	6.00	6.72	7.14	172 352
83 263	7.77	7.04	7.09	6.84	6.26	7.09	7.12	7.79	7.50	7.40	7.18	6.59	173 353
84 264	6.37	6.17	6.03	4.86	4.43	3.83	3.16	1.96	1.67	1.29	0.51	0.48	174 354
85 265	+0.17	+0.68	0.06	0.69	1.20	1.20	1.67	2.47	2.11	2.60	2.66	2.83	175 355
86 266	-3.60	-4.60	4.19	4.24	4.81	4.89	4.40	4.93	4.48	4.16	4.08	3.81	176 356
87 267	3.86	2.92	2.90	3.26	3.92	4.48	5.05	4.85	5.60	5.60	6.45	6.42	177 357
88 268	7.01	6.47	5.88	6.16	6.12	6.07	6.40	6.78	7.22	7.31	6.63	5.71	178 358
89 269	6.07	5.94	5.80	4.67	4.20	3.47	3.37	2.77	1.94	1.58	1.32	0.93	179 359

With regard to the amount of error attaching to the measures of North Polar Distance hitherto given, the case stands thus each result requires to be corrected by the values set down in the table, and then to be further corrected by the error of the Index Error. If every division of the circle had been

ERROR OF EACH DIVISION OF THE MADRAS MURAL CIRCLE

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employed, this latter error would amount to $-4,9''$ and we should have

A table of corrections due to the ALREADY REDUCED measures of N P D for error of division

Diameters	0'	5'	10'	15'	20'	25'	30'	35'	40'	45'	50'	55'	Diameters
0 0	"	"	"	"	"	"	"	"	"	"	"	"	00—270
0—180	+4.59	+4.44	+4.58	+4.57	+3.80	+3.48	+2.99	+2.51	+2.65	+2.28	+1.72	+0.95	90—270
1 181	0.87	0.49	0.55	0.50	0.05	0.50	-0.32	-0.54	-0.43	-0.51	-0.68	-0.51	91 271
2 182	-0.40	-0.17	0.28	0.09	-0.32	-0.60	1.85	2.14	1.64	1.71	2.70	3.24	92 272
3 183	3.48	2.99	-2.56	-1.90	2.10	2.01	2.48	2.76	2.67	3.41	3.66	2.78	93 273
4 184	2.37	2.16	1.61	1.33	0.56	+0.09	+0.94	+1.43	+1.99	+2.93	+3.32	+3.09	94 274
5 185	+4.27	+3.75	+3.42	+2.70	+2.30	+1.83	+2.08	+1.62	+1.65	+1.47	+0.92	+0.86	95 275
6 186	0.53	-0.49	-0.36	-0.22	-0.38	-0.72	-0.60	-0.89	-0.51	-0.22	0.16	0.33	96 276
7 187	0.10	+0.57	+0.59	+0.54	+0.07	-0.43	0.96	0.72	0.85	0.43	-1.29	-1.26	97 277
8 188	-0.46	-1.83	-1.63	-1.65	-1.76	-1.61	1.77	2.50	2.55	2.83	2.55	2.22	98 278
9 189	1.20	1.50	0.65	0.03	+1.05	+1.24	+1.10	+2.26	+2.46	+2.81	+3.29	+3.74	99 279
10 190	+4.03	+3.42	+3.37	+4.17	+3.67	+2.76	+2.18	+1.67	+1.94	+1.72	+0.99	+0.45	100 280
11 191	0.19	0.00	0.11	0.10	0.09	-0.29	-0.58	-0.92	-0.92	-0.67	-0.59	-0.40	101 281
12 192	-0.39	0.37	0.80	0.39	-0.08	0.30	1.00	1.25	1.76	1.69	2.56	2.68	102 282
13 193	3.51	-3.11	-2.78	-2.35	-2.29	2.32	2.94	3.14	2.98	3.03	2.96	2.20	103 283
14 194	2.26	2.28	1.27	1.05	+0.50	+1.09	+1.55	+2.18	+2.67	+2.77	+3.26	+3.33	104 284
15 195	+4.51	+4.55	+4.37	+4.28	+3.10	+2.74	+1.67	+1.44	+0.99	+1.34	+0.95	+1.05	105 285
16 196	0.33	0.02	-0.08	0.55	-0.22	-0.06	-0.63	-0.82	-0.99	-1.02	-0.90	-0.45	106 286
17 197	-0.72	-0.45	0.02	-0.27	0.28	0.90	1.50	2.05	2.00	1.88	2.60	2.25	107 287
18 198	-1.11	2.58	2.50	2.00	1.76	2.50	2.70	3.17	2.76	2.53	2.53	1.41	108 288
19 199	1.64	1.08	1.02	0.46	0.31	+0.55	+1.23	+1.92	+2.36	+2.68	+3.02	+3.85	109 289
20 200	+4.44	+4.45	+4.26	+4.13	+3.17	+2.92	+2.42	+2.34	+1.84	+1.97	+1.69	+0.73	110 290
21 201	0.10	-0.37	-0.16	-0.42	-0.50	-0.78	-0.54	-1.53	-1.79	-1.67	-1.17	-0.78	111 291
22 202	-0.63	0.20	0.16	0.50	0.15	0.80	1.74	2.52	2.52	2.34	3.02	2.85	112 292
23 203	3.92	3.93	3.53	3.90	3.62	3.34	2.95	2.91	3.02	3.37	3.35	2.71	113 293
24 204	2.18	1.92	1.22	0.67	0.11	+0.36	+1.23	+1.60	+2.39	+2.80	+3.20	+3.55	114 294
25 205	+4.20	+4.40	+3.99	+4.03	+3.75	+3.92	+2.93	+2.13	+2.09	+2.17	+1.88	+1.32	115 295
26 206	0.75	0.27	0.11	0.15	-0.28	0.04	-0.21	-0.63	-0.91	-0.76	-0.65	-0.25	116 296
27 207	-0.33	0.08	0.22	-0.10	0.63	-0.98	2.34	2.46	2.31	1.86	2.89	2.88	117 297
28 208	3.78	-3.67	-3.21	2.88	2.87	3.01	3.20	3.42	3.69	3.34	3.67	2.90	118 298
29 209	2.50	2.41	2.15	0.92	0.52	+0.56	+1.11	+2.05	+2.27	+3.02	+3.86	+3.93	119 299
30 210	+3.93	+3.74	+3.50	+3.68	+2.82	+2.64	+2.55	+1.94	+1.89	+2.72	+2.33	+1.43	120 300
31 211	0.93	-0.06	0.28	0.37	0.38	0.30	0.26	-0.05	-0.07	-0.10	-0.21	+0.08	121 301
32 212	0.05	+0.49	0.63	0.74	-0.10	-0.33	-0.84	1.18	1.86	1.61	2.11	-2.25	122 302
33 213	-3.00	-2.31	-2.03	-1.56	1.74	1.76	2.22	2.65	2.58	2.92	2.83	2.25	123 303
34 214	1.93	1.77	1.21	0.87	-0.08	+0.72	-1.41	+1.72	+2.51	+2.78	+3.11	+3.69	124 304
35 215	+4.04	+4.56	+4.13	+4.35	+3.28	+3.51	+2.91	+2.00	+2.18	+1.90	+1.79	+0.52	125 305
36 216	+0.44	0.51	0.09	-0.02	-0.10	-0.37	-0.67	-0.31	-0.48	-0.90	-0.46	0.03	126 306
37 217	-0.11	+0.40	0.38	+1.15	+0.18	0.33	0.95	1.20	1.65	1.45	2.39	-2.58	127 307
38 218	2.96	-2.39	-1.68	-1.73	-1.97	1.83	2.16	2.80	2.33	2.02	2.32	1.72	128 308
39 219	1.61	1.48	0.89	0.50	0.11	+0.87	+0.81	+1.58	+2.43	+2.16	+3.42	+3.75	129 309
40 220	+4.09	+3.63	+3.30	+3.70	+2.67	+2.51	+2.04	+1.19	+0.90	+0.76	+0.72	+0.19	130 310
41 221	-0.16	0.04	-0.52	-0.39	-1.26	-1.18	-1.50	-1.67	-1.47	-1.79	-1.64	-1.02	131 311
42 222	0.89	-0.24	0.26	+0.14	+0.07	1.00	1.37	1.85	1.33	1.46	2.44	2.51	132 312
43 223	3.30	1.07	2.49	-2.43	-2.41	1.81	2.22	3.23	3.11	3.49	2.85	2.47	133 313
44 224	1.68	2.01	1.42	0.90	0.36	+0.64	+1.05	+1.92	+2.21	+3.12	+3.10	+3.58	134 314

ERROR OF EACH DIVISION OF THE MADRAS MURAL CIRCLE

A table of corrections due to the already reduced measures of N P D for error of division

Diameters	0	5'	10'	15'	20'	25'	30'	35'	40'	45'	50"	55"	Diameters
45-225	+4.03	+3.94	+3.12	+3.10	+2.65	+2.29	+1.70	+0.98	+1.20	+0.58	+0.28	-0.19	135-315
46 226	-0.02	-0.55	-1.49	-1.57	-1.61	-0.98	-1.51	-1.79	-1.90	-1.83	-1.24	0.91	136 316
47 227	1.24	0.46	0.66	0.25	1.10	1.18	2.29	2.28	2.61	2.55	3.77	2.91	137 317
48 228	4.18	4.04	3.36	3.19	3.23	2.90	3.15	3.55	3.64	3.38	2.88	2.50	138 318
49 229	1.80	2.11	1.52	0.93	+0.20	+0.83	+1.11	1.86	+1.65	+2.18	-3.02	+3.31	139 319
50 230	+3.83	+3.91	+3.67	+3.53	+3.04	+2.52	+2.23	+1.53	+1.38	+1.31	+0.80	+0.39	140 320
51 231	-0.15	-0.11	-0.11	-0.32	-0.07	-0.55	-0.91	-0.89	-0.22	-0.52	-0.27	-0.21	141 321
52 232	0.35	+0.71	+0.75	+0.30	0.16	0.39	1.79	1.97	2.02	1.80	2.57	2.93	142 322
53 233	3.32	-2.51	-2.66	-2.25	2.70	2.70	3.24	3.14	3.32	3.31	2.91	1.91	143 323
54 234	1.64	1.20	0.91	0.53	0.18	1.084	+1.62	+2.51	+2.51	+2.91	+3.65	1.382	144 324
55 235	+3.80	+3.80	+3.70	+3.87	+3.46	+3.08	+2.88	+1.97	+2.25	+1.58	+0.86	+0.81	145 325
56 236	0.05	-0.10	-0.52	-0.08	-0.35	-0.37	-0.68	-0.51	-0.52	-0.71	-0.83	-0.39	146 326
57 237	-0.05	1.04	+0.90	+0.77	0.29	1.13	1.94	2.52	2.53	2.19	2.90	2.68	147 327
58 238	3.63	-2.92	-2.57	-2.19	2.52	2.75	2.60	3.00	3.25	3.23	3.25	2.32	148 328
59 239	2.16	1.86	1.20	0.74	0.10	+0.56	+1.34	+2.19	+2.41	+2.87	+3.03	+3.11	149 329
60 240	+3.14	1.309	+2.65	+2.94	+2.06	+1.78	+0.95	+0.46	+0.28	+0.54	+0.42	-0.24	150 330
61 241	-0.63	-0.84	-0.70	-0.61	-0.80	-0.82	-1.08	-1.84	-1.55	-1.20	-1.80	1.36	151 331
62 242	1.37	0.57	0.15	0.27	0.40	1.04	1.94	1.70	1.95	1.75	2.79	2.84	152 332
63 243	3.84	3.17	2.86	2.05	3.12	2.92	3.02	3.50	3.74	3.71	3.59	2.75	153 333
64 244	3.02	3.09	2.42	1.62	0.78	0.18	1.018	+1.28	+2.04	+2.12	+2.47	+3.25	154 334
65 245	+3.01	+3.19	+3.33	+3.08	+2.98	+2.17	+1.61	+1.04	+1.06	+0.82	+0.81	-0.87	155 335
66 246	-0.95	-1.36	-2.00	-1.58	-1.52	-1.12	-1.63	-1.62	-1.73	-0.04	-1.94	2.02	156 336
67 247	1.80	0.80	0.44	0.45	1.10	1.67	3.21	3.08	3.11	2.67	3.72	3.26	157 337
68 248	4.10	3.18	2.90	3.15	2.17	2.68	3.28	3.73	4.08	4.12	4.94	3.73	158 338
69 249	2.86	2.96	2.59	1.90	1.19	0.11	0.13	+1.61	+1.72	+1.95	+2.38	+3.07	159 339
70 250	+1.46	+3.61	+3.20	+3.29	+2.63	+2.29	+1.68	+1.05	+0.70	+0.64	+0.13	-0.59	160 340
71 251	-0.60	-1.35	-1.35	-1.19	-0.82	-1.10	-1.12	-1.26	-1.10	-1.21	-1.08	0.81	161 341
72 252	0.41	0.08	+0.44	-0.44	0.12	1.03	1.68	2.13	2.06	1.71	2.98	2.53	162 342
73 253	3.62	2.87	-2.78	-2.32	2.16	2.33	2.71	2.99	3.33	3.55	3.79	2.78	163 343
74 254	2.17	1.80	0.93	0.96	+0.05	+0.09	1.082	+2.01	+2.30	+2.52	+3.26	+3.87	164 344
75 255	+4.22	-3.66	+3.10	+3.75	+3.39	+3.15	+2.81	+2.28	+2.01	+2.10	+1.15	-0.63	165 345
76 256	0.16	-0.03	-0.55	-0.42	-0.93	-0.81	-0.68	-0.90	-0.15	-0.25	0.14	0.47	166 346
77 257	-0.39	1.064	+0.83	1.085	+0.19	0.35	1.25	1.45	2.20	1.95	-2.84	-2.57	167 347
78 258	3.31	-2.55	-2.21	-2.00	-1.75	2.33	2.73	3.07	3.06	3.03	3.17	2.34	168 348
79 259	1.90	1.64	0.95	0.36	-1.06	+0.79	+1.44	+1.80	+2.23	+2.99	+3.36	+3.73	169 349
80 260	+4.81	+5.38	+4.83	+4.38	+3.71	+3.67	+2.34	+1.47	+1.26	+1.48	+0.82	+0.70	170 350
81 261	0.20	-0.23	-0.33	-0.49	-0.60	-0.81	-0.52	-0.47	-0.59	-0.86	-1.03	-0.11	171 361
82 262	0.10	+1.03	+0.86	+1.12	+0.80	+0.09	0.62	0.66	0.59	1.10	1.82	2.24	172 362
83 263	-2.87	-2.14	-2.19	-1.91	-1.76	-2.19	2.22	2.89	2.60	2.50	2.28	1.62	173 363
84 264	1.47	1.27	0.13	+0.01	+0.47	+1.07	+1.74	+2.94	+3.23	+3.61	+4.39	+4.42	174 364
85 265	+5.07	+5.58	+4.84	+4.31	+3.70	+3.70	+3.23	+2.43	+2.79	+2.30	+2.24	+2.07	175 355
86 266	1.30	0.30	0.71	0.66	0.06	0.01	0.50	-0.03	0.42	0.75	0.82	1.09	176 356
87 267	1.04	1.98	2.00	1.66	0.98	0.12	-0.15	+0.05	-0.60	-0.70	-1.55	-1.62	177 357
88 268	-2.14	-1.57	-0.98	-1.26	-1.22	-1.17	1.50	-1.88	2.32	2.41	1.73	0.81	178 358
89 269	1.17	1.04	0.70	+0.23	+0.70	+1.43	+1.52	+2.13	+2.96	+3.32	+3.58	+3.97	179 359

ERROR OF EACH DIVISION OF THE MADRAS MURAL CIRCLE

CCXXI

It must here be carefully noted with regard to the two preceding tables, that the signs + and — are to be understood in the sense of North and South respectively, and *not* of addition and subtraction.

In order to shew how nearly the above corrections can satisfy observations made at Madras with those made at other Observatories I have selected from Vol II all the cases of large difference between the North Polar Distances there given and the Greenwich observations, and have applied the corrections due to error of division as follows.

A table, exhibiting all the large differences yet met with between the Greenwich and Madras determinations of North Polar Distance (i e all above 4"), together with the same corrected for error of division in the Madras Circle

No in Vol II	Names	Division Observed	Diff from Green- wich	err div	Cor diff from Green- wich	Remarks
41	15 Cassiopeæ	α	28 0	- 4.32	+ 3.78	- 0.54
59	31 Andromedæ	δ	60 5	+ 5.37	- 3.09	+ 2.28
162	98 Piscium	μ	84 45	+ 8.33	- 3.61	+ 4.72
178	102 —	π	78 40	- 5.65	+ 3.03	- 2.62
217	59 Ceti	ν^2	111 55	- 11.09	+ 0.78	- 10.31
269	78 Ceti	ν	85 10	+ 5.06	- 4.84	+ 0.22
280	83 —	ϵ	102 35	+ 7.81	+ 1.25	+ 9.06
399	41 Persei	ν	48 0	- 4.67	+ 4.18	- 0.49
630	48 Eridani	ν^3	93 45	- 4.16	+ 3.11	- 0.75
645	54 —		110 0	+ 4.21	- 4.44	- 0.23
506	105 Tauri		68 35	- 5.16	+ 3.73	- 1.43
697	2 Leporis	ϵ	112 40	- 4.43	+ 2.52	- 1.91
677	39 Orionis	λ	80 15	+ 4.12	- 4.38	- 0.26
735	34 Aurigæ	β	45 5	+ 5.10	- 3.94	- 1.16
747	61 Orionis	μ	80 25	+ 4.95	- 3.67	+ 1.28
757	67 Orionis	ν	75 15	+ 5.51	- 3.75	+ 1.79
791	1 Canis Maj.	ζ	120 0	+ 5.57	- 3.93	+ 1.61
857	16 —	α^1	114 0	- 4.05	+ 2.18	- 1.87
877	24 —	α^2	113 40	- 6.57	+ 3.02	- 3.55
995	15 Argus		113 50	+ 4.45	+ 3.35	+ 7.80
1131	40 Lynæs	τ	54 55	+ 4.44	- 3.82	+ 0.62
1179	29 Ursæ Maj.	ν	30 15	+ 5.04	- 3.68	+ 1.36
1243	Antl Pneum.	α	120 15	+ 4.24	- 3.68	+ 0.56
1254	47 Leonis	ρ	79 50	+ 5.01	- 3.96	+ 1.65
1289	46 Leonis Min.	σ	54 55	+ 5.66	- 3.82	+ 1.84
1333	12 Hyd and Crat.	δ	108 55	- 4.24	+ 2.20	- 2.01
1338	78 Leonis	ι	78 35	- 4.62	+ 3.07	- 1.55
1386	8 Virginis	π	82 30	+ 4.88	+ 0.62	+ 5.60
1575	85 Ursæ Maj.	η	30 55	+ 4.45	- 3.76	+ 0.70
1579	3 Centauri	κ	122 10	+ 4.78	- 0.63	+ 4.15
1607	11 Draconis	α	24 50	+ 5.39	- 3.20	+ 2.19
1619	99 Virginis	ι	95 15	+ 5.81	- 2.70	+ 3.11
1620	16 Bootis	α	70 0	+ 4.74	- 3.48	+ 1.28
1665	107 Virginis	μ	95 0	+ 5.63	- 4.27	+ 1.36
1681	9 Librae	α^2	105 20	+ 4.11	- 3.10	+ 1.31

No in Vol II	Names	Division Observed	Diff from Green wich	err div	Cor diff from Green wich	Remarks
1700	7 Urs Min	β	15 10	+ 7.86	- 4.37	+ 3.49
1701	19 Librae	δ	97 05	- 4.80	+ 1.26	- 3.04
1787	44 —	η	106 10	+ 4.01	- 4.17	- 0.36
1797	5 Lupi	λ	123 10	+ 4.19	- 2.03	+ 6.52
1803	37 Serpentis	ϵ	85 0	+ 5.30	- 5.07	+ 0.23
1806	2 Scorp	A ¹	114 50	+ 5.63	- 3.20	+ 2.43
1816	6 —	ρ	118 15	+ 7.73	+ 3.34	+ 11.07
1837	9 —	ω^1	110 15	+ 5.28	- 4.13	+ 1.15
1838	10 —	ω^2	110 25	+ 4.96	- 2.92	+ 2.03
1839	6 Herculis	ν	13 30	- 4.11	+ 2.22	- 1.89
1902	13 Ophiuchi	ζ	100 15	+ 4.18	- 4.17	+ 0.01
1976	65 Herculis	δ	65 0	+ 4.48	- 3.01	+ 0.87
1986	42 Ophiuchi	θ	111 50	+ 5.69	- 3.20	+ 2.49
2021	57 —	μ	98 0	- 4.10	+ 2.16	- 1.61
2028	56 Serpentis	α	102 50	- 5.03	+ 2.56	- 2.47
2079	10 Sagittarii	γ^e	120 25	+ 10.18	- 2.64	+ 7.54
2105	19 —	δ	119 55	+ 5.11	- 3.93	+ 1.18
2122	22 —	λ	115 30	+ 4.09	- 2.93	+ 1.16
2164	28 —	τ	112 35	- 4.27	+ 2.52	- 1.75
2187	37 —	ζ^e	111 20	+ 9.48	+ 0.50	+ 9.98
2196	38 Sagittarii	ζ	120 10	+ 5.87	- 3.50	+ 2.37
2198	13 Aquilae	ϵ	75 10	+ 5.57	- 3.40	+ 2.17
2213	16 —	λ	95 10	+ 4.56	- 3.12	+ 1.14
2303	13 Cygni	θ	40 10	+ 4.14	- 3.30	+ 0.84
2313	56 Sagittarii	f	110 10	+ 4.61	- 4.26	+ 0.38
2371	67 Draconis	ρ	22 40	- 5.44	+ 2.52	- 2.92
2388	6 Capricorni	α	103 5	- 4.75	+ 3.11	- 1.64
2501	23 —	θ	107 55	- 4.43	+ 2.25	- 2.18
2528	32 —	τ	107 35	- 4.56	+ 2.05	- 2.51
2546	36 —	b	112 35	- 4.08	+ 2.52	- 1.66
2561	73 Cygni	ρ	45 10	+ 6.89	- 3.42	+ 3.47
2562	23 Aquarii	ξ	98 40	- 5.13	+ 2.66	- 2.58
2665	43 —	θ	98 40	- 4.35	+ 2.66	- 1.80
2669	23 Cephei	ϵ	33 50	- 4.34	+ 2.83	- 1.51
2681	46 Aquarii	ρ	98 40	+ 16.33	+ 2.55	+ 18.88
2696	59 Aquarii	ν	111 35	+ 10.15	+ 1.63	+ 11.68
2710	42 Pegas	ζ	80 5	+ 6.39	- 5.38	+ 1.01
2764	83 Aquarii	h^1	98 40	- 5.21	+ 2.55	- 2.88
2776	42 —	x	98 40	- 4.43	+ 2.55	- 1.88
2796	4 Capricorni	d	28 40	- 4.37	+ 3.69	- 0.68

In addition to the above I may add the following, derived from page clxxiii, *et seq.* of the present volume

ERROR OF EACH DIVISION OF THE MADRAS MURAL CIRCLE

CCXXIII

A table of the larger differences (all above 3") between the determinations of declination at the St Helena and Madras observations, together with the same corrected for error of division in the Madras Circle

No from B Cat	Name	Division observed	Differ from J	err div	T - J corrected	Remarks
278	x Eridani	0 142 25	+ 3,5	- 0,4	+ 3,1	
353	λ —	138 25	+ 3,2	- 2,9	+ 0,3	
744	α Doradus	145 25	- 4,2	+ 3,1	- 1,1	
1389	α Equ Pict	151 45	+ 3,4	- 1,2	+ 2,2	
1819	R Argus	137 45	+ 4,6	- 2,5	+ 2,1	
2311	b Argus	148 30	+ 3,2	- 2,6	+ 0,6	
2326	c —	136 30	+ 3,3	- 1,5	+ 1,8	
2394	· —	151 40	+ 1,3	- 1,5	+ 2,8	
2752	φ —	143 50	+ 3,1	- 2,9	+ 0,5	
5767	Normæ	124 55	- 3,3	+ 3,7	+ 0,4	
5828	η Arae	148 45	+ 5,3	- 3,2	+ 2,1	
7267	γ Tucanæ	149 10	+ 3,3	- 1,2	+ 2,1	
7271	γ App Sculp	123 30	+ 6,3	- 2,2	+ 4,1	Greenwich place for 1836, differs + 1"84
7300	β — —	128 45	+ 3,3	- 2,0	+ 1,3	
7330	δ — —	119 0	+ 3,4	- 2,5	+ 0,9	

In conclusion I may state—that the discordances which have hitherto been met with in the Solar—Lunar, and Planetary observations, will, on applying the corrections from the above table,—in a great measure be got rid of, and the observations generally, will I believe be found to possess a considerable degree of accuracy



ERRATA IN THE BRISBANE CATALOGUE

No. of Star in Bris bane Catalogue	Column	Error	Correction	I — B corrected	
				M — O	I
163	Ann Picc in A R	for 2,508	read 2,492	-2.81	—
516	—	— 2,018	— 2,042	—	—
639	—	— 1,935	— 1,270	—	—
718	—	— 0,866	— 0,819	—	—
1045	—	— 1,099	— 1,109	-3.82	—
1284	—	— 1,753	— 1,737	—	—
1294	—	— 1,400	— 1,361	—	—
1309	—	— 1,071	— 1,182	—	—
1642	—	— 2,362	— 2,512	-2.27	—
1705	—	— 1,910	— 1,464	-2.52	—
1730	—	— 2,118	— 2,141	-2.24	—
1816	—	— 1,031	— 1,077	-2.31	—
1832	—	— 1,784	— 1,804	—	—
2001	—	— 1,191	— 1,991	—	—
2044	—	— 1,134	— 1,631	—	—
2110	—	— 1,895	— 1,921	-1.91	—
2322	—	— 1,737	— 1,389	—	—
2424	—	— 1,720	— 1,699	-2.31	-3.46
2466	—	— 2,142	— 2,164	-2.16	—
2712	—	— 2,458	— 2,684	-2.13	—
2790	—	— 2,147	— 2,169	-2.08	-3.10
2825	—	— 2,319	— 2,474	-3.04	-0.99
3056	—	— 2,661	— 2,555	—	—
3065	—	— 2,557	— 2,574	-2.44	—
3558	—	— 2,970	— 2,944	-2.00	—
3795	—	— 2,938	— 2,920	-1.67	—
4093	—	— 3,122	— 3,138	-1.81	—
		h m	h m		
4224	A R	— 12 42	— 12 43		
		s	s		
4231	Ann Picc in A R	— 3,111	— 3,171	—	—
4263	—	— 3,518	— 3,479	—	—
4396	—	— 1,091	— 3,173	—	—
4565	—	— 3,711	— 3,744	—	—
4586	—	— 4,002	— 3,962	-2.03	-2.21
4626	—	— 3,576	— 3,707	-1.23	—
4944	—	— 3,195	— 4,303	—	—
4961	—	— 4,074	— 3,868	-3.02	—
4979	—	— 3,951	— 3,998	-2.59	—
5288	—	— 4,205	— 4,155	—	—
5496	—	— 4,406	— 1,558	-1.49	—
5422	—	— 3,098	— 4,098	—	—
5699	—	— 4,249	— 1,194	-1.68	—
5920	—	— 4,308	— 1,053	—	—
6306	—	— 4,066	— 4,044	-2.70	—
6474	—	— 1,030	— 4,662	—	-2.26
6530	—	— 4,082	— 4,348	—	—
6607	—	— 4,734	— 4,391	-1.35	—
7308	—	— 3,387	— 3,265	—	—

Which errors, having for the most part been discovered since the Catalogue in the present Volume was in print, necessarily give rise to errors in the column "Difference from the Brisbane Catalogue"—hence the above column "T — B corrected". In addition to the above, the following errors have been detected

ERRATA IN THE PRESENT VOLUME							
No	Columns		Error				Correction
10	Declin	for	37 22	read			37 23
75	Ann Preo	—	2s 862	—			2s 782
	Log a	—	0 3514	—			0 4114
	A R	—	4s,37	—			1s,44
	Difference	—	— 1s 51	—			— 1s,58
304	A R	—	14s 33	—			13s,82
	Difference	—	— 3s,12 & — 2s 14	—			— 2s,08 & — 1s 63
407	Ann Preo	—	1s 946	—			0s 946
	Log a	—	0 2801	—			9 9759
414	Declin	—	19 10'	—			49 14'
484	Ann Preo	—	1s 570	—			1s 881
	Log a	—	0,1959	—			0,2751
505	Ann Preo	a	b	c	d	a'	b
	1s,326	+7 6939	+0 0395	+0,1226	—7 5934	+0 0237	+8 51
Insert	A R = 49m 32s,09	—	—	—	Declin	—	32 52
	Diff = +1,11 & —	—	—	—	Diff	—	+ 0
787	Difference	for	10s,67	read		1m 0s,67	
847	Ann Preo	a	b	c	d	a'	b
Insert	2s,158	—8,1688	+8 8350	+0 1906	+8 1173	+0 9020	+9,2
	A R 32m 53s,87	—	—	Difference	+0s,85 & —	—	
906	Ann Preo	a	b	c	d	a'	b
Insert	1s,293	—8 7250	+9,0286	+0 1116	+8 6197	+0 9931	+9 51
	A R 15m 41s 14	—	—	Declin	0 29 80	—	
	Difference	—3,22	—	Difference	+ 1,61	—	
938	Ann Preo	a	b	c	d	a'	b
Insert	1s,207	—8 7655	+9,0322	+0,0993	+8,6892	+0 9886	+9 60
	A R 53m 36s 30	—	—	Declin	0 4,06	—	
	Difference	—3,29	—	Difference	— 1,60	—	
946	Magnitude	for	6,7	read		7	
947	Magnitudo	—	8	—		7	
978	Ann Preo	—	1s 312	—			2s,512
1121	Ann Preo	—	2,083	—			2 283
1228	Difference	—	—3 ,07	—			—30 ,87
1353	B No	—	2178	—			2478
1368	Declination	—	49°	—			48°
1617	A R	—	36s 59	—			31° 76
	Difference	—	—2 ,71	—			—0 87
1643	B No	—	3016	—			9014
1667	Difference	—	+1 913	—			+1 3,19
1672	B No	—	8065	—			3065
2131	Difference	—	+2s,16 & +1s,59	—			—2s,14 & —
2396	Difference	—	—13s 20	—			—1m 3s,20
2523	Difference	—	+ 8 31	—			— 1s,69
2630	Difference	—	—	—			— 1s 85
2655	Difference	—	— 8°,32	—			+ 1m 51 68
2757	Magnitude	—	9	—			8,9
2866	The Ann Preo in A R of these two, as well as the values of log a, log b, log c,						
2866	and log d, must exchange places						
3019	Difference	for	+00,9	read		+0,09	
3280	Ann Preo	a	b	c	d	a'	b
Insert	4s,154	+8 9434	—8 8310	+0,6180	—8 8461	—9 3670	—9,81
	A R = 29m 190s	—	—	Declin	—4 38 ,20	—	
	Diff	— 2,02	—	Diff	—	+ 2,02	—

ADDITIONAL ERRATA IN VOL II
Page CXVII No 2801 N P D for 18,43 read 32,95