#### APPENDIX No. 7.

#### A CATALOGUE OF STARS FOR OBSERVATIONS OF LATITUDE.

The following catalogue supersedes the "List of Stars for Observations of Latitude," printed as an Appendix to the Coast Survey Report for 1873, by giving declinations as accurate as obtainable, and right ascensions to the nearest second. It thus furnishes the means of computing at once the results of observations for latitude without waiting for the collating of various astronomical catalogues in order to deduce the best obtainable declinations for the stars observed. For the purpose of a finished reduction it will always be advisable to make such collation, as more recent observations, or the discussions now in progress of systematic errors in existing Star Catalogues, may serve to correct the places contained in the present catalogue, from which, however, very satisfactory results will be obtained.

It has been the custom heretofore in the Coast Survey to select from the British Association's Catalogue the pairs of stars suitable for the determination of latitude, by the method of observing equal meridian zenith-distances with the zenith-telescope. The numbers of the stars so selected for observation at any station were sent to the office, where the mean declinations for the year of observation were obtained by reference to all recent catalogues of precision, comprising the several Greenwich Catalogues, the Washington Observations, the Radcliffe and Armagh, and, where these failed, the Rumker Catalogue. For stars not found in at least two of these catalogues, and those which exhibited large discrepancies in position, express observations were made, by request, at the observatories at Washington and Cambridge.

This practice of deducing the declinations of stars from observations made with different circles and under varied circumstances has led to a great degree of precision in the assumed declinations. The stars used in the method of equal zenith-distances comprise those down to the sixth magnitude, most of which have not been the object of precise determination as standard stars. Still we find that the probable error of the declination of a star derived in the manner above mentioned does not exceed  $\pm 0^{\prime\prime}$ .3. And the probable error of one observation with the instruments used being between  $0^{\prime\prime}$ .3 and  $0^{\prime\prime}$ .5, the observation of sixteen pairs of stars on four nights never fails to reduce the probable error of the latitude below  $0^{\prime\prime}$ .1.

The British Association's Catalogue is now very difficult to obtain, and its constants have become obsolete by lapse of time. The continued demand on the office for copies which could not be procured led to the preparation of the catalogue given below, which is intended to replace it as a list of stars available for the observation of latitude by the zenith-telescope in the limits of the United States.

This catalogue comprises all the stars found in the "Bonner Verzeichniss" or "Nördliche Durchmusterung" of Argelander, included in his northern zones and his zone of 1° south declination, and to his sixth magnitude, inclusive.

The list was selected under the direction of Assistant C. S. Peirce, and the names of the stars were assigned by him on the following principles:

1. If the star has a letter assigned by Bayer, it is so designated. If the latitude and longitude correspond with a star of Tycho's Catalogue, this star is considered to be Bayer's. If there was any difficulty in identifying Tycho's star, the identification was guided in several cases by remarks in Argelander's "De fide Uranometriae Bayeri." If the star is not in Tycho it was sought in Ptolemy's Catalogue. In such case the identification with Ptolemy has generally been made through the edition of George of Trebizond, which seems to agree very closely in its readings with the one used by Bayer.

Argelander states that Bayer used the edition of Schreckenfuchs. But the identification of Ptolemy with the heavens is based on Mr. Peirce's transcript of the Paris manuscript, an account of which he has presented to the American Academy of Arts and Sciences. If Bayer's star is neither in Tycho nor Ptolemy, it is then identified by its configuration. The letters thus assigned nearly always agree with those given by Argelander and Baily, except where these authorities differ. In regard to the index numbers attached to a few of the letters, Bayer has been followed as to the number of stars having one letter, and they have been numbered in the order of their right ascension at the epoch of Flamsteed's Catalogue. In cases where Bayer indicates only one star, and his star comprehends two, these have been distinguished as preceding (pr.), and following (sq.), or north (bor.), and south (aust.). The Roman letters are always in Roman type.

In the six constellations where Bayer has a Roman o, this letter and the Greek o are preceded by Flamsteed's numbers.

- 2. If the star is a variable, it has the letter given it by Schönfeld.
- 3. If the star has no letter assigned by Bayer or Schönfeld, it is designated by Flamsteed's number, when put by him in the same constellation as by Heis. In identifying Flamsteed's stars the authority of Baily has been followed.
- 4. If the star is in none of these lists, the Durchmusterung zone and number are given. D. M. is the abbreviation used for Durchmusterung. The *magnitudes* have been reduced to a scale of "equable distribution" according to the method explained in Mr. Peirce's Photometric Researches, in the Annals of the Harvard College Observatory.

The places of stars given in this catalogue have been prepared, under the immediate direction of Assistant Hilgard, by Assistant O. H. Tittmann, aided by C. Ferguson, H. W. Blair, J. B. Baylor, A. Braid, and A. H. Scott.

The right ascensions are given to nearest seconds of time only, as that is amply sufficient for the special purpose of the catalogue. The right ascensions of a great number of stars are found in other catalogues expressly prepared for observations of time, such as the Coast Survey Standard Mean Places of Fundamental Stars, prepared by Dr. B. A. Gould in 1862, and the Field Catalogue of 983 Transit Stars, prepared by Assistant G. Davidson, and published in 1874. Moreover, the American Ephemeris and Nautical Almanac will be generally used for the determination of time, as it gives ready to hand the apparent places of quite a sufficient number of convenient stars.

It is unnecessary to state in detail the process by which the right ascensions and their annual variations have been deduced, as only the nearest second of time is given; the computations, however, were carried to tenths of seconds.

The declinations have been deduced by a comparison of all modern catalogues of precision, notably the following, viz:

Greenwich New Seven-Year Catalogue of 2760 Stars, 1864.

Greenwich Seven Year Catalogue of 2022 Stars, 1860.

Greenwich Six-Year Catalogue of 1576 Stars, 1850.

Greenwich Twelve-Year Catalogue of 2156 Stars, 1836-1847.

Washington Catalogue of Stars, 1845-1871.

Astronomische Gesellschaft (mean and apparent places of 539 Stars for 1878).

Radcliffe Catalogue of 6317 Stars, for the epoch 1845.

Second Radeliffe Catalogue of 2356 Stars, for the epoch 1860.

Armagh Observatory Catalogue. Places of 5345 Stars, observed from 1828 to 1854.

British Association Catalogue of Stars, reduced to the epoch 1850.

Rumker's Catalogue. Mean places of 12000 Stars for the epoch 1836.

This examination has revealed the fact that there are in the northern heavens numerous stars as bright and brighter than the sixth magnitude, whose places have never been determined with precision, and that there are as many as 250 stars in this list that have either never been observed at all with precision, or that are not found in any catalogue more recent than that of the British Association or Radcliffe (1). Such stars are marked with an asterisk (\*) in the present catalogue, and a list of them has been furnished to the principal observatories, with the request that their positions be determined with accuracy.

All other stars have been found in one or more of the recent catalogues of precision, and generally with not less than four observations. Nearly two-thirds of their number had been heretofore used for latitude observations in the Coast Survey, and their positions deduced by a comparison of the catalogues above mentioned. This work had been performed in the Computing Division of the office, under the direction of Assistant C. A. Schott, by Mr. James Main, whose methods were followed in deducing the places of the remaining stars. The large number of results for latitude obtained with the use of declinations so deduced justify the statement made above that the average probable error of the declination of a star as here given will not exceed  $\pm 0''.3$ .

The annual precession in declination was computed for every minute of time by the expression

$$\Delta \delta = 20''.054 \cos \alpha$$

and that belonging to any particular star was obtained by interpolation.

The proper motions given in the last column were taken from the Coast Survey Catalogue of Fundamental Stars, from the Seven-Year New Greenwich, the Radcliffe (2), and the British Association Catalogues in that order of preference.

The introduction of thirteen stars omitted from the former list, and the transposition of some in order to preserve the order of right ascension, occasions a difference in the serial numbers of the present list as compared with the former, which must now be considered as entirely superseded.

J. E. HILGARD,

Assistant U.S. Coast Survey, in charge of Office.

REPORT OF THE SUPERINTENDENT OF

1 2 3 4 5	8373				Variation.	1880.	Precession.	Motion.
2 3 4 5				h, m. s.	s.	0 1 11	"	,,
3 4 5	4	10 Cassiopeæ	5 · 5	0 00 13	+ 3.08	63 31 41.5	+ 20.05	10. +
4 5		a Andromedæ	2.0	2 11	3.09	28 25 41.3	20.05	15
5	7	3 Cassiopeæ	2.3	2 47	3.17	58 29 16.8	20.05	17
9	8	87 Pegasi	5.5	2 51	3.09	17 32 42.5	20.05	+ .02
. !	14	34 Piscium	5 · 7	3 52	3.07	10 28 39.8	20.05	05
6	16	22 Andromedæ	5.2	4 05	3.10	45 24 15.5	20.05	
7		Andromedæ	5.6	5 42	3.10	47 29 02.8	20.05	
8*		D, M, 22°, 14	5.8	5	3.09	22 49	20.05	
9	26	γ Pegasi	2.8	7 03	3.08	14 30 58.9	20.04	+ .00
10	28	23 Andromedæ	6.0	7 17	3.10	40 22 22.5	20.04	08
11	32	χ Pegasi	4.9	0 8 24	+ 3.10	19 32 21.6	+ 20.01	+ .02
12*	-	Pegasi	6.0	8	3.09	21 37	20.04	
13	36	35 Piscium	5.8	8 48	3.08	8 09 15.0	20.04	05
14	-	Andromedæ	5.8	10 03	3.11	42 55 44.6	20.04	
	. 46	Cassiopeæ	5.8	10 32	3.20	60 51 58.4	20.03	01
15 16	46	D. M. 47°, 50	6.0	10 49	3.14	47 16 49.3	20.03	
1	51	B. M. 47, 50	4.8	10 49	3.11	38 00 55.7	20.03	10
17	52 58	σ Andromedæ	!	12 04	3.12	36 07 11.5	20.03	04
	58	Andromedæ	4.4 5.8	12 04	3.12	30 51 04.0	20.02	04
19 20	60	26 Andromedæ	6.0	12 23	3.14	43 07 29.3	20.02	+ .02
i				0 14.5	+ 3.13	32 15	+ 20.01	
21*		Andromedæ	5.8		i	37 18 16.2		02
22	67	ρ Andromedæ	5.4	14 48	3.15	51 21 17.5	20.01	
23	79	Cassiopeæ	5.8	17 48	3.20		19.99	63
24	83	Cassiopeæ	5.8	18 37	3.21	52 22 53.9 43 43 51.0	19.99	oz
25	100	Andromedæ	5.4	21 47	3.19	17 13 43.2	19.96	+ .11
26	101	47 Piscium	5.3	21 48	3.12	15 46 54.5	19.96	+ .01
27	102	48 Piscium	5.8	21 59	3.11	59 18	19.96	
28*		Cassiopeæ	5.8	23.7	3.30	29 05 23.8	19.95	
29	109	28 Andromedæ	5.5	23 48	3.15	_	19.95	07
30	120	Andromedæ	5.8	25 03	3.17	32 55 09.2	19.93	
31	121	λ Cassiopeæ	5.1	0 25 10	+ 3.28	53 51 34.7	+ 19.93	+ .02
32	126	κ Cassiopeæ	4.5	26 11	3.36	62 16 10.3	19.92	+ .02
33	130	52 Piscium	5-4	26 18	3.14	19 38 00.5	19.92	03
34	142	D. M. 12°, 57	5.8	28 42	3.11	12 42 43.0	19.90	+ .03
35	147	14 Ceti	5.9	29 23	3.08	- I 09 56.2	19.89	14
36	146	Cassiopeæ	5.7	29 28	3.31	53 30 26.1	19.89	+ .04
37	148	Cassiopeæ	5.8	29 39	3.36	59 39 54.5	19.89	.00
38	152	Andromedm	5.3	30 15	3.24	43 49 34.8	19.88	+ .01
39	153	ζ Cassiopeæ	3.8	30 17	3.31	53 14 11.2	19.88	10. +
40	155	π Andromedæ	4.2	30 28	3.19	33 03 31.3	19.88	+ .02
41*		Andromedæ	6.0	0 30.8	+ 3.15	23 21	+ 19.87	
42	158	Andromedæ	5.7	30 56	3.20	34 44 20.1	19.87	04
43	164	ε Andromedæ	4-4	32 13	3.15	28 39 37.2	19.85	24
44	165	Cassiopeæ	5.6	32 32	3.29	48 41 40.4	19.85	
45	166	δ Andromedæ	3.5	32 55	3.19	30 12 14.0	19.84	11
46	170	55 Piscium	5-4	33 37	3.15	20 46 48.0	19.84	то. —
47	169	a Cassiopeæ	var. 2.5-2.8	33 42	3.37	55 52 44.1	19.84	03
48	173	32 Andromedæ	5.1	34 37	3.25	38 48 00.3	19.82	+ .02
49	175	Cassiopeæ	6.0	34 55	3.52	65 29 21.1	19.82	• • • • • • • • • • • • • • • • • • • •
50	178	Andromedæ	6.0	35 15	3.20	23 58 16.3	19.82	+ .02

No.	B. A. C.	Constellation.	Mag.	A. R. 1880.	Annual Variation.	Declination 1880.	Annual Precession.	
				h. m. s.	s.	s 1 "	11	11
51	180	$\xi$ Cassiopeæ	5.1	0 35 23	+ 3.32	49 51 13.7	+ 19.82	05
52	189	$\pi$ Cassiopeze	5.3	36 50	3.30	46 22 05.6	19.79	01
53	194	21 Cassiopeæ	5 • 5	37 45	3.84	74 19 54.0	19.78	06
54	197	Cassiopeæ	6.0	37 46	3.30	47 12 22.3	19.78	
55	198	ο Cassiopeæ	5.0	38 03	3.32	47 37 39.1	19.78	03
56	201	Cassiopeæ	5.7	38 28	3.40	54 33 49.3	19.78	08
57	206	23 Cassiopeæ	5 • 5	39 47	3.89	74 11 29.3	19.75	04
58	211	57 Piscium	5.1	40 16	3.13	14 49 14.3	19.74	04
59	213	58 Piscium	5.0	40 46	3.12	11 19 11.6	19.74	+ .06
60	215	ζ Andromedæ	4.3	40 59	3.17	23 36 51.0	19.73	07
61	218	η Cassiopeæ	3.5	0 41 51	+ 3.58	57 10 43.8	+ 19.72	49
62	219		5.1	42 02	3.37	50 18 46.5	19.72	07
63	221		5.8	42 05	3.13	4 39 47.4	19.72	-1.18
64	222		· -	42 27	3.11	6 55 54.6	19.71	05
65	223		4.4	42 40	3.14	16 17 33.4	19.71	16
66	227	ν Andromedæ		43 12	3.28	40 25 30.7	19.70	01
67	220	i Piscium, (1st *)	4·9 5·3	43 26	3,21	27 03 24.4	19.69	+ .03
68	228	Cassiopeæ		43 27	3.58	63 35 36.9	19.69	03
69	239		5.7	45 55	3.53	60 27 52.5	19.63	+ .05
70	242		5.1	46 52	3.06	- 1 47 45·7	19.63	01
•		1	5.0		_			
71	244	v <sup>1</sup> Cassiopeæ	5.0	0 47 53	+ 3.51	58 19 20.1	+ 19.62	09
72	247	66 Piscium	5.8	48 14	3.16	18 32 17.3	19.61	+ .04
73	250	36 Andromedæ		4 <sup>§</sup> 33	3.20	22 58 42.9	19.61	,00
74		y Cassiopeæ	2.1	49 29	3.57	60 03 59.0	19.59	+ .02
75°		k Piscium	5.8	49 32	3.22	26 33 30.0	19.59	
76 	-	$v^2$ Cassiopeæ $\mu$ Andromedæ	5.0	49 32	3.53	58 31 58.0	19.59	+ .05
77		$\mu$ Andromedæ $\eta$ Andromedæ	4.1	50 06	3.30	37 50 54.3	19.58	+ .01
78	1		4.5	50 48	3.19	22 46 09.1	19.56	1
79	1	Cassiopeæ	5.8	50 56	3.72	65 42 11.3	19.56	.00
80	267	h Piscium	5.8	51 21	3.23	28 20 35.7	19.55	or
81	269	Piscium	5.8	0 51 37	+ 3.14	13 02 48.0	+ 19.55	05
82	262	Cephei	4.7	52 36	7.10	85 36 44.1	19.53	.00
83	283	39 Andromedæ	6.3	56 10	3.35	40 41 59.2	19.45	• • • •
8.4	* 285	σ Piscium	5.3	56 15	3.27	31 09 37.0	19.44	• • • •
85	288	ε Piscium	4.2	56 43	3.11	7 14 37-3	19.44	+ .03
86	*	Cassiopeæ	6.0	56 56	3.66	60 56	19.44	
87	*	D. M. 51°, 220	5.8	57	3.49	51 51	19.44	
88	295	26 Ceti (N. star)	6.0	57 3 <sup>8</sup>	3.08	0 43 22.2	19.42	07
89	303	73 Piscium	6.0	58 40	3.11	5 00 46.4	19.40	02
90	305	72 Piscium	5.6	58 45	3.16	14 18 01.4	19.40	+ .05
91	307	$\psi_i$ Piscium (pr.)	4.9	0 59 15	+ 3.21	20 49 48.9	+ 19.39	02
92	308	$\psi_1$ Piscium (sq.)	5.8	59 16	3.21	20 49 20.9	19.39	03
93		$\mu$ Cassiopeæ	5.3	1 00 18	3.93	54 19 51.0	19.36	-1.55
94	1 .	41 Andromedæ	5.3	or o8	3.42	43 18 08.9	19.35	04
9:		$\psi_2$ Piscium		01 31	3.21	20 06 01.4	19.34	10
90		Cephei		1 01 57	4.91	79 02 03.3	19.32	
9		e Piscium	5.5	02 11	3.08	5 00 52.3	19.32	19
98		φ Andromedæ	4.5	02 32	3.45	46 36 05.8	19.31	+ .02
99		31 Cassiopeæ	5.8	02 33	3.97	68 08 23.0	19.31	01
, J	, J-,	β Andromedæ		55		1		00

No.	B.A.C.	Constellation.	Mag.	A. R. 1880.	Annual Variation,	Declination 1880.	Annual Precession.	Prope Motion
10,000				h. m. s.	s.	0 / //	"	,,
101	336	ψ <sub>3</sub> Piscium	5 • 5	1 03 25	+ 3.21	19 01 14.2	+ 19.29	.00
102*	335	Cassiopeæ	5-8	03.7	3.81	63 34	19.28	• • • •
103	339	θ Cassiopeæ	4.6	03 48	3.61	51 30 40.4	19.28	• • • •
104*		Piscium	5.8	03.8	3.24	24 50	19.28	•••
105	338	32 Cassiopeæ	5-8	03 53	3.78	64 22 48.8	19.28	01
106	344	33 Ceti	6.0	04 23	3.08	1 48 23.6	19.27	02
107	343	45 Andromedæ	5.8	04 25	3.31	37 05 08.5	19.27	+ .00
108	345	g Piscium	5-3	04 30	3.30	30 47 08.2	19.26	03
109	348	$\chi$ Piscium	4.6	05 00	3.21	20 23 45.9	19.25	,01
110	349	τ Piscium	4.2	05 03	3.29	29 27 07.6	19.25	03
111	365	φ Piscium	4-5	1 07 14	+ 3.25	23 56 54.0	+ 19.20	+ .03
112	368	ζ Piscium (Ist *)	4.9	07 28	3.13	6 56 24.8	19.19	06
113	363	Cassiopeæ	6.0	07 36	4.20	71 06 29.9	19.19	+ .02
114	374	38 Ceti	5 · 7	08 41	3.05	— 1 36 58.0	19.16	+ .2
115	388	f Piscium	5.2	11 36	3.09	2 58 56.5	10.08	0:
116	395	v Piscium	4.5	12 52	3.28	26 37 58.9	19.06	+ .0
117	393	Cephei	5.8	13 16	5.08	78 05 48.6	19.04	٠.
118	400	42 Ceti	5.8	13 40	3.07	- I 08 22.5	19.02	0
IIG	401	l Piscium	4.9	14 29	3.30	28 06 39.7	19.00	0
120	360	σ Ursæ Minoris	2.1	14 46	21.64	88 40 08.9	18.99	.00
121	404	ξ Andromedæ	4.9	1 15 17	+ 3.50	44 53 57.7	+ 18.98	0
[22	400	47 Andromedæ	5.8	16 49	3.42	37 05 17.9	18.94	+ .0
123	412	ψ Cassiopeæ	5.0	17 28	4.15	67 30 10.3	18.92	+ .0
124	416	δ Cassiopeæ	2.7	17 59	3.87	59 36 39.4	18.90	0.
125	425	Andromedæ	6.2	19 16	3.50	42 50 05.4	18.86	0.
126	427	$\rho$ Piscium	5.1	19 47	3,22	18 32 49.3	18.85	+ .0:
127	431	94 Piscium	5.8	20 13	3.23	18 37 06.2	18,84	0
128	432	ω Andromedæ	5.1	20 29	3.56	44 47 11.8	18.83	10
129*		D. M. 40°, 289	5.8	20.5	3-47	40 29	18.83	• • •
130*		Cassiopeæ	6.0	22.5	4.11	65 29	18.77	
131	441	Andromedæ	5.5	1 22 54	+ 3.56	46 23 15.9	+ 18.75	0
132	448	μ Piscium	4.9	23 54	3.14	5 31 26.7	18.72	1
133	453	η Piscium	3.9	25 04	3.20	14 43 37.0	18.69	+ .0:
134	456	χ Cassiopeæ	5.6	26 06	3.87	58 36 55.6	18.65	03
135	468	40 Cassiopeæ	5.2	28 57	4.66	72 25 39.5	18.56	+ .02
136	480	v Andromedæ	4.3	29 46	3.49	40 48 17.3	18.54	37
137	482	Cassiopeæ	5.8	30 17	3.87	57 21 55.7	18.52	•••
138	487	v Persei	3.8	30 38	3.65	48 01 10.5	18.51	14
139	488	$\pi$ Piscium	5.6	30 44	3.17	11 31 38.6	18.50	+ .03
140	492	$\chi$ Andromedæ	5.2	32 09	3.57	43 46 30.3	18.45	•••
141	501	Andromedæ	5.9	1 33 28	+ 3.56	42 41 25.8	+ 18.41	• •
142	502	τ Andromedæ	5.6	33 30	3.52	39 58 05.5	18.41	00
143	499	42 Cassiopeze	5.6	33 39	4.55	70 00 54.5	18.40	02
144	510	Andromedæ	5.2	34 29	3.63	42 00 40.2	18.37	06
145*		D. M. 25°, 276	5.8	34.6	3.32	25 08	18.37	• • •
146	514	Trianguli	5.8	34 53	3.37	29 26 24.2	18.36	+ .14
147	516	Trianguli	5.8	35 08	3.45	34 38 22.6	18.35	• • •
148	518	ν Piscium	4-7	35 11	3.12	4 52 47.0	18.35	04
149	515	44 Cassiopeæ	5 · 7	35 13	4.02	59 56 42.2	18.35	03
150	523	107 Piscium	5.3	35 59	3.25	19 41 05.1	18.32	66

THE UNITED STATES COAST SURVEY.

No.	<b>B.</b> A. C.	Constellation.	Mag.	A. R. 1880.	Annual Variation.	Declination 1880.	Annual Precession.	Proper Motion.
				h. m. s,	s.	e / //	**	ti
151	522	• Persei	4 · 5	1 36 09	÷ 3.73	50 05 00.1	+ 18.31	03
152	537	o Piscium	4 · 3	39 04	3,16	8 33 11.4	18.21	+ .01
153	544	D. M. 37°, 372	5.8	41 34	3.51	37 21 17.5	18.12	+ .01
154	546	4 Arietis	5.8	41 40	3.25	16 21 28.2	18.11	+ .04
155	556	I Arietis	5.8	43 31	3.31	21 40 44.4	18,04	+ .09
156		I Persei	5.6	44 97	3.90	54 33 07.1	18.02	05
157	561	Arictis	5.6	44 30	3.17	10 26 54.0	18.00	07
158	564	ε Cassiopeæ	3.4	45 47	4.25	63 04 41.7	17.96	•••
159	566	55 Andromedæ	5.6	46 05	3.57	40 08 11.5	17.94	05
160	569	a Trianguli	3.5	46 15	3.40	28 59 37.3	17.94	21
161	568	ω Cassiopeæ	5.1	1 46 42	+ 4.56	68 05 40.3	+ 17.92	03
162	572	γ Arietis (North Star) .	3.8	46 57	3.28	18 42 17.5	17.91	11
163	574	ξ Piscium	4.3	47 21	3.10	2 35 39.1	17.89	o8
164	577	$\beta$ Arietis	2.6	48 or	3.30	20 13 15.2	17.87	09
165	579	56 Andromedæ (pr.)	5.8	48 49	3 - 54	36 41 19.4	17.84	+ .01
166	580	56 Andromedæ (sq.)	5.8	49 02	3.54	36 39 45-5	17.83	+ .04
167	592	ι Arietis	5.5	50 48	3.26	17 13 52.7	17.76	04
168	588	Cassiopeæ	5.8	50 48	4.35	64 02 12.3	17.76	
169	593	2 Arietis	4.9	51 13	3.33	23 00 30.1	17.74	• • •
170	595	A Cassiopeæ	4.6	52 08	4.83	70 19 <b>2</b> 6.0	17.70	,01
171	597	47 Cassiopeæ	5.I	1 53 09	+ 5.78	76 42 12.1	÷ 17,66	02
172	600	50 Cassiopeæ	4.1	53 13	4.99	71 50 22.1	17.66	.00
173	610	52 Cassiopeæ	5.8	53 57	4.40	64 19 15.5	17.62	02
174	608	49 Cassiopeæ	5.1	54 06	5 • 5 4	75 32 13.2	17.62	+ .02
175	бП	53 Cassiopeæ	5.9	54 08	4.37	63 48 35.0	17.62	+ .02
176	614	4 Persei	4.9	54 19	3.95	53 54 23.7	17.6 <b>1</b>	10. +
177	625	a Piscium (sq.)	3.6	55 50	3.09	2 11 00.3	17.55	02
178	624	ε Trianguli	5 - 5	55 58	3.49	32 42 18.4	17.54	•••
179	628	γ Andromedæ	2,2	56 32	3.65	41 <b>4</b> 5 10.8	17.52	06
180	630	10 Arietis	5.7	56 51	3.39	25 21 22.2	17.50	03
181	633	60 Ceti	5.7	1 57 02	+ 3.08	- 0 27 02.5	+ 17.50	02
182	611	$\kappa$ Arietis	5.5	59 51	3.35	22 04 32.9	17.38	+ .04
183	648	a Arietis , , ,	2.2	2 00 25	3.37	22 53 39.7	17.35	r3
181	649	58 Andromedæ	5.0	01 15	3.60	37 17 21.2	17.31	o3
185	653	Persei	5.8	02 05	3.95	53 16 31.1	17.28	02
186	656	$\beta$ Trianguli	3.1	02 24	3.55	34 25 08.3	17.26	05
187	657	14 Arietis	4.9	02 36	3.40	25 22 15.3	17.25	08
188	665	15 Arietis	5.7	03 59	3.31	18 56 00.8	17.19	05
189	668	55 Cassiopeæ	6.1	05 05	4.62	65 57 38.8	17.14	.00
190	675	6 Trianguli (1st star)	5.0	05 25	3.47	29 44 23.9	17.13	05
191	676	b Andromedæ	4.9	2 05 42	+ 3.74	43 40 04.0	+ 17.11	04
192	682	$\eta$ Arietis	5 <b>·4</b>	06 05	3 • 34	20 38 47.0	17.09	10. +
193	683	19 Arietis	5 7	06 31	3.26	14 43 00.S	17.07	02
194	684	$\xi^1$ Ceti	4.5	o6 38	3.17	S 16 58.7	17.07	oi
195	691	7 Trianguli	5.2	08 51	3-53	32 48 01.6	16.97	01
196	693	21 Arietis	5.7	08 54	3-39	24 29 09.5	16.96	07
197	697	$\delta$ Trianguli	5.0	09 44	3.64	33 40 27.7	16.93	25
198	698	γ Trianguli	4.2	10 11	3-55	33 17 30.4		02
199	707	& Arietis	5.7	11 27	3-33	19 20 42.9	16.84	01
200	706	c Andromedæ	5.6	11 33	3.54	46 49 31.2	16.84	02

S. Ex. 37——12

## CATALOGUE OF STARS FOR OBSERVATIONS OF LATITUDE.

No.	B. A. C.	Constellation.	Mag.	A. R. 1880.	Annual Variation.	Declination 1880.	Annual Precession.	Proper Motion.
				h. m. s.	s.	0 1 11	,,	" "
201	708	Ceti	5 • 7	2 11 47	+ 3.10	1 11 22.6	+ 16.83	+ .36
202	710	10 Trianguli	5 · 4	12 00	3.47	28 05 17.1	16.82	
203*		Arietis	6.0	12.2	3.77	22 37	16.81	
204	721	i Persei	5 4	11 00	4.13	55 17 44.1	16.82	
205	729	69 Ceti	5 · 5	15 48	3.07	- 0 09 12.7	1	05
<b>20</b> 6	732	70 Ceti	5 · 5	16 06	3.05	- I 25 54.7	16.62	03
207	731	64 Andromedæ	5 · 4	16 27	3.95	49 27 39.9	16.60	05
205	735	65 Andromedæ	4.9	17 38	3.97	49 44 02.7	16.55	06
209	745	$\xi$ Arietis	5 - 3	18 23	3.20	10 03 57.3	16.51	05
210	744	ι Cassiopeæ	4.4	19 12	4.85	66 51 40.8	16.47	02
211	752	11 Trianguli	5-5	2 20 21	+ 3.53	31 15 42.8	+ 16.41	02
212	757	12 Trianguli	5.3	21 08	3.50	29 07 57.8	16.37	09
213	760	El Ceti	4.3	21 47	3.18	7 55 16.7	16.33	02
214*		Arietis	5.8	22.4	3.40	22 56	16.30	
215	772	14 Trianguli	5 • 4	24 47	3.64	35 36 49.7	16.18	10. <del></del>
216	776	Ceti	5.6	25 18	3.09	1 44 05.8	16.16	
217	778	75 Ceti	5-5	26 03	3.05	- 1 33 56.4	16.12	06
218	777	115 Cassiopeæ	5.1	26 39	5.57	72 17 30.1	16.09	+ .01
219		Persei	5.8	28 15	3.67	36 47 10.2	16.00	.00
220	786	15 Trianguli	5.4	28 30	3.62	34 09 47.0	15.99	.04
221	794	v Ceti	5.0	2 29 35	+ 3.14	5 04 07.5	+ 15.93	03
222	798	31 Arietis	5.1	30 05	3.26	11 55 35.2	15.91	09
223	784	Cephei	5.7	30 35	8.21	80 56 16.6	15.88	.00
224	808	ν Arietis	5 - 5	32 00	3.39	21 26 29.8	15.80	02
225	811	δ Ceti	3.9	33 20	3.07	- 0 11 24.7	15.73	03
226	813	33 Arietis	5 - 3	33 40	3.49	26 32 43.3	15.71	TO. +
227	816	11 Persei	5.8	34 28	4.25	54 35 33-1	15.67	03
228	819	Persei	6.0	34 32	4.18	53 00 47.6	15.66	
229	821	12 Persei	5.1	34 41	3.76	39 41 08.3	15.66	.18
230	825	$\mu$ Arietis	5.6	35 36	3.37	19 29 57-4	15.61	01
231	827	. θ Persei	4.3	2 36 00	+ 4.06	48 43 09.8	+ 15.58	10
232	829	14 Persei	5 • 7	36 17	3.89	43 47 08.6	15.57	10
233	831	35 Arietis	4.9	36 25	3.50	27 11 44.1	15.56	+ .02
231	837	γ Ceti	3.4	37 05	3.10	2 43 45.3	15.52	15
235	842	o Arietis	5.8	37 56	3.30	14 48 08.9	15.48	07
236	844	38 Arietis	4.9	38 25	3.26	11 56 23.1	15.45	- ,10
237	845	μ Ceti	4.1	38 27	3.23	9 36 22.8	15.45	05
238	861	39 Arietis	4.9	40 46	3.55	28 44 52.9	15.32	11
239	866	Arietis	5 - 7	41 47	3.48	24 41 11.3	15.26	10. —
240	867	40 Arietis	6.0	41 49	3.35	17 46 57.3	15.26	02
241	863	η Persei	4 · 3	2 41 57	+ 4.33	55 23 46.4	+ 15.25	
242	870	$\pi$ Arietis	5.4	42 36	3.34	16 57 52.6	15.21	+ .02
	872	41 Arietis	3.7	42 55	3.51	26 45 53.4	15.20	13
243	871	16 Persei	4.6	43 01	3.76	37 49 26.1	15.19	07
244	[	Persei	6.0	43.7	3.99	46 21	15.15	
245		1	4.7	44 07	3.68	34 33 51.8	15.13	ir
246	1	17 Persei σ Arietis	5.6	44 52	3.30	14 35 11.4	15.08	05
247	(	σ Anens	4.1	45 45	4.21	52 16 12.1	15.04	10
248	3	- ·	5.6	46 08	3.77	37 50 51.3	15.01	07
249	1	D. M. 60°, 591	5.8	46.4	4.68	61 02	14.99	
250	*	D. M. 00 , 591	3.0	40.4	7.55	1		

†Triple.

No.	B. A. C.	Constellation.	Mag.	A. R. 1880.	Annual Variation,	Declination 1880.	Annual Precession,	Proper Motion.
				h. m. s.	s.	0 1 11		,,
251	897	D. M. 46°, 658	5.8	2 48 27	+ 4.02	<sub>14</sub> 6 40 34.5	+ 14.87	.00
252	got	ρ Arietis (pr.)	6.0	49 04	3.36	17 50 40.3	14.84	+ .01
253	904	21 Persei	4.9	50 01	3.62	31 26 59.8	14.78	+ .02
254	896	Cephei	5.6	50 12	7.68	78 56 31.0	14.77	10. +
255	912	π Persei	4.9	51 05	3.82	39 10 53.3	14.72	03
256	913	47 Arietis	5.6	51 13	3.42	20 11 11.2	14.71	03
257	915	24 Persei	5.2	51 38	3.70	34 42 01.5	14.69	07
258	914	Persei	5.7	51 41	4.04	46 44 18.5	14.68	.00
259	918	Persei	5-3	52 20	4.25	51 52 25.9	14.65	+ .05
260	921	ε Arietis	4.4	52 21	3.42	20 51 34.1	14.65	02
261		Cephei	5.6	2 53 12	+ 8.82	81 00 11.0	+ 14.59	+ .02
261 262	908	λ Ceti	i ,		3.22	8 25 42.5	14.59	03
	929	49 Arietis	4.7	53 17 54 50	3.52	25 59 11.2	14.50	01
263 264	941	a Ceti	5.6 2.6	56 00	3.13	3 37 04.6	14.43	09
265	949	$\gamma$ Persei	3.1	56 07	4.30	53 02 06.7	14.42	.00
266	947 948	k Persei	4.9	56 32	4.46	56 13 59.2	14.39	+ .08
267*	1 -	Cassiopeæ	6.0	57.3	4.95	63 36	14.34	
268	1		var. 3.5–4.0	57.3 57.29	3.82	38 22 28.3	14.33	08
269	953	52 Arietis	5,6	58 25	3.51	24 47 12.6	14.28	03
270	957	Cassiopeæ	5.4	58 58	6.34	73 56 08.4	14.25	07
	955	·						
271*	!	Arictis	5.4	2 59.8	+ 3.29	12 44	+ 14.19	
272	963	, "	var. 2.3-4.0		3.87	40 29 32.1	14,16	+ .01
273	962	t Persei	4.4	00 25	4.30	49 09 13.5	14.16	.00
274	967	κ Persei	4.0	OI 24	4.02	44 24 05.7	14.09	15
275	974	55 Arietis	5.8	02 24	3.60	28 37 03.5	14.03	+ .02
276	980	Arietis	6.0	03 20	3.55	26 26 07.9	13.97	+ .02
277	981	ω Persei	4.8	03 33	3.85	39 09 16.6	13.96	12
278	960	Cephei	5.8	04 08	13.03	\$4 28 53.5	13.92	.00
279	986	δ Arietis	4.3	01 46	3.42	19 16 18.4	13.88	08
280	994	94 Ceti	5.3	o6 <b>3</b> 9	3.06	- 1 38 46.4	13.76	
281*		Persei	5.8	3 06.6	+ 4.55	56 41	+ 13.77	
282	995	Persei	5 - 3	07 38	4.26	50 29 28.0	13.70	.00
283	999	$\zeta$ Arietis	4.6	08 00	3 - 44	20 35 55.7	13.68	07
284*	• • •	Persei	5 • 7	08 02	3.64	30 06 31.9	13.68	• • • •
285	1001	Camelopardalis	4.6	09 27	5.19	65 12 41.0	13.58	03
286	1006	30 Persei	5.8	09 43	4.01	43 34 57.3	13.57	04
287	1007	29 Persei	5 • 5	10 05	4.25	49 46 51.4	13.54	06
288	1011	31 Persei	5 • 5	10 36	4.24	49 39 17.3	13.51	04
289	1017	Persei	4.9	11 14	3 · 74	33 46 52.3	13.47	07
290	1023	59 Arietis	5.8	12 46	3 · 57	26 38 10.2	13.37	02
291	1028	к Ceti	5,1	3 13 04	+ 3.14	2 55 39.9	+ 13.35	02
292	1025	Arietis	5.0	13 06	3.64	28 36 43.5	13.35	06
293	1026	l Persei	5.2	13 24	4.00	42 53 40.3	13.33	01
294	1030	Camelopardalis	5.8	14 16	5.15	64 09 15.3	13.27	09
295	1034	τ Arietis	4.9	14 18	3.45	20 42 48.0	13.27	03
296	1040	62 Arietis	5.5	15 00	3.59	27 10 34.1	13.22	.00
297	1043	a Persei	2.0	15 46	4.25	49 25 56.5	13.17	05
298	1045	63 Arietis	5.0	15 51	3.44	20 18 41.6	13.17	02
	. 1	Persei	5.6	17	3.73	33 06	13.09	1
299	•	reisei.	5.0	*/ **	3.75	1 22		i

No.	B. A. C.	Constellation.	Mag.	A. R. 1880.	Annual Variation.	Declination 1880.	Annual Precession.	Proper Motion.
				h. m. s.	s.	o / !/		17
301	1053	65 Arietis	5.6	3 17 31	+ 3.45	20 22 35.5	+ 13.06	02
302*		Tauri	6.0	. 17.6	3.29	12 12	13.05	
303	1057	10 Tauri	3.8	18 21	3.22	8 36 19.9	13.00	10
304	1058	Camelopardalis	4.5	19 22	4.81	59 31 <b>1</b> 4.8	12.93	+ .04
305	1059	Persei	5.4	19 32	4.24	48 38 32.6	12.92	<b>-</b> .06
306	1062	Camelopardalis	4.9	20 20	4 - 75	58 27 40.2	12.87	+ .03
307	1068	ξ Tauri	3.9.	20 40	3 24	9 18 46.8	12.84	04
308	1066	34 Persei	5.1	20 47	4.26	49 05 29.5	12.84	06
309*		Persei	5.8	20.8	3 - 75	33 23	12.84	
310	1065	Camelopardalis	4.8	20 52	4.54	55 02 03.9	12.83	12
311	1069	66 Arietis	5.9	3 21 26	+ 3.50	22 23 20.2	+ 12.80	14
312	1071	σ Persei ,	4.6	22 07	4.20	47 34 45.4	12.75	.00
313	1084	s Tauri	5.2	23 51	3.27	10 55 23.9	12.63	05
314*		Tauri	5.6	24.1	3.60	27 09	12.62	
315	1083	36 Persei	5.5	21 08	4.13	45 38 54.6	12.61	08
316	1087	f Tauri	4.2	24 15	3.31	12 31 27.6	12.60	03
317*	1007	Camelopardalis	6.0	24.5	4 53	54 33	12.58	
318*		Persei	5.8	25.0	3,80	35 03	12.55	
319	• •	Persei	5.8	25 41	3.93	39 39 38.8	12.50	•••
320	1061	Cephei	5.6	27 38	21.67	86 15 56.3	12.37	•••
- 1							+ 12.35	04
321	1099	ψ Persei	4.6	3 27 58	+ 4.24	47 47 29.9 0 01 10.4	12.16	
322	1112	To Tauri	4.3	30 45	3.06	62 49 33.3		52 + .08
323	1111	Camelopardalis	5.3	31 45	5.15		12.09	
324*	• •		6.0	32.0	3 . 47	20 31 16 08 40.6	12.07	06
325	1119	Tauri	5.8	32 39	3 - 39		12.04	
326*	1117	Camelopardalis	6.0	32 49	4.89	59 35	12.01	+ .07
327	1123	Terser	5.6	33 20	3.91	37 11 30.7	11.98	
328	1128		5.8	33 36	3.12	2 39 56.0	11.96	
329	1120	δ Persei	3.2	34 23	4.21	47 24 08.2	11.90	05 .00
330	1132	40 Terset	4.9	31 46	3.79	33 34 43.5		
331	1135	13 Tauri	5.5	3 35 24	+ 3.45	19 18 53.0	+ 11.83	10
332	1133	Camelopardalis	$5 \cdot 3$	35 33	5.19	62 57 47.1	11.82	07
333*		Camelopardalis	5.2	36.8	6.14	70 30	11.73	• • •
334		Persei	5.6	36 46	3.86	36 04 48.1	11.73	• • •
335	1138	380 Perse	3.9	36 48	3.74	31 54 25.2	11.73	+ .03
336	1140	14 Tauri,	6.0	36 51	3.46	19 17 03.8	11.73	05
337	1139	v Persei	4.0	37 03	4.05	42 11 52.3	11.71	03
338	1137	Camelopardalis	4.3	37 43	6.22	70 57 36.8	11.67	03
339	1147	17 Tauri	4.5	37 45	3 - 55	23 44 04.9	11.66	04
340	1151	q Tauri	4.9	38 04	3.56	24 05 22.2	11.64	06
341	1153	24 Eridani	5.4	3 38 25	+ 3.04	- I 32 33.4	+ 11.62	· · o i
342	1144	Camelopardalis	4.6	38 33	5.42	65 09 11.0	11.61	or
343	1154	20 Tauri	4.8	38 41	3.56	23 59 28.9	11.60	04
344	1161	23 Tauri	4.6	39 12	3-55	23 34 23.9	11.56	03
345	1162	u Tauri	5.4	39 18	3.18	5 40 22.6	11.56	04
346*		Persei	6.0	39 28	4.39	50 21 46,0	11.54	
347	1166	η Tauri	2.8	40 21	3.55	23 43 58.0	11.48	- ,.06
348	1174	e Tauri	5.0	41 41	3.28	10 46 21.1	11.38	05
	1172	Persei	6.0	41 43	4.16	44 35 59.7	11.38	.00
349		The state of the s						

No.	B.A.C.	Constellation.	Mag.	A, R. 1880.	Annual Variation.	Declination 1880.	Annual Precession.	Proper Motion.
051	1176	a. T.		h, m. s.	5.	6 1 11		"
351 352	1170	Tauri	. 4.2	3 42 02	+ 3.55	23 41 05.8	+ 11.36	07
352*:		Tauri	5.8 6.0	43 06	3.60 4.82	25 12 54.1	11.21	25
354	1207	ζ Persei		44 · · · · · · · · · · · · · · · · · ·		57 36 31 31 33.4	11.02	02
355	1203	Camelopardalis	. 5.4	46 51	3.78	02 43 07.4	11.01	+ .05
356	1204	Camelopardalis	5.7	46 55	5.07	60 45 21.2	11.00	+ 06
357	1210	Persei	5.7	47 20	4.29	47 31 02.1	10.97	.00
358	1214	Λ Persei	5,6	47 41	4.43	50 20 45.5	10.94	16
359	1221	32 Tauri	5.8	49 47	3 54	22 07 50.4	10.79	14
360	1219	ε Persei	3.1	49 48	4.00	39 39 41.5	10.79	03
361 .	1211	Cephei , , .	4.9	3 50 OI	+ 9.72	So 21 53.9	+ 10.77	+ .05
362	1228	ξ Persei	4.1	51 11	3.88	35 26 40.3	10.69	04
363	1240	Tauri	5.8	53 54	3.44	17 51 14.9	10.49	03
364*		Camelopardalis	. 5.8	54.0	5.94	68 20	10.48	
365	1241	λ Tauri	var. 3.5-4.0	54 02	3.32	12 09 00.3	10.48	02
366	1237	Camelopardalis	. 5.1	54 28	4.95	58 49 11.8	10.44	01
367*	1244	Tauri	. 5-7	55 13	3.27	9 39 35.0	10.39	
368	1245	35 Eridani	5-4	55 <b>2</b> 7	3.03	— т 53 г <u>5</u> . г	10.37	05
369	1251	r Tauri	4.1	56 46	3.19	5 39 18.7	10.27	01
370	1253	36 Tauri	5.9	57 II	3.58	23 46 27.5	10.24	+ .01
37I		D. M. 53, 732	5.8	3 57 16	+ 4.63	53 41 01.4	+ 10.23	•••
372		Tauri	5.7	57 26	3.22	7 51 50.7	10.22	• • •
373	1257	A Tauri	. 4.8	57 37	3.53	21 45 oS.6	10.20	09
374	1254	λ Persel,	4.7	57 38	4.44	50 01 25.0	10.20	06
375*	• •	Tauri	5.7	57.9	3.12	2 30	10.19	•••
376	1262	41 Tauri	5.1	59 15	3.67	27 16 31.0	10.08	02
377	1265	ψ Tauri	5.3	59 36	3.70	28 40 31.9	10.06	+ .02
378*	• •	D. M. 54, 740	5.8	59.9	1.70	54 30	10.04	•••
379 380	1266 1268	49 Persei	4.5	49 57	4.33	47 23 24.9	10.03	05
		•	5.7 1	4 00 20	3.95	37 24 40.2	10.00	14
381	1247	Cephei	5.1	4 00 32	+13.26	83 30 36.0	+ 9.98	• • •
382	1269	Tauri	5.5	00 37	3.99	37 43 26.8	9.98	20
383	1272	p Tauri	5.6	01 07	3.43	17 01 04.2	9.94	01
384 385*	1279	Cephei	5.7	03 32 03 46	3.64	26 09 59.3 82 02	9.76	.00
386	1285	45 Tauri	5. I 5. 8	03 40	12.65	8 <sub>3</sub> 0 <sub>3</sub> 5 12 33.3	9.74 9.65	05
387*		Tauri	6.0	05.6	3.19	16 58	9.05	05
388	1280	D. M. 22°, 649	5.8	05 44	3.55	22 06 13.0	9.59	+ .05
389		$\mu$ Persei	4.4	06 05	4.37	48 06 08.1	9.56	06
390*		Persei	6.0	06.1	3.98	37 39	9.56	
391	1276	Cephei	5.6	4 06 14	+10.12	80 32 10.7	+ 9.55	
392	1286	Camelopardalis	5.4	06 20	5.24	61 32 46.6	9.54	10. —
393	!	f Persei	4.9	06 44	4.07	40 10 40.3	9.51	07
394	1296	6 Tauri	5.4	07 05	3.22	7 24 30.0	9.48	10. +
395		D. M. 12°, 564	5.8	07 09	3.33	12 26 49.9	9.48	
396	1293	Camelopardalis	4.9	07 21	4.65	53 18 28.8	9.46	06
397	1298	47 Tauri	4.9	07 25	3.26	8 57 28.3	9.46	08
398		Tauri	5.5	o8 <b>o</b> 3	3.27	9 42 26.4	9.41	
399	1304	μ Tauri	4.4	00 01	3.25	8 35 25.9	9.34	02
400	1301	b Persei	5.0	09 14	4.49	49 59 54 4	9.32	05

No.	B. A. C.	Constellation.	Mag.	A. R. 1880.	Annual Variation.	Declination 1880.	Annual Precession.	
				h. m. s.	s.	o , //	"	**
401	1300	Camelopardalis	5.8	4 09 24	+ 5.58	64 50 41.2	1 "	03
402	1307	D. M. 49°, 1155	5.8	10 13	4.47	49 45 17.7	9.25	• • • •
403	1311	ω Tauri	5.3	10 14	3.51	20 16 53.6	9.25	06
404	1316	51 Tauri	5.8	11 17	3.54	21 17 04.9	9.24	05
405	1313	Camelopardalis	5.5	11 23	5.18	60 26 53.6	9.23	07
406	1324	56 Tauri	5.7	12 30	3.55	21 28 58.0	9.06	01
407	1322	54 Persei	5.2	12 37	3.88	34 16 31.1	9.06	04
408	1323	d Persei	5.3	12 52	4.32	46 12 36.9	9.03	05
400	1328	7 Tauri	4.0	12 58	3.41	15 20 11.6	9.03	00
410	1326	φ Tauri	5.3	12 58	3.67	27 03 44.2	9.03	07
	-			4 13 12	+ 3.38	13 44 38.8	+ 9.01	or
411	1330	h Tauri	5.6			18 27 14.8	8.99	
412		Tauri	6.0	13 27	3.47	14 48 21.6	8.96	05
413	1332	58 Tauri	5.8	13 48	3.40	25 20 40.3	8.85	01
414	1	γ Tauri		15 17		13 47 31.0	8.85	10. —
415	1343	60 Tauri	5.6	15 18	3-37	17 15 35.0	8.79	03
416	1346	δ Tauri	4.1	16 01	3.46	1	8.75	+ .01
417	1350	63 Tauri	5-9	16 32	3.44	16 29 44.7	8.73	:05
418	1349	55 Persei	5.8	16 42	3.88	33 51 03.4	i	08
419	1352	56 Persei	5-9	16 51	3.88	33 40 53.7	2	.00
420	1356	64 Tauri	5.1	17 11	3.45	17 09 53.5	+ 8.69	05
421	1357	r Tauri	5.1	4 17 19	+ 3.27	9 10 48.3		
422	1362	κ Tauri	4.5	18 13	3.57	22 01 04.0	8.62	05
423	1363	67 Tauri	5.9		3.57	21 55 26.1	8.61	02
424	1364	Persei	5.2	18 28	3.81	31 09 59.7	8.59	12
425	1365	68 Tauri	4.8	18 33	3.46	17 39 07.7	8.59	+ .01
426	1367	v Tauri	4.6	19 08	3.58	22 32 23.6	8.54	05
427	1369	71 Tauri	5-3	19 31	3.41	15 20 38.2	8.51	04
428		Camelopardalis	5.8	19 37	6.85	72 16 03.0	8.51	•••
429	1370	$\pi$ Tauri	4.9	19 50	3.38	14 26 27.7	8.49	03
430		Tauri	6.0	21.3	3.78	30 07	8.37	
431	1377	75 Tauri	5.5	4 21 35	+ 3.42	16 05 24.5	+ 8.35	+ .04
432	1376	ε Tauri	3.8	21 37	3.50	18 54 47.4	8.35	10
433	1380	v Tauri	4.0	21 43	3.41	15 41 40.5	8.34	02
434	1381	θ <sup>2</sup> Tauri	4.0	21 48	3.42	15 36 12.5	8.33	02
435	1384	b Tauri	5.0	22 07	3.36	12 46 49.6	8.31	01
436	1386	44 Eridani	5.6	22 20	3.10	I 06 47.8	8.29	+ .01
437	1382	1 Camelopardalis	5.8	22 32	4.73	53 38 52.0	8.28	01
438	-	80 Tauri	6.3	23 18	3.41	15 22 26.0	8.21	03
439	1	Tauri	4.9	23 42	3.43	15 55 54.0	8.18	01
440	1392	81 Tauri	6.0	23 48	3.42	15 25 45.6	8.17	01
441	1393	83 Tauri	5.6	4 23 52	+ 3.37	13 27 43.1	+ 8.17	0
442	1403	45 Eridani	5.1	25 44	3.06	- 0 18 11.0	8.02	07
443	1409	$\rho$ Tauri	5.1	27 02	3.40	14 35 26.2	7.92	03
444	1408	Tauri	5.6	27 08	3.75	28 42 29.6	7.91	00
445	1	Tauri	5.8	27.8	3.19	5 19	7.85	•••
446	-	e Persei	4.4	28 23	4.14	41 01 00.3	7.80	01
447	ì	a Tauri	1.1	29 02	3-44	16 16 00.3	7 · 75	I
448		d Tauri	4.4	29 04	3.29	9 54 46.3	7.75	0
449	1	2 Camelopardalis	5.5	30 28	4.73	53 14 04.8	7.63	00
		3 Camelopardalis	1	30 28	4.70	52 50 18.1	7.63	0

<sup>†</sup> Double.

THE UNITED STATES COAST SURVEY.

1431   1431   1431   1432   1432   1432   1434	Prope Motion
151   1431   15   15   15   15   15   15   15	17
153   1434   c   Tauri	02
143	• • •
155	01
1436   Perset   5.9   32 27   1.15   48 03 57.6   7.47     1458   1428   Camedopardalis   6.0   32 45   7.98   75 44   10.2   7.45     1459   1442   93 Tauri   5.5   33 23   3.34   11 57 38.3   7.40     1459   1442   93 Tauri   5.5   33 23   3.34   11 57 38.3   7.40     1450   1441   Tauri   5.2   33 40   3.75   25 22 51.8   7.37     1461*   Perset   6.1   1 31 15   4.54   49 44 32.5   7.32     1462   1445   50   Perset   5.6   34 24   4.24   43 08 05.3   7.32     1463   1449   7 Tauri   4.6   25 03   3.59   22 43 31.1   7.27     1464   1466   Orionis   5.6   37 47   3.33   10 55 16.8   7.06     1455   1448   Cephel   5.2   37 57   0.07   86 39 22.2   7.02     1466   1456   4 Camelopardalis   5.4   38 01   4.07   56 32 29.5   7.02     1467   Aurige   5.8   41 33   3.87   32 23 34.2   6.72     1470   Aurige   5.8   41 33   3.87   32 23 34.2   6.73     1471   1476   1 Aurige   5.8   41 33   3.87   32 23 34.2   6.73     1472   1474   9 Camelopardalis   4.7   42 08   5.91   66 05 10.6   6.69     1473   Aurige   5.9   42 08   4.59   48 31 53.4   6.69     1474   1476   7 Aurige   5.9   42 08   4.59   48 31 53.4   6.69     1475   Aurige   5.9   42 08   4.59   48 31 53.4   6.69     1475   1491   \pi Orionis   3.5   4.8   41 05   3.27   8 41 31.0   6.52     1476   1493   7 Grionis   4.8   41 05   3.27   8 41 31.0   6.52     1476   1493   7 Grionis   4.8   41 05   3.27   8 41 31.0   6.52     1476   1493   7 Grionis   5.5   47 07   3.13   2 18 31.4   6.49     1476   1497   7 Grionis   5.5   47 07   3.13   2 18 31.4   6.49     1477   1492   2 Aurige   5.0   44 36   4.01   36 29 56.0   6.48     1497   1490   5 Gamelopardalis   5.7   45 15   4.88   55 02 29.2   6.42     1481   1500   40 Orionis   5.5   47 07   3.13   2 18 31.4   6.27     1481   1500   40 Orionis   5.5   47 07   3.13   2 18 31.4   6.27     1481   1500   40 Orionis   5.5   45 15   4.88   55 02 29.2   6.42     1481   1500   40 Orionis   5.5   47 07   3.13   2 18 31.4   6.27     1481   1500   40 Orionis   5.5   47 07   3.13   2 18 31.4   6.20     1481   1500	08
1457   148	- ,01
1458   1488   Cam*lopardalis   6.0   32   45   7.08   75   43   10.2   7.45     1499   1414   Tauri   5.2   33   49   3.75   28   22   51.8   7.37     1404   Tauri   5.2   33   49   3.75   28   22   51.8   7.37     1405   1415   59   Persei   6.1   4   4   13   4   4   4   4   3   6   6   5   7.37     1404   1460   Orionis   5.6   37   47   3.33   3.34   11   7.27     1404   1460   Orionis   5.6   37   47   3.33   3.35   22   43   31.1   7.27     1405   1416   Cephei   5.2   37   57   10.07   86   59   22.2   7.02     1466   1476   4   Camelopardalis   5.4   38   61   4.07   56   33   29.8   7.02     1466   1476   Aurigæ   5.8   41   33   3.87   32   22   34.2   6.79     1460   1473   Aurigæ   5.8   41   33   3.87   32   23   34.2   6.72     1470   Aurigæ   5.8   41   33   3.87   32   22   34.2   6.72     1471   1476   1   Aurigæ   5.4   44   150   44.03   37   16   60   60     1473   Aurigæ   5.4   44   150   44.03   37   16   60   60     1474   1476   1   Aurigæ   5.4   44   150   44.03   37   16   60   60     1475   Aurigæ   5.4   44   150   44   0.3   37   16   60   60     1475   Aurigæ   5.9   42   08   4.50   48   31   53.4   6.09     1475   1476   1   Aurigæ   5.9   42   08   4.50   48   31   53.4   6.09     1475   1476   1   Aurigæ   5.0   44   36   4.01   36   29   56.0     1475   1497   Aurigæ   5.0   44   36   4.01   36   29   56.0     1476   1493   1   Tauri   4.0   44   21   3.50   18   38   02.4   6.52     1476   1493   1   Tauri   4.0   44   21   3.50   18   38   02.4   6.52     1476   1493   1   Tauri   4.0   44   21   3.50   18   38   02.4   6.52     1476   1493   1   Tauri   4.0   44   21   3.50   18   38   02.4   6.52     1477   1492   4   4   4   4   4   4   4   4   4	••
1458   1428   Camelopardalis   6.0   32   24   7.08   75   42   10.2   7.45     1599   1442   93   Tauri   5.5   33   23   3.34   11   57   38.3   7.40     4606   1414   Tauri   5.2   33   40   3.75   28   22   51.8   7.37     461*   Perset   6.1   1   1   1   15   4   15   4   4   4   1     462   1445   59   Perset   5.6   34   24   4   24   4   36   65.3   7.32     465   1446   Tauri   4.6   35   03   3.59   22   43   31.1   7.27     406   1416   Orlionis   5.6   37   47   3.33   10   55   16.8     406   1448   Cephel   5.2   37   57   10.07   80   59   22.2   7.02     466   145   4   Camelopardalis   5.4   38   61   4.07   56   32   29.8     407   Camelopardalis   5.4   38   61   4.07   56   32   29.8     408   1470   Camelopardalis   5.7   40   51   5.57   63   17   54.3   6.79     470   1476   Aurige   5.8   41   33   3.57   32   22   31.2     471   1476   I Aurige   5.4   4   41   50   + 4.03   37   16   30.4   + 6.72     472   1474   9   Camelopardalis   4.7   42   68   5.91   66   65   10.8     473   1471   Aurige   5.9   42   68   4.59   48   31   53.4   6.69     474   1456   # Orionis   3.5   43   20   3.26   64   50   5   6.55     475   1491   # Orionis   3.5   43   20   3.26   64   50   50   6.52     475   1492   2 Aurige   5.0   44   36   4.01   36   29   50   0.48     470   1494   5   Camelopardalis   5.7   45   15   4.88   50   30.2   6.42     471   1492   2 Aurige   5.0   44   36   4.01   36   29   50   0.48     479   1494   5   Camelopardalis   5.7   45   15   4.88   50   30.2   6.42     480   1497   1494   5   Camelopardalis   5.7   45   15   4.88   50   50.2   6.42     481   1500   49   Orionis   5.5   47   77   3.73   14   0.2   6.90     483   1504   7   Camelopardalis   5.9   48   5.91   6.46     481   1514   # Orionis   5.5   47   77   3.73   14   0.2   6.06     483   1504   7   Camelopardalis   5.9   49   47   40   47   40   47   40     484   1514   # Orionis   5.5   47   77   3.73   13   14   0.2   6.06     485   1520   40   Orionis   5.5   47   47   40   47   57   57   6.00     486	• •
144	1
144	o.
140	o. –
462 1145 59 Persei 5.6 34 24 4.24 43 08 05.3 7.32 463 1419 7 Tauri 4.6 35 03 3.59 22 43 31.1 7.27 101 1416 Orlonis 5.6 37 47 3.33 3.59 22 43 31.1 7.27 101 1418 Cephei 5.2 37 57 10.07 85 50 22.2 7.02 466 1456 4 Camelopardalis 5.4 38 01 4.97 56 32 29.8 7.02 467  . Orlonis 5.6 39.4 3.33 11 29 6.91 468 1475 Aurigæ 5.8 41 33 3.87 32 22 34.2 6.72 470  . Aurigæ 5.8 41 33 3.87 32 22 34.2 6.72 470  . Aurigæ 5.5 44.5 3.83 31 13 6.73 471 1476 1 Aurigæ 5.4 44.5 5.5 3.83 31 13 6.73 471 1476 1 Aurigæ 5.4 44.5 5.91 66 05 10.8 6.69 473 1477 Aurigæ 5.9 42 08 4.59 48 31 53.4 6.69 473 1477 Aurigæ 5.9 42 08 4.50 48 31 53.4 6.69 474 1486 7 Orlonis 3.8 4.5 41 05 3.27 8 81 34.0 6.52 475 1491 7 Orlonis 3.8 41 05 3.27 8 81 34.0 6.52 475 1491 7 Orlonis 4.8 41 05 3.27 8 81 34.0 6.52 477 1492 2 Aurigæ 5.0 44 36 4.01 36 29 56.0 6.48 479 1494 5 Camelopardalis 5.7 45 15 4.88 5.5 03 20.2 6.42 488 1497 D. M. 27°, 701 5.8 45 18 3.75 27 41 42.3 6.42 488 1407 D. M. 27°, 701 5.8 45 18 3.75 27 41 42.3 6.42 483 1508 5 Orlonis 5.5 47 07 3.13 218 31.4 6.27 484 150 7 D. M. 27°, 701 5.8 45 18 3.75 27 41 42.3 6.42 483 1508 5 Orlonis 5.6 5.6 47 07 3.13 218 31.4 6.27 484 150 7 D. M. 27°, 701 5.8 45 18 3.75 27 41 42.3 6.42 483 1407 D. M. 27°, 701 5.8 45 18 3.75 27 41 42.3 6.42 483 1407 T. D. M. 27°, 701 5.8 45 18 3.75 27 41 42.3 6.42 483 1508 5 Orlonis 5.5 47 07 3.13 218 31.4 6.27 483 1508 5 Orlonis 5.5 47 07 3.13 218 31.4 6.27 483 1508 5 Orlonis 5.5 47 07 3.13 218 31.4 6.27 483 1508 5 Orlonis 5.5 47 07 3.13 218 31.4 6.27 483 1508 5 Orlonis 5.6 48 19 3.4 479	
1415   341   7   Tauri	<b>–</b> .o
149	0
14  14  14  15  15  15  15  15  15  15  15  15  15	, ο
1416	. 0
407°   . Orionis   . 5.6   39.4   3.33   11 29   6.91	- , r
1470   Camelopardalis   5.7   40   51   5.57   63   17   54.3   6.79     468   1475   Aurigæ   5.8   41   33   3.87   32   22   34.2   6.72     470*   .   Aurigæ   5.5   41.5   3.83   31   13   6.73     471   1476   1 Aurigæ   5.4   4   41   50   4.03   37   16   30.4   + 6.72     472   1474   9   Camelopardalis   4.7   42   08   5.91   65   05   10.5     473   1477   Aurigæ   5.9   42   08   4.50   43   31   53.4   6.69     474   1456   7   Orionis   3.5   43   20   3.26   6   45   00.5     475   1491   72   Orionis   4.5   44   05   3.27   8   41   34.0   6.52     476   1493   1   Tauri   4.9   44   21   3.50   18   38   02.4   6.50     477   1492   2   Aurigæ   5.0   44   36   4.01   36   29   56.0   6.48     478   1495   73   Orionis   4.0   44   49   3.19   5   23   53.4   6.46     479   1494   5   Camelopardalis   5.7   45   15   4.88   55   03   29.2   6.42     481   1500   40 <sup>1</sup> Orionis   5.2   4   45   45   4.39   14   02   50.9   4.38     482   1508   5   Orionis   5.5   47   07   3.13   2   18   31.4   6.27     483   1504   7   Camelopardalis   4.9   47   40   4.79   53   33   27.7   6.22     484   1514   76   Orionis   5.1   48   18   3.30   9   57   30.1   6.17     487   1520   4   Aurigæ   3.1   49   11   3.90   32   58   28.1     488   .   Cephei   6.0   49   26   20.42   85   47   53.8   6.08     490   1526   Tauri   5.3   50   27   3.47   16   57   51.7   6.00     491   1528   k Tauri   5.3   50   27   3.47   16   57   51.7   6.00     491   1528   k Tauri   5.3   50   27   3.47   16   57   51.0   5.80     490   1536   1540   40   40   47   52   50   40   40   50   40   40   40   40	
140	<b>–</b> .c
470°   Aurige   5.5   41.5   3.83   31 13   6.73     471	, 0
471 1476	
472	
1473   1477   Aurigæ	+ .0
474   1486	÷ .c
1491   π   Orionis   1.5   14   05   3.27   8   41   34.0   6.52	
476 1493 i Tauri	0
477       1493       1 Intit       1.493       1 Intit       1.493       4.01       36 29 56.0       6.48         478       1495       π° Orionis       4.0       44 36       4.01       36 29 56.0       6.46         478       1495       π° Orionis       4.0       44 49       3.19       5 23 53.4       6.46         479       1494       5 Camelopardalis       5.7       45 15       4.88       55 03 29.2       6.42         480       1497       D. M. 27°, 701       5.8       45 18       3.75       27 41 42.3       6.42         481       1500       400 Orionis       5.2       4 45 45       + 3.39       14 02 56.9       + 6.38         482       1508       5 Orionis       5.5       47 07       3.13       2 18 31.4       6.27         483       1504       7 Camelopardalis       4.9       47 49       4.79       53 33 27.7       6.22         484       1514       π° Orionis       5.1       48 18       3.30       9 57 30.1       6.17         485       1520       4 Aurigæ       3.1       49 11       3.90       32 58 28.1       6.10         487       1520       4 Aurigæ       3.1	0
478 1492	0
1495   1495   1496   5   Camelopardalis	+ .0
480 1497 D. M. 27°, 701 . 5.8 45 18 3.75 27 41 42.3 6.42 481 1500 40 Orionis . 5.2 4 45 45 + 3.39 14 02 56.9 + 6.38 482 1508 5 Orionis . 5.5 47 07 3.13 2 18 31.4 6.27 483 1504 7 Camelopardalis . 4.9 47 40 4.79 53 33 27.7 6.22 484 1514 π° Orionis . 5.1 48 18 3.30 9 57 30.1 6.17 486 . Orionis . 5.6 48 19 3.24 7 35 01.6 6.17 487 1520 ι Aurigæ . 3.1 49 11 3.90 32 58 28.1 6.10 488 . Cephei . 6.0 49 26 20.42 85 47 53.8 6.08 489 1525 90° Orionis . 4.8 49 37 3.37 13 19 24.2 6.66 490 1526 Tauri . 5.3 50 27 3.47 16 57 51.7 6.00 491 1528 k Tauri . 5.8 4 50 49 + 3.66 24 51 48.7 + 5.97 492 1530 4 Aurigæ . 5.7 51 07 4.07 37 42 24.7 493 1538 π° Orionis . 4.7 52 20 3.11 1 31 43.1 5.83 494 1536 10 Camelopardalis . 4.3 52 45 5.31 60 15 51.0 496 496 1541 ζ Aurigæ	0
481 1500 40 Orionis	0
482 1508 5 Orionis	(
482       1508       5 Orionis       5.5       47 07       3.13       2 18 31.4       6.27         483       1504       7 Camelopardalis       4.9       47 40       4.79       53 33 27.7       6.22         484       1514       π Orionis       3.9       48 00       3.12       2 14 33.5       6.20         485       1516       π Orionis       5.1       48 18       3.30       9 57 30.1       6.17         486       Orionis       5.6       48 19       3.24       7 35 01.6       6.17         487       1520       4 Aurigæ       3.1       49 11       3.90       32 58 28.1       6.10         488       .       Cephei       6.0       49 26       20.42       85 47 53.8       6.08         489       1525       90° Orionis       4.8       49 37       3.37       13 19 24.2       6.06         490       1526       Tauri       5.3       50 27       3.47       16 57 51.7       6.00         491       1528       k Tauri       5.8       4 50 49       + 3.66       24 51 48.7       + 5.97         492       1530       4 Aurigæ       5.7       51 07       4.07       37 42 24.7 <t< td=""><td></td></t<>	
484 1514 π Orionis . 3.9 48 00 3.12 2 14 33.5 6.20 485 1516 π Orionis . 5.1 48 18 3.30 9 57 30.1 6.17 486 . Orionis . 5.6 48 19 3.24 7 35 01.6 6.17 487 1520 ι Aurigæ . 3.1 49 11 3.90 32 58 28.1 6.10 488 . Cephei . 6.0 49 26 20.42 85 47 53.8 6.08 489 1525 90 Orionis . 4.8 49 37 3.37 13 19 24.2 6.06 490 1526 Tauri . 5.3 50 27 3.47 16 57 51.7 6.00 491 1528 k Tauri . 5.8 4 50 49 + 3.66 24 51 48.7 + 5.97 492 1530 4 Aurigæ . 5.7 51 07 4.07 37 42 24.7 5.94 493 1538 π Orionis . 4.7 52 20 3.11 1 31 43.1 5.83 494 1536 ιο Camelopardalis . 4.3 52 45 5.31 60 15 51.0 5.80 495 1540 ε Aurigæ . 3.8 54 05 4.18 40 53 56.9 5.69 496 1541 ζ Aurigæ . 3.8 54 05 4.18 40 53 56.9 5.69 497 1546 11 Camelopardalis . 5.4 55 43 5.20 58 48 08.8 5.55 498 1551 ι Tauri . 4.8 55 55 3.58 21 25 01.5 5.53 499 1549 Camelopardalis . 5.4 57 14 7.48 73 47 17.9 5.43	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	
485       1516       π² Orionis       5.1       48 18       3.30       9 57 30.1       6.17         486       .       Orionis       5.6       48 19       3.24       7 35 01.6       6.17         487       1520       t Aurigæ       3.1       49 11       3.90       32 58 28.1       6.10         488       .       Cephei       6.0       49 26       20.42       85 47 53.8       6.08         489       1525       90° Orionis       4.8       49 37 3.37       13 19 24.2       6.06         490       1526       Tauri       5.3       50 27 3.47       16 57 51.7       6.00         491       1528       k Tauri       5.8       4 50 49       + 3.66       24 51 48.7       + 5.97         492       1530       4 Aurigæ       5.7       51 07 4.07       37 42 24.7       5.94         493       1538       π <sup>6</sup> Orionis       4.7       52 20 3.11       1 31 43.1       5.83         494       1536       10 Camelopardalis       4.3       52 45 5.31       60 15 51.0       5.80         495       1540       ε Aurigæ       2.       var. 3.5-4.4       53 21       4.29       43 38 38.3       5.75	
486	
487       1520       ι Aurigæ	
488	
489       1525       90° Orionis	•
490       I526       Tauri       .       5.3       50 27       3.47       I6 57 51.7       6.00         491       I528       k       Tauri       .       .       5.8       4 50 49       +       3.66       24 51 48.7       +       5.97         492       I530       4       Aurigæ       .       .       5.7       51 07       4.07       37 42 24.7       5.94         493       I538       π6 Orionis       .       4.7       52 20       3.11       1 31 43.1       5.83         494       I536       Io Camelopardalis       .       4.3       52 45       5.31       60 15 51.0       5.80         495       I540       ε       Aurigæ       .       .       var. 3.5-4.4       53 21       4.29       43 38 38.3       5.75         496       I541       ζ       Aurigæ       .       3.8       54 05       4.18       40 53 50.9       5.69         497       I546       II Camelopardalis       .       5.4       55 43       5.20       58 48 08.8       5.55         498       I551       t       Tauri       .       4.8       55 55       3.58       21 25 01.5       5.53	- ,
491       1528       k Tauri       .       .       5.8       4 50 49       + 3.66       24 51 48.7       + 5.97         492       1530       4 Aurigæ       .       .       5.7       51 07       4.07       37 42 24.7       5.94         493       1538       π6 Orionis       .       4.7       52 20       3.11       1 31 43.1       5.83         494       1536       10 Camelopardalis       .       4.3       52 45       5.31       60 15 51.0       5.80         495       1540       ε Aurigæ       .       .       var. 3.5-4.4       53 21       4.29       43 38 38.3       5.75         496       1541       ζ Aurigæ       .       3.8       54 05       4.18       40 53 56.9       5.69         497       1546       11 Camelopardalis       .       5.4       55 43       5.20       58 48 08.8       5.55         498       1551       t Tauri       .       4.8       55 55       3.58       21 25 01.5       5.53         499       1549       Camelopardalis       .       5.4       57 14       7.48       73 47 17.9       5.43	
492       1530       4 Aurigæ	
493       1538       4 Things       1538       4.7       52 20       3.11       1 31 43.1       5.83         494       1536       10 Camelopardalis       4.3       52 45       5.31       60 15 51.0       5.80         495       1540       ε Aurigæ	·
494     1536     10 Camelopardalis	+ .
495     1540     ε Aurigæ	· – .
495     1540     ε Altrigæ	
490     1541     ζ Rungæ      3.0     54     55     7.20     58     48     08.8     5.55       498     1551     ι Tauri      4.8     55     55     3.58     21     25     01.5     5.53       499     1549     Camelopardalis      5.4     57     14     7.48     73     47     17.9     5.43	
498 1551 ι Tauri 4.8 55 55 3.58 21 25 01.5 5.53 499 1549 Camelopardalis 5.4 57 14 7.48 73 47 17.9 5.43	·
498 1549 Camelopardalis	
499 1549 Cameroparamo	· — .
500 1554 9 Aurigæ 5.4 57 17 4.68 51 26 11.2 5.42	·

No.	В. А. С.	Constellation.	Mag.	A. R. 1880.	Annual Variation.	Declination 1880,	Annual Precession.	Proper Motion
				h, m, s.	s.	0 1 11	0	,,
501	1557	11 Orionis	4.9	4 57 43	+ 3.42	15 14 07.5	+ 5.39	01
502	1558	η Aurigae	3.4	58 o6	4.19	41 04 13.0	5 - 35	09
503*		D. M. $+ 0^{\circ}$ , 339	5.8	59.2	3.10	1 01	5.26	
504	1568	m Tauri	5.1	5 00 22	3.54	18 28 56.8	5.16	+ .02
505	1570	l Tauri	5.4	00 42	3.55	20 15 30.4	5.13	04
506	1572	103 Tauri	5.7	00 48	3.65	24 06 19.7	5.12	+ .05
507	1584	i Orionis	5.8	01 21	3.26	\$ 20 25.9	5.08	06
508	1582	Aurigæ	5.7	OL 47	4.46	46 48 43.7	5.04	10
509*		Tauri	5.6	02.2	3.75	27 53	5.00	• •
510	1590	h Orionis	5.9	02 44	3.29	9 40 24.7	4.96	1
511	1565	Camelopardalis	5.0	5 02 48	+ 9.74	70 05 18.4	+ 4.95	+ .0
	1505	15 Orionis	5.0	02 50	3.43	15 26 33.7	4.95	+ .0:
512		Camelopardalis	5.7	03 26	7.35	73 07 37.6	4.88	
513*	1601	Orionis	5.6	04 48	3.45	15 53 42.9	4.78	I
514	1602	u Aurigæ	5.2	05 13	4.10	38 20 26.5	4.75	0
515		$\mu$ Aungle $\mu$ Orionis		07 01	3.14	2 43 00.7	4.60	0
516	1611	ρ Onoms	4-9 5-4	07 36	3.90	32 32 49.0	4.54	+ .0
517	1614		1	07 50	4.42	45 52 26.1	4.53	4
518	1613	a Aurigæ Orionis	5.8	uS.4	3.19	. 5 OI	4.48	
519 520		Camelopardalis		00.2	5.58	62 31	4.41	: ·
-	1	1	į	5 09 24	+ 3.33	. 11 18 17.9	+ 4.39	+ .0
521	1624	18 Orionis	5.9		4.27	12 30 36.0	4.37	.0
522		Aurigae	6.0	00 42 10 18		33 14 41.1	4.31	1
523	1627	16 Aurigæ	5.1	1	3.93 4.20	39 59 24.5	4.28	7
524	1631	λ Aurigæ	4.9	10 42	4.21	40 58	4.19	
525*		Aurigæ	5.8	12 04	3.60	21 58 16.5	4.16	+ .0
526	1637	n Tauri	5 · 5	12 04		33 49 50.1	4.16	0
527	1636	19 Aurigæ	5.6		3.95	57 25 30.5	4.05	<b>-</b> .c
528	1642	16 Camelopardalis		13 11	5.12	41 40 58.8	4,06	0
529	1645	ρ Aurigæ	5.6	13 19	4.25 3.81	29 26 41.5	4.03	I
530	1649	D. M. 29°, 869	5.8	13 35				
531		Aurigæ	5.9	5 14 25	+ 4.21	40 54 33.8	+ 3.96	.0
532	1660	22 Orionis	4.9	15 38	3,06	- 0 30 09.3	3.86	0
533	1663	σ Aurigæ	5.5	16 30	4.07	37 16 17.8	3.78	.0
534	1665	m Orionis	5.3	16 32	3.15	3 25 38.8	3.78	0
535	1671	III Tauri	5 • 4	17 25	3.50	17 16 13.9	3.71	.0
536	1682	p Orionis	5.7	18 23	3.05	- I 00 29.4	3.62	+ .1
537	1	25 Orionis	5.0	18 31	3.12	1 44 04.4	3.61	.0
538	1687	$\gamma$ Orionis	1.5	18 42	3.22	6 14 21.9	3.59	0
539	1681	β Tauri	1.6	18 42	3.79	28 30 15.5	3.59	1
540	1676	17 Camelopardalis	5.8	18 50	5.65	62 57 51.1	3.58	0
541	1690	φ Aurigæ	5.6	5 19 42	+ 3.98	34 22 17.8	+ 3.51	9
542	1692	115 Tauri	5.8	20 10	3-49	17 51 26.5	3 · 47	0
543	1695	o Tauri	5.6	20 26	3.60	21 49 58.6	3 - 45	0
544	1700	ψ Orionis	5.1	20 33	3.14	2 59 24.8	3 · 44	0
545	1701	116 Tauri	5.8	20 52	3-45	15 46 16.4	3.40	
546	1707	118 Tauri	5.5	21 53	3.69	25 03 05.0	3.32	0
547	1	31 Orionis	5.3	23 38	3.05	— г и 17.6	3.17	.0
548	1	Cephei	6.0	23 41	18.58	85 07 53.3	3.16	.
549	1	A Orionis	5.2	24 22	3.21	5 51 19.3	3.11	0
550	1	χ Aurigae	4.9	24 55	3.91	32 06 07.2	3.06	+ .0

#### CATALOGUE OF STARS FOR OBSERVATIONS OF LATITUDE.

	B. A. C.	Constellation.	Mag.	A. R. 1880.	Annual Variation.	Declination 1880,	Annual Precession.	Proper Motion.
				h. m. s.	s.	0 1 11		ti
551	1726	119 Tauri	4.7	5 25 11	+ 3.52	18 30 II.7	+ 3.03	01
552	1730	δ Orionis	var. 2.2-2.8	25 53	3.06	- 0 23 22.8	2.97	01
553		Aurigæ	5.8	<b>2</b> 6 44	4.91	54 20 47.2	2.90	.00
554*		Orionis	5.8	26.7	3.03	— т 41	2.90	
555	1737	35 Orionis	5.6	27 05	3.41	14 13 09.8	2.87	03
556	1736	Aurigæ	5.8	27 12	4.52	47 38 02.5	2.86	.00
557	1742	121 Tauri	5.6	<b>2</b> 8 o8	3.66	23 57 28.5	2.78	— .02
558	1748	$\phi^1$ Orionis	4.9	28 14	3.29	9 24 24.0	2.77	02
559	1749	$\lambda$ Orionis	3.8	28 32	3.30	9 51 08.0	2.75	02
560	1765	ε Orionis	1.8	30 07	3.04	<b>– т</b> 16 48.3	2.61	oı
561	1766	φ <sup>2</sup> Orionis	4.5	5 30 19	+ 3.30	9 13 26.3	+ 2.59	31
562	1751	Camelopardalis	5.8	30 25	6.00	65 37 47.7	2.58	
563	1767	ζ Tauri	2.9	30 28	3.58	21 04 03.1	2.57	05
564*		D. M. 4°, 989	5.8	30.8	3.18	4 41	2.55	
565	1768	26 Aurigæ	5.8	30 56	3.85	30 25 09.5	2.54	.00
566	1778	125 Tauri	5.7	32 18	3.72	25 49 41.8	2.42	.01
567	1782	$\omega$ Orionis	4.9	32 51	3.17	4 03 06.6	2.37	10. +
568	1792	126 Tauri	5.4	34 22	3.46	16 28 13.6	2,24	+ .02
569	1806	b Orionis	5.4	36 16	3.10	I 24 54.3	2.07	10. —
570	1804	o Aurigæ	5.8	36 36	4.65	49 46 16.2	2.04	08
571*	1826	Orionis	5.8	5 40.3	+ 3.30	9 29	+ 1.72	
572	1827	131 Tauri	5.7	40 23	3.42	14 26 32.2	1.71	09
573	1830	τ Aurigæ	4.7	40 52	4.16	39 08 16.0	1,67	06
574	1834	133 Tauri	5.2	40 55	3.41	13 51 16.0	1.67	10. —
575	1839	52 Orionis	5.5	41 33	3.23	6 24 37.2	1,61	06
576	1837	132 Tauri	5.3	41 39	3.68	24 31 32.2	1.61	01
577	1846	134 Tauri	5.1	42 49	3.37	12 36 42.7	1.50	+ .02
578	1844	v Aurigæ	5.0	42 51	4.09	37 16 08.9	1.49	03
579	1845	ν Aurigae	4.2	43 10	4.16	39 06 42.3	1.47	+ .03
58o	.1851	Orionis	5.8	43 26	3.31	9 49 53.5	1.45	19
581	1852	135 Tauri	5.6	5 43 39	+ 3.41	14 16 08.3	+ 1.43	02
582*		Orionis	5.8	43.9	3.17	4 23	1.41	
583	1849	31 Camelopardalis	5.4	44 13	5-37	59 51 30.9	1.38	02
584	1854	ξ Aurigæ	4.9	44 47	5.02	55 40 34.0	1.33	03
585*		D. M. 19°, 1110	5.8	45.3	3-55	19 50	1.29	
586	1862	137 Tauri	5.8	45 34	3.41	14 08 23.0	1.26	02
587	1863	136 Tauri	5.3	45 47	3-77	27 34 54-7	1.24	07
588	1869	56 Orionis	5.4	46 13	3.12	1 49 27.0	1.21	10. +
589	1876	$\chi^1$ Orionis	4.8	47 17	3.55	20 15 07.7	1.11	10
590	1883	a Orionis	var. 0. 4-1.4	48 41	3.24	7 22 59-7	0.98	+ .02
591		D. M. 24°, 1033	5.8	5 49 35	+ 3.67	24 13 48.2	+ 0.91	•••
592	1885	d Aurigae	3.9	49 39	4.94	54 16 23.2	0.91	II
593		Aurigae	6.0	50 <b>02</b>	4.66	49 54 33.8	0.87	
594	1896	139 Tauri	5.2	50 33	3 · 73	25 56 14.0	0.83	.00
595	1895	β Aurigæ	2.0	50 44	4.40	44 55 58.8	0.81	03
596	1897	π Aurigæ	4.6	51 02	4 - 45	45 55 25.6	0.79	02
597	1900	ϑ Aurigae	2.5	51 32	4.09	37 12 08.4	0.74	11
598	1902	36 Aurigæ	5.9	51 52	4.55	47 53 30.3	0.71	05
599	1913	60 Orionis	5.5	5 <b>2</b> 39	3.09	0 32 25.1	0.65	04
600	1914	Aurigae	6.2	53 29	4.66	49 54 11.0	0.57	+ ,10

S. Ex. 37—13

No.	в. А. С.	Constellation.	Mag.	A. R. 1880.	Annual Variation.	Declination 1880.	Annual Precession.	Prope Motion
	-		:	h. m. s.	5,	0 1 11	,,	,,
601	1928	$\mu$ Orionis	4.8	5 55 47	+ 3.30	9 38 44.7	+ 0.37	oi
602	1934	64 Orionis	5.7	56 21	3.56	19 41 27.5	0.32	03
603	1939	$\chi^2$ Orionis	5.1	56 47	3.56	20 08 21.3	0.28	04
604	1938	1 Geminorum	. 4.9	56 50	3.64	23 16 05.6	0.28	11
605	1942	40 Aurigæ	5 - 7	58 19	4.13	38 29 30.3	0.15	.00
606*		D. M. 29°, 1112	5.8	58.7	3.83	29 31	0.11	
607	1945	66 Orionis	5.8	58 <b>3</b> S	3.17	4 09 50.8	0.12	03
608	1943	37 Camelopardalis	5.S	59 24	5.30	58 56 54.6	0.05	+ .0
бод	1958	v Orionis	4.6	6 00 43	3.43	14 46 52.5	- 0.06	0:
610	1952	36 Camelopardalis	5.6	00 46	6.03	65 44 21.2	0.06	0
511	1963	41 Aurigæ	6.2	6 02 25	+ 4.60	48 43 58.0	- 0.21	12
612				04 17	1	51 12 06.2	0.38	
613		Aurigæ		04.5	4·73 3·93	32 43	0.39	
514	1979	40 Camelopardalis		04.5	5.39	60 OI 46.4	0.43	0
515	1979	68 Orionis	5.8	04 54	3.56	19 48 54.2	0.43	0
516	•	E Orionis		05 07	3.42	14 14 03.4	0.45	0
517	1990 1989		4.7	05 07	3.42	16 09 22.2	0.45	+ .0
517 : 518 :	1989	Camelopardalis	5.7	05 06	6.62	69 21 32.7	0.49	— .I
519	1992	I Lyncis	5.6	05 37	5.54	61 33 05.2	0.60	0
519 520	2002	η Geminorum	3.6	07 38	3.62	22 32 24.0	0.67	0
	!		!		1			
21	2001	к Aurigæ	4.4	6 07 44	+ 3.83	29 32 25.3	- o.68	2
22	2009	f <sup>2</sup> Orionis	5.5	08 30	3.45	16 10 42.7	0.74	+ .0
523	2012	73 Orionis	5.8	09 01	3.38	12 35 13.4	0.79	.0
524	2007	2 Lyncis	. 4.8	09 02	5.30	59 03 06.5	0.79	+ .0
25*		D. M. 14°, 1235	5.8	11.3	3.42	14 26	0.99	• •
526	2024	45 Aurigæ	5.6	12 01	4.88	53 30 15.3	1.05	I
527*		Orionis	5.7	13.2	3.42	14 43	1.15	•••
5 <b>2</b> 8		Camelopardalis	5.8	14 33	6.86	70 35 49.7	1.26	••
629	2044		4.9	15 39	4.62	49 20 47.1	1.37	0
530	2047	$\mu$ Geminorum	3.3	15 42	3.63	22 34 25-0	1.38	1
531*	2045	5 Lyncis	5.8	6 16 20	+ 5.25	58 28 49-7	<b>— 1.40</b>	.0.
532	2059	8 Monocerotis	4.7	17 25	3.18	4 39 08.0	1,52	0
533	2082	48 Aurigæ	5.5	20 51	3.86	30 33 53.8	1.82	0
534	2086	77 Orionis	5.7	21 04	3.08	0 22 11.2	1.84	o. –
635	2081	47 Aurigæ	6.1	21 05	5.49	46 45 33.2	1.84	0
536*	2069	Camelopardalis	5.6	21 49	9.38	78 05 11.0	1.93	• • •
537	2090	r Geminorum	4.4	21 50	3.56	20 17 10.9	1.90	ი. –
538	2083	Camelopardalis	6.0	22 46	7.65	73 47 06.3	1.99	
39	2110	Aurigæ	5 - 7	24 37	3.93	32 32 21.4	2.15	4 .0
540*		Monocerotis	5.2	25.1	3.35	11 38	2.19	
541	2095	Camelopardalis	5 - 3	6 25 45	+10.35	79 41 22.7	- 2.24	6
42	2126	13 Monocerotis		26 25	3.25	7 25 10.3	2.30	o, –
42*		Camelopardalis	5.8	26.4	7.12	71 51	2.30	
544*	2129	Geminorum	6.0	26.8	3.41	14 15	2.34	
545*		Monocerotis	5.5	27.5	3.05	— г о <b>7</b>	2.40	
646	2133	4) : urig :	5.1	27 39	3.78	28 06 50.3	2.41	0
547	2159	ψ <sup>2</sup> Aurigæ	5.0	30 46	4.29	42 35 32.1	2.69	0
648 :	2163	Geminorum	1	30 47	3.47	16 30 00.5	2.69	0
<b>U40</b> :	2103	; Geninorum	1.9	35 47	3.47		i	1
649	2170	54 Aurigæ	5.9	31 59	3.79	28 22 01.8	2.79	0

THE UNITED STATES COAST SURVEY.

Νo.	В. А. С.	Constellation,	Mag.	A, R, 1880.	Appual Variation.	Declination 1880.	Annual Precession.	Proper Motion
				h. m. s.	s.		- 3.00	"
651	2185		. var. 4.7-5.5	6 34 22	7 3.31	10 00 16.1	5	09
652	2191	26 Geminorum		35 <b>2</b> 5	3.49	17 45 41.4	3.00	08
653	2187	•	4.9	35 <b>3</b> 7	5.30	59 33 37.1	3.10	03
654	2194	ε Geminorum	. 3.3	36 33	3.69	25 14 54.1	3.18	02
655	2197	28 Geminorum	5.8	37 09	3.81	29 05 25.9	3.23	03
656	2199	30 Geminorum		37 13	3.38	13 20 51.3	3.24	02
657	2200	ψ Aurigæ	. 5.3	38 O5	4.33	43 41 40.9	3.32	+ .14
658		Lyncis		35 12	5.01	55 50 02.5	3.33	-1. 01
659	2198	42 Camelopardalis	· ·	38 <b>2</b> 6	6.29	67 42 04.6	3.34	+ .01
660	2201	ψ <sup>6</sup> Aurigæ	5 • 4	38 31	4.59	48 54 50.1	3.35	04
661	2206	ξ Geminorum	3.8	6 38 33	+ 3.37	13 01 24.2	- 3.36	22
662	2211	16 Monocerotis	. 5.8	40 00	3.27	8 42 45.2	3.48	02
663	<b>22</b> 09	43 Camelopardalis	5.1	40 45	6.51	69 01 28.6	3.55	.00
664	2216	17 Monocerotis	5.1	49 49	3.27	8 09 57.0	3.55	.00
665	2222	18 Monocerotis	. 4.8	41 36	3.13	2 32 30.8	3.62	03
666*		Geminorum	5 · 7	41.9	3.92	32 44	3.65	
667	2223	$\psi^{\tau}$ Aurigæ	5.1	42 17	4.25	41 55 15.1	3.68	11
668	2220	14 Lyncis	. 5.8	42 30	5.31	59 35 18.3	3.70	04
669	2210	Camelopardalis	4.6	42 32	8,85	77 07 33.9	3.70	03
670	2157	Cephei	5.0	43 45	30.12	87 13 45.6	3.81	0
671	2233	d Geminorum	. 5.S	6 41 22	+ 3.61	21 54 04.2	- 3.86	0:
672	2237	v Geminorum	3.6	44 52	3.96	34 00 15.1	3.89	0
673	2248	15 Lyncis	4.9	46 53	5.22	58 34 38.3	4.07	18
674	2247	Camelopardalis	6.0	47 42	6.86	70 57 58.5	4.14	
675	2255	e Geminorum	5.0	47 52	3.38	13 19 43.9	4.16	06
676	2261	$\psi^{10}\mathrm{Aurigæ}$	5.2	48 52	4.39	45 14 51.8	1.24	02
677	2285	41 Geminorum	. 5.8	53 22	3.45	16 14 38.3	4.62	+ *.03
678	<b>229</b> 9	$\omega$ Geminorum	. 5.6	55 06	3.66	21 23 05.2	4.77	01
679*		Geminorum	. 6,0	55.4	3.49	17 55	4.80	•
680*		Geminorum	6.0	55.4	3.43	15 30	4.80	• •
681	2305	$\zeta$ Geminorum	. var. 3,8–4.4	6 56 59	+ 3.56	20 44 40.5	- 4.94	0
682	2306	Geminorum	5.I	56 59	<b>3</b> · 33	11 07 35.5	4.94	.00
683	2314	Aurigæ	6.0	58 16	3.98	34 39 14.7	5.05	1
684*		Aurigæ	5.8	59+5	3.95	3.4 11	5.14	
685 <b>*</b>		Monocerotis	5.7	7 01.3	3.25	7 40	5.30	
686	2330	45 Geminorum	5 · 4	01 29	3.41	16 07 15.6	5.32	0'
687	2338	63 Aurigæ	5.1	03 24	4.13	39 30 52.3	5-47	, 00
688	2340	au Geminorum	. 4.6	03 30	3.83	30 26 24.3	5.50	0
689	2343	47 Geminorum	5.7	03 56	3.72	27 03 08.3	5.52	0
690	2341	D.M. 51°, 1295	5.8	04 02	4.70	51 37 31.7	5 - 53	.00
169	2350	48 Geminorum	5.8	7 05 09	+ 3.65	24 19 40.9	<b>-</b> 5.62	0
692	2319	18 Lyncis	. 5.1	05 25	5.27	59 50 54.1	5.64	33
693	2356	Canis Minoris	5.8	05 27	3.21	5 51 07.4	5.64	.00
694	2358	22 Monocerotis	. 4.4	05 44	3.07	- o 17 43.0	5.67	0
695	2326	Camelopardalis	. 5.3	05 45	12.99	82 38 14.6	5.67	0:
696	2362	51 Geminorum	. 5.3	06 29	3.44	16 21 40.2	5.74	0;
697	2361	Lyncis	. 5.7	o6 55	4.47	47 27 06.2	5 · 77	0
698	2373	Monocerotis	. 5.6	08 02	3.15	3 18 57.0	5.87	+ .0
699	2379	Lyncis	. 5.2	09 25	4.57	49 40 35.1	5.98	.00
700	2381	64 Aurigæ	. 6.0	09 42	4.18	41 05 40.9	6.01	+ .01

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				h. m. s.	S.	<b>6</b> 1 11		.,
701	2395	λ Geminorum	4.0	7 11 12	+ 3.45	16 45 19.9	- 6.13	04
702		Lyncis	6.0	12 36	4.36	45 26 53.5	6.25	•••
703	2110	d Geminorum	3.5	12 57	3.59	22 12 06.5	6.28	+ .01
704	2407	19 Lyncis	5.4	13 04	4.92	55 30 19.2	6.27	05
705	2416	65 Aurigæ	5.3	14 02	4.03	36 59 05.5	6.36	.00
706	2423	56 Geminorum	5.6	14 52	3.55	20 40 06.9	6.44	.00
707	2129	66 Aurigæ	5.4	15 50	4-17	40 54 07.1	6.51	oi
708	2431	A Geminorum	5.1	16 10	3.67	25 16 46.6	6.54	02
709	2111	21 Lyncis	4.8	17 40	4.55	49 26 50.7	6.67	09
710	2442	ι Geminorum	4.0	18 16	3.74	28 02 06.2	6.72	c9
711	2114	I Canis Minoris	5.7	7 18 18	+ 3.34	11 54 13.6	- 6.72	+ .02
712	2439	Camelopardalis	5.6	18 23	6.29	68 42 28.3	6.73	07
713	2451	ε Canis Minoris	5.3	19 05	3.28	9 30 39.8	6.79	07
714		Lyncis	5.9	19 55	4-36	48 25 35.3	6.85	
715	2460	63 Geminorum	5.5	20 37	3-57	21 41 20.6	6.90	10
716	2462	$\beta$ Canis Minoris	2.8	20 39	3.26	8 31 47.4	6.91	05
717	2459	22 Lyncis	5.5	20 49	4.56	49 55 04.8	6.93	11
718	2464	ho Geminorum	4.5	21 23	3.87	32 01 17.3	6.97	+ .19
719	2465	$\eta$ Canis Minoris	5.8	21 35	3.23	7 11 06.8	6.99	04
720	2468	$\gamma$ Canis Minoris	4.9	21 38	3.27	9 10 01,5	6.97	02
721	2467	64 Geminorum	5 - 5	7 21 52	+ 3.75	28 21 50.5	- 7.01	04
722	2469	b Geminorum	5.0	22 21	3.74	28 09 43.7	7.05	01
723	2473	6 Canis Minoris	4.9	23 07	3.34	12 15 12.4	7.11	.00
724*		D. M. 23°, 1744	-	25.7	3.60	23 09	7 - 33	• • • •
725	2480	di Canis Minoris	5 · 4	25 52	3.12	2 10 04.2	7 · 34	+ .05
726	2486	68 Geminorum	5.4	26 46	3 · 43	16 05 00.5	7.41	.00
727	2485	a Geminorum	1.5	26 56	3.85	32 09 00,1	7.42	08
728		Lyncis	6.0	27 01	4.91	56 01 03,2	7.43	• • • •
729	2488	Lyncis	5.7	<b>2</b> 7 49	4 · 37	46 26 35.3	7.50	
730	2493	ν Geminorum	4.3	28 32	3.71	27 09 39.9	7-55	11. —
731	2504	70 Geminorum	5.7	7 30 40	+ 3.95	35 18 55.3	- 7.73	03
732	<b>25</b> 0g	o Geminorum	5.0	31 20	3.93	34 51 20.1	7.78	30
733		Lyncis	6.0	32 10	4.05	38 37 02.9	7.85	.00
734		Lyncis	5.8	32 20	4.46	48 21 40.0	7.86	.00
735	2519	f Geminorum	5.6	32 33	3 · 47	17 56 46.9	7.88	+ .01
736	2516	24 Lyncis	5.0	32 51	5.11	58 59 19.6	7.90	07
737	2522	a Canis Minoris		33 OI	3.14	5 31 51.7	7.92	-1.08
738*		Geminorum	-	33.8	3.60	23 19	7.98	
739	2532	Lyncis	5 · 3	34 59	4.57	50 42 57.2	8.08	04
740*		Geminorum	6.0	35.3	3.39	14 29	8.10	
741	2540	$\sigma$ Geminorum		7 35 49	+ 3.76	29 10 20.4	- 8.14	24
742	2551	κ Geminorum	3.7	37 12	3.63	24 41 03.1	8.25	05
743	2555	$\beta$ Geminorum	1.3	37 58	3.68	28 18 53.0	8.32	04
744*		Lyncis	5.5	38.6	4.02	37 48	8.36	
745	2558	81g Geminorum	5.1	39 11	3.48	18 48 05. T	8.41	05
746	2564	11 Canis Minoris	5.2	39 40	3.31	11 03 35.0	8.45	+ .01
747	2563	$\pi$ Geminorum	5.4	39 46	3,88	33 42 32.5	8.46	02
748	2612	ζ Canis Minoris	5.3	45 29	3.12	2 04 19.4	8.91	ro. —
749	2596	Camelopardalis		45 48	7.31	74 14 08.0	8.93	
750	2590	Camelopardalis	5.4	45 51	9.70	79 48 12.2	8.93	-0.10

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				h. m. s.	s.	0 / //	,,	,,
75I	2609	26 Lyncis ,	5.6	7 45 58	+ 4.39	47 52 25.2	- 8.95	04
752	2617	$\phi$ Geminorum	5 . I	46 09	3.68	27 04 29.9	8.96	01
753	2585	Camelopardalis	5.8	48 01	15.23	84 23 56.3	9.10	
754	2632	85 Geminorum	8.9	48 40	3.51	20 11 58.2	9.16	04
755	<b>2</b> 6 <b>3</b> 9	1 Cancri	6.1	50 11	3.41	16 06 34.3	9.28	04
756	2647	Canis Minoris	6.0	50 45	3.26	8 57 37-4	9.31	06
757		Camelopardalis	5.8	51 16	5.07	59 22 15.1	9.36	
758*	2649	Cancri	6.0	51 41	3.43	16 50	9.38	
759		Camelopardalis	5.8	51 45	5 - 43	63 25 03.8	9.40	, 00
760	2653	1.4 Canis Minoris	5.8	52 07	3.12	2 32 33.9	9.42	+ .0
761	2659	3 Cancri	5.8	7 53 55	+ 3.44	17 38 09.4	- 9.56	0.
762	2668	28 Monocerotis		55 07	3.06	- 1 03 38.4	9.65	10
763	2673	Canis Minoris		56 02	3.12	2 39 47.0	9.72	+ .1
764	2672	$\chi$ Geminorum	5.1	56 09	3.69	28 07 45.1	9.74	0
765	26go	8 Cancri	5.7	58 23	3.35	13 27 31.6	9.91	0
766	2700	q Caneri	6.0	59 12	3.56	22 58 35.6	9.97	0
767	2697	27 Lyncis	4.9	59 25	4.54	51 51 03.0	9.98	0
768	2097	u Cancri	5.3	8 00 42	3.54	21 55 43.8	10.08	c
769 769	2714	Ursæ Majoris	4.9	00 51	6.05	68 49 29.6	10.09	c
770 770	2732	Lyncis	5.6	04 16	4.82	56 48 37.5	10.35	+ .0
	2722	Camelopardalis	5.5	8 04 25	+ 7.72	76 07 13.1	<b>–</b> 10.36	
771	=	i -	4.7	05 20	3.45	18 00 30.7	10.43	ı
772	2744	ζ Cancri	5.5	05 43	3.73	30 00 51.0	10.45	0
773	2747 2757	20 Lyncis	5.8	07 52	5.03	59 56 10.1	10.62	c
774 775	2765	Ursæ Majoris	6.0	08 50	5.28	62 52 32.8	10.69	,0
776	2778	β Cancri	3.9	10 00	3.26	9 33 14.7	10.77	0
777	2786	χ Cancri	1	12 46	3.66	27 36 18.0	10.98	3
778	2788	Cancri	- 0	13 23	3.52	21 07 31.7	11.02	+ .0
779	2789	λ Cancri		13 24	3.57	24 23 55.2	11.02	c
780	2793	31 Lyncis	4.4	14 37	4.13	43 34 18.4	11.11	1
781	2792	Lyncis	5.8	8 14 43	+ 4.58	53 36 17.8	- 11.12	0
782		Lyncis	5.8	17.4	3.86	35 24	11.31	
783	2803	Ursæ Majoris	5.8	18 26	5.76	67 41 25.1	11.38	+ .0
784	2815	φ Cancri	5.9	19 10	3.66	28 17 14.9	11.44	1
785		Lyncis	6.0	19 14	4.21	46 03 34.5	11.44	
786	2822	Cancri	5.2	19 29	3.22	7 57 35.7	11.47	]0
787	2817	φ <sup>2</sup> Cancri	5.6	19 32	3.64	27 19 32.1	11.47	0
788	2826	27 Cancri	6.0	20 ob	3.33	13 02 57.8	11.51	1
789	2819	o Ursæ Majoris	3.5	20 17	5.04	61 07 02.2		1
790	2833	28 Cancri	5 - 7	21 30	3.57	24 32 30.0	11.61	0
79 I	2842	A Ursæ Majoris	5.4	8 23 51	+ 5.45	65 33 07.6	- 11.77	0
792	2850	L Cancri	. 5.7	24 25	3.56	24 29 04.1	11.82	0
793	2853	θ Cancri	5.6	24 45	3 · 43	18 29 55.9	11.84	0
794	2862	η Cancri	5.5	25 46	3.48	20 50 51.5	11.91	0
795	2871	33 Lyncis	6.0	27 01	3.87	36 49 48.7	12.00	0
796	2876	3 Ursæ Majoris	5.5	28 31	5.40	65 25 59.6	12.10	+ .0
. , 797	2889	Hydræ	. 6.0	29 28	3.20	7 02 15.1	12.17	0
798	2884	π Ursæ Majoris	. 4.6	29 43	5.32	64 44 42.0	12.19	+ .0
799	2897	c Cancri	. 5.9	30 35	3.26	10 04 16.7	12.25	0
800	_	δ Hydræ	4.4	31 18	3.18	6 07 17.0	12.30	+ .0

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				h. m. s.	s.	0 , 11		"
801	2911	σ Hydræ	4.8	8 32 29	+ 3.15	3 45 42.3	- 12.38	02
802	<b>2</b> 909	34 Lyncis	5.4	32 43	4.17	46 15 12.3	12.40	+ .06
803	2937	γ Cancri	4.5	36 20	3.48	21 53 56.9	12.64	+ .01
804	2942	Al Cancri	5.8	36 35	3.31	13 06 36.1	12.66	+ .01
805	2945	η Hydræ	4.8	36 57	3.14	3 49 41.9	12.69	or
806	2953	δ Cancri	4.3	37 52	3.12	18 35 39.5	12.75	24
807*	2943	Ursæ Majoris	6.0	37 56	5.52	67 08 50.0	12.75	+ .02
808	2958	b Cancri	5.6	38 14	3.26	10 30 54.0	12.77	03
809	2965	ι Cancri	4.7	<b>3</b> 9 <b>2</b> 6	3.64	29 11 50.7	12.85	05
810	2971	ε Hydræ	3.5	40 25	3.18	6 51 29.8	12.92	02
811	2976	Hydræ	5 - 5	8 41 10	+ 3.04	- 1 27 28.2	- 12.97	+ .03
812	2978	ρ Hydræ	4.5	42 05	3.19	6 16 48.0	13.02	03
813	2982	b Ursæ Majoris	5.5	43 29	5.01	62 24 37.1	13.12	+ .17
814	2989	35 Lyncis	5.8	43 53	4.05	44 10 18.2	13.15	+ .03
815	2999	σ <sup>1</sup> Cancri	5.8	45 10	3.73	32 55 21.7	13.23	+ .02
816	3002	ρ Cancrí	5.8	45 27	3.58	28 47 17.3	13.25	25
817	3003	6 Ursæ Majoris	5.8	46 09	5.22	65 03 39.3	13.30	13
818	3016	57 Cancri	5.3	46 55	3.67	31 01 57.9	13.35	,00
819	3026	ρ2 Cancri	5.4	48 28	3,60	28 23 03.6	13.45	~ .o.
820	3027	Ursæ Majoris	6.0	48 43	3.92	40 39 38.6	13.46	.00
82 E	3032	ζ Hydræ	3.3	8 49 03	+ 3.18	6 24 04.4	- 13.48	.00
822	3035	60 Cancri	5.7	49 22	3.28	12 05 00.8	13.51	02
823	3033	σ <sup>2</sup> Cancri	5.6	49 32	3.72	33 22 14.7	13.51	07
824		Camelopardalis	5.8	50 03	13.61	84 39 3110	13.55	.00
825	3047	o Cancri	5.5	50 33	3.36	15 46 55.4	13.58	+ .04
826	3048	ι Ursæ Majoris	3.2	50 59	4.14	48 30 40.6	13.61	28
827*	3053	Cancri	6.0	51.2	3.24	9 51	13.62	
828	3049	ρ Ursæ Majoris	4.9	51 42	5.52	68 05 43.7	13.66	01
829	3055	a Cancri ,	4.2	51 55	3.28	12 19 16.2	13.67	04
830	3056	σ <sup>3</sup> Cancri	5.1	52 10	3.70	32 53 01.5	13.69	06
831	3059	10 Ursæ Majoris	4.1	8 52 51	+ 3.92	42 15 24.0	- 13.73	- ,27
832	3072	Ursæ Majoris	5.7	55 12	4.44	54 45 19.4	13.88	.00
833	3075	κ Ursæ Majoris	3.5	55 <b>2</b> 5	4.12	47 37 <b>46.2</b>	13.89	If
834	3079	ν Cancri	5.2	55 43	3.52	24 55 24.6	13.91	07
835	3087	11 Ursae Majoris	5.1	57 50	5.36	67 21 11.5	14.04	06
836	3097	Ursæ Majoris	4.7	58 54	3.85	38 55 49-7	14.11	06
837	3105	ω Hydræ	5.6	59 <b>3</b> 9	3.17	5 34 13.3	14.15	06
838	3099	σ Ursæ Majoris	5.0	59 49	5.37	67 37 11.6	14.17	o1. ~
839	3100	f Ursæ Majoris	4.9	9 00 24	4.27	52 05 15.6	14.20	05
840	3109	τ Cancri	5.8	00 48	3.62	30 08 07.3	14.23	05
841	3108	τ Ursæ Majoris	4.9	9 01 00	+ 5.02	63 59 59.9	- 14.24	08
842	3111	к Cancri	5.2	01 15	3.26	11 09 01.3	14.26	+ .02
843	3113	75 Cancri	5.7	01 44	3.55	27 07 28.4	14.28	08
844	3117	ξ Cancri	4.9	02 28	3.46	22 31 48.0	14.33	+ .02
845*	3116	Ursæ Majoris	6,0	03 48	6.20	73 26 27.8	14.41	.00
846	3125	16 Ursæ Majoris (c)	5.I	04 51	4.82	61 54 57.3	14.47	09
847	3131	36 Lyncis	5.5	05 57	3.95	43 42 40.2	14.54	05
848	3135	17 Ursæ Majoris	5.1	o6 56	4.50	57 14 14.2	14.60	+ .07
849	3140	e Ursæ Majoris	5.2	07 33	4.36	54 30 56.6	14.64	+ .02
850	3146	v Hydræ	4.2	o8 o7	3.13	2 49 11.1	14.67	32
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				h, m, s.	S.	» ( n	n	"
851	3147	$\pi$ Cancri	5.8	9 08 36	+ 3.32	15 26 18.8	- 14.70	+ .02
852	3162	38 Lyncis	3.9	11 22	3 - 75	37 18 36.3	14.87	04
853	3172	Ursæ Majoris	5 - 7	12 54	4 - 45	57 12 23.6	14.96	.00
854	3178	40 Lyncis	3.3	13 44	3.67	34 53 55.2	15.01	02
855	3204	к Leonis	4 - 4	17 40	3.51	26 41 52.0	15.23	·o3
856	3199	Draconis	4.3	19 51	9.14	Si 51 16.6	15.35	+ .00
857	3218	· Ursæ Majoris	5 - 4	20 48	3.96	46 07 34.5	15.41	13
858	3227	ω Leonis	5 • 4	22 02	3.22	9 34 41.9	15.48	02
859	3221	h Ursæ Majoris	3.6	22 03	4.80	63 35 07.8	15.48	+ .11
860	3228	3 Leonis	5.9	22 06	3.20	8 42 39.7	15.48	04
861	3251	22 Ursæ Majoris	5.8	9 23 32	+ 5.79	72 44 12.9	- 15.56	.00
862	3232	d Ursæ Majoris	4.9	23 51	5.42	70 21 22.4	15.57	+ .05
863	3241	8 Leonis Minoris	5.6	24 14	3.67	35 37 59.0	15.60	10
864	3242	v Ursæ Majoris	3.3	24 49	4.04	52 13 22.6	15.63	57
865	3246	λ Leonis	4.4	24 52	3.43	23 29 45.9	15.63	04
866	3250	$\xi$ Leonis	5.1	25 29	3.24	11 49 49.3	15.65	08
867	3251	n Leonis	5.5	25 32	3.22	10 14 38.2	15.65	02
868	3253	$\tau^2$ Hvdræ	4.9	25 52	3.07	- 0 39 22.8	15.69	08
869	3256	26 Ursæ Majoris	4.8	26 36	4.15	52 35 03.0	15.73	04
870	3261	· 10 Leonis Minoris	4.5	26 52	3.70	36 55 46.0	15.74	+ .00
871	3265	Lyncis	4.9	9 27 34	+ 3.76	40 09 09.6	- 15.78	05
872	3268	11 Leonis Minoris	5.6	28 28	3.61	36 21 07.4	15.83	2
873	3273	Leonis	5.3	29 35	3.57	31 41 55.3	15.89	02
874	32/3	i Sextantis	5.5	30 52	3.17	7 22 23.2	15.96	.00
875	3281	42 Lyncis	5.4	30 52	3.77	40 46 39.5	15.96	.00
876	3283	27 Ursæ Majoris	5.2	31 52	5.67	72 47 46.3	16.01	0
877	3295	2 Sextantis	5.0	32 12	3.14	5 11 24.6	16.03	o;
878	3284	D. M. 70°, 319	5.8	33 00	7-47	79 41 07.0	16.07	.00
879	3303		4.2	33 44	3.07	- 0 35 57.4	16.10	1:
88o	3307	43 Lyncis	5.6	34 34	3-74	40 18 13.9	13.15	00
881	1			9 34 45	+ 3.21	10 26 14.6	- 16.16	0.
882	3312	14 Leonis (0)	3.6			30 31 32.1	16.25	I
	3317	Leonis	5.3	36 31	3.53	14 34 09.8	16.28	0.
883	3321	ψ Leonis	5.8	37 12 28 01		1	16.33	.00
884	3324	63 Ursæ Majoris	5.4	38 01	4.30	57 40 39.8	16.38	0:
885	3331	ε Leonis	3.2	39 02	3.42	24 19 33.2 7 15 44.2	16.42	.01
886		Sextantis	5.7	39 50	3.17	2 20 23.3	16.44	0.
887	3339	Sextantis	5.6	40 12	3.10	46 34 45.2	16.47	10
888	3341	Ursæ Majoris R Leonis	5.0 var. 5.2-1.0	40 51 41 06	3.91	11 59 01.5	16.48	_ ı
889 890	3345	ν Ursæ Majoris	3.9	42 27	4.33	59 36 06.6	16.55	1
	3346					1	- 16.62	- ,0;
891	3358	φ Ursæ Majoris	4.8	9 43 56	+ 4.13	54 37 24.4	16,68	0; 20
892	3366	g Leonis	5.5	45 04	3.42	24 57 44.2	16.72	00
893	3371	$\mu$ Leonis	3.9	45 56	3.42	26 34 16.9	16.72	+ .1
894	3374	7 Sextantis	5.8	46 01	3.10	3 00 47.8	16.81	, r
895	3381	31 Ursæ Majoris	5.4	47 52	3.95	50 23 07.5	16.93	.00
896	3399	19 Leonis Minoris	5.2	50 20	3.70	41 37 35 4	16.99	.00
897	3402	Ursæ Majoris	5.1	51 35	4.18	57 23 07.3	17.00	
898	3406	v Leonis	5.5	51 46	3.23	13 00 59.9 30 13 06.7	17.04	1
899	3409	Leonis	5.6	52 41	3.50	8 37 09.5		o.
900	3415	$\pi$ Leonis	4.9	53 52	3.18	0 37 09.5	17.09	.0.

REPORT OF THE SUPERINTENDENT OF

No.	B, A, C.	Constellation.	Mag.	A. R. 1880.	Annual Variation.	Declination 1880.	Annual Precession.	Prope: Motion
				h. m. s.	s.	. , ,,	"	"
901	3416	20 Leonis Minoris	5 - 4	9 54 05	+ 3.47	32 30 47.2	- 17.09	45
902	3423	Leonis	5.3	56 07	3.36	22 31 38.6	17.19	- or
903	3446	21 Leonis Minoris	4.3	10 00 21	3.56	35 49 43.9	17.38	+ .01
904	3453	η Leonis	3.5	90 47	3.28	17 20 50.0	17.40	+ .01
905	3457	A Leonis	4.8	01 32	3.19	10 35 06.5	17-43	05
906	3458	15 Sextantis	4.4	or 48	3.08	0 12 52.0	17.44	or
907	3459	a Leonis	1.2	01 59	3.20	12 33 11.3	17-45	+ .01
908	3468	Leonis Minoris	6.0	04 06	3.58	37 59 34.1	17-53	.00
909	3496	32 Ursæ Majoris	5.7	91 80	4.43	65 42 20.9	17.76	04
910	3500	23 Leonis Minoris	5.8	09 25	3.43	29 54 26.1	17.76	ıı
	_	2 II Maiorio		; 10 09 51	+ 3.64	43 30 46.3	- 17.78	06
911	3505	λ Ursæ Majoris	3.4	i	i	,	1	+ .02
912	3508	ζ Leonis	3.4	10 01	3.35	24 00 54.0	17.79	02
913	3510	37 Leonis	5.5	10 14	3.23	14 19 33.4	17.79	
914	3514	Ursæ Majoris	5.8	11 53	4.67	69 20 59.0	17.86	, , ,
915	3495	Camelopardalis	5.0	11 58	9.73	84 51 35.7	17.87	05
916*	٠.	Ursæ Majoris	6. r	12	3.77	49 00	17.87	• • •
917	3522	40 Leonis	5.8	13 12	3.28	20 04 45.1	17.92	23
918	3523	y Leonis (1st star)	2.2	13 21	3.31	20 26 52.6	17.92	12
919	3533	μ Ursæ Majoris	3.2	15 11	3.60	42 06 09.2	17-99	+ .03
920	3531	Ursæ Majoris	4.9	15 28	4.40	66 10 19.6	18.00	06
921	3542	27 Leonis Minoris	5.8	10 16 12	+ 3.48	34 30 46.5	- 18.03	00
922	3528	Camelopardalis	5.0	16 18	7.92	83 10 03.3	18.04	0:
923	3548	28 Leonis Minoris	5.6	17 15	3.47	31 19 28.9	18.07	0
924	3561	44 Leonis	5.9	18 56	3.16	9 23 38.0	18.14	12
925	3560	30 Leonis Minoris	4.5	19 02	3.46	34 24 23.2	18.14	08
926	3572	31 Leonis Minoris	4.3	20 56	3.49	37 19 17.4	18.21	10
927	3580	36 Ursæ Majoris	4.7	22 57	3.89	56 35 44.1	18.23	+ .01
928	3590	29 Sextantis	5.0	23 23	3.05	2 07 33.1	18.30	04
929	3597	30 Sextantis	5.0	24 09	3.07	- 0 OI 21.0	18.32	03
930	3593	Draconis	4.8	24 51	5.29	76 19 48.4	18.34	,03
931	3606	i Leonis	5.7	10 25 48	+ 3.21	14 45 08.1	- 18.38	04
932	3607	Ursæ Majoris	4.9	26 14	3.53	41 02 33.2	18.40	.00
932 933 -	3600	$\rho$ Leonis	4.1	<b>2</b> 6 <b>3</b> 0	3.16	9 55 24.9	18.40	4 .00
	3610	34 Leonis Minoris	5.8	26 <b>3</b> 9	3.45	35 36 22.5	18.41	02
934	3612	37 Ursæ Majoris	5.0	27 25	3 91	57 41 58.4	18.44	03
935 936	3639	Ursæ Majoris	5.8	31 39	3.78	54 17 40.3	18.58	.00
		37 Leonis Minoris	4.7	31 58	3.40	32 35 56.9	18.59	. 00
937	3640	38 Leonis Minoris	6.0	32 16	3.45	38 32 06.1	18.60	03
938	3641	Ursæ Majoris		33 15	4.37	69 04 10.2	18.63	
939 94 <b>0</b>	3645 3647	38 Ursæ Majoris	5.0	33 45	4.18	66 20 39.0	18.65	10
			ì	10 34 28	+ 4.40	69 42 10,6	- 18.67	09
941	3652	Ursæ Majoris	4.9	36 08	3.84	57 49 43.1	18.72	0
942	3664	39 Ursæ Majoris	5.5		1	1	1	06
943	3666	40 Leonis Minoris	5.3	36 27	3.31	26 57 19.6	18.74	
944	3665	Ursæ Majoris	5.3	36 29	3.55	46 50 03.3	18.74	+ .03
945	3671	41 Leonis Minoris	5.2	36 53	3.28	23 48 58.1	18.75	01
946	3685	42 Leonis Minoris	5.0	39 11	3.35	31 18 50.3	18.82	03
947*	3691	m Leonis	5.5	39 57	3.24	19 31 24.6	18.84	08
948	3693	k Leonis	5 · 5	40 04	3.18	14 49 38.8	18.84	10
949	3708	1 Leonis	5.2	42 57	3.16	11 10 48.1	18.93	00
950	3714	42 Ursæ Majoris	5.7	43 51	3.83	59 57 23.5	18.96	09

#### CATALOGUE OF STARS FOR OBSERVATIONS OF LATITUDE.

No.	B, A, C,	Constellation.	Mag.	A, R. 1880.	Annual Variation.	Declination 1880.	Annual Precession.	Proper Motion,
				h. m. s.	s.	• 1 11	,,	"
951		Ursæ Majoris	5.8	10 45 19	+ 4.27	70 29 35.7	- 19.00	• • •
952		Ursæ Majoris (sq.)	5.9	45 20	3.65	53 oS 31.7	19.00	• • •
953	3725	44 Ursæ Majoris	5 · 4	46 18	3.68	55 13 20.0	19.02	04
954	3728	46 Leonis Minoris	4.0	46 36	3.37	34 51 41.8	19.03	25
955	3729	ω Ursæ Majoris	4.9	47 04	3.48	43 49 41.7	19.04	06
956	3732	p <sup>1</sup> Leonis	5 - 4	47 37	3.00	- 1 29 32.I	19.06	.00
957	3741	46 Ursæ Majoris	5 - 3	49 05	3 - 34	34 08 50.0	19.10	06
958	3742	54 Leonis	4 - 3	49 07	3.27	25 23 22.6	19.10	01
959*		Ursæ Majoris	5.8	52.2	3.58	52 32	19.18	•••
960	3757	47 Ursæ Majoris	5.1	52 45	3.35	41 01 11.5	19.19	+ .06
961*		Ursæ Majoris , , ,	5.8	10 52 51	+ 3.36	36 44 16.8	- 19.19	
962	3758	Ursæ Majoris	5 - 5	53 21	3.47	46 10 09.0	19.21	.00
963	3765	49 Ursæ Majoris	5.1	54 07	3.39	39 51 23.0	19.23	02
964	3768	d Leonis	4.6	54 22	3.10	4 15 41.2	19.24	03
965	3769	c Leonis	5.2	54 32	3.11	6 44 44.5	19.24	06
966	3767	β Ursæ Majoris	2.3	54 35	3.66	57 01 30.9	19.24	+ .03
967	3775	p <sup>2</sup> Leonis	5.0	55 42	3.06	- 1 50 20.4	19.27	04
968	3776	b Leonis	4.4	55 55	3.21	20 49 23.3	19.27	+ .03
969	3777	a Ursæ Majoris	1.9	56 19	3.76	62 23 53.8	19.28	09
970	3788	$\chi$ Leonis	4.8	58 50	3.10	7 59 02.6	19.34	08
971	3798	p <sup>4</sup> Leonis	5.7	11 00 47	+ 3.06	2 36 24.5	- 19.39	u8
972	3809	67 Leonis	5.6	02 23	3.23	25 18 27.2	19.42	or
	3811	Ursæ Majoris		02 43	3.23	36 57 37.2	19.43	02
973	3812		5.7	02 55	3.40	45 08 55.5	19.43	08
974		ψ Ursæ Majoris	3.1	07 37	3.40	0 34 59.0	19.53	.00
975	3832	p <sup>n</sup> Leonis	5.2	07 43	3.20	21 10 51.4	19.53	14
976	3834	θ Leonis	2.5		3.16	16 05 07.4	19.54	03
977	3838		3.3	07 57 08 49		23 44 57.6	19.55	or
978	3842	72 Leonis	4.9	i	3.20	13 57 41.5	19.57	04
979 980	3843	n Leonis	5.3	09 35	3.15 3.42	50 07 51.0	19.58	oi
	3846	Cisæ Majons	5 · 5				1	
186	3850	75 Leonis	5 • 4	11 11 07	+ 3.00	2 40 11.4	- 19.59	18
982	3851	$\xi$ Ursæ Majoris (1st *) .	3.9	11 47	3.21	32 12 16.4	19.61	- 57
983	3852	v Ursæ Majoris	3.5	12 00	3.26	33 44 56.7	19.61	+ .04
984	3856	55 Ursæ Majoris	4.8	12 35	3.20	38 50-37.1	19.62	os
985	3862	σ Leonis	4 - 3	14 57	3.11	6 41 11.9	19.67	03
986	3861	Ursæ Majoris	6.0	15 43	3.62	64 59 10.3	19.68	06
987	3868	56 Ursæ Majoris	5.0	16 14	3.32	44 08 24.4	19.69	07
988	3877	ι Leonis	4.0	17 40	3.13	11 11 24.5	19.71	06
989	3879	79 Leonis	5.6	17 53	3.08	2 03 57.7	19.72	02
<b>9</b> 90	3886	81 Leonis	5.8	19 21	3.14	17 06 57.8	19.74	.00
991	3900	τ Leonis	4.9	11 21 46	+ 3.09	3 31 00.9	- 19.77	02
992	3905	57 Ursæ Majoris	5 - 3	22 36	3.25	39 59 49-4	19.79	or
993	3915	86 Leonis	5 - 5	24 13	3.14	19 04 13.5	19.81	+ .01
994	3914	λ Draconis	3.8	24 16	3.63	69 59 34.6	19.81	06
995	3918	Ursae Majoris	5.8	25 32	3.45	61 44 54.1	19.82	,00
996	3932	90 Leonis	5 - 7	28 28	3.13	17 27 35.0	19.87	+ .01
997	3931	Ursæ Majoris	5.8	28 28	3.35	55 26 53.3	19.87	.00
998	3933	2 Draconis	5.2	29 00	3.58	69 59 26.3	19.87	10
		;		1	3.16	28 26 38.2	19.88	- ,05
999	3937	Leonis	5.6	29 59	3.10			, - 3

S. Ex. 37——14

No.	B. A. C.	Constellation.	Mag.	A. R. 1880.	Annual Variation.	Declination 1880.	Annual Precession.	Proper Motion.
				h. m. s.	s.			"
1001	3949	Ursæ Majoris	6.3	11 31 23	+ 3.28	51 17 60.0	- 19.90	.00
1002	2952	59 Ursæ Majoris	5.5	31 57	3.22	44 17 25.5	19.90	08
1003	3964	92 Leonis	5.2	34 33	3.13	22 01 08.8	19.93	+ .01
1004	3965	61 Ursæ Majoris	5.1	34 44	3.17	34 52 46.0	19.93	41
1005	3966	62 Ursæ Majoris	5.8	35 19	3.14	32 24 37.8	19.94	+ .03
ιυοί	3968	3 Draconis	5.I	35 46	3.41	67 24 32.5	19.94	+ .06
1007	3979	ξ Virginis	4.8	39 06	3.09	8 55 30.7	19.97	02
8001	3982	v Virginis	4.3	39 41	3.09	7 12 06.0	19.97	21
1009	3981	χ Ursæ Majoris	3.8	39 43	3.20	48 26 41.1	19.97	+ .02
1010	3985	Ursæ Majoris	5.5	40 30	3.24	56 17 46.1	19.98	.00
1011	3989	A <sup>1</sup> Virginis	5.8	11 41 45	+ 3.09	8 54 43.6	- 19.99	02
1012	3990	93 Leonis	4.2	41 48	3.12	20 53 09.0	19.99	.00
1013	3995	$\beta$ Leonis	2.1	<b>42</b> 56	3.06	15 14 34.5	20.00	10
1014	3998	Ursæ Majoris	5-5	43 28	3.14	35 35 54.1	20.00	03
1015	4002	3 Virginis	3-7	44 27	3.12	2 26 27.0	20.01	28
1016	4017	y Ursæ Majoris	2.4	47 31	3.18	54 21 42.3	20.02	.00
1017	4027	Aº Virginis	5.6	48 54	3.08	9 06 39.5	20.03	02
1018	4031	o Leonis	5-5	49 30	3.09	16 18 53.0	20.03	+ .06
1019	4033	66 Ursæ Majoris	5.8	49 42	3.17	57 15 58.6	20.03	02
1020*		Ursa: Majoris	6.0	5 <b>2</b>	3.11	33 49	20.04	.00
1021	4049	b Virginis	5.5	11 53 48	+ 3.07	4 19 24.8	- 20.C4	02
1022	4052	$\pi$ Virginis	4.4	54 43	3.08	7 16 59.9	20.05	0.
1023	4-3-	184 Ursæ Majoris	5.6	55 31	3.10	36 42 48.8	20.05	
1024	4057	67 Ursæ Majoris	5.1	56 01	3.07	43 42 39-4	20.05	+ .02
1025	4066	2 Comæ	5.8	58 o8	3.08	22 07 39.5	20.05	+ .01
1026	4070	Camelopardalis	5.9	58 42	3.19	86 15 07.8	20.05	+ .04
1027	4072	Q Virginis (o)	4.2	59 06	3.06	9 23 59.0	20.05	+ .09
1028	40/2	Draconis	5 · 5	59 08	3.14	77 34 36.7	20.05	
1029	4074	Ursæ Majoris	5.8	59 36	3.08	63 36 15.0	20.05	,00
1030	4099	3 Comæ.	6.0	12 04 25	3.06	17 28 38.6	20.05	+ .0:
-	4100		6.0	12 04 40	+ 3.07	27 56 57.7	- 20.05	0:
1031		Comæ	5.6	05 46	3.66	26 32 21.0	20.05	+ .0:
1032	4107	4 Comæ	5.8	o6 o3	3.06	21 12 35.8	20.05	+ .0
1033	4110	5 Comæ	4.8	06 34	2,89	78 16 58.7	20.04	0
1034	4112	Draconis	5.6	00 25	2.91	70 52 05.8	20.04	.0
1035	4122	Draconis	3.3	09 29	3.00	57 41 56.1	20.04	0
1036	4123		5,0	09 55	3.06	15 34 02.3	20.04	·o
1037	4125	6 Comæ	5.3	10 07	3.02	41 19 42.8	20.03	o. –
-		1	5.2	10 16	3.04	24 36 44.8	20.03	.0
1039	4127 4128	7 Comæ	5.0	10 28	3,04	33 43 55 7	20.03	1
				12 11.5	+ 3.03	29 37	- 20,03	ļ
1041		Comæ	5.7	-	2.79	75 49 36.8	20.03	+ .0
1042	4143	Draconis	5.5	13 27	3.06	0 00 00.0	20.02	0
1043	_	η Virginis	3.5	13 46		1	20,02	0
1044		3 Canum Venaticorum .	5.5	13 54	2.98	49 39 00.1		0
1045		c Virginis	5.0	14 15	3.05	3 58 52.0	20.02	.0
1046		D. M. 27°, 2114	4.9	14 18	3.03	27 17 23.4	20.02	
1047		D. M. 27°, 2115	5.8	14.6	3.03	27 44	20.02	<b></b> .0
1045		it Comæ	4.6	14 39	3.04	18 27 21.9	20,01	0. +
1049		70 Ursæ Majoris	5.8	15 02	2.94	58 31 57.2	20.01	1
1050	4169	12 Comæ	5.0	16 28	3.02	26 30 44.6	20,00	+ .0

## CATALOGUE OF STARS FOR OBSERVATIONS OF LATITUDE.

No.	B. A. C.	Constellation.	Mag.	A. R. 1880.	Annual Variation,	Declination 1880.	Annual Precession.	Proper Motion.
				h. m. s.	s.	0 1 11	.,	14
1051	4180	5 Canum Venaticorum .	5.1	12 18 11	+ 2.94	52 13 37.1	- 19.99	02
1052	4181	13 Comæ	5.3	18 17	3.02	26 45 50.9	19.99	02
1053	4184	Comæ	6.0	19 13	3.04	24 35 31.4	19.98	14
1054		D. M. 64°, 896	5.8	19 30	2.83	64 28 03.7	19.98	
1055	4188	6 Canum Venaticorum .	4.9	19 56	2.97	39 41 02.8	19.98	09
1056	4191	14 Comæ	5.0	20 24	3.01	27 55 59-4	19.97	02
1057	4195	15 Comæ	4.5	20 57	3.00	28 56 08.3	19.97	10
1058	4196	16 Comæ	5.1	20 59	3.01	27 29 25.7	19.97	.00
1059	4203	73 Ursæ Majoris	5.6	21 52	2.88	56 22 36,8	19.96	05
1060	4207	17 Comæ	5.6	22 55	3.01	26 34 39.4	19.95	or
	1				1 2 01	24 46 17.8	- 19.95	.08
1061	4209	18 Comæ	5.6	12 23 27	+ 3.01			.00
1062	4212	20 Comæ	5.7	23 42	3.03	21 33 40.0	19.94	
1063	4216	74 Ursæ Majoris	5.5	24 21	2.83	59 03 57.3	19.94	+ .06
1064	4222	4 Draconis	4.8	24 51	2.68	69 51 57.0	19.93	oç
1065	4223	21 Comæ	5.3	25 01	3.01	25 13 50.0	19.93	05
1066	4233	Canum Venaticorum .	5.4	27 44	3.02	33 54 39.0	19.91	07
1067	4235	8 Canum Venaticorum .	4.4	28 02	2.86	42 00 35.4	19.90	+ .30
1068	4239	к Draconis	3.8	28 21	2.60	70 26 57.8	19.90	03
1069	4240	23 Comæ	5.1	28 52	3.01	23 17 25.1	19.99	.00
1070	4242	21 Comæ	4.6	29 07	3.02	19 02 16.0	19.89	.00
1071	4246	6 Draconis	5.0	12 29 39	+ 2.60	70 40 59.5	- 19.89	0:
1072	4248	25 Comæ	5 · 7	30 57	3.02	17 45 03.1	19.87	·o.
1073	4254	Virginis	5.8	32 15	3.06	2 30 54.2	19.85	00
1074		R Virginis	var. 6.4-11.	32 25	3.05	7 38 55.4	19.85	• • • •
1075	4260	26 Comæ	5.6	<b>33 0</b> 9	2.99	21 43 22.7	19.84	+ .0
1076		Canum Venaticorum .	5.8	33 26	2.93	36 36 42.4	19.84	.00
1077	4268	γ Virginis	2.8	35 35	3.03	- 0 47 30.2	19.81	o.
1078	4271	ρ Virginis	5.0	<b>3</b> 5 49	3.03	10 53 50.2	19.81	10
1079	4274	31 Virginis (d1)	5.8	35 52	3.04	7 27 55.5	19.81	.0.
1080	4287	Canum Venaticorum .	5.0	39 29	2.83	46 05 46.9	19.76	.00
1081	4286	d <sup>2</sup> Virginis	5.8	12 39 33	+ 3.04	8 19 46.4	<b>- 19.75</b>	0.
1082	4290	27 Comæ	5.0	40 39	3.00	17 13 59.3	19.74	+ .0
1083	4300	Ursæ Majoris		42 11	2.58	63 26 11.4	19.71	.00
1084	4302	7 Draconis	5.3	42 40	2.52	67 26 44.7	19.71	0. +
1085	4301	29 Comæ	5.6	<b>42</b> 53	3.01	14 46 40.0	19.70	0
1086		Comæ	6,0	43	2.95	25 30	19.70	
1087	4303	11 Canum Venaticorum .	1	43 11	2.80	49 07 14.9	19.70	0
1088	4305	Ursæ Majoris	1	43 25	2.62	60 58 28.4	19.69	.00
1089	4311	Canum Venaticorum .	1	41 29	2.87	38 10 12.5	19.68	.00
10090	4315	31 Comæ	1	45 51	2.93	28 11 39.7	19.65	
1091	4328	35 Comæ	5.0	12 47 23	+ 2.96	21 53 50.9	- 19.63	0.
1091	1	41 Virginis		47 49	3.01	13 04 15.4	19.62	0
-	4329	Camelopardalis (sq.)	1	48 15	0.37	84 03 53.6	19.61	0
1093	4342	ε Ursæ Majoris	1	48 45	2.66	56 36 39.4	19.60	0
1094	4335	Canum Venaticorum .		49 28	2.75	47 50 52.4	19.59	.00
1095	4341	1		4	3.02	4 02 58.9	19.59	0
1096	4340	d Virginis		49 34	2.81	38 58 00.4	19.57	+ .0
1097	4346	12 Canum Venaticorum .	- 1	50 25		66 05 22.4	19.56	0
1098	4347	8 Draconis	1	50 42	2.42	18 03 24.9	19.50	+ .0
1099	4351	36 Comæ		52 59	2.97	1		. 0
1100	4360	37 Comæ	5 0	54 32	2.88	31 25 58.4	19.49	.0

† Double. South star.

No.	B, A. C.	Constellation.	Mag.	A. R. 1880.	Annual Variation.	Declination 1880.	Annual Precession.	Proper Motion
				h. m. s.	s.	o 1 11		**
101		Draconis	6.0	12 55 15	. + 1.7 <sup>8</sup>	76 07 09.5	- 19.47	.00
1102	4365	9 Draconis	5 · 4	55 23	2.29	67 14 41.0	19.47	02
103	4366	78 Ursæ Majoris	5.6	55 35	2.59	57 00 49.3	19.47	+ .02
1104	4367	ε Virginis	3.0	56 12	2.99	11 36 16.2	19.45	+ .03
1105	4371	Draconis	5.8	57 06	2.38	64 15 18.3	19.43	+ .02
1106		Canum Venaticorum .	5.8	58 25	2.75	43 39 08.6	19.41	.00
1107	4384	14 Canum Venaticorum .	5 · 3	13 ∞ o8	2.82	36 26 28.9	19.37	.00
1108	4389	Canum Venaticorum .	5 - 4	00 28	2.71	45 54 37.0	19.36	.00
1100	4387	39 Comæ	5.8	00 30	2.93	21 47 51.2	19.36	03
1110	4388	40 Comæ	5.7	00 32	2.93	23 15 38.5	19.36	+ .02
		Ursæ Minoris	6.0	13 01 07	+ 1.87	73 40 03.0	- 19.35	, 00
1111	4200	41 Comæ		OI 25	2.88	28 16 07.7	19.34	09
1112	4390		4.9 6.0	01 39	2.39	62 41 08.4	19.33	03
1113	4392		. 6.0	04 07	2.78	38 03 46.5	19.33	.00
1114	4407				1	18 09 52.0	19.27	+ .13
1115	4406	42 Comæ	4.8	04 00	2.92	28 29 13.2	19.27	+ .9r
1116	4421	43 Comæ	4.7	06 16	2.81	1	19.21	04
1117	4423	Virginis	6.0	06 35	2.99	12 11 41.4	19.17	04 06
1118	4433	Canum Venaticorum .	4.9	08 16	2.73	40 47 17.2		+ .02
1119	4438	19 Canum Venaticorum .		10 08	2.72	41 29 22.0	19.12	
1120	4440	e Virginis	5.6	10 49	2.98 + 2.97	10 03 05.7	19.10	-0.11
1121	4444		5.4	13 11 20		6 06 10.4	19.08	+ .06
1122	4446	σ Virginis	5.0	11 33	3.03	1	19.07	+ .03
1123	4451	20 Canum Venaticorum .	4.8	12 10	2.70	41 12 18.5	19.06	
1124*	• •	Draconis	6.0	12.5	1.99	69 02	-	03
1125	4456	21 Canum Venaticorum .	5.1	13 08	2.57	50 18 47.3	19.04	_
1126	4467	23 Canum Venaticorum .	5.6	14 56	2.70	40 46 51.5	18.99	oi
1127*	4470	Virginis	5.5	15.6	3.05	2 43	18.97	
1128	4479	D. M. 37°, 2404	5.8	18 27	2.72	37 39 40.2	18.89	.00
1129	4484	ζ Ursæ Majoris	2.0	19 06	2.43	55 33 08.2	18.87	04
t130		Comæ	5.6	19 23	2.86	24 28 49.8	18.86	
1131	4493	80 Ursæ Majoris (g)	4.9	13 20 25	+ 2.42	55 36 48.3	- 18.83	03
1132		Canum Venaticorum .	5.8	21 07	2.58	46 39 11.8	18.81	.00
1133	4499	70 Virginis	5.3	22 34	2.93	14 25 11.9	18.76	5
1134	4506	Ursæ Minoris	5 - 5	23 04	1.52	73 00 52.8	18.75	0:
1135	4510	Ursæ Majoris	5.2	24 03	2.21	60 33 54.5	18.72	0:
1136	4527	Camelopardalis	5.8	25 57	0.45	79 15 49.9	18.66	+ .03
1137	4526	Comæ	6.0	27 07	2.84	24 58 15.1	18.62	
1138	4529	78 Virginis (0)	4.9	28 03	3.03	4 16 32.3	18.59	0.
1139	4532	ζ Virginis	3.4	28 35	3.05	0 01 05.8	18.57	+ .0
1140	4536	Canum Venaticorum .	5.31	29 26	2.68	37 47 48.5	18.54	0
1141	4540	81 Ursæ Majoris	5.8	13 29 31	+ 2.32	55 57 49.5	- 18.54	0
1142	4538	24 Canum Venaticorum .	4.7	29 33	2.46	49 37 46.7	18.54	0
1143*	1	Comæ	5.8	31.3	2.83	25 13	18.48	
1144	4552	25 Canum Venaticorum .	5.1	32 08	2.68	36 54 20.2	18.45	.00
1145	133-	Camelopardalis	6.0	32 20	o.8r	77 09 33.8	18.45	
1146	4559	Bootis	5.2	33 40	2.97	11 21 22.5	18.40	.0
1147	4559	Ursæ Minoris	5.7	34 18	1.44	71 51 10.7	18.38	0
1148*		Canum Venaticorum .	5.8	34.8	2.74	31 37	18.36	
1140" 1149	4564	82 Ursæ Majoris	5.5	34.52	2.33	53 31 39.9	18.36	0
	i	1		i	2.87	20 33 47.1	18.36	+ .0
1150	4562	1 Bootis	5 · 4	34 57	2.07	20 33 4/.1	1 .3.35	' '

THE UNITED STATES COAST SURVEY.

No.	B. A. C.	Constellation.	Mag.	A. R. 1880.	Annual Variation.	Declination 1880.	Annual Precession.	Proper Motion
				h, m. s,	s.	s , ,,		11
151	4566	2 Bootis	5.5	13 35 22	+ 2.84	5 6	- 18.34	10.
152	4568	83 Ursæ Majoris	5 · 3	36 11	2.28	55 17 19.7	18.31	05
153	4570	84 Virginis	5 • 5	37 02	3.01	4 08 41.9	18.28	08
154		Canum Venaticorum .	6.2	37 22	2.57	42 16 46.0	18.27	
155	4577	Draconis	5.8	37 45	1.86	65 25 35.1	18.25	27
156	4595	D. M. 39°, 2678	5.9	41 07	2.61	39 06 18.8	18.13	. 00
157	4596	Canum Venaticorum .	6.º	41 03	2.56	41 41 30.6	18.13	.00
158	4594	3 Bootis	5.8	41 69	2.79	26 18 18.7	18.13	01
159	4597	au Bootis	4 · 5	41 34	2.85	18 03 20.3	18.12	+ .05
160	4600	Canum Venaticorum .	5.6	41 50	2.60	39 08 37.6	18.11	• • •
161	4614	D. M. 78°, 466	5.6	13 42 10	+ 0.18	78 39 55.5	_ 18.09	+ .07
162	4607	η Ursæ Majoris	1.8	42 49	2.37	49 54 45.2	18.07	03
163	4610	Canum Venaticorum .	5.6	43 14	2.71	31 47 10.6	18.05	. 00
164	4615	v Bootis	4.3	43 41	2.89	16 23 38.3	18.04	+ .05
165	4618	e Bootis	4.9	11 02	2.84	21 51 38.2	18.02	+ .16
166*	1	Canum Venat. (sq.)	5.4	45 51	2.65	35 15 41.2	17.95	
167		Draconis	5.8	. 45 51	1.95	62 05 20.7	17.95	.00
168	4632	Canum Venaticorum .	5.2	46 30	2.65	35 02 21.6	17.92	.00
169	4640	Canum Venaticorum .	5.8	47 44	2.74	29 14 19.2	17.88	1:
170	4646	i Draconis	4.8	47 56	2.76	65 18 58,2	17.87	0.
-		IIran Minaria	i	13 48 04	+ 1.50	68 54 39.0	_ 17.87	
171		Ursæ Minoris	6.0	1	2.86	18 59 59.9	17.83	3
172	4648	η Bootis	2.9	48 58	2.22	. 54 19 05.7	17.81	1
173	4649	86 Ursæ Majoris	5.8	49 26	3.05	1 38 17.5	17.78	+ .0
174	4651	92 Virginis	5.7	50 21	2.74	28 04 51 6	17.75	0
175	4656	9 Bootis	5.0	51 05	2.74	22 16 56.5	17.66	·o
176	4664	10 Bootis	5.6	53 01	2.96	9 29	17.56	·
177*	1	Bootis ,	5.8	55.4		2 07 32.3	17.50	c
178	4672	τ Virginis	4.2	55 32	3,05	46 20	17.48	
179*	į.	Canum Venaticorum .	6.4	57.4	2.39 2.25	51 32 54 6	17.43	c
180	4684	Bootis	6.2	58 32		:		
181	4696	a Draconis	3.8	14 01 08	+ 1.62	64 56 57.6	_ 17.32	0
182	4699	Bootis	5.2	03 08	2.41	44 25 30.5	17.23	1
183	4701	13 Bootis	5.2	03 48	2.24	50 01 29.8	17.20	0
184	4706	d Bootis	4.8	0.1 56	2.74	25 39 39.2	17.15	0
185		D. M. 60°, 1516	5.8	05 03	1.87	59 54 23.7	17.14	
186	4713	Virginis	4.7	06 11	3.04	2 58 29.5	17.08	0
187	4724	15 Bootis	5.5	08 58	2.94	10 39 59.5	16.96	1
188	4726	κ Bootis	4.5	09 11	2.16	52 21 04.5	16.95	0
189	4733	4 Ursæ Minoris	5.0	09 21	- 0.33	78 06 39.2	16.94	0
190	4732	Ursæ Minoris	5.3	09 49	+ 1.02	69 59 44.9	16.92	0
191	4729	a Bootis	0.2	14 10 11	+ 2.73	19 48 29.7	_ 16.90	— I , Ç
1192	4741	λ Bootis	4.2	11 49	2.29	46 38 22.9	16.83	+ .1
1193	4742	ι Bootis	4.8	11 55	2.13	51 55 16.0	16.82	+ .c
194	4747	A Bootis	4.8	12 55	2.53	36 03 49.5	16.77	, .c
1195	4748	v Virginis	4.9	13 22	3.09	<b>— I</b> 42 36.0	16.75	0
1196	1	18 Bootis	5.5	13 28	2.90	13 33 34.0	16.75	+ .0
1197	4753	20 Bootis	5.2	14 05	2.84	16 51 26.9	16.72	+ .1
	4758	Bootis	5.9	14 52	2.46	39 20 46.3	16.68	.0
	4/30		i	. ·	2.96	8 59 34.8	16.55	,c
1198 1199	4766	Bootis	4.9	17 29	2.90	- 5,5		1

## CATALOGUE OF STARS FOR OBSERVATIONS OF LATITUDE.

No.	B. A. C.	Constellation.	Mag.	A. R. 1880,	Annual Variation.	Declination 1880.	Annual Precession.	Proper Motion.
				h. m. s.	s	0 , 1,	n	,,
1201	4789	ϑ Bootis	4.2	14 21 07	+ 2.04	52 24 21.1	- 16.37	41
1202	4792	φ Virginis	4.9	22 01	3.09	- 1 4t 21.2	16.32	02
1203	4804	24 Bootis (g)	5.7	24 27	2.09	50 22 55.9	16.20	09
1204	4808	ρ Bootis	3.8	26 39	2.54)	30 53 56.7	16.09	+ .14
1205	4810	26 Bootis	5.4	27 05	2.72	22 47 19.8	16.06	+ .05
1206	4812	y Bootis	3.1	27 15	2.42	38 50 01.1	16.05	+ .14
1207	4822	5 Ursæ Minoris	4.6	27 48	- 0.20	76 13 44.3	16.02	02
1208*		Draconis	5· <b>7</b>	28.8	+ 1.88	55 56	15.97	•••
1209	4823	σ Bootis	4.9	29 27	2.61	30 16 01.5	15.94	+ .12
1210	4830	Bootis	5.9	30 28	2.10	49 53 29.9	15.88	.00
1211	4841	Bootis	5.8	14 33 42	+ 2.26	44 09 36.1	- 15.71	.00
1212	4843	33 Bootis	5.4	34 22	2.23	44 55 21.8	15.68	Io
1213	4845	Bootis	5.7	34 28	1.90	54 32 31.6	15.67	06
1214*		Bootis.	6.0	34.9	2.73	22 30	15.65	
1215	4847	π Bootis, (1st *)	4.1	35 05	2.82	16 56 01.8	15.64	+ .02
1216	4849	ζ Bootis	3.7	35 25	2.86	14 14 38.7	15.62	.00
1217	4850	31 Bootis	5.1	35 45	2.99	8 40 32.7	15.60	02
1218	4853	32 Bootis	5.4	35 58	2.80	12 10 44.7	15.58	07
1219	4864	34 Bootis	5.4	38 09	2.64	27 02 20.g	15.47	+ .01
1220	4874	Draconis	5.8	39 04	1.48	61 46 26.9	15,42	.00
1221*		Virginis	6.0	14 39 00	+ 3.00	- o 54	- 15.42	<b></b>
1222	4870	Bootis.	5.4	39 05	2.33	40 58 03.3	15.41	.00
1223	4873	o Bootis.	4.5	39 38	2.80	17 28 24.2	15.38	04
1224	4876	ε Bootis.	2.6	39 45	2.62	27 34 51.6	15.38	03
1225	4878	109 Virginis	3.9	40 11	3.03	2 23 57.8	15.35	02
1226*		Bootis	5.6	40.5	2.83	15 38	15.33	
1227	4898	II Libræ	5.1*	44 48	3.10	- I 47 53.5	15.09	14
1228*		Bootis	5.7	44.9	2.67	24 25	15,09	
1229	4903	38 Bootis (h)	5.8	45 02	2.14	46 37 01.0	15.08	09
1230	4907	39 Bootis	5 · 7	45 37	2.04	49 12 52.1	15.04	+ .02
1231	4906	Bootis	5.6	14 45 46	+ 2.38	37 45 52.0	- 15.03	.00
1232	4905	ξ Bootis, (2d *).	4.7	45 51	2.77	19 35 57.8	15.02	14
1233	4918	Draconis	5.5	48 24	1.52	59 46 54.3	14.88	+ .07
1234	4936	β Ursæ Minoris	2.2	51 04	- 0.25	74 38 44.2	14.72	03
1235	4931	Libræ	6.0	51 24	+ 3.07	0 18 59.8	14.70	04
1236	4937	Bootis	5.8	52 25	2.01	50 07 09.7	14.64	27
1237	4943	40 Bootis	5.4	55 01	2.30	39 44 30.8	14.49	+ .03
1238	4949	Ursæ Minoris	4.6	55 41	0.94	66 24 38.2	14.44	+ .05
1239	4951	40 Virginis	4.7	56 50	3.03	2 33 49.3	14.38	+ .01
1240	4953	ω Bootis	4.7	56 51	2.63	25 28 59.6	14.38	06
		0 Postis						- 04
1241	4958	β Bootis	3.6	14 57 26	+ 2.26	40 51 52.2	- 14.34	04
1242	4961	Bootis	5.7	58 19	2.41	35 40 35.7 83 00 16.5	14.29	.00
1243	4982	Camelopardalis	5.8	58 31	— 4.58 → 1.28		14.27	.00
1244*	4967	Draconis	5.8	58 39	+ 1.38	60 40 33.5	14.27	~ 01
1245	4969	$\psi$ Bootis	4.6	59 18	2.57	27 24 59.1	14.22	01 + .03
1246	4974	i Bootis	4.8 = 8	59 50 15 01 27	1.98	48 07 18.1 48 36 54.2	14.19	.00
1247	4980	k Bootis	5.8	1	1.98	•		16
1248	4981	Ursæ Minoris	5.0	02 02 02 08	2.63 0.89	25 20 14.8 66 23 09.3	14.06	.00
1249	4989	Draconis	5.7			1	14.05	.00
1250	4992	Diaconis	5.2	02 51	1.70	55 01 07.4	14.01	

\*Suspected variable, D. M. 4.4, 5 5.8.

#### CATALOGUE OF STARS FOR OBSERVATIONS OF LATITUDE.

No.	В. А. С.	Constellation.	Mag.	A. R. 1880.	Annual Variation.	Declination 1880.	Annual Precession.	Proper Motion.
				h. m. s.	s.	o , ,,	n	,,
1251		Bootis	5.7	15 06 37	+ 2.73	19 25 42.7	- 13.76	•••
1252	5026	Bootis	6.0	09 01	2.28	38 42 54.7	13.61	.00
1253	5024	3 Serpentis	5.3	09 13	2.98	5 23 08.4	13.60	03
1254	5031	$\chi$ Bootis	5.2	09 28	2.51	29 36 37.0	13.58	+ .01
1255	5030	4 Serpentis	5.6	09 42	3.06	0 49 03.2	13.57	+ .01
1256	5036	δ Bootis	3.6	10 40	2.42	33 45 48.5	13.51	09
1257	5047	5 Serpentis	4.9	13 11	3.05	2 13 13.3	13.34	52
1258	5058	U⊾rsæ Minoris	5.1	13 15	0.66	67 48 10.3	13.34	39
1259*		D. M. 46°, 2052	5.8	14.2	2.03	46 o3	13.27	• • •
1260	5061	o Coronæ Borealis	5 · 7	15 11	2.48	30 03 07.6	13.21	06
1261		D. M. 25°, 2902	5.8	15 15 56	+ 2.59	25 23 32.0	- 13.16	•••
1262	5071	Draconis	5.6	16 34	1.76	52 23 28.5	13.12	.00
1263	5072	50 Bootis	5 · 3	17 00	2.40	33 21 51.8	13.09	+ .02
1264	5079	rı Ursae Minoris	5.2	17 12	- 0.06	72 15 34-3	13.08	+ .03
1265	5076	Bootis	5.4	18 11	+ 2.22	40 00 38.5	13.01	.00
1266	5075	η Coronæ Borealis	5.0	18 15	2.48	30 43 19.9	13.01	18
1267	5084	μ <b>B</b> ootis	4 · 3	19 57	2.26	37 47 56.o	12.89	+ .09
1268*		D. M. 45°, 2284	5 · 7	20.1	2.02	45 42	12.88	
1269	5085	$ au^1$ Serpentis	4.8	20 14	2.78	15 51 04.5	12.88	+ .08
1270		Draconis	6.0	20 23	1.10	62 28 28.6	12.86	
1271	5091	Draconis	5.8	15 20 38	+ 0.99	63 46 16.2	- 12.85	.00
1272	5094	γ Ursæ Minoris	3.0	20 56	- 0.12	72 15 40.8	12.82	+ .03
1273	1	Bootis	5.8	21 35	+ 2.36	34 45 15.2	12.78	
1274	5097	ι Draconis	3.2	22 16	1.33	59 23 13.6	12.74	+ .04
1275*		Coronæ Borealis	5.8	22.5	2.58	25 31	12.72	
1276	5098	β Coronæ Borealis	3.7	22 53	2.48	29 31 12.8	12.70	+ .07
1277*		D. M. 47°, 2227	5.4	24.9	1.93	47 38	12.56	
1278	5122	ν Bootis (pr.)	4.8	26 37	2.15	41 14 35.8	12.44	10. +
1279	5119	Al Serpentis	5.8	26 47	3.09	- 0 46 41.2	12.43	09
1280	5130	ν Bootis (sq.)	4.9	27 29	2.14	41 18 27.7	12.38	10. +
1281	5131	θ Coronæ Borealis	4.2	15 28 05	+ 2.41	31 45 54.8	- 12.34	02
1282	5135	δ Scrpentis	3.8	29 04	2.86	10 56 27.8	12.27	+ .05
1283	5147	Draconis	5.7	29 16	0.86	64 36 42.7	12.25	10. +
1284	5143	a Coronæ Borealis	2.1	29 36	2.54	27 07 10.8	12.23	07
1285	5146	τ <sup>3</sup> Serpentis	5.8	30 06	2.72	18 03 25.3	12,20	+ .04
1236	5155	μ Coronæ Borealis	6.0	30 51	2.20	39 24 34.1	12.15	.00
1287	5153	75 Serpentis	5.8	30 58	2.76	16 31 01.8	12.14	01
1288		Draconis	6.0	32 06	1.58	54 19 11.6	12,06	
1289*	1	D. M. 52°, 1886	5.8	32.7	1.68	52 28	12.02	
1290		D. M. 55°, 1766	5.8	32 52	1.54	55 01 39.1	12.01	
1291	5168	φ Bootis	5.1	15 33 31	+ 2.15	40 44 42.7	- 11.96	+ .07
1292	5177	Herculis	5.7	34 26	1.92	47 11 37.3	11.90	13
1293		Draconis	5.8	34 27	1.54	54 54 08.6	11.90	
1294	5178	ζ Coronæ Borealis	4.4	34 52	2.26	37 01 32.3	11.87	10
1295	5191	v Ursæ Minoris	5.0	35 00	- 1.92	77 44 53.8	11.86	+ .01
1295 1296	5191	Draconis	5.6	35 04	+ 1.75	50 48 56.7	11.85	.00
	5180	$\tau^6$ Serpentis	5.8	35 28	2.76	16 24 46.6	11.82	+ .06
1297	1	$\chi$ Serpentis	ł	36 09	2.82	13 13 59.9	11.77	.00
1298	5185 5187	γ Serpentis	5 · 4 4 · 5	36 12	2.67	20 03 29.4	11.77	- ,02
1299	1	=	1	36 31	2.70	18 50 51.7	11.75	+ .09
1300	5189	τ <sup>7</sup> Serpentis	5.8	30 31	2.70	3- 3-1	/3	

† Double,

No.	B. A. C.	Constellation.	Mag.	A. R. 1880.	Annual Variation.	Declination 1880.	Annual Precession.	Proper Motion.
				h. m. s.	s.	0 1 11	"	. "
1301*		Ursæ Minoris	5.8	15 37.4	+ 0.14	69 40	- 11.69	
1302	5192	γ Coronæ Borealis	3.8	37 42	2.52	26 40 36.7	11.67	+ .08
1303	5196	a Serpentis	2.8	38 21	2.95	6 48 15.0	11.62	+ .05
1304	5210	Draconis	5.I	39 35	1.63	52 44 23.3	11.53	.00
1305	5206	A <sup>2</sup> Serpentis	5.6	<b>3</b> 9 53	3.10	<b>—</b> 1 25 36.8	11.51	05
i 306	5214	λ Serpentis	4.7	40 37	2.61	7 43 49.5	11.46	04
1307	5216	β Serpentis	3.6	40 39	2.77	15 47 55.2	11.46	10. —
1308	5223	v Serpentis	5.8	41 43	2.79	14 29 06.8	11.38	10
1309	5234	κ Serpentis	4.0	43 20	2.70	18 30 48.7	11.26	06
1310	5236	R Coronæ Borealis	var. 6–13.	43 38	2.49	28 31 34.1	11.24	,00
1311	5238	ω Serpentis	5.5	15 44 14	+ 3.02	2 33 49.4	- 11.20	07
1312	5214	δ Coronæ Borealis	1	44 34	2.51	26 26 12.0	11.17	06
1313	5248	Draconis		44 44	1.44	55 44 40.0	11.16	
	5245	$\varepsilon$ Serpentis		44 50	2.99	4 50 24.2	11.16	+ .07
1314	5249	Draconis		44 50	0.90	62 58 14.8	11.16	05
1315	5249	1	. 6.0	45 13	τ.15	59 56 14.0	11.13	
1317	5252		. 4.9	46 00	2.63	21 20 24.5	11.07	+ .03
1318	5259	κ Coronæ Borealis .		46 42	2.25	36 01 39.0	11.02	33
1319	5285	ζ Ursæ Minoris		48 23	- 2.25	78 09 46.3	10.89	00
1320	5271	$\chi$ Herculis	4.5	48 32	+ 2.07	42 47 16.0	10.88	+ .58
1321	5287	2 Herculis	5.2	15 50 38	+ 2.01	43 29 19.5	- 10.73	+ .06
1322	5284	y Serpentis	. 3.6	50 55	2.77	16 03 16.0	10.71	-1.27
1323	5295	2. Coronæ Borealis .		51 26	2.18	38 17 40.2	10.67	+ .09
1324	5298	4 Herculis	i	51 28	2.02	42 54 37.7	10.66	.00
1325	5293	ø Serpentis		51 43	2.78	14 45 32.8	10.65	05
1326	5302	ε Coronæ Borealis .	4.1	52 37	2.48	27 13 35.1	10.58	03
1327	5310	Coronæ Borealis	5.9	54 32	2.22	36 59 06.2	10.44	+ .02
1328	5313	Draconis	5.0	54 56	1.41	55 05 20.5	10.41	.00
1329		1	. 5.8	55 40	1.70	50 13 26.8	10.35	.00
1330		r Herculis	5.2	55 51	2.69	18 09 04.5	10.34	+ .17
1331	5319	ρ Coronæ Borealis .	. 5.5	15 56 27	+ 2.29	33 40 00.1	- 10.29	75
1332		Coronæ Borealis .		56 38	2.41	30 11 14.7	10.28	07
1333		$\pi$ Serpentis		57 08	2.58	23 08 20.8	10.25	+ .08
1334		Draconis	6.0	59 02	1.52	53 15 00.4	10.10	.00
1335		v Herculis	4.6	59 04	1.86	46 22 13.8	10.10	07
1336		9 Draconis	4.1	59 38	1,11	58 53 09.5	10.06	+ .32
1337	1	κ Herculis	1	16 02 40	2.70	17 22 04.2	9.82	.00
1338		τ Coronæ Borealis .		04 35	2.20	36 47 48.5	9.68	+ .35
1339		φ Herculis		04 59	1.87	45 15 00.4	. 9.65	+ .04
1340		Draconis		o6 oo	0.14	68 07 35.3	9.57	+ .07
	-	10 Herculis		16 06 31	+ 2.55	23 48 21.5	- 9.53	02
1341	1	q Herculis	1	07 19	2.97	5 19 45.3	9.47	— .og
1342		Ursæ Minoris	1	07 31	- 2.08	77 06 45.8	9.45	
1343		D. M. 39°, 2961		07 54	+ 2.10	39 21 54.1	9.42	
1344		16 Herculis		10 10	:	19 06 43.5	1	00
1345		σ Coronæ Borealis		10 11	2.24	34 09 49.8	9.25	04
1346	1	v Coronæ Borealis .	1	11 56	1	29 26 53.3	t	05
134	1	19 Ursæ Minoris	1	14 15	,	76 10 43.2	1	.∝
1 447	5402	1 '		15 15		60 03 46.5	i	.00
1340	5459	Draconis	. 5.6	רו כו		1 (0 0) 47	1 3	

## CATALOGUE OF STARS FOR OBSERVATIONS OF LATITUDE.

No.	B. A. C.	Constellation.	Mag.	A. R. 1880.	Annual Variation.	Declination 1880.	Annual Precession.	Proper Motion.
				h. m. s.	s.	o / //	u .	"
1351	5461	Herculis	6.0	16 15 50	+ 1.67	49 19 32.6	- 8.81	
1352	5456	σ Serpentis	4.9	16 00	3.04	1 18 44.5	8.79	+ .07
1353	5463	au Herculis	3.8	16 08	1.80	46 35 59.0	8.78	+ .03
1354	5466	Herculis	3.8	16 38	2.64	19 26 10.0		+ .06
1355	5473	ξ Coronæ Borealis	4.9	17 25	2.34	31 10 17.1	8.68	+ .12
1356	5479	v Coronæ Borealis (pr.) .	5.4	17 51	2.26	34 04 55.5	8.65	08
1357	5480	ν Coronæ Borealis (sq.) .	5.8	17 58	2.27	33 58 58.8	8.65	02
1358	5481	21 Herculis (0)	5.8	18 20	2.92	7 13 37.0	8.60	+ .04
1359	5490	ω Herculis	4.9	19 53	2.76	14 18 40.2	8.48	02
1360	5511	η Ursæ Minoris	4.9	21 02	- 1.80	76 or 51.6	8.40	+ .26
1361	5496	25 Herculis	5.5	16 21 08	+ 2.13	37 40 05.8	- 8.39	.00
1362	5502	Draconis	5 • 4	21 48	1.30	55 28 41.6	8.33	.00
1363	5514	Draconis	5 • 4	22 06	- o.16	69 23 12.3	8.31	.00
1364	5512	η Draconis	2.8	22 22	+ 0.82	61 47 10.1	8.29	+ .07
1365*		Ophiuchi	5.8	22.5	3.05	o 55	8.27	
1366	5523	g Herculis	var. 4.7-6.1	24 42	1.97	42 08 50.5	8.10	+ .09
1367	5520	λ Ophiuchi	3.9	24 52	3.02	2 14 53.2	8.09	·o5
1368	5525	3 Herculis	3.0	25 04	2.58	21 45 00.5	8.07	+ .01
1369	5527	s Herculis	5.8	25 21	2.6r	20 44 35.2	8.05	.00
1370	5531	n Herculis	5.6	26 42	2.95	5 46 40.0	7 - 94	04
1371	5535	34 Herculis	5.7	16 26 48	+ 1.64	49 13 21.3	- 7.93	07
1372	5532	h Herculis	5.1	27 00	2.81	11 44 49.2	7.92	05
1373	5545	A Draconis	5.0	28 13	- 0.14	69 OI 39.3	7.82	+ .03
1374	٠	Herculis	5.7	28.3	+ 1.80	45 53	7.81	• • •
1375	5547	12 Ophiuchi	5.5	30 03	3.09	- 2 04 00.8	7.67	32
1376	5552	$\sigma$ Herculis	4.2	30 15	1.93	42 41 07.5	7.65	+ .04
1377	5560	Draconis	5.8	30 45	0.85	61 04 30.9	7.62	+ .04
1378	5563	D. M. 13° 3177	5.8	32 16	2.76	13 55 50.1	7.49	13
1379	5592	Ursæ Minoris	5.6	32 27	- 3.42	70 13 03.7	7.47	.00
1380	5568	Herculis	5.7	32 41	+ 1.75	46 51 26.0	7 • 45	•••
1381	5574	16 Draconis	5.2	16 33 21	+ 1.41	53 08 30.3	- 7.40	+ .02
1382	5575	17 Draconis	4.9	33 24	1.41	53 09 56.8	7.40	.00
1383	5587	Herculis	6.0	35 16	2.79	12 37 43.6	7.24	06
1384	5596	42 Herculis	4.6	35 30	1.63	49 09 48.2	7.22	01
1385	5599	Draconis	5.3	35 35	1.21	56 14 59.9	7.22	.00
1386		Herculis	5.8	36 02	2.49	25 05 27.4	7.19	.00
1387	i i	39 Herculis	5.9	36 45	2.43	27 08 56.1	7.12	02
1388	5604	ζ Herculis .	3.0	36 46	2,26	31 49 16.4		+ .45
1389	5617	$\eta$ Herculis	3 - 5	38 47	2.05	39 09 05.7	6.96	07
1390	5619	Herculis .	5.6	39 26	2.22	34 15 35.2		01
1391	5621	i Herculis	5 · 5	16 40 04	+ 2.88	8 48 10.2		+ .04
1392	5628	g Draconis	5.2	40 05	0.40	64 48 59.8		02
1393	*	Herculis	6.0	41.4	1.88	43 26	6.75	•••
1394	5631	1 Herculis	5.4	41 52	2.95	5 27 59.6		.06
1395		D. M. 13°, 3225	5 · 7	42 37	2.76	13 48 13 4	6.64	•••
1396	5643	Herculis	4.9	43 01	1.13	56 59 46.6	6.61	.00
1397	5647	Herculis	5.6	44 02	4	13 28 20.6		.00
1398	5648	k Herculis	5.7	44 30	5	7 27 23.2	1	+ .02
1399	5659	21 Ophiuchi	5.8	45 20	i	1 25 19.2		10. +
1400	5667	52 Herculis	4.9	45 43	1.75	46 11 34.9	6.39	07

8. Ex. 37——15

No.	B. A. C.	Constellation.	Mag.	A. R. 1880.	Annual Variation	Declination 1880.	Annual Precession	Proper Motion.
				h. m. s.	s.	0 / "	,,	,,
1401	5677	51 Herculis	5.2	16 46 47	+ 2.48	24 51 32.5	- 6.30	10. +
1402	5692	Ophiuchi	4.4	48 20	2.84	10 21 50.6	6.17	04
1403	5705	Ursæ Minoris	6.0	48 27	- 2.76	77 43 08.8	6.15	.00
1404*	· •	Herculis	5.6	49.7	+ 2.58	21 11	6.05	1
1405	5702	54 Herculis	5.0	50 06	2.63	18 37 36.3	6.02	+ .05
1406	5708	κ Ophiuchi	3.2	51 59	2.83	9 33 47.0	5.86	+ .02
1407	5740	h Draconis	5.0	55 22	0.31	65 19 04-5	5.58	+ .01
1408	5731	ε Herculis	3.9	55 42	2.29	31 06 15.5	5 · 55	+ .04
1409*	• •	Herculis	5.7	55.9	2.53	22 49	5 · 54	•••
1410	575 <b>2</b>	Draconis	6.0	57 10	1.10	56 51 57.1	5.43	+ .37
1411	5747	d Herculis	5.0	16 57 11	+ 2.21	33 44 35.8	- 5.43	+ .03
1412		Herculis	5.8	57 23	2.45	25 40 32.2	5.41	
1413	5749	Herculis	4.9	57 38	2.75	14 15 57.6	5 - 39	05
1414	5780	ε Ursæ Minoris	4-3	58 19	- 6.37	82 13 56.2	5.33	+ .00
1415	5769	Ursæ Minoris	6.0	58 40	- 1.23	73 18 31.7	5.30	.00
1416	5760	Ophiuchi	5.7	59 <b>21</b>	+ 3.09	- 0 43 40.0	5.25	14
1417*		Herculis	5.8	59-3	2.61	<b>1</b> 9 46	5.25	
1418	5765	60 Herculis	4 · 7	59 49	2.78	12 54 26.0	5.21	+ .02
1419*		Herculis	5.8	17 01.2	2.54	22 15	5.01	• • •
1420	5776	Herculis	6.0	01 38	1.58	48 58 07.5	5.06	19
1421	5785	$\mu$ Draconis	4.8	17 02 51	+ 1.25	54 37 42.1	- 4.95	+ .03
1422	5788	c Herculis	5.3	O3 47	2.12	36 05 30.6	4.88	02
1423	5811	Ursæ Minoris	5 · 7	O5 27	- 1.94	75 27 46.5	4.72	.00
1424*	• •	Herculis	4.9	05.7	+ 1.95	40 56	4.71	
1425	5802	37 Ophiuchi	5 · 5	06 48	2.83	10 43 55.8	4:63	10. —
1426*		Draconis	5.8	07.9	1.37	52 33	4.52	• • •
1427	5823	ζ Draconis	3.1	08 27	0.17	65 51 45.1	4.47	+ .07
1428	5821	a Herculis	var. 3.3-3.9	09 11	2.73	14 31 41.8	4.41	+ .01
1429	5828	$\delta$ Herculis	3.1	10 06	2.46	24 58 54.0	4.33	<b>—</b> .15
1430*		Ophiuchi	5.6	10.5	3.04	1 21	4.30	• • •
1431	5830	41 Ophiuchi	4.6	17 10 27	+ 3.08	- 0 <b>1</b> 8 30.4	- 4.30	06
1432	5834	$\pi$ Herculis	3-3	10 52	2.09	36 56 43.8	4.26	+ .04
1433	5840	Draconis	5.5	11 31	0.51	63 00 39.8	4.21	03
1434*		Herculis	5.8	12.8	2.66	17 27	4.10	• • •
1435	5842	u Herculis	4.9	12 54	2.21	33 13 50.3	4.09	+ .02
1436	5841	Ophiuchi	4.9	12 59	2.82	10 59 44.6	i I	09
1437	5847	e Herculis	4-7	13 32	2.07	37 25 05.1	4.04	+ .08
1.438*		Herculis	5.5	14.1	2.35	28 57	3.99	•••
1439		Herculis	5-8	14 22	2.01	38 56 04.0	3-97	• • •
1440	5856	Herculis	5+4	15 02	2.64	18 10 53.1	3 91	05
1441*		Herculis	5.8	17 15.3	+ 2.44	25 39	- 3.89	
1.142	5860	70 Herculis	5.5	15 58	2.47	24 37 11.1	3.83	.00
1443	5863	w Herculis	5-3	16 10	2.24	32 37 25.6	3.82	-1.00
1444	5871	74 Herculis	5.3	16 58	1.69	46 21 32.4	3.74	+ .02
1445	5874	Herculis	5 · 5	17 47	1.97	40 05 37.4	3.67	.00
1446	5883	73 Herculis	5.6	19 06	2.52	23 04 22.5	3.56	03
1447*		Ophiuchi	5.4	19.1	2.69	16 25	3.56	
1448*		Draconis	5.8	19.2	1.29	53 32	3.55	• • •
1449	5886	ho Herculis	4. ī	19 32	2.07	37 15 28.7	3.52	+ .02
1450	5893	σ Ophiuchi	4.2	20 34	2.98	4 14 45.9	3.43	+ .02
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No.	В. А. С.	Constellation,	Mag.	A. R. 1880.	Annual Variation.	Declination 1880.	Annual Precession.	Proper Motion.
				h. m. s.	s.	• <i>t t</i>		,,
1451	5900	Herculis	5.6	17 21 38	+ 2.59	20 10 59.3	- 3.34	<b>1</b> 3
1452	5903	Ophiuchi	5.3	22 43	3.06	0 25 41.4	3.25	12
1453	5911	x Herculis	5 · 7	23 33	1.59	48 21 41.0	3.17	03
1454	5917	Draconis	5.2	. 21 08	0.77	60 08 58.0	3.13	•••
1455*	5910	Ophiuchi	5.3	24.2	3.09	- o 57 ····	3.12	• • •
1456	5918	Draconis	6.0	24 17	0.89	53 45 10.2	3.11	+ .04
1457	5919	Ophiuchi	5.6	25 20	3.00	2 48 58.0	3.02	06
1458	5922	λ Herculis	4.6	25 53	2.42	26 12 09.6	2.97	+ .07
1459	5927	Herculis	5 · 7	26 23	2.28	31 14 55.3	2.93	+ .03
1460	5931	78 Herculis	5.6	27 07	2.36	28 29 44.4	2.87	+ .06
1461	5937	$\beta$ Draconis	2.9	17 27 43	+ 1.35	52 23 26.9	- 2.82	.00
1462*		Herculis	5 · 3	28.t	2.61	19 21	2.78	
1463*		Ophiuchi	5. r	28.3	2.68	16 26	2.77	
1464	<b>594</b> 4	Herculis	5.6	29 19	1.91	41 19 46.3	2.68	.00
1465	5941	a Ophiuchi	2.0	29 22	2.78	12 38 56.1	2.68	20
1465	5950	ν Draconis (pr.)	5.0	29 49	1.18	55 15 59.1	2.64	+ .03
1467	5951	v Draconis (sq.)	5.0	20 54	1.18	55 15 17.1	2.63	+ .01
1468*		Herculis	5.8	30.9	2.56	21 05	2.54	• • • •
1469	5962	Herculis	5.8	32 03	2.28	30 51 37.9	2.44	10. +
1470	5972	f Draconis,	5 • 4	32 27	- 0.25	68 12 39.7	2.40	+ .11
1471	5967	79 Herculis	5.8	17 32 35	+ 2.47	21 22 57.1	- 2.38	+ .01
1472	5975	y Herculis	5.3	33 29	1.56	48 39 21.2	2.31	+ .03
1473	5978	26 Draconis	5.6	33 45	0.61	61 58 03.4	2.29	36
1474		Ophiuchi	6.0	35 • 7	2.71	15 14 30.4	2.12	
1475	<b>5</b> 990	ι Herculis	3.8	36 05	1.70	46 04 15.1	2.09	+ .01
1476	5991	Ophiuchi	5 · 4	36 36	2.69	16 00 31.5	2.04	+ .07
1477	5999	83 Herculis	6.0	37 33	2.46	<b>2</b> 4 37 34·3	1.96	+ .05
1478	5996	$\beta$ Ophiuchi	3.1	37 33	2.96	4 37 08.0	1.96	+ .17
1479	6006	ω Draconis	4.8	37 39	- 0.36	68 48 46.2	1.95	+ .29
1480*		D, M, 14°, 3321	5.8	37.9	+ 2.73	14 21	1.93	• · •
1481*		Draconis	5.8	17 38.6	+ 1.38	51 53	- 1.87	• • •
1482*		Ophiuchi, , , , ,	5.8	38.8	2.73	14 28	1.85	
1483*		D. M. 72°, 800	5.8	39.4	- 1.16	72 31	1.80	
1484*		Draconis	5 · 5	41.6	+ 1.25	53 50	1.61	
1485	6021	μ Herculis	3,6	41 46	2.34	27 47 31.4	1.59	— ·74
1486*		Herculis	5 · 4	41.8	2.65	17 47	1.59	• • •
1487*		Herculis		41.9	2,00	38 56	1.58	
1488	6020	γ Ophiuchi		41 52	3.00	2 45 13.7	1.58	07
1489*		Herculis	6.1	42.0	1.98	39 22	1.57	• • • •
1490*		Herculis	5.6	43.3	2.57	20 36	1.46	•••
1491	6030	Herculis	6.0	17 43 36	+ 2.60	19 17 40.3	- 1.43	01
1492	6033	87 Herculis	5 - 4	43 57	2.43	25 39 54.9	1.40	+ .21
1493	6047	$\psi$ Draconis (pr.)	4.5	44 04	- 1.08	72 12 26.1	1.40	<b>2</b> 6
1494*		Herculis	6.0	45 · 7	+ 2.32	29 22	1.25	
1495	6052	30 Draconis	4.9	46 12	1.43	50 48 36.0	1.21	+ .19
1496*		Ophiuchi	5.8	46.5	3.04	I 2I	1.18	• • •
1497*	• •	Ophiuchi	6.0	47 · 4	2.93	6 07	1.10	
1108	6068	f Herculis	5.0	49 24	1.95	40 01 51.7	0.93	+ ,01
1499	6069	Ophiuchi	5.7	50 12	3.06	0 41 23.7	0.86	— .o3 — .o3
1500	6073	89 Herculis	5.6	50 35	2.42	26 04 13.3	0.82	+ .02

No.	B.A.C.	Constellation.	Mag.	A. R. 1880.	Annual Variation,	Declination 1880.	Annual Precession.	Proper Motion.
				h. m. s.	s.	0 / 1/	,,	,,
1501*		Herculis	5.3	17 50.8	+ 2.52	22 28	- 0.81	• • •
1502	6079	§ Draconis	3.8	51 27	1.04	56 53 30.6	0.74	+ .00
1503	6082	ϑ Herculis	3.8	52 08	2,06	37 16 03.7	0.69	+ .05
1504	6084	§ Herculis	4.0	53 06	2.33	29 15 41.7	0.60	02
1505	609 <b>1</b>	7 Draconis	2.3	53 49	1.39	51 30 12.4	0.54	04
1506	6087	v Herculis	4.6	53 55	2.30	30 12 00.4	0.53	.00
1507	6089	66 Ophiuchi	5.1	54 19	2.97	4 22 38.9	0.50	+ .01
1508*		Herculis	5.8	54.5	2.09	36 17	0.48	•••
1509	6092		4.0	54 38	3.00	2 56 18.9	0.47	03
1510	6094	93 Herculis	5.0	54 43	2.67	16 45 33.0	0.46	+ .03
1511	6114	35 Draconis	5.I	17 54 49	- 2.69	76 58 38.7	- 0.45	+ .24
1512	6101	68 Ophiuchi	4.5	55 40	+ 3.04	1 18 35.2	0.38	+ .02
1513*		Herculis	5 - 4	56.2	2.20	33 13	0.33	
1514	6106	95 Herculis	4.5	56 25	2.54	21 35 52.5	0.32	+ .06
1515	6109	Herculis	5.5	56 31	1.72	45 30 27.2	0.31	<b>o</b> 6
1516*		D. M. 33°, 3009	5.8	57.2	2.19	<b>3</b> 3 <b>3</b> 0	0.25	
1517	6110	96 Herculis	5.0	57 15	2.56	20 50 04.3	0.24	+ .01
1518	6122	34 Draconis	5.8	57 16	- I.05	72 00 54.4	0.24	28
1519	6123	70 Ophiuchi	4.2	59 23	+ 3.03	2 31 45.7	- 0.05	-1.09
1520	6134	98 Herculis	5 · 3	18 00 59	2.53	22 12 32.8	+ 0.09	+ .04
1521*	٠.	Herculis	5.8	18 01.4	+ 2.23	32 14	+ 0.12	
1522	6142	71 Ophiuchi	4.9	01 34	2.87	8 43 10.9	0.14	+ .04
1523	6143	72 Ophiuchi	3.7	01 40	2.84	9 32 52.5	0.15	+ .06
1524	6147	b Herculis	4.9	02 28	2.28	30 32 44.5	0.21	+ .08
1525	<b>*615</b> 0	o Herculis	3.8	02 52	2.34	28 44 50.9	0.25	+ .02
1526	6151	100 Herculis	5.5	02 59	2.42	26 04 52.0	0.26	+ .07
1527	6157	102 Herculis	4.3	03 38	2.56	20 47 49.1	0.32	oı
1528	6159	101 Herculis	5.1	03 42	2.58	20 01 38.9	0.32	04
1529*		Herculis	5 · 7	03.9	2.09	36 23	0.34	•••
1530	6162	Herculis	4.8	03 52	1.80	43 26 53.0	0.34	, 00
1531*		D. M. 3°, 3620	5.8	18 04.7	+ 3.00	3 18	+ 0.41	
1532*	:	Herculis	6.0	04.8	2.68	16 27	0.42	
1533*		Herculis	5.8	5.8	2.08	36 26	0.51	
1534	6178	104 Herculis (A)	5.0	07 23	2. 26	31 22 36.6	0.65	+ .09
1535	6185	Draconis	5.8	08 03	1.21	54 15 03.2	0.70	+ .25
1536	• •	Lyræ	5.9	08 54	1.90	41 07 03.5	0.77	
1537	6193	Lyræ	5.8	09 05	2.00	38 44 26.8	0.80	+0.79
1538	6281	δ Ursæ[Minoris	4.4	11 03	-19.43	86 36 32.8	0.97	+ .04
1539	6203	Lyræ	5.5	11 55	+ 1.86	<b>42</b> 07 08.7	1.04	.00
1540	6224	36 Draconis	5.0	13 12	0.34	64 21 23.2	1.16	+ .01
1541	6218	Lyræ	5-9	18 13 19	+ 1.92	40 53 22.7	+ 1.16	.00
1542	6213	Ophiuchi,	5 <b>· 7</b>	13 22	2.90	7 12 43.0	1.17	.00
1543	6223	105 Herculis	5.5	14 14	2.47	24 23 50.0	1.24	.00
1544	6227	74 Ophiuchi	5.2	14 53	3.00	3 19 28.0	1.30	+ .01
1545	6231	106 Herculis	5 • 4	15 13	2.54	21 54 42.4	1.33	
1546	6320	24 Ursæ Minoris	5.8	15 15	-22.25	86 59 17.8	1.33	+ .01
1547	6235	к Lyrae	4.6	15 40	+ 2.10	36 00 40.5	1.37	+ .03
1548	6243	37 Draconis	6.1	15 59	- 0.35	68 42 43.5	1.40	06
1549	6237	108 Herculis	5•4	16 20	+ 2.30	29 48 10.1	1.43	+ .04
1550	6238	t Herculis	4.7	16 20	2.34	28 48 50.6	1.43	+ .06

THE UNITED STATES COAST SURVEY.

No.	B. A.C.	Constellation,	Mag.	A, R. 1880.	Annual Variation.	Declination 1880.	Annual Precession.	Proper Motion
				h. m. s.	s,	o / 1/	,,	
551*		Ophiuchi	5.8	18 17	+ 2.79	11 59	+ 1.49	
552	6245	Herculis	5.4	17 31	2.64	17 46 01.8	1.53	
553	6255	Draconis	4.8	18 28	1.53	49 03 40.3	1.62	.00
554	6251	109 Herculis	4.2	18 35	2.56	21 42 59.7	1.63	24
555*		Ophiuchi	5 · 7	19.9	2.89	7 58	1.74	
1556	6268	μ Lyræ	4.9	20 17	1.97	39 26 34.0	1.78	.00
1557	6269	d Serpentis	5.6	21 04	3.07	0 07 34.5	1.84	,00
1558	6289	b Draconis	4.9	22 09	0.87	58 43 53.8	1.93	+ .04
1559	6297	φ Draconis	4.3	22 29	- 0.85	71 16 24.7	1.96	+ .01
1560	6302	χ Draconis	3.7	23 13	- 1.07	72 40 48.7	2,02	38
-	1	1.7						
1561	6300	Herculis	5.8	18 24 37	+ 2.50	23 47 15.6	+ 2.15	.00
1562	6316	42 Draconis	5.1	25 38	0.17	65 29 19.8	2.24	06
1563*	1	Herculis	5 - 4	25.7	2.67	16 51	2.24	
1564	6322	Herculis	5.8	27 47	2.50	23 31 42.5	2.43	.00
1565*		Lyræ	5-4	28.3	<b>2.2</b> 9	30 28	2.47	
1566	6348	d Draconis	4.9	30 30	1.04	56 57 14.9	2,66	02
1567	6341	Herculis	5.S	30 31	2.50	23 30 32.4	2,66	05
1568*		Ophiuchi	5.2	30.7	2.86	9 02	2.68	• • •
1569*		Ophiuchi	5 • 5	30.8	2.92	6 34	2.69	
1570	6350	Draconis	5.3	31 13	1.36	52 15 31.5	2.72	.00
571*		e Serpentis	5.6	18 31.4	+ 3.08	_ o 25	+ 2.74	
1572*		Lyræ	5.7	32.2	2.20	33 22	2.81	
573	6355	a Lyrae	0.1	32 53	2.03	38 40 22.3	2.87	+ .28
1574		Lyræ	6.0	33 05	1.83	43 07 15.2	2.87	
575		Draconis	5.8	35 51	0.19	65 22 50.5	3,12	
1576		Draconis	5.6	36 29	0.54	62 25 01.0	3.18	
577	6372	Draconis	5.6	37 o8	1.39	52 05 01.6	3.23	+ .00
1578	6379	4 Aquilæ	5.0	38 47	3.03	I 56 22.5	3.38	+ .0
1579*	.1	Lyræ	5.6	39 - 4	2.25	31 49	3 · 43	
1580	6395	c Draconis	5.1	40 18	1.16	55 25 05.0	3.51	.00
	1		!		- T 00	f.		+ .0
1581	6390	ε Lyræ (bor.)	4.6	18 40 22	+ 1.99	39 32 43.7	+ 3.51	
1582	6391	ε Lyræ (aus.)	4.6	40 22	1.99	39 29 17.8	3.51	+ .0
1583	6387	110 Herculis	4.2	40 30	2.59	20 25 56.g	3.52	3
1584	6392	$\zeta$ Lyræ (pr.)	4.5	40 35	2.06	37 28 50.2	3 - 53	+ .07
1585	6394	ζ Lyræ (sq.)	5 • 5	40 40	2.06	37 28 11.6	3.54	+ 0:
1586		D. M. 53°, 2126	5.8	40-56	1.28	53 44 59.2	3.56	
1587	٠.٠	Lyræ	4.8	41.2	2.42	26 32	3.58	• •
1588	6397	III Herculis	4.1	41 43	2.65	18 02 56.9	3.63	1:
1589	6404	Lyræ ,	5.9	42 23	1.92	41 18 48.6	3.69	O
1590		Draconis	6.0	42.5	1,21	54 46	3.70	• •
591	6410	Draconis	6.0	18 42 52	+ 0.71	бо 55 15.2	+ 3.73	0
592		Lyræ	5.8	43.5	2.26	31 38	3.78	
593 <sup>3</sup>	1	D. M. 24°, 3545	5.8	41.3	2.46	24 54	3.85	
594	6428	Draconis	5.9	45 06	1.58	48 37 49.4	3.92	.0
1595	6427	v Lyræ	5.4	45 24	2.24	32 24 49.3	3.95	+ .0
		β Lyrae	1		2.21	33 13 27.4	3.96	0
1596 1507	1		var. 3.6-4.	45 39 46.5	2.75	13 50	4.04	
1597	· ·	1 -	5.7		2.56	21 16 55.5	4.10	+ .0
1598	ł	112 Herculis	5.2	47 09		73 56 46.0	4.10	+ .1;
1599		Draconis	5 - 5	48 45	- 1.46			
1600	6452	Draconis	5.6	48 54	+ 1.35	52 49 11.8	4.25	.0

No.	B.A.C.	Constellation.	Mag.	A. R. 1880.	Annual Variation.	Declination 1880.	Annual Precession,	Proper Motion.
			:	h. m. s.	s	0 1 11	17	"
1601	6463	o Draconis	4.5	18 49 26	+ 0.89	59 14 30.6	+ 4.29	+ .01
1602	6451	62 Serpentis	5.7	49 36	2.93	6 27 59.8	4.31	06
1603	6453	113 Herculis	4.6	49 41	2.54	22 29 38.6	4.31	+ .01
1004	6478	50 Draconis	5.6	50 14	- 1.91	75 17 28.6	4.36	+ .06
1605	6470	Draconis	5.1	50 15	+ 1.48	50 33 34-5	4.36	.00
1606	6460	8 Scrpentis (pr.)	4.4	50 15	2.98	4 02 56.2	4.36	+ .08
1607	6462	θ Serpentis (sq.)	4.7	50 16	2.98	4 02 52.4	4.37	+ .12
1608	6466	δ Lyræ	4.4	50 19	2.10	36 44 50.1	4.37	+ .04
1609*		Herculis	5.7	50.8	2.65	17 58	4.41	
1610	6473	Lyræ	5.4	51 OI	1.92	41 26 58.2	4 - 43	.00
1611	6471	64 Serpentis	5.7	18 51 15	+ 3.02	2 22 46.4	+ 4.45	+ .01
1612	6476		5.6	51 37	1.59	48 42 35.9	4.48	12
1613					1.82	43 47 17.4	4.49	.00
1614*	6475	R Lyræ			2.67	17 12	4.49	
1615*			5.5 5.6	52.9	2.61	19 38	4.64	
-				53.5	1		4.65	05
1616	6483	11 Aquilæ	5.1	53 34	2.76	13 27 51.0 14 54 22.6	4.69	10
1617	6487	Aquilæ	4.1	54 10				+ .02
1618	6491	γ Lyræ	3.2	54 27	2.25	32 31 34.0	4.72	07
1619	6496	48 Draconis		54 43	1.02	57 39 21.9	4.74	
1620*		Lyræ	5.7	54.9	2.44	26 04	4.76	•••
1621	6197	λ Lyræ	5.6	18 55 29	+ 2.26	31 58 42.9	+ 4.81	10. +
1622	6510	v Draconis	5.1	55 52	- 0.71	71 08 11.6	4.84	+ .05
1623*		Draconis	5.6	56.0	+ 0.28	65 07	4.85	• • • •
1624*		D. M. 20°, 4022	5.8	56.2	2.58	20 40	4.87	
1625*		Draconis	4.9	57.2	1.51	50 22	4.95	
1626*		Aquilæ	5.8	57.5	3.04	г 38	4.98	
1627*		D. M. 19°, 3888	5.8	57.7	2.61	19 29	÷.00	
1628	6520	16 Lyrae	4.9	58 03	1.71	46 45 56.3	5.02	06
1629	6522	49 Draconis	5.6	58 21	1.19	55 29 10.3	5.05	06
1630	6528	ζ Aquilæ	3.0	59 54	2.75	13 41 11.5	5.18	09
1631	6534	Lyræ	5.8	19 00 23	+ 2.28	31 33 58.4	+ 5.22	.00
1632	6543	18 Aquilæ		01 20	2.83	10 53 15.9	5.30	02
1633	6542	Vulpeculæ	5.5	01 38	2.50	24 03 59.4	5.33	+ .22
1634*		Aquilæ	5.3	01,6	2.69	16 41	5 · 33	
1635	6547	Lyræ	5.5	01 52	2.39	28 26 25.1	5 - 35	05
1636	6551	51 Draconis	5.6	02 13	1.35	53 12 44.7	5-37	.00
1637	6553	17 Lyræ	5.5	02 53	2.27	32 18 48.2	5.43	+ .06
1638	6556	Lyræ	5.1	03 01	2.14	35 54 46.8	5 - 44	+ .04
1639	6552	19 Aquilæ	5.2	03 07	+ 2.94	5 53 09.3	5 - 45	04
1640*		D. M. 82°, 572	5.8	06.6	- 6.28	82 12	5.74	
						21.05.02.4		+ .06
1641	6571	19 Lyræ	5.8	19 07 10	+ 2.30	31 05 03.4		1
1642	6574	Vulpeculæ	5.8	07 28	2.57	21 21 12.2	5.82	.00
1643	6572	21 Aquilæ	5.3	07 4C	3.02	2 05 29.7	5.84	+ .06
1644*	• •	Aquilæ	5.8	07.8	2.95	5 18	5.85	
1645	6583	53 Draconis	5 • 4	09 24	1.13	56 39 18.9	5.98	+ .05
1646	6581	$\eta$ Lyræ	4.2	09 40	2.04	38 56 26.8	6.00	+ .05
1647*	• • •	D. M. 19°, 3956	5.8	09.8	2.61	20 01	6.01	•••
1618	6582	ı Sagittæ	5.8	10 07	2.58	21 01 24.4	6.04	+ .04
1649	6585	22 Aquilæ	5.6	io 35	2.97	4 37 28.2	6.08	02
1650*		Lyræ ,	6.0	10.8	2.33	30 19	6.10	

CATALOGUE OF STARS FOR OBSERVATIONS OF LATITUDE.

No.	B. A. C.	Constellation.	Mag.	A. R. 1880.	Annual Variation.	Declination 1880.	Annual Precession.	Proper Motion.
				h. m. s.	s.	• , ,,		11
1651*		Aquilæ	5.6	19 11	+ 2.75	14 20	+ 6.11	
1652	6589	I Vulpeculæ	4 • 7	11 04	2.58	21 10 47.8	6.12	00. +
1653	6601	54 Draconis	5.2	11 47	1.08	57 29 53.9	6.18	07
1654	6595	ω Aquilæ	5.3	12 11	2.81	11 22 49.1	6.21	+ .02
1655	6599	ੳ Lyræ	4.0	12 12	2.08	37 55 14.9	6.21	.00
1656	6597	23 Aquilæ	5.1	12 26	3:05	0 52 04.8	6.23	04
1657	6612	$\delta$ Draconis	3.0	12 31	0.03	67 27 01.0	6.24	+ 07
1658		D. M. 9°, 4057	5.8	13 09	2.86	9 24 07.8	6.30	•••
1659	6625	59 Draconis	5 • 5	13 33	- 2.15	76 21 34.1	6.33	12
1660	6615	A Aquilæ	5.5	14 03	+ 2.80	12 09 16.8	6.37	+ .07
1661	6623	к Cygni	4.2	19 14 20	+ 1.38	53 08 51.2	+ 6.39	+ .09
1662	6618	d Aquilæ	5.3	14 24	3.10	- 1 06 50.7	6.40	01
1663*		Aquilæ	5.1	16.2	3.08	- 0 30	6.55	
1664	6650	τ Draconis	4.5	17 51	_ i,ii	73 07 55.8	6.68	+ .10
1665	6637	3 Vulpeculæ	5-4	17 56	+ 2.46	26 02 00.1	6.69	+ .01
1666	6640	Draconis (pr.)	5-9	18 04	1.10	57 25 05.3	6.70	.00
1667	6642	2 Sagittæ	5.8	18 59	2.69	16 42 19.8	6.78	+ .04
1668	6644	b Aquilæ	5.2	10 15	2.86	11 41 20.7	6.79	+ .69
166g	6648	2 Cygni	5.2	19 24	2 37	29 23 16.3	6.81	
1670	6646	$\delta$ Aquilæ	3.3	19 27	3.02	2 52 36.6	6.82	+ .05 + .10
1671	6662	-			_			
		$\pi$ Draconis	4.8	19 20 03	+ 0.32	65 29 00.2	+ 6.86	+ .03
1672	6656	Lyræ	5.6	20 09	1.89	43 09 18.7	6.86	.00
1673	6654	4 Vulpeculæ	4-9	20 13	2.63	19 33 53.9	6.87	— .03
1674 1675*	6653	v Aquilæ	4.9	20 23	3.07	0 06 01.2	6.89	02
1676	6667		5.8	20.8	2.79	12 48	6.91	
1677*	. 1	Aquilæ	5.0	21 50	2.16	36 04 40.9	7.01	+ .05
1678	6674	6 Vulpeculæ	5.8	22	2.76	14 02 ,	7.02	
1679*		Aquilæ	4.3	23 43	2.49	24 25 22.9	7.16	09
1680	66go	β Cygni	5.8	23.9	2.75	14 21	7.18	•••
	-	Addition	3.1	25 53	2.42	27 42 31.6	7.34	.00
1681	6697	L Cygni	4.2	19 26 41	+ 1.51	51 28 28.0	+ 7.41	+ .13
1682	6698	8 Cygni	4.6	27 19	2.23	34 11 55.0	7-45	+ .04
1683	• •	Cygni	5.8	28 09	1.59	50 03 00.0	7 - 53	
1684	6701	μ Aquilæ	4.7	28 14	2.93	7 07 32.1	7 - 53	14
1685	6709	9 Vulpeculæ	5 · 3	29 19	2,63	19 30 45.6	7.54	+ .03
1686*		D. M. 15°, 3872	5.8	30	2.73	15 21	7.67	
1687	6714	9 Cygni	5.6	30 05	2.39	29 II 57.7	7.68	05
1688*		Cephei	5.8	30,2	- 7.34	83 14	7.69	• • •
1689	6715	L Aquilæ	4.3	30 31	+ 3.11	— I 33 04.5	7.71	10, +
1690	6718	Cygni	5.2	30 46	1.95	42 09 01.8	7 - 74	.00
1691*	6723	Cygni	5.8	19 31 14	+ 1.57	50 58 50.2	+ 7.77	10
1692	6722	II Cygni	5.8	31 30	2,16	36 40 47.0	7.80	+ .04
1693	6724	ε Sagittæ	5 - 5	31 51	2.72	16 11 40.8	7.83	+ .00
1694	6735	σ Draconis	4.9	32 35	- 0.11	69 27 23.9	7.88	- r . 79
1695	6731	Cygni	5.0	32 55	+ 1.87	44 25 51.9	7.91	.00
1695	6734	θ Cygni	4.5	33 13	1.61	49 56 35.7	7.93	+ .15
1697	6729	σ Aquilæ	4.9	33 16	2.96	5 07 32.3	7 · 94	10. +
1698	6736	45 Aquilæ	5.8	34 32	3.10	- o 53 53.2	8.03	+ .02
1699	6740	φ Cygni,	5.1	34 38	2.37	29 52 40.0	8.0.1	+ .06
1700	6739	a Sagittæ	4.4	34 44	2.68	17 44 22.1	8.05	+ .03

No.	В. А. С.	Constellation.	Mag.	A. R. 1880.	Annual Variation.	Declination 1880.	Annual Precession.	Proper Motion,
			1	h. m. s.	s.	0 , 11	"	"
1701*		Aquilæ	5.7	19 35.5	+ 2.78	13 33	+ 8.12	
1702	6745	14 Cygni	5.2	35 32	1,95	42 32 31.4	8,12	+ .07
1703	6744	β Sagittæ	4.4	35 40	2.70	17 11 56.8	8.13	+ .02
1704	6748	Cygni	5.5	35 59	1.35	54 41 30.3	8.16	.00
1705	6749	$\chi$ Aquilæ	5 - 5	36 55	2.82	11 32 44.2	8.23	+ .07
1706	6754	Cygni	5.0	37 07	1.84	45 14 26.9	8.23	.00
1707*		Cygni	5.8	38.1	2.31	32 09	8.32	
1708	6758	10 Vulpeculæ	5.7	38 44	2.50	25 29 07.9	8.37	10. —
1709	6759	$\psi$ Aquilæ	6.0	38 59	2.80	13 00 57.3	8,40	or
1710	6769	D. M. 41°, 3469	5.4	39 45	2,00	41 29 08.5	8.46	.01
1711	6767	v Aquilæ , , , ,	5.9	19 39 50	+ 2.92	7 19 24.5	+ 8.46	+ .03
1712	6771	15 Cygni	5.2	39 57	2,16	37 93 55.3	8.47	+ .08
1713	6772	$\gamma$ Aquilæ	3.1	40 33	2.85	10 19 19.1	8.52	+ .00
1714	6779	δ Cygni	2.9	41 13	1,88	44 50 17.9	8.57	.00
1715	6784	17 Cygni	5.2	41 52	2.27	33 26 57.5	8.62	44
1716	6783	δ Sagittæ	4.0	42 02	2.68	18 14 22.4	8.63	+ .05
1717	6789	π Aquilæ	5.7	43 03	2.83	11 31 06.5	8.71	+ .02
1718	6794	ζ Sagittæ	5.1	43 39	2.67	18 50 32.7	8.76	+ .07
1719	6799	Cygni	5.9	43 56	1.75	47 36 42.1	8.78	.00
1720	6802	a Aquilæ	0.9	44 56	2.93	8 33 09.0	8.86	+ .38
1721	6805	o Aquilæ	i	ĺ	+ 2.88	10 06 58.1	+ 8.89	
1722	6810	-	5.4	19 45 17		22 18 22.q		16
1723*:		12 Vulpeculæ	5·3 var. 4-13.	45 54 46	2.59	32 37	8.94	+ .05
1724	6813	$\chi$ Cygni	5.6	46 19	2.12	38 24 52.1	8.95 8.97	
1725	6811	η Aquilæ	var. 3.6-4.6	46 22	3.06	0 41 54.8	8.97	+ .12
1726	6817	Cygni	5.6	46 30	2.06	40 17 42.9	8.99	04
1727*		Vulpeculæ	5.4	47	2.53	24 41		.00
1728	6824	20 Cygni (d)	5.2		1.50	52 41 02.6	9.03	•••
1729*		Cygni	5.6	47 37 48.4	1.81	46 43	9.07	05
1730	6527	13 Vulpeculæ	4.7	48 22	2.55	23 46 03.3	9.14 9.14	+ .08
	1	-						
1731	6825	ξ Aquilæ	5.1	19 48 26	+ 2.91	8 09 07.7	+ 9.14	09
1732	6836	ε Draconis	3.8	48 34	0.18	69 57 43.0	9.15	00
1733*	6830	Cygni	5.8	48 35	+ 1.77	47 37 21.2	9.15	+ .00
1734	6826	58 Aquilæ	5.6	48 36	3.07	0 02 21.2	9.15	10
1735	6833	$\beta$ Aquilæ	4.0	49 25	2.95	6 06 29.2	9.21	47
1736	6835	Vulpeculæ	5.7	49 26	2.55	24 00 21.2	9.21	01
1737*	6848	Cygni	5.8	50.4	2.19	36 41	9.29	
1738	6838	φ Aquilæ'	5.3	50 33	2.85	11 06 23.0	9.31	+ .05
1739	6839 6847	10 Sagittæ	5.3	50 34	2.73	16 19 06.5	9.31	+ .07
1740	1	23 Cygni	5.3	50 50	1.24	57 12 33.4	9.32	,00
1741	6852	Cygni	5.7	19 51 26	+ 1.07	59 23 28.4	+ 9.37	.00
1742	6849	22 Cygni	5.3	51 34	2.14	38 10 07.2	9.38	.00
1743		$\eta$ Cygni	4.4	51 48	2.25	34 45 54.6	9.40	04
1744		II Sagittæ	5.6	52 19	2.72	16 28 02,4	9.44	+ .11
1745		ψ Cygni	5.3	52 32	1.56	52 07 17.1	9.45	+ .02
1746	6857	Cygni	5.4	53 04	2.08	40 02 46,3	9.50	.00
1747	6858	y Sagittæ	3.8	53 25	2.67	19 10 02.8	9.52	+ .08
1748	6867	Cygni	5.2	53 39	1.16	58 31 32.8	9.54	02
1749*	6966	Cygni	5.7	53.9	2.38	30 39	9.56	• • •
1750	6866	14 Vulpeculæ	5.7	54 02	2.58	22 46 31.0	9.57	02

CATALOGUE OF STARS FOR OBSERVATIONS OF LATITUDE.

No.	B. A. C.	Constellation.	Mag.	A. R. 1880.	Appual Variation.	Declination 1880.	Annual Precession.	Proper Motion,
	6060			h. m. s.	s.	0 1 11	tı	"
1751	6868	13 Sagittæ	5.6	19 54 38	+ 2.71	17 11 23.0	+ 9.61	÷ , o6
1752	6875	25 Cygni	5 • 5	55 31	2,16	36 42 52.9	9.68	+ .08
1753	6876	Cygni	5.7	55 34	88.1	45 26 44.3	9,69	.00
1754	6879	15 Vulpeculæ	4.9	56 09	2.47	27 25 24.3	9.73	80. +
1755	6883	16 Vulpeculæ	5 • 4	56 56	2.55	24 36 10.9	9.79	+ .09
1756	6895	e Cygni	5.0	57 58	1.70	49 46 16.9	9.87	10
1757	6890	:4 Sagittæ	5.1	58 01	2.75	15 41 43.8	9.87	+ .04
1758	6893	au Aquilæ	5.8	58 17	2.93	6 56 25.3	9.90	. + .01
1759*	1		5.8	58.7	2.41	29 35	9.93	• • •
1760	6897	15 Sagittæ	5.5	58 43	2.69	16 44 46.7	9.93	36
1761	6901	η Sagittæ	5 · 3	19 59 50	+ 2.66	19 38 53.7	+ 10.01	+ .10
1762*		Cygni	5.8	59-9	2.35	31 53	10.02	
1763*		D. M. 15°, 4040	5 8	59.9	2.76	15 10	10.02	
1764	6905	e Draconis	5.1	20 00 12	0.65	64 29 05.8	10.04	02
1765	6912	17 Vulpeculæ	5.1	01 44	2.58	23 16 10.4	10.16	.00
1766	6915	b Cygni	5.6	01 54	2.23	35 38 34.0	10.17	- ,41
1767	6926	$\rho$ Draconis	4.8	02 16	0.29	67 31 52.4	10.20	+ .04
1768*		Aquilx	5.8	02.9	2.86	10 22	10.24	
1769	6936	69 Draconis	6,1	02 57	- 1.59	76 08 45.1	10.25	08
1770	6928	Cygni	5. 7	03 03	+ 1.56	52 48 37.8	10.25	.00
1771*	٠.	Cygni, , , , , ,	6.0	20 03,1	+ 2.30	34 04	+ 10,25	
1772	6932	66 Draconis	5.3	03 38	0.96	61 38 50.0	10.30	+ .05
1773	6937	b <sup>2</sup> Cygni	5.3	04 58	2.22	36 29 16.0	10.40	+ .11
1774	6934	& Aquilæ	3.2	05 07	3.10	— I 10 35.0	10,41	,00
1775	6940	18 Vulpeculæ	5 - 5	05 33	2.50	26 32 57.5	10,44	+ .04
1776*		D, M, 21°, 4088	5.8	06,1	2.62	21 31	10.47	
1777	6943	19 Vulpeculæ	. 5.7	06 47	2.51	26 27 09.3	10,54	+ .05
1778	6952	ho Aquilæ	4.9	oS 43	2.78	14 50 00.3	10.67	+ .08
1779	6957	21 Vulpeculæ	5.8	09 19	2.47	28 19 54.3	10.72	08
1780	6962	o Cygni (pr.)	5.0	09 32	1.89	46 27 11.7	10.74	+ .01
1781	6970	68 Draconis	5.6	20 00 37	+ n nn			
1782	6965	o¹ Cygni (sq.)	3.8		+ 0.99	61 42 54.7	+ 10.74	do. +
1783	6967	b³ Cygni	-	09 51	1.89	46 22 42.0 36 26 22.3	10,76	+ .04
1784	6966	Vulpeculæ	5.1		2.45	-	10.78	+ .12
1785	6968	22 Vulpeculæ	5.0 5.4	10 19	2.54	25 13 35.0 23 08 35.9	10.79	- ···
1786	6976	33 Cygni	4.5	10 19	2.59 1.40	23 08 35.9 56 12 01.8	10.80	+ .02
1787	6973	23 Vulpeculæ	4.8	10 48	2.48	27 26 49.4	10.82	+ .04
1788	6975	18 Sagittæ	5.9	11 03	2.40	21 13 54.6	10.85	.00
1789	6980	D. M. 60°, 2099	5.8	11 16	1,13	60 16 24.2	10.85	+ .01
1790	6979	24 Vulpeculæ	5.6	11 39	2.57	24 18 08.2	10.89	+ .02
1791	6983	•			: [			
1791		o² Cygni	3.9	20 11 46	+ 1.85	47 20 46.8	+ 10.90	+ .03
1	6986	Cygni	5.1	12 39	2.15	39 59 40.0	10.96	.00
1793	7005	• '	4.6	12 54	- 1.89	77 20 56.1	10.99	00
1794	6990	P Cygni	var. 3-6	13 22	+ 2.21	37 39 38.5	11.02	+ .03
1795*	6008	Delphini	5.6	13.9	2.82	12 52	11.06	• • •
1796	6998	35 Cygni	5.3	14 03	2.31	34 36 30.6	, 11.06	+ .02
1797	7074		5.6	15 27	1.49	55 01 20.0	11.18	• • •
1798	7014	115 Aquilæ	5-4	17 14	2.98	4 57 39.9	11.30	• • •
1799*	7004	Delphini	5.7	17.3	2.79	14 09	11.31	
1800	7024	71 Draconis	5.6	17 36	10.1	61 52 35.3	11.33	+ .02

S. Ex. 37——16

No.	B, A. C.	Constellation.	Mag.	A. R. 1880.	Annual Variation.	Declination 1880.	Annual Precession.	Proper Motion
			1	h. m. s.	s.	0 / 11	n	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
1801	7022	$\gamma$ Cygni	2.4	20 17 55	+ 2.15	39 52 24.6	+ 11.35	+ .02
1802*		Cygni	5 · 5	18 10	1.95	45 24 35.6	11.37	• • •
1803	7027	Cygni	5.6	18 30	2.13	40 38 36.1	11.39	.00
1804	<b>702</b> 9	39 Cygni	4.9	10 01	2.40	31 48 13.7	11.43	+ .05
1805*		Cygni	5.6	19.3	2.24	37 05	11.45	• • •
1806*	• •	D. M. 63°, 1618	· ·	19.5	0.96	63 37	11.47	
1807	7037	Draconis	5.8	19 33	0.29	68 29 45.4	11.43	03
1808*	!	Vulpeculæ	5.6	20.4	2.65	21 01	11.53	
1809	7061	40 Cygni	5.8	23 07	2.22	38 02 48.8	11.72	04
1810	7062	$\omega^{\text{I}}$ Cygni	5 · 7	23 22	1.83	48 59 08.8	11.74	+ .04
1181	7067	41 Cygni	4 · 3	20 24 29	+ 2.45	29 58 08.5	+ 11.82	+ .01
1812	7065	r Delphini	5 • 7	24 33	2.88	10 29 42.6	11.83	.00
1813	7085	ω <sup>2</sup> Cygni (pr.)	5.1	26 21	1.86	48 32 56.4	11.95	+ .02
1814	7086	Cygni	5.8	26 27	1.50	55 39 57.0	11.96	
1815*		Vulpeculæ	6.0	26.8	2.56	25 24	11.98	
1816	7088	ε Delphini	4.I	27 29	2.87	10 53 47.1	12.03	03
1817	7098	θ Cephei		27 31	1.02	62 35 27.7	12.04	05
1818	7091	ω <sup>2</sup> Cygni (sq.)		27 36	1.85	48 48 57.5	12.04	03
1819		D. M. 51°, 2882	5.8	27 55	1,71	51 54 02.3	12.06	.00
1820	7094	$\eta$ Delphini	5 • 5	28 16	2.84	12 37 02.7	12.09	+ .08
821	7103	47 Cygni	5 . I	20 29 14	+ 2.34	34 50 25.2	+ 12.15	05
822	7107	$\zeta$ Delphini	4.6	29 42	2.81	14 15 41.3	12.18	+ .04
823	7112	Cygni	5.8	29 59	1.96	46 16 56.8	12.21	.00
1824	7121	$\beta$ Delphini	3.8	31 55	2.81	14 10 44.0	12.34	<b>–</b> .or
1825	7126	27 Vulpeculæ	5.8	31 58	2.56	26 02 44.0	12.34	+ .02
826	7125	ι Delphini	5.1	32 05	2.87	10 57 34.9	12.35	or
827	7122	71 Aquilæ	4.6	32 08	3.10	- I 3I 2I.4	12 35	+ .02
1828		Cygni	5.8	<b>32</b> 53	2.25	37 54 44.5	12.41	
1829	7137	θ Delphini	5 - 5	33 04	2.83	12 53 40.9	12,42	or
1830	7156	73 Draconis	5 · 3	33 04	- 0.73	74 32 34.5	12.42	03
1831	7140	29 Vulpeculæ	4 · 7	20 33 10	+ 2.68	20 46 51.7	+ 12.43	+ .01
1832	7138	1 Aquarii	5.2	33 16	3.08	0 03 56.4	12.44	03
1833	7143	28 Vulpeculæ	5.2	33 18	2.61	23 41 45.5	12.43	10. +
1834	7141	κ Delphini	5.2	33 18	2.92	9 39 52.9	12.41	+ .02
1835	7146	D. M. 15°, 4220	5.8	33 31	2.78	15 25 04.3	12 45	+ .02
1836*		Vulpeculæ	5.8	33.8	2.66	21 24	12.47	•••
1837	7149	a Delphini	3.8	34 04	2.79	15 29 23.2	12.49	+ .03
1838	7158	Cygni	5.9	35 10	2.19	40 09 20.9	12.56	.00
1839	7160	ro Delphini	5.8	35 39	2.81	14 09 26.5	12.59	+ .03
840	7178	75 Draconis	5.6	35 42	- 3.50	81 00 37.9	12.60	.00
841*		Cygni	5 · 7	20 35.8	+ 2.10	43 02	+ 12.61	
842	7164	49 Cygni	5.6	36 11	2.43	31 52 53.2	12.63	+ .03
843	7171	a Cygni	1.5	37 20	2.04	44 51 07.6	12.71	.00
844	7174	Cygni	5.5	37 36	2.16	41 17 15.9	12.73	.00
845	7173	$\delta$ Delphini	4.2	37 51	2.80	14 38 41.8	12.75	02
1846	7182	51 Cygni	5.6	38 31	1.86	49 54 33.5	12.79	04
847	7188	30 Vulpeculze	5.4	39 41	2.60	24 50 31.8	12.87	17
818	7194	52 Cygni	4.4	40 43	2.48	30 16 56.2	12.93	10. +
	i		ŀ				1	
849	7200	γ Delphini	. 4.2	41 05	2.78	15 41 34.6	12.90	15

THE UNITED STATES COAST SURVEY.

No.	В, А, С,	Constellation.	Mag.	A. R. 1880.	Annual Variation.	Declination 1880.	Annual Precession.	Proper Motion.
				h. m. s.	s.	0 / //	"	,,
1851	7204	ε Cygni	2.8	20 41 22	+ 2.42	33 31 17.3	+ 12.98	+ .32
1852	7211	4 Cephei	5 · 4	41 40	0.76	66 13 15.3	13.00	oi
1853	7206	13 Delphini	5 - 5	41 52	2.98	5 34 07.1	13.02	
1854	7215	Cephei	4.7	42 22	1.49	57 08 58.7	13.05	19
1855		T Cygni	var. 5-6	42 23	2.39	33 56 oi.8	13.05	
1856	7213	λ Cygni	4.6	42 44	2.33	36 03 01.8	13.07	+ .02
1857	7220	η Cephei	3.6	42 51	1.23	61 22 23.7	13.08	+ .87
1858*		Cygni,	5 - 5	43.9	1.98	47 23	13.15	
1859	7223	15 Delphini	5.6	43 55	2.86	12 05 52.5	13.15	+ .30
1860	7222	14 Delphini	}	43 55	2.94	7 25 12.8	13.15	+ .05
1861	Ť	-		:	+ 1.78	51 58 16.2	+ 13.18	
		.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	6.0	20 44 17			i	+ .01
1862	7233	55 Cygni		44 5T	2.04	45 40 10.8 51 28	13.21	
1863*		Cygni	1	45.1		43 36 28.3	13.23	+ .13
1864	7241	56 Cygni	1	45 49	2.13	17 34	i	
1865*	70.6	Delphini		47.0	2.76	26 38 55.8	13.35	01
1866	7246	31 Vulpeculæ	4.9	47 00	2.57	43 56 00.8	13.35	.00
1867 1868*	<b>72</b> 53	57 Cygni	4.9	49 00	2.12	32 59	13.48 13.48	
			6.0	49.0	2.43	27 36 07.0	:	.00
1869	7256	32 Vulpeculæ	!	49 27	2.55 3.01	4 04 31.4	13.51	06
1870	7255		5.5	49 40				
1871	7257	16 Delphini	5 • 4	20 49 55	+ 2.87	12 06 40.5	+ 13.54	+ .05
1872	7258	17 Delphini	5 · 3	49 56	2.81	13 15 52.9	13.54	+ .04
1873	7291	76 Draconis	5.8	51 11	- 3.99	82 05 08.3	13.62	03
1874	7268	Cygni	5 · 7	51 47	+ 2.02	46 57 29.9	13,66	+04
1875	7278	Cygni,	5.6	52 36	1.90	50 16 05.2	13.71	.00
1876	7271	r8 Delphini	5 · 3	52 39	2.89	10 22 36.2	13.71	10
1877	7277	v Cygni	4.I	52 42	2.24	40 42 21.9	13.72	10. +
1878	7275	33 Vulpeculæ	5.2	52 54	2.69	21 51 47.2	13.73	+ .08
1879	7299	Draconis	1	52 59	2.52	80 06 05.8	13.74	.00
1880	7281	D. M. 56°, 2515	5.8	53 04	1.60	56 25 32.8	13.74	04
1881	7276	r Equulei (1st *)	5.2	20 53 05	+ 3.00	3 50 03.5	+ 13.75	14
1882	7290	Cygni	5 · 4	54 02	2.15	44 00 15.7	13.80	.00
1883	7294	Cygni	5 · 5	54 39	1.92	49 59 45.7	13.84	10
1884*		Delphini	5 · 7	55.0	2.74	18 52	13.87	•••
1885	7301	f Cygni,	5 · 3	55 45	2.03	47 03 10.8	13.91	01
1886	7311	Cephei	5.8	56 <b>o</b> 8	- o.63	75 27 39.8	13.94	+ .05
1887	7310	Cephei	5.6	56 28	+ I.47	58 58 11.0	13.96	05
1888	<b>730</b> 6	60 Cygni, . ,	5 • 4	57 00	2.09	45 41 05.2	13.99	03
1889	7320	Cygni	6.0	58 26	2.32	38 11 00.9	14.08	02
1890	7318	3 Equulci	5.6	58 36	2.99	5 OI 36.3	14.09	05
1891		Cephei	5.7	20 58 51	+ 1.65	56 11 45.7	+ 14.11	
1892	7332	Cygni	5.6	21 00 08	1.83	52 48 29.4	14.19	.00
1893	7333	ξ Cygni	4.0	00 34	2.18	43 26 59.6	14.22	+ .02
1894	7336 7336	61 Cygni (pr.)	5-3	01 31	2.67	38 09 36.2	14.27	+3.22
1895	7337	61 Cygni (sq.)	5.6	01 33	2.68	38 09 26.0	14.27	+3.00
1896*		149 Cygni	5.6	01.5	2.51	30 42	14.27	
1897	7345	f <sup>3</sup> Cygni	4.4	02 28	2.06	47 10 01.0	14.33	+ .01
1898	7350	γ Equulei	4.4	04 30	2.92	9 38 56.2	14.46	18
	7363	Cephei	5.8	05 40	0.40	<b>7</b> 0 57 <b>0</b> 6.4	14.53	.00
1899								

No.	B. A. C.	Constellation.	Mag.	A. R. 1880.	Annual Variation.	Declination 1880,	Annual Precession.	Proper Motion.
				h. m. s.	s.	. , ,,	,,	n
1901	7368	ζ Cygni	3.4	21 07 50	+ 2.55	29 44 07.5	+ 14.65	07
1902	7372	δ Equulei	4.6	c8 38	2.93	9 31 17.9	14.70	28
1903	7377	23 Cephei	5.8	08 45	1.52	59 29 35.6	14.71	04
1904	7380	a Equulci	4.2	09 49	3.00	4 45 10.0	14.77	09
1905	7385	τ Cygni,	3.9	10 00	2.39	37 32 03.2	14.78	+ .47
1906	7398	σ Cygni	4.3	12 42	2.35	38 53 32.4	14.94	01
1907	7399	" Cygni	4.4	12 59	2.46	34 23 38.3	14.96	+ .02
1908*		D. M. 53°, 2588	5.6	13.3	1.88	53 30	14.98	
1909	7401	D. M. 55°, 2549	5.8	13 39	1.80	55 17 37.2	15.00	11
1910	7402	A Cygni	5.2	r3 59	2.23	43 26 29.7	15.02	.00
1911*		Pegasi	5.8	21 14.8	+ 2.72	21 32	+ 15.07	
1912	7405	9 Equulei	5.7	15 09	2.97	6 50 49.0	15.07	+ .01
1913	7411	Cygni	5-7	15 21	2.06	49 00 11.0	15.06	.00
1914	7410	Pegasi	5.7	15 38	2.69	23 21 05.8	15.11	.00
1915	7416	a Cephei	2.5	15 43	1.43	62 04 37.7	15,12	+ .01
1916	7417	Cephei	5.6	15 56	1.66	58 06 58.4	15.13	
1917*		Cygni	5.8	16.3	2.52	32 об	15.15	
1918	7418	r Pegasi	4.3	16 32	2.78	19 17 31.6	15.16	+ .09
1919	7428	6 Cephei	5.2	16 53	1.25	64 21 48.2	15.18	.00
1920	7421	β Equulei	5.0	16 56	2.98	6 18 00.0	15.18	+ .05
1921	7438	Cephei	5.8	21 17 01	- 0.50	76 30 22.6	+ 15.19	+ .02
1921	7431	Cygni	5.8	17 50	+ 2.08	48 52 29.3	15.24	.00
-	7437	Pegasi	5.7	18 34	2.70	23 45 35.7	15.28	+ .06
1923		Cygni (sq.)	6.5	18 57	2.42	36 50 14.7	15.30	
1925	7444	Vulpeculæ	5.3	19 14	2.65	25 39 29.7	15.32	11
1926	7444	Cygni	5.8	20 53	2.18	46 11 42.6	15.41	+ .05
1927	7453	69 Cygni	5.8	20 53	2.45	36 08 58.7	15.41	+ .01
1928	7455	35 Vulpeculæ	5.3	22 23	2.65	27 05 13.7	15.50	+ .07
1929	7462	70 Cygni	5.0	22 28	2.45	36 35 44.7	15.50	02
1930*		Cygni	5.4	22.6	2,12	48 19	15.51	
1931	7468	Cygni	5.7	21 22 48	+ 1.97	52 22 39.8	+ 15.52	oı
	. 1			23 01	2.56	31 42 03.4	15.53	+ .00
1932	7465	Cygni	5·7 5.6	23.5	2.74	21 40	15.56	
	j			1		23 06 49.8	15.61	+ .02
1934	7474	2 Pegasi	4.5	24 31 25 OI	2.72 2.20	46 00 42.7	15 64	+ .11
1935	7480	g Cygni	5.3 5.8	25.3	2.90	11 37	15.66	
1936*	7,80		-			66 17 08.5	15.66	04
1937	7482	7 Cephei	5.4	25 27 27 06	0.80	70 02 01.1	15.75	04
1938	7493	Cephei	3.2	1	1.65	59 55 50.0	15.79	.00
1939	7495	Cephei	5·5 6.0	27 42 28 20	- 1.57	80 00 04.7	15.79	02
1940	7510						!	
1941*	• •	Cygni	6.0	21 28.7	+ 2.11	49 25	+ 15.84	- 05
1942	7503	ρ Cygni	4.1	29 28	2.25	45 03 43.5	15.88	05
1943	7505	72 Cygni	5.1	29 53	2.45	37 59 48.8	15.90	+ .12
1944	7521	74 Cygni	5.1	32 08	2.40	39 52 30.I	16.02	10. +
1945	7520	5 Pegasi	5·5	32 09	2.81	18 46 47.0	16.02	+ .09
1946	7528	Pegasi	5.8	33 25	2.78	19 43 28.3	16.09	.00
1947	7527	d Aquarii	5.2	33 28	3.05 1.61	1 42 17.7	16.09 16.16	02 + .02
1948	7542	9 Cephei	5. I	34 42		61 32 28.0	ł	+ .02
1949	7544	75 Cygni	5. I	35 29	2.35	42 43 46.2	16.20	+ .03
1950	7546	26 Aquarii	5 · 7	36 <b>0</b> 3	3.07	0 44 21.2	16.23	02

No.	B. A. C.	Constellation.	Mag.	A, R, 1880.	Annual Variation.	Declination 1880.	Annual Precession.	Proper Motion
				h. m. s.	· s.	c , ,,		
1951	7547	7 Pegasi	5.4	21 36 15	+ 3.01	5 08 02.5	+ 16.24	05
1952	7555	D. M. $54^{\circ}$ , $2595$	5.8	36 45	1.98	54 19 36.0	16.26	.00
1953	7559	77 Cygni	5.8	37 33	2.11	40 31 46.6	16.30	02
1954	7560	$\pi^1$ Cygni	4.9	37 50	2.12	50 38 32.3	16.31	01
1955	7565	Cygni	5.4	38 17	2.40	49 36 25.5	16.34	+ .02
1956	7561	arepsilon Pegasi	2.7	38 18	2.95	9 19 32.5	16.34	.00
1957	7566	79 Cygni	5.6	38 <b>2</b> 8	2.47	37 44 05.8	16.35	.00
1958	7568	$\mu$ Cygni (1st *)	4.6	38 47	2.67	28 12 04.5	16.37	26
1959	7567	9 Pegasi	4.1	38 50	2.85	16 48 02,6	16.37	+ .06
1960	7571	κ Pegasi	4.2	39 13	2.72	25 05 38.8	16.39	+ .eg
1961	7582	μ Cephei	var. 4.5-6.4	<b>21 3</b> 9 50	+ 1.83	58 13 48.8	+ 16,42	+ .01
1962	7588	11 Cephei	4.9	40 10	0.90	70 43 31.6	16,43	+ .07
1963	7585	12 Pegasi	5.1	40 33	2.76	22 23 47.3	16.45	+ .05
1961	7587	11 Pegasi	5.4	4T 00	3.05	2 07 55.7	16.49	÷ . o8
1965	7590	D. M. 16°, 4598	5.8	4I 22	2.86	16 38 24.4	16.49	
1966	7597	Cephei	5.4	41 36	0.75	71 46 12.8	16.51	02
1967	7595	v Cephei	4.6	41 59	1.73	60 34 01.9	16.53	03
1968	7598	π² Cygni	4.4	42 22	2.21	48 45 16.4	16.54	0:
1969	7605	12 Cephei	5.8	43 53	1.77	60 08 09 0	16.62	03
1970	7606	13 Pegasi	5.3	41 26	2.86	16 43 42.7	16,64	0
170	760 <del>7</del>	14 Pegasi ,	5.I	21 44 32	+ 2.65	20, 36 58.3	+ 16.65	0.
972		Pegasi	5.6	45 56	2.81	19 15 52.4		
973	7623	15 Pegasi	5.9	47 09	2.67	28 13 57.9	16.7S	0.
974	7627	16 Pegasi	5.4	47 36	2.73	25 21 39.6	16.79	0:
1975	7631	Cygni	5.8	47 57	2.02	55 13 58.3	16.82	00
1976*	- 1	Pegasi	5-5	48.0	2.82	19 06	16.82	• • • •
1977*	1	D. M. 20°, 5046	5.6	50.8	2.80	20 42	16.95	
1978	7641	17 Pegasi	5-5	51 06	2.93	11 30 27.6	16.96	+ .0:
1979	7658	Cephei	5.5	53 17	1.70	63 03 15.2	17.06	02
980	7659	18 Pegasi	5.6	54 08	3,00	6 08 34.6	17.11	+ .04
180	7660	28 Aquarii	5.6	21 54 57	+ 3.07	0 01 45.0	+ 17.14	05
1982	7662	19 Pegasi	5.6	55 12	2.98	7 40 52.7	17.15	+ .01
983	7664	20 Pegasi	5.8	55 14	2.92	12 32 46.0	17.15	.00
1984	7676	Cygni	5.5	57 27	2.19	52 18 14.5	17.26	.00
1985	7686	16 Cephei	5.1	57 32	0,88	72 36 30.9	17.27	<b>r</b> ç
986	7681	Lacertæ	5.8	58 o6	2.41	44 04 19.0	17.29	.00
987	7685	32 Aquarii	5.6	58 37	3.09	_ 1 29 09.2	17.30	03
988	7688	a Aquarii	3-7	59 37	3.08	_ 0 54 08.2	17.35	00
989	7689	$\nu$ Pegasi	4.9	59 38	3.03	4 28 22.1	17.35	+ .00
990	7693	23 Pegasi	5.6	22 00 09	2.71	28 22 54.4	17.37	+ .0.4
991	7699	18 Cephei	5.7	22 00 17	+ 1.78	62 32 08.6	+ 17.38	
992	7700	ξ Cephei (2d *)	4.5	00 19	1.74	64 02 36.6	17.38	+ .08
993	7705	Lacertæ	5.3	01 10	2.40	44 25 49.8	17.42	10
994	7707	20 Cephei	5.7	01 22	1.82	62 12 00.8	17.42	+ .01
995	7706	ι Pegasi	4.0	01 25	2.70	24 45 34.5	17.43	+ .02
996	7708	19 Cephei	5.6	or 28	1.87	61 41 46.3	17.43	- ,02
997	7712	25 Pegasi	5.6	02 12	2,82	21 07 09.7	17.46	- ,or
998	7721	$\pi$ Pegasi (pr.)	5.5	03 55	2.65	32 35 13.3	17.53	03
999	7723	θ Pegasi	3.7	04 09	3.03	5 36 29.6	17.55	+ .05
000	7731	π Pegasi (sq.)	4.1	04 39	2,66	32 35 24.5	17.56	+ .03

No.	В. А. С.	Constellation.	Mag.	A. R. 1880.	Annual Variation.	Declination 1880.	Annual Precession.	Proper Motion.
				h. m. s.	s.	o / //	,,	"
2001*		Pegasi	6.0	22 04.8	+ 2.95	11 02	+ 17.57	• • •
2002	7733	28 Pegasi	5.8	04 50	2.83	20 23 19.8	17.57	.00
2003	7746	Lacertæ	5 • 5	06 30	2,31	50 13 50.3	17.64	.00
2004	7749	$\zeta$ Cephei	3.6	06 41	2.07	57 36 35.5	17.65	01
2005	7755	λ Cephei	5.4	07 26	2.03	58 49 21.3	17.68	04
2006	7754	Cephei	5.8	07 29	2.15	56 14 35.1	17.69	+ .16
2007	7753	Pegasi	5 · 5	07 29	2,66	34 00 47.6	17.69	10
2008	7758	24 Cephei	5.0	07 30	1,16	71 44 59.8	17.69	03
2009	7760	Cephei	5 · 7	<b>07</b> 54	1.39	69 32 24.4	17.70	+ .08
2010	7759	Cephei	5 · 5	08 04	1.98	60 09 56.0	17.71	
2011	7765	Lacertæ	4.8	22 08 44	+ 2.58	39 07 07.8	+ 17.74	16
2012		Lacertæ	5.8	08 53	2.45	44 50 44-5	17.74	
		Lacertæ	5.8	00 JJ 09 4I	2.51	42 21 33.8	17.77	.00
2013	7770	ε Cephei		10 37	2,20	56 26 29.8	17.81	+ .02
2014	7778	•	4.7	10 44	2.61	37 09 06.4	17.81	+ .02
2015	7777	I Lacertæ	4.6		1	62 12 10.5	17.96	.00
2016	7789	25 Cephei	6.1	14 17	1.94	11 36 04.2	17.90	+ .04
2017	7796	31 Pegasi	5.1	15 37	2.95		18.02	+ .01
2018	7798	32 Pegasi	4.8	15 47	2.76	27 43 36.2	18.03	+ .02
2019	7800	2 Lacertæ	4.8	16 04	2.47	45 55 57.9		
2020	7807	33 Pegasi	6.1	17 53	2.89	20 14 32.2	18.10	02
2021	7815	3 Lacertæ	4.7	22 18 51	+ 2.35	51 37 41.0	+ 18.13	21
2022	7814	$\pi$ Aquarji	4.5	19 09	3.06	0 46 08.3	18.14	01
2023	7820	4 Lacertæ	4.9	19 39	2.42	48 52 05.6	18.16	02
2024	7823	34 Pegasi	5.8	20 31	3.06	3 46 54.6	18.19	+ .05
2025	7827	35 Pegasi	5.1	21 47	3.04	4 05 41.4	18.24	<b>—</b> .29
2026*		Lacertæ	5.8	22.2	2.62	39 12	18.25	•••
2027	7851	Cephei	5.0	·22 38	- 3.90	85 30 10.9	18.27	+ .04
2028*		Cephei	5.6	22.7	+ 1.55	70 09	18.27	•••
2029	7832	$\zeta$ Aquarii	3.9	22 39	3.09	- o 38 oo.2	18.27	+ .03
2030	7833	36 Pegasi	5 · 7	23 09	3.00	8 31 00.8	18.29	or
2031	7837	26 Cephei	5 • 7	22 23 14	+ 1.92	64 31 12.8	+ 18.29	04
2032*		Pegasi	5 · 5	23.5	2.80	26 09	18.30	,
2033	7845	5 Lacertæ	4.5	24 32	2.50	47 05 35-3	18.34	+ .01
2034	7843	38 Pegasi	5 • 4	24 33	2.74	31 57 33-5	18.34	+ .11
2035	7848		var. 3.8–4.7		2.21	57 48 04.1	18.34	02
2036	7850	6 Lacertæ	4.9	25 18	2.57	42 30 31.5	18.37	.00
2037	7857	28 Cephei	5.9	25 47	0.52	78 10 26.4	18.38	o6
2038	7855	7 Lacertae	4.0	26 2I	2.46	49 39 56.1	18.40	or
	7874	$\rho$ Cephei	5.9	28 48	0.59	78 12 30.1	18.48	03
2039 2040	7868	η Aquarii	4.0	29 11	3.08	- 0 44 <b>0</b> 7.8	18.50	06
			İ		1	69 17 34.6	+ 18.51	+ .23
2041	7876	Cephei	6.0	22 29 34 30 10	+ 1.73	75 36 28.5	18.53	oi
2012	7881	=	5.4	5	2.66	39 00 48.9	18.54	02
2013	7880	8 Lacertee (2d *)	5.3	30 32 32 27	2.46	50 55 34.7	18.61	08
2014	7888	g Lacertæ	5.3	32 27 32 49	1	73 01 13.5	18.62	+ .04
2045	7896	31 Cephei	5-3		1.49		18.63	
2046	7893	40 Pegasi	5.8	33 04	2.90	18 54 07.0	18.65	07
2047	7901	to Lacertæ	4.9	33 53	2.68	38 25 34.2	1	+ .02
2018		Cephei	5.8	33 55	2.34	56 10 21.8	18.65	
2019*	1	Lacertæ	5.8	34.2	2.70	36 58	18.66	
2050	7902	30 Cephei	5.3	34 24	2.11	62 57 38.9	18.67	02

No.	B. A. C.	Constellation.	Mag.	A. R. 1880.	Annual Variation.	Declination 1880.	Annual Precession.	Proper Motion.
				h. m. s.	s,	0 1 11	,,	. "
2051		Pegasi	5 · 7	<b>22</b> 34 55	+ 2.95	13 55 02.7	+ 18.69	
2052	7906	II Lacertæ	4.6	35 15	2.62	43 39 01.0	18.70	.00
2053		Lacertac	5.8	35 <b>2</b> 6	2.42	53 13 14.7	18.70	
2054	7908	ζ Pegasi	3.5	35 29	2.99	10 12 19.8	18.71	.00
2055	7915	12 Lacertæ	5 • 4	36 06	2.68	39 35 55.9	18.72	01
2056	7914	o Pegasi	4.6	36 08	2.81	28 40 54.4	18.72	ro. —
2057	7923	η Pegasi	3.1	37 22	2.81	29 35 39.2	18.76	or
2058		D. M. 53°, 2960	5.8	37 26	2.44	53 16 51.7	18.76	
2059	7932	13 Lacertæ	5.3	38 45	2.67	41 11 24.0	18.80	+ .02
2060	7943	ξ Pegasi	4.6	40 42	2.99	11 33 28.9	18.86	49
2061	7945	λ Pegasi	3.9	<b>22</b> 40 45	+ 2.88	22 56 04.9	+ 18.87	+ .02
2062	7948	Lacertæ	6.0	40 50	2.63	43 54 49.1	18.87	.00
2663		D. M. 36°, 4934	5.8	42 41	2.74	36 47 0g.7	18.92	
2064		Lacertæ	6.0	43 49	2.47	53 46 51.0	18.95	
2065		Cephei	6.0	44 13	2.24	62 18 21.4	18.97	.00
2066	7958	$\mu$ Pegasi	3.8	44 13	2.88	23 58 06.3	18.97	
2067	7951	D. M. 55°, 2820	5.7	44 49	1	55 15 58,3	18.98	.00
2068	7967	ι Cephei	3.6	44 49 45 <b>2</b> 5	2.45	65 34 09.6	19.00	
2069	7971	σ Pegasi	(	45 25 46 19				14 + .06
2070	7972	15 Lacertæ	4.9 5.1	46 37	3.05 2.69	9 11 51.8	19.02	
-		_	-				19.03	.00
2071	7973	Cephei	5.8	22 46 41	+ 2.31	61 03 32.8	+ 19.04	+ .07
2072	7975	Pegasi	5.4	47 08	2.95	16 12 18.2	19.05	oi
2073	7990	Cephei	4.9	47 54	- 0.07	82 31 01.7	19.07	+ .07
2074	7983	Lacertæ	6.0	48 18	+ 2.67	44 06 41.5	19.08	•00
2075	7984	Lacertæ	5.7	48 36	2.73	39 44 14.4	19.09	.00
2076	7988	$\rho$ Pegasi	4.8	49 11	3.02	8 10 35.9	19.10	+ .05
2077*		Lacertæ	5.7	49.5	2.77	36 27	19.11	* * *
2078*		Lacertæ	5.8	50.09	2.78	35 42 39.8	19.13	• • • •
2079	7995	Lacertæ	5.1	51 10	2.61	49 05 35.3	19.13	.00
2080	7997	51 Pegasi	5.3	51 34	2.95	20 07 33.2	19.14	+ .07
2081	7999	Lacertæ	5.4	22 51 46	+ 2.63	48 02 36.1	+ 19.17	.00
2082	8005	2 Piscium	5.8	53 18	3.08	0 19 20.3	19.21	12
2083*		D. M. 51°, 3514	5.8	53 59	2.59	52 00 37.3	19.23	.00
2084*		D. M. 30°, 4859	5.8	55.0	2.85	30 27	19.25	
2085*		D. M. 56°, 2923	5.8	55.1	2.51	56 18	19,25	
2086	8026	Cephei	5.0	£5 19	- 0.23	83 42 14.7	19.26	+ .05
2087	8023	o Andromedæ	3.8	56 24	+ 2.75	41 40 54.4	19.28	+ .03
2088*		D. M. 22°, 4762	5.8	56.5	2.92	22 40	19.29	
2089	8031	$\beta$ Piscium	4.6	57 46	3.05	3 10 26.9	19.32	02
2090	8032	$\beta$ Pegasi	var. 2.5-2.8	57 57	2.90	27 25 56.3	19.32	+ .15
2091	8034	a Pegasi ,	2.4	22 58 47	+ 2.99	14 33 36.5	+ 19.34	02
2092	8036	3 Andromedæ	4.7	58 48	2.68	49 23 59.1	19.34	+ .12
2093	8039	Cephei	5.3	58 59	2.26	66 33 45.0	19.35	+ .04
2094	8051	55 Pegasi	5.0	23 00 58	3.03	8 45 42.9	19.39	+ .01
2095	8052	56 Pegasi	5,1	OI 16	2.92	24 49 15.5	19.40	03
2096	8054	I Cassiopeze	5.0	01 33	2.52	58 46 17.0	19.40	01
2097		D. M. 52°, 3371	5.4	01 51	2.63	52 10 02.4	19.41	
2098	8058	4 Andromedæ	5.4	02 10	2.73	45 44 22.0	19.42	03
2099	8059	5 Andromedæ	5.7	02 10	2.71	48 38 32.2	19.42	+ .13
2100	8060	A Piscium	5.6	02 19	3.07	1 28 29.6	19.42	+ .10
			3.0	J2 J2	3.01	. 25 Ag. 0	-9.42	1 .10

REPORT OF THE SUPERINTENDENT OF

No.	B, A, C.	Constellation.	Mag.	A. R. 1880.	Annual Variation.	Declination 1880.	Annual Precession.	Proper Motion
				h. m. s.	<b>s.</b>	• • 11	,,	,,
2101	8070	57 Pegasi	5 - 3	23 03 28	+ 3.03	8 01 37.3	+ 19.45	+ .01
2102	8071	58 Pegasi	5.3	03 59	3.02	9 10 19.4	19.46	+ .04
2103	8074	$\pi$ Cephei	4.6	04 05	1.89	74 44 19.2	19.46	04
2104		Pegasi	5.7	04 45	2.97	16 56 42.1	19.47	
2105	8076	6 Andromedæ	6.0	04 55	2.76	42 54 00.7	19.48	14
2106	8078	59 Pegasi	5.4	05 41	3.03	8 04 08,0	19.49	+ .01
2107	8082	7 Andromedæ	4.8	07 03	2.73	48 45 02.9	19.52	+ .08
2108	8083	Cassiopeæ	5.8	07 30	2.86	56 30 20.8	19.53	+ .28
2100	8105	γ Piscium	3.9	10 57	3.11	2 37 35.8	19.60	- ,01
2110	8106	Cephei	5.6	11 00	2.28	70 14 01.0	19.60	oi
		-			1		1	
2111	8107	Andromedæ	5.5	23 11 14	+ 2.70	52 33 58.6	+ 19.60	28
2112	8114	8 Andromedæ	4.9	12 11	2.76	48 21 35.4	19.62	.00
2113	8124	o Cephei	5.1	13 42	2.44	67 27 17.5	19.64	- ,02
2114	8125	11 Andromedæ	5-5	13 55	2.78	47 58 01.1	19.65	+ .03
2115	8128	10 Andromedæ	5.9	14 10	2.85	41 25 18.4	19.65	+ .05
2116	8127	b Piscium	5 - 4	14 14	3.06	4 43 35.6	19.65	04
2117	8131	τ Pegasi	4.8	14 42	2.96	23 05 01.5	19.66	01
2118	8136	12 Andromedæ	5.8	15 06	2.89	37 31 39.5	19.67	05
5110	8138	Cassiopeæ	5.8	15 20	2.59	61 33 24.2	19.67	+ .04
2120	8141	б4 Pegasi	5.7	16 04	2.92	31 09 18.7	19.68	+ .02
2121	8149	66 Pegasi	5.3	23 17 01	+ 3.02	11 39 24.6	+ 19.70	+ .03
2122	8153	Cassiopeæ (sq.)	6.1	17 12	2.65	59 28 32.6	19.70	+ .01
2123	8159	67 Pegasi	5.8	18 58	2.93	31 43 33.9	19.73	.00
2121	8160	v Pegasi	4.5	19 23	2.99	22 44 37.9	19.74	+ .07
2125	8162	4 Cassiopeæ	5.3	19 31	2.64	61 37 27.4	19.74	+ .02
2126	8169	κ Piscium	5 · 3	20 47	3.08	0 35 55.0	19.76	12
2127	8177	θ Piscium	4.6	21 53	3.04	5 43 13.0	19.78	03
2128	8182	70 Pegasi	4.8	23 05	3.03	12 05 55.6	19.79	+ .06
2129	8818	Cassiopeæ	5.5	24 30	2.76	57 53 15.5	19.81	+ .02
2130	8195	14 Andromedæ	5.6	25 23	2.94	38 34 38.2	19.82	05
2131*		Pegasi	6.0	23 25.5	+ 2.96	28 00	+ 19.82	
2132	8203	71 Pegasi	5.6	27 28	3.00	21 50 13.0	19.85	02
2133*		Pegasi	5.8	27.9	3.00	20 11	19.85	
2134	8213	Cephei	6.0	27 50	_ 0.04	86 38 43.4	19.85	.00
2135	8206	72 Pegasi	5.1	28 00	+ 2.96	30 39 46.8	19.86	02
2136	8211	73 Pegasi	5.9	28 42	2.96	32 50 02.3	19.86	+ .06
2137	8212	15 Andromedæ	5.8	28 45	2.92	39 34 30.5	19.86	03
2138	8217	Cephei	6.0	29 46	2.56	70 58 44.0	19.88	10. +
2139	8224	λ Andromedæ	3.9	31 42	2.92	45 48 29.3	19.90	39
2140	8227	75 Pegasi	5.5	31 53	3.02	17 44 10.2	19.90	+ .07
2111	8229	ι Andromedæ	4.4	23 32 15	+ 2.92	42 36 14.1	+ 19.91	+ .02
2142	8231	18 Andromedæ	5.5	33 20	2.89	49 48 25.4	19.92	02
2143	8234	Pegasi	5.8	33 49	3.06	9 00 46.2	19.92	03
2144	8233	ι Piscium	4.3	33 47	3.08	4 58 32.7	19.92	45
2145		Cephei	5.8	34 08	2.56	73 20 15.2	19.93	.00
2146	8238	γ Cephei	3.5	.34 26	2.40	76 57 45.5	19.93	+ .15
2147	8237	κ Andromedæ	4.4	34 30	2.93	43 40 12.0	19.93	+ .02
2148 <del>*</del>		Andromedæ	6.0	34.7	2.96	36 03	19.93	
2149	8243	λ Piscium	4.7	35 55	3.06	1 07 10.0	19.94	17
2150		D. M. 63°, 2038	5.8	36 41	2.78	63 51 00.2	. 1	,
50	• •	2. 11. 05 12030 1	3.0	50 41	2.,0	05 51 00.2	19.95	• •

THE UNITED STATES COAST SURVEY.

No.	B. A. C.	Constellation.	Mag.	A. R. 1880.	Annual Variation,	Declination 1880.	Annual Precession.	Proper Motion,
9151	8250	um Domosi		h. m. s.	5.	0 1 11	11	"
2151	_	77 Pegasi	5.1	23 37 16	+ 3.05	9 39 55.8	+ 19.95	,00
2152	8256	78 Pegasi	5.0	37 57	3.01	28 41 50.1	19.96	10. +
2153	8261	ψ Andromedæ	5. T	40 05	2.95	45 45 14.8	19.98	01
2154*	• •	Cassiopeæ	6.0	41.2	2.90	56 47	19.98	•••
2155	8268	τ Cassiopeæ	5.1	41 12	2.90	57 59 01.2	19.98	òo. +
2156	8273	Cephei	5.3	42 11	2.83	67 08 24.5	19.99	or
2157	8279	6 Cassiopeæ	5.8	43 00	2.88	61 32 53.0	20.00	+ .04
2158*		Andromedæ	5 · 7	43.6	3.∞	35 46	20.00	• • •
2159	8296	Pegasi	5 · 5	46 18	3.04	21 00 14.1	20.02	+ .02
2160	8299	φ Pegasi	5.2	46 23	3.04	18 27 14.9	20.02	10. +
2161	8300	82 Pegasi	5.7	23 46 30	+ 3.06	10 16 46.4	+ 20.02	04
2162	8310	ρ Cassiopeæ	4.7	48 24	2.96	56 49 55.6	20.03	or
2163*		D. M. 46°, 4214	5 · 7	49 30	3.00	46 41 17.5	20.03	
2164*	٠.,	Pegasi	5.8	50.6	3.05	21 59	20.04	
2165	8321	Cephei	6.0	50 51	2.68	82 31 21.3	20.04	04
2166		Andromedæ	5.8	50 59	3.02	41 59 25.6	20.04	
2167	8322	Cassiopeæ	5.8	51 06	3.00	55 02 16.9	20.04	05
2168	8324	ψ Pegasi	4.4	51 39	3.05	24 28 28.9	20.04	or
2169	8330	σ Cassiopeæ	4.8	52 55	3.01	55 05 13.5	20.04	,02
2170	8331	ω Piscium	4.2	53 09	3.08	6 11 55.9	20.04	13
2171*		Andromedæ	5.7	23 53.4	+ 3.05	33 04	+ 20.04	
2172*		D. M. 44°, 4538	5.8	54.6	3.03	44 35	20.05	
2173	8344	Cassiopeæ	6.0	55 30	3.02	60 33 16.2	20.05	or
2174*		D. M. 16°, 5034	5.8	57. I	3.07	16 52	20.05	
2175	8359	9 Cassiopeæ	5.5	58 03	3.05	61 37 10.8	20.05	+ .02
2176		D. M. 41°, 4923	6.4	58 27	3.06	41 25 31.0	20.05	• • • •
2177	]	Cephei	5.8	58 28	3.04	66 29 49.8	20.05	
2178	8366	Cassiopeze	5.8	58 54	3.06	60 38 43.7	20.05	
2179	8370	86 Pegasi	5-5	59 32	3.07	12 43 43.2	20.05	+ .04

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