

KG
11365
257

M.9

Catalogue Stars

1854.

34
77
2
106
86
192

KG-11 365.257

Catalogue of Stars selected from the
 Zone Catalogue to be reobserved with
 the Transit Circle



No in Zone Cat.	Magn.	R of Star	Reading of Circle
2 2	8	0 ^h 01 ^m 56 ^s	311° 57'
(4) 4	8	9 08	311 21 + Obs'd in 1863?
7 18	8-9	12 30	312 2'
(11) 12	8-9	24 24	311 41'
16 17	8-9	32 51	312 3'
(21) 22	8-9	37 33	311 22
27 28	8	50 07	311 23
(31) 32	6	56 15	311 48
33 34	9	0 ^h 59 40	311 49
(37) 38	6-7	1 ^h 8 03	312 15
(42) 43	6-7	15 03	311 25
(44) 45	8	24 46	311 34
46 47	8-9	33 19	311 30
49 50	8-9	36 14	312 33
50 51	8	41 27	311 46
54 55	9	49 08	311 28
55 56	8-9	1 ^h 54 06	311 45
61 62	8-9	2 01 9	312 09
(66) 67	7-8	7 3	311 24
(69) 70	8	10 24	311 19
71 72	8	14 16	312 5
74 75	9	17 49	311 28
(76) 77	8	23 57	311 56
79 81	8	27 20	311 47
82 84	9	32 01	311 39

(Since Observed)
 Has this star a proper motion in Dec

about 312; 10

Obs Ill Obs Ill

1854 - W.C.B.

> Dec 2 Ill 2 Dec 8 W < r Pegasi-

" 2 " 2

" 8 W

" 2 " 2

" 8 W

" 2 " 2

" 8 W

" 2 " 2

" 8 W

P.S.E.

W.C.B. 1855

W.C.B.

Dec 20 " E Dec 21 E Jan 1 E Jan 8 W

" 20 " E " 21 E Jan 1 E Jan 8 W

" 20 " E " 21 E Jan 1 E Jan 8 W

" 20 " E " 21 E Jan 1 E Jan 8 W

" 20 " E " 21 E Jan 1 E Jan 8 W

" 20 " E " 21 E Jan 1 E Jan 8 W

" 20 " E " 21 E Jan 1 E Jan 8 W

" 20 " E " 21 E Jan 1 E Jan 8 W

" 20 " E " 21 E Jan 1 E Jan 8 W

" 20 " E " 21 E Jan 1 E Jan 8 W

" 20 " E " 21 E Jan 1 E Jan 8 W

" 20 " E " 21 E Jan 1 E Jan 8 W

" 20 " E " 21 E Jan 1 E Jan 8 W

" 20 " E " 21 E Jan 1 E Jan 8 W

" 20 " E " 21 E Jan 1 E Jan 8 W

" 20 " E " 21 E Jan 1 E Jan 8 W

" 20 " E " 21 E Jan 1 E Jan 8 W

" 20 " E " 21 E Jan 1 E Jan 8 W

" 20 " E " 21 E Jan 1 E Jan 8 W

" 20 " E " 21 E Jan 1 E Jan 8 W

" 20 " E " 21 E Jan 1 E Jan 8 W

" 20 " E " 21 E Jan 1 E Jan 8 W

" 20 " E " 21 E Jan 1 E Jan 8 W

" 20 " E " 21 E Jan 1 E Jan 8 W

Ill W 2nd 1/2 early
B Ceti

Jan 8 not more than 7th

Apr, Br 8-9 E 8 W.C.B.

not seen Jan 12. Disc

not seen (Jan 8) not more than 10

cannot be observed with any magnifying

telescope

not seen (Jan 8)

Jan 8 1st time last

9-8

double star

No	Mag	NR	Circle Reading
85	83	8	2.. 39 54
88	86	8	43 52
91	89	8	51 51
94	92	8	2 55 36
98	96	8	3 0 5
103	(100)	8	6 29
108	105	8	9 36
110	108	7-8	12 27
115	(113)	7	16 03
118	115	8	26 48
122	119	9	31 25
123	120	8-9	38 11
126	123	8	43 36
128	(125)	5	46 48
129	126	8	3 50 46
134	131	8-9	4 1 9
135	(132)	6-7	4 36
137	(134)	7-8	8 29
140	139	8	13 30
142	143	8	18 22
147	146	9-10	24 50
152	151	8	28 22
156	156	8-9	29 54
159	159	8	33 22
162	(162)	7-8	37 10
169	169	8	40 33
175-173	(173)	7	43 10
176	176	7	47 19
182	182	8	50 46
186	186	6-7	54 17
			311 56'
			311 17
			311 19
			311 36
			311 33
			312 12
			311 18
			312 17
			312 00
			311 29
			312 04
			312 14
			311 54
			311 34
			311 22
			311 59
			312 2
			312 18
			311 33
			311 51
			311 43
			312 18
			312 8
			311 42
			312 05
			311 58
			311 29
			312 09
			312 09
			311 53

there is a star of 8-7 mag. that brought at 4^h 16^m 17^s of which the C.R. is 311.58 about

4 31 30 311 42 = 49 Eridani

Lat $33^{\circ} 5'$
Jan 22

Jan 22³ 1855
W.C.B. observer.



Mr

Mr Ha

OL	MC	OL	MC
Jan 22		1855	
W. C. B.	West.	W. C. B.	Jan 25 East
th ₈₋₉ W. C. B.	West.*	W. C. B.	" 25 East
W. C. B.	West.	W. C. B.	" 25 East
W. C. B.	West.	West	~~25~~ "
W. C. B.	West.	W. C. B.	25 East

*no less than 3 stars in the field.
of the 8th magnitude.

W.C.B. West	W.C.B. -25 East.
W.C.B. West	W.C.B. 25 East
not seen	not seen
W.C.B. West	W.C.B. 25 East.
W.C.B. West	W.C.B. 25 East

This star is $+4'$ out of place, in Dec.

W.C.B. West. W.C.B. Jan 25 East
W.C.B. West. W.C.B. Jan 25 East 5'

1st W.C.B. West W.C.B. Jan 25. East
 8th W.C.B. West W.C.B. Jan 25. East. 8th Aug. both obs.
 9th W.C.B. West W.C.B. Jan 25. East brighter than last star

W.C.B.	west	W.C.B. Jan 25 East
W.C.B.	west	W.C.B. " 25 East
W.C.B.	west	W.C.B. " 25 East
W.C.B.	west	W.C.B. " 25 East.
not seen		not seen Jan 25 th

P.S.C. west P.S.C Jan 25 E.

P.L.C. work in 1125 E 250 yds in field
last in 125 E

P.S.C west " Jan 25 8
P.S.C West " Jan 25 8

P.S.C. West. 11 June 25 E

P.S.C. - West. n Jan 25 E.

P.S. E - West. Jan 25 -

PSL mac P.S.C. Jan 25 East
 PSL hnd PSL " 25 E

No	Mag	NR	Circle Reading
189 189	7	4 " 57 " 49	311° 24'
193 193	8	5 " 0 51	310 38
196 (196)	6-7	~~4~~ ~~10~~	311 32
203 203	8-9	10 49	311 57
207 207	8	15 31	311 28
208 208	7	18 14	311 59
218 219	7-8	32 04	311 39
222 223	8-9	35 52	312 17
227 228	8	47 12	311 42
232 232	7	47 39	311 27
236 (236)	6	51 16	311 51
237 (237)	7-8	5 " 57 34	311 30
244 244	8	6 " 8 43	311 19
251 250	8	18 17	311 29
260 259	8-9	22 48	312 19
263 262	8-9	27 25	311 46 lost
266 265	8	30 27	311 44 lost
275 274	8	33 50	312 17
280 279	8-9	37 02	311 39
287 286	8-9	40 27	311 54
295 295	8-9	47 53	311 51
306 306	8	52 41	312 06
311 311	8	6 " 55 50	311 50
326 326	8	7 " 01 19	312 08
328 328	8-9	4 59	311 33
335 335	8	7 46	311 30.
342 342	7	11 3	311 50

C.B. = 311.15 (Right HD)

No	Mag	R	Circle Reading
352 ~~352~~	7	7. 14. 59	312° 22'
360	8	19 28	311 51
363	7	23 25	311 55
Caster		25 17	280 11
370	8	27 5	311 53
(376)	8	30 57	311 33
(379)	8	35 33	311 51
(382)	8	39 30	312 00
389	9	46 10	312 13
397	8-9	50 12	311 42
(401)	7-8	52 53	312 03
407	8	59 27	311 49
~~417~~ 416	9	8 6 19	312 21
420 421	8	15 03	312 19
422 423	7-8	18 15	312 19
431 432	7	22 23	311 52
434 (435)	7	27 36	311 31
443 444	8-9	37 16	311 07
454 455	8	40 03	311 49
457 457	8-9	45 26	311 59
461 461	8	49 12	311 26
465 (468)	6	54 27	312 18
471 471	8	9 0 2	311 44
478 478	8	6 21	311 58
479 479	8-9	10 36	311 44
486 486	8	14 39	312 11
488 488	9	21 20	311 56
491 (491)	8	9 30 23	312 02

8. 37. 16 - 311. 07
 8. 40. 03 - 311. 49
 9. 00. 2 - 311. 44

these stars have been observed with
 the old apocryphal telescope, there is a
 star of 9.10 mag. preceding with 10.5 to be
 observed

(X Leonis 9.23.21 - 288° 47')

No	Mag	R	Circle Reading
352 ~~352~~	7	7. 14. 59	312° 22'
360	8	19 28	311 51
363	7	23 25	311 55
Center		25 17	280 11
370	8	27 5	311 53
(376)	8	30 57	311 33
(379)	8	35 33	311 51
(382)	8	39 30	312 00
389	9	46 10	312 13
397	8-9	50 12	311 42
(401)	7-8	52 53	312 03
407	8	59 27	311 49
~~417~~ 416	9	8 6 19	312 21
420 421	8	15 03	312 19
422 423	7-8	18 15	312 19
431 432	7	22 23	311 52
434 (435)	7	27 36	311 31
443 444	8-9	37 16	311 07
454 455	8	40 03	311 49
457 457	8-9	45 26	311 59
461 461	8	49 12	311 26
465 (468)	6	8 54 27	312 18
471 471	8	9 0 2	311 44
478 478	8	6 21	311 58
479 479	8-9	10 36	311 44
486 486	8	14 39	312 11
488 488	9	21 20	311 56
491 (491)	8	9 30 23	312 02

~~High P. maybe 31° 57'~~

336. 16.]

(X Lion's 9 23 21 - 268° 47')

January 22^d 1855. Jan 25th
 Ther 2

No	Mag	AR	Circle Reading	
492	7	9.. 34.. 52	312 00	γ 37.34
501	8	42 ~~37~~ ~~39~~ 40	311 55	ϵ Leonis 287° 57'
506	8	45 54	312 28	
~~508~~				
508	8	49 53	311 48	
509	9	9 53 45	312 26	μ Leonis 10 0 42 299° 48'
512	~~8~~ 10	~~00~~ 25	~~312~~ 2	
513	9	7 17	311 56	
514	8	13 51	311 52	
516	8	17 15	312 26	
520 (519)	6	22 47	312 16	
524 (527)	7	33 39	311 53	
527 526	9	38 35	311 31	
533 (531)	7	49 37	311 54	
535 (533)	7	53 32	311 33	
540 538	8 10	56 30	311 37	7 th mag. - back. S. f. 8 th mag.
543 541	8 11	00 53	312 24	
547 (545)	6	6 15	311 39	
553 (551)	7	15 46	311 27	
554 (552)	7	20 32	312 28	
559 (557)	5	29 25	312 24	
560 558	7	33 24	312 14	
563 (561)	6-7	41 32	311 53	β Leonis - 11h 41m 43s - 297m 00
564 562	8-9	47 29	312 07	
566 (564)	8-9	53 ~~58~~ 56	311 57	
568 (566)	7 11..	59 40	312 12	
570 568	7-8 12..	1 55	312 19	
575 (573)	6-7 11	08	312 21	

1855 Mar 29

O.H.

S.C.

O.H.

S.C.

J.H. East

a MCB 1856 E

9. Fr. Fr. Apr. 5th E

" " " E

" " " E

W.C.B. West
E Lewis 1st wire lost
W.C.B. WestWest W.C.B. 1st W. 0.2 100 soon

" " "

" " "

W.C.B. West pulse star just above

W.C.B. West
1855 May 7th O.S.C. West very faint 9-10 mag.
or Lewis W.C.B. with comp. 7 mag. spec.P.S.C. 1st West. May 7th

" " "

26th Apr. 1856 S.C. West 3rd wire lost

" " "

26th Apr. 1856 S.C. W. 2nd W. C.B. 1st wire of 1st one lost both 8 mag

" " "

26th Apr. 1856 S.C. W star of 6th mag precedes 3.4 & 5th wire obs.

" " "

P.S.C. May 7 J.H. West

" " "

P.S.C. " " W Comp. star 8-9 mag

" " "

26th Apr. 1856 S.C. West Very hard to make out 3 first wires lost.

" " "

P.S.C. May 7 W

Comp. S. h. & inf. both 9th mag.

" " "

P.S.C. " " W

P.S.C. May 10th 1855 first 2 wires lost

" " "

P.S.C. " " two stars

" " " J.H. E

" " "

P.S.C. May 3 J.H. West 8 P.S.C. May 7 W

" " " E

P.S.C. May 3 J.H. West 6 P.S.C. " " W

" " " E

P.S.C. May 3 J.H. West 7 P.S.C. " " W

" " " E

P.S.C. May 3 J.H. West 8.9 P.S.C. May 7 J.H. West

" " " E

P.S.C. May 3 J.H. West 5.6 P.S.C. " " W

" " " E

P.S.C. May 3 J.H. West 9 P.S.C. " " W

" " " E

P.S.C. May 3 J.H. West 7.8 P.S.C. May 7 W

" " " E

P.S.C. W " " 2 wires lost

" " " E

P.S.C. W " " two stars 6th wire just lost

" " " E

J.F. Fr. May 6 J.H. W O.S.C. W May 7 /55

W.C.B. May 23 1855 J.H. East

" " "

" " "

" " "

" " "

Note: a very bright star fell 8-9 which was observed - first wires lost.

No		Mag	AR	Circle Reading	
580	578	8	12.. 14.. 6	311 43	
582	(580)	8	18 10	311 51	
586	584	8-9	25 28	311 51	p Corvi - 12..26..50 - 334..59
587	585	8-9	28 51	311 46	(should be by Cat., 311..55 stars agreeing with observation)
595	593	8	39 9	311 14	
596	594	8-9	43 12	312 20	
~~600~~	~~7~~				
600	(598)	7	48 7	311 31	
603	(601)	8-9	12 55 17	312 23	
608	607	8-9	13 7 33	312 13	
610	609	8	14 57	312 11	
616	(615)	7-8	20 44	312 26	α Virginis - 13..17..37 - 322..47
617	(616)	7-8	26 47	311 56	
~~618~~	~~9-4~~				
621	620	?	33 43	312 11	
622	621	?	37 31	312 25	
623	622	?	42 12	312 25	
625	624	?	48 38	312 04	
629	(628)	8	52 11	311 50	
633	(632)	8	13 55 4	311 37	
639	638-9	7	14 0 19	311 44	
644	647	8-9	5 18 21	311 21	
646	649	8	11 57	311 43	
649	(653)	8	15 15	312 21	
654	658	8-9	18 32	312 24	
660	(661)	8	28 29	311 32	
662	666	8-9	31 58	312 00	very faint last 2 - 3 & C ^h win
666	670	8	40 3	312 2	

Stu

1856

J. Fr. Fr. W. May 6th 8-9 May, 1856
 " " " J. Fr. Fr. May 7th 1856
 " " " " " 1st W. Coast

" " " { bird reading 311 + 9 + 4
not seen - none in the given reading
 circle set right,
 J. F. H. May 6th W

и . и и

h n d

not seen birds set right

155. May 6th W

и и и

u u m

4th May
6th May

1656
J. O. W. Post along 31st
J. F. F. " " "

J. F. F. J. F. F. 1855 June 18 J. F. F. 1856 June

I Fr. Fe " "
I Fr. Fe " "
lost J. F. F. 1856 May 31st Post

J. F. F. 8 June 18
J. F. F. 14 11
J. F. F. 11 11

2. Fr. Fr. Aug 15. 24. 8, 1556 first 3 w. lost
~~to the wind. - 10' N.~~
1855 May 23. 24. 8

Not seen — Not seen

Note seen
1855 May 23. *Ind*

1855 May 23. J.M.E.

1455. July 23. M2

Not Seen

1855 May 22 Wed

1855 May 123 M 2

1855- May 23. M 8.

Not Seen

Not seen *E. D. W.* May 31st East
peras 2 m. long

W. J. P. B. v. J. P. B. v. J. P. B.
1855 May 27 W. J. P. B. v. J. P. B.

1855 Aug 25 E.

all west
1856 June 20th Ark. Mo. I. F. F.

11	11	11	11	11
11	11	11	11	11
11	11	11	11	11

					2d probably not me
"	"	"	"	"	2 stars observed
"	"	"	"	"	not greater than
"	"	"	"	"	9th mag

		Mag.		NR		Circle Reading
670	(673)	7	14..	43	29	312° 22'
677	681	8-9		46	40	311 40
680	(684)	6		50	1	311 57
685	(689)	6		54	17	311 56
687	691	8	14	59	54	311 47
690	(694)	8-9	15	03	16	311 41
692	696-7	7-8		6	51	311 28
700	704	8-9		13	35	312 5
702	(706)	8		16	49	312 24
705	709	8-9		20	13	312 29
710	714	8		27	18	312 2
718	722	7		34	31	311 27
720	724	9		41	29	311 43
721	725	8		46	10	311 39
723	727	8		50	9	312 3
729	733	8-9		53	14	311 36
732	736	7	15..	57	00	311 18
738	(742)	9	16	4	29	312 11
744	(748)	8		7	24	312 17
750	(755)	8		14	43	311 32
756	(760)	X		21	12	311 59
765	770	8		24	98	312 6
769	(774)	7		29	37	311 50
774	779	8-9		33	51	311 34
779	(784)	8		41	49	312 12
780	(785)	7		45	35	312 06
782	787	8-9		52	50	312 48

β Librae 15..09..16 - 321..14
 α Serpens 15..37..11 - 305..30
 α Scorp 16.20.35 838..29

Oh. Ill Oh Ill

1855

J. F. F. East June 18
lost

1st W. only

J. F. F. East June 18

J. F. F. " "
J. F. F. " "
lost

1st W. wrong

J. F. F. " June 18
J. F. F. " "
J. F. F. " "

very faint 5th W. lost

J. F. F. June 18
J. F. F. " "
J. F. F. " "

J. F. F. " " faint
J. F. F. " "
J. F. F. " " very faint

N.C. 2d June 1856 Ill West

" " " " 1st of 1st star lost
" " " " 1st W. of 1st star lost

" " " " 4th W. lost

" " " "

" " " "

" " " " 1856 June 22 J. F. F. West
lost one only - clouds

" " " " 2nd W. doubtful clouds

clouds
S.C. June 22 1856 Ill West
clouds

1856 J. F. F.

8th May 31st J. F. F. East
May 31st J. F. F. East
2nd W. of 2nd lost

1856

J. F. F. June 20th West

" " "

" " "

" " "

" " "

" " "

" " "

" " "

circum broke
J. F. F. June 20 West

" " "

" " "

" " "

Ill June 25b Ill West

" " " " 2nd W. lost 2nd W. lost

1856 May 31 G.P.B. East S.C. June 2 1856

" " " " S.C. 2 Jun

" " " " 2nd star is 5th W. of 2nd star

" " " " 1856 June 20th J. F. F. West

" " " "

" " " "

" " " "

" " " "

" " " "

" " " "

" " " "

" " " "

1854gha

No	Mag	R	Circle Reading	
785 790	7	16	56 10	312° 19'
794 799	8	17	2 13	311 38
797 (802)	7	5	24	311 51
			α Herenlis	17.08.05 - 297.49
801 806	8	15	33	311 24
804 (809)	7	19	3	311 26
809 (816)	8	24	27	312 13
813 819	8-9	27	15	312 17
816 822	8-9	32	28	311 32
818 824	8	36	40	311 57
821 827	8-9	41	54	311 54
824 830	8	45	20	312 23
828 (834)	5-6	48	49	311 41
832 839	8	52	44	312 12
836 843	0	17	57	311 28
838 (846)	8	18	2 00	312 01
			π Sagittarii	18.05.09 - 333.28
844 (855)	7-8	8	14	311 44
850 (861)	7	9	37	311 25
856 (867)	8	15	58	312 06
857 (871)	5-6	19	42	312 17
865 (879)	8	23	7	312 06
866 (882)	7	29	41	311 33
873 (884)	7-8	33	57	311 57
875 891	8-9	41	31	312 14
879 (898)	7	47	26	311 26
			β Lyrae	18.44.46 - 279.17
883 (900)	7	55	49	312 01
887 904	7	18	39	311 58
892 909	8	19	2 39	311 41

No		Mag	R	Circle Reading	
			^h ^m ^s		
899	916	7-8	19 ^h 09 ^m 37 ^s	311 [°] 54'	1854 Sept
909	926	8	13 27	311 44	
~~919~~	~~937~~	~~8-8~~	~~19 00~~	~~312 20~~	
914	931	7	30 50	312 22	
916	933	8-9	34 31	311 32	
921	938	8-9	37 35	311 59	
922	(939)	7	40 05	311 38	✓ Aquila 19.38.37
926	943	8	43 25	311 54	✓ Aquila 19.42.56
930	947	8	46 27	311 34	
933	950	8	49 42	312 25	β Aquila 19.47.23
940	957	8	53 47	311 21	
941	958	8	19 57 18	311 38	
944	(961)	7-8	20 5 5 ✓	311 57	
949	966	8	9 48	311 31	2 ² Capricorn
956	973	8-9	13 15 ✓	311 27	
958	976	7-8	17 13	311 29	
959	(977)	8	21 6 ✓	311 59	
961	979	8-9	26 8 ✓	311 36	
963	981	8-9	30 47	311 52	
969	987	9	33 16 ✓	311 57	
970	988	8	41 13 ✓	311 24	
973	991	9	46 30 ✓	311 36	
979	996	8	53 34 ✓	311 55	
984	1001	8-9	20. 57 49	312 14	
986	1003	7-8	21 0 20 ✓	311 49	
989	(1006)	8-9	4 36	311 22	
992	1010	8-9	9 21 ✓	311 49	

Observed III

Obs

Etc

1854 Sept 12 E

Sept 13 W

1856 May 31 E S. only observed

1856 May 31 June 23 9 F. F. West yet day.

~~not obs~~~~not obs~~

1854 Sept 12 E

Sept 13 W

"

"

Sept 16

Sept 16 W

"

Sept 16 W

"

Sept 13 W

"

Sept 13 W

"

Sept 13 W

"

Sept 13 W

"

"

"

"

"

Sept 13 W

"

"

"

"

"

Sept 13 W

"

"

"

"

"

"

"

Sept 13 W

"

Sept 13 W

Sept 12 East
Oct 24 West

Oct 26 E

Oct 24 West

~~Oct 26 E~~

Oct 26 S

"

"

"

"

Oct 24 West

Oct 26 S

has been observed
not to be found (C²)

No		Mag	R		Circ Reading		
996	(1014)	8-9	21..	13.. 32	312°	20'	
1000	(1015)	7		18.. 57 ✓	311	54	
1006	(1024)	8-9		25 50 ✓	311	57	
1011	(1029)	8		33 37 ✓	311	44	
1013	(1031)	8-9		39 23 ✓	312	12	
1015	(1033)	8		43 1	312	19	
1020	1039	9		47 50	10 ²² (28/1/1911)	311	49
1029	1042	8	21..	59	00 ✓	311	15 312.. 29
1030	1049	9	22..	6	20 ✓	311	30
1034	(1053)	9					
1036	1055	9		11 00	312	15	
1037	1056	9		14 32 ✓	312	20	
1040	(1059)	4-5		17 46	311	45	
1044	1060	8-9		20 20 ✓	311	28	
1042	1061	8		25 02 ✓	311	34	
1048	(1067)	8-9 ✓		32 29	311	56	
1049	1068	7 ✓		35 28	311	56	
1052	1071	8-9		37 54	311	24	
1057	1077	8		46 22	311	19	
1064	(1083)	6-7		51 56	312	12	
1067	(1086)	7-8	22..	57 47	311	52	
1070	(1090)	8-9	23..	5 58	312	15	
1072	(1092)	9 ✓		9 36	311	57	
1074	(1094)	6 ✓		19 24	311	56	
1079	1099	8-9		22 25	312	2	
1083	(1104)	7-8 ✓		27 58	311	53	
1084	1105	?		31 40	312	13	
1085	(1106)	5-6		34 33	311	25	
1090	(1118)	7-8	23	41 56	312	7	

No		Magn.	AR			Circle Reading
~~1093~~	(1116)	9	23..	44..	46	311° 42'
~~1094~~	1117-10	~~9~~ 8		48	59	311 17'
~~1096~~	1119-10	8		52	19	311 20'
~~1099~~	1122	8		57	15	311 40'

Obs	Ill	Obs	Ill	
1854				
Dec 2	" 8	Dec 8 th	W	faint
" 2	" "	" 8	W	faint & difficult
" 2	" "	" 8	W	Dec 8 th 1 st 2 nd 3 rd Early
" 2	" "	" 8	W	

Harvard Standard

Catalogue

II

M. in red
give m. obs. at
Paris 1886-61

No	Mag.	M	Circle Reading
	8-9	7. 7. 44	310. 30
	8-9	11. 49	310. 29
	9	14. 39	310. 34
<i>Pari (1) Santini</i>	8	20. 04	310. 39
<i>Pari (3)</i>	8	24. 34	310. 55
	9	27. 00	310. 58
<i>Santini</i>	9	31. 47	311. 06 <i>β Geminor</i>
	{ 7-8	41. 45. 5	311. 22
	{ 8-9	41. 45. 8	311. 21
	8-9	46. 04	311. 12
<i>Santini</i>	{ 7-8	49. 54	310. 53
	{ 9	50. 04	310. 53
	9	53. 40	311. 23
	8	7. 57. 13	311. 02
<i>Pari 1</i>	~~8~~	~~8. 01. 33~~	~~311. 13~~
		<i>3 + 15 Argus</i>	<i>8. 01. 25 - 336. 16</i>
	8	8. 06. 40	311. 20
	9	10. 21	310. 48
	8-9	13. 33	310. 33
	7	18. 33	310. 21
	8	21. 22	310. 40
	8	24. 24	310. 46
	9	27. 31	310. 25
	8	8. 34. 04	310. 56

Date Obs. Ill. Date Obs. Ill.

1856

Remarks.

29th J.F.F. W

" " "

very faint

" "

30th " "

" " "

" " "

March
29th

J.F.F.

E

1st W. last~~1st W. last~~

n.s.

" " "

" " "

" " "

not obsd

n.s.

" "

" " "

" " "

" J.F.F.

W

only one seen
every, which?only one seen
every, which?

" " "

" " "

" " "

not seen

Comp. S. p. 10th mag.

" J.F.F.

" "

—

Mar 28th J.F.F. W

" " "

" " "

" " "
" " "
" " "" " "
" " "
" " "" " "
" " "
" " "bad focus comp. n.f. 10th mag.) result. obs. 27th ill. nvery faint 4th mag.

now 0.2 too late

" " "

" " "

" " "

" " "

" " "

" " "

" " "

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" " "

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" " "

No	Mag.	NR	Circle Reading
		3-4	<i>C Hydrol</i> 8. 39. 09 - 305. 26
~~7-8~~	~~1~~	~~42. 22~~	~~310. 23~~
7-8	1	42. 22	310. 23
8-9		48. 43	310. 58
8	2	52. 21	310. 26
8		57. 27	310. 55
7	4	50. 40	311. 13
7	1	4. 18	311. 09
7	1	9. 28	311. 04
8		13. 37	310. 55
8	2	16. 41	310. 21
8	1	23. 22	310. 31
8-9	2	27. 39	311. 07
8-9		26. 27	311. 15
8-9		45. 52	310. 35
8-9		50. 06	310. 29 ²⁹
9		9. 56. 28	310. 42
~~9~~	~~1~~	~~XX. XX. XX~~	~~310. 42~~
8-9	1	10 7. 49	310. 52
9		11. 39	310. 35
8-9		17. 45	310. 20
9		21. 20	311. 08
8	1	31. 05	310. 25
8		35. 10	310. 47
8		38. 18	310. 37
8	1	42. 33	310. 42
7	1	45. 02	310. 37
6	4	10. 48. 30	310. 54

Date	Obs.	Dir.	Date	Obs.	Dir.	Remarks
	1856		1856			
Mar. 25 th	J. F. F.	W	Mar. 29 th	J. F. F.	E	
"	"	"	"	"	"	
"	"	"	"	"	"	
"	"	"	"	"	"	Obs. comp. fol. 9-10 days, circuit broke in dome circuit broken
Mar. 25 th	J. F. F.	W	Mar. 29 th	J. F. F.	E	
"	"	"	"	"	"	1 st W. lost - m.s. 1 st W. lost
"	"	"	"	"	"	
"	"	"	"	"	"	
"	"	"	"	"	"	
Apr. 26 th	S. C	W	Apr. 7 th	J. F. F.	E	lost
Mar. 25 th	J. F. F.	W	"	"	"	
"	"	"	"	"	"	
"	"	"	"	"	"	
Apr. 25 th 1856	S. C	W	"	"	"	Clear - no clouds
Apr. 25 th 1856	S. C	W	"	"	"	more than $\frac{1}{2}$ mag. smaller than preceding
Apr. 25 th 1856	S. C	W	"	"	"	Came sooner than rec. 1 st W. lost.
Apr. 25 th 1856	S. C	W	"	"	"	3 rd W. lost.
Apr. 25 th 1856	S. C	W	"	"	"	has a comp. n.f.
Apr. 25 th 1856	S. C	W	"	"	"	a star brighter than preceding one
Apr. 25 th 1856	S. C	W	"	"	"	2 nd W. lost
Apr. 25 th 1856	S. C	W	"	"	"	1 st W. lost
Apr. 25 th 1856	S. C	W	"	"	"	2 nd W. lost

Note these stars were reobserved on the 26th April. 24 W. S. C. dr. 2 foot wing
of 2nd one lost? but so long to night as its neighbors either above or below

No Mag. R Circle Reading

9 10.. 55.. 34 310.. 22

8 10.. 58.. 51 310.. 25

8 11.. 05.. 34 311.. 16

8 24d. et Crut.

3-4 δ 24d. et Crut. 11.. 12.. 09 - 326.. 23

~~8 12.. 55.. 34 310.. 22~~

8 18.. 53 310.. 34

8 21.. 37 310.. 24

9 26.. 13 310.. 48

7 33.. 14 310.. 39

8-9 37.. 57 310.. 42

2- β Leonis 11.. 41.. 43 - 297.. 00

7 46.. 41 311.. 03

6-7 51.. 54 311.. 04

8 11.. 55.. 12 311.. 02

7 12.. 00.. 51 310.. 59

8 4.. 16 311.. 24

8 9.. 48 311.. 15

7-8 18.. 04 310.. 50

9 21.. 46 310.. 27

~~8 24.. 04 310.. 34~~

2-3 β Barri 12.. 26.. 50 - 334.. 59

8-9 31.. 23 311.. 24

8 34.. 55 311.. 07

8 37.. 16 311.. 05

7-8 42.. 37 310.. 23

8-9 45.. 57 311.. 10

8-9 51.. 39 311.. 15

8 54.. 54 311.. 13

7 12.. 57.. 36 311.. 20

8 13.. 00.. 11 311.. 02

Date	Obs.	Ill.	Remarks	Date	Obs.	Ill.	Remarks
			Near no clouds				

Apr. 25th 1856 S.C. H. } barely seen by direct vision in daylight.
 } Darker than the 11 not seen very clear night,
 not seen, circle set

Apr. 25th 1856 S.C. H. } eggs more than 11 not seen
Apr. 25th 1856 S.C. W. } larger than 8th may. eggs 7 J.F.F. E

Apr. 25th 1856 S.C. W. 2 stars obs. Sec. read 310.16
4 stars of 8 to 9 mag in field 2 last
observed - a brighter star afterwards

observed a bright star after words
of 7-8 mag. 2 first was lost
See note

Apr 25 56 SC W only 7th win obs. reb. Apr 26 21 11 11 2nd probably the correct one 11
Apr 25 56 SC W only 7th win obs. reb. Apr 26 21 11 11 12th W. Long

lost ^{to 26th April} see note seen to late today ⁱⁿ very much out. " "

Apr. 25 th 56	S. C	W		May 16 th	J. F. F.	8
Apr. 25 th 56	S. C	W	has this been a com. S. P. or ill. Min.	"	"	"

Apr 20 th	SD	SC	W			
Apr 25 th	SD	SC	W			

Apr. 25 th 50	80	W			
Apr. 25 th 50	80	W	smaller than previous		
Apr. 25 th 50	N.C.	W	hardly 8 th m. 1 st w. lost.		

Apr. 25 th 50	J.C.	W	Henry & Mrs. F. W. W. F.	"	"	"
Apr. 25 th 55	C	W				

Apr 25 th 1855 J.C.	N.		n	n	n	
Apr 25 th 1855 J.C.	W.	this item is quite as bright as spec ^e .	n	n	n	7-8 th alloy,
Apr 25 th 1855 J.C.	W.	do do	n	n	n	" "

Apr. 25 th 1896	L.C.	W	hardly 8 th mag.	"	"	"	<u>8th</u> mag.
----------------------------	------	---	-----------------------------	---	---	---	----------------------------

lost clouds
May 21st 95 F. 8 lost wire 0.3 too late

May 16	9.55.	E
"	"	"
"	"	"

3 h n w + to many
 n r n very faint
 11th J. Fr. J. 8 first 2 w. last

Note the 2 first stars of the group were dy. tonight 28th Apr. 1856 M. West. N. by as also the bottom of the 25th

No.	Mag.	Alt	Circle Reading
8-9		13.. 04.. 47	310.. 48
7		9.. 44	310.. 24
9		12.. 30	310.. 23
		1 α Virginis	13.. 17.. 37 - 322.. 47
7		22.. 38	310.. 33
8		26.. 21	310.. 40
8		31.. 28	310.. 25
8		35.. 13	310.. 40
8-9		39.. 18	311.. 14
8-9		44.. 02	311.. 07
8-9		53.. 42	310.. 32
8		13.. 59.. 46	310.. 45
6-7		14.. 03.. 40	310.. 55
9		6.. 34	311.. 01/1 - α Bootis 14.. 09.. 06
6		12.. 32	311.. 21
6-7		16.. 05	310.. 28
6-7		18.. 48	310.. 45
6-7		22.. 42	310.. 56
8-9		26.. 47	310.. 55 - is this right?
9		31.. 08	310.. 53
8		34.. 37	311.. 23
108 Virg. 7		38.. 22	311.. 04
		3 α^2 Librae	12.. 42.. 55 - 327.. 49
8-9		48.. 25	311.. 05
8-9		53.. 08	311.. 17
7		14.. 56.. 44	310.. 56
9		15.. 05.. 10	311.. 23
6 Serpente 6		13.. 55	311.. 09
8-9		15.. 17.. 55	310.. 22
		15.. 09.. 16	2 β Librae - 321.. 14

Date	Obs.	Ill.	Remarks	Date	Obs.	Ill.	Remarks
1856			1856				
not seen			too faint to observe	not seen			
May 21 st J.F.F.	8		first 2 W. lost	June 2 ^d W.C.B.	W		
not seen			May 31 st J.F.F. E very faint 9-10 mag 1st wire wrong				May 31 st Ill. E. S. F. F. very faint 1st wire wrong
May 21 st J.F.F.	8						
" "	"	"	1 st W. lost				
" "	"	"					
" "	"	"	May 31 st 1856 J.D.B. East 1 st W. lost J.D.B. East 1 st W. lost				
not seen							
not seen							
May 21 st J.F.F.	8		very faint last W. lost				
" "	"	"	first 3 W. lost J.F.F. May 31 East				
not obsd.			J.F.F. May 31 st East				
May 21 st J.F.F.	8		Comp. W. p. 9-10 mag				
" "	"	"	faint Comp. S. p. (2)				
" "	"	"					
~~May 21st~~	~~J.F.F.~~	~~8~~					
" "	"	"	Comp. W. p. 9 th mag				
" "	"	"					
not seen							
May 31 st J.F.F.	8						
" "	"	"					
" "	"	"					
" "	"	"	1 st wire lost				
" "	"	"					
" "	"	"					
not seen							
May 31 J.F.F.	8						
" "	"	"					

Too light.
Could not see them

June 21 st	P.C.	W	
"	"	"	
"	"	"	
"	"	"	
"	"	"	Comp obs. also 8 th mag
"	"	"	didn't see it
"	WCB	"	
"	WCB	"	lost wire lost?
"	WCB	"	5 hours too early 0.2
"	WCB	"	0.2 & mid wire too soon
"	WCB	"	
"	WCB	"	
"	WCB	"	seen but too small to observe
"	WCB	"	
"	WCB	"	

No.	Mag.	Nr.	Circle Reading.
	8	15 " 21 " 25	311 " 17
	7-8	24 " 36	311 " 01
<i>Chloris</i>	6	28 " 00	311 " 14 <i>in the sky</i>
	8	33 " 16	310 " 27
	7	40 " 21	310 " 24
	9	45 " 49	310 " 53
	7	51 " 57	311 " 23
	7	15 " 57 " 22	311 " 19
	7	16 " 02 " 34	311 " 11
<i>Mag. 2</i>	6-7	10 " 38	310 " 32
<i>Scorpius</i>	5	15 " 00	311 " 01
	8	17 " 30	310 " 54
	8	26 " 56	310 " 39
	7	34 " 11	310 " 52
<i>Br. 2119</i>	6-7	34 " 38	310 " 56
<i>14 ophiuchi</i>	6-7	38 " 23	311 " 06
	8	41 " 07	311 " 02
<i>16 ophiuchi</i>	6-7	44 " 19	310 " 55
	8	49 " 00	310 " 44
	9	55 " 27	310 " 26
	8-9	01 " 35	310 " 37
	7-8	10 " 43	310 " 29
	7	14 " 04	310 " 49
	8-9	17 " 05	311 " 11
	7	24 " 27	310 " 36
	9	32 " 58	310 " 35
	8-9	36 " 02	310 " 34
	8	33 " 16	310 " 27
	7	40 " 21	310 " 24
	9	45 " 49	310 " 53
	7	51 " 57	311 " 23
	7	15 " 57 " 22	311 " 19
	7	16 " 02 " 34	311 " 11
	6-7	10 " 38	310 " 32
	5	15 " 00	311 " 01
	8	17 " 30	310 " 54
	8	26 " 56	310 " 39
	7	34 " 11	310 " 52
	6-7	34 " 38	310 " 56
	6-7	38 " 23	311 " 06
	8	41 " 07	311 " 02
	6-7	44 " 19	310 " 55
	8	49 " 00	310 " 44
	9	55 " 27	310 " 26
	8-9	01 " 35	310 " 37
	7-8	10 " 43	310 " 29
	7	14 " 04	310 " 49
	8-9	17 " 05	311 " 11
	7	24 " 27	310 " 36
	9	32 " 58	310 " 35
	8-9	36 " 02	310 " 34

Date Obs. Ill. Remarks Date Obs. Ill. Remarks

May 31 J.F.F. 8
 " " " Camp. S. p. 9 day
 not seen !!! Birds set right
 no wonder as it is

May 31 J.F.F. 8

" " "

" " "

July 5th J.F.F. E

" " " n.s.

" " "

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July 30 J.F.F. E

" " "

" " "

July 30 J.F.F. E

" " "

" " "

" " "

1856^h
 June 21 WCB W

" WCB W

" not there

" WCB

" " "

" " "

June 23^d J.F.F. W

" " "

" " "

" " "

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" " "

2 first wire of comp. obs.

6th May

3 stars in field from
7th to 9th May

Camp. N. p. 9-10 May.

7th May

3 stars in field 8th to 9th May.

can't be observed to advantage

first 3 wires last

very faint
 Camp. N. h. (?)
 Camp. S. h. 9-10 May.

9-10 May 2nd wire good for nothing
 very faint

No. Mag. R. Circle Reading

7-4-17.. 39.. 18 311..17
 7-4-17.. 42.. 15 310..22 310..49
 6-7 45.. 30 311..02

68 ophiuchi 5-6 53..15 310..46
 5-6 54.. 39 311..04 311..15
 7-8 17.. 57.. 33 310..24 311..14
 7-8 18.. 01.. 49 310..24

4 *μ* Sagittarii 18.. 05.. 09 - 333.. 28
 8-9 07.. 51 311..16
 7-8 14.. 40 311..20 310..52
 8-9 20.. 23 310..57
 8-9 22.. 51 311..17
 8-9 24.. 03 311..01 310..35
 8-9 27.. 31 310..24
 8 31.. 32 310..25
 8-1-32.. 58 311..13

4 Aquilae 5 37.. 46 310..28

8-9 40.. 12 310..47
 { 8 (47.. 26) 310..39
 { 7-8 (47.. 32) 310..39

7-8 17-8 51.. 18 311..22 311..10
 7-8 18.. 51.. 20 311..17
 7-8 19.. 01.. 08 311..18
 8-9 02.. 35 311..22
 9 06.. 10 311..02

7-8 10.. 00 310..24
 7-8 21.. 38 310..43
 7 24.. 00 310..40
 9 25.. 24 310..46
 18 30.. 48 311..12
 8 33.. 45 311..02

8-1-35.. 21 311..07
 7-8 42.. 53 44.. 54 311..08
 8-9 47.. 45 310..50
 7-8 19.. 53.. 16 311..05 311..04

Date Obs. Ill. Remarks Date Obs. Ill. Remarks

July 30 J.F.F. E

Aug 22 J.F.F. W n.s. 1st w. lost

" " " "
" " " "
" " " "
" " " "
" " " "
" " " "
" " " "

Comp. S.f. 9-10 mag.

1st w. lost n.s.

9th mag.

8-9 mag. not much
to 9 mag.

" " "
" " "
" " "
" " "
" " "
" " "
" " "

first 3 w. lost
first 3 w. lost

" " "
" " "
" " "
" " "

clouds
must be very faint
w. faint clouds 3 stars in field
same mag.

" " " "
" " " "
" " " "
" " " "

Obsd. & S.f. low 2 w.

Obsd. & S.f. 2 w.

n.s.

on w. doubtful

Comp. W. H.

Obsd. Comp. W. H. 2

Comp. S.f. 2 w. 2 w. 2 w.

Obsd. Comp. W. H. 2 w.

" " "

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Aug. 22 J.F.F. W

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" " "

Obsd. Comp. n.s.

1st w. lost

Comp. S.f. 9-10 mag.

2 comp. following

Obsd. both Comp. W. H.

Obsd. Comp.

" " "

" " "

" " "

" " "

" " "

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Oct 5, 1857 A 26.

" " "

" " "

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" " "

" " "

" " "

" " "

" " "

" " "

" " "

" " "

" " "

" " "

very faint.

2 stars in field

lost instruments set wrong

not seen

not seen

Aug 22 J.F.F. W

" " "

" " "

" " "

Comp. W. same W.

Comp. W. H. - S.f.

+ 2 S.f. -

Comp. W. H.

No.	Mag.	Alt	Circle Reading	
7-8	2 19	58 05	310 39	
8-9	2 20	01 54	311 08	very faint, on 3 wires only.
8-9	1	05 07	310 24	
8-9	8 02	2 02	310 31	<i>α Capricorni</i> 20 10 04 - 325 22
7-8	2 11 56	14 31	311 09	310 35
8-9	1 18 16	19 35	310 55	311 05
7-8	8-9 -4	21 06	310 43	310 44
7	2 25	15	310 22	not taken, stars AR should be
8-9	27 40	29 38	310 22	310 44
8	8-9 32 12	33 56	310 53	
9		40 29	311 04	2 taken
8		42 54	310 24	310 28
9		44 58	311 06	311 11
7	7-8-2 49 41	48 02	311 19	took 3 stars.
8	1	53 22	311 14	not taken
8-9	2	53 45	310 40	
8	8 58 00	57	311 09	
6	2 20	57 38	311 18	
7		21 01 46	311 18	
6	1	05 40	311 18	
8-9	7 32	11 34	311 04	311 13
9		14 41	311 17	311 18
7-8	8-2 16 40	18 25	310 56	
8-9		27 49	310 45	
8-9		32 27	310 46	
9		35 07	310 36	circle reading wrong, star in the upper
6	2	40 08	310 20	
9	1	43 50	310 38	
7	2	48 32	310 41	
9	1	21 53 35	310 16	<i>α Cygni</i> 21 58 23
8-9	1	22 02 02	310 20	313 24
8-9	1	22 08 27	311 08	
8		9 27	311 08	these stars differ in

Date	Obsr.	Ill.	Remarks	Date	Obsr.	Ill.	Remarks
Oct 5, 1857	A.H.	E		Aug 22	J.F.F.	W	
"	"	"	very faint, 2 first wires only	"	"	"	
"	"	"		"	"	"	
"	"	"	took 2 stars	"	"	"	
"	"	"		Oct 16 th 1857	A.H.	Ill. W.	
"	"	"	not seen	"	"	"	
"	"	"		"	"	"	
Oct 26, 40	"	"	not seen	"	"	"	another star of ^h Dec 20 th 1857
"	"	"		"	"	"	lost
"	"	"	very faint	"	"	"	q mag
"	"	"		"	"	"	
"	"	"	not seen	"	"	"	
"	"	"		"	"	"	
"	"	"	faint, 4 last wires only	"	"	"	
"	"	"	" 3 last wires only	"	"	"	
"	"	"		"	"	"	
"	"	"		"	"	"	
Oct 8, 1857	A.Hall	Ill. E		"	"	"	
"	"	"		"	"	"	
"	"	"		"	"	"	
"	"	"		"	"	"	very faint
"	"	"	these stars not seen	Oct 17, 1857	A.H.	W	not seen
"	"	"		"	"	"	
"	"	"		"	"	"	
Oct 7, 1857	A.Hall	Ill. E	star of 8 mag in field	"	"	"	took 2 stars, the sec. is shown
"	"	"	lost	"	"	"	took 2 stars, the sec. is shown
"	"	"		"	"	"	
"	"	"	very faint 2 stars in f.	"	"	"	
"	"	"		"	"	"	
"	"	"		"	"	"	
"	"	"	lost.	Oct 13, 1857	A.Hall	"	3 last wires
"	"	"	story 8 magnitude	"	"	"	
"	"	"		"	"	"	
more than 20 ³ in ill. took the last only				"	"	"	

No. Mag. R Circle Reading

8-9	3	22	19	16	310.07	311.18	
8-9	8	20.33	23	13	311.08		
8	2		28	03	310.26		
18-9			30	07	311.16		
8	4		31	20	310.38		
8	4	37.54	40	22	311.13		
8-9	7	41.37	44	33	311.20	310.57	
7-8-9			46	43	310.17		
9	4		48	50	311.10		
9			22	53	310.43		
6-7	2		23	01	311.01		
8			03	30	311.06		
7-8-9			06	32	310.56		
8	7-8-19	34	13	42	310.41	310.40	
8			20	33	311.16		
8-5			23	56	310.47		
8-9		27.14	29	15	311.09		
6-7	8	34.08	37	00	311.03		
8-9	2				311.01		
7	1		41	39	310.56	310.55	
8	2	43.57	47	15	310.42		
9			51	11	310.52		
7	8		63	13	310.29		
7-8	2		55	36	311.01		
9	8	23	59	42	311.18		
18	8	0	09	29	311.18		
9	2		15	30	311.20		
6-7	3		18	14	311.13		
9	7-8		24	40	310.42	310.20	
8			30	49	310.23		
8			43	53	310.23		
9			0	46	311.14		

3 Degasi 22.84.16
302.18

2 Degasi 22.57.36
297.57

4-5 mag.
Discum 23.32.33
307.32

3-2 y Degasi 0.5.50
298.00

2-β beti 0.36.22
331.09

[illegible]

No. Aug. Alt Circle Reading

8-9 0" 50" 30 311.03
 8-9 ⁸⁻⁹ - 52.54 54" 46 310.37 310.30
 7-8 - 0" 57" 32 310.49

7 -3- 1" 00" 46 311.07
 7 -1- 03" 21 310.41 310.39
 7 7-8 5" 20 06" 32 310.34

7-8 8 11.03 9" 58 311.06 310.34
 9 13" 08 310.38
 9 26" 41 310.32

7-8 2 (31) 30" 07 310.30
 8-9 -1- 34" 89 310.23
 8-9 -1- 37" 51 310.35

8 45" 14 310.34
 6 -1- 48" 40 311.14
 9 1" 51" 11 310.45

2 - α crictis 1" 59" 04 - 389.86

9 2" 03" 12 311.01
 8 07" 25 311.21
 6 8 9" 14 10" 45 310.48
 311.17

8 11" 54 311.00
 8-9 15" 02 310.34
 7 -1- 20" 47 311.03
 6 24" 16 310.44

8-9 27.36 310.21

7-8 -2- 29" 55 310.34
 8-9 33.20 40" 27 311.07
 8 42" 26 44" 14 311.15
 311.13 311.02

8 46" 25 310.59

8 -3- 48" 18 310.56
 8-9 -2- 50" 00 52" 23 311.03
 311.17

7 -1- 2" 57" 24 311.04
 2-3 α bet' 2" 54" 45 - 308.51

No.	Mag.	R	Circle Reading
8	1	8 " 03 " 40	310 " 36
8	8	7.24 09 " 58	311 " 20 ^{310 " 22}
9		12 " 81	311 " 13 ³
	8-19	15 " 02	310 " 34
8-9		17 " 11	310 " 47
8		19 " 58	310 " 35
9		23 " 20	310 " 47
9		29 " 25	311 " 10
9	8-9	35 " 54	310 " 52 ^{310 " 24}
8	41.19	43 " 28	311 " 15
8		43 " 2	
7-8	47.27	46 " 14	310 " 11
9		55 " 31	310 " 55
8		3 " 59 " 27	311 " 04
8		4 " 03 " 53	310 " 26
8	5 " 41	07 " 11	311 " 05 ^{310 " 49}
8-9		(11 " 40)	310 " 57
8-9		(11 " 44)	
8	6-7	19 " 44 18 " 08	310 " 29 ^{310 " 37}
6		21 " 18	311 " 19
8-9		31 " 53	310 " 32
			1-2 Tauri 4 " 27 " 40
			296 " 10
9		35 " 21	311 " 12
8	8	44 " 58 42 " 17	310 " 25 ^{310 " 06}
7		46 " 41	311 " 03
7	7	48 " 46	310 " 59
5		51 " 18	310 " 58
7		54 " 45	310 " 59
8-9		4 " 58 " 39	310 " 48
6	7-8	5 " 06 " 15	310 " 35 ^{310 " 59}
7	7 " 56	09 " 25	310 " 35
8		5 " 12 " 38	310 " 56
8		15 " 52	311 " 14

No. Mag. R Circle Reading

5-6 5" 17" 29 310" 40
 8 ⁻² 21" 30 310" 51 *2-Orionis - 5" 24" 39*
 9 7 22" 39 27" 35 310" 58 *312" 47*

8 8-9-32" 34 31" 00 310" 29 310" 58
 5-6 ⁻² 35" 14 310" 59
 7 ⁻¹ 39" 22 311" 16

7 6-7 45" 10 43" 13 310" 25 *var α Orionis 5" 47" 23*
 { 8 ⁻¹ (50" 57) 310" 33 *305" 00*
 { 6-7 (51" 08)

7-8 55" 01 310" 41
 9 5" 59" 44 310" 31
 7-8 ⁻¹ 6" 08" 40 311" 10 310" 33
3 μ geminorum 6" 12" 15 - 289" 48

9 17" 58 311" 05
 7 21" 00 310" 23
 8 25" 52 311" 00
 8-9 27" 23 310" 33
 7-8 31" 22 310" 39 311" 18
 8 4 ⁻¹ 34" 12 35" 24 310" 32 *1-Orionis 6" 38" 48*
 7-8 41" 50 311" 13 *328" 54*

9 46" 22 310" 42
 8-9 8 50" 25 49" 20 311" 01 310" 43
 8-9 52" 18 311" 17

9 6" 58" 08 311" 17

Finis

Feb 10 1858 A Hall East-

Feb 9, 1858 A Hall W

very faint 9-10 mag

lost 9 mag

on thin wires

Feb 6, 1858 AH W

very faint

lost camp went out

very faint

5 stars of 2nd mag may be
faintest 1/2 mag, but about
differs only 10 or 12 in AM

$$m = 0.674a + 0.739b$$

$$n = -0.739a + 0.674b$$

*Copied from book sheet
in M. Hall's Transit Circle*

	1.	2.	X	X			m	n	
1856 Nov 25	-0.48	-0.17	-0.324	-0.126	+0.355	-0.115	-0.45	+0.24	-0.13
— 27	-0.48	-0.17	-0.324	-0.126	+0.355	-0.115	-0.45	+0.24	-0.11
— 29	-0.46	-0.16	-0.310	-0.118	+0.340	-0.108	-0.43	+0.23	-0.11
Dec 7	-0.33	-0.10	-0.222	-0.074	+0.244	-0.067	-0.30	+0.18	-0.08
— 25	-0.27	-0.11	-0.182	-0.081	+0.200	-0.074	-0.26	+0.13	+0.15
— 26	-0.25	-0.11	-0.168	-0.081	+0.185	-0.074	-0.25	+0.11	-0.10
May 16	-0.16	+0.02	-0.108	+0.015	+0.118	+0.013	-0.09	+0.13	+0.15
— 21	-0.13	+0.02	-0.088	+0.015	+0.096	+0.013	-0.07	+0.11	+0.04
June 31	-0.13	+0.09	-0.088	+0.062	+0.096	+0.061	+0.14	+0.16	+0.02
— 2	-0.13	+0.10	-0.088	+0.074	+0.096	+0.067	+0.16	+0.16	-0.08
— 21	0.00	+0.20		+0.148		+0.13	+0.15	+0.13	-0.10
— 23	0.00	+0.13		+0.088		+0.088	+0.09	+0.09	-0.06
July 5	+0.09	+0.20	+0.061	+0.125	-0.067	+0.35	+0.27	+0.07	+0.10
— 30	+0.16	+0.27	+0.108	+0.125	-0.118	+0.32	+0.31	+0.06	+0.13
Aug. 22	+0.10	+0.27	+0.067	+0.200	-0.074	+0.182	+0.27	+0.17	-0.12
— 26	+0.06	+0.26	+0.041	+0.125	-0.044	+0.175	+0.23	+0.13	-0.11

*Copied or interpolated from
book. Meridian marks.
Sept 1856 - Feb. 1859.*

1857 Oct. 5	-0.25	+0.34	-0.168	+0.251	+0.185	+0.229	+0.08	+0.40	-0.10
7	-0.24	+0.34	-0.162	+0.251	+0.177	+0.229	+0.09	+0.40	-0.10
8	-0.24	+0.34	-0.162	+0.251	+0.177	+0.229	+0.09	+0.40	-0.10
13	-0.18	+0.32	-0.121	+0.237	+0.133	+0.216	+0.12	+0.35	+0.08
16	-0.24	+0.34	-0.142	+0.251	+0.155	+0.229	+0.11	+0.38	+0.05
17	-0.22	+0.34	-0.148	+0.251	+0.163	+0.229	+0.10	+0.39	+0.06
21	-0.24	+0.36	-0.162	+0.264	+0.177	+0.241	+0.10	+0.42	+0.02
Nov 3	-0.29	+0.28	-0.195	+0.207	+0.214	+0.189	+0.07	+0.40	+0.11
10	-0.29	+0.18	-0.195	+0.133	+0.214	+0.121	-0.06	+0.34	+0.09
11	-0.41	+0.17	-0.276	+0.126	+0.303	+0.115	-0.15	+0.42	-0.20
Dec 4	-0.52	+0.15	-0.350	+0.111	+0.384	+0.101	-0.24	+0.48	-0.19
18	-0.51	+0.11	-0.344	+0.081	+0.387	+0.074	-0.26	+0.45	-0.21
1858 Jan 19	-0.54	-0.07	-0.364	-0.052	+0.399	+0.072	-0.27	+0.35	+0.16
Feb. 3	-0.54	-0.07	-0.364	-0.052	+0.399	+0.072	-0.27	+0.35	+0.17
— 6	-0.54	-0.07	-0.364	-0.044	+0.399	+0.140	-0.41	+0.36	+0.17
— 10	-0.61	-0.05	-0.411	-0.037	+0.451	+0.034	-0.45	+0.42	-0.19

& Hydrae & Hydrae & Leo
 β Geminorum & Navis
 β Geminorum E. & Hydra
 & Leo & Crateri
 & Leo & Crat. & Pleura & Pleura
 & Leo
 β Leo & Corvi
 & Virginis
 & Virg. & Bootis & Librae
 β Corvi & Virginis
 & Librae & Libra & Libra
 & Ophiuchi & Scorp. & Her. }
 & Sagitt. & Lyrae & Aquila }
 & Ophiuchi & Scorp. & Her. }
 & Ophiuchi & Sagitt. & Lyrae & Aquila }
 & Sagitt. & Lyrae & Aquila }
 & Sagitt. & Lyrae & Aquila }
 & Bootis & Leo & Leo & Leo }
 & Ophiuchi & Scorp. & Leo }
 & Aquarii & M. Cat. & Leo
 & Aquarii
 & & Capri. β Aquarii
 & Aquarii
 & Capricorni
 β Aquarii & Aquarii
 & Lyrae & Pegasi
 γ Pegasi
 & Ceti & Antares & Ceti
 γ Aquarii & Aquarii & Pegasi }
 γ Pegasi & Ceti & Pegasi }
 & Ceti & Antares, γ, & Ceti
 η Tauri
 & Ceti & Tauri & Eridani
 & Tauri & Orionis & Orionis
 μ Gemin. & Canis maj.
 Orion & Orion
 μ Gemin. & Canis maj. }

1856		
δ Navis	24.762	+0.05
β Geminorum	29.959	+0.52
ε Hydrae	8.876	+0.18
α Leo	30.673	+0.71
δ Leo	41.956	+0.60
δ Crateri	8.672	+0.36
β Leo	42.736	+0.76
β Corvi	49.863	+0.77
α Virginis	36.717	+0.70
α Bootis	5.688	+0.53
α Librae	43.706	-11.408
α Librae	58.137	+0.023
β Ophiuchi	15.789	+0.036
α Scorp.	48.173	+0.079
α Heruli	38.064	+0.023
α Ophiuchi	5.016	+0.126
α Ophiuchi	15.102	+0.093
μ Sagittarii	9.145	-0.093
β Lyrae	45.857	+0.107
γ Aquilae	47.507	+0.120
δ	14.258	+0.071
γ	24.844	+0.075
α Capricorni	39.842	-23.502
α	3.749	+0.105
α Corvini	38.558	+0.054
α Serpenti	10.683	+0.073
β Scorp.	4.204	+0.066
ε Leo	40.350	+0.035
α Leo	7.558	+0.092
γ Aquilae	30.549	+0.111
α Aquilae	51.317	-0.101
α Capricorni	46.505	-23.794
α	10.419	+0.120
β Aquarii	4.878	0.90
α Aquarii	29.402	-0.114
γ Pegasi	22.842	0.90
α Pegasi	38.898	0.44
γ Pegasi	55.700	-0.118
β Ceti	27.609	-0.07
ε Ceti	34.607	0.15
α Ceti	55.587	0.26
α Antares	10.543	0.61
γ Ceti	56.780	0.57
α Ceti	51.612	0.22
η Tauri	2.991	0.62
γ Eridani	24.367	-0.04
α Tauri	46.592	0.26
δ Orionis	45.241	0.32
α Orionis	29.151	0.27
μ Gemin.	22.224	+0.069
α Canis maj.	53.427	-0.114
α Lyrae	10.874	+0.57

* Including Peters' correction.

31125
+0.479
2.24
1.54
4.16
4.91

