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Plate 1229.

	V	H	Type	No. lines	K	Faint lines	Other lines
11.20 A.M.							
10 50	12.4	8.7	II?	2	K=H	1	—
	12.4	10.9	I?	3	H1	1	—
	12.3	15.4	I	4	H1	3	F?
?	11.3	7.4	II a?	7543	K=H	2	F.
	11.3	14.0	I	4	H1	1	—
	11.5	14.2	III III	2 2	K=H K=H1	1	— —
	11.0	17.3	III	1	H1	1	—
	11.1	18.9	II?	2	K=H	1	—
	10.9	7.7	II	2	K=H	1	—
	10.8	8.6	II?	2	K=H	1	—
Peculiar spectrum III? 5.3, 5.6, 6.6.	10.0	15.1	III b.c.	7553	K=H	2	F.
	10.2	18.2	I	6	K=2H	2	F?
	10.6	22.5	III	3	K=H	1	F.
	9.4	6.1	III b.c.	7563	K=H?	3	F.
	9.4	10.1	I	6	H1	2	—
	9.4	11.6	I	8	K=2H?	3	F?
	9.8	14.2	I	5	K=.5H	1	—
	9.3	17.4	II	2	K=H	1	—
	8.0	7.2	III	2	K=H	1	pec.
?	8.0	9.5	II a	7572	K=H	1	pec.
	8.9	10.9	I	3	H1	1	—
	8.1	12.8	II	2	K=H	1	—
	8.6	15.3	II	2	K=H	1	—
	8.3	20.5	III	2	K=H	1	—
	7.5	6.9	I?	4	K=H	1	—
	7.1	15.4	I	3	H1	1	—
?	6.7	7.8	I a	7582	K=H	1	—
	6.6	10.7	III	2	K=H	1	—

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Mean 7.

	No.	R. A.	Dec.	Mag.		Bre.			Corr. Bre.
8 27 + 81.0	270	8 26.5	+ 81	0	8.0	7.2	2.0	9.2	7.7	6.5
7 38 + 71.5	429	7 38.4	+ 71	27	6.8	6.8	1.2	8.0	6.5	6.1
6 58 + 81.5	242	6 57.6	+ 81	30	6.3	5.3	2.1	7.4	5.9	4.6
8 50 + 81.4	282	8 49.2	+ 81	24	6.7	6.0	2.1	8.1	6.6	5.3
7 19 + 82.3	213	7 18.8	+ 82	0	7.3	6.7	2.1	8.8	7.3	6.0
7 19 + 62.0	934	7 19.0	+ 62	3	7.0	7.0	2.1	7.8	6.3	6.3
6 57 + 72.0	352	6 57.1	+ 72	3	6.4	7.3	2.8	8.1	6.6	6.6
6 47 + 71.9	378	6 46.6	+ 71	57	7.7	6.9		8.2	6.7	6.2
8 45 + 81.6	278	8 45.4	+ 81	36	7.9	7.2	1.3	8.5	7.0	6.5
8 36 + 81.6	273	8 35.2	+ 81	49	7.6	7.0	1.3	8.3	6.8	6.3
7 0 + 82.7	201	7 0.3	+ 82	40	3.3	6.9	2.1	9.0	7.3	6.2
6 14 + 82.3	177	6 13.8	+ 82	13	6.7	5.7		7.9	6.4	5.0
6 23 + 71.9	359	6 23.4	+ 71	32	6.0	6.2	2.2	8.4	6.9	5.5
9 17 + 81.9	362	9 16.0	+ 81	38	4.3	5.8	2.2	8.0	6.3	5.1
8 20 + 82.7	253	8 19.7	+ 82	44	7.0	6.6		7.9	6.4	5.9
7 57 + 82.9	335	7 57.0	+ 82	32	6.3	7.0	1.3	8.3	6.8	6.3
7 18 + 62.8	933	7 18.4	+ 62	48	7.0	5.2		7.3	5.8	4.5
6 55 + 72.9	350	6 55.1	+ 72	53	7.5	5.7	2.1	7.8	6.3	5.0
7 49 + 63.5	749	7 49.6	+ 63	28	6.0	6.0	2.2	8.2	6.7	5.3
8 36 + 83.3	233	8 35.8	+ 83	17	7.0	5.3	2.3	7.6	6.1	4.6
7 33 + 63.2	733	7 33.3	+ 63	10	7.0	6.9		7.7	6.2	6.2
7 52 + 83.5	207	7 53.7	+ 83	32	8.2	7.1	1.3	8.4	6.9	6.4
7 9 + 73.4	375	7 9.0	+ 73	20	7.2	6.6		7.5	6.0	5.9
~~7 9 + 73.4~~	~~376~~	~~7 9.2~~	~~+ 73~~	~~20~~	~~7.8~~	6.9	.9	7.8	6.3	6.2
5 30 + 82.7	152	5 30.2	+ 82	42	7.6	6.3	2.3	8.6	7.1	5.6
9 19 + 83.0	261	9 19.0	+ 83	0	7.5	6.7	.9	7.6	6.1	6.0
7 8 + 74.1	322	7 7.9	+ 74	7	7.5	7.0	2.4	9.4	7.9	6.3
9 12 + 83.6	256	9 12.5	+ 83	33	7.2	6.9	1.4	8.3	6.8	6.2
7 42 + 74.3	338	7 42.8	+ 74	18	3.2	7.0	2.2	9.0	7.3	6.1
						6.5	2.3	8.8	7.3	5.8
						7.0	1.4	8.4	6.9	6.3
						6.3	2.4	8.7	7.2	5.6
						6.5		7.9	6.4	5.8
						7.1	1.4	8.5	7.0	6.4

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Plate 1229.

	V	H	Type	No. lines	K	Focus	Other lines.
	6.5	10.9	~~I~~ I d ?	2	K = H	1	—
	6.5	12.8	I	8	K = 1.2 H	3	F.
	6.7	22.2	II	2	K = H	1	—
	5.2	10.1	I ?	6	K = .8 H	2	—
	5.8	13.2	I	5	K = .5 H	1	—
	5.5	16.5	II ?	1	N	1	—
?	5.8	21.0	I d ?	4	?	2	neb.
	5.7	23.5	II	2	K = H	1	—
	4.1	11.8	II ?	2	K = H	1	—
	4.6	15.9	I ~~I~~	4	~~H~~ N	1	1 — —
	4.1	18.2	II ?	2	K = H	1	—
	4.4	24.6	III ?	2	K = H	2	—
	3.9	6.2	II ?	1	N	1	—
	3.7	24.1	I	7	K = H ?	4	F.
Double star?	2.8	7.1	II	6	K = .5 H ?	3	F.
	2.2	15.2	I	5	K = .5 H	1	—
	2.7	19.1	I	6	N	2	—
12.10	2.0	19.3	I	2	N	1	F.

Plate 1072.

~~9.40~~	22.4	10.3	~~II~~ III d ? 759	3	K = 1.2 H	4	F.
	22.8	23.2	I	5	N	2	—
	21.0	15.4	I	7	N	3	—
10.40	20.2	6.9	II ?	2	K = H	1	—
	19.1	13.2	III	2	K = H	1	—
	18.3	20.6	I	4	K = H	1	—
	17.8	10.4	I	5	K = .5 H	1	—
	17.5	10.8	I	5	N	1	—

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Mean 7

	No.	R.A.	Dec.	Mag.			Br.				Corr. Br.
7 33 +64.4	649	7 33.5	+64	23	7.1	_	6.9	.9	7.8	6.3	6.2
7 41 +84.5	169	7 41.6	+84	28	6.0	_	5.3	2.5	7.8	6.3	4.6
6 19 +73.8	340	6 19.6	+73	47	6.0	_	6.5	1.4	7.9	6.4	5.8
8 44 +84.7	196	8 44.3	+84	45	6.0	_	5.4	2.6	8.0	6.5	4.7
7 34 +84.8	168	7 33.6	+84	47	7.8	_	6.5	2.6	9.1	7.6	5.8
6 20 +84.8	135	6 20.9	+84	48	8.2	_	7.0	2.6	9.6	8.1	6.3
5 0 +83.7	141	5 0.6	+83	43	7.1		5.9	2.4	8.3	6.8	5.2
4 27 +82.9	125	4 27.1	+82	56	8.3	_	6.5	2.3	8.8	7.3	5.8
8 12 +85.6	128	8 12.7	+85	33	7.3	_	6.8	2.8	9.6	8.1	6.1
7 2 +75.3	296	7 2.8	+75	20	7.0						
~~6 58 +75.1~~	~~291~~	~~6 58.0~~	~~+75~~	~~25~~	~~8.3~~	.	6.6 ~~6.7~~	1.5	8.1	6.6	5.9
6 44 +75.4	281	6 44.7	+75	26	6.8	_	7.0	1.5	8.5	7.0	6.3
3 58 +82.9	113	3 58.5	+82	59	5.0	_	~~5.8~~ 5.9	2.3	8.1 8.2	~~6.6~~ 6.7	5.1 5.2
8 20 +75.2	342	8 19.8	+75	13	6.4	_	6.7	1.5	8.2	6.7	6.0
3 55 +83.5	104	3 55.1	+83	26	5.0	_	4.7	2.4	7.1	5.6	4.0
10 7 +84.9	234	10 7.8	+84	59	5.0	_	5.3	2.6	7.9	6.4	4.6
7 13 +66.7	502	7 13.0	+66	37	6.2	_	~~6.7~~	~~1.2~~	~~7.7~~	~~6.2~~	
4 53 +85.7	78	4 55.1	+85	32	7.0	.	5.6	2.8	8.4	6.9	4.7
4 39 +85.7	74	4 41.0	+85	45	6.0	.	~~6.3~~	2.8	9.1	~~7.6~~	

$\frac{60}{4}$ $\frac{4-4}{4}$

Mean 8

8 18 +61.2	1054	8 18.2	+61	11	3.3	_	5.4 5.5	6.2 8 6.3	4.9 5.0		4.6 4.7
7 33 +50.8	1460	7 33.1	+50	46	5.8	1448 5.2	~~6.5~~	.5	7.0		
7 57 +71.9	1391	7 57.6	+71	55	5.1	1509 4.8 16 +0.3	5.9	.5	6.4	5.1	5.1
8 49 +71.9	486	8 49.3	+71	52	6.7	_	7.1	1.3	8.4	7.1	6.3
8 7 +62.9	991	8 6.6	+62	57	6.0	_	6.9 7.1	.9	7.8 8.0	6.3 6.7	6.1 6.3
7 33 +63.2	733	7 33.3	+63	10	7.0	_	6.7	.9	7.6	6.3	5.9
8 30 +73.8	430	8 30.1	+73	48	7.0	_	6.8	1.4	8.2	6.9	6.0
8 27 +73.7	428	8 27.0	+73	40	6.3	.	6.6	1.4	8.0	6.7	5.8

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Plate 1072.

	v	H	Type	No. Lines	K	Focus	Other Lines.
	17.5	11.0	I	7	K=.2H	2	F.
	17.9	16.9	II a 760	2	K=H	1	—
	17.4	21.8	I	3	N	1	—
?	16.7	6.0	I d 761	6	K=.5H?	2	—
?	16.8	6.6	I ?	2	K=H	1	—
	16.6	11.4	III	2	K=H	1	—
?	16.9	12.0	II a? 761	2	K=H	1	diff.
	16.4	16.8	III	2	K=H	1	—
III? 5.8, 6.2.	15.1	8.8	III b. 762	2	K=H	2	light?
	15.5	9.1	I	4	N	1	—
	15.8	20.3	I	5	N	1	—
	15.6	20.6	II a 763	2	K=H	1	—
	15.9	21.6	I	4	N	1	F?
	14.5	6.1	III	1	N	1	—
	14.5	12.1	I	7	K=.5H	2	F.
	14.9	12.7	I	4	K=H	1	—
	14.5	14.0	III?	2	K=H	1	F?
?	14.6	17.3	II a 764	2	K=H	1	diff.
	13.9	5.4	II	2	K=H	1	F?
	13.8	9.2	II	2	K=H	2	—
	13.6	10.2	II	6	N	2	—
?	13.5	15.2	II a 765	2	K=H	1	diff.
	13.6	20.0	I	5	N	2	—
	13.1	20.1	III	2	K=H	1	—
	13.4	21.7	I	5	N	2	—
?	12.3	5.7	I d	5	?	2	diff.
	12.7	6.4	II ?	2	K=H	1	—
?	12.7	14.5	III b 766	2	K=H	2	diff.

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	No	R.A.	Dec.	Mag.			Mean 8 Br.				Corr. Br.
8 13 +53.7	1246	8 12.8	+53	40	6.0	_	6.4	.6	7.0	5.7	5.6
7 49 +63.5	749	7 49.6	+63	28	6.0	_	6.8	.9	7.7	6.4	6.0
7 9 +73.4	375	7 9.0	+73	20	7.2	?	6.8	1.4	8.2	6.9	6.0
	~~376~~	~~7 9.2~~	~~+73~~	~~20~~	~~7.8~~						
9 1 +73.5	452	9 1.2	+73	32	6.0	_	6.0	1.4	7.4	6.1	5.2
8 27 +53.9	1268	8 27.5	+53	53	6.8	_	6.9	.6	7.5	6.2	6.1
8 23 +74.1	370	8 23.5	+74	8	6.4	_	6.9 7.1		8.3 1.4 8.5	7.0 7.2	6.1 6.3
8 9 +54.0	1217	8 9.4	+54	1	6.9	_	6.9	.6	7.5	6.2	6.1
7 43 +74.3	338	7 42.8	+74	18	5.8	_	6.6 7.0	1.4	8.0 8.4	6.7 7.1	5.8 6.2
8 27 +64.9	698	8 27.5	+64	49	4.7	_	6.3 6.6	.9	7.2 7.5	5.7 6.2	5.5 5.8
8 19 +54.6	1231	8 19.6	+54	36	7.2	.	6.6	.6	7.2	5.9	5.8
7 33 +64.4	649	7 33.5	+64	23	7.1	.	6.7	.9	7.6	6.3	5.9
7 39 +54.5	1177	7 39.7	+54	29	6.3	_	6.7	.6	7.3	6.1	5.9
7 8 +74.1	322	7 7.9	+74	7	7.5	.	6.9	1.4	8.3	7.1	6.1
9 4 +74.6	393	9 4.8	+74	37	6.5	_	7.0 7.2	1.4	8.4 8.6	7.1 7.3	6.2 6.4
8 20 +75.3	342	8 19.8	+75	13	6.4	_	6.2	1.5	7.7	6.4	5.4
8 7 +55.0	1265	8 7.2	+55	D	6.7	_	6.8	.6	7.4	6.1	6.0
8 4 +75.3	334	8 4.6	+75	17	6.5	_	6.8 7.0	1.5	8.3 8.5	7.0 7.2	6.0 6.2
7 47 +65.1	606	7 46.9	+65	9	7.1	_	6.9	.9	7.8	6.5	6.1
8 44 +65.1	673	8 44.1	+65	9	6.0	_	6.7	.9	7.6	6.3	5.9
8 26 +65.6	643	8 26.3	+65	31	5.8	_	6.4	1.0	7.4	6.1	5.6
8 22 +65.7	638	8 21.6	+65	38	5.8	1566 5.3 17+4	6.0	1.0	7.0	5.7	5.2
7 58 +55.7	1254	7 58.0	+55	41	7.0	_	6.9	.6	7.5	6.2	6.1
7 41 +55.6	1228	7 41.0	+55	35	6.5	.	6.6	.6	7.2	5.9	5.8
7 32 +65.9	593	7 32.8	+65	48	6.2	_	6.9 7.1	1.0	7.9 8.1	6.6 6.8	6.1 6.3
7 3 +75.3	296	7 2.8	+75	20	7.0		6.4	1.5	7.9	6.6	5.6
9 12 +75.7	377	9 12.6	+75	44	6.2		5.8	1.5	7.3	6.0	5.0
9 6 +75.5	370	9 6.6	+75	31	7.3	_	7.0	1.5	8.5	7.3	6.2
8 1 +76.3	310	8 1.2	+76	11	6.0	_	6.0 6.3	1.6	7.6 7.9	6.3 6.6	5.2 5.5

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Plate 1072.

V	H	Type	No. lines	K	Focus	Other lines
12.7	20.9	I	∨	H	1	—
12.7	23.9	III	2	K=H	1	—
11.4	14.1	III	2	K=H	1	—
11.1	14.3	II?	1	H	1	—
11.0	18.8	I	4	H	1	—
10.2	7.7	I	6	H	2	—
10.9	23.8	I	∨	H	2	—
9.0	8.2	I	∨	K=H	2	—
9.5	11.6	III	3	K=H	1	F.
9.9	12.5	II?	1	H	1	—
9.9	13.5	II?	2	K=H	1	—
9.1	16.9	I	6	K=.∨H	2	—
9.7	17.1	II a 767	2	K=H	1	—
9.3	23.3	III b? 768	2	K=H	3	—
8.5	11.6	I?	3	H	1	—
? 8.7	12.4	II a 769	3	K=H	2	diff.
8.6	16.4	III	2	K=H	1	—
8.4	24.0	I?	3	H	1	—
7.5	10.7	I	3	H	1	—
7.2	11.6	I	4 1.01	H	1	—
7.7	13.5	III	2	K=H	1	—
7.5	14.9	III	3	K=H	2	F.
7.9	20.1	I	4	H	1	—
7.0	22.5	III	2.1	K=H	1	—
6.7	9.0	I	14	H	1	—
6.4	12.9	III?	1	H	1	—
? 6.2	17.4	II a 770	3	K=H	2	F. diff.
6.3	21.1	II I?	2	K=H	2	diff

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Means

	No.	R.A.	Dec.	Mag.			Br.			Cor. Br.
7 7+75.9	360	7 7.6	+75	52	7.7	.	6.7	1.5	8.2 6.9	5.9
6 44+75.4	281	6 44.7	+75	26	6.8	_	6.8	1.5	8.3 7.0	6.0
8 2.2+76.9	1278	8 2.2	+76	53	5.7	_	6.8		7.5 (6.2)	6.0
8 1.9+76.9	1276	8 1.8	+76	58	6.8		7.1	1	7.8 (6.5)	6.3
7 44+76.9	1253	7 44.7	+76	53	7.0	.	7.0	1	7.7 6.4	6.2
8 36+67.3	360	8 35.6	+67	13	6.0	1601 6.0 10^{-3}_{16}	6.7	1	7.4 6.1	5.9
7 13+66.6	302	7 13.0	+66	37	6.2	1385 6.2 9^{-4}_{7}	6.0	1.0	7.0 5.7	5.2
9 0+77.7	359	8 59.8	+77	40	6.8	_	6.1	1.0	7.1 5.8	5.3
8 16+67.8	1345	8 16.0	+67	46	6.0	_	6.4	1.7	8.1 6.8	5.6
8 18+77.6	337	8 18.4	+77	30	7.2	_	6.6		7.7 6.4	5.8
8 10+77.5	330	8 10.3	+77	32	7.7	_	6.9	1.1	8.0 6.7	6.1
7 36+77.9	303	7 37.0	+77	56	7.0	_	7.0	1.7	8.7 7.4	6.2
7 51+57.7	1118	7 50.8	+57	40	6.5	_	7.0	1.7	8.7 7.4	6.2
6 39+77.2	266	6 38.8	+77	9	4.7	_	6.3	1.7	8.0 6.7	5.5
8 29+78.2	291	8 29.0	+78	12	7.0	.	7.0		7.7 6.4	6.2
8 8+58.2	1112	8 8.7	+58	11	6.2	_	5.7		7.3 (6.0)	4.9
7 53+58.1	1093	7 53.4	+58	11	7.5	_	6.1	1.6	7.7 (6.4)	5.3
6 30+77.4	259	6 30.8	+77	22	7.8		7.1	1.7	8.8 7.5	6.3
8 39+78.7	297	8 39.4	+78	42	6.9	.	6.5		7.2 5.9	5.7
16 68.9	470	8 16.6	+69	0	6.7		7.0		7.7 (6.4)	6.2
~~8 3+78.4~~	~~243~~	8 31.4	+78	42	6.5	.	7.3	1	8.0 (6.7)	6.5
8 10+78.7	287	8 10.6	+78	41	6.8	_	6.7		7.7 6.4	5.8
7 58+68.9	524	7 58.3	+68	34	4.8	_	7.0		8.8 (7.5)	6.2
7 4+78.3	251	7 4.2	+78	19	7.0	.	7.3	1.8	9.1 (7.8)	6.5
7 15+68.8	480	7 15.8	+68	46	5.5	_	6.4		7.5 (6.2)	5.6
8 22+59.1	1176	8 22.3	+59	4	7.0	.	6.7	1.1	7.8 (6.5)	5.9
8 9+69.3	464	8 9.5	+69	22	7.2		6.5	1.7	8.2 6.9	5.7
7 49+59.4	1130	7 49.2	+59	27	6.0	_	6.5		7.6 (6.3)	5.4
6 50+78.9	240	6 50.7	+78	59	6.7	_	6.9	1.1	8.0 (6.7)	6.1
							6.9		7.6 6.3	6.1
							7.0		8.1 (6.8)	6.2
							7.2	1.1	8.3 (7.0)	6.4
							6.5		7.2 5.9	5.7
							6.6	1.8	8.4 7.1	5.8

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Plate 1672.

			Type	Lines	K	Focus	Other Lines.
	6.6	22.1	I	7	N	3	F.
	6.1	13.3	I	7	K=1.2H	2	—
	5.0	15.4	II	2	K=H	1	—
	5.8	16.2	I	4	K=H	1	—
	5.5	16.1	I	9	N	5	—
	4.0	6.8	I[d]?	5	K=H	2	—
?	4.0	23.1	II[a] 771	3	K=H	2	F, anom.
	3.8	7.9	I	5	N	1	—
	3.8	11.8	I	3	N	1	—
	3.5	13.8	I	5	K=1.5H	1	—
	3.9	16.8	II?	2	K=H	1	—
	3.7	17.2	I	4	N	2	—
	3.4	20.1	I?	2	N	1	—
	3.7	23.6	I	5	K=1H	1	—
	2.3	10.3	III[b] 772	3	K=1.2H	4	F.
12 40	2.0	10.9	II?	2	K=2.5H?	1	—

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Mean 8

	No.	R.A.	Dec.	Mag.				Br.				Corr. Br.
7 31 + 59.0	1103	7	30.7	+ 59	2	5.0	1441 4.9 14 +1 −2	5.6	7	6.3	5.0	4.8 ✓
8 6 + 60.0	1124	8	5.8	+ 60	0	6.0	_	6.2	8	7.0	5.7	5.4 ✓
7 55 + 70.1	497	7	55.2	+ 70	8	6.5	_	6.9	12	8.1	6.8	6.1 ✓
7 54 + 59.6	1136	7	53.9	+ 59	40	7.0	_	6.8	7	7.5	6.2	6.0 ✓
7 42 + 79.9	265	7	41.9	+ 79	52	5.8	1477 5.3 14 +1 −2	4.8	19	6.7	5.4	4.0 ✓
9 30 + 79.8	319	9	29.8	+ 79	48	6.0	_	6.3	19	8.2	6.9	5.5 ✓
6 21 + 79.7	212	6	21.4	+ 79	42	5.5	_	5.5	19	7.4	6.1	4.7 ✓
8 27 + 60.5	1148	8	27.3	+ 60	26	6.8	.	6.7	8	7.5	6.2	5.9 ✓
8 34 + 80.5	272	8	34.0	+ 80	34	7.3	.	6.7	20	8.7	7.4	5.9 ✓
8 4 + 60.8	1119	8	3.6	+ 60	50	6.8	_	6.7	8	7.5	6.2	5.9 ✓
7 31 + 80.6	238	7	32.1	+ 80	37	6.5	_	6.7	20	8.7	7.4	5.9 ✓
7 49 + 60.7	1105	7	49.3	+ 60	42	6.1	1490 6.0 13 +0 −3	6.5	8	7.3	6.0	5.7 ✓
7 38 + 60.7	1084	7	37.6	+ 60	40	6.7		6.8	8	7.6	6.3	6.0 ✓
6 16 + 79.7	208	6	15.4	+ 79	41	6.3	_	6.3	19	8.2	6.9	5.5 ✓
8 18 + 61.2	1054	8	18.2	+ 61	11	3.3	_	5.1 5.3	8	5.9 6.1	4.6 4.8	✓
8 50 + 81.4	282	8	49.2	+ 81	24	6.7	_	6.6	21	8.7	7.4	✓

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Plate 111 N.

	V.	H	Type	No. lines	K	Focus	Other lines.
8 45?	22.5	10.5	III b.c. 7733		K=1.5H	4	F. nebulous.
	22.0	17.3	II	2	K=H	1	—
?	22.9	23.6	I b 7745		N	2	nebulous.
	21.3	15.7	I	7	N	3	F?
	21.8	18.0	I	5	K=2H?	1	—
	20.3	7.0	II	2	K=H	1	—
	20.5	17.5	I	3	N	1	—
	20.2	17.6	II?	2	K=H?	1	—
	20.3	21.1	I	3	N	1	—
	19.5	12.2	II	2	K=H	1	—
	19.2	13.4	II a 7753		K=H	2	F.
	19.3	14.0	III	1	N	1	—
	18.4	6.6	III	2	K=H	1	—
	18.0	6.7	III	2	K=H	1	—
	18.8	10.0	II	2	K=H	1	—
	18.0	17.1	II	2	K=H	2	—
	18.4	20.8	I	7	K=H	1	F.
?	17.0	7.0	III b 7762		K=H	1	F? nebulous.
	17.8	8.7	III	2	K=H	1	—
	17.1	10.5	I	6	N	1	—
	17.5	10.9	I	6	N	2	—
	17.8	11.3	I	7	K=2H?	3	F?
?	17.0	12.4	I b 7777	4	K=H	1	nebulous.
	17.3	14.2	III?	2	K=H	1	—
	17.8	15.0	II	2	K=H	1	—
	17.4	21.8	I?	5	K=H	1	F.
	16.9	6.1	I	6	K=H	2	F. nebulous.
	16.4	9.9 —	II	2	K=H	1	—

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	No.	R. A.	Dec.	Mag.	No. Maps HP	HP	Mean 5 Prv.				Iowa Bi.
8 18 + 61.2	1034	8 18.2	+ 61	11	33	_	~~5.1~~	5.9	~~4.7~~		✓
							~~5.2~~	8 6.1	~~4.8~~		
7 49 + 61.3	1021	7 49.7	+ 61	23	6.5	_	7.2	8 8.0	6.8		6.7 ✓
7 33 + 50.8	1460	7 33.1	+ 50	46	5.8	~~1448 5.2 17 + 5~~	~~6.4~~	.5 6.9	~~5.7~~		✓
7 57 + 57.9	1391	7 57.6	+ 51	55	5.1	1509 4.8 12 8	5.5	.5 6.0	4.8		5.0 ✓
7 38 + 71.4	429	7 38.4	+ 71	27	6.8	_	6.8	1.2 8.0	6.8		6.3 ✓
8 57 + 71.9	492	8 56.8	+ 71	57	6.5	_	6.8	1.3 8.1	6.9		6.3 ✓
7 40 + 72.0	386	7 41.0	+ 72	3	7.3	.	6.9	1.3 8.2	7.0		6.4 ✓
7 40 + 72.2	385	7 40 3	+ 72	13	7.0	_	7.1	1.3 8.4	7.2		6.6 ✓
7 17 + 71.9	405	7 17.7	+ 71	53	7.4	.	7.0	1.3 8.3	7.1		6.5 ✓
8 11 + 62.8	996	8 11.6	+ 62	45	7.8	_	7.0	8 7.8	6.6		6.5 ✓
8 7 + 62.9	991	8 6.6	+ 62	57	6.0	_	6.5	.9 7.4	6.2		6.0 ✓
8 4 + 72.8	409	8 4.6	+ 72	51	6.2	_	6.7 8.0		6.8		6.2
							7.1	1.3 8.4	7.2		6.6
8 28 + 53.2	1272	8 28.5	+ 53	13	6.4	_	7.0	7.6	6.4		6.5
							7.1	.6 7.7	6.5		6.6 ✓
8 28 + 53.5	1269	8 28.2	+ 53	25	6.6	_	6.4	7.5	6.3		6.4
							7.1	.6 7.7	6.5		6.6
8 32 + 72.9	427	8 31.8	+ 72	55	6.8	_	7.0	1.3 8.3	7.1		6.5 ✓
7 49 + 63.5	749	7 49.6	+ 63	28	6.0	_	6.5	9 7.4	6.2		6.0 ✓
7 33 + 63.2	733	7 33.3	+ 63	10	7.0	_	6.6	.9 7.5	6.3		6.1 ✓
8 27 + 53.7	1268	8 27.5	+ 53	53	6.8	_	6.8	7.4	6.2		6.3
							7.0	.6 7.6	6.4		6.5
8 22 + 53.6	1259	8 21.7	+ 53	35	6.4	_	6.9	7.5	6.3		6.4 ✓
							7.1	.6 7.7	6.5		6.6
8 30 + 73.8	430	8 30.1	+ 73	48	7.0	.	6.6	1.4 8.0	6.8		6.1 ✓
8 27 + 73.6	428	8 27.0	+ 73	40	6.5	.	6.4	1.4 7.8	6.6		5.9 ✓
8 12 + 53.7	1246	8 12.8	+ 53	40	6.0	_	5.9	.6 6.5	5.3		5.4 ✓
8 9 + 54.0	1217	8 9.4	+ 54	1	6.9	_	6.6	.6 7.2	6.0		6.1 ✓
8 3 + 64.1	674	8 3.4	+ 64	9	8.1	_	7.0	7.9	6.7		6.5
							7.3	.9 8.2	7.0		6.6
8 0 + 53.7	1221	8 0.0	+ 53	40	7.0	_	6.9	.6 7.5	6.3		6.4 ✓
7 9 + 73.3	~~376~~ 375	~~7 9.2~~ 7 9.0	~~+ 73~~ + 73	~~20~~ 20	~~7.8~~ 7.2		6.6	1.4 8.0	6.8		6.1 ✓
9 1 + 73.6	452	9 1.2	+ 73	32	6.0	_	5.8	1.4 7.2	6.0		5.5 ✓
8 18 + 54.2	1228	8 17.8	+ 54	20	7.3	_	7.0	.6 7.6	6.4		6.5 ✓

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April 22, 1887.

Plate 1112.

	V	H	Type	No. Lines	K	Focus	Other Lines.
	16.2	11.0	II	2	K=H	1	—
	16.6	11.5	III	3	K=H	1	F.
	16.9	12.1	III	2	K=H	1	—
	16.0	16.2	II	II? 2 2	K=H K=H	1 1	— —
III? 5.9, 6.3.	16.4	16.8	III	b. 7782	K=H	2	F?
	16.9	16.9	II	3	K=H	1	F.
	16.6	20.0	III	3	K=H	1	F.
	15.3	9.0	III	b.c. 7793	K=H	3	F.
	15.8	9.5	I	5	Ir	1	F.
?	15.1	13.0	II	a 7805	K=H	1	F. neu.
	15.2	15.0	III	3	K=H	1	F.
	15.4	15.3	II	2	K=H	1	—
	15.9	17.4	I	3	Ir	1	—
	15.4	17.9	I	4	Ir	1	—
	15.9	20.5	I	6	K=H	1	—
?	15.9	20.9	II	a 7812	K=H	1	neu.
10.30 a.m.	15.3	21.1	I	4	K=H	1	—
	15.8	21.6	I	5	Ir	1	—
	14.6	6.1	III	3	K=H	1	F.
	14.0	7.6	III	3	K=H	2	F.
	14.6	12.1	I	6	K=2H	3	F?
	14.5	14.1	III	3	K=H	2	F.
?	14.8	16.9	~~II~~ I	~~2~~ 4	K=K	1	neu.
	14.8	17.5	II	2	K=H	1	neu.
	14.4	23.5	III	III? 1 2	Ir K=H	1 1	— —
	13.9	9.4	II	3	K=H	2	F.
	13.8	10.4	I	7	Ir	3	F.
	13.8	15.5	I	? 4	Ir	1	—

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	No.	R.A.	Dec.	Mag.		Br.			Cor. Br.
8 14 +54.4	1223	8 14.1	+54 23	7.3	_	7.0	.6	7.6	6.4 6.5
8 23 +74.1	370	8 23.5	+74 8	6.4	_	6.4		7.8	6.6 6.7
18 +73.9	420	8 18.6	+73 56	7.3		6.7	1.4	8.1	6.9 6.9
8 44 +65.1	673	8 44.1	+65 9	6.0	≈	7.0		7.9	6.7 6.7
						7.3	.9	8.2	7.0 6.8
7 55 +54.5	1200	7 55.8	+54 31	8.0	_	7.1	.6	7.7	6.5 6.6
7 43 +74.3	338	7 42.8	+74 18	5.2	_	6.2		7.6	6.4 6.5
7 53 +54.0	1195	7 53.3	+54 4	7.0	_	6.6	1.4	8.0	6.8 6.9
7 20 +73.9	381	7 20.9	+73 54	7.3	_	6.9	.6	7.5	6.3 6.4
8 27 +64.8	698	8 27.3	+64 49	4.7	_	6.9		8.3	7.1 6.4
8 19 +54.6	1231	8 19.6	+54 36	7.2	.	7.1	1.4	8.5	7.3 6.6
8 9 +55.0	1265	8 7.2	+55 0	6.7	_	5.8		6.7	5.3 5.4
8 0 +54.9	1208	7 59.9	+54 38	6.7	_	6.1	.9	7.0	5.8 5.9
7 53 +74.8	348	7 53.9	+74 47	8.2	_	6.6	.9	7.0	6.2 6.3
7 51 +54.5	1190	7 51.4	+54 32	7.3	.	6.6	.6	7.2	6.0 6.1
7 49 +54.9	1188	7 49.8	+54 30	6.7	.	6.6	.6	7.2	6.0 6.1
7 33 +64.4	649	7 33.3	+64 23	7.1	_	6.9		7.5	6.3 6.4
7 39 +54.5	1177	7 39.7	+54 29	6.3	_	7.2	.6	7.8	6.6 6.7
7 10 +74.4	324	7 10.7	+74 26	7.8	_	7.2	1.5	8.7	7.3 6.7
7 8 +74.1	322	7 7.9	+74 7	7.5	.	7.0	.6	7.6	6.4 6.5
9 4 +74.6	393	9 4.8	+74 37	6.5	_	6.8	.6	7.4	6.2 6.3
8 44 +65.2	673	8 44.1	+65 9	6.0	_	6.4	.9	7.3	6.1 5.9
8 20 +75.2	342	8 19.8	+75 13	6.4	_	6.2	1.5	7.7	6.3 5.7
8 4 +75.3	334	8 4.6	+75 17	6.5	_	6.7		8.2	7.0 6.3
7 53 +55.1	1242	7 53.2	+55 9	7.5	_	6.9	1.5	8.4	7.2 6.4
7 47 +65.1	606	7 46.9	+65 9	7.1	_	7.0	.6	7.6	6.4 6.5
7 30 +55.1	1214	7 30.2	+55 7	6.7	_	6.9	.9	7.8	6.6 6.4
8 26 +65.5	643	8 26.3	+65 31	5.8	_	7.0		7.6	6.4 6.5
8 22 +65.6	638	8 21.6	+65 38	5.8	1566 5.3 13 **	7.3	.6	7.9	6.7 6.8
7 58 +55.7	1254	7 58.0	+55 41	7.0	.	6.0	1.0	7.0	5.8 5.5
						5.6	1.0	6.6	5.4 5.1
						6.7	.6	7.3	6.1 6.2

Mean 5

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Plate 1112.

	V	H	Type	No. Lines	K	Focus	Other Lines.
	13.7	20.3	I	5	N	2	—
?	13.2	20.3	III k 7822		K=H	2	sum.
	13.1	20.3	I	3	N	1	—
	13.4	21.7	I	6	N	2	—
	13.7	20.5	II	2	K=H	1	—
?	12.4	5.8	I d?	7	K=H?	2	F. sum.
	12.9	6.4	I	4	N	1	F.
	12.5	7.6	III	2	K=H	1	—
	12.7	14.5	III ?	2	K=H	3	F.?
	12.7	14.8	II ?	2	K=H	1	—
	12.5	15.0	III ? I 4		K=H	1	—
∫	12.7	15.3	II ? a IIa! 7832	2	K=H K=H	1 1	— sum
	12.9	19.0	II	2	K=H	1	—
	12.3	19.3	III	2	K=H	1	—
	12.5	20.9	I	5	N	2	—
	12.6	22.1	I ?	4	K=H	1	—
	12.5	23.8	II	3	K=H	1	F.
	12.1	23.7	III !	2	K=H	1	—
	11.4	5.7	I	3	N	1	—
	11.4	6.8	I 3		N	1	—
✓	11.9	9.0	I 2 ? I 2 4		K=H	1 1	—
	11.9	14.4	I ?	3	N	1	—
	11.5	14.4	III	2	K=H	1	—
	11.3	14.6	I ?	2	K=H	1	—
∫	11.7	14.7	III III	2 2	K=H K=H	1 1	— —
	11.3	19.1	I	5	N	2	F.?
	10.4	7.9	I	6	N	3	F.
	10.0	12.6	II	3	K=H	1	F.

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	No.	R.A.	Dec.	Mag.		Mean 5 Br.	corr. Br.
7 41 +55.5	1228	7 41.0	+55	35	6.5	6.4 .6 7.0 5.8	5.9
7 32 +65.8	593	7 32.8	+65	48	6.2	6.5 } 7.5 } 6.3 }	6.0
7 12 +75.6	305	7 12.9	+75	36	8.0	6.8 } 1.0 7.8 } 8.6 }	6.3
7 3 +75.3	296	7 2.8	+75	20	7.0	7.0 1.5 8.5 7.9	6.5
7 32 +65.5	592	7 32.1	+65	30	7.3	6.4 1.5 7.9 6.7	5.9
9 12 +75.9	377	9 12.6	+75	44	6.2	6.8 1.0 7.8 6.6	6.3
9 6 +75.5	370	9 6.6	+75	31	7.3	5.8 1.5 7.3 6.1	5.3
8 57 +75.9	365	8 57.8	+75	52	7.0	6.9 1.5 8.4 7.2	6.4
8 1 +76.2	310	8 1.2	+76	11	6.0	7.1 } 8.6 } 7.4 }	6.6
7 58 +76.2	308	7 58.5	+76	10	7.5	7.4 } 1.5 8.9 } 7.7 }	6.9
7 56 +76.3	307 307	7 55.9	+76	16	7.8	5.9 } 7.5 } 6.3 }	5.4
7 59 +76.2	1269 1269	7 58.7 7 58.7	+76	13	7.9	6.0 } 1.6 7.6 } 6.4 }	5.5
7 23 +75.9	312	7 23.2	+75	53	7.7	7.1 1.6 8.7 7.5	6.6
7 19 +76.1	284	7 19.8	+76	6	7.3	7.2 1.6 8.8 7.6	6.7
7 7 +75.9	300	7 7.6	+75	52	7.7	7.2 7.3 1.6 7.8 6.6	6.7
7 34 +65.9	1218	7 34.3	+65	60	7.3	7.0 1.5 8.5 7.3	6.5
6 44 +75.4	281	6 44.7	+75	26	6.8	6.9 } 8.4 } 7.2 }	6.4
6 44 +75.7	280	6 44.7	+75	36	7.0	7.1 } 1.5 8.6 } 7.4 }	6.6
8 46 +66.5	589	8 46.0	+66	33	7.0	6.5 1.5 8.0 6.8	6.0
9 6 +76.3	348	9 6.8	+76	17	8.1	7.0 .6 7.6 6.4	6.6
8 47 +76.3	336	8 47.4	+76	15	8.3	6.8 1.5 8.3 7.1	6.3
8 2 +66.6	541	8 2.0	+66	37	6.5	7.0 } 8.5 } 7.3 }	6.5
8 2 +56.8	1278	8 2.2	+56	53	5.7	7.3 } 1.5 8.8 } 7.6 }	6.8
8 2 +56.9	1276	8 1.8	+56	58	6.8	6.9 1.0 7.9 6.7	6.4
7 59 +76.8	309	7 59.0	+76	39	8.3	6.9 1.6 8.5 7.3	6.4
7 44 +56.9	1253	7 44.7	+56	53	7.0	7.1 } 7.4 } 8.7 } 7.4 }	6.5
8 35 +67.2	560	8 35.6	+67	13	6.0	7.4 } 1.6 9.0 } 7.8 }	6.6
8 18 +77.5	337	8 18.4	+77	30	7.2	6.6 .7 7.3 6.1	6.1
						5.8 1.0 6.8 5.6	5.3
						6.7 1.7 8.4 7.2	6.2

1601 6.0 8 =H

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Plate 1142.

	T	H	Type	No. lines	K	Focus	Other lines.
	10.0	13.5	~~III~~ I?	1	3	1	—
√	10.1	13.8	III	2	2	K=H K=H	1 —
	10.3	14.0	III	2		K=H	1 —
√	10.0	18.0	III	2	2	K=H K=H	1 —
	10.5	18.6	II?	2		K=H	1 —
	10.0	19.9	III	2		K=H	1 —
?	10.9	24.0	I b.	784	√	?	2 neu.
	9.0	8.2	I	√	3		2 —
√	9.6	11.1	III	2	2	K=H K=H	1 —
	9.6	11.7	III	3		K=H	2 F.
	9.0	15.4	I?	2		K=H	1 —
	9.1	16.8	I	8	1	K=1.2H	2 F.
√	9.8	17.3	II?	3		K=H	1 F.
III? 5.3, 5.7.	? 9.2	23.3	III b.c.	785	2	K=2.0H	3 neu.
	? 8.6	11.6	II a	786	2	K=H	1 neu.
	8.9	12.7	I	√		K=H	2 —
	8.3	14.1	I	3		3	1 —
√	8.0	15.3	III	2	3	K=H K=H	1 1 — F
	8.9	16.6	II	2		K=H	1 —
	8.9	16.6	II?	2		K=H	1 —
	8.0	20.5	III	2		K=H	1 —
	8.4	24.0	I	3		3	1 —
?	7.5	10.7	II a	787	3	K=H	1 F, neu.
	7.6	11.5	III	2		K=H	1 —
	7.2	11.7	I	√		3	2 —
	7.8	13.5	III	2		K=H	1 —
	7.6	15.0	III b.c.	788	3	K=H	2 F.
√	7.8	17.4	II? III?	2	2	K=H K=H	1 1 — —

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	No.	R.A.	Dec.	Mag.		Mean 5 Br.				Cor. Br.
8 10 +77.5	330	8 10.3	+77 32	7.7		6.9	17	8.6	7.4	6.4
8 4 +77.5	1128	8 4.3	+57 32	7.8	_	7.0 7.3 7.5	17	7.7 8.1	(3) 6.8	6.5 6.8
8 6 +77.4	327	8 5.7	+77 25	7.0	_	6.8 7.1 7.0 7.3 7.4 7.5	17 16	8.5 8.8 8.6 9.0	7.3 7.6 7.4 7.8	6.3 6.6 6.5 6.9
7 28 +77.3	297	7 28.2	+77 20	8.0	_					
7 22 +77.0	293	7 22.9	+77 5	8.2	_	6.9 7.0 7.3	16 16	8.5 8.6 8.9	7.3 7.4 7.7	6.4 6.5 6.8
7 10 +77.2	286	7 10.6	+77 14	7.4	_					
7 13 +66.7	502	7 13.0	+66 37	6.2		6.0	10	7.0	5.8	5.5
9 0 +77.7	359	8 59.8	+77 40	6.8	.	6.3 7.1 7.4 7.6 6.3 6.4	17 11	8.0 8.2 8.5 7.4 7.5	6.8 7.0 7.3 6.2 6.3	5.8 6.6 6.9 5.8 5.9
8 19 +67.8	549	8 19.4	+67 47	7.8	_					
8 16 +67.8	545	8 16.0	+67 46	6.0	_					
7 51 +78.0	278	7 50.7	+78 2	7.5	_	7.0	17	8.7	7.3	6.5
7 37 +77.9	303	7 37.0	+77 36	7.0	_	6.2	17	7.9	6.7	5.7
7 51 +57.6	1118	7 50.8	+57 40	6.3	_	6.7 5.6 6.0	7 16	7.4 7.2 7.6	6.2 6.0 6.4	6.2 5.1 5.5
6 39 +77.2	266	6 38.8	+77 9	4.7	_					
8 29 +78.2	291	8 29.0	+78 12	7.0	_	6.9	17	8.6	7.4	6.4
8 8 +57.2	1112	8 8.7	+58 11	6.2	_	6.2	7	6.9	5.7	5.7
8 4 +78.4	284	8 4.4	+78 23	7.5	.	7.0	17	8.7	7.5	6.5
7 58 +58.6	1102	7 58.2	+58 41	6.2	_	6.8 7.2	(8) (2) 7	7.5 7.9	(3) 6.7	6.3 6.7
7 39 +78.0	273	7 39.4	+78 1	7.7	_	7.0	17	8.7	7.5	6.5
7 53 +58.2	1093	7 53.4	+58 11	7.5	_	7.1 6.9 7.2	7 17	7.8 8.6 8.9	6.6 7.4 7.7	6.6 6.4 6.7
7 1 +78.2	246	7 0.9	+78 10	7.0	_					
6 30 +77.4	259	6 30.8	+77 22	7.8		6.8	17	8.5	7.3	6.3
8 39 +78.7	297	8 39.4	+78 42	6.9	_	6.6 7.0 7.3	18 18	8.4 8.8 9.1	7.2 7.6 7.9	6.1 6.5 6.8
8 31 +78.7	293	8 31.4	+78 43	6.5	_					
8 16 +68.9	470	8 16.6	+69 0	6.7	.	6.6 6.7 7.0 6.1 6.5 7.0 7.1	11 18 12 11	7.7 8.5 8.8 6.0 7.6 7.6 8.9	6.5 7.3 7.6 5.6 6.4 7.0 7.7	6.1 6.2 6.5 5.6 6.0 6.6 6.6
8 10 +78.7	287	8 10.6	+78 41	6.8	_					
7 58 +68.9	524	7 58.3	+68 34	4.8	_					
7 30 +78.6	270	7 30.3	+78 35	8.0	_					

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Plate III 21.

V	H	Type	No. Lines	K	Other Focus Lines.
?	7.9	19.6	II[a] 789	2 K=H	1 neu.
	7.8	20.1	I	6 N	2 F.
	6.0	6.1	III	3 K=H	1 F.
V	6.9	9.2	~~I~~ I	5 6 N K	1 1 — —
	6.5	13.0	~~I~~ I? ~~II~~ II	K=H	1 F.
	6.0	16.4	I	5 K=.5H	1 —
?	6.4	17.6	II[a]? 7904	K=H	2 F, neu.
	6.7	19.2	III	2 K=H	1 —
	6.2	21.0	I[d]	6 N	2 F.
	6.8	22.4	I	6 ?,	4 —
	6.9	22.7	III	2 K=H.	2 —
	6.9	23.3	III	2 K=H	1 —
	5.0	10.6	I	5 K=.5H	1 —
	5.7	11.5	III	2 K=H	1 —
	5.4	13.5	I	7 K=.2H?	3 —
	5.3	15.0	~~III~~ II?	2 K=H	1 —
	5.0	15.4	~~X~~ III	3 K=H	1 F.
	5.5	16.0	I	10 N	5 F.
	5.9	19.6	I	6 K=H	1 —
	4.0	6.7	I[d]	6 K=H	3 F.
	4.8	6.9	III	2 K=H	1 —
V	4.1	8.2	I I.	5 N K	2 1 F.? —
	4.7	9.5	~~I~~ \	4 K=H	1 —
	4.6	16.5	III	1 N	1 F.
	4.8	23.0	II?	2 K=H	1 —
	4.4	23.9	II?	2 K=H	1 —
	3.8	11.7	I	5 N	2 —
	3.7	14.0	I	7 K=.5H	2 —

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	No.	R. A.	Dec.	Mag.			Mean 5 Br.	Corr. Br.
7 41 +58.6	1072	7 41.6	+58	35	7.5	_	7.1 7.7 7.8 6.6	6.6 ✓
7 4 +78.3	251	7 4.2	+78	19	7.0	.	6.4 1.7 8.1 6.9	5.9 ✓
9 28+78.8	317	9 28.8	+78	47	6.8	_	6.5 8.3 7.2 6.9 1.8 8.7 7.3	6.0 6.4 ✓
8 22+59.1	1176	8 22.4	+59	4	7.0	.	6.5 6.5 7 7.2 6.0	6.0 ✓
8 9 +69.4	464	8 9.5	+69	22	7.2	_	6.7 1.1 7.8 6.6	6.2 ✓
7 54+59.6	1136	7 53.9	+59	40	7.0	_	6.6 7 7.3 6.1	6.1 ✓
7 49+59.4	1130	7 49.2	+59	27	6.0	_	6.3 7 7.0 5.8	5.8 ✓
7 10 +78.9	254	7 10.4	+78	60	6.8	_	6.7 8.5 7.3 6.9 1.8 8.7 7.3	6.2 6.4 ✓
6 50+78.9	240	6 50.7	+78	59	6.7	.	6.3 1.8 8.1 6.9	5.8 ✓
7 31+59.1	1103	7 30.7	+59	2	5.0		5.4 .7 6.1 4.9	4.9 ✓
7 15+68.7	480	7 15.8	+68	46	5.5	_	6.4 7.5 6.3 6.8 1.1 7.9 6.7 7.0 8.7 7.3 7.3 1.7 9.0 7.8	5.9 ✓ 6.3 6.5 ✓ 6.8
6 32+78.2	234	6 31.8	+78	10	7.3	_	6.7 1.9 8.6 7.4 7.0 8.2 7.0 7.4 1.2 8.6 7.3	6.2 6.5 ✓ 6.9
8 45+79.9	294	8 45.4	+79	55	7.0	_	6.1 .8 6.9 5.7	5.6 ✓
8 18+69.8	472	8 18.5	+69	49	6.5	_	7.0 1.9 8.9 7.7 6.6 7.8 6.6 6.7 1.2 7.9 6.7	6.5 ✓ 6.1 6.2 ✓
8 6 +60.0	1124	8 5.8	+60	0	6.0	_	4.3 1.9 6.2 5.1	5.8 ✓
7 54+79.9	269	7 54.0	+79	56	7.8	_	6.8 1.1 7.9 6.7	6.3 ✓
7 55+70.1	497	7 55.2	+70	8	6.5	_	5.8 1.9 7.7 6.5	5.3 ✓
7 42+79.9	265	7 41.9	+79	~~42~~ 52	5.8	1477 5.3 9 ~~8~~	7.2 1.8 9.0 7.8	6.7 ✓
7 32+69.5	~~319~~ 438	~~7~~ 7 31.9	+69	30	7.2	_	6.5 6.5 .8 7.3 6.1	6.0 ✓
9 30+79.8	319	9 29.8	+79	48	6.0	_	6.7 1.9 8.6 7.4 6.9 8.8 7.6 7.2 1.9 9.1 7.9	6.2 6.4 ✓ 6.7
9 25+79.5	316	9 24.8	+79	28	7.5	_	7.0 .7 7.7 6.5	6.5 ✓
8 27+60.4	1148	~~7~~ 6 27.4	+60	26	6.8	.	7.0 1.8 8.8 7.6	6.5 ✓
8 57+79.9	300	8 57.6	+79	32	7.3	_	6.4 2.0 8.4 7.2	5.9 ✓
7 36+80.2	240	7 35.8	+80	14	6.5	_	6.5 8 7.3 6.1	6.0
7 27+59.9	1099	7 27.5	+59	52	7.2	_		
6 16+79.2	209	6 15.8	+79	14	8.0	_		
8 35+80.6	272	~~8~~ 8 34.0	+80	34	7.3	.		
8 3 +60.8	1119	8 3.6	+60	50	6.8	_		

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Plate 1112.

V	H	Type	No. lines	K	Focus	Other Lines
?	3.8	16.7	III b? 7913	K=H	2	F. sem.
	3.8	17.4	I	7	N	2 F.
	3.9	19.3	III	2	K=H	1 —
	3.6	20.3	I	6	N	1 F.
	3.6	20.9	III III? 2	3	K=H K=H	1 1 — F
?	3.9	23.0	II a? 7923		K=H	4 F. sem.
?	3.6	23.5	I d	6	?	2 F. sem.
?	2.9	10.5	III b.c. 7935		K=1.5H	5 F. sem. bright?
	2.0	10.8	I ?	2	N	2 —
	2.5	17.2	III	2	K=H	1 —
	2.3	18.0	I	4	N	1 —
	2.4	18.4	III	2	K=H	1 —
	2.7	19.3	III	1	N	1 —
	2.6	20.4	III?	2	K=H	1 —
	2.9	23.4	I	4	K=H	1 —

Plate 1064.

	22.5	10.1	III b 7943	K=2.5H	4	F.
	22.0	16.8	II	2	K=H	1 —
	21.1	15.2	I	6	N	4 F.
	21.9	17.7	I	4	N	1 —
	20.4	6.7	~~II~~ I? ~~5~~		K=H	1 —
	20.7	17.2	I?	4	?	1 —
	20.3	17.3	II?	2	K=H	1 —
	20.5	20.8	II	2	K=H	1 —
	19.4	11.8	I?	4	K=H	1 —
?	19.2	12.9	III b? 7953		K=H	1 F. sem.
11 10	19.4	13.7	III	2	K=H	1 —

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Mean 5 Lon. Br.

	No.	R.A.	Dec.	Mag.		Br.				
7 32 +80.6	238	7 32.1	+80	37	6.5	_	6.2	8.2	7.0	5.7
							6.5	2.0 8.5	7.3	6.0
~ 49 +60.7	1105	7 49.3	+60	42	6.1	1490 60 11 ✕	6.3	8 7.1	5.9	5.8
7 32 +70.5	474	7 31.9	+70	33	6.8	_	7.0	8.2	7.0	6.5
							7.2	1.2 8.4	7.2	6.7
7 37 +60.7	1084	7 37.6	+60	40	6.7	.	6.7	8 7.5	6.3	6.2
~ 35 +60.6	1082	7 35.4	+60	39	7.0	_	7.0	7.8	6.6	6.5
							7.2	7.8 8.0	6.8	6.7
6 21 +79.7	212	6 21.4	+79	42	5.5	_	5.3	19 7.2	6.1	4.8
6 16 +79.7	208	6 15.4	+79	41	6.3		6.2	19 8.1	6.9	5.7
8 18 +61.2	1054	8 18.2	+61	11	3.3	_	4.6	5.4	4.2	4.1
							5.0	8 5.8	4.6	4.5
8 50 +81.4	282	8 49.2	+81	24	6.7	.	~~6.1~~	2.1 8.2	~~7.1~~	
7 49 +61.4	1021	7 49.7	+61	23	6.5	_	~~6.9~~	~~7.7~~	~~6.5~~	
							~~7.1~~	.8 7.9	~~6.7~~	
7 38 +71.4	429	7 38.4	+71	27	6.8	.	~~6.7~~	1.2 7.9	~~6.7~~	
7 8 +81.2	252	7 8.6	+81	11	7.0	_	~~6.3~~	8.3	~~7.1~~	
							6.7	2.0 8.7	~~7.5~~	
6 58 +80.9	230	6 57.4	+80	32	7.4	_	6.9	8.9	7.7	6.4
							7.2	2.0 9.2	8.0	6.7
6 45 +80.7	227	6 44.8	+80	45	8.6	_	7.0	9.0	7.8	6.5
							7.2	2.0 9.2	8.0	6.7
7 24 +60.9	1069	7 24.8	+60	30	6.7	_	6.9	8 7.7	6.5	6.4

~~$\frac{70}{6}$~~ ~~$\frac{6-8}{6}$~~

Mean 9

8 18 +61.2	1054	8 18.2	+61	11	3.3	_	~~5.5~~	6.3	~~4.9~~	
							5.7	8 6.5	3.1	
7 49 +61.3	1021	7 49.7	+61	23	6.5	_	6.9	.8 7.7	6.3	6.0
7 57 +51.9	1391	7 57.6	+51	55	5.1	1509 4.8 16 +21	5.9	.5 6.4	5.0	5.0
7 38 +71.4	429	7 38.4	+71	27	6.8	.	6.9	1.2 8.1	6.7	6.0
8 57 +71.9	492	8 56.8	+71	57	6.5	_	6.9	1.3 8.2	6.8	6.0
~ 43 +72.0	386	7 41.0	+72	3	7.3		6.9	1.3 8.2	6.8	6.0
7 40 +72.2	385	7 40.3	+72	13	7.0	_	7.0	1.3 8.3	6.9	6.1
7 17 +71.9	405	7 17.7	+71	53	7.4	_	7.0	1.3 8.3	6.9	6.1
8 11 +62.8	996	8 11.6	+62	45	7.8	_	6.9	.8 7.7	6.3	6.0
							6.7	7.6	6.2	5.8
8 7 +62.9	991	8 6.6	+62	57	6.0	_	6.8	.9 7.7	6.3	5.9
							6.8	8.1	6.7	5.7
8 4 +72.8	409	8 4.6	+72	51	6.2	_	7.0	1.3 8.3	6.9	6.1

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Plate 1064.

	T	H	Type	No. Lines	K	Focus	Other Lines.
8 45	19.5	23.9	III	2	K=H	1	—
	18.2	6.4	II	1	H	1	—
	18.8	9.7	II	2	K=H	1	—
	18.2	16.7	III	3	K=H	2	F.
	18.5	20.4	I a?	5	K=H?	2	F. faint.
	18.5	23.8	I	4	K=H	1	—
	17.6	8.1	II?	1	H	1	—
	17.2	10.2	I	3	H	1	—
	17.5	10.6	I	2	K=H	1	—
	17.8	10.8	I	6	H	2	F?
	17.0	11.8	I	3	?	1	F?
	17.4	13.9	III	2	K=H	1	—
	17.7	14.6	III?	2	K=H	1	—
	17.5	21.5	II?	3	K=H	2	F.
	17.8	23.7	I	3	H	1	—
	16.8	5.8	I	5	K=H	2	F.
	16.8	6.5	III?	2	K=H	1	—
	16.3	9.4	II	3	K=H	1	F.
	16.1	10.5	II?	3	K=H	1	F.
	16.6	11.2	II'	3	K=1.2H	2	F.
	16.8	16.4	II?	3	K=H	1	F.
	16.4	16.6	III	3	K=H	2	F.
	16.0	16.9	II?	2	K=H	1	—
	16.8	19.7	II a	796 2	K=H	1	—
	16.0	20.1	I	5	H	2	[illegible]
	16.0	21.3	I	6	K=H	1	F.
	16.7	22.9	III V	2	K=H	1	—
	15.2	8.6	III	5	K=1.2H	2	F.

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Meang.

	No.	R.A.	Dec.	Mag.		Bre.				Cor. Bre.
6 56 +72,0	352	6 57.1	+72	3	6.4	6.8		8.1	6.7	5.9 ✓
						7.0	1.3	8.3	6.9	6.1
8 28+53,5	1269	8 28.2	+53	25	6.6	7.0	.6	7.6	6.2	6.1 ✓
8 32+72,9	427	8 31.8	+72	35	6.8	6.9	1.3	8.2	6.8	6.0 ✓
7 49+63,5	749	7 49.6	+63	28	6.0	6.5	.9	7.4	6.0	5.6 ✓
						6.8		7.7	6.3	5.9
7 33+63,2	733	7 33.3	+63	11	7.0	6.5	.9	7.4	6.0	5.6 ✓
7 18+62,8	933	7 18.4	+62	48	7.0	6.9	.8	7.7	6.3	6.0 ✓
8 21+53,6	1239	8 21.7	+53	35	6.4	7.0	.6	7.6	6.2	6.1 ✓
8 30+73,8	430	8 30.1	+73	48	7.0	6.8	1.4	8.2	6.8	5.9 ✓
8 27+73,6	428	8 27.0	+73	40	6.5	6.5	1.4	7.9	6.5	5.6 ✓
8 12+53,7	1246	8 12.8	+53	40	6.0	1540 5.8 16 -4				
						6.2	.6	6.8	5.4	5.3 ✓
8 9+54,0	1217	8 9.4	+54	1	6.9	6.6	.6	7.2	5.8	5.7 ✓
8 3+64,1	674	8 3.4	+64	9	8.1	7.1		8.0	6.6	6.2 ✓
						7.4	.9	8.3	6.9	6.5
8 0+53,7	1221	8 0.2	+53	40	7.0	7.0		7.6	6.2	6.1 ✓
						7.2	.6	7.8	6.4	6.3
7 9+73,3	375	7 9.0	+73	20	7.2	6.5	1.4	7.9	6.3	5.6 ✓
	376	7 9.8	+73	20	7.3					
6 55+72,9	350	6 55.1	+72	33	7.3	6.8	1.3	8.1	6.7	5.9 ✓
9 1+73,6	432	9 1.2	+73	32	6.0	6.9	1.4	7.6	6.2	5.3 ✓
8 27+53,9	1268	8 27.5	+53	53	6.8	6.7		7.3	5.9	5.8 ✓
						6.8	.6	7.4	6.0	5.9
8 18+54,4	1228	8 17.8	+54	20	7.3	6.9	.6	7.5	6.1	6.0 ✓
8 14+54,4	1223	8 14.1	+54	23	7.5	7.0	.6	7.6	6.2	6.1 ✓
	370	8 23.5	+74	8	6.4					
8 38+74,1	~~1195~~	~~7 53.3~~	~~+54~~	~~4~~	~~7.0~~	6.5	1.4	7.9	6.3	5.6 ✓
7 53+54,1	1195	7 53.3	+54	4	7.0	6.9	.6	7.5	6.1	6.0 ✓
7 43+74,3	338	7 42.8	+74	18	5.2	6.3		7.7	6.3	5.4 ✓
						6.6	1.4	8.0	6.6	5.7
7 51+54,5	1190	7 51.4	+54	32	7.3	7.0	.6	7.6	6.2	6.1 ✓
7 20+73,4	381	7 20.9	+73	34	7.5	6.9	1.4	8.3	6.9	6.0 ✓
34+64,4	649	7 33.5	+64	23	7.1					
	~~1177~~	~~7 39.7~~	~~+54~~	~~29~~	~~6.3~~	6.5	.6	7.1	5.7	5.6 ✓
7 8+74,1	322	7 7.9	+74	7	7.5	6.8	1.4	8.2	6.8	5.9 ✓
6 58+73,5	366	6 58.2	+73	33	7.5	7.0		8.4	7.0	6.1 ✓
	698	8 27.5	+64	49	4.7	7.3	1.4	8.7	7.3	6.4
8 27+64,8	~~420~~	~~8 18.6~~	~~+73~~	~~36~~	~~7.3~~	6.0	.9	6.9	5.5	5.1
						6.2		7.1	5.7	5.3

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	V	H	Type	No. lines	K	Focus	Other lines.
?	15.7	8.9	I	5	H	1	F. seen.
	15.0	12.5	I	6	K=H	1	F.
	15.1	14.6	III	3	K=H	1	F.
	15.4	15.1	II ?	2	K=H	1	—
?	15.3	17.4	II a, 797	3	K=H	1	F. seen.
∫ H	15.2	19.6	II ? II ?	2 2	K=H K=H	1 1	— —
	15.9	20.4	II	3	K=H	1	F.
	15.4	20.8	II	2	K=H	1	—
	15.9	23.9	I	6	K=H	1	F.
	14.6	5.8	III	2	K=H	1	—
	14.5	11.8	I	8	K=.2H	2	F?
?	14.5	13.8	III ?	3	K=H	1	F. seen.
∫ H	14.3	15.2	II II	2 2	K=H K=H	1 1	— —
	14.6	16.4	II ?	2	K=H	1	—
?	14.6	17.1	II a, 798	1	H	1	seen.
∫ H	14.5	20.2	II II ?	2 2	K=H K=H	1 1	— —
	13.9	8.9	II	2	K=H	1	—
	13.8	9.0	II	3	K=2.5H	2	F.
	13.6	10.0	I	7	H	2	F.
	13.6	15.0	II a 799	3	K=H	1	F.
∫ H	13.9	16.5	II II a. 799 b.	2 2	K=H K=H	1 1	seen
	13.0	18.7	II	3	K=H	1	F.
	13.6	19.8	II a 799 a	7	K=.5H	2	F.
?	13.0	19.9	III b. 800	3	K=H	1	F. seen.
	13.7	20.1	III ?	2	H	1	—
∫ H	13.8	20.8	II II	2 2	K=H K=H	1 1	— —
∫ H	13.1	20.7	I I	3 4	H K=H	1 1	— —
	13.5	21.4	I	6	H	2	—

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	No.	R.A.	Dec.	Mag.				Mean q Br.	log Br.
8 19 +54.6	1231	8 19.6	+54	36	7.2	.		6.6 .6 7.2 5.8	5.7
8 7 +55.0	1265	8 7.2	+55	0	6.7	_		6.8 .6 7.4 6.0	5.9
8 0 +54.9	1208	7 59.9	+54	58	6.7	_		6.7 7.3 5.9 / 7.0 .6 7.6 6.2	5.8 / 6.1
7 53 +74.8	348	7 53.9	+74	47	8.2	_		7.0 1.5 8.5 7.1	6.1
7 49 +54.9	1188	7 49.8	+54	50	6.7	_		6.7 .6 7.3 5.9	5.8
7 35 +64.8	651	7 35.4	+64	43	7.8	_		7.0 7.2 7.9 6.5	6.1
7 39 +54.5	1177	7 39.7	+54	29	6.3	_		6.5 .6 7.1 5.7	5.6
7 10 +74.4	324	7 10.7	+74	26	7.8	_		6.8 1.4 8.2 6.8	5.9
7 15 +64.1	633	7 15.1	+64	8	7.7	_		6.6 9 7.5 6.1	5.7
9 4 +74.6	393	9 4.8	+74	37	6.5	_		6.9 8.3 6.9 / 7.2 1.4 8.6 7.2	6.0 / 6.3
8 20 +75.2	342	8 19.8	+75	13	6.4	_		6.4 1.5 7.9 6.5	5.5
8 4 +75.3	334	8 4.6	+75	17	6.5	_		6.6 8.1 6.7 / 6.9 1.5 8.4 7.0	5.7 / 6.0
7 53 +75.4	325	7 52.8	+75	21	8.8	_		7.2 7.3 1.5 8.7 7.3	6.3
7 53 +55.1	1242	7 53.2	+55	9	7.5	_		6.9 .6 7.5 6.1	6.0
7 47 +65.1	606	7 46.9	+65	9	7.1			6.7 .9 7.6 6.2	5.8
7 39 +55.1	1226	7 39.8	+55	6	7.1	_		7.0 7.1 .6 7.6 6.2	6.1
8 20 +55.4	1283	8 20.6	+55	25	7.5	_		7.2 .6 7.8 6.4	6.3
8 26 +65.5	643	8 26.3	+65	31	5.8	_		6.2 1.0 7.2 5.8	5.3
8 22 +65.6	638	8 21.6	+65	38	5.8	1566 5.3 16 +21		5.9 1.0 6.9 5.5	5.0
7 58 +55.7	1254	7 58.0	+55	41	7.0	_		6.8 .6 7.4 6.0	5.9
7 49 +65.5	607	7 49.6	+65	32	7.0	_		7.0 7.0 1.0 8.0 6.6	6.1
7 23 +75.9	312	7 23.2	+75	53	7.7	_		6.3 1.5 7.8 6.4	5.4
7 41 +55.5	1228	7 41.0	+55	35	6.5	_		59 ~~6.5~~ 7.1 ~~5.7~~ / 6.8 .6 7.4 6.2	5.0
7 32 +65.8	593	7 32.8	+65	48	6.2	_		6.6 7.6 6.2 / 6.9 1.0 7.9 6.3	5.7 / 6.0
7 32 +65.5	592	7 32.1	+65	30	7.3			6.7 7.7 6.3 / 6.9 1.0 7.9 6.3	5.8 / 6.0
7 12 +75.0	304	7 12.0	+75	5	7.6	_		7.0 7.2 1.5 8.5 7.1	6.1
7 29 +65.6	586	7 29.0	+65	37	8.2	.		7.4 7.4 1.0 8.4 7.0	6.5
7 3 +75.3	296	7 2.8	+75	20	7.0	.		6.1 1.5 7.6 6.2	5.2

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	γ	H	Type	No. Lines	K	Focus	Other Lines,
	13,6	22,1	III III	2 2	K=H	K=H	1 1 — —
	12,8	6,1	II a	801 3	H	1	—
	12,7	14,2	II a	802 5	K=H	3	F.
	12,6	14,6	II	2	K=H	1	—
	12,5	19,1	II a	803 2	K=H	1	—
	12,6	20,6	I	5	N	1	—
	12,6	21,6	III ?	? 3	K=H	1	F.
	12,2	27,5	II	? 2	K=H	1	—
	12,5	23,6	III	? 3	K=H	1	F.
	11,3	6,5	II	? 2	K=H	1	—
	11,4	13,9	II	? 2	K=H	1	—
	11,9	14,0	I	4	K=H	1	—
	11,2	14,1	II	2	K=H	1	—
	11,1	18,6	I	6	H	2	F.
?	10,2	7,4	I d	? 6	?	2	F, nebl.
	10,6	18,4	III	2	K=H	1	—
	10,0	19,7	III	2	K=H	1	—
?	10,9	23,6	I d	? 6	?	2	F, nebl.
	9,0	8,0	I	6	H	2	F.
	9,5	11,4	III	2	K=H	2	—
	9,1	16,6	I	6	K=1,5H	2	F.
	9,7	16,9	II	3	K=H	1	F.
	9,6	22,8	III III	2 2	K=H	K=H	1 1 — —
	9,3	23,1	III b2	804 3	K=1,2H	3	F.
	9,2	23,8	II ? II ?	2 2	K=H	K=H	1 1 — —
	8,5	11,4	I	2	K=H	1	—
?	8,7	12,2	II a	805 5	K=H	2	F, nebl.
	8,7	16,2	II a	806 3	K=H	1	F.

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	No.	R.A.	Dec.	Mag.					Corr. Brr.
					Brr.				
7 23+65.4	579	7 22.7	+65	23	6.8	7.0	7.2 8.0	6.6	6.1 ✓
						7.3	7.4 8.3	6.9	6.4
9 6+75.5	370	9 6.6	+75	31	7.3	6.9	1.5 8.4	7.0	6.0 ✓
8 1+76.2	310	8 1.2	+76	11	6.0	6.1	1.6 7.7	6.3	5.2 ✓
7 58+76.2	308	7 58.5	+76	10	7.3	7.0	1.6 8.6	7.2	6.1 ✓
7 19+76.1	284	7 19.8	+76	6	7.3	6.9	1.5 8.4	7.0	6.0 ✓
7 7+75.9	300	7 7.6	+75	32	7.7	6.5	1.5 8.0	6.6	5.6 ✓
7 34+55.9	1218	7 34.3	+55	60	7.3	7.0	7.6	6.2	6.1 ✓
						7.2	.6 7.8	6.4	6.3
6 44+75.7	280	6 44.7	+75	36	7.0	7.0	1.5 8.5	7.1	6.1 ✓
6 44+75.4	281	6 44.7	+75	26	6.8	6.5	8.0	6.6	5.6
						6.6	1.5 8.1	6.7	5.7 ✓
9 6+76.3	348	9 6.8	+76	17	8.1	7.0	1.6 8.6	7.2	6.1 ✓
8 2+56.8	1278	8 2.2	+56	53	5.7	6.9	.7 7.6	6.3	6.0 ✓
8 2+66.6	341	8 2.0	+66	37	6.5	6.9	1.0 7.9	6.5	6.0 ✓
8 2+56.9	1276	8 1.8	+56	38	6.8	7.0	.7 7.7	6.3	6.1 ✓
7 44+56.9	1253	7 44.7	+56	53	7.0	6.6	.7 7.3	5.9	6.7 ✓
8 35+67.2	360	8 35.6	+67	13	6.0	6.2	1.0 7.2	5.8	5.3 ✓
7 22+77.0	293	7 22.9	+77	5	8.2	7.0	8.6	7.2	6.1 ✓
						7.2	1.6 8.8	7.4	6.3
7 10+77.2	286	7 10.6	+77	14	7.4	6.9	8.5	7.1	6.0 ✓
						7.0	1.6 8.6	7.20	6.1
7 13+66.7	562	7 13.0	+66	37	6.2	6.4	1.0 7.4	6.0	5.5 ✓
9 0+77.7	359	8 59.8	+77	40	6.8	6.5	1.7 8.2	6.8	5.6 ✓
8 16+67.8	545	8 16.0	+67	46	6.0	6.6	7.7	6.3	5.7 ✓
						6.8	1.1 7.9	6.3	5.9
7 37+77.9	303	7 37.0	+77	56	7.0	6.5	1.7 8.2	6.8	5.6 ✓
7 51+57.6	1118	7 50.8	+57	40	6.3	6.7	.7 7.4	6.0	5.8 ✓
7 29+57.4	1093	7 28.8	+57	24	6.3	6.9	7.1 7.4	6.2	6.0
						7.2	7.7	6.3	6.3 ✓
6 39+77.2	266	6 38.8	+77	9	4.7	5.7	7.3	5.9	4.8
						6.0	1.6 7.6	6.2	5.1 ✓
7 8+67.5	485	7 8.6	+67	30	7.9	6.9	7.2 1.0 7.9	6.5	6.0 ✓
8 29+78.2	291	8 29.0	+78	12	7.0	6.8	1.7 8.5	7.1	5.9 ✓
8 8+58.2	1112	8 8.7	+58	11	6.2	6.3	.7 7.0	5.5	5.4 ✓
7 39+78.0	273	7 39.4	+78	1	7.7	6.9	1.7 8.6	7.1	6.0 ✓

Mean 9

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	V	H	Type	No. Lines	K	Focus	Other Lines.
	8.0	20.3	~~II~~ I	2	K=H	1	—
	8.4	23.8	II	2	K=H	1	—
?	7.5	10.5	II a 807	2	K=H	1	diff.
	7.6	11.3	III	2	K=H	1	—
	7.1	11.4	I	6	N	1	—
	7.8	13.3	III	3	K=1.2H	1	F.
	7.5	14.7	III	3	K=H	2	F.
?	7.9	19.2	I d ?	~~4~~ ?	K=H ?	1	diff.
	7.9	19.8	I	V	N1	2	F.
	7.0	22.3	III	3	K=2.0H	2	F.
	7.1	23.1	~~III~~ II ?	2	K=H	1	—
	6.8	8.8	II a 808	2	K=H	1	—
	6.5	12.7	II a 809	2	K=H	1	—
?	6.3	17.1	II a 810	4	K=H	2	F, diff.
?	6.8	19.0	III	2	K=H	1	diff.
	6.0	19.2	I	3	N	1	—
?	6.3	20.8	I d ?	V	?	2	F, diff.
	6.6	21.9	I	7	?	3	F.
	5.0	10.3	I	3	N1	1	—
	5.5	11.2	III	2	K=H	1	—
	5.3	13.1	I	9	K=.2H	3	F.
	5.4	14.9	II	2	K=H	1	—
	5.0	15.1	II	2	K=H	1	—
	5.5	15.9	I	10	N1	4	F.
	5.9	15.9	I	V	K=.8H	1	—
	4.0	6.5	I d ?	V	K=H	3	F.
	4.7	6.7	II ?	2	K=H	1	—
	4.0	7.7	I	3	N	1	—

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Means.

	No.	R. A.	Dec.	Mag.			Br.			Cor. Br.
7 1 +78.2	246	7 0.9	+78	10	7.0		6.9	1.7 8.6	7.2	6.8
6 30 +77.4	259	6 30.8	+77	22	7.8		6.8	1.7 8.5	7.1	5.9
8 39 +78.7	297	8 39.4	+78	42	6.9		6.5	1.8 8.3	6.9	5.6
8 31 +78.7	293	8 31.4	+78	42	6.5		7.0 / 7.3	8.8 / 1.8 9.1	7.4 / 7.7	6.1 / 6.4
8 16 +68.9	470	8 16.6	+69	0	6.7		6.5	1.1 7.6	6.2	5.6
8 10 +78.7	287	8 10.6	+78	41	6.8		6.7 / 6.9	8.5 / 1.8 8.7	7.1 / 7.3	5.8 / 6.0
7 58 +68.9	524	7 58.3	+68	34	4.8		6.2 / 6.5	7.3 / 1.1 7.6	5.9 / 6.2	5.3 / 5.6
7 41 +58.6	1072	7 41.7	+58	35	7.5		6.9	7 7.6	6.2	6.0
7 4 +78.3	251	7 4.2	+78	19	7.0		6.4	1.7 8.1	6.7	5.5
7 15 +68.7	480	7 15.8	+68	46	5.5		6.3 / 6.6	7.4 / 1.1 7.7	6.0 / 6.3	5.4 / 5.7
6 32 +78.2	234	6 31.8	+78	10	7.3		7.0 / 7.1	8.7 / 1.7 8.8	7.3 / 7.4	6.1 / 6.2
8 22 +59.1	1176	8 22.3	+59	4	7.0		6.7	7 7.4	6.0	5.8
8 9 +69.4	464	8 9.3	+69	22	7.2		6.9	1.1 8.0	6.6	6.0
7 49 +59.4	1130	7 49.2	+59	27	6.0		6.3	7 7.0	5.6	5.4
7 10 +78.9	254	7 10.4	+78	60	6.8		6.8 / 6.9	8.6 / 1.8 8.7	7.2 / 7.3	5.9 / 6.0
7 32 +69.5	438	7 31.9	+69	30	7.2		6.5	1.1 7.6	6.2	5.6
6 50 +78.9	240	6 50.7	+78	59	6.7		6.2	1.8 8.0	6.6	5.3
7 31 +59.1	1103	7 30.7	+59	2	5.0		5.7	7 6.4	5.0	4.8
8 45 +79.9	294	8 45.4	+79	55	7.0		6.6	1.9 8.5	7.1	5.7
8 18 +69.8	472	8 18.3	+69	49	6.5		6.9 / 7.2	8.1 / 1.2 8.4	6.7 / 7.0	6.0 / 6.3
8 6 +60.0	1124	8 5.8	+60	0	6.0		6.2	8 7.0	5.6	5.3
7 54 +79.9	269	7 54.0	+79	56	7.8		6.8	1.9 8.7	7.3	5.9
7 55 +70.1	497	7 55.2	+70	8	6.5		6.7	1.2 7.9	6.3	5.8
7 42 +79.9	265	7 41.9	+79	52	5.8	1477 5.3 19 +5	5.3	1.9 7.2	5.8	4.4
7 54 +59.6	1136	7 53.9	+59	40	7.0		6.5	7 7.2	5.8	5.6
9 30 +79.8	319	9 29.8	+79	48	6.0		6.2	1.9 8.1	6.7	5.3
	316	9 24.8	+79	28	7.5	=				
~~9 24 +79.5~~	~~1148~~	~~8 27.3~~	~~+60~~	~~26~~	~~6.8~~		7.1	1.8 8.9	7.5	6.2
8 27 +60.4	1148	8 27.3	+60	26	6.8		6.4	1.8 7.2	5.8	5.5

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Plate 1064.

	V	H	Type	No. Lines	K	Other Lines.	
	4.8	9.3	III?	2	K=H	1	—
	4.7	16.3	III	2	K=H	1	—
	4.9	22.6	~~III~~ I?	2	K=H	1	—
!	4.0	22.9	~~III~~ II a 2 811	3	K=2.5H?	3	F, sum.
	3.9	11.6	I	4	N	1	—
	3.6	13.6	I	4	K=H	1	—
?	3.9	16.5	III b 812	2	K=H	2	F? sum.
	3.8	17.0	I	6	N	2	F.
	3.9	19.0	III	2	K=H	1	—
	3.6	19.9	I	3	N	1	—
	3.8	23.3	I	4	K=H	2	—
?	2.8	10.1	III b.c. 813	V.	K=H?	4	F, sum.
	2.0	10.6	I?	3	N	2	F.
	2.4	16.9	I?	3	N	1	—
	2.2	17.7	~~I~~ II a? 814	4	K=H	1	—
	2.5	18.2	III	2	K=H	1	—
	2.9	19.2	III	3	K=H	1	F.
	2.7	20.2	III	2	K=H	1	—
	2.9	23.0	I	4	K=H	1	—

Plate 1065

	22.0	7.7	I	8	N	4	F.
	22.9	8.9	I	V	N	3	—
	22.5	14.7	I	V	K=H	2	—
	22.0	17.0	III	2	K=H	1	—
	22.0	18.4	II	2	K=H	1	—
?	22.0	20.3	II a 840	3	K=H	1	sum.
	21.6	6.6	III	2	K=H	1	—

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	No.	R. A.	Dec.	Mag.					Mean Bv.				Mean Bv.
8 17+79.9	300	8 57.6	+79	52	7.3	–			6.7	19 8.6	7.2		5.8
7 36+80.2	240	7 35.8	+80	14	6.5	–			6.8 / 7.1	8.7 / 19 9.0	7.3 / 7.6		5.9 / 6.2
7 27+79.9	1099	7 27.5	+79	52	7.2	–			6.9	7 7.6	6.2		6.0
6 21+79.7	212	6 21.4	+79	42	5.5	–			5.7	19 7.6	6.2		4.8
8 35+80.1	272	8 34.0	+80	34	7.3	.			6.5	20 8.5	7.1		5.6
8 3+60.8	1119	8 3.6	+60	50	6.8	–			6.5	8 7.3	5.9		5.6
7 32+80.6	238	7 32.1	+80	37	6.5	–			5.9 / 6.1	7.9 / 20 8.1	6.5 / 6.7		5.0 / 5.2
7 49+60.7	1105	7 49.3	+60	42	6.1	1490 6.0	9	-5	6.1	8 6.9	5.5		5.2
7 32+70.5	474	7 31.9	+70	33	6.8	–			6.7 / 6.9	7.9 / 12 8.1	6.5 / 6.7		5.8 / 6.0
7 37+60.7	1084	7 37.6	+60	40	6.7	.			6.7	8 7.5	6.1		5.8
6 16+79.7	208	6 15.4	+79	41	6.3	–			5.8	19 7.7	6.3		4.9
8 18+61.2	1054	8 18.2	+61	11	3.3	–			5.3 / 5.5	6.1 / 8 6.3	4.7 / 4.9		4.4 / 4.6
8 50+81.4	282	8 49.2	+81	24	6.7	.			~~6.2~~	~~2.~~ 8.~~1~~	~~6.9~~		
7 49+61.4	1021	7 49.7	+61	23	6.5	.			~~6.9~~	~~8~~ ~~7.7~~	~~6.3~~		
7 38+71.4	429	7 38.4	+71	27	6.8	–			~~6.7~~	~~12~~ ~~7.9~~	~~6.5~~		
7 8+81.2	252	7 8.0	+81	11	7.0	–			~~6.5~~ / 6.8	8.5 / 20 8.8	~~7.1~~ / 7.4		
6 58+80.9	230	6 57.4	+80	52	7.4	–			6.7 / 7.0	8.7 / 20 9.0	7.3 / 7.6		5.8 / 6.1
6 45+80.7	227	6 44.8	+80	45	8.6	–			6.8 / 7.1	8.8 / 20 9.1	7.4 / 7.7		5.9 / 6.2
7 24+60.9	1069	7 24.8	+60	50	6.7	–			6.8	8 7.6	6.2		5.9
							70/5	9-9/5					
10 14+66.3	664	10 13.6	+66	18	5.0	1829 5.0	13	~~+2~~	5.8	1.0 6.3	5.2		4.9
10 7+65.8	767	10 7.5	+65	49	5.8	1807 5.7	11	8	6.8	1.0 6.8	~~5.7~~		
9 39+66.3	637	9 39.0	+66	16	6.7	–			~~6.2~~	1.0 7.2	~~6.1~~		
9 31+56.5	1397	9 31.1	+56	31	6.5	–			6.9 / 7.1	7.5 / .6 7.7	6.4 / 6.6		6.5 / 6.7
9 6+76.3	348	9 6.8	+76	17	8.1	–			6.8	1.6 8.4	7.3		6.4
9 19+56.3	1388	9 19.4	+56	22	6.6	–			6.6	6 7.2	6.1		6.2
10 9+66.3	671	10 19.6	+66	22	6.6	–			6.9 / 7.2	7.9 / 1.0 8.2	6.8 / 7.1		6.5 / 6.8

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	V	H	Type	No. Lines	K	Focus	Other Lines.
8 45?	21.6	9.5	III b 8413		K=H	2	F, nebs.
	21.0	20.3	I?	4	K=H	1	—
	20.2	6.2	II II	2 2	K=H K=H	1	— —
	20.8	6.6	II?	2	K=H	1	—
	20.5	7.7	~~I~~	~~4~~	K=H	1	—
	20.2	11.0	II? II?	2 2	K=H K=H	1	— —
	20.1	12.0	III	3	K=H	1	F.
	20.4	14.2	III?	1	H	1	—
	20.5	14.9	I?	4	K=H	1	—
	20.1	15.5	I?	K	H	1	—
?	20.0	17.9	II a 8422		K=H	1	neb.
	19.2	6.4	II	2	K=H	1	—
	19.1	11.9	III	2	K=H	1	—
?	19.0	12.7	III b 8432		K=H	2	F? neb.
	19.6	15.6	III	3	K=H	2	F.
	19.2	16.8	III	3	K=H	1	F.
	19.8	18.2	I	5	K=H	1	—
	19.9	18.4	II	2	K=H	1	—
	19.3	18.7	I	7	H	2	F.
	19.0	21.5	I	5	K=H?	1	—
?	19.0	22.5	II a 8443		K=1.2H?	3	F, neb.
	19.4	22.9	III	3	K=H	2	F.
	19.8	24.0	III	2	K=H	1	—
	18.5	7.9	III	1	H	1	—
	18.1	9.3	I	.4	H	1	—
	18.5	9.5	I?	4	H	1	—
	18.5	13.6	II? II?	2 2	K=H K=H	1	— —
	18.6	18.4	I	.6	H	1	F

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	No.	R. A.	Dec.	Mag.		Mean 4 Bpr.		Log. Bpr.
10 22+76.5	393	10 22.6	+76 28	5.0	_	5.7 5.8	7.3 7.6 7.4	6.2 6.3	5.3 5.4
9 19+56.9	1386	9 18.9	+56 32	6.5	_	6.8	.7 7.5	6.4	6.4
10 52+76.3	658 410	10 20.9 51.5	+76 67	3 41	7.2 8.8	6.9	7.0 1.6 8.5	7.4	6.5
10 48+76.5	406	10 48.0	+76 30	7.3	_	6.8	1.6 8.4	7.3	6.4
10 40+76.8	402	10 39.8	+76 46	7.0	_	6.6	1.6 8.2	7.1	6.2
9 53+57.3	1246	9 53.5	+57 22	7.8	_	7.0	7.2 7.7	7.7	6.6
9 50+57.5	1242	9 49.8	+57 30	5.0	_	6.6 6.9	.7 7.3 7.6	6.2 6.5	6.2 6.5
9 43+77.3	389	9 43.0	+77 18	7.4		6.8 6.9	1.6 8.4 8.5	7.3 7.4	6.4 6.5
9 38+67.2	608	9 38.2	+67 12	8.0	_	7.0	1.0 8.0	6.9	6.6
9 30+77.4	379	9 30.4	+77 23	8.4		7.0	1.7 8.7	7.6	6.6
9 22+67.5	597	9 22.2	+67 26	7.2	_	6.8	1.0 7.8	6.7	6.4
10 54+77.3	419	10 54.2	+77 14	8.4	_	6.9	1.6 8.5	7.4	6.5
9 54+67.9	632	9 53.8	+67 39	6.8	_	6.9 7.1	1.1 8.0 8.2	6.7 7.1	6.5 6.7
9 47+58.1	1224	9 47.1	+58 6	6.2	_	6.4 6.6	.7 7.1 7.3	6.0 6.2	6.0 6.2
9 36+57.8	1231	9 36.2	+57 47	5.0	_	6.3 6.6	.7 7.0 7.3	5.9 6.2	5.9 6.2
9 27+67.9	602	9 27.4	+67 55	6.5	_	6.5 6.8	1.1 7.6 7.9	6.5 6.8	6.0 6.4
9 26+57.6	1224	9 26.3	+57 37	6.8	_	6.5	.7 7.2	6.1	6.1
9 19+67.5	594	9 19.5	+67 30	7.5	_	6.9	1.0 7.9	6.8	6.5
8 59+77.7	359	8 59.8	+77 40	6.8	.	6.0	1.7 7.7	6.6	5.6
9 2+67.7	581	9 2.6	+67 44	7.8	_	6.5	1.1 7.6	6.3	6.1
8 58+67.7	577	8 57.6	+67 44	5.3	_	5.3	1.1 6.4	5.3	4.7
8 55+67.5	573	8 55.7	+67 27	5.2	_	6.4 6.8	1.0 7.4 7.8	6.3 6.7	6.0 6.4
9 5+57.3	1211	9 5.1	+57 19	5.0	_	6.7 7.0	.7 7.4 7.7	6.3 6.6	6.3 6.6
10 43+77.8	412	10 43.4	+77 52	6.8	_	6.9 7.2	1.7 8.6 8.9	7.3 7.8	6.5 6.8
10 30+78.2	359	10 30.4	+78 11	7.0	..	6.5	1.7 8.2	7.1	6.4
10 29+77.9	406	10 28.6	+77 59 60	8.0		6.7	1.7 8.4	7.3	6.3
9 43+58.4	1220	9 43.7	+58 22	7.4	_	7.2	7.3 7.7 7.9	6.8	6.8
9 18+68.2	572	9 18.8	+68 9	6.8	_	6.5	1.1 7.6	6.5	6.1

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Plate 1065.

	V	H	Type	No. Lines	K	Focus	Other Lines.
	18,3	22,3	I	4	K=H	1	—
J N	18,4	23,1	II IIa?	8HH'a 2 3	K=HK=H	1	— Fsem
	17,1	7,7	II	2	K=H	1	—
	17,0	7,8	II	3	K=H	2	F.
	17,6	8,5	I	5	K=H	1	—
	17,5	11,2	I	4	K=H	1	—
	17,8	14,4	III	2	K=H	1	sem,
	17,5	15,5	III	3	K=H	2	F.
	17,6	18,2	III	3	K=H	1	F.
	17,5	21,6	I?	4	K=H	1	~
	17,8	23,8	III	b 8453	K=2,0H	2	F.
	16,6	6,8	III	2	K=H	1	—
	16,0	9,3	I	10	K=,2H	3	F.
	16,9	10,2	III?	2	K=H	1	—
	16,4	11,4	III	3	K=H	1	F.
	16,7	11,8	III	2	K=H	1	—
?	16,0	12,1	II	a 8462	K=H	1	sem,
?	16,0	14,5	II	a 8477	K=H	4	F. sem.
?	16,0	15,8	II	a 8482	K=H	1	sem,
?	16,8	16,6	II	a 8492	K=H	1	sem,
	16,8	17,4	II	3	K=H	1	F.
	16,9	20,3	II	a 8503	K=H	1	F.
	16,2	22,8	I	5	K=H	1	~
	16,0	23,0	III?	2	K=H	1	—
	15,4	6,6	III	2	K=H	1	—
J N	15,1	6,9	II	II? 2 2	K=HK=H	1	— —
	15,8	12,6	I	7	?	2	—
	15,6	15,3	I	8	K=H	2	—

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	No.	R.A.	Dec.	Mag.		Mean 4			Lon. Br.
8 58 +68.0	357	8 58.1	+ 68	3	8.0 _	7.0	1.1 8.1	7.0	6.6
9 7 +58.1	1182	9 7.0	+ 58	5	7.1 _	6.7 6.7	7.7 7.4	6.3	6.3
10 48 +78.4	368	10 48.6	+ 78	27	8.0 _	6.9	1.7 8.6	7.5	6.5
10 48 +78.5	367	10 48.2	+ 78	33	6.2 _	6.2	1.8 8.0	6.9	5.8
10 3 +58.7	1244	10 3.6	+ 58	42	7.0 _	6.5	.7 7.2	6.1	6.1
9 53 +58.8	1231	9 53.2	+ 58	48	7.4 _	6.9	.7 7.6	6.5	6.5
9 41 +78.6	327	9 41.0	+ 78	37	7.1 _	6.9 7.2	8.7 1.8 9.0	7.6 7.9	6.5 6.8
9 29 +78.8	317	9 28.8	+ 78	47	6.8 _	6.5 6.8	8.3 1.8 8.6	7.2 7.5	6.1 6.4
9 2 +78.5	303	9 2.1	+ 78	34	7.9 _	6.9 7.1	8.7 1.8 8.9	7.6 7.8	6.5 6.7
8 28 +78.2	291	8 29.0	+ 78	12	7.0 _	6.6	1.7 8.3	7.2	6.2
8 49 +68.2	551	8 49.4	+ 68	11	5.1 _	6.1 6.4	1.1 7.2 7.5	6.1 6.4	5.7 6.0
	~~375~~	~~10 58.9~~	~~+ 78~~	~~34~~	~~6.5~~				
10 59 +78.5	375	10 58.9	+ 78	34	6.5 _	6.9 7.3	8.7 1.8 9.1	7.6 8.0	6.5 6.8
10 10 +69.5	368	10 10.0	+ 69	29	6.0 _	5.9	1.1 7.0	5.9	5.5
10 24 +78.8	354	10 24.1	+ 78	30	7.8 _	6.9 7.0	8.7 1.8 8.8	7.8 7.7	6.5 6.6
9 58 +69.3	361	9 58.1	+ 69	23	7.0 _	6.9 7.1	8.0 1.1 8.2	6.9 7.1	6.5 6.7
12 9 +79.0	330	10 8.8	+ 79	4	7.3 _	7.0 7.2	8.8 1.8 9.0	7.7 7.9	6.6 6.8
10 6 +79.5	329	10 6.4	+ 79	30	8.0 _	6.8	1.8 8.6	7.5	6.4
9 41 +59.7	1268	9 40.7	+ 59	42	4.0 _	4.9	.7 5.6	4.3	4.5
9 24 +79.5	316	9 24.8	+ 79	28	7.5 _	6.8	1.8 8.6	7.5	6.4
9 28 +69.2	528	9 28.2	+ 69	12	8.0 _	6.8	1.1 7.9	6.8	6.4
9 8 +79.0	305	9 8.6	+ 79	2	7.4 _	6.8	1.8 8.6	7.5	6.4
8 39 +78.7	297	8 39.4	+ 78	42	6.9 _	6.5	1.8 8.3	7.2	6.1
8 53 +69.0	504	8 53.1	+ 69	2	7.3 _	6.7	1.1 7.8	6.7	6.3
8 10 +78.6	287	8 10.6	+ 78	41	6.8 _	6.4 6.9	8.5 1.8 8.7	7.4 7.6	6.3 6.5
11 6 +79.1	356	11 5.4	+ 79	6	7.3 _	6.7 7.0	8.5 1.8 8.8	7.4 7.7	6.3 6.6
	~~577~~	~~10 24.3~~	~~+ 69~~	~~27~~	~~7.7~~				
10 24 +69.6	579	10 25.4	+ 69	40	7.9 _	7.0 7.3	1.1 8.1	7.0	6.6
10 1 +79.6	328	10 0.8	+ 79	39	8.7	6.0	1.9 7.9	6.8	5.6
9 30 +79.8	319	9 29.8	+ 79	48	6.0 _	5.4	1.9 7.3	6.2	5.0

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Plate 1065.

	V	H	Type	No. Lines	K	Focus	Other Lines.
?	15.5	16.2	III b	851 3	K=H	2	F. nebs.
.	15.0	18.1	I	3	K	1	—
√	15.2	21.6	II II	2 2	K=H	K=H 1	—
?	14.6	17.2	II a	852 2	K=H	1	F. nebs.
?	14.3	17.5	III b?	853 2	K=1.2H	3	F? nebs.
	14.8	19.2	I	5	K	1	—
	13.3	8.2	I ?	5	K=H	1	F.
	13.6	8.4	III	2	K=H	1	—
	13.4	9.0	II	3	K=H	1	F.
	13.0	14.4	II ?	2	K=H	1	—
	13.4	16.8	II a	854 3	K=H	2	F.
?	13.4	17.3	II a?	855 2	K=H	1	nebs.
	13.5	17.7	II	2	K=H	1	—
√	13.0	18.8	III III	2 2	K=H	K=H 1	— F.
	13.2	19.8	I	6	K	2	F.
	13.9	20.4	III	3	K=H	1	F.
	13.0	23.4	II ?	2	?	K=H 1	—
	12.6	6.5	II	2	K=H	1	—
	12.5	10.7	I	8	K=.2H	2	F.
	12.4	11.4	II	2	K=1.2H	2	—
?	12.0	15.2	II a	856 4	K=H	2	F. nebs.
	12.1	18.3	II	2	K=H	1	—
	12.3	20.0	II	2	K=H	1	—
	11.5	10.4	I	7 8	K=H	2	F?
	11.1	12.2	II ?	1	K	1	—
	11.8	13.5	III	2	K=H	1	—
?	11.3	16.1	III b.c.	857 3	K=H	3	bright F. nebs.
	11.5	18.4	II	2	K=H	1	—

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	No.	R.A.	Dec.	Mag.	Mean Br.	Corr. Br.
9 30 +69.9	531	9 29.8	+69 53	6.1	6.3 6.5 / 12 / 7.5 7.7 / 6.4 6.6	5.9 6.1
8 58 +79.9	300	8 57.6	+79 52	7.3	6.7 19 8.6 7.5	6.3
8 59 +69.6	509	8 58.5	+69 38	8.5	6.8 7.0 11 7.9 6.8	6.4
9 24 +70.3	567	9 24.0	+70 17	7.5	6.5 12 7.7 6.6	6.1
9 22 +70.4	565	9 21.6	+70 29	5.2	5.5 5.7 / 12 / 6.7 6.9 / 5.6 5.8	5.1 5.3
8 45 +79.9	294	8 45.4	+79 55	7.0	6.7 19 8.6 7.5	6.3
10 6 +60.9	1250	10 6.0	+60 52	6.7	6.7 8 7.5 6.4	6.3
10 5 +60.7	1246	10 5.1	+60 44	6.3	6.9 7.2 / 8 / 7.7 8.0 / 6.6 6.9	6.5 6.8
10 49 +80.4	347	10 46.5	+80 27	7.8	6.6 20 8.6 7.5	6.2
9 40 +81.1	319	9 41.0	+81 4	7.4	6.9 2.0 8.9 7.8	6.5
9 25 +70.9	568	9 23.4	+70 55	7.0	6.5 12 7.7 6.6	6.1
9 3 +80.7	287	9 3.8	+80 44	7.8	6.9 2.0 8.9 7.8	6.5
9 26 +60.9	1198	9 26.8	+60 31	6.5	6.5 8 7.3 6.2	6.1
9 13 +70.9	561	9 12.8	+70 38	7.5	6.6 6.9 / 6.6 6.9 / 12 / 7.8 8.1 / 6.7 7.0	6.2 6.5
8 35 +80.5	272	8 34.0	+80 34	7.3	6.3 2.0 8.3 7.2	5.9
9 4 +70.5	557	9 4.1	+70 29	7.0	6.6 6.9 / 12 / 7.8 8.1 / 6.7 7.0	6.2 6.5
7 53 +79.9	269	7 54.0	+79 36	7.8	6.7 19 8.6 7.5	6.3
10 29 +70.9	620	10 29.1	+70 34	7.7	7.0 12 8.2 7.1	6.6
10 30 +81.2	349	10 28.9	+81 11	6.2	5.7 2.0 7.7 6.6	5.3
10 20 +81.2	343	10 20.8	+81 14	6.2	6.2 2.0 8.2 7.1	5.8
8 50 +81.4	282	8 49.2	+81 24	6.7	5.5 2.1 7.6 6.5	5.1
9 24 +61.5	1132	9 24.2	+61 32	7.5	6.8 .8 7.6 6.5	6.4
8 26 +81.0	270	8 26.5	+81 6	8.0	7.0 2.0 9.0 7.9	6.6
10 6 +71.8	534	10 6.1	+71 47	6.3	6.1 1.3 7.4 6.3	5.7
10 12 +81.9	337	10 11.8	+81 55	7.9	6.9 2.1 9.0 7.9	6.5
9 44 +61.5	1151	9 44.4	+61 48	6.4	6.6 6.9 / .8 / 7.4 7.7 / 6.3 6.6	6.2 6.5
9 16 +81.9	302	9 16.0	+81 58	4.3	5.2 5.6 / 2.1 / 7.3 7.7 / 6.2 6.6	4.8 5.2
8 45 +81.6	278	8 45.4	+81 36	7.9	6.8 2.1 8.9 7.8	6.4

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Plate 1065.

	v	H	Type	No. Lines	K	Focus	Other Lines.
	10,8	8,9	II	2	K=H	1	—
	10,6	14,3	I	4	N	1	—
?	10,4	16,4	II a 8582	2	K=H	1	seen.
	10,8	19,0	I	5	K=H	1	—
	10,3	20,5	III	3	K=H	1	F.
	10,8	21,1	III	3	K=H	1	F.
	10,9	21,7	I?	4	K=H	1	—
	10,6	22,2	I	4	K=H	1	—
?	10,6	23,2	II a? 8593	3	K=1,2H	2	F. seen.
	10,0	23,5	I	6:	N	1	—
?	9,8	7,5	I d?	5	?	3	seen.
	9,3	9,5	II	2	K=H	1	—
	9,2	9,9	III	2	K=H	1	—
?	9,5	12,1	II a 860	2	K=H	1	seen.
	9,2	15,7	I	7	K=,5H	2	F.
?	9,5	16,0	III b.c. 861	3	K=H	2	F. seen.
	9,0	17,1	I	4	K=H	1	—
	9,8	16,9	II IIa ?862	2	K=H	1	—
?	9,5	17,2	II IIa 863	3	K=H	2	F. seen.
✓ ✓	9,7	17,7	III III 863a	2 2	K=H K=H	1 1	— F.?
✓ ✓	9,0	21,8	II IIa?	2 2	K=H K=H	1 1	— seen
✓ ✓	9,1	23,3	III III	1 3	N K=H	1 1	— F.
	8,7	10,6	III	2	K=H	1	—
?	8,6	12,5	II a 864	7	K=H	4	F. seen.
	8,1	13,0	III	2	K=H	1	—
	8,2	13,7	III b 865	3	K=H	1	F.
	8,0	15,9	II ?	2	K=H	1	—
	8,4	16,5	I	6	K=,5H	1	F.

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	No.	R. A.	Dec.	Mag.		Mean # Brv.				Cor. Brv.
10 58 +81.7	362	10 58.6	+ 81	44	8.2 _	6.8	2.1	8.9	7.8	6.4
9 41 +72.4	473	9 41.2	+ 72	21	7.1 _	6.6	1.3	7.9	6.8	6.2
9 27 +72.4	465	9 27.3	+ 72	24	7.7 _	6.7	1.3	8.0	6.9	6.3
8 36 +81.8	273	8 35.2	+ 81	49	7.6 _	6.5	2.1	8.6	7.3	6.1
9 0 +72.3	444	8 59.8	+ 72	15	6.3 _	6.4 6.7 6.6 7.0	1.3	7.7 8.0 7.9 8.3	6.6 6.9 6.8 7.2	6.0 6.3 6.2 6.6
8 56 +71.9	492	8 56.8	+ 71	57	6.5 _					
9 9 +61.9	1114	9 9.4	+ 61	59	7.5 _	7.0	8	7.8	6.7	6.6
8 50 +71.9	486	8 49.5	+ 71	52	6.7 _	6.6	1.3	7.9	6.8	6.2
9 2 +62.0	1058	9 2.9	+ 62	0	5.0 _	5.7	8	6.5	5.4	5.3
9 1 +62.2	1054	9 1.2	+ 62	14	7.6 ?	6.5	8	7.3	6.2	6.1
	1055	9 1.2	+ 62	15	7.6 ?					
11 21 +81.9	373	11 21.4	+ 81	56	6.2	5.6	2.1	7.7	6.6	5.2
10 58 +82.5	325	10 58.0	+ 82	31	7.0 _	6.5	2.2	8.7	7.6	6.1
10 11 +72.9	486	10 11.0	+ 72	54	8.4 _	7.0 7.3	1.3	8.3 8.6	7.2 7.5	6.6 6.9
10 18 +82.8	307	10 17.8	+ 82	46	8.2 _	6.6	2.2	8.8	7.7	6.2
9 19 +83.0	261 2	9 19.0	+ 83	0	7.3 _	6.0	2.3	8.3	7.2	5.6
9 30 +72.9	466	9 29.5	+ 72	35	5.3 _	5.8 6.1	1.3	7.1 7.4	6.0 6.3	5.4 5.7
8 57 +82.9	265	8 56.2	+ 82	56	8.8 _	6.8	2.3	9.1	8.0	6.4
9 24 +72.7	464	9 23.6	+ 72	43	7.3 _	6.8	1.3	8.1	7.0	6.4
9 22 +72.9	462	9 21.2	+ 72	50	6.0 _	5.8	1.3	7.1	6.0	5.4
9 18 +72.7	459	9 18.1	+ 72	45	7.2 _	7.0 7.3	1.3	8.3 8.6	7.2 7.5	6.6 6.9
7 47 +82.2	231	7 46.4	+ 82	10	8.3 _	6.8 6.7 6.9	2.2	9.0 8.8 9.0	7.9 7.7 7.9	6.4 6.3 6.5
7 30 +81.7	257	7 30.4	+ 81	43	7.2 _	6.4 7.0	1.3	8.0 8.3	6.9 7.2	6.3 6.6
10 7 +73.2	491	10 7.1	+ 73	10	7.6 _	4.4	2.3	6.7	5.6	4.0
10 13 +83.3	297	10 13.0	+ 83	18	5.2 _	6.5 6.7 6.5 6.8	2.4 1.4	8.9 9.1 7.9 8.2	7.8 8.0 6.8 7.1	6.1 6.3 6.1 6.4
10 5 +83.5	287	10 5.4	+ 83	32	6.8 _					
9 45 +73.5	478	9 45.3	+ 73	33	6.3 _					
9 13 +83.6	256	9 12.3	+ 83	33	7.2 _	6.2	2.4	8.6	7.5	5.8
9 26 +73.4	471	9 25.7	+ 73	23	7.0 _	6.5	1.4	7.9	6.8	6

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	V	H	Type	No. lines	K	Focus	Other lines.
?	8.5	16.5	II[a] 8662		K=H	1	sens.
	8.2	18.1	II?	2	K=H	1	—
	8.1	18.3	III	2	K=H	1	—
?	8.0	18.9	II[a] 8677		K=H	4	F, sens.
	8.9	19.4	I	7	N	2	F
	8.1	20.7	I	8	N	2	—
	8.3	23.7	II	2	K=H	1	—
	7.4	5.6	III	2	K=H	1	—
√	7.6	6.1	~~I~~ I	~~4~~ H	N	K=H	1 1 — —
?	7.6	10.9	II[a] 8684		K=H	2	F, sens.
	7.3	15.2	~~I~~ ?	~~4~~	K=H	1	—
	7.6	15.3	III	2	K=H	1	—
	7.9	16.7	I	6	K=H	2	—
√	8.0	17.3	II II?	2	2	K=H	K=H 1 1 — —
	7.9	19.9	I	8	K=2H	2	F
	6.4	7.8	I?	3	N	1	—
	6.8	11.0	II	2	K=H	1	—
	6.7	9.1	III	2	K=H	1	—
	6.0	12.0	I	3	N	1	—
	6.1	14.2	III	3	K=H	1	F
	6.2	15.6	II	2	K=H	1	—
?	6.8	15.6	II[a] 8691	2	K=H	2	sens.
?	6.5	17.1	II[a] 8701	2	K=H	1	sens.
	6.0	20.1	III	3	K=H	1	F
	6.8	20.2	II?	2	K=H	1	—
	6.5	23.4	I[d?]	7	K=H	3	F
	6.5	23.8	III?	3	K=H	2	F
	6.2	24.1	I?	4	N	1	—

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	No.	R.A.	Dec.	Mag.		Mean Br.	Corr. Br.
9 3+83.3	248	9 3.5	+83	18	8.4	6.8 2.3 9.1 8.0	6.4
8 36+83.3	233	8 35.8	+83	17	7.0	6.0 2.3 8.3 7.2	5.6
8 33+83.3	232	8 33.0	+83	15	7.0	6.7 9.0 7.9 / 7.0 2.3 9.3 8.2	6.3 / 6.6
9 20+63.7	845	9 20.1	+63	40	3.5	4.5 9 5.4 4.3	4.1
8 19+82.8	253	8 19.7	+82	44	7.0	5.5 2.2 7.7 6.6	5.1
7 56+82.9	235	7 56.0	+82	52	6.5	5.3 2.3 7.6 6.5	4.9
7 19+82.0	213	7 18.8	+82	0	7.5	6.4 2.1 8.5 7.4	6.0
12 4+82.5	356	12 4.4	+82	31	6.7	6.4 8.6 7.3 / 6.8 2.2 9.0 7.9	6.0 / 6.4
10 18+63.6	901	10 18.3	+63	38	7.5	6.8 6.7 9 7.7 6.6	6.4
10 6+73.8	489	10 5.7	+73	48	6.5	6.2 1.4 7.6 6.5	5.8
9 24+83.9	263	9 24.6	+83	39	8.0	6.7 2.4 9.1 8.0	6.3
9 36+63.9	861	9 36.5	+63	55	7.0	7.0 7.9 6.8 / 7.2 9 8.1 7.0	6.6 / 6.8
9 24+73.7	470	9 24.0	+73	44	6.5	6.0 1.4 7.4 6.3	5.6
9 19+73.6	467	9 19.6	+73	39	8.1	7.1 7.2 1.4 8.6 7.5	6.8
9 1+73.5	452	9 1.2	+73	32	6.0	5.7 1.4 7.1 6.0	5.3
11 42+83.5	339	11 42.3	+83	28	8.0	6.8 2.4 9.2 8.1	6.4
10 47+83.9	318	10 46.9	+83	60	8.5	7.1 2.4 9.5 8.4	6.7
10 20+74.1	436	10 19.5	+74	4	7.0	7.0 8.4 7.3 / 7.3 1.4 8.7 7.6	6.6 / 6.9
9 52+74.6	427	9 58.6	+74	35	7.7	6.8 1.4 8.2 7.1	6.4
9 44+84.6	325	9 44.7	+84	37	6.5	6.1 8.7 7.6 / 6.5 2.6 9.1 8.0	5.7 / 6.1
9 16+84.5	212	9 15.2	+84	29	8.5	6.8 2.5 9.3 8.2	6.4
9 35+64.3	752	9 34.7	+64	19	6.8	6.5 9 7.4 6.3	6.1
8 48+84.3	199	8 47.2	+84	13	8.6	6.8 2.5 9.3 8.2	6.4
9 14+64.5	733	9 14.0	+64	34	6.5	6.8 7.7 6.6 / 7.1 9 8.6 6.9	6.4 / 6.7
7 53+83.5	207	7 53.7	+83	32	8.2	6.5 2.4 8.9 7.8	6.1
8 59+64.1	723	8 58.9	+64	6	5.0	5.3 9 6.2 5.1	4.9
7 0+82.7	201	7 0.3	+82	40	5.5	5.2 7.4 6.3 / 5.8 2.2 8.0 6.9	4.5 / 5.4
8 30+73.8	430	8 30.1	+73	48	7.0	6.5 1.4 7.9 6.8	6.1

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	V	H	Type	No. Lines	K	Focus	Other Lines.
?	5.6	8.9	II[a] 871	2	K=H	1	nebl.
	5.3	13.2	I	10	K=.5H	4	F.
	5.3	16.6	II[a] 872	2	K=H	1	—
	5.4	16.8	I	8	N	2	—
?	5.5	17.0	II[a] ?873	4	K=.8H	3	F? nebl.
	5.9	18.0	II	2	K=H	1	—
	5.8	19.1	III	2	K=H	1	—
	5.0	19.9	I	6	N	3	F.
	4.6	6.0	I	4	K=H	2	—
	4.9	13.0	II	2	K=H	1	—
?	4.3	15.0	II[a] 874	2	K=H	1	nebl.
?	4.8	15.7	II[a] 875	5	K=H	2	F. nebl.
?	4.1	15.9	II[a] 876	2	K=H	1	nebl.
	4.4	17.0	II	2	K=H	1	—
	4.5	18.6	II? II	2 2	K=H K=H	1 1	— —
	4.0	18.6	I	4	K=H	1	—
	4.1	19.9	I	5	N	1	—
	3.1	5.9	I	6	K=H?	3	F?
	3.5	8.9	I	6	N	2	—
	3.4	10.6	I?	3	N	1	—
	3.3	13.4	III	2	K=H	1	—
	3.0	14.8	I?	6	K=H	2	—
	3.6	16.4	III	2	K=H	1	—
	3.6	17.7	II	2	K=H	1	—
	3.8	17.8	I	7	K=.2H	2	F.
	2.4	7.8	I	6	N	3	—
	2.6	9.5	II?	2	N	2	F.
	2.0	12.1	II	1	N	1	—

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	No.	R. A.	Dec.	Mag.		Br.			Mean Br.
10 22 +74.6	438	10 22.4	+74 35	7.4		6.7	1.4	8.1 7.0	6.3
10 8 +84.9	232	10 7.8	+84 59	5.0		4.6	2.6	7.2 6.1	4.2
9 24 +74.9	403	9 23.4	+74 60	8.2		6.9	1.5	8.4 7.3	6.5
9 22 +74.9	402	9 21.6	+74 59	7.3		5.8	1.5	7.3 6.2	5.4
8 44 +84.7	196	8 44.3	+84 45	6.0		5.4	2.6	8.0 6.9	5.0
8 24 +84.5	186	8 25.1	+84 25	8.0		6.4	2.5	8.9 7.8	6.0
9 4 +74.6	393	9 4.8	+74 37	6.5		6.5 / 6.8	1.4	7.9 / 8.2 6.8 / 7.1	6.1 / 6.4
7 41 +84.5	169	7 41.6	+84 28	6.0	1485 6.5 12 N	5.2	2.5	7.7 6.6	4.8
10 20 +65.0	789	10 20.4	+64 59	6.2		6.2	9	7.1 6.0	5.8
10 12 +85.1	161	10 13.4	+85 8	7.3		6.6	2.7	9.3 8.2	6.2
9 37 +65.5	736	9 37.4	+65 34	7.3		6.8	1.0	7.8 6.7	6.4
9 30 +75.3	389	9 30.1	+75 15	6.8		6.2	1.5	7.7 6.6	5.8
9 33 +66.6	736	9 33.2	+65 38	6.8		6.0	1.0	7.0 5.9	5.6
8 37 +85.3	132	8 36.9	+85 15	8.2		6.8	2.7	9.5 8.4	6.4
	179	8 3.8	+84 55	8.3					
8 4 +84.9	~~370~~	~~9 6.6~~	~~+75 31~~	~~7.3~~		7.0 6.8	2.6	9.6 8.5	6.6
9 6 +75.5	370	9 6.6	+75 31	7.3		6.8	1.5	8.3 7.2	6.4
7 33 +84.8	168	7 33.6	+84 47	7.8		6.0	2.6	8.6 7.5	5.6
12 48 +84.2	289	12 48.0	+84 12	6.5					
	290	12 48.1	+84 12	5.5		4.6	2.5	7.1 6.0	4.2
10 7 +65.8	767	10 7.5	+65 49	5.8	1807 5.7 10 2	5.7	1.0	6.7 5.6	5.3
11 20 +85.0	183	11 20.0	+85 30	7.5		6.8	2.8	9.6 8.3	6.4
10 13 +85.9	160	10 11.5	+85 58	8.5		7.0 / 7.3	2.9	9.9 10.2 8.8 / 9.1	6.6 / 6.9
9 39 +66.3	637	9 39.0	+66 16	6.7		6.1	1.0	7.1 6.0	5.7
9 24 +75.5	386	9 23.7	+75 51	6.8		6.7 / 7.0	1.5	8.2 7.1 / 8.5 7.0 / 7.3	6.5 / 6.6
8 11 +85.5	128	8 12.7	+85 33	7.5		6.5	2.8	9.3 8.2	6.4
9 12 +75.7	377	9 12.6	+75 44	6.2		5.6	1.5	7.1 6.0	5.2
10 14 +66.3	664	10 13.6	+66 18	~~5.0~~	~~1829 5.0 11 0~~	~~5.1~~	~~1.0~~	~~6.1~~ ~~5.0~~	
10 22 +76.3	393	10 22.6	+76 28	5.0		~~5.5~~	~~1.6~~	~~7.1~~ ~~6.1~~	
10 57 +86.4	161	10 56.2	+86 26	7.2		6.4	3.0	9.4 8.3	

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V	H	Type	No. Lines	K	Focus	Other Lines.
2.8	12.7	III	2	K=H	1	—
~~2.5~~	18.4	I	3	N	1	—

Plate 1113.

	22.8	20.3	I	5	K=H	1	—
	21.1	8.7	III	2	K=H	1	—
	22.0	13.6	~~I~~ III	4	K=H	1	—
	21.1	16.9	I	4	K=H	1	—
?	21.5	17.5	II a? 815	2	K=H	1	Neb.
	21.2	18.0	~~III~~ III ? 2	~~2~~	K=~~H~~ ~~K=H~~	1	— —
?	21.0	18.4	II a 816	3	K=H	2	F, Neb.
	21.2	19.1	I	4	K=H	1	—
	20.9	7.3	I	7	K=.2H ?	2	F.
	20.3	11.3	I ?	3	N	1	—
	20.0	13.3	I	9	K=.2H	4	F.
	20.4	13.4	II ?	2	K=H	1	—
?	20.6	13.8	II a 817	7	K=1.2H	5	F, Neb.
	20.8	16.2	III	2	K=H	1	—
	20.6	17.5	III	2	K=H ?	1	—
	20.5	18.8	I	5	N	1	—
	20.7	21.1	I	7	N	3	F.
	19.4	13.1	III b 818	2	K=H	2	—
	19.0	13.6	I	4	K=H	1	—
	19.8	14.0	II	2	K=H	1	—
?	19.5	14.4	I a 819	3	K=H	2	Neb.
	19.0	17.5	I	.6	N	2	—
	19.4	23.3	I	6	K=.5H	2	—
11 15	18.2	7.7	III	2	K=H	1	—

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	No.	R.A.	Dec.	Mag.					Mean 4 Br.	Mean 4 Lev. Br.
10 32+86.1	154	10 33.4	+86	8	8.2	_			6.9 7.1 / 9.8 29 10.0 / 8.7 8.9	6.5 6.7 ✓
7 34+86.1	113	7 37.2	+86	6	7.2	.			~~7.0~~ / 2 9.9 / ~~8.8~~	✓

											Mean 8	
9 2+51.0	1488	9 1.8	+51	3	6.5	_			1		~~6.5~~ .5 ~~7.3~~ ~~6.1~~	✓
9 44+61.8	1151	9 44.4	+61	48	6.4	_			2		6.8 7.1 / .8 7.6 7.9 / 6.4 6.7	6.3 ✓
9 24+61.5	1132	9 24.2	+61	32	7.5	_			2		6.9 7.2 / .8 7.7 8.0 / 6.3 6.8	6.1 6.4 ✓
9 9+61.9	1114	9 9.4	+61	59	7.5	_			2		7.1 .8 7.9 6.7	6.3 ✓
9 10+51.9	1495	9 10.6	+51	53	6.5	_			1		6.9 .5 7.4 6.2	6.1 ✓
8 57+71.9	492	~~9~~ 8 56.8	+71	57	6.5	_			3		7.0 7.2 / .8 8.3 8.6 / 7.1 7.4	6.2 6.5 ✓
9 3+62.0	1058	9 2.9	+62	0	5.0	_			2		6.0 .8 6.8 5.6	5.2 ✓
8 50+71.9	486	8 49.5	+71	52	6.7	_			3		6.8 1.3 8.1 6.9	6.0 ✓
10 6+71.8	534	10 6.1	+71	47	6.3	_			3		6.4 1.3 7.7 6.5	5.6 ✓
9 41+72.4	473	9 41.2	+72	21	7.1				3		6.9 1.3 8.2 7.0	6.1 ✓
9 25+52.7	1402	9 24.9	+52	42	5.0	_			1		5.2 .5 5.7 4.3	4.4 ✓
9 27+72.4	465	9 27.3	+72	24	7.7	_			3		7.1 1.3 8.4 7.2	6.3 ✓
9 23+52.3	1401	9 23.1	+52	21	3.0	_			1		4.8 .5 5.3 4.1	4.0 ✓
9 15+52.2	1389	9 14.9	+52	12	6.7	_			1		6.9 7.1 / .5 7.4 7.6 / 6.2 6.4	6.1 6.3 ✓
9 0+72.3	444	8 59.8	+72	15	6.3	_			3		6.8 7.0 / 1.3 8.1 8.3 / 6.9 7.1	6.0 6.2 ✓
9 1+62.3	1054 / 1055	9 1.2 / 9 1.2	+62 / +62	14 / 15	7.6 / 7.6	} .			2		6.7 .8 7.5 6.3	5.9 ✓
8 58+52.2	1365	8 58.6	+52	12	5.0	1656 44		181+6			5.7 .5 6.2 5.1	4.9 ✓
9 29+72.5	466	9 29.5	+72	55	5.3	_			3		6.0 6.3 / 1.3 7.3 7.6 / 6.1 6.4	5.2 5.5 ✓
9 23+53.0	1347	9 23.8	+53	4	7.5	_			1		7.2 .6 7.8 6.6	6.4 ✓
9 24+72.5	464	9 23.6	+72	43	7.3	_			3		7.0 1.3 8.3 7.1	6.2 ✓
9 21+72.9	462	9 21.2	+72	50	6.0	_			3		6.0 1.3 7.3 6.1	5.2 ✓
9 10+53.0	1330	9 10.3	+53	4	7.0	.			1		6.5 .6 7.1 5.9	5.7 ✓
8 41+62.5	1027	8 41.4	+62	30	5.7	_			2		6.1 .8 6.9 5.7	5.3 ✓
10 7+73.2	491	10 7.1	+73	10	7.6	_			3		7.0 7.3 / 1.3 8.3 8.6 / 7.1 7.4	6.2 6.5 ✓

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Plate 1113.

	ν	H	Type	No. lines	K	Focus	Other lines.
1, 40	18.7	10.3	III?	2	K=H	1	—
III? 6.1, 6.5.	18.0	10.9	III	3	K=H	2	F.
	18.0	11.9	II a 8220	2	K=H K=H	1	— Seen
	19.0	12.0	III III	2 2	K=H K=H	1	— —
	18.4	13.4	I?	4	N	1	—
	18.5	13.7	I	6	?	2	F.
	18.1	17.1	I	8	K=.2H	2	F.
	18.7	19.3	II 820a IIa?	2 2	K=H K=H	1	— F? Seen
	18.9	20.6	I	3	N	1	—
	18.7	21.4	II?	3	K=H	1	F.
	17.0	8.2	I	8	K=H	2	F.
	17.9	8.8	III III	2 2	K=H K=H	1	— F?
	17.2	10.9	III	2	N	1	F.
	17.9	14.0	I	8	K=H	2	F.
	17.9	14.6	II a ? 8221	2	K=.8H	8	F.
	17.1	21.8	I	8	?	2	F.
	17.6	22.6	III III?	2 2	K=H K=H	1	— F?
	16.0	6.4	III	1	N	1	—
	16.5	11.4	II a 8226	6	K=H	1	—
	16.2	15.0	III III	2 2	K=H K=H	1	— —
	16.2	15.7	III	3	K=2,0H	1	F.
	16.0	15.9	I	7	K=.5H	1	F.
	16.0	16.5	III	3	K=H	1	F.
	16.0	18.7	I	10	K=.2H	3	F.
	16.9	19.0	I c. 8239	9	K=.2H	3	F.
	16.9	21.3	I	7	K=.5H	1	F.
	16.9	21.7	I	6	N	1	F.
	16.1	22.1	III	3	K=H	1	F.

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Mean 8.

	No.	R. A.	Dec.	Mag.	Ex.	Br.	Br.
9 49+73.1	481	9 49.0	+73 7	8.2 _	3	7.1 8.4 7.2	6.3
						7.3 1.3 8.6 7.4	6.5
9 45+73.5	478	9 45.3	+73 33	6.3 _	3	6.5 7.9 6.7	5.7
						6.8 1.4 8.2 7.0	6.0
9 32+63.6	858	9 32.1	+63 35	7.5 _	2	7.2 7.2.9 8.1 6.9	6.4
9 29+52.9	1408	9 29.2	+52 59	8.0 _	1	7.1 7.3 7.7 6.3	6.3
						7.4 7.6.6 8.0 6.8	6.6
9 25+63.4	851	9 25.1	+63 26	7.4 .	2	6.9 .9 7.8 6.6	6.1
9 26+73.4	471	9 25.7	+73 23	7.0	3	7.2 1.4 8.6 7.4	6.4
9 1+73.5	452	9 1.2	+73 32	6.0 _	3	3.6 1.4 7.0 3.8	4.8
8 59+63.0	825	8 58.6	+63 2	7.8 _	2	7.1 7.3.9 8.0 6.8	6.3
8 59+52.9	1371	9 0.0	+52 59	8.0 .	1	7.2 .6 7.8 6.6	6.4
8 32+72.9	427	8 31.8	+72 55	6.8 _	3	6.9 1.3 8.2 7.0	6.1
10 5+73.8	489	10 5.7	+73 48	6.5 _	3	6.5 1.4 7.9 6.7	5.9
9 41+53.5	1361	9 40.0	+53 34	7.2 _	1	7.2 7.3 7.8 6.6	6.4
						7.4 7.5.6 8.0 6.8	6.6
9 36+63.9	861	9 36.5	+63 55	7.0 _	2	7.0 7.9 6.7	6.2
						7.3 .9 8.2 7.0	6.5
9 24+73.7	470	9 24.0	+73 44	6.5 _	3	6.2 1.4 7.6 6.4	5.4
9 20+63.7	845	9 20.1	+63 40	3.5 _	2	4.3 .9 5.2 4.1	3.5
8 27+73.7	428	8 27.0	+73 40	6.5	3	6.4 1.4 7.8 6.6	5.6
8 53+53.7	1305	8 53.0	+53 40	7.0 _	1	7.1 7.2 7.7 6.3	6.3
						7.4 7.4.6 8.0 6.8	6.6
10 19+74.1	436	10 19.5	+74 4	7.0 _	3	7.0 8.4 7.2	6.2
						7.3 1.4 8.7 7.5	6.5
9 34+64.3	752	9 34.7	+64 19	6.8 _	2	6.4 .9 7.3 6.1	5.6
9 17+74.6	399	9 16.5	+74 35	8.0 _	3	7.0 7.2 8.4 7.2	6.2
						7.4 7.5.4 8.8 7.6	6.6
9 14+64.5	733	9 14.0	+64 34	6.5 _	2	6.8 7.7 6.3	6.0
						7.1 .9 8.0 6.8	6.3
9 15+54.6	1299	9 15.4	+54 39	7.5 _	1	6.8 .6 7.4 6.2	6.8
9 4+74.6	393	9 4.8	+74 37	6.5 _	3	6.4 7.8 6.6	5.6
						6.6 1.4 8.0 6.8	5.8
9 6+54.6	1285	9 5.8	+54 38	5.7 _	1	5.4 .6 6.0 4.1	4.6
8 59+64.1	723	8 58.9	+64 6	5.0 _	2	5.2 .9 6.1 4.9	4.4
8 30+73.8	430	8 30.1	+73 48	7.0 _	3	6.6 1.4 8.0 6.8	5.5
8 47+63.9	812	8 46.9	+63 54	7.2 _	2	6.6 .9 7.5 6.3	5.8
8 23+74.1	370	8 23.5	+74 8	6.2 _	3	6.5 7.9 6.7	5.7
						6.7 1.4 8.1 6.9	5.7

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γ	H	Type	Lines	K	Focus	Other lines.
15,1	6,6	II?	2	K=H	1	—
15,6	8,3	I	8	N	4	F.
15,6	9,4	I	5	K=.5H	1	—
15,1	11,0	I	6	N	2	F.
15,3	14,1	~~II?~~ I a?	2	K=H	1	—
15,4	14,3	I	8	N	2	F.
15,3	22,2	I	7	N	2	—
14,9	6,3	I	7	K=.5H	1	F.
14,4	7,2	~~II~~ II a? 8242		K=H	1	neb.
14,0	11,0	II	2	K=H	1	—
14,2	11,0	II?	2	K=H	1	—
14,8	13,3	I	7	K=.5H	2	F.
14,2	16,1	I	6	K=H	1	F.
14,4	21,9	III	3	K=H	2	F.
? 13,9	11,9	II a 8254		K=H	2	F. neb.
13,2	13,8	III	III 3	2 K=H	K=H 1	F. —
13,6	14,1	III	3	K=H	1	F.
? 13,5	14,4	a? 8262		K=H	1	neb.
13,9	15,4	I	9	K=1.2H	3	F.
13,5	17,2	III	2	K=H	1	—
13,9	22,1	I	9	K=.5H	2	F.
13,2	23,9	III	3	K=H	1	F.
12,5	9,4	? III	2	2 K=H	K=H 1	— —
12,6	10,8	I	7	K=H	2	F.
12,3	11,7	III	3	K=H	1	F.
? 12,6	14,9	a 827	4	K=H	2	F. neb.
12,7	16,0	I	5	N	1	—
12,4	18,2	II I I	2	2 K=H	K=H 1	— —

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	No.	R. A.	Dec.	Mag.		Cl	Mean 8 Br.				Cor. Br.
10 20 + 74.5	437	10 19.9	+ 74	32	7.8	_	3	7.1	1.4	8.5	7.3	6.3
9 42 + 64.7	1331	9 42.2	+ 64	45	5.0	1756 44	115 +3	5.3	.6	5.9	4.7	4.5
9 58 + 74.6	427	9 58.6	+ 74	35	7.7	_	3	6.8	1.4	8.2	7.0	6.0
9 33 + 55.0	1345	9 33.1	+ 55	2	6.7	.	1	6.4	.6	7.0	5.8	5.6
9 23 + 74.9	403	9 23.4	+ 74	60	8.2	_	3	6.9	1.5	8.4	7.2	6.4
9 22 + 74.9	402	9 21.6	+ 74	59	7.3	.	3	5.8	1.5	7.3	6.1	5.0
8 53 + 54.8	1272	8 53.4	+ 54	51	5.8	1644 5.6	1 10 -2	6.0	.6	6.6	5.4	5.2
10 22 + 74.6	438	10 22.4	+ 74	35	7.4	_	3	6.7	1.4	8.1	6.9	5.9
9 55 + 65.1	749	9 55.0	+ 65	7	7.5	_	2	7.0	.9	7.9	6.7	6.2
9 37 + 65.6	736	9 37.4	+ 65	34	7.3	_	2	6.7	1.0	7.7	6.5	5.9
9 48 + 75.5	399	9 48.4	+ 75	27	7.2	_	3	6.5	1.5	8.0	6.8	5.7
9 30 + 75.3	389	9 30.1	+ 75	15	6.8	_	3	6.0	1.5	7.5	6.3	5.2
9 6 + 75.5	370	9 6.6	+ 75	31	7.3	_	3	6.6	1.5	8.1	6.9	5.8
8 44 + 65.1	673	8 44.1	+ 65	9	6.0	_	2	6.0 / 6.2	.9	6.9 / 7.1	5.7 / 5.9	5.2 / 5.4
9 33 + 65.7	731	9 33.2	+ 65	38	6.3	_	2	6.1	1.0	7.1	5.9	5.3
9 26 + 76.1	360	9 25.8	+ 76	5	7.3	_	3	6.9 / 7.2	7.0 / 7.8 / 1.5	8.4 / 8.7	7.2 / 7.3	6.4 / 6.4
9 24 + 75.8	386	9 23.7	+ 75	51	6.8	_	3	6.3 / 6.6	1.5	7.8 / 8.1	6.6 / 6.9	5.5 / 5.8
9 21 + 55.9	1339	9 21.2	+ 55	54	7.3	_	1	7.2	.6	7.8	6.6	6.4
9 12 + 75.7	377	9 12.6	+ 75	44	6.2	_	3	5.5	1.5	7.0	5.8	4.7
8 58 + 75.9	365	8 57.8	+ 75	52	7.0	_	3	7.1 / 7.4	1.5	8.6 / 8.9	7.4 / 7.7	6.3 / 6.6
8 20 + 75.3	342	8 19.8	+ 75	13	6.4	_	3	5.6	1.5	7.1	5.9	4.8
8 5 + 75.3	334	8 4.6	+ 75	17	6.5	_	3	6.4 / 6.7	1.5	7.9 / 8.2	6.7 / 7.0	5.6 / 5.9
10 3 + 76.2	380	10 3.3	+ 76	10	8.3	_	3	7.1 / 7.4	7.3 / 7.6	8.7 / 8.8	7.5 / 7.6	6.3 / 6.4
9 39 + 66.3	737	9 39.6	+ 66	16	6.7	_	2	6.1	1.0	7.1	5.9	5.3
9 31 + 56.5	1397	9 31.1	+ 56	31	6.5	_	1	6.9 / 7.1	.6	7.5 / 7.7	6.3 / 6.5	6.1 / 6.3
9 19 + 56.4	1388	9 19.4	+ 56	22	6.6	_	1	6.5	.6	7.1	5.9	5.7
9 6 + 76.3	348	9 6.8	+ 76	17	8.1	_	3	6.7	1.6	8.3	7.1	5.9
9 1 + 66.4	600	9 1.3	+ 66	23	7.7	_	2	6.9	7.0 / 7.1 / 1.0	7.9	6.7	6.1

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	V	H	Type	No. Lines	K	Focus	Other Lines.
✓	12,6	18,3	~~II~~ ? II	2	2 K=H	K=H 1	— —
	12,7	19,0	I	3	N	1	—
?	11,5	7,3	~~III~~ b.c. 8283		K=1.2H	3	F. bright.
✓	11,3	13,2	~~II~~ ? II	2	2 K=H	K=H 1	— —
?	11,6	15,0	~~III~~ a 8283		K=H	1	F. diff.
✓	11,1	18,2	~~III~~ III	2	2 K=H	K=H 1	diff. —
	11,6	21,2	I	4	N	1	F.
	11,4	23,7	~~III~~	3	K=1.5H	2	F.
	10,8	5,5	I	6	K=H	1	F.
	10,0	6,7	~~III~~	3	K=H	1	F.
	10,6	11,0	~~I~~ 1 ? ~~2~~ 5		K=H	1	—
	10,6	12,0	~~III~~	2	K=H	1	—
	10,4	12,7	I	5	K=H	1	—
	10,1	13,0	I	6	N	1	—
✓	10,6	13,4	~~II~~ II	2	2 K=H	K=H 1	— —
	10,4	14,2	~~II~~	2	K=H	1	—
	10,2	14,7	I	4	K=H	1	—
✓	10,0	15,1	~~II~~ Id? ~~2~~ 4	3	K=H	N 1	— —
	10,0	16,6	I	6	N	2	F.
✓	10,8	17,0	~~III~~ III	1 3	N	K=H 1	— F.
	10,6	18,6	~~III~~	3	K=H	2	F.
✓	10,5	18,8	~~II~~ A ~~III~~ A	3	2 K=H	K=H 1	F. —
III ? 5.9, 6.3.	10,3	19,1	~~III~~	2	K=H	2	—
	10,0	23,0	I	8	N	3	F.
	9,8	7,2	I	3	N	1	—
	9,4	7,9	~~III~~	2	K=H	1	—
	9,7	10,4	~~III~~	3	K=H	2	F.
	9,4	13,2	~~III~~	3	K=H	1	F.

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	No.	R.A.	Dec.	Mag.		dt	Yr.	Mean δ.	Corr Brec.
9 1 +66.3	599	9 1.0	+66	19	7.7	2	6.8	6.6	6.0
9 4 +56.2	1375	9 4.2	+56	13	7.5	1	6.9	6.3	6.1
10 23 +76.5	393	10 22.6	+76	28	5.0	3	5.4 5.7	5.8 6.1	4.6 4.9
9 32 +76.9	363	9 32.0	+76	58	8.5	3	7.2	7.6	6.4
9 19 +56.9	1386	9 18.9	+56	32	6.5	1	6.7	6.2	5.9
8 46 +76.9	335	8 46.2	+76	58	7.5	3	6.9 7.0	7.3 7.4	6.1 6.2
8 46 +66.6	589	8 46.0	+66	33	7.0	2	6.6	6.4	5.8
8 1 +76.2	310	8 1.2	+76	11	6.0	3	5.8 6.1	6.2 6.3	5.0 5.3
10 40 +76.7	402	10 39.8	+76	46	7.0	3	6.5	6.9	5.7
9 50 +57.5	1242	9 49.8	+57	30	5.0	1	6.6 7.0	6.1 6.5	5.8 6.2
9 38 +67.2	617	9 38.2	+67	14	8.0	2	7.0	6.8	6.2
9 43 +77.3	389	9 43.8	+77	18	7.4	3	6.9 7.1	7.3 7.5	6.1 6.3
9 30 +67.4	608	9 29.9	+67	24	8.0	2	7.0	6.8	6.2
9 26 +57.6	1224	9 26.3	+57	37	6.8	1	6.6	6.1	5.8
9 30 +77.4	378	9 27.8	+77	32	7.8	3	6.9	7.4	6.1
9 23 +67.5	597	9 22.2	+67	26	7.2	2	6.8	6.6	6.0
9 19 +67.5	594	9 19.5	+67	30	7.5	2	6.9	6.7	6.1
9 14 +77.7	370	9 14.0	+77	41	8.5	3	7.0	7.5	6.2
9 0 +77.7	359	8 59.8	+77	40	6.8	3	5.9	6.4	5.1
9 11 +57.3	1214	9 11.0	+57	19	5.8	1	6.8 7.1	6.3 6.6	6.0 6.3
9 5 +57.4	1211	9 5.0	+57	19	5.0	1	6.5 6.9	6.0 6.4	5.7 6.1
8 57 +67.3	576	8 57.4	+67	15	8.8	2	7.1 7.3	6.9 7.1	6.3 6.5
8 56 +67.4	573	8 55.7	+67	27	5.2	2	6.4 6.8	7.4 7.8	6.2 6.6	5.6 6.0
8 36 +67.3	560	8 35.6	+67	13	6.0	1601 6.0 27 -5	5.7	6.7	5.5	4.9
10 26 +77.3	405	10 26.8	+77	12	8.3	3	6.9	8.5	7.3	6.7
10 22 +77.5	404	10 21.9	+77	28	7.8	3	7.0 7.3	8.7 9.0	7.5 7.8	6.2 6.5
9 36 +57.8	1231	9 36.2	+57	47	5.0	1	6.4 6.8	7.1 7.5	5.9 6.3	5.6 6.0
9 27 +67.9	602	9 27.4	+67	35	6.5	2	6.6 7.0	7.7 8.1	6.3 6.9	5.8 6.2

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	τ	H	Type	No. Lines	K	Focus	Other Lines.
	9.6	13.7	III	2	K=H	1	F.
	9.7	17.7	I	5	H	1	neb
?	9.7	18.7	II a	8304	K=1.2H	4	F? neb.
	9.0	18.5	III	2	K=H	1	—
	9.4	21.0	III	3	K=H	1	F.
	9.2	21.9	I	4	K=H	1	—
	9.2	22.4	III	3	K=H	1	F.
	8.0	5.9	III	2	K=H	1	—
	8.8	6.1	II?	1	H	1	—
	8.4	7.5	II a	8312	K=H	1	—
	8.8	7.5	III	3	K=H	1	F.
	8.9	8.2	III	2	K=H	1	—
	8.6	10.8	III	2	K=H	1	—
	8.0	12.5	III	2	K=H	1	—
	8.2	16.3	III	2	K=H	1	—
	8.4	19.6	I?	4	K=H	1	—
III 5.6, 6.0, 7.0. ?	8.6	20.1	III b.c.	8321	K=H	2	F, neb.
	7.9	7.4	I	5	H	1	—
	7.9	13.7	III b	8333	K=H	2	—
	7.3	15.6	II	2	K=H	1	—
?	7.7	18.4	II a	8314	K=H	1	neb.
	7.1	19.2	I	4	K=H	1	—
	7.1	21.2	II?	2	K=H	1	—
?	7.5	22.0	I	4	K=H?	1	neb.
	7.3	23.3	I	5	H	1	F.
	7.6	23.5	II?	2	K=H	1	—
	6.6	6.0	III	3	K=2.0H	2	F.
	6.8	8.4	II?	2	K=H	1	—

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	No.	R.A.	Dec.	Mag.		Ex.	Brr.				len. Brr.
9 26 + 78.2	315	9	25.9	+ 78	12	8.2	3	6.9 7.2	7.2 7.2	8.6 1.7 8.9	7.4 7.7	6.1 6.4
9 2 + 67.7	881	9	2.6	+ 67	44	7.8	2	6.6	1.1	7.7	6.5	5.8
8 58 + 67.7	577	8	57.6	+ 67	44	5.3	2	4.9	1.1	6.0	4.8	4.1
8 58 + 68.0	557	8	58.1	+ 68	3	8.0	2	7.6 7.2		8.1 1.1 8.3	6.9 7.1	6.2 6.4
8 18 + 77.5	337	8	18.4	+ 77	30	7.2	3	6.6	1.7	8.3	7.1	5.8
8 10 + 77.5	330	8	10.3	+ 77	32	7.7	3	6.8	1.7	8.5	7.3	6.0
8 6 + 77.4	327	8	5.7	+ 77	25	7.0	3	6.8 7.2	1.7	8.5 8.9	7.3 7.7	6.0 6.4
10 44 + 77.9	412	10	43.4	+ 77	52	6.8	3	7.0 7.3	1.7	8.7 9.0	7.5 7.8	6.2 6.5
10 37 + 77.7	410	10	37.0	+ 77	38	8.3	3	7.2	1.7	8.9	7.7	6.4
10 29 + 77.9	406	10	28.6	+ 77	~~60~~ 59	8.1	3	6.9	1.7	8.6	7.4	6.1
9 47 + 58.1	1234	9	47.1	+ 58	6	6.2	1	6.5 6.6	.7	7.2 7.3	6.0 6.1	5.7 5.8
9 54 + 67.9	932	9	53.8	+ 67	59	6.8	2	7.0 7.2	1.1	8.1 8.3	6.9 7.1	6.2 6.4
9 56 + 78.2	37 340	9	56.3	+ 78	10	8.3	3	7.0 7.4	7.1 7.4	8.7 1.7 9.1	7.5 7.9	6.2 6.6
9 41 + 78.6	327	9	41.0	+ 78	37	7.1	3	6.9 7.2		8.7 1.8 9.0	7.3 7.8	6.1 6.4
9 2 + 78.5	303	9	2.1	+ 78	34	7.9	3	6.9 7.1		8.7 1.8 8.9	7.3 7.7	6.1 6.3
8 29 + 78.2	291	8	29.0	+ 78	12	7.0	3	6.6	1.7	8.3	7.1	5.8
8 49 + 68.2	551	8	49.4	+ 68	11	5.1	2	6.1 6.5	1.1	7.2 7.6	6.0 6.4	5.3 5.7
10 30 + 78.2	359	10	30.4	+ 78	11	7.0	3	6.4	1.7	8.1	6.9	5.6
9 29 + 78.7	317	9	28.8	+ 78	47	6.8	3	6.3 6.8	1.8	8.1 8.6	6.9 7.4	5.5 6.0
9 8 + 79.0	305	9	8.6	+ 79	2	7.4	3	6.9	1.8	8.7	7.5	6.1
8 39 + 78.7	297	8	39.4	+ 78	42	6.9	3	6.4	1.8	8.2	7.0	5.6
8 53 + 69.0	504	8	53.1	+ 69	2	7.3	2	6.7	1.1	7.8	6.6	5.9
8 10 + 78.7	287	8	10.6	+ 78	41	6.8	3	6.7	1.8	8.5	7.3	5.9
8 4 + 78.4	284	8	4.4	+ 78	23	7.5	3	6.8	1.7	8.5	7.3	6.0
8 46 + 58.7	1159	8	46.2	+ 58	46	7.0	1	6.5	.7	7.2	6.0	5.7
7 51 + 78.0	278	7	50.7	+ 78	2	7.5	3	6.9	1.7	8.6	7.4	6.1
10 48 + 78.6	367	10	48.2	+ 78	33	6.9	3	6.1 6.4	1.8	7.9 8.2	6.7 7.0	5.3 5.6
10 24 + 78.8	354	10	24.1	+ 78	50	7.8	3	7.0	1.8	8.8	7.6	6.2

Mean 8

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April 28, 1887.

Plate 1113.

	H	H	Type	No. Lines	K	Focus	Other lines.
	6,8	9,9	III	3	K=H	1	F.
	6,4	14,1	I	5	K=H	1	—
	5,5	5,8	I	7	K=H	2	F.
	5,9	9,5	I	13	K=1,5H	5	F.
	5,9	10,4	I	4	K=H	1	—
	5,8	10,9	I	7	K=1,2H?	2	F.
	5,6	12,9	III b 8353		K=1,2H	2	F.
	5,9	13,7	I	8	K=1,8H	3	F.
	5,6	16,5	II?	2	K=H	1	—
	5,4	17,5	I	5	K=1,2H? N	1	F.?
	5,4	20,7	I	7	H	2	F.
	4,8	13,9	I	5	K=1,8H	1	F.
?	4,5	14,3	III b.c. 8364		K=H	4	F. neu.
	4,3	17,1	III	1	H	1	—
	4,0	18,3	I	6	K=1,2H	1	—
	4,2	21,9	I?	3	H	1	—
	4,0	22,9	I	6	H	4	F.?
	3,0	7,5	~~III?~~ I	~~3~~ 3	H	1	—
	3,5	8,6	I	3	H	1	—
	3,7	13,0	III	3	K=H	1	F.
?	3,5	13,7	II a 8373		K=H	1	F. neu.
	2,3	9,13	I	5	H	2	—
	2,4	9,9	III ~~838~~ 3		K=H	1	F.
?	2,4	13,7	II a 8382		K=H	1	neu.
	2,6	16,8	I?	6	K=H	2	—
	2,1	17,0	II	2	K=H	1	—
	3,0	23,1	III	2	K=H	1	—
3 20	2,2	23,1	III b 8393		K=H	1	F.

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	No.	R.A.	Dec.	Mag.	Cl.	Br.			Mean Br.	log Br.
10 9+79.0	330	10 8.8	+79 41	7.3	3	6.8	8.6	7.4	6.0	
						7.2	1.8 9.0	7.8	6.4	
9 25+79.5	316	9 24.8	+79 28	7.5	3	6.3	1.8 8.1	6.9	5.5	
10 10+69.5	568	10 10.0	+69 29	6.0	2	5.9	1.1 7.0	5.8	5.1	
9 40+59.7	1268	9 40.7	+59 42	4.0	1	4.3	.7 5.0	3.8	3.5	
10 6+79.5	329	10 6.4	+79 30	8.0	3	6.9	1.8 8.7	7.5	6.1	
10 1+79.7	328	10 0.8	+79 39	6.7	3	6.3	1.9 8.2	7.0	5.5	
9 30+69.9	531	9 29.8	+69 53	6.1	2	6.3	7.5	6.3	5.5	
						6.6	1.2 7.8	6.6	5.8	
9 30+79.8	319	9 29.8	+79 48	6.0	3	5.4	1.9 7.3	6.1	4.6	
8 58+79.9	300	8 57.6	+79 52	7.3	3	6.7	1.9 8.6	7.4	5.9	
8 46+79.9	294	8 45.4	+79 55	7.0	3	6.6	1.9 8.5	7.3	5.8	
8 55+59.9	12/17 ~~317~~	8 55.4	+59 55	6.2	1 1650 6.1 10 -2	6.4	.7 7.1	5.9	5.6	
9 25+70.3	567	9 24.0	+70 17	7.5	2	6.7	1.2 7.9	6.7	5.9	
9 22+79.5	565	9 21.6	+70 29	5.2	2	5.3	6.5	5.3	4.5	
						5.5	1.2 6.7	5.5	4.7	
9 4+70.5	557	9 4.1	+70 29	7.0	2	7.0	8.2	7.0	6.2	
						7.3	1.2 8.5	7.3	6.5	
8 34+80.6	272	8 34.0	+80 34	7.3	3	6.4	2.0 8.4	7.2	5.6	
7 54+79.9	269	7 54.0	+79 36	7.8	3	6.8	1.9 8.7	7.5	6.0	
7 42+79.9	265	7 41.9	+79 52	5.8	3 1477 5.3 12 0	4.6	1.9 6.5	5.3	3.8	
10 47+80.5	347	10 46.3	+80 27	7.8	3	6.7	2.0 8.7	7.5	5.9	
9 56+70.7	598	9 56.2	+70 38	7.5	2	7.3	1.2 8.5	7.3	6.5	
9 27+60.9	1198	9 26.8	+60 51	6.5	1	6.8	7.6	6.4	6.0	
						7.1	.8 7.9	6.7	6.3	
9 26+70.9	568	9 25.4	+70 55	7.0	2	6.7	1.2 7.9	6.7	5.9	
10 30+81.2	349	10 28.9	+81 11	6.2	3	~~5.6~~	~~2.0 7.8~~	~~6.6~~		
10 21+81.3	343	10 20.8	+81 14	6.2	3	~~6.4~~	~~8.4~~	~~7.2~~		
						~~6.7~~	~~2.0 8.7~~	~~7.5~~		
9 24+61.5	1132	9 24.3	+61 32	7.5	1	~~7.0~~	~~.8 7.8~~	~~6.6~~		
8 50+81.5	282	8 49.8	+81 24	6.7	3	~~6.8~~	~~2.1 7.9~~	~~6.7~~	5.0	
8 46+81.6	278	8 43.4	+81 36	7.9	3	~~6.8~~	~~2.1 9.0~~	~~7.8~~		
7 36+80.3	240	7 35.8	+80 14	6.8	3	~~7.0~~	~~8.9~~	~~7.1~~	6.2	
						~~7.3~~	~~1.9 9.2~~	~~8.0~~	6.5	
7 32+80.6	238	7 32.1	+80 37	6.5	3	~~6.3~~	~~8.3~~	~~7.1~~		
						~~6.6~~	~~2.0 8.6~~	~~7.4~~		

$\frac{72}{6}$ $\frac{9-9}{6}$

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May 4, 1887.

Plate 1073.

	V	H	Type	Lines.	No.	K	Focus	Lines.	Other
	22,5	10,5	I		6	K=H	1		–
?	21,2	9,1	II	a 877	3	K=1,2 H	2	F.	nebs.
	21,2	13,2	I		7	K=1,5 H	2		–
	21,4	19,4	I		4	K=H	1		–
	21,2	20,2	I		5	K=H	1		–
?	21,1	22,1	II	a 878	3	K=H	2	F.	nebs
	20,4	6,8	I		6	K=H	1		–
	20,0	10,8	III		2	K=H	1		–
	20,3	12,0	I		8	N	3	F.	
	20,2	18,9	I		5	K=1,5 H	1		–
?	19,0	8,0	II	a 879	4	K=H	2	F?	nebs.
	19,5	8,3	III		3	K=H	1	F.	
	19,8	17,6	III		1	N	1		–
	18,4	5,7	I		7	K=1,2 H	2	F.	
	18,6	10,7	I		2	N	1		–
	18,6	18,2	III		2	K=H	1		–
√	18,7	16,8	III	III?	2	N	K=H	1 1	– –
	18,9	21,1	III		3	K=H	1	F.	
	18,8	23,8	I		3	N	1		–
	17,5	14,0	I		6	?	1	nebs.	
	17,2	16,6	III		2	K=H	1		–
	17,6	20,5	III		2	K=H	1		–
√	16,6	11,7	III	III?	3	N	K=H	K=H 1 1	F. F.
	16,2	16,7	III	?	2	K=H	1		–
	16,6	20,8	III		2	K=H	1		–
	16,2	23,8	I		7	N	2	F.	
	15,7	8,9	II		2	K=1,2 H	1	F?	
√	15,6	17,7	III	III	2	2	K=H	K=H 1 1	– –

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	No.	R. A.	Dec	Mag.		Yr.
10 20+65.0	789	10 20.4	+64 59	6.2 _		✓ ~~6.5~~ 9 7.4 ~~6.3~~ .
10 21+56.7	1459	10 21.4	+56 43	4.7 _		✓ 6.0 .7 6.7 5.6 .
10 7+65.8	767	10 7.5	+65 49	5.8 _		✓ 6.0 1.0 7.0 5.9 .
9 37+65.5	736	9 37.4	+65 34	7.3 _		✓ 7.0 1.0 8.0 6.9 .
9 33+65.6	731	9 33.2	+65 38	6.3 _		✓ 6.7 1.0 7.7 6.6 .
9 39+46.7	1551	9 39.2	+46 42	5.9 _		✓ 6.4 .4 6.8 5.7 .
10 39+65.9	803	10 39.1	+65 54	6.5 _		✓ 6.3 1.0 7.3 6.2 .
10 20+66.3	671	10 19.6	+66 22	6.6 _		✓ 6.9 7.9 6.8 . 7.2 1.0 8.2 7.1
10 14+66.3	664	10 13.6	+66 18	5.0 _	1829 5.0 32+1	✓ 5.2 1.0 6.2 5.1 .
9 39+66.3	637	9 39.0	+66 16	6.7 _		✓ 6.5 1.0 7.5 6.4 .
10 26+57.8	1277	10 25.8	+57 50	5.0 _		✓ 6.0 .7 6.7 5.6 .
10 32+66.5	678	10 32.0 49.9	+66 28	5.2 _		✓ 6.3 7.3 6.2 . 6.6 1.0 7.6 6.5
9 50+57.5	1242	9 ~~50.8~~	+57 30	5.0 _		✓ 6.8 7.5 6.4 . 7.2 .7 7.9 6.8
10 35+57.9	1286	10 34.6	+57 37	5.8 _		✓ 6.1 .7 6.8 5.7 .
~~17+53.4~~	~~1404~~		~~+53~~	~~7.5~~		
10 20+67.6	638	10 20.9	+67 3	7.2		✓ 6.9 1.0 7.9 6.8 .
9 47+58.1	1224	9 47.1 5	+58 6	6.8 _		✓ 6.6 7.3 6.2 . 6.7 .7 7.4 6.3
9 52+57.9	1245	9 52.4	+57 37	7.8 _		✓ 7.3 7.9 8.0 6.9 . 7.5 7.5 8.2 7.1
9 36+57.7	1231	9 36.2	+57 47	5.0 _		✓ 6.8 7.5 6.4 . 7.1 .7 7.8 6.7
9 26+57.5	1224	9 26.3	+57 37	6.8 .		✓ 6.8 .7 7.5 6.4 .
10 3+58.7	1244	10 3.6	+58 42	7.0		✓ 6.6 .7 7.3 6.2 .
9 53+58.8	1231	9 53.2	+58 48	7.4 _		✓ 7.0 .7 7.7 6.6 .
	608	9 29.9	+67 24	8.0 =		✓ 7.2 1.1 8.3 7.2 . 7.5 8.6 7.3
9 27+67.9	~~608~~	~~9 29.9~~	~~+67 24~~	~~8.0~~		✓ 6.6 6.7 7.1 5.9 . 6.9 6.9 .5 7.4 6.3
10 10+49.1	1940	10 10.4	+49 8	6.0 _		✓ 7.0 7.5 6.4 . 7.4 .5 7.9 6.8
9 57+49.3	1909	9 57.9	+49 17	7.2 _		✓ 6.6 7.7 6.6 . 7.0 1.1 8.1 7.0
9 27+67.9	602	9 27.4	+67 55	6.5 _		✓ 6.4 .5 6.9 5.8 .
9 33+49.1	1868	9 33.2	+49 5	6.3 .		✓ 6.7 .5 7.2 6.1 .
~~10 19+49.6~~	~~1960~~	~~10 19.1~~	~~+49 7~~	~~6.6~~		✓ 7.0 7.8 7.7 6.6 . 7.3 .7 8.0 6.9
10 19+49.6	1961	10 19.1	+49 33	6.2 _		
9 48+59.6	1274	9 48.3	+59 39	7.1 _		

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May 4, 1887.

Plate 1073.

	γ	H	Type	No. Lines	K	Other Lines.
?	15.5	19.6	II[a] 8807	K=H	4	F. diff.
	15.8	22.3	II[a] 8812	K=H	1	—
	14.3	9.1	III	2	K=H	1 —
	14.1	10.4	III	2	K=H	1 —
√	14.3	12.2	III III? 2	2	K=H K=H	1 1 — —
	14.0	13.0	I	8	K=.5H	2 F.
√	14.6	14.3	III III 2	2	K=H K=H	1 1 — —
√	14.5	14.7	III III? 2	2	K=H K=H	1 1 — —
√	14.0	16.2	III III 2	2	K=H K=H	1 1 — —
	14.1	20.3	I	4	K=H	1 —
	13.0	9.1	III[b] 8823	K=H	2	F.
√	13.5	10.5	II? II? 2	2	K=H K=H	1 1 — —
	13.3	13.4	I	6	K=H	1 —
	13.6	13.6	III	2	K=H	1 —
	13.3	18.3	I	7	H	2 F.
	13.8	19.3	I	8	K=.2H	2 F.
	13.0	19.8	III	2	K=H	2 —
√	13.1	20.1	III III 1 2		H K=H	1 1 — —
	12.9	7.8	II	2	K=H	1 —
?	12.2	8.4	II[a] 8832	K=H	1	diff.
	12.6	13.6	I	6	K=.5H	1 —
	12.0	20.7	II	2	K=H	1 —
?	12.8	22.8	~~II~~ II[a]? 8842	K=H	1	diff.
	11.2	7.5	III	3	K=H	1 F.
√	11.3	8.5	II? II? 2	2	K=H K=H	1 1 — —
√	11.9	15.0	II II 2	2	K=H K=H	1 1 — —
	11.7	15.3	III	2	K=H	1 —
	11.2	18.4	III	2	K=H	1 —

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No.	R. A.	Dec.	Mag.		Br.			
1268	9 40.7	+59	42	4.0	4.6	7	5.3	4.2
572	9 18.8	+68	9	6.8	6.7	1.1	7.8	6.7
583	10 31.3	+69	11	5.5	6.5		7.6	6.5
1263	10 18.1	+60	19	6.5	6.9	1.1	8.0	6.9
~~1736~~	~~10 14.7~~	~~+50~~	~~20~~	~~8.5~~	6.9	.8	7.7	6.6
					7.1		7.9	6.8
1732	10 8.8	+50	18	7.3	7.5	7.4	8.7	7.6
					7.4	7.5	8.9	7.8
568	10 10.0	+69	29	6.0	5.8	1.1	6.9	5.8
1725	10 2.5	+50	11	6.8	7.1	7.0	7.6	6.3
1721	10 1.1	+50	13	7.2	7.4	7.2 .5	7.9	6.8
1234	9 54.4	+60	22	8.0	6.9	6.9	7.4	6.3
528	9 28.2	+69	12	8.0	7.1	8.0 .5	7.6	6.5
586	10 32.6	+69	49	4.7	6.9	7.3	7.7	6.6
576	10 24.1	+69	36	8.2	7.2	7.5 .8	8.0	6.9
1250	10 6.0	+60	52	6.7	7.1	1.1	8.2	7.1
1246	10 5.1	+60	44	6.3	6.2		7.4	6.3
1702	9 49.3	+50	30	7.0	6.5	1.2	7.7	6.6
1698	9 46.2	+50	30	5.6	7.2	7.1	1.1	8.3
531	9 29.8	+69	33	6.1	6.4	.8	7.4	6.3
1209	9 38.2	+60	46	7.4	6.9	.8	7.7	6.6
1274	10 28.8	+60	32	6.7	7.2	.8	8.0	6.9
1605	10 21.2	+51	19	6.2	6.4	.5	6.9	5.8
1585	10 4.5	+51	13	6.5	5.6	.5	6.1	5.0
567	9 24.0	+70	17	7.5	6.3		7.5	6.4
1198	9 26.8	+60	51	6.5	6.6	1.2	7.8	6.7
634	10 43.6	+70	37	6.0	7.1	7.3	7.9	6.8
1604	10 21.2	+51	45	6.6	7.5	7.5	8.3	7.2
1577	9 59.8	+51	33	7.1	6.8	.8	7.6	6.5
598	9 56.2	+70	38	7.5	6.7	.5	7.2	6.1
1151	9 44.4	+61	48	6.4	6.6	.5	7.1	6.0
					6.7	1.2	7.9	6.8
					6.7	.8	7.5	6.4
					6.3		7.5	6.4
					6.6	1.2	7.8	6.7
					7.0	7.3 .5	7.5	6.4
					7.0	7.3 .5	7.5	6.4
					6.9	1.2	8.1	7.0
					6.8		7.6	6.5
					7.0	.8	7.8	6.7

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Plate 1073.

									Other Focus lines.
	11.7	21.0	III	b? 885	3	K=1.5H	3	F	
	11.2	23.2	II		2	K=H	1	—	
	10.5	15.9	III		2	K=H	1	—	
	10.8	12.0	II a	886	2	K=H	1	—	
✓	10.6	13.9	II a?	887	2	K=H K=H	1 1	— 2 cen	
9.45 a.m. ✓	10.7	16.1	I ?	I	4 3	H H	1 1	— —	
✓	10.5	19.3	II ?	II	1 2	H K=H	1 1	— —	
?	10.8	20.3	I ?	5	2	K=H	1	F cen.	
	9.6	13.7	I		6	K=.8H	2	F	
	9.0	16.2	I		6	K=.2H	2	—	
✓	9.4	18.2	III	III	1 2	H K=H	1 1	— —	
✓	9.0	19.0	III	III	1 3	H K=H	1 1	— F	
✓	8.1	10.0	III	III?	2 2	K=H K=H	1 1	— —	
	8.2	17.5	I	?	4	H	1	—	
	7.3	13.0	III		2	K=H	1	—	
✓	7.9	14.8	III	III?	2 2	K=H K=H	1 1	— —	
✓	7.2	15.5	I	I	4 4	H K=H	1 1	— —	
?	7.1	19.1	III	b 888	3	K=1.2H	2	F cen.	
	7.0	19.9	III		2	K=H	1	—	
	7.2	20.0	III		2	K=H	1	—	
?	7.0	20.3	II	a 889	2	K=1.2H	2	F?	
	7.6	22.5	I	?	2	H	1	—	
	7.0	23.5	I	d?	9	K=H	5	F	
	7.5	23.7	II		2	K=H	1	—	
	6.3	7.8	I		7	H	2	—	
	6.8	10.4	III		2	K=H	1	—	
	6.1	11.8	II		3	K=H	1	F	
	6.8	13.6	III		1	H	1	—	

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No.	R. A.	Dec.	Mag.	Br.
565	9 21.6	+70 29	5.2 _	✓ 5.3 5.4 | 6.5 1.2 6.6 | 5.4 5.5 .
1132	9 24.2	+61 32	7.3 _	✓ 6.8 8 7.6 6.5 .
645	10 53.7	+70 49	6.3 _	✓ 7.0 7.3 | 8.2 1.2 8.5 | 7.1 7.4 .
1473	10 9.8	+52 8	6.7 _	✓ 6.8 .5 7.3 6.2 .
1461	10 3.6	+52 13	7.3 _	✓ 7.2 7.3 1.5 8.7 7.6 .
1450	9 56.1	+52 6	7.7	✓ 7.0 7.2 .5 7.5 6.4 .
509	9 31.1	+71 6	8.0 _	✓ 7.2 7.2 1.2 8.4 7.3 .
568	9 25.4	+70 55	7.0 _	✓ 6.5 1.2 7.7 6.6 .
534	10 6.1	+71 47	6.3 _	✓ 6.0 1.3 7.3 6.2 .
1384	9 55.6	+53 3	6.5 _	✓ 6.2 .6 6.8 6.7 .
1438	9 49.2	+52 46	8.0 _	✓ 7.0 7.3 | 7.5 .5 7.8 | 6.4 6.7 .
1431	9 46.4	+52 37	7.2 _	✓ 6.8 6.9 | 7.4 7.0 7.1 .6 7.6 | 6.3 6.5 .
1404	10 16.8	+53 22	7.5 _	✓ 6.9 7.2 | 7.5 7.1 7.3 .6 7.7 | 6.4 6.6 .
473	9 41.2	+72 21	7.1 .	✓ 6.6 1.3 7.9 6.8 .
486	10 11.0	+72 54	8.4 _	✓ 7.1 1.3 8.4 7.3 .
886	9 59.9	+63 38	6.5 _	✓ 6.9 7.1 7.8 | 6.7 7.1 7.3 .9 8.0 | 6.9 .
1387	9 58.2	+53 55	8.0 .	✓ 6.9 7.0 .6 7.5 6.4 .
466	9 29.3	+72 55	5.3 _	✓ 5.8 6.1 | 7.1 1.3 7.4 | 6.0 6.3 .
861	9 36.5	+63 55	7.0 _	✓ 7.0 7.3 | 7.9 .9 8.2 | 6.8 7.1 .
464	9 23.6	+72 43	7.3 _	6.9 7.1 | 8.2 1.3 8.4 | 7.1 7.3 .
462	9 21.2	+72 50	6.0 _	✓ 5.8 1.3 7.1 6.0 .
851	9 25.1	+63 26	7.4	✓ 6.9 .9 7.8 6.7 .
845	9 20.1	+63 40	3.5 _	✓ 4.2 .9 5.1 4.0 .
444	8 59.8	+72 15	6.3 _	✓ 6.9 1.3 8.2 7.1 .
1381	10 24.6	+54 14	6.8 .	✓ 6.5 .6 7.1 6.0 .
788	10 20.2	+64 5	7.5 _	✓ 7.1 7.4 | 8.0 .9 8.3 | 6.9 7.2 .
3 X 66	10 10.9	+54 31	7.0 _	✓ 6.8 .6 7.4 6.3
491	10 7.1	+73 10	7.6 _	✓ 7.0 7.3 | 8.3 1.3 8.6 | 7.2 7.5 .

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Plate 1073.

	τ	H	Type	No. lines	K	Focus	Other lines.
	6.9	16.2	III	2	K=H	1	—
?	6.0	16.4	II[a] 890	2	K=H	2	F. diff.
	6.0	16.7	III	3	K=H	1	F.
	6.0	19.5	I	5	K=.5H	1	—
	6.1	20.2	I	7	K=H	1	—
	6.5	21.0	II II	2 2	K=H K=H	1 1	— —
	5.8	6.2	III	2	K=H	1	—
	5.0	10.5	I	8	K=.5H	2	F
	5.2	11.8	III	3	K=H	1	F.
	5.7	13.9	I	7	K=H	1	—
	5.4	19.7	I	7	K=H	1	F.
	5.6	20.0	I	9	K=.2H	3	F.
	5.0	21.0	II[a?] II[?] 891	2	K=H K=H	1 1	— —
	5.0	22.9	I	6	K=H	1	—
	4.7	10.1	III	2	K=H	1	—
	4.9	12.0	III	2	K=H	1	—
	4.8	15.8	III[?]	2	K=H	1	—
	4.6	22.6	I	7	K=.5H	1	F.
	3.8	10.7	II	2	K=H	1	—
	3.8	11.6	I	6	K=H	1	—
	3.9	12.0	III	1	H	1	—
	3.5	13.2	I	8	K=.2H	2	F.
	3.9	14.8	I	4	H	1	—
	3.8	19.4	II[a] 892	2	K=H	1	—
?	3.6	20.2	II[a] 893	3	K=H	1	F. diff.
	3.0	21.9	III	2	K=H	1	—
	2.6	6.8	I	5	H	1	—
	2.3	10.8	III	2	K=H	1	—

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	No.	R. A.	Dec.	Mag.		Br.			
9 49 + 73.1	481	9 49.0	+ 73	7	8.2		7.1	1 3 8.4	7.3
9 55 + 54.6	1348	9 54.9	+ 54	35	6.2		6.2	6 6.8	5.7
9 45 + 73.5	478	9 45.3	+ 73	33	6.3		6.0 / 6.4	7.4 / 1.4 7.8	6.3 / 6.7
9 26 + 73.4	471	9 25.7	+ 73	23	7.0		6.4	1.4 7.8	6.7
9 35 + 64.3	752	9 34.7	+ 64	19	6.8		6.3	.9 7.2	6.1
9 16 + 72.9	456	9 16.2	+ 72	57	7.8		7.2 / 7.2	1 3 8.5	7.4
10 30 + 54.5	1387	10 30.1	+ 54	24	6.0		6.8 / 7.0	7.4 / .6 7.6	6.3 / 6.5
10 20 + 65.0	789	10 20.4	+ 64	59	6.2		6.1	.9 7.0	5.9
10 11 + 54.9	1367	10 11.1	+ 54	56	6.3		6.7 / 7.0	7.3 / .6 7.6	6.2 / 6.5
10 6 + 73.8	489	10 5.7	+ 73	48	6.3		5.8	1.4 7.2	6.1
9 24 + 73.7	470	9 24.0	+ 73	44	6.3		5.9	1.4 7.3	6.2
9 42 + 54.7	1331	9 42.2	+ 54	45	3.0		4.7	.6 5.3	4.2
9 39 + 54.9	1329	9 38.6	+ 54	56	7.4		7.1 / 7.3	.6 7.7	6.6
9 1 + 73.5	458	9 1.2	+ 73	32	6.0		5.6	1.4 7.0	5.9
10 15 + 55.1	1390	10 17.1	+ 55	8	7.0		7.2 / 7.4	7.8 / .6 8.0	6.7 / 6.9
10 19 + 74.1	436	10 19.3	+ 74	4	7.0		6.9 / 7.2	8.3 / 1.4 8.6	7.2 / 7.3
9 55 + 65.1	749	9 55.0	+ 65	7	7.3		6.9 / 7.0	7.8 / .9 7.9	6.7 / 6.8
9 33 + 55.0	1345	9 33.1	+ 55	2	6.7		6.5	.6 7.1	6.0
10 30 + 74.6	440	10 29.6	+ 74	32	7.3		7.0	1.4 8.4	7.3
10 22 + 74.6	438	10 22.4	+ 74	35	7.4		6.9	1.4 8.3	7.2
10 20 + 74.5	437	10 19.9	+ 74	32	7.8		7.0 / 7.2	8.4 / 1.4 8.6	7.3 / 7.3
10 7 + 65.8	767	10 7.3	+ 65	49	5.8		5.8	1.0 6.8	5.7
9 58 + 74.6	427	9 58.6	+ 74	35	7.7		6.9	1.4 8.3	7.2
9 37 + 65.5	736	9 37.4	+ 65	34	7.3		6.8	1.0 7.8	6.7
9 33 + 65.6	731	9 33.2	+ 65	38	6.3		6.5	1.0 7.5	6.4
9 4 + 74.6	393	9 4.8	+ 74	37	6.5		6.8 / 7.1	8.2 / 1.4 8.5	7.1 / 7.4
10 39 + 66.9	803	10 39.1	+ 65	54	6.5	1890 6.3 10 −1	6.3	1.0 7.3	6.2
10 20 + 66.4	671	10 19.6	+ 66	22	6.6	√	6.9 / 7.2	7.9 / 1.0 8.2	6.8 / 7.1

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Plate 1073

V	H	Type	Lines	K	Focus	Other lines.
2.5	12.0	I	9	?	4	F.
3.0	15.6	I ? II ?	2	K=H K=H	1	— —
2.2	16.1	III	2	K=H	1	—
2.5	18.4	I ?	5	K=.5H	1	—
2.5	18.9	I	6	K=H	1	—
2.8	19.6	I	8	K=.5H	2	F.
1.8	8.3	III	1	N1	1	F.

Plate 1233

22.4	6.2	I	4	N1	1	—
22.0	11.5	I	8	N1	4	—
22.1	18.3	I	6	K=H	1	—
22.6	19.8	I	4	N	2	—
21.5	7.8	III	2	K=H	1	—
? 21.2	8.5	II	a 8943	K=H	2	F, nebs.
21.8	11.5	I ?	2	K=H	1	—
19.0	7.5	I	7	K=H	2	—
19.0	20.6	III	2	K=H	1	—
18.4	11.0	I	4	K=H	1	—
18.6	17.7	III	2	K=H	1	—
18.6	20.2	III	2	K=H	1	—
18.7	20.4	I	6	N	1	—
17.4	9.3	III	3	K=H	1	F.
17.5	13.4	I ?	5	K=H	1	—
17.2	17.1	II	2	K=H	1	—
17.8	21.7	III	2	K=H	1	—
16.2	8.6	III	3	K=H	1	F.
3 30	16.0	12.4	I	8	K=.5H	2 F.

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No.	R.A.		Dec.		Mag.		Br.				
664	10	13.6	+66	18	5.0		4.5	1.0	5.5	4.4	
648	9	55.7	+66	1	8.3		7.1	1.0	8.1	7.0	
399	9	48.4	+75	27	7.2		6.9	1.5	8.4	7.3	
389	9	30.1	+75	15	6.8		6.5	1.5	8.0	6.9	
637	9	39.0	+66	16	6.7		6.3	1.0	7.3	6.2	
402	9	21.6	+74	59	7.3		5.8	1.5	7.3	6.3	
678	10	32.0	+66	28	5.2		6.5	1.0	7.5	6.4	
							6.8		7.8	6.8	

$\frac{22}{2}$ $\frac{1-1}{2}$

Mean 5 Cor. Br.

803	10	39.1	+65	54	6.5	1890 6.3 1.3 0	6.6	1.0	7.6	6.3	6.1
664	10	13.6	+66	18	5.0	1829 5.0 1.0 -3	5.0	1.0	6.0	4.7	4.5
637	9	39.0	+66	16	6.7		6.6	1.0	7.6	6.3	6.1
377	9	12.6	+75	44	6.2	~~1889 6.4 1.4 +1~~	6.3	1.5	7.8	6.3	
678	10	32.0	+66	28	5.2		6.6		7.6	6.3	6.1
1459	10	21.4	+56	43	4.7		7.0	1.0	8.0	6.7	6.5
393	10	22.6	+76	28	5.0		5.8	.7	6.5	5.2	5.3
1277	10	25.8	+57	50	5.0		6.1	1.6	7.7	6.4	5.6
1231	9	36.2	+57	47	5.0		5.9	.7	6.6	5.3	5.4
359	10	30.4	+78	11	7.0		6.7		7.4	6.1	
1224	9	47.1	+58	6	6.2		7.1	.7	7.8	6.3	6.2 6.6
602	9	27.4	+67	55	6.3		6.9	1.7	8.6	7.3	6.4
359	8	59.8	+77	40	6.8		6.7		7.4	6.1	
367	10	48.2	+78	33	6.2		6.9	.7	7.6	6.3	6.2 6.6
1244	10	3.6	+58	42	7.0		7.0		8.1	6.8	
317	9	28.8	+78	47	6.8		7.2	1.1	8.3	7.0	6.4 6.7
372	9	18.8	+68	9	6.8		6.6		7.7	6.4	
383	10	31.5	+69	11	5.5		7.0	1.1	8.1	6.8	6.1 6.5
368	10	10.0	+69	29	6.0		5.7	1.1	6.8	5.5	5.2

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May 5, 1887.

Plate 1233.

	V	H	Type	No. lines	K	Focus	Other lines.
8 45	16.1	14.5	III	2	K=H	1	—
	16.1	19.7	II	2	K=H	1	—
	16.0	21.8	II	2	K=H	1	—
	16.5	23.1	II?	2	K=H	1	—
	15.9	8.0	III	1	N	1	—
III ? 5.8, 6.2.	15.0	8.6	III b? 895	2	K=H	2	—
	15.6	14.0	I	6	K=.2H	2	F.
	15.2	16.7	I	7	K=.8H	2	F.
?	15.4	19.1	II a? 896	8	K=.5H	4	F. neu.
III ? 6.6, 7.0.	14.9	19.3	III	3	K=H	1	F.
	14.5	19.5	~~I~~	~~4~~	K=H	1	—
	14.0	20.5	I	4	K=H	1	—
	13.1	7.0	III	3	K=H	1	F.
	13.7	10.3	II	2	K=H	1	—
?	13.3	12.8	~~I~~ d?	~~II~~	K=H	1	neu.
	13.8	20.2	I d?	4	K=H	1	—
	13.5	20.5	II?	2	K=1.2H?	3	F?
	12.9	7.3	II?	1	N	1	—
	12.6	11.9	I	6	K=.2H	2	—
	12.6	12.5	III	2	K=H	1	—
	12.8	19.7	I	5	K=H	1	F.
	12.6	20.9	I	6	K=H	1	—
	12.7	22.3	III	2	K=H	1	—
	11.5	13.2	I	7	K=.5H	2	F.
?	11.0	17.1	III b.o. 897	3	K=H	3	F. neu. bright.
	11.2	22.7	II	2	K=H	1	—
	10.3	8.5	I	7	K=.2H	2	F.
	10.2	16.9	I	5	K=H	1	—

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	No.	R.A.	Dec.	Mag.		Brt.			Ten. Brt.
9 58+69.3	561	9 58.1	+69 23	7.0		7.0	8.1	6.8	6.5
9 28+69.2	528	9 28.2	+69 12	8.0		7.3	1.1 8.4	7.1	6.8
8 39+78.7	297	8 39.4	+78 42	6.9		7.2	1.1 8.3	7.0	6.7
8 28+78.2	291	8 29.0	+78 12	7.0		6.8	1.8 8.6	7.3	6.3
11 5+79.1	356	11 3.4	+79 6	7.8		7.0	1.7 8.7	7.4	6.5
10 32+69.9	586	10 32.6	+69 49	4.7		7.0	8.8	7.5	6.5
10 1+79.6	328	10 0.8	+79 39	6.7		7.4	1.8 9.2	7.9	6.9
9 30+79.8	319	9 29.8	+79 48	6.0		6.2	7.4	6.1	5.7
9 41+79.7	1368	9 40.7	+79 42	4.0		6.6	1.2 7.8	6.3	6.1
9 30+69.9	1231	9 29.8	+69 33	6.1		6.1	1.9 8.0	6.7	5.6
8 58+79.9	300	8 57.6	+79 32	7.3		5.5	1.9 7.4	6.1	5.0
8 45+79.9	294	8 45.4	+79 35	7.0		4.3	.7 5.0	3.7	3.8
10 43+70.6	634	10 43.6	+70 37	6.0		6.5	7.7	6.4	6.0
10 49+80.5	347	10 46.3	+80 27	7.8		6.8	1.2 8.0	6.7	6.3
10 6+69.9	1230	10 6.0	+69 32	6.7		6.9	1.9 8.8	7.3	6.4
9 24+70.3	567	9 24.0	+70 17	7.5		6.9	1.9 8.8	7.3	6.4
9 22+70.5	565	9 21.6	+70 29	5.2		6.4	7.6	6.3	5.9
10 28+69.9	634	10 43.6	+70 37	6.0		6.7	1.2 7.9	6.6	6.2
10 30+81.2	349	10 28.9	+81 11	6.2		6.8	2.0 8.8	7.3	6.3
10 21+81.3	343	10 20.8	+81 14	6.2		6.8	.8 7.6	6.3	6.3
9 25+70.9	568	9 25.4	+70 33	7.0		6.9	1.2 8.1	6.8	6.4
8 34+80.6	272	8 34.0	+80 34	7.3		5.3	1.2 6.5	5.2	4.8
9 27+69.9	1198	9 26.8	+69 31	6.5		6.9	.8 7.7	6.4	6.4
10 6+71.8	534	10 6.1	+71 47	6.3		5.7	2.0 7.7	6.4	5.2
9 16+81.9	302	9 16.0	+81 38	4.3		6.4	8.4	7.1	6.9
9 24+69.5	1132	9 24.2	+69 32	7.5		6.7	2.0 8.7	7.4	6.2
11 22+81.9	373	11 21.4	+81 36	6.2		6.7	1.2 7.9	6.6	6.2
9 41+72.3	473	9 41.2	+72 21	7.1		6.4	2.0 8.4	7.1	5.9
						6.8	7.6	6.3	6.3
						7.1	.8 7.9	6.6	6.6
						5.9	1.3 7.2	5.9	5.4
						5.0	7.1	5.8	4.5
						5.5	2.1 7.6	6.3	5.0
						7.1	.8 7.9	6.6	6.6
						5.3	2.1 7.4	6.1	4.8
						6.8	1.3 8.1	6.8	6.3

Means.

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1887phae.proj..841F

May 5, 1887.

Plate 1233.

	V	H	Type	Lines	K	Focus	Other lines.
	10.2	19.9	III	2	K=H	1	—
	9.8	6.2	III	2	K=H	1	—
	9.5	10.3	II	2	K=H	1	—
	9.5	12.9	II?	2	K=H	1	—
III? 5.6, 6.0.	9.1	18.5	III b.c.? 898	2	K=H	2	—
	9.1	19.4	II	2	K=H	1	—
?	9.0	19.8	II a 899	3	K=H	2	F. nnn.
	9.4	23.1	III	2	K=H	1	—
	8.0	6.3	III	2	K=H	1	—
	8.8	13.1	III	2	K=H	1	—
?	8.6	13.3	II a 900	5	K=H	3	nnn.
	8.1	13.8	III	2	K=H	1	—
III? 6.5, 6.9.	8.0	16.1	III b. 901	3	K=H	1	F.
	8.9	16.5	I	5	K=H	1	—
	8.0	18.9	I	6	K=.2H	1	—
	8.3	20.2	I	6	N	2	—
	7.6	13.3	I	6	K=H	1	—
	7.0	15.9	II?	2	K=H	1	—
	7.8	16.7	II a 902	2	K=H	1	—
	7.7	18.9	II a 903	2	K=H	1	—
	7.4	19.1	I	6	K=.8H	1	—
	7.5	21.4	I	6	N	2	—
	7.0	22.3	I	7	K=.2H	2	F.
	7.1	23.0	I?	10	K=H	4	F.
	6.9	11.4	III	2	K=H	1	—
	6.0	14.8	III	2	K=H	1	—
	6.2	19.7	I?	2	K=H?	1	—
	6.1	20.8	II	2	K=H	1	—

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1887phae.proj..341f

	No.	R.A.		Dec.		Mag.		Br. Mean 5				Cor. Br.
8 36 +81.8	273	8	35.2	+81	49	7.6	_	6.8	8.9	7.6		6.3
								7.0	2.1 9.1	7.8		6.5
11 52 +81.7	389	11	52.6	+81	40	6.8	_	6.7	8.8	7.5		6.2
								7.0	2.1 9.1	7.8		6.5
10 58 +82.5	325	10	58.0	+82	31	7.0	_	6.8	2.2 9.0	7.7		6.3
10 18 +82.8	307	10	17.8	+82	46	8.2	_	6.9	2.2 9.1	7.8		6.4
9 29 +72.9	466	9	29.5	+72	55	8.3	_	6.1	7.4	6.1		5.6
								6.4	1.3 7.7	6.4		5.9
9 24 +72.7	464	9	23.6	+72	43	7.3	_	7.0	1.3 8.3	7.0		6.5
9 21 +72.9	462	9	21.2	+72	50	6.0	_	6.0	1.3 7.3	6.0		5.5
9 0 +72.3	444	8	59.8	+72	15	6.3	_	6.9	8.2	6.9		6.4
								7.2	1.3 8.5	7.2		6.7
12 4 +82.5	356	12	4.4	+82	31	6.7	_	6.6	8.8	7.5		6.1
								6.9	2.2 9.1	7.8		6.4
10 7 +73.2	491	10	7.1	+73	10	7.6	_	7.0	8.3	7.0		6.5
								7.4	1.3 8.7	7.4		6.9
10 13 +83.3	297	10	13.0	+83	18	5.2	_	4.3	2.3 7.6	6.3		3.8
10 5 +83.5	287	10	5.4	+83	32	6.8	_	6.5	8.9	7.6		6.0
								6.6	2.4 9.0	8.7		6.1
9 45 +73.5	478	9	45.3	+73	33	6.3	_	6.4	7.8	6.5		5.4
								6.8	1.4 8.2	6.9		6.3
9 19 +83.0	261	9	19.0	+83	0	7.8	_	6.5	2.3 8.8	7.5		6.0
9 26 +73.4	471	9	25.7	+73	23	7.0	_	6.5	1.4 7.9	6.6		6.0
8 19 +82.8	253	8	19.7	+82	44	7.0	.	5.7	2.2 7.9	6.6		5.2
10 6 +73.5	489	10	5.7	+73	48	6.5	_	6.4	1.4 7.8	6.5		5.9
9 24 +83.9	263	9	24.6	+83	59	8.0	_	6.8	2.4 9.2	7.9		6.3
9 12 +83.6	256	9	12.5	+83	33	7.2	_	6.4	2.4 8.8	7.5		5.7
8 37 +83.3	233	8	35.8	+83	17	7.0	_	6.4	2.3 8.7	7.4		5.9
9 26 +73.5	470	9	24.0	+73	44	6.5	_	6.4	1.4 7.8	6.5		5.9
7 57 +82.9	235	7	56.0	+82	52	6.5	.	5.0	2.3 7.3	6.0		4.5
9 1 +73.6	432	9	1.2	+73	32	6.0	_	5.7	1.4 7.1	5.8		5.2
9 20 +63.7	845	9	20.1	+63	40	3.5	_	4.0	.9 4.9	3.6		3.5
10 19 +74.0	436	10	19.3	+74	4	7.0	_	7.1	8.5	7.2		6.6
								7.5	1.4 8.9	7.6		7.0
9 44 +84.6	~~224~~ 224	9	44.7	+84	37	6.5	_	6.6	9.2	7.9		6.1
								7.0	2.6 9.6	8.3		6.5
9 35 +64.3	752	9	34.7	+64	19	6.8		6.7	.9 7.6	6.3		6.2
7 54 +83.5	207	7	53.7	+83	32	8.2	_	7.0	2.4 9.4	8.1		6.5

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Plate 1233.

V.	H	Type	No. Lines	K	Other Focus	Lines.
5.0	9.9	I	7	K=.2H	1	F.
5.8	10.2	III	2	K=H	1	—
5.8	11.2	I	5	K=H	1	—
5.3	13.7	I	9	K=.5H	3	F.
5.9	14.3	I	4	K=H	1	—
5.2	17.4	I?	6	K=H	2	—
5.4	18.5	III	2	K=H	1	—
4.2	15.6	III	1	N	1	—
4.4	17.9	I	4	K=H	1	—
4.8	19.1	I	8	N	2	—
4.3	20.4	I	7	K=.2H	2	—
3.8	6.3	I	7	N	4	F.
3.5	12.7	I	7	K=.2H	2	F.
3.1	18.1	II	2	K=H	1	—
3.1	18.5	III	1	N	1	—
3.6	19.7	II	9041	N	1	—
3.2	19.9	I	6	N	2	—
2.4	6.2	I	5	K=H	1	—
2.6	11.5	I	10	K=.2H	3	F.
2.0	12.3	III	2	K=H	1	—
2.5	18.4	I	3	N	1	—
1.8	7.8	III	2	K=H	1	—

12.11

Plate 1074.

23.1	21.0	I	4	N	2	—
22.5	7.3	II	2	K=H	1	—
22.5	13.6	II	2	K=H	1	—
22.5	16.0	III	2	K=H	1	—

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	No.	R.A.	Dec.	Mag.		Mean 5 Br.				Corr Br.
10 20 + 65.0	789	10 20.4	+ 64	59	6.2	6.3	9 7.2	5.9		5.8
10 29 + 74.5	440	10 29.6	+ 74	32	7.3	7.0 / 7.3	8.4 / 1.4 8.7	7.1 / 7.4		6.5 / 6.8
10 22 + 74.6	438	10 22.4	+ 74	35	7.4	6.9	1.4 8.3	7.0		6.4
10 7 + 84.9	234	10 7.8	+ 84	59	5.0	4.4	2.6 7.0	3.7		3.9
9 58 + 74.6	427	9 58.6	+ 74	35	7.7	7.0	1.4 8.4	7.1		6.5
8 44 + 84.7	196	8 44.3	+ 84	45	6.0	5.4	2.6 8.0	6.7		4.9
8 24 + 84.4	186	8 25.1	+ 84	25	8.0	6.9	2.5 9.4	8.1		6.4
9 48 + 75.1	399	9 48.4	+ 75	27	7.2	7.0 / 7.2	8.5 / 1.5 8.7	7.2 / 7.4		6.5 / 6.7
9 30 + 75.3	389	9 30.1	+ 75	15	6.8	6.6	1.5 8.1	6.8		6.1
9 21 + 74.9	402	9 21.6	+ 74	59	7.3	5.8	1.5 7.3	6.0		5.3
7 41 + 84.5	169	7 41.6	+ 84	28	6.0	5.5	2.5 8.0	6.7		5.0
12 49 + 84.3	289	12 48.0	+ 84	12	6.5					
	290	12 48.1	+ 84	12	5.5	4.2	2.5 6.7	5.4		3.7
10 7 + 65.9	767	10 7.5	+ 65	49	5.8	5.8	1.0 6.8	5.5		5.3
8 12 + 85.5	128	8 12.7	+ 85	33	7.5	6.8	2.8 9.6	8.3		6.3
9 24 + 75.8	386	9 23.7	+ 75	51	6.8	6.8 / 7.0	8.3 / 1.5 8.5	7.0 / 7.2		6.3 / 6.5
9 33 + 65.6	731	9 33.3	+ 65	38	6.3	6.6	1.0 7.6	6.3		6.1
9 12 + 75.7	377	9 12.6	+ 75	44	6.2	5.9	1.5 7.4	6.1		5.4
10 39 + 65.9	803	10 39.1	+ 65	54	6.5	6.7	1.0 7.7	6.4		
10 14 + 66.3	664	10 13.6	+ 66	18	5.0	4.5	1.0 5.5	4.2		4.0
10 56 + 86.4	161	10 56.2	+ 86	26	7.2	6.9 / 7.2	9.8 / 2.9 10.1	8.3 / 8.8		
9 39 + 66.3	637	9 39.0	+ 66	16	6.7	6.6	1.0 7.6	6.3		
10 32 + 66.5	678	10 32.0	+ 66	28	5.2	6.4 / 6.7	2.4 / 1.0 7.7	6.1 / 6.4		

$\frac{84}{3}$ $\frac{5-6}{5}$

This plate had 12 large residuals after grouping it was checked & applied a correction of +3 to correct brightness

Corr Br. Mean 1

10 7 + 65.8	767	10 7.5	+ 65	49	5.8	1807 5.7 1.0	0	2	5.9	1.0 6.9	5.6
11 43 + 76.2	434	11 42.8	+ 76	9	7.3			3	7.0	1.6 8.6	7.3
10 48 + 76.2	406	10 48.0	+ 76	30	7.3			3	6.9	1.6 8.5	8.2
10 32 + 66.5	678	10 32.0	+ 66	28	5.2			2	6.6	1.0 7.6	6.3

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	T	H	Type	No. Lines	K	Focus	Other Lines,	
?	22.5	16.5	III b	905 2	K=1.2H	2	Neb.	
	22.5	18.5	III	1	N	1	—	
	22.0	19.4	II a	906 3	K=H	2	—	
	22.6	19.7	I	9	N	4	F	
	22.1	23.7	~~I~~ III	2	K=H	1	—	
	21.1	10.8	I	9	N	5	F	
∫ H	21.2	11.2	II	II? 2	2	K=H	K=H 1 1	— —
	21.0	12.9	II	2	K=H	1	—	
	21.4	13.8	I	5	N	1	—	
	21.9	14.5	I	5	K=H	1	—	
	21.0	17.5	III	2	K=H	1	—	
	21.1	18.1	III	1	N	1	—	
?	20.2	6.0	~~I~~	~~5~~	K=H	1	Neb.	
	20.1	8.7	I	5	N	1	—	
	20.2	14.8	II	2	K=H	1	—	
9.35 a.m	20.1	15.1	I?	5	N	1	—	
	20.4	16.4	III	2	K=H	1	—	
	20.1	20.7	II	1	N	1	—	
	19.0	6.3	II	2	K=H	1	—	
	19.3	6.7	II	2	K=H	1	—	
	19.3	8.4	~~III~~ ?	2	K=H	1	—	
	19.0	10.0	III	2	K=H	1	—	
	19.4	10.6	I	8	K=H	2	F	
	19.8	14.2	I ?	1	N	1	—	
∫ H	19.3	14.5	III a	907 II 2	2	K=H	K=H 1 1	— —
∫ H	19.3	15.0	III	III 1	2	N	K=H 1 1	— F.b
	19.1	15.4	I	6	N	1	—	
	19.5	15.6	I	4	N	1	—	

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Mean 1

	No.	R.A.	Dec.	Mag.	Diff	Bre.				
10 23+76.5	393	10 22.6	+76 28	5.0	3	5.4	7.0	5.7		
						5.7	7.3	6.8		✓
10 19+66.4	671	10 19.6	+66 22	6.6	2	6.8	7.8	6.3		
						7.0	8.8	6.3		✓
10 21+56.7	1459	10 21.4	+56 43	4.7	1	5.7	6.4	5.1		5.6
10 14+66.3	664	10 13.6	+66 18	5.0	2	5.3	6.3	5.1		✓
						6.8	8.3	7.0		6.7
9 24+75.9	386	9 23.7	+75 51	6.8	3	7.0	8.5	7.2		6.9
10 53+57.2	1302	10 53.1	+57 10	2.3	1	4.0	4.7	3.4		3.9
11 10+76.9	423	11 9.6	+76 58	8.3	3	7.0	7.6	6.3		6.9
10 54+77.3	419	10 54.2	+77 14	8.4	3	6.9	8.5	7.2		6.8
10 42+57.0	1293	10 42.1	+57 0	7.3	1	6.7	7.4	6.1		6.6
10 40+76.5	402	10 39.8	+76 46	7.0	3	6.3	7.9	6.6		6.2
10 28+57.2	1278	10 28.1	+57 11	6.3	1	6.9	7.6	6.3		6.8
						7.1	7.8	6.3		7.0
10 20+67.0	658	10 20.9	+67 3	7.2	2	6.9	7.9	6.6		6.8
						7.1	8.1	6.8		7.0
11 56+76.6	439	11 56.3	+76 32	7.7	3	6.8	8.4	7.1		6.9
11 9+67.5	691	11 9.9	+67 28	6.8	2	6.5	7.5	6.2		6.4
10 37+77.0	410	10 37.0	+77 38	8.3	3	7.2	8.9	7.6		7.1
10 37+57.2	1290	10 36.9	+57 40	6.8	1	6.7	7.4	6.1		6.6
10 22+77.5	404	10 21.9	+77 28	7.8	3	6.9	8.6	7.3		6.8
						7.2	8.9	7.6		7.1
9 43+77.3	389	9 43.0	+77 18	7.4	3	6.8	8.4	7.1		6.7
11 57+77.6	460	11 57.7	+77 34	7.4	3	6.6	8.3	7.0		6.5
11 21+67.7	701	11 20.8	+67 44	7.2	2	6.9	8.0	6.7		6.8
11 12+67.9	692	11 12.0	+67 53	6.2	2	6.7	7.8	6.3		6.6
						6.8	7.9	6.6		6.7
11 4+68.1	635	11 4.0	+68 7	6.5	2	6.8	7.9	6.6		6.7
						7.0	8.1	6.8		6.9
11 0+68.0	632	11 0.4	+68 0	6.5	2	5.8	6.9	5.6		5.7
10 44+77.0	412	10 43.4	+77 32	6.8	3	6.8	8.5	7.2		6.7
10 39+57.8	1283	10 39.3	+57 5	7.7	1	7.1	7.8	6.5		7.0
10 37+57.6	1281	10 37.3	+57 7	6.3	1	6.7	7.4	6.1		6.6
						7.1	7.8	6.5		7.0
10 30+78.2	359	10 30.2	+78 11	7.0	3	6.4	8.1	6.8		6.3
10 29+77.9	406	10 28.6	+77 59	8.0	3	7.0	8.7	7.4		6.9

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Plate 1074.

		Type	No. Lines	K	Focus	Other lines.
19.7	15.7	I	8	N	2	—
19.8	18.1	I	8	K=H	3	F.
19.5	22.0	II@?	9082	K=H	1	—
18.7	6.4	III ?	3	K=H	2	F.
18.4	7.0	III	2 2	K=H K=H	1 1	— —
18.0	9.0	III	2	K=H	1	—
18.3	9.7	III	2	K=H	1	—
19.0	11.2	III	3	K=H	1	F.
18.9	12.4	III	2	K=H	1	—
18.4	12.7	III	2	K=H	1	—
18.5	13.7	II@ ?	9094 3	K=1.2H	2	F, prom.
18.6	23.0	II	2	K=H	1	—
17.5	6.0	I	6	K=H	2	—
17.2	6.1	I	7	K=H	4	F.
17.6	6.2	III	2	K=H	1	—
17.0	7.0	II ?	2 2	K=H K=H	1 1	— —
17.3	7.2	II ?	2	K=H	1	—
17.3	10.3	I	6	N	2	—
17.3	12.1	III	2	K=H	1	—
17.3	15.9	III	3	K=H	1	F.
17.8	16.0	III	3	K=H	1	F.
17.3	17.4	III	2	K=H	1	—
17.6	20.2	III	2	K=H	1	—
17.0	21.3	III	3	K=H	1	F.
17.5	23.7	I d?	5	N	1	F.
16.4	5.9	II ?	1 2	N K=H	1 1	— —
16.4	7.5	II ?	2 2	K=H K=H	1 1	— —
16.2	10.2	II	2 2	K=H K=H	1 1	— —

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No.	R.A.	Dec.	Mag.		Expl	Br.				Mean	Cor. Bru.
1286	10 34.6	+37 57	5.8	1881 5.7 8	1	5.8	.7	6.5	5.2	5.7	
1277	10 25.8	+37 30	5.0		1	5.6	.7	6.3	5.0	5.5	
379	9 30.4	+77 23	6.4		3	7.0	1.7	8.7	7.4	6.9	
461	11 57.9	+77 43	5.8		3	5.9 / 6.1	1.7	7.6 / 7.8	6.3 / 6.5	6.0	
644	11 20.6	+68 14	7.3		2	7.0 / 7.3	7.7 / 7.4	8.1 / 8.4	6.8 / 7.1	7.2	
1304	11 0.6	+38 39	7.0		1	6.9 / 7.0	.7	7.6 / 7.7	6.3 / 6.4	6.8	
392	11 28.3	+78 24	6.2		3	6.6 / 6.9	1.7	8.3 / 8.6	7.0 / 7.3	6.9	
385	11 12.8	+78 11	6.8		3	6.6	1.7	8.3	7.1	6.8	
1290	10 47.6	+38 16	7.3		1	6.8 / 7.0	.7	7.5 / 7.7	6.2 / 6.4	6.5	
375	10 38.9	+78 34	6.5		3	6.7 / 7.1	1.8	8.5 / 8.9	7.2 / 7.6	6.9	
367	10 48.2	+78 33	6.2		3	6.0	1.8	7.8	6.3	6.6	
632	9 33.8	+67 39	6.8		2	6.9	1.1	8.0	6.7	6.9	
411	12 5.0	+78 15	7.3		3	5.9	1.7	7.6	6.3	5.8	
412	12 5.4	+78 26	5.1		3	4.6	1.7	6.3	3.0	4.5	
406	12 2.9	+78 12	7.0		3	6.6 / 6.9	1.7	8.3 / 8.6	7.0 / 7.3	6.8	
645	11 21.4	+68 36	8.2		2	7.0	7.0	1.1	8.1	6.8	6.4
404	11 55.4	+78 30	8.8		3	7.1	1.8	8.9	7.6	7.0	
602	11 3.0	+69 2	6.2	1945 6.6 2	+11 +102	5.7	1.1	6.8	3.5	5.6	
356	11 5.4	+79 6	7.2		3	6.5 / 6.8	1.8	8.3 / 8.6	7.0 / 7.3	6.7	
583	10 31.5	+69 11	5.5		2	6.3 / 6.6	1.1	7.4 / 7.7	6.1 / 6.4	6.5	
354	10 24.1	+78 50	7.8		3	6.7	1.8	8.5	7.2	6.6	
330	10 8.8	+79 4	7.3		3	6.6 / 6.9	1.8	8.4 / 8.7	7.1 / 7.4	6.8	
327	9 41.0	+78 37	7.1		3	6.7 / 7.0	1.8	8.5 / 8.8	7.2 / 7.5	6.9	
317	9 28.8	+78 47	6.8		3	6.3 / 6.6	1.8	8.1 / 8.4	6.8 / 7.1	6.7	
1244	10 3.6	+38 42	7.0		1	6.5	.7	7.2	5.9	6.4	
1369	11 13.1	+39 16	7.8		1	7.3	7.4	7.7	8.0	6.7	7.2
608	11 18.8	+69 14	8.2		2	7.1	7.2	1.1	8.2	6.9	7.0
603	11 3.8	+69 33	8.3		2	7.0	7.1	1.1	8.1	6.8	6.9

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Plate 107.

		No.				Other
ν	H	Type	Lines	K	Focus	Lines.
	16.6	10.9	III	2	K=H 1	—
✓	16.2	11.6	III III	3 2	K=H K=H 1 1	F. F?
✓	16.1	12.6	III?	2	K=H 1	—
	16.3	13.7	II	3	K=H 1	F.
	16.0	15.7	b 9,10 III	3	K=H 2	F.
	16.4	17.5	I	5	N 1	—
	16.0	18.0	I	8	K=1.2H 2	F.
	16.3	19.6	I	8	K=1.5H 2	F.
	16.3	21.7	II	2	K=H 1	—
✓	16.4	22.0	II II?	2 2	K=H K=H 1 1	— —
✓	15.9	6.2	I I?	3 3	N N 1 1	— —
✓	15.5	6.6	II II?	2 2	K=H K=H 1 1	— —
✓	15.4	7.5	I I	3 3	N N 1 1	— —
✓	15.4	9.3	III III?	2 2	K=H K=H 1 1	— F?
✓	15.2	9.7	II II?	2 2	K=H K=H 1 1	— —
✓	15.4	12.0	? II II?	2 2	K=H K=H 1 1	— —
✓	15.4	12.3	9,10a b. II a? II	2 2	K=H K=H 1 1	— 2 em
III? 5.9, 6.3	15.5	13.8	III 9,11	2	K=1.2H 2	—
	15.4	14.4	III	3	K=H 1	—
	15.1	20.6	I	9	K=H 3	F.
	15.6	21.2	d I	4	N 1	—
✓	15.6	22.9	II II	2 2	K=H K=H 1 1	— —
	15.6	23.0	II	2	K=H 1	—
✓	15.6	23.2	9,10 a? II	2	K=H K=H 1 1	— 2 em
	14.6	6.4	III	3	K=2.5H 2	F.
✓	14.0	6.5	III III	2 2	K=H K=H 1 1	— —
	14.7	7.2	bc. III 9,12	3	K=2.0H 3	F.
✓	14.7	8.2	II II	2 2	K=H K=H 1 1	— —

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No.	R. A.	Dec.	Mag.	Dyn	Mean Br.	Log Dia.
1345	10 53.5	+59 27	6.6	1	6.9 7.3 7.6 7.7 8.0 6.3 6.7	6.8
1338	10 50.9	+59 42	7.0	1	6.9 7.0 7.2 7.6 7.9 6.3 6.6	6.8
352	11 1.3	+79 41	8.0	3	7.0 7.1 7.3 8.9 9.0 7.6 7.7	6.9
348	10 49.4	+79 39	7.3	3	6.7 1.9 8.6 7.3	6.6
586	10 32.6	+69 49	4.7	2	5.7 6.0 1.2 6.9 7.2 5.6 5.9	5.6
329	10 6.4	+79 30	8.0	3	6.6 1.8 8.4 7.1	6.5
328	10 0.8	+79 39	6.7	3	5.8 1.9 7.7 6.4	5.7
568	10 10.0	+69 29	6.0	2	5.7 1.1 6.8 5.5	5.6
561	9 58	+69 23	7.0	2	6.9 1.1 8.0 6.7	6.8
312	9 20.8	+78 53	8.7	3	7.0 7.2 1.8 8.8 7.3	6.9
1368	11 12.0	+59 34	7.8	1	7.0 7.3 .7 7.7 6.4	6.9
387	12 6.9	+79 15	9.1	3	7.0 7.3 1.8 8.8 7.3	6.9
1362	11 7.4	+59 55	8.3	1	6.9 7.2 .7 7.6 6.3	6.8
1351	11 0.3	+59 60	7.3	1	6.9 7.1 7.2 .8 7.7 7.8 6.4 6.3	6.8
654	11 7.4	+70 0	8.3	2	6.9 7.1 1.2 8.1 6.8	6.8
1299	10 49.4	+60 2	7.7	1	7.0 7.3 .8 7.8 6.3	6.9
597	10 52.2	+69 59	8.2	2	7.0 7.3 1.2 8.2 6.9	6.9
1296	10 42.3	+60 5	5.8	1	6.3 6.5 .8 7.1 7.3 5.8 6.0	6.4
338	10 41.6	+80 6	7.5	3	6.8 7.0 1.9 8.7 8.9 7.4 7.6	6.9
319	9 29.8	+79 48	6.0	3	5.3 1.9 7.2 5.9	5.2
316	9 24.8	+79 28	7.5	3	6.8 1.8 8.6 7.3	6.7
551	9 51.2	+69 29	7.8	2	6.9 7.1 1.1 8.0 6.7	6.8
305	9 8.6	+79 2	7.4	3	6.7 1.8 8.5 7.2	6.6
550	9 49.8	+69 25	7.7	2	7.0 7.2 1.1 8.1 6.8	6.9
670	11 27.6	+70 8	5.2	2	5.7 5.9 1.2 6.9 7.1 5.6 5.8	5.8
669	11 27.1	+70 23	7.3	2	6.9 7.1 7.2 1.2 8.1 8.3 6.8 7.0	7.0
665	11 22.8	+70 9	3.3	2	5.3 5.8 1.2 6.5 7.0 3.2 3.7	5.2
381	11 53.8	+79.53	8.5	3	6.9 7.0 1.9 8.8 7.3	6.8

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Plate 1074.

	r	H	Type	No. Lines	K	Focus	Other lines.
✓	14,2	11,5	~~III~~ IIa? 913	2	K=H	K=H 1 1	— Sun
	14,0	12,2	III	3	K=H	1	F.
	14,5	13,8	III	3	K=H	2	F.
	14,7	14,0	II	2	K=H	2	—
	14,5	14,1	II	2	K=H	1	—
	14,6	19,7	III	3	K=H	1	F.
✓	13,1	7,3	III	3 3	K=H	K=H 1 1	F. F.
	13,8	7,6	I	5	N	1	—
	13,8	8,6	II	2	K=H	1	—
✓	13,4	10,1	II	2 2	K=H	K=H 1 1	— —
	13,1	12,4	I d?	5	K=H	1	—
✓	13,0	13,3	I	3 3	N	N 1 1	— —
	13,8	14,8	I	7	K=H	1	F.
	13,3	15,3	I	7	N	2	F.
	13,2	15,9	~~II~~ III? d?	3	K=H	2	F.
?	13,8	16,2	I d?	3	?	1	Sun.
	13,8	17,0	II 914	3	K=H	1	F.
	13,0	19,0	II	2	K=H	1	—
✓	13,7	20,0	II	1 2	N	K=H 1 1	— —
	13,7	21,6	II	2	K=H	1	—
	13,3	22,5	II	3	K=H	1	F.
	13,6	22,8	III	1	N	1	—
?	13,8	23,2	II a? 915	2	K=H	1	Sun.
	13,2	24,2	I	5	K=H	1	—
?	12,4	7,6	I a 916	5	K=H	2	F. Sun.
✓	12,3	9,3	II?	2 2	K=H	K=H 1 1	— —
✓	12,4	10,6	IIa 916a	2 2	K=H	K=H 1 1	— Sun
✓	12,0	11,3	II	2 2	K=H	K=H 1 1	— —

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Mean

No.	R.A.	Dec.	Mag.	Expr.	Br.					
356	11 17.2	+ 80	34	8.4	3	6.7	6.8	2.0	8.7	7.4	6.6
645	10 53.7	+ 70	49	6.3	2	6.6 6.9	12	7.8 8.1	6.3 6.8		6.5 6.8
634	10 43.6	+ 70	37	6.0	2	6.1 6.4	12	7.3 7.6	6.0 6.3		6.0 6.3
347	10 46.5	+ 80	27	7.8	3	6.5	2.0	8.5	7.2		6.4
344	10 45.2	+ 80	34	8.6	3	6.9	2.0	8.9	7.6		6.8
1263	10 18.1	+ 60	19	6.5	1	6.7 6.9	.8	7.5 7.7	6.2 6.4		6.6 6.8
1235	11 8.9	+ 61	4	6.5	1	6.7 7.0	6.6 6.8 .8	7.5 7.8	6.2 6.3		6.6 6.9
1318	11 7.8	+ 60	43	6.7	1	6.3	.8	7.1	5.8		6.2
370	11 52.2	+ 80	24	7.3	3	6.3	1.9	8.2	6.9		6.2
363	11 36.6	+ 80	48	9.0	3	7.1	7.1	2.0	9.1	7.8	7.0
357	10 52.5	+ 71	10	7.9	2	6.7	1.2	7.9	6.6		6.6
360	10 56.4	+ 81	13	8.6	3	6.9	7.0	2.0	8.9	7.6	6.8
1289	10 38.3	+ 60	32	7.2	1	6.5	.8	7.3	6.0		6.4
349	10 28.9	+ 81	11	6.2	3	5.1	2.0	7.1	5.8		5.0
343	10 20.8	+ 81	14	6.2	3	5.9 6.0	2.0	7.9 8.0	6.6 6.7		5.5 5.9
620	10 29.1	+ 70	54	7.7	2	6.9	1.2	8.1	6.8		6.8
1274	10 28.8	+ 60	32	6.7	1	6.4	.8	7.2	5.9		6.3
319	9 41.0	+ 81	4	7.4	3	6.8	2.0	8.8	7.5		6.7
603	10 6.2	+ 70	43	8.2	2	7.1	7.2	1.2	8.3	7.0	7.0
598	9 56.2	+ 70	38	7.5	2	6.9	1.2	8.1	6.8		6.8
1250	10 6.0	+ 60	32	6.7	1	6.4	.8	7.2	5.9		6.3
1246	10 5.1	+ 60	44	6.3	1	6.7 7.0	.8	7.5 7.8	6.2 6.3		6.6 6.9
300	8 57.6	+ 79	32	7.3	3	6.3	1.9	8.2	7.9		6.2
294	8 45.4	+ 79	35	7.0	3	6.3	1.9	8.2	7.9		6.2
380	12 .8	80	56	8.4	3	5.7	2.0	7.7	6.4		5.6
381	12 9.9	+ 80	56	8.3							
1223	11 1.1	+ 61	33	7.3	1	7.0	7.2	1.8	7.8	6.3	6.9
384	11 32.9	+ 81	23	8.5	3	6.8	6.9	2.1	8.9	7.6	6.7
375	11 24.7	+ 81	37	9.0	3	7.1	7.4	2.1	9.2	7.9	7.0

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	v	H	Type	No. Lines	K	Focus	Other Lines.
1	12,6	11,8	II?	2	2 K=H K=H	1	— —
	12,2	13,2	III	2	K=H	1	—
	12,0	13,6	II	2	K=H	1	—
	12,8	18,9	II?	2	2 K=H K=H	1	— —
Recorded on p. 82.	~~12,8~~	~~19,1~~	~~II~~	~~2~~	~~K=H~~	~~1~~	~~—~~
	12,4	22,0	II	2	K=H	1	—
	11,5	6,3	II a	9174	K=H	1	F.
	11,4	8,8	I	5	N	1	—
	11,5	9,4	III b?	9183	K=H	1	F.
	11,0	11,4	II?	2	2 K=1.5H K=H	1	— —
	11,5	11,6	I	8	N	2	F.
	11,6	15,4	? II	2	2 K=H K=H	1	— —
	11,6	16,5	II	~~3~~ 2	K=H ~~K=2.5H~~	1	~~F~~ —
	11,5	19,5	II	2	2 K=H K=H	1	— —
	11,6	19,7	I	7	K=H	2	F.
	10,5	5,9	I	7	K=H	2	F.
	10,6	10,9	II a?	919 2	K=2.5H	5	F?
	10,0	11,7	I	5	K=H	1	—
	10,6	13,4	II	2	K=1.5H	1	—
	10,2	15,5	II?	2	2 K=H K=H	1	— —
	10,0	15,9	I	6	K=H	1	—
	10,8	20,2	III b.e.	9203	K=2,0H	3	F.
	10,1	21,3	II	2	2 K=H K=H	1	— —
?	10,9	22,4	II a	9213	K=1.2H	2	F? pecu.
	10,4	22,5	II	2	K=H	1	—
	9,3	7,4	III	2	2 K=H K=H	1	— F?
	9,7	9,1	III	?	N	1	F.
	9,9	9,6	II	2	K=H	1	—

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No.	R. A.	Dec.	Mag.	Exp	Bin.	Mean Bin.
369	11 16.0	+81 21	9.0	3	7.0 7.4 2.1 9.1 7.8	6.9
362	10 58.6	+81 44	8.2	3	6.4 8.5 7.2 / 6.6 2.1 8.7 7.4	6.3 / 6.5
359	10 52.5	+81 49	8.2	3	6.9 2.1 9.0 7.7	6.8
320	9 42.8	+81 5	8.4	3	6.9 7.1 2.0 8.9 7.6	6.8
287	9 3.8	+80 44	7.8	3	6.8 2.0 8.8 7.5	6.7
400	12 29.7	+81 3	6.8	3	6.0 2.0 8.0 6.7	5.9
1226	11 3.4	+61 39	7.9	1	6.5 .8 7.3 6.0	6.4
389	11 52.6	+81 40	6.2	3	6.2 8.3 7.0 / 6.6 2.1 8.7 7.4	6.1 / 6.5
337	11 25.9	+82 5	9.0	3	7.8 7.8 2.0 9.0 7.7	6.9
338	11 26.1	+82 6	9.0			
373	11 21.4	+81 56	6.8 1982 6.1 8	5	4.8 2.1 6.9 5.6	4.7
347	10 27.4	+81 59	8.4	3	6.8 7.0 2.1 8.9 7.6	6.7
337	10 11.8	+81 55	7.9	3	6.5 7.1 2.1 9.2 7.9	6.4 7.0
313	9 30.8	+81 37	9.0	3	7.1 7.2 2.1 9.2 7.9	7.0
534	10 6.1	+71 47	6.3	2	5.6 1.3 6.9 5.6	5.5
402	12 40.8	+81 25	6.3	3	4.9 2.1 7.0 5.7	4.8
1161	10 54.8	+62 31	2.0	1	7.3 .8 B. B.	
315	10 38.5	+72 43	7.0	2	6.6 1.3 7.9 6.6	6.5
325	10 58.0	+82 31	7.0	3	6.3 2.2 8.5 7.2	6.2
310	10 24.0	+82 41	9.0	3	7.1 7.3 2.2 9.3 8.0	7.0
307	10 17.8	+82 46	8.2	3	6.5 2.2 8.7 7.4	6.4
302	9 16.0	+81 38	4.3	3	4.6 6.7 5.4 / 5.2 2.1 7.3 6.0	4.5 / 5.1
289	8 59.1	+81 59	9.0	3	7.0 7.2 2.1 9.1 7.8	6.9
282	8 49.2	+81 24	6.7	3	5.4 2.1 7.5 6.2	5.3
278	8 45.4	+81 26	7.9	3	6.6 2.1 8.7 7.4	6.5
1172	11 10.4	+62 38	7.3	1	6.7 6.9 7.6 / 6.9 7.1 7.8 / 6.9 6.3	6.6 / 6.8
356	12 4.4	+82 31	6.7	3	6.0 8.2 6.9 / 6.5 2.2 8.7 7.4	5.9 / 6.4
355	11 55.9	+82 30	7.6	3	6.7 2.2 8.9 7.6	6.6

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V	H	Type	No. Lines	K	Other Lines.	
9.9	10.6	I	4	N	1	—
9.0	11.3	II?	2	K=H	1	—
9.7	12.1	II	2 2	K=H K=H	1	— —
9.1	16.1	II d?	7	K=H	4	F.
9.3	17.3	III	2	K=H	1	—
9.0	19.1	II	1	N	1	—
9.7	23.0	II	2	K=H	1	—
9.7	23.2	I	3	N	1	—
8.8	7.1	II	II? 2 2	K=H K=H	1	— —
8.6	8.2	III?	2	K=H	1	—
8.3	11.0	II	2	K=H	1	—
8.6	16.4	III	2	K=H	1	—
8.9	19.3	I	6	K=1.5H	2	—
8.4	20.7	I	3	N	1	—
8.0	20.0	II	2	K=H	1	—
7.5	6.8	II	2	K=H	1	—
7.3	11.7	II d	5	N	2	—
7.4	13.2	II	II? 2 2	K=H K=H	1	— —
7.7	14.2	II	2	K=H	1	—
7.5	17.2	III	2	K=H	1	—
7.1	18.4	II	2	K=H	1	—
7.8	19.1	I	4	K=H	1	—
7.8	19.3	II a 922	2	K=H	1	neb.
7.9	20.5	III	2	K=1.2H	1	—
7.3	21.4	II	3	K=H	1	F.
7.3	21.6	III	2	K=H	1	—
7.8	22.0	III	2	K=H	1	F?
7.7	22.9	I	6	K=H	2	F.

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No.	R. A.	Dec.	Mag.	Eph.	Br.	Mean Br.	cor. Br.
526	11 5.4	+ 72 48	7.0 .	2	6.5 | 1.3 8.3 | 7.0	6.4	✓
336	11 94.9	+ 83 8	7.7 _	3	6.8 2.3 9.1 | 7.8	6.7	✓
332	11 19.3	+ 82 54	8.3 _	3	7.0 7.3 2.3 9.3 | 8.0	6.9	✓
297	10 13.0	+ 83 18	5.2 _	3	4.2 2.3 6.5 | 5.2	4.1	✓
280	9 53.1	+ 83 6	7.1 _	3	6.6 6.9 | 8.9 2.3 9.2 | 7.6 7.9	6.5 6.8	✓
491	10 7.1	+ 73 10	7.6 _	2	6.9 1.3 8.2 | 6.9	6.8	✓
273	8 35.2	+ 81 49	7.6 _	3	6.4 2.1 8.5 | 7.2	6.3	✓
473	9 41.2	+ 72 21	7.1 .	2	6.5 1.3 7.8 | 6.5	6.4	✓
352	11 12.0	+ 63 9	8.0 _	1	7.0 7.2 9 7.9 | 6.6	6.9	✓
365	12 23.8	+ 82 48	8.0 _	3	6.5 6.6 | 8.8 2.3 8.9 | 7.3 7.6	6.4 6.5	✓
339	11 42.3	+ 83 28	8.0 _	3	6.9 2.4 9.3 | 8.0	6.8	✓
287	10 5.4	+ 83 32	6.8 _	3	6.2 6.5 | 8.6 2.4 8.9 | 7.3 7.6	6.4 6.4	✓
262	9 19.0	+ 83 0	7.8 _	3	6.1 2.3 8.4 | 7.1	6.0	✓
265	8 56.2	+ 82 56	8.8 .	3	6.9 2.3 9.2 | 7.9	6.8	✓
248	9 3.5	+ 83 18	8.4 _	3	6.8 2.3 9.1 | 7.8	6.7	✓
378	12 52.9	+ 82 56	8.3 _	3	6.9 2.3 9.2 | 7.9	6.8	✓
824	10 51.9	+ 64 12	6.8 .	1	6.1 9 7.0 | 5.7	6.0	✓
252	11 6.3	+ 84 8	8.4 _	3	7.1 7.4 2.5 9.6 | 8.3	7.0	✓
312	10 46.9	+ 83 60	8.3 _	3	6.9 2.5 9.4 | 8.1	6.8	✓
436	10 19.3	+ 74 4	7.0 _	2	6.9 7.2 | 8.3 1.4 8.6 | 7.0 7.3	6.8 7.1	✓
263	9 24.6	+ 83 59	8.0 _	3	6.6 2.4 9.0 | 7.7	6.5	✓
489	10 5.7	+ 73 48	6.5 _	2	6.3 1.4 7.7 | 6.4	6.2	✓
256	9 12.5	+ 83 33	7.2 _	3	6.2 2.4 8.6 | 7.3	6.1	✓
243	8 54.9	+ 83 12	8.3 _	3	6.6 6.8 | 8.9 2.3 9.1 | 7.6 7.8	6.5 6.7	✓
233	8 35.8	+ 83 17	7.0 _	3	6.0 2.3 8.3 | 7.0	5.9	✓
232	8 33.0	+ 83 15	7.0 _	3	6.5 6.8 | 8.8 2.3 9.1 | 7.3 7.8	6.4 6.7	✓
478	9 45.3	+ 73 33	6.3 _	2	6.2 6.5 | 7.6 1.4 7.9 | 6.3 6.6	6.1 6.4	✓
253	8 19.7	+ 82 44	7.0 _	3	5.6 2.2 7.8 | 6.3	5.5	✓

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Plate 1074.

r	H	Type	No. Lines	K	Other Lines.	
6.9	7.2	III	2	K=H	1	—
6.0	7.3	I	3	H	1	—
6.1	9.7	II	2	K=H	1	—
6.6	14.3	III[b] 9233		K=H	1	F,
√ 6.9	16.0	II II	2 2	K=H K=H'	1	— —
6.5	16.7	I	4	H	1	—
6.2	17.1	III	2	K=H	1	—
√ 6.3	18.2	II II	2 2	K=H K=H'	1	— —
√ 6.4	20.2	II II	2 2	K=H K=H'	1	— —
? 6.6	23.9	I[d?]	4	H	2	neb.
5.3	6.7	II?	2	K=H	1	—
? 6.0	7.1	I[d?]	5	?	2	F, neb.
? 5.6	8.4	I[d?]	7	H	4	F, neb.
5.4	9.1	II	2	K=H	1	—
5.4	15.6	II	2	K=H	1	—
5.8	15.9	I[d?]	8	K=H	4	F,
5.7	18.4	I	8	K=H	2	F
? 5.0	19.6	II[a] 9243		K=H	2	F, neb.
5.0	20.7	II	2	K=H	1	—
5.4	23.1	II	2	K=H	1	—
4.5	6.6	III?	2	K=H	1	—
4.4	10.9	I	4	K=H	1	—
4.6	13.0	III	2	K=H	1	—
4.0	14.5	I	6	K=H	2	—
4.0	19.4	II	2	K=H	1	—
3.8	7.6	II	3	K=H	1	F,
3.3	11.6	III	1	H	1	—
3.5	14.8	II	2	K=H	1	—

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Mean 1

No.	R.A.	Dec.	Mag.	Obs.	Diff.	Brr.				Corr. Brr.
369	12 52.8	+83 18	7.5	3		6.6 6.9	8.9 2.3	9.2	7.6 7.9	6.5 6.8
373	12 38.8	+83 43	8.3	3		6.7	2.4	9.1	7.8	6.6
276	12 19.3	+84 14	7.9	3		6.9	2.5	9.4	8.1	6.8
810	10 39.9	+64 33	7.0	1		6.5 6.8	7.4 9	7.7	6.1 6.4	6.4 6.7
237	10 10.1	+84 17	8.5	3		7.0	7.6 2.5	9.5	8.2	6.9
438	10 22.4	+74 35	7.4	2		6.7	1.4	8.1	6.8	6.6
223	9 44.7	+84 37	6.5	3		6.4 6.9	9.0 2.6	9.5	7.7 8.2	6.3 6.8
216	9 23.6	+84 24	8.7							
213	9 22.2	+84 27	8.3	3		6.9 6.9	2.5	9.4	8.1	6.8
239	8 48.0	+83 35	9.0	3		7.1 7.3	2.4	9.5	8.2	7.0
235	7 36.0	+82 32	6.5	3		5.8	2.3	8.1	6.8	5.7
476	11 45.8	+74 34	6.7	2		6.7	1.4	8.1	6.8	6.6
828	11 14.2	+65 8	6.0	1		5.8	9	6.7	5.4	5.7
289	12 48.0	+84 12	6.5							
290	12 48.1	+84 12	5.5	3	0	4.1	2.2	6.3	5.0	4.0
286	12 37.2	+84 26	7.0	3		6.7	2.5	9.2	7.9	6.6
161	10 13.4	+83 8	7.5	3		6.6	2.7	9.3	8.0	6.5
234	10 7.8	+84 39	5.0	3		4.9	2.6	7.5	6.2	4.8
789	10 20.4	+64 39	6.2	1		6.0	9	6.9	5.6	5.9
196	8 44.3	+84 45	6.0	3		5.8	2.6	8.4	7.1	5.7
186	8 25.1	+84 25	8.0	3		6.7	2.5	9.2	7.9	6.6
207	7 53.7	+83 32	8.2	3		6.8	2.4	9.2	7.9	6.7
311	13 27.9	+84 3	7.5	3		6.6 6.8	9.1 2.5	9.3	7.8 8.0	6.5 6.7
817	10 56.4	+65 35	7.1	1		6.7	1.0	7.7	6.4	6.6
183	11 20.0	+85 30	7.5	3		6.6 6.9	9.4 2.8	9.7	8.1 8.4	6.5 6.8
803	10 39.1	+65 54	6.5	1		6.0	1.0	7.0	5.7	5.9
132	8 37.6	+85 15	8.2	3		7.0	2.7	9.7	8.4	6.9
307	13 21.9	+84 40	8.0	3		6.6	2.6	9.2	7.9	6.5
196	12 4.6	+85 53	8.2	3		6.8 7.1	9.7 2.9	10.0	8.4 8.7	6.7 7.0
154	10 33.4	+86 8	8.2	3		6.9	2.9	9.8	8.5	6.8

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Plate 1074.

V	H	Type	No. Lines	K	Focus	Other Lines.
3.7	20.9	I d?	6	K=H	2	F.
3.7	22.3	I	6	N	2	F.
3.9	23.2	II?	2	K=H	1	—
4.0	24.3	I d?	5	K=H	1	—
2.6	8.7	II	2	K=H	1	—
2.6	12.2	II a	9253	K=H	2	F.
2.8	13.2	II	2	K=H	1	—
2.9	14.1	I	4	H_1	1	—
3.0	14.2	I	3	H_1	1	—
2.8	15.9	III b	9263	K=H	2	F.
2.8	16.4	~~III~~ I?	3	K=2.0 H	2	F.
2.9	18.4	III	2	K=H	1	—
2.9	19.6	I	9	K=H	4	F.
2.9	19.9	II	2	K=H	1	—
2.9	22.1	I?	3	N	1	—

12.20
12 10

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Mean 1

No.	R.A.	Dec.	Mag.		Dyn	Br.				Corr. Br.
767	10 7.5	+65	49	5.8	1	5.8	1.0	6.8	5.5	5.7
169	7 41.6	+84	28	6.0	3	5.9	2.5	8.4	7.1	5.8
389	9 30.1	+75	15	6.8	2	6.7	1.5	8.2	6.9	6.6
402	9 21.6	+74	59	7.3	2	6.4	1.5	7.9	6.6	6.3
B22	13 20.7	+85	31	7.0	3	6.5	2.8	9.3	8.0	6.4
176	11 57.4	+86	24	8.7	3	6.2	3.0	9.2	7.9	6.1
170	11 23.8	+86	25	7.0	3	6.5	3.0	9.5	8.2	6.4
161	10 56.2	+86	26	7.2	3	6.4	3.0	9.4	8.1	6.3
159	10 50.4	+86	20	8.3	3	6.9	3.0	9.9	8.6	6.8
678	10 32.0	+66	28	5.2	1	6.0 / 6.3	1.0	7.0 / 7.3	5.7 / 6.0	5.9 / 6.2
393	10 22.6	+76	28	5.0	2	6.0 / 6.1	1.6	7.6 / 7.7	6.3 / 6.4	5.9 / 6.0
671	10 19.6	+66	22	6.6	1	6.8 / 7.1	1.0	7.8 / 8.1	6.3 / 6.8	6.7 / 7.0
664	10 13.6	+66	18	5.0	1	5.1	1.0	6.1	4.8	5.0
128	8 12.7	+85	33	7.3	3	6.9	2.8	9.7	8.4	6.8
168	7 33.6	+84	47	7.8	3	6.6	2.6	9.2	7.9	6.5

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Plate 1208.

			Type	No. lines	K	Focus	Other lines.
g 30	22.1	21.5	II	2	K=H	1	—
	22.4	23.7	II	2	K=H	1	—
∫ A	21.8	17.5	III	2 2	K=H K=H	1 1	— —
	20.7	10.0	I d2	4	K=H	1	—
∫ A	20.4	12.1	III ?	2 2	K=H K=H	1 1	— —
?	20.0	12.1	b 927	3	K=1.2H	5	F.
	20.9	20.6	I	6	?	2	F.
?	19.0	6.2	a 928	3	K=H	1	F, diff.
	19.1	11.6	I	5	K=.8H	1	F.
	19.4	12.6	I	6	K=H	1	F.
	19.4	14.6	II	2	K=H	1	—
	19.2	19.5	I ?	K	N	1	—
?	18.6	14.6	III	3	K=H	1	F.
	18.6	19.5	III	2	K=H	1	—
	18.3	20.0	III	2	K=H	1	—
	18.0	22.6	II	2	K=H	1	—
	17.6	7.5	II	3	K=H	1	F.
∫ A	17.7	10.0	III	2 2	K=H K=H	1 1	— —
!	17.6	17.9	a 929	2	K=H	1	diff.
	17.0	20.0	I d?	7	K=H	2	F.
	16.3	7.6	III	2	K=H	1	—
∫ A	16.3	11.9	III	1 2	N K=H	1 1	— —
	16.6	13.0	I	6	N	2	F.
	16.7	18.1	III	3	K=H	1	F.
	16.3	18.5	III	3	K=H	1	F.
	16.6	19.7	III	2	K=H	1	—
	16.6	20.1	I	7	N	2	F.
	16.9	22.9	k 930	3	K=H	2	F.

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	No.	R.A.	Dec.	Mag.	Br.
10 21+51.3	1605	10 21.2	+51 19	6.2 _	6.8 .5 7.3 6.5 .
10 6+60.9	1250	10 6.0	+60 52	6.7 _	6.8 .8 7.6 6.8 .
10 34-51.5	1621	10 34.1	+51 34	6.5 _	6.9 {7.3 7.4} 6.6 } .
11 3+61.9	1226	11 3.4	+61 59	7.9 _	7.2 {7.5 7.7} 6.9 }
10 53+52.3	1529	10 51.9	+52 16	6.3 _	6.8 .8 7.6 6.8 .
10 54+62.5	1161	10 54.8	+62 31	2.0 _	6.8 {7.0 7.3} 6.5 } .
10 6+71.8	534	10 6.1	+71 47	6.3	7.1 {7.2 .5 7.6} 6.8 }
11 21+62.6	1183	11 20.8	+62 34	6.4 _	B. .8 B. B. .
11 5+72.8	526	11 5.4	+72 48	7.0 _	6.4 1.3 7.7 6.9 .
10 58+72.1	515	10 58.5	+72 43	7.0 _	6.3 .8 7.1 6.3 .
10 44+52.9	1519	10 44.0	+52 50	6.5 _	6.7 1.3 8.0 7.2 .
10 27+52.9	1496	10 27.3	+52 52	6.9 .	6.6 1.3 7.9 7.1 .
10 44+53.3	1439	10 43.8	+53 20	6.2 } -1	6.7 .5 7.2 6.4 .
	1440	10 43.8	+53 17	6.0 }	6.7 .5 7.2 6.4 .
10 11+72.9	486	10 11.0	+72 54	8.4 _	6.6 {7.2} 6.4 } .
10 7+73.2	491	10 7.1	+73 10	7.6 _	6.9 {7.3 .6 7.3} 6.7 } .
9 49+73.1	481	9 49.0	+73 7	8.2 _	6.9 {8.2} 7.4 }
11 7+53.5	1480	11 7.7	+53 34	6.5 _	7.3 1.3 8.6 7.8 } .
10 59+53.6	1466	10 59.6	+53 36	7.2 _	6.6 {7.9} 7.1 } .
10 32+53.7	1427	10 32.3	+53 44	7.0 _	6.8 1.3 8.1 7.3 }
10 6+73.8	484	10 5.7	+73 48	6.5 _	6.9 1.3 8.2 7.4 .
	532	11 36.3	+73 57	6.8 _	6.5 .6 7.1 6.3 .
11 36+73.9	~~475~~	11 45.4	+74 6	7.5	7.0 {7.2 7.4} 7.6 } 6.8 } .
11 5+74.3	456	11 5.6	+74 16	6.5 _	7.3 1.6 7.9 7.1 }
10 52+64.2	824	10 51.9	+64 12	6.8 .	6.7 .6 7.3 6.5 .
10 19+74.0	436	10 19.5	+74 4	7.0 _	6.2 1.4 7.6 6.8 .
10 30+54.4	1387	10 30.1	+54 24	6.0 _	6.9 {8.3} 7.5 }
10 20+64.0	788	10 20.2	+64 5	7.5 _	7.2 1.4 8.6 7.8 }
10 24+54.3	1381	10 24.6	+54 14	6.8 .	6.8 {7.0 7.2} 8.2 7.4 } .
10 47+53.5	478	9 45.3	+73 33	6.3 _	7.2 1.4 8.6 7.8 }
					6.2 .9 7.1 6.3 .
					6.7 {8.1} 7.3 } .
					7.0 } 1.4 8.4 } 7.6 }
					6.5 {7.1} 6.3 } .
					6.6 } .6 7.2 } 6.5 }
					8.0 } 7.2 } .
					7.1 {8.3} 7.5 }
					7.4 } .9 8.3 }
					6.3 .6 6.9 6.1 .
					6.2 {7.6} 6.8 }
					6.5 } 1.4 7.9 } 7.1 }

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Plate 1268.

			No.				Other
			Type	Lines	K	Focus	Lines.
✓	15.6	6.5	III	III 2 2	K=H	K=H 1 1	— —
	15.0	9.1	I	6	H	1	—
✓	15.2	9.6	I²	I? 1, H	H	H 1 1	— F
	15.9	15.4	III	2	K=H	1	F?
	15.9	16.6	II	2	K=H	1	—
	15.8	17.6	I	4	?	1	F?
	15.8	17.9	I	4	H	1	—
	15.3	20.7	I	5	H	1	F
	14.7	6.7	III a	9313	K=H	1	F
	14.4	8.3	I	9	K=1.2H	2	F
	14.6	11.8	III	2	K=H	1	—
	14.4	14.1	III	2	K=H	1	—
	14.5	14.4	III b	9321 3	K=H	2	F
	14.9	19.6	I	9	K=1.5H	2	F
	14.5	22.2	III	? 1	H	1	—
	14.7	24.0	III	3	K=H	1	F
	15.5	24.1	II	3	K=H	1	F
	13.6	8.9	I	.6	H	2	F
✓	13.4	9.9	III	III? 1 2	H	K=H 1 1	— —
✓	13.0	11.7	III	III 2 2	K=H	K=H 1 1	— —
✓	13.4	11.9	II	IIa¹ 3 2 (9321a)	K=H	K=H 1 1	F. F.? Green
	13.7	12.1	II	? 3	K=H	1	F
✓	13.8	14.1	III	III? 2 2	K=H	K=H 1 1	— —
	13.3	15.6	I	.9	H	2	F
✓	13.8	18.7	III	III 1 2	H	K=H 1 1	— —
✓	13.7	21.2	III	III? 2 2	K=H	1	—
	13.4	21.7	III	2	K=H	1	—
	13.4	24.0	I	.8	K=H	2	F

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No.	R.A.	Dec.	Mag.	Br.
11 45+74.1	4175	11 45.4	+74 6	7.5	7.0 7.2 8.4 7.6 / 7.3 7.5 1.4 8.7 7.9
11 3+54.9	1426	11 3.1	+54 56	7.0	6.4 .6 7.0 6.2
11 1+54.9	1425	11 1.3	+54 53	7.1	6.9 7.0 .6 7.5 6.7
10 40+64.6	810	10 39.9	+64 33	7.0	6.7 7.6 6.8 / 7.0 .9 7.9 7.1
10 29+74.5	4140	10 29.6	+74 32	7.3	6.5 1.4 7.9 7.1
10 22+74.6	438	10 22.4	+74 35	7.4	6.3 1.4 7.7 6.9
10 20+74.5	437	10 19.9	+74 32	7.8	6.8 1.4 8.2 7.4
9 58+74.6	427	9 58.6	+74 35	7.7	6.5 1.4 7.9 7.1
11 46+74.6	4176	11 45.8	+74 34	6.7	6.4 1.4 7.8 7.0
11 14+65.1	828	11 14.2	+65 8	6.0	5.8 .9 6.7 5.9
11 8+75.2	438	11 7.5	+75 8	7.4	6.9 / 7.1 1.5 8.4 7.6 / 8.6 7.8
10 47+65.3	808	10 46.8	+65 19	7.5	7.0 / 7.3 .9 7.9 7.1 / 8.2 7.4
10 44+74.4	1418	10 44.8	+75 21	7.7	6.5 / 6.8 .6 7.1 6.3 / 7.4 6.6
10 20+65.0	789	10 20.4	+64 59	6.2	5.9 .9 6.8 6.0
10 17+75.1	1390	10 17.1	+75 8	7.0	7.0 / 7.1 .6 7.7 6.9 / 7.6 6.8
10 11+74.9	1467	10 11.1	+74 56	6.5	6.5 / 6.8 .6 7.1 6.3 / 7.4 6.6
10 11+74.5	1466	10 10.9	+74 31	7.0	6.6 .6 7.2 6.4
11 4+75.5	1446	11 4.3	+75 41	6.7	6.4 .6 7.0 6.2
11 7+65.7	823	11 7.1	+65 42	7.0	7.0 7.3 8.0 7.2 / 7.1 7.5 1.6 8.1 7.3
11 9+75.9	439	11 9.5	+75 52	7.8	7.0 7.0 8.5 7.7 / 7.2 7.3 1.5 8.7 7.9
10 54+75.8	1436	10 53.9	+75 48	7.5	6.9 7.0 .6 7.5 6.7
10 56+65.6	817	10 56.4	+65 35	7.1	6.8 1.0 7.8 7.0
10 49+75.7	431	10 49.6	+75 34	8.0	7.0 7.2 8.5 7.7 / 7.1 7.5 1.5 8.6 7.8
10 39+65.9	803	10 39.1	+65 34	6.5	5.9 1.0 6.9 6.1
10 12+75.7	412	10 12.1	+75 31	8.2	7.0 7.1 8.5 7.7 / 7.1 7.3 1.5 8.6 7.8
10 20+75.7	1394	10 20.5	+75 34	7.4	7.0 7.22 7.6 6.8 / 7.2 7.56 7.8 7.0
9 48+75.4	399	9 48.4	+75 27	7.2	6.5 8.0 7.2 / 6.9 1.5 8.4 7.6
9 30+75.3	389	9 30.1	+75 15	6.8	6.2 1.5 7.7 6.9

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Plate 1208.

	T	H	Type	No. lines	K	Focus	Other lines.
	12,1	6,2	II	2 2	K=H	K=H 1 1	— —
	12,5	8,7	II	2 3	K=H	K=H 1 1	— F1
	12,8	9,1	III?	2 2	K=H	K=H 1 1	— —
	12,6	12,1	III	1 3	1	K=H 1 1	F F1
	12,6	13,8	III	3 3	K=H	K=H 1 1	F F1
	12,0	14,4		3	K=H	1	F
	12,5	15,8	II	2 2	K=H	K=H 1 1	— —
	12,1	17,0		b 9332	K=1,2H	2	—
?	12,1	17,3		b.c. 9342 3	K=H	3	bright, neb.
	12,1	19,5		2	K=H	1	—
	12,2	20,7		9	1	4	F
	12,9	22,0		6	1	3	—
	11,8	7,9	I	5	K=H	1	F
	11,0	12,2		12	1	5	F
	11,2	15,1		4	1	1	—
	11,6	15,3		7	K=2H	2	F
?	11,5	20,8		a 9352	K=H	3	pec.
	10,6	9,1	III	2 2	K=H	K=H 1 1	— F?
	10,6	13,7		3	K=H	1	F
	10,6	15,0	III	3 3	K=H	K=H 2	F F1
	10,6	16,7		d?	3	1	—
	10,7	18,9		2	K=H	1	—
	10,7	19,1		a 9362	K=H	1	—
	10,0	6,7		d? 4	K=H	1	—
	9,0	6,8		1	?	2	F
	9,0	7,7	I	4	K=H	1	—
	9,0	9,4		3	K=H	1	F
?	9,8	9,7		d? 4	?	1	pec.

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	No.	R.A.	Dec.	Mag.				Byr.
11 25 +66.6	724	11 25.8	+66	3	7.2	_		6.8 6.9 1.0 7.8 7.0 .
11 5 +76.2	1508	11 5.2	+76	11	7.5	_		6.8 6.9 1.6 7.4 6.6 .
11 31 +75.9	455	11 30.8	+75	50	7.8	_		7.0 {7.2} 8.3 7.7 .
11 7 +76.2	421	11 7.1	+76	9	7.6	_		7.3 {7.4} 1.5 8.8 8.0 .
10 52 +76.3	411	10 52.8	+76	13	8.0	_		6.7 {7.0} 8.3 7.5 .
10 48 +76.5	406	10 48.0	+76	30	7.3	_		7.1 {7.3} 1.6 8.7 7.9 .
	681	10 37.8	+66	22	7.9	_		6.7 {7.0} 8.3 7.5 .
~~10 37 +66.4~~	~~1288~~	~~10 38.1~~	~~+66~~	~~24~~	~~8.5~~			7.0 {7.3} 1.6 8.6 7.8 .
10 32 +66.5	678	10 32.0	+66	28	5.2	_		6.5 1.6 8.1 7.3 .
10 22 +76.5	393	10 22.6	+76	28	5.0	_		6.8 6.8 1.0 7.8 7.0 .
10 19 +66.4	671	10 19.6	+66	22	6.6	_		6.0 {6.4} 1.0 {7.0 7.4} {6.2 6.6} .
10 13 −66.3	664	10 13.6	+66	18	5.0	1829 5.0 7 −1		5.4 {5.7} 1.6 {7.0 7.3} {6.2 6.5} .
10 7 +65.8	767	10 7.5	+65	49	5.8	1807 5.7 9 +1		6.7 {7.0} 1.0 {7.7 8.0} {6.9 7.2} .
11 43 +76.3	434	11 42.8	+76	9	7.3	_		4.7 1.0 5.7 5.9 .
10 53 +57.2	1302	10 53.1	+57	10	2.3	1923 2.6		5.6 1.0 6.6 3.8 .
10 42 +57.0	1293	10 42.1	+57	6	7.3	.		6.9 1.6 8.3 7.7 .
10 40 +76.7	402	10 39.8	+76	46	7.0	_		B. .7 B. B. .
10 21 +57.7	1459	10 21.4	+56	43	4.7	_		6.6 .7 7.3 6.5 .
11 4 +57.2	1309	11 4.3	+57	11	7.3	_		6.5 1.6 8.1 7.3 .
10 54 +77.3	419	10 54.2	+77	14	8.4	_		5.7 .7 6.4 5.6 .
10 42 +57.3	1294	10 42.2	+57	21	6.1	_		7.0 {7.2} 7.7 6.9 .
10 26 +77.3	405	10 26.8	+77	12	8.3	.		7.2 {7.3} .7 7.9 7.1 .
10 28 +57.2	1278	10 28.1	+57	11	6.8	_		6.8 1.6 8.4 7.6 .
10 20 +67.0	658	10 20.9	+67	3	7.2	_		6.4 {6.5} 7.1 6.3 .
11 56 +76.0	439	11 56.3	+76	52	7.7	_		6.7 {6.8} .7 7.4 6.6 .
11 13 +57.9	1316	11 13.5	+57	52	6.5			7.0 1.6 8.6 7.8 .
11 21 +67.7	701	11 20.8	+67	44	7.2	_		6.9 {7.2} .7 7.6 7.9 6.8 7.1 .
11 12 +67.9	692	11 12.0	+67	53	6.2	_		6.8 1.0 7.8 7.0 .
10 +67.1	691	11 9.9	+67	28	6.8			6.6 1.6 8.2 7.4 .
								6.5 .7 7.2 6.4 .
								6.9 1.1 8.1 7.2 .
								6.5 {6.8} 1.1 7.6 7.9 6.8 7.1 .
								6.5 1.0 7.5 6.7 .

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r	H	Type	No. lines	K	Other Focus	Lines.
9.1	11.6	I	7	K=1.5H	2	F.
9.5	14.9	III	2	K=H	1	—
9.1	16.4	I	5	N	1	—
? 9.9	16.4	II a² 9372		K=H	1	F? neb.
9.4	17.1	I	8	N	3	—
9.5	19.4	I?	7	K=1.8H	3	F.
9.7	21.4	III	1	N	1	—
9.1	22.7	III	2	K=H	1	—
8.6	7.0	III	1	N	1	—
8.4	7.1	III	2	K=H	2	F?
8.8	11.0	III	3	K=H	1	F.
8.6	11.9	III	2	K=H	1	—
8.0	13.4	III	1	N	1	—
8.7	13.7	III?	2	K=H	1	—
8.3	14.4	III	2	K=H	1	—
8.1	14.5	III?	2	K=H	2	—
8.8	16.2	I	.5	N	1	—
7.1	6.8	I	7	K=1.5H	2	F.
7.4	6.9	III	3	K=H	1	F.
√ 7.5	7.0	III III	2 2²	K=H K=H	1 1	— —
7.8	10.3	III	1	N	1	—
7.9	10.4	III	2	K=H	1	—
7.0	11.3	I	9	K=1.2H	2	F.
7.0	12.9	III	1	N	1	—
7.5	16.7	III	2	K=H	1	—
7.2	21.0	III	2	K=H	1	—
6.9	6.9	I d 2 1	8	K=H	4	F.
6.4	12.3	III	2	K=H	1	—

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	No.	R. A.	Dec.	Mag.		
11 0 +68.0	632	11 0.4	+68	0	6.5	–
10 44 +77.9	412	10 43.4	+77	32	6.8	–
10 29 +77.9	406	10 28.6	+77	39	8.0	
10 37 +57.7	1290	10 36.9	+57	40	6.8	–
10 35 +57.9	1286	10 34.6	+57	37	5.8	1881 57 8 0
10 26 +57.8	1277	10 25.8	+57	50	5.0	–
9 43 +77.3	389	9 43.0	+77	18	7.4	–
9 30 +77.4	379	9 30.4	+77	23	8.4	–
11 58 +77.5	460	11 57.7	+77	34	7.4	–
11 58 +77.7	461	11 57.9	+77	43	5.8	–
11 4 +68.1	635	11 4.0	+68	7	6.5	–
11 12 +78.2	385	11 12.8	+78	11	6.8	–
10 59 +78.5	375	10 58.9	+78	34	6.5	–
10 47 +58.3	1290	10 47.6	+58	16	7.3	–
10 48 +78.5	368	10 48.6	+78	27	8.0	–
10 48 +78.6	367	10 48.2	+78	33	6.2	–
10 31 +78.2	359	10 30.4	+78	11	7.0	.
	411	12 5.0	+78	15	7.3	–
12.5 +78.3	~~412~~	~~12 5.4~~	~~+78~~	~~26~~	~~5.1~~	
12.3 +78.2	406	12 2.9	+78	12	7.0	–
11 26 +68.3	650	11 25.6	+68	23	8.7	–
11 1 +58.7	1304	11 0.6	+58	39	7.0	–
11 28 +78.4	392	11 28.5	+78	24	6.2	–
11 3 +69.0	602	11 3.0	+69	2	6.2	–
11 5 +79.1	356	11 5.4	+79	6	7.2	–
10 24 +78.8	354	10 24.1	+78	50	7.8	–
9 41 +78.6	327	9 41.0	+78	37	7.1	–
12 6 +78.4	412	12 5.4	+78	26	5.1	–
10 53 +59.5	1345	10 53.5	+59	27	6.6	–

Bx.				
6.0	1.1	7.1	6.3	.
6.8		8.5	7.7	.
7.2	1.7	8.9	8.1	
6.6	1.7	8.3	7.3	.
6.7	.7	7.4	6.6	.
5.8	.7	6.5	5.7	.
5.7	.7	6.4	5.6	.
6.7		8.3	7.3	.
6.9	1.6	8.5	7.7	
7.0		8.7	7.9	.
7.3	1.7	9.0	8.2	
6.5	1.7	8.2	7.4	.
5.9		7.6	6.8	.
6.2	1.7	7.9	7.1	
6.6		7.7	6.9	.
6.9	1.1	8.0	7.2	
6.4	1.7	8.1	7.3	.
6.8		8.6	7.8	.
7.2	1.8	9.0	8.2	
6.7		7.4	6.6	.
6.8	.7	7.5	6.7	
6.8		8.3	7.7	.
7.2	1.7	8.7	8.1	
6.0		7.5	7.0	.
6.3	1.8	8.1	7.3	
6.4	1.7	8.1	7.3	.
	1.7	7.6	6.8	
5.9				.
6.5		8.2	7.4	.
6.8	1.7	8.5	7.7	
7.0	7.2	8.1	7.3	.
7.2	7.4 1.1	8.3	7.5	
		7.6	6.8	.
6.9		7.9	7.1	
7.2	.7	8.2	7.4	.
6.5		8.7	7.9	
7.0	1.7			.
5.9	1.1	7.1	6.2	.
6.6		8.4	7.6	.
6.9	1.8	8.7	7.9	
6.9		8.7	7.9	.
7.0	1.8	8.8	8.0	
6.9		8.7	7.9	.
7.2	1.8	9.0	8.2	
4.9	1.7	6.6	5.8	.
7.0		7.7	6.9	.
7.3	1.7	8.0	7.2	

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Plate 1208.

	r	H	Type	No. Lines	K	Other Focus Lines.	
?	6,8	16,9	III b 938	1	H	1	bright? pure.
	6,9	18,1	III	2	K=H	1	—
	6,0	20,6	I	8	K=,5H	2	F.
	6,6	22,0	III	2	K=H	1	—
✓	5,6	9,8	II a IIa² 939	2	K=H	K=H 1	— Sem
	5,9	14,4	III	2	K=H	1	—
	5,2	15,0	III b 940	3	K=H	1	F.
	5,6	16,6	III b.c. 941	2	K=2,0H	2	bright, pure.
	5,6	18,7	I	8	K=,2H	2	F.
	5,8	22,7	III	2	K=H	1	—
	4,2	7,3	III	3	K=H	2	F.
III ? 5.2, 5.6, 6.6.	4,4	8,1	III b.c. 942	3	K=H	2	F.
	4,3	14,7	III ?	3	K=H	1	F.
	4,0	14,8	III	2	K=1,2H	1	—
	4,7	21,3	I	8	K=,5H	3	F.
✓	3,5	8,9	I I.	4 4	H	K=H 1	— —
	3,4	9,3	II ?	2	K=H	1	—
	3,5	16,0	III ?	2	K=H	1	—
	3,5	18,3	II	2	K=H	1	—
	2,0	8,3	II a 943	1	H	2	F.
	2,9	16,1	I	9	K=,2H	2	F.
	2,7	16,7	III	3	K=H	1	F.
	2,5	19,8	III	2	K=H	1	—
	3,6	13,1	III	2	K=H	1	—

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	No.	R.A.		Dec.		Mag.	
10 37 + 69.2	583	10	31.5	+ 69	11	5.5	–
10 9 + 79.0	330	10	8.8	+ 79	4	7.3	–
10 10 + 69.5	568	10	10.0	+ 69	29	6.0	–
9 28 + 78.8	317	9	28.8	+ 78	47	6.8	–
11 38 + 79.5	374	11	38.4	+ 79	31	8.7	–
10 49 + 79.6	348	10	49.4	+ 79	39	7.3	–
10 42 + 60.1	1296	10	42.3	+ 60	5	5.8	–
10 32 + 69.9	586	10	32.6	+ 69	49	4.7	–
10 0 + 79.6	328	10	0.8	+ 79	39	6.7	–
9 58 + 69.4	561	9	58.1	+ 69	23	7.0	–
11 27 + 70.1	670	11	27.6	+ 70	8	5.2	–
11 22 + 70.1	665	11	22.8	+ 70	9	3.3	–
10 47 + 80.4	347	10	46.5	+ 80	27	7.8	–
10 44 + 70.6	634	10	43.6	+ 70	37	6.0	–
9 30 + 79.8	319	9	29.8	+ 79	48	6.0	–
11 19 + 70.6	661	11	19.1	+ 70	36	8.3	.
11 52 + 80.4	370	11	52.2	+ 80	24	7.5	–
10 38 + 60.9	1289	10	38.3	+ 60	52	7.2	–
10 29 + 60.9	1274	10	28.8	+ 60	52	6.7	–
12 10 + 80.9	380	12	9.8	+ 80	56	8.4	} ?
	381	12	9.8	+ 80	56	8.3	
10 20 + 81.2	349	10	28.9	+ 81	11	6.2	–
10 21 + 81.2	343	10	20.8	+ 81	14	6.2	–
9 41 + 81.1	319	9	41.0	+ 81	4	7.4	–
10 54 + 70.8	645	10	53.7	+ 70	49	6.3	–

Br.

6.5		7.6	6.8	.
6.8	1.1	7.9	7.1	
6.8		8.6	7.8	
7.0	1.8	8.8	8.0	.
5.8	1.1	6.9	6.1	.
6.4		8.2	7.4	
6.8	1.8	8.6	7.8	.
7.0	1.9	8.9	8.1	.
6.8		8.7	7.9	.
7.0	1.9	8.9	8.1	
6.5		7.3	6.5	
6.8	8	7.6	6.8	.
6.0		7.2	6.4	
6.5	1.2	7.7	6.9	.
5.9	1.9	7.8	7.0	.
6.9		8.0	7.2	.
7.1	1.1	8.2	7.4	
6.0		7.2	6.4	
6.3	1.2	7.5	6.7	.
5.4		6.6	5.8	
5.9	1.2	7.1	6.3	.
6.7		8.7	7.9	
6.8	2.0	8.8	8.0	.
6.4		7.6	6.8	
6.7	1.2	7.9	7.1	.
5.5	1.9	7.4	6.6	.
6.8	1.2	9.0	8.2	.
6.9	1.9	8.8	8.0	.
6.9		7.7	6.9	.
7.0	.8	7.8	7.0	
6.9	.8	7.7	6.9	.
6.0	2.0	8.0	7.2	.
5.8	2.0	7.8	7.0	.
6.5		8.5	7.7	
6.8	2.0	8.8	8.0	
7.0		9.0	8.2	
7.0	2.0	9.2	8.4	
6.8		8.0	7.2	
7.0	1.2	8.2	7.4	

$\frac{24}{3}$ $\frac{1-1}{3}$

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Plate 1116.

V	H	Type	No. Lines	K	Focus	Other Lines.
22,4	8,6	I	6	?	3	F?
22,1	9,7	III	3	K=H	1	F.
22,5	23,2	I	5	K=H	1	—
21,9	15,6	III	2	K=H	1	—
21,0	19,5	I	4	K=H	1	—
21,3	21,6	III	3	K=H	2	F.
20,0	7,4	III	2	N	1	F.
20,0	12,2	III b 9443		K=H	1	F.
20,1	14,4	II	2	K=H	1	—
20,1	14,7	I	5	N	1	F.
20,2	16,9	I?	4	N	1	—
20,5	22,2	I	9	N	5	F.
19,4	10,9	III	2	K=H	1	—
19,4	16,5	III	2	K=H	1	—
19,5	16,7	I	8	K=1/2H	2	F.
19,0	18,6	I	7	K=1/2H	2	—
18,2	10,4	I	4	N	1	—
18,1	20,0	I	4	N	1	—
17,9	10,4	I	6	N	3	—
17,6	11,8	I	7	N	2	—
17,0	18,0	I	7	K=1/2H	2	F.
17,9	18,1	III	3	K=H?	1	F.
16,9	16,3	III	1	N	1	—
15,7	8,2	II	2	K=H	1	—
15,8	10,9	II a 9452		K=H	1	seen.
15,0	13,7	III	2	K=H	2	bright? seen.
15,1	14,5	III b,c 9463		K=H	3	bright? seen.
D 15,6	19,2	II a 9462	2	K=H K=H	1	seen

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	No.	R.A.	Dec.	Mag.		Br.			
12 12 +75.9	470	12 12.3	+75	59	5.8	5.2	1.5	6.7	5.1
11 39 +56.4	1544	11 39.8	+56	27	5.7 _	6.6		7.2	5.6
						7.0	.6	7.6	6.1
10 39 +65.9	803	10 39.1	+65	54	6.5 _	~~6.7~~	1.8	~~7.7~~	~~6.1~~
						6.5		7.1	5.3
11 17 +56.6	1518	11 17.8	+56	39	6.2 _	6.8	.6	7.4	5.8
10 40 +76.8	402	10 39.8	+76	46	7.0 _	6.7	1.6	8.3	6.1
						5.3		6.9	5.3
10 22 +76.5	393	10 22.6	+76	28	5.0 _	5.6	1.6	7.2	5.6
						6.7		7.4	5.8
11 48 +57.4	1343	11 48.4	+57	24	6.0 _	7.0	.7	7.7	6.1
						6.4		7.4	5.8
11 34 +67.6	714	11 34.4	+67	33	5.3 _	6.8	1.0	7.8	6.2
11 23 +57.5	1326	11 22.6	+57	32	7.2 _	7.0	.7	7.7	6.1
11 22 +57.5	1324	11 21.6	+57	32	6.5 1981 5.9 13 -3	6.5	.7	7.2	5.6
11 9 +67.4	691	11 9.9	+67	28	6.8	6.9	1.0	7.9	6.3
10 53 +57.2	1302	10 53.1	+57	10	2.3 1923 2.6	13	.7	13.	13
						6.0		7.7	6.1
11 58 +77.7	461	11 57.9	+77	43	5.8 _	6.4	1.7	8.1	6.3
						6.6		7.7	6.1
11 12 +67.9	692	11 12.6	+67	53	6.2 _	7.0	1.1	8.1	6.3
11 13 +57.9	1316	11 13.3	+57	52	6.5 _	6.4	.7	7.1	5.5
11 0 +68.0	632	11 0.4	+68	0	6.3 _	6.0	1.1	7.1	5.3
12 5 +78.3	411	12 5.0	+78	15	7.3 .	6.5	1.7	8.2	6.6
10 30 +78.2	359	10 30.4	+78	11	7.0 .	6.8	1.7	8.3	6.9
12 5 +78.4	412	12 5.4	+78	26	5.1 2070 5.1 13 -3	4.7	1.7	6.4	4.8
11 32 +58.7	1331	11 32.5	+58	46	6.3 .	6.2	.7	6.9	5.3
11 3 +69.0	602	11 3.0	+69	2	6.2 _	6.3	1.1	7.4	5.8
						6.3		8.1	6.3
10 48 +78.5	367	10 48.2	+78	33	6.2 _	6.6	1.8	8.4	6.8
						6.9		8.7	7.1
11 5 +79.1	356	11 5.4	+79	6	7.2 _	7.2	1.8	9.0	7.4
11 59 +69.5	644	11 58.8	+69	30	7.0 _	6.9	1.1	8.0	6.2
11 43 +69.6	628	11 43.5	+69	39	7.0 _	6.7	1.1	7.8	6.2
						6.0		7.2	5.6
11 27 +70.1	670	11 27.6	+70	8	5.2 _	6.2	1.2	7.4	5.8
						5.3		6.3	4.9
11 23 +70.2	665	11 22.8	+70	9	3.3 _	5.9	1.2	7.1	5.3
11 3 +59.2	1353	11 3.1	+59	42	7.0 _	7.1	1.7	7.8	6.2

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Plate 1116.

r	H	Type	No. Lines	K	Focus	Other Lines.
15,9	23,5	III	1	N	1	—
14,2	8,7	II	2	K=H	1	—
14,2	12,3	III	2	K=H	1	—
14,4	14,3	II	5	K=H	1	F.
14,0	17,7	III	3	K=H	1	F.
14,6	21,9	I	6	N	2	F.
14,8	23,0	III	2	K=H	2	—
13,0	11,0	I?	5	K=.5H	1	F.
13,7	12,2	I	3	N	1	—
13,2	17,6	III	2	K=H	1	—
13,7	17,9	I	6	K=.2H	1	—
13,4	19,2	II?	1	N	1	—
13,5	20,9	III	2	K=H	1	F.
12,6	7,1	III	3	K=H	1	F.
12,2	7,5	III	2	K=H	1	—
12,9	9,5	I	6	N	1	F.
12,3	9,6	I	5	K=H	1	—
12,5	18,8	I	7	N	2	F.
12,2	19,3	III	3	K=2,0H?	1	F.
11,4	9,0	I	7	K=.2H	2	F.
11,8	12,6	III	2	K=H	1	F.?
?	11,7	14,0	III a 947	3 ~~7~~	K=H	2 F. Diff.
	11,5	14,8	I	6	K=.2H	3 F.
	11,2	18,8	III	2	K=H	1 —
	10,8	6,7	III	2	K=H	1 —
	10,4	8,0	III	2	K=H	1 —
	10,3	8,2	III	2	K=H	1 —
	10,8	10,5	I	5	N	1 —

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	No.	R. A.		Dec.		Mag.		Br.			
10 31 + 69.2	583	10	31.5	+ 69	11	5.5	-	✓6.6 6.9	1.1	7.7 8.0	6.1 6.4
12 33 + 80.0	389	12	32.8	+ 80	1	6.7	-	✓6.5	1.9	8.4	6.8
11 52 + 80.4	370	11	52.2	+ 80	24	7.5	-	✓6.9	1.9	8.8	6.2
11 23 + 60.5	1330	11	23.1	+ 60	30	6.8	-	✓6.7	.8	7.5	5.9
10 47 + 80.4	347	10	46.5	+ 80	27	7.8	-	✓6.5	2.0	8.5	6.9
10 1 + 79.6	328	10	0.8	+ 79	39	6.7	·	✓6.0	1.9	8.9	7.3
10 32 + 69.9	586	10	32.6	+ 69	49	4.7	-	✓6.0 6.5	1.2	7.2 7.7	5.6 6.1
	380	12	9.8	+ 80	36	8.4					
12 10 + 80.9	381	12	9.8	+ 80	36	8.3	- ?	✓6.0	2.0	8.0	6.4
11 37 + 70.7	674	11	36.9	+ 70	44	7.3	·	✓6.9	1.2	8.1	6.3
10 46 + 80.5	344	10	45.2	+ 80	34	8.6	-	✓7.0 7.3	2.0	9.0 9.3	7.4 7.7
11 8 + 60.7	1318	11	7.8	+ 60	43	6.7	-	✓6.5	.8	7.3	5.7
10 54 + 70.8	645	10	53.7	+ 70	49	6.3		✓6.7	1.2	7.9	6.6
10 43 + 70.6	634	10	43.6	+ 70	37	6.0	-	✓6.2 6.5	1.2	7.4 7.7	5.8 6.1
12 8 + 71.0	610	12	8.2	+ 71	2	6.0	-	✓6.3 6.7	1.2	7.3 7.9	5.9 6.3
	398	12	34.6	+ 80	43	8.3	-	✓7.0	2.0	9.0	7.4
~~12 55 + 80.7~~	~~383~~	~~12~~	~~14.6~~	~~+ 80~~	~~49~~	~~8.3~~					
11 53 + 71.0	598	11	53.3	+ 71	2	6.5	·	✓6.2	1.2	7.4	5.8
12 30 + 81.0	400	12	29.7	+ 81	3	6.8	-	✓6.4	2.0	8.4	6.8
10 29 + 81.2	349	10	28.9	+ 81	11	6.2	·	✓5.8	2.0	7.8	6.2
10 21 + 81.3	343	10	20.8	+ 81	14	6.2	-	✓6.3 6.6	2.0	8.3 8.6	6.7 7.0
12 40 + 81.4	402	12	40.8	+ 81	25	6.3	-	✓5.7	2.1	7.8	6.2
11 52 + 81.6	389	11	52.6	+ 81	40	6.2	-	✓6.6 6.9	2.1	8.7 9.0	7.1 7.4
11 24 + 61.9	1246	11	24.1	+ 61	52	6.0	-	✓5.7	.8	6.5	4.9
11 21 + 81.9	373	11	21.4	+ 81	56	6.2	-	✓5.4	2.1	7.5	5.9
11 13 + 61.9	1226	11	3.4	+ 61	59	7.9	-	✓6.9	.8	7.7	6.1
13 11 + 81.3	416	13	11.2	+ 81	14	6.3	-	✓6.0 6.4	2.0	8.0 8.4	6.4 6.8
12 58 + 81.6	412	12	58.0	+ 81	39	7.0	-	✓6.5	2.1	8.6	7.0
11 49 + 62.4	1204	11	49.3	+ 62	21	6.2	-	✓6.7 7.0	.8	7.5 7.8	5.9 6.2
11 39 + 62.2	1198	11	39.3	+ 62	13	6.5	·	✓6.4	.8	7.2	5.6

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Plate 1116.

	r	H	Type	No. Lines	K	Focus	Other Lines.
1	10,0	12,0	III	2	K=H	1	—
	10,0	12,6	III	2	K=H	1	—
	10.4	14.8	I?	7	K=H	2	F.
	10,1	16,3	II	2	K=H	1	—
	10.6	19.6	I	3	H	1	—
	10.1	20.7	II?	9483	K=1.5H	5	F bright?
	9.6	17.0	I	3	H	1	—
	9.7	18.1	I?	3	H	1	—
	9,2	18,7	II?	2	K=H	1	—
	9.0	23,1	III	2	K=H	2	—
	8,8	6,1	III	2	K=H	1	—
	9,0	12,2	III	2	K=H	1	—
	8,4	12,9	II a?	949 2	K=H	1	—
	8,2	13,6	II	2	K=H	1	—
?	8,2	18.7	II a	950 5 3	K=H	4	F. diff.
9.45 a.m.	7.4	6,5	III	1	H	1	—
	7,6	9,6	III	2	K=H	1	—
	7,2	16,6	II?	2	K=H	1	—
	7,6	19,0	III	3	K=H	1	F.
	7.4	21.9	I?	4	K=H	1	—
	6,1	10,5	I	9	H	4	F.
	6,1	11,5	II	2	K=H	1	—
	6,7	21,0	I	6	H	2	F.
	6,3	21,7	II	2	K=H	1	—
	5,8	7,1	III	3	K=H	2	F.
	5,8	11,2	II?	2	K=H	1	—
	5,1	12,7	I	8	K=1.5H	2	F.
	5,4	12,8	III	2	K=H	1	—

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	No.	R.A.	Dec.	Mag.		Bx.			
12 4 +82,5	356	12	4.4	+82 31	6.7	6.3	5.3	6.9	
11 56 +82,5	353	11	55.9	+82 30	7.6	6.8	2.2 7.0	7.4	
11 20 +62,5	1183	11	20.8	+62 34	6.4	6.8	7.0	7.4	
10 58 +82,5	325	10	58.0	+82 31	7.0	7.2	2.2 9.4	7.8	
10 11 +81,9	337	10	11.8	+81 55	7.9	6.1	.8 6.9	5.3	
10 55 +62,5	1161	10	54.8	+62 31	2.0	6.6	2.2 8.8	7.6	
11 5 +72,8	326	11	5.4	+72 48	7.0	6.9	2.1 9.0	7.4	
10 58 +72,7	315	10	58.5	+72 43	7.0	73	8 B.	B.	
10 18 +82,8	307	10	17.8	+82 46	8.2	6.6	1.3 7.9	6.3	
9 16 +81,9	303	9	16.0	+81 58	4.3	6.5	1.3 7.8	6.2	
12 20 +72,7	565	12	20.1	+72 44	6.5	6.7	2.2 8.9	7.3	
11 32 +63,2	974	11	32.3	+63 12	6.8	5.2	7.3	5.7	
11 29 +63,5	972	11	29.3	+63 30	7.0	5.6	2.1 7.7	6.1	
11 42 +83,5	339	11	42.3	+83 28	8.0	6.8	8.1	6.3	
10 13 +83,3	297	10	13.0	+83 18	5.2	7.1	1.3 8.4	6.8	
11 58 +63,8	979	11	58.3	+63 45	6.0	6.8	7.7	6.1	
12 54 +83,3	369	12	53.8	+83 18	7.5	6.9	.9 7.8	6.2	
~~12 17 +83,7~~	~~373~~	~~12~~	~~38.8~~	~~+83 43~~	~~8.3~~	7.0	9.4	7.8	
10 45 +83,9	312	10	46.9	+83 60	8.5	7.3	2.4 9.7	8.1	
10 5 +83,5	287	10	5.4	+83 32	6.8	7.0	2.4 9.4	7.8	
9 19 +83,0	262	9	19.2	+83 0	7.5	6.5	5.9	7.3	
	289	12	48.0	+84 12	6.5	6.8	2.2 9.2	7.6	
12 49 +84,3	290	12	48.1	+84 12	5.5	6.4	2.3 8.7	7.1	
11 45 +74,6	476	11	45.8	+74 34	6.7	4.1	2189 5.0 16 8		
10 52 +64,2	824	10	51.9	+64 12	6.8	6.6	2.5 6.6	5.0	
9 12 +83,6	256	9	12.5	+83 33	7.2	6.6	1.4 8.0	6.4	
13 46 +83,5	397	13	46.7	+83 29	6.5	6.3	.9 7.2	5.6	
12 38 +84,5	286	12	37.2	+84 26	7.0	6.2	2.4 8.6	7.0	
11 30 +65,2	843	11	30.7	+65 8	6.7	6.0	5.4	6.8	
11 30 +64,9	857	11	30.2	+64 58	7.7	6.3	2.4 8.7	7.1	
						6.5	2.5 9.0	7.4	
						6.3	.9 7.2	5.6	
						7.0	7.9	6.3	
						7.3	.9 8.2	6.6	

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Plate 1116,

v	H	Type	No. Lines	K	Other Focus Lines.	
5,3	16,1	I	7	K=1,2H	2	—
5,0	18,0	I	8	K=1,5H	4	F.
5,3	19,2	III	1	?	1	—
4,5	9,5	II?	2	K=H?	1	—
4,0	9,5	II	2	K=H	1	—
4,9	10,9	I	3	?	1	—
4,4	14,9	III	2	K=H	1	—
4,7	17,7	III?	2	K=H	1	—
3,4	7,9	III	2	K=H	1	—
3,1	10,4	II	2	K=H	1	—
4,0	19,8	II	2	K=H	1	—
3,5	21,5	I	6	K=K	2	F.
3,0	23,2	I	6	?	1	F.?
2,8	8,6	I	7	K=1,2H?	3	F.
3,0	9,0	III	2	K=H	1	—
2,5	13,7	II	3	K=H	2	F.
2,5	14,8	II	2	K=H	1	—
2,5	15,6	I	4	?	1	—
1,8	12,7	I	3	?	1	—
1,7	23,9	I?	2	?	1	—

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	No.	R.A.	Dec.	Mag.		Br.			
11 14 + 65.1	828	11 14.2	+ 65	8	6.0	5.9	.9	6.8	3.2
10 7 + 84.9	234	10 7.8	+ 84	59	5.0	4.5	2.6	7.1	5.5
9 43 + 84.6	225	9 44.7	+ 84	37	6.5	6.6		9.2	7.6
13 22 + 84.6	307	13 21.9	+ 84	40	8.0	7.0	2.6	9.6	8.0
12 3 + 75.5	469	12 2.7	+ 75	28	6.7	6.7	2.6	9.3	7.7
11 39 + 65.2	851	11 39.2	+ 65	12	7.1	6.5	1.5	8.0	6.4
11 20 + 85.5	183	11 20.0	+ 85	30	7.5	6.8	9	7.7	6.1
10 13 + 85.2	161	10 13.4	+ 85	8	7.5	6.8		9.6	8.0
11 54 + 65.8	863	11 54.2	+ 65	44	6.8	7.0	2.8	9.8	8.2
13 21 + 85.5	222	13 20.7	+ 85	31	7.0	6.8		9.5	7.9
10 56 + 65.6	817	10 56.4	+ 65	35	7.1	6.9	2.7	9.6	8.0
8 44 + 84.7	196	8 44.3	+ 84	45	6.0	7.0		8.0	6.4
10 39 + 65.9	803	10 39.1	+ 65	34	6.5	7.1	1.0	8.1	6.5
12 12 + 75.9	470	12 12.3	+ 75	39	5.8	6.8	2.8	9.6	8.0
11 49 + 66.0	737	11 49.0	+ 66	2	6.5	7.0	1.0	8.0	6.4
11 57 + 86.4	176	11 57.4	+ 86	24	5.7	6.2	2.6	8.8	7.2
11 22 + 86.5	170	11 23.8	+ 86	25	7.0	6.4	1.0	7.4	5.8
10 56 + 86.5	161	10 56.2	+ 86	26	7.2	5.4	1.5	6.9	5.3
12 34 + 86.6	182	12 34.7	+ 86	32	6.5	6.9		7.9	6.3
7 42 + 84.5	169	7 41.6	+ 84	28	6.0	7.2	1.0	8.2	6.6
						6.3	3.0	7.3	7.X
						6.6	3.0	7.6	8.X
						6.5	3.0	7.5	7.X
						6.5	3.0	7.5	7.X
						6.0	2.5	8.5	8.X

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Plate 1255.

			Type	Lines	K	Focus	Lines.	Other
	H	K						
8 #0 ?	22.4	22.7	I	5	?	1	cen.	
	21.7	8.1	I	6	Jl	3	—	
	21.9	9.2	III	2	K=H	1	—	
	21.7	15.1	III	3	K=H	1	F.	
∫ H	21.0	18.0	~~I~~ I ~~4~~	H	K=H	K=H	1	— —
	20.3	10.3	I	4	K=H	1	—	
	20.5	18.9	I	6	K=H	1	—	
?	20.8	20.9	III b.c. 951	2	K=1.2H	2	cen.	Lyll?
	20.5	21.7	I	9	Jl	5	F.	
	19.7	6.8	III	3	K=H	1	F.	
	19.8	11.7	III b 9523		K=H	1	F.	
	19.9	14.1	I	6	K=1.2H	2	F.?	
	19.3	15.9	III	3	K=H	1	F.	
	19.2	16.2	I	6.	K=.2H	1	—	
	19.9	16.3	I	5	K=1.5H	1	—	
	19.0	18.0	I	4	K=H	2	F?	
	21.0	24.0	III	3	K=H	1	F.	
	18.5	19.2	III ?	2	K=H	1	—	
	18.8	10.4	III	2	K=1.2H	2	—	
	18.2	15.1	II a 9533		K=H	1	F.	
	18.8	17.4	III	2	K=H	1	—	
∫ H	17.4	8.9	III	2	K=H	K=H	1	— —
	17.6	9.9	I	4	Jl	2	cen.	
	17.3	9.9	I	8	K=1.2H	3	—	
	17.6	10.1	III	2	K=H	1	—	
	17.5	11.3	I	7	Jl	2	F.	
	17.2	13.6	III	2	K=H	1	—	
	17.4	16.4	III	2	K=H	1	—	

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9. Plate 225 has 21 large wounds. Thompson & decided that another exposure of 9 should be added to the plate.

Mean 8 for Bx.

	No.	R.A.	Dec.	Mag.		Bx.				
10 39+65.9	803	10 39.1	+65 54	6.3	2	5.9	1.0	6.9	5.5	5.1
12 12+75.2	470	12 12.3	+75 39	5.8	2084 5.4 13-13	5.2	1.5	6.7	3.3	4.4
11 39+76.4	1544	11 39.1	+76 27	5.7	1	6.5	.6	7.1	3.7	5.7
						6.8		7.4	6.0	6.0
11 18+76.6	1518	11 18.8	+76 39	6.2	1	6.4	.6	7.0	3.6	5.6
						6.6		7.2	3.8	5.8
10 48+77.5	417	10 48.8	+77 24	8.5	3	7.0	6.9	1.7	8.7	7.3 6.2
11 56+76.9	439	11 56.3	+76 52	7.7	3	6.9	1.6	8.5	7.1	6.1
10 40+76.7	402	10 39.8	+76 46	7.0	3	6.5	1.6	8.1	6.7	5.7
10 22+76.5	393	10 22.6	+76 28	5.0	3	5.7	1.6	7.3	5.7	4.9
						5.9		7.3	6.1	5.1
10 53+77.1	1302	10 53.1	+77 10	2.3	1923 2.6 21 +7	4.0	.7	4.7	3.3	3.2
11 48+57.3	1343	11 48.4	+57 24	6.0	1	6.6	.7	7.3	5.9	5.8
						6.8		7.5	6.1	6.0
11 34+67.6	714	11 34.4	+67 33	5.3	2	6.2	1.0	7.2	5.8	5.4
						6.6		7.6	6.2	5.8
11 21+57.8	1324	11 21.6	+57 32	6.3	1	6.3	.7	7.0	5.6	5.5
11 12+67.9	692	11 12.6	+67 33	6.2	2	6.4	1.1	7.5	6.1	5.6
						6.7		7.8	6.4	5.9
11 13+57.9	1316	11 13.3	+57 32	6.3	1	6.3	.7	7.0	5.6	5.5
11 9+67.5	691	11 9.9	+67 28	6.8	2	6.6	1.0	7.6	6.2	5.8
11 0+68.0	632	11 0.4	+68 1	6.3	2	5.7	1.1	6.8	3.4	4.9
						6.3		7.3	5.9	5.5
10 32+66.5	678	10 32.0	+66 28	5.2	2	6.6	1.0	7.6	6.2	5.8
11 47+68.9	666	11 47.9	+68 4	7.0	2	7.0	1.1	8.1	6.7	6.2
						7.2		8.3	6.9	6.4
11 57+77.2	461	11 57.9	+77 43	5.8	3	5.8	1.7	7.3	6.1	5.0
						6.2		7.9	6.3	5.4
11 12+77.2	385	11 12.8	+78 11	6.8	3	6.7	1.7	8.4	7.0	5.9
11 4+68.1	635	11 4.0	+68 7	6.3	2	6.7	1.1	7.8	6.4	5.9
						7.0		8.1	6.7	6.2
11 50+68.6	667	11 50.4	+68 37	6.7	2	7.0	7.2	8.1	6.7	6.2
						7.2	7.5 1.1	8.3	6.9	6.4
12 5+78.3	411	12 5.0	+78 15	7.3	3	5.9	1.7	7.6	6.2	5.1
12 6+78.4	412	12 5.4	+78 26	5.1	3	5.0	1.7	6.7	5.3	4.2
12 3+78.2	406	12 2.9	+78 12	7.0	3	6.7	1.7	8.4	7.0	5.9
						6.9		8.6	7.2	6.1
11 32+58.7	1331	11 32.5	+58 46	6.3	1	6.0	.7	6.7	5.3	5.2
11 28+78.4	392	11 28.5	+78 24	6.2	3	6.8	1.7	8.5	7.1	6.0
						7.2		8.9	7.5	6.4
10 59+78.6	375	10 58.9	+78 34	6.3	3	7.0	1.8	8.8	7.4	6.2
						7.4		9.2	7.8	6.6

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Plate 1255.

V	H	Type	No. lines	K	Focus	Other lines.
17.4	17.5	III b.c.	954 2	K=H	2	—
17.8	19.4	I	6	K=.2H	1	—
18.0	19.6	I	4	K	1	—
17.9	23.0	III	2	K=H	1	—
16.4	15.7	III	3	K=H	1	F.
16.8	17.5	I	7	K=.2H	2	F?
15.5	7.7	II	2	K=H	1	—
15.6	10.4	I	6	K=.5H	1	—
15.0	17.1	III	2	K=H	1	—
15.5	21.0	III	2	K=H	1	—
15.8	23.0	III	3	K=H	1	F.
14.6	8.8	II a	955 2	K=H	1	—
14.8	13.2	III b.c.	956 3	K=H	2	F.
? 14.9	14.0	III b.c.	957 3	K=H	3	F. bright
14.1	13.8	I	5	K=.5H	1	—
14.0	17.6	III	1	K	1	—
14.5	21.0	I	5	K	1	—
14.0	21.3	I	6	K	2	—
III 2 5.6.6.0.	14.6	22.5	III b.	958 3	K=H	2	F.
14.2	23.8	III	3	K=H	1	F.
13.8	7.9	II	2	K=H	1	—
13.5	8.3	II a	959 3	K=H	1	F.
13.5	11.7	I	4	K	1	F.
13.6	11.8	II	2	K=H	1	—
? 13.5	17.1	II a	960 3	K=H	1	F. neb
13.6	17.5	I	6	K=.2H	1	—
13.3	18.7	III	3	K=H	1	F.
13.5	19.6	I	I 4	3 K=H	1	— —

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	No.	R.A.	Dec.	Mag.		Cy	Bo.				Means
10 48+78.5	367	10 48.2	+78 33	6.2	-	3	5.9 6.2	1.8	7.7 8.0	6.3 6.6	5.4
10 30+78.2	339	10 30.4	+78 11	7.0	-	3	6.5	1.7	8.2	6.8	5.7
10 28+77.9	406	10 28.6	+77 39	8.0	.	3	7.0	1.7	8.7	7.3	6.2
10 47+78.3	1290	10 47.6	+78 16	7.3	-	2	7.1 7.5	1.7	7.8 8.2	6.4 6.8	6.3 6.7
11 5+79.1	356	11 5.4	+79 6	7.2	-	3	6.7 7.0	1.8	8.3 8.8	7.1 7.4	5.9 6.2
11 2+69.0	602	11 3.0	+69 2	6.2	-	2	6.0	1.1	7.1	5.7	5.2
11 58+69.5	644	11 58.8	+69 30	7.0	-	2	6.7	1.1	7.8	6.4	5.9
11 43+69.5	628	11 43.5	+69 39	7.0	-	2	6.5	1.1	7.6	6.2	5.7
10 49+79.6	348	10 49.4	+79 39	7.3	-	3	6.7 6.9	1.9	8.6 8.8	7.2 7.4	5.9 6.1
10 9+79.1	330	10 8.8	+79 4	7.3	-	3	6.9 7.0	1.8	8.7 8.8	7.3 7.4	6.1 6.2
10 31+69.2	583	10 31.5	+69 11	3.5	-	2	6.3 6.6	1.1	7.4 7.7	6.0 6.3	5.5 5.8
11 53+70.0	636	11 53.1	+69 60	7.0	-	2	6.6	1.2	7.8	6.4	5.8
11 27+70.2	670	11 27.6	+70 8	3.2	-	2	5.6 5.9	1.2	6.8 7.1	5.4 5.7	4.8 5.1
11 22+70.2	665	11 22.8	+70 9	3.3	-	2	4.8 5.5	1.2	6.0 6.7	4.6 5.3	4.0 4.7
11 23+69.5	1330	11 23.1	+69 30	6.8	-	2	6.5	.8	7.3	5.9	5.7
10 41+80.1	338	10 41.6	+80 6	7.5	-	3	6.9 7.2	1.9	8.8 9.1	7.4 7.7	6.4 6.7
10 7+79.5	329	10 6.4	+79 30	8.0	.	3	6.8 6.7	1.8	8.6	7.2	6.0
10 1+79.6	328	10 6.8	+79 39	6.7	.	3	5.7	1.9	7.6	6.2	4.9
10 32+69.5	586	10 32.6	+69 49	4.7	-	2	5.9 6.4	1.2	7.1 7.6	5.7 6.2	5.1 5.6
10 42+80.1	1296	10 42.3	+80 5	5.8	-	1	6.4 6.7	.8	7.2 7.5	5.8 6.1	5.6 5.9
12 37+79.8	400	12 36.3	+79 49	8.7	-	3	7.0	1.9	8.9	7.3	6.2
12 33+80.0	389	12 32.8	+80 1	6.7	-	3	6.4	1.9	8.3	6.9	5.6
11 36+70.7	674	11 36.9	+70 44	7.3	.	2	6.7	1.2	7.9	6.5	5.9
11 52+80.4	370	11 52.2	+80 24	7.5	-	3	6.8	1.9	8.7	7.3	6.0
10 49+80.4	347	10 46.5	+80 27	7.8	-	3	6.4	2.0	8.4	7.0	5.6
11 7+69.7	1318	11 7.8	+69 43	6.7	-	1	6.4	.8	7.2	5.8	5.6
10 53+70.8	615	10 53.7	+70 49	6.3	-	2	6.5 6.9	1.2	7.7 8.1	6.3 6.7	5.7 6.1
10 45+70.5	640	10 48.8	+70 35	7.8	-	2	6.9	1.2	8.1	6.8	6.1

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	λ	H	Type	No. Lines	K	Focus	Other Lines.		
	13.5	20.4	III	3	K=H	2	F.		
	12.3	6.7	III	2	K=H	2	F?		
	12.6	9.1	I	6.	H	2	—		
	12.3	10.6	I?	6	K=H	2	—		
√ √	12.9	17.2	~~I~~ II	2	2	K=H	K=H 1	—	—
	12.3	18.9	I	2	H	1	—		
	12.6	23.8	I	6	K=1.5H	2	—		
	11.5	7.0	II	2	K=H	1	—		
	11.6	9.2	I	6	K=1.8H?	2	—		
III ? 6.2, 6.4.	11.0	12.1	III b?	9612	K=H	1	—		
	11.5	12.3	II	2	K=H	1	—		
?	11.4	13.6	II a	9622	K=H	2	F, perm.		
	11.0	15.9	II a	9632	K=H	1	—		
	11.8	18.3	I	8	K=1.2H	3	—		
	11.5	18.8	III b	9642	K=H	2	—		
	10.0	6.3	III b	9653	K=1.2H	3	F.		
	10.0	7.7	III	2	K=H	1	—		
	10.8	8.1	III	2	K=H	1	—		
	10.7	8.6	I	10	K=1.2H	3	—		
	10.5	10.0	I	6	K=1.5H	1	F?		
?	10.0	14.4	II a	9664	K=H	2	perm.		
	10.8	14.4	I	9	K=1.2H	4	F.		
	10.7	16.3	III	2	K=H	1	—		
?	10.0	19.1	II a?	9672	K=H	1	perm.		
	9.7	7.6	II	3	K=H	1	F		
√ √	9.3	10.6	~~I~~ ~~II~~ ?		2	K=H	~~K=H~~ 1	~~F.~~	
	9.2	11.6	III b a	9682	K=H	2	Eight?		
	9.4	12.2	II	2	1	K=H	1	—	

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	No.	R. A.	Dec.	Mag.	Exp	Means Bv.				Cor. Bv.
10 44 + 70.6	634	10 43.6	+ 70 37	6.0	2	6.3		7.5	6.1	5.5
						6.4	1.2	7.0	6.2	5.6
12 8 + 71.0	610	12 8.2	+ 71 2	6.0	2	6.2		7.4	6.0	5.4
						6.4	1.2	7.6	6.2	5.6
11 53 + 71.0	398	11 53.3	+ 71 2	6.3	2	5.8	1.2	7.0	5.6	5.0
	380	12 9.8	+ 80 56	8.4						
12 10 + 80.9	381	12 9.8	+ 80 36	8.3	3	5.8	2.0	7.8	6.4	5.0
11 8 + 61.0	1235	12 8.9	+ 61 4	6.3	1	7.0	7.0 .8	7.8	6.4	6.2
10 52 + 71.2	357	10 52.5	+ 71 10	7.9	2	5.5	1.2	6.7	5.3	4.7
9 30 + 79.5	319	9 29.8	+ 79 48	6.0	3	5.6	1.9	7.3	6.1	4.8
12 55 + 80.2	398	12 54.6	+ 80 43	8.3	3	6.6	2.0	8.6	7.2	5.8
12 30 + 81.0	400	12 29.7	+ 81 3	6.8	3	6.3	2.0	8.3	6.9	5.5
11 53 + 81.5	389	11 52.6	+ 81 40	6.2	3	6.3		8.4	7.0	5.5
						6.7	2.1	8.8	7.4	5.9
11 50 + 81.4	388	11 50.2	+ 81 26	8.0	3	6.9	2.1	9.0	7.6	6.1
11 24 + 61.9	1246	11 24.1	+ 61 52	6.0	1	5.5	.8	6.3	4.9	4.7
10 58 + 81.5	362	10 58.6	+ 81 44	8.2	3	6.8	2.1	8.9	7.3	6.0
	349	10 28.9	+ 81 11	6.2		5.3				
10 29 + 81.2	343	10 20.8	+ 81 14	6.2	3	6.8	2.0	8.8	7.4	4.5
10 21 + 81.2	343	10 20.8	+ 81 14	6.2	3	6.1		8.1	6.7	5.3
						6.4	2.0	8.4	7.0	5.6
13 11 + 81.2	416	13 11.2	+ 81 14	6.3	3	6.0		8.0	6.6	5.2
	1204	11 49.3	+ 62 21	6.2		6.2	2.0	8.2	6.8	5.4
11 49 + 62.3	412	12 58.0	+ 81 39	7.0	1	6.7	.8	7.3	6.1	5.9
						6.9		7.7	6.3	6.1
12 45 + 81.2	407	12 45.6	+ 81 12	7.6	3	6.7		8.7	7.3	5.9
						6.9	2.0	8.9	7.5	6.1
12 40 + 81.4	402	12 40.8	+ 81 25	6.3	3	5.4	2.1	7.3	6.1	4.6
11 39 + 62.2	1198	11 39.3	+ 62 13	6.3	1	6.4	.8	7.2	5.8	5.6
11 21 + 62.2	1181	11 20.8	+ 62 34	6.4	1	5.8	.8	6.6	5.2	5.0
11 21 + 81.9	373	11 21.4	+ 81 56	6.2	3	5.2	2.1	7.3	5.9	4.4
10 52 + 81.8	359	10 52.5	+ 81 49	8.2	3	7.1		9.2	7.8	6.3
						7.3	2.1	9.4	8.0	6.5
10 14 + 81.9	337	10 11.8	+ 81 55	7.9	3	6.8	2.1	8.9	7.5	6.0
12 58 + 81.6	412	12 58.0	+ 81 39	7.0	3	6.5	2.1	8.6	7.2	5.7
11 46 + 72.9	350	11 46.3	+ 72 43	7.1	2	6.8	6.9	8.1	6.7	6.0
						6.9	7.1 1.3	8.9	6.8	6.1
12 5 + 82.5	356	12 4.4	+ 82 31	6.7	3	6.0		8.0	6.8	5.2
						6.6	2.2	8.7	7.3	5.7
11 55 + 82.5	355	11 55.9	+ 82 30	7.6	3	6.7		8.7	7.3	5.7
						6.8	2.2	9.0	7.6	6.0

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				Type	No. lines	K	Other Fowns	lines.	
	9.5	15.8	II		2	K=H	2	—	
?	9.4	16.6	I	b. 9695	?		1	nuc.	
✓	9.5	18.2	III		3	N	K=H 1	1	— F.
✓	9.4	19.1	III		2	2	K=H K=H 1	1	— —
✓	9.7	19.2	III		2	2	K=H K=H 1	1	— —
	9.9	20.2	II	a. 9703		K=1.2H	✓		F.
?	8.4	10.5	II	a 9712		K=H	1	nuc.	
	8.7	11.7	II		2	K=H	1	—	
	8.1	12.4	I?		4	K=H	1	nuc.	
	8.4	13.6	III		2	K=H	1	—	
	8.6	18.3	I		4	K=H	1	—	
?	8.5	22.7	III	b.c. 9723		K=1.2H?	3	F,	4 bright nuc.
	8.0	7.0	II		2	K=H	1	—	
	7.6	7.5	III		2	K=H	1	—	
	7.5	8.9	I		2	N	1	—	
	7.1	12.2	III		2	K=H	1	—	
	7.6	13.2	I		5	K=H?	1	F?	
✓	7.5	15.9	III		? III? 3	2	K=H K=H	1 1	F, —
?	7.6	18.3	II	a 9733		K=H	4	F, nuc.	
✓ III? 6.2, 6.5	7.0	18.6	III	b. 9742		K=H	2	—	
	7.5	19.5	III		2	K=H	1	—	
	6.9	6.0	III		1	N	1	—	
	6.9	9.2	III		2	K=H.	1	F?	
	6.0	9.2	I		4	N	1	—	
✓	6.2	13.7	I		3 5	N	K=H 1	1	— F.
?	6.5	16.1	II	a 9755		K=H	1	nuc.	
	6.5	20.6	I		6	K=.2H?	2	—	
	6.8	21.5	I		7	K=.5H	2	F	

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No.	R.A.	Dec.	Mag.	Exp.	Brc.				Mean & Corr. Brc.
325	10 58.0	+ 82 31	7.0	3	6.3	2.2	8.5	7.1	5.5
326	11 5.4	+ 72 48	7.0	2	6.4	1.3	7.7	6.3	5.6
308	10 22.4	+ 82 20	7.7	3	6.7 6.7		8.9	7.3	5.9
					7.0 7.2	2.2	9.2	7.8	6.2
300	10 9.0	+ 82 14	8.1	3	6.8 7.1		9.0	7.6	6.0
					7.1 7.4	2.2	9.3	7.9	6.3
301	10 9.4	+ 82 0	8.6	3	6.9 7.2		9.0	7.6	6.1
					7.2 7.4	2.1	9.3	7.9	6.4
1161	10 34.8	+ 62 31	2.0	1	13	8	B.	B.	
365	12 23.8	+ 82 48	8.0	3	6.5	2.3	8.8	7.4	5.7
974	11 32.3	+ 63 12	6.8	1	6.9	9	7.8	6.4	6.1
972	11 29.5	+ 63 36	7.0	1	6.9	9	7.8	6.4	6.1
336	11 34.9	+ 83 8	7.7	3	6.8 7.0	2.3	9.1 9.3	7.7 7.9	6.0 6.2
307	10 17.8	+ 82 46	8.2	3	6.5	2.2	8.7	7.3	5.7
302	9 16.6	+ 81 38	4.3	3	5.0 5.5	2.1	7.1 7.6	5.7 6.2	4.2 4.7
390	13 16.6	+ 82 16	8.4	3	6.9	2.2	9.1	7.7	6.1
549	12 8.8	+ 73 22	6.3	2	6.3 6.6	1.4	7.7 8.0	6.3 6.6	5.5 5.8
678	12 32.9	+ 82 56	8.3	3	6.8	2.3	9.1	7.7	6.0
532	11 36.3	+ 73 37	6.8	2	7.0 7.4	1.4	8.4 8.8	7.0 7.4	6.2 6.6
339	11 42.3	+ 83 28	8.0	3	6.5	2.4	8.9	7.5	5.7
318	10 34.2	+ 83 32	8.2	3	6.8 6.8 7.0 6.9	2.4	9.2 9.4	7.8 8.0	6.10 6.2
297	10 13.0	+ 83 18	5.2	3	4.4	2.3	6.7	5.3	3.6
287	10 5.4	+ 83 32	6.8	3	6.4 6.7	2.4	8.8 9.1	7.4 7.7	5.6 5.9
280	9 53.1	+ 83 6	7.1	3	6.8 7.2	2.3	9.1 9.5	7.7 8.1	6.0 6.4
999	11 58.3	+ 63 45	6.0	1	6.7 6.9	9	7.6 7.8	6.2 6.4	5.9 6.1
369	12 52.8	+ 83 18	7.5	3	6.5 6.8	2.3	8.8 9.1	7.4 7.7	5.7 6.0
373	12 58.8	+ 83 43	8.3	3	6.5	2.4	8.9	7.5	5.7
260	11 34.7	+ 84 14	8.4	3	6.8 6.8	2.5	9.3	7.9	6.0
312	10 46.9	+ 83 60	8.3	3	6.8	2.4	9.2	7.8	6.0
824	10 51.9	+ 64 12	6.8	1	6.2	9	7.1	5.7	5.4
262	9 19.0	+ 83 0	7.5	3	6.8	2.3	8.3	6.9	5.2

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	V	H.	Type	No. Lines	K	Other Focus Lines.
?	5.0	6.7	III b 9762		K=2.0H	2 neb
	5.5	10.2	I	8	N	.5 F.
?	5.1	10.8	II a 9773		K=H	1 F, neb.
?	5.8	11.0	II a 9783		K=H	1 F, neb.
	5.8	11.6	II	2	K=H	1 —
	5.8	12.2	II	2	K=H	1 —
	5.0	15.7	I	8	K=1.2H	3 —
∫ ∫	5.2	19.6	II a? 9792	2	K=H	K=H 1 1 — Seen
	5.2	20.2	I	4	K=H	1 —
?	5.5	21.3	II a 9802		K=H	2 F, neb.
	5.7	21.9	II	2	K=H	1 —
	5.5	22.5	II	2	K=H	1 —
	6.0	22.7	I	4	K=H	1 —
	4.6	8.2	II a? 9813		K=H	1 F.
	4.5	10.5	I	4	K=H	1 —
	4.8	12.3	I	6	K=1.5H	2 F.
?	4.0	17.3	III b 9822		K=H	1 —
	4.3	17.6	I	10	K=1.5H	5 F.
	4.6	18.8	III b 9833		K=H	2 F.
	4.1	20.2	II a 9842		K=H	1 —
∫ ∫	4.1	20.7	III III	2	3 K=H, K=H	1 1 — F1
?	4.8	23.3	II a 9853		K=H	2 F, neb.
	4.8	23.5	III	2	K=H	1 —
!	3.8	9.1	II a 9862		K=H	1 neb.
	3.6	9.2	II a 9872		K=H	1 —
	3.6	14.5	III b 9883		K=H	1 F.
	3.4	19.1	II V	2	K=H	1 —
	3.8	21.5	I	4	N	1 —

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Mean &

	No.	R. A.	Dec.	Mag.	Exp	Bv.				Cor. Bv.
13 46 +83.5	397	13 46.2	+83 29	6.5	3	5.4 / 5.7	7.8 / 2.4 8.1	6.4 / 6.7	.	4.6 / 4.9
12 49 +84.3	289	12 48.0	+84 12	6.5	3					
	290	12 48.1	+84 12	5.3	2189 5.0 16+21	4.1	2.5 6.6	5.2	.	3.3
12 38 +84.5	286	12 37.2	+84 26	7.0	3	6.2	2.5 8.7	7.3	.	5.4
11 45 +74.6	476	11 45.8	+74 34	6.7	2	6.4	1.4 7.8	6.4	.	5.6
12 20 +84.3	276	12 19.3	+84 14	7.9	3	6.8	2.5 9.3	7.9	.	6.0
12 8 +84.3	269	12 6.8	+84 19	7.5	3	6.9	2.5 9.4	8.0		6.1
11 14 +65.1	828	11 14.2	+65 8	6.0	1	5.8	.9 6.7	5.3		5.0
9 37 +84.2	222	9 36.5	+84 10	8.0	3	6.7 6.8	2.5 9.2	7.8	.	5.9
9 25 +83.9	263	9 24.6	+83 39	8.0	3	6.5	2.4 8.9	7.5	.	5.7
9 12 +83.6	256	9 12.5	+83 33	7.2	3	5.8	2.4 8.2	6.8	.	5.0
9 3 +83.3	248	9 3.5	+83 18	8.4	3	6.7	2.3 9.0	7.6	.	5.9
8 55 +83.2	243	8 54.9	+83 12	8.3	3	6.6	2.3 8.9	7.5		5.8
8 57 +82.9	265	8 56.2	+82 36	8.8	3	6.8	2.3 9.1	7.7		6.0
13 28 +84.1	311	13 27.9	+84 3	7.5	3	6.0	2.5 8.5	7.1		5.2
11 39 +65.2	851	11 39.2	+65 12	7.1	1	6.8	.9 7.7	6.3	.	6.0
11 30 +65.1	843	11 30.7	+65 8	6.7	1	6.5	.9 6.4	5.0	.	5.7
10 13 +85.2	161	10 13.4	+85 8	7.5	3	6.3 / 6.6	2.7 9.0 / 9.3	7.6 / 7.9	.	5.5 / 5.8
10 7 +84.9	234	10 7.8	+84 59	5.0	3	4.3	2.6 6.9	3.5	.	3.5
9 44 +84.6	225	9 44.7	+84 37	6.5	3	6.2 / 6.6	2.6 8.8 / 9.2	7.4 / 7.8	.	5.4 / 5.8
9 15 +84.4	212	9 15.2	+84 29	8.5	3	6.8	2.5 9.3	7.9	.	6.0
9 5 +84.2	206	9 5.8	+84 22	8.0	3	6.9 6.8 / 7.3 7.0	2.5 9.4 / 9.8	8.0 / 8.4	.	6.1 / 6.5
8 36 +83.9	233	8 35.8	+83 17	7.0	3	5.7	2.3 8.0	6.6	.	4.9
8 32 +83.7	232	8 33.0	+83 15	7.0	3	6.5 / 6.9	2.3 8.8 / 9.2	7.4 / 7.8	.	5.7 / 6.1
13 21 +84.5	307	13 21.9	+84 40	8.0	3	6.3	2.6 8.9	7.5		5.5
12 3 +75.7	469	12 2.7	+75 28	6.7	2	6.1	1.5 7.6	6.2	.	5.3
11 20 +85.5	183	11 20.0	+85 30	7.5	3	6.3 / 6.5	2.8 9.1 / 9.3	7.7 / 7.9	.	5.5 / 5.7
9 24 +85.3	150	9 25.4	+85 9	8.0	3	6.4	2.7 9.1	7.7	.	5.6
8 47 +84.8	199	8 47.2	+84 13	8.6	3	6.5	2.5 9.1	7.6	.	5.7

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Plate 1255.

	r	λ	Type	No. lines	K	Focus	lines	
?	3.0	7.5	II a	989 2	K=H	1	pecu.	
	2.5	8.2	II	8	H	3	F, ?	
?	2.4	10.0	II a	990 3	K=H	2	F, pecu.	
√	2.1	12.5	II I	3 H	H H	1	1	— —
	2.7	12.9	II	3	H	1	—	
	2.3	16.1	II	3	K=H	1	F.	
	2.5	16.9	II	1	H	1	—	
	2.9	21.1	II	6	K=1.5H?	3	F.	
?	2.8	22.2	II a?	991 2	K=H	1	pecu.	
?	2.7	22.8	II d	4	H	1	pecu.	
	1.1	10.1	II	1	H.	1	—	
	1.2	12.3	II	5	K=H	2	F.	
	2.0	14.0	III	2	K=H	1	—	
?	1.9	14.4	II	4	K=H	2	pecu.	
	1.8	15.3	I	7	K=.8H?	2	—	
	1.9	15.5	I	5	K=.8H	1	—	
	1.5	21.2	I?	1	H	2	—	
	1.2	23.6	II?	3	H	3	F.	

Plate 1218

	22.8	10.9	II	5	H	2	—	
√	16.0	15.0	II	II! 2	2 K=H	K=H	1	—
	16.4	19.6	I	8	K=.2H?	4	F?	
	12.6	13.9	II	5	H	1	—	
	9.9	13.4	I	6	K=.2H?	3	—	
	7.8	14.8	II	3	H	1	—	
?	3.9	10.9	II d?	5	H	2	F, pecu.	

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Means

No.	R. A.	Dec.	Mag.	Cl.	Remarks	Br.				Corr. Br.
86X	11 54.2	+65 44	6.8	1		6.9	1.0	7.9	6.3	6.1
470	12 12.3	+75 39	5.8	2	2084 5.4 29-4	~~4.8~~	1.5	6.3	~~5.9~~	
222	13 20.7	+85 31	7.0	3		6.3	2.8	9.1	~~7.7~~	
180	12 19.3	+86 7	8.4	3		~~6.8~~	2.9	~~9.7~~	~~8.3~~	
196	12 4.6	+85 53	8.2	3		6.7	2.9	9.6	8.2	5.9
154	10 33.4	+86 8	8.2	3		~~6.6~~	2.9	~~9.5~~	~~8.1~~	
160	10 11.5	+85 38	8.5	3		~~6.8~~	2.9	~~9.7~~	~~8.3~~	
196	8 44.3	+84 45	6.0	3		4.9	2.6	7.5	6.1	4.1
186	8 25.1	+84 25	8.0	3		6.3	2.5	8.8	7.4	5.5
803	10 39.1	+65 54	6.3	1	1890 6.3 10 ~~2~~	6.3	1.0	7.3	5.9	5.5
193	13 35.7	+86 1	7.5	3			~~2.9~~			
182	12 34.7	+86 32	6.5	3			~~3.0~~			
172	11 36.4	+86 20	8.2	3			~~3.0~~			
170	11 23.8	+86 25	7.0	3			~~3.0~~			
161	10 56.2	+86 26	7.2	3			~~3.0~~			
159	10 50.4	+86 20	8.3	3			~~3.0~~			
393	10 22.6	+76 28	5.0	2			~~1.6~~			
169	7 41.6	+84 28	6.0	3			~~2.5~~			
				89/5		9-10/3				
703	12 27.2	+70 35	3.3		~~2135 3.8~~		~~7.2~~			
						7.4	7.5			
1473	11 46.2	+54 30	2.5			5.2	.6	5.8	2.5	
470	12 12.3	+75 59	5.8		2084 5.4 29-4	6.8	1.5	8.3	5.0	
1363	12 8.2	+57 50	3.3			5.8	.7	6.5	3.2	
412	12 5.4	+78 26	5.1		2070 5.1 36+3	7.0	1.7	8.7	5.4	
703	12 27.2	+70 35	3.3		2135 3.8 35+2	6.1	1.2	7.3	4.0	
					100/3	5-4/3				

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Plate 1374.

			No.	Type	Lines	K	Focus	Lines.	Other
	20.1	7.3		II	2	K=H	1	—	
	20.3	9.2	b.	III	992 3	K=H	2	F.	
	20.8	16.1		~~III~~ I I 2 3	3	~~K=H~~ K M N	1 1	~~F~~ —	
	20.4	16.7		III	3	K K=H	1	F.	
	20.5	19.0		I	3	K	1	—	
?	20.7	22.6	a	II	993 3	K=H	2	F, pun.	
	19.6	11.3		III	3	K=H	1	F	
	19.7	16.2		II	2	K=H	1	—	
?	19.3	23.2	a?	II	994 4	K=H	2	F, pun.	
	18.6	13.0		III	2	K=H	1	—	
	18.4	20.4		II	2	K=H	1	—	
	18.5	22.2		I	4	K=H	1	—	
	18.4	23.2		III	2	K=H	1	—	
	17.7	6.4		I	6	K	2	—	
?	17.3	7.3	a	II	995 2	K=H?	1	pun.	
	17.2	11.4		III	2	K=H	1	—	
	17.8	14.7		III	3	K=H	1	F	
	17.3	17.4		III	1	K	1	—	
	17.6	21.0		III	2	K=H	1	—	
	16.6	5.9		I	6	K=,2H	2	—	
	16.8	12.2		III	3	K=H	1	F	
	16.1	16.1		II	3	K=H	2	F.	
	16.4	18.3		I	12	K?	5	F.	
	15.9	10.4		III	3	K=H	1	F	
?	14.5	13.9	a	II	996 4	K=H	2	F, pun.	
	14.7	18.5		I	4	K=H?	1	—	
	14.7	20.3		I	7	K=,2H	2	F.	
	14.0	23.8		I.	7	K	2	F	

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	No.	R. A.	Dec.	Mag.		Bre.
12 23 +52,3	1631	12 23.2	+52	20	6.3 _	7.0 .5 7.5 6.4 .
12 17 +52,3	1626	12 17.0	+52	20	5.2 _	6.0 6.5 5.4 / 6.2 .5 6.7 5.6 .
11 52+62,1	1207	11 51.8	+62	8	6.8 .	7.2 .8 8.0 6.9 .
11 49+62,3	1204	11 49.3	+62	21	6.2 _	6.9 7.8 6.7 / 7.1 .8 7.9 6.8 .
11 39+62,2	1198	11 39.3	+62	13	6.8 .	6.6 .8 7.6 6.5 .
11 24+61,9	1246	11 24.1	+61	52	6.0 _	6.2 .8 7.0 5.9 .
12 20+72,7	565	12 20.1	+72	44	6.5 _	6.7 8.0 6.9 / 6.9 1.3 8.2 7.1 .
11 46+72,7	550	11 46.3	+72	43	7.1 _	7.1 1.3 8.4 7.3 .
11 21+62,5	1183	11 20.8	+62	34	6.4 _	6.2 .8 7.0 5.9 .
12 8+73,3	549	12 8.8	+73	22	6.5 _	6.6 8.0 6.9 / 7.0 1.4 8.4 7.3 .
11 32+63,2	974	11 32.3	+63	12	6.8 _	7.1 .9 8.0 6.9 .
11 5+72,8	525	11 5.4	+72	48	7.0 _	6.9 1.3 8.2 7.1 .
10 58+72,7	515	10 58.1 (15)	+72	43	7.0 _	6.9 8.2 7.1 / 7.1 1.3 8.4 7.3 .
12 35+63,5	1026	12 35.2	+63	32	6.3 2159 6.0 10 -1	6.1 .9 7.0 5.9 .
12 24+53,9	1554	12 ~~24.6~~ 23.9 3	+53	52	6.5 _	6.8 .6 7.6 6.5 .
12 10+54,0	1510	12 10.4	+54	0	6.1 _	6.8 7.4 6.3 / 7.1 .6 7.7 6.6 .
11 58+63,7	999	11 58.3	+63	45	6.0 _	6.7 7.6 6.5 / 7.0 .9 7.9 6.8 .
11 36+63,9	532 / 981	11 36.3 / 11 45.2	+63	37 / 44	6.8 = / 7.8	7.0 1.4 8.4 7.3 / 7.4 — — 8.8 7.7 .
11 29+63,5	972	11 29.5	+63	30	7.0 _	7.0 7.9 6.8 / 7.4 .9 8.3 7.2 .
13 0+73,8	583	13 0.3	+73	48	6.0 _	6.2 1.4 7.6 6.3 .
12 7+54,3	1504	12 7.5	+54	15	6.7 _	6.9 7.8 6.7 / 7.0 .6 7.6 6.5 .
11 45+74,5	476	11 45.8	+74	34	6.7 _	6.4 1.4 7.8 6.7 .
11 46+74,5	1475	11 46.2	+54	30	2.5 2036 2.6	7.3 .6 8 8. .
12 18+64,6	896	12 18.3	+64	37	6.0 _	6.6 7.5 6.4 / 6.9 .9 7.8 6.7 .
12 3+75,1	469	12 2.7	+75	28	6.7 _	5.9 1.5 7.4 6.3 .
11 39+65,2	851	11 39.2	+65	12	7.1 _	6.7 .9 7.6 6.5 .
11 30+65,2	843	11 30.7	+65	8	6.7 _	6.3 .9 7.2 6.1 .
11 14+65,1	828	11 14.2	+65	8	6.0 1966 5.9 9 -2	5.9 .9 6.8 5.7 .

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Plate 1314.

V.	H	Type	Lines	K	Focus	Other Lines.
17.4	15.2	I	5	K=H	2	—
15.8	5.5	II ?	2	K=H	1	—
13.1	8.9	I	3	N	1	—
13.4	12.7	I	10	K=1.2H	4	F.
13.8	15.3	I	6	K=H	1	F.
13.2	16.4	III	2	K=H	1	—
13.4	23.5	II	3	K=H	1	F.
12.1	7.7	III	3	K=H	2	F.
12.4	8.3	III	3	K=H	1	F.
12.1	8.7	III III	2 2	K=H K=H	1 1	— F?
12.7	14.1	III ? III ?	2 2	K=H K=H	1 1	— —
12.9	16.2	I	3	N	1	—
III ? 6.3	12.2	20.0	III b.c. 997	1	N	1 —
11.3	6.9	III	2	K=H	1	—
11.7	9.4	I	5	K=1.5H	1	—
11.5	12.9	III III	3 2	K=H K=H	1 1	F. F?
11.6	14.6	I	5	K=H	1	—
10.0	9.5	III III	2 2	K=H K=H	1 1	— —
10.9	11.6	I	6	K=1.2H	1	F.
10.3	14.4	?	1	?	1	—
10.0	14.4	III b.c. 998	2	K=H	2	—
10.5	17.4	III	2	K=H	1	—
10.0	19.0	III b.? 999	3	K=H	2	F.
10.0	22.4	II	2	K=H	1	—
10.3	23.1	I	7	K=1.5H	1	F.
9.5	6.3	III	3	K=H	1	F.
9.8	12.2	I	13	K=1.2H	1	F.
9.0	13.9	III	2	K=H	1	—

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	No.	R. A.	Dec.	Mag.	Br.
12 41 +63	1034	12 41.1	+63 34	6.0	5.9 .9 6.8 5.7
13 4 +74.1	321	13 3.8	+74 7	7.7	6.9 1.4 8.3 7.2
12 19 +55.9	1533	12 19.6	+55 58	7.1	6.8 .6 7.4 6.3
12 12 +75.9	470	12 12.3	+75 59	5.8	4.8 1.5 6.3 5.2
11 54 +65.7	861	11 54.2	+65 44	6.8	6.6 1.0 7.6 6.5
11 48 +66.0	737	11 49.0	+66 2	6.5	6.6 1.0 7.6 6.3 / 6.9 1.0 7.9 6.8
11 27 +65.6	1473	11 27.1	+65 55	6.0	6.5 .6 7.1 6.0
12 54 +76.3	473	12 54.5	+76 15	8.0	6.3 7.9 6.8 / 6.6 1.6 8.2 7.1
12 49 +76.2	470	12 49.7	+76 12	6.8	6.9 8.5 7.4 / 7.1 1.6 8.7 7.6
12 20 +56.5	1598	12 20.7	+56 30	6.0	6.9 6.9 7.5 6.4 / 7.2 7.3 1.6 7.8 6.7
	1568	12 0.8	+56 16	8.0	7.0 7.3 7.6 6.3
12 1 +56.3	1569	12 0.9	+56 16	8.3	7.2 7.5 1.6 7.8 6.7
11 43 +76.2	434	11 42.8	+76 9	7.3	6.8 1.6 8.4 7.3
11 39 +56.4	1544	11 39.8	+56 27	5.7	6.4 7.0 5.9 / 6.8 .6 7.4 6.3
12 37 +66.8	768	12 37.2	+66 44	7.3	7.0 8.0 6.9 / 7.3 1.0 8.3 7.2
12 24 +66.7	763	12 24.4	+66 42	6.3	6.5 1.0 7.3 6.4
12 7 +66.9	757	12 7.0	+66 55	6.8	6.9 7.2 7.7 6.8 / 7.2 7.5 1.0 8.2 7.1
11 56 +76.9	439	11 56.3	+76 52	7.7	6.6 1.6 8.2 7.1
12 18 +57.6	1373	12 18.1	+57 34	6.4	7.0 7.2 7.7 6.6 / 7.5 7.5 1.7 8.2 7.1
12 13 +67.2	742	12 13.5	+67 12	6.8	6.4 1.0 7.4 6.3
11 58 +77.6	460	11 57.7	+77 34	7.4	6.5 1.7 8.2 7.1 / 5.6 7.3 6.2 / 6.1 1.7 7.8 6.7
11 58 +77.7	461	11 57.9	+77 43	5.8	6.5 7.2 6.1 / 6.8 .7 7.3 6.4 / 6.0 7.0 5.9 / 6.5 1.0 7.5 6.4
11 48 +57.4	1343	11 48.4	+57 24	6.0	6.8 1.6 8.4 7.3
11 34 +67.5	714	11 34.4	+67 33	5.3	6.3 1.6 7.9 6.8 / 6.5 7.5 6.4 / 7.0 1.0 8.0 6.9
10 48 +76.5	406	10 48.0	+76 30	7.3	4.0 .7 4.7 3.6 / 6.9 8.6 7.3 / 7.1 1.7 8.8 7.7
10 40 +76.8	402	10 39.8	+76 46	7.0	
12 42 +67.5	764	12 41.6	+67 35	5.3	
12 8 +57.8	1363	12 8.2	+57 50	3.3	
12 3 +78.2	406	12 2.9	+78 12	7.0	

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Plate 1344.

				Type	No. lines	K	Focus	Other lines.
	9,1	16,4	III?		2	K=H	1	—
	9,0	17,6	III		2	K=H	1	—
	9,8	21,3	II		2	K=H	1	—
?	9,2	21,5	II a	10002		K=H	1	neb.
	9,4	23,6	I		3	N	1	—
	8,3	7,0	II?		2	K=H	1	—
	8,0	10,7	III		2	K=H	1	—
	8,9	13,6	I		5	K=1,2H?	2	F?
	8,6	13,6	I?		8	K=1,2H	3	—
?	8,6	18,9	II a2	10012		K=H	1	neb.
	8,7	23,1	III		3	K=H	1	F
	7,3	21,2	III		2	K=1,5H	2	—
	7,5	21,4	I		7	N	2	F
	7,2	23,1	I		4	K=H	1	—
	6,8	8,4	I		6	K=1,2H	3	F?
	6,5	14,5	II		2	K=H	1	—
	6,1	17,0	I		6	K=H	1	—
	6,6	19,3	III		1	N	1	—
	5,3	6,4	III		3	K=1,5H	2	F
III? 6,2 6,5	5,3	10,2	III		1	N	1	—
	5,3	11,4	II		2	K=H	1	—
	4,1	9,7	I		10	N	5	F
	4,9	19,7	III b?	10023		K=H	2	F
III 5,2 5,6 6,6	4,8	20,5	III		3	K=H	3	F
	3,6	9,5	III b	10033		K=H	1	F
	3,2	11,9	II		2	K=H	1	—
	3,5	12,9	III		3	K=H	1	F
	3,6	13,4	I		5	K=H	2	—

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	No.	R.A.	Dec.	Mag.		73.			
11 48 +68.0	666	11 47.9	+68	4	7.0 _	✓6.9	11	8.0	6.9 .
11 41 +68.1	662	11 41.2	+68	8	7.0 _	✓6.7	11	7.8	6.7 .
10 54 +77.3	419	10 54.2	+77	14	8.N _	✓7.0	16	8.6	7.3 .
11 20 +67.7	701	11 20.8	+67	44	7.2 _	✓6.9	11	8.0	6.9 .
11 9 +67.5	691	11 9.9	+67	28	6.8 .	✓6.6	10	7.6	6.3 .
13 9 +77.0	506	13 9.4	+77	38	7.6 _	✓6.6	17	8.3	7.2 .
12 14 +58.6	1371	12 13.8	+58	46	6.0 _	✓6.4 7.0	7	7.1 7.7	6.0 6.6 .
12 5 +78.3	411	12 5.0	+78	15	7.3 _	✓5.9	17	7.6	6.5 .
12 5 +78.4	412	12 5.4	+78	26	5.1 _	✓4.6	17	6.3	5.2 .
11 12 +78.2	385	11 12.8	+78	11	6.8 _	✓6.7	17	8.4	7.3 .
11 12 +67.0	692	11 12.0	+67	53	6.2 _	✓6.4 6.7	11	7.3 7.8	6.4 6.7 .
10 48 +78.5	367	10 48.2	+78	33	6.2 _	✓5.8 6.1	18	7.6 7.7	6.5 6.8 .
11 32 +58.7	1331	11 32.3	+58	46	6.3 .	✓5.9	7	6.6	5.5 .
10 31 +78.2	359	10 30.4	+78	11	7.0 _	✓6.5	17	8.2	7.1 .
12 23 +59.2	1444	12 23.2	+59	12	5.7 _	✓5.7	7	6.4	5.3 .
11 58 +69.5	644	11 58.8	+69	30	7.0 _	✓6.8	11	7.9	6.8 .
11 43 +69.5	628	11 43.3	+69	39	7.0 _	✓6.5	11	7.6	6.5 .
11 5 +79.1	356	11 5.4	+79	6	7.2 _	✓6.8 7.0	18	8.6 8.8	7.3 7.7 .
13 26 +79.4	422	13 25.8	+79	23	6.0 _	✓5.6 5.8	18	7.4 7.6	6.3 6.5 .
12 24 +70.0	700	12 23.8	+70	0	4.7 _	✓6.2 6.8	12	7.4 8.0	6.3 6.9 .
12 33 +80.0	389	12 32.8	+80	1	6.7 _	✓6.5	19	8.4	7.3 .
12 27 +70.6	703	12 27.2	+70	35	3.3 2135 3.8 14+3	✓4.0	12	5.2	4.1 .
11 27 +70.2	670	11 27.6	+70	8	3.2 _	✓5.8 6.2	12	7.0 7.4	5.9 6.3 .
11 22 +70.2	665	11 22.8	+70	9	3.3 _	✓5.3 5.8	12	6.3 7.0	5.4 5.9 .
12 28 +70.8	705	12 28.6	+70	50	4.8 _	✓5.9 6.4	12	7.1 7.6	6.0 6.5 .
12 30 +81.0	400	12 29.7	+81	3	6.8 _	✓6.6	20	8.6	7.5 .
12 8 +71.0	613	12 8.2	+71	2	6.0	✓6.4		7.6	6.3 .
	380	12 9.8	+80	56	8.4 _ } ?	6.9	12	8.1	7.0
12 10 +80.9	381	12 9.8	+80	56	8.3 _ } ?	✓6.0	20	8.0	6.9 .

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Plate 1314.

γ	H	Type	No. lines	K	Focus	Other lines,
3.4	15.2	I	6	K=.2H	2	—
3.8	17.9	I	3	N	1	—
3.5	20.1	II ?	2	K=H	1	—
2.2	8.8	III	2	K=H	1	—
2.5	11.1	I	7	K=.5H	2	F
1.7	20.9	I ?	1	N	2	—

Plate 1256

22.4	13.1	I	8	K=.8H	3	F
22.2	13.2	II ?	1	N	1	—
22.5	18.2	I	6	?	3	—
21.0	8.9	II ?	1	N	1	—
21.5	13.1	I	10	N	5	F
21.4	15.4	II	1003a IIa? 2	K=H	K=H 1	1 — Seen
21.2	15.5	II	2	K=H	1	—
21.3	18.0	I	4	K=.5H	1	—
20.5	11.3	I	7	K=H	3	—
20.0	12.3	III b	1004 2	K=H	1	—
20.5	19.8	II a	1005 2	K=H	1	—
20.1	20.1	I	6	N	1	F
19.5	7.8	II	2	K=H	1	—
19.0	8.6	I	6	K=.5H	2	F
19.7	9.1	III	2	K=H	1	—
19.7	14.5	III b	1006 2	K=H	1	—
19.4	18.2	II	II 2 2	K=H	K=H 1 1	— —
19.0	19.3	III b	1007 2	K=H	2	—
19.3	19.4	II	2	K=H	1	—
18.5	9.5	III	III 1 3	N	K=H 1 1	F F

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	No.	R.A.	Dec.	Mag.	Br.			
11 53 +71,0	598	11 53.3	+71	2	6.3	6.3	12 7.5	6.4
11 36 +70,7	674	11 36.9	+70	44	7.3	6.9	1.2 8.1	7.0
10 47 +80,4	347	10 46.5	+80	27	7.8	7.0	2.0 9.0	7.9
13 12 +81,3	416	13 11.2	+81	14	6.3	6.4 6.8	8.4 2.0 8.8	7.3 7.7
12 40 +81,4	402	12 40.8	+81	25	6.2	5.6	2.1 7.7	6.6
10 29 +81,2	349	10 28.9	+81	11	6.2	1	2.0 1	1

33/3 3-3/3

12 50 +66,2	778	12 49.7	+66	14	5.0	5.3	1.0 6.3	5.4
12 54 +76,3	473	12 54.5	+76	15	6.0	6.2	1.6 7.8	6.9
12 12 +75,9	470	12 12.3	+75	59	5.8	1	+5 1	1
13 32 +76,5	492	13 31.9	+76	31	7.0	6.7	1.6 8.3	7.4
12 47 +76,7	1627	12 47.7	+76	44	2.0 2191 1.8	B.	1 B.	B.
12 36 +76,7	463	12 35.3	+76	43	7.2	7.0 7.0	1.6 8.6	7.7
12 37 +66,6	768	12 37.2	+66	44	7.3	7.0	1.0 8.0	7.1
12 24 +66,7	763	12 24.4	+66	42	6.5	6.5	1.0 7.5	6.6
12 54 +57,2	1408	12 54.5	+57	8	5.0	5.3	.7 6.0	5.1
12 54 +67,4	773	12 54.4	+67	23	5.8	6.4 6.7	1.0 7.4 7.7	6.3 6.8
11 56 +76,9	439	11 56.5	+76	30	7.7	6.9	1.6 8.5	7.6
12 13 +67,2	748	12 13.5	+67	12	6.8	6.7	1.0 7.7	6.8
13 7 +57,5	1425	13 7.7	+57	28	7.0	6.8	.7 7.5	6.6
13 39 +77,5	519	13 39.3	+77	34	6.2	5.5	1.7 7.2	6.3
13 33 +77,3	516	13 32.8	+77	18	6.0	6.8 7.2	8.4 1.6 8.8	7.5 7.9
12 41 +67,6	764	12 41.6	+67	35	5.3	6.5 6.9	7.5 1.0 7.9	6.6 7.0
12 22 +67,7	746	12 22.8	+67	42	6.5	7.0	7.2 1.1 8.1	7.2
11 58 +77,7	461	11 57.9	+77	43	5.8	5.7 6.0	7.4 1.7 7.7	6.3 6.8
11 58 +77,6	460	11 57.7	+77	34	7.4	6.7	1.7 8.4	7.3
13 8 +68,1	517	13 8.0	+68	3	7.0	6.8 7.1	6.7 7.8 1.1 8.1	6.9 7.2

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Plate 1256.

					No. Lines	K	Focus	Other Lines.
1.0	18.7	11.8	=	5	K=1.1H	1	—	
✓ ✓	18.8	12.9	III	3 3	K=H	K=H	1 1	F. F1
✓ ✓	18.8	13.6	II	3 2	K=H	K=H	1 1	F. —
✓ ✓	18.4	16.3	II	1. 2	?	K=H	1 1	— —.
	18.1	18.4	I.	8	K=.2H		2	F.
	18.2	18.6	III	3	K=H		1	F.
	18.6	23.6	I	8.	?		✓	F.
	17.8	6.0	I	?	4	K=H	1	—
✓ ✓	17.9	12.3	I	I 4	H	N	1 1	— —
	17.8	18.3	I	10	K=.2H		4	F.
	17.4	19.3	II	2	K=H		1	—
	17.3	21.9	?	1	N		1	—
	16.8	6.0	III	b.c. 1008 3	K=1.2H		2	F. bright Lines.
	16.6	8.9	III	3	K=2.0H		2	F.
	16.9	9.3	II	2	K=H		1	—
	16.3	9.4	I.	6	N		3	—
✓ ✓	16.0	13.1	III	2 2	K=H	K=H	1 1	— —
✓ ✓	16.3	13.8	III	2 2	K=H	K=H	1 1	— —
✓ ✓	16.8	15.0	II	2 2	K=H	K=H	1 1	— —
✓ ✓	16.3	17.5	II	II 3 2	K=H	K=H	1 1	F. —
	16.5	19.4	I	8	K=.2H		3	F.
	15.6	7.9	II	3	K=H		2	F.
	15.8	10.7	II	2	K=1.2H		3	F.?
✓ ✓	15.8	11.9	II	IIa? 1008a 2 2	K=H	K=H	1 1	— Lem
✓ ✓	15.6	12.6	II	II 2 2	K=H	K=H	1 1	— —
✓ ✓	15.9	12.8	III	III. 1 2	N	K=H	1 1	— —
	15.4	15.2	II	2	K=H		1	—
	15.0	15.5	II	a. 1009 2.	K=2.0H		2	—

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	No.	R.A.	Dec.	Mag.						B-V				
13 9+77.9	306	-13 9.4	+77 38	7.6						6.4	17	8.1	7.2	.
12.51+68.0	703	12 51.4	+68 2	6.3						✓ 6.7	6.9	7.8	6.9	.
										7.0	7.3	8.1	7.2	
12 53+77.9	495	12 53.6	+77 60	8.3						✓ 7.1	7.2	17 8.8	7.9	.
12 32+68.3	690	12 32.3	+68 20	8.3						✓ 7.1	7.3	1.1 8.2	7.3	.
12 5+78.3	411	12 5.0	+78 15	7.3						✓ 5.5	17	7.2	6.3	.
12 2+78.2	406	12 2.9	+78 12	7.0						✓ 6.7		8.4	7.3	.
										6.9	17	8.6	7.7	
12 8+57.9	1363	12 8.2	+57 50	3.3						✓ 4.2	7	4.9	4.0	.
14 5+77.7	529	14 5.4	+77 40	7.8						✓ 6.7	17	8.4	7.5	.
12 51+58.5	1407	12 51.1	+58 29	7.8						✓ 6.6	6.7	7.3	6.4	.
12 5+78.5	412	12 5.4	+78 26	5.1						✓ 4.5	17	6.2	5.3	.
11 56+78.5	404	11 56.4	+78 30	8.8						✓ 7.1	18	8.9	8.0	.
12 14+58.7	1371	12 13.8	+58 40	6.0						✓ 6.5	7	7.2	6.3	.
14 9+78.2	478	14 9.3	+78 14	5.0						✓ 5.0		6.7	5.8	.
										5.5	17	7.2	6.3	
13 42+78.8	466	13 42.1	+78 47	5.8						✓ 5.8		7.6	6.7	.
										6.1	18	7.9	7.0	
13 37+78.6	464	13 36.9	+78 38	8.0						✓ 7.0	18	8.8	7.9	.
13 11+69.2	694	13 11.7	+69 10	6.0	2250	6.1	3	-6		✓ 5.3	11	6.4	5.3	.
12 51+69.4	677	12 51.2	+69 23	7.5						✓ 7.1	7.2	8.2	7.3	.
										7.3	7.3	1.1 8.4	7.5	
12 52+79.3	407	12 51.7	+79 16	7.0						✓ 7.0	7.2	8.8	7.9	.
										7.4	7.5	18 9.2	8.3	
12 38+79.0	403	12 38.8	+79 2	9.0						✓ 7.0	7.3	18 8.8	7.9	.
12 25+69.3	666	12 25.5	+69 18	7.0						✓ 6.6	6.7	1.1 7.7	6.8	.
12 23+79.2	1444	12 23.2	+59 13	5.7						✓ 5.3	7	6.0	5.1	.
13 55+79.1	433	13 55.4	+79 6	7.7						✓ 6.3	18	8.1	7.2	.
13 26+79.4	422	13 25.8	+79 23	6.0						✓ 5.3	18	7.1	6.2	.
13 12+79.5	418	13 13.0	+79 28	7.0						✓ 6.8	6.9	18 8.7	7.8	.
12 53+69.6	681	12 53.6	+69 34	8.0						✓ 7.1	7.4	1.1 8.2	7.3	.
12 52+69.5	680	12 52.8	+69 29	7.2						✓ 7.0	7.2	8.1	7.2	.
										7.3	7.4	1.1 8.4	7.5	
12 36+79.8	460	12 36.3	+79 19	8.7						✓ 6.9		1.9 8.8	7.9	.
12 33+80.0	389	12 32.8	+80 1	6.7						✓ 6.2		1.9 8.1	7.2	.

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Plate 1256.

	v	H	Type	No. Lines	K	Focus	Other lines.
	15,8	16,0	II	3 2	K=H	K=H 1 1	F. —
	15,3	16,7	II?	II 2 2	K=H	K=H 1 1	— F.?
	15,7	19,3	III?	III 2 2	K=H	K=H 1 1	— F.?
	15,5	20,0	III	III 2 2	K=H	K=H 1 1	— —
?	15,3	22,2	II a	10103	K=H	1	F. very
	14,4	7,9	II	II? 2 2	K=H	K=H 1	— —
	14,9	8,0	II	2	K=H	1	—
	14,6	8,2	III	2	K=2,0·H	1	F.
	14,8	8,8	II?	2	K=H	1	—
	14,2	10,1	III	III 2 2	K=H	H=H 1 1	— —
	14,3	13,4	I	3 H	N	K=H 1 1	— —
	14,8	14,1	I	1010 a 6	N	N 1 1	— —
	14,3	16,6	IIa?	3 2	K=H	K=H 1 1	F. F.? very
III 8.8, 6.1, 7.0.	14,9	17,7	III	b.c. 1011 3	K=H	2	F.
	14,6	22,5	III	III 3 2	K=H	K=H 1 1	F. F.?
	14,8	23,6	III	2	N	1	F.
	16,8	23,6	III	3	K=2,0H	1	F.
	13,9	11,1	I	7	K=.2H	2	—
	13,9	12,3	III	III 3	K=H	K=H 1	F —
	13,6	13,7	II	2	K=H	1	—
	13,6	14,8	III	III 1 3	N	K=H 1 1	F. F
	13,5	15,7	II	II 2 2	K=H	K=H 1	— —
	13,0	16,4	III	III 2 2	N	K=H 1	F —
	13,4	16,8	III	b.c. 1012 3	K=H	2	F. light very
	13,8	17,0	I	11	N?	✓	F.
	13,7	18,5	II	2	K=H	1	—
	14,0	22,9	II	3	K=H	1	F.
	12,4	6,7	I	5	N	2	—

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	No.	R.A.	Dec.	Mag.		B-V			
12 34 +69.6	671	12 34.3	+69 35	8.0	_	7.0	1.1	8.1	7.2
12 29 +69.8	669	12 29.7	+69 49	7.3	_	6.8	1.2	8.0	7.1
12 23 +69.6	1446	12 23.3	+69 34	6.2	_	6.4	1.1	7.1	6.2
12 11 +69.6	657	12 11.2	+69 36	7.7	_	6.5	1.2	7.2	6.3
11 58 +69.6	644	11 58.8	+69 30	7.0	_	7.1	1.1	8.2	7.3
13 9 +60.0	1456	13 9.2	+60 4	8.0	_	7.3	1.1	8.4	7.5
13 56 +79.4	435	13 56.3	+79 24	8.1	_	6.4	1.1	7.5	6.6
13 56 +79.7	434	13 55.3	+79 41	7.7	_	7.1	1.1	8	7.9
13 51 +79.7	431	13 50.6	+79 43	6.6	_	6.6	1.8	8.4	7.5
13 37 +80.1	417	13 36.7	+80 6	7.5	_	6.8	1.9	8.7	7.8
12 47 +60.3	1426	12 47.4	+60 18	8.0	.	7.0	1.9	8.9	8.0
12 45 +70.1	715	12 45.6	+70 5	7.9	.	6.5	1.9	8.4	7.5
12 34 +60.3	1416	12 33.9	+60 20	8.2	_	7.0	1.9	8.9	8.0
12 24 +70.0	700	12 23.8	+70 0	4.7	_	7.4	1.9	9.3	8.4
11 56 +69.9	638	11 56.2	+69 50 60	6.6	_	7.0	1.8	8.5	7.0
11 6 +79.1	356	11 5.4	+79 6	7.2	_	7.0	1.2	8.2	7.3
11 12 +78.2	385	11 12.8	+78 11	6.8	_	6.5		8.3	7.4
12 56 +60.5	1439	12 56.7	+60 31	6.5	_	6.9	1.8	8.7	7.8
13 10 +80.4	402	13 10.8	+80 25	7.5	_	6.5	1.7	8.2	7.3
12 55 +70.7	398	12 54.6	+80 43	8.3	_	5.9	.8	6.7	5.8
12 42 +80.7	395	12 41.2	+80 43	7.4	_	6.7	1.9	8.6	7.7
12 37 +70.7	711	12 37.3	+70 44	8.3	_	6.9	1.9	8.8	7.9
12 30 +70.9	707	12 30.8	+70 39	6.8	_	6.4	2.0	8.4	7.5
12 28 +70.8	705	12 28.8	+70 50	4.8	_	6.6	1.8	8.6	7.7
12 27 +70.6	703	12 27.2	+70 35	3.3		7.0	2.0	9.0	8.1
11 52 +80.4	370	11 52.2	+80 24	7.5	_	7.1	1.2	8.3	7.2
11 53 +70.0	636	11 53.1	+69 60	7.0	_	6.5	1.2	7.7	6.8
13 31 +70.0	547	13 31.2	+70 51	7.0		6.0	1.2	7.2	6.3
						6.2	1.2	7.4	6.5

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Plate 1256.

G.A.M.	V	H	Type	Lines	K	Focus	Lines.	Other
	12,7	7,8	III	1 2	K=H	1	F.	—
	12,3	8,0	II	2.	K=H	1	F?	
	12,9	9,2	III	1	K	1	—	
	12,5	10,0	III	2	K=H	1	—	
	12,4	12,5	III	2	K=H	1	—	
	12,2	12,8	III	2 3	K=H	K=H 1	—	F
	12,6	14,4	III	1	K	1	—	
?	12,9	14,6	II a 1013 2		K=1.2H	2	F,	
	12,9	15,6	I	5.	K=H	2	—	
	12,3	14,8	I	9	K=1.5H	3	F.	
III ? 6.2, 6.5.	12,7	20,1	III	3	K=H	2	F.	
	12,1	22,4	I	6.	K	2	F.	
	11,9	7,4	II a? 1013 a.	2 3	K=H	K=H 1	—	F seen
	11,2	9,5	III	3	K=1.5H	1	F.	
	11,9	13,1	II a 1014 a	3	K=H	K=H 1	F.	F seen
	11,6	13,6	II	2	K=H	2	F?	
	11,6	14,6	III	1 2	K	K=H 1	—	F?
	11,1	15,8	III	3 3	K=H	K=H 1	F.	F
	11,4	18,2	III	3	K=H	1	F	
	11,6	18,5	II	2	K=H	1	—	
	11,5	20,3	II ?	II 1 2	K	K=H 1	—	—
	11,8	23,9	II	3	K=H	1.	F.	
	10,4	6,3	II ?	II ? 2 2	K=H	K=H 1	—	—
	10,1	6,6	II	3	K=H	2	F?	
	10,3	6,7	III	3	K=H	2	F.	
	10,1	7,0	II ?	II ? 3 2	K=H	K=H 1	F.	—
	10,7	9,8	II	II 3 3	K=H	K=H 1	F.	F
	10,6	11,5	I	I 4	K	K=H 1	—	—

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*Spectrum of Dm. +72° 600 superposed on Dm +82° 395.

	No.	R.A.	Dec.	Mag.		BV.			
13 24 +70.9	741	13 24.0	+70 52	7.3	_	6.8 6.7		7.9	7.0
13 23 +71.0	651	13 23.1	+71 5	7.2	_	7.0 6.9	1.2	8.1	7.2
13 50 +80.6	422	13 50.3	+80 38	7.4	_	✓ 6.5	1.2	7.7	6.8
13 43 +80.9	421	13 42.6	+80 38	7.1	_	✓ 6.4		8.4	7.3
13 12 +81.3	416	13 11.2	+81 14	6.3	_	6.7	2.0	8.7	7.8
12 54 +71.4	638	12 53.9	+71 23	7.2	_	✓ 6.7		8.7	7.8
12 46 +81.2	407	12 45.6	+81 12	7.6	_	7.0	2.0	9.0	8.1
12 42 +61.1	1320	12 42.4	+61 6	6.0	_	✓ 5.7		7.7	6.8
12 30 +81.0	400	12 29.7	+81 3	6.8	_	5.9	2.0	7.9	7.0
12 40 +81.4	402	12 40.8	+81 25	6.3	_	✓ 6.8	.8	8.0	7.1
12 8 +71.0	610	12 8.2	+71 2	6.0	_	7.1	1.2	8.3	7.4
11 53 +71.0	598	11 53.3	+71 2	6.5	.	✓ 6.7		8.7	7.8
13 27 +71.2	634	13 27.6	+71 10	7.3	_	6.9	2.0	8.7	8.0
13 53 +81.5	432	13 53.3	+81 29	6.8	_	✓ 6.1	.8	6.9	6.0
12 52 +71.6	636	12 52.0	+71 32	7.8	_	✓ 6.0	2.0	8.0	7.1
12 58 +81.6	412	12 58.0	+81 39	7.0	_	✓ 4.7	2.1	6.8	5.9
12 42 +71.8	630	12 42.4	+71 44	7.0	_	✓ 6.3		7.3	6.6
12 36 +61.9	1312	12 36.7	+61 57	6.5	_	6.6	1.2	7.8	6.9
11 53 +81.5	389	11 52.6	+81 40	6.2	_	✓ 6.0	1.2	7.2	6.3
11 50 +81.4	388	11 50.2	+81 26	8.0	_	6.8 6.8	1.2	8.0	7.1
12 18 +61.5	1294	12 18.2	+61 29	7.3	_	✓ 6.3		8.4	7.3
10 47 +80.4	347	10 46.5	+80 27	7.8	_	6.6	2.1	8.7	7.8
14 37 +81.2	483	14 36.0	+81 12	8.7	_	✓ 6.6 6.6	1.2	7.7	6.8
14 35 +81.5	482	14 34.8	+81 27	6.7	_	✓ 6.0	2.1	8.1	7.2
13 34 +71.9	659	13 33.7	+71 39	5.8	_	6.9 7.0	2.1	8.2	7.3
13 15 +62.1	1288	13 15.0	+62 10	7.5	_	✓ 6.6 6.6	1.3	8.3	7.6
13 13 +72.0	608	13 13.4	+72 0	7.8	_	✓ 7.0 7.0	.8	7.4	6.3
13 29 +82.0	395	13 28.8	+82 1	8.5	_	✓ 6.0	2.1	7.8	6.9
						✓ 6.5	2.1	8.1	7.2
						✓ 6.8	2.0	8.6	7.7
						6.9 7.2	2.0	8.8	7.9
						✓ 6.9	2.1	9.2	8.3
						✓ 5.8 6.3	1.3	8.1	7.2
						7.0 7.3	.8	7.1	6.2
						6.7 6.8	1.3	7.6	6.7
						6.7 6.5	2.1	7.8	6.9
								8.1	7.2
								8.6	7.7

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Plate 1256.

		V	H	Type	No. Lines	K	Focus	Other Lines.		
		10,3	12,4	II	2	K=H	1	—		
✓	✓	10,4	13,8	I?	6	K=.5H	K=H	1 1	—	Fi?
✓	✓	10,7	17,3	III	2 3	N	K=H	1 1	F	Fi
		10,3	20,2	I	8	K=.2H	3	F		
	✓	10,9	22,1	III	2 2	K=H	K=H	1 1	—	Fi?
		9,4	9,6	I	4	N	1	—		
		9,3	10,4	III	3	K=H	2	F		
		9,1	11,5	II?	2	K=H	1	—		
		9,1	14,0	I	4	K=H	1	—		
✓	✓	9,1	14,5	III?	2 2	K=H	K=H	1 1	—	—
		9,4	15,8	II	2	K=H	1	—		
✓	✓	9,1	16,0	I	5	N	N	1 1	—	—
✓	✓	9,0	17,0	I	5	K=H	K=H	1 1	—	—
		9,9	17,1	III	3	K=H	2	F		
		9,8	17,7	III	2	K=H	1	—		
		9,5	17,8	III	2	K=H	2	—		
✓	✓	9,3	20,8	II?	2 2	K=H	K=H	1 1	—	—
✓	✓	9,9	20,8	III	2 3	K=H	K=H	1 1	—	Fi
		9,9	21,9	II	2	K=H	1	—		
		9,8	24,3	I	5	?	2	—		
III ? 6.2, 6.5.	✓	8,3	8,9	III	1	N	2	—		
		8,8	9,7	I	4	N	2	—		
✓	✓	8,6	12,2	I	6	K=.2H	K=.5H 1	—		
		8,5	14,1	III	1	N	1	—		
		8,0	14,9	I	8	K=.5H	3	—		
		8,1	16,1	I	8	K=.2H	3	F?		
✓	✓	8,5	16,7	II	3 2	K=H	K=H	1 1	F	Fi?
		8,1	19,4	III	2	K=H	1	—		

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	No.	R.A.	Dec.	Mag.	B-V.			
13 17 +82.3	390	13 16.6	+82 16	8.4	6.6	2.2	8.8	7.9
12 47 +72.4	588	12 47.5	+72 21	7.8	6.5	6.4 1.3	7.8	6.9
12 24 +72.1	569	12 24.7	+72 7	7.0	6.4 6.6	7.7	6.8	
					6.7 6.8 1.3	8.0	7.1	
11 22 +81.9	373	11 21.4	+81 56	6.2	4.8	2.1	6.9	6.0
11 54 +71.6	599	11 54.2	+71 40	7.2	7.0 7.02	8.3	7.4	
					7.2 7.2 1.3	8.3	7.6	
14 0 +82.3	407	14 0.5	+82 19	8.2	6.6	2.2	8.8	7.9
13 0 +62.4	1275	13 0.6	+62 50	6.0	6.3		7.2	6.3
					6.6	.9	7.5	6.6
13 33 +82.8	397	13 32.8	+82 44	8.6	6.8	2.2	9.0	8.1
12 53 +82.9	~~369~~ 378	~~12 52.8~~ 12 52.9	~~+83 18~~ +82 56	~~7.5~~ 8.5	6.8	2.3	9.1	8.2
12 43 +72.9	583	12 43.3	+72 37	8.3	6.9 7.2		8.2	7.3
					7.2 7.3 1.3		8.3	7.6
12 23 +82.8	365	12 23.8	+82 48	8.0	6.5	2.3	8.8	7.9
12 32 +72.9	575	12 32.4	+72 56	8.1	6.7 6.5 1.3		8.0	7.1
12 25 +72.9	570	12 25.8	+72 39	7.6	6.7 6.6 1.3		8.0	7.1
12 5 +82.5	356	12 4.4	+82 31	6.7	5.8		8.0	7.1
					6.4	2.2	8.6	7.7
11 56 +82.5	355	11 55.9	+82 30	7.6	6.5		8.7	7.8
					6.8	2.2	9.0	8.1
12 20 +72.7	565	12 20.1	+72 44	6.5	6.1		7.4	6.5
					6.4	1.3	7.7	6.8
12 14 +62.5	1127	12 14.6	+62 34	7.5	7.0 7.1	.8	7.8	6.9
12 15 +62.3	1129	12 15.4	+62 17	7.3	6.8 6.9		7.6	6.7
					7.0 7.2	.8	7.8	6.9
10 58 +81.7	362	10 58.6	+81 44	8.2	6.6	2.1	8.7	7.8
10 29 +81.2	349	10 28.9	+81 11	6.2	5.0	2.0	7.0	6.1
13 22 +73.2	592	13 22.4	+73 9	6.0	6.2		7.5	6.6
					6.6	1.3	7.9	7.0
13 4 +63.0	1056	13 4.2	+63 1	6.4	6.0	.9	6.9	6.0
12 59 +73.2	581	12 59.3	+73 11	8.1	6.5 6.7	1.3	8.0	7.1
12 53 +83.3	369	12 52.8	+83 18	7.5	6.2		8.3	7.6
					6.5	2.3	8.8	7.9
12 41 +63.5	1034	12 41.1	+63 34	6.0	5.6	.9	6.3	5.6
12 35 +63.5	1026	12 35.2	+63 32	6.3	5.6	.9	6.3	5.6
12 27 +73.3	559	12 27.5	+73 17	7.2	6.7 6.6	1.4	8.1	7.2
12 8 +73.3	549	12 8.8	+73 22	6.5	6.2		7.6	6.7
					6.5	1.4	7.9	7.0

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Plate 125-6.

								Other Lines.
	8,6	21,3	—	3	K=2,0 H.	2	F.	
	8,6	22,8	—	1	N	1	—	
∫	7,0	9,5	—?	II? 3	K=H	K=H	1 1	F. F
	7,8	10,8	—	6	N	2	—	
	7,6	11,1	—	b. 1017 2	K=H	3	—	
	7,5	12,2	—	7	K=,2H	2	—	
	7,7	13,8	—	5	K=,2H	1	—	
∫	7,6	14,1	—	a II a 1018 3	K=H	K=H	11	F. F sem
∫	7,5	15,8	—	III 2 3	K=H	K=H	1 1	— F
	7,7	18,1	—	4.	K=H	1	—	
	6,4	6,2	—	1	N	1	—	
	6,4	6,9	—	2	K=2,0 H	4	—	
?	6,2	11,7	—	a 1019 2	K=H	2	sem.	
	6,6	11,7	—	5	N	1	—	
	6,7	12,4	—	3	K=H	2	F.	
	6,8	14,5	—	10	N	5	F.	
	6,3	15,6	—	a 1020 2	K=H	1	—	
	6,6	15,9	—	2	K=H	1	—	
∫	6,7	16,1	—	III 1 2	N	K=H	1 1	— —
	6,4	16,5	—	2	K=H	1	—	
∫	6,6	20,6	—	II 2 2	K=H	K=H	1	— —
	6,8	23,2	—	2	K=H	1	—	
	5,6	12,9	—	a 1021 2	K=H	1	—	
	5,7	19,7	—	3	K=H	1	F.	
	5,1	22,1	—	a 1022 2	K=H	1	—	
	5,9	22,8	—	? 6	K=H.	4	—	
	5,2	22,9	—	1	N	1	—	
	4,0	13,3	—	3	K=2,0 H	2	F.	

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	No.	R.A.	Dec.	Mag.	B-V.			
10 57 +82.5	325	10 58.0	+82	31	7.0	✓5.9	2.2	8.1	7.2
11 46 +72.7	550	11 46.3	+72	43	7.1	✓6.7	1.3	8.0	7.1
13 6 +63.9	1057	13 5.9	+63	36	7.5	✓6.8 6.9	.9	7.8	6.9
13 9 +73.6	587	13 9.4	+73	34	6.8	✓5.7	1.4	7.1	6.2
13 48 +83.5	397	13 46.7	+83	29	6.3	✓5.3 5.6	2.4	7.7 8.0	6.8 7.1
13 0 +73.8	583	13 0.3	+73	48	6.0	✓5.7	1.4	7.1	6.2
12 59 +83.7	373	12 58.8	+83	43	8.3	✓6.2	2.4	8.6	7.7
12 44 +63.8	1037	12 44.8	+63	46	7.5	✓6.6 6.6 6.9		7.3	6.6
12 33 +73.8	561	12 33.8	+73	48	7.0	✓6.9 6.8 7.1 7.0	1.4	8.3 8.3	7.4 7.6
11 42 +83.5	339	11 42.3	+83	28	8.0	✓6.5	2.4	8.9	8.0
13 21 +64.0	949	13 21.0	+64	6	6.3	✓6.5	.9	7.4	6.3
15 1 +83.1	431	15 0.4	+83	6	6.0	✓4.6 4.9	2.3	6.9 7.2	6.0 6.3
12 56 +64.4	927	12 56.1	+64	24	6.0	✓6.0	.9	6.9	6.0
13 4 +74.1	521	13 3.8	+74	7	7.7	✓6.4	1.4	7.8	6.9
13 28 +84.1	311	13 27.9	+84	3	7.5	✓5.9	2.5	8.4	7.3
	289	12 48.0	+84	12	6.5				
12 49 +84.2	290	12 48.1	+84	12	5.3	✓4.0	2.5	6.3	3.6
12 38 +84.4	286	12 37.2	+84	26	7.0	✓6.0	2.5	8.3	7.6
12 19 +84.3	276	12 19.3	+84	14	7.9	✓6.7	2.5	9.2	8.3
12 16 +84.2	274	12 14.9	+84	11	7.2	✓6.7 6.6 7.0 6.9	2.5	7.2 7.3	8.3 8.6
12 6 +84.4	269	12 6.8	+84	19	7.5	✓6.8	2.5	9.3	8.4
11 58 +74.3	484	11 57.9	+74	15	7.2	✓6.9 6.8	1.4	8.3	7.4
10 18 +82.8	307	10 17.8	+82	46	8.2	✓6.7	2.2	8.9	8.0
13 22 +84.7	307	13 21.9	+84	40	8.0	✓6.1	2.6	8.7	7.8
12 18 +64.6	896	12 18.3	+64	37	6.0	✓6.5 6.8	.9	7.4 7.7	6.3 6.8
11 45 +74.5	476	11 45.8	+74	34	6.7	✓6.2	1.4	7.6	6.7
10 13 +83.3	297	10 13.0	+83	18	5.2	✓4.2	2.3	6.5	3.6
10 4 +83.5	287	10 5.4	+83	32	6.8	✓6.1 6.4	2.4	8.3 8.8	7.6 7.9
13 21 +85.5	322	13 20.7	+85	31	7.0	✓6.1	2.8	8.9	8.0

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Plate 1256.

				No.					Other		
	r	H	Type	Lines	K	Focus	Lines.				
√	4.0	14.5	~~I~~ I	~~4~~ 8	K=H	N	1	1	—	—	
	3.4	6.4	I	4	K=H		2		—		
	3.1	7.0	a	1023 2	K=H		1		—		
	3.9	8.3	III	2	K=H		1		—		
√	3.6	12.5	III	III 2	2	K=H	K=H	1	1	—	—
	3.1	16.1	~~I~~	~~4~~	K=H		1		—		
√	3.8	16.7	III	III	1	2	N	K=H	1	1	— —
	3.6	17.9	III	2	K=H		1		—		
?	3.9	19.6	a	1024 3	K=H		2		F,		
	3.1	21.0	I	11	K=.5H		4		F		
	2.8	12.9	II	2	K=H		1		—		
	2.7	13.2	I	9	K=.5H		3		F		
	2.6	13.2	~~III~~	2	K=H		1		—		
	2.7	13.8	III	2	K=H		1		—		
	2.1	15.0	I	8	K=.2H		2		F		
	2.3	16.2	a	1025 2	K=H		2		—		
	1.8	9.4	III	2	K=H		1		—		
	1.7	12.3	II	2	K=1.2H		1		—		
	1.8	14.2	II	2	K=H		1		—		
	1.9	17.2	II	2	K=H		1		—		
	1.6	18.0	I	2	N		1		—		
	1.6	18.2	I	3	N		1		—		
	1.7	18.9	II	2	K=H		1		—		

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	No.	R. A.	Dec.		Mag.		Bx.			
12 43 +65.5	903	12 42.9	+ 65	32	8.0		6.9	1.0	7.9	7.0
13 22 +65.5	935	13 22.2	+ 65	29	6.7	?-				
	936	13 22.3	+ 65	27	6.7	?-	6.0	1.0	7.0	6.1
15 36 +84.4	345	15 35.1	+ 84	22	8.3	-	6.3	2.5	8.8	7.9
15 7 +84.5	335	15 6.8	+ 84	31	7.5	-	6.5		7.0	8.1
							6.8	2.5	9.3	8.4
12 52 +65.7	913	12 52.6	+ 65	42	7.0	-	6.7		7.7	6.8
							7.0	1.0	8.0	7.1
12 4 +85.9	196	12 4.6	+ 85	53	8.2	-	6.6	2.9	9.5	8.6
12 26 +75.6	473	12 26.2	+ 75	37	7.0	-	6.9		8.4	7.3
							7.2	1.5	8.7	7.8
11 19 +85.5	183	11 20.0	+ 85	30	7.5	-	6.5		9.3	8.4
							6.8	2.8	9.6	8.7
12 3 +75.4	469	12 2.7	+ 75	28	6.7	-	5.9	1.5	7.4	6.5
10 7 +84.9	234	10 7.8	+ 84	59	5.0	-	4.7	2.6	7.3	6.4
13 35 +86.0	193	13 35.7	+ 86	1	7.5	-	6.7	2.9	9.6	8.7
12 50 +66.2	778	12 49.7	+ 66	14	5.0	-	5.3	1.0	6.3	5.4
							6.0		7.6	6.7
12 54 +76.3	473	12 54.5	+ 76	15	6.0	-	6.3	1.6	7.9	7.1
12 49 +76.2	470	12 49.7	+ 76	13	6.8	-	6.5		8.1	7.2
							6.6	1.6	8.2	7.3
12 34 +86.5	182	12 34.7	+ 86	32	6.5	-	~~6.0~~	~~3.0~~	~~8.8~~	~~8.1~~
11 57 +86.4	176	11 57.4	+ 86	24	5.7	-	~~5.8~~	~~3.0~~	~~8.8~~	~~7.9~~
15 16 +85.6	249	15 16.6	+ 85	41	8.0	-		~~2.8~~		
14 5 +85.5	201	14 5.1	+ 86	27	7.5	-		3.0		
13 2 +86.6	187	13 1.8	+ 86	39	7.0	-		3.1		
11 23 +86.4	170	11 23.8	+ 86	25	7.0	-		3.0		
10 56 +86.4	161	10 56.2	+ 86	26	7.2	.		3.0		
12 24 +66.7	763	12 24.4	+ 66	42	6.5	.		1.0		
10 32 +86.2	154	10 33.4	+ 86	8	8.2	-		2.9		

$\frac{18}{2}$ $\frac{6-6}{2}$

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Plate 1162.

			Type	No. Lines	K	Focus	Other Lines.	
11	20	22.4	8.3	I	6	?	2	F.
		22.0	9.9	III	1	N	1	—
		22.4	23.2	I	6	K=.5H	1	F.
		21.7	15.7	III?	2	K=H	1	—
		21.3	21.2	III b 10263		K=H	1	F.
		20.8	19.2	III?	2	K=H	1	—
		20.0	14.8	II	4	N	1	—
		20.3	22.4	II	9	N	5	F.
		19.8	7.5	III	1	N	1	—
		19.4	10.6	~~III~~	3	K=H	1	F
		19.9	12.2	III	2	K=H	1	—
		19.9	14.5	III	2	K=H	1	—
		19.1	16.3	III	3	K=H	1	F.
		19.9	16.7	III	2	K=H	1	—
		19.2	16.8	I	6	N	1	F.
		18.1	10.1	I	4	?	1	—
		18.6	10.9	III	2	K=H	1	—
		18.6	15.3	III	2	K=H	1	—
		18.8	18.5	I d?	6	K=.5H	2	—
		17.9	10.1	I	7	K=.2H	3	—
		17.5	11.9	I	5	N	2	F.
		17.8	17.7	III	2	K=H	1	—
		16.8	17.8	I	6	K=.2H	2	—
		15.5	8.1	II	2	K=H	1	—
		15.6	10.8	I	5	K=.5H	1	—
		15.6	23.3	III	3	K=H	1	F.
		14.1	8.4	II	2	K=H	1	—
		14.7	9.2	II	2	K=H	1	—

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	No.	R. A.	Dec.	Mag.	B-V.				Mean b	Corr. B-V
12 12+75.9	470	12 12.3	+75	59	5.8					
11 39+76.4	1544	11 39.8	+76	27	5.7	1.5	7.3	6.0	5.8	5.2
10 39+65.9	803	10 39.1	+65	54	6.5		7.3	6.2	6.9	6.3
11 18+76.6	1518	11 17.8	+76	39	6.2	.6	7.9	6.6	7.3	6.7
10 22+76.5	393	10 22.6	+76	28	5.0	1.0	7.4	6.1	6.4	5.8
10 40+76.7	402	10 39.8	+76	46	7.0		7.3	6.2	6.9	6.3
11 21+77.5	1324	11 21.6	+77	32	6.3	1.6	7.3	6.0	7.3	6.7
10 53+77.1	1302	10 53.1	+77	10	2.3		7.3	6.0	6.7	6.1
11 48+77.4	1343	11 48.4	+77	24	6.0	1.6	7.7	6.4	7.1	5.5
11 58+77.7	461	11 57.9	+77	43	5.8		8.6	7.3	7.0	6.4
11 34+67.5	714	11 34.4	+67	33	5.3	1.6	8.7	7.4	7.1	6.5
11 22+77.5	1326	11 22.6	+77	32	7.2	1.9	7.3	6.0	6.5	5.9
11 12+67.9	692	11 12.0	+67	53	6.2				B	
11 10+67.5	691	11 9.9	+67	28	6.8	.7	7.7	6.4	7.0	6.4
11 13+77.9	1316	11 13.5	+77	32	6.3		8.1	6.8	7.4	6.5
12 5+78.3	411	12 5.0	+78	15	7.3	1.7	8.1	6.8	6.6	5.8
11 41+68.1	662	11 41.2	+68	8	7.0		8.3	7.0	6.5	6.0
11 12+78.2	385	11 12.8	+78	11	6.8		7.5	6.2	6.9	5.9
11 0+68.0	632	11 0.4	+68	0	6.5	1.0	7.9	6.6	6.9	6.3
12 5+78.4	412	12 5.4	+78	26	5.1	1.7	7.9	6.6	7.2	6.2
11 32+78.8	1321	11 32.5	+78	46	6.3		7.9	6.6	7.0	6.6
10 48+78.7	367	10 48.2	+78	33	6.2	1.7	6.3	5.0	4.6	4.0
11 3+69.0	602	11 3.0	+69	2	6.2		7.1	5.8	6.4	5.8
11 39+69.7	644	11 38.8	+69	30	7.0	.7	8.2	6.9	6.4	5.8
11 43+69.6	628	11 43.5	+69	39	7.0	1.8	8.5	7.2	6.7	6.1
10 31+69.2	583	10 31.5	+69	11	5.5		7.9	6.6	6.8	6.2
12 33+80.0	389	12 32.8	+80	1	6.7		7.6	6.3	6.5	5.9
11 53+70.0	636	11 53.1	+69	60	7.0	1.1	8.1	6.8	7.0	6.4
					6.6	1.9	8.5	7.2		
					6.9		8.1	6.8	7.0	6.3
					7.0	1.2	8.2	6.9		6.4

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Plate 116.

	r	H	Type	No. Lines	K	Focus	Other Lines.
	14.9	13.5	b? 1027	2	K=H	2	—
III. 2, 5.2, 5.6, 6.6.	14.9	14.4	b.c. 1028	3	K=H	3	F. Bright pair.
?	14.4	21.5	d	4	N	1	pair.
III ? 6.2, 6.6.	14.5	22.9	b 1029	2	K=H	1	F, pair.
?	13.0	10.7	a? 1030	2	K=H	1	pair
	13.5	12.0		5	K=.8H	1	—
	14.1	14.3		4	K=H	1	—
	13.5	18.0		4	N	1	F.
	13.2	20.8	b 1031	2	K=H	1	—
	13.0	23.9		4	K=H	2	F?
	12.4	7.0		2	K=H	1	—
	12.4	9.2		1	N	1	—
	12.7	9.4		5	N	2	—
	12.4	18.4		5	?	2	—
	12.0	19.0		2	K=H	1	—
	11.4	8.6		6	?	2	F.
	11.7	12.2		1	N	1	F.
?	11.5	14.1	a 1032	2	K=H	2	pair.
	11.4	14.5		7	K=.2H	2	F.
	10.8	6.4		2	K=H	1	—
	10.4	7.6		2	K=H	1	—
	10.1	8.2		2	K=H	1	—
	10.6	10.6		4	K=H	1	—
	10.0	14.9		7	K=H	2	F.
	10.1	15.9		2	K=H	1	—
?	9.5	16.8	b. 1033		N	1	pair.
	9.5	17.9	?	2	K=H	1	—
?	9.9	20.7	a? 1034	2	K=2.5H?	5	F.?

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	No.	R.A.	Dec.	Mag.		Mean b			Corr. B-V
11 27 +70.1	670	11 27.6	+70 8	5.2	B-V				
					6.2		7.4	6.1	5.6 ✓
					6.5	1.2	7.7	6.4	5.9
11 23 +70.1	665	11 22.8	+70 9	3.3	5.4		6.6	3.3	4.8 ✓
					6.1	1.2	7.3	6.0	5.5
10 1 +79.6	328	10 0.8	+79 39	6.7	6.0	1.9	7.9	6.6	5.4 ✓
					6.4		7.6	6.3	5.8 ✓
10 32 +69.9	586	10 32.6	+69 49	4.7	6.9	1.2	8.1	6.8	6.3
	380	12 9.8	+80 56	8.4					
12 10 +80.9	381	12 9.8	+80 56	8.3 - 3?	5.9	2.0	7.9	6.6	5.3 ✓
11 36 +70.7	674	11 36.9	+70 44	7.3	7.0	1.2	8.2	6.9	6.4 ✓
11 23 +60.5	1330	11 23.1	+60 30	6.8	6.9	.8	7.7	6.4	6.3 ✓
11 7 +60.7	1318	11 7.8	+60 43	6.7	6.7	.8	7.5	6.2	6.1 ✓
					6.4		8.3	7.0	5.8 ✓
10 44 +70.6	634	10 43.6	+70 37	6.0	6.9	1.9	8.8	7.3	6.3
9 30 +79.8	319	9 29.8	+79 48	6.0	5.0	1.9	6.9	5.6	4.4 ✓
					6.4		7.6	6.3	5.8 ✓
12 8 +71.0	610	12 8.2	+71 2	6.0	6.8	1.2	8.0	6.7	6.2
12 30 +81.0	400	12 29.7	+81 3	6.8	6.3	2.0	8.3	7.0	5.7 ✓
11 53 +71.0	598	11 53.3	+71 2	6.5	6.4	1.2	7.6	6.3	5.8 ✓
10 29 +81.2	349	10 28.9	+81 11	6.2	5.4	2.0	7.4	6.1	4.8 ✓
10 21 +81.2	343	10 20.8	+81 14	6.2	6.2	2.0	8.2	6.9	5.6 ✓
12 40 +81.4	402	12 40.8	+81 23	6.3	5.2	2.1	7.3	6.0	4.6 ✓
					6.3		8.4	7.1	5.7 ✓
11 53 +81.7	389	11 52.6	+81 40	6.2	6.6	2.1	8.7	7.4	6.0
11 24 +61.9	1246	11 24.1	+61 32	6.0	6.0	.8	6.8	5.5	5.4 ✓
11 22 +81.9	373	11 21.4	+81 36	6.2	4.5	2.1	6.6	3.3	3.9 ✓
					6.2		8.2	6.9	5.6 ✓
13 11 +81.3	416	13 11.2	+81 14	6.3	6.5	2.0	8.5	7.2	5.9
12 58 +81.6	412	12 58.0	+81 39	7.0	6.6	2.1	8.7	7.4	6.0 ✓
					6.8		7.6	6.3	6.2 ✓
11 49 +62.3	1204	11 49.3	+62 21	6.2	7.1	.8	7.9	6.6	6.5
11 39 +62.2	1198	11 39.3	+62 13	6.3	6.6	.8	7.4	6.1	6.0 ✓
11 21 +62.5	1183	11 20.8	+62 34	6.4	6.3	.8	7.1	5.8	5.7 ✓
10 58 +82.5	325	10 58.0	+82 31	7.0	6.4	2.2	8.6	7.3	5.8 ✓
11 5 +72.8	326	11 5.4	+72 48	7.0	6.7	1.3	8.0	6.7	6.1 ✓
10 59 +72.7	315	10 58.5	+72 43	7.0	6.8	1.3	8.1	6.8	6.2 ✓
10 55 +62.5	1161	10 54.8	+62 31	2.0 ✓	4.0	.8	4.8	3.5	3.4 ✓

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Plate 1162.

	v	7+	Type	No. Lines	K	Other Focus Lines.	
	9.0	22.7	III	3	K=H	3	F.
	8.1	12.9	III	2	K=H	1	—
?	8.1	18.3	II	a 10352	K=H	4	F? Perm.
	7.2	6.5	III	2	K=H	1	—
	7.9	7.7	III	1	K	1	—
	7.5	18.6	III	1	K	1	—
	7.2	21.5	I	3	K	1	—
	6.1	10.1	I	8	K	5	F?
	6.5	21.0	I	5	K=.2H	2	—
	6.1	21.2	II	2	K=H	1	—
	5.8	6.6	III	2	K=H	1	—
	5.9	11.2	II	2	K=H	1	—
	5.0	22.2	I	5	K=H	1	—
	5.2	23.2	I	3	K	1	—
	5.1	12.8	I	3	K	1	—
	4.9	12.7	I	6	K=.5H	2	F.
?	3.9	9.3	II	a 10363	K=H	1	F, Perm.
	3.4	21.0	I	5	K=.8H	2	F?
	2.7	8.3	I	6	K	3	—
	2.4	13.2	III	2	K=H	1	—
?	2.5	23.2	I	4	K	2	Perm.

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	No.	R.A.	Dec.	Mag.					Means B-V			Corr. B-V	
9 16 +81.9	302	9 16.0	+81	58	4.3				5.3	7.4	6.1		4.7 ✓
11 29 +63.5	972	11 29.5	+63	30	7.0				5.8	2.1 7.9	6.6		5.2 ✓
10 13 +83.3	297	10 13.0	+83	18	5.2				7.2	8.1	6.8		6.6 ✓
11 58 +63.7	999	11 38.3	+63	45	6.0				7.5	9 8.4	7.1		6.9
12 8 +73.3	549	12 8.8	+73	22	6.5				4.2	2 3 6.5	3.2		3.6 ✓
10 6 +83.5	287	10 3.4	+83	32	6.8				7.0	7.9	6.6		6.4 ✓
9 19 +83.0	262	9 19.0	+83	0	7.5				7.2	9 8.1	6.8		6.6
	289	12 48.0	+84	12	6.5				6.9	8.3	7.0		6.3 ✓
12 49 +84.2	290	12 48.1	+84	12	3.5	2189	5.0	17 +4	7.1	1.4 8.3	7.2		6.5
									6.5	8.9	7.6		5.9 ✓
10 52 +64.2	824	10 51.9	+64	12	6.8				6.9	2.4 9.3	8.0		6.3
9 12 +83.6	256	9 12.3	+83	33	7.2				6.5	2 3 8.8	7.3		5.9 ✓
13 47 +83.5	397	13 46.7	+83	29	6.3				4.2	2 5 6.7	3.4		3.6
11 45 +74.6	476	11 45.8	+74	34	6.7				6.5	9 7.4	6.1		5.9 ✓
10 22 +74.6	438	10 22.4	+74	35	7.4				6.7	2.4 9.1	7.8		6.1 ✓
8 36 +83.3	233	8 35.8	+83	17	7.0				6.3	8.7	7.4		5.7 ✓
11 30 +64.9	857	11 30.2	+64	58	7.7				6.5	2.4 8.9	7.6		5.9
11 31 +65.1	843	11 30.7	+65	8	6.7				6.6	1.4 8.0	6.7		6.0 ✓
12 3 +75.5	469	12 2.7	+75	28	6.7				6.4	1.4 8.0	6.7		6.0 ✓
8 45 +84.7	196	8 44.3	+84	45	6.0				6.4	2 3 8.7	7.4		5.8 ✓
12 12 +75.9	470	12 12.3	+75	39	5.8	2084	5.4	13 0	6.9	9 7.8	6.3		6.3 ✓
11 57 +86.4	176	11 57.4	+86	24	3.7				6.3	9 7.2	5.9		5.7 ✓
10 39 +65.9	803	10 39.1	+65	54	6.5	1890	6.3	9 −4	5.2	1.5 6.7	3.4		4.6 ✓
									~~6.4~~	~~3.0 9.4~~	~~8.8~~		✓
									6.2	1.0 7.2	3.9		5.6 ✓
								5 3 / 4		5 − 4 / 4			

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Plate 1242.

	V	H	Type	Lines	K	Focus	Other Lines.
12 40	22.3	23.5	III	2	K=H	1	—
	22.9	23.2	I	6	?	4	F.
	21.0	13.1	III	2	K=H	1	—
	20.4	9.5	III	2	K=H	1	—
	19.4	10.0	I	5	N	2	—
	19.0	18.8	I	5	~~K=H?~~	1	—
	19.2	19.7	III	2	K=H	1	—
	18.0	11.4	I	5	N	2	F?
	18.8	14.8	III	1	N	1	F
	18.3	14.9	I	5	K=.2H	1	—
	18.0	16.6	I	5	N	2	F.
	17.2	15.1	III	2	K=H	1	—
	17.5	17.8	I	7	K=.2H	2	F.
	17.3	23.9	I	6	K=H	2	F.
	16.0	7.2	I	6	N	2	F.
	16.7	17.3	I	4	K=.5H	1	—
	16.2	20.4	I	6	K=H	1	F.
	15.4	14.2	I? I? I		4K=HK=H	1	— —
	14.6	6.8	I	8	N	5	F.
	14.1	9.3	I	7	K=.2H	2	—
	14.8	9.4	I	6	N	2	F?
III 6.0, 6.4.	14.2	9.6	III b 10373		K=H	2	F.
	14.5	11.2	III	3	K=H	1	F.
	14.1	11.7	I	8	K=.2H	3	F.
?	14.4	14.8	II a 10382		K=H	1	piece.
	14.0	15.9	II	10	?	5	F.
"	14.9	24.0	I	3	N	1	—
?	13.2	11.7	I	4	N	1	pur.

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	No	R.A.	Dec.	Mag				Mean ? BV.				Cor. BV.
12 22 +70.8	705	12	28.6	+70 50	4.8	_		6.6	7.8	6.8	.	5.9
								6.9	8.1	7.1		6.2
12 27 +70.6	703	12	27.2	+70 35	3.3			~~7.2~~	~~1.2~~	~~5.4~~	~~4.4~~	.
13 34 +71.9	659	13	33.7	+71 59	5.8	_		6.4	7.7	6.7	.	5.7
								6.9	8.2	7.2		6.2
13 45 +62.2	1318	13	45.0	+62 12	6.0	_		6.9	7.7	6.7	.	6.2
								7.1	8 7.9	6.9		6.4
13 38 +52.8	1733	13	38.3	+52 46	6.2	2325 5.9	11 ~~*~~	6.5	.5 7.0	6.0	.	5.8
13 4 +63.0	1056	13	4.2	+63 1	6.4	_		6.4	.9 7.3	6.3	.	5.7
13 0 +62.8	1275	13	0.6	+62 30	6.0	_		7.1	8.0	7.0	.	6.4
								7.4	.9 8.3	7.3		6.7
13 34 +53.6	1640	13	33.9	+53 39	5.8	2309 5.3	12 ~~*~~	5.9	.6 6.5	3.5	.	5.2
13 22 +73.2	592	13	22.4	+73 9	6.0	_		6.8	8.1	7.1	.	6.1
								7.1	1.3 8.4	7.4		6.4
13 21 +53.5	1622	13	21.2	+53 30	6.3	_		6.8	.6 7.4	6.4	.	6.1
13 9 +73.5	587	13	9.4	+73 34	6.8	.		6.3	1.4 7.7	6.7	.	5.6
13 20 +64.0	949	13	21.0	+64 0	6.5	_		6.8	7.7	6.7	.	6.1
								7.0	.9 7.9	6.9		6.3
13 0 +73.6	583	13	0.3	+73 48	6.0	_		6.3	1.4 7.7	6.7	.	5.6
12 41 +63.6	1034	12	41.1	+63 34	6.0	_		6.3	.9 7.2	6.2	.	5.6
13 48 +52.4	1630	13	48.5	+52 26	6.0	2362 5.5	10 ~~*~~	5.9	.6 6.5	3.5	.	5.2
13 4 +74.1	521	13	3.8	+74 7	7.7	_		7.0	1.4 8.4	7.4		6.3
12 56 +64.4	927	12	56.1	+64 24	6.0	_		6.4	.9 7.3	6.3	.	5.7
13 25 +64.9	951	13	25.0	+64 36	7.0	_		7.2	7.1 .9 8.0	7.0	.	6.4
14 0 +65.0	978	14	0.4	+65 4	3.4	2381 3.6	13 ~~*~~	4.1	.9 5.0	4.0	.	3.4
14 6 +75.3	529	14	5.8	+75 17	6.7	_		6.1	1.5 7.6	6.6	.	5.4
13 41 +55.1	1634	13	41.2	+55 10	6.5	2337 5.6	10 ~~*~~	6.0	.6 6.6	3.6	.	5.3
13 47 +65.5	963	13	47.2	+65 27	4.8	_		6.2	7.2	6.2	.	5.5
								6.8	1.0 7.8	6.8		6.1
13 35 +55.4	1625	13	35.2	+55 24	5.5	_		6.5	7.1	6.1	.	5.8
								7.0	.6 7.6	6.6		6.3
13 36 +65.5	953	13	37.0	+65 34	6.0	_		5.9	1.0 6.9	3.9	.	5.2
	935	13	22.2	+65 29	6.7	- 2 ?						
13 22 +65.5	936	13	22.3	+65 27	6.7	- 3 ?		6.4	1.0 7.4	6.4	.	5.7
13 18 +55.7	1598	13	18.1	+55 41	2.0			13	.6 B.	B.	.	
12 50 +54.9	1555	12	~~50.0~~ 49.9	+54 53	6.2	.		6.4	.6 7.0	6.0	.	5.7
13 37 +65.0	816	13	37.6	+66 1	7.3	.		6.5	1.0 7.3	6.3	.	5.8

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Plate 1242.

	x	H	Type	No. Lines	K	Focus	Other Lines.
	13,2	13,0	I	9	N	3	F.
	13,9	15,5	I	10	K=,2H	4	F.
	12,3	11,8	I	4	K=H	1	—
	12,4	18,1	III	3	K=H	1	F.
✓	12,4	21,3	~~I~~	~~I.289~~	~~K=H~~ K=,8H	3 ~~3~~	F. ~~F~~
?	11,4	7,2	~~III~~ b.c.	10392	K=1,5H?	3	F.? bright. peece.
	11,9	10,0	II	2	K=H	1	—
	11,5	13,9	III	2	K=H	1	—
	11,8	23,1	I	6	?	3	F.
	11,2	24,2	I	9	?	5	F.
	10,0	13,0	I	6	K=,8H	1	F.
	10,5	13,7	III	2	K=H	1	—
	10,2	18,6	II	1	N	1	—
	10,2	20,1	III	3	K=H	1	F.
?	10,6	22,2	~~II~~ a	10402	K=H	3	F.? peece.
	9,3	10,2	I	4	K=H	1	—
	9,4	11,4	I	5	N	2	—
	9,1	16,1	I	4	K=H	1	—
	9,5	22,4	III	3	K=H	1	F.
?	8,3	10,0	III b.c.	10412	K=H	2	F.? bright?
	7,6	12,9	III b	10422	K=H	1	—
	7,0	16,6	I	7	N	2	F.
	7,1	22,4	I	8	K=H	3	F.
	7,4	22,5	I	5	N	2	—
?	8,1	23,5	~~X~~ III d	10433	K=H	2	F. peece
?	8,2	23,7	II a	10442	K=H	1	peece.
	6,9	8,5	II	2	K=H	1	—
	6,8	8,8	I	5	N	1	F.

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	No.	R. A.	Dec.	Mag.		Br.				Mean Br.
13 28+56.1	1667	13 28.6	+56 6	6.0	2298 5.5 10 a	5.9	.6	6.3	5.3	5.2
13 19+55.7	1603	13 19.4	+55 44	5.0	_	4.7	.6	5.3	4.3	4.0
13 48+76.3	502	13 48.0	+76 17	7.0	_	6.7	.6	8.3	7.3	6.0
12 54+76.3	473	12 54.5	+76 15	6.0	_	6.3 / 6.7	1.6	7.9 / 8.3	6.9 / 7.3	5.6 / 6.0
50 66.7	778	12 49.7	+66 14	5.0						
12 28+76.5	434	12 28.0	+76 0	6.7	_	5.5	1.5	7.0	6.0	4.8
14 28+76.4	527	14 27.8	+76 21	5.0	_	5.6 / 6.0	1.6	7.2 / 7.6	6.2 / 6.6	4.9 / 5.3
13 40+56.6	1683	13 39.9	+56 38	7.0	_	6.8	.6	7.4	6.4	6.1
13 30+76.8	491	13 30.3	+76 49	6.7	_	6.3 / 6.7	1.6	8.3	7.3	6.3 / 6.6
12 12+75.9	470	12 12.3	+75 39	5.8		4.8	1.5	6.3	5.3	4.1
12 47+56.7	1627	12 47.7	+56 44	2.0		B	7	B.	B.	
13 39+77.5	519	13 39.3	+77 34	6.2	_	6.2	1.7	7.9	6.9	5.5
13 33+77.3	516	13 32.8	+77 18	6.0	_	7.0 / 7.4	1.6	8.6 / 9.0	7.6 / 8.0	6.3 / 6.7
13 7+57.5	1425	13 7.7	+57 28	7.0	_	7.1	.7	7.8	6.8	6.4
12 54+67.4	773	12 54.4	+67 23	5.8	_	6.3 / 6.6	1.0	7.3 / 7.6	6.3 / 6.6	5.6 / 5.9
12 54+57.2	1408	12 54.5	+57 8	5.0	_	5.8	.7	6.5	5.5	5.1
14 5+77.7	529	14 5.4	+77 40	7.8	_	6.9	1.7	8.6	7.6	6.2
13 35+57.9	1456	13 35.1	+57 36	6.1	2314 6.2 8 = B	6.3	.7	7.0	6.0	5.6
13 10+77.9	506	13 9.4	+77 38	7.6	_	6.8	1.7	8.5	7.5	6.1
12 41+67.5	764	12 41.6	+67 35	5.3	_	6.7 / 7.1	1.0	7.7 / 8.1	6.7 / 7.1	6.0 / 6.4
14 9+78.3	478	14 9.5	+78 14	5.0	_	5.8 / 6.3	1.7	7.5 / 8.0	6.5 / 7.0	5.1 / 5.6
13 42+78.8	466	13 42.1	+78 47	5.8	_	6.0 / 6.4	1.8	7.8 / 8.2	6.8 / 7.2	5.5 / 5.7
13 11+69.2	694	13 11.7	+69 10	6.0	2250 6.1 8 = B	5.8	1.1	6.9	5.9	5.1
12 5+78.4	412	12 5.4	+78 26	5.1	_	4.7	1.7	6.4	5.4	4.0
12 5+78.2	411	12 5.0	+78 15	7.3	.	6.0	1.7	7.7	6.7	5.3
11 58+77.8	461	11 57.9	+77 43	5.8	_	6.0 / 6.2	1.7	7.7 / 7.9	6.7 / 6.9	5.3 / 5.5
11 58+77.6	460	11 57.7	+77 34	7.4	_	6.8	1.7	8.5	7.5	6.1
14 29+77.2	447	14 29.1	+77 9	6.8	_	6.7	1.8	8.5	7.5	6.0
13 45+59.3	1433	13 45.5	+59 15	6.5	2350 6.3 8 = B	6.4	.7	7.1	6.1	5.7

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Plate 1242.

r	H	Type	No. Lines	K	Focus	Other lines.
6.7	11.7	III	2	K=H	1	—
6.5	14.5	III	2	K=H	2	—
5.6	12.3	III	2	K=H	1	—
4.3	6.7	III	1	N	1	F.
4.0	7.2	I	4	K=H	1	—
4.0	14.5	I	7	K=.2H	2	F.
4.7	19.2	III	1	N	1	—
4.0	21.0	I	4	N	1	—
3.5	8.5	III	2	K=H	1	—
3.1	23.8	I	9	N	4	F.
2.8	15.6	III	1	N	1	—
2.0	17.9	I	7	K=.5H	2	F.
2.6	18.8	III	2	K=H	1	—
?	2.5	20.4	~~I~~ II	~~4~~ 5	K=H	1	F. ? pecc.

Plate 1221

6.6	18.9	I	4	?	1	—
5.4	8.8	III	2	K=H	1	—
5.5	15.5	I	6	N	2	—

Plate 1245.

	22.7	11.7	I	4	N	1	—
?	22.1	11.9	III	b.c.? 1045	2	K=H	2	F.?
	22.6	19.9	I	6	K=.5H	2	—
?	22.4	23.0	III	a? 1044	2	K=H	1	pecc.
?	22.2	24.1	I	d?	4	?	2	pecc.
	21.6	9.0	III	?	1	N	1	—
	21.5	18.3	I	4	K=H	1	—

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Means

	No.	R.A.	Dec.	Mag.		Bv.				Cor Bv.
13 √√ +79.1	433	13 35.4	+79 6	7.7	_	6.9	1.8	8.7	7.7	6.2 ✓
13 26 +79.4	422	13 25.8	+79 23	6.0	_	5.8	1.8	7.6	6.6	5.1 ✓
13 50 +79.7	431	13 50.6	+79 43	6.6	_	6.9 / 7.1	1.9	8.8 / 9.0	7.8 / 8.0	6.2 / 6.4 ✓
14 9 +70.1	778	14 9.4	+70 7	5.3	_	6.5 / 7.0	1.2	7.7 / 8.2	6.7 / 7.2	5.8 / 6.3 ✓
14 6 +70.3	774	14 6.7	+70 17	7.2	_	6.7	1.2	7.9	6.9	6.0 ✓
13 23 +60.7	1461	13 23.1	+60 43	5.3	_	5.7	.8	6.5	5.5	5.0 ✓
12 33 +80.0	389	12 32.8	+80 1	6.7	_	6.6	1.9	8.5	7.5	5.9 ✓
12 56 +60.5	1439	12 56.7	+60 31	6.5	.	6.5	.8	7.3	6.3	5.8 ✓
14 37 +80.3	448	14 37.8	+80 17	6.3	_	6.7 / 7.1	1.9	8.6 / 9.0	7.6 / 8.0	6.0 / 6.4 ✓
12 27 +70.6	703	12 27.2	+70 35	3.3	2135 3.8 16	4.2	1.2	5.4	4.4	3.5 ✓
13 11 +81.2	416	13 11.2	+81 14	6.3	_	6.3 / 6.5	2.0	8.3 / 8.3	7.3 / 7.5	5.6 / 5.8 ✓
12 40 +81.4	402	12 40.8	+81 23	6.3	_	~~4~~	2.1	.	~~4~~	. ✓
12 30 +81.0	400	12 29.7	+81 3	6.8	_	~~6.6~~	2.0	8.6	~~7.6~~	5.9 ✓
12 10 +80.9	380 / 381	12 9.8 / 12 9.8	+80 56 / +80 56	8.4 / 8.3	?	~~8.3~~	2.0	8.3	~~7.3~~	. ✓

~~80~~ / ~~8~~ 6 / 8 −6

12 49 +84.3	289	12 48.0	+84 12	6.5		✓ 6.4	2.5	8.9	5.1	.
	290	12 48.1	+84 12	5.5	2189 3.0 39 +1	✓ 6.2 / 6.8	1.4	7.6 / 8.2	3.8 / 4.4	.
14 √1. +74.7	595	14 31.2	+74 45	2.1	_					
14 0 +65.0	978	14 0.4	+65 4	3.4	2381 3.6 38 ~~8~~ 0	✓ 6.5	.9	7.4	4.1	.

~~38~~ / 1 77 / 2 1−0 / 2

14 13 +56.1	1725	14 13.~~8~~0	+56 6	7.3	.	✓ ~~5.4~~	1.6	7.0	~~5.8~~	.
14 28 +76.4	527	14 27.8	+76 21	5.0	_	5.9	1.6	7.3	6.3	.
13 36 +65.5	953	13 37.0	+65 34	6.0	_	✓ ~~4~~	1.0	1	~~4~~	.
13 22 +65.5	~~935~~ 936	~~13 22.2~~ 13 22.3	~~+65 29~~ +65 27	~~6.7~~ 6.7	?	✓ 6.5	1.0	7.5	6.3	.
13 28 +56.1	1667	13 28.6	+56 6	6.0		5.9	.6	6.5	5.3	.
14 31 +66.0	855	14 30.5	+66 1	6.7	_	✓ 6.9	1.0	7.9	6.7	.
13 32 +76.5	492	13 31.9	+76 31	7.0	_ ✓	✓ 6.9	1.6	8.5	7.3	.

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r	H	Type	No. lines	K	Focus	Other lines.
21.0	9,5	I	3	N	1	—
21,8	19,7	I	5	?	1	—
21,2	22,8	III	2	K=H	1	—
20,6	10,8	II	2	K=H	1	—
20,3	12,3	~~I~~ I	~~4~~ 4	K=H	1	—
19,3	7,3	II a	10472	K=H	1	—
19,6	14,6	II a	10482	K=H	1	neb.
19,7	17,3	I	7	K=,8H	2	F
18,6	14,2	III b?	10492	K=H	2	—
18,4	20,3	I	I 3. 4	N K=H	1 1	— —
18,9	21,9	I	5	K=,5H	1	—
17,1	11,9	I	4.	N	1	—
17,2	12,1	I	5	N	2	—
17,5	16,8	III b	10502	K=H	2	—
17,6	17,3	II	2	K=H	1	—
16,5	10,1	II	II 2 2	K=H K=H	1 1	— —
16,6	12,4	II a	10512	K=H	1	neb.
16,8	15,5	II	2	K=H	1	—
16,0	17,4	III	III 3 3	K=H K=H	1 1	F F
16,1	18,2	~~III~~ III b?	10522	K=H	3	—
16,6	19,0	I	5	K=,2H	2	—
15,1	14,0	III	III 1 3	N K=H	1 1	— F
15,2	14,3	III	III 1 3	N K=H	1 1	— F
15,5	15,4	III	2	K=H	1	—
15,6	15,9	III	2	K=H	1	—
15,1	23,7	I d?	5	?	2	F?
14,2	10,1	II a?	10532	K=H	1	—
14,3	12,0	III b	10543	K=H	2	F

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* Dm +77° 506 is superposed on Dm +67 790, Plate 1245.

	No.	R.A.	Dec.	Mag.		BV.			
14 48+76.6	536	14 48.6	+76 40	7.3	.	✓ 6.8	1.6	8.4	7.2 .
13 37+66.0	816	13 37.6	+66 1	7.5		✓ 6.6	1.0	7.6	6.4 ..
12 54+76.3	473	12 34.5	+76 15	6.0	_	✓ 6.3 / 6.6	1.6	7.9 / 8.2	6.7 / 7.0 .
14 23+66.7	847	14 22.4	+66 38	6.8	_	✓ 7.1	1.0	8.1	6.9 .
	1498	14 11.3	+57 22	6.5	_ ?				
14 11+57.3	1499	14 11.5	+57 22	6.5	_ ?	✓ 6.6	.7	7.3	6.1 .
14 30+57.7	1519	14 29.9	+57 42	6.3	_	✓ 6.8	.7	7.5	6.3 .
14 5+77.7	529	14 5.4	+77 40	7.8	_	✓ 6.7	1.7	8.4	7.2 .
13 39+77.5	519	13 39.3	+77 34	6.2	_	✓ 6.0	1.7	7.7	6.3 .
14 9+78.2	478	14 9.5	+78 14	5.0	_	✓ 5.5 / 6.0	1.7	7.2 / 7.7	6.0 / 6.5 .
13 32+67.8	*790	13 32.7	+67 47	6.3	.	6.6 6.5	1.1	7.6	6.4 .
13 35+57.9	1456	13 35.1	+57 56	6.1	_	✓ 6.4	.7	7.1	5.9 .
14 18+68.5	781	14 18.3	+68 28	7.4	.	✓ 6.6	1.1	7.7	6.5 .
14 17+68.5	777	14 17.1	+68 27	6.8	.	✓ 6.4	1.1	7.5	6.3 .
13 42+78.7	466	13 42.1	+78 47	5.8	_	✓ 6.2 / 6.5	1.8	8.0 / 8.3	6.8 / 7.1 .
13 36+78.6	464	13 36.9	+78 38	8.0	_	✓ 7.0	1.8	7.8	6.6 .
14 28+68.7	787	14 28.4	+68 43	7.2	_	6.9 6.8	1.1	7.9	6.7 .
14 29+79.2	447	14 29.1	+79 9	6.8	_	✓ 6.5	1.8	8.3	7.1 .
13 55+79.1	433	13 55.4	+79 6	7.7	_	✓ 6.3	1.8	8.1	6.9 .
13 47+69.0	724	13 47.3	+69 2	6.0	_	6.7 ✓ 6.6 / 7.0 7.0	1.1	7.7 / 8.1	6.3 / 6.9 .
13 26+79.4	422	13 25.8	+79 23	6.0	_	✓ 5.5 / 5.6	1.8	7.3 / 7.4	6.1 / 6.2 .
13 45+59.3	1533	13 45.5	+59 15	6.5	_	✓ 6.3	.7	7.0	3.8 .
14 7+69.5	736	14 7.2	+69 33	6.5	_	6.9 6.7 / 7.1 7.0	1.1	7.8 / 8.1	6.6 / 6.9 .
14 4+60.0	1516	14 4.3	+60 1	6.0	_	6.8 6.8 / 7.1 7.1	.8	7.6 / 7.9	6.4 / 6.7 .
13 56+79.7	434	13 55.5	+79 41	7.7	_	✓ 6.8 / 7.1	1.9	8.7 / 9.0	7.3 / 7.8 .
13 50+79.7	431	13 50.6	+79 43	6.6	_	✓ 6.3 / 6.8	1.9	8.2 / 8.7	7.0 / 7.3 .
13 11+69.2	694	13 11.7	+69 10	6.0		✓ 5.5	1.1	6.6	3.4 .
14 59+80.1	459	14 59.2	+80 7	8.2	_	✓ 6.8	1.9	8.7	7.3 .
14 37+80.3	448	14 37.8	+80 17	6.3	_ V	✓ 6.3 / 6.7	1.9	8.2 / 8.6	7.0 / 7.4 .

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H	H	Type	No. lines	K	Other Focus Lines.
14,1	13,6	III b. 10552		K=H	2 —
13,3	8,6	I b.? 10568		K=√H	2 F
13,0	9,3	I I	3 5	N	K=H 1 1 — H
13,7	14,1	I	4	N	1 —
13,8	15,9	III	1	N	1 —
13,1	16,4	III	2	K=H	1 —
13,1	20,4	I	4	N	1 —
13,5	22,4	II	2	K=H	1 —
12,3	6,4	II a 10573		K=H	1 F
12,0	10,8	I	5	N	2 —
12,1	12,√	II	3	K=H	2 F
12,1	15,√	III	3	K=H	1 F
12,2	18,7	III	3	K=H	2 F
12,2	19,8	I	5	K=H	1 —
? 11,0	6,2	II a 10583		K=H	2 F piece.
11,8	6,3	II	1	N	1 —
11,2	7,2	III	3	K=H	1 F
11,7	7,6	II	2	K=H	2 —
11,1	7,8	III	2	K=H	
11,0	16,7	III III	3 3	K=H	K=H 7 F
11,1	19,1	II	2	K=H	1 —
11,2	20,8	I	8	K=2H	3 F
11,6	21,1	II a 10592		K=H	1 —
11,6	21,9	II a? 10602		K=H	1 —
11,1	23,4	I	√	?	1 F
10,0	√9	II	2	K=H	1 —
10,4	6,8	II	2	K=H	1 —
10,4	15,0	I d?	2	K=H	1 —
10,5	15,6	I I	1 4	K=H	K=H 1 — —

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	No.	R.A.	Dec.	Mag.	BN.
14 9 +70.1	778	14 9.4	+70 7	5.3	6.1 7.3 6.1
14 28 +60.9	1547	14 27.8	+60 51	6.2	6.6 12 7.8 6.6
14 25 +61.0	1432	14 25.0	+61 2	7.2	6.3 8 7.1 3.9
14 6 +70.3	774	14 6.7	+70 17	7.2	6.8 6.7 8 7.5 6.3
13 50 +80.6	422	13 50.3	+80 38	7.4	6.3 12 7.5 6.3
13 43 +80.9	421	13 42.6	+80 58	7.1	6.6 8.6 7.4
13 39 +60.9	1485	13 38.9	+60 53	6.5	6.8 20 8.8 7.6
12 32 +80.0	389	12 32.8	+80 1	6.7	6.6 8.6 7.4
15 48 +80.4	487	15 47.8	+80 26	6.7	6.9 20 8.9 7.7
14 37 +81.3	495	14 37.2	+81 20	6.8	6.6 8 7.4 6.2
14 35 +81.4	482	14 34.8	+81 27	6.7	6.0 19 7.9 6.7
13 53 +81.5	452	13 53.3	+81 29	6.8	5.9 19 7.8 6.6
13 11 +81.3	416	13 11.2	+81 14	6.3	5.7 21 7.8 6.6
13 31 +70.9	747	13 31.2	+70 37	7.0	6.3 21 8.4 7.2
14 38 +61.9	1457	14 38.4	+61 52	6.0	6.3 8.4 7.2
15 52 +80.5	489	15 51.6	+80 34	8.0	6.6 21 8.7 7.3
15 48 +81.1	523	15 45.9	+81 4	7.3	5.7 7.6 6.4
15 37 +80.9	480	15 37.8	+80 56	7.0	6.0 19 7.9 6.7
15 39 +81.3	517	15 38.9	+81 13	6.8	6.5 12 7.7 6.5
	1325	13 53.0	+62 12	6.7	6.4 8 7.2 6.0
12 58 +81.6	412	12 58.0	+81 39	7.0	6.8 2.0 8.8 7.6
12 40 +81.4	402	12 40.8	+81 25	6.3	6.5 8.3 7.3
23.8	651	13 23.1	+71 5	7.2	6.8 2.0 8.8 7.6
13 [illegible] +71 [illegible]	~~747~~	~~13 31.2~~	~~+70 51~~	~~7.0~~	5.7 2.0 7.7 6.5
12 29 +81.0	400	12 29.7	+81 3	6.8	6.4 8.4 7.2
12 10 +80.9	380	12 9.8	+80 56	8.4	6.7 2.0 8.7 7.5
	381	12 9.8	+80 56	8.3	6.7 6.8 7.2
16 6 +81.2	538	16 6.6	+81 14	8.0	6.3 21 8.4 7.2
15 55 +81.4	531	15 54.7	+81 23	7.4	5.2 2.1 7.3 6.1
14 0 +82.3	407	14 0.5	+82 19	8.2	6.8 12 8.0 6.8
13 58 +62.3	1327	13 58.4	+62 23	7.1	6.2 20 8.2 7.0
					5.5 2.0 7.3 6.3
					6.5 2.0 8.3 7.3
					6.4 8.3 7.3
					7.0 2.1 9.1 7.7
					6.7 2.2 8.9 7.7
					6.8 6.8 8 7.6 6.4

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Plate 1245.

T	H	Type	No. Lines	K	Focus	Other Lines.
10,4	17,9	II	2	K=H	1	—
10,8	18.7	III	2	K=H	2	—
10,2	19,2	III b.1061	2	K=H	2	—
9,1	8,9	II	2	K=H	1	—
9,5	16,7	II	2	K=H	1	—
9,2	23,8	III	1	N	1	—
8,6	6,1	II	3	K=H	1	F
8,6	8,4	I	4	K=H	1	—
? 8,4	8,8	I a1062	3	K=H	1	F, pecu.
8,1	10,5	II	2	K=H	1	—
8,6	11,5	IH	2	K=1/2 H	3	—
8,3	15,8	II b1063	2	K=H	2	—
8,1	18,9	III	1	N	1	—
8,4	20,9	II	2	K=H	1	—
8,4	22,2	III	2	K=H	1	—
? 7,5	9,2	II a1064	2	K=H	2	pecu.
7,0	16,7	II	2	K=H	1	—
7,4	18,3	I	3	N	1	—
7,8	20,5	III	2	K=H	1	—
6,4	6,5	II a2 1065	2	K=H	1	—
6,4	8,1	I	4	K=H	1	—
6,7	8,5	I	5	K=H	1	—
6,4	18,6	I	8	N	5	F
6,5	22,2	I	5	N	1	—
5,5	8,0	III	2	K=H	1	—
5,4	8,7	I?	4	K=H	1	—
5,8	11,9	III	1	N	1	—
5,4	15,1	I	12	?	?	F

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	No.	R.A.	Dec.	Mag.		Br.			
13 17 +82,3	390	13 16.6	+82 16	8.4	_	6.5	22	8.7	7.5 .
13 45 +62,2	1318	13 45.0	+62 12	6.0	_	6.3 6.6	8	7.1 7.4	5.9 6.2 .
13 33 +71,9	659	13 33.7	+71 59	5.8	_	5.8 6.2	13	7.1 7.3	5.9 6.3 .
15 36 +82,4	455 6	15 35.4	+82 23	8.2	_	6.7	22	8.9	7.7 .
13 33 +82,7	397	13 32.8	+82 44	8.6	_	6.9	22	9.1	7.9 .
11 53 +81,6	389	11 52.6	+81 40	6.2	_	6.2 6.9	21	8.3 9.0	7.1 7.8 .
15 0 +72,3	664	15 0.3	+72 19	6.3	_	6.4	13	7.7	6.5 .
14 45 +72,5	652	14 45.2	+72 34	6.8	_	6.7	13	8.0	6.8 .
15 42 +82,7	463	15 42.2	+82 44	7.5	_	5.8	22	8.0	6.8 .
14 21 +63,5	1131	14 21.2	+63 36	7.2	_	7.0	9	7.9	6.7 .
15 0 +83,1	431	15 0.4	+83 6	6.0	_	4.6 4.8	23	6.9 7.1	5.7 5.9 .
13 47 +83,5	397	13 46.7	+83 29	6.5	_	5.2 5.6	24	7.6 8.0	6.4 6.8 .
12 53 +83,3	369	12 52.8	+83 18	7.5	_	6.4 6.8	23	8.7 9.1	7.5 7.9 .
12 23 +82,8	365	12 23.8	+82 48	8.0	_	6.8	23	9.1	7.9 .
12 5 +82,5	356	12 4.4	+82 31	6.7	_	6.2 6.9	22	8.4 9.1	7.2 7.9 .
14 27 +63,9	1136	14 27.3	+63 50	6.2	_	6.2	9	7.1	5.9 .
13 28 +84,1	311	13 27.9	+84 3	7.5	_	6.0	25	8.3	7.3 .
12 59 +83,7	373	12 58.8	+83 43	8.3	.	6.5	24	8.9	7.7 .
13 22 +73,2	598	13 22.4	+73 9	6.0	_	6.3 6.8	13	7.6 8.1	6.4 6.9 .
16 30 +82,9	485	16 29.1	+82 58	8.0	_	6.5	23	8.8	7.6 .
14 50 +73,6	646	14 50.2	+73 38	8.0	_	6.6	14	8.0	6.8 .
	~~437~~	~~16 4.9~~	~~+83 13~~	~~8.5~~					
15 59 +83,4	453	15 58.8	+83 23	7.8	_	5.8	23	8.1	6.9 .
12 48 +84,3	289	12 48.0	+84 12	6.5	_				
	290	12 48.1	+84 12	3.5	2189 5.0 15+3	4.0	25	6.3	5.3 .
13 9 +73,5	587	13 9.4	+73 32	6.8	.	5.8	14	7.2	6.0 .
16 19 +83,8	468	16 18.1	+83 47	8.2	_	6.6 6.8	24	9.0 9.2	7.8 8.0 .
16 8 +84,0	351	16 7.0	+84 2	7.7	_	6.2	25	8.7	7.5 .
15 7 +84,5	335	15 6.8	+84 31	7.5	_	6.5 7.0	25	9.0 9.3	7.8 8.3 .
14 0 +65,0	978	14 0.4	+65 4	3.4	v	4.0	9	4.9	3.7 .

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Plate 1245.

τ	H	Type	Lines	K	Other Lines.		
5.8	16.8	~~I~~ I	~~x~~ 4	K=H	1	—	
5.6	18.9	II	2	K=H	1	—	
5.7	23.3	I	5	K=H	1	—	
✓	4.2	6.4	I	I 3 H	N K=H	1 1	— —
	4.4	7.3	I	4	K=H	1	—
?	4.4	8.4	III	b2 1066.2	K=1.2H	5	—
	4.0	16.5	II	a 1067.2	K=H	1	—
III ?	4.5	17.8	III	b2 1068.3	K=H	1	∓
	4.1	19.9	I	6	N	2	—
	3.5	10.7	III	1	N	1	—
∫	3.2	11.6	~~I~~ I	~~I~~ I? ~~+~~ H	K=H	K=H 1	— —
	3.9	14.4	I	6	K=1.5H	2	—
	3.2	19.7	I	4	N	1	—
	2.6	10.5	I	6	K=1.2H	1	—
	2.8	12.5	II	? 2	K=H	1	—
	2.4	14.9	II	2	K=H	1	—

Plate 1326.

21.6	11.7	I	9	N	4	∓
17.8	11.4	II	a 1069.2	K=H	1	—
17.4	14.6	II	2	K=H	1	—
15.0	14.5	III	1	N	1	∓
15.1	24.1	I	9	?	5	∓
14.0	7.9	II	2	K=H	1	—
12.0	16.0	I	6	K=1.2H	2	—
11.3	11.6	I	5	N	1	—
11.2	12.0	I	7	K=~~1.2~~ 5H	3	—
?	10.2	9.2	II	a 1070.3	K=1.2H	3	∓

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	No.	R. A.	Dec.	Mag.							
13 21 +84.6	307	13 21.9	+84	40	8.0 _					6.3	2.6 8.9 7.7 .
12 38 +84.5	286	12 37.2	+84	26	7.0 _					6.3	2.5 8.8 7.6 .
13 0 +73.8	583	13 0.3	+73	48	6.0 _					6.0	1.4 7.4 6.2 .
16 47 +84.3	365	16 47.6	+84	17	8.3⁻ .					6.9	2.5 9.4 8.2 .
16 40 +84.0	361	16 40.2	+84	0	7.2 _					6.1	2.5 8.6 7.4 .
14 51 +74.7	595	14 51.2	+74	45	2.1 _					4.0 / 4.3	1.4 (5.4 3.7) (4.2 4.3) .
13 21 +85.5	222	13 20.7	+85	31	7.0 _					6.4	2.8 9.2 8.0 .
13 47 +65.4	963	13 47.2	+65	27	4.8 _					6.0 / 6.6	1.0 (7.0 7.6) (5.8 6.4) .
13 36 +65.5	953	13 37.0	+63	34	6.0	2320	5.6	10 - 2		5.6	1.0 6.6 5.4 .
15 50 +85.3	263	15 50.2	+85	18	7.2 _					5.5 / 5.7	2.7 (8.2 8.4) (7.0 7.2) .
14 17 +66.0	842	14 17.8	+66	1	7.0 _					7.0	7.0 1.0 8.0 6.8 .
14 6 +75.3	529	14 5.8	+75	17	6.7 _					5.8	1.5 7.3 6.1 .
13 37 +66.0	816	13 37.6	+66	1	7.3⁻ .					6.4	1.0 7.4 6.2 .
16 7 +85.7	269	16 6.6	+85	43	7.3⁻ _					6.0	2.8 8.8 7.6 .
15 14 +86.0	221	15 14.6	+86	11	8.1 _					6.8	2.9 9.7 8.3⁻ .
14 5 +86.4	201	14 5.1	+86	27	7.3⁻ _						3.0 . 1 .

$\frac{2.3^-}{2}$ $\frac{3-2}{2}$

Mean 5 Log. Br.

14 11 +46.8	1949	14 10.9	+46	46	4.0	2403	4.3	5 - 3	4.4	4 4.8 4.0	. 3.9 ✓
14 12 +48.7	2188	14 12.4	+48	40	6.6 _				6.9	.5 7.4 6.6	. 6.4 ✓
14 2 +48.9	2177	14 2.4	+48	54	6.7 _				7.0	.5 7.3⁻ 6.7	. 6.5 ✓
14 3 +50.1	2047	14 2.8	+50	9	5.5⁻ _				6.5 / 7.2	.5 (7.0 7.7) (6.2 6.9)	. 6.0 ✓ . 6.75
13 42 +50.0	2027	13 41.8	+50	3	2.0				B	.5 B. B.	. ✓
14 23 +50.7	2084	14 23.6	+50	30	5.8 _				6.5	.5 7.0 6.2	. 6.0 ✓
13 57 +51.7	1889	13 57.6	+51	41	6.0 _				6.0	.5 6.5 5.7	. 5.5 ✓
14 12 +51.9	1908	14 12.2	+51	59	6.8 .				6.1	.5 6.6 5.8	. 5.6 ✓
14 11 +52.0	1784	14 11.4	+52	2	4.5⁻ _				4.9	.5 5.4 4.6	. 4.4 ✓
14 20 +52.7	1804	14 20.3	+52	31	4.0 _				4.6	.5 5.1 4.3	. 4.1 ✓

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Plate 1326

V	H	Type	No. Lines	K	Focus	Lines.	Other
10,4	12,9	I	9	K=,5H	4	F.	
12,2	23,2	III	2	K=H	1	—	
9,8	11,3	I	4	N	1	—	
9,4	21,8	I	5	N	2	—	
8,9	12,3	I	I 6 7	K=,2HK=,3H	1	—	F?
7,6	17,1	I	5	K=H	1	—	
7,7	23,0	I	5	N	2	F.	
6,4	18,6	I	6	N	3	—	
5,5	5,5	II?	4	N	2	—	d?
4,2	11,3	I	5	K=,5H	1	—	
4,9	20,6	I	6	N	2	—	
3,1	11,6	I	5	N	1	—	
4,2	22,3	III	1	N	1	F.	III ? 6.6, 6.9.
2,6	24,0	I	7	N	2	F.	

Plate 1351

V	H	Type	No. Lines	K	Focus	Lines.	Other
22,3	11,4	III	1071/2	K=H	2	bright pcm.	b.c. III ? 5.2, 5.6. ?
22,8	19,5	III	2	K=H	1	—	
20,3	12,1	III	2	K=H	1	—	
19,7	14,1	II?	2	K=H	1	—	
20,0	16,9	I	7	K=,2H	2	F.	
18,2	16,6	I	4	N	1	—	
18,3	11,8	I	4	?	1	—	
18,8	13,8	III	1072 1/2	K=H	2	bright pcm.	b.c? ?
19,0	21,7	I	7	N	2	—	
17,1	9,2	III	2	K=H	1	—	
17,0	15,1	I	2	K=H	1	—	
17,6	16,4	III	1073 1/2	K=H	2	pcm.	b. ?

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Mean 5

	No.	R.A.	Dec.	Mag.					Bv.				
14 8+√2,7	1783	14 8.3	+52	27	4.3	–			4.7	.5	5.2	6.4	4.2 ✓
13 35+√1,2	1859	13 34.5	+51	16	7.0	–			6.7	.5	7.2	6.4	6.2 ✓
14 13+√2,7	1788	14 13.4	+52	43	7.3	.			6.8	.5	7.3	6.3	.6.3 ✓
13 38+√2,8	1733	13 38.3	+52	46	6.2	2325	5.9	6 –2	6.0	.5	6.5	5.7	.5.5 ✓
14 10+√3,2	1699	14 10.2	+53	12	7.0	–			6.3 6.5	.6	7.1	6.3	.6.0 ✓
13 √3+√3,9	1676	13 33.6	+53	48	7.3	–			6.6	.6	7.2	6.4	.6.1 ✓
13 34+√3,6	1640	13 33.9	+53	39	5.8	2309	5.3	10 +2	5.7	.6	6.3	5.5	.5.2 ✓
13 48+√4,4	1630	13 48.5	+54	26	6.0	2362	5.5	8 0	5.7	.6	6.3	5.5	5.2 ✓
14 33+√4,6	1693	14 33.7	+54	39	5.8	2447	5.6	10 +2	6.0	.6	6.6	5.8	5.4 ✓
14 14+√5,7	1678	14 14.1	+55	33	6.5	–			6.6	.6	7.2	6.4	6.1 ✓
13 41+√5,1	1634	13 41.2	+55	10	6.5	2337	5.6	8 0	5.8	.6	6.4	5.6	.5.3 ✓
14 13+√6,1	1725	14 13.0	+56	6	7.3	.			6.7	.6	7.3	6.5	.6.2 ✓
13 35+√5,4	1625	13 35.2	+55	24	5.5	–			6.5 7.1	.6	7.1 7.7	6.3 6.9	6.0 ✓ 6.6 ✓
13 28+√6,1	1667	13 28.6	+56	6	6.0	2298	5.5	10 +2	5.9	.6	6.5	5.7	.5.4 ✓

57/7 6–5/7

Mean 4

14 28+76,4	527	14 27.8	+76	21	5.0	–			5.6 6.2	.6	7.2 7.8	6.2 6.8	.5.2 ✓ 5.8 ✓
13 37+66,0	816	13 37.6	+66	1	7.5	–			~~7.1~~	~~+0~~	~~1~~	~~7.1~~	. ✓
14 11+√7,4	1498 1499	14 11.3 14 11.5	+37 +37	22 22	6.5 6.5	} ?			6.8	.7	7.3	6.5	.6.4 ✓
14 5+77,6	529	14 5.4	+77	40	7.8	–			7.1	1.7	8.8	7.8	.6.7 ✓
13 39+77,5	519	13 39.3	+77	34	6.2	–			6.4	1.7	8.1	7.1	.6.0 ✓
14 18+68,5	781	14 18.3	+68	28	7.4	.			6.7	1.1	7.8	6.8	.6.3 ✓
14 17+68,5	777	14 17.1	+68	27	6.8				6.5	1.1	7.6	6.6	.6.1 ✓
14 9+78,3	478	14 9.3	+78	14	5.0	–			5.6 6.1	1.7	7.3 7.8	6.3 6.8	.5.2 ✓ 5.7 ✓
13 35+√7,9	1436	13 35.1	+57	56	6.1	2314	6.2	10 0	6.5	.7	7.2	6.2	.6.1 ✓
14 56+78,7	501	14 56.6	+78	43	6.5	–			6.7 6.9	1.8	8.3 8.7	7.3 7.7	.6.2 ✓ 6.5 ✓
13 55+79,1	433	13 55.2	+79	6	7.7	–			6.9	1.8	8.7	7.7	.6.5 ✓
13 42+78,7	466	13 42.1	+78	47	5.8	–			6.2 6.5	1.8	8.1 8.3	7.0 7.3	.5.3 ✓ 6.1 ✓

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Plate 135.

	r	H	Type	No. lines	K	Focus	Other lines.
	16,8	12,0	II	2	K=H	1	—
	16,4	17,8	II	3	K=H	2	F.
	16,7	18,8	I	4	N	1	—
III ? 6.0, 6.4.	15,1	13,4	III b. 10742		K=H	1	—
	15,9	15,5	III	1	N	1	F.
	15,9	23,4	I	6	N	2	F.
	14,6	11,5	III	3	K=H	1	F.
	14,8	13,8	I	5	K=,5H	1	—
	13,3	8,4	I	5	K=H	1	—
	13,1	19,6	I	3 *	N	K=H	1 1 —
	13,2	20,2	I	3	N	1	—
	13,7	22,0	II	2	K=H	1	—
	13,2	24,1	I	5	N	2	—
?	12,5	6,0	II a 10752		K=H	1	neu.
	12,2	10,4	I	6	K=,2H	2	F.
	12,3	12,1	III b. 10763		K=H	1	F.
	12,4	15,2	III	2	K=H	1	—
	12,4	18,3	III	3	K=1,2H	2	F.
?	11,0	6,1	II a 10772		K=H	1	neu.
	11,3	6,7	III	2	K=H	1	—
	11,9	7,2	II ?	2	K=H.	2	—
	11,2	7,4	III	2	K=H	1	—
	11,2	18,9	III b. 10782		K=H	1	—
	11,5	19,1	II	2	K=H	1	—
	11,6	20,4	I	7	K=,2H	3	F.
	11,9	21,5	I ?	4	K=H	1	—
	11,4	23,0	I	4	K=H	1	—
	10,9	18,6	III	2	K=H	1	—

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	No.	R.A.	Dec.	Mag.		Br.				Mean	Cor. Br.
14 29+79.2	447	14 29.1	+79 9	6.8	–	6.7	1.8	8.5	7.3		6.3 ✓
13 26+79.4	422	13 25.8	+79 23	6.0	–	5.6	1.8	7.4	6.4		5.2 ✓
13 45+79.3	5 433	13 45.5	+79 15	6.5	2350 6.3 9 – 1	6.5	.7	7.2	6.2		6.1 ✓
14 9+70.1	778	14 9.4	+70 7	3.3	–	6.4		7.6	6.6		6.0 ✓
						6.9	1.2	8.1	7.1		6.5 ✓
13 50+79.7	431	13 50.6	+79 43	6.6	–	6.7		8.6	7.6		6.3 ✓
						7.0	1.9	8.9	7.9		6.6
13 11+69.2	694	13 11.7	+69 10	6.0	2250 6.1 7 – 3	5.7	1.1	6.8	5.8		5.3 ✓
14 38+80.3	448	14 37.8	+80 17	6.3	–	6.4		8.3	7.3		6.0 ✓
						6.7	1.9	8.8	7.8		6.5
14 7+70.3	774	14 6.7	+70 17	7.2	–	6.6	1.2	7.8	6.8		6.2 ✓
14 28+60.9	1547	14 27.8	+60 51	6.3	–	6.3	.8	7.1	6.1		5.9 ✓
13 31+70.9	747	31.2 13 ~~13.2~~	+70 51	7.0	.	~~6.7~~	1.2	7.9	6.9		6.3 ✓
13 39+60.9	1485	13 38.9	+60 53	6.5	.	6.8	.8	7.6	6.6		6.4 ✓
12 33+80.0	389	12 32.8	+80 1	6.7	–	6.4	1.9	8.3	7.3		6.0 ✓
13 23+60.7	1461	13 23.1	+60 43	5.3	2279 5.4 8 – 2	5.4	.8	6.2	5.2		5.0 ✓
15 48+80.4	487	15 47.8	+80 26	6.7	–	5.9	1.9	7.8	6.8		5.5 ✓
14 5+81.3	9 4 35	14 57.2	+81 20	6.8	–	5.9	2.1	8.0	7.0		5.5 ✓
						6.4	2.1	8.3	7.3		6.0 ✓
14 35+81.4	480	14 34.8	+81 27	6.7	–	6.7	~~.1~~	8.8	7.8		6.3
						6.5		8.6	7.6		6.1 ✓
13 53+81.5	432	13 53.3	+81 29	6.8	–	6.8	2.1	8.9	7.9		6.4
						5.9		7.9	6.9		5.5 ✓
13 11+81.3	416	13 11.2	+81 14	6.3	–	6.1	2.0	8.1	7.1		5.7
14 38+61.9	1451	14 38.4	+61 52	6.0	–	6.4	.8	7.2	6.2		6.0 ✓
						6.4		8.4	7.4		6.0 ✓
15 46+81.1	523	15 45.9	+81 4	7.3	–	6.8	2.0	8.8	7.8		6.4
15 37+80.9	480	15 37.8	+80 56	7.0	–	6.1	2.0	8.1	7.1		5.7 ✓
						6.7		8.7	7.7		6.3 ✓
15 39+81.3	517	15 38.9	+81 15	6.8	–	7.0	2.0	9.0	8.0		6.6
						6.1		7.4	6.4		5.7 ✓
13 33+71.9	659	13 33.7	+71 39	5.8	–	6.5	1.3	7.8	6.8		6.1
12 58+81.6	413	12 58.0	+81 39	7.0	–	6.7	2.1	8.8	7.8		6.3 ✓
12 40+81.4	402	12 40.8	+81 25	6.3	–	5.2	2.1	7.3	6.3		4.8 ✓
12 30+81.0	400	12 29.7	+81 3	6.8	–	6.3	2.0	8.3	7.3		5.9 ✓
	380	12 9.8	+80 56	8.4							
12 10+80.9	381	12 9.8	+80 56	8.3	–	6.1	2.0	8.0	7.0		5.6 ✓
						6.5		7.3	6.3		6.1 ✓
13 45+62.2	1318	13 45.0	+62 12	6.0	– ✓	6.8	.8	7.6	6.6		6.4

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May 23, 1887.

Plate 1351.

	T	H	Type	Lines	K.	Focus	lines.	
?	8.6	8.4	III	a 1079.2	K=H	1	pecu.	
	8.8	11.1	III	3	K=1.2H	2	∓	
	8.5	15.4	III	b 1080.2	K=H	2	—	
	8.1	18.5	III	1	N	1	—	
	8.6	20.3	III	2	K=H	1	—	
	8.4	21.9	III	2	K=H	1	—	
	7.4	7.8	II	2	K=H	1	—	
	7.5	9.1	II	a² 1081	3	K=H	1	∓pecu.
	7.2	16.3	I	I	I	K=H	1	—
	7.6	22.0	I	1	N	2	∓	
	6.6	6.1	I	3	N	1	—	
	6.6	18.2	I	9	N	4	∓	
	6.8	23.1	I	5	K=H	1	—	
?	5.4	8.2	III	b² 1082.2	K=1.2H	√	—	
	5.6	8.4	I?	4	K=H	1	—	
	5.8	10.1	I	3	N	1	—	
	5.5	15.0	I	11	?	√	∓	
	5.9	18.6	II	2	K=H	1	—	
	4.6	6.9	I	3	N	1	—	
	4.9	14.1	I	6	K=.5H	2	—	
	4.3	16.1	II	2	K=H	1	—	
III 5.8, 6.2, 7.0.	4.6	17.7	III	b 1083	2	N	1	∓
	4.1	19.8	I	5	N	2	—	
	3.8	10.3	III	2	K=H	1	—	
	3.2	19.6	I	6	K=.5H	1	—	
?	3.9	22.9	III	a² 1084	2	K=H	1	pecu.
	2.6	14.5	III	?	2	K=H	1	—
	2.8	10.1	I	5	K=.5H	1	—	
	1.9	17.7	I	3	N	1	—	
4 01	2.0	11.0	III	b² 1085	3	K=H	½	∓, pecu.

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1997phas.prOj...041F

	No.	R.A.	Dec.	Mag.		BN.				Mean 4	Corr. Bin.
15 42 +82.7	463	15 42.2	+82 44	7.5	–	6.1	2.2	8.3	7.3	5.7	
15 0 +83.1	431	15 0.5	+83 6	6.0	–	5.2	2.3	7.3	6.5	4.8	
13 46 +83.5	397	13 46.7	+83 29	6.5	–	5.8 / 6.1	2.4	8.2 / 8.3	7.2 / 7.3	5.4 / 5.7	
12 53 +83.3	369	12 52.8	+83 18	7.5	–	6.9 / 7.1	2.3	9.2 / 9.4	8.2 / 8.4	6.5 / 6.7	
13 22 +73.2	592	13 22.4	+73 9	6.0	–	6.5 / 7.1	1.3	7.8 / 8.4	6.8 / 7.4	6.1 / 6.7	
12 5 +82.5	356	12 4.4	+82 31	6.7	–	6.3 / 6.9	2.2	8.3 / 9.1	7.3 / 8.1	5.7 / 6.5	
14 50 +73.6	646	14 50.2	+73 38	8.0	–	6.8	1.4	8.2	7.2	6.4	
14 27 +63.9	1136	14 27.3	+63 50	6.2	–	6.5	.9	7.4	6.4	6.1	
13 28 +84.0	311	13 27.9	+84 3	7.5	–	6.4	2.5	8.9	7.9	6.0	
13 9 +73.5	587	13 9.4	+73 34	6.8	.	5.9	1.4	7.3	6.3	5.5	
16 30 +82.9	185	16 29.1	+82 38	8.0	.	6.6	2.3	8.9	7.9	6.2	
12 48 +84.2	289	12 48.0	+84 12	6.5							
	290	12 48.1	+84 12	5.5	2189 5.0 15 +5	4.0	2.5	6.3	5.3	3.6	
13 0 +73.8	583	13 0.3	+73 48	6.0	–	6.2 / 7.3	1.4	7.6	6.6	5.8 / 6.3	
14 51 +74.7	595	14 51.2	+74 45	2.1	–	4.2	1.4	5.6	4.6	3.8	
16 8 +84.0	351	16 7.0	+84 2	7.7	–	6.5	2.5	9.0	8.0	6.1	
15 36 +84.4	343	15 35.1	+84 22	8.3	.	6.7	2.5	9.2	8.2	6.3	
14 0 +65.0	978	14 0.4	+63 21	3.4		4.0	.9	4.9	3.9	3.9	
12 38 +84.5	286	12 37.2	+84 26	7.0	–	6.4	2.5	8.9	7.9	6.6	
16 40 +84.0	361	16 40.2	+84 0	7.2	.	6.3	2.5	8.8	7.8	5.9	
14 6 +75.3	529	14 5.8	+75 17	6.7	–	5.9	1.5	7.4	6.4	5.5	
13 21 +85.5	222	13 20.7	+85 31	7.0	–	6.5	2.8	9.3	8.3	6.1	
13 47 +65.4	963	13 47.2	+65 27	4.8	–	6.2 / 6.8	1.0	7.2 / 7.8	6.2 / 6.8	5.8 / 6.4	
13 36 +65.5	953	13 37.0	+65 34	6.0	2320 5.6 11 +1	5.7	1.0	6.7	5.7	5.3	
15 50 +85.3	263	15 50.2	+85 18	7.2	–	6.6 / 6.9	2.7	9.3 / 9.6	8.3 / 8.6	6.2 / 6.5	
13 37 +66.0	816	13 37.6	+66 1	7.5	–	6.5	1.0	7.5	6.5	6.1	
	935	13 22.2	+65 29	6.7	?						
13 22 +65.5	936	13 22.3	+65 27	6.7	?	6.5	1.0	7.5	6.5	6.1	
14 5 +86.4	201	14 5.1	+86 27	7.5	–	6.6	3.0	9.6	8.6	6.4	
16 6 +85.7	269	16 6.6	+85 43	7.5	–	6.0	2.8	8.8	7.8	5.6	
12 35 +86.5	182	12 34.7	+86 32	6.5	.	5.6	3.0	8.6	7.6	5.2	
14 28 +76.3	527	14 27.8	+76 21	5.0	–	6.0 / 6.2	1.6	7.6	6.6	5.8	

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Plate 1340.

	V	H	Type	No. Lines	K	Focus	Other Lines.
8. 40	21.1	14.2	II a?	10862	K=H	1	—
	21.4	15.6	I	5	K=H	1	F
	20.1	8.8	I	9	N	1	F
III ? 6.1, 6.5. ?	20.1	9.3	III b	10873	K=H	1	F, Light pecu.
	20.5	11.7	I	5	K=H	1	—
	20.4	11.9	III	2	K=H	1	—
	20.0	14.2	I	4	K=H	1	—
	19.4	6.1	I	1	N	2	—
1. 40 ?	20.0	21.5	II a	10883	K=1.5H	4	F, pecu.
	20.5	24.4	I	7	K=H	2	F.
	20.6	24.1	I	4	N	1	—
	17.6	9.7	II ?	2	K=H	1	—
	17.9	13.5	I	1	N	1	—
?	17.6	17.9	II a	1089 2	K=H	2	pecu.
	17.8	19.3	II ?	2	K=H	1	—
	16.9	6.4	III	3	K=H	1	F
∫ ∫	16.5	8.8	~~III ?~~ II	II 1/2 2	K=H K=H	1	— —
	16.7	9.1	~~II~~	2	K=H	1	—
	16.3	11.2	I	5	K=H	1	F
	16.2	11.5	I	1	K=H	1	—
∫ ∫	16.4	22.2	II ?	1089a II a 1 2	N K=H	1	— —
	15.8	9.8	III	2	K=H	1	—
	15.9	13.5	III b?	1090 3	K=2.0H	1	F, bright?
	15.9	17.3	I	7	?	3	F.
	14.8	9.3	III b	1091 3	K=H	2	F.
	14.2	12.7	II	2	K=H	1	—
∫ ∫	14.6	14.6	III	III ? 2 3	K=H K=H	1	— F
	14.4	19.2	I	7	K=.5H	2	F.
	14.5	23.4	I	9	N	1	F.

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	No.	R.A.	Dec.	Mag.			Bv.			
14 45+51.9	1957	14 44.8	+51 59	6.3	–		6.9	.5	7.4	6.2
14 38+61.9	1451	14 38.4	+61 52	6.0	–		6.6	.8	7.4	6.2
15 20+72.4	679	15 21.0	+72 20	2.8	2566	3.2	7.3	1.3	B	B
15 17+72.4	678	15 17.2	+72 20	5.5	–		6.4 / 6.8	1.3	7.7 / 8.1	6.3 / 6.9
14 55+62.7	1380	14 55.5	+62 15	6.8	–		6.9	.8	7.7	6.3
15 0+72.3	664	15 0.3	+72 19	6.3	–		6.8	1.3	8.1	6.9
14 45+72.6	652	14 45.2	+72 34	6.8	–		6.9	1.3	8.2	7.0
15 20+62.5	1410	15 19.9	+62 33	6.0	2564	5.7 10–2	5.9	.8	6.7	5.3
14 20+52.5	1804	14 20.3	+52 31	4.0	–		5.2	.5	5.7	4.3
14 11+52.0	1784	14 11.1	+52 2	4.5	–		5.6	.5	6.1	4.9
14 12+51.9	1908	14 12.2	+51 59	6.8	.		6.8	.5	7.3	6.1
15 5+63.6	1167	15 5.1	+63 40	6.7	–		7.0	.9	7.9	6.7
14 50+73.6	646	14 50.2	+73 38	8.0	.		6.6	1.4	8.0	6.8
14 27+63.8	1136	14 27.3	+63 50	6.2	–		6.2	.9	7.1	5.9
14 21+63.5	1131	14 21.2	+63 36	7.2	–		7.2	.9	8.1	6.9
15 20+63.9	1192	15 20.2	+63 32	6.0	–		6.9 / 7.2	.9	7.8 / 8.1	6.6 / 6.9
15 9+64.2	1032	15 9.2	+64 10	7.5	–	?	7.0 / 7.4	.9	7.9	6.7
	1033	15 9.3	+64 11	7.5	–					
15 22+73.9	672	15 22.8	+73 38	7.2	–		6.9	1.5	8.4	7.2
14 55+54.4	1724	14 55.3	+54 26	7.5	–	?	6.8	.6	7.4	6.2
	1725	14 55.3	+54 27	7.5	–					
15 6+74.4	602	15 6.0	+74 26	7.5	–		6.8	1.4	8.2	7.0
14 17+54.2	1668	14 17.1	+54 11	7.5	–		7.1	.6	7.7	6.3
15 18+74.5	609	15 18.7	+74 34	6.7	–		6.7 / 6.9	1.4	8.1 / 8.3	6.9 / 7.1
14 51+74.7	595	14 51.2	+74 45	2.1	–		1.3 / 4.0	1.4	B. / 3.4	B. / 4.2
14 34+54.6	1693	14 33.7	+54 39	5.8			5.6	.6	6.2	5.0
15 2+55.1	1730	15 2.2	+55 7	5.5	–		6.3 / 6.4	.6	6.9 / 7.0	5.7 / 5.8
14 58+75.5	547	14 58.0	+75 28	7.0	–		7.0	1.5	8.5	7.3
14 43+65.2	1012	14 43.3	+65 14	7.8	–		7.0 / 7.2	.9	7.9 / 8.1	6.7 / 6.9
14 6+75.3	529	14 5.8	+75 17	6.7	–		5.7	1.5	7.2	6.1
14 0+65.0	978	14 0.4	+65 4	3.4	2381	3.6 13+1	4.0	.9	4.9	3.7

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Plate 1340.

	λ	H	Type	Lines	K	Focus	Other lines.
∫	13.1	11.6	III.?	1 2	N	K=H	1 — —
∫	13.5	14.2	III.?	1 2	N	K=H	1 — —
	13.5	14.9	~~III~~ X	2	K=H	1	—
?	13.2	17.1	a 1092	2	K=H	1	pecu.
	13.1	18.8	III	1	N	1	—
∫	13.3	18.5	III.?	2 2	K=H	K=H	1 — —
	13.8	20.8	I	3	N	1	—
	13.6	22.8	I	5	?	2	F.
	12.2	10.9	I	6	K=1.2H	3	—
Peculiar spectrum ? III ? 5.9, 6.3.	12.5	11.1	III	1 3	N	K=H	1 1 — F
?	12.3	12.2	b.c.? 1093	2	N	2	F. bright pecu.
	12.6	13.3	I	3	N	1	—
	12.0	13.9	I	5	K=H	1	—
Peculiar spectrum ?	12.8	16.3	b.c.? 1094	3	K=H	3	F. bright pecu.
	12.6	23.0	I	4	N	1	—
	11.6	7.6	I ?	4	K=H	1	—
∫	11.9	11.5	I	3 4	N	K=H	1 1 — —
	11.7	18.6	III ?	2	K=H	1	—
	11.6	20.3	I ?	2	N	1	—
	11.9	21.0	I	4	K=H	1	—
	10.7	8.4	I	4	K=H	1	—
	10.9	22.6	I	3	N	1	—
	10.5	22.6	III	2	K=H	1	—
?	10.0	23.2	a 1095	2	K=H	1	pecu.
?	9.2	9.0	a 1096	2	K=1.2H	3	pecu.
Peculiar spectrum ?	9.1	9.0	b.c. 1097	2	K=H	2	bright pecu.
	9.2	12.0	III	2	K=H	1	—
	9.9	18.1	I	2	K=H	1	—

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	No.	R. A.	Dec.	Mag.	Br.			
14 58 + 66.0	882	14 37.6	+ 66 3	7.2 _	7.0 7.0		8.0	6.8
14 45 + 65.9	1015	14. 44.9	+ 65 50	7.5 _	7.3 7.3	1.0	8.3	7.1
14 42 + 65.9	1011	14 42.5	+ 65 58	8.5 _	7.2 7.2		8.2	7.0
14 30 + 66.0	835	14 30.5	+ 66 1	6.7 _	7.5 7.5	1.0	8.5	7.3
14 28 + 56.0	1746	14 28.0	+ 56 2	5.9 _	7.0		8.0	6.8
14 29 + 55.9	1695	14 29.3	+ 55 52	8.0 _	7.2	1.0	8.2	7.0
14 12 + 65.7	987	14 12.4	+ 65 31	7.2 .	6.7	1.0	7.7	6.3
14 14 + 55.7	1678	14 14.1	+ 55 33	6.5	7.0 7.4	.6	7.6 8.0	6.4 6.8
15 1 + 66.5	887	15 1.8	+ 66 29	5.8 _	7.1 7.3	.6	7.7 7.9	6.5 6.7
15 0 + 66.4	886	15 0.7	+ 66 21	7.5 _	7.0	1.0	8.0	6.8
14 55 + 66.5	878	14 55.3	+ 66 31	4.5 _	6.8 7.0		8.0	6.8
14 48 + 56.3	1767	14 48.3	+ 56 20	7.3 .	7.2	1.0	8.2	7.0
14 48 + 76.6	536	14 48.6	+ 76 40	7.5 _	6.0		7.0	5.8
14 28 + 76.4	527	14 27.8	+ 76 21	5.0 _	6.4	1.0	7.4	6.2
14 13 + 56.1	1725	14 13.6	+ 56 6	7.3 .	7.0	.6	7.6	6.4
15 9 + 56.6	1790	15 9.1	+ 56 36	7.3 _	6.6	1.6	8.2	7.0
15 9 + 76.5	551	15 9.1	+ 76 32	8.0 .	5.4 5.9	1.6	7.0 7.3	5.8 6.3
14 22 + 66.6	847	14 22.4	+ 66 38	6.8 _	6.8	.6	7.4	6.2
14 22 + 56.7	1737	14 22.3	+ 56 41	8.0	7.2	.6	7.8	6.6
13 48 + 76.3	502	13 48.0	+ 76 17	7.0 _	7.1	1.6	8.7	7.5
15 38 + 76.9	563	15 37.9	+ 76 35	7.5 _	7.1	1.0	8.1	6.9
13 32 + 76.5	492	13 31.9	+ 76 31	7.0 .	7.1	.7	7.8	6.6
13 30 + 76.8	491	13 30.5	+ 76 49	6.7 _	6.9	1.6	8.5	7.3
14 11 + 57.3	1498	14 11.3	+ 57 22	6.5 _ } ?	6.7	1.6	8.3	7.1
	1499	14 11.5	+ 57 22	6.5 _ }	6.8	1.6	8.4	7.2
15 13 + 67.9	876	15 13.0	+ 67 34	5.2 _	7.0	1.6	8.6	7.4
15 36 + 77.8	592	15 35.8	+ 77 51	5.0 _	6.5	.7	7.2	6.0
15 8 + 77.9	571	15 7.4	+ 77 55	7.8 _	5.5	1.1	6.6	5.4
14 30 + 57.2	1519	14 29.9	+ 57 42	6.3 _	6.0 6.6	1.7	7.7 8.3	6.3 7.1
					7.1	1.7	8.8	7.6
					6.5	.7	7.2	6.0

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Plate 1340.

		Type	Lines	K	Focus	Lines.	Other
9.6	18.5	I	4	K=H	1	—	
9.3	21.3	I	6	K=.5H	2	—	
9.6	22.1	III	1	N	1	—	
9.1	5.3	I	7	K=.5H?	2	F.	
8.0	7.9	I	9	?	5	F.	
8.5	9.8	I	6	K=.2H	2	—	
? 8.7	17.9	III	b.c. 1098 2	K=H	2	F.	Right prism.
8.2	19.1	I	4	N	1	—	
8.2	19.3	I	6	N	1	F.	
7.9	13.2	III	3	K=H	1	F.	
7.1	15.8	I	3	K=H	1	F.	
7.1	20.4	III	b. 1099 3	K=H	2	F.	
6.1	9.2	I	7	K=.2H	2	F.	
6.1	18.7	III	1	N	1	—	
6.8	19.0	I	1	N	1	—	
5.6	13.5	III	3	K=H	1	F.	
5.5	19.1	III	2	K=H	1	—	
5.6	21.5	III?	3	K=H	2	F.	
4.6	14.7	III	a IIa 1100 2	2	K=H K=H	1 1	Seem piece.
4.9	15.0	III	2	K=H	1	—	
III? 6.3 6.8	4.9	20.2	III	b. 1101 2	K=H	1	—
4.4	20.7	I	4	N	1	—	
3.6	9.2	I?	4	K=H	1	—	
3.0	10.2	I	2	K=H	1	—	
3.7	11.0	I	7	K=.2H	2	—	
3.6	18.3	I	6	K=.8H	2	—	
2.7	13.5	I	6	K=.2H	2	—	
2.5	15.2	III	2	K=H	1	—	

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	No.	R.A.	Dec.	Mag.		B-V.				
14 6 +77.7	529	14 5.4	+77	40	7.8	6.6	1.7	8.3	7.1	.
13 39 +77.5	519	13 39.3	+77	34	6.2	5.9	1.7	7.1	6.4	.
13 32 +77.3	516	13 32.8	+77	18	6.0	7.0 / 7.4	1.6	8.6 / 9.0	7.4 / 7.8	.
16 8 +77.2	616	16 8.5	+77	11	6.0	5.3	1.6	6.9	5.7	.
15 49 +78.2	527	15 49.3	+78	13	4.7	4.0	1.7	3.7	4.3	.
15 9 +68.3	823	15 9.2	+68	20	6.5	5.9	1.1	7.0	5.8	.
14 9 +78.2	478	14 9.3	+78	14	5.0	5.3 / 5.7	1.7	8.6	5.4	.
14 18 +68.5	781	14 18.3	+68	28	7.4	6.9	1.1	7.7	6.5	.
14 17 +68.5	777	14 17.1	+68	27	6.8	6.6	1.1	7.7	6.5	.
14 56 +78.7	501	14 56.6	+78	45	6.5	6.6 / 6.8	1.8	8.4 / 8.6	7.2 / 7.4	.
14 29 +79.2	447	14 29.1	+79	9	6.8	6.5	1.8	8.3	7.1	.
13 42 +78.8	466	13 42.1	+78	47	5.8	6.3 / 6.5	1.8	8.1 / 8.3	6.9 / 7.1	.
15 14 +69.5	789	15 13.8	+69	28	6.5	6.1	1.1	7.7	6.5	.
13 56 +79.4	435	13 56.5	+79	24	8.1	7.0 / 7.2	1.8	8.8 / 9.0	7.6 / 7.8	.
13 55 +79.1	433	13 55.4	+79	6	7.7	6.9	1.8	8.5	7.3	.
14 47 +59.9	1685	14 47.8	+59	53	5.7	6.7 / 7.1	.7	7.4 / 7.8	6.2 / 6.6	.
13 50 +79.7	431	13 50.6	+79	43	6.6	6.8 / 7.0	1.9	8.7 / 8.9	7.3 / 7.5	.
13 26 +79.4	422	13 25.8	+79	23	6.0	5.8 / 6.0	1.8	7.6 / 7.8	6.4 / 6.6	.
14 43 +60.3	1567	14 43.3	+60	19	6.8	7.0 7.6	.8	7.8	6.6	.
14 37 +80.3	448	14 37.8	+80	17	6.3	6.7 / 7.0	1.9	8.6 / 8.9	7.4 / 7.7	.
14 9 +70.1	778	14 9.4	+70	7	5.3	6.5 / 7.0	1.2	7.7 / 8.2	6.5 / 7.0	.
14 6 +70.3	774	14 6.7	+70	17	7.2	6.7	1.2	7.9	6.7	.
15 48 +80.4	487	15 47.8	+80	26	6.7	6.3	1.9	8.2	7.0	.
15 38 +80.9	480 / ~~481~~	15 / ~~15~~	37.8 + 80 / ~~38.0 + 80~~	56 / ~~56~~	7.0 / ~~8.3~~	6.0	2.0	8.0	6.8	.
14 58 +60.8	1582	14 58.1	+60	46	6.0	5.9	.8	6.7	5.5	.
14 28 +60.9	1547	14 27.8	+60	51	6.2	6.4	.8	7.2	6.0	.
14 57 +81.3	495	14 57.2	+81	20	6.8	6.0	2.1	8.1	6.9	.
14 35 +81.4	482	14 34.8	+81	27	6.7	~~6.6~~		8.7	~~7.3~~	.
						6.8	2.1	8.9	7.7	.

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May 26, 1887.

Plate 1266.

r	H	Type	No. Lines	K	Focus	Other Lines.
?	22,6	10,8	I	3	?	1 poor,
✓	20,9	14,0	II	2	K=H	K=H 1 — —
	20,6	15,6	I	3	N	1 —
	19,8	8,9	I	9	?	√ F
	19,9	9,4	III b.	11021	N	1 —
	20,0	12,0	II	2	K=H	1 —
?	19,6	14,3	II a	11032	K=H	1 poor.
?	19,7	21,4	II a	11042	K=1,√H	3 F? poor,
	20,1	24,3	I	8	K=H	2 F.?
	18,6	6,0	I	√	?	2 poor.
	17,6	13,6	I	4	N	1 —
	16,5	9,2	II	2	K=H	1 —
	16,9	9,7	II a?	11052	K=H	1 —
	16,0	11,0	I I	4	K=H	1 —
?	16,8	18,0	II a	11063	K=H	2 F, poor,
	15,5	9,9	III	2	K=H	1 —
	15,8	11,6	I	√	N	1 —
	15,6	13,6	III b.c.?	11073	K=2,1H	√ F, bright poor?
	15,7	17,2	I	6	N	2 —
	14,6	9,1	III	3	K=H	2 F
	14,1	19,3	I	7	K=2H	2 —
	13,9	12,8	III	2	K=H	1 —
	13,0	18,7	III	1	N	1 F
	13,1	20,8	I	3	N	1 —
	13,6	22,7	I	4	N	1 —
	13,8	23,4	I	9	N	√ F
	12,6	10,9	I I	4	K=H	1 —
	12,3	13,1	III	1	N	1 —

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Means 5 Jan.

	No.	R.A.	Dec.	Mag.			Br.					Br.
14 58 +60.8	1584	14 58.1	+60 46	6.0								
14 40 +61.7	1454	14 40.3	+61 43	6.3	_		7.3 7.1	.8	7.9	7.0	.	6.6
14 38 +61.9	1451	14 38.4	+61 32	6.0			7.0	.8	7.8	6.9	.	6.5
15 21 +72.3	679	15 21.0	+72 20	2.8			4.0	1.3	5.3	4.4	.	3.5
15 17 +72.3	678	15 17.2	+72 20	3.5	_		6.4 6.8	1.3	7.7 8.1	6.8 7.2	.	5.9 6.3
15 0 +72.3	664	15 0.3	+72 19	6.3	_		7.0	1.3	8.3	7.4	.	6.5
14 45 +72.6	652	14 45.2	+72 34	6.8	_		7.1	1.3	8.4	7.5	.	6.6
14 20 +52.5	1804	14 20.3	+52 31	4.0	_		5.4	.5	5.9	5.0	.	4.9
14 11 +52.0	1784	14 11.1	+52 2	4.3	_		5.7	.5	6.2	5.3	.	5.2
15 20 +62.5	1410	15 19.9	+62 33	6.0	2460 6.2	6-3	6.0	.8	6.8	5.9	.	5.5
14 50 +73.6	646	14 50.2	+73 38	8.0	.		7.0	1.4	8.4	7.3	.	6.5
15 22 +73.9	673	15 22.8	+73 38	7.2	_		7.1	1.4	8.5	7.6	.	6.6
15 5 +63.7	1167	15 5.1	+63 40	6.7	_		7.0	.9	7.9	7.0	.	6.5
14 55 +54.4	1724 1725	14 55.3 14 55.3	+54 26 +54 27	7.5 7.5	v		6.7	.6	7.3	6.4	.	6.2
14 27 +63.9	1136	14 27.3	+63 50	6.2	_		6.3	.9	7.2	6.3	.	5.8
15 18 +74.5	609	15 18.7	+74 34	6.7	_		6.8 7.0	1.4	8.2 8.4	7.3 7.5	.	6.3 6.5
15 6 +74.4	602	15 6.0	+74 26	7.5	.		6.8	1.4	8.2	7.3	.	6.3
14 51 +74.7	595	14 51.2	+74 45	2.1	_		4.3 4.1	1.4	B. 5.3	B. 4.6	.	3.6
14 34 +54.6	1693	14 33.7	+54 39	5.8	2447 5.6	7-2	5.7	.6	6.3	5.4	.	5.2
15 2 +55.1	1730	15 2.2	+55 7	3.5	_		6.2 6.4	.6	6.8 7.0	5.9 6.1	.	5.7 5.9
14 6 +75.3	529	14 5.8	+75 17	6.7	_		5.8	1.6	7.4	6.3	.	5.3
14 58 +75.5	547	14 58.0	+75 28	7.0	_		6.7 6.9	1.6	8.3 8.5	7.4 7.6	.	6.2 6.4
14 28 +56.0	1746	14 28.0	+56 3	3.9	_		6.9 7.3	.6	7.3 7.9	6.6 7.0	.	6.4 6.8
14 12 +65.5	987	14 12.4	+65 31	7.2	.		7.0	1.0	8.1	7.1	.	6.5
14 14 +55.5	1678	14 14.1	+55 33	6.3	.		6.4	.6	7.1	6.1	.	5.9
14 0 +65.0	978	14 0.4	+65 4	3.4	2381 3.6	15+6	4.2	.9	5.1	4.2	.	3.7
14 56 +56.2	1777	14 56.3	+56 12	7.0	_		7.1	.6	7.7	6.8	.	6.6
14 48 +56.4	1767	14 48.3	+56 20	7.2	_ √		7.0 7.4	.6	7.6 8.0	6.7 7.1	.	6.5 6.9

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May 26, 1887.

Plate 1260.

K	H	Type	No. Lines	K	Focus	Other lines.
12,7	14,7	I	4	K=H	1	—
12,5	16,4	III b.c.	11083	K=H	3	F, bright-pcem.
12,6	17,0	II a	11092	K=H	1	—
12,5	22,8	I	5	K=H	1	—
11,5	7,4	I	3	N	1	—
11,5	10,8	I	6	N	2	—
11,6	12,1	III b?	11102	N	2	F. bright-pcem.
11,7	14,0	I	5	K=,5H	1	—
11,3	20,2	I ?	3	N	1	—
11,7	21,1	I	4	K=H	1	—
10,4	8,5	I	3	N	1	—
10,8	12,6	III	1	N	1	—
10,7	22,7	I	4	K=H	1	—
10,3	22,7	III	2	K=H	1	—
9,5	8,5	a II a ?	1111	1 2	N	K=H 1 1 seen seen
9,6	18,0	a	11122	K=H	1	pcem.
9,4	18,6	I	3	N	1	—
9,1	21,4	I	7	K=H	2	—
9,4	22,2	III	3	K=H	1	F.
9,9	23,0	a	11133	K=H	1	pcem.
8,9	5,4	I	6?	K=,5H ?	2	F. ?
8,5	8,9	a	11142	K=1,5H	2	pcem.
8,8	9,1	III b?	11152	N	2	F. bright-pcem?
8,5	18,0	III b.c.	11163	K=H	3	F. bright-pcem.
7,8	8,0	I	9	N	5	F.
7,8	9,7	I	5	?	2	—
7,6	13,3	III	3	K=H	1	F.
7,5	19,0	I	3	N	1	—

Peculiar spectrum!

Peculiar spectrum. III? 6.0, 6.5.

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Mean 5

	No.	R.A.	Dec.	Mag.			Brt.				log Brt.
	1011	14	42.5	+65	58	8.5					
14 42+65.9	~~1011~~	~~14~~	~~43.0~~	~~+65~~	~~14~~	~~7.8~~	7.1	1.0	8.1	7.2	.6.6
14 28+76.4	527	14	27.8	+76	21	5.0	5.4 / 5.9	1.6	7.0 / 7.3	6.1 / 6.6	4.9 / 5.4
14 31+66.0	855	14	30.5	+66	1	6.7	6.9	1.0	7.9	7.0	.6.4
14 13+76.1	1725	14	13.0	+76	6	7.3	6.8	.6	7.4	6.5	.6.3
15 9+76.6	1790	15	9.1	+76	36	7.3	7.2	.6	7.8	6.9	.6.7
15 1+66.5	887	15	1.8	+~~29~~ 66	29	5.8	5.9	1.0	6.9	6.0	.5.4
14 55+66.5	878	14	55.3	+66	31	4.5	6.3 / 6.6	1.0	7.3 / 7.6	6.4 / 6.7	.5.8 / 6.1
14 48+76.6	536	14	48.6	+76	40	7.5	6.5	1.6	8.1	7.2	.6.0
14 22+76.7	1737	14	22.3	+76	41	8.0	7.0	.7	7.7	6.8	.6.5
13 48+76.3	502	13	48.0	+76	17	7.0	6.9	1.6	8.5	7.6	.6.4
15 38+76.9	563	15	37.9	+76	35	7.5	6.5	1.6	8.1	7.2	.6.0
15 1+77.1	565	15	1.0	+77	6	7.7	7.0 / 7.3	1.6	8.6 / 8.9	7.7 / 8.0	.6.5 / 6.8
13 32+76.5	492	13	31.9	+76	31	7.0	6.5	1.6	8.1	7.2	.6.0
13 30+76.8	491	13	30.3	+76	49	6.7	6.7 / 6.9	1.6	8.3 / 8.5	7.4 / 7.6	.6.2 / 6.4
15 6+77.6	1554	15	5.6	+77	40	7.3	6.9	.7	7.6	6.7	.6.4
14 30+77.7	1319	14	29.9	+77	42	6.3	6.9	.7	7.6	6.7	.6.4
14 6+77.7	529	14	5.4	+77	40	7.8	6.9	1.7	8.6	7.7	.6.4
13 39+77.5	519	13	39.3	+77	34	6.2	6.1	1.7	7.8	6.9	.5.6
13 33+77.3	516	13	32.8	+77	18	6.0	7.0 / 7.3	1.6	8.6 / 8.9	7.7 / 8.0	.6.5 / 6.8
14 11+77.3	1498 / 1499	14	11.3 / 11.5	+77	22	6.5 / 6.5	6.6	.7	7.3	6.4	.6.1
16 8+77.2	616	16	8.5	+77	11	6.0	5.5	1.6	7.1	6.2	.5.0
15 13+67.9	876	15	13.0	+67	54	5.2	5.7	1.1	6.8	5.9	.5.2
15 36+77.8	592	15	35.8	+77	51	5.0	6.9 / 6.6	1.7	7.6 / 8.3	6.7 / 7.4	.5.4 / 6.1
14 9+78.3	478	14	9.3	+78	14	5.0	5.9 / 6.4	1.7	7.6 / 8.1	6.7 / 7.2	.5.4 / 5.9
15 49+78.3	527	15	49.3	+78	13	4.7	7.3	1.7	B.	B.	
15 9+68.3	823	15	9.2	+68	20	6.5	6.3	1.1	7.4	6.5	.5.8
14 56+78.7	501	14	56.6	+78	45	6.5	6.5 / 6.7	1.8	8.3 / 8.5	7.4 / 7.6	.6.0 / 6.2
14 18+68.5	781	14	18.3	+68	28	7.4	7.0	1.1	8.1	7.2	.6.5

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Plate 1260.

	V	H	Type	No. Lines	K	Focus	Other Lines.
	7.6	19.3	I	6	N	1	—
?	6.8	15.9	II @ 1117	2	K=H	1	Rue.
	6.5	19.1	II ?	1	N	1	—
	6.9	20.5	III	2	K=H	1	—
	6.4	9.2	I	4	N	2	—
	5.5	13.4	III	2	N	1	F
	5.2	19.3	III	1	N	1	—
	5.3	21.6	III @ 1116	2	K=H	2	—
	4.6	15.1	III	2	K=H	1	—
III ? 6.6, 6.9.	4.1	20.3	III	1	N	1	F
?	3.5	9.4	II @ 1119	2	K=H	1	Rue
	4.0	10.7	II ?	2	K=H	1	—
	3.5	10.9	I	7	K=.2H	2	—
	3.4	18.3	I	6	K=.5H	2	—
	3.6	20.7	I	3	N	1	—
	2.8	10.4	II	2	K=H ?	2	—
	2.5	13.6	I	5	N	1	—

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Mean 5

	No.	R. A.	Dec.	Mag.	B-V				Corr. B-V
14 17 +68.5	777	14 17.1	+68 27	6.8 .	6.6	11	7.7	6.8 .	6.1
14 30 +79.1	447	14 29.1	+79 9	6.8 _	6.7	18	8.5	7.6 .	6.2
13 56 +79.1	433	13 55.4	+79 6	7.7 _	7.0	18	8.8	7.9 .	6.5
13 42 +78.8	466	13 42.1	+78 47	5.8 _	6.1 / 6.3	18	7.9 / 8.1	7.0 / 7.2 .	5.6 / 5.8
15 13 +69.5	789	15 13.8	+69 28	6.5 .	6.3	11	7.4	6.5 .	5.8
14 47 +79.9	1615	14 47.7	+79 53	5.7 _	6.8 / 7.1 / 6.9 / 7.1	7 / 19	7.3 / 7.8 / 8.8 / 9.0	6.6 / 6.9 / 7.9 / 8.1 .	6.3 / 6.6 / 6.4 / 6.6
13 51 +79.7	431	13 50.6	+79 43	6.6 _	5.6	12	6.8	5.9 .	5.1
13 25 +79.4	422	13 25.8	+79 23	6.0	6.9 / 7.3	19	8.8 / 9.2	7.9 / 8.3 .	6.4 / 6.8
~~14 9 +79.1~~	~~778~~	~~14 9.4~~	~~+79 7~~	~~5.3~~	6.6 / 7.0	19	8.5 / 8.9	7.6 / 8.0 .	6.1 / 6.5
14 37 +80.3	448	14 37.8	+80 17	6.3 _	6.4	19	8.3	7.4 .	5.9
~~14 9 +79.1~~	~~778~~	~~14 9.4~~	~~+79 7~~	~~5.3~~	6.7	19	8.6	7.7 .	6.2
~~13 37 +80.1~~	~~417~~	~~13 36.7~~	~~+80 6~~	~~7.3~~ _	6.2	8	7.1	6.1 .	5.7
15 47 +80.5	487	15 47.8	+80 26	6.7 _	6.5	8	7.3	6.4 .	6.0
15 35 +80.3	478	15 34.5	+80 16	7.8 _	6.8	12	8.1	7.1 .	6.3
14 52 +80.8	1582	14 52.1	+80 46	6.0 _	6.0	20	8.1	7.1 .	5.5
14 28 +80.9	1547	14 27.8	+80 31	6.2 _	~~5.9~~	~~14~~	~~8.1~~	~~7.1~~ .	
14 6 +79.3	774	14 6.7	+79 17	7.2 .					
~~15 37 +80.1~~	~~481~~	~~15 38.0~~	~~+80 36~~	~~8.3~~ ?					
15 37 +80.9	480	15 37.8	+80 36	7.0 ?					
14 57 +81.3	495	14 57.2	+81 20	6.8 .					

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May 27, 1887.

Plate 1328.

	V	H	Type	No. Lines	K	Forces	Other Lines.
2.45	22.0	7.8	I?	8	K=H	3	F.
	22.0	8.6	I	8	N	3	F.
	22.1	18.9	I	5	?	2	—
	22.0	20.2	III	3	K=H	1	F.
	21.2	7.6	I	5	K=H	1	—
	21.3	13.1	I	4	N	1	—
	21.6	18.6	I	4	K=H	1	—
?	21.9	21.1	II b.c.	1120.3	K=H	3	F. bright pairs.
	20.4	9.8	I	9	K=1.2H	3	F.
	20.9	17.1	III	2	K=H	1	—
III.? 5.7 6.1 7.0 ?	19.6	13.4	III b.?	1121 2	K=H	2	bright pairs.
	19.4	16.3	III	2	K=H	1	—
?	19.5	16.5	II a	1122 3	K=H	3	F. pairs.
?	18.0	5.8	II a	1123 3	K=H	2	F. pairs.
	18.1	6.8	I	6	N	3	—
	18.5	7.1	III	2	K=H	1	—
	18.7	12.1	I	11	?	V	F.
	18.6	17.2	I	7	K=1.2H	2	F.
	18.5	22.8	I	3	N	1	—
	17.9	6.9	I	4	K=H	1	—
	17.6	17.3	II b	1124 3	K=H	1	F.
?	17.8	22.1	II b.c.	1125 3	K=H	3	F. bright pairs.
?	16.8	5.4	II a	1126 3	K=3.0H?	3	F. pairs.
	16.3	7.1	I	5	N	2	—
?	16.6	9.4	II a	1127 3	K=H	1	F. pairs.
	16.9	10.9	I	3	N	1	—
N	16.6	12.1	II?	2	K=H	K=H 1	— —
?	16.6	15.0	II b.c.	1128 2	K=1.5H?	4	bright pairs

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	No.	R.A.	Dec.	Mag.		Bv.			
16 22 +76.1	396	16 21.8	+76 3	5.3	_	5.3	1.5	6.8	5.8
16 15 +76.2	394	16 15.0	+76 16	6.0	2739 5.5 12 +2	5.1	1.6	6.7	5.7
15 12 +66.4	887	15 1.8	+66 29	5.8		6.0	1.0	7.1	6.0
14 55 +66.5	878	14 55.3	+66 31	4.5	_	6.2 / 6.6	1.0	7.2 / 7.6	6.2 / 6.6
16 24 +76.5	600	16 24.5	+76 28	7.2	_	6.7	1.6	8.3	7.3
15 38 +76.9	563	15 37.9	+76 55	7.5	.	6.8	1.6	8.4	7.4
14 48 +76.6	536	14 48.6	+76 40	7.5	_	6.9	1.6	8.5	7.5
14 28 +76.4	527	14 28.8	+76 21	5.0	_	5.4 / 6.0	1.6	7.0 / 7.6	6.0 / 6.6
16 2 +77.2	616	16 8.5	+77 11	6.0	_	5.3	1.6	6.9	5.9
15 1 +77.1	565	15 1.0	+77 6	7.7	_	7.2 / 7.5	1.6	8.8 / 9.1	7.8 / 8.1
15 36 +77.8	592	15 35.8	+77 51	5.0	_	5.9 / 6.6	1.7	7.6 / 8.3	6.6 / 7.3
15 7 +77.9	571	15 7.4	+77 55	7.8	_	7.2 / 7.4	1.7	8.9 / 9.1	7.9 / 8.1
15 13 +67.9	876	15 13.0	+67 54	5.2	_	5.3	1.1	6.4	5.4
16 50 +77.8	634	16 49.6	+77 45	6.0	_	5.8	1.7	7.5	6.5
16 5 +68.2	864	16 6.0	+68 11	6.0	2717 5.4 7-3	5.0	1.1	6.1	5.1
16 37 +77.7	627	16 36.9	+77 43	6.5	_	6.9 / 7.1	1.7	8.6 / 8.8	7.6 / 7.8
15 49 +78.3	527	15 49.3	+78 13	4.7		13	1.7	B.	B.
15 9 +68.3	823	15 9.2	+68 20	6.5	_	5.7	1.1	6.8	5.8
14 5 +77.6	529	14 5.4	+77 40	7.8	.	7.0	1.7	8.7	7.7
16 42 +78.0	563	16 42.0	+78 2	6.8	_	7.0	1.7	8.7	7.7
14 56 +78.7	501	14 56.6	+78 45	6.5	_	6.7 / 6.9	1.8	8.3 / 8.7	7.5 / 7.7
14 9 +78.2	478	14 9.3	+78 14	5.0	_	5.7 / 6.0	1.7	7.4 / 7.7	6.4 / 6.7
15 59 +58.9	1608	15 59.2	+58 37	3.5	_	5.0	1.7	6.7	4.7
15 53 +59.3	1691	15 53.0	+59 20	6.6	.	6.5	1.7	7.2	6.2
15 53 +69.1	825	15 53.3	+69 8	6.8	_	6.7	1.1	7.8	6.8
15 44 +69.1	812	15 44.3	+69 7	7.0		6.7	1.1	7.8	6.8
15 38 +69.3	808	15 38.2	+69 17	8.0	_	7.8 7.1	1.1	8.2	7.2
15 22 +59.5	1654	15 21.7	+59 28	3.0	_	5.0 / 5.4	1.7	6.7 / 7.1	4.7 / 5.1

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	v	H	Type	Lines	K	Focus	Other Lines.
	16.4	16.3	I	5	N	2	—
?	16.5	19.8	IIa 1129	2	K=H	1	seen.
	15.5	7.1	IIIb 1130	3	K=H	1	F.
	15.0	7.5	III	2	K=H	1	—
	15.8	8.3	I	8	K=1.2H	4	F.
	15.3	10.6	I	5	K=.5H	1	—
III? 6.2-6.6	15.8	12.3	IIIb	1131	3	K=H	1 F.
?	15.5	22.8	IIa	1132	2	K=H	1 seen.
	15.0	23.5	III		3	K=H	1 F.
	15.6	24.2	IIIb	1133	2	K=H	2 —
	14.0	6.6	III		2	K=H	1 —
	14.0	8.2	IIa	1134	3	K=H	1 F
	14.0	12.5	I		5	?	1 —
	14.4	12.8	I		7	K=H	2 F?
	14.6	13.8	I		2	N	1 —
	14.9	16.8	I		4	N	1 —
	14.8	17.2	I		6	K=H	1 F.
✓ ✓	14.8	20.2	I	I	3 H	N K=H	1 1 — —
	14.3	22.8	IIIb	1135	3	K=1.2H	1 F.
	13.4	7.7	I		5	?	1 F.
✓ ✓	13.4	10.8	IIa? 1135-a IIa		2	K=H	K=H 1 — seen seen
	13.2	13.1	IIIb	1136	2	K=H	1 —
?	13.5	13.7	IIIb	1137	2	K=H	2 brightness?
✓ ✓	13.1	14.3	III	III	1 2	N	K=H 1 — —
✓ ✓	13.6	16.1	I I?	H	H	K=H	K=H 1 — —
	13.6	20.7	I		7	K=.2H	2 F.
✓ ✓	12.4	9.0	II	II	2	K=H	K=H 1 — —
3 2.5	12.6	10.5	III		2	K=H	1 —

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	No.	R.A.	Dec.	Mag.		B-V.			
15 14 +69.4	789	15 13.8	+69 28	6.3	.	6.0	1.1	7.1	6.1
14 29 +79.2	447	14 29.1	+79 9	6.8	_	6.5	1.8	8.3	7.3
16 46 +79.2	511	16 46.2	+79 11	6.3	_	6.7 / 7.0	1.8	8.3 / 8.8	7.3 / 7.8
16 44 +79.4	508	16 44.6	+79 30	7.8	_	6.9 / 7.1	1.8	8.7 / 8.9	7.7 / 7.9
16 34 +79.3	498	16 33.9	+79 16	5.5	_	4.9	1.8	6.7	5.7
15 47 +69.9	813	15 46.9	+69 35	7.1	_	6.8	1.2	8.0	7.0
15 37 +69.7	806	15 37.3	+69 45	6.0	_	6.5 / 7.0	1.2	7.7 / 8.2	6.7 / 7.2
13 55 +79.1	433	13 55.4	+79 6	7.7	_	6.7	1.8	8.5	7.5
14 47 +79.9	1615	14 47.7	+79 53	5.7	_	6.7 / 7.0	.7	7.4 / 7.7	6.4 / 6.7
13 42 +78.7	466	13 42.1	+78 47	5.8	_	5.8 / 6.0	1.8	7.6 / 7.8	6.6 / 6.8
16 56 +79.7	517	16 57.1	+79 44	6.8	_	6.8 / 7.2	1.9	8.7 / 9.1	7.7 / 8.1
16 41 +80.1	419	16 40.8	+80 5	7.0	_	6.2	1.9	8.1	7.1
15 52 +80.5	489	15 51.6	+80 34	8.0		6.7	2.0	8.7	7.7
15 48 +80.4	487	15 47.8	+80 26	6.7	_	6.0	1.9	7.9	6.9
15 35 +80.3	478	15 34.5	+80 16	7.8	.	7.1	1.9	9.1	8.0
14 59 +80.1	459	14 59.2	+80 7	8.2	.	7.0	1.9	8.9	7.9
15 8 +70.2	827	15 8.2	+70 13	7.2	_	6.5	1.2	7.7	6.7
15 0 +60.1	1586	15 0.8	+60 6	7.2	.	7.0 / 7.1	8	7.9	6.9
13 50 +79.7	431	13 50.6	+79 43	6.6	_	6.5 / 6.9	1.9	8.4 / 8.8	7.4 / 7.8
16 5 +70.6	863	16 5.4	+70 39	6.5		6.2	1.2	7.4	6.4
15 47 +70.9	846	15 47.1	+70 49	7.5	_	7.1 / 7.3	1.2	8.3 / 8.5	7.3 / 7.5
15 46 +81.1	523	15 43.9	+81 4	7.3	_	6.3 / 6.6	2.0	8.3 / 8.6	7.3 / 7.6
15 38 +80.9	480	15 37.8	+80 36	7.0	_	5.7	2.0	7.7	6.7
15 25 +61.1	1509	15 25.0	+61 11	6.2	_	6.9 / 7.2	.8	7.8 / 8.2	6.8 / 7.2
15 17 +60.9	1606	15 17.1	+60 54	7.4	_	6.9 / 7.0	8	7.8	6.8
14 58 +60.8	1582	14 58.1	+60 46	6.0	_	5.7	8	6.3	5.5
15 59 +71.3	762	15 59.1	+71 20	7.0	_	7.0 / 7.0	1.2	8.2	7.2
16 19 +81.1	342	16 19.4	+81 4	8.5	_	7.0 / 7.2	2.0	9.0 / 9.2	8.0 / 8.2

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				No.			Other
g.40 G.M.	V	H	Type	Lines	K	Focus	Lines.
N 10	12,6	11,6	I	5	K=H	1	—
	12,0	12,4	III	3 2	K=H K=H	1	F —
	12,5	12,5	III	2	K=H	1	—
	12,9	13,6	III	3	K=H	2	F
	12,3	14,4	III	3 3	K=H K=H	1	F F.
	12,6	16,7	I	6	K=.2H	2	—
	12,1	18,3	III b	11383	K=H	2	F
	12,7	18,5	II	2 2	K=H K=H	1	— —
	12,6	22,2	III	3	K=H	1	F
	11,4	6,9	III	3	K=H	1	F
	11,6	8,1	II	2 2	K=H K=H	1	— —
	11,8	10,5	III	2 2	K=H K=H	1	— —
	11,7	12,6	III	?1 3	N K=H	1	— F
	11,0	14,0	I	6	K=.5H	1	—
	11,9	15,6	II a	11392	3 K=H K=H	1	F Seen pecu.
	11,6	16,2	II	?1 2	N K=H	1	— —
III: 6.3 6.7	11,2	21,3	III	3	K=H	2	F.
	10,0	10,9	I	3	N	1	—
	10,3	13,9	III	1 2	N K=H	1	— —
	10,5	14,0	II	2	K=H	1	—
	10,8	15,0	I	14	K=.5H?	5	F
	10,4	15,4	I	7	K=.2H	3	F?
Pec.	10,8	15,6	III b.c	11402	K=H	3	Bright pecu.
	10,6	18,1	II	2	K=H	2	—
	10,6	21,1	I	4	K=.8H	1	—
?	9,5	8,4	II a?	11413	K=3.0H	5	F pecu.
	9,2	9,9	I	8	K=.2H	3	—
	9,9	10,6	I	I? 3 4	N K=H	1	— —

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	No.	R.A.	Dec.	Mag.	BN.			
16 6+81,2	538	16 6.0	+81 14	8.0	6.6	2.0	8.6	7.6
15 38+71,6	741	15 38.2	+71 37	7.2	6.9 / 7.2	1.3	8.2 / 8.5	7.2 / 7.5
15 55+81,4	531	15 54.7	+81 22	7.4	6.7 / 7.1	2.1	8.8 / 9.2	7.8 / 8.2
15 39+81,2	516	15 38.9	+81 15	6.8	6.3 / 6.6	2.0	8.3 / 8.6	7.3 / 7.6
15 30+81,5	510	15 29.6	+81 33	7.8	6.8 / 7.0	2.1	8.9 / 9.1	7.9 / 8.1
14 57+81,3	495	14 57.2	+81 20	6.8	5.7	2.1	7.8	6.8
14 35+81,4	482	14 34.8	+81 27	6.7	6.2 / 6.5	2.1	8.3 / 8.6	7.3 / 7.6
14 59+71,2	706	14 59,4	+71 11	6.8	7.0 7.1	1.2	8.3	7.3
13 50+80,6	422	13 50.3	+80 38	7.4	6.8 / 7.0	2.0	8.8 / 9.0	7.8 / 8.0
17 9+81,1	568	17 8.6	+81 4	7.3	6.3 / 6.6	2.0	8.3 / 8.6	7.3 / 7.6
16 4+71,5	764	16 4.9	+71 31	8.2	7.3 7.1	1.2	8.3	7.3
16 22+81,5	543	16 21.6	+81 30	8.2	7.0 / 7.2 7.1 / 7.4	2.1	9.2 / 9.5	8.2 / 8.5
15 55+81,7	530	15 54.3	+81 45	8.4	6.9 7.0 / 7.0 7.3	2.1	9.1 / 9.4	8.1 / 8.4
15 26+82,2	1415	15 26.0	+82 14	6.5	6.3	.8	7.1	6.1
15 17+71,7	722	15 17.2	+71 44	7.7	6.6 6.6	1.3	7.9	6.9
15 16+61,9	1495	15 16.4	+61 33	6.8	7.0 7.1	.8	7.9	6.9
13 53+81,5	452	13 53.3	+81 29	6.8	6.3 / 6.7	2.1	8.4 / 8.8	7.4 / 7.8
16 24+82,4	481	16 24.0	+82 26	8.5	6.4	2.2	8.6	7.6
15 26+62,6	1416	15 26.8	+62 36	6.1	6.9 / 7.2 7.0 / 7.4	.8	7.8 / 8.2	7.8 / 7.2
15 36+82,4	456	15 35.4	+82 23	8.2	6.7	2.2	8.9	7.9
15 21+72,4	679	15 21.0	+72 20	2.8	B.	1.3	B.	B.
15 20+62,6	1410	15 19.9	+62 33	6.0	6.6	.8	6.4	3.4
15 17+72,4	678	15 17.2	+72 20	5.5	5.9 / 6.4	1.3	7.2 / 7.7	6.6 / 6.7
15 0+72,3	664	15 0.3	+72 19	6.3	6.4	1.3	7.7	6.7
14 55+62,2	1380	14 55.3	+62 15	6.8	6.8	.8	7.6	6.6
17 0+82,3	498	17 1.0	+82 16	4.0	B.	2.2	B.	B.
15 44+63,0	1225	15 44.5	+63 3	5.8	4.8	.9	3.7	4.7
16 25+82,4	484	16 27.8	+82 26	8.7	7.0 7.0	2.2	9.2	8.2

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	T	H	Type	No. lines	K.	Focus	Other lines.	
∫	9.1	11.8	II	2	2K=H	K=H+1	1	— —
	9.6	12.5	I	5	K=H		1	—
?	9.9	13.6	II a 1142	H	K=H		2	perm.
	9.9	14.3	I	6	K=.2H		2	—
?	9.2	16.1	III b? 1143	2	K=1.2H		3	Bright perm.
	9.7	20.2	I	4	N		1	—
	9.8	20.3	I	5	K=H		1	—
? ∫	9.0	7.5	I	I H H N N			1 1	— —
√	8.9	10.8	I	6	K=.2H		1	—
	8.8	12.4	II	2	K=H		1	—
	8.5	12.8	I	5	K=.2H		2	F?
?	8.0	18.6	II a 1144	2	K=H		1	perm.
	7.4	7.0	I	3	N		1	—
	7.0	7.3	I	6	?		3	F?
	7.8	8.8	II a 1145	2	K=H		1	—
	7.6	11.9	III	2	K=H		1	—
	7.3	12.6	I	3	K=.5H		2	—
	7.5	14.8	II a 1146	2	K=H		1	—
	7.9	15.3	III	2	N		1	F
	7.9	19.3	I	5	K=H		1	—
?	7.6	20.1	III b.c 1147	2	K=1.2H		2	Bright perm.
	6.3	7.5	II	2	K=H		1	—
	6.8	10.9	I	7	K=.5H		2	—
∫ √	6.6	12.9	I I? I 4	H	K=H	K=H+1	1	— —
	6.1	13.5	III b 1148	2	K=H		1	—
	6.8	14.2	I	5	K=.5H		2	—
	6.4	15.3	III	2	K=H		1	—
	6.5	15.6	III	1	N		1	—

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16 12+82.9	475	16 12.1	+82	56	8.6	6.8 6.9	2.3	9.2	5.2
15 59+82.8	470	15 59.6	+82	48	8.2	6.8	2.3	9.1	5.1
15 42+82.7	463	15 42.2	+82	44	7.3	5.8	2.2	8.0	7.0
15 25+82.8	1414	15 25.1	+82	46	6.7	6.2	.8	7.0	6.0
15 1+83.1	431	15 0.4	+83	6	6.0	4.7 4.8	2.3	7.0 7.1	6.0 6.1
14 0+82.3	407	14 0.3	+82	19	8.2	7.0	2.2	9.2	8.2
14 45+72.5	652	14 45.2	+72	34	6.8	6.8	1.3	8.1	7.1
16 12+72.8	718	16 12.4	+72	46	7.0	6.9 7.0	1.3	8.3	7.3
16 29+82.9	485	16 29.1	+82	38	8.0	6.3	2.3	8.6	7.6
16 6+83.2	457	16 4.9	+83	13	8.3	6.8	2.3	9.1	8.1
15 59+83.4	453	15 58.8	+83	23	7.3	6.1	2.3	8.4	7.4
15 5+63.7	1167	15 5.1	+63	40	6.7	6.8	.9	7.7	6.7
17 36+82.9	521	17 35.8	+82	51	8.5	6.8	2.3	9.1	8.1
16 17+73.7	713	16 17.0	+73	46	6.2	5.4	1.4	6.8	5.8
16 7+73.5	707	16 6.1	+73	32	6.7	6.5	1.4	7.9	6.9
16 19+83.8	468	16 18.1	+83	47	8.2	6.5 6.6	2.4	8.9 9.0	7.9 8.0
16 8+84.0	351	16 7.0	+84	2	7.7	6.0	2.5	9.5	7.5
15 23+73.9	672	15 22.8	+73	38	7.2	6.8	1.4	8.2	7.2
15 20+63.9	1192	15 20.2	+63	32	6.0	6.9 7.0	.9	7.8 7.9	6.8 6.9
14 56+73.6	646	14 56.2	+73	38	8.0	6.7	1.4	8.1	7.1
13 46+83.5	397	13 46.7	+83	29	6.5	5.4 5.8	2.4	7.8 8.2	6.8 7.2
17 39+83.4	512	17 39.6	+83	26	7.5	6.5	2.4	8.9	7.9
16 40+84.0	361	16 40.2	+84	0	7.2	5.5	2.5	8.0	7.0
15 32+64.4	1077	15 31.8	+64	23	8.0	7.0	.9	7.9	6.9
15 29+64.7	1074	15 28.9	+64	40	5.8	6.2 6.5	.9	7.1 7.4	6.1 6.4
15 36+84.4	345	15 35.1	+84	22	8.3	6.2	2.5	8.7	7.7
15 18+74.6	609	15 18.7	+74	32	6.7	6.4 6.8	1.4	7.8 8.2	6.8 7.2
15 7+84.5	335	15 6.8	+84	31	7.5	6.6 7.1	2.5	9.1 9.6	8.1 8.6

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T	H	Type	No. Lines	K	Focus	Other Lines.
6,5	17,0	I	4	K=H	1	—
6,0	18,9	III b? 1149	2	K=3,0 H?	5	Bright pair?
6,0	20,6	II	2	K=H	1	—
6,1	23,0	III	2	K=H	1	—
5,6	8,0	I	4	K=H	1	—
5,1	11,6	I	3	N	1	—
5,4	12,9	II	2	K=H	1	—
4,0	7,1	I	5	K=.5H	1	—
4,1	9,0	III	2	K=H	1	—
4,8	9,4	I	4	N	1	—
4,2	9,9	I	4	N	1	—
4,0	13,2	I	8	K=.5H	2	F.
4,1	15,1	III	2	K=H	1	—
4,4	17,9	III	2	K=H	1	—
4,8	20,2	II a 1150	2	K=H	1	—
4,7	22,1	I	7	N	5	F.
3,1	7,6	I?	3	N	1	—
3,9	12,6	I	4	N	1	—
3,4	15,1	II a 1151	2	K=H	1	—
? 3,3	19,4	II a 1152	2	K=H	1	prem.
3,9	22,2	II	2	K=H	1	—
2,6	6,9	II	2	K=H	1	—
2,4	7,7	I	7	K=H	3	F.
2,4	8,6	I	4	N	3	—
2,5	15,6	III b 1153	2	K=H	1	—
2,3	17,2	I c 1154	6	K=H	1	F.
2,7	21,2	III	3	K=H	2	F.
2,6	18,5	II a 1155	2	K=H	1	—
2,4	20,3	III b 1156	1	N	1	—
2,5	19,0	I	6	K=.5K	2	—

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	No.	R.A.	Dec.	Mag.		Br.			
15 6+74.4	602	15 6.0	+ 74 26	7.5	–	6.5	1.4	7.9	6.9
14 51+74.7	595	14 51.2	+ 74 45	2.1	–	13		B.	B.
13 27+84.0	311	13 27.9	+ 84 3	7.5	–	4.0	1.4	5.4	4.4
12 53+83.3	369	12 52.8	+ 83 18	7.5	–	6.4	2.5	8.9	7.9
17 39+83.8	511	17 38.6	+ 83 49	8.3	–	6.5		8.8	7.8
16 39+84.9	360	16 38.2	+ 84 52	8.3	.	6.8	2.3	9.1	8.1
16 9+84.9	353	16 7.8	+ 84 60	8.4	–	6.6	2.4	9.0	8.0
15 59+65.3	1095	15 59.6	+ 65 20	6.5	–	6.7	2.6	9.3	8.3
17 38+84.7	383	17 37.0	+ 84 44	7.7	–	6.6	2.6	9.2	8.2
15 48+65.2	1481	15 48.6	+ 65 14	6.8	.	6.7	.9	7.6	6.6
17 21+84.9	378	17 21.1	+ 84 37	8.2	.	6.4		9.0	8.0
16 5+85.7	269	16 6.6	+ 85 23	7.5	–	6.7	2.6	9.3	8.3
15 18+85.6	249	15 16.6	+ 85 41	8.0	–	6.0	2.6	8.6	7.6
14 58+75.5	547	14 58.0	+ 75 28	7.0	–	5.3	2.8	8.1	7.1
13 22+84.6	307	13 21.9	+ 84 40	8.0	–	6.5		9.3	8.3
12 48+84.2	289	12 48.0	+ 84 12	6.5		6.8	2.8	9.6	8.6
	290	12 48.1	+ 84 12	5.5	2189 5.0	6.7		8.2	7.2
18 17+85.6	294	18 18.1	+ 85 40	7.5		7.0	1.5	8.5	7.5
15 33+65.8	1062	15 33.5	+ 65 45	6.8	.	6.3	2.6	8.9	7.9
15 18+86.0	221	15 14.6	+ 86 4	8.1	–	6.9	1.0	7.9	6.9
13 21+85.5	322	13 20.7	+ 85 31	7.0	–	6.5	2.9	9.4	8.4
12 38+84.5	286	12 37.2	+ 84 26	7.0	–	6.3	2.8	9.1	8.1
18 32+84.5	412	18 32.8	+ 84 35	7.5	–	6.5	2.5	9.0	8.0
16 22+76.1	596	16 21.8	+ 76 3	3.3	–	6.4	2.6	9.0	8.0
16 15+76.2	594	16 15.0	+ 76 16	6.0	2739 5.5				
14 58+86.5	217	14 58.5	+ 86 33	6.8	–				
14 4+86.4	201	14 5.1	+ 86 27	7.5	–				
14 28+76.4	527	14 27.8	+ 76 21	5.0	–				
13 36+86.0	193	13 35.7	+ 86 1	7.5	–				
14 55+86.5	878	14 55.3	+ 86 31	4.5	–				
15 1+85.4	887	15 1.8	+ 86 29	5.8	–				

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		T	H	Type	No. Lines	K	Other Focus Lines	
N	20	22,4	7,6	I	6	K=.2H	2	—
	?	21,3	9,8	III b? 1157	3	K=2.5H?	5	F. bright? F. seen.
✓	✓	20.2	10,1	I	3	N	1	—
		19,8	8,8	I	4	N	1	—
		19,0	18,4	I	6	K=.2H?	3	F?
	✓	19.8	20.6	I	9	N	5	F
III?	8.9, 6.8.	19.7	21.1	III b? 1158	2	K=H	2	—
		19,4	21,3	I	6	N	3	—
		20,0	22,8	I	4	N	1	—
✓	✓	19,0	22,8	I	6	K=H	2	—
		19,6	23,5	II	2	K=H	1	—
		19,1	24,1	I	5	N	2	—
	?	18,4	5,3	III b? 1159	3	N	2	seen.
		18,4	7.9	III ?	2	K=H	1	—
		18,6	9,8	III	2	K=H	1	—
		18,5	18,7	I	5	N	1	F
		18,9	23,7	I	4	K=H	1	—
		17,2	6,4	I d?	6	K=H	2	—
		18,0	11,5	III a 1160	2	K=H	1	—
		17,5	12,4	I	7	K=.2H	3	—
		17,6	13,2	I	5	K=H	1	—
		17,8	13,9	III a 1161	3	K=H	1	F
		16,0	8,6	I	5	K=.5H	1	—
	?	16,5	19,8	III a? 1162	2	K=H	1	seen.
		16,0	23,2	III	2	K=H	1	—
		16,6	23,5	III	1	N	1	F
		15,1	16,6	I	8	K=.8H	3	F
		15,8	20,2	III	2	K=H	1	—

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	No.	R.A.	Dec.	Mag.		B-V.			Mean	Cor. Bru.
16 31 +61.1	1598	16 30.4	+61	8	6.0					
						6.2	.8	7.0	6.4	6.1
16 22 +61.9	1598	16 22.1	+61	49	2.5					
						B	B.	B.		
						4.0	.8	4.8	4.2	3.9
16 17 +52.4	1960	16 17.7	+52	23	6.8					
						~~6.7~~ 6.6	.5	7.1	6.3	6.5
16 21 +52.6	1964	16 20.8	+52	37	6.5					
						6.6	.5	7.1	6.3	6.5
15 44 +63.0	1225	15 44.5	+63	3	3.8					
						4.9	.9	5.8	5.2	4.8
15 21 +72.3	679	15 21.0	+72	20	2.8	2566	3.2			
						B	1.3	B.	B.	
15 17 +72.3	678	15 17.2	+72	20	3.5					
						6.0		7.3	6.7	5.9
						6.6	1.3	7.9	7.3	6.5
15 39 +52.8	1898	15 38.9	+52	50	3.0	2630	5.6	5-1		
						5.6	.5	6.1	5.5	5.5
15 26 +62.2	1415	15 26.0	+62	14	6.5					
						6.6	.8	7.4	6.8	6.5
15 25.8 +62.8	1414	15 25.1	+62	46	6.7					
	~~670~~	~~15 5.6~~	~~+72~~	~~26~~	~~7.0~~					
						~~6.8~~ 6.4	1.3	7.7	7.1	6.3
15 32 +52.5	1886	15 32.0	+52	32	6.0					
						6.9	.5	7.4	6.8	6.8
15 20 +62.5	1410	15 19.9	+62	33	6.0	2564	5.7	9+3		
						5.8	.8	6.6	6.0	5.7
	1873	16 32.6	+53	11	3.3					
16 33 +53.2	1876	16 32.8	+53	13	3.0	?				
						5.2	.6	5.8	5.2	5.1
16 31 +63.1	1281	16 31.2	+63	8	6.8					
						7.1	.9	8.0	7.4	7.0
16 33 +72.9	734	16 33.8	+72	35	6.3					
						6.9		8.2	7.6	6.5
						7.2	1.3	8.3	7.9	7.1
15 47 +53.3	1816	15 47.4	+53	21	6.3					
						6.5	.6	7.1	6.5	6.4
15 0 +72.4	664	15 0.3	+72	19	6.3					
						6.8	1.3	8.1	7.5	6.7
16 59 +73.4	731	16 59.2	+73	19	6.0					
						6.0	1.4	7.4	6.8	5.9
16 12 +53.6	1856	16 12.3	+53	36	7.0					
						7.0	.6	7.6	7.0	6.9
16 17 +73.7	713	16 17.0	+73	46	6.2					
						5.3	1.4	6.7	6.1	5.2
16 8 +63.8	1253	16 7.7	+63	47	6.3					
						6.6	.9	7.5	6.9	6.5
16 6 +73.5	707	16 6.1	+73	32	6.7					
						6.6	1.4	8.0	7.4	6.5
16 46 +74.1	680	16 45.2	+74	10	6.5					
						6.2	1.4	7.6	7.0	6.1
15 22 +73.9	672	15 22.8	+73	58	7.2					
						7.0	1.4	8.4	7.8	6.9
						6.9		7.3	6.9	6.5
15 31 +74.4	1756	15 31.4	+54	25	6.0					
						7.1	.6	7.7	7.1	7.0
15 20 +63.9	1192	15 20.2	+63	52	6.0					
						6.5		7.4	6.8	6.4
						7.0	.9	7.9	7.3	6.9
15 54 +55.1	1793	15 54.4	+55	10	5.1					
						5.2	.7	5.9	5.3	5.1
15 18 +74.5	609	15 18.7	+74	34	6.7					
						6.8		8.2	7.6	6.7
						7.0	1.4	8.4	7.8	6.9

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	T	H	Type	No. Lines	K	Focus	Other Lines
	15,5	21,4	III	3	K=H	1	F,
	15,1	21,9	I	3	N	1	—
III? 5.7, 6.1.	14,9	6,5	III l.c. 1163	2	K=H	2	F? Brightens,
	14,9	6,8	II a 1164	2	K=H	1	—
	14,9	7,2	II	1	N	1	—
	14,0	9,1	I	6	N	3	—
	14,5	15,0	I	4	K=.5H	1	—
	14,6	17,2	I	5	K=.5H	1	—
	14,9	22,4	III	3	K=H	1	F
	14,6	22,9	I	5	N	2	—
	14,2	23,6	III l.c.? 1165	2	K=3,0H?	5	F,?
	13,0	6,7	~~II~~ III	3	K=H	1	F
	13,8	12,8	III	2	K=H	1	—
	13,0	15,0	III III	2 2	K=H K=H	1 1	— —
	13,7	16,5	III III	1 3	N K=H	1 1	— F
	13,6	19,4	I	3	K=.2H	2	F,?
	13,3	19,7	III III	1 2	N K=H	1 1	— —
	13,3	20,3	I	4	N	1	—
	12,9	6,6	I	7	K=H	2	F
	12,9	7,7	I	5	N	1	—
	12,9	8,1	II	2	K=H	1	—
?	12,8	12,2	II a 1166	6	K=H	4	F, reins.
	12,5	13,0	I	9	N	4	F
	12,9	13,3	III b III 1167	2 2	K=H K=H	1 1	—
	12,8	18,0	III b 1168	2	K=1,2H	1	—
	12,1	21,8	I	4	N	1	—
	12,9	22,4	III	2	K=H	1	—
	11,9	11,9	I	4	K=.5K	1	—

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	No	R.A.	Dec.	Mag.		B-V			Mean	Corr. B-V
15 28 +64.7	1074	15 28.9	+64 40	5.8	_	6.4	7.3	6.7		6.3
						6.6	7.5	6.9	6.9	6.5
15 1 +74.4	602	15 5.0	+74 26	7.5	.	6.7	1.4	8.1	7.3	6.6
16 40 +64.9	1145	16 39.9	+64 51	5.2	_	5.8	6.7	6.1		5.7
						6.4	7.3	6.7	6.7	6.3
15 0 +74.5	695	17 0.0	+74 31	7.2	_	6.7	1.4	8.1	7.5	6.6
16 57 +74.5	690	16 57.4	+74 31	7.7	_	7.1	1.4	8.5	7.9	7.0
16 21 +55.5	1845	16 21.3	+55 33	5.7		5.5	.6	6.1	5.5	5.4
15 59 +65.3	1095	15 59.6	+65 20	6.5	_	6.5	9	7.4	6.8	6.4
15 48 +65.2	1081	15 48.6	+65 14	6.8	_	6.6	9	7.5	6.9	6.5
15 34 +54.9	1758	15 33.8	+54 60	6.0	_	6.6	6	7.2	6.6	6.5
						6.9	.6	7.5	6.9	6.8
15 32 +55.1	1766	15 32.2	+55 6	6.0	2608 5.8 4-2)	5.6	.6	6.2	5.6	5.5
14 51 +74.7	595	14 51.2	+74 45	2.1	_	B.		B.	B.	
						B.	1.4	B.	B.	
17 5 +75.5	613	17 5.0	+75 25	6.5	_	6.5	1.5	8.0	7.4	6.4
16 16 +75.5	586	16 16.2	+75 34	6.8	_	6.6		8.1	7.3	6.5
						7.0	1.5	8.3	7.9	6.9
15 59 +75.9	579	15 58.6	+75 60	6.3	_	6.7		8.2	7.6	6.6
						6.8	1.5	8.3	7.7	6.7
15 52 +65.7	1087	15 52.1	+65 42	6.3	_	6.9		7.9	7.3	6.8
						7.1	1.0	8.1	7.3	7.0
15 44 +55.8	1779	15 44.1	+55 49	6.0	_	5.7	.6	6.3	5.7	5.6
15 43 +55.9	1777	15 43.1	+55 35	6.5	_	7.0		7.6	7.0	6.9
						7.2	.6	7.8	7.2	7.1
15 33 +65.8	1062	15 33.5	+65 45	6.8	.	6.9	1.0	7.9	7.3	6.8
~~17 6 +75.5~~	~~613~~	~~17 5.0~~	~~+75 25~~	~~6.5~~						
17 6 +75.5	613	17 6.3	+75 30	5.8	_	5.6	1.5	7.1	6.3	5.5
16 58 +75.6	608	16 57.5	+75 38	6.8	.	6.1	1.5	7.6	7.0	6.6
16 54 +75.6	605	16 54.1	+75 36	7.0	_	7.0	1.5	8.5	7.9	6.9
16 22 +76.1	596	16 21.8	+76 5	5.3	_	4.4	1.5	5.9	5.3	4.3
16 15 +76.3	594	16 15.0	+76 16	6.0	2739 5.5 6 0	4.5	1.6	6.1	5.5	4.4
						6.9		7.6	7.0	6.9
16 6 +76.2	1867	16 6.2	+76 13	6.7	_	7.0	.6	7.8	7.2	7.1
						6.5		7.1	6.5	6.4
15 48 +76.2	1838	15 48.9	+76 16	6.4	_	6.8	.6	7.4		6.7
15 35 +76.3	1820	15 35.1	+76 28	7.5	.	6.7	.6	7.3	6.7	6.6
14 58 +75.5	547	14 58.0	+75 28	7.0	_	6.9		8.4	7.8	6.8
						7.1	1.5	8.6	7.0	7.0
16 24 +76.5	600	16 24.5	+76 28	7.2	_	6.2	1.6	7.8	7.2	6.1
	~~594~~	~~16 15.0~~	~~+76 16~~	~~6.0~~						

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	γ	H	Type	No. Lines	K	No. Spectra	Other Lines.
	11.0	17.2	I	4	N	1	—
	10.0	8.2	I		K=H	1	—
↓	10.2	12.6	III b 11693	3	K=H K=H	1	F, F fem
	10.7	13.8	I	9	K=1.2H	3	F
	10.4	22.8	I	6	K=H	1	F
?	9.0	9.5	II a 11704	4	K=H	3	F, perm.
	9.2	10.8	III	3	K=H	1	F
	9.0	13.8	I	7	N	3	—
↓	9.2	14.9	II? II? 2	2	K=H K=H	1	— —
III? 5.3, 5.6. ↓	? 9.3	17.2	III b, c 11713		K=H	2	F, Bright, perm.
	8.5	8.2	I	5	N	2	—
	8.6	10.4	II	2	K=H	1	—
	8.7	10.6	I	4	K=H	1	—
	8.9	13.4	I	6	K=2H?	2	—
	8.7	15.8	I	11	?	√	F
	8.6	20.1	II	2	K=H	1	—
?	8.7	23.6	II a 11723		K=2.0H?	2	F, perm.
	7.0	9.8	I	9	N	4	F
?	7.7	15.2	II a 11735		K=H	4	F, Bright, perm.
	7.0	16.0	II	2	K=H	1	—
	7.0	17.6	I	4	K=H	1	—
	6.4	10.4	III b 11742		K=H	1	—
	6.4	11.0	III	2	K=H	2	—
	6.4	11.6	I	9	K=√H	3	F
	6.8	16.7	I	6	N	2	F
	6.7	20.8	III	3	K=H	1	F
	7.6	24.1	I	√	K=H?	1	—
	5.7	6.4	I	3	N	1	—

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	No.	R.A.	Dec.	Mag.			BN.					Corr. Bn.
15 38 +76.9	563	15 37.9	+76 55	7.5	.		6.5	1.6	8.1	7.5	.	6.4
16 59 +77.1	539	16 58.7	+77 4	7.2	_		6.5	1.6	8.1	7.5	.	6.4
16 12 +67.5	930	16 11.9	+67 31	6.3	_		6.6 6.5 / 6.8 6.8	1.0	7.5 / 7.8	6.9 / 7.2	.	6.4 / 6.7
16 8 +77.2	615	16 8.3	+77 11	6.0	_		4.8	1.6	6.4	5.8	.	4.7
14 48 +76.6	536	14 48.6	+76 40	7.5	_		6.5	1.6	8.1	7.5	.	6.4
16 50 +77.7	634	16 49.6	+77 45	6.0	_		5.6	1.7	7.3	6.7	.	5.5
16 37 +77.7	627	16 36.9	+77 43	6.5	_		6.4 / 6.7	1.7	8.1 / 8.4	7.5 / 7.8	.	6.3 / 6.6
16 6 +68.2	864	16 6.0	+68 11	6.0	2717 5.4 5-1		4.8	1.1	5.9	5.3	.	4.7
15 59 +68.0	858	15 59.8	+68 2	7.7	_		6.7 7.0 / 5.8	1.1	8.1 / 7.3	7.5 / 6.9	.	6.9 / 5.7
15 36 +77.8	592	15 35.8	+77 51	5.0	_		6.5	1.7	8.2	7.6	.	6.4
17 3 +77.8	641	17 3.1	+77 32	6.5	.		5.8	1.7	7.5	6.9	.	5.7
16 42 +78.0	561	16 42.0	+78 2	6.8	_		6.4	1.7	8.1	7.5	.	6.3
16 40 +77.9	628	16 39.9	+77 58	7.8	_		6.5	1.7	8.2	7.6	.	6.4
16 6 +58.3	1622	16 6.2	+58 19	6.7	_		5.9	.7	6.6	6.0	.	5.8
15 49 +78.2	527	15 49.3	+78 13	4.7			B	1.7	B.	B	.	
15 7 +77.9	571	15 7.4	+77 55	7.8	_		7.0	1.7	8.7	8.1	.	6.9
15 13 +67.9	876	15 13.0	+67 34	5.2	_		5.2	1.1	6.3	5.7	.	5.1
16 28 +69.0	850	16 28.3	+69 5	5.2	2781 5.0 6 0		4.5	1.1	5.6	5.0	.	4.4
15 59 +58.9	1608	15 59.2	+58 57	5.5	_		4.5	.7	5.2	4.6	.	4.4
15 53 +69.1	825	15 53.3	+69 8	6.8	_		6.6	1.1	7.7	7.1	.	6.5
15 44 +69.1	812	15 44.3	+69 7	7.0	_		6.7	1.1	7.8	7.2	.	6.6
16 46 +79.2	511	16 46.2	+79 11	6.3	_		6.4 / 6.8	1.8	8.2 / 8.6	7.6 / 8.0	.	6.3 / 6.7
16 22 +69.5	843	16 22.2	+69 27	5.5	_		6.3 / 6.5	1.1	7.4 / 7.6	6.8 / 7.0	.	6.2 / 6.4
16 34 +79.3	498	16 33.9	+79 16	5.5	_		4.5	1.8	6.3	5.7	.	4.4
15 53 +59.3	1691	15 53.0	+59 20	6.6	.		6.2	.7	6.9	6.3	.	6.1
14 56 +78.7	501	14 56.6	+78 45	6.5	_		6.5 / 6.8	1.8	8.3 / 8.6	7.7 / 8.0	.	6.4 / 6.7
15 9 +68.3	823	15 9.2	+68 20	6.5	_		5.8	1.1	6.9	6.3	.	5.7
16 48 +69.3	872	16 48.1	+69 19	7.5	.		6.8	1.1	7.9	7.3	.	6.7

Mean

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May 30, 1887.

Plate 1343.

	T	H	Type	No. lines	K	Focus	Other lines.	
∫	5,8	8,1	~~I~~ II? II?	2 2	K=H K=H	1	—	—
	5,0	9,7	~~III~~	2	K=H	1	—	
	5,7	10,7	~~II~~	2	K=H	1	—	
	5,1	11,3	~~III~~	2	K=H	1	F.	
	5,0	13,2	~~I~~	6	K=,5H	1	—	
	5,5	17,1	~~II~~	4	K=H	1	—	
	5,7	18,7	~~III~~ b 1175	3	K=H	1	F.	
	6,6	22,9	~~I~~	4	?	1	—	
	5,1	23,1	~~II~~	2	K=H	1	—	
?	5,9	24,6	~~III~~ b? 1176	3	K=H	3	F, pec.	
	4,6	6,8	~~I~~	5	K=H	1	—	
	4,6	11,2	~~III~~	2	K=H	1	—	
	4,0	13,9	~~I~~	6	K=,5H	1	—	
	4,3	15,7	~~I~~	6	K=H	2	—	
	4,0	20,5	~~II~~	2	K=H	1	—	
	3,0	7,2	~~III~~	2	K=H	1	—	
∫	3,8	11,5	~~II~~ II	2 2	K=H K=H	1	—	—
	3,9	15,4	~~I~~	4	K=H	1	—	
	3,2	16,4	~~II~~ a 1177	3	K=H	2	F.	
	3,0	15,8	~~III~~	2	K=H	1	—	
	3,4	21,5	~~III~~	2	K=H	1	—	
	2,8	7,7	~~I~~	6	N	2	F.	
	2,1	9,5	~~III~~	1	N	1	—	
3 40	2,5	16,3	~~III~~	2	K=H	1	—	

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	No.	R. A.	Dec.	Mag.		Bv.				Mean	Cor. Bv
16 39 +69.4	860	16 38.6	+69	27	7.7						
16 57 +79.7	517	16 37.1	+79	44	6.8						
16 44 +79.4	508	16 44.6	+79	30	7.8						
16 15 +60.1	1665	16 14.8	+60	5	5.5						
16 7 +60.2	1658	16 7.5	+60	15	6.8						
15 46 +69.9	813	15 46.9	+69	55	7.1						
15 37 +69.7	806	15 37.3	+69	43	6.0						
15 14 +69.5	789	15 13.8	+69	28	6.5						
14 29 +79.1	447	14 29.1	+79	9	6.8						
15 21 +59.4	1654	15 21.7	+59	28	3.0						
17 29 +79.4	540	17 28.8	+79	27	7.3						
16 41 +80.1	519	16 40.8	+80	5	7.0						
16 5 +70.6	863	16 5.4	+70	39	6.5						
15 48 +80.4	487	15 47.8	+80	26	6.7						
15 8 +70.2	827	15 8.2	+70	13	7.3						
17 31 +80.3	544	17 30.7	+80	15	6.2						
16 20 +70.7	874	16 20.4	+70	42	7.3						
15 51 +80.5	489	15 51.6	+80	34	8.0						
15 37 +80.9	480	15 37.8	+80	36	7.0						
15 46 +81.1	523	15 45.9	+81	4	7.3						
14 37 +80.3	448	14 37.8	+80	17	6.3						
16 30 +61.1	1398	16 30.4	+61	8	6.0	2789	6.0	7 +1			
17 9 +81.0	568	17 8.6	+81	4	7.3						
15 38 +81.2	517	15 38.9	+81	15	6.8						

$\frac{42}{7}$ $\frac{4-4}{7}$

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Plate 1354.

	T	H	Type	No. Lines	K	Focus	Other Lines.
10 15 a.m.							
12 20	22,8	9,0	I	7	N	5	—
	22,5	16,2	III ?	2	K=H	1	—
	22,0	16,4	I	3	N	1	—
	22,8	16,7	I ?	7	K=H	3	—
	22,4	17,6	I	8	N	3	—
?	21,0	14,3	I ?	4	K=H	2	F? piece.
	20,5	18,1	I	8	K=1,2H	3	F
?	19,8	6,2	II a 1178	3	K=H	3	F? piece.
	19,5	11,8	I	4	N	1	—
	19,4	12,2	I	5	N	2	—
?	19,5	13,6	II a 1179	2	K=H	2	F? piece.
	19,0	14,4	II	2	K=H	1	—
	19,0	14,6	I	3	N	1	—
	19,6	15,0	III	2	K=H	1	—
	18,7	12,5	II	2	K=H	1	—
√	18,5	14,2	III III	1 2	N	K=H 1 1	— —
	18,1	19,7	I	9	K=1,2H	5	F
	18,4	21,0	I	6	N	2	—
III ? 6.1, 6.5.	18,5	21,3	III b.c. 1180	3	K=H	2	F
	17,2	6,8	III	2	K=H	1	—
?	17,5	10,4	I ?	4	N	1	piece.
	17,0	16,8	I	8	?	4	—
	16,2	11,3	III	2	K=H	1	—
	16,4	13,4	I ?	4	K=H	1	—
	16,8	14,1	III b ? 1181	2	K=H	1	—
	16,0	14,2	II ?	2	K=H	1	—
	16,6	15,2	I	8	K=1,√H	3	F?
	16,2	17,8	III b. 1182	3	K=H	2	F

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	No.	R. A.	Dec.	Mag.					Br.				
17 8 +66.9	1180	17 8.4	+65 54	3.0					✓	~~7.0~~	.	.	.
16 35 +56.3	1907	16 33.1	+56 18	3.4	–				✓	.6	.	.	.
16 24 +76.5	600	16 24.5	+76 28	7.2	.				✓	7.0	1.6	8.6	7.4
16 22 +76.1	596	16 21.8	+76 3	3.3	–				✓	~~7.5~~	.	.	.
16 15 +76.3	594	16 15.8	+76 16	6.0	2739	5.5	13	+1	✓	5.2	1.6	6.8	3.6
16 43 +57.0	1702	16 42.6	+57 3	3.0	–				✓	5.8	.7	6.3	3.3
16 8 +77.2	616	16 8.3	+77 11	6.0	–				✓	5.3	1.6	6.9	3.7
17 56 +76.9	667	17 33.9	+76 38	3.3	–				✓	6.4	1.6	8.0	6.8
16 56 +67.7	977	16 33.9	+67 42	6.3	.				✓	6.7	1.1	7.8	6.6
17 3 +77.9	641	17 3.1	+77 32	6.3	.				✓	6.3	1.7	8.0	6.8
16 49 +77.7	634	16 49.6	+77 45	6.0	–				✓	5.9	1.7	7.6	6.4
16 42 +78.0	562	16 42.0	+78 2	6.8	–				✓	6.9	1.7	8.6	7.4
16 40 +77.9	628	16 39.9	+77 38	7.8	.				✓	7.0	1.7	8.7	7.3
16 36 +77.7	627	16 36.9	+77 43	6.3	–				✓	6.7 7.0	1.7	8.4 8.7	7.2 7.5
16 52 +68.1	893	16 52.2	+68 9	7.7	–				✓	7.2	1.1	8.3	7.1
16 43 +68.3	883	16 43.0	+68 21	7.6	–				7.1 7.4	7.1	1.1	8.2 8.3	7.0 7.3
15 49 +78.2	527	15 49.3	+78 13	4.7	–				✓	7.3	1.7	B.	B.
16 6 +68.2	864	16 6.0	+68 11	6.0	2717	5.4	11	-1	✓	5.4	1.1	6.5	3.3
15 36 +77.8	592	15 35.8	+77 31	5.0	–				✓ ✓ ✓	6.4 7.0 7.0	1.7	8.1 8.7 8.7	6.9 7.5 7.5
17 59 +78.3	616	17 58.4	+78 20	6.5	–					7.4	1.7	9.1	7.9
16 57 +58.6	1689	16 57.5	+58 40	6.3	–				✓	7.1	.7	7.8	6.6
16 28 +69.0	850	16 28.3	+69 3	5.2					✓	4.7	1.1	5.8	4.6
17 0 +69.4	884	16 59.9	+69 24	6.5	–				✓	6.7 6.8	1.1	7.8 7.9	6.6 6.7
16 48 +69.3	872	16 48.1	+69 19	7.5	–				✓	7.0	1.1	8.1	6.9
16 46 +79.2	511 ~~556~~	16 46.2 ~~17 47.1~~	+79 11 ~~+79 16~~	6.3 ~~7.3~~	–				✓	6.6 7.0	1.8	8.4 8.8	7.2 7.6
16 44 +79.4	508	16 44.6	+79 30	7.8	–				✓	7.3	1.8	9.1	7.9
16 34 +79.3	498	16 33.9	+79 16	5.5	–				✓	4.8	1.8	6.6	5.4
16 22 +69.4	845	16 22.2	+69 27	5.5	–				✓	6.3 6.6	1.1	7.4 7.7	6.2 6.5

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Plate 1354.

	r	H	Type	No. lines	K	Focus	Other lines.
	17.7	23.7	I	4	N	1	—
	15.2	7.5	I	3.	N	1	—
	15.7	8.5	II	2	K=H	1	—
	15.8	10.2	I	4	?	1	—
	15.6	13.1	III	1	N	1	—
	15.9	23.0	II	1	N	1	—
	14.2	10.4	III b?	1183 2	K=H	1	F?
	14.6	21.1	III	1	N	1	F
	14.0	22.9	I	.3	N	1	—
?	13.8	6.9	II a?	1184 3	K=1.2H	4	F, seen
	13.4	10.2	III	3	K=H	1	F
	13.7	12.2	I	4	K=.5H	1	—
	13.0	12.4	III b	1185 2	K=H	1	—
	13.7	18.9	I?	4	K=H	1	—
	13.5	20.4	I	.5	N	1	F
?	12.9	6.6	II a	1186 2	K=H	4	seen
	12.8	8.2	I	4	N	1	—
✓ ✓	12.2	8.6	II a?	1186a 2	2 K=H	K=H 1	seen
✓ ✓	12.4	17.1	I I?	2	3 N	N 1	1 — —
	12.9	17.2	I	6	K=.2H	2	—
	12.6	18.7	III	2	N	1	F
	12.0	19.1	III	3	K=H	1	F
?	12.7	19.4	II a	1187 2	K=H	2	seen
?	11.5	19.1	III b	1188 2	K=2.5H	7 5	F. Bright? seen.
	10.8	7.4	I	4	K=H	1	—
	10.8	13.2	III b?	1189 3	K=2.0H	4	F
✓ ✓	10.0	15.0	I	I 3	5 N	K=H 1	1 — F1
	10.2	15.6	I	4	K=H	1	—

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	No.	R.A.	Dec.	Mag.	Bv.			
16 6 +58.3	1622	16 6.2	+58 19	6.7 .	✓ 6.5	1.7	7.2	6.0 .
17 59 +79.4	564	17 58.6	+79 21	7.5 .	✓ 7.0	1.8	8.8	7.6 .
17 47 +79.3	556	17 47.1	+79 16	7.3 _	✓ 7.0	1.8	8.8	7.6 .
17 28 +79.4	540	17 28.8	+79 27	7.3	✓ 6.4	1.8	8.2	7.0 .
16 57 +79.7	517	16 57.1	+79 44	6.8 _	✓ 7.0 / 7.3	1.9	8.9 / 9.2	7.7 / 8.0 .
15 53 +69.1	825	15 53.3	+69 8	6.8 _	✓ 6.7	1.1	7.8	6.6 .
17 31 +80.2	544	17 30.7	+80 15	6.8 _	✓ 6.3 / 6.9	1.9	8.2 / 8.8	7.0 / 7.6 .
16 15 +60.1	1665	16 14.8	+60 3	5.5 _	✓ 6.8 / 7.2	8	7.6 / 8.0	6.4 / 6.8 .
16 7 +60.2	1658	16 7.3	+60 15	6.8 .	✓ 6.5	8	7.3	6.1 .
18 11 +79.9	570 / 571	18 10.9 / 18 11.0	+79 59 / +79 60	6.5 / 6.5	✓ 4.8	1.9	6.7	5.5 .
16 59 +60.9	1728	16 59.5	+60 51	6.5 _	✓ 6.9 / 7.3	8	7.7 / 8.1	6.3 / 6.9 .
16 56 +70.5	906	16 55.8	+70 41	7.0 _	✓ 6.4	1.2	7.6	6.4 .
17 9 +81.0	568	17 8.6	+81 4	7.3 _	✓ 6.5 / 6.8	2.0	8.5 / 8.8	7.3 / 7.6 .
15 47 +80.4	487	15 47.8	+80 26	6.7 _	✓ 6.3	1.9	8.2	7.1 .
16 5 +70.6	863	16 5.4	+70 39	6.5 .	✓ 6.5	1.2	7.7	6.5 .
17 15 +60.9	1743	17 14.8	+60 49	6.5 :	✓ 6.9	.8	7.7	6.5 .
17 20 +70.0	925	17 20.7	+70 36	7.0 .	✓ 6.6	1.2	7.8	6.6 .
17 6 +61.3	1640	17 6.5	+61 20	6.8 _	6.9 6.9	7.1	8	7.9 6.7 .
16 31 +61.5	1599	16 31.4	+61 32	7.8 .	6.9 6.8	.8	7.6	6.4 .
16 30 +61.1	1598	16 30.4	+61 8	6.0 _	✓ 5.7	8	6.5	5.3 .
15 45 +81.0	523	15 45.9	+81 4	7.3 _	✓ 6.7 / 7.0	2.0	8.7 / 9.0	7.5 / 7.8 .
15 39 +81.2	517	15 38.9	+81 15	6.8 _	✓ 6.8 / 7.2	2.0	8.8 / 9.2	7.6 / 8.0 .
15 38 +80.9	480	15 37.8	+80 36	7.0 _	✓ 6.1	2.0	8.1	6.9 .
16 22 +61.8	1598 1	16 22.1	+61 49	2.5 _	✓ 4.0 / 4.1	.8	4.8 / 4.9	3.6 / 3.7 .
18 19 +81.4	619	18 19.4	+81 26	8.5 _	✓ 6.9	1.9	8.8	7.6 .
17 0 +82.2	498	17 1.0	+82 16	4.0 _	✓ 4.2 / 4.3	2.2	6.4 / 6.5	3.2 / 3.3 .
16 39 +62.6	1501	16 39.5	+62 35	7.2 .	6.9 ✓ 7.0	.8	7.8	6.6 .
16 24 +82.4	481	16 24.0	+82 26	8.5 _ ✓	6.9	2.2	9.1	7.9 .

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Plate 1354.

T	H	Type	No. lines	K	Other lines.		
10,8	22,0	I	4	N	1	—	
9,0	5,8	III	2	K=H	1	—	
9,0	11,2	I	3	N	1	—	
9,9	11,5	I	3	N	1	—	
9,3	15,2	I	4	K=H	1	—	
9,4	15,6	III	2	K=H	1	—	
9,2	16,4	III	2	K=H	1	—	
9,4	17,1	II	2	K=H	1	—	
? 9,2	18,1	II	a 1190 2	K=H	2	pecu	
9,7	23,4	II	2	K=H	1	—	
8,9	7,8	I	6	K=1,2H	2	—	
8,0	8,1	I	5	N	1	—	
8,0	11,2	II?	2	K=H	1	—	
8,5	12,0	I	6	K=1,8H	2	F,	
∫ H 8,5	15,8	III	III 1 2	N K=H	1 1	—	—
Recorded above	8,8	16,8	III	2	K=H		
8,3	16,9	I	5	K=1,5H	1	F,	
7,4	7,4	I	6	N	3	F,	
7,2	11,4	II?	2	K=H	1	—	
7,0	14,0	I	5	K=1,5H	1	—	
7,4	14,5	I	6	K=1,8H	2	F,	
7,6	15,8	III	3	K=H	1	F,	
7,1	16,2	I	5	K=1,5H	1	—	
7,6	17,9	I	6	K=1,2H	2	—	
7,8	19,4	I?	4	K=H	1	—	
7,8	20,3	II	a 1191 2	K=1,2H	2	—	
6,5	9,6	III	2	K=H	1	—	
6,1	12,0	III?	2	K=H	1	—	

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No.	R.A.	Dec.	Mag.		Bv.			
495	14 57.2	+ 81	20	6.8	6.3	2.1	8.4	7.2
800	17 39.9	+ 72	32	6.0	6.4 6.7	1.3	7.7 8.0	6.3 6.8
521	17 34.0	+ 82	31	8.5	7.0	2.3	9.3	8.1
1521	16 54.9	+ 62	36	7.0	6.6	.8	7.4	6.2
485	16 29.1	+ 82	38	8.0	6.4	2.3	8.7	7.3
734	16 33.8	+ 72	35	6.3	6.8 7.1	1.3	8.1 8.4	6.9 7.2
1281	16 31.2	+ 63	8	6.8	7.1 7.4	.9	8.0 8.3	6.8 7.1
470	15 59.6	+ 82	48	8.2	7.0	2.3	9.3	8.1
463	15 42.2	+ 82	44	7.3	5.9	2.2	8.1	6.9
482	14 34.8	+ 81	27	6.7	6.7	2.1	8.8	7.6
1336	17 11.3	+ 63	3	5.8	5.7	.9	6.6	5.4
540	18 28.6	+ 82	32	7.3	6.0	2.3	8.3	7.1
512	17 39.0	+ 83	26	7.3	7.0	2.4	9.4	8.2
851	16 39.2	+ 73	19	6.0	5.9	1.4	7.3	6.1
1289	16 35.4	+ 63	22	6.3	7.1 7.4	.9	8.0 8.3	6.8 7.1
~~1281~~	~~16 31.2~~	~~+ 63~~	~~8~~	~~6.8~~	7.2 7.5	.9	8.1 8.4	6.9 7.2
453	15 58.8	+ 83	23	7.3	6.3	2.3	8.6	7.4
336	18 43.2	+ 83	4	6.2	4.9	2.3	7.2	6.0
511	17 38.6	+ 83	49	8.3	7.0	2.4	9.4	8.2
680	16 45.2	+ 74	10	6.5	6.4	1.4	7.8	6.6
361	16 40.2	+ 84	0	7.2	5.9	2.5	8.4	7.2
468	16 18.1	+ 83	47	8.2	7.0 7.2	2.4	9.4 9.6	8.2 8.4
351	16 7.0	+ 84	2	7.7	6.2	2.5	8.7	7.3
713	16 17.0	+ 73	46	6.2	5.5	1.4	6.9	5.7
707	16 6.1	+ 73	32	6.7	6.8	1.4	8.2	7.1
431	15 0.4	+ 83	6	6.0	5.3	2.3	7.6	6.4
527	18 15.8	+ 83	34	7.7	6.9 7.0	2.4	9.3 9.4	8.1 8.2
695	17 0.0	+ 74	31	7.2 ✓	7.1 7.2	1.4	8.5 8.6	7.3 7.4

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Plate 1354.

		Type	No. lines	K	Focus	Other lines.
6,1	12,4	II?	2	K=H	1	—
6,0	17,7	I?	3	?	1	perc.
7,4	21,9	I	3	N	1	—
5,4	6,8	I	4	?	2	—
5,2	5,1	I	5	K=2H?	2	—
5,5	10,3	III	3	K=H	1	F
5,6	11,9	III	2	K=H	1	—
5,3	12,7	I	3	N	1	—
?	5,7	14,9	III b.c. 11922	K=H	2	Bright perc.
	4,8	9,6	II	2	K=H,	1 —
	4,1	11,4	I	6	K=.5H	2 —
	4,7	11,6	I	4	K=H	1 —
?	4,6	11,7	II a? 11934	K=H	3	perc.
	4,5	16,5	III	2	K=H	1 —
	3,3	9,0	I	10	N	5 F
?	3,4	10,9	II a? 11941	N	1	perc
	3,8	15,7	I	6	K=.5H	1 —
	3,0	16,8	I?	7	K=H	3 —
	4,8	23,4	III	2	K=H	1 —
	2,3	16,4	I	4	?	1 —
	2,7	17,6	I	7	N	3 —

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	No.	R.A.	Dec.	Mag.		Bv.				
16 57 +74.5	690	16 37.4	+74	31	7.7 _	✓7.3	1.4	8.7	7.5	.
15 37 +84.4	345	15 33.1	+84	22	8.3	✓6.6	2.5	9.1	7.9	.
16 8 +63.8	1253	16 7.7	+63	47	6.3 .	✓6.8	.9	7.7	6.5	.
19 12 +83.6	547	19 10.4	+83	42	6.5	6.0	2.4	8.4	7.2	.
19 33 +83.2	552	19 33.4	+83	10	6.0 _	5.7	2.3	8.0	6.8	.
17 1 +64.9	1170	17 1.4	+64	49	6.5 _	✓6.8 7.0	.9	7.7 7.9	6.5 6.7	.
17 38 +84.7	383	17 37.0	+84	44	7.7 _	✓6.9 7.2	2.6	9.3 9.8	8.3 8.6	.
17 21 +84.9	378	17 21.1	+84	57	8.2 .	✓6.5	2.6	9.1	7.9	.
16 40 +64.9	1145	16 39.9	+64	51	5.2 _	✓6.1 6.5	.9	7.0 7.4	5.8 6.2	.
18 33 +84.6	412	18 32.8	+84	35	7.5 _	✓6.6	2.6	9.2	8.0	.
17 6 +75.5	613	17 6.3	+75	30	5.8 _	✓6.0	1.5	7.5	6.3	.
	1139	16 53.7	+65	15	6.7 _	✓				
16 55 +65.2	~~1357~~	~~16 55.2~~	~~+65~~	~~21~~	~~5.3~~	6.6	.9	7.5	6.3	.
16 55 +66.3	1137	16 55.2	+66	21	5.3 _	✓5.3	.9	6.2	5.0	.
15 51 +85.3	263	15 50.2	+85	18	7.2 _	✓6.5 6.8	2.7	9.2 9.5	8.0 8.3	.
17 8 +65.9	1170	17 8.4	+65	34	3.0 2878 3.3	✓B	1.0	B.	B.	.
18 19 +85.6	294	18 18.1	+85	40	7.5	✓6.6	2.8	9.4	8.2	.
16 6 +85.7	269	16 6.6	+85	43	7.5 _	✓5.9	2.8	8.7	7.5	.
16 22 +76.1	596	16 21.8	+76	5	5.3 _	✓5.2	1.5	6.7	5.5	.
13 47 +83.5	397	13 46.7	+83	29	6.5 _	✓6.3 6.5	2.4	8.7 8.9	7.3 7.7	.
16 24 +76.5	600	16 24.3	+76	28	7.2	✓	~~1.6~~	,	,	.
16 15 +76.3	594	16 15.0	+76	16	6.0 2739 5.5 13 +1	✓5.2	1.6	6.8	5.6	.

$\frac{37}{3}$ $\frac{2-1}{3}$

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Ant. of Fog. due to moon & clouds. 7.3

Ant. of Fog. dye to chemicals 7.5

June 2, 1887.

Plate 1333.

	V	H	Type	No. lines	K	Focus	Other lines.
8 45	22.8	7.7	I	5	N	3	—
	22.5	15.1	I	5	K=.2H?	1	—
	22.8	19.3	I	4	?	1	—
	22.6	20.5	I	5	N	1	—
?	21.4	5.4	III b? 1195	2	K=3.0 H?	4	F? Bright, perm.
	21.6	6.2	I	3	N	1	—
	20.5	5.4	I	7	N	H	F
?	20.0	9.5	III a 1196	5	K=H	3	F, perm.
?	20.0	11.6	III a 1197	5	K=H	4	F, perm.
?	20.9	12.3	III a 1198	2	K=H	2	perm.
	20.1	12.3	I	3	N	1	—
?	20.3	13.6	III b c 1199	3	K=1.2H	4	F Bright perm.
	21.0	19.4	I	4	K=.5H	1	—
	19.1	7.4	III?	2	K=H	1	—
	19.0	9.1	II	2	K=H	1	—
	19.4	12.3	III b 1200	3	K=H	1	F
	19.2	15.0	II	2	K=H	1	—
	19.0	17.4	I	8	K=.5H	2	F
	19.7	19.6	I	5	N	2	—
	19.5	21.2	I	3	N	1	—
✓ ✓	20.0	23.5	II III c?	2	K=H	K=H	1 — —
?	18.0	5.9	II a? 1201	2	K=2.0H?	5	F? perm.
✓ ✓	18.1	9.5	III	2	N	K=H	1 — —
	18.3	12.0	II	2	K=H	1	—
	18.0	12.6	I	4	N	1	—
	18.0	16.1	III	3	K=H	1	F
+ ✓ ✓	18.2	20.7	III	2	K=H	K=H	1 — —
	18.0	22.0	III	3	K=H	1	F

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Mean 1

No.	R. A.	Dec.	Mag.					B-V.				
2468	17 45.6	+30	50	5.0	2989	5.2		1	.5	,	1	.
925	17 20.7	+70	56	7.0	_			1	12	,	1	.
906	16 55.8	+70	41	7.0				1	12	,	1	.
2178	17 4.7	+51	2	6.5	.			1	.5	,	1	.
2282	17 53.3	+51	32	2.2	_			4.8		5.3	4.3	4.7
								5.5	.5	6.0	5.2	5.4
985	18 16.1	+70	46	7.2	.			6.6	1.2	7.8	7.0	6.5
889	18 23.0	+71	14	4.7	3120	4.2	10 +2	4.0	1.2	5.2	4.4	3.9
818	17 57.7	+72	0	6.0	_			5.4	1.3	6.7	5.9	5.3
805	17 44.8	+72	14	6.2	3	?						
804	17 44.5	+72	13	4.8	5	?		4.1	1.3	5.4	4.6	4.0
1678	17 33.5	+61	59	6.0	_			5.8	.8	6.6	5.8	5.7
799	17 39.3	+72	8	7.3	.			6.8	1.3	8.1	7.3	6.7
2065	17 27.2	+52	24	3.0	_			4.1		4.6	3.8	4.0
								4.3	.5	4.8	4.0	4.2
2187	17 7.9	+51	56	7.2	_			7.0	.5	7.5	6.7	6.9
1586	17 55.2	+62	37	7.0	3	?		6.8		7.6	6.8	6.7
1587	17 55.2	+62	38	7.2	3	?		6.9	.8	7.7	6.9	6.8
1573	17 48.0	+62	49	6.3	_			6.8	.9	7.7	6.9	6.7
800	17 39.9	+72	32	6.0	_			6.3		7.6	6.8	6.6
								6.5	1.3	7.8	7.0	6.4
2057	17 22.2	+52	35	6.3	_			7.0	.5	7.5	6.7	6.9
1336	17 11.3	+63	3	3.8	_			5.5	.9	6.4	5.6	5.4
2032	17 7.2	+52	35	6.0	2876	6.3	5 -3	6.3	.5	6.8	6.0	6.2
1521	16 54.9	+62	36	7.0	.			6.4	.8	7.2	6.4	6.3
789	16 26.9	+71	42	7.1	_			7.0	1.3	8.3	7.3	6.9
839	18 23.7	+72	40	3.8	_			B	1.3	B	B	.
1377	17 46.2	+63	9	7.3	_			7.2		8.1	7.3	7.1
								7.6	.9	8.3	7.7	7.5
786	17 43.0	+73	2	8.0	_			6.6	1.3	7.9	7.1	6.5
782	17 39.0	+73	8	7.8	.			6.7	1.3	8.0	7.2	6.6
1937	17 18.6	+53	34	6.0	_			6.9		7.5	6.7	6.8
								7.1	.6	7.7	6.9	7.0
745	16 43.2	+72	56	7.0	_			7.1		8.4	7.6	7.4
								7.4	1.3	8.7	7.9	7.3
734	16 33.8	+72	55	6.3	_			6.6		7.9	7.1	6.5
								6.9	1.3	8.2	7.4	6.8

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Plate 1333.

γ	H	Type	Lines	K	Form	Lines.	Other
19.0	22.3	I	5	N	1	—	
17.4	8.8	I	4	K=H	1	—	
17.0	9.6	I	6	K=2H?	3	F?	
17.8	10.9	~~III~~ I	2	K=H	1	—	
17.4	11.3	II	3	K=H	1	F	
17.3	11.7	I	5	N	1	—	
17.2	15.9	I	5	6 K=.5H	K=.5H	1	—
17.7	16.4	~~III~~ 8	1	N	1	—	
17.8	18.2	I	7	K=.8H	2	—	
16.0	7.2	II	3	K=H	1	F	
16.2	8.2	I	7	K=H	1	F	
16.1	12.6	II	2	K=H	1	—	
16.1	13.3	I	6	N	1	F	
16.6	16.2	~~III~~ I? I?	4	K=H	K=4	1	—
16.4	18.6	I	5	K=1.5H	1	—	
16.8	20.8	~~III~~ I? I?	4	K=H	K=H	1	—
15.3	6.4	I	4	N	1	—	
15.0	9.6	I	3	N	1	—	
15.0	10.6	I	6	K=H	2	—	
15.3	13.6	II?	2	K=H	1	—	
15.0	14.4	I	5	K=H	1	—	
? 15.5	17.9	II a 12022		K=H	1	pec.	
15.3	18.3	II a 12032		K=H	1	—	
15.4	10.4	III	3	K=H	1	F	
15.9	20.0	I	4	K=1.5H	2	F	
? 15.5	20.8	II a 12044	3	K=1.2H	3	F? pec.	
15.8	24.0	I	6	?	3	F	
14.6	13.1	I 12055		K=1.2H	2	F	

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Mean 1

No.	R. A.	Dec.	Mag.		B-V.				
16 58 +52.9	2018	16 57.9	+52 48	6.8	!	6.6	.5	7.1	6.3	6.5
17 43 +53.6	1984	17 43.4	+53 38	7.3	_	7.0	.6	7.6	6.8	6.9
17 41 +53.9	1978	17 41.0	+53 31	3.7	_	6.0	.6	6.6	3.8	5.9
17 51 +73.2	796	17 50.8	+73 11	7.3	_	7.0 / 7.1	1.3	8.3 / 8.4	7.3 / 7.6	6.9 / 7.0
17 39 +63.7	1371	17 39.4	+63 45	6.9	_	6.8	.9	7.7	6.9	6.7
	~~791~~	~~17 45.5~~	~~+73 31~~	~~7.3~~	.					
17 45 +73.5	~~528~~	~~17 43.1~~	~~+74 30~~	~~8.3~~		6.7	1.4	8.1	7.3	6.6
17 18 +63.9	1343	17 18.0	+63 33	7.3	_	6.6 6.7	.9	7.6	6.8	6.6
17 12 +73.3	559	17 12.8	+73 20	7.8		7.0 / 7.2	1.4	8.4 / 8.6	7.6 / 7.8	6.9 / 7.1
16 59 +73.3	731	16 59.2	+73 19	6.0	_	5.7	1.4	7.1	6.3	5.6
17 58 +64.1	1237	17 58.5	+64 9	7.0	_	6.5	.9	7.4	6.6	6.4
17 46 +54.2	1911	17 46.1	+54 14	6.3	_	6.5	.6	7.1	6.3	6.4
17 40 +74.1	720	17 40.0	+74 3	7.4	_	6.9 / 7.1	1.4	8.3 / 8.5	7.3 / 7.7	6.8 / 7.0
17 28 +54.4	1889	17 28.5	+54 28	7.3	.	6.7	.6	7.3	6.3	6.6
17 16 +64.1	1191	17 16.8	+64 10	7.3	_	69 7.0 / 7.1	.9	7.9 / 8.0	7.1 / 7.2	6.9 / 7.0
17 10 +54.3	1869	17 10.0	+54 19	7.0	_	6.7	.6	7.3	6.3	6.6
16 41 +73.6	733	16 41.0	+73 36	8.0	_	7.1 7.2 / 7.3	1.4	8.6 / 8.7	7.8 / 7.9	7.1 / 7.2
18 25 +73.9	822	18 25.2	+73 37	8.0	.	6.7	1.4	8.1	7.3	6.6
17 48 +64.8	1222	17 48.1	+64 48	7.0	.	6.8	.9	7.7	6.9	6.7
17 36 +74.6	740	17 35.7	+74 36	6.8	_	5.9	1.4	7.3	6.3	5.8
17 32 +74.6	713	17 32.6	+74 36	7.7	_	7.1	1.4	8.5	7.7	7.0
17 27 +74.8	710	17 27.9	+74 47	7.0	_	6.5	1.5	8.0	7.2	6.4
17 0 +74.5	695	17 0.0	+74 31	7.2	_	6.3	1.4	7.7	6.9	6.2
16 57 +74.1	690	16 57.4	+74 31	7.7	_	6.6	1.4	8.0	7.2	6.5
17 1 +64.8	1170	17 1.4	+64 49	6.3	_	6.4 / 6.6	.9	7.3 / 7.5	6.3 / 6.7	6.3 / 6.5
16 45 +74.1	680	16 45.2	+74 10	6.3	_	6.0	1.4	7.4	6.6	5.9
17 2 +54.6	1857	17 2.3	+54 40	4.8	_	5.6	.6	6.2	3.4	5.5
16 17 +73.5	713	16 17.0	+73 46	6.2		5.5	1.4	6.9	6.1	5.4
	~~1944~~	~~17 29.3~~	~~+55 17~~	~~5.2~~	~~8~~					
17 29 +55.3	1945	17 29.4	+55 16	5.2	8	5.3	6	5.9	5.1	5.2

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Plate 1333.

			No.	Type	Lines	K	Focus	Lines.	Other
	14.6	13.2	=	I	1206 7	K=.2H	2	—	
√ √	14.0	15.9	=	I	3 8	K	H	1 1	— —
√ √	14.0	16.5	=	IIa	1206a 2 8 3	K=H	K=H	1 1	— F seen
	14.3	20.6	=		6	K=H		1	F. ?
?	14.1	20.6	=	a	1207 4	K=1.2H		3	seen.
	14.6	24.0	=	b2	1208 3	K=H	?	2	F. Bright seen.
	13.8	10.3	=	b	1209 3	K=H		1	F.
	13.4	11.7	=		2	K=H		1	—
	13.1	11.9	=	b	1210 2	K=H		1	—
√ √	13.0	13.5	=	?	II ? 2	2 K=H	K=H	1 1	— —
	13.1	11.3	E?		2	K=H		1	—
√ √	13.5	15.4	=	II	1,2	K	K=H	1 1	— —
	13.6	17.0	=	?	8	K=.5H		2	F.
?	13.7	17.2	=	a	1211 2	K=H		1	seen.
	13.4	17.8	=		12	K		5	F.
	13.3	18.1	=		5	K=H		1	—
	13.2	18.5	=		4	K=H		1	—
	12.4	6.0	=		4	K=H		1	—
	12.8	6.3	=		6	K=1.2H		2	—
	12.6	6.6	=		6	K=H		2	—
√ √	12.4	7.1	=	IIa	IIa 1212 2	2 K=H	K=H	1 1	seen seen
	12.4	7.7	=		5	K=H		1	—
	12.5	9.5	=		6	K=.2H		2	—
	12.2	10.8	=		4	?		1	—
√ √	12.2	14.3	=	III	3 3	K=H	K=H	1 1	F. F
√ √	12.3	17.3	=	I	1 5	K=H	K=H	1 1	— —
	12.5	23.1	=	b	1213 3	K=H		2	F.
√ √	11.8	7.2	=	II	? 1 2	K	K=H	1 1	— —
	11.8	9.2	=		2	K=H		1	—

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Mean

	No.	R. A.	Dec.	Mag.		B-V				
17 29 +55.3	1944	17 29.3	+55	17	5.2	5.3	.6	5.9	5.1	.5.2
17 16 +75.3	617	17 13.4	+75	16	7.5	6.7	6.8	1.5	8.3	7.5 .6.7
17 10 +75.3	616	17 10.6	+75	18	7.0	6.6	6.7	1.5	8.2	7.4 .6.6
16 55 +65.2	1159	16 55.7	+65	15	6.7	6.4	.9	7.3	7.5	.6.3
16 55 +65.3	1157	16 55.2	+65	21	5.3	5.0	.9	5.9	5.1	.4.9
16 40 +64.9	1145	16 39 40.9	+64	51	5.2	5.8 / 6.1	.9	6.7 / 7.0	5.9 / 6.2	.5.7 / 6.0
17 59 +75.2	647	17 59.2	+75	10	7.0	6.4 / 6.6	1.5	7.9 / 8.1	7.1 / 7.3	.6.3 / 6.5
17 35 +55.8	1960	17 34.5	+55	50	7.3	7.1 / 7.3	.6	7.7 / 7.9	6.9 / 7.1	.7.0 / 7.2
17 48 +75.6	640	17 47.7	+75	35	7.0	7.1 / 7.4	1.5	8.6 / 8.9	7.8 / 8.1	.7.0 / 7.3
17 34 +75.7	634	17 34.5	+75	44	8.3	7.1	1.5	8.8	8.0	.7.2
	1961	17 35.9	+55	50	7.3	7.3				
17 20 +65.8	1176	17 20.3	+65	48	7.3	7.0	7.2	1.0	8.2	7.4 .7.1
17 6 +75.5	613	17 6.3	+75	30	5.8	5.5	1.5	7.0	7.2	.5.4
17 5 +75.4	612	17 5.0	+75	25	6.3	6.3	1.5	7.8	8.0	.6.2
17 8 +65.9	1170	17 8.4	+65	34	3.0	2878 3.3	7.3	1.0	B.	B. .
16 59 +75.6	608	16 57.3	+75	38	6.8	6.2	1.5	7.7	6.9	.6.1
16 54 +75.6	605	16 54.1	+75	36	7.0	6.7	1.5	8.2	7.4	.6.6
18 7 +65.9	1245	18 6.8	+65	32	7.5	6.9	1.5	8.4	7.6	.6.8
18 5 +65.7	1240	18 5.0	+65	42	6.8	6.4	1.0	7.4	6.6	.6.3
17 53 +65.9	1995	17 52.8	+65	68	6.5	6.4	.6	7.0	6.2	.6.3
18 1 +65.9	1238	18 1.8	+65	57	7.0	6.7 / 6.8	1.0	7.8	7.0	.6.7
17 49 +56.1	2028	17 49.1	+56	9	7.2	6.6	.6	7.2	6.4	.6.3
18 8 +75.8	635	18 8.2	+75	46	6.5	5.9	1.5	7.4	6.6	.5.8
17 58 +76.0	668	17 57.8	+76	1	7.5	6.5	1.5	8.0	7.2	.6.4
17 29 +76.2	647	17 29.0	+76	10	7.0	6.8 / 7.1	1.6	8.6 / 8.9	7.8 / 8.1	.6.9 / 7.2
17 11 +66.5	999	17 10.8	+66	26	8.2	6.7	1.0	7.7	6.9	.6.6
16 16 +75.5	586	16 16.2	+75	34	6.8	6.3 / 6.6	1.5	7.8 / 8.1	7.0 / 7.3	.6.2 / 6.5
18 28 +75.8	668	18 27.4	+75	45	8.0	6.8 / 7.0	1.5	8.5	7.7	.6.9
18 11 +76.1	678	18 11.8	+76	6	7.2	6.8	1.5	8.3	7.5	6.7

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Plate 1333.

	τ	H	Type	Lines	K	Focus	Lines. Other
√ √	11,8	15.3	~~III~~ III	3	K=H	K=H	1 1 F. F:
√ √	11,5	18,8	~~II~~ II	2	2 K=H	K=H	1 1 — —
√ √	11.0	22,1	~~III~~ III	2	2 K=H	K=H	1 1 — —
?	11,6	22,2	~~I~~ I	10	K=H		4 F, diff.
	11,2	22,9	~~I~~	9	N		4 F.
	10,9	6,5	~~III~~	2	K=H		1 —
	10,4	6,7	~~II~~	2	K=H		1 —
?	10,9	7,3	~~III~~ b.c. 1214	2	K=1,2H		3 F, Bright diff.
	10,1	10,9	~~III~~ III	2	K=H		1 —
?	10,5	11,3	~~II~~ a 1215	4	K=1,2H		3 F? diff. Bright.
	10,3	11,4	~~II~~	2	K=H		1 —
	10,4	14,5	~~III~~ b. 1216	3	K=H		1 F,
√ √	10,9	15,4	~~I~~ I	6	K=1,5H	K=.5H	2 2 F. —
	10,4	17,7	~~I~~	5	K=,8H		2 —
	10,8	21,7	~~I~~	5	N		2 —
√ √	9,1	7,2	~~I~~ I	3	H	N	K=H 1 1 — —
√ √	9,6	8,2	~~I~~ I	3	H	N	K=H 1 1 — —
	9,8	12,8	~~I~~	5	K=H		2 —
√ √	9,1	13,6	~~III~~ III	2	3 K=H	K=H	1 1 — F
√ √	9,4	14,3	~~II~~ ? IIa 1216a	2	3 K=H	K=H	1 1 — F diff
	9,0	16,4	~~II~~	2	K=H		1 —
?	9,0	17,1	~~II~~ I a	II	K=,2H		2 F? diff.
?	9,0	18,5	~~II~~ 1217	4	K=H		2 diff.
	9,6	20,0	~~I~~	7	K=,2H		2 F.
√ √	9,5	20,7	~~I~~ I?	4	H N	K=H	1 1 — —
	9,1	23,1	~~I~~	7	N		3 F.
	8,5	7,1	~~III~~ b. 1218	3	K=H		2 F.
	8,5	7,7	~~III~~	2	K=H		1 —

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	No.	R.A.	Dec.	Mag.			Br.				
17 21+66.7	1013	17 20.9	+66 42	7.0	_		6.9	7.9	7.1		6.8
							7.5	1.0 8.2	7.4		7.1
17 8+56.9	1954	17 8.3	+56 30	7.5	_		6.9	7.0 .7	7.7	6.9	6.9
16 56+56.9	1934	16 56.7	+56 34	6.0	_		6.7	6.7	7.4	6.6	6.6
							6.9	7.0 .7	7.7	6.9	6.9
16 22+76.1	396	16 21.8	+76 3	3.3	_		4.3	1.5 5.8		3.5	4.2
16 15+76.2	394	16 13.8	+76 16	6.0	2739	5.5 6-2	4.5	1.6 6.1		3.3	4.4
18 35+76.1	694	18 35.0	+76 6	7.8	_		6.9		8.4	7.6	6.8
							7.1	1.5 8.6		7.8	7.0
18 5+66.9	1077	18 3.3	+66 36	6.5	_		6.8	1.0 7.8		7.0	6.7
17 51+56.9	2033	17 51.0	+56 34	3.5	_		5.0		5.7	4.9	4.4
							5.4	.7 6.1		5.3	5.3
17 38+57.4	1791	17 38.2	+57 23	7.0	_		7.0		7.7	6.9	6.9
							7.1	.7 7.8		7.0	7.0
17 56+76.2	667	17 55.9	+76 38	3.2	_		4.4	1.6 6.0		3.2	4.3
17 55+77.0	670	17 54.8	+77 3	7.5	_		7.0	1.6 8.6		7.8	6.9
17 25+67.4	1014	17 25.4	+67 26	6.5	_		6.3		7.3	6.5	6.2
							6.4	1.0 7.4		6.6	6.3
17 21+57.1	1758	17 20.9	+57 8	6.3	_		6	26.4 .7	7.1	6.3	6.3
16 58+77.1	639	16 58.7	+77 4	7.2	_		6.4	1.6 8.0		7.2	6.3
16 24+76.5	600	16 24.5	+76 28	7.2	.		6.2	1.6 7.8		7.0	6.1
18 34+77.0	697	18 33.9	+77 2	8.5	.		6.7	6.8 1.6	8.4	7.6	6.7
18 24+77.0	693	18 24.3	+77 2	8.0	.		7.0	7.0 1.6	8.6	7.8	6.9
17 31+57.6	1780	17 31.2	+57 40	6.3	_		6.3	.7 7.0		6.2	6.2
							6.8	7.0	7.7	6.9	6.7
17 28+57.9	1774	17 28.4	+57 39	6.7	_		7.1	7.3 .7	8.6	7.2	7.2
17 27+67.9	1015	17 26.8	+67 33	7.8	_		6.7	6.9 1.1	8.0	7.2	6.8
15 7+77.8	571	15 7.4	+77 35	7.8	_		7.0	1.7 8.7		7.9	6.9
17 3+77.8	641	17 3.8	+77 32	6.5	_		5.6	1.7 7.3		6.5	5.5
16 49+77.7	634	16 49.6	+77 45	6.0	_		5.3	1.7 7.0		6.2	5.2
16 56+67.7	977	16 55.9	+67 42	6.5	_		6.0	1.1 7.1		6.3	5.7
17 1+57.7	1729	17 1.1	+57 42	8.2	_		7.2	7.2 .7	7.9	7.1	7.1
16 8+77.2	616	16 8.5	+77 11	6.0	2724	5.7 6-2	4.7	1.6 6.3		3.5	4.6
18 37+77.4	699	18 36.8	+77 25	6.5	_		6.0		7.7	6.9	5.7
							6.5	1.7 8.2		7.2	6.4
18 31+77.5	696	18 31.3	+77 28	7.7	_		6.8		8.5	7.7	6.7
							7.0	1.7 8.7		7.9	6.9

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The reading of this plate is continued in Book 18, p. 4.

June 2, 1887.

Plate 1333.

	r	H	Type	No. lines	K	Focus	No. lines.	Other
	8,0	10,0	I	5	K=.5H	1	—	
	8,7	13,2	III b,c	12192	K=H	2	Bright pecu,	
√	8,0	16,5	III	2	K=H	1	=	
?	8,3	19,2	II a	12203	K=H	1	F, pecu,	
	8,4	19,4	I	6	K=.5H	1	—	
	8,8	19,8	III	3	K=H	1	F	
	8,6	20,6	I	3	N	1	—	
?	7,9	6,4	II a	12212	K=H	1	pecu,	
	8,1	6,3	II?	2	K=H	1	—	
	7,4	10,0	I	4	N	1	—	
	7,8	11,5	III b	12222	K=H	1	—	
?	7,5	12,3	II a	12235	K=H	4	F pecu Bright,	
	7,7	14,7	I	7	K=.2H	2	F?	
√	7,3	19,1	I	4 4	K=H K=H	1	— —	
	7,7	21,5	I	6	K=.8H	1	—	
	6,9	11,1	II d?	4	K=H	1	—	
	6,6	11,7	II a	12242	K=H	1	—	
?	6,0	12,8	II a	12253	K=H	1	pecu,	
	6,1	18,5	III b	12263	K=H	1	F,	
?	6,3	19,0	II a	12272	K=H	1	pecu,	
	6,1	21,1	I	5	N	1	—	
	6,5	24,3	I	9	N	4	F	
?	6,1	24,6	II d?	9	?	3	F, pecu,	
	5,5	8,4	III	3	K=H	1	F,	
	5,9	9,1	III	2	K=H	1	—	
	5,9	10,2	II	2	K=H	1	—	
?	5,8	11,7	II a	1228	K=H	1	pecu,	
?	5,9	12,3	II a	12293	K=H	2	F, pecu	

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Mean

No.	R.A.	Dec.	Mag.		Br.				
961	17 49.8	+68 23	7.7	–	6.9	11	8.0	7.2	6.8 ✓
938	17 32.3	+68 13	3.5	–	5.6 / 6.1	11	5.7 / 7.2	5.9 / 6.4	5.5 ✓ / 6.0
580	17 7.7	+78 19	7.0	–	7.2 / 7.5 / 7.4	17	8.8 / 9.1	8.0 / 8.3	7.0 ✓ / 7.3
562	16 42.0	+78 2	6.8	–	6.3	17	8.0	7.2	6.2 ✓
628	16 39.9	+77 38	7.8	–	6.4	17	8.1	7.3	6.3 ✓
627	16 36.9	+77 43	6.3	–	6.0 / 6.3	17	7.7 / 8.0	6.9 / 7.2	5.9 ✓ / 6.2
893	16 32.2	+68 9	7.7	.	6.6	11	7.7	6.9	6.5 ✓
702	18 44.5	+77 32	7.0	–	6.0	17	7.7	6.9	5.9 ✓
1052	18 9.6	+67 38	7.5	–	7.0	11	8.1	7.3	6.4 ✓
963	17 50.3	+68 43	7.4	.	6.3	11	7.4	6.6	6.2 ✓
616	17 38.4	+78 20	6.3	–	6.4 / 6.8	17	8.1 / 8.5	7.3 / 7.7	6.3 ✓ / 6.7
949	17 37.8	+68 48	4.8	–	4.7	11	3.8	3.0	4.6 ✓
1731	17 23.9	+38 48	6.0	–	6.4	7	7.1	6.3	6.3 ✓
908	~~17~~ 16 39.9	+68 32	7.5	–	6.8	11	7.9	7.1	6.7 ✓
1689	16 37.5	+38 40	6.3	–	6.5	7	7.2	6.4	6.4 ✓
621	18 2.9	+78 41	7.4	–	6.5	18	8.3	7.5	6.4 ✓
939	17 41.3	+69 12	7.0	–	6.7	11	7.8	7.0	6.6 ✓
536	17 47.1	+79 16	7.3	–	6.4	18	8.2	7.4	6.3 ✓
511	16 46.2	+79 11	6.3	–	6.3 / 6.7	18	8.1 / 8.5	7.3 / 7.7	6.2 ✓ / 6.6
884	16 39.9	+69 24	6.3	–	6.3	11	7.4	6.6	6.2 ✓
872	16 48.1	+69 19	7.5	.	6.5	11	7.6	6.8	6.4 ✓
527	15 49.3	+78 13	4.7	2657 4.5 2 + 4	4.0	17	5.7	4.9	3.9 ✓
850	16 28.3	+69 5	5.2		5.0	11	6.1	5.3	4.9 ✓
587	18 33.3	+79 7	7.0	–	6.2 / 6.6	18	8.0 / 8.4	7.2 / 7.6	6.1 ✓ / 6.5
632	18 24.8	+78 39	7.7	–	6.9 / 7.0	18	8.7 / 8.8	7.9 / 8.0	6.8 ✓ / 6.9
576	18 14.1	+79 5	8.2	–	7.1	18	8.9	8.1	7.0 ✓
564	17 58.6	+79 21	7.5	–	6.5	18	8.3	7.5	6.4 ✓
933	17 38.0	+69 39	6.5	± ✓	6.2 (39/5 6–7/3)	11	7.3	6.5	6.1 ✓

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