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Book 10.

Plates	Means
919	—
940	6
941	5
932	5
864	—
952	8
981	7
949	4
975	—
894	1
883	19
890	—
897	5
830	—
880	—
895	4
986	—
911	5
988	—
1002	—
1028	8
1054	11
1068	8
1034	7
1092	8
1099	15
1108	5
1070	4
1118	11
1167	4
1106	—
1132	10
1100	9
1036	11
1228	11
1101	9
1120	12
1157	7
1121	12
1230	10
1273	7
1122	11
1160	6
1238	4
1302	6
1309	3
1161	4
1304	5
1310	3
1138	7
1217	—
1385	2
1139	11
1181	2
1129	9
1140	8
1210	1

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Amt. of Fog. due to moon & clouds. 7.6

Amt. of Fog. due to chemicals. 7.7

December 9. 1886.

Plate 907

α 48	V	H	Type	No. lines	K	Focus	Other lines.	V	H	V	H	Correc.
	22.7	9.7	I	17	K=.2H	N ?	2	—	11.4	19.4	46.4	33.8	+3.4
	21.1	17.8	II[a] 1474	13	K=H	N	2	Keen F. Line.	10.6	35.6	47.2	17.6	-1.1
	21.1	18.7	I	7		N	2	—	10.6	37.4	47.2	15.8	-2.5
	21.0	9.6	I[b?] 1475	6		N	2	—	10.5	19.2	47.3	34.0	+6.5
	20.3	9.5	I	9		N	3	—	10.2	19.0	47.6	34.2	+6.6
	19.8	19.4	I	17	K=.1 H	K=.1 H	3	F	9.9	38.8	47.9	14.4	-1.8
	19.3	17.7	I	14		N	1	—	9.6	35.4	48.2	17.8	-1.8
	18.2	10.5	II 1476	12	K=H		1	Keen	9.1	21.0	48.7	32.2	+1.9
	19.2	17.6	II[a] 1477	12	K=H		1	Keen	9.6	35.2	48.2	18.0	-1.8
	17.1	15.4	I	14		N	1	—	8.6	30.8	49.2	22.4	-0.3
	17.4	7.1	I	14		N	1	—	8.7	14.2	49.1	39.0	+5.5
	17.8	19.9	I ?	3		N	1	—	8.8	39.8	49.0	13.4	-3.3
	17.2	20.0	I ?	4	K=H		1	—	8.6	40.0	49.2	13.2	-3.5
	16.7	11.7	I	6		N	1	—	8.2	23.4	49.6	29.8	+1.5
	16.8	10.8	I	10	K=2H ?		3	Keen	8.0	21.6	49.8	31.6	+6.0
	15.8	18.0	I	I 13	H	N	1	—	7.8	36.0	50.0	17.2	-2.1
	15.5	20.8	I	9	K=H		2	—	7.6	41.6	50.2	11.6	-2.8
	15.2	8.6	I	9		N	2	—	7.4	17.2	50.4	36.0	+4.6
	15.0	7.0	I	9		N	3	—	7.4	14.0	50.4	39.2	+6.9
	15.0	18.5	I 1478	15		N	2	—	7.2	36.8	50.6	16.4	-2.6
	14.0	8.9	I	5		N	1	—	7.0	17.8	50.8	35.4	+4.4
	13.8	8.0	I	5	K=H ?		1	—	6.8	16.0	51.0	37.2	+5.1
	13.7	7.8	I	6		N	1	—	6.8	15.6	51.0	37.6	+5.2
	12.7	20.6	I ?	5	K=H		1	—	6.2	41.2	51.6	12.0	-4.2
	12.7	11.1	I	5		N	1	—	6.3	22.2	51.5	31.0	+3.0
	12.8	10.7	I	5	K=H		1	—	6.2	21.4	51.6	31.8	+3.2
4	11.8	14.1	III	2	K=H		2	F	5.8	28.2	52.0	25.0	+0.7
	13.0	16.2	I[b?] 1479	8		N	2	Keen	6.5	32.4	51.3	20.8	-0.9

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Mean 6

½ cos δ	No.	R.A.	Dec.	Mag.	H	V	H'	Red. 1900	Cou. Bu	Bres.					
	102	0 36.8	+ 46 22	5.0	56.2	57.8	52.8	h m ° ' 0 37.9 + 46 29							
	49	0 14.9	+ 37 18	5.3	60.5	47.9	61.6	0 15.8 +37 25	—	5	5.7	6.3	6.0	0.2	6.2 5.6
0.2 6.1	39	0 10.8	+ 47 16	5.8	48.2	57.9	50.7	0 11.9 + 47 24			5.5	6.1	5.9	0.4	6.3 5.7
0.2 6.1	105	0 37.8	+ 47 12	5.5	57.0	57.7	53.5	0 38.8 + 47 19		8 +2	5.4	6.0	5.9	0.4	6.3 5.7
0.2 5.1	107	0 38.0	+ 47 38	4.6	57.0	57.8	53.4	0 39.2 + 47 44		7 +1	4.6	5.2	4.9	0.4	5.3 4.7
0.1 5.3	40	0 10.8	+ 38 1	4.3	49.6	47.9	51.4	0 11.9 + 38 8		12 +6	4.9	5.5	5.2	0.3	5.5 4.9
	Dm. 79	0 12.4	+ 48 3	6.4	47.8	57.6	49.6	0 14.8 + 48 18							
	~~66~~	~~0 15.8~~	~~+ 37 69~~	~~9.0~~	~~60.7~~	~~47.6~~	~~51.9~~	~~— —~~			6.0	6.6	6.4	0.4	6.8 6.2
	96	0 34.6	+ 38 48	5.6	55.6	47.9	53.7	0 35.7 + 38 55	—		6.1	6.7	6.3		6.6 6.0
	Dm. 84	0 12.8	+ 48 11	6.6	48.0	57.8	49.6	0 15.2 + 48 26			6.3	6.9	6.5	0.3	6.8 6.3
	~~68~~	~~0 16.4~~	~~+ 37 46~~	~~var.~~	~~61.6~~	~~47.4~~	~~52.6~~	~~— —~~			6.4	7.0	6.7	0.4	7.3 6.7
	Dm 91	0 19.4	+ 49 11	7.1	60.2	57.8	50.5	0 21.8 + 49 26			6.1	6.7	6.5	0.3	7.0 6.4
	Dm. 272	0 45.1	+ 48 52	7.8	59.2	57.6	53.7	0 47.6 + 49 7							
	~~226~~	~~0 43.8~~	~~+ 49 16~~	~~7.8~~	~~58.6~~	~~60.9~~	~~52.5~~	~~— —~~			6.5	7.1	6.6	0.3	7.1 6.3
	Dm. 40	0 3.8	+ 48 55	7.0	45.6	57.7	48.9	0 8.1 + 48 10							
	~~60~~	~~0 9.3~~	~~+ 48 40~~	~~6.5~~	~~49.1~~	~~57.5~~	~~52.4~~	~~— —~~			6.6	7.2	6.8	0.3	7.3 6.7
	30	0 3.5	+ 49 7	6.7	43.5	57.7	49.6	0 7.8 + 49 22	—						
	Dm. ~~65~~	~~0 8.0~~	~~+ 49 15~~	~~7.5~~	~~48.0~~	~~67.8~~	~~51.5~~	~~— —~~			6.7	7.3	6.9	0.3	7.4 6.8
	Dm. 138	0 29.7	+ 39 32	6.5	63.1	47.7	51.6	0 32.1 + 39 47							
0.2 5.1	100	0 35.5	+ 49 51	4.8	57.1	57.9	54.1	0 36.5 + 49 38		6	4.7	5.3	4.9	0.3	5.4 4.8
	Dm. 43	0 11.3	+ 49 58	7.5	47.3	57.7	49.4	0 13.7 + 49 50 8 68			6.9	7.5	7.1	7.1 0.3	7.6 7.0
	25	0 7.3	+ 40 22	5.8	48.9	48.0	51.7	0 8.3 + 40 29	—		5.7	6.3	6.0	0.3	6.3 5.7
0.2 5.2	121	0 42.0	+ 50 19	5.0	59.2	57.7	54.6	0 43.2 + 50 25		5	4.8	5.4	5.0	0.3	5.3 4.9
0.1 5.0	127	0 43.2	+ 40 26	4.4	57.2	47.8	53.3	0 44.3 + 40 32		8 +2	4.7	5.3	4.9	0.3	5.2 4.6
	Dm 46	0 10.1	+ 50 38	6.5	46.9	57.8	49.5	0 12.5 +50 56 3			5.5	6.1	5.8	0.3	6.3 5.7
	Dm 143	0 39.8	+ 50 39	7.5	57.6	57.6	53.2	0 42.3 +50 54							
	~~10+~~	~~0 39.2~~	~~+ 40 39~~	~~neb.~~	~~54.0~~	~~47.6~~	~~51.6~~	~~— —~~			6.1	6.7	6.4	0.3	6.9 6.3
	Dm. 161	0 42.7	+ 50 43	6.7	58.7	57.5	53.6	0 45.2 +50 58	—						
	Dm. 164	0 43.3	+ 60 47	6.7	58.9	57.6	53.7	0 45.8 +50 57 02 ~~+60 67~~			5.7	6.3	6.0	0.3	6.3 5.7
	Dm. 122	0 2.7	+ 51 27	7.1	43.9	57.6	48.1	0 5.0 +51 42	—						
	~~60~~	~~0 7.4~~	~~+ 61 60~~	~~7.6~~	~~48.6~~	~~58.0~~	~~52.8~~	~~— —~~			6.3	6.9	6.7	0.3	7.2 6.6
	Dm. 126	0 66.1	+ 61 24	7.0	66.3	57.7	52.3	0 35.6 +51 39							
	Dm. 163	0 34.6	+ 61 66	7.0	65.9	57.8	52.7	0 37.0 +51 58 4	—		6.3	6.9	6.5	0.3	7.1 6.4
	~~91~~	~~0 23.1~~	~~+ 42 5~~	~~9.0~~	~~51.3~~	~~47.9~~		~~0 25.5 + 42 20~~			~~6.4~~	~~6.9~~	~~6.5~~	~~0.3~~	~~7.0 6.4~~
	Dm ~~92~~	~~0 28.8~~	~~+ 62 2~~	~~6.2~~	~~42.0~~	~~57.8~~	~~51.2~~	~~0 26.2 + 52 17~~	—		6.5	7.1	6.9	6.7 0.3	7.4 6.8
0.3 5.8	65	0 17.8	+ 61 21	6.4	60.2	57.9	51.1	0 18.9 + 51 28		6	4.9	5.5	5.5	0.3	6.0 5.4

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December 10th 1886

Plate 907

	V	H	Type	Lines	K	Focus	Other Lines.	V	H	V	H	Correc.
	11.7	19.2	I	II 2	K=H			5.8	38.4	52.0	14.8	-3.7
	11.3	7.4	I					5.6	14.8	52.2	38.4	+5.8
	11.1	16.0	I					5.6	32.0	52.2	21.2	-0.8
	10.6	18.5	I					5.3	37.0	52.5	16.2	-2.8
	10.3	13.5	I					5.2	27.0	52.6	26.2	+0.8
	10.2	12.9	I					5.1	25.8	52.7	27.4	+1.6
	10.0	19.4	I		K=H			5.0	38.8	52.8	14.4	-2.3
	9.9	19.9	I					5.0	39.8	52.8	13.4	-3.8
	9.7	18.6	I				F	4.8	37.2	53.0	16.0	-1.9
	9.5	12.5	I	h 1480				4.8	25.0	53.0	28.2	+1.9
	9.4	14.1	I					4.7	28.2	53.1	25.0	+0.5 +0.4
	9.0	13.3	I		K=H			4.5	26.6	53.3	26.6	+1.4
	9.0	12.7	I					4.5	25.4	53.3	27.8	+1.8
	8.9	13.0	I		K=.5H	K=.2H? 2		4.4	26.0	53.4	27.2	+1.6
	8.9	12.7	I					4.4	39.4	53.4	13.8	-2.6 -3.7
	8.8	10.3	I		K=H			4.4	20.6	53.4	32.6	+3.7
	8.8	16.6	I		K=H			4.4	38.2	53.4	20.0	-0.6
	8.7	15.1	I					4.4	30.2	53.4	23.0	-0.1
	8.4	14.1	I				F?	4.2	28.2	53.6	25.0	+0.7
	8.5	12.1	III		K=H			4.2	24.2	53.6	29.0	+1.6
	8.3	17.0	I					4.2	34.0	53.6	19.2	-1.1
	8.1	18.6	I					4.0	37.2	53.8	16.0	-1.9
	7.5	8.7	I					3.8	17.4	54.0	35.8	+2.1
	7.6	13.7	III		K=H	2	F	3.8	27.4	54.0	25.8	+1.1
	7.0	7.2	I					3.5	14.4	54.3	38.8	+4.5
	6.7	10.2	I					3.4	20.4	54.4	32.8	+3.9
	6.5	10.0	I	h 1481			Rem	3.2	20.0	54.6	33.2	+4.1 +4.7
	6.6	23.3	I		K=H			3.3	46.6	54.5	6.6	-6.3

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Mean. 6

cor.

½ Cos δ.	No.	R.a.	Dec.	Mag.	H	V	H′	Red. to 1900.	Br.	Brc.
	Dm 25	0 6.7	+ 52 3	7.4	45.1	57.8	48.8	0 8.0 +52 18		
	~~30~~	~~0 7.6~~	~~+ 51 50~~	~~7.6~~	~~45.8~~	~~57.6~~	~~49.5~~			
	Dm. 179	0 45.5	+ 51 54	6.3	60.3	57.5	54.5	0 48.1 +52 9	5.9	6.5 6.3 0.3 6.8 6.2
0.3 5.9	67	0 18.6	+ 52 23	5.8	60.6	58.0	51.4	0 19.7 +52 30	5.2	5.8 5.6 0.5 6.1 5.3
	Dm. 33	0 9.4	+ 52 26	7.8	46.4	57.7	49.2	0 11.8 +52 41	6.7	7.3 7.0 7.8 0.5 7.5 6.9
	Dm 99	0 24.7	+ 42 42	6.5	51.7	47.9	50.9	0 27.1 +42 57	6.0	6.6 6.5 0.3 6.8 6.2
	Dm. 115	0 27.6	+ 52 41	7.6	63.4	57.8	51.8	0 30.1 +52 56	6.4	7.0 6.7 6.7 0.3 7.2 6.6
0.2 6.7	36	0 10.1	+ 42 56	6.0	48.9	47.9	51.2	0 11.1 +43 3 / ~~0 12.4 +43 11~~	5.6	6.2 6.0 0.3 6.3 6.7
	Dm 19	0 4.5	+ 52 49	6.5	44.3	47.8	48.1	0 6.8 +53 4		
	~~30~~	~~0 7.6~~	~~+ 52 46~~	~~7.6~~	~~47.4~~	~~57.8~~	~~51.2~~		6.4	7.0 6.7 0.3 7.2 6.6
0.2 6.1	43	0 12.4	+ 43 8	5.9	49.6	47.9	51.5	0 13.4 +43 14	5.9	6.1 5.9 0.3 6.2 5.6
0.3 4.3	82	0 30.3	+ 53 14	3.7	55.3	58.0	53.4	0 31.3 +53 21	4.3	4.3 4.0 0.6 4.6 4.0
	~~97~~ Dm. 86	~~0 23.8~~ 0 24.2	~~+ 43 9~~ + 43	~~6.7~~ 7.4	~~51.8~~ 52.1	~~57.9~~ 57.7	~~51.3~~ 51.7	0 ~~25.8~~ 26.0 +43 24		
	~~70~~	~~0 25.1~~	~~+ 30 56~~	~~6.2~~	~~53.3~~	~~35.6~~				
	Dm. 98	0 26.2	+ 53 16	7.3				0 28.7 +53 31		
	Dm. ~~120~~	~~0 27.6~~	~~+ 66 24~~	~~7.1~~	~~64.1~~	~~69.1~~	~~52.7~~	0 30.0 +53 39	6.7	7.3 7.0 0.6 7.6 7.0
0.3 5.6	77	0 29.5	+ 53 30	5.0	54.9	58.0	53.1	0 30.5 +53 38	4.7	5.3 5.3 0.6 5.9 5.3
	~~82~~	~~0 30.3~~	~~+ 53 14~~	~~3.7~~	~~55.9~~	~~57.9~~	~~53.9~~	30.0		
	Dm. ~~100~~	~~0 29.5~~	~~+ 53 24~~	~~7.1~~	~~53.4~~	~~57.8~~	~~51.8~~	0 ~~31.1~~ +53 39		
	Dm. ~~102~~	~~0 34.1~~	~~+ 52 22~~	~~5.8~~						
	~~77~~	~~0 29.5~~	~~+ 53 30~~	~~6.0~~	~~55.5~~	~~57.9~~	~~53.9~~		6.2	6.8 6.5 0.6 7.1 6.3
	Dm. 33	0 7.7	+ 43 23	6.7	47.1	47.8	49.7	0 10.0 +43 38		
	~~30~~	~~0 8.8~~	~~+ 43 8~~	~~7.0~~	~~48.2~~	~~47.6~~	~~51.9~~		6.2	6.8 6.5 0.3 6.8 6.3
	Dm. 131	0 36.2	+ 53 21	7.6	66.8	57.7	53.1	0 38.7 +53 36	6.6	7.2 6.8 6.8 0.6 7.4 6.9
	Dm. 53	0 17.7	+ 43 36	6.6	50.9	48.0	51.3	0 18.7 +43 43		
	~~84~~	~~0 18.9~~	~~+ 43 14~~	~~8.6~~	~~51.1~~	~~47.6~~	~~51.7~~		6.6	7.2 6.8 6.8 0.4 7.2 6.6
0.2 5.7	59	0 21.8	+ 43 44	6.2	52.0	48.1	52.1	0 22.9 +43 51	5.0	5.6 5.5 0.4 5.9 5.3
0.3 4.9	69	0 25.1	+ 53 50	4.8	53.3	58.0	52.6	0 ~~27.6~~ 26.2 +53 59	4.3	5.1 4.6 0.6 5.1 4.3
	81	0 30.2	+ 43 50	6.4	54.4	48.0	52.8	0 31.3 +43 37	6.4	7.0 6.7 0.4 7.1 6.5
	Dm. 67	0 15.4	+ 43 43	7.0	49.4	47.9	50.4	0 17.3 +43 58	6.8	7.4 7.0 0.4 7.4 6.8
	~~53~~	~~0 19.7~~	~~+ 43 36~~	~~6.6~~	~~51.7~~	~~47.8~~	~~52.8~~		6.6	7.2 7.0 0.4 7.4 6.8
	Dm. 49	0 11.1	+ 43 51	6.8	48.3	47.8	50.2	0 13.5 +44 6		
	~~62~~	~~0 12.2~~	~~+ 43 54~~	~~8.2~~	~~49.4~~	~~47.9~~			6.5	7.1 6.8 6.8 0.4 7.2 6.6
0.2 6.7	113	0 39.6	+ 44 11	5.9	57.0	48.0	54.9	0 40.7 +44 18 / ~~0 42.1 +44 26~~	5.6	6.2 6.0 0.4 6.4 5.8
	Dm. 101	0 26.2	+ 54 6	6.5	56.6	57.9	51.5	0 27.7 +54 21	6.6	7.2 7.0 7.0 0.6 7.6 7.8
0.2 6.4	133	0 43.6	+ 44 20	5.9	58.0	47.8	53.5	0 44.7 +44 27 / ~~0 46.1 +44 35~~	5.9	6.5 6.2 0.4 6.6 6.0
0.3 5.6	110	0 38.4	+ 54 34	5.4	68.8	68.0	54.9	0 39.6 +54 40	5.1	5.7 5.3 0.6 5.9 5.3
	Dm. 148	0 38.0	+ 54 31	7.3	68.0	57.7	53.9	0 40.1 +54 46	6.2	6.8 6.3 0.6 6.9 6.3
	Dm. 4550	23 57.7	+ 44 25	6.3	104.3	47.7	109.0	~~43.0~~ ~~68.0~~ +44 40		
	~~6~~	~~0 1.0~~	~~+ 44 10~~	~~8.2~~	~~47.6~~	~~47.0~~	~~50.9~~		6.8	7.4 6.8 0.4 7.2 6.6

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December 10. 1886.

Plate 907.

V	H	Type	No. Lines	K	Focus	Other Lines	V	H	V	H	Correc.
5.5	23.4	I	6	N	2	F?	2.8	46.8	65.0	6.4	-7.0
? 5.4	23.9	II a 14822	5	K=H	1	Recen.	2.7	47.8	65.1	6.4	-7.5 -6.4
2.3	19.8	I	5	K=H	1	—	2.6	39.6	65.2	13.6	-4.0 -3.8
5.2	20.5	I	4	N	1		2.6	41.0	65.2	12.2	-3.2
? 5.1	21.3	II a 14833	2	K=H	2	I. Recen.	2.6	42.6	65.2	10.6	-3.8
? 4.3	11.7	III b.c. 14843	4	K=1.2H K=.2H?	4	F. Bright Recen.	2.2	23.4	65.6	29.8	+2.9
4.0	15.5	I	1	—	1	—	2.0	31.0	65.8	22.2	-0.4
3.2	9.9	I	2	K=.2H	2	—	1.6	19.8	66.2	33.4	+3.2
2.8	19.9	I	5	N	1	—	1.4	39.8	66.4	13.4	-4.5

Amt. of Fog due to Moon & Clouds. 9.4

Amt. of Fog due to Chemicals 9.8

Plate 908.

22.3	11.5	I	6	N	2	—	11.2	23.0	26.7	29.2	+0.7
22.3	21.0	I	6	N	2	—	11.2	42.0	26.7	10.2	-1.3
? 21.7	13.2	I a 1485	5	N	1	Recen.	10.8	26.4	27.1	26.8	+0.4
? 21.2	15.3	III a 1486	2	K=H	1	F Recen.	10.6	30.6	27.3	21.6	0
23.3	23.7	I I	3	N	1	—	10.2	47.4	27.7	4.8	-2.0 -0.9
18.9	23.9	I ?	12		5	F.	9.4	47.8	28.5	4.4	-2.1
? 18.5	13.6	III b 1487	2	K=1.2H	3	Recen.	9.2	27.2	28.7	31.0	+1.1
18.2	17.6	I	4	K=H	1	—	9.0	35.2	28.9	17.0	-0.7
17.3	6.2	I	5	K=H	1	—	8.6	12.4	29.3	39.8	+1.0
17.2	14.4	I	7		3	—	8.6	28.8	29.3	23.4	+0.1
16.9	16.3	I	7	N	1	—	8.4	32.6	29.5	19.6	-0.1
16.8	21.7	III	3	N	1	F.	8.4	43.4	29.5	8.8	-0.8
16.6	13.2	III	3	K=H	2	F	8.3	26.4	29.6	25.8	+0.2
? 15.4	10.4	III b.c. 1488	2	K=1.2H	3	F. Bright Recen.	7.7	20.8	30.2	31.4	+1.3
15.3	18.5	I	6	N	2	—	7.6	37.0	30.3	15.2	-0.9
14.6	10.0	III	4	N	1	Bright?	7.3	20.0	30.6	32.2	+0.7
							7.2	19.6	30.7	32.6	+0.5

4 4

Recorded on p.10.

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Mean 6

No.	R.a.	Dec.	Mag.	H	V	H'	Red. to 1900	Cow. Bv	Cow. Bc.
~~Dm.~~	~~4237~~	~~23 53.0~~	~~+ 55~~	~~5~~	~~5.5~~	~~48.0~~	~~57.6~~	~~107.0~~	~~23 53.9 + 55 18~~
~~6109~~	~~26 58.2~~	~~+ 64~~	~~54~~	~~7.0~~	~~107.0~~	~~57.7~~	~~114.0~~		
~~Dm. 3076~~	~~23 49.9~~	~~+ 54~~	~~55~~	~~6.0~~	~~97.7~~	~~57.6~~	~~105.2~~	23 52.1 + 55 9	
~~4549~~	~~23 57.6~~	~~+ 44~~	~~52~~	~~7.2~~	~~106.4~~	~~49.6~~	~~116.5~~		
~~Dm. 15~~	~~0 4.0~~	~~+ 35~~	~~9~~	~~7.4~~	~~43.6~~	~~57.8~~	~~47.6~~	0 6.3 + 55 24	
~~52~~	~~0 10.5~~	~~+ 46~~	~~24~~	~~7.0~~	~~50.1~~	~~48.0~~	~~52.9~~		
~~Dm. 26~~	~~0 5.2~~	~~+ 45~~	~~18~~	~~7.0~~	~~46.2~~	~~47.9~~	~~49.5~~	0 7.5 + 45 33	
~~50~~	~~0 8.1~~	~~+ 44~~	~~43~~	~~8.0~~	~~49.1~~	~~47.6~~	~~52.3~~		
13	0 4.1	+ 45	24	4.9	46.7	48.0	50.5	0 5.1 + 45 31	
94	0 33.7	+ 55	53	2.2	57.1	58.1	54.2	0 34.8 + 56.6	
Dm. 74	0 18.8	+ 55	50	6.5	49.8	57.8	50.2	0 21.2 + 36 5	
102	0 36.8	+ 46	22	5.0	56.6	48.0	53.4	0 37.9 + 46 29	
11	0 2.9	+ 36	21	6.7	42.7	57.8	47.2	0 5.2 + 36 36	
~~Dm. 46~~	~~0 4.2~~	~~+ 56~~	~~28~~	~~4.3~~	~~44.0~~	~~57.9~~	~~48.5~~		

Mean 5

79	0 30.0	+ 26	36	6.1	63.0	37.8	52.3	0 31.1 + 26 42 / 0 32.4 + 26 50	
34	0 9.0	+ 26	36	6.9	61.0	37.8	52.3	0 10.0 + 26 43 / 0 11.3 +	
Dm. 76	0 26.0	+ 26	46	6.8	61.0	37.6	50.6	0 27.4 + 26 39	
60	0 21.8	+ 17	13	6.4	62.4	27.8	52.4	0 22.8 + 17 21	
Dm. 3	0 1.5	+ 27	26	7.0	48.9	37.6	50.9	0 3.8 + 27 39	
~~10~~	~~0 2.9~~	~~+ 17~~	~~34~~	~~6.7~~	~~60.3~~	~~27.8~~	~~51.2~~		
5	0 2.2	+ 28	26	2.1	60.0	37.8	52.1	0 3.2 + 28 33	
90	0 32.2	+ 28	40	4.6	63.4	37.9	52.3	0 33.2 + 28 47	
Dm. 49	0 16.3	+ 28	40	7.6	50.5	37.7	51.2	0 17.6 + 28 55	
118	0 40.9	+ 18	55	6.0	53.3	27.5	52.3	0 41.9 + 19 1	
~~Dm. 101~~	~~0 29.6~~	~~+ 18~~	~~48~~	~~6.3~~	~~52.0~~	~~27.4~~	~~51.6~~		
66	0 23.8	+ 29	6	6.3	62.6	37.7	52.5	0 24.8 + 29 12	
Dm. 64	0 18.5	+ 19	22	6.6	51.1	27.8	51.2	0 20.8 + 19 37	
28	0 8.4	+ 19	33	4.9	61.8	28.0	52.6	0 9.4 + 19 39	
76	0 26.3	+ 19	38	6.6	62.7	27.9	52.5	0 27.3 + 19 45	
92	0 32.9	+ 30	12	3.4	63.7	37.9	52.4	0 33.9 + 30 19	
46	0 14.2	+ 30	16	6.6	61.2	37.9	52.1	0 15.2 + 30 23	
Dm. 85	0 31.8	+ 20	28	6.2	51.8	1 37.8	51.1	0 34.2 + 20 43	
~~Dm. 93~~	~~0 33.6~~	~~+ 20~~	~~48~~	~~5.5~~	~~53.6~~	~~28.1~~	~~52.9~~		
82	0 30.1	+ 20	18	7.5	50.1	27.6	49.4		
~~93~~	~~0 33.6~~	~~+ 20~~	~~48~~	~~5.5~~	~~53.6~~	~~28.0~~	~~52.8~~		

0.3	5.5								
0.2	5.6								
0.1	6.6								
0.1	6.5								
0.1	5.9								

5.3	5.9	5.7	0.4	6.1	5.3				
3.4	4.0	3.8		B.	B.				
3.8	4.4	4.2	0.6	4.8	4.2				
6.1	6.7	6.5	0.6	7.1	6.5				
5.0	5.6	5.4	0.4	5.8	5.2				
6.3	6.9	6.5	0.6	7.1	6.5				
6.3	6.9	6.5	0.6	7.1	6.5				
6.5	7.0	6.6	0.1	6.7	6.3				
6.5	7.0	6.7		6.7	6.3				
6.9	7.4	7.0	0	7.0	6.6				
6.5	7.0	6.8	0.1	6.9	6.3				
5.1	5.6	5.6		5.7	5.3				
5.4	5.9	5.8	0.1	5.9	5.5				
6.5	7.0	6.6	0.1	6.7	6.3				
6.3	6.8	6.5	0.1	6.6	6.2				
5.3	5.8	5.5	0.1	6.6	6.2				
6.1	6.6	6.4	0.1	6.5	6.1				
6.1	6.6	6.4		6.5	6.1				
6.6	7.1	6.9	0.1	7.0	6.6				
6.1	6.6	6.3		6.4	6.0				
6.4	6.9	6.6	0.1	6.7	6.3				
4.5	5.3	5.3		5.3	5.1				
5.3	5.8	5.6	0.2	6.0	5.6				
5.5	6.0	5.8	0.2	6.0	5.6				
6.6	7.1	6.9	0.1	7.0	6.6				

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December 13th. 1886.

Plate 906.

1.45	ν	H	Type.	Lines	K	Focus	Other Lines.	ν	H	ν	H	Corrc.
	14.4	16.7	I	6	N	2	—	7.2	33.4	30.7	18.8	−0.5
∫	14.5	19.6	I	I 3	N	1 1	— —	7.2	39.2	30.7	13.0	−1.3
∫	14.2	23.8	I	I? H	K=H	1 1	— —	7.1	47.6	30.8	4.6	−2.5
↑	14.2	9.8	III	1489		1	seen	7.1	19.6	30.8	32.6	+0.7
Recorded above.	14.3	16.7	I	6	N	2		7.2	33.4	30.7	18.8	
∫	13.9	11.4	I	I 3	H N K=H	1 1	— —	7.0	22.8	30.9	29.4	+1.0
	14.0	19.3	I		N	2	—	7.0	38.6	30.9	13.6	−1.2
	12.5	21.4	I			1	—	6.2	42.8	31.7	9.4	−0.9
	12.3	15.1	I		K=H	2	—	6.2	30.2	31.7	22.0	0
	11.7	9.4	I			1	—	5.8	18.8	32.1	33.4	+1.7
∫	11.1	18.3	III	III 2	K=H	1 1	— F.?	5.6	36.6	32.3	15.6	−1.0
	10.7	21.2	I		N	2	—	5.4	42.4	32.5	9.8	−1.9
	10.4	8.6	I			1	—	5.2	17.2	32.7	35.0	+2.0
∫	10.2	22.6	III?	III 2	K=H	1 1	— F	5.1	45.2	32.8	7.0	
	10.1	13.8	III		K=H	1	F.	6.0	27.6	32.9	24.6	+0.4
	9.0	11.2	III		K=H	1	—	4.5	22.4	33.4	29.8	+0.6
	9.0	9.7	I		K=H	1	—	4.5	19.4	33.4	32.8	+0.9
↑	8.5	6.5	III	1490	K=H	2	F. seen.	4.2	13.0	33.7	39.2	+1.5
	7.9	9.2	I		K=2H	2	—	4.0	18.4	33.9	33.8	+1.0
∫	7.8	18.0	II	IIa? 2	K=H	1	— seen	3.9	36.0	34.0	16.2	+1.2
	7.3	13.5	I			2	—	3.6	27.0	34.3	26.2	+0.5
↑	7.2	15.8	III	1491		1	seen.	3.6	31.6	34.3	20.6	−0.1
	6.4	11.5	III			2	—	3.2	23.0	34.7	29.2	+1.2
	5.8	12.2	II		K=H	1	—	2.9	24.4	35.0	27.8	+0.9
∫	5.5	16.1	I	I 6	K=H N	1 1	— —	2.8	32.2	35.1	20.0	−0.4
∫	5.5	18.1	I	I 5 H	K=H	1 1	— —	2.8	36.2	35.1	16.0	−1.2
	4.0	19.9	I			1	—	2.0	39.8	35.9	12.4	−1.8
	3.7	19.2	I		N	2	F.	1.8	38.4	36.1	13.8	−1.7
	2.7	11.7	I		N	1		1.4	23.4	36.5	28.8	+0.7

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Mean 5

Cor.

½ cos δ	No.	R.A.	Dec.	Mag.	H	V	H′	Red. to 1900	Br	Bv
	Dm. 66	0 17.1	+ 30 34	6.8	50.6	37.6	51.0	0 19.4 +30 49	6.0 6.5 6.4	0.2 6.6 6.2
	Dm. 33	0 10.4	+ 30 29	8.4	49.6	37.7	50.9	0 12.7 +30 44	7.1 7.6 7.3	0.2 7.5 7.1
	~~35~~	~~0 11.1~~	~~+ 30 43~~	~~6.0~~	~~50.3~~	~~37.9~~	~~51.6~~			
	Dm. 2	0 0.6	+ 30 35	6.8	48.2	37.7	50.7	2.9 0 [illegible] +30 50	6.9 7.4 6.9	0.2 7.1 6.7
	93	0 33.6	+ 20 48	6.5	53.2	27.9	52.5	0 34.6 +20 54	6.5 6.5 6.5	0.1 6.7 6.5
	Dm. 82	0 29.4	+ 30 42	8.0	52.2	37.7	51.2	0 31.8 +30 57	6.9 7.4 7.1	0.2 7.3 6.9
0.1 5.8	44	0 12.6	+ 30 52	6.8	51.1	37.9	52.3	0 13.4 + 30 58	5.4 5.9 5.7	0.2 5.9 5.5
0.0 6.0	31	0 8.7	+ 21 37	6.0	51.6	27.8	52.4	0 9.7 + 21 43	5.7 6.2 6.0	0.1 6.4 5.7
	Dm. 59	0 20.8	+ 31 38	6.7	51.0	37.4	51.0	0 23.2 +31 53	6.1 6.6 6.4	0.2 6.6 6.2
	Dm. 101	0 34.3	+ 31 49	8.1	53.1	37.6	51.4	0 36.7 +32 4	6.7 7.2 6.8	0.2 7.0 6.6
	48	0 14.6	+ 32 15	6.0	51.1	37.8	52.1	0 15.5 + 32 21	6.5 7.0 6.7	0.2 7.0 6.5
0.1 6.0	27	0 7.8	+ 32 32	6.0	50.2	37.9	52.1	0 8.8 + 32 39	5.5 6.0 5.9	0.2 6.1 5.7
	Dm. 122	0 36.1	+ 32 31	6.8	53.3	37.7	51.3	0 38.5 + 32 46	6.6 7.1 6.7	0.2 6.9 6.5
	20	0 5.8	+ 22 49	6.6	51.0	24.9		0 6.8 +22 56	6.7 7.2 6.9	0.2 7.0 6.6
	70	0 26.1	+ 32 66	~~6.2~~ 6.2	52.7	37.9	52.3	0 26.1 + 33 02	6.7 7.2 6.8	0.2 7.0 6.6
	86	0 30.8	+ 23 21	6.6	53.2	27.9	52.6	0 31.9 + 23 28	6.7 7.3 6.8	0.1 6.9 6.5
	Dm. 92	0 32.7	+ 23 15	6.5	52.1	27.7	51.2	0 35.1 + 23 30	6.7 7.2 6.8	0.1 6.9 6.3
	119	0 41.0	+ 23 37	4.4	54.0	27.8	52.5	0 42.0 + 23 43	5.5 6.0 5.7	0.1 6.1 5.7
0.0 6.3	99	0 36.3	+ 23 69	6.0	53.7	28.0	52.7	0 36.3 + 24 5	5.8 6.3 6.0	0.1 6.4 6.0
	43	0 14.8	+ 23 83	7.3	50.8	27.8	49.6	0 17.1 + 24 8	6.1 6.6 6.3	0.1 6.4 6.0
	~~Dm 104~~	~~0 36.0~~	~~+ 24 6~~	~~7.9~~	~~Gx.0~~	~~28.0~~	~~50.8~~			
	Dm. 73	0 24.5	+ 34 11	6.5	51.6	37.8	51.0	0 26.7 + 34 26	6.7 7.0 6.7	0.2 6.9 6.5
	Dm. 52	0 19.5	+ 24 14	6.5	51.1	27.8	51.2	0 21.8 + 24 29	6.4 6.9 6.5	0.1 6.6 6.2
	87	0 31.0	+ 34 44	6.6	54.0	37.9	52.8	0 32.0 + 34 51	6.0 6.5 6.2	0.2 6.4 6.0
	Dm. 119	0 27.8	+ 34 61	7.7	52.2	37.7	51.3	0 30.2 + 34 6	6.2 6.7 6.4	0.2 6.6 6.2
	Dm. 69	0 18.4	+ 35 1	7.4	50.6	37.8	51.0	0 20.8 + 35 16	7.0 7.5 7.0	0.2 7.2 6.8
	Dm. 63	0 13.6	+ 35 4	7.1	49.8	37.9	51.0	0 15.9 + 35 19	6.9 7.4 6.9	0.2 7.1 6.7
	Dm. 36	0 9.2	+ 35 60	7.1	49.0	37.8	50.8	0 11.5 + 36 5	6.8 7.3 7.0	0.2 7.2 6.8
0.1 4.9	42	0 12.0	+ 36 7	4.6	50.4	37.9	52.1	0 13.1 + 36 14	6.5 7.0 6.7	0.2 6.9 6.5
0.1 6.4	79	0 30.0	+ 26 36	6.1	53.4	27.9	52.7	0 31.1 + 26 42	4.5 5.0 4.8	0.2 5.0 4.6
									6.1 6.6 6.3	0.1 6.4 6.0

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December 13th 1886.

Plate 906

V	H	Type	No. Lines	K	Focus	Other Lines.	V	H	V	H	Correc.
2.6	21.1	I α	6 α	N α	1	—	1.3	42.2	36.6	10.0	−1.3
2 50	21.0	13.4	I α	6 α	N ?α	1	—	1.0	26.8	36.9	26.4	+0.4

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Means

½ cos δ.	No.	R.A.	Dec.	Mag.	H	V	H′	Red. to 1900.	Br.
0.166	34	0 9.0	+26 36	6.9	51.2	27.9	52.5	0 10.0 +26 43	7 +3 6.5 6.5 0.1 66 0.21 0.77 +26.5
	76	0 25.0	+26 46	6.8	51.8	27.8	51.4	0 27.4 +27 1	6 −10
									36/10 10

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Amt. of Fog. due to fromt clouds. 5.5

Amt. of Fog. due to chemicals, 6.4

December 16th – 1886

Plate 918.

V	H	V	H	Correc.
11.1	16.2	31.4	54.2	+2.0
10.5	45.2	32.0	26.2	-2.4
10.4	33.8	32.1	36.6	-0.6
9.8	32.4	32.7	38.0	-0.4
9.6	40.2	32.9	30.2	-2.7
9.4	31.8	33.1	38.6	-0.3
9.4	42.8	33.1	27.6	-2.0
9.4	38.2	33.1	32.2	-1.3
9.1	20.4	33.4	50.0	+1.6
~~9.0~~	~~47.0~~	~~33.5~~	~~53.4~~	~~+3.6~~
9.0	14.4	33.5	56.0	+4.3
9.2	41.0	33.3	29.4	-3.0
8.7	43.0	33.8	27.4	-3.7
~~8.6~~	~~46.6~~	~~33.9~~	~~24.8~~	~~-2.6~~
				-4.8
8.4	46.8	34.1	23.6	~~-3.0~~
8.6	37.0	33.9	33.4	-1.9
8.4	37.4	34.1	33.0	-2.0
8.4	35.4	34.1	35.0	-1.6
8.4	20.4	34.1	50.0	+2.8
8.3	30.2	34.2	40.2	-0.1
8.2	21.2	34.3	49.2	+1.5
8.2	27.2	34.3	43.2	+0.8
8.0	41.8	34.5	28.6	-2.0
7.8	22.2	34.7	48.2	+1.3 ~~+2.2~~
7.8	16.4	34.7	57.0	+3.1 ~~+4.1~~
8.1	14.6	34.4	55.8	+4.4
7.8	30.0	34.7	40.4	0
7.8	37.6	34.7	32.8	-1.3

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Mean 3

No.	R.A.	Dec.	Mag.	H	V	H′	Red. to 1900		Cor. Br.	Be.	
161	0 56.2	+31 10	6.6	72.4	42.3	70.4	0 57.3	+31 16	5.5	5.8	5.9
Dm. 59	0 20.8	+31 38	6.7	66.0	42.1	68.4	0 23.2	+31 53	6.8	6.3	6.4
~~71 0 22.0 + 32 12 7.6 67.2 42.7 69.6~~											
Dm. 101	0 34.3	+31 49	8.1	68.1	42.2	68.7	0 38.7	+32 4	6.4	6.7	6.9
Dm. 122	0 36.1	+32 61	6.8	68.5	42.3	68.9	0 38.3	+32 46	6.2	6.5	6.6
Dm. 99	0 24.7	+42 42	6.5	64.9	52.3	67.6	0 27.1	+42 57	6.0	6.3	6.4
~~106 0 26.0 + 42 54 8.1 66.2 52.6 68.4~~							0 24.8				
Dm. 124	0 36.6	+32 50	7.5	68.4	42.2	68.7	0 39.0	+33 5	6.5	6.8	6.9
70	0 26.1	+32 56	6.2	67.9	42.3	69.9	0 26.1	+33 02	6.2	6.5	6.5
83	0 30.6	+33 4	4.4	68.7	42.5	70.6	0 31.5	+33 11	4.7	5.0	4.9
154	0 51.7	+33 19	6.4	72.1	42.4	70.5	0 52.7	+33 26	6.2	6.5	6.4
Dm. ~~206 0 66.6 + 46 18 8.6 72.6 52.3 68.4~~							+ Not found on plate		6.4	6.7	6.7
176	1 1.1	+43 18	5.3	16.5	52.3	11.2	1 2.2	+43 24	5.3	5.6	5.5
Dm. 97	0 23.4	+43 9	6.7	64.4	52.4	67.4	0 23.8	+43 24	6.0	6.3	6.3
59	0 21.8	+43 44	5.2	64.8	52.4	68.5	0 22.9	+43 51	5.0	5.3	5.4
Dm. ~~58 0 19.0 + 34 7 8.5 64.6 42.8 67.4~~											
Dm. 67	0 15.4	+43 43	7.0	62.2	52.1	67.0	0 17.8	+43 58	6.3	6.6	6.6
~~64 0 19.0 + 34 7 8.5 66.8 42.5 68.8~~											
81	0 30.2	+43 50	5.4	67.2	52.4	69.1	0 31.3	+43 57	6.1	6.5	6.3
Dm. 110	0 28.5	+43 51	7.0	65.9	52.2	67.9	0 30.9	+44 6	6.6	6.9	6.7
Dm. 124	0 31.1	+43 52	7.9	66.5	52.3	68.1	0 33.5	+44 7	6.3	6.6	6.4
159	0 53.4	+44 3	6.7	73.8	52.4	71.0	0 54.4	+44 10	6.5	6.8	6.7
3											
114	0 39.6	+44 11	6.9	69.8	52.6	69.9	0 40.7	+44 18	5.2	5.5	5.4
Dm. 152	0 49.2	+34 5	8.0	70.4	42.3	68.9	0 51.7	+34 20	6.8	7.1	7.0
~~148 0 48.3 + 34 26 7.0 69.5 42.6 68.0~~											
133	0 43.6	+44 20	6.9	70.8	52.6	70.0	0 44.7	+44 27	5.3	5.6	5.6
Dm. 73	0 24.6	+34 11	6.5	66.3	42.2	68.3	0 26.9	+34 26	5.9	6.2	6.4
Dm. 148	0 48.3	+34 26	7.0	70.5	42.2	69.2	0 50.7	+34 41	5.8	6.1	6.3
~~206 0 60.1 + 44 48 7.6 72.3 52.6 70.4~~											
Dm. 183	0 58.8	+34 23	7.5	72.2	42.2	69.1	1 1.3	+34 38	6.5	6.8	6.7
~~244 1 0.6 + 44 26 7.6 14.0 52.2 9.3~~											
Dm. 240	0 59.9	+44 2	7.6	74.5	52.1	70.1	1 2.3	+44 17	6.4	6.7	6.7
Dm. 2 161	0 38.4	+44 38	7.5	68.4	52.4	68.4	0 40.9	+44 53	6.5	6.8	6.7
87	0 31.0	+34 44	6.6	68.6	42.6	69.9	0 32.0	+34 51	5.9	6.2	6.0

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Plate 918.

V	H	Type	No. Lines	K	Focus	Other lines		V	H	V	H	Correc.
15.1	9.8	I	6	K=H	1	F	—	7.6	19.6	34.9	60.8	+3.0
14.9	7.9	I	6		1	F?		7.4	15.8	35.1	64.6	+4.1
14.9	10.9	IIa	5	K=H	1	—	cmn	7.4	21.8	35.1	48.6	+2.4
14.8	19.5	I	5		1	—		7.4	39.2	35.1	31.2	−1.7
?	14.6	5.6	III	1558.3	K=H ?	4	F Bright cmn.	7.3	11.2	35.2	69.2	+3.6
	14.8	7.1	III				—	7.4	14.2	35.1	65.2	+2.8
?	14.6	9.5	II	1559.2		1	cmn.	7.3	19.0	35.2	51.4	+1.9
	15.4	23.6	III	2	K=H	1	— —	7.7	47.2	34.8	23.2	−3.2
	14.5	20.6	IIa	2	K=H	1	— —	7.2	41.2	35.3	29.2	−2.0
	13.8	14.5	II ?	2	K=H	1	—	6.9	29.0	35.6	41.4	+0.1
	13.2	14.5	II	2	K=H	1	—	6.6	29.0	35.9	41.4	+0.1
	13.3	14.0	III	2	K=H	1	—	6.6	28.0	35.9	42.4	+0.6
	13.3	17.5	I ?	4 H	K=H	1	—	6.6	35.0	35.9	36.4	−0.9
In paint	12.8	19.5	I	3				6.4	39.0	36.1	31.4	
	12.6	19.7	III ?	3	K=H	1	F —	6.3	39.4	36.2	31.0	−1.7
	13.0	18.2	I ?	3		1	—	6.5	36.4	36.0	34.0	−1.2
	13.0	12.7	II	2	K=H			6.5	25.4	36.0	46.0	+1.4
	12.8	9.3	III	2	K=H	1	— —	6.4	18.6	36.1	51.8	+2.0
	12.5	6.5	I	5	K=H			6.3	13.0	36.2	57.4	+5.2
	13.0	11.7	III	2	K=H			6.5	23.4	36.0	47.0	+1.9
	12.5	11.6	II	2	K=H	1	— —	6.2	23.6	36.3	46.8	+1.9 −1.0
	12.7	17.8	III	2	K=H	1	— —	6.4	35.6	36.1	34.8	−1.9 +0.8
	12.8	19.6	III				—	6.4	38.8	36.1	31.6	
Recorded above								6.3	39.2	36.2	31.2	−1.8
	12.4	22.1	III	3	K=H	2	F, F	6.2	44.2	36.3	26.2	−2.8
	12.5	17.7	I	4 H	K=H	1	— —	6.2	35.4	36.3	35.0	−1.7
	12.4	16.1	I	10				6.2	32.2	36.3	38.2	−0.7
	12.1	13.1	III	2	K=H	1	—	6.0	26.2	36.6	44.2	+0.7

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Mean 3

Corr.

No.	R.A.	Dec.	Mag.	H	V	H'	Red. to 1900	Br	Br.
Dm. 216	0 53.1	+ 44 40	7.2	72.7	62.3	69.7	0 35.6	+ 44 55	6.5 6.5 6.8 6.7 0.4 7.1
Dm. 171	0 56.0	+ 34 40	7.2	71.8	42.1	67.7	0 38.5	+ 34 55	6.1 6.4 6.5 0.2 6.7
Dm. 206	0 50.1	+ 44 48	7.6	71.9	62.2	69.5	0 32.6	+ 45 3	6.5 6.8 6.6 0.4 6.9
79	0 27.8	+ 34 61	7.7	67.0	42.2	68.7	0 30.2	+ 35 6	6.4 6.7 6.7 0.2 6.9
186	1 6.0	+ 34 69	2.2	14.2	42.6	10.6	1 4.1	+ 35 5	5.2 5.3 5.3 5.5 5.5 5.7 0.2 5.9
Dm. 181	0 58.1	+ 34 44	7.5	72.3	42.1	69.5	0 0.6	+ 34 39	6.5 6.8 6.8 7.0 7.0 7.4 0.2 7.2
Dm. 160	0 52.3	+ 34 54	7.3	71.3	42.2	69.4	0 54.8	+ 35 9	6.5 6.8 6.8 0.2 7.1
Dm 53	0 18.2	+ 34 31	7.8	65.4	42.2	68.6	0 20.6	+ 34 46	6.8 7.1 6.8 6.8 7.0 7.0 0.2 7.2
~~69~~	~~0 18.4~~	~~+ 35 1~~	~~7.4~~	~~66.6~~	~~42.2~~	~~68.8~~			
Dm. 90	0 26.1	+ 35 3	7.6	66.3	42.2	68.3	0 27.5	+ 35 18	6.4 6.7 6.7 0.2 6.9
Dm. 146	0 40.1	+ 35 25	7.4	69.1	42.6	69.0	0 42.5	+ 35 40	6.6 6.9 6.9 0.2 7.1
Dm. 145	0 40.1	+ 35 42	7.4	69.1	42.3	69.0	0 42.5	+ 35 57 58	6.5 6.8 7.0 0.2 7.2
Dm. 209	0 41.4	+ 46 43	7.0	69.4	62.3	68.8	0 43.9	+ 45 58	6.4 6.7 6.8 6.8 7.0 7.0 0.4 7.4
Dm. 121	0 32.8	+ 35 44	8.2	67.8	42.6	68.7	0 35.2	+ 35 59	6.7 7.0 7.0 0.2 7.1
Dm. 87	0 27.4	+ 36 2	6.6	66.8	42.3	68.5	0 29.8	+ 36 17	6.6 6.9 6.8 6.7 7.0 7.0 0.2 7.2
110	0 30.9	+ 35 48	7.8	67.3	42.3	68.5	0 33.3	+ 36 3	6.9 7.2 7.2 0.2 7.4
Dm ~~116~~	~~0 [illegible]~~	~~+ 36 60~~	~~7.6~~	~~68.2~~	~~42.6~~	~~69.4~~			
Dm. 247	0 46.2	+ 46 48	7.8	70.6	62.3	69.2	0 47.7	+ 46 3	6.3 6.6 6.6 0.4 7.0
Dm. 181	0 52.9	+ 35 53	7.1	71.5	42.3	69.5	0 55.4	+ 36 8	6.7 7.0 7.0 6.9 7.3 7.3 0.2 7.5
Dm. ~~292~~	~~1 2.9~~	~~+ 45 52~~	~~7.0~~	~~15.9~~	~~52.2~~	~~10.7~~	~~1 3.5~~	~~+ 46~~	
~~[illegible]~~	~~0 58.1~~	~~+ 36 54~~	~~8.3~~	~~64.4~~	~~62.6~~				
Dm 264	0 48.0	+ 46 52	7.6	71.4	62.4	69.5	0 50.5	+ 46 7	6.5 6.8 6.6 7.0 7.0 6.9 0.4 7.3
Dm. 202	0 47.7	+ 46 6	7.5	71.3	62.3	69.4	0 50.2	+ 46 26	6.5 6.8 6.7 6.9 0.2 7.1
113	0 38.8	+ 35 60	7.6	67.4	42.4	69.1	0 34.2	+ 36 15	6.4 6.7 7.0 7.1 7.2 7.2 0.2 7.4
Dm. ~~129~~	~~0 30.8~~	~~+ 46 10~~	~~7.0~~	~~66.4~~	~~52.6~~	~~68.4~~			
~~117~~	~~0 32.4~~	~~+ 36 39~~	~~7.7~~	~~68.3~~	~~42.0~~	~~69.3~~			
~~Dm. 87~~	~~0 27.4~~	~~+ 36 2~~	~~6.6~~	~~66.8~~	~~42.3~~	~~68.4~~			
~~79~~	~~0 30.0~~	~~+ 36 66~~	~~6.1~~	~~69.2~~	~~62.9~~				
Dm. 66	0 21.2	+ 36 6	6.3	65.4	42.3	68.2	0 23.6	+ 36 21	6.2 6.5 6.4 6.6 6.6 6.5 0.2 6.7
Dm. 129	0 30.8	+ 46 10	7.0	66.2	62.4	67.9	0 33.2	+ 46 25	6.3 6.6 6.5 6.6 6.6 6.4 0.2 6.6
~~131~~	~~0 32.3~~	~~+ 46 27~~	~~7.7~~	~~67.7~~	~~62.6~~	~~69.4~~			
102	0 36.8	+ 46 22	6.0	69.0	62.6	69.7	0 37.9	+ 46 29	6.4 6.9 6.7 6.8 7.1 7.0 0.4 7.3
Dm. 140	0 43.4	+ 36 14	7.9	69.6	42.2	68.9	0 45.8	+ 36 29	6.9 7.2 7.0 7.1 7.4 7.3 0.2 7.5

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Plate 918.

V.	H.	Type	No Lines	K	Forces	Other Lines.	V	H	V	H	Correc.
12.0	12.8	I I?	6 3	K=H	2	— —	6.0	25.6	36.6	44.8	+1.3
Recorded on page 16.							6.2	24.0	66.3	46.4	+1.6
12.3	6.2	I I?	4	K=H	1	— —	6.2	16.4	66.3	64.0	+2.7
12.2	10.8	I I	6 7	K=H?	2	Fl Fl	6.1	21.6	66.4	48.8	+2.7
12.0	19.9	I I	4	K=H	1	— —	6.0	39.8	66.6	30.6	−3.0 −1.8
11.6	7.2	I	10		3	Fl	5.8	14.4	66.7	66.0	+4.9
~~11.6~~	~~8.4~~						~~5.8~~	~~16.8~~	~~66.7~~	~~53.6~~	~~+4.1~~
11.4	9.4	IIa	1560 3	K=H		Fl seen	5.7	18.8	66.8	51.6	+3.6
11.5	10.2	II	2	K=H	1	—	5.8	20.4	66.7	60.0	+3.0
11.4	12.4	III	3 2	K=H	2	Fl Fl	5.7	24.8	66.8	46.6	+1.0
11.4	22.2	III? 2	2	K=H	1	— —	5.7	44.4	66.8	26.0	−3.1 −4.6
		IIa 2 III? 2		K=H	1	seen					
14.4	11.1	II a 2 2	1560 a 2	K=H	1	Seen	7.2	22.2	35.3	48.2	

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Mean 3

	No	R.A.	Dec.	Mag.	H	V	H'	Red. to 1900.	Br.	Br.	Cor.		
Dm.	189	0 44.8	+46 20	7.9	70.4	52.3	69.0	0 47.3	+46 35				
Dm.	194	0 45.7	+46 19	8.6	71.3	52.3	70.0	0 48.2	+46 34	6.8	7.1	6.6	7.0 0.4 7.3
	184	0 44.8	+46 20	7.9	70.4	60.6	69.1						
Dm.	208	0 47.7	+46 6	7.5	71.7	52.3	69.7	0 50.8	+46 21				
	198	0 47.0	+46 6	7.5	70	62.3	69.2						
Dm.	185	0 56.6	+36 4	7.8	71.9	42.3	69.2	0 58.0	+36 19	6.5	6.8	6.7	6.8 0.2 7.0
Dm.	215	0 50.6	+46 16	6.6	72.1	52.4	69.4	0 53.0	+46 31	6.6	5.9	5.8	6.0 0.4 6.2
Dm.	101	0 24.3	+46 20	7.5	64.1	52.3	67.1	0 26.7	+46 35	6.6	6.9	7.0	6.8 0.4 7.4
	87	0 27.4	+36 2	6.6	67.2	42.0	69.0						
	182	1 2.5	+46 36	4.6	16.9	62.4	12.0	1 3.7	+46 42	4.3	4.6	4.7	0.4 5.1
Dm.	245	0 56.6	+46 6	7.0	72.4	62.6	68.3						
Dm.	243	0 54.7	+46 35	6.3	73.5	52.3	69.9	0 57.3	+46 50.	5.7	6.0	6.2	0.4 6.6
	241	0 54.6	+46 54	7.4	72.6	62.6	69.7						
Dm.	229	0 52.4	+46 32	7.0	72.8	52.3	69.8	0 54.9	+46 47	6.2	6.3	6.6	6.6 0.4 7.0
	227	0 52.0	+46 32	7.0	72.4	62.3	69.4						
Dm.	148	0 40.5	+36 38	6.5	70.3	42.3	69.3	0 48.0 +47.9	+36 53	5.9	6.2	6.3	6.5 0.2 6.7
Dm.	62	1 21.1	+36 30	8.0	63.4	42.2	68.4	0 23.4	+36 45	6.2	6.5	6.6	6.9 0.2 7.1
	88	0 20.7	+46 54	8.0	66.1	62.6	69.7			6.8	7.1	6.9	7.1 0.4 7.5
										7.0	7.3	7.0	7.2 0.4 7.6
Dm.	237	0 49.5	+45 3	6.1	71.7	52.2		0 52.0	+45 18		6.7		6.7

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Plate 918.

	V	H	type	lines	K	Focus	lines.		V	H	V	H	correc.
1.40	11.4	18.0	III	2	K=H	1	—	—	5.7	36.0	36.8	34.4	-1.8
	11.0	10.5	I	5	K=H	1	F	—	5.5	21.0	37.0	49.4	+1.8
	10.7	9.2	a? 1561	3	K=H?	1	F	seen	5.4	18.4	37.1	52.0	+3.7 +2.3
	10.6	9.6	I	6 5		2	—	—	5.3	19.2	37.2	51.2	+2.1 +8.4
	10.7	14.0	I	8 6	K=H	2	—	—	5.4	28.0	37.1	42.4	+0.7
some star?	10.6	15.7	I	9		2	F		5.3	31.4	37.2	39.0	-0.5
	10.5	17.0	I	3					5.2	34.0	37.3	36.4	
	10.4	19.1	I	4 4	K=H	1	—		5.2	38.2	37.3	32.2	-2.7
	10.1	10.5	II ?	2	K=H	1	—		5.0	21.0	37.5	49.4	+2.9
	9.8	6.8	I	6		2	F		4.9	13.6	37.6	56.8	+3.5
some star?	9.8	15.7	I b? 1562	11		3	F		4.9	31.4	37.6	39.0	-0.6
	9.7	16.5	I	5					4.8	33.6	37.7	36.8	
	9.3	21.4	II ? IIa?	15-62a 2	K=H	1	—	seen	4.6	42.8	37.9	27.6	-2.7 -4.0
	9.3	11.1	I	4 K=2 H	5	F		seen	4.6	22.2	37.9	48.2	+1.7
	9.1	12.6	I	11 K=2 H?	2	—			4.6	25.2	37.9	45.2	+1.0 +1.7
	9.1	18.5	I I?	4 5	K=H	1	—	—	4.6	37.0	37.9	33.4	-2.2
	8.5	20.5	a2 IIa 1563	2	K=H	2 1	seen	seen	4.2	41.0	38.3	29.4	-2.4
	8.2	21.0	I	8 6 5	K=H	2	1 —	—	4.1	42.0	38.4	28.4	-2.7
	8.3	10.8	I ?	4 5	K=H	1	—	—	4.2	21.6	38.3	48.8	+2.8
	8.5	16.9	a? IIa 1564	2	K=H	2	seen	seen	4.2	33.8	38.3	36.6	-0.8
	8.0	12.1	I	6 4	K=H	1	—	—	4.0	24.2	38.5	46.2	+1.2 +2.0
II	8.2	18.6	I ?	4 4	K=H	1	—	—	4.1	37.2	38.4	33.2	-2.4
	8.1	23.8	I	5 ?		1	—		4.0	47.6	38.5	22.8	-4.2
	7.8	7.4	I ?	4	K=H	1	—		3.9	14.8	38.6	55.6	+5.0
	7.7	17.5	III	3 2	K=H	2	F	F?	3.8	35.0	38.7	35.4	-1.7
	8.0	23.6	II ?	2	K=H	1	F?		4.0	47.2	38.5	23.2	-5.8
	7.5	17.2	III	3	K=H	3	F		3.8	34.4	38.7	36.0	-0.9
	7.5	12.3	II	2	K=H		—		3.8	24.6	38.7	45.8	+1.8 +1.2

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Means

cou.

	No.	R.A.	Dec.	Mag.	H	V	H'	Red. to 1900	Bv	Br.	Bc.	
Dm.	126	0 30.0	+46 36	7.2	66.0	52.3	67.8	0 32.4 +46 51	6.7	7.0	6.7	7.1
									6.9	7.2	6.9	7.3
Dm	164	0 50.0	+36 43	7.3	71.0	42.2	69.2	0 32.5 +36 58	6.0	6.3	6.6	6.8
	245	0 55.6	+46 51	7.0	74.0	52.2	70.3	0 58.2 +47 6				
Dm.	190	0 52.5	+37 0	7.0	70.9	42.4	68.6		5.6	5.9	6.2	6.4
	190	0 52.5	+37 0	7.0	71.7	42.3	69.6	0 55.0 +37 15				
Dm.	272	0 51.7	+47 14	6.6	70.9	52.6	67.4		6.0	6.3	6.3	6.5
Dm	176	0 41.5	+46 58	6.5	69.5	52.4	68.8	0 43.0 +47 13	5.7	6.0	6.0	6.1
	105	0 37.8	+47 12	5.5	69.2	52.5	69.7	0 38.8 +47 19	5.0	5.3	5.4	5.8
Dm.	138	0 26.5	+47 7	7.4	64.7	52.3	67.4	0 28.9 +47 22	6.5	6.8	6.5	6.7
	272	0 51.7	+47 14	6.6	72.7	52.2	69.8	0 54.2 +47 29	6.1	6.4	6.3	6.7
Dm.	264	0 50.0	+47 26	7.3	71.0	52.4	68.1					
Dm.	213	0 59.2	+37 16	6.9	72.6	42.2	69.1	1 1.8 +37 31	6.0	6.3	6.4	6.6
	107	0 38.0	+47 38	4.6	69.4	52.6	69.9	0 39.2 +47 44	4.3	4.6	4.6	4.7
	75	0 22.2	+37 32	7.4	65.0	42.1	67.7	0 24.6 +37 47	6.6	6.9	6.8	7.1
Dm	113	0 24.1	+47 36	6.6	63.9	52.2	67.9					
	148	0 60.1	+37 51	6.9	72.3	42.4	70.6	0 51.1 +37 57	4.1	4.4	4.4	4.7
	159	0 44.9	+37 46	6.7	70.1	42.4	69.1	0 47.4 +38 1				
Dm	242	0 46.9	+47 54	6.5	72.1	52.5	70.4		4.8	5.4	6.2	6.4
Dm	145	0 28.3	+47 48	6.8	65.3	52.4	67.5	0 30.7 +48 0	6.4	6.7	6.4	6.8
Dm	68	0 25.0	+38 3	7.0	66.0	42.2	68.4	0 27.4 +38 18	6.2	6.5	6.4	6.7
Dm	64	0 23.7	+38 11	7.3	65.7	42.3	68.4	0 26.1 +38 26	6.3	6.6	6.5	6.6
Dm	309	0 51.2	+48 11	6.5	72.6	52.4	70.0	0 33.8 +48 26	6.4	6.7	6.4	6.8
								36.4				
Dm.	94	0 34.0	+38 6	7.6	67.8	42.3	68.6	0 [illegible] +38 21	6.2	6.5	6.5	6.8
	136	0 46.3	+38 16	8.0	70.5	42.3	69.3	0 48.8 +38 31				
Dm	288	0 46.9	+48 36	7.1	70.9	52.6	68.9		6.2	6.5	6.6	6.9
Dm.	177	0 27.9	+48 14	6.7	65.1	52.3	67.5	0 30.3 +48 29	6.4	6.7	6.6	7.0
	79	0 17.4	+48 3	6.4	60.0	52.0	64.2	0 14.8 +48 18				
Dm.	106	0 16.2	+48 24	8.2	63.8	52.4	68.0		6.0	6.3	6.0	6.4
Dm.	348	1 1.4	+48 17	6.9	16.2	52.2	1 1.2	1 4.1 +48 32	6.3	6.6	6.5	6.9
	91	0 32.5	+48 42	5.6	67.5	52.5	69.2	0 33.6 +48 49	6.2	6.5	6.0	6.3
	79	0 12.4	+48 3	6.4	59.6	52.0	65.4	0 14.8 +48 18	6.5	6.8	6.5	7.0
	344	0 12.8	+48 11	6.6	60.0	52.2	65.8	0 15.2 +48 26				
Dm	112	0 16.9	+48 43	8.2	64.1	52.4	69.9		6.4	6.7	6.5	6.9
	96	0 34.6	+38 48	5.6	69.0	42.6	69.9	0 35.7 +38 55	5.8	5.8	6.0	6.3
	288	0 46.7	+48 37	7.1	71.3	52.4	69.5	0 49.2 +48 52	5.9	6.0	6.0	6.3
Dm	131	0 45.1	+38 22	8.1	69.9	42.2	68.5		6.5	6.8	6.5	6.9

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Plate 9.8.

V	H	Type	No. lines	K	Focus	Other lines.	V	H	V	H	Corrn.
7.6	9.2	II?	2	K=H	1	— —	3.8	18.4	38.7	52.0	+3.9
7.7	11.1	II	2	K=H	1	— —	3.8	22.2	38.7	48.2	+2.6
7.2	10.6	III	2	K=H	1	— F.?	3.6	21.2	38.9	49.2	+1.7
6.9	8.3	I	1	K=H			3.4	16.6	39.1	53.8	+4.7
6.9	12.8	I	1	K=H	1	—	3.4	25.6	39.1	44.8	+1.6
6.8	17.2	II	2	K=H	1	— —	3.4	34.4	39.1	36.0	−1.0
6.2	21.3	I	1	N	1	—	3.1	42.6	39.4	27.8	−4.3
6.0	8.2	II?	2	K=H	2	—	3.0	16.4	39.5	54.0	+3.2
5.8	10.2	I?	1	K=H	1	— —	2.9	20.4	39.6	50.0	+2.1
5.8	12.7	II?	2	K=H	2	1 line —	2.9	25.4	39.6	46.0	+1.1
5.6	16.6	I	1	N	3	F.	2.8	37.2	39.7	33.2	−1.7
5.4	16.5	I	1	N	3	F.	2.7	36.0	39.8	37.4	−1.1
5.3	17.6	I	1	N	1	—	2.6	35.2	40.1	36.2	−1.2
5.3	11.7	I?	1	K=H	1	— —	2.6	23.4	40.1	47.0	+1.5
4.8	16.8	II	2	K=H	2	Seen —	2.4	33.6	40.1	36.8	−0.8
4.5	14.3	1566	1	N	3	F.	2.2	28.6	40.3	41.8	+0.6
4.5	15.4	I	1	N	1	—	2.2	30.8	40.3	39.6	−0.2
4.6	13.6	I	1	N	1	— —	2.3	27.2	40.2	43.2	+0.7
4.1	13.9	1567	1	N	5	F. line	2.0	27.8	40.5	42.6	+0.6
4.0	9.3	II?	2	K=H	1	—	2.0	18.6	40.5	51.8	+4.1
4.0	10.1	I	1	K=H	1	—	2.0	20.2	40.6	50.2	+3.6
3.8	13.2	I?	1	K=H	2	—	1.9	26.4	40.6	44.0	+0.8
3.4	14.6	II	2	K=H	1	—	1.7	29.2	40.8	41.2	+0.3
3.3	13.7	II	2	K=H	1	—	1.6	27.4	40.9	43.0	+1.0
3.1	13.5	I	1	K=H	2	—	1.6	27.0	40.9	43.4	+1.1
3.4	8.9	I	1	N	3	F.?	1.7	17.8	40.8	52.6	+3.0
2.8	7.1	II?	2	K=H		—	1.4	14.2	41.1	56.2	+3.9
2.8	21.0	II	2	K=H	1	— —	1.4	42.0	41.1	28.4	−4.4
2.5	10.0						1.2	20.0	41.3	50.4	+0.7

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Mean 3

	No.	R.A.	Dec	Mag.	H	V	H'	Red. to 1900	Cor. Br	Br
	329	0 56.0	+ 48	26	7.8	74.4	52.2	70.5	0 38.6 + 48 41	
Dm.	326	0 56.6	+ 48	57	7.2	74.0	52.8	70.1		6.7 7.0 6.9 6.9 0.4 7.3
	301	0 50.4	+ 48	24	7.2	72.6	52.2	70.0	0 53.0 + 48 39	
Dm.	148	0 50.1	+ 38	42	6.8	72.6	42.5	70.6		6.6 6.9 6.9 0.4 7.3
	148	0 50.1	+ 38	42	6.8	71.3	42.3	69.6	0 52.6 + 38 57	6.5 6.8 6.8 0.3 7.1
Dm.	320	0 59.1	+ 48	46	6.2	74.3	52.4	71.3		6.8 7.1 7.2 0.3 7.5
Dm.	363	0 58.8	+ 48	47	6.7	75.4	52.2	70.7	1 1.4 + 49 2	6.0 6.3 6.0 0.5 6.5
	272	0 45.1	+ 48	52	7.8	70.7	52.3	69.1	0 47.6 + 49 7	
Dm.	223	0 43.8	+ 49	13	7.8	69.4	62.6	67.8		6.2 6.5 6.1 0.3 6.4
	91	0 33.4	+ 38	48	8.0	67.8	42.2	68.8	0 35.8 + 39 3	
Dm.	161	0 33.7	+ 49	21	7.6	68.1	62.4	69.7		6.6 6.9 6.6 0.3 6.9
Dm.	91	0 19.4	+ 49	11	7.1	62.0	62.6	66.3	0 21.8 + 49 26	5.9 6.2 6.0 0.3 6.3
Dm.	249	0 56.5	+ 39	12	6.5	72.9	42.2	69.7	0 59.0 + 39 27	6.2 6.5 6.4 0.3 6.7
Dm.	224	0 57.4	+ 39	22	7.0	71.8	42.3	69.7	0 53.9 + 39 37	6.5 6.8 6.6 0.3 6.9
Dm.	198	0 44.9	+ 39	28	6.5	70.3	42.3	69.2	0 47.4 + 39 43	6.2 6.5 6.3 0.3 6.6
Dm.	138	0 29.7	+ 39	32	6.5	66.9	42.3	68.6	0 32.1 + 39 47	5.8 6.1 6.1 0.3 6.4
	100	0 66.5	+ 49	51	4.8	68.6	62.6	69.6	0 36.5 + 49 58	4.9 5.2 5.2 0.3 5.5
Dm.	158	0 34.2	+ 39	54	7.0	69.6	42.5	70.6		
	210	0 47.4	+ 39	36	7.2	70.8	42.2	69.3	0 49.9 + 39 51	6.7 7.0 6.8 0.3 7.1
Dm.	247	0 49.1	+ 39	46	7.8	72.5	42.4	71.0		
	158	0 34.2	+ 39	54	7.0	67.8	42.3	68.6	0 36.6 + 40 9	6.4 6.7 6.6 0.3 7.0
Dm.	147	0 34.8	+ 40	4	mab.	68.4	42.5	69.2		
	121	0 42.0	+ 50	19	6.0	70.6	62.6	70.0	0 43.2 + 50 25	5.0 5.3 5.2 0.3 5.5
	108	0 38.0	+ 40	1	7.4	68.8	42.2	69.0		
Dm.	172	0 42.5	+ 40	1	7.5	69.7	42.3	69.0	0 45.0 + 40 17	6.7 7.0 6.9 0.3 7.2
	127	0 43.2	+ 40	26	4.4	71.0	42.4	70.4	0 44.3 + 40 32	4.7 5.0 4.9 0.3 5.2
Dm.	212	0 66.3	+ 50	14	6.8	74.9	62.2	70.8	0 38.9 + 50 39	6.3 6.6 6.3 0.3 6.6
Dm.	202	0 63.9	+ 50	16	6.9	74.1	62.2	70.5	0 56.5 + 50 30	6.4 6.7 6.4 0.3 6.7
Dm.	177	0 43.5	+ 40	28	7.3	69.9	42.4	69.1	0 46.0 + 40 43	6.3 6.6 6.5 0.3 6.8
Dm.	143	0 39.8	+ 50	39	7.5	69.0	62.3	68.7	0 42.3 + 50 54	6.5 6.8 6.7 0.3 7.0
Dm.	161	0 42.7	+ 50	43	6.9	70.1	62.3	69.1	0 45.2 + 50 58	6.5 6.8 6.7 0.3 7.0
Dm.	164	0 43.3	+ 50	47	6.7	70.3	62.4	79.2	0 45.8 + 51 2	6.2 6.5 6.3 0.3 6.6
	160	0 66.2	+ 40	41	6.9	74.0	42.4	71.0	0 57.3 + 40 48	5.7 6.0 5.9 0.3 6.2
Dm.	224	0 69.6	+ 40	46	6.5	73.8	42.2	69.9	1 2.1 + 41 0	6.5 6.8 6.7 0.3 7.0
Dm.	204	0 24.6	+ 50	56	7.1	66.1	62.9	71.0	0 23.5 + 40 58	6.4 6.7 6.6 0.3 6.9
	104	0 23.1	+ 40	43	7.3	65.1	42.1	69.3		
Dm.	216	0 64.4	+ 51	41	7.1	74.4	52.2	78.7	0 57.0 + 51 16	

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Fog. due to moon & clouds.
6.2 6.0

Fog. due to chemicals.
7.2

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Plate 917.

V	H	Type	No. Lines	K	Focus	Other Lines.	V	H	V	H	Correc.
22.9	6.9	I	16	N	4	—	11.4	11.8	21.0	68.1	+1.2
22.1	14.7	III	192	K=H	2, 1	—	11.0	29.4	21.4	40.5	0
? 20.4	12.6	II	3330 19	K=H	2	diffuse.	10.2	26.2	22.2	44.7	+0.1 +0.4
20.1	12.8	III	I? 19	K=H	1	— —	10.0	26.6	22.4	44.3	+0.4
19.7	20.2	II	3 1	K=	2	I,	9.8	40.4	22.6	29.5	-0.4
19.7	21.4	III	III 2 2	K	K=H 1	— —	9.8	42.6	22.6	27.1	-0.9
19.4	20.6	III	2	K=H			9.7	41.2	22.7	28.7	-0.4
III? 5.8, 5.9. ?	19.3	10.0	III	3331 Hδ? 3	1.2 K=H?	3	highly diffuse.	9.6	20.0	22.8	49.9	+0.8
III? 6.2, 6.5 ?	18.7	11.1	III	3332 Hε? 2	K=H	2	highly diffuse.	9.4	22.2	23.0	47.7	+0.4

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Mean 1

No.	R.A.	Dec.	Mag.	H	V	H'	Red. to 1900.	Br.
169	0 59.3	+ 20 50	5.0	71.1	32.2	69.9	1 0.4 + 20 56	
117	0 40.7	+ 11 20	6.7	70.1	22.3	70.1	0 41.8 + 11 25	
106	0 44.0	+ 11 6.0	7.0	69.0	22.2	68.9	0 46.3 + 12 15	
~~DM 111~~	~~0 43.9~~	~~+ 21 50~~	~~7.0~~	~~69.1~~	~~32.0~~	68.7		
DM 134	0 43.4	+ 22 4	8.0	69.0	32.1	68.6	0 45.8 + 22 19	
DM. 59	0 28.4	+ 12 25	6.5	68.8	22.2	69.2	0 30.7 + 12 40	
~~74~~	~~0 28.9~~	~~+ 12 46~~	~~6.4~~	~~69.1~~	~~22.5~~	69.5		
DM. 79	0 25.1	+ 22 23	7.5	67.9	32.2	68.8	0 27.4 + 22 38	
74	0 28.7	+ 12 43	6.4	69.9	22.4	70.3	0 29.8 + 12 50	
~~DM 69~~	~~0 27.4~~	~~+ 12 36~~	~~6.0~~	~~68.6~~	~~22.3~~	69.0		
165	0 50.8	+ 22 49	4.6	70.8	32.4	70.0	0 51.9 + 22 52	
141	0 48.5	+ 22 59	6.4	70.7	32.4	70.3	0 49.6 + 23 6	0 47.2 + 22.8

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Plate 917.

	V	H	Type	No. Lines	K	Focus	Other Lines,	V	H	V	H	Correc.
	18.8	15.5	I	8	H	5	N 2 1	9.4	31.0	26.0	38.9	-0.1
	18.6	12.1	I	8	H	2		9.3	24.2	26.1	45.9	+0.2
	18.6	9.4	III	1 2	K=H	1	—	9.3	18.8	26.1	51.1	+0.5
	18.0	10.4	III	1 2	K=H	K=H 1	—	9.0	20.8	26.4	49.1	+0.4
	18.0	17.7	I	6	H	2		9.0	36.4	26.4	34.5	-0.5
	18.1	19.2	III	1 2	K=H	1	—	9.0	38.4	26.4	31.6	-0.7
	17.7	14.5	III	3	H	3	Bright	8.8	29.0	26.6	40.9	+0.1
	17.8	11.0	III	2	K=H	1	—	8.9	22.0	26.5	47.9	+0.7
	17.0	9.5	III	2	K=H	1	—	8.6	19.0	26.9	50.9	+0.9
	17.0	11.0	III	1 2	2	K=H K=H	1 —	8.6	22.0	26.9	47.9	+0.7
	17.0	17.2	I	8	K	5	H 3 —	8.6	34.4	26.9	35.5	-0.5
	16.1	6.0	II	3	K=H	1	3	8.0	12.0	24.4	57.9	+0.7
	16.4	22.6	III	1 2	2	K=H	1 —	8.2	45.2	24.2	24.7	-1.3
	16.0	23.3	II	1 3	K=H	2	1	8.0	47.6	24.4	22.3	-1.6 -0.1
	15.9	19.7	I	10	H	3		8.0	39.4	24.4	30.5	-0.4
	15.4	8.0	II	2	K=H	1	—	7.7	16.0	24.7	53.9	+1.2
	15.3	11.4	III	1 2 2	K=H	K=H 1	—	7.6	22.8	24.8	47.1	+0.7
	15.1	13.1	III	1 2 2	K=H	K=H 1	—	7.6	26.2	24.8	43.7	+0.4
	15.2	14.4	I	8	H	K=H 2	1 —	7.6	28.8	24.8	41.1	+0.1
III ? 6.5, 6.8.	15.4	15.0	III	3	3	K=H	K=H 2 2	7.7	30.0	24.7	39.9	0
	14.1	15.8	I	8	H	K=H	K=H 1 —	7.0	37.6	25.4	32.3	-0.7
	14.2	22.6	I	8	H	K=H	2	7.1	46.2	25.3	24.7	-0.6
	14.2	24.2	IIap	3	K=H	2	seen	7.1	48.4	25.3	21.5	-0.7
	13.9	21.6	IIa	1 3 2	K=H	K=H 1	Seen Seen	7.0	43.2	25.4	26.7	-0.6
Recorded above	14.0	18.9	I		K=H			7.0	37.8	25.4	32.1	-0.8
	13.8	14.5	III	3	2	K=H	1	6.9	29.0	25.5	40.9	+0.1
	13.4	7.6	III	3	K=H		1	6.7	15.2	25.7	54.7	+1.4
	13.2	20.2	II	3	2	K=H	1	6.6	40.4	25.6	29.5	-0.5

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Means

No.	R.A.	Dec.	Mag.	H	V	H′	Red. to 1900	Cou. Br.	Br.
Dm. 113	0 37.6	+ 22 48	7.0	68.6	32.2	68.7	0 40.0 + 23 3	6.6	6.6
Dm. 104	0 44.9	+ 12 52	7.3	69.1	22.2	68.9	0 47.2 + 13 7	6.7	6.8
1653	0 51.6	+ 13 4	6.4	70.4	22.4	69.9	0 52.6 + 13 9	6.6 6.7	6.7 6.8
Dm. 127	0 48.5	+ 13 11	6.5	69.3	22.2	68.9	0 50.9 + 13 24	6.8 7.0	6.9 7.1 7.0
Dm 92	0 32.7	+ 23 15	6.5	68.1	32.2	68.6	0 35.1 + 23 30	6.5	6.6
86	0 30.8	+ 23 21	6.6	69.4	32.4	70.1	0 31.9 + 23 28	6.5 6.9	6.6 7.0
119	0 41.0	+ 23 37	6.4	70.0	32.4	69.9	0 42.0 + 23 43	5.3 5.6	5.4 5.7
Dm 125	0 47.3	+ 23 18	7.5	69.3	32.2	68.6	0 49.7 + 23 33	7.0 7.2	7.1 7.3
Dm 134	0 50.7	+ 23 44	8.0	69.7	32.3	68.8	0 53.1 + 23 59	6.9 7.2	7.0 7.3
Dm 128	0 47.6	+ 24 46	6.8	69.5	32.3	68.8	0 49.9 + 24 1	6.1 7.3	7.0 7.4 7.2
99	0 36.3	+ 24 59	6.0	69.7	32.6	70.2	0 36.3 + 24 5	6.1	6.2
168	0 58.8	+ 14 18	6.7	70.8	22.3	70.1	0 59.8 + 14 24	5.7	6.0
Dm 66	0 21.9	+ 24 6	7.6	67.1	32.3	68.4	0 24.2 + 24 21	6.7 7.2	7.0 7.3 7.3
52	0 19.5	+ 24 14	6.5	67.1	32.2	68.7	0 21.8 + 24 29	6.4	6.5
~~Dm. 117~~	~~0 41.5~~	~~+ 14 +~~	~~6.8~~	~~69.1~~	~~22.0~~	~~69.0~~			
84	0 30.6	+ 14 36	6.2	70.0	22.6	70.4	0 31.6 + 14 41	5.5	5.6
Dm 163	0 53.9	+ 24 31	6.5	69.9	32.2	68.7	0 56.3 + 24 46	6.8	6.9
Dm 136	0 46.3	+ 24 42	7.0	69.1	32.3	68.4	0 48.7 + 24 57	6.8 6.9	6.9 7.0 7.0
Dm 126	0 42.9	+ 24 47	7.4	69.1	32.4	68.7	0 45.3 + 25 2	6.8 7.0	6.9 7.1 7.0
Dm. 115	0 40.0	+ 24 44	8.3	68.8	32.3	68.7	0 42.4 + 24 59	6.6	6.7
116	0 40.3	+ 14 49	5.7	70.6	22.5	70.3	0 41.3 + 14 55	6.3 6.8	6.4 6.9
* 87	0 30.1	+ 25 19	8.3	67.9	32.3	68.5	0 32.5 + 25 34		
~~Dm 92~~	~~0 31.3~~	~~+ 25 32~~	~~6.5~~	~~68.9~~	~~32.5~~	~~69.6~~			
Dm 69	0 26.3	+ 15 13	7.0	68.5	22.3	69.1	0 28.6 + 15 28	6.3	6.4
Dm 69	0 20.0	+ 15 14	6.7	68.4	22.3	69.1	0 22.3 + 15 29	6.4	6.5
114	0 25.4	+ 15 23	7.1	68.6	22.4	69.2	0 27.7 + 15 38	6.6	6.7
~~Dm. 73~~	~~0 24.1~~	~~+ 15 13~~	~~7.0~~	~~67.3~~	~~22.2~~	~~67.9~~			
Dm 87	0 30.1	+ 25 19	8.3	67.9	32.3	68.7	0 32.5 + 25 34	6.9	7.0
Dm 118	0 40.0	+ 26 29	7.0	69.0	32.4	68.9	0 42.4 + 25 44	6.8 7.0	6.9 7.1 7.1
Dm 156	0 66.0	+ 26 32	7.0	70.2	32.2	68.8	0 57.4 + 25 47	6.7 6.9	6.8 7.0
Dm. 93	0 28.3	+ 16 47	7.6	68.7	22.4	69.2	0 30.6 + 16 2	6.3	6.4 6.7

* Dm +25° 88 is superposed on Dm +25° 87. Meas. of br. combined light of both

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Plate 917

V	H.	Type	No. Lines	K	Focus	Other lines	V	H	V	H	Corrn
											-1.8
	13.7	23.5	I II	12 2	K=H	K=H 1	—	—	68	47.0	25.6	22.9	-0.6
	13.5	23.8	III III	13	K=H	K=H 1	F	F	68	47.6	25.6	22.3	-0.6 -1.8
	13.0	16.8	III III	3 3	K=H	K=H 1	F.	F	6.5	13.6.6	26.9	13.6.3	-0.2
?	12.5	13.8	II a	3337 1 9			F	seen,	6.2	27.6	26.2	42.3	+0.1
	12.1	10.1	I I	4	K=H	1	—	F?	6.0	20.2	26.4	49.7	+1.0
	12.2	12.3	a. II a ?	3338 12 2	K=H	K=H 1	seen	F? Seen	6.1	138.6	26.3	13.6.3	-0.9
	11.9	10.7	I	17		3	F.		6.0	21.4	26.4	48.5	+1.0
	11.9	19.5	I	9		3	F.		6.0	39.0	26.4	30.9	-0.9
	11.8	17.0	I ? I ?	334	K=H	1	—		5.9	34.0	26.5	36.9	-0.5
	11.2	21.1	I						5.6	42.2	26.8	27.7	-1.3
?	11.0	13.4	II a ?	3339 1 9		3	F. seen,		6.8	26.8	26.9	46.1	+0.4
	10.6	7.8	III ?	2	K=H	1	F		6.3	15.6	27.1	54.3	+1.6
	10.4	23.8	III	13	K=H	1	F.		5.2	47.6	27.2	22.3	-0.9
	10.2	17.2	II ? II a ?	3339a. 2 2	K=H	K=H 1	F?	Seen	5.1	34.4	27.3	36.6	-0.6
	10.0	22.0	II II	12 2	K=H	K=H 1	F?	—	5.0	44.0	27.4	25.9	-1.6 -0.8
	9.8	21.0	III ? III ?	3	K=H	K=H 2 1	F.	F	4.9	42.0	27.6	27.9	-1.4
	9.1	11.7	II ? II	12 2	K=H	1 1	—	—	4.6	23.4	27.8	46.6	+0.8
	9.1	11.0	I	6	N	2	—		4.6	22.0	27.8	47.9	+0.9
	9.5	13.9	III III ?	12 2	K=H	K=H 1	—	—	4.8	27.8	27.6	42.1	+0.1
	8.9	13.8	III ? III	12 2	K=H	K=H 1	—	—	4.4	27.6	28.0	42.3	+0.3
?	8.4	14.5	IIa II a	3340 2 2	K=H	1	seen	Seen 4.2	29.0	28.2	40.9	+0.1
III ? 6.4, 6.7	8.5	9.9	III	3			F.		4.2	19.8	28.2	50.1	+1.3
	8.3	11.8	I I	4	N	K=H 1 1	—	—	4.2	23.6	28.2	46.3	+0.8
	8.0	15.3	I I ? I	3341 3 4	K	K=H 1	—	—	4.0	30.6	28.4	39.6	-0.1
	7.8	18.4	III ?	1.2		4	F. seen,		3.9	36.8	28.6	33.1	-0.9
?	7.1	14.6	a	3342 2 3	K=H	2	F	seen	3.6	29.2	28.8	40.9	0
	9.4	11.8	III ? III	2	K=H	K=H 1	F?	F?	3.9	23.6	28.9	46.3	+0.8
	8.9	11.8	II ? II ?	2 2	K=H	K=H 1	—	—	3.4	23.6	29.0	46.3	+0.4

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Means

Corr.

	No.	R.A.	Dec.	Mag.	H	V	H'	Red. to 1900	By Br.
Dm.	55	0 19.8	+ 25 29	7.5	66.8	32.3	68.6	0 22.1 + 25 44	6.8 6.9 7.0
	61	0 22.0	+ 16 46	6.7	69.0	22.6	69.6		
	61	0 22.0	+ 15 46	6.7	69.6	32.6	70.2	0 23.0 + 15 54	6.7 6.8 6.7
Dm.	66	0 19.8	+ 26 29	7.5	69.4	32.3	69.2		6.9 7.0 7.1
Dm.	106	0 65.3	+ 16 52	7.3	68.9	22.4	69.1	0 37.6 + 16 7	6.7 6.8 6.8
									6.9 7.0 7.1
	126	0 42.7	+ 16 18	6.3	70.3	22.5	70.2	0 43.7 + 16 24	5.4 5.5
	155	0 49.5	+ 26 13	7.8	69.7	32.2	68.7	0 51.9 + 26 28	
Dm.	161	0 48.2	+ 26 26	6.0	68.4	32.4	67.4		6.8 6.9 6.9
Dm.	92	0 29.1	+ 26 14	8.0	67.7	32.3	68.6	0 31.5 + 26 29	6.9 7.0 7.0
	144	0 49.5	+ 26 66	6.0	70.9	32.6	69.9	0 50.6 + 26 40	6.0 6.1
	79	0 30.0	+ 26 36	6.1	69.0	32.6	69.9	0 31.1 + 26 42	6.1 6.2 0 28.7 + 26.8
Dm.	103	0 34.0	+ 26 24	8.0	68.0	32.3	68.5	0 36.4 + 26 39	6.9 7.0 7.1
Dm.	76	0 26.0	+ 26 46	6.8	67.2	32.4	68.5	0 27.4 + 27 1	6.2 6.3
	131	0 46.5	+ 27 4	6.6	70.3	32.6	69.9	0 44.5 + 27 10	5.7 5.8
								0 44.8 + 27 10.5	
Dm.	169	0 54.7	+ 26 58	6.5	70.3	32.3	68.7	0 57.1 + 27 13	6.7 6.8
	60	0 21.8	+ 17 13	6.4	69.4	22.4	70.3	0 22.8 + 17 21	6.3 6.4 6.5
Dm.	103	0 33.7	+ 27 16	8.2	68.1	32.3	68.7	0 36.1 + 27 30	6.9 7.0 6.9
	71	0 22.8	+ 27 16	8.2	66.8	32.3	68.4	0 25.2 + 27 31	6.8 6.9
Dm.	67	0 24.3	+ 17 18	8.1	68.3	22.3	69.1		6.9
Dm.	84	0 26.2	+ 27 29	7.0	67.2	32.4	68.6	0 27.6 + 27 44	6.5 6.6 6.6
									6.6 6.7 6.7
Dm.	144	0 46.0	+ 27 47	7.7	69.4	32.4	68.6	0 48.4 + 28 2	7.0 7.1 7.3
Dm.	148	0 47.6	+ 27 46	7.5	69.6	32.4	68.7	0 50.0 + 28 1	6.6 6.7
Dm.	106	0 41.2	+ 17 32	7.6	69.0	22.3	68.9	0 48.6 + 17 47	6.9 7.0 7.0
									7.2 7.3 7.1
Dm.	129	0 41.4	+ 27 56	7.5	69.0	32.3	68.7	0 43.8 + 28 11	6.8 6.9 7.0
									6.9 7.0 7.2
Dm.	106	0 39.9	+ 18 7	7.6	68.9	22.3	68.8	0 42.3 + 18 22	6.9 7.0 6.9
	152	0 51.6	+ 28 21	6.6	71.1	32.6	69.8	0 52.4 + 28 27	6.0 6.1
									6.3 6.4
Dm.	143	0 46.8	+ 28 18	7.6	69.4	32.5	68.6	0 48.2 + 28 33	6.6 6.7 6.6
Dm.	121	0 37.9	+ 28 24	8.5	68.5	32.4	68.6	0 40.3 + 28 38	6.9 7.0 6.9
	90	0 32.2	+ 28 40	4.6	69.0	32.6	69.9	0 33.2 + 28 47	5.2 5.3
									5.4 5.5
	118	0 40.9	+ 18 66	6.0	70.1	22.6	70.1	0 41.9 + 19 1	5.9 6.0
Dm.	144	0 45.8	+ 28 43	7.5	69.4	32.4	68.6	0 48.2 + 28 58	6.7 6.8 6.7
									6.9 7.0 6.9
Dm.	116	0 46.6	+ 18 59	7.5	69.2	22.4	68.8	0 48.0 + 19 14	6.9 7.0 6.9

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December 20, 1886.

Plate 9.7

V	H	Type	No. Lines	K.	Foc.	Other lines.	V	H	V	H	Corrc.
7.9	16.2	I	9	N	3	F.	4.0	22.4	28.4	47.5	+0.5
7.1	14.7	I	8	K=.2 H	2	—	13.6	29.4	28.8	40.5	
6.8	7.1	II a?	3	K=H	2	F. curv	6.4	14.2	29.0	55.7	+2.0
? 6.8	21.1	I	9	K=.5H	3	F. curv	6.4	42.2	29.0	28.7	-1.8
5.6	21.6	III ? III	3 2	K=H	2 2	F.	2.6	46.2	29.6	26.7	-0.8
III ? 5.3, 5.6, 6.7. ? 4.6	18.0	III c	3	K=H	4	F. Bright curv.	2.3	36.0	30.1	36.9	-0.8
4.4	14.3	II ? II	2 2	K=H	K=H 2 1	— —	2.2	28.6	30.2	41.3	+0.1
? 3.5	9.4	I d?	1	N	1	—	1.8	18.8	30.6	51.1	+0.8
3.9	18.3	III 1	9	K=H	1	F	2.0	36.6	30.4	36.3	-0.5
3.6	18.1	III	3	K=H	1	F.	1.8	36.2	30.6	36.7	-0.5
3.2	6.0	I	8	N	3	F.	1.6	12.0	30.8	57.9	+1.1
2.6	7.9	I	7	N	3	F.	1.3	15.8	31.1	54.1	+2.1

Recorded on p. 29.

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Mean 1

	No.	R.A.	Dec.	Mag.	H	V	H'	Red. to 1900		Cov.	By Br.
	140	0 48.2	+18 32	6.4	70.6	22.5	70.1	0 49.3	+18 38	✓	5.6 5.7 ✓
Dm.	174	0 56.5	+28 54	6.5	70.7	32.3	68.7	0 58.9	+29 9	✓	6.1 6.2 ✓
	65	0 23.6	+29 5	5.3	68.0	32.5	69.8	0 24.8	+29 12	✓	5.5 5.6 ✓
	76	0 26.3	+19 38	6.5	69.5	22.4	70.3	0 27.3	+19 45	✓	6.4 6.5 6.6 ✓ 6.2 6.5
	92	0 32.9	+30 12	6.4	68.9	32.5	69.7	0 33.9	+30 19	✓	4.9 5.0 5.4 5.5 ✓
Dm.	105	0 40.2	+20 8	6.5	68.8	22.3	68.7	0 42.6	+20 23	✓	6.6 6.7 ✓ 6.5
Dm.	161	0 60.6	+20 37	6.5	69.4	22.4	68.6	0 53.0	+20 52	✓	6.3 6.4 ✓
Dm.	85	0 31.8	+20 28	6.2	68.4	22.5	68.9	0 32.2	+20 43	✓	6.7 6.8 6.8 6.9 ✓
	93	0 33.6	+20 48	6.5	69.8	22.6	70.3	0 34.6	+20 54	✓	6.6 6.7 6.8 6.9
	169	0 59.3	+20 60	6.0	71.3	22.4	70.2	1 0.4	+20 56	✓	5.1 5.2 ✓
	161	0 56.2	+31 10	6.6	72.0	32.5	69.9	0 57.3	+31 16	✓	5.6 5.7 ✓

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Amt. of Fog. due to cumo-clouds. 7.5

Amt. of Fog. due to chemicals 7.7

December 21st 1886.

Plate 9 10 12. See Book 8 p. 110.

V	H	Type	Lines	K	Focus	Lines		V.	H.	V.	H.	Correc.
20.7	19.7	I	6	N	2	—		10.4	69.4	27.6	32.5	− 0.5
20.5	22.0	I						10.2	44.0	27.8	27.9	− 1.6
19.8	14.1	I	7	K=3H				9.9	28.2	28.1	43.7	+ 0.2
19.3	12.8	III	2	K=H				9.6	25.6	28.4	46.3	+ 0.3
19.1	6.8	I	10					9.6	11.6	28.4	60.3	+ 2.2
18.8	16.5	III	b 1492	2			Seen	9.4	66.0	28.6	38.9	− 0.4
18.5	11.7		7					9.2	26.4	28.8	48.5	+ 0.8
16.4	19.5	III	2	K=H				8.2	69.0	29.8	32.9	− 0.6
15.7	20.2		4	K=H				7.7	40.4	30.3	31.3	− 1.5
15.2	11.3	III	2	K=H				7.6	20.6	30.4	47.3	+ 1.0
15.2	11.1		K=H					7.6	22.2	30.4	49.7	+ 0.5
14.9	20.8	III	? b 1493	2			Seen	7.4	41.6	30.6	30.3	− 1.7
14.0	14.4		a? 1494	2			Seen	7.0	28.8	31.0	43.1	+ 0.2
14.3	12.8		2	K=H				7.2	25.6	30.8	46.3	+ 0.3
14.0	12.7	I ?	4	K=H				7.0	25.4	31.0	46.5	+ 0.3
13.9	20.3	I	5	5	N	1	—	7.0	40.6	31.0	31.3	− 1.5
13.6	12.5	II	a 1495 IIa	2	K=H	1	Seen Seen	6.8	25.0	31.2	46.9	+ 0.8
13.0	20.1	II ?	2	K=H		1	—	6.5	40.2	31.5	31.7	− 1.5
12.8	13.2		6					6.4	20.4	31.6	51.5	+ 1.5
12.5	17.6	I	5					6.2	66.2	31.8	36.7	− 0.8
12.5	11.6	I	4	K=H				6.2	26.2	31.8	48.7	+ 0.5
12.3	10.8	III ?	2	K=H				6.2	25.6	31.8	50.3	+ 0.6
Recorded above								6.2	65.2	31.8	36.7	−
12.6	21.5	III ?	2					6.3	43.0	31.7	28.9	− 0.9
Recorded above								6.2	25.6	31.8	50.3	+
12.0	14.2		6					6.0	28.4	32.0	43.5	+ 0.1
11.9	19.6	II	a 1496	2				6.0	39.2	32.0	32.7	− 1.5
11.1	15.7	I	4	H	N	1	—	5.6	31.4	32.4	40.5	− 0.2

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	No.	R.A.	Dec.	Mag.	M.	V.	M'	Red of stars to 1900.	Br.	Brc.
½ cosδ.	4175	23 31.9	+17 46	5.4	71.3	28.2	71.8	23 32.9 +17 51	9 +16.1	6.2 0.1 6.3 5.5
0.0 6.2	Dm. 4568	23 24.5	+27 36	6.3	68.5	37.8	70.1	23 26.7 +29 51	6.8	6.7 0.1 6.8 6.0
	~~4135~~	~~23 25.5~~	~~+28 0~~	~~6.7~~	~~69.5~~	~~38.2~~	~~71.1~~			Dm 23 25.0 +27.6
0.1 6.5	4209	23 43.6	+28 10	5.9	71.8	38.1	71.6	23 44.6 +28 17	6 −26.5	6.4 0.1 6.3 5.7
	4217	23 46.4	+18 27	5.2	72.0	28.0	71.7	23 47.4 +18 34	6.9 7.2	6.7 (6.8) 6.0 7.1 0.1 7.2 6.4
	5	0 2.2	+28 26	2.1	13.8	38.0	12.6	5 3.2 +28 33	B.	B. B. 0.1 B. B. 5 0.7 +28 +8
	4192	23 38.0	+28 42	4.9	71.0	38.1	71.0	23 39.0 +28 49	6.4 6.6	(6.3) (6.4) 0.1 (6.5) 5.6 5.7
	Dm. 4666	23 47.6	+28 41	7.2	71.0	37.9	70.2	23 49.9 +28 56	6.8 7.0	6.5 0.1 (6.8) 5.8 (6.9) 6.1
	Dm. 5129	23 30.9	+19 17	6.8	69.9	38.0	70.5	23 33.2 +19 20 2	7.3	7.2 0.1 7.3 6.5
	Dm. 4982	23 28.2	+30 12	7.5	68.6	37.9	70.1	23 30.4 +30 27	7.2	7.0 0.2 7.2 6.4
	~~Dm. 4983~~	~~23 28.3~~	~~+30 23~~	~~7.9~~						Dm 23 28.1 +30.2
	Dm. 5053	23 48.7	+30 16	7.0	71.3	37.8	70.3	23 51.0 +30 31	7.1 7.4	7.0 7.2 (6.4) 7.3 0.2 7.5 6.7
	Dm. 5396	23 48.6	+20 22	7.0	70.8	28.0	70.3	23 50.9 +20 37	6.7	6.7 0.1 6.8 6.0
	4163	23 28.0	+30 10	5.2	69.6	38.1	71.3	23 29.0 +30 47	6.6 7.0	6.4 (6.6) 5.8 6.8 0.2 7.0 6.2
	Dm 5028	23 41.5	+30 54	7.7	70.3	37.9	70.1	23 43.8 +31 9	7.3	7.1 0.2 7.3 6.5
	4216	23 46.3	+21 0	6.2	71.9	28.2	71.6	23 47.3 +21 7	7.2 7.5	7.0 7.1 (6.3) 7.2 0.1 7.3 6.5
	~~Dm. 4984~~	~~23 28.6~~	~~+21 6~~	~~7.3~~						
	Dm. 5387	23 45.3	+20 57	6.6	70.7	28.0	70.4	23 47.6 +21 12	7.2	7.1 0.1 7.2 6.4
	Dm. 4932	23 27.8	+31 2	7.7	68.4	38.0	69.9	23 30.0 +31 17	7.0	7.0 6.8 0.2 7.0 6.2
	Dm. 4989	23 45.8	+21 6	7.3	70.8	37.9	70.0	23 48.1 +31 21	7.1	7.2 7.0 0.2 7.2 6.4
	Dm. 4935	23 28.3	+31 24	6.8	68.5	37.9	70.0	23 30.5 +31 39	7.2	7.1 7.1 0.2 7.3 6.5
	4236	23 32.8	+31 41	6.3	73.2	38.1	71.7	23 33.7 +31 48	6.4	6.3 0.2 6.5 5.7 23 31.4 +31 35
	Dm. 4952	23 34.1	+31 45	7.0	69.3	38.0	70.1	23 36.3 +32 0	6.9	6.8 0.2 7.0 6.2
	Dm 4994	23 47.5	+21 39	7.8	70.7	27.8	70.2	23 49.8 +21 54	7.1	7.0 0.1 7.1 6.3
	4229	23 30.6	+21 59	6.1	72.2	28.2	71.6	23 31.6 +22 5	7.3 7.5	7.0 0.1 7.1 6.3 23 33.3 +21 50
	~~Dm. 4950~~	~~23 34.1~~	~~+21 45~~	~~7.0~~						
	4158	23 27.5	+21 52	5.4	70.5	28.2	71.4	23 28.5 +21 57	7.0 7.3	6.8 (6.7) (6.1) 7.1 0.1 7.2 6.4
	~~Dm. 5002~~	~~23 44.9~~	~~+21 33~~	~~7.8~~						
	Dm 4908	23 42.0	+22 3	6.6	70.4	28.0	70.3	23 44.3 +22 18	6.7	6.6 0.1 6.7 5.9
	4171	23 30.5	+32 14	6.5	69.7	38.2	71.2	23 31.5 +32 21	6.5	6.5 0.2 6.7 5.9 23 29.3 +32 6
	Dm 4703	23 38.6	+32 29	7.5	70.0	38.2	70.2	23 40.8 +32 44	6.8	6.8 6.7 0.2 6.9 6.1

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Plate 910 909.

V	H	Type	No. lines	K.	Focus	Other lines		V	H	V.	H.	Correc.
10.8	11.3	I	6	N	2	—		G4	22.6	32.6	49.3	+ 1.2
10.5	12.1	I	5	N	1	—		G2	24.2	32.8	47.7	+ 0.9
11.0	19.1	I	4	K=H	1	—		G6	38.2	32.5	33.7	- 0.7
10.7	20.4	III	b 1497 2	K=H	2	Rem		G4	40.8	32.6	31.1	- 1.7
10.0	15.9	I	I? 2	K=H	N	1	—	G0	31.8	33.0	40.1	- 0.3
12.3	10.0	II	a 1498 2	K=H	2	Rem		G2	20.0	32.8	51.9	+ 1.6
Not plain on plate.								G2	44.2	32.8	27.7	—
8.7	14.9	I	I 4	H	N	1	—	44	29.8	33.6	43.1	+ 0.0
9.0	21.5	I	I 3	? N	1	—		45	46.0	33.5	28.9	- 1.2
8.4	7.8	II	a? 1499 2	K=H	1	Rem		K2	16.6	33.8	56.3	+ 2.5
8.0	13.8	III	2	K=H	1	—		40	27.6	34.0	44.3	+ 0.2
7.8	10.5	I	6	K=2H	2	—		G9	27.0	34.1	50.9	+ 1.6
7.5	10.4	III?	3	K=H	2	Flare?		G8	20.8	34.2	51.1	+ 0.8
7.9	18.1	I	7	N	2	5		40	G6.2	34.0	35.7	- 1.0
7.8	18.6	I	9	K=2H	2	—		G9	G7.2	34.1	34.7	- 1.3
7.8	21.1	I	9	K=2H	2	Faint?		G9	42.2	34.1	29.7	- 2.0
7.3	24.1	I	6		1	—		G6	48.2	34.4	24.7	- 1.7
6.5	14.6	II	2		1	—		G2	29.2	34.8	43.7	+ 0
6.5	7.6	I	4	K=H	1	—		G2	16.2	34.8	56.7	+ 2.7
6.0	8.7	I	?I 4 4	K=H	1	—		G0	17.4	35.0	54.5	+ 2.3
5.8	17.5	I	I 9 5	K=H K=8H	1	—		29	G5.0	35.1	36.9	- 1.1
5.0	14.0	II	a 1500 2		2	Faint		26	28.0	33.5	43.9	+ 0.4
4.9	13.1	I	5 4	K=H	K=H	1	—	24	26.2	35.6	45.7	+ 0.7
4.4	17.7	I	?2 7		2	—		22	G5.4	33.8	36.5	- 1.0
3.8	12.8	III	2	K=H	1	—		19	25.6	36.1	46.3	+ 0.9
3.5	8.5	I	4	K=H	1	—		18	17.0	36.2	54.9	+ 1.4
6.5	17.9	I	2		1	—		12	G5.8	36.8	36.1	- 1.2

III? 6.5, 6.7.

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rec.			No.	R.A.	Dec.	Mag.	M.	V.	M'	Red. of stars to 1900		Br.	Be.
1.2	12	0.6	DM. 4737	23 48.8	+32 40	7.0	71.4	38.1	70.2	23 51.1	+32 55	6.6	6.5 0.2 6.7 7.9
0.9	09	0.4	DM. 4731	23 47.0	+32 47	7.9	71.2	38.0	70.3	23 49.3	+33 2	7.3	7.0 0.2 7.2 6.4
0.7	1.3	0.7	DM. 4880	23 31.6	+22 31	6.8	69.8	28.0	70.5	23 33.9	+22 46	7.0	6.9 0.1 7.0 6.2
1.7	1.7	0.8	4164	23 28.7	+32 50	5.8	69.5	38.2	71.2	23 29.7	+32 57	6.5 6.7	(6.3) 6.5 0.2 6.7 5.9
2.3	0.3	0.1	DM. 4698	23 37.9	+32 58	8.2	69.7	38.0	70.0	23 40.1	+33 13	7.5	6.9 7.2 0.2 7.4 6.6
1.6	1.6	0.7	4239	23 53.4	+33 4	5.8	73.4	38.3	71.8	23 54.4	+33 11	6.4	6.3 0.2 6.5 5.7
	2.3	1.1	DM. 4655	23 21.4	+32 53	7.7							
0.0	0	0	DM. 4773	23 40.3	+33 44	7.5	70.1	38.1	70.1	23 42.5	+33 59	6.8	7.0 6.8 0.2 7.0 6.2
1.2	2.2	1.2	DM. 4764	23 26.2	+23 33	7.1	69.2	28.1	70.4	23 28.4	+23 48	6.8	7.1 6.7 0.1 6.8 6.0
2.5	2.5	1.3	DM. 21828	23 57.3	+33 52	6.3	72.9	38.1	70.4	23 59.6	+34 7	6.7	6.6 0.2 6.8 6.0
0.2	0.4	0.2	DM. 4844	23 42.9	+24 3	6.8	70.5	28.0	70.3	23 45.2	+24 18	7.3	7.0 (6.9) 7.0 (6.3) 0.1 7.2 6.4
1.6	1.6	0.8	DM. 5039	23 31.0	+34 11	6.6	72.0	38.1	70.4	23 53.3	+34 26	6.6	6.5 0.2 6.7 5.9
0.8	1.6	0.8	21233	23 51.6	+24 28	4.6	72.4	28.3	71.6	23 52.6	+24 35	6.3 6.7	(6.3) 6.4 5.6 0.1 6.8 6.0
1.0	1.0	0.5	DM. 4979	23 32.6	+34 9	7.2	68.8	38.2	69.8	23 34.8	+34 24	6.7	6.5 0.2 6.7 5.9
			DM. 4972	23 31.4	+34 13	6.5	68.6	38.1	69.9	23 33.6	+34 28	6.7	
2.3	1.3	0.6	~~DM. 4785~~	~~23 33.2~~	~~+23 53~~	~~7.5~~							
2.0	2.0	1.0	DM. 4948	23 25.3	+34 10	6.5	67.5	38.1	69.5	23 27.5	+34 25	6.3	6.2 0.2 6.4 5.6
1.7	3.2	1.7	4148	23 21.7	+24 31	6.0	69.9	28.1	71.6	23 22.7	+24 37	6.6	6.4 0.1 6.5 5.7
0	0.1	0	DM. 4836	23 41.2	+24 51	6.8	70.4	28.0	70.4	23 43.5	+25 6	7.1	6.8 0.1 6.9 6.1
2.7	2.7	1.4	DM. 5061	23 57.8	+34 46	7.0	73.0	38.0	70.3	0 0.1	+35 1	7.0	6.7 0.2 6.9 6.1
2.3	2.3	1.2	DM. 5159	23 53.3	+35 1	7.0	72.7	38.0	70.4	23 57.6	+35 16	7.3	7.2 7.1 0.2 7.3 6.5
1.1	1.1	0.6	DM. 5076	23 33.8	+35 10	7.8	68.8	38.1	69.9	23 36.0	+35 25	6.9	7.0 6.9 0.2 7.1 6.3
0.4	0.4	0.2	4208	23 43.6	+35 46	5.9	71.6	38.3	71.2	23 44.6	+35 53	6.7	6.4 0.2 6.6 5.8
0.7	0.7	0.4	DM. 5124	23 44.8	+35 32	7.8	71.0	37.9	70.3	23 47.1	+35 47	7.2	7.3 7.1 0.2 7.3 6.5
0	1.0	0.6	4184	23 34.7	+36 3	6.4	70.1	38.2	71.1	23 35.6	+36 9	6.8	6.4 0.2 6.6 5.8
0.9	0.9	0.4	DM. 5126	23 45.7	+36 8	6.5	71.3	38.0	70.4	23 48.0	+36 23	7.2	7.0 (6.4) 6.6 0.2 6.8 6.0
1.4	2.5	1.4	4246	23 55.8	+26 27	5.8	72.8	28.2	71.4	23 56.8	+26 34	6.9	6.6 0.1 6.7 5.9
1.2	1.2	0.6	DM. 5098	23 32.9	+36 51	6.5	68.7	38.0	69.9	23 35.1	+37 6		

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F. m.+c, 8.2 8.0

F. cl. 8.3

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Plate 908.

V	H	Type	No. lines	K	Focus	No. other lines		V	H	V	H	Correc.
23.2	23.8	II ?	2	K=H	2	2	—	11.6	47.6	26.4	43.6	-0.5
22.6	20.1	I	6	K=.5H	2	2	—	11.3	40.2	26.7	60.9	-1.1
22.6	9.6	I	9	K=.2H	3	3	F?	11.3	19.2	26.7	71.9	+1.1
21.7	17.2	II ?	x2	K=H	1		—	10.8	34.4	27.2	56.7	-0.6
21.6	22.8	I ?	6	K=H	2		—	10.8	46.6	27.2	45.5	-1.8
21.4	7.2	II a ?	3345 2	K=H	1		— seen	10.7	14.4	27.3	76.7	+0.8
20.1	20.4	I ?	6	K=H	1		—	10.0	40.8	28.0	60.3	-1.2
19.8	7.9	III	2	K=H	1		—	9.9	16.8	28.1	76.3	+0.7 +1.7
19.8	9.0	III ?	19	K=H	1		F	9.9	18.0	28.1	76.1	+1.5
19.7	14.6	II a ?	3346 II a 3 3	K=H	K=H 1 1		F F. seen	9.8	29.2	28.2	61.9	+0.1
19.4	19.2	III ?	3347 19	K=H	2		F seen	9.7	38.4	28.3	52.7	-1.0
19.0	21.1	I	8	K=H	2		seen	9.5	42.2	28.5	48.9	-0.7
18.8	6.0	II a ?	3348 19	K=H ?	2		F seen.	9.4	12.0	28.6	79.1	+1.0
18.6	5.8	III ?	x2	K=H	1		—	9.3	11.6	28.7	79.5	+1.0
18.1	13.8	II	2	K=H	2		—	9.0	27.6	29.0	63.5	+0.1
? 18.0	16.3	II a	3349 3	K=H	2		F, seen.	9.0	32.6	29.0	58.5	-0.3
17.9	12.3	III ? III	12 2	K=H	K=H 1 1		— F ?	9.0	24.6	29.0	66.5	+0.7
17.3	12.6	III III	1 3 3	K=H	K=H 1 1		— F F.	8.6	25.2	29.4	66.9	+0.7
? 17.2	13.2	III bc	3350 3	K=H 1.2 1	3		F. seen, bright	8.6	26.4	29.4	64.7	+0.5
17.0	15.1	I ? I ?	3 2	K	K	1	—	8.5	30.2	29.5	60.9	0
16.6	14.4	I ? I ?	3 4	K	K=H	1 1	—	8.3	28.8	29.7	62.3	+0.1
16.5	11.2	I	7	K=.2H ?	2		—	8.2	22.4	29.8	68.7	+0.5
16.3	12.0	I	6	H	1		—	8.2	24.0	29.8	67.1	+0.7
16.0	14.8	I	9	K=.2H	3		F ?	8.0	29.6	30.0	61.5	0
? 15.5	13.1	III bc	3351 2	K=H	3		bright. seen,	7.8	26.2	30.2	64.9	+0.3
15.0	10.6	II ? II ?	2 2	K=H	K=H 1 1		— F ?	7.5	21.2	30.6	68.9	+0.7
14.6	13.4	I ?	9	K=.2H	3		F ?	7.3	26.8	30.7	64.3	+0.6
14.5	15.8	I	9	K	4		—	7.2	31.6	30.8	59.5	-0.1

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Mean - 1

No.	R.A.	Dec.	Mag.	H	V	H'	Red to 1900.		Br.				
126	0 42.7	+ 16 18	6.6	90.3	27.9	91.1	0 43.7	+ 16 24					
144	0 49.6	+ 26 66	6.0	89.7	37.9	90.8	0 50.6	+ 26 40					
209	1 12.9	+ 26 68	4.7	31.1	37.9	30.0	1 13.9	+ 26 45					
DM. 169	0 54.7	+ 26 68	6.5	89.1	37.8	89.7	0 57.1	+ 27 13		7.1	7.0		
131-2	0 46.6	+ 27 4	6.6	89.1	37.9	90.9	0 41.5	+ 27 10		6.6	6.5		
Dm 200	1 16.1	+ 17 3	7.2	30.6	27.7	29.7	1 18.5	+ 17 17		7.1	7.0		
Dm. 148	0 47.6	+ 27 46	7.5	88.4	37.8	89.6	0 50.0	+ 28 1		7.1	7.0		
197	1 14.4	+ 17 56	7.9	30.2	27.8	29.5	1 16.8	+ 18 10		7.3	7.2		
~~Dm. 225~~	~~1 19.1~~	~~+ 27 48~~	~~7.7~~	~~32.9~~	~~39.9~~	31.2				7.5	7.4		+ 17.9
212	1 14.6	+ 28 6	6.8	32.6	38.0	31.0	1 15.5	+ 28 13		6.6	6.5		
Dm. 187	1 0.4	+ 28 6	7.3	29.6	37.9	29.5	1 2 8.8	+ 28 21		7.0	6.9		
162	0 61.6	+ 28 21	6.6	89.7	68.1	90.7	0 52.4	+ 28 27		6.9	6.8	6.7	
140	0 48.2	+ 18 62	6.8	90.4	28.0	91.1	0 49.3	+ 18 38		6.5	6.4		
226	1 19.8	+ 18 66	6.2	31.8	28.0	30.8	1 20.9	+ 18 39		6.7	6.6		
227	1 20.2	+ 18 67	6.6	31.8	27.9	30.8	1 21.3	+ 18 44		6.8	6.7		
186	1 6.4	+ 19 1	6.6	31.0	28.0	30.9	1 4.5	+ 19 7		7.1	7.0		
Dm 174	0 66.5	+ 28 64	6.5	89.1	37.9	89.4	0 58.9	+ 29 9		6.2	6.1		
Dm. 204	1 6.6	+ 28 68	7.6	30.2	38.0	29.5	1 8.1	+ 29 13		6.3	6.2		
Dm. 195	1 6.0	+ 29 19	6.6	30.2	37.9	29.5	1 7.5	+ 29 33		7.1	7.0	6.9	
197	1 6.1	+ 29 27	4.7	31.6	38.0	31.0	1 6.1	+ 29 33		7.3	7.2	7.1	
Dm. 180	0 69.4	+ 19 24	6.5	89.6	27.9	89.6	1 1.8	+ 19 31		6.7	6.6	6.6	
Dm. 181	1 0.9	+ 29 39	7.2	29.7	37.9	29.6	1 3.4	+ 29 54		6.9	6.8	6.8	
Dm. 212	1 7.7	+ 19 39	6.8	30.2	27.8	29.7	1 10.2	+ 19 53		5.8	5.7		
Dm. 200	1 6.4	+ 29 47	7.6	30.4	38.0	29.7	1 8.9	+ 30 1		6.3	6.2		
178	1 1.5	+ 20 6	6.7	31.1	28.1	31.1	1 2.6	+ 20 12		7.3	7.2	7.2	
196	1 6.0	+ 20 24	4.9	31.2	28.2	30.9	1 6.1	+ 20 30		7.1	7.0	7.0	
Dm 186	1 9.0	+ 20 19	7.0	29.2	27.8	28.5	1 11.4	+ 20 33		6.7	6.6		
196	1 4.7	+ 30 47	6.1	31.6	38.1	31.0	1 6.6	+ 30 53		7.0	6.9	6.9	
169	0 69.3	+ 20 60	6.0	90.9	28.0	91.0	1 0.2	+ 20 56		5.3	5.2		
										4.7	4.6		

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	V	H	Type	No. Lines	K	Focus	Other Lines.	V	H	V	H	Correc.
	14.6	19.2	I	7	N	2	—	7.3	38.4	30.7	52.9	-0.6
√	14.4	22.0	I	3 3	N	1 1	— —	7.2	44.0	30.8	47.1	-0.9
√	13.8	8.7	III	1 2	K=H	1 1	— —	6.9	17.4	31.1	43.7	+1.8
× √	13.7	11.0	III	3 3	K=H	1 1	— F — F	6.8	22.0	31.2	69.1	+1.2
	13.8	17.0	I	10	N	3	F?	6.9	34.0	31.1	57.1	-0.6
√	13.4	14.7	I	6 6	K=2H	2 2	— —	6.7	29.4	31.3	61.7	+0.1
√	13.1	15.6	III	1 2	K=H	1 1	— —	6.6	31.2	31.4	59.9	-0.2
	13.2	12.7	I	7	N	2	F	6.6	25.4	31.4	66.7	+0.7
√	13.0	8.1	III	1 2	K=H	1 1	— —	6.5	16.2	31.5	44.9	+0.9
√	12.5	18.3	I	4 4	K=H	1 1	— —	6.2	36.6	31.8	64.5	-1.0
√	12.5	18.5	I	4 4	N	1 1	— —	6.2	37.0	31.8	64.1	-1.0
Too faint	11.9	21.8	I	3	N	1	—	6.0	43.6	32.0	47.5	
Recorded on p. 40.	12.0	13.1	III	2	K=H	1	—	6.0	26.2	32.0	64.9	+0.3
4.5	~~11.6~~	~~14.1~~	~~I~~	~~2~~	~~N~~	~~1~~	~~—~~	~~5.8~~	~~28.2~~	~~32.2~~	~~62.9~~	~~+0.1~~

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Mean – 1

Corr.

No.	R.A.	Dec.	Mag.	H	V	H'	Red. to 1900		Br.	Br.	
Dm. 131	0 50.6	+ 20 37	6.5	89.0	27.9	89.6	0 53.0	+20 52	6.2	6.1	
Dm. 117	0 44.8	+ 20 37	7.5	88.8	27.8	89.7	0 47.2	+20 52	7.2	7.1	7.1
210	1 14.1	+ 30 57	7.6	31.5	37.9	29.7	1 16.7	+31 11	7.2	7.1	7.1
~~Dm. 236~~	~~1 14.9~~	~~+ 31 5~~	~~7.6~~	~~32.3~~	~~38.0~~	~~30.5~~			7.5	7.4	7.4
Dm. 196	1 9.4	+ 30 60	6.8	31.4	37.8	30.2	1 11.9	+31 14	6.9	6.8	6.7
									7.1	7.0	7.0
161	0 56.2	+ 31 10	6.6	90.2	38.1	90.8	0 57.3	+31 16	5.1	5.0	
176	1 0.3	+ 31 23	6.2	29.7	38.1	29.6	1 2.4	+31 29	6.3	6.2	6.3
Dm. 180	0 58.2	+ 31 24	7.2	89.4	38.0	89.6	1 0.7	+31 39	6.9	6.8	6.8
									7.3	7.2	7.3
Dm. 197	1 4.9	+ 31 18	7.3	30.3	37.9	29.6	1 7.4	+31 32	6.4	6.3	
Dm. 182	1 14.6	+ 21 20	7.3	30.8	27.8	29.9	1 17.0	+21 34	7.1	7.0	7.0
									7.3	7.2	7.1
Dm. 163	0 57.6	+ 31 44	7.3	88.2	37.9	89.2	0 54.0	+31 59	6.7	6.6	6.7
Dm. 150	0 57.2	+ 31 42	6.8	88.2	37.9	89.2	0 53.6	+31 57	6.8	6.7	6.8
Dm. 161	1 13.9	+ 21 57	7.5	30.1	28.0	29.8	1 6.3	+22 11	7.0	7.0	
									7.3	7.2	
~~Dm. 182~~	~~1 1.6~~	~~+ 22 9~~	~~7.5~~	~~29.8~~	~~28.0~~	~~29.7~~					

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Plate 908.

	T	H	Type	No. Lines	K	Focus	Other Lines.	T	H	T	H	Correc.
1.	11.4	14.1	I? I?	3 3	N N	1 1	— —	5.7	28.2	32.3	62.9	+0.1
	11.9	22.3	II? I?	2 3	K=H N	1 1	— —	6.0	44.6	32.0	46.5	-1.0
	11.8	21.8	III? III?	2 2	K=H K=H	1 1	— —	5.9	43.6	32.1	47.5	-2.0
	11.2	15.6	II? II? 3351	2 2	K=H K=H	1 1	— Seen	5.6	31.2	32.4	59.9	-0.2
	11.0	16.3	II III	2	K=H	1 1	F F	5.5	22.6	32.6	68.5	+1.1
	10.9	12.6	I? I	3	N N	1 1	— —	5.4	25.2	32.6	65.9	+0.4
	10.7	12.7	I? I	3 4	N K=H	1 1	— —	5.4	25.4	32.6	65.7	+0.7
?	10.5	19.7	III hc 3382	3	K=H 1.2 1		F bright Seen.	5.2	39.4	32.8	51.7	-0.7
	10.0	6.8	II?	2	K=H	2	F?	5.0	13.6	33.0	77.5	+1.2
	10.1	10.2	III? III?	2 2	K=H K=H	1 1	— —	5.0	20.4	33.0	70.7	+1.5
	10.6	10.9	I	10	K=.5H	2	F Fine?	5.3	21.8	32.7 33.0	69.3	+0.6
III? 6.6, 7.0.	10.0	20.7	III?	3	K=H	2	F	5.0	41.4	33.0	49.7	-0.9
	9.8	14.0	I	10	K=.5H	2	Faint.	4.9	28.0	33.1	63.1	+0.1
	9.6	10.3	I I	3 4	N K=H	1 1	— —	4.8	20.6	33.2	70.5	+1.5
	9.4	14.2	I I	7 6	K=.5H K=H?	2 1	— —	4.7	28.4	33.3	62.7	+0.2
	9.4	18.8	III	3	K=H?	2	F.	4.7	37.6	33.3	53.5	-1.2
	9.1	12.5	I	10	K=.2H	2	—	4.6	25.0	33.4	66.1	+0.8
	8.7	24.2	III	3	K=H?	3	F	4.4	48.4	33.6	42.7	-1.6
	8.7	8.3	III?	2	K=H	1	F	4.4	16.6	33.6	74.5	+2.2
	9.0	20.7	III	3	K=H	1	F,	4.5	41.4	33.5	49.7	-0.9
	8.2	12.1	III hc 3953	3	K=H 1.2 1		F bright Seen.	4.1	24.2	33.9	66.9	+0.5
	8.3	12.3	III? III?	2 2	K=H K=H	1 1	— —	4.2	24.6	33.8	66.5	+0.9
	8.2	19.1	II?	2	K=H	1	—	4.1	38.2	33.9	52.9	-0.7
	7.9	7.2	I?	6	K=H?	1	—	4.0	14.4	34.0	76.7	+2.5
	7.7	14.2	I I?	9 5	K=H K=H	1 1	— —	3.8	28.4	34.2	62.7	+0.2
	7.1	15.3	I	6	K=H	1	—	3.6	30.6	34.4	60.5	-0.1
Is this a star?	~~7.0~~	~~22.3~~	~~I?~~	~~3?~~	~~K=H~~	~~1~~	—	~~3.5~~	~~46.6~~	~~34.5~~	~~44.3~~	-1.6
	6.8	19.6	I I	8 6	K=.5H K=H	2 2	— —	3.4	39.2	34.6	51.9	-1.6

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Mean – 1

	No.	R.A.	Dec.	Mag.	H	V	H'	Red. to 1900	Cor.	Br	Br.
DM	182	1 1.6	+ 22 9	7.5	29.8	27.9	29.7	1 4.0 +22 33	✓	7.3	7.2 ✓ 7.1 ✓
Dm.	118	0 43.9	+ 21 60	7.0	88.5	27.8	89.5	0 46.3 +22 5	✓	7.3	7.2 ✓ 7.3 ✓
Dm.	129	0 43.6	+ 31 62	7.1	87.2	37.8	89.2	0 46.0 +32 7	✓	7.1	7.0 7.4 ✓ 6.9 7.0 ✓
Dm.	191	0 57.9	+ 32 16	7.8	89.1	37.6	89.3	1 0.4 +32 28	✓	7.2	7.1 ✓ 7.0 ✓
Dm.	226	1 8.2	+ 32 22	6.5	30.8	37.9	29.7	1 10.7 +32 36	✓	7.0	6.5 6.9 ✓ 6.6 6.9 ✓
Dm.	192	1 4.6	+ 22 29	7.6	29.8	27.9	29.4	1 7.0 +22 43	✓	7.0	6.9 ✓ 6.9 ✓
Dm.	204	1 6.0	+ 32 22	7.9	30.4	37.8	29.7	1 7.5 +32 36	✓	7.1	7.0 ✓ 6.9 ✓
	160	0 60.8	+ 22 47	4.6	90.2	28.0	90.9	0 51.9 +22 52	✓	5.5	5.4 5.8 5.7 ✓
Dm.	226	1 17.7	+ 22 48	6.5	31.6	27.8	30.1	1 20.1 +23 0	✓	6.7	6.6 ✓
Dm.	230	1 10.8	+ 32 46	7.8	31.2	37.8	29.7	1 13.3 +32 59	✓	7.1	7.0 7.1 7.0 7.1 ✓
Dm.	204	1 8.6	+ 22 48	7.0	30.4	27.8	29.8	1 11.0 +23 21	✓	6.4	6.3 ✓
	141	0 48.6	+ 22 69	6.4	89.9	28.0	90.8	0 49.6 +23 6	✓	6.3	6.2 6.5 6.4 ✓ 0 47.2 +22.8 51
✝ Dm.	160	1 1.9	+ 23 2	6.8	29.9	27.9	29.8	1 4.3 +23 16	✓	6.6	6.5 ✓
Dm.	229	1 10.6	+ 32 60	8.0	31.2	37.8	29.7	1 13.1 +33 14	✓	6.7	6.6 ✓ 6.8 ✓
	178	1 1.2	+ 33 10	7.0	29.6	37.9	29.4	1 3.7 +33 25	✓	6.7	6.6 ✓ 6.8 ✓
~~Dm.~~	~~181~~	~~1 4.9~~	~~+ 33 6~~	~~7.0~~	~~30.6~~	~~37.8~~	30.1		✓	6.5	6.4 6.6 ✓ 6.8 ✓
	164	0 61.7	+ 33 19	~~7.6~~ 6.4	89.3	38.0	90.5	0 52.7 +33 26	✓	6.7	6.6 ✓ 0 50.3 +33.2 11
Dm.	187	1 6.2	+ 33 21	7.0	30.2	38.0	29.4	1 7.7 +33 35	✓	6.1	6.0 ✓
	119	0 41.0	+ 23 67	4.4	89.4	28.0	91.0	0 42.0 +23 43	✓	5.7	5.6 5.8 ✓
Dm.	220	1 15.4	+ 33 29	6.3	32.0	37.9	29.8	1 17.9 +33 43	✓	7.3	7.2 7.4 ✓
Dm.	126	0 47.3	+ 23 18	7.5	88.7	27.8	89.6	0 49.7 +23 33	✓	7.4	7.3 ✓
	198	1 7.3	+ 23 56	4.6	31.5	28.0	31.0	1 8.3 +24 3	✓	5.8	5.7 5.9 ✓
Dm.	188	1 5.9	+ 33 44	7.0	30.6	37.9	29.6	1 8.2 +33 58	✓	7.2	7.1 7.2 7.0 7.1 ✓
Dm.	134	0 60.7	+ 23 44	8.0	88.9	27.8	89.6	0 53.1 +23 59	✓	7.2	7.1 ✓
	224	1 19.3	+ 33 68	6.6	33.7	38.0	31.0	1 20.4 +34 4	✓	6.5	6.4 ✓ 1 17.9 +33.8 50
Dm.	194	1 1.2	+ 34 2	7.4	29.6	37.8	29.4	1 3.7 +34 16	✓	6.7	6.7 6.9 ✓
Dm.	183	0 58.8	+ 34 23	7.5	89.4	38.0	89.5	1 1.3 +34 38	✓	6.8	6.7 ✓
~~Dm.~~	~~223~~	~~0 42.9~~	~~+ 24 47~~	~~7.4~~	~~89.5~~	~~28.3~~	91.1		✓	7	0.8
Dm.	148	0 48.3	+ 34 26	7.0	87.5	37.8	89.1	0 ~~51.7~~ 51.7 +34 41	✓	6.3	6.2 ✓ 6.4 ✓

✝ Spectra of Dm +23° 150 superposed on Dm 181 +33°. Meas. of h. combined light of both

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Plate 908.

V	H	Type	No. Lines	K	Focus	Other Lines.	V	H	V	H	Correc.
6.8	17.6	III?	21	K=H	1	—	63	65.2	34.6	66.9	-0.5
6.4	16.4	I	6	K=½H	1	—	63	62.6	34.8	58.3	-0.5
6.3	15.5	I?	2		1	—	63	61.0	34.8	60.1	-0.1
6.5	13.6	III?	3?	K=H		F?	63	27.2	34.8	63.9	+0.2
6.3	14.1	III	3	K=H	4	F, Bright space	63	28.2	34.8	62.9	+0.3
5.9	17.9	I?	5	K	1	—	60	65.8	36.0	66.3	-1.0
4.8	17.1	III?	2	K=H	1	—	24	34.2	36.6	66.9	-0.5
4.1	8.7	I	5	K=H	1	—	20	17.4	36.0	43.7	+2.4
3.6	16.7	I?	2	K=H	1	—	18	63.4	36.2	57.7	-0.6
3.4	8.2	I	3	K	1	—	17	16.4	36.3	44.7	+2.6
2.8	9.6	I	9	K=½H?	4	F	14	19.2	36.6	41.9	+1.1
3.0	20.2	I	6	K	2	F	15	40.4	36.5	60.9	-1.1
2.5	10.5	I	5	K	1	—	12	21.0	36.8	40.1	+1.8
2.4	18.8	II?	2	K=H	1	—	12	37.6	36.8	55.5	-1.5 -0.8
2.5	20.6	III?	2	K=H	1	—	12	41.2	36.8	49.9	-2.2

Peculiar spectrum?

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Mean – 1

No.	R.A.	Dec.	Mag.	H	V	H'	Red. to 1900 –	Cor. Ru.	Cor. Br.
DM. 163	0 63.9	+ 24 61	6.5	89.1	27.9	89.6	0 56.3 + 24 46	7.0	6.8 6.9
DM. 171	0 66.0	+ 34 41	7.2	88.8	37.9	89.3	0 58.5 + 34 58	6.9	6.8
DM. 181	0 58.1	+ 34 44	7.5	89.1	37.9	89.2	1 0.6 + 34 59	7.0	6.9
190	1 3.8	+ 24 60	6.1	31.0	28.0	30.8	1 4.9 + 24 56	7.3	7.2
185	1 6.0	+ 34 69	2.2	31.2	38.2	30.9	1 4.1 + 35 5	4.7	4.0 4.6
DM. 160	0 52.3	+ 34 64	7.3	88.1	37.9	89.1	0 54.8 + 35 9	7.3	7.2
DM. 156	0 66.0	+ 26 62	7.0	89.2	27.9	89.7	0 57.4 + 25 47	7.5	7.4
DM. 260	1 15.1	+ 35 45	6.7	32.5	37.8	30.1	1 17.5 + 36 8	6.5	6.4 6.4
DM. 185	0 55.5	+ 36 4	7.8	88.9	37.8	89.5	0 58.1 + 36 19	7.3	7.2 7.1
DM. 241	1 16.1	+ 36 8	7.3	32.6	37.8	29.9	1 18.6 + 36 22	6.8	6.7
209	1 12.9	+ 26 38	4.7	31.1	28.0	30.0	1 13.9 + 26 45	5.1	5.0
144	0 49.5	+ 26 63	6.0	89.9	28.1	91.0	0 50.6 + 26 40	6.4	6.3
DM. 220	1 10.6	+ 36 38	6.5	31.6	37.8	29.8	1 13.1 + 36 52		
164	0 50.0	+ 36 43	7.3	87.6	37.9	89.1	0 52.5 + 36 58		
~~DM. 163~~	~~0 54.2~~	~~+ 26 53~~	~~7.2~~	~~88.6~~	~~28.1~~	89.6			
DM. 148	0 45.5	+ 36 38	6.5	86.7	37.8	88.9	0 48.0 + 36 53		

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F. mtc. 8.1 7.2

F ch. 7.3

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Plate 931.

	V	H	Type	No. lines	K	Focus	Other lines.
1.40 ?	23.0	21.5	I	9	K=.2H	2	seen ?
	22.9	23.8	I?	2	N	1	—
?	22.9	11.0	II a	3385 3	K=1.2H?	3	F. seen.
	21.8	17.3	I?		N	1	—
	21.4	20.7	I	3	N	1	—
?	21.5	21.0	II a	3356 2	K=H	1	F? seen.
	21.3	14.2	I?	XH	XK=H		—
?	20.4	9.3	II a	3357	K=H	2	F seen.
	20.0	21.7	II a?	3358 2 2	K=H KH	1 1	— seen
	20.0	18.6	I	XH	XK=H	1	—
	19.6	11.4	III ?	2	K=H ?	1	—
	19.8	15.7	I	10	N	2	Time?
	19.2	9.7	I	9	K=.8H?	2	F.
?	19.1	15.0	II a	3359	K=H?	2	F. seen.
?	18.8	16.5	I b	3360 6	N	2	F? seen.
	18.3	9.3	I	3	N	1	—
	18.5	14.8	I ?	4	XK=H	1	—
	18.2	21.6	I	11	K=.2H	3	F.
	17.9	14.3	I	10	N	2	—
	17.7	20.4	I	8	N	1	—
	17.5	16.2	I?	3	N	1	—
	14.3	14.8	II ?	3361 2	K=H KH	1 1	— —
III ? 6.4, 6.7	17.2	10.4	III b c	3362 1 3	K=H	2	F? seen. bright
	16.9	15.2	II a?	2	K=H	1	F? seen
	16.9	18.6	I	I 3 3	N N	1 1	—
	16.4	12.7	I b	3363 10	N	3	—
	16.2	21.5	I?	6	N	1	—
	15.4	8.5	I	9	N	3	—

V	H	V	H	Correc.
11.5	46.0	41.0	6.3	-1.6
11.4	47.6	41.1	1.7	-4.5 -2.1
11.4	22.0	41.1	27.3	+1.9
10.9	34.6	41.6	14.7	-1.2
10.7	41.4	41.8	7.9	-1.7 +2.6
10.8	42.0	41.7	7.3	-3.1 -1.7
10.6	28.4	41.9	20.9	+0.4
10.2	18.6	42.3	30.7	+2.9
10.0	46.4	42.5	6.9	-3.5
10.0	37.2	42.5	12.1	-1.8
9.8	22.8	42.7	26.6	+1.1
9.9	31.4	42.6	17.9	-0.4
9.6	19.4	42.9	29.9	+2.8
9.6	30.0	42.9	19.3	0
9.4	36.0	46.1	16.3	-0.8
9.2	18.6	46.3	30.7	+3.0
9.2	29.6	46.3	19.7	+0.1
9.1	43.2	46.4	6.1	-3.6
9.0	28.6	46.5	20.7	+0.4
8.8	40.8	46.7	8.5	-1.7
8.8	32.4	46.7	16.9	-0.4
8.6	29.6	46.9	19.7	+0.1
8.6	20.8	46.9	28.5	+2.6
8.4	30.4	44.1	18.9	-0.1
8.4	37.2	44.1	12.1	-2.0
8.2	25.4	44.3	26.9	+0.8
8.1	43.0	44.4	6.3	-3.7
7.7	17.0	44.8	32.3	+2.3

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Mean ⌖

Corr.

No.	R.A.	Dec.	Mag.	H	V	H'	Red to 1900	Bv	Br.
195	1 4.7	+ 30 47	5.1	47.7	42.3	49.5	1 5.6 +30 53		
~~Dm. 181~~	~~1 3.1 + 30 40 6.5~~			~~46.1~~	~~42.2~~	~~47.9~~			
160	0 36.2	+ 40 41	5.9	103.8	52.1	108.3	0 57.3 +40 48		
~~176 1 0.6 + 61 26 6.2~~				~~47.9~~	~~42.6~~	~~50.5~~			
248	1 29.7	+ 40 48	4.2	61.7	62.2	49.8	1 ~~30.9~~ 31.0 +40 5~~4~~		
Dm. 262	1 11.8	+ 41 13	7.0	46.4	62.1	47.6	1 11.4 +41 27	6.8	7.2
P.W. 197	1 4.9	+ 31 18	7.3	46.3	42.0	48.0	1 7.2 +31 32		
~~Dm 224~~	~~1 3.7 + 41 28 8.1~~			~~45.1~~	~~62.2~~	~~47.9~~		6.4	6.8
187	1 3.5	+ 41 27	5.7	45.5	52.2	48.6	1 4.6 +41 33		
~~Dm. 194 1 4.9 + 32 18 8.3~~				~~46.9~~	~~42.1~~	~~48.6~~		6.3	6.7
283	1 20.1	+ 41 30	7.0	48.5	52.1	48.1	1 22.7 +41 44	6.8	7.2
~~Dm. 278 1 19.6 + 41 43 7.9~~				~~48.0~~	~~52.3~~	~~47.6~~			
261	1 34.5	+ 42 1	6.2	66.1	62.2	50.2	1 35.7 +42 7	5.4	5.8
240	0 59.9	+ 42 4	7.0	103.3	52.1	106.8	1 2.4 +42 19		
~~Dm 266 1 0.9 + 42 10 7.2~~				~~44.1~~	~~62.2~~	~~47.6~~		6.8	7.2 7.2
271	1 8.2	+ 42 11	7.0	45.4	52.2	47.2	1 10.8 +42 25		
~~Dm. 289 1 8.9 + 42 14 6.9~~				~~46.1~~	~~62.2~~	~~47.9~~		6.8	7.2 + 42.2
								6.8	7.2
Dm. 272	1 26.7	+ 62 26	7.2	49.5	42.2	48.4	1 29.2 +32 37	6.9	7.3
Dm. 293	1 15.9	+ 42 26	6.5	47.6	62.3	47.7	1 18.5 +42 37	6.3	6.7
268	1 33.5	+ 42 41	5.6	62.9	62.3	50.1	1 34.7 +42 47	5.4	5.8
226	1 19.3	+ 42 50	6.1	49.3	62.4	49.3	1 20.4 +42 57	6.2	6.6
Dm 288	1 13.8	+ 42 50	6.5	46.8	62.2	47.6	1 16.4 +43 4	6.0	6.4
Dm. 362	1 33.4	+ 42 54	7.5	62.0	62.1	49.0	1 36.1 +43 8	6.6	7.0
Dm 305	1 18.2	+ 42 57	6.9	47.8	62.2	47.7	1 20.8 +43 11	6.7	7.1
176	1 1.1	+ 43 18	6.6	44.3	62.4	47.9	1 2.2 +43 24	4.9	5.3
Dm. 302	1 19.7	+ 43 18	6.5	48.3	62.3	47.9	1 22.3 +43 32	6.1	6.5
P.W. 187	1 15.2	+ 33 21	7.0	56.0	42.3	57.7	1 7.7 +33 35		
~~Dm. 188 1 6.9 + 63 44 7.0~~				~~46.9~~	~~42.6~~	~~48.4~~		6.2	6.6
Dm. 220	1 15.4	+ 63 29	6.3	47.8	42.3	48.2	1 17.9 +33 43	6.7	7.1
P.W. 234	1 18.9	+ 33 36	6.6	48.5	42.2	48.4	1 21.4 +33 50		
~~224 1 19.3 + 63 58 6.8~~				~~48.9~~	~~42.6~~	~~48.8~~		6.2	6.6 6.8
254	1 32.2	+ 43 46	6.1	63.0	62.4	50.4	1 33.4 +43 52	5.5	5.9
224	1 19.3	+ 33 58	6.3	49.7	42.4	49.8	1 20.4 +34 4	5.7	6.1
~~Dm. 228 1 17.9 + 63 58 6.6~~				~~48.3~~	~~42.2~~	~~48.4~~		6.5	6.9
258	1 8.1	+ 43 41	7.5	45.3	52.1	47.3	1 10.7 +43 55	6.9	7.3 7.1
~~Dm. 262 1 9.3 + 43 54 6.9~~				~~46.6~~	~~62.2~~	~~48.5~~			
Dm. 266	1 23.9	+ 64 4	6.6	49.3	42.3	48.5	1 26.4 +34 18	6.0	6.4
240	0 59.9	+ 44 2	7.6	102.9	52.1	106.6	1 2.3 +44 17		
~~Dm. 247 1 0.6 + 44 26 7.5~~				~~48.6~~	~~62.5~~	~~47.3~~		6.6	7.0
264	1 36.1	+ 64 68	6.4	62.1	42.3	49.8	1 36.3 +34 44	5.2	5.6

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December 24 1886.

Plate 931

	V	H	Type	No. lines	K	Focus	Other lines.	V	H	V	H	Corrn.
?	15.3	14.5	II a 3364	13	K=H	4	F Lines	7.6	29.0	44.9	20.3	+0.3
	15.4	16.2	I	7	N	1	—	7.7	32.4	44.8	16.9	-0.7
	15.2	10.8	I		N	2	F	7.6	21.6	44.9	27.7	+2.4
?	15.0	16.5	III bc 3365	13	K=1.2H	2	F bright lines,	7.5	33.0	46.0	16.3	-0.9
?	14.7	21.9	III bc 3366	13	K=1.2H?	4	F bright lines,	7.4	43.8	46.1	6.6	-2.6
	14.7	14.9	VI?	14	K=H	1	—	7.4	29.8	46.1	19.5	+0.1
	14.2	10.4	III?	2	K=H	1	—	7.1	20.8	46.4	28.5	+2.7
	13.3	7.6	II?	13	K=H	1	F	6.6	15.2	45.9	34.1	+4.4
	13.0	16.3	I	6	N	1	—	6.5	32.6	46.0	16.7	-0.5
	12.6	20.3	I	5	N	1	—	6.3	40.6	46.2	8.7	-3.2
	12.3	15.8	I	4	N	1	—	6.2	31.6	46.4	17.7	-0.2
	12.7	9.9	I	8	N	1	—	6.4	19.8	46.1	29.6	+1.9
?	12.1	13.7	III bc 3367	3	K=H	2	F bright lines	6.0	27.4	46.5	21.9	+0.8
✓	11.9	11.3	I I	3 2	N N	1 1	— —	6.0	22.6	46.5	26.7	+2.2
	11.8	11.7	I	6	N	1	—	5.9	23.4	46.6	25.9	+2.0
	11.6	11.9	I	9	N	3	—	5.8	23.8	46.7	25.5	+1.2
✓	11.8	14.2	II? II?	2 2	K=H K=H	1	— —	5.9	28.4	46.6	20.9	+0.6
✓	11.5	16.6	I I?	3 2	N N	1 1	— —	5.8	33.2	46.7	16.1	-1.0
	11.6	19.6	I I?	3 2	N N	1 1	— —	5.8	39.2	46.7	10.1	-2.9
	11.5	20.8	I	12	N	5	F?	5.8	41.6	46.7	7.7	-3.6
	11.3	18.1	I	6	N	2	—	5.6	36.2	46.8	13.1	-1.2
✓	11.3	17.8	III	2	K=H	1	—	5.6	35.6	46.9	13.7	-2.0
	10.7	6.7	I	3	N	1	—	5.4	13.4	47.1	35.9	+5.4
No plate on plate	~~11.4~~	~~8.3~~	~~I~~	~~4~~	~~N~~	~~1~~	—	~~5.2~~	~~16.6~~	~~47.3~~	~~32.7~~	~~+2.8~~
	10.5	14.4	I	6	2	1	—	5.2	28.8	47.3	20.5	+0.2
	10.7	16.1	I	7	N	2	—	5.4	32.2	47.1	17.1	-0.5
	10.6	21.0	I	10	N	3	—	5.3	42.0	47.2	7.3	-2.4
	11.0	22.9	I	6	K=H	1	—	5.5	45.8	47.0	3.5	-3.5

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Means of Cov.

No.	R.A.	Dec.	Mag.	H	V	H'	Red. to 1900	Br	Br.
228	1 20.6	+ 44 47	4.8	49.5	52.4	49.2	1 21.6	+ 44 54	4.8	5.2
Dm. 290	1 14.8	+ 44 34	7.5	47.2	52.3	47.9	1 17.4	+ 44 48	6.5	6.9
Dm. 341	1 29.8	+ 44 40	7.0	51.4	52.3	49.0	1 32.3	+ 44 54	5.8	6.2
214	1 15.3	+ 44 54	4.9	48.3	52.4	49.2	1 16.4	+ 46 0	5.5 / 5.9	5.9 / 6.3
185	1 3.0	+ 34 59	2.2	46.8	42.4	49.3	1 4.1	+ 35 5	4.4 / 4.8	4.8 / 5.2
Dm. 304	1 18.3	+ 44 56	8.3	48.1	52.3	48.0	1 20.9	+ 45 10	6.8	7.2
Dm. 304	1 30.8	+ 45 9	7.0	51.6	52.3	48.9	1 33.3	+ 45 23	6.7 / 6.9	7.1 / 7.3
Dm. 447	1 38.9	+ 45 30	6.9	54.1	52.1	49.7	1 41.6	+ 45 44	6.4	6.8
Dm. 260	1 15.1	+ 35 45	6.7	47.7	52.3	48.2	1 17.6	+ 35 59	6.2	6.6
Dm. 292	1 2.9	+ 46 52	7.0	43.6	52.2	46.7	1 5.3	+ 46 6	6.4	6.8
Dm. 241	1 16.1	+ 36 8	7.3	47.7	42.3	47.9	1 18.6	+ 36 22	6.5	6.9
Dm. 314	1 30.8	+ 36 48	7.0	50.6	42.2	48.7	1 33.4	+ 36 2	6.5	6.9
234	1 22.9	+ 46 26	5.2	50.3	52.4	49.5	1 24.1	+ 46 30	5.8 / 6.1	6.2 / 6.5
404	1 28.5	+ 46 13	7.7	51.1	52.2	48.9	1 31.2	+ 46 27	6.9	7.3
~~Dm. 397~~	~~1 24.6~~	~~+ 46 34~~	~~7.1~~	~~50.2~~	~~52.6~~	~~48.0~~			~~6.9~~ / 6.1	~~7.3~~ / 6.5
Dm. 396	1 27.3	+ 46 22	7.0	50.7	52.3	48.7	1 30.0	+ 46 36		7.3
243	1 27.3	+ 36 37	5.9	51.1	42.4	49.9	1 30.5	+ 36 44	5.4	5.8
Dm. 259	1 20.1	+ 36 20	7.3	48.5	42.2	48.2	1 22.7	+ 36 34	6.7	7.1 / 7.0
Dm. 334	1 13.3	+ 46 31	7.7	46.5	52.3	47.5	1 15.9	+ 46 45	6.9	7.3 / 7.2
~~289~~	~~1 4.5~~	~~+ 46 25~~	~~7.7~~	~~43.7~~	~~52.2~~	~~46.6~~	1 7.1	+ 46 39	7.0	7.4 / 7.5
~~Dm. 344~~	~~1 16.2~~	~~+ 46 47~~	~~8.0~~	~~55.4~~	~~52.6~~	~~58.3~~				
182	1 2.6	+ 46 36	4.3	44.1	52.4	47.7	1 3.7	+ 46 42	4.1	4.5
Dm. 220	1 10.6	+ 36 38	6.5	46.8	42.2	48.0	1 13.1	+ 36 52	6.2	6.6
Dm. 319	1 9.6	+ 46 39	6.9	45.2	52.2	47.2	1 12.3	+ 46 53	6.7 / 7.0	7.1 / 7.4
Dm. 463	1 42.1	+ 46 44	7.3	55.5	52.1	60.1	1 44.9	+ 46 58	6.5	6.9
~~279~~	~~1 42.0~~	~~+ 47 18~~	~~6.0~~	~~55.4~~	~~52.7~~	~~56.0~~				
~~Dm. 305~~	~~1 35.9~~	~~+ 36 56~~	~~6.5~~	~~52.6~~	~~42.1~~	~~49.7~~	~~1 38.5~~	~~+ 37 10~~		
Dm. 363	1 19.4	+ 46 60	7.3	48.2	52.2	48.0	1 22.1	+ 47 14	6.5	6.9
216	1 16.8	+ 37 6	5.6	49.0	42.6	49.5	1 19.9	+ 37 12	5.6	6.0
193	1 4.4	+ 37 6	5.8	46.4	42.4	48.8	1 5.5	+ 37 12	5.6	6.0
243	0 54.7	+ 46 35	6.3	100.5	52.1	103.5	0 57.3	+ 46 50	6.1	6.5
~~Dm. 246~~	~~0 55.6~~	~~+ 46 57~~	~~7.0~~	~~101.4~~	~~52.3~~	~~104.9~~				

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Plate 931.

V	H	Type	No. lines	K	Focus	Other lines.	V	H	V	H	Corr.
11.0	23.8	I ? I 3368	3 3	K K	1 1	— —	6.5	47.6	47.0	1.7	-5.6
10.6	22.6	IIa ?	3	K=H	1	F. cont.	6.3	46.2	47.2	4.1	-4.9
10.4	7.8	I ?	3	K	1	—	6.2	15.6	47.3	36.7	+2.9
9.9	7.2	I	7	K=2H ?	2	F.	6.0	14.4	47.5	34.9	+4.9
9.9	18.3	I	8	K	2	F.	6.0	36.6	47.5	12.7	-2.0
9.6	23.8	II ?	3	K=H	1	F.	4.8	47.6	47.7	1.7	-5.8
9.8	17.5	I I	2 2	K K	1 1	— —	4.9	35.0	47.6	14.3	-1.0 -1.9
9.4	8.0	I	6	K	1	—	4.7	18.0 20.0	47.8	31.3 29.3	+2.1
9.2	11.2	II ?	2	K=H	1	—	4.6	22.4	47.9	26.9	+2.5
8.8	11.2	III b c 3369	3	K=1.2H	3	F. Knight cont.	4.4	22.4	48.1	26.9	+2.5
8.6	11.6	III	2	K=H	1	—	4.3	23.2	48.2	26.1	+2.2
8.5	13.0	I	6	K=1.2H	1	—	4.2	26.0	48.3	23.3	+0.8
8.1	17.8	I	7	K	1	—	4.0	35.6	48.5	16.7	-1.8
7.9	20.4	I	7	K	1	—	4.0	40.8	48.5	8.5	-3.7
7.2	18.5	I	8	K	2	—	3.6	37.0	48.9	12.3	-1.6
7.2	18.8	I	6	K	1	—	3.6	37.6	48.9	11.7	-2.6
6.8	21.2	I	8	K	2	—	3.4	42.4	49.1	6.9	-4.2
6.5	9.3	I ?	3	K	1	—	3.2	18.6	49.3	30.7	+3.9
5.5	14.5	I b 3370	8	K	2	cont.	2.8	29.0	49.7	20.3	+0.2
4.8	9.7	I	11	K	3	F.	2.4	19.4	50.1	29.9	+2.5
4.6	9.5	I	9	K	5	—	2.3	19.0	50.2	30.3	+3.9
4.0	6.8	I	7	K=2.5H	2	F.	2.0	13.6	50.5	36.7	+6.0
3.9	14.6	I ?	6	K=H	1	—	2.0	29.2	50.5	20.1	+0.2
3.9	20.0	II ?	2	K=H	1	— F	2.0	40.0	50.5	9.3	-3.6 -2.4
3.8	21.8	I	7	K	1	—	1.9	43.6	50.6	6.7	-4.9
5.9	23.4	III	2	K=H	1	—	3.0	46.8	49.5	2.5	-3.8
3.7	22.6	I	6	K	1	—	1.8	46.2	50.7	4.1	-5.6 -3.7
3.2	11.1	IIa 3371	3	K=1.2H	4	F. cont.	1.6	22.2	50.9	27.1	+1.8

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Mean of Con.

No.	R.A.	Dec.	Mag.	H	V	H'	Red. to 1900	Br.	Br.
227	0 52.0	+ 46 32	7.0	99.6	52.0	105.2	0 54.5 + 46 47	6.7	7.1 7.1
Dm. ~~337~~	~~0 53.6~~	~~+ 46 54~~	~~7.5~~	~~101.1~~	~~52.4~~	~~106.7~~			
245	0 55.6	+ 46 51	7.0	101.8	52.1	106.7	0 58.2 + 47 6	6.2	6.6
Dm. ~~263~~	~~0 57.3~~	~~+ 46 60~~	~~8.3~~	~~102.5~~	~~52.3~~	~~107.4~~		0	6.9
Dm. 305	1 35.9	+ 36 58	6.5	51.5	42.1	48.6	1 38.5 + 37 10	6.7	7.1
279	1 42.0	+ 47 18	6.0	56.4	52.3	51.5	1 43.2 + 47 24	5.6	6.0
~~Dm. 308~~	~~1 40.3~~	~~+ 47 11~~	~~6.2~~	~~64.9~~	~~52.2~~	~~49.8~~			
Dm. 357	1 7.9	+ 47 19	6.5	44.5	52.3	46.3	1 10.5 + 47 33	5.9	6.3
272	0 51.7	+ 47 14	6.6	99.3	52.0	105.1	0 54.2 + 47 29	6.6	7.0
Dm. ~~281~~	~~0 53.3~~	~~+ 47 34~~	~~8.0~~	~~100.9~~	~~52.4~~	~~106.7~~			
259	1 12.8	+ 37 16	7.9	47.8	42.2	48.8	1 15.3 + 37 30	6.9	7.3
Dm. ~~375~~	~~1 11.4~~	~~+ 47 24~~	~~7.9~~	~~46.4~~	~~52.3~~	~~48.1~~			7.5
491	1 35.3	+ 47 28	7.8	53.3	52.2	51.2	1 38.0 + 47 42	6.3	6.7
Dm. ~~335~~	~~1 30.3~~	~~+ 37 54~~	~~7.4~~	~~50.3~~	~~42.6~~	~~48.2~~			
Dm 466	1 28.9	+ 47 41	8.0	67.3	52.3	48.8	1 31.8 + 47 56	6.6	7.0
261	1 30.6	+ 48 1	6.7	63.0	52.4	50.5	1 31.8 + 48 7	4.5	4.9
460	1 27.6	+ 47 58	6.4	50.8	52.3	48.6	1 30.3 + 48 12	5.0	5.4
Dm. ~~468~~	~~1 28.3~~	~~+ 47 58~~	~~8.0~~	~~51.5~~	~~52.3~~	~~49.3~~		6.7	7.1
Dm. 278	1 23.1	+ 38 1	6.6	49.1	42.2	48.3	1 25.7 + 38 15	6.7	7.1
Dm. 392	1 9.2	+ 48 15	6.9	44.8	52.2	46.6	1 11.8 + 48 29	6.4	6.8
Dm. 348	1 1.4	+ 48 17	6.9	42.2	52.3	45.9	1 4.0 + 48 31	6.5	6.9
Dm. 229	1 9.0	+ 38 42	6.8	46.0	42.3	47.6	1 11.5 + 38 56	6.2	6.6
Dm. 374	1 6.0	+ 48 40	7.0	43.6	52.3	46.2	1 8.6 + 48 54	6.4	6.8
Dm 337	0 58.8	+ 48 47	6.7	101.2	52.2	105.4	1 1.4 + 49 2	6.3	6.7
Dm. 618	1 34.9	+ 48 65	7.3	53.5	52.1	49.6	1 37.7 + 49 9	6.7	7.1
Dm. 334	1 19.4	+ 39 34	6.5	48.4	42.4	48.2	1 22.0 + 39 48	6.2	6.6
269	1 33.6	+ 39 58	4.9	63.0	42.4	50.5	1 34.6 + 40 4	5.1	5.5
269	1 36.1	+ 50 5	4.2	65.1	52.4	51.2	1 37.4 + 50 11	3.9	4.3
284	1 44.5	+ 50 12	5.4	68.1	52.2	52.1	1 45.7 + 50 18	5.3	5.7
229	1 20.5	+ 40 29	6.4	49.7	42.6	49.5	1 21.7 + 40 35	6.5	6.9
228	1 2.0	+ 50 14	7.1	42.0	52.2	45.6	1 4.6 + 50 28	6.7	7.1
Dm. ~~250~~	~~0 53~~	~~+ 40 24~~	~~7.3~~	~~45.3~~	~~42.4~~	~~47.7~~			
Dm. 212	0 56.3	+ 50 14	6.8	99.9	52.1	104.8	0 58.9 + 50 29	6.2	6.6
Dm. 249	0 56.5	+ 39 12	6.5	103.3	42.2	107.1	0 59.2 + 39 27	7.1	7.5
Dm. 202	0 53.9	+ 50 15	6.9	99.1	52.0	104.7	0 56.3 + 50 30		
~~Dm. 212~~	~~0 59.3~~	~~+ 40 29~~	~~6.8~~	~~104.5~~	~~42.3~~	~~108.2~~		6.2	6.6
248	1 29.7	+ 40 48	4.2	61.9	42.4	50.1	~~30.9~~ 31.0 + 40 ~~54~~ 5	4.5	4.9

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Plate 931.

V	H	Type	No. lines	K	Focus	No. lines	V	H	V	H	Correct.
2.8	16.8	I?	4	N	1	—	1.4	66.6	61.1	16.7	-1.3
2.8	6.7	I	7	K=H	1	—	1.4	16.4	61.1	66.9	+6.1
3.0	23.9	I	5	N	1	—	1.5	47.8	61.0	1.5	-4.2
2.3	22.3	II?	2	K=H	1	—	1.2	44.6	61.6	4.7	-5.4
F. mtc.							F. clr.				
8.0	7.3	Plate 930					7.3				
22.8	24.6	I	8	K=.2H	2	—	11.4	49.2	20.9	0.6	-1.3
21.5	9.7	I?	7	N	1	—	10.8	19.4	21.6	30.6	+0.3
18.9	15.4	II?	2	K=H	1	—	9.4	30.8	22.9	19.2	0
18.9	19.6	I	9	N	1	—	9.4	39.2	22.9	10.8	-0.8
17.0	20.8	III	3	K=H	2	F	8.5	41.6	26.8	8.4	-1.0
? 16.6	10.5	IIa, 3372	3	K=H	1	F, cum.	8.3	21.0	24.0	29.0	+0.3
? 15.5	12.6	IIe 3372	2	K=.2H?	4	F, cum. Bright?	7.8	25.2	24.5	24.8	+0.1
14.4	8.2	II? 3373	2	K=H	1	—	7.2	16.4	26.1	66.6	+1.2
13.8	21.0	I	7	N	2	—	6.9	42.0	26.4	8.0	-0.4
13.2	11.1	I? I?	3	N N	1 1	—	6.6	22.2	26.9	27.8	+0.8
11.7	18.1	I	11	N	4	—	5.6	36.2	26.5	13.8	-0.6
11.2	10.5	I	6	N	1	—	5.6	21.0	26.7	29.0	+0.4
10.5	16.3	I?	2	?	1	—	5.2	32.6	27.1	17.4	-0.1
9.4	13.4	I	9	N	2	—	4.7	26.8	27.6	26.2	+0.1
8.8	17.3	III	3	N	1	—	4.4	34.6	27.9	16.4	-0.1
? 7.8	15.2	III a 3374	3	K=H	2	F, cum.	3.9	30.4	28.4	19.6	0
? 6.0	21.5	III b 3375	3	K=H	1	F, cum.	3.0	43.0	29.3	7.0	-1.7
5.4	7.5	III?	3	K=H	1	F	2.7	15.0	29.6	66.0	+0.9
6.7	22.9	II?	2	K=H	1	—	3.4	46.8	28.9	4.2	-0.9
? 4.6	23.8	d	6	K=H	1	F?	2.3	47.6	30.0	2.4	-1.1
4.0	22.1	III b 3376	3	K=H	1	F, cum.	2.0	44.2	30.3	5.8	-0.9
3.40	3.3	21.6	I	9	K=.2H	2	F	1.6	43.2	30.7	6.8	-1.8

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Mean 4

Cor.

	No.	R.A.	Dec.	Mag.	H	V	H'	Red. to 1900		Br.	Br.
Dm	260	1 11.9	+ 50 50	6.5	45.5	52.2	46.8	1 14.6	+ 51 4	6.5	6.9
Dm.	381	1 43.6	+ 50 46	6.6	57.0	52.2	50.9	1 46.4	+ 51 0	6.1	6.5
	160	0 56.2	+ 40 41	5.9	104.1	42.2	108.2	0 57.3	+ 40 48	6.0	6.4
~~Dm.~~	~~209~~	~~0 54.8~~	~~+ 40 33~~	~~6.0~~	~~102.6~~	~~42.1~~	~~106.8~~				
Dm.	216	0 54.4	+ 51 1	7.1	99.0	52.2	104.4	0 57.0	+ 51 16		

Mean 6

	169	0 59.3	+ 20 50	6.0	108.5	32.2	109.8	1 0.4	+ 20 56		
	252	1 30.7	+ 11 32	6.6	60.3	22.3	50.0	1 31.8	+ 11 ~~27~~ 38	6.3	6.9
Dm.	226	1 17.7	+ 22 46	6.5	48.5	32.2	48.5	1 20.1	+ 23 0	6.6	7.2
Dm.	204	1 8.6	+ 22 48	7.0	47.8	32.2	48.6	1 11.0	+ 23 2	6.5	7.1
	198	1 7.3	+ 26 56	4.6	48.9	32.4	49.9	1 8.3	+ 24 3	5.6 5.9	6.2 6.5
Dm.	240	1 28.0	+ 13 55	6.6	49.0	22.2	48.7	1 30.4	+ 14 9	6.0	6.6
	263	1 26.1	+ 14 44	6.7	60.3	22.6	50.2	1 26.2	+ 14 50	4.6 5.0	5.2 5.6
	262	1 34.6	+ 26 8	6.1	67.0	32.3	49.8	1 35.7	+ 25 14	6.5	7.1
	202	1 7.8	+ 15 30	5.9	49.8	22.4	50.2	1 8.8	+ 15 36	5.8	6.4
Dm.	265	1 27.4	+ 26 56	7.4	49.6	32.6	48.8	1 29.9	+ 26 10	6.8	7.4
	209	1 12.9	+ 26 38	4.7	49.1	32.4	49.7	1 13.9	+ 26 45	4.8	5.1
	247	1 29.4	+ 16 49	5.9	60.4	22.4	50.0	1 30.5	+ 16 55	6.0	6.6
Dm.	200	1 16.1	+ 17 3	7.2	48.7	22.2	48.8	1 18.5	+ 17 17	6.7	7.3
	266	1 26.4	+ 17 44	6.0	60.2	22.4	50.1	1 24.5	+ 17 51	5.8	6.4
	212	1 14.5	+ 28 1	6.8	49.1	32.4	49.2	1 15.5	+ 28 13	6.2 6.6	6.8 7.2
	226	1 19.8	+ 18 36	6.2	60.2	22.5	50.2	1 20.9	+ 18 39	5.6 5.5	6.2 6.1
	197	1 5.1	+ 29 27	4.7	48.1	32.4	49.8	1 6.1	+ 29 33	5.8	6.4
	268	1 36.0	+ 19 42	6.4	61.0	22.4	50.1	1 37.1	+ 19 47	6.2 6.4	6.8 7.0
	186	1 3.4	+ 19 0	6.6	49.2	22.4	50.1	1 4.5	+ 19 7	6.4	7.0
	178	1 1.5	+ 20 6	6.7	49.1	22.4	50.2	1 2.6	+ 20 12	5.7	6.3
	196	1 6.0	+ 20 24	4.9	49.2	22.4	50.1	1 6.1	+ 20 30	5.9 6.3	6.5 6.9
	195	1 4.7	+ 30 47	6.1	47.9	32.4	49.7	1 5.6	+ 30 53	5.1	5.7

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52

F. m.t.c. 8.0 7.2

F. ch. 7.3

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Plate 963.

1.40

	V	H	Type	No. Lines	K	Focus	Other lines.	V	H	V	H	Correc.
	22.9	10.0	I	9	N	3	—	11.4	20.0	21.1	51.7	+0.7
	21.8	19.5	I	10	K=.2H	2	F	10.9	39.0	21.6	32.7	-0.6
	22.2	10.1	II?	2	K=H	1	—	11.1	20.2	21.4	51.5	+0.1
	20.9	16.7	I	9	K=.2H	2	F	10.4	33.4	22.1	38.3	-0.1
?	20.8	20.6	II a 3378	2	K=H	1	F? pecu.	10.4	41.6	22.1	30.1	-0.3
?	18.7	23.9	I d?	8	K=.2H	1	~~pecu.~~	9.4	47.8	22.7	23.9	-1.4
?	16.5	20.3	II a 3378	3	K=H	1	F pecu.	8.2	40.6	24.3	31.1	-0.9
	15.7	13.6	I b 3379	10	N	3	—	7.8	27.2	24.7	44.5	+0.1
?	15.7	22.6	II a 3380	3	K=H	1	F pecu.	7.8	45.2	24.7	26.5	-0.5
?	15.3	23.2	II a 3381	2	K=H	1	F, N pecu	7.6	46.4	24.9	25.3	-1.5
	15.5	16.0	I	9	N	2	—	7.8	30.0	24.7	41.7	0
	15.3	16.9	I	7	N	2	—	7.6	33.8	24.9	37.9	-0.1
	15.3	7.3	I	10	N	2	—	7.6	14.6	24.9	57.1	+1.3
	14.6	17.2	I	8	K=.2H	2	—	7.3	34.4	25.2	37.3	-0.6
	12.9	9.1	I	6	N	2	—	6.4	18.2	26.1	53.5	+1.2
?	12.9	12.8	II a 3382	2	K=H	1	pecu.	6.4	25.6	26.1	46.1	+0.1
	11.9	18.6	I	9	K=.2H	3	F?	6.0	37.2	26.5	34.5	-0.8
	11.5	14.4	I	11	N	5	F	5.8	28.8	26.7	42.9	+0.1
	11.1	14.7	I	10	N	3	—	5.6	29.4	26.9	42.3	0
	10.7	17.3	I	11	N	4	—	5.4	34.6	27.1	37.1	-0.6
	10.5	12.1	I	6	N	1	F?	5.2	24.2	27.3	47.5	+0.2
?	9.9	11.3	II a 3383	2	K=H	2	pecu.	5.0	22.6	27.5	49.1	+0.3
	9.9	6.0	I	6	N	2	—	5.0	12.0	27.5	59.7	+0.8
	10.0	5.5	I	6	N	2	—	5.0	11.0	27.8	60.7	+2.1
	9.8	9.3	I	6	N	1	—	4.9	18.6	27.6	53.1	+0.5
	9.4	15.0	III III	2	K=H	1	—	4.7	30.0	27.8	41.7	0
	9.3	11.6	II?	2	K=H	1	—	4.6	23.2	27.9	48.5	+0.3
	9.2	8.5	I	6	K=.5H?	1	—	4.6	17.0	27.9	54.7	+1.5

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Mean 1

Cor

No.	R.A.	Dec.	Mag.	H	V	H'	Red. to 1900 -	Br.	Br.
472	2	52.4	+ 20	52	4.6	72.4	32.3	71.7	2 53.4 +20 56	√	√
417	2	32.0	+ 21	26	5.4	71.0	32.3	71.6	2 33.1 +21 32	√	5.9 6.0
Dm. 397	2	50.6	+ 21	2	7.0	70.8	32.1	70.2	2 53.2 +21 13	√	6.9 7.0
435	2	38.4	+ 11	57	5.2	71.8	22.4	71.9	2 39.5 +12 2	√	5.6 5.7
412	2	30.1	+ 11	57	5.6	71.7	22.4	72.0	2 31.2 +12 1	√	6.0 6.1
390	2	22.4	+ 22	56	6.1	70.2	32.4	71.6	2 23.5 +23 2	√	6.4 6.5
410	2	30.0	+ 24	8	6.1	70.6	32.3	71.5	2 31.2 +24 12	√	6.6 6.7
452	2	44.9	+ 14	34	5.5	72.1	22.4	72.0	2 45.9 +14 41	√	5.3 5.4
Dm. 419	2	26.0	+ 14	24	6.6	70.2	22.2	70.7	2 27.5 +14 36	√	6.6 6.7
391	2	23.6	+ 24	42	5.8	70.0	32.3	71.5	2 24.8 +24 48	√	6.4 6.5
440	2	41.8	+ 24	42	6.0	71.8	32.5	71.8	2 43.0 +24 47	√	5.5 5.6
434	2	37.9	+ 14	49	5.8	71.7	22.4	71.8	2 39.0 +14 53	√	5.4 5.5
490	2	58.4	+ 24	47	5.3	73.0	32.4	717	2 59.6 +24 52	√	5.2 5.4
Dm. 441	2	36.4	+ 26	2	6.7	69.8	32.3	70.3	2 38.0 +25 14	√	5.9 6.0
481	2	54.8	+ 26	0	5.9	73.0	32.4	71.8	2 56.0 +26 4	√	5.7 5.8
Dm. 400	2	45.1	+ 16	54	6.5	70.7	22.3	70.6	2 47.6 +16 3	√	6.2 6.3
419	2	33.7	+ 26	33	5.4	70.9	32.6	71.7	2 34.8 +26 38	√	5.2 5.3
446	2	42.9	+ 26	46	5.8	71.7	32.6	71.6	2 44.1 +26 51	√	4.2 4.3
444	2	42.6	+ 16	58	6.6	72.0	22.6	72.0	2 43.7 + 17 3	√	5.1 5.2
432	2	36.4	+ 27	12	4.7	71.0	32.6	71.6	2 37.6 +27 17	√	4.7 4.8
Dm. 454	2	46.8	+ 27	8	7.8	71.0	22.4	70.8	3 49.4 +27 19	√	6.2 6.3
469	2	49.7	+ 17	32	6.6	72.3	22.5	72.0	2 50.8 +17 37	√	5.8 5.9
Dm. 493	2	53.3	+ 17	19	6.7	71.3	22.3	70.5	3 1.8 +17 30	√	6.1 6.2
Dm. 480	3	15	+ 27	16	6.5	12.5	32.3	10.4	3 4.2 +27 27	√	6.2 6.3
Dm. 471	2	52.4	+ 17	26	6.8	71.0	22.3	70.5	2 54.9 +17 36	√	6.4 6.5
441	2	41.8	+ 17	48	6.1	71.8	22.5	71.8	2 42.9 +17 52	√	6.6 6.7 6.6 6.9
468	2	49.1	+ 17	51	5.8	72.3	22.4	72.0	2 50.2 +17 55	√	6.8 6.9
Dm. 468	2	54.9	+ 27	42	6.5	71.9	32.3	71.4	2 57.6 +27 53	√	6.4 6.5

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Plate 933.

Y	H	Type	No. Lines	K	Focus	Other lines.	Y	H	Y	H	Corrn
8.5	18.6	I	6	N	1	—	4.2	637.2	28.3	634.5	-0.4
8.3	22.2	I	5	N	1	—	4.2	44.4	28.3	27.3	-0.8
7.7	14.0	II	2	K=H	1	—	3.8	28.0	28.7	43.7	+0.1
7.7	11.7	I?	3 H	K=H		—	3.8	23.4	28.7	48.3	+0.8
? 7.7	15.4	III bc 3884	2	K=H 1.2 1	2	Fl? Bright, Fl? Feeble	3.8	30.8	28.7	40.9	-0.1
7.3	20.6	I	7	K=2H	1	—	3.6	41.2	28.9	30.5	-1.4
7.6	5.8	I	6	N	2	F?	3.8	11.6	28.7	60.1	+2.2
7.3	16.9	III?	2	K=H	1	—	3.6	33.8	28.9	37.9	-0.5
√ 7.3	15.6	II? III	2 2	K=H K=H	1 1	— —	3.6	31.2	28.9	40.5	-0.1
6.7	15.5	I	6	N	1	—	3.4	31.0	29.1	40.7	-0.1
6.6	24.0	I	7	K=H?	2	—	3.3	48.0	29.2	26.7	-2.2
6.3	23.5	I	6	N	1	—	3.2	47.0	29.3	24.7	-1.0
6.1	23.7	II	2	K=H	1	—	3.0	47.4	29.5	24.3	-2.2
6.4	18.7	I	6	N	1	—	3.2	37.4	29.3	34.3	-0.6
6.1	18.0	I	9	N	2	—	3.0	36.0	29.5	35.7	-0.4
5.1	20.0	I	3	N	1	—	2.6	40.0	29.9	31.7	-1.3
? 4.6	10.6	II a 3885	2	K=H	1	Feeble,	2.3	21.2	30.2	50.5	+0.6
3 4.3	10.1	I	8	N	3	—	1.6 2.2	20.2	30.9 30.6	51.5	+0.6
2.1	11.4	I	3	N	2	F?	1.0	22.8	31.5	48.9	+1.1
2.0	14.4	I	4	K=H	1	—	1.0	28.8	31.5	42.9	+0.1
√ 2.3	19.6	I II	4 3	K=H H	2 2	A F?	1.2	39.2	31.3	32.5	-0.7

F. m.& c. 7.9 6.9

F. cl. 7.1

Plate 934.

21.9	11.4	I	8	K=2H	2	—	11.0	22.8	31.4	49.2	+1.0
21.8	14.3	I	4	N	1	—	10.9	28.6	31.6	43.4	+0.1
18.0	14.7	III?	2	K=H	1	—	9.0	29.4	33.5	42.6	+0.1
17.3	16.8	II?	3	K=H	1	— F?	8.6	33.6	33.9	38.4	-1.1
16.5	20.4	II?	2	K=H	1	—	8.2	40.8	34.3	31.2	-1.8

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Means

No.	R.A.	Dec.	Mag.	H	V	H'	Red to 1900		Bv	Br.
Dm 637	2	36.0	+ 18 11	7.0	70.2	22.4	70.6	2 35.5	+ 18 23		6.6	6.7
Dm 626	2	26.6	+ 18 16	7.0	69.9	22.6	70.7	2 28.0	+ 18 28		6.9	7.0
Dm 659	2	42.6	+ 18 63	7.2	70.5	22.4	70.4	2 45.0	+ 18 44		6.8	6.9
Dm 477	2	47.6	+ 28 34	6.8	71.0	32.4	70.2	2 50.3	+ 28 45		7.0	7.1
439	2	40.8	+ 28 48	4.6	71.6	32.6	71.7	2 41.9	+ 28 50		5.6 5.8	5.7 5.9
Dm 436	2	27.6	+ 28 46	7.0	68.6	32.4	70.0	2 30.2	+ 28 58		6.8	6.9
600	3	2.4	+ 28 67	5.6 5	14.0	32.4	11.8	3 3.6	+ 28 42		5.7	5.8
Dm 466	2	36.0	+ 28 61	7.5	69.8	32.4	70.3	2 38.6	+ 29 3		6.9 7.1	7.0 7.2
Dm 347	2	39.3	+ 18 47	6.8	70.5	22.4	70.6	2 41.8	+ 18 59		7.1	7.2
~~439~~	~~2~~	~~40.8~~	~~+ 28 46~~	~~4.6~~	~~72.0~~	~~32.4~~	~~72.1~~				7.4	7.5
Dm 471	2	39.1	+ 29 6	7.4	70.1	32.6	70.2	2 41.8	+ 29 17		6.6	6.7
688	2	21.2	+ 29 8	6.5	69.2	32.4	71.4	2 22.3	+ 29 14		5.4	5.7
692	2	26.9	+ 19 19	6.1	70.9	22.5	71.9	2 25.0	+ 19 25		6.2	6.3
Dm 423	2	20.4	+ 29 17	7.5	67.8	32.3	70.0	2 23.0	+ 29 29		6.6	6.7
Dm 463	2	31.8	+ 29 9	7.5	69.2	32.4	69.8	2 34.4	+ 29 21		6.8	6.9
428	2	35.6	+ 19 29	6.8	71.6	22.6	72.0	2 36.7	+ 19 35		5.3	5.4
Dm 444	2	28.6	+ 29 47	7.8	68.6	32.4	69.9	2 31.2	+ 29 59		7.1	7.2
466	2	51.2	+ 20 10	6.9	72.4	22.6	71.8	2 52.3	+ 20 16		6.1	6.2
472	2	52.4	+ 20 62	4.6	72.6	22.5	72.0	2 53.4	+ 20 56		4.8	4.9
461	2	50.0	+ 31 26	6.2	72.8	32.4	71.7	2 57.2	+ 31 32			
Dm 490	2	41.7	+ 31 22	6.5	70.5	32.4	70.4	2 44.4	+ 31 33			
418	2	32.0	+ 21 26	6.4	71.2	22.6	71.9	2 34.4 33.1	+ 21 32			

461	2	50.0	+ 31 26	6.2	72.8	42.4	71.8	2 57.2	+ 31 32		6.5	
Dm 490	2	41.7	+ 31 22	6.6	70.3	42.3	70.2	2 44.4	+ 31 33		6.7	
Dm 521	2	40.6	+ 33 20	7.1	70.0	42.3	69.9	2 43.3	+ 33 31		6.9 7.1	
431	2	36.4	+ 43 47	6.6	70.0	52.4	71.1	2 37.5	+ 43 52		6.8	
Dm 471	2	27.1	+ 34 5	7.3				2 29.8	+ 34 17			
~~403~~	~~2~~	~~28.6~~	~~+ 34 10~~	~~6.6~~	~~69.4~~	~~42.4~~	~~71.2~~	2 29.7	+ 34 13		6.5	

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Plate 964.

	V	H	Type	No. Lines	K	Focus	Other lines.	V	H	V	H	Correc.
~~X~~ ?	16.0	7.9	III b 3386	3	K = H	3	F. seen	8.0	15.8	34.6	56.2 ~~49.8~~	+4.6
?	15.8	13.9	III b 3387	3	K = H	2	F. seen.	7.9	27.8	34.6	44.2	+0.4
	15.6	16.9	I	4	K	1	—	7.8	63.8	34.9	38.2	-0.6
?	15.5	10.8	III b 3388	3	K = H	2	F. seen.	7.8	21.6	34.9	60.4	+1.8
	15.4	21.0	I ?	3	K	1	—	7.7	42.0	34.6	30.0	-2.0
?	14.8	15.7	II a 3389	3	K = H	2	F. seen.	7.4	31.4	36.1	40.6	-0.2
✓ X	13.9	15.8	III ? III	2 2	X K=H K=H	1 1	— —	7.0	31.6	36.6	40.4	-0.3
	13.6	21.8	III ?	2	K = H	1	—	6.8	46.6	36.7	28.4	-2.6
	12.1	8.3	I	6	K = H	1	—	6.0	16.6	36.5	66.4	+2.7
	12.4	14.1	III ?	2	K = H	1	F.?	6.2	28.2	36.3	46.8	+0.6
X ✓	12.1	14.3	II a 3389a	2 2	K = H K=H	1 1	— seen	6.0	28.6	36.6	46.4	+0.2 ~~+0.4~~
	11.7	13.3	IIa. 3390	2 2	X K=H	1	seen	5.8	26.6	36.7	46.4	+1.1 ~~+1.0~~
	11.5	11.4	~~II~~ II ?	2 2	K = H	1	F	6.8	22.8	36.7	49.2	+2.2
✓ ?	11.4	14.8	II a ? II a 3391	2 2	K = H K=H	1 1	F seen seen	6.7	29.6	36.8	42.4	+0.1
	11.3	20.3	III ?	2	X K=H	1	—	6.6	40.6	36.9	31.4	-2.1
	10.5	19.2	II a 3392	3	K = H	1	F seen	6.2	38.4	37.3	33.6	-1.6
	10.3	10.0	II ?	3	K = H	1	F	6.2	20.0	37.3	60.0	+3.2
	9.8	19.1	I	6	K	2	—	4.9	38.2	37.6	33.8	-1.7
	9.7	9.0	I	4	K	1	—	4.8	18.0	37.7	64.0	+2.5
	9.7	10.5	I	7	K	2	F.	4.8	21.0	37.7	61.0	+1.8
?	9.5	14.3	II a 3393	3	K = H ?	4	F. seen.	4.8	28.6	37.7	46.4	+0.2
?	9.3	13.1	II a 3394	3	K = 1.2H	2	F. seen	4.6	26.2	37.9	46.8	+0.7
	9.4	6.9	I ?	4	K = H	1	—	4.7	13.8	37.8	68.2	+5.3
	9.1	9.2	I	5	K	1	—	4.6	18.4	37.9	63.6	+2.5
?	8.6	19.7	II a 3395	3	K = H	1	F. seen.	4.3	39.4	38.2	32.6	-2.0
III 55, 0.8. ?	8.3	8.6	III ? 3396	3	K = H	3	F. seen.	4.2	17.2	38.3	54.8	+2.7
	8.2	9.9	I	5	K = H	1	—	4.1	19.8	38.4	52.2	+2.2
	8.3	13.8	I	4	K	1	—	4.2	27.6	38.3	44.4	+0.9

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No.	R.A.	Dec.	Mag.	H	V	H'	Red. to 1900		Br.	
498	6 1.4	+ 44 24	4.0	16.6	52.4	11.0	2 2.7	+44 29	5.5 5.8	
449	2 44.2	+ 34 34	4.8	72.0	42.6	71.6	2 45.4	+34 39	6.0 6.5	
Dm. 504	2 36.3	+ 34 30	7.3	69.1	42.3	69.7	2 38.0	+34 42	6.7	
468	2 61.7	+ 34 42	6.0	76.3	42.5	71.5	2 52.9	+34 47	6.1 6.5	
Dm. 462	2 25.5	+ 34 30	7.0	67.5	42.2	69.5	2 28.2	+34 42	7.1	
Dm. 613	2 38.2	+ 34 57	6.5	69.6	42.4	69.8	2 40.9	+35 9	6.4	
Dm. 553	2 38.0	+ 36 26	6.8	69.6	42.4	69.9	2 40.8	+35 35	6.8 7.0 7.0	6.8
394	2 24.8	+ 36 38	6.3	68.4	42.4	71.0	2 26.6	+35 43	6.6 7.1	
Dm. 628	2 56.5	+ 36 16	6.5	73.1	42.2	70.4	2 59.3	+36 24	6.7	
447	2 43.7	+ 46 21	6.8	71.9	62.6	71.3	2 45.2	+46 25	6.7 6.9	2 42.0 +46.2 14
Dm. 569	2 41.6	+ 36 21	6.5	70.2	42.4	70.0	2 44.4	+36 32		
~~447~~	~~2 43.7~~	~~+ 46 21~~	~~6.8~~	~~71.9~~	~~62.6~~	~~71.3~~			6.6	6.6
Dm. 652	2 44.3	+ 46 33	7.0	70.9	62.4	69.8	2 47.3	+46 44		
~~457~~	~~2 48.5~~	~~+ 46 40~~	~~6.8~~	~~75.1~~	~~62.5~~				6.6	
467	2 61.7	+ 46 44	6.6	74.5	62.6	72.3	2 53.1	+46 49	6.5	
Dm. 566	2 40.4	+ 36 42	6.5	70.0	42.4	69.9	2 43.2	+36 54	6.4	6.6
402	2 28.2	+ 36 48	6.0	68.8	42.4	70.9	2 29.4	+36 53	6.8 7.1	2 26.7 +36.7 41
Dm. 688	2 29.3	+ 37 7	6.5	67.7	42.3	69.3	2 32.1	+37 19	6.4	
Dm. 760	2 54.0	+ 47 17	7.0	74.0	62.6	70.8	2 57.1	+47 28	6.7	
Dm. 691	2 29.5	+ 37 28	6.5	67.7	42.4	69.4	2 32.3	+37 40	6.1	
Dm. 696	2 66.0	+ 37 32	7.0	73.0	42.3	70.5	2 57.8	+37 43	6.5	
471	2 62.4	+ 37 40 59		73.4	42.5	71.6	2 53.8	+37 45	5.8	2 51.0 +37.8 34
446	2 43.0	+ 37 49	4.4	71.6	42.6	71.4	2 44.2	+37 55	4.8	
465	2 46.2	+ 37 62	6.4	72.4	42.5	71.7	2 47.4	+37 56	5.8	
Dm. 782	3 3.3	+ 47 40	6.5	17.1	62.4	11.8	3 6.4	+47 50	7.1	
Dm. 692	2 64.3	+ 37 60	7.0	72.7	42.4	70.2	2 57.1	+38 1	6.9	
Dm. 615	2 27.9	+ 38 6	6.2	67.3	42.4	69.3	2 30.7	+38 18	6.4	
489	2 67.6	+ 38 22	6.7	74.7	42.6	72.0	2 58.8	+38 27	5.6 6.0	
Dm. 617	2 62.7	+ 38 20	6.8	72.5	42.4	70.3	2 55.5	+38 31	6.6	
Dm. 783	2 42.8	+ 48 13	7.2	70.4	62.4	69.5	2 45.8	+48 24	6.9	

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1886phae.proj..835F

January 3, 1887

Plate 934.

	Y	H	Type	No Lines	K	Focus	Other lines.	Y	H	Y	H	Correc.
?	7.8	16.7	II a	3397 x 3	K=H	3	F faint,	39	36.4	38.6	38.6	-1.2
	6.9	17.9	I ?	5	K	1	—	34	36.8	39.1	36.2	-2.0
	6.7	11.2	I	9	K	3	F.	34	22.4	39.1	49.6	+1.7
	6.7	20.2	I	7	K	1	F.	34	40.4	39.1	31.6	-2.3
	6.7	8.6	~~II~~ a	3398 3	K=H 1.2 1	2	F. faint	34	17.2	39.1	54.8	+4.5
	6.3	19.5	I	5	K	1	—	32	39.0	39.3	36.0	-2.1
?	5.7	17.6	II a ?	3399 3	K=H 1.5 1	2	F. faint	28	36.2	39.7	36.3	-1.2
	5.6	21.3	I	6	K	1	—	28	42.6	39.7	29.4	-2.8
	4.0	7.7	I	10	K	5	F.	20	16.4	40.5	56.6	+3.5
	5.8	23.0	II ?	2	K=H	1	—	29	46.0	39.6	26.0	-5.7
3.25	5.5	24.1	I ?	3	K	1	—	28	48.2	39.7	26.8	-6.5
?	6.5	6.4	III	3	K=H	2	F. faint	32	12.8	39.3	59.2	+4.0
	V.4	V.V	I ?	6	K=H	2	F.	27	11.0	39.8	61.0	+4.5
	5.1	5.7	I ?	V	K=H	2	F.	26	11.4	39.9	60.6	+4.5
	V.V	22.V	III	2	K=H	1	—	28	45.0	39.7	27.0	-3.6

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No.	R.A.	Dec.	Mag	H	V	H'	Red. to 1900.	Br.
429	2	36.0 + 48 43	4.2	69.4	52.6	70.6	2 37.3 +48 48	5.8 (2 34.3 +48.6 37)
Dm. 722	2	30.6 + 48 56	6.7	66.4	52.3	68.4	2 33.6 +49 8	6.8
465	2	51.1 + 39 11	4.7	73.5	42.6	71.8	2 52.4 +39 16	4.7
Dm. 573	2	26.4 + 39 3	7.0	66.8	42.4	69.1	2 29.2 +39 15	6.5
496	3	0.4 + 49 9	4.1	17.6	52.6	13.1	3 1.8 +49 14	5.5
Dm. 582	2	28.3 + 39 15	6.8	67.3	42.4	69.4	2 31.1 +39 27	6.4
427	2	34.8 + 39 41	4.9	70.0	42.6	71.2	2 35.9 +39 46	5.5
Dm. 560	2	23.4 + 39 37	6.8	66.0	42.4	68.8	2 26.2 +39 49	6.6
496	3	0.4 + 40 30	2.3	16.8	42.6	12.3	3 1.6 +40 34	B
378	2	16.5 + 49 27	5.3	62.5	52.3	68.2	2 17.8 +49 33	6.9
~~381~~	~~2~~	~~17.7 + 49 44~~	~~4.9~~	~~63.9~~	~~52.6~~	~~69.4~~		~~6.9~~
369	2	13.1 + 49 36	5.6	61.3	52.4	67.8	2 14.4 +49 42	6.5
503	3	3.6 + 39 9	4.7	16.4	42.4	12.4	3 4.8 +39 14	6.0 6.4
522	3	10.7 + 49 40	5.0	21.7	52.4	17.2	3 12.0 +49 43	6.8
521	3	10.1 + 49 47	5.3	21.5	52.4	17.0	3 11.5 +49 51	6.9
381	2	17.7 + 49 44	4.9	62.7	52.5	66.3	2 18.9 +49 50	6.7 7.1

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Amt. of Fog. due to moon & clouds. 6.3

Amt. of Fog. due to chemicals. 6.4

February 4, 1887.

Plate 960.

	T	H	Type	No. lines	K	Focus	Other lines.	V	H	V	H	Correc.	
11:03 ?	22.3	10.5	I	4	K=H	1	seen	11.2	21.0	41.0	70.5	+1.3	
	22.4	7.9	II ?	2	K=H	1	—	11.2	15.8	41.0	75.7	+2.0	
	22.0	16.1	I	5	K	1	—	11.0	32.2	41.2	59.3	-0.6	0.2
?	21.5	17.2	I	6	K=H	1	seen	10.8	34.4	41.4	57.1	-1.1	
	20.7	18.9	II	2	K=H	1	seen	10.4	37.8	41.8	53.7	-1.9	
	20.7	19.0	III ?	2	K=H	1	—	10.4	38.0	41.8	53.5	-1.2	
	20.7	16.7	II	2	K=H	1	—	10.4	33.4	41.8	68.1	-0.8	
	19.2	12.5	I	7	K ?	2	—	9.6	25.0	42.6	66.5	+0.8	
?	19.0	11.9	I	8	K=H	2	F. seen	9.5	23.8	42.7	67.7	+1.6	
?	18.6	11.1	I	7	K	2	F. seen	9.3	22.2	42.9	69.3	+2.0	0.2
	18.6	6.1	II	2	K=H	1	—	9.3	12.2	42.9	79.3	+4.8 +3.0	
	18.6	20.0	I ?	4	K=H	1	—	9.3	40.0	42.9	51.5	-1.6	
	18.3	18.5	III ?	2	K=H ?	2	—	9.2	37.0	43.0	54.5	-1.1	
?	17.3	7.7	I	9	K=H	3	F. seen	8.6	15.4	43.6	76.1	+3.8	0.2
	16.8	11.2	III ? III ?	2	K=H K=H	1	— —	8.4	22.4	43.8	69.1	+2.0	
	16.5	16.3	II	2	K=H	1	—	8.2	32.6	44.0	58.9	-0.4	
	15.9	15.9	I	5	K=H	2	—	8.0	31.8	44.2	59.7	-0.6	
	15.8	17.5	I	8	K	2	F.	7.9	35.0	44.3	56.5	-1.4	0.2
	15.7	18.9	I ?	4	K=H	1	—	7.8	37.8	44.4	53.7	-1.3	
	17.2	24.6	I	10	K=H	3	F.	7.6	49.2	44.6	42.3	-5.6	2
?	14.5	16.1	I ?	4	K=H	1	seen	7.2	32.2	45.0	59.3	-0.4	
?	14.2	14.1	II a	3	K=H	3	F. seen	7.1	28.2	45.1	63.3	+0.6	
	14.1	13.3	II	2	K=H	1	—	7.0	26.6	45.2	64.9	+1.0	
	13.5	14.4	I	5	K=H	11	F. —	6.8	28.8	45.4	62.7	+0.4	
	13.5	19.1	II a ?	2	K=H	1	seen	6.8	38.2	45.4	53.3	-2.5	
	13.5	18.1	II	3	K=H	2	F.	6.8	36.2	45.4	55.3	-1.9 -4.5	
	13.8	22.4	III	3	K=H	2	F.	6.6	44.8	45.6	46.7	-2.9	
	13.1	23.0	III ?	2	K=H	1	—	6.6	46.0	45.6	46.5	-4.9	

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Means 8

Corr.

½ cos δ.	No.	R.A.	Dec.	Mag.	H	V	H'	Red. to 1900.	Bv	Bv	Bv.
	44	0 12.5	+ 30 62	5.8	33.5	42.1	32.2	0 13.4 + 30 58	6.0	6.8	6.4 0.2 6.6 5.9
											0 11.1 + 30 7
Dm.	55	0 17.1	+ 30 34	6.8	32.9	41.8	30.9	0 19.4 + 30 49	6.6	7.4	7.0 0.2 7.2 6.3
											10 + 3
0.2 6.8	4257	23 58.5	+ 41 26	6.9	90.7	52.4	91.3	23 59.5 + 41 33	6.3	7.1	6.6 0.3 6.9 6.2
	4244	23 55.6	+ 41 42	6.1	90.0	52.5	91.1	23 56.6 + 41 49			23 57.2 + 41.3
	4242	23 54.6	+ 41 35	6.1	89.0	52.4	90.1		6.1	6.9	6.4 0.3 6.7 6.0
	4231	23 51.0	+ 41 59	6.0	88.8	52.4	90.7	23 52.0 + 42 6	6.4	7.2	6.8 0.3 7.1 6.4
											23 49.7 + 41.8
	4236	23 52.8	+ 31 41	6.3	90.8	42.1	92.0	23 53.7 + 31 48	6.2	7.0	7.0 0.2 7.2 6.3
Dm.	4925	23 55.7	+ 41 56	6.8	89.1	52.3	89.9	23 58.0 + 42 11	6.4	7.2	7.1 0.3 7.3 6.6
	4244	23 55.6	+ 41 42	6.1	89.0	52.1	89.8				23 52.3
									6.7	7.5	7.0 0.3 7.3 6.6
	27	0 7.8	+ 32 32	6.0	32.8	42.1	32.0	0 8.8 + 32 39	6.1	6.9	6.4 0.2 6.6 5.9
											0 6.5 + 32.4
	36	0 10.1	+ 42 66	6.0	33.9	52.4	32.3	0 11.1 + 42 3	5.8	6.6	6.2 0.3 6.5 5.8
											0 8.8 + 42.8
0.2 6.2	43	0 12.4	+ 43 8	5.9	34.6	52.4	32.6	0 13.4 + 43 14	6.4	6.4	6.0 0.3 6.3 5.6
	09	0 24.7	+ 42 42	6.5	36.9	52.0	32.1	0 27.1 + 42 57	6.0	6.8	6.8 0.3 7.1 6.4
Dm.	69	0 24.0	+ 32 60	7.5	36.2	42.1	30.2				0 24.1 + 32.2
Dm.	4737	23 48.8	+ 32 40	7.0	88.8	42.0	90.4	23 51.1 + 32 55	6.8	7.6	6.9 0.2 7.1 6.4
									5.8	6.6	6.5 0.2 6.7 6.0
	4239	23 53.4	+ 33 4	5.8	90.4	42.3	91.5	23 54.4 + 33 11	6.0	6.8	6.7 0.3 6.9 6.2
											23 51.2 + 32.9
	59	0 21.8	+ 43 47	6.2	37.2	52.4	33.4	0 22.9 + 43 51	6.4	5.7	5.5 0.4 5.9 5.2
0.2 5.7									6.8	6.9	6.7 0.4 7.1 6.4
									7.0	7.1	7.0 0.4 7.4 6.7
Dm.	47	0 10.7	+ 43 46	6.5	33.1	52.2	31.1	0 13.0 + 44 1	6.3	7.4	6.9 0.2 7.1 6.4
Dm.	4838	23 57.3	+ 33 52	6.3	89.9	42.1	90.3	23 59.6 + 34 7	6.2	7.0	6.5 0.4 6.9 6.2
Dm.	4550	23 57.7	+ 44 25	6.3	89.5	52.4	90.1	0.0 + 44 39	5.7	6.5	6.2 0.4 6.6 5.9
0.2 6.4	4242	23 54.6	+ 44 35	6.1	89.6	52.5	91.0	23 55.7 + 44 42			23 53.4 + 44 27
Dm.	5039	23 51.0	+ 34 11	6.6	88.8	42.0	90.1	23 53.3 + 34 26	6.4	7.2	6.8 0.2 7.0 6.3
	4183	23 34.5	+ 43 40	4.4	83.7	51.3		23 35.4 + 43 47			
23 33 + 43	Dm. 4473	23 35.1	+ 44 11	6.5	84.3	51.8	89.9	23 37.3 + 44 26	5.8	4.6	4.7 0.4 7.1 6.4
Dm.	6061	23 57.8	+ 34 46	7.0	90.0	42.0	90.4	0.1 + 35 1	6.4	7.2	7.0 0.2 7.2 6.3
	13	0 4.1	+ 45 24	4.9	32.3	52.5	31.7	0 5.1 + 45 31	5.1	5.9	5.7 0.4 6.1 5.4
	26	0 5.2	+ 45 18	7.0	31.8	52.3	30.8	0 7.3 + 45 33			
Dm.	24	0 4.9	+ 45 8	8.0	31.5	52.1	30.5		6.2	7.0	6.8 0.4 7.2 6.5
Dm.	11	0 2.9	+ 45 35	7.0	30.8	52.4	30.4	0 4.3 + 45 50	6.8	7.1	7.0 0.4 7.4 6.7
	4363	23 48.3	+ 45 33	6.7	87.5	52.4	90.0	23 50.6 + 45 48	6.4	6.9	6.8 0.4 7.2 6.5
Dm.	4366	23 49.1	+ 45 16	8.0	87.3	52.1	89.8				23 48.4 + 45.6
Dm.	4381	23 51.5	+ 45 37	6.8	87.7	52.4	89.6	23 53.8 + 45 52	5.9	6.7	6.6 0.4 7.0 6.3
	4197	23 40.1	+ 45 45	5.0	84.9	52.4	89.4	23 41.1 + 45 52	6.4	6.2	6.4 0.4 7.0 6.3
	4208	23 43.6	+ 35 46	5.9	88.4	42.4	91.3		6.6	6.7	7.1 6.4
Dm.	4316	23 37.4	+ 45 34	7.3	83.4	52.5	88.3	23 39.6 + 45 49	7.2	7.0	7.1 0.4 7.5 6.8
	4197	23 40.1	+ 45 45	5.0	86.1	52.4	91.0		7.4	7.3	7.4 7.8 7.1

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February 4, 1887.

Plate 960.

V	H	Type	No. lines, K	Focus	Other lines.	V	H	V	H	Correc.
12.8	22.3	~~I~~ I	~~1~~ 4	K=H	1	—	6.4	44.6	46.8	46.9	-2.6
12.4	21.9	I	7	K	2	F	6.2	43.8	46.0	47.7	-4.2 -2.7
12.5	17.5	I	I 6 4	K=H K	1 1	— —	6.2	36.0	46.0	56.5	-1.5 -0.9
12.5	14.7	II a	1513 3	3 K=H	1 I	— F	6.2	29.4	46.0	62.1	+0.1
12.5	11.5	I	K=H	1	F		6.2	26.0	46.0	68.5	+1.3
12.2	10.9	I	11 K=.2H	3	F		6.1	21.8	46.1	69.7	+1.6
11.6	19.1	III III	2 2	2 K=H K=H	1	— —	5.8	38.2	46.4	63.3	-2.6
10.1	13.6	III III	2 9	K=H K=H	1 1	— —	5.0	27.2	47.2	64.3	
10.5	11.9	I	K	2	F		5.2	26.8	47.0	67.7	+1.9
10.4	13.1	II II?	3 2	K=H K=H	2 2	F F?	5.2	26.2	47.0	65.3	+0.7
?	9.8	9.8	II a 1514	3 K=H	2	F aver.	4.9	19.6	47.3	71.9	+2.1
9.7	18.4	II II	2 2 K=H	K=H	1 1	— —	4.8	36.8	47.4	64.7	-2.0 -1.4
9.5	16.3	I	8 ?		1	F	4.8	32.6	47.4	68.9	-0.8
9.2	19.9	II II	2 2 K=H	K=H	1 1	— —	4.6	39.8	47.6	61.7	-3.2
8.6	10.9	I	8 K=.5H		1	F	4.3	21.8	47.9	69.7	+2.7
?	8.4	10.8	II a 1515	3 K=H	1	F aver.	4.2	21.6	48.0	69.9	+2.9 +1.7
8.5	11.4	I	11 K=.2H		4	F aver.	4.2	22.8	48.0	68.7	+1.6
8.1	18.0	II a	1516 3	K=H	1	F	4.0	36.0	48.2	66.6	-1.2
6.9	13.2	II	2 K=H		1	—	3.4	26.4	48.8	65.1	+1.3 +0.8
6.5	13.3	II a?	1517 2	K=H	1	aver	3.2	26.6	49.0	64.9	+1.1
7.0	23.5						3.5	47.0	48.7	44.5	
7.2	13.5	I d	K=H	?	1	—	3.6	27.0	48.4	64.6	+1.1
6.2	8.7	I	5 K=H		1	—	3.1	17.4	49.1	74.1	+4.4
6.4	17.0	III	2 K=H		1	F	3.2	34.0	49.0	57.5	-1.4
5.0	24.0	I d	8 K=H?		2	F	2.6	48.0	49.7	43.6	-6.3
4.7	17.5	II	? 2 K=H		1	F	2.4	36.0	49.8	56.6	-1.8
3.7	12.9	I	6 K=H		1	—	1.8	26.8	50.4	65.7	+1.0
3.5	11.9	II?	3 K=H		2	F	1.8	26.8	50.4	67.7	+2.1 +1.5
2.3	9.9	I	? H?		2	F	1.2	19.8	51.0	71.4	+3.8
3.0	20.4	II?	2 K=H		1	—	1.5	40.8	50.7	50.7	-3.8

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Mean 8

½ cos δ.

No.	R.a.	Dec.	Mag.	H	V	H′	Red. to 1900	Br.
H208	23 43.6	+35 46	5.9	88.2	42.2	91.0	23 44.6 +35 53	23 42.4 +35 38
~~Dm. 5104~~	~~23 41.3~~	~~+35 28~~	~~7.0~~	~~85.9~~	~~41.9~~	~~88.7~~		6.1 6.9 6.9 0.2 7.1 6.4
Dm. H169	23 40.4	+46 1	6.5	83.2	52.2	87.4	23 42.6 +46 16	5.6 6.4 6.2 0.4 6.6 6.9
~~4208~~	~~23 43.6~~	~~+35 46~~	~~5.9~~	~~87.4~~	~~42.0~~	~~90.1~~		
H231	23 52.8	+46 8	7.0	87.8	52.3	89.3	23 55.1 +48 23	7.0 7.0 6.9 0.4 7.3 6.6
~~Dm. 5153~~	~~23 53.4~~	~~+35 58~~	~~8.0~~	~~88.4~~	~~42.2~~	~~89.3~~		
Dm. 8	0 1.2	+35 49	6.2	30.6	42.0	30.5	0 3.5 +36.4	6.5 6.7 6.8 0.2 7.1 6.3
Dm. 35	0 9.2	+35 50	7.1	32.2	42.0	30.9	0 11.5 +36 5	7.0 6.9 0.2 7.1 6.4
42	0 12.0	+36 7	4.6	33.8	42.2	32.2	0 13.1 +36 14	9 +2 5.3 5.3 0.2 5.5 4.8
4228	23 49.5	+46 41	6.1	87.5	52.5	90.1	23 50.6 +46 48	7.1 6.9 0.4 7.3 6.6
19	0 5.7	+47 29	6.3	32.9	52.5		0 6.7 +47 36	7.3 7.4 7.3 23 48.6 +46.7
39	0 10.8	+47 16	5.8	34.6	52.5	32.7	0 11.9 +47 24	7.0 +2 7.5 6.0 5.9 0.4 6.3 5.6
22	0 6.6	+37 2	6.6	32.8	42.2	32.1	0 7.6 +37 9	6.4 6.5 6.8 0.2 7.0 6.3
49	0 14.9	+37 18	5.3	34.5	42.2	32.4	0 15.8 +37 25	0 5.3 +36.9 6.1 6.0 0.2 6.2 5.5
H381	23 50.0	+47 28	7.4	86.8	52.3	88.8	23 52.3 +47 43	7.2 6.4 7.2 7.2 0.4 7.6 6.9
Dm. ~~4812~~	~~23 52.6~~	~~+37 30~~	~~6.4~~	~~89.6~~	~~42.3~~	~~91.0~~		
Dm. 4373	23 56.3	+47 38	6.4	88.9	52.4	89.7	23 58.6 +47 53	6.1 6.9 6.5 0.4 6.9 6.2
H308	23 45.6	+47 41	7.5	85.4	52.3	88.6	23 47.8 +47 56	7.2 6.3 7.1 7.1 0.4 7.5 6.8
~~Dm. 4312~~	~~23 47.1~~	~~+47 50~~	~~7.5~~	~~86.9~~	~~52.4~~	~~91.1~~		
79	0 12.4	+48 3	6.4	34.2	52.3	31.5	0 14.8 +48 18	5.7 6.5 6.3 0.4 6.7 6.0
~~Dm. 49~~	~~0 9.5~~	~~+47 46~~	~~8.2~~	~~31.3~~	~~52.1~~	~~28.6~~		
84	0 12.8	+48 11	6.6	34.4	52.4	31.5	0 13.2 +48 26	6.2 7.0 6.7 0.4 7.1 6.4
Dm. ~~40~~	~~0 10.8~~	~~+37 56~~	~~8.8~~	~~32.4~~	~~42.1~~	~~30.7~~		
40	0 10.8	+38 1	4.3	33.6	42.2	32.5	0 11.9 +38 8	12 +5 5.2 5.2 0.3 5.5 4.8
Dm. 5108	23 52.6	+38 6	6.5	88.6	42.0	89.8	23 54.9 +38 18	6.1 6.9 6.7 0.3 7.0 6.3
40	0 5.8	+48 33	7.0	32.2	52.3	30.9	0 8.1 +49 10	6.2 7.0 7.1 0.5 7.6 6.9
Dm. ~~14~~	~~0 5.1~~	~~+38 29~~	~~8.3~~	~~31.5~~	~~41.9~~	~~30.7~~		
30	0 3.5	+49 7	6.7	32.1	52.3	31.0	0 7.8 +49 22	6.3 7.1 7.1 0.5 7.6 6.9
Dm. ~~40~~	~~0 5.8~~	~~+48 56~~	~~7.0~~	~~32.4~~	~~52.1~~	~~31.2~~		
Dm. 4127	23 34.4	+48 43	6.5	81.4	52.2		23 36.6 +48 58	23 34.4 +48.7
~~Dm. 30~~	~~0 3.6~~	~~+48 45~~	~~7.2~~	~~30.6~~	~~52.3~~	~~29.5~~	0 5.9 +49 0	5.7 6.5 6.5 0.5 7.0 6.3
Dm 91	0 19.4	+49 11	7.1	36.8	52.3	32.4	0 21.8 +49 26	6.3 6.7 6.6 0.5 7.1 6.4
Dm. 4309	23 64.0	+49 10	6.5	88.0	52.4	89.4	23 56.3 +49 25	6.5 7.0 7.2 0.5 7.3 7.0
4177	23 33.3	+49 48	5.3	81.3	52.3	87.6	23 34.3 +49 55	4.7 5.5 5.6 0.5 7.1 6.4
Dm. 4208	23 52.2	+50 2	7.2	87.2	52.4	89.0	23 54.6 +50 17	6.1 6.9 6.9 0.5 7.4 6.7
~~25~~	~~0 7.3~~	~~+40 22~~	~~5.8~~	~~33.1~~	~~42.2~~	32.1	0 8.3 +40 29	6.1 6.9 0.3 7.2 6.5
46	0 10.6	+50 38	6.5	33.8	52.4	31.5	0 12.4 +50 53	
~~24~~	~~0 7.0~~	~~+40 13~~	~~6.9~~	~~30.8~~	~~42.0~~	29.3		6.3 6.0 0.5 6.5 5.8
~~25~~	~~0 7.3~~	~~+40 22~~	~~5.8~~	~~31.1~~	~~42.2~~			
55	0 17.8	+51 21	6.4	37.6	52.6	33.8	0 18.9 +51 28	
Dm. 4165	23 43.2	+50 49	6.8	83.9	52.3	87.7	23 45.5 +51 4	6.3 7.1 6.6 0.5 7.3 6.6

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Plate 960.

V	H	Type	No. lines	K	Focus	Other lines	V	H	V	H	Correc.
17	16.2	I	3	N	1	—	0.8	32.4	61.4	69.1	-0.6
15.5	18.0	III	2	K=H	1	—	2.8	36.0	49.4	66.5	-2.0

Plate 974.

Amt. of Fog due to ground clouds 6.6

Amt. of Fog due to chemicals 6.7

V	H	Type	No. lines	K	Focus	Other lines	V	H	V	H	Correc.
22.9	10.0	I	5	K=H	1	—	11.4	20.0	40.7	70.5	+1.4
21.8	15.7	I	4	K=H	1	—	10.9	31.4	41.2	59.1	-0.3
? 21.2	16.8	I?	6	K=H	1	F? Rem.	10.6	33.6	41.5	56.9	-0.9
21.0	18.5	II	2	K	1	—	10.5	37.0	41.6	53.6	-1.0
20.5	18.6	III?	2	K=H	1	—	10.2	37.2	41.9	53.3	-1.8
20.4	16.3	II	2	K=H	1	—	10.2	32.6	41.9	57.9	-0.6
19.5	12.0	I	7	K=H	1	—	9.8	24.0	42.3	66.5	+0.9
18.8	11.5	I	5	K=H	1	—	9.4	26.0	42.7	67.5	+1.8
18.4	10.7	I	7	K=H?	2	F	9.2	21.4	42.9	69.1	+2.3
17.5	12.0	I?	4	K=H	1	—	8.8	24.0	43.3	66.5	+1.6
17.1	7.3	I	9	K=2H?	2	F	8.6	14.6	43.5	75.9	+4.2
16.9	24.3	I	8	K=.5H	6	F	8.4	48.6	43.7	41.9	-5.1
15.6	17.1	I	7	K	1	F	7.8	34.2	44.3	56.3	-1.2
15.5	15.5	I	5	K=H	1	—	7.8	31.0	44.3	59.5	-0.3
? 14.0	13.8	II	3	K=H	6	F Rem.	7.0	27.6	45.1	62.9	+0.7
13.2	17.7	III	2	K=H	1	—	6.6	66.4	45.5	66.1	-1.6
13.1	21	III	3	K=H	1	F	6.6	42	45.5	48.3	-2.3
12.6	10.4	I	10	K=2H	4	F	6.3	20.8	45.8	69.7	+1.8
12.3	21.5	I	1	K=H	1	F?	6.2	43.0	45.9	47.5	-3.8
10.3	11.5	I	7	K?	2	F	5.2	26.0	46.9	67.5	+2.2
? 10.2	9.3	II	3	K=H	2	F Rem.	5.1	18.6	47.0	71.9	+2.3
? 9.3	15.9	II?	2	K=H	1	Rem.	4.6	31.8	47.5	58.7	-0.6
8.8	11.0	I	10	K=.5H	4	F	4.4	22.0	47.7	68.5	+1.7
? 8.4	10.6	I?	7	K=H	1	Rem.	4.2	21.2	47.9	69.3	+2.8

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Means

Cor

No.	R.A.	Dec.	Mag.	H	V	H'	Red. to 1900	Br.	Br.
4257	23 58.5	+ 41 26	5.9	90.9	42.2	91.5	23 59.5 + 41 33		
Dm. 4291	23 50.8	+ 49 38	6.7	86.8	52.4	88.8	23 53.8 + 49 53	7.1 6.8	7.3 6.6
								7.4 7.0	7.5 6.8
								52 / 7	10 − 7 / 7

½ cos δ.

Means

44	0 12.5	+ 30 52	6.8	32.5	42.3	31.1	0 13.4 + 30 58	0 11.1 + 30 7		
4257	23 58.5	+ 41 26	6.9	89.9	62.3	90.2	23 59.5 + 41 33	6.8	6.7	0.3 7.0 5.9
4244	23 55.6	+ 41 42	6.1	89.2	62.3	90.1	23 56.6 + 41 49	6.8	6.6	0.3 6.9 5.8
4236	23 52.8	+ 31 41	6.3	89.8	42.2	90.8	23 53.7 + 31 48	7.1	7.0	0.2 7.2 6.1
4231	23 51.0	+ 41 59	6.0	88.2	62.2	90.0	23 52.0 + 42 6	7.3 7.2	7.2	0.3 7.5 6.4
								7.6 7.4		
Dm. 4926	23 65.7	+ 41 56	6.8	88.3	62.1	88.9	23 58.0 + 42 11	7.2	7.0	0.3 7.3 6.2
27	0 7.8	+ 32 32	6.0	31.8	42.3	30.9	0 8.8 + 32 39	6.7	6.6	0.2 6.8 5.7
36	0 10.1	+ 42 56	6.0	33.1	62.3	31.3	0 11.1 + 43 3	6.5	6.6	0.3 6.9 5.8
43	0 12.4	+ 43 8	6.9	33.8	62.3	31.5	0 13.4 + 43 14	6.4	6.5	0.3 6.8 5.7
Dm. 33	0 7.7	+ 43 23	6.7	31.7	62.2	30.1	0 10.0 + 43 38	7.0	6.9	0.3 7.2 6.1
69	0 21.8	+ 43 44	6.2	36.4	62.3	32.2	0 22.9 + 43 51	5.9	5.7	0.4 6.1 5.0
4183	23 34.5	+ 43 40	4.4	83.1	62.1	88.2	23 35.4 + 43 47	4.9	5.2	0.4 5.6 4.5
4242	23 54.6	+ 44 36	6.1	88.8	62.4	90.0	23 55.7 + 44 42	6.6	6.7	0.4 7.1 6.0
Dm 4550	23 57.7	+ 44 24	6.3	88.7	62.2	89.0	24 0.0 + 44 39	7.0	7.0	0.4 7.4 6.3
13	0 4.1	+ 45 24	4.9	31.7	62.4	31.0	0 5.1 + 45 31	6.1	5.7	0.4 6.1 5.0
Dm 4381	23 51.6	+ 46 67	6.6	86.9	62.2	88.5	23 53.8 + 46 52	6.8	6.6	0.4 7.0 5.9
4197	23 40.1	+ 45 45	5.0	84.3	52.4	88.6	23 41.1 + 45 52	7.0	6.7	7.1 6.0
~~4208~~	~~23 43.6~~	~~+ 35 46~~	~~6.9~~	~~86.8~~	~~42.4~~	~~88.1~~		6.6	6.7	0.4 7.1 6.0
								7.0	6.9	7.3 6.3
42	0 12.0	+ 36 7	4.6	32.8	42.4	31.0	0 13.1 + 36 14	5.3	5.3	0.2 5.5 4.4
Dm 4169	23 40.4	+ 46 1	6.5	83.4	62.2	87.2	23 42.8 + 46 16	6.4	6.4	0.4 6.8 5.7
~~4208~~	~~23 43.6~~	~~+ 36 46~~	~~6.9~~	~~86.6~~	~~42.0~~					
39	0 10.8	+ 47 16	5.8	33.8	62.5	31.6	0 11.9 + 47 24	6.2	6.1	0.4 6.5 5.4
49	0 14.9	+ 37 18	6.3	33.6	42.4	31.2	0 15.8 + 37 25	6.4	6.2	0.2 6.4 5.3
Dm. 4373	23 66.3	+ 47 38	6.4	88.1	62.2	88.7	23 58.6 + 47 53	7.1	6.9	0.4 7.3 6.2
40	0 10.8	+ 38 1	4.3	32.8	42.4	31.1	0 11.9 + 38 8	5.8	5.4	0.3 5.7 4.6
Dm. 79	0 12.4	+ 48 3	6.4	33.6	62.2	30.8	0 14.8 + 48 18	7.0	6.8	0.4 7.2 6.1

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Plate 974

	Y	H	Type	No. Prism	K	Form	Other Lines	V	H	V	H	Correc.
?	6.7	23.1	I	5	K=H	1	nebs.	3.4	46.2	48.7	44.3	-5.5
	4.9	23.7	I	5	K=H ?	2	F?	2.4	47.4	49.7	43.1	-6.1
	4.1	12.4	I		K=H	1	F.	2.0	24.8	50.1	65.7	+1.3
	3.4	11.5	II ?	2	K=H	1	—	1.7	23.0	50.4	67.5	+2.6
	2.0	9.5	I		N	1	—	1.0	19.0	51.1	71.5	+4.0
	2.0	15.7	I	3	N	1	—	1.0	31.4	51.1	59.1	-0.4

F. m. 8c. 8.1 7.5 F. cl. 7.6

Plate 976.

	21.6	13.8	I	9	K	4	F.?	10.8	27.6	46.8	61.0	+1.2
//	21.7	28.6	I		N	1	—	10.8	48.5	46.8	43.4	-4.7
	20.6	13.0	I	6	N	1	—	10.3	26.0	47.3	62.6	+1.2
	20.5	8.0	I ?	3	N	1	—	10.2	16.0	47.4	72.6	+4.3
	20.1	22.2	I		N	1	—	10.0	44.4	47.5	44.2	-6.9
?	19.5	22.0	I	b 3400 8	N	3	F. neb.	9.8	44.0	47.8	44.6	-6.6
	19.4	18.6	I	9	K=.2 H	5	F	9.7	37.2	47.9	61.4	-2.3
?	18.1	22.6	I	b 3401 8	N	3	F. neb.	9.6	45.2	50.0	43.4	-8.3
	14.3	15.3	III ?	2	K=H	1	—	7.2	30.6	50.4	58.0	-0.2
	14.2	16.2	I ?	3	N	1	—	7.1	32.4	50.4	56.2	-1.3
	14.3	20.4	I	9	N	3	F?	7.2	40.8	50.4	47.8	-5.7
?	14.1	21.1	I	b 3402 9	N	4	F. neb.	7.0	42.2	50.6	46.4	-4.5
	13.6	16.1	I	6	N	2	—	6.8	32.2	50.8	56.4	-0.9
	13.1	19.4	I	4	N	1	—	6.6	38.8	51.0	49.8	-4.8
	12.7	16.0	III ?	2	K=H	1	—	6.4	32.0	51.2	55.6	-1.2
	12.2	13.4	II ?	2	K=H	1	—	6.1	26.8	51.4	61.8	+1.2
	10.8	18.7	I ?	?	N=H	1	—	5.4	37.4	52.2	51.2	-4.2
	8.9	9.1	I ?	2	N	1	—	4.4	18.2	53.2	70.4	+4.8
	8.5	14.3	I	9	K=.2 H	2	F.	4.2	28.6	53.4	60.0	+0.6
	8.2	23.5	I	8	N	5	F.	4.1	47.0	53.4	41.6	-10.2

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Mean 9

	No.	R.A.	Dec.	Mag.	H	V	H′	Red. to 1900		Cou. Bc	Bc	Bc
Dm.	4127	23 34.4	+ 48 43	6.5	80.6	62.1	86.1	23 36.8	+48 58.	6.0	6.9	6.7 0.5 7.2 6.1
	4177	23 33.3	+ 49 48	6.3	80.7	62.2	86.8	23 34.3	+49 55	4.8	8.7	5.7 0.5 6.2 5.1
	25	0 7.3	+ 40 22	6.8	32.1	42.4	30.8	0 8.3	+40 29	5.8	6.7	6.6 0.3 6.9 5.8
Dm.	46	0 10.1	+ 60 38	6.5	36.1	62.3	30.5	0 12.5	+50 53	5.9	6.8	6.7 0.5 7.2 6.1
	55	0 17.8	+ 61 21	6.4	36.8	62.4	32.8	0 18.9	+51 28			
	4257	23 58.5	+ 41 26	5.9	89.9	42.4	90.3	23 59.5	+41 33			23 57.2 +41 2

54 4 – 5 / 5 4 / 5

Mean 8

	182	1 2.5	+ 46 36	4.3	30.1	57.4	28.9	1 3.7	+46 42	4.0	4.8	— — —
	102	0 36.8	+ 46 22	6.0	82.0	67.2	86.7	0 37.9	+46 29	5.3	6.1	— — —
	193	1 4.4	+ 37 5	5.8	30.4	47.4	29.2	1 5.5	+37 12	5.7	6.5	
	216	1 16.8	+ 37 6	5.5	32.8	47.3	28.6	1 17.9	+37 12	6.0	6.8	
	108	0 37.8	+ 47 12	6.5	82.2	67.2	89.1	0 38.8	+47 19	5.7	6.5	
	107	0 38.0	+ 47 38	4.6	82.0	67.4	88.6	0 39.2	+47 44	4.6	5.4	
	148	0 50.1	+ 37 51	3.9	87.3	47.5	89.6	0 51.1	+37 57	3.8	4.6	
	100	0 35.5	+ 49 51	4.8	80.7	67.4	89.0	0 36.5	+49 58	4.7	5.5	
Dm.	212	0 56.3	+ 50 14	6.8	86.9	67.4	87.2	0 58.9	+52 29	6.0 6.2	6.8 7.0	
Dm.	202	0 53.9	+ 60 15	6.9	86.3	57.4	87.6	0 56.5	+50 30	6.2	7.0	
	121	0 42.0	+ 60 19	6.0	82.8	67.5	88.6	0 43.2	+50 25	4.8	5.8	
	127	0 43.2	+ 40 26	4.4	85.4	47.4	89.9	0 44.3	+40 32	4.2	5.0	
	160	0 56.2	+ 40 41	6.9	88.4	47.5	89.3	0 57.3	+40 48	5.9	6.7	
Dm.	164	0 43.6	+ 60 47	6.7	82.1	57.4	86.9	0 45.8	+51 2	6.0	6.8	
Dm.	216	0 64.4	+ 61 1	7.1	86.4	67.4	87.6	0 57.0	+51 16	6.2 6.5	7.0 7.3	
	187	1 3.5	+ 41 27	5.7	30.3	47.5	29.1	1 4.6	+41 33	6.1	6.9	
Dm.	179	0 45.5	+ 61 54	6.3	82.9	67.3	87.1	0 48.1	+52 9	6.1	6.9	
Dm.	288	1 13.8	+ 42 50	6.5	32.0	47.2	27.2	1 16.4	+43 4	6.2	7.0	
	176	1 1.1	+ 43 18	6.3	29.7	47.5	29.1	1 2.2	+43 24	4.9	5.5	
	82	0 30.3	+ 53 14	3.7	77.3	67.3	87.5	0 31.3	+53 21	3.8	4.1	— — —

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Plate 976.

V	H	Type	No. Lines.	K	Focus	Other Lines.	V	H	V	H	Correc.
7.6	23.7	I	7	H	2	F?	3.8	47.4	53.8	41.2	-10.5
7.0	17.1	I	6	H	2	—	3.5	34.2	54.4	52.3	-1.8
6.5	22.0	I	6	H	1	—	3.2	44.0	54.4	42.6	-6.0
6.3	20.6	I	6	H	1	—	3.2	41.2	54.4	45.3	-4.8
6.5	14.6	III	3	K=H	1	F	3.2	29.2	54.4	57.3	+0.6
?	6.2	13.6	I h? 3H03	10	K=.2H	4	F? Seen.	3.1	27.2	54.5	59.3	+1.8
	5.8	20.9	I		H	2	—	2.9	41.8	54.7	46.7	-7.2
?	√.3	7.5	II a 3404	2	K=H	1	Seen,	2.6	15.0	55.0	73.6	+6.6
	√.2	9.3	III	2	K=H	1	—	2.6	18.6	55.0	70.0	+5.1
?	3.2	22.1	III 3405	3	K=H	√	F √Bright Seen.	1.6	44.2	56.0	42.3	-9.3
	2.0	13.9	I ?	1	H	4	F.	1.0	27.8	56.6	60.8	+1.1
	2.2	22.8	I	2	H	2	—	1.1	45.6	56.5	43.0	-7.2

F. w. & c.

F. ch.

Plate 999.

	7.0	6.9								7.9		
	22.5	14.4	II ?	2	K=H	1	—	11.2	28.8	26.2	42.5	+0.1
-	21.8	15.0	I	7	H	2	—	10.9	30.0	26.5	41.3	0
√	20.8	15.7	I I	7 4	K=H	K=H 1 2	—	10.4	31.4	27.0	39.9	-0.1
	20.8	6.5	II ?	2	K=H	1	—	10.4	13.0	27.0	58.3	+1.9
	20.8	20.8	I	8	H	1	—	10.4	41.6	27.0	29.7	-0.6
- ?	20.0	10.6	II a 3406	1 3	K=H	2	F Seen,	10.0	21.2	27.4	50.1	+0.4
	18.6	10.7	I	7	H	1	—	9.3	21.4	28.1	49.9	+1.0
√	18.8	16.5	II ? II a 3406a	2 2	K=H	K=H 1 1	Seen	9.4	33.0	28.0	38.3	-0.4
	19.0	23.7	I	√	H	1	—	9.5	47.4	27.9	23.9	-0.8
	17.3	12.5	I	9	H	4	F.	8.6	25.0	28.8	46.3	+0.8
-	16.9	6.9	I ?	6	H	1	F	8.4	13.8	29.0	57.5	+2.0
- √	16.8	17.6	I I	6 5	K=H	H 1 1	— —	8.4	35.2	29.0	36.1	-0.7
?	16.6	12.9	II a 3407	1 3	K=H 1.2 1		F. Seen,	8.3	25.8	29.1	46.5	+0.4
√	15.7	16.5	II ? II	2 2	K=H	K=H 1 2	F? F ?	7.8	33.0	29.6	38.3	-0.2
	4.2	21.3	III ? III	2 2	K=H	K=H 1 1	— —	2.1	42.6	35.3	28.7	

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Mean 8

Cor.

No.	R.A.	Dec.	Mag.	H	V	H'	Red. to 1900	Ge	Br.
77	0 29.5	+ 53 30	5.0	76.9	57.3	87.4	0 30.5	+53 38	7.6 5.4
159	0 53.4	+ 44 3	5.7	87.6	47.5	89.4	0 54.4	+ 44 10	5.5 6.3 0 51.9 +43 55
113	0 39.6	+ 44 11	5.9	83.6	47.4	89.6	0 40.7	+ 44 18	5.7 6.5 0 38.2 +44 3
133	0 43.6	+ 44 20	5.9	84.8	47.5	89.6	0 44.7	+ 44 27	6.1 6.9 0 42.2 +44 12
175	1 0.4	+ 54 20	6.2	29.6	67.5	29.0	1 1.2	+ 54 27	5.7 6.5 6.7
189	1 3.8	+ 54 31	4.4	31.0	57.6	29.2	1 5.0	+ 54 37	3.9 4.7
110	0 38.4	+ 54 34	5.4	80.2	57.5	87.4	0 39.6	+ 54 40	5.1 5.9
228	1 20.5	+ 44 47	4.8	35.5	47.4	28.9	1 21.6	+ 44 54	5.2 6.0
214	1 15.3	+ 44 54	4.9	33.9	47.5	28.8	1 16.4	+ 44 5 0	6.0 6.8 6.4 7.2
94	0 33.7	+ 55 53	2.2	77.9	57.5	87.2	0 34.8	+ 56 0	3.3 6.8 4.1 3.7 7.2 4.5
182	1 2.5	+ 46 36	4.3	30.3	47.6	29.2	1 3.7	+ 46 42	
102	0 36.8	+ 46 22	6.0	82.4	47.5	89.6	0 37.9	+ 46 29	

Mean 5

Dm. ~~30.5~~ 305	1 41.3	+ 26 46	6.5	70.1	37.0	70.0	1 43.8	+ 26 0	
277	1 41.7	+ 16 22	6.6	71.7	27.3	71.7	1 42.8	+ 16 27	5.5 6.0
275	1 40.1	+ 16 49	6.5	71.5	27.2	71.6	1 41.2	+ 16 55	6.3 6.8 6.6
Dm. 357	1 59.1	+ 26 33	7.0	72.1	37.0	70.2	2 1.7	+ 26 46	6.9 7.4
247	1 29.4	+ 16 49	6.9	71.0	27.2	71.6	1 30.5	+ 16 55	6.0 6.5
299	1 60.8	+ 17 14	6.2	72.0	27.2	71.6	1 51.9	+ 17 20	5.7 6.2
Dm. 311	1 49.8	+ 27 49	7.7	71.2	37.1	70.2	1 52.3	+ 28 2	6.3 6.8
Dm. 277	1 36.7	+ 27 44	7.6	69.7	37.1	70.1	1 39.2	+ 27 58	6.5 7.0 6.8
235	1 23.4	+ 17 44	6.0	70.8	27.2	71.6	1 24.5	+ 17 51	5.9 6.4
291 / 292	1 46.9	+ 18 42	4.3	71.9	27.3	71.6	1 48.0 / 1 48.0	+ 18 48 / + 18 49	4.1 4.6
Dm. 359	1 68.5	+ 28 35	6.7	72.3	37.0	70.3	2 1.1	+ 28 48	6.3 6.8
Dm. 282	1 33.9	+ 28 47	7.5	69.1	37.2	69.8	1 36.4	+ 29 1	6.5 7.0 6.8
289	1 46.2	+ 29 0	3.6	72.0	37.3	71.6	1 47.8	+ 29 6	4.4 4.5 4.9
Dm. 282	1 37.0	+ 19 21	6.7	70.2	27.2	70.2	1 39.4	+ 19 35	6.2 6.7 6.5
240	1 28.9	+ 35 14	6.7	68.5	37.3.		1 27.X	+ 35 20	6.0 6.3 6.8 7.0

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Plate 990.

				No.				Focus		Thus						
	Y	H	Type	lines	K					lines.	V	H	V	H	Correc.
	15.7	17.8	III ?	2	K=H					F.	7.8	35.6	29.6	35.7	-0.8
?	15.3	17.6	II a 3408	2 9	K=H				2	F Seen	7.6	35.2	29.8	36.1	-0.3
	15.0	11.7	I	8	K=H				1	—	7.5	23.4	29.9	47.9	+0.8
√	14.8	13.6	I I ?	8 4	K=H	K=H			2	F.	7.4	27.2	30.0	44.1	+0.2
√	14.4	23.5	I ? II 3408a	2 2	K=H	K=H			1	— —	7.2	47.0	30.2	24.3	-2.2
	14.3	12.0	I ?	12	K=H					F.	7.2	24.0	30.2	47.3	+0.4
√	13.6	9.7	II a ? II a 3409	9 2	K=H	K=H			1	F Seen Seen	6.8	19.4	30.6	51.9	+0.7
√	13.5	15.4	II ? II a 3409a	1 2	K=H				1	— Seen	6.8	30.8	30.6	40.5	0
√	13.4	19.7	I ? I	3 4	K=H				1	— —	6.7	39.4	30.7	31.9	-0.6
√	11.5	16.8	III ? III	2 2	K=H	K=H			2	F. ? F. ?	5.8	33.6	31.6	37.7	-0.6
√	11.4	14.1	II a 3410 II a	3 3	K=H	K=H			2	F. Seen F. Seen	5.7	28.2	31.7	43.1	+0.1
√	10.8	16.6	II a ? 3411 II a	2 2	K=H	K=H			2	F. ? Seen F. Seen	5.4	33.2	32.0	38.1	-0.5
√	10.6	14.8	II a 3412 II a	3 3	K=1.5H	?			2	F. F. Seen	5.3	29.6	32.1	41.7	+0.1
?	10.4	6.5	I	8	K				2	F. Seen	5.2	13.0	32.2	58.3	+1.2
	10.2	23.5	I	3	K				1	—	5.1	47.0	32.3	24.3	-1.3
	9.6	20.5	III ?	2	K=H				1	—	4.8	41.0	32.6	30.3	-1.7
	9.2	8.9	I	9	K				2	F	4.6	17.8	32.8	53.6	+1.9
?	8.8	6.3	III Ic 3413	9	K=3.0H	?				F Bright	4.4	12.6	33.0	58.7	+1.3
√	8.8	11.5	III III	3 2	K=H	K=H			1	F —	4.4	23.0	33.0	48.3	+0.5
δ	8.8	10.6	Ia 3414	9	K=H	?				Seen	4.4	21.2	33.0 32.5	50.1	+0.7
√	8.2	23.2	I I ?	4 3	K=H	H			1	—	4.1	46.4	33.3	30.9	-1.7
√	8.2	11.0	I ? I	2 3	H	H			1	— —	4.1	22.0	33.3	49.3	+1.3
√	7.0	6.7	III	2 2	K=H	K=H			1	— —	3.5	13.4	33.9	57.9	+1.4
√	6.6	13.6	II ? II a 3414a	2 2	K=H	K=H			1	Seen	3.3	27.2	34.1	44.1	+0.2
√	6.8	23.7	III ~~III ?~~	~~2~~	~~K=H~~	~~K=H~~			2	— —	3.4	47.4	34.0	23.9	-3.1
	6.5	24.1	~~I~~ ?	2	H				1	—	3.2	48.2	34.2	23.1	-3.3
	6.3	21.6	I	6	H				1	—	3.2	43.2	34.2	28.1	-2.3
√	6.2	10.0	II II	2 2	K=H	K=H			1	— —	3.1	20.0	34.3	51.3	+0.9

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Mean 5

	No.	R.A.	Dec.	Mag.	H	V	H'	Red. to 1900	Cor.	Bu.	Br.
	263	1 34.8	+ 29 27	6.1	70.4	37.2	71.2	1 36.0	+29 32	6.1	6.6 6.7
	268	1 36.0	+ 19 42	6.4	71.2	27.3	71.5	1 37.1	+19 47	5.7	6.2
Dm.	324	1 47.5	+ 29 39	7.5	70.9	37.1	70.1	1 50.1	+29 32	6.2	6.7
Dm.	296	1 43.2	+ 19 49	7.5	70.4	27.2	70.2	1 45.7	+20 3	6.4	6.6 6.4
Dm.	243	1 20.2	+ 29 48	7.5	67.2	37.0	69.4	1 22.7	+30 2	6.4	6.9 6.7
	295	1 48.0	+ 20 13	2.8	72.0	27.4	71.6	1 49.1	+20 19	3.5	4.0
Dm.	322	1 61.6	+ 20 21	6.5	71.0	27.2	70.3	1 54.1	+20 34	6.0	6.5 6.4
Dm.	283	1 39.2	+ 20 28	8.2	70.0	27.3	70.0	1 41.7	+20 42	6.6	7.1 7.0
	261	1 30.0	+ 2.0 32	8.0	69.4	27.2	70.0	1 32.4	+20 46	6.7	7.2 7.2
Dm.	~~264~~	~~1 30.9~~	~~+ 20 40~~	~~6.5~~	~~70.1~~	~~27.4~~	~~70.7~~				
Dm.	301	1 36.6	+ 31 29	6.5	69.2	37.3	69.8	1 38.2	+31 43	6.0	6.5 6.6 6.7
	281	1 43.6	+ 21 40	6.0	71.7	27.4	71.6	1 44.6	+21 47	5.7	6.2 6.1
Dm.	303	1 36.1	+ 31 47	7.2	69.3	37.2	69.8	1 38.7	+32 1	6.1	6.6 6.4
	278	1 41.8	+ 32 6	6.0	71.4	37.4	71.3	1 43.0	+32 13	5.7	6.2 6.0
	632	1 59.8	+ 22 0	6.2	72.8	27.2	71.6	2 1.0	+22 11	4.9	5.4
Dm.	236	1 21.8	+ 22 4	6.5	68.8	27.2	70.1	1 24.2	+22 18	6.2	6.7
Dm.	252	1 26.7	+ 32 23	7.2	67.7	37.2	69.4	1 29.2	+32 37	6.3	6.7 6.8
	323	1 56.1	+ 32 43	6.4	73.9	37.3	72.0	1 57.1	+32 49	5.2	5.7
	333	2 0.4	+ 22 54	2.0	13.0	27.3	11.7	2 1.5	+23 0	4.5	4.5 5.0
	298	1 49.2	+ 22 59	6.9	72.2	27.4	71.7	1 50.3	+23 5	6.2	6.5 6.7 6.5 6.8
	303	1 51.8	+ 23 1	4.9	72.5	27.4	71.8	1 52.4	+23 7	4.8	5.3
Dm.	259	1 27.6	+ 33 6	6.5	68.0	37.2	69.7	1 30.1	+33 20	6.4	6.9 6.9
Dm.	328	1 49.4	+ 33 7	7.6	71.4	37.2	70.1	1 52.0	+33 20	6.6	7.1 7.1
Dm.	285	1 68.3	+ 23 39	7.3	71.7	27.1	70.3	2 0.8	+23 52	6.4	6.9 7.0 7.0 7.1
Dm.	246	1 43.1	+ 23 56	7.0	70.3	27.2	70.1	1 45.6	+24 10	6.6	7.1 6.9
Dm.	234	1 18.9	+ 33 36	6.6	66.3	37.0	69.4	1 21.4	+33 50	6.1	6.6 6.6
	~~224~~	~~1 19.3~~	~~+ 33 58~~	~~6.3~~	~~66.9~~	~~37.4~~	~~69.8~~	~~1 20.4~~	~~+ 34 5~~	~~6.3~~	~~6.9~~
	224	1 19.3	+ 33 58	6.3	67.5	37.2	70.8	1 20.4	+ 34 4	6.3	6.8
Dm.	~~228~~	~~1 17.9~~	~~+ 33 60~~	~~6.5~~	~~66.1~~	~~37.0~~	~~69.4~~	~~1 20.4~~	~~+ 34 4~~		
Dm.	265	1 23.9	+ 34 4	6.6	67.1	37.3	69.4	1 26.4	+ 34 18	5.9	6.4
Dm.	288	1 51.2	+ 24 8	7.7	71.2	27.2	70.3	1 53.7	+24 21	6.4	6.9 6.8

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Plate 999.

	T	H	Type	No. lines	K	Focus	Other lines.	V	H	V	H	Correc.
?	5.7	6.3	I d	10	K=H?		7	2.8	12.6	34.6	58.7	+3.1
?	5.5	17.5	I b	3H15 8	N	2	9?	2.6	35.0	34.8	36.3	−0.9
A	4.6	16.2	I ? I ?	3 4	N	K=H 1	—	2.3	32.4	35.1	38.9	−0.5
	4.5	18.1	II ? II ?	2	K=H	1	—	2.2	36.2	35.2	36.1	−0.6
A	4.2	14.0	I ? I	4	2	K=H	—	2.1	28.0	35.3	43.8	+0.4
A	4.4	12.4	I ? I	3	2	K	1	2.2	24.8	35.2	46.5	+0.5
?	4.2	6.6	II a	3H16 2	K=H	1	Perm.	2.1	13.2	35.3	58.1	+1.7
?	3.9	8.1	II a ?	3H17 2	K=H	1	Perm.	2.0	16.2	35.4	55.1	+1.3
A	4.2	13.9	II ? II ?	2 2	K=H	1	—	2.1	27.8	35.3	43.6	+0.2 +0.2
1.1	3.0	14.5	I	6	N	1	—	1.5	29.0	35.9	42.3	+0.2

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Mean 5

Cou.

No.	R.A.	Dec.	Mag.	H	V	H'	Red. to 1900.	Bu. Br.
336	2 24	+34 26	3.1	150	37.2	11.9	2 3.5 +34 31	4.3
264	1 35.1	+34 38	6.4	70.1	37.2	71.0	1 36.3 +34 44	5.8
Dm. 304	1 37.0	+34 69	7.3	69.4	37.3	69.9	1 39.6 +35 13	7.1 7.0
262	1 34.6	+25 8	6.1	70.8	27.2	71.4	1 35.7 +25 18	6.5
Dm. 350	1 42.4	+35 8	7.3	70.4	37.2	70.0	1 45.0 +35 22	7.1 7.1
Dm. 319	1 45.8	+25 4	7.5	70.6	27.3	70.1	1 48.3 +25 17	7.2 7.2
Dm. 349	1 58.6	+25 0	6.5	71.8	27.1	70.1	2 1.7 +25 13	6.3
~~337~~	~~2 2.6~~	~~+25 24~~	~~6.1~~	~~158~~	~~27.5~~	~~14.1~~		
326	1 56.8	+26 21	6.8	73.0	27.4	71.7	1 58.0 +25 28	6.3
Dm. 311	1 42.9	+25 8	7.7	70.7	27.2	70.5	1 45.4 +25 22	7.3 7.1
Dm. 305	1 41.3	+25 46	6.5	70.3	27.3	70.1	1 43.8 +26 0	6.6

133.2+25.0

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F. w. & c. 8.2 7.5 — F. ch. 7.5

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Plate 881.

8.40

	V	H	Type	No. lines	K	Focus	Other lines	V	H	V	H	Correc.
?	18.6	11.2	I b	3418 8	N	2	Seen.	9.3	22.4	18.7	46.1	+0.5
?	18.0	11.6	IIa.1	3419 2	K=H	2	F? Seen.	9.0	23.2	19.0	45.3	+0.8
	15.6	10.7	I	9	K=.2H	4	F.	7.8	21.4	20.2	47.1	+0.6
—	10.4	7.6	I	6	N	1	F?	5.2	15.2	22.8	53.3	+2.4
—	10.0	9.3	I	V	N	1	—	5.0	18.6	23.0	49.9	+0.9
	6.8	16.2	I	6	N	1	—	3.4	32.4	24.6	36.1	-0.5

F. w. & c. 8.2 7.4 — F. ch. 7.4

Plate 882.

?	19.8	17.2	III b	3420 2	N.	1	F? Seen.	9.9	34.4	48.1	33.3	-1.4
?	16.1	16.7	I d	6	N	1	~~Seen~~	8.0	33.4	60.0	34.3	-0.8
?	15.9	15.3	?	3421 6	N?	3	F. Seen	8.0	30.6	60.0	37.1	-0.2
	15.6	12.7	I	6	N	1	—	7.9	25.4	60.1	42.3	+1.6
—	14.5	18.1	III?	12	K=H	2	F.?	7.2	36.2	60.8	31.5	-1.5
?	12.6	8.1	III bc	3422 3	K=~~.5~~H?	3	F. Bright Seen.	6.3	16.2	61.7	61.6	+3.5
	12.1	16.2	II?	14	K=H	1	—	6.0	32.4	62.0	36.3	-0.6
	8.2	9.9	I	10	N	2	F.	4.1	19.8	63.9	47.9	+4.0
	7.0	12.9	I	8	N	1	—	3.5	25.8	64.5	41.9	+1.8
	6.4	21.1	I	4?	K=H	1	—	3.2	42.2	64.8	26.5	-5.2
	6.4	24.5	I	7	K=.2H	2	F.	3.2	49.0	64.8	18.7	-8.2 ~~-8.6~~
	3.1	14.9	II?	2	K=H	1	—	1.6	29.8	66.4	37.9	+0.1

F. w. & c. 5.5 5.5 — F. ch. 7.9

Dark Plate. Hard to measure.

Plate 910.

	22.5	14.5	II?	12	K=H	1	—	11.2	29.0	16.1	20.7	0
	22.1	8.5	I I	2 2	N N	1 1	— —	11.0	17.0	16.3	32.7	+0.6
	22.0	16.8	I	8	K=.1H	2	—	11.0	33.6	16.3	16.1	-0.2
	21.5	8.7	I	7	K=.5H?	2	—	10.8	17.4	16.5	32.3	+1.3
	21.4	23.2	II?	2	K=H	1	—	10.7	46.4	16.6	3.3	-0.8
	21.2	23.6	II?	2	K=H	1	—	10.6	47.2	16.7	2.5	-1.9

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Mean 17

Cow.

No.	R.A.	Dec.	Mag.	H	V	H'	Red to 1900 -	Bz.	Br.
291/292	1 46.9	+ 18 42	4.3	69.3	28.0	68.8	1 48.0 + 18 48 / 1 48.0 + 18 49	1.1	5.8
289	1 46.2	+ 29 0	3.6	69.4	38.0	68.6	1 47.3 + 29 6	1.0	5.7
295	1 48.0	+ 20 13	2.8	69.4	28.0	68.8	1 49.1 + 20 19	2.0	4.7
323	1 66.1	+ 32 43	6.4	71.3	37.9	68.9	1 57.1 + 32 49	5.2	6.9
303	1 61.3	+ 23 1	4.9	69.9	28.0	69.0	1 52.4 + 23 7	3.1	6.8
264	1 36.1	+ 34 38	5.4	67.5	38.0	68.0	1 36.3 + 34 44	5.2	6.9

Mean 15

251	1 30.6	+ 48 1	3.7	65.0	57.9	66.4	1 31.8 + 48 7	5.0 / 5.5	6.5 / 7.0
259	1 33.6	+ 39 58	4.9	67.0	48.0	67.8	1 34.6 + 40 4	4.9	6.4
269	1 36.1	+ 50 8	4.2	66.7	58.1	66.9	1 37.4 + 50 11	5.7	5.2
284	1 44.5	+ 60 12	6.4	69.9	68.1	68.3	1 45.7 + 50 18	5.4	6.9
248	1 29.7	+ 40 48	4.2	65.9	48.0	67.4	1 30.9 + 40 54	4.6 / 4.7	6.1 / 6.2
324	1 66.5	+ 41 45	2.1	71.7	48.1	68.2	1 57.7 + 41 51	5.3 / 5.8	4.8 / 5.3
261	1 34.5	+ 42 1	6.2	66.9	48.0	67.5	1 35.7 + 42 7	5.7	7.2
314	1 54.4	+ 53 65	4.9	74.2	68.0	70.2	1 55.6 + 53 71	4.5	6.0
283	1 44.1	+ 54 33	6.5	69.9	68.1	68.1	1 45.4 + 54 39	5.0	6.5
228	1 20.5	+ 44 47	4.8	62.7	48.0	67.9	1 21.6 + 44 54	5.3	6.8
189	1 3.8	+ 54 31	4.4	62.8	57.7	61.0	1 5.0 + 54 37	4.3	5.8
~~217~~	~~1 15.3~~	~~+ 44 54~~	~~4.9~~	~~64.3~~	~~48.1~~	~~69.8~~			
Dm 334	1 35.3	+ 56 22	6.5	65.1	58.0	66.0	1 38.2 + 56 36	5.6	7.1

Mean 3

Dm. 293	2 19.6	+ 16 0	6.8	48.6	27.2	48.6	2 22.1 + 16 12		
Dm. 322	2 32.1	+ 16 6	7.8	49.1	27.1	48.5	2 34.6 + 16 18	7.0	7.3 / 7.1
Dm. 281	2 14.6	+ 16 12	7.0	48.2	27.2	48.4	2 17.1 + 16 25	6.7	7.0
419	2 33.7	+ 26 33	5.4	61.1	37.4	49.8	2 34.8 + 26 38	5.6	6.9
Dm. 247	2 1.4	+ 16 33	6.8	47.8	27.3	48.6	2 3.9 + 16 46	6.5	6.8
Dm 357	1 69.1	+ 26 33	7.0	106.3	37.2	108.2	2 1.7 + 26 46	6.7	7.0

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Plate 9210.

V	H	Type	No. lines	K	Focus	Other lines.	V	H	V	H	Correc.
20.6	16.6	I I	3	N M	1	—	10.3	33.2	17.0	16.5	-0.2
20.6	12.8	III ? III	2 2	K=H K=H	1	—	10.3	25.6	17.0	24.1	+0.5
20.4	13.0	III III	2 2	K=H K=H	1	F? —	10.2	26.0	17.1	23.7	+0.2
20.2	7.5	I ?	8	K=H	3	F	10.1	15.0	17.2	34.7	+1.7
19.8	23.9	I ?	3	N	1	—	9.9	47.8	17.4	1.9	-0.9
19.0	12.4	II ? II ?	3 2	2 K=H K=H	1	—	9.5	24.8	17.8	24.9	+0.6
19.0	19.2	II II	2 2	K=H K=H	1	—	9.5	38.4	17.8	11.3	-0.5
19.0	22.6	I ?	2	K=H	1	—	9.5	45.2	17.8	4.5	-1.8
18.7	18.3	I	8	N	3	F?	9.4	36.6	17.9	13.1	-0.8
18.5	20.2	III ?	2	K=H	1	—	9.2	40.4	18.1	9.3	-1.2
18.5	19.0	II II	2 2	K=H K=H	1	—	9.2	38.0	18.1	11.7	-1.0
18.5	17.5	I ? I	3423 4 3	K=H N	1	—	9.2	35.0	18.1	14.7	-0.6
18.2	11.7	I a ?	2	K=H	1	seen.	9.1	23.4	18.2	26.3	+0.4
18.2	8.2	I	6	N	1	—	9.1	16.4	18.2	33.3	+0.7
17.3	23.7	I ?	8	K=H	1	—	8.6	47.4	18.7	2.3	-2.1
17.0	22.5	III III	2 2	K=H K=H	1	F? —	8.5	46.0	18.8	4.7	-0.8
16.6	21.0	III III	2 2	K=H K=H	1	— —	8.3	42.0	19.0	7.7	-0.7
16.6	18.5	II ? II	2 2	K=H K=H	1 2	F? F?	8.3	37.0	19.0	12.7	-0.5
17.0	10.9	II	2	K=H	1	—	8.5	21.8	18.8	27.9	+1.0
17.1	5.7	III	3	K=H	2	F	8.6	11.4	18.7	38.3	+2.2
16.6	7.2	II ?	2	K=H	1	—	8.3	14.4	19.0	35.3	+2.0
16.6	14.5	I	7	?	3	—	8.3	29.0	19.0	20.7	+0.1
16.4	23.3	II ? II	2 2	K=H K=H	1	— —	8.2	46.6	19.1	3.1	-2.1
16.2	21.7	I ? I	3 3	K=H N	1	— —	8.0	43.4	19.3	6.3	-0.8
16.4	18.9	I	11	N	3	F seen	8.2	37.8	19.1	11.9	-0.5
16.4	18.6	II a II	3424 a 2 2	K=H K=H	1	seen.	8.2	37.2	19.1	12.5	-0.9 -0.5
16.2	14.1	II a	3425 3	K=H	2	F — seen	8.1	28.2	19.2	21.5	+0.1
16.4	13.1	I b	3426 8	K=8H	2	F seen.	8.2	26.2	19.1	23.5	+0.3

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Mean 3

Corr.

No.	R.A.	Dec.	Mag.	H	r	H'	Red. to 1900	Br.	Br.
Dm. 283	2 15.0	+16 56	7.3	48.2	27.2	48.4	2 17.5	+17 9	7.0	6.7	6.9
Dm. 464	2 23.1	+26 55	7.3	48.9	37.2	48.4	2 23.7	+27 7	7.0	6.7	6.9
Dm. 380	2 22.9	+17 4	6.5	48.9	27.3	48.7	2 23.4	+17 16	6.7	6.6	6.6
432	2 36.4	+27 12	4.7	61.4	37.3	49.7	2 37.6	+27 17	5.3	5.0	
Dm. 315	1 59.8	+17 20	7.3	107.6	27.3	108.5	2 2.3	+17 33	6.9	6.6	
Dm. 394	2 23.9	+27 56	7.9	48.7	37.4	48.1	2 26.5	+28 8	7.3	7.0	7.2
Dm. 339	2 9.7	+17 47	7.3	48.1	27.3	48.6	2 12.2	+17 0	7.0	6.7	7.0
Dm. 337	2 1.0	+27 43	8.0	46.2	37.2	48.0	2 3.6	+27 56	7.1	6.8	
367	2 12.0	+28 6	6.3	48.6	37.5	49.4	2 13.2	+28 11	5.6	5.3	
Dm. 374	2 6.3	+28 1	6.5	46.7	37.2	47.9	2 8.9	+28 14	6.8	6.5	
Dm. 382	2 9.0	+28 6	6.8	47.0	37.3	48.0	2 11.6	+28 18	6.9	6.6	6.7
Dm. 393	2 12.4	+28 4	7.3	47.4	37.3	48.0	2 15.0	+28 17	7.1	6.8	6.9
Dm. 325	2 25.5	+18 16	7.0	48.9	27.4	48.5	2 28.0	+18 28	6.7	6.4	
Dm. 337	2 33.0	+18 11	7.0	49.4	27.3	48.7	2 35.5	+18 23	6.6	6.3	
Dm. 359	1 58.5	+28 35	6.7	105.9	37.2	108.0	2 1.1	+28 48	6.5	6.2	
341	2 4.0	+18 56	6.9	49.0	27.4	49.8	2 5.1	+19 1	6.5	6.2	6.4
Dm. 283	2 5.8	+18 56	7.2	47.8	27.2	48.5	2 8.3	+19 9	7.0	6.7	6.9
Dm. 342	2 11.1	+19 1	7.5	48.1	27.3	48.6	2 13.6	+19 14	7.2	6.9	7.1
Dm. 438	2 27.6	+28 46	7.0	49.4	37.3	48.4	2 30.2	+28 58	6.7	6.4	6.5
439	2 40.8	+28 46	4.6	62.2	37.4	50.0	2 41.9	+28 50	6.5	6.2	
Dm. 455	2 36.0	+28 61	7.5	60.4	37.1	48.4	2 38.6	+29 3	6.0	5.7	
388	2 21.2	+29 8	6.6	60.2	37.4	50.1	2 22.3	+29 14	6.4	6.1	
Dm. 361	1 59.3	+29 4	7.8	105.9	37.6	108.0	2 1.9	+29 17	7.1	6.8	7.0
Dm. 332	2 4.8	+19 7	8.0	48.2	27.1	49.0	2 7.3	+19 20	7.2	6.9	7.0
365	2 11.5	+19 21	6.6	49.3	27.6	49.8	2 12.6	+19 26	5.8	5.5	
387	2 9.7	+29 11	7.3	46.9	37.4	47.8	2 12.3	+29 24	6.8	6.5	
~~Dm. 340~~	~~2 11.1~~	~~+19 1~~	~~7.5~~	~~48.3~~	~~27.2~~	~~48.8~~					
Dm. 323	2 20.4	+29 17	7.5	48.6	37.4	48.5	2 23.0	+29 29	6.3	6.0	
392	2 23.9	+19 19	6.1	60.1	27.5	49.8	2 25.0	+19 25	6.0	5.7	

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Plate 920.

V	H	Type	No. Lines	K	Focus	Other Lines.	V	H	V	H	Correc.
16.1	9.1	I	3	N	1	—	8.0	18.2	19.3	31.5	+1.5
16.2	7.8	III	2	K=H	1	—	8.1	11.6	19.2	38.1	+2.4
15.8	7.6	I	10	N	3	F.	7.9	15.2	19.4	34.5	+0.9
15.6	17.8	III?	2	K=H	1	—	7.8	35.6	19.5	14.1	−0.8
? 15.7	21.1	IIa; 3427	3	K=H	2	F. sem.	7.8	42.2	19.5	7.5	−1.5
15.2	20.2	I	1	N	1	—	7.6	40.4	19.7	9.3	−1.4
15.0	10.5	III	2	K=H	1	—	7.5	21.0	19.8	28.7	+1.3
14.3	6.1	I I	4	N K=H	1 1	— —	7.2	12.2	20.1	37.5	+1.1
14.2	10.0	III? III 3428	2	K=H	1 1	— —	7.1	20.0	20.2	29.7	+1.4
? 13.7	21.4	IIIa?	3	K=H	3	F. sem.	6.8	42.8	20.5	6.9	−0.8
13.5	7.1	I?	4	K=H	1 1	— —	6.8	14.2	20.5	35.5	+1.0
13.4	17.9	III? III	2	K=H	1 1	F.? F.?	6.7	35.8	20.6	13.9	−0.8
? 13.0	21.5	I IIa 3429	6	K=H	2	F. sem.	6.5	43.0	20.8	6.7	−1.8
12.7	10.8	III III 3430	3	K=H	1 2	F. F.	6.4	21.6	20.9	28.1	+1.1
12.5	14.7	IIIb?	3	K=H	2	F. sem	6.2	29.4	21.1	20.3	+0.1
12.0	12.5	II? II	2	K=H	1 1	F.? —	6.0	25.0	21.3	24.7	+0.4
12.0	9.4	I	10	K=H	3	F.	6.0	18.8	21.3	30.9	+0.7
11.2	9.3	I I	6 4	N K=H	1 1	— —	5.6	18.6	21.7	31.1	+1.7
10.4	17.1	III III	3 2	K=H	1 2	F. F.	5.2	34.2	22.1	15.5	−0.4
? 10.2	10.7	IIa; 3431 II	3 3	K=H	2 2	F. sem. F.?	5.1	21.4	22.2	28.3	+1.2
10.0	8.4	II? II?	2 2	K=H	1 1	— —	5.0	16.8	22.3	32.9	+2.0
? 9.8	18.5	Id	8	K=H?	2	F. sem.	4.9	37.0	22.4	12.7	−0.5
9.4	19.5	I	8	N	3	F.	4.7	39.0	22.6	10.7	−1.4
9.2	21.9	I? I	2 4	N K=H	1 1	— —	4.6	43.8	22.7	5.9	−2.2
? 9.0	24.0	IIIc? 3432	3	K=H?	3.0	Bright F. sem.	4.5	48.0	22.8	1.7	−1.7
9.0	13.9	I	9	K=H	2	—	4.5	27.8	22.8	21.9	+0.2
8.9	16.2	I? I	3 3	N K	1 1	— —	4.4	32.4	22.9	17.3	−0.4
8.4	18.9	I	10	N	4	F.	4.2	37.8	23.1	11.9	−1.2

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Mean 3

	No.	R.A.	Dec.	Mag.	H	V	H'	Red. to 1900	Cow.	Br.	Br.
Dm.	453	2 31.8	+ 29 9	7.5	50.0	37.1	48.5	2 36.4	+29 21	6.6	6.9
Dm.	471	2 39.1	+ 29 6	7.4	50.7	37.2	48.3	2 41.8	+29 17	6.5	6.8
	428	2 36.6	+ 19 29	6.8	60.8	27.4	49.9	2 36.7	+19 35	5.5	5.8
Dm.	392	2 11.6	+ 29 32	6.5	47.2	37.3	48.0	2 14.2	+29 45	6.8	7.1
	345	2 6.4	+ 29 46	5.3	47.6	37.6	49.1	2 6.6	+29 50	5.8	5.8
Dm.	376	2 6.3	+ 29 44	7.3	46.7	37.3	48.1	2 8.9	+29 57	6.3	6.6
Dm.	444	2 28.6	+ 29 47	7.8	49.6	37.3	48.3	2 31.2	+29 39	6.7	7.0
Dm.	458	2 37.6	+ 20 4	7.3	49.8	27.3	48.7	2 40.1	+20 16	6.7	7.0
Dm.	421	2 30.0	+ 30 13	7.3	50.0	37.3	48.6	2 32.7	+30 25	6.8	7.1
	360	2 6.1	+ 20 39	6.4	48.9	27.4	49.7	2 7.2	+20 44	5.4	5.7
Dm.	452	2 35.5	+ 20 32	7.2	49.7	27.3	48.7	2 38.0	+20 44	6.3	7.2
Dm.	372	2 11.4	+ 30 41	7.3	47.2	37.4	48.0	2 14.0	+30 54	6.6	6.9
Dm.	347	2 3.0	+ 30 50	6.5	46.0	37.3	47.8	2 5.6	+31 3	6.7	7.0
Dm.	418	2 28.1	+ 30 58	6.1	49.7	37.4	48.6	2 30.8	+31 10	6.0	6.3
	387	2 20.4	+ 31 15	5.7	49.8	37.4	49.7	2 21.5	+31 22	5.9	6.2
Dm.	348	2 24.0	+ 21 22	7.5	49.0	27.4	48.6	2 26.5	+21 34	6.4	6.7
	417	2 32.0	+ 21 26	6.4	60.8	27.4	50.1	2 33.1	+21 32	5.4	5.7
Dm.	463	2 31.8	+ 31 41	7.3	60.4	37.3	48.7	2 34.5	+31 53	6.5	6.8
Dm.	334	2 13.9	+ 22 12	6.8	48.1	27.4	48.5	2 16.4	+22 25	6.2	6.5
Dm.	473	2 28.4	+ 32 15	6.5	49.8	37.3	48.6	2 31.1	+32 27	6.1	6.4
Dm.	490	2 34.0	+ 32 17	7.4	60.8	37.3	48.8	2 36.7	+32 29	6.8	7.1
	368	2 12.2	+ 22 37	6.6	49.2	27.5	49.7	2 13.3	+22 43	6.0	6.3
	356	2 8.8	+ 32 49	6.2	47.8	37.5	49.2	2 10.0	+32 54	5.3	5.8
Dm.	390	2 1.8	+ 32 40	7.0	45.6	37.3	47.8	2 4.4	+32 53	6.7	7.0
	333	2 0.4	+ 22 64	2.0	48.4	27.4	50.1	2 1.5	+23 0	3.8	4.1
	390	2 22.4	+ 22 56	6.1	60.2	27.4	50.0	2 23.5	+23 2	5.6	5.9
Dm.	433	2 15.3	+ 32 51	8.0	47.7	37.2	48.1	2 18.1	+33 3	6.7	7.0
	361	2 10.2	+ 33 17	4.2	48.0	37.6	49.2	2 11.3	+33 23	4.2	4.5

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Plate 920.

	V	H	Type	No. Lines	K	Focus	Other lines.	V	H	V	H	Correc.
	8.4	13.6	III	II 2	K=H	K=H 2	F?	4.2	27.2	23.1	22.6	+0.4
	7.6	21.5	III	III 2 3	K=H	K=H 1 2	F	3.8	43.0	23.6	6.7	-1.0
?	7.6	19.1	II a	3H33 X 3	K=H	? 2	7. seen	3.8	38.2	23.6	11.5	-1.4
	7.4	20.2	III	2	K=H	1	—	3.7	40.4	23.6	9.3	-0.9
	7.2	12.2	II a	3H34 II 2	K=H	K=H 1 1	Seen Seen	3.6	24.4	23.7	26.3	+0.9
	6.8	12.5	III	III X 3 3	K=H	K=H 1 2	F. F	3.4	25.0	23.9	24.7	+0.8
?	6.6	10.4	II a	3H35 2	K=H	2	F? seen	3.3	20.8	24.0	28.9	+0.9
	6.5	11.4	I ?	X 7	K	K=H 2	F	3.2	22.8	24.1	26.9	+1.2
?	6.0	20.0	II a	3H36 X 2	K=H	2	F? seen	3.0	40.0	24.3	9.7	-0.9
	6.0	22.1	I	8	K=2H?	6	7	3.0	44.2	24.3	6.6	-2.6
	5.6	15.5	I	5	N	1	—	2.8	31.0	24.5	18.7	-0.1
	5.6	12.0	I	5	N	1	—	2.8	24.0	24.5	25.7	+1.0
	5.5	8.0	I	6	N	1	—	2.8	16.0	24.5	33.7	+2.5
?	5.5	13.4	II a	3H37 3	K=H	2	7. seen	2.8	26.8	24.5	22.9	+0.3
	5.2	16.4	III	III 2 2	K=H	K=H 1 1	— —	2.6	32.8	24.7	16.9	-0.6
	4.8	15.1	I	5	N	1	—	2.4	30.2	24.9	19.5	0
	4.5	20.0	I	5	N	2	—	2.2	40.0	26.1	9.7	-0.9
	4.5	7.3	I	7	N	2	—	2.2	14.6	26.1	35.1	+1.5
	4.5	6.8	II ?	X 2	K=H	1	—	2.2	13.6	26.1	36.1	+3.0
	4.5	24.1	I	6	N	1	—	2.2	48.2	26.1	1.5	-1.7
	4.1	22.8	I ?	8	K=H?	2	7.	2.0	45.6	26.3	4.1	-1.3
	4.2	22.1	III	III 2 2	K=H	K=H 1 1	— —	2.1	44.2	26.2	6.6	-1.4
	3.7	12.9	III	8	K=H	1	F	1.8	25.8	26.6	23.9	+0.8
	2.5	8.8	I ? I	2 3 3	N	N 1 1	—	1.2	17.6	26.1	32.1	+1.3
	2.6	20.1	I ? I	? 3 3	N	K=H N 1	— —	1.3	40.2	26.0	9.5	-1.0

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Mean 3

	No.	R.A.	Dec.	Mag.	H	V	HE'	Red. to 1900.		Br.	Br.	
Dm.	445	2 21.6	+ 33 11	6.5	48.8	37.4	48.4	2 24.3	+33 23	6.5	6.8	6.5 6.8
Dm.	297	2 4.5	+ 23 30	6.7	47.6	27.3	48.5	2 7.0	+23 43	6.7	7.0	6.5 6.9
	360	2 9.9	+ 33 42	6.0	48.1	37.5	49.5	2 10.8	+33 46	5.8	5.8	
Dm.	303	2 7.1	+ 23 37	6.5	47.6	27.3	48.4	2 9.6	+23 50	6.8	7.0	
Dm.	458	2 25.0	+ 33 43	7.5	49.4	37.3	48.5	2 27.7	+33 55	6.9	6.7	
	398	2 25.6	+ 34 1	6.9	50.6	37.4	49.8	2 26.8	+34 8	6.9	6.7	6.3 6.7
	410	2 30.0	+ 24 8	6.1	50.8	27.4	49.9	2 31.2	+24 12	5.9	6.2	
Dm.	471	2 27.1	+ 34 5	7.3				2 29.8	+34 17			
	~~463~~	~~2 28.6~~	~~+ 34 10~~	~~6.6~~	~~51.4~~	~~37.4~~	50.2	~~2 29.7~~	~~+34 15~~	5.7	6.0	
	358	2 8.9	+ 24 30	6.6	48.9	27.5	49.8	2 10.0	+24 35	5.7	6.0	
	336	2 2.4	+ 34 25	3.1	46.6	37.4	49.2	2 3.5	+34 31	3.8	4.1	
Dm.	347	2 17.6	+ 24 30	7.3	48.6	27.3	48.7	2 20.2	+24 42	6.3	6.6	
Dm.	462	2 25.5	+ 34 30	7.0	49.5	37.3	48.5	2 28.2	+34 42	6.5	6.8	
Dm.	504	2 35.3	+ 34 30	7.3	51.3	37.3	48.8	2 38.0	+34 42	6.5	6.8	
	391	2 23.6	+ 24 42	6.8	50.4	27.5	50.1	2 24.8	+24 48	5.7	6.0	
Dm.	425	2 14.8	+ 34 47	7.0	47.6	37.4	48.2	2 17.5	+35 0	6.9	7.2	6.8 7.1
Dm.	437	2 18.1	+ 34 57	6.9	48.3	37.4	48.3	2 20.8	+35 9	6.3	6.6	
	357	2 8.9	+ 26 14	6.8	48.9	27.4	49.8	2 10.0	+25 19	5.8	6.1	
Dm.	441	2 35.4	+ 25 2	6.7	50.0	27.2	48.5	2 38.0	+25 14	6.1	6.3	
Dm.	513	2 38.2	+ 34 57	6.5	51.8	37.2	48.8	2 40.9	+35 9	6.1	6.4	
Dm.	349	1 58.6	+ 25 0	6.5	106.8	27.2	108.5	2 1.1	+25 13	5.7	6.0	
	~~339~~	~~2 2.6~~	~~+ 25 23~~	~~6.1~~	48.2 ~~47.8~~	~~27.4~~	48.3	2 3.7	+25 28	5.7	5.7	
Dm.	~~362~~	~~2 3.0~~	~~+ 25 14~~	~~6.8~~	~~49.2~~	~~27.3~~	48.6	2 5.5	+25 27	6.8	7.2	6.6 7.1
	394	2 24.8	+ 35 38	6.3	50.6	37.4	49.8	2 26.0	+35 43	6.2	6.7	
Dm.	436	2 32.3	+ 25 60	8.0	49.9	27.2	48.6	2 34.9	+26 12			
	372	2 7.4	+ 25 58	8.4	47.6	27.3	48.6	2 10.0	+26 11			
Dm.	~~446~~	~~2 7.2~~	~~+ 36 6~~	~~7.8~~	~~49.2~~	~~37.4~~	48.2			6.9	7.2	7.1

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F. nw. & c. 5.6 5.5

F. ch. 8.0

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Plate 921.

V	H	Type	No. lines	K	Focus	Other lines	V	H	V	H	Correc.
23.2	13.4	I	?		1	—	11.6	26.8	46.0	82.8	+1.0
23.1	17.4	I	6	N	1	—	11.6	34.8	46.0	74.8	-1.4
22.8	13.2	I ?	6	K=H	1	—	11.4	26.4	46.2	83.2	+1.2
22.5	19.0	I	7	N	1	—	11.2	38.0	46.4	71.6	-2.5
21.9	23.2	I	3	N	1	—	11.0	46.4	46.6	63.2	-5.1
22.0	8.8	II ? II	2 2	K=H K=H	1	— —	11.0	17.6	46.6	92.0	+3.8 +2.5
21.8	15.5	I I	4	N N	1 1	—	10.9	31.0	46.7	78.6	-0.2
21.5	16.9	I	7	N	1	—	10.8	33.8	46.8	75.8	-1.2
21.4	11.4	III	12	K=H	1	—	10.7	22.8	47.1	86.8	+1.4
21.4	13.9	I ?	5	N ?	1	—	10.7	27.8	46.9	81.8	+0.4
21.3	17.3	I	9	N	2	F.	10.6	34.6	47.1	75.0	-1.4
?	21.0	19.2	II a 3438	3	K=H	1	F. seen	10.5	38.4	47.2	71.2	-2.7
	20.7	10.1	II a? II a 3439	12 2	K=H	1	— seen	10.4	20.2	47.2	89.4	+3.1
	20.5	10.4	II a? 3440	2	K=H	1	— seen	10.2	20.8	47.4	88.8	+1.8
	20.4	18.5	III	2	K=H	1	—	10.2	37.0	47.4	72.6	-2.2
?	20.3	22.1	I	8	N?	3	F. seen	10.2	44.2	47.4	65.4	-3.0
	19.6	16.2	I a? 3441	2	K=H	1	— seen	9.8	32.4	47.8	77.2	-0.5
	19.6	14.7	II a? II a 3442	12 2	K=H	1 1	— seen	9.8	29.4	47.8	80.2	+0.1
?	19.6	14.0	II a? 3443	2	K=H	1	seen	9.8	28.0	47.8	81.6	+0.4
	19.8	10.3	I	9	N	2	—	9.9	20.6	47.7	89.0	+1.8
	18.8	12.0	III III	2 2	K=H	1	—	9.4	24.0	48.2	85.6	+1.3
	18.6	11.0	II a 3444	3	K=H	2	F. seen	9.3	22.0	48.3	87.6	+1.7
	18.5	14.4	I a II a 3445	2 2	K=H	1 1	F? seen	9.2	28.8	48.4	80.8	+0.4
	18.5	18.8	III III	12 2	K=H K=H	1	— —	9.2	37.6	48.4	72.0	-2.6
	18.1	24.2	I	8	N	3	F.	9.0	42.0	48.6	67.6	-2.7
?	18.4	17.3	II a 3446	3	K=H	2	F. seen	9.2	34.6	48.4	75.0	-1.5
	18.3	13.6	I ? I	4	N K=H	1 1	— —	9.2	27.2	48.4	82.4	+0.6
	18.2	10.6	I a? II a 3447	2 2	K=H K=H	1 1	— Seen	9.1	21.2	48.5	88.4	+1.8

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Mean 3

Cor.

No.	R.A.	Dec.	Mag.	H	V	H'	Red. to 1900	Bu	Br.
Dm. 619	2 21.8	+ 45 45	7.3	48.6	57.4	47.6	2 24.7 + 45 57		
Dm. 589	2 9.9	+ 45 48	6.3	44.7	57.4	46.1	2 12.8 + 46 1		
Dm. 620	2 22.4	+ 45 57	7.2	48.8	57.4	47.6	2 25.3 + 46 9		
Dm. 539	2 5.5	+ 46 1	7.0	43.5	57.2	46.0	2 8.3 + 46 14		
Dm. 498	1 53.2	+ 46 9	7.3	99.6	57.2	104.7	1 56.8 + 46 22	6.7	7.0
622	2 34.9	+ 46 14	7.2	52.3	57.2	48.7	2 37.8 + 46 26		
~~Dm. 541~~	~~2 33.9~~	~~+ 46 34~~	~~7.8~~	~~51.5~~	~~57.6~~	~~49.0~~		6.7	7.0 6.9
Dm. 478	2 16.4	+ 46 28	7.2	47.4	47.4	47.6	2 19.1 + 46 40	6.6	6.9 6.6
Dm. 557	2 11.3	+ 46 38	6.5	45.1	57.4	46.3	2 14.2 + 46 51	6.5	6.0
402	2 28.2	+ 46 48	6.0	51.0	47.5	49.6	2 29.4 + 46 56	6.5	6.8 7.0
Dm. 499	2 20.3	+ 46 42	6.5	48.1	47.4	47.7	2 23.0 + 46 54	6.3	6.6
364	2 11.5	+ 46 49	6.2	46.1	57.4	47.5	2 12.8 + 46 55	5.2	5.5
Dm. 436	2 4.8	+ 46 49	6.2	43.2	57.3	45.9	2 7.7 + 47 2	6.1	6.4
~~Dm. 605~~	~~2 31.6~~	~~+ 46 56~~	~~7.7~~	~~51.8~~	~~57.3~~	~~48.7~~	2 34.6 + 47 8	6.8	7.1 7.0
Dm. 588	2 29.3	+ 37 7	6.5	50.1	47.3	48.3	2 32.1 + 37 19	6.3	6.3
590	2 6.6	+ 47 8	6.7	43.6	57.3	45.8	2 9.5 + 47 21	6.6	6.9
~~Dm. 604~~	~~2 8.8~~	~~+ 47 29~~	~~7.2~~	~~45.8~~	~~57.7~~	~~48.0~~		6.8	7.1
334	2 1.3	+ 37 18	4.8	45.5	47.5	48.5	2 2.5 + 37 23	5.3	5.3
Dm. 544	2 14.4	+ 37 36	7.0	46.8	47.4	47.3	2 17.1 + 37 49	6.3	6.6
631	2 18.1	+ 47 34	7.8	47.5	57.4	47.4	2 21.0 + 47 46		
~~Dm. 635~~	~~2 19.0~~	~~+ 47 38~~	~~7.5~~	~~48.4~~	~~57.4~~	~~48.3~~		6.7	7.1 7.0
Dm. 560	2 20.4	+ 37 36	7.2	48.4	47.4	48.0	2 23.1 + 37 47	6.5	6.8
Dm. 691	2 29.5	+ 37 28	6.5	50.1	47.4	48.3	2 32.3 + 37 40	5.7	6.0
Dm. 506	2 25.2	+ 38 6	7.0	49.2	47.5	47.9	2 28.0 + 38 18	6.9	7.2 7.0
~~Dm. 523~~	2 27.9	+ 38 6	6.2	49.9	47.4	48.2	2 30.7 + 38 18	5.8	6.1
Dm. 487	2 19.2	+ 38 11	7.2	48.0	47.4	47.6	2 22.0 + 38 23	6.8	6.7 6.9
Dm. 633	2 5.5	+ 48 7	6.8	43.1	57.3	45.7	2 8.4 + 48 20	6.9	7.2 7.0
340	2 3.6	+ 38 29	6.6	45.6	47.5	48.3	2 4.8 + 38 34	5.7	5.8
Dm. 648	2 10.0	+ 48 16	6.7	44.6	57.5	46.1	2 12.9 + 48 29	6.1	6.4
Dm. 491	2 21.0	+ 38 30	7.0	48.2	47.7	47.6	2 23.8 + 38 42	6.5	6.8 6.8
Dm. 527	2 29.8	+ 38 31	7.8	51.0	47.6	49.2	2 32.6 + 38 43	6.4	6.9 6.9

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Plate 921.

V	H	Type	No. lines	K	Focus	Other lines.	V	H	V	H	Correc.
?	18.0	6.4	II a ? 3448	K=H	1	F. seen	9.0	12.8	48.6	96.8	+5.8
?	17.6	9.3	II a 3449 3	K=H 1.5	3	F. seen.	8.8	18.6	48.8	91.0	+3.8
?	17.5	15.9	II a? 3450 II a 2	2 K=H	K=H 1	1 Seen seen.	8.8	31.8	48.8	77.8	-0.3
	17.5	21.6	II? II 2	2 K=H	K=H 1	1 — —	8.8	43.2	48.8	66.4	-3.0
	17.3	21.8	II ? II ? 2	2 K=H	K=H 1	1 — —	8.6	43.6	49.0	66.0	-4.6
	17.1	12.6	II II 2	2 K=H	K=H 1	1 — —	8.6	25.2	49.0	84.4	+1.0
	17.4	7.8	III III 3	2 K=H	K=H 1	1 F. —	8.7	15.6	48.9	94.0	+4.8
	16.9	10.6	I 8	N	1	F.	8.4	21.2	49.2	88.4	+3.0
	16.8	11.6	I 10	N	2	F.	8.4	23.2	49.2	86.4	+1.5
	16.6	17.6	I 9	K=H	2	F.	8.3	36.2	49.3	74.4	-1.2 -1.9
	16.5	18.2	I I 4	N?	1	1 — —	8.2	36.4	49.4	73.2	-2.2 -1.5
	16.5	23.0	II? II 2	2 K=H	K=H 1	1 — —	8.2	46.0	49.4	63.6	-3.7
	16.0	16.7	I 9	N	2	F.	8.0	33.4	49.6	76.2	-1.2
III? 6.1, 6.5	16.3	15.6	III? 3451 3	K=H	2	F. seen	8.2	31.2	49.4	78.4	-0.6
	16.4	12.3	I I 3 4	N K=H	1	1 — —	8.2	24.6	49.4	85.0	+1.8
	16.4	10.9	I 9	N	2	F.	8.2	21.8	49.4	87.8	+1.2
	16.1	12.5	I 7	N	1	—	8.0	25.0	49.6	84.6	+1.7 +1.2
	16.1	12.8	I? I 3 3	N N	1	1 — —	8.0	25.6	49.6	84.0	+1.0 +1.7
	15.7	9.0	II a 3452 4 3	K=H	2	F. seen	7.8	18.0	49.8	91.6	+2.8
	15.7	11.4	I? I 5	N K=H	2	1 — —	7.8	22.8	49.8	86.8	+1.6
	15.7	11.5	I? 7	N	1	—	7.8	23.0	49.8	86.6	+2.5
	15.7	12.8	I 6	N	2	—	7.8	25.6	49.8	84.0	+1.7
	15.7	13.3	I? I 3 4	4 K=H	K=H 1	1 F.? —	7.8	26.6	49.8	83.0	+0.8
III? 6.2, 6.6	15.8	15.2	III b c 3 3453	K=H	2	F. bright excl.	7.9	30.4	49.7	79.2	-0.1
	15.7	18.0	II? 2	K=H	1	F.	7.8	36.0	49.8	73.6	-1.3
	15.7	8.9	I ? I 6 5	N	K=H 1	1 — —	7.8	17.8	49.8	91.8	+2.8 +4.2
?	15.2	14.7	II? 3454 3	K=H	2	F. seen	7.6	29.4	50.0	80.2	+0.3
	15.2	20.0	III III 2	2 K=H	K=H 1	1 — —	7.6	40.0	50.0	69.6	-2.3

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Mean 3

Cor.

No.	R.A.	Dec.	Mag.	H	V	H'	Red. to 1900	Br.	Br.
Dm. 783	2 42.8	+ 48 13	7.2	55.6	57.2	49.8	2 45.8	+48 24	6.2 6.5
429	2 36.0	+ 48 43	4.2	54.6	57.5	50.8	2 37.3	+48 48	4.8 5.1
Dm. 472	2 15.3	+ 38 41	7.5	47.1	47.5	47.4	2 18.0	+38 53	6.6 6.9 6.8
Dm. 416	2 0.1	+ 38 40	7.3	43.3	47.5	46.3	2 2.8	+38 51	6.7 7.0 7.1
Dm. 603	1 57.7	+ 48 56	8.4	101.3	57.5	105.9	2 0.8	+49 1	6.8 7.1 7.0
Dm. 502	2 23.7	+ 38 54	7.5	48.9	47.5	47.9	2 26.3	+39 6	6.5 6.8 6.7
Dm. 762	2 39.0	+ 48 34	7.0	54.6	57.3	49.8	2 42.0	+48 46	6.8 6.9 7.0 7.1
Dm. 722	2 30.6	+ 48 56	6.7	51.8	57.3	48.8	2 33.6	+49 8	6.1 6.4
Dm. 573	2 26.4	+ 39 3	7.0	49.6	47.4	48.1	2 29.2	+39 15	5.7 6.0
Dm. 521	2 10.7	+ 39 10	6.8	43.9	47.5	47.1	2 13.4	+39 23	6.0
~~369~~	~~2 13.1~~	~~+ 49 26~~	~~6.6~~	~~49.3~~	~~57.9~~	~~51.0~~			
614	2 7.1	+ 49 9	7.5	43.5	57.4	43.7	2 10.0	+49 23	6.5 6.8 6.8
~~Dm. 521~~	~~2 10.7~~	~~+ 39 10~~	~~6.8~~	~~47.1~~	~~47.4~~	~~48.6~~			
Dm. 464	1 57.1	+ 39 4	7.8	103.1	47.3	106.8	1 59.8	+39 17	6.8 7.1 7.0
369	2 13.1	+ 49 36	5.6	46.5	57.6	47.7	2 14.4	+49 42	5.5
~~378~~	~~2 16.5~~	~~+ 49 27~~	~~5.5~~	~~49.9~~	~~57.4~~	~~51.1~~			
378	2 16.5	+ 49 27	5.5	47.7	57.7	48.2	2 17.8	+49 33	5.9 6.0
~~381~~	~~2 17.7~~	~~+ 49 44~~	~~4.9~~	~~48.9~~	~~57.9~~	~~49.4~~			
Dm. 701	2 25.5	+ 49 13	7.8	50.1	57.4	48.3	2 28.3	+49 25	6.7 7.0 7.0
Dm. 582	2 28.3	+ 39 15	6.8	50.1	47.4	48.9	2 31.1	+39 27	5.8 6.1
696	2 25.0	+ 49 26	7.0	50.0	57.4	48.3	2 28.0	+49 38	
~~Dm. 559~~	~~2 23.4~~	~~+ 39 25~~	~~7.3~~	~~48.4~~	~~47.4~~	~~47.2~~			6.2 6.5
559	2 23.4	+ 39 25	7.3	49.0	47.4	48.0	2 26.2	+39 37	6.5 6.8 6.9
~~Dm. 695~~	~~2 25.0~~	~~+ 49 26~~	~~7.0~~	~~50.6~~	~~57.4~~	~~48.9~~			
427	2 34.8	+ 39 41	4.9	52.8	47.5	50.0	2 35.9	+39 46	5.0 5.3
Dm. 577	2 27.3	+ 39 34	7.7	50.1	47.4	48.5	2 30.1	+39 46	6.3 6.7 6.5
Dm. 719	2 27.8	+ 49 36	7.2	50.8	57.4	48.3	2 30.8	+49 48	6.3 6.6
Dm. 560	2 23.4	+ 39 37	6.8	49.0	47.4	47.3	2 26.2	+39 49	5.9 6.2
Dm. 554	2 21.6	+ 39 31	6.8	48.2	47.3	47.4	2 24.4	+39 43	6.4 6.7 6.7
381	2 17.7	+ 49 44	4.9	48.1	57.6	48.2	2 18.9	+49 50	5.7 6.0
~~Dm. 666~~	~~2 18.2~~	~~+ 49 55~~	~~6.5~~	~~48.6~~	~~57.8~~	~~48.7~~			6.4
Dm. 517	2 9.8	+ 39 36	6.5	45.8	47.4	47.1	2 12.5	+39 49	6.2 6.6
611	2 33.3	+ 39 38	8.7	51.1	47.4	48.3	2 36.1	+39 50	6.4 6.7 6.7
~~Dm. 627~~	~~2 36.4~~	~~+ 50 1~~	~~8.1~~	~~54.2~~	~~57.8~~	~~50.0~~			
Dm. 666	2 18.2	+ 49 55	6.5	47.6	57.5	47.3	2 21.2	+50 7	5.9 6.2
Dm. 498	2 4.3	+ 39 50	7.0	44.3	47.4	46.6	2 7.0	+40 3	6.7 7.0 7.0 7.1

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Plate 9 21

V	H	Type	No. lines	K	Focus	Other lines	V	H	V	H	Correc.
14.7	7.6	I ? I	4	N ? K=H	1 1	— —	7.4	16.2	60.2	94.4	+3.6
14.6	11.5	I ? I	2 2	N N	1 1	— —	7.3	23.0	60.3	86.6	+1.6
14.9	11.7	I ! I ?	4	K=H K=H	1	— —	7.4	23.4	60.2	86.2	+1.6 +2.6
14.8	20.2	II ? II 3H5b	2 2	N K=H K=H	1 1	I ? —	7.4	40.4	60.2	69.2	−2.5
14.6	19.9	II a ? 3H5b	3	K=H	1	I faint	7.3	39.8	60.3	69.8	−2.4
14.2	7.7	II a ? II ?	2 2	K=H K=H	1 1	faint	7.1	15.4	60.6	94.2	+3.6
14.1	8.1	I ?	3	N	1	—	7.0	16.2	60.6	93.4	+4.8
14.5	15.1	I I	4	N N	1 1	— —	7.2	30.2	60.4	79.4	0
14.2	14.7	I I	4	N K=H	1 1	— —	7.1	29.4	60.6	80.2	+0.1
14.4	17.0	II II 3H57	2 2	K=H K=H	2 2	— —	7.2	34.0	60.4	75.6	−1.5
14.1	19.0	III 3H57	3	K=H	2	I faint	7.0	38.0	60.6	71.6	−3.0
14.0	19.9	I	6	N	1	—	7.0	39.8	60.6	69.8	−3.6
13.9	20.9	I	3	N	1	—	7.0	41.8	60.6	67.8	−4.2
13.9	20.4	III ? III	2 2	K=H K=H	1 1	— —	7.0	40.8	60.6	68.8	−3.8
13.6	18.1	I I	3 3	N N	1 1	— —	6.8	36.2	60.8	73.4	−1.5
13.7	16.6	I I	3 4	N K=H	1 1	— —	6.8	33.2	60.8	76.4	−1.2 −0.8
13.6	16.4	I	10	K=H	2	I ?	6.8	32.8	60.8	76.8	−0.7
13.4	6.3	III III	2 2	K=H K=H	1 1	I ?	6.7	12.6	60.9	97.0	+6.2
13.1	22.7	I	5	N	1	—	6.6	45.4	61.0	64.2	−3.8 −6.7
13.0	8.6	I	5	K=H	1	—	6.5	17.2	61.1	92.4	+3.2
12.8	8.4	II ?	3	K=H	1	I	6.4	16.8	61.2	92.8	+4.7
12.6	17.6	I I	3 4	N K=H	1 1	— —	6.3	35.2	61.3	74.4	−1.9
12.5	18.2	I I 3H58	3 4	N N	1 1	— —	6.2	36.4	61.4	73.2	−2.3
12.7	22.1	II a ? 3H58	3	K=H	1	I faint	6.4	44.2	61.2	65.4	−5.3
12.5	12.6	I I	4 4	N K=H	1 1	— —	6.2	25.2	61.4	84.4	+1.1
12.1	16.0	I	10	K=H	2	I ?	6.0	32.0	61.6	77.6	−1.2
12.0	21.3	I ? I	3 3	N N	1 1	— —	6.0	42.6	61.6	67.0	−3.2
12.2	21.5	I	5	N	1	—	6.1	43.0	61.6	66.6	−3.3
12.1	21.8	I	5	N	1	—	6.0	43.6	51.6	66.0	

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Mean 3

Corr

No.	R.A.	Dec.	Mag.	H	V	H'	Red to 1900	Br.	Br.	
Dm. 628	2 36.8	+ 39 58	7.8	52.0	47.4	48.4	2 39.6 +40 10	6.8	6.5	6.9
Dm. 551	2 26.7	+ 40 4	8.2				2 28.5 +40 16			
Dm. 796	2 27.8	+ 40 3	8.0	50.8	47.3	49.2	2 30.6 +40 15	7.3	7.0	7.4
570	2 26.2	+ 39 57	8.0	49.6	47.4	48.0	2 29.0 +40 9			
Dm. 724	2 28.4	+ 49 51	6.6	51.8	57.2	49.2		6.8	6.8	6.9
496	2 4.1	+ 39 59	7.2	44.5	47.4	47.0	2 6.8 +40 12			
Dm. 498	2 4.3	+ 39 60	7.0	44.7	47.2	47.2		7.0	6.9	7.0
Dm. 462	2 4.6	+ 40 6	7.3	44.4	47.4	46.8	2 7.3 +40 19	6.7	6.4	
589			7							
Dm. 589	2 36.6	+ 40 18	7.9	52.0	47.4	48.4	2 39.4 +40 30	6.9	6.6	7.0
Dm. 636	2 38.5	+ 50 17	7.8	54.7	57.3	49.9	2 41.6 +50 29	7.2	6.9	
514	2 17.1	+ 40 14	8.2	47.3	47.4	47.3	2 19.9 +40 26			
Dm. 521	2 18.4	+ 40 24	7.7	48.6	47.6	48.6		6.8	6.8	6.9
521	2 18.4	+ 40 24	7.7	47.8	47.5	47.7	2 21.3 +40 36			
Dm. 504	2 19.0	+ 40 36	7.8	48.4	47.7	48.3		6.9	6.6	6.9
Dm. 522	2 10.6	+ 50 17	7.0	44.6	57.5	46.1	2 13.6 +50 30	6.5	6.2	6.6
348	2 6.6	+ 60 60	6.4	43.6	57.5	46.6	2 6.9 +50 36	5.9	5.6	
Dm. 466	2 1.2	+ 50 22	7.2	41.0	57.4	44.6	2 4.1 +50 35	6.7	6.4	
Dm. 455	1 58.2	+ 50 24	7.9	100.0	57.4	104.2	2 1.1 +50 37	7.1	6.8	
Dm. 459	1 59.7	+ 50 23	8.1	100.5	57.4	104.3	2 2.6 +50 36	7.0	6.7	7.2
								7.3	7.0	7.5
Dm. 476	2 9.3	+ 40 39	8.0	45.5	47.4	47.1	2 12.1 +40 52	7.0	6.7	7.0
530	2 11.8	+ 50 37	8.3	45.0	57.4	46.2	2 14.8 +50 50	7.2	6.9	
Dm. 495	2 13.4	+ 40 30	8.4	46.6	47.3	47.4		5.6	5.3	7.1
374	2 16.4	+ 40 61	6.0	48.2	47.6	48.9	2 16.6 +40 57	5.6	5.3	
Dm. 654	2 44.3	+ 50 34	6.5	56.9	57.3	50.7	2 46.4 +50 45	7.2	6.9	7.1
434	1 57.2	+ 40 50	7.3	100.6	47.4	51.2	1 59.9 +41 8			
Dm. 430	2 54.1	+ 50 57	7.6	99.5	57.6	105.2		6.5	6.2	
Dm. 577	2 34.5	+ 40 53	7.1	51.7	47.4	48.5	2 37.3 +40 5	6.7	6.4	
Dm. 630	2 38.0	+ 50 57	7.6	54.8	57.4	50.1	2 41.1 +51 9	6.8	6.5	
								7.1	6.8	
Dm. 538	2 8.3	+ 51 7	8.2	43.5	57.4	45.4	2 11.3 +51 20	6.8	6.5	7.0
Dm. 530	2 6.5	+ 51 11	8.2	42.9	57.4	45.2	2 9.5 +51 24	7.0	6.7	7.1
430	1 54.1	+ 50 57	7.6	98.3	57.4	103.6	1 57.0 +51 10			
Dm. 483	1 54.8	+ 51 16	6.7	99.0	57.7	104.3		6.9	6.6	
Dm. 480	2 24.0	+ 41 11	7.5	49.2	47.4	48.1	2 26.8 +41 23	6.9	6.6	7.0
Dm. 556	2 13.6	+ 51 24	6.5	45.6	47.4	46.8	2 16.6 +51 37	6.1	5.8	
412	2 0.7	+ 41 19	8.0	43.3	47.3	46.6	2 3.4 +41 32			
Dm. 411	2 0.2	+ 41 16	7.5	42.8	47.3	46.0		6.7	6.4	6.9
411	2 0.2	+ 41 16	7.5	43.2	47.4	46.5	2 2.9 +41 29			
Dm. 408	1 59.7	+ 41 29	8.0	102.7	47.6	106.0		6.4	6.1	
Dm. 483	1 54.8	+51 16	6.7	98.4	57.3	1 57.7	+51 29	6.5		

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Plate 921

V	H	Type	No. lines	K	Focus	Other lines.	V	H	V	H	Correc.
11.6	7.4	I?	3	N	1	—	5.8	14.8	61.8	94.8	+3.9
11.6	13.0	I	0	K=H	2	Fl.	5.8	26.0	61.8	83.6	+1.0
?	11.5	23.4	III	he 3459 3	K=H	1	Fl. faint	5.8	46.8	61.8	62.8	-4.3
	11.2	7.7	II	a 3460 2	K=H	1	Fl.	5.6	15.4	62.0	94.2	+5.4
	11.4	11.3	I	8	?	2	Fl.	5.7	22.6	61.9	87.0	+1.8
	11.0	13.2	I	?	N	1	—	5.5	26.4	62.1	83.2	+0.9
✓	11.1	14.6	I	? I 4	N	K=H 1	1	— —	5.6	29.2	62.0	80.4	+0.2
	11.1	17.1	I	? 6	N	1	Fl.	5.6	34.2	62.0	75.4	-1.6
✓	11.0	18.3	III	III 2 2	K=H	K=H 1	1	— —	5.5	36.6	62.1	73.0	-1.6
✓	10.5	9.3	I	? I 3 3	N	N 1	1	— —	5.2	18.6	62.4	91.0	+3.0
	10.5	10.9	I	7	K=H	1	—	5.2	21.8	62.4	87.8	+3.2	
✓	10.5	11.7	I	I 3 2	N	N 1	1	— —	5.2	23.4	62.4	86.2	+2.5
✓	10.5	12.6	II	II 3 3	K=H	K=H 1	1	Fl. Fl.	5.2	26.2	62.4	84.4	+1.2
	10.4	17.0	I	6	N	1	—	5.2	34.0	62.4	75.6	-1.6	
✓	10.4	21.2	II	? II 3461 1 3 2	N	K=H K=H 1	1	Fl. —	5.2	42.4	62.4	67.2	-3.3
?	10.3	6.7	II	a? 1 3	K=H	3	Fl. faint	5.2	13.4	62.4	96.2	+6.4	
	9.8	7.2	I	7	N	2	Fl.	4.9	14.4	62.7	95.2	+6.0	
✓	9.8	13.8	I	I? I 4 4	K=H	K=H 1	1	Fl.? —	4.9	27.6	62.7	82.0	+1.0
	9.7	19.8	II	2	K=H	1	—	4.8	39.6	62.8	70.0	-3.7	
✓	9.6	21.6	II	II 2 2	K=H	K=H 1	1	— —	4.8	43.2	62.8	66.4	-3.6
✓	9.6	21.8	I	I? I 2 3	K=H	N 1	1	— —	4.8	43.6	62.8	66.0	-3.6
	9.0	8.9	I		N	1	Fl.	4.5	17.8	63.1	91.8	+3.4	
	9.1	10.2	III	2	K=H	2	Fl.?	4.6	20.4	63.0	89.2	+3.8	
?	9.3	23.9	II	a 3462 3	K=H	1	Fl. faint	4.6	47.8	63.0	61.8	-7.0	
	8.6	7.2	I	4	N	1	—	4.3	14.4	63.3	95.2	+6.1 +3.3	
	8.5	19.8	III	4	K=H	1	Fl.	4.2	39.6	63.4	70.0	-3.7	
	8.0	10.0	I	?	K=H	1	Fl.	4.0	20.0	63.6	89.6	+2.8	
	7.5	7.4	I		K=H?	1	—	3.8	14.8	63.8	94.8	+4.3	

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Mean 3

No.	R.A.	Dec.	Mag.	H	V	H′	Red. to 1900	Br.	Br.
Dm. 538	2 37.8	+ 41 34	7.5	52.6	47.4	48.7	2 40.7	+41 46	6.8	6.5	
Dm. 588	2 23.4	+ 51 40	6.5	49.4	57.5	48.4	2 26.4	+51 52	6.2	5.9	
324	1 66.6	+ 41 46	2.1	103.3	47.6	107.6	1 57.7	+41 51	4.5	4.7	4.4
							1 54.4	+41 51			
Dm. 636	2 40.4	+ 51 40	7.5	55.8	57.3	50.4	2 43.5	+51 52	6.8	6.5	
Dm. 495	2 27.4	+ 41 46	7.3	50.0	47.5	48.2	2 30.2	+41 58	6.2	5.9	
Dm. 474	2 22.3	+ 41 55	7.7	48.7	47.4	47.8	2 25.1	+42 7	7.0	6.7	
Dm. 579	2 18.1	+ 51 54	8.0	47.3	57.5	47.1	2 21.1	+52 6	6.9	6.6	7.0
Dm. 548	2 9.9	+ 51 52	7.0	44.1	57.5	45.7	2 13.9	+52 8	6.5	6.2	
435	2 8.7	+ 41 55	7.9	45.3	47.4	46.9	2 11.5	+42 8	7.0	6.7	7.1
~~Dm. 489~~	~~2 8.9~~	~~+ 42 14~~	~~6.7~~	~~45.5~~	~~47.7~~	~~47.1~~			7.3	7.0	7.4
426	2 34.8	+ 42 11	cmc.	53.4	47.4	50.4	2 36.1	+42 16	6.7	6.4	7.1
609	2 30.3	+ 52 10	7.5	52.1	57.4	48.9	2 33.4	+52 22	6.6	6.3	
~~Dm. 612~~	~~2 31.4~~	~~+ 52 3~~	~~8.5~~								
602	2 27.8	+ 52 11	8.2	51.2	57.4	48.7	2 30.9	+52 23	7.2	6.9	7.2
~~Dm. 609~~	~~2 30.3~~	~~+ 52 10~~	~~7.5~~								
Dm. 546	2 24.0	+ 42 16	7.0	49.2	47.5	48.0	2 26.8	+42 28	6.8	6.5	6.5
Dm. 502	2 12.0	+ 42 17	6.5	46.0	47.5	47.6	2 14.8	+42 30	6.5	6.2	
Dm. 456	2 0.7	+ 42 10	7.2	43.1	47.4	46.4	2 3.5	+42 23	6.8	6.5	7.0
454	2 45.8	+ 52 16	4.0	39.2	57.5	52.8	2 47.2	+52 22	5.1	4.8	
Dm. 640	2 42.6	+ 52 24	7.0	37.0	57.3	51.0	2 43.8	+52 35	6.4	6.1	
Dm. 590	2 20.9	+ 52 32	7.5	48.5	57.4	47.5	2 23.9	+52 44	7.0	6.7	7.0
Dm. 528	2 1.0	+ 52 32	8.5	40.6	57.3	44.3	2 4.0	+52 45	7.0	6.7	
Dm. 449	2 59.4	+ 42 31	7.5	102.6	47.3	106.2	2 2.2	+42 44	7.0	6.7	7.0
Dm. 448	2 59.0	+ 42 28	7.8	102.6	47.3	106.2	2 2.8	+42 41	7.0	6.7	7.0
Dm. 614	2 34.2	+ 42 55	6.8	52.0	47.4	48.6	2 37.1	+43 7	6.4	6.1	
426	2 34.5	+ 53 1	6.1	54.9	57.6	51.1	2 35.9	+53 6	6.7	6.4	
468	2 47.2	+ 52 35	7.5	95.0	57.3	102.0	2 50.8	+52 46	6.5	6.2	
~~Dm. 492~~	~~2 52.8~~	~~+ 52 56~~	~~7.8~~	~~100.6~~	~~57.5~~	~~107.6~~					
387	2 43.3	+ 53 12	7.8	37.1	57.5	51.6	2 46.5	+53 23	6.8	6.5	
~~Dm. 579~~	~~2 38.8~~	~~+ 43 1~~	~~7.2~~	~~53.2~~	~~47.3~~	~~49.9~~					
335	2 21.1	+ 53 17	6.4	41.7	57.5	45.4	2 23.4	+53 22	6.6	6.3	
Dm. 551	2 31.2	+ 43 28	7.0	51.2	47.5	48.4	2 34.1	+43 40	6.6	6.3	
Dm. 577	2 38.5	+ 43 35	7.5	53.3	47.4	49.0	2 41.4	+43 47	6.9	6.6	

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Plate 921.

	V	H	Type	No. lines	K	Focus	Other lines.	V	H	V	H	Correc.
	7.5	7.6	II II	3462a 2	K=H	1 1	F? Seen	3.8	15.2	63.8	94.4	+3.1
	7.5	8.8	II a	3463 3	K=H	2	F. seen	3.8	17.6	63.8	92.0	+3.5
?	7.8	9.2	II	3464 9	K=H	1	F seen.	3.9	18.4	63.7	91.2	+4.6
	7.7	15.0	III III	2 2	K=H	K=H 1 1	— —	3.8	30.0	63.8	69.6	0
	7.7	18.9	II II	2 2	K=H	K=H 1 1	— —	3.8	37.8	53.8	71.8	-3.2
?	7.9	19.8	III b	3465 3	K=H	2	F. seen.	4.0	39.6	63.6	70.0	-2.7
	7.0	11.9	I I	6 3	N	N 1 1	— —	3.5	23.8	64.1	85.8	+1.7
	7.4	16.5	II a II a	3466 3 2	K=H	K=H 1 1	F. Seen seen	3.7	33.0	63.9	76.6	-1.2
?	7.2	16.8	I?	6	K=H?	1	F. —,	3.6	33.6	64.0	76.0	-1.0
	7.2	18.4	I ? I ?	3 4	N	K=H 1 1	— —	3.6	36.8	64.0	72.8	-2.5
	7.3	21.4	III	3	K=H	1	F	3.6	42.8	64.0	66.8	-3.6
	7.1	22.0	I	9	N	3	F.	3.6	44.0	64.0	65.6	-5.7
?	6.0	10.4	I ?	3467 9	N	3	F. seen.	3.0	20.8	64.6	88.8	+3.8
	5.8	15.4	I I	75	K=.5H	K=5H? 1	— —	2.9	30.8	64.7	78.8	-0.3
?	5.7	15.8	II a	3468 3	K=H	1	F. seen.	2.8	31.6	64.8	78.0	-0.7
	5.6	18.4	II	3468a 2 2	K=H	K=H 1 1	— seen	2.8	36.8	64.8	72.8	-2.9 -1.8
?	5.4	13.5	II	3469 3	K=H	1	F. seen	2.7	27.0	64.9	82.6	+1.2
	5.2	13.9	II ? II ?	2 2	K=H	K=H 1 2	F? —	2.6	27.8	66.0	81.8	+1.0
	5.3	14.3	I	10	K=.2H	2	F?	2.6	28.6	65.0	81.0	+0.6
	5.2	10.8	I I	4	N	K=H 1 1	— —	2.6	21.6	65.0	88.0	+3.6
	5.0	18.2	I? I	2 3	N	N 1 1	— —	2.5	36.4	66.1	73.2	-2.7
	4.9	8.4	I I	3 3	N	N 1 1	— —	2.4	16.8	66.2	92.8	+5.7
	4.8	9.1	I	6	N	1	F.	2.4	18.2	66.2	91.4	+5.0
?	4.7	16.2	II	3470 3	K=H	3	F. seen.	2.4	32.4	66.2	77.2	-1.0
	4.9	21.1	I	7	K=H	1	F.	2.4	42.2	66.2	68.4	-5.2 -3.7
	4.5	16.7	II II	2 2	K=H	K=H 1 2	F? —	2.2	33.4	66.4	76.2	-5.2
?	4.2	8.3	III bc	3471 3	K=H	3	F. Bright? quite	2.1	16.6	66.6	93.0	+5.7
	3.9	19.2	II? II a	3472 13 2	K=H	K=H 1 1	F seen	2.0	38.4	66.6	71.2	-3.6

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Mean 3

No.	R.A.	Dec.	Mag.	H	V	H'	Red. to 1900.	Br.	Br.
Dm. 576	2 38.4	+ 43 38	6.5	53.6	47.4	50.5	2 41.0 31.3 +43 50		6.6
431	2 36.4	+ 43 47	6.6	54.0	47.6	50.5	2 37.5 +43 52		6.8
Dm. 567	2 36.3	+ 53 27	6.8	54.7	57.3	50.1	2 39.5 +53 39		6.7
526	2 16.5	+ 53 39	8.2	46.5	57.4	46.5	2 19.6 +53 51		6.7
Dm. 497	2 8.6	+ 53 37	7.5	38.5	57.4	38.5			6.9
Dm. 474	2 3.4	+ 53 31	8.1	41.2	57.3	44.4	2 6.4 +53 44		6.9
349	2 5.8	+ 43 40	6.1	45.4	47.7	48.1	2 6.9 +43 45		6.5
Dm. 534	2 26.2	+ 44 0	7.4	50.0	47.5	48.3	2 29.1 +44 12		6.8
Dm. 507	2 11.3	+ 53 51	6.5	44.3	57.5	45.5	2 14.3 +53 4		6.6
Dm. 474	2 12.4	+ 43 56	6.5	46.6	47.5	47.0	2 15.2 +44 9		6.5
Dm. 486	2 6.1	+ 53 61	8.5	41.9	57.4	44.4	2 8.1 +53 4		6.8
Dm. 431	1 59.5	+ 43 45	6.9	102.3	47.4	103.9	2 2.3 +43 58		6.5 6.7
314	1 54.4	+ 63 55	4.9	98.4	57.5	104.1	1 55.6 +54 1		5.3
424	2 34.5	+ 64 36	6.6	55.3	57.6	51.5	2 35.8 +54 41		5.7
Dm. 538	2 15.2	+ 54 36	7.0	46.0	57.5	46.3	2 18.3 +54 48		6.8
Dm. 535	2 13.8 54.7	+ 54 42	6.4	45.4 86.3	57.5	46.1 87.0	2 16.9 +54 55		6.4
494	2 4.7	+ 54 38	7.9	41.5	57.4	44.4	2 7.7 +54 51		7.0
Dm. 456	2 9.0	+ 44 32	8.3	43.8	47.3	47.6			7.0
Dm. 567	2 22.0	+ 54 49	6.5	49.0	57.5	47.8	2 25.1 +55 1		6.5
Dm. 561	2 21.6	+ 54 54	6.5	49.4	57.5	48.4	2 24.7 +55 6		6.7 6.6
Dm. 558	2 19.2	+ 54 53	6.5	47.8	57.5	47.2	2 23.3 +54 5		6.1
Dm. 596	2 31.3	+ 54 52	7.3	52.9	57.5	49.3	2 34.5 +55 4		6.9 7.0
Dm. 500	2 5.5	+ 54 55	7.8	41.9	57.4	44.6	2 8.5 +55 8		7.0 7.0
610	2 39.5	+ 54 53	7.5	56.3	57.3	50.6	2 42.7 +55 5		7.2 7.2
Dm. 573	2 36.8	+ 44 50	8.1						
Dm. 606	2 37.5	+ 54 59	7.3	55.7	57.4	50.7	2 40.7 +55 11		6.5
373	2 14.0	+ 66 18	6.2	46.4	57.7	47.4	2 15.4 +55 23		5.3
453	1 55.3	+ 34 56	6.9	97.5	57.3	102.7	1 58.3 +55 9		
Dm. 554	2 0.1	+ 45 9	7.4	42.3	47.6	46.0			6.2
Dm. 588	2 10.6	+ 55 14	6.8 6.5	44.0	57.4	49.2	2 13.7 +55 27		6.7 6.5
443	2 42.0	+ 66 24	3.9	58.6	57.5	52.9	2 43.4 +55 29		6.0
535	2 11.6	+ 55 26	8.1	40.0	57.4	43.6	2 11.7 +55 39		
Dm. 554	2 5.8	+ 55 19	7.9	44.2	57.3	47.8			6.9 7.0

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Plate 921.

	γ	H	Type	No. lines	K	Focus	Other lines.	V	H	V	H	Correc.
	3.6	11.0	I	3	H	1	—	1.6	22.0	66.8	87.6	+3.6
	3.5	13.5	III ?	2	K=H	1	—	1.6	27.0	66.8	82.6	+0.9
	3.5	17.6	I	8	K=H	2	F	1.6	35.2	66.8	72.4	-1.6
	3.1	13.3	III ? x2		K K=H	1	F?	1.6	26.6	66.0	83.0	+1.0
?	3.2	15.4	IIa 3473	12	K=H	2	F? faint,	1.6	30.8	66.0	78.8	-0.4
?	2.9	19.1	Ia? 3474	2	K=H	1	faint	1.4	38.2	66.2	71.4	-2.6

F. m. & c. F. cl. 7.8

7.2 7.0 Plate 987.

?	21.1	19.0	IIa 3475	2	K=H	2	faint.	10.6	20.0	21.6	30.6	+0.2
	20.2	11.2	I ? I H	4	K K=H	K=H 1	— —	10.1	22.4	22.1	28.2	+0.2
	19.8	13.8	I	6	K	1	—	9.9	27.6	22.3	23.0	+0.2
?	18.5	15.6	IIa 3476	18	K=H	1	H faint	9.4	31.2	22.8	19.4	-0.1
	18.3	19.8	I	5	K	1	—	9.2	39.6	23.0	11.0	-0.7
	17.8	22.9	I ? H		K K=H	1	—	8.9	45.8	23.3	4.8	-1.2
	16.3	10.8	I	8	K	2	F	8.2	21.6	24.0	29.0	+0.2
?	16.5	21.0	IIIb 3477	3	K	2	F, very bright	8.2	42.0	24.0	8.6	-1.0
?	15.0	12.9	IIIb 3478	2	K 1 2	H ?	3 F. faint	7.5	25.8	24.7	24.8	+0.1
	14.5	22.5	III ? x2		K K=H	1	F ?	7.2	45.0	25.0	6.6	-1.2
	14.0	8.6	II	3	K=H	2	F	7.0	17.2	25.2	33.4	+1.1
	13.7	13.4	III ? III x3	2	K K=H	K=H 1	F —	6.8	26.8	25.4	23.8	+0.3
	13.4	21.2	I	8	N	2	F	6.7	42.4	25.5	8.2	-0.4
	12.7	8.9	IIIb 3479 III	2	K=H	K=H 1	1 F faint —	6.4	17.8	25.8	32.8	+0.5
	11.5	14.4	II ? III	3	K=H	K=H 1	1 F —	6.8	28.8	26.4	21.8	0
	11.2	15.1	III ? III	3	K=H	K=H 1	1 F —	6.6	30.2	26.6	20.4	0
	11.2	17.0	II ? III x2	2	K=H	K=H 1	1 F ? —	6.6	34.0	26.6	16.6	-0.1
	11.2	18.4	I	10	K=H	3	F	6.6	36.8	26.6	13.8	-0.7
	10.7	10.8	I	11	K=H	2	F	6.4	21.6	26.8	29.0	+0.4
	10.0	16.5	IIa 3480	3	K=H	1	F faint	6.0	33.0	27.2	17.6	-0.1
?	9.2	11.2	III ? III x2	2	K K=H	K=H 1	F ? —	4.6	22.4	27.6	28.2	+0.8

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1886phae..proj..835F

Mean 3

	No.	R.A.	Dec.	Mag.	H	V	H'	Red. to 1900	Br.	Br.
Dm.	589	2 30.7	+ 55 39	7.5	52.7	57.4	49.1	2 33.9 +55 51	6.4	6.7
Dm.	619	2 21.8	+ 45 45	7.3	48.8	47.6	47.9	2 24.7 +45 57	6.6	6.9
Dm.	589	2 9.9	+ 45 48	6.3	45.1	46.6	46.7	2 12.8 +46 1	5.3	6.1
Dm.	620	2 22.4	+ 45 57	7.2	49.0	47.6	48.0	2 25.3 +46 9	6.4	6.7
	379	2 16.8	+ 56 4	6.2	47.6	57.7	48.0	2 18.2 +56 10	6.1	6.4
Dm.	539	2 5.5	+ 46 1	7.0	43.7	47.4	46.3	2 8.3 +46 14	6.2	6.5

Mean 2

	252	1 30.7	+ 11 32	6.6	50.7	22.1	50.5	1 31.8 +11 38	6.1	6.8
Dm.	201	1 27.2	+ 11 49	6.8	49.6	21.9	49.4	1 29.6 +12 3	6.6	6.8 6.9
Dm.	236	1 21.8	+ 22 4	6.5	49.4	32.0	49.2	1 24.2 +22 18	6.4	6.6
Dm.	226	1 17.7	+ 22 46	6.5	48.9	32.2	49.0	1 28.1 +23 0	6.4	6.6
Dm.	204	1 8.6	+ 22 48	7.0	48.2	32.0	48.9	1 11.0 +23 2	6.4	6.6
Dm.	150	1 1.9	+ 23 2	6.8	47.7	31.9	48.9	1 4.3 +23 16	6.6	6.8 6.9
Dm.	240	1 28.0	+ 13 66	6.6	49.6	22.1	49.4	1 30.4 +14 9	6.8	6.0
	198	1 7.3	+ 23 56	4.6	49.3	32.1	50.3	1 8.3 +24 3	6.0	6.2
	239	1 25.1	+ 14 44	3.7	50.9	22.2	50.8	1 26.2 +14 50	6.5	6.5
	190	1 3.8	+ 24 50	6.1	48.8	32.0	50.0	1 4.9 +24 56	6.8	7.2
	262	1 34.6	+ 25 8	6.1	51.8	32.1	50.7	1 35.7 +25 14	6.3	6.5
Dm.	258	1 22.7	+ 26 9	7.0	49.5	32.0	49.2	1 25.2 +26 23	6.8	7.0 6.7 7.0
	202	1 7.8	+ 15 30	6.9	50.2	22.2	50.6	1 8.8 +15 36	6.3	6.0
	256	1 33.2	+ 15 48	6.1	51.0	22.2	50.5	1 34.3 +15 54	6.8	6.7 7.0 6.7 6.9
Dm.	154	1 20.6	+ 16 20	7.2	49.4	22.1	49.4	1 23.0 +16 34	6.5	6.7 6.6
Dm.	239	1 18.7	+ 26 29	6.8	48.9	32.1	48.9	1 21.2 +26 43	6.7	6.9 7.2 6.9 7.1
Dm.	141	1 15.0	+ 16 27	8.0	49.0	22.0	49.1	1 17.4 +16 41	6.7	6.9 6.8
	209	1 12.9	+ 26 36	4.7	49.7	32.2	50.4	1 13.9 +26 45	4.9	5.1
	247	1 29.4	+ 16 49	6.9	51.0	22.2	50.6	1 30.3 +16 55	6.0	6.2
Dm.	200	1 16.1	+ 17 3	7.2	49.1	22.0	49.2	1 18.5 +17 17	6.5	6.7
	248	1 27.5	+ 27 32	7.3	49.9	32.1	49.1	1 30.0 +27 46	7.2	7.0 7.2
~~Dm.~~	~~806~~	~~1 26.8~~	~~+ 27 34~~	~~7.1~~	~~49.2~~	~~32.2~~	~~48.4~~		~~7.2~~	~~7.4~~

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Plate 987.

	V	H	Type	No. lines	K	Focus	Other lines.	V	HE	V	HE	Correc.
	9.0	13.7	I	9	K=.2H	2	7	4.5	27.4	27.7	26.2	+0.1
	8.7	11.3	III	22	K=H	K=H	F?	4.4	22.6	27.8	28.0	+0.4
	8.6	15.8	IIa?	9	K=H	K=H	F	4.3	31.6	27.9	19.0	-0.1
	8.3	17.2	III?	2	K=H	1	—	4.2	34.4	28.0	16.2	-0.3
	8.3	17.6	III	9	K=H	1	F	4.2	36.2	28.0	15.4	-0.6
?	7.4	15.4	IIa	3	K=H	2	F	3.7	30.8	28.5	19.8	0
?	7.3	15.2	III	2	K=H	1	F?	3.6	30.4	28.6	20.2	0
	6.2	14.9	II	2	K=H	K=H	— —	3.1	29.8	29.1	20.8	0
	6.3	23.1	II?	9	K=H	1	H	3.2	46.2	29.0	44	-0.9
	5.6	15.3	III?	2	K=H	K=H	F —	2.8	30.6	29.4	20.0	0
	5.5	8.7	III	2	K=H	1	F?	2.8	17.4	29.4	36.2	+1.6
?	5.5	21.6	III	3	K=H	2	F	2.8	43.2	29.4	7.4	-1.7
?	5.0	7.7	IIa?	9	K=H	1	F	2.6	16.4	29.7	36.2	+0.8
	4.5	20.4	I	3	K	1	—	2.2	40.8	30.0	9.8	-0.6
	4.1	23.9	I	6	K	2	F?	2.0	47.8	30.2	2.8	-1.1
	3.6	22.3	III	9	K=H	2	F	1.8	44.6	30.4	6.0	-0.9
12.10	?	2.8	21.8	IIa?	3	K=.8H?	2	F	1.4	43.6	30.8	7.0	-1.9

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1886phae.proj..835F

Mean 2.

	No.	R.A.	Dec.	Mag.	H	V	H'	Red to 1900	Br.	Br. Calc.
	236	23.4	+ 17 44	6.0	50.8	22.2	50.7	24.5 + 17 51	5.9	5.7
Dm.	224	27.0	+ 17 43	6.3	49.6	22.1	49.2	29.4 + 17 57	7.0 7.4	6.8 7.2
Dm.	225	17.8	+ 17 48	7.7	59.4	32.1	59.5	~~20.9~~ 19.6 + 28 2	7.0	6.8 7.0
Dm.	197	14.4	+ 17 56	7.9	48.8	22.1	49.1	16.8 + 18 10	6.9 7.0	6.7 6.8
	212	14.5	+ 28 6	5.8	49.7	32.3	50.3	15.5 + 28 13	6.3 6.6	6.1 6.4
	226	19.8	+ 18 33	6.2	50.6	22.3	50.6	20.9 + 18 39	5.6	5.4
	227	20.2	+ 18 37	5.6	50.6	22.2	50.6	21.3 + 18 44	6.6 6.8	6.4 6.6
Dm.	239	19.8	+ 29 1	7.5	49.1	32.1	49.1	21.8 + 29 16	7.0	6.8 6.9
	186	3.4	+ 19 1	5.6	49.6	22.2	50.5	4.5 + 19 7	6.5	6.3 6.1+18.9
	238	18.6	+ 19 19	6.7	49.2	22.1	49.2	21.0 + 19 33	7.0 7.2	6.8 7.0 6.9 7.1
Dm.	~~238~~	~~18.6~~	~~+ 29 19~~	~~6.7~~	~~49.2~~	~~32.1~~	~~49.2~~			
	263	34.8	+ 29 27	~~6.4~~ 6.1	52.2	32.2	50.6	36.0 + 29 32	6.7 6.8	6.5 6.6
	197	6.1	+ 29 27	4.7	48.3	32.2	50.0	6.1 + 29 33	5.8 6.2	5.6 6.0
	268	36.0	+ 19 42	6.4	51.4	22.2	50.6	37.1 + 19 47	6.4	6.2
Dm	200	6.4	+ 29 47	7.5	47.2	32.0		18.9 + ~~29~~ 30 1		
~~Dm~~	~~212~~	~~7.8~~	~~+ 19 39~~	~~6.8~~	~~48.6~~	~~21.8~~	~~49.2~~	~~16.8 + 17 53~~	6.9	6.7
	178	1.5	+ 20 6	5.7	49.3	22.1	50.4	2.6 + 20 12	6.0	5.8
	196	6.0	+ 20 24	4.9	49.6	22.2	50.5	6.1 + 20 36	6.0 6.3	5.8 6.1
	195	4.7	+ 30 47	6.1	48.3	32.2	50.2	5.6 + 30 53	5.6	5.4

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Ant. of Fog. due to moon & clouds 6.6

Ant. of Fog. due to chemicals 6.8

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Plate 973.

	T	H	Type	Nos	K	Focus	Other lines	T	H	T	H	Correc.
9	0	21.2	11.3	I	5	K	1	—	10.6	22.6	21.7	68.1	+0.6
		19.0	15.7	III?	3	K=H	1	F	9.5	31.4	22.8	69.3	0
		15.6	19.2	III	3	K=H	1	F?	7.8	38.4	24.5	62.3	-0.8
		15.6	12.1	I	1520 17	K=.2H?		F	7.8	24.2	24.5	66.5	+0.2
		15.0	14.2	III III	22	K=H K=H	1 1	— —	7.5	28.4	24.8	62.3	
		12.0	12.1	III	2	K=H	1	—	6.0	24.2	26.3	66.5	+0.6
		12.2	17.8	II?	2	K=H	1	—	6.1	35.6	26.2	65.1	-0.6
		11.8	17.1	II	3	K=H	1	F	5.9	34.2	26.4	66.5	-0.5
		11.4	11.3	I	7	K=.5H K=H	1	—	6.7	22.6	26.6	68.1	+0.8
		10.7	13.9	I? I	4 2	K=H	1 1	— —	6.4	27.8	26.9	62.9	+0.1
		10.0	15.8	III III?	2	K=H	1	—	5.3	31.6	27.0	59.1	-0.1
		9.5	14.0	I?	6	K	1	F	4.8	28.0	27.5	62.7	+0.1
		8.0	14.3	I 15	21	?		F	4.0	28.6	28.3	62.1	+0.1
		8.0	15.1	III	3	K=H	1	F	4.0	30.2	28.3	60.5	0
		8.0	22.5	I	6	K=H	1	F	4.0	46.0	28.3	45.7	-1.8
		6.9	20.1	I	6	K=H	1	—	3.4	40.2	28.9	60.6	-1.3
		5.5	11.4	III	3	K=H	1	F	2.8	22.8	29.5	67.9	+0.4
		4.6	13.2	I I	2	K K	1 1	— —	2.3	26.4	30.0	64.3	+0.5
		7.0	8.0	III?	2	K=H	1	—	3.5	16.0	28.8	74.7	+1.7
		4.1	9.1	I	6	K	2	F	2.0	18.2	30.3	72.6	+1.6
		3.5	20.0	I	2	K=H	1	—	1.8	40.0	30.6	60.7	-0.6
		3.4	14.4	I I	4	K=H	1	—	1.7	28.8	30.6	61.9	+0.1
		3.2	7.3	I II	2	K=H	1	—	1.6	14.6	30.7	76.1	+2.1
		3.0	9.9	I	7	K	2	F	1.6	19.8	30.8	70.9	+1.5

F. m. fc. 6.8 ~~H~~ 6.7

F ch. 7.4

Plate 1000

		22.8	11.0	I?	3	K	1	—	11.4	22.0	46.1	49.4	+2.3
		22.8	18.9	I?	3	K	1	—	11.4	37.8	46.1	33.6	-2.3
		22.2	10.4	I	—	K	1	—	11.1	20.8	46.4	50.6	+4.2

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Mean 4

½ cos δ	No.	R.A.	Dec.	Mag.	JE	V	JE'	Red. to 1900	Cou. Pa	Br.	Bc.
0.0 6.6	31	0 8.7	+ 21 37	6.0	31.3	32.2	30.7	0 9.7	+ 21 43	7 0 6.5	6.6 0.1 6.7 6.0
	4260	23 59.6	+ 12 44	6.6	91.0	22.2	91.0	0 0.6	+ 12 51	6.7 7.0	6.7 6.8 0 6.8 6.1
	4233	23 61.6	+ 24 28	4.6	90.0	32.3	90.8	23 52.6	+ 24 35	6.5 7.0	6.5 6.9 0.1 7.0 6.3
0.0 4.0	23	0 7.1	+ 14 31	3.0	31.3	22.3	31.1	0 8.1	+ 14 39	10 + 3	4.0 3.3
	8	0 2.7	+ 24 47	6.2	31.1	32.3		0 3.7	+ 24 54		
	24	0 7.2	+ 26 18	6.3	31.4	32.3	30.8	0 8.2	+ 26 25	7.1	6.7 5.9 + 26.2
Dm.	4727	23 63.0	+ 26 7	6.5	88.6	32.2	89.2	23 53.3	+ 26 22	6.5 6.9	6.7 0.1 6.8 6.1
	4246	23 66.8	+ 26 27	6.8	90.0	32.3	90.5	23 56.8	+ 26 34	6.6	6.6 0.1 6.7 6.0
0.1 6.6	34	0 9.0	+ 26 36	5.9	31.6	32.3	30.8	0 10.0	+ 26 43	7 0 6.3	6.5 0.1 6.6 5.9 0.7.7 + 26.5
Dm.	3	0 1.9	+ 16 44	7.0	29.7	22.1	29.6	0 4.2	+ 16 59	7.2	7.3 7.2 0 7.2 6.5
Dm.	4744	23 67.6	+ 26 62	6.8	99.2	32.2	99.3	23 59.9	+ 27 6	7.2 7.4	7.3 7.1 7.2) 6.3 7.5 7.4 0.1 7.5 6.8
Dm	3	0 1.5	+ 27 26	7.0				8 27 41			
	~~10~~	~~0 2.9~~	~~+ 17 34~~	~~5.7~~	30.9	22.4	30.8	0 3.8	+ 17 40	5.8	6.6 3.0 0.1 6.4 5.7
	5	0 2.2	+ 28 26	2.1	30.8	32.4	30.7	0 3.2	+ 28 33	6.8	6.8 0.1 B. B.
Dm.	4704	23 69.1	+ 28 14	7.6	89.3	32.2	89.3	0 1.4	+ 28 29	6.7 7.0	6.7 6.9 0.1 7.0 6.3
	4209	23 43.6	+ 28 10	6.9	88.6	32.2	90.4	23 44.6	+ 28 17	6.5	6.5 0.1 6.6 5.9
Dm.	4666	23 47.6	+ 28 41	7.2	87.8	32.1	89.1	23 49.9	+ 28 56	6.8	6.7 0.1 6.8 6.1
	28	0 8.4	+ 19 33	4.9	31.2	22.4	30.8	0 9.4	+ 19 39	6.7 7.0	6.6 7.1 6.7) 6.0 0.1 7.2) 6.5
Dm.	10	0 3.3	+ 29 63	8.0	29.7	32.2	39.2	0 3.6	+ 30 8	7.2	7.3 7.3 0.2 7.5 6.8
Dm.	49	0 15.3	+ 28 40	7.5	31.3	32.2	29.6	0 17.6	+ 28 45	7.0	7.1 7.1 7.2) 6.3 7.2 7.2 0.1 7.3 6.6
0.1 6.1	46	0 14.2	+ 30 16	6.6	32.4	32.3	30.8	0 15.2	+ 30 23	6 -1 5.8	6.0 0.2 6.3 5.5 0 12.9 + 30.1
Dm.	5396	23 48.6	+ 20 22	7.0	88.6	22.2	89.2	23 50.9	+ 20 37	6.7	7.1 6.8 0.1 6.9 6.2
Dm.	2	0 0.6	+ 30 36	6.8	29.4	32.3	29.3	0 2.9	+ 30 50	6.8 7.2	6.9 0.2 7.1 6.4
Dm.	66	0 17.1	+ 30 34	6.8	31.7	32.2	29.6	0 19.4	+ 30 49	6.6 7.0	6.8 0.2 7.0 6.3
0.1 6.2	44	0 12.6	+ 30 62	6.8	32.3	32.4	30.8	0 13.4	+ 30 58	5 -2 6.0	6.1 0.2 6.3 5.6 0 11.1 + 30.7

35/5 = 7 ; 3−3/5 = 0

Mean 1

										Cou. Pa
Dm.	3822	1	60.2	+ 35 54	7.0	72.2	47.8	69.9	1 52.8	+ 36 7
Dm.	314	1	30.8	+ 35 48	7.0	68.6	47.2	70.9	1 33.4	+ 36 2
Dm.	498	1	63.2	+ 46 9	7.3	74.0	57.3	69.8	1 56.0	+ 46 22

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Plate 1000.

	Y	H	Type	No. lines	K	Focus	Other Lines	V	H	V	H	Correc.
?	21.8	21.4	II	3	K=H	2	F. equ.	10.9	42.8	46.6	28.6	-5.7
?	21.7	19.4	I?	5	K=H	2	F.	10.8	38.8	46.7	32.6	-4.1
	21.5	20.8	I	11	K=2H	2	F.	10.8	41.6	46.7	29.8	-3.3
?	21.5	12.1	III?	3	K=H	1	F.	10.8	24.2	46.7	47.2	+1.5
√	21.2	13.6	II?	2	K=H	K=H	1 1	F?	10.6	27.2	46.9	44.2	+0.7
	21.2	14.3	II	2	K=H		1	Neb.	10.6	28.6	46.9	42.8	+0.6
	20.6	6.5	I?	6	K=H		1	—	10.3	13.0	47.2	58.4	+8.1
	20.8	16.7	II?	1	H		1	—	10.4	33.4	47.1	38.0	+1.1
?	20.4	22.0	I	6	K=H		1	F?	10.2	44.0	47.3	27.4	-6.5
	20.4	15.0	I	10	H		2	F.	10.2	30.0	47.3	41.4	0
√	20.3	15.1	I	4	K=H	K=H	1 1	—	10.2	30.2	47.3	41.2	0
	20.1	7.2	I	11	K=H		2	F.	10.0	14.4	47.5	57.0	+4.8
	19.7	16.5	I	10	K=.5H		2	F.	9.8	33.0	47.7	38.4	-1.5
√	19.7	18.5	I	3	H		1	—	9.8	37.0	47.7	34.4	-3.3
√	19.5	18.1	I	3	H		1	—	9.8	36.2	47.7	35.2	-3.0 -1.9
√	19.5	19.0	III?	2	K=H	K=H	1 1	F?	9.8	38.0	47.7	33.4	-3.9
√	19.3	17.1	I	6	H	K=H	1	—	9.6	34.2	47.9	37.2	-1.9
√	19.5	14.6	II	2	K=H	K=H	1 1	—	9.8	28.8	47.7	42.6	+0.3
	19.4	18.7	II?	2	K=H		1	—	9.7	37.4	47.8	34.0	-3.6
III 5.4, 5.8.	?	19.0	18.6	III	3	K=1.5H	?	3	Bright F. equ.	9.5	37.2	48.0	34.2	-3.6
√		18.7	15.8	II?	III.	2	H	K=H	1 1	—	9.4	31.6	48.1	39.8	-0.5
	?	18.7	10.5	II	a	2	K=H		1	Neb.	9.4	21.0	48.1	50.4	+2.7
√		18.4	14.1	II?	II	2	K=H	K=H	1 1	—	9.2	28.2	48.3	43.2	+0.5
		18.7	19.1	III	3	K=H		1	F.	9.4	38.2	48.1	33.2	-3.7
		18.5	21.8	I	?	H		1	—	9.2	43.6	48.3	27.8	-4.5
		17.7	6.5	I	8	K=H		2	F.	8.8	13.0	48.7	58.4	+5.7
		17.7	11.9	III	3	K=H		2	F.	8.8	23.8	48.7	47.6	+3.0
√		17.5	9.4	II	II	2	K=H		1 1	—	F?	8.8	18.8	48.7	52.6	+5.7

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Means

	No.	R.A.	Dec.	Mag.	H	V	JE'	Red. to 1900		Bv.	Br.
	234	1 22.9	+ 46 23	5.2	65.7	57.3	71.4	1 24.1	+ 46 30	6.7	6.6
Dm.	393	1 27.3	+ 46 22	7.0	66.1	57.2	70.2	1 30.0	+ 46 36	6.8	6.7
	243	1 27.3	+ 36 37	5.9	68.9	47.4	72.2	1 28.5	+ 36 44	6.0	5.9
	297	1 49.0	+ 36 40	5.7						6.8	6.7
	~~296~~	~~1 48.8~~	~~+ 36 41~~	~~6.8~~	73.2	47.4	71.7	1 50.2	+ 36 46	6.9	6.8
Dm.	332	1 43.9	+ 36 43	6.8	71.1	47.3	70.4	1 46.5	+ 36 57	6.9	6.8
Dm.	463	1 42.1	+ 46 44	7.3	70.7	57.3	70.1	1 44.9	+ 46 58	6.9	6.8
Dm.	536	~~1~~ 2 48	+ 46 49	6.2	17.8	37.1	9.7	~~1~~ 2 7.8	+ 47 8	6.8	6.7
Dm.	305	1 35.9	+ 36 66	6.5	69.3	47.3	68.2	1 38.5	+ 37 10	6.9	6.8
Dm.	363	1 19.4	+ 46 60	7.3	63.4	57.2	69.9	1 22.1	+ 47 14	6.9	6.8
	279	1 42.0	+ 47 18	6.0	72.6	57.5	72.0	1 43.2	+ 47 24	5.9	5.8
	276	1 41.6	+ 37 21	6.1	71.8	47.6	71.8	1 42.7	+ 37 27	6.8	6.7
	334	2 1.3	+ 37 18	4.8	15.7	47.3	10.9	2 2.5	+ 37 23	5.4	5.3
Dm.	491	1 35.3	+ 47 28	7.8	68.3	57.3	69.8	1 38.0	+ 47 42	6.7	6.6
Dm.	470	1 29.6	+ 47 22	8.2	66.6	57.2	69.9	1 32.3	+ 47 36	7.2	7.1
	475	1 30.6	+ 47 31	8.4	66.8	57.3	69.8	1 33.3	+ 47 45		7.2
Dm.	~~344~~	~~+ 32.6~~	~~+ 37 32~~	~~7.5~~	68.8	47.3	70.7			7.3	7.2
Dm.	463	1 28.0	+ 47 35	7.0	66.0	57.4	69.9	1 30.7	+ 47 49	7.0	6.9
	483	1 33.7	+ 47 40	8.0	67.9	57.3	69.8	1 36.4	+ 47 54	7.1	7.0
Dm.	~~485~~	~~+ 34.3~~	~~+ 47 49~~	~~7.3~~	68.5	57.4	70.4			6.9	6.8
Dm.	382	1 41.9	+ 37 35	7.0	70.7	47.4	70.4	1 44.5	+ 37 49	7.1	7.0
Dm.	466	1 28.9	+ 47 41	8.0	66.3	57.4	69.9	1 31.6	+ 47 55	6.9	6.8
	251	1 30.6	+ 48 1	3.7	67.8	57.5	72.4	1 31.8	+ 48 7	5.8	5.7
Dm.	349	1 38.3	+ 38 1	7.1	69.9	47.4	70.4	1 40.9	+ 38 15	7.2	7.1
Dm.	115	1 51.7	+ 37 54	7.4	72.7	47.3	70.0	1 54.4	+ 38 8	6.8	6.7
Dm.	365	1 42.7	+ 38 7	7.3	70.9	47.3	70.4	1 45.3	+ 38 21	7.0	6.9
Dm.	460	1 27.6	+ 47 68	6.4	65.8	57.4	69.5	1 30.3	+ 48 12	6.7	6.6
Dm.	278	1 23.1	+ 38 1	6.6	66.7	47.2	71.2	1 25.7	+ 38 15	6.8	6.7
	340	2 3.6	+ 38 29	5.6	16.6	47.3	10.9	2 4.8	+ 38 34	6.0	5.9
	301	1 61.0	+ 48 36	5.7	74.8	57.4	71.8	1 52.2	+ 48 43	6.5	6.4
Dm.	600	1 56.9	+ 48 28	8.0	75.7	57.3	70.0	1 59.8	+ 48 41	7.0	6.9

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Plate 1000.

V	H	Type	No. lines	K	Focus	Other lines.	V	H	V	H	Correc.
17.2	7.2	I ? I	4	N	K=H	1 1	—	8.6	14.4	48.9	57.0	+7.9
17.1	11.5	II ?	2	K=H	1	F? seen	8.6	23.0	48.9	48.4	+3.6
17.0	21.9	II III	1 2	N	K=H	1 1	— F ?	8.5	43.8	49.0	27.6	-4.7
16.8	12.1	III III	3 3	K=H	K=H	1 1	F — F	8.4	24.2	49.1	47.2	+2.7
16.5	13.9	I I ? I	3 3	K=H	N	1 1	— —	8.2	27.8	49.3	43.6	+1.2
16.9	16.6	II ?	2	K=H		2	F ?	8.4	33.2	49.1	38.2	-1.8
16.0	15.4	I ? II	2 2 2	K=H	K=H	1	— —	8.0	30.8	49.5	40.6	-0.3
15.5	17.4	III III	2 2	K=H	K=H	1 1	— —	7.8	34.8	49.7	36.6	-1.6
15.4	23.0	I	9	K=.8H ?		2	F	7.7	46.0	49.8	25.4	-5.7
15.2	18.1	I	10	N		3	F	7.6	36.2	49.9	35.2	-2.3
14.9	16.7	I	11	N		5	F	7.4	33.4	50.1	38.0	-1.8
14.8	15.5	I ? I	3	N	N	1 1	— —	7.4	31.0	50.1	40.4	-0.5
14.9	12.7	III III	2 2	K=H	K=H	1 1	— F	7.4	25.4	50.1	46.0	+1.7
14.9	13.4	III	3	K=H		2	F	7.4	26.8	50.1	44.6	+1.2
14.7	14.1	I	11	N		3	F	7.4	28.2	50.1	43.2	+0.9
14.6	11.6	II ? II	3 3	K=H	K=H	1 1	F F seen	7.3	23.2	50.2	48.2	+2.4
14.7	9.8	II	3	K=H		1	F	7.4	19.6	50.1	51.8	+5.5
14.4	20.8	II ? II	2 3	K=H	K=H	1 1	— F	7.2	41.6	50.3	29.8	-4.1
14.0	19.9	III III	2 2	K=H	K=H	1 1	— —	7.0	39.8	50.5	31.6	-3.5
13.8	18.7	I I	5	N	N	1 1	F —	6.9	37.4	50.6	34.0	-2.5
13.7	9.2	I ?	3	N		1	—	6.8	18.4	50.7	53.0	+6.1
13.7	8.2	I	8	N		1	F	6.8	16.4	50.7	55.0	+7.2
? 13.7	7.4	III	3	K=H		2	F seen	6.8	14.8	50.7	56.6	+8.3
13.4	11.6	I ? II	2 2	K=H	K=H	1 1	— Seen	6.7	23.2	50.8	48.2	+2.4
13.4	13.4	III ? III ? I	2	N	K=H	1 1	— —	6.7	26.8	50.8	44.6	+1.2
? 13.3	13.9	I	8	N		3	F seen	6.6	27.8	50.9	43.6	+1.2
13.8	23.0	I	7	K=H		2	F	6.9	46.0	50.6	25.4	-5.9
13.5	22.7	I I	11 4 4	K=H	K=H	1 1	— —	6.8	45.4	50.7	26.0	-5.4

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Mean 1.

	No.	R.A.	Dec.	Mag.	H.	V	HE'	Red. to 1900.	Br.	Br. cor
Dm.	621	2	3.7	+48 42	7.5	18.1	57.3	10.2	2 6.6	+48 55	7.0	6.9 7.1
Dm.	580	1	50.6	+48 46	8.0	73.6	57.4	70.0	1 53.4	+48 39	6.9	6.8
Dm.	276	1	22.7	+38 45	7.3	66.5	47.3	71.2	1 23.3	+38 59	6.9	6.8 6.9
Dm.	574	1	48.9	+48 56	7.3	73.1	57.3	70.4	1 51.7	+49 9	7.0 7.3	6.9 7.2 7.1 7.3
Dm.	481	1	43.4	+49 5	8.1	71.2	57.3	70.0	1 47.2	+49 19	7.0	6.9 7.1
Dm.	518	1	34.9	+48 65	7.3	68.1	57.3	69.9	1 37.7	+49 9	6.6	6.5
Dm.	404	1	39.4	+39 24	8.5	70.2	47.4	70.5	1 42.0	+39 38	7.3	7.2 7.3
Dm.	384	1	34.1	+39 39	7.0	68.9	47.4	70.5	1 36.7	+39 53	7.2 7.4	7.1 7.3 7.1 7.4
Dm.	334	1	19.4	+39 34	6.5	65.4	47.3	71.1	1 22.0	+39 48	6.2	6.1
	259	1	33.6	+39 56	4.9	69.8	47.6	72.1	1 34.6	+40 4	5.1	5.0
	269	1	36.1	+50 5	4.2	69.5	57.5	71.3	1 37.4	+50 11	4.5	4.4
Dm.	357	1	38.4	+60 1	8.2	69.4	57.4	69.9	1 41.2	+50 15	7.2	7.1 7.3
Dm.	434	1	46.2	+39 59	6.8	71.6	48.4	69.9	1 48.9	+40 12	6.8 7.0	6.7 6.9 6.7 7.0
	288	1	46.1	+40 9	5.6	72.9	47.6	71.7	1 47.3	+40 14	6.2 6.6	6.1 6.5
	284	1	44.5	+50 12	6.4	73.7	57.6	72.8	1 45.7	+50 18	5.4	5.3
Dm.	408	1	49.2	+40 3	6.9	72.4	47.3	70.0	1 51.9	+40 16	6.8	6.7 6.7
Dm.	644	1	56.1	+49 56	7.0	75.7	57.3	70.2	1 59.0	+50 9	6.8	6.7
Dm.	315	1	25.1	+40 8	7.0	66.7	47.3	70.8	1 27.7	+40 22	6.9	6.8 6.9
Dm.	328	1	27.4	+40 20	6.8	67.2	47.3	70.7	1 30.0	+40 34	6.9 7.1	6.8 7.0 6.8 7.0
Dm.	341	1	30.6	+40 29	7.3	68.0	47.3	70.5	1 33.2	+40 41	6.6	6.5 6.6
Dm.	455	1	58.2	+50 24	7.9	76.6	57.2	70.5	2 1.1	+50 37	7.1	7.0
Dm.	466	2	1.2	+50 22	7.2	17.6	57.2	10.4	2 4.1	+50 35	6.7	6.6
	348	2	5.6	+50 30	5.4	20.4	57.3	12.1	2 6.9	+50 36	6.1 6.2	6.0 6.1
Dm.	411	1	49.3	+40 41	7.3	72.5	47.4	70.1	1 52.0	+40 54	7.2	7.1 7.1
Dm.	390	1	44.1	+40 45	8.0	70.9	47.5	69.7	1 46.8	+40 59	7.2 7.4	7.1 7.3 7.2 7.5
Dm.	381	1	43.6	+50 46	6.6	71.4	57.4	70.2	1 45.4	+51 0	6.0	5.9
	229	1	20.5	+40 29	6.4	66.5	47.4	72.4	1 21.1	+40 35	6.4	6.3
Dm.	267	1	15.4	+50 25	7.0	60.8	57.2	69.2	1 18.1	+50 39	6.9 7.1	6.8 6.9

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February 9, 1887.

Plate 1090.

	V	H	Type	No. Lines	K	Focus	Other lines.	V	H	V	H	Correc.
?	13.4	19.5	IIIa	3	K=H	3	F. eccn.	6.7	39.0	50.8	32.4	-3.1
	13.0	8.6	I	7	K=H	1	F	6.5	17.2	51.0	34.2	+4.8
	12.8	10.5	I	6	N	1	F	6.4	21.0	51.1	30.4	+5.1
?	12.8	11.6	I	8	N	2	F.	6.4	23.2	51.1	48.2	+2.5
	12.6	14.3	II	2	K=H	K=H	Decn.	6.3	28.6	51.2	42.8	+0.7
	12.9	18.3	III	2	K=H	K=H	F	6.4 7.0	36.6	51.1 50.5	34.8	-2.4
	12.7	21.2	III	3	K=H	K=H	F	6.4 6.8	42.4	51.1 50.7	29.0	-6.9
	12.6	23.8	I	3	N	1	—	6.3 6.8	47.6	51.2 50.7	23.8	-9.7
	12.2	10.4	I	8	N	2	F.	6.1	20.8	51.4	30.6	+5.3
	12.5	12.2	I	8	N	2	F.	6.2	24.4	51.3	37.0	+1.9
?	12.4	14.5	IIIa	3	K=H	2	F. eccn.	6.2	29.0	51.3	42.4	+0.6
	12.0	7.5	I	8	K=H	1	F.	6.0	15.0	51.5	36.4	+5.7
?	11.5	9.5	III	3	K=H?	5	F. bright	5.8	19.0	51.7	52.4	+4.2
	11.6	17.9	I	4	N	1	—	5.8	35.8	51.7	35.6	-3.3
	11.5	22.2	I	3	N	1	—	5.8	44.4	51.7	27.0	-5.5
	11.5	22.5	II	3	K=H	1	F.	5.8	45.0	51.7	26.4	-5.7
	11.5	23.8	IIa	2	K=H	1	— eccn	5.8	47.6	51.7	23.8	-9.7
?	11.1	17.6	II	3	K=H	2	F. eccn.	5.6	35.2	51.9	36.2	-1.9
	10.6	16.6	I	8	K=H	1	F.	5.4 5.3	33.2	52.2 52.5	38.2	-1.8
	10.5	17.7	II	2	K=H	1	—	5.2	11.4	52.3	60.0	+10.5
	10.2	6.7	III	2	K=H	K=H	—	5.1	13.4	52.4	59.0	+9.5
	10.1	15.5	I	6	K=.5H	K=H	—	5.0	31.0	52.5	40.4	-0.4
	9.5	8.6	I	3	N	1	—	4.8	17.2	52.7	54.2	+7.5
	9.6	12.8	I	8	N	2	F.	4.8	25.6	52.7	45.8	+2.5
	9.7	18.0	I	10	K=.5H	3	F.	4.8	36.0	52.7	35.4	-2.2
	9.5	19.0	I	9	N	2	F.	4.8	38.0	52.7	33.4	-4.8
	9.7	23.9	I	8	N	1	F.	4.8	47.8	52.7	23.6	-9.1
?	9.1	23.2	IIa	3	K=H	2	F. eccn.	4.6	46.4	52.9	25.0	-6.6

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Means

	No.	R.A.	Dec.	Mag.	H	V	H'	Red. to 1900	Br.	Corr. Br.
	248	1 29.7	+ 40 48	4.2	68.7	47.5	71.8	1 30.9	+ 40 54	4.7	4.6
Dm.	434	1 57.2	+ 40 50	7.3	74.4	47.3	69.6	1 59.9	+ 41 3	6.5	6.4
Dm.	430	1 54.1	+ 60 57	7.6	75.1	57.4	70.0	1 57.0	+ 57 10	6.8	6.7
Dm.	407	1 49.2	+ 40 59	6.9	72.4	47.4	69.9	1 51.9	+ 41 12	6.1	6.0
Dm.	418	1 42.4	+ 51 5	8.6	71.0	57.4	70.3	1 45.2	+ 51 19	7.2	7.1
~~Dm.~~	~~416~~	~~1 41.7~~	~~+ 51 13~~	~~6.3~~	~~70.3~~	~~57.5~~	~~69.6~~	~~1 44.5~~	~~51 27~~		
Dm.	344	1 31.4	+ 40 56	7.0	68.0	47.3	70.4	1 34.8	+ 41 10	6.9 7.8	6.8 7.0
Dm.	286	1 20.2	+ 50 56	6.8	62.6	57.3	69.5	1 20.9	+ 51 10	7.0 7.2	6.9 7.1
Dm.	260	1 11.9	+ 50 50	6.5	59.5	57.1	69.2	1 14.6	+ 51 4	6.5	6.4
Dm.	483	1 54.8	+ 51 16	6.7	75.6	57.4	70.3	1 57.7	+ 51 29	6.1	6.0
Dm.	374	1 47.8	+ 41 11	7.0	72.2	47.4	70.3	1 50.3	+ 41 24	6.3	6.2
Dm.	416	1 41.7	+ 51 13	6.3	70.7	57.4	70.1	1 44.3	+ 51 27	5.8	5.7
	187	1 3.5	+ 41 27	5.7	18.5	47.4	12.8	4 6.7	+ 41 33	6.7	6.6
~~Dm.~~	~~219~~	~~1 2.1~~	~~+ 41 18~~	~~6.2~~	~~17.1~~	~~47.3~~	~~11.4~~	~~4 6.6~~	~~+ 41 32~~		
	324	1 66.5	+ 41 45	2.1	75.5	47.6	71.3	1 57.7	+ 41 51	6.7 4.1	6.6 4.0
Dm.	357	1 30.4	+ 51 32	7.5	66.2	57.3	69.5	1 33.2	+ 51 46	7.2	7.1 7.1
Dm.	288	1 20.9	+ 41 32	7.5	65.3	47.3	70.8	1 23.5	+ 41 46	7.0	6.9 7.0
Dm.	283	1 20.1	+ 41 30	7.0	65.1	47.3	70.8	1 22.7	+ 41 44	6.8	6.7
Dm.	283	1 11.4	+ 51 22	7.0	59.0	57.2	68.7	1 14.1	+ 51 36	6.8	6.7
	261	1 34.5	+ 42 1	6.2	69.7	47.6	71.6	1 35.7	+ 42 7	5.4	5.3
Dm.	420	1 34.5	+ 52 9	7.0	67.7	57.3	69.5	1 37.3	+ 52 23	6.5	6.4
Dm.	548	2 9.9	+ 51 52	7.0	21.3	57.1	10.8	2 12.9	+ 52 3	6.8	6.7
Dm.	551	2 6.9	+ 52 3	7.9	20.3	57.1	10.8	2 9.9	+ 52 16	7.0 7.2	6.9 7.1
Dm.	373	1 38.7	+ 42 22	7.5	69.7	47.4	70.1	1 41.4	+ 42 36	6.8	6.7 6.9
Dm.	528	2 1.0	+ 52 32	8.5	18.2	57.3	10.7	2 4.0	+ 52 45	7.1	7.0
Dm.	468	1 47.2	+ 52 35	7.5	72.8	57.4	70.3	1 50.1	+ 52 48	6.2	6.1
	258	1 33.5	+ 42 41	6.6	69.5	47.5	71.7	1 34.7	+ 42 47	5.5	5.4
Dm.	382	1 26.3	+ 52 36	6.6	64.3	57.4	69.1	1 29.1	+ 52 50	6.0	5.9
Dm.	293	1 15.9	+ 42 23	6.5	63.7	47.2	70.8	1 18.5	+ 42 37	6.1	6.0
	223	1 19.3	+ 42 50	6.1	65.7	47.4	72.3	1 20.4	+ 42 57	6.0	5.9

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Plate 1000.

	V	H	Type	No. lines	K	Focus	Other lines.		V	H	V	H	Correc.
	8.7	8.4	III ? III	32	X	K=H	1	1	—	—	4.4	16.8	53.1	54.6	+ 5.4
	8.8	11.1	I I	6	4	N	K=H	1	1	—	—	4.4	22.2	53.1	49.2	+ 4.5
	9.0	11.6	II ?			N		1		—		4.5	23.2	53.0	48.2	+ 2.5
	8.9	15.9	I ? I	6	4	K=H	K=H	1	1	—	—	4.4	31.8	53.1	39.6	- 0.6
	9.0	17.4	I ?	6		K=H		1		—		4.5	34.8	53.0	36.6	- 1.9
	8.6	23.0	III ?	2		K=H		1		—		4.3	46.0	53.2	23.4	- 6.5
	8.3	8.8	III	3		K=H		1		F		4.2	17.6	53.3	53.8	+ 7.5
	8.4	14.0	I ? I	6	4	N	K=H	1	1	—	—	4.2	28.0	53.3	43.4	+ 1.2
	8.4	15.4	I	6		N		1		—		4.2	30.8	53.3	40.6	- 0.6
	8.5	17.6	III III		3	N	K=H	1	1	—		4.2	35.2	53.3	36.2	- 3.0
	7.5	6.3	III		3	K	=H	1		F		3.8	12.6	53.7	58.8	+ 7.2
?	7.6	18.4	III	b 3503	3	K	=H	2		F	Dcm	3.8	36.8	53.7	34.6	- 2.7
	7.3	11.2	I		10	N		3		F		3.6	22.4	53.9	49.0	+ 4.8
	7.4	17.5	III I ?		5	K	=H	1		F		3.7	35.0	53.8	36.4	- 3.0
	7.1	17.8	I		7	N		1		F		3.6	35.6	53.9	35.8	- 3.3
	6.6	10.5	II a ? II a	3504 2	2	K	=H	K=H	1	1	Dcm Dcm	3.3	21.6	54.2	50.4	+ 5.5
	6.6	13.8	I I	3	4	N	K=H	1	1	—	—	3.3	27.6	54.2	43.8	+ 1.1
	6.4	14.4	I I	7	5	N	H	1	1	F ?	—	3.2	28.8	54.3	42.6	+ 0.7
	6.5	16.4	III		2	K	=H	1		F ?		3.2	32.8	54.3	38.6	- 1.7
	6.4	17.4	I I	6	5	K	=H	N	1	1	—	3.2	34.8	54.3	36.6	- 2.7
	6.6	23.1	II a ?	3505	X2	K	=H		1		F ? Dcm	3.3	46.2	54.2	23.2	- 9.9
	6.2	20.9	III ?		X2	K	=H		1		—	3.1	43.8	54.4	27.6	- 8.4
?	6.0	14.2	I	3506	9	K	=2H ?		3		F Dcm	3.0	28.4	54.5	43.0	+ 1.1
	5.5	18.6	I		8	N		2		F		2.8	37.2	54.7	34.2	- 3.0
?	5.4	22.5	II a	3507	X2	K	=H	2		F ? Dcm		2.7	45.0	54.8	26.4	- 6.6
	5.1	13.7	I		10	K	=2H	2		F		2.6	27.4	54.9	44.0	+ 1.5
	5.3	13.1	I ? II	2	2	K	=H	K=H	1	1	—	2.6	26.2	54.9	45.2	+ 2.4
	5.1	12.2	I I ? I	4	3	K	=H	N	1	1	—	2.6	24.4	54.9	47.0	+ 2.1

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Means

	No.	R.A.	Dec.	Mag.	H.	V.	H.	Red to 1900	Cor Br.	Br.	
4	Dm.	445	1 58.4 + 42 56	8.1	75.2	47.3	69.8	2 1.2 + 43 9	6.9	7.0 7.3	7.2 7.4
5	Dm.	192	1 52.8 + 52 56	7.8	75.0	57.3	70.5	1 53.7 + 53 9	6.8	6.9	6.9
.5	Dm.	409	1 49.5 + 42 54	8.0	72.7	47.4	70.2	1 52.2 + 43 7	6.9	7.0	
6	Dm.	370	1 37.6 + 42 59	7.5	69.4	47.4	70.0	1 40.3 + 43 13	6.7	6.8	6.8
9	Dm.	352	1 33.4 + 42 54	7.5	68.2	47.4	70.1	1 36.1 + 43 8	6.2	6.3	
5	Dm.	305	1 18.2 + 42 57	6.9	64.2	47.3	707	1 20.8 + 43 11	6.6	6.5 6.7	
.5		335	2 2.1 + 53 17	6.4	19.7	57.5	12.2	2 3.4 + 53 25	6.4 6.7	6.5 6.8	
.2	Dm.	405	1 43.0 + 53 11	8.4	71.0	57.4	69.8	1 45.9 + 53 25	6.8	6.9	7.0
.6	Dm.	386	1 38.4 + 53 17	7.2	69.2	57.5	69.8	1 41.3 + 53 31	6.1	6.2	
3.0	Dm.	363	1 31.0 + 53 8	7.0	66.2	57.3	69.2	1 33.8 + 53 22	6.8 7.2	6.9 7.3	6.9 7.2
.2		349	2 5.8 + 43 40	5.7	18.4	47.5	11.2	2 6.9 + 43 48	6.1 6.5	6.2 6.6	
.7		254	1 32.2 + 43 46	6.1	69.0	47.6	71.7	1 33.4 + 43 52	5.6 5.8	5.7 5.9	
.8		314	1 54.4 + 53 55	4.9	76.8	57.5	72.0	1 55.6 + 54 1	4.5	4.6	
3.0	Dm.	362	1 31.0 + 53 43	7.8	66.0	57.4	69.0	1 33.8 + 53 57	6.5	6.6	7.6
3.3	Dm.	354	1 30.1 + 53 52	7.5	65.7	57.5	69.0	1 32.9 + 54 6	6.5	6.6	
5.5	Dm.	440	1 53.8 + 53 60	7.9	74.8	57.3	69.3	1 56.8 + 54 13	6.9	7.0	7.1
1.1	Dm.	384	1 43.7 + 44 5	7.5	71.3	47.4	70.2	1 46.4 + 44 19	6.8	6.9	7.0
0.7	Dm.	393	1 42.0 + 54 11	7.4	70.8	57.4	70.1	1 44.9 + 54 25	6.4	6.5	6.6
1.7	Dm.	368	1 34.9 + 54 9	7.5	67.7	57.4	69.4	1 37.8 + 54 23	6.7 6.8	6.8 6.9	
2.7	Dm.	350	1 31.3 + 54 12	7.5	66.1	57.4	68.8	1 34.1 + 54 26	6.5	6.6	6.7
3.9	Dm.	281	1 12.2 + 53 52	7.3	58.4	57.2	68.3	1 14.9 + 54 6	6.4	6.5	
3.4	Dm.	282	1 15.9 + 54 9	8.0	59.7	57.3	68.1	1 18.7 + 54 23	6.9 7.1	7.0 7.2	
.1		283	1 44.1 + 54 33	6.5	72.5	57.6	71.4	1 45.4 + 54 39	4.8	4.9	
3.0	Dm.	341	1 29.8 + 44 40	7.0	67.0	47.5	70.0	1 32.3 + 44 54	5.9	6.0	
4.6		228	1 20.5 + 44 47	4.8	65.5	47.5	72.1	1 21.2 + 44 54	5.3	5.4	
1.5	Dm.	408	1 44.2 + 54 53	6.6	71.6	57.5	70.1	1 47.1 + 55 7	6.1	6.2	
2.4	Dm.	~~466~~ 429	~~1 49.9 +~~ 1 49.2 + 54 52	~~5~~ 7.6	75.4	57.5	73.0	1 52.2 + 55 1 52.8 + 54 13	6.9	7.0	7.0
2.1	Dm.	466 ~~429~~	1 49.9 + 54 0 ~~49.2 + 54 52~~	7.9 ~~7.6~~	74.3	56.6	72.2		6.9	7.0	7.2

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T	H	Type	No. lines	K	Focus	Other lines.	V	HE	V	HE	Correc.
4.9	10.5	I				—	2.4	21.0	55.1	50.4	+ 5.7
4.6	17.6	IIa; 3508	x 2	K=H	1	— Lum	2.3	35.2	55.2	36.2	- 3.3
4.8	23.8	III?	2	K=H	1	—	2.4	47.6	55.1	23.8	- 10.8
4.5	18.2	III	4 5	K=H	1	F	2.2	36.4	55.3	35.0	- 2.7
4.5	16.4	I?	6	K=H	1	—	2.2	32.8	55.3	38.6	- 1.8
4.1	18.8	I	9	K=2H	2	F?	2.0	37.6	55.5	33.8	- 4.9
3.8	15.4	II;	2	?	1	—	1.9	30.8	55.6	40.6	- 0.3
3.5	14.0	I? I	3 3	K	K	1 1	— —	1.8	28.0	55.7	43.4	+ 0.9
2.5	10.4	II?	2	K=H	1	—	1.2	20.8	56.3	50.6	+ 4.2
2.2	13.4	I?	2	K	1	—	1.1	26.8	56.4	44.6	+ 2.1
2.2	16.2	I	3	K	2	F,	1.1	32.4	56.4	39.0	- 1.7
2.1	19.4	I;	2	K	1	—	1.0	38.8	56.5	32.6	- 4.2
2.2	21.4	III?	8509	K	1	—	1.1	42.8	56.4	28.6	- 5.7
?	3.9	5.6	II a;	3	K=H	2	F diff.	2.0	11.2	55.5	60.2	-12.1

Amt. of Fog. due to Moon & Clouds 6.3 — Amt. of Fog. due to Chemicals 6.4

Poor Plate. Heard to measure. Plate 959.

21.2	11.7	I?	5	K=H	1	—	10.6	23.4	21.6	67.8	+0.7
19.1	16.0	I?	5	K=H	1	—	9.6	32.0	22.6	59.2	-0.1
15.8	12.4	I	10	?		F diff.	7.9	24.8	24.3	67.4	+0.3
15.7	19.5	III	3	K=H	1	F	7.8	39.0	24.4	52.2	-1.2
13.4	10.2	II II	2 2	K=H K=H	1 1	— —	6.7	20.4	26.5	70.8	+0.6
13.5	17.5	II II	2 2	K=H	1	F	6.8	36.0	25.4	66.2	-0.3
12.0	12.5	III	2	K=H	1	—	6.0	25.0	26.2	66.2	+0.7
12.1	18.3	II	2	K=H	1	—	6.0	36.6	26.2	54.6	-0.9
11.8	17.5	II	3	K=H	1	F?	5.9	36.0	26.3	56.2	-0.7
11.4	11.7	I	8	K	1	—	5.9	23.4	26.5	69.6	+1.1
10.9	14.2	I? I?	4 4	K=H K=H	1	— —	5.4	28.4	26.8	62.8	+0.1
10.6	23.2	I?	4	K=H	1	—	5.3	46.4	26.9	44.8	-1.2

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Mean 1

	No.	R.A.	Dec.	Mag.	H	V	H'	Red. to 1900.	Bv.	Cor. Bv
Dm.	453	1 55.3	+ 54 56	6.9	76.3	37.3	70.6	1 58.3 + 54 9	6.3	6.2
Dm.	375	1 30.4	+ 55 3	7.5	65.6	37.3	68.9	1 33.3 + 55 17	6.9	6.8
Dm.	258	1 9.0	+ 54 40	7.5	56.6	37.1	67.4	1 11.7 + 54 54	6.7 6.8	6.6 6.7
Dm.	404	1 30.8	+ 45 9	7.0	67.2	47.4	69.9	1 33.5 + 45 23	6.6 6.7	6.5 6.6
Dm.	391	1 34.4	+ 55 9	7.1	67.2	37.4	69.0	1 37.3 + 55 23	6.3	6.2
Dm.	360	1 26.2	+ 55 18	7.2	63.8	37.3	68.7	1 29.0 + 55 32	6.2	6.1
Dm.	447	1 38.9	+ 45 30	6.9	69.7	47.4	70.0	1 41.6 + 45 44	6.5	6.4
Dm.	465	1 42.8	+ 45 37	8.0	70.8	47.4	69.9	1 45.5 + 45 49	7.0	6.9 7.3
Dm.	498	1 53.2	+ 46 9	7.3	74.0	47.4	69.8	1 56.0 + 46 22		
Dm.	386	1 45.6	+ 56 23	7.4	72.4	57.5	78.3	1 48.6 + 56 36		
Dm.	334	1 35.3	+ 56 22	6.5	67.7	57.5	69.4	1 38.2 + 56 36		
Dm.	393	1 27.3	+ 46 22	7.0	66.1	47.4	70.3	1 30.0 + 46 36		
	234	1 22.9	+ 46 23	6.2	65.7	47.5	71.4	1 24.1 + 46 30		
	373	2 14.0	+ 55 18	6.2	25.2	57.3	37.3	2 15.3 + 55 23	5.6	5.5

Red. by Bv. not to be made for this Plate

	31	0 8.7	+ 21 37	6.0	32.1	32.2	31.4	0 9.7 + 21 43	6.6	6.5	0.1
	4260	23 59.6	+ 12 44	6.8	91.6	22.3	91.7	0 0.6 + 12 51	6.7	6.5	0.65
	23	0 7.1	+ 14 31	6.0	31.9	32.4	31.6	0 8.1 + 14 39	B.	7.2	0 B.
	4233	23 51.6	+ 24 28	4.6	90.6	32.3	31.8	23 52.6 + 24 35	6.5 7.0	6.6 7.0	6.7 0.1 7.1
Dm.	39	0 10.3	+ 15 32	7.4	30.7	22.2	30.1	0 12.6 + 15 47	7.0	6.9	0 6.9 6.8
Dm.	4926	23 56.1	+ 16 28	7.0	90.1	22.3	30.4	23 57.4 + 15 43	6.9	6.8 6.6	0 6.6
	24	0 7.2	+ 26 18	6.3	32.2	32.3	31.5	0 8.2 + 26 25	6.7 6.9	6.7 6.9	0.1 6.8 7.0 10
Dm.	4727	23 53.0	+ 26 7	6.5	89.7	32.1	90.6	23 55.4 + 26 22	6.7	6.7	0.1 6.8
	4246	23 55.8	+ 26 27	6.8	90.8	32.3	91.5	23 56.8 + 26 34	6.5	6.6	0.1 6.7
	34	0 9.0	+ 26 36	6.9	32.4	32.3	31.3	0 10.0 + 26 43	6.2	6.4	0.1 6.3 23
Dm.	3	0 1.9	+ 16 44	7.0	30.3	22.1	30.2	0 4.2 + 16 59	7.1	6.9	0 6.9 6.7
Dm.	5003	23 43.1	+ 16 48	7.3	89.5	22.1	30.7	23 45.4 + 17 3	7.1	6.6	0 6.8

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Plate 959.

V	H	Type	No. lines	K	Focus	Other lines,	V	HE	V	HE'	Correc.
9.6	14.4	III	3	K=H	1	F?	4.8	28.8	27.4	62.4	+0.1
8.0	14.7	I	12	K		F.	4.0	29.4	28.2	61.8	+0.1
8.2	22.9	IIa 1521	2	K=H	1	—	4.1	45.8	28.1	45.4	−2.8
7.0	20.6	III?	2	K=H	1	—	3.5	41.2	28.7	60.0	−2.1
7.0	8.4	I		K=H	1	—	3.6	16.8	28.7	74.4	+2.4
? 5.8	11.8	III 1522	3	K=H	1	F. diff.	2.9	23.6	29.3	67.6	+0.6
4.0	9.6	I	6	K=H	1	F.	2.0	19.2	30.2	72.0	+2.3
3.0	10.4	I	7	K=H	2	F.	1.5	20.8	30.7	70.4	+1.9

F. nw. & c. 7.5 7.3 — Plate 1006. — F cl. 8.1

21.1	19.7	I		K=.5H	1	—	10.6	39.4	21.8	63.0	−0.9
? 20.6	16.1	I 3510	9	N	2	F. diff.	10.3	32.2	22.1	60.2	−0.3
19.5	10.5	I		K=H	1	—	9.8	21.0	22.6	71.4	+1.1
? 19.1	15.9	III bc 3511	3	K=2.0	4	F. Bright diff.	9.6	31.8	22.8	60.6	−0.2
19.1	18.4	II II	2 2	K=H K=H	1 1	— —	9.6	36.8	22.8	66.6	−0.2 −0.5
18.7	20.1	I	10	K=.2H	2	F.	9.4	40.2	23.0	62.2	−1.2
17.4	12.2	I ?	3	N	1	—	8.7	24.4	23.7	68.0	+0.7
? 15.9	12.1	II a 3512	3	K=H	2	F. diff.	8.0	24.2	24.4	68.2	+0.7
15.4	13.2	III ? III	2 2	H-K=H	1 1	— —	7.7	26.4	24.7	66.0	+0.2
15.4	7.5	I	3	N	1	—	7.7	15.0	24.7	77.4	+1.9
14.8	18.0	II ? II	2 2	K=H K=H	1 1	— —	7.4	26.0	25.0	66.4	+0.6
14.6	16.1	I	9	N	2	F.	7.3	32.2	26.1	60.2	−0.3
? 14.4	12.1	II a 3513	3	K=H	2	F. diff.	7.2	24.2	25.2	68.2	+0.9
? 14.2	14.9	II a ? 3514	3	K=H	2	F. diff.	7.1	29.8	25.3	62.6	0
? 14.2	17.5	II a 3515	3	K=H	2	F. diff.	7.1	36.0	26.3	57.4	−0.7
12.1	8.6	I	8	K=.2H	1	F.	6.0	17.2	26.4	75.2	+0.9
? 11.6	14.9	IIa 3516	3	K=H	1	F. diff.	5.8	29.8	26.6	62.6	0
11.6	15.8	I	7	?	1	F.	6.8	31.6	26.6	60.6	−0.2

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No.	R.A.	Dec.	Mag.	H	V	H'	Red. to 1900		Br.	Br.
10	0 2.9	+ 17 36	6.7	31.7	22.4	31.6	0 3.9	+ 17 40	6.3 6.6	6.4 6.7 (13) 0.1 (83)
6	0 2.2	+ 28 26	2.1	31.6	32.4	31.6	0 3.2	+ 28 33	B. 73	0.1 B.
42	0 9	23 43.6	+ 28 10	6.9	89.4	32.3	32.2	23 44.6	+ 28 17	6.5	6.4 0.1 (63)
Dm. 4666	23 47.6	+ 28 41	7.2	88.8	32.2	30.9	23 49.9	+ 28 56	6.8 6.9	6.5 6.6 (66) 0.1 (67)
Dm. 49	0 16.3	+ 28 40	7.6	32.1	32.2	29.7	0 17.6	+ 28 55	7.1	7.0 0.1 (71)
28	0 8.4	+ 19 33	4.9	32.0	22.5	31.4	0 9.4	+ 19 39	6.4 7.0	6.5 7.0 (66) 0.1 (71)
46	0 14.2	+ 30 16	6.6	33.4	32.3	31.1	0 15.2	+ 30 23	6.1	6.1 0.2 (63) 8 9 12.9 + 30.1
44	0 12.6	+ 30 52	6.6	33.3	32.4	31.4	0 13.4	+ 30 58	6.2	6.2 0.2 (64) 43 11.7 + 30.7

6/1 0/1

Mean Br.

306	1 53.0	+ 11 47	6.2	92.4	22.4	93.3	1 54.1	+ 11 49	6.0	6.6
362	1 59.8	+ 22 6	6.2	92.0	32.4	92.3	2 1.0	+ 22 11	5.3	5.9
368	2 12.2	+ 22 37	6.6	33.2	32.4	32.1	2 13.3	+ 22 43	6.2	6.8 2 10.8 + 22.5 (30)
333	2 0.4	+ 22 54	2.0	32.2	32.5	32.4	2 1.5	+ 23 0	4.0 4.4	(46) 5.0
296	1 53.5	+ 22 41	7.0	91.3	32.3	90.8	1 56.0	+ 22 54		
~~Dm. 271~~	~~1 54.8~~	~~+ 12 47~~	~~6.5~~	~~91.6~~	~~22.4~~	~~90.8~~			6.4	7.0 6.9
306	1 56.3	+ 26 1	4.9	91.5	32.4	92.7	1 52.4	+ 23 7	5.0	5.6
Dm. 303	2 7.1	+ 23 37	6.5	31.5	32.3	30.8	2 9.6	+ 23 50	6.4	7.0
368	2 8.9	+ 24 30	6.6	33.1	32.5	32.4	2 10.0	+ 24 35	5.8	6.4
361	2 6.5	+ 14 42	6.2	32.9	22.4	32.7	2 7.6	+ 14 48	6.4 6.7	7.0 (69) 7.3 7.2
Dm. 347	2 17.6	+ 24 30	7.3	32.6	32.2	30.7	2 20.2	+ 24 42	6.3	6.9
Dm. 325	2 6.5	+ 24 66. 7.5		31.5	32.3	30.9	2 8.0	+ 24 8	6.4	7.0 7.0
Dm. 349	1 58.6	+ 25 0	6.5	90.8	32.3	91.1	2 1.1	+ 25 13	5.6	6.2
357	2 8.9	+ 26 14	6.8	33.1	32.4	32.2	2 10.0	+ 25 19	5.9	6.5
337	2 2.6	+ 26 23	6.1	32.4	32.5	32.4	2 3.7	+ 25 28	5.4	5.7
326	1 66.8	+ 26 21	6.8	91.8	32.5	92.5	1 58.0	+ 25 28	5.9	6.5
Dm. 281	2 14.6	+ 16 12	7.0	31.8	22.2	30.9	2 17.1	+ 16 25	6.3	6.9
Dm. 247	2 1.4	+ 16 33	6.8	31.2	22.4	31.2	2 3.9	+ 16 46	6.2	6.8
Dm. 357	1 59.1	+ 26 33	7.0 ~~6.9~~	90.7	32.4	90.9	2 1.7	+ 26 46	6.3	6.9

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Plate 1006.

	T	H	Type	No. lines	K	Focus	Other lines.	T	H	T	H	Correc.
	10.4	20.0	III	32	K=H	1	F?	62	40.0	27.2	62.4	-1.8
?	10.4	20.6	IIa	3	K=H?	2	F. neb.	62	41.2	27.2	61.2	-0.9
	10.0	15.6	I	9	K=H	1	F	60	31.2	27.4	61.2	-0.1
	9.0	19.9	II?	2	K=H	1	F?	46	39.8	27.9	62.6	-1.8 -0.8
	9.2	15.0	I	2	H	1	—	46	30.0	27.8	62.4	0
	8.8	10.7	I	10	K=½H?	2	F	44	21.4	28.0	71.0	+1.5
	8.7	12.6	III	2	K=H	1	—	44	26.2	28.0	67.2	+0.9
	7.6	16.0	I	6	H	1	—	38	32.0	28.6	60.4	-0.3
	7.5	22.4	I	9	H	4	F	38	44.8	28.6	47.6	-1.2
?	6.9	22.0	IIa	3578 3	K=H	3	F. neb.	34	44.0	29.0	48.4	-2.9
	6.6	10.3	III?	III 12	K=H	1	—	33	20.6	29.1	71.8	+0.9
	6.5	6.8	I	11	K=H	2	F	32	13.6	29.2	78.8	+3.0
?	6.2	10.8	I	3579 8	H	2	neb.	31	21.6	29.3	70.8	+0.7
	6.0	6.5	II?	3	K=H	1	F	30	13.0	29.4	79.4	+3.3
?	5.6	13.7	II	3	K=H	2	F neb.	28	27.4	29.6	65.0	+0.5
	5.4	20.8	II	2	K=H	1	—	27	41.6	29.7	60.8	-2.3
I?	5.3	12.6	I?	2	K=H	1	—	26	26.2	29.8	67.2	+0.9
	4.5	21.8	I	12	K=½H?		F	22	43.6	30.2	48.8	-1.3
?	3.6	13.4	IIa	3520 3	K=H	2	F neb.	18	26.8	30.6	65.6	+0.4
	3.1	14.1	I	6	H	1	F	16	28.2	30.8	64.2	+0.3

F. m. & c. F. cl.

Plate 1007.

	7.0	6.9						7.9				
	22.9	9.7	I	9	K=H	2	—	114	19.4	41.0	72.2	+3.9
	23.0	13.8	I	9	H	1	—	115	27.6	40.9	64.0	+0.5
?	22.4	19.0	IIa?	3521 2	K=H	1	neb.	112	38.0	41.2	63.6	-2.9
	22.1	7.0	III?	2	K=H	1	—	110	14.0	41.4	77.6	+3.6
	21.9	15.0	I	3	H	4	—	110	30.0	41.4	61.6	0
?	21.4	16.7	IIIc	3522 3	K=½H?	5	F. Bright neb.	107	33.4	41.7	68.2	-1.2

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Mean 6

	No.	R.A.	Dec.	Mag.	H	V	H'	Red. to 1900	Cor. By.	Cor. Bu.	
Dm.	310	1 49.5	+27 6	6.5	89.5	32.2	91.3	1 52.0	+27 18	6.4 6.8	7.0 7.4	7.0 7.4
	299	1 60.8	+17 14	6.2	92.0	22.4	92.9	1 51.9	+17 20	5.7	6.3	
Dm.	315	1 69.8	+17 20	7.3	91.0	22.3	9.11	2 2.3	+17 33	6.0	6.6	
	311	1 49.8	+27 49	7.7	89.6	32.3	91.4	1 52.3	+28 2	6.3	6.9	27.9
~~Dm~~	~~299~~	~~1 51.0~~	~~+17 39~~	~~7.7~~	~~90.8~~	~~22.1~~	~~91.6~~					
Dm.	337	2 1.0	+27 43	8.0	31.0	323	310	2 3.6	+27 36	6.7	7.3	
	367	2 12.0	+28 6	6.3	33.4	32.5	31.9	2 13.2	+28 11	5.7	6.7	
Dm.	374	2 6.3	+28 1	6.5	31.5	32.4	30.6	2 8.9	+28 14	6.3 6.6	6.7 7.2	
Dm.	359	1 58.5	+28 36	6.7	90.5	32.4	90.8	2 1.1	+28 48	6.4	6.7	
	291	1 46.9	+18 42	4.3	91.7	22.5	92.9	1 48.0	+18 48	4.0	4.6	
	292							1 48.0	+18 49			
	289	1 46.2	+29 0	3.6	90.2	32.4	93.1	1 47.3	+29 6	4.2	4.8	
Dm.	342	2 11.1	+19 1	7.5	31.7	22.3	30.8	2 13.6	+19 14	6.5 6.8	7.1 7.4	7.0 7.15
	388	2 21.2	+29 8	6.5	34.8	32.3	31.8	2 22.3	+29 14	5.4	6.0	
	365	2 11.5	+19 21	5.6	33.1	22.5	32.4	2 12.6	+19 26	5.5	6.1	
Dm.	423	2 20.4	+29 17	7.5	33.4	32.3	30.1	2 23.0	+29 29	6.0	6.6	
	345	2 6.4	+29 46	6.3	32.8	32.6	32.3	2 6.6	+29 50	5.5	6.1	
Dm.	324	1 47.5	+29 39	7.5	89.1	32.3	91.4	1 50.1	+29 52	6.4	7.0	
Dm.	376	2 6.3	+29 44	7.3	31.5	32.3	30.6	2 8.9	+29 57	6.3	6.9	
	295	1 48.0	+20 13	2.8	91.6	22.4	92.9	1 49.1	+20 19	3.5	4.1	
	350	2 6.1	+20 39	6.4	32.9	22.4	32.5	2 7.2	+20 44	5.6	6.2	
Dm.	347	2 3.0	+30 60	6.5	31.2	32.4	30.9	2 3.8	+31 3	6.1	6.7	

Mean 5

	374	2 15.4	+40 61	6.0	34.8	52.2	30.9	2 16.6	+40 57			
Dm.	347	2 3.0	+30 50	6.5	30.6	42.3	30.1	2 3.6	+31 3			
Dm.	407	1 49.2	+40 59	6.9	87.2	52.2	90.1	1 51.9	+41 13		7.0	
	387	2 20.4	+31 16	6.7	34.4	42.2	30.8	2 21.5	+31 22	6.5 6.7	7.0 7.2	
Dm.	411	2 0.2	+41 16	7.5	30.2	52.3	30.2	2 2.9	+41 29	6.5	7.0	
	324	1 66.5	+41 45	2.1	89.9	62.6	91.1	1 57.7	+41 51	3.8 4.2	4.3 4.7	

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Plate 1007.

V	H	Type	No. lines	K	Focus	Other lines	V	H	V	H	Correc.
19.9	10.6	I	5	K	1	—	10.0	21.2	42.4	70.4	+3.3
19.6	17.4	I	10	K	2	Fl.	9.8	34.8	42.6	66.8	−1.1
19.4	12.1	I	11	K=1.2H	2	Fl.	9.7	24.2	42.7	67.4	+1.2
18.9	18.8	I	4	K	1	—	9.4	37.6	43.0	64.0	−2.9
18.5	11.5	I	9	K	4	Fl.	9.2	23.0	43.2	68.6	+1.8
?	17.6	11.7	IIa	3523 3	K=H	2	Fl. diff.	8.8	23.4	43.6	68.2	+1.7
?	17.6	13.5	IIIb	3524 3	K=H	1	Fl. diff.	8.8	27.0	43.6	64.6	+1.2
	17.2	15.1	III?	2	K=H	1	Fl.?	8.6	30.2	43.8	61.4	0
	16.7	10.5	I	5	K=H	1	—	8.4	21.0	44.0	70.6	+3.7
	16.3	14.8	I	12	K=.2H	5	Fl.	8.2	29.6	44.2	62.0	+0.2
?	14.7	7.7	IIa?	3525 2	K=H	1	diff.	7.4	16.4	45.0	76.2	+4.1
	13.6	10.1	I I	3 4	K=H	11	— —	6.8	20.2	45.6	71.4	+4.5
?	13.5	22.3	IIa?	3526 2	K=H	1	Fl.? diff.	6.8	44.6	45.6	47.0	−6.4
	13.0	19.1	I	5	K=.5H	1	—	6.5	38.2	45.9	63.4	−2.4
	13.1	11.6	I	9	K=.5H	2	Fl.	6.6	23.2	45.8	68.4	+3.0
	12.9	7.4	I?	4	K=H?	1	Fl.	6.4	14.8	46.0	76.8	+6.9
	12.8	13.1	I	7	?	1	Fl.	6.4	26.2	46.0	66.4	+1.8
	12.5	16.3	III? III	2 2	H K=H	11	— —	6.2	32.6	46.2	59.0	−1.2
	12.5	17.3	I	5	K	1	—	6.2	34.6	46.2	57.0	−1.9
	12.0	18.8	III III	3 2	2 K=H K=H	11	Fl.? —	6.0	37.6	46.4	54.0	−3.5
	11.7	20.1	III III	3 3	K=H K=H	11	Fl —	5.8	40.2	46.6	51.4	
	11.8	20.0	III	3	K=H	1	Fl.	5.9	40.0	46.5	51.6	−2.9
	11.3	7.0	I?	6	K=H	1	Fl.	5.6	14.0	46.8	77.6	+4.8
	11.4	11.1	I	9	K	2	Fl.	5.7	22.2	46.7	69.4	+3.5
	11.4	11.6	I	9	K	3	Fl.	5.7	23.2	46.7	68.4	+3.0
?	11.2	13.4	IIa?	3527 3	K=H	2	Fl. diff.	5.6	26.8	46.8	64.8	+1.5
	11.2	21.1	I	3	K	1	—	5.6	42.2	46.8	49.4	−5.7 −3.7
	10.6	15.2	I	11	K=.24	3	Fl.	5.3	30.4	47.1	61.2	−0.1
	10.5	12.7	III	7 3	K=H	1	Fl	5.2	25.4	47.2	66.2	+2.1

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Means

	No.	R.A.	Dec.	Mag.	JE	ν	JE'	Red. to 1900	Cor. By	Cor. Br.
Dm.	502	2 12.0	+ 42 17	6.5	332	52.3	29.9	2 14.8	+42 30	6.4 6.9
	323	1 56.1	+ 32 43	6.4	90.9	42.5	92.0	1 57.1	+32 49	5.3 5.8
	366	2 8.8	+ 32 49	6.2	33.0	42.5	31.8	2 10.0	+32 54	5.2 5.7
Dm.	409	1 49.5	+ 42 54	8.0	87.1	52.3	90.0	1 52.2	+43 7	6.5 7.0
	361	2 10.2	+ 33 19	4.2	33.2	42.5	31.4	2 11.3	+33 23	4.0 4.5
	360	2 9.9	+ 33 42	6.0	33.3	42.5	31.6	2 10.8	+33 46	5.5 6.0
	349	2 6.8	+ 43 40	6.1	32.8	52.6	31.6	2 6.9	+43 45	5.9 6.4 6.3 6.8
Dm.	431	1 59.5	+ 43 45	6.9	89.7	52.4	89.7	2 2.3	+43 58	6.5 7.0 6.6 7.15
Dm.	474	2 12.4	+ 43 56	6.5	33.4	52.3	29.7	2 13.2	+44 9	6.3 6.8
	336	2 2.4	+ 34 26	3.1	32.0	42.6	31.8	2 3.5	+34 31	3.5 4.0
Dm.	437	2 18.1	+ 34 57	6.9	33.5	42.4	29.4	2 20.8	+35 9	6.6 7.1
Dm.	605	2 14.0	+ 45 30	7.8	34.2	52.3	29.7	2 18.9	+45 43	6.5 7.0 6.9
Dm.	447	1 38.9	+ 45 30	6.9	83.5	52.3	89.9	1 41.6	+45 44	6.3 6.8
Dm.	382	1 50.2	+ 35 54	7.0	88.4	42.4	90.8	1 52.8	+36 7	6.5 7.0
Dm.	589	2 9.9	+ 45 48	6.3	33.1	52.4	30.1	2 12.8	+46 1	5.7 6.2
	619	2 21.8	+ 45 45	7.3	36.6	52.2	29.7	2 24.7	+45 57	
Dm.	~~620~~	~~2 22.4~~	~~+ 45 59~~	~~7.2~~	~~37.2~~	~~52.4~~	~~30.3~~			6.3 6.8
Dm.	539	2 5.5	+ 46 1	7.0	31.7	52.4	29.9	2 8.3	+46 14	6.0 6.5
Dm.	511	1 57.0	+ 46 10	7.0	89.6	52.4	90.8	1 59.8	+46 23	6.5 7.0 6.6 7.1 7.0 7.2
Dm.	498	1 53.2	+ 46 9	7.3	87.8	52.4	89.7	1 56.0	+46 22	6.1 6.6
Dm.	485	1 48.9	+ 46 23	6.8	86.5	52.4	90.0	1 51.7	+46 36	6.5 7.0 6.7 7.2 6.9 7.0
	296	1 48.8	+ 36 41	5.8	89.0	42.5		1 50.0	+36 47	6.4 6.9 6.9 7.15
	297	1 ~~47.0~~	+ 36 40	6.7	89.0	42.6	91.9	1 50.2	+36 46	6.2 6.7
Dm.	499	2 20.3	+ 36 42	6.5	34.3	42.3	29.5	2 23.0	+36 54	6.2 6.7
Dm.	557	2 11.3	+ 46 38	6.5	33.5	52.3	30.0	2 14.2	+46 51	5.5 6.0
	364	2 11.5	+ 46 49	5.2	34.7	52.5	31.7	2 12.8	+46 55	5.0 5.5
Dm.	536	2 4.8	+ 46 49	6.2	31.6	52.4	30.1	2 7.7	+47 2	5.8 6.3
	463	1 42.1	+ 46 44	7.3	84.3	52.3	90.0	1 44.9	+46 58	
Dm.	~~330~~	~~1 43.9~~	~~+ 36 43~~	~~6.8~~	~~86.1~~	~~42.3~~	~~89.8~~			6.5 7.0
	334	2 1.3	+ 37 18	4.8	31.7	42.6	31.8	2 2.5	+37 23	4.7 5.2
Dm.	590	2 6.6	+ 47 8	6.7	32.0	52.3	29.9	2 9.5	+47 21	6.5 7.0 6.8 7.3

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Plate 1007.

V	H	Type	No. lines	K	Focus	Other lines.	V	H	V	H	Correc.
10.3	21.6	I	6	N	2	F.	6.2	43.2	47.2	48.4	-6.6
10.2	23.0	III	3	K=H	1	F.	6.1	46.0	47.3	45.6	-5.1
9.6	12.0	I	4	N	1	—	4.8	24.0	47.6	67.6	+2.7
9.4	23.3	I	5	N	1	—	4.7	46.6	47.7	46.0	-7.8
9.6	9.4	I	3	N	1	—	4.8	18.8	47.6	72.8	+3.6
9.4	7.0	I	3	N	1	—	4.7	14.0	47.7	77.6	+5.1
9.0	18.4	I	2	N	1	—	4.5	36.8	47.9	64.8	-2.1
8.4	16.0	II	3527.a 2	K=H	1	F. Seem	4.2	32.0	48.2	69.6	-0.6
8.3	14.3	I	11	K=2H	3	F.	4.2	28.6	48.2	63.0	+0.5
8.2	11.7	III	a 3528 3	K=H	1	F. seem	4.1	23.4	48.3	68.2	+3.3
7.9	18.5	III	h 3529 3	K=H	1	F.	4.0	37.0	48.4	64.6	-3.5
7.3	18.1	I	4	K=H	1	—	3.6	36.2	48.8	66.4	-3.0 -4.9
6.6	10.9	I	8	N	1	—	3.3	21.8	49.1	69.8	-2.7
6.0	10.1	III	h 3530 3	K=H	2	F. seem	3.0	20.2	49.4	71.4	+5.3
5.8	11.3	I	12	N	2	F.	2.9	22.6	49.5	69.0	+3.9
5.5	9.8	III	h 3531 3	K=H	1	F. seem	2.8	19.6	49.6	72.0	+5.4
5.5	6.8	I	4	N	1	—	2.8	13.6	49.6	78.0	+8.5
5.4	6.1	I	7	N	1	—	2.7	12.2	49.7	79.4	+6.1
5.0	5.9	I	4	N	1	—	2.6	11.8	49.9	79.8	+9.5
4.8	9.1	II	a 3532 13	K=H	1	F. seem	2.4	18.2	50.0	73.4	+6.0
4.7	13.4	I	3	N	1	—	2.4	26.8	50.0	64.8	+1.2
5.0	16.2	III	2	K=H	1	—	2.6	32.4	49.9	59.2	-1.2
4.9	21.0	III	3	K=H	1	F	2.4	42.0	50.0	49.6	-4.3
4.6	23.1	III	a 3533 3	K=H	1	F. seem	2.3	46.2	50.1	46.4	-8.7
4.5	20.4	I	11	N	2	F.	2.2	40.8	50.2	50.8	-5.7
4.1	11.6	II	3534.a 12	K=H	1	F. Seem	2.0	23.2	50.4	68.4	+3.7
4.0	13.7	III	h 3535 3	K=H	2	F. seem	2.0	29.4	50.4	64.2	+1.5
4.0	14.6	I	3	N	1	—	2.0	29.2	50.4	62.4	+0.3

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Mean 5

No.	R.A.	Dec.	Mag.				Red. to 1900	Br.	Br. corr.
279	1 42.0	+ 47 18	6.0	85.2	52.5	31.8	1 43.2 + 47 24	6.1	5.6
Dm. 372	1 40.1	+ 37 14	6.0	86.1	42.3	91.2	1 43.2 + 37 28	6.8 6.9	6.3 6.4
Dm. 604	2 8.8	+ 47 29	7.2	32.8	52.3	30.1	2 11.7 + 47 42	6.9	6.4
Dm. 491	1 35.3	+ 47 28	7.8	81.9	52.2	89.7	1 38.0 + 47 42	6.7	6.2
Dm. 544	2 14.4	+ 37 36	7.0	33.2	42.4	29.6	2 17.1 + 37 49	6.8	6.3
Dm. 560	2 20.4	+ 37 35	7.2	34.4	42.3	29.3	2 23.1 + 37 47	7.0	6.5
Dm. 452	1 51.7	+ 37 58	7.4	88.5	42.4	90.6	1 54.4 + 38 7	7.0	6.5
Dm. 408	1 57.7	+ 38 12	8.2	89.7	42.4	90.3	2 0.4 + 38 25	7.2	6.7 7.0
340	2 3.6	+ 38 29	6.6	32.2	42.7	31.7	2 4.8 + 38 34	5.8	5.3
Dm. 648	2 10.0	+ 48 16	6.7	33.4	52.4	30.1	2 12.9 + 48 29	6.7	6.2
301	1 51.0	+ 48 37	5.7	88.0	52.6	31.5	1 52.2 + 48 43	6.6 6.9	6.1 6.4
580	1 50.6	+ 48 46	8.0	86.8	52.4	89.8	1 53.4 + 48 39		
~~Dm. 392~~	~~1 52.1~~	~~+ 38 55~~	~~7.8~~	~~88.3~~	~~42.5~~	~~90.2~~		7.1	6.6
Dm. 521	2 10.7	+ 39 10	6.8	32.5	42.5	35.2	2 13.4 + 39 23	6.5	6.0
378	2 16.6	+ 49 27	6.6	36.7	52.5	31.4	2 17.8 + 49 33	6.8 6.5	5.8 6.0
369	2 13.1	+ 49 36	5.6	35.7	52.5	31.6	2 14.4 + 49 42	5.6	5.1
381	2 17.7	+ 49 44	4.9	37.3	52.5	31.9	2 18.9 + 49 50	6.5 7.0	6.0 6.5
Dm. 696	2 25.0	+ 49 26	7.0	38.6	52.2	30.1	2 28.0 + 49 38	6.9	6.4
566	2 23.4	+ 39 37	6.8	35.6	42.3	29.5	2 26.2 + 39 49		
~~Dm. 554~~	~~2 24.6~~	~~+ 39 31~~	~~6.8~~	~~33.8~~	~~42.2~~	~~27.7~~		6.9	6.4
719	2 27.8	+ 49 36	7.2	39.6	52.1	30.1	2 30.8 + 49 48		
~~Dm. 724~~	~~2 28.4~~	~~+ 49 51~~	~~6.6~~	~~40.2~~	~~52.3~~	~~30.7~~		7.1	6.6
Dm. 666	2 18.2	+ 49 55	6.5	36.4	52.3	30.4	2 21.2 + 50 7	6.5	6.0
462	2 4.6	+ 40 6	7.3	31.4	42.3	30.2	2 7.3 + 40 19		
~~Dm. 498~~	~~2 4.3~~	~~+ 39 50~~	~~7.0~~	~~31.1~~	~~42.2~~	~~29.9~~		7.2	6.7
Dm. 544	1 56.1	+ 49 56	7.0	88.5	52.4	89.7	1 59.0 + 50 9	7.0 7.2	6.5 6.7
288	1 46.1	+ 40 9	5.6	88.1	42.6	32.4	1 47.3 + 40 14	6.8 7.2	6.3 6.7
269	1 36.1	+ 50 6	4.2	82.3	52.4	31.0	1 37.4 + 50 11	4.8	4.3
284	1 44.5	+ 50 12	6.4	85.3	52.4	31.0	1 45.7 + 50 18	5.8	5.3
Dm. 522	2 10.5	+ 50 17	7.0	33.7	52.3	30.0	2 13.3 + 50 30	6.9	6.4 6.7
348	2 6.6	+ 50 30	6.4	33.0	52.5	31.5	2 6.9 + 50 36	6.2 6.4	5.7 5.9
Dm. 466	2 1.2	+ 50 22	7.2	30.4	52.4	30.1	2 4.1 + 50 35	7.0	6.5

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February 9, 1887.

Plate 100 J.

T	H	Type	No. lines	K	Focus	Other lines	V	HE	V	HE	Correc.
3.3	9.9	I	6	K=H	2	7.	1.6	19.8	60.8	71.8	+3.7
3.3	16.2	I	3	K	1	—	1.6	32.4	60.8	69.2	-0.9
3.2	20.2	I	7	K	2	—	1.6	40.4	60.8	61.2	-5.7
2.8	19.2	I ? I	3 4	K	K=H 11	—	1.4	38.4	61.0	63.2	-5.3 -3.0
2.5	19.7	I		K	1	—	1.2	39.4	61.2	62.2	-3.5
2.4	15.1	I		K	1	—	1.2	30.2	61.2	61.4	-0.1
2.4	16.6	I	4	K	1	—	1.2	33.2	61.2	68.4	-1.8
2.3	20.7	I	2	K	1	—	1.2	41.4	61.2	60.2	-6.3

F. w. 4 c.

F cl.

Plate 102 J.

	8.0	7.H						7.5				
?	21.5	19.4	III ?	2	K=H	1	—	10.8	38.8	21.4	32.8	-1.1
	20.5	16.6	I	6	K=H	2	—	10.2	33.2	22.0	38.4	-0.1
	20.5	20.7	~~I~~ I ?	4	K=H	1	—	10.2	41.4	22.0	30.2	-0.6
?	16.4	20.2	~~I~~ IIa ?	2	K=H	1	[illegible]	8.2	40.4	23.0	31.2	-1.3 -0.5
	15.5	22.4	II ?	1	K	1	—	7.8	44.8	24.4	26.8	-0.6
	15.4	13.5	I	11	K	2	—	7.7	27.0	24.6	44.6	+0.1
	15.3	14.9	I	8	K	2	—	7.6	29.8	24.6	41.8	0
	15.0	23.1	I ?	4	K=H	1	—	7.5	46.2	24.7	25.4	-2.3
	15.0	16.8	I	9	K	2	7 ?	7.5	33.6	24.7	38.0	-0.1
	14.8	7.3	I	8	K	2	7.	7.4	14.6	24.8	57.0	+2.1
	14.4	17.1	I	7	K	1	7.	7.2	34.2	26.0	37.4	-0.7 -0.3
?	12.6	12.7	~~II~~ a ?	11	K=H	1	F [illegible]	6.3	25.4	25.9	46.2	+0.3
	12.6	9.0	I	8	K	2	7.	6.3	18.0	26.9	53.6	+1.8
	11.6	18.5	I	9	K=½H ?	2	7.	5.8	37.0	26.4	34.6	-1.2
	11.2	14.4	I	12	K	4	7.	5.6	28.8	26.6	42.8	+0.2
	10.7	14.6	I	9	K	2	7.	5.4	29.2	26.8	42.4	0
	10.4	17.2	I	10	K	1 3	7.	5.2	34.4	27.0	37.2	-0.9
?	10.1	12.0	I ?	5	K	1	[illegible]	5.0	24.0	27.2	47.6	+0.3

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Mean 5

No.	R.A.	Dec.	Mag.	H	V	H'	Red. to 1900	Br.	Cor. Br.
374	2 15.4	+40 61	6.0	35.2	42.4	31.5	2 16.6 +40 57	6.1	5.6
Dm. 434	1 57.2	+40 50	7.3	89.6	42.4	90.5	1 59.9 +41 3	7.0	6.5
381	1 43.6	+50 46	6.6	84.0	52.4	89.7	1 46.4 +51 0		
~~Dm. 384~~	~~1 46.3~~	~~+50 34~~	~~6.5~~	~~84.7~~	~~52.2~~	~~90.4~~	~~1 49.0 +51 11~~	6.2	5.7
394	1 46.4	+50 58	7.3	84.8	52.4	90.1	1 49.3 +51 11		
Dm. 409	1 49.2	+40 59	6.9	87.6	42.4	90.6		6.5	6.0
Dm. 374	1 47.8	+41 11	7.0	87.2	42.4	90.7	1 50.3 +41 24		
Dm. 411	2 0.2	+41 16	7.5	30.4	42.5	30.5	2 2.9 +41 29		
Dm. 483	1 54.8	+51 16	6.7	88.0	52.5	89.8	1 57.7 +51 29		
Dm. 416	1 41.7	+51 13	6.3	83.1	52.4	89.4	1 44.5 +51 27		

Mean 5

									Cor. Br.
417	2 32.0	+21 26	6.4	70.8	32.2	71.9	2 33.1 +21 32	6.4	5.9
								6.6	6.1
436	2 38.4	+11 57	6.2	71.6	22.2	71.7	2 39.5 +12 2	6.8	6.3
412	2 30.1	+11 57	5.6	71.5	22.2	72.1	2 31.2 +12 1	7.2	6.7
410	2 30.0	+24 8	6.1	70.4	32.3	71.7	2 31.2 +24 12		
~~Dm. 411~~	~~2 28.1~~	~~+13 8~~	~~7.5~~	~~68.5~~	~~21.3~~	~~69.0~~		6.8	6.3
Dm. 419	2 25.0	+14 24	6.5	69.8	22.2	70.2	2 27.3 +14 36	6.8	6.3
452	2 44.9	+14 34	6.5	71.9	22.3	71.8	2 45.9 +14 41	5.8	5.3
440	2 41.8	+24 42	6.0	71.6	32.3	71.6	2 43.0 +24 47	6.0	5.5
391	2 23.6	+24 42	5.8	69.8	32.2	72.1	2 24.8 +24 48	6.5	6.0
434	2 37.9	+14 49	5.8	71.5	22.3	71.6	2 39.0 +14 53	6.0	5.5
490	2 58.4	+24 47	5.3	73.0	32.2	70.9	2 59.6 +24 52	5.9	5.4
441	2 35.4	+25 2	6.7	69.6	32.3	70.3	2 38.0 +25 14		
~~Dm. 459~~	~~2 36.6~~	~~+14 42~~	~~6.0~~	~~70.8~~	~~21.9~~	~~71.1~~		6.5	6.0
Dm. 400	2 45.1	+15 53	6.5	70.5	22.2	70.2	2 47.6 +16 4	6.8	6.3
481	2 54.8	+26 0	5.9	72.8	32.3	71.0	2 56.0 +26 4	6.5	6.0
419	2 33.7	+26 33	5.4	70.7	32.4	71.9	2 34.8 +26 38	6.8	6.3
445	2 42.9	+26 46	3.8	71.7	32.4	71.5	2 44.1 +26 51	4.2	3.7
444	2 42.6	+16 58	5.6	71.8	22.4	71.8	2 43.7 +17 3	5.8	5.3
432	2 36.4	+27 12	4.8	70.8	32.4	71.7	2 37.6 +27 17	5.4	4.9
Dm. 455	2 46.8	+27 8	7.2				2 49.4 +27 19		
~~Dm. 454~~	~~2 46.8~~	~~+17 9~~	~~7.0~~	~~70.8~~	~~22.2~~	~~70.5~~	~~2 49.3 +17 20~~	7.0	6.5

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February 9, 1887.

Plate 1027. No. 3597

	T	H	Type	Lines	K	Focus	Other Lines.	V	HE	V	HE	Correc.
?	9.5	11.2	III a	3	K=H	1	7. poor	4.8	22.4	27.4	49.2	+0.6
	9.5	9.3	I	3	H	1	—	4.8	18.6	27.4	63.0	+0.9
	9.5	6.0	I	3	H	1	—	4.8	12.0	27.4	59.6	+0.3 +1.3
	8.9	8.4	I?	2	H	1	—	4.4	16.8	27.8	54.8	+2.4
	7.9	22.0	I?	2	H	1	—	4.0	44.0	28.2	29.6	-1.1
	8.0	18.4	I	6	H	1	—	4.0	36.8	28.2	34.8	-0.6
?	7.4	15.3	III h? 35 38	3	K=H	2	7. poor,	3.7	30.6	28.6	41.0	-0.1
	5.7	17.9	I	8	H	2	7.	2.8	36.8	29.4	35.8	-0.5
	6.2	23.9	I	7	K=H	2	7	3.1	47.8	29.1	23.8	-3.3
	5.9	23.4	I	3	H	1	—	3.0	46.8	29.2	24.8	-1.5
	4.2	10.6	I	4	K=H	1	—	2.1	21.2	30.1	50.4	+0.9
	2 5.9	10.1	I	8	H	2	7.	1.4 2.2	20.2	30.2 3	51.4	+1.1
	1.7	11.4	I	3	H	1	—	0.8	22.8	31.4	48.8	+1.5
12	1.8	19.5	I	3	H	1	—	0.9	39.0	31.3	32.6	-0.9

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Means 5

No.	R.A.	Dec.	Mag.	H	V	H'	Red. to 1900	Br.	Br. corr.
459	2 49.7	+ 17 32	6.6	72.1	22.3	71.5	2 50.8	+ 17 37	6.3	5.8
Dm. 471	2 52.4	+ 17 25	6.8	71.0	22.2	70.1	2 54.3	+ 17 36	7.0	6.5
493	2 59.3	+ 17 19	6.7	71.3	22.1	70.0	3 1.8	+ 17 30	6.5	6.0 ~ 3
~~Dm. 480~~	~~3 1.5~~	~~+ 27 16~~	~~6.5~~	~~13.5~~	~~32.1~~	~~13.2~~				
Dm. 468	2 54.9	+ 27 42	6.5	71.7	32.1	69.3	2 57.6	+ 27 53	7.1	6.6
Dm. 325	2 25.5	+ 18 16	7.0	69.5	22.3	70.6	2 28.0	+ 18 28	7.2	6.7
Dm. 337	2 33.0	+ 18 11	7.0	69.8	22.2	70.4	2 33.5	+ 18 23	7.0	6.5
439	2 40.8	+ 28 45	4.6	71.4	32.5	71.5	2 41.9	+ 28 50	6.5	6.0
428	2 35.6	+ 19 29	5.8	71.4	22.3	71.9	2 36.7	+ 19 35	6.3	5.8
388	2 21.2	+ 29 8	5.5	69.0	32.2	72.3	2 22.3	+ 29 14	6.2	5.7
Dm 423	2 20.4	+ 29 17	7.5	69.2	32.3		2 23.0	+ 29 29		
~~392~~	~~2 23.9~~	~~+ 19 19~~	~~6.1~~	~~70.7~~	~~22.3~~	~~72.2~~	~~2 23.0~~	~~+ 19 25~~	6.9	6.4
466	2 51.2	+ 20 10	5.9	72.4	22.3	71.5	2 52.3	+ 20 16	7.0	6.5
472	2 52.4	+ 20 52	4.6	72.6	22.3	71.5	2 53.4	+ 20 56	6.3	4.8
461	2 50.0	+ 31 26	5.2	72.8	32.2	71.3	2 51.2	+ 31 32		
417	2 32.0	+ 21 26	5.4	71.0	22.3	71.9	2 33.1	+ 21 32		

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F. nv. 4c. 6.3 6.3

F. clv. 7.6

March 5, 1887.

Plate 1008.

		T	H	Type	No. lines	K	Focus	Other lines	V.	H.	V.	H.	Correc.
2	0	22.3	17.8	I	10	K=.2H	2	—	11.2	35.6	26.1	55.4	-0.9
		22.2	22.2	II?	2	K=H?	1	—	11.1	44.4	26.2	46.6	-0.9
		22.1	13.0	I? I	3 4	K	K=H	11	—	11.0	26.0	26.3	65.0	+0.3
		21.4	14.1	III III	x2 2	K=H	K=H	11	F?	10.7	28.2	26.6	62.8	+0.3
		21.2	8.4	I	3	K		1	—	10.6	16.8	26.7	74.2	+2.1
		20.9	9.8	III?	2	K=H		1	F?	10.4	19.6	26.9	71.4	+1.7
	?	20.7	13.3	I b? 3529	9	N		3	pecu	10.4	26.6	26.9	64.4	+0.6
		20.6	23.1	I	10	K=.2H			F	10.3	46.2	27.0	44.8	-2.7
	?	20.3	24.0	I	7	K=H?	2		F	10.2	48.0	27.1	43.0	-1.3
		19.9	8.9	III?	2	K=H		1	F?	10.0	17.8	27.3	73.2	+2.1
		19.6	14.2	I	11	N		2	F	9.8	28.4	27.5	62.6	+0.5
		19.5	15.4	I? 3540	6	N		2	—	9.8	30.8	27.5	60.2	0
		19.7	20.7	I?	6	K=.8H		1	F	9.8	41.4	27.5	49.6	-1.8
		19.6	21.3	III? III?	x2 2	K=H	K=H	11	— —	9.8	42.6	27.5	48.4	-1.1
	?	19.2	20.7	II a 3544	3	K=H		2	F pecu	9.6	41.4	27.7	49.6	-0.9
		19.2	18.6	I	6	K=.2H?		1	F	9.6	37.2	27.7	53.8	-0.6
		19.4	16.2	I? I	2 4	K	K=H	11	— —	9.7	32.4	27.6	58.6	-0.5
		18.7	17.1	I	7	K=.8H		2	F	9.4	34.2	27.9	56.8	-0.7
		18.5	20.9	II?	2	K=H		1	—	9.2	41.8	28.1	49.2	-0.9
		17.7	11.2	I I	11 6	K=.8H	K=H	21	— —	8.8	22.4	28.5	68.6	+1.1
	?	17.7	7.8	I b 3542	5	N		1	pecu	8.8	15.6	28.5	75.4	+2.7
		17.6	7.0	III III	x2 2	K=H	K=H	11	F? —	8.8	14.0	28.5	77.0	+2.7
		17.5	6.1	I	5	K=H		1	—	8.8	12.2	28.5	78.8	+1.5
	?	17.2	9.8	III? c? 3543	x3	K=.2H		2	F pecu	8.6	19.6	28.7	71.4	+1.9
		17.0	9.6	I? I	6 4	N N		11	— —	8.5	19.2	28.8	71.8	+0.9
		17.2	14.5	I	12	N		2	F	8.6	29.0	28.7	62.0	+0.1
		17.0	15.5	I I	8 4	N N		11	F —	8.5	31.0	28.8	60.0	-0.1
		17.0	20.2	II	7	K=H		1	F?	8.5	40.4	28.8	50.6	-1.9

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Mean 4

	No.	R.A.	Dec.	Mag.	JE	V	JE'	Red. to 1900	Cor. Bv	Cor. Bl.
	481	2 54.8	+26 0	5.9	90.4	37.2	91.3	2 56.0 +26 4	5.9	6.3
Dm.	400	2 45.1	+15 54	6.5	89.5	27.0	90.4	2 47.6 +16 3	6.6	7.0
Dm.	447	3 4.3	+15 57	7.0	30.3	27.0	30.0	3 6.8 +16 7	6.7	7.1 7.2
	502	3 3.3	+26 26	5.8	31.5	37.1	31.2	3 4.6 +26 31	6.5 6.7	7.1 6.7 7.0
Dm.	548	3 14.4	+26 22	7.0	31.2	37.0	29.1	3 17.1 +26 32	6.6	7.0
	526	3 12.7	+26 38	5.9	32.3	37.0	30.6	3 14.0 +26 43	6.3 6.5	6.7 6.9
	507	3 5.1	+26 48	6.5	31.7	37.2	31.1	3 6.3 +26 53	5.4	5.8
	445	2 42.9	+26 48	3.8	89.1	37.1	31.8	2 44.1 +26 51	4.1	4.5
	444	2 42.6	+16 58	5.6	90.6	37.2	91.9	2 43.7 +17 3	5.8	6.2
	539	3 15.0	+27 11	5.6	32.8	37.2	30.7	3 16.2 +27 15	6.3 6.5	6.7 6.9
Dm.	480	3 1.5	+27 16	6.5	29.9	37.1	29.4	3 4.2 +27 27	6.0	6.4
Dm.	493	2 59.3	+17 18	6.7	90.1	27.1	90.1	3 1.8 +17 29	5.6	6.0
Dm.	455	2 46.8	+27 8	7.2	88.1	36.9	89.9	2 49.4 +27 19	6.3	6.7
Dm.	454	2 46.8	+17 9	7.0	89.4	27.0	90.5	2 49.3 +17 20	6.6 6.8	7.0 7.2 6.9 7.1
	459	2 49.7	+17 32	5.5	91.1	27.1	92.0	2 50.8 +17 37	6.0	6.4
Dm.	471	2 52.4	+17 25	6.8	89.6	27.0	90.2	2 54.9 +17 36	6.3	6.7
Dm.	~~464~~	~~2 57.0~~	~~+27 18~~	~~8.5~~	~~89.4~~	~~37.0~~	~~89.9~~	2 59.7 +27 29	6.9	7.3 7.2
Dm.	468	2 54.9	+27 42	6.5	89.1	37.1	89.8	2 57.6 +27 53	6.1	6.5
	468	2 49.1	+17 51	5.8	90.9	27.0	91.8	2 50.2 +17 55	6.7	7.1
Dm.	511	3 8.4	+28 14	8.2	30.8	37.0	29.7	3 11.1 +28 24	6.4	6.8 6.8
Dm.	~~532~~ 526	~~3 14.8~~ 3 16.1	~~+28 13~~ +28 8	~~7.0~~ 7.2	31.7	36.9	29.9	3 18.8 +28 18	6.4	6.8
Dm.	532	3 17.8	+28 13	7.0	31.8	37.0	29.1	3 20.5 +28 23	6.6 6.8	7.0 7.2 6.8 7.0
Dm.	484	3 18.8	+18 15	6.5	31.0	27.0	29.6	3 21.4 +18 25	6.5	6.9
	528	3 13.1	+28 37	4.7	32.7	37.2	30.8	3 14.3 +28 41	5.8 6.2	6.2 6.6
Dm.	459	3 11.5	+18 33	7.3	30.7	27.1	29.8	3 14.1 +18 43	6.7	7.1 7.0
	500	3 2.4	+28 36	5.5	31.4	37.2	31.3	3 3.6 +28 42	5.5	5.9
Dm.	493	2 58.6	+28 34	7.5	89.6	37.1	89.7	3 1.3 +28 35	6.6	7.0 6.9
Dm.	477	2 47.6	+28 34	6.8	88.0	37.1	89.9	2 50.3 +28 45	6.7	7.1

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1886phae.proj..835F

March 8, 1887.

Plate 1008.

		V	H	Type	No. Lines	K	Focus	Other Lines	V.	H.	V.	H.	Correc.
9	10	16.9	23.3	II	2	K=H	1	—	8.4	46.6	28.9	44.4	-1.3
	?	16.6	23.9	III b 3544	2	K=H?	2	F.	8.3	47.8	29.0	43.2	-3.3
✓	✓	16.6	14.4	I I	5	N	H	1 1	—	—	8.3	28.8	29.0	62.2	+0.1
	?	16.0	13.5	III bc 3545	3	K=H	1.2 1	F. Bigsby	8.0	27.0	29.3	64.0	+0.3
✓	✓	15.7	9.3	I ? I	4	K=H	H	1 1	—	—	7.8	18.6	29.5	72.4	+1.1
		15.6	24.0	II ?	1	K=2.0 H?	1	F.			7.8	48.0	29.5	43.0	-3.5
✓	✓	15.5	8.7	I ? I	3	N	H	1 1	—	—	7.8	17.4	29.5	73.6	+2.4
✓	✓	14.9	21.9	I ? I	6	K=H	H	1 1	—	—	7.4	43.8	29.9	47.2	-2.9
✓	✓	14.4	15.6	II a IIa 3546	2	K=H	H	K=H 1 1	F. Seeing		7.2	31.2	30.1	59.8	-0.2
		14.3	12.1	I	12	N		2	F.		7.2	24.2	30.1	66.8	+1.2
✓	✓	14.2	6.2	I? I	4	K=H	K=H	1 1	F.	—	7.1	12.4	30.2	78.6	+3.5
	?	14.1	19.7	II a 3547	3	K=H		2	F.		7.0	39.4	30.3	51.6	-0.9
✓	✓	14.1	22.9	I ? I	6	K=H	K=H	1 1	F.	—	7.0	45.8	30.3	45.2	-3.1
		13.6	7.5	I	11	N		1	F.		6.8	15.0	30.5	76.0	+1.3
		13.7	8.2	III	3	K=H		1	F.		6.8	16.4	30.5	74.6	+1.3
	?	13.0	8.9	I	11	N		2	F.		6.5	17.8	30.8	73.2	+1.2
✓	✓	13.1	10.8	I ? I	3	N	H	1 1	—	—	6.6	21.6	30.7	69.4	+1.8
	?	13.1	11.1	II a 3548	2	K=H		1	F.		6.6	22.2	30.7	68.8	+1.7
✓	?	13.3	12.0	I	12	N		3	F.		6.6	24.0	30.7	67.0	+0.6
✓	✓	13.2	18.4	I ? I	4	N	K=H	1 1	—	—	6.6	36.8	30.7	54.2	-1.7
✓	✓	13.0	23.4	III III	2	N	K=H	1 1	—	—	6.5	46.8	30.8	44.2	-3.3
		12.8	19.2	I	11	N		3	F.		6.4	38.4	30.9	52.6	-0.9
		12.2	19.4	I	7	K=H		1	—		6.1	38.8	31.2	52.2	-0.9
✓	✓	12.0	21.4	II a II 3549	3	K=H	K=H	1	F.		6.0	42.8	31.3	48.2	-2.7
✓	✓	12.5	24.2	II ? II	2	K=H	K=H	1 1	—	—	6.2	48.4	31.1	42.6	-4.1
✓	?	11.1	7.5	I I	5	N	H	1 1	F.	—	5.6	15.0	31.7	76.0	+1.5
	?	11.0	11.6	III ?	1	K=H		1	F.		5.5	23.2	31.8	67.8	+1.5
✓	?	11.0	13.7	I ? I	4	N	H	1 1			5.5	27.4	31.8	63.6	+0.3

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1886phae.proj..8355

Mean 4

	No.	R.A.	Dec.	Mag.	H	V	H.	Red. to 1900.	Cov.	Br.	Br.	
Dm.	359	2	42.5	+18 33	7.2	89.1	27.0	30.4	2	45.0	+18 44	6.6 7.0
	439	2	40.8	+28 45	4.6	88.6	37.1	31.9	2	41.9	+28 50	5.6 6.0 5.9 6.3
Dm.	418	3	1.3	+18 49	7.0	30.1	27.1	30.0	3	3.8	+19 0	6.3 6.7 6.6
	505	3	4.8	+19 16	4.5	31.8	27.3	31.5	3	5.9	+19 21	5.3 5.7 5.8 5.9
Dm.	510	3	12.1	+19 20	7.5	30.7	27.1	29.6	3	14.7	+19 33	6.8 7.2 7.0
Dm.	471	2	39.1	+29 5	7.4	87.1	36.9	90.6	2	41.8	+29 17	6.4 6.8
Dm.	552	3	14.1	+29 17	7.7	31.5	37.1	29.1	3	16.8	+29 39	6.9 7.3 7.1
Dm.	~~485~~ 492	~~3~~ 2	~~42.4~~ 43.7	~~+29 55~~ +29 35	~~7.7~~ 8.2	— 87.5	— 37.0	— 90.4	2	46.4	+29 46	6.8 7.2 7.0
Dm.	522	2	58.1	+29 58	7.5	89.3	37.2	89.5	3	0.8	+30 8	6.3 6.7 6.7
	514	3	8.0	+30 7	5.5	32.2	37.3	31.0	3	9.2	+30 11	5.3 5.7
Dm.	566	3	19.9	+29 52	6.8	32.1	37.0	28.6	3	22.6	+30 2	6.5 6.9 6.9
	466	2	51.2	+20 10	5.9	90.6	27.2	31.5	2	52.3	+20 16	6.0 6.4
Dm.	481	2	41.4	+29 55	7.1	87.2	36.9	90.3	2	44.2	+30 4	6.4 6.8 6.7
	547	3	17.5	+20 23	5.6	32.5	27.2	30.2	3	18.7	+20 27	5.9 6.3
	542	3	15.8	+20 19	5.2	32.2	27.1	30.9	3	17.0	+20 23	6.1 6.5 6.5 6.9
	535	3	14.3	+20 43	5.2	32.1	27.2	30.9	3	15.5	+20 47	5.1 5.5
Dm.	524	3	9.5	+30 29	8.2	31.1	37.1	29.3	3	12.2	+30 39	6.9 7.3 7.2
Dm.	520	3	8.8	+30 36	6.5	31.0	37.2	29.3	3	11.5	+30 46	6.3 6.7
	515	3	8.0	+20 36	4.9	32.0	27.2	31.4	3	9.2	+20 40	4.8 5.2
Dm.	477	2	51.5	+30 32	7.5	88.3	37.1	30.0	2	54.2	+30 43	6.8 7.2 7.0
Dm.	448	2	40.0	+30 31	7.2	86.8	37.0	30.1	2	42.7	+30 43	6.5 6.9 6.8 7.2 7.1
	472	2	52.4	+20 52	4.6	90.8	27.3	91.7	2	53.4	+20 56	4.8 5.2
Dm.	397	2	50.6	+21 2	7.0	89.4	27.1	90.3	2	53.2	+21 13	6.2 6.6
Dm.	497	2	44.7	+31 3	7.0	87.5	37.0	90.2	2	47.4	+31 14	6.4 6.8 6.7
Dm.	444	2	38.4	+30 47	7.9	86.8	37.0	90.9	2	41.1	+30 59	6.6 7.0 7.0
Dm.	447	3	16.1	+21 31	6.8	31.1	27.1	29.6	3	18.7	+21 41	6.5 6.9 6.8
Dm.	576	3	7.7	+31 39	6.5	30.9	37.1	29.4	3	10.5	+31 49	6.3 6.6 6.3 6.7
Dm.	419 ~~416~~	3 ~~3~~	3.0 ~~2.3~~	+21 37 ~~+21 21~~	8.2 ~~7.7~~	30.4 —	27.1 —	30.1 —	3	5.6	+21 47	6.8 7.2 7.1

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March 8, 1887.

Plate 1008.

	V	H	Type	No. Lines	K	Focus	Other Lines	V.	H.	V.	H.	Correc.
	11.5	16.7	I ? I	6 4	K=H K=H	1 1	— —	5.8	33.4	31.5	57.6	-0.9
	11.6	19.7	I	13	H	3	F	5.8	39.4	31.5	51.6	-2.1
	11.4	22.7	I	10	K=H	2	F	5.7	45.4	31.6	45.6	-3.5
	10.8	14.1	III ? III	2 2	K=H K=H	1 1	— —	5.4	28.2	31.8	62.8	+0.3
	10.4	14.6	III ? III	2 2	K=H K=H	1 1	— —	5.2	29.2	32.1	61.8	+0
	10.6	17.7	II ? II ?	2 2	K=H K=H	1 1	— —	5.3	35.4	32.0	55.6	-0.6
	10.6	18.0	IIa ? II ?	3 2	K=H K=H	1 1	F	5.3	36.0	32.0	55.0	-1.3
	10.5	19.3	III III	2 2	K=H K=H	1 1	F —	5.2	38.6	32.1	52.4	-1.8
	9.5	5.7	I ? I	4	K=H K=H	1 1	F —	4.8	11.4	32.5	79.6	+2.3
	9.9	10.6	I ? I	3 3	H H	1 1	F	5.0	21.2	32.3	69.8	+1.1
?	9.7	12.0	IIa 3551	2	K=H ?	2	F	4.8	24.0	32.5	67.0	+1.3
	9.5	21.2	I ? II	6 4	H K=H	1 1	F	4.8	42.4	32.5	48.6	-3.1
	9.6	22.6	I I	4 3	H H	1 1	F —	4.8	45.2	32.5	45.8	-3.7
	8.2	8.4	I	12	H	2	F	4.1	16.8	33.2	74.2	+3.3
	8.0	9.6	I	3	H H	1 1	— —	4.0	19.2	33.3	71.8	+1.3
	8.2	15.8	I I	7 5	H H	1 1	F —	4.1	31.6	33.2	59.4	-0.3
?	7.5	×6.8	I d	8	?	2	F —	3.8	13.6	33.5	77.4	+4.2
?	7.0	10.8	III bc 3552	3	K=H	2	F Bright?	3.5	21.6	33.8	69.4	+2.1
	7.5	16.1	I I	6 4	H H	1 1	F —	3.8	32.2	33.5	58.8	-0.6
	7.8	18.7	II ? II	2 2	K=H K=H	1 1	F? —	3.9	37.4	33.4	53.6	-1.8
?	7.5	23.9	I d ?	6	H	1	F —	3.8	47.8	33.5	45.2	-2.3
	6.1	12.0	I	11	K=2H	2	F	3.0	24.0	34.3	67.0	+1.6
	5.9	7.8	III ?	3	K=H	1	F	3.0	15.6	34.3	75.4	+1.9
	5.4	12.0	I ? I	2 4	K=H K=H	1 1	— —	2.7	24.0	34.6	67.0	+1.6
	5.1	16.4	I	3	H	3	F	2.6	32.8	34.7	58.2	-0.5
III ? 6.4, 6.7 ?	5.2	18.9	III bc ? 3553	3	K=H	2	F Bright?	2.6	37.8	34.7	53.2	-1.9
III ? 6.3, 6.7 ?	5.4	22.0	III b 3554	3	K=H	2	F	2.7	44.0	34.6	47.0	-3.6
?	5.0	24.0	I d ?	6	H	2	F	2.5	48.0	34.8	43.0	-2.5

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Means 4

	No.	R.A.	Dec.	Mag.				Red to 1900		cgw. Bn.	Bn.
Dm.	531	2 55.5	+ 31 22	8.0	88.9	37.2	89.8	2 28.2	+31 33	6.8 7.2	7.0
	461	2 60.0	+ 31 26	5.2	89.4	37.2	31.5	2 51.2	+ 31 32	5.1 5.5	
Dm.	490	2 41.7	+ 31 22	6.5	87.1	37.1	30.6	2 44.4	+31 33	5.9 6.9	
Dm.	553	3 2.0	+ 31 40	7.0	30.2	37.1	29.9	3 4.7	+31 51	6.8 7.2 / 6.9 7.3	7.1 / 7.3
Dm.	549	3 0.8	+ 31 55	8.2	30.0	37.1	30.0	3 3.5	+32 6	6.9 7.3 / 7.3 7.5	7.1 / 7.4
Dm.	403	2 54.1	+ 21 48	8.0	89.5	27.1	90.1	2 56.7	+21 59	7.0 7.4	7.2
Dm.	526	2 52.7	+ 31 50	6.5	88.7	37.1	90.0	2 55.4	+32 1	6.4 6.8	6.8
Dm.	512	2 49.5	+ 31 54	6.6	88.1	37.1	89.9	2 52.2	+32 5	6.7 7.1 / 6.8 7.1	6.8 / 7.0
	559	3 21.4	+ 22 26	6.1	32.8	27.2	30.5	3 22.6	+22 28	6.7 7.1	7.0
	409	3 9.4	+ 22 18	7.5	30.6	27.3	29.5	3 12.0	+22 28		
Dm.	~~602~~	~~3 10.1~~	~~+ 32 9~~	~~7.8~~						6.7 7.1	7.0
Dm.	591	3 6.8	+ 32 19	6.5	30.8	37.1	29.5	3 9.6	+32 29	6.0 6.4	
Dm.	522	2 44.9	+ 32 19	7.5	87.3	37.1	30.4	2 47.6	+32 30	6.9 7.3	7.1
Dm.	511 / ~~508~~	2 41.6 / ~~2 40.3~~	+ 32 14 / ~~+ 32 14~~	8.2 / ~~7.5~~	86.8	37.0	90.5	2 44.3	+32 25	6.9 7.3	7.1
	544	3 17.0	+ 33 6	5.6	33.8	37.2	30.5	3 18.2	+33 11	5.4 5.8	3.155 +33.0
Dm.	442	3 11.8	+ 23 10	7.0	31.0	27.2	29.7	3 14.4	+23 20	6.9 7.3	7.0
Dm.	578	2 57.6	+ 33 4	7.7	89.2	37.2	89.5	3 0.7	+33 15	6.5 6.9	6.8
	556	3 20.8	+ 33 23	5.5	34.4	37.2	30.2	3 22.0	+ 33 28	5.5 5.9	3 19.2 +33.2
	524	3 11.3	+ 33 46	4.8	32.9	37.3	30.8	3 12.5	+ 33 51	5.9 6.8 / 6.5 6.5	
Dm.	574	2 57.0	+ 33 26	7.5	89.2	37.2	89.8	2 59.8	+33 37	6.6 7.0	6.9
Dm.	553	2 50.7	+ 33 15	8.3	88.1	37.1	89.9	2 53.5	+33 26	6.9 7.3	7.2
	521	2 40.6	+ 33 20	7.1	86.4	37.3	90.5	2 43.3	+33 31		
Dm.	~~369~~	~~2 39.2~~	~~+ 23 2~~	~~6.8~~	~~85.0~~	~~26.3~~	~~87.3~~	2 41.8	+	6.4 6.8	33.3
Dm.	610	3 7.0	+ 34 9	6.5	31.0	37.2	29.4	3 9.8	+34 19	5.8 6.2	
	546	3 17.2	+ 24 19	5.6	32.8	27.3	30.9	3 18.4	+ 24 22	6.3 6.7 / 6.5 6.9	
Dm.	611	3 7.0	+ 34 30	7.5	31.0	37.2	29.4	3 9.8	+ 34 41	6.9 7.0	6.9
	490	2 58.4	+ 24 47	5.3	91.2	27.4	91.7	2 59.6	+ 24 52	5.2 5.6	
	468	2 51.7	+ 34 42	5.0	89.5	37.3	31.4	2 52.9	+ 34 47	5.9 6.3 / 5.6 6.0	
	449	2 44.2	+ 34 34	4.8	88.2	37.3	31.8	2 45.4	+ 34 39	6.1 6.5 / 5.6 6.0	
	440	2 41.8	+ 24 42	6.6	89.8	27.2	32.3	2 43.0	+ 24 47	5.7 6.1	

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Plate 1008.

V	H	Type	No. lines	K	Focus	Other lines	V.	H.	Y.	H.	Correc.
4.0	9.6	III? III	x2 2	K=H	K=H	1	– –	2.0	19.2	35.3	72.6 1.8	+1.8
4.5	15.0	II I	6 4	H	H	1 1	– –	2.2	30.0	35.1	61.0	0
4.2	23.8	I?	?	?	?	1	F	2.1	47.6	35.2	43.4	-4.9
3.3	23.7	III III	2 2	K=H	K=H	1 1	F? –	1.6	47.4	35.7	43.6	-4.9
2.7	11.5	I?	4	H		1	–	1.4	23.0	35.9	68.0	+1.9
2.5	11.9	I? I	3 3	H	H	1 1	– –	1.2	23.8	36.1	67.2	+1.1
2.6	12.3	I?	4	H		1	–	1.3	24.6	36.0	66.4	+1.6
2.6	17.0	I? I	2 2	H	H	1 1	– –	1.3	34.0	36.0	57.0	-1.2
2.3	15.4	II? II	1 2	H	K=H	1 1	– –	1.2	30.8	36.1	60.2 -02	0
2.4	17.7	II	2	K=H		1	–	1.2	35.4	36.1	55.6	-0.9
2.7	17.9	I	7	?		2	A	1.4	35.8	35.9	55.2	-0.9
2.7	21.9	I? I	2 3	H	H	1 1	– –	1.4	43.8	35.9	47.2	-4.1
1.9	16.2	I	10	H		1	F	1.0	32.4	36.3	58.6	-0.7

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Mean 4

No.	R.A.	Dec.	Mag.				Red. to 1900		cow. Bv.	Bv.	
Dm. 536	3 11.8	+ 25 8	6.5	32.2	27.1	29.2 28.4	3	14.5 + 25 18	6.5	6.9 7.1	7.1 7.3
Dm. 585	2 59.7	+ 34 53	8.0	89.7	37.1	89.7	3	2.5 + 35 11	6.6	7.0	7.0
Dm. 513	2 38.2	+ 34 57	6.5	85.8	37.1	90.7	2	40.9 + 35 9	6.0	6.4	
Dm. 553	2 38.0	+ 35 23	6.8	85.4	37.0	90.3	2	40.8 + 35 35	6.5 6.7	6.9 7.1	6.7 6.9
Dm. 660	3 8.2	+ 35 60	7.0	31.2	37.2	29.3	3	11.0 + 36 0	6.7	7.1	
Dm. 515	3 6.6	+ 25 57	8.0	30.4	27.2	29.3	3	9.3 + 26 7			
Dm. 653	3 6.1	+ 35 56	7.0	30.7	37.2	28.9	3	8.9 + 36 6	6.7	7.1	
Dm. 616	2 54.5	+ 35 52	7.1	88.5	37.2	29.7	3	57.3 + 36 3	7.0	7.4	7.2
632	2 58.5	+ 36 11	7.0	89.3	37.3	89.5	3	1.3 + 36 15			
~~Dm. 495~~	~~2 59.9~~	~~+ 25 48~~	~~7.9~~	~~90.7~~	~~27.0~~	~~90.7~~				7.1	
Dm. 603	2 58.8	+ 26 3	7.2	89.2	27.2	90.1	2	56.4 + 26 14			
481	2 54.8	+ 26 0	5.9	90.6	27.4	91.5	2	56.0 + 26 4	5.7	6.1	
Dm. 576	2 42.3	+ 35 42	8.0	86.1	37.1	90.2	2	45.1 + 35 53	6.9	7.3	7.1
Dm. 628	2 56.5	+ 36 13	6.5	88.9	37.2	89.6	2	59.3 + 36 24			

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1886phae.proj..835F

F. no. 9c. 6.4 6.3

F. ch. 7.5

March 9, 1887.

Plate 1009.

V	H	Type	No. Lines	K	Focus	Other Lines	V	H	V	H	Correc.
22.0	16.3	I: 4		K=H	1	—	11.0	32.6	46.4	58.2	−0.7
21.9	21.0	II? 2		K=H	1	—	11.0	42.0	46.4	48.8	−5.4
21.5	8.1	I 2? 42		K=H	1	seen	10.8	16.2	46.6	74.6	+6.5
21.2	7.8	I? 3		N	1	—	10.6	15.6	46.8	75.2	+6.7
21.1	15.5	I 9		K=½H	2	F?	10.6	31.0	46.8	59.8	−0.5
21.1	18.1	II? 12		K=H	1	F?	10.6	36.2	46.8	54.6	−2.7
21.2	19.2	III? 2		K=H	1	—	10.6	38.4	46.8	52.4	−3.9
21.2	20.2	I 5		K=.2H?	1	—	10.6	40.4	46.8	50.4	−4.9
20.9	5.8	I? 4		N	1	—	10.4	11.6	47.0	79.2	+9.0 +5.7
20.2	16.7	I 7		K=.5H	1	F	10.1	33.4	47.3	57.4	−1.9
19.3	6.9	II? 2		K=H	1	—	9.6	13.8	47.8	77.0	+8.1
19.3	7.4	I 10		K=H	2	F	9.6	14.8	47.8	76.0	+7.5
19.6	7.6	I 6		K=H	1	— —	9.8	15.2	47.6	75.6	+7.2
19.4	7.9	IIa 13	2K=H		2	F seen	9.7	15.8	47.7	75.0	+6.9
19.1	7.9	I d		?	2	—	9.6	15.8	47.8	75.0	+7.1
19.8	8.7	I? 3		N	1	—	9.9	17.4	47.5	73.4	+6.0 +4.4
19.0	9.1	I 6		N	1	—	9.5	18.2	47.9	72.6	+5.7
19.6	9.8	I? 3		N	1	—	9.8	19.6	47.6	71.2	+5.1
19.5	13.6	III 2		K=H	1	F?	9.8	27.2	47.6	63.6	+1.3
19.0	14.6	I 3 4		NK=H	1	— —	9.5	29.2	47.1	61.6	+0.2
19.5	16.8	II? 1		N	1	—	9.8	33.6	47.6	57.2	−1.1
19.4	18.4	I 8		K=.2H	2	F	9.7	36.8	47.7	54.0	−1.9
18.8	5.9	I d? 6		?	3	F —	9.4	11.8	48.0	79.0	+9.0
18.7	8.4	I 3		N	1	—	9.4	16.8	48.0	74.0	+6.5
18.6	9.4	I 4		N	1	—	9.3	18.8	48.1	72.0	+5.4
18.3	10.2	I 7		N	1	—	9.2	20.4	48.2	70.4	+4.7
18.3	11.5	I 4		N	1	—	9.2	23.0	48.2	67.8	+3.3
18.2	16.4	III 1c? 3		K=H	2	F bright seen	9.1	32.8	48.3	58.0	−0.9

III 5.4 5.7 6.7?

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Work at Mean 5 all sts

			No.	R.A.	Dec.	Mag.	H	V	H	Red. to 1900		Cow. Bu	Br.
-0.7	1.2	Dm.	628	2 56.5	+ 36 13	6.5	89.1	47.2	89.8	2 59.3	+ 36 24	6.5	7.6
			447	2 43.7	+ 46 21	5.8	85.7	57.4	91.1	2 45.0	+ 46 25	6.4	6.9
+4.1	6.5	Dm.	760	3 19.4	+ 46 27	6.5	35.6	57.3	29.1	3 22.5	+ 46 37	6.3	6.8
4.2	6.7	Dm.	762	3 20.3	+ 46 32	7.0	35.9	57.1	29.2	3 23.4	+ 46 42	6.6	7.1
0.3	0.5	Dm.	692	2 57.9	+ 46 44	6.4	88.9	57.3	89.4	3 0.9	+ 46 55	6.0	6.5
			467	2 51.7	+ 46 44	5.6	87.9	57.3	90.6	2 53.1	+ 46 49	6.1	6.6
			457	2 48.5	+ 46 40	5.8	86.9	57.3	90.8	2 49.8	+ 46 45	6.5	7.0
3.0	4.9	Dm.	652	2 44.3	+ 46 33	7.0	84.7	57.2	89.6	2 47.2	+ 46 44	6.2	6.7
			773	3 25.8	+ 46 37	7.1	37.4	57.0	28.4	3 28.9	+ 46 46	6.6	7.1
5.7	9.0	Dm.	~~723~~	~~3 24.6~~	~~+ 36 59~~	~~8.2~~	~~34.2~~	~~47.4~~	~~28.5~~				
1.1	1.9	Dm.	760	2 54.0	+ 47 17	7.0	87.4	57.4	89.3	2 57.1	+ 47 28	6.4	6.6
5.4	8.1	Dm.	850	3 23.1	+ 47 26	7.3	36.9	57.0	28.8	3 26.2	+ 47 36	6.3	6.8
4.9	7.5	Dm.	847	3 21.9	+ 47 31	6.5	36.7	57.1	29.2	3 25.0	+ 47 41	5.2	5.7
4.8	7.2	Dm.	846	3 21.4	+ 47 21	7.4	36.6	57.2	29.4	3 24.5	+ 47 31	6.3	6.8
			560	3 22.1	+ 47 35	4.4	37.9	57.3	31.0	3 23.5	+ 47 39	5.3	5.8
4.7	7.1	Dm.	844	3 20.4	+ 47 36	7.0	36.2	57.2	29.1	3 23.3	+ 47 46	5.4	5.9
			831	3 17.8	+ 47 14	7.9	35.2	57.1	29.2	3 20.9	+ 47 24	6.6	7.1
4.1	6.0	Dm.	~~765~~	~~3 15.9~~	~~+ 37 24~~	~~7.6~~	~~33.3~~	~~47.3~~	~~29.7~~				
3.9	5.7	Dm.	828	3 16.9	+ 47 42	6.7	35.1	57.2	29.4	3 20.0	+ 47 52	6.3	6.8
3.3	5.1	Dm.	817	3 14.7	+ 47 22	7.3	34.3	57.2	29.2	3 17.8	+ 47 32	6.7	7.2
0.9	1.3	Dm.	782	3 3.3	+ 47 40	6.5	30.5	57.5	29.2	3 6.4	+ 47 50	6.1	6.6
0.2	0.5	Dm.	715	3 0.9	+ 37 48	8.0	30.1	47.3	29.9	3 3.7	+ 37 59	6.6	7.1
1.1	1.7	Dm.	696	2 55.0	+ 37 32	7.0	88.6	47.3	29.7	2 57.8	+ 37 43	6.4	6.9
			471	2 52.4	+ 37 40	5.9	89.2	47.4	91.1	2 53.8	+ 37 45	5.5	6.0
			578	3 28.0	+ 47 48	4.2	39.8	57.2	30.8	3 29.4	+ 47 57	4.8	5.0
4.5	6.5	Dm.	835	3 18.9	+ 47 48	7.5	35.7	57.2	29.2	3 22.0	+ 47 58	6.5	7.0
3.6	5.4	Dm.	821	3 16.0	+ 47 52	7.1	34.8	57.2	29.4	3 19.1	+ 48 2	7.4	7.9
3.0	4.7	Dm.	903	3 13.6	+ 48 5	7.0	34.0	57.3	29.3	3 16.7	+ 48 15	6.0	6.5
2.3	3.3	Dm.	886	3 9.6	+ 48 7	7.5	32.6	57.3	29.3	3 12.7	+ 48 17	6.5	7.0
												5.1	5.6
			489	2 57.5	+ 38 22	3.7	90.3	47.5	91.2	2 58.8	+ 38 27	5.5	6.0

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Plate 1009.

V	H	Type	No. lines	K	Focus	Other lines	V	H	V	H	Correc.
18.1	17.7	I			1	–	9.0	35.4	48.4	55.4	-1.8
18.9	17.1	I	7	K=.2H	1	F	9.4	34.2	48.0	56.6	-1.3
18.9	19.5	I	I 5	N H	1 1	F	9.4	39.0	48.0	51.8	-4.5
18.4	20.3	III ?	III x2 2	K=H	1 1	–	9.2	40.6	48.2	50.2	-5.3
?	18.9	20.9	II	a 3558	K=H	2	F.sun	9.4	41.8	48.0	49.0	-3.7
?	19.0	22.0	II	a? 3559	K=1.H?	3	F.sun	9.5	44.0 44.4	47.9	46.8 50.4	-4.5
	17.9	6.7	I		K=H	1	–	9.0	13.4	48.4	77.4	+8.4
	17.9	7.5	I	7	K=H	1	–	9.0	15.0	48.4	75.8	+7.5
	17.0	7.7	I	10	K=.8H	1	F	8.5	15.4	48.9	75.4	+7.9
	17.0	8.–	I	4	N	1	–	8.5	16.4	48.9	74.4	+6.9
	17.3	8.6	I	6	K=H	1	–	8.6	17.2	48.8	73.6	+6.5 +6.3
	17.4	8.9	I	9	N	3	F	8.7	17.8	48.7	73.0	+6.3
	17.4	9.5	I	11	N	2	F	8.7	19.0	48.7	71.8	+5.7
	17.3	10.0	I	9	K=.8H	1	–	8.6	20.0	48.8	70.8	+5.1
	17.3	10.4	I	13	N	3	F	8.6	20.8	48.8	70.0	+5.1
	17.5	10.9	II	a 3560 II x3	K=H	1 2	F.sun	8.8	21.8	48.6	69.0	+4.2
	17.3	11.6	I	9	K=.2H?	1	F	8.6	23.2	48.8	67.6	+2.3
	17.7	13.7	I	I 4	N H	1 1	–	8.8	27.4	48.6	63.4	+1.3
	17.3	21.6	I	I 6	K=H	1 1	F	8.6	43.2	48.8	47.6	-6.7
?	17.1	23.2	II	a 3561 x3	K=2.5H?	3	F.sun	8.6	46.4	48.8	44.4	-8.4
	16.6	7.6	I		N	1	–	8.3	15.2	49.1	75.6	+7.5
?	16.5	8.5	I	9	N	3	F	8.2	17.0	49.2	73.8	+6.6
	16.3	9.1	I	6	N	1	F	8.2	18.2	49.2	72.6	+3.5
	16.0	9.6	I ?	2	N	1	–	8.6	19.2	49.4	71.6	+2.9
?	16.0	10.2	IIa ?	3562 x3	K=1.5H?	5	F.sun	8.0	20.4	49.4	70.4	+4.9
	16.6	13.5	I	I 8	N K=H	1 1	F	8.3	27.0	49.1	63.8	+1.5
III? 6.2, 6.4	?	16.6	14.1	III	f? 3563 3	K=1.5H?	2	F.sun	8.3	28.2	49.1	62.6	+0.6
	?	16.6	15.1	II	a 3564 x3	K=1.5H	3	F.sun	8.3	30.2	49.1	60.6	-0.1

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Means

			No.	R.A.	Dec.	Mag.	H	V	H	Red. to 1900	Cou. Br.	Br.
1.8	2.7	Dm.	617	2 52.7	+ 38 20	6.8	88.1	47.3	89.9	2 55.5 + 38 31	✓	6.3 6.8 ✓
1.3	1.9	Dm.	692	2 54.3	+ 37 50	7.0	88.5	47.2	89.8	2 57.1 + 38 1	✓	6.4 6.9 ✓
2.9	4.5	Dm.	737	2 45.8	+ 47 45	7.0	84.8	57.2	89.3	2 48.8 + 47 56	✓	6.4 6.9 ✓ 6.8 ✓
3.6	5.3	Dm.	723	2 43.5	+ 47 58	6.7	84.1	57.2	89.4	2 46.5 + 48 9	✓	6.5 {7.0 7.2} ✓ 6.8 7.0 ✓
			455	2 46.2	+ 37 52	5.4	88.0	47.3	91.7	2 47.4 + 37 56	✓	5.4 5.9 ✓
			446	2 43.0	+ 37 49	4.4	87.0	47.3	91.5	2 44.2 + 37 55	✓	4.6 5.1 ✓
5.5	8.4	Dm.	949	3 23.9	+ 48 8	7.5	37.3	57.1	28.9	3 27.1 + 48 17	✓	6.5 7.0 ✓
5.1	7.5	Dm.	943	3 21.6	+ 48 14	7.0	36.6	57.2	29.1	3 24.8 + 48 24	✓	6.2 6.7 ✓
5.4	7.9	Dm.	938	3 21.1	+ 48 41	6.5	36.5	57.2	28.6	3 24.3 + 48 51	✓	6.0 6.5 ✓
4.7	6.9	Dm.	933	3 19.5	+ 48 43	8.2	35.9	57.2	29.0	3 22.7 + 48 53	✓	6.4 6.9 ✓
		Dm.	927	3 18.6	+ 48 34	8.1	35.8	57.2	29.5	3 21.8 + 48 44	✓	6.6 7.1 ✓
4.3	6.5	Dm.	~~722~~	~~3 16.9~~	~~+ 38 34~~	~~8.0~~	~~34.1~~	~~47.2~~	~~29.8~~	3 + 48.6		
			552	3 19.6	+ 48 39	5.0	37.4	57.3	31.1	3 20.9 + 48 43	✓	4.7 5.2 ✓
			547	3 17.8	+ 48 42	5.9	36.8	57.4	31.1	3 18.9 + 48 45	✓	5.5 6.0 ✓ 3 15.7 + 48 35
3.3	5.1	Dm.	906	3 14.2	+ 48 36	8.0	34.2	57.2	29.1	3 17.4 + 48 46	✓	6.7 7.2 ✓
			537	3 14.7	+ 48 47	5.2	35.5	57.4	30.4	3 16.1 + 48 51	✓	5.1 5.6 ✓
2.7	4.2	Dm.	893	3 11.6	+ 48 33	6.5	33.4	57.4	29.2	3 14.8 + 48 43	✓	6.0 6.5 ✓ 6.5 ✓
2.3	3.3	Dm.	690	3 8.4	+ 38 46	6.5	31.6	47.4	29.3	3 11.3 + 38 56	✓	5.4 5.9 ✓
0.9	1.3	Dm.	862	3 8.0	+ 48 28	7.8	30.4	57.3	29.1	3 6.1 + 48 38	✓	6.6 7.1 ✓ 7.1 ✓
4.5	6.7	Dm.	762	2 39.0	+ 48 34	7.0	82.2	57.2	88.9	2 42.2 + 48 46	✓	6.4 6.9 7.0 ✓
			429	2 36.0	+ 48 43	4.2	82.6	57.3	91.0	2 37.3 + 48 48	✓	4.6 5.1 ✓
5.3	7.5	Dm.	942	3 21.5	+ 48 54	7.0	36.7	57.2	29.2	3 24.7 + 49 4	✓	6.0 6.5 ✓
			555	3 20.8	+ 49 7	4.8	37.8	57.3	31.2	3 22.2 + 49 10	✓	4.7 5.2 ✓
			936	3 17.3	+ 49 16	7.7	35.5	57.3	32.0	3 20.3 + 49 16	✓	
2.1	3.5	Dm.	~~929~~	~~3 15.8~~	~~+ 49 14~~	~~7.3~~	~~34.0~~	~~57.4~~	~~30.5~~			
			929	3 15.8	+ 49 14	7.3	35.0	57.2	32.1	3 19.0 + 49 24	✓	6.2 6.7 ✓ 6.9 ✓
1.9	2.9	Dm.	~~922~~	~~3 14.8~~	~~+ 49 14~~	~~8.7~~	~~34.0~~	~~57.2~~	~~31.1~~			
			541	3 15.8	+ 49 26	1.9	36.2	57.4	31.3	3 17.1 + 49 30	✓	B B ✓
1.1	1.5	Dm.	876	3 3.7	+ 49 2	7.4	30.7	57.3	29.2	3 6.9 + 49 12	✓	6.2 6.7 ✓ 6.7 ✓
			503	3 3.6	+ 39 9	4.7	31.8	47.5	31.2	3 4.8 + 39 14	✓	5.5 6.0 ✓ 5.8 6.3 ✓
			495	3 0.4	+ 49 9	4.1	30.6	57.5	30.7	3 1.8 + 49 14	✓	4.7 5.2 ✓

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March 10, 1887.

Plate 1009.

	V	H	Type	No. lines	K	Focus	Other lines.	V	H	V	H	Correc.
12 40	16.6	16.3	III? III	2 2	K=H?	1 1	—	8.3	32.6	49.1	58.2	−1.3 −0.9
	16.8	18.8	I	13	K=.2H	3	F	8.4	37.6	49.0	53.2	−2.5
	16.3	19.0	I? I	4 4	K=H	1 1	F	8.2	38.0	49.2	52.8	−4.2
	15.8	8.8	I?	4	K=H	1	F?	7.9	17.6	49.5	73.2	+6.5
	15.8	11.9	I	10	N	3	F	7.9	23.8	49.5	67.0	+3.0
?	15.6	12.1	I	13	N	3	F. sun.	7.8	24.2	49.6	66.6	+2.9
	15.3	12.3	I	7	K=.8H	1	F	7.6	24.6	49.8	66.2	+2.7
	15.8	13.0	I	10	N	1	F	7.9	26.0	49.5	64.8	+1.3
	15.0	16.3	II? II	3 2	K=H K=H	1 2	F F?	7.5	32.6	49.9	58.2	−0.9
	15.6	16.6	III III	2 2	K=H K=H	1 1	F? —	7.8	33.2	49.6	57.6	−1.1
	15.4	18.0	II? II	2 2	K=H K=H	1 1	F? —	7.7	36.0	49.7	54.8	−2.1
	14.1	6.5	I?	7	K=H	1	F	7.0	13.0	50.4	77.8	+6.3
	14.7	8.1	II a? 3566	3	K=.2H	1	F	7.4	16.2	50.0	74.6	+7.2
	14.8	8.8	I? I	4 4	K=H K=H	1 1	— —	7.4	17.6	50.0	73.2	+6.6
	14.3	9.0	II? II 3567 3568	3 2	K=H K=H	1 1	F —	7.2	18.0	50.2	72.8	+4.2
?	14.0	11.6	II a?	2	K=H	1	F? sun.	7.0	23.2	50.4	67.6	+3.6
	15.0	11.8	I	9	N	2	—	7.5	23.6	49.9	67.2	+2.3
	14.8	12.2	I? I	4	N K=H	1 1	— —	7.4	24.4	50.0	66.4	+2.7
	14.2	12.9	II?	13	K=1.2H	2	F	7.1	25.8	50.3	65.0	+2.3
	14.1	13.0	I	10	N	2	F	7.0	26.0	50.4	64.8	+2.3
?	14.4	15.2	I?	11	N	5	F	7.2	30.4	50.2	60.4	−0.3
	14.0	16.3	I I	9 6	N N	1 1	F —	7.0	32.6	50.4	58.2	−0.9
	14.2	18.5	III III	7 3	K=H K=H	1 1	F F	7.1	37.0	50.3	53.8	−2.5
	14.2	21.5	I	3	N	1	—	7.1	43.0	50.3	47.8	−7.1
	13.8	6.2	I	6	N	1	—	6.9	12.4	50.5	78.4	+6.5
	13.4	9.0	I	8	?	1	F	6.7	18.0	50.7	72.8	+4.3
	13.0	9.8	II II	2 2	K=H K=H	1	F —	6.5	19.6	50.9	71.2	+5.7
	13.6	12.7	I	6	K=.2H	1	—	6.8	25.4	50.6	65.4	+2.5

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Means

			No.	R.A.	Dec.	Mag.	JE	V	JE		Reduc to 1900		Cou. Bu.	Br.	
			841	2 55.0	+ 49 9	8.0	87.6	57.5	88.9	2	58.1	+49 20	6.7	7.3	7.1
0.9	1.3	Dm.	~~902~~	~~2 56.1~~	~~+ 39 4~~	~~8.0~~	~~88.7~~	~~47.4~~	~~89.6~~				6.9	7.4	7.2
			465	2 51.1	+ 39 11	4.7	88.7	47.6	31.2	2	52.4	+ 39 16	4.8	5.3	
2.7	4.2	Dm.	801	2 46.5	+ 49 12	7.7	84.5	57.4	88.7	2	49.6	+ 49 23	6.6	7.1	7.0
4.3	6.5	Dm.	944	3 18.5	+ 49 21	6.5	36.1	57.3	29.6	3	21.7	+ 49 31	5.3	5.8	
			522	3 10.7	+ 49 40	5.0	34.5	57.6	31.5	3	12.0	+ 49 43	4.9	5.4	
			521	3 10.1	+ 49 47	5.3	34.3	57.6	31.4	3	11.5	+ 49 51	5.0	5.5	
1.8	2.7	Dm.	895	3 7.4	+ 49 49	7.7	32.0	57.4	29.3	3	10.6	+ 49 59	6.4	6.9	
1.3	2.1	Dm.	737	3 4.7	+ 39 34	7.5	30.7	47.5	29.4	3	7.6	+ 39 44	6.1	6.6	
0.9	1.3	Dm.	664	2 56.0	+ 40 1	6.5	88.6	47.5	29.5	2	58.9	+ 40 12	6.3	6.8	6.6
1.1	1.8	Dm.	699	2 55.1	+ 39 43	6.8	88.3	47.5	29.4	2	58.0	+ 39 54	6.7	7.2	7.1
													6.9	7.4	7.2
2.1	3.0	Dm.	687	2 51.6	+ 39 51	7.3	87.6	47.5	29.7	2	54.5	+ 40 2	6.8	7.3	7.2
6.3	9.3	Dm.	772	3 21.9	+ 40 16	6.5	34.9	47.3	28.6	3	24.9	+ 40 26	6.1	6.6	
5.1	7.2	Dm.	952	3 20.7	+ 49 59	7.0	36.9	57.4	29.7	3	23.9	+ 50 9	6.3	6.8	
4.5	6.6	Dm.	941	3 18.2	+ 49 56	7.7	358	57.3	29.2	3	21.4	+ 50 6	6.6	7.1	7.0
			733	3 15.2	+ 40 14	7.5	32.2	47.4	28.0	3	18.1	+ 40 24			
4.2	6.5	Dm.	~~737~~	~~3 15.8~~	~~+ 40 27~~	~~7.0~~	~~33.8~~	~~47.6~~	~~29.6~~				6.6	7.1	7.1
2.4	3.6	Dm.	738	3 9.7	+ 50 26	7.0	32.9	57.4	29.3	3	12.9	+ 50 36	6.0	6.5	
2.3	3.3	Dm.	743	3 7.7	+ 39 57	6.8	31.3	47.5	29.0	3	10.6	+ 40 7	5.6	6.1	
1.9	2.7	Dm.	736	3 8.1	+ 50 1	8.0	32.5	57.4	29.8	3	11.3	+ 50 11	6.6	7.1	6.9
			513	3 7.6	+ 50 29	5.2	33.4	57.6	31.1	3	9.0	+ 50 35	5.7	6.2	
1.5	2.3	Dm.	725	3 5.5	+ 50 25	6.7	31.5	57.4	29.2	3	8.7	+ 50 35	5.7	6.2	
			724	3 5.5	+ 50 26	9.5				3	8.7	+ 50 36			
			496	3 0.4	+ 40 30	2.3	30.8	47.7	31.1	3	1.6	+ 40 34		B.	
0.9	1.5	Dm.	663	2 55.9	+ 40 33	7.3	88.5	47.6	89.4	2	58.8	+ 40 44	6.3	6.8	6.6
2.5	3.7	Dm.	639	2 50.3	+ 40 27	6.5	87.3	47.5	89.8	2	53.2	+ 40 38	6.4	6.8	6.7
													6.7	7.2	7.0
4.8	7.1	Dm.	636	2 38.5	+ 50 17	7.8	81.5	57.4	88.6	2	41.6	+ 50 29	6.6	7.1	
6.5	9.5	Dm.	776	3 22.7	+ 40 26	7.2	35.1	47.3	28.6	3	25.7	+ 40 36	6.1	6.6	
4.3	6.5	Dm.	736	3 15.6	+ 40 44	6.5	33.6	47.4	29.3	3	18.6	+ 40 54	5.8	6.3	
3.9	5.7	Dm.	755	3 15.5	+ 50 54	7.6	35.1	57.4	29.4	3	18.7	+ 51 4	6.7	7.2	6.9
1.9	2.7	Dm.	731	3 6.4	+ 50 40	7.6	31.8	57.5	29.3	3	9.6	+ 50 50	6.1	6.6	

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V	H	Type	No. Lines	K	Focus	Other Lines.	V	H	V	H	Correc.
13.7	18.9	III III	2 2	K=H K=H	1 1	F? F?	6.8	37.8	50.6	52.0	−4.2
13.7	19.7	II II	2 2	K=H K=H	1 1	F?	6.8	39.4	50.6	51.4	−5.1
12.3	6.7	IIa 3569	X 3	K=H	1	F cum	6.2	13.4	51.2	77.4	+6.3
12.4	10.6	I I	4	K=H K=H	1 1	— —	6.2	21.2	51.2	69.6	+4.8
12.8	11.6	I	8	N	2	F	6.4	23.2	51.0	67.6	+3.9
12.9	15.2	I I	4 ?	H	1 1	— —	6.4	30.4	51.0	60.4	−0.2
12.5	19.9	II a? 3570 II?	2 2	K=H K=H	1 1	F? F cum	6.2	39.8	51.2	51.0	−3.6
12.8	21.6	I	7	K=H	1	F	6.4	43.2	51.0	47.6	−7.3
11.3	7.0	I?	2	?	1	F?	5.6	14.0	51.8	76.8	+6.1
11.2	12.9	III b 3571	3	K=H	1	F F cum	5.6	25.8	51.8	65.0	+1.7
11.5	13.9	I	11	N	2	F	5.8	27.8	51.6	63.0	+0.9
11.8	14.4	I	9	N	2	F	5.9	28.8	51.5	62.0	+0.7
11.7	15.4	I	11	N	2	F	5.8	30.8	51.6	60.0	−0.5
11.5	17.6	I	12	N	3	F	5.8	35.2	51.6	55.6	−2.9
11.9	19.0	I? I	3 4	K=H	H 1 1	F —	6.0	38.0	51.4	52.8	−3.0 −6.3
11.5	20.7	I I?	5	K=H	1	F cum	5.8	41.4	51.6	49.4	−4.3
10.2	6.6	I	3	N	1	—	5.1	13.2	52.3	77.6	+6.6
10.4	10.2	I I	6 4	K=H	K=H 1 1	F —	5.2	20.4	52.2	70.4	+3.7 +5.5
10.7	11.3	III III	2 2	K=H	K=H 1 1	F? —	5.4	22.6	52.0	68.2	+4.3
10.5	11.3	I ? I	4 4 ?	H	1 1	F —	5.2	22.6	52.2	68.2	+4.3
10.7	11.9	II I?	2 2	K=H	1	F?	5.4	23.8	52.0	67.0	+2.4
? 10.7	19.6	IIa 3572	X 3	K=H	3	F cum	5.4	39.2	52.0	51.6	−5.4
10.9	20.5	II II	2 2	K=H	K=H 1 1	F? —	5.4	41.0	52.0	49.8	−4.3
10.1	23.8	I	4	N	1	—	5.0	47.6	52.4	43.2	−10.1
9.8	7.2	III I?	4 4	K=H	1	F?	4.9	14.4	52.5	76.4	+6.1
? 9.3	10.2	I	6	N	1	F N	4.6	20.4	52.8	70.4	+5.5
9.4	10.5	I	12	N	3	F	4.7	21.0	52.7	69.8	+3.6
9.9	14.5	I I	6 5	K=H ?	K=H 1 1	F F cum	5.0	29.0	52.4	61.8	+0.6

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Means

			No.	R.A.	Dec.	Mag.	H	V	H'	Red. to 1900		Br.	Br.
2.7	4.2	Dm.	665	2 46.7	+ 50 40	6.5	84.5	57.5	88.7	2 49.8	+ 50 51	6.8 7.2	6.3 6.7 7.0
3.3	5.1	Dm.	654	2 44.3	+ 50 34	6.5	83.7	57.4	88.8	2 47.4	+ 50 45	6.9	6.4 6.7
6.3	9.3	Dm.	696	3 21.6	+ 41 15	7.4	35.0	47.4	28.7	3 24.6	+ 41 23	6.7	6.2
3.1	4.8	Dm.	728	3 13.2	+ 51 14	7.8	34.4	57.4	29.4	3 16.4	+ 51 24	6.8	6.3 6.9
2.5	3.9	Dm.	726	3 9.9	+ 51 5	7.6	33.1	57.5	29.2	3 13.1	+ 51 15	6.5	6.0
0.2	0.3	Dm.	617	2 58.7	+ 41 2	7.8	89.1	47.4	89.3	3 1.6	+ 41 13	7.0	6.5 7.1
3.6	5.4	Dm.	570	2 46.6	+ 41 12	7.0	86.4	47.4	90.0	2 49.5	+ 41 23	7.1	6.6 7.2
4.9	7.3	Dm.	630	2 38.0	+ 50 57	7.6	81.2	57.4	88.5	2 41.1	+ 51 9	6.9	6.4
6.1	9.0	Dm.	693	3 21.0	+ 41 42	6.9	35.0	47.3	28.9	3 24.0	+ 41 52	6.8	6.3
1.7	2.4	Dm.	638	3 5.4	+ 41 58	6.8	31.2	47.6	29.5	3 8.4	+ 42 8	6.5 6.9	6.0 6.4
0.9	1.3	Dm.	631	3 2.6	+ 41 50	6.5	30.4	47.4	29.5	3 5.5	+ 42 1	6.0	5.5
0.5	0.7	Dm.	689	3 1.3	+ 51 38	7.3	30.1	57.5	29.4	3 4.5	+ 51 49	6.3	5.8
0.3	0.5	Dm.	681	2 57.7	+ 51 39	6.8	88.5	57.4	88.0	3 0.9	+ 51 50	6.1	5.6
			470	2 52.4	+ 51 54	5.1	87.6	57.7	90.5	2 53.7	+ 51 57	5.1	4.6
3.0	4.5	Dm.	580	2 48.8	+ 41 32	8.2	86.8	47.5	89.8	2 51.7	+ 41 43	7.0	6.5 6.9
			636	2 40.4	+ 51 40	7.5	81.8	57.5	88.1	2 43.5	+ 51 52		
4.3	6.3	Dm.	~~556~~	~~2 43.0~~	~~+ 41 25~~	~~7.2~~	~~84.4~~	~~47.2~~	~~88.7~~			6.8	
6.6	9.7	Dm.	776	3 22.4	+ 42 15	7.8	35.6	47.3	29.0	3 25.4	+ 42 25	6.7	6.2
			754	3 12.5	+ 42 18	8.0	33.9	47.5	29.2	3 15.5	+ 42 28		
3.7	5.5	Dm.	~~690~~	~~3 5.1~~	~~+ 52 14~~	~~8.0~~	~~35.5~~	~~57.4~~	~~30.0~~			6.8	6.3 6.8
2.9	4.3	Dm.	685	3 11.3	+ 52 6	7.5	33.9	57.5	29.6	3 14.6	+ 52 16	7.0 7.4	6.5 6.9 7.0 7.3
2.9	4.3	Dm.	684	3 11.2	+ 52 11	7.5	33.8	57.4	29.5	3 14.5	+ 52 21	7.1	6.6 6.9
2.4	3.6	Dm.	736	3 8.0	+ 42 8	7.7	31.8	47.5	29.4	3 11.0	+ 42 18	7.0	6.5
			454	2 45.8	+ 52 16	4.0	85.0	57.7	90.4	2 47.2	+ 52 22	5.1	4.6
4.3	6.0	Dm.	646	2 44.8	+ 42 0	6.8	85.8	47.4	90.1	2 47.7	+ 42 11	6.9	6.4 6.9
6.9	10.1	Dm.	609	2 30.3	+ 52 10	7.5	77.9	57.2	88.0	2 33.4	+ 52 22	6.9	6.4
6.1	9.0	Dm.	772	3 20.7	+ 42 30	7.5	35.1	47.4	29.0	3 23.7	+ 42 40	6.9	6.4
3.9	5.5	Dm.	691	3 15.2	+ 52 48	7.0	35.6	57.4	30.1	3 18.5	+ 52 58	6.8	6.3
			532	3 13.5	+ 42 54	4.8	34.5	47.6	30.9	3 14.7	+ 42 58	5.3	4.8
0.3	0.6	Dm.	663	3 0.5	+ 52 36	7.0	29.5	57.6	28.9	3 3.7	+ 52 47	6.8	6.3 6.7

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	Y	H	Type	No. Lines	K	Focus	Other Lines	V	H	V	H	Correc.
?	9.3	16.3	II a 3573 3	K=.5H?	4	F. seen		4.6	32.6	52.8	58.2	- 1.5
	8.4	18.0	I	N	1	—		4.2	36.0	53.2	54.8	+ 6.0
	8.1	10.3	I 6	K=H	1	F.		4.0	20.6	53.4	70.2	+ 5.5
	8.2	11.9	I 11	N	2	F.		4.1	23.8	53.3	67.0	+ 2.4
	8.6	18.3	I I 6 5	N K=H	1 1	F.		4.3	36.6	53.1	54.2	- 3.7 - 2.7
	8.5	19.7	I 7	K=H	1	F.		4.2	39.4	53.2	51.4	- 5.5
	8.8	22.6	II ? 3	K=H	1	F.		4.4	45.2	53.0	45.6	- 6.1
	8.9	22.9	III bc? 3 3574H	K=H	1	F.	bright? seen	4.4	45.8	53.0	45.0	- 9.3
	7.5	16.3	I? I 2 3	N K	1 1	—		3.8	32.6	53.6	58.2	- 1.1
	7.5	17.1	I I 7 4	K=H K=H	1 1	F.		3.8	34.2	53.6	56.6	- 2.5
	7.8	21.8	I 7	K=H	1	F.		3.9	43.6	53.5	47.2	- 6.1
?	7.5	23.8	II a 3575 3	K=H	1	F. seen		3.8	47.6	53.6	43.2	- 7.2
	7.0	24.0	II a? 3576 II a 3	K=H K=H	1 2	F. seen	F Seen	3.5	48.0	53.9	42.8	- 7.5
	6.4	11.6	I 8	?	1	F.		3.2	23.2	54.2	67.6	+ 2.7
III? 5.4, 5.7	?	6.4	14.9	III bc 3 3577	K=H 45	3	F. seen	Bright	3.2	29.8	54.2	61.0	+ 0.3
		5.8	6.6	I? 2	N	1	F.		2.9	13.2	54.5	77.6	+ 7.1
		5.6	8.1	I 10	K=½H?	2	F.		2.8	16.2	54.6	74.6	+ 8.7
		5.4	11.1	II? II 3 2	K=H K=H	1	F.	—	2.7	22.2	54.7	68.6	+ 4.8
		5.9	14.2	I ? 4	K=1H	1	F.?		3.0	28.4	54.4	62.4	+ 0.7
		5.6	17.7	I 11	?	1	F.		2.8	35.4	54.6	55.4	- 3.3
?		5.5	22.6	I d? 10	N	2	F.	—	2.8	45.2	54.6	45.6	- 9.6
		4.8	9.2	I 10	N	3	F.		2.4	18.4	55.0	72.4	+ 7.2
		4.5	15.8	I 3	N	1	—		2.2	31.6	55.2	59.2	- 0.7
?		4.2	20.3	III bc 3 3578	K=H	2	F. seen	Bright	2.1	40.6	55.3	50.2	- 6.6
		4.5	21.1	I 9	K=.5H	1	F		2.2	42.2	55.2	48.6	- 7.8
?		3.4	6.8	II a 3579 3	K=H	2	F. seen		1.7	13.6	55.7	77.2	+ 7.5
?		3.6	7.5	II a? 3580 3	K=H	1	F. seen		1.8	15.0	55.6	75.8	+ 9.9
		3.7	14.0	I ?	K=.5H	1	F.		1.8	28.0	55.6	62.8	+ 0.9

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Mean 5

			No.	R.A.	Dec.	Mag.	~~I~~	V	~~I~~	Red. to 1900	Br.	Cor. Br.
			483	2 66.1	+ 53 2	3.1	88.7	57.6	90.2	2 57.6 + 53 7	4.1	3.6
6.0	8.5	Dm.	732	3 18.8	+ 43 15	7.5	34.8	47.4	28.8	3 21.8 + 43 25	6.9	6.4
3.9	5.5	Dm.	657	3 15.0	+ 53 25	6.3	35.6	57.4	30.1	3 18.3 + 53 35	6.4	5.9
			517	3 9.7	+ 43 35	5.4	33.5	47.7	31.1	3 11.0 + 43 39	5.8	5.3
			516	2 47.8	+ 53 13	7.7	84.4	57.5	88.1	2 51.0 + 53 24		
2.7	3.9	Dm.	~~667~~	~~2 49.3~~	~~+ 42 46~~	6.5	~~85.9~~	~~47.1~~	~~88.6~~		7.0	6.8
3.9	5.5	Dm.	587	2 43.3	+ 53 12	7.8	82.7	57.4	88.2	2 46.5 + 53 23	7.0	6.5
			579	2 38.8	+ 43 41	7.2	84.0	47.4	90.1	2 41.7 + 43 18		
6.1	9.0	Dm.	~~628~~	~~2 38.0~~	~~+ 42 49~~	7.5	~~83.2~~	~~47.2~~	~~89.3~~		7.0	
			425	2 34.5	+ 53 1	6.1	80.3	57.4	89.6	2 35.9 + 53 6	6.8	6.3
1.1	1.7	Dm.	627	2 56.0	+ 43 50	7.5	88.6	47.6	89.7	2 59.0 + 44 1	6.8	6.3 6.9
1.8	2.5	Dm.	606	2 51.9	+ 53 47	7.3	86.1	57.6	88.6	2 55.1 + 53 58	6.5	6.0 6.6
		Dw	567	2 36.3	+ 53 27	6.8	79.9	57.3	88.0	2 39.3 + 53 39		
5.5	8.1	Dm.	~~606~~	~~2 51.9~~	~~+ 53 47~~	~~7.3~~	~~86.1~~	~~57.6~~	~~88.6~~		6.6	6.1
			431	2 36.4	+ 43 47	5.6	84.0	47.6	91.2	2 37.5 + 43 52	6.5	6.0
7.5	11.1	Dm.	663	2 34.2	+ 43 48	8.3	82.2	47.3	89.7	2 37.1 + 44 0	~~7.2~~	~~6.7~~
2.7	4.1	Dm.	656	3 8.7	+ 44 11	7.9	31.9	47.4	29.2	3 11.7 + 44 21	6.5	6.0
			498	3 1.4	+ 44 24	4.0	31.2	47.6	30.9	3 2.7 + 44 29	6.2 3.7	4.7 4.9
			568	3 24.4	+ 44 26	6.0	37.6	47.3	30.5	3 25.8 + 44 32	6.5	6.0 3 22.7 + 44 22
			569	3 24.5	+ 54 33	5.7	40.7	57.4	32.0	3 26.0 + 54 38	6.0	5.5 3 22.6 + 54 28
3.3	4.8	Dm.	672	3 12.1	+ 54 42	7.0	34.3	57.4	29.5	3 15.5 + 54 52	7.0	6.5 7.0
0.7	1.1	Dm.	634	3 1.5	+ 44 28	7.5	29.9	47.5	29.2	3 4.5 + 44 39	6.9	6.4
2.4	3.3	Dm.	629	2 49.5	+ 54 37	8.0	84.9	57.4	88.2	2 53.7 + 54 48	6.6	6.1
			424	2 34.5	+ 54 36	5.6	79.7	57.4	89.3	2 35.8 + 54 41	5.7	5.2
			557	3 20.9	+ 55 2	5.0	39.3	57.4	32.1	3 22.4 + 55 7	5.4	4.9
0.5	1.1	Dm.	710	2 57.0	+ 45 11	7.8	88.6	47.4	89.3	3 0.0 + 45 22	6.8	6.3
			443	2 42.0	+ 55 24	3.9	82.6	57.5	89.2	2 43.4 + 55 29	5.5 5.9	5.0 5.4
			606	2 37.5	+ 54 59	7.3	79.7	57.2	87.5	2 40.7 + 55 11		
4.3	7.8	Dm.	~~706~~	~~2 37.8~~	~~+ 55 9~~	~~7.5~~	~~80.0~~	~~57.4~~	~~87.8~~		6.5	6.0
			566	3 24.2	+ 45 39	5.4	37.8	47.3	30.3	3 25.5 + 45 44	6.2	5.7
6.5	9.9	Dm.	801	3 25.2	+ 55 23	7.0	40.2	57.2	30.3	3 28.6 + 55 32	6.5	6.0
0.9	1.3	Dm.	722	3 2.1	+ 45 34	7.0	30.1	47.4	29.2	3 5.1 + 45 45	6.7	6.2

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Plate 1009.

V	H	Type	No. lines	K	Focus	Other Lines.	V	H	V	H	Correc.
3.8	16.1	III	32	K=H	1	F.?	1.9	32.2	55.5	58.6	-1.5
3.0	22.9	I?	2	N	1	—	1.5	45.8	55.9	45.0	-10.5
2.6	6.6	I	6	N	1	F.	1.3	13.2	56.1	77.6	+11.4
2.6	16.1	III bc?	3	K=H	2	F. bright	1.3	32.2	56.1	58.6	-1.5
2.2	21.0	III III	3 2	K=H K=H	1 1	F.	1.1	42.0	56.3	48.8	-5.5

F. m. bc. 8.0 6.0 — Fdk. 6.0

Dark Plate.

Plate 953

Very hard to measure.	23.0	17.4	I?	?	N	1	—	11.5	34.8	20.8	14.8	-0.5
	22.7	13.1	I	9	N	2	—	11.4	26.2	20.9	23.4	+0.2
	21.7	22.7	I	3	N	1	—	10.8	45.4	22.5	4.2	-0.7 +0
	20.0	14.6	I I	6 3	N K=H	1 1	— —	10.0	29.2	22.3	20.4	+0.1
III & 5.4, 5.7 ?	19.6	12.9	III bc?	3	K=H	2	F. bright	9.8	25.8	22.5	23.8	+0.6
	17.5	6.0	I	9	N	4	F.	8.8	12.0	23.5	37.6	+2.3
	17.3	6.7	I	11	N	1	F.	8.6	13.4	23.7	36.2	+2.1
	17.2	5.5	I	11	?	1	F.	8.6	11.0	23.7	38.6	+2.5
	16.7	6.7	I	9	N	2	—	8.4	13.4	23.9	36.2	+2.1
	16.6	6.3	I	8	N	1	F.	8.3	12.6	24.0	37.0	+2.4
	16.5	6.6	I	8	N	4	F.	8.2	13.2	24.1	36.4	+2.3
	16.2	5.7	I	3	N	1	—	8.1	11.4	24.2	38.2	+2.5
	16.2	6.3	I	8	N	2	—	8.1	12.6	24.2	37.0	+2.4
	16.6	11.5	I	10	K=.5H K=.2H	1	F.	8.3	23.0	24.0	26.6	+0.9
	16.2	16.0	III	λ2	K=H	1	—	8.1	32.0	24.2	17.6	+0.3
	15.6	6.6	I	7	N	2	—	7.8	13.2	24.5	36.4	+2.3
	14.8	8.6	I	8	N	1	F.	7.4	17.2	24.9	32.4	+1.7
	14.6	9.6	I	6	K=H	1	F.	7.3	19.2	25.0	30.4	+0.6
	12.1	13.6	II?	II 2	K=H K=H	1 1	— —	6.0	27.2	26.3	22.4	+0.2
	11.9	16.6	IIa?	2	K=H	1	Rem	6.0	33.2	26.3	16.4	-0.6
	11.6	18.0	II?	λ2	N K=H	1	—	5.8	36.0	26.5	13.6	-0.9

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Means

			No.	R.A.	Dec.	Mag				Red. to 1900	Br.	Br.
1.1	1.5	Dm.	738	2 54.9	+ 55 39	6.3	87.1	57.4	88.6	2 58.2 +53 41	6.6	6.1
			~~696~~	~~2 36.7~~	~~+ 55 39~~	~~7.5~~	~~76.5~~	~~57.1~~	~~87.0~~		6.8	6.3
			~~696~~	~~2 33.0~~	~~+ 55 52~~	~~7.8~~	~~78.8~~	~~57.4~~	~~87.3~~	2 33.9 +55 57	6.8	6.3
7.2	10.5	Dm.	~~692~~	~~2 31.8~~	~~+ 55 66~~	~~8.0~~	~~77.6~~	~~57.4~~	~~88.1~~		2 5.1	4.6
7.7	11.4	Dm.	803	3 28.4	+ 55 54	7.0	41.6	57.2	30.2	3 31.9 +56 3	6.4	5.9
			484	2 56.5	+ 56 14	5.0	88.7	57.5	90.2	2 58.0 + 56 19	5.9	5.2
			447	2 43.7	+ 46 21	5.8	85.7	47.5	91.2	2 ~~46.7~~ 450 + ~~46~~ 46 ~~25~~ 25	2 ~~43.0~~ 46.2	14

Means

			535	3 14.3	+ 20 43	5.2	49.1	32.2	49.6	3 15.5 +20 47		
			563	3 23.8	+ 10 56	5.1	50.0	22.3	49.8	3 24.9 + 11 0		
		Dm.	445	3 2.7	+ 11 20	6.5	48.1	22.1	48.8	3 5.1 +11 31	6.8	6.2
0.7	1.8	Dm.	~~452~~	~~3 3.4~~	~~+ 12 30~~	~~6.3~~	~~48.8~~	~~22.1~~	~~48.8~~			
		Dm.	477	3 19.3	+ 12 14	7.0	48.5	22.2	48.5	3 21.8 +12 3 24	6.5	6.6
			~~559~~	~~3 21.4~~	~~+ 22 25~~	~~6.1~~	~~50.6~~	~~22.4~~	~~50.5~~		6.8	6.3
			567	3 24.2	+ 12 31	4.3	50.0	22.3	49.4	3 25.3 + 12 36	6.3	5.7
			615	3 39.2	+ 23 34	4.2	51.2	22.4	48.9	3 40.4 +23 39	5.1	4.5
			608	3 37.8	+ 23 44	3.8	51.2	22.3	49.1	3 39.0 +23 48	4.7	4.1
			618	3 40.4	+ 23 44	3.0	51.4	22.3	48.9	3 41.6 +23 48	4.5	3.9
0.9	2.1	Dm.	505	3 36.2	+23 50	6.5	49.6	32.2	47.5	3 38.9 +23 39	6.0	5.4
			613	3 38.7	+ 24 0	4.0	51.3	22.3	48.9	3 39.9 +24 4	4.8	4.2
			610	3 38.1	+ 24 5	4.4	51.3	32.3	49.0	3 39.3 +24 10	5.2	4.6
1.1	2.5	Dm.	562	3 38.4	+ 24 4	7.5	49.8	32.2	47.3	3 41.1 +24 13	7.0	6.4
1.1	2.4	Dm.	553	3 37.3	+ 24 6	7.0	49.9	32.2	47.5	3 40.0 +24 15	* 6.6?	6.0
			~~556~~	~~3 37.4~~	~~+ 24 4~~	~~7.0~~	~~50.0~~	~~32.2~~	~~47.6~~	~~3 40.1 +24 13~~		
			577	3 27.4	+ 24 3	5.9	50.4	32.3	49.6	3 28.5 + 24 7	6.3	5.7
			546	3 17.2	+ 24 19	5.6	49.2	32.4	48.9	3 18.4 +24 22	6.9 7.2	6.3 6.6
0.9	2.3	Dm.	546	3 36.5	+24 23	6.3	49.7	32.2	47.4	3 39.2 +24 32	6.0	5.4
0.7	1.7	Dm.	529	3 32.1	+24 51	6.7	49.3	32.2	47.6	3 34.8 +25 0	6.4	5.8
0.6	1.5	Dm.	586	3 29.7	+ 14 56	6.5	48.9	22.2	48.3	3 32.2 +15 5	6.8	6.2
0.2	0.5	Dm.	450	3 21.5	+ 16 15	7.5	48.7	22.2	48.5	3 24.0 +16 25	7.0	6.4 7.0
0.3	0.6	Dm.	548	3 14.4	+ 26 22	7.0	47.6	32.4	48.2	3 17.1 +26 32	6.9	6.3
			526	3 12.7	+ 26 38	5.9	48.7	32.4	47.8	3 14.0 + 26 43	6.9	6.3

* Spectra superimposed on plate. Meas. of brightness combined light of both.

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Plate 953.

	V	H	Type	No. lines	K	Focus	Other lines	V	H	V	H	correc.
10 40	11.2	21.4	I	7	N	2	F	5.6	42.8	26.7	6.8	-1.8
	10.5	13.0	I	8	K=.2 H	2	F	5.2	26.1	27.1	23.6	+0.7
	10.5	16.9	III	3	K=H	1	F	5.2	33.8	27.1	15.8	-0.7
	10.2	13.1	I	5	N	1	—	5.1	26.2	27.2	23.4	+0.6 +0.3
	9.9	22.3	I	5	K=.2 H?	1	—	5.0	44.6	27.3	5.0	-2.5
	9.7	24.1	II?	x2	xK=H	2	F?	4.8	48.2	27.5	1.4	-1.3
	8.1	8.6	I	5	K=.5 H	1	F	4.0	17.2	28.3	32.4	+2.4
	8.0	9.0	I?	4 3584	K=H	1	—	4.0	18.0	28.3	31.6	+2.3
	8.2	14.9	II a?	3	K=H	1	F cen	4.1	29.8	28.2	19.8	+0
	8.4	15.9	II I?	4	K=H	1	—	4.2	31.8	28.1	17.8	-0.3
	7.3	10.7	I?	4	K=H	1	F	3.6	21.4	28.7	28.2	+1.5
?	7.8	17.7	III b 3585	3	K=H	1	F cen Bipyr	3.9	35.4	28.4	14.2	-1.1
	7.6	22.5	I	8	K=H	2	F	3.8	45.0	28.5	4.6	-2.7
	6.1	7.7	I	8	N	2	F	3.1	14.4	29.3	35.2	+1.3
?	4.2	16.0	I b? 3586	7	N	2	cen	2.1	32.0	30.2	17.6	-0.2
	4.3	16.8	III	1	N	1	F	2.2	33.6	30.1	16.0	-0.3
	4.7	19.9	I	7	N	2	F	2.4	39.8	29.9	9.8	-1.9
	3.5	6.7	I	7	K=H	1	F	1.8	13.4	30.5	36.2	+1.5
?	3.7	9.3	I?	x4	K=.2 H	1	F?	1.8	18.6	30.5	31.0	+1.1
?	3.5	17.5	I b 3587	11	N	2	F cen	1.8	35.0	30.5	14.6	-0.5
	3.7	20.5	I	8	N	3	F	1.8	41.0	30.5	8.6	-1.1

F. nw. & c. 6.5 6.4 F. ch. 7.8

Plate 1010.

	22.4	6.0	I?	4	N	1	—	11.2	12.0	41.2	41.3	+1.1
	21.2	9.7	I	6	N	1	—	10.6	19.4	41.8	33.9	+2.4
	21.7	13.1	I	3	N	1	—	10.8	26.2	41.6	27.1	+0.9
	21.2	13.4	I?	2	N	1	—	10.6	26.8	41.8	26.5	+0.7
	20.5	7.9	II a? 3588	3	K=H	1	F	10.2	15.8	42.2	37.5	+3.3

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Mean 6

		No.	R.A.	Dec.	Mag.	ΔE	ν	ΔE'	Red. to 1900		Bn	Bv
		507	3 5.1	+26 48	5.5	47.9	32.4	49.7	3 6.3	+26 53	5.9	5.3
		565	3 24.1	+27 9	5.8	50.1	32.4	49.4	3 25.3	+27 14	6.2	5.6
		539	3 15.0	+27 11	5.6	48.8	32.4	49.5	3 16.2	+27 15	6.8	6.2
		513	3 22.2	+27 13	8.0	48.4	32.3	47.8	3 24.1	+27 23	7.0	6.4
0.3	0.6	Dm. 514	3 22.3	+27 13	8.0	48.5	32.3	47.9	3 25.0	+27 23	7.0	6.4
		~~564~~	~~3 23.1~~	~~+17 27~~	~~6.5~~	~~49.3~~	~~32.5~~	~~49.0~~				
1.1	2.5	Dm. 480	3 1.5	+27 16	6.5	46.1	32.3	48.6	3 4.3	+27 27	6.6	6.6
1.3	3.1	Dm. 493	2 59.3	+17 19	6.7	107.5	22.1	108.8	3 1.8	+17 30	6.5	5.9
1.1	2.4	Dm. 564	3 32.5	+28 14	7.0	49.7	32.2	47.3	3 33.2	+28 23	6.9	6.3
1.1	2.3	Dm. 562	3 31.8	+28 18	7.0	49.8	32.3	47.5	3 34.5	+28 27	7.0	6.4
0	0.1	Dm. 484	3 18.8	+18 15	6.5	48.6	22.3	48.6	3 21.4	+18 25	6.8	6.2
0.1	0.3	Dm. 526	3 16.1	+28 8	7.2	47.9	32.3	48.2	3 18.8	+28 18	7.0	6.4
0.9	1.5	Dm. 548	3 27.8	+28 45	6.8	49.2	32.4	47.7	3 30.5	+28 54	6.9	6.3
		528	3 13.1	+28 37	4.7	48.5	32.5	49.6	3 14.3	+28 41	6.2 6.8	5.6 6.2
		500	3 2.4	+28 37	5.5	47.4	32.4	50.1	3 3.6	+28 42	6.2	5.6
		595	3 35.4	+19 19	5.4	50.8	22.3	49.5	3 36.6	+19 23		
		~~601~~	~~3 36.8~~	~~+19 17~~	~~6.4~~	~~51.2~~	~~22.3~~	~~49.9~~			6.0	5.4
		547	3 17.5	+20 23	5.6	49.5	22.5	49.7	3 18.7	+20 27	6.3	5.7
		542	3 15.8	+20 19	5.2	49.4	22.5	49.7	3 17.0	+20 23	6.7 7.1	6.1 6.5
		514	3 8.0	+30 7	5.5	47.8	32.5	49.7	3 9.2	+30 11	5.8	5.3
		603	3 37.4	+20 33	5.8	50.8	22.4	49.3	3 38.6	+20 37	6.7	6.1
		584	3 32.0	+20 31	6.2	50.6	22.3	49.5	3 33.2	+20 35	7.0	6.4
		535	3 14.3	+20 43	5.2	49.3	22.5	49.8	3 15.5	+20 47	5.4	4.8
		515	3 8.0	+20 36	4.9	49.0	22.4	50.1	3 9.2	+20 40	5.3	4.7

Mean 1

		Dm. 582	3 43.0	+30 44	6.5	55.0	11.9	50.9	3 45.8	+30 52				
4.1	5.7	~~638~~	~~3 46.6~~	~~+31 32~~	~~3.1~~	~~58.6~~	~~42.7~~	~~54.5~~						
		Dm. 742	3 35.7	+41 34	7.5	55.1	52.2	52.7	3 38.7	+41 43	6.8	6.7		
2.4	4.0	~~600~~	~~3 36.8~~	~~+31 54~~	~~4.0~~									
0.9	1.5	Dm. 619	3 26.6	+31 12	7.0	52.8	42.0	51.9	3 29.4	+31 21	6.8	6.7		
0.7	1.2	Dm. 616	3 26.0	+31 32	6.5	52.8	42.1	52.1	3 28.8	+31 41	6.8	6.7		
3.3	5.5	Dm. 650	3 38.7	+31 45	6.5	54.5	42.0	52.2	3 41.5	+31 54	6.6	6.5		

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Plate 1010.

T	H	Type	No. Lines	K	Focus	Other lines.	V	H	V	H	Correc.
20.4	8.4	I	6	N	1	—	10.2	16.8	42.2	36.5	+ 3.0
20.5	9.4	I	9	N	4	F.	10.2	18.8	42.2	34.5	+ 2.5
? 20.2	9.9	I a? 3589	3	K=H	3	F. diff.	10.1	19.8	42.3	33.5	+ 4.1
20.2	12.2	III	2	K=2.0 H?	1	—	10.1	24.4	42.3	28.9	+ 2.1
20.2	12.6	I	7	N	2	F.	10.1	25.2	42.3	28.1	+ 1.8
20.9	15.2	I?	3	N	1	—	10.4	30.4	42.0	22.9	− 0.3
20.7	21.1	III	2	K=H	1	F.?	10.4	42.2	42.0	11.1	− 2.7
20.2	21.0	III	3	K=H	1	F.	10.1	42.0	42.3	11.3	− 4.8
20.5	22.1	I	7	N	2	F.	10.2	44.2	42.2	9.1	− 5.5
19.4	8.8	I	5	N	1	—	9.7	17.6	42.7	35.7	+ 4.9
19.2	10.2	II	2	K=H	1	—	9.6	20.4	42.8	32.9	+ 2.3
19.5	13.5	III?	x2	K=H	1	F.?	9.8	27.0	42.6	26.3	+ 1.2
19.3	15.3	I?	3	N	1	—	9.6	30.6	42.8	22.7	− 0.3
19.9	14.8	I	4	N	1	F.	10.0	29.6	42.4	23.7	+ 0.3
19.9	20.0	I?	3	N	1	—	10.0	40.0	42.4	13.3	− 2.4
19.5	21.4	I	9	K=H	1	F.	9.8	42.8	42.6	10.5	− 3.0
18.8	7.3	I	8	N	2	F.	9.4	14.6	43.0	38.7	+ 3.9
18.0	16.0	I b 3590	5	N	1	F.? diff.	9.0	32.0	43.4	21.3	− 0.9
18.3	17.7	I	10	N	2	F.	9.2	35.4	43.2	17.9	− 1.3
18.9	18.6	I	10	N	3	F.	9.4	37.2	43.0	16.1	− 2.9
17.8	8.0	II a? 3591	3	K=H	1	F. diff.	8.9	16.0	43.5	37.3	+ 3.6
17.3	8.6	I	11	K=2 H	2	F.	8.6	17.2	43.8	36.1	+ 5.1
17.2	9.3	I	6	N	1	—	8.6	18.6	43.8	34.7	+ 4.8
17.3	10.4	I	11	K=2 H	3	F.	8.6	20.8	43.8	32.5	+ 2.3
17.0	11.3	II II	3 2	K=H K=H	11	F. —	8.5	22.6	43.9	30.7	+ 1.9
17.8	16.1	I	10	N	2	F.	8.9	32.2	43.5	21.1	− 0.5
17.5	19.9	I	10	N	2	F.	8.8	39.8	43.6	13.5	− 4.1
16.3	6.4	I!	9	N	2	F	8.2	12.8	44.2	40.5	+ 5.7

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Mean

			No.	R.A.	Dec.	Mag.	H	r	H'	Red. to 1900.	Br.	Corr. Br.
3.0	5.3	Dm.	649	3	37.6	+31 51	6.8	54.4	42.0	51.4	3 40.4+32 0	6.6	6.5
2.5	4.3		600	3	36.8	+31 54	4.0	55.6	42.1	53.1	3 38.0+31 59	4.2	4.1
			602	3	37.0	+42 12	4.0	56.8	52.3	52.7	3 38.4+42 16	4.9	4.8
1.2	2.1	Dm.	803	3	29.2	+42 4	7.2	53.6	52.2	51.5	3 32.2+42 13	6.8 7.0	6.7 6.9
0.9 :1	1.8	Dm.	795	3	28.2	+42 6	6.7	53.4	52.2	51.6	3 31.2+42 15	6.1	6.0
0.2		Dm.	693	3	21.0	+41 42	6.9	51.4	52.1	51.7	3 24.0+41 52	6.9	6.8
2.7	4.8	Dm.	576	3	7.7	+31 39	6.5	49.9	42.0	52.6	3 10.5+31 49	6.4 6.6	6.3 6.5
2.7	4.8	Dm.	638	3	5.4	+41 58	6.8	47.4	52.1	52.2	3 8.4+42 8	6.8 7.2	6.7 7.1
3.3	5.5	Dm.	631	3	2.6	+41 50	6.5	46.8	52.0	52.3	3 5.5+42 1	6.0	5.9
2.9	4.9	Dm.	824	3	38.5	+42 25	7.8	56.1	52.1	51.2	3 41.6+42 34	6.8	6.7
2.3	3.9	Dm.	659	3	33.3	+32 29	6.8	53.7	42.1	51.4	3 36.1+32 38	6.6	6.5
0.7	1.2	Dm.	787	3	25.8	+42 25	7.5	52.8	52.2	51.6	3 28.8+42 34	6.9 7.2	6.8 7.1
0.1	0.3	Dm.	772	3	20.7	+42 30	7.5	51.3	52.1	51.6	3 23.7+42 40	6.9	6.8
0.1	0.3	Dm.	776	3	22.4	+42 15	7.8	52.0	52.2	51.7	3 25.4+42 25	6.7	6.6
			736	3	8.0	+42 8	7.7	48.0	52.1	50.4	3 11.0+42 18		
2.4	3.9	Dm.	602	3	10.1	+32 9	7.8	50.1	42.2	52.6		6.5	6.4
3.0	5.1	Dm.	591	3	6.8	+32 19	6.5	49.6	42.1	52.6	3 9.6+32 29	6.2	6.1
			626	3	42.1	+32 43	5.2	56.7	42.1	52.8	3 43.4+32 48	5.3	5.2
0.5	0.9	Dm	732	3	18.8	+43 15	7.5	50.8	52.2	51.7	3 21.8+43 26	6.8	6.7
			544	3	17.0	+33 6	5.6	52.4	42.3	53.7	3 18.2+33 11	5.3	5.2 3 15.5+33.0
			532	3	13.5	+42 54	4.8	50.7	52.3	53.6	3 14.7+42 58	5.7	5.6
3.6	5.7	Dm.	717	3	38.7	+33 9	7.0	54.7	42.1	51.1	3 41.5+33 18	6.3	6.2
			620	3	40.8	+43 33	6.0	58.0	52.2	52.9	3 42.3+43 39	6.2	6.1 3 39.2+43.8
2.9	4.8	Dm.	809	3	37.3	+43 37	7.0	55.9	52.2	51.1	3 40.4+43 46	6.6	6.5
			594	3	34.8	+33 34	5.0	55.6	42.2	53.3	3 36.0+33 39	5.2	5.1
1.9	3.0	Dm.	690	3	31.0	+33 39	6.5	53.6	42.1	51.7	3 33.8+33 48	6.5	6.4 6.6
			556	3	20.8	+33 23	5.5	53.0	42.3	52.5	3 22.0 +33 28	5.7	5.6 3 19.2+33.8
2.5	4.1	Dm.	517 674	3	9.7 8.1	+43 35 +43 28	5.4 6.0	49.5	52.4	53.6	3 11.0 +43 39	5.6	5.5
			632	3	44.3	+34 0	5.7	57.1	42.2	51.4	3 45.5 +34 3	5.5	5.4 3 41.6+33.5

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March 12, 1887.

Plate 1010.

	V	H	Type	No. Lines	K	Focus	Other Lines	V.	H.	V.	H.	Correc
	16.5	7.7	II ? II	2 2	K=H K=H	1 1	F? —	8.2	15.4	44.2	37.9	+ 3.9
	16.6	12.7	III III	1 2 2	K=H K=H	1 1	F? —	8.3	25.4	44.1	27.9	+ 1.1
	16.0	19.6	I	7	H	1	—	8.0	39.2	44.4	14.1	− 3.9
	16.9	20.1	III bc? 3592	3	K=H	2	F. bright 2cm	8.4	40.2	44.0	13.1	− 2.7
	15.4	7.2	I	7	K=H	1	F.	7.7	14.4	44.7	38.9	+ 4.3
?	15.3	8.5	II a 3593	3	K=H	1	F. 2cm	7.6	17.0	44.8	36.3	+ 3.5
	15.8	12.6	I	9	H	1	F	7.9	25.2	44.5	28.1	+ 2.1
	15.2	12.6	I I	4 5	H K=H	1 1	— —	7.6	25.2	44.8	28.1	+ 1.2
	15.4	13.0	I I	4 4	H K=H	1 1	— —	7.7	26.0	44.7	27.3	+ 1.1
	15.7	14.6	I	9	H	2	F	7.8	29.2	44.6	24.1	+ 0.5
	15.4	15.8	IIa? II 3594	1 3	K=H K=H	1 1	F. F.	7.7	31.6	44.7	21.7	− 0.7
	15.9	21.2	I	8	K=H?	2	F	8.0	42.4	44.4	10.9	− 3.3 4
	15.3	22.1	I	7	H	1	—	7.6	44.2	44.8	9.1	− 6.1
?	15.7	22.7	III bc? 3595	3	K=H 2.0	3	F. bright 2cm	7.8	45.4	44.6	7.9	− 6.7
?	14.5	9.2	II a 3596	2	K=H 1	1	— 2cm	7.2	18.4	45.2	34.9	+ 5.3
	14.5	14.4	I	8	H	2	F	7.2	28.8	45.2	24.5	+ 1.3
	14.8	16.9	I ? I	4 4	H K=H	1 1	— —	7.4	33.8	45.0	19.5	− 1.1
	14.5	17.0	I ? I	5 5	H K=H	1 1	— —	7.2	34.0	45.2	19.3	− 1.7
	14.7	18.5	II ? II	1 2 2	K=H K=H	1 1	F —	7.4	37.0	45.0	16.3	− 3.0
	14.5	22.7	I I	3 4	H K=H	1 1	— —	7.2	45.4	45.2	7.9	− 4.2
	13.4	9.6	I ? I ?	3 4	H K=H	1 1	— —	6.7	19.2	45.7	34.1	+ 3.0
	14.0	10.0	I	10	H	2	—	7.0	20.0	45.4	33.3	+ 4.5
	13.3	10.5	I	9	K=, 2 H	2	F.	6.6	21.0	45.8	32.3	+ 4.1
?	13.5	14.7	IIa 3597	3	K=H	2	F. 2cm	6.8	29.4	45.6	23.9	+ 0.3
	13.7	15.9	III III	2 2	K=H K=H	1 1	F? —	6.8	31.8	45.6	21.5	− 0.5
	13.2	21.7	I ?	6	H	1	F	6.6	43.4	45.8	9.9	− 6.0
	13.6	23.6	III ?	2	K=H	1	F?	6.8	47.2	45.6	6.1	− 7.8
	12.4	9.6	I	[illegible]	K=, 2 H	2	F.	6.2	19.2	46.2	34.1	+ 3.1

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Mean 1

	No.	R.A.	Dec.	Mag.	H	r	H'	Red. to 1900		Br.	Cor. Br.
Dm.	719	3 39.5	+ 33 51	7.5	54.9	42.0	51.0	3 42.3 + 34 0	✓	7.0	6.9
Dm.	682	3 27.6	+ 33 52	7.0	53.0	42.2	51.9	3 30.4 + 34 1	✓	6.9 7.2	6.8 7.1
Dm.	656	3 8.7	+ 44 11	7.9	47.9	52.2	51.8	3 11.7 + 44 21	✓	6.5	6.4
	524	3 11.3	+ 33 46	4.8	51.5	42.2	54.2	3 12.3 + 33 51	✓	6.0 6.4	5.9 6.3
	741	3 40.9	+ 34 23	7.0	53.3	42.1	51.0	3 43.9 + 34 32	✓		
Dm.	~~746~~	~~3 41.6~~	~~+ 34 40~~	~~7.2~~	~~56.0~~	~~42.4~~	~~51.7~~			6.3	6.2
	624	3 41.8	+ 44 33	5.9	58.8	52.2	53.3	3 43.1 + 44 40	✓	6.3	6.2
	757	3 28.3	44 19	8.0	53.5	52.2	51.4	3 31.4 + 44 28	✓		
Dm.	759	3 28.4	+ 44 19	8.0	53.6	52.2	51.5	3 31.5 + 44 28		6.5	6.4
Dm.	693	3 27.8	+ 34 34	7.4	53.0	42.2	51.8	3 30.6 + 34 43	✓	6.8	6.7 6.6
Dm.	689	3 26.8	+ 34 27	7.5	52.8	42.1	51.7	3 29.6 + 34 36	✓	6.9	6.8 6.8
Dm.	734	3 22.7	+ 44 22	6.5	51.9	52.2	51.4	3 23.8 + 44 32	✓	6.0	5.9
Dm.	714	3 19.3	+ 44 32	7.3	50.9	52.2	51.6	3 22.4 + 44 42	✓	6.8	6.7 6.7
Dm.	610	3 7.0	+ 34 9	6.5	49.4	52.2	~~54.8~~ 52.7	3 9.8 + 34 19	✓	5.8	5.7
Dm.	634	3 1.5	+ 44 28	7.5	45.7	52.1	51.8	3 4.3 + 44 39	✓	6.9	6.8
	498	3 1.4	+ 44 21	4.0	46.8	52.2	53.5	3 2.7 + 44 29	✓	5.2 5.4	5.1 5.3
Dm.	797	3 38.0	+ 44 54	7.8	56.4	52.1	51.1	3 41.1 + 45 3	✓	7.0	6.9
	572	3 25.0	+ 35 3	5.7	53.8	42.2	53.5	3 26.3 + 35 6	✓	5.4	5.3 5.7 3 23.5 + 34 57
Dm.	645	3 17.2	+ 34 49	8.0	51.0	42.2	52.1	3 20.0 + 34 59	✓	7.0	6.9 6.9
Dm.	695	3 15.7	+ 44 60	7.6	49.7	52.2	51.4	3 18.8 + 45 10		6.9	6.8 6.7
Dm.	677	3 11.6	+ 44 51	7.8	48.6	52.2	51.6	3 14.6 + 45 1		6.6	6.5 6.7
	579	3 3.7	+ 34 47	7.8	49.1	42.0	53.3	3 6.3 + 34 57			
Dm.	~~589~~	~~3 1.2~~	~~+ 34 56~~	~~8.2~~	~~46.6~~	~~42.1~~	~~50.8~~			7.0	6.9 6.9
Dm.	744	3 35.2	+ 35 24	7.5	54.4	42.1	51.4	3 38.1 + 35 33	✓	7.0	6.9 7.1
	606	3 37.6	+ 45 18	5.6	57.6	52.3	53.1	3 39.0 + 45 28	✓		
Dm.	~~811~~	~~3 35.9~~	~~+ 45 14~~	~~6.2~~	~~55.9~~	~~52.2~~	~~51.4~~			5.5	5.4
	597	3 36.2	+ 45 44	6.1	57.2	52.3	53.1	3 37.7 + 45 48	✓	5.9	5.8 3 34.6 + 45 56
	566	3 24.2	+ 45 39	5.4	53.6	52.4	53.3	3 25.5 + 45 44	✓	5.5	5.4
Dm.	697	3 19.6	+ 35 18	7.5	51.4	42.1	51.9	3 22.4 + 35 28	✓	6.8 7.1	6.7 7.0 7.2
Dm.	722	3 21.1	+ 45 34	7.0	45.5	52.2	51.5	3 8.1 + 45 45	✓	6.6	6.5
Dm.	710	2 57.0	+ 45 11	7.8	1042	52.0	112.0	2 0.0 + 45 22	✓	6.8	6.7
	599	3 36.8	+ 36 5	5.6	56.0	42.3	52.9	3 38.1 + 36 9	✓	5.3	5.2 3 35.2 + 36 17

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March 12, 1887.

Plate 1010.

V	H	Type	No. Lines	K	Focus	Other lines.	V	H	N	H	Correc.
12.4	13.5	III	III 3 2	K=H	K=H 1	F. —	6.2	27.0	46.2	26.3	+ 1.5
12.4	14.8	I	I? 6 4	K=.2 H	K=5H 1	F. —	6.2	29.6	46.2	23.7	+ 0.1
12.1	15.4	II	? III 3 2	K=H	K=H 1 1	F. —	6.0	30.8	46.4	22.5	− 0.1
12.6	20.5	I	7	K=H	1	F.	6.3	41.0	46.1	12.3	− 3.1
12.3	21.4	I	7	K=H	1	F.	6.2	42.8	46.2	10.5	− 3.9
12.5	21.6	II	II 3 2	K=H	K=H 1 1	F. —	6.2	43.2	46.2	10.1	− 6.0
11.7	9.0	I	I 4 3	N	N 1 1	—	5.8	18.0	46.6	35.3	+ 5.5
11.4	13.5	I	9	N	1	F.	5.7	27.0	46.7	26.3	+ 1.5
11.4	15.3	I	6	N	1	—	5.7	30.6	46.7	22.7	− 0.3
11.7	15.7	I	11	N	2	F.	5.8	31.4	46.6	21.9	− 0.7
11.5	19.7	I	? II 3 6 5	K=.2 H	K=H 1 1	— —	5.8	39.4	46.6	13.9	− 4.3
10.1	10.3	I	7	N	1	F.	5.0	20.6	47.4	32.7	+ 4.5
10.1	10.8	I	I 6 4	N	K=H 1 1	F. —	5.0	21.6	47.4	31.7	+ 2.5
10.3	11.1	III	10	N	2	F.	5.2	22.2	47.2	31.1	+ 2.4
10.0	11.2	I	12	N	5	F.	5.0	22.4	47.4	30.9	+ 3.7
10.4	12.8	I	6	N	1	—	5.2	25.6	47.2	27.7	+ 2.3
10.6	14.4	I	I 3 4	N	K=H 1 1	— —	5.3	28.8	47.1	24.5	+ 0.7
10.5	15.6	I	I? 4	N	K=H 1 1	— —	5.2	31.2	47.2	22.1	− 0.7
10.1	16.2	I	6	N	1	F.	5.0	32.4	47.4	20.9	− 1.2
10.7	21.3	I	? I 2 3	N	N 1 1	F? —	5.4	42.6	47.0	10.7	− 3.9
10.7	23.0	I	7	N	2	F.	5.4	46.0	47.0	7.3	− 7.5
9.5	6.8	I	8	N	2	F.	4.8	13.6	47.6	39.7	+ 8.1
9.4	7.6	I	6	N	1	F.	4.7	15.2	47.7	38.1	+ 8.9
9.3	13.4	I	? 3598 11	?	4	F. um.	4.6	26.8	47.8	26.5	+ 2.1
9.4	13.4	I	I	N	N 1 1	F. —	4.7	26.8	47.7	26.5	+ 1.1
9.4	14.0	I	? 3599 8	N	1	F. um	4.7	28.0	47.7	25.3	+ 0.6
9.7	14.4	II	a 3600 4 3	K=H	1	F. rem	4.8	28.8	47.6	24.5	+ 0.7
9.3	14.6	III	3	K=H	1	F.	4.6	29.2	47.8	24.1	+ 0.3

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1880phae.proj - 8357

Mean 1

			No.	R. A.	Dec.	Mag.	H	v	H'	Red. to 1900		Br.		Br.		
1.3	0.7	Dm.	774	3	26.0	+ 46	5	7.7	53.0	52.3	51.5	3	29.1	+46 14		7.0 7.3	6.9	7.1 7.4
0.3	0.1	Dm.	708	3	22.5	+ 35	59	7.5	52.1	42.2	52.0	3	25.4	+36 9		6.8	6.7	6.7
0.3	0.1	Dm.	698	3	20.9	+ 36	8	7.2	51.7	42.1	51.8	3	23.8	+36 18		6.9	6.8	6.9 7.6
5.1	3.1	Dm.	660	3	8.2	+ 35	50	7.0	49.2	42.2	52.3	3	11.0	+36 0		6.8	6.7	
			653	3	6.1	+ 35	56	7.0	48.9	42.1	52.8	3	8.9	+36 6				
3.7	3.9	Dm.	~~666~~	3	6.6	+ 36	9	7.5	~~49.4~~	~~42.2~~	~~53.3~~					6.9	6.8	7.0
6.0	3.9	Dm.	724	3	2.3	+ 45	50	7.3	45.5	52.0	51.5	3	5.3	+46 1		6.8	6.7	6.9
3.5	3.6	Dm.	802	3	38.8	+ 46	21	8.0	56.8	52.2	51.3	3	42.0	+46 30		7.0	6.9	7.1
1.5	0.9	Dm.	773	3	25.8	+ 46	37	7.1	52.8	52.3	51.3	3	28.9	+46 46		6.1	6.0	
0.3	0.1	Dm.	762	3	20.3	+ 46	32	7.0	50.9	52.2	51.2	3	23.4	+46 42		6.2	6.1	
0.7	0.3	Dm.	760	3	19.4	+ 46	27	6.5	50.8	52.2	51.5	3	22.5	+46 37		5.8	5.7	
4.3	2.7	Dm.	722	3	7.7	+ 46	24	7.3	47.1	52.2	51.4	3	10.8	+46 34		6.9	6.8	6.7
4.5	2.7	Dm.	881	3	35.1	+ 47	11	7.8	55.7	52.2	51.2	3	38.3	+47 20		6.4	6.3	
3.9	2.5	Dm.	814	3	32.3	+ 37	7	7.5	53.9	42.1	51.4	3	35.2	+37 16		6.7	6.6	6.7
			588	3	33.4	+ 37	12	5.9	55.6	42.4	53.2	3	34.6	+37 16		5.2	5.1	
			591	3	34.4	+ 47	24	3.2	56.8	52.4	53.1	3	35.8	+47 28		4.0	3.9	
2.3	1.2	Dm.	865	3	28.0	+ 47	6	7.7	53.6	52.3	51.3	3	31.2	+47 15		6.6	6.5	
0.7	0.3	Dm.	767	3	23.2	+ 46	55	8.5	52.0	52.2	51.5	3	26.3	+47 5		7.1	7.0	7.8
0.7	0.3	Dm.	761	3	19.6	+ 46	60	7.9	50.8	52.2	51.5	3	22.7	+47 10		7.0	6.9	7.0
1.2	0.7	Dm.	831	3	17.8	+ 47	14	7.9	50.2	52.2	51.4	3	21.9	+47 24		6.4	6.3	
6.0	3.9	Dm.	664	3	6.0	+ 36	43	7.0	48.6	42.1	52.7	3	8.8	+36 53		6.8	6.7	6.8
7.5	5.1	Dm.	692	2	57.9	+ 46	44	6.4	103.9	52.1	111.4	3	0.9	+46 55		5.9	5.8	
8.1	5.4		642	3	47.3	+ 47	32	5.4	60.9	52.3	52.8	3	48.8	+47 35		5.4	5.3	
7.2	4.9	Dm.	833	3	40.6	+ 37	26	6.5	55.8	42.1	50.9	3	43.5	+37 38		6.3	6.2	
			578	3	28.0	+ 47	18	4.2	54.8	52.4	52.7	3	29.4	+47 51		4.7	4.6	
1.7	1.1	Dm.	794	3	25.8	+ 37	32	7.5	52.6	42.2	51.5	3	28.7	+37 41		6.8	6.7	6.9
1.1	0.6	Dm.	786	3	24.3	+ 37	32	7.0	52.3	42.2	51.7	3	27.2	+37 41		6.2	6.1	
0.7	0.5	Dm.	850	3	23.1	+ 47	26	7.3	51.9	52.2	51.2	3	26.2	+47 36		6.2	6.1	
0.5	0.3	Dm.	783	3	23.0	+ 37	34	6.8	52.2	42.2	51.9	3	25.9	+37 44		6.9 7.0	6.8	7.0 7.2

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March 12, 1887.

Plate 1010.

ν	H	Type	No. Lines	K	Focus	Other Lines.	V	H	V	H	Correc.
9.6	14.8	I	10	N	3	F.	4.8	29.6	47.6	23.7	+1.3
9.9	15.0	I	8	N	1	F.	5.0	30.0	47.4	23.3	−0
9.7	15.3	III	3 3601	K=H	2	F. bright clear	4.8	30.6	47.6	22.7	−0.3
9.4	15.3	I	6	N	2	—	4.7	30.6	47.7	22.7	−0.3
9.6	15.6	I	5	N	1	—	4.8	31.2	47.6	22.1	−0.7
9.0	15.8	I	7	N	1	F.	4.5	31.6	47.9	21.7	−0.7
9.2	16.4	I	9	K=2H	2	F.	4.6	32.8	47.8	20.5	−1.5
9.8	16.5	I	4 5	N	1	—	4.9	33.0	47.5	20.3	−1.5
9.8	17.2	I	4	N	1	—	4.9	34.4	47.5	18.9	−2.3
9.2	21.0	II	3	K=H	1	F.	4.6	42.0	47.8	11.3	−5.9
8.0	7.7	III?	3	K=H	1	F.	4.0	15.4	48.4	37.9	+7.3
8.5	10.9	III	III X9 2	K=H	1	F.	4.2	21.8	48.2	31.5	+4.1
8.3	13.5	I	I 4	K=HK=H	1	F?	4.2	27.0	48.2	26.3	+1.5
8.4	14.2	I	7	N	1	—	4.2	28.4	48.2	24.9	+0.7
8.2	14.9	I	7	N	2	F.	4.1	29.8	48.3	23.5	+0
8.5	17.5	I	8	N	1	F.	4.2	35.0	48.2	18.3	−2.1
8.4	18.9	I	3	N	1	—	4.2	37.8	48.2	15.5	−3.9
7.5	12.2	I	I 3 3	N	1	—	3.8	24.4	48.6	28.9	+2.3
7.2	12.8	I	7	N	1	F.	3.6	25.6	48.8	27.7	+2.5
7.5	12.9	I	6	N	1	F.	3.8	25.8	48.6	27.5	+2.7
7.3	15.0	I	8	N	2	F.	3.6	30.0	48.8	23.3	−1
7.3	15.5	I	7	K=½H	1	F.	3.6	31.0	48.8	22.3	−0.6 −0.3
7.5	15.9	I	9	K=½H	1	F.	3.8	31.8	48.6	21.5	−0.9
? 7.6	16.1	I	b 3602, 2	N	3	F. diff.	3.8	32.2	48.6	21.1	−1.1
7.5	16.8	I	10	N	2	F.	3.8	33.6	48.6	19.7	−1.8
7.4	17.3	I		N	1	F.	3.7	34.6	48.7	18.7	−2.3
? 7.4	17.7	I	b 3603 11	N	2	F. diff.	3.7	35.4	48.7	17.9	−2.7
7.5	18.2	II	a? 3604 3	K=H	1	F. diff	3.8	36.4	48.6	16.9	−3.0

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Mean 1

		No.	R.A.	Dec.	Mag.	H	V	H'	Red. to 1900	Br.	Br.
0	0	Dm. 847	3 21.9	+47 31	6.5	51.5	52.3	51.2	3 25.0 +47 41	5.2	5.1
0	0	Dm. 846	3 21.4	+47 21	7.4	51.4	52.4	51.4	3 23.5 +47 31	6.2	6.1 6.4
		560	3 22.1	+47 35	4.4	52.7	52.4	53.2	3 23.5 +47 39	5.4 5.3 5.3	5.6
0.3	0.1	Dm. 844	3 20.4	+47 36	7.0	51.0	52.3	51.3	3 23.3 +47 46	6.5	5.4
0.7	0.6	Dm. 840	3 19.6	+47 28	8.2	50.8	52.3	51.5	3 22.7 +47 38	6.8	6.7 6.7
0.7	0.5	Dm. 835	3 18.9	+47 48	7.5	50.5	52.3	51.2	3 22.0 +47 58	6.5	6.4
1.5	0.9	Dm. 828	3 16.9	+47 42	6.7	49.7	52.3	51.2	3 20.0 +47 52	5.9	5.8
1.5	0.9	Dm. 826	3 16.7	+47 24	7.5	49.7	52.3	51.2	3 19.8 +47 34	6.7	6.6 6.8
2.3	1.3	Dm. 817	3 14.7	+47 22	7.3	49.1	52.3	51.4	3 17.8 +47 32	6.7	6.6
5.9	3.9	Dm. 782	3 3.3	+47 40	6.5	45.3	52.3	51.2	3 6.4 +47 50	6.2	6.4
7.3	5.1	Dm. 1015	3 43.2	+48 13	6.2	58.6	52.2	51.3	3 46.4 +48 21	6.6 6.5	6.4 6.5
4.1	2.5	Dm. 984	3 33.7	+48 4	6.5	55.5	52.3	51.4	3 36.9 +48 13	6.6 7.1	6.5 7.0 6.7 7.1
1.5	0.9	Dm. 949	3 25.6	+38 6	7.0	52.6	42.3	51.1	3 28.5 +38 15	6.5	6.4 6.2
0.7	0.5	Dm. 949	3 23.9	+48 8	7.5	52.3	52.3	51.6	3 27.1 +48 17	6.5	6.4
0	0	Dm. 943	3 21.6	+48 14	7.0	51.4	52.3	51.4	3 24.8 +48 24	5.9	5.8
2.1	1.7	Dm. 903	3 13.6	+48 5	7.0	48.6	52.3	50.7	3 16.7 +48 15	6.0	5.9
3.9	2.5	Dm. 886	3 9.6	+48 7	7.5	47.4	52.3	50.3	3 12.7 +48 17	6.7	6.6
2.3	1.3	Dm. 968	3 29.7	+48 29	8.0	54.3	52.3	52.0	3 32.9 +48 38	7.0	6.9 7.0
2.5	1.8	Dm. 963	3 28.1	+48 45	7.0	53.7	52.4	51.2	3 31.3 +48 54	6.1	6.0
2.7	1.9	Dm. 962	3 27.9	+48 36	7.5	53.7	52.4	51.2	3 31.1 +48 45	6.3	6.2
0	0	Dm. 938	3 21.1	+48 41	6.5	51.1	52.3	51.1	3 24.3 +48 51	5.5	5.4
0.6	0.3	Dm. 933	3 19.5	+48 43	8.2	50.5	52.3	51.1	3 22.7 +48 53	6.5	6.4
0.9	0.6	Dm. 927	3 18.6	+48 34	8.1	50.4	52.4	51.3	3 21.8 +48 44	6.7	6.6
		552	3 19.6	+48 39	5.0 4.9	51.8	52.4	52.9	3 20.9 +48 43	4.8	4.7
		549	3 17.8	+48 42	3.9	51.4	52.5	53.2	3 18.9 +48 45	5.7	5.6 3 15.7+48.6
2.3	1.5	Dm. 906	3 14.2	+48 36	8.0	48.8	52.3	51.1	3 17.4 +48 46	6.9	6.8
		537	3 14.7	+48 47	3.2 6	50.1	52.5	52.8	3 16.1 +48 57	5.2	5.1
3.1	2.3	Dm. 893	3 11.6	+48 33	8.5	48.0	52.4	51.0	3 14.7 +48 43	5.9	5.8

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Plate 1010.

	V	H	Type	No. lines	K	Focus	Other lines	V.	H.	V.	H.	Correc.
	7.4	19.7	I	II 3 4	N K=H	1 1	— —	3.7	~~38.1~~ 39.6	48.7	~~15.4~~ 13.9	−2.5
	6.9	15.0	I	8	N	2	F.	3.4	30.0	49.0	23.3	− 0
?	6.7	15.7	I	b 3605 1N	N	3	F. um.	3.4	31.4	49.0	21.9	−0.7
?	6.0	15.9	I	b 3606 8	N	2	F. um.	3.0	31.8	49.4	21.5	−0.9
	6.5	16.3	I	9	N	1	F.	3.2	32.6	49.2	20.7	−1.3
	6.2	16.8	I	K=1,5 H	1	—		3.1	33.6	49.3	19.7	−1.9
?	6.1	17.3	IIa	3607 1 3	K=1,2 H	5	F. um.	3.0	34.6	49.4	18.7	−2.3
	6.0	19.1	I?	I 4 5	N K=H	1 1	— —	3.0	38.2	49.4	15.1	−4.3
	6.9	20.2	I	8	N	2	F.	3.4	40.4	49.0	12.9	−3.5
	6.4	20.7	I	I 3608 6 5	N K	1 1	F. —	3.2	41.4	49.2	11.9	−5.9
?	6.3	22.4	II	IIa? 3	K=1,5 H	3	F. um.	3.2	44.8	49.2	8.5	−7.5
	6.1	22.6	III	3	K=H	2	F.	3.0	45.2	49.4	8.1	−5.4
	5.3	12.6	I	8	N	1	F.	2.6	25.2	49.8	28.1	+1.8
	5.7	14.1	I	10	K=1,2 H	2	F.	2.8	28.2	49.6	25.1	+1.6
	5.5	19.0	I	11	N	2	F.	2.8	38.0	49.6	15.3	−1.2
	5.3	19.1	I	11	N	2	F.	2.6	38.2	49.8	15.1	−4.3
	5.1	21.5	I	7	N	1	F.	2.6	43.0	49.8	10.3	−4.7
	4.0	14.9	I	9	K=H	1	F.	2.0	29.8	50.4	23.5	+0
	4.7	15.1	I	4	N	1	—	2.4	30.2	50.0	23.1	−0
	4.8	19.4	I	6	K=.8 H	1	—	2.4	38.8	50.0	14.5	−4.7
	4.5	20.3	I	8	N	1	F.	2.2	40.6	50.2	12.7	~~−3.5~~ −3.7
?	3.9	7.1	II	a 3609 1 3	K=H	2	F. um.	2.0	14.2	50.4	39.1	+8.5
	4.2	9.7	I	9	K=.2 H	2	F.	2.0	19.4	50.4	33.9	+5.1
	3.3	10.5	I	I 3 4	N K=H	1 1	— —	1.6	21.0	50.8	32.3	+3.3
	3.7	14.6	I	7	N	1	F.	1.8	29.2	50.6	24.1	+0.3
	3.9	16.6	I	I? 6 4	K=H K=H	1 1	F. —	2.0	33.2	50.4	20.1	−1.8
	3.6	17.2	I	I 7 5	N K	1 1	F. —	1.8	34.4	50.6	18.9	−1.7
	3.0	17.3	I	8	K=.2 H	1	F.?	1.5	34.6	50.9	18.7	−1.8

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Mean 1

			No.	R. A.	Dec.	Mag	H	V	H'	Red. to 1900	Br.	Cor Br.
4.2	2.5	Dm.	693	3 9.9	+ 38 31	7.3	49.3 48.1	42.2	51.8 50.6	3 12.8 + 38 41	6.6	6.5
0	0	Dm.	942	3 21.5	+ 48 54	7.0	51.5	52.3	51.5	3 24.7 + 49 4	6.0	5.9
0.7	0.5		335	3 20.8	+ 49 7	4.8	52.2	52.5	52.9	3 22.2 + 49 10	4.7	4.6
0.9	0.6	Dm.	944	3 18.5	+ 49 21	6.5	50.3	52.4	51.2	3 21.7 + 49 31	5.4	5.3
1.3	0.7	Dm.	936	3 17.3	+ 49 6	7.7	49.9	52.3	51.2	3 20.5 + 49 16	6.2	6.1
1.9	1.2	Dm.	929	3 15.8	+ 49 14	7.3	49.4	52.3	51.3	3 19.0 + 49 24	6.6	6.5
2.3	1.5		341	3 15.8	+ 49 26	1.9	50.4	52.4	52.7	3 17.1 + 49 30	B	B
4.3	2.7	Dm.	900	3 8.5	+ 49 14	7.5	46.7	52.2	51.0	3 11.7 + 49 24	7.1	7.0
5.3	3.5	Dm.	690	3 8.4	+ 38 46	6.5	48.8	42.2	52.3	3 11.3 + 38 56	5.2	5.1
5.9	3.9	Dm.	876	3 3.7	+ 49 2	7.4	45.1	52.2	51.0	3 6.8 + 49 12	6.7	6.6
7.5	5.3		495	3 0.4	+ 49 9	4.1	45.2	52.4	52.7	3 1.8 + 49 14	4.7	4.6
7.9	5.4		303	3 3.6	+ 39 9	4.7	48.8	42.2	54.2	3 4.8 + 39 14	5.6 5.8	5.5 5.7
2.4	1.8	Dm.	829	3 27.8	+ 39 36	7.0	53.0	42.2	51.2	3 30.8 + 39 45	6.4	6.3
0.9	0.6		573	3 25.7	+ 39 30	5.8	53.9	42.3	53.3	3 26.9 + 39 34	5.4	5.3 3 24.0 + 39 25/4
4.2	2.5		522	3 18.7	+ 49 40	5.0	48.7	52.5	52.9	3 12.0 + 49 43	5.1	5.0
4.3	2.7		521	3 10.1	+ 49 47	5.3	48.3	52.4	52.6	3 11.5 + 49 51	5.3	5.2
6.7	4.7	Dm.	737	3 4.7	+ 39 34	7.5	47.7	42.2	52.4	3 7.6 + 39 44	6.2	6.1
0	0	Dm.	772	3 21.9	+ 40 16	6.5	51.7	42.3	51.7	3 24.9 + 40 26	6.0	5.9
0	0	Dm.	952	3 20.7	+ 49 59	7.0	50.9	52.4	50.9	3 23.9 + 50 9	6.8	6.7
4.7	3.0	Dm.	895	3 7.4	+ 49 49	7.7	46.2	52.2	50.9	3 10.6 + 49 59	7.0	6.9
4.3		Dm.	7 43	3 7.7	+ 39 57	6.8	48.3	42.1	52.0	3 10.6 + 40 7		
3.5	3.7		~~513~~	~~3 7.6~~	~~+ 50 29~~	~~3.2~~	~~48.2~~	~~52.7~~	~~53.7~~		5.8	5.7
8.3	5.7		643	3 47.7	+ 30 21	3.3	61.9	52.4	53.4	3 49.2 + 50 24	5.8	5.7
5.1	2.7		617	3 39.5	+ 30 21	3.7	58.9	52.4	53.8	41.0 ~~40.1~~ 3 ~~40.1~~ + 50 26	6.0	5.9 3 37.6 + 50.8
4.9	3.3	Dm.	821	3 33.4	+ 40 32	7.8	54.4	42.1	51.1	3 36.4 + 40 41	7.1	7.0
0.3	0.3	Dm.	776	3 22.7	+ 40 26	7.2	51.9	42.2	51.6	3 25.7 + 40 36	6.0	5.9
1.8	1.1	Dm.	757	3 16.2	+ 50 20	7.5	49.4	52.3	51.2	3 19.4 + 50 30	6.9	6.8
2.3	1.7	Dm.	734	3 15.8	+ 40 27	7.0	50.2	42.2	51.9	3 18.7 + 40 37	6.6	6.5
2.4	1.8	Dm.	736	3 15.6	+ 40 44	6.5	50.2	42.2	52.0	3 18.6 + 40 54	5.9	5.8

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Plate 1010.

T	H	Type	No. Lines	K	Focus	Other Lines	V.	H.	V.	H.	Correc.
3.0	17.9	I? II 4 4	K=H K=H	1	1	— —	1.5	35.8	50.9	17.5	−2.1
3.7	18.6	I	N	1		—	1.8	37.2	50.6	16.1	−3.9
3.1	19.6	I	N	1		—	1.6	39.2	50.8	14.1	−5.1
3.8	19.9	III 1 ?	3610 X3	K=H	1	F. sem	1.9	39.8	50.5	13.5	−5.3
3.7	20.0	I	6	N	1	F.	1.8	40.0	50.6	13.3	−5.4
~~3.4~~	~~22.5~~	~~I~~	~~6~~	~~?~~	~~1~~	~~F~~	~~1.7~~	~~47.0~~	~~50.7~~	~~6.8~~	~~−6.5~~
3.4	23.7	I	10	N		F.	1.7	47.4	50.7	5.9	−6.5
2.4	10.0	I	3	K	1	—	1.2	20.0	51.2	33.3	+5.5
2.2	15.0	II	2	K=H	1	—	1.1	30.0	51.3	23.3	0
2.5	18.5	I		K=H	1	—	1.2	37.0	51.2	16.3	−3.9

Same Star.

F. nv. & cv. F. clv.

Dark plate. Hard to measure. 5.5 5.4

Plate 926 ϕ 7.7

20.6	8.9	I	3	N	1	—	10.3	17.8	27.0	53.0	+0.9
20.6	12.5	II	2	K=H	1	F.?	10.3	25.0	27.0	45.8	+0.3
20.0	22.5	I	6	N	1	F	10.0	45.0	27.3	25.8	−2.5
19.9	6.8	I	8	K=H	2	F.	10.0	13.6	27.3	57.2	+2.7
19.7	22.5	I?	3	N	1	—	9.8	45.0	27.5	25.8	−2.5 +1.1
18.9	8.9	~~III~~ I?	~~4~~ H	~~K=H~~	1	F.?	9.4	17.8	27.9	53.0	+0.9
18.0	16.2	I	3	N	1	—	9.0	32.4	28.3	38.4	−0.5
18.0	18.0	I	5	N	1	F	9.0	36.0	28.3	34.8	−1.1
17.2	6.8	~~III~~ II?	3	K=H	2	F	8.6	13.6	28.7	57.2	+3.1
17.9	18.3	I	4	N	1	—	9.0	36.6	28.3	34.2	−1.1
16.2	17.6	I	9	N	2	F	8.1	35.2	29.2	35.6	−0.6
17.0	20.0	I	3	N	1	—	8.5	40.0	28.8	30.8	−1.9
15.5	20.2	I I	4 5	N K=H	1	— —	7.8	40.4	29.5	30.4	−0.9
13.4	12.0	III	3	K=H	1	F.	6.7	24.0	30.6	46.8	+0.9
13.2	13.4	I	8	N	1	F	6.6	26.8	30.7	44.0	+0.7
13.7	16.6	I	8	N	1	F.	6.8	33.2	30.5	37.6	−0.5

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Mean 1

			No.		R.A.	Dec.	Mag.	H	V	H'	Red. to 1900	Br.	Cor. Br.	
3.0	2.1	Dm.	725	3	13.9	+ 40 41	7.3	49.7	42.2	51.8	3 16.8 +40 51	7.0	6.9	7.0
3.9	2.5	Dm.	738	3	9.7	+ 50 26	7.0	46.9	52.2	60.8	3 12.9 +50 36	6.5	6.4	
5.1	3.5	Dm.	731	3	6.4	+ 50 40	7.6	45.6	52.3	60.7	3 9.6 +50 50	6.6	6.5	
			513	3	7.6	+ 50 29	3.2	47.4	52.4	52.7	3 9.0 +50 35	5.9	5.8	
5.3	3.6	~~Dm.~~	~~729~~	3	5.9	+ 50 24	6.0	45.7	52.3	61.0		6.1	6.0	6.3
5.4	3.6	Dm.	725	3	5.5	+ 50 25	6.7	45.5	52.2	50.9	3 8.7 +50 35	6.1	6.0	
			724	3	5.5	+ 50 26	9.5				3 8.7 +50 36			
~~9.9~~	~~6.5~~	~~Dm.~~	~~673~~	3	58.7	+ 40 24	Var.	105.7	42.1	112.2	3 +	= H' 4.96		
9.6	6.5		496	3	0.4	+ 40 30	2.3	47.8	42.2	54.3	3 1.2 +40 34	B	B	
5.5	3.7	Dm.	775	3	36.9	+ 51 4	7.0	56.9	52.3	51.4	3 40.2 +51 13			
0	0	Dm.	696	3	21.6	+ 41 15	7.4	61.6	42.3	51.6	3 24.6 +41 25			
3.9	2.5	Dm.	716	3	9.9	+ 51 5	7.6	46.9	52.3	60.8	3 13.1 +51 15			

Mean 7

Cor. Br.

2.1	0.9	Dm.	544	3	52.3	+ 16 52	6.5	70.1	27.2	69.2	3 54.9 +17 0	6.8	6.1	
0.9	0.3		636	3	46.3	+ 16 39	6.0	71.3	27.3	71.0	3 47.4 +17 2	6.8	6.1	
2.5	1.1		563	3	22.1	+ 27 9	5.8	71.1	37.2	73.6	3 25.3 +27 14	6.7	6.0	3 22.6+27.4
2.7	1.2		677	3	59.8	+ 27 18	5.4	72.8	37.3	70.1	4 0.5 +27 21	5.9	5.2	
			513	3	22.2	+ 27 13	8.0	67.2	37.0	69.7	3 24.9 +27 23			
			514	3	22.3	+ 27 13	8.0	67.3	37.0	69.8	3 25.0 +27 23			
2.5	1.1	Dm.	~~564~~	3	23.1	+ 17 27	6.5	68.1	27.2	69.1		7.1	6.4	
2.1	0.9		635	3	53.9	+ 17 52	5.7	71.7	27.3	70.8	3 55.1 +17 55	6.6	5.9	
0.5	0.3	Dm.	575	3	36.6	+ 28 12	7.9	69.0	37.2	69.5	3 39.3 +28 21	7.2	6.5	
1.1	0.6	Dm.	564	3	32.5	+ 28 14	7.0	68.5	37.2	69.6	3 35.2 +28 23	6.9	6.2	
3.1	1.3		680	3	59.6	+ 28 41	5.2	73.2	37.3	70.1	4 0.8 +28 43	6.2	5.5	
1.1	0.6	Dm.	562	3	31.8	+ 28 18	7.0	68.4	37.3	69.5	3 34.5 +28 27	6.9	6.2	
1.6	1.1	0.6	593	3	35.4	+ 19 19	5.4	70.6	27.4	71.2	3 36.6 +19 23	5.8	5.1	
1.9	0.9	Dm.	548	3	27.8	+ 28 45	6.8	67.8	37.3	69.7	3 30.5 +28 54	6.7	6.0	
			579	3	27.3	+ 29 31	7.4	67.7	37.3	69.8	3 30.0 +29 40			
2.1	0.9	Dm.	~~562~~	3	28.0	+ 19 35	7.0	68.4	27.4	69.3		7.1	6.4	7.2
0.9	0.6	Dm.	591	3	46.3	+ 30 38	6.5	70.3	37.3	69.4	3 49.1 +30 46	6.5	5.8	
1.7	0.5	Dm.	582	3	43.0	+ 30 44	6.5	69.6	37.3	69.1	3 45.8 +30 52	6.4	5.7	
0.7	0.5		603	3	37.4	+ 20 33	5.8	70.6	27.4	71.1	3 38.6 +20 37	6.0	5.3	

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Plate 926.

T	H	Type	No. Lines	K	Focus	Other Lines	V.	H.	V.	H.	Correc.
13.7	19.2	I	6	N	1	F	6.8	38.4	30.5	32.4	−0.7
13.3	19.2	II?	3½	K = H K=H	1	F	6.6	38.2	30.7	32.6	−1.8
12.1	20.3	I?	—	N	1	F	6.0	40.6	31.3	30.2	−2.3
11.3	7.0	III	3	K = H	1	F	5.6	14.0	31.7	56.8	+1.8
11.2	7.3	III	3	K = 2.0 H?	2	F	5.6	14.6	31.7	56.2	+1.7
11.6	12.3	I	3	N	1	—	5.8	24.6	31.5	46.2	+0.6
11.8	19.0	I	3611 2	K=H	1	—	5.9	38.0	31.4	32.8	
11.8	12.6	I b?	10	N	5	F. cm	5.9	25.2	31.4	45.6	+1.1
11.1	14.2	I	7	N	2	F	5.6	28.4	31.7	42.4	+0.1
11.2	15.2	II	3	K = H	1	F	5.6	30.4	31.7	40.4	−0
11.0	15.6	II?	2	N	1	F?	5.5	31.2	31.8	39.6	−0.3
11.1	16.6	I	12	N	4	F	5.6	33.2	31.7	37.6	−0.7
11.5	20.6	II?	2	N	1	F	5.8	41.2	31.5	29.6	−2.4
10.4	7.3	II?	3	K = H	1	F	5.2	14.6	32.1	56.2	+3.7
10.2	8.1	I?	3	N	1	—	5.1	16.2	32.2	54.6	+3.3
10.5	11.0	I	8	K = H	1	F	5.2	22.0	32.1	48.8	+1.1
10.5	14.3	I	—	N	1	—	5.2	28.6	32.1	42.2	+0.1
10.3	19.3	I	7	N	1	F	5.2	38.6	32.1	32.2	−1.1
9.0	9.1	I	6	N	1	F	4.5	18.2	32.8	52.6	+1.3
9.1	10.9	I	8	N	2	F	4.6	21.8	32.7	49.0	+0.9
9.4	14.5	I	11	N	2	F	4.7	29.0	32.6	41.8	+0.1
9.2	16.0	I	5	N	1	—	4.6	32.0	32.7	38.8	−0.1
9.6	17.4	I?	14	K = H	1	—	4.8	34.8	32.5	36.0	−1.1
9.1	20.0	I	7	N	1	F	4.6	40.0	32.7	30.8	−1.2
8.4	7.2	III?	2	N	1	F?	4.2	14.4	33.1	56.4	+3.9
8.2	14.3	I	8	N	1	F	4.1	28.6	33.2	42.2	+0.1
8.8	14.9	I b	3612 9	N	2	F. cm	4.4	29.8	32.9	41.0	+0
8.4	15.2	I?	4	N	1	—	4.2	30.4	33.1	40.4	−0
8.0	15.3	I	2	N	1	—	4.0	30.6	33.3	40.2	−0

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Mean 7

			No.	R.A.	Dec.	Mag.	H	V	H'	Red. to 1900		Br.	Br.
1.8	0.7		584	3 32.0	+20 31	6.2	70.4	27.3	71.1	3 33.2 + 20 35		6.7	6.0 3 33.6 +20 26
1.8	0.7	Dm.	558	3 28.5	+ 30 39	7.1	66.7	37.2	69.5	3 31.3 + 30 48		6.9	7.0 6.2
2.3	1.4	Dm.	619	3 26.6	+ 31 12	7.0	67.2	37.2	69.5	3 29.4 + 31 21		6.9	6.2
3.7	1.8	Dm.	587	3 56.8	+ 21 36	6.5	70.8	27.2	69.0	3 59.4 + 21 44		6.8 7.0	6.1 6.3
3.6	1.7		670	3 57.6	+ 21 45	4.4	72.2	27.4	70.5	3 58.7 + 21 49		6.0 6.2	5.3 5.5
1.2	0.6	Dm.	550	3 45.5	+ 21 30	7.5	70.1	27.3	69.5	3 48.1 + 21 38		7.0	6.3
		Dm.	492	3 ~~44.4~~ 46.1	+ 21 28.2	7.2	68.8	27.3		3 33.4 + 21 32		6.8	
1.1	0.6		638	3 46.6	+ 31 32	3.1	71.8	37.4	70.7	3 47.8 + 31 35		4.0	3.3
0.3	0.1		628	3 42.9	+ 21 33	6.0	71.3	27.5	71.2	3 44.0 + 21 37		6.5	5.8
0	0	Dm.	650	3 38.7	+ 31 45	6.5	69.1	37.4	69.1	3 41.3 + 31 54		6.8	6.1
0.3	0.1	Dm.	649	3 37.6	+ 31 51	6.8	68.8	37.3	69.1	3 40.4 + 32 0		6.9	6.2
0.7	0.3		600	3 36.8	+ 31 54	4.0	70.0	37.5	70.7	3 38.0 + 31 59		5.1	4.4
2.4	1.2	Dm.	616	3 26.0	+ 31 32	6.5	67.2	37.3	69.6	3 28.8 + 31 41		7.0	6.3
3.7	1.8	Dm.	703	3 57.5	+ 31 58	6.5	72.1	37.2	68.4	4 0.3 + 32 6		7.0	6.3
3.3	1.5	Dm.	714	3 55.5	+ 32 10	6.5	71.7	37.3	68.4	3 58.3 + 32 18		7.0	6.3
1.9	1.1		618	3 49.7	+ 22 8	5.7	71.7	27.3	70.6	3 50.9 + 22 12		6.2	5.5
0.3	0.1	Dm.	572	3 41.1	+ 22 6	7.3	69.7	27.3	69.6	3 43.7 + 22 15		6.8	6.1
2.1	1.1	Dm.	523	3 30.2	+ 22 11	6.8	68.8	27.4	69.9	3 32.8 + 22 20		6.6	5.9
2.7	1.3	Dm.	617	3 52.4	+ 22 49	7.5	70.6	27.3	69.3	3 33.1 + 32 57		6.6	5.9
1.9	0.9	Dm.	607	3 48.5	+ 22 46	7.0	70.3	27.4	69.4	3 51.3 + 22 54		6.4	5.7
0.1	0		626	3 42.1	+ 32 43	5.2	71.1	37.4	71.0	3 43.4 + 32 48		5.5	4.8
0.3	0.1	Dm.	545	3 37.3	+ 22 42	8.0	69.3	27.3	69.4	3 39.9 + 22 51		6.8	6.1
1.1	0.6	Dm.	659	3 33.3	+ 32 29	6.8	68.1	37.3	69.2	3 36.1 + 32 38		7.0	6.3
2.4	1.2	Dm.	518	3 28.4	+ 22 45	7.0	68.4	27.4	69.6	3 31.0 + 22 54		6.8	6.1
3.9	1.9	Dm.	785	3 57.7	+ 33 3	7.0	72.1	37.2	68.2	4 0.6 + 33 11		6.7 6.8	6.0 6.1
0.3	0.1	Dm.	563	3 41.1	+ 23 16	7.2	69.7	27.4	69.6	3 43.8 + 23 25		6.3	5.6
0	0	Dm.	563	3 39.8	+ 22 59	6.9	69.6	27.4	69.6	3 42.4 + 23 8		5.7	5.0
0	0	Dm.	717	3 38.7	+ 33 9	7.0	69.1	37.4	69.1	3 41.5 + 33 18		6.7	6.0
0.1	0	Dm.	~~587~~	~~3 38.8~~	~~+ 23~~	~~2.1~~	~~7.5~~	~~69.4~~	27.4	69.4 3 41.5 + 23 30		6.9	6.2

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March 12, 1887.

Plate 926.

V	H	Type	No. Lines	K	Focus	Other Lines	V.	H.	V.	H.	Correc.
7.2	7.6	III	3	K=H	1	F	3.6	15.2	33.7	55.6	+ 1.9
7.3	10.4	I	3	N	1	—	3.6	20.8	33.7	50.0	+ 1.2
7.6	13.8	I	6	N	1	F	3.8	27.6	33.5	43.2	+ 0.3
7.8	14.2	I	5	N	1	—	3.9	28.4	33.4	42.4	+ 0.3
7.6	14.6	I	13	N	4	F	3.8	29.2	33.5	41.6	+ 0
7.5	15.2	I	12	N	5	F	3.8	30.4	33.5	40.4	− 0
7.5	15.3	II	6 5	N	N? 11	— —	3.8	30.6	33.5	40.2	− 0
7.8	15.8	I	11	N	2	F	3.9	31.6	33.4	39.2	− 0.3
7.5	16.4	I	9	N	4	F	3.8	32.8	33.5	38.0	− 0.3
7.7	17.4	I	9	N	2	F	3.8	34.8	33.5	36.0	− 1.2
7.9	23.4	I	9	N	2	F	4.0	46.8	33.3	24.0	− 2.3
6.7	7.9	III	? 3?	K=H	1	F?	3.4	15.8	33.9	55.0	+ 1.8
6.9	13.6	I	7	N	2	F	3.4	27.2	33.9	43.6	+ 0.7
6.8	14.2	II	4 4	N N	11	— —	3.4	28.4	33.9	42.4	+ 0.3
6.8	14.5	I	5	N	1	—	3.4	29.0	33.9	41.8	+ 0
6.8	14.9	I	5	N	1	—	3.4	29.8	33.9	41.0	+ 0
6.5	15.5	I	8	N	1	—	3.2	31.0	34.1	39.8	− 0.1
6.5	15.9	I	5	N	1	—	3.2	31.8	34.1	39.0	− 0.3
6.9	16.0	I	10	N	3	F	3.4	32.0	33.9	38.8	− 0.3
6.4	16.0	I	6	N	1	—	3.2	32.0	34.1	38.8	− 0.3
6.2	19.0	I	4	N	1	—	3.1	38.0	34.2	32.8	− 1.2
6.6	21.2	I	7	N	1	F	3.3	42.4	34.0	28.4	− 1.7
5.9	11.1	I	5	K=H	1	F	3.0	22.2	34.3	48.6	+ 2.1 + 1.1
5.4	11.7	I	b 3613 7	N	2	F faint	2.7	23.4	34.6	47.4	+ 1.8
5.3	13.6	I	3	N	1	—	2.6	27.2	34.7	43.6	+ 0.5
5.9	14.3	IIa	3614 2	K=H	1	—	3.0	28.6	34.3	42.2	+ 0.3
6.3	16.3	I	8	N	2	—	3.6	32.6	34.3	38.2	− 0.3
4.2	12.6	I	7	K=½H	1	F	2.1	25.2	35.2	45.6	+ 0.7

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Mean 7

			No.	R.A.	Dec.	Mag.	H	V	H'	Red. to 1900	Br.	Cor. Br.
3.7	1.9		666	3 57.2	+23 47	5.6	72.4	27.4	70.5	3 58.4 +23 50	6.7 6.8	6.0
2.3	1.2	Dm.	594	3 49.7	+23 40	7.3	70.5	27.3	69.3	3 52.4 +23 48	7.0	6.3
0.6	0.3	Dm	570	3 42.3	+23 31	7.3	69.9	27.3	69.6	3 43.0 +23 40	6.8	6.1
0.5	0.3	Dm.	569	3 41.4	+23 24	7.5	69.8	27.3	69.5	3 44.1 +23 33	6.7	6.0
0.1	0		625	3 42.0	+23 41	3.8	71.2	27.5	71.2	3 43.3 +23 45	4.5	3.8
0	0		618	3 40.4	+23 44	3.0	70.8	27.5	70.8	3 41.6 +23 48	4.0	3.3
		Dm.	534	3 38.7	+23 41	8.0	69.3	27.5	69.3	3 41.4 +23 50	6.9	6.2
		*Dm.	536	3 38.8	+23 39	8.0	69.4	27.4	69.4	3 41.5 +23 48		
		~~Dm. 538~~		~~3 38.8~~	~~+23 28~~	7.5	69.4	27.3	69.4			
0.3	0.3		615	3 39.2	+23 34	4.2	70.8	27.5	71.1	3 40.4 +23 39	5.0	4.3
0.7	0.3		608	3 37.8	+23 44	3.8	70.6	27.5	70.9	3 39.0 +23 48	4.9	3.9
1.2	0.6		594	3 34.8	+33 34	3.8	69.6	37.4	70.8	3 36.6 +33 39	5.8	5.1
4.3	2.3		556	3 20.8	+33 23	3.5	67.6	37.4	71.9	3 22.0 +33 28	6.0	5.3
3.7	1.8	Dm	776	3 56.3	+33 51	7.3	72.1	37.2	70.3	3 39.2 +33 39	6.9 7.1	6.2 6.4
0.7	0.3		632	3 44.3	+34 0	3.7	71.5	37.4	70.8	3 45.5 +34 3	6.0	5.3
0.5	0.3	Dm	567	3 41.3	+23 54	7.9	69.7	27.3	69.4	3 44.0 +24 3	~~6.6~~ 7.1	6.4
0.1	0	Dm.	561	3 40.7	+23 56	7.5	69.7	27.3	69.7	3 43.4 +24 5	6.6	5.9
0	0	Dm.	553	3 39.9	+23 54	7.8	69.7	27.3	69.7	3 42.8 +24 3	7.0	6.3
0.3	0.1	Dm.	562	3 38.4	+24 4	7.5	69.4	27.3	69.5	3 41.1 +24 13	6.9	6.2
0.5	0.3	Dm.	556	3 37.4	+24 4	7.0	69.2	27.3	69.5	3 40.1 +24 13	6.9	6.2
0.5	0.3		613	3 38.7	+24 0	4.0	70.7	27.4	71.0	3 39.9 +24 4	4.8	4.1
0.5	0.3	Dm.	553	3 37.3	+24 6	7.0	69.3	27.3	69.6	3 40.0 +24 15	6.6	5.9
2.1	1.2	Dm.	527	3 30.5	+24 14	7.7	68.5	27.3	69.7	3 33.2 +24 23	7.0 ~~6.5~~	6.3
3.1	1.7		577	3 27.4	+24 3	5.9	69.8	27.3	71.5	3 28.5 +24 7	6.5	5.8
			773	3 48.7	+34 24	7.0	70.9	37.4	68.8	3 51.6 +34 32		
2.1	1.1	~~Dm.~~	~~599~~	~~3 48.8~~	~~+24 4~~	6.8	71.0	27.1	69.9		6.8	6.1
1.8	0.9		647	3 48.7	+34 44	5.5	72.1	37.4	70.3	3 50.0 +34 47	5.8	5.1
1.7	0.5	Dm.	583	3 42.7	+24 44	7.7	69.9	27.3	69.4	3 45.4 +24 52	6.9	6.2
0.3	0.1	Dm.	741	3 40.9	+34 23	7.0	69.5	37.4	69.2	3 43.8 +34 32	7.0	6.3
0.3	0.3		610	3 38.1	+24 5	4.4	70.7	27.1	71.0	3 39.3 +24 [illegible]	5.9	5.2
1.3	0.7	Dm.	641	3 44.8	+25 15	6.6	70.0	27.4	69.3	3 47.3 +25 23	6.4	5.7

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March 12, 1887.

Plate 926.

T	H	Type	No. Lines	K	Focus	Other Lines.	V	H	V.	H.	Correc.
4.5	14.1	I	8	N	2	F	2.2	28.2	35.1	42.6	+ 0.3
4.9	18.3	I	6	N	1	—	2.4	36.6	34.9	34.2	− 0.9
4.6	21.4	I?	v−	N	1	F	2.3	42.8	35.0	28.0	− 3.6
3.9	10.7	I?	8	N	3	F	2.0	21.4	35.3	49.4	+ 2.4
2.7	16.6	I	7	N	2	F	1.4	33.2	35.9	37.6	− 1.9

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Mean 7

			No.		R.A.	Dec.	Mag.	H	r	H'	Red. to 1900.		Br.	Cor. Br.
ec.														
3	0.5	0.3	629	3	43.1	+25 14	3.5	71.3	27.4	71.0	3 44.3	+25 17	5.9	5.2
9	1.8	0.9	Dm. 529	3	32.1	+24 51	6.7	68.7	27.2	69.6	3 34.8	+25 0	6.5	5.8
6	3.6	1.8	572	3	25.0	+33 3	3.7	67.8	37.3	71.4	3 26.3	+35 6	6.2	5.5 57 323.5+34.0
.4	2.4	2.7	652	3	51.2	+35 27	4.1	72.6	37.4	70.2	3 52.4	+35 30	4.9	4.3
.9	0.9	0.6	599	3	36.8	+36 3	5.6	70.0	37.5	70.9	3 38.1	+36 9	6.1	5.4 343.5+36.0

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F. nw. 4c. 5.4 5.3 F. ch. 7.8

Dark plate.
Very hard to measure.

March 18, 1887.

Plate 927.

	V	H	Type	No. lines	K	Focus	Other lines	V.	H.	V.	H.	Correc.
1	10	22.6	16.5	I ↓	9 ↓	N	2	F. ↓	11.2	33.0	~~59.2~~ 36.2	37.4	− 0.9
		21.1	9.2	I? ↓	3 ↓	N ↓	1	—	10.6	18.4	~~59.7~~ 36.8	52.0	+ 5.4
		21.2	10.0	I? ↓	1 ↓	N ↓	1	—	10.6	20.0	~~59.8~~ 36.8	50.4	+ 3.0
		21.2	19.3	I? ↓	2 ↓	N ↓	1	—	10.6	38.6	~~59.8~~ 36.8	31.8	− 3.6
		21.5	21.6	II a? 3615 ↓	3 ↓	K = H	1	F. ↓ recn	10.8	43.2	~~59.6~~ 36.6	27.2	− 6.1
		20.0	16.1	I? ↓	↓	K = H	1	F. ↓	10.0	32.2	~~60.7~~ 37.4	38.2	− 1.2
		20.4	17.8	I ↓	10 ↓	N	2	F. ↓	10.2	35.6	~~60.8~~ 37.2	34.8	− 1.7
		20.1	18.5	I? ↓	4 ↓	N ↓	1	—	10.0	37.0	~~60.4~~ 37.4	33.4	− 3.1
		19.6	7.2	III? ↓	3 ↓ 3616	K = H?	1	F. ↓	9.8	14.4	~~60.6~~ 37.6	56.0	+ 5.1
?		19.0	7.1	~~IV~~ IIa?	3 ↓	K = H	2	F. ↓ recn.	9.5	14.2	~~60.9~~ 37.9	56.2	+ 5.3
		19.8	8.4	I ↓	9 ↓	N	4	F. ↓	9.9	16.8	~~60.5~~ 37.5	53.6	+ 6.3
		19.6	12.7	I ↓	10 ↓	N	2	F. ↓	9.8	25.4	~~60.6~~ 37.6	45.0	+ 2.3
?		19.6	14.5	~~III~~ b? ↓ 3617	↓	N	1	F. ↓ recn.	9.8	29.0	~~60.6~~ 37.6	41.4	+ 8
		19.9	17.0	I ↓	11 ↓	N	5	F. ↓	10.0	34.0	~~60.4~~ 37.4	36.4	− 1.9
		19.1	19.1	I ↓	↓10 ↓	N	3	F. ↓	9.6	38.2	~~60.8~~ 37.8	32.2	− 3.9
		19.4	20.2	~~III~~ b 3618 ↓	3 ↓	K = H	1	F. ↓ recn	9.7	40.4	~~60.7~~ 37.7	30.0	− 5.1
		19.3	20.6	I ↓	10 ↓	N	2	F. ↓	9.6	41.2	~~60.8~~ 37.8	29.2	− 5.5
		19.5	20.8	I ↓	6 ↓	N	1	F. ↓	9.8	41.6	~~60.6~~ 37.6	28.8	− 5.5
		19.4	21.1	III? ↓	3 ↓	~~K = H~~ K = H	2	F. ↓	9.7	42.2	~~60.7~~ 37.7	28.2	− 5.7
		19.0	21.1	I ↓	6 ↓	N	2	F. ↓	9.5	42.2	~~60.2~~ 37.9	28.2	− 5.7 − 3.9
		19.7	22.0	I ↓	4 ↓	N ↓	1	—	9.8	44.0	~~60.6~~ 37.6	26.4	− 6.7
?		18.2	6.4	~~III~~ c? 3619 ↓	3 ↓	K = H	2	F. ↓ bright? recn.	9.1	12.8	~~60.2~~ 38.3	57.6	+ 8.7
		18.9	11.4	I? ↓	3 ↓	N ↓	1	—	9.4	22.8	~~47.6~~ 38.0	47.6	+ 3.6
		18.1	13.5	~~III~~ b? 3620 ↓	3 ↓	K = H	1	F. ↓	9.0	27.0	~~43.4~~ 38.4	43.4	+ 1.5
		18.3	19.8	I ↓	6 ↓	N	1	F. ↓	9.2	39.6	~~30.2~~ 38.2	30.8	− 3.0 − 4.8
		18.3	20.2	IIa? 3621 IIa ↓	3 ↓	K = H K = H	1	F. ↓ Seem recn	9.2	40.4	~~35.8~~ 38.3	30.1	− 3.3
		18.6	21.6	I ↓	3 ↓	N ↓	1	—	9.3	43.2	~~27.2~~ 38.1	27.2	− 6.6
		18.7	22.3	I ↓	7 ↓	K = H	1	F. ↓	9.4	44.6	~~24.8~~ 38.0	25.8	− 7.2

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1886phae.proj..835F

Mean 5

rec.				No.		R.A.		Dec.	Mag.	H	r	H'	Red. to 1900	Br.	Br.
0.9	0.9	1.5		599	3	36.8	+	36 5	5.6	69.8	47.3	70.7	3 38.1 + 36 9		
5.4	3.6	5.4	Dm.	840	3	55.6	+	46 32	7.2	74.0	57.1	68.6	3 58.8 + 46.40	6.8	6.3
5.0	3.0	4.9	Dm.	805	3	51.8	+	36 36	7.5	71.8	47.2	68.8	3 54.7 + 36 44	6.5	6.0
3.6	2.5	3.6	Dm.	773	3	25.8	+	46 37	7.1	64.4	57.2	68.0	3 28.9 + 46 46	6.8	6.3
6.1	4.1	6.1	Dm.	760	3	19.4	+	46 27	6.5	62.6	57.2	68.7	3 22.5 + 46 37	6.5	6.0
1.2	0.9	1.2	Dm.	881	3	35.1	+	47 11	7.8	67.3	57.2	68.5	3 38.3 + 47 20	6.8	6.3
2.7	1.7	2.5		588	3	33.4	+	37 12	5.9	69.0	47.4	70.7	3 34.6 + 37 16	5.9	5.4
3.1	2.1	3.1	Dm.	865	3	28.0	+	47 6	7.7	65.0	57.1	68.1	3 31.2 + 47 15	7.0	6.5
				683	4	0.3		37 23	6.2					6.8	6.3
5.1	3.1	5.1	Dm.	881	3	58.7	+	37 21	6.0	73.1	47.2	68.0	4 1.7 + 37 28	6.9	6.4
3.3	3.3	3.7		686	3	1.6	+	37 44	3.7	14.8	47.2	9.5	4 1.9 + 37 47	6.2	5.7
6.3	4.2	6.3		682	4	0.0	+	47 23	4.3	16.8	57.3	10.5	4 1.4 + 47 26	4.3	3.8
2.3	1.5	2.3		642	3	47.3	+	47 32	5.4	72.7	67.3	70.4	3 48.8 + 47 35	5.4	4.9
3	0.3	0.5	Dm.	833	3	40.6	+	37 26	6.5	69.6	47.2	69.6	3 43.5 + 37 35	6.5	6.0
1.9	1.2	1.9		591	3	34.4	+	47 24	3.2	68.4	57.4	70.3	3 35.8 + 47 28	11.0	3.5
3.9	2.4	3.9		578	3	28.0	+	47 18	4.2	66.2	57.4	70.1	3 29.4 + 47 52	5.2	4.7
				850	3	23.1	+	47 26	7.3	53.5	47.1	68.6	3 26.2 + 47 36		
3.1	3.1	4.8	Dm.	844	3	25.8	+	37 32	7.5	66.2	47.2	69.3		6.5	6.0
			Dm.	765	3	15.9	+	37 24	7.8	56.3	47.1	69.4		6.6	6.1
3.5	3.6	5.5	Dm.	847	3	21.9	+	47 31	6.5	63.1	57.1	68.6	3 23.0 + 47 41	6.0	5.5
3.7	3.7	5.5		886	3	24.3	+	37 32	7.0	65.9	47.3	69.6	3 27.2 + 37 41		
			Dm.	846	3	21.4	+	47 21	7.4	63.0	57.2	68.5		6.5	6.0
3.8	3.9	5.9		560	3	22.1	+	47 35	4.4	64.3	57.3	70.2	3 23.5 + 47 39	6.0	5.5
5.9	3.9	5.9		844	3	20.4	+	47 36	7.0	62.6	57.1	68.5	3 23.3 + 47 26	6.4	5.9
3.9			Dm.	783	3	23.0	+	37 34	6.8	66.2	47.1	69.1		6.0	5.8
				831	3	17.8	+	47 14	7.9	61.8	57.0	68.5	3 20.9 + 47 24		
6.7	4.5	6.7	Dm.	833	3	18.7	+	47 19	7.7	62.7	57.1	69.4		7.0	6.5
8.7	5.9	8.7		702	4	6.1	+	48 6	4.2	18.9	57.2	10.2	4 7.5 + 48 9	5.3	4.8
3.6	2.3	3.6	Dm.	920	3	49.3	+	47 44	8.1	72.1	57.1	68.5	3 42.8 + 47 52	6.9	6.4
1.5	0.9	1.5	Dm.	1015	3	43.2	+	48 13	6.2	70.2	67.2	68.7	3 46.4 + 48 21	6.6	6.1
				947	3	27.1	+	37 8	7.2	66.9	47.3	69.7			
3.0	3.0	4.8	Dm.	949	3	23.9	+	48 8	7.5	63.5	57.3	68.3	3 27.1 + 48 17	7.0	6.5
				749	3	25.6	+	38 6	7.0				3 28.5 + 38 16		
3.3	3.3	5.1	Dm.	941	3	25.7	+	37 11	7.2	66.1	47.4	69.4	3 28.6 + 37 26	7.1	6.6
4.6	4.5	6.6	Dm.	835	3	18.9	+	47 48	7.5	62.1	57.1	68.7	3 22.1 + 47 58	6.9	6.4
7.2	4.8	7.2	Dm.	828	3	16.9	+	47 42	6.7	61.5	57.1	68.7	3 20.0 + 47 52	6.6	6.1

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V	H	Type	No. Lines	K	Focus	Other Lines	V.	H.	V.	H.	Correc.
18.5	22.5	I	5	K	1	F	9.2	43.0	38.2 ~~45.0~~	25.4	−7.5
17.8	10.7	I	8	K	2	F	8.9	21.4	38.5 ~~21.4~~	49.0	+2.7
17.8	11.2	III ?	12	K=H	1	F ?	8.9	22.4	38.5 ~~22.4~~	48.0	+2.4
17.3	12.9	III ?	1	K	1	F	8.6	25.8	38.8 ~~25.8~~	44.6	+2.1
17.1	18.4	I	7	K	1	F	8.6	36.8	38.8 ~~36.8~~	33.6	−3.3
17.3	18.5	I	6	K	1	F	8.6	37.0	38.8 ~~27.6~~	33.4	−3.6
17.9	20.6	I	7	K	1	F	9.0	41.2	38.4 ~~41.2~~	29.2	−5.5
17.0	20.7	I	7	K	1	F	8.5	41.4	38.9 ~~41.4~~	29.0	−5.5
17.1	21.6	I	5	K	1	F	8.6	43.2	38.8 ~~42.2~~	27.2	−6.6 ~~−4.5~~
17.3	21.8	I	12	K	2	F	8.6	43.6	38.8	26.8	−6.9
17.0	22.5	I	8 (3622)	K	1	F	8.5	45.0	38.9	25.4	−7.5
17.0	23.9	II a ?	13	K=H	1	F eeu	8.5	47.8	38.9	22.6	−9.1
16.7	6.6	I	4	K=H	1	F ?	8.4	13.2	39.0	57.2	+5.7
16.6	20.6	I	5	K	1	F	8.3	41.2	39.1	29.2	−5.7
16.4	21.3	I	12	K	3	F	8.2	42.6	39.2	27.8	−6.6
16.0	21.9	I	6	K=H	1	F	8.0	43.8	39.4	26.6	−7.2
? 16.9	23.4	II a ? (3623)	13	K=H ?	2	F eeu	8.4	46.8	39.0	23.6	−8.7
15.5	10.0	I	4	K	1	F	7.8	20.0	39.6	50.4	+3.6
15.3	10.2	III ?	13	~~K~~ K=H	1	F	7.6	20.4	39.8	50.0	+3.3
15.4	10.6	I	8	K=2H	1	F	7.7	21.2	39.7	49.8	+3.0
? 15.5	11.5	~~I~~ II (3624)	11	K	5	F eeu	7.8	23.0	39.6	47.4	+2.2
15.4	19.2	I	6	K	1	F	7.7	38.4	39.7	32.0	−2.9
15.7	20.6	I	8	K	2	F	7.8	41.2	39.6	29.2	−3.9
15.7	21.5	I	9	K	2	F	7.8	43.0	39.6	27.4	−6.9
15.9	22.4	II a ? (3624)	13	K=H	1	F eeu	8.0	44.8	39.4	25.6	−7.5
? 15.6	22.9	II a ? (3625)	13	K 2.0 1 =H	5	F eeu	7.8	45.8	39.6	24.6	−8.3
14.4	5.7	I	8	K=H	2	F	7.2	11.4	40.2	59.0	+10.9
14.8	8.7	I	3	K	1	F ?	7.4	17.4	40.0	53.0	+6.6

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Mean 5

rec.			No.	R. A.	Dec.	Mag.	H	r	H	Red. to 1900.	Br.	Br.
5	5.1	7.5	Dm. 821	3	16.0	+ 47 52	7.1	61.0	67.1	68.5	3 19.1 +48 21	6.8	6.3
7	2.7	4.3	Dm. 829	3	50.1	+ 38 23	6.8	71.5	47.3	68.8	3 53.1 +38 31	6.4	5.9
4	2.4	3.7	Dm. 827	3	48.9	+ 38 25	6.5	71.3	47.3	69.1	3 51.9 +38 33	6.8 7.1	6.3 6.6
1	1.3	2.1	Dm. 1019	3	44.9	+ 48 37	7.0	70.7	67.2	68.6	3 48.1 +48 45	6.6 6.9	6.1 6.4
3	2.3	3.3	Dm. 963	3	28.1	+ 48 45	7.0	64.9	57.4	68.2	3 31.3 +48 54	6.5	6.0
6	2.4	3.6	Dm. 962	3	27.9	+ 48 36	7.5	64.9	67.4	68.5	3 31.1 +48 45	6.7	6.2
5	3.7	5.5	Dm. 943	3	21.6	+ 48 14	7.0	62.8	67.2	68.3	3 24.8 +48 24	6.3	5.8
5	3.9	5.5	Dm. 938	3	21.1	+ 48 41	6.5	62.5	67.2	68.0	3 24.3 +48 51	6.3	5.8
6 5	4.5	6.7	927 Dm. 739	3	18.6	+ 48 34	8.1	61.8	57.2	68.4	3 21.8 +48 44	7.0	6.5
9	4.7	6.9	552	3	19.6	+ 48 39	5.0	63.2	67.2	70.1	3 20.9 +48 43	5.4	4.9
5	5.3	7.5	5 749	3	17.8	+ 48 42	5.9	62.8	67.2	70.3	3 18.9 +48 45	6.2	5.7 35 3 15.7+48.6
1	6.1	9.1	Dm. 893	3	11.6	+ 48 33	6.5	59.4	67.1	68.5	3 14.7 +48 43	6.6	6.1
7	5.7	8.7	Dm. 848	4	0.6	+ 38 52	6.8	138	47.3	8.1	4 3.6 +38 39	7.1	6.6
7	3.9	5.7	Dm. 942	3	21.5	+ 48 54	7.0	62.7	67.3	68.4	3 24.7 +48 N	6.3	5.8
6	4.3	6.6	553	3	20.8	+ 49 7	4.8	63.4	67.3	70.0	3 22.2 +49 10	5.1	4.6
2	4.9	7.2	Dm. 936	3	17.3	+ 49 6	7.7	61.1	67.1	68.3	3 20.5 +49 16	6.7	6.2
7	5.7	8.7	537	3	14.7	+ 48 47	5.2	61.5	67.2	70.2	3 16.1 +48 51	5.8	5.3
6	3.6	5.3	Dm. 911	3	52.1	+ 39 34	7.3	72.1	47.4	68.5	3 55.8 +39 42	6.8	6.3
3	3.3	5.1	Dm. 909	3	51.6	+ 39 42	7.0	72.0	47.3	68.7	3 54.6 +39 50	6.8 7.2	6.3 6.7
0	3.0	4.7	Dm. 904	3	50.4	+ 39 36	7.4	71.6	47.3	68.6	3 53.4 +39 44	6.6	6.1
2	2.2	3.6	649	3	49.8	+ 39 40	3.0	72.8	47.5	70.6	3 51.1 +39 43	B.	B.
9	2.9	4.7	Dm. 829	3	27.8	+ 39 36	7.0	66.2	47.3	69.1	3 30.8 +39 45	6.5	6.0
9	3.9	5.7	573	3	25.7	+ 39 30	5.8	66.9	47.3	70.8	3 26.9 +39 34	6.0	5.5 3 24.6 +39 25
9	4.5	6.9	Dm. 944	3	18.5	+ 49 21	6.5	61.5	67.2	68.4	3 21.7 +49 31	6.9	5.4
5	5.3	7.5	Dm. 929	3	15.8	+ 49 14	7.3	60.6	67.2	68.1	3 19.0 +49 24	6.9	6.4
3	5.5	8.3	541	3	15.8	+ 49 26	1.9	6.6	67.2	69.9	3 17.1 +49 30	B.	B.
0.9	6.7	10.9	719	4 2	9.2	+ 50 0	4.6	20.6	67.2	9.7	4 10.7 +50 3	5.4	4.7
6	4.5	6.6	Dm. 1108	3	58.0	+ 49 48	7.3	754	67.2	68.8	4 1.3 +49 56	6.6	6.1

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	V	H	Type	Lines	K	Focus	Other Lines	V.	H.	V.	H.	Correc.
	14.6	9.4	I	11		3	F	7.3	18.8	40.1	51.6	+3.9
?	14.1	12.6	II a	3626 3	K=H?	2	F.	7.0	25.2	40.4	45.2	+2.4
√	14.3	14.9	I ? I?	3 4	K=H	1 1	F —	7.2	29.8	40.2	40.6	+0.1
	14.1	15.2	I	7		2	F	7.0	30.4	40.4	40.0	−0.3
√	14.5	15.1	III	? 32	K=H	K=H 1 1	F —	7.2	30.2	40.2	40.2	−0.1
√	14.4	16.3	I? I	34	K=H	1 1	F —	7.2	32.6	40.2	37.8	−1.5
√	13.9	13.7	I	4	K	1 1	? —	7.0	27.4	40.4	43.0	+0.9
√	13.4	13.8	I ? I	5 ?3	K=H	K 1 1	F —	6.7	27.6	40.7	42.8	+1.3
√	13.2	17.8	II a	3627 II? 2	K=H	K=H 1 1	F. Seen	6.6	35.6	40.8	34.8	−1.9
	13.6	21.1	I	8		1	F	6.8	42.2	40.6	28.3	−4.5
	13.9	21.4	I	8	K±2H	1	F	7.0	42.8	40.4	27.6	−4.7
	13.4	23.7	I ?	3		1	F?	6.7	47.4	40.7	23.0	−6.5
	12.3	7.4	I ?		K=H	1	F	6.2	14.8	41.2	53.6	+5.7
?	12.5	15.4	I d?			1	F.	6.2	30.8	41.2	39.6	−0.6
√	12.2	15.5	I d ? I?	4 ?	K=H	1 1	F —	6.1	31.0	41.3	39.4	−0.6
	12.0	21.4	II	3	K=H	1	F	6.0	42.8	41.4	27.6	−4.9
√	11.7	10.0	I I	2 3	K	1 1	— —	5.8	20.0	41.6	50.4	+3.7
√	11.0	10.6	I ? I	4 4	K=H	1 1	F —	5.5	21.2	41.9	49.2	+3.5
	11.8	11.8	I	7		1	F	5.9	23.6	41.5	46.8	+2.4
	11.0	13.0	II ?	3	K=H	1	F	5.5	26.0	41.9	44.4	+2.3
	11.5	16.1	I	8		2	F	5.8	32.2	41.6	38.2	−0.9
?	11.0	21.5	II a	3628 3	K=H	1	F.	5.5	43.0	41.9	27.4	−5.1
	10.3	13.0	II ?	3	K=H	1	F	5.2	26.0	42.2	44.4	+2.1
	10.6	14.6	II	3	K=H	1	F	5.3	29.2	42.1	41.2	+0.5
√	10.3	14.9	II a? II	3629 3	K=H	K=H 1 1	F. Seen	5.2	29.8	42.2	40.6	+0.1
?	10.5	16.2	II a	3630 3	K=H	3	F.	5.2	32.4	42.2	38.0	−1.1
√	10.4	16.7	III	32	K=H	K=H 1 1	F —	5.2	33.4	42.2	37.0	−1.3
	10.5	18.4	II a?	3631 3	K=H	1	F	5.2	36.8	42.2	33.6	−2.5

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Mean 5

Correc.			No.		R.A.	Dec.	Mag.	π	r	π'	Red. to 1900	Br.	cor. Br.
3.9	4.1	5.9	671	3	37.7	+50 1	4.3	76.5	57.3	70.6	3 59.1 + 50 5	5.1	4.6
2.4	1.8	2.4	643	3	47.7	+50 21	3.5	72.9	57.4	70.5	3 49.2 + 50 24	5.7	5.2
0.1	0.1	0.1	Dm. 842	3	39.2	+40 14	7.3	69.0	47.4	68.9	3 42.3 + 40 23	7.0	6.5 7.0
0.3	0.1	0.3	617	3	39.5	+50 21	3.7	69.9	57.4	70.2	3 41.0 + 50 26	5.9	5.4 3 37.7 + 50.8
0.1	0.1	0.1	Dm. 835	3	38.3	+40 4	7.2	68.5	47.3	68.6	3 41.3 + 40 13	6.9 7.0	6.4 6.5 7.1
1.5	0.9	1.5	Dm. 809	3	34.1	+50 5	7.3	66.7	57.3	68.7	3 37.4 + 50 14	6.8	6.3 6.9
0.9	0.9	1.5	Dm. 847	3	42.4	+40 22	7.2	69.8	47.4	68.9	3 45.4 + 40 30	6.8	6.3 7.0
1.3	0.7	1.3	Dm. 849	3	42.2	+50 37	7.5	69.8	57.3	68.5	3 45.5 + 50 46	7.0	6.5 7.0
1.9	1.9	2.1	Dm. 813	3	31.2	+40 42	7.0	66.8	47.3	68.7	3 34.2 + 40 31	6.9 1	6.4 6.9
4.5	4.5	6.6	Dm. 776	3	22.7	+40 26	7.2	64.9	47.2	69.4	3 25.7 + 40 36	6.3	5.8
4.7	4.7	6.9	Dm. 772	3	21.9	+40 16	6.5	64.7	47.3	69.4	3 24.9 + 40 26	6.2	5.7
6.5	6.5	9.6	Dm. 736	3	15.6	+40 44	6.5	63.0	47.4	69.5	3 18.6 + 40 34	6.5	6.0
5.7	5.7	8.3	Dm. 818	3	59.1	+41 7	7.0	73.9	47.3	68.2	4 2.2 + 41 15	6.8	6.3
0.6	0.3	0.6	Dm. 775	3	36.9	+51 4	7.0	67.7	57.3	68.3	3 40.3 + 51 13	6.9	6.4
0.6	0.5	0.6	Dm. 774	3	36.4	+51 15	6.5	67.4	57.3	68.0	3 39.7 + 51 24	6.9	6.4 6.8
4.9	4.9	7.1	Dm 696	3	21.6	+41 15	7.4	64.4	47.2	69.3	3 24.6 + 41 25	6.9	6.4
3.7	2.7	3.5	Dm 795	3	52.2	+41 26	7.5	72.2	47.2	68.5	3 55.3 + 41 34	7.2	6.7 7.2
3.5	3.5	5.1	Dm. 792	3	50.7	+41 51	7.5	71.9	47.3	68.4	3 53.8 + 41 59	7.2	6.7 7.1
2.4	2.4	3.6	Dm. 779	3	47.4	+41 27	7.0	71.0	47.3	68.6	3 50.4 + 41 35	6.4	5.9
2.3	1.5	2.3	637	3	46.6	+51 52	6.6	72.6	57.4	70.3	3 48.1 + 51 55	6.7	6.2 3 44.7 + 51.8
1.9	0.9	1.3	Dm. 742	3	35.7	+41 34	7.5	67.9	47.4	68.8	3 38.7 + 41 43	6.5	6.0
5.1	5.1	7.3	Dm. 693	3	21.0	+41 42	6.9	64.0	47.2	69.1	3 24.0 + 41 52	6.8	6.3
2.1	1.7	2.1	Dm. 726	3	44.7	+52 13	6.5	70.7	57.4	68.6	3 48.1 + 52 21	6.7	6.2
0.5	0.1	0.5	Dm. 715	3	39.5	+52 2	6.6	68.7	57.3	68.2	3 42.9 + 52 11	6.8	6.3
0.1	0	0.1	Dm. 714	3	38.5	+52 12	6.5	68.3	57.4	68.2	3 41.9 + 52 21	6.9	6.4 6.6
1.1	1.1	1.5	602	3	37.0	+42 12	4.0	69.4	47.4	70.5	3 38.4 + 42 16	4.9	4.4
1.3	1.3	2.1	Dm. 812	3	33.9	+42 8	7.5	67.3	47.3	68.6	3 36.9 + 42 17	7.1 7.3	6.6 6.8 7.0 7.2
2.5	2.5	3.7	Dm. 803	3	29.2	+42 4	7.2	66.0	47.3	68.5	3 32.2 + 42 13	6.8	6.3

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March 18, 1887.

Plate 927.

V	H	Type	No. lines	K	Focus	Other lines	V.	H.	V.	H.	Correc.
10.5	18.8	I	7	N	2	F	5.2	37.6	42.2	32.8	-2.9
9.0	7.9	I	7	N	2	F	4.5	15.8	42.9	54.6	+5.7
9.8	15.0	I	6	K=H	1	F	4.9	30.0	42.5	40.4	- 0
9.7	19.7	II a?	2 (3632)	K=H	1	F? seen	4.8	39.4	42.6	31.0	-3.7
9.9	21.0	I	7	N	1	F	5.0	42.0	42.4	28.4	-6.9 (-4.8)
9.4	21.6	II a?	3 (3633)	K=H	1	F seen	4.7	43.2	42.7	27.2	-5.4
8.9	11.8	I	6	N	1	F	4.4	23.6	43.0	46.8	+2.3
8.4	18.9	II? II	3 2	K=H K=H	1 1	F?	4.2	37.8	43.2	32.6	+3.0 +1.3
8.6	21.9	I	5	N	1	F	4.3	43.8	43.1	26.6	-8.3
7.9	6.8	I	9	N	2	F	4.0	13.6	43.4	56.8	+9.9 +6.9
7.5	9.5	(a) II a (3634)	3 2	K=H	1 1	F (Seen) seen	3.8	19.0	43.6	51.4	+4.5
7.4	9.9	III?	3	K=H	1	F	3.7	19.8	43.7	50.6	+6.0
7.5	22.2	I	7	N	1	F	3.8	24.4	43.6	46.0	+3.1
7.9	14.9	I	9	K=.5H	2	F	4.0	29.8	43.4	40.6	+ 0
7.5	15.4	I	8 6	K=.2H K=2H	? 1	F	3.8	30.8	43.6	39.6	-0.3
7.5	21.8	I	7	K=H	1	F	3.8	43.6	43.6	26.8	-8.3
6.1	7.7	I	3	N	1	F	3.0	15.4	44.4	55.0	+8.7
6.5	11.2	I	3	N	1	—	3.2	22.4	44.2	48.0	+3.1
6.0	18.6	I	7	K=.2H	2	F	3.0	37.2	44.4	33.2	-3.0 -4.5
6.6	22.3	III? III	3 2	K=H K=H	1 1	F	3.3	44.6	44.1	25.8	-6.1
5.7	9.2	II a? (3635)	3	K=H	1	F seen	2.8	18.4	44.6	52.0	+7.2
5.3	10.6	II?	3	K=H	1	F	2.6	21.2	44.8	49.2	+5.4
5.8	14.5	III	3	K=H	2	F	2.9	29.0	44.5	41.4	+0.5
5.5	15.9	I	5	N	1	F	2.8	31.8	44.6	38.6	-1.2
5.6	19.4	I	9	K=.2H	2	F	2.8	38.8	44.6	31.6	-5.4
5.9	20.6	II (3636)	3 2	K=H K=H	1 2	F F?	3.0	41.2	44.4	29.2	-4.9
4.9	15.1	a?	2	K=H	1	F? seen	2.4	30.2	45.0	30.2	-0.1
4.4	15.9	I	9	N	2	F	2.2	31.8	45.2	38.6	-0.7

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Means

		No.	R. A.	Dec.	Mag.	H	V	H'	Red. to 1900.	Br.	Br.
											cow.
2.9	4.3	Dm. 795	3 28.2	+ 42	6	6.7	65.8	47.3	68.7	3 31.2+42 15	6.8 — 5.8
		796	3 58.0	+ 42	48	6.7	73.8	47.3	68.1	4 1.1+42 56	
5.7	8.4	Dm. 697	3 58.2	+ 42	48	6.5	74.0	47.3	68.3	4 1.3+42 56	6.5 — 6.0
0	0	Dm. 824	3 38.5	+ 42	25	7.8	68.5	47.3	68.5	3 41.6+42 34	6.7 — 6.2
3.7	5.4	Dm. 787	3 25.8	+ 42	25	7.5	65.2	47.2	68.9	3 28.8+42 34	7.0 — 6.5
		776	3 22.4	+ 42	15	7.8	64.4	47.2	69.2	3 25.4+42 25	
4.8	6.9	Dm. ~~699~~	~~3 19.5~~	~~+ 42~~	~~26~~	~~6.7~~	~~61.5~~	~~57.4~~	~~68.4~~		6.8 — 6.3
5.4	7.8	Dm. 772	3 20.7	+ 42	30	7.5	63.9	47.2	69.3	3 23.7+42 40	7.0 — 6.5
2.3	3.7	Dm. 855	3 47.4	+ 42	54	7.4	71.0	47.3	68.7	3 30.3+43 2	6.6 — 6.1
		773	3 27.8	+ 42	4	8.2	65.6	47.3	68.6	3 30.8+43 13	
0.9	1.3	Dm. ~~698~~	~~3 41.8~~	~~+ 53~~	~~3~~	~~8.0~~	~~69.6~~	~~57.2~~	~~68.3~~		7.3 — 6.8 — 7.1
5.5	8.3	Dm. 691	3 15.2	+ 52	48	7.0	59.0	57.1	67.3	3 18.5+52 38	6.8 — 6.3
		711	4 7.4	+ 53	18	5.2	210	57.3	14.1	4 8.9+53 22	5.3 — 4.8
6.9	9.9	~~Dm. 951~~	~~3 12.5~~	~~+ 43~~	~~6~~	~~7.5~~					
4.5	6.6	Dm. 884	3 53.9	+ 43	35	7.7	72.9	47.4	68.4	3 57.0+43 43	7.2 — 6.7 — 7.1
4.2	6.0	667	3 57.3	+ 53	41	6.5	77.1	57.4	71.1	3 58.8+53 45	6.8 — 6.3 — 6.4 — 3 55.3+53 37
2.3		Dm. 718	3 47.5	+ 53	34	6.8	71.9	57.4	68.8	3 ~~51.0~~ 50.1+53 42	6.7 — 6.2
0	0.1	620	3 40.8	+ 43	35	6.0	70.6	47.6	70.6	3 42.3+43 39	5.9 — 5.4 — 3 39.2+43 30
0.3	0.5	Dm. 809	3 37.3	+ 43	37	7.0	68.1	47.4	68.4	3 30.4+43 46	6.7 — 6.2 — 6.6
5.5	8.3	Dm. 657	3 15.0	+ 53	25	6.3	58.6	57.2	68.9	3 18.3+53 35	6.5 — 6.0
6.1	8.7	Dm. 749	4 3.0	+ 54	8	7.0	184	57.1	9.7	4 6.3+54 15	6.8 — 6.3
3.1	4.7	Dm. 826	3 49.3	+ 44	4	7.7	71.7	47.3	68.6	3 52.4+44 12	7.2 — 6.7
		S.W. 569	3 24.5	+ 54	33	5.7	61.7	57.6	66.2		6.5 — 6.0
3.0	4.5	Dm. 693	3 22.6	+ 54	28	6.0	ul	um	m		
		S.W. 787	3 28.3	+ 44	19	8.0	65.5	47.3	68.5	3 31.4+44 28	
		757	3 28.4	+ 44	19	8.0	65.6	47.3	68.6	3 31.5+44 28	7.2 — 6.7 — 7.0
6.1	8.7	Dm. 730	3 18.5	+ 43	52	7.0	63.1	47.2	69.2	3 21.5+44 2	7.3 — 6.8 — 7.2
5.1	7.2	681	3 59.9	+ 54	30	6.5	78.3	57.3	71.1	4 1.5+54 34	6.5 — 6.0 — 3 58.6+54 26
3.7	5.4	Dm. 734	3 53.2	+ 54	40	7.0	74.4	57.3	69.0	3 56.7+54 48	6.8 — 6.3
0.5	0.6	624	3 41.8	+ 44	35	5.9	70.8	47.5	70.3	3 43.1+44 40	6.3 — 6.4 — 5.8 — 5.9
0.7	1.2	Dm. 707	3 34.7	+ 54	36	6.5	66.5	57.4	67.7	3 38.1+54 45	6.5 — 6.0
3.7	5.4	569	3 24.5	+ 54	33	5.7	63.3	57.4	68.8	3 26.0+54 38	6.0 — 3 22.6+54 28
4.9	7.1	568	3 24.4	+ 44	26	6.0	66.6	47.4	70.5	3 25.8+44 ~~47~~ 32	6.3 — 5.8 — 6.5 — 3 22.7+44 27
0.1	0.3	Dm. 799	3 38.0	+ 44	54	7.8	68.2	47.3	68.3	3 41.1+45 3	7.2 — 6.7
0.7	1.2	606	3 37.6	+ 45	18	5.6	69.4	47.5	70.1	3 39.0+45 22	5.6 — 5.1

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Plate 927.

	V	H	Type	No. lines	K	Focus	Other lines.	V.	H.	V.	H. Correc
	4.6	20.4	I	10	M	2	F.	2.3	40.8	45.1	29.6 -6.9
	3.4	11.6	I	5	M	1	F.	1.7	23.2	45.7	47.2 +4.3
	3.8	15.4	I	9	M	2	F.	1.9	30.8	45.6	39.6 ~~-0.5~~ -0.6
	3.5	16.3	I	9	K=.5H	2	F.	1.8	32.6	45.6	37.8 -1.2
	3.8	18.6	I	8	M	1	F.	1.9	37.2	45.5	33.2 -4.7
?	3.5	20.6	IIa?	3	K=H	2	F. faint	1.8	41.2	45.6	29.2 -5.3
	2.9	8.0	I	5	K=H	1	F.	1.H	16.0	46.0	34.4 +6.5
	2.8	17.6	I	9	K=.2H	2	F.	1.H	35.2	46.0	35.2 -3.3

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Mean 5

			No.	R.A.	Dec.	Mag.	H	V	H	Red. to 1900.	Br.	Corr. Br.
6.9	4.9	6.9	557	3	20.9	+ 55	2	5.0	61.7	57.3	68.6	3 22.4 + 55 7	55	5.0
4.3	3.0	4.3	Dm. 839	3	49.9	+ 55	37	7.5	73.1	57.3	68.8	3 53.4 + 55 45	6.9	6.4
0.6			Dm. 824	3	36.2	+ 55	28	6.5	67.0	57.4	67.6	3 39.7 + 55 37		
0.5	0.5	0.6	~~506~~	~~3~~	~~37.6~~	~~+ 45~~	~~18~~	~~5.6~~	~~68.4~~	~~47.2~~	~~68.9~~		5.9	5.4
2	1.2	1.8	597	3	36.2	+ 45	44	6.1	68.8	47.5	70.0	3 37.7 + 45 48	62	5.7
4.7	3.1	4.7	Dm. 801	3	25.2	+ 55	23	7.0	62.4	57.3	67.1	3 28.6 + 55 32	66	6.1
5.3	5.3	7.2	566	3	24.2	+ 45	39	5.4	65.4	47.4	70.7	3 25.5 + 45 44	5.8	5.3
6.5	6.5	9.1	Dm. 881	3	58.6	+ 45	50	7.3	74.6	47.2	68.1	4 1.8 + 45 58	69	6.4
3.3	2.4	3.3	Dm. 803	3	28.4	+ 55	54	7.0	63.6	57.3	66.9	3 31.9 + 56 3	65	6.0

39
3 34.6 + 45 7

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F. m. 3 c. 6.0 5.9

F. ch. 7.8

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Plate 1011.

	T	H	Type	No. lines	K	Focus	Other lines	V.	H.	V.	H.	Correc.
9 15	22.7	8.0	I	1?	H	1	—	11.4	16.0	21.0	75.6	+ 2.3
	22.7	10.0	I	7	H	2	—	11.4	20.0	21.0	71.6	+ 1.1
	22.0	7.7	I	4	K=H	1	—	11.0	15.4	21.1	76.2	+ 0.5
	21.6	6.0	I	6	K=H	1	F	10.8	12.0	21.6	79.6	+ 2.1
	21.5	9.9	I	9	H	2	F	10.8	19.8	21.6	71.8	+ 1.2
	21.9	10.5	I	8	K=.5H?	2	F	11.0	21.0	21.4	70.6	+ 0.9
	21.1	16.4	II	3	K=H	1	F	10.6	32.8	21.8	58.8	− 0.3
?	21.1	16.7	II	1c? 3638	K=H	2	F bright	10.6	33.4	21.8	58.2	− 0.5
	21.3	21.7	I?	4	K=H	1	F?	10.6	43.4	21.8	48.2	− 1.5
*	20.5	7.2	I?	?	~~O=H~~ ?	1	F	10.2	14.4	22.2	77.2	+ 1.8
*	20.4	7.3	I	9	~~K=H~~ ?	2	F	10.2	14.6	22.2	77.0	+ 1.8
	20.3	13.1	I	8	H	1	F	10.2	26.2	22.2	65.4	+ 0.5
	20.3	18.7	I	1 3639	K=.2H	4	F	10.2	37.4	22.2	54.2	− 0.3
	20.2	20.3	I	11	K=H	1	F	10.1	40.6	22.3	51.0	− 1.2
✓ ?	20.5	23.6	~~I~~	7 6	K=H ~~K=H~~	1	F	10.2	47.2	22.2	44.4	− 2.1
?	19.0	6.4	I	d? 7	?	2	F	9.5	12.8	22.9	78.8	+ 2.1
?	19.4	6.9	I	d? 7	K=H	2	F	9.7	13.8	22.7	77.8	+ 1.9
	19.6	12.6	III	? 2	K=H	1	F?	9.8	25.2	22.6	66.4	+ 0.1
?	19.0	14.9	II	a 3640 2	K=H	1	F?	9.5	29.8	22.9	61.8	+ 0
	19.0	20.3	I	8	H	1	F	9.5	40.6	22.9	51.0	− 1.2
✓ ?	19.9	20.7	I	3 3	H K	1 1	F —	10.0	41.4	22.4	50.2	− 1.3
	19.0	23.3	I?	5	K=H	1	F	9.5	46.6	22.9	45.0	− 0.6
	18.5	14.7	I	9	H	2	F	9.2	29.4	23.2	62.2	+ 0
?	18.9	18.5	I	1? 3641 4	K	1	F dim	9.4	37.0	23.0	54.6	− 0.9
✓ ?	17.9	18.5	I	I 3 3	H K	1 1	— —	9.0	17.0	23.4	74.6	+ 0.5
✓ ?	17.4	9.0	IIa?	II 3642 1 3 2	~~K=H~~ K=H	1 1	F dim	8.7	18.0	23.7	73.6	+ 0.5
	17.0	9.5	I	9	K=H	2	F	8.5	19.0	23.9	72.6	+ 0.5 + 1.2
✓ ?	17.5	10.0	I	I 3	K=H K	1 1	— —	8.8	20.0	23.6	71.6	+ 0.5

* Spectra superposed on plate. Measure of brightness combined light of both.

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Mean 6

			No.	R.A.	Dec.	Mag.	H	V	H'	Red. to 1900.	Br.	Br.
			751	4 15.0	+ 20 38	6.2	31.0	32.0	28.7	4 17.8 + 20 45		
3	2.3	0.5	Dm. 601	4 15.3	+ 11 3	6.8	31.0	~	~			
1.1	1.1	0.3	731	4 12.4	+ 20 52	5.5	32.4	32.3	31.3	4 13.5 + 20 55		
5	1.3	0.5	Dm. 601	4 15.3	+ 11 3	6.8	30.7	22.0	30.2	4 17.8 + 11 10	6.8	6.2
2.1	2.1	0.6	770	4 20.9	+ 21 21	5.7	32.9	32.2	30.8	4 22.1 + 21 24	6.6	6.0
12	1.2	0.3	732	4 12.5	+ 21 31	5.4	32.3	32.3	31.1	4 13.6 + 21 32	5.8	5.2
0.9	0.9	0.3	725	4 11.3	+ 21 17	5.4	32.3	32.3	31.4	4 12.4 + 21 21	6.4	5.8
0.3	0.3	0	Dm. 587	3 56.8	+ 21 36	6.5	89.6	32.2	89.9	3 59.4 + 21 44	6.6	6.0
0.5	0.5	0.1	670	3 57.6	+ 21 45	4.4	91.0	32.4	91.5	3 58.7 + 21 49	5.7 5.8	5.1 5.2
1.5	1.5	0.5	Dm. 550	3 45.5	+ 21 30	7.5	88.9	32.1	90.4	3 48.1 + 21 38	7.0	6.4
1.8	1.8	0.6	761	4 18.3	+ 21 55	5.5	32.7	32.1	30.9	4 19.5 + 21 58	5.7	5.3
			~~Dm. 643~~	~~4 16.8~~	~~+ 21 52~~	~~6.0~~	~	~	~		~~5.7~~ 5.7	~~7.5~~
1.8	1.8	0.6	760	4 18.2	+ 22 2	4.6	34.8	32.2	33.0	4 19.4 + 22 4	5.7	4.5
0.5	0.5	0.1	700	4 5.7	+ 22 7	6.2	31.9	32.3	31.4	4 7.0 + 22 9	6.5	5.9
0.3	0.9	0.3	657	3 54.0	+ 12 9	3.6	91.4	32.4	91.7	3 55.2 + 12 13	4.5	3.9
1.2	1.2	0.3	648	3 49.7	+ 22 1	5.7	90.3	32.1	91.5	3 50.9 + 22 12	6.3	5.7
2.1	2.1	0.6	Dm. 535	3 41.4	+ 21 48	6.5	88.6	32.0	90.7	3 43.0 + 21 57	6.4	5.8 6.5
21	2.1	0.6	769	4 20.1	+ 22 43	5.4	32.9	32.2	30.8	4 21.3 + 22 46	6.0	5.4
1.9	1.9	0.6	764	4 19.1	+ 22 32	4.6	32.9	32.2	31.0	4 20.3 + 22 35	5.4	4.8
0.1	0.6	0.1	719	4 7.7	+ 12 28	6.6	32.4	22.3	32.3	4 8.3 + 12 31	6.8	5.8 + 12
			~~Dm. 664~~	~~4 6.8~~	~~+ 12~~	~~6.0~~	~	~	~		6.9	
0	0	0	Dm. 637	4 0.3	+ 22 44	7.0	30.1	32.2	30.1	4 3.0 + 22 52	6.8	6.2
1.2	1.2	0.3	Dm. 607	3 48.5	+ 22 46	7.0	89.1	32.3	90.3	3 51.2 + 22 54	6.0	5.4
1.3	1.3	0.3	Dm. 602	3 47.9	+ 22 15	8.0	89.3	32.2	90.6	3 50.5 + 22 23	7.4	6.8 7.4
0.6	1.9	0.6	634	3 44.6	+ 12 41	6.0	91.2	22.2	91.8	3 45.7 + 12 44	6.3	5.7
			Dm. 648	4 0.9	+ 13 1	6.3	30.3	22.2	30.3	4 3.2 + 13 8		
0	0	0	~~692~~	~~4 3.3~~	~~+ 33~~	~~6.0~~	~	~	~		6.0	
0.9	0.9	0.3	Dm. 617	3 52.4	+ 22 49	7.5	89.4	32.2	90.3	3 53.1 + 22 57	6.4	5.8
0.5	1.5	0.5	Dm. 667	4 13.6	+ 13 14	7.5	30.6	22.2	30.1	4 16.1 + 13 21	7.0	7.1
			Dm. 665	4 12.7	+ 13 31	6.5	30.7	22.2	30.2	4 15.2 + 13 38		
0.5	1.5	0.5	~~748~~	~~4 15.3~~	~~+ 13 47~~	~~5.8~~	~~33.3~~	~~22.5~~	~~32.8~~		6.7	6.5
0.5	1.5	0.5	738	4 13.2	+ 13 44	5.7	32.2	22.2	31.1	4 14.3 + 13 48	6.0	
+ 12												
+ 0.5	1.2	0.5	Dm. 672	4 11.1	+ 23 24	7.5	31.1	32.2	29.9	4 13.8 + 23 31	7.3	7.1

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Plate 1011.

	T	H	Type	No. lines	K	Focus	Other lines.	V.	H.	V.	H.	Correc.
	17.2	14.6	I I?	6 4	K=H	1 1	F. —	8.6	29.2	23.8	82.4	+ 0
	17.3	16.9	II	7 3	2 K=H	2	F.	8.6	33.8	23.8	57.8	- 0.5
	17.2	19.6	I	7	H	1	F.	8.6	39.2	23.8	52.4	- 1.1
	17.2	23.1	I ?		H	1	F.	8.6	46.2	23.8	45.4	- 2.1
	17.5	23.5	I	6	H	1	F.	8.8	47.0	23.6	44.6	- 2.3
	17.7	23.6	I	7	H	2	F.	8.8	47.2	23.6	44.4	- 2.4
	17.0	23.8	I	VI	H	4	F.	8.5	47.6	23.9	44.0	- 2.4
	16.5	8.1	II a 3643	3	K=H	2	F. faint	8.2	16.2	24.2	73.4	+ 1.9 + 0.6
	16.9	8.4	I	9	K=H	2	F.	8.4	16.8	24.0	74.8	+ 0.6 + 1.7
	16.2	8.7	II ?	3	K=H	1	F.	8.1	17.4	24.3	73.2	+ 0.5 + 1.7
	16.5	16.0	I ? II 3	3	2 K=H	K=H 1 1	F. —	8.2	32.0	24.2	59.6	- 0
	16.4	20.1	III III	3 2	K=H	K=H 1 1	F. faint —	8.2	40.2	24.2	51.4	- 1.3
	16.2	23.2	I I	4 4	H	K=H 1 1	F. —	8.1	46.4	24.3	45.2	- 2.3
	16.5	23.5	I I	4	H	K 1 1	F. —	8.2	47.0	24.2	44.6	- 2.4
?	16.4	23.7	I d?		?	1	F. faint	8.2	47.4	24.2	44.2	- 2.4
	16.5	24.1	I	6	H	1	F.	8.2	48.2	24.2	43.4	- 2.5
?	16.9	24.6	I d?		?		F. faint	8.4	49.2	24.0	42.4	- 2.7
	15.6	6.2	II a? 3644	3	K=H	2	F. faint	7.8	12.4	24.6	79.2	+ 0.7
	14.9	8.1	III ? III	3 2	K=H	K=H 1 1	F. —	7.4	16.2	23.0	75.4	+ 0.6
	14.0	8.8	I	8	H	2	F.	7.0	17.6	23.4	74.0	+ 1.8
	14.0	9.6	III a 3645	3	K=H 1.2	3	F. bright faint	7.0	19.2	23.4	72.4	+ 0.6
	14.9	9.2	I	10	K=2H	2	F.	7.4	18.4	23.0	73.2	+ 0.6
?	14.4	11.5	II a 3646	3	K=H	1	F. faint	7.2	23.0	23.5	68.6	+ 0.2
?	14.9	15.4	I I?	6	K=H	2	F. faint	7.4	30.8	25.0	60.8	- 0
	14.9	22.4	II II	3 2	K=H	K=H 1 1	F. —	7.4	44.8	25.0	46.8	- 2.1
	14.9	22.8	I ? I	4	H	K 1 1	F. —	7.4	45.6	25.0	46.0	- 2.3
	14.0	21.8	I	7	H	2	F.	7.0	43.6	25.4	48.0	- 1.8
	14.1	23.2	I	8	H	2	F.	7.0	46.4	25.4	45.2	- 2.3

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Means

rec.			No.	R.A.	Dec.	Mag.	H	r	H'	Red. to 1900		Br.	Br.
0	0	Dm.	627	4	1.0	+ 23 41	7.5	30.2	32.3	30.4	-3.7+23 48	6.9	7.0
0.5	1.1		666	3	57.1	+ 23 47	5.6	90.9	32.4	91.4	3 58.4+23 50	6.2	5.6
			594	3	49.7	+ 23 40	7.3	88.9	32.3	89.9	3 52.4+23 48	6.8	6.2
1.1	0.5	Dm.	624	3	51.2	+ 23 36	6.8	90.4	32.2	91.5			
2.1	0.6	Dm.	570	3	42.3	+ 23 31	7.3	88.5	32.1	90.6	3 43.0+23 41	6.7	6.1
		Dm.	569	3	41.4	+ 23 24	7.5	88.4	32.2	91.3	3 42.1+23 45		
2.3	0.7	Dm.	623	3	41.1	+ 23 16	7.2	88.1	32.1	90.4		6.6	6.0
		Dm.	563	3	41.1	+ 23 16	7.2	88.3	32.1	90.7	2 43.8+23 25		
2.4	0.7		625	3	42.0	+ 23 41	3.8	89.2	32.5	91.6		6.3	5.7
			625	3	42.0	+ 23 41	3.8	89.6	32.2		3433+2345		
2.4	0.7		618	3	40.4	+ 23 41	3.0	88.0	32.2	90.4	3 41.6+23 48	4.7	4.1
		Dm.	584	4	16.8	+ 24 158	6.2	33.0	32.2	31.1	4 18.0+24 4		
1.8	0.6		748	4	15.3	+ 13 47	5.8	31.5	22.0	30.9		6.5	5.9
			748	4	15.3	+ 13 47	3.8	32.1	22.2	31.3	4 16.4+13 50		
1.7	0.6		754	4	16.8	+ 24 1	6.2	33.6	32.4	31.9		6.2	5.6
		Dm.	687	4	13.4	+ 14 4	7.4	30.8	22.2	30.3	4 15.9+14 11		
1.7	0.5	Dm.	684	4	15.3	+ 23 58	6.5	32.4	32.1	31.0		6.8	6.2
0	0.3	Dm.	650	3	58.2	+ 14 0	8.0	90.2	22.2	90.2	4 0.7+14 8	7.2	6.6 7.1
1.3	0.5	Dm.	599	3	48.8	+ 24 4	6.8	89.0	32.3	90.3	3 51.5+24 12	7.0 7.2	6.4 6.8 7.0
2.3	0.6	Dm.	578	3	41.8	+ 24 3	7.7	88.2	32.1	90.5	3 44.5+24 12	6.9	6.3 7.0
2.4	0.7	Dm.	562	3	40.8	+ 23 48	7.8	87.8	32.0	90.2	3 43.5+23 57	6.9	6.3 7.1
2.4	0.7	Dm.	561	3	40.7	+ 23 56	7.5	88.1	32.1	90.5	3 43.4+24 5	6.5	5.9
2.5	0.7	Dm.	553	3	39.9	+ 23 54	7.8	88.1	32.1	90.6	3 42.6+24 3	6.8	6.2
			608	3	39.8	+ 23 44	3.8	87.0	32.1	89.7	3 39.0+23 48		3 36.3+23.7
2.7	0.9		613	3	38.7	+ 24 0	4.0	87.9	32.1	90.6		4.4	3.8
			618	3	40.4	+ 23 41	3.0	89.6	32.1		3446+2348		
0.7	2.4	0.7	768	4	19.8	+ 14 28	4.9	32.2	22.3	31.5	4 20.9+14 29	6.1	5.5
0.6	1.9	0.6	Dm. 690	4	14.6	+ 14 44	7.8	30.8	22.1	30.2	4 17.1+14 31	7.2 7.3	6.6 6.7 7.1 7.3
1.8	1.8	0.6	747	4	15.3	+ 25 20	5.5	32.9	32.3	31.1	4 16.5+25 23	5.6	5.0
0.6	1.5	0.6	737	4	13.0	+ 15 20	3.9	32.2	22.3	31.6	4 14.1+15 24	5.3 5.4	4.7 4.8
0.6	1.7	0.6	742	4	13.8	+ 14 48	5.1	32.2	22.2	31.6	4 14.9+14 52	5.8	5.2
0.2	0.9	0.2	Dm. 603	4	7.6	+ 15 2	6.3	30.6	22.2	30.4	4 10.1+15 9	6.5	5.9
0	0.1	0	Dm. 657	3	59.5	+ 14 46	6.5	90.3	22.2	90.3	4 2.0+14 54	6.3	5.7
2.1	2.1	0.7	Dm. 587	3	43.5	+ 24 45	7.5	88.3	32.2	90.4	4 46.2+24 53	6.8	6.2 6.9
2.3	2.3	0.7	Dm. 583	3	42.7	+ 24 44	7.7	88.3	32.1	90.6	4 45.4+24 52	6.6	6.0 6.6
1.8	1.8	0.7	Dm. 641	3	44.8	+ 25 15	6.6	88.4	32.2	90.2	3 47.5+25 23	6.3	5.7
2.3	2.3	0.7	629	3	43.1	+ 25 14	5.5	89.5	32.2	91.8	3 44.3+25 17	6.7	5.1

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Plate 1011.

V	H	Type	No. Lines	K	Focus	Other Lines.	V.	H.	V.	H. Correc.
13.8	6.4	I	10	K=.5H	3	F.	6.9	12.8	23.5	78.8 + 0.9
13.2	6.8	IIa?	3647 3	K=H	1	F. seen	6.6	13.6	23.8	78.0 + 1.1
13.4	13.9	I	8	H	1	F.	6.7	27.8	25.7	63.8 + 0.1
13.2	22.5	I	I 6 4	K=H	H 1	F.	6.6	45.0	25.8	46.6 − 2.3
12.1	9.6	II	II 3 2	K=H	K=H 1	F.	6.0	19.2	26.4	72.4 + 0.7
12.7	11.0	III	III 3 2	K=H	K=H 1	F.	6.4	22.0	26.0	69.6 + 0.5
12.0	13.8	I	I 4	K=H	K=H 1	F.	6.0	27.6	26.4	64.0 + 0.1
12.5	14.2	IIa?	3648 8	K=H	2	F. seen	6.2	28.4	26.2	63.2 + 0.3
12.2	15.2	IIa	IIa3 3649 3	2 K=H	K=H 1	F. Seen	6.1	30.4	26.3	61.2 − 0
12.0	21.7	I?	I 5 4	K=H	K=H 1	F.	6.0	43.4	26.4	48.2 − 0.9
11.6	7.9	I	8	K=H	2	F.	5.8	15.8	26.6	75.8 + 1.1
11.0	19.2	I	I 4 5	H	K=5H 1	—	5.5	38.4	26.9	53.2 − 1.3
10.3	5.9	IIa	IIa2 3650 3	2 K=H	K=H 1	F. Seen	5.2	11.8	27.2	79.8 + 3.0
10.3	7.6	I	10	K=.2H	2	F.	5.2	15.2	27.2	76.4 + 1.1
? 10.1	8.2	IIIb?	3651 3	K=2H	3	F. seen	5.0	16.4	27.4	75.2 + 1.1
10.6	9.9	III?	3	K=H	2	F.	5.3	19.8	27.1	71.8 + 1.8
10.8	13.1	III	III 3 2	K=H	K=H 1	F.	5.4	26.2	27.0	65.4 + 0.3
10.7	14.9	IIa2 IIIa	3652 3	2 K=H	K=H 1	F. Seen seen	5.4	29.8	27.0	61.8 + 0
10.7	15.2	III	III 3	2 K=H	K=H 1	F.	5.4	30.4	27.0	61.2 − 0
10.3	15.9	I	12	H	2	F.	5.2	31.8	27.2	59.8 − 0.3
10.2	16.5	I	I 4 4	H	H 1	F.	5.1	33.0	27.3	58.6 − 0.1
10.8	18.7	I	8	H	1	F.	5.4	37.4	27.0	54.2 − 0.5
10.5	22.3	I	9	K=H	2	F.	5.2	44.6	27.2	47.0 − 1.1
9.3	6.9	I	8	?	3	F. seen	4.6	13.8	27.8	77.8 + 1.2
9.1	17.1	I	I	K=H	K=H 1	F.	4.6	34.2	27.8	57.4 − 0.7
9.0	18.6	IIa	3653 3	K=H	2	F. seen	4.5	37.2	27.9	54.4 − 0.6
8.6	6.2	I	7	K=H	1	F.	4.3	12.4	28.1	79.2 + 1.3 + 3.3
8.4	8.9	II	3	K=H	1	F.	4.2	17.8	28.2	73.8 + 0.9

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Mean 6

			No.	R A.	Dec.	Mag.	H	V	H'	Red. to 1900		Br.	Br. corr.
0.9	2.7	0.9	765	4 19.5	+15 20	4.6	323	222	314	4 20.6	+15 23	5.8	4.7
1.1	2.5	1.1 Dm.	621	4 17.8	+15 36	6.8	310	222	299	4 20.0	+15 43	6.9	6.3
1	0.3	0.1 Dm.	592	4 2.7	+15 35	7.5	305	223	304	4 5.2	+15 42	6.8	6.2
1.9	2.3	0.7 Dm.	631	3 43.2	+25 33	8.0	882	323	305	3 45.9	+25 41	7.2	6.6 7.1
7	1.7	0.7 Dm.	579	4 11.6	+16 11	7.3	308	222	301	4 14.2	+16 18	7.0	6.4 6.9
5	1.2	0.5 Dm.	607	4 8.6	+15 51	7.1	306	222	301	4 11.2	+15 58	7.15	6.58 6.8 7.1
1	0.5	0.1 Dm.	567	4 2.8	+16 15	6.5	304	222	303	4 5.4	+16 22	6.7	6.1 6.7
1.3	0.3	0	693	4 3.5	+26 9	5.8	319	324	316	4 47	+26 13	5.9	5.3
	0	0 Dm.	559	3 59.7	+16 8	7.5	90.1	222	90.1	4 2.3	+16 16	7.0	6.4 6.9
9	2.3	0.9 Dm.	527	3 46.2	+16 11	7.0	89.6	222	90.5	3 48.7	+16 19	7.0	6.4 7.1
1	2.4	1.1	752	4 16.5	+16 31	5.6	323	223	312	4 17.7	+16 32	6.2	5.6
3	1.3	0.6 Dm.	655	3 50.3	+26 47	6.8	88.7	323	90.0	3 53.0	+26 55	6.8	6.2 6.9
0	3.0	1.3 Dm.	661	4 20.4	+27 4	6.5	322	323	293	4 23.2	+27 10	6.5	5.9 6.5
1	2.5	1.1	756	4 17.2	+17 10	4.7	324	224	313	4 18.4	+17 13	5.6	5.0
1	2.4	1.1	750	4 16.0	+17 16	4.0	324	223	313	4 17.2	+17 18	5.4 5.6	4.8 5.0
8	1.8	0.7	736	4 13.0	+27 4	5.1	328	324	310	4 14.2	+27 7	6.2 6.4	5.6 5.8
3	0.6	0.3	699	4 5.6	+16 59	6.4	318	224	315	4 6.8	+17 2	6.6 6.9	6.0 6.3 4 4.2 +16 54 6.6 6.9
0	0	0 Dm.	561	4 0.5	+16 54	8.0	303	223	303	4 3.1	+17 1	6.9	6.3 6.8
0	0	0	689	4 1.1	+17 1	6.3	315	224	315	4 2.3	+17 4	6.8 7.2	6.2 6.6 6.7 7.1
3	0.3	0.1	677	3 59.2	+27 18	5.4	91.0	325	91.3	4 0.5	+27 21	5.6	5.0
1	0.6	0.1 Dm.	676	3 56.4	+17 7	6.5	89.4	222	89.4	3 59.0	+17 15	7.0	6.4 7.1
5	1.2	0.5 Dm.	544	3 52.3	+16 52	6.5	89.7	223	90.2	3 54.9	+17 0	6.2	5.6
1	2.5	1.1	636	3 46.3	+16 59	6.0	909	222	920	3 47.4	+17 2	6.2	5.6
2	2.7	1.2	763	4 18.6	+17 39	4.2	324	222	312	4 19.8	+17 42	5.3	4.7
			623	3 55.0	+27 46	8.2	892	324	899	3 57.8	+27 54		
7	0.7	0.3 Dm.	~~839~~	~~3 56.6~~	~~+27 30~~	~~7.8~~	~~903~~	~~324~~	~~915~~			7.1	6.5 7.2
6	1.2	0.6	635	3 53.9	+17 32	5.7	91.1	222	91.7	3 55.2	+17 55	6.1	5.5
3			724	4 18.7	+17 52	6.9	31.1	223	298	4 21.3	+17 58	6.6	6.0
3	3.3	1.3 Dm.	~~662~~	~~4 21.3~~	~~+27 49~~	~~6.5~~	~~337~~	~~324~~	~~304~~				
9	2.3	0.9	629	4 13.1	+18 4	7.0	309	223	300	4 15.7	+18 11	6.9	6.3
			739	4 13.4	+18 26	5.9							

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Plate 1011.

V	H	Type	No. Lines	K	Focus	Other Lines	V.	H.	V.	H.	Correc.
8.5	14.0	II?	II 3 2	K=H K=H	1 1	F. —	4.2	28.0	28.2	63.6	+ 0.1
8.5	18.2	I	I 7 4	K=½H K=5H	1	F. —	4.2	36.4	28.2	55.2	− 1.1
7.0	7.3	I	6	K=H	1	F.	3.5	14.6	28.9	77.0	+ 1.3
?	7.8	9.4	II a? 3654 3	K=H	1	F. scum.	3.9	18.8	28.5	72.8	+ 0.9
?	7.6	15.7	II a 3655 3	K=H	2	F. scum.	3.8	31.4	28.6	60.2	− 0.3
?	6.8	5.5	II b? 3656 3	K=2.5H?	2	F. scum.	3.4	11.0	29.0	80.6	+ 1.7
	6.3	14.8	III b? III b 3657 3 3	K=H K=H	1 2	F. Seen. F. scum.	3.2	29.6	29.2	62.0	+ 0
	4.6	6.4	I	6	K=H	1	F.	2.3	12.8	30.1	78.8	+ 3.6
	4.3	11.0	I	9	K=.2H	2	F.	2.2	22.0	30.2	69.6	+ 0.7
	3.4	8.1	I?	?	N	2	F.	1.7	16.2	30.7	75.4	+ 1.3
	3.1	10.0	I	9	N	2	F.	1.6	20.0	30.8	71.6	+ 0.9
	3.4	20.8	II?	3	K=H	1	F.	1.7	41.6	30.7	50.0	− 2.4
	3.2	22.2	I	7	K=H?	1	F.	1.6	44.4	30.8	48.2	− 3.0
	2.5	7.7	II	3	K=H	1	F.	1.2	15.4	31.2	76.2	+ 3.3
	2.3	10.5	I	7	K=.8H	2	F.	1.2	21.0	31.2	70.6	+ 0.9
	1.9	9.9	I?	1	N	2	F.?	1.0	19.8	31.4	71.8	+ 1.1
	1.9	21.3	I?	1	N	5	F.	1.0	42.6	31.4	49.0	− 2.7

F. nv. 7c. 5.0 −57

F. ch. 6.9

Plate 1012.

V.	H.	V.	H.	Correc.
11.0	14.8	41.4	75.5	+ 3.5
11.2	29.8	41.2	60.5	+ 0
11.4	43.8	41.0	46.5	− 3.0
10.8	21.4	~~41.8~~ 41.6	68.9	+ 3.3
10.5	23.0	42.9	67.3	+ 2.5
10.8	38.4	41.6	51.9	− 3.1
10.8	41.8	41.6	48.5	− 2.5
10.2	19.0	42.2	71.3	+ 4.3
10.2	30.0	42.2	60.3	− 0

	20.3	15.0	I	I 4 4	N	K=H	1	F. —			

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Means

		No.	R.A.	Dec.	Mag.	n	v	n'	Red. to 1900		Br.	Br. Corr.	
0.5	0.1	Dm. 594	4	2.3	+ 18	3	6.5	30.3	22.2	30.2	4 4.9+18 10	✓	6.6	6.0	6.5
1.1	0.6	Dm. 609	3	52.5	+ 28	5	6.7	88.9	32.3	90.0	3 55.3+28 13	✓	6.7	6.1	6.4
2.9	1.3	Dm. 633	4	16.5	+ 18	42	6.5	31.1	22.2	29.8	4 19.1+18 49	✓	6.5	5.9	
2.1	0.9	739	4	13.4	+ 18	26	5.9	32.2	22.3	31.3	4 14.6+18 29	✓	6.5	5.9	
~~2.1~~	~~0.9~~	~~Dm. 624~~	~~4~~	~~12.0~~	~~+ 18~~	~~22~~	~~6.0~~	~~—~~	~~—~~	~~—~~					
0.3	0.1	680	3	59.6	+ 28	41	5.2	91.0	32.5	91.3	3 0.8+28 43	✓	5.8	5.2	
3.7	1.7	773	4	21.6	+ 18	35	3.7	31.6	22.3	29.9	4 22.8+18 58	✓	5.7 5.9	5.1 5.3	
0	0	691	4	2.1	+ 19	17	3.8	31.7	22.5	31.7	4 3.3+19 20	✓	6.5 6.8	5.9 6.2	6.4 6.6
3.6	1.7	772	4	21.3	+ 30	7	6.2	34.0	32.4	30.4	4 22.5+30 9	✓	4 19.7+30 6		
~~3.6~~	~~1.7~~	~~Dm. 666~~	~~4~~	~~19.7~~	~~+ 30~~	~~3~~	~~6.0~~	~~—~~	~~—~~	~~—~~			6.7	6.1	
1.7	0.7	722	4	10.2	+ 20	17	4.6	32.2	22.5	31.5	4 11.4 + 20 20	✓	5.4	4.8	
2.9	1.3	751	4	16.5	+ 20	42	5.9	32.7	22.4	31.4	4 17.6 + 20 45	✓	6.2	5.6	38 4 15.0+20.6
2.3	0.9	731	4	12.4	+ 20	32	5.3	32.4	22.5	31.5	4 13.5+20 55	✓	5.9	5.3	
2.4	1.2	Dm. 591	3	46.3	+ 30	38	6.5	87.9	32.3	90.3	3 49.2+30 47	✓	6.5	5.9	
3.0	1.5	Dm. 582	3	43.0	+ 30	44	6.5	87.4	32.3	90.4	3 45.8+30 52	✓	6.5	5.9	
3.3	1.5	762	4	18.5	+ 31	10	5.4	33.9	32.4	30.6	4 19.8+31 13	✓	—	—	—
1.9	0.9	725	4	11.3	+ 21	17	5.1	31.3	22.5	30.4	4 12.4+21 21	✓	—	—	—
2.4	1.1	732	4	12.5	+ 21	31	5.4	32.3	22.5	31.2	4 13.6+21 32	✓	—	—	—
2.7	1.3	638	3	46.6	+ 31	32	3.1	89.2	32.5	31.9	3 47.8+31 35	✓	—	—	—

Means 3

3.5	5.7	3.3	762	4	18.5	+ 31	10	5.4	333	422	298	4 19.8+31 13	✓	6.7	6.4	—
0	0	0	Dm. 818	3	59.1	+ 41	7	7.0	88.9	52.3	88.9	4 2.2+41 15	✓	6.6	6.3	—
3.0	5.3	3.0	Dm. 582	3	43.0	+ 30	44	6.5	86.8	42.1	89.8	3 45.8+30 32	✓	—	—	—
3.3	3.3	1.9	Dm. 852	4	10.3	+ 41	28	6.5	31.7	52.3	28.4	4 13.4+41 35	✓	6.8	6.5	6.8
			Dm. 844	4	8.1	+ 41	47	6.4	31.1	52.3	28.6	4 11.2+41 54	✓	6.1	5.8	—
~~2.5~~	~~2.5~~	~~1.5~~	~~719~~	~~4~~	~~9.2~~	~~+ 30~~	~~0~~	~~4.6~~	~~—~~	~~—~~	~~—~~					
3.1	3.1	1.9	Dm. 779	3	47.4	+ 41	27	7.0	85.8	52.3	88.9	3 50.4+41 35	✓	6.5	6.2	—
2.5	4.5	2.5	638	3	46.6	+ 31	32	3.1	88.4	42.3	90.9	3 47.8+31 35	✓	4.6	4.3	—
4.3	4.3	2.5	Dm. 946	4	13.5	+ 42	5	6.5	32.5	62.3	28.2	4 16.6+42 12	✓	6.4	6.1	—
0	0	0	Dm. 926	3	59.1	+ 32	4	7.5	89.1	42.3	89.1	4 1.9+32 12	✓	6.9	6.6	6.9

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Plate 1012.

	V	H	Type	No. Lines	Ty	Focus	Other Lines	V.	H.	V.	H.	Correc.
	20.4	15.6	II a2 3658	2	K=H	1	F? seen	10.2	31.2	42.2	59.1	− 0.3
?	20.1	16.4	II a2 3659	3	K=H	2	F seen	10.0	32.8	42.4	57.5	− 0.6
	20.0	23.6	II a ? 3660	1	K=1.5H	3	F	10.0	47.2	42.4	43.1	− 6.9
	19.1	15.1	I	8	N	2	F	9.6	30.2	42.8	60.1	− 0
	19.2	22.8	I	7	K=.2H?	2	F	9.6	45.6	42.8	44.7	− 3.7
?	18.9	6.0	II a	3661	3	K=H	1	F seen	9.4	12.0	42.0	78.3	+ 7.2 + 4.3
√	18.3	14.0	III b2	3662	2	K=H	K=H 1 1	F Seen	9.2	28.0	43.2	62.3	+ 0.5
	18.5	15.5	I	7	N	2	F	9.2	31.0	43.2	59.3	− 0.3
	18.7	19.0	I		N	1	F	9.4	38.0	43.0	52.3	− 3.1
	18.0	23.5	I		N	1	F	9.0	47.0	43.4	43.3	− 4.3
√	17.3	8.3	II a2 II a 3663	3 2	K=H	K=H 2 2	F seen	8.6	16.6	43.8	73.7	+ 3.5
	17.0	8.4	I	8	N	2	F	8.5	16.8	43.9	73.5	+ 3.5
√	17.9	11.5	I ?	4	N	K=H 1 1	F	9.0	23.0	42.4	67.3	+ 2.7
?	17.0	16.1	II a	3664	3	K=H	1	F seen	8.5	32.2	43.9	58.1	− 0.5
	17.5	22.0	II a?	3665	3	K=H	2	F	8.8	44.0	43.6	46.3	− 5.9
	17.2	22.6	I	4	N	1	—	8.6	45.2	43.8	45.1	− 6.5
√	16.4	8.4	I II	4	K=H	K=H 1 1	—	8.2	16.8	44.2	73.5	+ 3.5
	16.2	10.1	III ?	3	K=1.2H	2	F	8.1	20.2	44.3	70.1	+ 2.5
	16.5	18.2	II ?	3	K=H	1	F	8.2	36.4	44.2	53.9	− 2.5
	16.7	21.7	I	8	N	2	F	8.4	43.4	44.0	46.9	− 3.5
	15.8	19.2	I	8	K=H?	1	F	7.9	38.4	44.5	51.9	− 2.3 − 3.6
?	15.3	19.8	I	3666	8	N	2	F seen	7.6	39.6	44.8	50.7	− 2.5
	15.5	21.5	II a2	3667	3	K=H	2	F Seen	7.8	43.0	44.6	47.3	− 5.5
	15.6	22.4	I		K=H	1	F	7.8	44.8	44.6	45.5	− 3.9
√	14.5	6.6	II a II a2	3668	2 2	K=H	K=H 1 1	— Seen	7.2	13.2	45.2	77.1	+ 4.8
√	14.4	10.8	I	6	4	K=H	K=H 1 1	F —	7.2	21.6	45.2	68.7	+ 3.7
√	14.4	13.0	I	3	3	N	N 1 1	— —	7.2	26.0	45.2	64.3	+ 1.2
√	14.5	23.1	II ? II ?	3	2	K=H	K=H 1 1	F —	7.2	46.2	45.2	44.1	− 7.2

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Mean 3

			No.	R. A.	Dec.	Mag.	H	V	H'	Red. to 1900.	Br.	Cor. Br.
0.6	0.3	Dm.	703	3 57.5	+ 31 58	6.5	88.7	42.2	89.0	4 0.2+32 6	6.7	6.4
1.1	0.6	Dm.	714	3 55.5	+ 32 10	6.5	88.3	42.2	88.9	3 58.3+32 18	6.5	6.2
6.9	4.2		602	3 37.0	+ 42 12	4.8	84.2	52.2	91.1	3 38.4+42 16	5.3	5.0
			896	3 58.0	42 48	6.7	88.2	52.4	88.7	4 1.1+42 56		
0	0	Dm.	897	3 58.2	+ 42 48	6.5	88.4	52.4	88.4	4 1.3+42 56	6.3	6.0
6.3	3.7		626	3 42.1	+ 32 43	5.2	87.7	42.3	91.4	3 43.4+32 48	5.6	5.3
			~~790~~	~~4 23.8~~	~~+ 42 45~~	~~6.5~~	~~33.0~~	~~52.2~~	~~28.0~~	~~4 26.4+42 51~~		
7.2	4.3	Dm.	806	4 21.3	+ 32 8	6.5	333	42.5	29.0		6.2	5.9
			785	4 25.0	+ 42 48	6.0				4 26.4+42 51	6.7	6.4
0.9	0.5		692	4 3.3	+ 33 16	6.0	31.3	42.5	30.8	4 4.6 + 33 19	7.0	6.7
0.5	0.3	Dm.	785	3* 57.7	+ 33 3	7.0	88.7	42.2	89.0	4 0.6+33 11	6.4	6.1
3.1	2.1	Dm.	855	3 47.4	+ 42 54	7.4	85.4	62.3	88.5	3 50.5+43 2	6.7	6.4
7.1	4.3	Dm.	714	3 38.7	+ 33 9	7.0	85.7	42.2	90.0	3 41.5+33 18	6.5	6.2
5.5	3.5		755	4 16.9	+ 33 42	5.7	33.5	42.3	30.0	4 18.1 + 33 44	6.0	5.7
5.4	3.5		753	4 16.7	+ 33 51	5.6	33.5	42.3	30.0	4 18.0 + 33 54	5.6	5.3
2.7	1.8	Dm.	938	4 8.3	+ 43 22	7.0	31.3	52.4	28.6	4 11.4+43 29	6.9	6.6
1.9	0.5	Dm.	776	3 56.3	+ 33 51	7.3	88.5	42.3	89.0	3 59.2+33 59	6.5	6.2
5.9	3.6		620	3 40.8	+ 43 35	6.0	84.8	52.4	90.7	3 42.3 + 43 39	6.2	5.9
										3 39.2+43 30		
6.5	4.1	Dm.	809	3 37.3	+ 43 37	7.0	82.5	62.2	89.0	3 40.4+43 46	6.6	6.3
3.5	3.5	Dm.	851	4 15.0	+ 33 58	6.9	31.8	42.2	28.3	4 17.9+34 85	6.7	6.4
4.1	2.5		733	4 12.6	+ 34 17	5.1	32.8	42.4	30.3	4 13.9 + 34 20	5.9 6.1	5.6 5.8
2.5	1.7	Dm.	826	3 49.3	+ 44 4	7.7	85.7	62.3	88.2	3 52.4+44 12	7.1	6.8
5.5	3.5		632	3 44.3	+ 34 0	5.7	87.7	42.4	91.2	3 45.5 + 34 3	5.6	5.3
			773	3 48.7	+ 34 24	7.0	87.1	42.3	89.4	3 51.6 + 34 32		
3.6	2.3	Dm.	~~826~~	~~3 46.2~~	~~+ 44 30~~	~~7.8~~	~~84.6~~	~~62.4~~	~~88.2~~		6.5	6.2
4.1	2.5		647	3 48.7	+ 34 44	5.5	88.3	42.3	90.8	3 50.0 + 34 47	5.5	5.3
												3 47.1+34 39
5.5	3.5		624	3 41.8	+ 44 35	5.9	84.8	62.4	90.3	3 43.1 + 44 40	6.1	5.8
6.3	3.9	Dm.	741	3 40.9	+ 34 23	7.0	85.7	42.2	89.6	3 43.8 + 34 32	6.6	6.3
7.5	4.8	Dm.	883	4 19.7	+ 34 56	6.8	32.9	42.1	28.1	4 22.6+35 2	7.0	6.7
3.7	2.4	Dm.	921	4 11.6	+ 45 6	7.9	33.2	62.3	29.5	4 14.8+45 13	6.7	6.4
1.8	1.2	Dm.	823	4 3.9	+ 35 6	8.0	29.9	42.3	28.7	4 6.8+35 13	7.1	6.8
7.2	4.7	Dm.	790	3 35.5	+ 44 53	7.8	81.7	62.1	88.9	3 38.6+45 2	7.0	6.7

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Plate 1012.

	V	H	Type	No. Lines	K	Focus	Other Lines.	V.	H.	V.	H.	Correc.
	13.0	12.0	I ? I	4 6	H	K=H 1 1	F. F?	6.5	24.0	45.9	66.3	+2.7 +1.7
	13.1	15.0	I	8	K=H	1	F.	6.6	30.0	45.8	60.3	+ 0
	13.6	16.5	II a? II 3669 3	2	K=H	K=H 1 1	F? seen	6.8	33.0	45.6	57.3	- 0.9
	13.9	18.8	I 3671	9	?	3	F.	7.0	37.6	45.4	52.7	- 2.1
?	13.9	22.9	I	7	?	2	F. seen.	7.0	45.8	45.4	42.5	- 7.1
	12.5	10.6	I	11	H	3	F.	6.2	21.2	46.2	69.1	+ 4.1
	12.4	12.4	I I	6	K=H	K=H 1 1	F. —	6.2	24.8	46.2	65.5	+ 1.5
	12.6	13.9	I ?	3 3	H	H 1 1	— —	6.3	27.8	46.1	62.5	+ 1.1 +0.7
	12.5	19.3	II a? II 3671	3 2	K=H	K=H 1 1	F. seen	6.2	38.6	46.2	51.7	- 2.4
	11.5	8.6	III III	3 2	K=H	K=H 1 1	F. F?	5.8	17.2	46.6	73.1	+ 5.9
	11.8	15.9	I	7	K=.5H	2	F.	5.9	31.8	46.5	58.5	- 0.9
	11.3	16.3	I I	4 3	H	H 1 1	F. —	5.6	32.6	46.8	57.7	- 0.7
	11.5	17.8	I	9	H	2	F.	5.8	35.6	46.6	54.7	- 1.7
	10.4	12.5	III 2 III	3 2	K=H	K=H 1 1	F. —	5.2	25.0	47.2	65.3	+ 1.5
	10.3	15.0	I	11	H	4	F.	5.2	30.0	47.2	60.3	+ 0
	10.1	15.1	II ?	3	K=H	1	F.	5.0	30.2	47.4	60.1	- 0.1
	9.4	10.7	I a? II a 3672	2	K=.5H	K=H 1 1	F. F? seen	4.7	21.4	47.7	68.9	+ 2.5
	9.5	12.9	III III	3 2	K=2.0H	K=H ? 1 1	F. F?	4.8	25.8	47.6	64.5	+ 1.2
?	9.5	15.0	II a 3673	3	K=H	2	F. seen	4.8	30.0	47.6	60.3	+ 0
	9.4	17.0	I I	6 5	H	H 1 1	F. —	4.7	34.0	47.7	56.3	- 1.2
	9.3	18.0	I	6	H	1	F.	4.6	36.0	47.8	54.3	-2.9 -1.9
	9.9	19.3	I	10	H	2	F.	5.0	38.6	47.4	51.7	- 4.2
?	9.6	22.2	II a? 3674	3	K=H	1	F. seen	4.8	44.4	47.7	45.9	- 4.7
	9.8	23.8	I ? 16 a ?				F.	4.9	47.6	47.5	42.7	- 8.6
	8.8	10.0	II a II a 3674 III 2	3 2	K=H	? K=H 1 1	F. —	4.4	20.0	48.0	70.3	+ 3.1
	8.6	12.8	II a? II 2 3675	3 2	K=H	K=H 1 1	F. seen	4.3	25.6	48.1	64.7	+ 1.3
?	8.8	13.0	III l.c. 3676	3	K=1.2H	2	F. Knight? seen	4.4	26.0	48.0	64.3	+ 2.1
	8.5	14.2	I ? I	5 4	H	K=H 1 1	F. —	4.2	28.4	48.2	61.9	+ 0.5

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Mean 3

			No.		R.A.	Dec.	Mag.	H	V	H	Reduced to 1900		Br.	cor. Br.
			905	4	6.9	+ 45 50	17.0	30.9	52.3	28.2	4	10.7 + 45 57		
1.7	2.7	Dm.	~~840~~	~~4~~	~~9.0~~	~~+ 35 38~~	~~4.3~~	~~33.0~~	~~42.1~~	~~31.3~~				
			881	3	58.6	+ 45 50	7.3	88.6	52.4	88.6	4	1.8 + 45 38		
0	0	Dm.	~~807~~	~~3~~	~~59.9~~	~~+ 35 39~~	~~7.0~~	~~89.9~~	~~42.2~~	~~89.9~~				
0.9	1.5	Dm.	796	3	55.1	+ 35 31	7.3	88.1	42.3	89.0	3	58.0 + 35 39	7.0	6.7 7.1
2.1	3.3		652	3	52.1	+ 35 24	4.1	89.7	42.4	91.8	3	52.4 + 35 30	4.8	4.5
4.5	7.1		606	3	37.6	+ 45 18	5.6	83.4	52.3	90.5	3	39.0 + 45 22	5.8	5.5
2.5	4.1		735	4	13.0	+ 46 13	4.9	34.2	62.4	30.1	4	14.3 + 46 16	5.2	4.9
1.5	2.4	Dm.	857	4	5.4	+ 36 8	6.8	30.2	42.3	28.7	4	8.4 + 36 15	6.9	6.6 6.9
			830	4	1.6	+ 46 8	8.5	29.4	52.4	28.3	4	4.8 + 46 15		
0.7	1.1	Dm.	~~837~~	~~4~~	~~1.0~~	~~+ 36 8~~	~~6.5~~	~~28.8~~	~~42.4~~	~~28.1~~			7.1	6.8 7.1
2.4	4.0	Dm.	792	3	48.1	+ 36 4	7.0	86.7	42.3	89.1	3	51.0 + 36 12	6.7	6.4 6.6
3.9	5.9	Dm.	884	4	16.9	+ 46 32	7.0	34.1	62.3	28.2	4	20.1 + 46 39	6.5 6.7	6.2 6.4 6.6
0.5	0.9	Dm.	840	3	55.7	+ 46 32	7.2	87.5	62.4	88.4	3	58.9 + 46 40	6.3	6.0
0.7	1.2	Dm.	813	3	55.4	+ 36 41	7.8	88.0	42.3	88.7	3	58.3 + 36 49	7.0	6.7 7.2
1.7	2.5	Dm.	805	3	51.8	+ 36 36	7.5	87.4	42.4	89.1	3	54.7 + 36 44		
			~~810~~	~~3~~	~~53.6~~	~~+ 36 43~~	~~7.0~~	~~89.2~~	~~42.5~~	~~90.9~~			6.0	5.7
1.5	2.4	Dm.	899	4	5.3	+ 37 10	6.2	30.3	42.4	28.8	4	8.2 + 37 17	6.5 6.6	6.2 6.3 6.6
0	0		682	4	0.0	+ 47 23	4.3	30.0	52.6	30.0	4	1.4 + 47 26	4.6	4.3
0.1	0.2		683	4	0.3	+ 37 25	6.2	30.5	42.4	30.6	4	1.7 + 37 28	6.9	6.6
2.5	4.1	Dm.	909	4	9.8	+ 37 39	7.0	31.2	42.3	28.7	4	12.8 + 37 46	6.8	6.5 6.8
1.2	2.1		703	4	6.1	+ 37 39	6.4	31.9	42.4	30.7	4	7.4 + 37 43	6.6 6.8	6.3 6.6 4.4 + 6.8
0	0		686	4	0.6	+ 37 44	5.7	30.6	42.5	30.6	4	1.9 + 37 47	5.8	5.5
1.2	2.1	Dm.	866	3	53.6	+ 37 39	7.0	87.6	42.3	88.8	3	56.6 + 37 47	6.8	6.8 7.0
			920	3	49.3	+ 47 44	8.1	85.3	52.3	88.2	3	52.3 + 47 52		
1.9	2.9	Dm.	~~859~~	~~3~~	~~51.5~~	~~+ 37 58~~	~~7.3~~	~~87.5~~	~~42.6~~	~~89.4~~			6.6	6.3 6.5
2.5	4.2		642	3	47.3	+ 47 32	5.4	85.9	52.5	90.1	3	48.8 + 47 35	5.5	5.2
4.7	7.1	Dm.	833	3	40.6	+ 37 26	6.5	85.0	42.2	89.7	3	43.5 + 37 35	6.4	6.1
5.5	8.5		591	3	34.4	+ 47 24	3.2	82.0	62.3	90.5	3	35.8 + 47 28	4.0	3.7
3.1	4.9	Dm.	912	4	11.6	+ 37 54	7.5	31.6	42.3	28.5	4	12.6 + 38 1	6.9	6.8 7.2
1.3	2.1	Dm.	861	4	4.4	+ 38 6	6.7	30.0	42.4	28.7	4	7.4 + 38 13	7.0	6.7 6.9
1.3	2.1		702	4	6.1	+ 48 6	4.2	32.1	62.5	30.0	4	7.5 + 48 9	5.3 5.5	5.0 5.2
0.5	0.9	Dm.	850	4	1.0	+ 38 6	7.5	29.4	42.3	28.9	4	4.0 + 38 13	7.1	6.8 7.0

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Plate 1012.

	T	H	Type	No. lines	K	Focus	Other lines.	V.	H.	V.	H.	Correc.
	8.0	16.5	I? I	3 4	K=H	1	—	4.0	32.0	48.4	58.3	- 0.7
	8.0	16.8	II? II	3 2	K=H? K=H	1	F, F?	4.0	33.6	48.4	56.7	- 1.8
	8.3	20.0	II?	3	K=H	1	F	4.2	40.0	48.2	50.8	- 5.1
	7.5	13.5	III III	3 3	K=H K=H	1 1	F, F	3.8	27.0	48.6	63.8	+ 1.5
	7.0	14.3	II a 3677	3	K=H	1	F	3.5	28.6	48.9	61.7	+ 0.9
	7.4	17.3	I? I	3 4	K=H K=H	1 1	F, —	3.7	34.6	48.7	55.7	- 1.5
	7.9	18.4	I	10	K=.2H	2	F	4.0	36.8	48.4	53.5	- 2.3
	7.9	18.8	III	3	K=H	1	F	4.0	37.6	48.4	52.7	- 2.5
	7.5	19.4	I?		H	1	F	3.8	38.8	48.6	51.5	- 4.3
?	5.1	6.3	II a? 3678	3	K=H	2	F, neb	2.6	12.6	49.8	77.7	+ 6.3
	5.5	9.9	III? III	3 2	K=H K=H	1 1	F —	2.8	19.8	49.6	70.5	+ 3.4
	5.5	11.7	I	11	K=.5H	2	F	2.8	23.4	49.6	66.9	+ 3.5
	5.0	12.0	I?	13	K=.2H	3	F	2.5	24.0	49.9	66.3	+ 3.0
?	5.3	15.0	I	8	H	1	F, neb	2.6	30.0	49.8	60.3	+ 0
	5.0	15.7	I	13	H	4	F	2.5	31.4	49.9	58.9	- 0.9
	5.5	17.5	I	8	H	1	F	2.8	35.0	49.6	55.3	- 1.7
	5.4	17.7	II a? 3679	2	K=H	1	F, neb	2.7	35.4	49.7	54.9	- 1.9
	5.5	18.1	I	9	K=.2H?	1	F	2.8	36.2	49.6	54.1	- 2.1
	5.6	19.0	I	11	H	5	F	2.8	38.0	49.6	52.3	- 2.7
	4.9	6.7	I	5	K=H	1	F?	2.4	13.4	50.0	76.9	+ 9.0
?	4.6	12.7	III Bc 3680	3	K=H	2	F, neb	2.3	25.4	50.1	64.9	+ 1.7
	4.4	17.2	I II	6 4	K=H K=H	1 1	F —	2.2	34.4	50.2	55.9	- 2.4
	4.3	18.9	II a? 3681	3	K=H	2	F, neb	2.2	37.8	50.2	52.5	- 4.1
?	3.7	11.5	II a 3682	3	K=H	2	F, neb	1.8	23.0	50.6	67.3	+ 3.9
	3.7	14.0	I I	7 7	K=.2H K=.5H	1 1	— —	1.8	28.0	50.6	62.3	+ 0.7
	2.6	14.9	I	8	K=.5H	1	F	1.3	29.8	51.1	60.5	+ 0.1
	2.6	15.1	I I?	3 4	H K=H	1 1	— —	1.3	30.2	51.1	60.1	- 0.1
	2.4	21.6	I?	4	K=H	1	—	1.2	43.2	51.2	47.1	- 7.1

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Mean 3

rec.				No.	R.A.	Dec.	Mag.	H	r	H	Red. to 1900		Br.	Cor. Br.
.7	0.7	1.1	Dm.	836	3 54.7	+ 38 23	7.4	86.7	424	874	3 57.7+38 31	✓	6.9	6.6 7.0
.8	1.1	1.8	Dm.	1029	3 52.8	+ 48 26	7.0	864	624	882	3 56.1+48 34	✓	6.6	6.3 6.7
.1	3.1	5.1	Dm.	1015	3 43.2	+ 48 13	6.2	832	624	883	3 46.4+48 21	✓	6.3	6.0
.5	1.1	1.5	Dm.	1059	4 3.0	+ 48 42	7.0	300	625	285	4 6.3+48 49	✓	6.8 7.0	6.5 6.7 6.5 7.0
.9	0.9	1.2	Dm.	848	4 0.6	+ 38 52	6.8	292	424	283	4 3.6+38 39	✓	6.7	6.4
.5	1.5	2.3	Dm.	834	3 52.8	+ 38 41	7.3	874	424	889	3 55.8+38 49	✓	7.0	6.7 7.0
.3	2.3	3.3	Dm.	829	3 50.1	+ 38 23	6.8	869	424	892	3 53.1+38 31	✓	6.0	5.7
.5	2.5	3.9	Dm.	827	3 48.9	+ 38 25	6.5	865	424	890	3 51.9+38 33	✓	6.8 7.1	6.5 6.8
.8	2.7	4.3	Dm.	1019	3 44.9	+ 48 37	7.0	837	624	880	3 48.1+48 45	✓	6.6	6.3
.3	5.3	9.3	Dm.	1013	4 21.5	+ 39 42	6.6	341	423	278	4 24.6+39 48	✓	5.9	5.6
.6	3.6	5.4	Dm.	980	4 12.2	+ 39 35	7.4	320	424	284	4 15.2+39 42	✓	6.8 7.0	6.5 6.7 6.8 7.0
.5	2.3	3.5		723	4 10.3	+ 49 45	5.6	337	626	302	4 11.7+49 48	✓	5.6	5.3 4.8+49 41
.0	2.1	3.0		719	4 9.2	+ 50 0	4.6	332	625	302	4 10.7+50 3	✓	5.1	4.8
.7	0	0	Dm.	1108	3 58.0	+ 49 48	7.3	880	624	880	4 1.3+49 56	✓	6.5	6.2
.9	0.5	0.9		671	3 57.7	+ 50 1	4.5	89.1	625	900	3 59.1+50 5	✓	4.8	4.5
.7	1.7	2.5	Dm.	911	3 52.1	+ 39 34	7.3	87.1	424	886	3 53.1+39 42	✓	6.8	6.5
.9	1.9	2.9	Dm.	909	3 51.6	+ 39 42	7.0	87.0	424	889	3 52.6+39 50	✓	7.0	6.7
.1	2.1	3.0	Dm.	904	3 50.4	+ 39 36	7.4	866	424	887	3 53.4+39 44	✓	6.5	6.2
.7	2.7	4.2		649	3 49.8	+ 39 40	3.0	878	425	905	3 51.1+39 43	✓	7.3	7.0
.0	6.0	9.0	Dm.	1204	4 23.8	+ 49 48	7.1	37.2	622	282	4 27.2+49 54	✓	6.7	6.4
.7	1.7	2.4		707	4 6.7	+ 40 11	4.9	321	425	304	4 8.1+40 14	✓	5.7 5.8	5.4 5.5
.4	1.5	2.4	Dm.	882	3 51.0	+ 50 14	8.0	854	624	878	3 54.3+50 22	✓	7.0	6.7 7.1
.1	2.5	4.1		643	3 47.7	+ 50 21	5.5	855	626	896	3 49.2+50 24	✓	5.8	5.5
.9	2.5	3.9		724	4 11.1	+ 50 38	5.4	341	624	302	4 12.6+50 41	✓	5.4	5.1
.7	0.7	1.2	Dm.	903	4 1.6	+ 40 32	7.0	296	423	289	4 4.7+40 39	✓	6.7	6.4 6.7
.1	0.1	0.3	Dm.	818	3 59.1	+ 41 7	7.0	889	424	888	4 2.2+41 15	✓	6.5	6.2
.1	0.1	0.3	Dm.	815	3 58.4	+ 41 6	7.5	886	424	887	4 1.5+41 14	✓	7.0	6.7 7.0
.1	4.8	7.1	Dm.	795	3 36.9	+ 51 4	7.0	801	623	872	3 40.2+51 13	✓		

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F. w. 4c. 8.2 6.9

F. ch. 6.9

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Plate 1055.

	V	H	Type	No. lines	K	Focus	Other lines.	V.	H.	V.	H.	Correc.
	23.0	14.6	I	8	K=.5H	1	F.	11.5	29.2	26.1	23.4	+ 0
?	22.5	12.0	III	b.c. 36833	K=1.5H?	4	F. Bright	11.2	24.0	26.4	28.6	+ 0.5
	20.6	17.7	I	9	K=.5H	1	F.	10.3	35.4	27.3	17.2	- 0.5
?	20.4	18.2	III	b. 36843	K=H	1	F. cen.	10.2	36.4	27.4	16.2	- 0.6
	19.8	17.0	I	11	K=.2H	2	F.	9.9	34.0	27.7	18.6	- 0.3
	18.2	10.1	I	6	N	1	F.	9.1	20.2	28.5	32.4	+ 1.8
	17.6	13.1	I	6	N	1	F.	8.8	26.2	28.8	26.4	+ 0.7
?	17.3	15.5	III	b.c. 36853	K=H	2	F. Bright? cen.	8.6	31.0	29.0	21.6	- 0.1
	14.2	11.1	I	6	N	1	F.	7.1	22.2	30.5	30.4	+ 0.9
	14.5	20.9	I	8	N	2	F.	7.2	41.8	30.4	10.8	- 1.2
?	13.7	17.9	I	b 3686	N	1	F. cen.	6.8	35.8	30.8	16.8	- 0.6
	13.4	19.8	I	8	N	2	F.	6.7	39.6	30.9	13.0	- 1.1
	12.4	15.9	I	6	N	1	F.	6.2	31.8	31.4	20.8	- 0.2
	12.8	16.7	III	3	K=¼H	1	F.	6.4	33.4	31.2	19.2	- 0.9
	12.2	19.7	I	8	N	2	F.	6.1	39.4	31.5	13.2	- 1.1
	12.6	20.3	I	6	K=¼H	1	F.	6.3	40.6	31.3	12.0	- 1.1
	11.4	17.0	I	4	N	1	F.	5.7	34.0	31.9	18.6	- 0.6
	11.2	17.1	I	9	K=.5H	3	F.	5.6	34.2	32.0	18.4	- 0.6
?	10.8	14.9	I	b 36877	N	1	F. cen.	5.4	29.8	32.2	22.8	+ 0.1
?	10.2	7.0	I	b 3688 3	N	1	F. cen.	5.1	14.0	32.5	38.6	+ 3.9
	10.2	16.7	I	10	K=.8H?	2	F.	5.1	33.4	32.5	19.2	- 0.5
?	9.7	9.4	I	b 368910	N	3	F. cen.	4.8	18.8	32.8	33.8	+ 1.3
?	9.8	16.2	I	b 36907	N	2	F. cen.	4.9	32.4	32.7	20.2	- 0.3
	7.9	17.4	II	a IIIa 36913 2	K=H K=H	1 1	F. ? Seen	4.0	34.8	33.6	17.8	- 1.1
?	7.5	17.5	I	b? 36927	N	2	F. cen.	3.8	34.0	33.8	17.6	- 1.1
?	6.6	19.1	III	b? 36933	K=H	1	F. cen.	3.3	38.2	34.3	14.4	- 2.1
	5.3	10.8	II	? 2	K=¼H	1	—	2.6	21.6	35.0	31.0	+ 1.2
	4.5	18.4	I	8	N	2	F.	2.2	36.8	35.4	15.8	- 1.1

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Means

rec.			No.	R.A.	Dec.	Mag.	H	r	H'	Red. to 1900		Br.	Cor. Br.
0	0	0.1	783	4 23.7	+ 15 56	4.9	629	27.4	629	4 24.8 +15 59	√	- - - -	
.5	0.5	1.1	799	4 29.0	+ 16 16	1.0	630	27.5	625	4 30.2 +16 19	√	- - - -	
.5	0.5	1.1	756	4 17.2	+ 17 10	4.7	526	27.5	631	4 18.4 +17 13	√	6.1	5.3
.6	0.6	1.2	750	4 16.0	+ 17 16	4.0	624	27.5	630	4 17.2 +17 18	√	6.0 6.4	5.2 5.6
.3	0.3	0.7	763	4 18.6	+ 17 39	4.2	526	27.5	629	4 19.8 +17 42	√	5.4	4.6
.8	0.9	1.8	815	4 33.8	+ 28 24	5.9	540	37.5	622	4 35.0 +28 25	√	6.5	5.7
.7	0.3	0.7	790	4 27.1	+ 28 43	5.6	633	37.5	626	4 28.4 +28 46	√	6.6	5.8
.1	0.1	0.2	773	4 21.6	+ 18 55	3.7	526	27.5	627	4 22.8 +18 58	√	5.6 5.9	4.8 5.1
.9	0.9	1.7	804	4 31.2	+ 20 27	5.8	634	27.5	625	4 32.3 +20 30	√	6.6	5.8
.2	1.2	2.5	722	4 10.2	+ 20 17	4.6	620	27.5	632	4 11.4 +20 20	√	6.0	5.2
.6	0.6	1.2	751	4 16.5	+ 20 42	5.9	623	27.5	629	4 17.6 +20 44	√	6.7	5.9
.1	1.1	2.1	731	4 12.4	+ 20 52	5.5	620	27.6	631	4 13.5 +20 55	√	6.0	5.2
.2	0.2	0.5	770	4 20.9	+ 21 21	5.7	627	27.6	629	4 22.1 +21 24	√	6.7	5.9
.9	0.5	0.9	762	4 18.5	+ 31 10	5.4	619	37.6	628	4 19.8 +31 13	√	6.8 7.2	6.6 6.4
.1	1.1	2.1	732	4 12.5	+ 21 31	5.4	619	27.6	630	4 13.6 +21 32	√	5.8	5.0
.1	1.1	2.4	725	4 11.3	+ 21 17	5.4	619	27.6	630	4 12.4 +21 21	√	6.7	5.9
.6	0.6	1.1	761	4 18.3	+ 21 55	5.5	623	27.6	629	4 19.5 +21 58	√	6.6	5.8
.6	0.6	1.1	760	4 18.2	+ 22 2	4.6	624	27.6	630	4 19.4 +22 4	√	4.9	4.1
.1	0	0.1	Dm. 806	4 21.3	+ 32 8	6.5	611	37.5	610	4 24.2 +32 14	√	6.6	5.8
.9	1.8	3.9	832	4 41.5	+ 32 24	6.0	655	37.5	516	4 42.8 +32 25	√	6.8	6.0
.5	0.5	0.9	764	4 19.1	+ 22 32	4.6	625	27.6	630	4 20.3 +22 35	√	5.3	4.5
.3	1.3	2.7	819	4 35.0	+ 22 44	4.4	638	27.5	523	4 36.2 +22 46	√	5.0	4.2
.3	0.3	0.6	769	4 20.1	+ 22 43	5.4	625	27.6	628	4 21.3 +22 46	√	6.1	5.3
			755	4 16.9	+ 33 42	5.7	517	37.7	728	4 18.0 +33 45	√	4 15.2+33 45	3.9
.1	0.6	1.1	~~753~~	~~4 16.7~~	~~+ 33 51~~	~~5.6~~	~~515~~	~~378~~	~~526~~			6.6	5.8
			753	4 16.7	+ 33 51	5.6	517	37.6	728	4 18.0 +33 54	√		
.1	0.6	1.1	~~775~~	~~4 18.9~~	~~+ 33 42~~	~~5.7~~	~~609~~	~~375~~	~~520~~			6.2	5.4
.1	1.2	2.1	733	4 12.6	+ 34 17	5.1	608	37.6	629	4 13.9 +34 20	√	6.5 6.8	5.7 6.0
.2	1.2	2.4	Dm. 674	4 30.6	+ 24 56	6.3	622	27.5	610	4 33.3 +25 2	√	7.2	6.4
.1	1.1	1.8	747	4 15.3	+ 25 20	5.5	621	27.5	632	4 16.5 +25 23	√	6.0	5.2

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F.w. rc. 7.6 – 6.8

F. cl. 6.9

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Plate 1056

	V	H	Type	No. Lines	K	Focus	Other Lines.	V.	H.	V	H	Correc.
	22.4	18.2	I	8	N	2	F.	11.2	36.4	46.1	15.6	- 2.9
	19.9	22.5	I	b? 3694 10	N	3	F.	10.0	45.0	47.3	7.0	- 7.2
	18.7	11.6	I	10	N	2	F.	9.4	23.2	47.9	28.8	+ 3.3
	18.6	20.3	III	l.c. 3695 3	K=H	2	F. diff	9.3	40.6	48.0	11.4	- 5.4
	15.5	16.1	II	8	N	2	F.	7.8	22.2	49.5	29.8	+ 4.1
	15.2	13.9	I	6	N	1	F.	7.6	27.8	49.7	24.2	+ 1.2
	15.5	14.7	I	7	N	1	F.	7.8	29.4	49.5	22.6	+ 0.2
A	15.4	18.8	I	I 9 7	N N	2 2	F.	7.7	37.6	49.6	14.4	- 4.1
	14.9	19.1	I	9	N	3	F.	7.4	38.2	49.9	13.8	- 4.3
	14.5	21.0	II	? 3	K=H	1	F.	7.2	42.0	50.1	10.0	- 4.3
	14.8	22.1	I	4	N	1	—	7.4	44.2	49.9	7.8	- 7.5
	14.5	22.8	I	9	N	4	F. V	7.2	45.6	50.1	6.4	- 8.4
	13.7	9.9	I	8	N	1	F.	6.8	19.8	50.5	32.2	+ 3.9
?	13.2	12.8	III	l.c. 3696 3	K=H	2	F. pun.	6.6	25.6	50.7	26.4	+ 1.7
?	13.8	18.4	I	b? 3697 8	N	2	F. pun.	6.9	36.8	50.4	15.2	- 3.7
	11.8	7.6	I	? 3	N	1	—	5.9	15.2	51.4	36.8	+ 8.4
	11.6	17.1	I	5	N	1	F.	5.8	34.2	51.5	17.8	- 2.4 - 1.7
	11.3	19.6	I	7	N	2	F.	5.6	39.2	51.7	12.8	- 3.5
	10.1	6.9	I	7	N	2	F.	5.0	13.8	52.3	38.2	+ 6.5
	10.6	10.9	I	3	N	1	F.	5.3	21.8	52.0	30.2	+ 3.1 + 4.8
	10.8	17.6	I	6	N	1	F.	5.4	35.2	51.9	16.8	+ 2.9 - 2.1
	9.4	7.5	I	6	N	2	F.	4.7	15.0	52.6	37.0	+ 8.7
	9.5	8.4	I	6	N	1	F.	4.8	16.8	52.5	35.2	+ 7.7
?	9.4	12.4	III	b 3698 3	K=H	2	F. pun.	4.7	24.8	52.6	27.2	+ 2.9
	9.5	14.0	I	I 6	K=H	1	F.	4.8	28.0	52.5	24.0	+ 0.9
	8.8	10.6	I	8	N	2	F.	4.4	21.2	52.9	30.8	+ 3.5
	8.6	12.5	I	7	K=H	2	F.	4.3	25.0	53.0	27.0	+ 2.9
	8.4	19.3	I	7	N	3	F.	4.2	38.6	53.1	13.4	- 6.1

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Mean 6

			No.	R.A.	Dec.	Magn.	H	V	H'	Red. to 1900	Br.	Br. Corr.
1.8	2.9		735	4 13.0	+ 46 13	4.9	49.4	57.4	52.3	4 14.3 + 46 16	5.5	4.9
4.8	7.2		682	4 0.0	+ 47 24	4.3	45.0	57.4	52.2	4 1.4 + 47 26	5.0	4.4
2.1	3.3		809	4 32.5	+ 48 4	5.7	55.7	57.5	52.4	4 33.9 + 48 7	5.9	5.3
3.3	5.4		702	4 6.1	+ 48 6	4.2	46.7	57.4	52.1	4 7.5 + 48 9	5.6 / 5.7	5.0 / 5.1
2.7	4.1		817	4 34.3	+ 49 45	5.7	56.5	57.6	52.4	4 35.8 + 49 48	6.0	5.4
0.9	1.2	Dm.	1204	4 23.8	+ 49 48	7.1	51.6	57.4	50.4	4 27.2 + 49 54	7.1	6.5
0.2	0.3	Dm.	1013	4 21.5	+ 39 42	6.6	50.9	47.5	50.7	4 24.6 + 39 48	6.6	6.0
2.1	4.1		723	4 10.3	+ 49 45	5.6	47.9	57.5	52.0	4 11.7 + 49 48	5.8	5.2
2.7	4.3		719	4 9.2	+ 50 0	4.6	47.4	57.4	51.7	4 10.7 + 50 3	5.0	4.4
4.3	6.3		707	4 6.7	+ 40 11	4.9	48.7	47.4	53.0	4 8.1 + 40 14	6.3	5.7
5.3	7.5	Dm.	1108	3 58.0	+ 49 48	7.3	102.2	57.2	109.7	4 1.3 + 49 56	6.9	6.3
5.5	8.1		671	3 57.7	+ 50 1	4.5	103.3	57.2	111.7	3 59.1 + 50 5	4.7	4.1
3.9	5.5	Dm.	1032	4 34.2	+ 40 31	6.2	54.0	47.3	50.1	4 37.3 + 40 37	6.5	5.9
1.7	2.4		793	4 28.4	+ 41 1	4.4	54.0	47.6	52.3	4 29.7 + 41 4	6.0 / 6.3	5.4 / 5.7
2.5	3.7		724	4 11.1	+ 50 38	5.4	47.9	57.5	51.6	4 12.6 + 50 41	5.7	5.1
5.5	8.4	Dm.	992	4 43.9	+ 51 21	7.0	59.1	57.3	50.7	4 47.4 + 51 26	6.9	6.3
			719	4 13.1	+ 51 35	6.6	47.3	57.4	49.7	4 16.3 + 51 42		
1.7	2.4	Dm.	~~864~~	~~4 14.4~~	~~+ 41 23~~	~~7.0~~	~~48.6~~	~~47.2~~	~~50.3~~		6.8	6.2
3.5	5.3	Dm.	844	4 8.1	+ 41 47	6.4	47.3	47.4	50.8	4 11.2 + 41 54	6.3	5.7
5.5	9.3		843	4 44.4	+ 42 23	5.5	58.2	47.4	51.7	4 45.8 + 42 25	6.2	5.6
3.1	4.8	Dm	876	4 33.6	+ 52 3	7.0	55.4	57.3	50.6	4 37.1 + 52 9	6.9	6.3
2.1	2.9	Dm.	946	4 13.5	+ 42 5	6.5	48.7	47.5	50.8	4 16.6 + 42 12	6.2	5.6
6.0	8.7		853	4 46.7	+ 52 40	5.9	61.7	57.4	53.0	4 48.2 + 52 42	5.9	5.3
5.4	7.7	Dm.	891	4 41.7	+ 52 34	7.2	58.5	57.4	50.8	4 45.2 + 52 39	6.4	5.8
2.1	2.9		801	4 30.5	+ 52 50	5.4	55.3	57.5	52.4	4 32.0 + 52 53	6.2 / 6.6	5.6 / 6.0
0.9	1.2		785	4 25.0	+ 42 48	6.0	53.0	57.6	52.1	4 26.4 + 42 51	6.4	5.8
3.5	5.1		818	4 34.3	+ 43 8	5.3	55.5	47.5	52.0	4 35.8 + 43 10	5.7	5.1
1.9	2.9		800	4 30.5	+ 53 14	5.5	55.5	57.5	52.6	4 32.0 + 53 17	5.9	5.3
3.6	5.1		711	4 7.4	+ 53 18	5.2	46.0	57.5	51.1	4 8.9 + 53 22	5.3	4.7

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March 19, 1887.

Plate 1056.

	V	H	Type	No. lines	K	Focus	Other lines.	V	H	V	H	Correc.
	7.0	6.3	I	7	K=H	1	—	3.5	12.6	538	394	+7.2
	7.7	7.4	I	9	N	3	F	3.8	14.8	535	372	+9.0
?	7.9	14.8	I	b. 3699 7	N	2	F. sem.	4.0	29.6	533	224	+0.3
?	4.7	8.3	I	d? 7	?	1	F. sem.	2.4	16.6	549	354	+8.4
	4.2	10.3	I	3	N	1	—	2.1	20.6	552	314	+6.0
	2.6	17.7	I	6	N	1	F	1.3	35.4	560	166	-3.6
?	2.7	18.2	I	b. 3700 9	?	2	F. sem.	1.4	36.4	559	156	-2.7
	1.9	10.5	I	? 12	N	2	F.	1.0	21.0	563	310	+5.9

Fw. 8 c.
7.8 – 5.8

Plate 955.

Fclo.
5.8

	22.3	11.1	I	5	N	1	—	11.2	22.2	11.3	48.0	+0.3
	22.9	16.1	I	3	N	1	—	11.4	32.2	11.1	38.0	-0.1
	21.8	7.5	I	8	K=.8H	2	F	10.9	15.0	11.6	552	+1.5
	21.8	15.3	I	8	K=H	1	F	10.9	30.6	11.6	396	-0
	20.9	18.2	I	8	N	1	F	10.4	36.4	12.1	338	-0.3
	20.3	19.2	I	9	K=.2H	3	F	10.2	38.4	12.3	318	-0.5
?	19.5	17.2	I	b. 3701 10	N	4	F. sem.	9.8	34.4	12.7	358	-0.3
?	19.1	23.8	I	d? 5	?	1	F. sem.	9.6	47.6	12.9	226	-0.9
?	19.1	24.1	I	d? 6	K=H?	1	F. sem.	9.6	48.2	12.9	220	-2.1
?	19.5	24.4	I	d? 6	K=H?	2	F. sem.	9.8	48.8	12.7	214	-2.5
	18.3	10.4	III	b? 3702 3	K=H	2	F. seen	9.2	20.8	13.3	494	+0.5
	18.0	15.6	I	b? 3703 4	K=H	1	F. seen	9.0	31.2	135	390	-0.2
	18.0	22.9	I	? 6	K=H	1	F	9.0	458	135	244	-0.9
	17.3	16.7	III	? III 3 2	K=H	K=H 1	1 F	8.6	33.4	13.9	368	-0.5
	16.2	9.2	I	6	N	1	F	8.1	18.4	144	518	+0.7
	16.1	10.9	II	a II^a 3704 3 2	K=H	K=H 1	1 F	F2 Seen 8.0	21.8	145	484	+1.2
	15.3	10.1	I	9	N	2	F	7.6	20.2	149	500	+1.3
	15.3	10.8	I	8	N	2	F	7.6	21.6	149	486	+0.5
	18.0	12.6	II	II 2 2	K=H	K=H 1 1	—	9.0	~~6.3~~ 13.5		450	

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Mean 6

sec.			No.	R.A.	Dec.	Magn.	H	V	H'	Red to 1900 -	Corr	Br.	Br.	
.2	7.2	10.7	852	4 46.3	+ 43 52	6.1	58.9	47.4	51.7	4 47.7	+ 43 54	✓	5.8	6.4 ✓
.0	6.5	9.0	856	4 47.7	+ 53 34	4.5	62.5	67.4	53.5	4 49.3	+ 53 35	✓	4.1	4.7 ✓
.3	0.1	0.3	779	4 22.5	+ 53 39	5.5	52.1	57.6	51.8	4 24.1	+ 53 42	✓	5.2	5.8 ✓
.4	5.7	8.4	848	4 45.3	+ 55 4	5.8	61.9	57.5	53.5	4 46.9	+ 55 6	✓	5.1	5.7 ✓
.0	4.2	6.0	826	4 38.2	+ 55 24	6.2	58.8	57.5	52.8	4 39.9	+ 55 26	✓	6.2	6.8
.6	2.5	3.6	730	4 12.1	+ 56 13	5.9	47.5	57.5	56.1	4 13.7	+ 56 16	✓	5.9	6.5
.7	2.7	4.2	735	4 13.0	+ 46 13	4.9	49.4	47.6	52.1	4 14.3	+ 46 16	✓	4.7	5.3
5.9	4.2	5.9	825	4 38.0	+ 56 32	5.4	59.0	57.5	53.1	4 39.7	+ 56 35	✓	✓	

Mean 6

.3	0.3	0.9	858	4 48.2	+ 11 14	5.2	70.4	22.4	70.1	4 49.3	+ 11 16	✓	5.7	6.3 ✓
.1	0.1	0.3	822	4 37.8	+ 10 56	5.3	70.0	22.3	70.1	4 38.9	+ 10 58	✓	✓	
.5	0.6	1.5	888	4 55.9	+ 21 25	4.7	70.9	22.3	69.4	4 57.1	+ 21 27	✓	5.1	5.7
0	0	0.1	829	4 39.4	+ 11 29	5.6	70.0	22.4	70.0	4 40.5	+ 11 31	✓	5.8	6.4 ✓
.3	0.3	0.7	814	4 33.4	+ 11 58	5.3	69.8	22.4	70.1	4 34.5	+ 12 0	✓	5.5	6.1
.5	0.5	1.1	805	4 31.5	+ 12 16	4.3	69.9	22.5	70.4	4 32.6	+ 12 18	✓	4.7	5.3 ✓
.8	0.3	0.6	819	4 35.0	+ 22 44	4.4	69.4	32.5	69.7	4 36.2	+ 22 46	✓	3.8	4.4 ✓
.9	0.9	1.9	777	4 22.1	+ 12 47	5.2	69.7	22.4	70.6	4 23.2	+ 12 50	✓	5.6	6.2 ✓
2.1	0.9	2.1	769	4 20.1	+ 22 43	5.4	68.3	32.3	70.4	4 21.3	+ 22 46	✓	5.7	6.3
2.5	0.9	2.5	764	4 19.1	+ 22 32	4.6	67.9	32.3	70.4	4 20.3	+ 22 35	✓	4.5	5.1
.5	0.5	1.2	865	4 49.6	+ 13 19	4.3	70.4	22.5	69.9	4 50.7	+ 13 21	✓	5.4 5.8	6.0 6.4
.2	0.1	0.2	Dm. 739	4 37.0	+ 23 22	7.0	68.2	32.4	68.4	4 39.7	+ 23 27	✓	6.2	6.8 ✓
.9	0.9	1.9	784	4 23.9	+ 13 29	5.4	69.7	22.5	70.6	4 25.0	+ 13 31	✓	5.9	6.5 ✓
.5	0.3	0.5	Dm. 733	4 34.5	+ 23 50	6.8	67.9	32.4	68.4	4 37.2	+ 23 55	✓	6.3 6.5	6.9 7.1 6.8 7.0
.7	0.7	1.5	Dm. 796	4 50.8	+ 14 20	6.5	69.2	22.4	68.5	4 53.4	+ 14 24	✓	5.8	6.4 ✓
.2	0.5	1.2	Dm. 709	4 47.4	+ 24 22	6.5	69.2	32.4	68.0	4 50.1	+ 24 27	✓	6.3	6.9 6.7 ✓
.3	0.6	1.3	872	4 50.8	+ 24 52	5.7	71.0	32.5	69.7	4 52.0	+ 24 54	✓	5.4	6.0 ✓
.5	0.5	1.2	Dm. 787	4 47.6	+ 14 49	6.5	69.2	22.4	68.7	4 50.2	+ 14 54	✓	5.4	6.0 ✓
			U.A. St. 168	4 44.8	+ 13 26	6.6	70.0	22.4		4 46.2	+ 13 29		6.6	7.2 7.0 ✓

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March 23, 1887.

Plate 955.

	T	H	Type	No. lines	K	Focus	Other lines.	V	H	T	H	Correc.
9 30 ?	15.0	18.5	I	7	H	1	F. diff.	7.5	37.0	15.0	33.2	- 1.1
	15.8	21.3	I	11	K=.5H	2	F	7.9	42.6	14.6	27.6	- 0.7
	15.8	24.0	I ?	8	K=H	1	F	7.9	48.0	14.6	22.2	- 1.1
	14.4	6.6	I	10	H	3	F	7.2	13.2	15.3	57.0	+ 1.1
	14.0	22.8	I	6	K=H	1	F	7.0	45.6	15.5	24.6	- 0.9
?	14.0	23.1	II a	3705	K=H	1	F diff.	7.0	46.2	15.5	24.0	- 0.9
	13.7	18.7	I	10	K=.2H	2	F	6.8	37.4	15.7	32.8	- 0.5
	13.9	18.8	I	8	H	2	F	7.0	37.6	15.5	32.6	- 0.5
	13.5	19.2	I	7	K=.5H	1	F	6.8	38.4	15.7	31.8	- 0.6
	13.7	20.0	I ?	2	H	1	—	6.8	40.0	15.7	30.2	- 0.6
	13.7	22.3	I	3	H	1	F	6.8	44.6	15.7	25.6	- 1.1
	13.1	22.8	I	8	K=.5H	2	F	6.6	45.6	15.9	24.6	- 1.1
?	13.5	23.8	I d?	9	K=H	4	F diff	6.8	47.6 47.0	15.5	22.6	- 1.1
?	12.6	20.3	III d.c.?	3706 3	K=1.5H ~~K=1.2H~~	5	F diff. Bigh	6.3	4.06 ~~2.54~~	16.2	29.6	- 0.6
	13.4	23.9	II ?	3	K=H	1	F	6.7	47.8 ~~36.8~~	15.8	22.4	- 1.1
	12.6	23.9	III	3	K=H	1	F	6.3	47.8 ~~30.2~~	16.2	22.4	- 1.2
	11.1	10.1	III	3	K=H	1	F	5.6	20.2 ~~23.2~~	16.9	50.0	+ 0.6
	11.6	18.9	II a?	3707 3	K=H	1	F	5.8	37.8 ~~23.2~~	16.7	32.4	- 1.1
	10.6	9.5	I ?	5	K=H	1	F	5.3	19.0 ~~21.2~~	17.2	51.2	+ 1.8
	10.4	23.0	II ?	3	K=H	1	F	5.2	46.0 ~~20.8~~	17.3	24.2	- 2.7
	9.8	7.4	I	3	H	1	—	4.9	14.8 ~~19.6~~	17.6	55.4	+ 2.5
- ?	9.6	12.6	II a?	3708 3	K=H	1	F diff.	4.8	25.2 ~~19.2~~	17.7	45.0	+ 0.9
	9.3	21.4	I	5	H	1	F	4.6	42.8 ~~18.6~~	17.9	27.4	- 1.1
	8.4	17.6	I	8	H	2	F	4.2	35.2 ~~16.8~~	18.3	35.0	- 1.1
	7.8	13.0	I	11	K=.5H	2	F	3.9	26.0 ~~15.8~~	18.6	44.2	+ 0.3
	7.6	20.5	I	6	H	1	F	3.8	41.0	18.7	49.2	- 1.9
?	7.2	23.7	III b?	3709 3	K=2.0H	3	F diff.	3.6	47.4	18.9	22.8	- 1.5
	6.5	11.3	II ?	11	H	1	F	3.8	22.6	19.3 ~~18.7~~	47.6	+ 0.7

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Mean 6

			No.	R.A.	Dec.	Magn.	H	V	H'	Red. to 1900	Cou. By	Cou. Bv.
0.5	1.1	Dm.	674	4 30.6	+ 24 56	6.3	67.6	32.4	68.7	4 33.3 +25 2		6.0 6.6
0.7	1.7		789	4 27.0	+ 14 35	4.8	69.6	22.5	70.3	4 28.1 +14 38		4.9 5.5
~~1.1~~	~~2.4~~	~~Dm.~~	~~702~~	~~4 20.2~~	~~+ 14 24~~	~~6.5~~	~~68.2~~	~~22.3~~	~~69.3~~			
1.1	2.4		894	4 57.7	+ 15 14	4.7	70.9	22.4	69.8	4 58.8 +15 16		4.7 5.3
0.9	1.8		781	4 23.8	+ 15 26	5.5	69.4	22.4	70.3	4 24.9 +15 29		5.8 6.4
0.9	1.8		780	4 23.3	+ 15 22	5.6	69.5	22.4	70.4	4 24.4 +15 25		6.0 6.6
0.5	1.1		808	4 32.4	+ 15 42	4.8	69.8	22.5	70.3	4 33.5 +15 43		4.8 5.4
0.5	1.1		807	4 32.3	+ 15 33	5.1	69.9	22.6	70.4	4 33.4 +15 36		5.1 5.7
0.6	1.3	Dm.	661	4 29.9	+ 15 45	6.5	68.3	22.6	68.9	4 32.5 +15 51		5.9 6.5
0.6	1.3	Dm.	656	4 28.4	+ 15 34	7.0	68.4	22.4	69.0	4 31.0 +15 40		6.6 7.2
1.1	2.1	Dm.	645	4 23.6	+ 15 32	6.5	68.2	22.3	69.3	4 26.2 +15 38		6.1 6.7
1.1	2.4		783	4 23.7	+ 15 56	4.9	69.3	22.5	70.4	4 24.8 +15 59		5.0 5.6
1.1	2.5		776	4 21.8	+ 15 36	3.6	69.4	22.4	70.5	4 22.9 +15 39		4.0 4.6
0.6	1.5		797	4 29.0	+ 16 16	1.0	69.6	22.6	70.2	4 30.2 +16 19		3.6 {3. 4.2}
1.1	2.7		775	4 21.7	+ 15 42	3.9	69.5	22.4	70.6	4 22.8 +15 44		5.7 6.3
1.2	2.9		774	4 21.6	+ 16 6	5.3	69.4	22.4	70.6	4 22.7 +16 8		6.3 {6.9 6.5 7.4}
0.6	1.5		868	4 50.4	+ 16 58	5.8	70.6	22.5	70.0	4 51.6 +17 0		6.4 {7.0 6.7 7.3}
0.5	1.1	Dm.	731	4 29.6	+ 26 39	7.0	67.4	32.4	68.5	4 32.4 +26 43		6.4 7.0
0.9	1.8	Dm.	716	4 50.9	+ 27 5	7.2	69.9	32.4	68.1	4 53.7 +27 9		6.4 7.0
1.2	2.7	Dm.	661	4 20.4	+ 27 4	6.5	66.4	32.3	69.1	4 23.2 +27 10		6.3 6.9
1.1	2.5		893	4 57.7	+ 27 46	6.3	70.5	32.7	70.0	4 58.9 +27 48		6.3 6.9 56.1 +27 44
0.5	0.9		849	4 45.3	+ 27 42	5.9	70.5	32.5	69.6	4 46.5 +27 44		5.9 6.5 44.7 +27 39
1.1	2.3	Dm.	750	4 25.2	+ 17 42	6.5	68.0	22.3	69.1	4 27.8 +17 48		6.1 6.7
0.5	1.1		815	4 33.8	+ 28 24	5.9	69.0	32.6	70.1	4 35.0 +28 25		5.3 5.9
0.3	0.5		842	4 44.3	+ 18 39	5.1	70.3	22.5	70.0	4 45.5 +18 41		5.0 5.6
0.9	1.9		790	4 27.1	+ 28 43	5.6	68.1	32.5	70.0	4 28.4 +28 46		5.6 6.2
1.6	3.3		773	4 21.6	+ 18 55	3.7	69.0	22.5	70.5	4 22.8 +18 58		4.9 {5.5 5.1 5.7}
0.7	1.3	Dm.	811	4 46.4	+ 19 15	7.0	69.0	22.4	68.3	4 49.0 +19 20		6.9

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March 23, 1887.

Plate 955.

V	H	Type	No. Lines	K	Focus	Other lines.	V	H	V	H	Correc.
4.2	19.1	I	8	K=1.5H	1	F	2.1	38.2	20.4	32.0	- 0.9
2.7	14.3	I	3	N	1	—	1.4	28.6	21.1	41.6	+ 0.3

Fav. rel. 8.0–6.1

Plate 956.

Fclv. 6.1

	22.4	8.1	I	10	N	5	F	11.2	16.2	41.2	53.7	+ 5.5
	22.8	9.6	III ?	2	K=H	1	F?	11.4	19.2	41.0	50.7	+ 4.1
	22.6	19.2	III ?	2	K=H	1	—	11.3	38.4	41.1	31.5	- 3.0
	20.0	13.3	I	7	K=1.5H	1	—	10.0	26.6	42.4	43.3	+ 1.3
	20.1	14.4	I	7	K=H	1	F	10.0	28.8	42.4	41.1	+ 0.3
	20.3	22.2	I	4	N	1	F	10.2	44.4	42.2	25.5	- 3.3
?	19.0	11.2	III	b.c. 3/10 3	K=1/4	3	F. Bright seen	9.5	22.4	42.9	47.5	+ 1.8
	19.0	20.4	I ?	4	K=H	1	—	9.5	40.8	42.9	29.1	- 4.3
	19.9	24.1	I	3	N	1	—	10.0	48.2	42.4	21.7	- 7.2
	18.5	16.9	I	8	N	2	F	9.2	33.8	43.2	36.1	- 1.5
?	17.5	10.1	II	a? 3/11 4	K=1.2H K=H	1	F. seen	8.8	20.2	43.6	49.7	+ 4.1
	17.1	12.7	I	8	N	1	F	8.6	25.4	43.8	44.5	+ 1.9
	13.3	7.7	I	3	N	1	—	6.6	15.4	45.8	54.5	+ 4.2
	13.5	9.5	II	? 3	K=H	1	F	6.8	19.0	45.6	50.9	+ 5.1
	13.0	11.7	II	? 3	K=H	1	F	6.5	23.4	45.9	46.5	+ 1.9
	12.1	13.2	III	l.c. 3/12 3	K=H	1	F. B. seen	6.0	26.4	46.4	43.5	+ 1.1
	12.0	24.2	I	8	K=1/4	3	F	6.0	48.4	46.4	21.5	- 8.7
?	11.0	7.4	II	a? 3/13 3	K=H	1	F. seen	5.5	14.8	46.9	55.1	+ 7.8
	10.7	10.9	I	3	N	1	—	5.4	21.8	47.0	48.1	+ 2.5
?	10.5	14.3	III	b. 3/14 3	K=1/4	1	F. seen	5.2	28.6	47.2	41.3	+ 0.5
	9.6	10.6	I	8	N	3	F	4.8	21.2	47.6	48.7	+ 2.5
	8.9	17.3	I	8	N	2	F	4.4	34.6	48.0	35.3	- 2.3
	8.9	17.4	II	a 3/15 3	K=H	1	F. seen	4.4	34.8	48.0	35.1	- 1.5
	8.0	14.2	III	? 3	K=H	1	F	4.0	28.4	48.4	41.5	+ 0.9

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Mean 6

			No.	R.A.	Dec.	Magn.	n	v	n'	Red. to 1900	cor.	Br.	Br.
0.9	1.8		804	4 31.2	+ 20 27	5.8	69.4	22.5	70.3	4 32.4 + 20 30	✓	5.9	6.5
0.1	0.3		833	4 41.5	+ 31 13	5.7	70.1	32.6	69.8	4 42.8 + 31 16	✓	6.1	6.7

Mean 4

3.0	5.5		896	4 58.1	+ 41 4	3.3	74.3	52.3	68.8	4 59.5 + 41 7	✓	6	7	✓
2.4	4.1		879	4 54.1	+ 40 54	4.0	73.3	52.3	69.2	4 55.5 + 40 56	✓			
1.8	3.0		793	4 28.4	+ 41 1	4.4	66.8	52.3	69.8	4 29.7 + 41 4	✓			
0.9	1.3		843	4 44.4	+ 42 23	5.5	71.0	52.4	69.7	4 45.8 + 42 25	✓	5.8	6.2	4 42.6 + 42 20
0.3	0.6		832	4 41.5	+ 32 24	6.0	70.3	42.4	70.0	4 42.8 + 32 25	✓	6.1	6.5	✓
3.3	5.7	Dm.	806	4 21.3	+ 32 8	6.5	65.7	42.3	69.0	4 24.2 + 32 14	✓	6.2	6.6	✓
1.8	3.0		862	4 49.2	+ 32 58	2.7	71.6	42.5	69.8	4 50.4 + 33 0	✓	4.6 / 5.2	5.0 / 5.6	✓
2.5	4.3		785	4 25.0	+ 42 48	6.0	65.8	52.3	70.1	4 26.4 + 42 51	✓	6.3	6.7	✓
4.5	7.2	Dm.	946	4 13.5	+ 42 5	6.5	61.7	52.1	68.9	4 16.6 + 42 12	✓	6.4	6.8	✓
0.9	1.5		818	4 34.3	+ 43 8	5.3	68.1	52.3	69.6	4 35.8 + 43 10	✓	5.2	5.6	✓
2.5	4.1		877	4 53.4	+ 43 39	3.2	73.6	52.4	69.5	4 54.8 + 43 41	✓	6	6	✓
1.1	1.9		852	4 46.3	+ 43 52	6.1	71.7	52.5	69.8	4 47.7 + 43 54	✓	5.9	6.3	4 44.5 + 43.8
4.2	6.5	Dm.	973	4 56.3	+ 35 44	6.5	71.7	42.3	67.5	4 59.3 + 35 48	✓	6.3	6.7	✓
3.0	5.1	Dm.	1032	4 53.7	+ 45 34	6.8	72.7	52.4	67.6	4 57.0 + 45 38	✓	6.3	6.7	✓
1.9	3.0	Dm.	930	4 46.7	+ 35 56	6.5	70.1	42.4	68.2	4 49.7 + 36 1	✓	6.3	6.7	✓
1.1	1.7		844	4 44.6	+ 36 31	5.0	71.0	42.5	69.9	4 45.9 + 36 33	✓	5.8 / 6.2	6.2 / 6.6	✓
5.7	8.7		735	4 13.0	+ 46 13	4.9	61.4	52.2	70.1	4 14.3 + 46 16	✓	5.0	5.4	✓
5.1	7.8		908	5 1.8	+ 46 49	5.6	16.6	52.3	88	5 3.3 + 46 50	✓	5.9	6.3	✓
2.5	3.9	Dm.	1002	4 48.7	+ 37 6	7.0	70.5	42.5	68.0	4 51.7 + 37 11	✓	6.6	7.0	✓
0.5	0.7		835	4 41.8	+ 37 17	5.2	70.4	42.5	69.9	4 43.2 + 37 19	✓	5.9 / 6.5	6.3 / 6.9	✓
2.5	4.1		873	4 51.1	+ 37 42	5.1	72.3	42.5	69.8	4 52.5 + 37 44	✓	4.6	5.0	✓
1.3	2.3	X	809	4 32.5	+ 48 4	5.7	67.1	52.5	69.4	4 33.9 / 34.1 + 48 7	✓	5.1	5.5	4 30.6 + 48 0
1.5	2.4	Dm.	954	4 32.0	+ 37 59	6.2	66.8	42.4	68.3	4 33.0 + 38 5	✓	6.4	6.8	✓
0.5	0.9		837	4 42.2	+ 48 32	5.8	70.6	52.5	69.7	4 43.6 + 48 35	✓	6.3 / 6.6	6.7 / 7.0	✓

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Plate 956.

	V	H	Type	No. lines	K	Focus	Other lines.	V	H	V	H	Correc.
?	6.5	10.3	II a?	37163	K=H	1	F. diff.	3.8	20.6	482	493	+ 3.0
	5.5	16.7	I	8	K=.2H	1	F	2.8	33.4	496	365	- 1.8
	5.4	21.4	I	5	K=H	1	—	2.7	42.8	497	27.1	- 4.5
?	3.2	9.6	III	37117 3	K=H	2	F. diff.	1.6	19.2	508	507	+ 4.1
	3.9	16.5	I	7	K=.5H	1	—	2.0	33.0	504	369	- 1.1
?	3.0	19.3	III	37183	K=H	1	F. diff	1.5	38.6	509	313	- 3.0
	2.8	8.2	I	10	H	1	F. diff.	1.4	16.4	51.0	535	+ 5.1

Fm. 4C. 5.8 - 5.7 — Fch. 7.5

Plate 1013.

	22.2	16.4	I?	3	H	1	—	11.1	32.8	365	59.0	- 0.5
	21.4	8.0	I	6	K=.5H	1	—	10.7	16.0	36.9	958	+ 0.9
	21.0	13.4	I	6	H	1	F	10.5	26.8	37.1	650	+ 1.1
	21.6	21.8	III	2	K=H	1	F?	10.8	43.6	36.8	482	- 4.2
	20.2	7.7	II a?	37119 3 2	K=H K=H	2 2	F. diff	10.1	15.4	37.5	764	+ 1.1 (+2.5)
	20.2	10.7	I?	7 6	K=H K=H	1 1	F	10.1	21.4	37.5	704	+ 2.5
	20.5	14.8	II ?	2	K=H	1	—	10.2	29.6	374	622	+ 0.2
	20.4	19.1	I ?	7	H	1	F	10.2	38.2	374	536	- 1.3
	20.5	19.4	I?	2	K=H	1	—	10.2	38.8	374	530	- 2.7
	19.0	6.4	I	8	H	2	F	9.5	12.8	38.1	790	+ 1.3 (+5.7)
	19.1	9.9	I	9	?	2	F	9.6	19.8	38.0	720	+ 1.8
	19.9	14.8	III ?	III ? 2	K=H K=H	1 1	F?	10.0	29.6	376	622	+ 0.1
	19.1	14.9	I	7	K=.5H ?	2	F	9.6	29.8	38.0	620	+ 0
	19.7	17.0	I	8	K=.5H	2	F	9.8	34.0	37.8	578	- 0.9
	19.5	19.1	I	10	K=.2H	2	F	9.8	38.2	378	536	- 2.5
	19.2	22.2	II a?	37120 3	K=H	1	F Diff	9.6	44.4	38.0	474	- 2.5
	18.3	13.6	I	10	K=.2H	2	F	9.2	27.2	384	646	+ 0.9
	18.6	15.3	I	I 3	H	H K=H	1 1	—	9.3	30.6	383	612 - 0.1
	18.0	16.8	II	3	K=H	2	F	9.0	31.6	38.6	612	- 0.6 (- 2.1)

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Mean 4

Cor.

			No.	R.A.	Dec.	Magn.	H	V	H'	Red. to 1900.		Br	Br.	
3.0	4.8	Dm.	1133	4 50.3	+ 39 10	6.4	70.9	42.4	67.9	4 53.4	+ 39 13	✓	6.2	6.6 ✓
1.2	1.8		817	4 34.3	+ 49 45	5.7	67.7	62.6	69.5	4 35.8	+ 49 48	✓	5.6	6.0 ✓ 4 32.4 + 49 42
4.5	6.9	Dm.	1013	4 21.5	+ 39 42	6.6	64.3	42.4	68.8	4 24.6	+ 39 48	✓	6.1	6.5 ✓
4.1	5.7		879	4 54.1	+ 40 54	4.0	73.3	42.5	69.2	4 55.5	+ 40 56	✓	5.0 5.4	5.4 5.8 ✓
1.1	1.7	Dm.	1032	4 34.2	+ 40 31	6.2	67.2	42.5	68.3	4 37.3	+ 40 37	✓	6.1	6.5 ✓
3.0	4.7		793	4 28.4	+ 41 1	4.4	67.0	42.5	70.0	4 29.7	+ 41 4	✓	5.8 6.1	6.2 6.5 ✓
5.1	7.5		896	4 58.1	+ 41 4	3.3	74.5	42.5	69.4	4 59.5	+ 41 7	✓	B	B ✓

Mean 4

0.5	1.1	Dm.	783	4 56.9	+ 26 13	6.5	89.7	37.3	90.2	4 59.7	+ 26 17	✓	6.1	6.5 ✓
2.4	4.3	Dm.	765	5 15.3	+ 16 33	6.8	31.3	27.3	30.4	5 17.9	+ 16 36	✓	5.9	6.3 ✓
0.6	1.1	Dm.	1047	5 4.0	+ 36 51	7.0	30.8	47.3	29.7	5 7.0	+ 36 55	✓	6.1	6.5 ✓
2.1	4.2		844	4 44.6	+ 36 31	5.0	88.2	47.3	92.4	4 45.9	+ 36 33	✓	6.0 6.4	6.4 6.8 ✓
2.5	4.7		970	5 17.4	+ 17 17	5.2	32.8	27.4	31.7	5 18.6	+ 17 17	✓	5.8	6.2 6.5 ✓
1.3	2.5	Dm.	1146	5 10.9	+ 37 17	7.2	32.3	47.4	29.8	5 13.9	+ 37 20	✓	6.4	6.8 6.7 ✓
0.1	0.2	Dm.	1067	5 0.5	+ 37 7	6.4	30.1	47.3	29.9	5 3.5	+ 37 11	✓	6.4	6.8 ✓
1.3	2.5	Dm.	716	4 50.9	+ 27 5	7.2	89.1	37.3	90.4	4 53.7	+ 27 9	✓	6.2	6.6 ✓
1.5	2.7	Dm.	1002	4 48.7	+ 37 6	7.0	87.5	47.3	90.2	4 51.7	+ 37 11	✓	6.4	6.8 ✓
3.1	5.7		986	5 20.2	+ 17 52	5.4	33.0	27.4	31.7	5 21.3	+ 17 53	✓	5.4	5.8 ✓
1.8	3.1	Dm.	758	5 11.9	+ 27 48	6.5	31.7	37.4	29.9	5 14.7	+ 27 51	✓	6.0	6.4 ✓
0.1	0.2	Dm.	734	5 1.0	+ 27 22	7.3	30.6	37.4	30.5	5 3.8	+ 27 26	✓	6.4 6.6	6.8 7.0 7.0 ✓
0	0.1		911	5 2.2	+ 27 53	6.0	32.0	37.5	32.0	5 3.5	+ 27 55	✓	5.6	6.0 ✓ 0.7 + 27 51 8
0.9	1.3		893	4 57.7	+ 27 46	6.3	91.7	37.6	92.6	4 58.9	+ 27 48	✓	6.1	6.5 4 56.1 + 27 44 7
1.5	2.5		873	4 51.1	+ 37 42	5.1	89.3	47.5	91.8	4 52.5	+ 37 44	✓	5.0	5.4 ✓
2.5	4.5		849	4 45.3	+ 27 42	5.9	89.7	37.3	92.2	4 46.5	+ 27 47	✓	6.1	6.5 4 43.7 + 27 39
0.5	0.9		922	5 5.2	+ 38 20	4.9	32.4	47.5	31.5	5 6.6	+ 38 22	✓	5.0	5.4 ✓
0.1	0.2	Dm.	751	4 59.5	+ 28 5	7.0	90.1	37.4	90.2	5 2.3	+ 28 9	✓	6.5	6.9 7.0 ✓
0.3	0.6		900	5 0.3	+ 18 30	5.1	31.9	27.5	32.0	5 1.5	+ 18 30	✓	5.4	5.8 ✓

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Plate 1013.

V	H	Type	No. Lines	K	Focus	Other Lines.	V	H	V	H	Correc.
17.8	7.6	I?	8	?	5	F. Bright	8.9	15.2	38.7	76.6	+ 2.7
17.1	8.9	I	5	H 1	1	—	8.6	17.8	39.0	74.0	+ 2.4
? 17.5	23.4	I d?	6	K=H?	2	F. seen.	8.8	46.8	38.8	45.0	- 1.3
16.5	6.2	II a² 3721 3	K=H	1	F		8.2	12.4	39.4	79.4	+ 3.5
? 16.5	18.6	II a² 3722 3	K=H	1	F. dim,		8.2	27.2	39.4	52.6	- 2.5
16.2	21.7	II a² 3723 3	K=H	1	F. seen		8.1	43.4	39.5	48.4	- 1.2
15.9	9.8	I	6	H 1	1	F	8.0	19.6	39.6	72.2	+ 0.9
15.9	9.9	I	8	H	2	F	8.0	19.8	39.6	72.0	+ 1.9
15.0	11.5	II a² 3724 3	K=H	2	F. dim		7.5	23.0	40.1	68.8	+ 2.5
15.0	14.1	II? 3	K=H	1	F		7.5	28.2	40.1	63.6	+ 0.6
15.6	14.3	I I 6	H K=H 1	1	—	—	7.8	28.6	39.8	63.2	+ 0.3
15.5	15.0	II a 3725 II a 2	K=H K=H 1	1	F. seen.		7.8	30.0	39.8	61.8	+ 0
15.6	16.7	I	H	1	F		7.8	33.4	39.8	58.4	- 0.7
? 14.5	7.4	II a 3726 3?	K=H	2	F. seen		7.2	14.8	40.4	77.0	+ 3.1
14.8	10.3	III III 3	K=H K=H 1	1	F F		7.4	20.6	40.2	71.2	+ 0.9
14.3	13.0	II a 3727 II a 3	2 K=H K=H 1	1	F. dim. seen		7.2	26.0	40.4	65.8	+ 0.9
14.4	15.6	I	8	K=, 2H	2	F	7.2	31.0	40.4	60.8	- 0.1
14.2	17.2	III III 2 2	K=H K=H 1	1	F 2		7.1	34.4	40.5	57.4	- 1.1
13.8	7.6	II II 3 3	K=H K=H 1	1	F? F		6.9	15.2	40.7	76.6	+ 1.5 - 5.7
13.2	10.2	I	8	H	2	F	6.6	20.4	41.0	71.4	+ 3.6
13.4	10.9	I	6	K=, 5H	1	—	6.7	21.8	40.9	70.0	+ 3.0
13.0	11.1	I	10	K=, 2H	2	F	6.5	22.2	41.1	69.6	+ 2.7
13.6	14.2	III III 2 2	K=H K=H 1	1	— —		6.8	28.4	40.8	63.4	+ 0.3
13.0	16.3	I	11	H	5	F	6.5	32.6	41.1	59.2	- 1.1
13.3	17.8	II a 3728 3	K=H	2	F. seen		6.6	35.6	41.0	56.2	- 1.9
12.8	8.6	I?	6	H	2	F?	6.4	17.2	41.2	74.6	+ 2.7
12.4	12.9	III III 2 2	K=H K=H 1	1	F 2	—	6.2	25.8	41.4	66.0	+ 0.9
12.5	17.5	I	6	?	1	F	6.2	35.0	41.4	56.8	- 1.8

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Mean of

Corr.

			No.	R.A.	Dec.	Magn.	H	V	H'	Red. to 1900		Pv	Bv
2.7	5.1		978	5 18.7	+ 28 30	1.9	33.9	37.4	31.2	5 20.8	+28 32	B	B
2.4	4.2	Dm.	788	5 14.2	+ 28 48	7.0	32.0	37.4	29.6	5 17.0	+28 51	6.0	6.4
3.0	5.7		842	4 44.3	+ 18 39	5.1	91.1	27.4	92.4	4 45.5	+18 41	5.3	5.7
3.5	6.1	Dm.	909	5 29.5	+ 29 4	7.0	32.9	37.3	29.4	5 28.4	+29 7	6.1	6.5
1.3	2.5	Dm	1133	4 50.3	+ 39 10	6.4	87.5	47.4	30.0	4 53.4	+39 15	5.9	6.3
2.5	4.7	Dm.	811	4 46.4	+ 19 15	7.0	89.7	27.3	90.9	4 49.0	+19 20	6.1	6.5
1.9	3.6	Dm.	898	5 11.8	+ 19 27	6.5	31.4	27.4	30.5	5 14.4	+19 30	6.1	6.5
1.8	3.6		956	5 13.6	+ 29 27	5.6	33.4	37.4	31.5	5 14.9	+29 26	5.7	6.1
1.3	2.5		944	5 10.7	+ 40 0	5.0	33.7	47.5	31.2	5 12.1	+40 2	5.3	5.7
0.3	0.6	Dm.	1205	5 2.2	+ 39 55	7.1	30.4	47.4	29.8	5 5.3	+39 59	6.3	6.7
			830	5 2.1	+ 29 33	7.0	30.7	37.4	30.4	5 5.0	+29 37		
0.3	0.5	Dm.	~~833~~	~~5 2.4~~	~~+ 29 44~~	~~6.5~~	~~31.0~~	~~37.5~~	~~30.7~~			6.2	6.6
0	0	Dm.	822	5 0.5	+ 29 36	6.5	30.5	37.4	30.5	5 3.4	+29 40	6.2	6.6
0.7	1.2	Dm.	847	4 57.0	+ 19 36	6.5	90.4	27.4	90.7	4 59.6	+19 40	6.1	6.5
3.1	5.7		983	5 19.5	+ 30 7	5.8	34.3	37.3	31.2	5 20.8	+30 ~~7~~	5.6	6.0
1.9	3.1	Am.	893	5 10.7	+ 19 58	6.5	31.3	27.4	30.4	5 13.4	+20 1	6.4	6.5
0.9	1.5	Dm.	827	5 5.0	+ 30 14	7.5	31.0	37.4	30.1	5 7.9	+30 18	6.5	6.9
0.2	0.3		903	5 0.7	+ 20 15	5.4	31.7	27.4	31.8	5 1.9	+20 17	5.3	5.7
1.1	1.5	Am.	772	4 55.0	+ 30 18	6.5	89.4	37.4	90.5	4 57.9	+30 20	6.5	6.9
		Am.	948	5 16.6	+ 20 27	7.6	31.8	27.3	30.3	5 19.3	+20 30	6.7	7.1
3.1	5.7	~~Dm.~~	~~1310~~	~~5 20.2~~	~~+ 40 23~~	~~7.2~~	~~35.4~~	~~47.3~~	~~29.7~~			6.5	6.9
2.1	3.6		958	5 14.0	+ 40 54	5.5	34.4	47.5	30.8	5 15.8	+40 56	5.4	5.8
1.8	3.0	Am.	1255	5 10.7	+ 40 44	7.8	32.5	47.4	29.5	5 13.8	+40 47	6.5	6.9
1.7	2.7		947	5 11.8	+ 40 58	5.3	34.0	47.5	31.3	5 13.3	+40 59	5.4	5.8
0.3	0.6	Dm.	812	5 2.2	+ 30 38	7.0	30.6	37.4	30.3	5 5.1	+30 42	6.9	7.3
0.6	1.1		896	4 58.1	+ 41 4	3.3	90.7	47.6	91.8	4 59.5	+41 7	B	B
1.2	1.9		879	4 54.1	+ 40 54	4.0	89.7	47.5	91.6	4 55.5	+40 56	5.3	5.7
2.7	4.8	*	~~968~~	~~5 16.9~~	~~+ 31 7~~	~~6.4~~	~~34.1~~	~~37.5~~	~~31.4~~	~~5 18.2~~	~~+ 31 8~~		
			969	5 16.9	+ 31 2	5.9	34.1	37.4	31.4	5 18.2	+31 3	5.6	6.0
0.9	1.5	Dm.	895	5 5.3	+ 31 14	6.8	31.1	37.4	30.2	5 8.2	+31 18	6.7	7.1
1.1	1.8	Dm.	1044	4 53.1	+ 41 14	6.5	88.1	47.4	89.9	4 56.3	+41 18	6.0	6.4

* Two stars superimposed on plate. Meas. of brightness combined light of both

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Plate 1013.

V	H	Type	No. Lines	K	Focus	Other Lines.	V	H	r	H	Correc.
12.3	17.8	I	10	K=.2H	3	F.	6.2	35.6	41.4	56.2	- 0.7
12.3	23.6	III ?	3	K=H	1	F.	6.2	47.2	41.4	44.6	- 3.9
11.2	6.5	I ?	5	N	2	F.	5.6	13.0	42.0	78.8	+ 1.8 (6.6)
11.4	9.6	I ?	4	N	1	F.	5.7	19.2	41.9	72.6	+ 4.2 (+ 2.4)
11.0	10.4	III	3	K=2.0H ?	1	F.	5.5	20.8	42.1	71.0	+ 1.2
11.6	10.6	I	8	N	2	F.	5.8	21.2	41.8	70.6	+ 3.3
11.9	15.6	I	5	N	1	F.	6.0	31.2	41.6	60.6	- 0.1
11.5	16.9	I	3	N	1	—	5.8	33.8	41.8	58.0	- 1.5
10.6	6.3	II ?	2	K=H	1	F. ?	5.3	12.6	42.3	79.2	+ 6.9 + 4.2
10.6	12.2	I	9	N	1	F.	5.3	24.4	42.3	67.4	+ 2.1 + 0.6
10.3	16.2	II a 3729 3	3	K=H	1	F. seen	5.2	32.4	42.4	59.4	- 0.3
10.6	17.0	II a ? 3730 3	3	K=H ?	2	F.	5.3	34.0	42.3	57.8	- 0.9
10.2	21.3	I	7	N	2	F.	5.1	42.6	42.5	49.2	- 4.9
? 10.0	23.5	I d ?	5	N	1	F. very	5.0	47.0	42.6	44.8	- 4.1
9.5	10.7	II a 3731 3	2	K=H ?	1	F. seen	4.8	21.4	42.8	70.4	+ 1.9
9.9	12.6	I	9	K=.5H	2	F.	5.0	25.2	42.6	66.6	+ 1.1
? 9.0	16.2	II a ? 3732 3	3	K=H	1	F. very	4.5	32.4	43.1	59.2	- 1.1
9.1	16.7	II a ? 3733 3	3	K=H	1	F. seen	4.6	33.4	43.0	58.4	- 0.5
III ? 5356.6 ?	9.1	20.2	III l.c. 3734 3	K=2.0H	3	F. very bright seen	4.6	40.4	43.0	51.4	- 2.5
8.5	11.5	III l.c. 3735 3	3	K=H ?	2	F. Br. seen	4.2	23.0	43.4	68.8	+ 2.7 (1.8)
8.5	11.9	I ?	6	K=.5H	1	—	4.2	23.8	43.4	68.0	+ 1.5
8.0	18.0	II a ? 3736	3	K=H	4	F. seen	4.0	36.0	43.6	55.8	- 2.4
7.4	10.8	I	9	K=.2H	2	F.	3.7	21.6	43.9	70.2	+ 2.1
? 7.3	11.0	II a ? 3737	3	K= H ?	1	F seen	3.6	22.0	44.0	69.8	+ 2.1
7.8	11.2	I	8	N	2	F. ?	3.9	22.4	43.7	69.4	+ 1.9
7.8	11.5	I	7	N	2	—	3.9	23.0	43.7	68.8	+ 1.8
7.5	16.4	I	6	K=.5H	1	F. ?	3.8	32.8	43.8	59.0	- 0.7
7.3	20.5	I	6	?	1	F. ?	3.6	41.0	44.0	50.8	- 4.7
7.5	20.2	III ?	2	K=H	1	—	3.8	40.4	43.8	51.4	

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Mean of

		No.	R.A.	Dec.	Magn.	H	V	H'	Red. to 1900	Cor. Br.	Br.
1.2	2.1	888	4 55.9	+ 21	24	4.7	91.5	27.6	92.2	4 57.1 + 21 27		5.0	5.4
3.9	6.5	833	4 41.5	+ 31	13	5.7	88.7	37.4	92.6	4 42.8 + 31 16		6.2 6.3	6.6 6.7
		Am. 1218	5 23.2	+ 41	60	6.8	36.2	47.3	28.9				
4.1	6.6	987	5 20.4	+ 21	50	4.8	33.4	27.4	31.6	5 21.6 + 21 51		4.7	5.3
		1181	5 14.2	+ 41	41	8.2	33.4	47.4	29.2	5 17.4 + 41 44			
2.4	4.2	Dm. 949	5 13.8	+ 31	37	8.7	33.0	37.3	32.5			6.6	7.0
		950											
2.3	3.6	990	5 12.1	+ 21	59	5.2	32.9	27.5	31.7	5 13.3 + 22 0		5.6 5.8	6.0 6.2
1.9	3.3	954	5 13.4	+ 41	41	5.1	34.6	47.5	31.3	5 14.7 + 41 43		5.0	5.4
0.3	0.6	905	5 0.8	+ 21	33	5.8	32.0	27.6	32.1	5 2.0 + 21 34		5.9	6.3
0.9	1.5	Dm. 1050	4 54.8	+ 41	40	8.0	88.6	47.5	90.1	4 58.0 + 41 44		6.6	7.0
		Am. 1218	5 23.2	+ 41	60	6.8	35.8	47.3	28.9	5 26.4 + 42 2			
4.2	6.9	1001	5 24.6	+ 32	6	5.0	37.2	37.4	33.0			6.1	6.5
		1443	5 8.1	+ 41	59	8.0	32.5	47.3	30.5				
1.3	2.1	Dm. 864	5 6.8	+ 22	7	6.8	31.4	27.4	30.8	5 9.5 + 22 10		5.8	6.2
0.6	0.9	Dm. 825	4 58.0	+ 22	20	7.0	90.4	27.5	90.7	5 0.7 + 28 24		6.6	7.0 7.0
0.9	1.7	Dm. 879	4 55.2	+ 32	7	6.6	89.2	37.4	30.1	4 58.1 + 32 11		6.0	6.4
2.9	4.9	843	4 44.4	+ 42	24	5.5	87.0	47.5	91.9	4 43.8 + 42 25		5.7	6.1
4.1	6.7	832	4 41.5	+ 32	24	6.0	88.5	37.4	92.6	4 42.8 + 32 25		6.0	6.4
1.9	3.6	Dm. 945	5 10.6	+ 32	38	7.4	32.0	37.4	30.1	5 13.5 + 32 41		6.5	6.9 6.9
1.1	1.8	930	5 7.6	+ 32	33	5.2	32.8	37.6	31.7	5 8.8 + 32 35		5.2	5.6
0.6	1.1	Am. 1170	4 56.5	+ 42	58	6.8	88.9	47.5	90.0	4 59.7 + 43 2		6.2	6.6
0.7	1.3	Dm. 818	4 56.9	+ 22	52	7.5	90.3	27.5	90.8	4 59.6 + 22 56		6.2	6.6
2.5	4.2	862	4 49.2	+ 32	58	2.7	89.6	37.6	92.1	4 50.4 + 33 0		4.9 5.3	5.3 5.7
1.8	2.7	942	5 10.3	+ 33	15	5.0	33.3	37.4	31.5	5 11.6 + 33 17		5.6 5.9	6.0 6.3
1.5	2.5	Dm. 991	5 7.6	+ 33	10	7.6	31.4	37.4	29.9	5 10.6 + 33 13		6.3	6.7
1.5	2.4	877	4 53.4	+ 43	39	3.2	89.4	37.6	31.8	4 54.8 + 43 41		4.3	4.7
2.1	3.5	949	5 12.1	+ 33	50	5.1	33.7	37.5	31.6	5 13.4 + 33 52		5.2	5.6
2.1	3.3	Dm. 1010	5 9.8	+ 33	50	7.2	31.8	37.4	29.7	5 12.8 + 33 53		6.1	6.5
1.9	3.0	946	5 11.1	+ 33	37	5.3	33.5	37.6	31.6	5 12.4 + 33 39		5.1	5.5
1.8	2.9	Dm. 1002	5 8.8	+ 33	36	6.5	31.8	37.5	30.0	5 11.8 + 33 39		5.7	6.1
0.7	1.2	Am. 953	4 56.6	+ 33	43	7.0	89.4	37.5	90.1	4 59.5 + 33 47		6.1	6.5
2.9	4.7	852	4 46.3	+ 43	52	6.1	87.3	47.5	92.0	4 47.7 + 43 54		5.7 6.2 6.5	6.1 6.6 6.9
		869	4 50.5	+ 23	46	6.0	90.9	27.6		4 51.7 + 23 48			

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Plate 1013.

V	H	Type	No. Lines	K	Focus	Other Lines	V	H	v	h	Correc.
6.1	7.6	III b?	3738 7 3	K=½H	1	F. sun	3.6	15.2	44.0	76.6	+ 3.9
6.3	8.0	I ?	5	H	2	F.	3.2	16.0	44.4	75.8	+ 3.9
6.7	12.3	I	5	H	2	F.	3.8	24.6	44.2	67.2	+ 1.3
6.9	15.6	I	8	H	2	F.	3.4	31.2	44.2	60.6	- 0.1
6.6	18.1	I	5	H	1	—	3.3	36.2	44.3	55.6	- 2.5
5.4	8.6	III ?	III 2 2	K=H K=½H	1	F. ?	2.7	17.2	44.9	74.6	+ 3.5
5.4	11.1	II ?	2	K=H	1	F. ?	2.7	22.2	44.9	69.6	+ 2.1 + 3.3
5.3	20.1	I	7	H	2	F.	2.6	40.2	45.0	51.6	- 4.5 - 1.3
? 4.7	6.0	I d?	5	H	2	F. sun	2.4	12.0	45.2	79.8	+ 2.7
? 3.5	12.8	II a?	8739 A 3	K=2.0/1 H	1	F. sun	1.8	25.6	45.8	66.2	+ 1.8
3.5	16.5	I	8	K=.5H	1	F.	1.8	33.0	45.8	58.8	- 0.9
3.9	17.1	I I 8740	5	H	K=.5H 1	F.	2.0	34.2	45.6	57.6	- 1.9
? 3.0	20.4	II a ?	3	K=H	1	F. sun.	1.5	40.8	46.1	51.0	- 3.0
2.5	16.6	II a 8741	2	K=H	1	F. ? sun	1.2	33.2	46.4	58.6	- 0.6

Fw. 8.0 9.0 — Fch. 9.0

Plate 1091.

22.7	18.1	I	5	K=H	1	—	11.4	36.2	41.0	76.5	- 1.3 - 2.4
22.6	19.1	I ?	3	H	1	—	11.3	38.2	41.1	74.5	- 3.0
21.9	10.7	II ?	2	K=H	1	—	11.0	21.4	41.4	91.3	+ 1.9
? 22.2	24.2	I d?	10	K=.5H ?	4	F. sun.	11.1	48.4	41.3	64.3	- 6.9
21.3	18.4	I	5	H	1	—	10.6	36.8	41.8	75.9	- 2.5
20.5	14.1	II	3	K=2.0H	2	F.	10.2	28.2	42.2	84.5	+ 0.5
19.2	13.8	I	2	H	1	—	9.6	27.6	42.8	85.1	+ 0.6
19.5	21.3	I	7	K=.5H	2	F.	9.8	42.6	42.6	70.1	- 2.9
18.4	20.2	III	19	K=H	1	F.	9.2	40.4	43.2	72.3	- 2.4
17.2	19.3	I ?	8	K=.5H	2	F.	8.6	38.6	43.8	74.1	- 2.1
17.5	19.8	I	7	H	2	F.	8.8	39.6	43.6	73.1	- 2.4
17.4	20.1	I	5	K=H ?	1	+	8.7	40.2	43.7	72.5	- 2.5

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Means 4

Cou

			No.	R.A.	Decl.	Magn.	H	V	H'	Red. to 1900 -	Br.	Br.
			985	5L 19.7	+ 34° 23'	5.3	34.9	38.0	31.0	5 21.0 + 34 24	6.0	6.4
9	3.9	6.1	Dm.	~~1289~~	~~5 18.2 + 33 49~~	7.1	33.4	37.4	29.5		6.3	6.7
			Dm.	1040	5 17.2 + 34 13	6.6	33.2	37.4	29.3	5 20.2 + 34 18		
9	3.9	6.0		~~984~~	~~5 19.7 + 34 24~~	5.3	35.7	39.6	31.8		5.6	6.0
3	1.3	2.4		934	5 8.3 + 34 11	5.9	32.9	37.6	31.6	5 9.7 + 34 12	5.4	5.8
1	0.3	0.5		904	5 0.8 + 24 7	5.5	32.0	27.5	32.1	5 2.0 + 24 8	5.2	5.6
5	1.7	2.5	Dm.	1077	4 51.0 + 44 11	7.5	87.2	37.5	89.7	4 54.2 + 44 13	6.4	6.8
5	3.5	5.4	Dm.	1031	5 15.6 + 34 42	7.0	32.8	37.4	29.3	5 18.6 + 34 45	6.8	7.2
				994	5 9.6 + 34 44	7.8	31.8	37.4	29.7	5 12.6 + 34 47		
3	2.1	3.3	Dm.	~~1480~~	~~5 11.6 + 44 56~~	7.4	33.8	47.6	30.5		6.5	6.9
5			Dm.	~~1052~~	~~4 44.4 + 44 48~~	7.0	85.6	47.4	79.1			
3	2.9	4.5		872	4 50.8 + 24 52	5.7	91.0	27.5	92.3	4 52.0 + 24 54	5.5	5.9
7	5.1	7.9		992	5 21.9 + 25 3	5.4	33.9	27.4	31.2	5 23.1 + 25 4	5.4	5.8
8	1.2	1.8		932	5 7.8 + 45 52	0.2	33.4	47.7	31.6	5 9.3 + 45 54	B.	B.
9	0.9	1.5	Dm.	973	4 56.3 + 35 44	6.5	89.3	37.5	90.2	4 59.3 + 35 48	6.1	6.5
9	1.2	1.9	Dm.	1037	4 53.7 + 45 34	6.8	87.9	47.6	89.8	4 56.7 + 45 38	6.2	6.6 6.7
0	3.0	4.9	Dm.	930	4 46.7 + 35 56	6.5	87.5	37.4	90.5	4 49.7 + 36 1	6.1	6.5
6	1.1	1.5	Dm.	783	4 56.9 + 26 13	6.5	90.1	27.4	90.7	4 59.7 + 26 17		

Means 8

4	1.3	2.4		958	5 14.0 + 40 54	5.5	50.2	52.3	52.6	5 15.8 + 40 56		
0	1.8	3.0		947	5 11.8 + 40 58	5.3	50.0	52.3	53.0	5 13.3 + 40 59		
9	1.9	3.1	Dm.	1048	5 31.2 + 31 16	6.4	52.6	42.3	50.7	5 34.1 + 31 18	6.0	6.8
9	4.2	6.9		896	4 58.1 + 41 4	3.3	106.5	52.2	113.4	4 59.5 + 41 7	3.7	4.5
5	1.5	2.5		954	5 13.4 + 41 41	5.1	50.2	52.3	52.7	5 14.7 + 41 43	5.0	5.8
5	0.5	0.7		1001	5 24.6 + 32 6	5.0	52.8	42.3	52.3	5 26.2 + 32 8	5.0	5.8
6	0.6	0.9	Dm.	1028	5 24.0 + 32 42	6.7	51.6	42.3	51.0	5 26.9 + 32 44	6.2	7.0
9	2.9	4.9		930	5 7.6 + 32 33	5.2	50.2	42.4	53.1	5 8.8 + 32 35	5.9	6.7
4	2.4	4.2		942	5 10.3 + 33 15	5.0	50.7	42.4	53.1	5 11.6 + 33 17	6.3	7.1
1	2.1	3.6		949	5 12.1 + 33 50	5.1	50.7	42.4	52.8	5 13.4 + 33 52	5.3	6.1
2	2.4	3.9		946	5 11.1 + 33 37	5.3	50.7	42.4	53.1	5 12.4 + 33 39	5.5	5.9
				1002	5 8.8 + 33 36	6.5	49.0	42.3	51.5	5 11.8 + 33 39		
5	2.5	4.3	Dm.	~~1008~~	~~5 9.5 + 32 35~~	6.2	49	42.3	52.2		6.8	

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Plate 1091.

	V	H	Type.	No. Lines	K	Focus	Other Lines.	V.	H.	V	H	Correc.
	16.4	16.5	I	6	K	1	F.	8.2	33.0	44.2	79.7	- 0.9
	16.4	20.9	II ?	3	K=H	1	F.	8.2	41.8	44.2	70.9	- 3.0
	15.5	13.8	I	8	K=H	1	F.	7.8	27.6	44.6	85.1	+ 0.6
?	13.2	20.1	II a ?	3742 X 9	K=H	2. a	F. Lum.	6.6	40.2	45.8	72.5	- 4.5
?	11.0	22.1	II a ?	3743 2	K=H	1	F? Lum.	5.5	44.2	46.9	68.5	- 6.7
	10.4	17.4	III	X 3	X K=H	1	F.	5.2	34.8	47.2	77.9	- 1.3
	10.2	19.0	II ?	3 ?1	K=H	1	F. ?	3.1	38.1	47.3	74.7	-2.4
	10.9	21.8	II a ?	3744 X 9	K=H	1	F Lum.	5.4	43.6	47.0	69.1	- 4.7 4.2
	10.2	7.0	III	X 3	X K=H	1	F.	5.8	14.0	47.3	98.7	+ 5.1
	9.6	13.5	I		K=H	1	—	4.8	27.0	47.6	85.7	+ 1.5
	9.0	11.6	II ?	X 3 2	K=H K=H	1	F —	4.5	23.2	47.9	89.5	+ 2.1
	8.2	21.8	I	9	K=.2 H	2	F.	4.1	43.6	48.3	69.1	- 4.7
?	6.5	7.0	III b	3745 3	K=H	1	F. Lum.	3.2	14.0	49.2	98.7	+ 5.5
	6.5	7.9	III ?	3	K=H	1	F.	3.2	15.8	49.2	96.9	+ 5.1
	5.4	10.5	I	7	K	2	F.	2.7	21.0	49.7	91.7	+ 4.7
	5.0	19.6	II a	3746 3	K=1.5 H ?	2	F Lum.	2.3	39.2	49.9	73.5	- 3.1
	3.2	18.1	I	7	K	2	F.	1.6	36.2	50.8	76.5	- 2.4
	3.0	19.1	I	7	K=.2 H	2	F.	1.5	38.2	50.9	74.5	- 2.9
?	2.6	24.3	I d ?	10	K=H ?	4	F. —	1.3	48.6	51.1	64.1	- 6.9

Fmw. & c. F. ch.

Plate 1025.

	7.6	7.0						7.8				
	23.0	19.0	I ?	4	K	2	—	11.5	38.0	26.0	33.6	- 1.2
	21.8	18.4	I	8	?	2	F.	10.9	36.8	26.6	34.8	- 0.5
	21.0	20.1	I	7	K=.5 H	1	F.	10.5	40.2	27.0	31.4	- 1.7
	20.8	20.4	I	6	K=H	1	F.	10.4	40.8	27.1	30.8	- 0.9
	20.6	22.7	I	5	K	1	—	10.3	45.4	27.2	26.2	- 1.2
	19.8	13.0	I	9	K	2	F.	9.9	26.0	27.6	45.6	+ 0.6
∴	19.5	15.5	I	8	K=.5 H	1	F.	9.8	31.0	27.7	40.6	- 0

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Mean 8

			No.	R.A.	Dec.	Magn.	H	V	H'	Red. to 1900	Bi Br.
		Dm.	1040	5 17.2	+ 34 15	6.6	50.2	42.4	51.1	5 20.2 + 34 18	
0.9	1.3		~~984~~	~~5 19.7~~	~~+ 34 23~~	~~5.3~~	~~52.7~~	~~42.6~~	~~53.6~~		5.8 6.6
3.0	5.1		934	5 8.3	+ 34 11	5.9	50.1	42.4	53.1	5 9.7 + 34 12	5.9 6.7
0.6	1.1	Dm.	1083	5 24.0	+ 34 37	6.9	51.6	42.4	51.0	5 27.0 + 34 39	6.0 6.8
2.9	4.5		932	5 7.8	+ 45 52	0.2	48.0	52.5	52.5	5 9.3 + 45 54	B B.
4.5	6.7		908	5 1.8	+ 46 49	5.6	46.0	52.3	52.7	5 3.3 + 46 50	5.8 6.6
1.3	2.3		965	5 16.5	+ 37 16	5.2	51.3	42.5	52.6	5 17.9 + 37 17	6.0 6.8 6.4 7.2
2.4	3.9	Dm.	1146	5 10.9	+ 37 17	7.2	48.9	42.4	51.3	5 14.0 + 37 20	6.2 7.0
			~~908~~	~~5 1.8~~	~~+ 46 49~~	~~5.6~~	~~53.4~~	~~52.2~~	~~62.1~~	~~5 3.3 + 46 50~~	
4.2	6.7	~~Dm.~~	~~970~~	~~5 59.9~~	~~+ 46 47~~	~~6.0~~	~~1035~~	~~52.2~~	~~110~~		6.0 6.8
		Dm.	1047	5 4.0	+ 36 51	7.0	47.6	42.2	51.8	5 7.0 + 36 55	6.0 6.9 54.0 + 36.8
5.1	7.7		1072	5 43.0	+ 37 16	5.2	57.0	42.4	51.9	5 44.2 + 37 16	6.5 7.8 — — —
0.9	1.5		1013	5 27.2	+ 47 40	6.1	54.2	52.5	52.7	5 28.7 + 47 40	5.9 6.7
2.1	3.1	Dm.	1275	5 29.7	+ 37 54	7.0	52.9	42.4	50.8	5 34.8 + 37 56	6.2 7.0 7.2
4.7	6.9		922	5 5.2	+ 38 20	4.9	48.8	42.4	53.5	5 6.6 + 38 22	4.5 5.3
5.5	8.4		1073	5 43.2	+ 39 7	4.2	57.2	42.3	51.9	5 44.6 + 39 7	5.0 5.8 5.3 6.1 — — —
5.1	7.3		1063	5 40.9	+ 39 8	4.6	56.7	42.3	51.6	5 42.3 + 39 9	5.3 6.1 5.4 6.2
3.0	4.7		1052	5 36.6	+ 49 46	5.4	57.6	52.5	52.9	5 38.2 + 49 47	5.0 5.8
3.1	4.9		944	5 10.7	+ 40 0	5.0	49.9	42.5	53.0	5 12.1 + 40 2	5.0 5.8
2.4	3.3		958	5 14.0	+ 40 54	5.5	50.2	42.5	52.6	5 15.8 + 40 56	5.2 6.0 512.6+40 53
2.9	4.5		947	5 11.8	+ 40 58	5.3	50.0	42.5	52.9	5 13.3 + 40 59	5.1 5.9 — ~~5 10.1+40 56~~
			~~896~~	~~5 54.1~~	~~+ 40 54~~	~~4.0~~	~~52.7~~	~~42.2~~	~~109.7~~		
6.9	10.2		896	4 58.1	+ 41 4	3.3	106.7	42.4	113.6	4 59.5 + 41 7	3.4 4.2 — — — —
					+						
					+						Mean 6
0.6	1.2		1037	5 32.3	+ 25 50	4.9	70.3	37.3	71.5	5 33.5 + 25 50	— — — —
0.5	1.1		1044	5 34.4	+ 16 29	4.9	71.2	27.4	71.7	5 35.5 + 16 29	6.0 5.4 — —
0.9	1.7	Dm.	870	5 28.1	+ 26 50	6.7	68.3	37.3	70.0	5 30.9 + 26 52	6.4 5.8 — — —
0.9	1.7		1029	5 30.1	+ 16 58	5.4	70.9	27.4	71.8	5 31.3 + 16 59	6.4 5.8
1.2	2.5		1004	5 25.2	+ 16 58	5.5	70.6	27.3	71.8	5 26.4 + 16 59	6.2 5.6
0.3	0.6		1084	5 45.8	+ 27 36	4.5	71.8	37.5	71.2	5 47.0 + 27 35	5.2 4.6
0	0.1		1060	5 40.4	+ 17 41	5.5	71.4	27.5	71.4	5 41.6 + 17 42	6.4 5.8

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Plate 1025.

V	H	Type	No. Lines	K	Focus	Other Lines.	V.	H.	V	H	Correc.
17.1	11.6	I	6	N	1	F?	8.6	23.2	28.9	48.4	+ 1.2
17.3	17.0	II? II	2 2	K=H K=H	1	— —	8.6	34.0	28.9	37.6	- 0.5
17.0	17.6	I I	5 6	N N	1 1	F. F?	8.5	35.2	29.0	36.4	- 0.5
17.8	22.1	II a	87H7 3	K=H	2	F. seen	8.9	44.2	28.6	27.4	- 1.2
17.7	22.7	III ?	3	K=H	1	F	8.8	45.4	28.7	26.2	- 1.3
16.2	18.2	I	8	N	2	F.	8.1	36.4	29.4	35.2	- 1.2
16.6	19.1	I?	5	N	2	F.	8.3	38.2	29.2	33.4	- 1.5
15.5	8.0	I	8	N	2	F.	7.8	16.0	29.7	55.6	+ 1.2
15.5	12.1	I	3	N	2	F?	7.8	24.2	29.7	47.4	+ 0.6
15.3	13.3	I	5	K=.2 H	1	F.	7.6	26.6	29.9	45.0	+ 0.3
15.9	13.5	I I	5 H	N K=H	1 1	— —	8.0	27.0	29.5	44.6	+ 0.3
15.8	20.9	I ? I	3 H	N K=H	1 1	F —	7.9	41.8	29.6	29.8	- 1.1
14.6	7.8	II ?	87H8 3 ?	K=H	2	F seen	7.3	15.6	30.2	56.0	+ 1.3
14.5	12.3	II a	87H9 3	K=.2 H	2	F seen	7.2	24.6	30.3	47.0	+ 0.6
14.4	12.8	I I	6 7	N N	1 1	— —	7.2	25.6	30.3	46.0	+ 0.5
14.1	19.3	I	9	K=.2 H	2	F.	7.0	38.6	30.5	33.0	- 1.8
14.0	21.9	I	7	N	1	F.	7.0	43.8	30.5	27.8	- 1.3
13.4	15.1	I	8	N	2	F.	6.7	30.2	30.6	41.4	- 0
13.8	23.5	I ? I	4 H	N K=H	1 1	— —	6.9	47.0	30.6	24.6	- 1.7
12.9	9.7	I d?	7	N	1	F —	6.4	19.4	31.1	52.2	+ 2.3
12.7	14.8	I	3	N	1	—	6.3	29.6	31.2	42.0	+ 0
12.8	18.2	I I	4 5	N K=H	1 1	— —	6.4	36.4	31.1	35.2	- 1.3
12.5	18.5	I	7	N	1	F.	6.2	37.0	31.3	34.6	- 1.5
12.9	20.0	I	11	N	1	F.	6.4	40.0	31.1	31.6	- 1.1
11.7	9.9	I I	H	N	1 1	F. —	5.8	19.8	31.7	51.8	+ 1.2
11.7	12.4	I	8	K=.2 H	2	F.	5.8	24.8	31.7	46.8	+ 1.2
11.5	14.6	I? I	3 4	? K=H	1 1	F. —	5.8	29.2	31.7	42.4	+ 0.2
11.5	19.2	I	7	N	1	F.	5.8	38.4	31.7	33.2	- 1.1

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Mean 6

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			No.	R.A.	Dec.	Magn.	H	V	H'	Red. to 1900	Br.	Br
0.6	1.2	Dm.	952	5 47.3	+ 28 55	6.5	70.5	37.5	69.3	5 50.2	+ 28 36	6.6	6.0
0.5	0.9	Dm.	938	5 35.8	+ 18 47	7.8	69.8	27.4	70.3	5 38.4	+ 18 49	7.2 7.2	6.6
0.5	1.1	Dm.	923	5 34.4	+ 18 55	7.1	69.6	27.4	70.1	5 37.0	+ 18 57	6.5 6.6	5.9
1.2	2.5		1008	5 26.5	+ 18 28	5.3	70.7	27.4	71.9	5 27.6	+ 18 29	6.2	5.6
1.3	2.9		1003	5 25.2	+ 18 30	4.6	70.6	27.3	71.9	5 26.4	+ 18 32	6.9 7.2	6.3 6.6
0.6	1.2	Dm.	953	5 32.1	+ 29 24	7.0	68.5	37.5	69.7	5 33.0	+ 29 26	5.9	5.3
			954	5 32.1	+ 29 25	7.5	68.5	37.5	69.7	5 33.0	+ 29 27		
0.7	1.5	Dm.	947	5 30.1	+ 29 8	6.2	68.3	37.4	69.8	5 33.0	+ 29 10	6.2	5.6
1.2	2.7		1119	5 56.4	+ 19 42	5.1	72.4	27.5	71.2	5 57.6	+ 19 41	5.7	5.1
0.6	1.1		1090	5 47.9	+ 19 44	5.8	72.1	27.5	71.5	5 49.1	+ 19 44	6.0	5.4
0.3	0.7		1081	5 45.3	+ 19 50	6.1	71.9	27.4	71.6	5 46.3	+ 19 50	6.7	6.1
												5 43.8	+ 19 49
0.3	0.6	Dm.	1106	5 43.3	+ 19 29	6.8	70.3	27.5	70.0	5 46.0	+ 19 30	6.9 6.9	6.3
1.1	2.4	Dm.	972	5 27.5	+ 19 27	7.5	69.3	27.3	70.4	5 30.2	+ 19 29	7.0 7.0	6.4
1.3	2.9		1122	5 56.8	+ 20 9	4.8	72.4	27.4	71.1	5 58.0	+ 20 8	5.7	5.1
0.6	1.1		1089	5 47.3	+ 20 16	4.6	71.9	27.5	71.3	5 48.5	+ 20 16	5.6	5.0
0.5	1.1	Dm.	1156	5 44.7	+ 20 16	7.2	70.3	27.5	69.8	5 47.4	+ 20 17	6.6 6.6	6.0
0.9	1.8		1032	5 30.9	+ 30 25	5.6	69.5	37.4	71.3	5 32.2	+ 30 26	6.2	5.6
1.3	2.9	Dm.	989	5 25.0	+ 20 22	6.3	68.8	27.4	70.1	5 27.7	+ 20 24	6.4	5.8
0	0.1	Dm.	1105	5 39.7	+ 20 49	7.3	69.9	27.5	69.9	5 42.4	+ 20 50	6.1	5.5
1.7	3.5	Dm.	969	5 21.6	+ 20 26	7.5	68.6	27.3	70.3	5 24.3	+ 20 29	6.8 6.9	6.2
1.1	2.3	Dm.	1164	5 51.8	+ 31 1	6.5	71.2	37.4	68.9	5 54.7	+ 31 2	6.3	5.7
			1003	5 40.5	+ 21 5	7.9	70.1	27.4	70.1	5 43.2	+ 21 6		
0.0	0.1	Dm.	~~1115~~	~~5 41.1~~	~~+ 31 1~~	~~8.0~~	~~70.7~~	~~37.3~~	~~70.7~~			6.9	6.3
0.7	1.3	Dm.	1056	5 32.0	+ 31 6	8.1	68.4	37.5	69.7	5 34.9	+ 31 8	7.0 6.9	6.4
0.9	1.5	Dm.	1048	5 31.2	+ 31 16	6.4	68.2	37.5	69.7	5 34.1	+ 31 18	6.3	5.7
1.1	2.3		1032	5 30.5	+ 21 4	3.0	70.5	27.5	71.6	5 31.7	+ 21 5	4.1	3.5
1.2	2.4	Dm.	1072	5 51.0	+ 21 35	7.2	70.8	27.4	69.6	5 53.7	+ 21 36	6.8 6.7	6.2
0.6	1.2	Dm.	1139	5 45.6	+ 31 40	6.2	70.4	37.5	69.2	5 48.5	+ 31 41	6.8	5.7
1.1	2.2	Dm.	1111	5 40.5	+ 31 44	7.0	69.7	37.5	69.5	5 43.4	+ 31 45	6.7 6.7	6.1
1.1	1.8	Dm.	918	5 30.8	+ 21 40	7.0	69.2	27.5	70.3	5 33.5	+ 21 42	6.3	5.9

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Plate 1025.

	V	H	Type	No. Lines	K	Focus	Other Lines.	V.	H.	V	H	Correc
	10.2	9.0	I	5	H	1	F,	5.1	18.0	32.4	53.6	+ 1.3
?	10.4	21.6	I d?	6	H	1	F,	5.2	432	32.3	28.4	- 3.0
	10.7	21.8	II a? 3750	3	H	1	F seen	5.4	436	32.1	28.0	- 3.1
	9.7	9.1	II	2	K=H	1	—	4.8	18.2	32.7	53.4	+ 2.7
∫ ∝	9.2	9.6	I ? I	4	H	K=H	1 1	F, —	4.6	19.2	32.9	52.4	+ 1.2
	9.5	21.5	I	6	H	1	—		4.8	43.0	32.7	28.6	- 3.0
	8.5	7.9	II ?	2	K=1.2H	2	F? N		4.2	15.8	33.3	55.8	+ 1.8
∫ ∝	8.8	10.3	II ? II	2	K=H	K=H	1 1	F? F	4.4	20.6	33.1	51.0	+ 2.4
?	8.8	17.4	II b 3751		H	1	seen		4.4	34.8	33.1	36.8	- 0.6
	8.5	18.1	I		H	1	—		4.2	36.2	33.3	35.4	- 0.9
	7.8	8.1	I		H	1	F		3.9	16.2	33.6	55.4	+ 3.5
∫ ? ∝	8.0	16.6	II a? 3752 II a? 3?	2	K=H	K=H	1 1	F? F seen	4.0	33.2	33.5	38.4	- 0.9
	7.1	21.0	I	8	H	2	—		3.6	42.0	33.9	29.6	- 1.5
	6.5	11.2	II ?	x2	K=H	1	—		3.2	22.6	34.3	49.0	+ 1.1
	6.1	14.9	III b 3753	3	K=H	1	F seen		3.0	29.8	34.5	41.8	+ 0
∫ ∝	6.6	15.8	II II	2	K=H	K=H	1 1	F? —	3.3	31.6	34.2	40.0	- 0.3
	6.2	24.1	I		K=H	1	F?		3.1	48.2	34.4	23.4	- 5.1
∫ ∝	5.9	11.0	II ? II	3	K=H	K=H	1 1	F F	3.0	22.0	34.5	49.6	+ 1.1 + 2.1
	5.7	21.3	I	7	H	J	—		2.8	42.6	34.7	29.0	- 3.3
	5.7	21.9	I ?		H	1	—		2.8	43.8	34.7	27.8	- 1.8
∫ ∝	4.1	8.0	I ? I?	3	H	K=H	1 1	— F?	2.0	16.0	35.5	55.6	+ 4.1
?	4.8	23.8	I d?	6	?	2	F?		2.4	47.6	35.1	24.0	- 2.5
	3.3	10.8	I	9	H	3	F		1.6	21.6	35.9	50.0	+ 1.2
∫ ∝	3.3	16.2	I ? I?	4	H	K=H	1 1	— —	1.6	32.4	35.9	39.2	- 0.3
	3.4	19.0	I	10	K=1.2H	2	F		1.7	38.0	35.8	33.6	- 1.2

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Mean 6 cov.

			No.	R.A.	Dec.	Magn.	H	V	H'	Red. to 1900.	Bv	Br.
1.3	2.9	Dm.	1140	5 52.9	+ 22 24	6.7	70.9	27.5	69.6	5 33.6+22.24	5.9	6.5
		Dm.	1027	5 23.8	+ 32 11	9.5	67.0	37.4	70.0	5 26.7+32.13	5.9	6.5
1.5	3.0		~~1001~~	~~5 24.6~~	~~+ 32 6~~	~~5.0~~	~~68.8~~	~~37.3~~	~~71.8~~			
1.5	3.1	Dm.	~~1003~~	~~5 23.6~~	~~+ 31 46~~	~~7.0~~						
			1001	5 24.6	+ 32 6	5.0	68.8	37.5	71.9	5 26.2+32.8	5.1	5.7
1.3	2.7	Dm.	1166	5 53.4	+ 32 38	6.5	71.6	37.4	68.9	5 56.3+32.38	6.1	6.7
1.2	2.5	Dm.	1135	5 51.9	+ 22 53	7.0	71.1	27.5	69.9	5 54.6+22.54	6.3	6.9 7.0
1.5	3.0	Dm.	1028	5 24.0	+ 32 42	6.7	67.0	37.5	70.0	5 26.9+32.44	6.1	6.7
1.8	3.6		1121	5 56.8	+ 23 16	4.3	72.6	27.5	70.8	5 58.0+23.16	5.2	5.8
1.2	2.4	Dm.	1209	5 50.7	+ 33 7	6.9	71.3	37.5	68.9	5 53.7+33.8	6.3	6.9 6.9
0.6	1.1		1049	5 36.0	+ 23 9	6.0	70.8	27.6	71.4	5 37.2+23.10	5.7	6.3
0.9	1.5	Dm.	1007	5 33.1	+ 23 14	6.8	69.3	27.4	70.2	5 33.8+23.16	5.9	6.5
1.7	3.5	Dm.	1236	5 56.0	+ 33 36	6.3	72.2	37.5	69.7	5 59.0+33.36	5.7	6.3
0.5	0.9	Dm.	1139	5 35.5	+ 33 33	7.0	68.7	37.6	69.6	5 38.3+33.33	6.3	6.9 6.9
1.5	3.0		1016	5 28.1	+ 23 58	5.4	70.1	27.6	71.6	5 29.3+23.58	5.3	5.9
1.1	1.9		1094	5 49.6	+ 24 14	6.0	72.2	27.4	71.1	5 50.9+24.14	6.0	6.6
0	0.1		1067	5 41.7	+ 24 33	5.1	71.5	27.6	71.5	5 42.9+24.32	5.6 5.8	6.2 6.4
0.2	0.3	Dm.	1172	5 37.4	+ 34 15	7.7	69.0	37.5	69.3	5 40.4+34.16	6.2	6.8 6.9
		Dm.	1040	5 17.2	+ 34 15	6.6	68.4	37.3	70.5	5 20.2+34.18		
2.5	5.1		~~984~~	~~5 19.7~~	~~+ 34 23~~	~~5.3~~	~~69.9~~	~~37.5~~	~~73.0~~		5.9	6.5
			1039	5 48.7	+ 24 35	7.5	70.7	27.6	69.6	5 31.3+24.36		
1.1	2.1	Dm.	~~1231~~	~~5 50.8~~	~~+ 34 29~~	~~6.7~~	~~72.8~~	~~37.5~~	~~70.7~~		6.3	6.9 7.1
1.7	3.3	Dm.	1083	5 24.0	+ 34 37	6.9	66.6	37.4	69.9	5 27.0+34.39	5.9	6.5
1.8	3.7	Dm.	854	5 24.6	+ 24 31	7.0	68.4	27.3	70.2	5 27.4+24.33	6.3	6.9
2.1	4.1	Dm.	1334	5 56.4	+ 35 24	6.1	72.4	37.4	68.3	5 59.4+33.24	6.3	6.9 6.8
2.5	4.8		992	5 21.9	+ 25 3	5.4	69.5	27.4	72.0	5 23.1+25.4	5.4	6.0
1.2	2.4		1099	5 50.6	+ 25 56	5.1	72.2	27.5	71.0	5 51.8+25.57	4.9	5.5
0.3	0.7	Dm.	963	5 36.9	+ 25 51	7.7	69.3	27.4	69.6	5 39.7+25.53	6.4	7.0 6.9
1.2	2.4		1037	5 32.3	+ 25 50	4.9	70.3	27.5	71.5	5 33.5+25.50	5.2	5.8

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Fw. ∗c. 6.3 6.2

Fclv. 7.3

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Plate 1026.

V	H	Type	No. Lines	K	Focus	Other Lines.	V	H	V	H	Correc.
20.4	10.8	I	8	N	5	F.	10.2	21.6	47.3	48.8	+ 2.5
19.0	11.2	~~II?~~ I	~~4b~~	K = H	1	— F	9.5	22.4	48.0	48.0	+ 3.9
19.4	19.3	II a 3754	2	K = H	1	— seen	9.7	38.6	47.8	31.8	- 4.2
17.8	8.2	II a? 3755	~~2~~	K = ~~=~~ H	1	— seen	8.9	16.4	48.6	54.0	+ 4.7
17.8	13.9	I I	H	K N	1 1	F. —	8.9	27.8	48.6	42.6	+ 0.7
17.1	7.7	I	K = 2 H	1	—		8.6	15.4	48.9	55.0	+ 7.3
? 16.8	14.2	III bc 3756	3	K = 1.2 H	3	F. bright	8.4	28.4	49.1	42.0	+ 0.5
16.8	15.1	III bc 3757	1 3	K = H	2	F bright seen	8.4	30.2	49.1	40.2	- 0.1
15.0	10.8	I	8	N	2	F.	7.5	21.6	50.0	48.8	+ 4.5
15.1	11.9	III III	2 2	K = H K = H	1	F? —	7.6	23.8	49.9	46.6	+ 3.0
15.9	13.8	I	7	K = 2 H	2	F.	8.0	27.6	49.5	42.8	+ 0.9
15.4	15.0	I I	N N		1 1	— —	7.7	30.0	49.8	40.4	+ 0
15.5	16.1	I	N		2	—	7.8	32.2	49.7	38.2	- 1.3
15.4	22.0	III? III	3 2	K = H K = H	1	F. —	7.7	44.0	49.8	26.4	- 4.9
14.2	13.5	II? IIa? 3759a	2 2	K = H K = H	1	— seen	7.1	27.0	50.4	43.4	+ 1.1
14.1	16.2	I	6	K = 2 H	1	—	7.0	32.4	50.5	38.0	- 0.9
13.4	11.7	I ? I	4	H K = H K = H	1 1	— —	6.7	23.4	50.8	47.0	+ 2.4
13.4	18.0	II ? II	2 2	K = H K = H	1 1	— —	6.7	36.0	50.8	34.4	- 2.3
12.3	7.5	III III	3 2	K = H K = H	1	F. F?	6.2	15.0	51.3	55.4	+ 8.4
12.8	11.8	I I 3758	6	N N	2 1	— —	6.4	23.6	51.1	46.8	+ 3.6
? 12.4	12.6	II a? II a	2 2	K = H K = H	1	F? seen	6.2	25.2	51.3	45.2	+ 1.8
12.1	14.8	III III	~~2~~ 2	~~K = H~~ K = H	1	— —	6.0	29.6	51.5	40.8	+ 0.3
12.8	15.4	~~II~~ II	2 2	K = H K = H	1 1	— —	6.4	30.8	51.1	39.6	- 0.5
12.2	15.8	III III	2 2	K = H K = H	1 1	— —	6.1	31.6	51.4	38.8	- 1.1
12.5	18.7	~~III~~ ? III	~~3~~ 3	~~K = H~~ K = H	1 1	F F	6.2	37.4	51.3	33.0	- 2.7
12.2	21.8	III ?	3	K = H	1	F.	6.1	43.6	51.4	26.8	- 5.1
11.2	6.0	I I	3 4	N N	1 1	— —	5.6	12.0	51.9	58.4	+ 6.9
11.5	7.7	I I	3 3	N N	1 1	— —	5.8	15.4	51.7	55.0	+ 5.5

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Means

		No.	R.A.	Dec.	Magn.	H	r	H'	Red. to 1900		Br.	Br.
2.5	4.1		1104	5 51.5	+ 37 12	2.7	73.1	47.4	70.6	5 52.9 + 37 13	✓	4.4	3.5
2.4	3.9		1106	5 51.9	+ 47 52	5.5	74.3	57.4	70.4	5 53.4 + 47 54	✓	6.6	5.7
2.7	4.2		1013	5 27.2	+ 47 40	6.1	65.8	57.4	70.0	5 28.7 + 47 40	✓	6.8	5.8
4.7	6.9		1123	5 58.4	+ 38 30	5.3	74.8	47.4	70.1	5 59.6 + 38 29	✓	6.5	5.6
0.7	1.2	Dm.	1318	5 42.2	+ 38 31	7.2	70.0	47.4	69.3	5 45.3 + 38 32	✓	6.8 6.9	5.9
4.9	7.3		1139	6 2.4	+ 48 45	5.6	17.8	57.4	10.5	6 3.9 + 48 44	✓	6.6	5.7
0.5	0.9		1073	5 43.2	+ 39 7	4.2	71.6	47.5	71.1	5 44.6 + 39 7	✓	5.8 6.0	4.9 5.1
0.1	0.2		1063	5 40.9	+ 39 8	4.6	71.1	47.5	71.2	5 42.3 + 39 9	✓	6.1 6.3	5.2 5.4
2.9	4.5		1112	5 53.5	+ 49 53	6.0	75.1	57.4	70.6	5 55.6 + 49 55	✓	6.2	5.3
2.1	3.0		1097	5 50.1	+ 49 55	6.0	73.9	57.5	70.9	5 51.6 + 49 55	✓	6.8 7.0	5.9 6.1
0.9	1.3	Dm.	1435	5 42.6	+ 39 32	7.3	70.2	47.5	69.3	5 43.7 + 39 33	✓	6.4	5.5
0	0	Dm.	1416	5 38.8	+ 39 29	6.5	68.8	47.2	68.8	5 41.9 + 39 30	✓	7.2 7.1	6.3
0.9	1.3		1052	5 36.6	+ 49 46	5.4	68.8	57.6	70.1	5 38.2 + 49 47	✓	5.8	4.9
4.9	7.3	Dm.	1321	5 20.6	+ 39 43	7.7	64.6	47.4	69.5	5 23.9 + 39 46	✓	6.9	6.0
		Dm.	1322	5 20.7	+ 39 43	6.5	64.7	47.4	69.6	5 23.8 + 39 46		7.0	6.1
1.1	1.7	Dm.	1449	5 43.9	+ 40 21	7.8	70.9	47.4	69.8	5 47.1 + 40 22	✓	7.3	6.4
0.9	1.3	Dm.	1403	5 35.7	+ 40 26	6.6	68.1	47.4	69.0	5 38.9 + 40 28	✓	6.6	5.7
2.4	3.6	Dm.	1469	5 48.1	+ 40 46	7.5	71.5	47.5	69.1	5 51.3 + 40 47	✓	7.1 7.2	6.2
2.3	3.1	Dm.	1369	5 30.9	+ 40 48	7.5	66.9	47.5	69.2	5 34.1 + 40 50	✓	6.9 7.1	6.0
5.5	8.4		1145	6 4.3	+ 51 12	6.3	19.3	57.4	10.9	6 5.8 + 51 12	✓	6.7 6.9	5.8 6.0
2.4	3.6	Dm.	1139	5 48.6	+ 51 3	6.7	72.2	57.4	68.6	5 52.1 + 51 4	✓	6.3	5.4
1.8	2.5	Dm.	1304	5 45.7	+ 41 18	7.0	70.9	47.5	69.1	5 48.9 + 41 19	✓	6.5 6.6	5.6
0.1	0.3	Dm.	1117	5 39.4	+ 51 28	6.3	69.0	57.5	68.7	5 43.0 + 51 29	✓	6.9 7.2	6.0 6.3
0.3	0.5	Dm.	1112	5 37.2	+ 51 6	8.1	68.0	57.5	68.5	5 40.7 + 51 7	✓	7.0	6.1
0.6	1.1	Dm.	1111	5 35.6	+ 51 26	6.4	67.2	57.5	68.3	5 39.2 + 51 28	✓	6.8 7.0	5.9 6.1
2.7	4.2	Dm.	1240	5 28.9	+ 41 16	7.0	66.3	47.5	69.0	5 32.1 + 41 18	✓	6.9 7.1	6.0 6.2
4.1	7.5	Dm.	1206	5 20.6	+ 41 20	6.7	64.2	47.4	69.3	5 23.8 + 41 23	✓	6.7 6.9	5.8 6.0
6.9	10.2	Dm.	1392	6 3.4	+ 41 44	7.3	15.4	47.3	8.5	6 6.6 + 41 44	✓	6.9	6.0
5.5	8.3	Dm.	1369	5 58.8	+ 41 34	7.7	74.2	47.4	68.7	6 2.0 + 41 34	✓	7.2	6.3

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March 23, 1887.

Plate 1026.

V	H	Type	No. Lines	K	Focus	Other Lines.	v	H	V	H	Correc
14.1	8.3	III III	1,3 3	K K=H K=H	1 1	F, F	5.6	16.6	51.9	53.8	+ 5.3
11.8	10.5	I	8	K = .2 H	2	—	5.9	21.0	51.6	49.4	+ 5.1
11,5	13,1	I	8	K = .2 H	2	F?	5.8	26.2	51.7	44.2	+ 21.1
11.8	17.2	II II	3 2	K = H K=H	1 1	F —	5.9	34.4	51.6	36.0	- 1.3
11.5	19.5	I? I	2 3	K K	1 1	— —	5.8	39.0	51.7	31.4	- 3.3
10.0	15.8	III III	1 2	K K=H	1 1	F? —	5.0	31.6	52.5	38.8	- 0.6
10.8	16.3	II II	2 2	K = H K=H	1 1	F? F?	5.4	32.6	52.1	37.8	- 1.5
10.9	20.8	I	7	K	2	F	5.4	41.6	52.1	28.8	- 4.5
10.4	22,5	III? III	2 2	K = H K=H	1 1	F? —	5.2	45.0	52.3	25.4	- 5.9
9.4	8.4	I	8	K	2	F	4.7	16.8	52.8	53.6	+ 5.4
9.0	9.4	I	8	K = .5 H	2	F	4.5	18.8	53.0	51.6	+ 4.5
9.1	10,0	II	2	K = H	1	—	4.6	20.0	52.9	50.4	+ 4.1
9.0	17,5	II a 3759	? 2	K = H K=H	1 1	F? Seen	4.5	35.0	53.0	35.4	- 2.1
9.8	19.9	I	3	K	1	—	4.9	39.8	52.6	30.6	- 5.5
8.5	7.7	I I	2	H K=H	1 1	— F?	4.2	15.4	53.3	55.0	+ 6.0
8.3	10,2	III III	X 2 2	K=H K=H	1 1	— —	4.2	20.4	53.3	50.0	+ 3.9
8.0	13.2	I I	2 5	K K	1 1	— —	4.0	26.4	53.5	44.0	+ 2.1
8,3	17.5	III	2	K = H	1	—	4.2	35.0	53.3	35.4	- 2.9
8.2	20.9	I?	4	K = H	1	—	4.1	41.8	53.4	28.6	- 6.9
8.4	22.9	I	6	K	2	F	4.2	45.8	53.3	24.6	- 6.5
7.4	10.0	I I	3 3	K K	1 1	— —	3.7	20.0	53.8	50.4	+ 4.2
7.2	14.7	I I	5 5	K K	1 1	— —	3.6	29.4	53.9	41.0	+ 0.2
7.3	20.5	I	5	K	1	—	3.6	41.0	53.9	28.4	- 4.5
6.4	9,8	II? II	2 2	K = H K=H	1 1	— —	3.2	19.6	54.3	50.8	+ 4.5
6.0	11.3	III? III 3760	? X 2 2	K=H K=H	1 1	F? —	3.0	22.6	54.5	47.8	+ 3.5
6.6	12,3	III h c	2	K = H 1.2	3	F? Bright Seen	3.3	24.6	54.2	45.8	+ 3.3
5.4	11.6	I	12	K	1	F	2.7	23.2	54.8	47.2	+ 2.7 − 1.5
5.6	16.1	I? I	3 3	K K	1 1	— —	2.8	32.2	54.7	38.2	- 1.1

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Means 9

Cor.

		No.	R.A.	Dec.	Magn.	H	V	H'	Red. to 1900	Br.	Br.	
5.3 7.5	Dm.	135.7	5 57.1	+ 41 52	6.3	73.7	475	68.4	5 0.3 + 41 52	5.9 6.3	6.8 7.2	6.8 7.0
3.3 5.1	Dm.	1146	5 53.0	+ 51 35	6.3	74.0	575	68.9	5 36.6 + 51 35	5.5	6.4	
1.3 2.1	Dm.	1128	5 44.7	+ 51 45	7.0	70.9	576	68.8	5 48.3 + 51 46	5.6	6.5	
1.3 2.4	Dm.	1256	5 32.9	+ 41 38	7.0	67.3	475	68.6	5 36.1 + 41 40	6.0	6.9	6.8
3.3 5.1	Dm.	1231	5 26.8	+ 41 44	7.3	66.8	475	70.1	5 30.0 + 41 46	6.0	6.9	7.1
0.6 0.9	Dm.	1396	5 36.9	+ 42 28	6.8	68.5	475	69.1	5 40.1 + 42 30	6.0 6.2	6.9 7.1	6.8 7.1
1.1 1.5	Dm.	994	5 33.9	+ 52 6	8.1	66.5	575	68.0	5 37.5 + 52 8	6.0	6.9	6.7
4.5 6.6	Dm.	1218	5 23.2	+ 41 60	6.8	64.8	474	69.3	5 26.4 + 42 2	5.3	6.2	
5.9 8.5	Dm.	1298	5 18.7	+ 42 9	6.9	63.7	474	69.6	5 21.9 + 42 12	6.0 6.1	6.9 7.0	7.0 7.1
5.4 7.7	Dm.	1041 ~~1486~~	6 0.1 ~~5 59.5~~	+ 52 40 ~~+ 42 41~~	6.7 ~~6.8~~	169 ~~74.3~~	574 ~~474~~	9.2 ~~68.9~~	6 3.7 + 52 40	5.4	6.3	
4.5 6.6	Dm.	1477	5 54.6	+ 42 59	6.8	73.4	475	68.9	5 57.8 + 42 59	5.3	6.2	
4.1 5.9		1115	5 54.7	+ 42 55	6.2	74.7	475	70.6	5 56.1 + 42 56	5.7	6.6	
2.1 2.9	Dm.	1376	5 31.9	+ 42 58	7.5	66.9	475	69.0	5 33.1 + 43 0	5.8	6.7	6.7
3.9 6.5	Dm.	968	5 21.9	+ 52 32	7.9	61.7	574	67.2	5 23.5 + 52 34	6.1	7.0	
6.0 8.7	Dm.	1466 ~~1~~	5 59.2 ~~5 ~~	+ 43 10 ~~+ 43 ~~	7.4 ~~6.9~~	74.6 ~~~~	474 ~~~~	8.6 ~~10.5~~	6 2.4 + 43 10	5.9	6.8	6.7
3.9 5.7	Dm.	1421	5 52.4	+ 43 22	7.3	72.8	476	68.9	5 53.6 + 43 22	5.9 6.2	6.8 7.1	6.9 7.2
1.5 2.1	Dm.	966	5 44.6	+ 53 32	8.2	71.0	575	68.9	5 48.3 + 53 33	6.1	7.0	7.1
2.1 2.9	Dm.	934	5 29.6	+ 53 24	6.3	64.6	576	67.5	5 33.3 + 53 26	5.6 5.8	6.5 6.7	
4.8 6.9		985	5 20.2	+ 53 19	6.9	62.0	574	68.9	5 18.8 + 53 ~~17~~ 20	6.0	6.9	5 18.2 + 53 17
6.5 9.3	Dm.	1272	5 17.2	+ 43 14	6.8	63.0	474	69.5	5 20.4 + 43 17	5.4	6.3	
4.2 6.0	Dm.	1423	5 53.0	+ 43 47	8.2	73.0	475	68.8	5 56.3 + 43 47	6.2	7.1	7.4
0.2 0.3	Dm.	1362	5 40.1	+ 43 58	7.3	69.5	476	69.3	5 43.4 + 43 59	6.2	7.1	7.3
4.5 6.6	Dm.	1301	5 23.6	+ 43 50	7.2	64.6	474	69.1	5 26.8 + 43 52	5.7	6.6	
4.5 6.5	Dm.	1353	5 53.9	+ 44 16	7.4	73.5	475	69.0	5 57.2 + 44 16	6.0	6.9	6.9
3.5 4.7	Dm.	1332	5 49.7	+ 44 35	7.0	72.3	476	68.8	5 53.0 + 44 36	6.0 6.3	6.9 7.2	7.0 7.3
2.4 3.3		1093	5 49.6	+ 54 16	3.8	74.2	576	70.9	5 51.~~1~~ 3 + 54 17	4.8	5.4 5.7	5 47.6 + 54 15
2.7 4.2		1100	5 50.7	+ 44 56	2.1	73.9	476	71.2	5 52.2 + 44 57	3.1	4.0	
1.1 1.5	Dm.	1278	5 35.6	+ 44 43	7.3	67.8	475	68.9	5 38.9 + 44 45	6.3 ~~6.5~~ 7.2	7.3	

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Plate 1026.

V	H	Type	No. lines	K	Focus	Other lines.	V	H	V	H	Correc.
5.5	16.7	I	8	M	2	F.	2.8	33.4	54.7	37.0	- 2.3
5.5	17.3	I I	3 3	M M	1 1	— —	2.8	34.6	54.7	35.8	- 1.9
4.6	11.0	I I	4 3	M M	1 1	F. —	2.3	22.0	55.2	48.4	+ 3.6
4.4	12.3	I	8	K=.5H	2	F.	2.2	24.6	55.3	45.8	+ 3.5
4.6	14.7	I ? I	5 H	K=H	K=H 1	— —	2.3	29.4	55.2	41.0	+ 0.3 + 0.2
3.6	8.5	I ? I	3 3	M M	1 1	— —	1.8	17.0	55.7	53.4	+ 5.4
3.8	9.9	I ? I	3 3	M M	1 1	— —	1.9	19.8	55.6	50.6	+ 4.7
III ? 6.4, 6.6.	3.3	11.5	III h? 3761	3?	K=H?	2 F.?	sum. 1.6	23.0	55.9	47.4	+ 3.1
3.9	11.7	I	7	M	1	F.	2.0	23.4	55.5	47.0	+ 2.9
3.8	13.0.	I ?	5	M	1	—	1.9	26.0	55.6	44.4	+ 2.5
3.8	13.8	I	8	M	3	F.	1.9	27.6	55.6	42.8	+ 1.7
3.7	18.1.	I I	3 N	M M	1 1	— —	1.8	36.2	55.7	34.2	- 2.7
3.0	16.0	I	8	K=.2H	2	F.	1.5	32.0	56.0	38.4	- 1.3
? 2.5	18.1	II a? 3762	2	K=H	1	F?	sum. 1.2	36.2	56.3	34.2	- 4.1
2.6	19.4	I ?	3	M	1	—	1.3	38.8	56.2	31.6	- 5.7

F nw. + v. 8.0 7.2 F cv. 7.2

Plate 1042.

22.6	10.5	I	9	M	1	F.	11.3	21.0	21.1	30.0	+ 0.9
22.3	20.8	I	5	M	1	—	11.2	41.6	21.2	9.4	- 0.6
? 21.1	15.3	I h 3763	8	M	2	F.	sum. 10.6	30.6	21.8	20.4	- 0.1
20.7	19.1	II ?	2	K=H	1	—	10.4	38.2	22.0	12.8	- 1.1
20.3	20.9	I ?	4	M	1	—	10.2	41.8	22.2	9.2	- 1.3
18.4	8.1	II ?	2	K=H	1	F.?	9.2	16.2	23.2	34.8	+ 1.5
18.2	8.7	I ?	2	M	1	—	9.1	17.4	23.3	33.6	+ 1.5
17.7	14.8	I	3	M	1	—	8.8	29.6	23.6	21.4	+ 0
? 16.9	11.8	I h 3764	7	M	2	F.	sum. 8.4	23.6	24.0	27.4	+ 0.9
? 16.5	12.2	I h 3765	7	M	2	F.	sum. 8.2	24.4	24.2	26.6	+ 0.3
15.8	5.7	I	7	K=.2H	1	F.	7.9	11.4	24.5	39.6	+ 1.1
13.4	22.8	III III	2 2	K=H	K=H 1	— —	6.7	45.6	25.7	5.4	~~0.7~~

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Mean 9

		No.	R.A.	Dec.	Magn.	H	V	H'	Red. to 1900		Br.	Cor. Br.
4.5	2.3	Dm	932	5 32.0	+ 54 46	7.0	654	576	678	5 35.7 + 54 48	6.5	5.6
1.9	2.7	Dm.	1270	5 32.4	+ 44 46	7.3	670	476	689	5 35.7 + 44 48	7.0	7.1 6.1
3.6	5.1	Dm.	1225	5 50.6	+ 45 9	7.7	726	475	690	5 53.9 + 45 10	7.0	7.1 6.1
2.4	3.5	Dm.	1036	5 47.7	+ 55 18	6.5	723	575	688	5 51.5 + 55 19	6.5	5.6
			1022	5 39.4	+ 55 13	8.0	688	575	685	5 43.2 + 55 14		
0.2	0.3	Dm.	~~1084~~	~~5 39.5~~	~~+ 45 2~~	~~7.9~~	~~689~~	~~473~~	~~687~~		7.0	7.1 6.1
5.4	8.4	Dm.	1248	5 57.6	+ 45 33	7.0	746	474	692	6 0.9 + 45 33	7.0	7.2 6.1
4.7	6.6	Dm.	1238	5 53.8	+ 45 34	7.0	736	475	689	5 57.1 + 45 34	7.1	7.2 6.2
3.1	4.5		1102	5 51.0	+ 45 56	4.5	740	475	709	5 52.5 + 45 56	6.0 6.4	5.1 5.5
2.9	4.2	Dm.	1216	5 48.7	+ 45 36	7.2	721	476	692	5 52.0 + 45 37	6.7	5.8
1.8	2.5	Dm.	1032	5 45.5	+ 55 38	7.1	715	575	690	5 48.3 + 55 39	6.8	5.9
1.1	1.7		1079	5 44.8	+ 55 41	5.0	724	576	707	5 46.8 + 55 41	5.4	4.5 5 42.7 + 55 40
2.7	3.9	Dm	1156	5 30.0	+ 45 37	7.9	662	474	689	5 33.3 + 45 39	7.2 7.3	6.3
0.9	1.3		1051	5 36.4	+ 56 4	6.0	684	576	697	5 38.8 + 56 5	6.2	5.3 5 34.3 + 56 2
2.9	4.1	Dm.	1044	5 26.9	+ 56 16	6.9	631	575	672	5 30.7 + 56 18		
4.1	5.7	Dm.	1035	5 22.1	+ 56 9	8.0	609	575	666	5 25.9 + 56 11	6.9	6.0

Mean 7

0.5	0.9		1032	5 30.5	+ 21 4	3.0	515	324	506	5 31.7 + 21 5		
0.6	1.2		940	5 9.4	+ 11 12	5.6	510	224	516	5 10.5 + 11 14	6.5	5.8
0	0.1		987	5 20.4	+ 21 50	4.8	510	324	511	5 21.6 + 21 51	6.5	4.8
0.5	1.1		950	5 12.1	+ 21 59	5.2	503	324	514	5 13.3 + 22 0	7.0	6.3
0.6	1.3	Dm.	864	5 6.8	+ 22 7	6.8	486	323	499	5 9.5 + 22 10	7.0	6.3
0.7	1.5		1049	5 36.0	+ 23 9	6.0	522	324	507	5 37.2 + 23 10	6.9	6.2
0.7	1.5	Dm.	1007	5 33.1	+ 23 14	6.8	505	323	490	5 35.8 + 23 16	7.0	6.3
0	0	Dm.	903	5 20.4	+ 13 34	6.5	500	224	500	5 22.9 + 13 37	6.9	6.2
0.5	0.9		1016	5 28.1	+ 23 58	5.4	517	324	508	5 29.3 + 23 58	6.0	5.3
0.3	0.7		1012	5 27.1	+ 14 13	5.7	515	224	512	5 28.2 + 14 15	6.3	5.6
1.1	2.5		1061	5 40.4	+ 14 27	5.7	518	223	507	5 41.2 + 14 28	6.6	5.9
			920	5 4.8	+ 18 54	5.3	504	228		5 6.0 + 18 55	7.1 7.5	6.4 6.8

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Plate 104.

	V	H	Type	No. Lines	Ky	Focus	Other Lines.	v	H	v	H	Comm
	15.3	13.3	II?	2	K=H	1	—	7.6	26.6	24.8	24.4	+0.2
	14.4	13.9	I	5	?	1	Fe	7.2	27.8	25.2	23.2	+0.1
	14.8	14.6	I	7	N	2	Fe	7.4	29.2	25.0	21.8	+0.1
	14.6	15.3	I	5	N	1	Fe	7.3	30.6	25.1	20.4	- 0
	13.3	9.9	I	8	N	2	Fe	6.6	19.8	25.8	31.2	+1.5
	13.4	15.1	I	6	N	2	Fe	6.7	30.2	25.7	20.8	- 0
	13.7	23.8	I	7	K=H	2	Fe	6.8	47.6	25.6	34	-1.2
?	12.0	8.7	I b 3766	8	N	2	Fe seen	6.0	16.4	26.4	34.6	+1.1
	11.0	10.7	I	8	K=.52	2	Fe	5.5	21.4	26.9	29.6	+0.7
	11.2	11.1	I	8	N	2	Fe	5.6	22.2	26.8	28.8	+1.2 +0.6
	11.0	13.1	I	7	N	2	Fe	5.5	26.2	26.9	24.8	+0.3
	11.7	15.9	IIa 3769	9	K=H	1	Fe seen	5.8	31.8	26.6	19.2	-0.1
	11.7	17.1	I	3	N	1	—	5.8	34.2	26.6	16.8	-0.5
?	10.5	16.7	I a 3768	9	K=H	2	Fe seen,	5.2	33.4	27.2	17.6	-0.3
	9.3	15.4	I b 3769	7	N	2	Fe seen	4.6	30.8	27.8	20.2	- 0
	9.2	18.2	I	4	K=H	1	—	4.6	36.4	27.8	14.6	-1.1
	8.1	12.5	I?	3	N	1	Fe?	4.0	25.0	28.4	26.0	+0.5
	8.5	14.5	I	3	N	1	—	4.2	29.0	28.2	22.0	+ 0
	8.2	15.9	I?	12?	N	1	Fe	4.1	31.8	28.3	19.2	-0.3
	7.3	17.2	I	3	N	1	—	3.6	34.4	28.8	16.6	-0.9
	6.1	9.4	I	5	N	1	—	3.0	18.8	29.4	32.2	+2.3
	6.6	10.3	III?	2	K=H	1	Fe?	3.3	20.6	29.1	30.4	+2.1
	6.1	18.1	I	6	N	1	—	3.0	36.2	29.4	14.8	-1.2
	4.1	10.6	I	5	K=H	1	Fe	2.0	21.2	30.4	29.8	+1.8
	4.2	12.5	I	5	N	1	—	2.1	25.0	30.3	26.0	+0.5
?	4.8	15.5	IIa 3770	3	K=H	1	Fe seen	2.4	31.0	30.0	20.0	-0.1
	3.0	10.6	I d?	13	N	1	Fe	1.5	21.2	30.9	29.8	+0.9
	2.9	16.6	I	6	K=.5H	1	—	1.4	33.2	31.0	17.8	-0.7
2 30	2.3	9.8	I	5	K=.5H	1	—	1.2	19.6	31.2	31.4	+2.4

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Mean 7

		No.	R.A.	Dec.	Magn.	M	V	M'	Red to 1900.		Br.	Corr Br
0.2	0.6	Dm.	934	5 23.3	+ 14 49	7.0	49.9	22.4	49.7	5 25.9	+14 51	7.1	6.4
0.1	0.3	Dm.	837	5 22.1	+ 15 15	6.5	49.9	22.4	49.8	5 24.7	+15 17	6.5	5.8
0	0.1		992	5 21.9	+ 25 3	5.4	51.1	32.4	51.0	5 23.1	+25 4	5.9	5.2
0	0.1	Dm.	822	5 18.9	+ 15 8	6.5	49.5	22.4	49.5	5 21.5	+15 11	6.8	6.1
0.6	1.5		1037	5 32.3	+ 25 50	4.9	52.1	32.4	50.6	5 33.5	+25 50	5.5	4.8
0	0		990	5 20.9	+ 15 47	5.5	51.1	22.5	51.1	5 22.0	+15 48	6.2	5.5
1.2	2.5		914	5 2.8	+ 15 27	4.8	50.4	22.3	51.6	5 4.0	+15 28	6.0	5.3
1.1	2.1		1044	5 34.4	+ 16 29	4.9	52.8	22.6	50.7 49.7	5 35.5	+16 29	5.6	4.9
0.7	1.3		1028	5 30.1	+ 16 58	5.4	51.5	22.5	50.8	5 31.3	+16 59	6.4	5.7
			870	5 28.1	+ 26 50	6.7	50.3	32.4	49.1	5 30.9	+26 52		5.8
0.6	1.2	Dm.	822	5 28.7	+ 16 55	6.2	50.9	22.5	50.3			6.4	5.7
0.3	0.6		1004	5 25.2	+ 16 58	5.5	51.4	22.5	51.1	5 26.4	+16 59	6.1	5.4
0.1	0.3	Dm.	775	5 17.7	+ 16 33	7.0	49.5	22.4	49.6	5 20.3	+16 36	6.5	5.8
0.5	0.9	Dm.	765	5 15.3	+ 16 33	6.8	49.5	22.4	50.0	5 17.9	+16 36	6.5	5.8
0.3	0.6		970	5 17.4	+ 17 17	5.2	50.8	22.5	51.1	5 18.6	+17 17	6.3	5.6
0	0.1		986	5 20.2	+ 17 52	5.4	51.0	22.5	51.0	5 21.3	+17 53	6.0	5.3
0.6	1.1	Dm.	758	5 11.9	+ 27 48	6.5	48.3	32.4	49.4	5 14.7	+27 51	6.9	6.2
0.5	0.9		1003	5 25.2	+ 18 30	4.6	50.2	22.5	49.7	5 26.4	+18 32	6.3	5.6
0.0	0.1	Dm.	862	5 20.8	+ 18 15	7.0	49.8	22.4	49.8	5 23.4	+18 18	7.0	6.3
0.1	0.3		978	5 18.7	+ 28 30	1.9	50.5	32.6	50.8	5 20.0	+28 32	B.	B
0.5	0.9	Dm.	788	5 14.2	+ 28 48	7.0	48.6	32.4	49.5	5 17.0	+28 51	7.0	6.3
			954	5 32.1	+ 29 27	7.4				5 31.0	+29 27		
1.1	2.3	Dm.	953	5 32.1	+ 29 24	7.0	50.9	32.4	48.6	5 35.0	+29 26	6.4	5.7
												6.6	5.9
0.9	2.1	Dm.	947	5 30.1	+ 29 8	6.2	50.7	32.4	48.6	5 33.0	+29 10	6.7	6.0
0.6	1.2		956	5 13.6	+ 29 27	5.6	49.8	32.5	51.0	5 14.9	+29 28	6.2	5.5
0.9	1.8		1033	5 30.9	+ 30 25	5.6	52.1	32.4	50.3	5 32.2	+30 26	6.5	5.8
0.5	1.1	Dm.	989	5 25.0	+ 20 22	6.3	50.0	22.5	49.5	5 27.7	+20 24	6.7	6.0
0	0.1		983	5 19.5	+ 30 7	5.8	50.5	32.5	50.6	5 20.7	+30 7	6.6	5.9 5 17.9 +30 4
0.9	1.8		1032	5 30.5	+ 21 4	3.0	51.7	22.6	50.6	5 31.7	+21 5	4.2	3.5
			968	5 16.9	+ 31 7	6.4	50.1	32.5	50.8	5 18.2	+31 8		
0.3	0.7		969	5 16.9	+ 31 2	5.9	50.1	32.4	50.8	5 18.2	+31 3	6.5	5.8
1.1	2.4	Dm.	1048	5 31.2	+ 31 16	6.4	50.8	32.5	48.4	5 34.1	+31 18		

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