

KODAIKANAL OBSERVATORY

BULLETINS Nos. 14 to 28

VOLUME II

MADRAS
PRINTED BY THE SUPERINTENDENT, GOVERNMENT PRESS

1913

CONTENTS

NO.	PAGE
XIV. List of prominences observed between 1908 January 1 and 1908 June 30 .	1-61
XV. Radial movement in sunspots	63-69
XVI. On the curvature of lines in the spectrum formed by a plane grating ..	71-72
XVII. List of prominences observed between 1908 July 1 and 1908 December 31, with an abstract for the year	73-130
XVIII. Pressure in the reversing layer	131-134
XIX. List of prominences observed between 1909 January 1 and 1909 June 30 .	135-198
XX. Observations of Halley's Comet	199-207
XXI. List of prominences observed between 1909 July 1 and 1909 December 31, with a summary for the year	209-264
XXII. Note on the magnetic field in the sunspot of September 1909	265-267
XXIII. List of prominences observed between 1910 January 1 and 1910 June 30 ..	269-337
XXIV. List of prominences observed between 1910 July 1 and 1910 December 31, with a summary for the year	339-393
XXV. List of prominences observed between 1911 January 1 and 1911 June 30 ..	395-451
XXVI. List of prominences observed between 1911 July 1 and 1911 December 31, with a summary for the year	453-501
XXVII. On the presence of radium and the elements of the inactive group in the chromosphere	503-507
XXVIII. On the relative numbers of prominences observed on the eastern and western limbs	509-516

ABSTRACTS.

Abstract of prominences observed in 1908	127
" " " 1909	258
" " " 1910	369
" " " 1911	501

Kodaikanal Observatory.

BULLETIN No. XIV.

LIST OF PROMINENCES OBSERVED BETWEEN 1908 JANUARY 1 AND 1908 JUNE 30.

This list is a continuation of that published in Bulletin No. XIII. and contains all prominences recorded during the first six months of 1908.

The methods of observation and the observers remain the same as formerly.

The basis of the list is the set of drawings made in the hydrogen line C but this is supplemented by a detailed comparison with the photographs taken with the spectroheliograph in the K line of calcium. Most of these photographs have been taken by Mr. Evershed and most of the work of comparison has been done by Mrs. Evershed.

During the six months dealt with here the weather was on the whole favourable and the following table shows the observations made:—

										Days.
Complete visual observations	..	..	..	..	..	..	..	..	..	111
Partial do. do.	..	..	..	..	..	..	..	..	..	58
No do. do.	..	..	..	..	..	..	..	..	..	15
Complete spectroheliograph records	..	..	..	..	..	..	..	..	..	159
Partial do. do.	..	..	..	..	..	..	..	..	..	14
No do do.	..	..	..	..	..	..	..	..	..	9

It is worth noting that it is frequently possible to obtain a record of the chief prominences on photographs of the disc (foculus plates) on days that are so cloudy that it is not possible to obtain photographs of the limb (prominence plates). In such cases the record will not be complete, as only the stronger prominences will be photographed.

Date and observer	Hour I.S.T.	Base.	Latitude.		Limb.	Height.	Remarks.	
			North.	South.				
1908.	H. M.	°	°	°		"		
January 1.	S.S.	9 23	1	08	...	E	10	Broad at top.
		21		59		E	50	
		21	1	54		E	25	Low, bright, metallic. D ₁ , D ₂ , b ₁ , b ₂ , b ₃ , b ₄ bright.
		17	2	16		E	...	
		14	3		14.5	E	15	
		12	6		24	E	45	
		11	1		31.5	E	10	A Ca streak from top meets limb at lat. — 7° E.
		10	0.5		39	E	30	Slants southwards.
		8			53	E	10	
		45			86.5	E	30	Broad at top.
		44	0.5		52	W	15	
		44	0.5		49	W	20	Two prominences 70" high connected by a curved streak 90" high
		40	20		28	W	90	
			37			10	W	30	Ca.
	10 0		2		W	10		

Date and observer.	Hour L.S.T.	Base.	Latitude.		Limb.	Height.	Remarks.	
			North.	South.				
1908. January 1. —contd.	S.S.	H. M.	°	°	°	'		
		9 35	4	22	...	W	20	
		34	2	35		W	20	A short detached streak. } Connected in Ca. Narrow at top.
		32		37		W	20	
		31	7	49·5		W	75	
	10 0	1	70		W	10		
	9 27		85		W	15	Strong wind. Image very unsteady. Ca photographs 10 ^h 0 ^m and 9 ^h 6 ^m .	
January 3.	S.S.	10 48	5	39·5	...	E	25	
		23	0·5			E	25	
		9 45	0·5			E	25	
		45	1			E	25	
		11 44			55	W	30 ±	Detached.
		28	2	53		W	50	Observed during short breaks in clouds. No Ca photograph.
	25	2	58		W	25		
January 4.	K.V.S.	8 53	...	69·5	...	E	35	Ca. An arch.
		48		56		E	10	
		53		54		E	30	Ca Slants towards east.
		45		47		E	10	Faint.
		53		48		E	30	Ca Slants towards north.
		42		7·5		E	10	Needlelike.
		40	0·5	Equator.		E	15	
		53	0·5		8	E	15	Ca.
		36	1		13	E	10	
		30	1		15	E	10	
		30	1		17	E	10	
		53	1·5		45	E	15	Ca.
		53	1		66	E	15	Ca.
		53			79	E	20	Ca.
		53			67	W	100	Ca. An arch 12° broad with two small promi- nences within.
		53			35	W	10	Ca.
		53			23	W	10	Ca.
		9 25	0·5		9	W	10	Bright. D ₁ , D ₂ , b ₁ , b ₂ , b ₃ bright.
	8 53			7	W	10	Ca Meets the last prominence.	
	9 20	1·5	19		W	50	Ca streaks extend on both sides.	
	10		32		W	30	Cloudlike. Connected to limb by faint filaments.	
	8 53		40		W	20	Ca.	
	9 0	3	58·5		W	50	Filamental. Ca photographs 8 ^h 53 ^m and 8 ^h 28 ^m .	
January 5.	K.V.S.	9 11	..	71·5	...	E	90	Ca.
		11	1·5	48		E	25	Ca.
		10	1		6	E	10	
		5	0·5		30	E	10	
		5	2		33	E	30	
		2			36	E	10	
		0	1		50	E	40 & 25	
		52			24	W	15	
		50	12		3	W	55	
		28	5	58·5		W	45, 70	Ca photographs 9 ^h 11 ^m and 9 ^h 46 ^m .
	January 7.	K.V.S.	11 30	...	86	...	E	20
		15		40·5		E	60	
		10	0·5	29·5		E	30	
		10		27·5		E	20	Top meets the next prominence.
		10		24·5		E	30	
		10		21·5		E	15	
		5	1		49·5	E	20	
		5	0·5		53·5	E	25	
		10 40	1·5		83·5	E	15	
		40	9		67·5	W	40	Ca.
		40	1		39·5	W	30	
		15 28	1	Equator		W	25	Slants towards north.
		10 40	2·5	7·5		W	60	Ca.
		40		21·5		W	30	Ca.
	15 25	2	55·5		W	50	A Ca streak from this meets limb 4° further north. Ca photograph 10 ^h 40 ^m .	

Date and observer.	Hour I.S.T.	Base.	Latitude.		Limb.	Height.	Remarks.
			North.	South.			
1908.	H. M.	°	°	°		'	
January 8. S.S.	9 3	.	71.5	...	E	10	
	8 35	0.5	44	...	E	60	Ca.
	59	1	42.5		E	15	
	56	3	40.5		E	100	Slants northwards. Ca prominence only 75" high but more continuous.
	54	1.5	30		E	10	
	52	2.5	25		E	30	Slants northwards.
	35		21		E	15	Ca.
	35		12		E	10	Ca.
	47	1.5	2		E	40	A Ca streak from top meets limb at lat. - 3° E.
	44	1		36	E	10	
	35	1		59	E	15	Ca Very faint.
	39	1		84.5	E	10	About 30" high at 9h 35m.
	9 29	1.5		46	W	25	
	28	0.5		44	W	45	
	26	3		27.5	W	10	
	24	2		20	W	10	C slightly displaced to red at western end } Nearly connected in Ca.
	24	1.5	1		W	10	
	21		7		W	20	Detached.
	8 35		17		W	15	Ca.
	9 18		22		W	30	Detached. Faint.
	16		27		W	10	Faint.
11		38		W	10		
7	6	54		W	50	Ca photographs 8h 35m and 9h 4m.	
January 9. G.N.	8 52	...	53	...	E	10	Ca.
	52		49	...	E	15	Ca.
	9 5		46		E	60	
	4	2	43		E	50	
	1		32		E	15	
	8 58	5	2		E	60	
	53	2.5		6	E	60	Connected with the limb by 2 stems and also to the previous prominence by a streamer.
	52			47	E	20	Ca.
	49			80	E	35	± Detached.
	49			86	-	10	
	52			62.5	W	30	Ca.
	9 14			59	W	15	
	8 52			52	W	30	Ca.
	9 18	1.5		46	W	30	
	8 52			31	W	10	Ca.
9 11	4	12		W	40	A streamer extends to P.A. 287° in Ca.	
10		36		W	10	Extends in Ca to P.A. 308°.	
9		52		W	45	± Faint.	
9		61.5		W	30	Ca photographs 8h 52m and 9h 13m.	
January 10. S.S.	9 48	...	38	...	E	20	Detached.
	20		60.5	...	E	20	Ca.
	41	0.5	45		E	25	Slants northwards.
	33	0.5	29		E	20	Do.
	33		26		E	10	
	31	2	17		E		Low. Metallic. D ₁ , D ₂ , b ₁ , b ₂ , b ₃ , b ₄ , 5,316.8, 5,018.6 and 4,924.1 bright.
	21	3		14	E	60	Connected at top. D ₁ , D ₂ , b ₁ , b ₂ , b ₃ , b ₄ , 5,316.8, 5,018.6 and 4,924.1 bright, at base only, at Lat. -14° and -30° E.
	21	1.5		30	E	40	
	18	1		44.5	E	20	
	15	0.5		50.5	E	10	
	13			71.5	E	10	
	10 11	0.5		65.5	W	45	
	10	1.5		61.5	W	15	
	9 20	1		56	W	15	Ca.
	10 9	3		48	W	30	Top faint and narrow.
6	3.5		34	W	25		
2	2		18.5	W	20	D ₁ , D ₂ , b ₁ , b ₂ , b ₃ , b ₄ , 5,316.8, 5,018.6 and 4,924.1, bright at base	
9 0	0.5	6		W	10		
9 57	4	29.5		W	10		

Date and observer.	Hour L.S.T.	Base.	Latitude.		Limb.	Height.	Remarks.
			North.	South.			
1908.	H. N.	°	°	°		"	
January 10. S.S.	9 55	1.5	34	..	W	10	Metallic --b ₁ , b ₂ , b ₃ , b ₄ , 5, 316.8, 5, 018.6, and 4924.1, bright
—cont'd.	54		45		W	25	A short streak parallel to limb.
	52	0.5	64.5		W	90	Ca prominence extends as broken streaks from lat. + 55° to + 68° W, Ca photographs 9 ^h 20 ^m and 9 ^h 32 ^m .
January 11. K.V.S.	9 43	0.5	51	.	E	10	Ca
	43		47		E	35	Ca
	48		26		E	15	Ca.
	48		24		E	15	Ca.
	15		9		E	25	
	12			6	E	25	Bright jets. Not metallic.
	12			9	E	Low	There was a detached Ca streak over this 120" high.
	8			26	E	15	Three prominences connected to one another.
	7			30.5	E	10	
	43			73.5	E	10	Ca
	43			85.5	W	20	Ca.
	48			65.5	W	60	Ca
	48			61.5	W	30	Ca
	43			60	W	60	Ca.
	50	5		35.5	W	60	An arch.
	45			19	W	10	
	40	5		5	W	Low	Chromosphere slightly elevated.
	34	0.5	25		W	10	
	32	1	30		W	Low	
	28	2.5	60		W	20	Faint. Filamental. Ca photographs 9 ^h 43 ^m and 9 ^h 54 ^m .
January 12. S.S.	9 24	..	74.5		E	10	
	19		50		E	50	
	19		48		E	50	
	15	1.5	36		E	10	
	14		32		E	10	
	14		30		E	15	
	12	0.5	9		E	10	
	8	8		19	E	70	A Ca streak from it meets limb } Connected in Ca. at lat. -8° E.
	8	7		27.5	E	40	
	3	0.5		45	E	10	
	0			85	W	15	Very faint.
	57			88.5	W	20	Do.
	55	0.5		78.5	W	30	Do. Detached in Ca. } Tops connected in
	55	0.5		68.5	W	60	Very faint. } Ca
	50			47	W	200	Very faint. 150" at 9 ^h 16 ^m and 200" at 9 ^h 48 ^m in Ca
	45	5		37	W	50	b ₁ , b ₂ faintly reversed.
	42	0.5		14	W	15	
	40	4		7	W	10	} Connected and 40" high in Ca.
	38		20		W	15	
	35	4	37		W	25	
	32	1	52		W	30	
	30	5	59.5		W	35	
							Ca photographs 9 ^h 16 ^m and 9 ^h 48 ^m .
January 13. S.S.	9 9	...	71.5	...	E	20	
	10 8	0.5	64.5		E	25	Ca Faint.
	9 5	0.5	46		E	10	
	10 8	1.5	87		E	15	40" in Ca.
	8 57	0.5		8	E	20	
	55	1.5		25	E	20	
	51	0.5		41	E	20	
	49			48	E	50	Faint Detached,
	10 8			58.5	E	40	Ca.
	8 45			78.5	E	10	
	45	0.5		76	E	15	
	40	1		85	W	25	
	9 38	2		60.5	W	20	Very faint in hydrogen.
	35	1		49	W	15	
	29			46	W	150	Ca. A cloud connected by streaks to the last and the next prominences.

Date and observer.	Hour I.S.T.		Base	Latitude.		Limb.	Height.	Remarks.
				North.	South.			
1908.	H	M	°	°	°			
January 13. S.S.	9	34	3	.	41	W	26	
--contd.		32	3		11 5	W	25	
		30		3		W	10	
		29	3	23		W	20	
		27	2 5	27		W	15	
		26	3	36		W	25	Top flows northwards in Ca.
		20	0 5	54		W	20	A Ca cloud 130'' high floats over it.
		20	0 5	57 5		W	35	Ca photographs 9 ^h 29 ^m and 10 ^h 8 ^m .
January 14. K.V.S.	8	54	0 5	75	..	E	20	Ca.
		54		50		E	15	Ca.
	9	0	3 5	37		E	60	
		0		11		E	15	
	8	54	0 5		26	E	20	Ca. Bends eastwards.
	9	45			48	E	10	35'' high in Ca.
	8	50	0 5		71 5	E	10	
		54	8		81	W	105	Ca.
		54	0 5		60 5	W	30	Ca.
	10	20	1		58 5	W	30	Top bends downwards.
	8	54			50	W	90	Ca.
	10	35	1		44	W	60	
		30			35 5	W	20	
	8	54	2		33	W	15	Ca.
	9	20			18	W	Low.	Bright.
	8	54	2 5		15	W	15	Ca.
		54		10		W	30	Ca. Slants northwards.
		54		16		W	45	Ca.
		54	4	41		W	45	Ca. Very faint.
	10	17		45 5		W	10	Observed in a bright sky Ca photograph 8 ^h 54 ^m .
January 15. S.S.	8	23	3	38 5	...	E	120	Ca. Narrow at top.
		23	0 5	26		E	15	Ca.
	9	2	2	24		E	10	
	8	50	3 5	Equator.		E	60 ±	Very faint.
		55	6		16	E	20	} Connected by a Ca streak.
		51	1 5		31	E	20	
		23	1		34	E	15	
		47			48 5	E	25 ±	Faint.
		42	0 5		65 5	E	20 ±	Very faint.
	9	55	2 5		69 5	W	30	Narrow at top.
	8	23			53	W	60	Ca.
	9	44	2		40	W	50 ±	150'' in Ca.
		12			42	W	15	
		41			34	W	10	
		40	1		14	W	10	
		40	1		12	W	15	
		30	1 5	10		W	40	Metallic, D ₁ , D ₂ , b ₁ , b ₂ , b ₃ , b ₄ bright.
		30	1 5	14		W	25	Metallic, D ₁ , D ₂ , b ₁ , b ₂ , b ₃ , b ₄ bright.
		18	2	33 5		W	20	
		16	0 5	41		W	25 ±	Seeing poor. Ca photograph 8 ^h 23 ^m .
January 17. S.S.	10	16	1 5	56 5	...	E	45	Ca.
		16	4	38 5		E	35	Ca.
		56	1	21		E	15	
		47	0 5	1 5		E	15	
		46	2		8	E	10	
		45	7		15 5	E	25	
		12	5		31 5	E	30	
		11			48 5	E	15	
		9			73	E	20	
		8	0 5		84 5	W	15	
		27			46	W	90	Ca.
		27			44	W	15	Ca.

Date and observer.	Hour I.S.T.	Base.	Latitude.		Limb.	Height.	Remarks.
			North.	South.			
1908.	H. M.	°	°	°		"	
January 17. S.S. —contd.	10 27 27 27 27	1.5 2 1	. Equator. 32	33 18	W W W W	30 30 20 15	Ca. Ca. Ca. Ca. Observed only between P.A. 60° and 180°. Weather bad. Ca photographs { 10 ^h 18 ^m E. limb. 10 ^h 27 ^m W. limb.
January 18. K.V.S.	9 20 20 20 18 20 17 17 20 15 10 5 20 20 0 47 45 20 20 20 20	1.5 2.5 0.5 1 1 1 2 1 0.5 3	60 57 53 45.5 42.5 37 30.5 7.5 19.5 27 32.5 35.5 58 62 51 4.5 1.5 4.5 68 75.5	... 19.5 27 32.5 35.5 58 62 51 4.5 1.5 4.5 68 75.5	E E E E E E E E E E E E E E W W W W W W	20 25 25 — 05 20 Low. 60 80 15 15 35 30 10 15 100 15 15 15 40 15 20	Ca. 50" high in Ca Low jet. Ca Top extends for 4' towards north. Connected to the last in Ca Ca. A Ca streak from top extends as far as P.A. 84°. There were also other Ca streaks near base. Nearly detached cloud In Ca it is 9° long. Bends southwards. Faint. Ca. Detached. Ca Slants eastwards. Bright jet. D ₁ , D ₂ , b ₁ , b ₂ , b ₃ bright. Faint. Filamental. Ca. Ca. Ca. Ca. Ca. Ca photographs 9 ^h 20 ^m and 8 ^h 56 ^m .
January 19. S.S.	9 43 41 9 38 32 31 28 24 18 10 14 12 9 4 2 9 59 55 54 58 9 9 45	0.5 4 5 1 3 6 5 0.5 1 2 8	84 88.5 61.5 57 20 5 89.5 55.5 50.5 34 26 17.5 9 6 4.5 28 48.5 58.5	... 0.5 29 84 89.5 55.5 50.5 34 26 17.5 9 6 4.5 28 48.5 58.5	E E E E E E E E W W W W W W W W W W W W W W	10 20 80 10 15 55 20 10 15 90 ± 40 30 20 80 10 10 10 20 20 20	Low. Metallic, D ₁ , D ₂ , b ₁ , b ₂ , b ₃ , b ₄ , bright. Ca. Narrow at top 190" in Ca. Top flows as in 18 lat - 26° W. See Note. Ca. Ca. Ca photographs 9 ^h 9 ^m and 9 ^h 50 ^m .
January 20. K.V.S.	9 13 10 0 8 55 52 50 45 45 40 9 47 40 29 8 52 9 20 20	1 6 11 1 0.5 1 6 1 1 10 2 1.5	80 58 5 17 26.5 33.5 43.5 47 51 49 33.5 31 17.5 26.5 33.5 41.5	 17 26.5 33.5 43.5 47 51 49 33.5 31 17.5 26.5 33.5 41.5	E E E E E E E E E W W W W W W W W W	10 90 45 25 20 15 40 35 15 70 55 35 20 20 80 30	Faint arch Ca. Top broader. Tops connected Top is connected to the last by a Ca streak. An arch. 50" high in Ca. See Note (1). See Note (2). Ca Tops connected by Ca streaks which extend as far as P.A. 211° Ca photographs 8 ^h 52 ^m , 9 ^h 16 ^m and 10 ^h 40 ^m .

Date and observer.	Hour I S T	Base.	Latitude.		Limb	Height.	Remarks.
			North.	South.			
1908.	H M	°	°	°		'	
January 21. S.S.	9 13	5	59	..	E	100	Narrow at top.
	10		52		E	80	Ca. A streak 5° long parallel to limb.
	11	3	45		E	60	
	10	4	32		E	30	Ca.
	4	2	14		E	15	
	10	1	6		E	20	Ca.
	2	0.5		7	E	10	
	8 58	11		18.5	E	40	
	56	0.5		26.5	E	20	
	54	2		31	E	20	
	53	0.5		37	E	15	
	50	1.5		43	E	40	
	49			46	E	50	Detached } Connected in Ca. D ₁ , D ₂ , b ₁ , b ₂ , b ₃ , b ₄ slightly bright at base. Seeing poor.
	47	1.5		48.5	E	45	
	35	0.5		77	W	10	
	9 43	0.5		66.5	W	25	Faint.
	41	2		52.5	W	15	
	40	1.5		47.5	W	20	
	37			38	W	20	
	35	2		85	W	25	
	10			27	W	50	Ca. Not on photograph taken at 9h 50m.
	10			22	W	30	Ca.
	30	2	7		W	15	
	25	2	27		W	60	
	22	1	40		W	40	
	22		43		W	40	
	18		50.5		W	15	
	10		80.5		W	15	Ca. Ca photographs 9h 10m and 9h 30m.
January 22. K.V.S.	9 10	4	62		E	50	90° in Ca.
	8 32		58		E	30	Ca. Detached.
	9 5	3	46		E	60	
	5		42.5		E	20	
	0		2.5		E	10	
	8 55	1.5		16	E	20	A streak from top goes parallel to limb for over 5° towards south.
	52	1		27	E	10	Connected to the last by a Ca streak.
	32			27.5	E	160	Ca. A detached cloud.
	32			28.5	E	110	Ca. Do
	50	3		46	E	60	Two prominences close together.
	9 37			83	E	20	Bright jet. Become faint a minute later.
	8 32			72	W	50	Ca.
	32			68	W	60	Ca. Top extends for 5° towards west.
	9 35	4		53	W	10	
	8 32			39.5	W	15	Ca.
	32			14.5	W	20	Ca Detached
	9 34	0.5		11.5	W	15	Connected to last by a Ca streak.
	33	2.5		5.5	W	15	
	32	1	3.5		W	30	Top bends northwards.
	30		17.5		W	20	Top bends southwards.
	27		26		W	10	
	25	3.5	30		W	50	
	25	2	39.5		W	50	Top bends towards the last. } Continuous in Ca.
	15	1	49		W	25	
							Ca photographs 8h 32m and 9h 31m
January 23 S.S.	9 20	4	61.5		E	65	
	20	3	59.5		E	40	
	20	2	55.5		E	20	
	17		48		E	60	
	15		41		E	20	
	3	1		16	E	10	
	84			29.5	E	80	Ca. Two little streaks far away from limb.
	0	1.5		87	E	10	
	8 58	5		47	E	55	Narrow at top. D ₁ , D ₂ , b ₁ , b ₂ , b ₃ bright at base.
	9 34			66	W	90	
	57	4		49.5	W	30	
	48			17	W	65	
	48	5.5		16	W	10	
	46	1.5		9	W	10	
	44		15		W	16	

Date and observer.	Hour I S T.	Base	Latitude.		Limb.	Height.	Remarks.
			North	South.			
1908,	h. m.	°	°	°		"	
January 23. S.S.	9 39	10	43	..	W	10, 25 & 65	Three prominences connected to one another.
—contd	35	15	51.5		W	10	
	32		61.5		W	10	Ca photographs 9h 34m, 15h 19m, 8h 19m and 8h 39m.
January 24. K.V.S.	8 50	0.5	84.5	...	E	20	
	50		69		E	15	
	50		68		E	30	
	9 5		49		E	60	
	3	1	36.5		E	30	Faint
	0	1	20.5		E	30	Ca. } Tops connected in Ca.
	8 50		18.5		W	15	Several low jets.
	55	7	6		E	—	Ca. A detached slanting streak.
	50			7.5	E	70 to 130	
	50	2		17.5	E	10	
	40	2		49	E	20	Ca prominence is 6° broad and 30" to 50" high.
	50			68	E	40	Ca. Slants southwards.
	50	5		64.5	W	30	
	9 50	0.5		30	W	20	
	50	0.5		27.5	W	20	Slants towards the last.
	44	4		13.5	W	20	Ca prominence extends 6° further west.
	35	3	0.5		W	15	Ca prominence is 8" broad.
	30		11		W	25	Detached cloud Connected to the last by a Ca streak
	26		33.5		W	20	
	26		35.5		W	20	
	23	4	46		W	35	Ca prominence is 5° broad and 50" high } Connected in Ca.
	23	1	50.5		W	10	Ca photographs 8h 50m, 8h 39m and 9h 21m.
January 25 S.S.	9 21		71		E	25	Detached. Connected to limb in Ca.
	8 27		67		E	15	Ca
	9 18		53.5		E	26	Slants northwards
	18	12	37		E	130	More continuous in Ca than in hydrogen.
	10	6	27		E	15	
	7	0.5	21		E	20	Top meets limb again at lat. + 17° N.
	58	1.5	5		E	180	See Note.
	8 58	3		5.5	E	10	Metallic. D ₁ , D ₂ , 5,316.8, b ₁ , b ₂ , b ₃ , b ₄ , 5,018.6, 4,924.1 bright
	52	5		39.5	E	20	Do. do.
	27			45.5	E	45	Ca A short streak parallel to limb.
	48			54.5	E	10	
	47	0.5		56.5	E	25	
	46			60.5	E	15	
	45			67.5	E	35	
	45	2		74	E	35	} Meet at top.
	41			79.5	E	20	
	39			83	E	10	
	27			81	W	15	Ca.
	10 10			74.5	W	40	
	7	0.5		41	W	10	
	6	8		25	W	10	
	3	2		16	W	15	} Connected in Ca
	2		2		W	25	
	0	4	12		W	30	
	9 44	3	32.5		W	20	
	41	1	48.5		W	45	
	8 27	1	80.5		W	15	Ca.
January 26 G.N	9 4	..	65		E	15	Ca.
	4		41.5		E	20	Ca.
	4	2	37.5		E	120	Bends to north and extends to P.A. 35'.
	4		8		E	180	Detached from limb.
	0	1.5		39.5	E	35	
	8 59	1		45	E	15	
	57			56	E	30	
	9 4			82	E	40	Ca

Date and observer.	Hour L.S.T.		Base.	Latitude.		Limb.	Height.	Remarks.
	H.	M.		North.	South.			
1908. January 26. —contd.	G.N.	H. M.	°	°	°		"	
		9 4	...	..	84.5	E	30	Ca.
		55			80	W	70	
		4			53	W	10	Ca.
		10	2		14.5	W	15	A streamer extends to P.A. 254° in Ca.
		4		33.5	W	15		Ca photograph 9h 4m. Sky poor for visual observation.
January 27.	S.S.	8 58	3	40.5	..	E	20	
		52		36.5		E	40	Ca. Detached.
		55	10	29		E	10	
		52	0.5		8	E	10	Ca. Very faint.
		45	6		45.5	E	35	
		52			51.5	E	40	Ca Very faint.
		39	4		63.5	E	25	
		36	1		80.5	E	20	
		35			83	E	35	
		34			84	E	20	Detached.
		31	0.5		80.5	W	150	
		9 23	1		71	W	10	
		17	1.5		30.5	W	25	
		16			23	W	25	
		8 52	2		20	W	15	Ca.
		9 13			4	W	10	
		8 52			14	W	30	Ca. } Connected.
		9 11	0.5		16	W	10	Ca }
		8 52			23	W	20	Ca }
		52			32	W	15	
52			38	W	10	Ca. } Connected in Ca.		
9 9	0.5		40	W	10			
9	8		42.5	W	10			
5			65.5	W	25	Ca photograph 8h 52m.		
January 28.	K.V.S.	8 37	...	84.5	...	...	10	Ca.
		37		84		E	10	Ca.
		37	4		66.5	E	10	Ca.
		9 15	2		60.5	E	25	Top 5° broad in Ca. Filamental.
		8 37			56.5	E	15	Ca.
		37			53.5	E	15	Ca.
		37			40.5	E	25	Ca.
		9 10	2.5		35.5	E	20	Faint arch } Connected.
		8 37	2		33.5	E	20	Ca. }
		9 8	2		28	E	15	
		8 37			26	E	60	Ca. Two prominences.
		9 6			19	E	15	Connected to the last by a slanting Ca streak.
		8 37			8	E	45	Ca. Two prominences.
		9 5	1		25	E	20	See Note.
		8 55	4		44.5	E	35	An arch.
		55			40.5	E	10	Connected to last by a Ca streak.
		44	0.5		59.5	E	50	Slants southwards nearly meeting the next prominence.
		44	1.5		63.5	E	50	
		37			70	E	20	Ca
		11 58			78	E	150	Detached. Connected to last prominence by a slender Ca streak.
		8 30			32	W	20	
		9 36			33	W	30	Slants westward. An arch 4° broad in Ca.
8 37			26	W	25	Ca. Slants southwards.		
9 34	0.5		24	W	25	Slants southwards.		
30			12	W	Low.			
30			6	W	Low.	Bright. D ₁ , D ₂ , b ₁ , b ₂ , b ₃ , b ₄ bright.		
8 37	8		2	W	50	Ca.		
37	3	5.5		W	25	Ca A streak runs parallel to limb for 8° towards north.		
9 25			35	W	30	} Connected by Ca streaks.		
20	2	40		W	35			
8 37			57.5	W	10	Ca.		
						Ca photographs 8h 37m and 8h 55m.		
January 29.	S.S.	9 20	...	59.5	.	E	30	
		20		56.5		E	30	
		11		27.5		E	70	See Note (1).

Date and observer.	Hour L.S.T.	Base.	Latitude.		Limb.	Height.	Remarks.
			North.	South.			
1908.							
January 29.	S.S.						
—contd.							
	H. M.	°	°	°		"	
	9 0	4	9	...	E	30	See Note (2).
	8 56	3.5		14	E	35	Bright, metallic. Bright lines same as in last prominence.
	52	0.5		26	E	20	
	51	0.5		38	E	10	
	48			39.5	E	15	Detached.
	48	3		43.5	E	20	
	46	1		47	E	10	
	44	1		51	E	10	
	42			53.5	E	70	
	42	1.5		61.5	E	50	} Connected in Ca.
	39	2		68.5	E	20	
	9 49			32.5	W	70	
	45	1.5		27	W	25	
	44	14		18	W	25	} Connected at top.
	41			7	W	20	
	41			4	W	10	
	35	3.5	36		W	25	Slants northwards. (a photograph 9 ^h 48 ^m (poor).
January 30.	K.V.S.						
	9 12	3	54	...	E	35	
	5	2	34		E	25	
	5	1.5	28		E	45	} Nearly meet to form an arch.
	8 58		12		E	20	A streak on top runs parallel to limb for 3°. In Ca this streak meets limb at lat. + 17° E.
	50	3		4.5	E	25	
	45	1.5		12	E	30	
	9 32			30	E	10	Ca.
	8 40	0.5		40.5	E	10	Ca prominence is 2° broad. A Ca streak from top extends for 3° further south.
	40			45.5	E	10	
	38	1		66.5	E	Low.	Ca prominence is 2° broad.
	35	0.5		79.5	E	15	Faint.
	9 40	28		19	W	15 to 60	See Note.
	25	2	12		W	15	
	20		39		W	50	Slanting jet.
	15	1	57		W	20	Ca prominence is 3° broad.
	32	2	61.5		W	10	Ca. Ca photographs 9 ^h 32 ^m and 9 ^h 52 ^m
January 31.	S.S.						
	9 15		75		E	15	
	12		60.5		E	30	Detached.
	10	1	57.5		E	20	
	5	2	38.5		E	10	Very rapidly changing.
	8 56			16	E	15	A short streak parallel to limb.
	51	1		26	E	15	See Note
	46	1		48.5	E	20	
	41	0.5		75	E	10	
	39	0.5		78.5	E	20	
	39	2		82	E	25	
	38	8		31	W	10	
	34	0.5		18	W	30	
	49			15	W	30	} A streak 7° long passes through the tops of these.
	9 32			3	W	15	
	8 49		28		W	30	Ca. A short streak parallel to limb.
	9 28	7	26.5		W	10	
	8 49	0.5	40.5		W	120	Ca.
	9 24	1.5	58		W	60	Base extends to lat. + 64° W in Ca.
	20		71		W	10	Very faint. Ca photograph 8 ^h 49 ^m .
February 1.	K.V.S.						
	9 5	.	61.5		E	25	
	8 55	1		5	E	10	Ca.
	55	4		13	E	40	Ca.
	45	1		50	E	20	Top connected to limb on both sides by Ca streaks.
	43			73.5	E	35	
	43	1		81	E	40	} Tops connected in Ca.
	9 18	0.5		38	W	15	
	18			30	W	10	
	8 55	1		28	W	30	Ca Meets the top of the next prominence.
	9 15			21	W	25	
	15	1		16	W	35	
	15			11	W	20	} Connected at top.

Date and observer.	Hour L.S.T.	Base.	Latitude.		Lamb.	Height.	Remarks.
			North.	South.			
1906.	K. M.	.	.	.		"	
February 1. K.V.S. —contd.	8 55 55 55 55 55	2 1 3 0.5	.. Equator. 19 40.5 58 62.5	7	W W W W W	15 15 25 25 30 20	Ca. Connected to the last. Ca. Ca. Ca. Ca. Ca. Ca photographs 8h 55m and 8h 27m.
February 2. K.V.S.	9 10 5 10 0 0 8 42 10 0 8 38 35 10 0 9 40 10 0 9 30 25 25 10 0 9 20	... 9 3 0.5 3 1 1.5 1 2 1.5 1.5 1 3	75 58.5 40 8 58	... 29 32 49 78.5 75 72 59.5 31.5 28 19 16	E E E E E E E E W W W W W W W	10 10 40 30 15 15 20 30 10 20 25 45 20 25 15 30	Ca. Ca. A streak from top runs parallel to limb for about 15° towards east. See Note. Ca. Top meets the last prominence. Ca. } Connected in Ca. Ca Two prominences. Ca photograph 10h 0m and 8h 45m.
February 3. S.S.	9 13 10 8 59 55 51 31 9 38 35 38 50 50 24 21	.. 1 1 1 1 3 3 1 2 0.5 1 1	74 54.5 2.5 4 50.5 59.5 64.5	... 17.5 49.5 74 51.5 38 35	E E E E E W W W W W W W	10 10 25 20 25 20 15 50 10 15 15 10 10	Ca. Ca. Ca photograph 9h 50m
February 4. K.V.S.	9 5 5 8 58 48 28 35 35 30 9 50 55 48 40 38 34 58 28 23 55 15 15	0.5 0.5 1 2 7 3 4 8 2	28 24 5 13 29 38.5 44.5 56.5 62.5	... 2 38.5 45 48.5 64.5 80 87.5 37.5 29.5 17 1	E E E E E E E W W W W W W W W W W W	20 10 40 20 10 20 25 10 105 50 10 20 20 70 30 20 30 20 25	Top broader. Slants towards east Faint. Three small prominences. Ca. Eruptive The height was 65" at 8h 50m, 80" at 9h 18m and 105" at 9h 55m. Arch-like. A streak runs parallel to limb for about 3° towards south. Top bends towards south. Ca. Archlike. Ca. Detached. } Connected in Ca. Ca photographs 9h 55m, 8h 43m and 9h 18m.
February 5. S.S.	9 25 23 8 57 57		78.5 64 45.5 34.5		E E E E	15 10 35 10	Ca. Ca.

Date and observer.	Hour I.S.T.	Base.	Latitude.		Limb.	Height	Remarks.
			North.	South.			
1908.	H. M.	°	'	"		"	
February 5. S.S. — <i>conid.</i>	9 19	2	81	...	E	20	Slants towards and meets the last.
	8 57		13		E	50	Ca.
	9 12	13	3'5		E	30	Two Ca streaks connect this to the next.
	8	8		11	E	20	Metallic, D ₁ , D ₂ , b ₁ , b ₂ , b ₃ , b ₄ , 5, 316'8, 5, 018'6, 4, 924'1 bright. Nothing in Ca except at lat. — 8° E.
	8 59			21	E	10	
	55			38'5	E	20	
	50	0'5		62	E	10	
	46	2		79	E	30	
	9 47			57'5	W	10	
	45	2		47 5	W	30	Eruptive. The various Ca photographs and the visual observations show considerable change in the prominence.
	44			41'5	W	60	
	42	0'5		38'5	W	10	
	37	3			W	10	
	34			4	W	15	Slants northwards.
	34			23	W	15	Do. Double.
	34	4		29	W	25	
	32	1		48'5	W	10	
28	4		59'5	W	20	Ca photographs 8 ^h 57 ^m , 8 ^h 31 ^m and 9 ^h 25 ^m to 9 ^h 32 ^m .	
February 6. K.V.S.	9 20	6	41'5	...	E	20	45" high in Ca.
	8 35		28		E	10	
	9 15	8	20		E	15	
	15	1	14		E	15	
	10		3'5		E	15	Detached. Ca prominence is an arch 5° broad.
	8 35			16	E	15	Ca.
	9 8	0 5		21	E	10	Slanting eastwards.
	5			28	E	10	
	3			44'5	E	20	
	0			66	E	25	
	50	2		46 5	W	50	Slanting southwards for about 7°.
	8 35	1		15	W	15	Ca.
	9 45	1		8	W	10	
	43	9		6'5	W	25	
	8 35	0'5		53'5	W	25	Ca. A streak at top parallel to limb.
9 35	1		60	W	30	A Ca streak passes westward from the middle of it. Ca photographs 8 ^h 35 ^m and 9 ^h 4 ^m .	
February 7. S.S.	9 57	...	82	...	E	10	Faint.
	54		51'5		E	30	
	54		48'5		E	50	
	52		44'5		E	40	Detached.
	49		35		E	10	Do.
	48	6	25		E	25	Narrow at top.
	41	2	11		E	10	
	39		8		E	10	
	38	4	2		E	30	
	11	1		1'5	E	10	Very bright. Slightly higher at 9 ^h 35 ^m . } See Note.
	9	9		7'5	E	30	
	6	0 5		17	E	10	
	5	1'5		25	E	30	
	2			36	E	20	
	0	1'5		44'5	E	15	
	8 55	2		79	E	20	
	52	2		88	W	20	
	10 16	7		50	W	70	
	11	12		28	W	25	
	7	4		26	W	20	
	4	2'5		43'5	W	60	Faint.
	8 29			47'5	W	25	Ca.
29	3		51'5	W	20	Ca.	
9 58	0'5		83'5	W	10	Ca photographs 8 ^h 29 ^m and 8 ^h 2 ^m .	
February 8. K.V.S.	9 28	..	82	...	E	10	Ca.
	28	0 5	69		E	10	Ca.
	28		65'5		E	25	Ca.
	28		63'5		E	10	Ca.

Date and observer.	Hour I.S.T.	Base.	Latitude.		Limb.	Height.	Remarks.
			North.	South.			
1908.	H. M.	°	°	°		"	
February 8. K.V.S. —contd.	9 5	1	46.5	.	E	20	Ca prominence is 5° broad and 65" high.
	0	1	36.5	.	E	80	} Connected by a Ca streak.
	0	1	33	.	E	35	
	28		28	.	E	25	Ca. Slants northwards to meet the last.
	28	0.5	25	.	E	40	Ca
	8 53		12	.	E	30	A cloud. Connected to base in Ca.
	53	2	9	.	E	15	Arch. Ca prominence is 45" high and continuous with the last.
							See Note
	48	2		6	E	25	
	45			29	E	Low.	
	41			34	E	15	
	58			79.5	E	15	Two prominences connected to each other.
	32	1		60.5	W	10	
	30	5		52	W	35	Ca prominence is 60" high and extends from Lat. -62° W to -42° W.
	30			45.5	W	10	
	9 25	13		32.5	W	40	
	28			19	W	150	Ca. A broken slanting streak extending as far as Lat. + 1° 5' W.
	20	3		10.5	W	15	
	16	1	33		W	10	
	14	2	44.5		W	15 ±	Faint. } Tops connected by a Ca streak. The streak extends towards west as far as Lat. + 26° W.
	28		54.5		W	30	Ca
	13	0.5	58.5		W	15	Faint.
	28	1	67		W	15	Ca. Ca photographs 9 ^h 28 ^m , 9 ^h 2 ^m and 8 ^h 37 ^m .
February 9. G.N.	9 20	...	57.5	...	E	20	
	8 38	1	49.5		E	90	Ca.
	36		48.5		E	90	Detached from limb. Ca.
	36		39		E	15	Ca.
	36		37.5		E	30	Ca.
	36		35		E	30	Ca.
	36		21		E	25	Ca.
	36		14.5		E	30	Ca.
	9 17		9		E	15	
	15	7		4.5	E	45	
	15	2		13	E	10	
	12	4		13	E	30	
	12	2		24	E	30	} Joined at top.
	9			31.5	E	70	Detached from limb.
	8 38			52.5	E	20	Ca.
	5			70	E	10	
	36			78	E	30	Ca.
	9 11			79.5	E	20	
	8 36			88.5	E	10	
	36			64	W	10	Ca
	36			62.5	W	45	Ca.
	36			48.5	W	70	Ca.
	9 50	13		37.5	W	45	
	8 36		Equator.		W	120	Ca. Streamers extend on both sides.
	9 30	1	36.5		W	45	Short prominences in Ca extend up to P.A. 279°.
	30	3	40.5		W	65	Streamers extend in Ca up to P.A. 309°.
	8 38		56.5		W	120	Ca Ca photographs 8 ^h 36 ^m and 9 ^h 6 ^m .
February 10. S.S.	9 6	0.5	56.5	...	E	10	
	5		52.5		E	10	
	8 59		20		E	10	Very faint.
	9 11			16	E	40	Ca.
	8 54	0.5		25	E	15	
	9 11			28	E	75	Ca. } Connected.
	8 52			31	E	60	
	48	1		47.5	E	10	
	44			75.5	E	40	} Connected in Ca.
	41	2		81	E	20	
	38			76.5	W	10	
	9 45	1		71	W	25	
	43	1.5		47.5	W	65	Faint.
	34	8		41	W	10	80" in Ca.

Date and observer.	Hour I.S.T.	Base.	Latitude.		Lumb.	Height.	Remarks.
			North.	South.			
1908.	H. M	°	°	°		"	
February 10. S.S. —contd.	9 24 11 15 14	20 1 1.5 0.5	84.5 52 59.5 65	..	W W W W	90 25 10 25	Changing. Ca. Very faint. Ca photographs 9h 11m and 8h 53m.
February 11. K.V.S.	9 0 8 38 30 30 9 12 10 8 30 30 30 30 30	0.5 1 4 9 0.5 1 2 2 2 2 2	27.5 1 82.5 45 32 38.5 38.5 44.5 58.5 60.5	. 82.5 45 7	E E E W W W W W W W W	15 ± 15 ± 45 60 25 ± 20 ± 30 40 20 25 20	Ca. Ca. Archlike. A Ca streak at top. Ca. Ca. Ca. Ca. Ca. Observed in a bright sky. Ca photograph 8h 30m
February 12. S.S.	8 49 49 9 10 8 3 8 56 45 43 41 49 49 10 15 15 20 9 33 31 30 8 49 49 9 16 8 49 49	... 1.5 2 11 8 4 2 0.5 1 8 0.5 0.5	69.5 66.5 64.5 51.5 25 25.5 49.5 51.5 58.5	. 22.5 78 82 83.5 57.5 50.5 43.5 35.5 31 28 16 13 8 25.5 49.5 51.5 58.5	E E E E E E E E W W W W W W W W W W W W W W	10 10 10 20 10 20 20 15 50 ± 15 90 60 60 50 10 10 70 65 10 10 10 10 15	Ca. Ca. See Note (1). Ca. Ca. Double. Very faint. Tall only at southern end 10" high at other places. Detached. See Note (3). Ca. Very bright. Broad at top. Ca. Ca. Ca. Seeing mostly poor. S.W. quadrant observed a second time from 10h 15m to 10h 25m. Ca photographs 8h 49m, 8h 33m, and 8h 22m.
February 13. K.V.S.	9 22 17 20 17 18 17 18 15 17 17 12 10 8 48 9 17 8 43 9 17 50 17 17 11 55	... 1 2 2 2 1 3 1 1 1 1 1 1 1.5	74 62.5 55.5 52.5 42.5 37.5 24 12 9 3 18.5 83.5 82.5 80.5 78.5 71 61.5 58.5	... 7.5 18 18.5 83.5 82.5 80.5 78.5 71 61.5 58.5	E E E E E E E E E E E W W W W W W W W	10 15 10 10 30 15 20 Low. 10 20 15 20 20 15 45 10 40 ±	Ca. Ca. A streak from top runs eastwards parallel to limb. In Ca. the streak nearly meets limb at Lat. + 18° E. Not found in Ca. Ca. Detached cloud. Ca. Bright. Ca. Ca. Ca prominence is 40" high. Ca. A streak from top running towards east. Ca. Faint. 60" high in Ca.

Date and observer.	Hour I.S.T	Base.	Latitude.		Limb.	Height.	Remarks.
			North.	South			
1908.	H. M.	°	°	°		°	
February 13. K.V.S.	9 17	0.5	..	41.5	W	60	Ca } Tops connected by a Ca streak which } extends 8° further south. } Tops connected. Ca streaks at top run in different directions. Ca. Detached cloud. Detached. Ca Ca. Ca photographs 9 ^h 17 ^m and 8 ^h 44 ^m .
—contd.	48			37.5	W	70	
	48			32	W	70	
	38	4		15	W	15	
	38	1		11	W	60	
	17			6.5	W	80	
	35				W	35	
	12 0		36.5		W	15	
	9 17	0.5		47.5	W	15	
	17	2		52.5	W	50	
				55.5	W	15	
February 14. S.S.	11 28	...	29.5		E	10	
	18		Equator.		E	20 ±	
	17			8	E	30 ±	
	14			15	E	10	
	10 42	1		20	E	20	
				74.5	W	20	
						Seeing bad. No photograph.	
February 15. K.V.S.	9 13	4	57.5	...	E	50 ±	80" high in Ca.
	8 31		54.5		E	15	Ca.
	48	0.5	35.5		E	35 ±	50" high in Ca. Ca streaks at top extend on both sides.
	31		11		E	10	Ca.
	43	1		2.5	E	65	Top is connected to limb in Ca at Lat. -8° W.
	31			30.5	E	80	Faint. Detached
	9 43			32	W	30 ±	Faint.
	46			71.5	W	10	
	8 31			67	W	85	Ca.
	9 43			53.5	W	30	3° broad in Ca.
	40	1		47.5	W	20 ±	Faint.
	33	10		5	W	15	
	30	3	8		W	Low.	Observed in a bright sky. Ca photographs 8 ^h 31 ^m and 8 ^h 56 ^m .
February 16. K.V.S.	9 22		75.5	...	E	10	Bends towards north
	18	12	57.5		E	75	Two prominences. Filamental. Tops very faint. In Ca the prominence is continuous and 135" high.
	8 48	8	40.5		E	15	Ca.
	9 5	2	3		E	20	
	3	4		19	E	15	
	8 43			32.5	E	80	Ca. Slants towards east.
	9 0			37.5	E	15	30" high in Ca
	8 43			43.5	E	50	Ca. Detached streak slanting towards east.
	55			65.5	E	15 ±	Faint. Ca prominence slants towards east and is 2° broad and 25" high.
	43	3		32.5	E	20	Ca. Connected to limb at the two ends only.
	43	1.5		33	W	20	Ca. Arch.
	53			32.5	W	15	
	50			72.5	W	30	Nearly detached } Form an arch in Ca.
	50			68	W	60	Detached. }
	43			62	W	15	Ca.
	43	5		56	W	15	Ca. Faint in hydrogen.
	43	18		42.5	W	30 to 60	Ca. Only 4° broad in hydrogen.
	43	6	Equator.		W	10	Ca
	9 33	1	5		W	20	Top broader. A streak from top runs parallel to limb towards south. D ₁ , D ₂ , b ₁ , b ₂ , b ₃ , and b ₄ were faintly reversed.
	33		8.5		W	10	
	30		12		W	Low.	Metallic D ₁ , D ₂ , b ₁ , b ₂ , b ₃ , b ₄ bright.
	26	0.5	26		W	20	4° broad in Ca
	43		32.5		W	15	Ca.
	43	1	42.5		W	10	Ca. Ca photographs 8 ^h 43 ^m and 8 ^h 27 ^m .

Date and observer.	Hour I.S.T.	Base.	Latitude.		Lamb.	Height.	Remarks.
			North.	South.			
1908.	H. M.	.	°	°		'	
February 17. S.S.	9 24	5	58	...	E	55	Faint.
	16		18		E	10	
	18	5	0'5		E	60	Narrow at top.
	6	8		21	E	55	Narrow at top. Metallic; D ₁ , D ₂ , b ₁ , b ₂ , b ₃ , b ₄ bright A streak from it meets limb at Lat. — 14° E.
	2	2'5		37'5	E	55	Narrow at top.
	8 55	2		66	E	35	Do. Very faint in Ca.
	10 14			70	W	60 ±	Faint. Changing. Height 180' in Ca at 9 ^h 23 ^m .
	13			66'5	W	20	Not found in some of the Ca photographs.
	12			58'5	W	15	See Note.
	0	0'5	7		W	15	
	9 58	0'5	20		W	10	
	81	1	24'5		W	10	
	31	0'5	27		W	10	
	31		29		W	10	
8 57		30'5		W	10	Connected by a Ca streak 35' high. Ca } Seeing poor. Ca photographs 8 ^h 57 ^m , 9 ^h 11 ^m , 9 ^h 24 ^m , 9 ^h 30 ^m , 9 ^h 44 ^m , and 9 ^h 51 ^m .	
February 18. K.V.S.	9 20	.	82	...	E	10	A bright jet.
	38	5	60		E	60	Ca
	38		35'5		E	10	Ca.
	15	0'5	19'5		E	10	Not in Ca.
	3	2'5		18	E	25	
	3 56	16		40'5	E	50 & 75	See Note (1).
	48	3		61'5	E	45	80' high at 9 ^h 48 ^m
	9 38			66	W	195	Ca See Note (2).
	45	25	0'5		W	85	
	30	1	27		W	15	
30	3	34'5		W	20	See Note (3)	
February 19. S.S.	9 21		57	...	E	10	
	15	0'5	36		E	10	
	15	1'5	33'5		E	20	
	15	0'5	30'5		E	15	
	6	6	4		E	20	
	4	1		8	E	10	
	8 9			15	E	45	Ca. Meets the next prominence
	9 1	1'5		20	E	20	Changing.
	8 57	0'5		43'5	E	10	
	54	2		54'5	E	85	4° broad at top.
	50			57	E	90	A streak 9° long parallel to limb.
	50			61	E	70 ±	Detached.
	9			77	W	10	Ca
	9			75'5	W	30	Ca. Detached.
	9			44'5	W	15	Ca.
	59	0'5		24	W	10	
	50	5		16'5	W	40	See Note
	47			3'5	W	20	
	45			Equator.	W	20	
	42	7	9'5		W	25	Metallic. D ₁ , D ₂ , b ₁ , b ₂ , b ₃ , b ₄ , 5,816'8, 5,018'6, 4,924'1 bright.
39	4	18		W	10		
38	2	34'5		W	25	Narrow at top.	
36		39		W	10		
9	0'5	64		W	15	Ca. Ca photographs 8 ^h 9 ^m and 8 ^h 51 ^m .	
February 20. K.V.S.	9 12	1	61	..	E	10	
	8		55'5		E	25	Faint.
	8 58	0'5	35'5		E	20	Pointed at top.
	53	2	8		E	35	Two prominences.
	8			9	E	30	Ca. Detached high cloud.
	8	0'5		19	E	20	Ca.
	46	3		23'5	E		Chromosphere slightly elevated.
43			45'5	E	15	Ca prominence is 2° broad.	

Date and observer.	Hour I S T	Base	Latitude.		Limb.	Height.	Remarks
			North.	South			
1908.	п. м.	°	°	°		"	
February 20. K.V.S. —contd	8 35 8 10 2 9 58 8 8 8 9 48 46 28 28 23	0.5 1 0.5 0.5 1 2 2 2	... 7 13 29 30.5 37.5	78 75.5 72.5 49.5 23 21 6 6	W W W W W W W W W	20 20 15 10 25 10 35 20 20 25 25 20	The height was 30'' at 10h 0m. Ca. Ca. Ca. Top bends toward west. } Tops bend toward each other } Ca prominence extends from Lat. + 23° W. to + 33° W. Top bends toward last. Two prominences. Connected at top in Ca. Ca photographs 8h 8m and 8h 27m.
February 21. S.S.	10 15 13 1 9 57 52 8 39 10 51 38 34 32 31	... 3 2 0.5 1 1	58.5 48.5 18 3 9 35.5 42 48	 29 77 68	E E E E W W W W W W W	20 20 10 15 10 25 25 30 10 20 20	Seeing poor. Ca. A streamer extends to P.A. 31° in Ca. Ca. Ca. } Meet at top. Ca. Ca. Streamers extend on both sides. There is a Ca streak above this prominence and detached from it. Ca. Ca photographs 8h 32m, 8h 38m, and 8h 6m.
February 22. G.N.	8 32 9 15 14 13 12 12 8 32 32 9 10 9 9 7 6 8 32 9 3 8 32 9 33 22 22 35 18 32	.. 1 0.5 2.5 5 4 2 4 1.5 6 1	65 57.5 52.5 50.5 45.5 38.5 30.5 27 2 3 7 35.5 48.5 53.5 79.5 70 31.5 16 8 8 50.5	.. 3 7 35.5 48.5 53.5 79.5 70 31.5 16 8 1	E E E E E E E E E E E E E W W W W W W W W W W W	25 45 10 10 35 30 15 15 20 15 10 10 70 70 75 15 20 30 45 20 15 45	Ca. Ca. Ca. } Meet at top. Ca. Ca. Streamers extend on both sides. There is a Ca streak above this prominence and detached from it. Ca. Ca photographs 8h 32m, 8h 38m, and 8h 6m.
February 23. S.S.	8 29 29 29 29 29 29 29 9 7 8 54 29 29 29 29	2 1.5 6 2 1 3 7 3	55.5 53.5 51.5 46.5 30 47	40 48.5 53.5 75.5 82.5 79 67.5 20 6.5	E E E E E E E E W W W W W W	20 10 50 50 20 50 60 60 10 20 50 30 15 45 60	Ca. Ca. Ca. Ca. Ca. Ca. Ca. Ca. Ca. } Connected. Ca. Ca. Ca. Ca. Ca. Visual observations were made between P.A. 140° and 180° only. Seeing bad. Ca photograph 8h 29m.

Date and observer.	Hour L.S.T.	Base.	Latitude.		Lumb.	Height	Remarks.
			North	South.			
1908.	H. M.	°	°	°		'	
February 26. K.V.S.	15 25 23 21 17 13 0	1 10	... 1 80.5 40.5	10.5 68 22.5	E W W W W	45 10 20 10 60 ± 10	Two prominences. P.A. 0° to 80° not observed Poor weather. No Ca photograph.
February 27. S.S.	15 7 9 16 16 13 13 11 10 15 7 8 57 49 45 9 46 43 40 37 36 34 33 27	. 0.5 1 7 0.5 1 1 0.5 0.5 1.5 0.5 0.5 7	77 60 58.5 45 38.5 32.5 29 3 19.5 58.5	48.5 48.5 83 82.5 57 26 21 11 5	E E E E E E E E — W W W W W W W W W	10 10 15 40 25 30 10 20 10 30 10 40 15 10 15 10 25 10	Ca. } Tops connected by a Ca streak. Ca Very faint } In Ca the two together form a single Faint } faint prominence 60" high
February 28. K.V.S.	9 5 8 34 34 55 34 34 40 40 40 9 35 30 25 18 8 34 34 9 12 10 8 34	0.5 2 22 3 1 1 1 1.5 1 2.5 1 1.5 2.5 1 1 1.5 2.5	60.5 57.5 45.5 7 46 66.5 88 82 79.5 26.5 19.5 7.5 15 30 35.5 41.5 49.5 80	7 46 66.5 88 82 79.5 26.5 19.5 7.5 15 30 35.5 41.5 49.5 80	E E E E E E W W W W W W W E	20 20 15 20 20 50 60 60 15 45 40 30 15 15 15 20 20 15	Nothing here in Ca. Ca. An each. Ca Slants towards east for 5° Ca Ca. Nearly detached. Detached. 25" away } Ca prominence is continuous and 18" broad. Sharp jet. Middle of the prominence is connected to lumb on both sides by streaks Top bends towards south Ca streaks on both sides Ca prominence is 5° broad. Slants towards west. } Ca Tops connected. Ca. Ca photographs 8h 34m and 8h 15m.
February 29. S.S.	9 22 20 8 8 59 51 49 49 45 9 37 45 2 43 2 43 41 39 39	1.5 19 7 1 1 1 2 1 1 1 1.5	82.5 62 2.5 22.5 58.5 62 65 80 62 36.5 33.5 29.5 23 26 23 13 10	2.5 22.5 58.5 62 65 80 62 36.5 33.5 29.5 23 26 23 13 10	E E E E E E E E W W W W W W W W W	15 25 20 40 10 20 10 80 10 25 10 10 10 20 40 20 20	A Ca streak from it slants eastward. D ₁ , D ₂ slightly bright at base Detached. Ca prominence is 2° broad at base, 6° at top and 120" high. Bright Not on Ca photographs. Ca. Ca. Slants northwards. } Connected in Ca Do. } Prominences from — 26° W to + 9° W were connected in Ca.

Date and observer.	Hour I.S.T.	Base.	Latitude		Limb.	Height.	Remarks.
			North.	South.			
1908.	H. M.	°	°	°		"	
February 29. —contd.	S.S.	9 38	..	5 5	W	25	} Connected in Ca.
		38	1 5	3	W	10	
		35	1	6	W	10	
		2		9	W	20	
		32		30	W	10	
		32		31.5	W	20	
		29	1	49.5	W	20	
		25		69	W	10	Bright at base. Small. Detached. Ca photographs 9 ^h 2 ^m and 8 ^h 25 ^m .
March 1.	S.S.	10 20	62	..	E	10	} Connected in Ca.
		5	0.5	44.5	E	10	
		9 28	5	20.5	E	25	
		26			E	10	
		21	7	14	E	40	
		18		23.5	E	10	
		17	2	29.5	E	25	
		13		34.5	E	15	
		8 38		61	E	20	
		9 26		77	W	25	
		10 34	0.5	89.5	W	25	
		0	5	35.5	W	25	
		26		3.5	W	20	
		9 26		22	W	15	
				64	W	30 ±	
March 2.	K.V.S.	9 4	..	46.5	E	25	Ca.
		10 5	5	27.5	E	40	Three prominences. Ca prominence is 9° broad.
		9 53	3		E	35	In Ca it is 17° broad and 20" to 45" high.
		4	1	21	E	80	Ca. A streak at top extending for 5° towards south.
		30	2	32.5	E	20	Slants towards south.
		30		35.5	E	25	Top 4° broad in Ca.
		10	1	70.5	E	25	Ca.
		4		83		35	
		4	4	80	W	120	
		4	4	37.5	W	30	Ca.
		4	2	29	W	80	Ca.
		4	6	3	W	90	Ca.
		4	0.5	23	W	15	Ca.
		4	0.5	39.5	W	30	Ca. Streaks run parallel to limb on both sides.
		4	1	57.5	W	60	Ca.
							Only half the limb observed on account of bright sky.
							Ca photographs 9 ^h 4 ^m and 9 ^h 53 ^m .
March 3.	S.S.	9 3		55.5	E	10	Very faint.
		0	3	50	E	40	
		8 57	9	28.5	E	45	
		53		18	E	10	
		28		9	E	10	Ca.
		28		6	E	10	Ca.
		51	15	4.5	E	45	
		47		23	E	20	
		28		38	E	20	Ca.
		43	3	41	E	30	Narrow at top.
		28	0.5	49.5	E	20	Ca.
		37	2	70	E	25	
		9 35		80	W	10	
		31	3.5	40.5	W	15	
		30	2	36.5	W	45	
		27	8	28	W	65	
		8 28		20	W	60	Ca A streak slanting southwards.
		9 20	4	4	W	15	
		20	7	10.5	W	15	
		17	1.5	29	W	30	Base extends to Lat. + 22° W.
		15	0.5	36.5	W	50	} Connected in Ca.
		13	0.5	45.5	W	15	
		9	3	60.5	W	20	
							Faint
							Ca photographs 8 ^h 23 ^m and 8 ^h 15 ^m .

Date and observer.	Hour L.S.T.	Base	Latitude.		Limb.	Height.	Remarks.
			North.	South.			
1908.	. m.	°	°	°		"	
March 4. K.V.S	8 55	5	34.5	...	E	35	
	51		21.5		E	10	
	51	4	17		E	10	
	60	1	11		E	30	A streak at top runs parallel to limb for 4° towards east.
	48			8	E	25	A detached cloud Ca streak continuous with this is 10° long.
	40	2		12	E	15	Arch After 5 ^m this became very faint
	38			18	E	40	15" away from limb. Faint. Changing.
	35	2.5		40.5	E	15	
	32			58.5	E	10	
	30			30	W	10	
	24			50.5	W	15	Ca.
	9 30	5		42	W	45	
	20	1		21	W	30	D ₁ , D ₂ , b ₁ , b ₂ , b ₃ , b ₄ bright. } Connected.
	8 24	0.5		18	W	30	Ca.
	9 15			15	W	10	
	15	0.5		11	W	Low.	20" in Ca. } Tops connected by a Ca streak.
	8 24	0.5		4	W	30	
	9 12		1		W	15	
	12	4.5	4		W	15	
	12	1	10.5		W	10	Ca streak from this forms an arch with the base of the last prominence.
	8 24		12.5		W	10	Ca.
	9 10	8	16.5		W	25	Arch.
	8 24	5	27.5		W	10	Ca.
	9 4		31		W	15	
	8 24	9	36		W	30 to 65	Ca.
	24		44.5		W	10	Ca.
	24		48.5		W	20	Ca.
	24		49.5		W	10	Ca.
	24		47		W	30 to 90	Ca. Very faint. Slanting cloud detached from limb.
	24		58.5		W	15	Ca.
	24		60		W	10	Ca.
							Ca photographs 8 ^h 24 ^m and 9 ^h 5 ^m .
March 5. S.S.	9 11	1.5	36.5	...	E	30	
	8	3	27.5		E	15	
	5	6	22		E	35	
	8 50	5	13.5		E	55	Bright, metallic. Whole prominence visible in D ₁ , D ₂ , b ₁ , b ₂ , b ₃ , b ₄ } Connected in Ca.
	33			3	E	20 ±	Ca.
	33			8	E	30 ±	Ca.
	49	2		13	E	45 ±	Slants northwards Faint.
	48			18	E	25	A Ca streak about 60" high slants northwards from it
	40			70.5	E	25	
	35			83	W	10	Faint
	34			81	W	20	
	9 58			68	W	10	
G.N.	58	4		44.5	W	60	
	53	2		26	W	70	
	50	2		19	W	90	
S.S.	8 33	1		7	W	90	Ca. A streak slanting northwards
	9 36			4.5	W	10	
	29	1.4	89.5		W	100	Top narrow. Top faint in hydrogen.
	22	1.5	64		W	10	
	20	6	73.5		W	25	Ca photographs 8 ^h 33 ^m and 8 ^h 18 ^m .
March 6. K.V.S	8 17	7	27.5		E	25	Ca.
	15	2	21		E	40	
	10	3	14.5		E	10	} Connected in Ca.
	10	1.5	12		E	15	
	5	4	1		E	30	
	0	7.5		24	E	35 ±	} Connected in Ca. Ca prominence extends from Lat + 4° E to - 35° E.
	17	2.5		48.5	E	30	Ca. Three prominences.
	9 54	2		48.5	W	50	
	35	8		28	W	55	} Connected in Ca. Ca prominence extends from Lat - 50° W to - 14° W
	35	1.5		22.5	W	25	
	8 17			10	W	120	Ca A high detached streak 6° long

Date and observer.	Hour I.S.T.	Base	Latitude.		Lamb.	Height.	Remarks
			North	South.			
1908.	H. M.	'	°	°		#	
March 6. K.V.S.	9 27	3		4.5	W	Low.	
—contd.	8 17			1	W	120	Ca. A high detached cloud
	9 23		10		W	10	A Ca streak from the top of this runs to meet the limb at lat. — 3° W.
	8 17	1	18		W	30	Ca
	17		20		W	30	Ca Detached
	17	12	31.5		W	20	Ca Several prominences with tops connected by a Ca streak.
	17		44.5		W	50	Ca
	17	11	64.5		W	50	Ca Several connected prominences of different heights.
							Observed mostly in a bright sky. Ca photographs 8 ^h 17 ^m and 8 ^h 41 ^m .
March 7 S.S.	8 12	.	70.5		E	10	Ca.
	57	0.5	33.5		E	10	
	54	2	24		E	35	
	12	0.5	20		E	20	Ca. Slants northwards
	50	15	6.5		E	40	
	45	2		4	E	20	
	12			8.5	E	40	Ca. Slants northwards
	40	10		23	E	150	Three prominences meeting at top. More continuous at top in Ca.
	35	1		33	E	20	Connected to the last by a Ca streak
	33	3		45	E	10	
	10 57	1		73.5	E	20	
	58			78	E	25	Very faint. Surmounted by a Ca streak.
	8 27			82.5	W	30	
	12	1		79.5	W	30	Ca Slants eastwards and passes through the top of the last prominence.
	9 28	2		49.5	W	60	Slants southwards.
	20	13		33	W	40	See Note (1).
	8 12			24	W	75	Ca. Slants westwards
	11 8			4.5	W	30	
	9 11	7	18.5		W	10	See Note (2).
	11 13	1	47.5		W	25 ±	Faint. Ca prominence extends to lat. + 40°E. and is 60" high.
	9 8		59.5		W	15	
	8 12		77		W	15	Ca. Ca photographs 8 ^h 12 ^m , 8 ^h 28 ^m and 8 ^h 36 ^m
March 8. K.V.S.	9 0	0.5	44.5		E	45	Ca
	32	0.5	36		E	10	Ca prominence is 5" broad
	32	5	28.5		E	35 ±	A Ca streak runs eastwards.
	0		0		E	45	Ca
	0		3		E	15	Ca.
	0		1		E	15	Ca
	0			1	E	10	Ca.
	0			3	E	25	Ca.
	23	3		21.5	E	25	(a prominence is 8" broad.
	0			83	W	25 ±	Faint
	0			80	W	25 ±	Faint.
	0	13		46	W	10, 15, 45	Ca.
	50			37	W	15 ±	Two prominences, one of which is higher in Ca.
	0			35.5	W	10	Ca
	0			34.5	W	20	Ca
	0			31.5	W	15	Ca.
	0		13		W	20	Ca
	0	9	47.5		W	60	Ca. Arch Observed in a very bright sky. Ca photographs 9 ^h 0 ^m and 9 ^h 32 ^m .
March 9. S.S.	9 17	2	60		E	25	
	13	1	48.5		E	40	
	10	4	30.5		E	40	A Ca streak proceeds eastwards from it.
	4	1	18		E	20	
	0	2	2		E	30	It slants as far as lat. + 13°E in Ca.
	8 57	1		10	E	20	Surmounted by a Ca streak 3" long.
	56	1.5		29	E	20	Double.
	55			40.5	E	10	

Date and observer	Hour I.S.T.		Base.	Latitude		Limb	Height.	Remarks.
				North	South.			
1908.	H	M.	°	°	°		"	
March 9. —cont'd	S.S.	8 43 40 9 47 47 47 39 32	2 0.5 0.5 1 2 30	.. 78 81.5 57.5 55.5 51.5 47.5		E E W W W W W	30 10 30 30 20 — 50	Double. Connected in Ca. Ca prominence extends 4° further west. Low, bright points. See Note Seeing poor. Ca photographs 9h 32m and 9h 0m.
March 10.	K.V.S.	8 50 48 45 40 31 31 37 31 30 9 18 8 31 31 9 10 10 10 8 31 9 5 5 8 31 55	1 5 1 0.5 0.5 0.5 7 1 4 2.5 0.5	51.5 42.5 29.5 22 21 19 13.5 3 61.5 48.5 38.5 26 7 11 35.5 50 61 69.5 82.5	Equator to 5	E E E E E E E E E E W W W W W W W W W W W W	20 10 15 30 15 15 15 20 20 30 15 10 15 — 15 70 10 40 15 Low.	Detached. Ca prominence extends from lat. + 39° E. to + 22° E. Ca. Ca. Ca prominence extends from lat. + 16° E to + 8° E. Ca. Filamental. } Continuous in Ca. 45" high in Ca. } Ca. Ca. D ₁ , D ₂ , b ₁ , b ₂ , b ₃ , b ₄ bright. } Ca. prominence extends from lat. — 13° W. to + 11° W. Several low prominences } Ca. Connected in Ca. Ca photographs 9h 31m and 8h 18m
March 11.	S.S.	8 22 22 22 9 20 14 10 10 10 8 58 56 9 50 8 22 9 44 39 37 8 22 22	2 1.5 1 2 1.5 1 0.5 0.5 2 1.5 1 4 2 1.5 1 4 80	55.5 40.5 37.5 22 6 12 18 23 50.5 36 28 10 2.5 34.5 42.5 58.5 80		E E E E E E E E E W W W W W W W W W W	15 10 10 20 20 60 40 20 10 10 35 10 10 10 40 15 15	Ca. Ca. Ca. Tops connected in Ca. } Tops connected } Very faint in Ca. Connected at } base } Ca. Ca. Ca photographs 8h 22m and 8h 8m.
March 12.	S.S.	9 30 31 28 30 26 23 21 18 18 8 58 55 47 9 30 8 42 9 30 8 40 9 30	5 0.5 8 4 8.5 2 1 1.5 9 0.5 0.5 0.5	81.5 44 33.5 24 11.5 7 Equator. 10 15 19.5 27 39 74 82.5 79.5 78 74.5 72.5		E E E E E E E E E E E E E E W W W W W	15 45 10 15 15 10 30 120 60 30 15 20 40 15 10 20 10 20	Ca. Faint in hydrogen. Ca. Are connected into a single group in Ca. Base extends to lat. — 25° E in Ca. Very faint A group of 4 prominences connected to one another. Ca. Ca. Ca. Slants as far as lat — 65° W.

Date and observer.	Hour L.S.T.	Base.	Latitude		Limb	Height	Remarks
			North	South.			
1908.							
March 12	S.S.	°	°	°		"	
--cont'd.		1.5	..	54.5	W	30	Ca
		3		41	W	30	} Connected by a Ca streak Narrow at top Ca photographs 8 ^h 30 ^m and 8 ^h 50 ^m .
		1		30	W	25	
		2.5	9		W	10	
March 13.	K.V.S.	4	46.5	.	E	120	Ca. Faint
			24		E	45	Detached from limb. Connected to limb on both sides in Ca.
			15.5		E	Low	
		4	1		E	20	<i>See Note</i>
				12	E	70	A prominence 18' broad at top but connected to limb at 2 points only
					E	30	Ca. Small Ca streaks at top
		0.5		38.5	E	35	
		1		39.5	E	15	
				42.5	E	30	
		3		69	E	25	Ca
				82	W		Two prominences with tops connected. Ca prominence extends to lat +9°W
				75.5	W	10	
				54.5	W	15	Detached.
				45.5	W	10	Faint.
		1		18	W	20	
				16	W	Low.	} Tops connected in Ca.
		14	8		W	45	
		1		11.5	W	15	
		0.5		4.5	W	15	
							Ca photographs 8 ^h 22 ^m and 8 ^h 35 ^m .
March 14.	S.S.	1	30	.	E	45	
		0.5	27		E	45	Ca
		0.5	26		E	50	Ca Slants as far as lat. +18°E.
		0.5	22		E	20	Ca
		0.5	4		E	20	A Ca streamer 6" long proceeds northwards from it.
		2		38.5	E	35	
				56.5	E	20	Faint.
		1		87	E	20	<i>See Note.</i>
				79.5	W	10	
		2		49.5	W	25	Slants southwards in Ca. 4.5" high in Ca.
				24	W	25	} Slant toward and meet each other
				20	W	25	
		3	3.5		W	80	} Connected.
		2	10		W	80	
		4	17		W	30	
		1.5	21		W	20	Ca photographs 8 ^h 19 ^m and 8 ^h 34 ^m .
March 15.	G.N.	1.5	30.5	...	E	30	Ca
		2	20		E	35	Ca streamer extends to P.A. 52°
			6		E	20	A Ca loop.
		3	2		E	25	
		4		6	E	25	
		2		10	E	15	Ca.
				23	E	15	
				27	E	15	
		3		38.5	E	70 & 30	
		5		53.5	W	60 & 20	
				48.5	W	40	
				47.5	W	20	Ca
				26	W	10	Ca.
				24	W	15	Ca
		7	7		W	45	
		17	25		W	55	
			57.5		W	25	Ca photographs 8 ^h 16 ^m and 8 ^h 44 ^m
March 16.	S.S.	2	56.5	...	E	25	Faint
		10	42.5		E	50	Narrow at top. Faint.
		0.5	30		E	10	
		7	20.5		E	60	
		6	5		E	40	} Tops connected.
		5		3.5	E	20	

Date and observer.	Hour I.S.T.	Base.	Latitude.		Limb.	Height	Remarks
			North.	South			
1908.	H. M.	°	°	°		"	
March 16. —contd.	S.S.	0 5		13	E	60	
		7		24.5	E	20	Faint.
		3		36.5	E	40	
	8 53	2		80	W	15	
	49	0.5		71.5	W	20	
	47	0.5		69	W	10	It became a jet 20" high at 10h 4m.
	38			51.5	W	45	Ca.
	10 0	1		37.5	W	15	Faint, double
	8 33	0.5		30	W	15	Ca.
	9 53	1.5	10	8	W	30	
	53	1.5	13		W	40	
	48	18	20		W	20	
			20		W	50	A group of 5 prominences closely connected to one another. } Connected at base in Ca.
	41		68.5		W	10	Ca photographs 8h 33m and 8h 42m
March 17.	G.N.	4	40.5		E	70	Ca.
			39.5		E	10	
		8	25		E	50	
		10	5		E	60	
		2		11	E	25	
		1		38.5	E	35	
		2		45.5	E	25	
	8 34			59.5	W	30	Ca.
	9 49	2		38.5	W	15	
	48	1.5		25	W	25	
	44	9	12		W	20 & 25	
	40	16	30		W	65, 45 & 20	
	8 34		54.5		W	15	Ca photographs 8h 34m and 8h 15m
March 18.	S.S.	3	55		E	35	
		0.5	50.5		E	25	
		1	35		E	10	
		2	31.5		E	20	
		1	18.5		E	20	
		6	10		E	150 ±	See Note
		2	1		E	10	
	8 58	6		46.5	E	30	Not seen on Ca photographs. Metallic. D ₁ , D ₂ , b ₁ , b ₂ , b ₃ , b ₄ bright.
		0.5		53.5	E	10	
		3		60	E	40 ±	Faint
	9 59	8		12	W	25	
	56	1.5		3	W	60	Slanting southwards, detached from limb and 120" high in Ca
		14	9		W	50	} Connected at base D ₁ , D ₂ , bright at base
		1	28.5		W	30	} throughout
		5	33		W	35	} Connected by 2 Ca streaks
		0.5	51.5		W	10	
		2	55.5		W	30	Ca photographs 8h 15m and 8h 30m.
March 19.	K.V.S.	1	68		E	10	Faint
		1	55.5		E	60	} Connected in Ca
		0.5	51.5		E	30	
		4	35.5		E	20	Several sharp jets
		1.5	17		E	35	See Note.
	8 9		8		E	60	Ca
		2		4	E	20	Filamental.
		2		10.5	E	20	
				17	E	35	A streak detached from } Connected in Ca. limb. The streak is longer } Ca prominence in Ca } extends over 36° of the limb.
		13		28.5	E	30	
		3		43	E	25	40" high in Ca
		1.5		47.5	W	20	Ca.
	9 50	11	12		W	40	A streak from top runs southwards parallel to limb.

Date and observer.	Hour I.S.T.	Base	Latitude		Lamb.	Height	Remarks
			North.	South.			
1908.	H. M	°	°	°		"	
March 19. K.V.S. —contd.	9 40 38 8 9	1 5	21 34 5 55 5		W W W	40 10 20	A streak from top runs westwards parallel to limb. Ca Ca photographs 8 ^h 9 ^m and 8 ^h 23 ^m .
March 20. S.S.	9 19 19 14 13 8 27 9 10 8 59 58 52 49 27 27 37 9 55 54 43 42 40 38 35 30 8 27	0 5 2 0 5 0 5 3 0 5 0 5 10 0 5 12	74 5 71 5 62 56 5 42 5 40 5 19 10 5 10 24 48 5 82 5		E E E E E E E E E W W W W W W W W W W	15 30 30 30 30 10 60 25 30 10 20 10 10 10 10 10 10 25 25 50 30	Faint. Faint. } Tops connected in Ca Ca. Faint, detached. Ca prominence slants northwards and is 90° high. Very faint. Ca Ca 2° broad in Ca. Slants southwards. D ₁ , D ₂ bright at base. See Note. Slants northwards. Ca. Ca photographs 8 ^h 27 ^m and 8 ^h 10 ^m .
March 21. S.S.	9 18 17 8 29 29 9 15 13 8 29 9 10 10 8 59 9 32 30 29 27 25 25	1 5 2 2 5 5 7 1 1 2 5 11	75 5 61 5 52 5 42 5 41 5 19 14 30 44 76	...	E E E E E E E E E W W W W W W W	10 40 20 50 20 10 60 25 25 25 20 10 15 10 60 40	Ca. Ca. Slants eastwards Ca. Slants northwards. Ca prominence slants northwards and was 35" high at 8 ^h 29 ^m and 60" high at 8 ^h 39 ^m . More continuous in Ca than in H. Very faint Detached. Seeing poor. Strong south east wind. Ca photographs 8 ^h 29 ^m and 8 ^h 39 ^m .
March 23. G.N.	9 56 53 52 50 46 45 45 43 40 38 38 10 20 15 15 15 12	1 1 2 4 3 3 1 5 1 5 1 5 1 5 1 5 1 5 1 5 1 5 1 5 1 5 1 5 1 5 1 5	61 28 17 11 15 27 41 5 47 5 74 5 77 72 5 70 5 14 6 9 26 5 36 5 47 5		E E E E E E E E E W W W W W W W W W W W	15 15 15 15 70 25 15 15 20 30 40 15 15 20 20 50 45 40	Detached from limb.

Date and observer.	Hour I.S.T.	Base.	Latitude		Limb.	Height.	Remarks.
			North.	South.			
1908.	H. M.	°	°	°		"	
March 25. S.S.	9 52	2	58.5		E	10	
	49		53.5		E	30	
	46	1.5	48.5		E	40	
	45		42		E	25	
	35	2	30.5		E	20	
	27	2		22	E	25	Faint, cone-like
	22			33.5	E	25	
	22	1		38	E	80	} Connected } Connected in Ca
	22			44.5	E	45	
	16	0.5		54.5	E	10	} Connected in Ca. Ca prominence is 4° broad, 40" high and narrow at top.
	18			57	E	30 ±	
	1	0.5		82.5	W	10	
	8 58			65	W	10	Detached both in Ca and H. Ca prominence is 3° broad and 120" high.
	10 40			44.5	W	10	
	9 29	2		21	W	30	Ca.
	29			10	W	60	Ca. Detached, slanting. 4° long.
	10 23	0.5	1.5		W	10	
	9 29	2	4		W	20	Ca. Double.
	10 16			52.5	W	25 ±	Detached; 2° long; 6° long and 60" high in Ca. Seeing poor. Ca photographs 9h 29m, 8h 29m, and 9h 3m.
	March 26. K.V.S.	10 17		70		E	15
15		2	59.5		E	25	Two prominences connected at top.
8 26		7	40		E	40	Ca. Faint
26		1	36.5		E	15	Ca. Faint.
26		2		5	E	15	Ca.
10 7		2		8.5	E	15	} Tops connected in Ca
7		1		13.5	E	15	
5		0.5		19	E	15	
8 45		3.5		41.5	E	50	8° broad in Ca.
26		1		52.5	E	30	Ca. A streak from top runs } Tops connected in eastwards. } Ca.
38		1		56	E	15	30° high in Ca
35				76.5	E	10	Detached.
32				81.5	W	Low.	
30				65.5	W	Low	
26				63	W	60	Ca.
26			7		W	60	Ca. Slants southwards.
26	3	36		W	30	Observed only half the limb on account of clouds. Ca photographs 8h 26m and 8h 15m.	
March 27. G.N.	9 5	3.5	60.5		E	20	
	55	4	46.5		E	20	
	51		11		E	10	Ca.
	53	1.5	7		E	20	
	52	2		11	E	15	
	52	1.5		22	E	25 ±	
	50	4		41.5	E	50 ±	90" in Ca.
	45			52.5	E	30 ±	
	51	3		75.5	E	20	Ca.
	51			68.5	W	30	Ca S-shaped.
	44			40.5	W	40 ±	} Connected by Ca cloud 60" high.
	48			33.5	W	40	
	43			30	W	40	Joins the previous prominence at top.
	10 0			17	W	30	Faint.
	9 59	1		11	W	10	
	59	2		4	W	20	
	51		Equator		W	15	Ca.
	51		11		W	30	Ca.
	51		21		W	20	Ca.
51		42.5		W	30	Ca.	
58		48.5		W	15	Ca.	
51		68.5		W	20	Poor weather. Ca photograph 9h 51m.	

Date and observer.	Hour I.S.T.		Base.	Latitude.		Limb.	Height	Remarks.
				North	South			
1908.	H	M	°	°	°		"	
March 28. K.V.S.	8	19	2	62.5	.	E	20	Ca.
	9	43	1.5	53.5	.	E	30	Ca.
		43	4	39.5	.	E	30	Ca. Arch.
	10	0	5	45	.	E	35	See Note. } 15° broad and 60" high in
		0	2	39.5	.	E	25	Two prominences. } Ca.
	8	19	1.5		39.5	E	35	Ca.
		32			43.5	E	10	2° broad and 40" high in Ca
	9	55	1		50.5	E	50	70" high in Ca.
	8	18			78.5	W	Low.	Ca. Slants towards south.
	9	50			74	W	15	
		32			45.5	W	15	
		30			39.5	W	30	Ca prominence is continuous and is 60" high.
	8	19	1		36.5	W	90	Ca. } Faint.
		19	1		34	W	75	Ca. }
		19	6		21	W	150	Ca. }
	9	27	0.5		16	W	20	
		25			6	W	Low.	
		10	20	5		W	Low.	Very faint } Ca prominence extends from lat. 9° W. to + 11° W. and is 50" and 70" high.
	8	19		25		W	Low	Ca.
		19		30		W	60	Ca. Slants towards south. A Ca streak from top runs northwards
		19	1	43.5		W	30	Ca. A streak from top runs both ways. Observed mostly through cirrus clouds Ca photographs 8 ^h 19 ^m and 9 ^h 43 ^m .
March 29. G.N.	8	44	0.5	54.5	..	E	30	Ca.
		41	1	38.5	..	E	20	Ca.
	9	10	1.5	23	..	E	35	} Connected at top.
		10	1.5	20	..	E	30	
	8	44		7	..	E	25	Ca A streamer extends from this to the next prominence at P.A. 72°.
		44			8	E	25	
	9	2	1.5		15	E	40	Streamer extends to } Connected by a streak.
		2	1.5		21	E	60	
	8	44	3		27	E	20	Ca
		44	1.5		31	E	15	Ca.
		53			50.5	E	35	Connected with the limb by 3 stems.
		56	1		60.5	E	15	
		41			67	E	15	
	9	52			68	W	40	
	8	44			13	W	75	Ca. A streamer extends to P.A. 225°
	9	22	5	2		W	35	65" high in Ca. Streamers extend to P.A. 235°.
	8	44		9		W	20	Ca.
		44		22		W	70	Ca. Faint, detached cloud. Extends over 8° of the limb.
	9	16		50.5		W	90	
		5		70		W	15	
		12		69		E	15	
	8	41	3	64		E	30	Ca. Ca photograph 8 ^h 44 ^m .
March 30. S.S.	9	8	..	46.5	.	E	20	
	10	0	1	41.5	.	E	20	Ca
		6	1	38.5	.	E	30	Ca
	9	5		26	.	E	10	
		5	3	23.5	.	E	30	} Connected in Ca.
	10	0	1	12	.	E	30	Ca.
	8	50	0.5	10	.	E	10	Bright at top.
		59	1	8	.	E	25	Bright.
		58			1	E	15	
	10	6			10	E	15	Ca
	8	54	8		23	E	30	D ₁ , D ₂ bright at base
		48	9.5		51.5	E	90 ±	Ca prominence is 24° broad, 150" high at the northern end and 90" at the southern.
	10	6	5		82	W	120	Ca. Faint.
	8	38	2		66	W	30	80" high in Ca.
	9	32	3		39	W	40	Conelike.
		28	1.5		14	W	45	Slants towards and meets the next prominence at top.

Date and observer	Hour I, S T	Base	Latitude		Limb	Height,	Remarks.	
			North.	South.				
1908	H M.	°	'	°		"		
March 30 -contd	S.S.	0.5		9	W	45	Slants southwards. Connected to the prominence at lat. +15° W by a Ca streak passing through the next prominence. A detached streak Base extends 3° further north in Ca. Faint Ca Seeing poor when observing the S.W. quadrant. Ca photograph 10 ^h 8 ^m	
	9 28 26	3	1		W	30		
	24 23		10 15		W W	20 30		
	21		25.5		W	25		
	10 6 9 19	1 2	28 32		W W	15 20		
March 31.	K.V.S.	5	18.5		E	35 & 25	Two prominences connected at base	
	8 20	1	10		E	20	Ca	
	50	1	5.5		E	25	} Tops connected.	
	50	2	2.5		E	25		
	20	1.5		2.5	E	20		Ca
	20	1		6	E	45		Ca
	45	1		9	E	10	Bright. Metallic. D ₁ , D ₂ , b ₁ , b ₂ , b ₃ , b ₄ bright.	
	40	9		14.5	E	20		
	20	0.5		29	E	15		
	20			33	E	20	Ca.	
	20	0.5		39.5	E	15	Ca	
	30			67.5	W	25	Detached An arch 3° broad in Ca Changing.	
	9 40	3		40	W	35		
	35	1		30.5	W	15		
	8 20	3		34	W	15	Ca. Two prominences connected at base.	
	20			30	W	10		
	9 30	13		15.5	W	130	Two large prominences, one tall and the other slanting, meeting at top	
	20		8		W	10	} Connected by a Ca streak.	
	20	1.5	14		W	60		
	15	1	20.5		W	25		Ca streaks at top. 35" high in Ca.
	12		40		W	Low.	Ca photographs 8 ^h 20 ^m and 8 ^h 30 ^m .	
April 1.	G.N.							
	9 1		62		E	20		
	0	1	32		E	15		
	8 58	1.5	20.5		E	50	} Meet at top.	
	58	1	23.5		E	30		
	40		17.5		E	15	Ca	
	56	4	11.5		E	40	} Connected in Ca	
	52	6	3.5		E	15		
	52			1	E	15		
	51			14.5	E	15		
	51	4		18.5	E	15		
	40	3		42	E	20	Ca cloudlet extends from the top of this to P.A. 101°.	
	48	1		55	E	25		
	40			60	E	50	Ca. Faint.	
	40	3		51	W	100	Ca. Very bright.	
	9 23	2		42	W	30	Top bends and meets limb again at P.A. 204°	
	20	11		27.6	W	35		
	15	0.5		11.5	W	130	Arches over 12° to the south and widens out at top	
	9			2.5	W	20		
	7	2	12.5		W	60		
	5	9	28.5		W	15		
	8 40	3	56		W	20	Ca A streamer extends to P.A. 219° and another to P.A. 306°.	
	9 3	5	63.5		W	20		
	8 40		79.5		W	20	Ca. Ca photographs 8 ^h 49 ^m and 8 ^h 20 ^m .	

Date and observer	HOUR I S T	Base	Latitude.		Limb	Height	Remarks.	
			North.	South.				
1908.	H. M.	°	°	°		"		
April 2	S.S.							
		9 45	..	57.5	..	E	10	
		8 24		49.5		E	30	Ca. Detached
		9 43	1	40		E	Low	Two points. Faint and 30" high in Ca.
		42	5	31		E	60	
		36	1.5		12.5	E	10	
		36			14.5	F	20	Faint
		8 24			21.5	E	20	Ca.
		9 31	2		26.5	E	60	A streak proceeds northwards from its top, it meets limb in Ca near the last prominence.
		8 24			44	E	15	Ca. Faint.
		9 27			66.5	E	10	
		14			54	W	50 ±	Faint except near base. Only 15" in Ca.
		12	1.5		42	W	20	
		7	18		30	W	90	
		2			19.5	W	150	A cloud with its base 80" from limb } Connected in Ca.
		8 58	1		12.5	W	70	
		24	5		5	W	10	Ca.
		24			3.5	W	30	Ca. Faint.
		24			9.5	W	10	Ca.
		10 8	2		14.5	W	30	In Ca the southern end forms a separate prominence 10" high and the northern end is faint.
8 24			20.5	W	15	Ca. Bends northwards over 4°		
10 1			33.5	W	10			
9 55	14		63	W	35			
8 24			76	W	15	Ca.		
37			80	E	40	Ca. Ca photographs 8 ^h 24 ^m and 8 ^h 37 ^m .		
April 3.	G.N.							
		9 10	1.5	35	..	E	65	} Connected at top
		10	1	30.5		E	65	
		8		12.5		E	15	
		8 32		6.5		E	40	Ca. Connected with the limb by 4 stems, and meeting prominences at P.A. 60° and 70°
		9 6			0.5	E	20	
		6	5		11.5	E	35 & 75	
		8 32			19.5	E	75	Ca.
		9 2			28.5	E	20	
		0			46	E	30	
		8 56			60	E	40	Arched cloud.
		32			77	W	20	Ca.
		50	3		51	W	80	
		32			47	W	15	Ca.
		32			44	W	15	Ca.
		32			42	W	10	Ca.
		9 32			32.5	W	105	A huge cloud connected with the limb by 3 stems. Very bright in Ca.
31			23	W	160			
8 32			1.5	W	20	Ca.		
9 25	2.5	7.5		W	25			
22	4	28.5		W	40	A streamer extends from top to P.A. 277°.		
20	5	58		W	25 & 70			
20	1	65.5		W	70	Meets the last prominence. Ca photographs 8 ^h 32 ^m and 8 ^h 18 ^m .		
April 4.	S.S.							
		8 13		82.5		E	20	Ca.
		9 49	1	57		E	25	
		8 13		50		E	20	Ca. Slender, vertical.
		13		49		E	30	Ca. Do. do.
		9 48	14	35		E	45, 60	45" at northern end, 60" at southern.
		27	3.5	26.5		E	10	
		8 13		22		E	30	Ca. A streak 3° long parallel to limb.
		9 13	26	0.5		E	30, 60	80" at the southern end only. Faint in hydrogen.
		8 13			20.5	E	30	Ca.
		9 14	1.5		29.5	E	25	
		8 13	1		46	E	15	Ca.
		9 12	1		50	E	20	Faint.
12			53	E	15	Do		
9	1.5		61	E	20	Double.		

Date and observer.	Hour I S T.	Base.	Latitude		Limb	Height.	Remarks
			North	South			
1908.	H. M.	°	°	°		"	
April 4.	S.S.						
—contd.							
	9 7	..		78	E	10	
	8 13			80	W	25	Ca.
	9 1	3		51.5	W	40	Very bright in Ca
	8 56	12		33.5	W	100	See Note (1)
	13			26.5	W	70	Ca.
	50			10.5	W	15	
	46	2		4.5	W	10	See Note (2)
	9 59		33.5		W	10	
	58		51.5		W	30	A cloudlet 3° long Connected to limb in Ca.
	8 13		56		W	10	Ca.
	9 56		59		W	30	Detached. Connected to limb and to the next prominence in Ca
	56	2	63.5		W	60	
	53	0.5	66.5		W	20	
							Ca photographs 8 ^h 13 ^m , and 8 ^h 31 ^m .
April 5.	G.N.						
	8 14	0.5	41		E	75	Ca. Meets the next prominence.
	9 25	1.5	32.5		E	60	
	8 14	2	6.5		E	30	Ca. A streak from top meets limb at lat. +12° 5 E.
	14			4.5	E	120	Ca. Slants northwards.
	14			8.5	E	135	Ca. An oblique streak detached from limb.
	9 20	10	24.5		E	10 & 20	
	20	1.5	46		E	25	
	18		53		E	15	
	8 14		71.5		E	20	Ca. Detached.
	14	1	88.5		W	20	Ca.
	9 12	1.5	54		W	45	
	12	2	52		W	65	
	12	2	49		W	30	} Tops are connected by a Ca streak.
	38	4	37.5		W	50 ±	Much bigger and 90° high in Ca.
	8 14	1.5	10.5		W	20	Ca.
	9 14	1	9.5		W	Low	30° high in Ca
	32	0.5	13.5		W	30	7° broad in Ca
	8 14	24	47		W	30	Ca.
	9 29	2.5	59		W	30 ±	} Tops connected by a Ca streak
	29	2	63		W	60 ±	
							Cirrus clouds on the sun during part of the visual observation.
							Ca photographs 8 ^h 14 ^m and 8 ^h 31 ^m
April 6.	S.S.						
	9 30		76		E	10	
	26	3	41		E	60	
	24	2	35.5		E	35	A short streamer flows eastwards in Ca.
	9	2	4.5		E	15	Narrow at top. } Connected at base.
	9	2	2.5		E	30	Do.
	1			61	E	50 ±	
	8 58	0.5	69.5		E	10 ±	
	58	4	75.5		E	25 ±	Very faint.
	52	7	51.5		W	30	
	48	3	48.5		W	30	
	9 48	2	19.5		W	20	
	46	3.5	10.5		W	40	
	44	3.5	2.5		W	70	} Connected in Ca
	41	3.5	14.5		W	10	A Ca streak 7° long flows northwards from it
	39	0.5	32.5		W	40	Slants northwards over 8°.
	38		46		W	25	Slants northwards in Ca.
	38		54		W	25	See Note.
	34	1	62		W	35	
							Ca photographs 8 ^h 43 ^m , 8 ^h 28 ^m , and 8 ^h 17 ^m .
April 7.	S.S.						
	11 11		21.5		E	30 ±	
	8	0.5		19	E	20	
	1			68	E	25 ±	Very faint
	1			69	E	25 ±	Do.
	25			50	W	10	
	24			47	W	25 ±	Detached.
	22	0.5		20.5	W	30 ±	
	21	8		8.5	W	60	
	19		31.5		W	60	Slants southwards.
	8 14	0.5	32.5		W	50	Ca. Slants northwards.
	11 18		47		W	30 ±	
	8 14		60		W	10	Ca.

Date and observer.	Hour I S.T.	Base.	Latitude.		Limb	Height.	Remarks.
			North.	South			
1908.	H. M.	°	°	°		"	
April 7 —contd.	S.S. 8 14	0.5	62	.	W	30	Ca. } Connected at top Observed through cirrus clouds. Ca photographs 8 ^h 14 ^m and 9 ^h 7 ^m (Poor.)
	11 17	0.5	64	.	W	30	
April 8.	S.S. 9 13	.	64.5	.	E	25	Double in Ca. } Form a single prominence in Ca. A Ca streak from it meets limb at lat. + 1° 5' E. Ca A detached streak 2° long Slants southwards Ca. Slants northwards. Ca. Slants southwards over 4°. Ca. Faint Faint } Connected in Ca Do. } Ca. Ca. Slants northwards over 5°. Ca. Observed through cirrus. Ca photographs 8 ^h 46 ^m , 8 ^h 53 ^m , and 8 ^h 10 ^m . 3° broad and 30" high in Ca. Ca. Faint. An arch. Ca. Ca. Ca. Faint. A faint Ca streak 60" high and slanting southwards proceeds from the top of this prominence. Ca } A jet. } Tops connected by a Ca streak. 60" high in Ca. Narrow at top } Ca. } 1° broad in Ca. } Tops connected in Ca. Top slants southwards. Ca Ca Ca. Ca. Narrow at top. It covers 8° in Ca. Ca. Poor sky. Ca photographs 8 ^h 27 ^m and 8 ^h 18 ^m .
	11	2	52	.	E	20	
	7	0.5	41	.	E	25	
	7	0.5	38.5	.	E	25	
	0	2	7	.	E	15	
	8 46		2.5		E	30	
	59			2.5	E	45	
	53	3		42.5	E	30	
	46	5		52.5	E	90	
	46			57	E	15	
	46	4		65	E	15	
	49	5.5		76	E	20	
	9 37			40	W	10	
	36	1		28.5	W	20	
	31	1		22.5	W	20	
	8 46	2		15.5	W	20	
	46		0.5		W	15	
	9 27	0.5	1.5		W	10	
	27		0.5		W	10	
	23	0.5	28.5		W	10	
	22	0.5	32.5		W	25 ±	
19	1.5	47		W	25		
8 46	1	52		W	20		
9 17	1	65		W	20		
April 9.	G.N. 9 14	1.5	50	...	E	20	3° broad and 30" high in Ca. Ca. Faint. An arch. Ca. Ca. Ca. Faint. A faint Ca streak 60" high and slanting southwards proceeds from the top of this prominence. Ca } A jet. } Tops connected by a Ca streak. 60" high in Ca. Narrow at top } Ca. } 1° broad in Ca. } Tops connected in Ca. Top slants southwards. Ca Ca Ca. Ca. Narrow at top. It covers 8° in Ca. Ca. Poor sky. Ca photographs 8 ^h 27 ^m and 8 ^h 18 ^m .
	18		43		E	40	
	18	1.5	41		E	10	
	8 27	2	27.5		E	20	
	9 16		16		E	35	
	8 27	1	14.5		E	—	
	27	0.5	9.5		E	10	
	9 25	2	2.5		E	30	
	8 27	4.5		5	E	30	
	9 13	4.5		11.5	E	20	
	8 27	0.5		18.5	E	30	
	9 12	0.5		20.5	E	30	
	12			27.5	E	20	
	10	1.5		31.5	E	20	
	7			41	E	60	
	8 27			45.5	E	10	
	9 5			60.5	E	30	
	5	1		63.5	E	60	
	8 27	2.5		77	E	60	
	55	1		84	W	15	
	55			60.5	W	30	
9 29	1.5		38.5	W	20		
8 27			33.5	W	15		
9 27	1		30.5	W	15		
27	1		22	W	20		
27	0.5		10.5	W	Low		
26	1.5		7.5	W	30		
25	1.5		1	W	30		
20	4	4.5		W	60		
23	1	12.5		W	25		
8 27	2	61		W	30		
9 21		63		W	25		
20	1.5	82		W	15		
20	0.5	65		E	Low.		

Date and observer	Hour M. S. T.	Base.	Latitude.		Limb.	Height	Remarks.	
			North	South.				
1908.								
April 10.	S.S.	8 14	...	72.5		E	15	Ca
		14		67.5		E	15	Ca
		9 19	2	46		E	30	
		8 14	1	35.5		E	30	Ca. Faint.
		14		27.5		E	60	Ca. A faint detached vertical streak.
		14	5	25		E	10	Ca.
		9 14	1	16.5		E	80	An irregular Ca streak 9° long passes through it.
		8 14			2.5	E	50	Ca.
		14			7.5	E	60	Ca. } Connected at top.
		14			10.5	E	60	Ca. }
		14	4		15.5	E	20	Ca.
		9 11	1.5		20.5	E	35	A Ca streak from top meets limb at lat. -- 11° 5 E.
		8 14	2		31.5	E	30	Ca
		14	3		38	E	60	Ca Surmounted by an irregular streak, 7° long.
		9 7			47	E	20	±
		49			56	W	10	
		8 14	1		52	W	10	Ca.
		14	1		40	W	10	Ca.
		14	1		38.5	W	10	Ca.
		9 36			10.5	W	15	
		36			14.5	W	10	
		35	8		9.5	W	60	Slants northwards.
		32	10	9.5		W	40	
8 14	8	50		W	15	Ca Observed mostly through thick cirrus. Ca photographs 8h 14m and 9h 9m Good.		
April 11.	G.N.	10 57	1	35.5		E	45	Ca.
		57		32		E	30	Ca
		5	1		8.5	E	80	} Form a single prominence in Ca and extend from P.A. 65° to P.A. 82°
		5	1		15.5	E	45	
		5	1		19.5	E	60	
		57	1		32.5	E	40	Ca. Faint.
		57	1.5		40	E	40	Ca.
		57	1		42	E	20	Ca.
		57	1.5		44	E	40	Ca.
		1	1.5		40.5	E	45	±
		57	0.5		57	W	30	Ca.
		57	11		47.5	W	60	Ca.
		12	1		18	W	30	Top slants southwards in Ca
		12	0.5		16.5	W	30	
		57	0.5		15.5	W	30	Ca. Top slanting northwards
		57			13.5	W	30	Ca.
		57			9.5	W	25	Ca. Detached.
57	5	20		W	25	Ca.		
57	1	40		W	20	Ca.		
57	7	58		W	45	Ca. Thick cirrus clouds during observations. Ca photographs 10h 57m and 9h 57m		
April 12.	S.S.	9 39	..	36.5		E	30	Detached. A Ca streak connects it to the limb at lat. + 33° E.
		36	3	19.5		E	10	
		33	2		8.5	E	20	Conelike
		30	6		16.5	E	45	D ₁ , D ₂ bright at base } Connected
		29			27.5	E	10	A little Ca cloudlet, 30" high, floats over it
		27			44	E	20	Connected to the next by a Ca streak.
		27	1		48	E	80	
		27	0.5		50	E	15	
		23	1		75.5	E	20	
		22			84	W	10	
		18	11		58.5	W	100	Narrower at top.
		57	14		15.5	W	70	Only 15" high except at lat. - 24° W. where the prominence is faint.
		54		6.5		W	20	D ₁ , D ₂ bright at base
51	4	25.5		W	25	Very faint		
48	0.5	52		W	10	Bright. D ₁ , D ₂ bright at base.		
48	0.5	58		W	25	Ca photographs 9h 58m and 9h 28m.		

Date and observer.	Hour I S T		Base	Latitude.		Lamb.	Height	Remarks.
				North.	South			
1908.	H.	M	°	°	°		"	
April 13, G.N.	8	43	0.5	30.5	.	E	15	Ca
		58	2	26.5	.	E	30	
		58		8.5	.	E	40	Detached.
		55			0.5	E	35	
		53	5		11	E	45	
		51			16.5	E	65	Detached.
		51	1.5		17.5	E	25	2° broad and 30" high in Ca.
		50	1		42.5	E	45	
		45	5		48.5	E	25	7° broad and 50" high in Ca.
		45	1		76.5	E	Low.	
		40			62	W	15	
		40			59	W	30	
	11	29			56	W	140	} Form a single conical prominence 7° broad and 150" high in Ca.
	9	13	1		53	W	20	
	8	43			35.5	W	10	Ca
		43			33.5	W	15	Ca.
	9	11	1		25	W	35	A Ca streak proceeds from the top of this as far as P.A. 224°
		9	3		15.5	W	35	
		7	1	26.5		W	20	
		7		29.5		W	15	
		7		31.5		W	20	Detached
		5		60		W	15	
		3		72.5		W	25	
	8	43		82		W	10	Ca
		43		83		W	10	Ca.
	9	1		71.5		E	15	Ca photographs 8h 43m and 9h 16m.
April 14, S.S.	8	55		57.5	.	E	15	Ca.
	9	6		54.5	.	E	10	
	8	55	0.5	51.5	.	E	15	Ca.
	9	3		29	.	E	25	
	8	59	1	17	.	E	30	
		56	1		9	E	15	
		56	1.5		12	E	20	
		56	0.5		15	E	10	
		50	10		42	E	30	A group of four prominences almost continuous in Ca
		45	3		59	E	10	
		55	0.5		71	E	15	Ca.
		41	0.5		77	E	10	
		36			60.5	W	20	Small, detached, very faint.
		55	0.5		57.5	W	15	Ca
		35	1		54.5	W	10	
		33	0.5		51.5	W	10	} D ₁ , D ₂ bright at base. Ca prominence is 9° broad.
		33	0.5		49.5	W	20	
	9	31			30	W	10	
	8	55			29	W	30	} Ca Slants northwards.
	9	31			21.5	W	30	
		29	6		13	W	15	} See Note (1).
		25	2		5	W	15	
		25			1	W	60	} See Note (2).
	8	55		8		W	15	
	9	22	2	28		W	20	Ca.
		19	4	34		W	20	
		16	1	50		W	15	Ca photographs 8h 55m and 8h 23m.
April 15 G.N.	8	44	1	63.5	.	E	45	Ca. Faint.
		44		28	.	E	15	Ca Do.
	9	20		17	.	E	Low.	
		20		16	.	E	Low.	
	8	44	1	14	.	E	15	Ca.
		44	2		9	E	45	
		44	4		16	E	20	Ca. A streamer extends from the last prominence to this.
	9	14	2	28	.	E	35	
		12	1.5	42	.	E	10	

Date and observer.	Hour I.S.T.	Base.	Latitude.		Lumb.	Height.	Remarks.	
			North.	South				
1908.	H. M.	°	°	°		"		
April 15. —contd.	G.N.		...	48.5	E	15		
				46.5	E	10		
				59.5	E	20	Ca.	
				69.5	E	15	Ca.	
				74	E	30	Ca.	
				24	W	30	Ca. Meets lumb again at P.A. 225°.	
				5	W	15	Ca.	
				1.5	12	W	30	Ca.
					22	W	30	
				5	35	W	40	Ca photograph 8 ^h 44 ^m .
April 16.	S.S.		...	77.5	E	10		
				67.5	E	10		
				59.5	E	60	Ca.	
				86	E	60	Ca.	
			6		12	E	25	There are several Ca cloudlets above it at the northern end—height 60".
					20	E	10	
			7		27.5	E	60	
			2		34	E	20	Ca.
			2		43	E	25	
			6		72	E	25	
					65.5	W	10	Ca.
					64.5	W	10	Ca.
					54.5	W	10	Ca.
			0.5		48	W	20	Ca.
			0.5		42	W	20	
			1.5		26	W	15	Ca.
			2		23	W	60	
			4		14	W	10	
					10	W	60	A faint detached streak. Connected to the last by four Ca streaks.
			7	0.5		1	W	10
	10 46	1.5	14		W	30	Ca. Faint.	
	11 4	5	84.5		W	25		
	10 46	3	72.5		W	20	Ca. Narrow at top.	
	46		76		W	20	Ca. Ca photographs 10 ^h 46 ^m and 10 ^h 58 ^m .	
April 17.	S.S.			83	E	20	Ca.	
				64	E	30	Ca.	
				57.5	E	35 ±	Faint	
				30	E	20		
				11.5	E	10		
			3.5	Equator		E	35	
			1		5	E	15	Ca.
			1		10	E	25	Base extends 2° further north in Ca.
					17	E	30	Ca.
					23	E	30	Ca.
			2		27.5	E	15	Ca. Double.
			2		43	E	25	Slightly slants northwards.
			0.5		54.5	E	10	
			0.5		88.5	W	10	
					68	W	15	
			0.5		16.5	W	10	
			1		43.5	W	10	Ca.
			0.5		27	W	60	See Note.
	0.5		14	W	10			
			23	W	10			
	1.5		32	W	15	} Tops connected by a Ca streak. Ca photographs 8 ^h 27 ^m and 8 ^h 46 ^m .		
April 18.	S.S.			78	E	10		
			4	64.5	E	20	} See Note (1).	
			1	57	E	10		
				31.5	E	10	Very faint	
			1.5		8	E	20	
			1		4	E	20	} Connected in Ca.

Date and observer.	Hour L.S.T	Base.	Latitude.		Limb.	Height.	Remarks.
			North.	South.			
1908.	M. M.	°	°	°		"	
April 18. —contd.	S.S.						
	9 5	4		2	E	15	} See Note (2)
	5	2		7	E	55	
	5			10	E	10	} In Ca they form a connected group 90" high at the tallest place.
	2	0.5		13	E	10	
	2	0.5		16	E	10	
	2	0.5		22	E	10	
	8 59			38	E	10	
	58	3.5		42.5	E	55	Connected to the next by a Ca streak. Ca prominence extends 5° further } D ₁₁ , D ₂ bright north. } at base.
	55	0.5		50	E	35	Ca.
	21			53.5	E	30	Ca.
	21			62.5	E	15	Ca. } Slant toward each other.
	53			65.5	E	20	
	51			84	E	10	Very faint
	21	1		77.5	W	10	Ca.
	9 58	1.5		46.5	W	35	
	56	5		27.5	W	60	
	53	5		21.5	W	20	
	8 21	10		6	W	10	Ca.
	9 52	1.5	1		W	10	
	8 21	0.5	7		W	30	Ca. Slants northwards.
	9 50	1.5	15		W	10	} Connected at base in Ca.
	48	4	25		W	20	
	8 21		48.5		W	30	Ca. Slants southwards. Ca photographs 8 ^h 21 ^m and 8 ^h 48 ^m .
April 19.	G.N.						
	8 14	...	54.5	...	E	10	Ca.
	14	1	49.5		E	10	Ca.
	14	0.5	45.5		E	10	Ca.
	9 16	2	15		E	60	} Connected at top. In Ca streaks proceed from both sides as far as P.A.'s. 40° and 60°.
	16	1.5	11		E	60	
	9	2	5		E	20	
	7	2	Equator.		E	20	80" high in Ca.
	7	0.5		4	E	15	
	8 14			6	E	90	Detached.
	9 5	5		14	E	25	
	8 14			19	E	90	Ca Faint. Detached.
	14			37	E	15	Ca.
	9 1	4		41	E	90	} Form a single prominence in Ca, 7" broad.
	7	1.5		45	E	30	
	1			47.5	E	20	Slants southwards
	8 14			50.5	E	15	Ca.
	14	1		55.5	E	15	Ca
	55			61	E	15	45" high in Ca.
	54			73	E	15	
	14			55.5	W	20	Ca.
	9 26			50.5	W	35	Detached.
	8 14	2		28	W	25	Ca. A faint loop.
	14	1		3	W	10	Ca.
	14			1	W	10	Ca.
	14		1		W	10	Ca. Slants northwards.
	14		3		W	25	Ca. Slants southwards.
	14	1.5	6		W	10	Ca.
	9 25	2	9		W	40	A streak connected to limb by 2 stems.
	24	0.5	22		W	45	Broad at top.
	8 14	7	31.5		W	35	Ca.
	14	0.5	42		W	30	Ca.
	14	0.5	51.5		W	15	Ca.
	14	0.5	74		W	30	Ca.
	9 20		67.5		E	80	Much bigger in Ca and covers 4" in it. Ca photographs 8 ^h 14 ^m and 8 ^h 38 ^m .
April 20.	G.N.						
	9 25	1	63.5		E	30	
	25	3	60		E	30	
	8 35		24		E	25	Ca. } Connected at top in Ca.
	9 20	1	19.5		E	45	} Connected at top.
	20	6	14		E	45	
	14	14	9		E	30	
	12			20	E	30	Connected to the last by a Ca streak.
	10	6.5		29	E	15	Connected to the last by a Ca streak.

Date and observer.	Hour I.S.T.	Base.	Latitude.		Limb	Height.	Remarks
			North	South.			
1908.	h m.	°	°	°			
April 20. —contd.	G.N.	..					
	9 8			50.5	E	25	
	6			73.5	E	15	
	5			85	E	15	
	0			62.5	W	20	
	35			54.5	W	30 ±	
	8 35			24	W	20	Ca.
	35			10	W	20	Ca.
	35			1	W	10	Ca.
	9 30		8		W	45	Double
	25		71.5		E	30	Not in Ca. Ca photographs 8h 35m and 8h 45m.
April 21.	S.S.						
	9 22		85		E	10	
	20	3	60.5		E	25	
	20	1	58		E	20	} Connected in Ca.
	14	2	34.5		E	10	
	14		32.5		E	10	
	11		20.5		E	30	Slants northwards over 7°.
	8 39		18.5		E	10	Ca.
	39		17.5		E	10	Ca.
	39			0.5	E	15	Ca.
	9 5	4		7.5	E	15	Metallio. D ₁ , D ₂ , b ₁ , b ₂ , b ₃ , b ₄ and 5816.8 bright.
	0	21		26	E	180	Height of the main part is 50'' but a few tall Ca streaks shoot up from it.
	8 55	3.5		45.5	E	10	
	49	1		76	E	10	
	39			64	W	50	Ca. Slants westwards
	39			57	W	30	Ca.
	39			38.5	W	15	Ca. Faint.
	39			20.5	W	30	Ca. Faint, detached.
	9 34	1		8.5	W	20	Extends 2° further south in Ca.
	8 39			3.5	W	20	Ca.
	39			1.5	W	20	Ca.
	39	1	8.5		W	15	Ca.
	9 32	1.5	13.5		W	10	
	8 39		20.5		W	100	Ca Faint Slants southwards slightly.
	9 31	0.5	22.5		W	20	Very faint.
	8 39		34.5		W	15	Ca Ca photographs 8h 39m and 8h 43m.
April 22.	K.V.S.						
	9 12	3	62.5		E	30	
	8 22	0.5	60		E	10	Ca.
	9 10	1.5	48.5		E	10	} Connected by Ca streaks. Ca prominence
	5	1.5	44.5		E	10	extends from lat. + 48° 5 E. to + 38° 5 E.
	8 55		37.5		E	15	
	22	1.5	35.5		E	30	Ca.
	30		18.5		E	30	Ca Faint.
	50		8		E	10	
	22	1		12.5	E	30	Ca.
	45	1.5		17.5	E	10	20'' high in Ca D ₁ , D ₂ , b ₁ , b ₂ , b ₃ , b ₄ bright.
	40	18		80.5	E	60	Series of connected prominences.
	35	1		64	E	Low.	
	22			76.5	E	30	Ca Faint.
	22	0.5		84	W	20	Ca
	30	1		68.5	W	Low.	
	22	1.5		50	W	20	Ca
	22	1.5		48.5	W	10	Ca.
	9 32	1.5		34.5	W	85 ±	Faint. Bright and 50'' high in Ca.
	8 22			20.5	W	50	Ca. Slants towards south.
	9 23	2		14.5	W	20	
	23	1		9.5	W	20	
	27			4.5	W	10	
	25		4.5		W	20	
	20		10.5		W	10	Bright jet. D ₁ , D ₂ , b ₁ , b ₂ , b ₃ , b ₄ bright.
	8 22	3	14		W	60	Ca.
	22		17.5		W	15	Ca. Slants westwards.
	20		32.5		W	10	
	15		61.5		W	10	Sharp jet Ca photographs 8h 22m and 8h 30m.

Date and observer.	Hour I S.T.		Base	Latitude.		Limb	Height	Remarks.			
				North	South						
1908.	H.	M.	°	°	°		"				
April 23.	S.S.	9 7	1 5	64	.	E	30	Top portion detached A Ca streak flows east wards from the lower half. 40' high and slanting eastwards in Ca Faint streaks. Not in Ca Ca. Faint. Faint Ca. Detached. Connected to the next prominence in Ca. <i>See Note.</i> A group of three prominences Ca. Detached. } Slant toward each other. Ca. Detached Ca photographs 8 ^h 33 ^m and 8 ^h 43 ^m . Ca Ca. Ca. } Tops connected in Ca. Ca. Ca. Ca. Ca. Ca. Slants towards north A Ca streak from this nearly meets the last prominence. Ca Faint. Filamental. Slants towards north. <i>See Note (1).</i> } <i>See Note (2).</i> Very faint 4° broad and 70" high in Ca. An arch. Ca. Ca. Faint. Archlike. Slants southwards. Ca. Ca. A bright jet. } Tops connected by Ca streaks. Ca streaks from the last run parallel to limb as far as lat. + 25° 5W Ca. Ca. Ca. Detached. Ca. Ca photographs 8 ^h 28 ^m and 8 ^h 30 ^m .			
		9 7	5	59.5		E	30				
		9 5	2	54		E	60				
		8 4	2	48.5		E	25				
		8 57	1.5	9.5		E	10				
		8 54	11		7	E	30				
		8 53	8		17.5	E	30				
		8 52	10		34.5	E	40				
		8 52			41.5	E	10				
		8 33	3		55.5	E	30				
		8 43	3		68.5	E	30				
		8 33			61	W	70				
		8 39			49	W	60				
		8 31	0.5		24.5	W	45				
		8 26	15		12	W	90 ±				
		8 19	12	17.5		W	50, 30				
		8 16	0.5	30.5		W	25				
		8 33		39.5		W	15				
		8 15		15.5		W	20				
		8 15		48.5		W	25				
		8 33		49		W	20				
		April 24.	K. V S.	8 28	...	85	...		E	15	Ca Ca. Ca. } Tops connected in Ca. Ca. Ca. Ca. Ca. Ca. Slants towards north A Ca streak from this nearly meets the last prominence. Ca Faint. Filamental. Slants towards north. <i>See Note (1).</i> } <i>See Note (2).</i> Very faint 4° broad and 70" high in Ca. An arch. Ca. Ca. Faint. Archlike. Slants southwards. Ca. Ca. A bright jet. } Tops connected by Ca streaks. Ca streaks from the last run parallel to limb as far as lat. + 25° 5W Ca. Ca. Ca. Detached. Ca. Ca photographs 8 ^h 28 ^m and 8 ^h 30 ^m .
				8 28		71			E	10	
8 26	0.5			69		E	10				
8 20	1			62		E	20				
8 28	1			60		E	30				
8 28	2			57		E	30				
8 28				43.5		E	30				
8 28				40.5		E	10				
8 28	2			31.5		E	15				
8 28	0.5			24.5		E	15				
8 28				18.5		E	15				
8 10	1			15.5		E	15				
8 28	1			13.5		E	15				
8 5	3				12.5	E	50				
8 0	1				19	E	10				
8 0					23	E	20				
8 55					29.5	E	10				
8 50					59	E	25 ±				
8 45	3				78	E	25				
8 35	0.5				55	W	45				
8 28	5				43	W	90				
8 28	16				29.5	W	90				
8 45	4				16.5	W	90				
8 28			8.5	W	80						
8 28			6.5	W	30						
8 35			3	W	10						
8 28	6	0.5		W	15						
8 30	4	12.5		W	55						
8 25	1	20		W	20						
8 28		26.5		W	10						
8 28		38.5		W	40						
8 28		44.5		W	15						
8 28	1	61		W	15						
April 25.	S.S.	8 17	1	81.5	..	E	10	Ca. Ca. A slender streak. Ca. do. Ca. do. Ca. do. Ca. do.			
		9 8	2	61.5		E	25				
		9 5		43		E	10				
		9 5		41		E	10				
		8 17		15		E	10				
		8 17		13		E	10				
		8 17		5		E	15				
		8 17		Equator		E	10				
		8 17			2	E	15				

Date and observer	Hour. I.S.T	Base.	Latitude.		Limb.	Height.	Remarks.
			North.	South.			
1908.	H. M.	°	°	°		"	
April 25. —contd.	S.S.	18	...	14	E	60	Southern end very faint and slants southwards as far as lat. -28° E.
	8 55	0.5		28	E	10	Ca. Faint.
	17	0.5		34	E	20	Ca.
	50	1.5		39	E	30	Faint.
	49	1		45	E	90	Do.
	47			48	E	60	Slants southwards. } Almost connected in Ca
	47	3		54.5	E	10	
	17			59.5	E	10	Ca.
	44			65	E	10	
	48			69.5	E	16	
	17			78	E	15	Ca.
	32			67.5	W	15	Slants eastwards Faint At 9 ^h 43 ^m it was a jet 20" high.
	9 48			63.5	W	10	
	8 31			59.5	W	15	
	17	0.5		45	W	10	
	9 37	5		23.5	W	15	D ₁ , D ₂ bright at the southern end 60" high in Ca. } Connected in Ca.
	33	1.5		15	W	10	See Note (1).
	28	1.5		7	W	15	
	27	1.5		2	W	10	
	25		21		W	10	
	28		26		W	10	
	21	2.5	31		W	60	See Note (2).
	19	3	38.5		W	45	More continuous in Ca than in hydrogen
	17		47		W	10	
	8 17	0.5	52		W	15	Ca.
	17		54.5		W	10	Ca.
	9 14	4	60.5		W	10	Height 25" at the southern end and 10" at the northern in Ca. Ca photographs 8 ^h 17 ^m and 8 ^h 24 ^m
April 26.	K.V.S.	0.5	31		E	100	Ca.
	21	1	27		E	15	Ca.
	55			20	E	10	
	10	1		22	E	10	75" in Ca.
	52			25	E	Low	Low sharp jet Ca prominence is 170" high and extends southwards as far as lat. -38° E.
	52	0.5		27	E	10	
	21	1		40	E	15	Ca.
	0			63	E	10	Two prominences.
	50	2		84	W	Low	Chromosphere slightly elevated
	21	1.5		80	W	15	Ca.
	21			76.5	W	15	Ca.
	25	0.5		50	W	25 ±	Very faint. 50" in Ca.
	20			9.5	W	10	
	8 59	0.5	11		W	15	Ca.
	9 21		40		W	15	Ca.
	58		56		W	25	Detached Connected to limb by Ca streaks. Ca photographs 9 ^h 21 ^m and 8 ^h 59 ^m
April 27.	G.N.		63.5		E	15	
	8 22	2	49		E	15	Ca.
	22		42		E	10	Ca.
	9 5		21		E	10	
	5	1.5	18		E	15	
	8 22		16		E	10	Ca
	9 5	10	10		N	60	
	8 22			7	E	45	Ca. A detached streak
	22			11	E	50	Ca. Faint A detached streak.
	9 1			25	E	50	
	0			35	E	20	
	8 22	1.5		84.5	W	30	Ca.
	22			78	W	10	Ca.
	22			59.5	W	15	Ca. A streak extending over 9° of limb.
	9 25			50	W	75	Bright and only 45" in Ca.
	8 22			38	W	15	Ca.
	22			16	W	10	Ca.
	22		5		W	10	Ca.

Date and observer.	Hour L.S.T.	Base.	Latitude.		Limb.	Height.	Remarks.
			North.	South.			
1908.	H M	°	°	°		"	
April 27. —contd.	G.N.	.	12		W	15	Ca
			17		W	30	
			26		W	10	Ca.
			34		W	15	Ca.
			46		W	15	Ca.
			52		W	10	
8 22		78		W	15	Ca	
							Ca photographs 8 ^h 22 ^m and 8 ^h 29 ^m .
April 28.	K.V.S.		75		E	20 ±	
			65.5		E	15	Ca.
			57.5		E	20	Ca.
			35		E	10	Ca.
			32		E	10	Ca
			30	1	E	15	
			24		E	10	Ca
			21	2	E	30	
			10	8	E	50	Ca prominence extends as far as lat. — 2°E.
			10		E	15	Ca. Faint
			10	1	E	15	Ca
			55		E	Low,	Bright.
			10	4	E	25	Ca
			21		E	20	Ca.
			10		E	15	Ca.
			10		E	15	Ca. A detached slanting streak.
			45		W	10	
			10		W	20	Ca.
			9 25	2	W	20	Faint. Height 80" in Ca.
			8 10		W	15	Ca.
10		W	30	Ca. Almost detached.			
9 23	2	W	15	Faint. Ca prominence is 9° broad and 30" high.			
20	1	W	55				
20	1	W	75	Detached from limb but connected to the last prominence			
April 29.	G.N.	..	45.5		E	15	Ca photographs 8 ^h 10 ^m and 8 ^h 21 ^m .
			33.5		E	15	Ca.
			22.5		E	25	Ca. Detached.
			15.5		E	30	Ca.
			10.5	2	E	35	Connected to the last by a Ca streak.
			3.5		E	20	
			0.5		E	15	Ca
			1.5		E	15	
			9.5		E	20	Ca.
			18.5	6	E	30	A Ca streak extends to 60" in height.
			47.5		E	45	
			50.5		E	45	Top connected with the last prominence
			56		E	20	Ca.
			80.5		E	10	Ca.
			83.5		W	15	
			75		W	15	
			73		W	15	Ca
			47.5		W	30	
26.5	3	W	45				
10.5		W	15				
15	6	W	80				
10	1.5	W	30				
9	4	W	50 ±				
8 13		W	25	Ca.			
							Ca photographs 8 ^h 13 ^m and 8 ^h 17 ^m .
April 30.	K.V.S.	0	56.5	..	E	20	Ca.
			37.5		E	10	Ca.
			32		E	35	
			16		E	20	
			14		E	20	] Top connected Ca prominence is continuous and is 8° broad.
					E	50	Ca.
					E	50	Ca.
					E	15	Ca.
8 20		E	10	A streak from top runs eastwards.			
20	1	E	100	Ca.			

Date and observer.	Hour I.S.T.	Base	Latitude.		Limb.	Height.	Remarks.						
			North.	South									
1908.	H. M	°	°	°		"							
April 30. — <i>sonid.</i>	K.V.E						Ca. Hook-like.						
							8 20		20.5	E	40	Ca.	
								Ca.					
								Ca.					
	9 57	2.5		46	W	65	Hook-like at top. 4°-5° broad in Ca						
	55	1.5		30.5	W	45	Ca streaks on both sides.						
	50	2.5		25.5	W	60	A Ca streak runs parallel to limb for 5° towards west						
	47	4		19.5	W	25							
	35	4		2	W	50	Two Ca streaks flow } Connected by a Ca streak westwards						
	25	1	49.5		W	10							
8 20		54.5		W	30	Ca. Ca photographs 8 ^h 20 ^m and 8 ^h 33 ^m							
May 1.	G.N.						Ca						
							8 11		71.5	W	30	Ca	
							11		34	E	30	Ca	
							9 52	1	32	E	45		
							50	0.5	5	E	15		
							8 11		1		E	15	Ca.
							9 50			2	E	15	
							8 11			11	E	20	Ca
							9 45	20		25	E	60	A number of prominences are connected together..
							37	1		47	E	20	
							33	1		74.5	E	60	
							33	1		71.5	E	25	
							10 12	4		47	W	50	
							9	1		31	W	65	Ca streaks extend on both sides.
							6			15	W	10	
8	1.5		12	W	30								
2		2		W	25								
8 11		9		W	10	Ca							
10 3	0.5	33		W	15								
2	1	41		W	15								
0		52		W	30	An arch.							
9 57		60		W	15	Ca photographs 8 ^h 11 ^m and 8 ^h 31 ^m .							
May 2.	S.S.						Ca						
							8 32		78.5	E	15	Ca.	
							32		68.5	E	10	Ca.	
							9 30	15	28.5	E	35		
							23		9	E	10	Slants northwards over 3°	
							19		2	E	10		
							18			1	E	25	Slants southwards } Connected in Ca. over 4°
							14			17	E	25	Slants northwards over 3°.
							8 32			39	E	15	Ca.
							9 6	2		45	E	15	Slants southwards.
							8 57			81	E	20	Faint
							32			78.5	W	10	Ca.
							32			75.5	W	15	Ca
							54			67.5	W	15	
							48			63.5	W	10	
32	2		46	W	15	Ca.							
32			38	W	40	Ca.							
10 5	0.5		12	W	10								
9 56	5	15.5		W	35	Slants southwards.							
54	0.5	26		W	10								
47	0.5	64		W	20								
							Poor weather. Limb not examined between lats. — 15° and — 65° W						
							Ca photographs 8 ^h 32 ^m (fair) and 8 ^h 40 ^m .						
May 3.	S.S.						Ca.						
							9 55	1	42	E	10		
							52	14	32	E	40		
							8 30	0.5	21	E	20	Ca.	
							9 46	3	9	E	25		
							45	0.5	3	E	10	In Ca it goes up to 60" and slants southwards over 5°.	
44			2	E	40								
38	7		49.5	E	25								
27	5		79	W	30								

Date and observer.	Hour I S T	Base	Latitude		Limb.	Height.	Remarks.
			North.	South.			
1908.							
May 3. —contd.	S.S.						
	8 30			60 5	W	10	
	30	0.5		38	W	20	
	10 15	17		11 5	W	30	
	18	6	15		W	35	
	8 30		24		W	35	Ca. } Tops nearly connected.
	10 15	2	28		W	25	Ca. } Connected in Ca.
	15		38		W	20	Ca. } Connected
	11	1	64		W	10	
							Ca photographs 8 ^h 30 ^m and 9 ^h 14 ^m .
May 4	G.N.						
	9 26		60.5		E	10	
	24	1.5	32		E	70 ±	
	24	3	29		E	70 ±	
	31		14		E	10	Ca.
	31		11		E	10	Ca.
	20	5	6		E	10	
	18			3	E	30	
	17			6	E	20	
	11	2.5		9	E	60	Connected by Ca streaks.
	14			13	E	80	
	31	2.5		35	E	30	Ca
	38			45	W	15	
	38			41	W	20	
	35	10		21	W	55	Streamers extend from this prominence to lat. — 9°.
	31		6		W	20	Ca. Detached.
	31		8		W	20	Ca.
	31		23		W	40	Ca. A streamer extends to lat. + 13°.
	31	4	28		W	45	Ca.
	30	1	36		W	45	
	30		37		W	15	
	29		46		W	30	
							Ca photographs 9 ^h 31 ^m and 9 ^h 23 ^m .
May 5.	S.S.						
	9 19		35.5		E	15	
	8 20		37.5		E	20	Ca.
	9 12		38		E	50	Faint. } Meet at top.
	12		32		E	50	" }
	3	12		17	E	30	
	8 48			78	E	10	
	20	0.5		86.5	E	30	Ca.
	20			84.5	W	20	Ca.
	45			77	W	10	
	9 48			44	W	15	Faint.
	44	15		27.5	W	45	
	36			1	W	15	Faint.
	34	0.5	3		W	20	
	32	0.5	35		W	20	
	31	0.5	46		W	20	
	16		57.5		W	10	
	14		60.5		W	10	
							Ca photographs 8 ^h 30 ^m (very poor) and 8 ^h 20 ^m .
May 6	G.N.						
	8 11	3	..	0	E	30	Ca. A Ca streak extends to lat. — 10°.
	11	1		14	E	45	Ca.
	40	2		21	E	50	Connected to the last.
	11			35	E	35	Ca.
	11			53	E	25	Ca.
	11	9		30	W	60	Ca.
	11	2		15	W	15	Ca.
	11			11	W	15	Ca.
	11		53		W	10	Ca.
							Weather bad. Only part of the limb observed visually.
							Ca photograph, flocculus plate, 8 ^h 11 ^m ; poor.
May 7	S.S.						
	9 18		67	..	E	10	
	0		30		E	30	
	8 58	7	15.5		E	60	Slants southwards as far as lat. + 5° E. } Ca streaks from tops of these flow towards each other
	36		Equator.		E	10	Ca. Detached

Date and observer.	Hour L S T	Base.	Latitude		Limb	Height.	Remarks
			North	South.			
1908.	H. M.	°	°	"		"	
May 7. —contd.	S.S.						
	8 53	.		5	E	25	Detached. } Nearly connected in Ca.
	51	18		18	E	25	
	46			34	E	10	
	39			86	E	10	
	9 45	10		37	W	55	Narrow at top
	42	2		24	W	50	} Connected.
	40			21	W	50	
	38	4		17	W	60	} Connected at base in hydrogen
	38	1		11	W	50	
	36	2		4	W	20	
	34	3	8.5		W	25	
	32	5	14.5		W	55	
	24	1	49		W	20	
	21		76		W	15	
	20	3	82.5		W	15	
							Ca photographs 8 ^h 36 ^m and 8 ^h 20 ^m .
May 8.	G.N.						
	14 34		61	..	E	30	Ca.
	34		32		E	60	Ca. }
	34		26		E	65	Ca. } Tops connected
	34	6	60		E	120	Ca. }
	18 25	2	5		E	45 ±	
	25		1		E	30	
	14 34	9		5	E	25	Ca.
	13 20			18	E	20	
	14 34			23	E	50	Ca.
	34			38	E	20	Ca. An arch
	34			54	E	50	Ca.
	2	4		40	W	60	
	0			31	W	40	Not in Ca
	34			29	W	30	Ca
	13 59			25	W	10	
	57	2		16	W	25	
	14 34	1		5	W	120	Ca Connected to the top of the last prominence.
	13 57	1.5		10	W	10	
	14 34		16		W	40	Ca Ca photograph 14 ^h 34 ^m .
May 9.	S.S.						
	10 36	3	41.5		E	45	Faint in hydrogen, bright in Ca.
	52	3	38.5		E	180	Ca. }
	1	8	16		E	60	Ca. } Connected in Ca.
	9 59	1	7.5		E	25	
	57	1.5		2	E	10	
	48	4		52	E	80	Double.
	45			59.5	E	10	
	14			87	W	10	
	8 42			60	W	10	
	10 25			43.5	W	10	
	28			6.5	W	45 ±	Detached. 120'' high in Ca. Forms different in Ca at 8 ^h 25 ^m and 10 ^h 52 ^m
	52		3		W	20	Ca.
	20	6	18		W	25	
	32		57.5		W	10	Seeing mostly poor Ca photographs 10 ^h 52 ^m and 8 ^h 25 ^m .
May 10.	G.N.						
	9 18		48		E	15	
	20	1.5	44		E	50	Ca. A streak extends to lat. + 30°.
	20		15		E	15	Ca.
	20		12		E	15	Ca.
	16	3	7		E	80	
	15			11	E	50	
	20	3		51	E	60, 50	Ca Double.
	13			63	E	20	
	20			53	W	20	Ca.
	20	1.5		41	W	15	Ca.
	20			38	W	15	Ca.
	26			27	W	25	
	24		8		W	20	
	23	3	28		W	45	} Connected at base in Ca.
	22	1	30		W	35	
							Ca photographs 9 ^h 20 ^m , 8 ^h 28 ^m and 8 ^h 54 ^m .

Date and observer.	Hour I. S. T.	Base.	Latitude.		Limb.	Height	Remarks.
			North.	South.			
1908.	H. M.	°	'	•		"	
May 11. S.S.	9 27	0.5	58		E	10	
	25	0.5	49		E	10	
	22	6	43		E	50	Very faint in } Connected by a Ca streak hydrogen
	15		39		E	10	Ca
	15		36		E	20	Ca
	15		19		E	15	Ca
	16		17		E	25	
	18	3	11.5		E	25	} Connected in hydrogen
	15	3	7.5		E	10	Ca.
	10	2		11	E	40	
	5			25	E	10	
	3	1.5		38	E	35	Faint. } A Ca streak passes through these and meets limb at lat. — 37° N.
	8 58	4		52	E	40	
	9 15	4		48	W	60	Ca Narrow at top
	51	3		38.5	W	35	
	48	2		.14	W	15	
	46			15	W	10	
	15	2		12	W	30	Ca. Two streaks meeting at top.
	15	2		6	W	45	Ca. Three streaks close to one another.
	43	2		1	W	20	
	42	2			W	10	
	15	3	8		W	40	Ca An irregular arch.
	41	3	21.5		W	45	Slants northwards.
	15	1	25		W	15	Ca
	38	0.5	32.5		W	10	
							Fine with passing clouds. Ca photographs 4 ^h 15 ^m and 8 ^h 26 ^m .
May 12. K.V.S.	9 40		70.5	...	E	Low	
	35		50		E	15	
	35		49		E	30	
	30	0.5	46.5		E	10	} Connected in Ca Ca prominence extends to lat. + 43° E.
	20		33		E	50	Ca Broad at top.
	22	2		9	E	30	
	20	2		32	E	165	Ca.
	6	3		50.5	E	45	
	20	3		55.5	E	20	Ca } Connected by a Ca streak.
	20			60	E	20	Ca.
	20			64	E	20	Ca
	10 12			80.5	W	10	
	9 20			62	W	15	Ca.
	20			54	W	10	Ca.
	20			50	W	10	Ca
	10 10	1		40	W	30	
	9 20			23	W	10	Ca
	20			6	W	30	Ca
	20			5	W	10	Ca
	10 7			3.5	W	10	
	9 20	3	4.5		W	30	Ca
	20		32.5		W	10	Ca A short streak parallel to limb.
	10 0	1	34.5		W	30	
	9 55		33.5		W	15	Detached Not found in Ca photographs. Observed mostly in a bright sky. Ca photographs 9 ^h 20 ^m and 8 ^h 51 ^m .
May 13. S.S.	10 54		80.5	..	E	15	
	50		65		E	10	Ca
	50	1	63		E	10	Ca
	53		59		E	10	
	9 55	4	50		E	60	Faint in hydrogen, bright in Ca.
	10 48	4	36		E	75	Two streaks meeting at top in Ca In hydrogen there was only a detached streak slanting east- wards.
	8 51		15		E	10	
	10 43	1	12.5		E	15	Lower part bright, metallic. D ₁ , D ₂ , b ₁ , b ₂ , b ₃ , b ₄ bright
	43	1	10		E	Low	Two short detached Ca streaks 60" high float over it
	50		7		E	30	Ca.
	50		6		E	60	Ca

Date and observer.	Hour I.S.T.	Base.	Latitude		Limb	Height.	Remarks.
			North.	South.			
1908.							
May 13.	S.S.						
—contd.							
	8 46	1	2.5		E	25	
	46	1		1	E	10	
	10 50			9	E	45	Ca
	50	0.5		12	E	15	Ca
	8 43	1		15	E	10	
	10 38			30	E	70	See Note (1)
	8 35	10		54	E	55	
	10 50			85	E	30	Ca. Faint.
	50			85	W	20	Ca. Faint. } Slant away from each other.
	19	1		40	W	25	
	17	1		17.5	W	70	See Note (2).
	50	3		7.5	W	30, 60	Ca. 30" at northern end, 60" at southern.
	50	8	Equator		W	20	Ca
	10	9	34.5		W	20	
	50		54.5		W	10	
							Ca photographs 10h 50m, 11h 11m, 8h 51m, and 10h 20m.
May 14	K.V.S.						
	10 0	2	49		E	50	Ca.
	0		80		E	15	Ca.
	9 40	1		14	E	10	
	10 0	4		51	E	60	Ca.
	0			78.5	E	20	Ca.
	0	1		40	W	10	Ca.
	0	1		36	W	10	Ca.
	0			34	W	10	Ca.
	0			31	W	15	Ca.
	0			23	W	10	Ca.
	0			21	W	10	Ca.
	0			16	W	10	Ca.
	0	0.5		11	W	40	Ca Faint.
	33	4		6	W	10	
	30	1	1		W	10	Faint, 60" high and slants northwards in Ca.
	0	1	9		W	15	Ca.
	0	12	33		W	15	Ca.
							Seeing poor owing to bright cirrus clouds. Ca photographs 10h 0m and 10h 21m (poor).
May 15.	S.S.						
	8 13	0.5	69		E	10	Ca.
	9 8		59		E	10	
	5	7	52.5		E	25	
	8 13	0.5	6		E	15	Ca Faint.
	56	0.5		3	E	10	
	13			10	E	15	Ca
	13			31	E	15	Ca
	48	9		51.5	E	55	
	43			64.5	E	15	
	13	1.5		59	W	15	Ca. Double Slants westwards.
	13			49	W	10	Ca.
	13	1		42	W	15	Ca.
	9 39	1		31	W	25	
	33	1.5		18	W	20	} Metallic, D ₁ , D ₂ , } Connected in Ca. One of the b ₁ , b ₂ , bright } Ca streaks was 60" high
	30	1		14	W	15	
	26	3		5.5	W	20	
	27	3	1.5		W	10	
	26	2	8		W	10	
	25	1	19		W	20	
	9 24	1	26		W	30	} A streak passes through these and meets limb at lat. + 33° W.
	24	1	31		W	30	
	18		49		W	15	See Note.
	8 13	1	50		W	10	Ca
	13		60		W	10	Ca.
	13	0.5	68		W	20	Ca Faint. Ca photographs 8h 13m and 8h 24m.
May 16.	K.V.S.						
	8 59	3	55.5		E	40	Ca.
	10 5		51		E	15	} Connected and 40" high in Ca
	9 0		46.5		E	10	
	8 59		15		E	20	Ca.
	55		5		E	40	Detached
	59			9	E	15	Ca

Date and Observer.	Hour I.S.T.	Base.	Latitude		Limb	Height	Remarks.	
			North	South.				
1908.								
May 16 —cont'd	K.V.S.	" M. 8 45 40 59 35 59 9 40 8 59 59 59 9 38 35 30 20	13 6 0.5 2.5 0.5 2 8	° ° ... 24 48	° 17.5 28 48 52 56 61 70 58 57 36 33 21 12.5	" E E E E E E E W W W W W W W	40 20 15 60 30 10 15 10 10 20 30 40 10 40 30	Ca Faint Faint in hydrogen and bright in Ca. Ca Faint Not in Ca. Ca Ca Ca. Very bright. Metallic. D ₁ , D ₂ , b ₁ , b ₂ , b ₃ , b ₄ bright. Height 20' at 10 ^h 20 ^m . Ca. Ca photographs 8 ^h 50 ^m and 8 ^h 26 ^m .
May 17.	K.V.S.	9 12 50 45 30 12 12 20 12 10 5 9 12 58	2 1 24 3 3 12 1 4	60 56 4.5 24 27	. 18 82 50 54.5 56 18.5 13.4 6	E E E E E W W W W W	30 10 60 95 30 30 Low 30 15 20 30 15 60	Ca. 5° broad at top Ca. Meets the last. Ca Slants southwards } Meet. Ca. Faint Faint. A group of 3 prominences Ca. Ca photographs 9 ^h 12 ^m and 9 ^h 25 ^m .
May 18.	G.N.	9 23 22 20 18 16 13 40 32 30 28	2 20 8 2	55 34 7 5 18 29	. 22 48 68 70	E E E E E W W W W	20 15 25 90 20 60 30 15 20 35	± Four prominences joined at top. } Tops connected by a Ca arch Ca photographs 9 ^h 17 ^m and 9 ^h 4 ^m .
May 19.	K.V.S.	9 15 12 10 8 55 49 25 25 9 40 30	2 19 8 0.5 8 7	57 51 43 31	. 27.5 74 69 21 17 4.5	W E E E E W W W W	15 15 15 70 45 10 10 45 70	Ca. Ca. } Connected in Ca. Ca photographs 8 ^h 25 ^m and 8 ^h 41 ^m .
May 20.	G.N.	8 26 26 26 55 50 26 9 6 6 2 1 8 26	.. 5 14 3.5 3 1 6	37 15 Equator 31	... 1 31 60 52 22 16 5	E E E E W W W W W W	10 15 15 45 15 10 35 35 70 25 15	Ca. Ca. Ca Ca A streak extends to meet the top of the last prominence A number of Ca streaks extend both ways Ca Faint. Ca photograph 8 ^h 26 ^m
May 21.	K.V.S.	9 45 8 38 38	6	16	2 5	E E E	35 75 50	Ca. A detached clondlet. Ca. Do.

Date and observer.	Hour I.S.T.	Base	Latitude		Limb	Height.	Remarks.
			North.	South.			
1908.	h. m.	'	°	°		'	
May 21. K.V.S.	8 38	..	.	6	E	75	Ca. A detached cloudlet.
—contd.	9 14	0 5		13	E	30	Ca. A short detached streak.
	12	0 5		14	E	15	A small detached cloudlet 75" high floats over it.
	8 38			17	E	Low.	Do do do.
	38			22	E	60	Ca. Slants southwards
	38			26	E	30	Ca. Do. do. Detached.
	38			29	E	50	Ca. Do. do. Do
	9 10	7		37.5	E	25	
	8 50	5		57.5	E	25	
	38	2		84.5	E	25	Ca. Faint.
	19	1.5		88	W	25	Ca.
	19	0 5		81	W	15	Ca.
	19			43	W	110	Ca.
	11 40			31	W	15	Faint in Ca.
	8 19	2		25	W	15	Ca.
	11 35	1	22		W	25	Ca prominence extends from lat +4° to +38° W. Observed in a clear sky. Ca photographs 8 ^h 38 ^m (E. limb), 8 ^h 19 ^m (W. limb), and 9 ^h 19 ^m .
May 22. G.N.	9 18	1.5	87.5	...	E	30	Not in Ca.
	16		50		E	30	Much larger in Ca when it covers 5° of the limb.
	18	8	16		E	80	
	10	2		3	E	40	A detached cloud on the top of this in Ca at a height of about 120" above atmosphere
	8 27			11	E	10	Ca.
	27			22	E	10	Ca.
	27			24	E	15	Ca.
	27			27	E	10	Ca.
	27			29	E	120	Ca. A long streamer extending to lat. —40°
	27			33	E	15	Ca.
	9 8	3		40	E	40	
	7	1		68	E	15	
	5			85	E	15	
	5			87.5	W	20	
	29			60	W	30	
	25			39	W	120 ±	In Ca a huge cloud extends from lat. —39° to —60°.
	8 27			30	W	15	Ca.
	27			21	W	15	Ca.
	9 23	2		18	W	20	
	8 27			16	W	30	Ca.
	27			6	W	30	Ca.
	9 22		4		W	15	
	8 27		23		W	15	Ca. An arched streak meeting limb again at lat. +29°.
	27		38		W	30	Ca.
	27		35		W	15	Ca.
							Ca photographs 8 ^h 27 ^m , 8 ^h 20 ^m , and 9 ^h 43 ^m .
May 23. S.S.	9 8	0.5	65.5	..	E	10	
	8 21	2	59		E	10	Ca.
	21		58		E	10	Ca.
	21		50		E	10	Ca.
	21	4	32		E	40	Ca. Slants southwards
	21		24		E	40	Ca.
	55	1	8 5		E	10	D ₁ , D ₂ bright at base.
	55	2	3		E	10	
	21	3		2 5	E	10	
				29.5	E	60	Ca. Faint Two slanting streaks connected at top.
	48	5		33 5	E	25	D ₁ , D ₂ slightly bright at base.
	47			38	E	20	Faint.
	43	1		44	E	10	Faint.
	21			74	E	15	Ca.
	35	1		73	W	10	
	21			65	W	10	Ca.
	9 30			58	W	30	
	8 21			51	W	30	Ca.
	9 28			40	W	25	
	28			38	W	15	
	23	4		8	W	25	

Date and observer.	Hour I.S.T.	Base.	Latitude		Limb.	Height	Remarks.		
			North.	South.					
1908.	n. m.	°	'	"		"			
May 23. -contd	S S	1	4		W	30			
			18	1	7	W	35		
			18	3	8.5	W	10		
			13		13	W	10	} Connected in Ca	
			13		15.5	W	15		
			13	0.5	20	W	15		
			8 21		27	W	40	Ca. Broader at top. Slants northwards.	
			9 14		31	W	10	} Connected in Ca.	
			13		36	W	35		
			8 21		41	W	10		
May 24.	G.N.	2	5.4		E	15			
			32		47	E	45		
			8 53		25	E	50	Ca. A slanting loop	
			9 31		21	E	30	A slanting streak 50" high in Ca.	
			30		16	E	95		
			8 53			11	E	10	Ca.
			53			14	E	15	Ca.
			9 25			17	E	50	Detached mass, connected with the limb by a thin Ca streak.
			23	1		23	E	25	
			21	3		33	E	100	Extends in Ca to lat. - 39'
			15			43	E	60	
			12			61	E	15	
			11			66	E	20	
			10	1		85.5	E	30	
			49			51	W	20	
			17			25	W	15	
			45	1		10	W	75	A streamer extends to lat. - 6°.
			42	14	12		W	45, 40	Four prominences all connected together.
			36	1.5	3.1		W	40	75" high in Ca.
			8 53	3	37		W	40	Ca.
9 37	2	44		W	60				
35		50		W	20	Ca photographs 8h 53m and 8h 39m			
May 25	S S.	1	76	...	W	10	Ca.		
			9 17		71.5	E	15	Faint.	
			8 10	1	61	E	10	Ca.	
			10	1	49	E	10	Ca.	
			10		46	E	10	Ca.	
			9 10	1.5	21	E	20	A Ca streak from top meets limb at lat. + 23° E.	
			10	1.5	17	E	30	A Ca streak from top meets limb at lat. + 11° E.	
			7	0.5	Equator	E	10	Not in Ca	
			1	16	13	E	60	See Note.	
			8 53	2	35	E	40	D ₁ , D ₂ , slightly bright at base	
			50		39	E	10	} Connected in Ca.	
			49		41	E	15		
			47	1	44	E	10		
			10		87.5	W	30	Ca. Slants eastwards.	
			10		80	W	10	Ca.	
			38	1	66	W	10		
			9 49		51	W	15		
			8 10		42	W	10	Ca.	
			9 43	5	8.5	W	70	Narrower at top.	
			37	2	13	W	30		
34		27.5	W	10					
30	2	34	W	30	} Connected in Ca.				
30	1	39	W	30					
30	1.5	41	W	25					
30	0.5	50.5	W	40					
8 10	0.5	65	W	15	Slants northwards.				
May 26.	G.N.	6	56	..	E	15	Ca.		
			23		38	E	10	Ca.	
			23		35	E	10	Ca.	
			56		31	E	20	Four small prominences joined together at top.	

Date and Observer.	Hour I.S.T.	Base.	Latitude.		Limb.	Height.	Remarks.
			North.	South.			
1908	H. M.	°	°	°		"	
May 28.	G.N.						
<i>—contd.</i>	8 17	.	..	8	W	10	Ca.
	17		19		W	10	Ca.
	17		44		W	15	Ca.
	55		80		W	40	
							Ca photographs 8h 17m, 8h 25m and 8h 50m.
May 29.	S.S.						
	9 9	1	58		E	10	
	9		55		E	20	Detached.
	4	2	30		E	45	A faint Ca streak 20" high branches from it and meets limb at lat. + 22° E.
		3	18.5		E	20	Ca. Archlike
	2		12		E	30	Ca.
	8 58	2		16	E	35	} Connected in Ca.
	50	2.5		20	E	40	
	9 2			29	E	15	Ca
	8 50			37	E	15	Faint. Surmounted by a short slanting Ca streak.
	46	2		48.5	E	25	
	9 39	1		50	W	25	Double in Ca.
	37	10		35	W	35	
	30			17	W	30 ±	Faint except near base. Not found in Ca.
	27		3.5		W	10	
	24	1.5	18.5		W	50	Slants slightly both ways at top
	18	3.5	52		W	20	} Connected; 30" high, and faint in Ca.
	15		58		W	10	
							Observed through thin cirrus
							Ca photographs 9h 2m and 8h 38m.
May 30	G.N.						
	9 12	.	60		E	20	Ca
	6	8	26		E	60, 30	Ca
	12		10		E	15	Ca
	2	3		11	E	30	See Note.
	0	4		25	E	15	
	12			33	E	20	Ca.
	12			60	E	15	Ca.
	12			72	E	30	Ca.
	12			85	E	10	Ca.
	12			50	W	30	Ca
	22	12		38	W	50 ±	
	12			22	W	10	Ca
	12			18	W	10	Ca
	10	2		10	W	35	
	17		1		W	50	
	12		9		W	10	Ca.
	11	3	18		W	70 ±	
	12	6	50		W	30	Ca.
	12		55		W	10	Ca.
							Ca photographs 9h 12m and 8h 34m.
May 31.	S.S.						
	9 17	13	21.5		E	60	Only 15" high over the eastern half
	11			9	E	25	
	15			15	E	10	Ca.
	15	1		18	E	15	Ca
	50	6		52	W	20	Very faint. } Connected and the greatest height
	47	1		42	W	30	} 120" in Ca.
	47	1		39	W	30	
	47	0.5		35	W	15	
	43	1		20	W	20	
	15			24	W	30	Ca
	42	3		21.5	W	45	
	40	1.5		13	W	15	
	38	0.5		10	W	30	
	33	1.5	19		W	25	
	15	2	49		W	30	Ca.
	15	0.5	59		W	10	Ca.
							Ca photographs 9h 15m and 8h 39m.
June 1.	G.N.						
	8 15	8	28	...	E	30	
	30	2	20		E	15	
	41	10		20	E	30	
	30			57	E	20	Ca.
	30			55	E	20	Ca.

Date and observer.	Hour I S.T.	Base.	Latitude.		Limb.	Height	Remarks.
			North.	South.			
1908.	H. M.	°	°	°		"	
June 1. —contd	G.N.	...	.	58	W	20	Ca.
				52	W	20	Ca.
				50	W	20	Ca.
	9 5	4		42	W	100	
	0			27	W	20	
	0	3		22	W	45	
	8 55	3		12	W	15	
	56	1		8	W	15	Metallic Shows slight displacement to red in C.
	56	1		6	W	25	Metallic
	30	1	29		W	30	Ca.
	30		31		W	10	Ca.
	48	0 5	47		W	20	
	30		58		W	15	Ca. Ca photographs 8 ^h 30 ^m and 8 ^h 22 ^m .
June 2.	S.S.	.	11	..	E	15	Ca.
	9 36		10		E	10	Ca.
	6			1	E	25	
	36	2		26	E	30	Ca. Pointed at top.
	36	5		68.5	E	15	Ca
	39			27.5	W	10	
	34			6	W	20	Detached.
	29	3	37.5		W	25	
	27		46		W	10	
	24	1.5	57		W	50	Upper part very faint and slants northwards. Ca photographs 9 ^h 30 ^m and 9 ^h 26 ^m .
June 4.	S.S.	...	87.5	...	E	10	
	8 21	4	19		E	20	Ca
	21		9		E	30	Ca
	10 29			2.5	E	25	Detached. Not found in Ca.
	8 21	8		8	E	60	Ca
	9 29			85	E	25	Faint. Not found in Ca
	27	1		37.5	E	15	
	25			58.5	E	10	
	21			79.5	W	20	
	8 6			70	W	10	Ca (found only at 8 ^h 6 ^m). Small, detached.
	15 6			38.5	W	30	See Note.
	13	0 5		22.5	W	10	Ca prominence extends 2° further west.
	8 21			4	W	30	Ca. Top bends as far as lat -9° W.
	21			2	W	30	Ca.
	15 15	1	20.5		W	20	slants northwards.
	19		54		W	10	N E. quadrant was not observed visually. Ca photographs 8 ^h 21 ^m and 8 ^h 6 ^m .
June 5.	G.N.	1	73	...	E	10	
	4		23		E	25	
	2		15		E	30	Meets limb again at lat. + 19° in Ca.
	8 52	2	3		E	35	
	33			9	E	30	Ca.
	38	2		30	E	15	Ca.
	50	2		38	E	35	
	43	2.5		43	E	15	
	47			49	E	25	
	58	3		85	E	10	
	33			1	W	90	Ca. A streamer extends to lat. -5°.
	9 8	1.5	22		W	45	
	8 33		25		W	10	Ca.
	9 7		28		W	15	Not in Ca. Ca photographs 8 ^h 33 ^m and 8 ^h 25 ^m .
June 6.	S.S.	..	81	..	E	10	
	8 57		34		E	50	Ca.
	53		32		E	30	Faint.
	52	5	19 5		E	40	Slants eastwards.
	49	1	12		E	25	Faint.
	47	1		12	E	25	
	13			19	E	30	Ca (seen only at 8 ^h 13 ^m). Faint.
	42	2 5		42	E	35	A Ca streak from top goes as far as lat. -47° E.
	21			81	W	10	Ca.

Date and observer.	Hour I.S.T.	Base.	Latitude.		Dirn.	Height.	Remarks.
			North.	South.			
1908.	H. M.	.	.	.	.	.
June 6.	S.S.	0.5		70.5	W	10	
—contd.				67	W	10	Ca.
		0.5		46	W	25	
		3		33	W	40	
				29	W	30	Ca (seen only at 8 ^h 13 ^m).
				26	W	15	
		1	12.5		W	45	Top extends to lat + 3° W.
		1.5	22.5		W	45	} Tops connected.
		2	30.5		W	30	
		1	40		W	20	Ca (only at 8 ^h 15 ^m)
		0.5	48		W	25	Faint.
			50.5		W	25	Ca.
			65		W	15	Ca photographs 8 ^h 21 ^m and 8 ^h 13 ^m .
June 7.	G.N.	.	44	...	E	15	Ca.
			41		E	80 ±	
		2	33		E	16	Ca.
		5	20		E	30	
			11		E	45	
			3		E	10	Ca.
		4.5		11	E	60	
				18	E	10	Ca.
				22	E	10	Ca.
		4		42	E	30	
				50	E	45	Meets a streamer at top from the last prominence.
		1		53	E	45	Connected to the previous prominence at top.
				46	W	20	Ca.
				44	W	25	
				38	W	15	
				28	W	30	Ca.
				25	W	15	Ca.
				23	W	20	
				18	W	45	
		25	16		W	80, 60, 40	A number of prominences all joined together.
			34		W	40	Ca.
			53		W	10	
							Ca photographs 8 ^h 50 ^m and 8 ^h 19 ^m .
June 8.	S.S.	.	41	...	E	60	See Note (1).
		0.5	32.5		E	10	
			21		E	10	Faint.
		0.5	13		E	10	
			4		E	10	Ca.
		4		10	E	30	
		6		20	E	70	
		1		44	E	10	Ca.
		3		50.5	E	30	
				84	E	10	Ca.
				61	W	60	Ca.
		11		54.5	W	75	Ca. See Note (2).
		0.5		33	W	20	
				13	W	15	Ca.
		1		8.5	W	20	} Connected at base; —4° to —12° W in Ca.
				5	W	10	
				1	W	45	Ca. Slants northwards over 4°.
			14.5		W	40	Faint. A broken Ca streak from it goes as far as lat. + 4° W.
		6	27		W	25	Base extends to + 19° W in Ca.
		0.5	32.5		W	10	Not in Ca.
		4	55		W	25	
			59		W	10	Ca. Not seen at 8 ^h 33 ^m .
			67		W	10	Ca. Do.
							Passing clouds.
							Ca photographs 8 ^h 33 ^m and 8 ^h 12 ^m .
June 9.	S.S.	.	42	..	E	15	Ca.
			40		E	30	Faint, detached.
		2	29		E	60	Ca. Slants eastwards.
		3	13.5		E	10	} Connected and 25" high in Ca.
		1	4		E	10	

Date and observer	Hour L.S.T.	Base.	Latitude.		Limb.	Height	Remarks.	
			North	South.				
1908.	H. M	.	.	.		"		
June 9. —contd.	S.S.	9 30	..	11	E	40	Ca.	
		25	6	20.5	E	60	Slants southwards, top — 30° E.	
		20	5	40.5	E	35		
		15		78.5	E	10		
		30	6	61	W	45	Ca.	
		30		53	W	15	Ca.	
		30		21	W	30	Ca.	
		10	2	11	W	35	Slants northwards. Top slants to — 3° W. C slightly displaced to red at base.	
		8	2		3.5	W	15	Metallic. D ₁ , D ₂ , b ₁ , b ₂ , b ₃ bright.
		59		21		W	10	Detached. } See Note.
		52	1.5	27		W	40	
		49	1.5	32		W	30	
		48		37		W	10	
		30	1	45		W	15	Ca.
		44	1	54.5		W	50	
		41		64		W	20	Faint. Base + 59° to + 64° in Ca. Passing clouds — 75° W to — 55° W not visually observed. Ca photographs 9h 30m and 9h 51m
	June 10.	G.N.	9 30	.	51	E	20	
30				46	E	20	Ca.	
30			1	41	E	45	Ca.	
30			4	14	E	20	Ca.	
27			7		21	E	60	
23			12		51	E	50 ±	
51			1		27	W	20	
50			4		19	W	40	A streamer extends to meet the last prominence and another to meet the limb at lat — 13° W.
30			30	25		W	60, 45, 30	A number of prominences joined together.
30				46		W	10	Ca.
42		55		W	25	Cloudy during visual observation. Ca photographs 9h 30m and 9h 23m.		
June 12.	G.N.	11 13	...	21	E	15	Ca.	
		16			34	E	20	
		14			56	E	60 ±	
		12			87	E	15	
		18	5		42	W	45	Ca. Detached from limb.
		18			38	W	15	Ca.
		18	25		8	W	60, 50	A number of prominences over this part of the limb from lat. 0° to — 21°
		13	9	10		W	60	Ca.
		13	3	51		W	15	Ca. Weather bad during visual observations Ca photograph (incomplete and poor) 11h 13m.
June 14.	G.N.	10 35	5	52	...	E	40	
		30	1.5	31		E	30	
		30		28		E	15	
		27	3		8	E	15	
		25	13		25	E	60, 45	
		30			52	E	15	Ca.
		30	2		25	W	30	Ca.
		30			22	W	30	Ca.
		43	3.5		18	W	30 ±	Not in Ca.
		30		10		W	15	Ca.
		30		27		W	10	Ca.
30		29		W	15	Ca. Very poor weather during visual observation. Ca photograph 10h 30m, focculus plate 10h 57m.		
June 15.	G.N.	8 21	...	79	...	E	15	Ca.
		9 10	5	51.5		E	50	
		7	2	43		E	15	
		6	0.5	37		E	10	
		8 21	0.5	36		E	10	Ca.
		9 6	0.5	34		E	10	Ca.
			32		E	35		

Date and observer.	Hour I S.T.	Base.	Latitude.		Limb.	Height.	Remarks.		
			North.	South.					
1908.	H. M.	°	°	°		"			
June 15. —contd.	G.N.	.	30	...	E	35			
			28		E	30	Ca.		
			8		E	15	Ca.		
			6		E	10	Ca.		
			Equator.		E	15	Ca.		
				1	E	15	Ca.		
				2	E	30	Ca.		
				7	E	30			
				9	E	30			
	S.S.	8	2	14		E	15	Ca.	
				28		E	100		
				51		E	20		
	G.N.	8	2	65		E	10		
				68		W	15	Ca. Faint.	
				61		W	10	Ca. Faint	
	9	10	20		W	55			
			9		W	20			
			13		W	30	Ca.		
	9	1	22.5		W	10			
			64		W	15	Ca.		
							Ca photographs 8 ^h 21 ^m and 8 ^h 35 ^m .		
June 16.	S.S.	11	49.5	...	E	30, 20	A group of 4 prominences.		
			42		E	10	Ca.		
			22		E	10	Ca.		
			20		E	10			
			14		E	15	Ca.		
			6		E	15	Ca.		
			4		E	15			
				5		1.5	E	75	Ca. } Connected in Ca.
					5	E	15		
				3		9	E	15	
					5		15.5	E	15
				4		30	E	30	
					4.5		37	E	25	Not in Ca. } Tops connected by a streak.
				4		25	W	15	Slants northwards. Top — 15° W.
					4	11		W	20
	10	3	41.5		W	10			
			3	55.5		W	25		
							Examined twice. Seeing bad at the first time. Ca photographs 8 ^h 48 ^m and 8 ^h 11 ^m . Poor.		
June 17.	G.N.	1.5	52	..	E	30			
			46		E	20			
					2		E	30	
					6		E	35	
							E	15	
				1.5			E	20	
						66		W	10
				3			W	20	Ca.
						24		W	20	Ca.
				3		3	W	20	Ca.
		7			W	15	Ca.		
	3		11	W	30	A Ca streak extends from top of this to lat. + 5°. Ca photograph 9 ^h 50 ^m ; poor and incomplete owing to clouds. Shows one limb only from + 65° W to - 85° E.			
June 18.	S.S.	3	...	6.5	E	20	Ca.		
				28	E	20	} Connected in Ca.		
				32	E	30			
				1		38	E	10	
						69	E	15	Ca. Not seen at 9 ^h 3 ^m .
						68	W	10	Small, detached.
						41	W	50 ±	} Very faint. Meet at top.
						38	W	50 ±	
				0.5		39.5	W	10	
					1	21.5	W	35	} Nearly connected at base } Tops connected by a in Ca. } Ca streak.
				1	17	W	20		
				2	12	W	15		
					6	W	10		

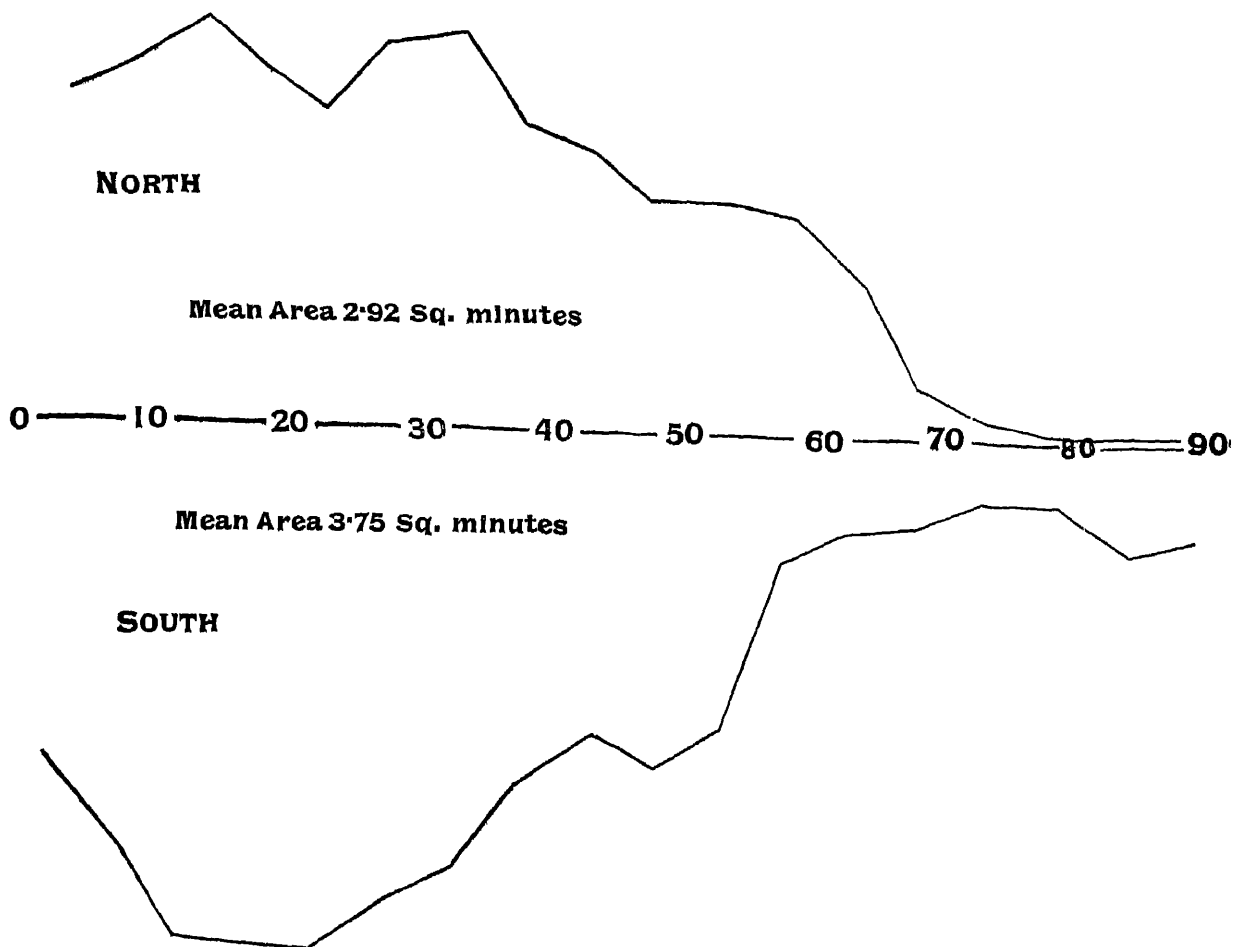
Date and observer.	Hour I.S.T.	Base.	Latitude.		Limb.	Height.	Remarks.
			North.	South.			
1908.	H. M.	.	.	.			
June 18	S.S.	3	11.5	...	W	30	Detached in hydrogen, but } Connected in Ca. base 3° in Ca.
-contd.	10 17	2	26		W	30	
	15 18		32.5		W	40	
June 19.	G.N.	1	12	.	E	30	Passing clouds.
	8 59	2	5		E	10	Ca photographs 9h 8m and 8h 24m. Both inter-
	55			4	E	20	rupted and obscured by cloud.
	14			10	E	45	Ca.
	14			54	E	10	Ca.
	14			56	E	10	Ca.
	14			68	E	20	Ca.
	14			73	E	10	Ca.
	14			75	E	30	Ca.
	14			88	E	10	Ca.
	14			85	W	10	Ca.
	14			71	W	10	Ca.
	24			69	W	10	Ca.
	24			67	W	10	Ca.
	9 15			44	W	25	
	15	2		39	W	30	
	8 14			29	W	60	Ca. See Note.
	9 12	7		9	W	60 ±	
	9	2	14		W	25	Bright.
	7	2	22		W	30	Ca streamers extend from this to lat. + 16°.
	5	4	32		W	35	Ca photographs 8h 14m and 8h 24m.
June 20.	S.S.	...	84.5	.	E	30	Detached.
	9 12		80		E	10	Not in Ca.
	8 44		57		E	10	Ca.
	9 7		49		E	10	
	5		24		E	10	
	0	18	10.5		E	50	
	8 55			18	E	10	
	58	2		19	E	10	
	44	2		57	E	30	Ca. Faint.
	44	8		66	E	75	Ca. Two faint streaks meeting at top.
	44			60	W	30	Ca.
	21	4		58	W	30	Ca. Faint. Not seen at 8h 44m.
	21	1		51	W	10	Ca. Not seen at 8h 44m.
	9 37	7		41.5	W	45	Narrow at top.
	30	5		11.5	W	60	Ca. Slants northwards.
	24	11	19.5		W	70	
	8 44		38		W	20	Ca.
	9 21		36.5		W	25	
	8 44	1	41.5		W	25	Ca.
							Ca. photographs 8h 44m and 8h 21m.
June 21.	G.N.	8	32	..	E	20	
	8 55	16	19		E	45, 15, 20	Ca. A number of connected prominences.
	55		5		E	70	Ca. A Ca streak extends from this to lat. - 1°.
	55	8		10	E	15	Ca. A Ca cloud 150" high hangs over this and is connected to it by a thin Ca streak.
	9 13			13	E	25	
	8 55			15	E	30	Ca.
	9 11			47	E	20	
	8 55			17	E	75	Ca. Detached from limb.
							Differently shaped at 8h 33m.
	9 8			78	E	15	
	8 55			81	E	15	Ca.
	9 32	5		48	W	15	Three prominences connected together. Ca streamers extend on both sides to lat. - 39° and - 52°.
	32			40	W	20	
	8 55	4		17	W	15, 10	Ca.
	9 30	3.5		8	W	60 ±	
	8 33		18		W	45	Ca. Meets limb again at lat. + 11°. Had changed at 8h 55m.

Date and observer.	Hour I.S.T.	Base.	Latitude.		Limb	Height.	Remarks.
			North.	South.			
1908.	H. M.	°	°	°		"	
June 21. —contd.	G.N.						
	8 55	.	25	.	W	80	Ca.
	9 20	.	46	.	W	30 ±	Not in Ca. Poor weather during visual observations. Ca photographs 8h 55m and 8h 33m.
June 22.	S.S.			...			
	9 2	4	31	...	E	30	Ca. Not found at 8h 12m { Connected by a Ca 30" in Ca. } streak.
	8 22	0.5	25	...	E	20	
	9 1	2	21	...	E	10	} Connected in Ca
	1	1	18	...	E	15	
	1	0.5	15.5	...	E	15	
	8 58	2	10	...	E	20	
	12	0.5	7	...	E	20	Ca.
	12	1	1.5	...	E	60	Ca. Faint. A streak branches from it and slants northwards. Ca. Faint. Detached.
	12			9	E	60	
	52	2		19	E	15	
	50	0.5		36	E	30	
	40	0.5		38	E	25	} Connected in Ca.
	48	3		42	E	25	
	46	1		47	E	10	
	41			82	E	10	Not in Ca.
	12			82	W	10	Ca.
	10 17	5		47.5	W	25	
	15	2		86	W	10	Faint. Slants southwards.
	14	2		31	W	90	Faint. Top - 25° to - 84° W.
	12	14		15	W	60	Tallest at the southern end.
	9		Equator.		W	10	
	4	4	12		W	15	Not in Ca.
	8 12	4	40		W	60	Top + 37° to + 44° W.
	9 52	0.5	60.5		W	Low.	See Note
June 25.	S.S.			45.5			Ca photographs 8h 12m and 8h 22m.
	15 20	1			W	25	
	3	0.5	49.5		W	20 ±	Very faint. Lat - 50° W to N pole only was observed during a few short breaks in clouds. Seeing poor. Ca photographs 15h 31m and 15h 29m.
June 26.	S.S.			...			
	8 18		68	...	E	15	Ca.
	18		32	...	E	10	Ca.
	9 3	1	3	...	E	10	
	1		1	...	E	20	Faint.
	0			15	E	10	
	8 59		20	...	E	25	Top 4" broad. } Connected by a Ca streak.
	57	1	30	...	E	25	
	51		76	...	E	10	Small, detached.
	50		82.5	...	E	10	Faint.
	13	1	87	...	W	15	Ca
	9 28	4	59	...	W	60	Slants westwards Detached in hydrogen.
	24	2	33	...	W	10	
	22	8	22	...	W	10	
	20	3	10.5	...	W	15	
	16	1	23	...	W	10	
	16	1.5	29	...	W	25	Slants as far as + 24° W. and height 60" in Ca.
	18	4	51	...	W	25	
	8 18		56	...	W	10	Ca. Ca photographs 8h 18m, 8h 34m, and 8h 1m (floc- culus).
June 27.	..	...		...
	9 7	...	66	...	E	10	Ca.
	7		13	...	E	10	Ca.
	7	1		24	W	30	Ca.
	7	3	27	...	W	60	Ca.
							No visual observation. Ca photograph 9h 7m. Flocculus plate. No prominence plate.
June 28.	S.S.			...			
	9 23	...	21	...	E	10	
	27	1.5	8	...	E	25	
	25	1.5		21.5	E	10	
	11	0.5		46	E	25	
	8 53			31	W	10	
							Observed visually only between lat. + 25° E. and - 80° W. Cloudy. No Ca photograph.

Date and observer.	Hour I.S.T.		Base.	Latitude.		Limb.	Height.	Remarks.
				North.	South.			
1908.	h. m.	°	°	°				
June 29.	...	11 12	25	...	33	W	40, 30	Ca. A number of prominences connected together.
		12	4		12	W	30	Ca. Connected to the limb by 3 stems.
		12	15	32		W	30	Ca. No visual observation. Ca photograph, focculus plate, 11 ^h 12 ^m .
June 30.	...	10 7	9	21.5	.	E	15, 30	Ca. A group of prominences.
		7	3	9.5		E	20	Ca.
		7	1		26	E	20	Ca.
		7	9		39.5	W	45	Ca.
		7	8		31	W	50	Ca.
		7	1		24	W	10	Ca.
		7			20	W	30	Ca.
		7	0 5		18	W	15	Ca.
		7	2	35		W	40	Ca.
		7	2	53		W	30	Ca. Not observed visually. Cloudy with high wind Ca photograph 10 ^h 7 ^m .

REMARKS ON THE DISTRIBUTION OF THE PROMINENCES IN LATITUDE
FOR THE FIRST HALF OF THE YEAR 1908.

The mean daily profile areas in square minutes of arc for each zone of 5 degrees in latitude and for the half-year ending June 30, 1908 are represented graphically in the accompanying diagram :—



Compared with the previous six months the distribution has undergone very little change, the general form of the curve for each hemisphere remaining practically the same. It is remarkable that the south polar region has continued active, chiefly during the first three months of the year, whilst the northern polar region from latitude 70° to the pole has remained inactive, having ceased to produce prominences of any considerable size since the close of 1906.

The total mean areas for each hemisphere may be judged from the following table in which the figures for the previous six months are given for comparison :—

MEAN DAILY PROFILE AREAS OF PROMINENCES.							1907.	1908.
							July to December.	January to June.
							Square minutes.	Square minutes.
North	..	..	..	..	..	..	1.47	2.92
South	..	..	..	..	..	..	2.24	3.75
Total ..							3.71	6.67

A very large increase is indicated in both hemispheres. The southern hemisphere has indeed been remarkably active, especially over the whole region between the equator and latitude 40° .

Metallic prominences were far more numerous in the southern hemisphere than in the northern and they were distributed over a greater range of latitude in the south. Altogether 63 were observed, 49 being south of the equator, ranging from latitude -2° to -50° , and 14 north between $+9^{\circ}$ and $+25^{\circ}$. A single high latitude metallic prominence was observed on May 27 in south latitude 78° .

The most noteworthy prominence observed during the period under review was that of February 18 in latitude -17° to -63° . A practically complete photographic record of this prominence was obtained showing the gradual increase in height and final rapid ascent of the entire mass which became separated from the sun's limb and ascended with an accelerating velocity, attaining finally a height of $9\frac{1}{2}$ minutes above the limb.

[J.E.]

NOTES.

1908.

- January 19. Lat. $-17^{\circ}5$ W Eruptive. 5° broad, almost detached from limb in hydrogen but connected in Ca at $9^h 59^m$. Forms of Ca prominence at $9^h 9^m$ and $9^h 59^m$ were quite different from each other. A low elevation of chromosphere at lat. -18° W. was metallic. $D_1, D_2, b_1, b_2, b_3, b_4, 5318.6, 5018.6, 4924.1$ were bright.
20. (1) Lat. -31° W. Top meets the last prominence. A Ca streak from top extends westwards for about 5° .
- (2) Lat. $-17^{\circ}5$ W. Bright jet. Metallic. $D_1, D_2, b_1, b_2, b_3, b_4$ bright. At $9^h 34^m$ this prominence appeared as a curved streak $55''$ away from limb. The total height was $80''$ at $10^h 0^m$.
25. Lat. $+5^{\circ}$ E. A Ca streak connects it to limb at lat. -2° E. This streak was not seen in photographs taken later than $8^h 52^m$.
28. Lat. -25° E $50''$ high in Ca. Ca streaks from top extend for 7° towards east and 4° towards west.
29. (1) Lat. $+27^{\circ}5$ E. A detached slanting streak $70''$ high at northern end, $35''$ at eastern.
- (2) Lat. $+9^{\circ}$ E. Base extends to equator. Metallic; $D, D_2, b_1, b_2, b_3, b_4, 5316.8, 5018.6, 4924.1$ bright.
30. Lat. -19° W. Two arches touching each other and a continuous series of prominences within, $25''$ high.
31. Lat. -26° E Metallic; D_1, D_2, b_1, b_2, b_3 bright. $25''$ and $40''$ high at $8^h 53^m$ and $8^h 54^m$ respectively. Only a faint streak $10''$ high at $8^h 57^m$.
- February 2. Lat. -29° E. Top runs parallel to limb for 3° towards east. A Ca streak extends 5° further east.
7. Lat. $-1^{\circ}5$ and $-7^{\circ}5$ E. Metallic; lines brightest in the first of the two prominences. C slightly displaced to red at lat. -6° E.

Bright lines :—

7065 He.	5271.2
6677 He.	5269.8 Fe.(?)
D_1 } Na.	5234.8
D_2 }	5227.0? Very probably the central one of
5535.0 Fe.	the 3 lines close to one another.
5447.1 Fe.	b_1, b_2, b_3, b_4 .
5434.7 Fe.	5197.8
5429.9 Fe.	5188.9
5406.0 Fe.	5018.6 Fe.
5404.8 Fe.	5016.0 He, diffused.
5397.2	4934.1 Fe.
5316.8 Fe.	4924.1 Fe.
5284.3 Ti.	4922.4 He.

Time $9^h 15^m$ to $9^h 35^m$.

8. Lat. -6° E. A streak parallel to the limb running towards east as far as lat. -10° E. In Ca the streak extends from lat. -3° to -14° E. where it meets the limb.
12. (1) Lat. $-32^{\circ}5$ W. Very faint except at base. Ca prominence $150''$ high and slants as far as lat. -85° E. A Ca streak from it meets the limb at lat. -72° W.
- (2) Lats. $-43^{\circ}5, 35^{\circ}5$ and 31° W. A Ca streak passes through these and meets the limb at lat. -24° W.
- (3) Lat. -13° W. A streamer about 8° long proceeds northwards from the middle of it. Changed—no streamer—at $10^h 24^m$. Nothing here in Ca.
17. Lat. $-58^{\circ}5$ W. At $8^h 57^m$ the Ca prominence consisted of a tall jet with a cloud floating over it—height $300''$ (which was the limit of the plate). At $9^h 11^m$ the cloud was smaller and the total height $270''$. At $9^h 51^m$ the height was $210''$.

1908.

- February 18. (1) Lat. $-40^{\circ}5$ E Slanting northwards as far as lat. -23° E where it was highest, *i.e.* 75" high. The main prominence which was only 55" high at 8^h 56^m rose to 85" at 9^h 50^m. At 10^h 30^m the upper part of the prominences formed a long cloud quite detached from the lower portions and 120" high. The prominence was photographed 20 times in Ca and was found to be a cloud rising higher and higher till it reached a height of 9 minutes in the last photograph at 18^h 2^m.*
- (2) Lat. -66° W. Ca. Two irregular detached streaks meeting at top 6" broad. Form-changed slowly but the prominence was visible till 17^h 17^m.
- (3) Ca photographs: 9^h 38^m, 8^h 23^m, 9^h 9^m, 9^h 54^m, 10^h 1^m, 11^h 5^m, 11^h 13^m, 13^h 59^m, 14^h 6^m, 14^h 10^m, 14^h 30^m, 14^h 36^m, 16^h 5^m, 16^h 10^m, 17^h 11^m, 17^h 17^m, 17^h 33^m, 17^h 41^m, 17^h 56^m, and 18^h 2^m. In most of these only a small part of the limb, containing the prominence at lat. -41° E, was photographed
19. Lat. $-16^{\circ}5$ W. Very bright and continuous near base. A very bright Ca flocculus close to it at the limb. Changing. C displaced slightly at several places—direction changing. Metallic. 7065, D₁, D₂, b₁, b₂, b₃, b₄ 5316·8, 5018·6, and 4924·1 strong; 6677, 5016 and 4922 faint.
- March 1 Lat. $-3^{\circ}5$ W. Metallic. D₁, D₂, b₁, b₂, b₃, b₄, 5316·8, and 6677 bright. F displaced both ways 2·1 Å to violet and 2·4 Å to red. Prominence more continuous at 10^h 30^m. Very bright Ca flocculi near it.
7. (1) Lat. -33° W. Bright and metallic at lat. -31° W. D₁, D₂, b₁, b₂, b₃, b₄ bright throughout the height at that position.
- (2) Lat. $+13^{\circ}5$ W. Metallic. D₁, D₂, b₁, b₂, b₃, b₄, 6677, 5316·8, 5018·6, 4924·1, 5016, and 4922 bright; the last two slightly.
9. Lat. $+47^{\circ}5$ W. A group of five prominences connected to one another, none except the northernmost one being found in hydrogen.
13. Lat. $+1^{\circ}$ E. Two prominences with tops connected. The top of the first is also connected to the limb at lat. $+6^{\circ}$ E. by a Ca streak.
14. Lat. -81° E. A cloud 10" broad at the base, but narrow at the top and with the base and top about 70" and 190" away from the limb, floats over it. The cloud was changing and had almost completely disappeared by 9^h 50^m. It was nearly connected by a streak in hydrogen to the lower prominence at 8^h 45^m. The Ca photographs show the whole prominence as connected to the limb and extending from lat. -78° E. to -82° W.
18. Lat. $+10^{\circ}$ E. The main prominence is only about 50" high with its northern half brighter than the southern. A faint broken streak from the southern end slants northwards making up the total height given. Changing rapidly. The upper part of the streak was not seen on the Ca photographs.
19. Lat. $+17^{\circ}$ E. Slants towards east. Top is connected to limb at lat. $+9^{\circ}$ E in Ca, forming an arch 8" wide.
20. Lat. $+10^{\circ}$ W. About 5" long, slanting, detached. Ca prominence (8^h 10^m and 8^h 27^m) was not detached, was 60" high at 8^h 10^m and 110" high at 8^h 27^m.
28. Lat. $+45^{\circ}$ E. Three prominences connected to one another. A streak from the top of the first runs parallel to the limb towards north.
- April 4. (1) Lat. $-33^{\circ}5$ W. Very bright in Ca. D₁, D₂, b₁, b₂, b₃, b₄, 5316·8, 4924·1 bright at base, brightest at western end.
- (2) Lat. $-4^{\circ}5$ W. Bright, metallic. 6677, D₁, D₂, b₁, b₂, b₃, b₄, 5316·8, 5018·6, 5016, 4924·1, 4922 bright.
6. Lat. $+54^{\circ}$ W. Ca prominence is 45" high and slants southwards over 8" and a streak from it meets the limb again between this and the last prominence
14. (1) Lat. $-21^{\circ}5$ — 13° , — 5° , W. Metallic. D₁, D₂, b₁, b₂, b₃, b₄ bright. Connected in Ca. One of the connecting streaks reaches 60".
- (2) Lat. -1° W. A streak 6" long parallel to the limb. It meets the limb in Ca at lat. $+5^{\circ}$ W.
17. Lat. -27° W. There are a number of faint slanting Ca streaks covering 19" to the north of this prominence. The tallest of them, 120" high, being in the northern end.

* See A.P.J., Vol. XXVIII, p. 79.

1908.

- April 18. (1) Lat. + 73°, + 64°·5, + 57° E. Ca prominence formed a big irregular arch 90" high extending from lat. + 55°·5 E to + 82° E at 8^h 21^m. Most of it disappeared at 8^h 48^m, but there was still a detached streak 90" high.
- (2) Lat. - 2°, - 7° E. Tops connected by a streak. Metallic. D₁, D₂, b₁, b₂, b₃, b₄, and 5316·8 bright. C slightly displaced to red at several places; amounts slightly greater and F displaced 1·5 Å to violet at top, at 9^h 42^m.
23. Lat. - 12° W. Taller portions faint. Very bright and metallic and 25" high at lat. - 10°·5 W. 4924·1, 5018·6, b₁, b₂, b₃, b₄, 5316·8, D₁, D₂, 6677 and 7065 were bright. 9^h 48^m. A few more lines were seen at 9^h 30^m. F displaced 1 Å both ways at top at that position. Maximum height only 45" in Ca.
24. (1) Lat. - 19° E. Bright, metallic. Several bright lines. These disappeared soon.
- (2) Lats. - 12°·5, - 19°, - 23° and - 29°·5 E. In Ca these prominences are connected at the base. The height about the middle of the prominence was 90".
25. (1) Lat - 7° W. Bright metallic. D₁, D₂, b₁, b₂, b₃, b₄, 7065, 6677 (faint), 5316·8 and 4924·1 bright. Height 45" in Ca.
- (2) Lat + 31° W. Several Ca streaks flow southwards from it, some of them passing through the last two prominences, as far as lat + 13° W
- May 13. (1) Lat. - 30° E. Detached. Slants southwards. Height 110" and 120" in Ca at 9^h 51^m and 10^h 50^m respectively and base 60" above limb in it.
- (2) Lat. - 17°·5 W. Slants northwards. Eruptive. Height remained 70" throughout but form changed rapidly as shown by Ca photographs.
15. Lat. + 49° W. Not in Ca. Very rapidly changing. At 9^h 17^m it became a group of spikes 10" high and 2° broad.
25. Lat. - 13° E. Only 20" high except at lat. - 14° E. Rapidly changing at that position. D₁, D₂, b₁, b₂, b₃, b₄ bright over the whole prominence. b slightly displaced to red at lat. - 11° E. at 9^h 54^m.
27. (1) Lat - 19°·5 E. Faint. C displaced 1 Å to violet over the whole prominence. Prominence had disappeared by 9^h 28^m.
- (2) Lats. - 19°·5, - 29° - 34°·5, - 41, - 47° E. Almost continuous and maximum height only 50" in Ca.
- (3) Lat. - 78°·5 E. Metallic. 6141·9, D₁, D₂, 5535·1, 5363·0, 5316·8, 5284·2, 5276·2, 5234·8, 5197·8, b₁, b₂, b₃, b₄ (b₄ least bright of these four), 5018·6 and 4924·1 bright. 8^h 50^m to 9^h 12^m.
- Prominence almost completely disappeared by 9^h 12^m.
30. Lat. - 11° E. The taller of the stems was only 15" high at 8^h 3^m in the Ca photograph. It was slowly increasing. At 8^h 7^m the height was 20", at 8^h 30^m 28", at 8^h 34^m 30" and at 9^h 12^m 45".
- June 4. Lat. - 36°·5 W. In Ca there was near this position a group of three prominences, 20", 15" and 10" high respectively and extending from lat. - 34° to - 40° W.
8. (1) Lat. + 41° E. Detached, slanting and 4° long. Ca prominence detached at 8^h 12^m, but connected to limb at lat + 39° E. at 8^h 33^m.
- (2) Lat - 54°·5 W. Ca. A long irregular streak meeting the limb at lats. - 60° and - 49°. At 8^h 12^m it was connected to the limb at - 52° W and unconnected at the southern end and the height was 60".
9. Lats. + 21°, 27°, 32° W. A long Ca patch passes through these and meets the limb at lat. + 15° E. There is a continuation of it on the other side in both H and Ca as far as + 35° W.
19. Lat. - 29° W. A number of low jets in Ca on both sides of this up to lat. - 22° on one side and - 36° on the other.
22. Lat + 60°·5 W. F displaced 1·2 Å to red at base. Height 20" at 9^h 53^m, 25" at 9^h 55^m and 30" at 9^h 57^m. Upper portion detached and no displacement in F at 9^h 57^m.

KODAIKANAL,
1st November 1908.

C. MICHIE SMITH,
Director, Kodaikanal and Madras Observatories.