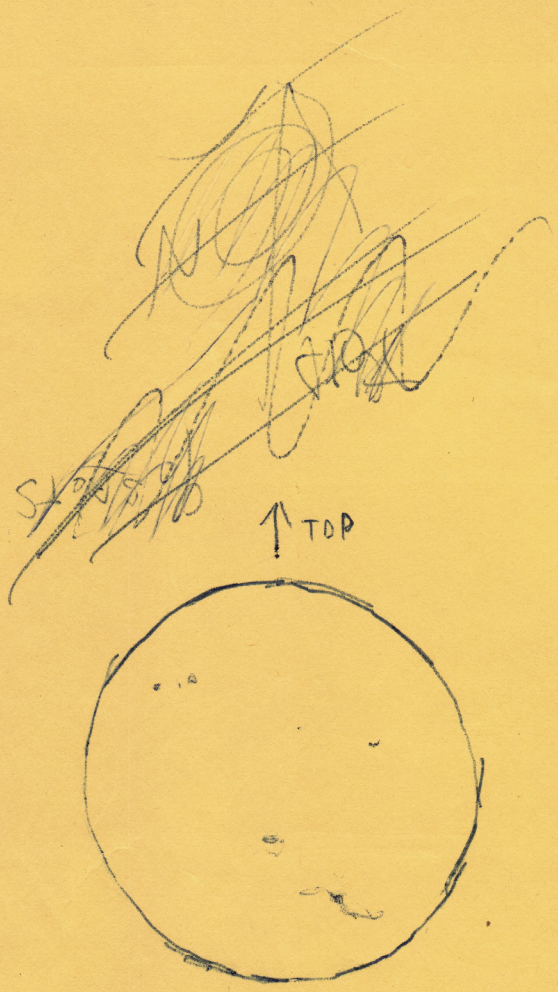
30 mm refractor

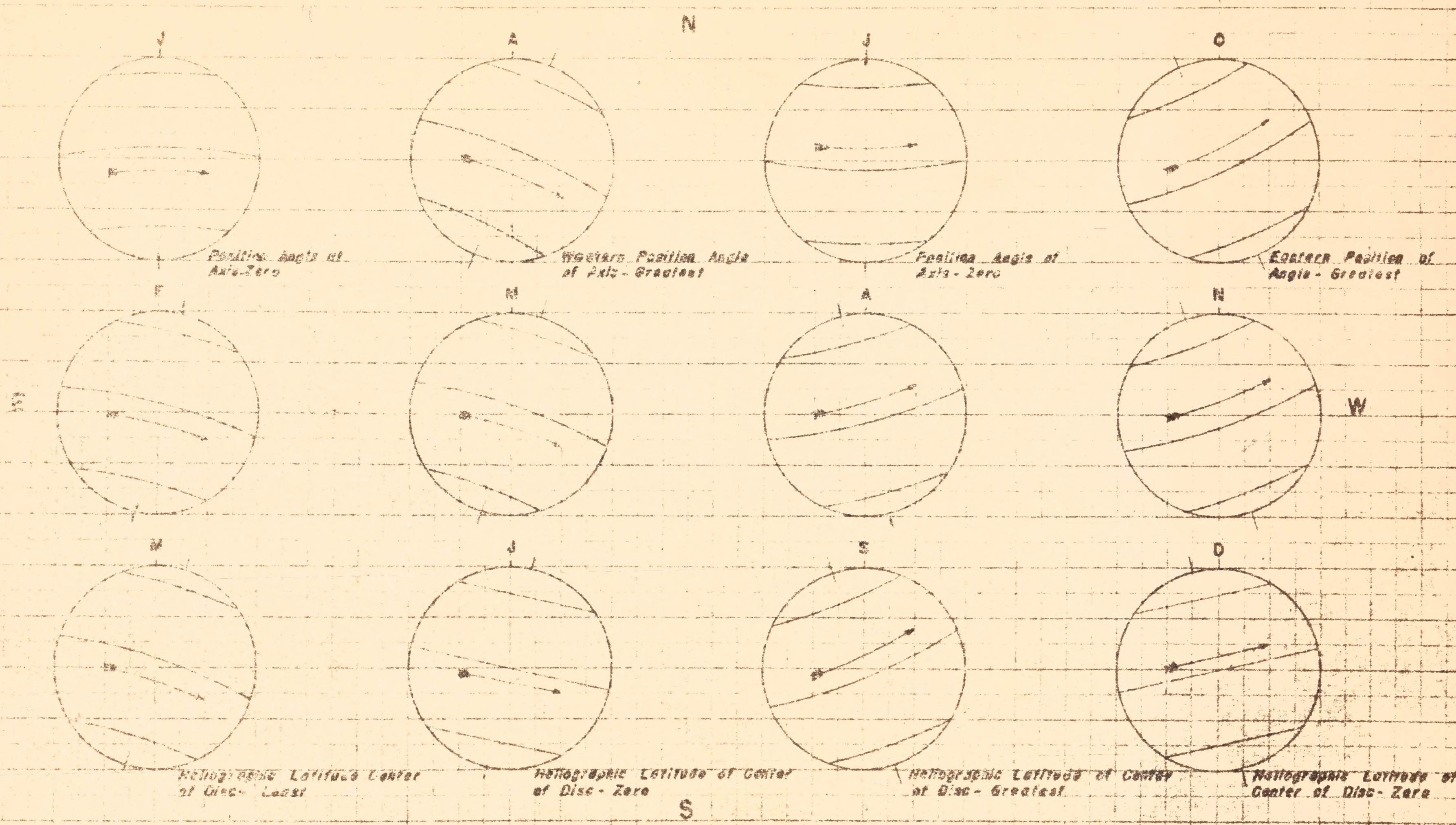


OCT 14, 1957 (~~E~~

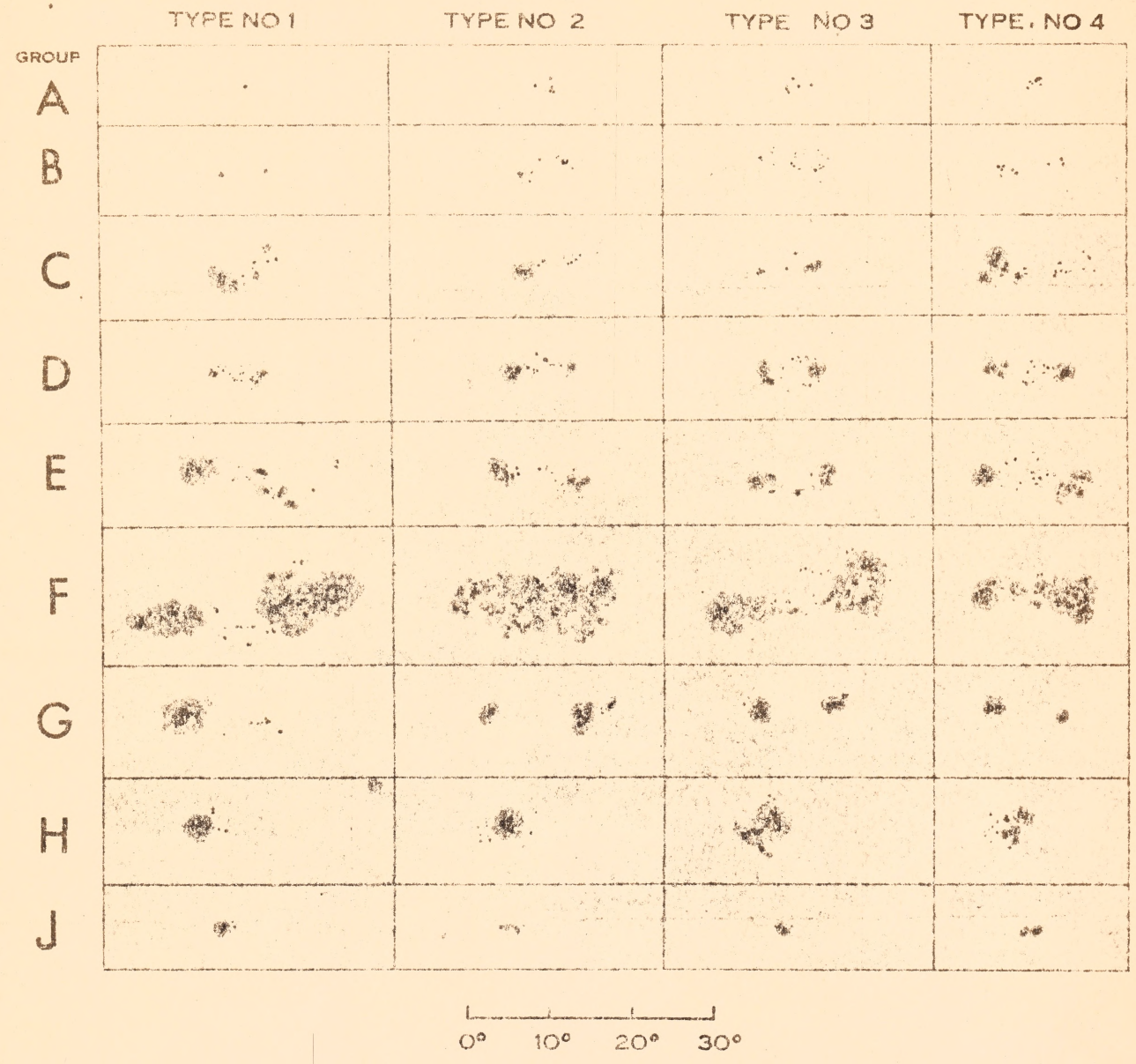
14 shots (14 hr EDT)

The mean apparent daily motion of a Sun-Spot with respect to the central meridian on the Sun's disc is 13°.2 A long lived spot appears to cross the visible disc of the Sun in 13-14 days.

THE PATHS OF SUN-SPOTS AT DIFFERENT SEASONS



SUN'S ROTATION 25.38 DAYS - MEAN ROTATION 27.75
CARRINGTON PERIOD


TYPE NO 1
TYPE NO 2
TYPE NO 3
TYPE NO 4
GROUP
A
B
C
D
E
F
G
H
J
0°
10°
20°
30°

A A V S O - SOLAR DIVISION - SUNSPOT REPORT FOR DECEMBER..... 1959..

Name GEOFFREY GAHERTY JR

Address 636, SYDENHAM AVENUE, MONTREAL 6 Instrument 2" REFRACTOR Method PROJECTION (5" DISK)

a Day	c d Vis	e U.T.	f gr	g sp	R	j N-GR	k S-GR	l N-Sp	m S-Sp	Remarks
1										
2										
3										
4										
5										
6										
7										
8										
9										
10										
11										
12										
13										
14										
15										
16										
17										
18										
19										
20										
21										
22										
23										
24	G3	18:55	8	23	103	7	1	22	1	1.05
25	F6	15:30	7	14	84	6	1	13	1	LIGHT CLOUDS OVER SUN 1.31
26	G3	16:50	9	19	109	8	1	18	1	0.87
27										
28										
29										
30										
31										
TOT.			24	56		21	3	53	3	R=187 ↑ 1.08 ↖ 1.18

c - Visibility: E, G, F, P
d - Cloudiness: 0-10
e - Universal Time
f - No. of Groups

G- No. of Spots
j - No. of Groups N hemisphere
k - No. of Groups S hemisphere

l - No. of spots N hemisphere
m - No. of spots S hemisphere
- Totals
R - 10f-g $\frac{3.23}{3} = 1.08$

A A V S O - SOLAR DIVISION - SUNSPOT REPORT FOR JANUARY 1960

Name GEOFFREY GAHERTY, JR.

Address 636, SYDENHAM AVENUE, MONTREAL 6 Instrument 2" REFR. Method PROJECTION

a Day	c d Vis	e U.T.	f gr	g sp	R	j N-GR	k S-GR	l N-Sp	m S-Sp	Remarks	
1	G1	16:05	9	13	103	7	2	11	2	j, k, l, m uncertain.	1.32
2											
3											
4											
5											
6											
7											
8											
9											
10											
11											
12											
13											
14											
15											
16											
17	G0	16:55	9	15	105	6	3	11	4		1.11
18	F6	19:20	6	10	70	5	1	9	1		1.27
19											
20											
21											
22											
23											
24	E2	17:45	7	32	102	6	1	30	2	IMAGE VERY STEADY	1.27
25	G4	19:30	8	43	123	6	2	38	5	HAZY	1.24
26	G1	18:05	9	46	136	7	2	41	5	WINDY	1.54
27											
28											
29											
30	F6	18:30	9	42	132	7	2	33	9		1.35
31	G0	18:05	8	41	121	6	2	29	12		1.47
TOTAL			65	242		50	15	202	40	R = 111.5	← 1.25 1.32

c - Visibility: E, G, F, P
d - Cloudiness: 0-10
e - Universal Time
f - No. of Groups
g - No. of Spots
j - No. of Groups N hemisphere
k - No. of Groups S hemisphere
l - No. of spots N hemisphere
m - No. of spots S hemisphere
R - 10f+g

Totals

$\frac{3 \cdot 23}{3} + \frac{1057}{8} = \frac{13 \cdot 80}{11} = 1.25$

A A V S O - SOLAR DIVISION - SUNSPOT REPORT FOR FEBRUARY ..... 19.60.

Name

Address

Instrument 2" REFR. Method PROJECTION

a Day	c d Vis	e U.T.	f gr	g sp	R	j N-GR	k S-GR	l N-Sp	m S-Sp	Remarks
1										— k
2										
3										
4										—
5										
6										
7										
8										
9										
10										
11										
12										
13										
14										
15										
16										
17										—
18										
19										— —
20										
21	PO	16:15	4	8	48	3	1	7	1	.46
22										
23										
24										
25										
26										
27										
28	FI	18:25	5	12	62	2	3	7	5	WINDY, g, k, l, m, 1.32 uncertain
29										
30										
31										
			9	20		5	4	14	6	R = 55.0 ← 1.38 1.14 ↑

c - Visibility: E, G, F, P
d - Cloudiness: 0-10
e - Universal Time
f - No. of Groups

G- No. of Spots
j - No. of Groups N hemisphere
k - No. of Groups S hemisphere

l - No. of spots N hemisphere
m - No. of spots S hemisphere
- Totals
R - 10f-g

$\frac{13 \cdot 80}{11} + \frac{2 \cdot 28}{2} = \frac{16 \cdot 08}{13} = 1.24$

A A V S O - SOLAR DIVISION - SUNSPOT REPORT FOR MARCH 1960

Name

Address

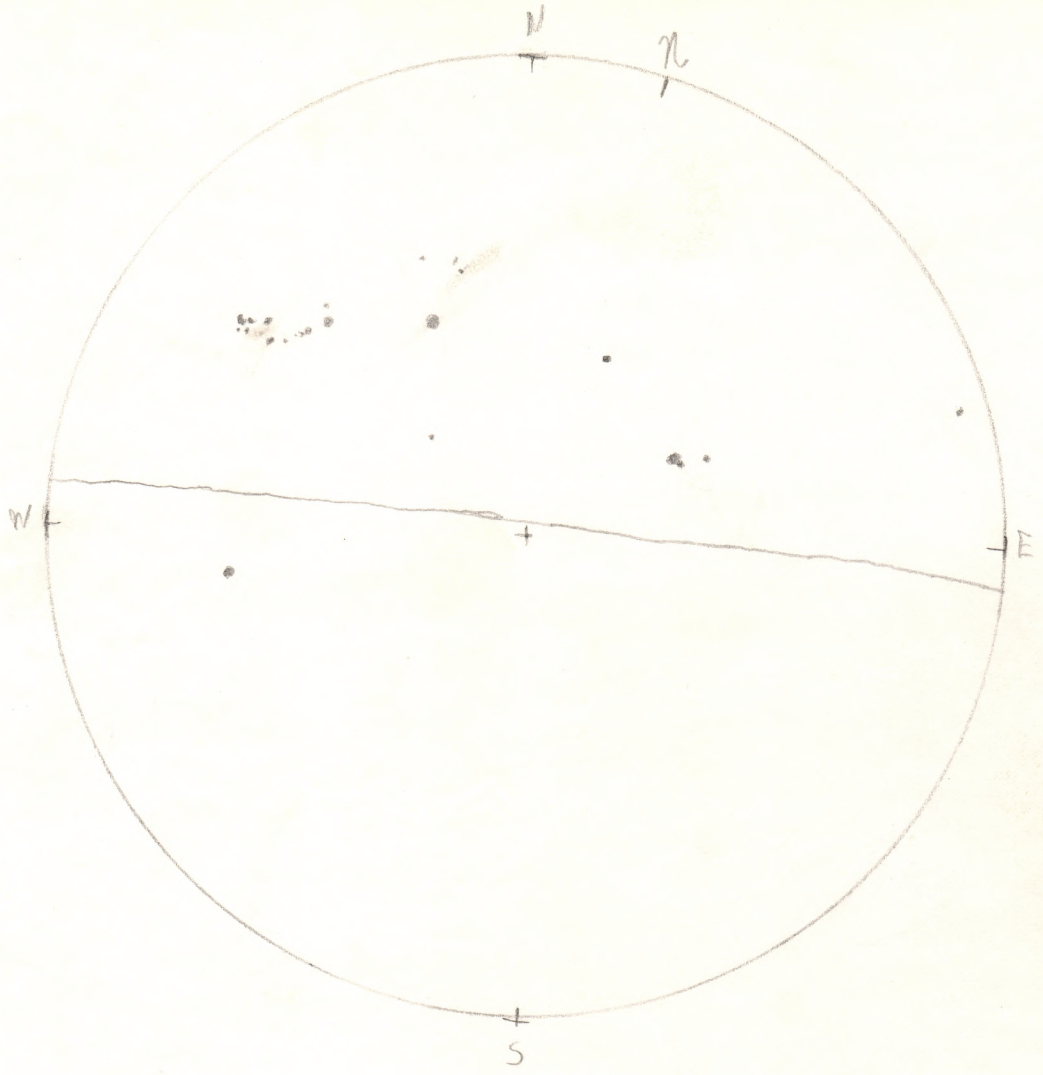
Instrument 2" RFR Method PROJ.

a Day	c d Vis	e U.T.	f gr	g sp	R	j N-GR	k S-GR	l N-Sp	m S-Sp	Remarks
1	FO	20:10	4	10	50	2	2	7	3	WINDY
2										
3										
4										
5										
6										
7										
8										
9	GO	19:30	6	21	81	4	2	13	8	
10	GO	18:20	5	19	69	4	1	14	5	
11										
12										
13										
14										
15										
16	F6	17:35	4	14	54	1	2	4	9	1 GR. 1 SP. ON EQUATOR
17										
18										
19										
20										
21	G2	19:40	5	13	63	4	1	11	2	WINDY
22										
23										
24										
25										VERY CLEAR BUT TOO WINDY
26										
27										
28										
29										
30										
31										

c - Visibility: E, G, F, P
d - Cloudiness: 0-10
e - Universal Time
f - No. of Groups

g - No. of Spots
j - No. of Groups N hemisphere
k - No. of Groups S hemisphere

l - No. of spots N hemisphere
m - No. of spots S hemisphere
- Totals
R - 10f-g

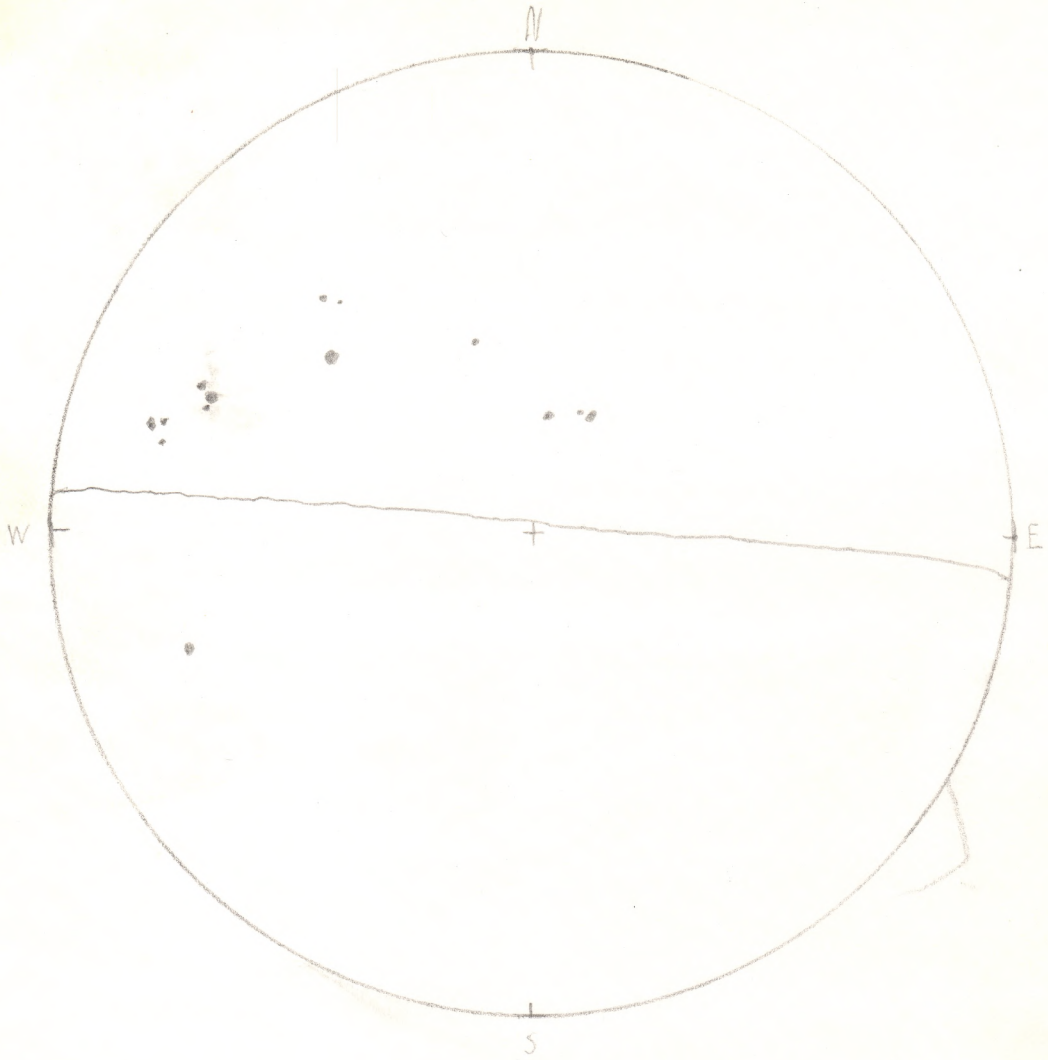


DECEMBER 24, 1959
13:55 E.S.T. 18:55 U.T.
VIS: G3

	GR.	SP.
N	7	22
S	1	1
T	8	23

R=103

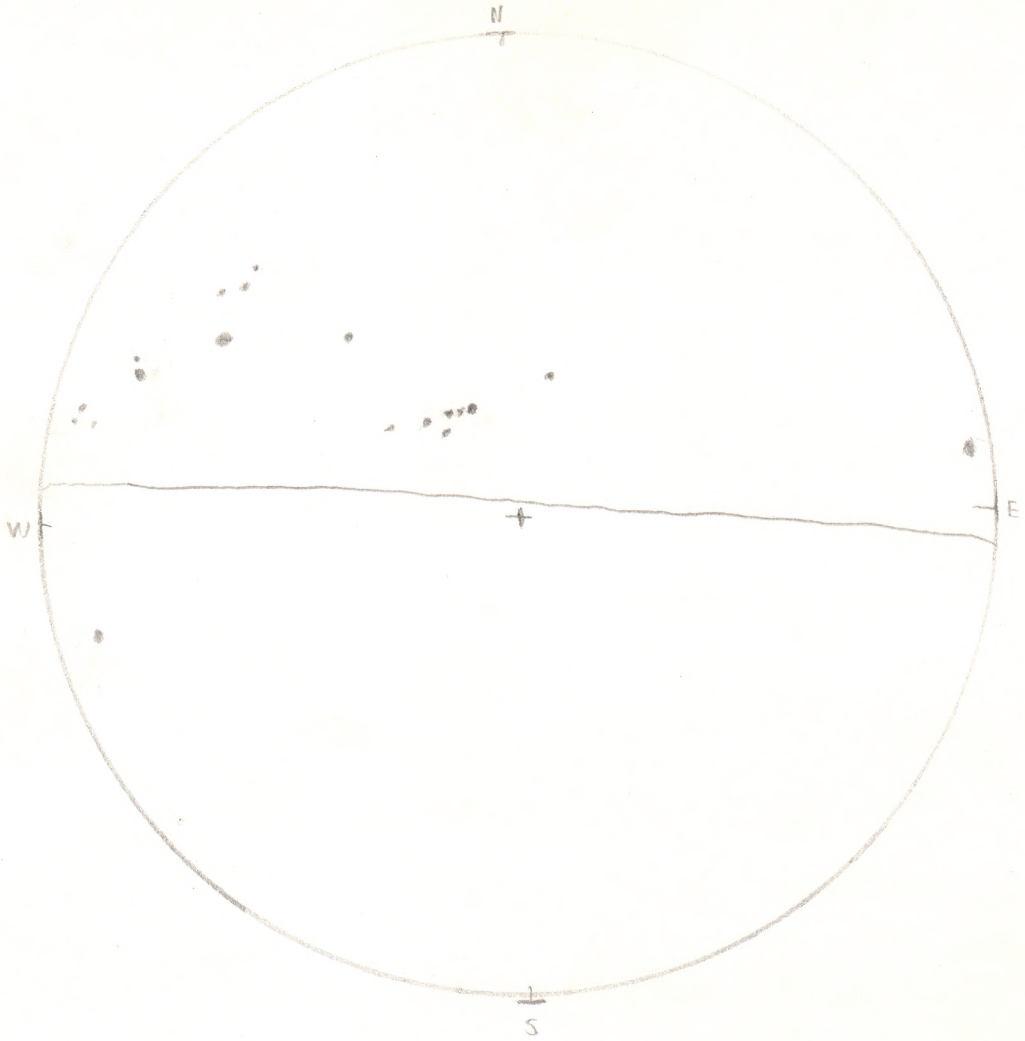
NOTE: As evident from observation on Dec. 25 the cardinal points + equator are incorrect. The Dec. 25 observation implies a north point at "N".



DEC. 25, 1959
10:30 EST 15:30 U.T.
VIS. F6

	GR	SP
N	6	13
S	1	1
T	7	14

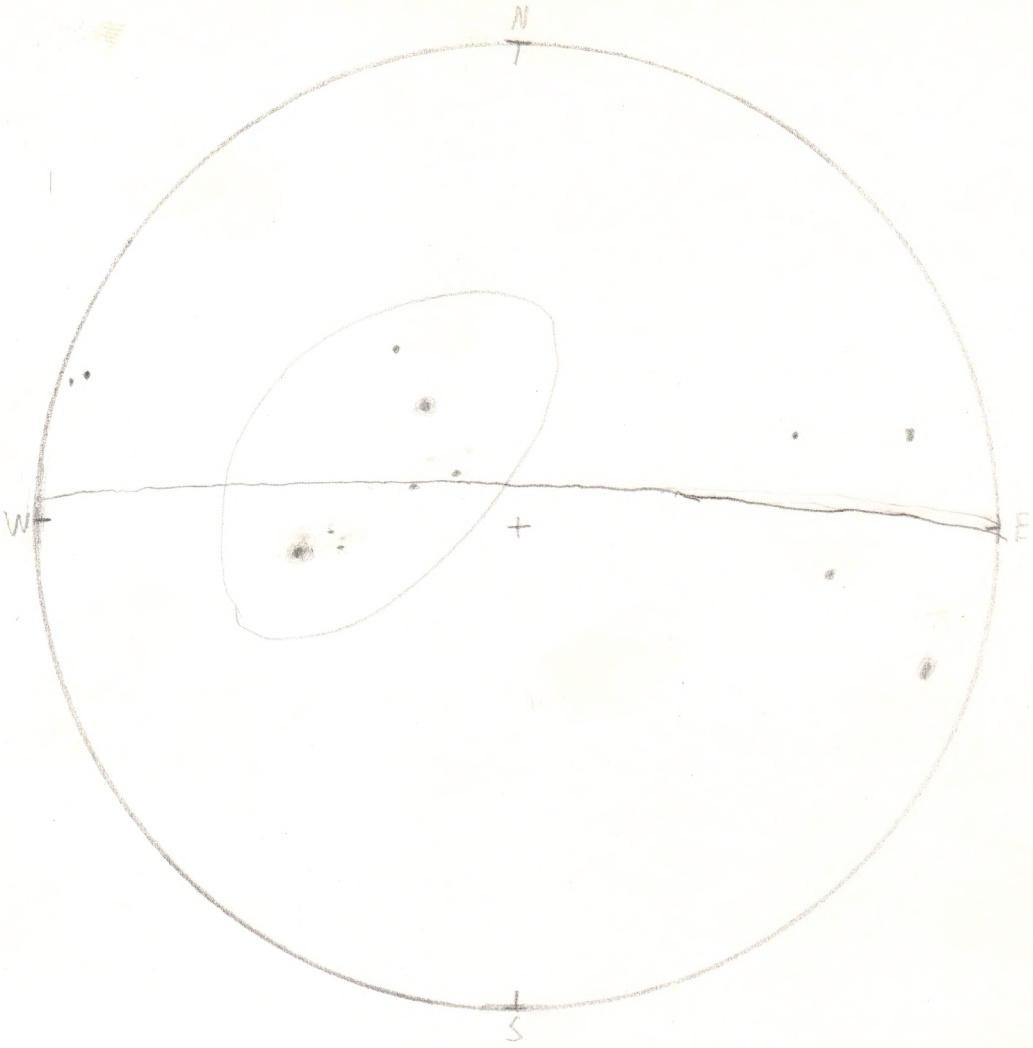
R = 84



DEC. 26, 1959
11:50 EST. 16:50 U.T.
VIS. G3

	GR	SP
N	8	18
S	1	1
T	9	19

R = 109



JAN. 1, 1960
11:05 E.S.T. 16:05 U.T.
VIS: G I

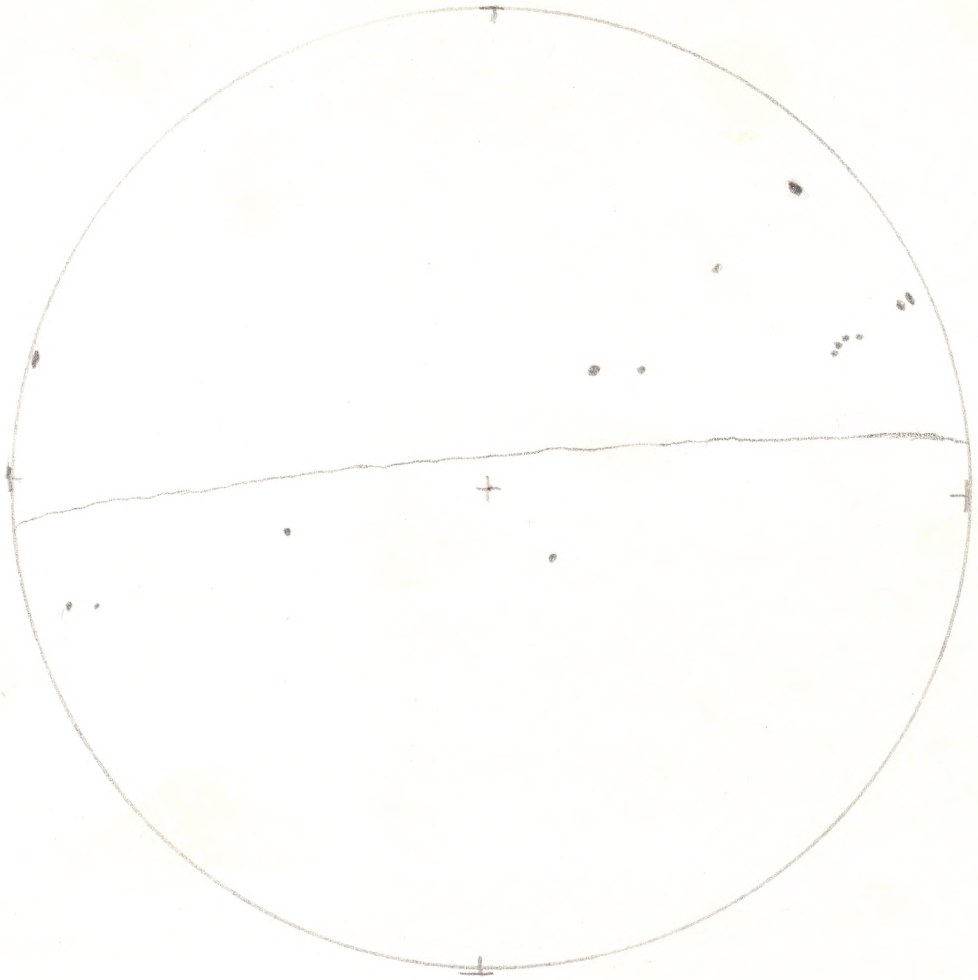
	GROUPS	SPOTS
N	6	7
S	4	6
TOT	10	13

R = 113

Note: I believe that the isolated encircled was incorrectly placed and should be considered in the northern hemisphere:

	GROUPS	SPOTS
N	7	11
S	2	2
TOT	9	13

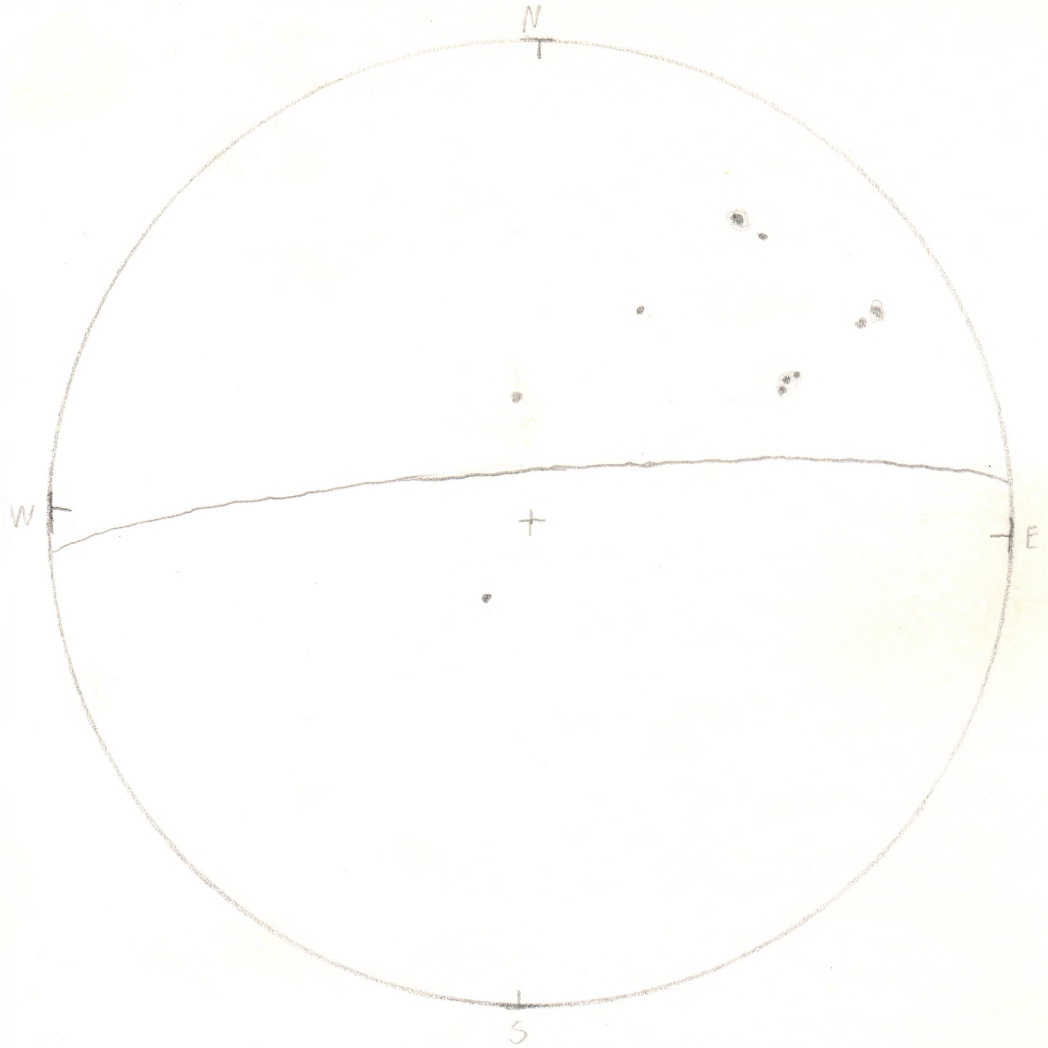
R = 103



JAN 17, 1960
11:54 EST. 16:55 UT.
VIS: GO

	GR	SP
N	6	11
S	3	4
T	9	15

R = 105

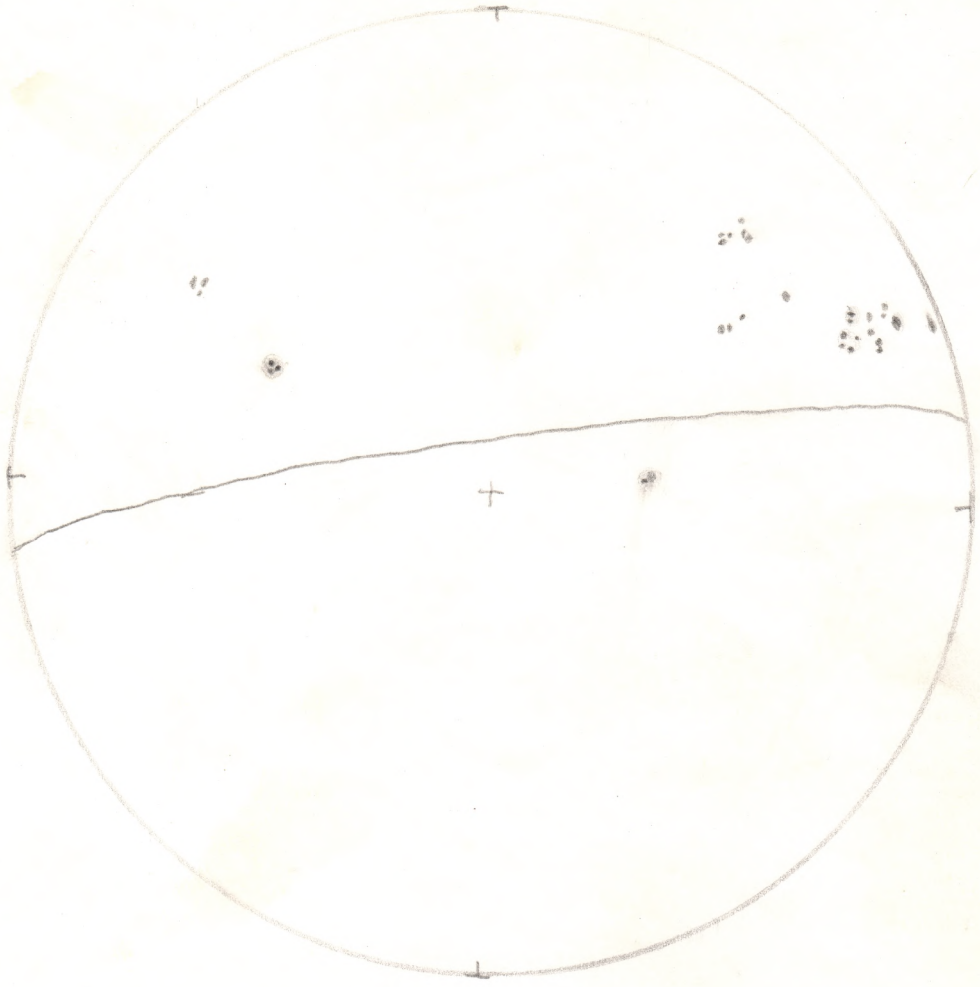


JAN. 18, 1960.
14:20 EST 19:20 U.T.

VIS. F6

	GR	SP
N	5	9
S	1	1
T	6	10

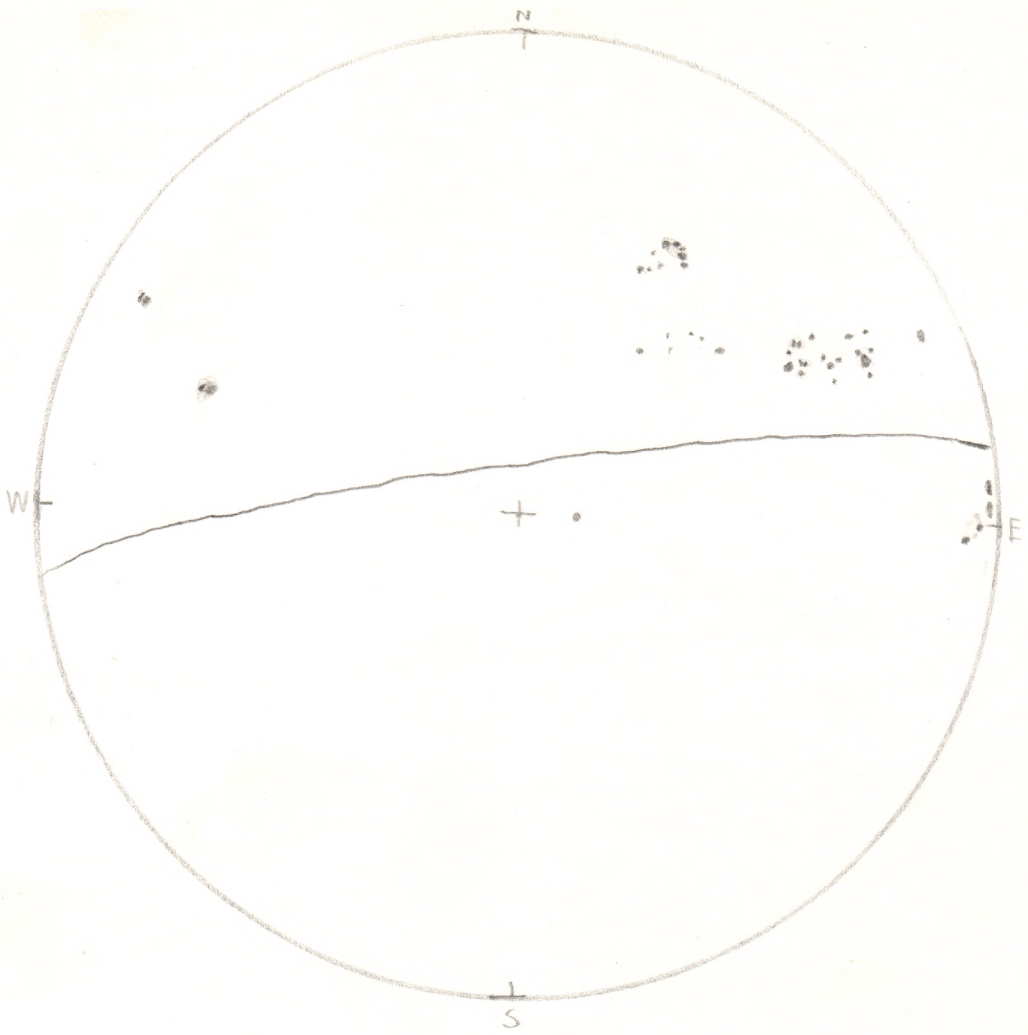
R = 70



JAN. 24, 1960
12:45 EST. 17:45 U.T.
VIS E 3 (image very steady)

	GR	SP
N	6	30
S	1	2
T	7	32

R = 102



JAN 25, 1960
14:30 EST. 19:30 U.T.
VIS. G4 (Harry)

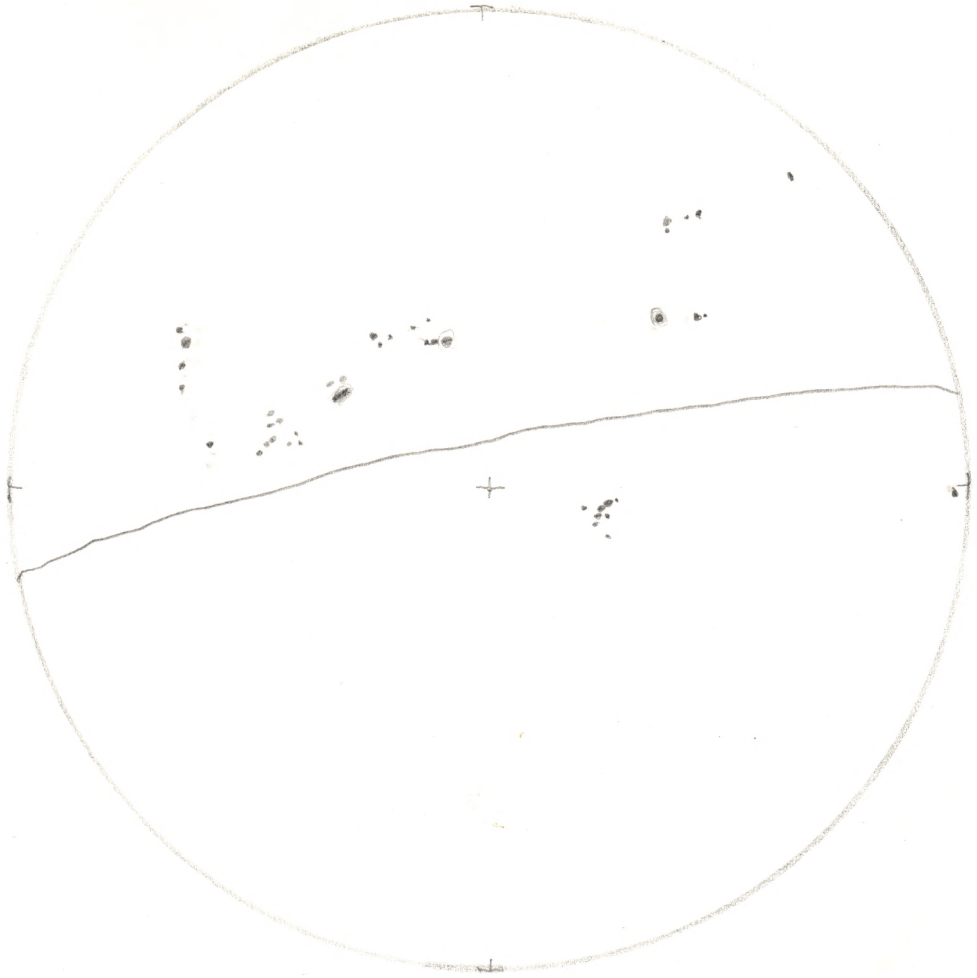
	GR	SP
N	6	38
S	2	5
T	8	43

R = 123

JAN 26, 1960
13:05 EST. 18:05 U.T.
VIS. G1 (windy)

	GR	SP
N	7	41
S	2	5
T	9	46

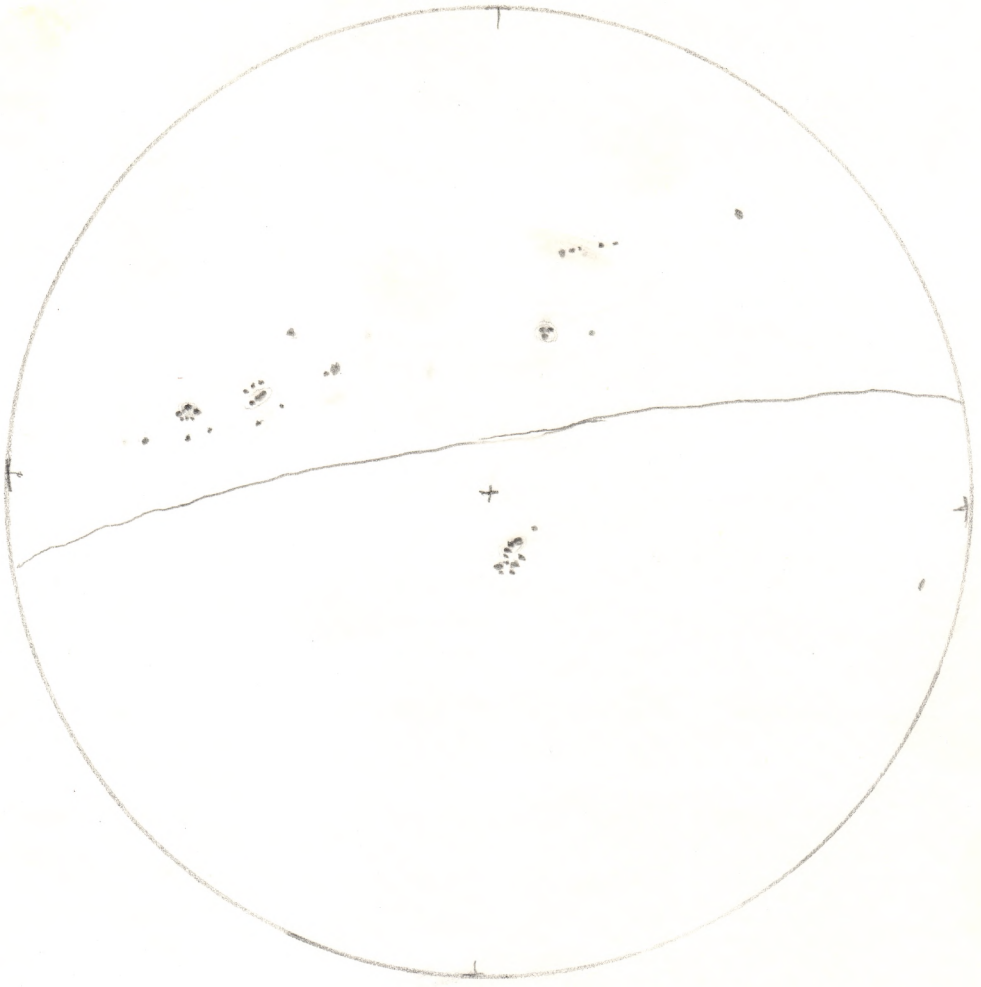
R = 136



JAN 30, 1960
13:30 E.S.T. 18:30 U.T.
VIS. F6

	GR	SP
N	7	33
S	2	9
T	9	42

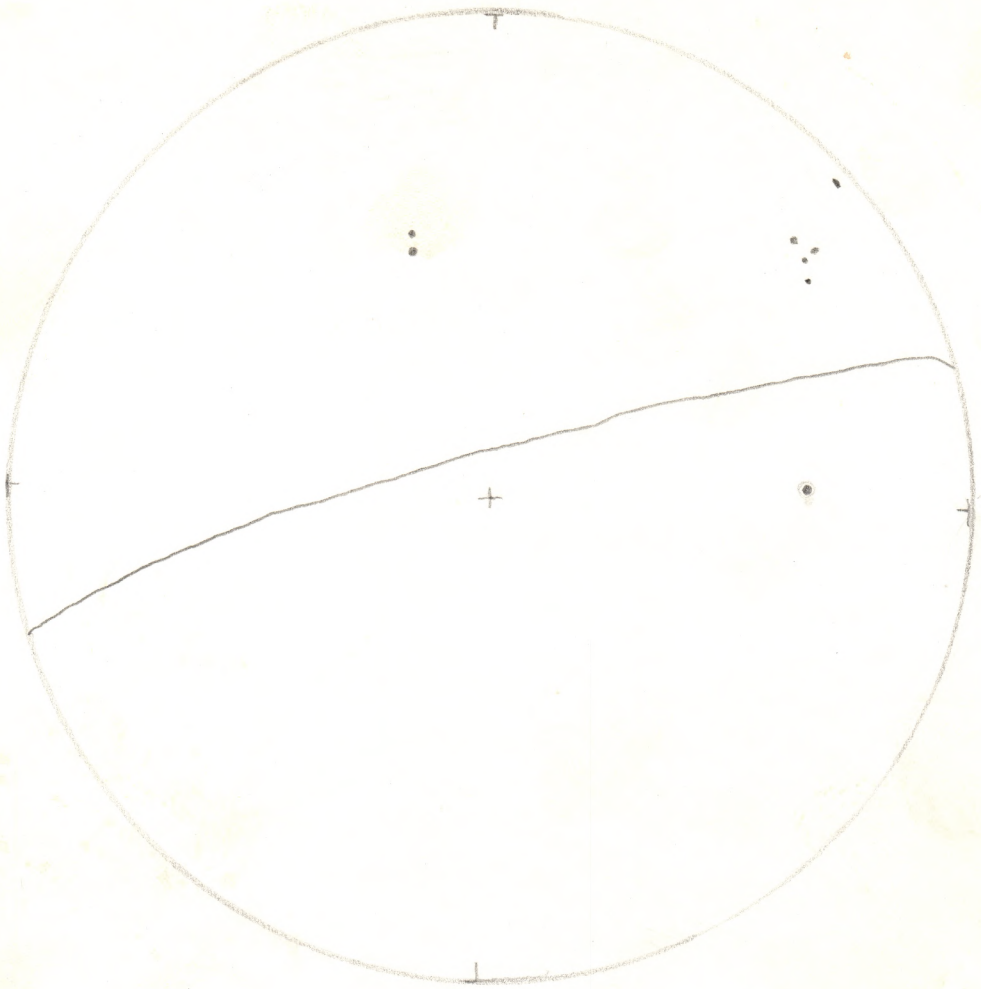
R = 132



JAN 31, 1960
13:05 E.S.T. 18:05 U.T.
VIS. GO

	GR	SP
N	6	29
S	2	12
T	8	41

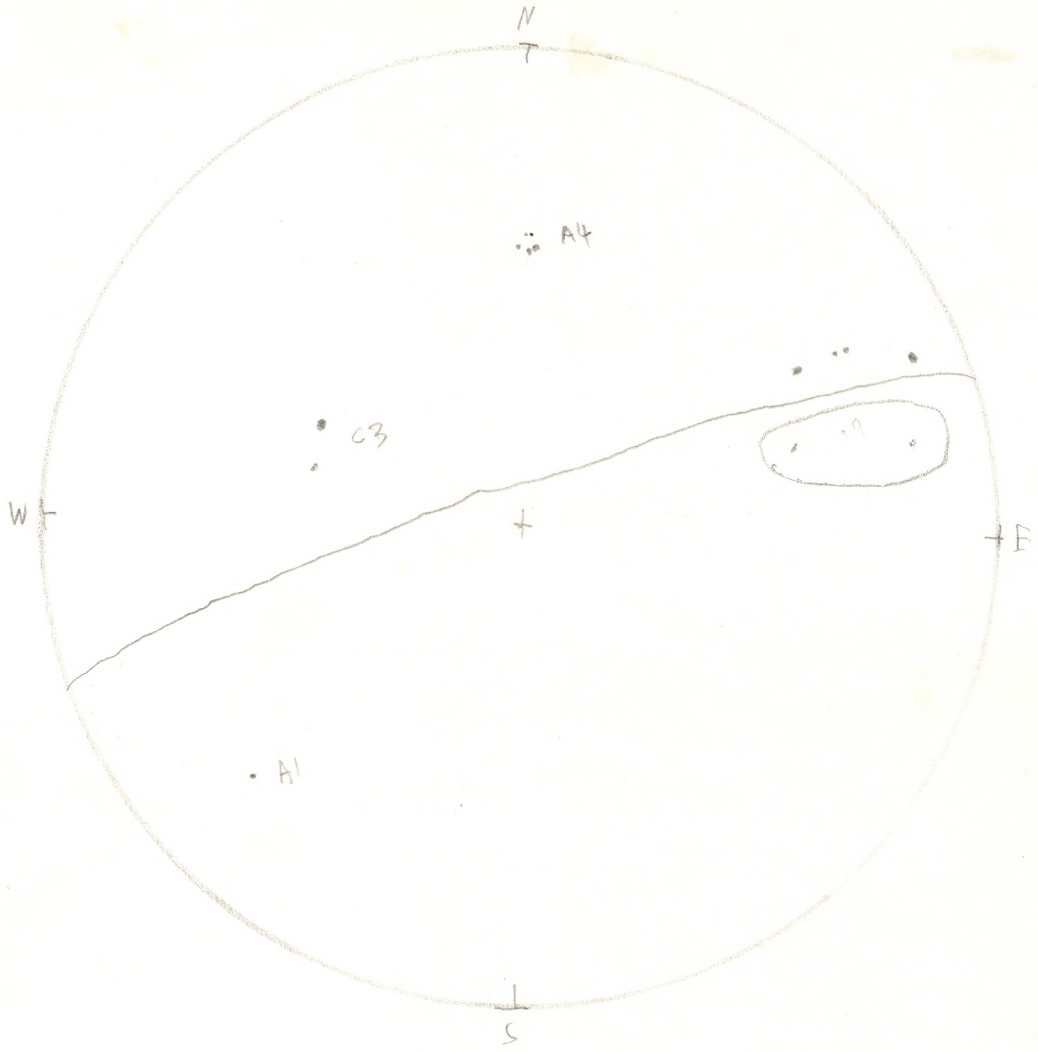
R = 121



FEB 21, 1960
11:15 E.S.T.
VIS: P0

	GR	SP
N	3	7
S	1	1
TOT	4	8

R = 48



FEB. 28, 1960
13:25 EST.
VIS. FID (Windy)

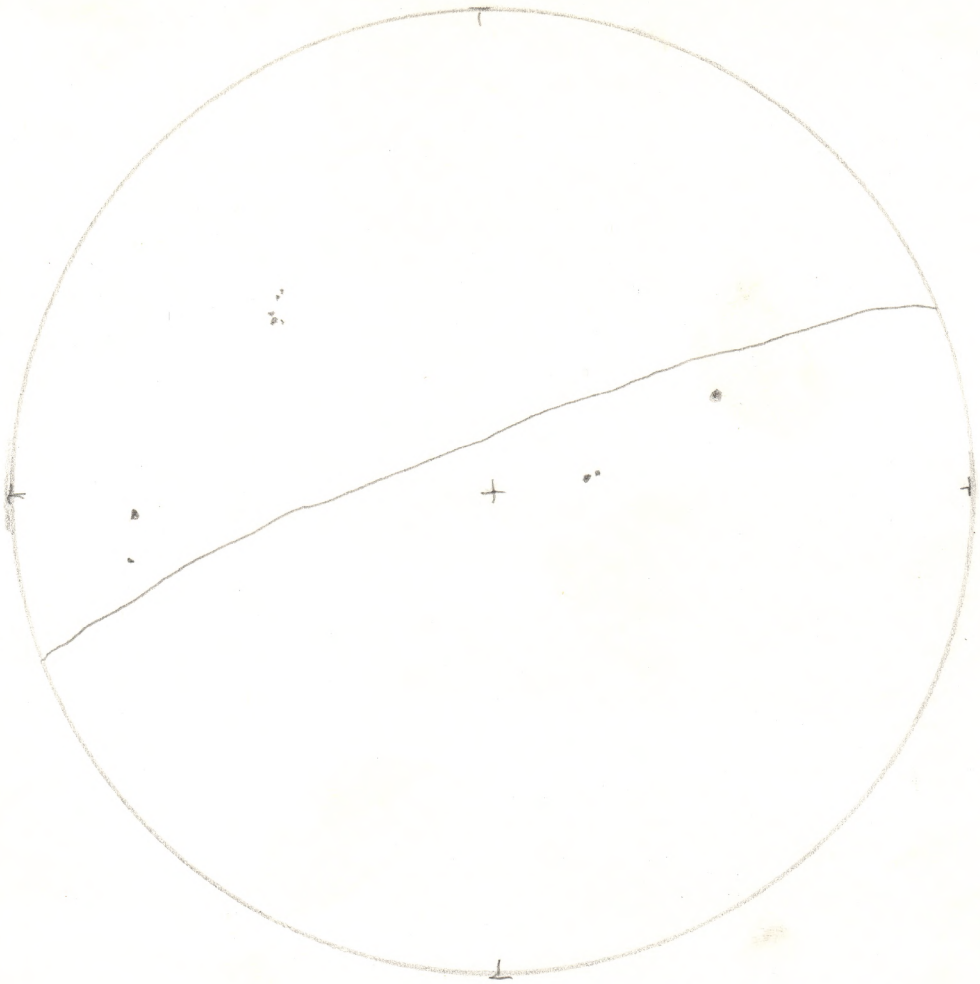
	GR	SP
N	4	11
S	1	1
T	5	12

R = 162

I believe spots are too far east
north:

	GR	SP
N	2	7
S	3	5
	5	12

R = 62

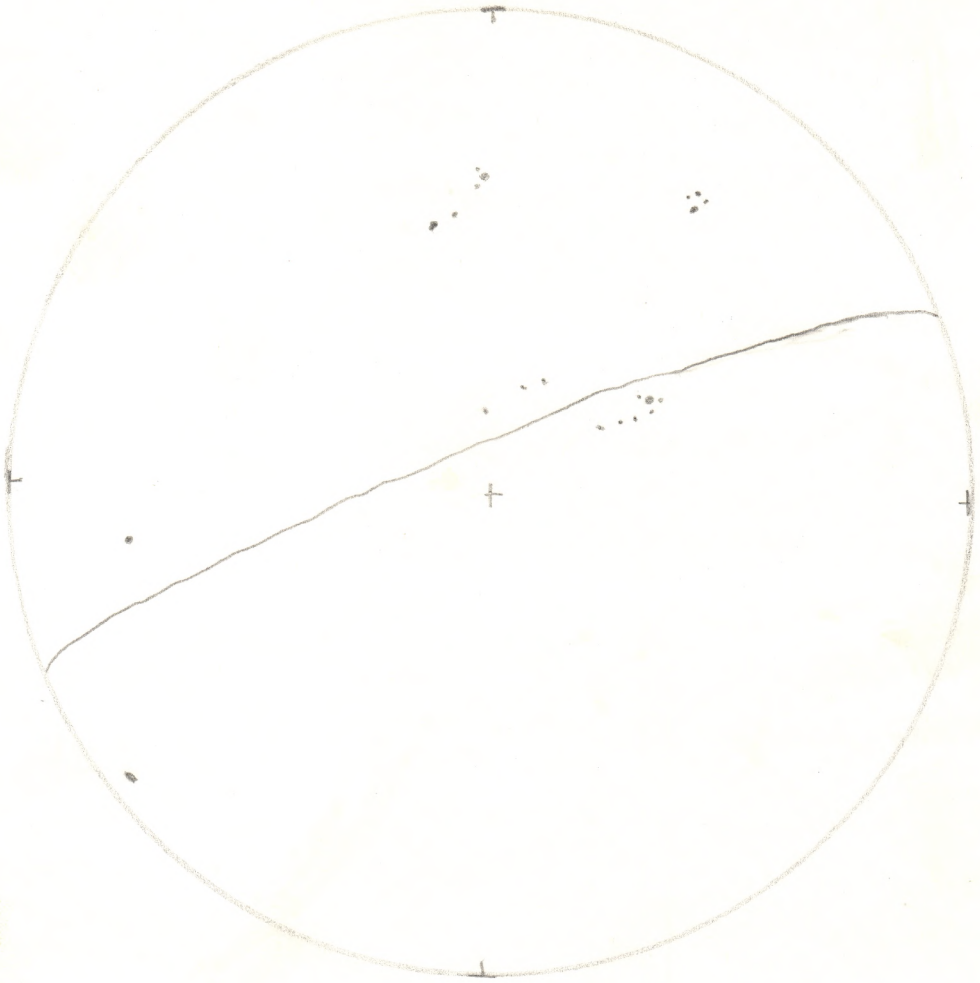


MAR 1, 1960
15:10 EST. 20:10 U.T

VIS. Fo (Windy)

	GR	SP
N	2	7
S	2	3
TOT	4	10

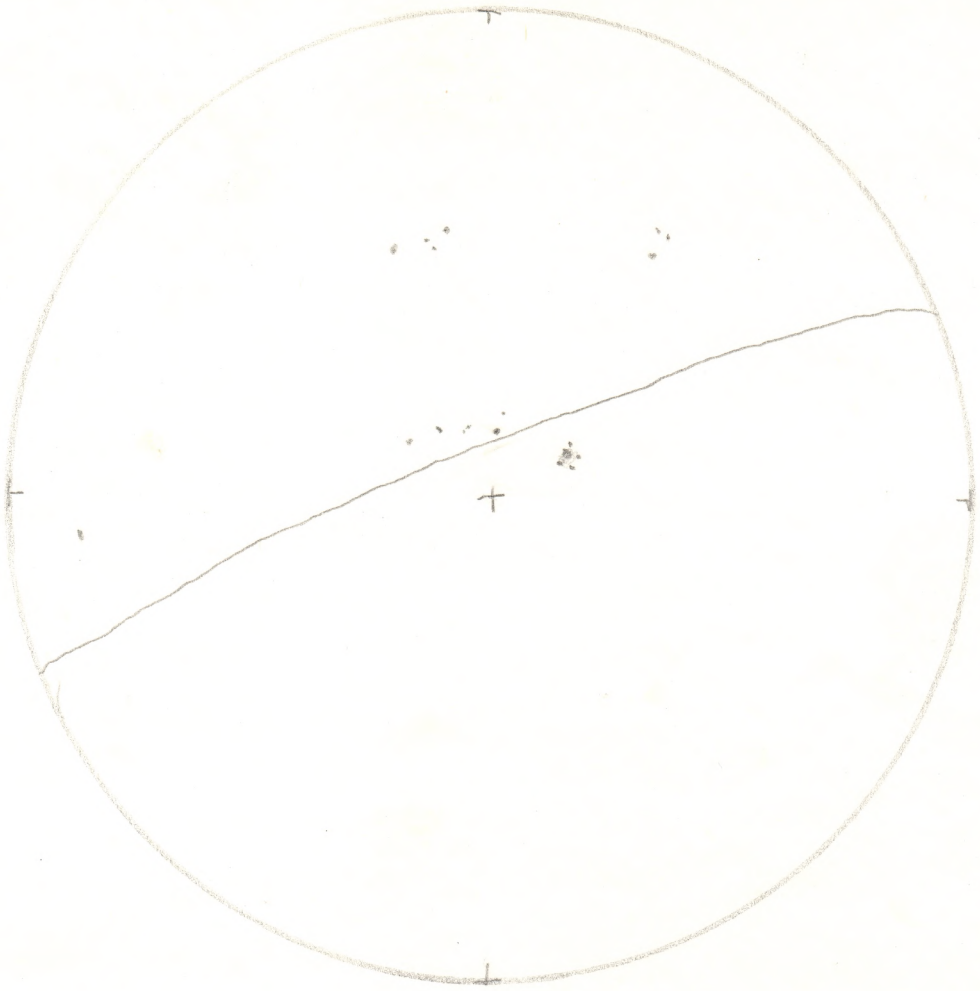
R = 50



MAR 9, 1960
14:30 EST. 19:30 U.T.
VIS.: GO

	GR	SP
N	4	13
S	2	8
T	6	21

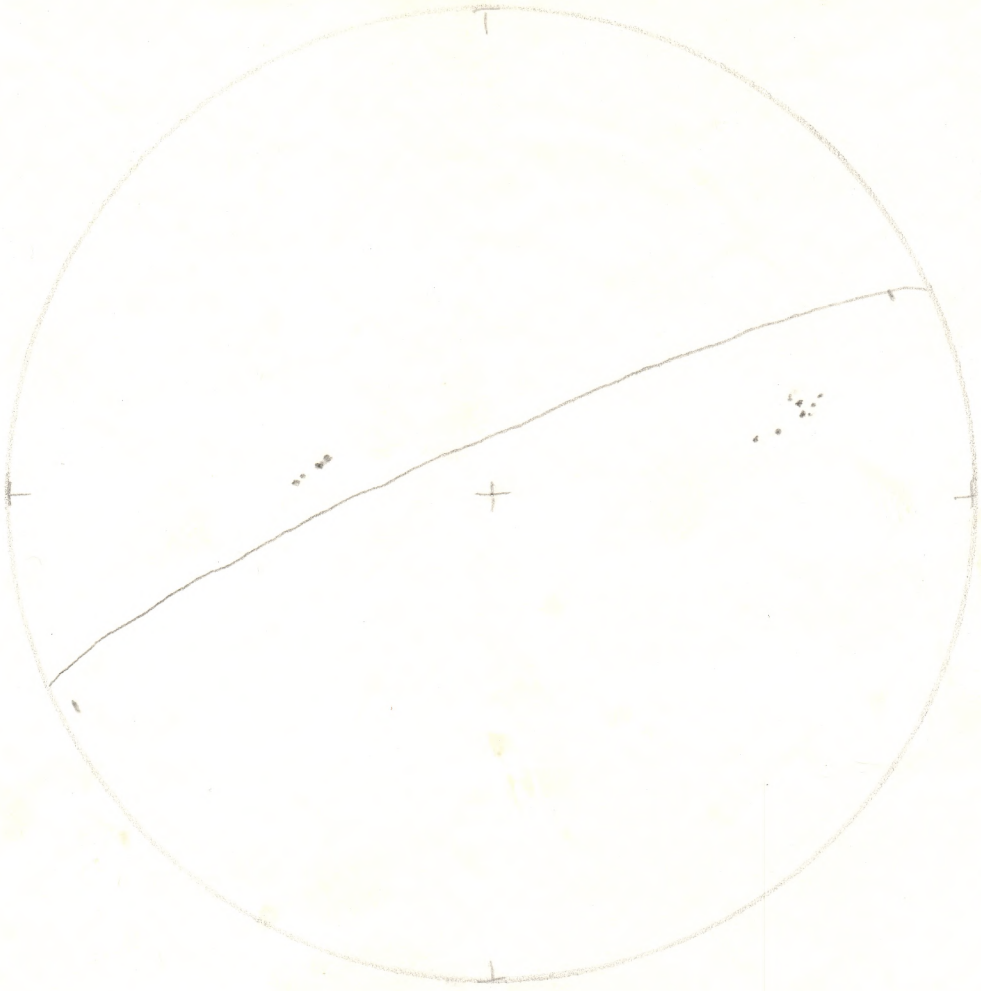
R = 81



MARCH 10, 1960
13:20 EST 18:20 U.T.
VIS. GO

	OR	SP
N	4	14
S	1	5
T	5	19

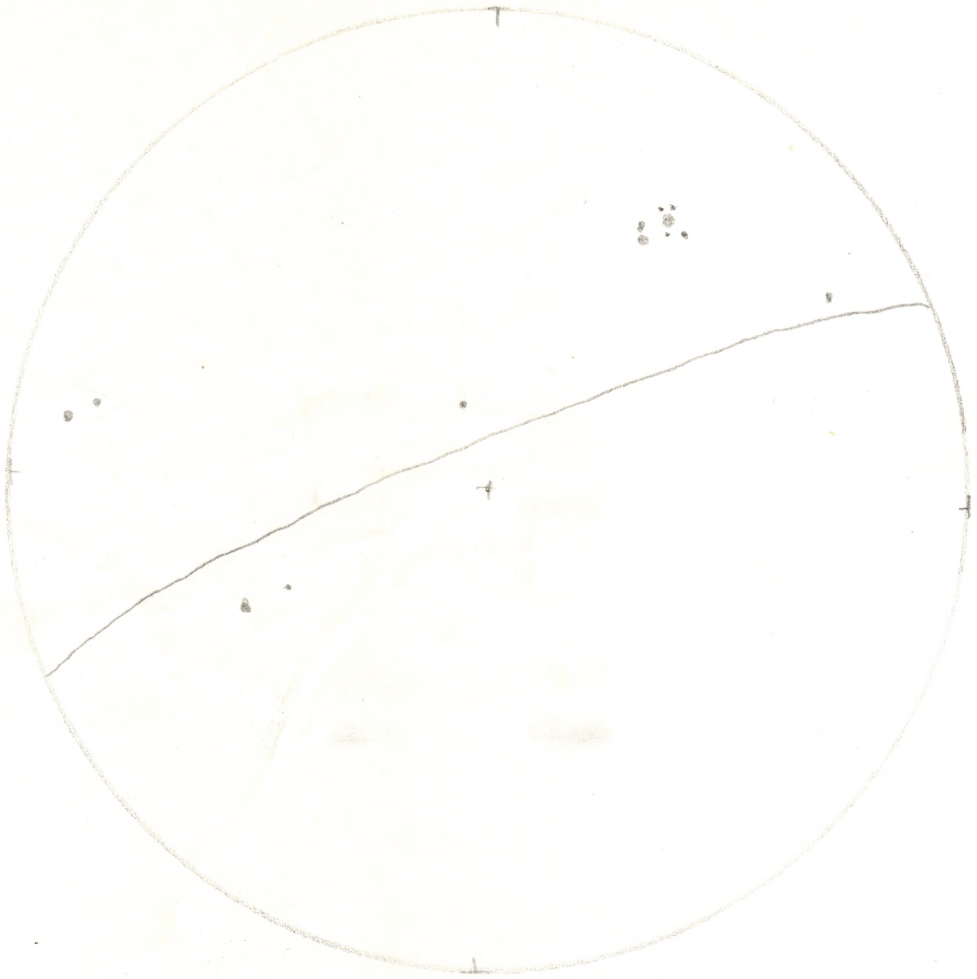
R=69



MARCH 16, 1960
12:35 E.S.T. 17:35 U.T.
VIS. F6

	GR	SP
N	1	4
S	2	9
EQ	1	1
TOT	4	14

R = 54



MAR. 21, 1960
14:40 EST. 19:40 U.T.
VIS; G 2 (Windy)

	GR	SP
N	4	11
S	1	2
TOT	5	13

R = 63