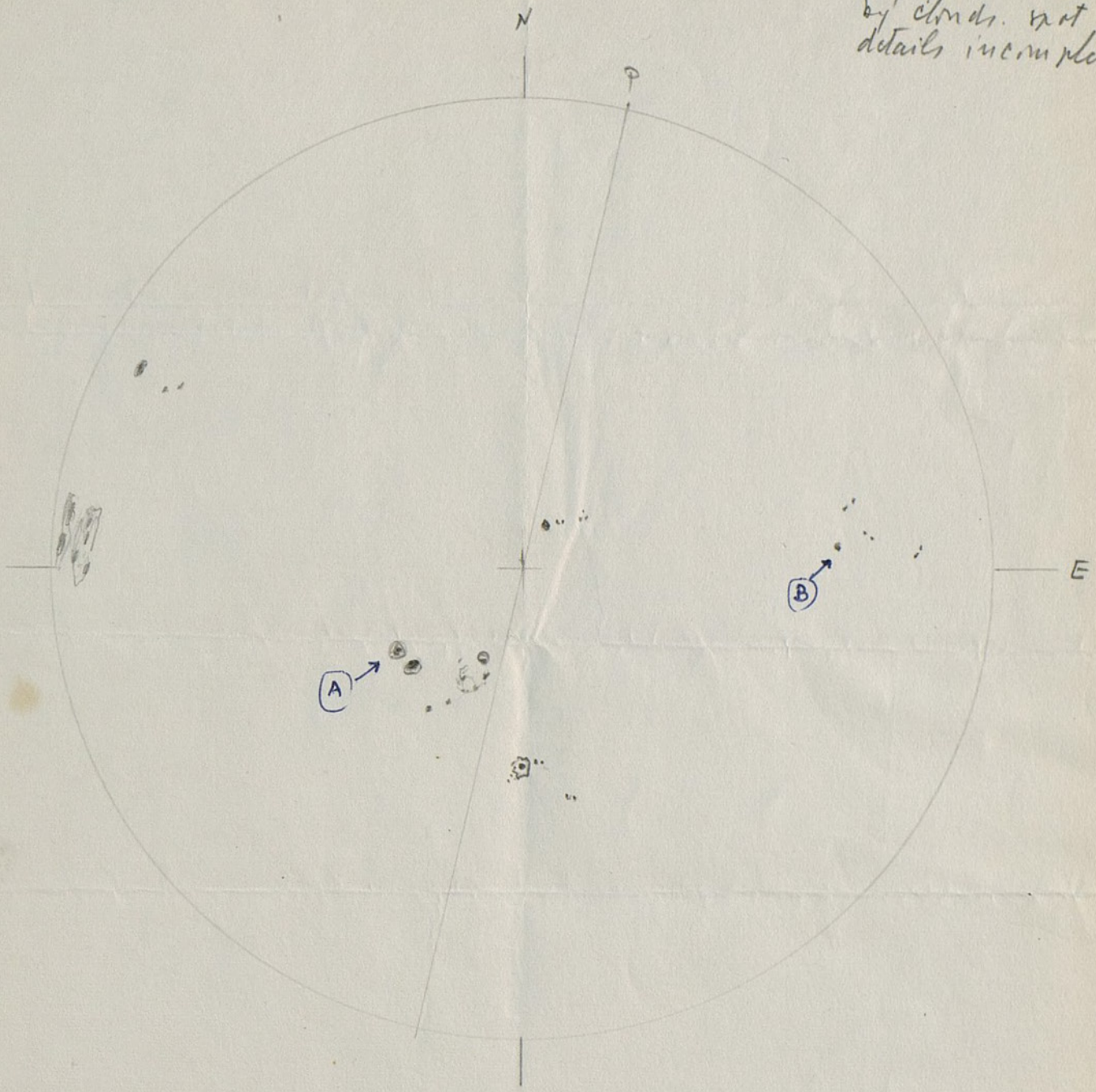
29th Aug. 69 — 11 July 70

6|3.

4 3/8" O.G.
RMT 1550

1969 Aug 6
9^30 - 9^45 UT
seeing fair, interrupted by clouds. spot details incomplete



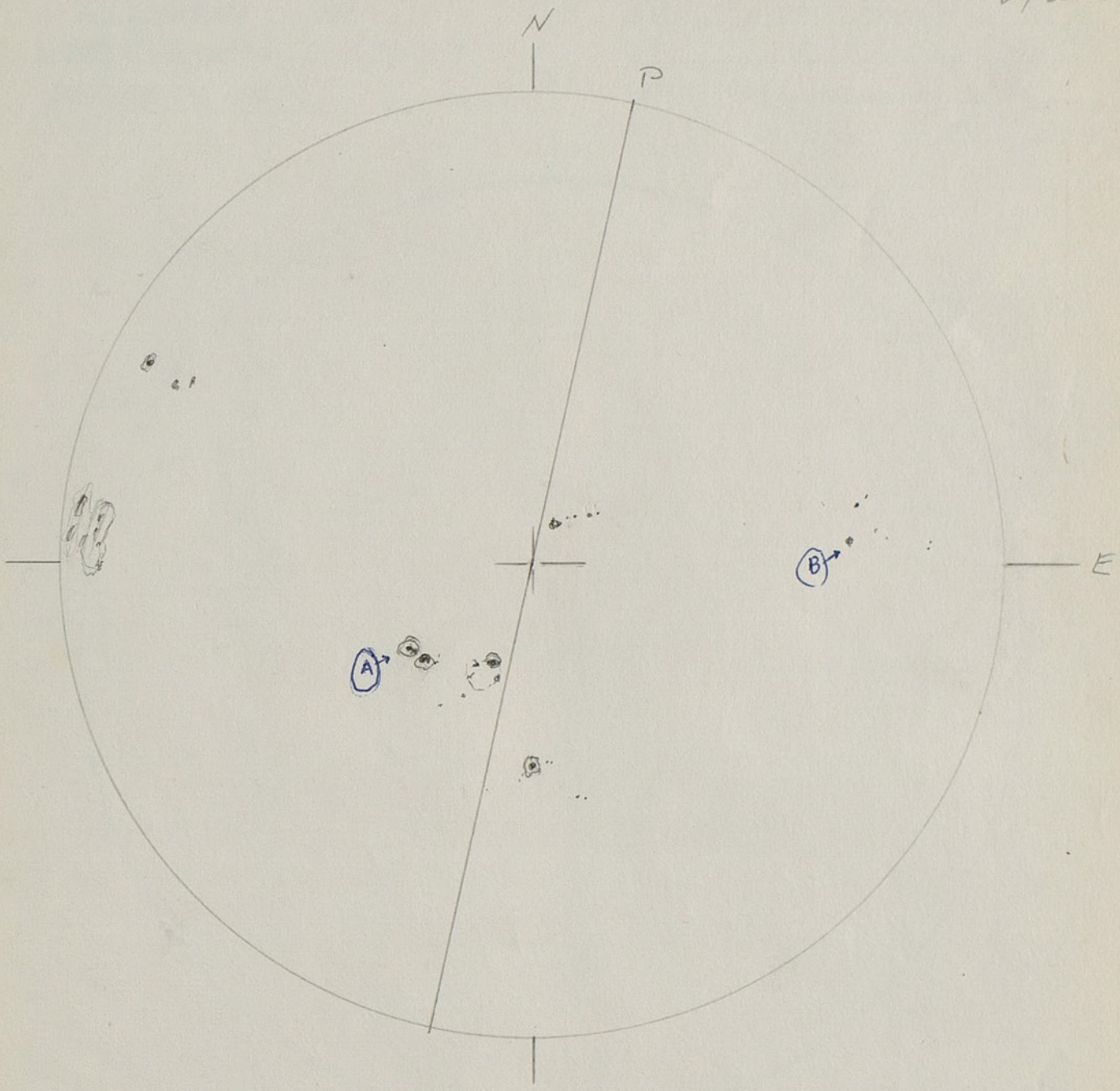
P = +12.8°
B_0 = 6.17
L_0 54.5

A B = 7.5° S
L = 67.6°

B B = 15.5° N
L = 13.6°

4 3/8" Refr.
Rvt 1550

1969 Aug 6
9 30-45 UT
fair but interr. by cloud



$P = +12.8°$
$B_0 = 6.17$
$L_0 = 54.5$

(A) B = 7.5° S
L = 69.6°

(B) B = 15.5 N
L = 13.6°

6.8.69
9 ~~12~~ 30-45 UT

B.A.A. SOLAR SECTION

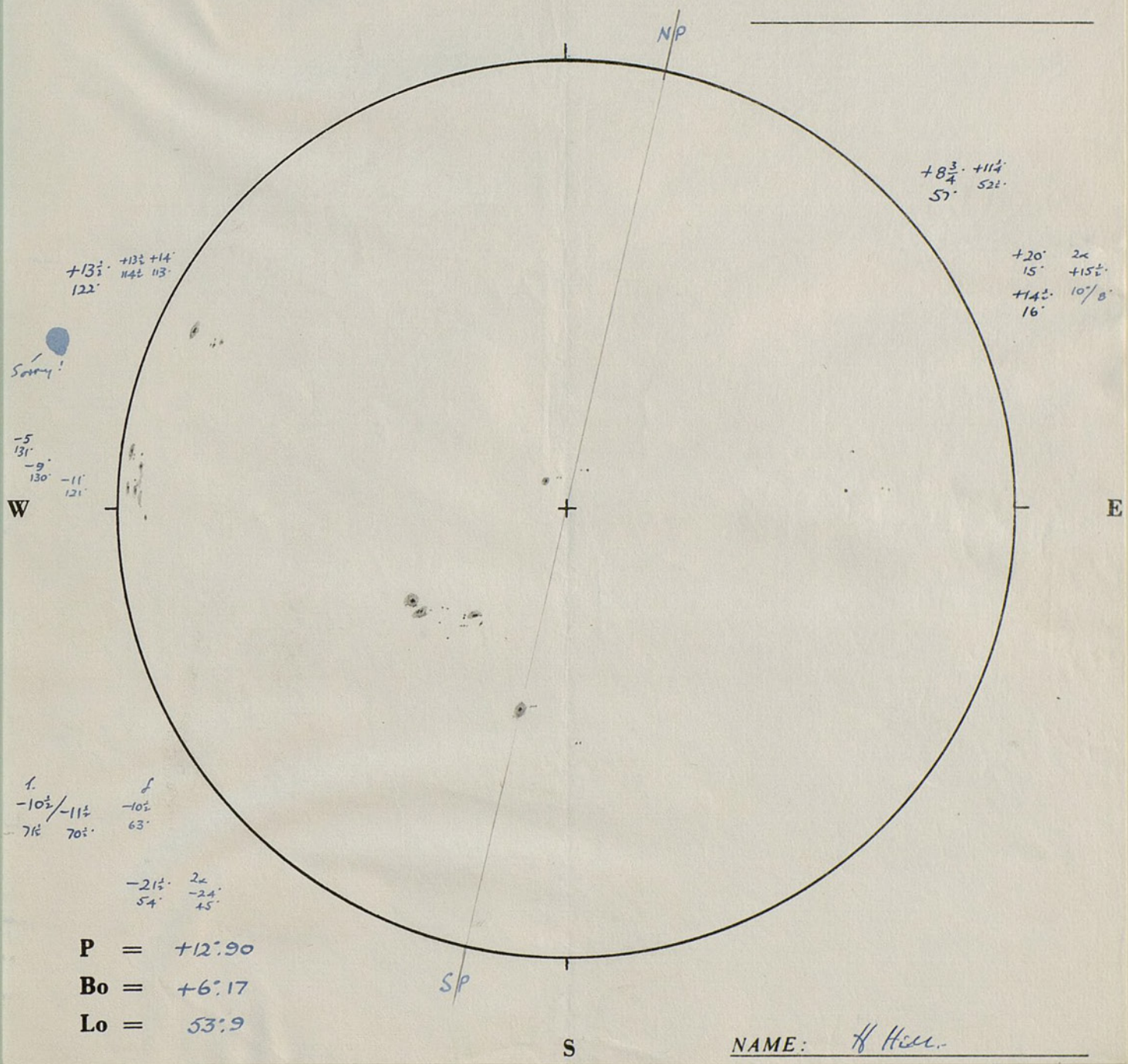
INSTRUMENT: 3" Refr. fed by coelostat

ROTATION No.: 1550

DATE: 1969: August 6

U.T.: 10 h. 35 m.

CONDITIONS: Fairly good



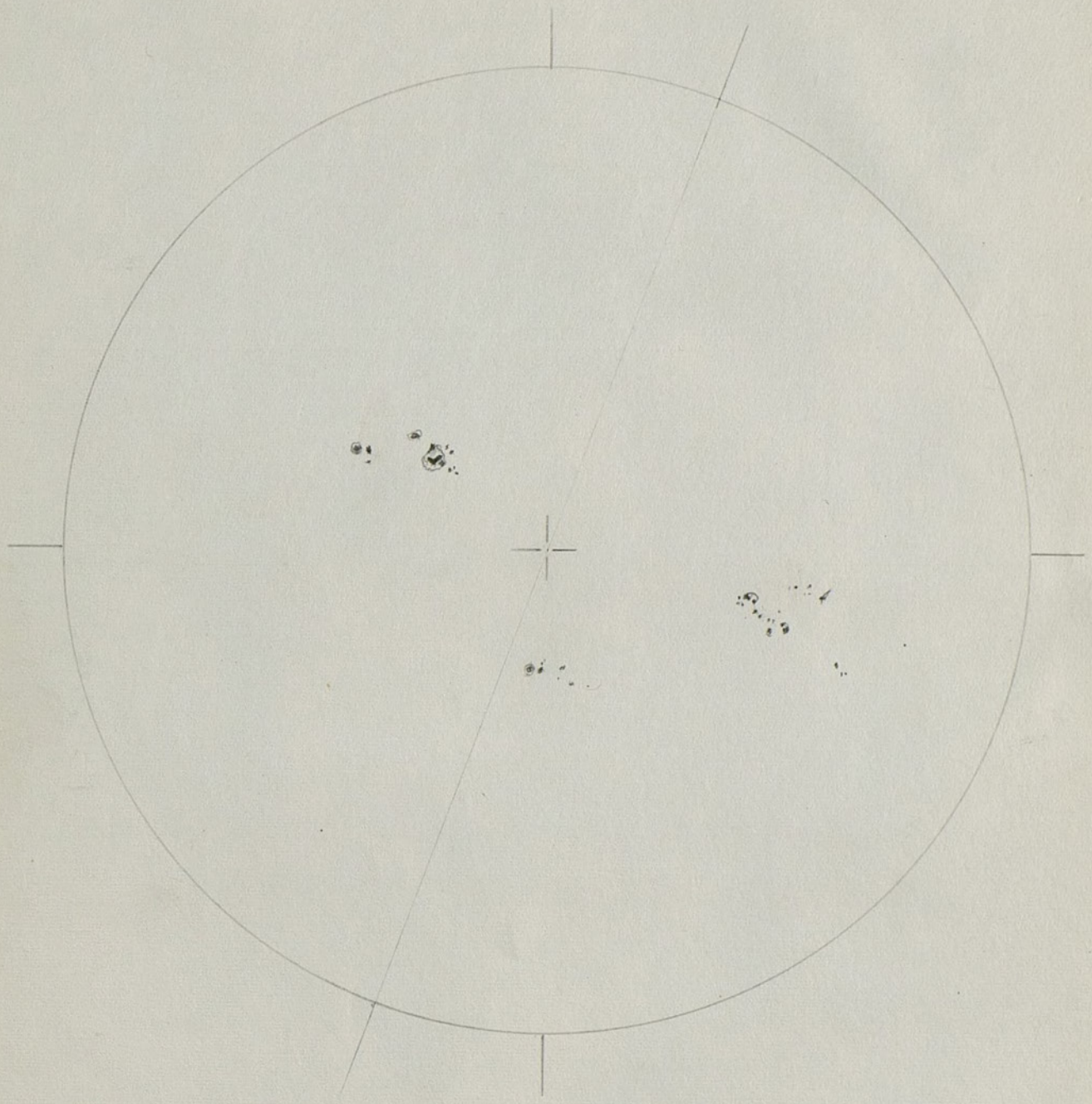
P = +12°.90

Bo = +6°.17

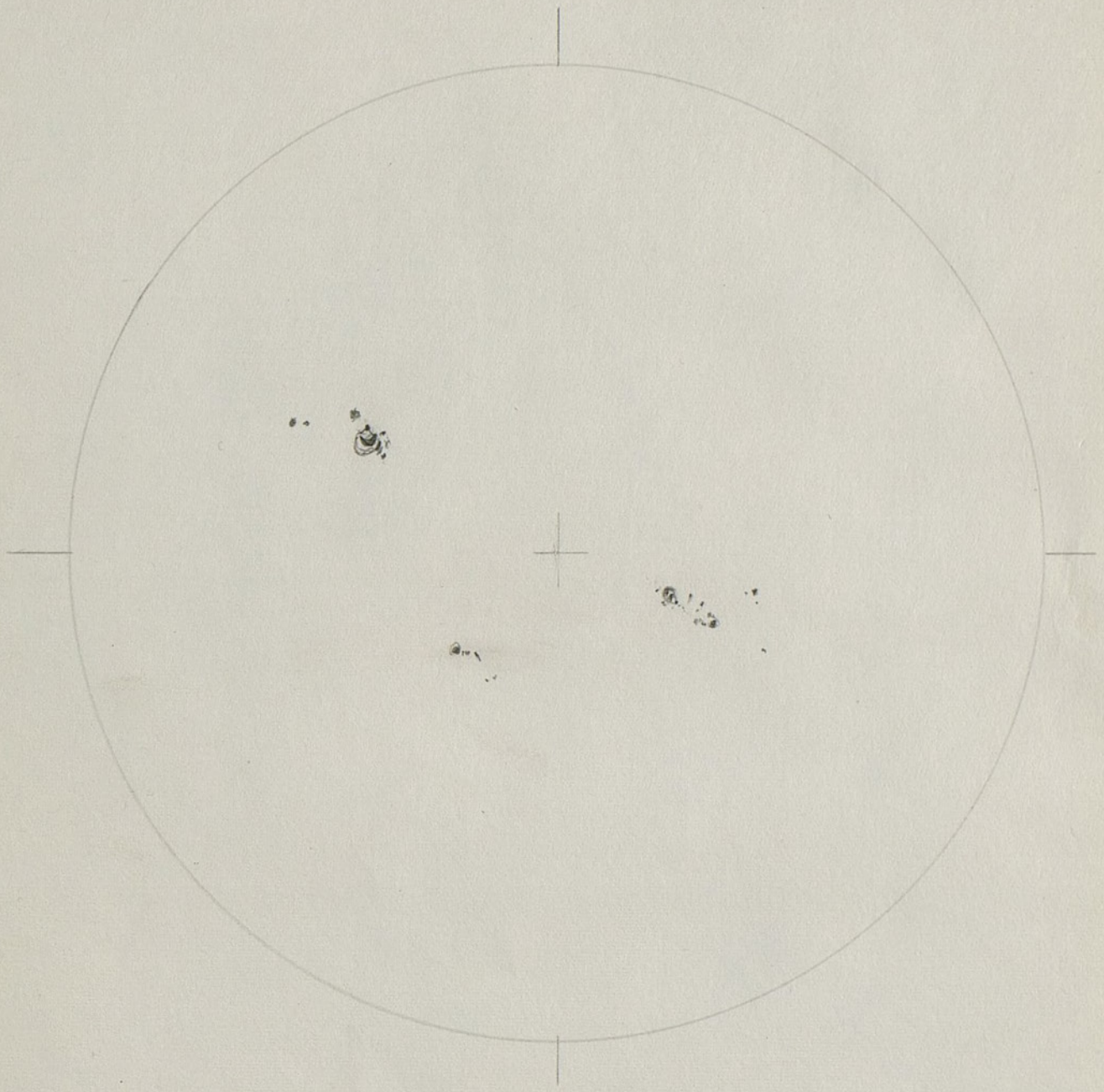
Lo = 53°.9

NAME: H Hill.

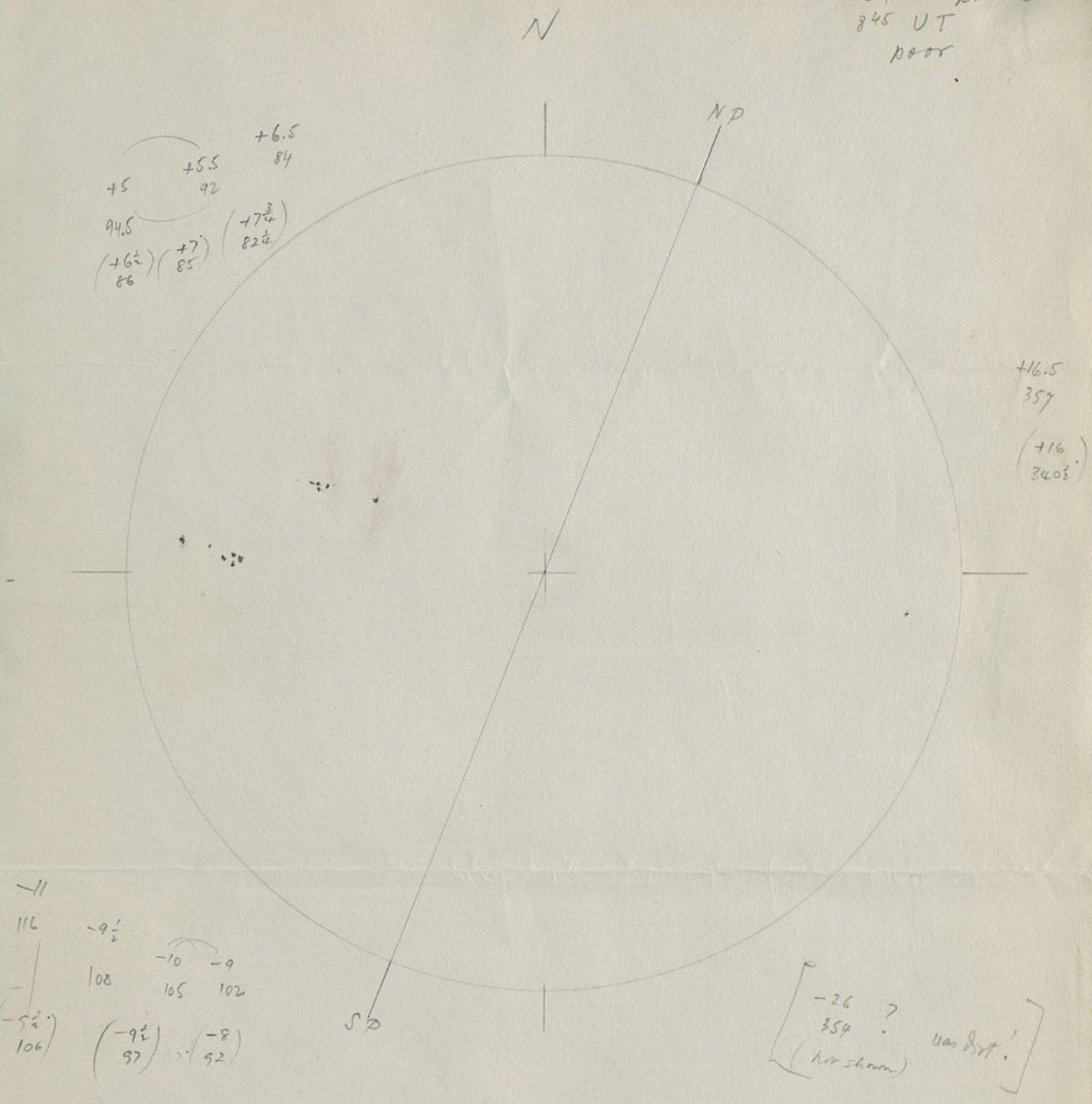
1969 Aug 29
15h 30 UT
par



1969 Aug. 30
12 - 12^30 UT
pass



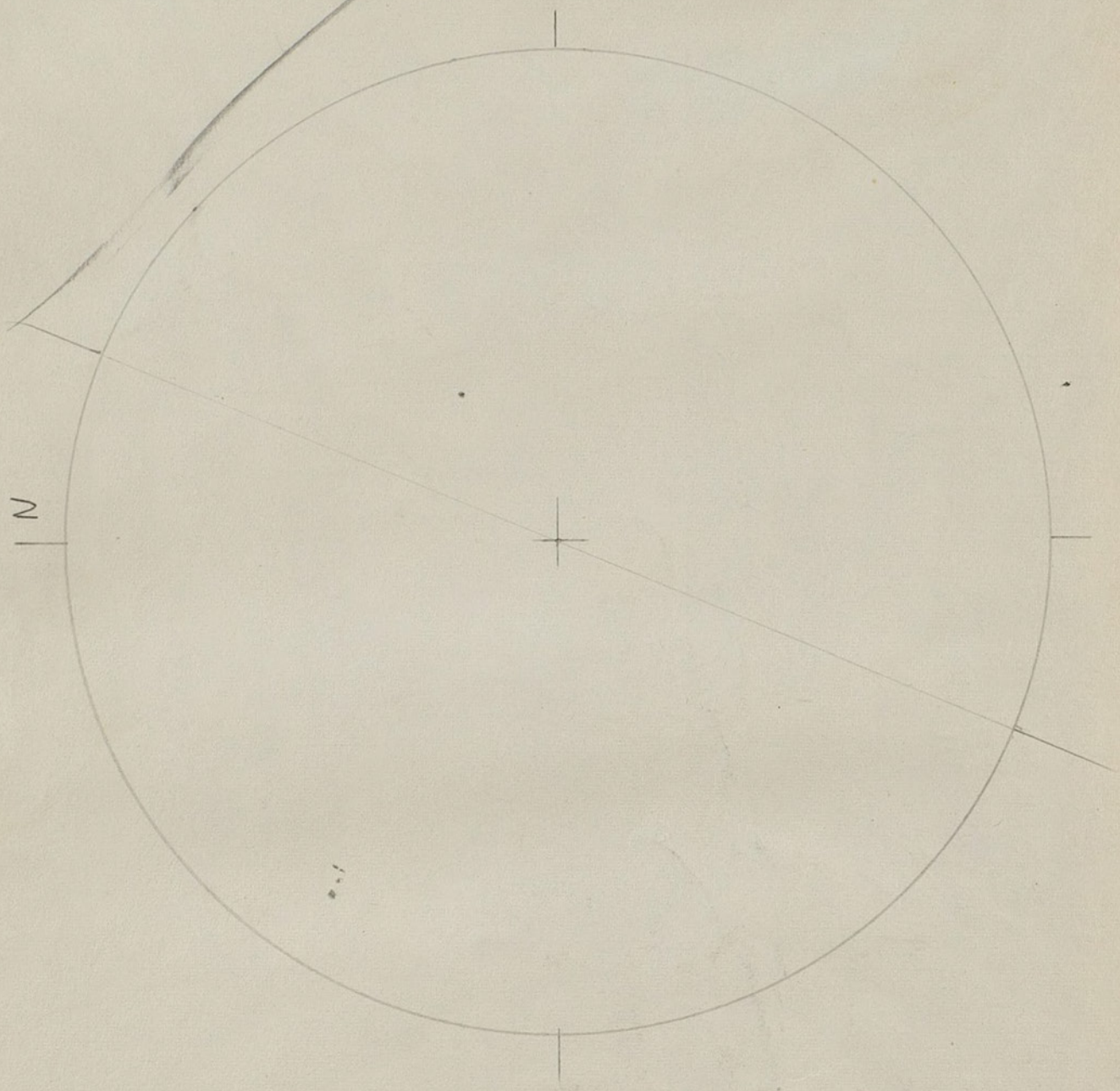
1969 Sept 3
845 UT
poor



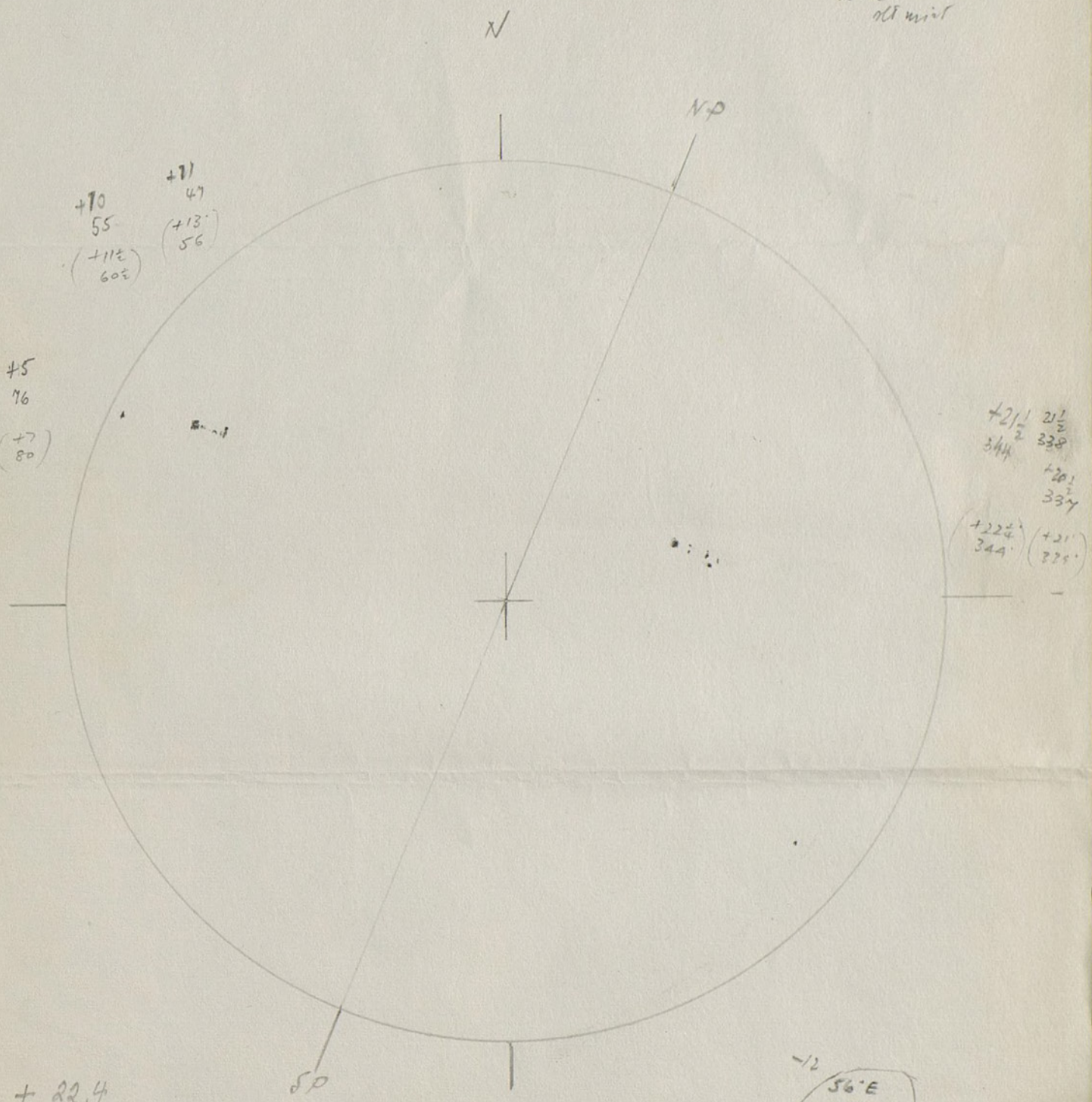
P +21.5
B_0 +7.22
L_0 58.
(44.8)

278.3
28.5
306.8

6.9.69
14.10 UT



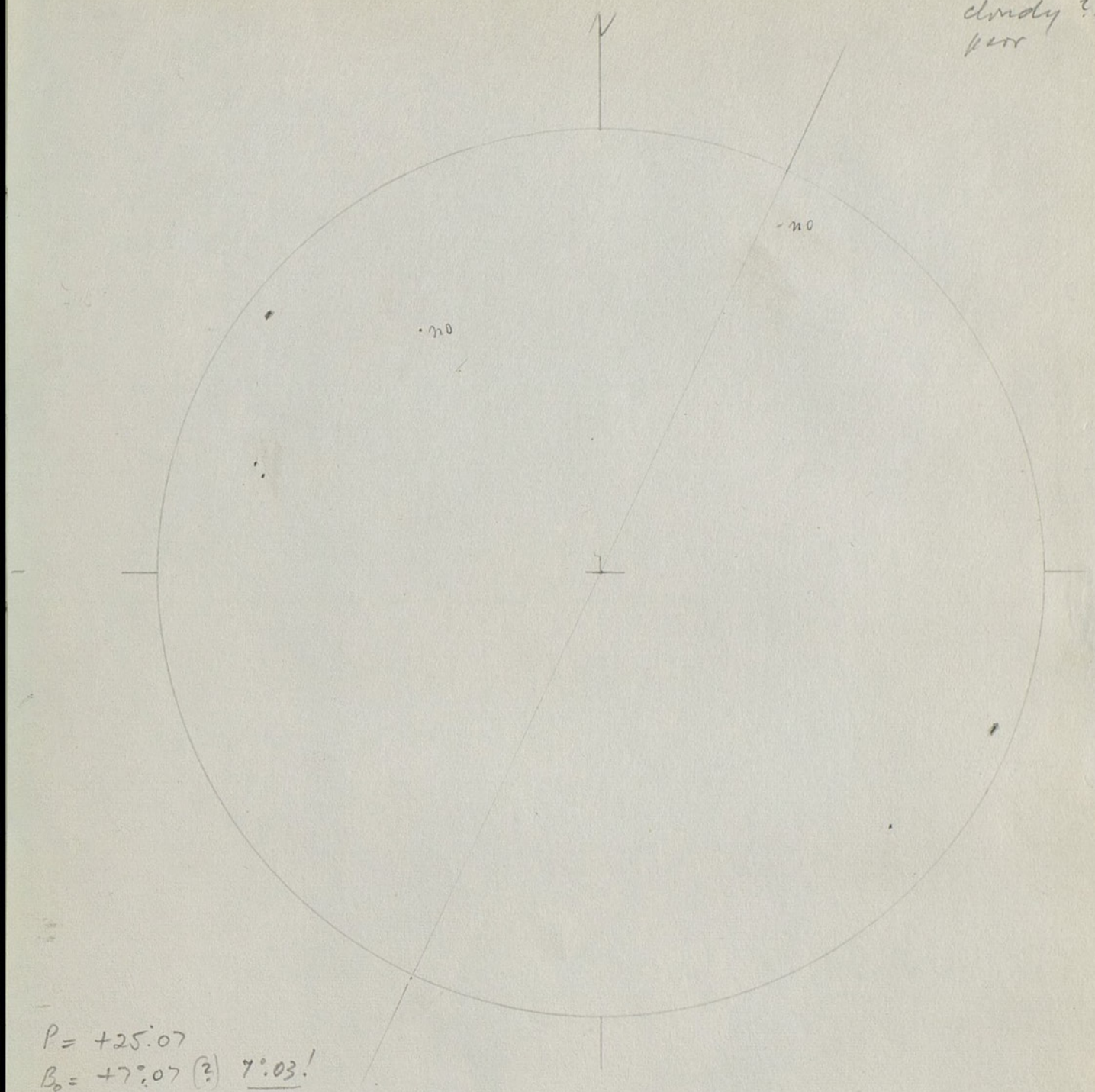
6. 9. 69
13 UT
med.
alt mirt



P = + 22.4
B_0 = + 7.3
L_0 = 2.9

-12
56° E
= long. 307°

21.9.69
1045 - 1055
cloudy ? incomplete
poor



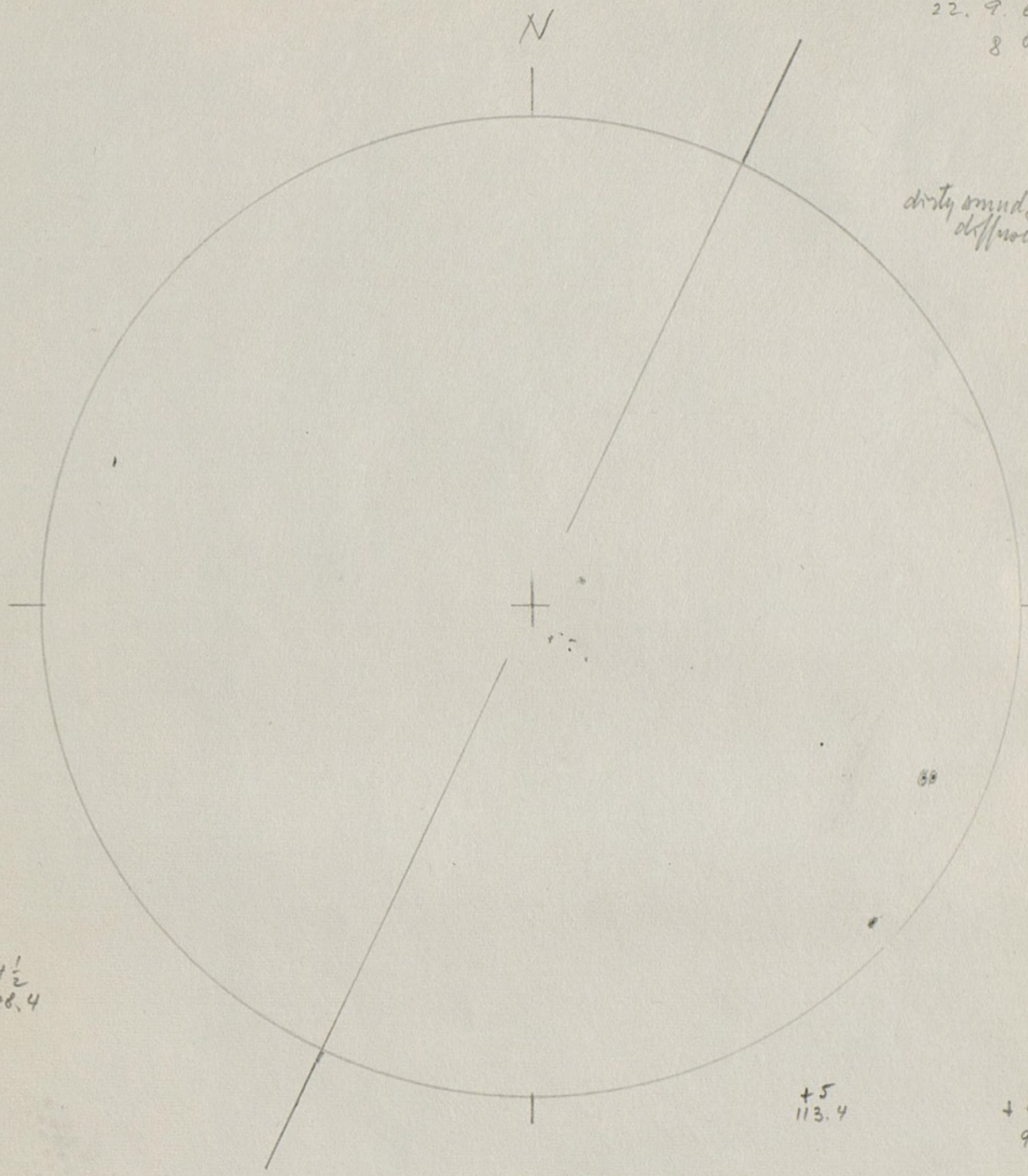
$P = +25.07$
$B_0 = +7.07$ (?) $\underline{7.03}$!
$L_0 = 166.0$

$+14\frac{1}{2}$
$238\frac{1}{2}$

$+5\frac{1}{2}$
93 ?

$-1\frac{3}{4}$ $-2\frac{3}{4}$
220 217

-10
$108\frac{1}{2}$



22. 9. 69
8 05

poor

dirty smudge
diffuse

$+11\frac{1}{2}$
150.4

−3
217.4

+4
151

$+4\frac{1}{2}$
148.4

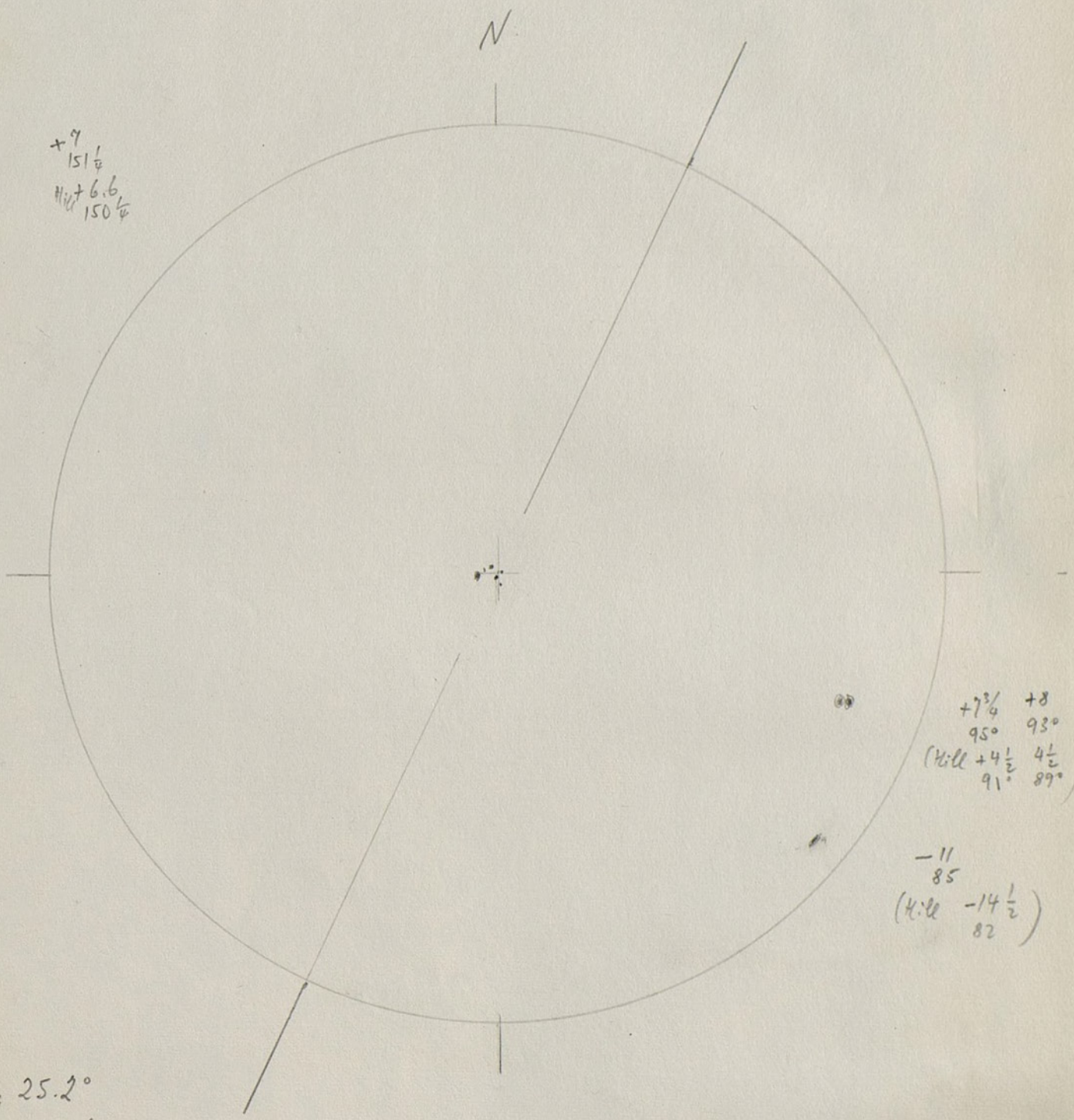
+5
113.4

$+4\frac{3}{4}$ | 5
93.4 | 90.9

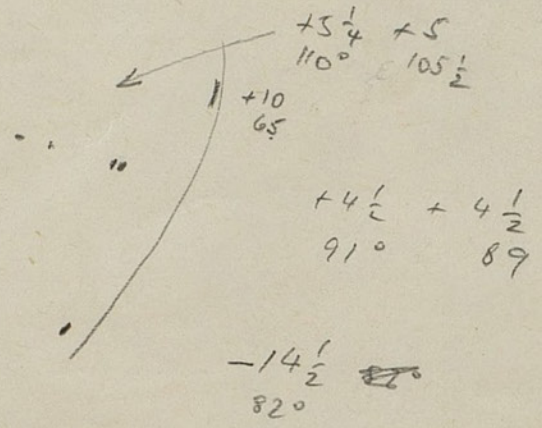
−14
85

P +25.2
B_0 +7
L_0 154.4

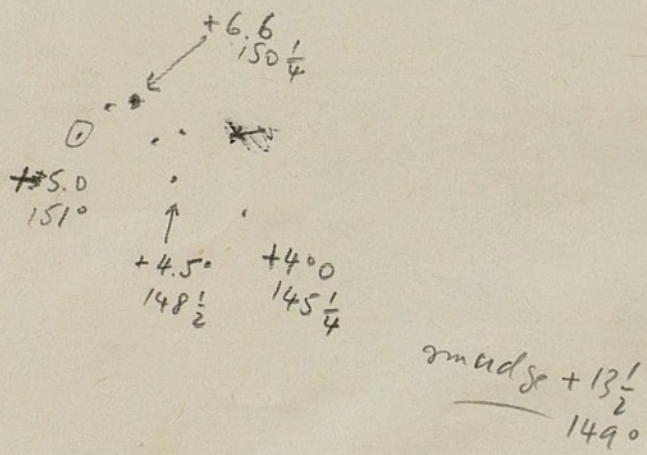
22.9.69
16 hrs
[illegible]



P : 25.2°
B_0 : +7.0°
L_0 : 150.0



Central group.



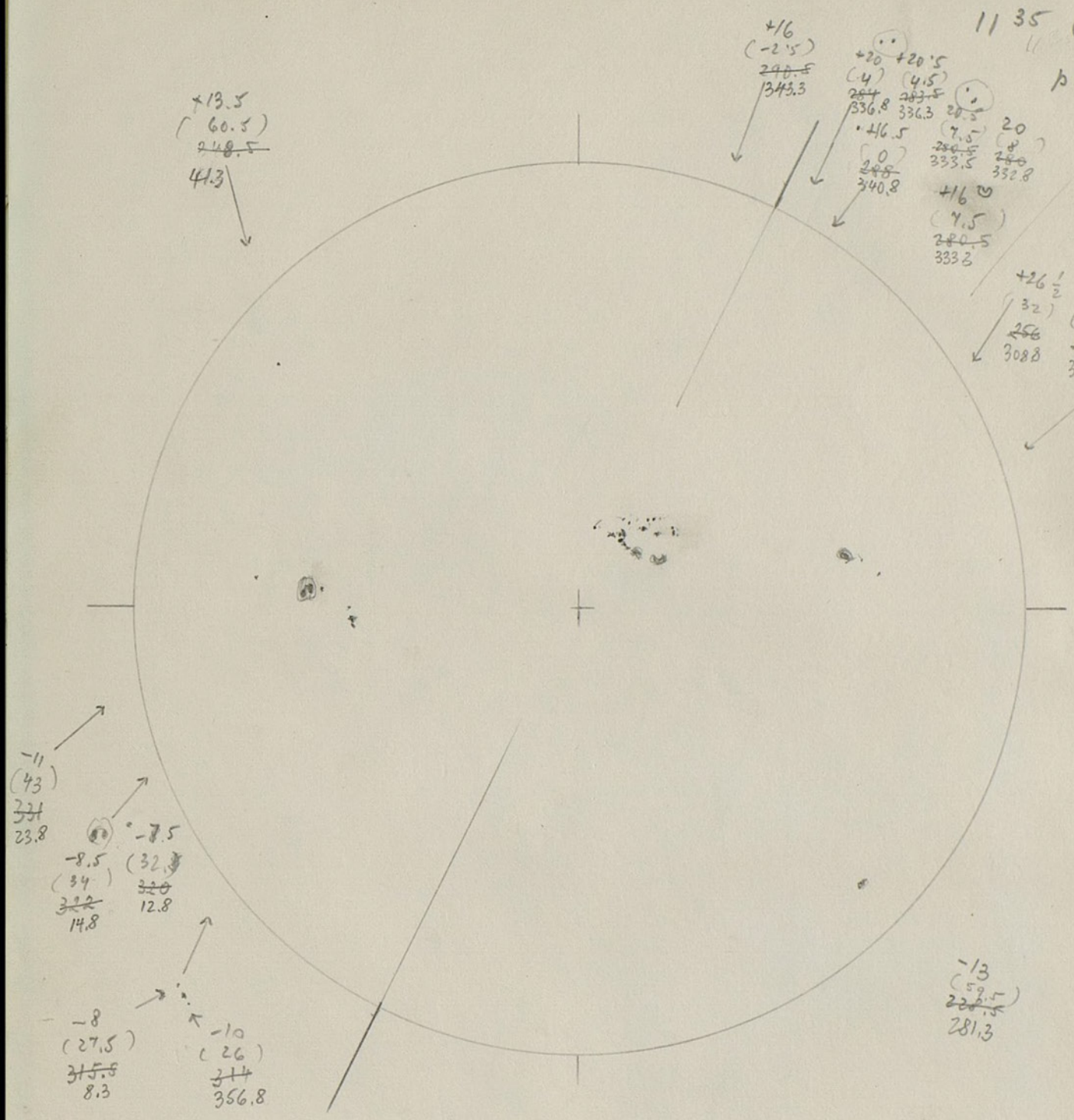
Harold Smith 22.9.69

Lo 150.7 1435 UT.

Rot 1553

1969 Oct 5

11 35 UT



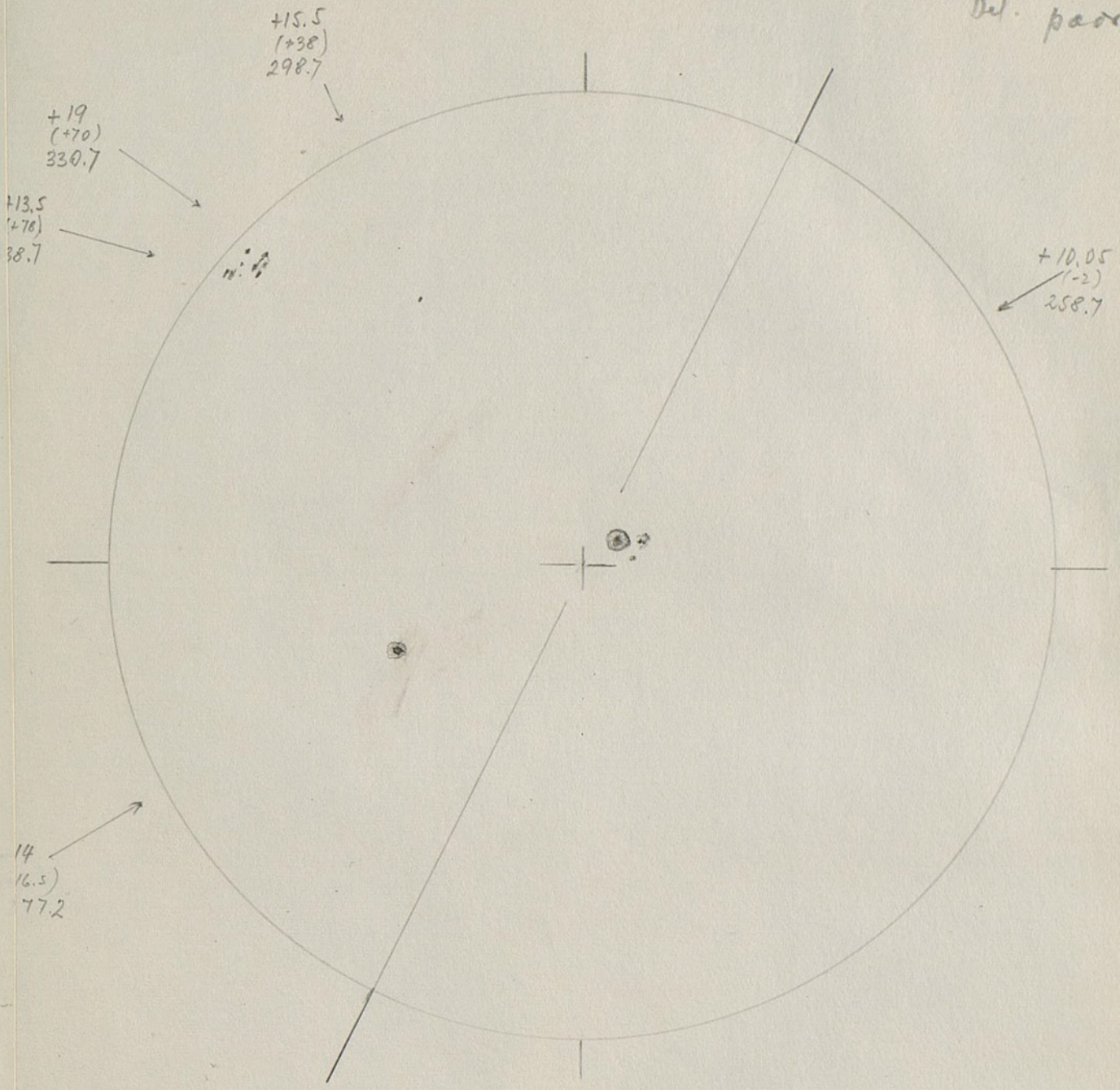
P 26.22

B_o 6.46

L_o ~~288.0~~ 340.8

Rot 1553

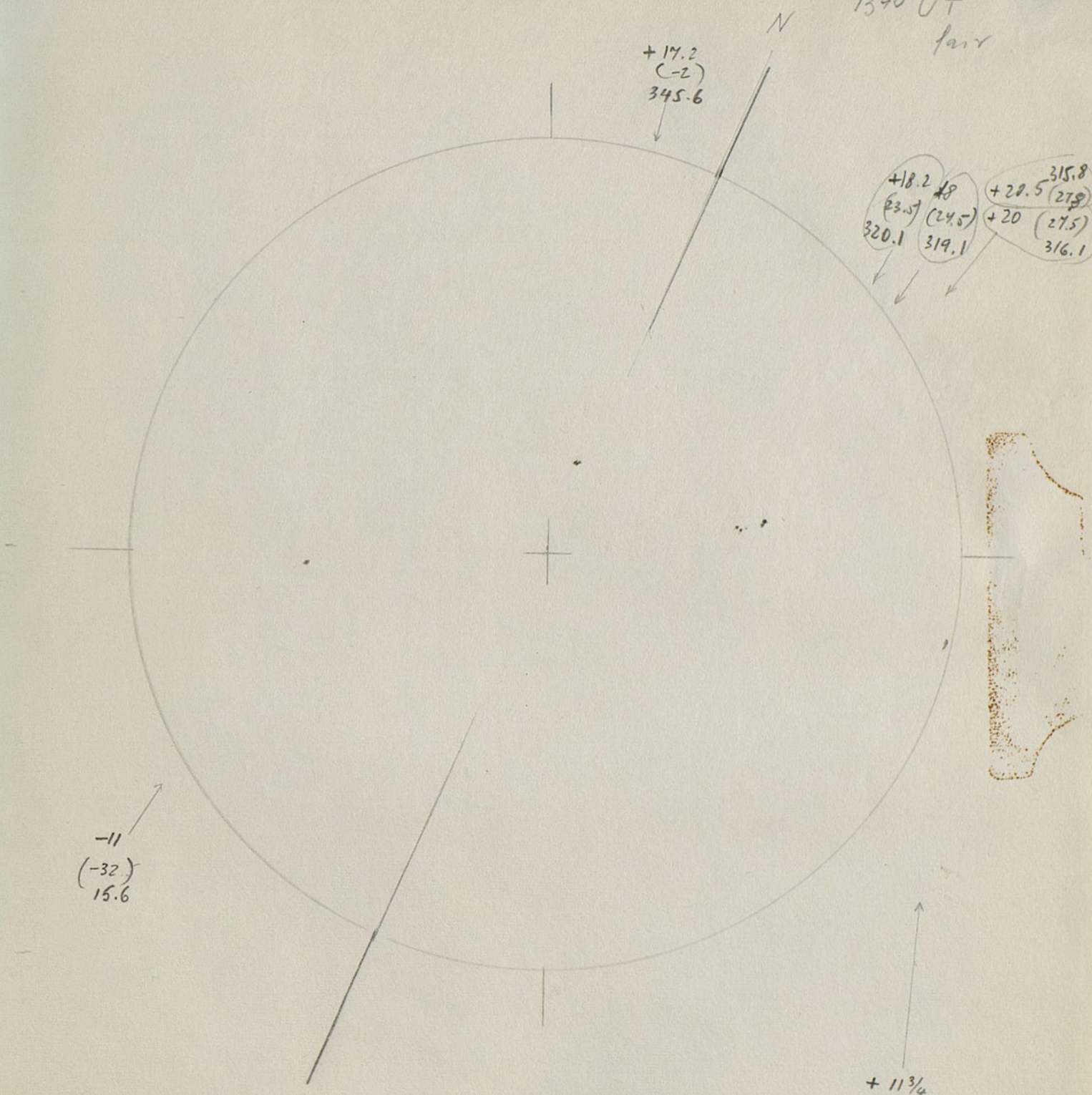
11.10.69
1330
Del. paor



P +26.3
B₀ +6.07
L₀ 260.7

Rot 1554

1st Nov 1969
1340 UT
fair



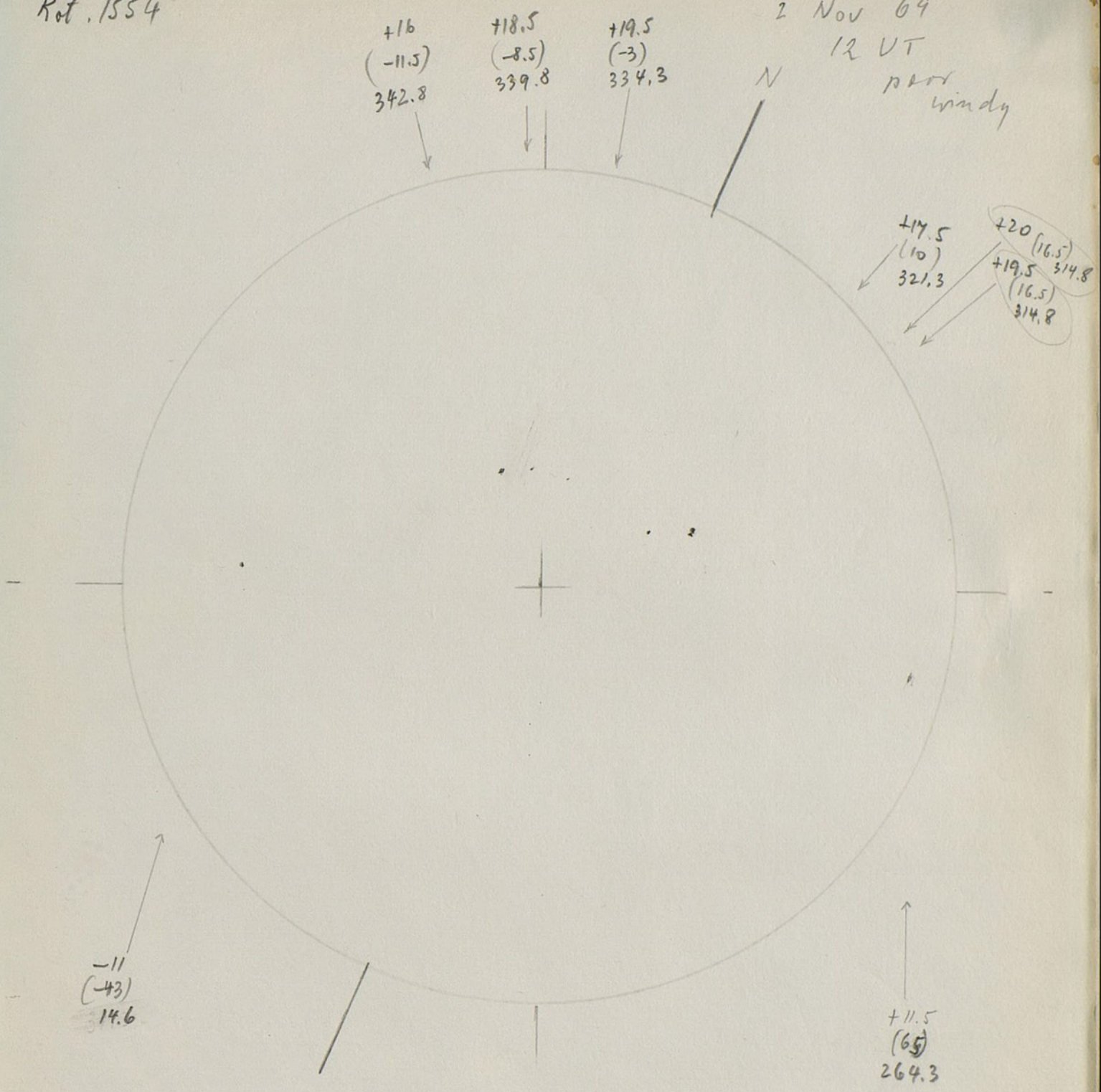
P: +24.5

B_0: +4.3

L_0: 343.6

Rot. 1554

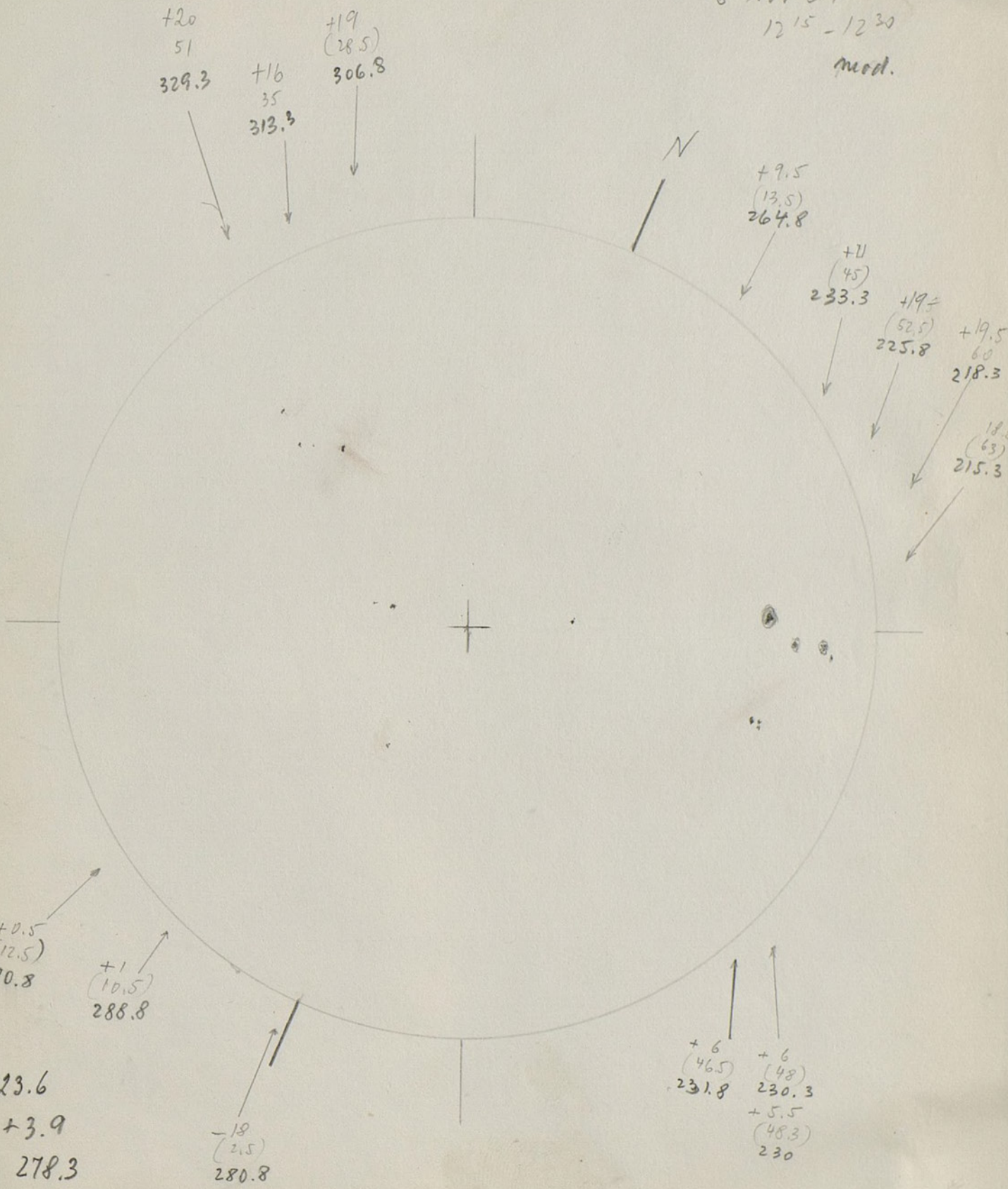
2 Nov 69
12 UT
poor
windy



P = +24.3
B_0 = + 4.2
L = 331.3

Rat 1554

6 Nov 69
12 15 - 12 30
mod.

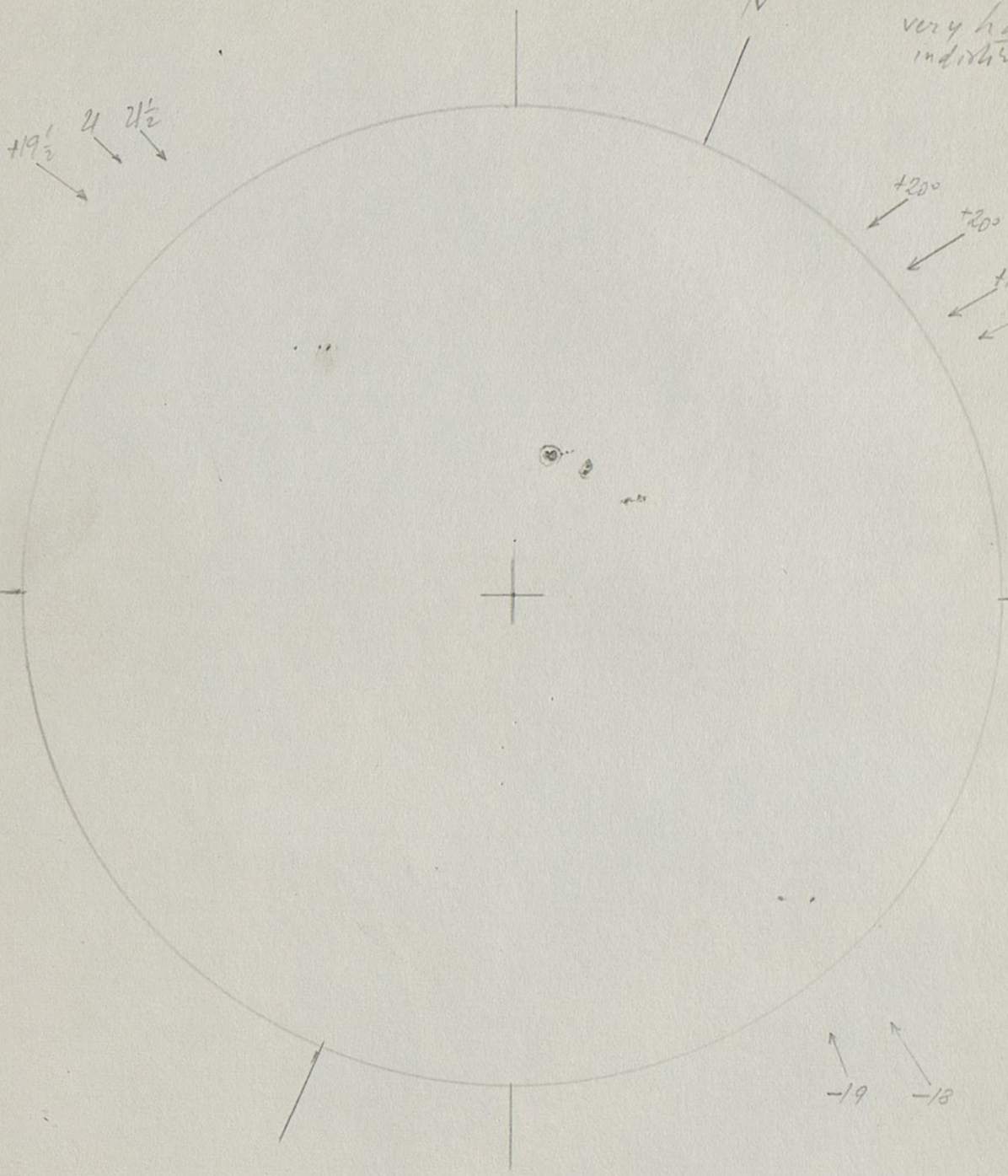


P: +23.6
B_0: +3.9
L_0: 278.3

Rot 1554

10. 11. 69 thin cloud
very hazy
indistinct

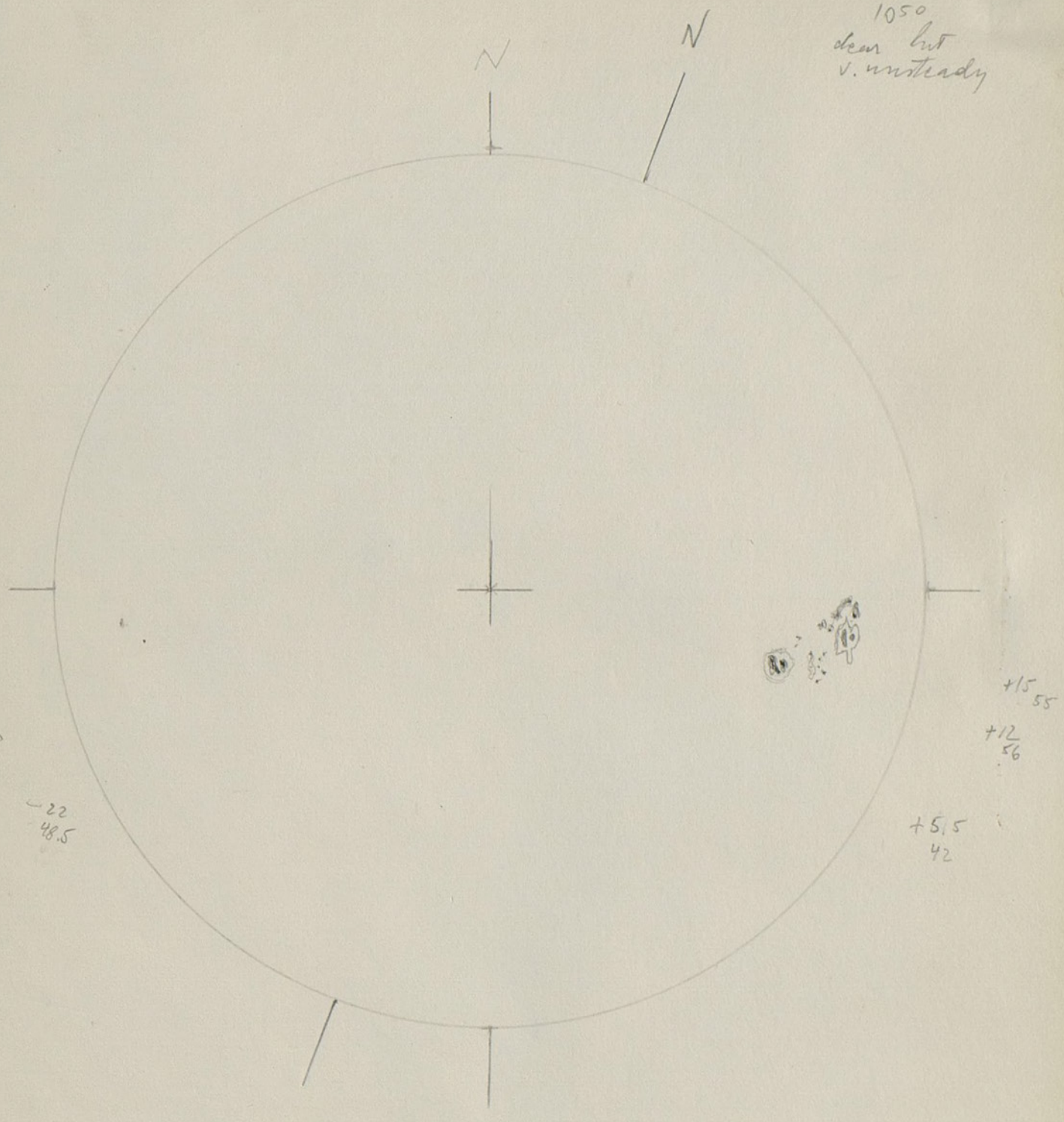
? Time
? 40m



P: +22.7
B_0: +3.3
L_0: ? 225.8

Rot 1554

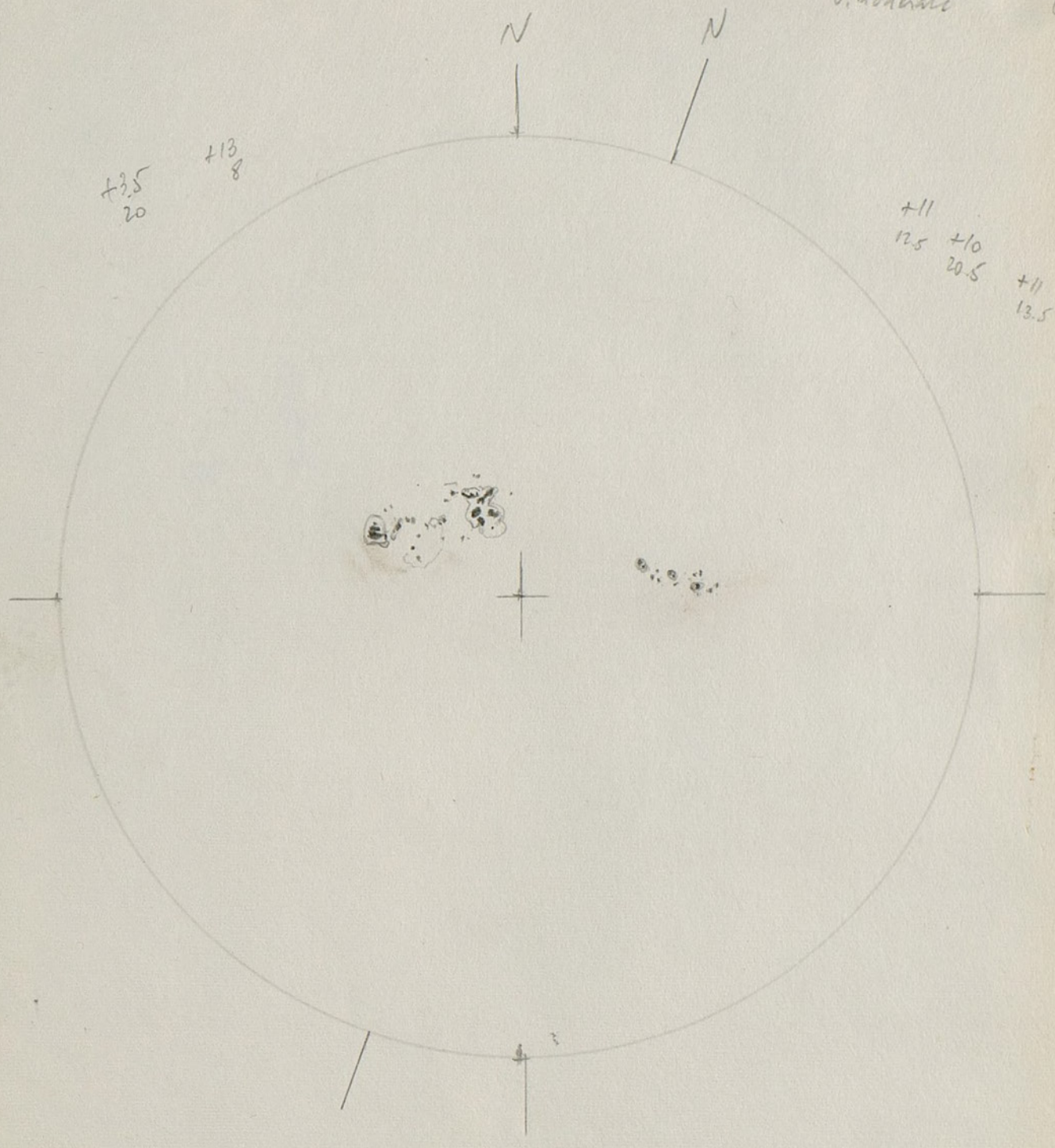
17. 11. 69
1050
clear but
v. unsteady



P : +20.8°
B_0 : + 2.5°
L_0 134.1

Rot 1554

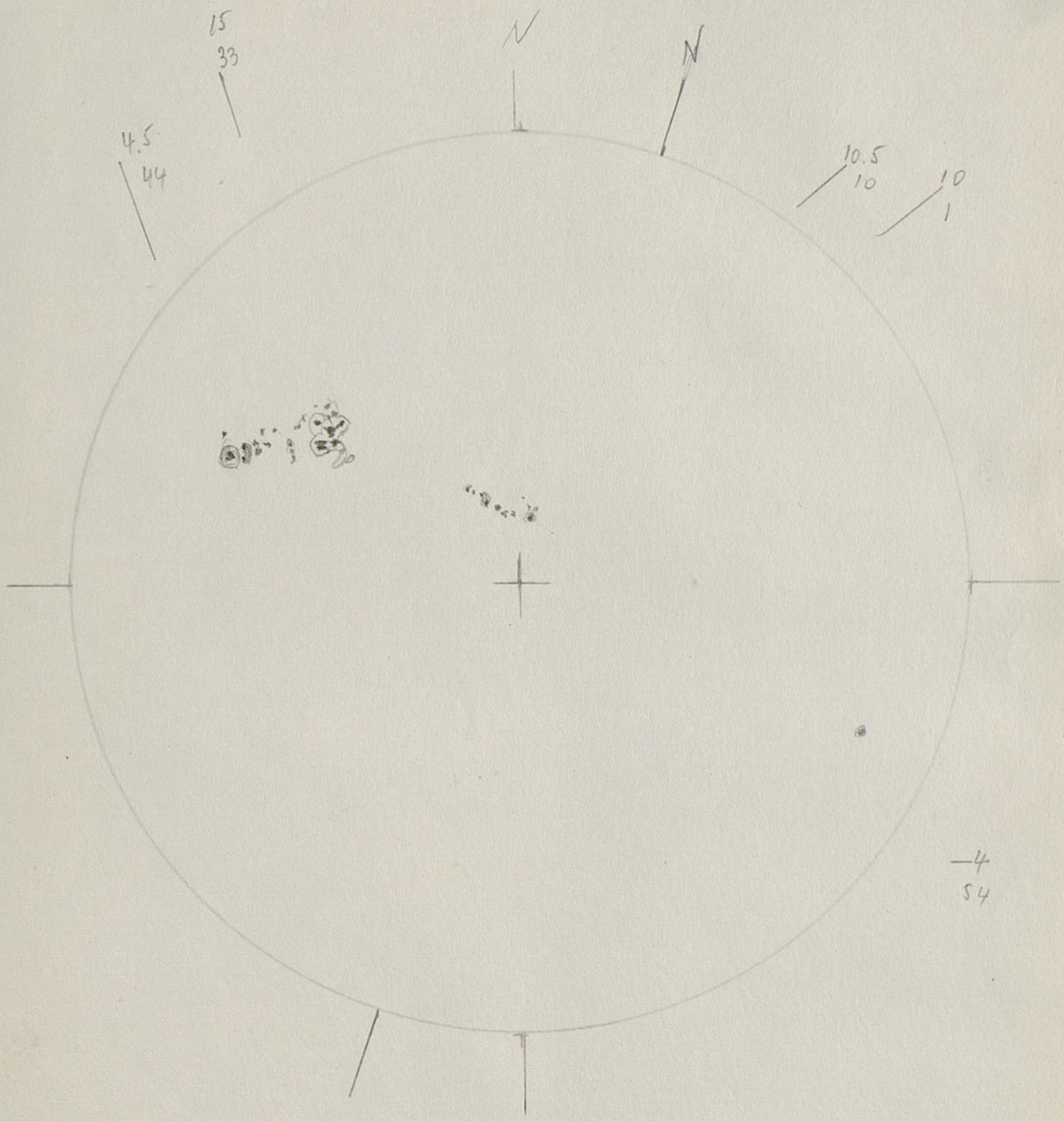
22. Nov 69 1-1 15 h m
V. moderate U T



P: 19·6
B_0: +2.0
L_0 67.0

Rot 1554

24.11.69
pers obs
noon UT



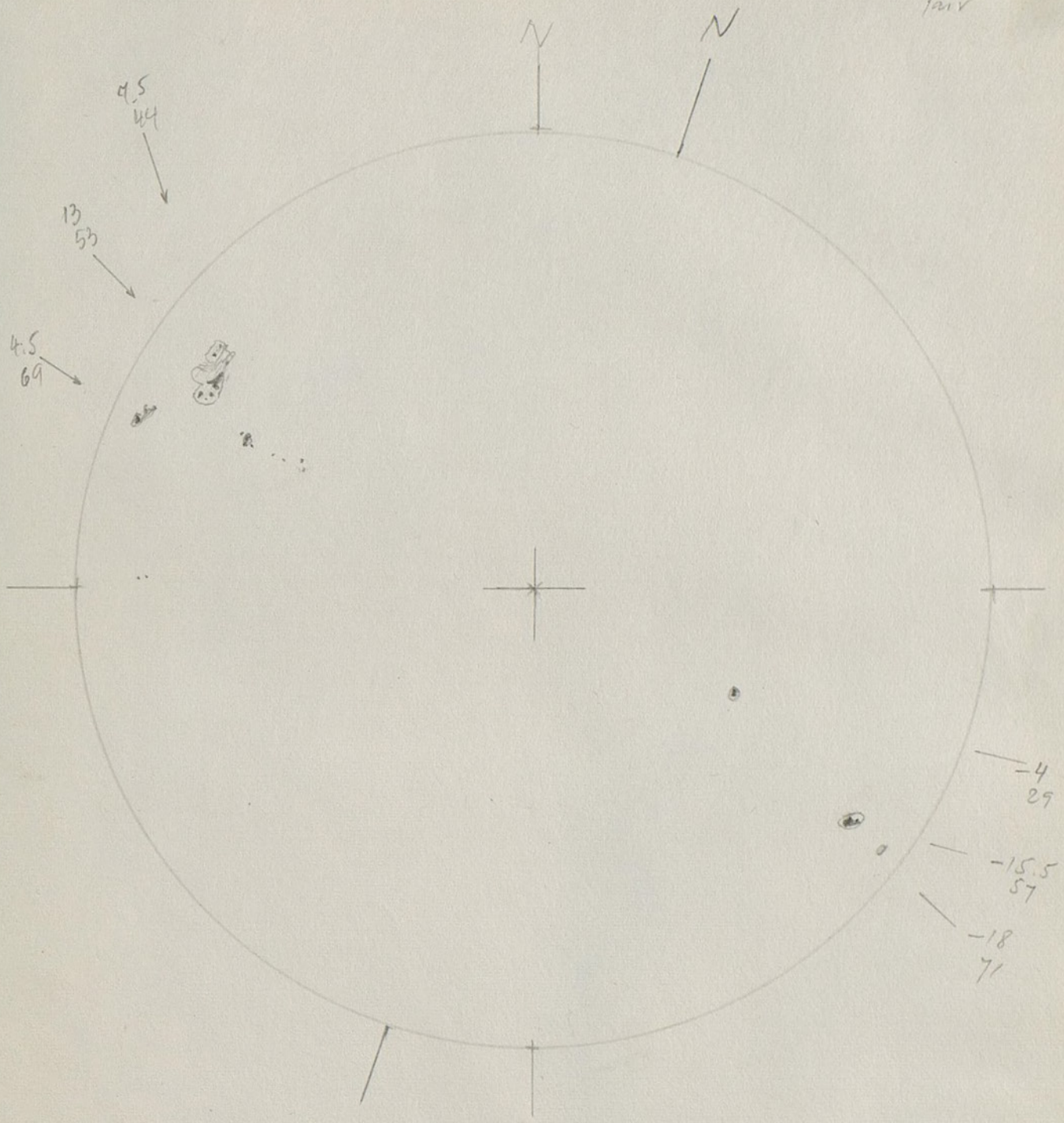
P +18.55

B_0 + 1.6°

L_0 41.3

Rot 1554

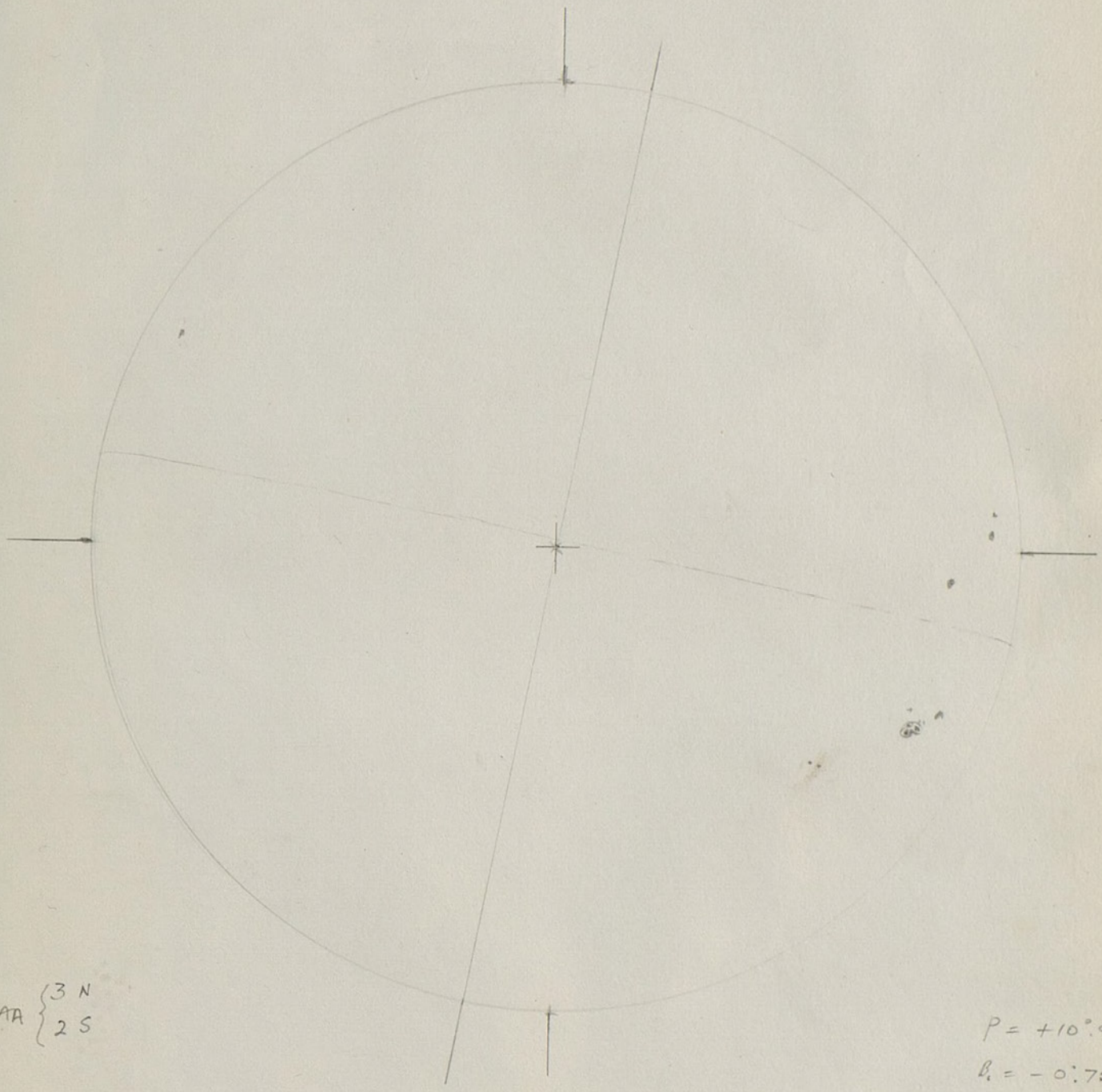
26.11.69
9~~h~~45 UT
fair



P : +17.9
B_0 : + 1.4
L_0 16.1

S.R. 1555

13.12.69
12^5
very unsteady



5 AA { 3 N
2 S

P = +10°.55
B_1 = −0°.75
L_0 = 150°.8

+16½°
217½°

+5°
93°

+12°
82½

+15°
81°

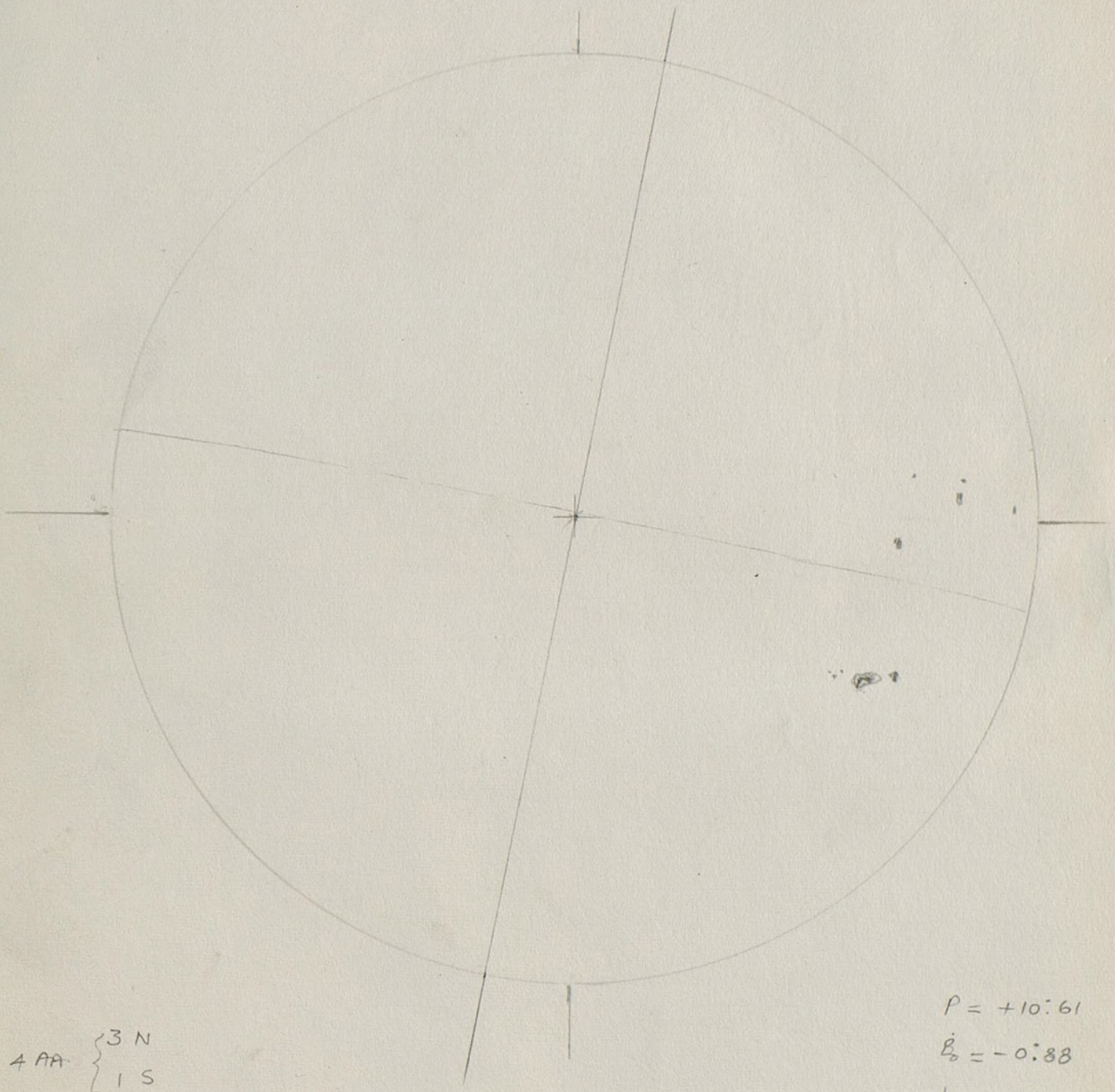
−21° −21°
104½ 102½°

−14½°
94/92°

−11½° f
88½°

S.R. 1555

14.12.69
12 · UT
poor seeing
incomplete



4 AA { 3 N
1 S

P = +10°.61
B_0 = −0°.88
L_0 = 137°.7

Measured spot positions:

+12½°
92°

+4½°
93½°

+11½°
83

+13½°
82°

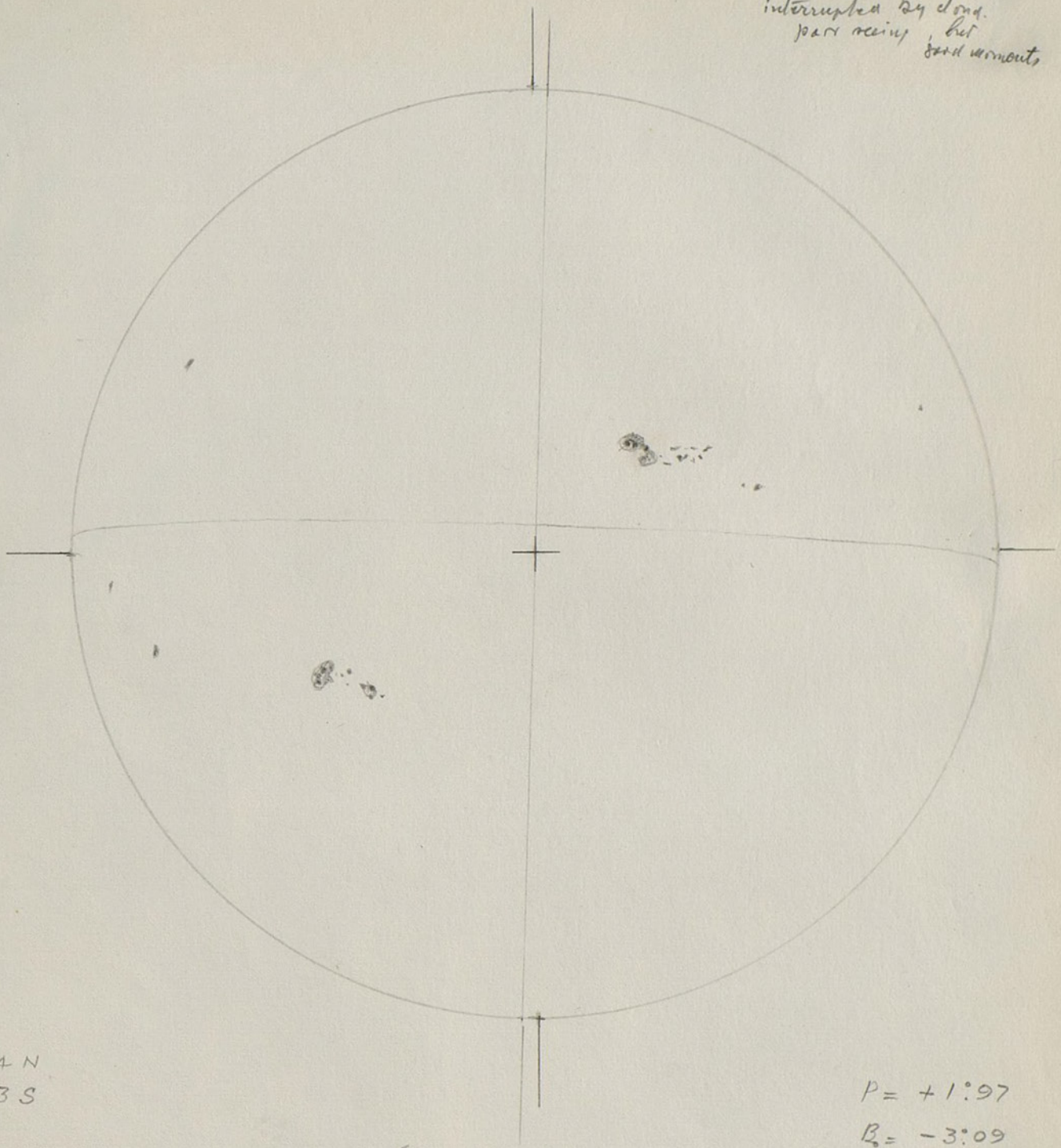
+11½°
67½°

−12½°
−12½°
−13½°
−13°
−12°
88½°

S.R. 1556

1970 1st Jan
1145 UT
interrupted by cloud.
part seeing, but
good movement.

N



{4 N
3 S

P = +1°.97
B_0 = −3°.09
L_0 = 260°.7

+20½°
314½°

2α Mean +11°
248½° to 238½°

Group
+6½° +6½°
234° 232°

+18½°
200½°

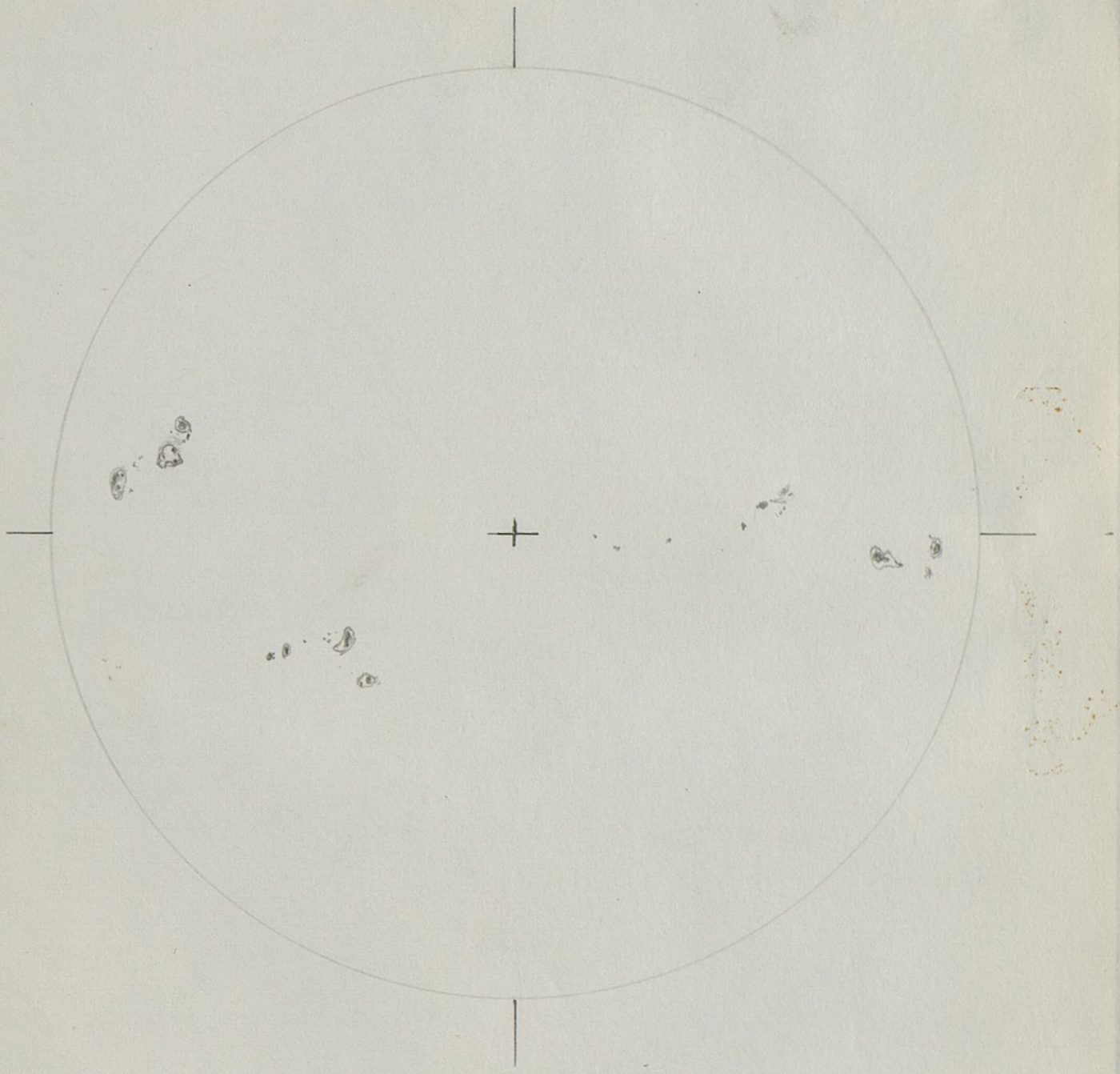
−7½°
327½°

−15½°
318°

Mean of
large leader
−19°

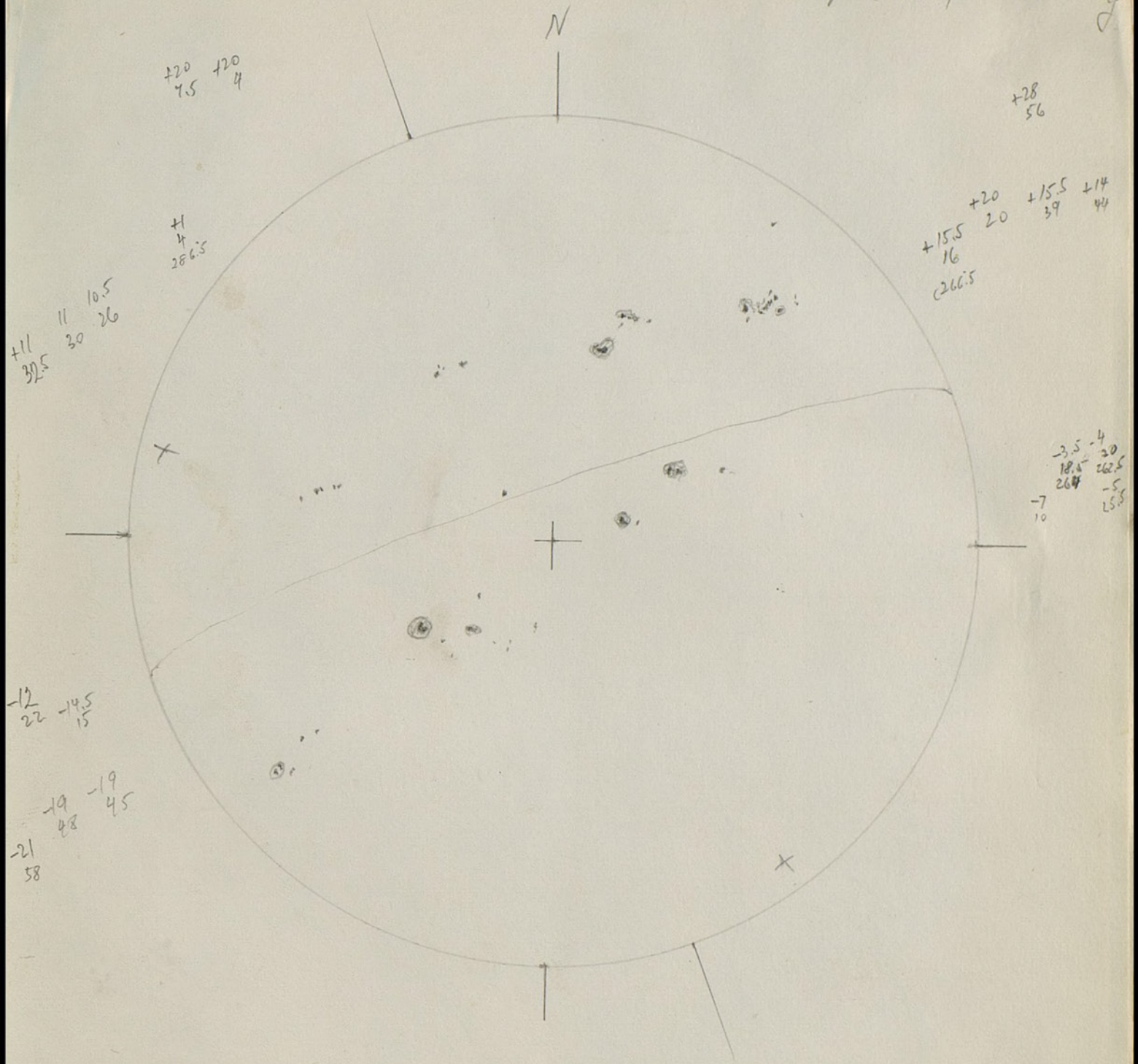
−20½° −21½°
280½°

14. Feb 1940
1230 – 1250 UT



Rot No 1558

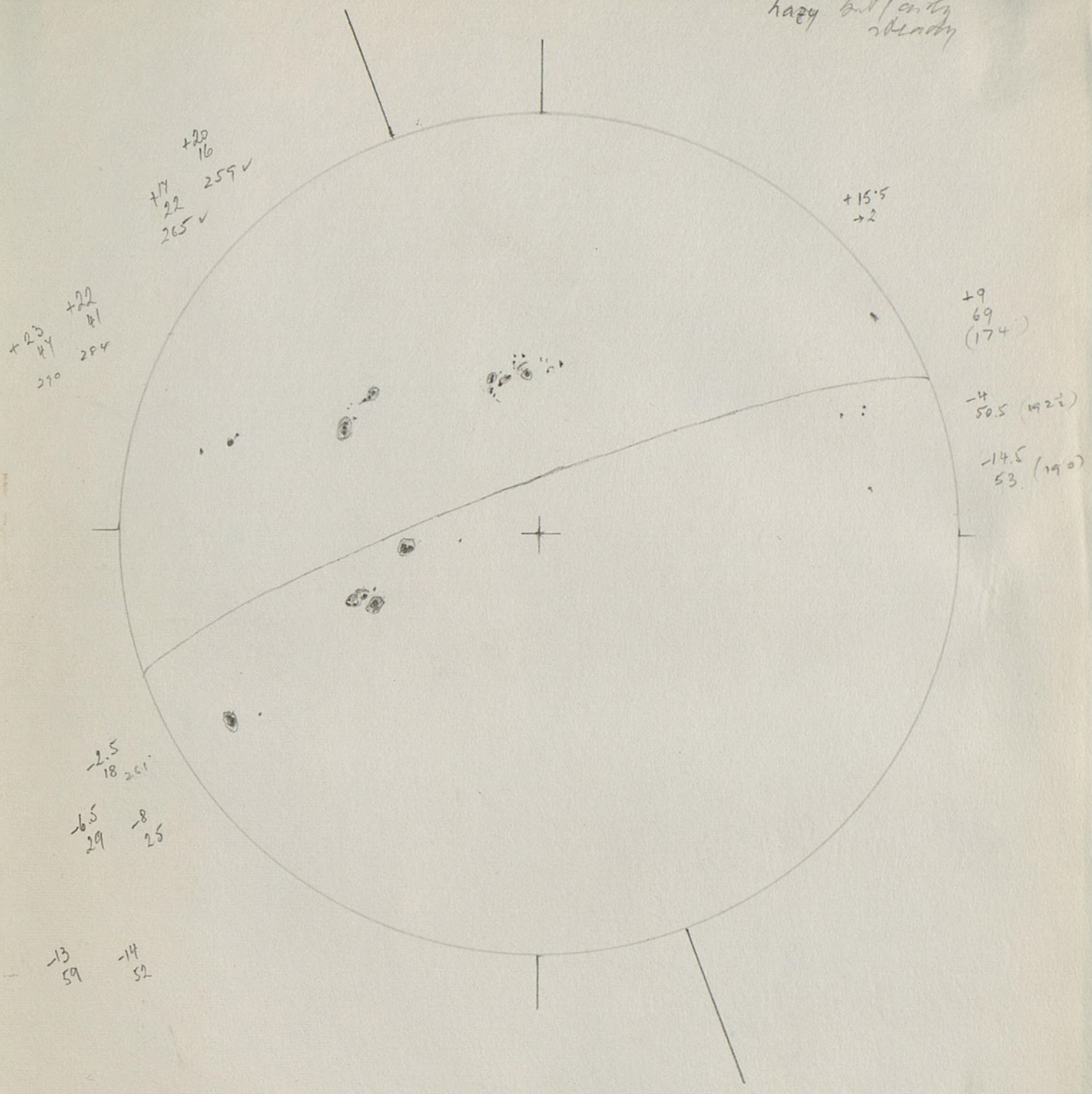
23.2.70
$12^{20} - 12^{30}$ UT
good seeing – deteriorating



P – 20.1
B_0 – 7.1
L_0 282.5

Rot No 1558

26.2.70
12^{15} U.T
hazy but fairly steady

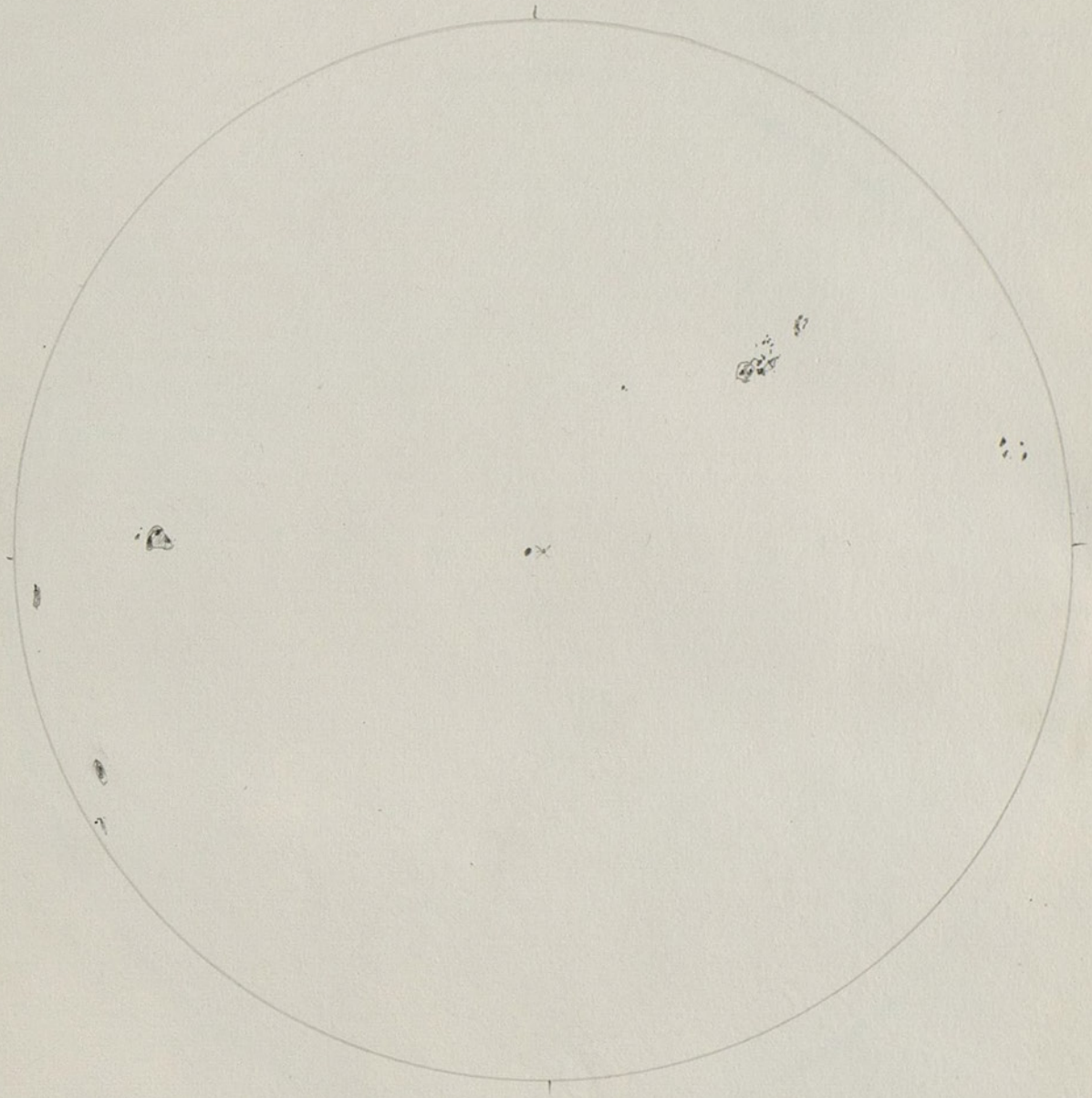


P: −20.8

B_0: −7.2

L_0 243.1

2.3.70 ~~1230~~ 1230
-1245 cloud inter
fair



B.A.A. SOLAR SECTION

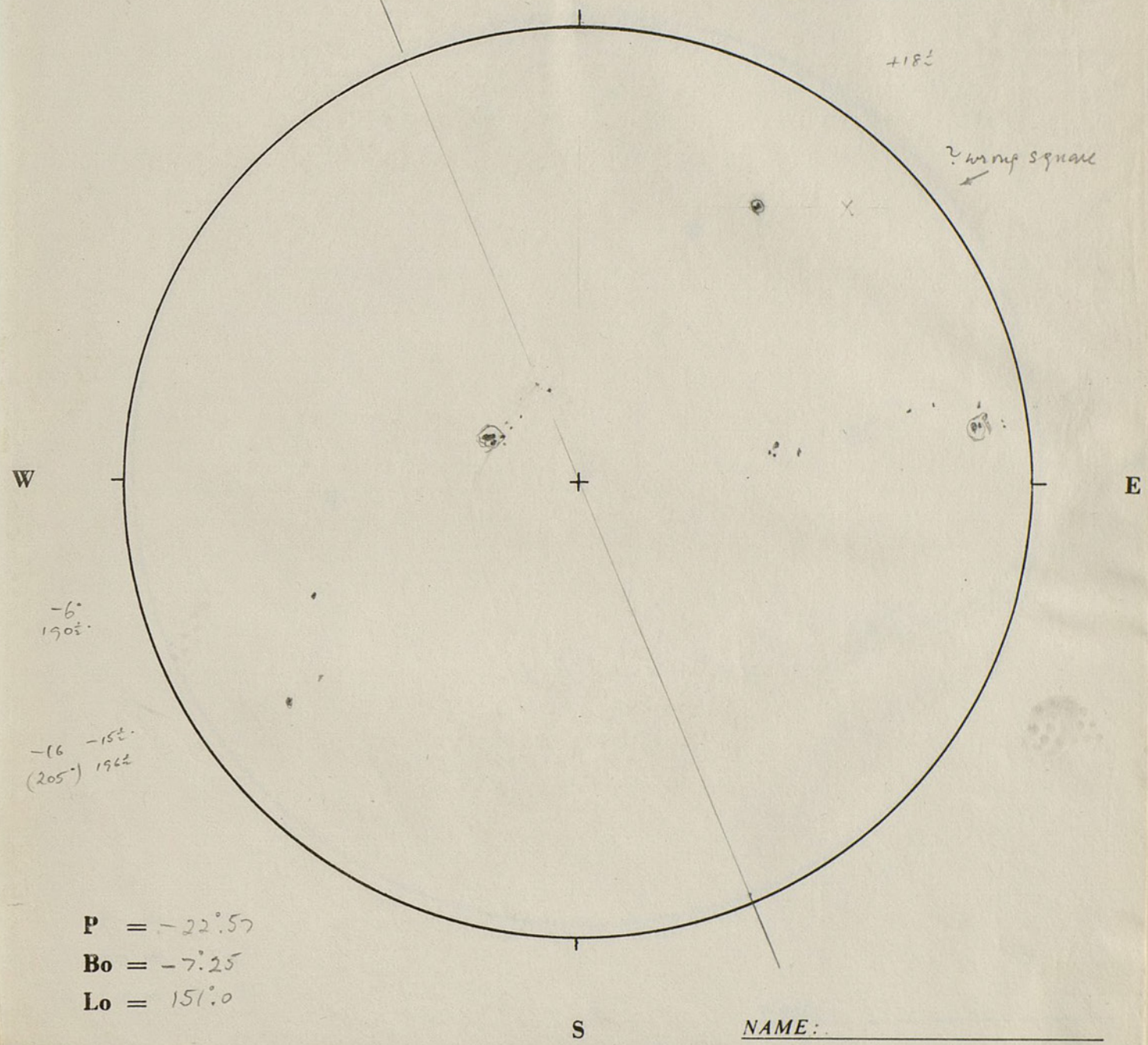
INSTRUMENT:

ROTATION No.:

DATE: March 5th 1970

U.T.: 12 h. 5 m.

CONDITIONS: fair, interruption by cloud



P = -22°.57

Bo = -7°.25

Lo = 151°.0

NAME:

B.A.A. SOLAR SECTION

INSTRUMENT:

ROTATION No.:

DATE: 1970 March 7

U.T.: 11 h. 40 m.

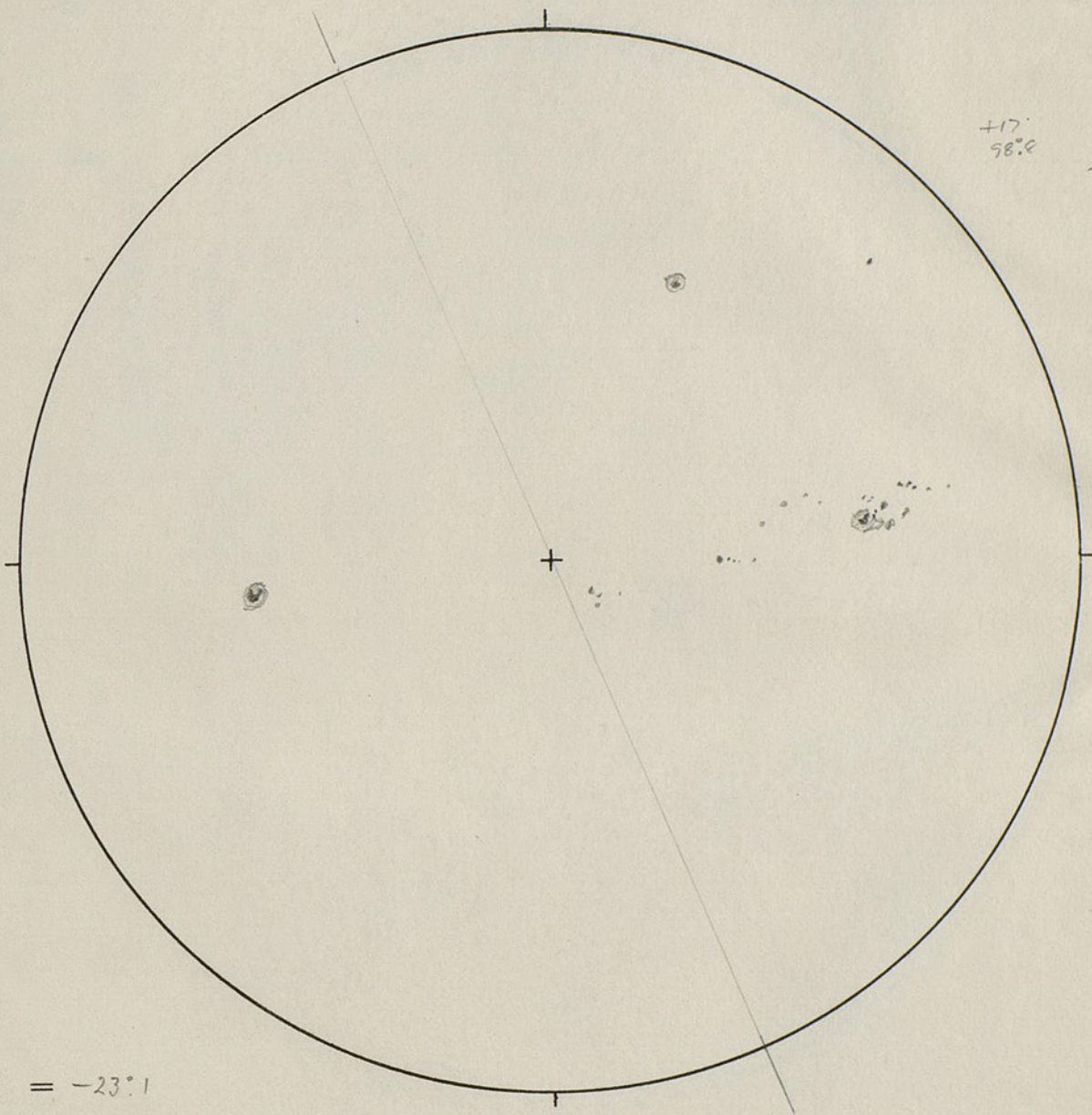
CONDITIONS: moderate. seeing of beta. seeing

N

W

E

S



P = −23°.1

Bo = −7°.25

Lo = 124°.8

NAME:

Jan 70

	N	S	TT
1	4	3	7

Feb

14	4	1	5
23	4	4	8
26	4	5	9

Mar

2	4	4	8
5	2	4	6
7	3	3	6
9			

B.A.A. SOLAR SECTION

INSTRUMENT:

ROTATION No.:

DATE: 1910 9th March

U.T.: 12 h. 45 m.

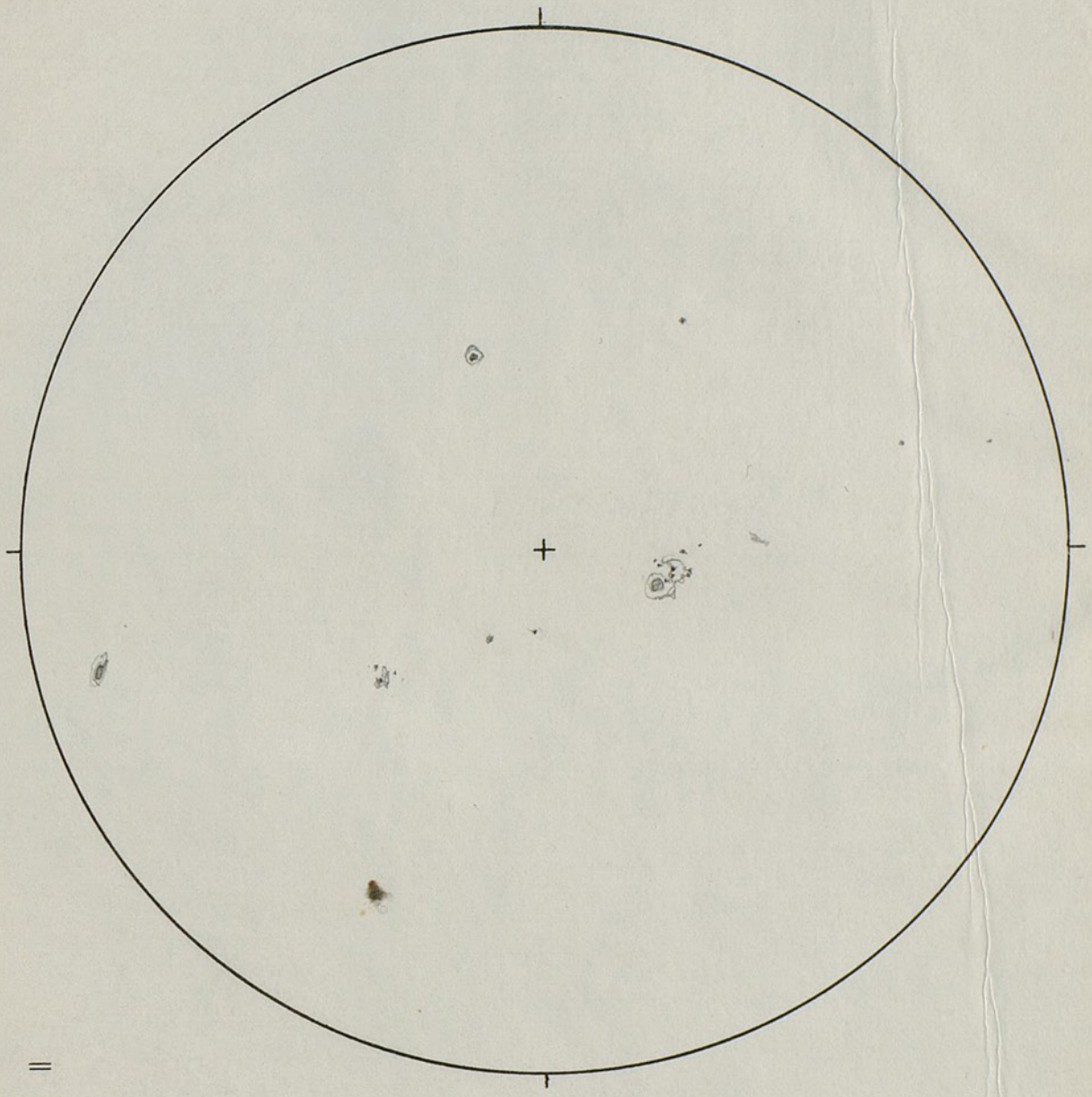
CONDITIONS: hazy, getting cloudy

N

W

E

S



P =

Bo =

Lo =

NAME:

B.A.A. SOLAR SECTION

INSTRUMENT:

ROTATION No.:

DATE: 12. March 70

U.T.: 12 h. 45 m.

CONDITIONS: all haze, fair only

N

W

E

S

P =

Bo =

Lo =

NAME:

B.A.A. SOLAR SECTION

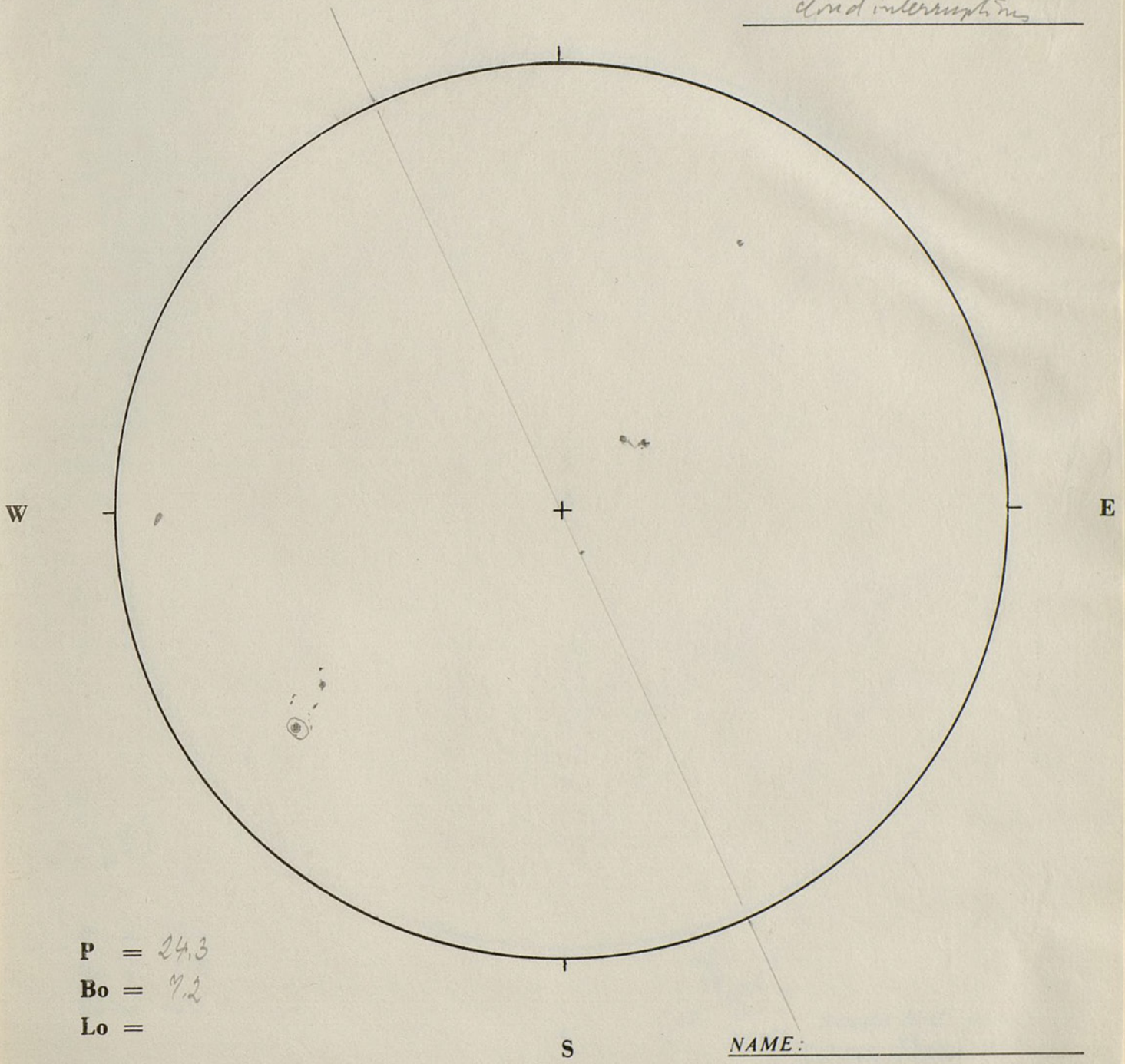
INSTRUMENT:

ROTATION No.:

DATE: 14. 3. 70

U.T.: 12 h. 30 m.

CONDITIONS: atrocious, boiling ++ cloud interruptions



P = 24.3

Bo = 7.2

Lo =

NAME:

B.A.A. SOLAR SECTION

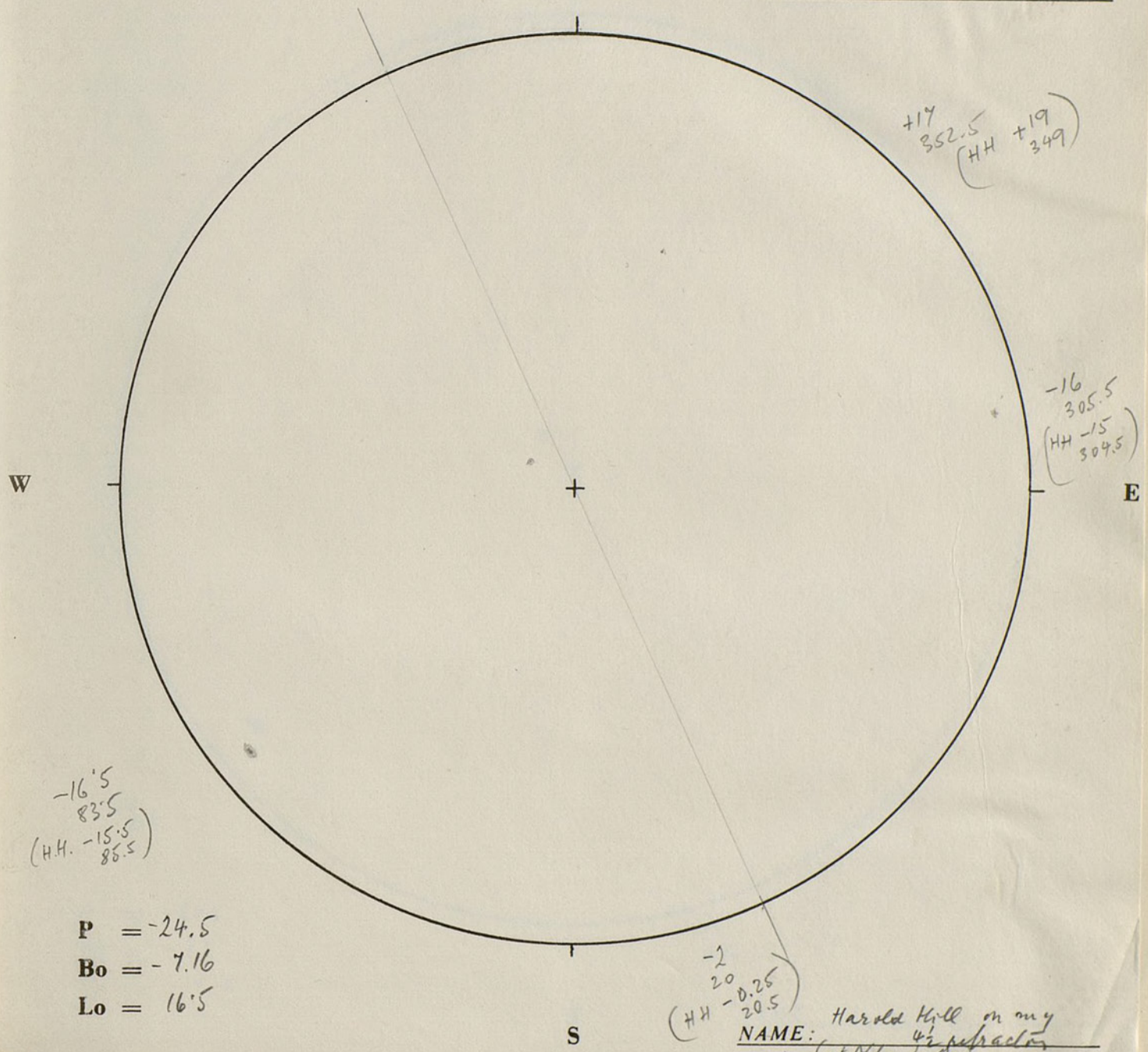
INSTRUMENT:

ROTATION No.:

DATE: 1970 March 15

U.T.: 16 h. 55 m.

CONDITIONS: incomplete trees in the way



P = -24.5

Bo = - 7.16

Lo = 16.5

NAME: Harold Hill on my 4½ refractor (at Abbey Lathes)

B.A.A. SOLAR SECTION

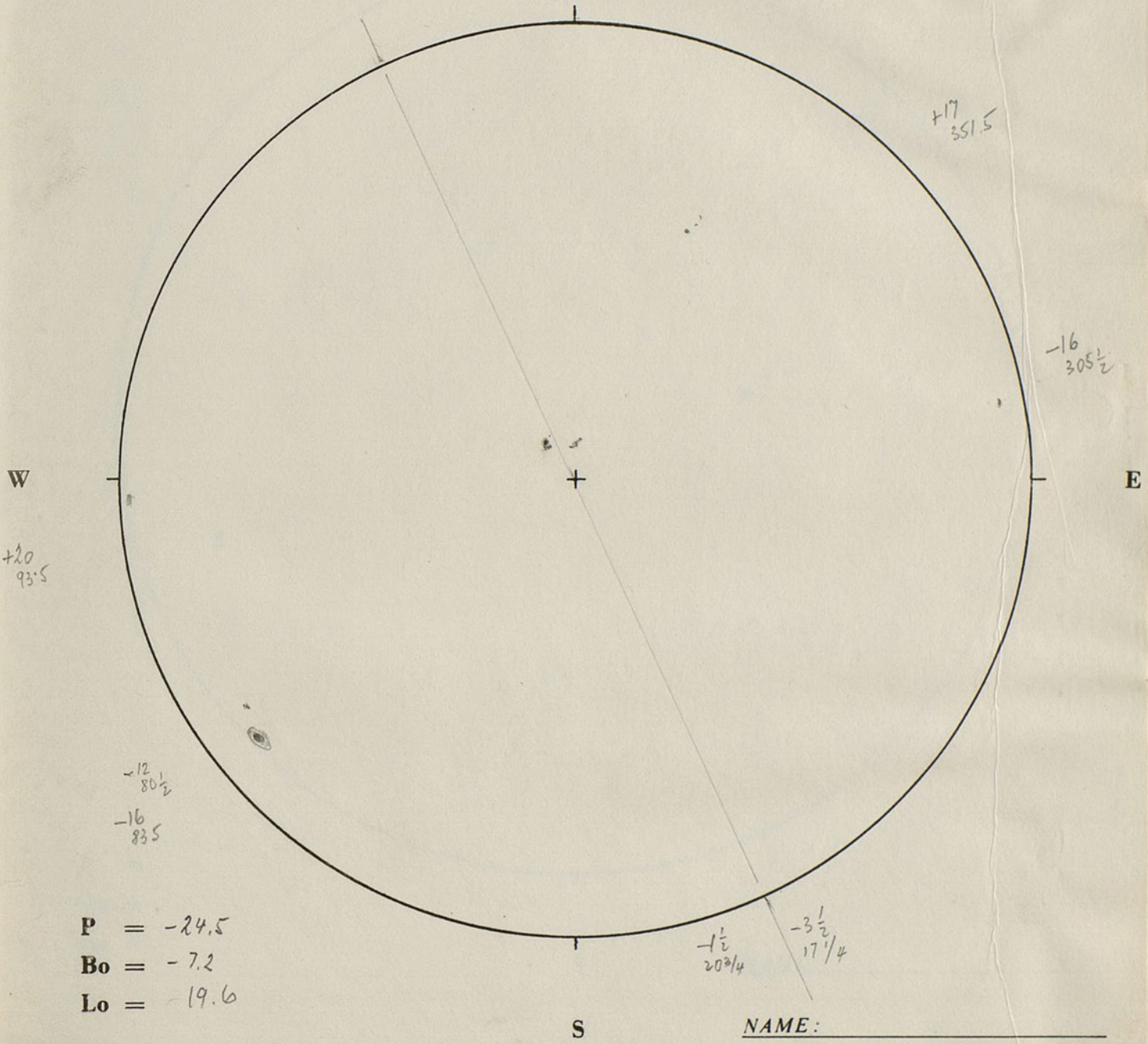
INSTRUMENT:

ROTATION No.:

DATE: 15th March 1970

U.T.: 11 h. 20 m.

CONDITIONS: fair improving



P = -24.5

Bo = -7.2

Lo = 19.6

NAME:

B.A.A. SOLAR SECTION

INSTRUMENT:

ROTATION No.:

DATE: 19th March 1970

U.T.: 12 h. 15 m. to 25

CONDITIONS: cloudy intervals windy

N

W

E

S

P =

Bo =

Lo =

NAME:

B.A.A. SOLAR SECTION

INSTRUMENT:

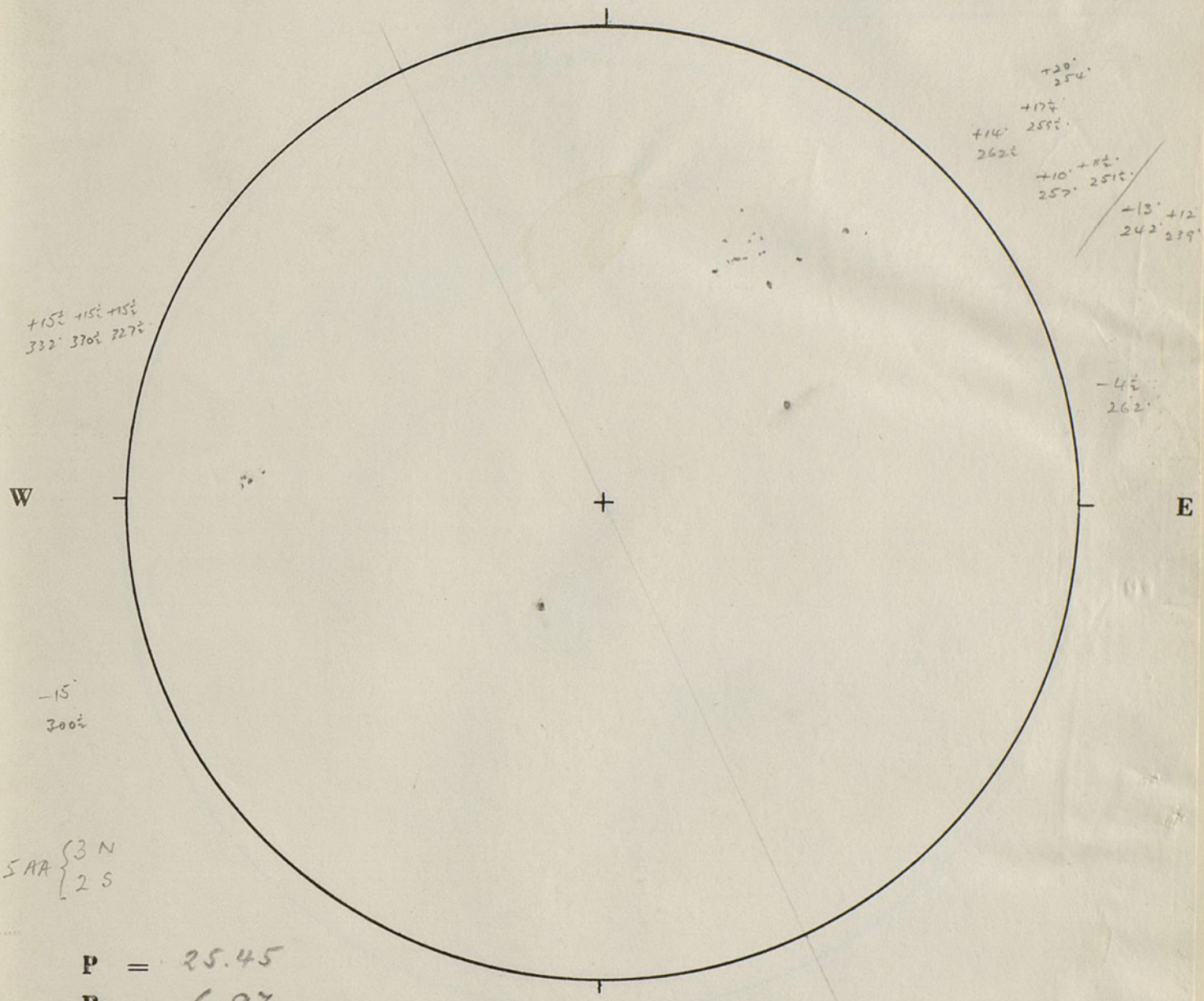
ROTATION No.:

DATE: 22. 3. 70

U.T.: 9 h. 45 m.

CONDITIONS: very high cloud

N



5 AA { 3 N, 2 S }

P = 25.45

Bo = 6.97

Lo = 288.1

NAME:

B.A.A. SOLAR SECTION

INSTRUMENT:

ROTATION No.:

DATE: 24. 3. 70

U.T.: 8 h. 0 m.

CONDITIONS: pasr

N

W

E

S

P =

Bo =

Lo =

NAME:

B.A.A. SOLAR SECTION

INSTRUMENT:

ROTATION No.:

DATE: 25th March 1970

U.T.: 8 h. 10 m.

CONDITIONS: fair

N

W

E

S

P =

Bo =

Lo =

NAME:

B.A.A. SOLAR SECTION

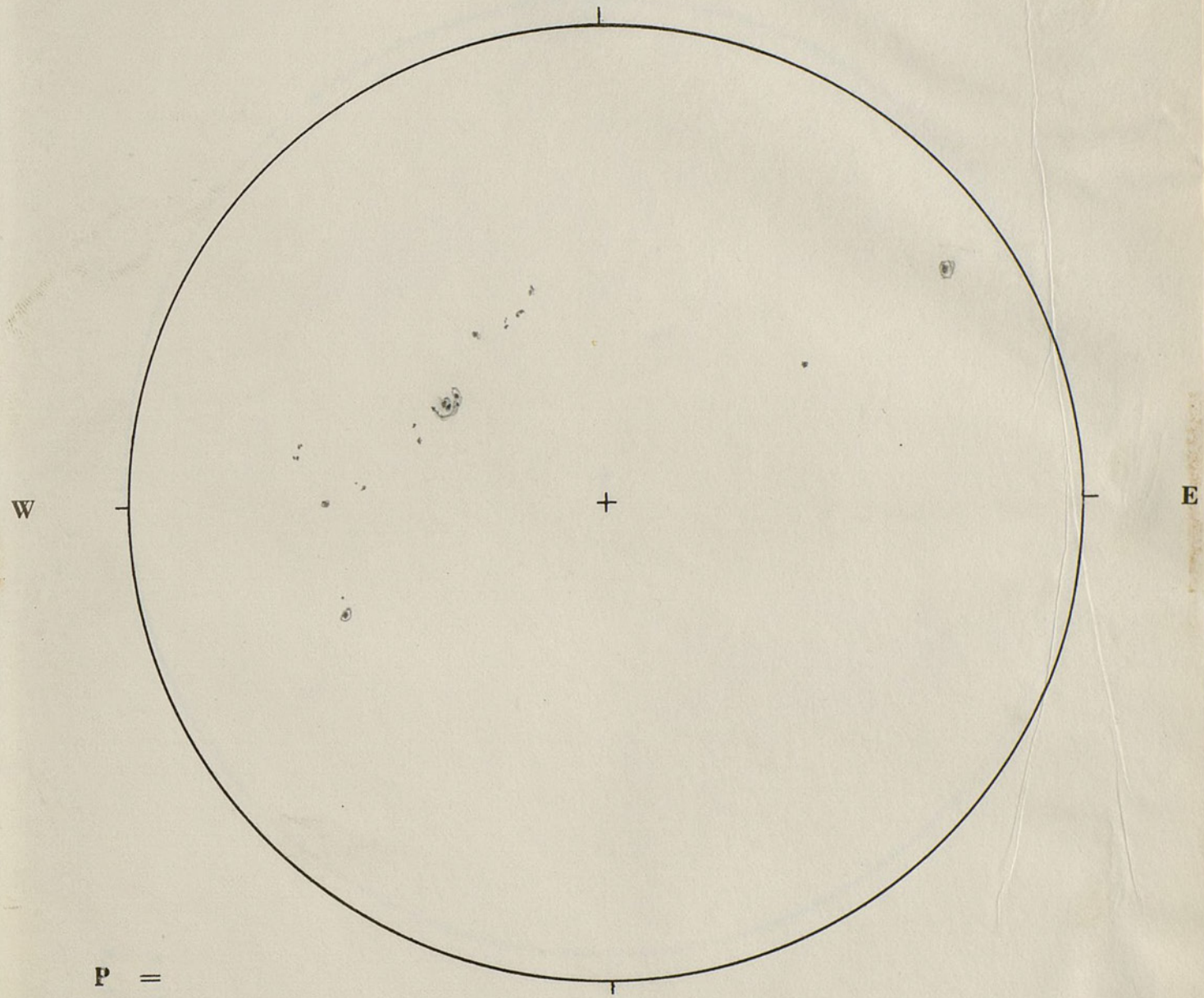
INSTRUMENT:

ROTATION No.:

DATE: 27. 3 70

U.T.: 9 h. 40 m.

CONDITIONS: windy + cloud
fair between



P =

Bo =

Lo =

NAME:

B.A.A. SOLAR SECTION

INSTRUMENT:

ROTATION No.:

DATE: 30th ~~April~~ March 1970

U.T.: 14 h. 30 m.

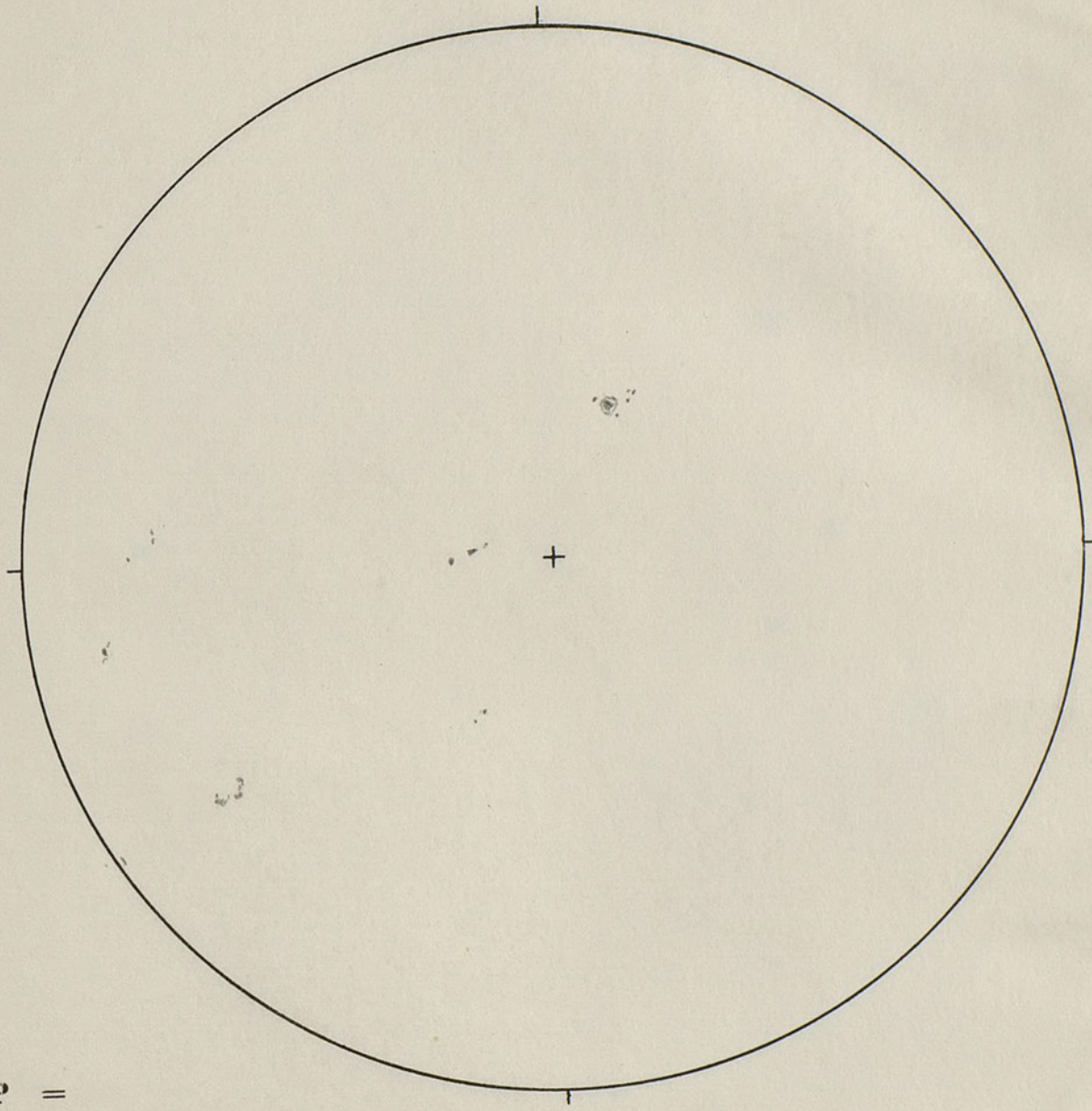
CONDITIONS: inaccurate observation

N

W

E

S



P =

Bo =

Lo =

NAME: E H Strange

B.A.A. SOLAR SECTION

INSTRUMENT:

ROTATION No.:

DATE: 3rd May 1970

U.T.: 13 h. – m. –

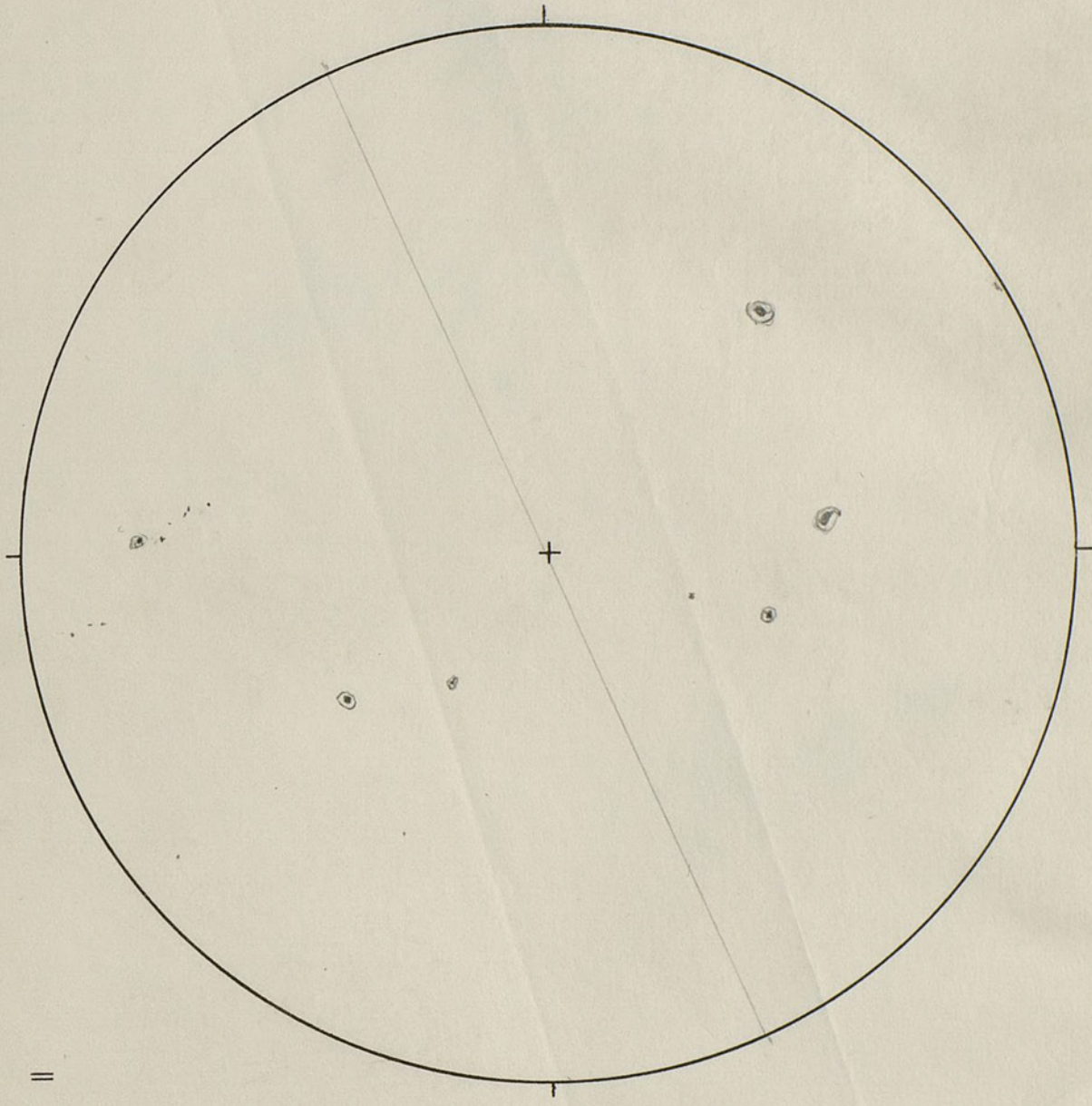
CONDITIONS: good definition

N

W

E

S



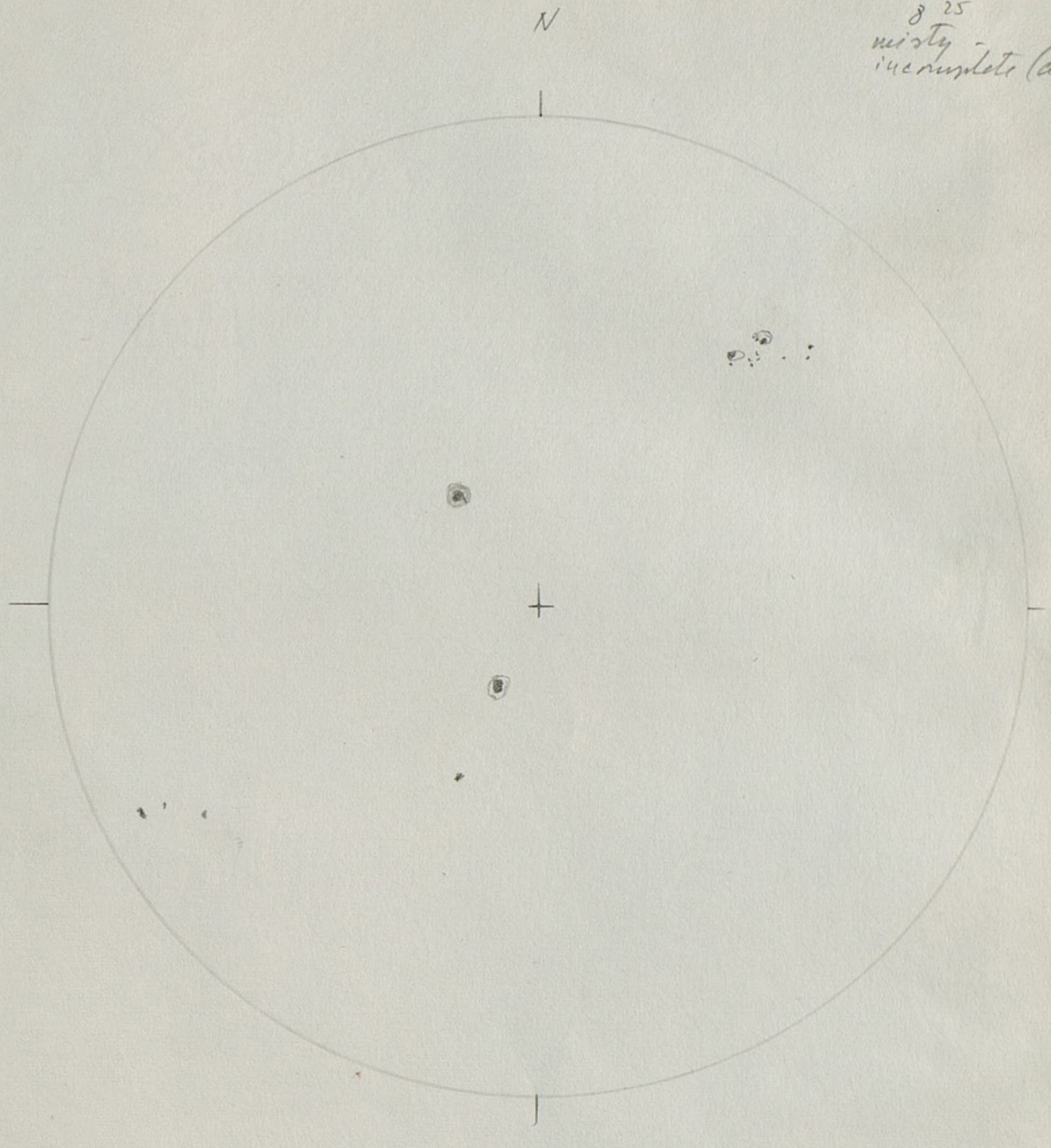
P =

Bo =

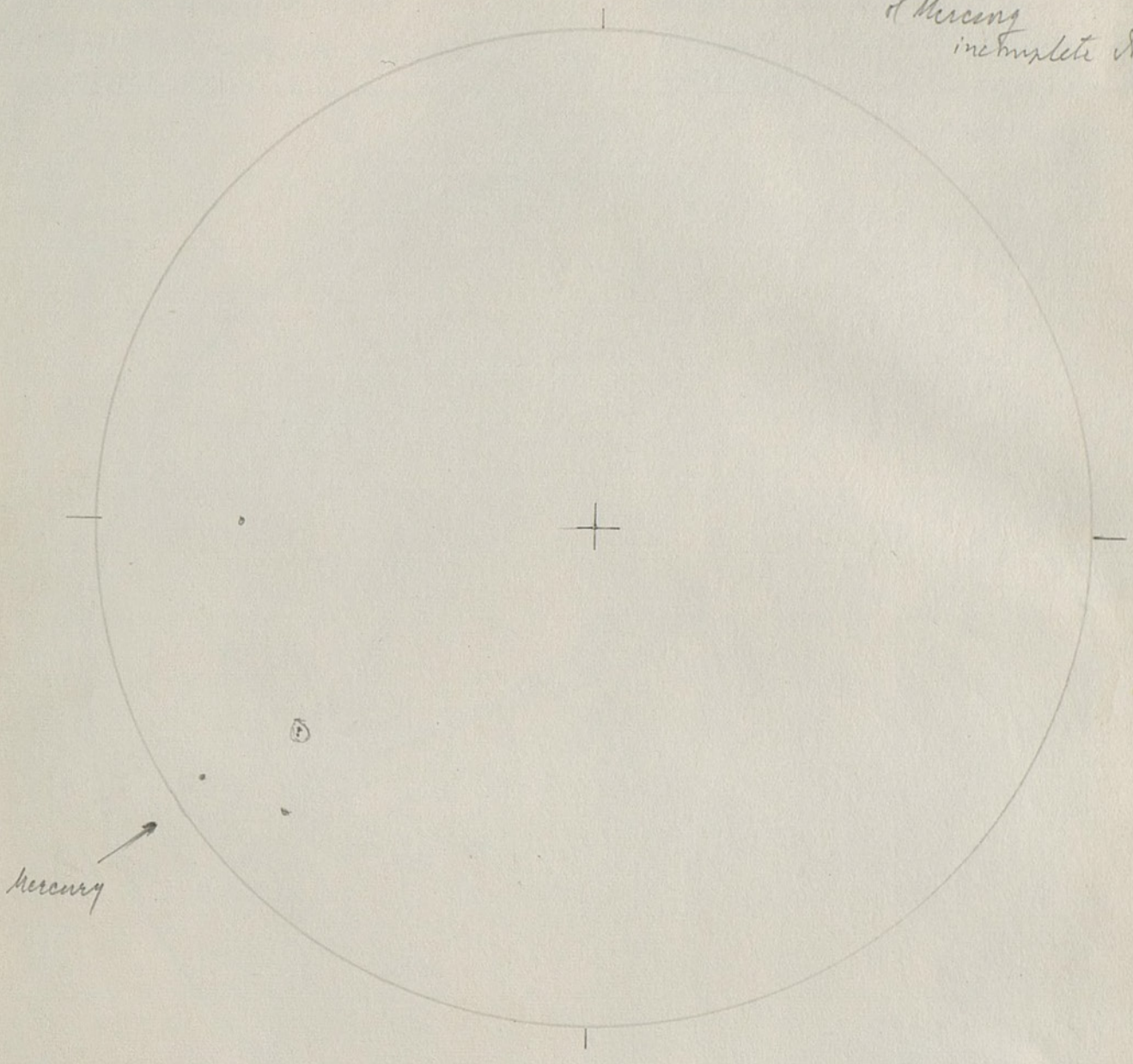
Lo =

NAME:

6th May 1970
8 25
misty
incomplete (cloud)



9th May 1970
11 58 UT
only glimpses through
cloud to see transit
of Mercury
incomplete drawing



B.A.A. SOLAR SECTION

INSTRUMENT:

ROTATION No.:

DATE: 13. 5. 70

U.T.: 8 h. 05 m.

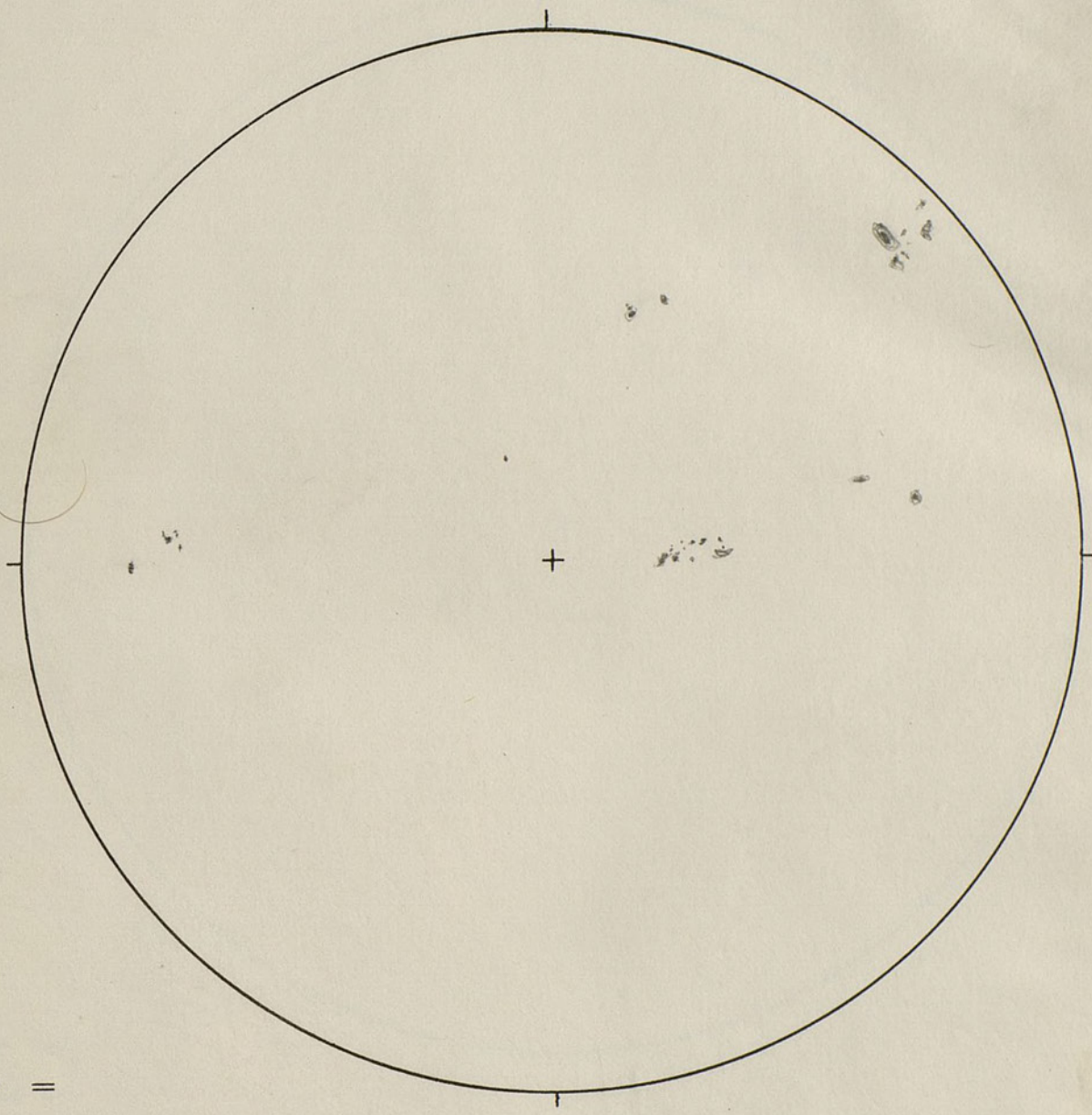
CONDITIONS: fair

N

W

E

S



P =

Bo =

Lo =

NAME:

B.A.A. SOLAR SECTION

INSTRUMENT:

ROTATION No.:

DATE: 15. 5 70

U.T.: 7 h. 50 m.

CONDITIONS: hazy fair

N

W

E

S

P =

Bo =

Lo =

NAME:

B.A.A. SOLAR SECTION

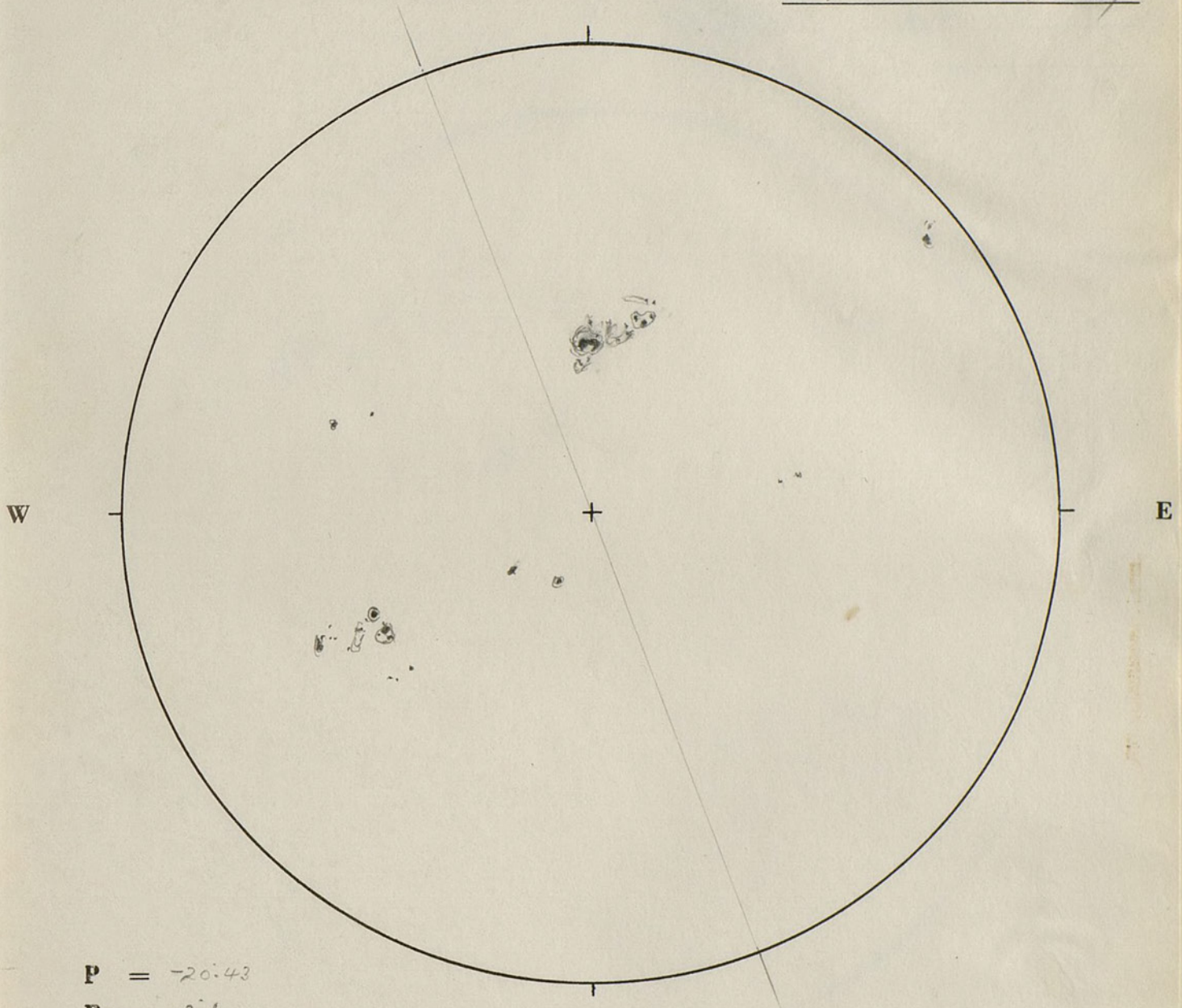
INSTRUMENT:

ROTATION No.:

DATE: 17.5.1970

U.T.: 10 h. 15 m.

CONDITIONS: atrocious seeing
Kept excellent transparency



P = -20.43

Bo = -2.4

Lo = 268.3

NAME:

B.A.A. SOLAR SECTION

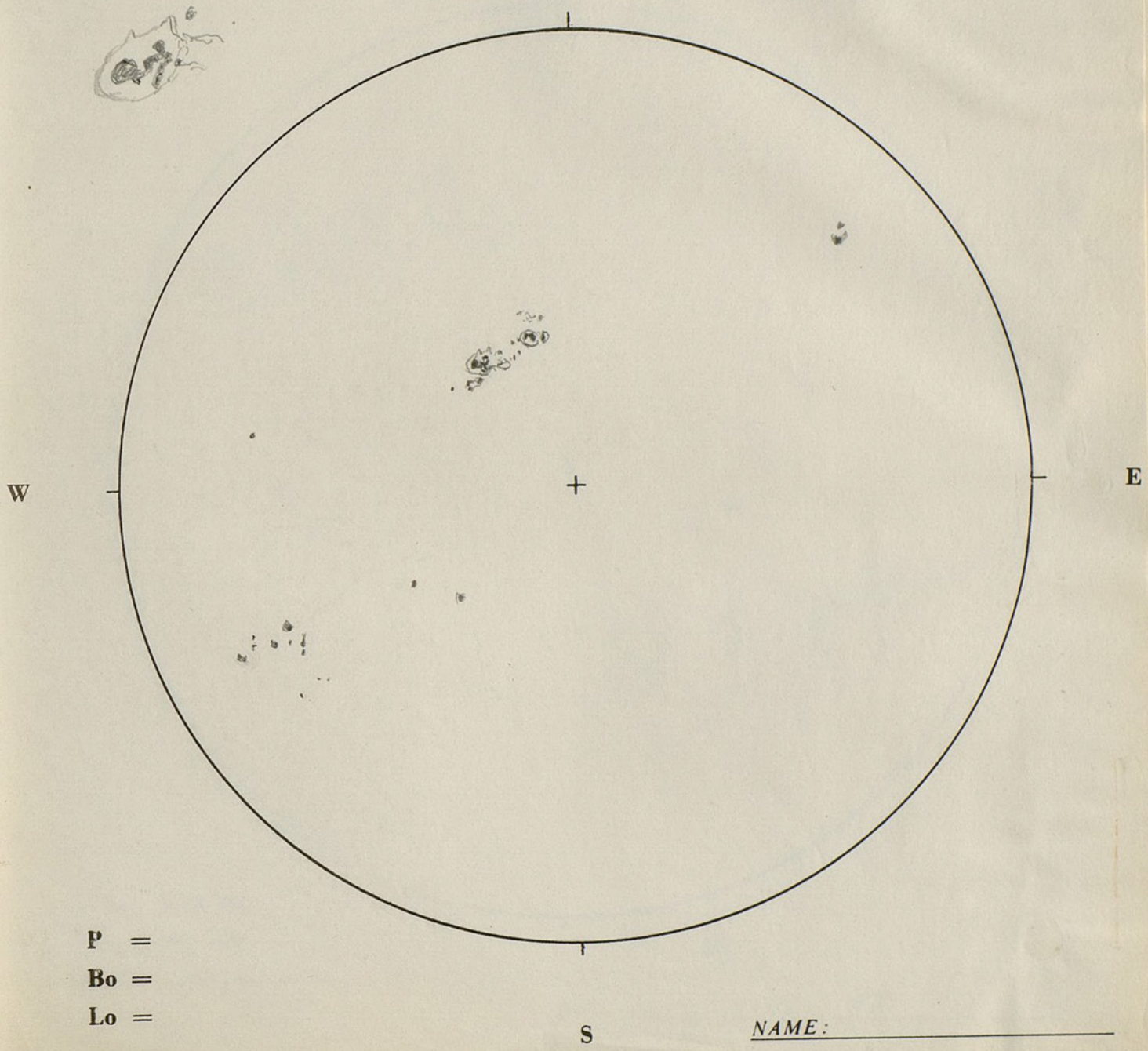
INSTRUMENT:

ROTATION No.:

DATE: 18.5.70

U.T.: 12 h. 00 m.

CONDITIONS: poor



P =

Bo =

Lo =

NAME:

B.A.A. SOLAR SECTION

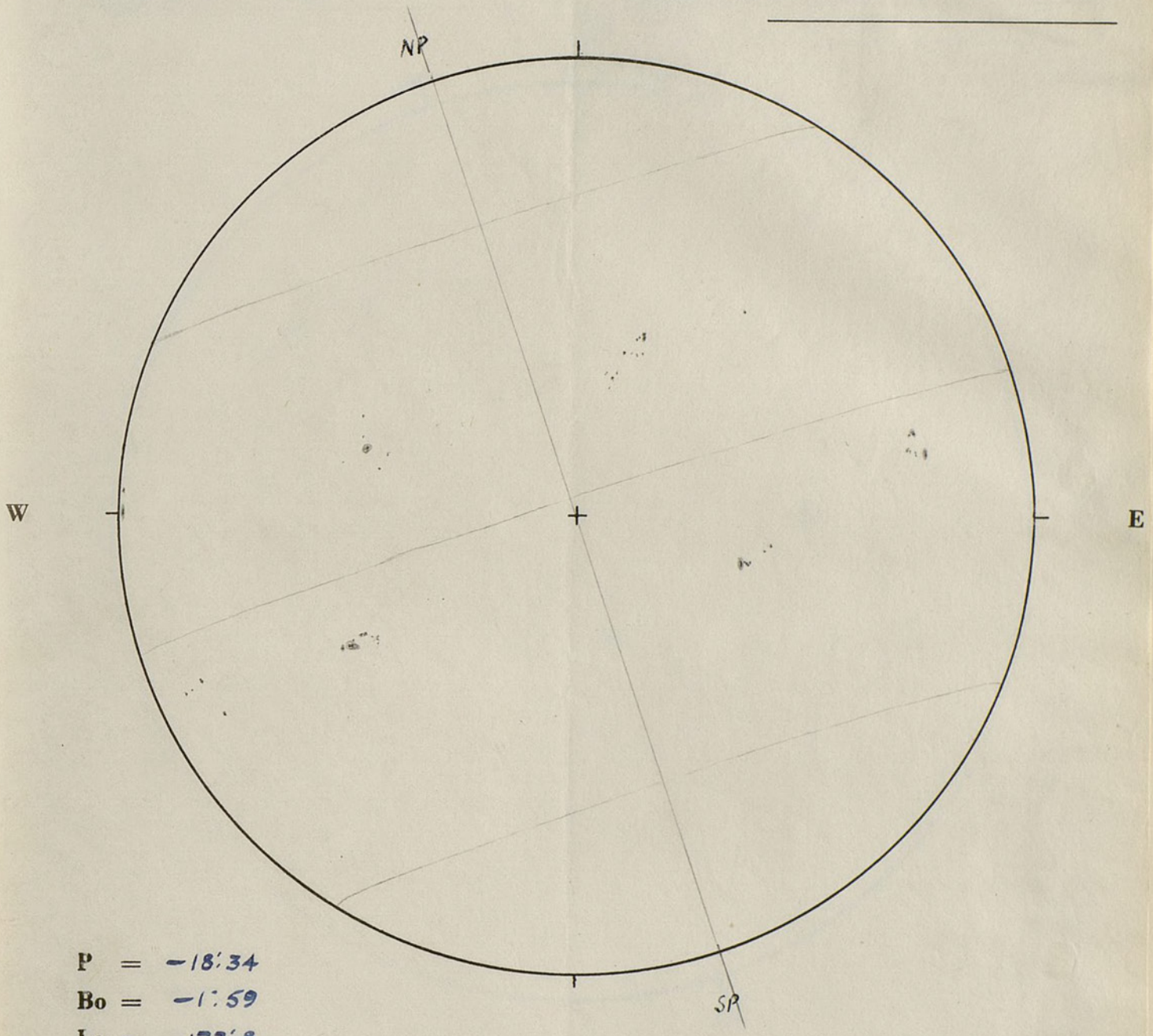
INSTRUMENT: 3" Refractor fitted by Coelostat

ROTATION No.: 1561

DATE: 1970: May 24

U.T.: 06 h. 25 m.

CONDITIONS: Very good.



P = −18°.34

Bo = −1°.59

Lo = 177°.8

NAME: [illegible]

B.A.A. SOLAR SECTION

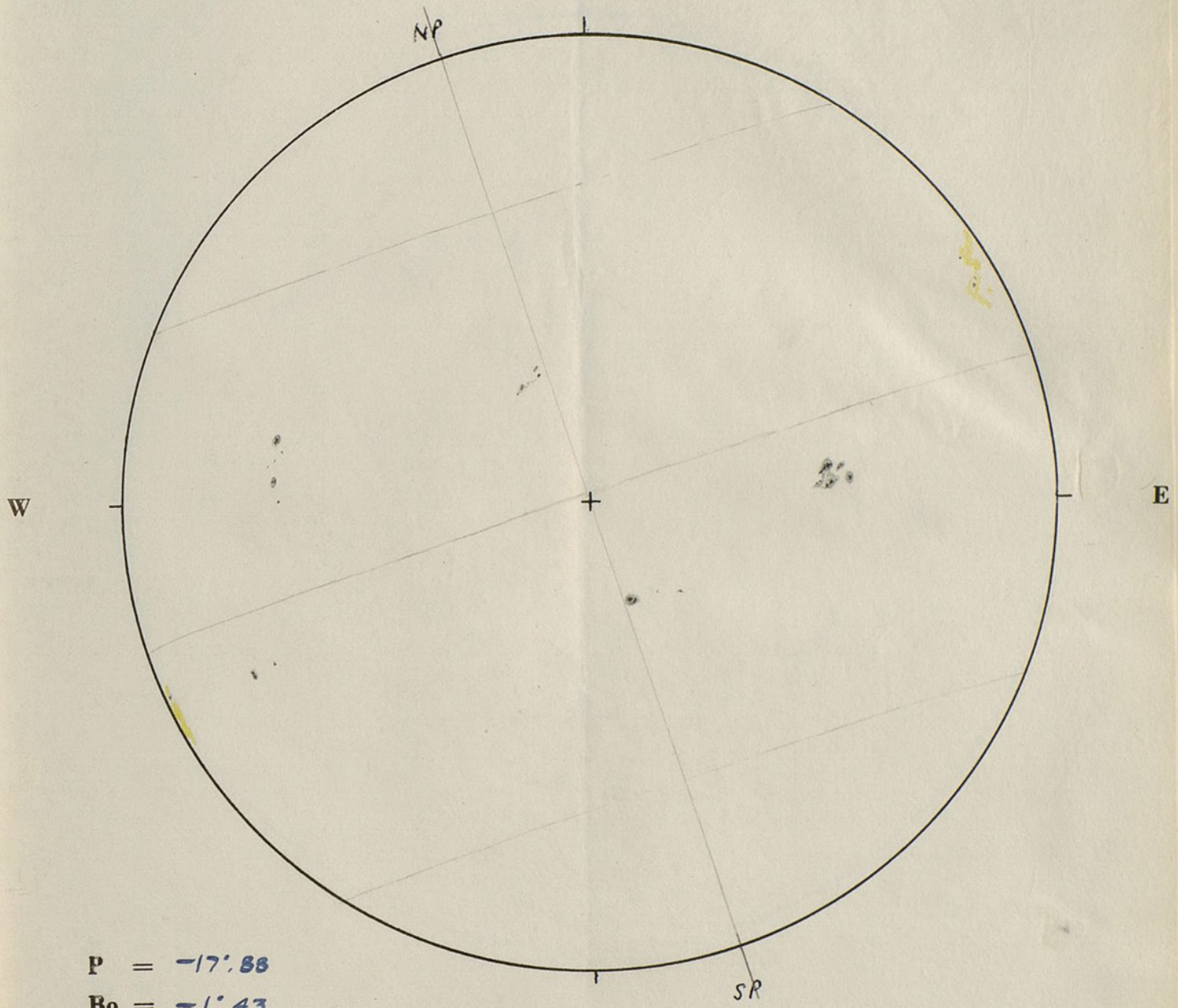
INSTRUMENT: 3" Refractor fed by Coelostat

ROTATION No.: 1561

DATE: 1970: May 25

U.T.: 13 h. 20 m.

CONDITIONS: Fair



P = −17°.88

Bo = −1°.43

Lo = 160°.8

NAME: [illegible]

B.A.A. SOLAR SECTION

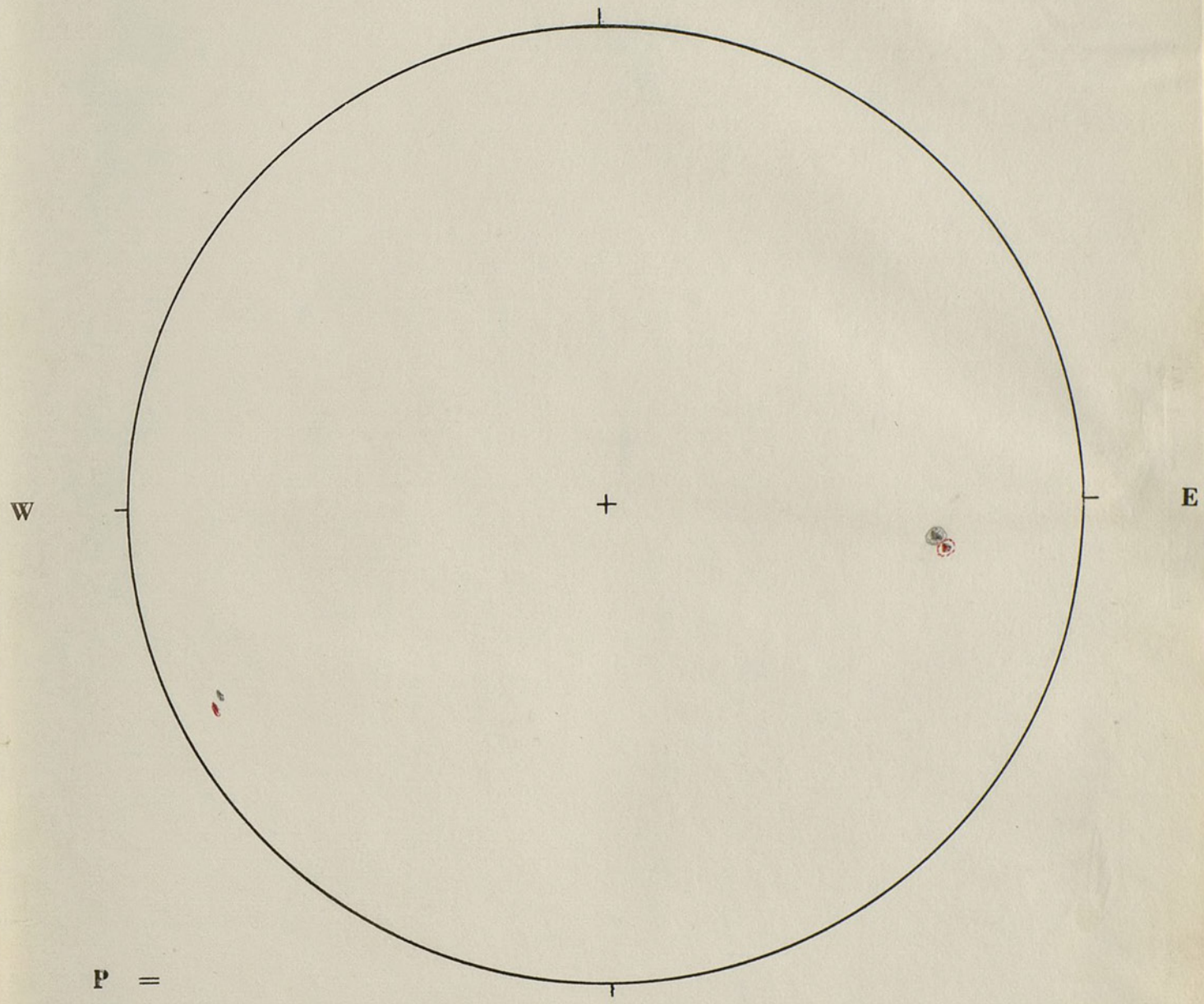
INSTRUMENT: 4½ 3"

ROTATION No.:

DATE: 7. 6. 70

U.T.: 9 10 h. 10 0 m.

CONDITIONS: fair



P =

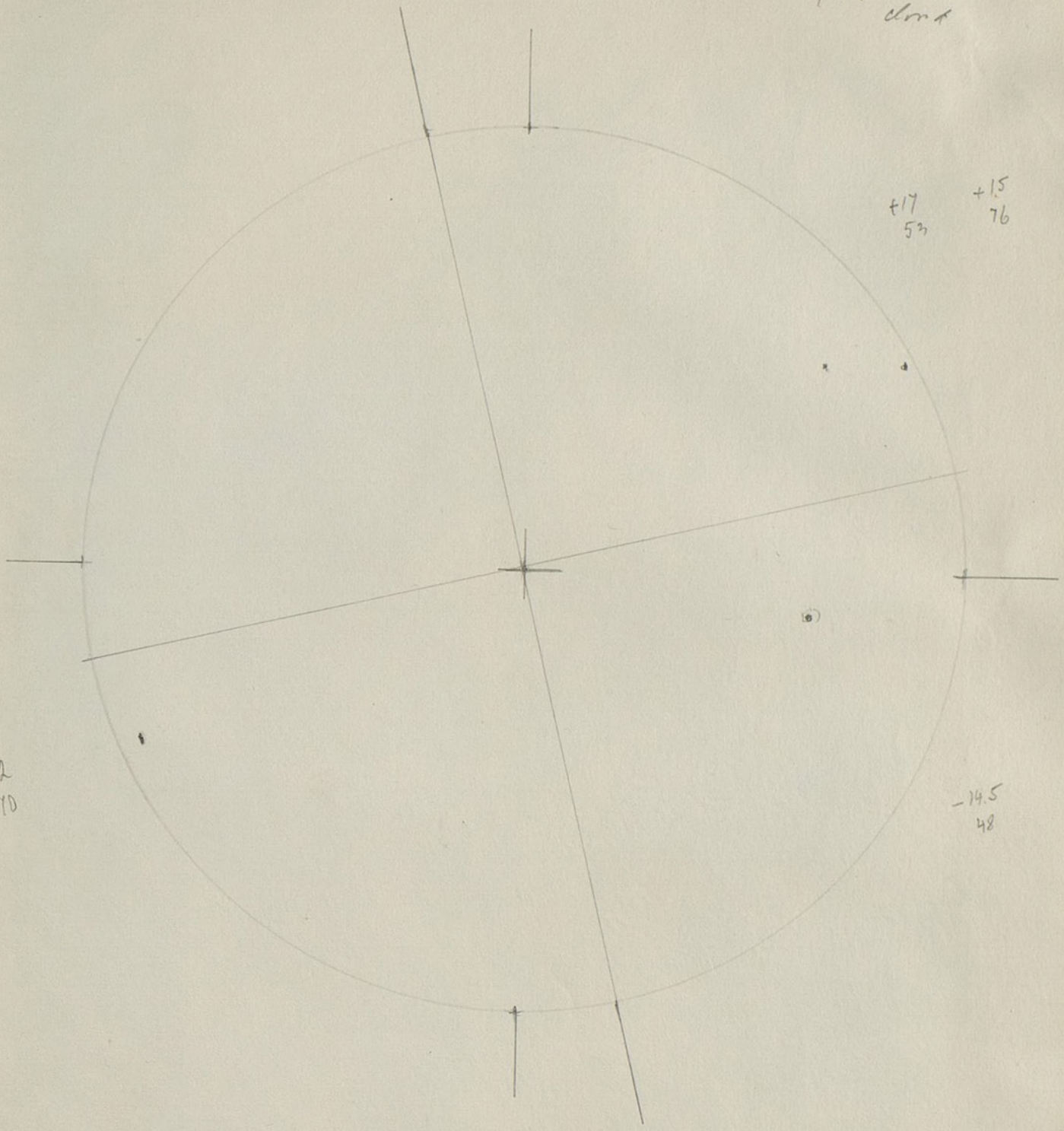
Bo =

Lo =

NAME:

3" in star ch.
? offcentre

7.6.70
18 05
fair clear



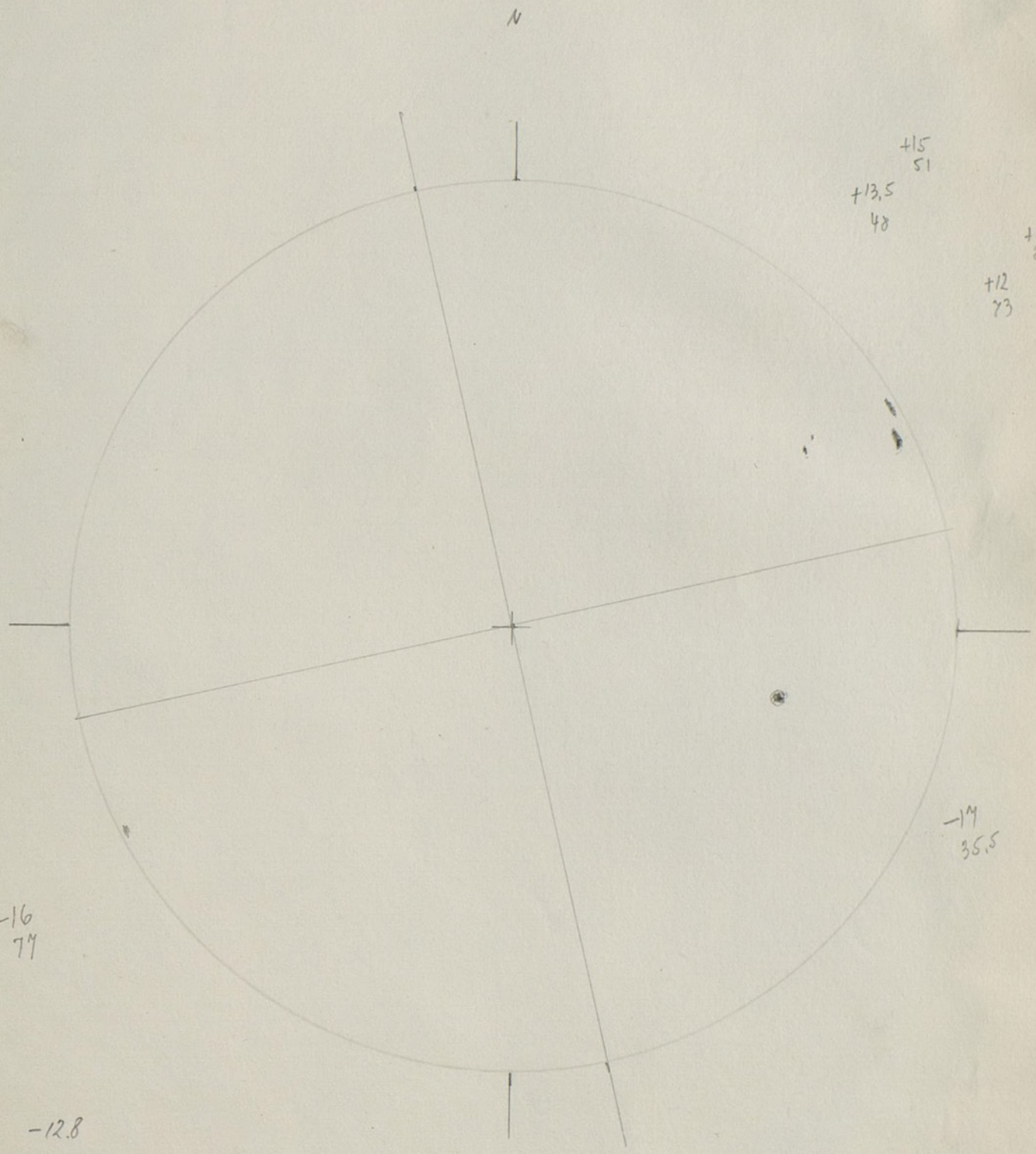
P −13

B_0 +0.1

L_0 346.2

3" ord. obs.

8.6 70
7 45
fair

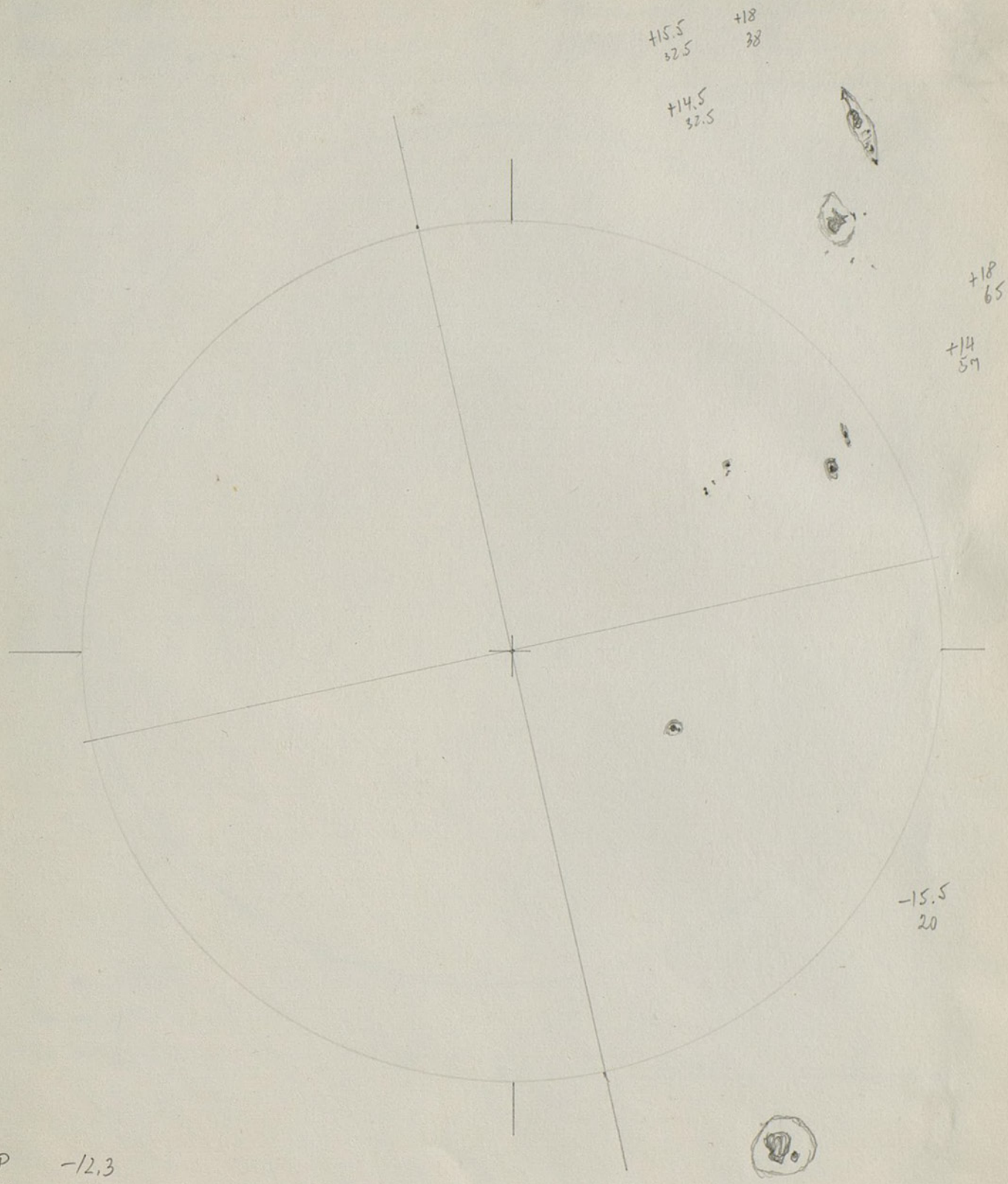


P -12.8
B_0 +0.2
L_0 338.5

9.6.70

3" in orl. obs.

745 Pain



P -12.3
B_0 +0.4
L_0 3253

B.A.A. SOLAR SECTION

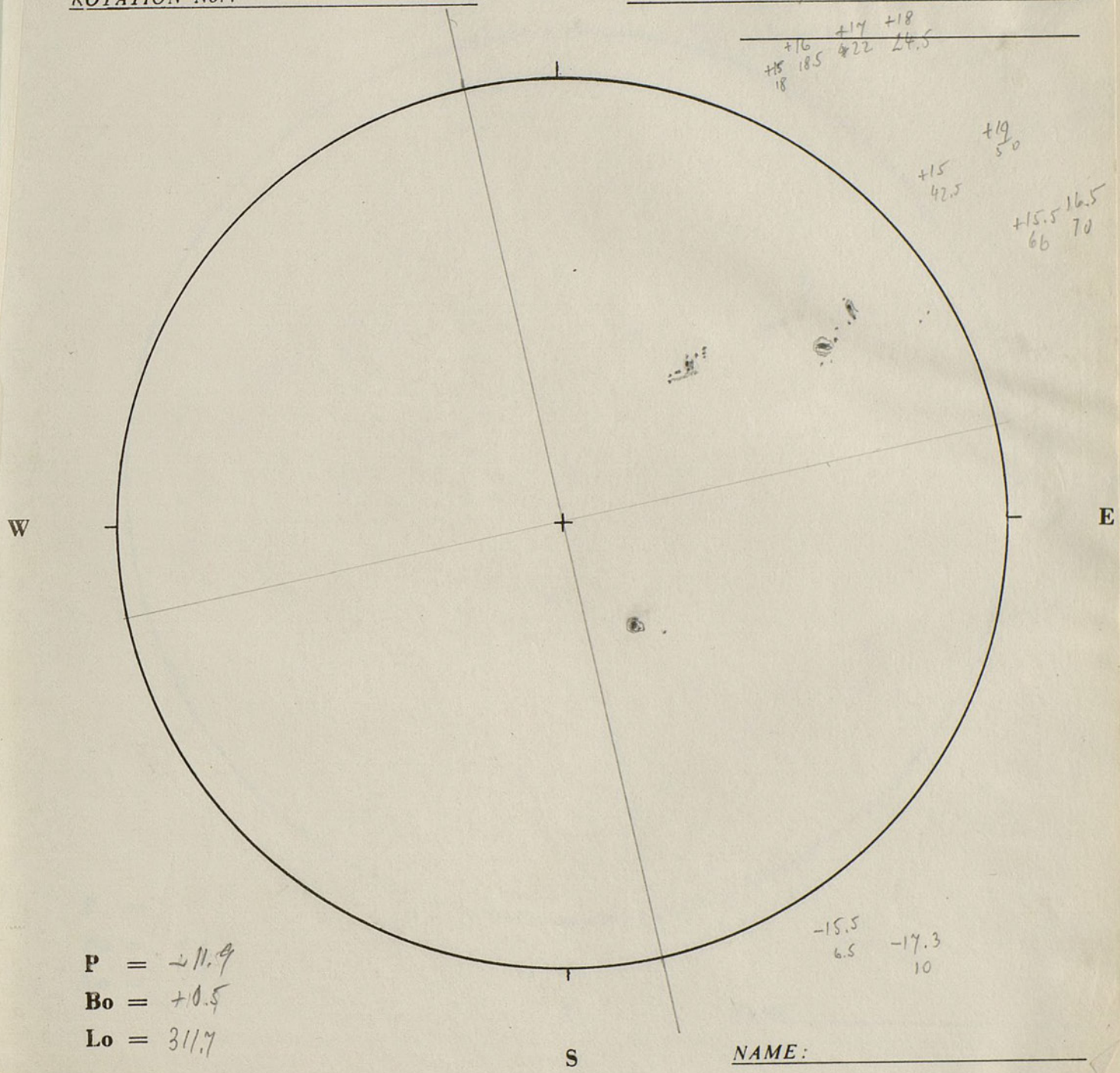
INSTRUMENT: 3″

ROTATION No.: –

DATE: 10.6.70

U.T.: 8 h. 35 m.

CONDITIONS: fair



P = -11.9

Bo = +10.5

Lo = 311.7

NAME:

B.A.A. SOLAR SECTION

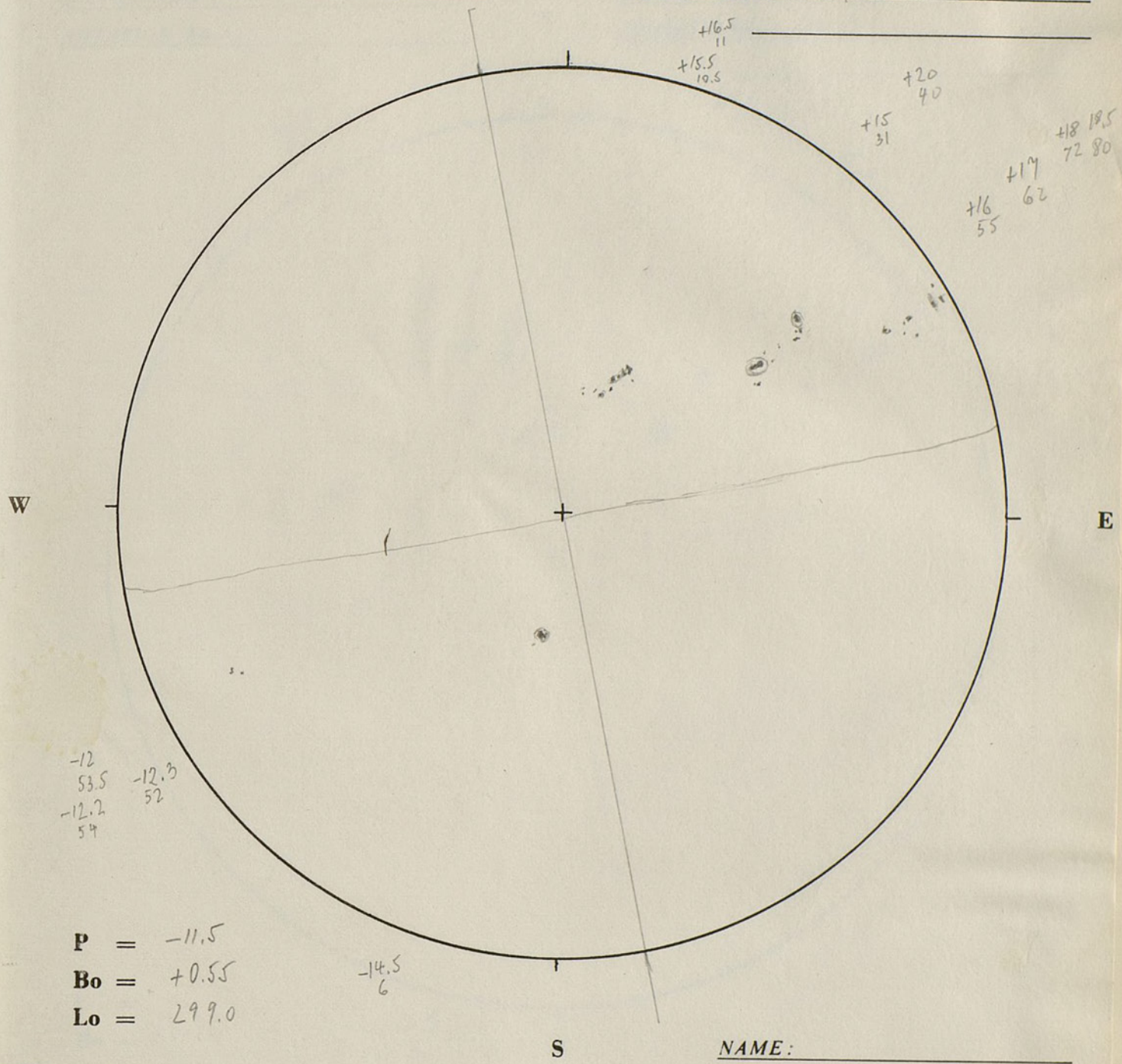
INSTRUMENT: 3"

ROTATION No.:

DATE: 11. 6 70

U.T.: 7 h. 30 m.

CONDITIONS: fair



P = -11.5

Bo = +0.55

Lo = 299.0

NAME:

B.A.A. SOLAR SECTION

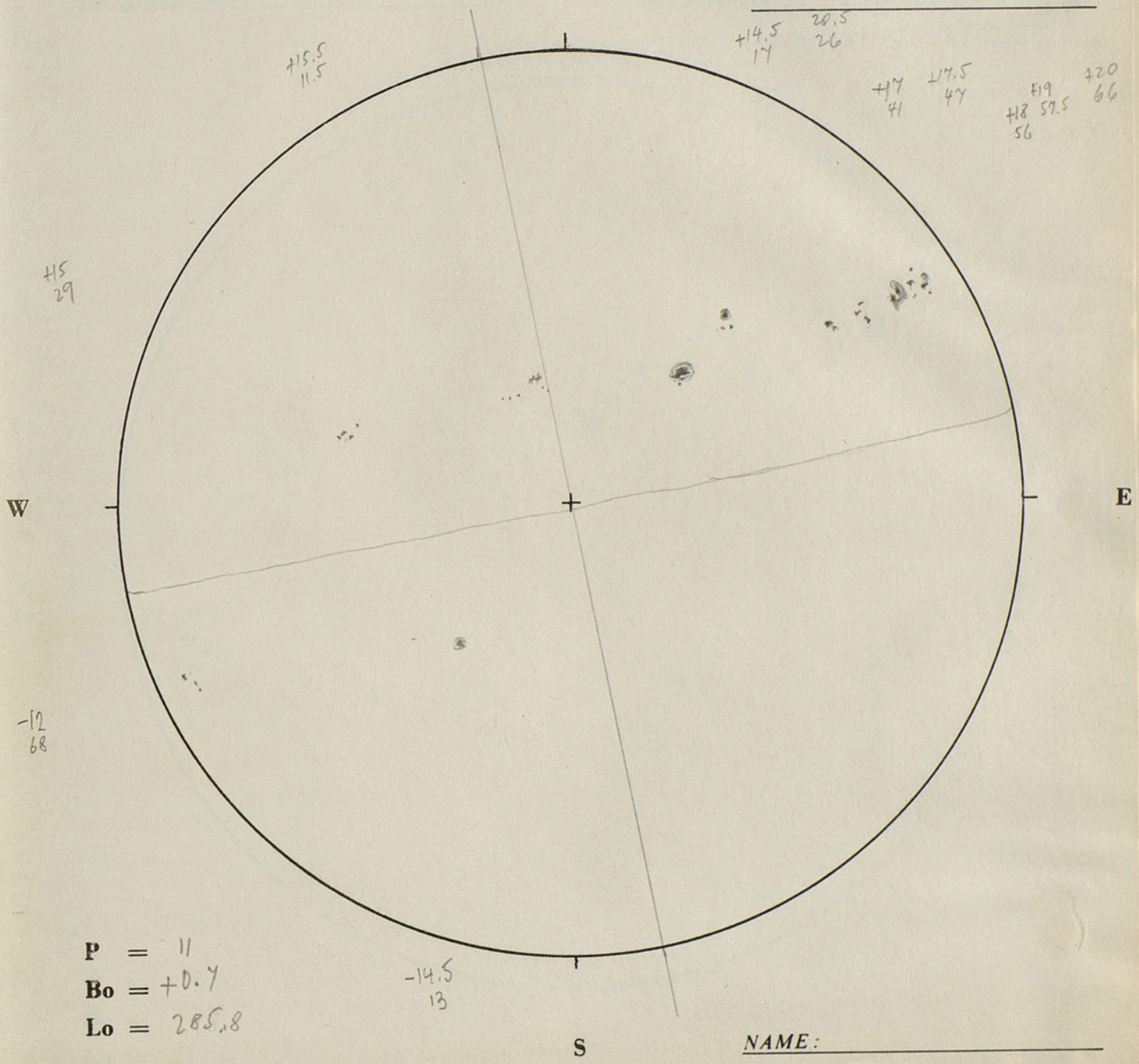
INSTRUMENT: 3"

ROTATION No.:

DATE: 12. 6. 70

U.T.: 7 h. 40 m.

CONDITIONS: fair



P = 11

Bo = +0.7

Lo = 285.8

NAME:

B.A.A. SOLAR SECTION

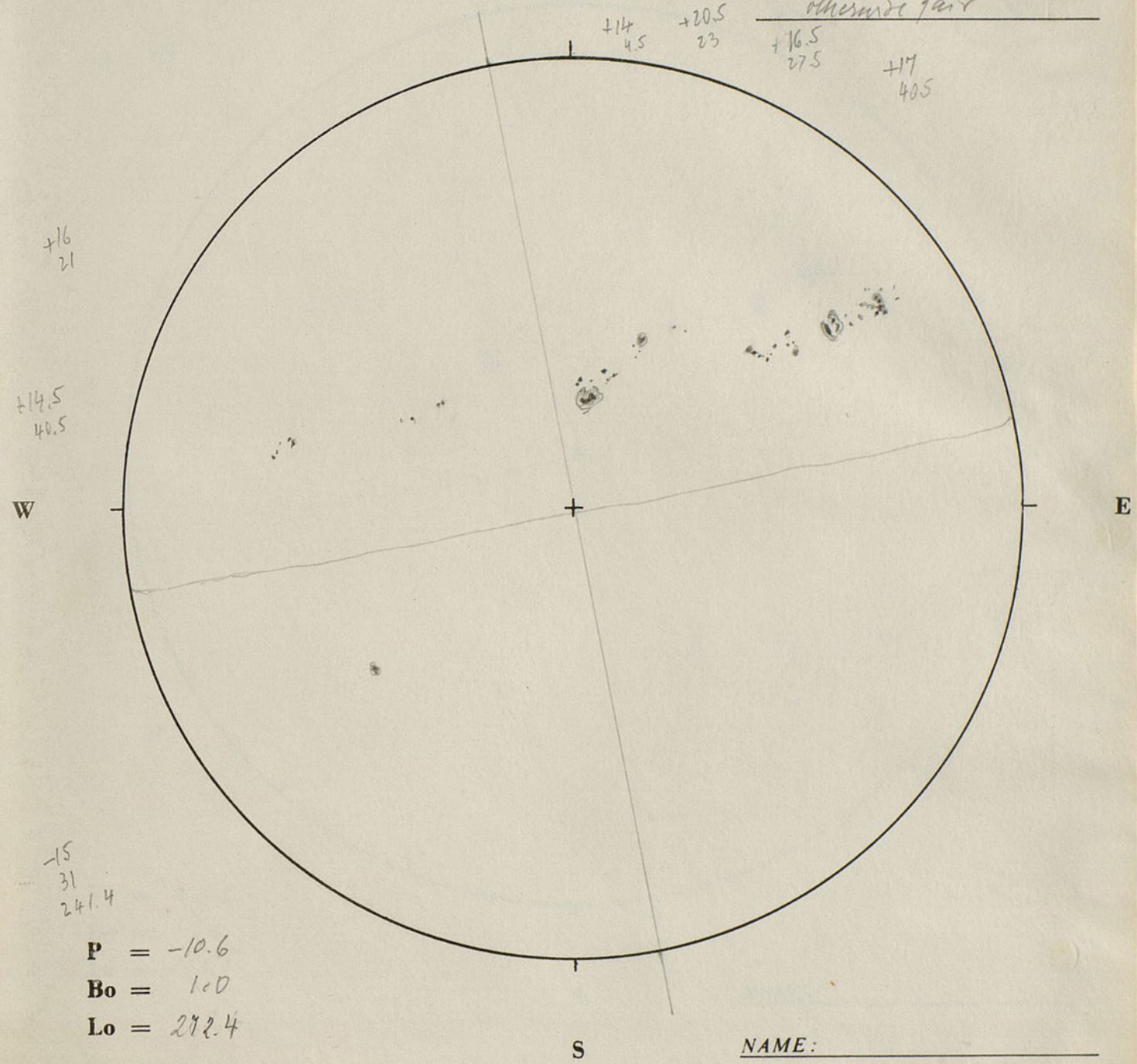
INSTRUMENT: 3"

ROTATION No.:

DATE: 13. 6. 70

U.T.: 7 h. 40 m.

CONDITIONS: moments of good seeing otherwise fair



P = -10.6

Bo = 1.0

Lo = 272.4

NAME:

B.A.A. SOLAR SECTION

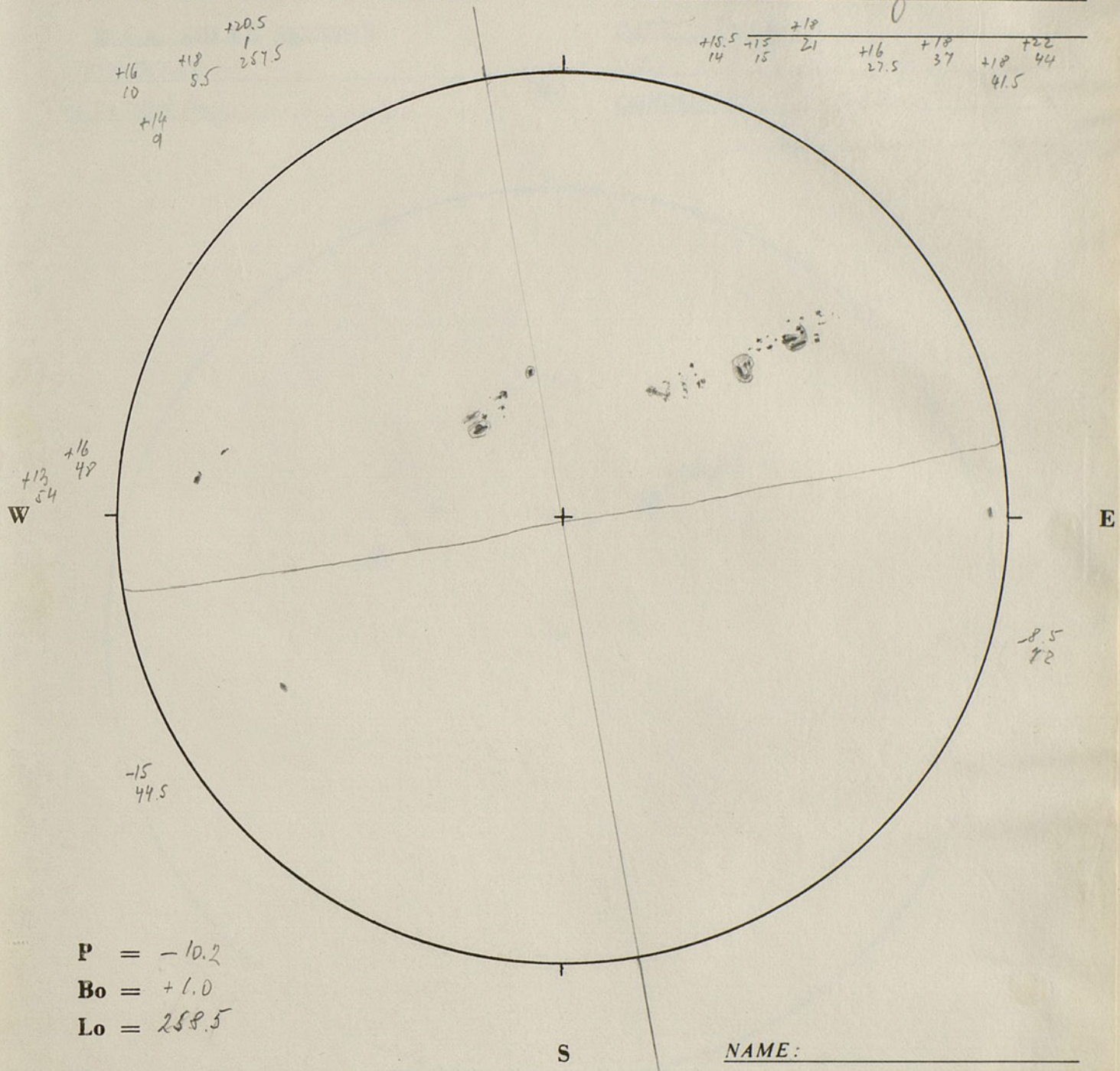
INSTRUMENT: 3"

ROTATION No.:

DATE: 14th June 1970

U.T.: 8 h. 50 m.

CONDITIONS: boiling



P = −10.2

Bo = +1.0

Lo = 258.5

NAME:

B.A.A. SOLAR SECTION

INSTRUMENT:

ROTATION No.:

DATE: 15. 6. 70

U.T.: 7 h. 40 m.

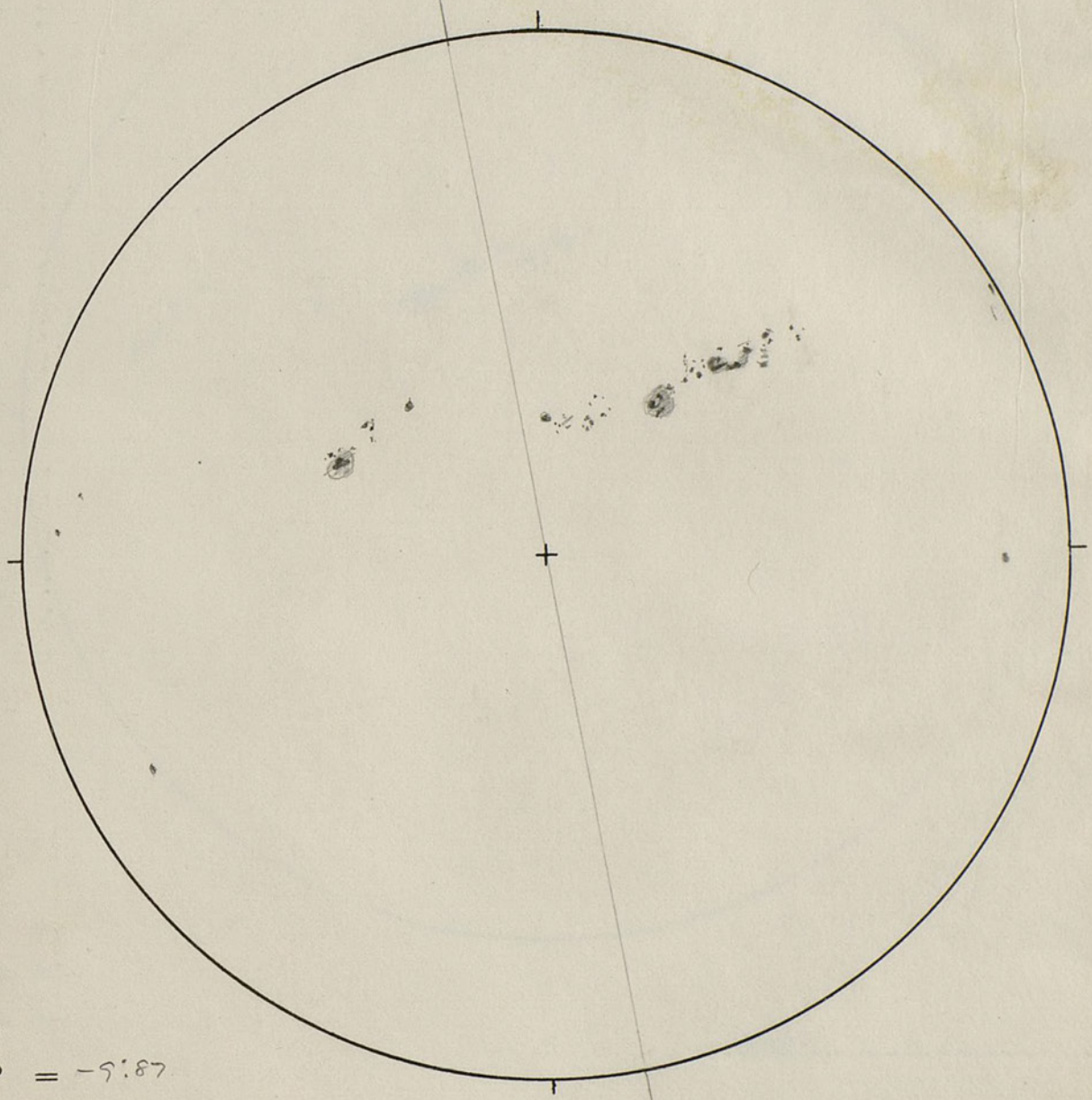
CONDITIONS: poor

N

W

E

S



P = −9°.87

Bo = +1°.06

Lo = 246°.0

NAME:

B.A.A. SOLAR SECTION

INSTRUMENT: 3"

ROTATION No.:

DATE: 17.6.70

U.T.: 11 h. – m.

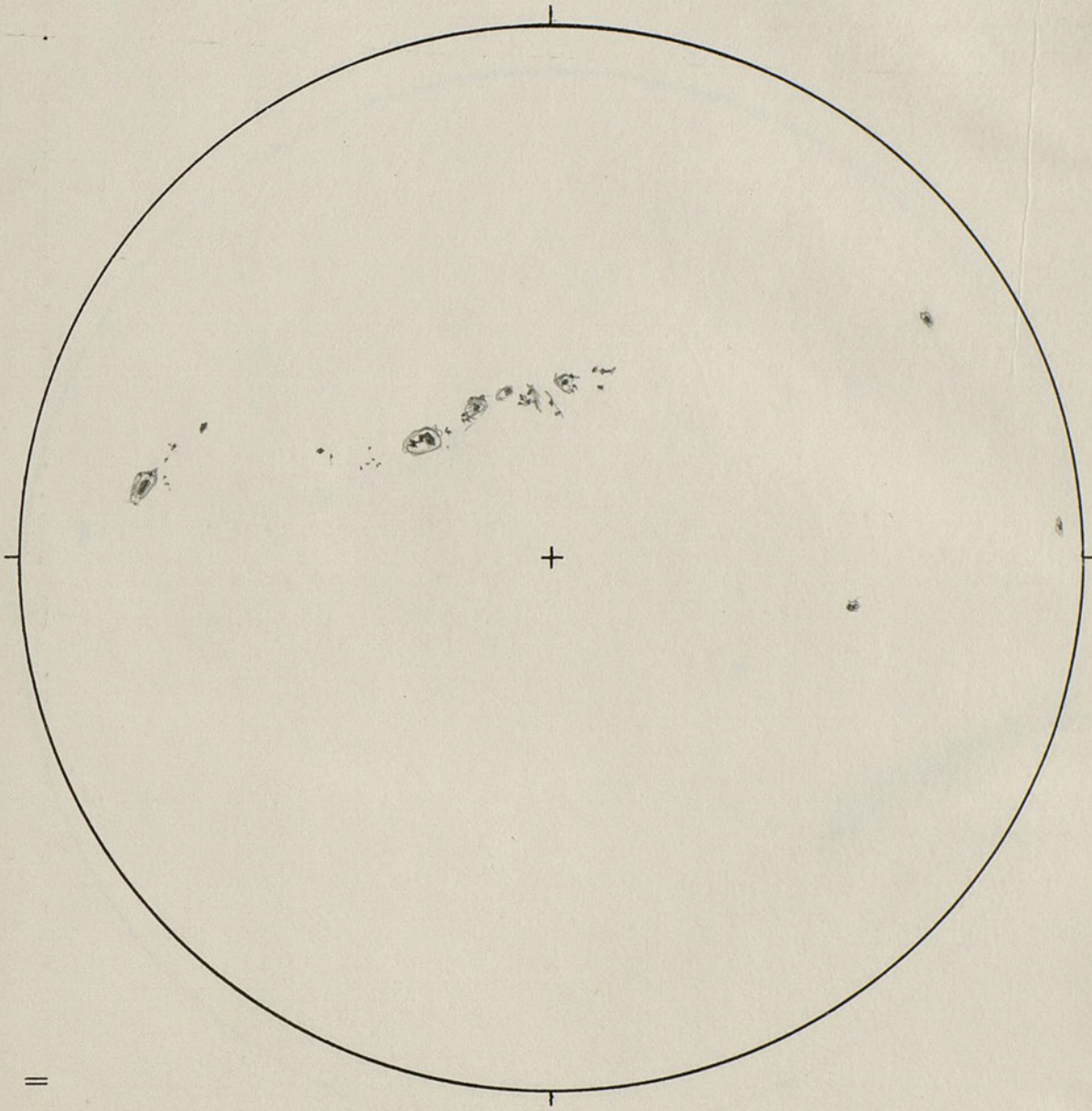
CONDITIONS: windy
moderate seeing

N

W

E

S



P =

Bo =

Lo =

NAME:

B.A.A. SOLAR SECTION

INSTRUMENT: 3"

ROTATION No.:

DATE: 18. 6. 70

U.T.: 12 h. 20 m.

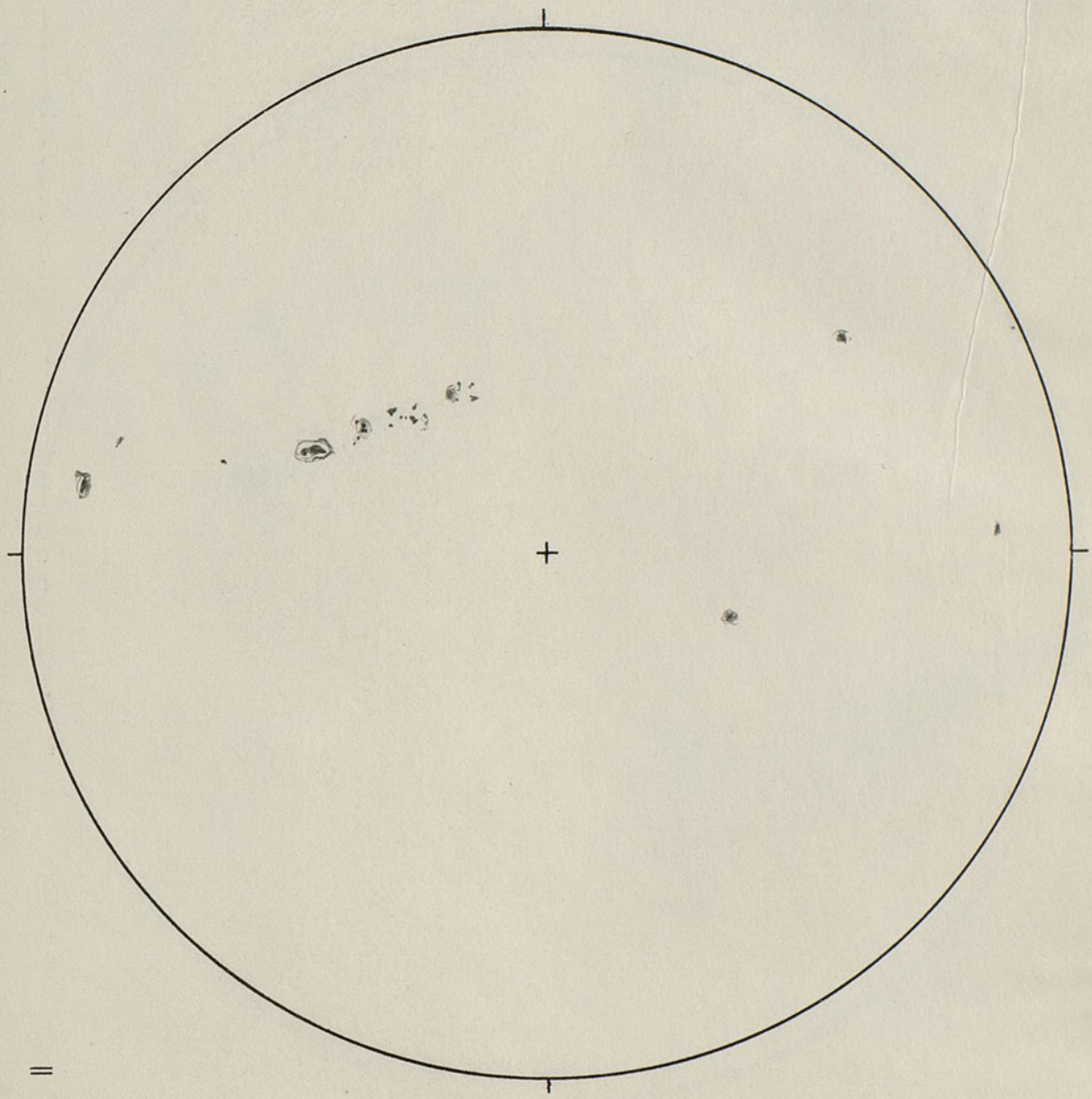
CONDITIONS: windy poor

N

W

E

S



P =

Bo =

Lo =

NAME: Howard Ens

B.A.A. SOLAR SECTION

INSTRUMENT: 3"

ROTATION No.:

DATE: 19. 6. 1970

U.T.: 7 h. 20 m.

CONDITIONS: boiling

N

W

E

S

P =

Bo =

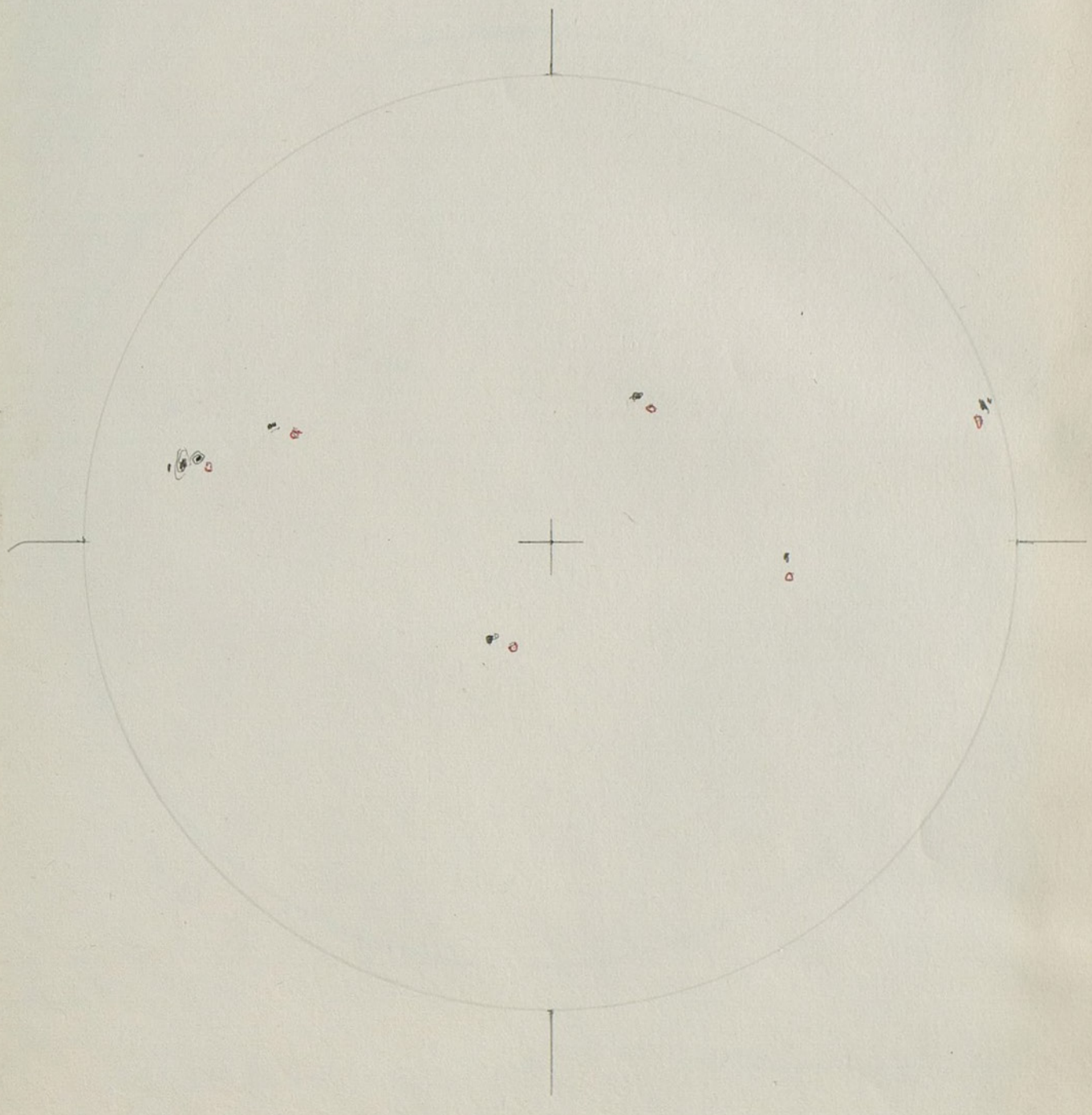
Lo =

NAME:

3"
4"

2 p.m

20. June 1970
150



B.A.A. SOLAR SECTION

INSTRUMENT:

ROTATION No.:

DATE: 20. June 1970

U.T.: 7 h. 45 m.

CONDITIONS: fair

N

W

E

S

P =

Bo =

Lo =

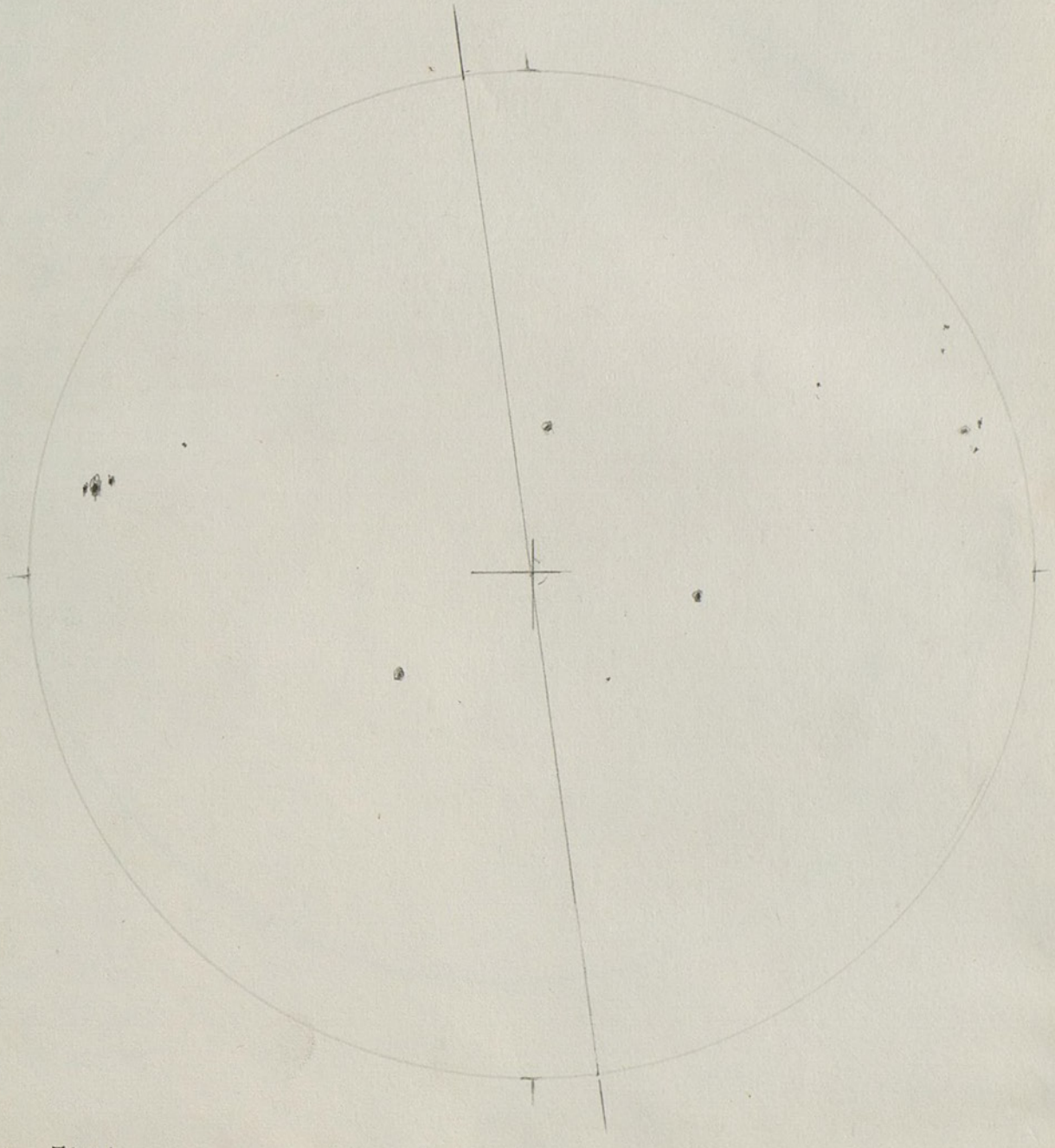
NAME:

4" (well centered)

21. 6. 70

9 20

windy - cloudy
interruption.



P = − 7°21

B_0 = + 1·78

L_0 = 165.6

B.A.A. SOLAR SECTION

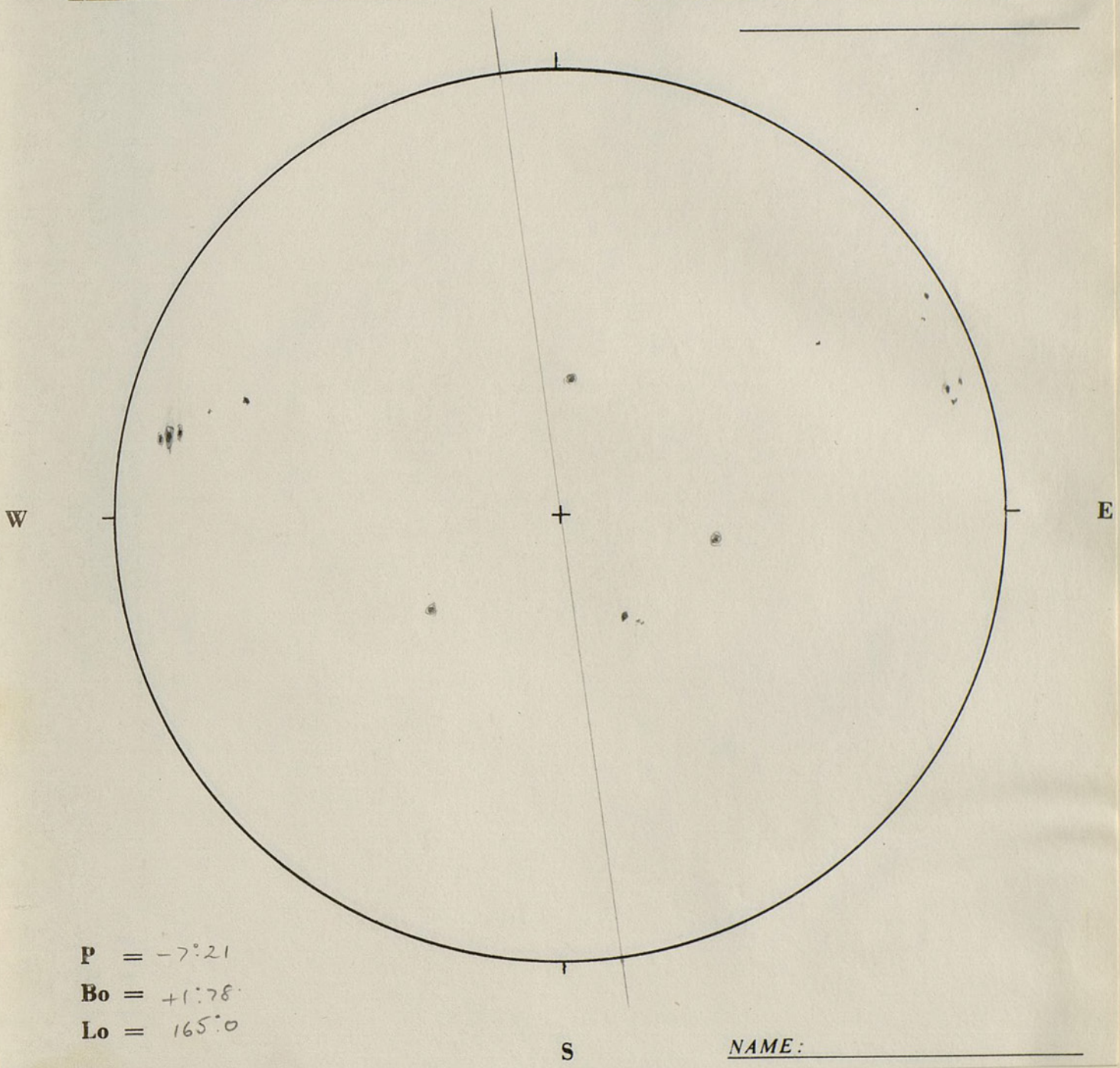
INSTRUMENT: 3" (well centered)

ROTATION No.:

DATE: 21. 6. 70

U.T.: 10 h. 20 m.

CONDITIONS: windy cloudy



P = −7°.21

Bo = +1°.78

Lo = 165°.0

NAME:

B.A.A. SOLAR SECTION

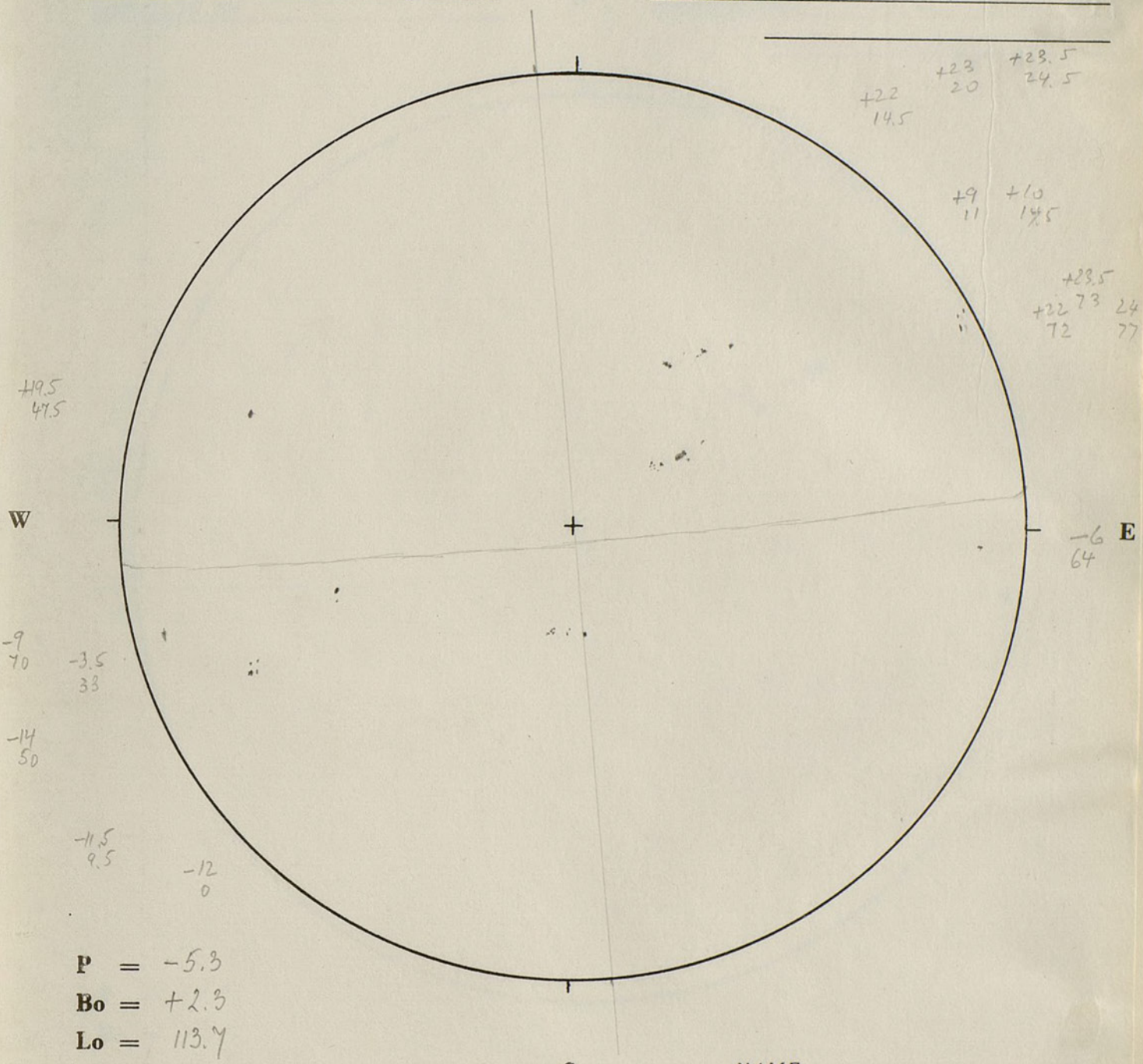
INSTRUMENT: 3"

ROTATION No.:

DATE: 25. 6 70

U.T.: 7 h. 35 m.

CONDITIONS: boiling



P = -5.3

Bo = +2.3

Lo = 113.7

NAME:

B.A.A. SOLAR SECTION

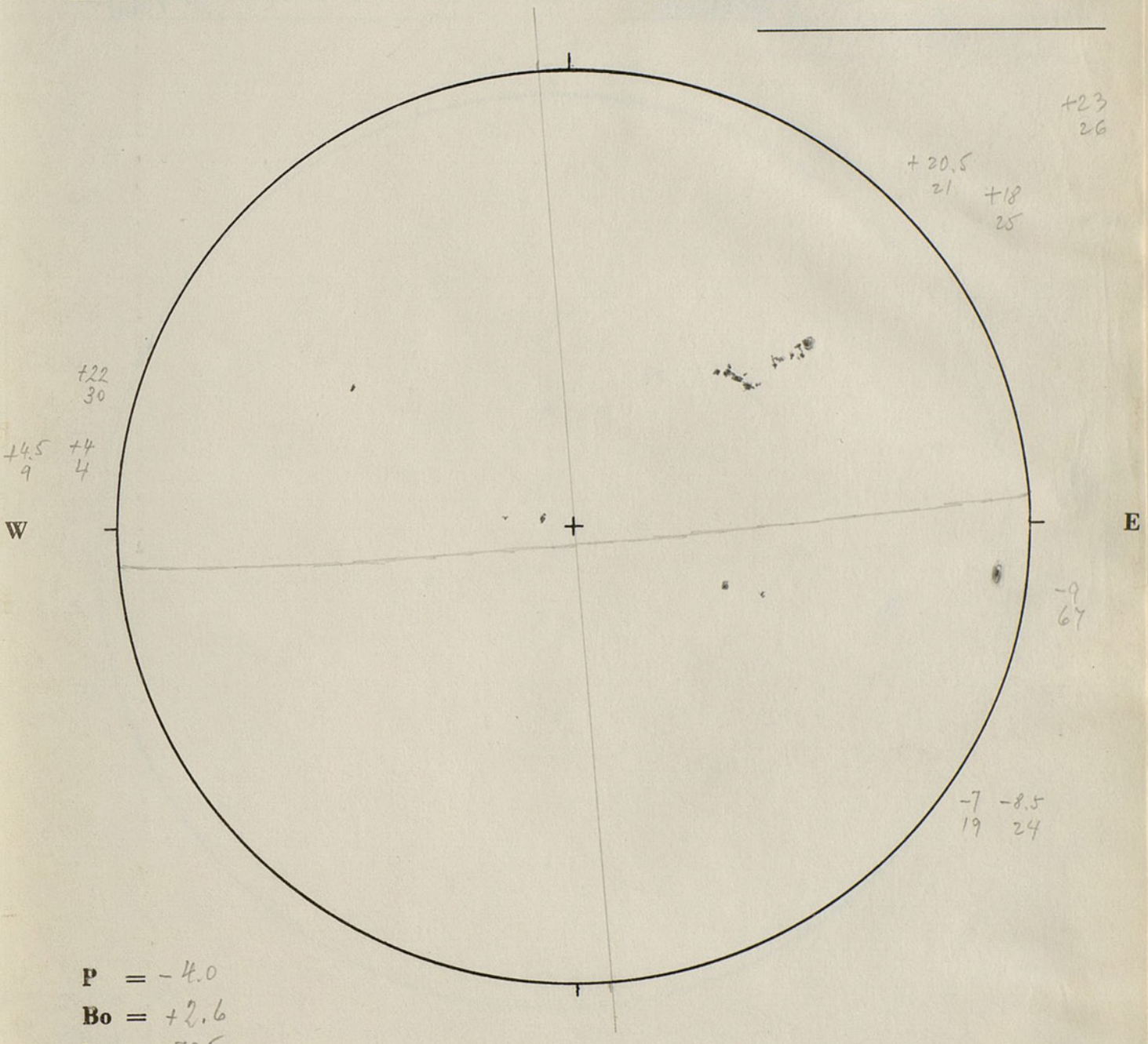
INSTRUMENT: 3"

ROTATION No.:

DATE: 28 June 1970

U.T.: 14 h. — m.

CONDITIONS: windy poor



P = -4.0

Bo = +2.6

Lo = 70.5

NAME:

B.A.A. SOLAR SECTION

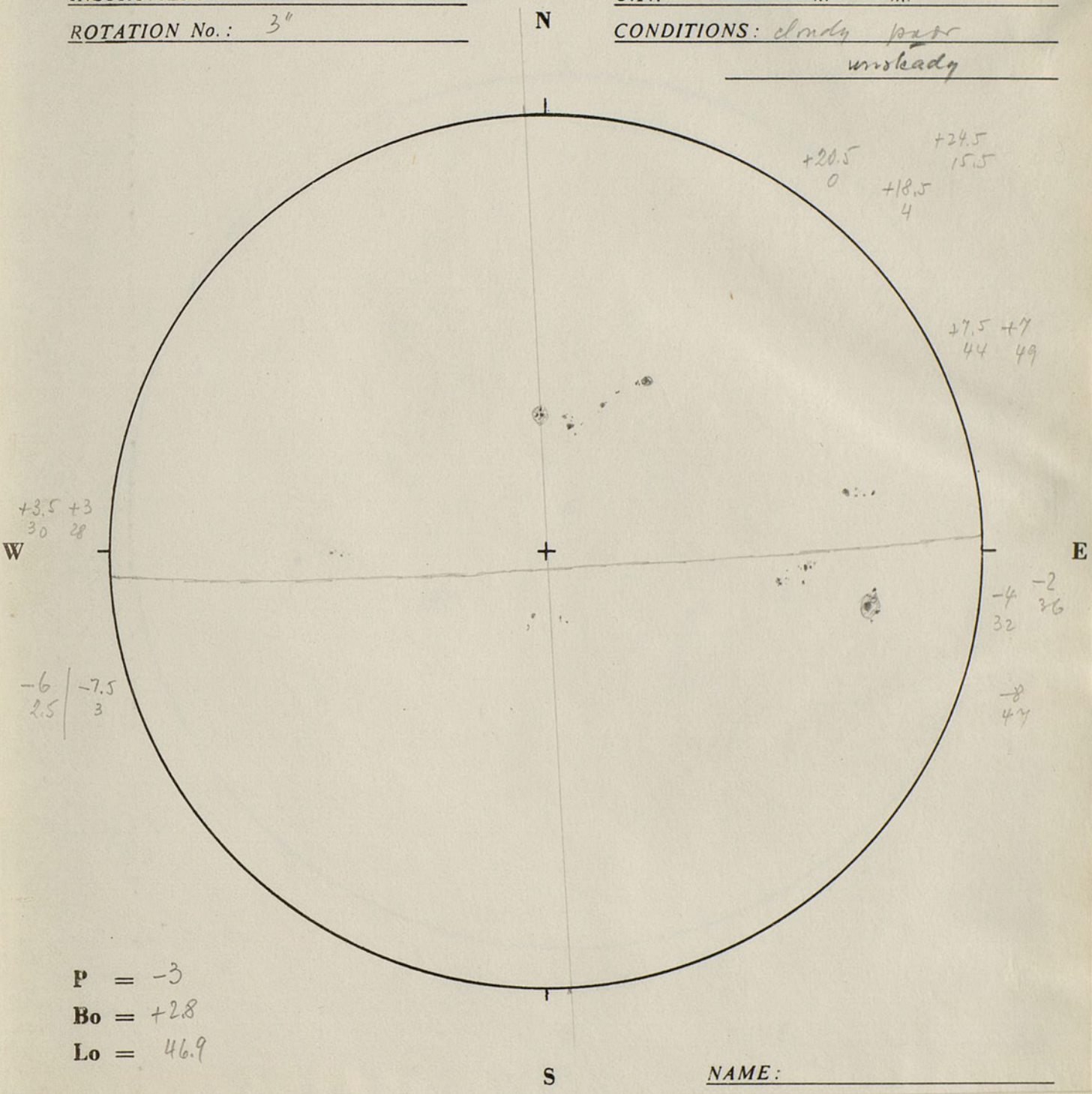
INSTRUMENT:

ROTATION No.: 3"

DATE: 30. 6. 70

U.T.: 8 h. 30 m.

CONDITIONS: cloudy poor unsteady



P = -3

Bo = +2.8

Lo = 46.9

NAME:

B.A.A. SOLAR SECTION

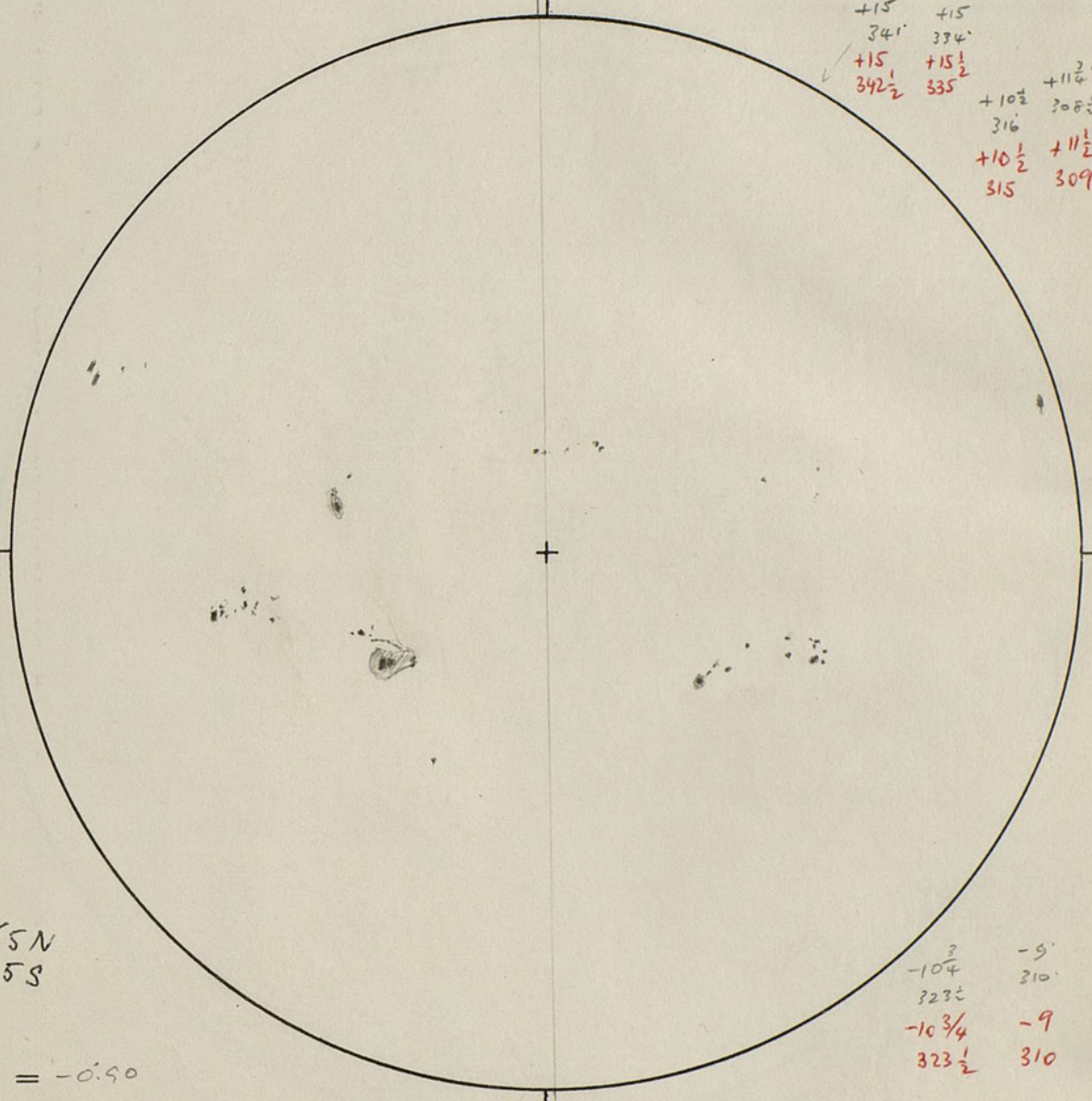
INSTRUMENT: 3"

ROTATION No.:

DATE: 5th July 1970

U.T.: 9 h. 50 m.

CONDITIONS: unsteady, cloudy later.



+15° 341° +15 342½
2x +15 334° +15½ 335
+10½ 316° +10½ 315
+11¾ 308½ +11½ 309
+17½ 265° +16½ 264
+22½ 45 +21 42½ 21 44½ +22 44
+8° 7¾ 3½ 5.5
−3½ 18½ −4 19
−5 1½/0½ −8 358° −5 1¾ −8 359
10AA { 5N 5S
−10¾ 323½ −9° 310° −10¾ 323½ −9 310
−15½ 353½ −19½ 354

P = −0.90

Bo = +3.36

Lo = 340.1

NAME:

B.A.A. SOLAR SECTION

INSTRUMENT: 3" 4½

ROTATION No.:

DATE: 6.7.1970

U.T.: 19 h. – m.

CONDITIONS: boiling

wrap square

N

W

E

S

P =

Bo =

Lo =

NAME:

B.A.A. SOLAR SECTION

INSTRUMENT:

ROTATION No.: 8 11

DATE: 6.7.70

U.T.: 12 h. 20 m.

CONDITIONS: thin cloud v. difficult

N

W

E

S

4N
4S

P =

Bo =

Lo =

NAME:

B.A.A. SOLAR SECTION

INSTRUMENT: 5"

ROTATION No.:

DATE: 7th July 1980

U.T.: 7 h. 30 m.

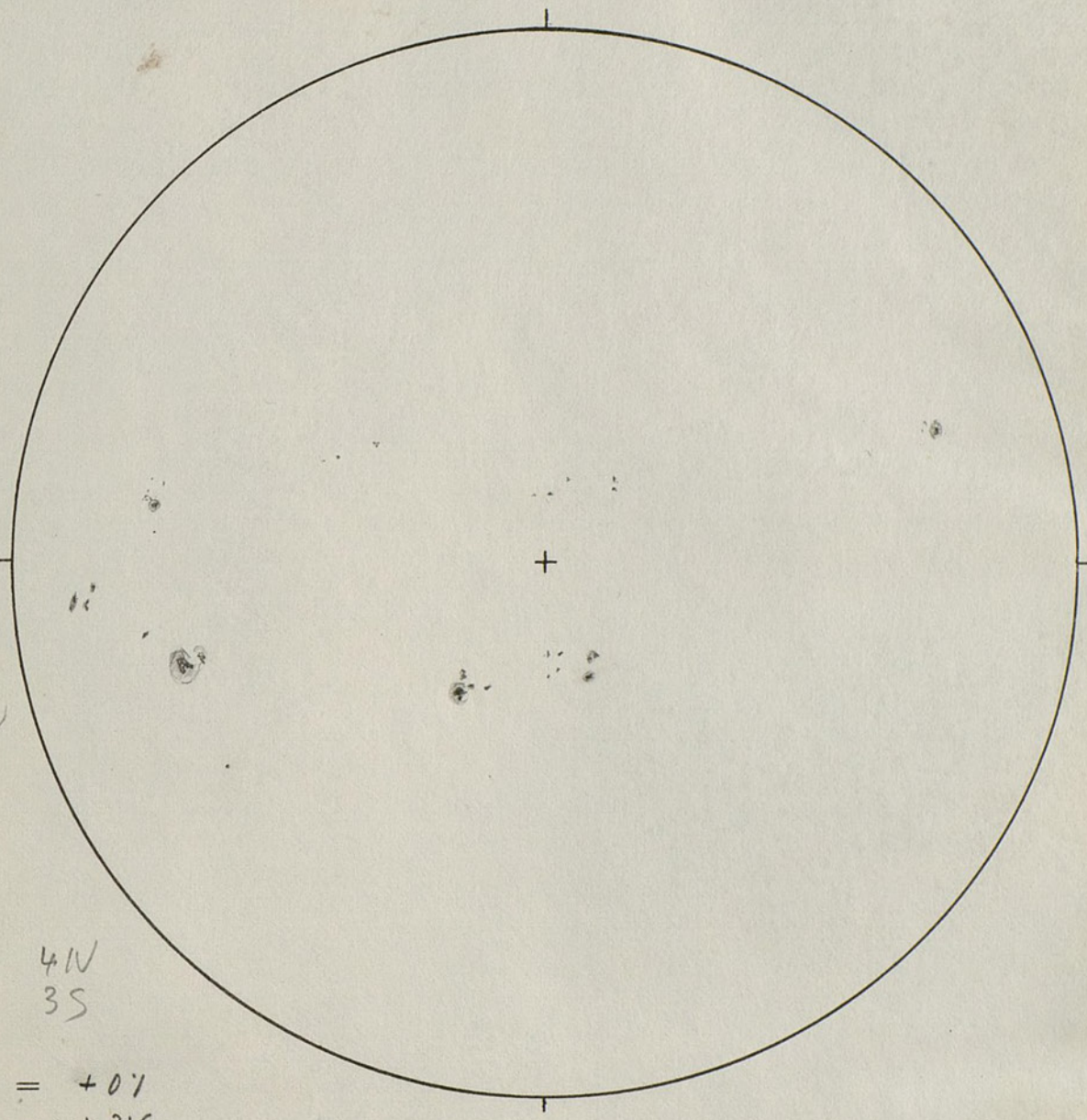
CONDITIONS: mod.

N

W

E

S



+85
48

-3
62

51
58

33
59

4N
3S

P = +0.1

Bo = +3.6

Lo = 314.7

NAME:

B.A.A. SOLAR SECTION

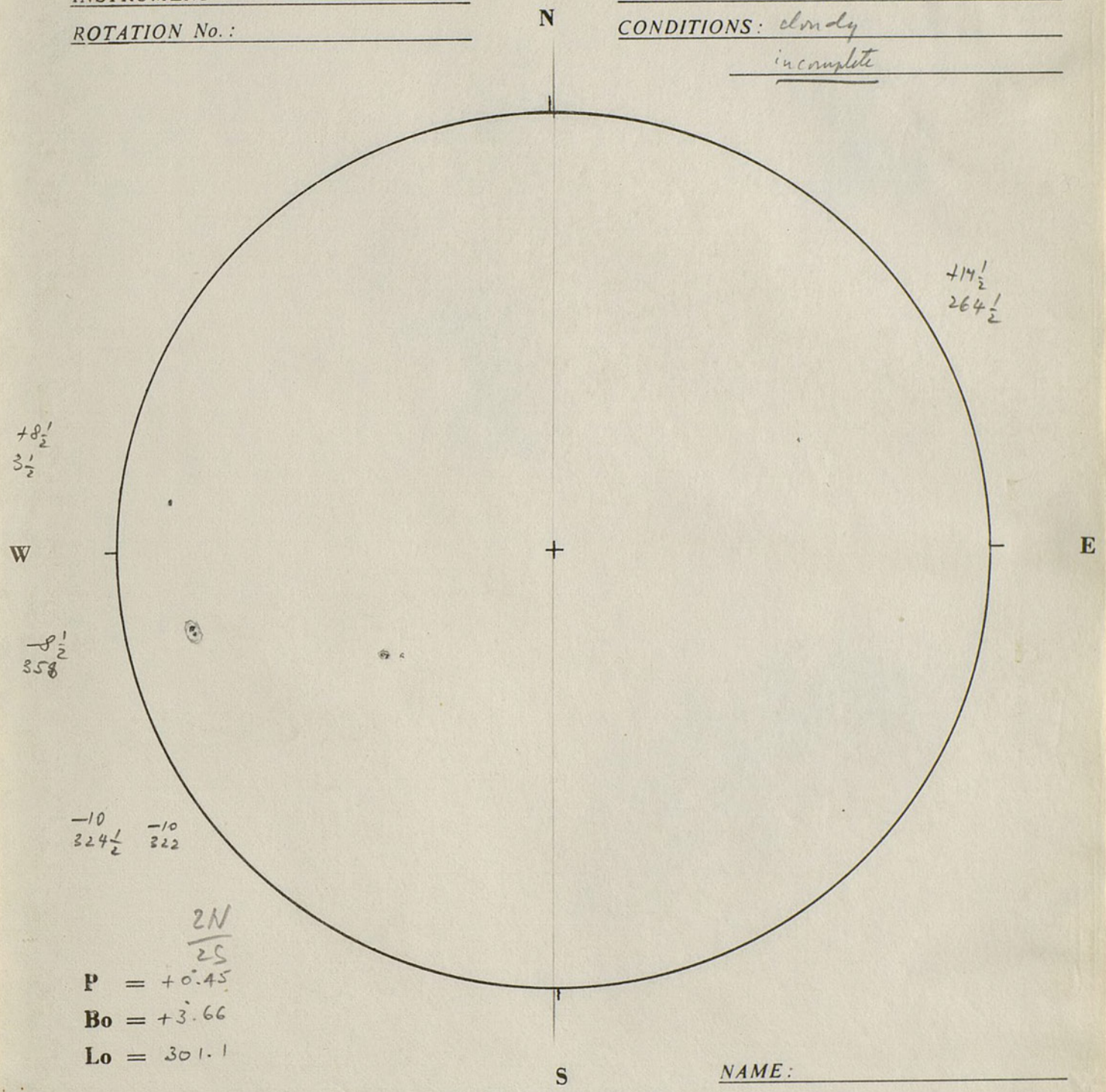
INSTRUMENT: 3"

ROTATION No.:

DATE: 8.7.70

U.T.: 8 h. 20 m.

CONDITIONS: cloudy
incomplete



2N
2S

P = +0°.45

Bo = +3°.66

Lo = 301.1

NAME:

B.A.A. SOLAR SECTION

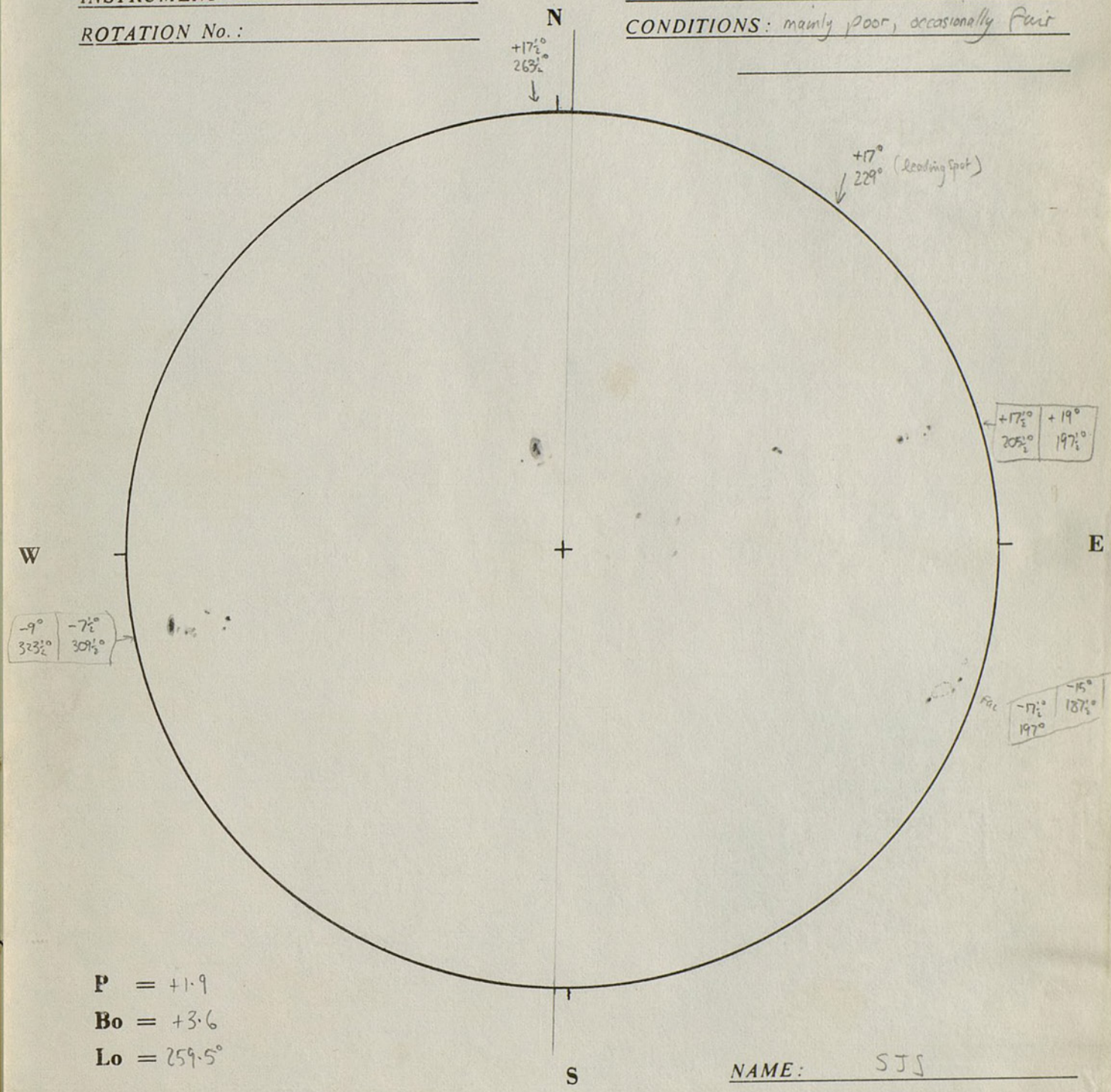
INSTRUMENT: 3"

ROTATION No.:

DATE: 11/7/70

U.T.: 11 h. 45 m.

CONDITIONS: mainly poor, occasionally fair



P = +1·9

Bo = +3·6

Lo = 259·5°

NAME: SJS

B.A.A. SOLAR SECTION

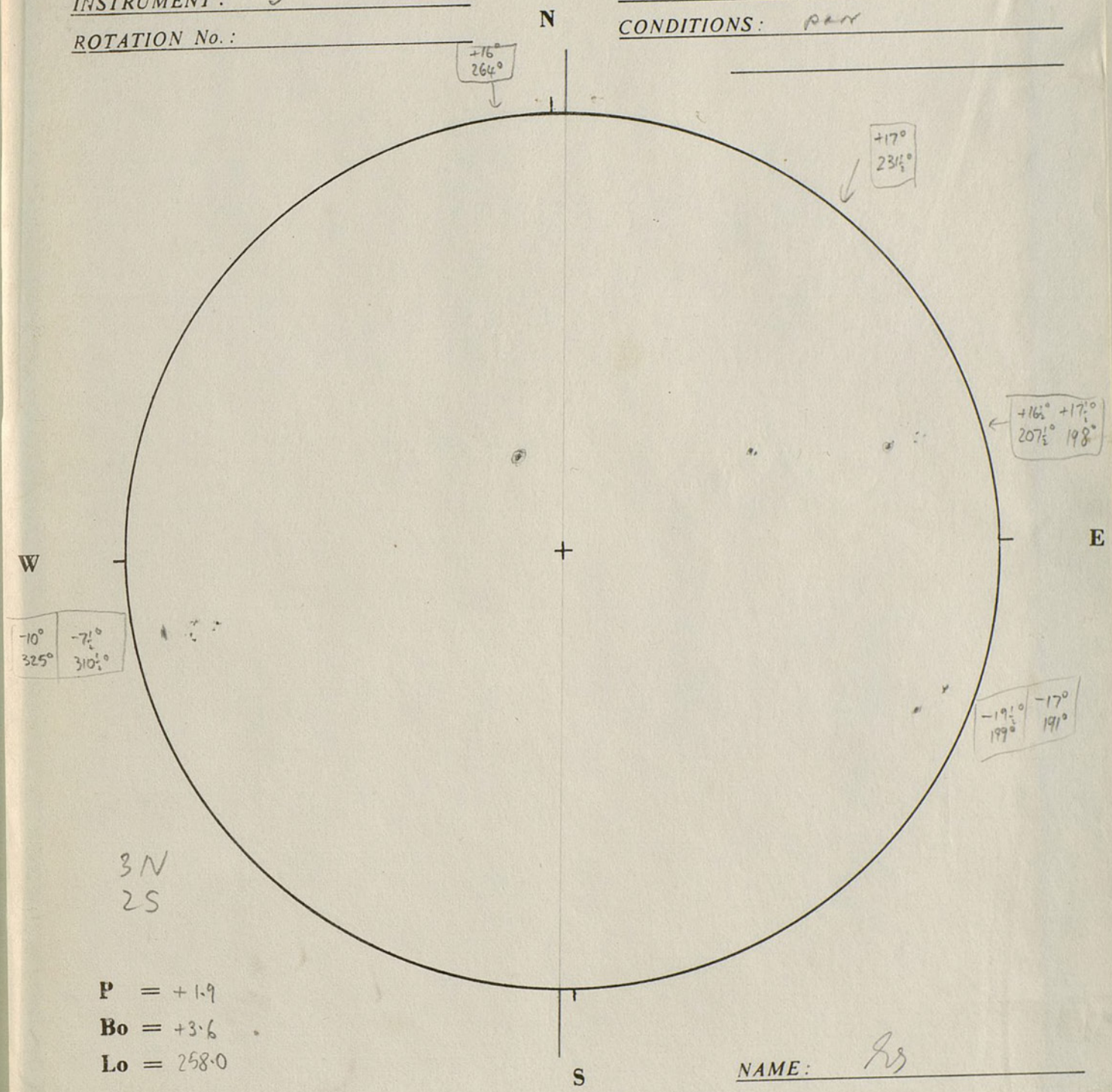
INSTRUMENT: 3"

ROTATION No.:

DATE: 11. 7. 70

U.T.: 14 h. 35 m.

CONDITIONS: poor



3N
2S

P = +1.9

Bo = +3.6

Lo = 258.0

NAME: RS