

12 METER MILLIMETER WAVE TELESCOPE

MEMO No. 229

TO: J. FINDLAY

FROM: L. KING

SUBJECT: RMS CALCULATIONS FOR 08/04/1983 SURVEY

The following table shows the surface RMS values of the two surveys dated 08/04/83 and 03/01/83:

| | | ① | ② | ① | - | ② |
|----------------|----------------|----------|----------|------|---|---|
| | | 08/01/83 | 03/01/83 | | | |
| RMS in microns | | data | data | | | |
| I | all | 248 | 85 | ---- | | I |
| I | as inner | 219 | 95 | ---- | | I |
| I | measured outer | 283 | 69 | ---- | | I |
| I | all | 104 | 79 | '70 | | I |
| I | best- inner | 124 | 86 | 87 | | I |
| I | fitted outer | 60 | 55 | 26 | | I |

The 08/04/83 survey data are plotted on p.2. At the first glance, it is completely different from that of the 03/01/83 data. However, there is a rigid body rotation* between these two survey data as shown on a plot of their differences, delW, ref. p.3.

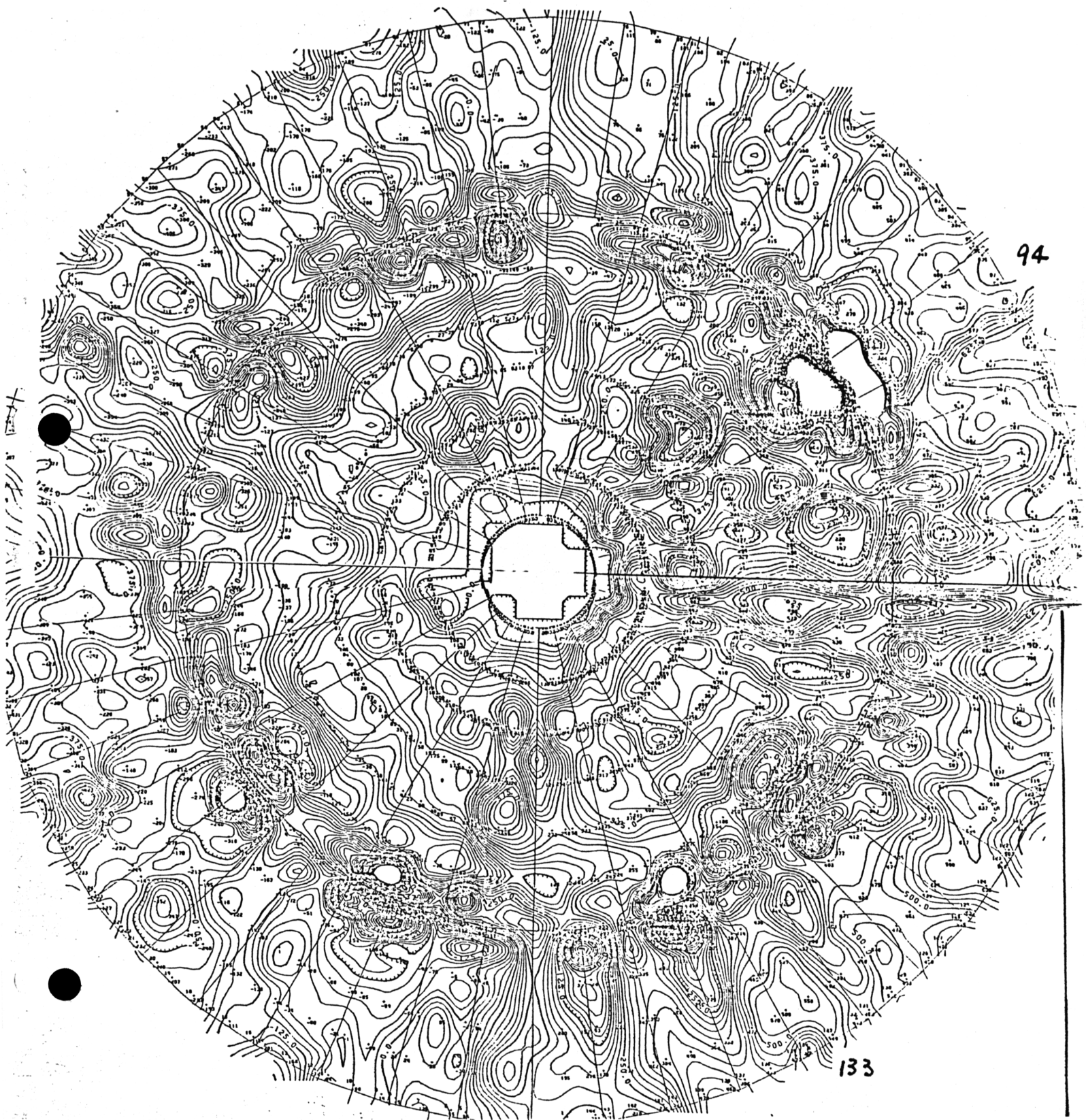
The best fitted deviations of the delW are given on pp. 4 & 5 for inner & outer rings, respectively.

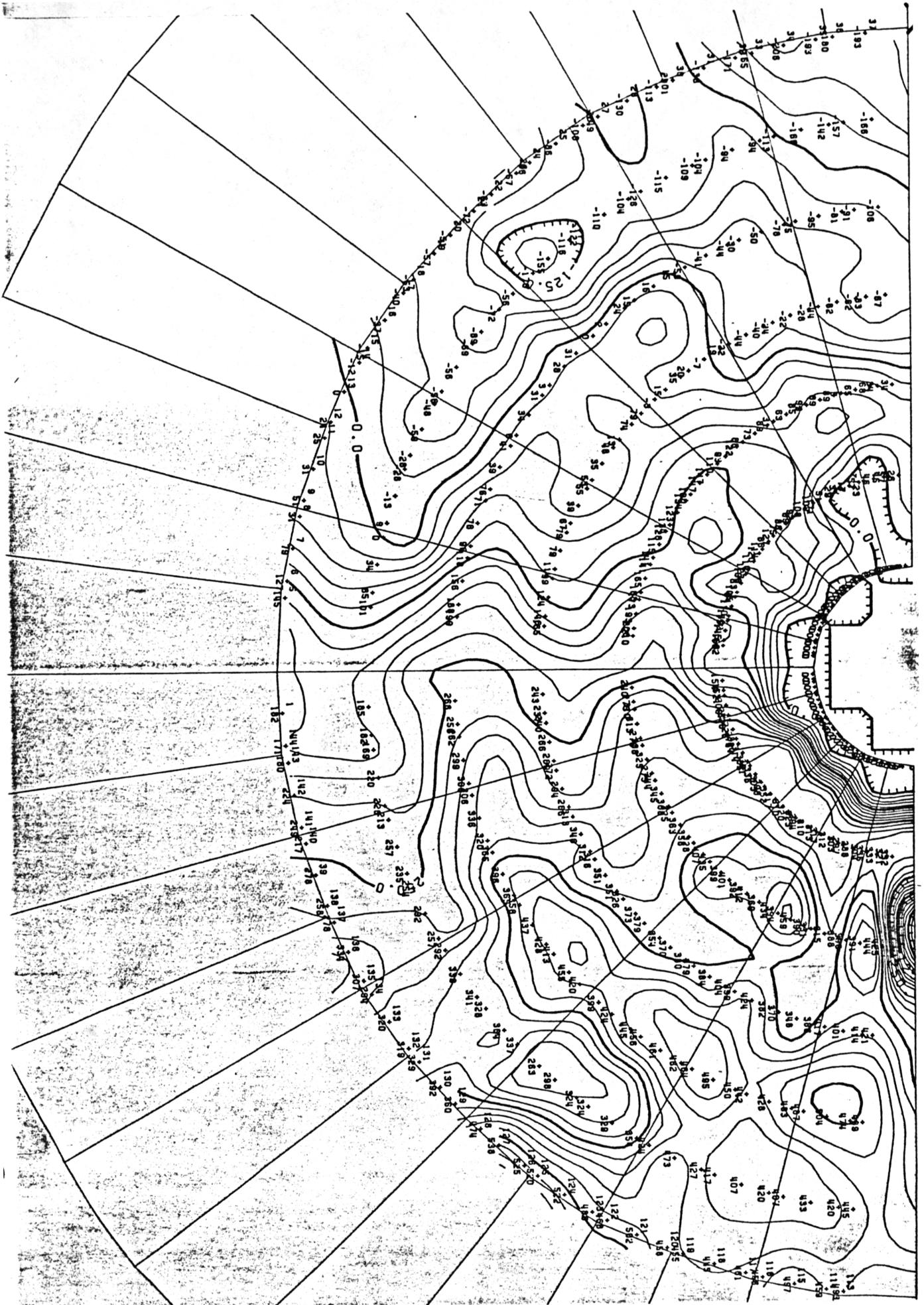
The discrepancy of the inner ring is due to the replacement of panel A12. The 26 microns RMS for the outer panels suggests that the surface is quite stable from March to August.

cc: Horne, Peery.

NOTE: * RHODES AND FINDLAY HAVE CORRECTED THE CENTER BALL OFFSET (~2.4 mm) WHICH CAUSED THIS ROTATION. 8/11/83 LK

12M SURF MEAS (08/04/83) DATA --- IN MICR



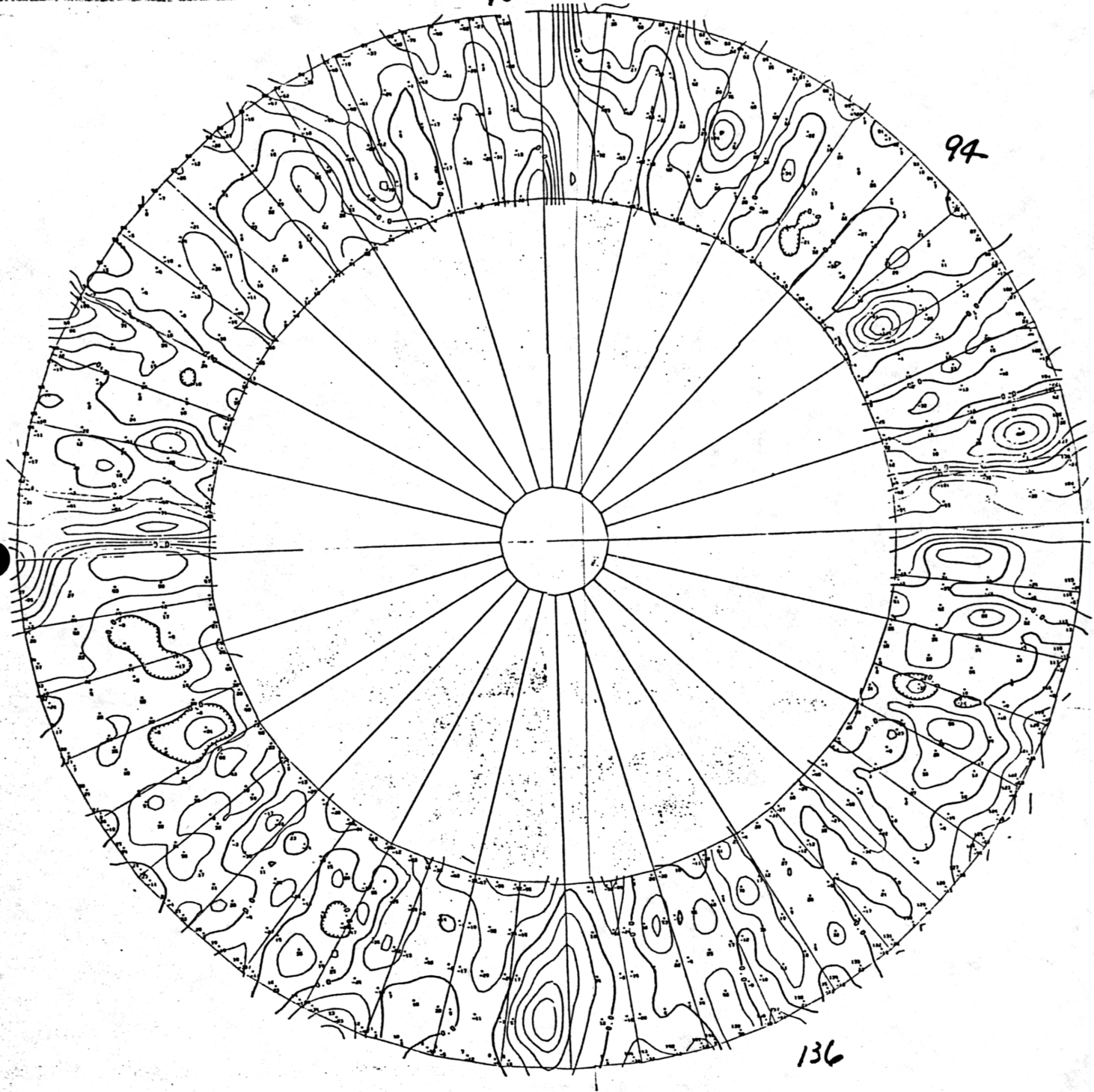


AS (08/04/83) - (03/01/83) OUTER PANELS BESTFI

73

94

136



P.5/5

