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N. F.

CATALOG OF MEASURED AND CALCULATED VALUES OF GEOMAGNETIC FIELD INTENSITY MODULUS ALONG  
ORBIT OF SATELLITE COSMOS-49

Part III

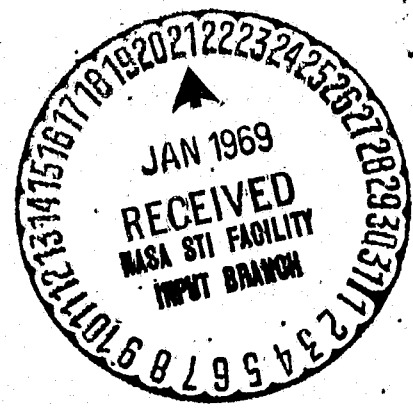
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## Explanation of Numerical Tables of Catalog

1. Ordinal number of measurement
2. Moscow time in hours and minutes. Moments of time rounded off to even minutes in correspondence with time scale of standard magnetograms (20 mm-60 min).
3. Height  $h$ , at which measurement was performed, in kilometers.
- 4-5. Geographical coordinates to  $0.01^\circ$ . North and south latitudes distinguished by sign, longitude, from Greenwich, always east.
6. Measured value of intensity modulus  $T$  in gammas.
7. Theoretical (calculated) values of intensity modulus in gammas.
8. Difference  $\Delta T = T_{\text{meas}} - T_{\text{theor}}$  in gammas.

For technical reasons, processing of the experimental material was done first for measurements made by the first instrument, then by the second. 360 measurements were put in the machine simultaneously. In order to simplify composition of the overall numeration of the catalog, the numbers were given in the following order: ~360 measurements by the first instrument, then ~360 measurements, covering the same interval of trajectory and time, by the second instrument. Subsequently, the next numbers were assigned for the next segment of the trajectory by the first instrument, etc. Changes of instruments and dates are indicated. The distribution of ordinal numbers by instruments is given before the numerical tables in each portion of the catalog.

Column 8 shows the difference between  $T_{\text{meas}}$  and  $T_{\text{theor}}$ . It was produced using values of  $T_{\text{meas}}$  and  $T_{\text{theor}}$  which had not been rounded off, and may differ by one gamma from the data produced directly from the catalog.

Table

## Distribution of Catalog Numbers by Dates and Instruments

| Instru-<br>ment 1: | Date        | Numbers of<br>points     | Time | Instru-<br>ment 11 | Date        | Point<br>numbers         | Time |
|--------------------|-------------|--------------------------|------|--------------------|-------------|--------------------------|------|
| 31.X-1.XI          | I2337-I2624 | I9 I2-01 46 <sup>m</sup> |      | 31.X-1.XI          | I2625-I2882 | I9 I2-01 46 <sup>m</sup> |      |
| I-XI               | I2883-I3147 | 01 38-08 12              |      | I-XI               | I3148-I3393 | 01 38-08 12              |      |
|                    | I3394-I3567 | 08 06-12 02              |      |                    | I3568-I3720 | 08 06-12 02              |      |
|                    | I3721-I3937 | I2 12-18 22              |      |                    | I3938-I4192 | I2 06-18 20              |      |
| I.XI-2.XI          | I4193-I4473 | I8 40-01 14              |      | I-2-XI             | I4475-I4744 | I8 40-01 14              |      |
| 2-XI               | I4745-I4947 | 01 14-07 48              |      | 2-XI               | I4948-I5114 | 01 14-07 48              |      |
|                    | I5115-I5353 | 07 48-14 20              |      |                    | I5354-I5592 | 07 50-14 22              |      |
|                    | I5593-I5795 | I4 26-20 58              |      |                    | I5796-I5991 | I4 22-20 58              |      |
| 2-3-XI             | I5992-I6240 | 20 58-03 30              |      | 2-3-XI             | I6241-I6491 | 20 58-03 30              |      |
| 3-XI               | I6492-I6684 | 03 30-10 04              |      | 3-XI               | I6685-I6883 | 03 03-10 02              |      |
|                    | I6884-I7126 | I0 04-16 38              |      |                    | I7127-I7394 | I0 08-16 38              |      |
|                    | I7395-I7439 | I6 38-17 48              |      |                    | I7440-I7489 | I6 38-17 48              |      |

| Point<br>num-<br>bers | Time<br>hr min | Height<br>in km | $\varphi^\circ$ | $\lambda^\circ$ | $T_{meas}^\circ$ | $T_{theor}^\circ$ | $\Delta T^\circ$ |
|-----------------------|----------------|-----------------|-----------------|-----------------|------------------|-------------------|------------------|
| 1                     | 2              | 3               | 4               | 5               | 6                | 7                 | 8                |

Instrument 1 31 October

o k I2337

337-343 No points in catalog

|     |       |       |        |        |       |       |      |
|-----|-------|-------|--------|--------|-------|-------|------|
| 344 | 19 20 | 430,2 | +16,71 | 89,47  | 34069 | 34126 | - 57 |
| 345 | 19 20 | 424,2 | +19,77 | 92,25  | 35220 | 35266 | - 46 |
| 346 | 19 22 | 417,9 | +22,78 | 95,16  | 36523 | 36574 | - 52 |
| 347 | 19 22 | 411,4 | +25,73 | 98,22  | 37993 | 37995 | - 3  |
| 348 | 19 24 | 404,6 | +28,60 | 101,44 | 39433 | 39460 | - 28 |
| 349 | 19 26 | 397,8 | +31,38 | 104,87 | 40895 | 40891 | + 3  |
| 350 | 19 30 | 369,0 | +41,20 | 121,15 | 44716 | 44857 | -141 |
| 351 | 19 30 | 361,7 | +43,21 | 125,99 | 44967 | 45161 | -195 |
| 352 | 19 32 | 354,3 | +44,97 | 131,16 | 44930 | 45161 | -231 |
| 353 | 19 32 | 347,0 | +46,46 | 136,67 | 44635 | 44879 | -145 |
| 354 | 19 34 | 339,8 | +47,65 | 142,47 | 44147 | 44363 | -217 |