

# 目 录

1995 年 12 月

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# 《太阳地球物理资料》各表表头内容说明

注:各表按目录顺序依次说明,若各表内容有相同的则只作一次说明。

## 太阳黑子相对数与面积数表

|                    |                                                        |                 |                                                                                                               |
|--------------------|--------------------------------------------------------|-----------------|---------------------------------------------------------------------------------------------------------------|
| Day:               | 每天观测日期                                                 | E':             | 预报误差                                                                                                          |
| Gro:               | 每天在日面上的黑子群总数                                           | H $\alpha$      | 太阳耀斑表                                                                                                         |
| Relative—Num—bers: | 每天的黑子相对数值                                              | Sta:            | 台站                                                                                                            |
| N. H.:             | 每天北半球的黑子相对数                                            | Start (UT):     | 耀斑开始时间(UT 为世界时,其中“E”为小于此时间。)                                                                                  |
| S. H.:             | 每天南半球的黑子相对数                                            | Max (UT):       | 耀斑的极大时间(“U”为接近此时间,不确定。)                                                                                       |
| Sum:               | 南、北半球黑子相对数的总和                                          | End (UT):       | 耀斑的结束时间(“D”为大于此时间。)                                                                                           |
| Sunspot Areas:     | 太阳黑子面积数值                                               | Cen             | 日心距,即 $r/R$ 。                                                                                                 |
| Drawing:           | 手描的                                                    | Dist:           |                                                                                                               |
| Photographic:      | 照相的                                                    | Area            | 耀斑极大时的面积(Sd 为视面积,单位为太阳圆面积的                                                                                    |
| N. H.:             | 每天北半球黑子面积                                              | Measurement     | $10^{-8}$ ; Sq 为校正面积,以平方度为单位。)                                                                                |
| S. H.:             | 每天南半球黑子面积                                              | Appar Corr      |                                                                                                               |
| Sum:               | 南、北半球黑子面积的总和                                           | (sd) (sq):      |                                                                                                               |
| 太阳黑子观测表            |                                                        | Imp:            | 耀斑的级别                                                                                                         |
| Group:             | 在日面上的黑子群号                                              | Obs             | 耀斑资料类型                                                                                                        |
| CMP                | 黑子群过日面中心经圈日期,                                          | Type:           |                                                                                                               |
| Mo—Day:            | 用月—日表示。                                                | A. R.:          | 耀斑所在活动区的黑子群号                                                                                                  |
| Lat:               | 黑子群在日面上的纬度                                             | Rem:            | 备注(记录耀斑发生时的形态)                                                                                                |
| L:                 | 黑子群在日面上的卡林顿经度                                          |                 |                                                                                                               |
| CMD:               | 黑子群在日面上的中经距                                            | H $\alpha$      | 耀斑巡视时间表                                                                                                       |
| Type:              | 黑子群的 McIntosh 类型                                       | From:           | 耀斑照相巡视开始时间                                                                                                    |
| r/R:               | 黑子群在日面上的日心距(以太阳半径为 1)                                  | To:             | 耀斑照相巡视的结束时间                                                                                                   |
| Corre. Area Sd     | 黑子群在日面上所占的面积                                           | 太阳活动区磁场和速度场的观测表 |                                                                                                               |
| whole Max:         | (Sd 为视面积,Whole 为校正后的全群面积,Max 为校正后的最大黑子的面积。)            | L $_0$ :        | 每天的日面中心经度                                                                                                     |
| See:               | 观测时大气视宁静度                                              | Huairou         | 北京天文台怀柔观测站的                                                                                                   |
| Remarks:           | 备注(空白表示云南天文台的观测资料,注明 PLAT 的为北京天文馆资料,PURP 为南京紫金山天文台资料。) | Region:         | 活动区编号                                                                                                         |
|                    |                                                        | Data:           | 取得的磁场资料类型                                                                                                     |
|                    |                                                        | 太阳射电辐射流量表       |                                                                                                               |
|                    |                                                        | BEIJ            | 每天的太阳在 2840 MHz 的                                                                                             |
|                    |                                                        | 2840:           | 流量密度(北台 0400 UT 测量,以 $10^{-22} \cdot \text{瓦} \cdot \text{米}^{-2} \cdot \text{赫}^{-1}(\text{s. f. u.})$ 为单位。) |
|                    |                                                        | PURP            | 每天的太阳在 2700 MHz 的                                                                                             |
|                    |                                                        | 2700:           | 流量密度(紫台 0400 UT 测)                                                                                            |

## 太阳黑子相对数的平滑值预报表

|       |              |  |  |
|-------|--------------|--|--|
| Time: | 预报的时间        |  |  |
| R':   | 月平滑黑子相对数的预报值 |  |  |

URUM 每天的太阳在 9375 MHz 的  
 9375 : 流量密度(乌站 0500 UT 测)  
 YUNN 每天的太阳在 2840 MHz 的  
 2840 : 流量密度(云台 0500 UT 测)

#### 太阳射电辐射显著事件表

Freq: 观测频率  
 Type: 射电爆发的型别  
 Duration: 射电爆发的持续时间(以分钟为单位)  
 Flux Density: 射电爆发的流量密度  
 Peak: 射电爆发流量的峰值增值  
 Rel: 射电爆发峰值流量与爆发前流量之比  
 Mean: 流量密度的增值对时间求积分再除以爆发持续时间

#### 太阳射电辐射巡视时间表

BEIJ 北京天文台 2840 MHz 频率  
 From To 巡视时间  
 2840 :  
 PURP 紫金山天文台 2700 MHz 频率  
 From To 巡视时间  
 2700 :  
 URUM 新疆乌鲁木齐天文站频率为  
 From To 9375 MHz 巡视时间  
 9375 :  
 YUNN 云南天文台 2840 MHz 频率  
 From To 巡视时间  
 2840 :

#### 宇宙线强度表

这部分共有三个表和宇宙线强度图。其中第 1 个表是“中子堆数据表”,它给出的值是记数率与 1500 的差;第 2 个表是“ $\mu$  介子垂直分量表”它给出的值是记数率与 3000 的差;第 3 个表是“ $\mu$  介子数据表”,它列出的是相对强度与 1000 的差。这三个表的第一行数据是 1—24 小时。

详细说明请见每年第一期。

Explanation of data reports can be found in the first issue of the year.

Mean: 日均值  
 N: 记录的小时数  
 Day: 日期

最后四行是仪器全天工作天数的月平均日变化与相应的月均值的差。宇宙线强度图说明请参见每年第 1 期说明。

#### 突然电离层扰动(D 层)表

Imp: 级别(最小为 1—级,最大为 3+级。)  
 SPA: 相位突然异常  
 LF—SPA: 低频相位突然异常  
 VLF—SPA: 甚低频相位突然异常  
 LF—SFA: 低频场强突然异常  
 地磁活动指数 K 和  $A_K$  表  
 第一行: 以三小时为时段的 K 指数  
 Sum: 总和  
 $A_K$ :  $A_K$  指数

#### 磁暴表

Time of Magne— 磁暴时间  
 tic:  
 Begining: 开始时间  
 Ending: 终止时间  
 h: 小时  
 m: 分钟  
 Type: 类型  
 Sudden Com. 急始变幅  
 Amplitude  
 D' HnT ZnT:  
 Deg. of Acti.: 活动程度  
 Maximum Acti. 最大活动程度  
 on K-scale:  
 3 hour Int.: 三小时时段  
 K Index: K 指数  
 Maximum 最大幅度  
 Range  
 D' HnT ZnT:

# DAILY RELATIVE SUNSPOT NUMBERS AND SUNSPOT AREAS

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| Day  | Relative-Numbers |      |      |      | Sunspot Areas |      |      |              |      |     |
|------|------------------|------|------|------|---------------|------|------|--------------|------|-----|
|      | Gro.             | N.H. | S.H. | Sum  | Drawing       |      |      | Photographic |      |     |
|      |                  |      |      |      | N.H.          | S.H. | Sum  | N.H.         | S.H. | Sum |
| 1    | 2                | 11   | 7    | 18   | 30            | 2    | 32   |              |      |     |
| 2    | 2                | 10   | 7    | 17   | 20            | 3    | 23   |              |      |     |
| 3    | 2                | 8    | 7    | 15   | 35            | 70   | 105  |              |      |     |
| 4    | 2                | 8    | 7    | 15   | 13            | 82   | 95   |              |      |     |
| 5    | 2                | 8    | 7    | 15   | 9             | 89   | 98   |              |      |     |
| 6    | 1                | 0    | 10   | 10   | 0             | 63   | 63   |              |      |     |
| 7    | 1                | 0    | 9    | 9    | 0             | 121  | 121  |              |      |     |
| 8    | 1                | 0    | 8    | 8    | 0             | 103  | 103  |              |      |     |
| 9    | 2                | 0    | 17   | 17   | 0             | 107  | 107  |              |      |     |
| 10   | 2                | 0    | 18   | 18   | 0             | 109  | 109  |              |      |     |
| 11   | 2                | 0    | 17   | 17   | 0             | 102  | 102  |              |      |     |
| 12   | 1                | 0    | 12   | 12   | 0             | 136  | 136  |              |      |     |
| 13   | 1                | 0    | 11   | 11   | 0             | 87   | 87   |              |      |     |
| 14   | 1                | 0    | 8    | 8    | 0             | 87   | 87   |              |      |     |
| 15   | 1                | 0    | 7    | 7    | 0             | 70   | 70   |              |      |     |
| 16   | 0                | 0    | 0    | 0    | 0             | 0    | 0    |              |      |     |
| 17   | 0                | 0    | 0    | 0    | 0             | 0    | 0    |              |      |     |
| 18   | 0                | 0    | 0    | 0    | 0             | 0    | 0    |              |      |     |
| 19   | 0                | 0    | 0    | 0    | 0             | 0    | 0    |              |      |     |
| 20   | 1                | 0    | 7    | 7    | 0             | 5    | 5    |              |      |     |
| 21   | 1                | 0    | 8    | 8    | 0             | 14   | 14   |              |      |     |
| 22   | 1                | 0    | 9    | 9    | 0             | 6    | 6    |              |      |     |
| 23   | 1                | 0    | 7    | 7    | 0             | 2    | 2    |              |      |     |
| 24   | 0                | 0    | 0    | 0    | 0             | 0    | 0    |              |      |     |
| 25   | 0                | 0    | 0    | 0    | 0             | 0    | 0    |              |      |     |
| 26   | 4                | 16   | 16   | 32   | 25            | 7    | 32   |              |      |     |
| 27   | 4                | 23   | 12   | 35   | 55            | 8    | 63   |              |      |     |
| 28   | 3                | 14   | 9    | 23   | 31            | 9    | 40   |              |      |     |
| 29   | 3                | 16   | 8    | 24   | 28            | 5    | 33   |              |      |     |
| 30   | 2                | 15   | 0    | 15   | 13            | 0    | 13   |              |      |     |
| 31   | 1                | 9    | 0    | 9    | 5             | 0    | 5    |              |      |     |
| Mean |                  | 4.5  | 7.4  | 11.8 | 8.5           | 41.5 | 50.0 |              |      |     |

# DAILY SUNSPOT OBSERVATIONS

DECEMBER 1995

| Day   | Group | CMP     |     | Lat | L   | CMD | Type | r/R  | Sd  | Corre. Area |     | See | Remarks |
|-------|-------|---------|-----|-----|-----|-----|------|------|-----|-------------|-----|-----|---------|
|       |       | Mo-Day  |     |     |     |     |      |      |     | Whole       | Max |     |         |
| 1.03  | 142   | 11-30.6 |     | 8   | 265 | 6W  | CRI  | 0.15 | 59  | 30          | 21  | 0   |         |
|       | 144   | 11-29.2 |     | -6  | 284 | 24W | AXX  | 0.41 | 4   | 2           | 2   | 0   |         |
| 2.04  | 142   |         |     |     |     | 19W | CRO  | 0.34 | 38  | 20          | 16  | 0   |         |
|       | 144   |         |     |     |     | 38W | AXX  | 0.62 | 4   | 3           | 3   | 0   |         |
| 3.06  | 142   |         |     |     |     | 33W | CRO  | 0.55 | 59  | 35          | 33  | 0   |         |
|       | 145   | 12- 9.5 | -10 | 148 |     | 85E | HSX  | 0.99 | 21  | 70          | 70  | 0   |         |
| 4.08  | 142   |         |     |     |     | 47W | AXX  | 0.75 | 17  | 13          | 9   | 0   |         |
|       | 145   |         |     |     |     | 71E | HSX  | 0.94 | 55  | 82          | 82  | 0   |         |
| 5.17  | 142   |         |     |     |     | 62W | AXX  | 0.87 | 8   | 9           | 4   | 0   |         |
|       | 145   |         |     |     |     | 57E | HSX  | 0.84 | 97  | 89          | 89  | 0   |         |
| 6.06  | 145   |         |     |     |     | 45E | HSX  | 0.71 | 88  | 63          | 63  | 0   | PURP    |
| 7.34  | 145   |         |     |     |     | 27E | CSI  | 0.49 | 210 | 121         | 116 | 0   |         |
| 8.13  | 145   |         |     |     |     | 17E | CSO  | 0.34 | 193 | 103         | 101 | 0   |         |
| 9.17  | 145   |         |     |     |     | 4E  | CSO  | 0.20 | 202 | 103         | 99  | 0   |         |
|       | 146   | 12- 8.9 | -19 | 156 |     | 4W  | AXX  | 0.34 | 8   | 4           | 2   | 0   |         |
| 10.10 | 145   |         |     |     |     | 9W  | CSO  | 0.24 | 189 | 98          | 95  | 0   |         |
|       | 146   |         |     |     |     | 16W | BXI  | 0.40 | 21  | 11          | 9   | 0   |         |
| 11.10 | 145   |         |     |     |     | 21W | CSO  | 0.40 | 172 | 94          | 92  | 0   |         |
|       | 146   |         |     |     |     | 29W | BXO  | 0.56 | 13  | 8           | 5   | 0   |         |
| 12.03 | 145   |         |     |     |     | 33W | DSI  | 0.57 | 223 | 136         | 103 | 0   |         |
| 13.04 | 145   |         |     |     |     | 47W | CSI  | 0.74 | 118 | 87          | 78  | 0   |         |
| 14.04 | 145   |         |     |     |     | 60W | CSO  | 0.86 | 88  | 87          | 83  | 0   |         |
| 15.05 | 145   |         |     |     |     | 73W | HSX  | 0.95 | 42  | 70          | 70  | 0   |         |
| 16.08 | 0     |         |     |     |     |     |      |      |     |             |     |     |         |

# DAILY SUNSPOT OBSERVATIONS

DECEMBER 1995

| Day   | Group | CMP     |     | L   | CMD | Type | r/R  | Sd | Corre. Area |     | See | Remarks |
|-------|-------|---------|-----|-----|-----|------|------|----|-------------|-----|-----|---------|
|       |       | Mo-Day  | Lat |     |     |      |      |    | Whole       | Max |     |         |
| 17.06 | 0     |         |     |     |     |      |      |    |             |     |     |         |
| 18.04 | 0     |         |     |     |     |      |      |    |             |     |     |         |
| 19.08 | 0     |         |     |     |     |      |      |    |             |     |     |         |
| 20.10 | 147   | 12-25.1 | -10 | 302 | 68E | AXX  | 0.92 | 4  | 5           | 5   | 0   |         |
| 21.05 | 147   |         |     |     | 54E | HRX  | 0.80 | 17 | 14          | 11  | 0   |         |
| 22.04 | 147   |         |     |     | 41E | AXX  | 0.66 | 8  | 6           | 3   | 0   |         |
| 23.09 | 148   | 12-21.8 | -1  | 345 | 17W | AXX  | 0.29 | 4  | 2           | 2   | 0   |         |
| 24.24 | 0     |         |     |     |     |      |      |    |             |     |     |         |
| 25.06 | 0     |         |     |     |     |      |      |    |             |     |     |         |
| 26.24 | 149   | 12-27.0 | -11 | 277 | 10E | BXO  | 0.23 | 8  | 4           | 2   | 0   |         |
|       | 150   | 12-28.8 | 6   | 254 | 32E | BXO  | 0.54 | 8  | 5           | 2   | 0   | PLAT    |
|       | 151   | 12-28.9 | -6  | 252 | 35E | AXX  | 0.57 | 4  | 3           | 3   | 0   |         |
|       | 152   | 12-31.9 | 11  | 213 | 77E | AXX  | 0.98 | 8  | 20          | 10  | 0   |         |
|       |       |         |     |     |     |      |      |    |             |     |     |         |
| 27.08 | 149   |         |     |     | 1W  | BXI  | 0.14 | 17 | 8           | 4   | 0   |         |
|       | 150   |         |     |     | 22E | AXX  | 0.40 | 8  | 5           | 2   | 0   |         |
|       | 152   |         |     |     | 66E | AXX  | 0.92 | 8  | 11          | 5   | 0   |         |
|       | 153   | 1- 1.8  | 10  | 200 | 78E | HSX  | 0.98 | 17 | 39          | 39  | 0   |         |
| 28.18 | 149   |         |     |     | 15W | BXO  | 0.29 | 17 | 9           | 7   | 0   |         |
|       | 152   |         |     |     | 50E | AXX  | 0.77 | 4  | 3           | 3   | 0   |         |
|       | 153   |         |     |     | 63E | HSX  | 0.90 | 25 | 28          | 28  | 0   |         |
| 29.08 | 149   |         |     |     | 27W | BXO  | 0.47 | 8  | 5           | 2   | 0   |         |
|       | 152   |         |     |     | 38E | AXX  | 0.63 | 8  | 5           | 3   | 0   |         |
|       | 153   |         |     |     | 50E | HRX  | 0.77 | 29 | 23          | 20  | 0   |         |
| 30.07 | 152   |         |     |     | 24E | AXX  | 0.46 | 4  | 2           | 2   | 0   |         |
|       | 153   |         |     |     | 36E | HRX  | 0.61 | 17 | 11          | 8   | 0   |         |
| 31.10 | 153   |         |     |     | 22E | BXO  | 0.43 | 8  | 5           | 2   | 0   |         |

# INTERVALS OF H-ALPHA FLARE PATROL OBSERVATION

DECEMBER 1995

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| Day | From | To | From | To | From | To | From | To | From | To | From | To |
|-----|------|----|------|----|------|----|------|----|------|----|------|----|
|-----|------|----|------|----|------|----|------|----|------|----|------|----|

---

|    |     |     |     |     |  |  |  |  |  |  |  |  |
|----|-----|-----|-----|-----|--|--|--|--|--|--|--|--|
| 1  |     |     |     |     |  |  |  |  |  |  |  |  |
| 2  |     |     |     |     |  |  |  |  |  |  |  |  |
| 3  |     |     |     |     |  |  |  |  |  |  |  |  |
| 4  |     |     |     |     |  |  |  |  |  |  |  |  |
| 5  | 319 | 405 | 824 | 943 |  |  |  |  |  |  |  |  |
| 6  |     |     |     |     |  |  |  |  |  |  |  |  |
| 7  |     |     |     |     |  |  |  |  |  |  |  |  |
| 8  | 829 | 900 |     |     |  |  |  |  |  |  |  |  |
| 9  | 331 | 429 |     |     |  |  |  |  |  |  |  |  |
| 10 | 310 | 402 |     |     |  |  |  |  |  |  |  |  |
| 11 |     |     |     |     |  |  |  |  |  |  |  |  |
| 12 |     |     |     |     |  |  |  |  |  |  |  |  |
| 13 | 700 | 819 |     |     |  |  |  |  |  |  |  |  |
| 14 | 318 | 527 |     |     |  |  |  |  |  |  |  |  |
| 15 |     |     |     |     |  |  |  |  |  |  |  |  |
| 16 |     |     |     |     |  |  |  |  |  |  |  |  |
| 17 |     |     |     |     |  |  |  |  |  |  |  |  |
| 18 |     |     |     |     |  |  |  |  |  |  |  |  |
| 19 |     |     |     |     |  |  |  |  |  |  |  |  |
| 20 |     |     |     |     |  |  |  |  |  |  |  |  |
| 21 |     |     |     |     |  |  |  |  |  |  |  |  |
| 22 |     |     |     |     |  |  |  |  |  |  |  |  |
| 23 |     |     |     |     |  |  |  |  |  |  |  |  |
| 24 | 337 | 400 | 838 | 926 |  |  |  |  |  |  |  |  |
| 25 | 825 | 844 |     |     |  |  |  |  |  |  |  |  |
| 26 | 311 | 400 | 842 | 921 |  |  |  |  |  |  |  |  |
| 27 | 316 | 401 | 835 | 923 |  |  |  |  |  |  |  |  |
| 28 | 716 | 840 |     |     |  |  |  |  |  |  |  |  |
| 29 | 839 | 928 |     |     |  |  |  |  |  |  |  |  |
| 30 | 848 | 937 |     |     |  |  |  |  |  |  |  |  |
| 31 | 842 | 931 |     |     |  |  |  |  |  |  |  |  |

Combined reports from the observatories listed below:

URUM

# OBSERVATION OF MAGNETIC AND VELOCITY FIELDS OF SOLAR ACTIVE REGIONS

DECEMBER 1995

HUAIROU ST. BEIJING OBS.

| Day | L0    | Huairou<br>Region | Lat | L   | Data                             |
|-----|-------|-------------------|-----|-----|----------------------------------|
| 1   | 259.9 | 70                | 8   | 262 | S5 L5                            |
| 2   | 246.7 | 70                |     |     | S4 L4 D4 V4 S5 L5 D5 V5 T5 Q5 U5 |
| 3   | 233.5 | 70                |     |     | D4 V4 S5 L5 D5 V5 T5 Q5 U5       |
| 4   | 220.4 | 70                |     |     | S5 L5                            |
| 5   | 207.2 | 70                |     |     | S5 L5                            |
|     |       | 71                | -9  | 152 | S4 L4 D4 V4 S5 L5 D5 V5 U5       |
| 6   | 194.0 | 71                |     |     | S4 L4 D4 V4 S5 L5 D5 V5 T5 Q5 U5 |
| 7   | 180.8 | 71                |     |     | S4 L4 D4 V4 S5 L5 D5 V5 T5 Q5 U5 |
| 8   | 167.6 | 71                |     |     | S4 L4 D4 V4 S5 L5 D5 V5 T5 Q5 U5 |
| 11  | 128.1 | 71                |     |     | S4 L4 D4 V4 S5 L5 D5 V5 T5 Q5 U5 |
|     |       | 72                | -18 | 157 | S4 L4 D4 V4 S5 L5 D5 V5 T5 Q5 U5 |
| 12  | 114.9 | 71                |     |     | S5 L5                            |
|     |       | 72                |     |     | S5 L5                            |
| 15  | 75.4  | 71                |     |     | S5 L5                            |
|     |       | 72                |     |     | S5 L5                            |
| 16  | 62.2  | 71                |     |     | L5                               |
|     |       | 72                |     |     | L5                               |
| 17  | 49.1  | 72                |     |     | L5                               |
| 18  | 35.9  | 72                |     |     | L5                               |
| 19  | 22.7  | 0                 |     |     |                                  |
| 20  | 9.5   | 0                 |     |     |                                  |
| 21  | 356.4 | 73                | -9  | 303 | S5 L5                            |
| 22  | 343.2 | 73                |     |     | S5 L5                            |

# OBSERVATION OF MAGNETIC AND VELOCITY FIELDS OF SOLAR ACTIVE REGIONS

DECEMBER 1995

HUAIROU ST. BEIJING OBS.

| Day | L0    | Huairou<br>Region | Lat | L     | Data  |
|-----|-------|-------------------|-----|-------|-------|
| 23  | 330.0 | 73                |     |       | S5 L5 |
| 24  | 316.8 | 0                 |     |       |       |
| 25  | 303.7 | 0                 |     |       |       |
| 27  | 277.3 | 74                | -9  | 278   | S5 L5 |
|     |       | 75                | 10  | (213) | S5 L5 |
| 28  | 264.2 | 74                |     |       | S5 L5 |
|     |       | 75                |     |       | S5 L5 |
| 29  | 251.0 | 75                |     |       | S5 L5 |
| 30  | 237.8 | 75                |     |       | S5 L5 |
| 31  | 224.6 | 75                |     |       | S5 L5 |

NPL SPL: 16 17 18 19

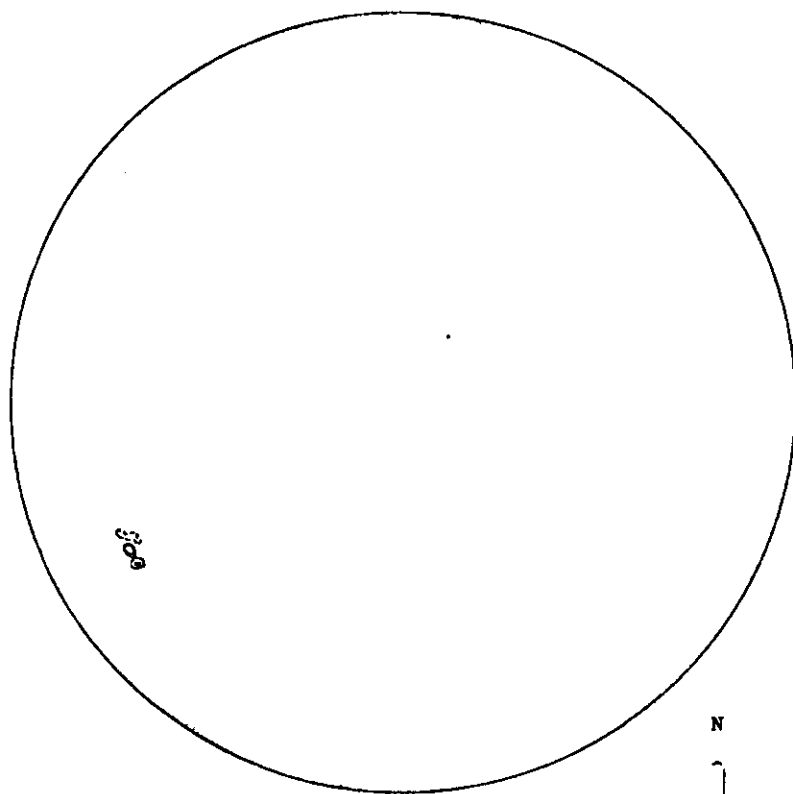
(No observed)

BC-2 p. 95. 7-2-77

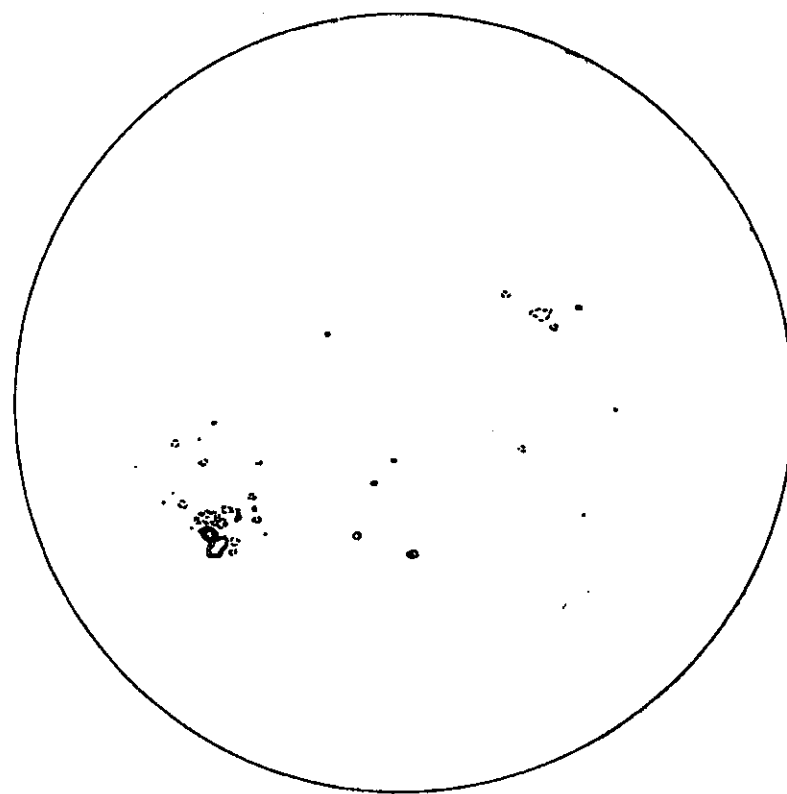
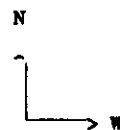
FULL DISK LONGITUDINAL  
MAGNETOGRAMS  
OF SOLAR PHOTOSPHERE  
HUAIROU ST. BEIJING OBS.

|               |       |        |
|---------------|-------|--------|
| N : —————     | 80.0  | 640.0  |
| S : - - - - - | 160.0 | 1280.0 |
| Lev. : Gauss  | 320.0 | 1920.0 |

8

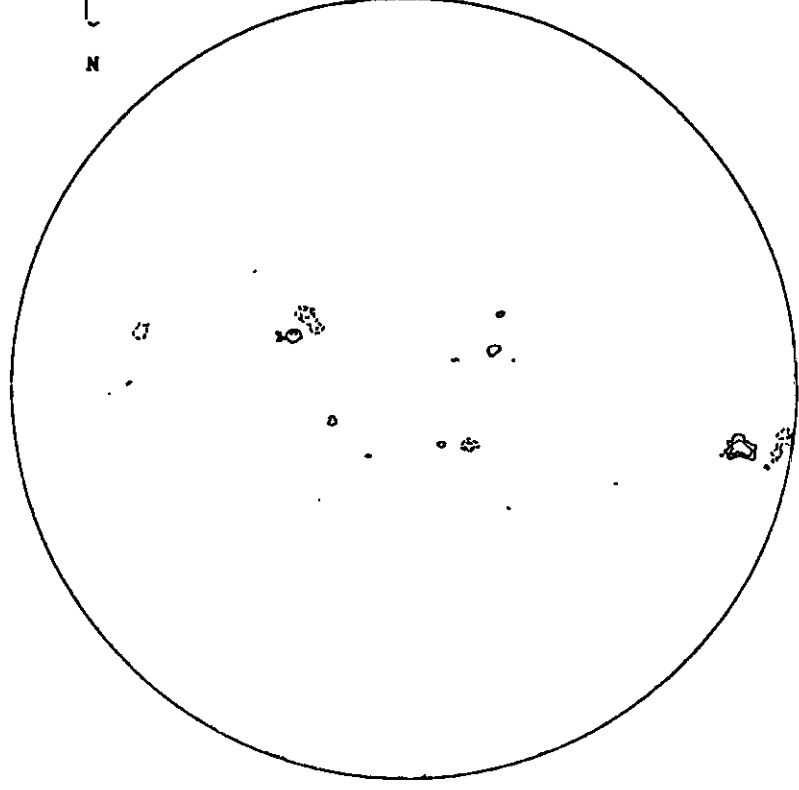


Time : Dec-08,1995 02:15:22



Time : Dec-07,1995 02:23:20

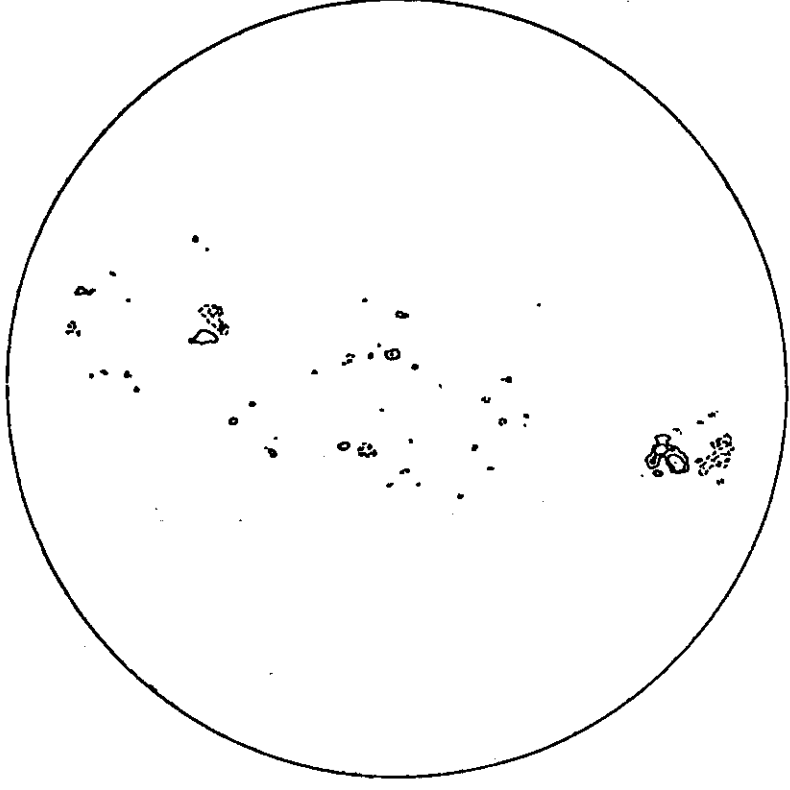
Time : Dec-28,1995 02:35:58



Lev. : Gauss  
S : -----  
N : -----

80.0      320.0  
160.0      1280.0  
640.0      1920.0

Time : Dec-29,1995 02:19:42



# SOLAR RADIO EMISSION FLUX

DECEMBER 1995

| Day  | BEIJ<br>2840 | PURP<br>2700 | URUM<br>9375 | YUNN<br>2840 |
|------|--------------|--------------|--------------|--------------|
| 1    | 74           | 69           |              |              |
| 2    | 71           | 69           |              |              |
| 3    | 71           | 68           |              |              |
| 4    | 71           | 70           |              |              |
| 5    | 75           | 70           |              |              |
| 6    | 71           | 70           |              |              |
| 7    | 73           | 70           |              |              |
| 8    | 71           | 71           |              |              |
| 9    | 67           | 70           |              |              |
| 10   | 71           | 72           |              |              |
| 11   | 72           | 72           |              |              |
| 12   | 73           | 71           |              |              |
| 13   | 69           | 71           |              |              |
| 14   | 72           | 71           |              |              |
| 15   | 70           | 68           |              |              |
| 16   | 74           | 62           |              |              |
| 17   | 65           | 65           |              |              |
| 18   | 66           | 66           |              |              |
| 19   | 63           | 70           |              |              |
| 20   | 71           | 71           |              |              |
| 21   | 70           | 70           |              |              |
| 22   | 67           | 71           |              |              |
| 23   | 72           | 71           |              |              |
| 24   | 70           | 70           |              |              |
| 25   | 71           | 68           |              |              |
| 26   | 71           | 71           |              |              |
| 27   | 72           | 72           |              |              |
| 28   |              | 71           |              |              |
| 29   | 72           | 72           |              |              |
| 30   | 75           | 74           |              |              |
| 31   | 74           | 73           |              |              |
| Mean | 70.8         | 70.0         |              |              |

# INTERVALS OF SOLAR RADIO EMISSION PATROL OBSERVATION

DECEMBER 1995

| Day | BEIJ |      | PURP |      | URUM |      | YUNN |      |
|-----|------|------|------|------|------|------|------|------|
|     | From | To   | From | To   | From | To   | From | To   |
|     |      | 2840 |      | 2700 |      | 9375 |      | 2840 |
| 1   | 0007 | 0845 | 0053 | 0810 |      |      |      |      |
|     | 2351 | 2400 |      |      |      |      |      |      |
| 2   | 0000 | 0836 | 0032 | 0800 |      |      |      |      |
| 3   | 0019 | 0828 | 0032 | 0810 |      |      |      |      |
|     | 2356 | 2400 |      |      |      |      |      |      |
| 4   | 0000 | 0836 | 0025 | 0810 |      |      |      |      |
|     | 2358 | 2400 |      |      |      |      |      |      |
| 5   | 0000 | 0827 | 0037 | 0805 |      |      |      |      |
| 6   | 0013 | 0745 | 0041 | 0810 |      |      |      |      |
|     | 2356 | 2400 |      |      |      |      |      |      |
| 7   | 0000 | 0831 | 0055 | 0810 |      |      |      |      |
| 8   | 0028 | 0817 | 0042 | 0808 |      |      |      |      |
| 9   | 0006 | 0817 | 0038 | 0811 |      |      |      |      |
| 10  | 0010 | 0815 | 0028 | 0808 |      |      |      |      |
|     | 2350 | 2400 |      |      |      |      |      |      |
| 11  | 0000 | 0830 | 0108 | 0806 |      |      |      |      |
| 12  | 0007 | 0825 | 0040 | 0800 |      |      |      |      |
| 13  | 0002 | 0829 | 0040 | 0640 |      |      |      |      |
| 14  | 0017 | 0830 | 0046 | 0800 |      |      |      |      |
| 15  | 0001 | 0833 | 0038 | 0800 |      |      |      |      |
| 16  | 0000 | 0826 | 0049 | 0800 |      |      |      |      |
|     | 2355 | 2400 |      |      |      |      |      |      |
| 17  | 0000 | 0837 | 0035 | 0800 |      |      |      |      |
| 18  | 0013 | 0740 | 0035 | 0800 |      |      |      |      |
| 19  | 0040 | 0828 | 0118 | 0810 |      |      |      |      |
| 20  | 0020 | 0833 | 0027 | 0811 |      |      |      |      |

# INTERVALS OF SOLAR RADIO EMISSION PATROL OBSERVATION

DECEMBER 1995

| Day | BEIJ |      | PURP |      | URUM |    | YUNN |    |
|-----|------|------|------|------|------|----|------|----|
|     | From | To   | From | To   | From | To | From | To |
|     | 2840 |      | 2700 |      | 9375 |    | 2840 |    |
| 21  | 0008 | 0828 | 0026 | 0810 |      |    |      |    |
| 22  | 0000 | 0844 | 0028 | 0810 |      |    |      |    |
|     | 2356 | 2400 |      |      |      |    |      |    |
| 23  | 0000 | 0833 | 0041 | 0810 |      |    |      |    |
| 24  | 0004 | 0834 | 0034 | 0814 |      |    |      |    |
| 25  | 0007 | 0750 | 0030 | 0810 |      |    |      |    |
| 26  | 0031 | 0836 | 0032 | 0810 |      |    |      |    |
|     | 2359 | 2400 |      |      |      |    |      |    |
| 27  | 0000 | 0838 | 0029 | 0810 |      |    |      |    |
| 28  | 2355 | 2400 | 0028 | 0810 |      |    |      |    |
| 29  | 0000 | 0841 | 0029 | 0810 |      |    |      |    |
| 30  | 0005 | 0835 | 0045 | 0745 |      |    |      |    |
| 31  | 0000 | 0838 | 0045 | 0745 |      |    |      |    |

COSMIC RAY NEUTRON INTENSITY  
Real Counts: 256 Times (Tabulated Counts Plus 1500)

DEC 1995

U.T. Hours at End of Interval

| Day | 1   | 2   | 3   | 4   | 5   | 6   | 7   | 8   | 9   | 10  | 11  | 12  | 13  | 14  | 15  | 16  | 17  | 18  | 19  | 20  | 21  | 22  | 23  | 24    | Mean  | $\sigma$ |    |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-------|-------|----------|----|
| 1   | 540 | 534 | 531 | 534 | 526 | 528 | 518 | 515 | 520 | 526 | 519 | 519 | 523 | 526 | 528 | 543 | 550 | 551 | 540 | 560 | 546 | 536 | 531 | 537   | 532.6 | 24       |    |
| 2   | 549 | 540 | 539 | 534 | 536 | 533 | 530 | 527 | 532 | 531 | 536 | 534 | 538 | 532 | 530 | 525 | 537 | 541 | 541 | 541 | 535 | 537 | 538 | 535.1 | 24    |          |    |
| 3   | 545 | 538 | 549 | 541 | 554 | 544 | 545 | 538 | 536 | 545 | 540 | 545 | 540 | 541 | 538 | 540 | 548 | 547 | 544 | 545 | 541 | 545 | 542 | 550   | 543.4 | 24       |    |
| 4   | 556 | 551 | 546 | 554 | 538 | 538 | 551 | 537 | 537 | 540 | 539 | 543 | 544 | 549 | 537 | 550 | 542 | 546 | 557 | 553 | 544 | 549 | 560 | 550   | 546.3 | 24       |    |
| 5   | 557 | 561 | 556 | 544 | 545 | 544 | 542 | 536 | 545 | 545 | 538 | 553 | 548 | 548 | 547 | 549 | 541 | 553 | 551 | 547 | 545 | 552 | 545 | 549   | 546.3 | 24       |    |
| 6   | 556 | 547 | 545 | 549 | 544 | 546 | 546 | 538 | 543 | 544 | 551 | 545 | 542 | 543 | 556 | 537 | 548 | 545 | 548 | 542 | 551 | 554 | 552 | 546   | 546.5 | 24       |    |
| 7   | 557 | 553 | 547 | 543 | 554 | 547 | 538 | 540 | 543 | 547 | 554 | 547 | 538 | 547 | 546 | 553 | 553 | 555 | 559 | 552 | 554 | 545 | 551 | 548   | 548.4 | 24       |    |
| 8   | 551 | 550 | 552 | 553 | 549 | 537 | 539 | 540 | 545 | 548 | 545 | 552 | 543 | 552 | 539 | 546 | 534 | 557 | 552 | 553 | 551 | 545 | 551 | 548   | 548.4 | 24       |    |
| 9   | 552 | 546 | 559 | 552 | 545 | 554 | 535 | 536 | 544 | 551 | 545 | 549 | 554 | 545 | 554 | 551 | 556 | 547 | 546 | 541 | 539 | 539 | 546 | 537   | 540   | 538.3    | 24 |
| 10  | 536 | 545 | 544 | 544 | 530 | 535 | 534 | 534 | 534 | 527 | 542 | 531 | 535 | 532 | 537 | 551 | 542 | 539 | 542 | 544 | 540 | 545 | 537 | 540   | 538.3 | 24       |    |
| 11  | 542 | 544 | 540 | 540 | 549 | 541 | 549 | 548 | 536 | 543 | 550 | 527 | 540 | 530 | 539 | 529 | 537 | 537 | 539 | 538 | 547 | 544 | 546 | 535   | 540.4 | 24       |    |
| 12  | 542 | 542 | 540 | 538 | 527 | 526 | 531 | 526 | 530 | 541 | 533 | 524 | 534 | 530 | 529 | 529 | 539 | 545 | 539 | 541 | 550 | 538 | 542 | 542   | 535.8 | 24       |    |
| 13  | 531 | 532 | 533 | 536 | 526 | 528 | 514 | 521 | 518 | 515 | 521 | 523 | 525 | 525 | 523 | 534 | 514 | 528 | 531 | 523 | 533 | 534 | 536 | 532   | 526.9 | 24       |    |
| 14  | 534 | 533 | 532 | 538 | 526 | 528 | 514 | 521 | 537 | 536 | 528 | 540 | 532 | 525 | 519 | 524 | 526 | 526 | 532 | 533 | 534 | 539 | 536 | 532.4 | 24    |          |    |
| 15  | 534 | 533 | 528 | 548 | 545 | 538 | 521 | 537 | 537 | 536 | 528 | 540 | 532 | 525 | 519 | 524 | 526 | 526 | 532 | 533 | 534 | 539 | 536 | 532.4 | 24    |          |    |
| 16  | 540 | 544 | 541 | 529 | 531 | 526 | 521 | 526 | 527 | 525 | 526 | 529 | 529 | 529 | 528 | 538 | 537 | 539 | 547 | 550 | 559 | 544 | 552 | 544   | 542.1 | 24       |    |
| 17  | 552 | 542 | 547 | 543 | 538 | 546 | 549 | 547 | 540 | 553 | 548 | 544 | 547 | 544 | 542 | 545 | 546 | 540 | 556 | 561 | 557 | 549 | 553 | 551   | 547.5 | 24       |    |
| 18  | 555 | 555 | 551 | 553 | 540 | 551 | 537 | 542 | 551 | 553 | 550 | 553 | 533 | 549 | 552 | 553 | 545 | 542 | 545 | 538 | 545 | 553 | 550 | 547.9 | 24    |          |    |
| 19  | 544 | 560 | 550 | 549 | 558 | 553 | 549 | 560 | 551 | 532 | 543 | 542 | 540 | 540 | 545 | 545 | 552 | 545 | 547 | 547 | 544 | 548 | 562 | 554   | 548.3 | 24       |    |
| 20  | 558 | 549 | 555 | 557 | 552 | 546 | 543 | 539 | 540 | 535 | 543 | 545 | 541 | 532 | 533 | 533 | 551 | 540 | 537 | 525 | 540 | 542 | 549 | 542.7 | 24    |          |    |
| 21  | 549 | 546 | 543 | 546 | 538 | 537 | 534 |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |       |       |          |    |
| 22  | 553 | 545 | 550 | 553 | 554 | 552 | 554 | 556 | 554 | 557 | 548 | 546 | 546 | 544 | 538 | 545 | 551 | 548 | 550 | 549 | 546 | 547 | 549 | 551   | 549.4 | 24       |    |
| 23  | 542 | 548 | 539 | 536 | 543 | 545 | 548 | 545 | 535 | 549 | 551 | 544 | 546 | 562 | 554 | 553 | 544 | 551 | 552 | 558 | 539 | 548 | 547 | 555   | 546.4 | 24       |    |
| 24  | 559 | 564 | 555 | 546 | 555 | 552 | 543 | 544 | 546 | 551 | 554 | 553 | 551 | 565 | 559 | 550 | 560 | 566 | 549 | 555 | 545 | 548 | 562 | 563   | 554.7 | 24       |    |
| 25  | 566 | 567 | 544 | 552 | 538 | 540 | 528 | 533 | 537 | 532 | 538 | 527 | 531 | 524 | 533 | 534 | 531 | 543 | 545 | 543 | 545 | 544 | 553 | 544   | 543   | 539.6    | 24 |
| 26  | 543 | 546 | 544 | 545 | 536 | 536 | 531 | 528 | 529 | 531 | 528 | 525 | 523 | 524 | 529 | 518 | 527 | 524 | 526 | 532 | 537 | 536 | 538 | 544   | 543   | 539.6    | 24 |
| 27  | 542 | 538 | 527 | 533 | 543 | 533 | 534 | 543 | 543 | 533 | 527 | 532 | 528 | 531 | 527 | 543 | 542 | 531 | 540 | 539 | 538 | 539 | 530 | 547   | 536.4 | 24       |    |
| 28  | 541 | 530 | 534 | 528 | 524 | 523 | 528 | 521 | 529 | 545 | 542 | 536 | 533 | 524 | 539 | 539 | 532 | 532 | 540 | 545 | 549 | 540 | 545 | 547   | 531.6 | 24       |    |
| 29  | 536 | 548 | 535 | 536 | 526 | 527 | 538 | 530 | 535 | 531 | 524 | 516 | 524 | 526 | 524 | 526 | 539 | 527 | 534 | 538 | 536 | 540 | 526 | 531.6 | 24    |          |    |
| 30  | 531 | 529 | 534 | 530 | 529 | 542 | 542 | 532 | 537 | 536 | 541 | 541 | 541 | 531 | 548 | 538 | 548 | 545 | 547 | 548 | 545 | 545 | 547 | 548   | 538.9 | 24       |    |
| 31  | 548 | 533 | 546 | 533 | 546 | 540 | 536 | 544 | 536 | 539 | 543 | 541 | 533 | 550 | 543 | 553 | 550 | 549 | 551 | 552 | 550 | 544 | 539 | 542   | 544.0 | 24       |    |

MONTHLY MEAN-DAILY VARIATION FOR 30 COMPLETE DAYS DEVIATIONS FROM AVERAGE:541.371

MONTHLY MEAN=541.375

(1-12) 6.26 3.70 1.60 1.30 -0.50 -1.50 -4.27 -4.74 -3.94 -1.87 -2.54 -3.17  
(13-24) -3.94 -2.90 -2.20 -0.67 0.60 1.40 2.20 3.33 2.46 2.73 3.70 3.00

HARMONIC COMPONENTS (ORDER, COS, SIN, AMPLITUDE, MAX.-HR)

U.T.=(1 3.58 -1.76 3.99 22.26) (2 0.57 0.21 0.60 0.69) (3 0.11 0.97 0.97 1.86) (4 0.04 -0.28 0.28 4.64)  
L.T.=(1 -0.27 3.98 3.99 6.26) (2 -0.10 -0.60 0.60 8.69) (3 0.11 0.97 0.97 1.86) (4 0.22 0.18 0.28 0.64)

# COSMIC RAY MESON INTENSITY VERTICAL COMPONENT

Real Counts: 128 Times (Tabulated Counts Plus 3000)

DEC 1995

U.T. Hours at End of Interval

| Day | 1   | 2   | 3   | 4   | 5   | 6   | 7   | 8   | 9   | 10  | 11  | 12  | 13  | 14  | 15  | 16  | 17  | 18  | 19  | 20  | 21  | 22  | 23  | 24    | Mean  | N     |    |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-------|-------|-------|----|
| 1   | 155 | 157 | 145 | 142 | 140 | 149 | 150 | 138 | 133 | 140 | 131 | 131 | 131 | 149 | 125 | 143 | 151 | 149 | 157 | 151 | 146 | 156 | 146 | 156   | 144.6 | 24    |    |
| 2   | 152 | 145 | 156 | 143 | 146 | 147 | 135 | 150 | 140 | 141 | 138 | 127 | 149 | 125 | 142 | 153 | 150 | 153 | 155 | 151 | 147 | 162 | 167 | 156   | 147.1 | 24    |    |
| 3   | 154 | 144 | 156 | 152 | 156 | 157 | 153 | 157 | 141 | 145 | 147 | 149 | 148 | 152 | 171 | 145 | 149 | 152 | 161 | 167 | 172 | 165 | 161 | 146   | 154.2 | 24    |    |
| 4   | 147 | 170 | 162 | 164 | 164 | 158 | 153 | 138 | 158 | 154 | 160 | 166 | 141 | 154 | 152 | 148 | 155 | 157 | 172 | 156 | 169 | 167 | 173 | 161   | 157.9 | 24    |    |
| 5   | 165 | 161 | 175 | 158 | 169 | 162 | 166 | 168 | 167 | 161 | 165 | 153 | 172 | 145 | 165 | 163 | 151 | 172 | 164 | 178 | 163 | 170 | 171 | 164.5 | 24    |       |    |
| 6   | 168 | 161 | 167 | 169 | 165 | 162 | 171 | 170 | 166 | 171 | 179 | 173 | 171 | 159 | 169 | 176 | 168 | 158 | 173 | 178 | 168 | 166 | 181 | 160   | 168.6 | 24    |    |
| 7   | 166 | 169 | 176 | 175 | 167 | 171 | 173 | 166 | 174 | 168 | 178 | 186 | 175 | 162 | 178 | 167 | 165 | 174 | 177 | 179 | 180 | 187 | 182 | 174.0 | 24    |       |    |
| 8   | 165 | 181 | 172 | 182 | 179 | 177 | 175 | 169 | 180 | 170 | 178 | 182 | 190 | 172 | 185 | 162 | 184 | 177 | 181 | 185 | 177 | 172 | 180 | 169   | 176.8 | 24    |    |
| 9   | 168 | 169 | 172 | 163 | 166 | 170 | 165 | 162 | 157 | 157 | 170 | 168 | 166 | 184 | 170 | 176 | 159 | 177 | 170 | 179 | 158 | 155 | 150 | 168   | 166.6 | 24    |    |
| 10  | 157 | 172 | 163 | 162 | 148 | 162 | 152 | 161 | 141 | 148 | 148 | 144 | 150 | 152 | 158 | 152 | 151 | 161 | 157 | 155 | 138 | 157 | 173 | 157   | 155.0 | 24    |    |
| 11  | 164 | 154 | 163 | 144 | 148 | 142 | 153 | 156 | 139 | 130 | 142 | 149 | 139 | 128 | 147 | 145 | 161 | 137 | 150 | 150 | 147 | 153 | 141 | 151   | 147.2 | 24    |    |
| 12  | 157 | 139 | 143 | 147 | 142 | 146 | 159 | 152 | 149 | 145 | 141 | 132 | 139 | 150 | 144 | 151 | 148 | 150 | 146 | 166 | 160 | 159 | 157 | 157   | 149.1 | 24    |    |
| 13  | 150 | 162 | 157 | 166 | 149 | 142 | 141 | 146 | 142 | 145 | 146 | 132 | 144 | 143 | 142 | 151 | 142 | 146 | 146 | 150 | 144 | 153 | 147 | 147   | 147.2 | 24    |    |
| 14  | 155 | 141 | 140 | 153 | 151 | 144 | 139 | 148 | 148 | 141 | 151 | 132 | 144 | 146 | 139 | 149 | 141 | 132 | 128 | 146 | 147 | 143 | 144 | 152   | 143.9 | 24    |    |
| 15  | 163 | 149 | 149 | 156 | 136 | 138 | 139 | 141 | 131 | 134 | 145 | 140 | 135 | 133 | 129 | 129 | 132 | 147 | 143 | 155 | 152 | 144 | 155 | 161   | 143.2 | 24    |    |
| 16  | 135 | 136 | 139 | 140 | 133 | 127 | 135 | 124 | 131 | 134 | 146 | 129 | 124 | 152 | 144 | 145 | 155 | 139 | 132 | 138 | 154 | 142 | 147 | 140   | 138.4 | 24    |    |
| 17  | 149 | 153 | 150 | 158 | 142 | 139 | 150 | 134 | 152 | 144 | 148 | 137 | 151 | 150 | 149 | 144 | 152 | 156 | 154 | 158 | 150 | 155 | 165 | 160   | 150.0 | 24    |    |
| 18  | 147 | 163 | 157 | 160 | 159 | 149 | 160 | 165 | 162 | 169 | 162 | 153 | 171 | 156 | 170 | 174 | 145 | 167 | 155 | 159 | 163 | 173 | 157 | 171   | 161.1 | 24    |    |
| 19  | 176 | 176 | 158 | 171 | 154 | 162 | 172 | 171 | 161 | 162 | 159 | 161 | 164 | 153 | 157 | 168 | 154 | 154 | 161 | 164 | 162 | 170 | 156 | 165   | 162.5 | 24    |    |
| 20  | 146 | 162 | 171 | 164 | 167 | 163 | 160 | 161 | 157 | 160 | 149 | 155 | 161 | 156 | 154 | 157 | 160 | 164 | 159 | 154 | 162 | 156 | 148 | 161   | 158.6 | 24    |    |
| 21  | 169 | 161 | 168 | 174 | 174 | 166 | 173 | 158 | 159 | 151 | 134 | 156 | 161 | 140 | 145 | 156 | 169 | 149 | 155 | 153 | 149 | 154 | 165 | 151   | 153.5 | 24    |    |
| 22  | 171 | 147 | 155 | 134 | 160 | 155 | 150 | 162 | 150 | 148 | 149 | 171 | 141 | 140 | 153 | 163 | 159 | 149 | 155 | 153 | 149 | 154 | 165 | 151   | 153.5 | 24    |    |
| 23  | 164 | 174 | 147 | 171 | 151 | 151 | 155 | 165 | 150 | 152 | 136 | 138 | 131 | 145 | 147 | 145 | 140 | 160 | 155 | 143 | 149 | 142 | 155 | 140   | 165   | 150.8 | 24 |
| 24  | 165 | 147 | 162 | 139 | 139 | 137 | 135 | 119 | 131 | 124 | 123 | 125 | 120 | 133 | 133 | 159 | 137 | 146 | 135 | 133 | 132 | 131 | 143 | 140   | 137.0 | 24    |    |
| 25  | 135 | 144 | 132 | 135 | 115 | 132 | 118 | 125 | 124 | 115 | 99  | 126 | 108 | 127 | 126 | 118 | 124 | 138 | 131 | 128 | 122 | 138 | 139 | 139   | 126.6 | 24    |    |
| 26  | 133 | 121 | 139 | 148 | 134 | 137 | 135 | 129 | 120 | 135 | 120 | 115 | 128 | 134 | 121 | 120 | 138 | 135 | 139 | 115 | 138 | 130 | 144 | 130   | 130.8 | 24    |    |
| 27  | 141 | 138 | 128 | 132 | 122 | 134 | 139 | 129 | 147 | 115 | 133 | 119 | 119 | 124 | 140 | 150 | 134 | 135 | 148 | 133 | 153 | 153 | 150 | 150   | 136.1 | 24    |    |
| 28  | 133 | 151 | 139 | 144 | 142 | 160 | 146 | 153 | 151 | 147 | 146 | 125 | 145 | 144 | 134 | 142 | 131 | 146 | 145 | 144 | 141 | 150 | 152 | 152   | 144.3 | 24    |    |
| 29  | 148 | 151 | 158 | 147 | 159 | 148 | 144 | 154 | 153 | 158 | 158 | 150 | 148 | 145 | 142 | 155 | 155 | 142 | 159 | 150 | 160 | 168 | 163 | 167   | 153.0 | 24    |    |
| 30  | 165 | 154 | 160 | 154 | 152 | 160 | 158 | 180 | 152 | 160 | 152 | 158 | 143 | 162 | 157 | 155 | 146 | 157 | 152 | 148 | 156 | 169 | 139 | 157   | 156.1 | 24    |    |
| 31  | 148 | 153 | 151 | 152 | 166 | 144 | 153 | 161 | 149 | 154 | 153 | 162 | 147 | 148 | 150 | 140 | 145 | 158 | 157 | 163 | 146 | 170 | 146 | 158   | 153.1 | 24    |    |

MONTHLY MEAN=152.001

MONTHLY MEAN DAILY VARIATION FOR 31 COMPLETE DAYS DEVIATIONS FROM AVERAGE:152.001

(1-12) 3.13 3.00 3.16 2.81 -0.87 -0.87 0.16 -0.49 -3.07 -4.84 -4.00 -5.65  
(13-24) -4.58 -4.42 -2.45 -0.52 -1.39 0.81 1.64 2.61 1.84 4.64 4.29 5.06

HARMONIC COMPONENTS (ORDER, COS, SIN, AMPLITUDE, MAX.-HR)

U.T.=((1 4.26 -0.82 4.34 23.27) (2 -0.37 -0.06 0.38 6.32) (3 0.53 -0.19 0.56 7.57) (4 -0.14 0.16 0.21 2.16)  
L.T.=((1 -1.42 4.10 4.34 7.27) (2 0.13 0.36 0.38 2.32) (3 0.53 -0.19 0.56 7.57) (4 -0.07 -0.19 0.21 4.16)

# COSMIC RAY MESON INTENSITY

Real Relative Intensity: 0.1% Times (Tabulated Value Plus 1000)

U.T. Hours at End of Interval

DEC 1995

[illegible]

MONTHLY MEAN DAILY VARIATION FOR 31 COMPLETE DAYS DEVIATIONS FROM AVERAGE: 42.577

(1-12)

|         |      |      |       |       |       |       |       |       |       |       |       |       |
|---------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| (1-12)  | 1.49 | 1.84 | 1.58  | 0.52  | -0.71 | -1.45 | -1.38 | -1.16 | -0.96 | -0.80 | -0.54 | -0.13 |
| (13-24) | 0.62 | 0.29 | -0.45 | -0.64 | -0.45 | -0.22 | 0.39  | 0.49  | 0.29  | 0.20  | 0.39  | 0.78  |

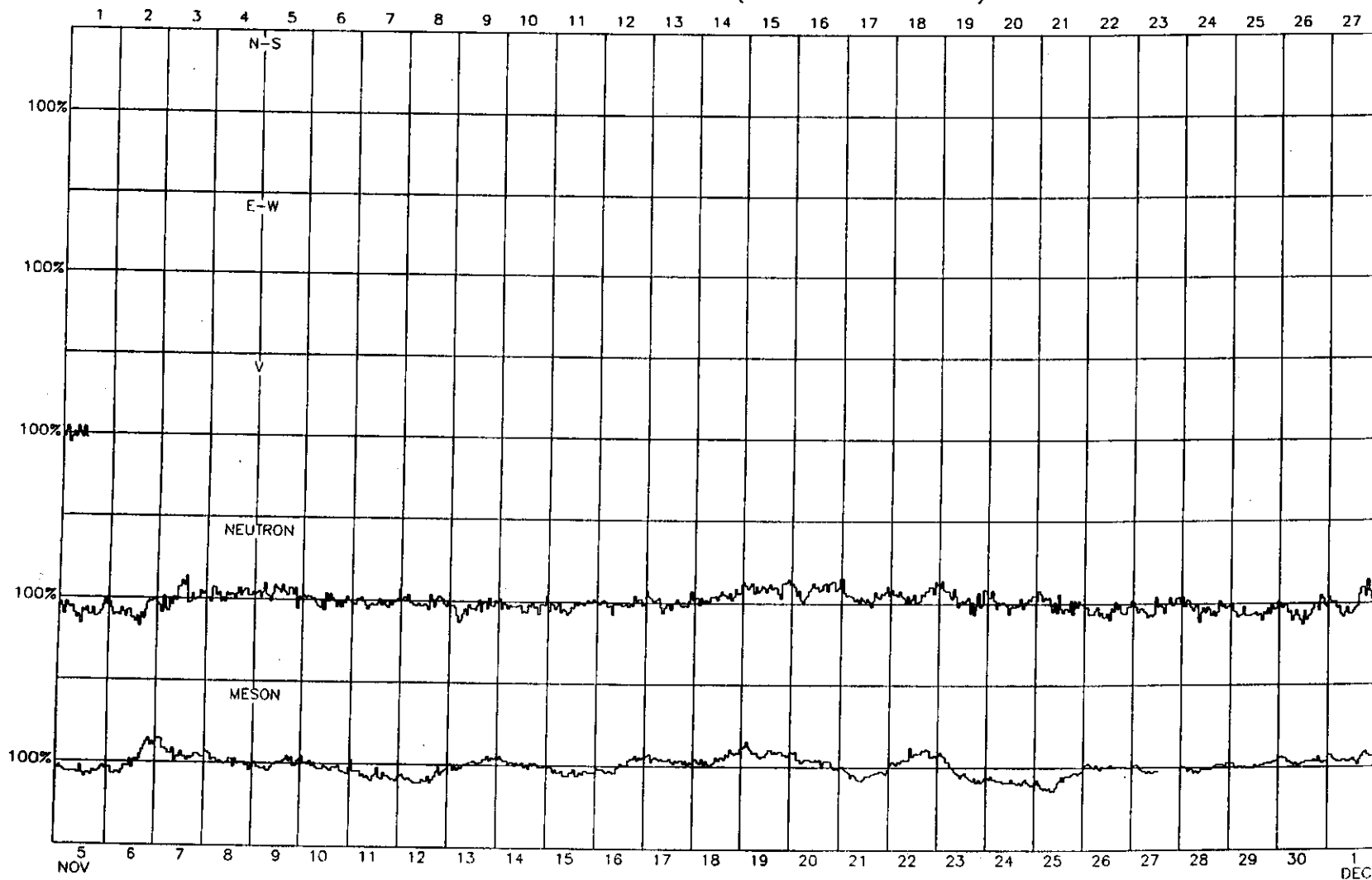
HARMONIC COMPONENTS (ORDER, COS, SIN, AMPLITUDE, MAX.-HN)

| U.T.=(1 | 0.71  | -0.33 | 0.78 | 22.34) | (2 | 0.69  | 0.31  | 0.75 | 0.80) | (3 | -0.19 | 0.41 | 0.46 | 2.55) | (4 | 0.03  | 0.37  | 0.37 | 1.43) |
|---------|-------|-------|------|--------|----|-------|-------|------|-------|----|-------|------|------|-------|----|-------|-------|------|-------|
| L.T.=(1 | -0.07 | 0.78  | 0.78 | 6.34)  | (2 | -0.08 | -0.75 | 0.75 | 8.80) | (3 | -0.19 | 0.41 | 0.46 | 2.55) | (4 | -0.33 | -0.16 | 0.37 | 3.43) |

# COSMIC RAY INDICES

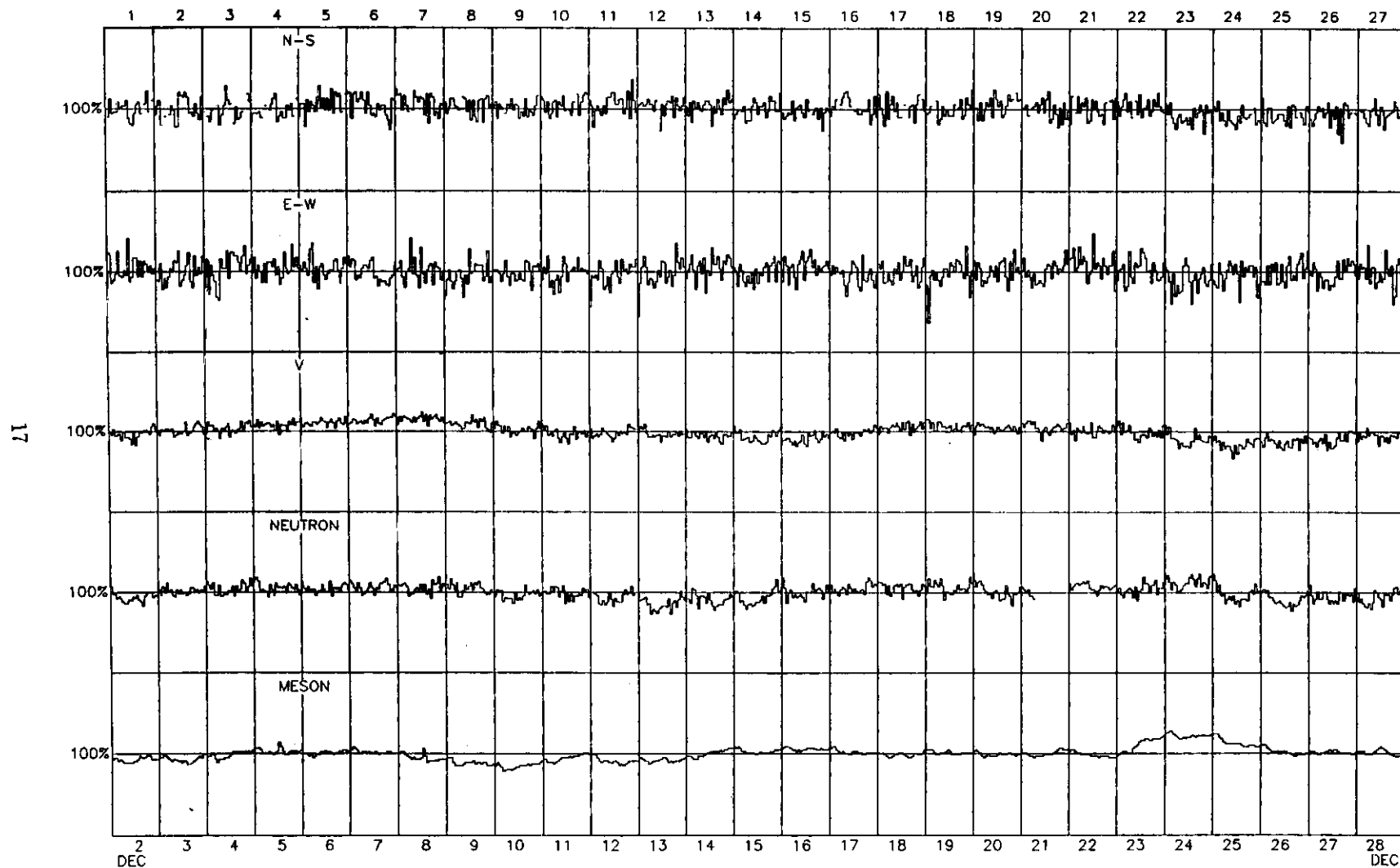
Bartels Rotation 2216 (NOV 1995–DEC 1995)

16



# COSMIC RAY INDICES

Bartels Rotation 2217(DEC 1995)



# SUDDEN IONOSPHERIC DISTURBANCES (D REGION)

DECEMBER 1995

| Day | Sta  | Start<br>(UT) | Max<br>(UT) | End<br>(UT) | Imp | SPA   |     | SFA<br>LF |
|-----|------|---------------|-------------|-------------|-----|-------|-----|-----------|
|     |      |               |             |             |     | LF    | VLF |           |
| 06  | LINT | 0420          | 0432        | 0450        | 1-  | - 0.5 |     | + 1.0     |
| 07  | LINT | 0410          | 0422        | 0510        | 1-  | - 0.4 |     | - 0.8     |
| 29  | LINT | 0736          | 0751        | 0950        | 3-  | - 6.4 |     | + 1.6     |

# GEOMAGNETIC ACTIVITY INDICES K AND A<sub>K</sub>

DECEMBER 1995

BGMO

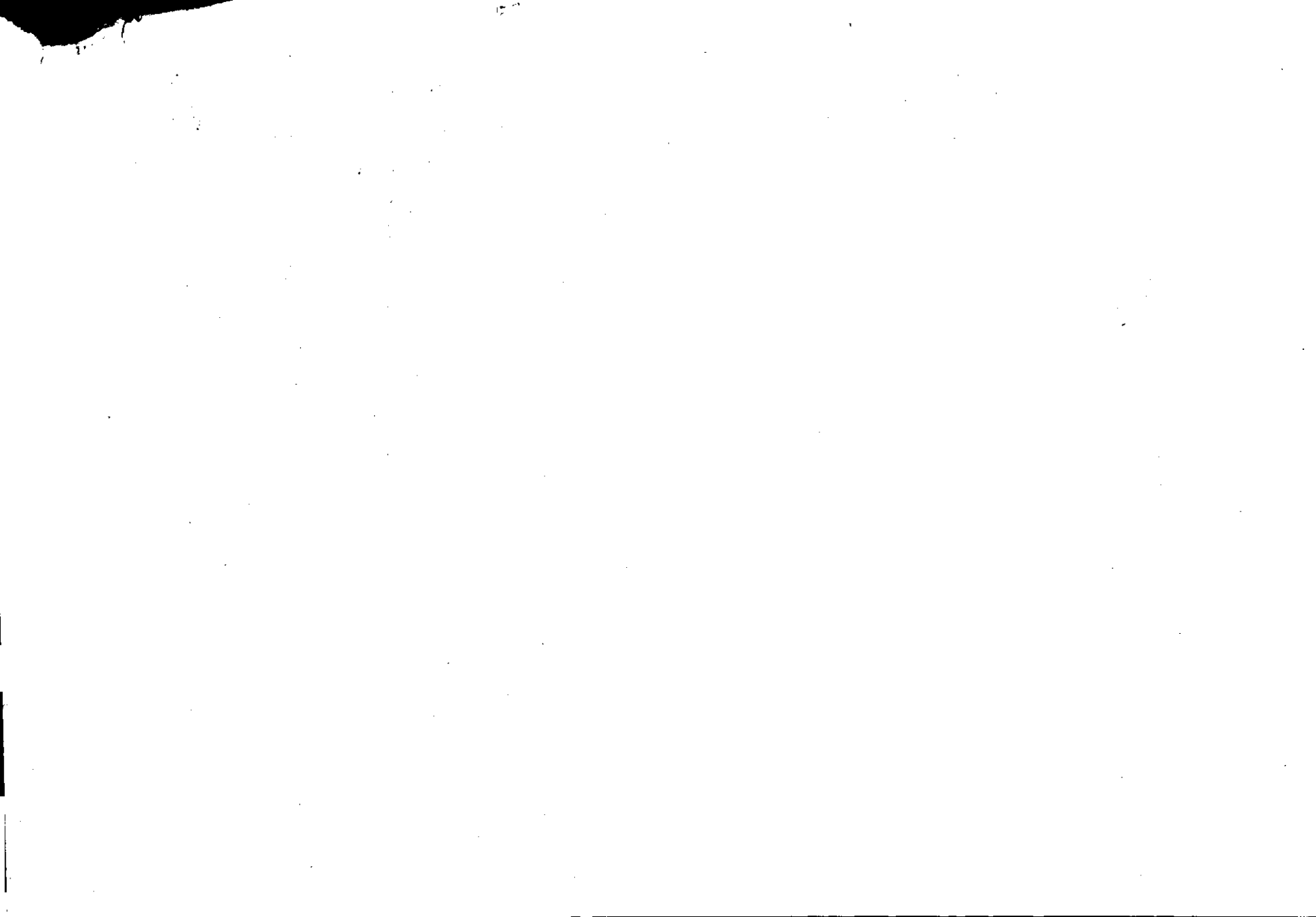
| Day  | Three-Hourly Indices K |     |     |      |       |       |       |       | Sum  | A <sub>K</sub> |
|------|------------------------|-----|-----|------|-------|-------|-------|-------|------|----------------|
|      | 0-3                    | 3-6 | 6-9 | 9-12 | 12-15 | 15-18 | 18-21 | 21-24 |      |                |
| 1 D  | 0                      | 2   | 1   | 3    | 5     | 5     | 4     | 2     | 22   | 19             |
| 2    | 3                      | 2   | 2   | 3    | 4     | 3     | 3     | 3     | 23   | 15             |
| 3    | 1                      | 2   | 2   | 3    | 3     | 3     | 4     | 2     | 20   | 12             |
| 4 D  | 2                      | 4   | 3   | 3    | 2     | 3     | 1     | 1     | 19   | 12             |
| 5    | 2                      | 2   | 1   | 1    | 0     | 2     | 1     | 1     | 10   | 4              |
| 6    | 0                      | 1   | 1   | 1    | 2     | 2     | 2     | 1     | 10   | 4              |
| 7    | 1                      | 1   | 2   | 2    | 2     | 3     | 0     | 1     | 12   | 6              |
| 8 Q  | 1                      | 2   | 0   | 1    | 1     | 0     | 1     | 3     | 9    | 4              |
| 9    | 3                      | 3   | 2   | 3    | 3     | 2     | 1     | 1     | 18   | 10             |
| 10   | 1                      | 2   | 2   | 2    | 1     | 0     | 0     | 1     | 9    | 4              |
| 11   | 1                      | 0   | 1   | 1    | 1     | 1     | 0     | 1     | 6    | 2              |
| 12   | 1                      | 2   | 2   | 1    | 4     | 2     | 4     | 2     | 18   | 11             |
| 13 Q | 1                      | 1   | 0   | 0    | 0     | 1     | 1     | 1     | 5    | 2              |
| 14   | 2                      | 2   | 2   | 1    | 2     | 1     | 2     | 2     | 14   | 6              |
| 15   | 1                      | 3   | 3   | 4    | 4     | 5     | 4     | 2     | 26   | 21             |
| 16 D | 4                      | 4   | 3   | 4    | 4     | 3     | 2     | 1     | 25   | 19             |
| 17   | 3                      | 2   | 4   | 3    | 1     | 4     | 4     | 1     | 22   | 16             |
| 18 Q | 1                      | 2   | 0   | 2    | 3     | 1     | 0     | 0     | 9    | 4              |
| 19   | 1                      | 1   | 2   | 2    | 1     | 3     | 1     | 1     | 12   | 6              |
| 20   | 2                      | 0   | 1   | 1    | 4     | 3     | 1     | 1     | 13   | 8              |
| 21   | 1                      | 2   | 3   | 1    | 3     | 3     | 2     | 2     | 17   | 9              |
| 22 D | 3                      | 2   | 2   | 4    | 3     | 3     | 5     | 3     | 25   | 19             |
| 23   | 3                      | 2   | 2   | 3    | 2     | 1     | 2     | 1     | 16   | 8              |
| 24 D | 1                      | 1   | 6   | 6    | 6     | 5     | 2     | 2     | 29   | 39             |
| 25   | 1                      | 2   | 2   | 3    | 4     | 3     | 3     | 3     | 21   | 13             |
| 26   | 2                      | 3   | 2   | 3    | 4     | 3     | 3     | 1     | 21   | 13             |
| 27   | 1                      | 2   | 1   | 2    | 3     | 2     | 2     | 2     | 15   | 7              |
| 28   | 1                      | 3   | 1   | 1    | 1     | 2     | 0     | 0     | 9    | 4              |
| 29 Q | 0                      | 0   | 1   | 0    | 0     | 1     | 1     | 1     | 4    | 2              |
| 30 Q | 1                      | 2   | 0   | 1    | 1     | 1     | 1     | 1     | 8    | 3              |
| 31   | 2                      | 2   | 3   | 2    | 2     | 3     | 2     | 2     | 18   | 9              |
|      |                        |     |     |      |       |       |       |       | Sum  | 311            |
|      |                        |     |     |      |       |       |       |       | Mean | 10.0           |

# MAGNETIC STORMS

DECEMBER 1995

BGMO

| Time of Magnetic |    |        |     |      | Sudden Com. |     |     | Deg.  | Maximum Acti. |     |   | Maximum |       |     |     |
|------------------|----|--------|-----|------|-------------|-----|-----|-------|---------------|-----|---|---------|-------|-----|-----|
|                  |    |        |     |      | Amplitude   |     |     | of    | on K-scale    |     |   | Range   |       |     |     |
| Beginning        |    | Ending |     | Type |             |     |     | Acti. | 3hour         |     | k |         |       |     |     |
| Day              | h  | m      | Day |      | h           | D'  | HnT |       | ZnT           | Day |   | Int.    | Index | D'  | HnT |
| <hr/>            |    |        |     |      |             |     |     |       |               |     |   |         |       |     |     |
| 15               | 04 |        | 15  | 23   | GC          |     |     | m     | 15            | 6   | 5 | 5.2     | 82    | 11  |     |
| 24               | 06 | 00     | 24  | 22   | SC          | 2.1 | 32  | 0     | ms            | 24  | 3 | 6       | 8.5   | 189 | 17  |



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