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1987, 1-2

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# 太阳黑子相对数与面积数 DAILY RELATIVE SUNSPOT NUMBERS AND SUNSPOT AREAS

| 1987年 1 月 |      |               |       |     | JAN 1987        |       |      |           |       |     |
|-----------|------|---------------|-------|-----|-----------------|-------|------|-----------|-------|-----|
| 日 群       |      | 相 对 数 值       |       |     | 面 积 数 值 (Areas) |       |      | 照 像 Photo |       |     |
|           |      | Relative-Num. |       |     | 手 描 Drawing     |       |      |           |       |     |
| 期 数       |      | 北半球           | 南半球   | 合计  | 北半球             | 南半球   | 合计   | 北半球       | 南半球   | 合计  |
| Day       | Cro. | N. H.         | S. H. | Sum | N. H.           | S. H. | Sum  | N. H.     | S. H. | Sum |
| 1         | 1    | 14            | 0     | 14  | 28              | 0     | 28   |           |       |     |
| 2         | 1    | 17            | 0     | 17  | 47              | 0     | 47   |           |       |     |
| 3         | 1    | 12            | 0     | 12  | 43              | 0     | 43   | 0         | 32    | 32  |
| 4         | 1    | 10            | 0     | 10  | 34              | 0     | 34   |           |       |     |
| 5         | 1    | 8             | 0     | 8   | 10              | 0     | 10   | 0         | 13    | 13  |
| 6         | 1    | 7             | 0     | 7   | 6               | 0     | 6    |           |       |     |
| 7         | 1    | 7             | 0     | 7   | 4               | 0     | 4    | 0         | 0     | 0   |
| 8         | 0    | 0             | 0     | 0   | 0               | 0     | 0    |           |       |     |
| 9         | 0    | 0             | 0     | 0   | 0               | 0     | 0    |           |       |     |
| 10        | 0    | 0             | 0     | 0   | 0               | 0     | 0    |           |       |     |
| 11        | 0    | 0             | 0     | 0   | 0               | 0     | 0    |           |       |     |
| 12        | 0    | 0             | 0     | 0   | 0               | 0     | 0    |           |       |     |
| 13        | 0    | 0             | 0     | 0   | 0               | 0     | 0    | 0         | 0     | 0   |
| 14        | 0    | 0             | 0     | 0   | 0               | 0     | 0    | 0         | 0     | 0   |
| 15        | 1    | 0             | 7     | 7   | 0               | 6     | 6    |           |       |     |
| 16        | 0    | 0             | 0     | 0   | 0               | 0     | 0    |           |       |     |
| 17        | 0    | 0             | 0     | 0   | 0               | 0     | 0    | 0         | 0     | 0   |
| 18        | 1    | 0             | 8     | 8   | 0               | 6     | 6    | 0         | 0     | 0   |
| 19        | 1    | 0             | 7     | 7   | 0               | 6     | 6    | 0         | 0     | 0   |
| 20        | 1    | 0             | 7     | 7   | 0               | 4     | 4    | 0         | 0     | 0   |
| 21        | 1    | 0             | 10    | 10  | 0               | 5     | 5    |           |       |     |
| 22        | 1    | 0             | 13    | 13  | 0               | 34    | 34   |           |       |     |
| 23        | 1    | 0             | 15    | 15  | 0               | 34    | 34   | 0         | 48    | 48  |
| 24        | 1    | 0             | 13    | 13  | 0               | 11    | 11   | 0         | 0     | 0   |
| 25        | 1    | 0             | 9     | 9   | 0               | 3     | 3    | 0         | 0     | 0   |
| 26        | 2    | 10            | 10    | 20  | 12              | 8     | 20   | 0         | 0     | 0   |
| 27        | 1    | 8             | 0     | 8   | 7               | 0     | 7    | 0         | 0     | 0   |
| 28        | 1    | 10            | 0     | 10  | 9               | 0     | 9    | 0         | 0     | 0   |
| 29        | 2    | 7             | 9     | 16  | 3               | 8     | 11   | 0         | 0     | 0   |
| 30        | 1    | 7             | 0     | 7   | 2               | 0     | 2    | 0         | 0     | 0   |
| 31        | 2    | 7             | 7     | 14  | 2               | 3     | 5    | 0         | 0     | 0   |
| Mean      |      | 4.0           | 3.7   | 7.7 | 6.7             | 4.1   | 10.8 |           |       |     |

# 太阳黑子相对数与面积数 DAILY RELATIVE SUNSPOT NUMBERS AND SUNSPOT AREAS

1987年2月

FEB 1987

| 日 期<br>Day | 群 数<br>Gro. | 相 对 数 值<br>Relative-Num. |              |            | 面 积 数 值 (Areas)<br>手 描 Drawing |              |            | 照 像 Photo    |              |            |
|------------|-------------|--------------------------|--------------|------------|--------------------------------|--------------|------------|--------------|--------------|------------|
|            |             | 北半球<br>N. H.             | 南半球<br>S. H. | 合 计<br>Sum | 北半球<br>N. H.                   | 南半球<br>S. H. | 合 计<br>Sum | 北半球<br>N. H. | 南半球<br>S. H. | 合 计<br>Sum |
| 1          | 0           | 0                        | 0            | 0          | 0                              | 0            | 0          | 0            | 0            | 0          |
| 2          | 0           | 0                        | 0            | 0          | 0                              | 0            | 0          | 0            | 0            | 0          |
| 3          | 0           | 0                        | 0            | 0          | 0                              | 0            | 0          | 0            | 0            | 0          |
| 4          | 0           | 0                        | 0            | 0          | 0                              | 0            | 0          | 0            | 0            | 0          |
| 5          | 0           | 0                        | 0            | 0          | 0                              | 0            | 0          | 0            | 0            | 0          |
| 6          | 0           | 0                        | 0            | 0          | 0                              | 0            | 0          | 0            | 0            | 0          |
| 7          | 0           | 0                        | 0            | 0          | 0                              | 0            | 0          | 0            | 0            | 0          |
| 8          | 0           | 0                        | 0            | 0          | 0                              | 0            | 0          | 0            | 0            | 0          |
| 9          | 0           | 0                        | 0            | 0          | 0                              | 0            | 0          | 0            | 0            | 0          |
| 10         | 1           | 0                        | 8            | 8          | 0                              | 8            | 8          | 0            | 0            | 0          |
| 11         | 1           | 0                        | 7            | 7          | 0                              | 2            | 2          |              |              |            |
| 12         | 1           | 7                        | 0            | 7          | 2                              | 0            | 2          |              |              |            |
| 13         | 0           | 0                        | 0            | 0          | 0                              | 0            | 0          | 0            | 0            | 0          |
| 14         | 0           | 0                        | 0            | 0          | 0                              | 0            | 0          | 0            | 0            | 0          |
| 15         | 1           | 8                        | 0            | 8          | 7                              | 0            | 7          | 0            | 0            | 0          |
| 16         | 0           | 0                        | 0            | 0          | 0                              | 0            | 0          |              |              |            |
| 17         | 0           | 0                        | 0            | 0          | 0                              | 0            | 0          |              |              |            |
| 18         | 0           | 0                        | 0            | 0          | 0                              | 0            | 0          | 0            | 0            | 0          |
| 19         | 0           | 0                        | 0            | 0          | 0                              | 0            | 0          |              |              |            |
| 20         | 0           | 0                        | 0            | 0          | 0                              | 0            | 0          | 0            | 0            | 0          |
| 21         | 0           | 0                        | 0            | 0          | 0                              | 0            | 0          |              |              |            |
| 22         | 0           | 0                        | 0            | 0          | 0                              | 0            | 0          |              |              |            |
| 23         | 0           | 0                        | 0            | 0          | 0                              | 0            | 0          | 0            | 0            | 0          |
| 24         | 0           | 0                        | 0            | 0          | 0                              | 0            | 0          | 0            | 0            | 0          |
| 25         | 0           | 0                        | 0            | 0          | 0                              | 0            | 0          | 0            | 0            | 0          |
| 26         | 2           | 7                        | 7            | 14         | 56                             | 2            | 58         | 70           | 0            | 70         |
| 27         |             |                          |              |            |                                |              |            | 71           | 0            | 71         |
| 28         | 1           | 7                        | 0            | 7          | 56                             | 0            | 56         | 62           | 0            | 62         |
| Mean       |             | 1.1                      | 0.8          | 1.9        | 4.5                            | 0.4          | 4.9        | 9.7          | 0.0          | 9.7        |

# 太阳黑子观测 DAILY SUNSPOT OBSERVATIONS

1987年 1 月

JAN 1987

| 日<br>期<br>Day | 群<br>号<br>No | 过日面中<br>心 经 圈<br>(月, 日)<br>CMP-Day | 日面位置<br>纬 经<br>度 度<br>Lat L | 中<br>经<br>距<br>CMD | 型<br>别<br>Type | 日<br>心<br>距<br>r/R | 视<br>面<br>积<br>Sd | 校正面积<br>全 最大<br>群 黑子<br>Whole Max | 备<br>注<br>Remarks |
|---------------|--------------|------------------------------------|-----------------------------|--------------------|----------------|--------------------|-------------------|-----------------------------------|-------------------|
| 1.03          | 1            | I- 2.7                             | 6 14                        | 22E                | B              | 0.40               | 50                | 28 7                              |                   |
| 2.04          | 1            |                                    |                             | 9E                 | C              | 0.21               | 92                | 47 32                             |                   |
| 3.06          | 1            |                                    |                             | 5W                 | C              | 0.18               | 84                | 43 38                             |                   |
| 4.24          | 1            |                                    |                             | 21W                | C              | 0.39               | 63                | 34 30                             |                   |
| 5.13          | 1            |                                    |                             | 33W                | A              | 0.55               | 17                | 10 8                              |                   |
| 6.06          | 1            |                                    |                             | 45W                | A              | 0.71               | 8                 | 6 6                               |                   |
| 7.04          | 1            |                                    |                             | 58W                | A              | 0.86               | 4                 | 4 4                               |                   |
| 8.16          | 0            |                                    |                             |                    |                |                    |                   |                                   |                   |
| 9.10          | 0            |                                    |                             |                    |                |                    |                   |                                   |                   |
| 10.06         | 0            |                                    |                             |                    |                |                    |                   |                                   |                   |
| 11.04         | 0            |                                    |                             |                    |                |                    |                   |                                   |                   |
| 12.06         | 0            |                                    |                             |                    |                |                    |                   |                                   |                   |
| 13.08         | 0            |                                    |                             |                    |                |                    |                   |                                   |                   |
| 14.03         | 0            |                                    |                             |                    |                |                    |                   |                                   |                   |
| 15.05         | 2            | I-20.5                             | -25 139                     | 72E                | A              | 0.94               | 4                 | 6 6                               |                   |
| 16.05         | 0            |                                    |                             |                    |                |                    |                   |                                   |                   |
| 17.05         | 0            |                                    |                             |                    |                |                    |                   |                                   |                   |
| 18.05         | 3            | I-21.5                             | -25 126                     | 45E                | B              | 0.74               | 8                 | 6 3                               |                   |
| 19.32         | 4            | I-24.5                             | -23 86                      | 69E                | A              | 0.93               | 4                 | 6 6                               |                   |
| 20.06         | 4            |                                    |                             | 59E                | A              | 0.86               | 4                 | 4 4                               |                   |
| 21.06         | 3            |                                    |                             | 6E                 | B              | 0.36               | 8                 | 5 2                               |                   |
| 22.06         | 3            |                                    |                             | 8W                 | C              | 0.37               | 63                | 34 20                             |                   |
| 23.06         | 3            |                                    |                             | 22W                | C              | 0.48               | 59                | 34 24                             |                   |
| 24.07         | 3            |                                    |                             | 34W                | B              | 0.61               | 17                | 11 3                              |                   |

1987年 1月

JAN 1987

| 日 期   | 群 号 | 过日面中<br>心 经 围<br>(月, 日)<br>CMP-Day | 日面位置<br>纬 经<br>度 度<br>Lat L | 中 型<br>经 别<br>距 别<br>CMD Type | 日 心<br>距<br>r/R | 视 面<br>积<br>Sd | 校正面积Sp<br>全 最大<br>群 黑子<br>Whole Max | 备 注<br>Remarks |
|-------|-----|------------------------------------|-----------------------------|-------------------------------|-----------------|----------------|-------------------------------------|----------------|
| 25.11 | 3   |                                    |                             | 44W A                         | 0.72            | 4              | 3 3                                 | PLAT           |
| 26.07 | 3   |                                    |                             | 57W B                         | 0.85            | 8              | 8 4                                 | PLAT           |
|       | 5   | I-31.0                             | 12 1                        | 68E A                         | 0.93            | 8              | 12 6                                | PLAT           |
| 27.38 | 5   |                                    |                             | 50E B                         | 0.80            | 8              | 7 4                                 |                |
| 28.08 | 5   |                                    |                             | 41E B                         | 0.69            | 13             | 9 3                                 |                |
| 29.07 | 5   |                                    |                             | 28E A                         | 0.56            | 4              | 3 3                                 |                |
|       | 6   | II- 2.3                            | -38 331                     | 55E B                         | 0.85            | 8              | 8 4                                 |                |
| 30.06 | 5   |                                    |                             | 11E A                         | 0.36            | 4              | 2 2                                 |                |
| 31.13 | 5   |                                    |                             | 2W A                          | 0.31            | 4              | 2 2                                 |                |
|       | 6   |                                    |                             | 27E A                         | 0.63            | 4              | 3 3                                 |                |

太 阳 黑 子 观 测  
DAILY SUNSPOT OBSERVATIONS

1987年 2 月

FEB 1987

| 日 期<br>Day | 群 号<br>No | 过日面中<br>心 经 圈<br>(月, 日)<br>CMP-Day | 日面位置<br>纬 经<br>度 度<br>Lat L | 中 型<br>经 别<br>距 Type | 日 心<br>距 r/R | 视 面<br>积 Sd | 校正面积<br>全 最大<br>群 黑子<br>Whole Max | 备 注<br>Remarks |
|------------|-----------|------------------------------------|-----------------------------|----------------------|--------------|-------------|-----------------------------------|----------------|
| 1.08       | 0         |                                    |                             |                      |              |             |                                   |                |
| 2.00       | 0         |                                    |                             |                      |              |             |                                   | PLAT           |
| 3.00       | 0         |                                    |                             |                      |              |             |                                   | PLAT           |
| 4.00       | 0         |                                    |                             |                      |              |             |                                   | PLAT           |
| 5.08       | 0         |                                    |                             |                      |              |             |                                   |                |
| 6.11       | 0         |                                    |                             |                      |              |             |                                   |                |
| 7.05       | 0         |                                    |                             |                      |              |             |                                   |                |
| 8.17       | 0         |                                    |                             |                      |              |             |                                   |                |
| 9.03       | 0         |                                    |                             |                      |              |             |                                   |                |
| 10.04      | 7         | II-13.0                            | -5 190                      | 38E                  | B 0.61       | 13          | 8 5                               |                |
| 11.03      | 7         |                                    |                             | 26E                  | A 0.44       | 4           | 2 2                               |                |
| 12.04      | 8         | II-14.2                            | 2 174                       | 28E                  | A 0.49       | 4           | 2 2                               |                |
| 13.03      | 0         |                                    |                             |                      |              |             |                                   |                |
| 14.04      | 0         |                                    |                             |                      |              |             |                                   |                |
| 15.22      | 9         | II-14.8                            | 18 166                      | 9W                   | B 0.43       | 13          | 7 5                               |                |
| 16.06      | 0         |                                    |                             |                      |              |             |                                   |                |
| 17.06      | 0         |                                    |                             |                      |              |             |                                   |                |
| 18.06      | 0         |                                    |                             |                      |              |             |                                   |                |
| 19.04      | 0         |                                    |                             |                      |              |             |                                   |                |
| 20.06      | 0         |                                    |                             |                      |              |             |                                   |                |
| 21.06      | 0         |                                    |                             |                      |              |             |                                   |                |
| 22.03      | 0         |                                    |                             |                      |              |             |                                   |                |
| 23.05      | 0         |                                    |                             |                      |              |             |                                   |                |
| 24.07      | 0         |                                    |                             |                      |              |             |                                   |                |

1987年2月

FEB 1987

| 日     | 群  | 过日面中          | 日面位置   | 中   | 型    | 日    | 视  | 校正面积Sp    | 备       |
|-------|----|---------------|--------|-----|------|------|----|-----------|---------|
| 期     | 号  | 心经圈           | 纬经     | 经   |      | 心    | 面  | 全最大       |         |
| Day   | No | (月, 日)        | 度度     | 距   | 别    | 距    | 积  | 群黑子       | 注       |
|       |    | CMP-Day       | Lat L  | CMD | Type | r/R  | Sd | Whole Max | Remarks |
| 25.06 | 0  |               |        |     |      |      |    |           |         |
| 26.06 | 10 | II-25.4       | -24 26 | 8W  | A    | 0.32 | 4  | 2         | 2       |
|       | 11 | III- 3.1      | 38 311 | 63E | J    | 0.95 | 34 | 56        | 56      |
| 27.00 |    | Not Available |        |     |      |      |    |           |         |
| 28.15 | 11 |               |        | 37E | J    | 0.83 | 63 | 56        | 56      |

# 太阳黑子群表 SUNSPOT GROUPS

1987年 1 月

JAN 1987

| 黑子群编号<br>及过日心经圈<br>日期(月, 日)<br>CMP-Day No | 日<br>期<br>Date | 日面位置<br>纬 度<br>Lat | 经 度<br>L | 中<br>经<br>距<br>CMD | 型<br>别<br>Type | 日<br>心<br>距<br>r/R | 视<br>面<br>积<br>Sd | 校正面积<br>全 群<br>Whole | Sp<br>最大<br>黑子<br>Max | 备<br>注<br>Remarks |
|-------------------------------------------|----------------|--------------------|----------|--------------------|----------------|--------------------|-------------------|----------------------|-----------------------|-------------------|
| 1<br>I- 2.7                               | I              | 1                  | 6        | 14                 | 22E            | B                  | 0.40              | 50                   | 28                    | 7                 |
|                                           |                | 2                  |          |                    | 9E             | C                  | 0.21              | 92                   | 47                    | 32                |
|                                           |                | 3                  |          |                    | 5W             | C                  | 0.18              | 84                   | 43                    | 38                |
|                                           |                | 4                  |          |                    | 21W            | C                  | 0.39              | 63                   | 34                    | 30                |
|                                           |                | 5                  |          |                    | 33W            | A                  | 0.55              | 17                   | 10                    | 8                 |
|                                           |                | 6                  |          |                    | 45W            | A                  | 0.71              | 8                    | 6                     | 6                 |
|                                           |                | 7                  |          |                    | 58W            | A                  | 0.86              | 4                    | 4                     | 4                 |
| 2<br>I-20.5                               | I              | 15                 | -25      | 139                | 72E            | A                  | 0.94              | 4                    | 6                     | 6                 |
| 3<br>I-21.5                               | I              | 18                 | -25      | 126                | 45E            | B                  | 0.74              | 8                    | 6                     | 3                 |
|                                           |                | 21                 |          |                    | 6E             | B                  | 0.36              | 8                    | 5                     | 2                 |
|                                           |                | 22                 |          |                    | 8W             | C                  | 0.37              | 63                   | 34                    | 20                |
|                                           |                | 23                 |          |                    | 22W            | C                  | 0.48              | 59                   | 34                    | 24                |
|                                           |                | 24                 |          |                    | 34W            | B                  | 0.61              | 17                   | 11                    | 3                 |
|                                           |                | 25                 |          |                    | 44W            | A                  | 0.72              | 4                    | 3                     | 3 PLAT            |
|                                           |                | 26                 |          |                    | 57W            | B                  | 0.85              | 8                    | 8                     | 4 PLAT            |
| 4<br>I-24.5                               | I              | 19                 | -23      | 86                 | 69E            | A                  | 0.93              | 4                    | 6                     | 6                 |
|                                           |                | 20                 |          |                    | 59E            | A                  | 0.86              | 4                    | 4                     | 4                 |
| 5<br>I-31.0                               | I              | 26                 | 12       | 1                  | 68E            | A                  | 0.93              | 8                    | 12                    | 6 PLAT            |
|                                           |                | 27                 |          |                    | 50E            | B                  | 0.80              | 8                    | 7                     | 4                 |
|                                           |                | 28                 |          |                    | 41E            | B                  | 0.69              | 13                   | 9                     | 3                 |
|                                           |                | 29                 |          |                    | 28E            | A                  | 0.56              | 4                    | 3                     | 3                 |
|                                           |                | 30                 |          |                    | 11E            | A                  | 0.36              | 4                    | 2                     | 2                 |
|                                           |                | 31                 |          |                    | 2W             | A                  | 0.31              | 4                    | 2                     | 2                 |
| 6<br>II- 2.3                              | I              | 29                 | -38      | 331                | 55E            | B                  | 0.85              | 8                    | 8                     | 4                 |
|                                           |                | 31                 |          |                    | 27E            | A                  | 0.63              | 4                    | 3                     | 3                 |

# 太阳黑子群表 SUNSPOT GROUPS

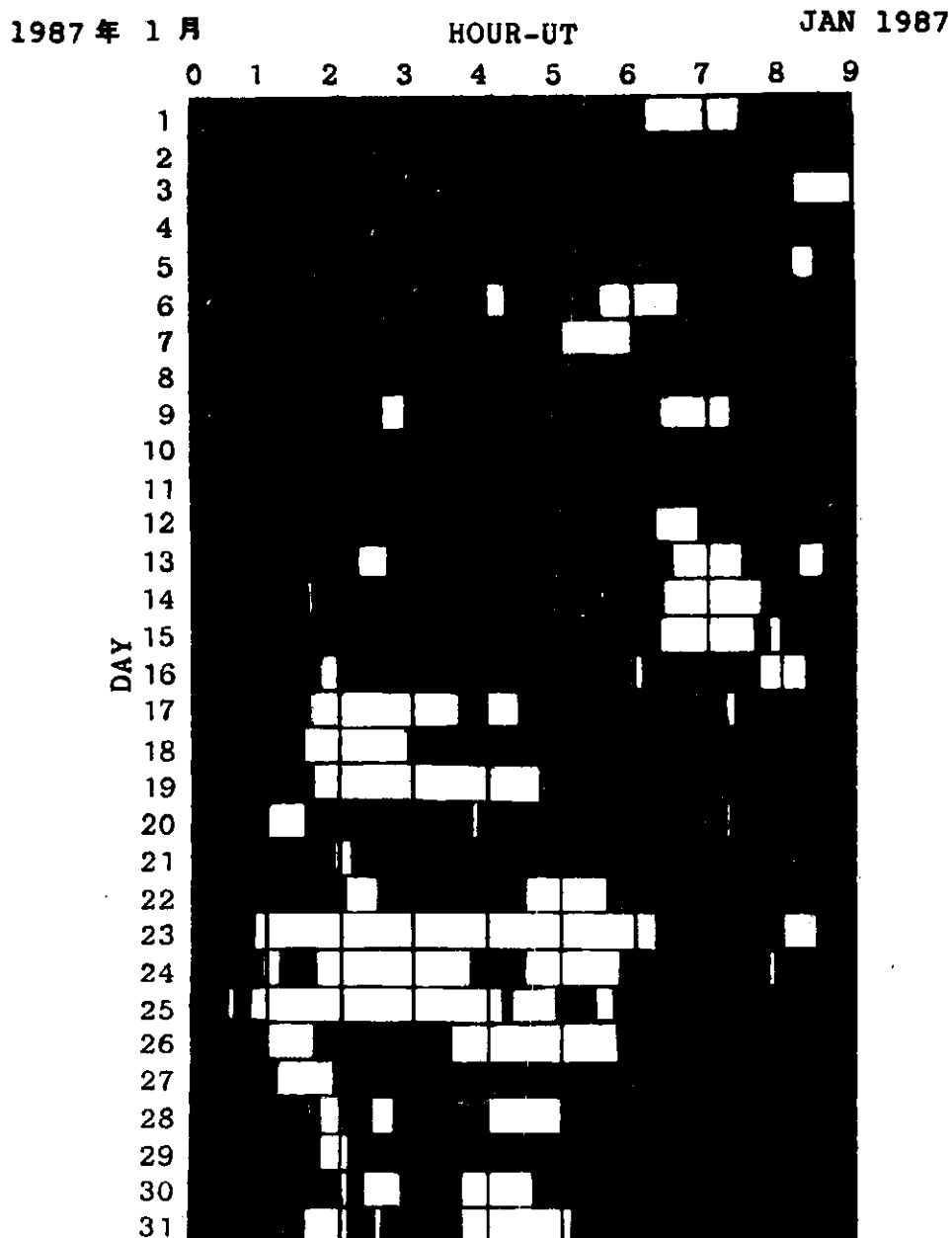
1987年 2 月

FEB 1987

| 黑子群编号<br>及过日心经圈<br>日期(月, 日)<br>CMP-Day No | 日<br>期<br>Date                                     | 日面位置<br>纬 经<br>度 度<br>Lat L | 中<br>经<br>距<br>CMD                                         | 型<br>别<br>Type                            | 日<br>心<br>距<br>r/R                                                   | 视<br>面<br>积<br>Sd                                | 校正面积Sp<br>全 最大<br>群 黑子<br>Whole Max              | 备<br>注<br>Remarks                                |
|-------------------------------------------|----------------------------------------------------|-----------------------------|------------------------------------------------------------|-------------------------------------------|----------------------------------------------------------------------|--------------------------------------------------|--------------------------------------------------|--------------------------------------------------|
| 7<br>II-13.0                              | II 10<br>11                                        | -5 190                      | 38E<br>26E                                                 | B<br>A                                    | 0.61<br>0.44                                                         | 13<br>4                                          | 8<br>2                                           | 5<br>2                                           |
| 8<br>II-14.2                              | II 12                                              | 2 174                       | 28E                                                        | A                                         | 0.49                                                                 | 4                                                | 2                                                | 2                                                |
| 9<br>II-14.8                              | II 15                                              | 18 166                      | 9W                                                         | B                                         | 0.43                                                                 | 13                                               | 7                                                | 5                                                |
| 10<br>II-25.4                             | II 26                                              | -24 26                      | 8W                                                         | A                                         | 0.32                                                                 | 4                                                | 2                                                | 2                                                |
| 11<br>III- 3.1                            | II 26<br>28<br>III 1<br>2<br>3<br>4<br>5<br>6<br>7 | 38 311                      | 63E<br>37E<br>25E<br>12E<br>2W<br>12W<br>23W<br>36W<br>50W | J<br>J<br>J<br>J<br>J<br>J<br>A<br>A<br>A | 0.95<br>0.83<br>0.77<br>0.72<br>0.70<br>0.71<br>0.76<br>0.83<br>0.90 | 34<br>63<br>59<br>59<br>63<br>46<br>17<br>4<br>4 | 56<br>56<br>46<br>43<br>44<br>33<br>13<br>4<br>5 | 56<br>56<br>46<br>43<br>41<br>33<br>10<br>4<br>5 |

# H $\alpha$ 耀斑 巡 视 时 间

## INTERVALS OF H-ALPHA FLARE PATROL OBSERVATION



黑色表示当天没有进行耀斑巡视

Time of no flare patrol are shown by the shaded area for each day.

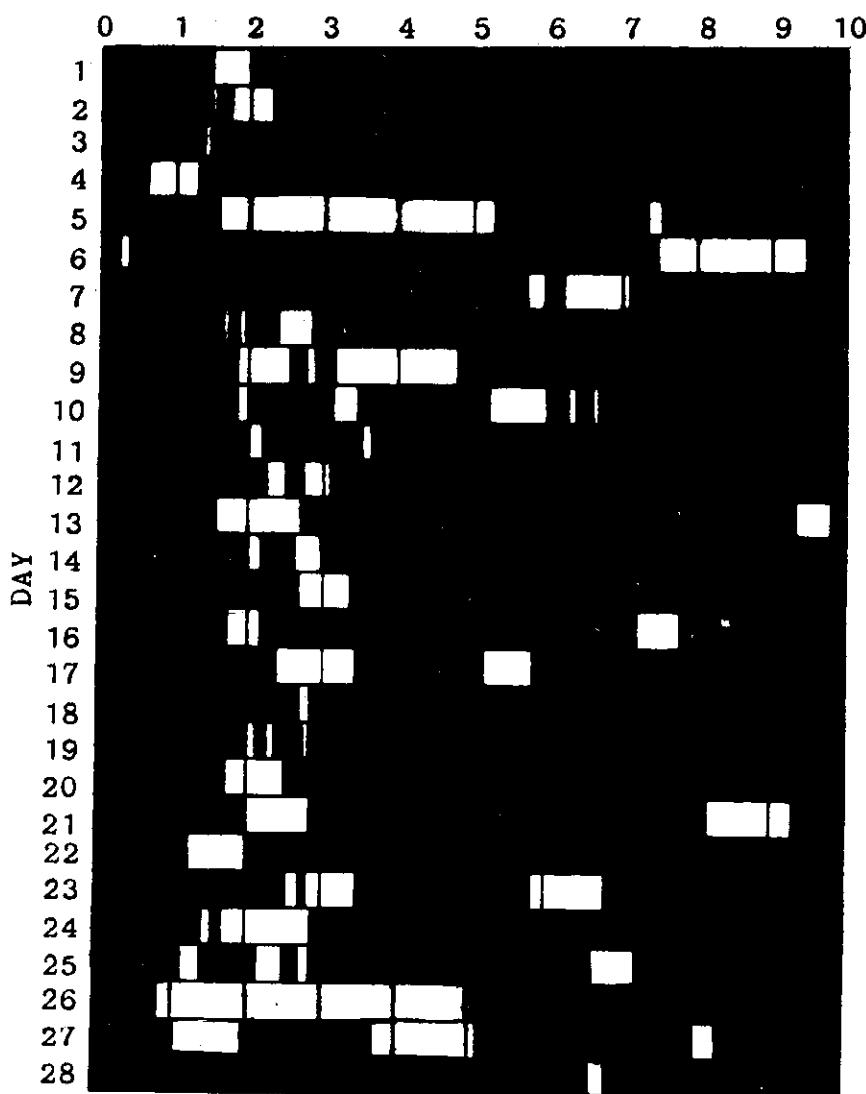
# H<sub>α</sub> 耀斑 巡 视 时 间

## INTERVALS OF H-ALPHA FLARE PATROL OBSERVATION

1987 年 2 月

HOUR-UT

FEB 1987



黑色表示当天没有进行耀斑巡视

Time of no flare patrol are shown by the shaded area for each day.

太阳射电辐射流量  
SOLAR RADIO EMISSION FLUX

| 1987年 1 月     |                     |                     | JAN 1987            |                     |                     |
|---------------|---------------------|---------------------|---------------------|---------------------|---------------------|
| 日<br>期<br>Day | 北 台<br>BEIJ<br>9395 | 紫 台<br>PURP<br>9375 | 紫 台<br>PURP<br>3000 | 云 台<br>YUNN<br>2840 | 北 台<br>BEIJ<br>2840 |
| 1             |                     |                     | 63                  | 76                  | 50                  |
| 2             |                     |                     | 61                  | 76                  | 48                  |
| 3             |                     |                     | 63                  | 74                  | 44                  |
| 4             |                     |                     | 63                  | 74                  | 39                  |
| 5             |                     |                     | 61                  | 74                  | 38                  |
| 6             |                     |                     | 64                  | 74                  | 54                  |
| 7             |                     |                     | 64                  | 77                  | 38                  |
| 8             |                     |                     | 63                  | 76                  | 40                  |
| 9             |                     |                     | 63                  | 73                  | 44                  |
| 10            |                     |                     | 63                  | 76                  | 54                  |
| 11            |                     |                     | 62                  | 72                  | 41                  |
| 12            |                     |                     | 63                  | 75                  | 41                  |
| 13            |                     |                     | 63                  | 74                  | 38                  |
| 14            |                     |                     | 65                  | 74                  | 54                  |
| 15            |                     |                     | 65                  | 75                  | 55                  |
| 16            |                     |                     | 66                  | 74                  | 56                  |
| 17            |                     |                     | 65                  | 73                  | 56                  |
| 18            |                     |                     | 61                  | 75                  | 58                  |
| 19            |                     |                     |                     | 78                  | 56                  |
| 20            |                     |                     | 65                  | 74                  | 55                  |
| 21            |                     |                     | 65                  | 74                  | 57                  |
| 22            |                     |                     | 62                  | 76                  | 58                  |
| 23            |                     |                     | 61                  | 76                  | 58                  |
| 24            |                     |                     |                     | 76                  | 58                  |
| 25            |                     |                     | 65                  | 74                  | 57                  |
| 26            |                     |                     | 66                  | 76                  | 58                  |
| 27            |                     |                     | 65                  | 74                  | 58                  |
| 28            |                     |                     | 65                  | 75                  | 57                  |
| 29            |                     |                     | 64                  | 74                  | 59                  |
| 30            |                     |                     | 64                  | 78                  | 56                  |
| 31            |                     |                     | 64                  | 74                  | 55                  |
| Mean          |                     |                     | 63.6                | 74.9                | 51.3                |

太阳射电辐射流量  
SOLAR RADIO EMISSION FLUX

| 1987年 2 月 |             |             |             |             | FEB 1987    |  |
|-----------|-------------|-------------|-------------|-------------|-------------|--|
| 日<br>期    | 北 台<br>BEIJ | 紫 台<br>PURP | 紫 台<br>PURP | 云 台<br>YUNN | 北 台<br>BEIJ |  |
| Day       | 9395        | 9375        | 3000        | 2840        | 2840        |  |
| 1         |             |             | 64          | 73          | 55          |  |
| 2         |             |             | 64          | 74          | 56          |  |
| 3         |             |             | 64          | 73          | 54          |  |
| 4         |             |             | 64          | 73          | 54          |  |
| 5         |             |             | 63          | 72          | 54          |  |
| 6         |             |             | 62          | 73          | 54          |  |
| 7         |             |             | 63          | 73          | 57          |  |
| 8         |             |             | 63          | 73          | 56          |  |
| 9         |             |             | 64          | 73          | 57          |  |
| 10        |             |             | 63          | 74          | 61          |  |
| 11        |             |             | 62          | 73          | 57          |  |
| 12        |             |             | 63          | 73          | 56          |  |
| 13        |             |             | 63          | 73          | 55          |  |
| 14        |             |             | 58          | 73          | 55          |  |
| 15        |             |             | 63          | 74          | 57          |  |
| 16        |             |             | 58          | 74          | 56          |  |
| 17        |             |             | 57          | 73          | 43          |  |
| 18        |             |             | 63          | 74          | 54          |  |
| 19        |             |             | 61          | 73          | 56          |  |
| 20        |             |             | 63          | 73          | 55          |  |
| 21        |             |             | 64          | 75          | 57          |  |
| 22        |             |             | 64          | 75          | 58          |  |
| 23        |             |             | 65          | 76          | 59          |  |
| 24        |             |             | 64          | 76          | 56          |  |
| 25        |             |             | 65          | 79          | 57          |  |
| 26        |             |             | 67          | 77          | 56          |  |
| 27        |             |             | 67          | 78          | 59          |  |
| 28        |             |             | 66          | 82          | 61          |  |
| Mean      |             |             | 63.1        | 74.3        | 51.8        |  |

太阳射电辐射显著事件  
SOLAR RADIO EMISSION OUTSTANDING OCCURRENCES

| 1987 年 1 月 |      |      |      |       |        |       | JAN 1987 |         |      |
|------------|------|------|------|-------|--------|-------|----------|---------|------|
| 日          | 频    | 台    | 型    | 开     | 极      | 持     | 流量密度     |         |      |
| 期          | 率    | 站    | 别    | 始     | 大      | 续     | Flux     | Density |      |
| Day        | Freq | Sta  | Type | Start | Max    | Dura- | 峰值       | 相对值     | 平均值  |
|            |      |      |      | (UT)  | (UT)   | tion  | Peak     | Rel     | Mean |
| 29         | 2840 | BEIJ | 45 C | 0348  | 0350.6 | 7     | 7.2      | 12.2    | 3.4  |

# 太阳射电辐射巡视时间 INTERVALS OF SOLAR RADIO EMISSION PATROL OBSERVATION

1987 年 1 月

JAN 1987

| 日<br>期<br>Day | 北 台<br>BEIJ |          | 紫 台<br>PURP |          | 紫 台<br>PURP |          | 云 台<br>YUNN |          | 北 台<br>BEIJ |          |
|---------------|-------------|----------|-------------|----------|-------------|----------|-------------|----------|-------------|----------|
|               | 开始<br>From  | 结束<br>To | 开始<br>From  | 结束<br>To | 开始<br>From  | 结束<br>To | 开始<br>From  | 结束<br>To | 开始<br>From  | 结束<br>To |
|               | 9395        |          | 9375        |          | 3000        |          | 2840        |          | 2840        |          |
| 1             |             |          |             |          | 0039        | 0645     | 0220        | 0815     | 0037        | 0745     |
| 2             |             |          |             |          | 0021        | 0710     | 0124        | 0933     | 0100        | 0742     |
| 3             |             |          |             |          | 0014        | 0730     | 0020        | 0950     | 0052        | 0600     |
| 4             |             |          |             |          | 0029        | 0807     | 0200        | 0900     | 0410        | 0900     |
| 5             |             |          |             |          | 0018        | 0830     | 0050        | 1010     | 0058        | 0750     |
| 6             |             |          |             |          | 0015        | 0835     | 0038        | 1018     | 0055        | 0600     |
| 7             |             |          |             |          | 0005        | 0840     | 0200        | 0957     | 0457        | 0555     |
| 8             |             |          |             |          | 0038        | 0840     | 0140        | 0820     | 0036        | 0750     |
| 9             |             |          |             |          | 0035        | 0838     | 0200        | 0900     | 0032        | 0745     |
| 10            |             |          |             |          | 0045        | 0838     | 0100        | 0810     | 0051        | 0520     |
| 11            |             |          |             |          | 0030        | 0813     | 0240        | 0800     | 0053        | 0740     |
| 12            |             |          |             |          | 0034        | 0835     | 0140        | 0832     | 0055        | 0719     |
| 13            |             |          |             |          | 0046        | 0842     | 0050        | 0838     | 0034        | 0748     |
| 14            |             |          |             |          | 0013        | 0837     | 0115        | 0940     | 0027        | 0745     |
| 15            |             |          |             |          | 0042        | 0842     | 0151        | 1020     | 0028        | 0745     |
| 16            |             |          |             |          | 0047        | 0843     | 0134        | 0820     | 0023        | 0745     |
| 17            |             |          |             |          | 0035        | 0840     | 0146        | 0953     | 0015        | 0645     |
| 18            |             |          |             |          | 0014        | 0833     | 0150        | 0827     | 0040        | 0830     |
| 19            |             |          |             |          |             |          | 0106        | 0858     | 0020        | 0705     |
| 20            |             |          |             |          | 0016        | 0841     | 0155        | 0850     | 0036        | 0745     |
| 21            |             |          |             |          | 0055        | 0840     | 0138        | 0800     | 0040        | 0208     |
| 22            |             |          |             |          | 0015        | 0840     | 0210        | 0950     | 0030        | 0428     |
| 23            |             |          |             |          | 0047        | 0844     | 0211        | 1006     | 0025        | 0645     |
| 24            |             |          |             |          | 0016        | 0840     | 0050        | 1010     | 0032        | 0820     |
| 25            |             |          |             |          | 0025        | 0826     | 0238        | 0803     | 0030        | 0828     |
| 26            |             |          |             |          |             |          |             |          | 2355        | 2400     |
| 27            |             |          |             |          | 0030        | 0500     | 0049        | 0800     | 0000        | 0750     |
| 28            |             |          |             |          | 0027        | 0825     | 0055        | 1002     | 0029        | 0650     |
| 29            |             |          |             |          | 0025        | 0825     | 0100        | 0900     | 0042        | 0725     |
| 30            |             |          |             |          | 0027        | 0835     | 0142        | 1000     | 0028        | 0725     |
| 31            |             |          |             |          | 0023        | 0821     | 0210        | 0800     | 0030        | 0745     |
|               |             |          |             |          | 0025        | 0830     | 0200        | 0818     | 0039        | 0723     |

# 太阳射电辐射巡视时间 INTERVALS OF SOLAR RADIO EMISSION PATROL OBSERVATION

1987年2月

FEB 1987

| 日    | 期    | Day  | From | To   | From | To   | From | To   | From | To   | From | To   |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 北台   | BEIJ | 北台   | BEIJ | 紫台   | PURP | 紫台   | PURP | 云台   | YUNN | 北台   | BEIJ | 北台   |
| 开始   | 开始   | 开始   | 开始   | 开始   | 开始   | 开始   | 开始   | 开始   | 开始   | 开始   | 开始   | 开始   |
| 结束   | 结束   | 结束   | 结束   | 结束   | 结束   | 结束   | 结束   | 结束   | 结束   | 结束   | 结束   | 结束   |
| 9395 | 9375 | 3000 | 2840 | 2840 | 2840 | 2840 | 2840 | 2840 | 2840 | 2840 | 2840 | 2840 |

|    |      |      |      |      |      |      |
|----|------|------|------|------|------|------|
| 1  | 0025 | 0827 | 0025 | 0800 | 0050 | 0700 |
| 2  | 0021 | 0833 | 0126 | 0808 | 0035 | 0745 |
| 3  | 0020 | 0811 | 0154 | 0935 | 0015 | 0745 |
| 4  | 0030 | 0820 | 0210 | 0900 | 0020 | 0830 |
| 5  | 0102 | 0830 | 0015 | 0800 | 0000 | 0745 |
| 6  | 0011 | 0823 | 0045 | 0905 | 0022 | 0750 |
| 7  | 0037 | 0114 | 0017 | 1005 | 0027 | 0720 |
| 8  | 0228 | 0835 | 0022 | 0828 | 0155 | 0845 |
| 9  | 0008 | 0839 | 0040 | 0910 | 0045 | 0740 |
| 10 | 0023 | 0829 | 0150 | 0820 | 0025 | 0742 |
| 11 | 0018 | 0821 | 0100 | 0930 | 0026 | 0743 |
| 12 | 0034 | 0825 | 0200 | 0920 | 0025 | 0742 |
| 13 | 0034 | 0806 | 0120 | 1013 | 0030 | 0744 |
| 14 | 0041 | 0044 | 0150 | 0905 | 0034 | 0720 |
| 15 | 0201 | 0832 | 0022 | 0051 | 0230 | 0940 |
| 16 | 0041 | 0635 | 0202 | 0807 | 0359 | 0723 |
| 17 | 0045 | 0743 | 0106 | 0942 | 0103 | 0720 |
| 18 | 0058 | 0752 | 0040 | 1010 | 0029 | 0101 |
| 19 | 0054 | 0832 | 0200 | 0913 | 0040 | 0750 |
| 20 | 0052 | 0720 | 0130 | 0820 | 0039 | 0752 |
| 21 | 0045 | 0628 | 0115 | 1029 | 0048 | 0719 |
| 22 | 0028 | 0832 | 0202 | 1000 | 0039 | 0750 |
| 23 | 0056 | 0155 | 0113 | 1030 | 0037 | 0750 |
| 24 | 0301 | 0835 | 0104 | 0751 | 0300 | 1037 |
| 25 | 0117 | 0808 | 0106 | 0800 | 0033 | 0157 |
| 26 | 0039 | 0812 | 0105 | 1050 | 0031 | 0750 |
| 27 | 0042 | 0048 | 0032 | 0800 | 0030 | 0750 |
| 28 | 0030 | 0101 | 0030 | 0630 | 0030 | 0845 |
|    | 0458 | 0751 |      |      | 2356 | 2400 |

**突然电离层扰动(D层)**  
SUDDEN IONOSPHERIC DISTURBANCES (D-Region)

1987 年 1 月

JAN 1987

| 日   | 台    | 开     | 极    | 结    | 级   | 相位异常<br>SPA |     | 场强异常 |
|-----|------|-------|------|------|-----|-------------|-----|------|
| 期   | 站    | 始     | 大    | 束    | 别   | 低频          | 甚低频 | SFA  |
| Day | Sta  | Start | Max  | End  | Imp | LF          | VLF | LF   |
| 2   | YUNN | 0335  | 0336 | 0340 | 1-  | -           | 0.9 |      |
| 8   | YUNN | 0216  | 0217 | 0218 | 1-  | -           | 0.4 |      |
| 8   | YUNN | 0254  | 0255 | 0257 | 1-  | -           | 1.0 |      |
| 8   | YUNN | 0257  | 0259 | 0300 | 1-  | -           | 0.5 |      |
| 8   | YUNN | 0540  | 0541 | 0544 | 1-  | -           | 0.8 |      |
| 8   | YUNN | 0623  | 0624 | 0627 | 1-  | -           | 0.7 |      |
| 9   | YUNN | 0548  | 0549 | 0555 | 1-  | -           | 0.8 |      |
| 14  | YUNN | 0308  | 0309 | 0312 | 1-  | -           | 0.6 |      |
| 20  | YUNN | 0435  | 0438 | 0442 | 1-  | -           | 0.4 |      |
| 21  | YUNN | 0103  | 0105 | 0115 | 1-  | -           | 0.9 |      |
| 25  | YUNN | 0226  | 0227 | 0233 | 1-  | -           | 0.3 |      |
| 30  | YUNN | 0455  | 0456 | 0458 | 1-  | -           | 0.2 |      |
| 30  | YUNN | 0701  | 0702 | 0706 | 1-  | -           | 0.4 |      |

### SUDDEN IONOSPHERIC DISTURBANCES (D-Region)

1987年2月

7861 FEB

| LINE | DESCRIPTION | AMOUNT | DATE | DEBIT | CREDIT | BALANCE |
|------|-------------|--------|------|-------|--------|---------|
| 28   | LINT        | 0702   | 0710 | 0738  | 1+     | - 1.8   |
| 27   | LINT        | 0724   | 0728 | 0800  | 1-     | - 0.4   |
| 25   | YUNN        | 0130   | 0131 | 0132  | 1-     | - 0.7   |
| 24   | YUNN        | 0804   | 0805 | 0806  | 1-     | - 0.9   |
| 24   | YUNN        | 0535   | 0537 | 0546  | 1+     | - 3.0   |
| 24   | YUNN        | 0532   | 0532 | 0535  | 1      | - 1.3   |
| 21   | YUNN        | 0800   | 0801 | 0802  | 1      | - 1.4   |
| 21   | YUNN        | 0746   | 0747 | 0748  | 1-     | - 0.6   |
| 18   | YUNN        | 0215   | 0216 | 0217  | 1-     | - 0.9   |
| 16   | YUNN        | 0240   | 0241 | 0242  | 1      | - 1.6   |
| 15   | YUNN        | 0434   | 0438 | 0445  | 1-     | - 0.6   |
| 13   | YUNN        | 0018   | 0020 | 0027  | 3      | - 7.2   |
| 10   | YUNN        | 0033   | 0035 | 0036  | 1-     | - 0.6   |
| 7    | YUNN        | 0341   | 0343 | 0344  | 1-     | - 0.4   |
| 6    | YUNN        | 0305   | 0306 | 0307  | 1-     | - 0.4   |
| 4    | YUNN        | 0748   | 0750 | 0752  | 1-     | - 0.2   |
| 2    | YUNN        | 0432   | 0434 | 0435  | 1-     | - 0.3   |
| 2    | YUNN        | 0428   | 0430 | 0432  | 1-     | - 0.3   |
| 2    | YUNN        | 0423   | 0425 | 0428  | 1-     | - 0.3   |

地磁活动指数K和A<sub>K</sub>  
THE GEOMAGNETIC ACTIVITY INDICES K AND A<sub>K</sub>

| JAN 1987 |     |     |     |      |       |       |       |       |      |    |
|----------|-----|-----|-----|------|-------|-------|-------|-------|------|----|
| 日 期      | 三   | 小   | 时   | 时    | 段     | K     | 指     | 数     | 总    | Ak |
| Day      | 0-3 | 3-6 | 6-9 | 9-12 | 12-15 | 15-18 | 18-21 | 21-24 | Sum  |    |
| 1 D      | 2   | 2   | 4   | 4    | 3     | 4     | 4     | 2     | 25   | 18 |
| 2        | 1   | 3   | 3   | 2    | 4     | 3     | 2     | 3     | 21   | 13 |
| 3        | 3   | 2   | 3   | 1    | 2     | 1     | 2     | 2     | 16   | 8  |
| 4 Q      | 2   | 2   | 1   | 0    | 1     | 1     | 1     | 3     | 11   | 5  |
| 5 Q      | 1   | 1   | 1   | 1    | 0     | 2     | 3     | 2     | 11   | 5  |
| 6 Q      | 2   | 1   | 2   | 2    | 1     | 1     | 1     | 2     | 12   | 5  |
| 7        | 2   | 3   | 1   | 2    | 0     | 2     | 2     | 3     | 15   | 8  |
| 8        | 3   | 2   | 2   | 3    | 3     | 2     | 2     | 2     | 19   | 10 |
| 9        | 2   | 4   | 4   | 4    | 3     | 2     | 1     | 2     | 22   | 15 |
| 10       | 1   | 2   | 3   | 2    | 2     | 2     | 2     | 2     | 16   | 8  |
| 11       | 2   | 2   | 2   | 2    | 2     | 2     | 2     | 3     | 17   | 8  |
| 12       | 3   | 4   | 3   | 3    | 2     | 2     | 2     | 3     | 22   | 14 |
| 13       | 1   | 2   | 2   | 2    | 2     | 3     | 2     | 1     | 15   | 7  |
| 14 Q     | 1   | 3   | 3   | 2    | 2     | 2     | 2     | 2     | 17   | 9  |
| 15       | 2   | 1   | 2   | 1    | 1     | 2     | 3     | 3     | 15   | 8  |
| 16 D     | 2   | 1   | 2   | 4    | 4     | 5     | 2     | 1     | 21   | 16 |
| 17       | 2   | 2   | 2   | 2    | 2     | 3     | 3     | 3     | 19   | 10 |
| 18       | 2   | 2   | 2   | 3    | 1     | 1     | 2     | 3     | 16   | 8  |
| 19       | 1   | 2   | 4   | 2    | 3     | 3     | 2     | 3     | 20   | 12 |
| 20 D     | 2   | 3   | 3   | 3    | 3     | 5     | 2     | 3     | 24   | 17 |
| 21       | 3   | 3   | 1   | 3    | 4     | 3     | 2     | 3     | 22   | 14 |
| 22       | 3   | 2   | 2   | 2    | 3     | 3     | 3     | 3     | 21   | 12 |
| 23 D     | 2   | 2   | 2   | 3    | 4     | 3     | 1     | 2     | 19   | 11 |
| 24       | 2   | 3   | 2   | 2    | 2     | 3     | 2     | 1     | 17   | 9  |
| 25       | 2   | 2   | 2   | 1    | 2     | 3     | 2     | 3     | 17   | 9  |
| 26       | 2   | 2   | 2   | 2    | 3     | 3     | 2     | 3     | 19   | 10 |
| 27       | 1   | 2   | 3   | 4    | 3     | 2     | 2     | 2     | 19   | 11 |
| 28 D     | 3   | 2   | 4   | 2    | 2     | 3     | 3     | 3     | 22   | 14 |
| 29       | 3   | 2   | 3   | 2    | 2     | 2     | 1     | 3     | 16   | 10 |
| 30 Q     | 3   | 2   | 3   | 2    | 2     | 2     | 2     | 3     | 19   | 10 |
| 31       | 3   | 3   | 3   | 3    | 2     | 1     | 2     | 1     | 18   | 10 |
| Sum      |     |     |     |      |       |       |       |       | 324  |    |
| Mean     |     |     |     |      |       |       |       |       | 10.5 |    |

地磁活动指数 K 和 A<sub>K</sub>  
THE GEOMAGNETIC ACTIVITY INDICES K AND A<sub>K</sub>

| 1987年2月 |        | FEB 1987 |     |     |      |       |       |       |       |        |                |
|---------|--------|----------|-----|-----|------|-------|-------|-------|-------|--------|----------------|
| 日<br>期  | 日<br>期 | 三        | 小   | 时   | 时    | 段     | K     | 指     | 数     | 总<br>和 | A <sub>K</sub> |
| Day     | Day    | 0-3      | 3-6 | 6-9 | 9-12 | 12-15 | 15-18 | 18-21 | 21-24 | Sum    |                |
| 1       | 1      | 4        | 3   | 4   | 2    | 2     | 3     | 2     | 2     | 22     | 14             |
| 2 Q     | 2 Q    | 4        | 2   | 3   | 2    | 2     | 3     | 1     | 1     | 18     | 11             |
| 3 Q     | 3 Q    | 4        | 2   | 3   | 2    | 1     | 1     | 2     | 1     | 16     | 9              |
| 4 Q     | 4 Q    | 2        | 3   | 2   | 2    | 3     | 3     | 3     | 1     | 19     | 11             |
| 5 Q     | 5 Q    | 3        | 2   | 2   | 3    | 1     | 3     | 1     | 3     | 18     | 10             |
| 6       | 6      | 2        | 2   | 1   | 2    | 2     | 2     | 1     | 3     | 15     | 7              |
| 7       | 7      | 3        | 2   | 2   | 2    | 3     | 3     | 2     | 2     | 19     | 10             |
| 8       | 8      | 3        | 4   | 3   | 3    | 2     | 4     | 3     | 1     | 23     | 16             |
| 9       | 9      | 3        | 2   | 3   | 3    | 3     | 3     | 1     | 3     | 21     | 13             |
| 10      | 10     | 3        | 2   | 3   | 3    | 3     | 4     | 3     | 2     | 23     | 15             |
| 11      | 11     | 3        | 2   | 2   | 1    | 1     | 2     | 4     | 2     | 17     | 10             |
| 12 D    | 12 D   | 4        | 3   | 4   | 4    | 5     | 5     | 3     | 2     | 30     | 27             |
| 13      | 13     | 4        | 1   | 3   | 1    | 2     | 2     | 2     | 3     | 18     | 11             |
| 14 Q    | 14 Q   | 4        | 3   | 3   | 3    | 1     | 3     | 2     | 1     | 20     | 13             |
| 15      | 15     | 3        | 2   | 3   | 2    | 2     | 2     | 2     | 2     | 18     | 9              |
| 16      | 16     | 3        | 2   | 4   | 4    | 5     | 3     | 3     | 2     | 26     | 20             |
| 17      | 17     | 4        | 3   | 3   | 1    | 3     | 3     | 4     | 2     | 23     | 16             |
| 18      | 18     | 2        | 1   | 2   | 2    | 2     | 2     | 2     | 2     | 15     | 7              |
| 19      | 19     | 2        | 1   | 1   | 1    | 2     | 2     | 3     | 3     | 15     | 8              |
| 20 D    | 20 D   | 3        | 5   | 4   | 5    | 5     | 5     | 3     | 3     | 33     | 33             |
| 21 D    | 21 D   | 3        | 3   | 5   | 5    | 2     | 5     | 2     | 3     | 28     | 25             |
| 22 D    | 22 D   | 2        | 4   | 3   | 3    | 3     | 2     | 2     | 3     | 22     | 14             |
| 23      | 23     | 3        | 3   | 3   | 3    | 4     | 3     | 3     | 2     | 24     | 16             |
| 24      | 24     | 3        | 2   | 2   | 2    | 3     | 3     | 3     | 2     | 20     | 11             |
| 25      | 25     | 3        | 3   | 2   | 3    | 2     | 2     | 2     | 2     | 19     | 10             |
| 26      | 26     | 3        | 2   | 3   | 2    | 3     | 2     | 1     | 1     | 17     | 9              |
| 27      | 27     | 3        | 3   | 4   | 2    | 3     | 4     | 4     | 3     | 26     | 19             |
| 28 D    | 28 D   | 3        | 2   | 4   | 4    | 4     | 3     | 2     | 3     | 25     | 18             |
|         |        |          |     |     |      |       |       |       |       | Sum    | 392            |
|         |        |          |     |     |      |       |       |       |       | Mean   | 14.0           |

# 磁 暴 MAGNETIC STORMS

1987年 2 月

FEB 1987

| 日<br>期<br>Day | 磁暴时间<br>Time of M.S.<br>始 终<br>(时, 分) (日, 时)<br>Start End |       | 类<br>型<br>Type | 急始变幅<br>Sudden Com.<br>Amplitude<br>D' H <sup>ST</sup> Z <sup>ST</sup> |  |  | 活动<br>程度<br>Deg.<br>of<br>Acti. | 最大活动程度<br>Max. Acti. on K<br>日 三小时段 指数<br>期 3Hour K<br>Day Int. Index |   |   | 最大幅度<br>Range<br>D' H <sup>ST</sup> Z <sup>ST</sup> |     |    |
|---------------|-----------------------------------------------------------|-------|----------------|------------------------------------------------------------------------|--|--|---------------------------------|-----------------------------------------------------------------------|---|---|-----------------------------------------------------|-----|----|
|               |                                                           |       |                |                                                                        |  |  |                                 |                                                                       |   |   |                                                     |     |    |
| 20            | 3                                                         | 20 22 | ...            |                                                                        |  |  | m                               | 20                                                                    | 4 | 5 | 6.0                                                 | 110 | 25 |

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