

Solar activity ranged from low to moderate levels. Region 3947 (N12, L=340, class/area=Ekc/370 on 08 Jan) produced the strongest event of the period, an M4.8 flare (R1-Minor) at 06/1624 UTC. Associated with the flare were Type II and Type IV radio sweeps. The CME produced originated from the W limb and no Earth-directed component was suspected. The only other region to produce an R1 event was 3737 (S17, L=083, class/area=Cso/130 on 02 Jan) with an M1.1 flare at 07/2305 UTC. No Earth-directed CMEs were identified in available coronagraph imagery.

No proton events were observed at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit reached high levels on 06-09 Jan following influence from a positive polarity CH HSS. The remainder of the summary period was at normal to moderate levels.

Geomagnetic field activity ranged from quiet to active levels. Active levels on 06 Jan and 08-10 Jan were associated with weak positive polarity CH HSS influence. The remainder of the summary period was at quiet to unsettled levels.

### **Space Weather Outlook** **13 January - 08 February 2025**

Solar activity is expected to be at low levels, with a chance for M-class (R1-R2/Minor-Moderate) and slight chance for X-class events (R3/Strong), throughout the outlook period.

No proton events are expected at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit is likely to reached high levels on 02-05 Feb due to recurrent CH HSS influence. The remainder of the outlook period is expected to be at normal to moderate levels.

Geomagnetic field activity is expected to range from quiet to G1 (Minor) geomagnetic storm levels. G1 conditions are likely on 31 Jan - 02 Feb due to the anticipated influence of a positive polarity CH HSS. Active conditions are likely on 13 Jan and 03-05 Feb. The remainder of the outlook period is expected to range from quiet to unsettled levels.



### ***Daily Solar Data***

| Date       | Radio<br>Flux<br>10.7cm | Sun<br>spot<br>No. | Sunspot<br>Area<br>(10 <sup>-6</sup> hemi.) | X-ray<br>Background<br>Flux | Flares |   |   |         |   |   |   |   |
|------------|-------------------------|--------------------|---------------------------------------------|-----------------------------|--------|---|---|---------|---|---|---|---|
|            |                         |                    |                                             |                             | X-ray  |   |   | Optical |   |   |   |   |
|            |                         |                    |                                             |                             | C      | M | X | S       | 1 | 2 | 3 | 4 |
| 06 January | 172                     | 154                | 720                                         | C1.2                        | 11     | 3 | 0 | 9       | 2 | 0 | 0 | 0 |
| 07 January | 168                     | 113                | 540                                         | C1.0                        | 5      | 1 | 0 | 2       | 0 | 0 | 0 | 0 |
| 08 January | 160                     | 113                | 540                                         | B8.5                        | 7      | 0 | 0 | 4       | 0 | 0 | 0 | 0 |
| 09 January | 162                     | 126                | 600                                         | B9.5                        | 6      | 1 | 0 | 0       | 0 | 0 | 0 | 0 |
| 10 January | 157                     | 105                | 650                                         | B9.1                        | 6      | 1 | 0 | 5       | 1 | 0 | 0 | 0 |
| 11 January | 156                     | 85                 | 580                                         | B8.6                        | 4      | 0 | 0 | 0       | 0 | 0 | 0 | 0 |
| 12 January | 158                     | 99                 | 765                                         | B9.9                        | 3      | 0 | 0 | 0       | 0 | 0 | 0 | 0 |

### ***Daily Particle Data***

| Date       | Proton Fluence<br>(protons/cm <sup>2</sup> -day -sr) |         | Electron Fluence<br>(electrons/cm <sup>2</sup> -day -sr) |  |
|------------|------------------------------------------------------|---------|----------------------------------------------------------|--|
|            |                                                      |         |                                                          |  |
|            | >1 MeV                                               | >10 MeV | >2MeV                                                    |  |
| 06 January | 1.9e+06                                              | 9.6e+04 | 5.8e+07                                                  |  |
| 07 January | 7.1e+05                                              | 2.6e+04 | 8.9e+07                                                  |  |
| 08 January | 3.4e+05                                              | 1.7e+04 | 6.8e+07                                                  |  |
| 09 January | 1.5e+05                                              | 1.5e+04 | 4.1e+07                                                  |  |
| 10 January | 7.6e+04                                              | 1.5e+04 | 3.9e+06                                                  |  |
| 11 January | 4.2e+04                                              | 1.5e+04 | 4.6e+06                                                  |  |
| 12 January | 1.4e+05                                              | 1.5e+04 | 1.1e+07                                                  |  |

### ***Daily Geomagnetic Data***

| Date       | Middle Latitude<br>Fredericksburg |                 | High Latitude<br>College |                 | Estimated<br>Planetary |                 |
|------------|-----------------------------------|-----------------|--------------------------|-----------------|------------------------|-----------------|
|            | A                                 | K-indices       | A                        | K-indices       | A                      | K-indices       |
|            |                                   |                 |                          |                 |                        |                 |
| 06 January | 13                                | 3-4-3-2-3-2-2-2 | 20                       | 2-2-3-5-5-4-2-1 | 15                     | 3-4-3-3-3-3-2-2 |
| 07 January | 8                                 | 1-2-2-2-2-3-2-2 | 24                       | 1-2-6-5-3-4-2-2 | 12                     | 2-3-3-3-2-3-3-2 |
| 08 January | 6                                 | 3-2-1-1-1-2-2-1 | 6                        | 2-1-1-0-4-2-1-0 | 8                      | 4-2-2-1-2-2-1-1 |
| 09 January | 9                                 | 1-0-2-3-4-2-2-2 | 18                       | 0-0-2-5-5-4-2-1 | 10                     | 2-1-2-3-4-3-2-2 |
| 10 January | 11                                | 2-3-1-3-3-2-2-3 | 18                       | 0-3-2-5-5-3-2-2 | 12                     | 1-3-2-3-3-2-3-4 |
| 11 January | 5                                 | 2-0-0-1-2-3-2-1 | 7                        | 2-0-0-3-3-3-2-0 | 7                      | 3-1-1-2-2-3-2-1 |
| 12 January | 6                                 | 1-2-2-1-2-2-1-2 | 7                        | 0-1-2-4-3-1-1-0 | 5                      | 1-2-2-2-2-1-2-2 |

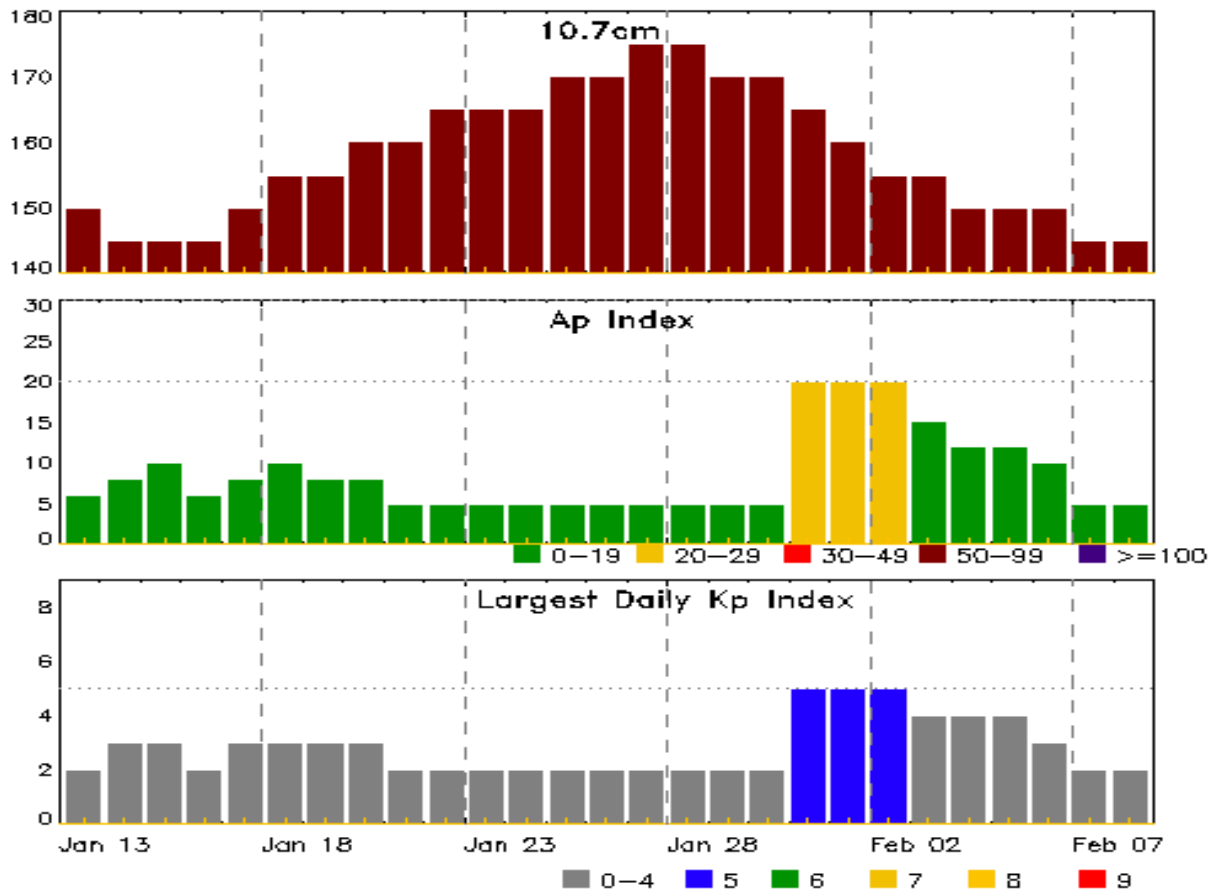


### *Alerts and Warnings Issued*

| <b>Date &amp; Time<br/>of Issue UTC</b> | <b>Type of Alert or Warning</b>                                | <b>Date &amp; Time<br/>of Event UTC</b> |
|-----------------------------------------|----------------------------------------------------------------|-----------------------------------------|
| 06 Jan 0503                             | WARNING: Geomagnetic K = 4                                     | 06/0503 - 1200                          |
| 06 Jan 0559                             | ALERT: Geomagnetic K = 4                                       |                                         |
| 06 Jan 1442                             | ALERT: Electron 2MeV Integral Flux $\geq$ 1000pfu              | 06/1430                                 |
| 06 Jan 1651                             | ALERT: Type II Radio Emission                                  | 06/1621                                 |
| 06 Jan 1705                             | ALERT: Type IV Radio Emission                                  | 06/1628                                 |
| 07 Jan 1152                             | CONTINUED ALERT:<br>Electron 2MeV Integral Flux $\geq$ 1000pfu | 06/1430                                 |
| 07 Jan 1640                             | WARNING: Geomagnetic K = 4                                     | 07/1639 - 2100                          |
| 08 Jan 0221                             | WARNING: Geomagnetic K = 4                                     | 08/0220 - 0900                          |
| 08 Jan 0237                             | ALERT: Geomagnetic K = 4                                       |                                         |
| 08 Jan 1245                             | CONTINUED ALERT:<br>Electron 2MeV Integral Flux $\geq$ 1000pfu | 06/1430                                 |
| 09 Jan 1052                             | CONTINUED ALERT:<br>Electron 2MeV Integral Flux $\geq$ 1000pfu | 06/1430                                 |
| 09 Jan 1324                             | WARNING: Geomagnetic K = 4                                     | 09/1325 - 2100                          |
| 09 Jan 1419                             | ALERT: Geomagnetic K = 4                                       |                                         |
| 10 Jan 0408                             | WARNING: Geomagnetic K = 4                                     | 10/0408 - 1200                          |
| 10 Jan 2246                             | WARNING: Geomagnetic K = 4                                     | 10/2245 - 2359                          |
| 10 Jan 2248                             | ALERT: Geomagnetic K = 4                                       |                                         |



## Twenty-seven Day Outlook



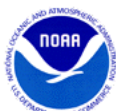
| Date   | Radio Flux<br>10.7cm | Planetary<br>A Index | Largest<br>Kp Index | Date   | Radio Flux<br>10.7cm | Planetary<br>A Index | Largest<br>Kp Index |
|--------|----------------------|----------------------|---------------------|--------|----------------------|----------------------|---------------------|
| 13 Jan | 150                  | 6                    | 2                   | 27 Jan | 175                  | 5                    | 2                   |
| 14     | 145                  | 8                    | 3                   | 28     | 175                  | 5                    | 2                   |
| 15     | 145                  | 10                   | 3                   | 29     | 170                  | 5                    | 2                   |
| 16     | 145                  | 6                    | 2                   | 30     | 170                  | 5                    | 2                   |
| 17     | 150                  | 8                    | 3                   | 31     | 165                  | 20                   | 5                   |
| 18     | 155                  | 10                   | 3                   | 01 Feb | 160                  | 20                   | 5                   |
| 19     | 155                  | 8                    | 3                   | 02     | 155                  | 20                   | 5                   |
| 20     | 160                  | 8                    | 3                   | 03     | 155                  | 15                   | 4                   |
| 21     | 160                  | 5                    | 2                   | 04     | 150                  | 12                   | 4                   |
| 22     | 165                  | 5                    | 2                   | 05     | 150                  | 12                   | 4                   |
| 23     | 165                  | 5                    | 2                   | 06     | 150                  | 10                   | 3                   |
| 24     | 165                  | 5                    | 2                   | 07     | 145                  | 5                    | 2                   |
| 25     | 170                  | 5                    | 2                   | 08     | 145                  | 5                    | 2                   |
| 26     | 170                  | 5                    | 2                   |        |                      |                      |                     |

### ***Energetic Events***

| Date   | Time  |      |          | X-ray |            | Optical Information |                  |       | Peak       |      | Sweep Freq |    |
|--------|-------|------|----------|-------|------------|---------------------|------------------|-------|------------|------|------------|----|
|        | Begin | Max  | Half Max | Class | Integ Flux | Imp/ Brtns          | Location Lat CMD | Rgn # | Radio Flux |      | Intensity  |    |
|        |       |      |          |       |            |                     |                  |       | 245        | 2695 | II         | IV |
| 06 Jan | 0129  | 0152 | 0208     | M3.1  | 0.027      | 1N                  | N11E30           | 3947  |            |      |            |    |
| 06 Jan | 0336  | 0350 | 0354     | M1.4  | 0.007      | 1F                  | N11E31           | 3947  |            |      |            |    |
| 06 Jan | 1612  | 1624 | 1630     | M4.8  | 0.003      |                     |                  |       | 3947       | 5300 | 2          | 1  |
| 07 Jan | 2235  | 2305 | 2342     | M1.1  | 0.032      |                     |                  |       | 3939       |      |            |    |
| 09 Jan | 0018  | 0026 | 0033     | M1.1  | 0.005      |                     |                  |       | 3947       |      |            |    |
| 10 Jan | 2229  | 2246 | 2253     | M0.9  | 0.006      | SN                  | N12W32           | 3947  |            |      |            |    |

### ***Flare List***

| Date   | Time  |      |      | X-ray Class | Imp/ Brtns | Optical Location Lat CMD |  | Rgn # |
|--------|-------|------|------|-------------|------------|--------------------------|--|-------|
|        | Begin | Max  | End  |             |            |                          |  |       |
| 06 Jan | 0100  | 0107 | 0115 | C3.2        | SF         | N11E32                   |  | 3947  |
| 06 Jan | 0129  | 0152 | 0208 | M3.1        | 1N         | N11E30                   |  | 3947  |
| 06 Jan | 0232  | 0240 | 0246 |             | SF         | N11E28                   |  | 3947  |
| 06 Jan | 0252  | 0256 | 0308 | C5.3        | SF         | N11E30                   |  | 3947  |
| 06 Jan | 0336  | 0350 | 0354 | M1.4        | 1F         | N11E31                   |  | 3947  |
| 06 Jan | 0608  | 0624 | 0654 | C4.9        | SF         | N11E31                   |  | 3947  |
| 06 Jan | 0659  | 0702 | 0706 | C5.3        | SF         | N11E28                   |  | 3947  |
| 06 Jan | 0742  | 0751 | 0757 | C3.2        | SF         | S10E02                   |  | 3945  |
| 06 Jan | 0843  | 0851 | 0855 | C2.1        | SF         | N11E28                   |  | 3947  |
| 06 Jan | 0936  | 0943 | 0947 | C4.3        | SF         | N12E28                   |  | 3947  |
| 06 Jan | 0948  | 0958 | 1011 | C6.6        | SF         | N12E28                   |  | 3947  |
| 06 Jan | 1324  | 1328 | 1338 | C2.0        |            |                          |  | 3947  |
| 06 Jan | 1612  | 1624 | 1630 | M4.8        |            |                          |  | 3947  |
| 06 Jan | 1658  | 1714 | 1731 | C9.0        |            |                          |  | 3947  |
| 06 Jan | 2158  | 2210 | 2238 | C2.7        |            |                          |  | 3941  |
| 07 Jan | 0038  | 0046 | 0103 | C2.3        |            |                          |  | 3947  |
| 07 Jan | 0600  | 0609 | 0615 | C2.8        | SF         | N10E20                   |  | 3947  |
| 07 Jan | 0919  | 0931 | 0955 | C2.5        | SF         | S15W08                   |  | 3951  |
| 07 Jan | 1737  | 1742 | 1746 | C1.4        |            |                          |  | 3947  |
| 07 Jan | 2117  | 2128 | 2136 | C3.2        |            |                          |  | 3945  |
| 07 Jan | 2235  | 2305 | 2342 | M1.1        |            |                          |  | 3939  |
| 08 Jan | 0353  | 0403 | 0409 | C3.8        | SF         | S07W18                   |  | 3945  |
| 08 Jan | 0601  | 0604 | 0609 | C1.9        |            |                          |  | 3947  |
| 08 Jan | 0629  | 0637 | 0641 | C9.8        |            |                          |  | 3950  |
| 08 Jan | 0824  | 0829 | 0849 |             | SF         | N11E05                   |  | 3947  |



## *Flare List*

| Date   | Time  |      |      | Optical        |               |                     |          |
|--------|-------|------|------|----------------|---------------|---------------------|----------|
|        | Begin | Max  | End  | X-ray<br>Class | Imp/<br>Brtns | Location<br>Lat CMD | Rgn<br># |
| 08 Jan | 0853  | 0904 | 0927 | C2.4           | SF            | S16W22              | 3951     |
| 08 Jan | 0957  | 1005 | 1012 | C2.3           | SF            | N12W03              | 3947     |
| 08 Jan | 1505  | 1512 | 1519 | C2.1           |               |                     | 3950     |
| 08 Jan | 2054  | 2059 | 2103 | C1.8           |               |                     | 3947     |
| 09 Jan | 0018  | 0026 | 0033 | M1.1           |               |                     | 3947     |
| 09 Jan | 0428  | 0438 | 0447 | C1.6           |               |                     | 3947     |
| 09 Jan | 0505  | 0512 | 0913 | C1.7           |               |                     | 3947     |
| 09 Jan | 0913  | 0920 | 0930 | C1.2           |               |                     |          |
| 09 Jan | 1018  | 1058 | 1113 | C3.9           |               |                     | 3947     |
| 09 Jan | 1113  | 1119 | 1123 | C4.1           |               |                     | 3947     |
| 09 Jan | 2132  | 2140 | 2147 | C5.0           |               |                     | 3947     |
| 10 Jan | 0100  | 0111 | 0117 | C4.8           |               |                     | 3947     |
| 10 Jan | B0128 | 0128 | 0133 |                | 1N            | N11W18              | 3947     |
| 10 Jan | 0540  | 0549 | 0600 | C1.7           |               |                     | 3945     |
| 10 Jan | 0655  | 0705 | 0713 | C2.7           |               |                     | 3947     |
| 10 Jan | 0659  | 0700 | 0711 |                | SF            | N10W18              | 3947     |
| 10 Jan | 0730  | 0737 | 0742 | C3.6           | SF            | N12W21              | 3947     |
| 10 Jan | 0924  | 0942 | 0950 | C6.1           | SF            | S15W49              | 3951     |
| 10 Jan | 1814  | 1824 | 1831 | C2.7           | SF            | N11W30              | 3947     |
| 10 Jan | 2229  | 2246 | 2253 | M0.9           | SN            | N12W32              | 3947     |
| 11 Jan | 0309  | 0313 | 0320 | C1.3           |               |                     |          |
| 11 Jan | 0320  | 0327 | 0334 | C1.2           |               |                     | 3956     |
| 11 Jan | 0835  | 0844 | 0902 | C2.8           |               |                     | 3948     |
| 11 Jan | 1427  | 1437 | 1449 | C1.7           |               |                     | 3947     |
| 12 Jan | 1200  | 1205 | 1216 | C1.9           |               |                     | 3951     |
| 12 Jan | 1730  | 1739 | 1752 | C1.6           |               |                     |          |
| 12 Jan | 2203  | 2208 | 2216 | C4.3           |               |                     |          |



## Region Summary

|             | Location |       | Sunspot Characteristics |         |       |       |       | Flares |   |   |         |   |   |   |   |
|-------------|----------|-------|-------------------------|---------|-------|-------|-------|--------|---|---|---------|---|---|---|---|
|             |          | Helio | Area                    | Extent  | Spot  | Spot  | Mag   | X-ray  |   |   | Optical |   |   |   |   |
| Date        | Lat CMD  | Lon   | 10 <sup>-6</sup> hemi.  | (helio) | Class | Count | Class | C      | M | X | S       | 1 | 2 | 3 | 4 |
| Region 3939 |          |       |                         |         |       |       |       |        |   |   |         |   |   |   |   |
| 25 Dec      | S17E74   | 82    | 30                      | 3       | Cso   | 2     | B     |        |   |   |         |   |   |   |   |
| 26 Dec      | S17E60   | 83    | 40                      | 4       | Hsx   | 1     | A     |        |   |   |         |   |   |   |   |
| 27 Dec      | S17E45   | 84    | 80                      | 2       | Hsx   | 2     | A     | 1      |   |   |         |   |   |   |   |
| 28 Dec      | S17E34   | 82    | 110                     | 5       | Dso   | 6     | B     | 1      |   |   | 1       |   |   |   |   |
| 29 Dec      | S17E20   | 83    | 120                     | 7       | Dso   | 14    | B     |        | 4 |   | 5       | 1 |   |   |   |
| 30 Dec      | S17E06   | 84    | 110                     | 7       | Dac   | 12    | B     | 1      | 2 |   | 4       | 2 |   |   |   |
| 31 Dec      | S17W07   | 84    | 130                     | 7       | Dac   | 14    | BD    |        |   |   | 2       |   |   |   |   |
| 01 Jan      | S17W20   | 84    | 130                     | 7       | Cai   | 9     | BG    |        |   |   |         | 1 |   |   |   |
| 02 Jan      | S17W33   | 83    | 130                     | 5       | Cso   | 10    | B     |        | 1 |   | 2       | 1 |   |   |   |
| 03 Jan      | S17W47   | 84    | 120                     | 5       | Cso   | 8     | B     |        |   |   | 1       |   |   |   |   |
| 04 Jan      | S17W61   | 85    | 90                      | 2       | Hsx   |       | A     | 2      |   |   |         |   |   |   |   |
| 05 Jan      | S17W74   | 85    | 80                      | 2       | Hsx   | 2     | A     |        |   |   |         |   |   |   |   |
| 06 Jan      | S17W92   | 90    | 60                      | 2       | Hsx   | 1     | A     |        |   |   |         |   |   |   |   |
|             |          |       |                         |         |       |       |       | 5      | 7 | 0 | 15      | 5 | 0 | 0 | 0 |

Crossed West Limb.

Absolute heliographic longitude: 84

### Region 3940

|        |        |    |       |   |     |   |   |   |   |   |   |   |   |   |   |
|--------|--------|----|-------|---|-----|---|---|---|---|---|---|---|---|---|---|
| 27 Dec | S05E38 | 91 | 5     | 1 | Axx | 1 | A |   |   |   | 1 |   |   |   |   |
| 28 Dec | S06E38 | 78 | 10    | 1 | Axx | 1 | A |   |   |   | 1 |   |   |   |   |
| 29 Dec | S06E24 | 80 | plage |   |     |   |   |   | 2 |   | 3 |   |   |   |   |
| 30 Dec | S06E10 | 80 | plage |   |     |   |   |   | 1 |   | 2 |   |   |   |   |
| 31 Dec | S06W04 | 81 | plage |   |     |   |   |   |   |   |   |   |   |   |   |
| 01 Jan | S06W18 | 82 | plage |   |     |   |   |   |   |   |   |   |   |   |   |
| 02 Jan | S06W33 | 83 | plage |   |     |   |   |   |   |   |   |   |   |   |   |
| 03 Jan | S06W47 | 84 | plage |   |     |   |   |   |   |   |   |   |   |   |   |
| 04 Jan | S06W62 | 86 | plage |   |     |   |   |   |   |   |   |   |   |   |   |
| 05 Jan | S06W76 | 87 | plage |   |     |   |   |   |   |   |   |   |   |   |   |
|        |        |    |       |   |     |   |   | 0 | 3 | 0 | 7 | 0 | 0 | 0 | 0 |

Died on Disk.

Absolute heliographic longitude: 81



### *Region Summary - continued*

| Date        | Location | Sunspot Characteristics |                                |                   |               |               |              | Flares |   |   |         |   |   |   |   |
|-------------|----------|-------------------------|--------------------------------|-------------------|---------------|---------------|--------------|--------|---|---|---------|---|---|---|---|
|             | Lat CMD  | Helio                   | Area<br>10 <sup>-6</sup> hemi. | Extent<br>(helio) | Spot<br>Class | Spot<br>Count | Mag<br>Class | X-ray  |   |   | Optical |   |   |   |   |
|             |          | Lon                     |                                |                   |               |               |              | C      | M | X | S       | 1 | 2 | 3 | 4 |
| Region 3941 |          |                         |                                |                   |               |               |              |        |   |   |         |   |   |   |   |
| 27 Dec      | S05E50   | 79                      | 20                             | 2                 | Hax           | 2             | A            |        |   |   |         |   |   |   |   |
| 28 Dec      | S06E37   | 79                      | 20                             | 5                 | Bxo           | 2             | B            |        |   |   |         |   |   |   |   |
| 29 Dec      | S06E26   | 77                      | 70                             | 9                 | Dai           | 16            | BG           |        |   |   |         |   |   |   |   |
| 30 Dec      | S06E14   | 76                      | 70                             | 11                | Eac           | 13            | BD           |        |   |   | 2       |   |   |   |   |
| 31 Dec      | S06W00   | 77                      | 80                             | 11                | Cai           | 10            | B            |        |   |   |         |   |   |   |   |
| 01 Jan      | S06W13   | 77                      | 80                             | 13                | Cai           | 10            | B            |        |   |   |         |   |   |   |   |
| 02 Jan      | S06W26   | 76                      | 80                             | 11                | Cso           | 7             | B            |        |   |   |         |   |   |   |   |
| 03 Jan      | S05W40   | 77                      | 80                             | 11                | Cso           | 6             | B            |        |   |   |         |   |   |   |   |
| 04 Jan      | S04W53   | 77                      | 90                             | 10                | Dso           | 3             | B            | 1      |   |   |         |   |   |   |   |
| 05 Jan      | S06W67   | 78                      | 50                             | 10                | Dso           | 2             | B            | 1      |   |   |         |   |   |   |   |
| 06 Jan      | S06W81   | 79                      | 60                             | 10                | Dso           | 3             | B            | 1      |   |   |         |   |   |   |   |
|             |          |                         |                                |                   |               |               |              | 3      | 0 | 0 | 2       | 0 | 0 | 0 | 0 |

Crossed West Limb.

Absolute heliographic longitude: 77

### **Region 3942**

|        |        |    |       |   |     |   |   |   |   |   |   |   |   |   |   |
|--------|--------|----|-------|---|-----|---|---|---|---|---|---|---|---|---|---|
| 29 Dec | S13E54 | 49 | 10    | 1 | Axx | 1 | A |   |   |   |   |   |   |   |   |
| 30 Dec | S13E40 | 50 | 10    | 1 | Axx | 1 | A |   |   |   |   |   |   |   |   |
| 31 Dec | S13E26 | 51 | plage |   |     |   |   |   |   |   |   |   |   |   |   |
| 01 Jan | S13E12 | 52 | plage |   |     |   |   |   |   |   |   |   |   |   |   |
| 02 Jan | S13W02 | 52 | plage |   |     |   |   |   |   |   |   |   |   |   |   |
| 03 Jan | S13W16 | 53 | plage |   |     |   |   |   |   |   |   |   |   |   |   |
| 04 Jan | S13W30 | 54 | plage |   |     |   |   |   |   |   |   |   |   |   |   |
| 05 Jan | S13W44 | 55 | plage |   |     |   |   |   |   |   |   |   |   |   |   |
| 06 Jan | S13W58 | 56 | plage |   |     |   |   |   |   |   |   |   |   |   |   |
| 07 Jan | S13W72 | 57 | plage |   |     |   |   |   |   |   |   |   |   |   |   |
| 08 Jan | S13W86 | 57 | plage |   |     |   |   |   |   |   |   |   |   |   |   |
|        |        |    |       |   |     |   |   | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

Crossed West Limb.

Absolute heliographic longitude: 52





### *Region Summary - continued*

|             | Location |       | Sunspot Characteristics |         |       |       |       | Flares |   |   |         |   |   |   |   |
|-------------|----------|-------|-------------------------|---------|-------|-------|-------|--------|---|---|---------|---|---|---|---|
|             |          | Helio | Area                    | Extent  | Spot  | Spot  | Mag   | X-ray  |   |   | Optical |   |   |   |   |
| Date        | Lat CMD  | Lon   | 10 <sup>-6</sup> hemi.  | (helio) | Class | Count | Class | C      | M | X | S       | 1 | 2 | 3 | 4 |
| Region 3943 |          |       |                         |         |       |       |       |        |   |   |         |   |   |   |   |
| 30 Dec      | S15E73   | 17    | 40                      | 3       | Hax   | 1     | A     |        |   |   |         |   |   |   |   |
| 31 Dec      | S15E62   | 15    | 90                      | 8       | Dao   | 6     | B     |        |   |   |         |   |   |   |   |
| 01 Jan      | S15E48   | 16    | 90                      | 7       | Cao   | 6     | B     | 1      |   |   | 1       |   |   |   |   |
| 02 Jan      | S16E35   | 15    | 130                     | 7       | Dao   | 7     | B     |        |   |   |         |   |   |   |   |
| 03 Jan      | S15E21   | 16    | 130                     | 8       | Dao   | 13    | BG    |        |   |   |         |   |   |   |   |
| 04 Jan      | S17E08   | 16    | 80                      | 11      | Eso   | 14    | BG    | 2      |   |   | 1       |   |   |   |   |
| 05 Jan      | S16W06   | 16    | 60                      | 7       | Hsx   | 5     | A     | 1      |   |   | 1       |   |   |   |   |
| 06 Jan      | S16W21   | 19    | 50                      | 4       | Cso   | 4     | B     |        |   |   |         |   |   |   |   |
| 07 Jan      | S17W33   | 18    | 40                      | 1       | Hsx   | 1     | A     |        |   |   |         |   |   |   |   |
| 08 Jan      | S17W47   | 18    | 30                      | 4       | Cso   | 2     | B     |        |   |   |         |   |   |   |   |
| 09 Jan      | S16W59   | 17    | 30                      | 1       | Hsx   | 2     | A     |        |   |   |         |   |   |   |   |
| 10 Jan      | S16W73   | 18    | plage                   |         |       |       |       |        |   |   |         |   |   |   |   |
| 11 Jan      | S16W87   | 19    | plage                   |         |       |       |       |        |   |   |         |   |   |   |   |
|             |          |       |                         |         |       |       |       | 4      | 0 | 0 | 3       | 0 | 0 | 0 | 0 |

Crossed West Limb.

Absolute heliographic longitude: 16

### **Region 3944**

|        |        |    |       |   |     |    |    |   |   |   |   |   |   |   |   |
|--------|--------|----|-------|---|-----|----|----|---|---|---|---|---|---|---|---|
| 31 Dec | S14E33 | 44 | 140   | 7 | Dao | 4  | BG |   |   |   |   |   |   |   |   |
| 01 Jan | S14E19 | 45 | 170   | 8 | Dai | 9  | B  |   |   |   |   |   |   |   |   |
| 02 Jan | S14E06 | 44 | 220   | 8 | Dai | 12 | B  |   |   |   |   |   |   |   |   |
| 03 Jan | S13W08 | 45 | 200   | 8 | Dao | 14 | B  |   |   |   |   |   |   |   |   |
| 04 Jan | S13W22 | 46 | 140   | 7 | Dao | 13 | B  |   |   |   |   |   |   |   |   |
| 05 Jan | S14W35 | 46 | 100   | 7 | Dao | 12 | B  |   |   |   |   |   |   |   |   |
| 06 Jan | S14W48 | 46 | 70    | 7 | Dao | 8  | B  |   |   |   |   |   |   |   |   |
| 07 Jan | S15W61 | 46 | 20    | 6 | Cro | 2  | B  |   |   |   |   |   |   |   |   |
| 08 Jan | S13W73 | 44 | 10    | 4 | Bxo | 2  | B  |   |   |   |   |   |   |   |   |
| 09 Jan | S13W87 | 45 | plage |   |     |    |    |   |   |   |   |   |   |   |   |
|        |        |    |       |   |     |    |    | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

Crossed West Limb.

Absolute heliographic longitude: 44



### *Region Summary - continued*

| Date        | Location |       | Sunspot Characteristics        |                   |               |               |              | Flares |   |   |         |   |   |   |   |
|-------------|----------|-------|--------------------------------|-------------------|---------------|---------------|--------------|--------|---|---|---------|---|---|---|---|
|             | Lat CMD  | Helio | Area<br>10 <sup>-6</sup> hemi. | Extent<br>(helio) | Spot<br>Class | Spot<br>Count | Mag<br>Class | X-ray  |   |   | Optical |   |   |   |   |
|             |          | Lon   |                                |                   |               |               |              | C      | M | X | S       | 1 | 2 | 3 | 4 |
| Region 3945 |          |       |                                |                   |               |               |              |        |   |   |         |   |   |   |   |
| 01 Jan      | S10E60   | 4     | 170                            | 11                | Eai           | 6             | B            | 1      |   |   | 2       |   |   |   |   |
| 02 Jan      | S09E46   | 4     | 310                            | 12                | Eki           | 12            | BG           |        |   |   | 1       |   |   |   |   |
| 03 Jan      | S10E33   | 4     | 350                            | 9                 | Dki           | 15            | BG           |        |   |   |         |   |   |   |   |
| 04 Jan      | S10E19   | 5     | 160                            | 9                 | Dai           | 16            | BG           |        |   |   |         |   |   |   |   |
| 05 Jan      | S09E05   | 6     | 80                             | 8                 | Cai           | 12            | B            |        |   |   |         |   |   |   |   |
| 06 Jan      | S09W10   | 8     | 80                             | 3                 | Cai           | 5             | B            | 1      |   |   | 1       |   |   |   |   |
| 07 Jan      | S09W23   | 6     | 40                             | 2                 | Cao           | 6             | B            | 1      |   |   |         |   |   |   |   |
| 08 Jan      | S10W37   | 8     | 30                             | 3                 | Cro           | 6             | B            | 1      |   |   | 1       |   |   |   |   |
| 09 Jan      | S10W49   | 7     | 20                             | 2                 | Cro           | 4             | B            |        |   |   |         |   |   |   |   |
| 10 Jan      | S07W59   | 6     | 20                             | 4                 | Bxo           | 2             | B            | 1      |   |   |         |   |   |   |   |
| 11 Jan      | S07W73   | 352   | plage                          |                   |               |               |              |        |   |   |         |   |   |   |   |
| 12 Jan      | S07W86   | 5     | plage                          |                   |               |               |              |        |   |   |         |   |   |   |   |
|             |          |       |                                |                   |               |               |              | 6      | 0 | 0 | 5       | 0 | 0 | 0 | 0 |

Still on Disk.

Absolute heliographic longitude: 6

### **Region 3946**

|        |        |     |     |   |     |   |   |   |   |   |   |   |   |   |   |
|--------|--------|-----|-----|---|-----|---|---|---|---|---|---|---|---|---|---|
| 01 Jan | S12W40 | 103 | 40  | 2 | Dao | 4 | B |   |   |   |   |   |   |   |   |
| 02 Jan | S12W53 | 103 | 160 | 3 | Dao | 6 | B |   |   |   |   |   |   |   |   |
| 03 Jan | S11W67 | 104 | 120 | 5 | Dao | 4 | B |   |   |   |   |   |   |   |   |
| 04 Jan | S10W81 | 105 | 120 | 5 | Dao | 4 | B |   |   |   |   |   |   |   |   |
| 05 Jan | S10W95 | 106 | 120 | 5 | Dao | 4 | B |   |   |   |   |   |   |   |   |
|        |        |     |     |   |     |   |   | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

Crossed West Limb.

Absolute heliographic longitude: 103



### *Region Summary - continued*

| Date        | Location | Sunspot Characteristics |                                |                   |               |               |              | Flares |    |   |         |   |   |   |   |
|-------------|----------|-------------------------|--------------------------------|-------------------|---------------|---------------|--------------|--------|----|---|---------|---|---|---|---|
|             | Lat CMD  | Helio                   | Area<br>10 <sup>-6</sup> hemi. | Extent<br>(helio) | Spot<br>Class | Spot<br>Count | Mag<br>Class | X-ray  |    |   | Optical |   |   |   |   |
|             |          | Lon                     |                                |                   |               |               |              | C      | M  | X | S       | 1 | 2 | 3 | 4 |
| Region 3947 |          |                         |                                |                   |               |               |              |        |    |   |         |   |   |   |   |
| 02 Jan      | N10E71   | 339                     | 100                            | 5                 | Dao           | 4             | BG           | 3      |    |   | 1       |   |   |   |   |
| 03 Jan      | N11E57   | 340                     | 240                            | 5                 | Dac           | 8             | BD           | 4      | 3  | 2 | 2       | 3 |   |   |   |
| 04 Jan      | N10E42   | 342                     | 310                            | 6                 | Dkc           | 10            | BGD          | 4      | 3  | 1 | 6       | 2 |   |   |   |
| 05 Jan      | N11E29   | 342                     | 230                            | 11                | Eac           | 12            | BGD          | 2      | 4  |   | 8       |   | 2 |   |   |
| 06 Jan      | N11E17   | 341                     | 290                            | 12                | Ehc           | 17            | BGD          | 9      | 3  |   | 8       | 2 |   |   |   |
| 07 Jan      | N12E03   | 342                     | 360                            | 12                | Eki           | 19            | BGD          | 3      |    |   | 1       |   |   |   |   |
| 08 Jan      | N12W09   | 340                     | 370                            | 13                | Ekc           | 12            | BGD          | 3      |    |   | 2       |   |   |   |   |
| 09 Jan      | N12W22   | 340                     | 320                            | 13                | Ekc           | 23            | BG           | 5      | 1  |   |         |   |   |   |   |
| 10 Jan      | N13W37   | 342                     | 250                            | 10                | Dko           | 15            | BG           | 4      | 1  |   | 4       | 1 |   |   |   |
| 11 Jan      | N11W50   | 341                     | 250                            | 11                | Dao           | 11            | BG           | 1      |    |   |         |   |   |   |   |
| 12 Jan      | N11W63   | 342                     | 240                            | 9                 | Dao           | 7             | BG           |        |    |   |         |   |   |   |   |
|             |          |                         |                                |                   |               |               |              | 38     | 15 | 3 | 32      | 8 | 2 | 0 | 0 |

Still on Disk.

Absolute heliographic longitude: 342

### **Region 3948**

|        |        |    |       |   |     |   |   |   |   |   |   |   |   |   |   |
|--------|--------|----|-------|---|-----|---|---|---|---|---|---|---|---|---|---|
| 02 Jan | N23E36 | 14 | 10    | 1 | Axx | 1 | A |   |   |   |   |   |   |   |   |
| 03 Jan | N16E33 | 4  | 10    | 2 | Bxo | 2 | B |   |   |   |   |   |   |   |   |
| 04 Jan | N16E19 | 5  | 5     | 1 | Axx | 1 | A |   |   |   |   |   |   |   |   |
| 05 Jan | N16E05 | 6  | 10    | 2 | Bxo | 1 | B |   |   |   |   |   |   |   |   |
| 06 Jan | N16W09 | 7  | 10    | 4 | Bxo | 2 | B |   |   |   |   |   |   |   |   |
| 07 Jan | N16W23 | 8  | 10    | 4 | Bxo | 2 | B |   |   |   |   |   |   |   |   |
| 08 Jan | N17W40 | 11 | 10    | 1 | Axx | 1 | A |   |   |   |   |   |   |   |   |
| 09 Jan | N16W54 | 12 | 10    | 1 | Axx | 1 | A |   |   |   |   |   |   |   |   |
| 10 Jan | N15W67 | 12 | 10    | 1 | Hsx | 1 | A |   |   |   |   |   |   |   |   |
| 11 Jan | N14W80 | 12 | 10    | 1 | Axx | 1 | A | 1 |   |   |   |   |   |   |   |
| 12 Jan | N14W94 | 13 | plage |   |     |   |   |   |   |   |   |   |   |   |   |
|        |        |    |       |   |     |   |   | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

Still on Disk.

Absolute heliographic longitude: 6



### *Region Summary - continued*

|             | Location | Sunspot Characteristics |                        |         |       |       |       | Flares |   |   |         |   |   |   |   |
|-------------|----------|-------------------------|------------------------|---------|-------|-------|-------|--------|---|---|---------|---|---|---|---|
|             |          | Helio                   | Area                   | Extent  | Spot  | Spot  | Mag   | X-ray  |   |   | Optical |   |   |   |   |
| Date        | Lat CMD  | Lon                     | 10 <sup>-6</sup> hemi. | (helio) | Class | Count | Class | C      | M | X | S       | 1 | 2 | 3 | 4 |
| Region 3949 |          |                         |                        |         |       |       |       |        |   |   |         |   |   |   |   |
| 03 Jan      | S09W23   | 60                      | 10                     | 3       | Bxo   | 6     | B     |        |   |   |         |   |   |   |   |
| 04 Jan      | S08W37   | 61                      | 40                     | 4       | Cso   | 5     | B     |        |   |   |         |   |   |   |   |
| 05 Jan      | S07W51   | 62                      | 30                     | 4       | Cro   | 2     | B     | 1      |   |   |         |   |   |   |   |
| 06 Jan      | S09W62   | 60                      | 10                     | 1       | Axx   | 1     | A     |        |   |   |         |   |   |   |   |
| 07 Jan      | S09W76   | 61                      | plage                  |         |       |       |       |        |   |   |         |   |   |   |   |
| 08 Jan      | S09W90   | 61                      | plage                  |         |       |       |       |        |   |   |         |   |   |   |   |
|             |          |                         |                        |         |       |       |       | 1      | 0 | 0 | 0       | 0 | 0 | 0 | 0 |

Crossed West Limb.

Absolute heliographic longitude: 60

|                    |        |     |     |   |     |   |   |   |   |   |   |   |   |   |   |
|--------------------|--------|-----|-----|---|-----|---|---|---|---|---|---|---|---|---|---|
| <b>Region 3950</b> |        |     |     |   |     |   |   |   |   |   |   |   |   |   |   |
| 04 Jan             | S18E64 | 320 | 100 | 2 | Hsx | 1 | A |   |   |   |   |   |   |   |   |
| 05 Jan             | S18E49 | 322 | 40  | 1 | Hsx | 1 | A |   |   |   |   |   |   |   |   |
| 06 Jan             | S18E36 | 322 | 60  | 1 | Hsx | 1 | A |   |   |   |   |   |   |   |   |
| 07 Jan             | S18E22 | 323 | 40  | 1 | Hsx | 1 | A |   |   |   |   |   |   |   |   |
| 08 Jan             | S18E09 | 322 | 70  | 3 | Cso | 3 | B | 2 |   |   |   |   |   |   |   |
| 09 Jan             | S18W05 | 323 | 60  | 3 | Cso | 3 | B |   |   |   |   |   |   |   |   |
| 10 Jan             | S15W18 | 323 | 40  | 3 | Cso | 3 | B |   |   |   |   |   |   |   |   |
| 11 Jan             | S15W32 | 324 | 20  | 1 | Hax | 1 | A |   |   |   |   |   |   |   |   |
| 12 Jan             | S18W45 | 324 | 10  | 1 | Axx | 2 | A |   |   |   |   |   |   |   |   |
|                    |        |     |     |   |     |   |   | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

Still on Disk.

Absolute heliographic longitude: 323

|                    |        |     |       |   |     |   |   |   |   |   |   |   |   |   |   |
|--------------------|--------|-----|-------|---|-----|---|---|---|---|---|---|---|---|---|---|
| <b>Region 3951</b> |        |     |       |   |     |   |   |   |   |   |   |   |   |   |   |
| 04 Jan             | S14E25 | 359 | 50    | 1 | Hsx | 1 | A |   |   |   |   |   |   |   |   |
| 05 Jan             | S13E11 | 360 | 20    | 1 | Hrx | 2 | A |   |   |   |   |   |   |   |   |
| 06 Jan             | S14W01 | 359 | 20    | 2 | Hrx | 1 | A |   |   |   |   |   |   |   |   |
| 07 Jan             | S13W15 | 359 | 20    | 1 | Hsx | 1 | A | 1 |   |   | 1 |   |   |   |   |
| 08 Jan             | S13W28 | 359 | plage |   |     |   |   | 1 |   |   | 1 |   |   |   |   |
| 09 Jan             | S15W41 | 359 | 40    | 4 | Bxo | 3 | B |   |   |   |   |   |   |   |   |
| 10 Jan             | S15W54 | 359 | plage |   |     |   |   | 1 |   |   | 1 |   |   |   |   |
| 11 Jan             | S15W68 | 360 | plage |   |     |   |   |   |   |   |   |   |   |   |   |
| 12 Jan             | S15W82 | 1   | plage |   |     |   |   | 1 |   |   |   |   |   |   |   |
|                    |        |     |       |   |     |   |   | 4 | 0 | 0 | 3 | 0 | 0 | 0 | 0 |

Still on Disk.

Absolute heliographic longitude: 359



### ***Region Summary - continued***

| Date | Location |              | Sunspot Characteristics        |                   |               |               |              | Flares |   |   |         |   |   |   |   |
|------|----------|--------------|--------------------------------|-------------------|---------------|---------------|--------------|--------|---|---|---------|---|---|---|---|
|      | Lat CMD  | Helio<br>Lon | Area<br>10 <sup>-6</sup> hemi. | Extent<br>(helio) | Spot<br>Class | Spot<br>Count | Mag<br>Class | X-ray  |   |   | Optical |   |   |   |   |
|      |          |              |                                |                   |               |               |              | C      | M | X | S       | 1 | 2 | 3 | 4 |

#### ***Region 3952***

|        |        |    |       |   |     |   |   |   |   |   |   |   |   |   |   |
|--------|--------|----|-------|---|-----|---|---|---|---|---|---|---|---|---|---|
| 04 Jan | N19W01 | 25 | 10    | 3 | Bxo | 2 | B |   |   |   |   |   |   |   |   |
| 05 Jan | N18W15 | 26 | 10    | 4 | Axx | 3 | A |   |   |   |   |   |   |   |   |
| 06 Jan | N19W26 | 24 | 10    | 1 | Axx | 1 | A |   |   |   |   |   |   |   |   |
| 07 Jan | N19W41 | 26 | 10    | 1 | Axx | 1 | A |   |   |   |   |   |   |   |   |
| 08 Jan | N19W57 | 28 | 10    | 1 | Axx | 1 | A |   |   |   |   |   |   |   |   |
| 09 Jan | N19W70 | 28 | plage |   |     |   |   |   |   |   |   |   |   |   |   |
| 10 Jan | N19W84 | 29 | plage |   |     |   |   |   |   |   |   |   |   |   |   |
|        |        |    |       |   |     |   |   | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

Crossed West Limb.

Absolute heliographic longitude: 25

#### ***Region 3953***

|        |        |     |    |   |     |   |   |   |   |   |   |   |   |   |   |
|--------|--------|-----|----|---|-----|---|---|---|---|---|---|---|---|---|---|
| 08 Jan | N20W18 | 348 | 10 | 5 | Bxi | 6 | B |   |   |   |   |   |   |   |   |
| 09 Jan | N20W32 | 350 | 90 | 5 | Cri | 6 | B |   |   |   |   |   |   |   |   |
| 10 Jan | N22W46 | 351 | 90 | 6 | Dao | 5 | B |   |   |   |   |   |   |   |   |
| 11 Jan | N22W61 | 353 | 90 | 6 | Dso | 6 | B |   |   |   |   |   |   |   |   |
| 12 Jan | N22W73 | 352 | 90 | 7 | Dso | 3 | B |   |   |   |   |   |   |   |   |
|        |        |     |    |   |     |   |   | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

Still on Disk.

Absolute heliographic longitude: 348

#### ***Region 3954***

|        |        |    |       |   |     |   |   |   |   |   |   |   |   |   |   |
|--------|--------|----|-------|---|-----|---|---|---|---|---|---|---|---|---|---|
| 09 Jan | N24W58 | 16 | 30    | 6 | Cso | 4 | B |   |   |   |   |   |   |   |   |
| 10 Jan | N25W69 | 14 | plage |   |     |   |   |   |   |   |   |   |   |   |   |
| 11 Jan | N25W83 | 15 | plage |   |     |   |   |   |   |   |   |   |   |   |   |
|        |        |    |       |   |     |   |   | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

Crossed West Limb.

Absolute heliographic longitude: 16

#### ***Region 3955***

|        |        |     |       |   |     |   |   |   |   |   |   |   |   |   |   |
|--------|--------|-----|-------|---|-----|---|---|---|---|---|---|---|---|---|---|
| 10 Jan | S29W52 | 357 | 20    | 3 | Bxo | 2 | B |   |   |   |   |   |   |   |   |
| 11 Jan | S30W65 | 357 | 10    | 1 | Axx | 1 | A |   |   |   |   |   |   |   |   |
| 12 Jan | S30W79 | 358 | plage |   |     |   |   |   |   |   |   |   |   |   |   |
|        |        |     |       |   |     |   |   | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

Still on Disk.

Absolute heliographic longitude: 357



### ***Region Summary - continued***

| Date | Location |              | Sunspot Characteristics        |                   |               |               |              | Flares |   |   |         |   |   |   |   |
|------|----------|--------------|--------------------------------|-------------------|---------------|---------------|--------------|--------|---|---|---------|---|---|---|---|
|      | Lat CMD  | Helio<br>Lon | Area<br>10 <sup>-6</sup> hemi. | Extent<br>(helio) | Spot<br>Class | Spot<br>Count | Mag<br>Class | X-ray  |   |   | Optical |   |   |   |   |
|      |          |              |                                |                   |               |               |              | C      | M | X | S       | 1 | 2 | 3 | 4 |

#### ***Region 3956***

|        |        |     |     |   |     |    |   |   |   |   |   |   |   |   |   |
|--------|--------|-----|-----|---|-----|----|---|---|---|---|---|---|---|---|---|
| 10 Jan | N10E25 | 280 | 220 | 6 | Dao | 7  | B |   |   |   |   |   |   |   |   |
| 11 Jan | N10E11 | 281 | 200 | 6 | Dao | 5  | B | 1 |   |   |   |   |   |   |   |
| 12 Jan | N06W02 | 281 | 250 | 8 | Dao | 12 | B |   |   |   |   |   |   |   |   |
|        |        |     |     |   |     |    |   | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

Still on Disk.

Absolute heliographic longitude: 281

#### ***Region 3957***

|        |        |     |    |   |     |   |   |   |   |   |   |   |   |   |   |
|--------|--------|-----|----|---|-----|---|---|---|---|---|---|---|---|---|---|
| 12 Jan | N21W40 | 319 | 20 | 4 | Bxo | 3 | B |   |   |   |   |   |   |   |   |
|        |        |     |    |   |     |   |   | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

Still on Disk.

Absolute heliographic longitude: 319

#### ***Region 3958***

|        |        |     |   |   |     |   |   |   |   |   |   |   |   |   |   |
|--------|--------|-----|---|---|-----|---|---|---|---|---|---|---|---|---|---|
| 12 Jan | S06E49 | 230 | 5 | 1 | Axx | 1 | A |   |   |   |   |   |   |   |   |
|        |        |     |   |   |     |   |   | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

Still on Disk.

Absolute heliographic longitude: 230

#### ***Region 3959***

|        |        |     |     |   |     |   |   |   |   |   |   |   |   |   |   |
|--------|--------|-----|-----|---|-----|---|---|---|---|---|---|---|---|---|---|
| 12 Jan | N19E72 | 207 | 150 | 3 | Hsx | 1 | A |   |   |   |   |   |   |   |   |
|        |        |     |     |   |     |   |   | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

Still on Disk.

Absolute heliographic longitude: 207



## ***Preliminary Report and Forecast of Solar Geophysical Data (The Weekly)***

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Space Weather Prediction Center  
325 Broadway, Boulder CO 80305

**Notice:** The 27-day Outlook, Satellite Environment, X-ray and Proton plots have been redesigned.  
Comments and suggestions are welcome SWPC.Webmaster@noaa.gov

The Weekly has been published continuously since 1951 and is available online since 1997.

<https://www.swpc.noaa.gov/products/weekly-highlights-and-27-day-forecast> --

Current

<ftp://ftp.swpc.noaa.gov/pub/warehouse> -- Online archive from 1997

<https://www.ngdc.noaa.gov/stp/satellite/goes-r.html> -- NCEI GOES data  
textarchive

<https://www.swpc.noaa.gov/products/solar-cycle-progression> -- Solar Cycle  
Progression web site

<https://www.swpc.noaa.gov/content/contact-us> -- Contact and Copyright  
information

[https://www.swpc.noaa.gov/sites/default/files/images/u2/Usr\\_guide.pdf](https://www.swpc.noaa.gov/sites/default/files/images/u2/Usr_guide.pdf) -- User  
Guide

