

Solar activity ranged from very low to moderate levels (R1-minor) with very low activity observed on 08 June, low activity observed on 09, 10 and 12 June and moderate activity observed on 11, 13 and 14 June. A majority of the flare activity occurred from Regions 2360 (N15, L=129, class/area Eac/220 on 12 June) and 2367 (S20, L=001, class/area Ekc/340 on 14 June). Region 2367, the largest region on the disk, produced an M1 flare at 11/0855 UTC. This region exhibited steady growth since first rotating onto the disk on 10 June. Region 2360 produced an M1/Sf flare at 13/0729 UTC and an M2 flare at 14/0059 UTC while exiting the west limb on the 14th. Multiple filament eruptions and eruptive prominences were observed throughout the week, but none resulted in Earth-directed coronal mass ejections.

No proton events were observed at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit was at normal levels on 08-09 June. High levels on 10-13 June and moderate levels on 14 June were observed in response to an enhanced solar wind environment caused by the influence of a negative polarity coronal high speed stream (CH HSS).

Geomagnetic field activity was at predominately quiet to active levels with isolated minor storm levels (G1-minor) observed on 08 and 14 June and an isolated major storm period (G2-moderate) observed on 08 June. The summary period began with unsettled to major storm levels as Earth was under the influence of a negative polarity CH HSS. Effects from the CH HSS persisted through midday on 11 June with quiet to active conditions. Quiet to unsettled conditions were observed for the remainder of 11 June through 13 June. The period ended on 14 June with a co-rotating interaction region in advance of a positive polarity CH HSS that affected Earth's geomagnetic field with unsettled to isolated minor storm periods.

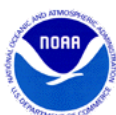
Space Weather Outlook **15 June - 11 July 2015**

Solar activity is expected to be at low levels with a slight chance for M-class (R1-minor) flare activity from 15-24 June from Region 2367 (S20, L=001). As region 2367 rotates off the disk, very low to low levels are expected on 25-26 June. Activity levels are expected to increase to low with a slight chance for M-class flare activity on 27 June - 11 July as old Region 2360 (N15, L=129) rotates back on to the visible disk.

No proton events are expected at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit is anticipated to reach moderate to high levels on 15-19 Jun and 07-11 Jul in response to an enhanced solar wind environment caused by the influence of coronal hole high speed streams (CH HSSs). Normal levels are expected for the remainder of the outlook period.

Geomagnetic field activity is expected to reach unsettled to active levels on 15-16 Jun and 06-08



Jul with minor storm levels (G1-minor) anticipated on 05 Jul and 11 Jul in response to recurrent CH HSS effects. Generally quiet field conditions are expected for 17 Jun-04 Jul.



Daily Solar Data

| Date | Radio Flux 10.7cm | Sun spot No. | Sunspot Area (10 ⁻⁶ hemi.) | X-ray Background Flux | Flares | | | | | | | |
|---------|----------------------|-----------------|--|--------------------------|--------|---|---|---------|---|---|---|---|
| | | | | | X-ray | | | Optical | | | | |
| | | | | | C | M | X | S | 1 | 2 | 3 | 4 |
| 08 June | 134 | 122 | 420 | B4.3 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 |
| 09 June | 137 | 110 | 350 | B5.3 | 2 | 0 | 0 | 2 | 1 | 0 | 0 | 0 |
| 10 June | 135 | 105 | 250 | B6.0 | 9 | 0 | 0 | 4 | 0 | 0 | 0 | 0 |
| 11 June | 140 | 101 | 320 | B7.1 | 19 | 1 | 0 | 20 | 1 | 0 | 0 | 0 |
| 12 June | 137 | 96 | 630 | B8.1 | 10 | 0 | 0 | 20 | 3 | 0 | 0 | 0 |
| 13 June | 136 | 97 | 610 | B8.9 | 14 | 1 | 0 | 19 | 0 | 0 | 0 | 0 |
| 14 June | 132 | 117 | 550 | B7.5 | 5 | 1 | 0 | 1 | 0 | 0 | 0 | 0 |

Daily Particle Data

| Date | Proton Fluence (protons/cm ² -day -sr) | | | Electron Fluence (electrons/cm ² -day -sr) | | |
|---------|--|---------|----------|--|---------|---------|
| | >1 MeV | >10 MeV | >100 MeV | >0.6 MeV | >2MeV | >4 MeV |
| | 08 June | 3.4e+05 | 1.2e+04 | 2.5e+03 | | 3.0e+05 |
| 09 June | 7.1e+05 | 1.1e+04 | 2.6e+03 | | 3.7e+07 | |
| 10 June | 1.2e+06 | 1.1e+04 | 2.7e+03 | | 1.3e+08 | |
| 11 June | 6.6e+05 | 1.2e+04 | 2.8e+03 | | 2.1e+08 | |
| 12 June | 8.4e+05 | 1.2e+04 | 2.8e+03 | | 2.5e+08 | |
| 13 June | 4.3e+05 | 1.1e+04 | 2.5e+03 | | 1.4e+08 | |
| 14 June | 1.1e+06 | 1.1e+04 | 2.5e+03 | | 3.1e+07 | |

Daily Geomagnetic Data

| Date | Middle Latitude Fredericksburg | | High Latitude College | | Estimated Planetary | |
|---------|-----------------------------------|-----------------|--------------------------|-----------------|------------------------|-----------------|
| | A | K-indices | A | K-indices | A | K-indices |
| | 08 June | 22 | 4-3-5-4-3-3-3-3 | 41 | 3-5-6-4-5-5-5-3 | 33 |
| 09 June | 0 | 4-3-3-2-3-0-0-0 | 0 | 4-4-4-2-4-0-0-0 | 13 | 4-3-3-2-3-3-3-2 |
| 10 June | 11 | 0-0-0-0-0-0-3-2 | 4 | 0-0-0-0-0-0-0-2 | 12 | 3-2-3-3-2-2-3-3 |
| 11 June | 9 | 2-2-3-2-3-2-1-2 | 20 | 3-4-4-4-4-4-2-1 | 9 | 2-3-3-2-2-2-1-1 |
| 12 June | 8 | 2-2-1-2-2-3-2-2 | 7 | 1-2-2-2-2-3-1-1 | 7 | 2-2-1-1-2-2-2-2 |
| 13 June | 10 | 3-2-2-3-2-2-2-3 | 14 | 3-2-3-4-4-2-2-2 | 10 | 3-2-2-3-2-2-2-3 |
| 14 June | 19 | 4-3-4-5-3-2-2-2 | 35 | 4-3-5-7-3-3-3-2 | 20 | 4-3-4-5-2-3-3-3 |

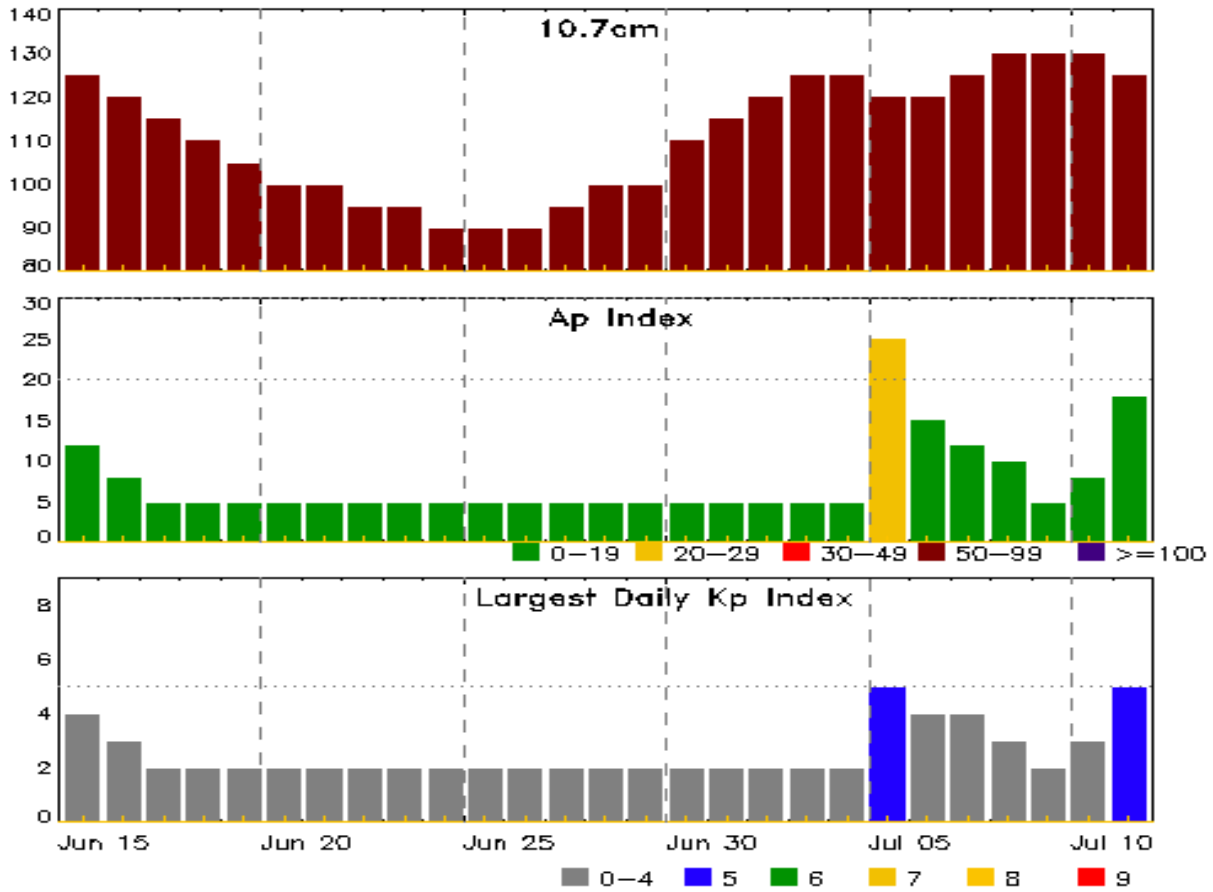


Alerts and Warnings Issued

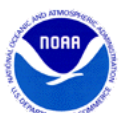
| Date & Time of Issue UTC | Type of Alert or Warning | Date & Time of Event UTC |
|-------------------------------------|--|-------------------------------------|
| 08 Jun 0202 | WARNING: Geomagnetic K = 4 | 08/0200 - 1500 |
| 08 Jun 0301 | ALERT: Geomagnetic K = 4 | 08/0300 |
| 08 Jun 0646 | WARNING: Geomagnetic K = 5 | 08/0645 - 1300 |
| 08 Jun 0713 | ALERT: Geomagnetic K = 5 | 08/0712 |
| 08 Jun 0719 | WARNING: Geomagnetic K = 6 | 08/0719 - 1300 |
| 08 Jun 0750 | ALERT: Geomagnetic K = 6 | 08/0749 |
| 08 Jun 1242 | EXTENDED WARNING: Geomagnetic K = 4 | 08/0200 - 2300 |
| 08 Jun 1242 | EXTENDED WARNING: Geomagnetic K = 5 | 08/0645 - 2000 |
| 08 Jun 1717 | ALERT: Geomagnetic K = 5 | 08/1713 |
| 08 Jun 2224 | EXTENDED WARNING: Geomagnetic K = 4 | 08/0200 - 09/1000 |
| 09 Jun 0959 | EXTENDED WARNING: Geomagnetic K = 4 | 08/0200 - 09/1900 |
| 09 Jun 1226 | ALERT: Electron 2MeV Integral Flux \geq 1000pfu | 09/1210 |
| 09 Jun 1857 | EXTENDED WARNING: Geomagnetic K = 4 | 08/0200 - 10/0400 |
| 10 Jun 0356 | EXTENDED WARNING: Geomagnetic K = 4 | 08/0200 - 10/1300 |
| 10 Jun 1207 | CONTINUED ALERT: Electron 2MeV Integral Flux \geq 1000pfu | 09/1210 |
| 10 Jun 1256 | EXTENDED WARNING: Geomagnetic K = 4 | 08/0200 - 10/2200 |
| 11 Jun 0306 | WATCH: Geomagnetic Storm Category G1 predicted | |
| 11 Jun 0926 | CONTINUED ALERT: Electron 2MeV Integral Flux \geq 1000pfu | 09/1210 |
| 12 Jun 0630 | CONTINUED ALERT: Electron 2MeV Integral Flux \geq 1000pfu | 09/1210 |
| 13 Jun 0556 | CONTINUED ALERT: Electron 2MeV Integral Flux \geq 1000pfu | 09/1210 |
| 14 Jun 0033 | WARNING: Geomagnetic K = 4 | 14/0033 - 1300 |
| 14 Jun 0057 | ALERT: Geomagnetic K = 4 | 14/0056 |
| 14 Jun 0939 | WARNING: Geomagnetic K = 5 | 14/0938 - 1400 |
| 14 Jun 1102 | ALERT: Geomagnetic K = 5 | 14/1100 |
| 14 Jun 1236 | EXTENDED WARNING: Geomagnetic K = 4 | 14/0033 - 2300 |
| 14 Jun 2123 | EXTENDED WARNING: Geomagnetic K = 4 | 14/0033 - 15/1300 |



Twenty-seven Day Outlook



| Date | Radio Flux 10.7cm | Planetary A Index | Largest Kp Index | Date | Radio Flux 10.7cm | Planetary A Index | Largest Kp Index |
|--------|----------------------|----------------------|---------------------|--------|----------------------|----------------------|---------------------|
| 15 Jun | 125 | 12 | 4 | 29 Jun | 100 | 5 | 2 |
| 16 | 120 | 8 | 3 | 30 | 110 | 5 | 2 |
| 17 | 115 | 5 | 2 | 01 Jul | 115 | 5 | 2 |
| 18 | 110 | 5 | 2 | 02 | 120 | 5 | 2 |
| 19 | 105 | 5 | 2 | 03 | 125 | 5 | 2 |
| 20 | 100 | 5 | 2 | 04 | 125 | 5 | 2 |
| 21 | 100 | 5 | 2 | 05 | 120 | 25 | 5 |
| 22 | 95 | 5 | 2 | 06 | 120 | 15 | 4 |
| 23 | 95 | 5 | 2 | 07 | 125 | 12 | 4 |
| 24 | 90 | 5 | 2 | 08 | 130 | 10 | 3 |
| 25 | 90 | 5 | 2 | 09 | 130 | 5 | 2 |
| 26 | 90 | 5 | 2 | 10 | 130 | 8 | 3 |
| 27 | 95 | 5 | 2 | 11 | 125 | 18 | 5 |
| 28 | 100 | 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 # | 245 | 2695 | II | IV |
| 11 Jun | 0849 | 0855 | 0859 | M1.0 | 0.003 | | | 2367 | | | | |
| 13 Jun | 0720 | 0729 | 0747 | M1.3 | 0.017 | SF | N11W78 | 2360 | | | | |
| 14 Jun | 0052 | 0059 | 0109 | M2.0 | 0.014 | SF | N14W73 | 2360 | | | | |

Flare List

| Date | Time | | | X-ray Class | Imp/ Brtns | Optical Location Lat CMD | Rgn # |
|--------|-------|-------|-------|-------------|------------|--------------------------|-------|
| | Begin | Max | End | | | | |
| 08 Jun | 0728 | 0732 | 0736 | B7.0 | SF | S13E49 | 2365 |
| 08 Jun | 2255 | 2258 | 2301 | B6.6 | | | 2366 |
| 09 Jun | 0340 | 0353 | 0409 | C5.8 | | | 2360 |
| 09 Jun | B0435 | U0438 | 0439 | | SF | N16W18 | 2360 |
| 09 Jun | B0459 | U0459 | A0529 | | SF | N13W18 | 2360 |
| 09 Jun | 1955 | 2001 | 2044 | C2.8 | 1F | S04E24 | 2364 |
| 10 Jun | 0010 | 0055 | 0128 | C1.8 | SF | S12E21 | 2365 |
| 10 Jun | 0131 | 0141 | 0156 | C2.5 | SF | N13W33 | 2360 |
| 10 Jun | 0214 | 0226 | 0238 | C6.0 | | | 2367 |
| 10 Jun | 0626 | 0649 | 0719 | C1.2 | | | 2366 |
| 10 Jun | B0730 | U0732 | A0740 | | SF | N19E16 | 2366 |
| 10 Jun | 1232 | 1305 | 1323 | C3.3 | | | 2367 |
| 10 Jun | 1233 | 1234 | 1249 | | SF | N14W35 | 2360 |
| 10 Jun | 1635 | 1652 | 1714 | C1.2 | | | 2361 |
| 10 Jun | 1801 | 1808 | 1818 | C2.2 | | | 2367 |
| 10 Jun | 2124 | 2127 | 2133 | C1.5 | | | 2365 |
| 10 Jun | 2208 | 2211 | 2214 | C1.2 | | | 2360 |
| 11 Jun | 0059 | 0118 | 0134 | C1.2 | | | 2367 |
| 11 Jun | 0231 | 0243 | 0251 | C4.6 | SF | N13W43 | 2360 |
| 11 Jun | 0455 | 0503 | 0510 | C1.8 | SF | N15W46 | 2360 |
| 11 Jun | 0516 | 0517 | 0522 | | SF | N14W18 | 2361 |
| 11 Jun | 0528 | 0532 | 0536 | C1.1 | | | 2367 |
| 11 Jun | 0548 | 0558 | 0604 | C1.6 | | | 2367 |
| 11 Jun | 0613 | 0624 | 0632 | C1.3 | | | 2367 |
| 11 Jun | 0645 | 0653 | 0658 | C1.1 | | | 2367 |
| 11 Jun | 0815 | 0820 | 0826 | C1.3 | SF | N13W45 | 2360 |
| 11 Jun | 0828 | 0841 | 0844 | C2.4 | SF | N13W44 | 2360 |
| 11 Jun | 0849 | 0855 | 0859 | M1.0 | | | 2367 |



Flare List

| Date | Time | | | Optical | | | Rgn # |
|--------|-------|------|------|-------------|-----------|------------------|-------|
| | Begin | Max | End | X-ray Class | Imp/Brtns | Location Lat CMD | |
| 11 Jun | 0914 | 0916 | 0934 | | SF | S05E07 | 2364 |
| 11 Jun | 1047 | 1032 | 1054 | | SF | N14W20 | 2361 |
| 11 Jun | 1125 | 1132 | 1150 | C3.8 | | | 2367 |
| 11 Jun | 1156 | 1201 | 1204 | C4.5 | | | 2367 |
| 11 Jun | B1245 | 1251 | 1257 | | SF | S19E76 | 2367 |
| 11 Jun | 1303 | 1303 | 1305 | | SF | N01E25 | |
| 11 Jun | 1319 | 1321 | 1323 | | SF | S18E82 | 2367 |
| 11 Jun | 1337 | 1337 | 1342 | | SF | S17E80 | 2367 |
| 11 Jun | 1400 | 1401 | 1404 | | SF | N13W52 | 2360 |
| 11 Jun | 1430 | 1437 | 1441 | C8.7 | SF | S17E81 | 2367 |
| 11 Jun | 1512 | 1519 | 1523 | C7.0 | 1F | S17E81 | 2367 |
| 11 Jun | 1555 | 1559 | 1604 | C1.3 | SF | S20E81 | 2367 |
| 11 Jun | 1608 | 1613 | 1615 | | SF | S20E81 | 2367 |
| 11 Jun | 1718 | 1726 | 1730 | C4.5 | | | 2367 |
| 11 Jun | 1720 | 1724 | 1727 | | SF | N11W54 | 2360 |
| 11 Jun | 1725 | 1726 | 1734 | | SF | S19E76 | 2367 |
| 11 Jun | 1757 | 1800 | 1803 | C1.7 | | | 2367 |
| 11 Jun | 1816 | 1821 | 1829 | C1.5 | SF | N14W26 | 2361 |
| 11 Jun | 1959 | 2041 | 2048 | C3.1 | SF | S20E81 | 2367 |
| 11 Jun | 2250 | 2306 | 2312 | C1.2 | SF | S19E76 | 2367 |
| 12 Jun | 0003 | 0008 | 0011 | C1.2 | SF | S19E76 | 2367 |
| 12 Jun | 0044 | 0050 | 0054 | C2.2 | SF | N14W58 | 2360 |
| 12 Jun | 0149 | 0206 | 0214 | C4.1 | 1F | N15W58 | 2360 |
| 12 Jun | 0244 | 0246 | 0251 | | SF | S21E74 | 2367 |
| 12 Jun | 0252 | 0252 | 0300 | | SF | N12W58 | 2360 |
| 12 Jun | 0433 | 0439 | 0448 | C1.9 | SF | S19E75 | 2367 |
| 12 Jun | 0441 | 0442 | 0449 | | SF | N09W57 | 2360 |
| 12 Jun | 0449 | 0509 | 0533 | | 1F | S17E72 | 2367 |
| 12 Jun | 0500 | 0517 | 0705 | | SF | N10W60 | 2360 |
| 12 Jun | 0656 | 0718 | 0731 | C2.2 | 1F | S16E72 | 2367 |
| 12 Jun | 0805 | 0808 | 0810 | | SF | N10W61 | 2360 |
| 12 Jun | 0945 | 1012 | 1015 | | SF | N11W62 | 2360 |
| 12 Jun | 1016 | 1022 | 1025 | | SF | N11W64 | 2360 |
| 12 Jun | 1153 | 1158 | 1203 | C2.9 | SF | N12W63 | 2360 |
| 12 Jun | 1228 | 1235 | 1237 | | SF | N12W66 | 2360 |
| 12 Jun | 1234 | 1252 | 1256 | | SF | S20E69 | 2367 |
| 12 Jun | 1309 | 1313 | 1316 | C1.8 | SF | S20E69 | 2367 |
| 12 Jun | 1520 | 1534 | 1537 | C3.9 | | | 2360 |



Flare List

| Date | Time | | | Optical | | | Rgn # |
|--------|-------|------|------|-------------|-----------|------------------|-------|
| | Begin | Max | End | X-ray Class | Imp/Brtns | Location Lat CMD | |
| 12 Jun | 1522 | 1525 | 1530 | | SF | S20E70 | 2367 |
| 12 Jun | 1530 | 1533 | 1547 | | SF | N14W67 | 2360 |
| 12 Jun | 1617 | 1618 | 1620 | | SF | N15W72 | 2360 |
| 12 Jun | 1916 | 1919 | 1921 | C1.1 | SF | S20E69 | 2367 |
| 12 Jun | 2026 | 2026 | 2030 | | SF | S05W15 | 2364 |
| 12 Jun | 2332 | 2348 | 0001 | C8.7 | SF | N14W73 | 2360 |
| 13 Jun | 0024 | 0031 | 0045 | C5.9 | SF | N14W74 | 2360 |
| 13 Jun | 0031 | 0032 | 0041 | | SF | S20E64 | 2367 |
| 13 Jun | 0134 | 0142 | 0149 | C3.5 | | | 2360 |
| 13 Jun | 0138 | 0139 | 0141 | | SF | S20E61 | 2367 |
| 13 Jun | 0139 | 0141 | 0149 | | SF | N15W72 | 2360 |
| 13 Jun | 0225 | 0237 | 0243 | C5.9 | SF | N15W72 | 2360 |
| 13 Jun | 0450 | 0452 | 0454 | | SF | N11W74 | 2360 |
| 13 Jun | 0458 | 0538 | 0601 | C3.8 | | | 2360 |
| 13 Jun | 0500 | 0501 | 0504 | | SF | S21E62 | 2367 |
| 13 Jun | 0535 | 0535 | 0548 | | SF | N14W73 | 2360 |
| 13 Jun | 0619 | 0625 | 0631 | C4.3 | SF | N14W73 | 2360 |
| 13 Jun | 0711 | 0723 | 0755 | M1.3 | SF | N11W78 | 2360 |
| 13 Jun | 0938 | 0945 | 0949 | C5.8 | SF | N11W77 | 2360 |
| 13 Jun | 1018 | 1019 | 1022 | | SF | S19E57 | 2367 |
| 13 Jun | 1024 | 1029 | 1034 | C2.4 | SF | N11W77 | 2360 |
| 13 Jun | 1124 | 1125 | 1127 | | SF | N13W77 | 2360 |
| 13 Jun | 1157 | 1201 | 1206 | C1.3 | SF | N10W78 | 2360 |
| 13 Jun | 1231 | 1250 | 1310 | C2.2 | SF | N11W80 | 2360 |
| 13 Jun | 1425 | 1437 | 1445 | C4.9 | SF | N11W80 | 2360 |
| 13 Jun | 1727 | 1731 | 1739 | C1.3 | | | 2360 |
| 13 Jun | 1913 | 1927 | 1938 | C2.6 | SF | N14W84 | 2360 |
| 13 Jun | 2112 | 2125 | 2132 | C2.5 | SF | N14W84 | 2360 |
| 13 Jun | 2309 | 2314 | 2321 | C2.2 | | | 2360 |
| 14 Jun | 0052 | 0059 | 0109 | M2.0 | SF | N14W73 | 2360 |
| 14 Jun | 0348 | 0417 | 0445 | C5.9 | | | 2365 |
| 14 Jun | 0751 | 0849 | 0942 | C2.7 | | | 2360 |
| 14 Jun | 1100 | 1110 | 1122 | C1.9 | | | 2360 |
| 14 Jun | 2029 | 2052 | 2058 | C1.2 | | | 2367 |
| 14 Jun | 2129 | 2203 | 2223 | C1.3 | | | 2267 |



Region Summary

| Date | Location | | Sunspot Characteristics | | | | Flares | | | | | | | | | | | |
|--------------------|----------|-----|-------------------------|-------------------------------|-------------------|---------------|---------------|--------------|-------|---|---|---------|---|---|---|---|---|--|
| | Lat | CMD | Helio Lon | Area 10 ⁶ hemi. | Extent (helio) | Spot Class | Spot Count | Mag Class | X-ray | | | Optical | | | | | | |
| | | | | | | | | | C | M | X | S | 1 | 2 | 3 | 4 | | |
| Region 2356 | | | | | | | | | | | | | | | | | | |
| 27 May | S15E75 | 199 | | plage | | | | | | | | 1 | | | | | | |
| 28 May | S15E61 | 199 | 60 | | 2 | Hax | 1 | A | | | | | | | | | | |
| 29 May | S15E47 | 200 | 60 | | 2 | Hsx | 1 | A | | | | | | | | | | |
| 30 May | S16E34 | 199 | 70 | | 2 | Cso | 3 | B | | | | | | | | | | |
| 31 May | S16E20 | 200 | 60 | | 3 | Cao | 3 | B | | | | | | | | | | |
| 01 Jun | S16E07 | 200 | 50 | | 2 | Hax | 2 | A | | | | | | | | | | |
| 02 Jun | S16W07 | 201 | 60 | | 2 | Cao | 3 | B | | | | | 1 | | | | | |
| 03 Jun | S16W20 | 199 | 50 | | 2 | Hax | 1 | A | | | | | | | | | | |
| 04 Jun | S15W33 | 199 | 50 | | 1 | Hax | 1 | A | | | | | | | | | | |
| 05 Jun | S16W46 | 199 | 70 | | 3 | Hsx | 3 | A | | | | | | | | | | |
| 06 Jun | S16W59 | 200 | 70 | | 2 | Hsx | 1 | A | | | | | | | | | | |
| 07 Jun | S16W72 | 200 | 70 | | 2 | Hsx | 1 | A | | | | | | | | | | |
| 08 Jun | S16W86 | 200 | 30 | | 2 | Hsx | 1 | A | | | | | | | | | | |
| | | | | | | | | | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | |

Crossed West Limb.
Absolute heliographic longitude: 200

| | | | | | | | | | | | | | | | | | | |
|--------------------|--------|-----|----|-------|---|-----|---|---|---|---|---|---|---|---|---|---|---|--|
| Region 2357 | | | | | | | | | | | | | | | | | | |
| 29 May | N09E45 | 202 | 10 | | 3 | Bxo | 2 | B | | | | | | | | | | |
| 30 May | N09E33 | 200 | 20 | | 3 | Cro | 4 | B | | | | | | | | | | |
| 31 May | N09E21 | 199 | 10 | | 1 | Axx | 1 | A | | | | | | | | | | |
| 01 Jun | N09E08 | 199 | | plage | | | | | | | | | | | | | | |
| 02 Jun | N09W06 | 200 | | plage | | | | | | | | | | | | | | |
| 03 Jun | N09W20 | 201 | | plage | | | | | | | | | | | | | | |
| 04 Jun | N09W34 | 201 | | plage | | | | | | | | | | | | | | |
| 05 Jun | N09W48 | 202 | | plage | | | | | | | | | | | | | | |
| 06 Jun | N09W62 | 203 | | plage | | | | | | | | | | | | | | |
| 07 Jun | N09W76 | 204 | | plage | | | | | | | | | | | | | | |
| 08 Jun | N09W90 | 204 | | plage | | | | | | | | | | | | | | |
| | | | | | | | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |

Crossed West Limb.
Absolute heliographic longitude: 200



Region Summary - continued

| Date | Location | | Sunspot Characteristics | | | | Flares | | | | | | | | | | | | | | | | |
|--------------------|----------|-----|--------------------------------|------|-------------------|---------------|---------------|--------------|-------|---|---|---------|---|---|---|---|---|---|---|---|---|--|--|
| | Lat CMD | Lon | Helio 10 ⁶ hemi. | Area | Extent (helio) | Spot Class | Spot Count | Mag Class | X-ray | | | Optical | | | | | | | | | | | |
| | | | | | | | | | C | M | X | S | 1 | 2 | 3 | 4 | | | | | | | |
| Region 2358 | | | | | | | | | | | | | | | | | | | | | | | |
| 31 May | S03E71 | 149 | 60 | 2 | Hsx | 1 | A | | | | | | | | | | | | | | | | |
| 01 Jun | S03E58 | 149 | 40 | 2 | Hax | 2 | A | | | | | | | | | | | | | | | | |
| 02 Jun | S03E43 | 151 | 40 | 2 | Hax | 2 | A | | | | | | 1 | | | | | | | | | | |
| 03 Jun | S03E30 | 149 | 30 | 3 | Cso | 4 | B | | | | | | | | | | | | | | | | |
| 04 Jun | S03E20 | 146 | 10 | 3 | Bxo | 2 | B | | | | | | 1 | | | | | | | | | | |
| 05 Jun | S04E09 | 145 | 10 | 1 | Axx | 2 | A | | | | | | | | | | | | | | | | |
| 06 Jun | S04W06 | 147 | 10 | 2 | Axx | 3 | A | | | | | | | | | | | | | | | | |
| 07 Jun | S03W21 | 149 | 0 | 2 | Axx | 2 | A | | | | | | | | | | | | | | | | |
| 08 Jun | S03W36 | 150 | plage | | | | | | | | | | | | | | | | | | | | |
| 09 Jun | S03W51 | 152 | plage | | | | | | | | | | | | | | | | | | | | |
| 10 Jun | S03W66 | 154 | plage | | | | | | | | | | | | | | | | | | | | |
| 11 Jun | S03W81 | 156 | plage | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | | |

Crossed West Limb.
Absolute heliographic longitude: 147

| | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------|--------|-----|-------|---|-----|---|---|--|--|--|--|--|---|---|---|---|---|---|---|---|---|--|--|
| Region 2359 | | | | | | | | | | | | | | | | | | | | | | | |
| 01 Jun | S14W02 | 208 | 10 | 5 | Bxo | 4 | B | | | | | | | | | | | | | | | | |
| 02 Jun | S14W16 | 210 | 10 | 5 | Bxo | 4 | B | | | | | | | | | | | | | | | | |
| 03 Jun | S16W26 | 207 | 10 | 3 | Bxo | 5 | B | | | | | | 1 | | | | | | | | | | |
| 04 Jun | S14W41 | 207 | 10 | 4 | Bxo | 2 | B | | | | | | | | | | | | | | | | |
| 05 Jun | S13W55 | 209 | 10 | 1 | Axx | 1 | A | | | | | | | | | | | | | | | | |
| 06 Jun | S13W69 | 210 | plage | | | | | | | | | | | | | | | | | | | | |
| 07 Jun | S13W83 | 211 | plage | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | | |

Crossed West Limb.
Absolute heliographic longitude: 208



Region Summary - continued

| Date | Location | | Sunspot Characteristics | | | | Flares | | | | | | | | | | |
|--------------------|----------|--------------|-------------------------------|-------------------|---------------|---------------|--------------|-------|---|---|---------|---|---|---|---|--|--|
| | Lat CMD | Helio Lon | Area 10 ⁶ hemi. | Extent (helio) | Spot Class | Spot Count | Mag Class | X-ray | | | Optical | | | | | | |
| | | | | | | | | C | M | X | S | 1 | 2 | 3 | 4 | | |
| Region 2360 | | | | | | | | | | | | | | | | | |
| 03 Jun | N12E52 | 127 | 50 | 7 | Dao | 5 | B | 1 | | | 1 | | | | | | |
| 04 Jun | N13E39 | 128 | 100 | 9 | Dai | 9 | B | | | | 3 | | | | | | |
| 05 Jun | N14E23 | 131 | 80 | 8 | Dao | 10 | B | | | | | | | | | | |
| 06 Jun | N15E09 | 132 | 90 | 10 | Dai | 10 | B | | | | | | | | | | |
| 07 Jun | N15W04 | 132 | 140 | 11 | Eac | 13 | BG | 2 | | | 1 | | | | | | |
| 08 Jun | N15W17 | 131 | 130 | 11 | Eac | 20 | BG | | | | | | | | | | |
| 09 Jun | N15W31 | 132 | 120 | 11 | Eai | 20 | BG | 1 | | | 2 | | | | | | |
| 10 Jun | N15W43 | 131 | 70 | 12 | Eai | 20 | BG | 2 | | | 2 | | | | | | |
| 11 Jun | N14W55 | 130 | 90 | 12 | Eai | 13 | BG | 4 | | | 6 | | | | | | |
| 12 Jun | N15W68 | 129 | 220 | 12 | Eac | 16 | BG | 5 | | | 12 | 1 | | | | | |
| 13 Jun | N15W82 | 130 | 150 | 13 | Eai | 6 | B | 14 | 1 | | 15 | | | | | | |
| 14 Jun | N15W91 | 126 | 60 | 5 | Cao | 2 | B | 2 | 1 | | 1 | | | | | | |
| | | | | | | | | 31 | 2 | 0 | 43 | 1 | 0 | 0 | 0 | | |

Still on Disk.

Absolute heliographic longitude: 132

Region 2361

| | | | | | | | | | | | | | | | | | |
|--------|--------|-----|-------|---|-----|----|---|----|---|---|----|---|---|---|---|---|--|
| 04 Jun | N16E64 | 101 | 80 | 4 | Dai | 3 | B | 2 | | | 4 | | | | | | |
| 05 Jun | N16E51 | 103 | 90 | 5 | Dai | 9 | B | 5 | | | 5 | | | | | | |
| 06 Jun | N16E36 | 105 | 110 | 5 | Dai | 16 | B | 1 | | | 2 | | | | | | |
| 07 Jun | N16E22 | 106 | 80 | 5 | Dai | 7 | B | 1 | | | | | | | | | |
| 08 Jun | N17E10 | 103 | 40 | 6 | Cao | 5 | B | | | | | | | | | | |
| 09 Jun | N17W04 | 105 | 40 | 4 | Cao | 5 | B | | | | | | | | | | |
| 10 Jun | N17W16 | 104 | 20 | 9 | Cso | 3 | B | 1 | | | | | | | | | |
| 11 Jun | N17W30 | 105 | 10 | 1 | Axx | 1 | A | 1 | | | 3 | | | | | | |
| 12 Jun | N18W46 | 106 | plage | | | | | | | | | | | | | | |
| 13 Jun | N18W60 | 108 | plage | | | | | | | | | | | | | | |
| 14 Jun | N18W74 | 109 | plage | | | | | | | | | | | | | | |
| | | | | | | | | 11 | 0 | 0 | 14 | 0 | 0 | 0 | 0 | 0 | |

Still on Disk.

Absolute heliographic longitude: 105



Region Summary - continued

| Date | Location | | Sunspot Characteristics | | | | Flares | | | | | | | | | | | |
|--------------------|----------|-----|-------------------------------|-------------------|---------------|---------------|--------------|-------|---|---|---------|---|---|---|---|---|--|--|
| | Lat CMD | Lon | Area 10 ⁶ hemi. | Extent (helio) | Spot Class | Spot Count | Mag Class | X-ray | | | Optical | | | | | | | |
| | | | | | | | | C | M | X | S | 1 | 2 | 3 | 4 | | | |
| Region 2362 | | | | | | | | | | | | | | | | | | |
| 04 Jun | N07E69 | 98 | 90 | 6 | Dao | 3 | B | | | | | | | | | | | |
| 05 Jun | N07E55 | 99 | 150 | 4 | Dao | 7 | B | | | | | | | | | | | |
| 06 Jun | N07E41 | 100 | 210 | 8 | Dai | 10 | B | | | | | | | | | | | |
| 07 Jun | N05E27 | 101 | 140 | 8 | Dao | 8 | B | 2 | | | | 1 | | | | | | |
| 08 Jun | N06E14 | 100 | 120 | 8 | Dao | 11 | B | | | | | | | | | | | |
| 09 Jun | N06W01 | 102 | 100 | 8 | Dso | 11 | B | | | | | | | | | | | |
| 10 Jun | N06W13 | 101 | 50 | 8 | Cso | 7 | B | | | | | | | | | | | |
| 11 Jun | N06W26 | 101 | 30 | 8 | Cso | 6 | B | | | | | | | | | | | |
| 12 Jun | N08W39 | 100 | 20 | 6 | Cro | 3 | B | | | | | | | | | | | |
| 13 Jun | N08W51 | 99 | 10 | 1 | Hrx | 1 | A | | | | | | | | | | | |
| 14 Jun | N07W63 | 98 | 10 | 1 | Hrx | 1 | A | | | | | | | | | | | |
| | | | | | | | | 2 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | | |

Still on Disk.
Absolute heliographic longitude: 102

| | | | | | | | | | | | | | | | | | | |
|--------------------|--------|-----|-------|---|-----|---|---|---|---|---|---|---|---|---|---|---|---|--|
| Region 2363 | | | | | | | | | | | | | | | | | | |
| 05 Jun | N04W16 | 170 | 10 | 3 | Bxo | 3 | B | | | | | | | | | | | |
| 06 Jun | N04W30 | 171 | 10 | 3 | Bxo | 3 | B | | | | | | | | | | | |
| 07 Jun | N04W45 | 173 | 10 | 2 | Axx | 2 | A | | | | | | | | | | | |
| 08 Jun | N04W60 | 174 | plage | | | | | | | | | | | | | | | |
| 09 Jun | N04W75 | 176 | plage | | | | | | | | | | | | | | | |
| 10 Jun | N04W90 | 178 | plage | | | | | | | | | | | | | | | |
| | | | | | | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |

Crossed West Limb.
Absolute heliographic longitude: 170

| | | | | | | | | | | | | | | | | | | |
|--------------------|--------|----|-------|---|-----|---|---|---|---|---|---|---|---|---|---|---|--|--|
| Region 2364 | | | | | | | | | | | | | | | | | | |
| 06 Jun | S05E64 | 77 | 10 | 2 | Bxo | 3 | B | | | | | 1 | | | | | | |
| 07 Jun | S06E49 | 79 | 10 | 3 | Bxo | 5 | B | | | | | | | | | | | |
| 08 Jun | S05E35 | 79 | 10 | 4 | Bxo | 5 | B | | | | | | | | | | | |
| 09 Jun | S07E24 | 77 | 10 | 1 | Axx | 3 | A | 1 | | | | | 1 | | | | | |
| 10 Jun | S07E11 | 77 | 10 | 1 | Axx | 2 | A | | | | | | | | | | | |
| 11 Jun | S07W04 | 79 | plage | | | | | | | | | | 1 | | | | | |
| 12 Jun | S07W19 | 80 | plage | | | | | | | | | | 1 | | | | | |
| 13 Jun | S07W34 | 82 | plage | | | | | | | | | | | | | | | |
| 14 Jun | S07W49 | 84 | plage | | | | | | | | | | | | | | | |
| | | | | | | | | 1 | 0 | 0 | 3 | 1 | 0 | 0 | 0 | 0 | | |

Still on Disk.
Absolute heliographic longitude: 79



Region Summary - continued

| Date | Location | | Sunspot Characteristics | | | | | Flares | | | | | | | | | | |
|--------------------|----------|-----|---------------------------------|------|-------------------|---------------|---------------|--------------|-------|---|---|---------|---|---|---|---|---|--|
| | Lat CMD | Lon | Helio 10 ⁻⁶ hemi. | Area | Extent (helio) | Spot Class | Spot Count | Mag Class | X-ray | | | Optical | | | | | | |
| | | | | | | | | | C | M | X | S | 1 | 2 | 3 | 4 | | |
| Region 2365 | | | | | | | | | | | | | | | | | | |
| 06 Jun | S13E64 | | 77 | 70 | 4 | Cso | 3 | B | 1 | | | | | | | | | |
| 07 Jun | S13E48 | | 80 | 90 | 6 | Cso | 5 | B | | | | | | | | | | |
| 08 Jun | S13E36 | | 78 | 70 | 6 | Cao | 6 | B | | | | | 1 | | | | | |
| 09 Jun | S13E22 | | 79 | 60 | 6 | Cao | 6 | B | | | | | | | | | | |
| 10 Jun | S13E07 | | 81 | 60 | 3 | Cao | 4 | B | 2 | | | | 1 | | | | | |
| 11 Jun | S12W05 | | 80 | 100 | 5 | Cso | 8 | B | | | | | | | | | | |
| 12 Jun | S13W18 | | 79 | 140 | 7 | Cao | 10 | B | | | | | | | | | | |
| 13 Jun | S15W33 | | 81 | 90 | 7 | Cao | 7 | B | | | | | | | | | | |
| 14 Jun | S15W47 | | 82 | 100 | 6 | Cao | 9 | B | 1 | | | | | | | | | |
| | | | | | | | | | 4 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | |

Still on Disk.

Absolute heliographic longitude: 80

Region 2366

| | | | | | | | | | | | | | | | | | | |
|--------|--------|--|----|----|---|-----|----|----|---|---|---|---|---|---|---|---|---|--|
| 07 Jun | N17E45 | | 83 | 20 | 5 | Cro | 3 | B | | | | | | | | | | |
| 08 Jun | N17E33 | | 81 | 20 | 6 | Cro | 4 | B | | | | | | | | | | |
| 09 Jun | N17E19 | | 82 | 20 | 6 | Cro | 5 | B | | | | | | | | | | |
| 10 Jun | N17E05 | | 83 | 40 | 5 | Dao | 9 | B | 1 | | | | 1 | | | | | |
| 11 Jun | N17W08 | | 83 | 60 | 8 | Dao | 8 | BG | | | | | | | | | | |
| 12 Jun | N17W20 | | 81 | 50 | 9 | Dai | 8 | BG | | | | | | | | | | |
| 13 Jun | N17W33 | | 81 | 60 | 9 | Cai | 10 | BG | | | | | | | | | | |
| 14 Jun | N16W45 | | 80 | 10 | 7 | Bxo | 6 | B | | | | | | | | | | |
| | | | | | | | | | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | |

Still on Disk.

Absolute heliographic longitude: 83

Region 2367

| | | | | | | | | | | | | | | | | | | |
|--------|--------|--|---|-------|----|-----|----|----|----|---|---|----|---|---|---|---|---|--|
| 10 Jun | S19E84 | | 5 | plage | | | | | | | | | 3 | | | | | |
| 11 Jun | S19E70 | | 5 | 30 | 5 | Dro | 5 | B | 14 | 1 | | | 9 | 1 | | | | |
| 12 Jun | S18E58 | | 3 | 200 | 9 | Dao | 9 | B | 5 | | | | 7 | 2 | | | | |
| 13 Jun | S20E44 | | 4 | 300 | 11 | Eki | 12 | B | | | | | 4 | | | | | |
| 14 Jun | S20E34 | | 1 | 340 | 11 | Ekc | 15 | BG | 1 | | | | | | | | | |
| | | | | | | | | | 23 | 1 | 0 | 20 | 3 | 0 | 0 | 0 | 0 | |

Still on Disk.

Absolute heliographic longitude: 1



Region Summary - continued

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

Region 2368

| | | | | | | | | | | | | | | | | | | |
|--------|--------|-----|-------|---|-----|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 13 Jun | S06W52 | 100 | plage | | | | | | | | | | | | | | | |
| 14 Jun | S06W65 | 100 | 10 | 3 | Bxo | 4 | B | | | | | | | | | | | |
| | | | | | | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

Still on Disk.

Absolute heliographic longitude: 100

Region 2369

| | | | | | | | | | | | | | | | | | | |
|--------|--------|-----|-------|---|-----|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 13 Jun | N06E55 | 353 | 0 | 1 | Axx | 1 | A | | | | | | | | | | | |
| 14 Jun | N06E40 | 355 | plage | | | | | | | | | | | | | | | |
| | | | | | | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

Still on Disk.

Absolute heliographic longitude: 355

Region 2370

| | | | | | | | | | | | | | | | | | | |
|--------|--------|----|----|---|-----|----|---|---|---|---|---|---|---|---|---|---|---|---|
| 14 Jun | N18E23 | 12 | 20 | 4 | Cri | 10 | B | | | | | | | | | | | |
| | | | | | | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

Still on Disk.

Absolute heliographic longitude: 12

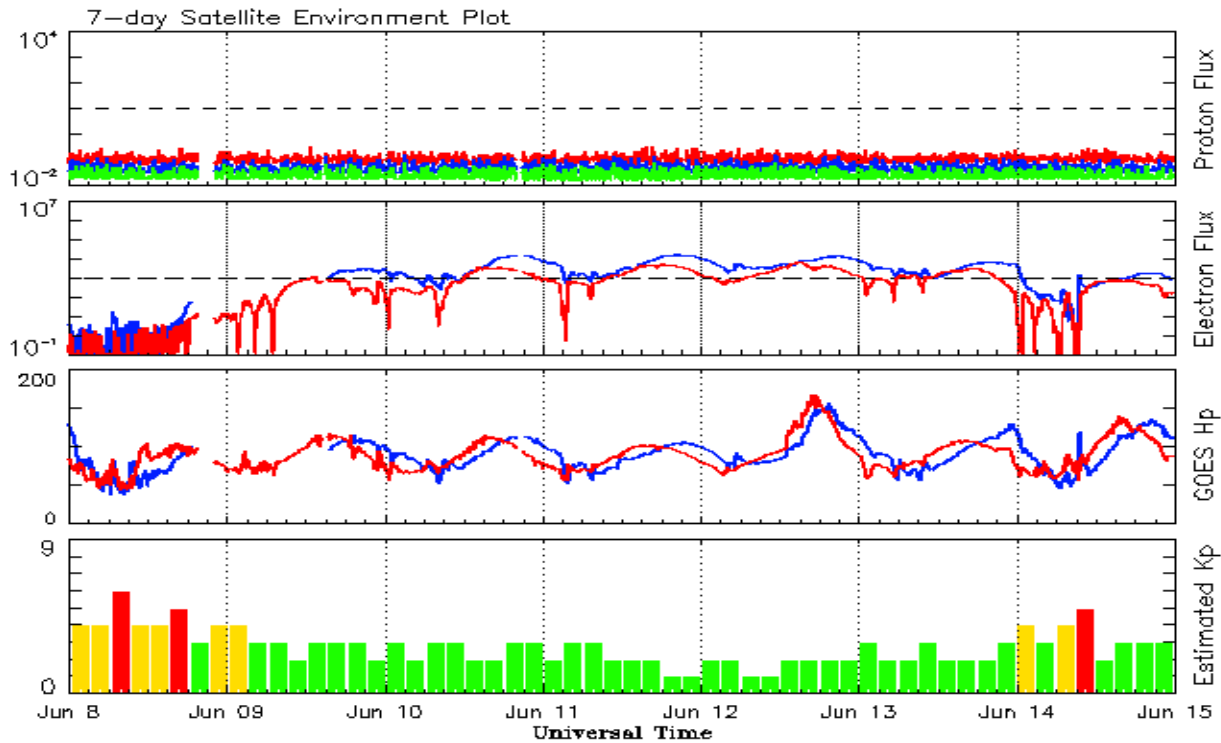


Recent Solar Indices (preliminary)
Observed monthly mean values

| Month | Sunspot Numbers | | | | | Radio Flux | | Geomagnetic | |
|-------------|-----------------|-------|--------|---------------|------|------------|--------|-------------|--------|
| | Observed values | | Ratio | Smooth values | | Penticton | Smooth | Planetary | Smooth |
| | SEC | RI | RI/SEC | SEC | RI | 10.7 cm | Value | Ap | Value |
| 2013 | | | | | | | | | |
| June | 80.1 | 52.5 | 0.66 | 94.4 | 62.6 | 110.2 | 120.9 | 13 | 7.1 |
| July | 86.1 | 57.0 | 0.66 | 97.9 | 65.5 | 115.6 | 123.9 | 9 | 7.3 |
| August | 90.2 | 66.0 | 0.73 | 103.7 | 68.9 | 114.7 | 127.9 | 9 | 7.6 |
| September | 55.0 | 37.0 | 0.67 | 111.0 | 73.0 | 102.7 | 132.3 | 5 | 7.8 |
| October | 127.1 | 85.6 | 0.67 | 114.3 | 74.9 | 132.3 | 134.7 | 7 | 7.8 |
| November | 125.7 | 77.6 | 0.62 | 114.6 | 75.3 | 148.4 | 135.4 | 5 | 7.9 |
| December | 118.2 | 90.3 | 0.76 | 115.4 | 75.9 | 147.7 | 135.9 | 5 | 7.5 |
| 2014 | | | | | | | | | |
| January | 125.9 | 81.8 | 0.65 | 117.7 | 77.3 | 158.6 | 137.3 | 6 | 7.1 |
| February | 174.6 | 102.3 | 0.59 | 119.5 | 78.3 | 170.3 | 138.6 | 12 | 6.9 |
| March | 141.1 | 91.9 | 0.65 | 123.2 | 80.8 | 149.9 | 140.8 | 6 | 7.2 |
| April | 130.5 | 84.7 | 0.65 | 124.8 | 81.9 | 144.3 | 143.5 | 9 | 7.5 |
| May | 116.8 | 75.2 | 0.64 | 122.3 | 80.5 | 130.0 | 144.7 | 7 | 7.9 |
| June | 107.7 | 71.0 | 0.66 | 121.4 | 79.7 | 122.2 | 145.5 | 7 | 8.4 |
| July | 113.6 | 72.4 | 0.64 | 120.4 | 78.5 | 137.3 | 145.2 | 5 | 8.8 |
| August | 106.2 | 74.6 | 0.70 | 115.1 | 75.5 | 124.7 | 142.8 | 9 | 8.9 |
| September | 127.4 | 87.6 | 0.69 | 107.4 | 70.8 | 146.1 | 140.1 | 11 | 9.3 |
| October | 92.0 | 60.6 | 0.66 | 101.7 | 67.3 | 153.7 | 138.4 | 10 | 9.9 |
| November | 101.8 | 70.2 | 0.69 | 97.9 | 65.4 | 155.3 | 137.4 | 10 | 10.1 |
| December | 120.0 | 76.7 | 0.65 | | | 158.7 | | 12 | |
| 2015 | | | | | | | | | |
| January | 101.2 | 67.0 | 0.66 | | | 141.7 | | 10 | |
| February | 70.6 | 44.8 | 0.63 | | | 128.8 | | 10 | |
| March | 61.7 | 38.4 | 0.62 | | | 126.0 | | 17 | |
| April | 72.5 | 54.4 | 0.75 | | | 129.2 | | 12 | |
| May | 83.0 | 58.8 | 0.71 | | | 120.1 | | 9 | |

Note: Values are final except for the most recent 6 months which are considered preliminary.
Cycle 24 started in Dec 2008 with an RI=1.7.





*Weekly Geosynchronous Satellite Environment Summary
Week Beginning 08 June 2015*

The proton flux plot contains the five-minute averaged integral proton flux (protons/cm²-sec -sr) as measured by the SWPC Primary GOES satellite, near West 75, for each of three energy thresholds: greater than 10, 50, and 100 MeV.

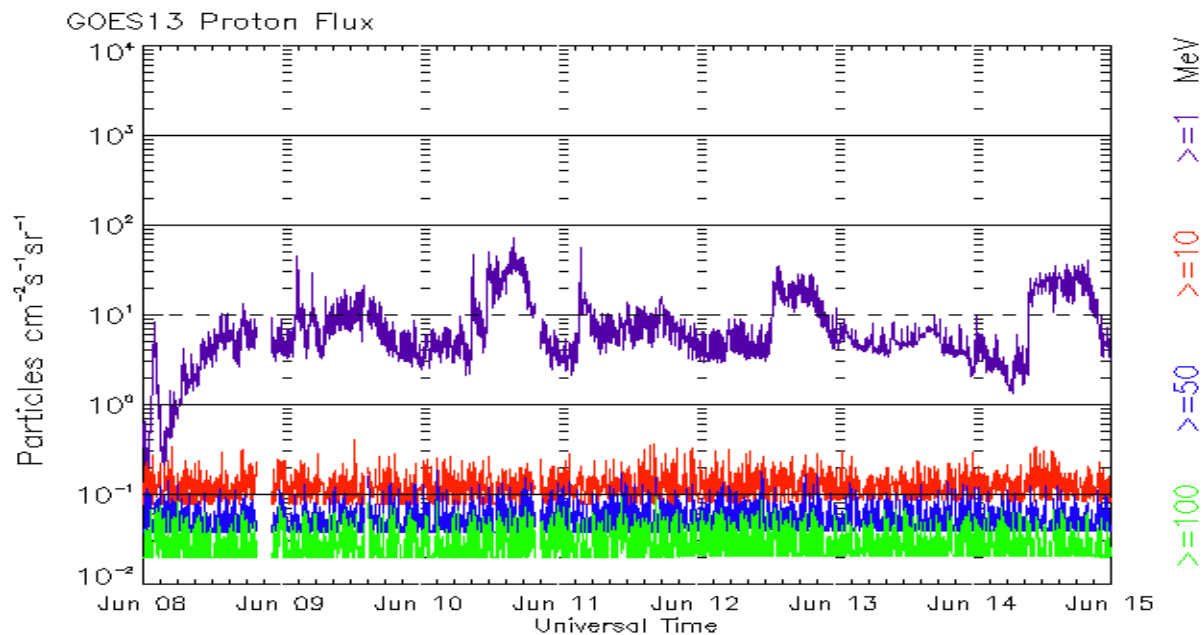
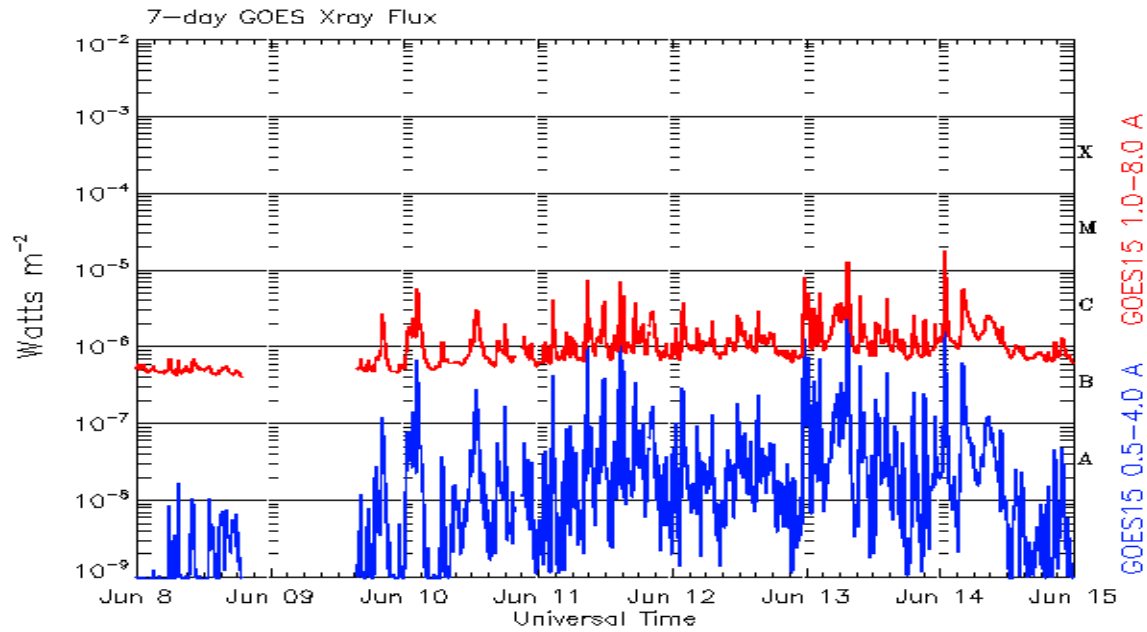
The electron flux plot contains the five-minute averaged integral electron flux (electrons/cm²-sec -sr) with energies greater than 2 MeV by the SWPC Primary GOES satellite.

The Hp plot contains the five minute averaged Hp magnetic field component in nanoteslas (nT) as by the SWPC Primary GOES satellite. The Hp component is parallel to the spin axis of the satellite, which is nearly parallel to the Earth's rotation axis.

The Estimated 3-hour Planetary Kp-index is derived at the NOAA Space Weather Prediction Center using data from the following ground-based magnetometers: Boulder, Colorado; Chambon la Foret, France; Fredericksburg, Virginia; Fresno, California; Hartland, UK; Newport, Washington; Sitka, Alaska. These data are made available thanks to the cooperative efforts between SWPC and data providers around the world, which currently includes the U.S. Geological Survey, the British Geological Survey, and the Institut de Physique du Globe de Paris.

The data included here are those now available in real time at the SWPC and are incomplete in that they do not include the full set of parameters and energy ranges known to cause satellite operating anomalies. The proton and electron fluxes and Kp are 'global' parameters that are applicable to a first order approximation over large areas. H parallel is subject to more localized phenomena and the measurements generally are applicable to within a few degrees of longitude of the measuring satellite.





*Weekly GOES Satellite X-ray and Proton Plots
Week Beginning 08 June 2015*

The x-ray plots contains five-minute averages x-ray flux (Watt/ m^2) as measure by the SWPC primary GOES X-ray satellite, usually at West 105 longitude, in two wavelength bands, 0.05 - 0.4 and 0.1 - 0.8 nm. The letters A, B, C, M and X refer to x-ray event levels for the 0.1 - 0.8 nm band.

The proton plot contains the five-minute averaged intergral flux units (pfu = protons/ cm^2 -sec -sr) as measured by the primary SWPC GOES Proton satellite for each of the energy thresholds: >1, >10, >30, and >100 MeV. The P10 event threshold is 10 pfu at greater than 10 MeV.



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

Published every Monday by the Space Weather Prediction Center.

U.S. Department of Commerce
NOAA / National Weather Service
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.

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