**Space Weather Highlights**
**24 October - 30 October 2022**

**SWPC PRF 2461**
**31 October 2022**

Solar activity was at low levels during the period. Weak to moderate levels of C-class activity was observed from Regions 3126 (S10, L=233, class/area Dai/160 on 25 Oct), 3130 (S25, L=185, class/area Dao/090 on 27 Oct), 3131 (N23, L=111, class/area Cso/190 on 27 Oct), 3133 (N26, L=095, class/area Dao/140 on 28 Oct) and 3135 (N27, L=063, class/area Eao/160 on 30 Oct). No Earth-directed CMEs were detected during the period.

No proton events were observed at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit was at normal to moderate levels on 24-29 October. High levels were observed on 30 Oct with a peak flux of 3,715 pfu observed at 30/1735 UTC.

Geomagnetic field activity was at quiet to G1 (Minor) storm levels during the period. Quiet to unsettled levels were observed from 24-27 October. Activity levels increased to unsettled to active on 28 October, unsettled to G1 (Minor) storm levels on 29 October and quiet to active levels on 30 October. The increase in activity on 28-30 October was due to positive polarity coronal high speed stream effects.

**Space Weather Outlook**
**31 October - 26 November 2022**

Solar activity is expected to be at very low to low levels on 31 Oct - 02 Nov and 18 - 26 Nov. There is a slight chance for M-class activity on 03 - 17 Nov due to the return of previously active regions with M-class flare history.

No proton events are expected at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit is expected to be at moderate to high levels on 31 Oct - 09 Nov and 26 Nov. Low to moderate levels are expected on 10 - 25 Nov.

Geomagnetic field activity is expected to be at unsettled to active levels on 31 Oct - 06 Nov, 10-12 Nov, 18-19 Nov and 24-26 Nov. G1 (Minor) geomagnetic storm levels are possible on 05, 18 and 25 Nov. This elevated level of activity is in anticipation of mulitple, recurrent CH HSSs. The remainder of the outlook period is likely to be at mostly quiet levels.

## *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 |
| 24 October | 115 | 46 | 130 | B3.6 | 3 | 0 | 0 | 6 | 0 | 0 | 0 | 0 |
| 25 October | 116 | 72 | 340 | B3.6 | 2 | 0 | 0 | 1 | 0 | 0 | 0 | 0 |
| 26 October | 122 | 78 | 430 | B4.3 | 2 | 0 | 0 | 2 | 0 | 0 | 0 | 0 |
| 27 October | 130 | 72 | 370 | B6.8 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 28 October | 129 | 87 | 410 | B5.5 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 29 October | 134 | 97 | 460 | B5.8 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 30 October | 131 | 68 | 390 | B5.7 | 3 | 0 | 0 | 0 | 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 | >2MeV |
| 24 October | 3.9e+05 | 2.9e+04 | 1.4e+06 |
| 25 October | 3.8e+05 | 2.9e+04 | 2.4e+06 |
| 26 October | 3.1e+06 | 2.9e+04 | 3.7e+06 |
| 27 October | 1.4e+05 | 2.9e+04 | 1.2e+06 |
| 28 October | 1.1e+05 | 3.0e+04 | 1.6e+06 |
| 29 October | 1.2e+05 | 3.0e+04 | 2.5e+07 |
| 30 October | 6.8e+04 | 3.0e+04 | 1.2e+08 |

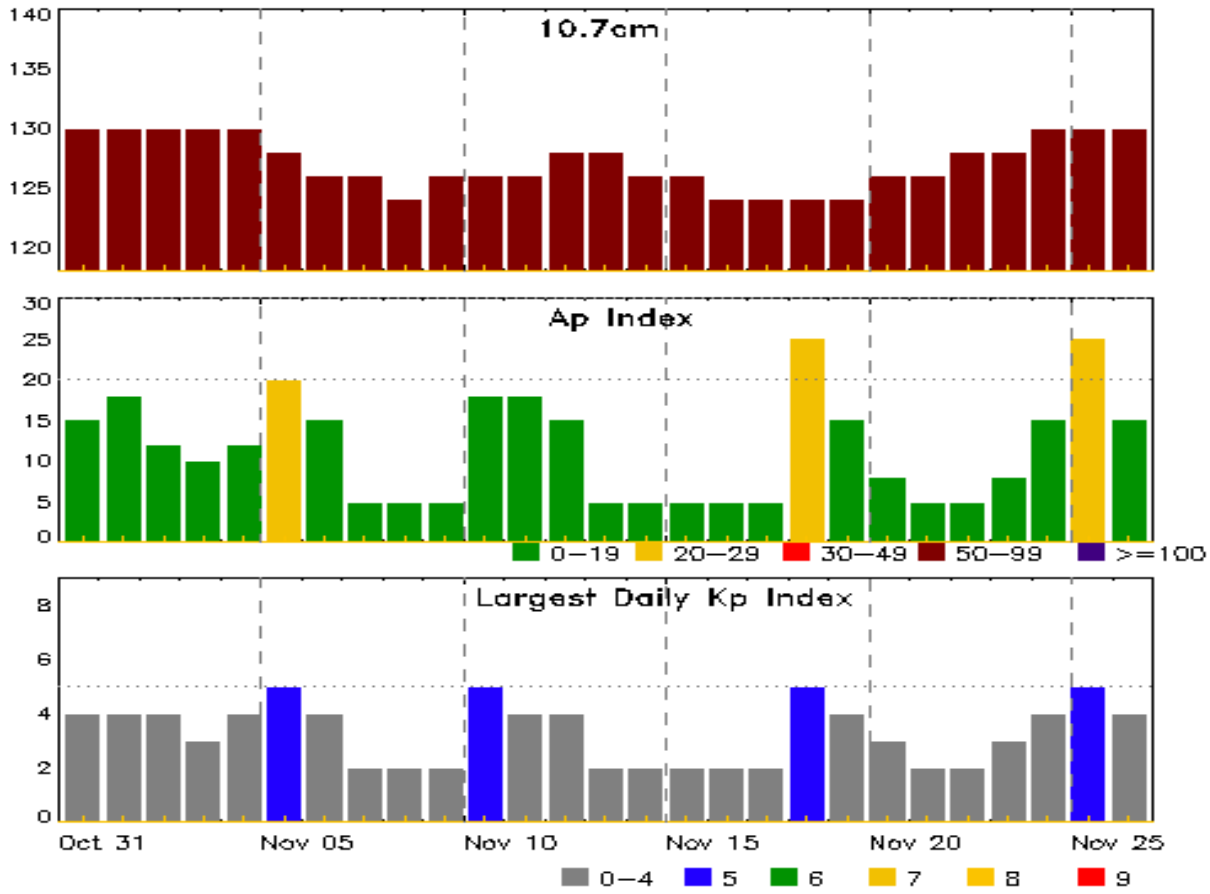
## *Daily Geomagnetic Data*

| Date | Middle Latitude Fredericksburg | | High Latitude College | | Estimated Planetary | |
|---|---|---|---|---|---|---|
| | A | K-indices | A | K-indices | A | K-indices |
| 24 October | 204 | 2-2-3-9-9-9-9-1 | 10 | 3-3-3-2-4-1-0-0 | 8 | 3-3-2-2-2-1-1-1 |
| 25 October | 172 | 0-0-1-0-9-9-9-0 | 4 | 0-0-2-2-1-3-0-1 | 5 | 1-1-1-2-1-2-0-1 |
| 26 October | 83 | 0-0-0-0-9-0-0-3 | 5 | 0-0-0-0-3-3-1-1 | 5 | 1-1-0-1-1-1-2-3 |
| 27 October | 6 | 2-1-2-0-0-0-0-2 | 22 | 1-2-3-5-5-5-2-1 | 9 | 2-2-2-3-3-3-2-2 |
| 28 October | 90 | 2-3-3-9-0-0-0-3 | 27 | 1-1-3-4-4-6-5-3 | 16 | 2-3-3-3-2-4-3-4 |
| 29 October | 94 | 3-3-4-9-0-0-0-3 | 49 | 4-4-7-6-5-5-3-2 | 26 | 4-4-5-5-4-3-3-3 |
| 30 October | 86 | 2-3-2-9-0-0-0-1 | 19 | 3-3-4-5-4-3-1-1 | 9 | 2-3-2-4-3-2-3-2 |

## *Alerts and Warnings Issued*

| Date & Time of Issue UTC | Type of Alert or Warning | Date & Time of Event UTC |
|---|---|---|
| 24 Oct 0509 | EXTENDED WARNING: Geomagnetic K = 4 | 22/0832 - 24/1500 |
| 25 Oct 0438 | SUMMARY: 10cm Radio Burst | 25/0419 - 0421 |
| 26 Oct 1935 | WATCH: Geomagnetic Storm Category G1 predicted | |
| 28 Oct 0803 | WARNING: Geomagnetic K = 4 | 28/0805 - 1500 |
| 28 Oct 0830 | WATCH: Geomagnetic Storm Category G1 predicted | |
| 28 Oct 1413 | EXTENDED WARNING: Geomagnetic K = 4 | 28/0805 - 2100 |
| 28 Oct 1706 | ALERT: Geomagnetic K = 4 | 28/1706 |
| 28 Oct 1712 | WARNING: Geomagnetic K = 5 | 28/1712 - 2100 |
| 28 Oct 2054 | EXTENDED WARNING: Geomagnetic K = 4 | 28/0805 - 29/0900 |
| 28 Oct 2221 | WARNING: Geomagnetic K = 5 | 28/2220 - 29/0900 |
| 29 Oct 0805 | ALERT: Geomagnetic K = 5 | 29/0802 |
| 29 Oct 0821 | EXTENDED WARNING: Geomagnetic K = 5 | 28/2220 - 29/1800 |
| 29 Oct 0822 | EXTENDED WARNING: Geomagnetic K = 4 | 28/0805 - 29/2100 |
| 29 Oct 1154 | ALERT: Geomagnetic K = 5 | 29/1152 |
| 29 Oct 2047 | EXTENDED WARNING: Geomagnetic K = 4 | 28/0805 - 30/0900 |
| 30 Oct 1200 | WARNING: Geomagnetic K = 4 | 30/1158 - 1800 |
| 30 Oct 1202 | ALERT: Geomagnetic K = 4 | 30/1159 |
| 30 Oct 1244 | ALERT: Electron 2MeV Integral Flux >= 1000pfu | 30/1220 |
| 30 Oct 1755 | EXTENDED WARNING: Geomagnetic K = 4 | 30/1158 - 2359 |

## *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 |
|---|---|---|---|---|---|---|---|
| 31 Oct | 130 | 15 | 4 | 14 Nov | 126 | 5 | 2 |
| 01 Nov | 130 | 18 | 4 | 15 | 126 | 5 | 2 |
| 02 | 130 | 12 | 4 | 16 | 124 | 5 | 2 |
| 03 | 130 | 10 | 3 | 17 | 124 | 5 | 2 |
| 04 | 130 | 12 | 4 | 18 | 124 | 25 | 5 |
| 05 | 128 | 20 | 5 | 19 | 124 | 15 | 4 |
| 06 | 126 | 15 | 4 | 20 | 126 | 8 | 3 |
| 07 | 126 | 5 | 2 | 21 | 126 | 5 | 2 |
| 08 | 124 | 5 | 2 | 22 | 128 | 5 | 2 |
| 09 | 126 | 5 | 2 | 23 | 128 | 8 | 3 |
| 10 | 126 | 18 | 5 | 24 | 130 | 15 | 4 |
| 11 | 126 | 18 | 4 | 25 | 130 | 25 | 5 |
| 12 | 128 | 15 | 4 | 26 | 130 | 15 | 4 |
| 13 | 128 | 5 | 2 | | | | |

## *Energetic Events*

| | Time | | | X-ray | | Optical Information | | | Peak Radio Flux | | Sweep Freq Intensity | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Date | Begin | Max | Half Max | Class | Integ Flux | Imp/ Brtns | Location Lat CMD | Rgn # | 245 | 2695 | II | IV |

**No Events Observed**

## *Flare List*

| | Time | | | | Optical | | |
|---|---|---|---|---|---|---|---|
| Date | Begin | Max | End | X-ray Class | Imp/ Brtns | Location Lat CMD | Rgn # |
| 24 Oct | 0532 | 0540 | 0544 | B7.7 | | | 3126 |
| 24 Oct | 0750 | 0802 | 0807 | C4.2 | | | 3126 |
| 24 Oct | B0846 | U0847 | A0857 | | SF | S12W42 | 3126 |
| 24 Oct | B0858 | U0921 | A0957 | | SF | S12W42 | 3126 |
| 24 Oct | 1000 | 1008 | 1024 | B5.9 | SF | N25E82 | 3126 |
| 24 Oct | 1127 | 1128 | 1130 | | SF | N25E82 | |
| 24 Oct | 1203 | 1214 | 1223 | B7.2 | SF | N24E81 | 3126 |
| 24 Oct | 1237 | 1242 | 1250 | B6.8 | | | 3126 |
| 24 Oct | 1330 | 1344 | 1356 | C2.5 | SF | S13W44 | 3126 |
| 24 Oct | 1852 | 1901 | 1911 | C1.0 | | | 3130 |
| 25 Oct | 0506 | 0521 | 0543 | B9.1 | | | |
| 25 Oct | 1217 | 1230 | 1235 | B6.8 | | | |
| 25 Oct | 1504 | 1519 | 1525 | C3.3 | | | 3133 |
| 25 Oct | 1852 | 1903 | 1911 | C4.9 | SF | N27E78 | 3133 |
| 25 Oct | 2149 | 2156 | 2209 | B6.1 | | | 3126 |
| 26 Oct | 0344 | 0348 | 0355 | B7.3 | | | |
| 26 Oct | 0409 | 0416 | 0421 | B8.7 | | | |
| 26 Oct | 1231 | 1243 | 1252 | C6.7 | | | 3133 |
| 26 Oct | 2222 | 2231 | 2241 | C1.1 | SF | N24E66 | 3133 |
| 26 Oct | 2345 | 2348 | 2351 | | SF | N24E66 | 3133 |
| 27 Oct | 0116 | 0126 | 0132 | C2.3 | | | 3133 |
| 27 Oct | 0143 | 0157 | 0203 | C2.2 | | | 3133 |
| 27 Oct | 0432 | 0439 | 0455 | C1.1 | | | 3133 |
| 27 Oct | 0639 | 0644 | 0650 | C0.9 | | | 3130 |
| 27 Oct | 0847 | 0856 | 0905 | C1.2 | | | 3130 |
| 28 Oct | 0009 | 0016 | 0021 | C1.1 | | | 3126 |
| 28 Oct | 0829 | 0838 | 0847 | C1.0 | | | 3130 |
| 28 Oct | 1609 | 1653 | 1736 | C1.0 | | | 3135 |
| 28 Oct | 2023 | 2029 | 2033 | C1.3 | | | 3135 |
| 28 Oct | 2215 | 2222 | 2226 | C1.6 | | | 3135 |
| 29 Oct | 0949 | 0956 | 1003 | C1.9 | | | 3130 |

## *Flare List*

| Date | Time | | | Optical | | | |
|---|---|---|---|---|---|---|---|
| | Begin | Max | End | X-ray Class | Imp/ Brtns | Location Lat CMD | Rgn # |
| 29 Oct | 1024 | 1032 | 1040 | C1.1 | | | 3135 |
| 29 Oct | 1545 | 1553 | 1603 | B9.3 | | | 3130 |
| 29 Oct | 1858 | 1914 | 1937 | C1.1 | | | 3130 |
| 29 Oct | 2343 | 2352 | 2359 | B9.7 | | | 3135 |
| 30 Oct | 0143 | 0150 | 0158 | C1.0 | | | 3133 |
| 30 Oct | 0900 | 0907 | 0911 | B8.9 | | | |
| 30 Oct | 1119 | 1129 | 1146 | B9.1 | | | 3133 |
| 30 Oct | 1223 | 1227 | 1231 | B8.2 | | | |
| 30 Oct | 1448 | 1451 | 1455 | C1.3 | | | 3130 |
| 30 Oct | 1648 | 1657 | 1702 | B9.6 | | | 3135 |
| 30 Oct | 1925 | 1935 | 1943 | C1.0 | | | 3131 |

## *Region Summary*

| | Location | | Sunspot Characteristics | | | | | Flares | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Helio | Area | Extent | Spot | Spot | Mag | X-ray | | | Optical | | | | |
| Date | Lat CMD | Lon | $10^{-6}$ hemi. | (helio) | Class | Count | Class | C | M | X | S | 1 | 2 | 3 | 4 |
| | | | ***Region 3121*** | | | | | | | | | | | | |
| 13 Oct | N23E54 | 272 | 20 | 5 | Bxo | 4 | B | | | | | | | | |
| 14 Oct | N24E41 | 272 | 20 | 6 | Bxo | 3 | B | | | | | | | | |
| 15 Oct | N24E31 | 269 | 10 | 1 | Axx | 1 | A | | | | | | | | |
| 16 Oct | N24E17 | 270 | plage | | | | | | | | | | | | |
| 17 Oct | N24E03 | 271 | plage | | | | | | | | | | | | |
| 18 Oct | N24W11 | 271 | plage | | | | | | | | | | | | |
| 19 Oct | N24W25 | 272 | plage | | | | | | | | | | | | |
| 20 Oct | N24W39 | 273 | plage | | | | | | | | | | | | |
| 21 Oct | N24W53 | 274 | plage | | | | | | | | | | | | |
| 22 Oct | N24W67 | 275 | plage | | | | | | | | | | | | |
| 23 Oct | N24W81 | 275 | plage | | | | | | | | | | | | |
| | | | | | | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

Crossed West Limb.
Absolute heliographic longitude: 271

| | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | ***Region 3125*** | | | | | | | | | | | | |
| 17 Oct | S25E01 | 272 | 10 | 4 | Cro | 6 | B | | | | | | | | |
| 18 Oct | S25W13 | 273 | 10 | 4 | Bxo | 3 | B | | | | | | | | |
| 19 Oct | S25W27 | 273 | 10 | 1 | Axx | 1 | A | | | | | | | | |
| 20 Oct | S25W41 | 275 | plage | | | | | | | | | | | | |
| 21 Oct | S23W49 | 270 | 10 | 1 | Axx | 1 | A | | | | | | | | |
| 22 Oct | S22W63 | 271 | plage | | | | | 1 | | | | | | | |
| 23 Oct | S22W76 | 270 | plage | | | | | | | | | | | | |
| 24 Oct | S22W90 | 271 | plage | | | | | | | | | | | | |
| | | | | | | | | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

Crossed West Limb.
Absolute heliographic longitude: 272

## *Region Summary - continued*

| | Location | | Sunspot Characteristics | | | | | Flares | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Helio | Area | Extent | Spot | Spot | Mag | X-ray | | | Optical | | | | |
| Date | Lat CMD | Lon | $10^{-6}$ hemi. | (helio) | Class | Count | Class | C | M | X | S | 1 | 2 | 3 | 4 |
| | | | ***Region 3126*** | | | | | | | | | | | | |
| 19 Oct | S11E15 | 231 | 30 | 2 | Cri | 3 | B | 3 | | | 2 | | | | |
| 20 Oct | S11E02 | 232 | 80 | 5 | Dsi | 10 | B | | | | | | | | |
| 21 Oct | S11W11 | 232 | 50 | 5 | Dri | 11 | B | | | | | | | | |
| 22 Oct | S11W25 | 233 | 30 | 6 | Cro | 7 | B | | | | | | | | |
| 23 Oct | S10W38 | 232 | 30 | 5 | Cso | 6 | B | | | | | | | | |
| 24 Oct | S10W51 | 232 | 80 | 4 | Dai | 8 | B | 2 | | | 3 | | | | |
| 25 Oct | S10W65 | 233 | 160 | 4 | Dai | 7 | B | | | | | | | | |
| 26 Oct | S10W79 | 234 | 160 | 4 | Dao | 3 | B | | | | | | | | |
| 27 Oct | S09W93 | 233 | 50 | 7 | Hsx | 1 | A | | | | | | | | |
| | | | | | | | | 5 | 0 | 0 | 5 | 0 | 0 | 0 | 0 |

Crossed West Limb.
Absolute heliographic longitude: 232

| | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | ***Region 3127*** | | | | | | | | | | | | |
| 20 Oct | S23E23 | 210 | 20 | 2 | Hax | 3 | A | | | | | | | | |
| 21 Oct | S23E10 | 211 | 30 | 4 | Cro | 6 | B | | | | | | | | |
| 22 Oct | S23W05 | 213 | 20 | 2 | Axx | 3 | A | | | | | | | | |
| 23 Oct | S22W19 | 213 | 10 | 1 | Axx | 1 | A | | | | | | | | |
| 24 Oct | S22W33 | 214 | plage | | | | | | | | | | | | |
| 25 Oct | S22W47 | 215 | plage | | | | | | | | | | | | |
| 26 Oct | S22W61 | 216 | plage | | | | | | | | | | | | |
| 27 Oct | S22W75 | 217 | plage | | | | | | | | | | | | |
| 28 Oct | S22W89 | 217 | plage | | | | | | | | | | | | |
| | | | | | | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

Crossed West Limb.
Absolute heliographic longitude: 213

| | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | ***Region 3128*** | | | | | | | | | | | | |
| 21 Oct | S17W54 | 275 | 20 | 2 | Hrx | 2 | A | | | | | | | | |
| 22 Oct | S17W67 | 275 | 30 | 3 | Cao | 3 | B | | | | | | | | |
| 23 Oct | S17W81 | 275 | 20 | 4 | Cao | 2 | B | | | | | | | | |
| | | | | | | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

Crossed West Limb.
Absolute heliographic longitude: 275

## *Region Summary - continued*

| | Location | | Sunspot Characteristics | | | | | Flares | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Helio | Area | Extent | Spot | Spot | Mag | X-ray | | | Optical | | | | |
| Date | Lat CMD | Lon | $10^{-6}$ hemi. | (helio) | Class | Count | Class | C | M | X | S | 1 | 2 | 3 | 4 |
| | | | ***Region 3129*** | | | | | | | | | | | | |
| 22 Oct | S26W72 | 280 | 30 | 4 | Cro | 2 | B | | | | | | | | |
| 23 Oct | S26W86 | 280 | 10 | 1 | Axx | 1 | A | | | | | | | | |
| | | | | | | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

Crossed West Limb.
Absolute heliographic longitude: 280

| | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | ***Region 3130*** | | | | | | | | | | | | |
| 23 Oct | S24E09 | 185 | 20 | 4 | Cro | 5 | B | 3 | | | | | | | |
| 24 Oct | S24W03 | 184 | 20 | 7 | Cro | 7 | B | 1 | | | | | | | |
| 25 Oct | S25W17 | 185 | 20 | 7 | Cro | 6 | B | | | | | | | | |
| 26 Oct | S24W30 | 184 | 60 | 7 | Dso | 12 | B | | | | | | | | |
| 27 Oct | S25W44 | 185 | 90 | 6 | Dao | 9 | B | 2 | | | | | | | |
| 28 Oct | S25W58 | 186 | 80 | 6 | Dai | 10 | B | 1 | | | | | | | |
| 29 Oct | S24W71 | 186 | 70 | 6 | Dai | 8 | B | 2 | | | | | | | |
| 30 Oct | S24W84 | 186 | 40 | 5 | Dao | 3 | B | 1 | | | | | | | |
| | | | | | | | | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

Still on Disk.
Absolute heliographic longitude: 184

| | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | ***Region 3131*** | | | | | | | | | | | | |
| 24 Oct | N23E70 | 111 | 30 | 2 | Hsx | 1 | A | | | | | | | | |
| 25 Oct | N23E58 | 110 | 130 | 6 | Cso | 5 | B | | | | | | | | |
| 26 Oct | N23E44 | 109 | 170 | 8 | Cao | 7 | B | | | | | | | | |
| 27 Oct | N23E29 | 111 | 190 | 8 | Cso | 4 | B | | | | | | | | |
| 28 Oct | N22E16 | 112 | 150 | 6 | Cso | 3 | B | | | | | | | | |
| 29 Oct | N23E06 | 112 | 150 | 7 | Cso | 8 | B | | | | | | | | |
| 30 Oct | N23W09 | 111 | 160 | 6 | Cso | 5 | B | 1 | | | | | | | |
| | | | | | | | | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

Still on Disk.
Absolute heliographic longitude: 112

## *Region Summary - continued*

| | Location | | Sunspot Characteristics | | | | | Flares | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Helio | Area | Extent | Spot | Spot | Mag | X-ray | | | Optical | | | | |
| Date | Lat CMD | Lon | $10^{-6}$ hemi. | (helio) | Class | Count | Class | C | M | X | S | 1 | 2 | 3 | 4 |
| | | | ***Region 3132*** | | | | | | | | | | | | |
| 25 Oct | S09W18 | 186 | 10 | 3 | Axx | 1 | A | | | | | | | | |
| 26 Oct | S10W31 | 185 | 10 | 1 | Axx | 2 | A | | | | | | | | |
| 27 Oct | S10W47 | 188 | 10 | 2 | Bxo | 2 | B | | | | | | | | |
| 28 Oct | S11W63 | 191 | 10 | 1 | Axx | 1 | A | | | | | | | | |
| 29 Oct | S12W77 | 192 | 10 | 1 | Axx | 1 | A | | | | | | | | |
| | | | | | | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

Died on Disk.
Absolute heliographic longitude: 186

| | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | ***Region 3133*** | | | | | | | | | | | | |
| 25 Oct | N26E73 | 95 | 20 | 2 | Cro | 3 | B | 2 | | | 1 | | | | |
| 26 Oct | N26E60 | 95 | 30 | 6 | Cro | 4 | B | 2 | | | 2 | | | | |
| 27 Oct | N26E46 | 94 | 30 | 5 | Cro | 6 | B | 3 | | | | | | | |
| 28 Oct | N26E33 | 95 | 140 | 6 | Dao | 8 | B | | | | | | | | |
| 29 Oct | N26E21 | 94 | 90 | 7 | Dri | 11 | B | | | | | | | | |
| 30 Oct | N26E07 | 95 | 30 | 8 | Bxo | 11 | B | 1 | | | | | | | |
| | | | | | | | | 8 | 0 | 0 | 3 | 0 | 0 | 0 | 0 |

Still on Disk.
Absolute heliographic longitude: 95

| | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | ***Region 3134*** | | | | | | | | | | | | |
| 28 Oct | N12E14 | 114 | 10 | 3 | Bxo | 2 | B | | | | | | | | |
| 29 Oct | N12W01 | 116 | 10 | 2 | Axx | 3 | A | | | | | | | | |
| 30 Oct | N12W15 | 117 | plage | | | | | | | | | | | | |
| | | | | | | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

Still on Disk.
Absolute heliographic longitude: 116

| | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | ***Region 3135*** | | | | | | | | | | | | |
| 28 Oct | N27E65 | 63 | 20 | 6 | Bxo | 3 | B | 3 | | | | | | | |
| 29 Oct | N27E52 | 63 | 130 | 9 | Dso | 6 | B | 1 | | | | | | | |
| 30 Oct | N27E39 | 63 | 160 | 11 | Eao | 9 | B | | | | | | | | |
| | | | | | | | | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

Still on Disk.
Absolute heliographic longitude: 63

## *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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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 -- User Guide