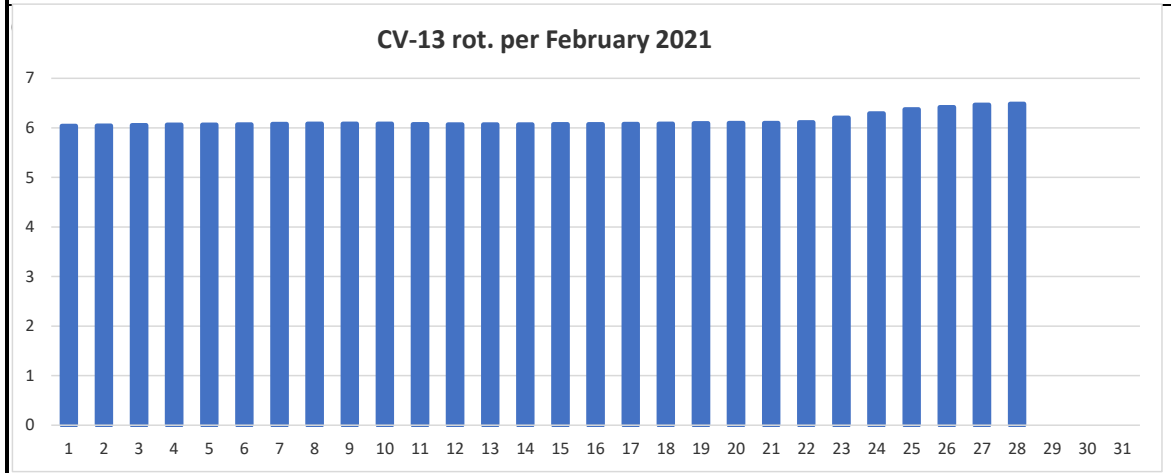
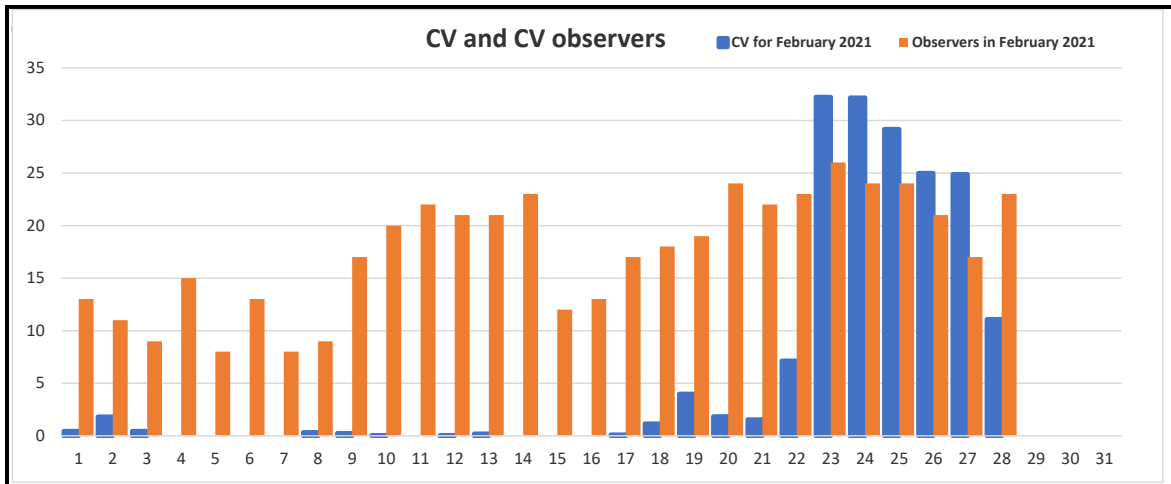




| <b>Results</b>   |             |             |                   |                   |              |             |
|------------------|-------------|-------------|-------------------|-------------------|--------------|-------------|
| Date             | CV          | Obsrvrs     | Regions<br>6 rot. | CV-USAF<br>6-rot. | CV-6 rot.    | CV-13 rot.  |
| 1                | 0,46        | 13          |                   |                   | 12,16        | 6,04        |
| 2                | 1,82        | 11          |                   |                   | 12,23        | 6,04        |
| 3                | 0,44        | 9           |                   |                   | 12,31        | 6,05        |
| 4                | 0,00        | 15          |                   |                   | 12,37        | 6,06        |
| 5                | 0,00        | 8           |                   |                   | 12,44        | 6,06        |
| 6                | 0,00        | 13          |                   |                   | 12,48        | 6,07        |
| 7                | 0,00        | 8           |                   |                   | 12,55        | 6,08        |
| 8                | 0,33        | 9           |                   |                   | 12,62        | 6,08        |
| 9                | 0,24        | 17          |                   |                   | 12,63        | 6,08        |
| 10               | 0,05        | 20          |                   |                   | 12,64        | 6,08        |
| 11               | 0,00        | 22          |                   |                   | 12,64        | 6,07        |
| 12               | 0,05        | 21          |                   |                   | 12,65        | 6,07        |
| 13               | 0,19        | 21          |                   |                   | 12,69        | 6,07        |
| 14               | 0,00        | 23          |                   |                   | 12,71        | 6,07        |
| 15               | 0,00        | 12          |                   |                   | 12,77        | 6,07        |
| 16               | 0,00        | 13          |                   |                   | 12,82        | 6,07        |
| 17               | 0,12        | 17          |                   |                   | 12,87        | 6,08        |
| 18               | 1,17        | 18          |                   |                   | 12,90        | 6,08        |
| 19               | 4,00        | 19          |                   |                   | 12,93        | 6,09        |
| 20               | 1,83        | 24          |                   |                   | 12,95        | 6,09        |
| 21               | 1,55        | 22          |                   |                   | 12,98        | 6,09        |
| 22               | 7,13        | 23          |                   |                   | 13,06        | 6,11        |
| 23               | 32,23       | 26          |                   |                   | 13,36        | 6,20        |
| 24               | 32,17       | 24          |                   |                   | 13,66        | 6,29        |
| 25               | 29,17       | 24          |                   |                   | 13,93        | 6,37        |
| 26               | 25,00       | 21          |                   |                   | 14,13        | 6,42        |
| 27               | 24,88       | 17          |                   |                   | 14,34        | 6,46        |
| 28               | 11,09       | 23          |                   |                   | 14,46        | 6,48        |
|                  |             |             |                   |                   |              |             |
|                  |             |             |                   |                   |              |             |
|                  |             |             |                   |                   |              |             |
| Totals/<br>Avrgs | <b>3,96</b> | <b>27,3</b> | <b>0,97</b>       | <b>4,83</b>       | <b>12,94</b> | <b>6,14</b> |



**Sunspot Region Summary for February 2021**

**Reg.-First day-Last day-Lat.-Lon.-Rot.-CVavrg.-ZMcl day1 to day14**

- 2801,02.02.21,03.02.21,31,250,2240-BXO,AXX,,,,,,,,,,,,,
- 2802,18.02.21,18.02.21,19,033,2240-BXO,,,,,,,,,,,,,
- 2803,19.02.21,21.02.21,21,279,2241-AXX,AXX,AXX,,,,,,,,,,,,,
- 2804,22.02.21,28.02.21,19,309,2241-CRO,CSO,DAI,DSI,DSI,DSO,DSO,,,,,,,,,
- 2805,22.02.21,25.02.21,-22,304,2241-BXO,CAO,CSO,AXX,,,,,,,,,,,,,

**:Product: Weekly Highlights and Forecasts**

:Issued: 2021 Mar 15 0111 UTC  
 # Prepared by the US Dept. of Commerce, NOAA, Space Weather Prediction Center  
 # Product description and SWPC contact on the Web  
 # <https://www.swpc.noaa.gov/content/subscription-services>

#  
 # Weekly Highlights and Forecasts  
 #

# Highlights of Solar and Geomagnetic Activity  
 08 - 14 March 2021

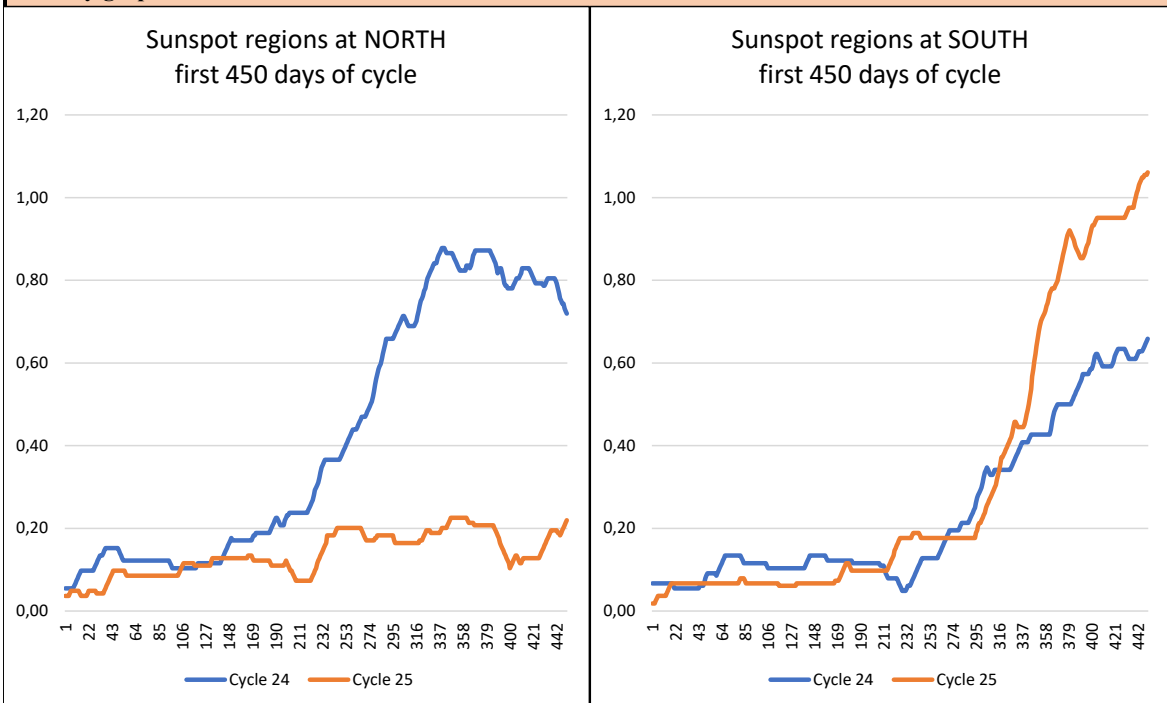
Solar activity was very low on 08 and 10-14 Mar. Low levels of solar activity were observed on 09 Mar due to a C1 flare at 09/1235 UTC, from Region 2808 (S19, L=035, class/area, Cao/30 on 12 Mar). No Earth-directed CMEs were observed in available imagery.

No proton events were observed at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit reached high levels on 08-12 and 14 Mar, with moderate levels observed on 13 Mar.

Geomagnetic field activity reached G1 (Minor) geomagnetic storm levels on 14 Mar, with active levels on 13 Mar due to recurrent, negative-polarity CH HSS influence. Quiet to unsettled conditions were observed for the remainder of the reporting period (08-12 Mar).

Forecast of Solar and Geomagnetic Activity

**Monthly graph**

Note the lack of sunspot regions in the NORTH at the start of solar cycle 25 compared to solar cycle 24

**News February 2021**

Solar activity is nearly at standstill in this phase of the new solar cycle 25. The rapid rise we saw in November 2020 and some of it in December 2020, have now gone into a stage of near standstill in activity. No very large activity sunspotwise has been seen lately, but solar wind has been rising steadily since last summer.

Region 2804, at lat. S19, long. 309 (2241), was at 190 mvh on 25 February, a fairly interesting group that soon after started decaying but managed to exit round west limb.

There should be a chance of higher activity during March and April.

**CV-HELIOS NETWORK GRAPHIC FILES**

The graphic files menu at [www.cv-helios.net](http://www.cv-helios.net) has undergone some changes lately, and will be updated every month on the 15th in due time for the MPR to be issued.

**NEW MENU: DAILY RUN FILES**

Located via the "Misc."-menu at <https://www.cv-helios.net/cvmisc3.html>:

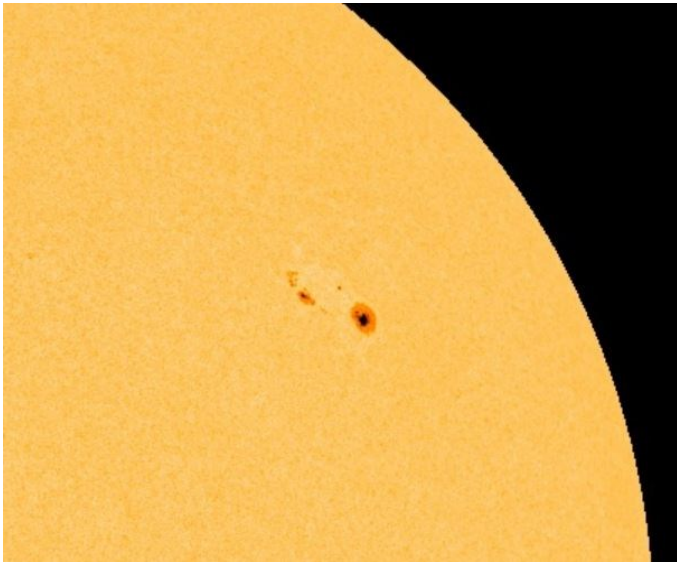
**DAILY RUN FILES**

giving you daily updates on DAILY SOLAR & CV-REPORTS, CV-OBS. REG. UPDATES, TEXT LIST & TABLE DAILY CV-INT., CV-USAF NUMBERS & NOAA/USAF SUNSPOT REGIONS, SOHO GRIDDED IMAGES AND POSITIONAL TABLES, SOLAR FLUX & P-INDEX, SOLAR WIND.

The menu is dynamic in the green background fields, meaning it is date-dependant and should be available from about 10:00 UTC until local midnight.

**NEW MENU: GRAPHICS/OBSERVATIONS/OBSERVER STATISTICS:**

The new graphics page over CV-Int., observations and observers is now ready from the main page or go to <https://www.cv-helios.net/cvobsgraph.html>. The page is updated every time new submissions have been registered. New or revised features may appear in time.

|   |  |
|---|--|
| <b>Pictures from last month - Observer contributions, etc.</b>                    |  |
| <b>SOLAR CYCLE 25</b>   | <b>Largest Regions of February 2021</b>                                      |
|  | <p>Region 2804<br/>on 25 Feb 2021 1200 UTC<br/>courtesy SDO/HMI NOAA gov</p> |
| <b>Awards this month</b>  | 0  |
| none  |  |
| <b>New member:</b>  | <b>Welcome to:</b>   |
| none  | none   |
|   | We are now 53 active members (last 12 mo.)                                   |

**Solar Coordinates**

New from April 2020

Daily list of Solar Ephemeris available at:

[Daily list of Solar Ephemeris and SDO on grid](#)

Here you can see Today's Po, Bo, Lo, Rotation no., RA and Dec. and adjusted SOHO-picture on grid.

**Calculating CV**

For your convenience and security, use the mif2002,

<https://www.cv-helios.net/mif2002.xls>

the Monthly Input Form, which you can use for all of your next reportings!

**Monitor MPR daily progress****CV-Helios Network: Monitor MPR progress as entries are made!**

Monitor your submissions as they are registered:

<https://cv-helios.net/helios/cv/web/mprpost.html>

The data are available fresh from about 10:00 UTC until local midnight.

Content comprises CV-Report for latest month, CV-Report for latest month

individual results, Extracts from NOAA on forecasts/discussion,

Extracts from NOAA warehouse on SRS and other activity,

Last 24 months CV-data, This month CV acc. to USAF

**NEW!** A special **Graphic section** is underway soon available from front page of [www.cv-helios.net](http://www.cv-helios.net)

**Registration data**

Check if your CV-observations have been registered (please allow up to 24 hrs):

<https://www.cv-helios.net/helios/cv/web/datlist.htm>

for checking of Entries Summary

<https://www.cv-helios.net/helios/cv/web/cvobsmonth.htm>**CONTRIBUTE WITH YOUR PHOTOS AND OTHER OF INTEREST!**

We would like YOU to contribute with drawings or photos from last month

Also any other contribution that may have an interest for our observers.

Please send by email to:

[cvhelios@gmail.com](mailto:cvhelios@gmail.com)[Please check out www.cv-helios.net/cvrep2.html](http://www.cv-helios.net/cvrep2.html) for updates of files!**SUBMISSIONS OF CV-OBSERVATIONS**

Log on to:

<https://www.cv-helios.net/observations/index.html>

login

solaris

password

cvheliosobs

Submission before 15th of proceeding month 18:00 UTC.

MPR issue 15th of proceeding month 2000 UTC. Good luck CV-observing!

**Average Registration time over last 40 entries: 15 hours 18 minutes****CV-Helios Network****- over 39 years in solar amateur astronomy service!**There are now 11849 entries registered  
containing 190557 CV-observations!**Editorial close: 15.03.2021 18:38 UTC****CV-Helios Network**