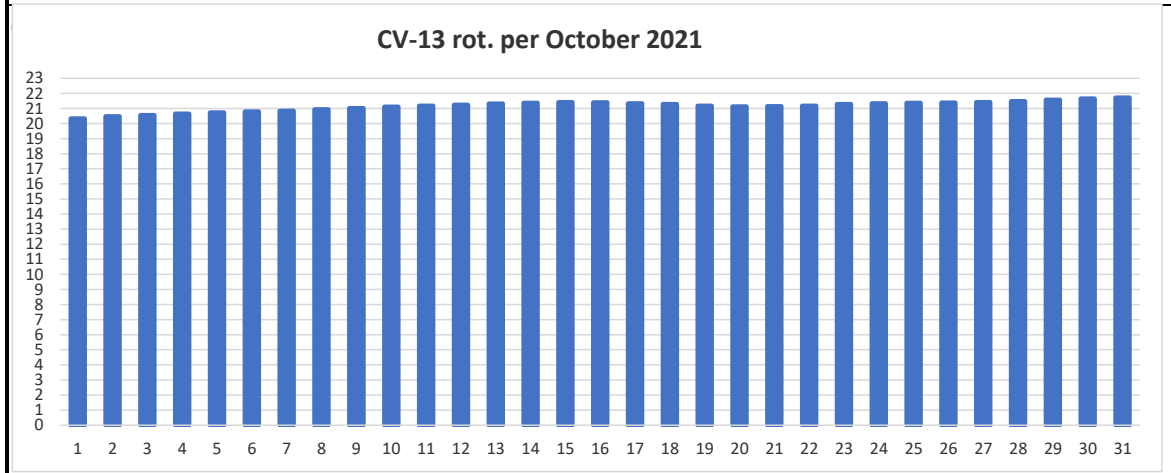
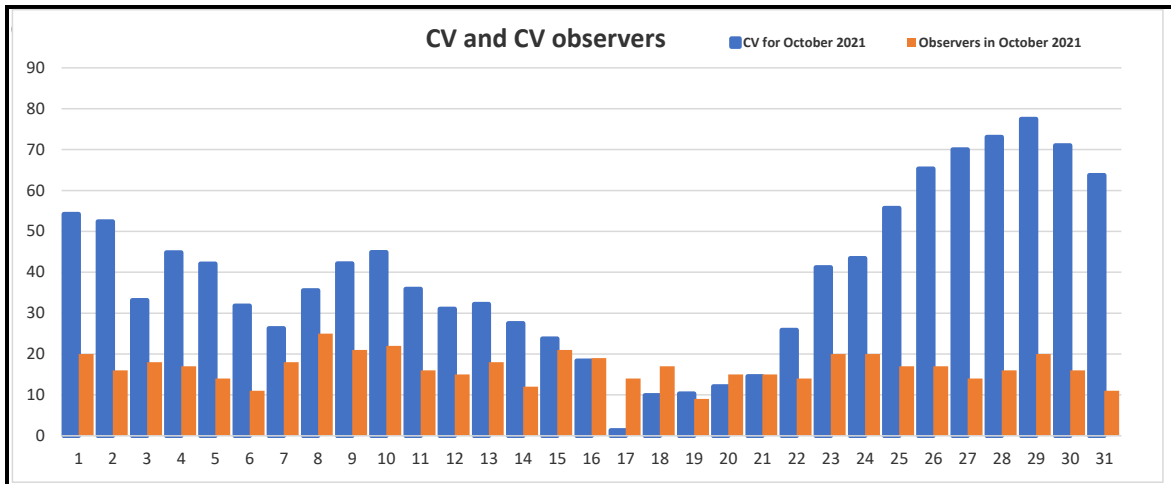




<b>Results</b>						
Date	CV	Obsrvrs	Regions 6 rot.	CV-USAF 6-rot.	CV-6 rot.	CV-13 rot.
1	54,25	20	2,20	25,24	25,61	20,33
2	52,44	16	2,21	25,51	25,55	20,47
3	33,17	18	2,21	25,61	25,53	20,56
4	44,82	17	2,21	25,92	25,63	20,66
5	42,07	14	2,20	25,81	25,63	20,74
6	31,82	11	2,18	25,65	25,53	20,79
7	26,28	18	2,17	25,40	25,24	20,84
8	35,56	25	2,16	25,18	25,01	20,93
9	42,14	21	2,15	25,26	24,95	21,02
10	44,91	22	2,15	25,43	25,07	21,12
11	35,94	16	2,15	25,60	25,16	21,18
12	31,07	15	2,15	25,90	25,31	21,25
13	32,22	18	2,16	26,18	25,49	21,32
14	27,50	12	2,16	26,44	25,69	21,37
15	23,76	21	2,16	26,68	25,82	21,41
16	18,37	19	2,16	26,74	25,95	21,39
17	1,36	14	2,16	26,74	25,98	21,34
18	9,88	17	2,16	26,74	25,99	21,29
19	10,33	9	2,16	26,73	26,02	21,18
20	12,07	15	2,16	26,62	25,99	21,14
21	14,53	15	2,16	26,51	25,91	21,14
22	25,86	14	2,16	26,51	25,89	21,18
23	41,20	20	2,16	26,66	25,99	21,28
24	43,45	20	2,16	26,93	26,12	21,33
25	55,71	17	2,17	27,19	26,35	21,37
26	65,35	17	2,20	27,71	26,63	21,39
27	70,00	14	2,22	28,10	26,94	21,42
28	73,06	16	2,24	28,52	27,27	21,47
29	77,50	20	2,26	29,08	27,60	21,58
30	71,00	16	2,27	29,32	27,89	21,66
31	63,73	11	2,29	29,60	28,10	21,72
Totals/ Avrgs	<b>3,96</b>	<b>27,3</b>	<b>0,97</b>	<b>4,83</b>	<b>25,99</b>	<b>21,16</b>



**LAST 10 SUNSPOT REGIONS**

- Reg-First-Last-Lat.-Long.-Rot.-Area-Lgth.-CV-max.
- 2896-14.11.21-15.11.21--18,0-330,0-2251-60-1-10 HSX-HSX-----
  - 2895-08.11.21-13.11.21-23,5-72,3-2249-62-4-13 DAO-DSO-DSO-CRO-BXO-AXX-----
  - 2894-05.11.21-15.11.21--27,4-91,0-2249-129-5-11 HSX-CSO-CSO-CSO-HSX-HSX-HAX-DAO-CSO-HSX-HSX---
  - 2893-31.10.21-12.11.21-16,8-155,6-2249-131-2-10 HSX-HSX-HSX-HSX-HSX-CSO-HSX-HSX-HSX-HSX-HSX-HSX-HSX-
  - 2892-30.10.21-31.10.21-26,5-255,0-2249-10-3-2 BXO-BXO-----
  - 2891-26.10.21-06.11.21-16,8-211,7-2249-177-6-20 DSO-CAO-CAI-DKI-EAC-DAC-DAI-DAI-DAO-CAO-DRO-AXX--
  - 2890-25.10.21-28.10.21--18,3-317,5-2249-28-5-3 BXO-CRO-BXO-BXO-----
  - 2889-25.10.21-31.10.21--23,6-249,1-2249-17-3-2 BXO-BXO-BXO-BXO-BXO-AXX-AXX-----
  - 2888-24.10.21-26.10.21--14,0-253,3-2249-13-1-4 HSX-AXX-AXX-----
  - 2887-22.10.21-03.11.21--26,1-276,4-2249-247-7-33 DAO-DKI-DKI-DKI-DHI-DHI-DKC-DHI-DSO-CSO-CSO-HAX-HSX-

**:Product: Weekly Highlights and Forecasts**

:Issued: 2021 Oct 11 0049 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  
 04 - 10 October 2021

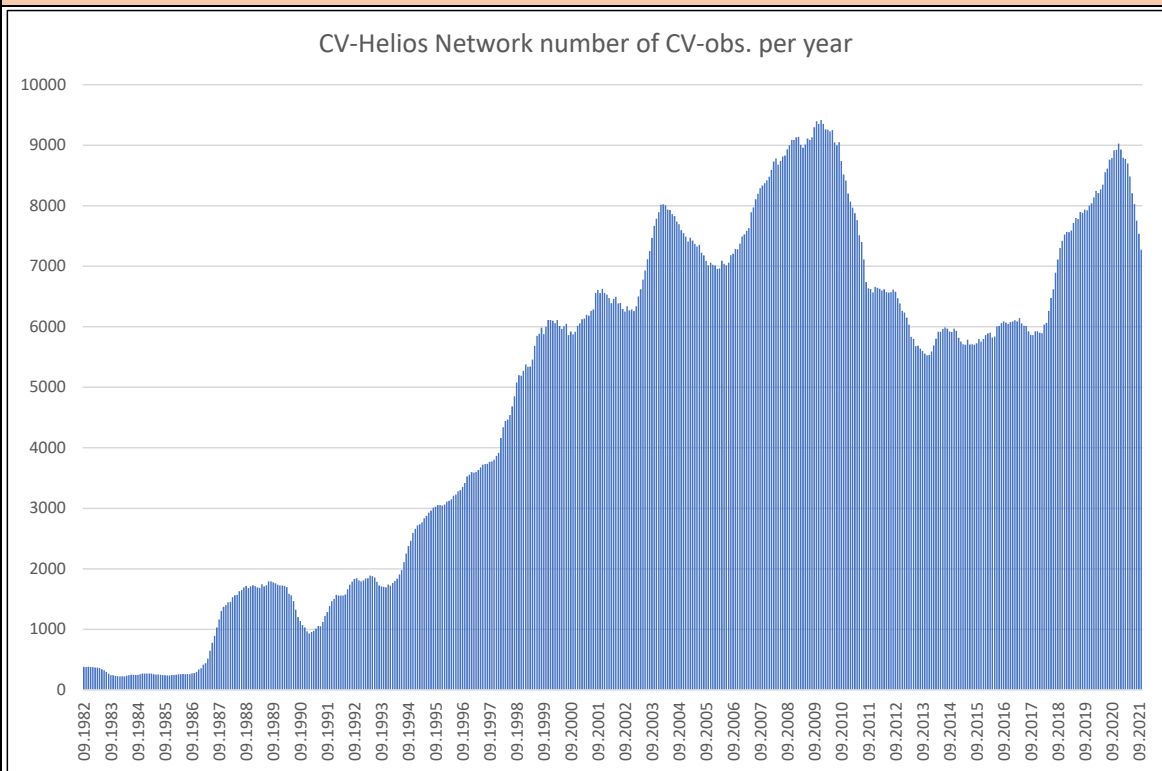
Solar activity was very low over 04-06 Oct. Low levels of solar activity were observed on 07-08 and 10 Oct, and moderate solar activity was observed on 09 Oct. Region 2882 (N17, L=157, class/area=Dho/280 on 09 Oct) produced the majority of the C-class flare activity in addition to the largest event of the period, an M1/2b flare (with Type-II and IV radio emissions) at 09/0638 UTC. An associated full-halo CME signature was observed in LASCO C2 imagery beginning at 09/0712 UTC, and is likely to arrive at Earth around midday on 11 Oct.

No proton events were observed at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit was at normal and normal to moderate levels throughout the period.

Geomagnetic field activity was quiet on 07-09 Oct, quiet to

## Monthly graph



## News October 2021

Solar activity is still low but number of regions are slowly increasing.  
As shown in this issue, the CV as 13-rot. centered averages are now higher than for solar cycle 24 at the same time of progress from minimum!  
According to solar flux we are now ahead with about 7 percent compared to cycle 24.

There were a total of 18 sunspot regions developing in September 2021.

List of 7 significant sunspot regions developing in October 2021:

The LARGEST SUNSPOT REGIONS ( $\geq 100$  mvh) 01.10-30.10 were:

Reg.-First-Last--Lat.-Long.-Rot.-Area - ZMcI-history

2877: 26.09-03.10 Lat S20, Lo 328 Rt. 2249 127 m., CV 16,0, BXO CRO CRO DAI DAO DAO DAO HSX

2880: 28.09-06.10 Lat N31, Lo 244 Rt. 2249 170 m., CV 23,5, CRO DKC DAO DHO ESO DSO ESO CSO HRX

2882: 03.10-16.10 Lat N16, Lo 157 Rt. 2249 234 m., CV 31,9, HAX HHX HSX CSO DSO DSO DHO DHO DHO DHO CHO CHO HHX HSX

2886: 18.10-29.10 Lat S19, Lo 335 Rt. 2249 118 m., CV 10,0, HSX HSX HSX HSX HSX HSX HSX HSX HSX HSX HSX

2887: 22.10-03.11 Lat S26, Lo 276 Rt. 2249 289 m., CV 40,4, DAO DK1 DK1 DK1 DHI DHI DKC DHI DSO CSO CSO HAX HSX

2891: 26.10-06.11 Lat N18, Lo 212 Rt. 2249 257 m., CV 25,2, DSO CAO CAI DK1 EAC DAC DAI DAI DAO CAO DRO AXX

2893: 31.10-12.11 Lat N16, Lo 156 Rt. 2249 120 m., CV 10,0, HSX HSX HSX HSX HSX CSO HSX HSX HSX HSX HSX HSX

Activity cut from Sunspot Region Summaries from NOAA:

10 Oct: Region 2882 (N17W01, Dho) produced an M1/2b flare.

29 Oct: Solar activity reached high levels. Region 2887 (S27W15, Dhi) produced an X1 flare.

30 Oct: Solar activity reached moderate levels.

Region 2891 (N17E41, Dki) produced an M1 flare observed at 29/0242 UTC.

31 Oct: Region 2887 (S27W54, Cso) produced an M1/1f flare.

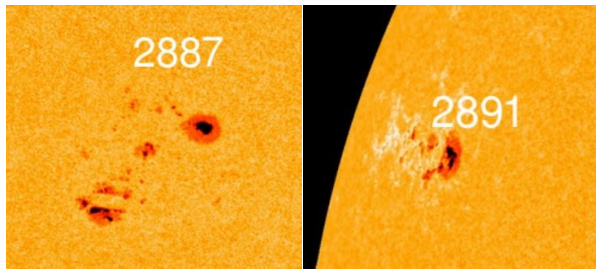
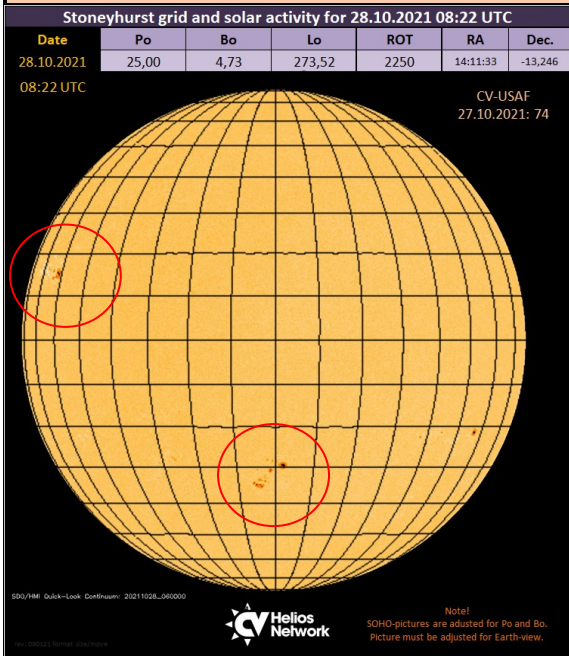
Apart from this solar activity varied from very low to low and mostly C-class flares most significant.

Solar Max.: Originally July 2025, which now may occur end Feb/start March 2025.

We wish you all lots of sunny days, happy observing and good luck further on in 2021!

Please remember you are always welcome to contribute with drawings and photos!

**Pictures from last month - Observer contributions, etc.**



**Largest Regions of Oct. 2021**

Regions 2887 and 2891  
on October 28, 2021  
courtesy SDO/HMI NOAA gov  
and Spaceweather.com


**Awards this month** 0

none

**New members:** **Welcome to:**

**none** **none**

We are now 54 active members (last 12 mo.)

<b>Solar Coordinates</b>	New from April 2020
Daily list of Solar Ephemeris available at: <a href="#">Daily list of Solar Ephemeris and SDO on grid</a> Here you can see Today's Po, Bo, Lo, Rotation no., RA and Dec. and adjusted SOHO-picture on grid.	
<b>Calculating CV</b>	
For your convenience and security, use the mif2021, <a href="https://www.cv-helios.net/mif2021.xlsx">https://www.cv-helios.net/mif2021.xlsx</a> the Monthly Input Form, which you can use for all of your next reportings!	
<b>Monitor MPR daily progress</b>	
<b>CV-Helios Network: Monitor MPR progress as entries are made!</b> Monitor your submissions as they are registered: <a href="https://cv-helios.net/helios/cv/web/mprpost.html">https://cv-helios.net/helios/cv/web/mprpost.html</a> 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	
<b>Registration data</b>	
Check if your CV-observations have been registered (please allow up to 24 hrs): <a href="https://www.cv-helios.net/helios/cv/web/datlist.htm">https://www.cv-helios.net/helios/cv/web/datlist.htm</a> <a href="https://www.cv-helios.net/helios/cv/web/cvobsmonth.htm">https://www.cv-helios.net/helios/cv/web/cvobsmonth.htm</a> for checking of Entries Summary	
<b>CONTRIBUTE WITH YOUR PHOTOS AND OTHER OF INTEREST!</b>	
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: <a href="mailto:cvhelios@gmail.com">cvhelios@gmail.com</a>	
<a href="http://www.cv-helios.net/cvrep2.html">Please check out www.cv-helios.net/cvrep2.html</a> for updates of files!	
<b><u>SUBMISSIONS OF CV-OBSERVATIONS</u></b>	
Log on to: <a href="https://www.cv-helios.net/observations/index.html">https://www.cv-helios.net/observations/index.html</a> 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!	
<b>Average received to registered time: 23 hours 22 minutes</b>	
<b>CV-Helios Network</b> - over 40 years in solar amateur astronomy service!  There are now Entries reg.: 12204 entries registered containing 196729 CV-observations! Last 12 months 7116 CV-observations from 41 observers originating from 17 countries	
<b>Editorial close: 16.11.2021 12:35 UTC</b>	
 <b>CV-Helios Network</b>	