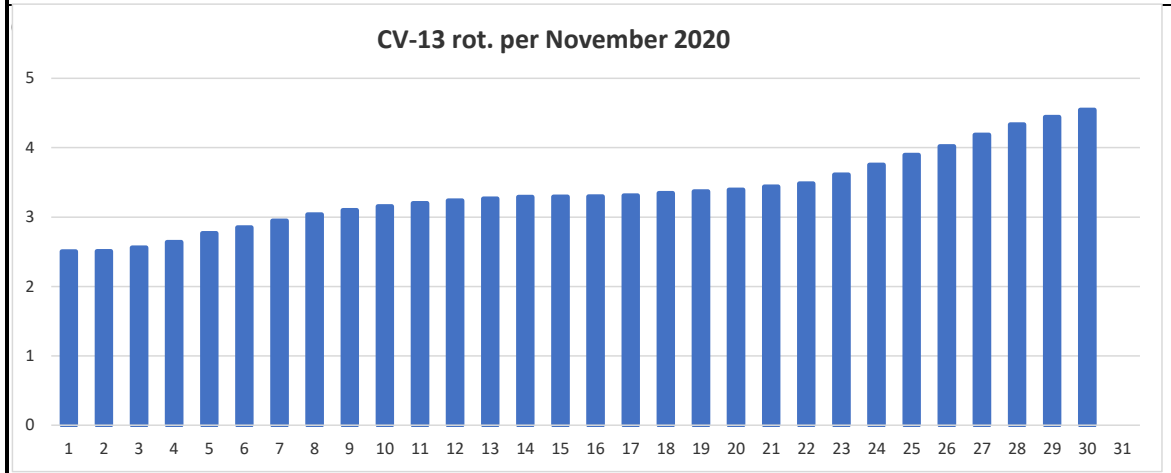
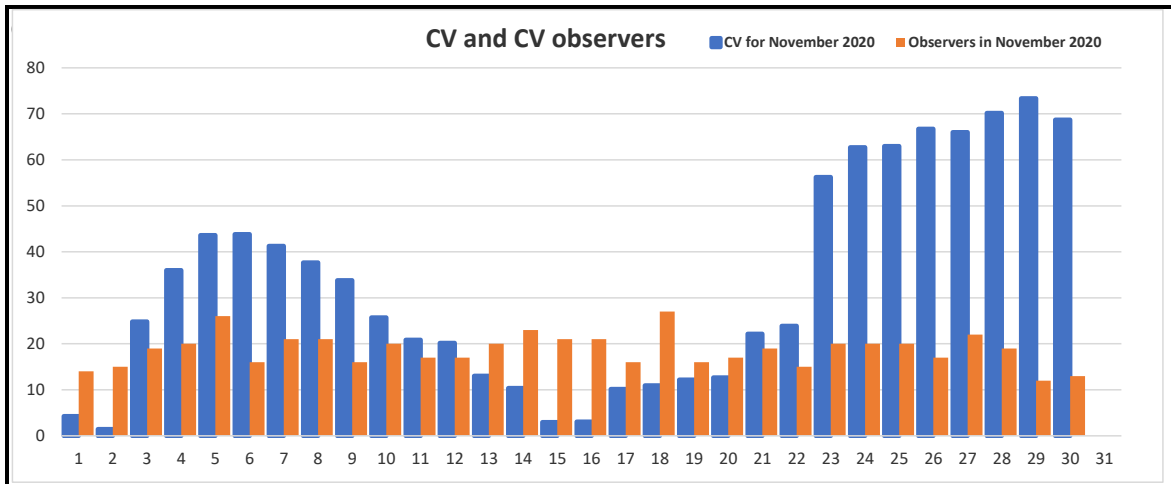


Results						
Date	CV	Obsrvrs	Regions 6 rot.	CV-USAF 6-rot.	CV-6 rot.	CV-13 rot.
1	4,29	14	0,10	4,28	4,16	2,50
2	1,47	15	0,10	4,29	4,18	2,51
3	24,84	19	0,11	4,36	4,28	2,56
4	36,00	20	0,11	4,68	4,45	2,64
5	43,62	26	0,11	4,97	4,70	2,77
6	43,81	16	0,11	5,28	4,88	2,85
7	41,24	21	0,11	5,57	5,09	2,95
8	37,67	21	0,11	5,91	5,28	3,04
9	33,81	16	0,11	6,09	5,43	3,10
10	25,70	20	0,11	6,24	5,57	3,16
11	20,88	17	0,12	6,34	5,67	3,20
12	20,18	17	0,11	6,43	5,76	3,24
13	13,05	20	0,11	6,50	5,84	3,26
14	10,35	23	0,10	6,50	5,85	3,29
15	2,95	21	0,10	6,44	5,82	3,29
16	3,05	21	0,10	6,39	5,76	3,29
17	10,19	16	0,11	6,30	5,65	3,31
18	10,96	27	0,11	6,31	5,62	3,34
19	12,19	16	0,11	6,30	5,61	3,37
20	12,65	17	0,11	6,30	5,61	3,39
21	22,16	19	0,12	6,33	5,66	3,44
22	23,87	15	0,12	6,40	5,69	3,48
23	56,25	20	0,13	6,62	5,90	3,61
24	62,70	20	0,13	6,92	6,14	3,75
25	62,95	20	0,13	7,22	6,41	3,89
26	66,71	17	0,13	7,60	6,68	4,02
27	66,00	22	0,13	8,01	7,04	4,18
28	70,16	19	0,13	8,52	7,36	4,33
29	73,33	12	0,15	8,98	7,61	4,44
30	68,69	13	0,15	9,29	7,85	4,54
Totals/ Avrgs	3,96	27,3	0,97	4,83	5,72	3,36



Sunspot Region Summary for November 2020

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

- 2780,02.11.20,06.11.20,20,279,2237-BXO,AXX,HRX,BXO,BXO,,,,,,,,
- 2781,03.11.20,14.11.20,-23,256,2237-CSO,EHI,DKI,EKI,DKI,EHI,ESI,ESO,CSO,HSX,HSX,HSX,,
- 2782,11.11.20,13.11.20,-31,155,2237-CRO,CRO,BXO,,,,,,,,
- 2783,17.11.20,29.11.20,-22,070,2237-HSX,HSX,HSX,HSX,HSX,HSX,DSO,CSO,CSO,CSO,CSO,HSX,HSX,
- 2784,21.11.20,22.11.20,33,060,2237-CRO,BXO,,,,,,,,
- 2785,22.11.20,04.12.20,-22,084,2237-HSX,CSO,HSX,HSX,HSX,CSO,FSO,HSX,HSX,HSX,HSX,HSX,HSX,
- 2786,23.11.20,05.12.20,-17,343,2237-HSX,CKO,CKO,FKO,FKO,FKO,FKI,CKI,CKO,HKX,HKX,HKX,CKO,
- 2787,27.11.20,30.11.20,29,304,2237-AXX,AXX,AXX,AXX,,,,,,,,
- 2788,29.11.20,30.11.20,-28,348,2238-CRO,AXX,,,,,,,,
- 2789,29.11.20,29.11.20,-25,299,2238-AXX,,,,,,,,

:Product: Weekly Highlights and Forecasts

:Issued: 2020 Dec 14 0119 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
 07 - 13 December 2020

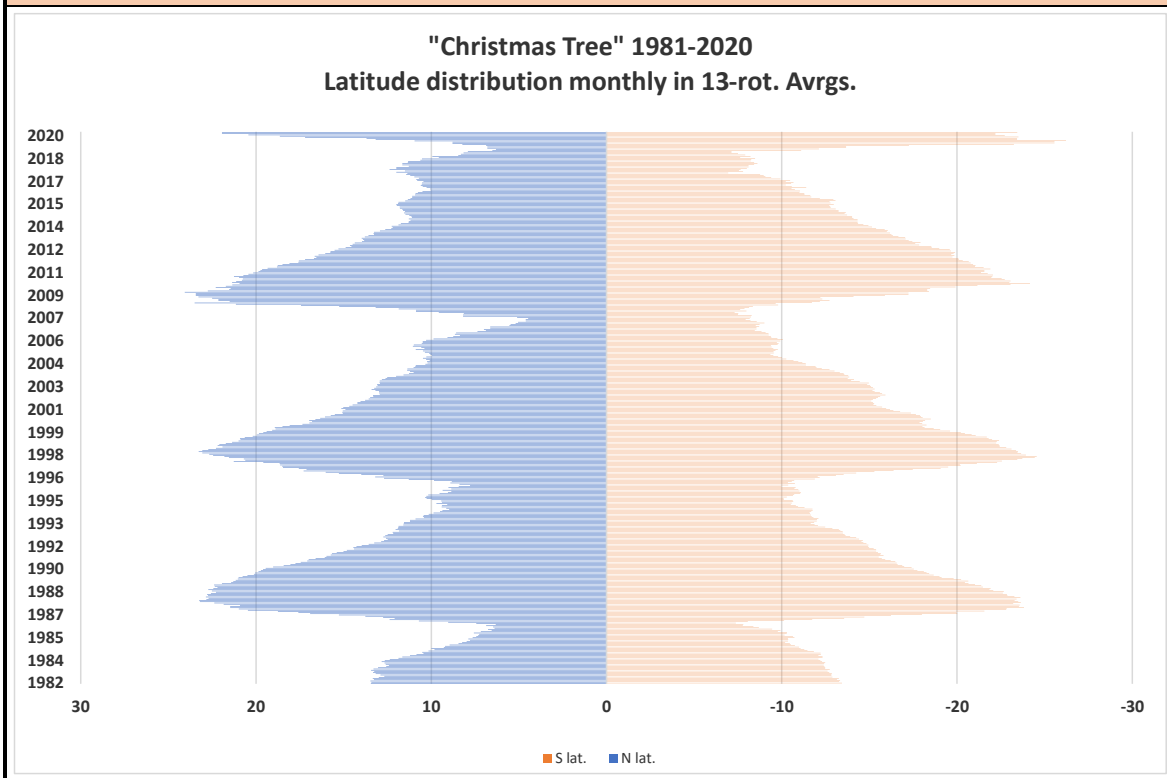
Solar activity was reached low levels on 07 Dec due to a long-duration C7/1f flare observed at 07/1632 UTC from Region 2790 (S22, L=252, class/area=Hsx/80 on 10 Dec). The associated halo CME arrived at Earth just after 10/0000 UTC as an interplanetary shock, and with the driver directed south of the ecliptic plane. Solar activity was at very low levels throughout the remainder of the period with B-class flare activity.

No proton events were observed at geosynchronous orbit.

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

Geomagnetic field reached active levels early on 10 Dec due to the arrival of the 07 Dec CME. Quiet or quiet to unsettled conditions were observed throughout the remainder of the period.

Monthly graph



News November 2020

Solar activity is still growing at the start of the new solar cycle 25.
Region 2779 produced C-flares both on 1st and 3rd November.

Region 2781, S23 long. 255, rot. 2237, reached a maximum of 475 mvh on the 6th November.
It started as a small Cso- group on 3rd November.
By the 6th it had developed into a nice EKI group, but already the day after began decaying and when reaching SW limb was only 50 mvh.

Region 2786, S17 long. 343, rot. 2238, came at SE limb on the 23rd November and quickly gained both umbra and penumbra area and reached a maximum of 1000 mvh on 25th November and then became the first sunspot region to og to this treshold since region 2673 on 8th September 2017.

Muliple flare activity happened in this region and umbral separation was observed in the larger leader spots.
Solar activity reached moderate levels on the 29th and reported a long duration M4 flare.
Region 2785 went along as a pair with the above mentioned 2786, reaching a maximum of 160 mvh.

The most active day flux-wise was the 29th, where flux-levels reached 116/113 pfu obs./adj. 1AU.
Fluxlevels reached above 100 24th Nov to 3rd Dec. This was the highest levels since 10 Sep 2017!
This record was also the highest CV-I since 09 Sep 2017.

Solar cycle 25 has just begun and lots of fascinating activity may come to life!

NEW MENU AT CV-HELIOS NETWORK WEBSITE:

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.

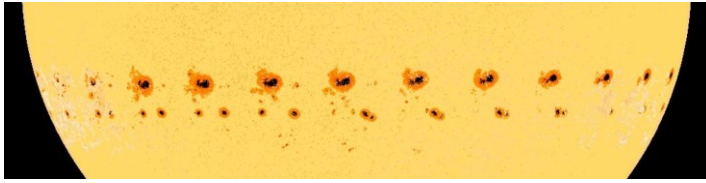
The menu is dynamic in the green background fields, meaning it is date-dependant and should be available from about 10:00 UTC until local midnight.

Try it out and hoping you will all like the new features at CV-Helios Network.
More url-objects may turn up later as interesting solar investigations continue.

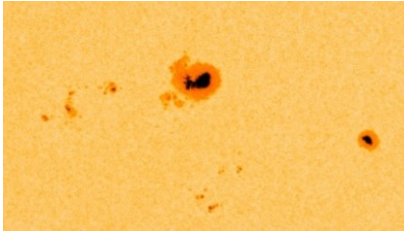
Pictures from last month - Observer contributions, etc.

SOLAR CYCLE 25's FIRST MAJOR REGIONS!

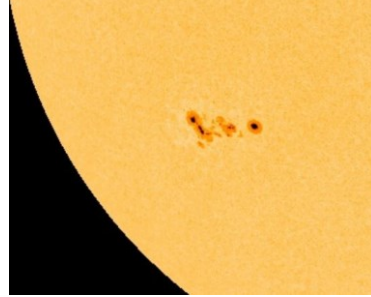
Largest Regions of November 2020



Region 2786's daily motion across solar disk



Region 2781
on 06 Nov 2020 1200 UTC
courtesy SDO/HMI NOAA gov



Region 2786
on 29 Nov 2020 1200 UTC
courtesy SDO/HMI NOAA gov

Awards this month

0


none

New member:

Welcome to:

none

We are now 54 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	
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	
Please check out www.cv-helios.net/cvrep2.html for updates of files!	
<u>SUBMISSIONS OF CV-OBSERVATIONS</u>	
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!	
Registration time average last 40 entries: 12 hours 59 minutes	
CV-Helios Network - over 39 years in solar amateur astronomy service!	
There are now 11795 entries registered containing 189819 CV-observations!	
Editorial close: 15.12.2020 19:12 UTC	
 CV-Helios Network	