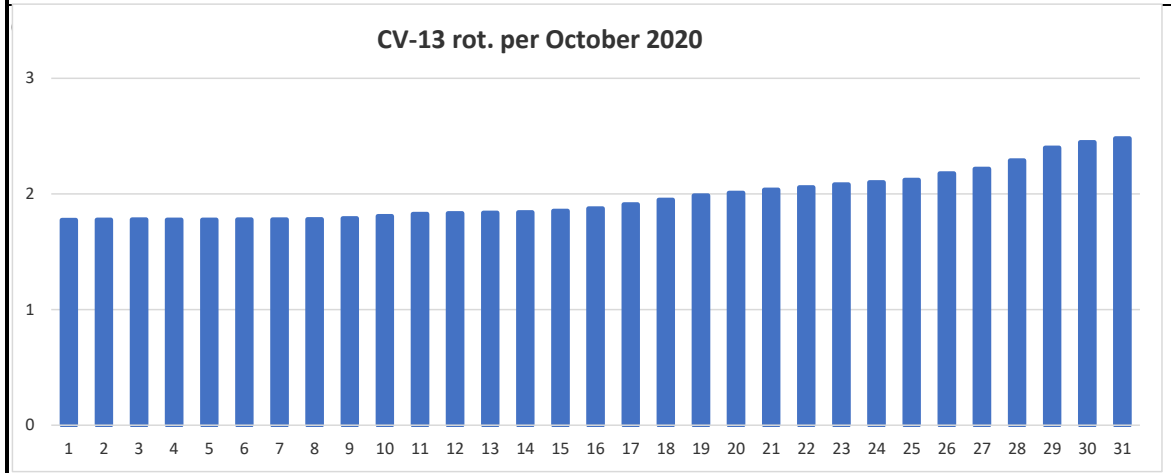
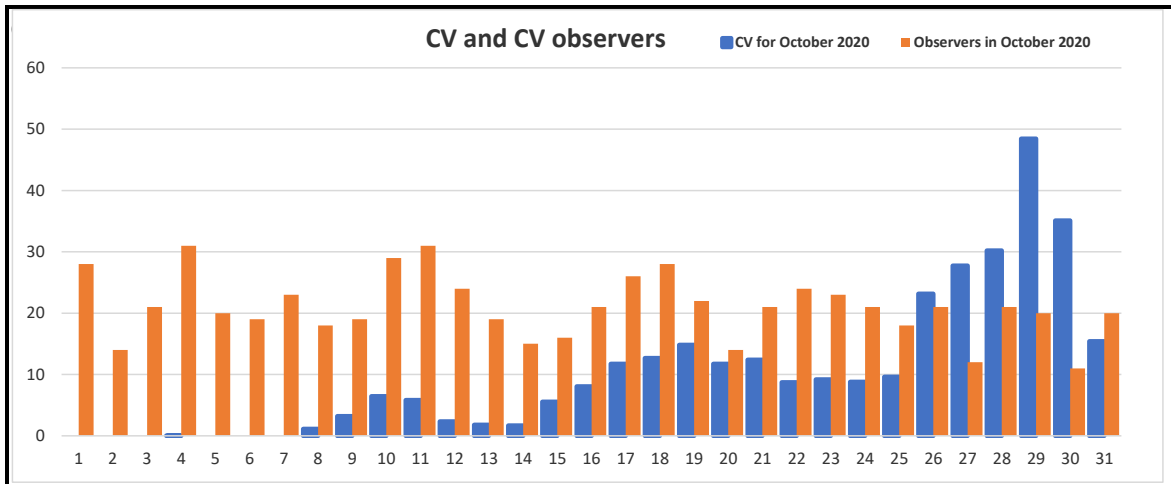


Results						
Date	CV	Obsrvrs	Regions 6 rot.	CV-USAF 6-rot.	CV-6 rot.	CV-13 rot.
1	0,00	28	0,08	2,46	2,68	1,77
2	0,00	14	0,08	2,46	2,69	1,78
3	0,00	21	0,08	2,46	2,70	1,78
4	0,03	31	0,08	2,46	2,70	1,78
5	0,00	20	0,07	2,42	2,70	1,78
6	0,00	19	0,07	2,42	2,70	1,78
7	0,00	23	0,07	2,42	2,69	1,78
8	1,11	18	0,07	2,42	2,67	1,78
9	3,21	19	0,09	2,44	2,68	1,79
10	6,45	29	0,08	2,43	2,69	1,81
11	5,84	31	0,07	2,43	2,70	1,83
12	2,33	24	0,07	2,45	2,71	1,83
13	1,79	19	0,07	2,45	2,73	1,84
14	1,67	15	0,08	2,45	2,74	1,84
15	5,56	16	0,08	2,48	2,77	1,85
16	8,05	21	0,08	2,53	2,81	1,87
17	11,73	26	0,08	2,58	2,89	1,91
18	12,68	28	0,09	2,66	2,97	1,95
19	14,82	22	0,09	2,73	3,05	1,99
20	11,71	14	0,09	2,79	3,10	2,01
21	12,38	21	0,09	2,85	3,16	2,03
22	8,71	24	0,09	2,91	3,20	2,06
23	9,17	23	0,09	2,97	3,26	2,08
24	8,81	21	0,09	3,03	3,30	2,10
25	9,61	18	0,09	3,09	3,34	2,12
26	23,14	21	0,09	3,15	3,46	2,18
27	27,75	12	0,09	3,28	3,55	2,22
28	30,19	21	0,10	3,47	3,70	2,29
29	48,45	20	0,10	3,87	3,92	2,40
30	35,09	11	0,10	3,87	4,03	2,45
31	15,40	20	0,10	4,04	4,11	2,48
Totals/ Avrgs	3,96	27,3	0,97	4,83	3,04	1,97



Sunspot Region Summary for October 2020

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

2774,09.10.20,11.10.20,-24,309,2236-AXX,AXX,AXX,,,,,,,,,
 2775,09.10.20,12.10.20,-23,272,2236-BXO,CRO,BXO,BXO,,,,,,,,,
 2776,14.10.20,25.10.20,-14,164,2236-AXX,CRO,CAO,CAO,CSO,CSO,HSX,HSX,HSX,HSX,HSX,HSX,,
 2777,18.10.20,18.10.20,-24,252,2236-BXO,,,,,,,,,
 2778,26.10.20,31.10.20,-20,086,2236-CAI,DAI,DAI,EKO,EAO,HAX,,,,,,,,,
 2779,28.10.20,01.11.20,-16,075,2236-CAI,DAI,CAO,BXO,BXO,,,,,,,,,

:Product: Weekly Highlights and Forecasts

:Issued: 2020 Oct 12 0040 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
 05 - 11 October 2020

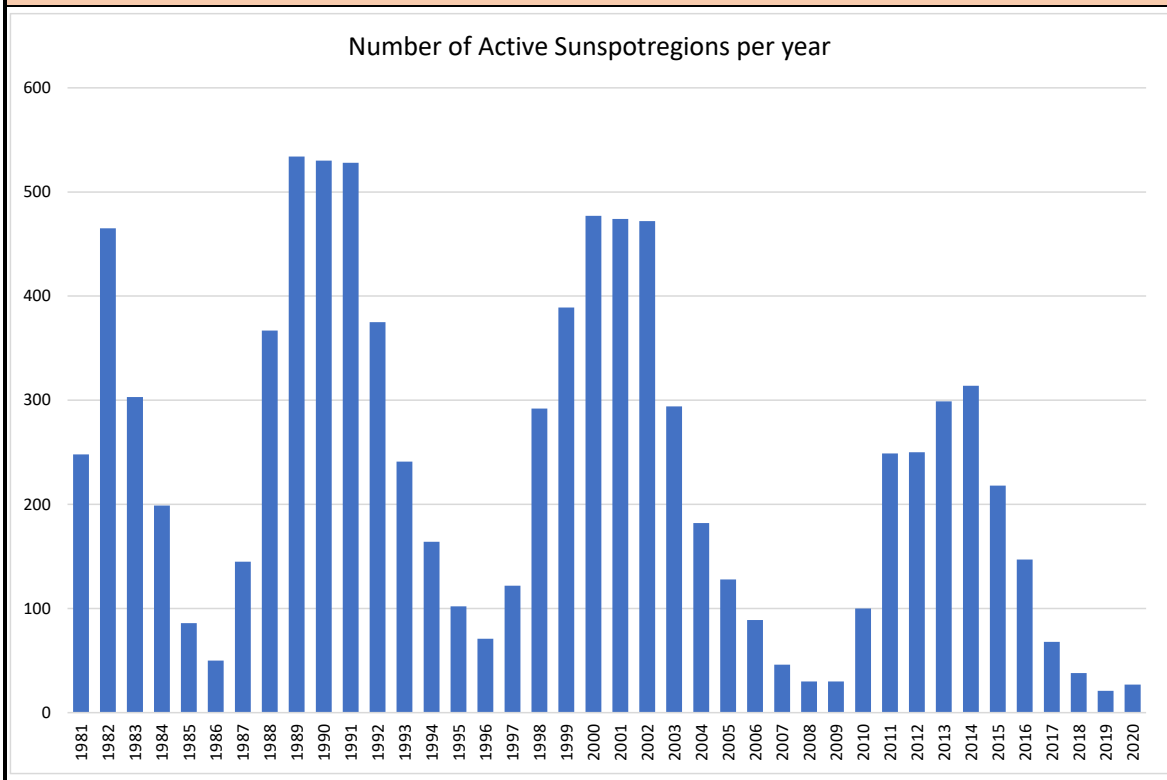
Solar activity was very low. Regions 2774 (S25, L=308, class/area Axx/010 on 09 Oct) and 2775 (S24, L=272, class/area Cro/050 on 10 Oct) were absent of significant flare activity and unremarkable throughout the period. No Earth-directed CMEs were observed.

No proton events were observed at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit reached high levels on 05, 07, and 10 Oct with a peak flux of 3,236 pfu on 07/1535 UTC. Moderate flux levels were observed throughout the remainder of the period.

Geomagnetic field activity reached isolated active levels on 05 and 06 Oct due to a slightly enhanced interplanetary magnetic field. Quiet conditions were observed on 07-11 Oct under a background solar wind regime.

Monthly graph



News October 2020

At last!

Solar activity is picking up.

Two regions worthwhile mentioning this reporting month:

AR 2776, S14 164 rot 2236, was at its maximum on the 18th October with 100 mvh and a classification according to NOAA at CSO.

Region 2776 appeared about 1,5 day from the east limb and developed fairly quickly and was for some days a C-group but later was an H-spot.

Region went around west limb on the 25th, but only the day after another group evolved a bit over a day travel from the central meridian.

This region was also, as all the other regions, member of new cycle 25, and all of them also on the southern hemisphere.

Region 2778, S20, 86 rot 2236 quickly developed from a small C-group to a very nice and big EKO class group which had its maximum on the 29th October at 300 mvh! The largest group since AR 2738 in April 2019.

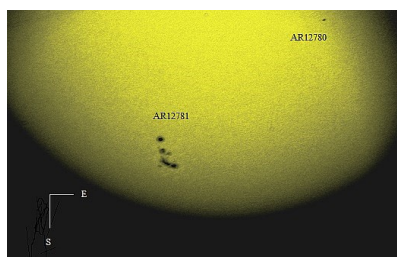
The group persisted until month end but decayed.

At the same time small region AR 2779 appeared.

Activity did not slow down in November either.

We shall come back to this in our next MPR-issue.

Until then, keep on observing as long as sun altitude and weather permits!



Digital filtergram, 6th November 2020, 22hrs 20mins Camera: Canon EOS 600D.
Telescope: Meade 10 inch S.C. F2500 mm. F10. 40mm eyepiece. Full aperture filter.
Monty Leventhal OAM.

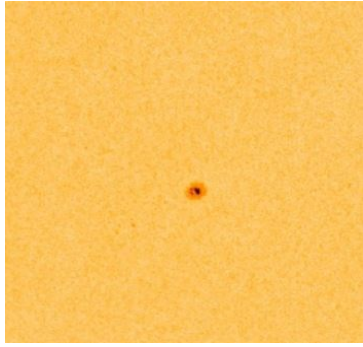
Picture received from
CV-107 Monty Leventhal OAM in Australia
showing beginning of November's
even more spectacular region AR 2781.

More on November activity next month!

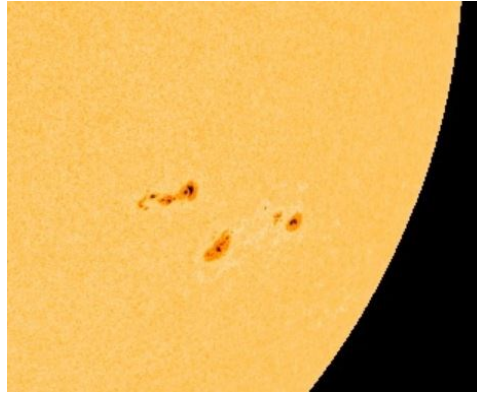
Pictures from last month - Observer contributions, etc.

SOLAR CYCLE 25 IS STILL GROWING!

Largest Regions of October 2020



Region 2776
on 18 Oct 2020 1200 UTC
courtesy SDO/HMI NOAA gov



Region 2778
on 29 Oct 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: 28 hours 48 minutes	
CV-Helios Network - over 39 years in solar amateur astronomy service! There are now 11698 entries registered containing 188081 CV-observations!	
Editorial close: 15.11.2020 21:33 UTC	
 CV-Helios Network	