

Monthly Preliminary Report***MPR***

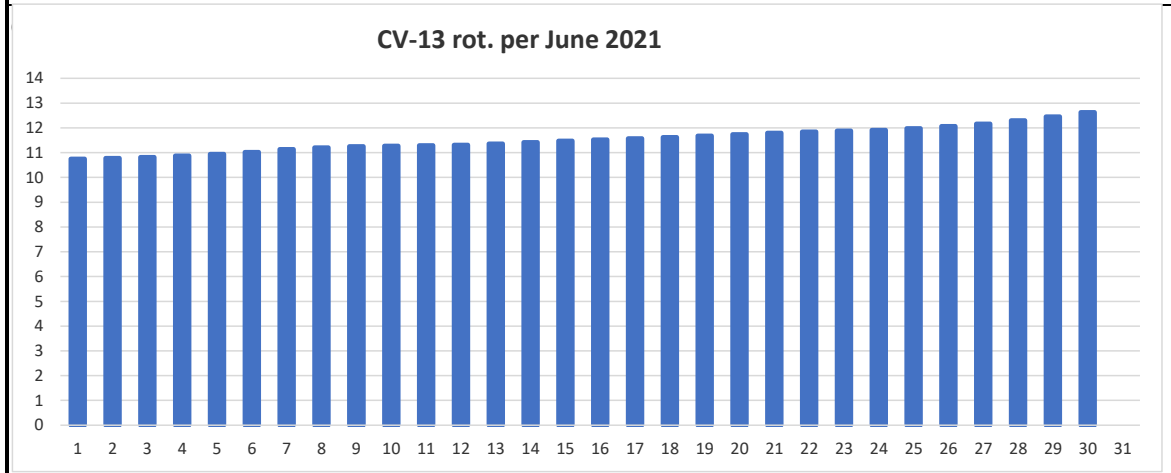
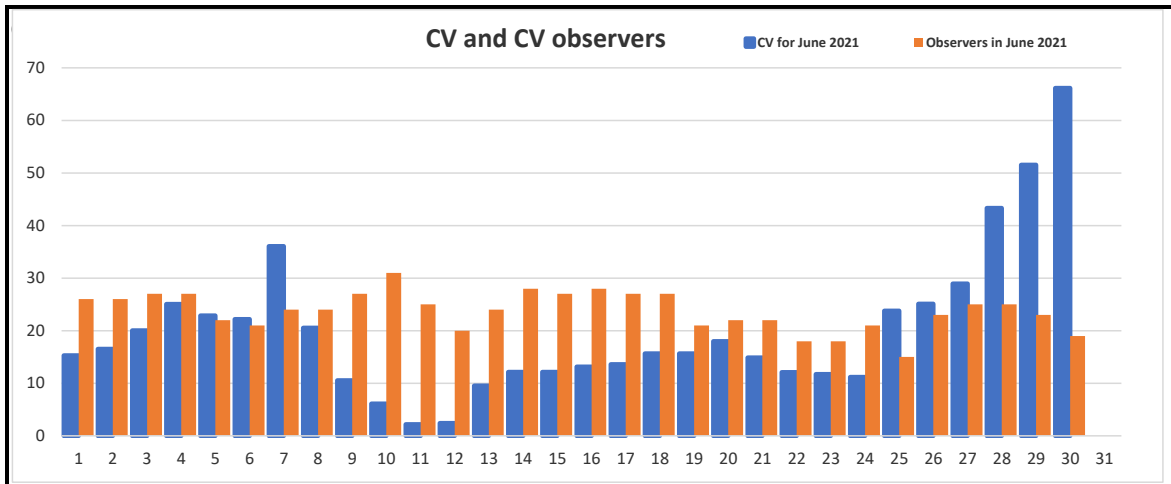
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Volume 41 Number 6**MPR no. 479****June 2021****ISSN 2535-3780****CV-Helios Network****Monthly Preliminary Report for June 2021****Solar Cycle 25: Month no. 19****Report id.: cv2106 - CV-report no.: 479**

Memno.	Name	Country	CV	Obs	K	Obs. Tot.
CV-001	KJELL INGE MALDE	NORWAY	22,8	23	1,168	8736
CV-009	DIETER BRAUCKHOFF	GERMANY	24,7	27	1,262	1593
CV-010	FRANKY DUBOIS	BELGIUM	16,5	22	0,842	9032
CV-019	ELMAR JUNKER	GERMANY	33,2	19	1,696	3614
CV-020	MANFRED HOLL	GERMANY	15,8	25	0,810	5663
CV-021	HOWARD BARNES	NEW ZEALAND	33,3	10	1,704	4522
CV-023	HARTMUT BRETSCHNEI	GERMANY	17,1	24	0,876	5364
CV-040	ROBERTO BATTAIOLA	ITALY	19,8	15	1,013	1925
CV-041	JENS ROTHERMEL	GERMANY	10,1	8	0,518	1258
CV-044	GERD SCHROEDER	GERMANY	16,9	28	0,866	4612
CV-068	SVEN OVE THIMM	DENMARK	19,9	22	1,016	3844
CV-077	ANDREW JOHNSTON	UNITED KINGDOM	16,1	20	0,821	3251
CV-080	JAN JANSSENS	BELGIUM	17,3	4	0,883	1111
CV-082	PIOTR URBANSKI	POLAND	17,0	30	0,870	5009
CV-086	TOS POLAND	POLAND	18,0	30	0,923	7874
CV-091	GRZEGORZ DALEK	POLAND	21,6	26	1,104	4378
CV-102	PAULO ROBERTO MOSE	BRAZIL	34,1	21	1,747	2404
CV-105	ALEXEY RYBACK	RUSSIA	22,3	20	1,138	3148
CV-107	MONTY LEVENTHAL	AUSTRALIA	11,8	16	0,604	4524
CV-116	TERJE BJERKGAARD	NORWAY	15,0	8	0,767	974
CV-122	VLASTISLAV FEIK	CZECH REPUBLIC	17,3	23	0,883	2799
CV-135	GEMA ARAUJO	SPAIN	17,5	30	0,897	6696
CV-136	FAUSTINO GARCIA	SPAIN	17,6	15	0,900	3556
CV-139	JAVIER ALONSO	SPAIN	28,2	22	1,442	3651
CV-151	JEFFREY CARELS	BELGIUM	13,6	19	0,697	2892
CV-181	ADAM DERDZIKOWSKI	POLAND	26,6	17	1,363	973
CV-198	DENIS WALLIAN	FRANCE	16,9	18	0,867	409
CV-202	JORDI ZAMORA	SPAIN	17,3	26	0,884	993
CV-204	STEFAN MEISTER	SWITZERLAND	18,5	25	0,945	471
CV-207	ONDREJOV OBS. (AI CAS	CZECH REPUBLIC	21,1	23	1,081	3336
CV-208	JOHAN NEYS	BELGIUM	11,6	14	0,596	494
CV-210	JEAN BOURGEOIS	BELGIUM	13,1	24	0,669	808
CV-214	IGOR GRAGEDA	BOLIVIA	17,2	28	0,879	591
CV-215	ARNAUD MENGUS	FRANCE	14,8	10	0,757	192
CV-218	STEFANIK OBSERVATOR	CZECH REPUBLIC	23,2	21	1,189	21
Totals	Observers 35	Days 30	CV 19,37	No 713	K 0,991	

Results						
Date	CV	Obsrvrs	Regions 6 rot.	CV-USAF 6-rot.	CV-6 rot.	CV-13 rot.
1	15,27	26	1,48	10,57	14,25	10,75
2	16,50	26	1,49	10,61	14,31	10,77
3	20,04	27	1,49	10,65	14,36	10,82
4	25,07	27	1,50	10,79	14,44	10,88
5	22,86	22	1,50	10,79	14,45	10,94
6	22,19	21	1,51	10,73	14,40	11,02
7	36,04	24	1,52	10,84	14,38	11,13
8	20,54	24	1,52	10,87	14,24	11,21
9	10,52	27	1,52	10,82	14,12	11,25
10	6,10	31	1,52	10,66	13,97	11,27
11	2,20	25	1,51	10,55	13,77	11,29
12	2,40	20	1,51	10,46	13,64	11,31
13	9,54	24	1,51	10,46	13,59	11,36
14	12,14	28	1,50	10,45	13,57	11,42
15	12,15	27	1,49	10,44	13,57	11,47
16	13,14	28	1,49	10,50	13,59	11,52
17	13,59	27	1,49	10,56	13,62	11,57
18	15,67	27	1,50	10,63	13,66	11,62
19	15,67	21	1,50	10,70	13,70	11,68
20	18,00	22	1,50	10,77	13,76	11,74
21	14,86	22	1,50	10,83	13,81	11,79
22	12,11	18	1,50	10,89	13,84	11,85
23	11,72	18	1,50	10,95	13,92	11,89
24	11,19	21	1,50	11,01	13,95	11,91
25	23,80	15	1,51	11,23	14,05	11,98
26	25,09	23	1,51	11,38	14,15	12,07
27	28,92	25	1,51	11,56	14,28	12,16
28	43,32	25	1,52	11,79	14,51	12,30
29	51,52	23	1,54	12,12	14,78	12,46
30	66,16	19	1,54	12,40	15,10	12,63
Totals/ Avrgs	3,96	27,3	0,97	4,83	14,06	11,54



Sunspot Region Summary for June 2021

Reg-First day-Last day-Lat.-Lon.-Rot.-CVavrg.-ZMcl day1 to day14
 2827,29.05.21,07.06.21,12,076,2244-BXO,CRO,CAI,CSI,CSI,CSO,DSO,HSX,HSX,HSX,,,
 2829,02.06.21,10.06.21,-18,012,2244-HRX,CRO,CAO,CRO,BXO,DSO,DSO,DSO,AXX,,,
 2830,06.06.21,08.06.21,-26,068,2244-CAO,CAO,CAO,,,,,,,,,
 2831,07.06.21,07.06.21,24,079,2244-HRX,,,,,,,,,
 2832,09.06.21,12.06.21,14,328,2245-BXO,BXO,AXX,AXX,,,,,,,,,
 2833,13.06.21,25.06.21,23,209,2245-HSX,HSX,HSX,HSX,HSX,CSO,CSO,HSX,HSX,HSX,HSX,
 2834,18.06.21,18.06.21,20,281,2245-BXO,,,,,,,,,
 2835,25.06.21,06.07.21,-18,053,2245-DSO,DSO,DSO,DSI,EKI,EKI,EKC,DKC,DKC,CKO,HKX,,
 2836,27.06.21,03.07.21,-27,059,2245-CRO,CRO,CRO,CRO,HSX,AXX,AXX,,,
 2837,28.06.21,06.07.21,17,009,2245-HSX,HRX,HRX,BXO,DRO,BXO,BXO,AXX,AXX,,,

:Product: Weekly Highlights and Forecasts

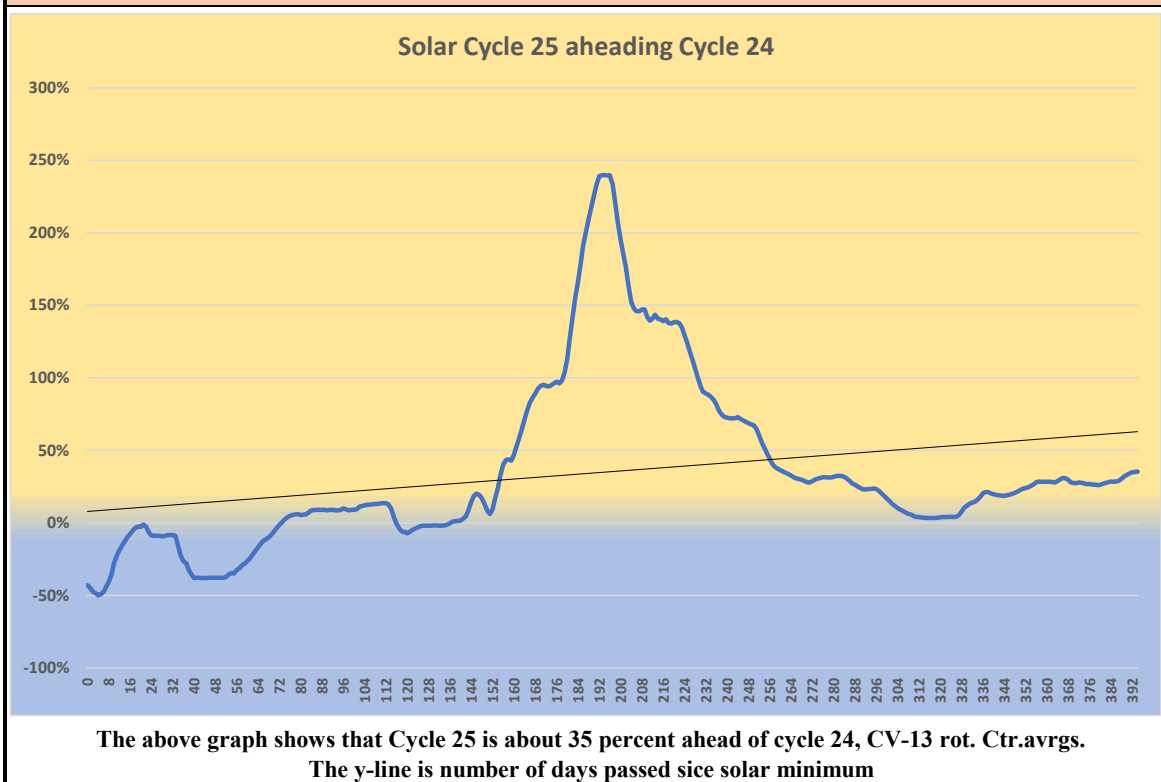
:Issued: 2021 Jul 12 0350 UTC
 # Prepared by the US Dept. of Commerce, NOAA, Space Weather Prediction Center
 # Product description and SWPC contact on the Web
 # <https://www.swpc.noaa.gov/content/subscription-services>
 #
 # Weekly Highlights and Forecasts
 #
 Highlights of Solar and Geomagnetic Activity
 05 - 11 July 2021

Solar activity was at very low to low levels. Region 2840 (N27, L=034, class/area Bxo/010 on 08 Jul) produced the strongest event of the period, a C7 flare at 09/1050 UTC. A Type II radio sweep, and several other C-class X-ray events, were produced by the region while it was just past the W limb. Region 2835 (S18, L=052, class/area Ekc/770 on 01 Jul) was the largest region of the period, but only produced some low-level C-class activity as it rotated around the SW limb after 06 Jul. The remaining numbered regions on the visible disk were relatively simple and quiet. Of the multiple coronal mass ejections observed during the period, none were determined to have an Earth-directed component.

No proton events were observed at geosynchronous orbit.

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

Monthly graph



News June 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!

There were a total of 9 sunspot regions developing in June 2021.

Region 2827 (N12-76-rot 2244) that was present from 29 May, continued on and reached HSX and 120 mvh on the 5th June.

Region 2829 (S18-13-rot 2244) reached DSO on 2nd June.

Region 2830 (S27-68-rot 2244) reached CAO on the 6th June.

Region 2833 (N24-208-rot 2245) reached HSX and 140 mvh on 23-24th June.

Region 2835 (S18-53-rot 2244) went from DSO to EKI class on 29-30th June. This was the largest region of June 2021 and the mvh rose from 130-150 to 500 on the 30th June.

The solar flux show a slight standstill at the time of writing, but hope for better times soon.

It is also expected that activity will come to fairly high levels around the first onset of this solar cycle, and that might commence at the end of this year.

Some changes on web

Some files have now been changed from dynamic-date files to static files.

You can see and follow the daily changes from the "Other info." on our web site.

This should have no large implications for you.

This has been done to save space both on local data machine and remote server.

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!

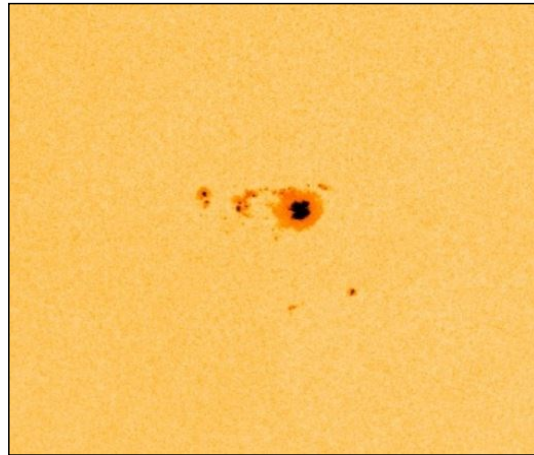
Pictures from last month - Observer contributions, etc.

CONTRIBUTIONS

A funny thing happened this afternoon (3 Jul 2021) while I was doing some hydrogen alpha solar imaging. A pair of pelicans in formation photobombed me. Took me by surprise when they flashed up on the screen for a few frames. Shot with a Basler 12mp monochrome camera, Daystar Quark chromosphere, and a Nikon 200mm f4 lens. Single frame processed in Photoshop. Enjoy!
 Brian Champion



Largest Regions of June 2021



Regions 2835
 on June 30, 2021
 courtesy SDO/HMI NOAA gov

Awards this month 1

Congratulations to CV-082 PIOTR URBANSKI with Milestone 5000 CV-observations!
 Milestone date 21 June 2021

Congratulations!




New members: **Welcome to:**

CV-217 PACO JIMENEZ CEBRIAN, Spain
CV-218 STEFANIK OBSERVATORY, Czech Rep.

Enrolled 05.04.2021
 Enrolled 28.06.2021

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 mif2021, https://www.cv-helios.net/mif2021.xlsx 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 https://www.cv-helios.net/helios/cv/web/cvobsmonth.htm for checking of Entries Summary	
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!	
Average Registration time over last 40 entries: 8 hours 35 minutes	
CV-Helios Network - over 39 years in solar amateur astronomy service! There are now 12061 entries registered containing 194330 CV-observations! Last 12 months 8018 CV-observations from 48 observers originating from 17 countries	
Editorial close: 15.07.2021 18:23 UTC	
 CV-Helios Network	