

Monthly Preliminary Report

MPR

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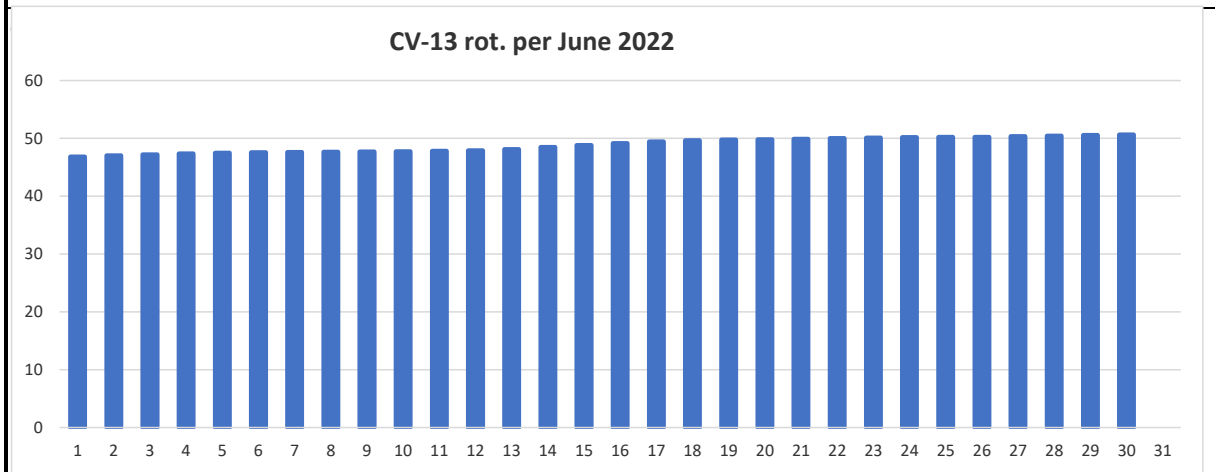
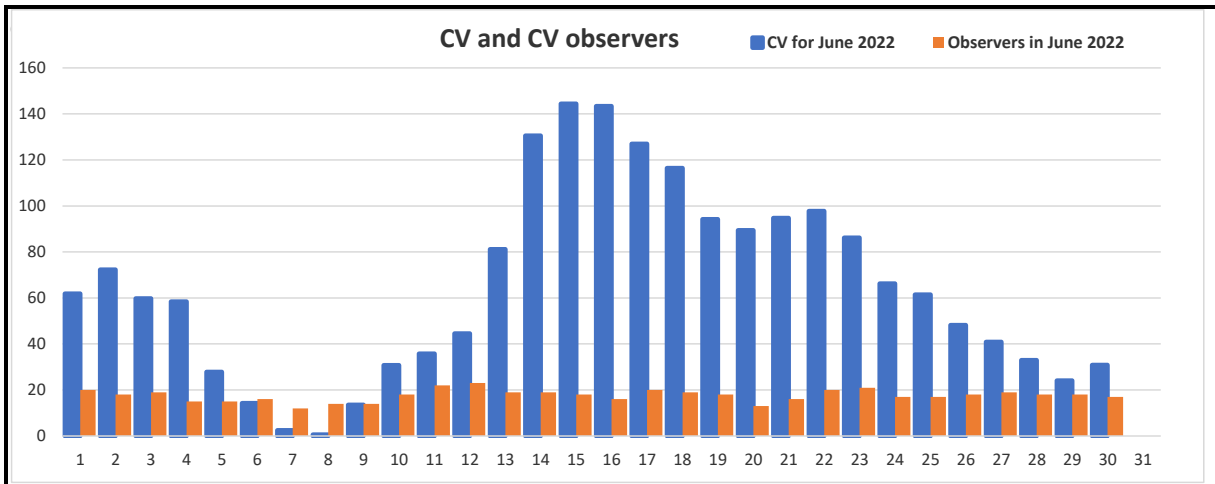
Monthly Preliminary Report for June 2022

Solar Cycle 25: Month no. 31

Report id.: cv2206 - CV-report no.: 491

Memno.	Name	Country	CV	Obs	K	Obs. Tot.
CV-001	KJELL INGE MALDE	NORWAY	63,4	21	0,940	8970
CV-010	FRANKY DUBOIS	BELGIUM	57,3	27	0,849	9313
CV-019	ELMAR JUNKER	GERMANY	117,3	4	1,737	3722
CV-023	HARTMUT BRETSCHNEIDER	GERMANY	48,8	29	0,722	5604
CV-040	ROBERTO BATTIOLA	ITALY	60,4	12	0,895	2037
CV-068	SVEN OVE THIMM	DENMARK	51,6	24	0,764	4042
CV-077	ANDREW JOHNSTON	UNITED KINGDOM	50,8	16	0,753	3453
CV-080	JAN JANSSENS	BELGIUM	44,7	6	0,662	1167
CV-082	PIOTR URBANSKI	POLAND	49,2	26	0,729	5236
CV-086	TOS POLAND	POLAND	64,6	30	0,956	8239
CV-091	GRZEGORZ DALEK	POLAND	76,3	22	1,130	4582
CV-102	PAULO ROBERTO MOSER	BRAZIL	53,7	24	0,796	2679
CV-105	ALEXEY RYBACK	RUSSIA	98,9	9	1,465	3267
CV-107	MONTY LEVENTHAL	AUSTRALIA	15,5	11	0,229	4710
CV-116	TERJE BJERKGAARD	NORWAY	57,8	4	0,855	1008
CV-122	VLASTISLAV FEIK	CZECH REPUBLIC	49,7	20	0,735	3002
CV-135	GEMA ARAUJO	SPAIN	70,7	30	1,048	7051
CV-136	FAUSTINO GARCIA	SPAIN	21,3	3	0,316	3731
CV-139	JAVIER ALONSO	SPAIN	84,5	21	1,251	3873
CV-151	JEFFREY CARELS	BELGIUM	53,5	20	0,792	3056
CV-171	WALTER JOSE MALUF	BRAZIL	119,5	17	1,771	2758
CV-181	ADAM DERSZYKOWSKI	POLAND	72,8	17	1,079	1055
CV-198	DENIS WALLIAN	FRANCE	158,2	16	2,343	502
CV-204	STEFAN MEISTER	SWITZERLAND	51,7	16	0,766	653
CV-206	TADEUSZ FIGIEL	POLAND	68,1	8	1,009	319
CV-207	ONDREJOV OBS. (AI CAS)	CZECH REPUBLIC	104,5	24	1,547	3550
CV-208	JOHAN NEYS	BELGIUM	57,4	13	0,850	613
CV-214	IGOR GRAGEDA	BOLIVIA	51,9	27	0,769	905
CV-215	ARNAUD MENGUS	FRANCE	62,5	6	0,926	275
CV-219	KANDILLI OBSERVATORY	TURKEY	56,1	26	0,831	628
Totals	Observers	Days	CV	No	K	
	30	30	66,42	529	0,984	

Results						
Date	CV	Obsrvrs	Regions 6 rot.	CV-USAF 6-rot.	CV-6 rot.	CV-13 rot.
1	61,90	20	4,74	78,29	70,29	46,81
2	72,28	18	4,72	78,32	70,28	47,02
3	59,79	19	4,68	78,09	70,09	47,20
4	58,47	15	4,65	77,87	69,69	47,38
5	27,87	15	4,64	77,34	69,28	47,48
6	14,31	16	4,62	76,55	68,75	47,54
7	2,50	12	4,59	75,78	68,33	47,61
8	0,57	14	4,56	75,11	67,90	47,64
9	13,57	14	4,54	74,65	67,51	47,68
10	30,78	18	4,52	74,26	67,19	47,74
11	35,77	22	4,51	73,91	66,89	47,82
12	44,57	23	4,50	73,83	66,74	47,91
13	81,16	19	4,51	74,14	66,93	48,11
14	130,53	19	4,53	74,59	67,48	48,48
15	144,44	18	4,57	75,04	68,14	48,81
16	143,38	16	4,62	75,68	68,75	49,13
17	127,00	20	4,66	76,29	69,34	49,44
18	116,42	19	4,70	76,76	69,84	49,65
19	94,22	18	4,73	77,03	70,24	49,77
20	89,46	13	4,76	77,21	70,44	49,79
21	94,69	16	4,78	77,51	70,67	49,88
22	97,80	20	4,79	77,71	70,89	50,00
23	86,14	21	4,80	77,91	71,05	50,11
24	66,29	17	4,80	77,86	71,09	50,17
25	61,41	17	4,78	77,71	71,04	50,21
26	48,22	18	4,74	77,45	70,88	50,24
27	40,84	19	4,71	76,84	70,64	50,35
28	32,94	18	4,69	76,32	70,24	50,44
29	24,06	18	4,67	75,80	69,80	50,56
30	30,88	17	4,65	75,30	69,49	50,63
Totals/ Avrgs	3,96	27,3	0,97	4,83	69,33	48,85



Latest sunspot regions developments

Reg.-First-Last-Lat.-Long.-Rot.-Area-Lgth.-CV-max.

- 3058-14.07.22-14.07.22-15,0-17,0-2259-230-4-19
- 3057-11.07.22-14.07.22-15,8-56,5-2259-293-9-43
- 3056-10.07.22-14.07.22--16,4-75,8-2259-140-6-8
- 3055-07.07.22-14.07.22--17,4-121,5-2259-610-11-42
- 3054-06.07.22-07.07.22-21,0-221,0-2259-10-2-8
- 3053-05.07.22-14.07.22-15,0-134,3-2259-408-11-40
- 3052-05.07.22-12.07.22-14,9-154,4-2259-25-3-4
- 3051-04.07.22-11.07.22-27,4-193,5-2259-46-5-5
- 3050-04.07.22-04.07.22-18,0-191,0-2259-20-3-2
- 3049-03.07.22-05.07.22--12,0-186,0-2259-10-1-1

:Product: Weekly Highlights and Forecasts

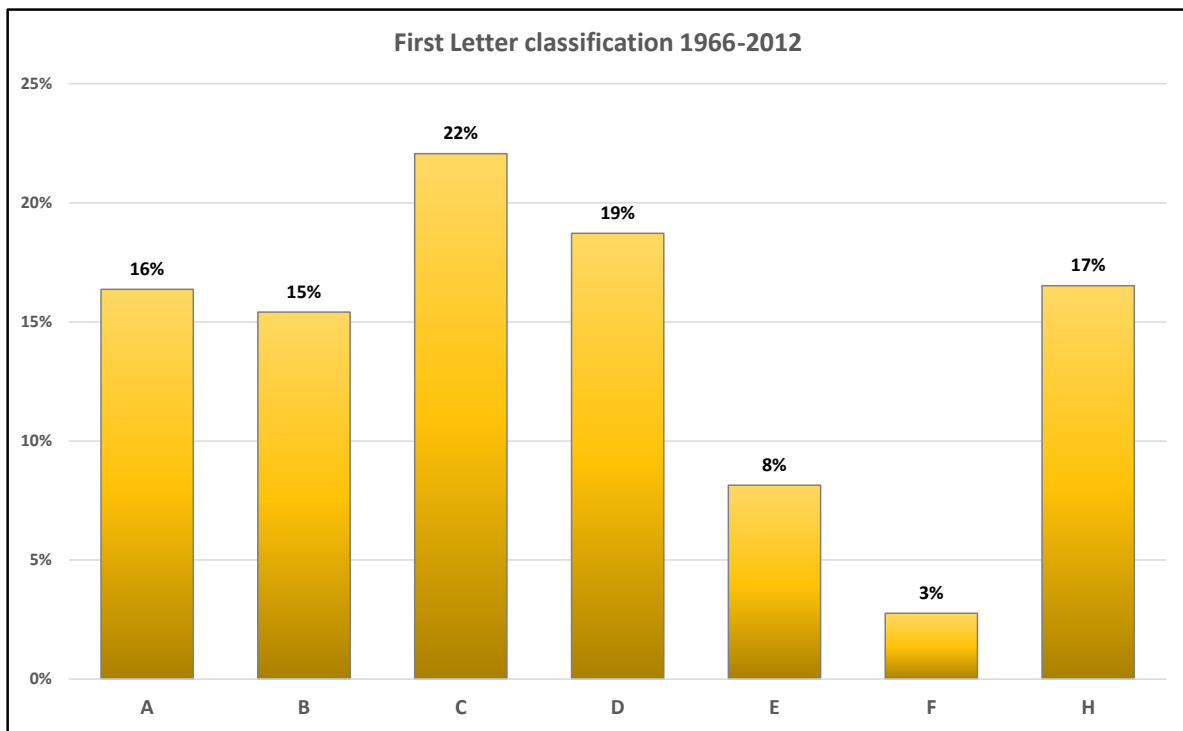
Highlights of Solar and Geomagnetic Activity
04 - 10 July 2022

Solar activity was at low levels all seven days of the period with moderate levels observed on 08 Jul and 10 Jul. At 08/2049 UTC, Region 3053 (N15, L=133, class/area Eko/700 on 08 Jul) produced an M2.5 long duration event with a 230 sfu Tenflare and non Earth-directed CME. At 10/2343 UTC, Region 3056 (S15, L=076, class/area Cro/060 on 10 Jul) produced an M1.3 flare.

Additional significant activity during the period included a C8.5 flare observed at 09/1348 UTC from Region 3047 (S19, L=243, class/area Cro/050 on 02 Jul) with a 828 km/s Type II Sweep and non Earth-directed CME. This event also enhanced the 10 MeV proton flux described in more detail below. Later on the 9th, at 2245 UTC, Region 3052 (N15, L=153, class/area Cro/060 on 07 Jul) produced a C4.6 flare with a non Earth-directed CME.

Solar activity is expected to be at low levels, with a chance for R1 (Minor) radio blackouts on 11-17 Jul and 30-31 Jul and 01-06 Aug, due to potential flare activity from active and complex regions. Very low to low levels are expected to prevail on 18-29 Jul.

Monthly graph



Classification of sunspot regions, 1st Letter according to RGO/USAF 1966-2022

News June 2022

Solar activity is low to more average and number of regions are slowly increasing. The CV 13-rot. centered averages are now considerably higher than for solar cycle 24 at the same time of progress from minimum!
 The CV-Int. 13-rot. avrgs. is now ahead with over 62 percent compared to same date in cycle 24 (01.054.11)!
 Sunspot region production at Month 31 is still good. A total of 303 regions this cycle per mid July 2022. (140 regions North and 163 regions South).
 At the same time solar cycle produced 226 regions.

SUNSPOT REGIONS EXCEEDING 100 mvh in June 2022
 Region,First date,Max.date,Last date,Lat.,Long.,Rot.,Max.mvh,Max class,Max CV
 3026,01.06.22,02.06.22,05.06.22,16,335,2258,190,DAO,19
 3030,10.06.22,19.06.22,21.06.22,19,117,2258,230,DAI,22
 3031,11.06.22,15.06.22,20.06.22,-26,130,2258,240,EAI,23
 3032,12.06.22,13.06.22,22.06.22,20,106,2258,180,DAI,22
 3033,12.06.22,15.06.22,18.06.22,17,86,2258,120,DAI,22
 3034,13.06.22,13.06.22,24.06.22,1,71,2258,110,DSO,25
 3038,16.06.22,24.06.22,26.06.22,15,52,2258,580,EHI,53
 3040,21.06.22,24.06.22,02.07.22,-13,324,2

Date	Strongest flare	June 2022
10.06.2022	M1.2	
13.06.2022	M3.4	
16.06.2022	M1.6	

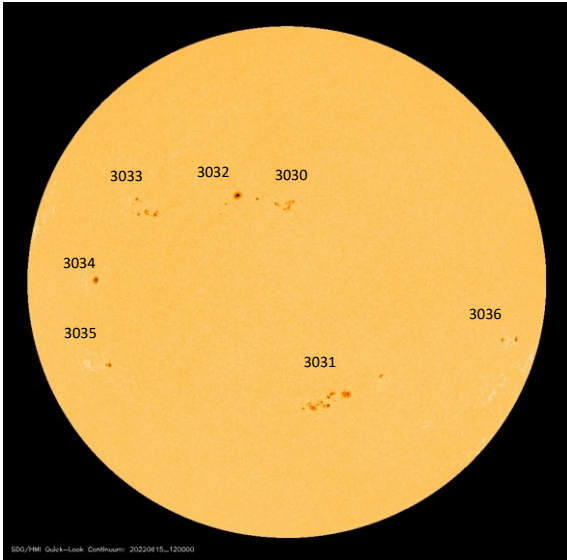
We reckon there have passed 937 days (solar flux 975 days) of the new cycle by this issue.
 The prospects for a solar cycle much higher than no. 24 certainly is good!

Solar Max.: Our latest and final prediction to occur late July 2025, earliest possible may be April 2025.
 Solar Flux onset period is ongoing but the P-Index is still rising (data from solar flux).
 The Onset predicted to occur late November 2022, still promising for a larger cycle than the previous!

Stay tuned and observe the solar disk from now on!

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

Pictures from last month - Observer contributions, etc.



Highlights May 2022

AMERICAN ASSOCIATION OF VARIABLE STAR OBSERVERS
 WIMBOR CITY, NEW SOUTH WALES, AUSTRALIA
 BRITISH ASTRONOMICAL ASSOCIATION
 SOLAR OBSERVERS SOCIETY, POLAND
 Lat. 33° 54' S - Long. 151° 15' E

E.A.S.T. DATE: 24th June 2022. TIME Other: 09:45.
 U.T. DATE: 24th June 2022. UT: 23hrs. 05min.

INSTRUMENT: S.C.T. 10". F=2,500 mm. F/10. 40 mm Eyepiece. Full Aperture Filter & 6x10 Alpha filter, f/32. Mag. X42.5

REYNOLDS No. 2295 (at 84.00mm). Synodic Rotation No. 0. CONDITIONS (1) Excellent WIND: W. 13 - 18kph

TRANSPARENCY: (1) Very good. Clear sky. CURRENT TEMP. 18°C. 61F.

SOLAR CYCLE 25

Group	Lat.	Long.
75-10	+20	3
76-11	-19	3/3

Size: 1,392,000 km. dia.
 Earth: 12,713 km. dia. Average distance to the Sun 150,000,000 km

NOTES: Region Nos. above Group Nos. for year - month in brackets above groups.
 Flares: 0 Prominences: 0 Filaments: 0 Faculae: 0 Plage: 3 Sunspot: 0 Active areas incl.: 11
 Total Sunspot groups: 2. Total Single Sunspots: 0 Total Sunspots: 8 R = 28 C.M.E.: 0 Total C.V.: 64
 Sun limb visibility: Total C.V.: 7
 www.aavso.org
 www.aavso.org/observers.org
 NAME: Monty Leventhal OAM
 Supported by the Australian Astronomical Society, Telstar Australia Pty. Ltd & the Bialby Grant of the BAA UK.

Peak of June, the 15th. photo courtesy SDO/HMI NOAA gov

Solar diagram 24-6-2022, CV-107 Monty Leventhal OAM

Awards this month

1

Award no.: 154 to CV-122 VLASTISLAV FEIK date 25 June 2022 milestone 3000 CV-obs.! CONGRATULATIONS!




New members:

Welcome to:

none

We are now 51 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 Classification Help login solaris password cvheliosobs Monthly Input Form as excel Submission before 15th of proceeding month 18:00 UTC. (password: cvhelios) MPR issue 15th of proceeding month 2000 UTC. Good luck CV-observing!	
Average received to registered time: 1 day 02 hours 15 minutes	
CV-Helios Network - over 40 years in solar amateur astronomy service! There are now Entries reg.: 12593 entries registered containing 203365 CV-observations! Last 12 months 6698 CV-observations from 45 observers originating from 18 countries	
Editorial close: 15.07.2022 17:44 UTC	
 CV-Helios Network	