Monthly Preliminary Report

MPR

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CV-Helios Network

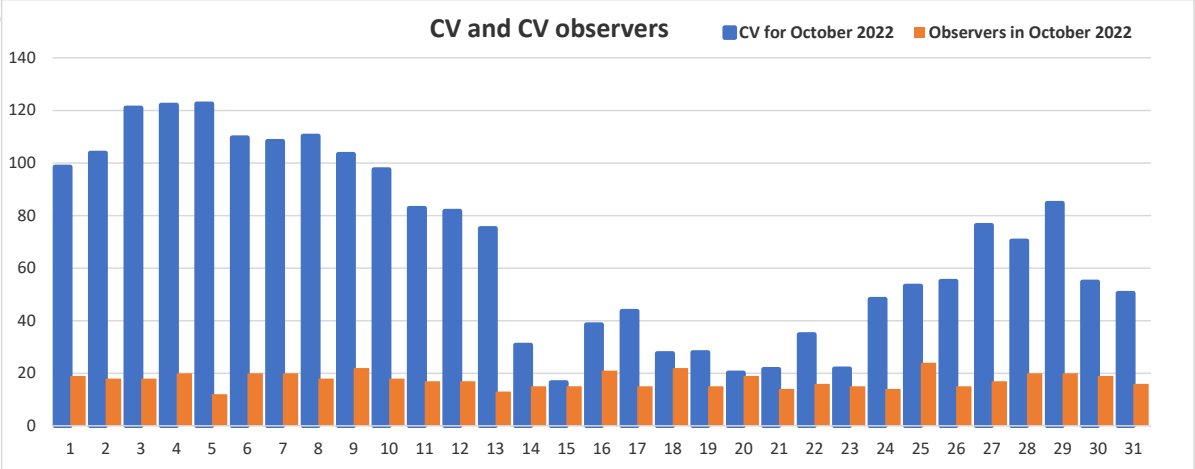
Monthly Preliminary Report for October 2022
Solar Cycle 25: Month no. 35
Report id.: cv2210 - CV-report no.: 495

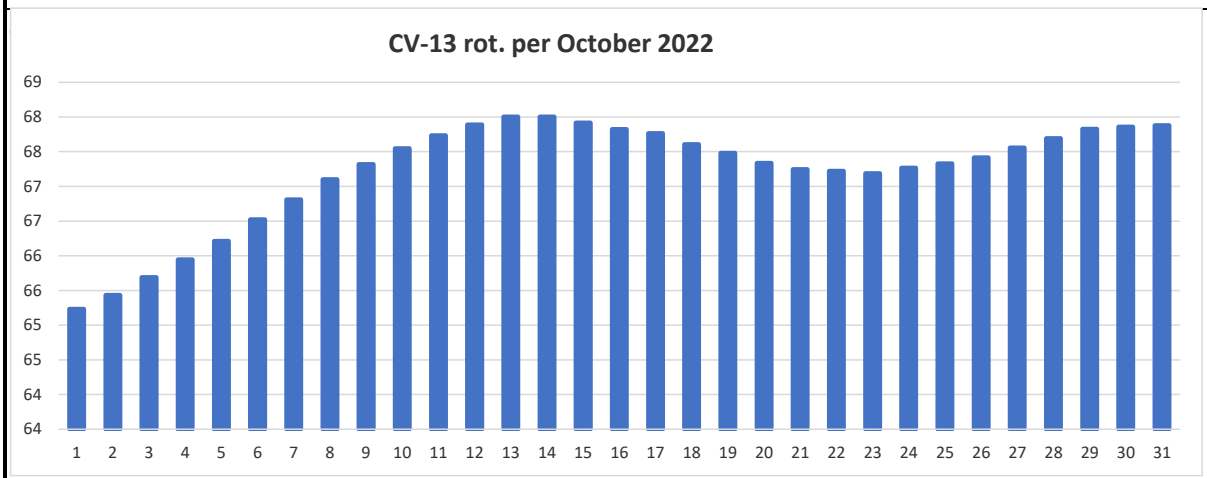
Memno.	Name	Country	CV	Obs	K	Obs. Tot.
CV-001	KJELL INGE MALDE	NORWAY	78,2	21	1,117	9062
CV-010	FRANKY DUBOIS	BELGIUM	57,1	28	0,815	9426
CV-019	ELMAR JUNKER	GERMANY	82,2	6	1,173	3759
CV-023	HARTMUT BRETSCHNEIDE	GERMANY	54,9	23	0,784	5696
CV-040	ROBERTO BATTAIOLA	ITALY	90,2	5	1,288	2067
CV-068	SVEN OVE THIMM	DENMARK	53,6	18	0,765	4120
CV-077	ANDREW JOHNSTON	UNITED KINGDOM	62,8	17	0,897	3526
CV-080	JAN JANSSENS	BELGIUM	65,7	6	0,938	1187
CV-082	PIOTR URBANSKI	POLAND	63,4	21	0,905	5337
CV-086	TOS POLAND	POLAND	68,4	31	0,977	8362
CV-091	GRZEGORZ DALEK	POLAND	63,4	21	0,905	4671
CV-102	PAULO ROBERTO MOSER	BRAZIL	62,9	27	0,897	2783
CV-105	ALEXEY RYBACK	RUSSIA	84,6	11	1,208	3336
CV-107	MONTY LEVENTHAL	AUSTRALIA	26,9	7	0,383	4739
CV-122	VLASTISLAV FEIK	CZECH REPUBLIC	72,0	17	1,028	3067
CV-135	GEMA ARAUJO	SPAIN	73,8	31	1,054	7173
CV-136	FAUSTINO GARCIA	SPAIN	57,1	15	0,815	3803
CV-139	JAVIER ALONSO	SPAIN	75,2	13	1,073	3947
CV-151	JEFFREY CARELS	BELGIUM	78,5	12	1,121	3119
CV-171	WALTER JOSE MALUF	BRAZIL	111,4	14	1,590	2823
CV-177	HENDRIK DE BACKER	BELGIUM	72,2	28	1,031	1889
CV-181	ADAM DERDZIKOWSKI	POLAND	105,5	4	1,506	1086
CV-198	DENIS WALLIAN	FRANCE	128,7	3	1,837	548
CV-204	STEFAN MEISTER	SWITZERLAND	43,8	11	0,626	726
CV-205	TOM MANGELSDORF	UNITED STATES	36,0	1	0,514	51
CV-206	TADEUSZ FIGIEL	POLAND	88,3	4	1,260	329
CV-207	ONDREJOV OBS. (AI CAS)	CZECH REPUBLIC	94,0	22	1,343	3646
CV-208	JOHAN NEYS	BELGIUM	81,7	10	1,166	664
CV-211	EDWIN DE CEUNINCK	BELGIUM	74,0	20	1,057	620
CV-213	DIRK LAURENT	BELGIUM	68,3	22	0,975	457
CV-214	IGOR GRAGEDA MENDEZ	BOLIVIA	64,0	30	0,913	1015
CV-215	ARNAUD MENGUS	FRANCE	55,7	6	0,795	298
CV-219	KANDILLI OBSERVATORY	TURKEY	69,6	25	0,994	741
CV-220	MICHEL FRANGEUL	FRANCE	62,9	14	0,897	28

Totals	Observers	Days	CV	No	K
	34	**31**	**71,37**	**544**	**1,019**

Results

Date	CV	Obsrvrs	Regions 6 rot.	CV-USAF 6-rot.	CV-6 rot.	CV-13 rot.
1	98,53	19	5,09	85,10	78,42	65,23
2	103,78	18	5,10	84,77	78,25	65,43
3	120,94	18	5,11	84,70	78,11	65,69
4	122,10	20	5,11	84,46	78,03	65,95
5	122,50	12	5,11	84,29	77,79	66,21
6	109,65	20	5,11	84,60	77,70	66,52
7	108,25	20	5,11	84,66	77,59	66,81
8	110,33	18	5,11	84,79	77,34	67,10
9	103,36	22	5,10	84,94	77,25	67,32
10	97,50	18	5,09	85,38	77,43	67,55
11	82,76	17	5,09	85,82	77,67	67,73
12	81,71	17	5,10	86,24	77,94	67,89
13	75,15	13	5,09	86,65	78,18	68,00
14	30,73	15	5,10	86,72	78,15	68,00
15	16,47	15	5,10	86,35	77,88	67,92
16	38,48	21	5,09	86,09	77,62	67,82
17	43,67	15	5,10	85,88	77,48	67,76
18	27,55	22	5,11	85,57	77,21	67,61
19	27,93	15	5,10	85,18	76,91	67,48
20	20,16	19	5,09	84,74	76,66	67,34
21	21,57	14	5,10	84,65	76,60	67,25
22	34,75	16	5,10	84,55	76,53	67,22
23	21,73	15	5,10	84,27	76,27	67,19
24	48,21	14	5,08	83,71	75,95	67,27
25	53,21	24	5,08	83,03	75,60	67,33
26	55,07	15	5,07	82,85	75,35	67,42
27	76,35	17	5,05	82,65	75,16	67,56
28	70,40	20	5,04	82,21	74,74	67,69
29	84,70	20	5,03	81,98	74,51	67,83
30	54,74	19	5,01	81,58	74,12	67,86
31	50,44	16	4,99	81,23	73,84	67,88
Totals/ Avrgs	**3,96**	**27,3**	**0,97**	**4,83**	**76,85**	**67,22**





Latest sunspot regions developments

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

3146-13.11.22-14.11.22-31,5-247,5-0-30-5-9
3145-10.11.22-14.11.22-26,2-312,0-0-10-3-2
3144-09.11.22-10.11.22--25,0-350,5-0-8-1-1
3143-07.11.22-08.11.22--13,5-300,5-0-10-2-3
3142-06.11.22-09.11.22-25,8-348,0-0-23-5-5
3141-04.11.22-14.11.22-14,5-318,3-2264-436-11-42
3140-04.11.22-14.11.22-25,7-328,4-2264-169-5-18
3139-03.11.22-05.11.22-28,3-1,0-2263-13-2-3
3138-01.11.22-01.11.22--39,0-67,0-2263-10-2-25
3137-01.11.22-10.11.22-36,2-9,3-2263-18-2-5

:Product: Weekly Highlights and Forecasts

Highlights of Solar and Geomagnetic Activity
07 - 13 November 2022

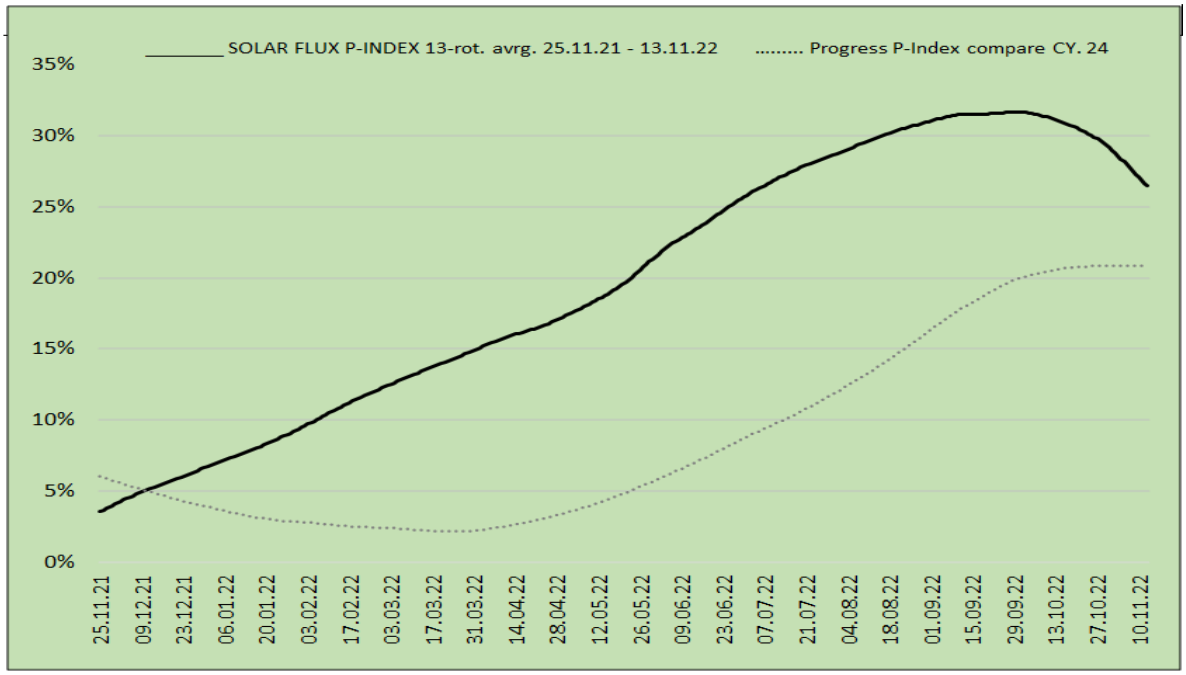
http://services.swpc.noaa.gov/text/weekly.txt

Solar activity was at low to high levels. Low levels were observed on 08-10 Nov and again on 13 Nov. Moderate levels occurred on 11-12 Nov due to M1 flare activity from Region 3141 (N14, L=318, class/area Eki/610 on 11 Nov). These flares were an M1/1f at 11/0714 UTC, an M1/Sn at 11/1140 UTC, and an M1/Sf at 12/0018 UTC as well as a total of 41 C-flares. High levels occurred on 07 Nov (reported on previous weekly) due to an M5 flare from Region 3141 at 07/0011 UTC along with an associated Type II radio sweep and a 740 sfu Tenflare. Region 3141 continued to exhibit growth through 11 Nov and developed into a beta-gamma-delta magnetic class on 10-11 Nov before slowly decaying to near 270 millionths by 13 Nov. Region 3140 (N25, L=326, class/area Dai/230 on 13 Nov) began to exhibit growth and development of trailing spots beginning on 11 Nov and was responsible for 12 C-flares. No Earth-directed CMEs were observed during the reporting period.

Solar activity is expected to be very low to low throughout the outlook period (14 Nov-10 Dec). There is a chance for M-class flares (R1-R2, Minor-Moderate) and a slight chance for X-class flares (R3-Strong) on 14-16 Nov and again on 28 Nov-10 Dec due to the flare potential of Regions 3140 and 3141.

There is a slight chance for an S1 (Minor) solar radiation storm on

Monthly graph



The P-Index Solar Flux Nov 2021 - Nov 2022
The P-Index show the **Acceleration** of Solar Flux, max 6-rot. avrgs.30 Sep 2022,
telling us the Maximum is about 3 years off. P-Index same period cycle 24 on dotted line.

Highlights October 2022

Solar activity has become more average and number of regions are slowly increasing.
The CV 13-rot. ctrd. avgs. are still higher than for solar cycle 24 at the same time of progress!
The CV-Int. 13-rot. avrgs. is now ahead with 48 percent compared to same date in cycle 24.
A marked drop since last month. Sunspot region production at Month 35 is slowing down a bit.
A total of 351 regions this cycle per mid Oct. 2022 (160 regions North and 191 regions South).
At the same time solar cycle 24 produced 304 regions.

SUNSPOT REGIONS EXCEEDING 100 mvh in October 2022
Region,First date,Max.date,Last date,Lat.,Long.,Rot.,Max.mvh,Max class,Max CV
3112,30.09.22,06.10.22,14.10.22,22,50,2262,800,FKC,57
3115,03.10.22,05.10.22,09.10.22,-18,97,2262,180,DAO,19
3116,03.10.22,10.10.22,14.10.22,30,45,2262,210,DAO,19
3119,07.10.22,10.10.22,17.10.22,28,11,2262,180,DAI,22
3124,16.10.22,18.10.22,19.10.22,-35,328,2263,180,DSO,25
3126,19.10.22,25.10.22,27.10.22,-10,232,2263,160,DAI,22
3131,24.10.22,27.10.22,05.11.22,23,111,2263,190,CSO,11
3133,25.10.22,28.10.22,31.10.22,26,94,22(
3135,28.10.

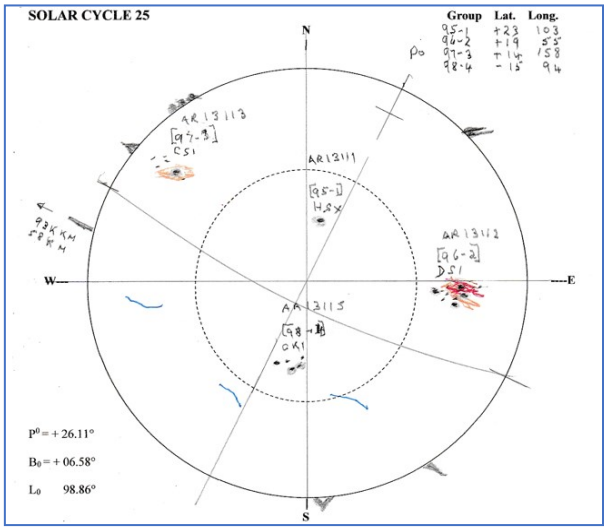
Date	Strongest flare	Date	Strongest fl	Date	Strongest flare
01.10.2022	M4.2	03.10.2022	M4.2	02.10.2022	M1.6
04.10.2022	M1.6	05.10.2022	M1.0	07.10.2022	M1.0
08.10.2022	M2.4	09.10.2022	M3.9	10.10.2022	M2.4
11.10.2022	M3.9	11.10.2022	M1.5	12.10.2022	M1.3
13.10.2022	M1.5	14.10.2022	M1.3		

We reckon there have passed 1061 days (solar flux 1098 days) of the new cycle by this issue.
The prospects for a solar cycle much higher than no. 24 still is good!

Solar Max.: Our latest and final prediction to occur late July 2025, earliest possible may be April 2025.
Solar Flux onset: OCCURED 30 September 2022, the Onset 13 rot. ctrd. will hopefully occur during Oct. 2022.

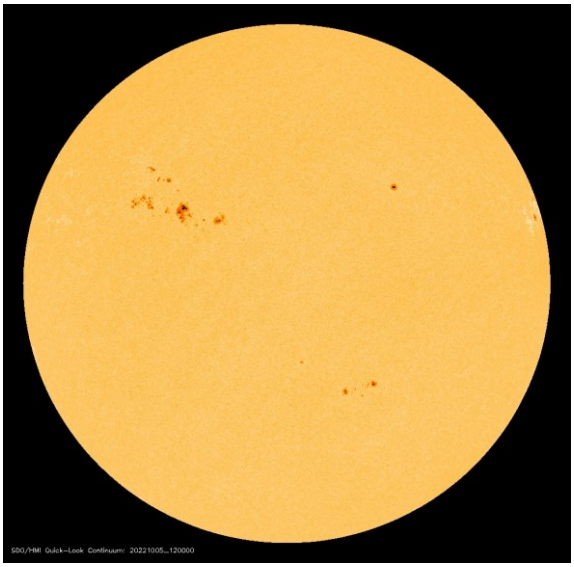
Stay tuned and observe the solar disk from now on!
Please remember you are always welcome to contribute with drawings and photos!

Pictures from last month - Observer contributions, etc.



Left: Snip of CV-107 M Leventhal's diagram 03 Oct 2022

Highlights October 2022



Right: SOHO image 05 October 2022. photo courtesy SDO/HMI NOAA gov

Awards this month 1

Award no.: 156 to CV-214 IGOR GRAGEDA MENDEZ date 16 October 2022 milestone 1000 CV-obs.! CONGRATULATIONS!

New members: **Welcome to:**

We are now 50 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!

SUBMISSIONS OF CV-OBSERVATIONS

Log on to:
https://www.cv-helios.net/observations/index.html Classification Help

login	solaris
password	cvheliosobs

Monthly Input Form as excel
(password: cvhelios)

Submission before 15th of proceeding month 18:00 UTC.
MPR issue 15th of proceeding month 2000 UTC. Good luck CV-observing!

Average received to registered time: 1 day 11 hours 47 minutes

CV-Helios Network
- over 41 years in solar amateur astronomy service!

There are now Entries reg.: 12724 entries registered
containing 205650 CV-observations!
Last 12 months 6415 CV-observations from 45 observers originating from 18 countries

Editorial close: 15.11.2022 16:36 UTC

CV-Helios Network