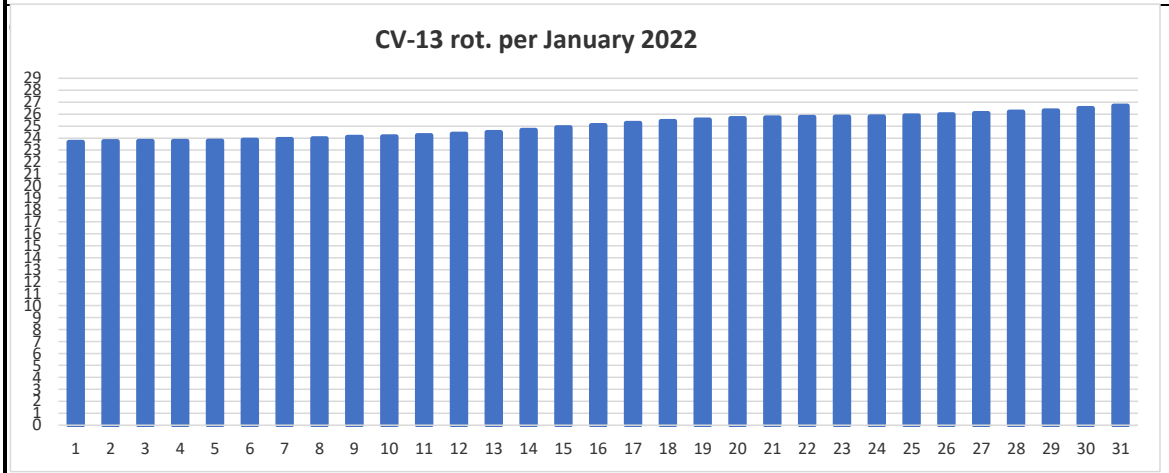
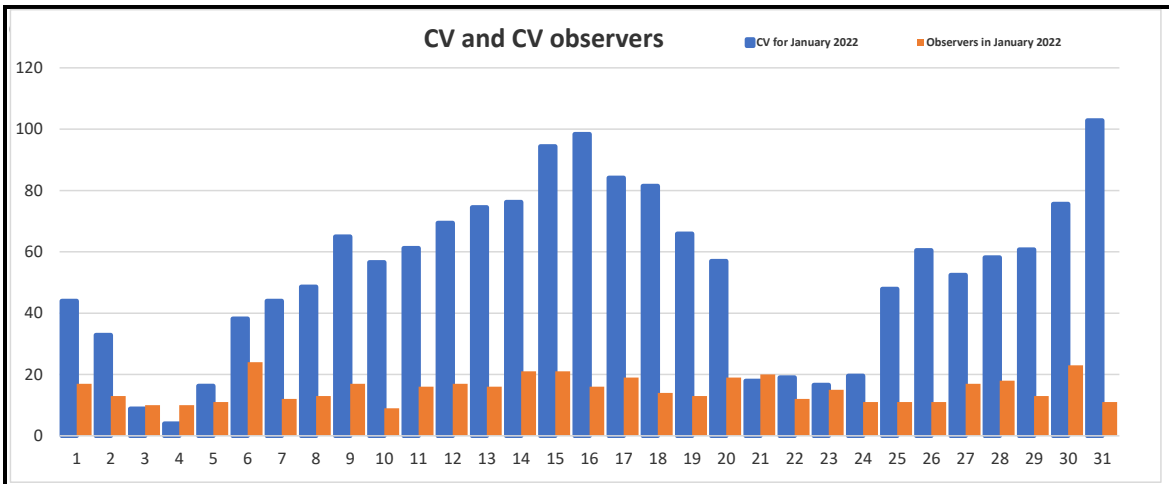




<b>Results</b>						
Date	CV	Obsrvrs	Regions 6 rot.	CV-USAF 6-rot.	CV-6 rot.	CV-13 rot.
1	43,94	17	2,84	37,53	33,77	23,68
2	32,85	13	2,82	37,68	33,72	23,74
3	8,80	10	2,80	37,76	33,79	23,75
4	4,00	10	2,79	37,74	33,84	23,74
5	16,27	11	2,79	37,90	34,01	23,76
6	38,17	24	2,79	38,17	34,26	23,84
7	44,00	12	2,79	38,54	34,52	23,92
8	48,62	13	2,80	38,93	34,81	23,98
9	64,94	17	2,81	39,35	35,30	24,09
10	56,56	9	2,82	39,78	35,66	24,14
11	61,19	16	2,84	40,27	36,09	24,24
12	69,41	17	2,87	40,88	36,52	24,36
13	74,50	16	2,91	41,50	36,95	24,49
14	76,24	21	2,95	42,10	37,42	24,67
15	94,38	21	2,99	42,96	37,99	24,89
16	98,38	16	3,02	43,63	38,56	25,07
17	84,11	19	3,05	44,39	39,17	25,26
18	81,43	14	3,07	44,90	39,66	25,41
19	65,92	13	3,09	45,24	40,15	25,53
20	57,00	19	3,12	45,59	40,60	25,66
21	17,90	20	3,12	45,69	40,78	25,71
22	19,00	12	3,12	45,80	40,99	25,75
23	16,60	15	3,13	45,91	41,17	25,77
24	19,55	11	3,13	46,01	41,45	25,79
25	47,91	11	3,13	46,12	41,79	25,89
26	60,45	11	3,15	46,48	42,19	25,97
27	52,41	17	3,18	46,65	42,44	26,08
28	58,11	18	3,20	47,09	42,73	26,19
29	60,69	13	3,22	47,49	43,01	26,29
30	75,57	23	3,23	47,96	43,51	26,51
31	102,82	11	3,26	48,71	44,04	26,70
Totals/ Avrgs	<b>3,96</b>	<b>27,3</b>	<b>0,97</b>	<b>4,83</b>	<b>38,41</b>	<b>25,00</b>



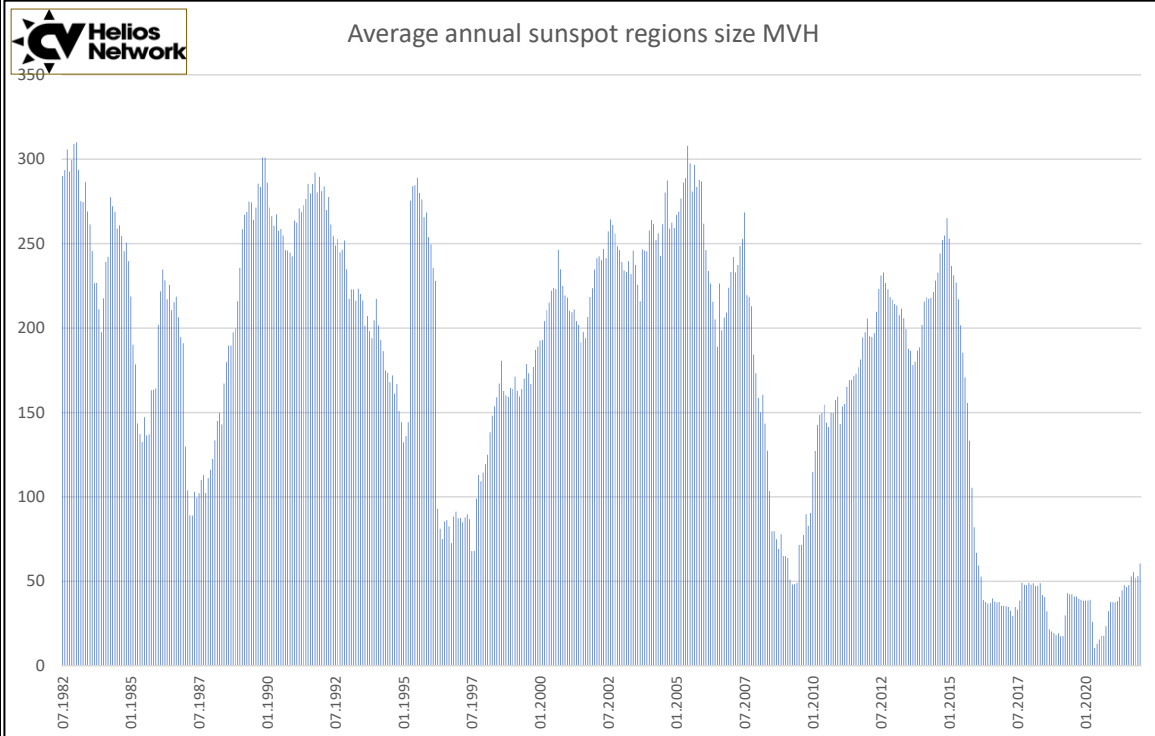
**:Product: Weekly Highlights and Forecasts**

Highlights of Solar and Geomagnetic Activity  
31 January - 06 February 2022

Solar activity was at low levels with many C-class flares observed. The largest flare of the period was a C9 at 01/2236 UTC from Region 2939 (S16, L=32, class/area Dho/300 on 02 Feb). Region 2939 also produced a long-duration C3/Sf flare at 06/1341 UTC. Filament structure suspended above the region, approximately 10 degrees long and centered near S20W05 at the time of the event, lifted-off during the flare. The event was subsequently detected in LASCO C2 beginning at around 06/1436 UTC, and is predicted to hit Earth. Initial analysis determined 10 Feb to be the likely timing to arrive at Earth. Regions 2936 (N17, L=116, class/area Ehi/750 on 31 Jan) 2940 (N17, L=35, class/area Dao/320 no 02 Feb), and 2941 (N24, L=340, class/area Eho/300 on 05 Feb) also contributed several C-class flares each.

Solar activity is expected to be at low levels, with a slight chance for M-class flares on 07-11 Feb due to the flare potential of Regions 2940 and 2941. Very low to low levels are expected on 12 Feb - 05 Mar.

## Monthly graph



The average sunspot region size MVH 1981-2021

## News January 2022

Solar activity is still low but number of regions are slowly increasing. The CV as 13-rot. centered averages are now higher than for solar cycle 24 at the same time of progress from minimum!  
 The solar flux is now ahead with about 16 percent (!) and CV-I 13-rot. ahead compared to cycle 24!  
 Sunspot region production at Month 26 is still good. A total of 192 regions produced this cycle per Feb 22.  
 There were a total of 21 sunspot regions in January 2022. The highest number of regions since Sep 2015!

List of 9 significant sunspot regions exceeding 50 mvh developing in January 2022:

The LARGEST SUNSPOT REGIONS ( $\geq 100$  mvh) 01.10-30.10 were:

Reg.-First-Last--Lat.-Long.-Rot.-Area - ZMcI-history

2916: 21.12-03.01 Lat S17, Lo 191 Rt. 2252 283 m., CV 42,7, HSX DSO DSO DHI EKC EKC EKC EKI EHI ESI EHI EHI EHO DSO

2924: 04.01-15.01 Lat S31, Lo 039 Rt. 2252 279 m., CV 36,9, CRO CAO DAI EHI EHI EHO EHO EHO EHO ESO ESO

2925: 05.01-17.01 Lat S33, Lo 005 Rt. 2252 82 m., CV 11,7, DSO DSO CSO HSX HSX HSX HSX HSX HSX HSX HSX HSX AX

2927: 09.01-20.01 Lat S20, Lo 318 Rt. 2253 55 m., CV 9,3, HSX HSX HSX HSX HSX HSX CSO HSX HSX HSX HSX AX

2929: 13.01-20.01 Lat N8, Lo 323 Rt. 2253 195 m., CV 32,6, BXO DSO DHI DKI DKC DKO DAO DAO

2930: 13.01-20.01 Lat N21, Lo 324 Rt. 2253 118 m., CV 17,0, BXO BXO DAO DSO DAC DAO DAO DAO

2931: 13.01-17.01 Lat N13, Lo 359 Rt. 2253 66 m., CV 11,6, BXO DSO DAO CSO AX

2933: 16.01-23.01 Lat S21, Lo 288 Rt. 2253 69 m., CV 11,3, CSO DSO CSO CAO CAO HAX HSX HSX

2934: 20.01-01.02 Lat S25, Lo 114 Rt. 2253 83 m., CV 6,7, HSX HSX HSX HSX HSX HSX HSX HSX HSX HSX HSX HSX

Rank50 - Type - Date - Region - Flare Start - Max - End

Activity cut from Sunspot Region Summaries from NOAA:

Rank50 - Type - Date - Region

Rank 4 -Type M1.4-Date 12.02.2022 Region 2944

Rank 6 -Type M1.1-Date 29.01.2022 Region 2936

Rank 1 -Type M5.5-Date 20.01.2022 Region 2929

Rank 3 -Type M1.5-Date 18.01.2022 Region 2929

Solar Max.: Will occur around July 2025, earliest possibility April 2025.

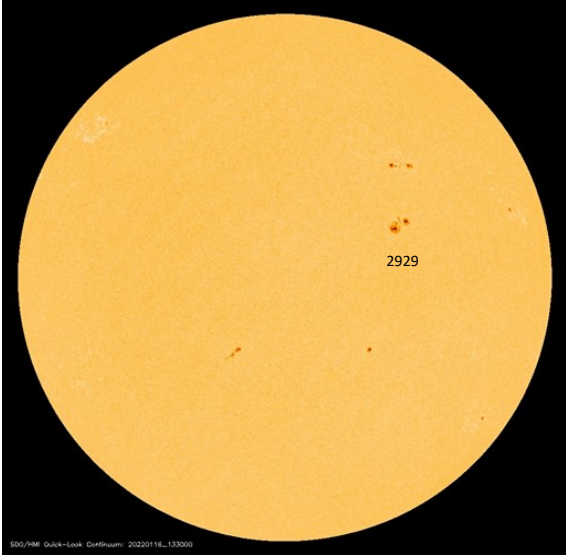
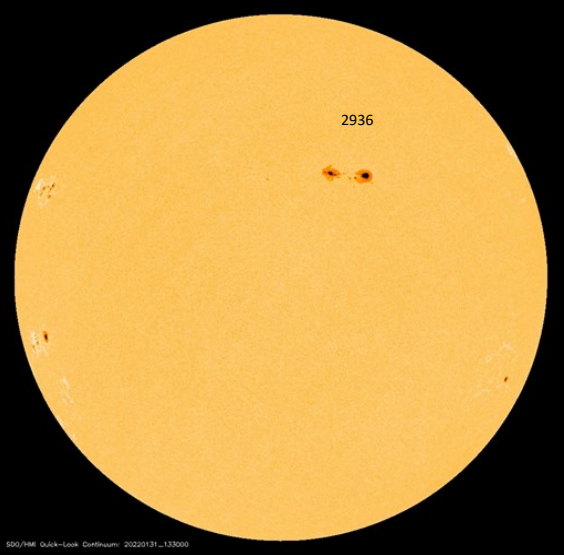
Solar Flux onset expected late this year. The P-Index, rise/fall data from solar flux,


This proved great activity in January 2022 and which may persist until at least March 2022.

Stay tuned and observe the solar disk from now on!

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

Preliminary total number for year 2021 is 7327 CV-observations from 49 observers! Thanks to all of you!

Pictures from last month - Observer contributions, etc.		
<b>Largest Regions of Jan. 2022</b>		
 <p>SDO/HMI Quick-Look Continuum: 20220116_133000</p> <p>2929</p>	 <p>SDO/HMI Quick-Look Continuum: 20220131_133000</p> <p>2936</p>	
<p>The second most active day, left 16th January 2022</p>	<p>photo courtesy SDO/HMI NOAA gov</p>	<p>The most active day, right 31st January 2022</p>
<b>Awards this month</b>	0	
none		
<b>New members:</b>	<b>Welcome to:</b>	
<p>CV-Helios Network decided to include Kandilli Observatory, Turkey, to the members New member CV-219 registered.</p>	<p>Backlog 2020-2021 registered Backlog 2012-2019 ready</p>	
<p>We are now 52 active members (last 12 mo.)</p>		

<b>Solar Coordinates</b>	New from April 2020
Daily list of Solar Ephemeris available at: <a href="#">Daily list of Solar Ephemeris and SDO on grid</a> Here you can see Today's Po, Bo, Lo, Rotation no., RA and Dec. and adjusted SOHO-picture on grid.	
<b>Calculating CV</b>	
For your convenience and security, use the mif2021, <a href="https://www.cv-helios.net/mif2021.xlsx">https://www.cv-helios.net/mif2021.xlsx</a> the Monthly Input Form, which you can use for all of your next reportings!	
<b>Monitor MPR daily progress</b>	
<b>CV-Helios Network: Monitor MPR progress as entries are made!</b> Monitor your submissions as they are registered: <a href="https://cv-helios.net/helios/cv/web/mprpost.html">https://cv-helios.net/helios/cv/web/mprpost.html</a> 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	
<b>Registration data</b>	
Check if your CV-observations have been registered (please allow up to 24 hrs): <a href="https://www.cv-helios.net/helios/cv/web/datlist.htm">https://www.cv-helios.net/helios/cv/web/datlist.htm</a> for checking of Entries Summary <a href="https://www.cv-helios.net/helios/cv/web/cvobsmonth.htm">https://www.cv-helios.net/helios/cv/web/cvobsmonth.htm</a>	
<b>CONTRIBUTE WITH YOUR PHOTOS AND OTHER OF INTEREST!</b>	
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: <a href="mailto:cvhelios@gmail.com">cvhelios@gmail.com</a>	
<a href="http://www.cv-helios.net/cvrep2.html">Please check out www.cv-helios.net/cvrep2.html</a> for updates of files!	
<b><u>SUBMISSIONS OF CV-OBSERVATIONS</u></b>	
Log on to: <a href="https://www.cv-helios.net/observations/index.html">https://www.cv-helios.net/observations/index.html</a> <a href="#">Classification Help</a> login solaris password cvheliosobs <a href="#">Monthly Input Form as excel</a> Submission before 15th of proceeding month 18:00 UTC. (password: cvhelios) MPR issue 15th of proceeding month 2000 UTC. Good luck CV-observing!	
<b>Average received to registered time: 0 day 21 hours 36 minutes</b>	
<b>CV-Helios Network</b> <b>- over 40 years in solar amateur astronomy service!</b>  There are now Entries reg.: 12345 entries registered containing 198664 CV-observations! Last 12 months 7408 CV-observations from 49 observers originating from 18 countries	
<b>Editorial close: 16.02.2022 15:24 UTC</b>	
 <b>CV-Helios Network</b>	