

# Monthly Preliminary Report

## MPR



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## CV-Helios Network

### Monthly Preliminary Report for December 2019

Solar Cycle 24: Month no. 134

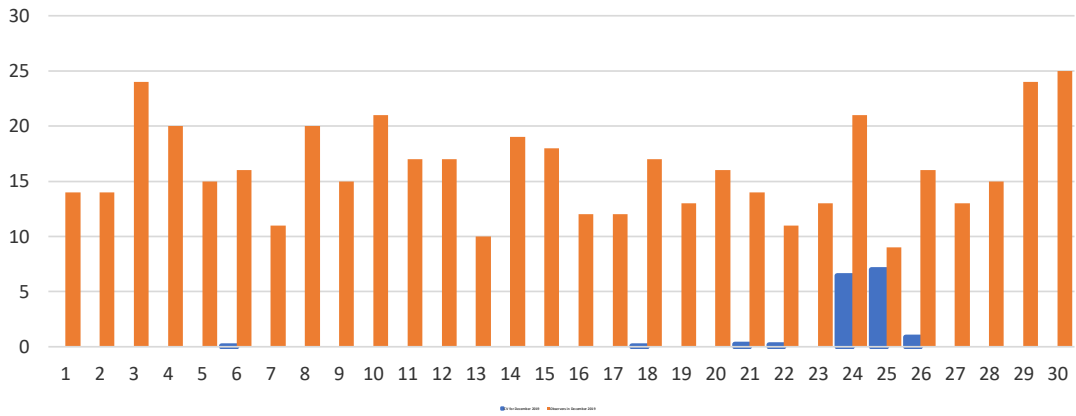
Report id.: cv1912 - CV-report no.: 461

Memno.	Name	Country	CV	Obs	K	Obs. Tot.
CV-001	MALDE, KJELL INGE	NORWAY	0,3	13	0,627	8386
CV-009	BRAUCKHOFF, DIETER	GERMANY	0,1	23	0,266	1169
CV-010	DUBOIS, FRANKY	BELGIUM	0,3	18	0,566	8576
CV-019	JUNKER, ELMAR	GERMANY	0,0	6	0,000	3386
CV-021	BARNES, HOWARD	NEW ZEALAND	0,0	12	0,000	4285
CV-022	VIERTEL, ANDREAS	GERMANY	0,0	7	0,000	5558
CV-023	BRETSCHNEIDER, HAR	GERMANY	0,1	18	0,226	4955
CV-038	MORALES, GERMAN	BOLIVIA	3,2	26	6,426	7026
CV-040	BATTAIOLA, ROBERTO	ITALY	0,0	2	0,000	1770
CV-041	ROTHERMEL, JENS	GERMANY	0,0	4	0,000	1069
CV-044	SCHRÖDER, GERD	GERMANY	0,0	17	0,000	4278
CV-077	JOHNSTON, ANDREW	UNITED KINGDOM	0,4	17	0,719	2926
CV-080	JANSSENS, JAN	BELGIUM	0,0	2	0,000	1020
CV-082	URBANSKI, PIOTR	POLAND	0,2	9	0,453	4651
CV-086	TOS-POLAND	POLAND	0,3	31	0,657	7356
CV-091	DALEK, GRZEGORZ	POLAND	0,6	9	1,132	4029
CV-103	STEEN, OCTAAF	BELGIUM	0,3	22	0,648	5187
CV-105	RYBACK, ALEXEY	RUSSIA	1,5	10	3,056	2904
CV-107	LEVENTHAL, MONTY	AUSTRALIA	0,3	3	0,679	4213
CV-122	FEIK, VLASTISLAV	CZECH REPUBLIC	0,9	16	1,783	2433
CV-135	ARAUJO, GEMA	SPAIN	0,6	29	1,194	6160
CV-136	GARCÍA, FAUSTINO	SPAIN	0,4	14	0,728	3224
CV-139	ALONSO, JAVIER	SPAIN	0,1	18	0,113	3334
CV-151	CARELS, JEFFREY	BELGIUM	0,5	15	0,951	2536
CV-171	MALUF, WALTER JOSE	BRAZIL	0,0	15	0,000	2049

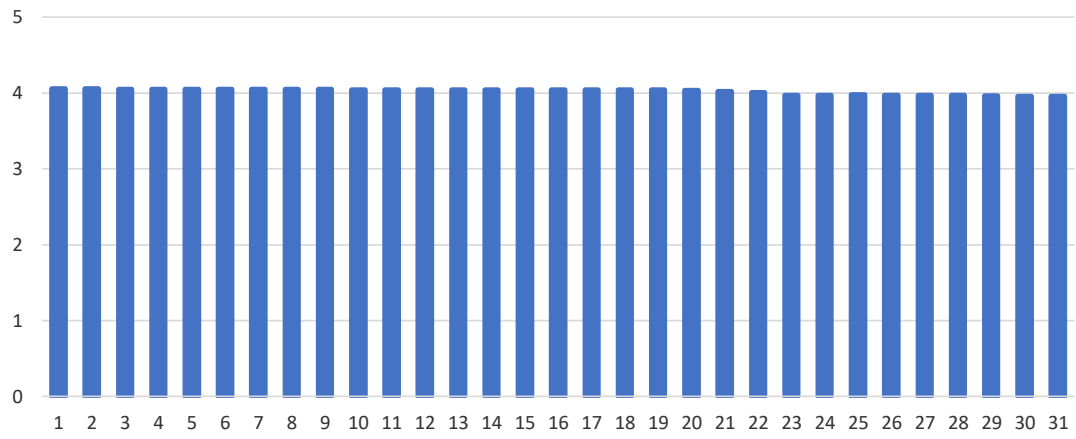


<b>Results</b>						
*CV-USAF prepared via data from Joint USDC/NOAA, SWPC/USAF						Prelim. MIN
Date	CV	Obsrvrs	Regions 6 rot.	* CV-USAF 6 rot.	CV-6 rot.	CV-13 rot.
1	0,00	14	0,09	0,16	0,12	4,06
2	0,00	14	0,09	0,16	0,12	4,06
3	0,00	24	0,09	0,16	0,12	4,05
4	0,00	20	0,09	0,16	0,12	4,05
5	0,00	15	0,07	0,15	0,11	4,05
6	0,06	16	0,07	0,15	0,09	4,05
7	0,00	11	0,06	0,14	0,09	4,05
8	0,00	20	0,05	0,13	0,09	4,05
9	0,00	15	0,05	0,13	0,09	4,05
10	0,00	21	0,05	0,13	0,09	4,04
11	0,00	17	0,05	0,13	0,08	4,04
12	0,00	17	0,05	0,13	0,08	4,04
13	0,00	10	0,05	0,13	0,08	4,04
14	0,00	19	0,05	0,13	0,08	4,04
15	0,00	18	0,05	0,13	0,08	4,04
16	0,00	12	0,05	0,13	0,08	4,04
17	0,00	12	0,05	0,13	0,08	4,04
18	0,06	17	0,05	0,12	0,08	4,04
19	0,00	13	0,05	0,12	0,07	4,04
20	0,00	16	0,05	0,12	0,07	4,04
21	0,21	14	0,05	0,12	0,07	4,02
22	0,18	11	0,05	0,12	0,07	4,01
23	0,00	13	0,05	0,12	0,07	3,97
24	6,43	21	0,06	0,15	0,12	3,97
25	7,00	9	0,07	0,16	0,14	3,97
26	0,88	16	0,08	0,17	0,14	3,97
27	0,00	13	0,08	0,17	0,14	3,97
28	0,00	15	0,08	0,17	0,14	3,97
29	0,00	24	0,08	0,17	0,14	3,96
30	0,00	25	0,08	0,17	0,14	3,96
31	0,00	13	0,08	0,17	0,14	3,96
Totals/ Avrgs	<b>0,48</b>	<b>16,0</b>	<b>0,16</b>	<b>0,26</b>	<b>0,10</b>	<b>4,02</b>

### CV and CV observers



### CV-13 rot. per December 2019



**Solar Region Summary for December 2019**

Reg.-First day-Last day-Lat.-Lon.-Rot.-Area-Lgth.-CVtot.-class14d

2753-23.12.19-25.12.19-S29-119-2225-10-3-1,7-BXO-BXO-AXX

2754-24.12.19-25.12.19-N24-168-2225-10-3-1,5-BXO-AXX

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**:Product: Weekly Highlights and Forecasts**

:Issued: 2020 Jan 13 0408 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

06 - 12 January 2020

Solar activity was very low. Region 2755 (S34, L=355, class/area Bxo/020 on 03 Jan) decayed to plage on 07 January and was absent of significant flare activity during the period. New Region 2756 (N22, L=017, class/area Cro/030 on 09 Jan) produced dual B1 flares at 10/1159 UTC and 10/1445 UTC before decaying to plage on 11 January. Both regions, one in the northern hemisphere and one in the southern hemisphere, presented in satellite imagery with reverse polarity magnetic field structure. No Earth-directed CMEs were observed.

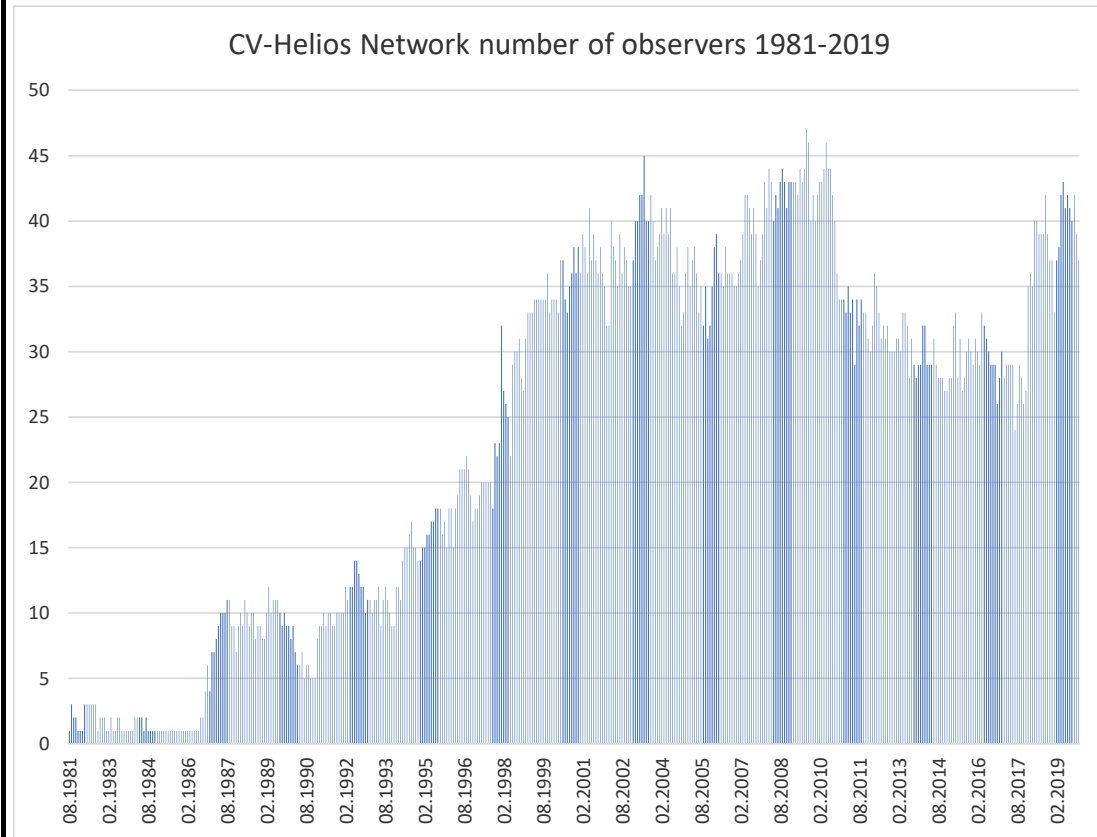
No proton events were observed at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit reached moderate levels on 09-12 Jan due to coronal hole influence. Normal levels were observed on 06-08 Jan.

Geomagnetic field activity reached active levels on 06 and 09 Jan, unsettled levels on 08 and 10 Jan due to influence from negative

CV-I vs CV-USAF graph

Solar minimum approaching



Observer counts are back at 2010-levels or better! Thanks to all CV-observers!

Awards this month

1

**CV-207 (AI CAS), ONDREJOV OBSERVATORY: 5000 CV-obs. on 06.12.2019**

**Congratulations!**

New member:

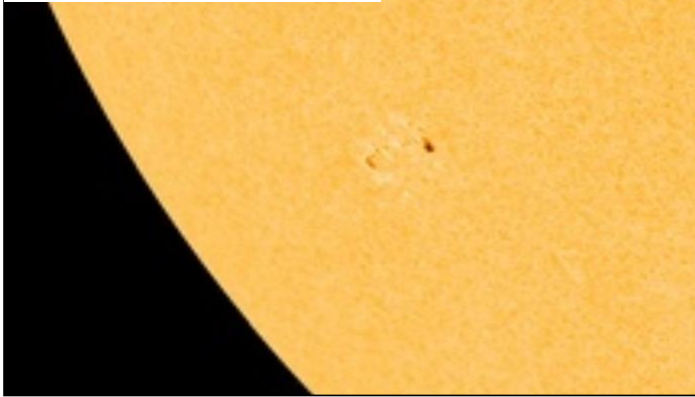
**CV-214 IGOR GRAGEDA, BOLIVIA**

Active CV-observer since 01 Sep 2019.

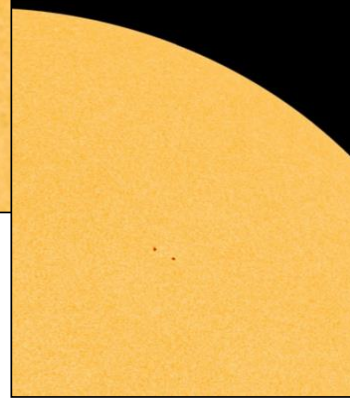
We are now 46 active members (last 12 mo.)

**Please check out [www.cv-helios.net/cvrep2.html](http://www.cv-helios.net/cvrep2.html) for updates of files!**

**MINIMUM Cycle 24/25** is expected to occur between November 2019/May 2020.  
 Latest: Predicted minimum April 2020. Value: Approx. 2008/2009 low values.

**December 2019 news**

Reg. 2753 S29 119  
left - and  
Reg. 2754 N24 168  
right  
(rot. 2225)  
Both belonging to cy. 25



The two "Christmas-regions"  
regs. 2753 and 2754  
They lasted only 3 and 2 days  
respectively and only reached class BXO as max.  
but tells us we now enter cycle 25.

Two more regions emerged early January 2020.  
A preliminary low on Adjusted Solar Flux came on January 6, 2020. More news later.

**Solar Coordinates**

Daily list of Solar Ephemeris for 2020 available at:

<https://www.cv-helios.net/helio2019/>

Here you can see Today's Po, Bo, Lo, Rotation no., RA and Dec.  
for the year 2020.

Comes with tilted Stoneyhurst-chart to use for observations!

**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!

Note! A new .php script is going to be launched this year,  
instead of the old, outdated and unsecure .cgi that has been used for about 17 years.

**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:

<https://www.cv-helios.net/cgi/data/datlist.txt> 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](mailto:cvhelios@gmail.com)

**SUBMISSIONS OF CV-OBSERVATIONS**

**Please note: We have improved! Please note the SECURE site "https" !**

Please go to: <https://www.cv-helios.net/observations/index.html>

Log on to:

<https://www.cv-helios.net/observations/index.html>

login

solaris

password

cvheliosobs

We now use php-scripts that are safer!

Submission before 15th of proceeding month 18:00 UTC.

MPR issue 15th of month 2000 UTC. Good luck CV-observing!



**Per December 2019: Registration time average last 40 entries: 19 hours 5 minutes**

## CV-Helios Network

**- over 36 years in solar amateur astronomy service!**

There are now 11355 entries registered  
containing 181084 CV-observations!

**This MPR issued 15th January 2020**



## CV-Helios Network

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**<https://www.cv-helios.net>**

(NOTE! from Dec 2018 a **SECURE** site)

Worldwide Amateur Solar Observing Network  
Magnetic Sunspot Classifications Zürich/McIntosh system  
CV - Classification Values (Malde/1981) - numeric system  
Serving Amateur Solar Astronomy since 1981

Editorial close: 15.01.2020 18:16 UTC