## Brief Summary of Solar Cycles CR2240-CR2242

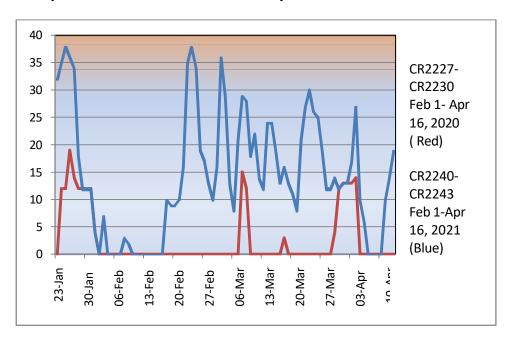
## Kim Hay

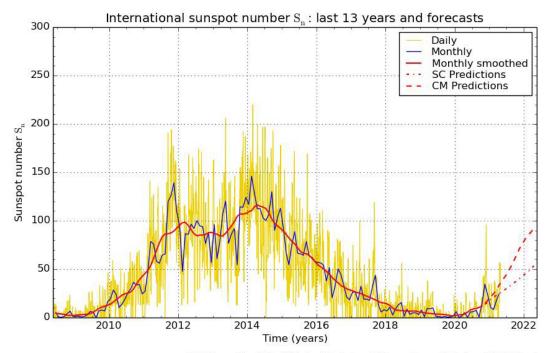
It was stated in December 2020 that we were entering Cycle 25. A slow start in January 2021 showed groups but then waned off to 0 groups and spots. February picked up with groups and higher sunspot numbers then it's been a roller coaster ever since. However in January and March we started seeing groups in the Northern Hemisphere which seems to spark the sun was finally coming into the Cycle 25. April carried on with groups in both hemispheres. According to NASA the Solar Flux has been increasing that is also a sign of the uptick of Solar Cycle 25.

There have been many C and G1 class flares causing Aurora in both the North and South Poles. There has even been the return of "STEVE" Strong Thermal Emission Velocity Enhancement.

The graph below show the Sunspots for the same time frame Feb-April 2020 & 2021 that show the activity of sunspot numbers. The data is from **SILSO.** I have also enclosed the International sunspot numbers last 13 years and forecasts.

## Sunspot Data from the Same time period 2020 vs. 2021





SILSO graphics (http://sidc.be/silso) Royal Observatory of Belgium 2021 May 1

So the bottom graph is showing that we are on track with the SC25.

## Groups present in the CR2240 to CR2242

<b>Carrington Rotation</b>	Sunspot Group and N/S hemisphere
CR2240	AR2797 (S), AR2798 (N 1st North group), AR2799(N), AR2800 N), AR2801(N)
CR2241	AR2802 (N),AR2803 (N),AR2804(N),AR2805 (S),AR2806 (S), AR2807( S),AR2808 (N),AR2809 (S)
CR2242	AR2808 (N), AR2810(N), AR2811(N), AR2812 (N), AR2813(N), AR2814(S)

We have had many observers over the last 3 Carrington Rotations that have uploaded images to the A.L.P.O. Solar Archive Gallery. Below is a list of Observers and Observing types per Rotation Period.

CR2240 Number of Images

Monty Leventhal	White light and Halpha sketches	152
G. Grassmann	Halpha , CaK	
David Teske	White light , Halpha sketches	
Theo Ramakers	CaK, Halpha, white light	
Tony Broxton	White light sketches	
Howard Eskildsen	White light , Halpha , CaK	
Frank J. Melillo	Halpha, white light	
Geert Vandenbulcke	Halpha	

CR2241

Monty Leventhal White light and Halpha sketches

G. Grassmann Halpha, CaK

David Teske White light , Halpha sketches

CaK, Halpha, White

Theo Ramakers light

Tony Broxton White light sketches
Howard Eskildsen White light , Halpha , CaK

Randy Shivak Halpha Paul Andrew Halpha

Luigi Morrone White Light granulation

David Taylor White Light

Geert Vandenbulcke Halpha granulation

Rik Hill White Light

CR2242

Monty Leventhal White light and Halpha sketches 301

360

David Teske white light , Halpha sketches & images

Geert Vandenbulcke Halpha , White light
Theo Ramakers CaK, Halpha, white light

Tony Broxton white light sketches & categorizes the sunspot type

Howard Eskildsen white light , Halpha , CaK

G. Grassmann Halpha , CaK, Sun protuberances

Christian Viladrich Halpha

Pat Poltrbin Halpha negative view

Paul Andrew Halpha Vlamir da Silva Junior Halpha

Carrington Rotation Data provided by Jeffrey D. Beish using WIMP



We invite you to the A.L.P.O. Solar email list which is located on groups.io under Solar ALPO.

Source Data from WDC-SILSO, Royal Observatory of Belgium, Brussels

www.spaceweather.com

ALPO Solar Image Gallery