

# SIDC Space Weather Briefing

27 September 2020 - 04 October 2020

Yana Maneva  
& the SIDC forecaster team



Royal Observatory  
*of Belgium*

Solar Influences  
Data analysis Centre  
[www.sidc.be](http://www.sidc.be)

# Summary Report

Solar activity from 2020-09-27 to 2020-10-04

Active regions	NONE, 1 plage (previously NOAA 2773)
Flares	# B-class flare: 0 # C-class flare: 0 # M-class flare: 0 # X-class flare: 0
Filament eruptions	NONE
Coronal Holes	CH82+ and CH83-

Proton flux	Background levels
Electron flux	Above $10^3$ pfu threshold (often above $10^4$ pfu)

Solar wind and geomagnetic conditions from 2020-09-27T12:00:00 to 2020-10-04T12:00:00

ICME	NONE detected
SW Conditions	B : 0.92 - 10.37 nT // Bz: -9.18 nT to 6.03 nT // Speed: 359.6 - 677.9km/s
K-indices	max K-index (Dourbes): 5 max Kp-index (NOAA): 6

All Quiet Alert: OFF until Oct 2nd, ON onwards

# Solar Activity

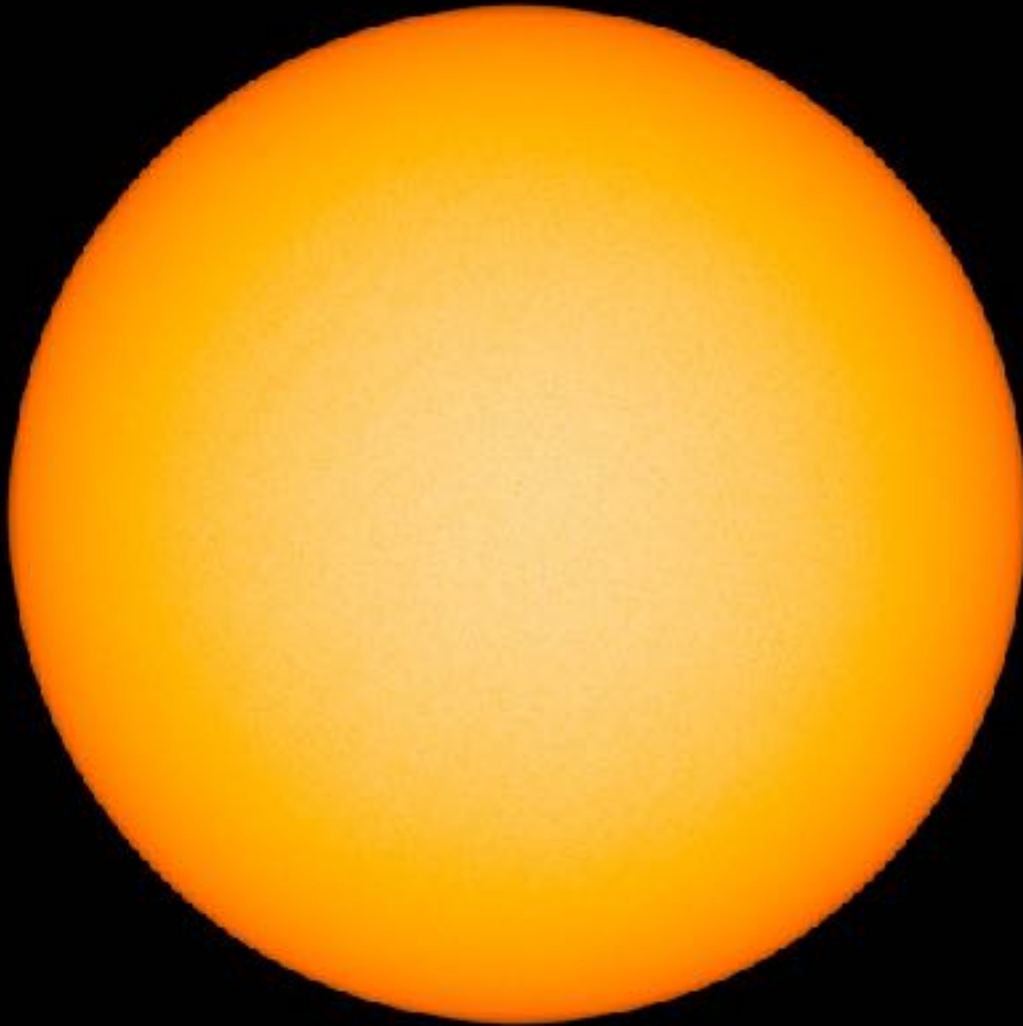


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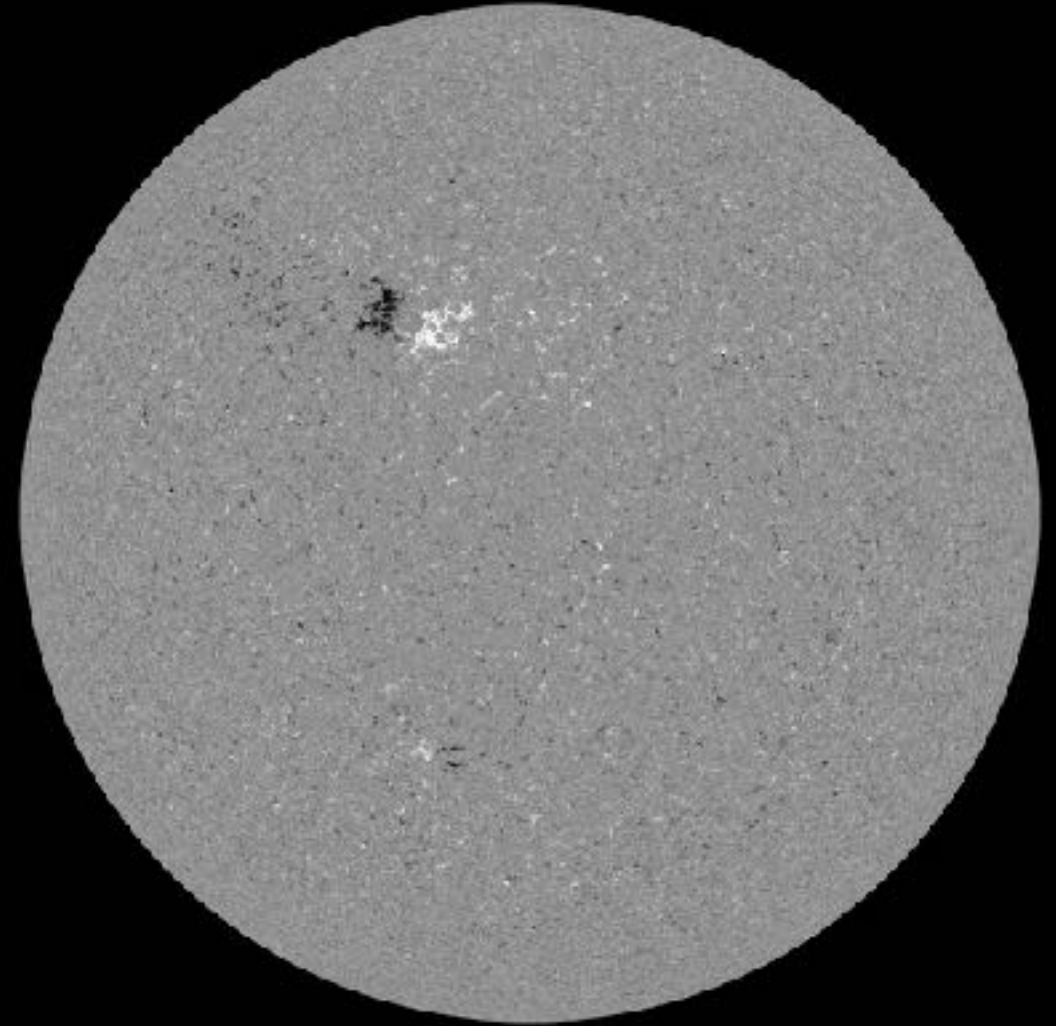
# Solar active regions - Sunday

SDO/HMI White Light 2020-09-27



SDO/HMI White Light 2020-09-27\_114500

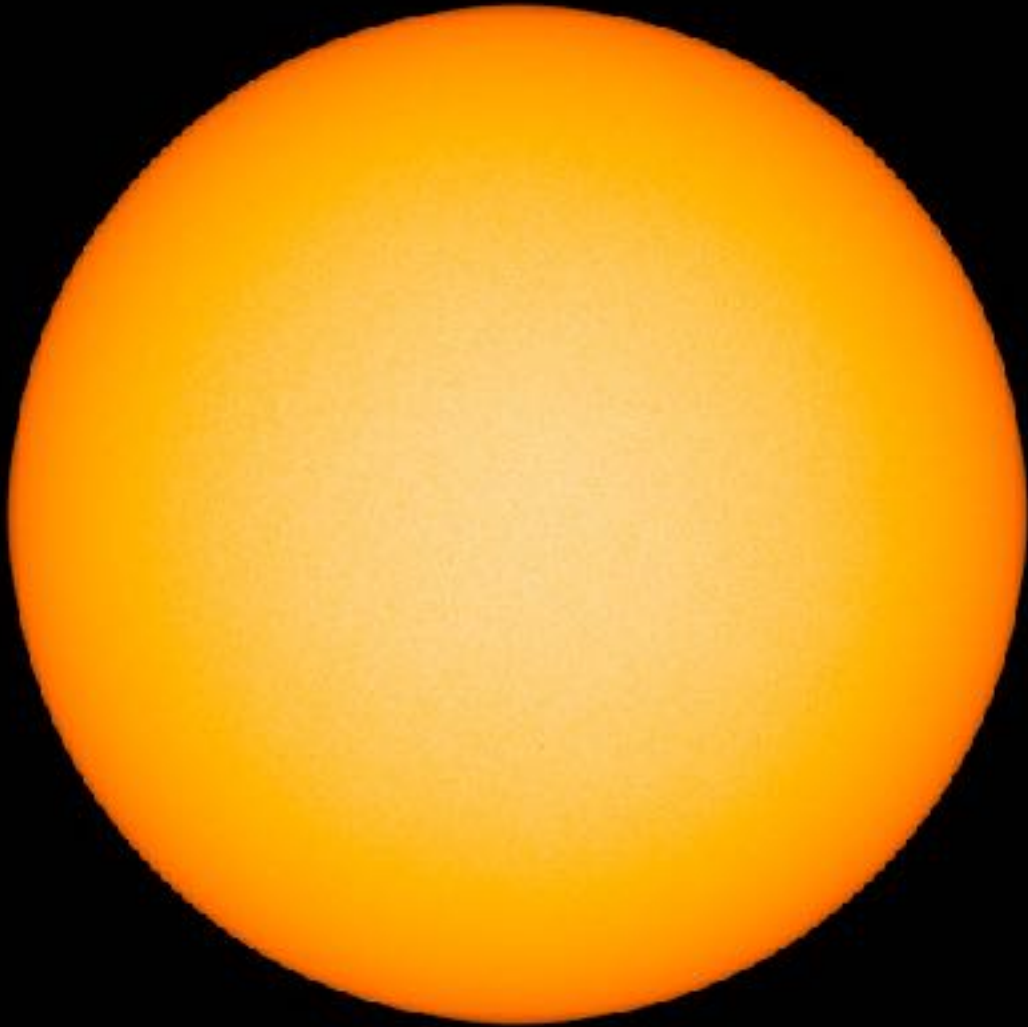
SDO/HMI Magnetogram 2020-09-27



SDO/HMI Magnetogram 2020-09-27\_114500

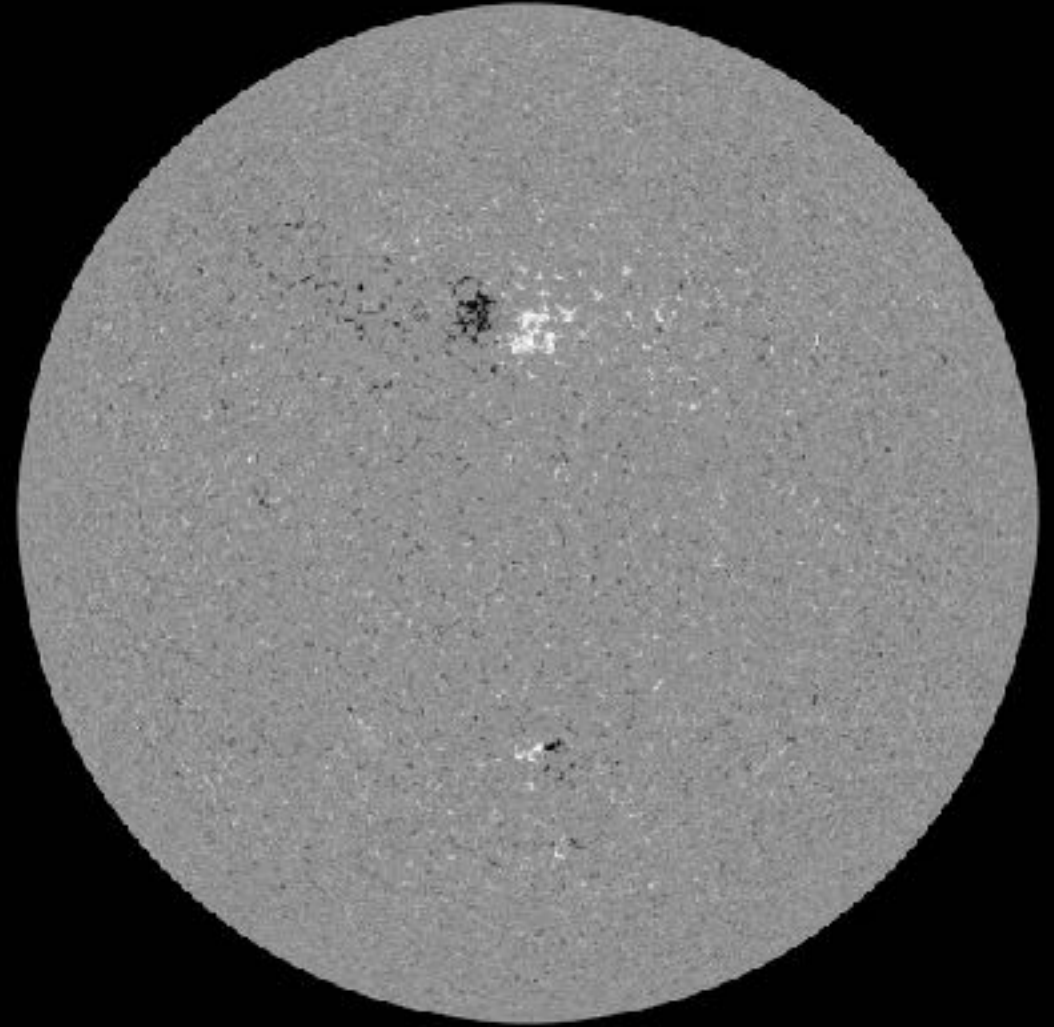
# Solar active regions - Monday

SDO/HMI White Light 2020-09-28



SDO/HMI White Light 2020-09-28

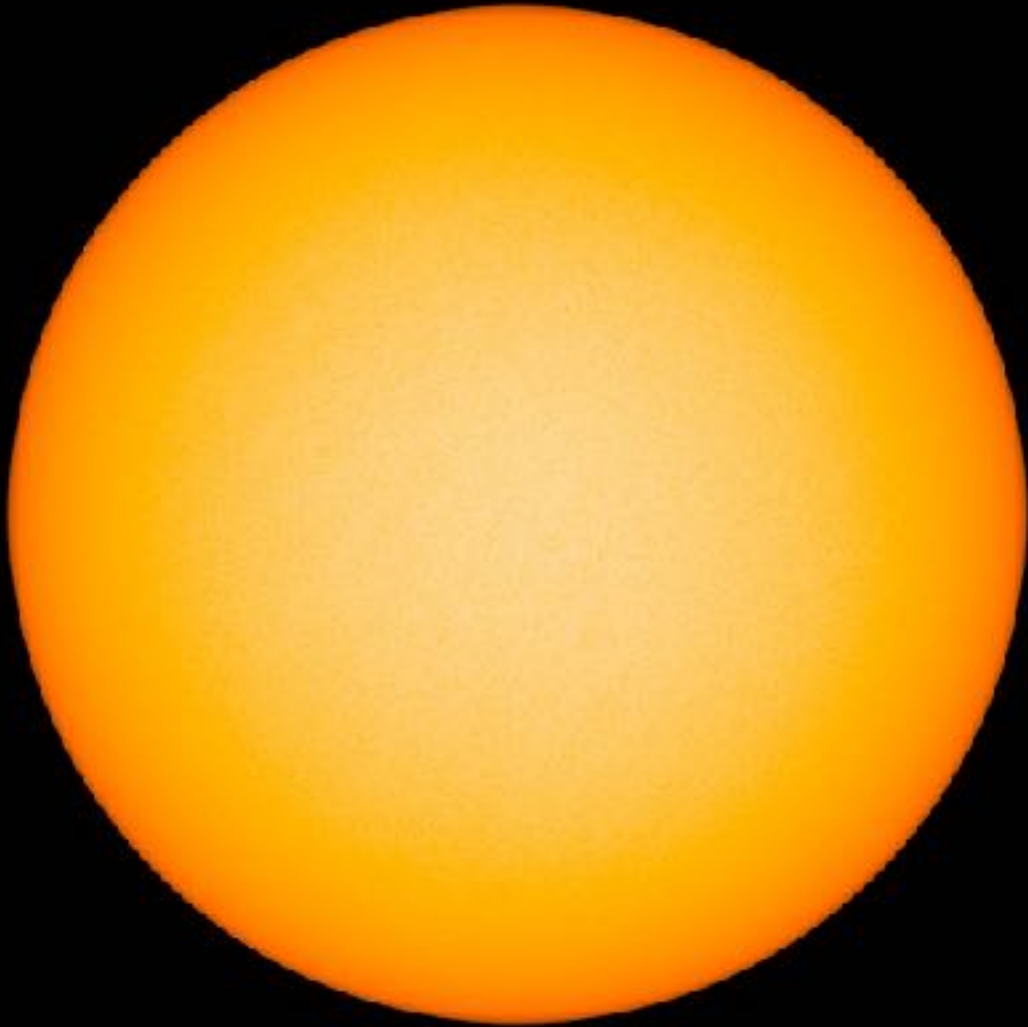
SDO/HMI Magnetogram 2020-09-28



SDO/HMI Magnetogram 2020-09-28

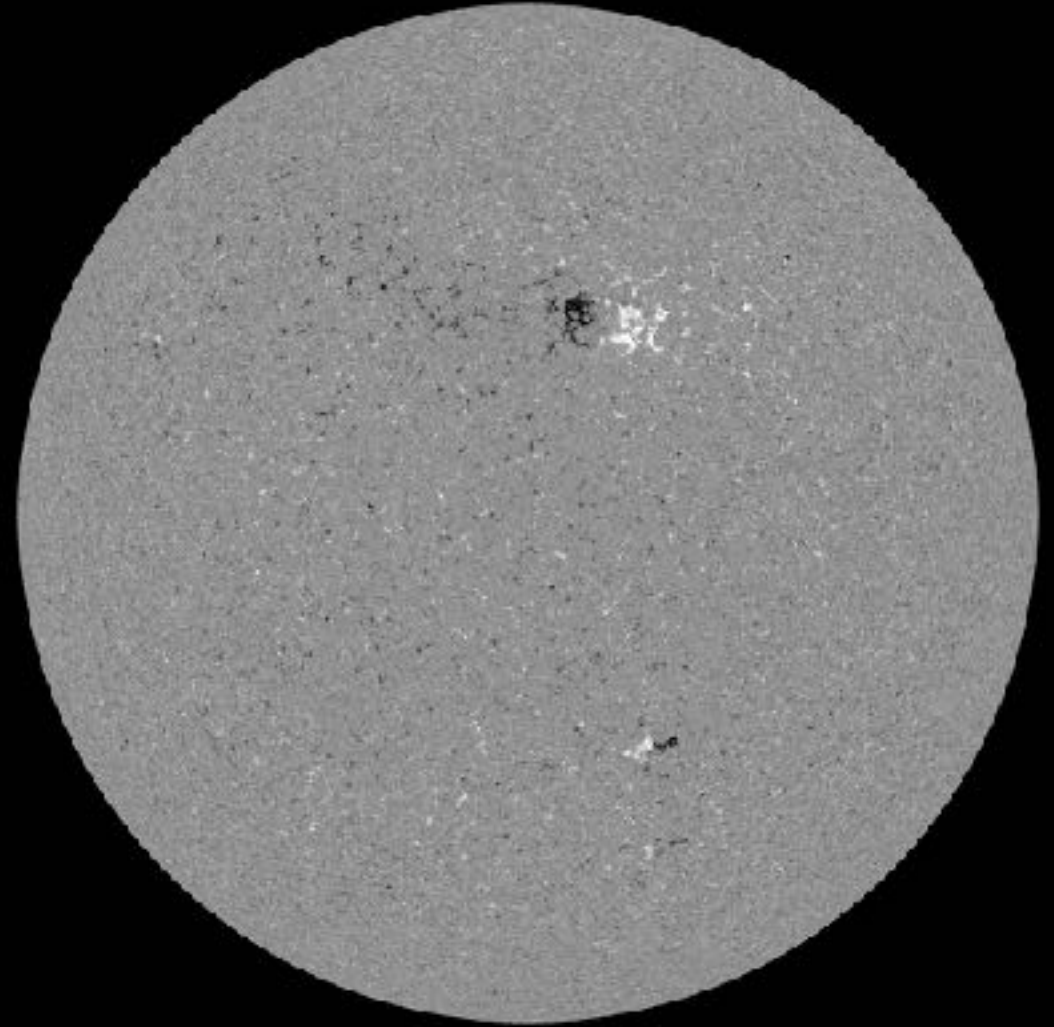
# Solar active regions - Tuesday

SDO/HMI White Light 2020-09-29



SDO/HMI White Light 2020-09-29 11:45:00

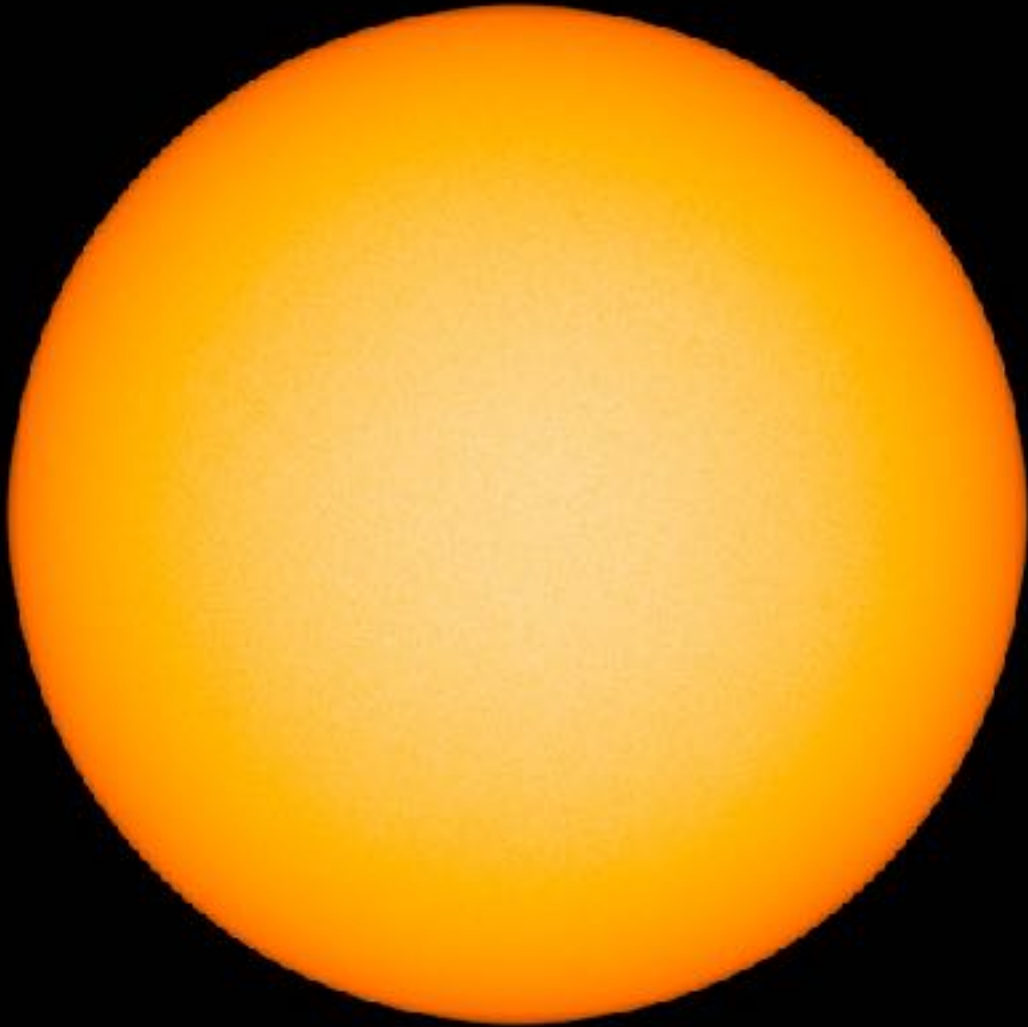
SDO/HMI Magnetogram 2020-09-29



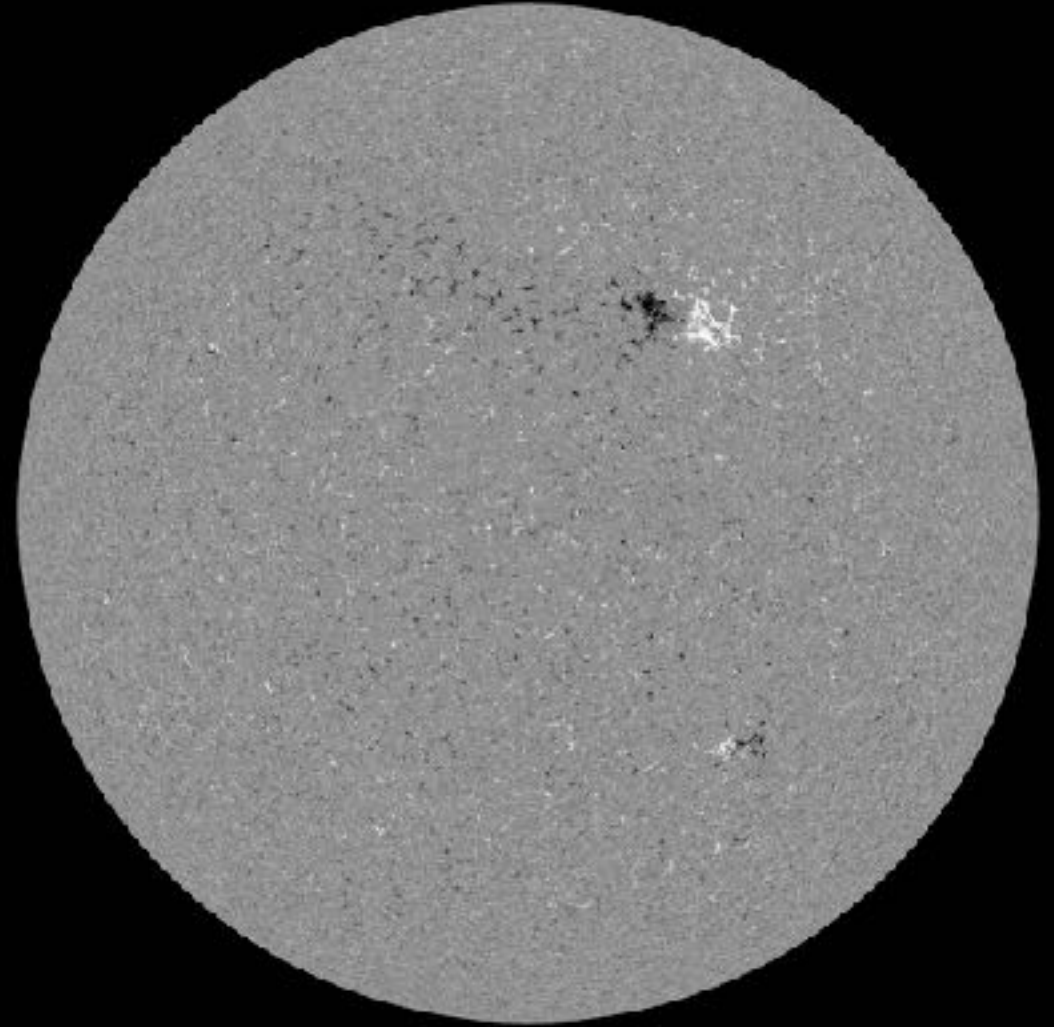
SDO/HMI Magnetogram 2020-09-29 11:45:00

# Solar active regions - Wednesday

SDO/HMI White Light 2020-09-30

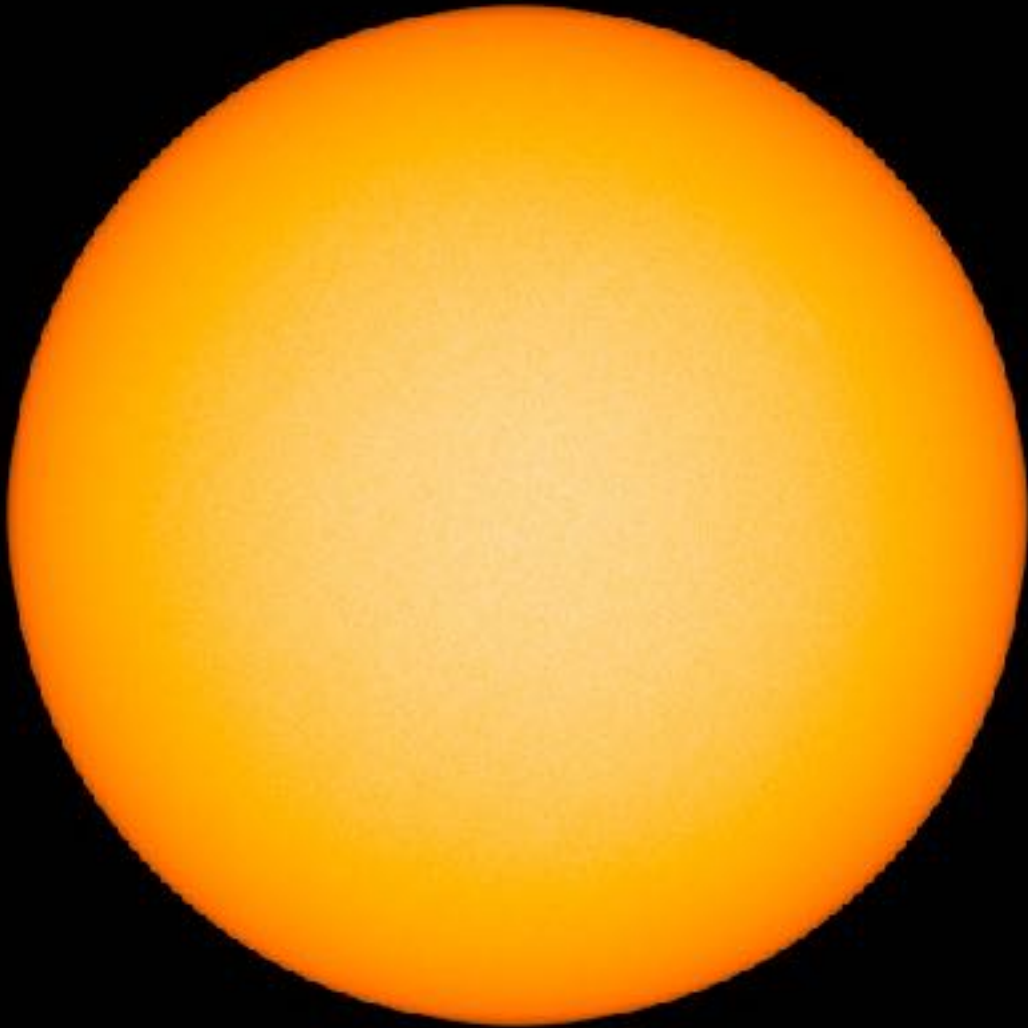


SDO/HMI Magnetogram 2020-09-30



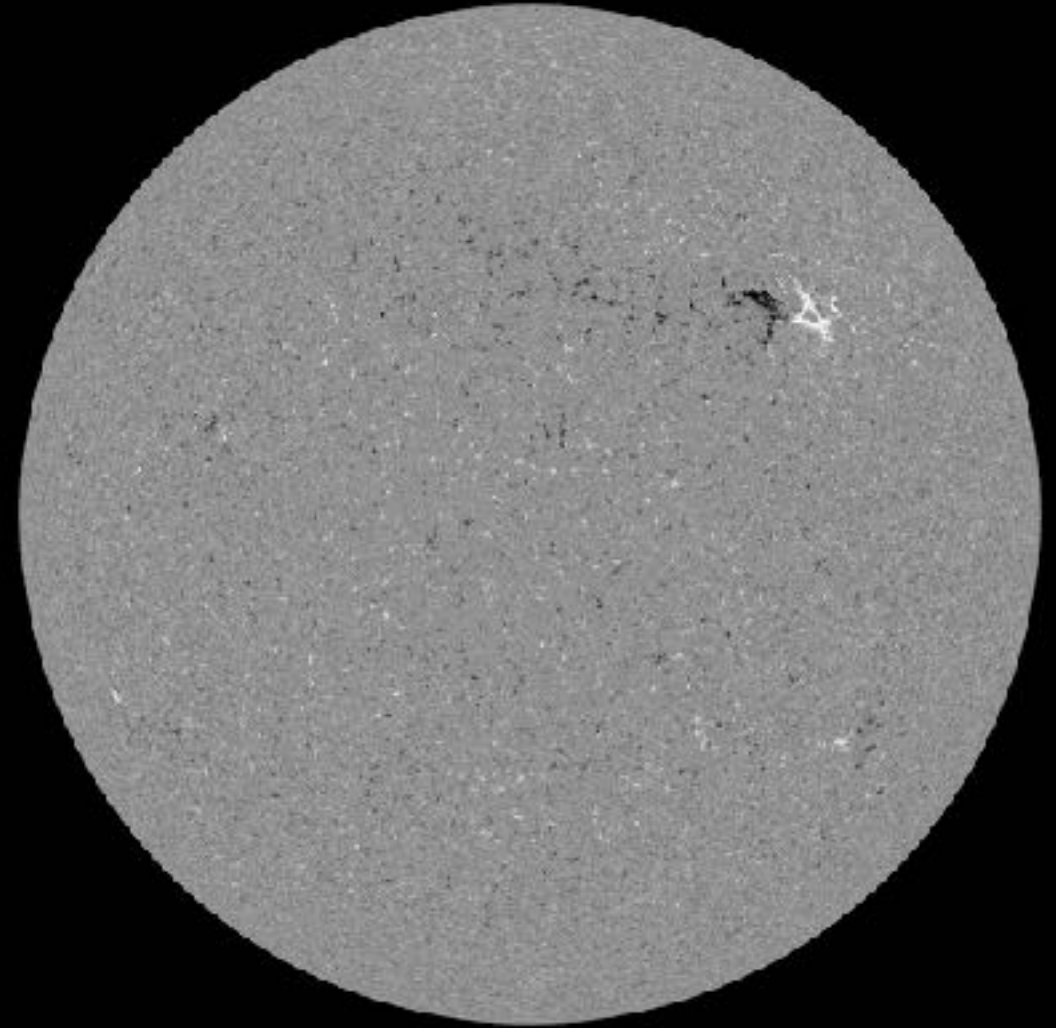
# Solar active regions - Thursday

SDO/HMI White Light 2020-10-01



SDO/HMI White Light 2020-10-01

SDO/HMI Magnetogram 2020-10-01

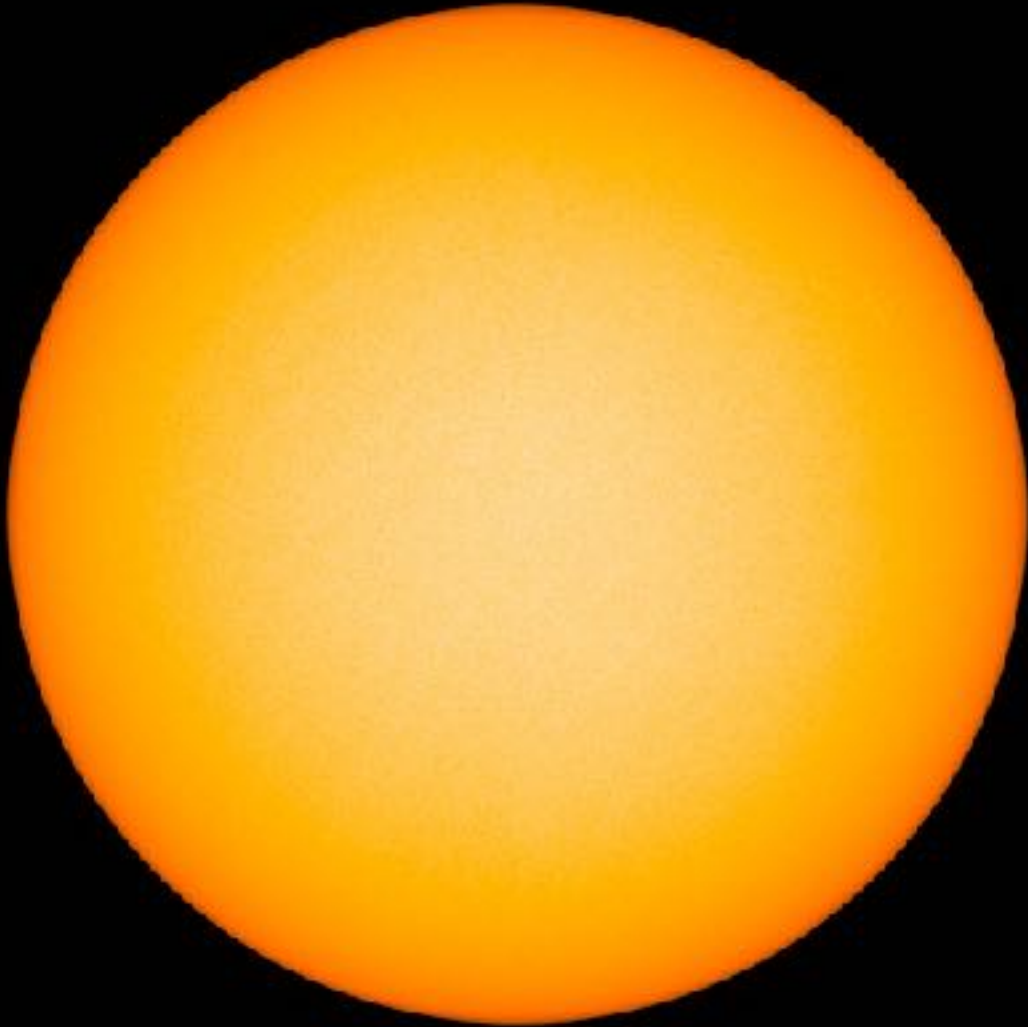


SDO/HMI Magnetogram 2020-10-01



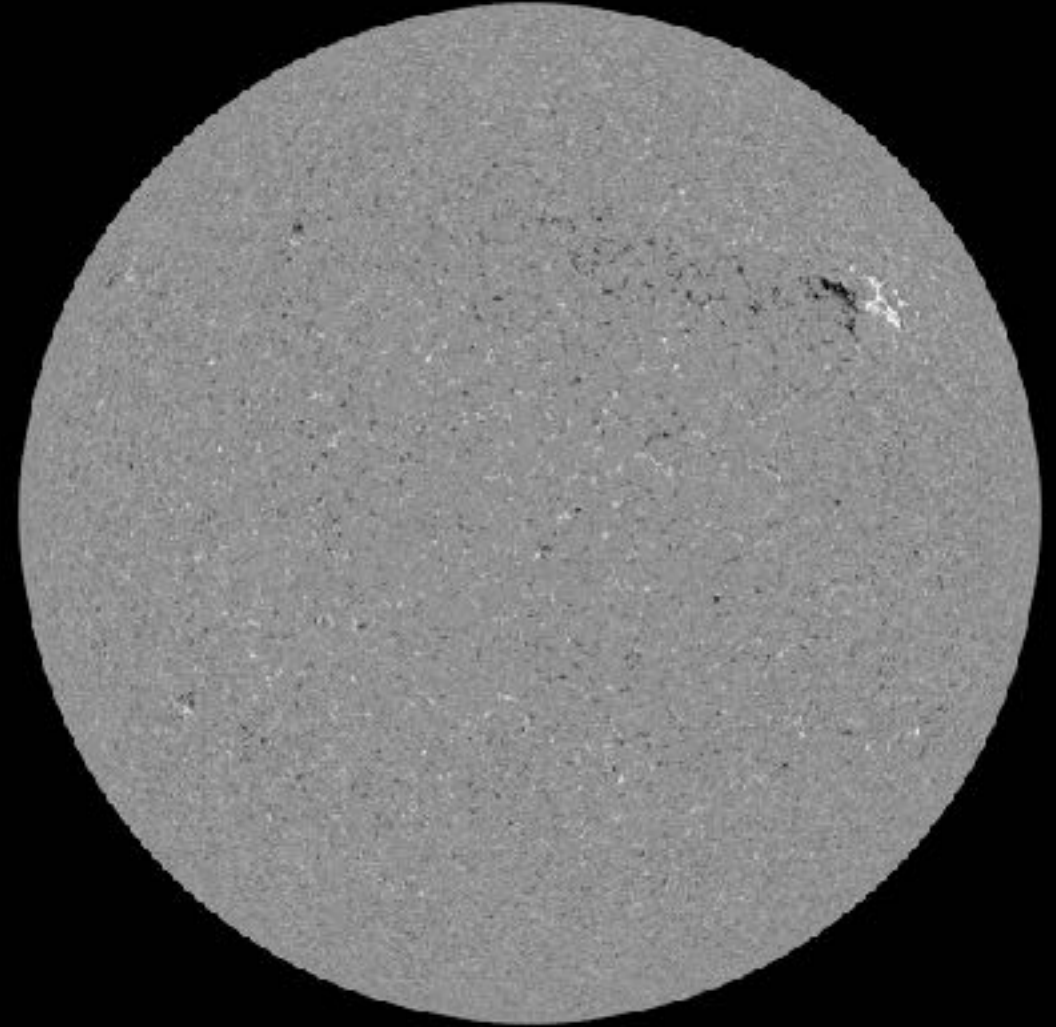
# Solar active regions - Friday

SDO/HMI White Light 2020-10-02



SDO/HMI White Light 2020-10-02 11:45:00

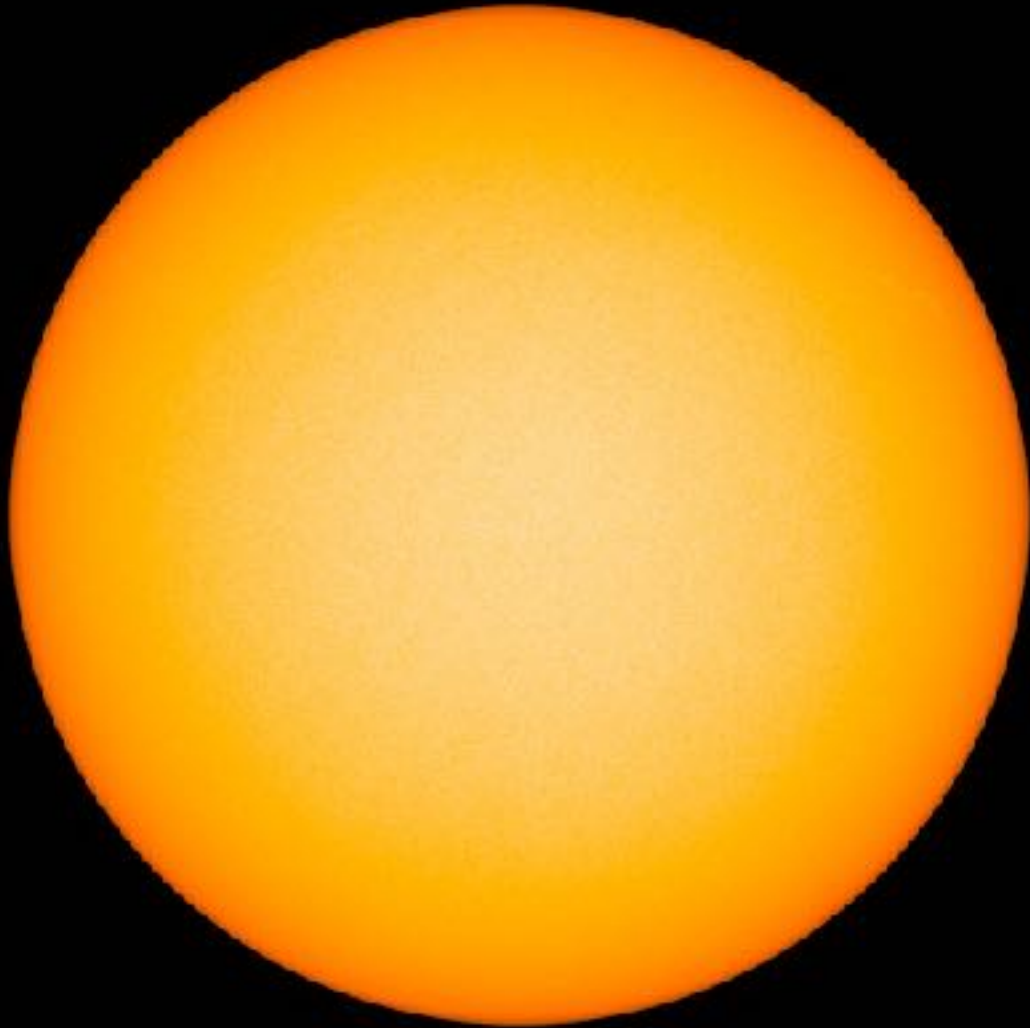
SDO/HMI Magnetogram 2020-10-02



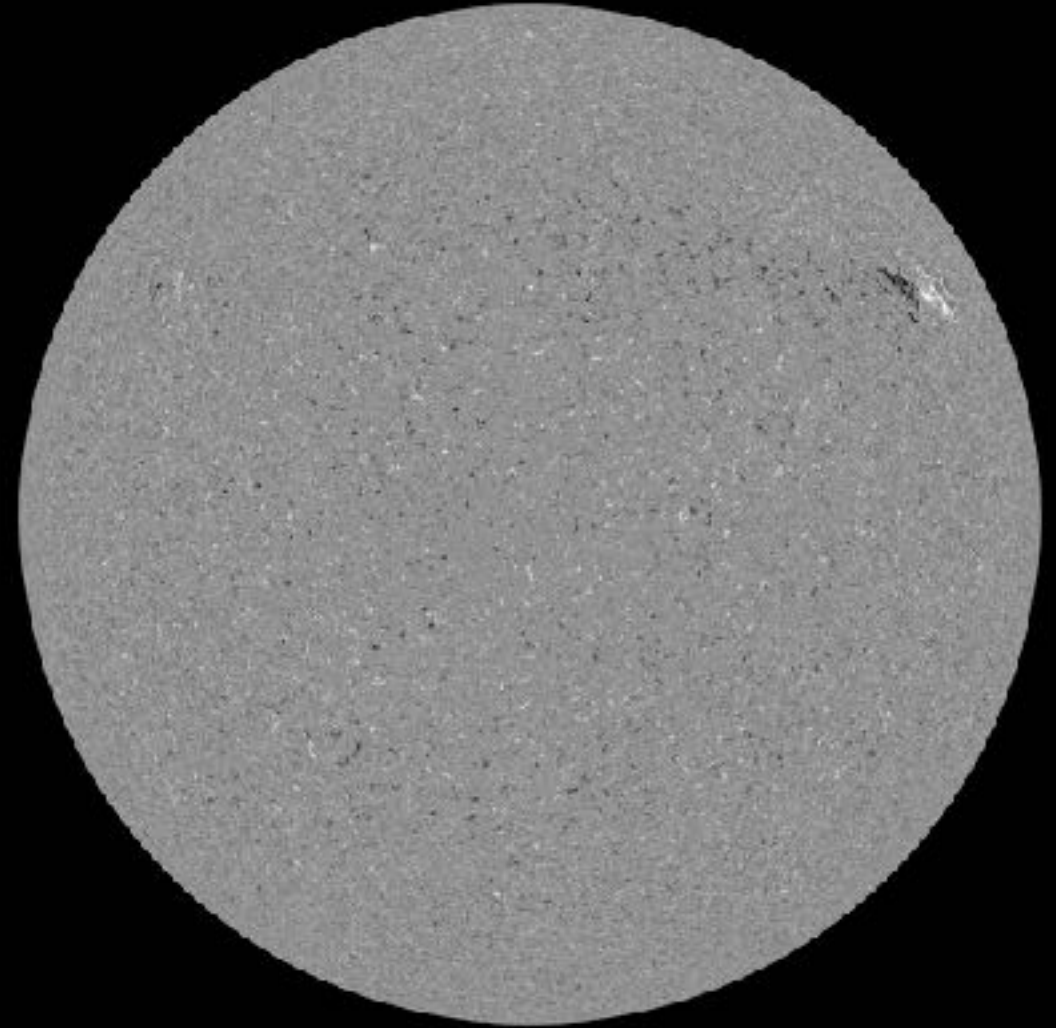
SDO/HMI Magnetogram 2020-10-02 11:45:00

# Solar active regions - Saturday

SDO/HMI White Light 2020-10-03



SDO/HMI Magnetogram 2020-10-03

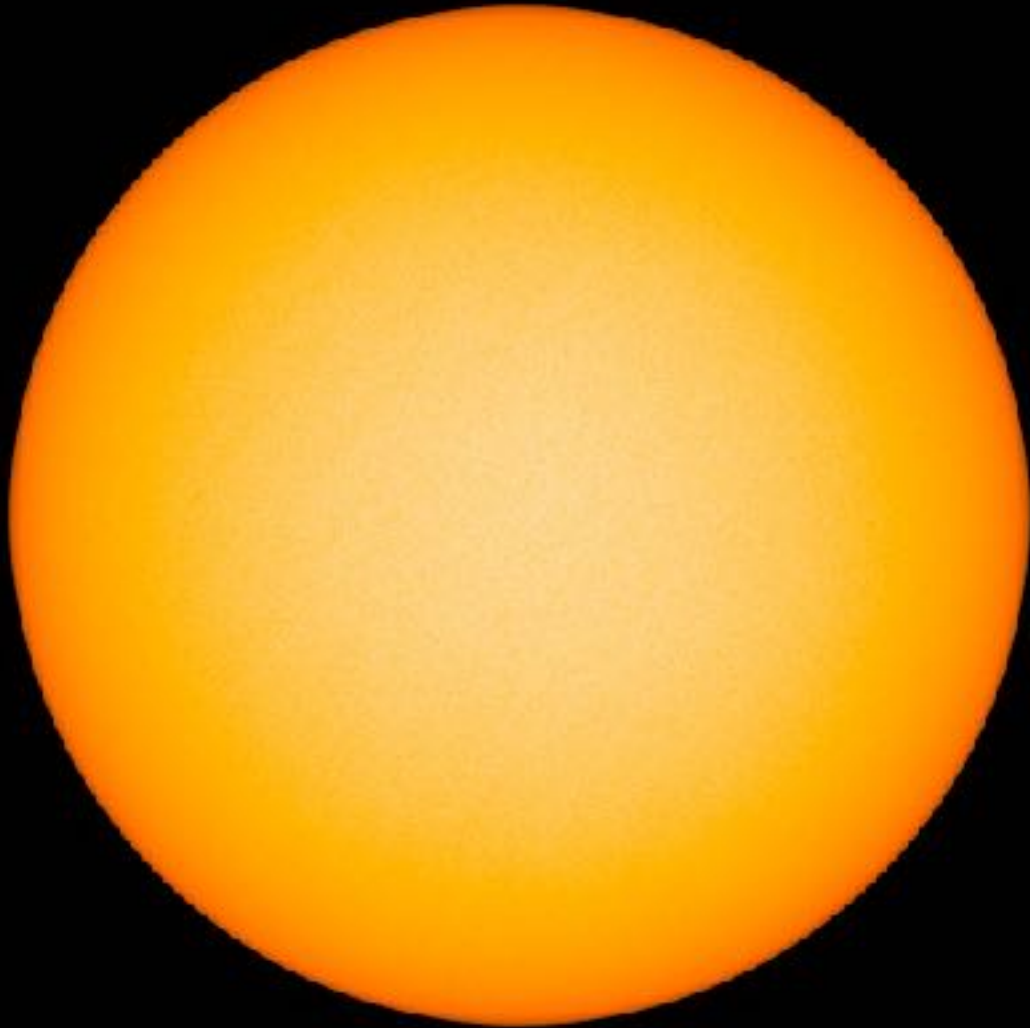


SDO/HMI White Light 2020-10-03 2430903\_114500

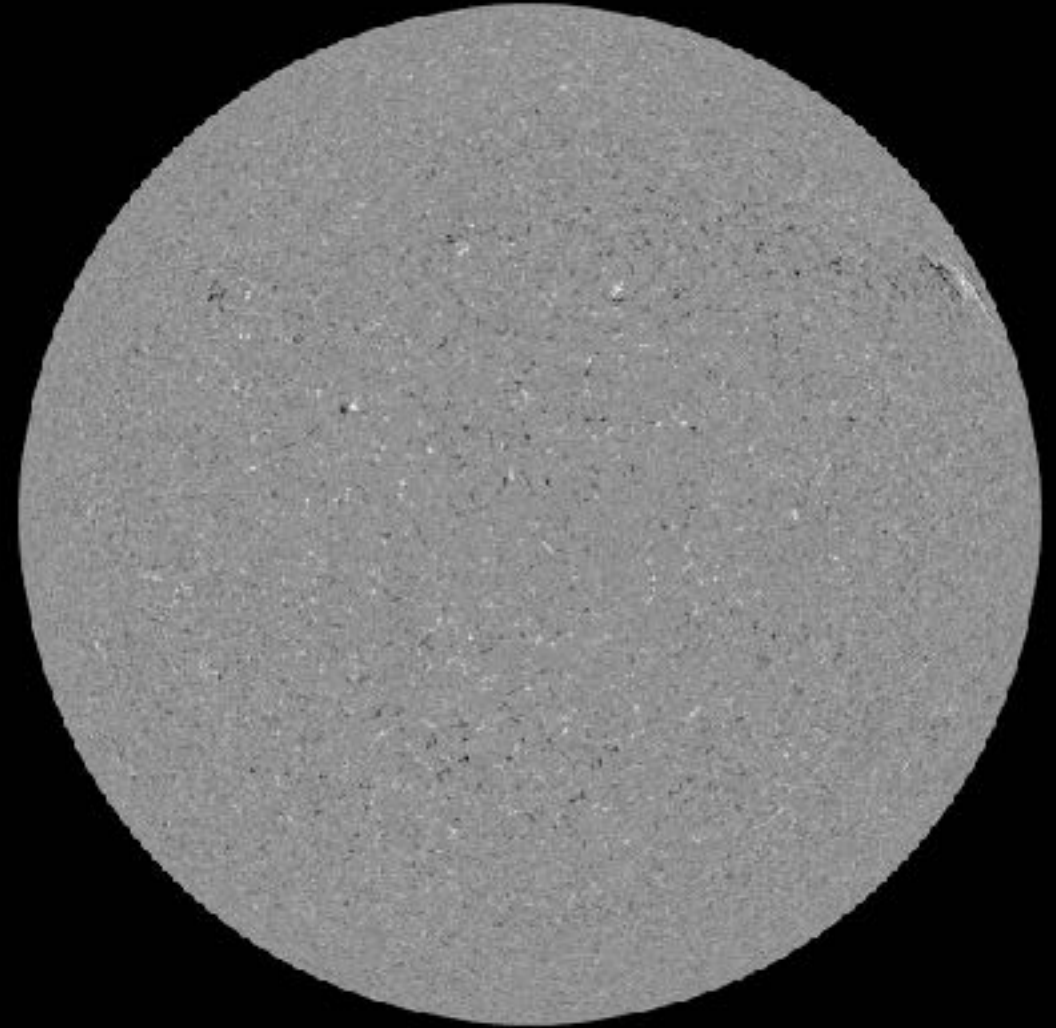
SDO/HMI Magnetogram 2020-10-03 2430903\_114500

# Solar active regions - Sunday

SDO/HMI White Light 2020-10-04



SDO/HMI Magnetogram 2020-10-04

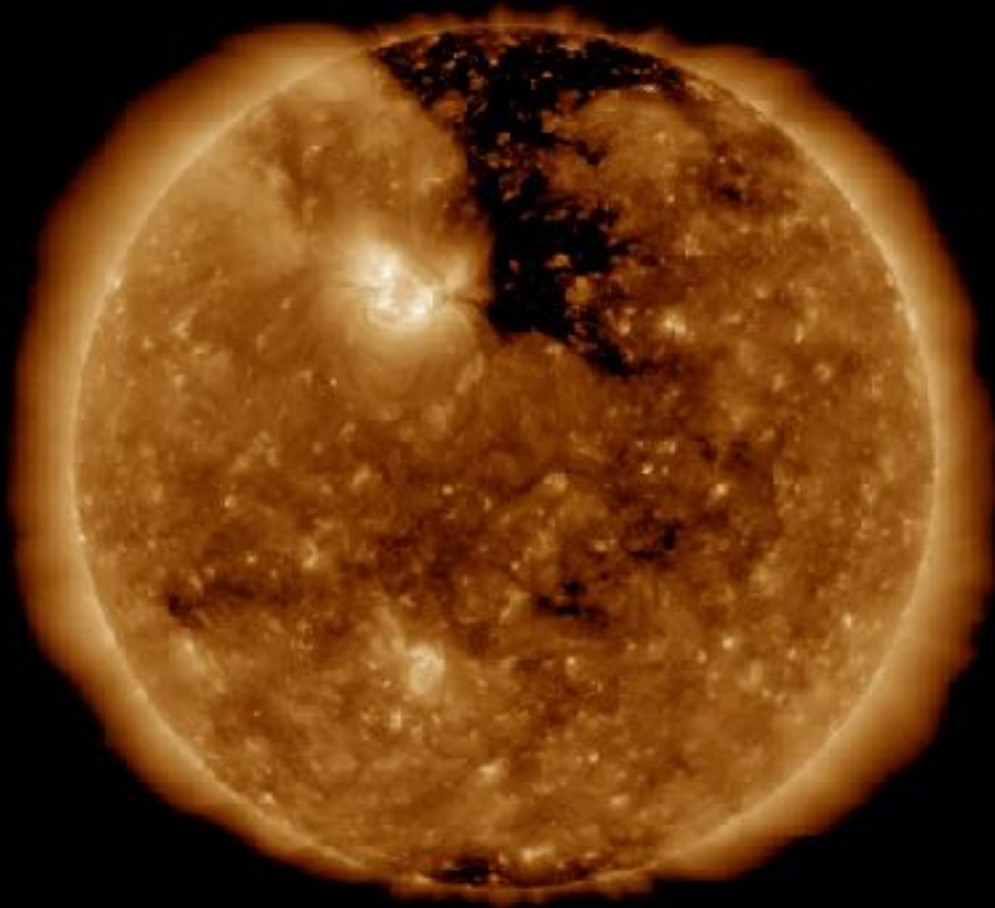


SDO/HMI White Light 2020-10-04\_114500

SDO/HMI Magnetogram 2020-10-04\_114500

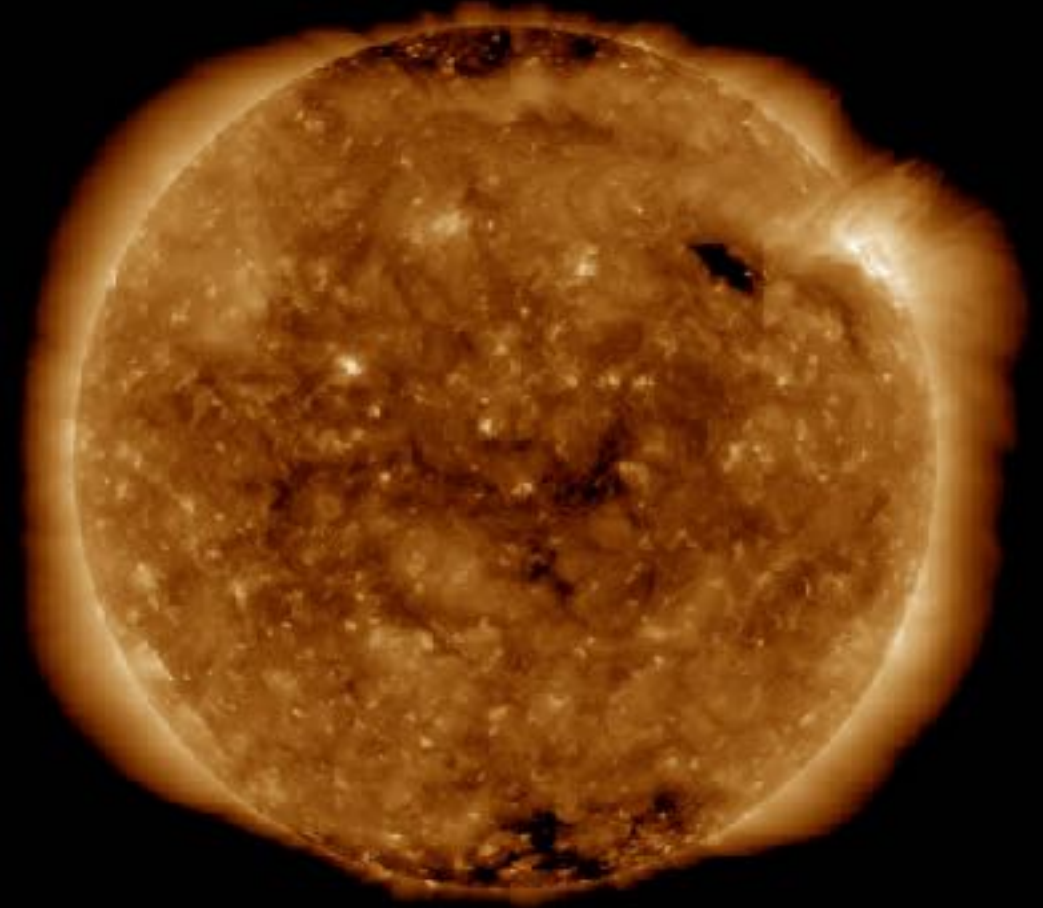
# Coronal holes (CH82+ and CH83-)

SDO/AIA 19.3 nm 2020-09-27



SDO/AIA 193 2020-09-27 12:17:23 UT

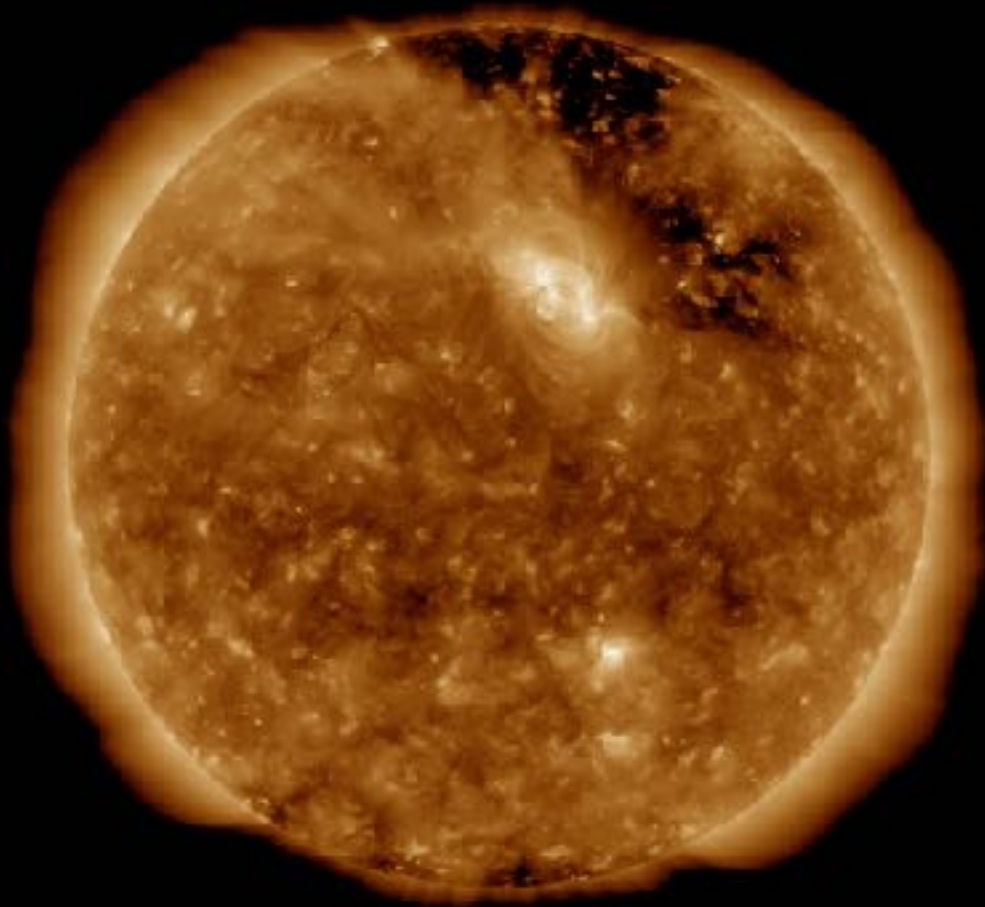
SDO/AIA 19.3 nm 2020-10-04



SDO/AIA 193 2020-10-04 12:18:17 UT

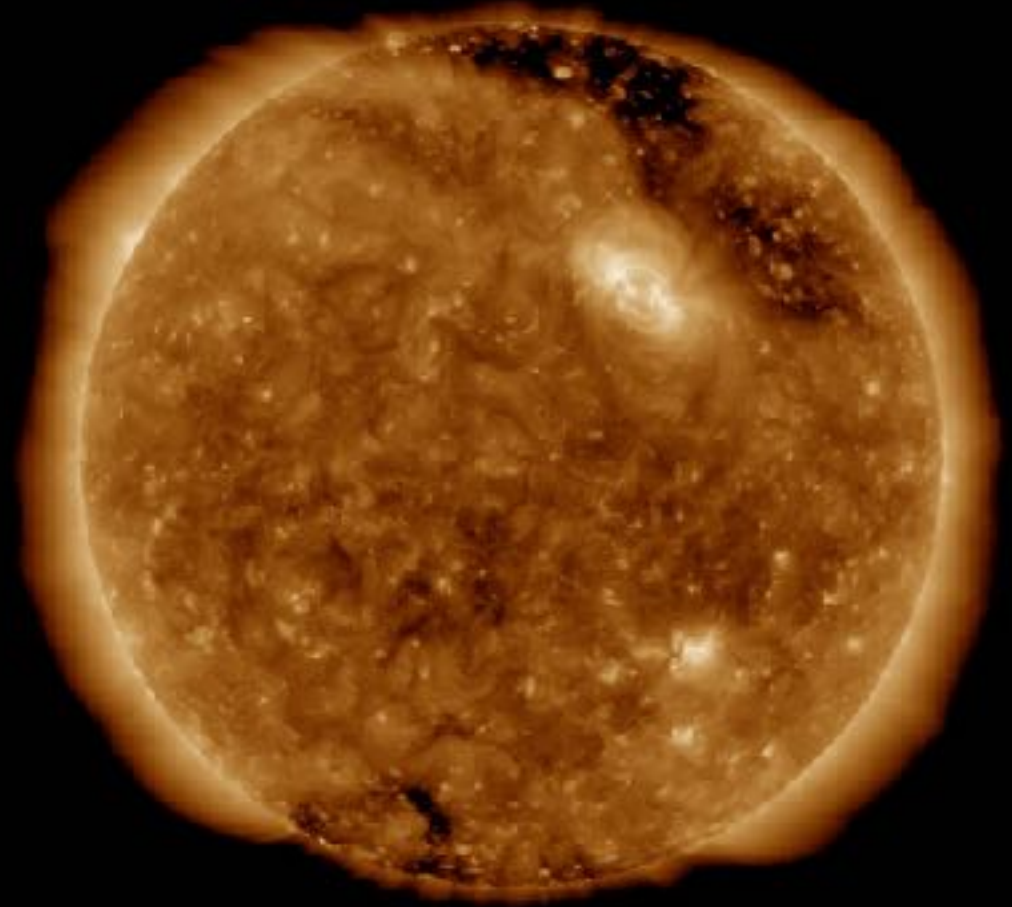
# Coronal holes: CH82+

SDO/AIA 19.3 nm 2020-09-29



SDO/AIA 193 2020-09-29 12:18:17 UT

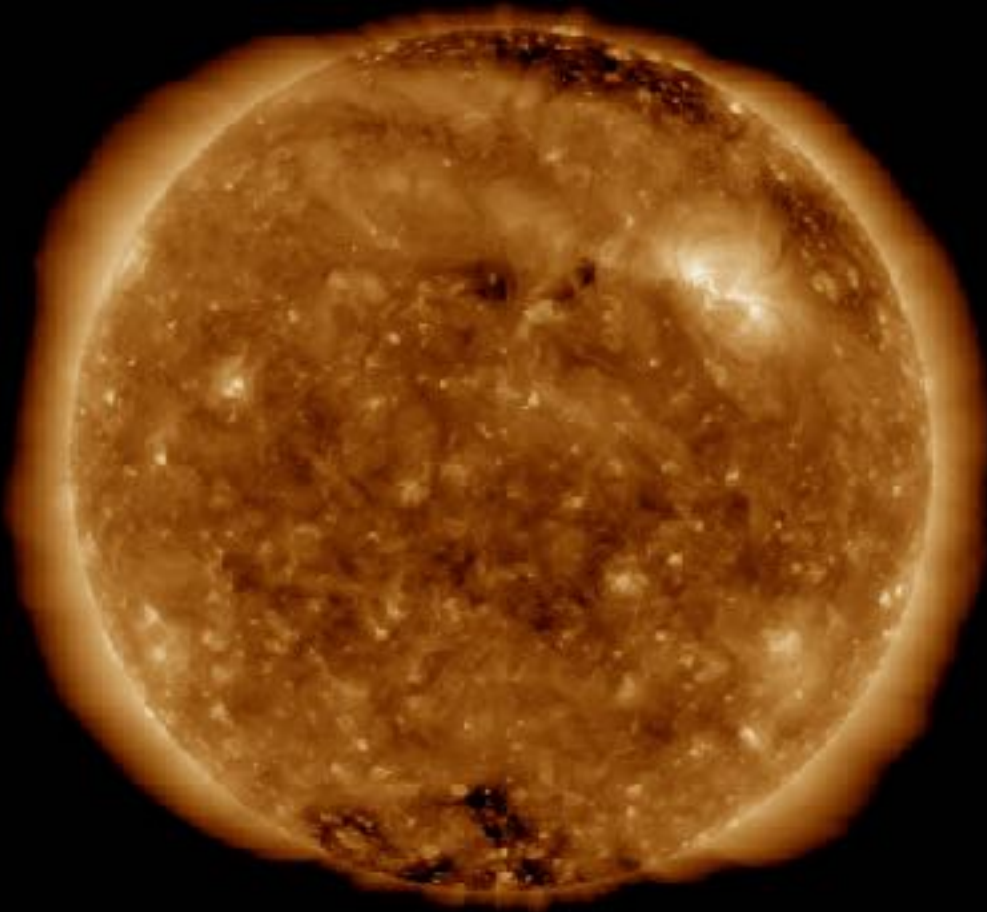
SDO/AIA 19.3 nm 2020-09-30



SDO/AIA 193 2020-09-30 07:00:41 UT

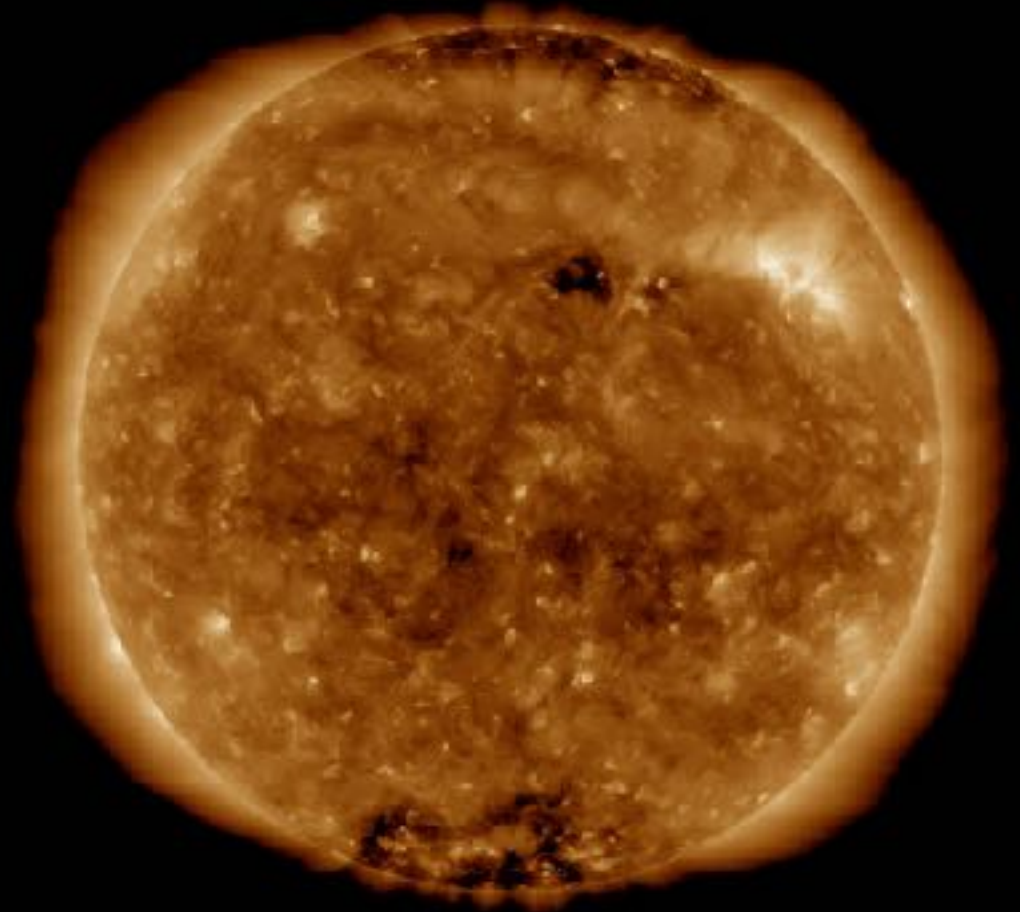
# Coronal holes: CH 83-

SDO/AIA 19.3 nm 2020-10-01



SDO/AIA 193 2020-10-01 12:17:53 UT

SDO/AIA 19.3 nm 2020-10-02

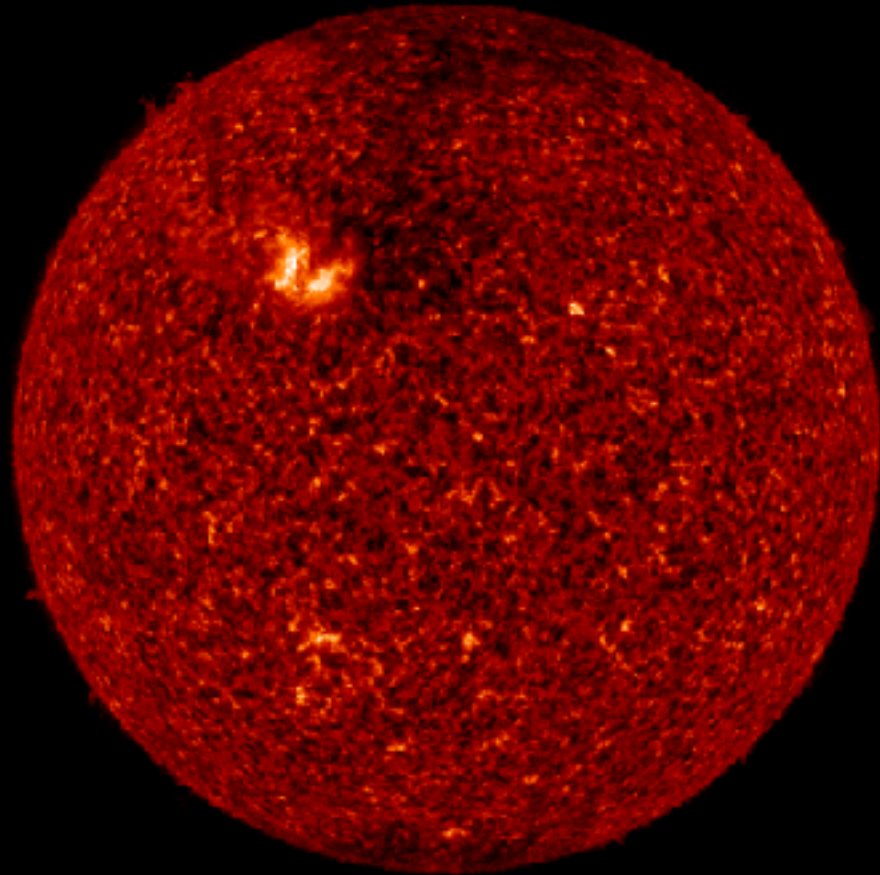


SDO/AIA 193 2020-10-02 12:16:53 UT

# Filaments

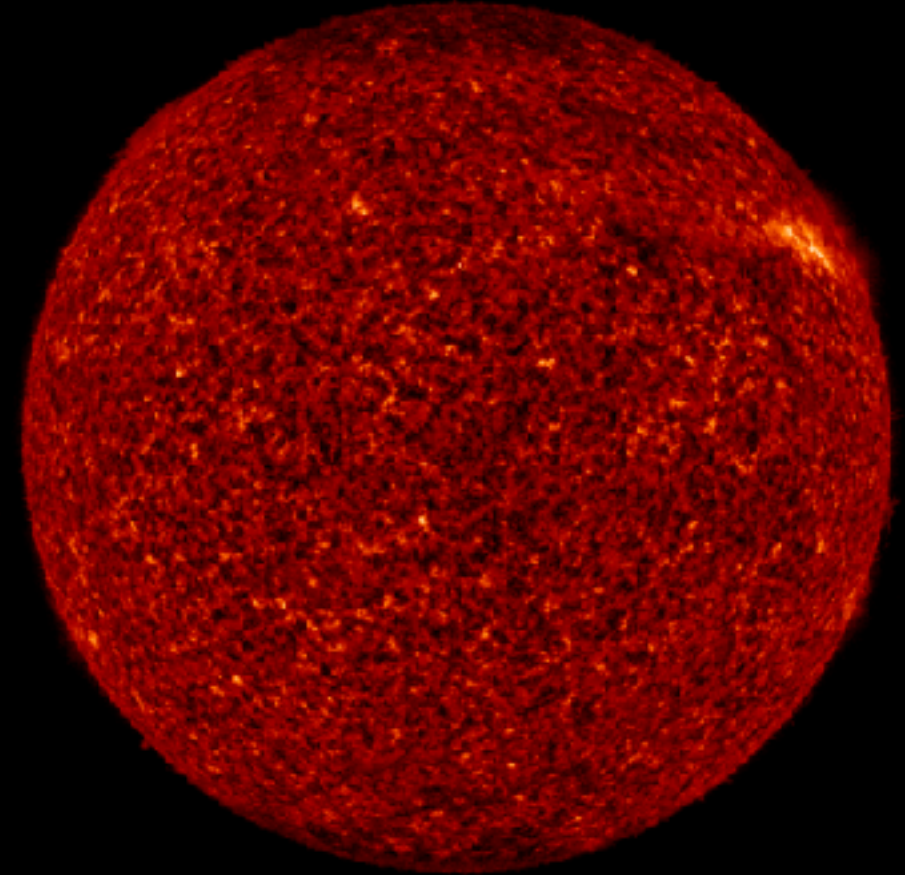
SDO/AIA 30.4 nm 2020-09-27

SDO/AIA AIA 304Å 2020-09-27T00:00:06.58

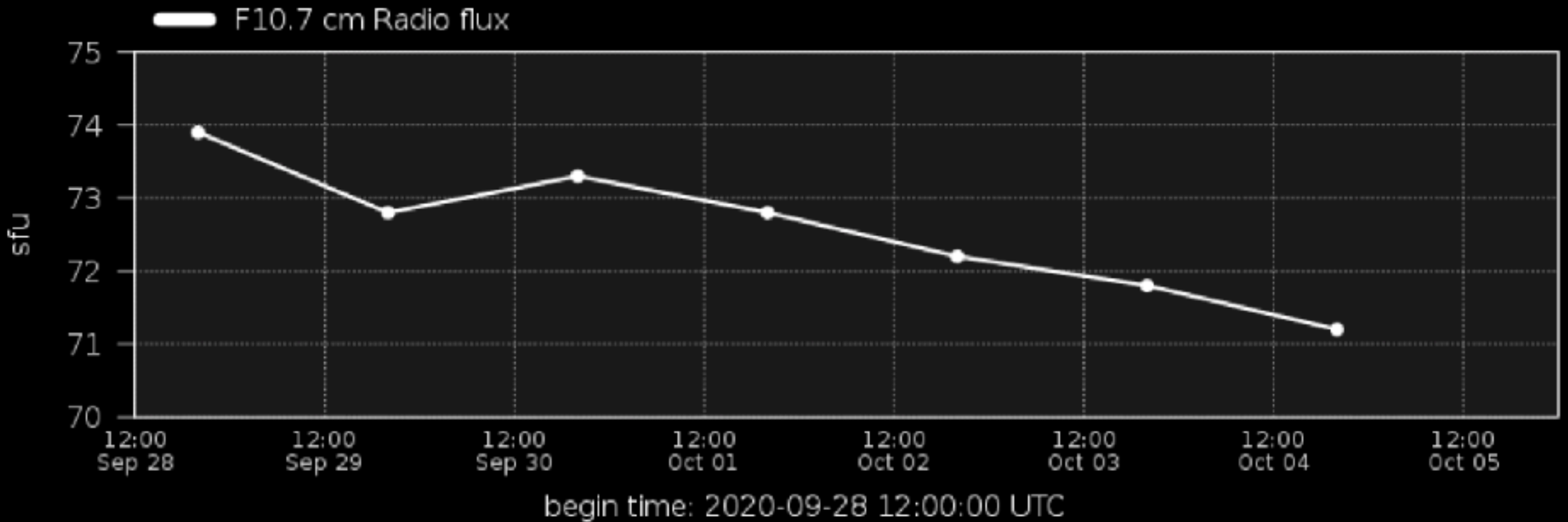


SDO/AIA 30.4 nm 2020-10-04

SDO/AIA AIA 304Å 2020-10-04T00:00:06.58

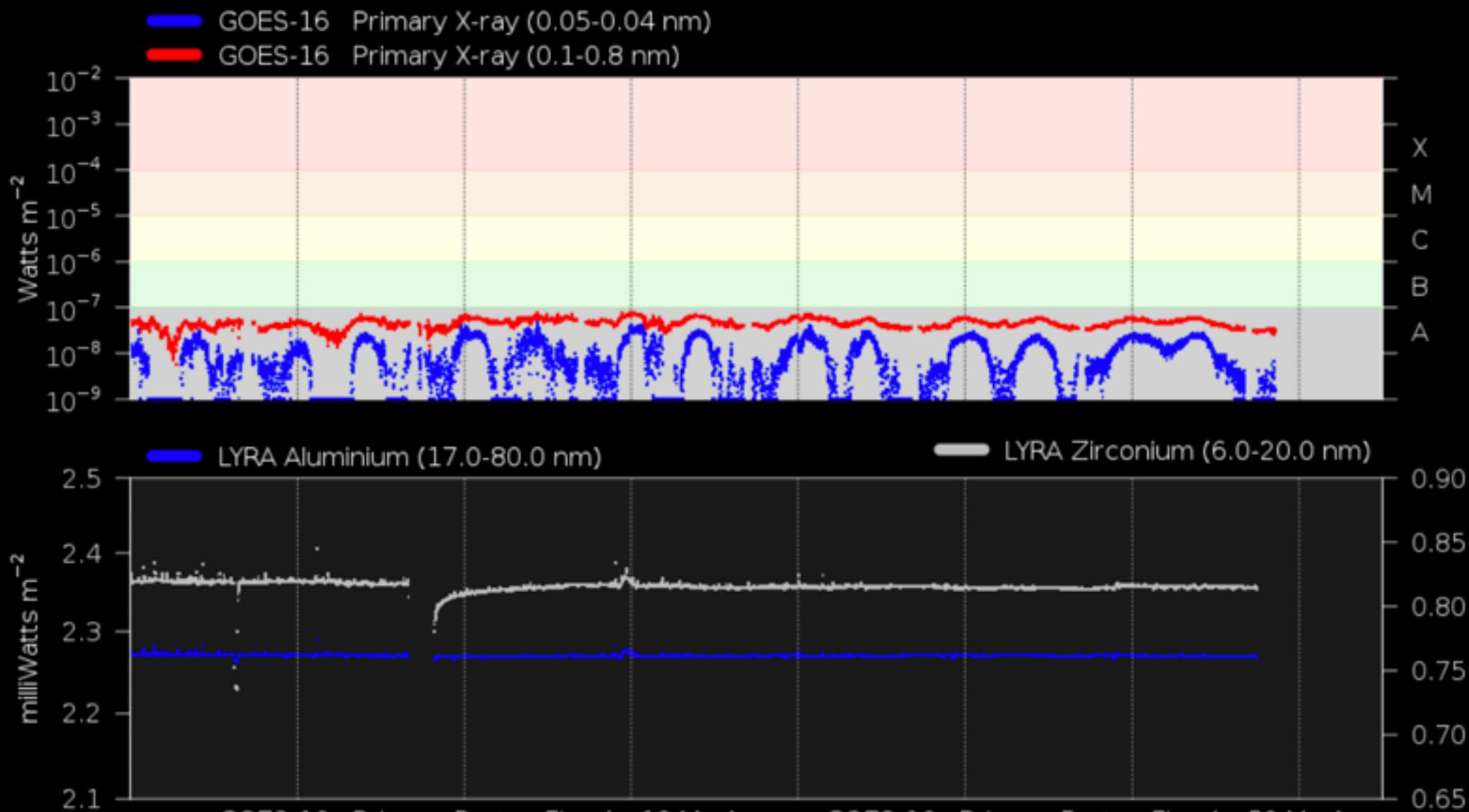


# Solar F10.7cm radio flux

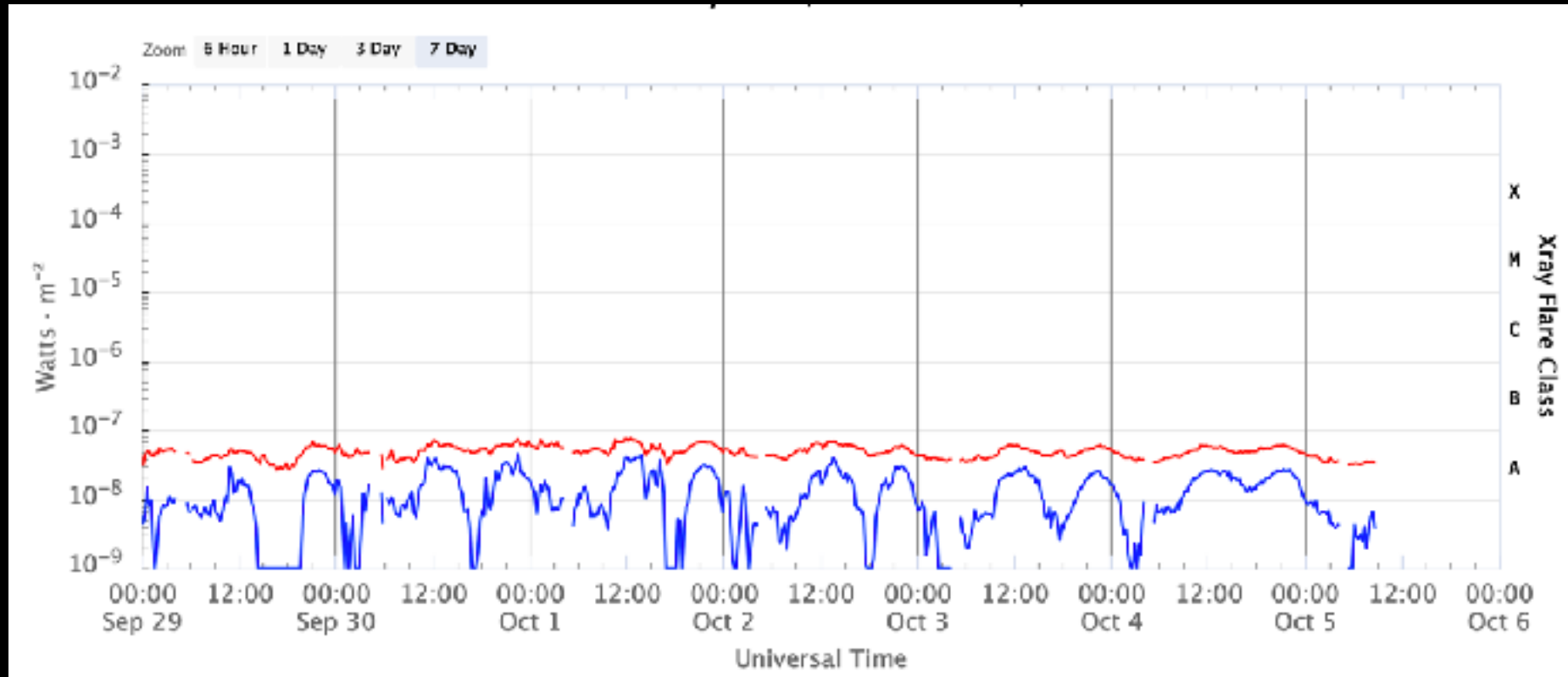




# Solar X-Ray and UV flux

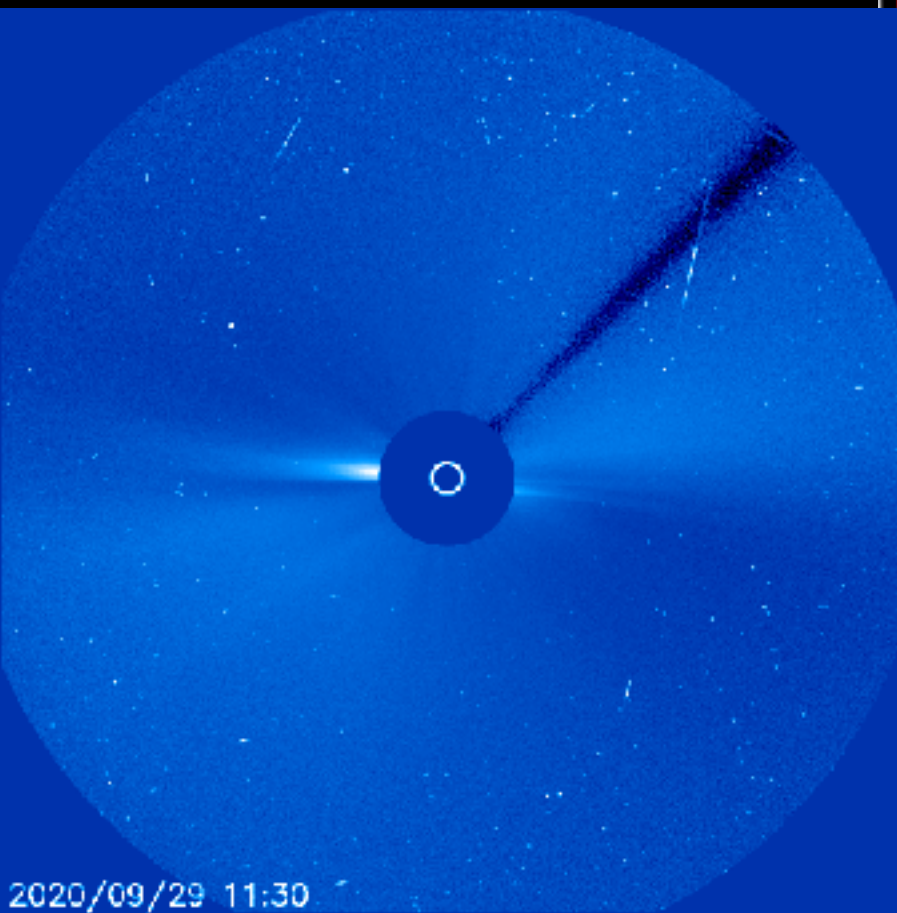
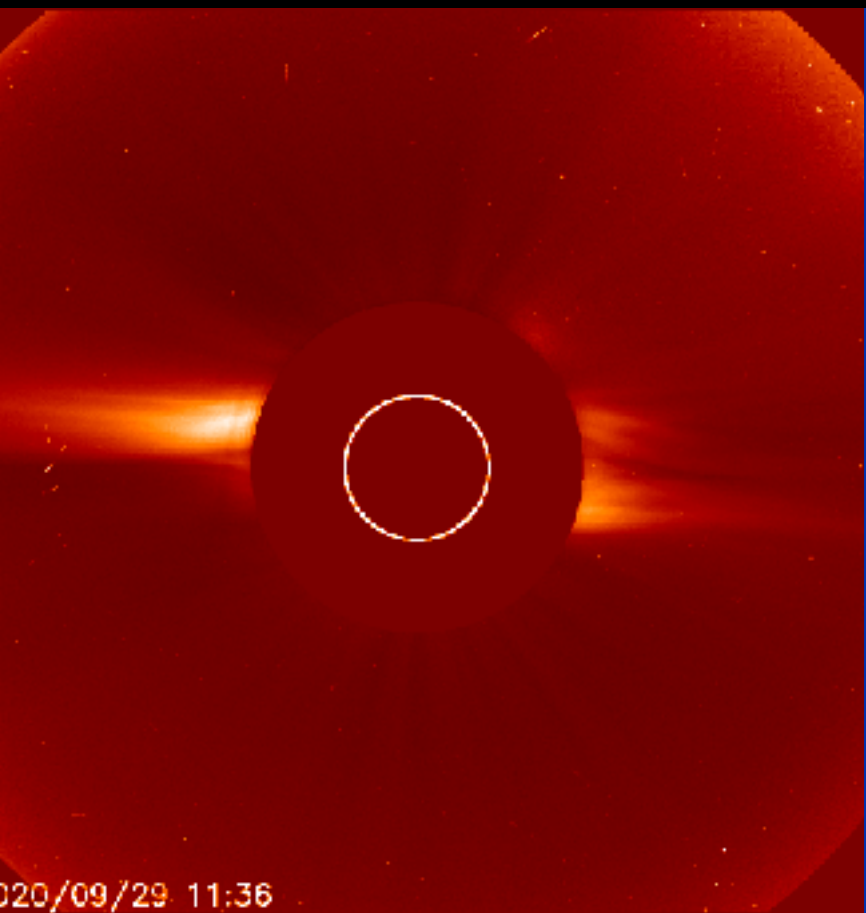


# Flaring activity



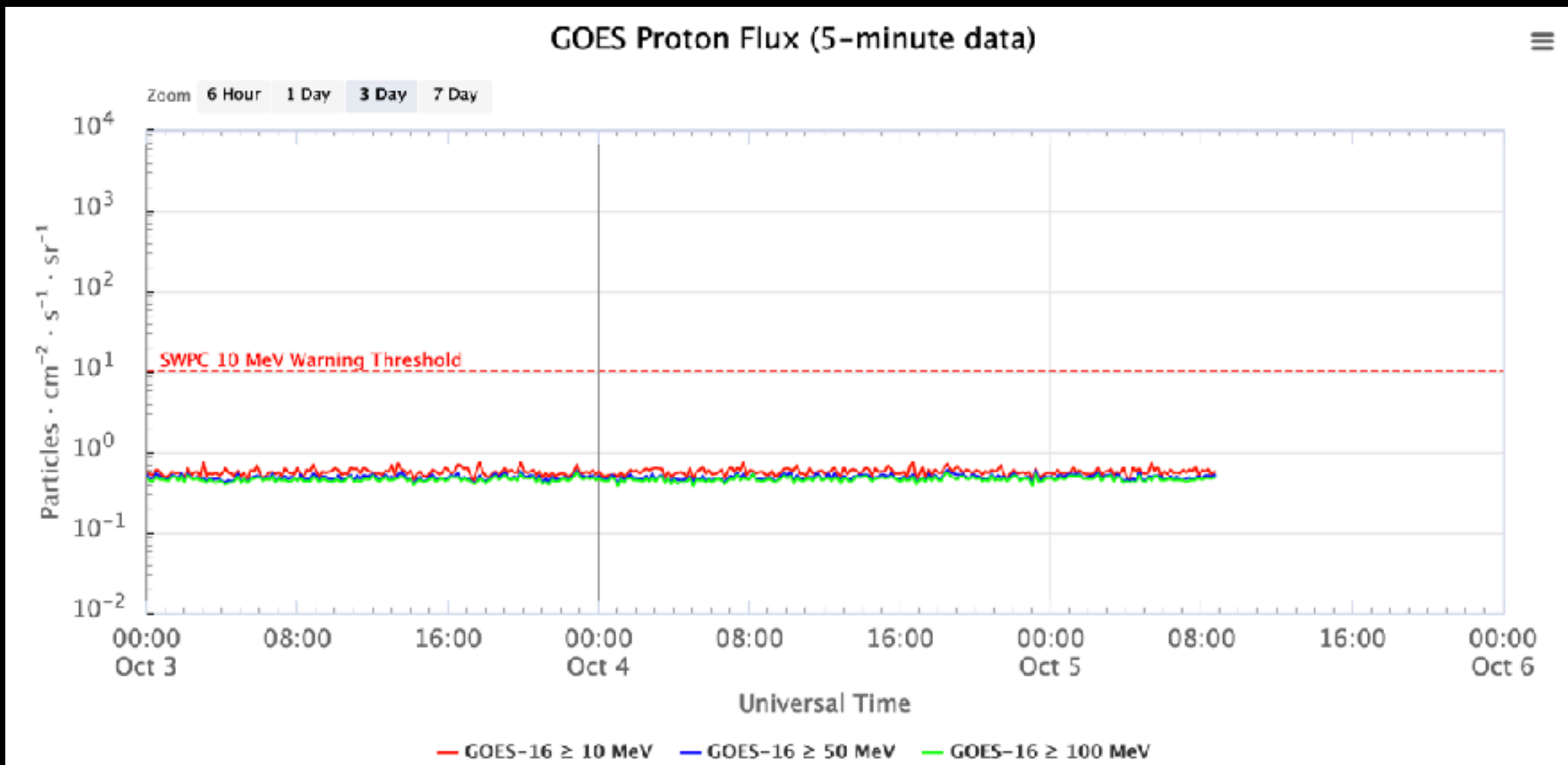
Issue date	2020-09-28	2020-09-29	2020-09-30	2020-10-01	2020-10-02	2020-10-03	2020-10-04	2020-10-05
Probability	01 01 01	01 01 01	01 01 01	01 00 01	01 01 01	01 01 01	01 01 01	01 01 01
Observed	00 00 00 00	00 00 00 00	00 00 00 00	00 00 00 00	00 00 00 00	00 00 00 00	00 00 00 00	00 00 00 00

# Coronal Mass Ejections

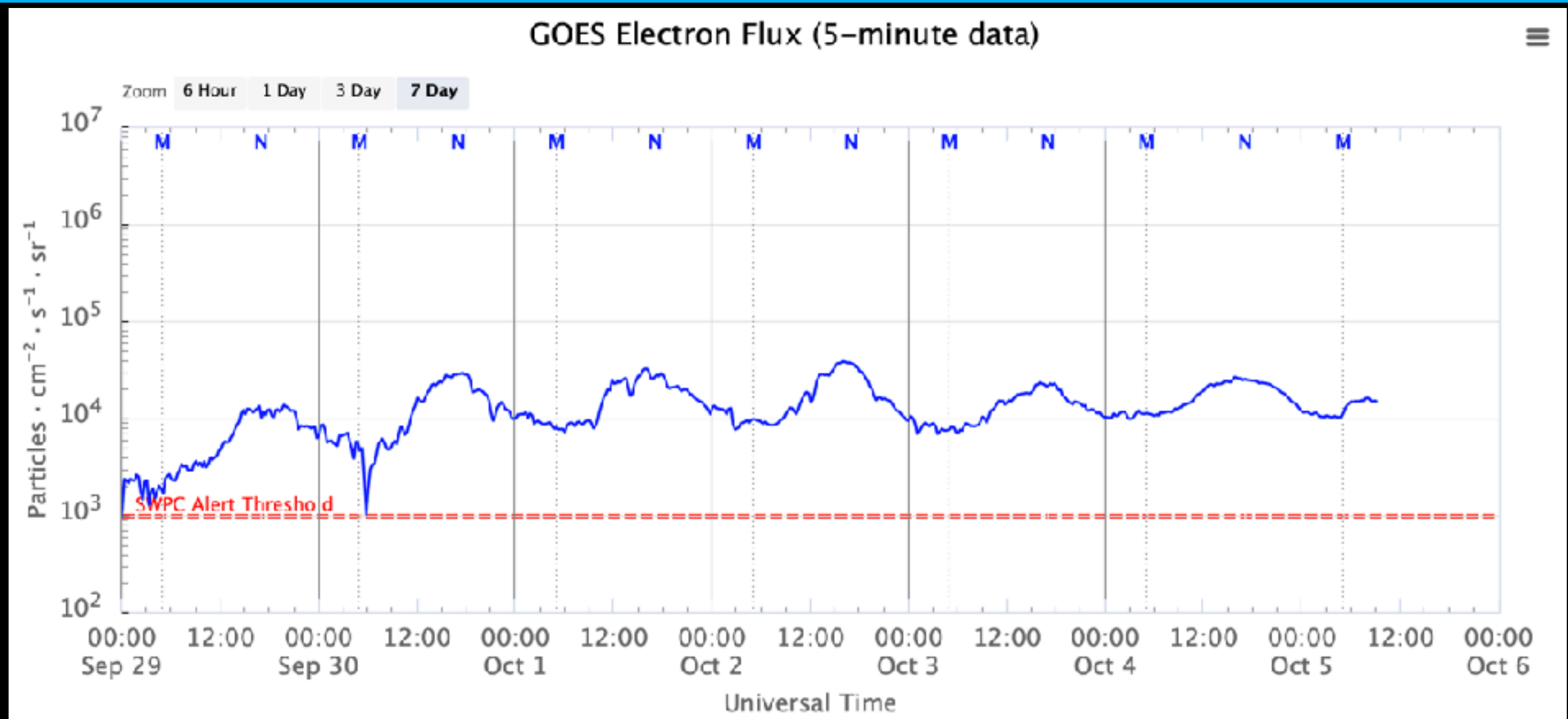


				01:25 10/05
				20:12 10/04
				17:36 10/04
				14:48 10/04
				11:24 10/04
				08:12 10/04
				05:24 10/04
				02:24 10/04
				23:24 10/03
				20:00 10/03
				17:00 10/03
				14:12 10/03
				11:12 10/03
				07:48 10/03
				04:48 10/03
				01:48 10/03
				22:24 10/02
				19:24 10/02
				16:24 10/02
				12:48 10/02
				10:12 10/02
				06:24 10/02
				03:18 10/02
				23:24 10/01
				19:42 10/01
				16:48 10/01
				13:36 10/01
				10:36 10/01
				00:36 10/01
				21:42 09/30
				18:48 09/30
				16:00 09/30
				12:12 09/30
				09:36 09/30
				06:48 09/30
				04:12 09/30
				00:48 09/30
				21:24 09/29
				18:36 09/29
				16:00 09/29
				12:24 09/29
				09:36 09/29
				06:36 09/29
				03:36 09/29
				00:00 09/29

# Solar proton flux



# GOES 16 > 2MeV electron flux



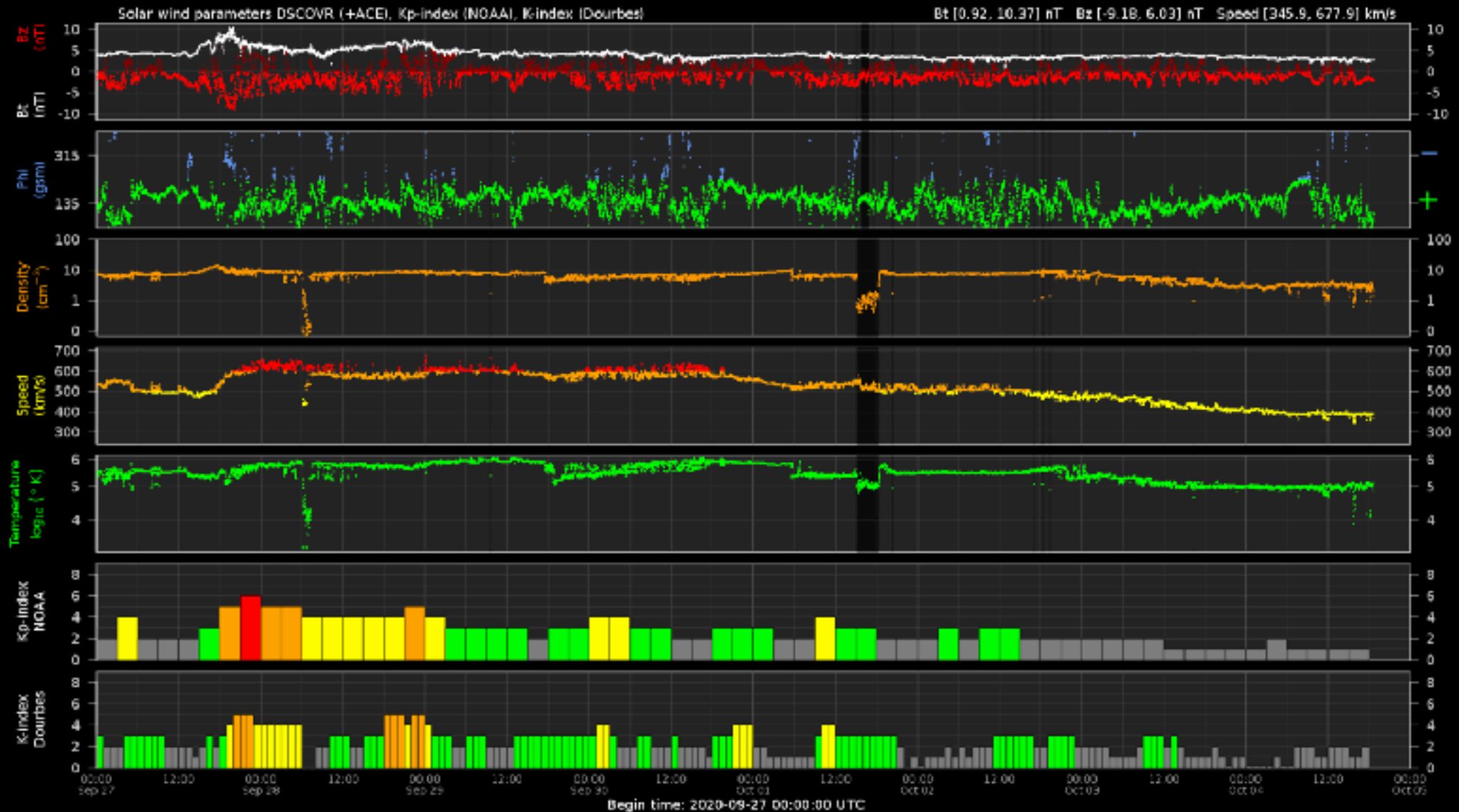
# Solar Wind and Geomagnetic Activity



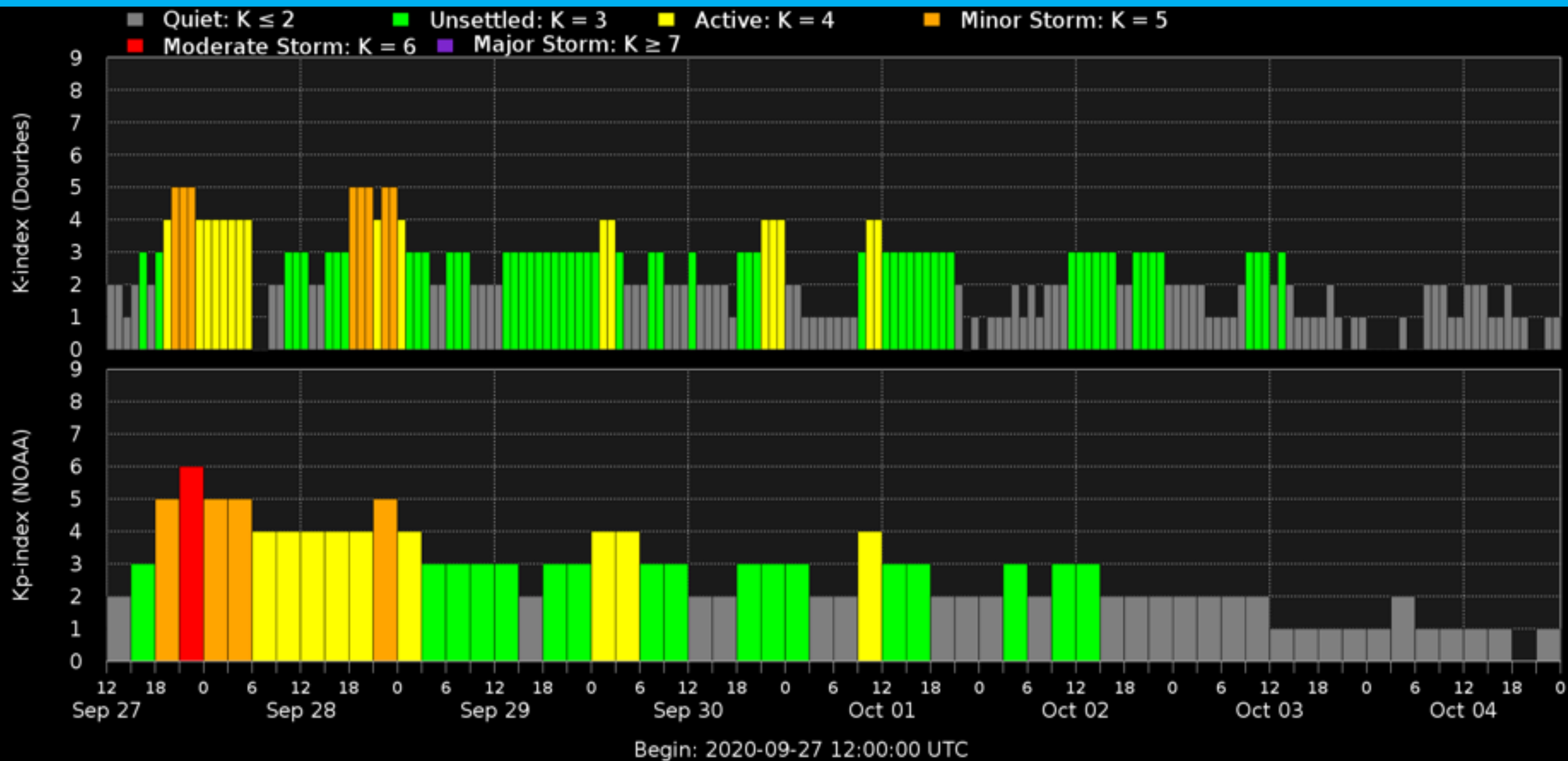
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# Solar wind parameters (ACE and DSCOVR data)



# Geomagnetic activity (K-indexes)





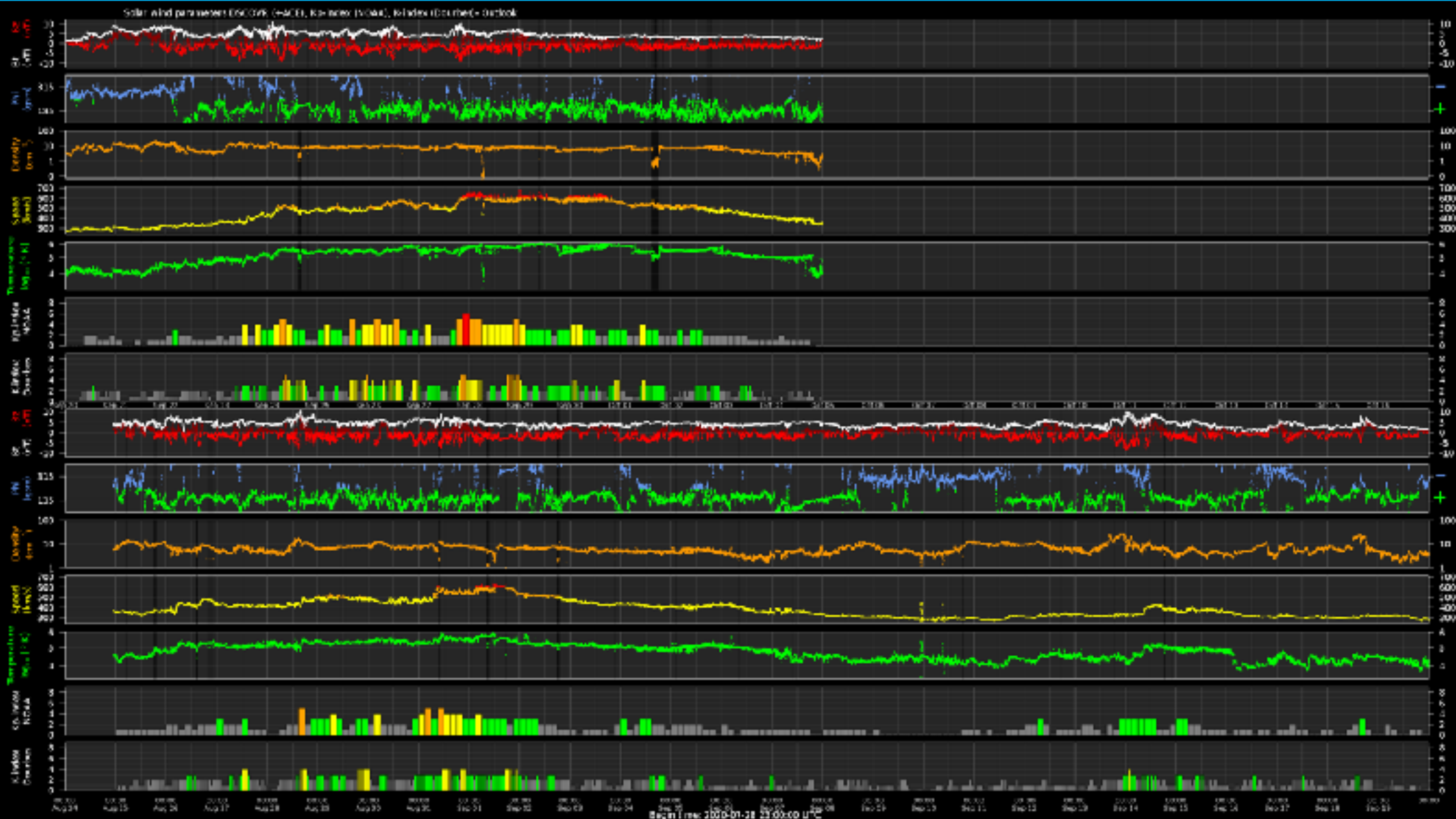
# Outlook



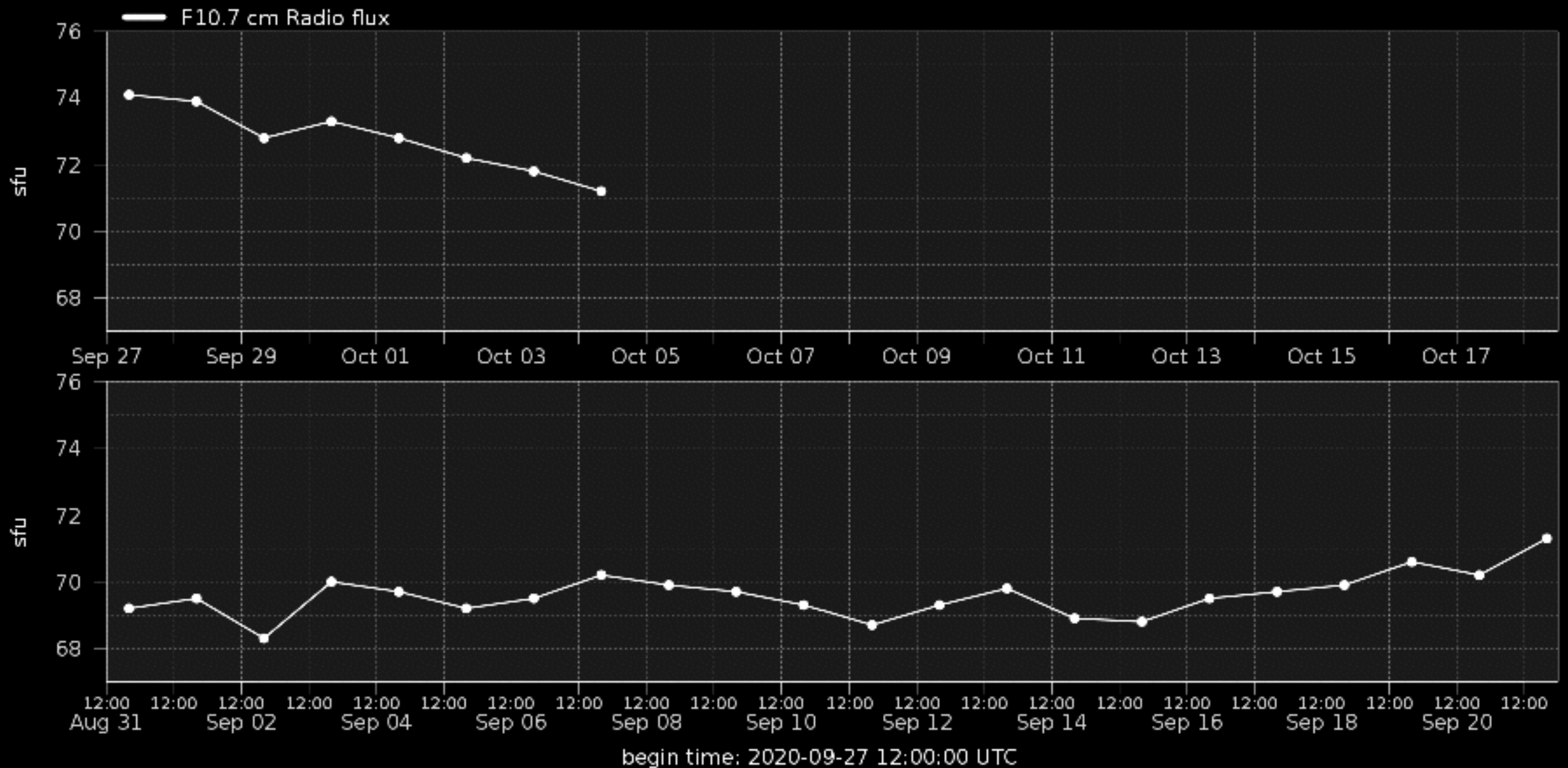
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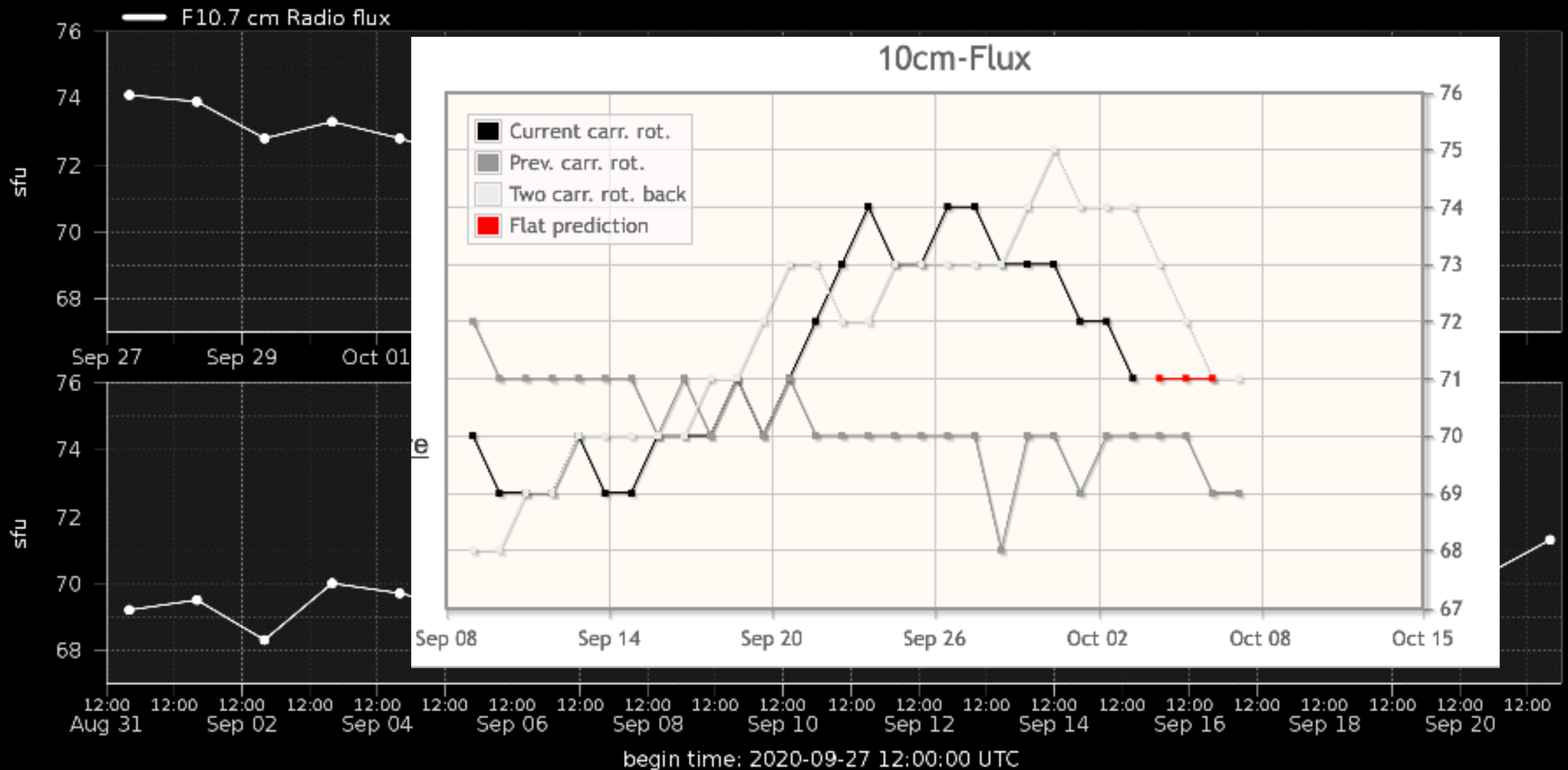
# Outlook: Solar wind and Geomagnetic Activity



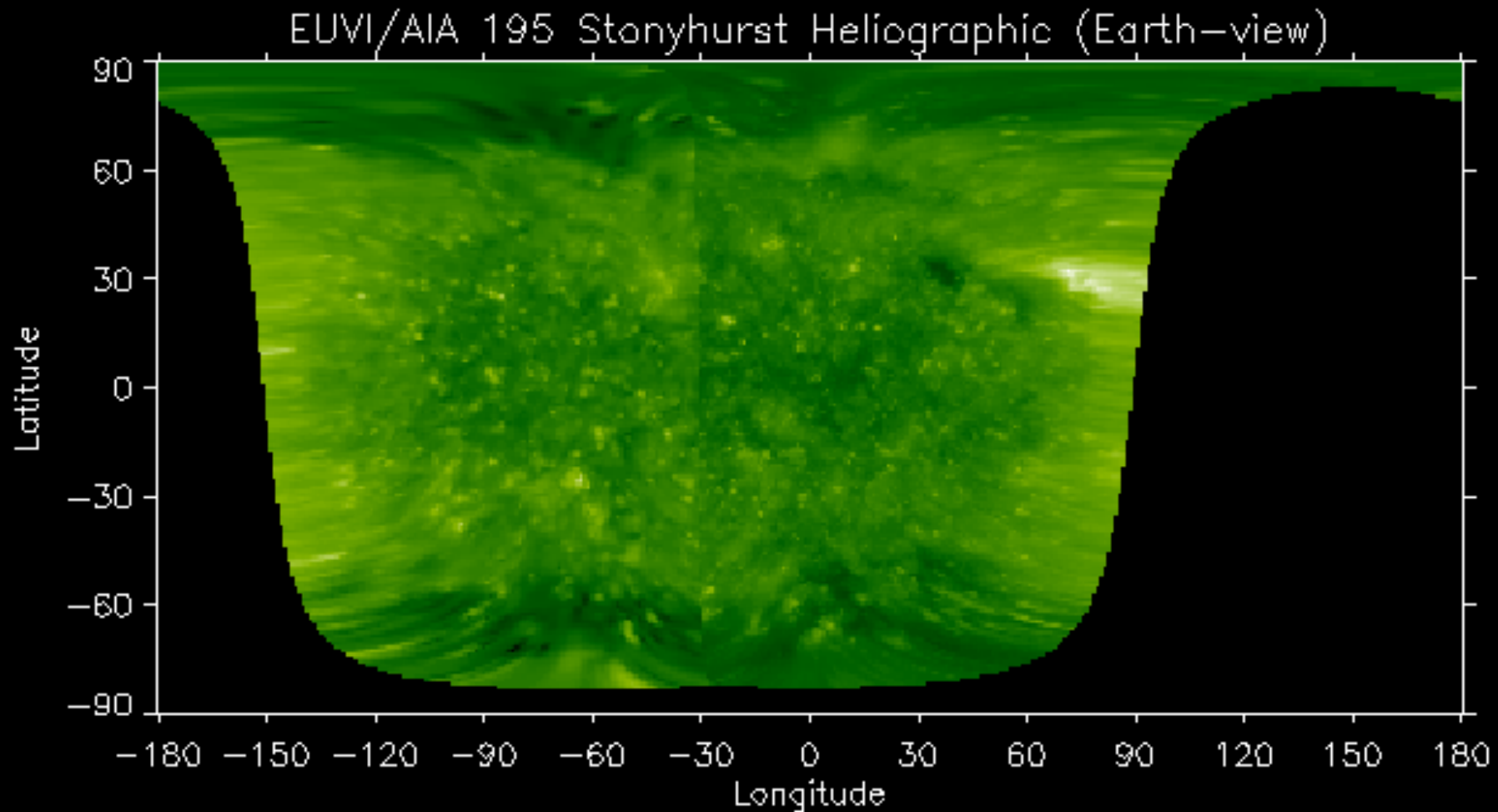
# Outlook: F10 flux



# Outlook: F10 flux



# Outlook: Solar activity



Observation date: 2020/10/04 11:45:30

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See you at our next briefing!

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