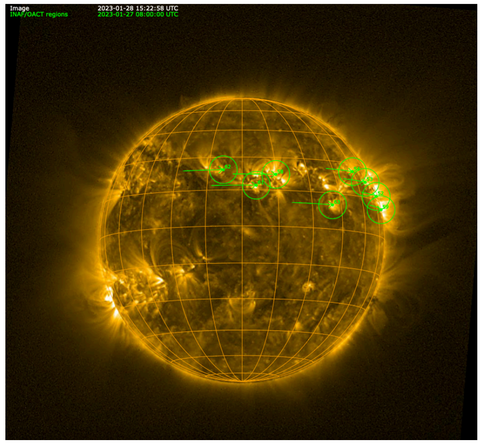
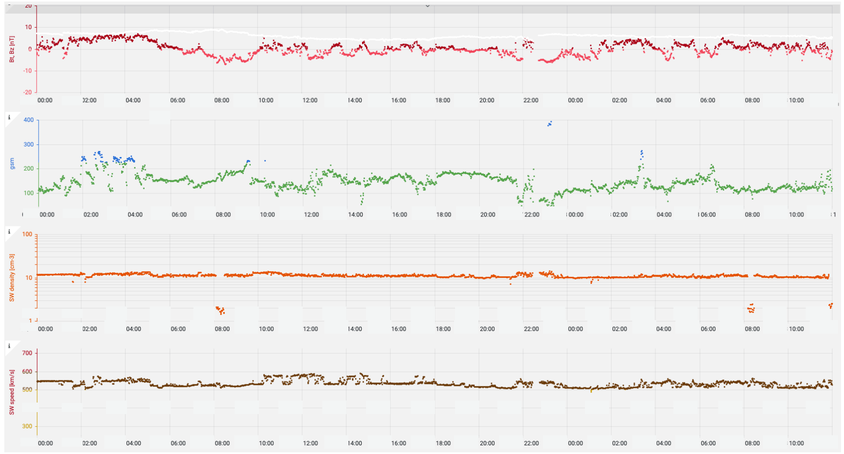
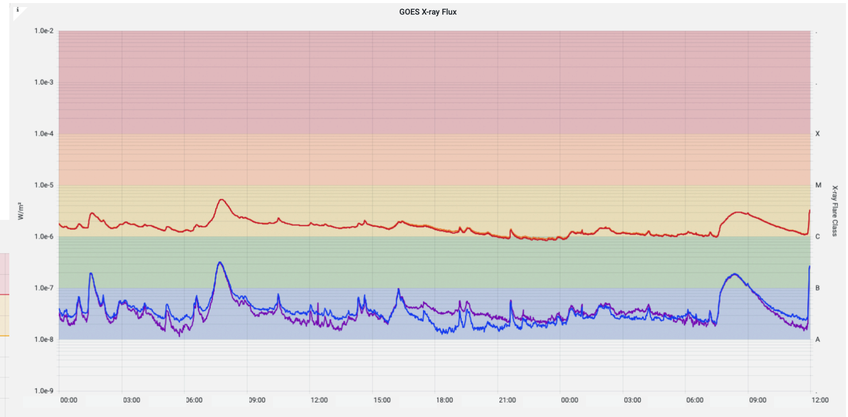
Ursigram matching

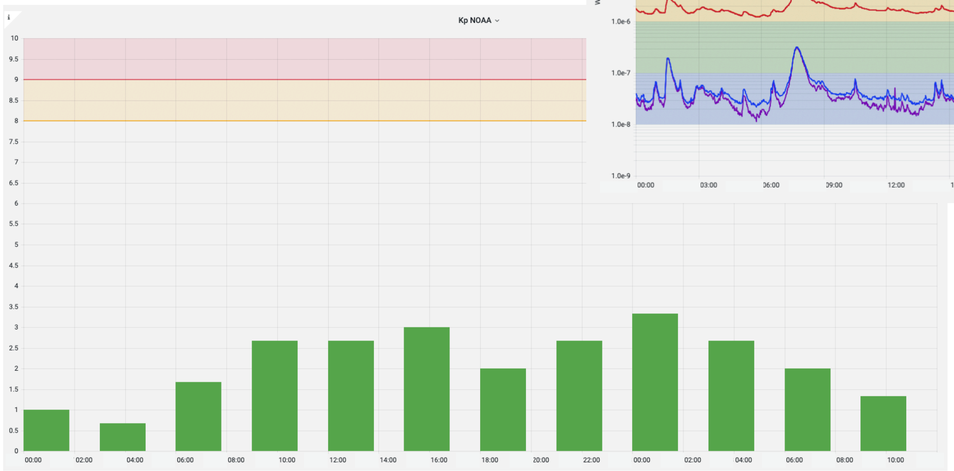
Solution

Ursigram 2023/01/28










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#---------------------------------------------------------------#
# DAILY BULLETIN ON SOLAR AND GEOMAGNETIC ACTIVITY from the SIDC #
# (RWC Belgium)                                                 #
#---------------------------------------------------------------#
SIDC URSIGRAM 30128
SIDC SOLAR BULLETIN 28 Jan 2023, 1237UT
SIDC FORECAST (valid from 1230UT, 28 Jan 2023 until 30 Jan 2023)
SOLAR FLARES  : C-class flares expected, (probability >=50%)
GEOMAGNETISM  : Quiet (A<20 and K<4)
SOLAR PROTONS : Quiet
PREDICTIONS FOR 28 Jan 2023  10CM FLUX: 142 / AP: 010
PREDICTIONS FOR 29 Jan 2023  10CM FLUX: 142 / AP: 006
PREDICTIONS FOR 30 Jan 2023  10CM FLUX: 144 / AP: 004
COMMENT: Solar flaring activity was at low levels over the past 24 hours.
The largest flare was a long duration C2.9 flare, peaking at 08:35 UT, and
was associated with NOAA AR3202 on the west limb. This region produced the
majority of the flaring activity but is now about to rotate over the west
limb. Low flaring activity was also produced by NOAA AR 3200. The remaining
regions on the solar disk are all relatively small and have not produced
significant flaring activity. The solar flaring activity is expected to be
at low levels over the next 24 hours with a chance for M-class flares.

No Earth-directed coronal mass ejections (CMEs) were detected in the
available coronagraph imagery over the past 24 hours.

The greater than 10 MeV proton flux was at nominal levels in the past 24
hours and is expected to remain so in the next 24 hours. The greater than 2
MeV electron flux has been below the1000 pfu threshold and is expected to
remain so. The 24h electron fluence was at nominal levels and is expected
to remain so over the next 24 hours.

Over the past 24 hours the solar wind conditions (ACE and DSCOVR) were
indicative of the ongoing influence of a mild high speed stream. Over the
past 24 hours the solar wind speed varied between 490 and 590 km/s. The
interplanetary magnetic fluctuated around 5nT with a minimum Bz of -6 nT.
The interplanetary magnetic field was predominantly in the positive sector
(directed away from the Sun). The solar wind conditions are expected to
continue to be mildly enhanced on January 28 before beginning to gradually
return to a slow solar wind regime on January 29 and 30.

The geomagnetic conditions over the past 24 hours were quiet to unsettled.
Quiet to unsettled conditions are expected for the next days.

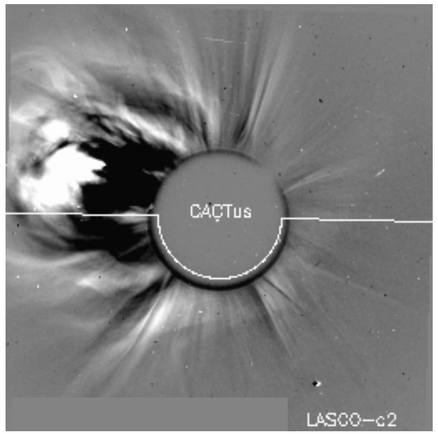
TODAY'S ESTIMATED ISN  : 088, BASED ON 04 STATIONS.

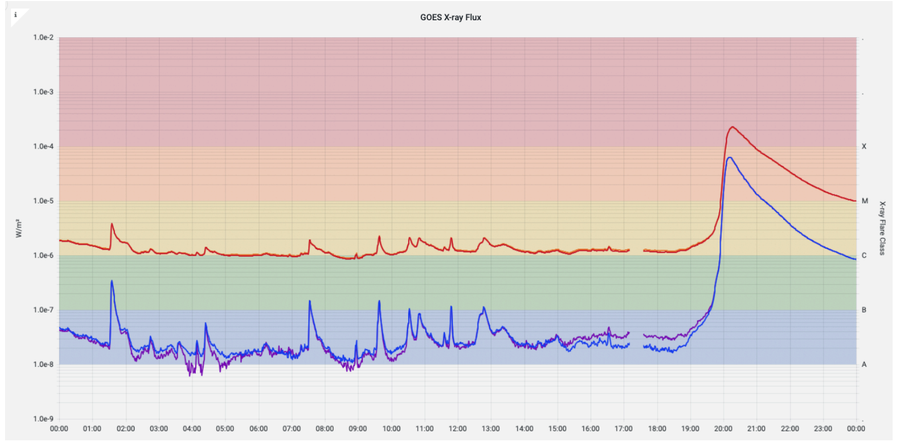
SOLAR INDICES FOR 27 Jan 2023
WOLF NUMBER CATANIA    : 112
10CM SOLAR FLUX        : 145
AK CHAMBON LA FORET    : 019
AK WINGST              : 010
ESTIMATED AP           : 010
ESTIMATED ISN          : 084, BASED ON 14 STATIONS.

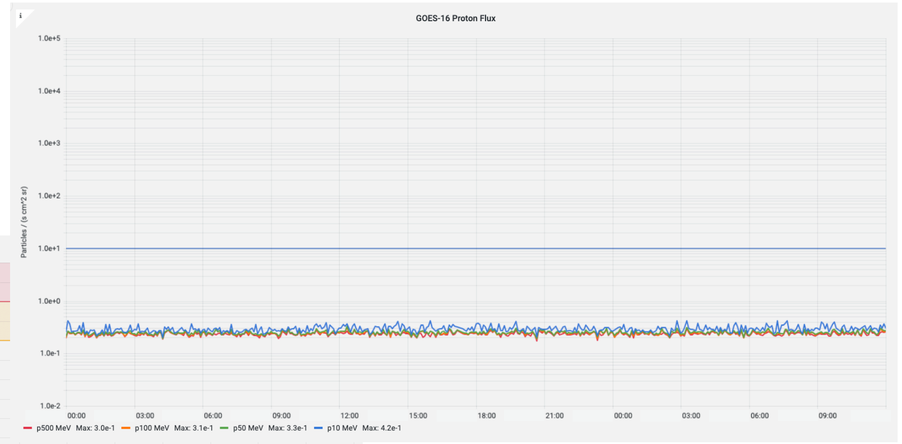
NOTICEABLE EVENTS SUMMARY
DAY BEGIN MAX  END  LOC    XRAY OP  10CM Catania/NOAA RADIO_BURST_TYPES
NONE
END
```

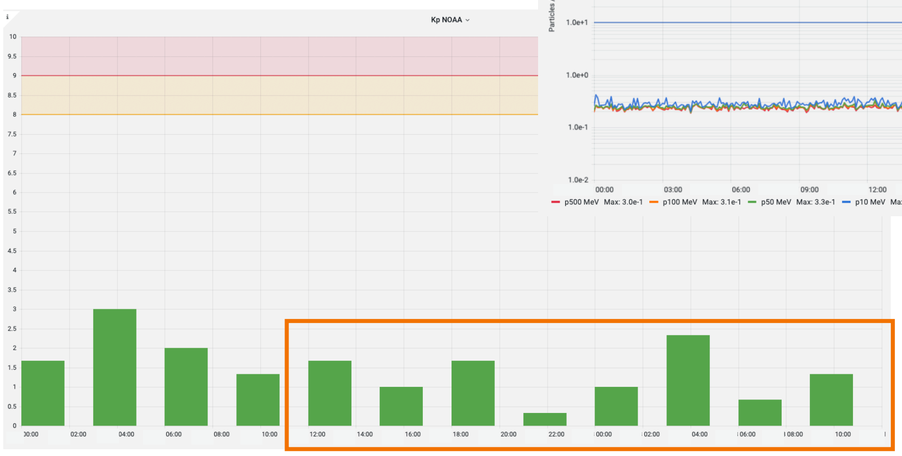
K<4

Ursigram 2023/02/18










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#-----------------------------------------------------------------#
# DAILY BULLETIN ON SOLAR AND GEOMAGNETIC ACTIVITY from the SIDC  #
# (RWC Belgium)                                                   #
#-----------------------------------------------------------------#
SIDC URSIGRAM 30218
SIDC SOLAR BULLETIN 18 Feb 2023, 1235UT
SIDC FORECAST (valid from 1230UT, 18 Feb 2023 until 20 Feb 2023)
SOLAR FLARES  : M-class flares expected (probability >=50%)
GEOMAGNETISM  : Minor storm expected (A>=30 or K=5)
SOLAR PROTONS : Quiet
PREDICTIONS FOR 18 Feb 2023  10CM FLUX: 160 / AP: 011
PREDICTIONS FOR 19 Feb 2023  10CM FLUX: 165 / AP: 034
PREDICTIONS FOR 20 Feb 2023  10CM FLUX: 168 / AP: 016
COMMENT: Solar flaring activity reached high levels over the past 24 hours.
The largest flare was a X2.2 flare, with peak time 20:16 UTC on February
17, associated with NOAA AR 3229 in the north east of the solar disk. This
event was associated with a dimming and EUV wave as well as a Type II radio
signature. This region was responsible for much of the flaring activity.
NOAA AR 3226 also produced low level flaring activity.  NOAA AR3225
exhibited rapid growth over the period.  A new region is also expected to
rotate onto the disk over the south east limb. The remaining regions on the
solar disk are all relatively simple and have not produced any significant
flaring activity. The solar flaring activity is expected to be at moderate
levels over the next 24 hours with C-class flares expected, M-class flares
likely and a low probability for further X-class flares.

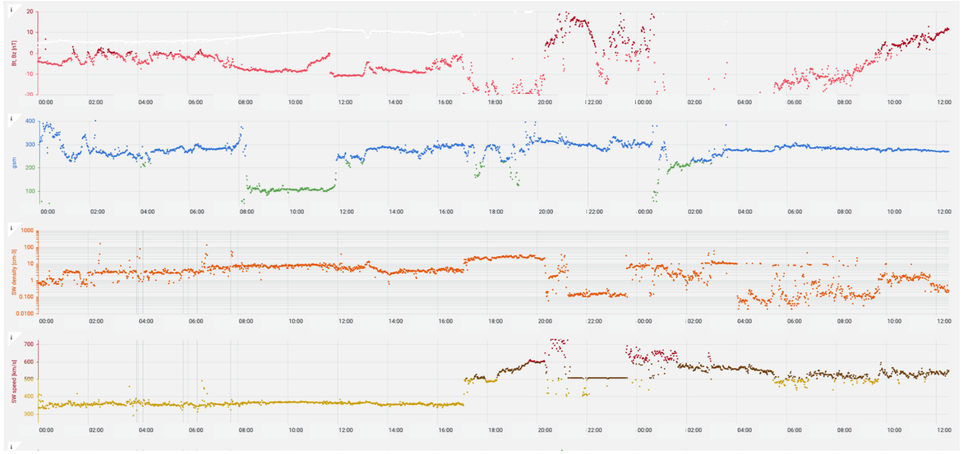
A halo Coronal Mass Ejection (CME) associated with the X2.2 flare was
observed by STEREO-A/COR2 from 20:38 UT and in SOHO/LASCO-C2 data from
20:12 UT. The CME is directed to the north east and the bulk of the CME is
not expected to be Earth directed. However, a glancing blow of the shock is
predicted to impact Earth early on February 20. A second partial halo CME
was observed in LASCO-C2 from 02:36UT February 18, directed to the south
east. This is a back-sided eruption and is not expected to impact Earth.

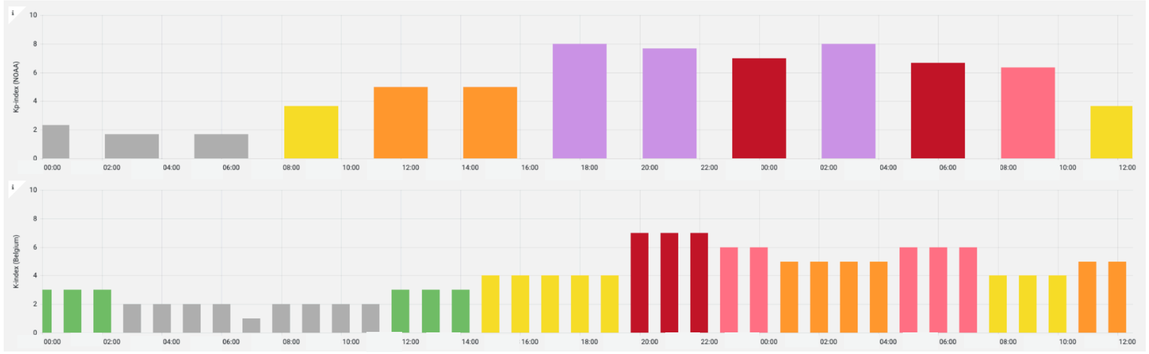
The greater than 10 MeV proton flux was at nominal levels in the past 24
hours. There is a small chance of a proton event exceeding the 10pfu
threshold, due to possible further high level flares. The greater than 2
MeV electron flux was below the 1000 pfu threshold and is expected to
remain below this threshold over the next days. The 24h electron fluence
was at nominal levels and is expected to be at nominal levels over the next
24 hours.

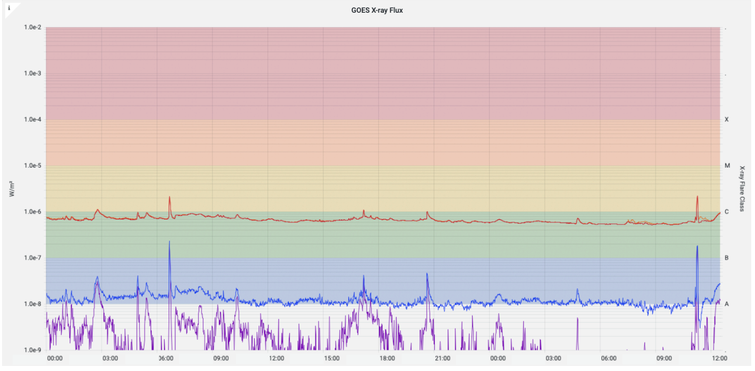
The Solar wind conditions reflected the waning influence of the high-speed
stream.The solar wind speed decreased from 500 km/s to values around 400
km/s. The total interplanetary magnetic field fluctuated around 5nT. Bz had
a minimum value of -5nT. The interplanetary magnetic field was
predominantly in the positive sector (directed away from the Sun).  The
solar wind conditions are expected to become enhanced again from late on
February 18, due to a combination of two predicted glancing blows from
CMEs. From early on February 20, the shock associated with the halo CME of
February 17 is also expected to arrive.

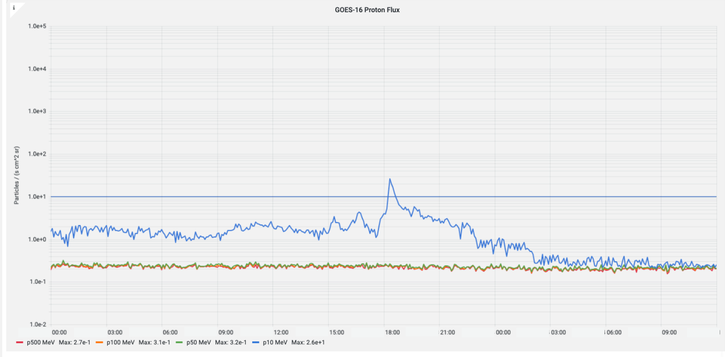
The geomagnetic conditions were at quiet to unsettled levels over the past
24 hours (local K-Bel 0-3 and NOAA Kp 0-2). Quiet conditions are expected
for February 18 with active to minor (possibly major) storm conditions
possible on February 19 and 20, due to the possible predicted CME arrivals.
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Ursigram 2023/04/24










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#-----------------------------------------------------------------#
# DAILY BULLETIN ON SOLAR AND GEOMAGNETIC ACTIVITY from the SIDC  #
# (RWC Belgium)                                                   #
#-----------------------------------------------------------------#
SIDC URSIGRAM 30424
SIDC SOLAR BULLETIN 24 Apr 2023, 1236UT
SIDC FORECAST (valid from 1230UT, 24 Apr 2023 until 26 Apr 2023)
SOLAR FLARES  : C-class flares expected, (probability >=50%)
GEOMAGNETISM  : Minor storm expected (A>=30 or K=5)
SOLAR PROTONS : Quiet
PREDICTIONS FOR 24 Apr 2023  10CM FLUX: 133 / AP: 051
PREDICTIONS FOR 25 Apr 2023  10CM FLUX: 140 / AP: 018
PREDICTIONS FOR 26 Apr 2023  10CM FLUX: 145 / AP: 010
COMMENT: Solar flaring activity was low and infrequent during the last 24
hours. Three C-class flares were detected, all from NOAA Active Region (AR)
3282 (magnetic type Beta-Gamma, Catania group 61). Further C-class activity
is likely in the next 24 hours, either from NOAA AR 3282 or NOAA AR 3285
(magnetic type Beta, Catania group 65).

No Earth-directed Coronal Mass Ejections (CME) were observed in the last 24
hours.

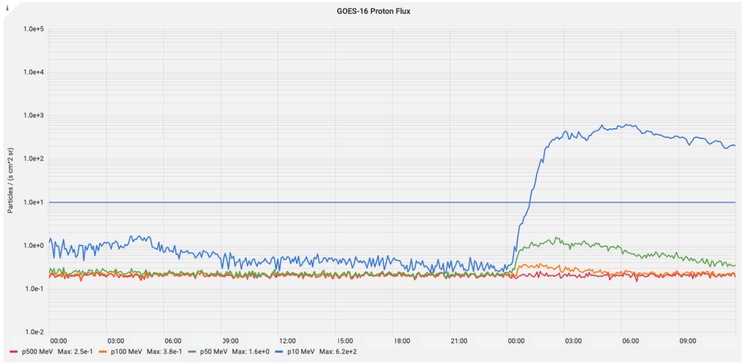
The greater than 10 MeV proton flux exceeded the 10 pfsu level yesterday
between 18:15 and 18:40 UT and stayed at nominal levels for the rest of the
past 24 hours. In the next 24 hours it is expected to remain below the 10
pfsu level. The greater than 2 MeV electron flux remained below the 1000
pfu alert threshold and is expected to remain below this threshold during
the next 24 hours. The 24h electron fluence was at nominal levels and is
expected to remain so.

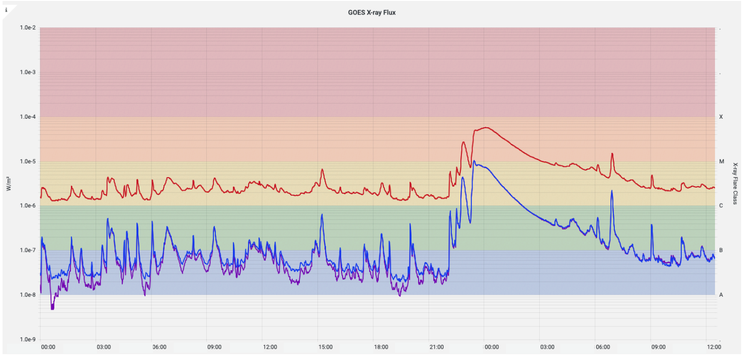
A small equatorial coronal hole of negative polarity started crossing the
central meridian today. An associated high speed stream in in-situ solar
wind measurements is expected for 28 April.

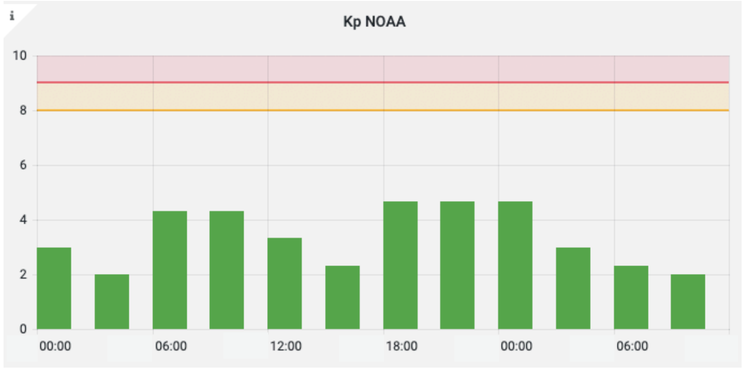
The Solar Wind (SW) conditions are strongly affected by the arrival of a
Corona Mass Ejection (CME) as previously forecasted. The SW speed increased
from 340 to km/h before the arrival of the CME to 650 km/h by today 01:00
UT. The total interplanetary magnetic field (Btot) increased to 35 nT
yesterday at 17:00 UT, while its North-South component (Bz) dropped as low
as -33 nT.  The interplanetary magnetic field phi angle was predominantly
directed towards the Sun over the last 24 hours. For the next 24 hours the
SW speed and the Btot are expected to remain high, however the Bz has
already increase above zero and is not expected to predicted to dropped to
such low values in the next 24 hours.

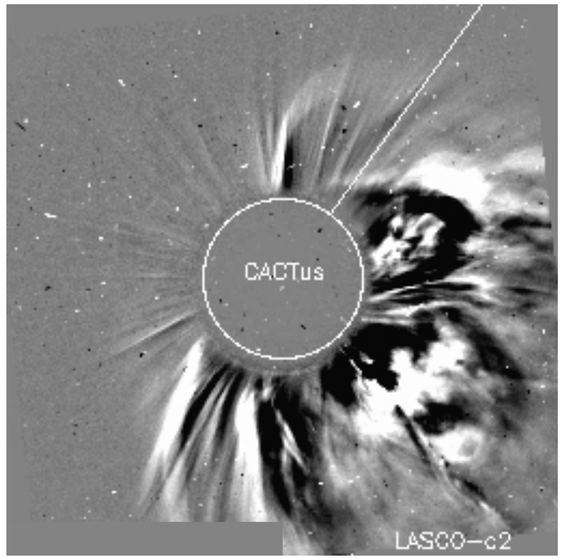
Geomagnetic conditions reached globally severe storm (Kp 8 between
18:00-21:00 UT yesterday and 03:00-06:00 UT today, Kp 8- between
21:00-00:00 yesterday) and strong storm (Kp 7 between 00:00-03:00 and Kp 7-
between 06:00-09:00 today), while the rest of the time they were at minor
to moderate storm levels. Locally the situation was rather similar, with K
BEL at storm level (K BEL 5 or more) since yesterday 21:00 UT. Storm levels
are expected for the next several hours and a significant decrease for the
rest of the next 24 hours, both globally and locally.
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Ursigram 2023/07/18










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TODAY'S ESTIMATED ISN  : 164, BASED ON 20 STATIONS.

SOLAR INDICES FOR 17 Jul 2023
WOLF NUMBER CATANIA    : 163
10CM SOLAR FLUX        : 180
AK CHAMBON LA FORET    : 026
AK WINGST              : 018
ESTIMATED AP           : 020
ESTIMATED ISN          : 159, BASED ON 24 STATIONS.

NOTICEABLE EVENTS SUMMARY
DAY BEGIN MAX  END  LOC    XRAY OP  10CM Catania/NOAA RADIO_BURST_TYPES
17  2241  2254 2306 ////// M2.7          69/3363
17  2317  2334 2337 ////// M5.0     1500 ///////       VI/2
17  2337  0006 0023 ////// M5.7          69/3363       VI/2
18  0645  0656 0702 N24E42 M1.5 SF       86/3376
END
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#-----------------------------------------------------------------#
# DAILY BULLETIN ON SOLAR AND GEOMAGNETIC ACTIVITY from the SIDC  #
# (RWC Belgium)                                                   #
#-----------------------------------------------------------------#
SIDC URSIGRAM 30718
SIDC SOLAR BULLETIN 18 Jul 2023, 1235UT
SIDC FORECAST
SOLAR FLARES   : M-class flares expected (probability >=50%)
GEOMAGNETISM   : Active conditions expected (A>=20 or K=4)
SOLAR PROTONS  : Proton event in progress (>10 MeV)
PREDICTIONS FOR 18 Jul 2023  10CM FLUX: 176 / AP: 008
PREDICTIONS FOR 19 Jul 2023  10CM FLUX: 170 / AP: 022
PREDICTIONS FOR 20 Jul 2023  10CM FLUX: 176 / AP: 016

Solar Active Regions and flaring: Solar flaring activity over the past 24
hours remained at moderate levels. NOAA AR 3363 produced two M-class flares
within a period of 3 hours, the largest was an M5.7-flare, with peak time
00:06 UTC on July 18, associated with a wide CME and proton event. Another
M1.5-flare, peak time 06:56 UTC, on July 18 was produced by a yet
unnumbered active region, which has started to rotate unto the visible
solar disk in the northern hemisphere.
There are currently 8 numbered active regions on the visible disk. NOAA AR
3363, NOAA AR 3372 and NOAA AR 3373 are the largest and most complex
regions. NOAA AR 3363 was the most active in the last 24 hours but has
started to rotate off the visible disk. NOAA AR 3372 and NOAA AR 3373 have
produced several C-class flares. NOAA AR 3372 is decaying while the number
of sunspots of NOAA AR 3373 has increased.
The remaining active regions were quiet and stable. The solar flaring
activity is likely to remain at moderate levels over the coming days with a
low chance for isolated X-class flaring.

Coronal mass ejections: A halo coronal mass ejection (CME) was observed in
LASCO/C2 coronagraph data from 23:50 UTC on July 17, as an initial estimate
the projected speed is over 1000 km/s. The CME is associated with the M5.7
originating from NOAA AR 3363 near the south west limb. Analysis of the CME
is ongoing but, due to the location of the CME origin, a glancing blow at
Earth may be possible from late on July 19.

Solar wind: The solar wind speed fluctuated around 500 km/s. The magnetic
field reached a peak value of 7 nT with an extended period of negative Bz
between 16:00 UTC July 17 and 00:45 UTC July 18, reaching a minimum Bz of
-6 nT.  Further enhancements continue to be possible on July 18 and 19 from
the expected ICME arrivals and a possible weak high speed stream arrival.

Geomagnetism: The geomagnetic conditions over the past 24 hours reached
minor storm levels globally (NOAA KP = 5 minus, K-Bel =4) starting at 18:00
UTC July 17 ending at 03:00 UTC July 18, coinciding with the long period of
negative Bz. Mostly unsettled to active geomagnetic conditions with
isolated minor storm periods are expected over the next two days, due to
the predicted weak high-speed stream and further glancing blow arrivals.

Proton flux levels: The greater than 10 MeV proton flux crossed the 10 pfu
threshold on 18 July at 01:15 UTC and reached a maximum value of 620 at
06:15 UTC. This proton event was associated with the M5.7 flare and the
halo CME. The proton flux is expected to remain above the threshold over
the 24 hours.


Electron fluxes at GEO: The greater than 2 MeV electron flux remained below
the 1000 pfu alert threshold, but has a small chance to exceed this level
during the next 24 hours. The 24h electron fluence was at nominal levels
and is expected to remain so.
```