Solar - WSA-ENLIL

EMC (https://ccmc.gsfc.nasa.gov/donki/):

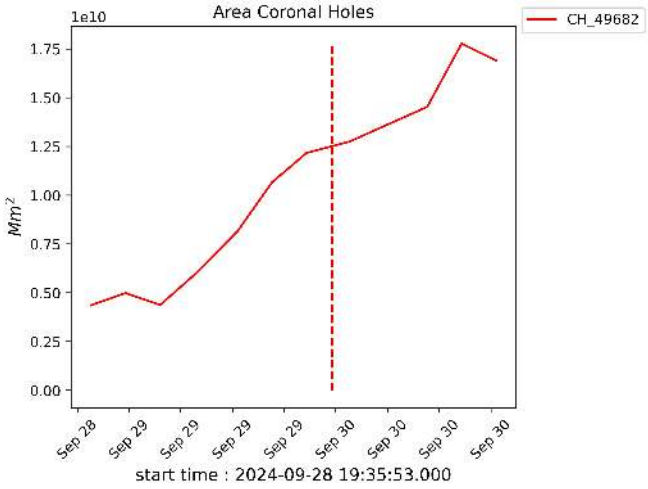
WSA-ENLIL(CME 2024-10-01 01:09:00 UT)
The simulation results indicate that the flank of CME will reach the DSCOVR mission between 2024-10-05 04:00:00 UT and 2024-10-05 18:00:00 UT.

WSA-ENLIL(CME 2024-10-02 14:24:00 UT)
The simulation results indicate that the flank of CME will reach the DSCOVR mission between 2024-10-05 17:00:00 UT and 2024-10-06 07:00:00 UT.

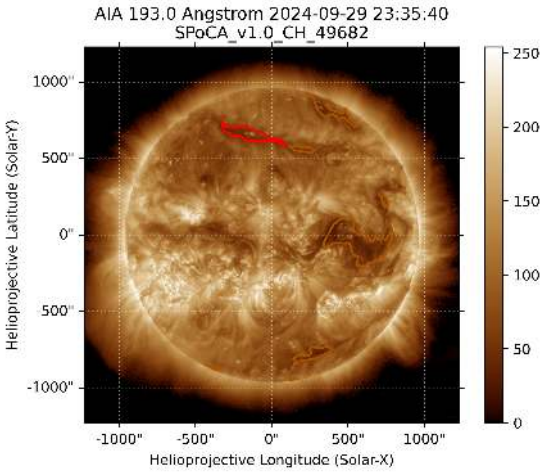
WSA-ENLIL(CME 2024-10-03 12:48:00 UT)
The simulation results indicate that the flank of CME will reach the DSCOVR mission between 2024-10-05 14:49:00 UT and 2024-10-06 04:49:00 UT.

WSA-ENLIL(CME 2024-10-03 20:36:00 UT)
The simulation results indicate that the flank of CME will reach the DSCOVR mission between 2024-10-07 00:00:00 UT and 2024-10-07 14:00:00 UT.

Solar - Coronal holes Spatial Possibilistic Clustering Algorithm (SPoCAS):



(a) The solid black line depicts the products of the sum of areas for each detection interval performed by SPOCA between September 23 and 30, 2024.



(b) Above the 193 Å image of the Sun are highlighted coronal holes observed by SPOCA around 23:35 UT on September 29, 2024 (red dot line).

EARTH'S RADIATION BELT

Responsible: Ligia Da Silva

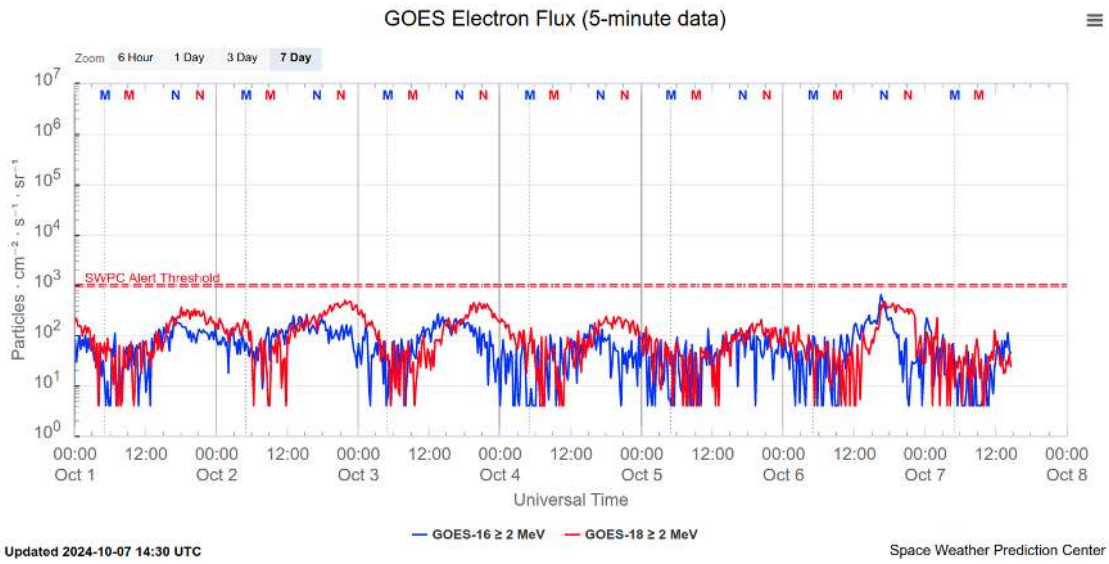


Figure 1: High-energy electron flux (> 2MeV) obtained from GOES-16 and GOES-18 satellite. Source: https://www.swpc.noaa.gov/products/goes-electron-flux

Summary

The high-energy electron flux (>2 MeV) in the outer boundary of the outer radiation belt obtained from geostationary satellite data GOES-16 and GOES-18 (Figure 1) is close to 10^2 particles/(cm^2 s sr) throughout the analyzed period. Some slight increases were observed on October 1, 2, 3 and 7, which may be associated with the arrival of solar wind structures in the magnetosphere.

Ionosphere - ROTI
Summary for Week 2334 (September 29 to October 5, 2024)

Carolina de Sousa do Carmo

In the week 2334 (September 29 to October 5, 2024), ionospheric irregularities (plasma bubbles) were observed during all nights. The Figure below shows the ROTI time series for three stations in the Brazilian sector (Bacabal (MABB), São Luis (SALU), and São José dos Campos (SJSP)).

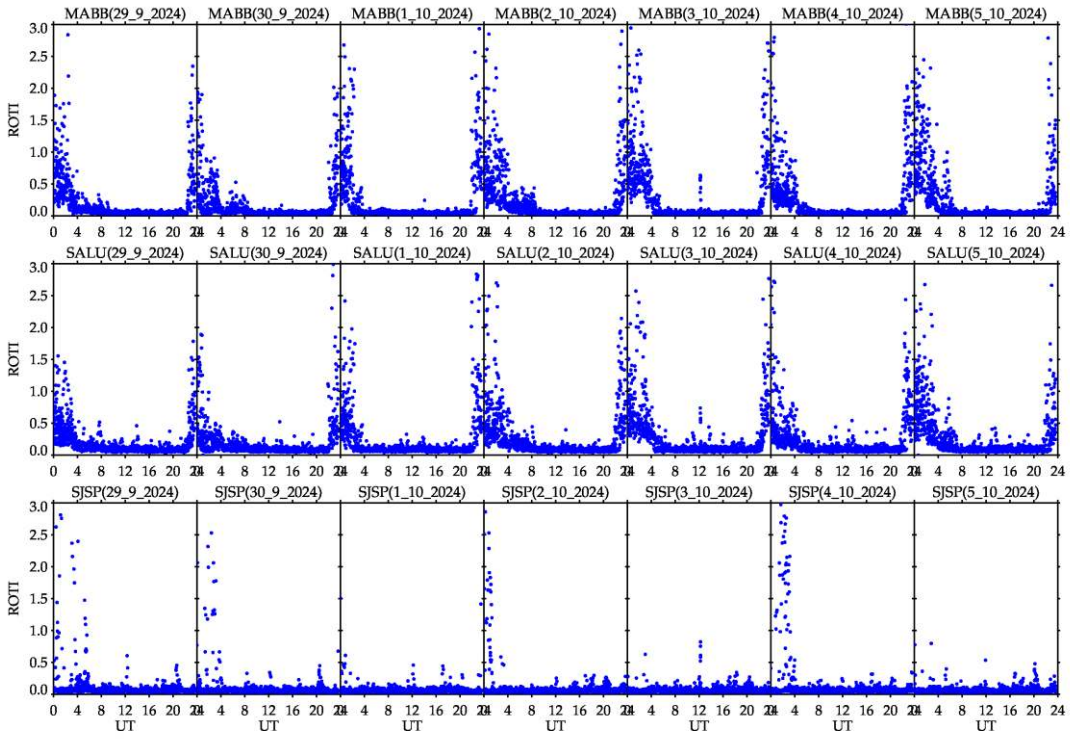


Figure – ROTI time series for three stations in the Brazilian sector (Bacabal (MABB), São Luis (SALU), and São José dos Campos (SJSP)), from September 29 to October 5, 2024.