



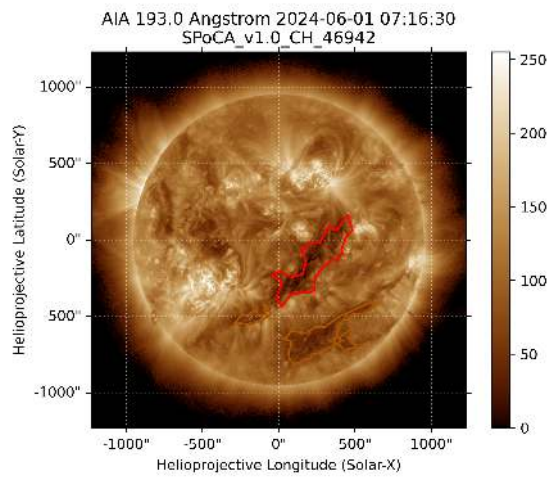
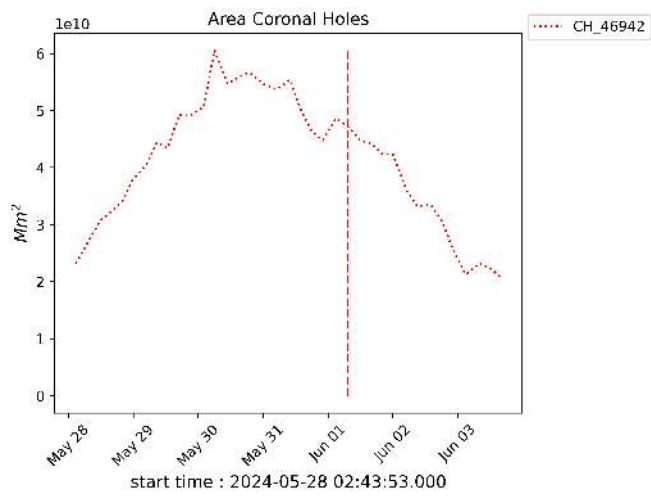
Solar - WSA-ENLIL

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

WSA-ENLIL(CME 2024-06-05 16:48:00 UT)

The simulation results indicate that the flank of CME will reach the DSCOVR mission between 2024-06-09 00:00:00 UT and 2024-06-09 14:00:00 UT.

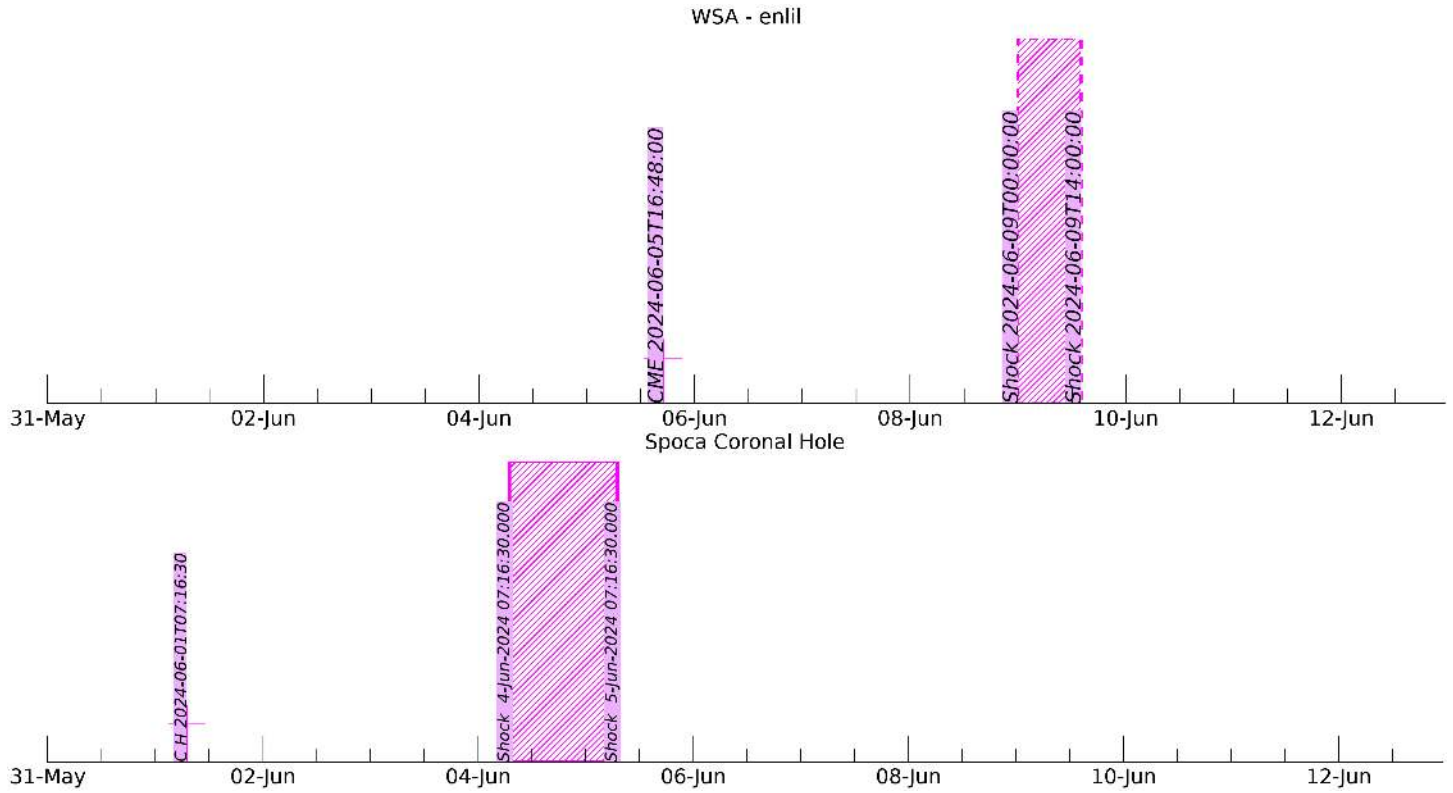
Solar - Coronal holes Spatial Possibilistic Clustering Algorithm (SPoCAS):



(a) The solid black line depicts the products of the sum of areas for each detection interval performed by SPOCA between May 28 and June 03, 2024.

(b) Above the 193 Å image of the Sun are highlighted coronal holes observed by SPOCA around 07:16 UT on June 01, 2024 (red dot line).

Solar - WSA - ENLIL and SPoCA



EARTH'S RADIATION BELT

Responsible: Ligia Da Silva

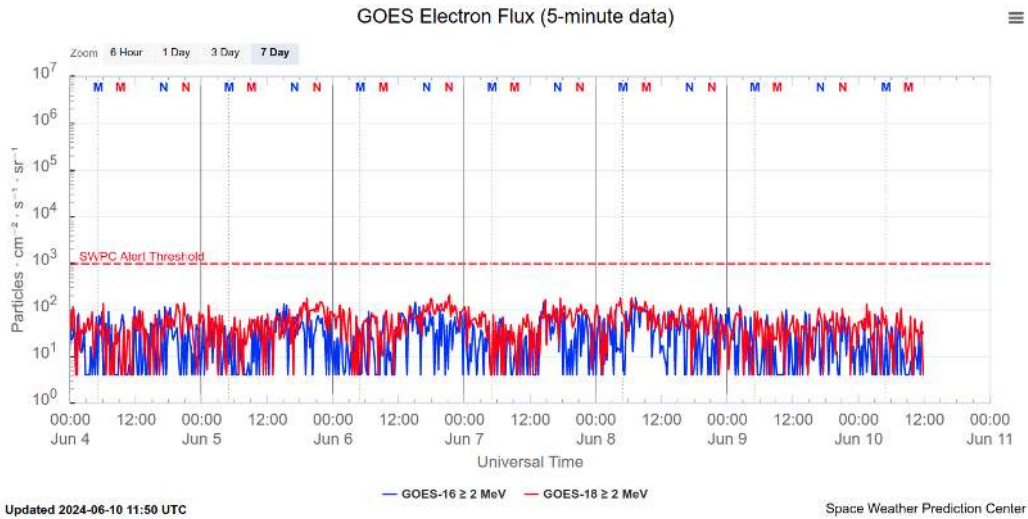


Figure 1: High-energy electron flux (> 2MeV) obtained from GOES-16 and GOES-18 satellite. Source: <https://www.swpc.noaa.gov/products/goes-electron-flux>

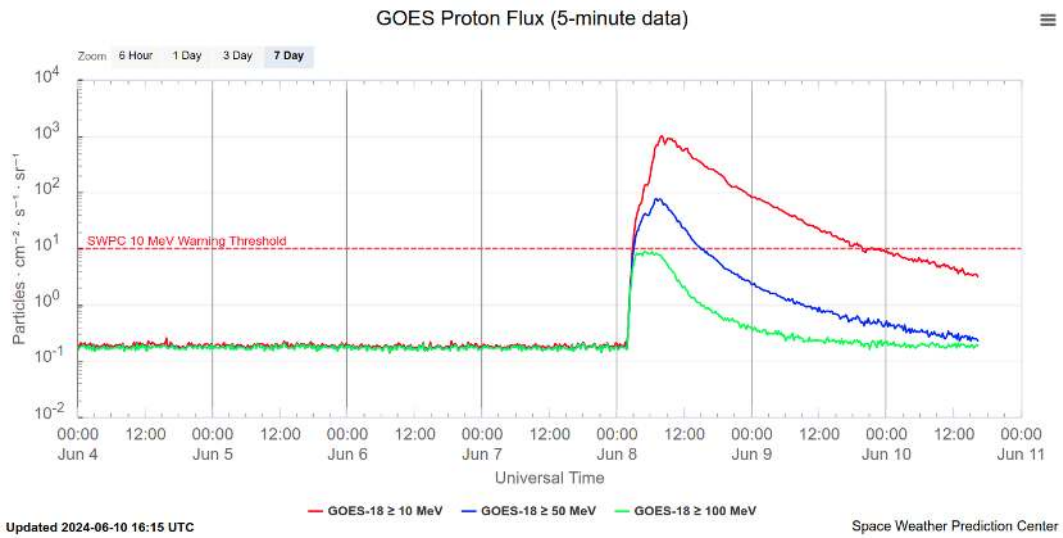


Figure 2: Proton flux ($\geq 10\text{MeV}$, $\geq 50\text{MeV}$, $\geq 100\text{MeV}$) obtained from GOES-18 satellite. Source: <https://www.swpc.noaa.gov/products/goes-proton-flux>



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 confined below 10^3 particles/(cm^2 s sr) throughout the analyzed period, without presenting significant variability.

Proton fluxes $\geq 10\text{MeV}$, $\geq 50\text{MeV}$ and $\geq 100\text{MeV}$ at the outer boundary of the outer radiation belt obtained from the geostationary satellite GOES-18 (Figure 2) increased significantly from 1:45 UT on June 8th, reaching a maximum peak (10^3 particles/(cm^2 s sr)) at around 8:00 UT on the same day, followed by slow decay. This proton flux increase is associated with the arrival of solar wind structures in the magnetosphere.

Ionosfera – Digisonda (Laysa Resende)

Summary

We observed a weak spread F in São Luís during this week. In Cachoeira Paulista, the spread F was not observed any day in this week. The Es layers reached a maximum of scale 3 in São Luís. Also, the F3 layer appears over São Luís (Figure 1).

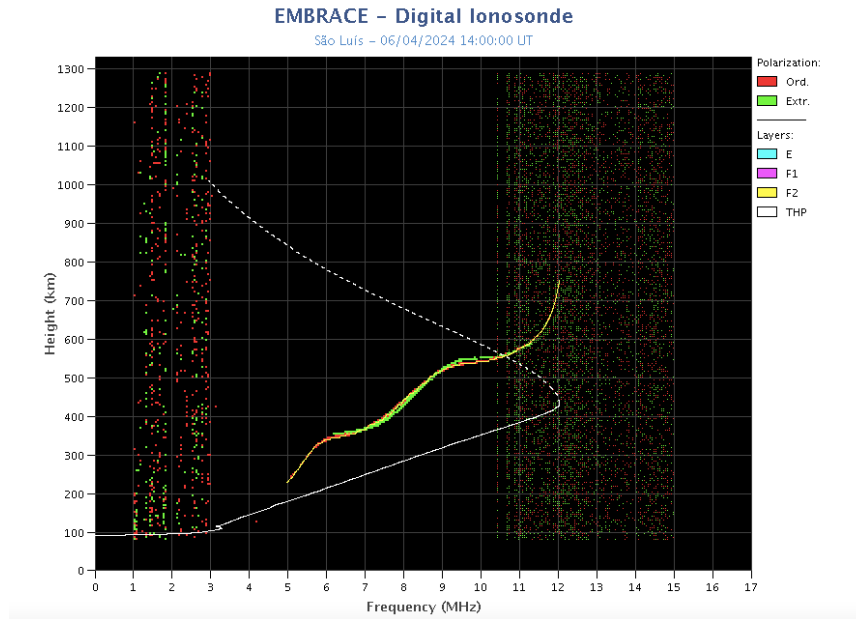


Figure 1 – Ionogram over São Luís, showing the F3 layer.

Ionosphere - ROTI Summary for Week 2317 (June 2 to 8, 2024)

Carolina de Sousa do Carmo

In the week 2317 (June 2 to 8, 2024), ionospheric irregularities (plasma bubbles) were not observed. The Figure below shows the ROTI time series for four stations in the Brazilian sector (São Luís (SALU), Bacabal (MABB), Cuiabá (CUIB) and São José dos Campos (SJSP)).

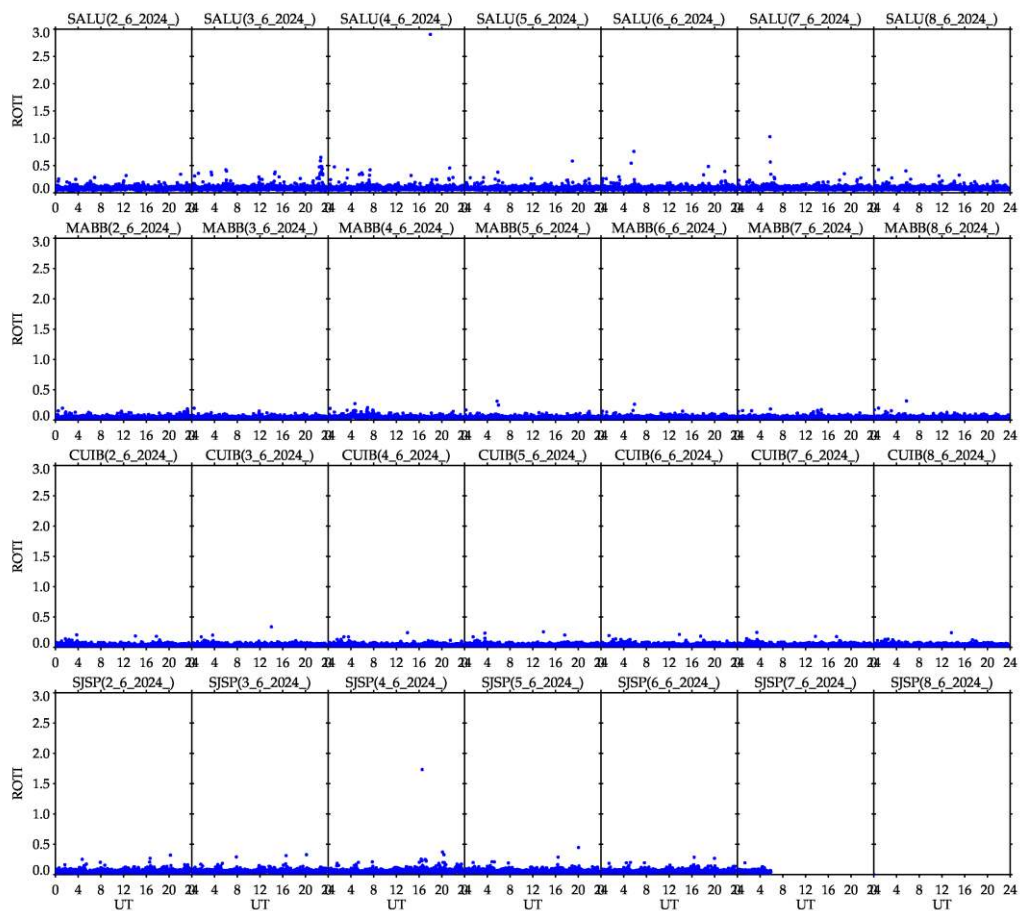


Figure – ROTI time series for four stations in the Brazilian sector (São Luís (SALU), Bacabal (MABB), Cuiabá (CUIB) and São José dos Campos (SJSP)), from June 2 to 8, 2024.