



Solar - WSA-ENLIL

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

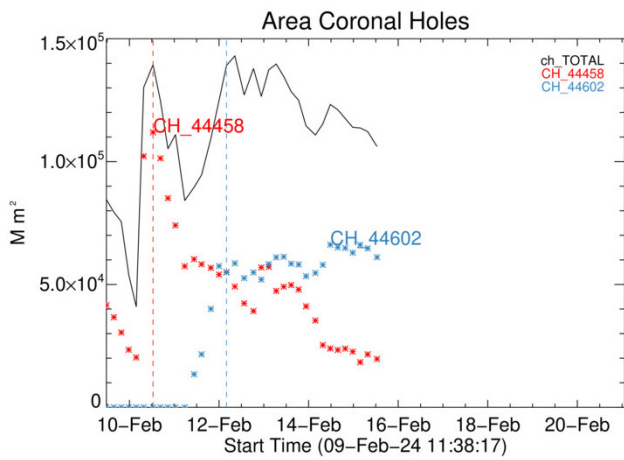
WSA-ENLIL(CME 2024-02-09 00:12:00 UT)

The simulation results indicate that the flank of CME will reach the DSCOVR mission between 2024-02-12 07:00:00 UT and 2024-02-12 21:00:00 UT.

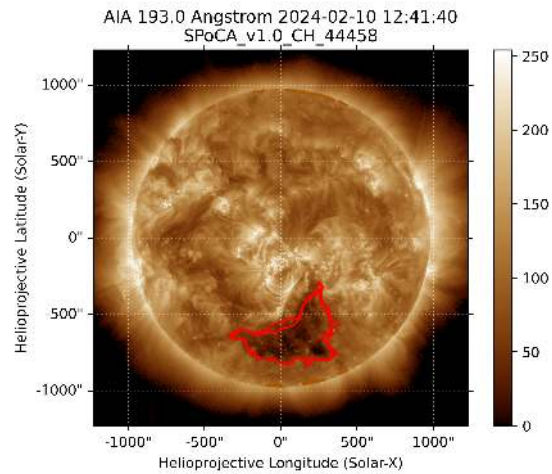
WSA-ENLIL(CME 2024-02-16 03:12:00 UT)

The simulation results indicate that the flank of CME will reach the DSCOVR mission between 2024-02-19 05:00:00 UT and 2024-02-19 19:00:00 UT.

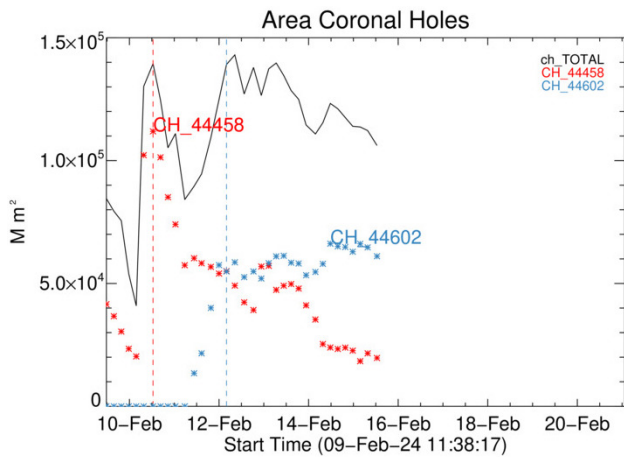
Solar - Coronal holes Spatial Possibilistic Clustering Algorithm (SPoCAS):



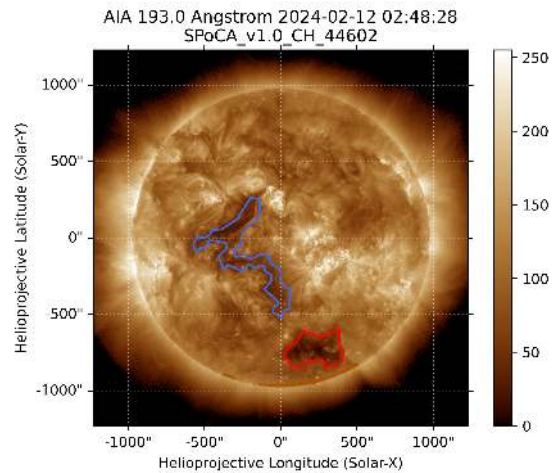
(a) The solid black line depicts the products of the sum of areas for each detection interval performed by SPOCA between February 09 and 15, 2024.



(b) Above the 193 Å image of the Sun are highlighted coronal holes observed by SPOCA around 12:41 UT on February 10, 2024 (red dot line).

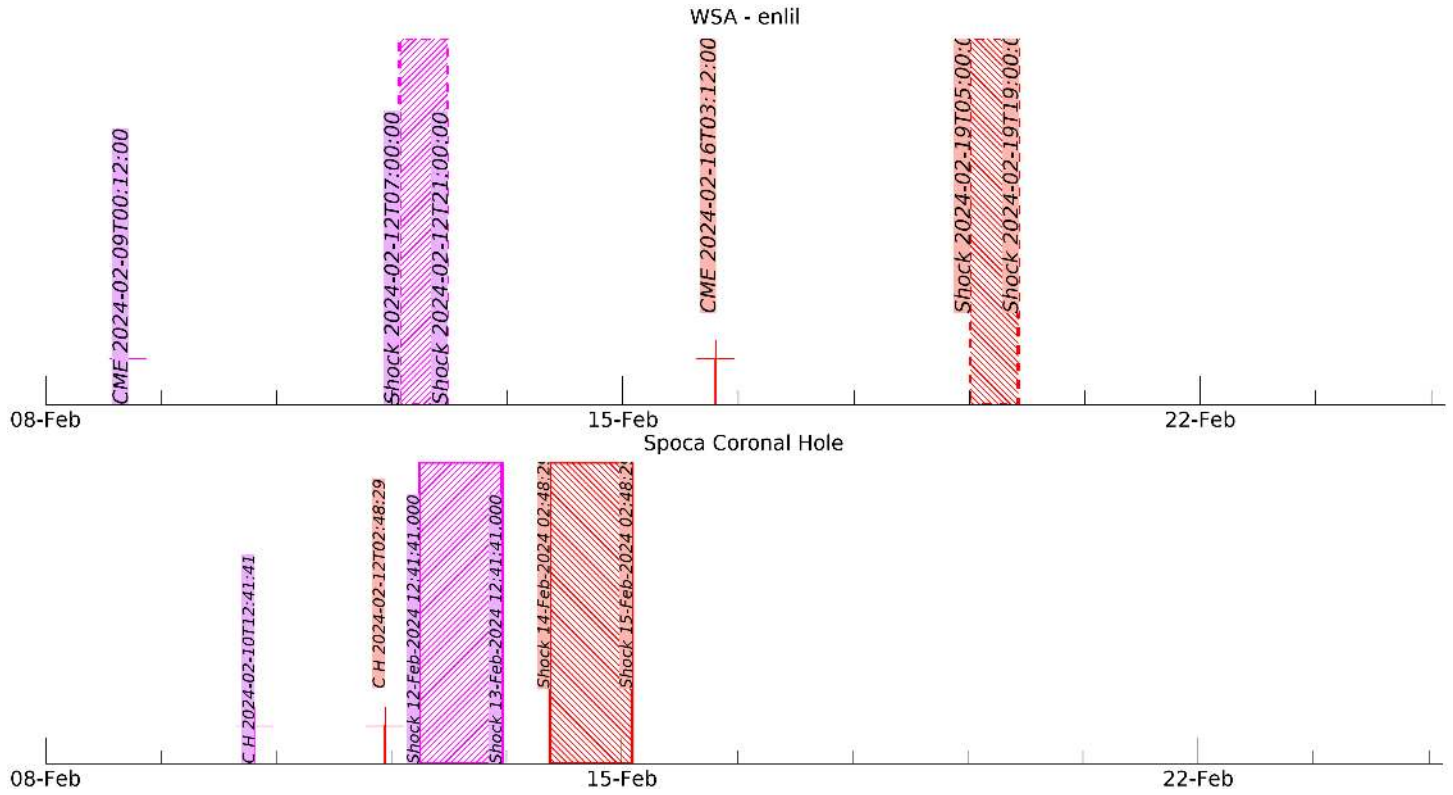


(a) The solid black line depicts the products of the sum of areas for each detection interval performed by SPOCA between February 09 and 15, 2024.



(b) Above the 193 Å image of the Sun are highlighted coronal holes observed by SPOCA around 02:48 UT on February 12, 2024 (blue dot line).

Solar - WSA - ENLIL and SPoCA



Geomagnetic Field / Campo Geomagnético

Summary

In the week of 13-19/02, the Embrace magnetometer network data recorded instabilities throughout the week, with emphasis on:

- 13, 15, and 18/02: The magnet Embrace Magnetometers recorded a drop of -60 nT and -40 nT, respectively in JAT.
- AE index was active, at 500 nT on the Feb 18. The minimum Dst index was -20 nT on Feb 14 and 18. The highest Kp of the week was 3o on Feb 13.

Resumo

Na semana de 13 a 19/02, os dados provenientes da rede de magnetômetros Embrace registraram instabilidades ao longo de toda semana, com destaque para:

- 13, 15 e 18/02: Os magnetômetros da rede Embrace MagNet registraram queda na componente H de até - 60 nT e -40 nT, repectivamente em JAT.
- índice AE esteve ativo, alcançou 500 nT no dia 18. O índice Dst mínimo foi -20 nT nos dias 14 e 18. O Kp mais alto da semana foi 3o no dia 13.

Rede EMBRACE de Magnetômetros

ΔH - (13/02/2024 - 19/02/2024)

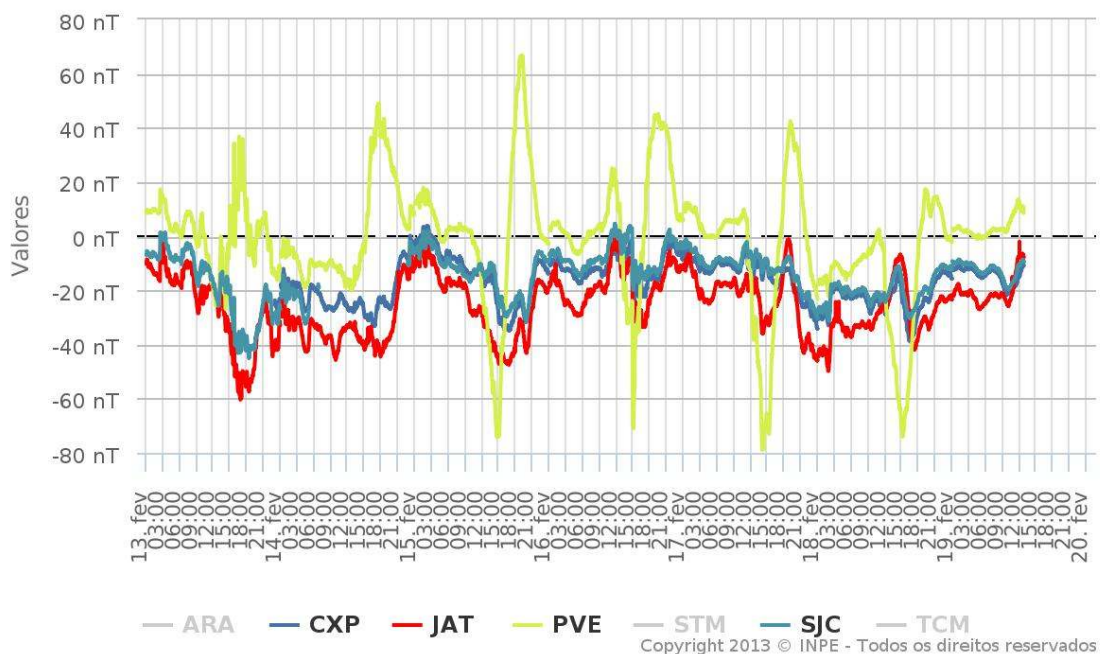


Figura 1.: Variação diurna da componente geomagnética H (nT) das estações da rede Embrace para o período de 04 à 11 de Dezembro de 2023

Figure 1.: Daily variation of the geomagnetic field from H (nT) measured at Embrace MagNet from 04-11 December 2023

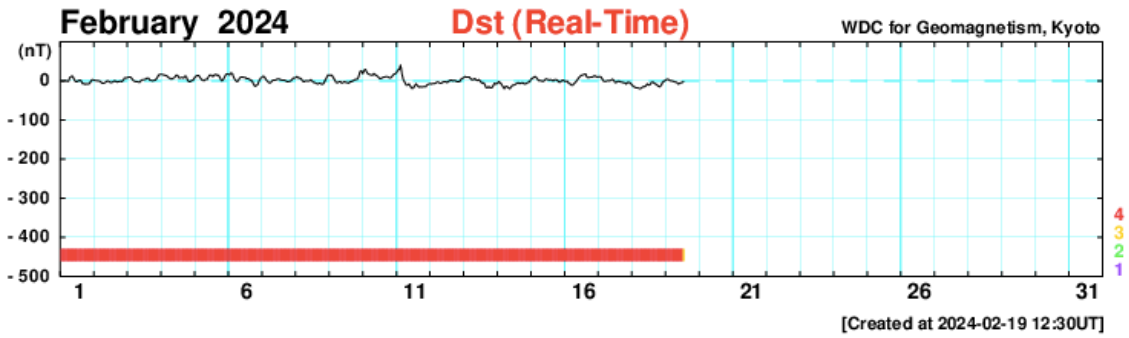


Figura 2.: Índice Dst para o mês de Fevereiro de 2024.
Figure 2: Dst index for February 2024

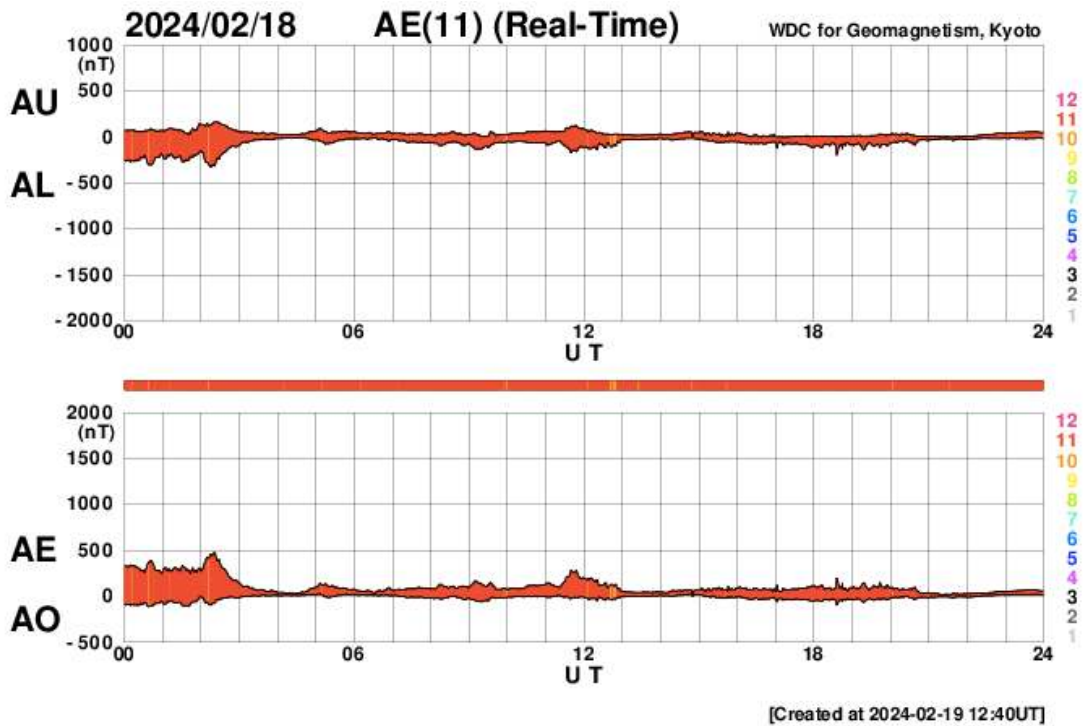


Figura 3.: Índice AE para os dias mais perturbados da semana.
Figure 3.: AE index for the most disturbed days in the current week.

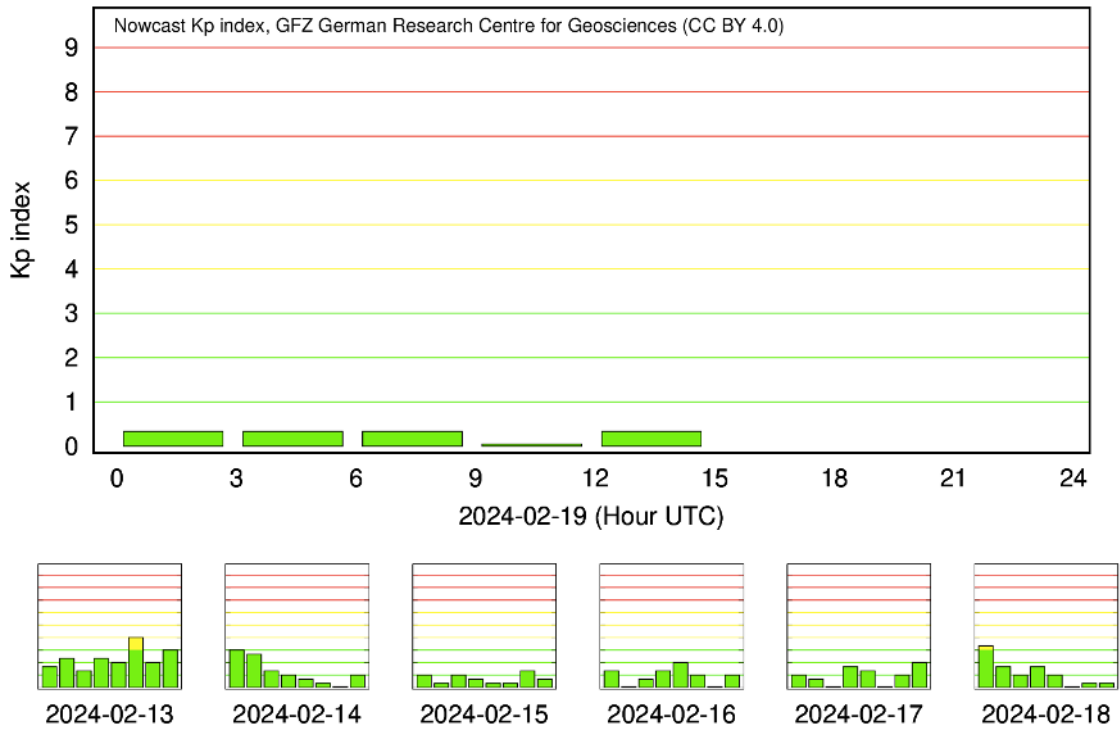


Figura 4.: Índice Kp referente a semana corrente.
Figure 4: Kp index for the current week.

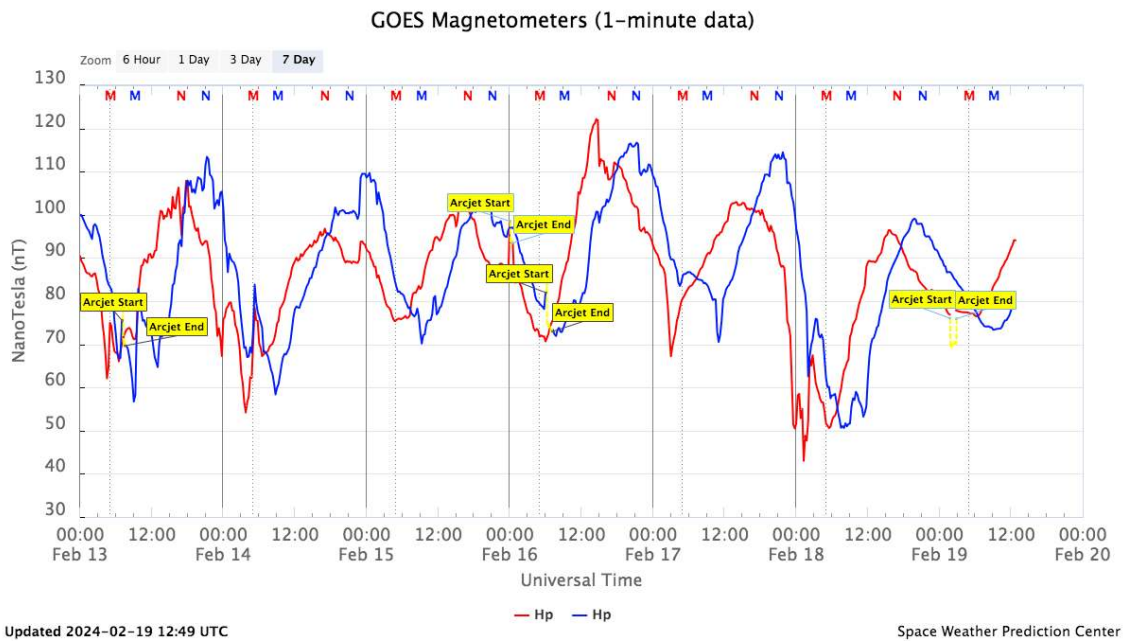


Figura5. Medida de Campo magnético na posição do satélite GOES referente a semana corrente



Figure 5.: Magnetic field horizontal component at the GOES satellite orbit for the current week

Ionosphere - ROTI Summary for Week 2301 (February 11 to 17, 2024)

Carolina de Sousa do Carmo

In the week 2301 (February 11 to 17, 2024) there were ionospheric irregularities (plasma bubbles) on all nights analyzed. The Figure below shows the ROTI time series for four stations in the Brazilian sector (Natal (RNNA), Bacabal (MABB), Cuiabá (CUIB) and São José dos Campos (SJSP)).

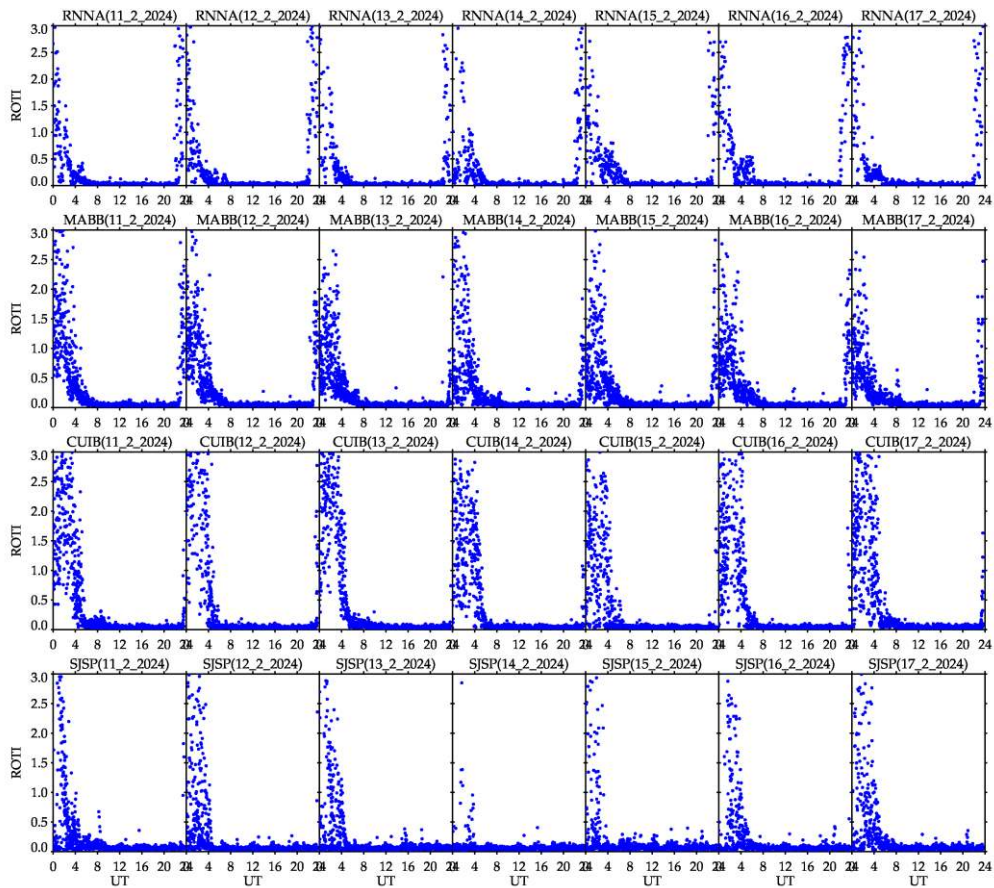


Figure – ROTI time series for four stations in the Brazilian sector (Natal (RNNA), Bacabal (MABB), Cuiabá (CUIB) and São José dos Campos (SJSP)), from February 11 to 17, 2024.