Nasa Space Apps Challenge

Rosario, Santa Fe, Argentina

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Challenge:

Magnetic Reconnection.
(https://www.spaceappschallenge.org/2023/challenges/magnetic-reconnection/?tab=details)

Github:

Team: TNS - (https://www.spaceappschallenge.org/2023/find-a-team/tns/)

Challenge: Magnetic Reconnection.

A Magnetic Reconnection is an event that occurs when the polarities of the Earth's electromagnetic field and the interplanetary electromagnetic field are opposite. This leads to possible occurrences of astronomical events such as auroras or possible solar storms.

Objetive:

Perform a statistical analysis using data provided by NASA from three space missions, ACE, WIND, DSCVR.

Approach:

Incorporate this data into an indicator dashboard using power bi. So that an expert can use the results to analyze the incidence of the different variables found for Magnetic Reconnection and Solar Storms.

In addition, we have developed a predictive model using Artificial Intelligence which allows us to forecast possible Magnetic Reconnections and Solar Storms in the future.

Applications:

It will be used in smart power grids, warning systems for astronauts and satellites, space flight routes, medical research to evaluate the effects on human physiology.