



## **Ionospheric GNSS-TEC disturbances during an intense geomagnetic storm of May 2017 over South American sector: Comparison with modeling results**

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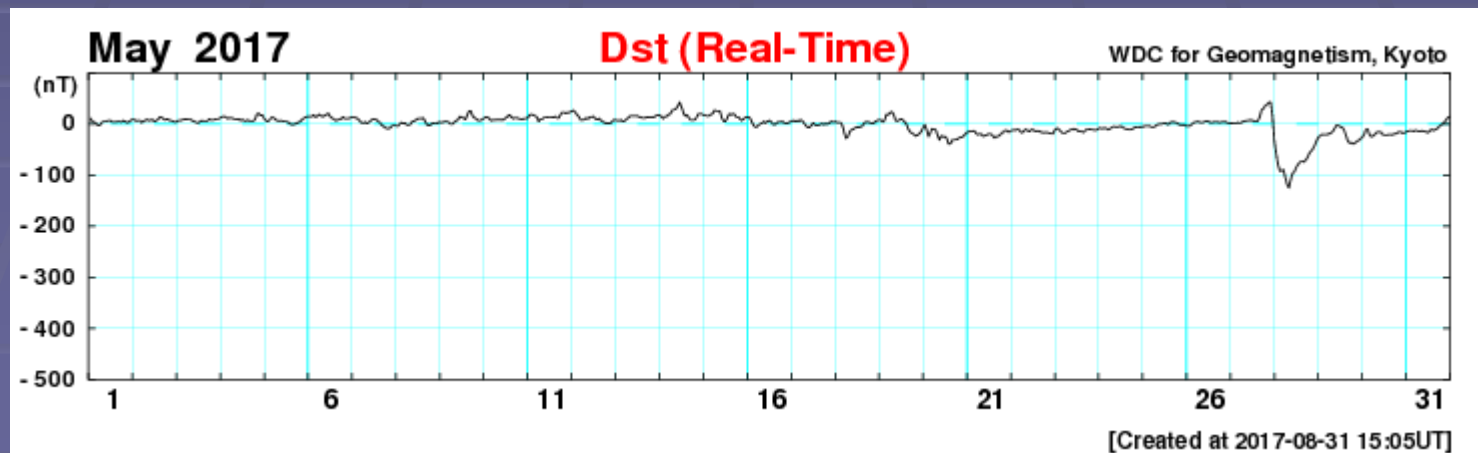
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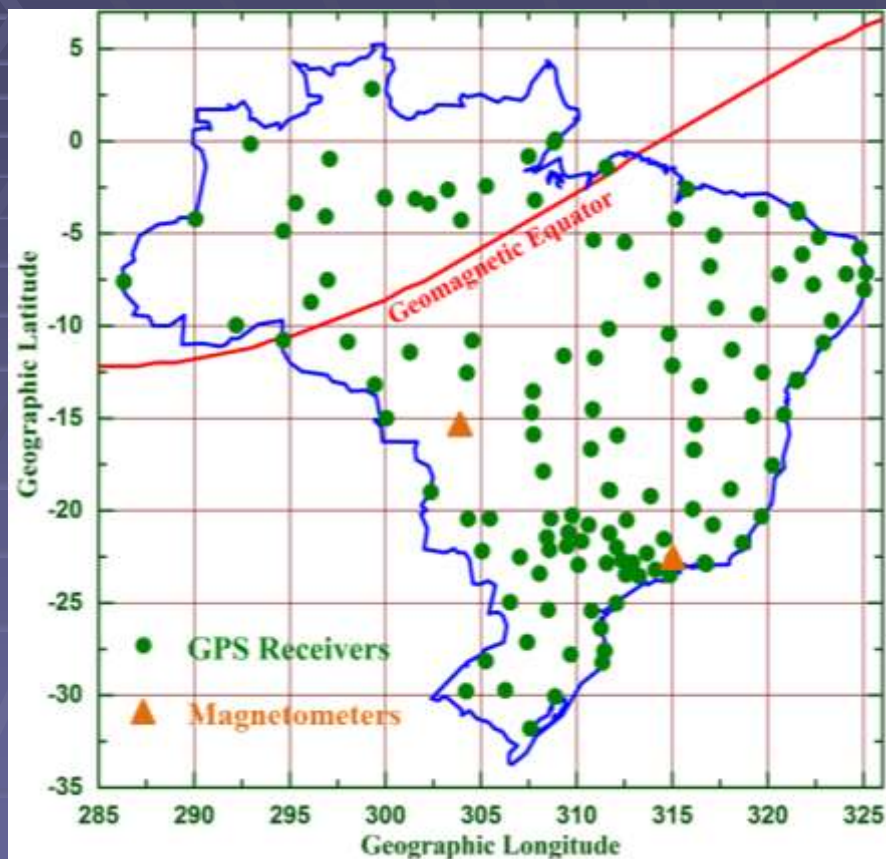


## Main Goal:

- In this study, we present and discuss the ionospheric F-region disturbances over South American sector during an intense geomagnetic storm occurred between 27 and 29 May 2017. This geomagnetic storm reached a minimum Dst of -125 nT at 0700 UT on 28 May.
- The vertical total electron content (VTEC) observations from a chain of nearly 120 Global Navigation Satellite System (GNSS) receivers and 2 magnetometers measurements were used. Model data not yet defined.



## Data Network



The locations of nearly 120 GNSS receivers (green dots) and 2 magnetometers (orange triangles) over the Brazilian sector used in the present study. The geographic longitude and latitude and geomagnetic equator are also shown in the map.

**GNSS-TEC: RBMC**  
**[www.ibge.gov.br](http://www.ibge.gov.br)**

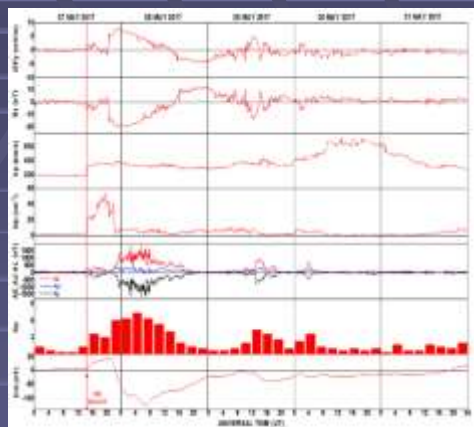
**Magnetometers: EMBRACE**  
**<http://www2.inpe.br/climaespacial/portal/pt/>**



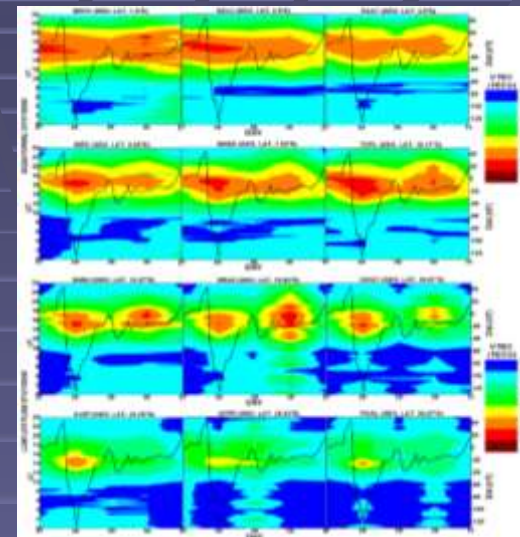
# Preliminary Results

# POSTER

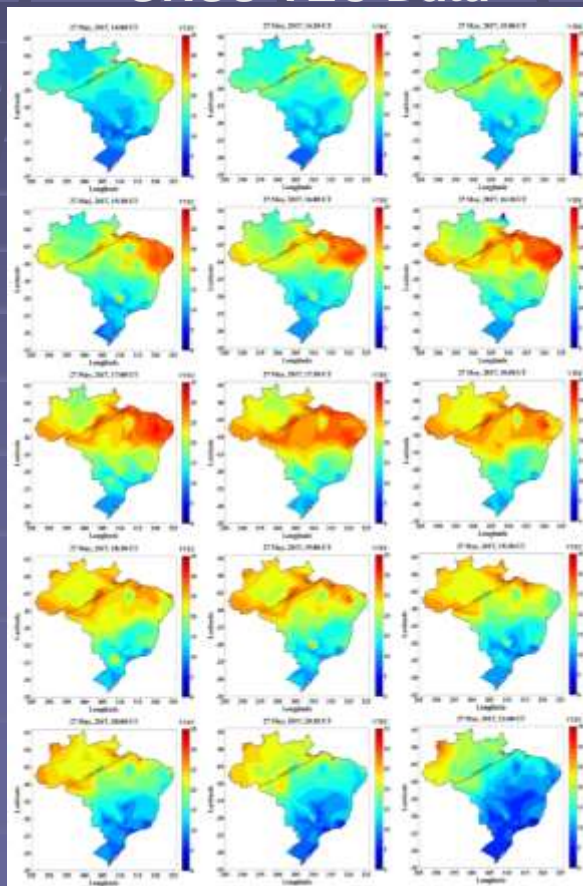
### Satellite Data



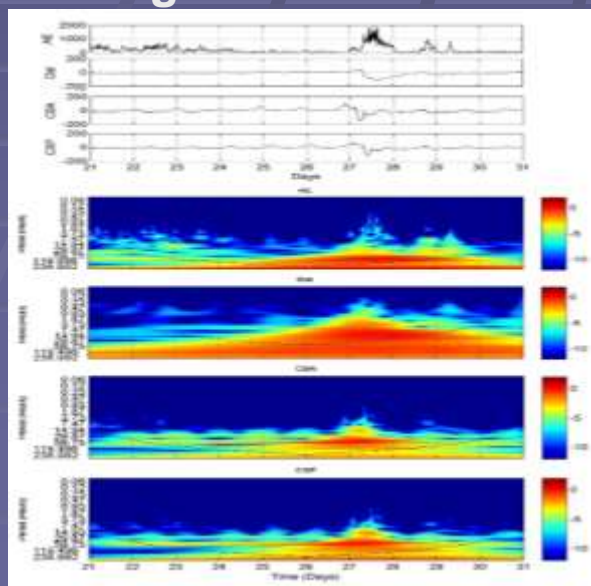
### GNSS-TEC Data



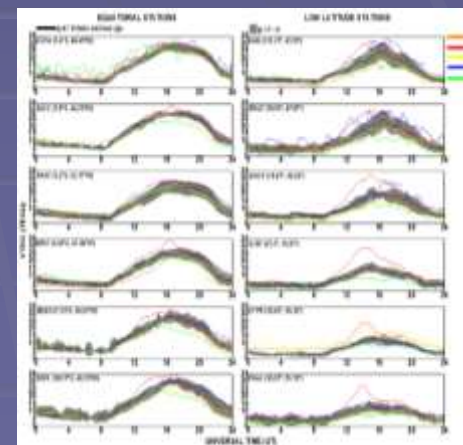
### GNSS-TEC Data



### Magnetometer Data



### GNSS-TEC Data



# Muchas Gracias!!!

## ACKNOWLEDGEMENTS:

