



# GRAPE

## GNSS RESEARCH AND APPLICATION FOR POLAR ENVIRONMENT

[WWW.GRAPE.SCAR.ORG](http://WWW.GRAPE.SCAR.ORG)

SCAR Activities  
Poster Session



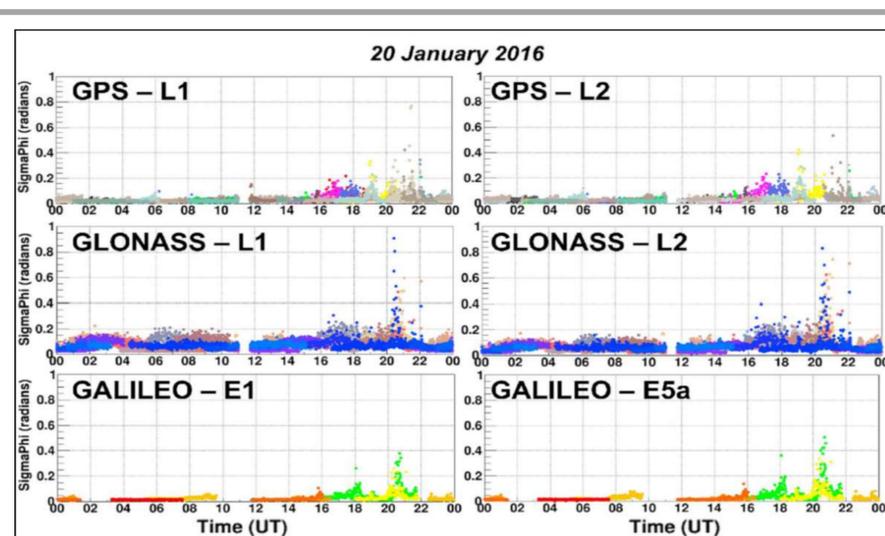
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GRAPE is a joint SSG Physical Science and Geoscience Expert Group, established in 2012. **GRAPE deals with the monitoring of neutral and ionized atmosphere at bi-polar latitudes for investigating the atmospheric response to the solar activity and its effects on GNSS based systems and applications.** The main goal is to continue to intensify the international efforts to build and coordinate a robust network of collaborations able to answer a variety of **Weather and Space Weather related needs** through ad hoc data sharing and models development.

### THE BI-POLAR INFRASTRUCTURE

### HIGHLIGHT

### EXTERNAL COOPERATION



[www.ursi.org](http://www.ursi.org)

### International Union of Radio Science

ICSU Scientific Member since 1922.

-**URSI** encompasses the study and knowledge of all aspects of electromagnetic fields and waves.

-**GRAPE** contributes to **URSI**, especially to the **Comission G**, dealing with ionosphere radio and propagation including Space Weather.

-Since 2015 **GRAPE special sessions** are organized within **URSI** meetings benefitting both **URSI** and **SCAR** communities.

**First observations of GALILEO ionospheric scintillation over Antarctica- Alfonsi et al. 2016, Space Weather.**

### EDUCATION

The International School of Space Science organizes the Course “The Polar Upper Atmosphere: from Science to Operational issues”, L’Aquila, Italy, 17-21 September 2018, directed by G. De Franceschi, M. Mendillo, C. Mitchell.

