

GRAPE (GNSS Research and Application for Polar Environment)

SCAR Expert Group (joint SSG PS and GS)

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From October 2014 (after the SCAR OSC in NZ) a GRAPE Business Meeting and a scientific session have been organized during the last URSI AT RAS Conference (Gran Canaria, Spain, 18-22 May 2015) www.at-rasc.org.

The Business Meeting (on Monday 18 May afternoon), was attended by more than 30 colleagues from different URSI Commissions (mainly from Commission G-Ionospheric Radio and Propagation). During the meeting, SCAR Horizon Scan and scientific priorities were presented and discussed focusing on the GRAPE future contribution to this. A task force will be soon established to start a process toward a possible proposal leading to a SRP based on GRAPE and enlarged to other interested polar communities.

The scientific session (on Tuesday 19 May afternoon) was also quite interesting and more than 10 papers were submitted as oral presentations.

Funds 2015:

GRAPE funds allocated in 2015 has been used (3000 USD from SSG GS and 1500 USD from SSG PS) for the registrations fees at URSI AT RASC 2015.

Future Activities

- ✓ Maintenance of the GRAPE web portal
- ✓ A GRAPE special issue on “Radio Science” has been discussed with Phil Wilkinson (Radio Science editor) aiming to collect selected papers from GRAPE-URSI (not before 2016).
- ✓ The GRAPE satellite meeting and the scientific session are planned at the next SCAR OSC in Kuala Lumpur 2016. For this meeting financial support to early career scientists would be appreciated.
- ✓ A special joint session at URSI General Assembly 2017 has been planned, titled: GNSS for terrestrial applications: snow/ice, vegetation and atmosphere.

References 2014-2015

2014

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2015

- Prikryl, P., Ghoddousi-Fard, R., Spogli, L., Mitchell, C. N., Li, G., Ning, B., Cilliers, P. J., Sreeja, V., Aquino, M., Terkildsen, M., Jayachandran, P. T., Jiao, Y., Morton, Y. T., Ruohoniemi, J. M., Thomas, E. G., Zhang, Y., Weatherwax, A. T., Alfonsi, L., De Franceschi, G., and Romano, V.: GPS phase scintillation at high latitudes during geomagnetic storms of 7–17 March 2012 – Part 2: Interhemispheric comparison, *Ann. Geophys.*, 33, 657-670, doi:10.5194/angeo-33-657-2015, 2015.