

SCAR2016

**Session S16: Global Navigation Satellite System Research and Application for the Polar Environment**

Conveners:

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Global Navigation Satellite Systems (GNSS) contribute to the study of many aspects of Antarctic science, from the atmosphere to the solid Earth.

This session solicits contributions on GNSS-based research and applications in Antarctica. In keeping with the SCAR OSC 2016 theme, ‘Polar Tropical Connectivity: Antarctica in the Global Earth System’, contributions highlighting the differences and similarities at high and low latitudes of the atmospheric effects on GNSS signals, strategies and performance are particularly welcome. Studies dealing with ionospheric irregularities, scintillation, total electron content (TEC) gradients, water vapor (WV) content, multipath, and impacts on different applications using GNSS such as positioning, space weather, solid Earth, cryosphere research and remote sensing are highly encouraged. Papers dealing with GNSS data collection, data sets, model and processing developments and infrastructure available to support investigations are also welcome, as are those where GNSS is one part of a multi-instrument approach.