## Category

SY Observation Systems

## Session Number SY-1

## **Session Title**

Earth Observation: Solutions for data collection, compilation and dissemination

## **Session Description**

Remote and in situ observations of the Polar and cryospheric regions continue to produce vast quantities of multi-disciplinary data on the terrestrial, marine, geological, biological, cryospheric and atmospheric systems. Coordination, cooperation and efficient dissemination are integral to optimize data impact.

This cross-disciplinary session presents the range of regional and global data being acquired and compiled, including remote earth observation and in situ data, the compilation and processing of existing geospatial data, and the collation and conversion of legacy datasets in to modern geospatial compilations. We will explore how datasets are best compiled, stored and distributed, and best practices for cross-disciplinary dissemination. We will highlight a good practice example: The Global Cryosphere Watch (GCW). This multi-disciplinary project of the World Meteorological Organization and its partners will establish a sustained, global, robust, end-to-end cryosphere observing and monitoring system, covering all components of the cryosphere.

We invite contributions from all fields of data collection, compilation and distribution, particularly highlighting gaps in our current knowledge to point to priority areas for future research. With respect to the cryosphere (in particular to GCW), contributions meeting the challenges of data consistency and data dissemination, data distribution through portals and providing an integrated cryosphere-observing network are invited.

**Keywords:** Cross-disciplinary, Antarctic, Arctic, cryosphere, data collection, earth observation, databases, data dissemination

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