The Concordiasi project over Antarctica during IPY

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The Context

The Concordiasi Experiment
A joint French-US initiative
With International collaborations
Belongs to the THORPEX-IPY cluster (N°121 in IPY)

Goal and Field campaign

Validate the assimilation of IASI and other sounder data over Antarctica

Field campaign in Sept-Nov 2008
- Extra radiosoundings over Concordia
- Driftsondes from CNES balloons
- Extra stratospheric measurements (aerosols, gravity-wave activity, ozone) to better understand stratospheric clouds and chemistry processes.

Scientific plans

Issues for an optimal assimilation of IASI
- Cloud detection
- Bias correction

To better assimilate microwave observations over snow-covered areas

Work on microwave surface emissivity
- Retrieval from data
- Modelling using a snow model

Evaluate impact of improvements on local forecasts, chemical-transport models and lower latitudes.

http://www.cnrm.meteo.fr/concordiasi/