CORDEX is a WCRP-sponsored program to organize an international coordinated framework to produce an improved generation of regional climate change projections for input into impact and adaptation studies. The Arctic CORDEX activities are coordinated through the WCRP Climate and Cryosphere Project (CliC). Currently, the core of Arctic-CORDEX consists of regional climate model simulations over the Arctic, with hindcast (ERA-Interim and GCM-driven historical simulations) and scenario (GCM-driven rcp4.5, rcp8.5) simulations.

**Arctic CORDEX Domain**

**Network**

**Science**

Ensemble mean from 12 Arctic RCMs of Cold Spell Days (CSD; shading) and mean 2m air temperature isolines for winter (DJF), averaged over 1980-2010.

In comparison to ERA-Interim, the ensemble mean captures the mean air temperature very well (pattern correlation coefficient 0.98, mean root mean square error 1.7K). Cold temperature extremes represented here by CSDI are less well reproduced (pattern correlation coefficient 0.64, mean root mean square error 1d), but still, the general pattern and magnitude of the reanalysis data is represented (Matthes et al., in preparation)

**Recent Highlights**

- Arctic CORDEX runs from 11 atmosphere and 6 coupled atmosphere-ice-ocean RCMs are available for the Era-Interim period.
- Some high resolution simulations (15 km pan Arctic and 5 km Greenland) are available.
- Multi-model analyses of extreme temperature and cyclones are finished.
- Arctic CORDEX simulations are used to project temperature and precipitation change over Svalbard area.
- The annual Arctic CORDEX meeting was held in Bergen/Norway at UNIS/Bjerkness Centre in Nov. 2016.
- 2017 - Polar CORDEX meeting, October, Cambridge, UK.

http://www.climate-cryosphere.org/activities/targeted/polar-cordex/arctic