

## **SVALI template (T.9) for submission of meta-data**

**Meta-data related to Milestone M3.3-2: Historical and future scenario (rcp8.5) simulations using the EC-Earth-PISM model system.**

### **Output data from EC-EARTH-PISM for historical and future conditions (rcp8.5)**

#### **1.) General description of the data set:**

*Output data from the EC-Earth-PISM coupled model system which is based on the IFS atmospheric model, the NEMO ocean model, the LIM2 sea-ice model and the PISM ice sheet model. The output data include global gridded **atmospheric data** including temperature, precipitation and surface mass balance, global gridded **ocean data** including temperature and salinity profiles as well as **ice sheet model data** for the Greenland ice sheet (e.g. ice volume and extent, basal melting rate.)*

**2.) Created:** 03-06-2014, Danish Meteorological Institute

**3.) Latest update:** 03-06-2014, Danish Meteorological Institute

**4.) Keywords:** Coupled climate-ice sheet model, future scenario (rcp8.5), Greenland ice sheet.

**5.) Area:** Global

**6.) Spatial extension:** Global

**7.) Spatial resolution:** Atmosphere: T159 (~125 km) reduced Gaussian grid and 62 vertical layers up to 5 hPa. Ocean: about 1° resolution with a refinement around equator, 42 vertical layers. Ice sheet: 20x20 km horizontal resolution.

**8.) Temporal coverage:** 1850-2005 (historical simulation), 2006-2100 (rcp8.5 simulation)

**9.) Temporal resolution:** 6-hourly/monthly mean data for atmosphere and ocean, monthly/yearly mean data for the ice sheet.

**10.) Data format:** Atmospheric data in GRIB, ocean and ice sheet data in NetCDF.

**11.) References:** The coupled model system is described in SVALI Deliverable 3.2-2: Evaluation of surface mass balance implemented in the EC-Earth global climate model and SVALI Deliverable 3.2-5: EC-Earth-PISM: An interactive Greenland Ice Sheet in the EC-Earth global climate model.

**12.) Data quality (degree of validation):** Model runs have been compared with CMIP5 runs using the standard EC-Earth model (without coupling to the ice sheet model). Evaluation of the coupled model system is on-going and is documented in a manuscript in preparation.

**13.) Where to find the data?** Danish Meteorological Institute, Marianne Sloth Madsen, [mms@dmi.dk](mailto:mms@dmi.dk).

**14.) References:**

Marianne Sloth Madsen, Danish Meteorological Institute.