



## **NORDHOM - Nordic collaboration on establishing long-term homogeneous climate data records**

Erik Engström (1), Thomas Carlund (1), Mikko Laapas (2), Elin Lundstad (3), Herdis Moströen Gjeltén (3), and Kairi Vint (4)

(1) Swedish Meteorological and Hydrological Institute, (2) Finnish Meteorological Institute, (3) Norwegian Meteorological Institute, (4) Estonian Environment Agency

High-quality instrumental climate records are crucial for analysis of climate variability. Long-term climate series are however often affected by inhomogeneities (artificial shifts) due to changes in measurement conditions (relocations, instrumentation, change in environment, etc.). To deal with this problem homogenization procedures have been developed for detecting and adjusting inhomogeneities.

The climate services at the Nordic National Meteorological Services have a long profound tradition in co-operation on activities of common interest. One successful activity within this collaboration was establishing the North Atlantic Climatological Dataset (NACD) in the 1990s. The NACD data set (1890-) was later continued as the Nordic ClimateDataset (NkDS).

Since the mid-1990s there have been little systematic homogenization efforts at the Nordic NMHSs. It was agreed at an expert meeting within the “Nordic Framework for Climate services (NFCS)” in 2012, to establish a NFCS-project NORDHOM: “Nordic collaboration on long-term homogeneous climate data records”. The ongoing activities in NORDHOM are to establish common methods for monthly and daily homogeneity testing and adjustment for inhomogeneities, homogenize long Nordic temperature and precipitation series, and update the Nordic Climate Dataset. We will present our recent activities within the Nordic collaboration, of which one was a workshop on methods on daily temperature homogenization. As a part of the workshop climate indices were calculated for Nordic stations to compare the methods SPLIDHOM, Climatol and Vincent Interpolation for daily temperature homogenization.