



NORDHOM - a Nordic collaboration to homogenize long-term climate data

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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 NMHSs have a long profound tradition in cooperation 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 Climate Dataset (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 homogeneity testing and adjustment for inhomogeneities, homogenize long Nordic temperature and precipitation series, and update the Nordic Climate Dataset. We are now summarizing what we have achieved during the first phase (2013-2014) of the project and have an outlook what will follow during the second phase (2015-2016).

There will also be some examples from each participating country in the collaboration.