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eSACP - a new Nordic initiative towards developing statistical climate services

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The Nordic research council NordForsk has recently announced its support for a new 3-year research initiative on "statistical analysis of climate projections" (eSACP). eSACP will focus on developing e-science tools and services based on statistical analysis of climate projections for the purpose of helping decision-makers and planners in the face of expected future challenges in regional climate change.

The motivation behind the project is the growing recognition in our society that forecasts of future climate change is associated with various sources of uncertainty, and that any long-term planning and decision-making dependent on a changing climate must account for this. At the same time there is an obvious gap between scientists from different fields and between practitioners in terms of understanding how climate information relates to different parts of the "uncertainty cascade".

In eSACP we will develop generic e-science tools and statistical climate services to facilitate the use of climate projections by decision-makers and scientists from all fields for climate impact analyses and for the development of robust adaptation strategies, which properly (in a statistical sense) account for the inherent uncertainty. The new tool will be publically available and include functionality to utilize the extensive and dynamically growing repositories of data and use state-of-the-art statistical techniques to quantify the uncertainty and innovative approaches to visualize the results. Such a tool will not only be valuable for future assessments and underpin the development of dedicated climate services, but will also assist the scientific community in making more clearly its case on the consequences of our changing climate to policy makers and the general public.

The eSACP project is led by Thordis Thorarinsdottir, Norwegian Computing Center, and also includes the Finnish Meteorological Institute, the Norwegian Meteorological Institute, the Technical University of Denmark and the Bjerknes Centre for Climate Research, Norway.

This poster will present details of focus areas in the project and show some examples of the expected analysis tools.