



## **Translating weather extremes into the future – a case for Norway**

Jana Sillmann (1), Malte Mueller (2), Uta Gjertsen (3), Rein Haarsma (4), Wilco Hazeleger (5), and Helene Amundsen (1)

(1) Center for International Climate and Environmental Research - Oslo, Oslo, Norway (jana.sillmann@cicero.oslo.no), (2) Meteorologisk Institutt (MET), Oslo, Norway, (3) Statkraft AS, Oslo, Norway, (4) Royal Netherlands Meteorology Institute (KNMI), De Bilt, Netherlands, (5) Netherlands eScience Center, Amsterdam, Netherlands

We introduce a new project “Translating weather extremes into the future – a case for Norway” (TWEX - <http://www.cicero.uio.no/en/twex>). In TWEX, we take a novel “Tales of future weather” approach in which we use future scenarios tailored to a specific region and stakeholder in order to gain a more realistic picture of what future weather extremes might look like in a particular context. We focus on hydroclimatic extremes associated with a particular circulation pattern (so-called “Atmospheric River”) leading to heavy rainfall in fall and winter along the West Coast of Norway and causing high-impact floods in Norwegian communities. We translate selected past events into the future (e.g., 2090) by using an approach very similar to what is used today for weather prediction. The data generated in TWEX will be distributed by standard (weather prediction) communication channels of the Norwegian Meteorological Institute and thus, will be accessible by end-user in a well-known data format for analyzing the impact of the events in the future and support decision-making on hazard prevention and adaptation planning.