



## **Towards the new CH2018 climate scenarios in Switzerland**

Andreas M. Fischer (1), Erich M. Fischer (2), Reto Knutti (2), Sven Kotlarski (1), Mark A. Liniger (1), Christoph Raible (3), Christoph Schär (2), Simon C. Scherrer (1), Cornelia Schwierz (1), and Elias M. Zubler (4)

(1) Federal Office of Meteorology and Climatology MeteoSwiss, Climate Division, Zurich-Airport, Switzerland (andreas.fischer@meteoswiss.ch), (2) Institute for Atmospheric and Climate Science, ETH Zurich, Switzerland, (3) Oeschger Centre for Climate Change Research, University of Bern, Switzerland, (4) Center for Climate Systems Modeling (C2SM), ETH Zurich, Switzerland

There is a growing demand for regional assessments of future climate change and its impacts on society and ecosystems to inform appropriate adaptation strategies. The basis for such assessments are reliable and up-to-date climate change scenarios on the local to regional scale. In Switzerland, an important step has been accomplished by the release of the climate scenarios in 2011 (“CH2011”). Since then, new climate model simulations have become available and the scientific understanding has improved. It is hence desirable to update these national scenarios. The new CH2018 scenarios are developed in the framework of the recently founded National Center for Climate Services (NCCS), a network which consists of several academic partners and federal offices.

The CH2018 scenarios will build primarily upon the latest EURO- and MED-CORDEX regional climate model simulations assuming different pathways of future greenhouse gas concentrations. Results of a recently conducted market research across current and potential future users of climate scenarios will guide the development process toward the CH2018 scenarios. This should ensure that the scenarios are presented in a user-oriented format and find a wide applicability. Compared to CH2011, more emphasis will be put on changes in extremes and in putting the projected changes in the context of observed variability. To provide end-users with future daily weather data at the local scale, improved statistical downscaling methods will be used.

In the presentation we will show the full methodological setup to generate the CH2018 scenarios and how consistency across the methods is maximized. First results on mean changes and selected indices will be presented.

In terms of dissemination, the results of the user survey show the necessity to address all different user types of climate scenarios, especially the non-experts. Compared to CH2011, this implies a stronger focus on consulting, condensing complex information and providing tutorials. Our plans on disseminating CH2018 will be part of our presentation.