



## UFZ-Seminar

Research Unit



## Water Resources and Environment

17 February 2020, 3 p.m.

Seminar Room 1, Brückstr. 3a, Magdeburg

### Stephan Thober

Department Hydrosystemmodellierung (CHS), UFZ

will give a talk on:

### **Changes in extreme hydrologic events over Europe under global warming of 1.5, 2, and 3 degrees**

Climate change is altering the hydrologic cycle at a global scale. To infer information about regional and local impacts of climate change, impact models are often used to downscale climate projections from global climate models. This approach was used within the EDgE and HOKLIM project to provide information to local stakeholders. Within these projects, high-resolution 5x5 km simulation of the water cycle under a changing climate have been created over Europe. In this presentation, I will provide an overview about the methods that we used and the results obtained. On focal point of the analysis was the assessment of a changing climate for discrete amounts of global warming (i.e., 1.5, 2 and 3 degrees) as a consequence of the Paris agreement on climate change. I will discuss the implications of these amounts of global warming on hydrologic extremes such as floods and droughts within Europe and Germany.

Websites:

HOKLIM - <https://www.ufz.de/index.php?de=42489>

EDgE - <http://edge.climate.copernicus.eu/Apps/#climate-change>