

FINNISH METEOROLOGICAL INSTITUTE



Baltic Earth Workshop on

Natural hazards and extreme events in the Baltic Sea region

Finnish Meteorological Institute, Dynamicum, Helsinki

30-31 January 2014

One of the grand challenges of Baltic Earth, the new Earth System Science programme for the Baltic Sea region and successor to BALTEX, focuses on natural hazards and extreme events in the Baltic Sea region. Many natural hazards - storms, flooding, droughts, blizzards – are of hydrometeorological origin and can potentially be better understood and forecasted. The most devastating natural hazards are often caused by a combination of several factors. Extreme flooding in a coastal city for instance could be caused by a combined effect of storm surge and river flooding, with additional effects on the water storage in the Baltic Sea. Presently, prediction capabilities as well as knowledge of potential future changes in the occurrence of extreme events are very limited.

In addition to the large scale extreme events, extremes of weather types on monthly to seasonal time scales are also key interest for society, and further research on processes like atmospheric blocking is needed for the development of monthly to seasonal forecast models.

The overarching aim of this Baltic Earth workshop is to review our understanding of extreme events in the past, present and future, and to identify research needs. Furthermore, workshop goals are

- to establish links between research groups focusing on observations, statistical analysis and predictions,
- to identify gaps in knowledge and weaknesses in our ability to observe, understand and statistically calculate extreme events, and
- to review modeling capabilities in order to estimate the occurrence of extreme events.

Projected outcomes of the workshop are

- to establish a review of the current state-of-the-art research, gaps and advances in observations, analysis, modeling and prediction (focusing on the scientific understanding),
- to identify partners and establish action items concerning the coordination of overlapping interests, the closure of gaps in knowledge, and the enhancement of networking between groups, and
- to contribute to the planning of future Baltic Earth research in this area.

There is no fee, but registration via the website is compulsory. Oral and poster contributions on the above outlined topics are welcome. Further information at the workshop website at: <u>www.baltic-earth.eu/hazards</u>

Abstract Deadline: 5 January 2014 Registration deadline: 10 January 2014

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