

Third International Summer School on Climate of the Baltic Sea region

co-organized by Leibniz Institute for Baltic Sea Research Warnemünde and University of Rostock
under the umbrella of Baltic Earth www.baltic.earth

Askö Laboratory
Trosa, Sweden

28 August - 4 September 2017

Scope

The course will focus on past and future changes in climate of the Baltic Sea region. The Baltic Sea is a semi-enclosed sea with a large freshwater supply from rivers of the adjacent catchment

area in the transition zone between maritime and continental climates in northern Europe. Many long-term observational data are available and provide a good knowledge about oceanic changes during the past two centuries and even longer periods. Proxy-data of the past 1,000 to 2,000 years bear witness of a pronounced climate variability in the region. We will start from basic principles and equations of motion that describe the circulation and dynamics in the atmosphere, ocean and sea-ice. The available knowledge in the literature about water and energy balances will be presented. Further basic methods of the analysis and modeling of the regional climate system will be introduced, including the statistical analysis of time series to identify changes in regional climate. We will explain atmospheric pressure patterns of

the large-scale circulation like the North Atlantic circulation with influence on the Baltic Sea and the corresponding catchment area. Furthermore, the course will deal with coupled atmosphere-ocean climate models, climate change, the greenhouse gas effect and other drivers of regional climate, dynamical downscaling, and the variability of circulation and regional climate. We will also study the possible impact of climate change on the marine ecosystem including biogeochemical cycles.

Application Deadline

1 May 2017

Find all relevant information at

www.baltic.earth/summerschool2017

Course period: 8 days in total, 28 August – 4 September 2017

Who is eligible? Master or PhD students in marine sciences and associated fields from all Baltic Sea countries can apply. Accepted applicants will be payed travel, accomodation, food and course materials.

Travel from Stockholm to Askö by bus and boat on 28 August and return on 4 September

Course site: Askö Laboratory is situated 80 km south of Stockholm in the Swedish archipelago. Website: <http://www.su.se/ostersjocentrum/english/askö-laboratory>

