



The Second Assessment of Climate Change for the Baltic Sea Region (BACC II)

M. Reckermann (1), H. von Storch (2), and A. Omstedt (3)

(1) Helmholtz Zentrum Geesthacht, International Baltic Earth Secretariat, Geesthacht, Germany (marcus.reckermann@hzg.de), (2) Helmholtz Zentrum Geesthacht, Institute of Coastal Research, Geesthacht, Germany (hvonstorch@web.de)), (3) University of Gothenburg, Earth System Centre, Gothenburg, Sweden (anders.omstedt@gvc.gu.se)

Baltic Earth is the new Earth system research network for the Baltic Sea region. It is the successor to BALTEX and stands for the vision to achieve an improved Earth system understanding of the Baltic Sea region. A first major outcome of Baltic Earth is the publication of the Second Assessment of Climate Change for the Baltic Sea Basin (BACC II, published with Springer Open Access).

This assessment, like its precursor, BACC (2008) was produced by a team of scientists from the region, led by lead authors who have recruited experts from relevant topics to contribute. The BACC reports aim to bring together consolidated knowledge that has broad consensus in the scientific community, but also acknowledging issues for which contradicting opinions are found in the literature, so that no consensus can be reached (“consensus on dissensus”). An international steering committee is responsible for overlooking the process, and all manuscripts are anonymously peer-reviewed by independent international experts.

This new study after 7 years, to which 140 authors have contributed, finds the results of BACC I still valid. Climate change can be detected at the regional scale but attribution is still weak. The effect of changing atmospheric aerosol loads and land use change is largely unknown so far and needs further attention in the coming years. For the observed changes in biogeochemical and ecological systems, multiple drivers are at work of which climate change is one. Their relative importance still needs to be evaluated.

When addressing climate change impacts on e.g. forestry, agriculture, urban complexes and the marine and terrestrial environment in the Baltic Sea basin, a broad perspective is needed which considers not only climate change but also other significant factors such as emission changes, demographic, economic as well as land-use changes.

The BACC II Author Team is credited at www.baltic-earth.eu/BACC2/team.html.