

BALTEX – A science broker for the Baltic Sea Region

Marcus Reckermann, Hans von Storch, Joakim Langner and Anders Omstedt

BALTEX (the Baltic Sea Experiment) is an interdisciplinary research network of scientists involved in environmental research dedicated to the Baltic Sea drainage basin (including disciplines such as meteorology, hydrology, oceanography, biogeochemistry and climate research). Originally founded in 1992 as a Continental Scale Experiment in GEWEX (the Global Energy and Water Cycle Experiment within the World Climate Research Programme (WCRP) of the World Meteorological Organization, WMO), it was intended to form a common science, communication and data platform with the overall goal to integrate efforts to gain a better understanding of the water and energy cycle in the Baltic Sea basin. BALTEX Phase II (since 2003) has extended the scope to research on regional climate change and variability, climate change impacts on biogeochemistry and water management, but also made first steps towards overarching social and political issues as cross-cutting activities in the context of the scientific objectives. An important aspect of BALTEX Phase II is a more holistic approach towards observing, understanding and modelling major environmental relevant for the entire Baltic Sea region. Parts of the BALTEX Phase II research activities thus contribute to the establishment of a high resolution integrated modelling system for Northern Europe, embedded in an Earth System Model.

An outstanding product of BALTEX as a “knowledge broker” for regional political institutions is the BACC report. Following to a large extent the method of IPCC, a regional assessment report on climate change in the Baltic Sea basin was compiled, which summarizes the published scientifically legitimate knowledge on regional climate change in the Baltic Sea basin and its impacts. The assessment, known as

the BACC report (BALTEX Assessment of Climate Change for the Baltic Sea Basin; BACC author team 2008, Reckermann et al., 2008) was published in 2008 as a book. A survey among climate researchers in the area confirmed the high credibility of this report (Bray et al. 2010). A remarkable aspect of this assessment, and BALTEX outreach activities in general, is the sensible cooperation with regional bodies acting as science-policy interfaces, such as HELCOM (Helsinki Commission, Baltic Marine Environment Protection Commission), and basin-wide organized regional decision makers (BSSSC, Baltic Sea States Sub-regional Co-operation), who are dependent on reliable scientific information to design and implement regional adaptation strategies against climate change impacts. A new BACC report has been initiated as a scientific update extending the scope to socio-economic impacts, and is expected to be finished in 2014.

References

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