

## 15th German-Polish Seminar

The coasts of the North Sea and the Baltic Sea under climate change – synthesis  
of German and Polish strategies for development and prediction

Hamburg, 11 – 12 October, 2016

International Maritime Museum Hamburg

### Final Agenda

#### Tuesday, October 11, 2016

9:00 Welcome and introduction  
J. Sündermann/G. Różyński/H. v. Storch

#### Session 1: Influence of climate change from the Northwest European Shelf

##### Chair: Thomas Pohlmann

09:30 – 09:50 M. Meier (Institute of Baltic Research)  
Regional climate system modelling for the North Sea and Baltic Sea regions –  
a review

09:50 – 10:10 M. Mathis (Max-Planck-Institute of Meteorology)  
Which complexity of regional climate system models is essential for  
downscaling anthropogenic climate change in the Northwest European Shelf?

10:10 – 10:30 Coffee break

10:30 – 10:50 M. Reckermann (Baltic Earth Secretariat)  
Baltic Earth

10:50 – 11:10 E. Zorita (Helmholtz-Zentrum Geesthacht)  
Trends and low-frequency Baltic sea level variability in the 20th century

11:10 – 11:30 A. Lehmann (Geomar Helmholtz-Zentrum f. Ozeanforschung)  
Pathways of deep cyclones associated with large volume changes (LVCs) and  
major Baltic inflows (MBIs)

11:30 – 12:00 Discussion

12:00 – 13:00 Lunch break

## Session 2: Local manifestations of climate change in the North Sea and in the Baltic Sea

Chair: Ralf Weisse

- 13:00 – 13:20 P. Fröhle (Technische Universität Hamburg)  
Future Options of Flood Protection in the Elbe Estuary
- 13:20 – 13:40 G. Różyński (Institute of Hydroengineering)  
Theoretical implications of empirical beach safety criterion based on long-term observations
- 13:40 – 14:00 D. Rak (Institute of Oceanology)  
Long-term monitoring of the inflows in Bornholm Deep, Słupsk Furrow and Gdańsk Deep
- 14:00 – 14:20 J. Dudzińska-Nowak (University of Szczecin)  
Temporal and spatial distribution of the changes of the eastern Pomeranian Bay coasts in 2008-2012 based on airborne laser scanning
- 14:20 – 14:40 Coffee break
- 14:40 – 15:00 S. Musielak / K. Furmańczyk / N. Bugajny (University of Szczecin)  
Temporal and spatial scales of the features and processes forming the Polish Baltic Sea coast
- 15:00 – 15:20 B. Szymczycha (Institute of Oceanology)  
Impact of groundwater discharge along the coast of Poland on the Baltic Sea ecosystem
- 15:20 – 15:40 M. Robakiewicz (Institute of Hydroengineering)  
Impact of predicted climate change on the Vistula Lagoon hydrodynamics
- 15:40 – 16:00 J. Jakacki and A. Przyborska (Institute of Oceanology)  
The impact of civil engineering structures on the coastline as exemplified in the case of the Sopot Pier
- 16:00 – 16:30 Discussion
- 16:30 – 18:00 Possibility to visit the Maritime Museum
- 18:30 Dinner at “Wasserschloss Speicherstadt”

**Wednesday, October 12, 2016**

**Session 3: Societal response**

**Chair: Gregorz Różyński**

- 09:00 – 09:20 S. Bierstedt (Helmholtz-Zentrum Geesthacht)  
A wind proxy based on migrating coastal dunes: statistical validation and calibration
- 09:20 – 09:40 J. Oelerich (LKN Husum)  
Coastal and Flood Protection in Schleswig-Holstein in Times of Climate Change
- 09:40 – 10:00 M. Darecki (Institute of Oceanology)  
SatBałtyk Monitoring System: results and perspectives
- 10:00 – 10:20 Coffee break
- 10:20 – 10:40 G. Różyński on behalf of A. Cieślak (Maritime Authority, Gdynia)  
Coastal protection strategy in Poland
- 10:40 – 11:00 M. Bielecka (Institute of Hydroengineering)  
Socio-economic scenarios of water quality change in the Vistula Lagoon
- 11:00 – 11:20 W. Jiang (Ocean University Qingdao)  
The **intermediary** stage of the Adaptation to Climate Change in China, a case study in Qingdao
- 11:20 – 12:00 Discussion
- 12:00 – 13:00 Lunch break

**Session 4:**

**Chair: Hans v. Storch**

- 13:00 – 14:30 Final discussion
- 14:30 Closing