# **Baltic Earth**

# Earth System Science and Outreach for the Baltic Sea Region





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and the

# **Baltic Earth Science Steering Group**

Baltic Earth Workshop on "Multiple Drivers for Earth System Changes in the Baltic Sea Region", Tallinn, Estonia, 26-27 November 2018



Centre for Materials and Coastal Research

# **Baltic Earth** - Earth system science for the Baltic Sea region





# **Baltic Earth**

Earth System Science for the Baltic Sea Region

## Vision of the programme

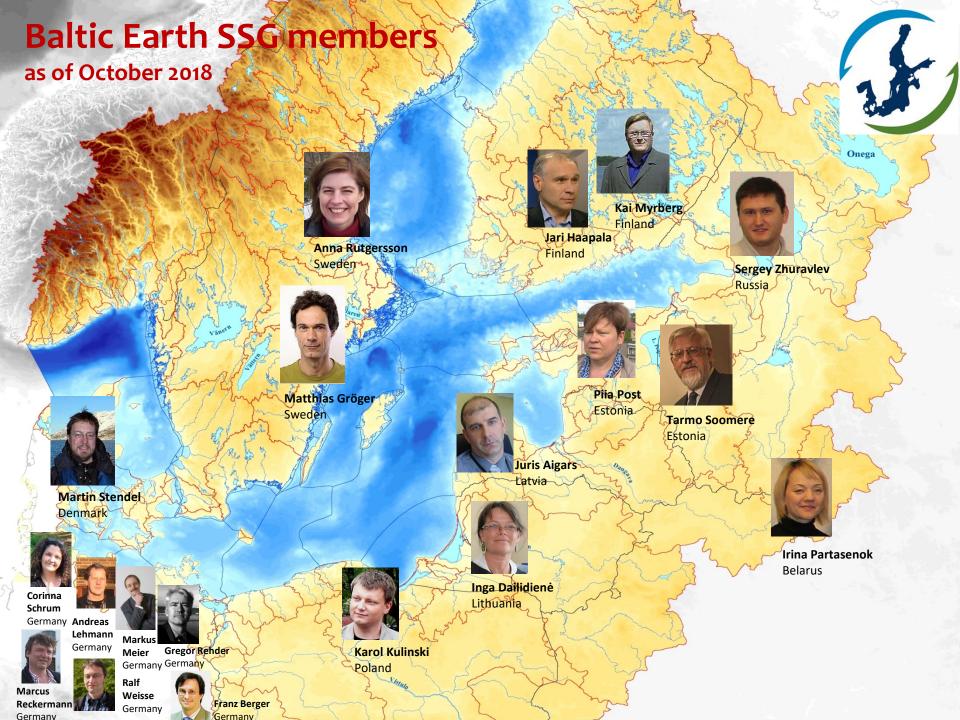
# To achieve an improved Earth System understanding of the Baltic Sea region

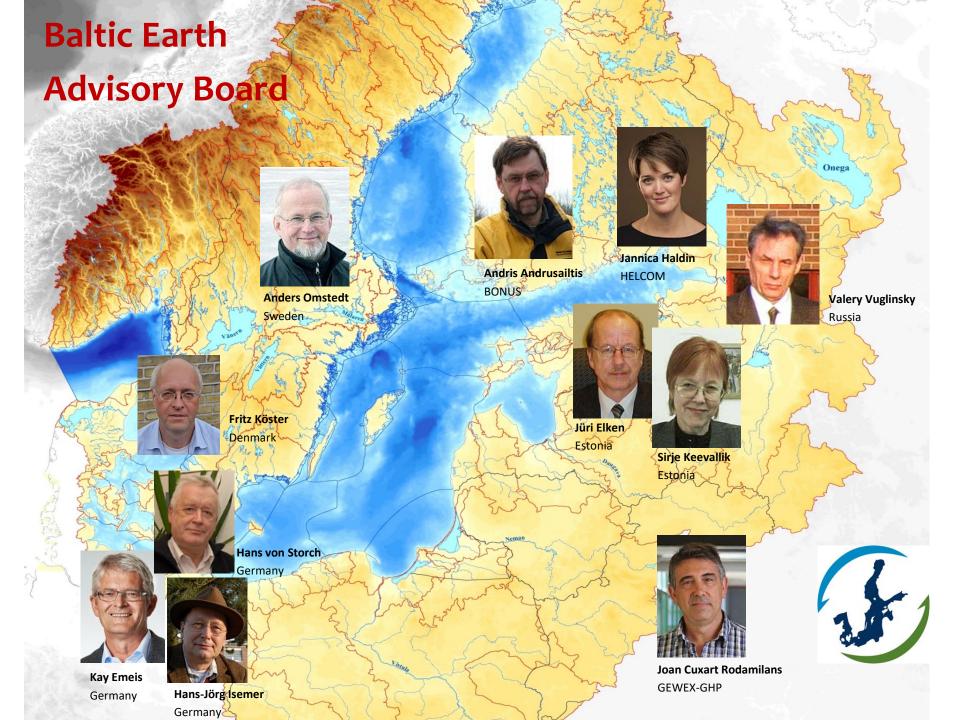
- Interdisciplinary and international collaboration (conferences, workshops, joint projects etc.)
- Holistic view on the Earth system of the Baltic Sea region, encompassing processes in the atmosphere, on land and in the sea and also in the anthroposphere
- "Service to society" in the respect that thematic
   assessments provide an overview over knowledge
   gaps which need to be filled (e.g. by funded projects)
- Education (summer and winter schools)
- Inherits the BALTEX network of scientists and infrastructuren
- Succeeds BALTEX since the 7<sup>th</sup> Study Conference on BALTEX, Borgholm, Öland, Sweden, 10-14 June 2013

# **Baltic Earth Infrastructure**



- International Baltic Earth Secretariat
   at Helmholtz Zentrum Geesthacht
- Baltic Earth Science Steering Group (BESSG) country balance, gender balance, discipline balance, institutional balance, currently 19 members, biannual meetings
- Working Groups installed for each Grand Challenge of the Science Plan plus
  - o WG on Outreach and Communication
  - WG on Education (Summer and Winter schools)
  - WG on the Regional Climate System Modelling
- Advisory Board
- Science Plan 2017
- Website, social media
- Publication series, Newsletter
- Publication database





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# **Baltic Earth**

# Earth System Science for the Baltic Sea Region

## Secretariat

International Baltic Earth Secretariat (IBES)

#### Address:

International Baltic Earth Secretariat
Helmholtz-Zentrum Geesthacht
Max-Planck-Straße 1
D-21502 Geesthacht
Tel: +49-4152-87-1693
Germany
E-mail: balticearth(at)hzg.de (replace "(at)" with
"@")



Social

Website

For details on IBES staff, click here

The International Baltic Earth Secretariat (IBES) as a focal support point for Baltic Earth is located at the Helmholtz-Zentrum Geesthacht (until 1 November 2010: GKSS Research Centre) in Geesthacht, Germany. The Baltic Earth Secretariat's tasks cover in particular:

- to support the Baltic Earth Science Steering Group, Working Groups and Panels in their activities, and to provide preliminary reviews of their work,
- to maintain connections with all participating research groups and with all operational data and numerical modelling centres for Baltic Earth,
- to prepare for international Baltic Earth meetings, workshops, seminars and conferences, and to
  provide assistance for reports by Baltic Earth scientists and to international research groups and the
  research and public community at large, and
- to inform participants about ongoing activities which may be of relevance to their work.

Since January 2002, GKSS (Helmholtz-Zentrum Geesthacht as of 1 November 2010) has been the only sponsor of the International BALTEX (now: Baltic Earth) Secretariat, covering salaries for the staff members, infrastructure and travel support.



Zentrum für Material- und Küstenforschung

## Earth System Science for the Baltic Sea Region

## Secretariat

Website

Social

Home / News Background Grand Challenges Working Groups Projects

<u>Publications</u> Organisation

International Baltic Earth Secretariat

Events Internal

How to participate

2<sup>nd</sup> Baltic Earth Conference The Baltic Sea Region in

BACCII

:::: Helmholtz-Zentrum Geesthacht Centre for Materials and Coastal Research

### Announcements

**HZG Current Employment** Opportunities More









#### Extending the knowledge of the regional Earth system in the Baltic Sea region

Baltic Earth strives to achieve an improved Earth System understanding of the Baltic Sea region as the basis for science-based management in the face of climatic, environmental and human impact in the region. Baltic Earth brings together a broad international research community around one scientific issues identified as fundamental to informing societal efforts to achieve sustainability in the region. These "Grand Challenges" are tackled through joint research efforts, workshops, conferences and capacity building events accompanied by a continuous process of synthesis of the current state of knowledge. Communication with stakeholders and research funders aims to ensure impact and relevance of the research. Bailtic Earth targets the atmosphere, land and marine environment of the Baltic Sea, its drainage basin and nearby areas with relevance for the Baltic Sea region. More...

#### NEWS





arkshop on

and drivers for Earth system changes in the Baitic Sea region allinn, 26-27 November 2018. In collaboration with BONUS, HELCOM, ICES. Registration and Poster Abstract Deadline: 29 October

#### 2nd Baitic Farth Conference

Aftermath page now updated with photos, session summaries and more.



Thank you to the 130 participants (of which about a third were Young Scientists) for a great conference!

#### Upcoming Events

Coastal Summer School 2018 on Coastal dynamics - consequences for coastal protection and ecology, 18 - 29 September 2018, Hiddensee Island, Germany, and on board of the RV "Ellsabeth Mann Borgese"

**EUMET SAT Meteorological Satellite** Conference 2018, 17-21 September 2018, Tallinn, Estonia. More...

ICES Annual Science Conference 2018 24-27 September 2018, Hamburg, Germany: More...

Trilateral Estonian-Finnish-Russian Gulf of Finland Forum "Gulf of Finland natural dynamics and anthropogenic Impact", devoted to 50th Anniversary of trilateral Gulf of Finland Cooperation, 17-18 October 2018, St. Petersburg, Russia.

Baitic Earth Workshop on Multiple drivers for Earth system changes in the Baltic Sea region Tallinn, 26-27 November 2018 in collaboration with BONUS, HELCOM, ICES More...

15t Baitic Earth Winter School on Analysis of Climate Variability Warnemünde, Germany 22 - 29 March 2019 More....

For past events look here...

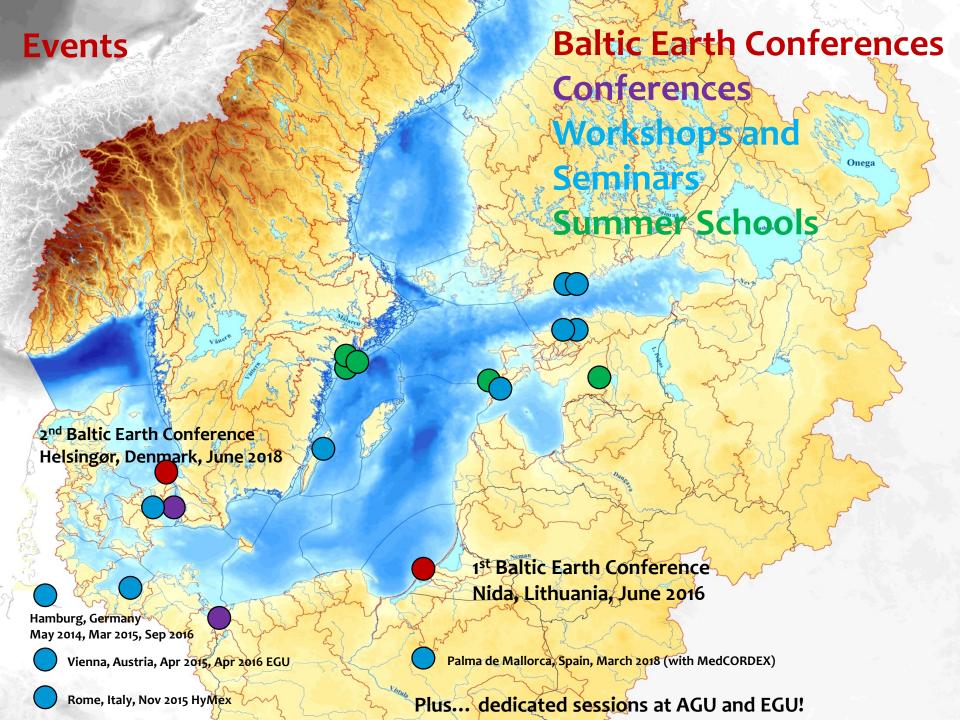
#### Baltic Earth Newsletter

#### The BACC Blog



**Baltic Earth** Science Plan 2017











#### Announcement

# 1st International Winter School on "Analysis of Climate Variability"

22 - 29 March 2019

## co-organized by

Leibniz Institute for Baltic Sea Research Warnemünde (IOW), the University of Rostock and the International Baltic Earth Secretariat at Helmholtz-Zentrum Geesthacht under the umbrella of Baltic Earth (www.baltic.earth)



(photo: IOW/M, Sommer)

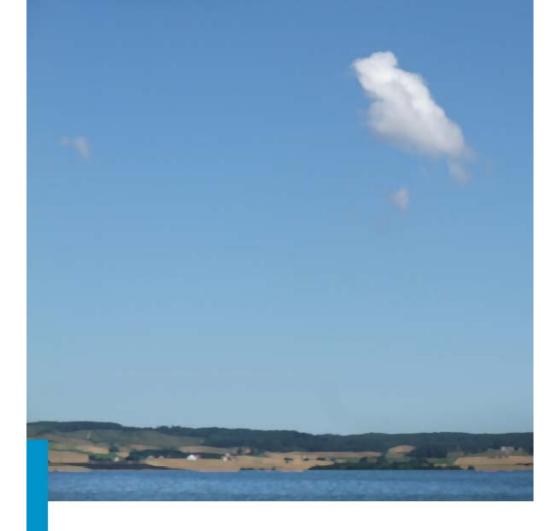
We invite students from the entire Baltic Sea region to the 1st Baltic Earth Winter School on "Analysis of Climate Variability"



# **Baltic Earth Science Plan and Grand Challenges**

- Flexible science plan with a continuously on-going definition of core research questions which are identified to be key scientific issues, so-called "Grand Challenges" (GCs)
- New Grand Challenges will be identified at conferences and by using assessments of existing research by dedicated working groups. Grand Challenges are envisaged to be research foci for periods of about 3-4 years (then terminated or updated).

# Baltic Earth Science Plan 2017



International Baltic Earth Secretariat Publication No. 11, February 2017

Baltic Earth Science Plan 2017



baltic.earth





Independent per-reviewed review articles of the available knowledge on the Baltic Earth Grand Challenges and other related topics

Review paper format published as Special Issue in Open Access Journal

- Salinity dynamics (BE-GC1)
- Land-sea interlinkages (BE-GC2)
- Natural hazards and extreme events (BE-GC3)
- Sea level dynamics and coastal erosion (BE-GC4)
- Regional variability of water and energy exchanges (BE-GC5)
- Multiple drivers for Earth system changes (BE-GC6)
- Coupled regional Earth system Modelling (BE topic)
- Climate change and impacts in the Baltic Sea region (BACC III)
- New climate observation systems (new BE topic)

Starting now in 2018, striving for finalization in 2020...