



7th Study Conference on BALTEX, Borgholm, Öland, Sweden, 10-14 June 2013



Perspectives for Outreach and Education in **Baltic Earth**

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Baltic Earth

Earth System Science for the Baltic Sea Region



Outreach and Education in Baltic Earth



Two new Working Groups in Baltic Earth

Working Group on Outreach and Communication

(Carin Nilsson, Hans von Storch, Marcus Reckermann et al.)

The task of this group will be **to initiate and design potential outreach activities** of the new programme. Also the content and design of the **new website** and activities in **social media** shall be in the hands of this group.

Working Group on Education

(Anders Omstedt, Markus Meier, Marcus Reckermann et al.)

The task of this group will be **to organise educational activities** of the new programme, like Summer Schools etc.



Outreach and Education in Baltic Earth - Definitions



Outreach is an activity of **providing services to populations who might not otherwise have access** to those services.

A key component of outreach is that the **groups providing it are not stationary, but mobile**; in other words they are meeting those in need of outreach services at the locations where those in need are.

In addition to delivering services, outreach has an **educational role**, raising the awareness of existing services.

(Wikipedia)



Outreach and Education in Baltic Earth - Definitions



Communication (from Latin "communis", meaning **to share**) is the activity of conveying information through the **exchange of thoughts**, messages, or information, as by speech, visuals, signals, writing, or behavior. It is the **meaningful exchange of information** between two or a group of persons.

(Wikipedia)



Outreach and Education in Baltic Earth – Looking back at BALTEX

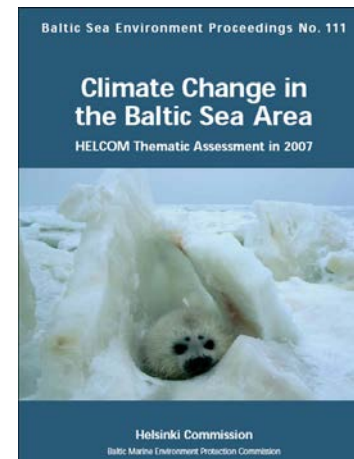
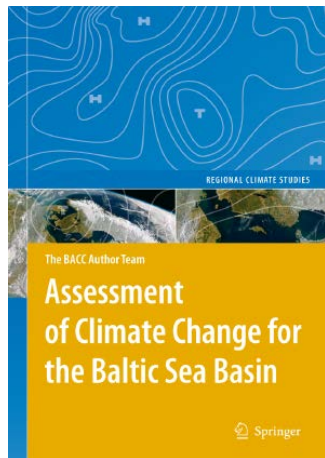


Outreach and communication in BALTEX Phase II

Objective 5:

Strengthened interaction with decision-makers, with emphasis on global change impact assessments

- *HELCOM collaboration via BACC; science-policy interface*





Outreach and Education in Baltic Earth – Looking back at BALTEX



Outreach and communication in BALTEX Phase II

Objective 5:

Strengthened interaction with decision-makers, with emphasis on global change impact assessments

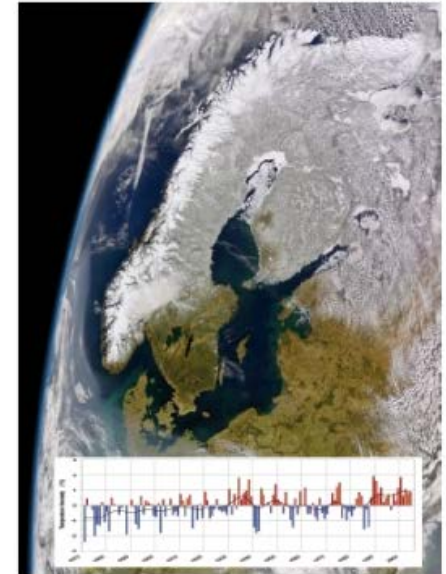
- *BSSSC Conference on Climate Change Adaptation; science-policy interface*
- International Conference for regional policy makers and administrators (“practitioners”)



A BSSSC / BALTEX Conference



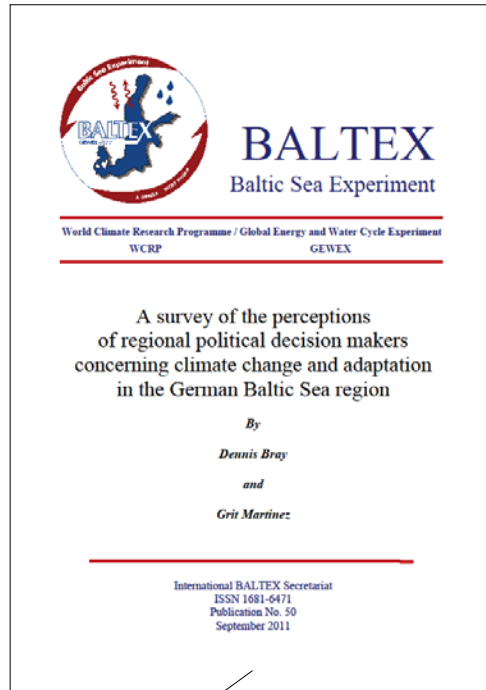
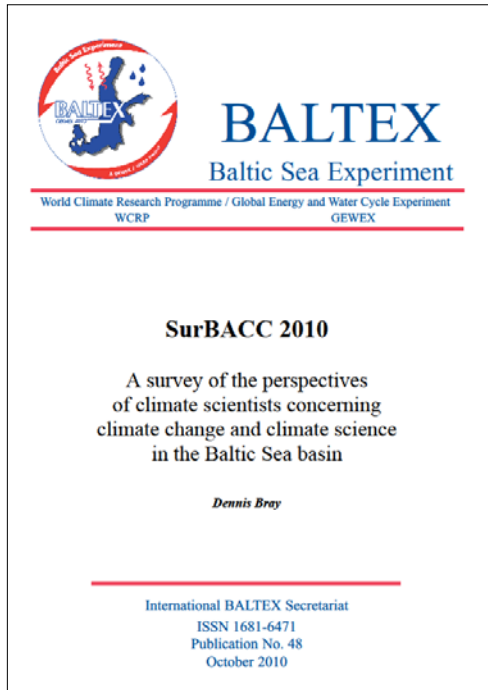
Adapting to Climate Change
Case Studies from the
Baltic Sea Region



Hamburg
Germany
31 May 2011

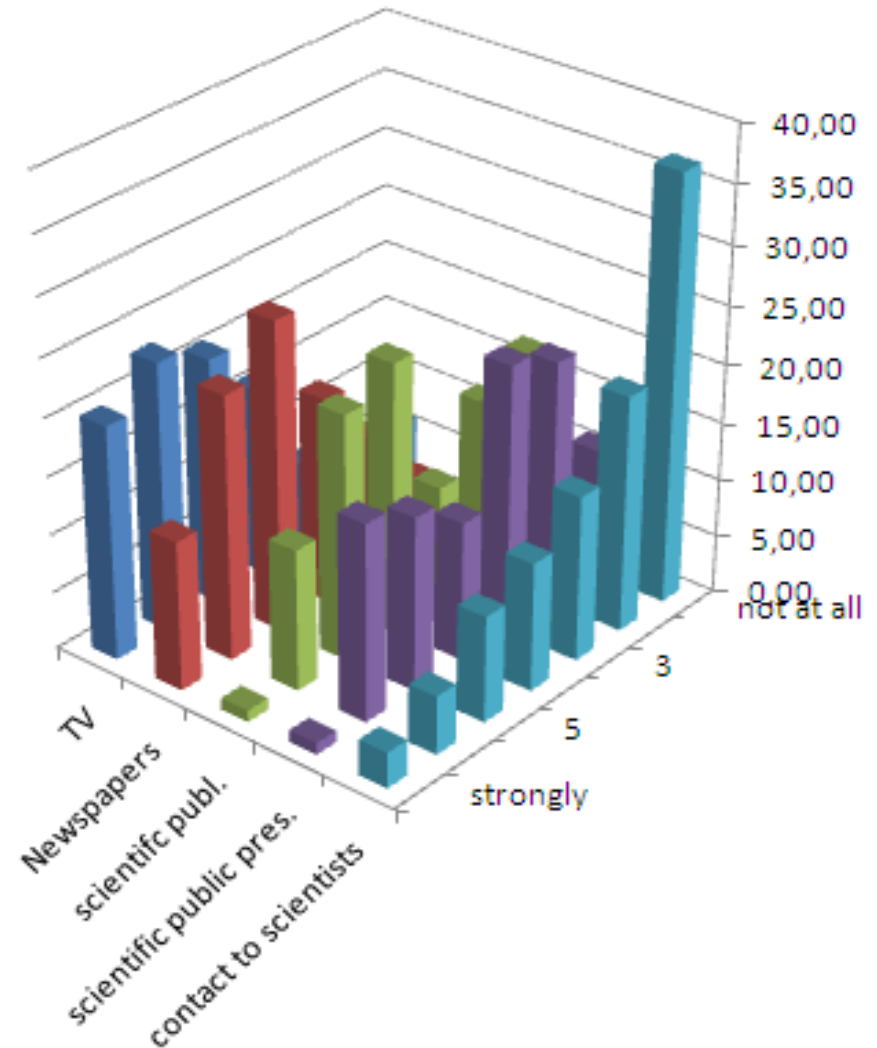


Outreach and Education in Baltic Earth – Looking back at BALTEX



Regional administrators in German Baltic Sea coastal regions:

How strongly do you employ the following sources of information for deciding about issues related to climate adaptation?





Outreach and Education in Baltic Earth – Looking back at BALTEX



Outreach and communication in BALTEX Phase II

Objective 6:

Education and outreach at the international level

Conferences, Workshops and Summer Schools

- *For the scientific community*
- *For the Stakeholder Community*
- *For Students*

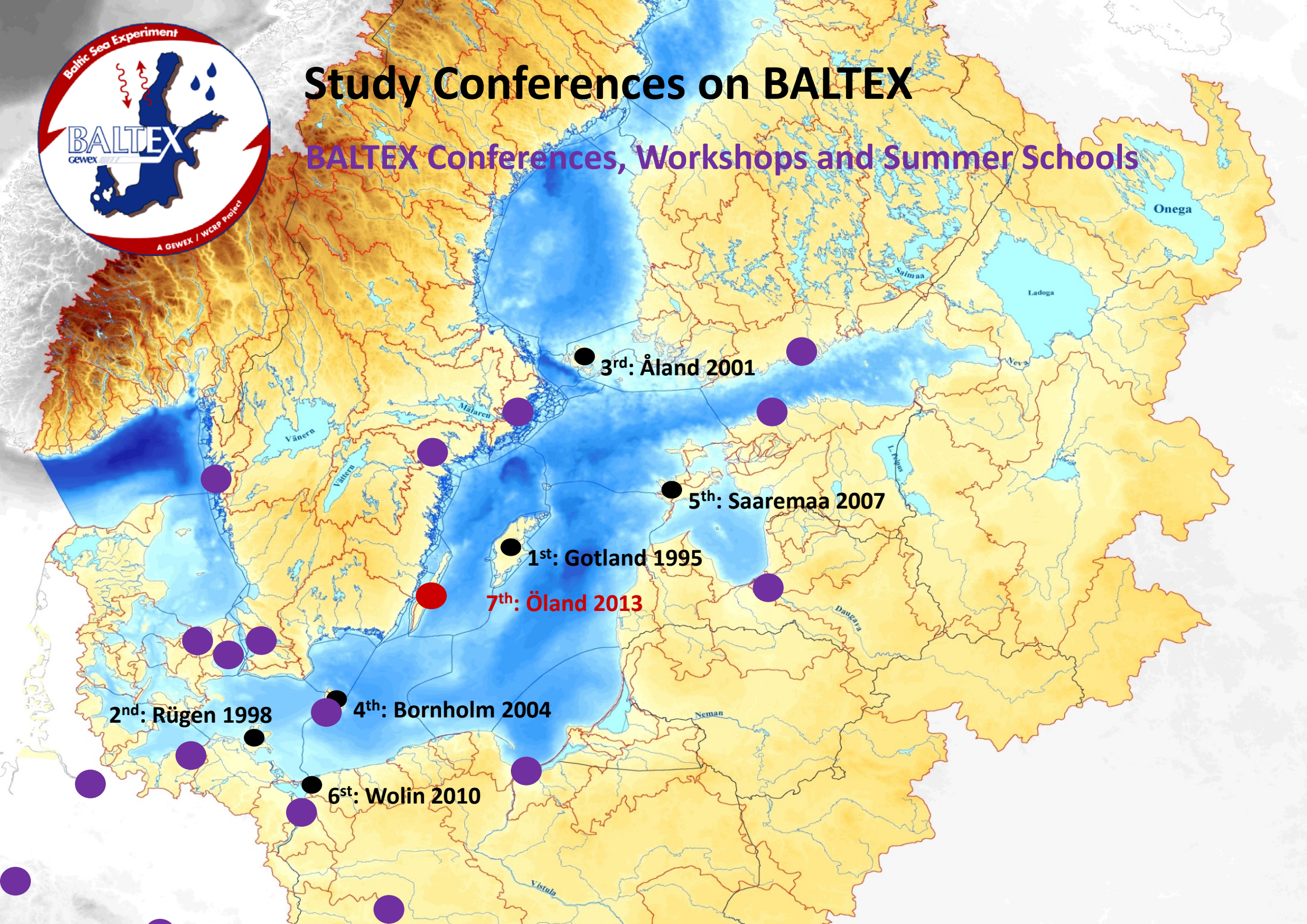
Lectures to the public (mainly on BACC results)

Publications for scientists and the public (on BACC results)



Study Conferences on BALTEX

BALTEX Conferences, Workshops and Summer Schools



3rd: Åland 2001

5th: Saaremaa 2007

1st: Gotland 1995

7th: Öland 2013

2nd: Rügen 1998

4th: Bornholm 2004

6st: Wolin 2010



Outreach and Education in Baltic Earth – Looking back at BALTEX



Outreach and communication in BALTEX Phase II

Objective 6:

Education and outreach at the international level

- *Summer Schools*

International Summer School on
**Climate Impacts on the Baltic Sea -
From Science to Policy**

27 July – 7 August 2009,

Nexø, Bornholm, Denmark

20 students from Dk, S, Fi, Est, Pl, D

Text book produced from lectures





Outreach and Education in Baltic Earth – Looking back at BALTEX



Outreach and communication in BALTEX Phase II

Objective 6:

Education and outreach at the international level

- *Publications for the public (on BACC results)*

→ **Summary brochure**
for policy makers and the public
(in German)

- *Lectures to the public (mainly on BACC results)*





Outreach and Education in Baltic Earth – Prospects



Communication and Outreach (recommendations from WG on PostBALTEX report)

Study Conferences ... modifications suggested:

- Conferences with **one or few specific research foci** related to the Grand Challenges
- Few **invited lecturers** and a larger **focus on posters**
- More time for **open discussions** (as part of the continuous process to define new research problems)
- **Invited scientists** to suggest discussion topics
- Interval of Conferences
- Dedicated **stakeholder involvement** in conferences and discussions, for example having one specific day with stakeholder involvement at a 5-day conference



Outreach and Education in Baltic Earth – Prospects



Communication and Outreach (recommendations from WG on PostBALTEX report)

- Assess ways to communicate with **climate services and environmental agencies** – though special targeted newsletters or policy papers or other types of interactions
- Specific **sessions** at already existing conferences (EGU, AGU, BSSC etc), focusing on Baltic Earth or related topics as a way to **reach out to other relevant scientific communities**
- Update/write a **communication and outreach plan** for the next phase



Communication and Outreach

- **Newsletter**
- **BACC II summary booklet for non-scientists** in English and the Baltic Sea riparian languages
- Other outreach **print publications for non-scientists**
- Online version of a **Baltic Earth Climate Atlas**
- Baltic Earth **Website** for Scientists with sections for non-scientists, explaining the science
- Baltic Earth **Blogs**
- Baltic Earth in **social media**





Outreach and Education in Baltic Earth – Prospects



Education

- **Summer Schools** and related textbooks
- **Network** of Baltic Earth Graduate **Students**
- **Materials**



Education

Recommendations from a survey with students at a summer school at Askö...

- More time on hands-on exercises and discussions, as well as more specified courses focusing on single modeling approaches
- Modelling in general (Spatial modeling, statistical approaches)
- Climate change and its effects on the Baltic Sea
- Species distribution models in relation to biogeochemical modeling
- Biogeochemical modeling including the carbon cycle, primary production, microbial loop
- Modeling the Baltic Sea social ecological system
- General course on the Baltic Sea ecology
- Practical methods (focus on experiments)
- ...