





"The marine ecosystem in changing climate

# On the added value of coupled climate environmental modeling for the Baltic Sea"

# Workshop at SMHI Friday October 16<sup>th</sup>

**Time**: October 16<sup>th</sup>, 2009, 10.00-17.00 Coffee from 09.00 **Place**: Hörsalen at SMHI in Norrköping **Registration**: Closed

The workshop is free of charge and open for all interested scientists

**The aim** of this workshop is to bring scientists with interest in the marine ecosystem and changing climate together and to discuss collaboration. Within the **ECOSUPPORT** project an advanced modeling tool for scenarios of the Baltic Sea ECOsystem to SUPPORT decision making will be developed (see <u>www.baltex-research.eu/ecosupport/</u>). ECOSUPPORT is funded by the **BONUS** program (see <u>www.bonusportal.org</u>). The objectives of ECOSUPPORT are to calculate the combined effects of changing climate and changing human

activity (changes of nutrient loads from land and air, coastal management, fisheries) on the Baltic Sea ecosystem, to perform multi-model ensemble simulations, and to quantify uncertainties. During the project period 2009-2011 many scenario simulations will be performed and a large amount of model data describing the possible future development of the marine ecosystem will be available.

We feel that there is substantial overlap of interests between ECOSUPPORT and other projects within BONUS and other programs. To stimulate cooperation and the exchange of data we invite all interested scientists to join the workshop and to discuss the impact of changing climate on the marine ecosystem.

### Final workshop program October 16

From 09:00 Registration and coffee

10:00 Welcome

## 10:05-12:25 Presentations (max 15 min plus 5 min for questions) Chair: Brian MacKenzie

- 10:05-10:25 Markus Meier, SMHI: Impact of changing climate on biogeochemical cycles in the Baltic Sea An introduction
- 10:25-10:45 Bo Gustafsson, Baltic Nest Institute: First results from coupled physical-biogeochemical modelling within the BONUS+ project ECOSUPPORT (An advanced modeling tool for scenarios of the Baltic Sea ECOsystem to SUPPORT decision making)
- 10:45-11:05 Christoph Humborg, Baltic Nest Institute: First results from the BONUS+ project RECOCA (Reduction of Baltic Sea Nutrient Inputs and Cost Allocation within the Baltic Sea Catchment)
- 11:05-11:25 Ivan Kuznetsov, Baltic Sea Research Institute, Warnemünde: Simulation of the carbon cycle in the Baltic Sea
- 11:25-11:45 Anders Omstedt and Anna Rutgersson, Gothenburg and Uppsala University: Building predictive capability regarding the Baltic Sea organic/inorganic carbon and oxygen system
- 11:45-12:05 Zhenwen Wan, Danish Meteorological Institute: Modeling Study on the seasonality of Ecosystem Dynamics in the Baltic Sea
- 12:05-12:25 Agneta Andersson, Umeå University: Effect of increasing load of allochtonous organic carbon and inorganic nutrients on the efficiency of a marine pelagic food web

#### 13:15-14:35 Presentations (max 15 min plus 5 min for questions) Chair: Thorsten Blenckner

- 13:15-13:35 Jan Marcin Weslawski, Institute of Oceanology, Sopot: Biological valorization of the Southern Baltic Sea
- 13:35-13:55 Per Jonsson, Gothenburg University: Dispersal of marine organisms in the Baltic Sea estimated from Lagrangian trajectories driven by ocean circulation models
- 13:55-14:15 Inari Helle, Helsinki University: IBAM Integrated Bayesian risk analysis of ecosystem management in the Gulf of Finland
- 14:15-14:35 Anna Gårdmark, Swedish Board of Fisheries: Biological Ensemble Modelling to improve fisheries science and management
- 14:35-15:00 Coffee + Poster

#### 15:00-17:00 Discussion of collaboration and data exchange Chair: Brian MacKenzie

- All

Welcome! Markus Meier