ECOSUPPORT

Project meeting in Tallin August 17 2009-08-20 Time: 9.00-13.00 Rapporteur: Kari Eilola

Participants.

Chubarenko	ABIORAS
Gorbunova	ABIORAS
Gustafsson	BNI
Ruoho-Airola	FMI
Schenk	GKSS
Wrobel	IOPAS
Piwowarczyk	IOPAS
Kuznetsov	IOW
Neumann	IOW
Lessin	MSI
Maljutenko	MSI
Raudsepp	MSI
Laanemets	MSI
Eilola	SMHI
Meier	SMHI
	Gorbunova Gustafsson Ruoho-Airola Schenk Wrobel Piwowarczyk Kuznetsov Neumann Lessin Maljutenko Raudsepp Laanemets Eilola

- 1. Introduction by Markus Meier.
 - a. Meeting mainly regarding the work packages WP2 and WP4.
 - b. Information about the ECOSUPPORT homepage <u>http://www.baltex-</u><u>research.eu/ecosupport/</u>.
- 2. Around table presentations and information.
- 3. Administrative information by Markus Meier.
 - a. Consortium agreement: Not all members have signed yet. Need to rewrite some legal issues and then send out the agreement for new assignments from partners. This delay has created some problems in funding for some participating countries.
 - b. ECOSUPPORT Management meeting in June: Notes are available on the ECOSUPPORT homepage.
 - c. Helsinki BONUS coordinator meeting on the new BONUS Science plan. Check more information on the BONUS home page <u>http://www.bonusportal.org/</u>. At the coordinator meeting 3 important and burning questions were requested and the importance of added value between the projects.
 - d. The General Annual Assembly of the ECOSUPPORT project will be held together with two workshops on October 14-16 2009 in Norrköping. More information at <u>http://www.baltex-research.eu/ecosupport/events.html</u>.
 - e. For the dissemination work all participants are requested to send complete information about all scientist and co-operators related to the ECOSUPPORT project.

Project status information:

- 4. Markus Meier (SMHI):
 - a. The first biogeochemical 2-nm model runs with RCA-ERA forcing for 1960-2007 have been performed. More work is needed to have satisfactory results.
 - b. The first climate scenario simulation 1960-2100 using RCAO is done but the analysis is not ready.
 - c. The coupled biological and physical climate scenario simulation 1960-2100 using RCO-SCOBI is ongoing.
- 5. Joanna Pinowarczyk (IOPAS):
 - a. Economical situation not ready due to lacking consortium agreement.
 - b. A methodology of biological valorization of the Southern Baltic Sea (followed by case study) was published in English (please find it attached). It will also be used as starting point for our work in ECOSUPPORT.
 - c. More than 20 questionnaires were gathered (general public), they are currently translated into English.
 - d. In September the meeting with NGOs will be organized and more questionnaires will be collected.
 - e. In October two workshops for local authorities and probably fishermen will be organizes and questioning will be continued.
 - f. Then a report will be prepared as per the guideline received from Anders Hansson.
- 6. Tuija Ruoho-Airola (FMI):
 - a. Done a literature review of 30-40 publications searching for atmospheric N and P concentration and deposition data for the period 1860 and forward.
 - b. The collected data will be scanned and transformed to excel data sheets.

- c. A common data format will be defined in discussions with Kari Eilola, Bo Gustafsson and Thomas Neumann.
- d. The data will be transferred to the home page together with a readme file and a report.
- e. Discussion about deliverables for 2010
 - i. How to determine uncertainties for future projections.
 - ii. What information is needed for the atmospheric carbon dioxide projections. pCO2 is needed. Investigate ratios between concentrations in the Baltic Sea region versus the global concentrations to check possible differences.
- 7. Thomas Neumann (IOW):
 - a. Used RCA-ERA forcing data received from SMHI and has performed first runs for the period 1960-2007.
 - b. Increased grid resolution to 3nm in the entire model domain.
 - c. Showed ppt-presentation with some model results and validations. The model needed renewed initial conditions and show still some weaknesses e.g. of phosphorus dynamics in the deepest Baltic proper.
- 8. Markus Meier (SMHI):
 - a. Initiated a discussion on how to calculate an ensemble mean based on the different model setups.
- 9. Ivan Kuzketsov (IOW):
 - a. Presentation of the carbon cycle included in the ERGOM model.
 - b. Presented a validation of modelled alkalinity in the Baltic Sea.
- 10. Frederik Schenk (GKSS):
 - a. Has started to reconstruct the lower atmospheric conditions for the period 1860 and forward.
 - b. Because of lack of information the reconstruction has to rely on the sea level pressure. This method has great weaknesses regarding e.g. the humidity and atmospheric temperature.
 - c. Markus Meier suggested that also air temperature observations as predictor should be included.
 - d. The first reconstructed atmospheric forcing may probably be tested on the BNI model within a 2-3 weeks period.
- 11. Boris Chubarenko (ABIORAS):
 - a. Fund is available.
 - b. First compilation of nutrient load for the Kaliningrad Oblast, some useful examples with FyRis model (one test internal catchment – river Instruch) and Pregolia River catchment – merging efforts of ECOSUPORT and contacts with SLU.
 - c. Questionnaire done, 30 persons from municipalities, analyzed in Russian, under preparation in English
- 12. Bo Gustafsson (BNI):
 - a. Has started to use the RCA-ERA forcing.
 - b. The biogeochemical model results are delayed.
 - c. The loading of atmospheric and land derived nutrients has been updated for the period 1970-2007.
- 13. Urmas Raudsepp (MSI):
 - a. Has decided to use the GETM model for the local model of Gulf of Finland.
 - b. The modelled time period will be 1997-2006 when large data sets are available for validation.

- c. The nutrient loading from the ERGOM model will probably be used.
- 14. Discussions about the needs for WP4
 - All partners in WP 4 should provide a list of what boundary conditions (including the coordinates at the open boundaries) and forcing they need from WP1 and WP2. The lists should be coordinated together with Urmas Raudsepp who will provide it to the other WPs. The time period 1997-2006 should be used.
 - b. The land runoff data either from the ERGOM model or the BNI model may be used.
 - c. The questionarie on socioeconomic impacts from LU should be discussed on the ECOSUPPORT meeting in October.
- 15. The results from the HYPE model are not yet available.

16. Kari Eilola (SMHI):

- a. Discussion about what figures and tables we should use for a common validation of model results.
- b. The task is to produce a document for this and use a first set of common model validation figures at the ECOSUPPORT meeting in Norrköping in October 2009. A first draft by Kari was distributed to WP2 partners.
- c. The task is also to put forward a suggestion on how to compute the ensemble means of climate scenarios in order to discuss the methods in detail at the meeting in Norrköping.