

Fifth Study Conference on BALTEX



Kultuurivara
Kuressaare, Saaremaa, Estonia

4 - 8 June 2007

Conference Programme

Fifth Study Conference on BALTEX, 4-8 June 2007, Kuressaare, Saaremaa, Estonia

Conference Programme - Overview

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday
	Registration 8:00 to 10:00 Opening Ceremony and Opening Session Lunch: 12:30-14:00	Session 2a Break: 10:20-10:50 Session 2a Lunch: 12:30-14:00 Poster Session I End: 15:30	Begin: 8:30 Session 2a Session 2b Break: 10:10-10:40 Session 2b Lunch: 12:40-14:00 Session 2c Break: 15:40-16:10	Session 3a Session 3b Break: 10:40-11:10 Session 4 Lunch: 12:40-14:00 Poster Session II Break: 15:30-16:00	Session 4 Break: 10:20-11:00 Session 4 Closing
Registration 14:00 to 18:00 End: 18:00	Session 1 Break: 16:00-16:30 Session 1 End: 18:10 Non-organized casual Ice-Breaker at Hotel Johan, Captain's Pub, from 20:00	Sightseeing Tour 16:00 - 19:30	End: 18:00 Open Workshop on BALTEX Data Management "How to get Access to BALTEX Data Bases" 18:15 - 20:00	End: 17:20 Conference Dinner at the Bishops Castle of Kuressaare 19:30	

Sessions

- 1 Improving Knowledge on Water and Energy Cycles
- 2a Past Climate Variability and Change
- 2b Climate Projections
- 2c Impact of Climate Change
- 3a Coastal Zone and Water Management
- 3b The Coastman Project
- 4 Linking BALTEX Science to Air Quality, Water Quality and Impacts on Ecosystems

Conference Programme

MONDAY, 4 June 2007

8:00 **Registration**

10:00 **Opening Ceremony**

Jüri Elken

Tallinn University of Technology, Estonia
Member of the BALTEX SSG

Andres Tarand

European Parliament, Estonia

Jaanus Tamkivi

Minister of the Environment, Estonia

Urve Tiidus

Mayor of Kuressaare, Saaremaa, Estonia

Joakim Langner

Swedish Meteorological and Hydrological Institute, Sweden
Chair of the BALTEX SSG

11:00 **Opening Session**

Chair: Sirje Keevallik

11:00 **The World Climate Research Programme – Achievements and Future**
Vladimir Ryabinin (*solicited*)

11:30 **GEWEX Coordinated Energy and Water Cycle Observation Project**
John Roads (*solicited*)

12:00 **Common Research Interests for LOICZ and BALTEX in the Baltic Sea Area**
Jozef M. Pacyna (*solicited*)

12:30 *Lunch*

MONDAY, 4 June 2007

Session 1: Improving Knowledge on Water and Energy Cycles

Chair: Hans-Jörg Isemer

14:00 Performance of an Ensemble of RCMs over the BALTEX Area from the Inter-Continental Transferability Study (ICTS)

Burkhardt Rockel, B. Geyer, R.W. Arritt, J. McGregor, W.J. Gutowski Jr., C. Jones, I. Meinke, D. Paquin, J. Roads, E. Takle, U. Willén

14:20 BALTEX Contribution to GEWEX: Independent Estimates of the Water and Energy Budgets in the Baltic Sea Region?

Daniela Jacob

14:40 Investigation of the Water and Energy Budgets in the BALTEX Area, as Simulated in a Regional Climate Model

Petter Lind, E. Kjellström

15:00 The Contribution of the BALTEX In-situ Reference sites to CEOP

Frank Beyrich, W. Adam, F. Bosveld, J. Poutiainen, T. Savunen

15:20 Comparison of Air-sea Fluxes in the Uncoupled and Coupled BALTIMOS System

Philip Lorenz, D. Jacob, A. Lehmann

15:40 Advances in Weather Radar Based Quantitative Precipitation Measurements for the Purposes of Climate Research

Jarmo Koistinen, T. Kuitunen, D. Michelson

16:00 *Break*

Chair: Andreas Lehmann

16:30 Estimating Climate Trends using GPS

Tobias Nilsson, J. Johansson, M. Lidberg, G. Elgered

16:50 Observations and Modelling of a Cold-air Outbreak over the Gulf of Finland

Lorenzo Claveri, T. Vihma, H. Savijärvi, B. Tammelin

17:10 Recent Advances in the Physical Oceanography of the Gulf of Finland

Kai Myrberg, T. Soomere, M. Leppäranta, A. Nekrasov

17:30 Modeling the Pathways and Ages of Inflowing Salt- and Freshwater in the Baltic Sea

Markus H. E. Meier

- 17:50 **Testing a New Swell-dependent Drag Coefficient in a Process Oriented Ocean Model**
Björn Carlsson, A. Rutgersson, A.-S. Smedman
- 18:10 *End of Monday's Sessions*
- 20:00 *Icebreaker*

TUESDAY, 5 June 2007

Session 2a: Past Climate Variability and Change

Chair: Anders Omstedt

- 8:30 **How do We Know that Human Influence is Changing the Climate in the Baltic Sea Region?**
Hans von Storch, J. Bhend (*solicited*)
- 9:00 **Towards the Detection of a Human Induced Climate Change in Northern Europe**
Jonas Bhend, H. von Storch
- 9:20 **Precipitation Pattern in the Baltic Sea Drainage Basin and its Dependence on Large-scale Atmospheric Circulation**
Jaak Jaagus
- 9:40 **Long-term Temperature, Salinity, and Sea Level Records from the Baltic Sea Entrance**
Kristine Madsen, N. Højerslev
- 10:00 **Air Mass Seasonality and Winter Season Cold Air Masses in Latvia**
Anita Draveniece

10:20 *Break*

Chair: Daniela Jacob

- 10:50 **Modelling the Baltic Sea Ocean Climate on Centennial Time Scale; Temperature and Sea Ice**
Daniel Hansson, A. Omstedt
- 11:10 **Trends of Temperature and Salinity of the Baltic Sea for the Period 1969-2005 and Long-Term Variability of Winter Water Mass Formation**
Andreas Lehmann, H.-H. Hinrichsen, S. Febiri, G. Tschersich
- 11:30 **Stagnation Periods and Deepwater Inflow Dynamics: An Analysis of Measurements in the Baltic Sea during the 20th Century**
Erik Gustafsson, A. Omstedt

TUESDAY, 5 June 2007

- 11:50 **Trends, Long-Term Variations and Extremes of the Northern Baltic Proper Wave Fields**
Tarmo Soomere
- 12:10 **Current and Expected Changes in River Ice Regimes within the Russian Part of Baltic Drainage Basin**
Valery Vuglinsky
- 12:40 *Lunch*
- 14:00 Poster Discussion I (*see page 10*)
- 15:30 *End of Tuesday's Sessions*
- 16:30 *Sightseeing Tour*

WEDNESDAY, 6 June 2007

Session 2a: Past Climate Variability and Change (cont.)

Chair: Hans von Storch

- 8:30 **Simulation of Runoff in the Baltic Sea Drainage Basin during the Past Millennium**
Jonas Olsson, L. P. Graham, J. Rosbjerg, S.-S. Hellström, E. Kjellström, R. Berndtsson
- 8:50 **Climate Simulations of the Past Millennium with the Global Model ECHO-G: Results for the Baltex Area**
Eduardo Zorita, S. Wagner, F. Gonzalez-Rouco, H. von Storch
- 9:10 **Towards Policies and Adaptation Strategies to Climate Change in the Baltic Sea Region - The ASTRA Project**
Walter Leal, F. Mannke (*solicited*)

End of session 2a

Session 2b: Climate Projections

- 9:40 **The ENSEMBLES and the BALTEX Projects**
Markku Rummukainen, C. Hewitt, D. Jacob (*solicited*)
- 10:10 *Break*

WEDNESDAY, 6 June 2007

Chair: Dan Rosbjerg

- 10:40 **Changes in the Water and Energy Budgets in the BALTEX Area in Future Warmer Climates as Simulated in a Regional Climate Model**
Erik Kjellström, P. Lind
- 11:00 **Transient Simulations of Future Runoff to the Baltic Sea for the 21st Century**
L. Phil Graham
- 11:20 **Precipitation Extremes under Climate Change in the Baltic Area as Simulated with a Regional Climate Model**
Ole Bøssing-Christensen
- 11:40 **Decadal Variability of the Hydrological Cycle in the Baltic Sea Region**
Daniela Jacob, P. Lorenz
- 12:00 **Prolonged Periods with Little Rain during Summer in Finland - Observations and Future Projections**
Kirsti Jylhä, T. Kilpeläinen, A. Venäläinen, S. Saku, H. Tuomenvirta, K. Ruosteenoja, A. Vajda
- 12:20 **Future Wave Climate of the Baltic Sea - Projections with Winds from the Regional Climate Model RCA3 of the Rossby Centre**
Barry Broman

End of Session 2b

12:40 *Lunch*

Session 2c: Impact of Climate Change

Chair: Fritz Köster

- 14:00 **Climate Change Impact on the Baltic Sea Ecosystem: The HELCOM View on Future Cooperation with BALTEX**
Juha-Markku Leppänen, H. Backer (*solicited*)
- 14:30 **Climate Change and Land Ecosystems of the Baltic Sea Basin – Knowledge Gaps and Research Priorities**
Benjamin Smith (*solicited*)
- 15:00 **RCM-Downscaled Climate Indices Requested by the Swedish Government Climate and Vulnerability Inquiry Committee: An Overview and Some Remarks**
Lars Bärring
- 15:20 **Impact of Climate Change on the Baltic Sea Ecosystem**
Kari Eilola, H. E. M. Meier

WEDNESDAY, 6 June 2007

15:40 *Break*

Chair: Benjamin Smith

16:10 **Methods for Assessing the Impact of Climate Change on Nutrient Flows from Catchments**
Heikki Kaipainen, Ä. Bilaletdin, T. Frisk, A. Paananen

16:30 **Perpetrator, Victim and Free-Rider – The Ambivalent Role of Tourism and Recreation for the Climate Change**
Ralf Scheibe

End of Session 2c

Session 3a: Coastal Zone and Water Management

16:50 **Adaptation to Climate Change in Water Management – Baltic Sea Basin**
Zbigniew W. Kundzewicz (*solicited*)

17:20 **The Application of the Conceptual Model Metq2006 for the River Iecava Basin as Case Study in Latvia**
Ansis Ziverts, A. Bakute, E. Apsite

17:40 **Water Levels and Flow in the River Systems of Lake Vänern and Lake Mälaren.**
Sara-Sofia Hellström, S. Bergström, J. Andréasson

18:00 *End of Wednesday's Sessions*

18:15 **Open Workshop on BALTEX Data Management**
“How to get Access to BALTEX Data Bases”

20:00 *End of Workshop*

THURSDAY, 7 June 2007

Session 3a: Coastal Zone and Water Management (*cont.*)

Chair: Jozef Pacyna

8:30 **Performance of the Operational HIROMB Model in Relation to the Oceanographic Extreme Events and Seasonal Fluxes in the Gulfs of Finland and Riga**

Jüri Elken, T. Kõuts, U. Lips, U. Raudseoo, P. Lagemaa, T. Liblik

8:50 **GIS Modelling of Water Transfer in System of River Catchment – Lagoon – Sea (Pregel River – Vistula Lagoon - Gdansk Gulf)**

Natalia Goncharova, D. Domnin, A. Korzh, E. Gurova

End of Session 3a

Session 3b: The Coastman Project

9:10 **COASTMAN – Coastal Zone Management in the Baltic Sea Region**
Jan Fidler, R. Wennersten, N. Brandt, Å. Larsson (*solicited*)

9:40 **Klaipeda Sea Deepwater Port Development Issue**

Olga Belous, S. Gulbinskas, R. Mileriene

10:00 **Coastal Zone Management in Haapsalu Bay Area, Estonia**

Arvo Iital, K. Vilta, E. Loigu, K. Roosalu

10:20 **The Conflict in the Kadetrinne: The Need for Integrative Approaches to Sustainable Coastal Zone Management in the Baltic Sea**

Walter Leal, A. Holda, D. Krahn

End of Session 3b

10:40 *Break*

Session 4: Linking BALTEX Science to Air Quality, Water Quality and Impacts on Ecosystems

Chair: Ilppo Vuorinen

11:10 **Atmospheric Input of Nitrogen to the Baltic Sea Basin – Present Situation, Trends, Variability and Impact of Climate Change**

Joakim Langner (*solicited*)

THURSDAY, 7 June 2007

- 11:40 **Developing an Integrated View on the Baltic Sea Ecosystem:
The EUR-OCEANS Baltic System Study**
Fritz Köster, D. Turner, A. Omstedt, C. Möllmann, H. Gislason, R. Autio,
A. Olsson, R. Diekmann (*solicited*)
- 12:10 **Climate Change Impacts on the Ecosystems of the North Sea and
Relevance to the Baltic: Evidence for Past Variability and Future
Prognosis**
Philip C. Reid (*solicited*)
- 12:40 *Lunch*
- 14:00 Poster Discussion II (*see page 12*)
- 15:30 *Break*
- Session 4: **Linking BALTEX Science to Air Quality, Water Quality and
Impacts on Ecosystems (*cont.*)**
- Chair: Joakim Langner
- 16:00 **Long-Range Transport of Polycyclic Aromatic Hydrocarbons over
Europe and their Deposition into the Baltic Sea**
Armin Aulinger, V. Matthias, M. Quante
- 16:20 **Impact of Anthropogenic Airborne Nutrients to the Bog Ecosystem in
the Eastern Baltic Sea Basin.**
Marko Kaasik, T. Ploompuu, E. Meier, Ü. Sõukand, H. Kaasik, T. Alliksaar,
J. Ivask, R. Ots
- 16:40 **The Drift and Dispersion of an Oil Spill in the Baltic Sea Ice Season:
Observation of the Runner 4 Case**
Keguang Wang, M. Leppäranta, M. Gästgifvars, J. Vainio
- 17:00 **High Resolution Atmosphere-Sea Hydro-Ecological Modelling in the
Coastal Zone**
Rein Tamsalu, V. Zalesny, R. Rõõm, R. Aps
- 17:20 *End of Thursday's Sessions*

FRIDAY, 8 June 2007

Session 4: Linking BALTEX Science to Air Quality, Water Quality and Impacts on Ecosystems (*cont.*)

Chair: Timo Vihma

8:30 **The Baltic Sea Carbon Cycle: A Challenge for Research within BALTEX**
Bernd Schneider (*solicited*)

9:00 **Simulations of Atmospheric CO₂ Concentration over Europe**
Ute Karstens

9:20 **Upscaling of CO₂ Fluxes**
Sven-Erik Gryning, H. Soegaard, E. Batchvarova

9:40 **A Comparison between Webb Corrected Humidity and CO₂ Spectra in the Marine Atmospheric Boundary Layer**
Erik Sahlée, A.-S. Smedman, A. Rutgersson

10:00 *Break*

Chair: Bernd Schneider

10:30 **The Annual Cycle of Carbon-Dioxide and Parameters Influencing the Air-Sea Carbon Exchange in the Baltic Proper**
Anna Rutgersson, A.-S. Smedman, E. Sahlée, M. Norman, B. Schneider

10:50 **Model for the Air-Sea Gas Exchange through Film-Covered Water**
Christoph Zülicke

11:10 **Set Up of a Thermodynamic Model of Snow, Snow Ice and Sea Ice Evolution to be Coupled with a Biogeochemical Flux Model**
Letizia Tedesco, M. Vichi, J. Haapala, T. Stipa

11:30 **Alkalinity in the Baltic Sea during 20th Century**
Sofia Hjalmarsson, L. Anderson, L. Mintrop, K. Wesslander, A. Omstedt, M. Pertillä

11:50 **Modelling the Carbon Cycle in the Baltic Sea Surface Water**
Anders Omstedt, K. Wesslander

12:10 *Closing of the Conference*

12:30 *End of the Conference*

Poster Discussion I: Tuesday, 5 June 2007, 14:00 – 15:30

Session 1: Improving Knowledge on Water and Energy Cycles

Poster 01

Transferability Studies – Evaluating and Improving Simulated Precipitation during CEOP

Insa Meinke, J. Roads, M. Kanamitsu

Poster 02

COSMOS - Community Earth System Models

Daniela Jacob, R. Budich, M. Claussen, M. Giorgetta

Poster 03

Diurnal Variability of Precipitable Water in the Baltic Region

Erko Jakobson, H. Ohvril, G. Elgered

Poster 04

Examination of Wind Data from Automatic Weather Stations

Sirje Keevallik, T. Soomere

Poster 05

Measurements of Solid Precipitation with an Optical Disdrometer

Guido Lempio, K. Bumke

Poster 06

Extreme Marine Snowfall as seen by BALTRAD

Daniel Michelson, U. Gjertsen, J. Koistinen, D. M. Schultz

Poster 07

Relationships between Extreme Daily Rainfall in Estonia and Atmospheric Circulation

Piia Post

Poster 08

Water Vapour Transport in Europe

Joanna Wibig

Poster 09

A Data Model for Hydrographic Data

Philip Axe, J. Szaron, E. Falkenroth, L. Fyrberg

Poster 10

The Impact of Surface Albedo on Snow and Sea Ice Mass Balance in the Baltic Sea

Bin Cheng, A. Riihela, T. Manninen

Poster 11

Validation of the Modelled Sea-Ice Thickness with the HEM-Data

Jari Haapala, C. Haas

Poster 12

Statistical Analysis of Surface Temperature and Salinity Variability of the Baltic Sea - A Comparison of Observations and Model Data

Anniina Kiiltomäki, A. Lehmann, T. Stipa, V. Fleming-Lehtinen

Poster 13

Upwelling Parameters Derived from Satellite Sea Surface Temperature Data in the Gulf of Finland

Jaan Laanemets, R. Uiboupin

Poster 14

The Roles of Brine Release and Sea Ice Drift for Winter Mixing and Sea Ice Formation in the Northern Baltic Sea

Andreas Lehmann, R. Hietala

Poster 15

Upwelling in the Baltic Sea – A Review

Kai Myrberg, A. Lehmann

Poster 16

On the Quasi-Steady Current along the Northern Slope of the Gulf of Finland

Juss Pavelson, T. Huttula, U. Lips, K. Myrberg

Poster 17

Surface Radiation Budget and Cloud Radiative Forcing on Sea Ice during the Spring Snowmelt Period in the Baltic Sea

Roberta Pirazzini, T. Vihma, M. Granskog, B. Cheng

Poster 18

CryoVEx 2005 – Altimeter Remote Sensing of Sea Ice Thickness in the Bay of Bothnia

Eero Rinne, J. Haapala, C. Haas, I. Heiler, S. Hendricks

Poster 19

Sensitivity Tests with Parameterization of Flow along Bottom Slope and Simulation of 1993 Major Baltic Salt Inflow with 3D Hydrostatic Model

Irene Suomi, O. Andrejev, K. Myrberg

Poster 20

Some Features of Bottom Water Spreading into the Baltic Sea

Valeriy Tsarev, M. Sharatunova

Poster 21

Estimation of Lateral Mixing in the Gulf Of Finland caused by Upwelling/Downwelling Squirts

Victor Zhurbas, J. Laanemets

POSTER Discussion II: Thursday, 7 June 2007, 14:00 – 15:30

Session 2a: Past Climate Variability and Change

Poster 21a

Longstanding Fluctuations of the River Stream Flow in Belarus Part of Baltic Sea Basin According to Atmospheric Circulation

Irina Danilovich, R. Chekan

Poster 22

Reconstructing the Past 500 Years of River Runoff to the Baltic Sea

Christin Eriksson, D. Hansson, A. Omstedt, D. Chen

Poster 23

Comparison of Selected Storminess Indices Based on Point Pressure Measurements

Krzysztof Fortuniak, L. Bärring

Poster 24

Regional Differences in Winter Sea-Level Variations in the Baltic Sea for the Past 200 Years

Birgit Hünicke, E. Zorita, J. Luterbacher, A. Pauling

Poster 25

Climate Fluctuations in Belarus Part of Baltic Sea Basin

Alena Kamarouskaya, I. Kulyashova

Poster 26

Tendencies of Seasonal Variability of Snow Storage in Conditions of Regional Climate Changes over Northern Europe

Lev Kitaev, R. Heino

Poster 27

River Discharge Regime in Latvia in Respect to Climate Variability

Maris Klavins, V. Rodinov

Poster 28

Past Storm Climate in Southern Sweden: A Comparison of Modelled Data with Observational Data, a NW/SE Storm Index and Aeolian Proxy Data

Carin Nilsson, R. De Jong, L. Bärring

Poster 29

Multi-centurial Temperature Reconstructions by Farmers' Diaries

Øyvind Nordli

Poster 30

Changes in Frequency and Mean SLP of Cyclones Formed Over The Baltic Sea Region

Mait Sepp

Poster 31

Formation of Hydrological Regime of Rivers and Reservoirs during Last Decades in The Belarus Part of the Baltic Sea Basin

Lyudmila Trafimava, R. Chekan, I. Danilovich, L. Nekrasava

Poster 32

Variations in the West Dvina River Annual Runoff

Alexander Volchak, S. Parfomuk

Poster 33

Recent Warming of the Arctic Ocean and Possible Consequences for Climate

Jan Piechura

Session 2c: Impact of Climate Change

Poster 34

Climate Change Impacts on the Distribution of Total Annual Rivers' Runoff in Latvia

Elga Apsīte, L. Širiņa, A. Bakute

Poster 35

Quantification of Climate Change Impacts in Urban Areas caused by Extreme Rainfall

Karsten Arnbjerg-Nielsen, C. Onof, W. May

Poster 36

Simulated Crop Yield – An Indicator of Climate Variability

Triin Saue, J. Kadaja

Poster 37

Sea Surface Temperature Development and Cyanobacteria in the Baltic Sea

Herbert Siegel, M. Gerth, G. Tschersich

Session 3a: Coastal Zone and Water Management

Poster 38

Storm Surges in the South Coast of the Gulf Of Riga

Tatjana Koltsova, J. Belakova

Poster 39

Storm Surges in the Odra Mouth Area in the 1997-2006 Decade

Halina Kowalewska-Kalkowska, B. Wisniewski

Poster 40

Meteorological Features of Spring Flood Formation in Nemunas River

Egidijus Rimkus, G. Stankunavicius, G. Valiuskevicius, A. Bukantis

Poster 41

Transformation of the Water Run-Off of the Baltic Sea Basin Rivers in the Territory of Belarus

Alexander Volchek, A. Volchak, V. Luksha

Poster 42

Distributed Automated System of Flood Registration and Prediction

Alexander Volchek, Y. Kuzavko, D. Kostiuk, An. Volchek

Poster 43

The Dynamics and Protection of the Sea Coasts and Dunes in Lithuania in Result of Extreme Climate Events (According to ASTRA Project Activities)

Regina Morkunaite

Session 3b: The Coastman Project

Poster 44

Education in Sustainable Conflict Resolution - Experiences and Objectives of the Coastal Zone Management Project

Nils Brandt, J. Fidler, Å.Larsson

Poster 45

The Swedish Case Study Loudden - A Controversial Harbour for Oil Products in Stockholm

Jan Fidler, N. Brandt, R. Wennersten, Å. Larsson

Poster 46

Participation of Ventspils City Council in the Project „Coastal Zone Management in the Baltic Sea Region / COASTMAN”

Ilga Zilniece, Tatjana Valdmene, Ineta Kraule

Session 4: Linking BALTEX Science to Air Quality, Water Quality and Impacts on Ecosystems

Poster 47

Long Term Trends in the Seas Surrounding Sweden. Part One – Nutrients

Pia Andersson, L. Andersson

Poster 48

Simulations of the Particulate Organic Carbon in the Southern Baltic Sea

Lidia Dzierzbicka-Głowacka, K. Kuliński, J. Pempkowiak

Poster 49

Transformation of the Surface Water Quality in the Baltic Sea Rivers on Belarus Territory

Michail Kalinin, A. Volchak

Poster 50

Changes of Flows of Major Dissolved Substances from Territory of Latvia

Ilga Kokorite, M. Klavins, V. Rodinov

Poster 51

Natural Water Quality Testing in Kaliningrad Area

Evgeny V. Krasnov

Poster 52

Classification of the Water Quality for Nutrients in Agricultural Runoff

Ainis Lagzdins, V. Jansons, K. Abramenko

Poster 53

Justification of the First Long-Term Prediction on the Main Environmental Factors and Fish Stocks in the Baltic Estimated after 20 Years

Evald Ojaveer, M. Kalejs

Poster 54

Continuous CO₂, O₂ and N₂ Measurements on a Cargo Ship: An Efficient Tool to Study the Baltic Sea Carbon Cycle

Bernd Schneider

Poster 55

Effect of Hydrological Regime and Nutrient Loadings on Lake Zuvintas Eutrophication

Edvinas Stonevicius

Poster 56

Pilot Study of the Spring Air-Sea CO₂ Exchange in a Baltic Sea Coastal Region

Karin Wesslander, L. Anderson, P. Hall, S. Hjalmarsson, D. Lefevre, A. Omstedt, A. Rutgersson, E. Sahlée, A. Tengberg