

Plenary lectures at international meetings and other important presentations since 1998

Lectures 1998

- SWECLIM workshop on atmosphere and ocean circulation climate modeling, Norrköping, Sweden, February 25, 1998, Author(s): **H.E.M. Meier**, Title: First steps towards a Baltic/North Sea model for regional climate studies.
- SWECLIM workshop on modeling sea ice coupled to a 3D Baltic Sea model, Norrköping, Sweden, November 19-20, 1998, Author(s): **H.E.M. Meier**, Title: Introduction into the workshop idea and brief overview of the ocean modeling activities at the Rossby Centre.

Lectures 1999

- CARTUM (Comparative Analysis and Rationalization of Second-Moment Turbulence Models) Kick-Off Workshop I, Hamburg, Germany, June 23-25, 1999, Author(s): **H.E.M. Meier**, Title: Choices for parameterization of turbulence in the Baltic Sea.
- BALTEX workshop on “Parameterization of surface fluxes, atmospheric planetary boundary layer and ocean mixed layer turbulence for BRIDGE - What can we learn from field experiments”, Abisko, Lapland, Sweden, June 20-21, 1999, Author(s): **H.E.M. Meier**, Title: Choices for parameterization of turbulence in the Baltic Sea.
- Third workshop of Baltic sea-ice climate change, Stawiska, Poland, October 5-8, 1999, Author(s): **H.E.M. Meier**, Title: Multi-year simulations using a coupled ice-ocean model for the Baltic Sea.
- SWECLIM workshop on coupling of ocean, ice, and atmosphere, Norrköping, Sweden, October 20-22, 1999, Author(s): **H.E.M. Meier**, Title: First results of multi-year simulations using the Rossby Centre Ocean model.

Lectures 2000

- European Geophysical Society 25th General Assembly, Nice, France, April 25-29, 2000, Author(s): **H.E.M. Meier**, Title: Scenario simulations using a coupled ice-ocean Baltic Sea model.
- Second CARTUM Workshop, Marseilles, France, March 1-2, 2000, Author(s): **H.E.M. Meier**, Title: Modeling turbulence under sea ice.

Lectures 2001

- Swedish Ministry of the Environment - Informal workshop on Climate Change, Norrköping, Sweden, February 4-7, 2001, Author(s): **H.E.M. Meier**, Title: Impact on Baltic Sea.
- European Geophysical Society 26th General Assembly, Nice, France, April 21-25, 2001, Author(s): **H.E.M. Meier**, Title: On the parameterization of mixing in 3D Baltic Sea models.
- European Geophysical Society 26th General Assembly, Nice, France, April 21-25, 2001, Author(s): **H.E.M. Meier** and R. D’oscher, Title: On the closure of simulated heat cycles in the Baltic Sea.

- Third CARTUM Workshop, Budapest, Hungary, May 31 - June 1, 2001, Author(s): **H.E.M. Meier**, Title: On the parameterization of mixing in 3D Baltic Sea models.
- Third study conference on BALTEX, Mariehamn, Åland, Finland, July 2 - 6, 2001, Author(s): **H.E.M. Meier**, Title: Simulated water and heat cycles of the Baltic Sea using a 3D coupled ice-ocean model.
- CARTUM Final Conference, Brussels, Belgium, December 3-5, 2001, Author(s): **H.E.M. Meier**, Title: On the mean vertical circulation of the Baltic Sea simulated with a 3D coupled ice-ocean-turbulence model.

Lectures 2002

- European Geophysical Society 27th General Assembly, Nice, France, April 21-25, 2002, Author(s): **H.E.M. Meier** and F. Kauker, Title: Modeling decadal variability of the Baltic Sea during 1902-1998 (Poster).
- Fourth Workshop on Baltic Sea Ice Climate, Norrköping, Sweden, May 22-24, 2002 Author(s): **H.E.M. Meier** and R. D'oscher, Title: On the sensitivity of Baltic Sea ice variability to changing climate.
- International Workshop on Small-Scale Sea Ice-Ocean Modeling (SIOM) for Nearshore Beaufort and Chukchi Seas, Fairbanks, Alaska, August 7-9, 2002, Author(s): **H.E.M. Meier**, Title: On the sensitivity of Baltic Sea ice variability to changing climate (invited).
- Kick-off meeting of SEAREG (Sea Level Change Affecting the Spatial Development in the Baltic Sea Region), Helsinki, Finland, September 15-17, 2002, Author(s): **H.E.M. Meier**, Title: Introduction of the SWECLIM project.
- Baltic Sea Ice Workshop, Celebrating the 100th anniversary of the Tvärminne Zoological Station, September 18-21, 2002, Author(s): **H.E.M. Meier**, Title: Baltic sea ice in changing climate simulated with the Rossby Centre coupled ice-ocean model.
- SWECLIM-MARE workshop on Processes of importance for the large-scale salinity distribution of a semi-enclosed sea such as the Baltic, Kristineberg, Sweden, November 4-6, 2002, Author(s): **H.E.M. Meier** and F. Kauker, Title: Modeling decadal variability of the Baltic Sea during 1902-1998.
- SWECLIM-MARE workshop on Processes of importance for the large-scale salinity distribution of a semi-enclosed sea such as the Baltic, Kristineberg, Sweden, November 4-6, 2002, Author(s): **H.E.M. Meier**, Title: Modeling the vertical circulation of the Baltic Sea deepwater using a 3D ocean model.
- First Workshop on Climate Variations in Sweden During the Past 2000 Years, Stockholm University, Stockholm, November 7-8, 2002, Author(s): **H.E.M. Meier** and F. Kauker, Title: Modeling climate variability of the Baltic Sea.
- BALTEX Workshop on Achievements of and Perspectives for the BALTEX Programme, Lund University, Lund, Sweden, November 18, 2002, Author(s): **H.E.M. Meier** and R. D'oscher, Title: Modeling the climate, environment and processes of the Baltic Sea: Examples and ideas based on the regional model system at the Rossby Centre (invited).

Lectures 2003

- Seminar at the International Arctic Research Center (IARC), Frontier Research System for Global Change, University of Alaska, Fairbanks, U.S.A., February 19, 2003,

- Author(s): **H.E.M. Meier**, Title: Regional climate modeling at the Rossby Centre (invited).
- Seminar on Measures against Coastal Erosion, Helsingborg, Sweden, March 27, 2003, Author(s): **H.E.M. Meier**, Title: Climate change - projections of Baltic sea level variability in 100 years (invited).
 - EGS - AGU - EUG Joint Assembly, Nice, France, April 6-11, 2003, Author(s): **H.E.M. Meier**, Title: On the sensitivity of the Baltic Sea salinity to the freshwater supply.
 - First Annual SEAREG Workshop (Sea Level Change Affecting the Spatial Development in the Baltic Sea Region), University of Greifswald, Greifswald, Germany, April 23-25, 2003, Author(s): **H.E.M. Meier**, Title: Modeling of climate change and possibilities of application.
 - First Annual SEAREG Workshop (Sea Level Change Affecting the Spatial Development in the Baltic Sea Region), University of Greifswald, Greifswald, Germany, April 23-25, 2003, Author(s): **H.E.M. Meier** and B. Broman, Title: Climate and sea level change modeling: Further work.
 - SWECLIM (Swedish Regional Climate Modelling Programme) Final Scientific Conference, Söderköping, Sweden, June 11-12, 2003, Author(s): **H.E.M. Meier** and R. Döscher, Title: Ocean Climate Research at the Rossby Centre during SWECLIM.
 - 4th Baltic Sea Science Congress, Helsinki University, Helsinki, Finland, August 24-28, 2003, Author(s): **H.E.M. Meier**, Title: Modelling the changing climate of the Baltic Sea during the 20th and 21st century (plenary session).
 - Second Workshop on Climate Variations in Sweden during the past 2000 years: Climate variability, environmental change, and cultural response, Uppsala, Sweden, October 20-21, 2003, Author(s): **H.E.M. Meier**, Title: The Baltic Sea as integrating climate indicator.

Lectures 2004

- WCRP-sponsored Regional-scale Climate Modelling Workshop on “High-resolution climate modeling: Assessment, added value and applications”, Lund, Sweden, March 29 April 2, 2004, Author(s): **H.E.M. Meier**, Title: Regional ocean modeling (invited), <http://www.natgeo.lu.se/Lars.barring/RCMworkshop/RCMhome.htm>
- Second Annual SEAREG Workshop (Sea Level Change Affecting the Spatial Development in the Baltic Sea Region), Stockholm, Sweden, April 22-24, 2004, Author(s): **H.E.M. Meier**, Title: Simulated sea level in past and future climate of the Baltic Sea.
<http://www.gsf.fi/projects/seareg/2ndworkshop.html>
- Second Annual SEAREG Workshop (Sea Level Change Affecting the Spatial Development in the Baltic Sea Region), Stockholm, Sweden, April 22-24, 2004, Author(s): **H.E.M. Meier**, Title: Foreseen SMHI contribution to Knowledge Base and other DSF parts.
<http://www.gsf.fi/projects/seareg/2ndworkshop.html>
- Fourth study conference on BALTEX, Gudhjem, Bornholm, Denmark, 24-28 May, 2004, Author(s): **H.E.M. Meier** and F. Kauker, Title: What causes stagnation of the Baltic Sea deepwater?

- Fourth study conference on BALTEX, Gudhjem, Bornholm, Denmark, 24-28 May, 2004, Author(s): **H.E.M. Meier**, B. Broman, and E. Kjellström, Title: Modelling sea level variability in different climates of the Baltic Sea (Poster).
- Workshop on “Sea waves and current modeling in marine ecology with emphasis given to data assimilation” organized by BALTDER (Centre of Excellence for Baltic Development, Education and Research), Marine Station on Hel, Institute of Oceanology, University of Gdansk, Poland, 22-24 August, 2004, Author(s): **H.E.M. Meier**, Title: Variational data assimilation using the adjoint method: an application for the Baltic Sea (invited).
- Presentation at the Institute of Oceanology, Polish Academy of Sciences, Sopot, Poland, 25 August, 2004, Author(s): **H.E.M. Meier**, Title: Modeling climate variability of the Baltic Sea - new results based upon the regional model system at the Rossby Centre (invited).
- Bjerknes Centenary 2004, Open Science Conference “Climate Change in High Latitudes”, Bergen, Norway, September 1-3, 2004, Author(s): **H.E.M. Meier** and R. D’oscher, Title: Sea-ice climate of the Baltic in the late 21st century - a dynamical downscaling approach using results of two global models and two forcing scenarios (Poster).
- Rossby Centre Climate Modelling Day, Norrköping, Sweden, October 6, 2004, Author(s): **H.E.M. Meier**, Title: What information do we get from the RCO model?

Lectures 2005

- Third Annual SEAREG Workshop (Sea Level Change Affecting the Spatial Development in the Baltic Sea Region), Tallin, Estonia, March 3-5, 2005, Author(s): **H.E.M. Meier**, B. Broman, H. Kallio, and E. Kjellström. Title: Projections of future surface winds and sea levels in the late 21st century and their application for impact studies of flood prone areas in the Baltic Sea Region. <http://www.gsf.fi/projects/seareg/2ndworkshop.html>
- 9th Workshop of the Arctic Ocean Model Intercomparison Project (AOMIP), McGill University, Montreal, Canada, June 15-16, 2005, Author(s): **H.E.M. Meier**, R. D’oscher, K. Wyser, and K. Döös, Title: The Rossby Centre Ocean model applied to the Arctic Ocean using ERA-40.
- 5th Baltic Sea Science Congress (“The Baltic Sea - a changing ecosystem”), Sopot, Poland, June 20-23, 2005, Author(s): **H.E.M. Meier**, Title: Modelling the age of Baltic Sea water masses: inter-annual variability, steady-state sensitivity experiments, and scenarios (plenary session).
- Workshop on “Ventilation of the Baltic Sea deepwater: observations and model results” at the 5th Baltic Sea Science Congress (“The Baltic Sea - a changing ecosystem”), Sopot, Poland, June 20-23, 2005, Author(s): **H.E.M. Meier**, R. D’oscher, B. Broman, and J. Piechura, Title: The major Baltic inflow in January 2003 and preconditioning by smaller inflows in summer/autumn 2002: a model study.
- 5th Baltic Sea Science Congress (“The Baltic Sea - a changing ecosystem”), Sopot, Poland, June 20-23, 2005, Author(s): R. D’oscher, and **H.E.M. Meier**, Title: Simulated Sea Surface Temperature and Sea Ice in different Climates of the Baltic (Poster).
- Rossby Centre Day 2005, Norrköping, Sweden, October 6, 2005, Author(s): **H.E.M. Meier**, Title: Stakeholder support. Experiences and tools from the SEAREG project.

- Presentation at the Baltic Sea Research Institute Warnemünde, Germany, 25 October, 2005, Author(s): **H.E.M. Meier**, Title: Klimaveränderungen der Ostsee im 20. und 21. Jahrhundert - neue Ergebnisse basierend auf dem regionalen Modellsystem des Rossby Centers (invited).
- Fourth Workshop on Climate Variations in Sweden during the past 2000 years: Observed and simulated climate variability. Norrköping, Sweden, November 3-4, 2005, Author(s): **H.E.M. Meier**, Title: Observed and simulated salinity variations in the Baltic Sea.
- Presentation at the Institute of Oceanology, University of Gdansk, Gdynia, Poland, 7 November, 2005, Author(s): **H.E.M. Meier**, Title: Past and future climate change of the Baltic Sea (invited).
- Presentation at the Institute of Oceanology, University of Gdansk, Gdynia, Poland, 9 November, 2005, Author(s): **H.E.M. Meier**, Title: Modelling the vertical circulation of the Baltic Sea deep water (invited).

Lectures 2006

- UK/Sweden science seminar “Predicting climate change in the Arctic”, Stockholm, Sweden, 8-9 March, 2006, Author(s): **H.E.M. Meier**, Title: The Rossby Centre Ocean model applied to the Baltic Sea and Arctic Ocean (invited).
- International “Workshop on Polar and Global Climate Modeling: Connection and Interplay”, International Arctic Research Center, University of Alaska Fairbanks, Alaska, USA, 14-16 June, 2006, Author(s): **H.E.M. Meier**, Title: Sensitivity of Arctic sea ice in coupled and uncoupled regional climate model simulations (invited).

Lectures 2007

- 6th Baltic Sea Science Congress, Rostock, Germany, 19-23 March, 2007, Author(s): **H.E.M. Meier**, Title: On the Baltic conveyor belt.
- Baltic Sea 2020 Workshop: Understanding hypoxia in the Baltic Sea, Lund University, Lund, Sweden, 17-19 April, 2007, Author(s): **H.E.M. Meier**, Title: Modelling hypoxia in the Baltic Sea during the 20th and 21st centuries (invited short presentation).
- HELCOM-EuroGOOS workshop: Operational models in the service of the Baltic Sea Action Plan, Helsinki, Finland, 22 May, 2007, Author(s): **H.E.M. Meier**, Title: Longterm scenario simulations of the Baltic Sea ecosystem to support decision making.
- Workshop on added values of regional climate models and detection and attribution studies in the Baltic Basin, Göteborg University, Göteborg, Sweden, 24-25 May, 2007, Author(s): **H.E.M. Meier**, Title: How RCO can be used in Baltic Sea attribution studies.
- Fifth study conference on BALTEX, Kuressaare, Saaremaa, Estonia, 4-8 June 2007, Author(s): **H.E.M. Meier**, Title: Modeling the pathways and ages of inflowing salt- and freshwater in the Baltic Sea.
- Fifth study conference on BALTEX, Kuressaare, Saaremaa, Estonia, 4-8 June 2007, Author(s): **H.E.M. Meier** and K. Eilola. Title: Impact of climate change on the Baltic Sea ecosystem.

- AOMIP/(C)ARCMIP/SEARCH for DAMOCLES workshop, University Pierre et Marie Curie, Paris, France, 29-31 October 2007, Author(s): **H.E.M. Meier** and Per Pemberton. Titel: On the parameterization of mixing in regional circulation models for the Arctic Ocean.
- Presentation at Uppsala University, Sweden, 5 October, 2007, Author(s): **H.E.M. Meier**, Title: Baltic Sea modeling activities at the Swedish Meteorological and Hydrological Institute 1997-2007 - a review (invited).
- Swedish Marine Science Conference 2007, Tjärno marine biological laboratory, Strömstad, Sweden, 7-9 November 2007, Author(s): **H.E.M. Meier**, Kari Eilola, and Elin Almroth, Title: Uncertainties of future projections of the Baltic ecosystem.
- Baltic Sea 2020 Workshop: Understanding hypoxia in the Baltic Sea, Lund University, Lund, Sweden, 27-29 November, 2007, Author(s): **H.E.M. Meier**, Kari Eilola, and Lars Axell, Title: Simulations of some engineering methods proposed to improve conditions in the Baltic proper using RCO-SCOBI (invited presentation).

Lectures 2008

- BALTEX workshop on the Utility of Regional Climate Models, Swedish Meteorological and Hydrological Institute, Norrköping, Sweden, 23 January, 2008, Author(s): **H.E.M. Meier**, Title: Scenarios of the Baltic Sea ecosystem calculated with a regional climate model.
- HELCOM EUTRO PRO 6-2008 meeting, Copenhagen, Denmark, 4-5 February, 2008, Author(s): Kari Eilola and **H.E.M. Meier**, Title: Modelling of Baltic Sea reference conditions for WFD implementation.
- ECOOP Annual Meeting, Hellenic Centre for Marine Research, Glyfada (Athens), Greece, 13-14 February, 2008, Author(s): **H.E.M. Meier**, Kari Eilola, and Elin Almroth, Title: Climate-related changes in marine ecosystems simulated with a three-dimensional coupled biogeochemical-physical model of the Baltic Sea (invited presentation).
- Presentation at the Centre for Marine and Atmospheric Sciences (ZMAW), Geophysical Colloquium, Hamburg, Germany, 17 April, 2008, Author(s): **H.E.M. Meier**, Title: Changing climate of the Baltic Sea during the 20th and 21st century - latest results based upon coupled physical-biogeochemical model simulations (invited presentation).
- US/EU-Baltic 2008 International Symposium: Ocean Observations, Ecosystem-Based Management and Forecasting, Tallinn, Estonia, 27-29 May, 2008, Author(s): **H.E.M. Meier**, Title: Impact of climate change on physical and biogeochemical variables of the Baltic Sea. (invited presentation).
- US/EU-Baltic 2008 International Symposium: Ocean Observations, Ecosystem-Based Management and Forecasting, Tallinn, Estonia, 27-29 May, 2008, Author(s): **H.E.M. Meier** and K. Eilola, Title: SMHI ecosystem hindcasting the last 30 years - a basis for reference conditions within the Marine Directive.
- Rossby Centre Day 2008: "Nordic-Arctic Climate Change : Towards an Earth System Approach" Norrköping, Sweden, October 13-14, 2008, Author(s): **H.E.M. Meier**, Title: Coupled Climate and Environmental Modeling for the Baltic Sea Region. (invited presentation)

- Marine Environmental Day 2008: “Can we save the Baltic Sea? - Eutrophication in future climate”, Norrköping, Sweden, October 21, 2008, Author(s): **H.E.M. Meier**, Title: Will the Baltic Sea Action Plan work in future climate?
- TELLUS-BALTEX Workshop on “Biogeochemical Land and Baltic Sea Interactions driven by Climate and Land Use”, University of Gothenburg, Sweden, 1-2 December 2008, Author: **H.E.M. Meier**, Title: Regional climate models and the coupling with marine biogeochemical models. (invited presentation)
- Application presentation at the Centre for Marine and Atmospheric Sciences (ZMAW), Hamburg, Germany, 22 December, 2008, Author(s): **H.E.M. Meier**, Title: Ursachen der dekadischen Variabilität der vertikalen Zirkulation in der Ostsee. (invited presentation)

Lectures 2009

- 2nd Lund Regional-scale Climate Modelling Workshop: “21st Century Challenges in Regional-scale Climate Modelling”, Lund, Sweden, 4 - 8 May 2009, Author(s): **H.E.M. Meier**, for the ECOSUPPORT consortium Title: Future challenges for regional coupled climate and environmental modeling in the Baltic Sea Region.
- 2nd Lund Regional-scale Climate Modelling Workshop: “21st Century Challenges in Regional-scale Climate Modelling”, Lund, Sweden, 4 - 8 May 2009, Author(s): **H.E.M. Meier**, L. Bärring, O. Bøssing Christensen, E. Kjellström, P. Lorenz, B. Rockel, and E. Zorita. Title: Selected examples of the added value of regional climate models (Poster).
- Joint Assembly of IAMAS (International Association of Meteorology and Atmospheric Science), IAPSO (International Association for the Physical Sciences of the Oceans) and IACS (International Association of the Cryospheric Sciences), Montreal, Canada, July 2024, 2009, Author(s): **H.E.M. Meier**, Title: Regional coupled climate and environmental modeling for the Baltic Sea Region.
- 7th Baltic Sea Science Congress, Tallinn, Estonia, 17-21 August, 2009, Author(s): **H.E.M. Meier**, for the ECOSUPPORT consortium Title: ECOSUPPORT - Advanced modeling tool for scenarios of the Baltic Sea ecosystem to support decision making.
- 7th Baltic Sea Science Congress, Tallinn, Estonia, 17-21 August, 2009, Author(s): **H.E.M. Meier**, K. Eilola, and E. Almroth Title: Climate-related changes in marine ecosystems simulated with a three-dimensional coupled biogeochemical-physical model of the Baltic Sea
- International conference on “Linking Science and Management in the Baltic Sea Ecoregion”, Copenhagen, Denmark, 9-10 September, 2009, Author(s): **H.E.M. Meier** Title: New modeling tools for scenarios of the Baltic Sea ecosystem to support decision making
- International Workshop on “The marine ecosystem in changing climate - on the added value of coupled climate-environmental modeling for the Baltic Sea”, Norrköping, Sweden, 16 October, 2009, Author(s): **H.E.M. Meier**, Title: Impact of changing climate on biogeochemical cycles in the Baltic Sea - an introduction.
- 13th Workshop of the Arctic Ocean Model Intercomparison Project (AOMIP), Woods Hole Oceanographic Institute, Woods Hole, MA, USA, October 20-23, 2009, Author(s): **H.E.M. Meier**, Sebastian Mårtensson, and Per Pemberton, Title: Impact of sea ice dynamics on the Arctic climate variability - a model study.

Lectures 2010

- BONUS annual conference 2010, Vilnius, Lithuania, 19-21 January, 2010, Author(s): **H.E.M. Meier** and ECOSUPPORT co-workers, Title: First results of recently performed scenario simulations for the Baltic Sea for 1961-2099.
- International workshop on “Effects of climate change on the marine environment” organized by the Nordic Council of Ministers, Copenhagen, Denmark, 9-10 March, 2010. Author(s): **H.E.M. Meier** Title: Impact of changing hydrography on biogeochemical cycles in future climates of the Baltic Sea. (invited presentation)
- Deutsche Meteorologische Gesellschaft, Deutscher Wetterdienst, Seewetteramt Hamburg, Hamburg, 16 March, 2010. Author(s): **H.E.M. Meier**, Title: Klimaszenarien für das 21. Jahrhundert - neue Ergebnisse basierend auf einem regionalen gekoppelten Atmosphäre-Eis-Ozeanmodell für die Ostsee. (invited presentation)
- Presentation at Finland’s environmental administration (SYKE), 24 May 2010, Helsinki, Finland, Author(s): **H.E.M. Meier**, Title: From daily algae forecasts towards scenario simulations of changing climate - an overview on environmental modelling activities at the Swedish Meteorological and Hydrological Institute. (invited presentation)
- Sixth study conference on BALTEX, Miedzyzdroje, Island of Wolin, Poland, 14 - 18 June 2010, Author(s): **H.E.M. Meier** and ECOSUPPORT collaborators. Title: Transient scenario simulations for the Baltic Sea for 1961-2099. (solicited)
- Sixth study conference on BALTEX, Miedzyzdroje, Island of Wolin, Poland, 14 - 18 June 2010, Author(s): K. Eilola, B.G. Gustafsson, R. Hordoir, A. Höglund, I. Kuznetsov, **H.E.M. Meier**, T. Neumann and O.P. Savchuk. Title: Quality assessment of state-of-the-art coupled physical-biogeochemical models for the Baltic Sea.
- EUTRO 2010, Nyborg, Denmark, 14 - 18 June 2010, Author(s): **H.E.M. Meier**, H. Andersson, K. Eilola, R. Hordoir, and A. Höglund, Title: New scenario simulations of the Baltic Sea ecosystem to support decision making.
- BalticStern workshop on scenarios, Stockholm Resilience Centre, Stockholm, Sweden, 6-7 October 2010, Author(s): **H.E.M. Meier**, Title: “Coupled climate-environmental modelling for the Baltic Sea Region” (invited presentation)
- BONUS+ program cluster workshop on “Uncertainties of scenario simulations”, Norrköping, Sweden, 14 October 2010. Author(s): **H.E.M. Meier**, A. Höglund, R. D’oscher, H. Andersson, U. Löptien and E. Kjellström, Title: “Quality assessment of atmospheric surface fields over the Baltic Sea of an ensemble of regional climate model simulations with respect to ocean dynamics”

Lectures 2011

- Presentation at the Swedish Ministry of Environment within a seminar on climate change impact studies, Stockholm, 29 March, 2011: Author(s): **H.E.M. Meier**, Title: Klimat och Osterns havsmiljö (Climate and the Baltic Sea environment).”
- Presentation at the Centre of Water and Environmental Studies, Linköping University, Sweden, 30 March, 2011, Author(s): **H.E.M. Meier**, Title: Coupled climate and marine environmental modelling (invited presentation).
- Kungliga Skogs- och Lantbruksakademiens (KSLAs) Vattenkommitté (The Royal Swedish Academy of Agriculture and Forestry’s water committee), Seminarium om

Baltic Sea Action Plan - De svåra frågorna om eutrofieringen. Author(s): **H.E.M. Meier**, Title: Behövs fler modeller av Osternsjöns eutrofiering? (Are several models of the Baltic Sea" eutrophication needed?) (invited presentation).

- EFARO (the European Fisheries and Aquaculture Research Organisation) General Assembly, Sopot, Poland, 24 May 2011, Author(s): **H.E.M. Meier**, Title: ECOSUPPORT management support for a changing Baltic Sea. (invited presentation)
- 8th Baltic Sea Science Congress, St. Petersburg, Russia, August 22-26, 2011, Author(s): **H.E.M. Meier**, H. Andersson, C. Dieterich, K. Eilola, B. Gustafsson, A. Höglund, R. Hordoir, I. Kuznetsov, T. Neumann, O. Savchuk and S. Schimanke, Title: Nutrient load reductions in future climate of the Baltic Sea - assessment of uncertainties.
- 8th Baltic Sea Science Congress, St. Petersburg, Russia, August 22-26, 2011, Author(s): **H.E.M. Meier**, Title: Assessment of Climate Change for the Baltic Sea - an update.
- 8th Baltic Sea Science Congress, St. Petersburg, Russia, August 22-26, 2011, Author(s): R. Hordoir and **H.E.M. Meier**, Title: Effect of climate change on the thermal stratification of the Baltic Sea: a sensitivity experiment.
- 8th Baltic Sea Science Congress, St. Petersburg, Russia, August 22-26, 2011, Author(s): R. Hordoir and **H.E.M. Meier**, Title: Freshwater fluxes in the Baltic Sea: A model study.
- ICES Annual Science Conference, Gdansk, Poland, 19 - 23 September 2011, Author(s): **H.E.M. Meier**, H. Andersson, C. Dieterich, K. Eilola, B. Gustafsson, A. Höglund, R. Hordoir, I. Kuznetsov, T. Neumann, O. Savchuk and S. Schimanke, Title: Projected Baltic Sea ecosystem changes in future climates.
- BALTEX Workshop on "Different concepts in biogeochemical modelling of the Baltic Sea", Baltic Sea Research Institute Warnemünde, Germany, 29 September 2011, Author(s): **H.E.M. Meier**, Title: Advantages and disadvantages of biogeochemical models used within ECOSUPPORT (invited).
- BONUS Forum at the 2nd Annual Forum for the EU Strategy for the Baltic Sea Region and the Baltic Development Forum, Gdansk, Poland, 24 October 2011, Author(s): **H.E.M. Meier**, Title: Advanced modeling tool for scenarios of the Baltic Sea Ecosystem to SUPPORT decision making (ECOSUPPORT).
- International ECOSUPPORT and RECOCA stakeholder conference on "An outlook to the future Baltic Sea: how can we reach the targets of the Baltic Sea Action Plan?", Stockholm University, Stockholm, Sweden, 7 December 2011, Author(s): **H.E.M. Meier**, Title: Introduction of ECOSUPPORT.

Lectures 2012

- European Climate Research Alliance (ECRA) pilot workshop: "Regional sea level change", Utrecht, The Netherlands, 13-14 March, 2012: Author(s): **H.E.M. Meier**, Title: Projections of future storm surges in the Baltic Sea.
- Second Joint International Symposium on "Effects of Climate Change on the World's Oceans" of ICES, PICES and IOS (convened as one of the official events related to Expo2012), Yeosu, Korea, May 15-19, 2012: Author(s): **H.E.M. Meier**, Title: Hypoxia in future climates - a model ensemble study for the Baltic Sea (invited).

- Hypoxia workshop at Utrecht University, The Netherlands, 13 November, 2012: Author(s): **H.E.M. Meier**, Title: Ensemble modeling for assessing the status of the Baltic Sea under future climate scenarios and management options (invited).

Lectures 2013

- Application presentation at the Baltic Sea Research Institute Warnemünde, Germany, 11 January 2013, Author(s): **H.E.M. Meier**, Title: Estimating uncertainties in future projections of Baltic Sea hypoxia (invited).
- HELCOM Workshop on “Baltic Sea region climate change and its implications”, 5-6 February 2013, Warnemünde, Germany: Author(s): **H.E.M. Meier**, Title: HELCOM Baltic Sea Action Plan in a warmer world (invited).
- ECOCHANGE seminar on “The cycling and fate of contaminants in the Baltic Sea in a Climate Change Perspective”, Ume, Sweden, 29 April, 2013, Author(s): **H.E.M. Meier**, Title: Climate change scenarios for the Baltic Sea and its drainage area (invited).
- BEAM seminar on “Modeling climate variability of the Baltic Sea and relevant processes”, Stockholm, Sweden, 22 May, 2013, Author(s): **H.E.M. Meier**, Title: (invited).
- Presentation at the DTU Aqua, National Institute of Aquatic Resources, Technical University of Denmark, Charlottenlund, Denmark, 4 June, 2013, Author(s): **H.E.M. Meier**, Title: Impact of changing climate on the marine ecosystem - a numerical modeling approach. (invited presentation)
- Seventh study conference on BALTEX, Borgholm, Island of Oland, Sweden, 10-14 June” 2013, Author(s): **H.E.M. Meier** and the ECOSUPPORT co-workers, Title: Advanced modeling tool for scenarios of the Baltic Sea ECOSystem to SUPPORT decision making (ECOSUPPORT, 2009-2011).
- Seventh study conference on BALTEX, Borgholm, Island of Oland, Sweden, 10-14 June” 2013, Author(s): **H.E.M. Meier** (chair of the new programme), Title: A new science and outreach programme for the Baltic Sea region.
- Joint Assembly of IAHS (International Association of Hydrological Sciences), IAPSO (International Association for the Physical Sciences of the Oceans) and IASPEI (International Association of Seismology and Physics of the Earth’s Interior) on ‘Knowledge for the future’, Gothenburg, Sweden, 22-26 July, 2013, Author(s): **H.E.M. Meier** and the ECOSUPPORT co-workers, Title: Comparing reconstructed past variations and future projections of the Baltic Sea ecosystem - results from multi-model ensemble simulations.
- Gulf of Finland Year 2014 data/modelling fusion workshop, Finnish Meteorological Institute, Helsinki, Finland, 19 September 2013, Author(s): **H.E.M. Meier**, Title: Long-term changes in Baltic Sea ecosystems under climate and nutrient load changes. (invited presentation)
- ICES Annual Science Conference, Reykjavik, Iceland, 23 - 27 September 2013, Author(s): **H.E.M. Meier** and the ECOSUPPORT co-workers, Title: Comparing reconstructed past variations and future projections of the Baltic Sea ecosystem.
- Conference of the Swedish Institute for the Marine Environment on “Climate change and its impact on the sea - and what are we doing?” (“Klimatförändringar och dess påverkan på havet - och vad gör vi?”), Marstrand, Sweden, 16-17 October 2013,

Author(s): **H.E.M. Meier**, Title: Hur kommer klimatet att påverka Ostersjöns framtid? (How will climate change impact the future Baltic Sea?)

- Colloquium, Mesoskalige Meteorologie und Klima Institut für Atmosphäre und Umwelt/ Geozentrum, Riedberg Goethe-Universität Frankfurt a.M., 24 October 2013, Author(s): **H.E.M. Meier**, Title: On the added value of regional climate system models. (invited presentation)
- Colloquium, Institute for Coastal Research, Helmholtz-Zentrum Geesthacht (HZG), Geesthacht, Germany, 7 November 2013, Author(s): **H.E.M. Meier**, Title: From daily forecasts to regional climate system modelling - an overview on ocean modelling activities at the Swedish Meteorological and Hydrological Institute. (invited presentation)
- Baltic Earth workshop on “Challenges for biogeochemistry research in the Baltic Sea Region”, Institute of Oceanology, Polish Academy of Sciences (IOPAN), Sopot, Poland, 13 November 2013, Author(s): **H.E.M. Meier**, Title: Challenges for biogeochemical modeling on centennial time scales. (invited presentation)
- Bolin Days, Bolin Centre for Climate Research, Stockholm University, Stockholm, Sweden, 21 November 2013, Author(s): **H.E.M. Meier**, Title: Modelling the impact of changing climate on biogeochemical cycles in the Baltic Sea and Laptev Sea/Arctic Ocean.

Lectures 2014

- International Conference organized by the European Cooperation in Science and Technology (COST) on “Predictive Power of Marine Science in a Changing Climate, Sopot, Poland, 7-8 April 2014, Author(s): **H. E. M. Meier**, Title: Uncertainties in state-of-the-art climate change projections of the Baltic Sea ecosystem (invited keynote speaker of the conference)
- 3rd Lund Regional-scale Climate Modelling Workshop: “21st Century Challenges in Regional Climate Modelling”, Lund, Sweden, 16-19 June 2014, Author(s): **H. E. M. Meier** and members of the Baltic Earth Working Group on Regional Climate System Modeling, Title: Challenges in regional climate system modeling for the Baltic Sea and North Sea regions. (invited keynote speaker of Theme 1 “Regional Climate and Earth System Models”)
- Sommerakademi (Expedition Akademi) 2014: Globalisierung und Meer - Die Ostsee zwischen Rekordverschmutzung, Wirtschaftswachstum und Interessenkonflikten, Mariehamn, Åland/Finland, 18-23 August 2014, Author(s): **H. E. M. Meier**, Title: Die Zukunft der Todeszonen in den tiefen Becken der Ostsee und mögliche Gegenmaßnahmen. (In German,
- The future of hypoxia in the deep basins of the Baltic Sea and possible countermeasures) (invited keynote speaker)
- The 12th Colloquium on Baltic Sea Marine Geology, Warnemünde, Germany, 8-12 September 2014, Author(s): **H. E. M. Meier**, Title: Reconstruction of Baltic Sea climate variations during the last millennium using numerical modeling (invited keynote speaker)
- Application presentation at the Helmholtz Zentrum Geesthacht, Germany, 19 November 2014, Author(s): **H.E.M. Meier**, Title: Challenges in climate system modelling for the Baltic Sea, North Sea and Arctic Ocean regions (invited).

Lectures 2015

- Gordon Research Conference (GRC) on Coastal Ocean Modeling, Biddeford, Maine, U.S., 7-12 June 2015, Author(s): **H. E. M. Meier**, Title: Challenges in regional climate system modeling. (invited presentation)
- Scientific Symposium on Harmful Algal Blooms and Climate Change, Göteborg, Sweden, 19-22 May 2015, Author(s): **H. E. M. Meier**, Title: Impact of changing physics on marine ecosystems in future coastal seas. (invited presentation)
- 10th Baltic Sea Science Congress, Riga, Latvia, June 15-19, 2015, Author(s): **H. E. M. Meier**, Title: Challenges in climate system modelling for the Baltic Sea, North Sea, Mediterranean Sea and Arctic Ocean regions.
- Euromarine Foresight Symposium: "Future Coast - Europe, Berlin, 5-7 October, 2015, Author(s): **H. E. M. Meier**, Title: Integrated system modelling for coastal seas. (invited presentation)
- Joint HyMeX-Baltic Earth Workshop on "Joint regional climate system modelling for the European sea regions", Rome, 5-6 November, 2015, Author(s): **H. E. M. Meier**, M. Reckermann, A. Rutgersson, G. Sannino, and S. Somot, Title: Regional climate system modelling for European sea regions aims of the workshop.
- Baltic Earth/Gulf of Finland PhD Seminar 2015: " Exchange processes between the Gulf of Finland and other Baltic Sea basins, Tallinn, 19 November, 2015, Author(s): **H. E. M. Meier**, K. Eilola, K. Myrberg, and G. Väli, Title: Physical-Biogeochemical modelling of the Baltic Sea- Gulf of Finland. (invited presentation)
- Szczecin Climate Seminars, Winter Semester 2015/2016, University of Szczecin, Faculty of Geosciences, Szczecin, 3 December, 2015, Author(s): **H.E.M. Meier**, Title: The future of hypoxia in the deep basins of the Baltic Sea. (invited presentation)
- Leibniz Institute for Baltic Sea Research, Institute seminar, Warnemünde, Germany, 16 December 2015, Author(s): **H.E.M. Meier**, Title: Hypoxia in past and future climates of the Baltic Sea.

Lectures 2016

- DEFROST final conference, University Centre in Svalbard (UNIS), Longyearbyen, Svalbard, 2 February 2016, Author(s): I. Wählström and **H.E.M. Meier**, Title: Impact of increasing inflow of warmer Atlantic water into the Arctic Ocean on the sea-air exchange of CO₂ and CH₄ in the Laptev Sea.
- Fakultätskolloquium der Mathematisch-Naturwissenschaftliche Fakultät, Universität Rostock, Antrittsvorlesung, 7 April, 2016: Author(s): **H.E.M. Meier**, Title: Klimaveränderungen der Ostsee im 20. und 21. Jahrhundert - neue Ergebnisse basierend auf regionaler Systemmodellierung. (In German, Changing climate of the Baltic Sea during the 20th and 21st century - new results based upon regional climate system modelling.) (invited presentation)
- Physikalisches Kolloquium der Mathematisch-Naturwissenschaftliche Fakultät, Universität Rostock, 12 Mai, 2016: Author(s): **H.E.M. Meier**, Title: Herausforderungen für die Klimamodellierung der Ostsee. (In German, Challenges in modelling of the Baltic Sea climate.) (invited presentation)
- International Conference on Regional Climate-CORDEX 2016 (ICRC-CORDEX 2016), Stockholm, 17-20 May, 2016: Author(s): **H.E.M. Meier** and Moa Edman, Title:

Estimating uncertainties in projections for the Baltic Sea region based upon an ensemble of regional climate system models.

- Fehmarn Belt Days 2016, Hafencity Universität, Hamburg, 20-22 September 2016, Author(s): **H.E.M. Meier**, Title: Impact of climate change on the water exchange between the North Sea and Baltic Sea. (invited presentation)
- 1st Baltic Earth Conference on “Multiple drivers for Earth system changes in the Baltic Sea region”, Nida, Curonian Spit, Lithuania, 13-17 June 2016, Author(s): **H.E.M. Meier** on behalf of the Baltic Earth program, Title: Baltic Earth and Conference Opening.
- Climate Limited-area Modelling Community Assembly, Lüneburg, 22 September 2016, Author(s): **H.E.M. Meier**, Title: Do we need regional climate system models? (invited presentation)
- 15th German-Polish Seminar, Hamburg, 11-12 October 2016, Author(s): **H.E.M. Meier**, Title: Regional climate system modelling for the North Sea and Baltic Sea region - a review. (invited presentation)

Lectures 2017

- International seminar connected to the COCOA annual meeting, Leibniz Institute for Baltic Sea Research Warnemünde, Rostock, Germany, 24 January 2017, Author(s): **H.E.M. Meier**, Title: Challenges in Baltic Sea coastal zone modelling. (invited presentation)
- Baltic Earth Seminar on Saltwater Inflows, Leibniz Institute for Baltic Sea Research Warnemünde, Rostock, Germany, 8 March 2017, Author(s): **H.E.M. Meier**, G. Väli, M. Naumann and K. Eilola, Title: Causes of recently accelerated oxygen consumption rates in the Baltic Sea.
- 11th Baltic Sea Science Congress “Living along gradients: past, present, future” to be held on June, 12 – 16, 2017 in Rostock, Germany, Author(s): **H.E.M. Meier**, A. Höglund, K. Eilola and E. Almroth, Title: Impact of accelerated future global mean sea level rise on hypoxia in the Baltic Sea

Lectures 2018

- Helmholtz Centre for Ocean Research Kiel (GEOMAR), FB1-Seminar, Kiel, Germany, 22 January 2018, Author(s): **H.E.M. Meier**, Title: Integrated Earth System Modeling for the Baltic Sea Region (invited presentation)
- WWF and Coalition Clean Baltic (CCB) side event at the HELCOM Ministerial Meeting in Brussels on “The uncomfortable truth of the BSAP – 10 years down the line towards saving the Baltic Sea”, 6th March 2018, 13:30-15:00, Palais d'Egmont, 8 Place du Petit Sablon, Brussels, Author(s): **H.E.M. Meier** (Leibniz Institute for Baltic Sea Research Warnemünde and Swedish Meteorological & Hydrological Institute), Title: What will the BSAP need to address to meet the challenges of climate change?
- MedCORDEX-Baltic Earth-COST Workshop on “Regional Climate System Modelling for the European Sea Regions”, Universitat de les Illes Balears, Palma de Mallorca, Spain, 14- 16 March 2018, Author(s): **H.E.M. Meier**, Title: Baltic Earth and Integrated Earth System Modeling for the Baltic Sea Region

- 8th GEWEX Open Science Conference: Extremes and Water on the Edge. May 6 - 11, 2018, Canmore, Alberta, Canada, Author(s): **H.E.M. Meier**, Title: Integrated Earth System Modeling for the Baltic Sea Region.
- 2nd Baltic Earth Conference on “The Baltic Sea Region in Transition”, Helsingør, Denmark, 11-15 June 2018, Author(s): H.E.M. Meier, **G. Väli**, M. Naumann, K. Eilola, and C. Frauen, Title: Recently accelerated oxygen consumption rates amplify deoxygenation in the Baltic Sea – observations and model results.
- 2nd Baltic Earth Conference on “The Baltic Sea Region in Transition”, Helsingør, Denmark, 11-15 June 2018, Author(s): **H.E.M. Meier** on behalf of the Baltic Earth program, Title: Baltic Earth and Conference Opening
- Baltic Earth Workshop on “Multiple drivers for Earth system changes in the Baltic Sea region”, Tallinn University of Technology, Tallinn, Estonia, 26- 27 November 2018, Author(s): **H.E.M. Meier**, Title: Response of the hydrography and marine biogeochemistry to multiple drivers in the Baltic Sea region.

Lectures 2019

- Coastal Seminar at Rostock University, 31 January 2019, Author(s): **H. E. M. Meier**, Title: The coastal zone in a Baltic Zone Model.
- Paleolink Workshop, A joint effort to bring together GCM, RCM and Proxy communities, University of Murcia, Spain, 6th-8th February 2019, Author(s): **H. E. M. Meier**, Title: Reconstructing low-frequency climate variability of the Baltic Sea region
- Meeresumweltsymposium 2019, Bundesamt für Seeschifffahrt und Hydrologie, Hamburg, 4-5 June 2019, Author(s): **H. E. M. Meier**, Title: Wird der Ostseeaktionsplan auch unter zukünftigen Klimabedingungen sein Ziel erreichen? (Will the Baltic Sea Action Plan achieve its goal under future climatic conditions?)
- 12th Baltic Sea Science Congress “Making connections for the future” 19-23 August, 2019 in Stockholm, Sweden, Author(s): **H. E. M. Meier**, Moa K. Edman, Kari J. Eilola, Manja Placke, Thomas Neumann, Helén C. Andersson, Sandra-Esther Brunnabend, Christian Dieterich, Claudia Frauen, René Friedland, Matthias Gröger, Bo G. Gustafsson, Erik Gustafsson, Alexey Isaev, Madline Kniebusch, Ivan Kuznetsov, Bärbel Müller-Karulis, Anders Omstedt, Vladimir Ryabchenko, Sofia Saraiva, and Oleg P. Savchuk, Title: Uncertainties of future projections of the Baltic Sea
- 6th Med-CORDEX workshop, Centre International de Conférences, Météo-France, Toulouse, France, November 25-29, 2019, Author(s): **H. E. M. Meier**, Title: Regional climate system modeling within Baltic Earth (invited presentation)
- Seminar at the Finnish Meteorological Institute, 19 Dezember 2019, Author(s): **H. E. M. Meier**, Title: Regional climate system analysis and modeling of the Baltic Sea region" (invited presentation).

Lectures 2020

- 3rd Baltic Earth Conference on “Earth System Changes and Baltic Sea Coasts”, online video conference, 2-3 June 2020, Author(s): **H. E. Markus Meier**, C. Dieterich, M. Gröger. Title: Uncertainties of Baltic Sea future projections under different shared socioeconomic pathways.

- 3rd Baltic Earth Conference on “Earth System Changes and Baltic Sea Coasts”, online video conference, 2-3 June 2020, Author(s): **H. E. Markus Meier** on behalf of the Baltic Earth program, Title: Welcome and Conference Opening.