

# Projects

(Third party funding total 11,986 M€)

- BALTEX (Baltic Sea Experiment), my PhD project was funded partly from the German Ministry of Research within BALTEX:  
[http://w3.gkss.de/baltex/baltex home.html](http://w3.gkss.de/baltex/baltex%20home.html)
- BASYS (Baltic Sea System Study), EU funded MAST-III project MAS3-CT96-0058 and IC20-CT96-0080, 1996-1998, project participant:  
[http://www.io-warnemuende.de/Projects/Basys/overview/overview 1.htm](http://www.io-warnemuende.de/Projects/Basys/overview/overview%201.htm)
- SWECLIM (Swedish Regional Climate Modelling Programme), funded by the Foundation for Strategic Environmental Research (MISTRA) and by the Swedish Meteorological and Hydrological Institute (SMHI), 1997-2003, project participant:  
<http://www.smhi.se/sweclim/>
- CARTUM (Comparative Analysis and Rationalization of Second-Moment Turbulence Models), EU Concerted Action MAS3-CT98-0172 and IC20-CT98-0104, 1999-2001, project participant:  
[http://www.ifm.uni-hamburg.de/ wwwto/ResearchTopics/CARTUM/carthome.htm](http://www.ifm.uni-hamburg.de/wwwto/ResearchTopics/CARTUM/carthome.htm)
- SEAREG (Sea Level Change Affecting the Spatial Development in the Baltic Sea Region), funded by the European Regional Development Fund (ERDF) within the Baltic Sea Region INTERREG IIIB program, 2002-2005, Co-PI for SMHI and the sub-contractor INREGIA AB Stockholm, workpackage leader, 475 000 Euro:  
<http://www.gsf.fi/projects/seareg/>
- ICEMON (Sea ice monitoring in the polar regions), funded by Global Monitoring for Environment and Security GMES is a joint initiative of the European Space Agency (ESA) and the European Commission, ESA ESRIN Contract No. 17060/03/I-IW, 2003-2004, project participant:  
<http://www.nersc.no/ICEMON/>
- GLIMPSE (Global implications of Arctic climate processes and feedbacks), European Commission project EVK2-CT-2002-00164, 2002-2005, project participant:  
<http://www.awi-potsdam.de/www-pot/atmo/glimpse/index.html>
- SNIC (Swedish National infrastructure for computing, computational resources from SWEGRID, Swedish National Allocation Committee, PI, SNIC 004/03-74, 2004, 11 738 cpuh/month; PI, SNIC 011/04-10, 2005, 8 000 cpuh/month; PI, SNIC 007/05-44, 2006, 13 000 cpuh/month; PI, SNIC 021/06-8, 2007, 32 000 cpuh/month)  
<http://www.swegrid.se/>, <http://www.snic.vr.se/>
- BALTDER (Centre of Excellence for Baltic Development, Education and Research, European Commission project EVK3-2002-00502, 2002-2005, external expert and advisor):  
<http://www.ocean.univ.gda.pl/baltder/>
- MUSCAD (Multi-proxy Studies of Climate Anno Domini), organizer of a workshop on “Climate variations in Sweden during the past 2000 years”, joined the network during 2002-2006

<http://www.geol.lu.se/proxy/>

- AOMIP (Arctic Ocean Model Intercomparison Project, since 2005), project participant (without funding)

<http://fish.cims.nyu.edu/project/aomip/overview.html>

- BACC (BALTEX Assessment of Climate Change for the Baltic Sea Basin), member of the writing team of chapter 2 and 3

<http://dvsun3.gkss.de/BACC/>

- DAMOCLES (Developing Arctic Modelling and Observing Capabilities for Long-term Environmental Studies, 2005-2009), project participant <http://www.damocles-eu.org>

- “Modeling climate variability of the Arctic Ocean in past and future climates with special focus on changing sea-ice”, Swedish Research Council (Vetenskåpsrådet), project-no. 621-2006-5030, 2007-2009, PI, 1 822 500 SEK (192 000 Euro)

<http://www.vr.se>

- “Sensor Networks to Monitor Marine Environment with Particular Focus on Climate Changes”, Swedish Governmental Agency for Innovation Systems (Vinnova), project-no. P29461-1, 2007-2009, under-consult of the Swedish Institute of Computer Science AB (SICS), PI: Dr. Thiemo Voigt, 1 500 000 SEK

<http://www.vinnova.se>

- “Investigating harmful algae blooms in future climate of the Baltic Sea”, The Swedish Research Council for Environment, Agricultural Sciences and Spatial Planning (Formas), project-no. 212-2006-1993, 2007-2008, PI, 1 659 450 SEK (175 000 Euro)

<http://www.formas.se>

- “Fluid and climate dynamics - Large scale simulations with applications to turbulence research and geophysics”, Knut and Alice Wallenberg foundation and the Swedish Infrastructure for Computing (SNIC), a unit of the Swedish Research Council, 2008-2011, Co-PI for SMHI and MISU, PI: Prof. Erland Källén, MISU, total 25.4 million SEK for a climate computing resource

- “Simulations of some engineering methods proposed to improve oxygen conditions in the Baltic proper”, Baltic Sea 2020 foundation, 2007, Co-PI for SMHI, PI: Dr. Bo Gustafsson, Göteborg University, 420 000 SEK

- Nolce (Nordic Observations of Ice Cover Extinction), Nordic Council of Ministers, 2007, 2009, 2010, Co-PI for SMHI, PI: Dr. Jari Haapala, Finnish Institute for Marine Research, 77 000 SEK (2007), 60 000 DKK (2009), 60 000 DKK (2010)

- NetICE (Nordic Network on sea-ice research), NordForsk, 2008-2010, Co-PI for SMHI, PI: Prof. Jorma Kuparinen, Helsinki University, 900 000 NOK (for the whole network) (<http://www.helsinki.fi/netice>)

- ECOSUPPORT (Advanced modeling tool for scenarios of the Baltic Sea ECOSystem to SUPPORT decision making), BONUS+ program, 2009-2011, PI and coordinator, total funding: about 1.6 mio Euro, 3 649 802 SEK for SMHI

- INFLOW (Holocene saline water inflow changes into the Baltic Sea, ecosystem responses and future scenarios), BONUS+ program, 2009-2011, Co-PI for SMHI, PI: Dr. Aarno Kotilainen, Geological Survey of Finland, 2 301 651 SEK
- AMBER (Assessment and Modelling Baltic Ecosystem Response), BONUS+ program, 2009-2011, Co-PI for SMHI, PI: Dr. Joachim Dippner, Leibniz Institute for Baltic Sea Research Warnemünde, 1 347 342 SEK
- BalticWay (The potential of currents for environmental management of the Baltic Sea maritime industry), BONUS+ program, 2009-2011, Co-PI for SMHI, PI: Prof. Tarmo Soomere, Institute of Cybernetics at Tallinn University of Technology, 2 379 501 SEK
- SAFEWIN (Safety of winter navigation in dynamic ice), EU/FP7, 2009-2012, Co-PI for SMHI, PI: Prof. Pentti Kujala, Helsinki University of Technology, 377 000 Euro
- ABNORMAL (A Baltic and North Sea model eutrophication assessment in a future climate), Nordic Council of Ministers, 2009, Co-PI for SMHI, PI: Dr. Morten Skogen, Institute of Marine Research, Bergen (Norway), 70 000 DKK (2009), 65 000 DKK (2010), 50 000 DKK (2011)
- “Ocean modelling of Kattegat and Skagerrak”, commonly funded by Göteborg University, Swedish Board of Fisheries, Swedish Environmental Protection Agency (Dnr. 2356835-09Nh), Länsstyrelse i Västra Götaland, Västragötalandsregionen (Dnr. 612-0690-09), 2010, PI, 450 000 SEK
- “Advanced Simulation of Arctic climate change and impact on Northern regions” (ADSIMNOR), The Swedish Research Council for Environment, Agricultural Sciences and Spatial Planning (Formas), Strategic Research Area, project-no. 214-2009-389, 2010-2013, Co-PI for SMHI/Ocean Research, PI: Prof. Colin Jones, SMHI/Rosby Centre, 3 200 000 SEK (for a PhD position)
- “Impact of accelerated future global mean sea level rise on the phosphorus cycle in the Baltic Sea”, The Swedish Research Council for Environment, Agricultural Sciences and Spatial Planning (Formas), project-no. 214-2009-577, 2010-2012, PI, 4 671 000 SEK (492 000 Euro)
- “Integrated Management of Agriculture, Fishery, Environment and Economy” (MAFIA), Danish Council for Strategic Research (DSF), 2010-2013, Co-PI for SMHI, PI: Prof. Bo Riemann, University of Aarhus, 216 000 DKK
- BEAM (Baltic Ecosystem Adaptive Management), The Swedish Research Council for Environment, Agricultural Sciences and Spatial Planning (Formas), Stockholm University’s Strategic Marine Environmental Research Funds, 2010-2015, Co-PI for Meteorological Institute at Stockholm University (MISU), PI: Prof. Kåre Bremer, Stockholm University, in total 41.7 MSEK (raised funding for a three-year research position at MISU, in total 3 170 000 SEK for MISU and SMHI)
- DEFROST - “Impacts of a changing cryosphere - depicting ecosystem-climate feedbacks from permafrost, snow and ice”, Nordic Center of Excellence on Interaction between Climate Change and the Cryosphere, 2011-2015, Co-PI for SMHI, PI: Torben R. Christensen, Lund University, 1 250 000 NOK (1 postdoc position)
- NorMER - “The Nordic Centre for Research on Marine Ecosystems and Resources under Climate Change”, Nordic Centre of Excellence on Climate Change Effects on Marine Ecosystems and Resource Economics, 2011-2015, Co-PI for SMHI, PI: Prof. Nils Christian Stenseth, University of Oslo, project in total 30.5 MNOK, SMHI 1.5 MNOK.

- KLIWAS - "Impacts of Climate Change on Waterways and Shipping - Development of Adaptation Options", Federal Ministry of Transport, Building, and Urban Development (BMVBS), Germany 2011-2012, SMHI is under-consult of the Federal Maritime and Hydrographic Agency (BSH), Germany, 195 000 EURO
- Interreg projekt, "Hav möter land - klimat, förvaltning och samhällsplanering tillsammans" (KASK), 2010-2013, project totally 3.8 mio EUR, FoUo 3915+360 hours, coordinator: Länsstyrelsen i Västra Götalands län
- "Impact of changing climate on circulation and biogeochemical cycles of the integrated North Sea and Baltic Sea system", The Swedish Research Council for Environment, Agricultural Sciences and Spatial Planning (Formas), project-no. 214-2010-1575, 2011-2013, PI, 5 170 000 SEK (544 000 Euro)
- MyOcean - 2010 Research and Development call, No. FP7-SPACE-2007-1, EU/FP7, "Towards operational modelling of the Baltic Sea using NEMO", 2011, PI (involved countries Sweden, Denmark, Finland), 35 000 Euro in total (15,397 Euro for SMHI)
- SNIC (Swedish National infrastructure for computing), Applications for large scale allocations coordinated by the Swedish National Allocations Committee (SNAC), "Regional climate modelling for the North Sea and Baltic Sea", PI, SNIC 002/12-25, 2012-2013, 200 000 core hours/month;
- Research projekt on "Flooding risks at Swedish coasts: extreme situations in present and future climates" funded by the Insurance company "Länsförsäkringar", 2013-2015, PI, 2 089 375 SEK
- North Sea Region Climate Change Assessment (NOSCCA), Lead author of the chapter 3.b Projected changes in the Norths Sea (and interface regions), 2011-2015, no funding
- "Reconstructing and projecting Baltic Sea climate variability 1850-2100", Swedish Research Council (Vetenskåpsrådet), project-no. 2012-23233-96678-38, DNR 2012-02117, 2013-2015, PI, 2 100 000 SEK (221 000 Euro)
- "Impact of future cryospheric changes on northern hemisphere. Climate, green growth and society (GREENICE)" funded by Top-level Research Initiative (TRI), Norden, 2014-2016, Co-PI for SMHI, PI: Prof. Noel Keenlyside, University of Bergen, 3 750 000 NOK (36 PMs)
- SNIC (Swedish National infrastructure for computing), Applications for large scale allocations coordinated by the Swedish National Allocations Committee (SNAC), "Impact of changing climate on biogeochemical cycling in the North Sea and Baltic Sea", PI, SNIC 2013/11-22, 2013-2014, 250 000 core hours/month
- COCOA - "Nutrient Cocktail in coastal zones of the Baltic Sea", BONUS program, 2014-2017, Co-PI for SMHI, PI: Prof. Jacob Carstensen, Aarhus University, Denmark, project in total 4 069 013 EURO, SMHI 396 648 EURO or 3 500 000 SEK.
- "Cyanobacteria life cycles and nitrogen fixation in historical reconstructions and future climate scenarios (1850-2100) of the Baltic Sea", The Swedish Research Council for Environment, Agricultural Sciences and Spatial Planning (Formas), project-no. 214-2013-1449, 2014-2016, PI, 5 135 000 SEK (541 000 Euro)
- BalticAPP - "Wellbeing from the Baltic Sea - applications combining natural science and economics", BONUS program, 2015-2017, Work Package 1 leader and Co-PI for

- SMHI, PI: Prof. Kari Hyytiäinen, University of Helsinki, Finland, project in total 1 998 560 EURO, SMHI 301 500 EURO or 2 788 875 SEK.
- STORMWIND - "Strategic and Operational Risk Management for Wintertime Maritime Transportation System", BONUS program, 2015-2017, Co-PI for SMHI, PI: Prof. Pentti Kujala, Aalto University (AALTO), Finland, project in total 1 996 654 EURO, SMHI 321 480 EURO or 2 973 690 SEK.
  - SNIC (Swedish National infrastructure for computing), Applications for large scale allocations coordinated by the Swedish National Allocations Committee (SNAC), "Impact of changing climate on biogeochemical cycling in the North Sea and Baltic Sea - part 2", PI, SNIC 2014/8-36, 2014-2015, 250 000 core hours/month
  - BACC II (BALTEX Assessment of Climate Change for the Baltic Sea Basin), lead author for chapter 13 (<http://www.baltic-earth.eu/BACC2/index.html>)
  - International advanced PhD course on "Impact of climate change on the marine environment with special focus on the role of changing extremes, 24 - 30 August 2015, co-organized by the "Baltic Ecosystem Adaptive Management (BEAM) and Baltic Earth programmes, PI, the application for the doctoral course was awarded 295 000 SEK or 31 053 EUR from BEAM.
  - ARCPATH - "Arctic Climate Predictions: Pathways to Resilient, Sustainable Societies, Nordic Center of Excellence in Arctic Research, Nordforsk, 2016-2019, Co-PI for SMHI, PI: Dr. Yongqi Gao, Nansen Environmental and Remote Sensing Center (NERSC), Bergen, Norway, project in total 28 mio NOK, SMHI 3 893 389 NOK.
  - "Per Hall", Swedish Research Council (Vetenskåpsrådet), DNR 2015-03717, 2016-2019, Co-PI for SMHI, PI: Prof. Per Hall, ??? SEK (??? Euro)
  - INTEGRAL "Integrated carbon and trace gas monitoring for the Baltic Sea, BONUS program, 2017-2019, Work Package 6 leader and project member for IOW, PI: Prof. Gregor Rehder, IOW, project in total 2 111 038 EUR, IOW (Meier): 33 person months for one postdoc
  - RADO – „Ran an die Ostsee", Co-PI for UI, PI: Prof Dr. U. Bathmann, IOW, project in total about 80 000 EUR
  - CoastalFutures "DAM Schutz und Nutzen – CoastalFutures: Zukunftsszenarien zur Förderung einer nachhaltigen Nutzung mariner Räume; Vorhaben: Szenarien für Ökosystemleistungen", 2021-2024, PI: Corinna Schrum (Hereon), Co-PI for IOW, Förderkennzeichen: 03F0911B, 835.806 €