



BALTEX /Baltic Earth Publications

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The data base for the publications is the BALTEX/Baltic Earth electronic publication library, accessible via the Baltic Earth homepage at <http://www.baltic-earth.eu>. A book, journal article or report is qualified as a BALTEX/Baltic Earth publication, if either it describes results of a BALTEX/Baltic Earth project and BALTEX/Baltic Earth is explicitly referred to in the title, abstract, introduction or summary of the publication the publication makes explicitly reference to the programme, or if the publication contributes to at least one BALTEX Phase II/Baltic Earth objective or Grand Challenge, and the authors agree that their publication is listed on the Baltic Earth website and publication database.

At present, there are 19 books, 891 peer-reviewed journal articles, 67 reports, 1061 Conference presentations with reference to BALTEX/Baltic Earth, as well as 55 issues of the International BALTEX Secretariat Publication Series (IBSP; ISSN 1681-6471) and 18 issues of the International Baltic Earth Secretariat Publication Series (IBESP; ISSN 2198-4247).

Status as of 19 November 2020

Silke Köppen and Marcus Reckermann

International Baltic Earth Secretariat

1. Books

- BACC II Author Team, 2015: Second Assessment of Climate Change for the Baltic Sea Basin. Springer Regional Climate Studies Open Access, 501 p.
- BACC Author Team, 2008: Assessment of Climate Change for the Baltic Sea Basin. Springer Verlag, 474 p.
- Feistel R, Nausch G, Wasmund N (Eds), 2008: State and Evolution of the Baltic Sea, 1952 – 2005 A Detailed 50-Year Survey of Meteorology and Climate, Physics, Chemistry, Biology, and Marine Environment, John Wiley & Sons, Inc., Hoboken
- Håkanson L, 2009: Modeling nutrient fluxes to, within and from the Kattegat to find an optimal, cost-efficient Swedish remedial strategy. Uppsala Univ., Geotryckeriet, 122 p.
- Håkanson L, Bryhn AC, 2008a: Tools and criteria for sustainable coastal ecosystem management – with examples from the Baltic Sea and other aquatic systems. - Springer Verlag, Berlin, Heidelberg, 292 p.
- Håkanson L, Bryhn AC, 2008b: Eutrophication in the Baltic Sea – present situation, nutrient transport processes, remedial strategies. Springer Verlag, Berlin, Heidelberg, 264 p.
- Harff J, Furmańczyk K, von Storch H (eds) 2017: Coastline Changes of the Baltic Sea from South to East. Springer Verlag, Coastal Research Library, Vol 19, ISBN: 978-3-319-49892-8 (Print) 978-3-319-49894-2 (Online)
- Harper D, Zalewski M, Pacini N, (Eds) 2008: Ecohydrology: Processes, Models and Case Studies. An approach to the sustainable management of water resources. CAB International. Cromwell Press, Trowbridge, UK. 391 pp.
- Kulinski K, Pempkowiak J, 2012: Carbon Cycling in the Baltic Sea, Springer Verlag, 130p. ISBN: 978-3-642-19387-3
- Leppäranta M, Myrberg K, 2009: Physical Oceanography of the Baltic Sea, Springer Verlag, 410 p
- Omstedt A, 2020: A Philosophical View of the Ocean and Humanity. Springer Earth and Environmental Science, Print ISBN 978-3-030-36679-7, Online ISBN 978-3-030-36680-3, February 2020
- Omstedt A, 2016: Connecting Analytical Thinking and Intuition: And the Nights Abound with Inspiration. Springer-Briefs in Earth Sciences, ISBN 978-3-319-27534-5
- Omstedt A, 2015: Guide to process based modelling of lakes and coastal seas. Second Edition. Springer-Praxis books in Geophysical Sciences, DOI 10.1007/978-3-319-17990-2
- Omstedt A, 2011: Guide to Process Based Modeling of Lakes and Coastal Seas
Series: Praxis Books, Geophysical Sciences. Springer Verlag, Heidelberg, 2011. 310 p.
- Reckermann M, Brander K, MacKenzie BR, Omstedt A (Eds) 2012
Climate Impacts on the Baltic Sea: From Science to Policy
Series: Springer Earth System Sciences. Springer Verlag, Heidelberg, 2012. 216 p.
- Schmelzer N, Holfort J, Sztobryn M, Przygodzki P (Eds) 2012: Climatological Ice Atlas for the western and southern Baltic Sea (1961 – 2010), *Digital supplement*: Comparison of ice conditions in the 30-year periods 1961 – 1990, 1971 – 2000 and 1981 – 2010. ISBN 978-3-86987-278-0, BSH no. 2338

Schmidt-Thomé P, Klein J (Eds) 2013: Climate Change Adaptation in Practice - from strategy development to implementation. Wiley Blackwell Book Publication, 327 p., ISBN 978-0-470-97700-2

Schneider B, Müller JD 2018: Biogeochemical Transformations in the Baltic Sea. Springer Oceanography, eBook ISBN: 978-3-319-61699-5, Hardcover ISBN: 978-3-319-61698-8, 110p

Snoeijs-Leijonmalm P, Schubert H, Radziejewska T (Eds) 2017: Biological Oceanography of the Baltic Sea. Springer Netherlands, Springer Science+Business Media, Dordrecht, e-book: ISBN 978-94-007-0668-2; hardcover: ISBN 978-94-007-0667-5, 683p

2. Special Journal Issues dedicated to Baltic Earth

(Please note that the papers listed here are also part of the Peer-reviewed Journal Articles)

2.1 Earth System Dynamics, Vol. 8, 2017, an interactive open access journal of the European Geosciences Union 1st Baltic Earth Conference 2016, 18 papers

Karabil S, Zorita E, Hünicke B: Mechanisms of variability in decadal sea-level trends in the Baltic Sea over the 20th century. pp 1031-1046, <https://doi.org/10.5194/esd-8-1031-2017>, 17 Nov 2017

Jakobson L, Jakobson E, Post P, Jaagus J: Atmospheric teleconnections between the Arctic and the eastern Baltic Sea regions. pp 1019-1030, <https://doi.org/10.5194/esd-8-1019-2017>, 14 Nov 2017

Jaagus J, Sepp M, Tamm T, Järvet A, Möisja K: Trends and regime shifts in climatic conditions and river runoff in Estonia during 1951–2015. pp 963-976, <https://doi.org/10.5194/esd-8-963-2017>, 03 Nov 2017

Bethere L, Sennikovs J, Bethers U: Climate indices for the Baltic states from principal component analysis. pp 951-962, <https://doi.org/10.5194/esd-8-951-2017>, 26 Oct 2017

Claremar B, Haglund K, Rutgersson A: Ship emissions and the use of current air cleaning technology: contributions to air pollution and acidification in the Baltic Sea. pp 901-919, <https://doi.org/10.5194/esd-8-901-2017>, 13 Oct 2017

Myllykangas J-P, Jilbert T, Jakobs G, Rehder G, Werner J, Hietanen S: Effects of the 2014 major Baltic inflow on methane and nitrous oxide dynamics in the water column of the central Baltic Sea. pp 817-826, <https://doi.org/10.5194/esd-8-817-2017>, 14 Sep 2017

Daewel U, Schrum C: Low-frequency variability in North Sea and Baltic Sea identified through simulations with the 3-D coupled physical–biogeochemical model ECOSMO. pp 801-815, <https://doi.org/10.5194/esd-8-801-2017>, 07 Sep 2017

Kudryavtseva N, Soomere T: Satellite altimetry reveals spatial patterns of variations in the Baltic Sea wave climate. pp 697-706, <https://doi.org/10.5194/esd-8-697-2017>, 08 Aug 2017

Bierstedt S, Hünicke B, Zorita E, Ludwig J: A wind proxy based on migrating dunes at the Baltic coast: statistical analysis of the link between wind conditions and sand movement. pp 639-652, <https://doi.org/10.5194/esd-8-639-2017>, 17 Jul 2017

Rimkus E, Stonevicius E, Kilpys J, Maciulyte V, Valiukas D: Drought identification in the eastern Baltic region using NDVI. pp 627-637, <https://doi.org/10.5194/esd-8-627-2017>, 17 Jul 2017

Venäläinen A, Laapas M, Pirinen P, Horttanainen M, Hyvönen R, Lehtonen I, Junila P, Hou M, Peltola HM: Estimation of the high-spatial-resolution variability in extreme wind speeds for forestry applications. pp 529-545, <https://doi.org/10.5194/esd-8-529-2017>, 05 Jul 2017

Česnulevičius A, Morkūnaitė R, Bautrėnas A, Bevainis L, Ovodas D: Intensity of geodynamic processes in the Lithuanian part of the Curonian Spit. pp 419-428, <https://doi.org/10.5194/esd-8-419-2017>, 28 Jun 2017

- Schade NH: Evaluating the atmospheric drivers leading to the December 2014 flood in Schleswig-Holstein, Germany. pp 405-418, <https://doi.org/10.5194/esd-8-405-2017>, 14 Jun 2017
- Parard G, Rutgersson A, Parampil SR, Charantonis AA: The Potential of using Remote Sensing data to estimate Air–Sea CO₂ exchange in the Baltic Sea. *Earth Syst. Dynam. Discuss.*, <https://doi.org/10.5194/esd-2017-33>, 02 May 2017
- Kuliński K, Schneider B, Szymczycha B, Stokowski M: Structure and functioning of the acid-base system in the Baltic Sea. *Earth Syst. Dynam. Discuss.*, <https://doi.org/10.5194/esd-2017-39>, 2017
- Dvornikov AY, Martyanov SD, Ryabchenko VA, Eremina TR, Isaev AV, Sein DV: Assessment of extreme hydrological conditions in the Bothnian Bay, Baltic Sea, and the impact of the nuclear power plant “Hanhikivi-1” on the local thermal regime. Pp 265-282, <https://doi.org/10.5194/esd-8-265-2017>, 12 Apr 2017
- Karabil S, Zorita E, Hünicke B: Contribution of atmospheric circulation to recent off-shore sea-level variations in the Baltic Sea and the North Sea. <https://doi.org/10.5194/esd-2017-23>, 27 Mar 2017
- Jeworrek J, Wu L, Dieterich C, Rutgersson A: Characteristics of convective snow bands along the Swedish east coast. pp 163-175, <https://doi.org/10.5194/esd-8-163-2017>, 06 Mar 2017

2.2 Frontiers in Earth Science, Interdisciplinary Climate Studies, The Baltic Sea in Transition, 2019, an interactive open access journal
2nd Baltic Earth Conference 2018, 19 papers

- Danilovich I, Zhuravlev S, Kurochkina L, Groisman P: The Past and Future Estimates of Climate and Streamflow Changes in the Western Dvina River Basin
- Elken J, Zujev M, She J, Lagemaat P: Reconstruction of Large-Scale Sea Surface Temperature and Salinity Fields Using Sub-Regional EOF Patterns From Models
- Gutiérrez-Loza L, Wallin MB, Sahlée E, Nilsson E, Bange HW, Kock A and Rutgersson A: Measurement of Air-Sea Methane Fluxes in the Baltic Sea Using the Eddy Covariance Method.
- Hagemann S, Stacke T, Ho-Hagemann HTM: High Resolution Discharge Simulations Over Europe and the Baltic Sea Catchment
- Hinrichs I, Jahnke-Bornemann A, Andersson A, Ganske A, Gouretski V, Jensen C, Klein B, Möller J, Sadikni R, Tinz B: The Baltic and North Seas Climatology (BNSC)—A Comprehensive, Observation-Based Data Product of Atmospheric and Hydrographic Parameters
- Kurkin A, Rybin A, Soomere T, Kurkina O, Rouvinskaya E: Spatial distribution of energy of subinertial baroclinic motions in the Baltic Sea
- Kuss J, Nausch G, Engelke C, von Weber M, Lutterbeck H, Naumann M, Waniek JJ, Schulz-Bull D: Changes of Nutrient Concentrations in the Western Baltic Sea in the Transition Between Inner Coastal Waters and the Central Basins: Time Series From 1995 to 2016 With Source Analysis
- Lakson M, Post P and Sepp M: The Impact of Atmospheric Circulation on Air Temperature Rise in Estonia.

- Liblik T, Lips U: Stratification Has Strengthened in the Baltic Sea – An Analysis of 35 Years of Observational Data
- Madsen KS, Hoyer J, Suursaar Ü, She J, Knudsen P: Sea Level Trends and Variability of the Baltic Sea From 2D Statistical Reconstruction and Altimetry
- Madsen KS, Murawski J, Blokhina M, Su J: Sea Level Change: Mapping Danish Municipality Needs for Climate Information
- Medvedev I, Kulikov E: Low-frequency Baltic sea level spectrum
- Norbäck Ivarsson L, Andrén T, Moros M, Andersen TJ, Lönn M and Andrén E: Baltic Sea Coastal Eutrophication in a Thousand Year Perspective
- Paka V, Zhurbas V, Golenko M, Korzh A, Kondrashov A, Shchuka S: Innovative Closely Spaced Profiling and Current Velocity Measurements in the Southern Baltic Sea in 2016–2018 With Special Reference to the Bottom Layer.
- Saraiva S, Meier HEM, Andersson H, Höglund A, Dieterich C, Gröger M, Hordoir R, Eilola K: Uncertainties in Projections of the Baltic Sea Ecosystem Driven by an Ensemble of Global Climate Models.
- Semenova I, Slizhe M: Synoptic Conditions of Droughts and Dry Winds in the Black Sea Steppe Province Under Recent Decades
- She J, Meier HEM, Darecki M, Gorringer P, Huess V, Kouts T, Reissmann JH, Tuomi L: Baltic Sea Operational Oceanography—A Stimulant for Regional Earth System Research
- Terski P, Kulesho A, Chalov S, Terskaia A, Belyakova P, Karthe D, Pluntke T: Assessment of Water Balance for Russian Subcatchment of Western Dvina River Using SWAT Model
- Tuomi L, Kanarik H, Björkqvist J-V, Marjamaa R, Vaino J, Hordoir R, Höglung A, Kahma K: Impact of Ice Data Quality and Treatment on Wave Hindcast Statistics in Seasonally Ice-Covered Seas

2.3 Baltic Earth continuous contributions to the Oxford Research Encyclopedias (ORE)"Climate Science"

Collection of overview papers authored by international scholars on specific topics around climate science of the Baltic Sea Region. The articles are peer-reviewed and intended as reference material for scientists from other fields, scholars, students and the interested public.

- Christensen OB, Kjellström E: Projections for Temperature, Precipitation, Wind, and Snow in the Baltic Sea Region until 2100
- Harff J, Jöns H, Rosentau A: Geological, Paleoclimatological, and Archaeological History of the Baltic Sea Region since the last Glaciation
- Kjellström E, Christensen OB: Regional Climate Modeling for the Baltic Sea Region
- Lavento M: Regional History of Settlement and Human Impacts in the Baltic Sea Region Over the Last 2000 Years
- Lilja S: Climate, History, and Social Change in Sweden and the Baltic Sea Area From About 1700

Meier M, Saraiva S: Projected Oceanographical Changes in the Baltic Sea

Möllmann C: Effects of Climate Change and Fisheries on the Marine Ecosystem of the Baltic Sea

Omstedt A: The Development of Climate Science of the Baltic Sea Region

Räisänen J: Future Climate Change in the Baltic Sea Region and Environmental Impacts

Viitasalo M: Impacts of Climate Change on the Ecosystem of the Baltic Sea

Vuorinen I: Ecosystems of the Baltic Sea Since the Last Glaciation

Weisse R, Hünicke B: Baltic Sea Level: Past, Present, and Future

3. Special Journal Issues dedicated to BALTEX

(Please note that the papers listed here are also part of the Peer-reviewed Journal Articles)

3.1 Tellus, Series A, Vol. 48A, No. 5, 1996, 1st Study Conference on BALTEX 1995, 15 papers

Calanca P, Fortelius C: Representation of model data and evaluation of diagnostic equations in pressure coordinates. pp. 756-766

Haapala J, Leppäranta M: Simulating the Baltic Sea ice season with a coupled ice-ocean model. pp. 622-643

Heise E: An investigation of water and energy budgets for the BALTEX region based on short-range numerical weather predictions. pp. 693-707

Holopainen E: Diagnostic studies on atmospheric budgets of water and energy based on aerological data. pp. 750-755

Karlsson K-G: Validation of modelled cloudiness using satellite-estimated cloud climatologies. pp. 767-785

Karstens U, Nolte-Holube R, Rockel B: Calculation of the water budget over the Baltic Sea catchment area using the regional forecast model REMO for June 1993. pp. 684-692

Keevallik S, Tooming H: Relationships between surface albedo and spring heat accumulation. pp. 727-732

Lass HU, Matthäus W: On temporal wind variations forcing salt water inflows into the Baltic Sea. pp. 663-671

Ljungemyr P, Gustafsson N, Omstedt A: Parameterization of lake thermodynamics in a high-resolution weather forecasting model. pp. 608-621

Lohmann D, Nolte-Holube R, Raschke E: A large-scale horizontal routing model to be coupled to land surface parametrization schemes. pp. 708-721

Mölders N, Raabe A, Tetzlaff G: A comparison of two strategies on land surface heterogeneity used in a mesoscale β meteorological model. pp. 733-749

Omstedt A: Preface. pp. 607

Omstedt A, Nyberg L: Response of Baltic Sea ice to seasonal, interannual forcing and climate change. pp. 644-662

Russak V: Atmospheric aerosol variability in Estonia calculated from solar radiation measurements. pp. 786-792

Samuelsson M, Stigebrandt A: Main characteristics of the long-term sea level variability in the Baltic sea. pp. 672-683

Tooming H: Changes in surface albedo and air temperature at Tartu, Estonia. pp. 722-726

3.2 Meteorologische Zeitschrift, Vol. 9, No. 1-2, 2000 **2nd Study Conference on BALTEX 1998, 14 papers**

Graham LP, Jacob D: Using large-scale hydrologic modelling to review runoff generation processes in GCM climate models. pp. 49-58

Hagedorn R, Lehmann A, Jacob D: A coupled high resolution atmosphere-ocean model for the BALTEX region. pp. 7-20

Kerschgens M: Editorial. pp. 3-4.

Lenderink G, van Meijgaard E, Holtslag A: Evaluation of the ECHAM4 cloud-turbulence scheme for Stratocumulus. pp. 41-48

Omstedt A, Rutgersson A: Closing the water and heat cycles of the Baltic Sea. pp. 59-66

Paplinka B: Case study of wave dependent drag coefficient in the Baltic Sea. pp. 67-72

Raschke E: BALTEX: Baltic Sea Experiment. pp. 5-6

Rutgersson A: A comparison between long term measured and modelled sensible heat and momentum fluxes using a High Resolution Limited Area Model (HIRLAM). pp. 31-40

Van Meijgaard E, Konings JA, Feijt A, van Lammeren A: Comparison of model predicted cloud cover profiles with observations from ground and satellite. pp. 21-30

The following 7 papers appear in **Meteorologische Zeitschrift, Vol. 9, No. 2, 2000**

Hantel M, Hamelbeck F: Convection in PIDCAP – A descriptive approach. pp. 77-84

Karlsson K-G: Satellite sensing techniques and applications for the purpose of BALTEX. pp. 111-116

Lindau R, Ruprecht E: SSM 1-derived total water vapour content over the Baltic Sea compared to independent data. pp. 117-124

Michelson DB, Foltescu V, Häggmark L, Lindgren B: MESAN Mesoscale analysis of precipitation. pp. 85-96

Raschke E: Editorial: BALTEX: Baltic Sea Experiment. pp. 75-76

Stewart RE, Burford J, Crawford R: On the characteristics of the water cycle of the Mackenzie River Basin. pp. 103-110

Tooming H, Kadaja J: Snow cover and surface albedo in Estonia. pp. 97-102

Van Lammeren A, Feijt A, Konings J, van Meijgaard E, van Ulden A: Combination of ground-based and satellite cloud observations on a routine basis. pp. 125-134

3.3 Meteorology and Atmospheric Physics, Vol. 77, No. 1-4, 2001

The European NEWBALTIC project, 14 papers

Bengtsson L: Numerical modelling of the energy and water cycle of the Baltic Sea. pp. 9-18

Graham LP, Bergström S: Water balance modelling in the Baltic Sea drainage basin - analysis of meteorological and hydrological approaches. pp. 45-60

Haimberger L, Ahrens B, Hamelbeck F, Hantel M: Impact of time sampling on atmospheric energy budget residuals. pp. 167-185

Hamelbeck F, Haimberger L, Hantel M: Convection in PIDCAP Part I: Evaluating LAM convection. pp. 85-98

Hantel M, Haimberger L, Hamelbeck F: Convection in PIDCAP Part II: DIAMOD - A standard for diagnosing convective quantities. pp. 185-203

Hantel M: Editorial: Scientific results of the European NEWBALTIC project. pp. 1-8

Hess R: Assimilation of screen-level observations by variational soil moisture analysis. pp. 145-154

Jacob D, Van den Hurk BJM, Andræ U, Elgered G, Fortelius C, Graham LP, Jackson SD, Karstens U, Köpken C, Lindau R, Podzun R, Rockel B, Rubel F, Sass BH, Smith RNB, Yang X: A comprehensive model inter-comparison study investigating the water budget during the BALTEX-PIDCAP period. pp. 19-44

Jacob D: A note to the simulation of the annual and inter-annual variability of the water budget over the Baltic Sea drainage basin. pp. 61-74

Lenderink G, van Meijgaard E: Impacts of cloud and turbulence schemes on integrated water vapor: Comparison between model predictions and GPS measurements. pp. 131-144

Rockel B, Karstens U: Development of the water budget for three extra-tropical cyclones with intense rainfall over Europe. pp. 75-84

Rubel F, Hantel M: BALTEX 1/6-degree daily precipitation climatology 1996-1998. pp. 155-166

Stoew B, Elgered G, Johansson JM: An assessment of estimates of integrated water vapor from ground-based GPS data. pp. 99-108

Van Meijgaard E, Andræ U, Rockel B: Comparison of model predicted cloud parameters and surface radiative fluxes with observations on the 100 km scale. pp. 109-130

3.4 Boreal Environment Research, Vol. 7, No. 3-4, 2002
3rd Study Conference on BALTEX 2001, 34 papers

Alestalo M: Preface. pp. 173

Crewell S, Drusch M, van Meijgaard E, van Lammeren A: Cloud observations and modelling within the European BALTEX Cloud Liquid Water Network. pp. 235-246

Döscher R, Willén U, Jones C, Rutgersson A, Meier HEM, Hansson U, Graham LP: The development of the regional coupled ocean-atmosphere model RCAO. pp. 183-192

Etling D, Harbusch G, Brümmer B: Large-Eddy-Simulation of an off-ice airflow during BASIS. pp. 225-228

Feijt A, Jolivet D, van Meijgaard E: Retrieval of the spatial distribution of liquid water path from combined ground-based and satellite observations for atmospheric model evaluation. pp. 265-272

Fortelius C, Andrae U, Forsblom M: The BALTEX regional reanalysis project. pp. 193-202

Gryning S-E, Batchvarova E: Marine boundary-layer height estimated from the HIRLAM model. pp. 229-235

Hollmann R, Gratzki A: The satellite derived surface radiation budget for BALTEX. pp. 247-252

Koistinen J, Michelson DB: BALTEX weather radar-based precipitation products and their accuracies. pp. 253-264

Kücken M, Gerstengarbe F-W, Werner PC: Cluster analysis results of regional climate model simulations in the PIDCAP period. pp. 219-224

Lorant V, MacFarlane N, Laprise R: A numerical study using the Canadian Regional Climate Model for the PIDCAP period. pp. 203-210

Oesterle H.: Selection of representative stations by means of a cluster analysis for the BAMAR region in the PIDCAP period. pp. 301-304.

Okulov O, Ohvril H, Kivi R: Atmospheric precipitable water in Estonia, 1990 – 2001. pp. 291-200

Pirazzini R, Vihma T, Launiainen J, Tisler P: Validation of HIRLAM boundary-layer structures over the Baltic Sea. pp. 211-218

Post P, Truija V, Tuulik J: Circulation weather types and their influence on temperature and precipitation in Estonia. pp. 281-290

Raschke E, Meywerk J, Rockel B: Has the project BALTEX so far met its original objectives? pp. 175-182

Sepp M, Jaagus J: Frequency of circulation patterns and air temperature variations in Europe. pp. 273-280

The following 18 papers appear in **Boreal Environment Research Vol.7, No 4, 2002**

Alestalo M: Preface. pp. 305

Berger FH: Surface radiant and energy flux densities inferred from satellite data for the BALTEX watershed. pp. 343-352

Brümmer B, Kirchgäßner A, Müller G, Schröder D, Launiainen J, Vihma T: The BALTIMOS (BALTEX Integrated Model System) field experiments: A comprehensive atmospheric boundary layer data set for model validation over the open and ice-covered Baltic Sea. pp. 371-378

Clemens M, Bumke K: Precipitation fields over the Baltic Sea derived from ship rain gauge measurements on merchant ships. pp. 425-436

Gryning S-E, Halldin S, Lindroth A: Area averaging of land surface-atmosphere fluxes in NOPEX: challenges, results and perspectives. pp. 379-388

Kitaev L, Kislov A, Krenke A, Razuvaev V, Martuganov R, Konstantinov I: The snow cover characteristics of northern Eurasia and their relationship to climatic parameters. pp. 437-446

Klavins M, Briede A, Rodinov V, Kokorite I, Frisk T: Long-term changes of the river runoff in Latvia. pp. 447-456

Lehmann A, Hinrichsen H-H: Water, heat and salt exchange between the deep basins of the Baltic Sea. pp. 405-416

Lindau R: Energy and water balance of the Baltic Sea derived from merchant ship observations. pp. 417-424

Malinin VN, Nekrasov A, Gordeeva S: Inter-annual variability of the Baltic Sea water balance components and sea level. pp. 399-404

Maslowski W, Walczowski W: Circulation of the Baltic Sea and its connection to the Pan-Arctic region - a large scale and high-resolution modeling approach. pp. 319-326

Meier HEM, Döscher R: Simulated water and heat cycles of the Baltic Sea using a 3D coupled atmosphere-ice-ocean model. pp. 327-334

Oltchev A, Cermak J, Nadezhdina N, Tatarinov F, Tishenko A, Ibrom A, Gravenhorst G: Transpiration of a mixed forest stand: field measurements and simulation using SVAT models. pp. 389-398

Peters G, Fischer B, Andersson T: Rain observations with a vertically looking Micro Rain Radar (MRR). pp. 353-362

Rimkus E, Stankunavichius G: Snow water equivalent variability and forecast in Lithuania. pp. 457-462

Roads J, Raschke E, Rockel B: BALTEX water and energy budgets in the NCEP/DOE reanalysis II. pp. 307-318

Stigebrandt A, Lass HU, Liljebladh B, Alenius P, Piechura J, Hietala R, Beszczynska A: DIAMIX - An experimental study of diapycnal deepwater mixing in the virtually tideless Baltic Sea. pp. 363-370

Stipa T, Vepsäläinen J: The fragile climatological niche of the Baltic Sea. pp. 335-342

Tomingas O: Relationship between atmospheric circulation indices and climate variability in Estonia. pp. 463-469

3.5 Atmospheric Research, Vol. 75, No. 3, 2005
The European CLIWA-NET project, 6 papers

Güldner J, Leps J-P: Analysis of CLIWA-NET intensive operation period data as part of the monitoring activities at the German Meteorological Service site Lindenberg. pp. 151-166

Illingworth A, Crewell S: CLIWA-NET: Observation and modelling of liquid water clouds. pp. 149-150

Meywerk J, Quante M, Sievers O: Radar based remote sensing of cloud liquid water—application of various techniques—a case study. pp. 167-182

Rose T, Crewell S, Löhnert U, Simmer C: A network suitable microwave radiometer for operational monitoring of the cloudy atmosphere. pp. 183-200

Van Meijgaard E, Crewell S: Comparison of model predicted liquid water path with ground-based measurements during CLIWA-NET. pp. 201-226

Willen U, Crewell S, Baltink HK, Sievers O: Assessing model predicted vertical cloud structure and cloud overlap with radar and lidar ceilometer observations for the Baltex Bridge Campaign of CLIWA-NET. pp. 227-255

3.6 Nordic Hydrology, Vol. 36, No. 4-5, 2005
4th Study Conference on BALTEX 2004, 10 papers

Arpe K, Hagemann S, Jacob D, Roeckner E: The realism of the ECHAM5 models to simulate the hydrological cycle in the Arctic and North European area. pp. 349-368

Isemer H-J, Gryning S-E, Rosbjerg D: Preface - Special issue of Nordic Hydrology – 4 Study Conference on BALTEX. pp. 295-296

Jakobson E, Ohvri H, Okulov O, Laulainen N: Variability of radiosonde-observed precipitable water in the Baltic region. pp. 423-433

Kitaev L, Førland E, Razuvaev V, Tveito OE, Krueger O: Distribution of snow cover over Northern Eurasia. pp. 311- 320

Kjellström E, Döscher R, Meier HEM: Atmospheric response to different sea surface temperatures in the Baltic Sea: coupled versus uncoupled regional climate model experiments. pp. 397-410

Kowalewska-Kalkowska H, Kowalewski M: Operational hydrodynamic model for forecasting extreme hydrographic events in the Oder Estuary. pp. 411-422

Krysanova V, Hattermann F, Habeck A: Expected changes in water resources availability and water quality with respect to climate change in the Elbe River basin (Germany). pp. 321-334

Lindau R, Simmer C: Derivation of a root zone soil moisture algorithm and its application to validate model data. pp. 335-348

Omstedt A, Chen Y, Wesslander K: A comparison between the ERA40 and the SMHI gridded meteorological databases as applied to Baltic Sea modelling. pp. 369-380

Rutgersson A, Omstedt A, Chen Y: Evaluation of the heat balance components over the Baltic Sea using four gridded meteorological databases and direct observations. pp. 381-396

Sepp M, Post P, Jaagus J: Long-term changes in the frequency of cyclones and their trajectories in Central and Northern Europe. pp. 297

3.7 Boundary-Layer Meteorology, Vol. 121, No. 1, 2006 **The LITFASS-2003 experiment, 10 papers**

Ament F, Simmer C: Improved Representation of Land-surface Heterogeneity in a Non-hydrostatic Numerical Weather Prediction Model. pp. 153-174

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Beyrich F, Mengelkamp H-T: Evaporation over a Heterogeneous Land Surface: EVA_GRIPS and the LITFASS-2003 Experiment—An Overview. pp. 5-32

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Heinemann G, Kerschgens M: Comparison of methods for area-averaging surface energy fluxes over heterogeneous land surfaces using high-resolution non-hydrostatic simulations. pp. 195-220

Heret C, Tittebrand A, Berger FH: Latent heat fluxes simulated with a non-hydrostatic weather forecast model using actual surface properties from measurements and remote sensing. pp. 175-194

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Carlsson B, Rutgersson A, Smedman A-S: Investigating the effect of a wave-dependent momentum flux in a process oriented ocean model. pp. 3–17

- Gustafsson EO, Omstedt A: Sensitivity of Baltic Sea deep water salinity and oxygen concentration to variations in physical forcing. pp. 18–30
- Jaagus J: Regionalisation of the precipitation pattern in the Baltic Sea drainage basin and its dependence on large-scale atmospheric circulation. pp. 31–44
- Jakobson E, Ohvril H, Elgered G: Diurnal variability of precipitable water in the Baltic region, impact on transmittance of the direct solar radiation. pp. 45–55
- Lind P, Kjellström E.: Water budget in the Baltic Sea drainage basin: Evaluation of simulated fluxes in a regional climate model. pp. 56–67
- Tedesco L, Vichi M, Haapala J, Stipa T: An enhanced sea-ice thermodynamic model applied to the Baltic Sea. pp. 68–80
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- Draveniece A: Detecting changes in winter seasons in Latvia: the role of arctic air masses. pp. 89–99
- Jacob D, Lorenz P: Future trends and variability of the hydrological cycle in different IPCC SRES emission scenarios — a case study for the Baltic Sea region. pp. 100–113
- Kjellström E, Lind P: Changes in the water budget in the Baltic Sea drainage basin in future warmer climates as simulated by the regional climate model RCA3. pp. 114–124
- Madsen KS, Højerslev NK: Long-term temperature and salinity records from the Baltic Sea transition zone. pp. 125–131
- Saue T, Kadaja J: Simulated crop yield — an indicator of climate variability. pp. 132–142
- Sepp M: Changes in frequency of Baltic Sea cyclones and their relationships with NAO and climate in Estonia. pp. 143–151
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- Graham LP, Olsson J, Kjellström E, Rosberg J, Hellström S-S, Berndtsson R: Simulating river flow to the Baltic Sea from climate simulations over the past millennium. pp. 173–182
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- Laanemets J, Zhurbas V, Elken J, Vahtera E: Dependence of upwelling-mediated nutrient transport on wind forcing, bottom topography and stratification in the Gulf of Finland: Model experiments. pp. 213–225

- Langner J, Andersson C, Engardt M: Atmospheric input of nitrogen to the Baltic Sea basin: present situation, variability due to meteorology and impact of climate change. pp. 226–237
- Rutgersson A, Norman M, Åström G: Atmospheric CO₂ variation over the Baltic Sea and the impact on air–sea exchange. pp. 238–249
- Leal Filho W, Mannke F: Towards policies and adaptation strategies to climate change in the Baltic Sea region — outputs of the ASTRA project. pp. 250–254

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- Meier HEM, Höglund A, Döscher R, Andersson H, Löptien U, Kjellström E: Quality assessment of atmospheric surface fields over the Baltic Sea from an ensemble of regional climate model simulations with respect to ocean dynamics. pp. 193-227
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- Päädam K, Post P: Temporal variability of precipitation extremes in Estonia 1961-2008. pp. 245-257
- Rimkus E, Kažys J, Bukantis A, Krotovas A: Temporal variation of extreme precipitation events in Lithuania. pp. 259-277
- Speranskaya NA: Changes in some elements of the water cycle in the easternmost part of the Baltic Sea Drainage Basin between 1945 and 2010. pp. 279-292
- Dailidienė I, Baudler H, Chubarenko B, Navrotskaya S: Long term water level and surface temperature changes in the lagoons of the southern and eastern Baltic. pp. 293-308
- Andrejev O, Soomere T, Sokolov A, Myrberg K: The role of the spatial resolution of a three-dimensional hydrodynamic model for marine transport risk assessment. pp. 309-334
- Soomere T, Räämet A: Spatial patterns of the wave climate in the Baltic Proper and the Gulf of Finland. pp. 335-371
- Wiśniewski B, Wolski T: Physical aspects of extreme storm surges and falls on the Polish coast. pp. 373-390
- Hongisto M: Variability of the marine boundary layer parameters over Baltic Sea sub-basins and their impact on nitrogen deposition. pp. 391-413
- Schneider B: PO₄ release at the sediment surface under anoxic conditions: a contribution to the eutrophication of the Baltic Sea? pp. 415-429
- Väli G, Zhurbas V, Laanemets J, Elken J: Simulation of nutrient transport from different depths during an upwelling event in the Gulf of Finland. pp. 431-448
- Dzierzbicka-Głowacka I, Jakacki J, Janecki M, Nowicki A: Variability in the distribution of phytoplankton as affected by changes to the main physical parameters in the Baltic Sea. pp. 449-470

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Special Issue ECOSUPPORT – Different Ecosystem Drivers under Future Climate Scenarios in the Baltic Sea, 11 papers

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Kononen K, Andrusaitis A, Sirola M: Scientific Support by the BONUS+ Projects for the Sustainability of the Baltic Sea Region: The Case of the HELCOM Baltic Sea Action Plan. pp 1-10

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Carstensen J, Conley DJ, Bonsdorff E, Gustafsson BG, Hietanen S, Janas U, Jilbert T, Maximov A, Norkko A, Norkko J, Reed DC, Slomp CP, Timmermann K, Voss M: Hypoxia in the Baltic Sea: Biogeochemical Cycles, Benthic Fauna, and Management. pp 26-36

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Lehtonen K, Sundelin B, Lang T, Strand J: Development of Tools for Integrated Monitoring and Assessment of Hazardous Substances and Their Biological Effects in the Baltic Sea. pp 69-81

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Rimkus E, Kažys J, Valiukas D, Stankūnavičius G: The atmospheric circulation patterns during dry periods in Lithuania. pp 223-239

Post P, Kõuts T: Characteristics of cyclones causing extreme sea levels in the northern Baltic Sea. pp 241-258

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Szymczycha B, Maciejewska A, Winogradow A, Pempkowiak J: Could submarine groundwater discharge be a significant carbon source to the southern Baltic Sea? pp 327-347

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5. Presentations at BALTEX Study Conferences

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3rd Baltic Earth Conference "Earth system changes and Baltic Sea coasts". Proceedings. Hel, Poland, 1 - 5 June 2020, due to the SARS-CoV-2 pandemic, an online conference on 2 - 3 June 2020. International Baltic Earth Secretariat Publication No.18, 209 pp.

No. 17, February 2020

Anders Omstedt: 45 years of wandering - from processes to systems, through outer and inner seas. An interview by Hans von Storch and Marcus Reckermann with foreword by Jüri Elken, 63 pp.

No. 16, November 2019

Programme, Abstracts, Participants. Baltic Earth Workshop "Climate Projections and uncertainties in the northern Baltic Sea region". Helsinki, Finland, 19-20 November 2019, 38 pp.

No.15, October 2019

Programme, Abstracts, Participants. Baltic Earth Workshop "Hydrology of the Baltic Sea Basin: Observations, Modelling, Forecasting". St. Petersburg, Russia, 8-9 October 2019, 48 pp.

No.14, November 2018

Programme, Abstracts, Participants. Baltic Earth Workshop "Multiple drivers for Earth system changes in the Baltic Sea region." Tallinn, Estonia, 26-27 November 2018. International Baltic Earth Secretariat Publication No.14, 58 pp.

No. 13, June 2018

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No. 12, March 2018:

Programme, Abstracts, Participants. MedCORDEX-Baltic Earth-Cost Workshop: "Regional climate system modelling for the European Sea Regions". Universitat de les Illes Balears, Palma de Mallorca, Spain, 14-16 March 2018. International Baltic Earth Secretariat Publication No.12, 96 pp.

No. 11, February 2017:

Baltic Earth Science Plan. International Baltic Earth Secretariat Publication No.11, 28 pp.

No. 10, February 2017:

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No. 9, June 2016:

1st Baltic Earth Conference "Multiple drivers for Earth system changes in the Baltic Sea region" Nida, Curonian Spit, Lithuania, 13 -17 June 2016. International Baltic Earth Secretariat Publication No.9, 222 pages

No. 8, November 2015:

Programme, Abstracts, Participants. A PhD seminar in connection with the Gulf of Finland Scientific Forum: "Exchange process between the Gulf of Finland and other Baltic Sea ba-

sins". Tallinn, Estonia, 19 November 2015. International Baltic Earth Secretariat Publication No.8, 27 pages

No. 7, October 2015:

Programme, Abstracts, Participants. HyMex-Baltic Earth Workshop: "Joint regional climate system modelling for the European sea regions". ENEA, Rome, Italy, 5-6 November 2015. International Baltic Earth Secretariat Publication No. 7, 103 pages

No. 6, August 2015:

Programme, Abstracts, Participants. International advanced PhD course: "Impact of climate change on the marine environment with special focus on the role of changing extremes". Askö Laboratory, Trosa, Sweden, 24-30 August 2015. International Baltic Earth Secretariat Publication No. 6, 61 pages.

No. 5, August 2015:

Programme, Abstracts, Participants. A Doctoral Students Conference: "Challenges for Earth system science in the Baltic Sea region: From measurements to models". University of Tartu and Vilsandi Island, Estonia, 10-14 August 2015. International Baltic Earth Secretariat Publication No. 5, 66 pages

No. 4, November 2014:

Programme, Abstracts, Participants. Baltic Earth - Gulf of Finland Year 2014 Modelling Workshop "Modelling as a tool to ensure sustainable development of the Gulf of Finland- Baltic Sea ecosystem". Finnish Environment Institute SYKE, Helsinki, 24-25 November 2014. International Baltic Earth Secretariat Publication No. 4, 27 pages

No. 3, June 2014:

Workshop Proceedings of the 3rd International Lund Regional-Scale Climate Modelling Workshop "21st Century Challenges in Regional Climate Modelling". Lund, Sweden, 16-19 June 2014. International Baltic Earth Secretariat Publication No. 3, 391 pages

No. 2, May 2014:

Conference Proceedings of the 2nd International Conference on Climate Change - The environmental and socio-economic response in the Southern Baltic region. Szczecin, Poland, 12-15 May 2014. International Baltic Earth Secretariat Publication No. 2, 110 pages

No.1, January 2014:

Programme, Abstracts, Participants. Baltic Earth Workshop on "Natural hazards and extreme events in the Baltic Sea region". Finnish Meteorological Institute, Dynamicum, Helsinki, 30-31 January 2014. International Baltic Earth Secretariat Publication No. 1, 33 pages