



## Sea level change in the Baltic Sea

## What is known about sea-level research in the Baltic?

## A literature research with focus on the mean Baltic sea-level change by Birgit Hünicke Helmholtz Zentrum Geesthacht, Institute of Coastal Research

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# **Sea Level Publications**

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At present, there is 1 book, 129 peer-reviewed journal articles, as well as 38 citations which are regarded as “grey literature” with reference to sea level.

Status as of 29 September 2014

Silke Köppen and Marcus Reckermann

International BALTEX Secretariat

## 1. Books

Ekman, M., 2009: The Changing Level of the Baltic Sea during 300 Years: A Clue to Understanding the Earth. Summer Institute for Historical Geophysics, Åland Islands, 2009. ISBN 978-952-92-5241-1. Hard cover, 155 pages, 10 tables, 40 figures

## 2. Peer-reviewed Sea Level Journal Articles

Andersson, H. C., 2002: Influence of long-term regional and large-scale atmospheric circulation on the Baltic Sea level. Tellus, Vol. 54A, pp. 76-88

Barbosa, S., 2008: Quantile trends in Baltic sea level. Geophysical Research Letters, Vol. 35, L22704, doi:10.1029/2008GL035182

Barbosa, S., M. Silva, M. Fernandes, 2008: Changing seasonality in North Atlantic coastal sea level from the analysis of long tide gauge records. Tellus Vol. 60A, pp. 165–177

Carlsson, M., 1998: Mean sea-level topography in the Baltic sea determined by oceanographic methods. Continental Shelf Research, Vol. 18, Issue 9, pp. 1015-1038

Carlsson, M. 1998b. The mean sea-level topography in the Baltic Sea determined by oceanographic methods. Mar Geodes Vol. 21, pp. 203-217

Cazenave, A., W. Llovel, 2010: Contemporary Sea Level Rise. Annu. Rev. Mar. Sci., Vol. 2, pp. 145–73

Chen, D., A. Omstedt, 2005: Climate-induced variability of sea level in Stockholm: Influence of air temperature and atmospheric circulation, Advances in Atmospheric Sciences, Vol. 20, No. 5, 655-664

Dailidiene, I., B. Tilickis, A. Stankevicius, 2004: General Peculiarities of Long-term Fluctuations of the Baltic Sea and the Curonian Lagoon Water Level in the Region of Lithuania. Environmental Research, Engineering and Management, Vol. 4(30), pp. 3-10

Dailidiene, I., A. Stankevicius, B. Tilickis, 2004: Peculiarities of the long-term water level fluctuations in the south eastern part of the Baltic Sea and the Curonian Lagoon. Geodesy and Cartography, Vol 30, Issue 2, pp. 58-64

Dailidiene, I., L. Davuliene, B. Tilickis, A. Stankevicius, K. Myrberg, 2006: Sea level variability at the Lithuanian coast of the Baltic Sea. Boreal. Env. Res., Vol. 11, pp. 109–121

Dailidiene, I., L. Davuliene, B. Tilickis, K. Myrberg, A. Stankevicius, E. Parseliunas, 2005: Investigations of Sea Level Change in the Curonian Lagoon. Environmental Research, Engineering and Management, Vol.4 (34), pp. 20-29

Davis, J. L., J. X. Mitrovica, H.-G. Scherneck, H. Fan, 1999: Investigations of Fennoscandian glacial isostatic adjustment using modern sea level records. J. Geophys. Res., 104(B2), pp. 2733–2747

Ekman, M., 1988: The World's Longest Continued Series of Sea Level Observations. Pageoph, Vol. 127, No. I

Ekman, M., 1994: Deviation of mean sea level from the mean geoid in the transition area between the North Sea and the Baltic Sea. Mar Geodes, Vol. 17, Issue 3, pp. 161-168

Ekman, M., 1996: A Common Pattern for Interannual and Periodical Sea Level Variations in the Baltic Sea and Adjacent Waters. Geophysica, Vol. 32, Issue 3, pp. 261-272

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- Ekman, M., 1996: Extreme Annual Means in the Baltic Sea Level during 200Years. *Small Publications in Historical Geophysics* No. 2, 15 pages
- Ekman, M., 1997: Anomalous Winter Climate coupled to Extreme Annual Means in the Baltic Sea Level during the last 200 years. *Small Publications in Historical Geophysics* No. 3, 14 pages
- Ekman, M., 1998: Long-term changes of Interannual Sea Level Variability in the Baltic Sea and Related Changes of Winter Climate. *Small Publications in Historical Geophysics* No. 5, 14 pages
- Ekman, M., 1998: Secular change of the seasonal sea level variation in the Baltic Sea and secular change of the winter climate. *Geophysica*, Vol 34, pp. 131-140
- Ekman, M., 1999: Climate changes detected through the world's longest sea level series. *Global and Planetary Change*, Vol. 21, pp. 215–224
- Ekman, M., 2000: Determination of Global Sea Level Rise and its Change with time. *Small Publications in Historical Geophysics* No. 7, 19 pages
- Ekman, M., 2005: Changes in Winter Climate Variability Dduced from the Baltic Sea Level, and the Winter that never arrived. *Small Publications in Historical Geophysics* No. 14, 13 pages
- Ekman, M., 2006: The First Land Uplift Map that could have been constructed - but never was. *Small Publications in Historical Geophysics* No. 15, 14 pages
- Ekman, M., 2007: A Secular Change in Storm Activity over the Baltic Sea Detected through Analysis of Sea Level Data. *Small Publications in Historical Geophysics* No. 16, 13 pages
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### 3. Grey Literature

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