



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
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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 37 citations which are regarded as “grey literature” with reference to sea level.

Status as of 8 February 2011

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

Dailidienė, 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

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Dailidienė, I., L. Davulienė, 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

Dailidienė, I., L. Davulienė, 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. 1

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

- Ekman, M., 1996: A constant map of the postglacial uplift of Fennoscandia. *Terra Research*, Vol 8, pp. 158-165
- Ekman, M., 1996: Extreme Annual Means in the Baltic Sea Level during 200 Years. *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 Deduced 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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