

Publications and presentations by Elin Almroth Rosell

Published Scientific paper

- Meier, H. E. M., A. Höglund, K. Eilola and E. Almroth-Rosell, 2016: Impact of accelerated future global mean sea level rise on hypoxia in the Baltic Sea. *Clim Dyn*, 1-10. doi: 10.1007/s00382-016-3333-y
- Eero, M., Andersson, H.C., Almroth-Rosell, E., MacKenzie, B.R., 2016. Has eutrophication promoted forage fish production in the Baltic Sea? *Ambio*, 1-12. Doi: 10.1007/s13280-016-0788-3
- Almroth-Rosell, E., Eilola, K., Kuznetsov, I., Hall, P. O., and Meier, H. M., 2015. A new approach to model oxygen dependent benthic phosphate fluxes in the Baltic Sea. *Journal of Marine Systems*, 144, 127-141. doi:10.1016/j.jmarsys.2014.11.007
- Eilola, K., Almroth-Rosell, E. and Meier, H. E. M. 2014. Impact of saltwater inflows on phosphorus cycling and eutrophication in the Baltic Sea. A 3D model study. *Tellus A* 66, 23985. <http://dx.doi.org/10.3402/tellusa.v66.23985>
- Eilola K., E. Almroth-Rosell, C. Dieterich, F. Fransner, A. Höglund, H.E.M. Meier, 2012. Modeling nutrient transport and exchanges of nutrients between shallow regions and the open Baltic Sea in present and future climate. *AMBIO*, 41:586-599. DOI 10.1007/s13280-012-0322-1
- Cathalot, C., B. Lansard, P.O.J. Hall, A. Tengberg, E. Almroth-Rosell, A. Apler, L. Calder, E. Bell, C. Rabouille, 2012. Spatial and temporal variability of benthic respiration a Scottish sea loch impacted by fish farming: a combination of *in situ* techniques. *Aquatic Geochemistry*, 18, 515-541. DOI 10.1007/s10498-012-9181-4
- Almroth-Rosell, E., A. Tengberg, S. Andersson, A. Apler, P.O.J. Hall, 2012. Effects of simulated natural and massive resuspension on benthic oxygen, nutrient and dissolved inorganic carbon fluxes in Loch Creran, Scotland. *Journal of Sea Research*, 72: 38-48. DOI 10.1016/j.seares.2012.04.012
- Viktorsson, L., E. Almroth-Rosell, A. Tengberg, R. Vankevich, I. Neelov, A. Isaev, V. Kravtsov, P.O.J. Hall, 2012. Benthic phosphorus dynamics in the Gulf of Finland, Baltic Sea. *Aquatic Geochemistry*, 16, no. 4. DOI 10.1007/s10498-011-9155-y.
- Meier, H.E.M., K. Eilola, E. Almroth, 2011. Climate-related changes in marine ecosystems simulated with a three-dimensional coupled physical -biogeochemical model of the Baltic Sea. *Climate Research* 48:31-55.
- Almroth, E., K. Eilola, R. Hordoir, H.E.M. Meier and P.O.J. Hall, 2011. Transport of fresh and resuspended particulate organic material in the Baltic Sea - a model study. *Journal of Marine Systems*, 87: 1-12.
- Almroth, E. and M. D. Skogen, 2010. A North Sea and Baltic Sea model ensemble eutrophication status assessment. *AMBIO* 39:59-69. DOI 10.1007/s13280-009-0006-7
- Almroth E., A. Tengberg, J.H. Andersson, S. Pakhomova and P.O.J. Hall, 2009. Effects of resuspension on benthic fluxes of oxygen, nutrients, dissolved inorganic carbon, iron and manganese in the Gulf of Finland, Baltic Sea. *Continental Shelf Research* 29, 807-818.
- Eilola K., H.E.M. Meier and E. Almroth, 2009. On the dynamics of oxygen, phosphorus and cyanobacteria in the Baltic Sea; a model study. *Journal of Marine Systems*, 75: 163-184.
- Tengberg A., E. Almroth and P. Hall, 2003. Resuspension and its effect on organic carbon recycling and nutrient exchange in coastal sediments: In-situ measurements using new experimental technology. *J. Exp. Mar. Biol. Ecol.* 285-286: 119-142.

Reports

- Eilola, K., E. Almroth-Rosell, M. Edman, T. Eremina, J. Larsen, U. Janas, A. Razinkovas-Basiukas, K. Timmermann, L Tedesco, E. Voloshchuk, 2015. Model set-up at COCOA study sites. Report deliverable D.5 of BONUS project COCOA (<http://cocoa.au.dk/>). Rapport Oceanografi, No. 117. SMHI, Norrköping, Sweden.

- Eilola K., H.E.M. Meier, E. Almroth and A. Höglund, 2008. Transports and budgets of oxygen and phosphorus in the Baltic Sea. SMHI report, Oceanografi, nr 96, 2008.
- Eilola K., H.E.M. Meier, E. Almroth and A. Höglund, 2008. Transports and budgets of oxygen and phosphorus in the Baltic Sea. External NV report SMHI Dnr: 2008/120/1933.
- Gustafsson, B.G., H.E.M., Meier, O.P. Savchuk, K. Eilola, L. Axell and E. Almroth, 2008. Simulation of some engineering measures aiming at reducing effects from eutrophication of the Baltic Sea. Earth Sciences Report Series, C82, pp 59, ISSN 1400-383X, Earth Sciences Centre, University of Gothenburg.
- Almroth E., M. Skogen, I. Sehested Hansen, T. Stipa and S. Niiranen, 2008. The year 2006 An eutrophication status report of the North Sea, Skagerrak, Kattegat and the Baltic Sea. SMHI report, Oceanography, Nr 91, 2008.
- Almroth E., K. Eilola, M. Skogen, H. Sjøiland and I. Sehested Hansen, 2007. The year 2005 An environmental status report of the Skagerrak, Kattegat and the North Sea. SMHI report, Oceanography, Nr 86, 2007.
- Stipa T., A. Kiiltomäki, H. Kaartokallio, K. Eilola, and E. Almroth, 2007. The year 2005. An environmental status report of the Baltic Sea. FIMR Reports.
- Eilola, K., E. Almroth, and B. Karlson, 2006. Modelling the dynamics of harmful blooms of *Chattonella* sp. in the Skagerrak and the Kattegat ICES CM 2006/E12, ICES Annual Science conference.
- Almroth, E. and K. Eilola, 2005. Three-dimensional (3-D) algal cycle modelling. Part I, Part II and Part III. HABLE reports, contributions to work package 4 (WP4).
- Almroth, E. and K. Eilola, 2004. One-dimensional (1-D) algal cycle modelling. HABLE report, contribution to work package 3 (WP3).

Thesis

- Elin Almroth Rosell, 2011. Influence of resuspension on sediment-water solute exchange and particle transport in marine environments. Department of Chemistry, University of Gothenburg, Faculty of Science, Gothenburg, Sweden. Ph.D. thesis.
- Elin Almroth, 2008. Effect of Resuspension on Solute Fluxes and Organic carbon Degradation in Marine sediments. Licentiate thesis, Department of Chemistry, University of Gothenburg, Faculty of Science, Gothenburg, Sweden. Licentiate thesis.

Master of Science report

- E. Almroth, 2002. Resuspension of coastal sediments: In-situ simulation and influence on sediment-water solute exchange. Master thesis, Göteborg University.