

Publications

PhD Elin Almroth-Rosell

Bibliometric summary

In total 1647 citations of which 991 are since 2018.

H-index is 22 in total and 19 since 2018.

Source: from Google Scholar 2023-03-17.

Published Scientific paper

32. Wählström, I., Hammar, L., Hume, D., Pålsson, J., **Almroth-Rosell, E.**, Dieterich, C., Arneborg, L., Gröger, M., Mattsson, M., Zillén Snowball, L., Kågesten, G., Törnqvist, O., Breviere, E., Brunnabend, S.-E., Jonsson, P.R., 2022. Projected climate change impact on a coastal sea—As significant as all current pressures combined. *Global Change Biology* 28, 5310–5319. <https://doi.org/10.1111/gcb.16312>
31. **Almroth-Rosell, E.**, Wählström, I., Hansson, M., Väli, G., Eilola, K., Andersson, P., et al. (2021). A regime shift towards a more anoxic environment in a eutrophic sea in northern Europe. *Frontiers in Marine Science* 8:799936. Doi: 10.3389/fmars.2021.799936.
30. Hieronymus, J., Eilola, K., Olofsson, M., Hense, I., Meier, H.E.M., **Almroth-Rosell, E.**, 2021. Modeling cyanobacteria life cycle dynamics and historical nitrogen fixation in the Baltic Proper. *Biogeosciences* 18, 6213–6227. Doi: 10.5194/bg-18-6213-2021
29. Skogen, M.D., Ji, R., Akimova, A., Daewel, U., Hansen, C., Hjøllø, S.S., van Leeuwen, S.M., Maar, M., Macias, D., Mousing, E.A., **Almroth-Rosell, E.**, Saille, S.F., Spence, M.A., Troost, T.A., van de Wolfshaar, K., 2021. Disclosing the truth: Are models better than observations? *Mar. Ecol-Prog. Ser.* 680, 7-13. Doi: 10.3354/meps13574
28. Hylén, A., van de Velde, S.J., Kononets, M., Luo, M., **Almroth-Rosell, E.**, Hall, P.O.J., 2021. Deep-water inflow event increases sedimentary phosphorus release on a multi-year scale. *Biogeosciences* 18, 2981-3004. Doi: 10.5194/bg-18-2981-2021
27. Bossier, S., Nielsen, J.R., **Almroth-Rosell, E.**, Höglund, A., Bastardie, F., Neuenfeldt, S., Wählström, I., Christensen, A., 2021. Integrated ecosystem impacts of climate change and eutrophication on main Baltic fishery resources. *Ecological Modelling* 453, 109609. Doi: <https://doi.org/10.1016/j.ecolmodel.2021.109609>
26. Nilsson, M.M., Hylén, A., Ekeröth, N., Kononets, M.Y., Viktorsson, L., **Almroth-Rosell, E.**, Roos, P., Tengberg, A., Hall, P.O.J., 2021. Particle shuttling and oxidation capacity of sedimentary organic carbon on the Baltic Sea system scale. *Marine Chemistry* 232, 103963. Doi: <https://doi.org/10.1016/j.marchem.2021.103963>
25. Jonsson, P.R., Hammar, L., Wählström, I., Pålsson, J., Hume, D., **Almroth-Rosell, E.**, Mattsson, M., 2021. Combining seascape connectivity with cumulative impact assessment in support of ecosystem-based marine spatial planning. *Journal of Applied Ecology* 58, 576-586. Doi: <https://doi.org/10.1111/1365-2664.13813>
24. Wählström, I., Höglund, A., **Almroth-Rosell, E.**, MacKenzie, B.R., Gröger, M., Eilola, K., et al. (2020). Combined climate change and nutrient load impacts on future habitats and eutrophication indicators in a eutrophic coastal sea. *Limnology And Oceanography* 65(9), 2170-2187. doi: 10.1002/lno.11446.
23. Carstensen, J., Conley, D.J., **Almroth-Rosell, E.**, Asmala, E., Bonsdorff, E., Fleming-Lehtinen, V., Gustafsson, B.G., Gustafsson, C., Heiskanen, A.-S., Janas, U., Norkko, A., Slomp, C., Villnäs, A., Voss, M., Zilius, M., 2019. Factors regulating the coastal nutrient filter in the Baltic Sea. *Ambio*. Doi: 10.1007/s13280-019-01282-y
22. Nilsson, M.M., Kononets, M., Ekeröth, N., Viktorsson, L., Hylén, A., Sommer, S., Pfannkuche, O., **Almroth-Rosell, E.**, Atamanchuk, D., Andersson, J.H., Roos, P., Tengberg, A., Hall, P.O.J., 2019. Organic carbon recycling in Baltic Sea sediments – An integrated estimate on the system scale based on in situ measurements. *Marine Chemistry* 209, 81-93. Doi: <https://doi.org/10.1016/j.marchem.2018.11.004>

21. Meier, H.E.M., Eilola, K., **Almroth-Rosell, E.**, Schimanke, S., Kniebusch, M., Höglund, A., Pemberton, P., Liu, Y., Väli, G., Saraiva, S.J.C.D., 2019. Disentangling the impact of nutrient load and climate changes on Baltic Sea hypoxia and eutrophication since 1850. *53*, 1145-1166. Doi: 10.1007/s00382-018-4296-y
20. Edman, M., Eilola, K., **Almroth-Rosell, E.**, Meier, H.E.M., Wåhlström, I., Arneborg, L., 2018. Nutrient Retention in the Swedish Coastal Zone. *Frontiers in Marine Science* 5. Doi: 10.3389/fmars.2018.00415
19. Lessin, G., Artioli, Y., **Almroth-Rosell, E.**, Blackford, J.C., Dale, A.W., Glud, R.N., Middelburg, J.J., Pastres, R., Queirós, A.M., Rabouille, C., Regnier, P., Soetaert, K., Solidoro, C., Stephens, N., Yakushev, E., 2018. Modelling Marine Sediment Biogeochemistry: Current Knowledge Gaps, Challenges, and Some Methodological Advice for Advancement. *Frontiers in Marine Science* 5. Doi: 10.3389/fmars.2018.00019
18. Hall, P.O.J., **Almroth Rosell, E.**, Bonaglia, S., Dale, A.W., Hylén, A., Kononets, M., Nilsson, M., Sommer, S., van de Velde, S., Viktorsson, L., 2017. Influence of Natural Oxygenation of Baltic Proper Deep Water on Benthic Recycling and Removal of Phosphorus, Nitrogen, Silicon and Carbon. *Frontiers in Marine Science* 4. Doi: 10.3389/fmars.2017.00027
17. Sommer, S., Clemens, D., Yücel, M., Pfannkuche, O., Hall, P.O.J., **Almroth-Rosell, E.**, Schulz-Vogt, H.N., Dale, A.W., 2017. Major Bottom Water Ventilation Events Do Not Significantly Reduce Basin-Wide Benthic N and P Release in the Eastern Gotland Basin (Baltic Sea). *Frontiers in Marine Science* 4. Doi:10.3389/fmars.2017.00018
16. **Almroth-Rosell, E.**, Edman, M., Eilola, K., Meier, H.E.M., Sahlberg, J., 2016. Modelling nutrient retention in the coastal zone of an eutrophic sea. *Biogeosciences* 13, 5753-5769. Doi:10.5194/bg-13-5753-2016
15. von Schuckmann, K., Le Traon, P.-Y., Alvarez-Fanjul, E., Axell, L., Balmaseda, M., Breivik, L.-A., Brewin, R.J.W., Bricaud, C., Drevillon, M., Drillet, Y., Dubois, C., Embury, O., Etienne, H., Sotillo, M.G., Garric, G., Gasparin, F., Gutknecht, E., Guinehut, S., Hernandez, F., Juza, M., Karlson, B., Korres, G., Legeais, J.-F., Levier, B., Lien, V.S., Morrow, R., Notarstefano, G., Parent, L., Pascual, Á., Pérez-Gómez, B., Perruche, C., Pinardi, N., Pisano, A., Poulain, P.-M., Pujol, I.M., Raj, R.P., Raudsepp, U., Roquet, H., Samuelsen, A., Sathyendranath, S., She, J., Simoncelli, S., Solidoro, C., Tinker, J., Tintoré, J., Viktorsson, L., Ablain, M., **Almroth-Rosell, E.**, Bonaduce, A., Clementi, E., Cossarini, G., Dagneaux, Q., Desportes, C., Dye, S., Fratianni, C., Good, S., Greiner, E., Gourrion, J., Hamon, M., Holt, J., Hyder, P., Kennedy, J., Manzano-Muñoz, F., Melet, A., Meyssignac, B., Mulet, S., Buongiorno Nardelli, B., O'Dea, E., Olason, E., Paulmier, A., Pérez-González, I., Reid, R., Racault, M.-F., Raitsos, D.E., Ramos, A., Sykes, P., Szekely, T., Verbrugge, N., 2016. The Copernicus Marine Environment Monitoring Service Ocean State Report. *Journal of Operational Oceanography* 9, s235-s320. Doi:10.1080/1755876X.2016.1273446
14. 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
13. Eero, M., Andersson, H.C., **Almroth-Rosell, E.**, MacKenzie, B.R., 2016. Has eutrophication promoted forage fish production in the Baltic Sea? *Ambio* 45, 649-660. Doi: 10.1007/s13280-016-0788-3
12. **Almroth-Rosell, E.**, K. Eilola, I. Kuznetsov, P.O. Hall and H.E.M. Meier, 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
11. Eilola, K., **E. Almroth-Rosell** and H.E.M. Meier, 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>
10. 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
9. 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

8. **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
7. 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.
6. 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.
5. **Almroth-Rosell, 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.
4. **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
3. **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.
2. 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.
1. 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.

Published reports (in addition to internal project reports)

13. Wählström, I., Pålsson, J., Törnqvist, O., Jonsson, P., Groger, M., Almroth-Rosell, E., 2020. Bringing climate change into ecosystem based management of the sea: Data and methods for the Symphony framework. Symphony-a cumulative assessment tool developed for Swedish Marine Spatial Planning. Report Oceanography, 68. SMHI.
12. Eilola, K., S. Lindqvist, **E. Almroth-Rosell**, M. Edman, I. Wählström, M. Bartoli, Dorota Burska, J. Carstensen, D. Hellemann, S. Hietanen, S. Hulth, U. Janas, H. Kendzierska, D. Pryputniewicz-Flis, M. Voss, and M. Zilius, 2017. Linking process rates with modelling data and ecosystem characteristics. Swedish Meteorological and Hydrological Institute, Report Oceanography, No. 61.
11. Wählström, I., Eilola, K., Edman, M., **Almroth-Rosell, E.**, 2017. Evaluation of open sea boundary conditions for the coastal zone. A model study in the northern part of the Baltic Proper. Report Oceanography, 55. Swedish Meteorological and Hydrological Institute, Norrköping.
10. 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.
9. 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.
8. 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.
7. 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.
6. **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, Ocenography, Nr 91, 2008.

5. **Almroth E.**, K. Eilola, M. Skogen, H. Søiland and I. Sehested Hansen, 2007. The year 2005 An environmental status report of the Skagerrak, Kattegat and the North Sea. SMHI report, Ocenography, Nr 86, 2007.
4. 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.
3. 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.
2. **Almroth, E.** and K. Eilola, 2005. Three-dimensional (3-D) algal cycle modelling. Part I, Part II and Part III. HABILE reports, contributions to work package 4 (WP4).
1. **Almroth, E.** and K. Eilola, 2004. One-dimensional (1-D) algal cycle modelling. HABILE report, contribution to work package 3 (WP3).

Popular scientific publications

Almroth-Rosell, E., Edman, M., 2016. Skärgården - det naturliga filtret mot övergödning. Havsutskikt, 1. Stockholms universitets Östersjöcentrum och Umeå marina forskningscentrum, Stockholm.

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. <https://130.241.16.4/handle/2077/27061>

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.