

Publication record research focus 3 (2016-2018)

July 2019

Total:	147
Articles in peer-reviewed journals	110
Articles in other journals	6
Monographs	9
Editorship of edited volumes	1
Individual contributions to edited volumes	8
Work and discussion papers	13

Articles in peer-reviewed journals (110)

Abraham, M.^{CHE}, N. Theobald and D. Schulz-Bull^{CHE} (2017). Hexachlorocyclohexane - Long term variability and spatial distribution in the Baltic Sea. **Chemosphere** **168**: 1356-1364, doi: 10.1016/j.chemosphere.2016.11.123 **FS3 CES Changing Ecosystems**

Allan, E., A. de Vernal, M. F. Knudsen, C. Hillaire-Marcel, M. Moros^{GEO}, S. Ribeiro, M. M. Ouellet-Bernier and M. S. Seidenkrantz (2018). Late Holocene Sea Surface Instabilities in the Disko Bugt Area, West Greenland, in Phase With $\delta^{18}O$ Oscillations at Camp Century. **Palaeogeography Palaeoclimatology** **33**: 227-243, doi: 10.1002/2017PA003289 **FS3 CES Changing Ecosystems**

Almroth-Rosell, E., M. Edman, K. Eilola, H. E. M. Meier^{PHY} and J. Sahlberg (2016). Modelling nutrient retention in the coastal zone of an eutrophic sea. **Biogeosciences** **13**: 5753-5769, doi: 10.5194/bg-13-5753-2016 **FS3 CES Changing Ecosystems**

Andrews, J. T., R. Stein, M. Moros^{GEO} and K. Perner^{GEO} (2016). Late Quaternary changes in sediment composition on the NE Greenland margin (~ to 73° N) with a focus on the fjords and shelf. **Boreas** **45**: 381-397, doi: 10.1111/bor.12169 **FS3 CES Changing Ecosystems**

Arz, H. W.^{GEO}, T. Leipe^{GEO} and M. Moros^{GEO} (2017). The Baltic Sea: geology and palaeoenvironmental evolution - introduction. **Boreas** **46**: 1-2, doi: 10.1111/bor.12214 **FS3 CES Changing Ecosystems**

Bartolino, V., H. Tian, U. Bergström, P. Jounela, E. Aro, C. Dieterich, H. E. M. Meier^{PHY}, M. Cardinale, B. Bland and M. Casini (2017). Spatio-temporal dynamics of a fish predator: density-dependent and hydrographic effects on Baltic Sea cod population. **PLoS One** **12**: 0172004, doi: 10.1371/journal.pone.0172004 **FS3 CES Changing Ecosystems**

Bauer, B., H. E. M. Meier^{PHY}, M. Casini, A. Hoff, P. Margonski, A. Orio, S. Saraiva, J. Steenbeek and M. T. Tomczak (2018). Reducing eutrophication increases spatial extent of communities supporting commercial fisheries: a model case study. **ICES J. Mar. Sci.** **75**: 1306-1317, doi: 10.1093/icesjms/fsy023 **FS3 CES Changing Ecosystems**

Becherer, J.^{PHY}, J. Hofstede, U. Gräwe^{PHY}, K. Purkiani^{PHY}, E. Schulz^{PHY} and H. Burchard^{PHY} (2018). The Wadden Sea in transition - consequences of sea level rise. **Ocean Dyn.** **68**: 131-151, doi: 10.1007/s10236-017-1117-5 **FS3 CES Changing Ecosystems**
FS4 CSS Coastal Seas and Society

Beuscher, S., S. Kruger, W. Ehrmann, G. Schmiedl, Y. Milker, H. Arz^{GEO} and H. Schulz (2017). End-member modelling as a tool for climate reconstruction - An Eastern Mediterranean case study. **PLoS One** **12**: e0185136, doi: 10.1371/journal.pone.0185136 **FS3 CES Changing Ecosystems**

Binczewska, A., B. Risebrobakken, I. Polovodova Asteman, M. Moros^{GEO}, A. Tisserand, E. Jansen and A. Witkowski (2018). Coastal primary productivity changes over the last millennium: A case study from the Skagerrak (North Sea). **Biogeosciences** **15**: 5909-5928, doi: 10.5194/bg-15-5909-2018 **FS3 CES Changing Ecosystems**

Binczewska, A., M. Moros, I. P. Asteman, J. Sławińska and M. Bąk (2018). Changes in the inflow of saline water into the Bornholm Basin (SW Baltic Sea) during the past 7100 years - evidence from benthic foraminifera record. **Boreas** **47**: 297-310, doi: 10.1111/bor.12267 **FS3 CES Changing Ecosystems**

Börgel, F.^{PHY}, C. Frauen^{PHY}, T. Neumann^{PHY}, S. Schimanke and H. E. M. Meier^{PHY} (2018). Impact of the Atlantic Multidecadal Oscillation on Baltic Sea variability. **Geophys. Res. Lett.** **45**: 9880-9888, doi: 10.1029/2018gl078943 **FS3 CES Changing Ecosystems**

Böttcher, M. E.^{GEO}, J. Fiebig and H. Strauss (2016). Tales of mystery and imagination in stable isotope geochemistry: celebrating the 75th birthday of Jochen Hoefs. **Isot. Environ. Health Stud.** **52**: 1-11, doi: 10.1080/10256016.2015.1114934 **FS1 SMP Small- and meso-scale processes; FS2 BED Basin-scale Ecosystem Dynamics; FS3 CES Changing Ecosystems; FS4 CSS Coastal Seas and Society**

Brunnabend, S.-E.^{PHY} and H. A. Dijkstra (2017). Asymmetric response of the Atlantic Meridional Ocean Circulation to freshwater anomalies in a strongly-eddy global ocean model. **Tellus Ser. A-Dyn. Meteorol. Oceanol.** **69**: 1299283, doi: 10.1080/16000870.2017.1299283 **FS3 CES Changing Ecosystems**

Brunnabend, S.-E.^{PHY}, H. A. Dijkstra, M. A. Kliphuis, H. E. Bal, F. Seinstra, B. v. Werkhoven, J. Maassen and M. v. Meersbergen (2017). Changes in extreme regional sea level under global warming. **Ocean Sci.** **13**: 47-60, doi: 10.5194/os-13-47-2017 **FS3 CES Changing Ecosystems**

Cabrera-Brito, L., G. Rodriguez, L. García-Weil, M. Pacheco, E. Perez and J. J. Waniek^{CHE} (2017). Fractal analysis of deep ocean current speed time series. **J. Atmos. Ocean. Technol.** **34**: 817-827, doi: 10.1175/JTECH-D-16-0098.1 **FS3 CES Changing Ecosystems**

Cui, Z., D. E. Schulz-Bull^{CHE}, Y. Hou, Z. Xia and J. J. Waniek^{CHE} (2016). Geochemical characteristics and provenance of holocene sediments (Core STAT22) in the Beibu Gulf, South China Sea. **J. Coast. Res.** **32**: 1105-1115, doi: 10.2112/JCOASTRES-D-14-00238.1 **FS3 CES Changing Ecosystems**

Czymzik, M.^{GEO}, E. Haltia, S. Saarni, T. Saarinen and A. Brauer (2018). Differential North Atlantic control of winter hydroclimate in late Holocene varved sediments of Lake Kortejärvi, eastern Finland. **Boreas** **47**: 926-937, doi: 10.1111/bor.12315 **FS3 CES Changing Ecosystems**

Czymzik, M.^{GEO}, R. Muscheler, F. Adolphi, F. Mekhaldi, N. Dräger, F. Ott, M. Słowinski, M. Błaszczewicz, A. Aldahan, G. Possnert and A. Brauer (2018). Synchronizing ¹⁰Be in two varved lake sediment records to IntCal13 ¹⁴C during three grand solar minima. **Clim. Past** **14**: 687-696, doi: 10.5194/cp-14-687-2018 **FS3 CES Changing Ecosystems**

Dornelas, M., L. H. Antão, F. Moyes, A. E. Bates, A. E. Magurran, D. Adam, A. A. Akhmetzhanova, W. Appeltans, J. M. Arcos, H. Arnold, N. Ayyappan, G. Badihi, A. H. Baird, M. Barbosa, T. E. Barreto, C. Bässler, A. Bellgrove, J. Belmaker, L. Benedetti-Cecchi, B. J. Bett, A. D. Bjorkman, M. Błażewicz, S. A. Blowes, C. P. Bloch, T. C. Bonebrake, S. Boyd, M. Bradford, A. J. Brooks, J. H. Brown, H. Bruelheide, P. Budy, F. Carvalho,, R. B. Waide, C. Waldock, D. Watts, S. Webb, T. Wesolowski, E. P. White, C. E. Widdicombe, D. Wilgers, R. Williams, S. B. Williams, M. Williamson, M. R. Willig, T. J. Willis, S. Wipf, K. D. Woods, E. J. Woehler, K. Zawada and M. L. Zettler^{BIO} (2018). BioTIME: A database of biodiversity time series for the Anthropocene. **Glob. Ecol. Biogeogr.** **27**: 760-786, doi: doi:10.1111/geb.12729 **FS3 CES Changing Ecosystems**

Dutz, J.^{BIO}, J. G. Støttrup, C. Stenberg and P. Munk (2016). Recent trends in the abundance of plaice *Pleuronectes platessa* and cod *Gadus morhua* in shallow coastal waters of the Northeastern Atlantic continental shelf - a review. **Mar. Biol. Res.** **12**: 785-796, doi: 10.1080/17451000.2016.1210806 **FS3 CES Changing Ecosystems**

Edman, M., K. Eilola, E. Almroth-Rosell, H. E. M. Meier^{PHY}, I. Wåhlström and L. Arneborg (2018). Nutrient retention in the Swedish coastal zone. **Front. Mar. Sci.** **5**: 415, doi: 10.3389/fmars.2018.00415 **FS3 CES Changing Ecosystems**

Egger, M., M. Hagens, C. J. Sapart, N. Dijkstra, N. A. G. M. van Helmond, J. M. Mogollón, N. Risgaard-Petersen, C. van der Veen, S. Kasten, N. Riedinger, M. E. Böttcher^{GEO}, T. Röckmann, B. B. Jørgensen and C. P. Slomp (2017). Iron oxide reduction in methane-rich deep Baltic Sea sediments. **Geochim. Cosmochim. Acta** **207**: 256-276, doi: 10.1016/j.gca.2017.03.019 **FS1 SMP Small- and meso-scale processesFS2 BED Basin-scale Ecosystem Dynamics; FS3 CES Changing Ecosystems**

Fisch, K.^{CHE}, B. Li, Q. Liang, Y. Wang, Y. Ni, K. Liang, M. Zhou, J. J. Waniek^{CHE} and D. E. Schulz-Bull^{CHE} (2017). Occurrence of the two endocrine disruptors octocrylene and nonylphenoxyacetic acid in four Chinese aquatic systems. **J. Aquat. Poll. Toxicol.** **2**: 19 **FS3 CES Changing Ecosystems**

Fisch, K.^{CHE}, J. J. Waniek^{CHE} and D. E. Schulz-Bull^{CHE} (2017). Occurrence of pharmaceuticals and UV-filters in riverine run-offs and waters of the German Baltic Sea. **Mar. Poll. Bull.** **124**: 388-399, doi: 10.1016/j.marpolbul.2017.07.057 **FS3 CES Changing Ecosystems**

Folmer, E. O., J. E. E. van Beusekom, T. Dolch, U. Gräwe^{PHY}, M. M. v. Katwijk, K. Kolbe and C. J. M. Philippart (2016). Consensus forecasting of intertidal seagrass habitat in the Wadden Sea. **J. Appl. Ecol.** **53**: 1800-1813, doi: 10.1111/1365-2664.12681 **FS3 CES Changing Ecosystems**

Fraszl, M. A., B. Boehrer, P. L. Holtermann^{PHY}, W. Hu, K. Klingbeil^{PHY}, Z. Peng, J. Zhu and K. Rinke (2018). Opportunities and limits of using meteorological reanalysis data for simulating seasonal to sub-daily water temperature dynamics in a large shallow lake. **Water** **10**: 594, doi: 10.3390/w10050594 **FS3 CES Changing Ecosystems**

Grotheer, H., P. F. Greenwood, M. T. McCulloch, M. E. Böttcher^{GEO} and K. Grice (2017). $\delta^{34}\text{S}$ character of organosulfur compounds in kerogen and bitumen fractions of sedimentary rocks. **Org. Geochem.** **110**: 60-64, doi: 10.1016/j.orggeochem.2017.04.005 **FS3 CES Changing Ecosystems**

Gu, F., K. A. F. Zonneveld, C. M. Chiessi, H. W. Arz^{GEO}, J. Pätzold and H. Behling (2017). Long-term vegetation, climate and ocean dynamics inferred from a 73,500 years old marine sediment core (GeoB2107-3) off southern Brazil. **Quat. Sci. Rev.** **172**: 55-71, doi: 10.1016/j.quascirev.2017.06.028 **FS3 CES Changing Ecosystems**

Haddam, N. A., G. Siani, E. Michel, J. Kaiser^{GEO}, F. Lamy, S. Duchamp-Alphonse, J. Hefter, P. Braconnot, F. Dewilde, G. Isgüder, N. Tisnerat-Laborde, F. Thil, N. Durand and C. Kissel (2018). Changes in latitudinal sea surface temperature gradients along the Southern Chilean margin since the last glacial. **Quat. Sci. Rev.** **194**: 62-76, doi: 10.1016/j.quascirev.2018.06.023 **FS3 CES Changing Ecosystems**

Hagen, E. ^{PHY} and J. J. Agenbag (2018). Namibian rainfall and the 1933/34 Benguela Niño. **Meteorol. Z.** **27**: 125-134, doi: 10.1127/metz/2018/0745 **FS3 CES Changing Ecosystems**

Häusler, K.^{GEO}, O. Dellwig^{GEO}, B. Schmetzer, P. Feldens^{GEO}, T. Leipe^{GEO}, M. Moros^{GEO}, F. Pollehne^{BIO}, M. Schönke^{GEO}, A. Wegwerth^{GEO} and H. W. Arz^{GEO} (2018). Massive Mn carbonate formation in the Landsort Deep (Baltic Sea): Hydrographic conditions, temporal succession, and Mn budget calculations. **Mar. Geol.** **395**: 260-270, doi: 10.1016/j.margeo.2017.10.010 **FS3 CES Changing Ecosystems**

Häusler, K.^{GEO}, M. Moros^{GEO}, L. Wacker, L. Hammerschmidt, O. Dellwig^{GEO}, T. Leipe^{GEO}, A. Kotilainen and H. W. Arz^{GEO} (2017). Mid- to late Holocene environmental separation of the northern and central Baltic Sea basins in response to differential land uplift. **Boreas** **46**: 111-128, doi: 10.1111/bor.12198 **FS3 CES Changing Ecosystems**

Hieronimus, J., K. Eilola, M. Hieronimus, H. E. M. Meier^{PHY}, S. Saraiva and B. Karlson (2018). Causes of simulated long-term changes in phytoplankton biomass in the Baltic proper: a wavelet analysis. **Biogeosciences** **15**: 5113-5129, doi: 10.5194/bg-15-5113-2018 **FS3 CES Changing Ecosystems**

Ho-Hagemann, H. T. M., M. Gröger, B. Rockel, M. Zahn, B. Geyer and H. E. M. Meier^{PHY} (2017). Effects of air-sea coupling over the North Sea and the Baltic Sea on simulated summer precipitation over Central Europe. **Clim. Dyn.** **49**: 3851-3876, doi: 10.1007/s00382-017-3546-8 **FS3 CES Changing Ecosystems**

Holopainen, R., M. Lehtiniemi, H. E. M. Meier^{PHY}, J. Albertsson, E. Gorokhova, J. Kotta and M. Viitasalo (2016). Impacts of changing climate on the non-indigenous invertebrates in the northern Baltic Sea by end of the twenty-first century. **Biol. Invasions** **18**: 3015-3032, doi: 10.1007/s10530-016-1197-z **FS3 CES Changing Ecosystems**

Jensen, J. B., M. Moros^{GEO}, R. Endler^{GEO} and IODP Expedition 347 Members (2017). The Bornholm Basin, southern Scandinavia: a complex history from Late Cretaceous structural developments to recent sedimentation. **Boreas** **46**: 3-17, doi: 10.1111/bor.12194 **FS3 CES Changing Ecosystems**

Jiabo, L., N. R. Nowaczyk, U. Frank and H. W. Arz^{GEO} (2018). A 20-15 ka high-resolution paleomagnetic secular variation record from Black Sea sediments - no evidence for the 'Hilina Pali excursion'? **Earth Planet. Sci. Lett.** **492**: 174-185, doi: 10.1016/j.epsl.2018.04.014 **FS3 CES Changing Ecosystems**

Jokinen, S. A., J. J. Virtasalo, T. Jilbert, J. Kaiser^{GEO}, O. Dellwig^{GEO}, H. W. Arz^{GEO}, J. Hänninen, L. Arppe, M. Collander and T. Saarinen (2018). A 1500-year multiproxy record of coastal hypoxia from the northern Baltic Sea indicates unprecedented deoxygenation over the 20th century. **Biogeosciences** **15**: 3975-4001, doi: 10.5194/bg-15-3975-2018 **FS3 CES Changing Ecosystems**

Kaiser, D.^{CHE}, S. Konovalov, D. E. Schulz-Bull^{CHE} and J. J. Waniek^{CHE} (2017). Organic matter along longitudinal and vertical gradients in the Black Sea. **Deep-Sea Res. Pt. 1.** **129**: 22-31, doi: 10.1016/j.dsr.2017.09.006 **FS3 CES Changing Ecosystems**

Kaiser, D.^{CHE}, D. E. Schulz-Bull^{CHE} and J. J. Waniek^{CHE} (2016). Profiles and inventories of organic pollutants in sediments from the central Beibu Gulf and its coastal mangroves. **Chemosphere** **153**: 39-47, doi: 10.1016/j.chemosphere.2016.03.041 **FS3 CES Changing Ecosystems**

Kaiser, J.^{GEO} and H. W. Arz^{GEO} (2016). Sources of sedimentary biomarkers and proxies with potential paleoenvironmental significance for the Baltic Sea. **Cont. Shelf Res.** **122**: 102-119, doi: 10.1016/j.csr.2016.03.020 **FS3 CES Changing Ecosystems**

Kaiser, J.^{GEO}, S. T. Belt, M. Tomczak, T. A. Brown, N. Wasmund^{BIO} and H. W. Arz^{GEO} (2016). C₂₅ highly branched isoprenoid alkenes in the Baltic Sea produced by the marine planktonic diatom *Pseudosolenia calcar-avis*. **Org. Geochem.** **93**: 51-58, doi: 10.1016/j.orggeochem.2016.01.002 **FS3 CES Changing Ecosystems**

Kaiser, J.^{GEO}, M. T. J. v. d. Meer and H. W. Arz^{GEO} (2017). Long-chain alkenones in Baltic Sea surface sediments: new insights. **Org. Geochem.** **112**: 93-104, doi: 10.1016/j.orggeochem.2017.07.002 **FS3 CES Changing Ecosystems; FS1 SMP Small- and meso-scale processes**

Kaiser, J.^{GEO}, M. Moros^{GEO}, M. Tomczak, O. Dellwig^{GEO}, D. Schulz-Bull^{CHE} and H. W. Arz^{GEO} (2018). The invasive diatom *Pseudosolenia calcar-avis* and specific C25 isoprenoid lipids as a sedimentary time marker in the Black Sea. **Geology** **46**: 507-510, doi: 10.1130/g40294.1 **FS3 CES Changing Ecosystems; FS1 SMP Small- and meso-scale processes**

Kaiser, J.^{GEO}, B. Ön, H. W. Arz^{GEO} and S. Akçer-Ön (2016). Sedimentary lipid biomarkers in the magnesium rich and highly alkaline Lake Salda (south-western Anatolia). **J. Limnol.** **75**: 581-596, doi: 10.4081/jlimnol.2016.1337 **FS1 SMP Small- and meso-scale processes; FS3 CES Changing Ecosystems**

Kilian, R., S. Breuer, J. H. Behrmann, O. Baeza, M. Diaz-Michelena, E. Mutschke, H. Arz^{GEO} and F. Lamy (2018). The Seno Otway pockmark field and its relationship to thermogenic gas occurrence at the western margin of the Magallanes Basin (Chile). **Geo-Mar. Lett.** **38**: 227-240, doi: 10.1007/s00367-017-0530-6 **FS3 CES Changing Ecosystems**

Kolling, H. M., R. Stein, K. Fahl, K. Perner^{GEO} and M. Moros^{GEO} (2017). Short-term variability in late Holocene sea ice cover on the East Greenland Shelf and its driving mechanisms. **Palaeogeogr., Palaeoclimatol., Palaeoecol.** **485**: 336-350, doi: 10.1016/j.palaeo.2017.06.024 **FS3 CES Changing Ecosystems**

Kostecki, R., B. Janczak-Kostecka, M. Endler and M. Moros (2018). Environmental evolution of western Baltic Sea in the Holocene in the light of multidisciplinary investigations of sediments cores from Arkona Basin. **Quat. Int.** **493**: 39-49, doi: 10.1016/j.quaint.2018.07.007 **FS3 CES Changing Ecosystems**

Kreuzburg, M.^{CHE}, M. Ibenthal, M. Janssen, G. Rehder^{CHE}, M. Voss^{BIO}, M. Naumann^{PHY} and P. Feldens^{GEO} (2018). Sub-marine continuation of peat deposits from a coastal peatland in the southern Baltic Sea and its Holocene development. **Front. Earth Sci.** **6**: 103, doi: 10.3389/feart.2018.00103 **FS3 CES Changing Ecosystems**

Kristjánisdóttir, G. B., M. Moros^{GEO}, J. T. Andrews and A. E. Jennings (2017). Holocene Mg/Ca, alkenones, and light stable isotope measurements on the outer North Iceland shelf (MD99-2269): a comparison with other multi-proxy data and sub-division of the Holocene. **Holocene** **27**: 52-62, doi: 10.1177/0959683616652703 **FS3 CES Changing Ecosystems**

Lang, S.-C., P. Mayer, A. Hursthouse, D. Kötke, I. Hand, D. Schulz-Bull^{CHE} and G. Witt (2018). Assessing PCB pollution in the Baltic Sea - An equilibrium partitioning based study. **Chemosphere** **191**: 886-894, doi: 10.1016/j.chemosphere.2017.10.073 **FS3 CES Changing Ecosystems**

Le Quéré, C., R. M. Andrew, P. Friedlingstein, S. Sitch, J. Hauck, J. Pongratz, P. A. Pickers, J. I. Korsbakken, G. P. Peters, J. G. Canadell, A. Arneeth, V. K. Arora, L. Barbero, A. Bastos, L. Bopp, F. Chevallier, L. P. Chini, P. Ciais, S. C. Doney, T. Gkritzalis, D. S. Goll, I. Harris, V. Haverd, F. M. Hoffmann, M. Hoppema, R. A. Houghton, G. Hurtt, T. Ilyina, A. K. Jain, T. Johannessen, C. D. Jones, E. Kato, R. F. Keeling, K. Klein Goldwijk, P. Landschützer, N. Lefèvre, S. Lienert, Z. Liu, D. Lombardozzi, N. Metzl, D. R. Munro, J. E. M. S. Nabel, S.-i. Nakaoka, C. Neill, A. Olsen, T. Ono, P.

Patra, A. Peregón, W. Peters, P. Peylin, B. Pfeil, D. Pierrot, B. Poulter, G. Rehder^{CHE}, L. Resplandy, E. Robertson, M. Rocher, C. Rödenbeck, U. Schuster, J. Schwinger, R. Séférian, I. Skjelvan, T. Steinhoff, A. Sutton, P. P. Tans, H. Tian, B. Tilbrook, F. N. Tubiello, I. T. van der Laan-Luijkx, G. R. Van der Werf, N. Viovy, A. P. Walker, A. J. Wiltshire, R. Wright, S. Zaehle and B. Zheng (2018). Global Carbon Budget 2018. **Earth Syst. Sci. Data** **10**: 2141-2194, doi: 10.5194/essd-10-2141-2018 **FS2 BED Basin-scale Ecosystem Dynamics; FS3 CES Changing Ecosystems**

Le Quéré, C., R. M. Andrew, P. Friedlingstein, S. Sitch, J. Pongratz, A. C. Manning, J. I. Korsbakken, G. P. Peters, J. G. Canadell, R. B. Jackson, T. A. Boden, P. P. Tans, O. D. Andrews, V. K. Arora, D. C. E. Bakker, L. Barbero, M. Becker, R. A. Betts, L. Bopp, F. Chevallier, L. P. Chini, P. Ciais, C. E. Cosca, J. Cross, K. Currie, T. Gasser, I. Harris, J. Hauck, V. Haverd, R. A. Houghton, C. W. Hunt, G. Hurtt, T. Ilyina, A. K. Jain, E. Kato, M. Kautz, R. F. Keeling, K. K. Goldewijk, A. Koertzing, P. Landschuetzer, N. Lefevre, A. Lenton, S. Lienert, I. Lima, D. Lombardozzi, N. Metz, F. Millero, P. M. S. Monteiro, D. R. Munro, J. E. M. S. Nabel, S.-i. Nakaoka, Y. Nojiri, X. A. Padin, A. Peregón, B. Pfeil, D. Pierrot, B. Poulter, G. Rehder^{CHE}, J. Reimer, C. Roedenbeck, J. Schwinger, R. Seferian, I. Skjelvan, B. D. Stocker, H. Tian, B. Tilbrook, F. N. Tubiello, I. T. van der Laan-Luijkx, G. R. van der Werf, S. van Heuven, N. Viovy, N. Vuichard, A. P. Walker, A. J. Watson, A. J. Wiltshire, S. Zaehle and D. Zhu (2018). Global Carbon Budget 2017. **Earth Syst. Sci. Data** **10**: 405-448, doi: 10.5194/essd-10-405-2018 **FS2 BED Basin-scale Ecosystem Dynamics; FS3 CES Changing Ecosystems**

Leduc, G., T. de Garidel-Thoron, J. Kaiser^{GEO}, C. Bolton and C. Contoux (2017). Databases for sea surface paleotemperature based on geochemical proxies from marine sediments: Implications for model-data comparisons. **Quaternaire** **28**: 201-216, doi: 10.4000/quaternaire.8034 **FS3 CES Changing Ecosystems**

Li, W., S. Krastel, T. M. Alves, M. Urlaub, L. Mehringer, A. Schürer, P. Feldens^{GEO}, F. Cross, C. J. Stevenson and R. B. Wynn (2018). The Agadir Slide offshore NW Africa: Morphology, emplacement dynamics, and potential contribution to the Moroccan Turbidite System. **Earth Planet. Sci. Lett.** **498**: 436-449, doi: 10.1016/j.epsl.2018.07.005 **FS3 CES Changing Ecosystems**

Liblik, T., M. Naumann^{PHY}, P. Alenius, M. Hansson, U. Lips, G. Nausch^{CHE}, L. Tuomi, K. Wesslander, J. Laanemets and L. Viktorsson (2018). Propagation of impact of the recent Major Baltic Inflows from the Eastern Gotland basin to the Gulf of Finland. **Front. Mar. Sci.** **5**: 222, doi: 10.3389/fmars.2018.00222 **FS3 CES Changing Ecosystems**

Liu, Y., H. E. M. Meier^{PHY} and K. Eilola (2017). Nutrient transports in the Baltic Sea - results from a 30-year physical-biogeochemical reanalysis. **Biogeosciences** **14**: 2113-2131, doi: 10.5194/bg-14-2113-2017 **FS3 CES Changing Ecosystems**

Meier, H. E. M.^{PHY}, M. K. Edman, K. J. Eilola, M. Placke^{PHY}, T. Neumann^{PHY}, H. C. Andersson, S.-E. Brunnabend^{PHY}, C. Dieterich, C. Frauen^{PHY}, R. Friedland^{KMP}, M. Gröger, B. G. Gustafsson, E. Gustafsson, A. Isaev, M. Kniebusch^{PHY}, I. Kuznetsov, B. Müller-Karulis, A. Omstedt, V. Ryabchenko, S. Saraiva and O. P. Savchuk (2018). Assessment of eutrophication abatement scenarios for the Baltic Sea by multi-model ensemble simulations. **Front. Mar. Sci.** **5**: 440, doi: 10.3389/fmars.2018.00440 **FS3 CES Changing Ecosystems**

Meier, H. E. M.^{PHY}, K. Eilola, E. Almroth-Rosell, S. Schimanke, M. Kniebusch^{PHY}, A. Höglund, P. Pemberton, Y. Liu, G. Väli and S. Saraiva (2018). Disentangling the impact of nutrient load and climate changes on Baltic Sea hypoxia and eutrophication since 1850. *Clim. Dyn.*: online, doi: 10.1007/s00382-018-4296-y **FS3 CES Changing Ecosystems**

Meier, H. E. M.^{PHY}, A. Höglund, K. Eilola and E. Almroth-Rosell (2017). Impact of accelerated future global mean sea level rise on hypoxia in the Baltic Sea. *Clim. Dyn.* **49**: 163-172, doi: 10.1007/s00382-016-3333-y **FS3 CES Changing Ecosystems**

Meier, H. E. M.^{PHY}, G. Väli, M. Naumann^{PHY}, K. Eilola and C. Frauen^{PHY} (2018). Recently accelerated oxygen consumption rates amplify deoxygenation in the Baltic Sea. *J. Geophys. Res. Oceans* **123**: 3227-3240, doi: 10.1029/2017JC013686 **FS3 CES Changing Ecosystems**

Meyer, J., I. Kröncke, A. Bartholomä, J. W. Dippner^{BIO} and U. Schückel (2016). Long-term changes in species composition of demersal fish and epibenthic species in the Jade area (German Wadden Sea/Southern North Sea) since 1972. *Estuar. Coast. Shelf Sci.* **181**: 284-293, doi: 10.1016/j.ecss.2016.08.047 **FS3 CES Changing Ecosystems**

Mohrholz, V. ^{PHY}(2018). Major Baltic inflow statistics - Revised. *Front. Mar. Sci.* **5**: 384, doi: 10.3389/fmars.2018.00384 **FS3 CES Changing Ecosystems**

Moros, M.^{GEO}, T. J. Andersen, D. Schulz-Bull^{CHE}, K. Häusler^{GEO}, D. Bunke^{GEO}, I. Snowball, A. Kotilainen, L. Zillén, J. B. Jensen, K. Kabel^{GEO}, I. Hand, T. Leipe^{GEO}, B. C. Lougheed, B. Wagner and H. W. Arz^{GEO} (2017). Towards an event stratigraphy for Baltic Sea sediments deposited since AD 1900: approaches and challenges. *Boreas* **46**: 129-142, doi: 10.1111/bor.12193 **FS3 CES Changing Ecosystems**

Moros, M.^{GEO}, J. M. Lloyd, K. Perner^{GEO}, D. Krawczyk, T. Blanz, A. d. Vernal, M.-M. Ouellet-Bernier, A. Kuijpers, A. E. Jennings, A. Witkowski, R. Schneider and E. Jansen (2016). Surface and sub-surface multi-proxy reconstruction of middle to late Holocene palaeoceanographic changes in Disko Bugt, West Greenland. *Quat. Sci. Rev.* **132**: 146-160, doi: 10.1016/j.quascirev.2015.11.017 **FS3 CES Changing Ecosystems**

Mousing, E. A., S. Ribeiro, C. Chisholm, A. Kuijpers, M. Moros^{GEO} and M. Ellegaard (2017). Size differences of Arctic marine protists between two climate periods - using the paleoecological record to assess the importance of within-species trait variation. *Ecol. Evol.* **7**: 3-13, doi: 10.1002/ece3.2592 **FS3 CES Changing Ecosystems**

Müller, F., M. Bergmann, R. Dannowski, J. W. Dippner^{BIO}, A. Gnauck, P. Haase, M. C. Jochimsen, P. Kasprzak, I. Kröncke, R. Kümmerlin, M. Küster, G. Lischeid, H. Meesenburg, C. Merz, G. Millat, J. Müller, J. Padisák, C. G. Schimming, H. Schubert, M. Schult, G. Selmeczy, T. Shatwell, S. Stoll, M. Schwabe, T. Soltwedel, D. Straile and M. Theuerkauf (2016). Assessing resilience in long-term ecological data sets. *Ecol. Indic.* **65**: 10-43, doi: 10.1016/j.ecolind.2015.10.066 **FS3 CES Changing Ecosystems**

Müller, J. D.^{CHE}, F. Bastkowski, B. Sander, S. Seitz, D. R. Turner, A. G. Dickson and G. Rehder^{CHE} (2018). Metrology for pH measurements in brackish waters - Part 1: Extending electrochemical pH measurements of TRIS buffers to salinities 5-20. **Front. Mar. Sci.** **5**: 176, doi: 10.3389/fmars.2018.00176 **FS3 CES Changing Ecosystems**

Müller, J. D.^{CHE} and G. Rehder^{CHE} (2018). Metrology of pH measurements in brackish waters - Part 2: Experimental characterization of purified meta-Cresol purple for spectrophotometric pH measurements. **Front. Mar. Sci.** **5**: 177, doi: 10.3389/fmars.2018.00177 **FS3 CES Changing Ecosystems**

Müller, J. D.^{CHE}, B. Schneider^{CHE}, S. Aßmann and G. Rehder^{CHE} (2018). Spectrophotometric pH measurements in the presence of dissolved organic matter and hydrogen sulfide. **Limnol. Oceanogr. Meth.** **16**: 68-82, doi: 10.1002/lom3.10227 **FS3 CES Changing Ecosystems**

Neumann, T.^{PHY}, H. Radtke^{PHY} and T. Seifert^{PHY} (2017). On the importance of Major Baltic Inflows for oxygenation of the central Baltic Sea. **J. Geophys. Res. Oceans** **122**: 1090-1101, doi: 10.1002/2016jc012525 **FS3 CES Changing Ecosystems**

Ni, Y., J. Harff^{GEO}, Z. Xia, J. J. Waniek^{CHE}, M. Endler^{GEO} and D. E. Schulz-Bull^{CHE} (2016). Post-glacial mud depocentre in the southern Beibu Gulf: acoustic features and sedimentary environment evolution. **Spec. Publ. - Geol. Soc. London** **429**, River-dominated shelf sediments of East Asian seas: 87-98, doi: 10.1144/SP429.13 **FS2 BED Basin-scale Ecosystem Dynamics; FS3 CES Changing Ecosystems**

Nowaczyk, N. R., L. Jiabo, U. Frank and H. W. Arz^{GEO} (2018). A high-resolution paleosecular variation record from Black Sea sediments indicating fast directional changes associated with low field intensities during marine isotope stage (MIS) 4. **Earth Planet. Sci. Lett.** **484**: 15-29, doi: 10.1016/j.epsl.2017.12.009 **FS3 CES Changing Ecosystems**

Pereira, L. S., H. W. Arz, J. Pätzold and R. C. Portilho-Ramos (2018). Productivity evolution in the South Brazilian Bight during the last 40,000 years. **Palaeogeography Palaeoclimatology** **33**: 1339-1356, doi: 10.1029/2018pa003406 **FS3 CES Changing Ecosystems**

Perner, K.^{GEO}, A. E. Jennings, M. Moros^{GEO}, J. T. Andrews and L. Wacker (2016). Interaction between warm Atlantic-sourced waters and the East Greenland Current in northern Denmark Strait (68 ° N) during the last 10 600 cal a BP. **J. Quat. Sci.** **31**: 472-483, doi: 10.1002/jqs.2872 **FS3 CES Changing Ecosystems**

Perner, K.^{GEO} and K.-L. Knudsen (2018). Two new species of recent and upper Holocene coccolith-agglutinated foraminifera from the North Icelandic shelf, North Atlantic. **J. Foraminifer. Res.** **48**: 246-250, doi: 10.2113/gsjfr.48.3.246 **FS3 CES Changing Ecosystems**

Perner, K.^{GEO}, M. Moros^{GEO}, P. De Deckker, T. Blanz, L. Wacker, R. Telford, H. Siegel^{PHY}, R. Schneider and E. Jansen (2018). Heat export from the tropics drives mid to late Holocene palaeoceanographic

changes offshore southern Australia. **Quat. Sci. Rev.** **180**: 96-110, doi: 10.1016/j.quascirev.2017.11.033 **FS3 CES Changing Ecosystems**

Perner, K.^{GEO}, M. Moros^{GEO}, E. Jansen, A. Kuijpers, S. R. Troelstra and M. A. Prins (2018). Subarctic Front migration at the Reykjanes Ridge during the mid- to late Holocene: evidence from planktic foraminifera. **Boreas** **47**: 175-188, doi: 10.1111/bor.12263 **FS3 CES Changing Ecosystems**

Placke, M.^{PHY}, H. E. M. Meier^{PHY}, U. Gräwe^{PHY}, T. Neumann^{PHY}, C. Frauen^{PHY} and Y. Liu (2018). Long-term mean circulation of the Baltic Sea as represented by various ocean circulation models. **Front. Mar. Sci.** **5**: 287, doi: 10.3389/fmars.2018.00287 **FS3 CES Changing Ecosystems**

Polovodova Asteman, I., B. Risebrobakken, M. Moros, A. Binczewska, S. Dobosz, E. Jansen, J. Sławinska and M. Bąk (2018). Late Holocene palaeoproductivity changes: a multi-proxy study in the Norwegian Trench and the Skagerrak, North Sea. **Boreas** **47**: 238-255, doi: 10.1111/bor.12264 **FS3 CES Changing Ecosystems**

Pretet, C., K. van Zuilen, T. F. Nägler, S. Reynaud, M. E. Böttcher^{GEO} and E. Samankassou (2016). Constraints on barium isotope fractionation during aragonite precipitation by corals. **Depositional Record** **1**: 118-129, doi: 10.1002/dep2.8 **FS1 SMP Small- and meso-scale processes; FS3 CES Changing Ecosystems**

Rasmussen, T. L., E. Thomsen and M. Moros^{GEO} (2016). North Atlantic warming during Dansgaard-Oeschger events synchronous with Antarctic warming and out-of-phase with Greenland climate. **Sci. Rep.** **6**: 20535, doi: 10.1038/srep20535 **FS3 CES Changing Ecosystems**

Rebotim, A., A. H. L. Voelker, L. Jonkers, J. J. Waniek^{CHE}, H. Meggers, R. Schiebel, I. Fraile, M. Schulz and M. Kucera (2017). Factors controlling the depth habitat of planktonic foraminifera in the subtropical eastern North Atlantic. **Biogeosciences** **14**: 827-859, doi: 10.5194/bg-14-827-2017 **FS3 CES Changing Ecosystems**

Rohden, C. v., S. Weinreben^{PHY} and F. Fehres (2016). The sound speed anomaly of Baltic seawater. **Ocean Sci.** **12**: 275-283, doi: 10.5194/os-12-275-2016 **FS3 CES Changing Ecosystems**

Schimanke, S. and H. E. M. Meier^{PHY} (2016). Decadal-to-centennial variability of salinity in the Baltic Sea. **J. Clim.** **29**: 7173-7188, doi: 10.1175/jcli-d-15-0443.1 **FS3 CES Changing Ecosystems**

Scholz, F., M. Baum, C. Siebert, S. Eroglu, A. W. Dale, M. Naumann^{PHY} and S. Sommer (2018). Sedimentary molybdenum cycling in the aftermath of seawater inflow to the intermittently euxinic Gotland Deep, Central Baltic Sea. **Chem. Geol.** **491**: 27-38, doi: 10.1016/j.chemgeo.2018.04.031 **FS3 CES Changing Ecosystems**

Sollai, M., E. C. Hopmans, N. J. Bale, A. Mets, L. Warden, M. Moros^{GEO} and J. S. Sinninghe Damsté (2017). The Holocene sedimentary record of cyanobacterial glycolipids in the Baltic Sea: an evaluation of their application as tracers of past nitrogen fixation. **Biogeosciences** **14**: 5789-5804, doi: 10.5194/bg-14-5789-2017 **FS3 CES Changing Ecosystems**

Staudinger, C., M. Strobl, J. P. Fischer, R. Thar, T. Mayr, D. Aigner, B. J. Müller, B. Müller, P. Lehner, G. Mistlberger, E. Fritzsche, J. Ehgartner, P. W. Zach, J. S. Clarke, F. Geißler, A. Mutzberg, J. D. Müller^{CHE}, E. P. Achterberg, S. M. Borisov and I. Klimant (2018). A versatile optode system for oxygen, carbon dioxide, and pH measurements in seawater with integrated battery and logger. **Limnol. Oceanogr. Meth.** **16**: 459-473, doi: 10.1002/lom3.10260 **FS3 CES Changing Ecosystems**

Stern, J.^{CHE}, O. Dellwig^{GEO} and J. J. Waniek^{CHE} (2017). Deep-sea fluxes of barium and lithogenic trace elements in the subtropical northeast Atlantic. **Deep-Sea Res. Pt. 1.** **122**: 72-80, doi: 10.1016/j.dsr.2017.02.002 **FS3 CES Changing Ecosystems**

Stevenson, C. J., P. Feldens^{GEO}, A. Georgiopoulou, M. Schönke^{GEO}, S. Krastel, D. J. W. Piper, K. Lindhorst and D. Mosher (2018). Reconstructing the sediment concentration of a giant submarine gravity flow. **Nat. Commun.** **9**: 2616, doi: 10.1038/s41467-018-05042-6 **FS3 CES Changing Ecosystems**

Teeling, H., B. M. Fuchs, C. M. Bennke^{BIO}, K. Kruger, M. Chafee, L. Kappelmann, G. Reintjes, J. Waldmann, C. Quast, F. O. Glockner, J. Lucas, A. Wichels, G. Gerds, K. H. Wiltshire and R. I. Amann (2016). Recurring patterns in bacterioplankton dynamics during coastal spring algae blooms. **eLife** **5**: e11888, doi: 10.7554/eLife.11888 **FS2 BED Basin-scale Ecosystem Dynamics; FS3 CES Changing Ecosystems**

Vermeersen, B. L. A., A. B. A. Slangen, T. Gerkema, F. Baart, K. M. Cohen, S. Dangendorf, M. Duran-Matute, T. Frederikse, A. Grinsted, M. P. Hijma, S. Jevrejeva, P. Kiden, M. Kleinherenbrink, E. W. Meijles, M. D. Palmer, R. Rietbroek, R. E. M. Riva, E. Schulz^{PHY}, D. C. Slobbe, M. J. R. Simpson, P. Sterlini, P. Stocchi, R. S. W. van de Wal and M. van der Wegen (2018). Sea-level change in the Dutch Wadden Sea. **Neth.J. Geosci.** **97**: 79-127, doi: 10.1017/njg.2018.7 **FS3 CES Changing Ecosystems**

Virtasalo, J. J., M. Endler^{GEO}, M. Moros^{GEO}, S. A. Jokinen, J. Hämäläinen and A. T. Kotilainen (2016). Base of brackish-water mud as key regional stratigraphic marker of mid-Holocene marine flooding of the Baltic Sea Basin. **Geo-Mar. Lett.** **36**: 445-456, doi: 10.1007/s00367-016-0464-4 **FS3 CES Changing Ecosystems**

Vogts, A.^{BIO}, T. Badewien, J. Rullkötter and E. Schefuß (2016). Near-constant apparent hydrogen isotope fractionation between leaf wax *n*-alkanes and precipitation in tropical regions: Evidence from a marine sediment transect off SW Africa. **Org. Geochem.** **96**: 18-27, doi: 10.1016/j.orggeochem.2016.03.003 **FS3 CES Changing Ecosystems**

Waelbroeck, C., S. Pichat, E. Böhm, B. C. Lougheed, D. Faranda, M. Vrac, L. Missiaen, N. V. Riveiros, P. Burckel, J. Lippold, H. W. Arz^{GEO}, T. Dokken, F. Thil and A. Dapoigny (2018). Relative timing of precipitation and ocean circulation changes in the western equatorial Atlantic over the last 45 kyr. **Clim. Past** **14**: 1315-1330, doi: 10.5194/cp-14-1315-2018 **FS3 CES Changing Ecosystems**

Wahl, M., S. S. Covach^Ā, V. Saderne, C. Hiebenthal, J. D. Müller^{CHE}, C. Pansch and Y. Sawall (2018). Macroalgae may mitigate ocean acidification effects on mussel calcification by increasing pH and its fluctuations. **Limnol. Oceanogr.** **63**: 3-21, doi: 10.1002/lno.10608 **FS3 CES Changing Ecosystems**

Wählström, I., C. Dieterich, P. Pemberton and H. E. M. Meier^{PHY} (2016). Impact of increasing inflow of warm Atlantic water on the sea-air exchange of carbon dioxide and methane in the Laptev Sea. **J. Geophys. Res. Biogeosciences** **121**: 1867-1883, doi: 10.1002/2015JG003307 **FS3 CES Changing Ecosystems**

Warden, L., M. Moros^{GEO}, T. Neumann^{PHY}, S. Shennan, A. Timpson, K. Manning, M. Sollai, L. Wacker, K. Perner^{GEO}, K. Häusler^{GEO}, T. Leipe^{GEO}, L. Zillén, A. Kotilainen, E. Jansen, R. R. Schneider, R. Oeberst, H. Arz^{GEO} and J. S. Sinninghe Damsté (2017). Climate induced human demographic and cultural change in northern Europe during the mid-Holocene. **Sci. Rep.** **7**: 15251, doi: 10.1038/s41598-017-14353-5 **FS3 CES Changing Ecosystems**

Warden, L., M. Moros^{GEO}, Y. Weber and J. S. Sinninghe Damsté (2018). Change in provenance of branched glycerol dialkyl glycerol tetraethers over the Holocene in the Baltic Sea and its impact on continental climate reconstruction. **Org. Geochem.** **121**: 138-154, doi: 10.1016/j.orggeochem.2018.03.007 **FS3 CES Changing Ecosystems**

Warden, L., M. T. J. van der Meer, M. Moros^{GEO} and J. S. Sinninghe Damsté (2016). Sedimentary alkenone distributions reflect salinity changes in the Baltic Sea over the Holocene. **Org. Geochem.** **102**: 30-44, doi: 10.1016/j.orggeochem.2016.09.007 **FS3 CES Changing Ecosystems**

Wasmund, N.^{BIO} (2017). The Diatom/Dinoflagellate index as an indicator of ecosystem changes in the Baltic Sea. 2. Historical data for use in determination of good environmental status. **Front. Mar. Sci.** **4**: 153, doi: 10.3389/fmars.2017.00153 **FS3 CES Changing Ecosystems**

Wasmund, N.^{BIO}, J. Kownacka, J. Göbel, A. Jaanus, M. Johansen, I. Jurgensone, S. Lehtinen and M. Powilleit (2017). The Diatom/Dinoflagellate index as an indicator of ecosystem changes in the Baltic Sea 1. Principle and handling instruction. **Front. Mar. Sci.** **4**: 22, doi: 10.3389/fmars.2017.00022 **FS3 CES Changing Ecosystems; FS4 CSS Coastal Seas and Society**

Wegwerth, A.^{GEO}, S. Eckert, O. Dellwig^{GEO}, B. Schnetger, S. Severmann, S. Weyer, A. Brüske, J. Kaiser^{GEO}, J. Köster, H. W. Arz^{GEO} and H.-J. Brumsack (2018). Redox evolution during Eemian and Holocene sapropel formation in the Black Sea. **Palaeogeogr., Palaeoclimatol., Palaeoecol.** **489**: 249-260, doi: 10.1016/j.palaeo.2017.10.014 **FS3 CES Changing Ecosystems**

Wegwerth, A., J. Kaiser, O. Dellwig, L. S. Shumilovskikh, N. R. Nowaczyk and H. W. Arz (2016). Northern hemisphere climate control on the environmental dynamics in the glacial Black Sea "Lake". **Quat. Sci. Rev.** **135**: 41-53, doi: 10.1016/j.quascirev.2016.01.016 **FS3 CES Changing Ecosystems**

Weinkauf, M. F. G., J. G. Kunze, J. J. Waniek^{CHE} and M. Kučera (2016). Seasonal variation in shell calcification of planktonic foraminifera in the NE Atlantic reveals species-specific response to

temperature, productivity, and optimum growth conditions. **PLoS One** 11: e0148363, doi: 10.1371/journal.pone.0148363 **FS3 CES Changing Ecosystems**

Wöfl, A.-C., N. Wittenberg, P. Feldens^{GEO}, H. C. Hass, C. Betzler and G. Kuhn (2016). Submarine landforms related to glacier retreat in a shallow Antarctic fjord. **Antarct. Sci.** 28: 475-486, doi: 10.1017/S0954102016000262 **FS3 CES Changing Ecosystems**

Wu, Z., B. Liu, P. Escher, N. Kowalski^{GEO} and M. E. Böttcher^{GEO} (2018). Carbon diagenesis in different sedimentary environments of the subtropical Beibu Gulf, South China Sea. **J. Mar. Syst.** 186: 68-84, doi: 10.1016/j.jmarsys.2018.06.002 **FS2 BED Basin-scale Ecosystem Dynamics; FS1 SMP Small- and meso-scale processes; FS3 CES Changing Ecosystems**

Zettler, M. L.^{BIO}, R. Friedland^{KMP}, M. Gogina^{BIO} and A. Darr^{BIO} (2017). Variation in benthic long-term data of transitional waters: Is interpretation more than speculation? **PLoS One** 12: e0175746, doi: 10.1371/journal.pone.0175746 **FS3 CES Changing Ecosystems; FS4 CSS Coastal Seas and Society**

Zheng, Y.-F. and M. E. Böttcher^{GEO} (2016). Oxygen isotope fractionation in double carbonates. **Isot. Environ. Health Stud.** 52: 29-46, doi: 10.1080/10256016.2014.977278 **FS1 SMP Small- and meso-scale processes; FS3 CES Changing Ecosystems**

Articles in other journals (6)

Bauer, B., H. E. M. Meier^{PHY}, M. Casini, A. Hoff, P. Margoński, A. Orio, S. Saraiva, J. Steenbeek and M. T. Tomczak (2018). Erratum: Reducing eutrophication increases spatial extent of communities supporting commercial fisheries: A model case study (ICES Journal of Marine Science (2018) DOI: 10.1093/icesjms/fsy003). **ICES J. Mar. Sci.** 75: 1155, doi: 10.1093/icesjms/fsy023 **FS3 CES Changing Ecosystems**

Feistel, R.^{PHY} (2017). Salzgehalt des Meeres und relative Feuchte der Luft: Rolle im Klimasystem und Probleme ihrer Definition: Vortrag in der Klasse für Naturwissenschaften und Technikwissenschaften am 10. 11. 2016. **Leibniz Online** Berlin: Leibniz-Sozietät der Wissenschaften zu Berlin: <http://leibnizsozietat.de/category/publikationen/leibniz-online/> Research Focus **FS3 CES Changing Ecosystems**

Kolling, H. M., R. Stein, K. Fahl, K. Perner^{GEO} and M. Moros^{GEO} (2018). New insights into sea ice changes over the past 2.2 kyr in Disko Bugt, West Greenland. **Arktos** 4: 11, doi: 10.1007/s41063-018-0045-z **FS3 CES Changing Ecosystems**

Labuhn, I., D. Hammarlund, E. Chapron, M. Czymzik^{GEO}, J.-P. Dumoulin, A. Nilsson, E. Régnier, J. Robygd and U. v. Grafenstein (2018). Holocene hydroclimate variability in Central Scandinavia inferred from flood layers in contourite drift deposits in lake Storsjön. **Quaternary** 1: 2, doi: 10.3390/quat101002 **FS3 CES Changing Ecosystems**

Meier, H. E. M.^{PHY} K. Eilola, E. Almroth-Rosell, S. Schimanke, M. Kniebusch^{PHY}, A. Höglund, P. Pemberton, Y. Liu, G. Väli and S. Saraiva (2018). Correction to: Disentangling the impact of nutrient load and climate changes on Baltic Sea hypoxia and eutrophication since 1850 (Climate Dynamics, (2018), 10.1007/s00382-018-4296-y). **Clim. Dyn.:** online, doi: 10.1007/s00382-018-4483-x **FS3 CES Changing Ecosystems**

Wäge, J.^{BIO}, S. Rohr, J. D. Hardege and J. M. Rotchell (2016). Short-term effects of CO₂-induced low pH exposure on target gene expression in *Platynereis dumerilii*. **J. Mar. Biol. Oceanogr.** 5: 2, doi: 10.4172/2324-8661.1000155 **FS1 SMP Small- and meso-scale processes; FS3 CES Changing Ecosystems**

Monographs (9)

Aoyama, M., M. Abad, C. Anstey, P. M. Ashraf, A. Bakir, S. Becker, S. Bell, E. Berdalet, M. Blum, R. Briggs, F. Caradec, T. Cariou, M. Church, L. Coppola, M. Crump, S. Curless, M. Dai, A. Daniel, C. Davis, E. d. S. Braga, M. E. Solis, L. Ekern, D. Faber, T. Fraser, K. Gundersen, S. Jacobsen, M. Knockaert, T. Komada, M. Kralj, R. Kramer, N. Kress, S. Lainela, J. Ledesma, X. Li, J.-H. Lim, M. Lohmann, C. Lønborg, K.-U. Ludwigowski, C. Mahaffey, F. Malien, F. Margiotta, T. McCormack, I. Murillo, H. Naik, G. Nausch^{CHE}, S. R. Ólafsdóttir, J. v. Ooijen, R. Paranhos, C. Payne, O. Pierre-Duplessix, G. Prove, E. Rabiller, P. Raimbault, L. Reed, C. Rees, T. Rho, R. Roman, E. M. S. Woodward, J. Sun, B. Szymczycha, S. Takatani, A. Taylor, P. Thamer, S. Torres-Valdés, K. Trahanovsky, H. Waldron, P. Walsham, L. Wang, T. Wang, L. White, T. Yoshimura and J.-Z. Zhang (2016). **IOCCP-JAMSTEC 2015 Inter-laboratory calibration exercise of certified reference material for nutrients in seawater**. Yokosuka: Japan Agency for Marine-Earth Science and Technology. 176 S. (IOCCP Report 1/2016) http://www.score-int.org/Working_Groups/IOCCP_JAMSTEC_IC2015report_protectedVer.1.1.pdf Research Focus **FS3 CES Changing Ecosystems**

Feistel, S.^{DIR}, R. Feistel^{PHY}, D. Nehring, W. Matthäus, G. Nausch^{CHE} and M. Naumann^{PHY} (2016). **Hypoxic and anoxic regions in the Baltic Sea, 1969 - 2015**. Rostock: Leibniz Institute for Baltic Sea Research Warnemünde. 84 S. (Meereswissenschaftliche Berichte = Marine Science Reports ; 100), doi: 10.12754/msr-2016-0100 Research Focus **FS3 CES Changing Ecosystems**

HELCOM (2018). **State of the Baltic Sea - Second HELCOM holistic assessment 2011-2016**. Helsinki: Baltic Marine Environment Protection Commission - HELCOM. 155 S. <http://www.helcom.fi/Lists/Publications/BSEP155.pdf> Research Focus **FS3 CES Changing Ecosystems**

Naumann, M.^{PHY}, L. Umlauf^{PHY}, V. Mohrholz^{PHY}, J. Kuss^{CHE}, H. Siegel^{PHY}, J. Waniek^{CHE} and D. Schulz-Bull^{CHE} (2017). **Hydrographic-hydrochemical assessment of the Baltic Sea 2016**. Rostock: Leibniz Institute for Baltic Sea Research Warnemünde. 94 S. (Meereswissenschaftliche Berichte = Marine Science Reports ; 104), doi: 10.12754/msr-2016-0101 Research Focus **FS3 CES Changing Ecosystems**

Naumann, M.^{PHY}, L. Umlauf^{PHY}, V. Mohrholtz^{PHY}, J. Kuss^{CHE}, H. Siegel^{PHY}, J. J. Waniek^{CHE} and D. E. Schulz-Bull^{CHE} (2018). **Hydrographic-hydrochemical assessment of the Baltic Sea 2017**. Rostock: Leibniz Institute for Baltic Sea Research Warnemünde. 97 S. (Meereswissenschaftliche Berichte = Marine Science Reports ; 107), doi: 10.12754/msr-2018-0107 Research Focus **FS3 CES Changing Ecosystems**

Nausch, G.^{CHE}, M. Naumann^{PHY}, L. Umlauf^{PHY}, V. Mohrholtz^{PHY}, H. Siegel^{PHY} and D. E. Schulz-Bull^{CHE} (2016). **Hydrographic-hydrochemical assessment of the Baltic Sea 2015**. Rostock: Leibniz Institute for Baltic Sea Research Warnemünde. 95 S. (Meereswissenschaftliche Berichte = Marine Science Reports ; 101), doi: 10.12754/msr-2016-0101 Research Focus **FS3 CES Changing Ecosystems**

Wasmund, N.^{BIO}, J. Dutz^{BIO}, F. Pollehne^{BIO}, H. Siegel^{PHY} and M. L. Zettler^{BIO} (2016). **Biological assessment of the Baltic Sea 2015**. Rostock: Leibniz Institute for Baltic Sea Research Warnemünde. 97 S. (Meereswissenschaftliche Berichte = Marine Science Reports ; 102), doi: 10.12754/msr-2016-0102 Research Focus **FS3 CES Changing Ecosystems**

Wasmund, N.^{BIO}, J. Dutz^{BIO}, F. Pollehne^{BIO}, H. Siegel^{PHY} and M. L. Zettler^{BIO} (2017). **Biological assessment of the Baltic Sea 2016**. Rostock: Leibniz Institute for Baltic Sea Research Warnemünde. 98 S. (Meereswissenschaftliche Berichte = Marine Science Reports ; 105), doi: 10.12754/msr-2017-0105 https://www.io-warnemuende.de/tl_files/forschung/meereswissenschaftliche-berichte/mebe105_2017_assessment-bio.pdf Research Focus **FS3 CES Changing Ecosystems**

Wasmund, N.^{BIO}, J. Dutz^{BIO}, F. Pollehne^{BIO}, H. Siegel^{PHY} and M. L. Zettler^{BIO} (2018). **Biological assessment of the Baltic Sea 2017**. Rostock: Leibniz Institute for Baltic Sea Research Warnemünde. 102 S. (Meereswissenschaftliche Berichte = Marine Science Reports ; 108), doi: 10.12754/msr-2018-0108 <http://doi.io-warnemuende.de/10.12754/msr-2018-0108> Research Focus **FS3 CES Changing Ecosystems**

Editorship of edited volumes (1)

Arz^{GEO}, H. W., T. Leipe^{GEO} and M. Moros^{GEO}, Eds. (2017). **The Baltic Sea: geology and paleoenvironmental evolution**. Oxford: Wiley. 142 S. (Boreas, Special issue) Research Focus **FS3 CES Changing Ecosystems**

Individual contributions to edited volumes (8)

Beusekom, J. v., R. Thiel, I. Bobsien, M. Boersma, C. Buschbaum, A. Dänhardt, A. Darr^{BIO}, R. Friedland^{KMP}, M. Kloppmann, I. Kröncke, J. Rick and M. Wetzel (2018). Aquatische Ökosysteme: Nordsee, Wattenmeer, Elbeästuar und Ostsee. In: **Hamburger Klimabericht - Wissen über Klima**,

Klimawandel und Auswirkungen in Hamburg und Norddeutschland. Ed. by H. v. Storch, I. Meinke and M. Claußen. Berlin: Springer: 89-107, doi: 10.1007/978-3-662-55379-4, 978-3-662-55379-4 Research Focus **FS3 CES Changing Ecosystems**

Clift, P. D., J. Harff^{GEO}, J. Wu and Y. Qiu (2016). Introduction to the river-dominated shelf sediments of East Asian seas. In: **River-dominated shelf sediments of East Asian seas.** Ed. by P. D. Clift, J. Harff, J. Wu and Y. Qiu. London: Geological Society (Geological Society of London / special publication): 1-8, doi: 10.1144/SP429.13, 978-1-86239-740-8 Research Focus **FS2 BED Basin-scale Ecosystem Dynamics; FS3 CES Changing Ecosystems**

Klein, B., R. Seiffert, U. Gräwe^{PHY}, H. Klein, P. Loewe, J. Möller, S. Müller-Navarra, J. Holfort and C. Schlamkow (2018). Deutsche Bucht mit Tideelbe und Lübecker Bucht. In: **Hamburger Klimabericht - Wissen über Klima, Klimawandel und Auswirkungen in Hamburg und Norddeutschland.** Ed. by H. v. Storch, I. Meinke and M. Claußen. Berlin: Springer: 55-87, doi: 10.1007/978-3-662-55379-4, 978-3-662-55379-4 Research Focus **FS3 CES Changing Ecosystems**

Krastel, S., W. Li, M. Urlaub, A. Georgiopoulou, R. B. Wynn, T. Schwenk, C. Stevenson and P. Feldens^{GEO} (2018). Mass wasting along the NW African continental margin. In: **Subaqueous Mass Movements, Special Publications, Geological Society, London.** Ed. by D. G. Lintern, D. C. Mosher, L. G. Moscardelli, P. T. Bobrowsky, C. Campbell, J. D. Chaytor, J. J. Clague, A. Georgiopoulou, P. Lajeunesse, A. Normandeau, D. J. W. Piper, M. Scherwath, C. Stacey and D. Turmel. London: Geological Society: Sp477.36, doi: 10.1144/sp477.36 Research Focus **FS3 CES Changing Ecosystems**

Meier, H. E. M.^{PHY}, M. Edman and members of the Baltic Earth working group on scenario simulations for the Baltic Sea 1960-2100 (2016). Estimating uncertainties in projections for the Baltic Sea region based upon an ensemble of regional climate system models. **1st Baltic Earth Conference, Multiple drivers for Earth system changes in the Baltic Sea region, Nida, Curonian Spit, Lithuania 13-17 June 2016:** 179 https://www.baltic-earth.eu/publications/IBESPublications/No_9_Nida2016_Proceedings/BalticEarth_Nida2016_Proceedings_web.pdf Research Focus **FS3 CES Changing Ecosystems**

Neumann, S., D. Oertel, H. Wörn, M. Kurowski, D. Dewitz, J. J. Waniek^{CHE}, D. Kaiser^{CHE} and R. Mars^{PHY} (2016). Towards deep-sea monitoring with SMIS-experimental trials of deep-sea acoustic localization. In: **Assistive robotics: Proceedings of the 18th International Conference on CLAWAR 2015.** Ed. by H. Su, T. Wang, M. O. Tokhi and G. S. Virk. Singapore: World Scientific: 715-725, 978-981-4725-23-1 Research Focus **FS3 CES Changing Ecosystems**

Rechid, D., H. E. M. Meier^{PHY}, C. Schrum, M. Rummukainen, C. Moseley, K. Bülow, A. Elizalde, J. Su and T. Pohlmann (2016). Climate model simulations for the North Sea region. In: **North Sea Region Climate Change Assessment.** Ed. by M. Quante and F. Colijn. Cham: Springer: 495-504, doi: 10.1007/978-3-319-39745-0, 978-3-319-39745-0 Research Focus **FS3 CES Changing Ecosystems**

Schrum, C., J. Lowe, H. E. M. Meier^{PHY}, I. Grabemann, J. Holt, M. Mathis, T. Pohlmann, M. D. Skogen, A. Sterl and S. Wakelin (2016). Projected Change-North Sea. In: **North Sea Region Climate Change**

Assessment. Ed. by M. Quante and F. Colijn. Cham: Springer: 175-217, doi: 10.1007/978-3-319-39745-0_6, 978-3-319-39745-0 Research Focus **FS3 CES Changing Ecosystems**

Work and discussion papers (13)

Baltic Marine Environment Protection Commission, Working Group on the State of the Environment and Nature Conservation, N. Wasmund^{BIO}, J. Göbel, A. Jaanus, M. Johansen, I. Jurgensone, J. Kownacka and S. Lehtinen (2016). **Pre-core indicator ‘Diatom-Dinoflagellate index’ - proposal to shift status to core indicator.** [Report] Tallin: HELCOM Baltic Marine Environment Protection Commission - Helsinki Commission [https://portal.helcom.fi/meetings/STATE%20-%20CONSERVATION%205-2016-363/MeetingDocuments/4\]-6%20Pre-core%20indicator%20%E2%80%98Diatom-Dinoflagellate%20index%E2%80%99%20%E2%80%93%20proposal%20to%20shift%20status%20to%20core%20indicator.pdf](https://portal.helcom.fi/meetings/STATE%20-%20CONSERVATION%205-2016-363/MeetingDocuments/4]-6%20Pre-core%20indicator%20%E2%80%98Diatom-Dinoflagellate%20index%E2%80%99%20%E2%80%93%20proposal%20to%20shift%20status%20to%20core%20indicator.pdf) Research Focus **FS3 CES Changing Ecosystems; FS4 CSS Coastal Seas and Society**

Naumann, M.^{PHY}, V. Mohrholz^{PHY} and J. J. Waniek^{CHE} (2018). Water Exchange between the Baltic Sea and the North Sea, and conditions in the Deep Basins. **Baltic Sea Environment Fact Sheet Hydrography** Baltic Marine Environment Protection Commission - Helsinki Commission: <http://www.helcom.fi/baltic-sea-trends/environment-fact-sheets/hydrography/water-exchange-between-the-baltic-sea-and-the-north-sea-and-conditions-in-the-deep-basins/> Research Focus **FS3 CES Changing Ecosystems**

Naumann, M.^{PHY}, G. Nausch^{CHE} and V. Mohrholz^{PHY} (2016). Water Exchange between the Baltic Sea and the North Sea, and conditions in the Deep Basins. **Baltic Sea Environment Fact Sheet** Baltic Marine Environment Protection Commission - Helsinki Commission: <http://helcom.fi/baltic-sea-trends/environment-fact-sheets/hydrography/water-exchange-between-the-baltic-sea-and-the-north-sea-and-conditions-in-the-deep-basins/> Research Focus **FS3 CES Changing Ecosystems**

Siegel, H.^{PHY} and M. Gerth (2017). Development of sea surface temperature in the Baltic Sea 2016. **HELCOM Baltic Sea Environ. Fact Sheets** HELCOM Baltic Marine Environment Protection Commission - Helsinki Commission: <http://helcom.fi/baltic-sea-trends/environment-fact-sheets/hydrography/development-of-sea-surface-temperature-in-the-baltic-sea> Research Focus **FS3 CES Changing Ecosystems**

Siegel, H.^{PHY} and M. Gerth (2016). Sea surface temperature in the Baltic Sea in 2015. **HELCOM Baltic Sea Environ. Fact Sheets** HELCOM Baltic Marine Environment Protection Commission - Helsinki Commission: <http://helcom.fi/baltic-sea-trends/environment-fact-sheets/hydrography/development-of-sea-surface-temperature-in-the-baltic-sea> Research Focus **FS3 CES Changing Ecosystems**

Siegel, H.^{PHY} and M. Gerth (2018). Sea surface temperature in the Baltic Sea in 2017. **Baltic Sea Environment Fact Sheets Hydrography** HELCOM Baltic Marine Environment Protection Commission -

Helsinki Commission: <http://helcom.fi/baltic-sea-trends/environment-fact-sheets/hydrography/development-of-sea-surface-temperature-in-the-baltic-sea> Research Focus **FS3 CES Changing Ecosystems**

Wasmund, N.^{BIO}, S. Busch and C. Burmeister (2016). Phytoplankton development at the coastal station "Seebrücke Heiligendamm" in 2015. **Algal blooms at Heiligendamm 2015**. Rostock: Leibniz Institute for Baltic Sea Research Warnemünde: <http://www.io-warnemuende.de/algal-blooms-at-heiligendamm-2015.html> Research Focus **FS3 CES Changing Ecosystems**

Wasmund, N.^{BIO}, S. Busch and C. Burmeister (2017). Phytoplankton development at the coastal station "Seebrücke Heiligendamm" in 2016. **Algal blooms at Heiligendamm 2016**. Rostock: Leibniz Institute for Baltic Sea Research Warnemünde: <https://www.io-warnemuende.de/algal-blooms-at-heiligendamm-2016.html> Research Focus **FS3 CES Changing Ecosystems**

Wasmund, N., S. Busch, C. Burmeister and R. Hansen (2018). Phytoplankton development at the coastal station "Seebrücke Heiligendamm" in 2017. **Algal blooms at Heiligendamm 2017**. Rostock: Leibniz Institute for Baltic Sea Research Warnemünde: <https://www.io-warnemuende.de/algal-blooms-at-heiligendamm-2017.html> Research Focus **FS3 CES Changing Ecosystems**

Wasmund, N.^{BIO}, S. Busch, J. Göbel, S. Gromisz, H. Högländer, S. Huseby, A. Jaanus, H. H. Jakobsen, M. Johansen, I. Jurgensone, J. Kownacka, W. Kraśniewski, S. Lehtinen, I. Olenina and M. v. Weber (2017). Cyanobacteria biomass 1990-2016. **Baltic Sea Environment Fact Sheet Eutrophication** Baltic Marine Environment Protection Commission - Helsinki Commission (HELCOM): <http://helcom.fi/baltic-sea-trends/environment-fact-sheets/eutrophication/cyanobacteria-biomass> Research Focus **FS3 CES Changing Ecosystems**

Wasmund, N.^{BIO}, S. Busch, J. Göbel, S. Gromisz, H. Högländer, S. Huseby, A. Jaanus, H. H. Jakobsen, M. Johansen, I. Jurgensone, J. Kownacka, W. Kraśniewski, S. Lehtinen, I. Olenina and M. v. Weber (2018). Cyanobacteria biomass 1990-2017. **Baltic Sea Environment Fact Sheet Eutrophication** Baltic Marine Environment Protection Commission - Helsinki Commission (HELCOM): <http://www.helcom.fi/baltic-sea-trends/environment-fact-sheets/eutrophication/cyanobacteria-biomass/> Research Focus **FS3 CES Changing Ecosystems**

Wasmund, N.^{BIO}, S. Busch, J. Göbel, S. Gromisz, H. Högländer, A. Jaanus, M. Johansen, I. Jurgensone, C. Karlsson, J. Kownacka, W. Kraśniewski, S. Lehtinen, I. Olenina and M. v. Weber (2016). Cyanobacteria biomass: information from the Phytoplankton Expert Group (PEG). **Baltic Sea Environment Fact Sheet Eutrophication** Baltic Marine Environment Protection Commission - Helsinki Commission: <http://helcom.fi/baltic-sea-trends/environment-fact-sheets/eutrophication/cyanobacteria-biomass> Research Focus **FS3 CES Changing Ecosystems**

Wasmund, N.^{BIO}, A. Jaanus, M. Johansen, J. Kownacka and I. Olenina (2017). Diatom/Dinoflagellate index. **HELCOM Core Indicator Report** Helsinki: HELCOM Baltic Marine Environment Protection Commission - Helsinki Commission: <http://helcom.fi/Core%20Indicators/Diatom-Dinoflagellate%20index%20-%20HELCOM%20pre->

[core%20indicator%20report_HOLAS%2011%20component.pdf](#) Research Focus **FS4 CSS Coastal Seas and Society; FS3 CES Changing Ecosystems**