

PUBLICATIONS

Laurent Bopp

Aout 2015 : 136 publications de rang A / h-factor = 36 (ISI web of knowledge)

2015 (12)

1. **Bopp, L.**, Lévy, M., Resplandy, L., and Sallée, J.B, Pathways of anthropogenic carbon subduction in the global ocean. *Geophysical Research Letters* 42, doi:10.1002/2015GL065073, 2015.
2. Gattuso, J.-P., Magnan, A., Bille, R., Cheung, W.W.L., Howes, E.L., Joos, F., Allemand, D., **Bopp, L.**, Cooley, S.R., Eakin, C.M., et al. Contrasting futures for ocean and society from different anthropogenic CO₂ emissions scenarios. *Science* 349, 4722–4722, 2015.
3. Martinez-Rey, J., **Bopp, L.**, Gehlen, M., Tagliabue, A., and Gruber, N. Projections of oceanic N₂O emissions in the 21st century using the IPSL Earth system model. *Biogeosciences* 12, 4133–4148, 2015.
4. Launois, T., Belviso, S., **Bopp, L.**, Fichot, C.G., and Peylin, P. A new model for the global biogeochemical cycle of carbonyl sulfide – Part 1: Assessment of direct marine emissions with an oceanic general circulation and biogeochemistry model. *Atmos. Chem. Phys.* 15, 2295–2312, 2015
5. Le Quéré, C., Moriarty, R., Andrew, R.M., Peters, G.P., Ciais, P., Friedlingstein, P., Jones, S.D., Sitch, S., Tans, P., Arneth, A., et al. (incl. **L. Bopp**). Global carbon budget 2014. *Earth System Science Data* 7, 47–85, 2015
6. Resplandy, L., Séférian, R., and **Bopp, L.**. Natural variability of CO₂ and O₂ fluxes: What can we learn from centuries-long climate models simulations? *J. Geophys. Res. Oceans* 120, 384–404, 2015
7. Lefort, S., Aumont, O., **Bopp, L.**, Arsouze, T., Gehlen, M., and Maury, O. Spatial and body-size dependent response of marine pelagic communities to projected global climate change. *Global Change Biology* 21, 154–164, 2015.
8. Nevison, C. D., Manizza, M., Keeling, R. F., Kahru, M., **Bopp, L.**, Dunne, J., Tiputra, J., Ilyina, T., and Mitchell, B. G.: Evaluating the ocean biogeochemical components of Earth system models using atmospheric potential oxygen and ocean color data, *Biogeosciences*, 12, 193-208, doi:10.5194/bg-12-193-2015, 2015.
9. Sitch, S., Friedlingstein, P., Gruber, N., Jones, S. D., Murray-Tortarolo, G., Ahlström, A., Doney, S. C., Graven, H., Heinze, C., Huntingford, C., Levis, S., Levy, P. E., Lomas, M., Poulter, B., Viovy, N., Zaehle, S., Zeng, N., Arneth, A., Bonan, G., **Bopp, L.**, Canadell, J. G., Chevallier, F., Ciais, P., Ellis, R., Gloor, M., Peylin, P., Piao, S. L., Le Quéré, C., Smith, B., Zhu, Z., and Myneni, R.: Recent trends and drivers of regional sources and sinks of carbon dioxide, *Biogeosciences*, 12, 653–679, doi:10.5194/bg-12-653-2015, 2015.
10. Roy, T., Lombard, F., **Bopp, L.**, and Gehlen, M. Projected impacts of climate change and ocean acidification on the global biogeography of planktonic Foraminifera. *Biogeosciences* 12, 2873–2889, 2015.
11. Bouttes, N., Roche, D.M., Mariotti, V., and **Bopp, L.**. Including an ocean carbon cycle model into iLOVECLIM (v1.0). *Geosci. Model Dev.* 8, 1563–1576, 2015
12. Wang, R., Balkanski, Y., Boucher, O., **Bopp, L.**, Chappell, A., Ciais, P., Hauglustaine, D., Peñuelas, J., and Tao, S. Sources, transport and deposition of iron in the global atmosphere. *Atmos. Chem. Phys.* 15, 6247–6270, 2015

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1. Dueri S., **L. Bopp** and O. Maury, Projecting the impacts of climate change on skipjack tuna abundance and spatial distribution, *Global Change Biology*, *Global Change Biology*, 20: 742–753. doi: 10.1111/gcb.12460, 2014.
2. Chust, G., Allen, J.I., **Bopp, L.**, Schrum, C., Holt, J., Tsiaras, K., Zavatarelli, M., Chifflet, M., Cannaby, H., Dadou, I., et al. . Biomass changes and trophic amplification of plankton in a warmer ocean. *Global Change Biology* 20, 2124–2139, 2014
3. Doney, S., **Bopp, L.**, and Long, M. Historical and Future Trends in Ocean Climate and Biogeochemistry. *Oceanography* 27, 108–119, 2014
4. Gehlen, M., Seferian, R., Jones, D.O.B., Roy, T., Roth, R., Barry, J., **Bopp, L.**, Doney, S.C., Dunne, J.P., Heinze, C., et al. Projected pH reductions by 2100 might put deep North Atlantic biodiversity at risk. *Biogeosciences* 11, 6955–6967, 2014
5. Guieu, C., Aumont, O., Paytan, A., **Bopp, L.**, Law, C.S., Mahowald, N., Achterberg, E.P., Marañón, E., Salihoglu, B., Crise, A., et al. The significance of the episodic nature of atmospheric deposition to Low Nutrient Low Chlorophyll regions: Atmospheric pulses to LNLC ocean. *Global Biogeochemical Cycles*, 2014
6. Le Quéré, C., Peters, G.P., Andres, R.J., Andrew, R.M., Boden, T.A., Ciais, P., Friedlingstein, P., Houghton, R.A., Marland, G., Moriarty, R., et al. (incl. **L. Bopp**). Global carbon budget 2013. *Earth System Science Data* 6, 235–263.
7. Rodgers, K.B., Aumont, O., Mikaloff Fletcher, S.E., Plancherel, Y., **Bopp, L.**, de Boyer Montégut, C., Ludicone, D., Keeling, R.F., Madec, G., and Wanninkhof, R. Strong sensitivity of Southern Ocean carbon uptake and nutrient cycling to wind stirring. *Biogeosciences* 11, 4077–4098, 2014.
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9. Seferian, R., **Bopp, L.**, Gehlen, M., Swingedouw, D., Mignot, J., Guilyardi, E., and Servonnat, J. Multiyear predictability of tropical marine productivity. *Proceedings of the National Academy of Sciences* 111, 11646–11651, 2014
10. Séférian, R., Ribes, A., and **Bopp, L.**. Detecting the anthropogenic influences on recent changes in ocean carbon uptake: Detecting changes in ocean carbon uptake. *Geophysical Research Letters* 41, 5968–5977, 2014
11. Tagliabue, A., Aumont, O., and **Bopp, L.**. The impact of different external sources of iron on the global carbon cycle. *Geophysical Research Letters* 41, 920–926, 2014.
12. Ciais, P., Dolman, A. J., Bombelli, A., Duren, R., Peregon, A., Rayner, P. J., Miller, C., Gobron, N., Kinderman, G., Marland, G., Gruber, N., Chevallier, F., Andres, R. J., Balsamo, G., **Bopp, L.**, Bréon, F.-M., Broquet, G., et al.: Current systematic carbon-cycle observations and the need for implementing a policy-relevant carbon observing system, *Biogeosciences*, 11, 3547-3602, doi:10.5194/bg-11-3547-2014, 2014.

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1. **Bopp, L.**, Resplandy, L., Orr, J. C., Doney, S. C., Dunne, J. P., Gehlen, M., Halloran, P., Heinze, C., Ilyina, T., Séférian, R., Tjiputra, J., and Vichi, M.: Multiple stressors of ocean ecosystems in the 21st century: projections with CMIP5 models, *Biogeosciences*, 10, 6225-6245, doi:10.5194/bg-10-6225-2013, 2013.
2. Mariotti, V., D. Paillard, D. M. Roche, N. Bouttes and **L. Bopp**, Simulated Last Glacial Maximum D14Catm and the deep glacial ocean carbon reservoir, *Radiocarbon*, 55 (2-3), DOI: 10.2458/azu_js_rc.55.16295, 2013.
3. Séférian, R., **Bopp, L.**, Swingedouw, D., and Servonnat, J.: Dynamical and biogeochemical control

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4. Séférian R., L. Bopp, M. Gehlen, J. Orr, C. Éthé, P. Cadule, O. Aumont, D. Salas-y-Mélia, A. Voldoire, G. Madec, Skill Assessment of Three Earth System Models with Common Marine Biogeochemistry, *Clim. Dyn.*, 40 (9-10), 10.1007/s00382-012-1362-8, 2013.
 5. Resplandy, L., L. Bopp, J. C. Orr, and J. P. Dunne, Role of mode and intermediate waters in future ocean acidification: analysis of CMIP5 models, *Geophys. Res. Lett.*, 40, 3091–3095 doi:10.1002/grl.50414., 2013.
 6. Vancoppenolle M., Bopp L., Madec G., Dunne J., Ilyina T., Halloran P.R., Steiner N.: Future Arctic Ocean primary productivity from CMIP5 simulations: Uncertain outcome, but consistent mechanisms. *Global Biogeochemical Cycles*, doi:10.1002/gbc.20055, 2013.
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 9. Anav A. , P. Friedlingstein, M. Kidston, L. Bopp, P. Ciais, P. Cox, C. Jones, M. Jung, R. Myneni, Z. Zhu, Evaluating the land and ocean components of the global carbon cycle in the CMIP5 Earth System Models, *Journal of Climate* , 26, 6801–6843, doi: <http://dx.doi.org/10.1175/JCLI-D-12-00417.1>, 2013.
 10. Jones, C. D., Friedlingstein, P., Arora, V., Bopp, L., Cadule, P., Reick, C., Segschneider, J., Tjiputra, J., Roelandt, C., Shevliakova, E., Kato, E., Hajima, T., Kawamiya, M., and Lindsay, K.: 21st Century compatible CO₂ emissions and airborne fraction simulated by CMIP5 Earth System models under 4 Representative Concentration Pathways, *Journal of Climate*, 26(13), 4398-4413, doi : 10.1175/JCLI-D-12-00554.1, 2013.
 11. Moore, C.M., Mills, M.M., Arrigo, K.R., Berman-Frank, I., L. Bopp, Boyd, P.W., Galbraith, E.D., Geider, R.J., Guieu, C., Jaccard, S.L., Jickells, T.D., La Roche, J., Lenton, T., Mahowald, N.M., Marañón, E., Marinov, I., Moore, J.K., Nakatsuka, T., Oschlies, A., Saito, M.A., Thingstad, T.F., Tsuda, A., Ulloa, O. and Wallace, D., Oceanic nutrient limitation: processes, patterns and potential for change, *Nature Geosciences*, 6, 701-710. doi:10.1038/ngeo1765, 2013.
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 14. Beaulieu, C., Henson, S. A., Sarmiento, J. L., Dunne, J. P., Doney, S. C., Rykaczewski, R. R., and Bopp, L.: Factors challenging our ability to detect long-term trends in ocean chlorophyll, *Biogeosciences*, 10, 2711-2724, doi:10.5194/bg-10-2711-2013, 2013.
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 18. Le Quéré C., R. J. Andres, T. Boden, T. Conway, R. A. Houghton, J. I. House, G. Marland, G. P. Peters, G. van der Werf, A. Ahlström, R. M. Andrew, L. Bopp, J. G. Canadell, P. Ciais, S. C. Doney,

- C. Enright, P. Friedlingstein, C. Huntingford, A. K. Jain, C. Jourdain, E. Kato, R. F. Keeling, K. Klein Goldewijk, S. Levis, P. Levy, M. Lomas, B. Poulter, M. R. Raupach, J. Schwinger, S. Sitch, B. D. Stocker, N. Viovy, S. Zaehle, and N. Zeng, The global carbon budget 1959–2011, *Earth Syst. Sci. Data*, 1, 1–21, doi:10.5194/essd-1-1-2013, 2013.
19. Dufresne J-L. Foujols, M-A, Denvil, S., Caubel, A., Marti, O., Aumont, O., Balkanski, Y., Bekki, S., Bellenger, H., Benshila, R., Bony S., **Bopp, L.**, Braconnot, P., Brockmann, P., Cadule, P., Cheruy, F., Codron, F., Cozic, A., Cugnet, D., de Noblet, N., Duvel, J-P., Ethé, C., Fairhead, L., Fichefet, T., Flavoni, S., Friedlingstein, P., Grandpeix, J-Y., Guez, L., Guilyardi, E., Hauglustaine, D., Hourdin, F., Idelkadi, A., Ghattas, J., Joussaume, S., Kageyama, M., Krinner, G., Labetoulle, S., Lahellec, A., Lefebvre, M-P., Lefevre, F., Levy, C., Li, Z. X., Lloyd, J., Lott, F., Madec, G., Mancip, M., Marchand, M., Masson, S., Meurdesoif, Y., Mignot, J., Musat, I., Parouty, S., Polcher, J., Rio, C., Schulz, M., Swingedouw, D., Szopa, S., Talandier, C., Terray, P., Viovy, N: Climate change projections using the IPSL-CM5 Earth System Model: from CMIP3 to CMIP5, *Clim. Dyn.*, 40 (9-10), 2123-2165, doi :10.1007/s00382-012-1636-1, 2013.
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