

Publication List

Clément de Boyer Montégut

Research scientist in physical oceanography and climate

<https://www.umr-lops.fr/deboyer>

Web Of Science ResearcherID F-9717-2010 (h-index 25, cit: 4299):

<https://www.webofscience.com/wos/author/rid/F-9717-2010>

Google Scholar (h-index 27) :

<http://scholar.google.fr/citations?user=5q5vrZMAAAAJ>

Contents:

- ❖ 1. Refereed publications (rank A) : 34 published/accepted (in journals with impact factor > 1)
- ❖ 2. Not Refereed publications (rank B) : 2 published (newsletters, scientific reports...)
- ❖ 3. Ph.D. Thesis dissertation

1. Refereed publications :

NB: Publications with a plus sign (e.g. [19]+) are those for which a dataset has also been produced and made available publicly on the web (see links on the above webpage from umr-lops).

2023

Tréguier, A.-M., C. de Boyer Montégut, A. Bozec, E. P. Chassignet, B. Fox-Kemper, A. McC. Hogg, D. Iovino, A. E. Kiss, J. Le Sommer, C. Lique1, Y. Li, P. Lin, H. Liu, G. Serazin, D. Sidorenko, Q. Wang, X. Xu, and S. Yeager. The Mixed Layer Depth in the Ocean Model Intercomparison Project (OMIP): Impact of Resolving Mesoscale Eddies, *Geosci. Model Dev.*, accepted

Sérazin, G., A.-M. Tréguier, and C. de Boyer Montégut. A seasonal climatology of the upper ocean pycnocline, *Frontiers in Marine Science*, accepted

Montero, M., N. Reul, C. de Boyer Montégut, J. Vialard, S. Brachet, S. Guimbard, D. Vandemark, and J. Tournadre, Sea Surface Salinity estimates from AMSR-E radiometer in the Bay of Bengal: algorithm principles and limits, *IEEE-TGRS*, accepted

2020

[31] Combot, C., Y. Quilfen, A. Mouche, J. Gourrion, C. de Boyer Montégut, B. Chapron, and J. Tournadre (2020). Space-based observations of surface signatures in the wake of the 2018 Eastern Pacific Tropical Cyclones. In: Copernicus Marine Service Ocean State Report, Issue 4, Journal of Operational Oceanography, 13:sup1, s132–s137.
<http://dx.doi.org/10.1080/1755876X.2020.1785097>

2017

[30] Keerthi, M. G., M. Lengaigne, M. Levy, J. Vialard, V. Parvathi, C. de Boyer Montégut, C. Ethé, O. Aumont, I. Suresh, and P.M. Muraleedharan (2017), Physical control of the interannual variations of the winter chlorophyll bloom in the northern Arabian Sea, *Biogeosciences*, 14, 3615-3632.
<http://dx.doi.org/10.5194/bg-14-3615-2017>

- [29] Nidheesh, A.G., M. Lengaigne, J. Vialard, T. Izumo, A.S. Unnikrishnan, B. Meyssignac, B. Hamlington, and C. de Boyer Montégut (2017), Robustness of observation-based decadal sea level variability in the Indo-Pacific Ocean, *Geophys. Res. Lett.*, 44, 7391-7400.
<http://dx.doi.org/10.1002/2017GL073955>

2016

- [28] Akhil, V. P., M. Lengaigne, J. Vialard, F. Durand, M. G. Keerthi, A. V. S. Chaitanya, F. Papa, V. V. Gopalakrishna, and C. de Boyer Montégut (2016), A modeling study of processes controlling the Bay of Bengal sea surface salinity interannual variability, *J. Geophys. Res. Oceans*, 121.
<http://dx.doi.org/10.1002/2016JC011662>
- [27] Akhil, V. P., M. Lengaigne, F. Durand, J. Vialard, A. V. S. Chaitanya, M. G. Keerthi, V. V. Gopalakrishna, J. Boutin, and C. de Boyer Montégut (2016), Assessment of seasonal and year-to-year surface salinity signals retrieved from SMOS and Aquarius missions in the Bay of Bengal, *International Journal of Remote Sensing*, 37 (5), 1089-1114.
<http://dx.doi.org/10.1080/01431161.2016.1145362>
- [26] Keerthi, M. G., M. Lengaigne, K. Drushka, J. Vialard, C. de Boyer Montégut, S. Pous, M. Levy, and P. M. Muraleedharan (2016), Intraseasonal variability of mixed layer depth in the tropical Indian Ocean, *Clim. Dyn.*, 46, 2633–2655.
<http://dx.doi.org/10.1007/s00382-015-2721-z>

2014

- [25] Rodgers, K. B., O. Aumont, S. E. Mikaloff Fletcher, Y. Plancherel, L. Bopp, C. de Boyer Montégut, D. Iudicone, R. F. Keeling, G. Madec, and R. Wanninkhof (2014), Strong sensitivity of Southern Ocean carbon uptake and nutrient cycling to wind stirring, *Biogeosciences*, 11, 4077-4098.
[\[http://dx.doi.org/10.5194/bg-11-4077-2014\]](http://dx.doi.org/10.5194/bg-11-4077-2014) / [\[pdf\]](#)
- [24] Benschila, R., F. Durand, S. Masson, R. Bourdallé-Badie, C. de Boyer Montégut, F. Papa, and G. Madec (2014), The upper Bay of Bengal salinity structure in a high-resolution model, *Ocean Modelling*, 74, 36-52.
[\[http://dx.doi.org/10.1016/j.ocemod.2013.12.001\]](http://dx.doi.org/10.1016/j.ocemod.2013.12.001) / [\[pdf\]](#)
- [23] Praveen Kumar, B., J. Vialard, M. Lengaigne, V. S. N. Murty, G. R. Foltz, M. J. McPhaden, S. Pous, and C. de Boyer Montégut (2014), Processes of interannual mixed layer temperature variability in the thermocline ridge of the Indian Ocean, *Clim. Dyn.*, 43, 2377-2397.
[\[http://dx.doi.org/10.1007/s00382-014-2059-y\]](http://dx.doi.org/10.1007/s00382-014-2059-y) / [\[pdf\]](#)
- [22] de Boyer Montégut, C., F. Durand, R. Bourdallé-Badie, and B. Blanke (2014), Role of fronts in the formation of Arabian Sea barrier layers during summer monsoon, *Ocean Dyn.*, 64, 809-822.
[\[http://dx.doi.org/10.1007/s10236-014-0716-7\]](http://dx.doi.org/10.1007/s10236-014-0716-7) / [\[pdf\]](#)
- [21] Akhil, V. P., F. Durand, M. Lengaigne, J. Vialard, M. G. Keerthi, V. V. Gopalakrishna, C. Deltel, F. Papa, and C. de Boyer Montégut (2014), A modelling study of the processes of surface salinity seasonal cycle in the Bay of Bengal, *J. Geophys. Res. Oceans*, 119.
[\[http://dx.doi.org/10.1002/2013JC009632\]](http://dx.doi.org/10.1002/2013JC009632) / [\[pdf\]](#)

2013

[20]+ Cabanes, C., A. Grouazel, K. von Schuckmann, M. Hamon, V. Turpin, C. Coatanoan, F. Paris, S. Guinehut, C. Boone, N. Ferry, C. de Boyer Montégut, T. Carval, G. Reverdin, S. Pouliquen, and P.-Y. Le Traon (2013), The CORA dataset: validation and diagnostics of in-situ ocean temperature and salinity measurements, *Ocean Sci.*, 9, 1–18.
[\[http://dx.doi.org/10.5194/os-9-1-2013\]](http://dx.doi.org/10.5194/os-9-1-2013) / [\[pdf\]](#) / [data \(CORA dataset\)](#)

[19]+ Keerthi, M. G., M. Lengaigne, J. Vialard, C. de Boyer Montégut, and P. M. Muraleedharan (2013), Interannual variability of the Tropical Indian Ocean mixed layer depth, *Clim. Dyn.*, 40, 743-759.
[\[http://dx.doi.org/10.1007/s00382-012-1295-2\]](http://dx.doi.org/10.1007/s00382-012-1295-2) / [\[pdf\]](#) / [data \(interannual MLD in Indian Ocean\)](#)

2011

[18] Martinez, E., D. Antoine, F. d'Ortenzio, and C. de Boyer Montégut (2011), Phytoplankton spring and fall blooms in the North Atlantic in the 1980s and 2000s, *J. Geophys. Res. Oceans*, 116, C11029, 11 pp.
[\[http://dx.doi.org/10.1029/2010JC006836\]](http://dx.doi.org/10.1029/2010JC006836) / [\[pdf\]](#)

[17] Souza, J. M. A. C., C. de Boyer Montégut, C. Cabanes, and P. Klein (2011), Estimation of the Aghulas ring impacts on meridional heat fluxes and transport using ARGO floats and satellite data, *Geophys. Res. Lett.*, 38, L21602, 5pp.
[\[http://dx.doi.org/10.1029/2011GL049359\]](http://dx.doi.org/10.1029/2011GL049359) / [\[pdf\]](#)

[16] Souza, J. M. A. C., C. de Boyer Montégut, and P.-Y. Le Traon (2011), Comparison between three implementations of automatic identification algorithms for the quantification and characterization of mesoscale eddies in the South Atlantic Ocean, *Ocean Sci.*, 7, 317-334.
[\[http://dx.doi.org/10.5194/os-7-317-2011\]](http://dx.doi.org/10.5194/os-7-317-2011) / [\[pdf\]](#)

2010

[15] Izumo, T., J. Vialard, M. Lengaigne, C. de Boyer Montégut, S. K. Behera, J.-J. Luo, S. Cravatte, S. Masson, and T. Yamagata (2010), Influence of the Indian Ocean Dipole on following year's El Nino, *Nature Geo.*, 3, 168-172.
[\[http://dx.doi.org/10.1038/NCEO760\]](http://dx.doi.org/10.1038/NCEO760) / [\[pdf\]](#) / [suppl. informations \[pdf\]](#) / [news and views \[pdf\]](#)

[14] Izumo, T., S. Masson, J. Vialard, C. de Boyer Montégut, S. K. Behera, G. Madec, K. Takahashi, and T. Yamagata (2009), Low and high frequency Madden-Julian oscillations in austral summer: interannual variations, *Clim. Dyn.*, 35 (4), 669-683.
[\[http://dx.doi.org/10.1007/s00382-009-0655-z\]](http://dx.doi.org/10.1007/s00382-009-0655-z) / [\[pdf\]](#)

2009

[13]+ Mignot, J., C. de Boyer Montégut, and M. Tomczak (2009), On the porosity of barrier layers, *Ocean Sci.*, 5, 379-387.
[\[http://dx.doi.org/10.5194/os-5-379-2009\]](http://dx.doi.org/10.5194/os-5-379-2009) / [\[pdf\]](#) / [suppl. material \[pdf\]](#) / [data \(BLP global climatology\)](#)

[12] Vialard, J., J.P. Duvel, M. McPhaden, P. Bouruet-Aubertot, B. Ward, E. Key, D. Bourras, R. Weller, P. Minnett, A. Weill, C. Cassou, L. Eymard, T. Fristedt, C. Basdevant, Y. Dandoneau, O. Duteil, T. Izumo, C. de Boyer Montégut, S. Masson, and F. Marsac (2009), Cirene: air-sea interactions in the Seychelles-Chagos thermocline ridge region, *Bull. Amer. Meteor. Soc.*, jan. 2009, 45-61.
[\[http://dx.doi.org/10.1175/2008BAMS2499.1\]](http://dx.doi.org/10.1175/2008BAMS2499.1) / [\[pdf\]](#) / [supplementary material \[pdf\]](#)

2008

[11] Vialard, J., G. Foltz, M. McPhaden, J.-P. Duvel, and C. de Boyer Montégut (2008), Strong Indian Ocean sea surface temperature signals associated with the Madden-Julian Oscillation in late 2007 and early 2008, *Geophys. Res. Lett.*, 35, L19608.
[\[http://dx.doi.org/10.1029/2008GL035238\]](http://dx.doi.org/10.1029/2008GL035238) / [\[pdf\]](#)

[10] Izumo, T., C. de Boyer Montégut, J.-J. Luo, S. K. Behera, S. Masson, and T. Yamagata (2008), The role of the western Arabian Sea upwelling in Indian monsoon rainfall variability, *J. Climate*, 21, 5603-5623.
[\[http://dx.doi.org/10.1175/2008JCLI2158.1\]](http://dx.doi.org/10.1175/2008JCLI2158.1) / [\[pdf\]](#)

[9] Rodgers, K. B., J. L. Sarmiento, O. Aumont, C. Crevoisier, C. de Boyer Montégut, and N. Metz (2008), A wintertime uptake window for anthropogenic CO₂ in the North Pacific, *Global Biogeochem. Cycles*, 22, GB2020.
[\[http://dx.doi.org/10.1029/2006GB002920\]](http://dx.doi.org/10.1029/2006GB002920) / [\[pdf\]](#)

2007

[8] Levy, M., D. Shankar, J.-M. André, S. S. C. Shenoi, F. Durand, and C. de Boyer Montégut (2007), Basin-wide seasonal evolution of the Indian Ocean's phytoplankton blooms, *J. Geophys. Res. Oceans*, 112, C12014.
[\[http://dx.doi.org/10.1029/2007JC004090\]](http://dx.doi.org/10.1029/2007JC004090) / [\[pdf\]](#)

[7]+ Mignot, J., C. de Boyer Montégut, A. Lazar, and S. Cravatte (2007), Control of salinity on the mixed layer depth in the world ocean: 2. Tropical areas, *J. Geophys. Res. Oceans*, 112, C10010.
[\[http://dx.doi.org/10.1029/2006JC003954\]](http://dx.doi.org/10.1029/2006JC003954) / [\[pdf\]](#) / [data \(BLT global climatology\)](#)

[6]+ de Boyer Montégut, C., J. Mignot, A. Lazar, and S. Cravatte (2007), Control of salinity on the mixed layer depth in the world ocean: 1. General description, *J. Geophys. Res. Oceans*, 112, C06011.
[\[http://dx.doi.org/10.1029/2006JC003953\]](http://dx.doi.org/10.1029/2006JC003953) / [\[pdf\]](#) / [data \(BLT global climatology\)](#)

[5] Vallina, S. M., R. Simo, S. Gasso, C. de Boyer Montégut, E. del Rio, E. Jurado, and J. Dachs (2007), Analysis of a potential "solar radiation dose-dimethylsulfide-cloud condensation nuclei" link from globally mapped seasonal correlations, *Global Biogeochem. Cycles*, 21, GB2004.
[\[http://dx.doi.org/10.1029/2006GB002787\]](http://dx.doi.org/10.1029/2006GB002787) / [\[pdf\]](#)

[4] de Boyer Montégut, C., J. Vialard, S. S. C. Shenoi, D. Shankar, F. Durand, C. Ethé, and G. Madec (2007), Simulated seasonal and interannual variability of mixed layer heat budget in the northern Indian Ocean, *J. Climate*, 20, 3249-3268.
[\[http://dx.doi.org/10.1175/JCLI4148.1\]](http://dx.doi.org/10.1175/JCLI4148.1) / [\[pdf\]](#)

[3] Durand, F., D. Shankar, C. de Boyer Montégut, S. S. C. Shenoi, B. Blanke, and G. Madec (2007), Modeling the barrier-layer formation in the South-Eastern Arabian Sea, *J. Climate*, 20, 2109-2120.
[\[http://dx.doi.org/10.1175/JCLI4112.1\]](http://dx.doi.org/10.1175/JCLI4112.1) / [\[pdf\]](#)

2005

[2]+ d'Ortenzio, F., D. Iudicone, C. de Boyer Montégut, P. Testor, D. Antoine, S. Marullo, R. Santoleri, and G. Madec (2005), Seasonal variability of the mixed layer depth in the Mediterranean sea as derived from in situ profiles, *Geophys. Res. Lett.*, 32, L12605.
[\[http://dx.doi.org/10.1029/2005GL022463\]](http://dx.doi.org/10.1029/2005GL022463) / [\[pdf\]](#) / [data \(MLD mediterranean sea climatology\)](#)

2004

- [1]+ de Boyer Montégut, C., G. Madec, A. S. Fischer, A. Lazar, and D. Iudicone (2004), Mixed layer depth over the global ocean: an examination of profile data and a profile-based climatology, *J. Geophys. Res. Oceans*, 109, C12003.
[\[http://dx.doi.org/10.1029/2004JC002378\]](http://dx.doi.org/10.1029/2004JC002378) / [\[pdf\]](#) / [data \(MLD global ocean climatology\)](#)

2. Not Refereed publications (newsletters, scientific reports...) :

2010

Cabanes C., de Boyer Montégut C., Coatanoan C., Ferry N., Pertuisot C., Von Schuckmann K., Petit De La Villeon L., Carval T., Pouliquen S., Le Traon P.-Y. (2010). CORA (Coriolis Ocean database for Re-Analyses), a new comprehensive and qualified ocean in-situ dataset from 1990 to 2008 and its use in GLORYS. *Mercator/Coriolis Quarterly Newsletter*, 37, 15-19.

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Cabanes C., de Boyer Montégut C., Von Schuckmann K., Coatanoan C., Pertuisot C., Petit De La Villeon L., Carval T., Pouliquen S., Le Traon P.-Y. (2010). CORA -Coriolis Ocean database for Re-Analyses-, a new comprehensive and qualified ocean in-situ dataset from 1990 to 2008. *Mercator Quarterly Newsletter*, 36, 5-7.

[\[Archimer Open Access version\]](#) / [\[pdf\]](#)

3. PhD Thesis Dissertation :

2005

de Boyer Montégut, C. (2005), Oceanic mixed layer and upper ocean heat and salinity budget in the North Indian Ocean, PhD thesis (in french), *University Pierre et Marie Curie, Paris VI*, 181 pp.

[\[online thesis from archive of cnrs ccsc web server\]](#) / [\[pdf\]](#)
