

## BoBBLE Publications

1. Roy R., Vinayachandran, P. N., George, J. V., Sarkar, A., Prakash, S., & Parida, C. (2023). Why the Bay of Bengal oxygen minimum zone does not cross the tipping point?, DSR-I, (Submitted.).
2. Nayak, A.A., Vinayachandran, P.N. & George, J.V. (2023) Arabian Sea high salinity core supplies oxygen to Bay of Bengal Oxygen Minimum zone, Submitted.
3. Singh, U., Vinayachandran, P. N., Natarajan, V. (2023) Advection-Based Tracking and Analysis of Salinity Movement in the Ocean, Computers & Geosci, Submitted.
4. Prasanth, R., Vijith, V., & Vinayachandran, P. N. (2023). Formation, maintenance, and diurnal variability of subsurface chlorophyll maximum during the summer monsoon in the southern Bay of Bengal. *Progress in Oceanography*, 212, 102974.
5. Nayak, A. A., N, V. P., & George, J. V. (2022). Turbulent dissipation rates across the Summer Monsoon Current. *Ocean Dynamics*, 72(9-10), 695-714.
6. Sheehan, P. M., Matthews, A. J., Webber, B. G., Sanchez-Franks, A., Klingaman, N. P., & Vinayachandran, P. N. (2023). On the influence of the Bay of Bengal's sea surface temperature gradients on rainfall of the South Asian monsoon. *J. Clim.*, 1-32.
7. Kottapalli, A., & Vinayachandran, P. N. (2022). On the weakening of northward propagation of intraseasonal oscillations during positive Indian Ocean Dipole events. *Clim. Dynamics*, 1-24..
8. Singh, U., Dhipu, T. M., Vinayachandran, P. N., Natarajan, V. (2022). Front and skeleton features based methods for tracking salinity propagation in the ocean. *Comp. & Geosci.*, 159.
9. Parida, C., Lotliker, A. A., Roy, R., & Vinayachandran, P. N. (2022). Radiant heating rate associated with chlorophyll dynamics in upper ocean of Southern Bay of Bengal: A case study during Bay of Bengal Boundary Layer Experiment. DSR Part II.
10. Roy, R., Vinayachandran, P.N. Sarkar, A., George, J., Parida, C., Lotliker, A., Prakash, S., & Choudhury, S.B. (2021). Southern Bay of Bengal: A possible hotspot for CO<sub>2</sub> emission during the summer monsoon. *Progress in Oceanography*, 197.

11. Jain, V., Shankar, D., Vinayachandran, P. N., Mukherjee, A., & Amol, P. (2021). Role of ocean dynamics in the evolution of mixed-layer temperature in the Bay of Bengal during the summer monsoon. *Ocean Modelling*, 168, 101895.
12. Gadi, R., Vinayachandran, P. N., & Subramani, D. N. (2021). Data-driven feature-oriented modelling of Southwest Monsoon Current. *Ocean Modelling*, 168, 101912..
13. Pargaonkar, S. M., & Vinayachandran, P. N. (2021). Wind forcing of the Ganga-Brahmaputra river plume. *Ocean Dynamics*, 71(2), 125-156.
14. George, J. V., Vinayachandran, P. N., & Nayak, A. A. (2021). Enhanced double-diffusive salt flux from the high-salinity core of Arabian Sea origin waters to the Bay of Bengal. *JPO*, 51(2).
15. Giddings, J., Heywood, K. J., Matthews, A. J., Joshi, M. M., Webber, B. G., Sanchez-Franks, A., King, B. A., & Vinayachandran, P. N. (2021). Spatial and temporal variability of solar penetration depths in the Bay of Bengal and its impact on sea surface temperature during the summer monsoon. *Ocean Science*, 17(4), 871-890.
16. Thushara, V., & Vinayachandran, P. N. (2020). Unprecedented surface chlorophyll blooms in the southeastern Arabian Sea during an extreme negative Indian Ocean Dipole. *Geophysical Research Letters*, 47(13), e2019GL085026.
17. Vijith, V., Vinayachandran, P. N., Webber, B. G., Matthews, A. J., George, J. V., Kannaujia, V. K., Lotlikar A. A., & Amol, P. (2020). Closing the sea surface mixed layer temperature budget from in situ observations alone: Operation Advection during BoBBLE. *Sci. Rep.*, 10(1).
18. Vinayachandran, P. N., Das, U., Shankar, D., Jahfer, S., Behara, A., Nair, T. B., & Bhat, G. S. (2020). Maintenance of the southern Bay of Bengal cold pool. *DSR-II*.
19. Sheehan, P. M., Webber, B. G., Sanchez-Franks, A., Matthews, A. J., Heywood, K. J., & Vinayachandran, P. N. (2020). Injection of oxygenated Persian Gulf Water into the southern Bay of Bengal. *Geophysical Research Letters*, 47(14), e2020GL087773.
20. Rath, S., Vinayachandran, P. N., Behara, A., & Neema, C. P. (2019). Dynamics of summer monsoon current around Sri Lanka. *Ocean Dynamics*, 69(10), 1133-1154.
21. George, J. V., Vinayachandran, P. N., Vijith, V., Thushara, V., Nayak, A. A., Pargaonkar, S. M., Amol, P., Vijayakumar, K., & Matthews, A. J. (2019).

Mechanisms of barrier layer formation and erosion from in situ observations in the Bay of Bengal. *JPO*, 49(5), 1183-1200.

22. Thushara, V., Vinayachandran, P. N. M., Matthews, A. J., Webber, B. G., & Queste, B. Y. (2019). Vertical distribution of chlorophyll in dynamically distinct regions of the southern Bay of Bengal. *Biogeosciences*, 16(7), 1447-1468.
23. Sanchez-Franks, A., Webber, B. G. M., King, B. A., Vinayachandran, P. N., Matthews, A. J., Sheehan, P. M., Behara, A., & Neema, C. P. (2019). The railroad switch effect of seasonally reversing currents on the Bay of Bengal high-salinity core. *Geophysical Research Letters*, 46(11), 6005-6014.
24. Sanchez-Franks, A., Kent, E. C., Matthews, A. J., Webber, B. G., Peatman, S. C., & Vinayachandran, P. N. (2018). Intraseasonal variability of air–sea fluxes over the Bay of Bengal during the southwest monsoon. *Journal of Climate*, 31(17), 7087-7109.
25. Webber, B. G., Matthews, A. J., Vinayachandran, P. N., Neema, C. P., Sanchez-Franks, A., Vijith, V., Amol, P., & Baranowski, D. B. (2018). The dynamics of the Southwest Monsoon current in 2016 from high-resolution in situ observations and models. *Journal of Physical Oceanography*, 48(10), 2259-2282,
26. Behara, A., & Vinayachandran, P. N. (2016). An OGCM study of the impact of rain and river water forcing on the Bay of Bengal. *JGR: Oceans*, 121(4), 2425-2446,
27. Thushara, V., & Vinayachandran, P. N. (2016). Formation of summer phytoplankton bloom in the northwestern Bay of Bengal in a coupled physical-ecosystem model. *JGR: Oceans*, 121(12), 8535-8550,
28. Vinayachandran, P. N., Matthews, et al., (2018). BoBBLE (Bay of Bengal Boundary Layer Experiment), *Bull. Amer. Met. Soc.*.
29. Adrian Matthews, P. N. Vinayachandran, Karen Heywood, S. S. C. Shenoi, T. Sudhakar, Manoj Joshi, M. S. Girishkumar, A. Chatterjee, G. S. Bhat, Brian King, Elizabeth Kent, Nick Klingaman, & A. K. Mitra, (2015). BoBBLE: Bay of Bengal Boundary Layer Experiment, *CLIVAR Exchanges No. 68, Vol. 19, No. 3.*