

Sumatra mooring for the eastern Indian Ocean upwelling research

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The south of Sumatra-Java is known as a strong upwelling region, and a seasonal upwelling appears from September to November in usual, associated with the monsoonal wind. Several studies indicate seasonal upwelling at the region may also affect development process of the Indian Ocean Dipole (IOD) events. However, in situ measurements at the region are limited. To contribute to the eastern Indian Ocean upwelling research initiative (EIOURI), a surface slack-line mooring, named Sumatra mooring, has been deployed at 5S 100E off south Sumatra at 03 December 2017 by R/V Mirai (MR17-08). The mooring observed air temperature, relative humidity, barometric pressure, precipitation, and shortwave as meteorological variables, and temperature at 12 layers until 500 m depth, salinity at 5 layers until 100 m depth, and ocean currents at 10 m depth as oceanic variables. The mooring will observe these variables more than 1 year from deployment, and capture basic information of the thermocline and mixed layer variation. The observed results will be shown in the presentation.

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