

## Cruise Summary

### 1. Cruise Information

- Cruise ID MR15-04
- Name of vessel Mirai
- Title of the cruise The observational study of the heavy rainfall zone in the eastern Indian Ocean
- Chief scientist [Affiliation] Masaki Katsumata [JAMSTEC]
- Representative of the Science Party [Affiliation] Kunio Yoneyama [JAMSTEC]
- Title of proposal Observational study of the heavy rain zone in the tropical eastern Indian ocean
- Cruise period 5 Nov. 2015 - 20 Dec. 2015
- Ports of departure / call / arrival Sekinehama - Hachinohe - Jakarta
- Research area tropical eastern Indian ocean

### 2. Overview of the Observation

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In order to investigate the atmospheric and oceanic variations and their mechanisms in the heavy rain zone in the tropical eastern Indian ocean, the intensive observations by using R/V Mirai were carried out. This cruise was a component of the intensive field campaign named Pre-YMC, as a pilot study of the project “Years of the Maritime Continent (YMC)”.

The main part of the cruise was dedicated to perform stationary observation at (4-04N, 101-54E) to obtain high-resolution time series of the oceanic and atmospheric variations. R/V Mira was at the station for 25 days from Nov.23 to Dec.17. Before and after the stationary observation, the oceanic cross section off Sumatra Island was obtained. The continuous observation instruments were also in operation in the period other than stationary observation or cross section observation.