

KY12-08 Cruise Summary

1. Cruise Information

1.1 Cruise ID

KY12-08

1.2 Name of vessel

RV Kaiyo

1.3 Title of the cruise

Tropical Ocean Climate Study and Operation of TRITON buoys.

1.4 Chief scientist [Affiliation]

Yutaka Ohta [JAMSTEC Marine Technology Center]

1.5 Representative of the Science Party [Affiliation]

Kentaro Ando [JAMSTEC Research Institute of Global Change]

Yasuhisa Ishihara [JAMSTEC Marine Technology Center]

1.6 Cruise period

May 19, 2012 - July 9, 2012

1.7 Ports of call

Yokohama, Japan (Departure: May 19, 2012)

Sembawang, Singapore (Arrival: June 1, 2012 Departure June 3, 2012)

Bali, Indonesia (Arrival: June 24, 2012, Departure June25, 2012)

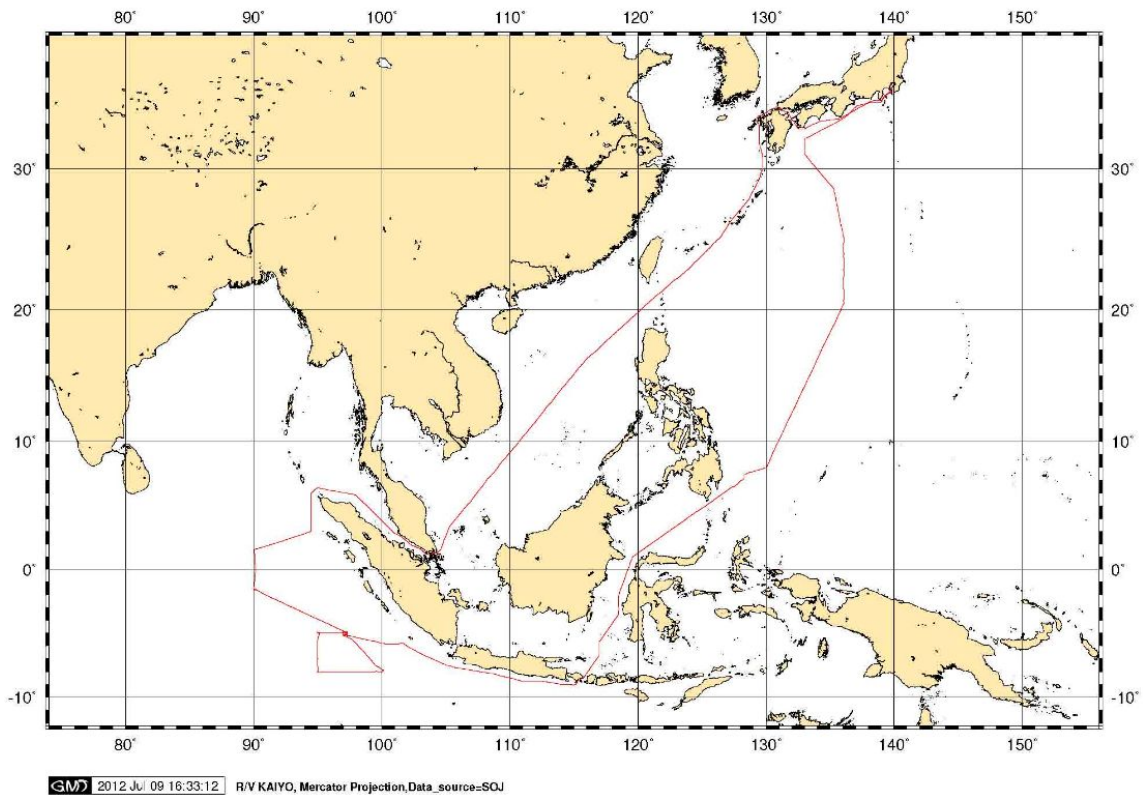
Yokosuka, Japan (Arrival: July 9, 2012)

1.8 Research area

Equatorial eastern Indian Ocean

1.9 Cruise track

KY12-08



2. Overview of the Observation

2.1 Purpose

The purpose of this cruise is to observe ocean and atmosphere in the equatorial eastern Indian Ocean for better understanding of climate variability involving the Indian Ocean Dipole mode (IOD) event. And the main missions of this cruise are maintenances and development of buoy network system in equatorial eastern Indian Ocean.

2.2 Observation summary

2.2.1 Operation of the TRITON/m-TRITON buoys

m - TRITON mooring deployment (include a new site #20; 5S97.25E):	4 moorings
m - TRITON mooring recovery (#18, 19; 1.5S 90E, 8S95E):	2 moorings
TRITON mooring recovery (#17 5S95E):	1 mooring

Locations of recovery and deployment are as follow:

(1) Locations of Recovery

①#17

Nominal location	5S95E (TRITON)
ID number at JAMSTEC	17504
Deployed date (UTC)	13 Jan. 2011
Recovered date (UTC)	14 Jun. 2012
Exact location	05 - 01.97S, 94 - 58.60E
Depth	5,014 m

②#18

Nominal location	1.5S90E (m-TRITON)
ID number at JAMSTEC	18505
Deployed date (UTC)	16 Jan. 2011
Recovered date (UTC)	10 Jun. 2012
Exact location	01 - 36.18S, 90 - 04.44 E
Depth	4,716 m

③#19

Nominal location	8S95E (m-TRITON)
ID number at JAMSTEC	19502
Deployed date (UTC)	11 Jan. 2011
Recovered date (UTC)	16 Jun. 2012
Exact location	08 - 04.05S, 95 - 07.40E
Depth	5,261 m

(2) Locations of Deployment

①#17

Nominal location	5S95E (m-TRITON)
ID number at JAMSTEC	17505
Deployed date (UTC)	13 Jun. 2012
Exact location	04 - 56.93S, 94 - 58.51E
Depth	5,023 m

②#18

Nominal location	1.5S90E (m-TRITON)
ID number at JAMSTEC	18506
Deployed date (UTC)	09 Jun. 2012
Exact location	01 - 39.34S, 89 - 59.74E
Depth	4,700 m

③#19

Nominal location	8S95E (m-TRITON)
ID number at JAMSTEC	19503
Deployed date (UTC)	15 Jun. 2012
Exact location	07 - 59.97S, 95 - 02.39E
Depth	5,243 m

④#20

Nominal location	5S97.25E (m-TRITON)
ID number at JAMSTEC	20501
Deployed date (UTC)	12 Jun. 2012
Exact location	04 - 57.55S, 97 - 17.13E
Depth	4,988 m

2.2.2 Subsurface ADCP moorings

Subsurface ADCP mooring deployment (Eq90E):	1 mooring
Subsurface ADCP mooring recovery (Eq90E):	1 mooring

2.2.3 CTD measurements

CTD (Conductivity, Temperature and Depth) and water sampling:	9 casts
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2.2.4 ZCTD measurements

XCTD observation:	23 casts
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