

KY09-01 cruise summary

1. Cruise ID number

KY09-01

2. Name of ship

Kaiyo

3. Title of the cruise

Tropical Ocean Climate Study

4. Chief Scientists

Kentaro Ando (JAMSTEC) for Leg1

Yasuhisa Ishihara (JAMSTEC) for Leg2

Shoichiro Baba (JAMSTEC) for Leg 3

5. Representatives of science party

Dr. Kentaro Ando: Tropical Ocean Climate Study

Mr. Yasuhisa Ishihara: Operation of TRITON buoy

Dr. Keisuke Mizuno: Indian Ocean Moored Buoy Network Initiative for Climate Study
(Japan Earth Observation System Promotion Program by MEXT)

Dr. Yugo Kanaya: MAX-DOAS measurements of aerosols and NO₂

6. Period of the cruise

Feb 9, 2009 (Yokohama, Japan) – May 11, 2009 (Yokosuka, Japan)

7. Port calls

Yokohama

Guam

Bali

Yokohama

8. Observation area

Western Tropical Pacific Ocean

Eastern Tropical Indian Ocean

9. Outline of the research

TRITON mooring recovery and re-installation: 6 moorings were deployed and recovered

m-TRITON mooring recovery and re-installation: 2 mooring were deployed and recovered

Subsurface ADCP mooring recovery and re-installation: 1 moorings were deployed and recovered

CTD (Conductivity, Temperature and Depth) and water sampling: 61 casts

XCTD: 48 casts

XBT: 46 casts

Current measurements by shipboard ADCP: continuous

Sea surface temperature, by seasnake : continuous

Surface meteorology: continuous

Aerosols and NO₂ : continuous