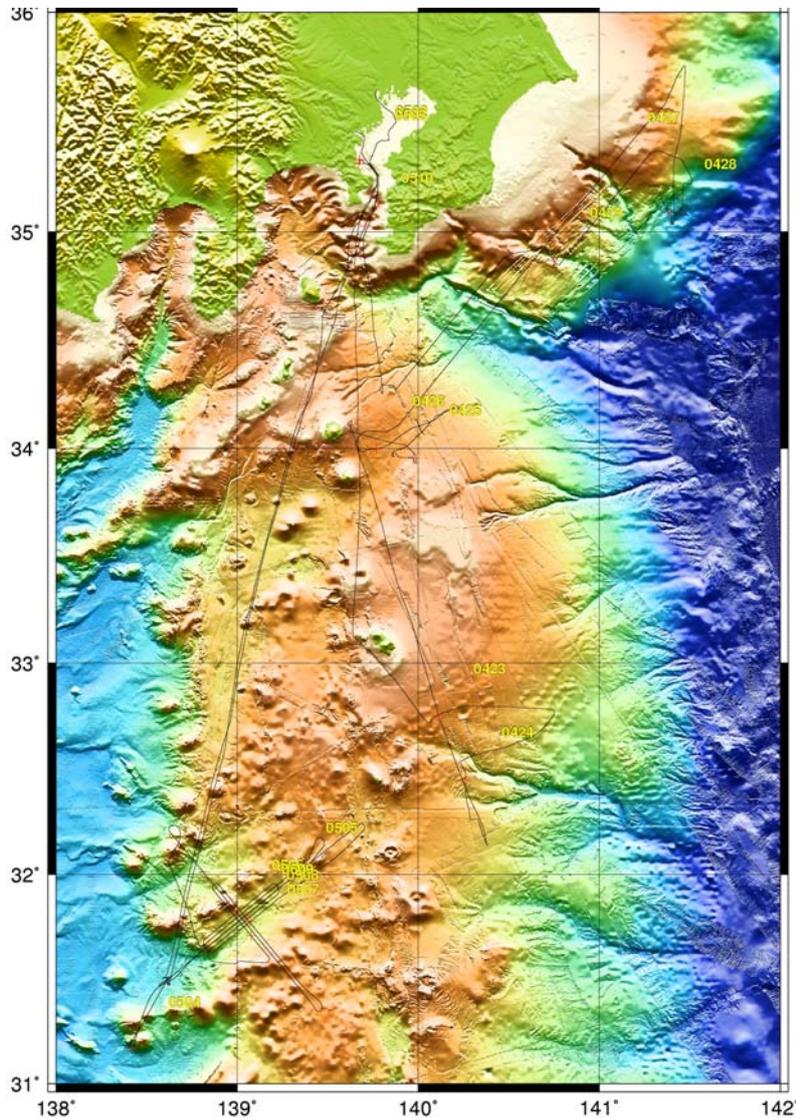


Cruise summary

1. Cruise Information :

- (1) Cruise number, Ship name: KR08-04, R/V Kairei
- (2) Title of the cruise: 2008FY “Seismic study at the Izu-Ogasawara region”
- (3) Chief Scientist [Affiliation]: Seiichi MIURA [JAMSTEC]
- (4) Representative of Science Party [Affiliation]:
 - 1) Yoshiyuki KANEDA [JAMSTEC],
 - 2) Reiji KOBAYASHI [Kagoshima University]
- (5) Title of proposal:
 - 1) Crustal growth of the Izu-Ogasawara oceanic island arc - Seismicity study for IODP Project IBM-,
 - 2) Site survey study for IODP proposal of Kanto Asperity Project(707)
- (6) Cruise period, Port call: 2008/4/22-5/10, Yokohama-shinko to Harumi
- (7) Research Area: Off-Boso, Izu-Ogasawara
- (8) Research Map:



2. Overview of Observation :

(1) Objectives :

IFREE have conducted seismic surveys intensively in the Izu-Ogasawara area to understand crustal evolution of oceanic arcs since 2004. The Izu-Ogasawara arc is composed of subducting oceanic crust beneath the oceanic crust. The objectives of this cruise are to reveal the structural characteristics of arcs and basins of the Izu-Ogasawara area with multi-channel seismic system (MCS) contributing the site characterizations of drill points of Project IBM sites. Moreover, MCS survey is also conducted off-Boso area for the cruise proposal for KAP.

(2) List of observation instruments :

1) Multi-channel seismic (MCS) reflection system

MCS survey have been conducted off-Boso and Izu-Ogasawara areas using a tuned airgun array of 7800 cu. in. and a 444-ch hydrophone streamer with 12.5-m group interval. The MCS system has been installed in 2007FY to acquire the high-resolution data and conducted sea trials at first of the curise.

2) Ocean bottom seismometer (OBS)

To record airgun signals of the newly installed MCS system, an ocean bottom seismometer (OBS) has been deployed in the Izu-Ogasawara area.

3) Bathymetry, magnetics and gravity observation

During the cruise, bathymetry, magnetics and gravity data have been recorded continuously by SEABEAM2112.004, three component magnetometer and gravity meter, respectively.

4) XBT

We have conducted two XBT to correct the sonic speed for the bathymetry survey.