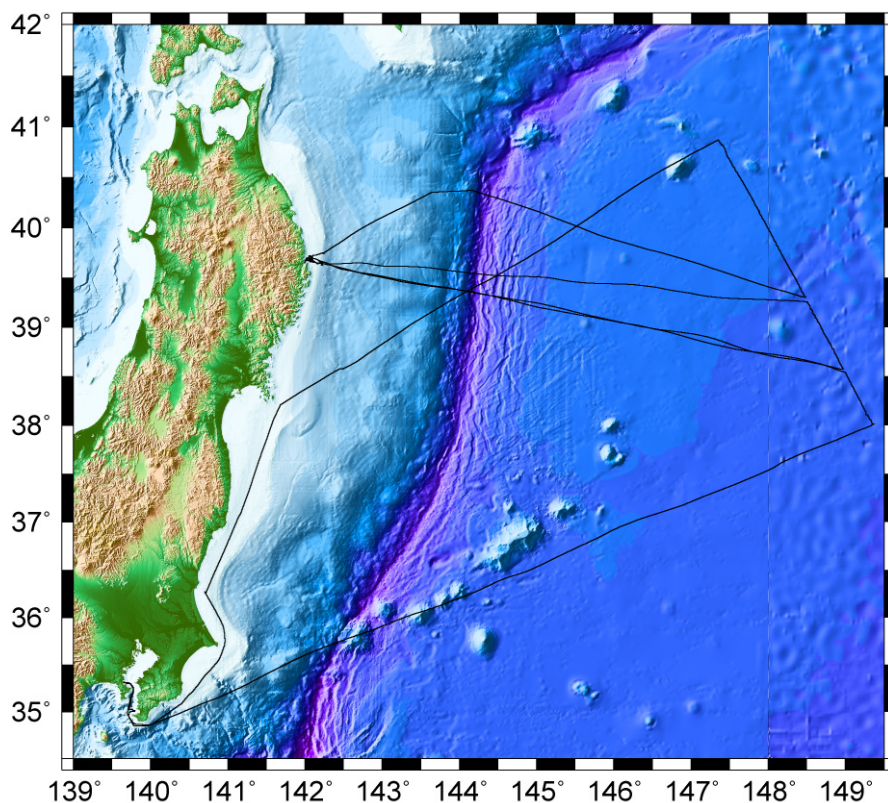


Cruise summary

1. Cruise Information :

- (1) Cruise number, Ship name: KY09-03, R/V Kaiyo
- (2) Title of the cruise: 2009FY “Seismic study in the northwestern Pacific region”
- (3) Chief Scientist [Affiliation]: Takeshi SATO [JAMSTEC]
- (4) Representative of Science Party [Affiliation]:
Yoshio FUKAO [JAMSTEC]
- (5) Title of proposal:
High-resolution structure study in the northwestern Pacific region
- (6) Cruise period, Port call:
2009/7/5-7/21, JAMSTEC (Yokosuka) to JAMSTEC (Yokosuka)
- (7) Research Area: Northwestern Pacific
- (8) Research Map:



2. Overview of Observation :

(1) Objectives :

In the northwestern Pacific region, the old oceanic plate (Pacific plate) formed in the eastern Pacific ridge is subducting in the Japan and Kuril trenches. To advance the “Mohole project” being one of an IODP project, it is important to clarify the detailed crust and uppermost mantle structure of the old oceanic plate and the transitional process of the structure in the plate. The objectives of this cruise are to reveal the detailed crust and uppermost mantle structure of the old oceanic plate (Pacific plate) in the northwestern Pacific region and transition of this structure in the outer rise.

(2) List of observation instruments :

1) Recovery of ocean bottom seismometers (OBSs)

OBSs deployed by KR09-06 cruise were recovered.

2) Refraction/Reflection seismic survey

A Refraction/Reflection seismic survey on S1 line using air-gun array of 12,000 cubic inch, OBSs and a 16-ch. hydrophone streamer was canceled by reason that the recovery of OBSs has a top priority and it kept up the bad weather during this cruise.

3) Bathymetry observation

During this cruise, bathymetry data have been recorded continuously by SEABEAM2112.

4) Temperature and Conductivity observation for the correction of sonic speed

Expendable-Bathy Thermograph (XBT) has been conducted to correct the sonic speed for the bathymetry survey.