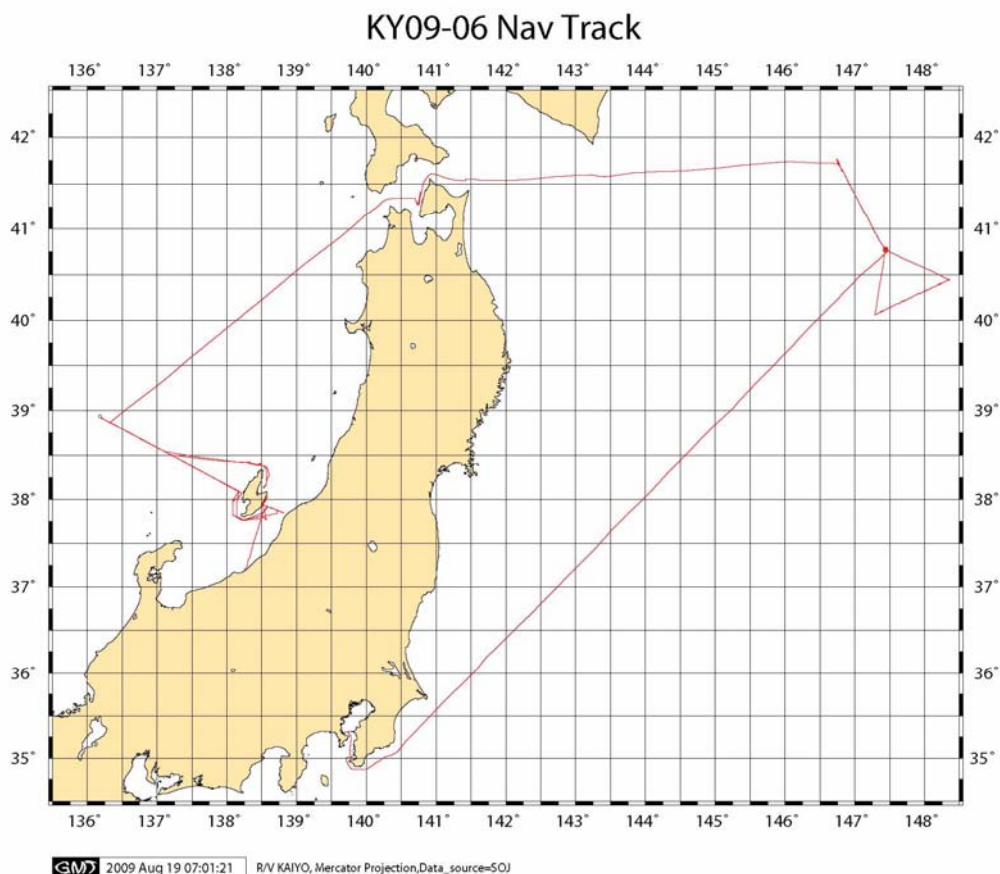


Cruise summary

1. Cruise Information :

- (1) Cruise number, Ship name: KY09-06, R/V Kaiyo
- (2) Title of the cruise: 2009FY “Seismic study at the eastern margin of the Japan Sea and the northwestern Pacific region”
- (3) Chief Scientist [Affiliation]: Narumi TAKAHASHI [JAMSTEC]
- (4) Representative of Science Party [Affiliation]:
 - 1) Yoshiyuki KANEDA [JAMSTEC],
 - 2) Yoshio FUKAO [JAMSTEC]
- (5) Title of proposal:
 - 1) Seismic study for crustal deformation in the eastern margin of the Japan Sea
 - 2) High-resolution structure study in the northwestern Pacific region
- (6) Cruise period, Port call: 2009/8/6-8/21, Naoetsu port to JAMSTEC
- (7) Research Area: The eastern margin of the Japan Sea, Northwestern Pacific
- (8) Research Map:



2. Overview of Observation :

(1) Objectives :

During this KY09-06 cruise, we performed a refraction survey using 30 ocean bottom seismographs (OBSs) around the Sado shima region in the eastern Japan Sea as a part of “the H21 priority investigation of the strain concentration areas” . This study was entrusted by the National institute of earthquake and disaster, which is a representative institute of the Kagakugijyutsu-shinko-choseihi study, “priority investigation of the strain concentration areas” . After above survey, we recovered other 30 OBSs in the northwestern Pacific region.

(2) List of observation instruments :

1) Refraction survey using ocean bottom seismographs (OBSs)

We performed a refraction survey using an airgun array with a total capacity of 12,000 cubic inches as the source, and using 30 OBSs as the receiver. OBSs were deployed at the off northwestern Sado shima and the Sado strait. After this survey, we recovered 30 OBSs around the northwestern Pacific region, which was deployed during previous Kairei cruise.

2) Multi-channel reflection seismic survey (MCS)

A 12-channel hydrophone streamer was towed during above refraction survey and recorded reflections from shallow structure.

3) Bathymetry, magnetics and gravity observation

During the cruise, bathymetry data have been recorded continuously by SEABEAM2100.

4) XBT

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