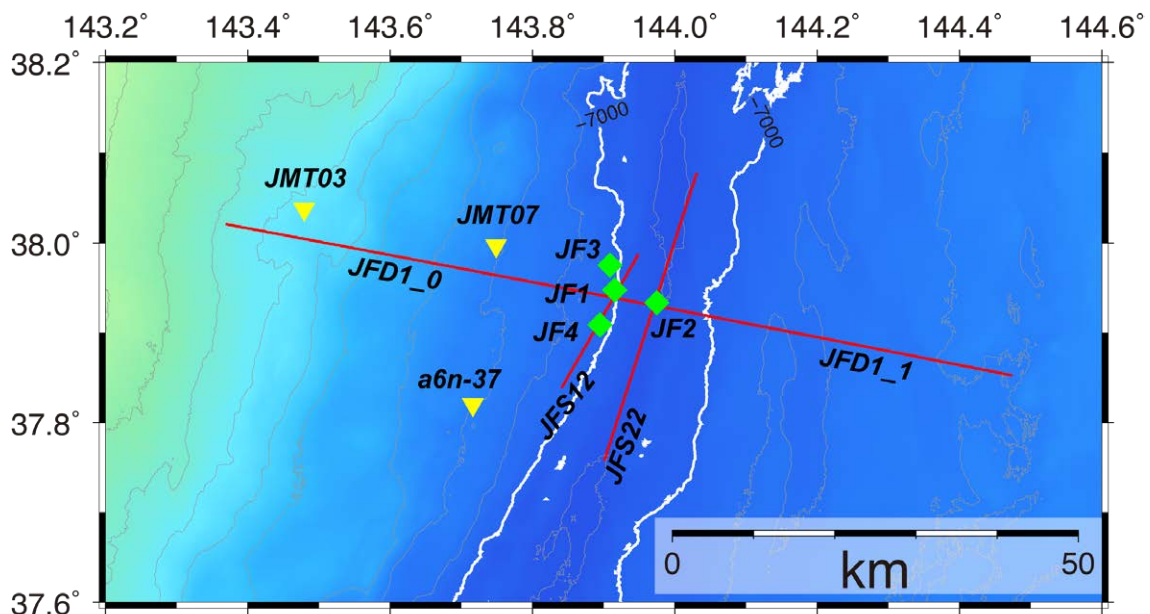


## Cruise Summary

### 1. Cruise Information

- Cruise ID: KR13-01
- Name of vessel: R/V Kairei
- Title of the cruise: Seismic survey at IODP JFAST site
- Chief scientist: Shuichi KODAIRA [JAMSTEC]
- Representative of the Science Party Shuichi Kodaira [JAMSTEC]
- Cruise period: Jan. 9, 2013 – Jan. 18, 2013
- Ports of call: Shiogama ~ Sendai ~ JAMSTEC (Yokosuka)
- Research area: Japan Trench



### 2. Overview of the Observation

- Overview of the observation
  - Purpose

A purpose of this cruise is to obtain detailed seismic velocity structure at the IODP JFAST site by using multichannel reflection seismic system and ocean-bottom seismographs (OBSs). In order to acquire seismic refraction data around the JFAST site, we used newly developed ultra-deep ocean bottom seismographs in this survey. In addition to the seismic survey, three OBSs were deployed near the JFAST site to monitor aftershock activity of the earthquake occurred on 7/Dec./2012 just beneath the JFAST site.

- Observations

(1) Seismic imaging

- Seismic reflection and refraction survey along the three profiles, JFD1, JFS12, JFS22
- Four OBSs were deployed around the JFAST site, JF1-4.

(2) Aftershock monitoring

- Three OBSs were deployed at the trench-ward slope, JMT03, JMT07, a6n-37.

(3) Bathymetry survey

- SEABEAM data were acquired along the ship track during this cruise

(4) XCTD

- In order to acquire precise sonic velocity structure of water layer along the seismic profile, XCTD data were acquired.