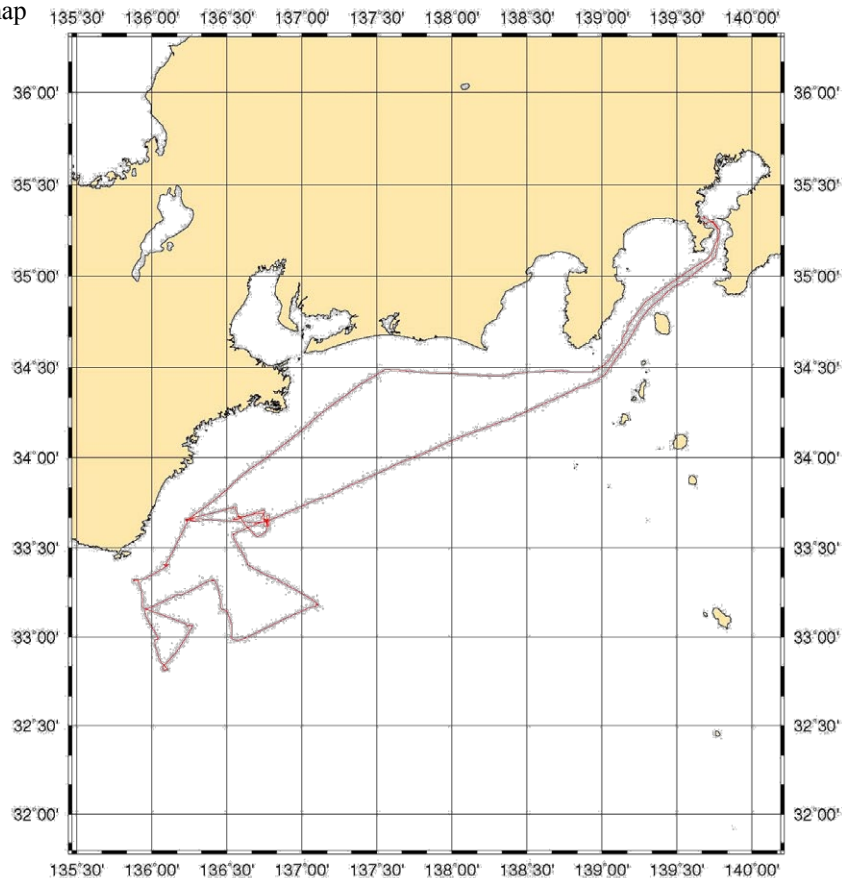


Cruise Summary

1. Cruise Information

- (1) Cruise ID NT12-11
- (2) Name of vessel R/V *Natsushima*
- (3) Title of the cruise 2012FY “Seismic survey and seismicity study in off Kii Peninsula”
/ Site survey for D/V *Chikyu* in the Kumano Trough
- (4) Chief scientist Norio SHIMOMURA (JAMSTEC)
- (5) Representative of the Science Party & title of proposal
 Proposal 1: Yoshiyuki KANEDA (JAMSTEC)
 Research for Interaction between the Tokai, Tonankai and Nankai Earthquakes
 –Seismic survey and seismicity study in off Kii Peninsula–
 Proposal 2: Moe Kyaw (JAMSTEC)
 DONET Cable survey for D/V *Chikyu* in the Kumano Mud Volcano
- (6) Cruise period & port call
 May 3 – 10, 2012; from JAMSTEC (Yokosuka) to Yokosuka-shinkou (Yokosuka)
- (7) Research area off Kii Peninsula to Kumano-nada
- (8) Research area map



Map of ship track in the NT12-11 cruise.

2. Overview of the Observation

(1) Objectives

1) Proposal 1

This research cruise was conducted as a part of the study of “Research program concerning interaction between the Tokai, Tonankai, and Nankai Earthquakes” funded by the Ministry of Education, Culture, Sports, Science, and Technology of Japan. The objectives of this cruise to reveal seismic structure and seismic activity in off Kii Peninsula, Nankai Trough.

During the cruise of NT12-11, 14 ocean bottom seismographs (OBSs) have been recovered. These OBSs were deployed during the cruise of KR11-09 by R/V *Kairei* in September 2011 and KY12-01 by R/V *Kaiyo* in January 2012.

2) Proposal 2

In June 2012, a hybrid coring is planned by D/V *Chikyu* in the Kumano Daigo Knoll. In this cruise, we verify the location of DONET cables around the Kumano Daigo Knoll for the safety of D/V *Chikyu* drilling.

(2) Observations

1) Proposal 1

a) Recovery of ocean bottom seismograph (OBS)

During the cruise, 14 OBSs have been retrieved. One OBS was retrieved by ROV *Hyper-Dolphin 3000*. Two OBS at site L11 and NT14 have not been recovered.

b) Others

During the cruise, bathymetry data have been recorded continuously.

2) Proposal 2

Two diving surveys were carried out by ROV *Hyper-Dolphin 3000*. The result from sea-floor observations, we've verified the position of DONET main and branch cables at the eastern and western sides of the Kumano Daigo Knoll.