



R/V Natsushima Cruise Report

NT11-12

Seismic survey and seismicity study  
in off Shikoku, Nankai trough

July 15 – 23, 2011

Japan Agency for Marine-Earth Science and Technology

(JAMSTEC)

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1. Cruise Information :

(1) Cruise number, Ship name: NT11-12, R/V Natsushima

(2) Title of the cruise: 2011FY “Seismic survey and seismicity study in off Shikoku”

(3) Chief Scientist [Affiliation]: Norio SHIMOMURA [JAMSTEC]

(4) Representative of Science Party [Affiliation]: Yoshiyuki KANEDA [JAMSTEC],

(5) Title of proposal:

Research for Interaction between the Tokai, Tonankai and Nankai Earthquakes

- Seismic survey and seismicity study in off Shikoku -

(6) Cruise period, Port call: 2011/7/15-7/23, from JAMSTEC (Yokosuka) to JAMSTEC (Yokosuka)

(7) Research Area: from off Shikoku to off Kii Peninsula and Kii channel, Nankai trough

(8) Research Area Map:

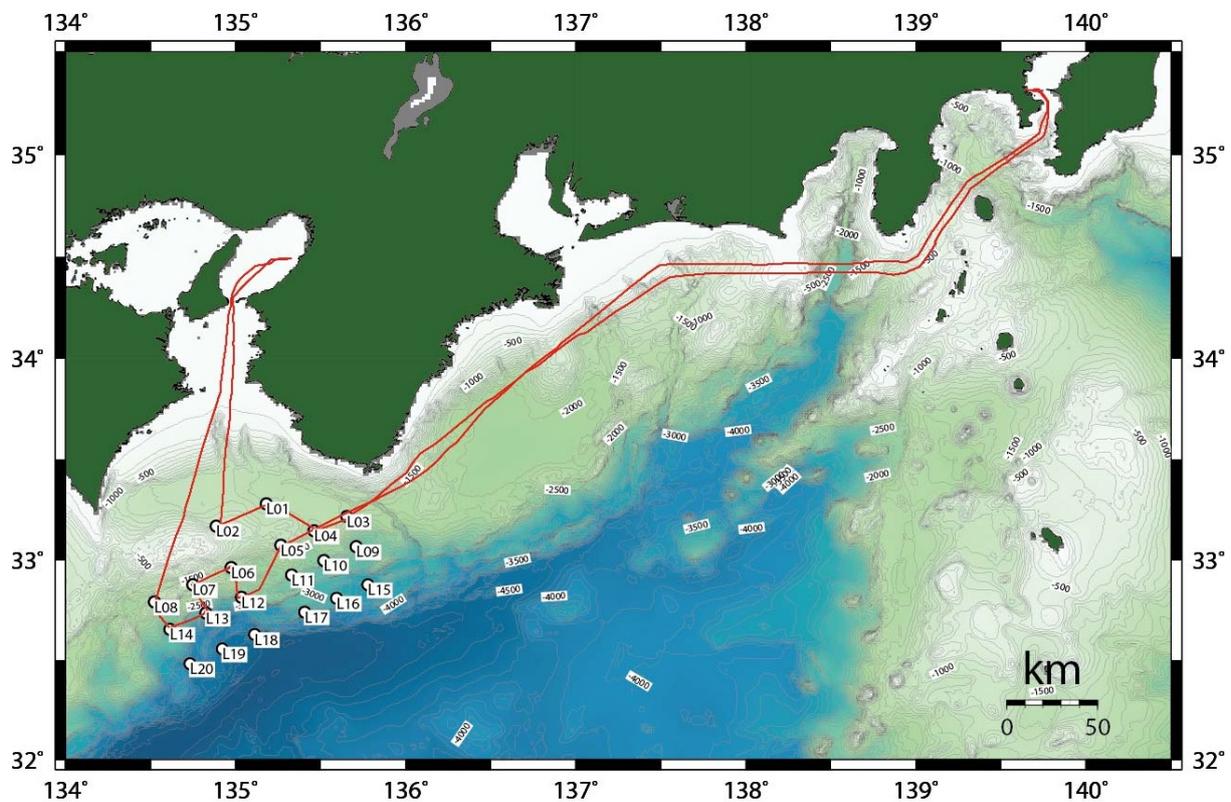


Fig.1 Map of the OBSs and ship track in NT11-12 cruise.

## 2. Researchers

- (1) Chief Scientist [Affiliation]: Norio SHIMOMURA [JAMSTEC]
- (2) Representative of Science Party [Affiliation]: Yoshiyuki KANEDA [JAMSTEC],
- (3) Science party list:
  - Shuichi KODAIRA [JAMSTEC]
  - Narumi TAKAHASHI [JAMSTEC],
  - Yuka KAIHO [JAMSTEC],
  - Koichiro OBANA [JAMSTEC],
  - Gou FUJIE [JAMSTEC],
  - Ayako NAKANISHI [JAMSTEC],
  - Seiichi MIURA [JAMSTEC],
  - Takeshi SATO [JAMSTEC],
  - Jin-Oh PARK [JAMSTEC],
  - Tsutomu TAKAHASHI [JAMSTEC],
  - Yojiro YAMAMOTO [JAMSTEC],
  - Mikiya YAMASHITA [JAMSTEC],
  - Tetsuo NO [JAMSTEC],
  - Kazuhiko KASHIWASE [JAMSTEC],
  - Kaoru TAKIZAWA [NME Ltd.],
  - Naoto NOGUCHI [NME Ltd.],
  - Ami IWAKI [NME Ltd.]

### 3. Overview of Observation:

#### (1) Objectives:

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 from off Shikoku to off Kii Peninsula, Nankai trough.

During the cruise of NT11-12, 10 ocean bottom seismographs (OBSs) have been recovered. These OBSs were deployed during the cruise of KR10-11 by R/V Kairei in October 2010.

#### (2) List of observation instruments:

##### 1) Ocean bottom seismographs (OBSs)

During the cruse, only 10 of 20 OBSs have been retrieved, although 20 OBSs was planned to be retrieved. The rest of OBSs will be retrieved during the cruise KR11-09 by R/V Kairei in September 2011.

##### 2) Others

During the cruise, bathymetry data have been recorded continuously.

#### (3) Cruise log:

Date		Remarks
2011/7/15	Fri	Departure from JAMSTEC (Yokosuka). Transit to survey area
2011/7/16	Sat	Transit to survey area. OBS recovery. Transit to Osaka Bay
2011/7/17	Sun	Transit to Osaka Bay. Stay at Osaka Bay to escape the typhoon
2011/7/18	Mon	Stay at Osaka Bay to escape the typhoon
2011/7/19	Tue	Stay at Osaka Bay to escape the typhoon
2011/7/20	Wed	Stay at Osaka Bay to escape the typhoon
2011/7/21	Thu	Stay at Osaka Bay to escape the typhoon. Transit to survey area. OBS recovery
2011/7/22	Fri	OBS recovery. Transit to JAMSTEC (Yokosuka)
2011/7/23	Sat	Arrive at JAMSTEC (Yokosuka)

(4) Research Information:

1) OBS Recovery

During the cruise, 10 ocean bottom seismographs (OBSs) have been recovered. These OBSs were deployed during the cruise of KR10-11 by R/V Kairei in October 2010. Ten OBSs have not been recovered.

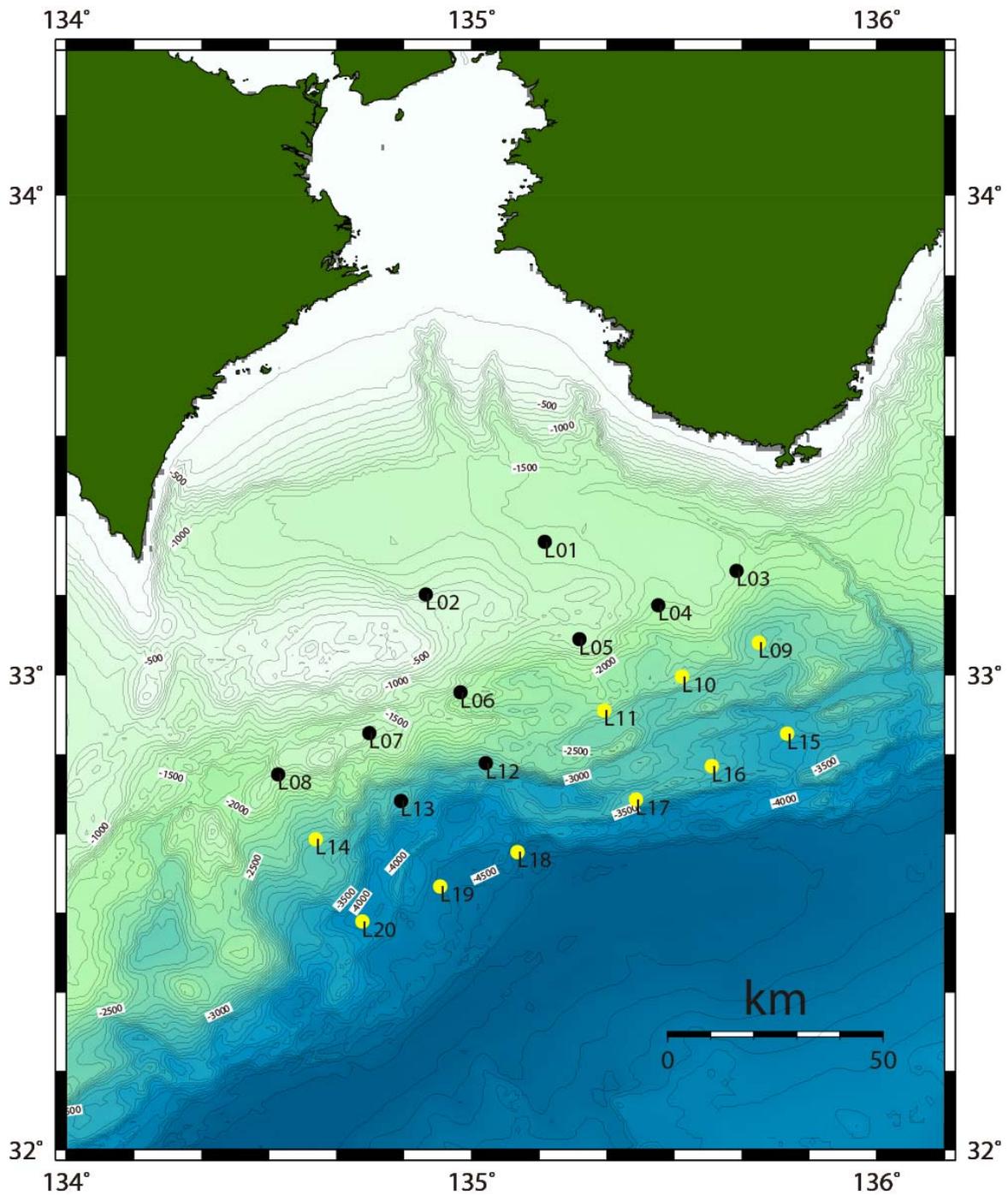


Fig.2 Map of the OBSs. Black circles are the OBSs recovered during the cruise NT11-12. Yellow circles are unrecovered OBSs.

4. Notice on using:

This cruise report is a preliminary documentation as of the end of the cruise. It may not be corrected even if changes on content (i.e. taxonomic classifications) are found after publication. It may also be changed without notice. Data on the cruise report may be raw or not processed. Please ask the PI(s) for the latest information before using. Users of data or results of this cruise are requested to submit their results to Data Integration and Analysis Group (DIAG), JAMSTEC.