Submission date 2016/04/18

Cruise Summary

1．Cruise Information：

（1） Cruise number, Ship name: YK14-E02, S/V Yokosuka

（2） Title of the cruise: 2014FY “Marine geological and geophysical surveys to unravel the subduction zone great earthquakes and tsunamis：Seismic refraction and reflection survey in the outer rise region” (OBS deployment and retrieve)

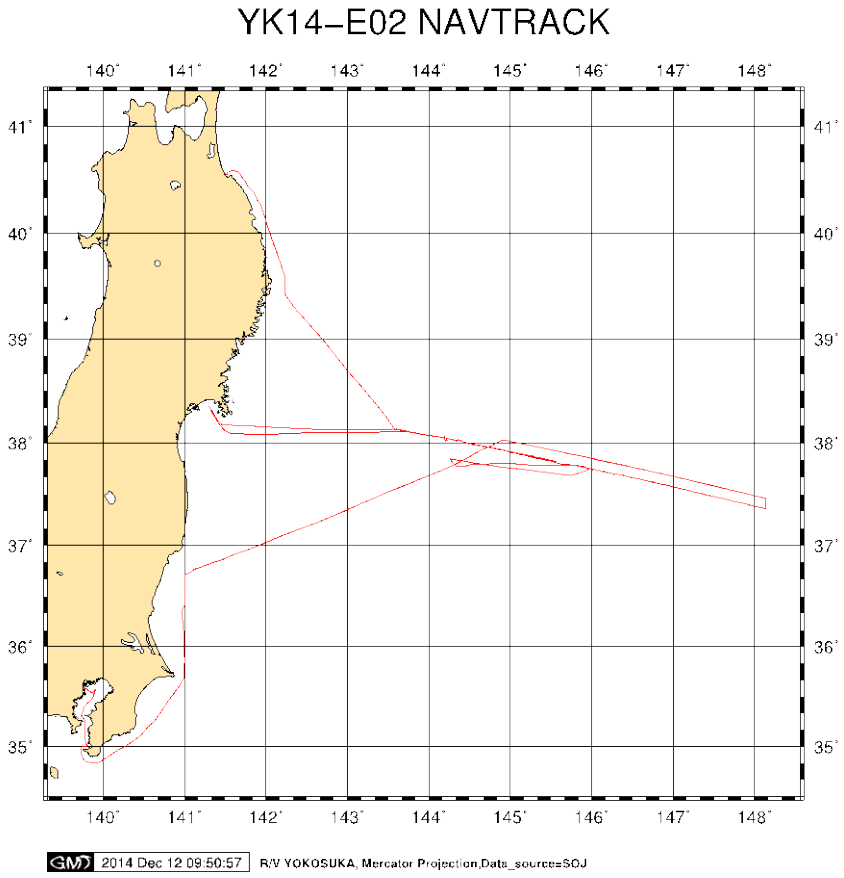
（3） Title of proposal: Marine geological and geophysical surveys to unravel the subduction zone great earthquakes and tsunamis：Seismic refraction and reflection survey in the outer rise region

（4） Cruise period, Port call:

2014/11/30-12/12, Hachinohe to Tokyo

（5） Research Area: Japan trench area

（6） Ship track:



２．Researchers

（１）Chief Scientist [Affiliation]: Yuka KAIHO [JAMSTEC]

（２）Representative of Science Party [Affiliation]:

Shuichi KODAIRA [JAMSTEC]

（３）Science party list:

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３．Overview of Observation：

（１）Objectives：

The objectives of this cruise are to reveal the nature of subduction zone mega earthquake through the crustal structure survey in the northern focal area of 2011 Off the Pacific coast of Tohoku Earthquake area and outer rise of adjacent oceanic plate.

Especially, large tunami Earthquake such as 1933 Showa Sanriku, is concerned at outer rise area. Results of this study will contribute to understand the nature of subduction zone great earthquakes, outer rise earthquakes and incidental Tsunamis.

（２）List of observations：

１）Deployment of ocean bottom seismometer (OBS)

1 OBS were deployed.

2） Retrieve of ocean bottom seismometers (OBSs)

53 OBS were retrieved.

3） Swath bathymetry mapping along survey line

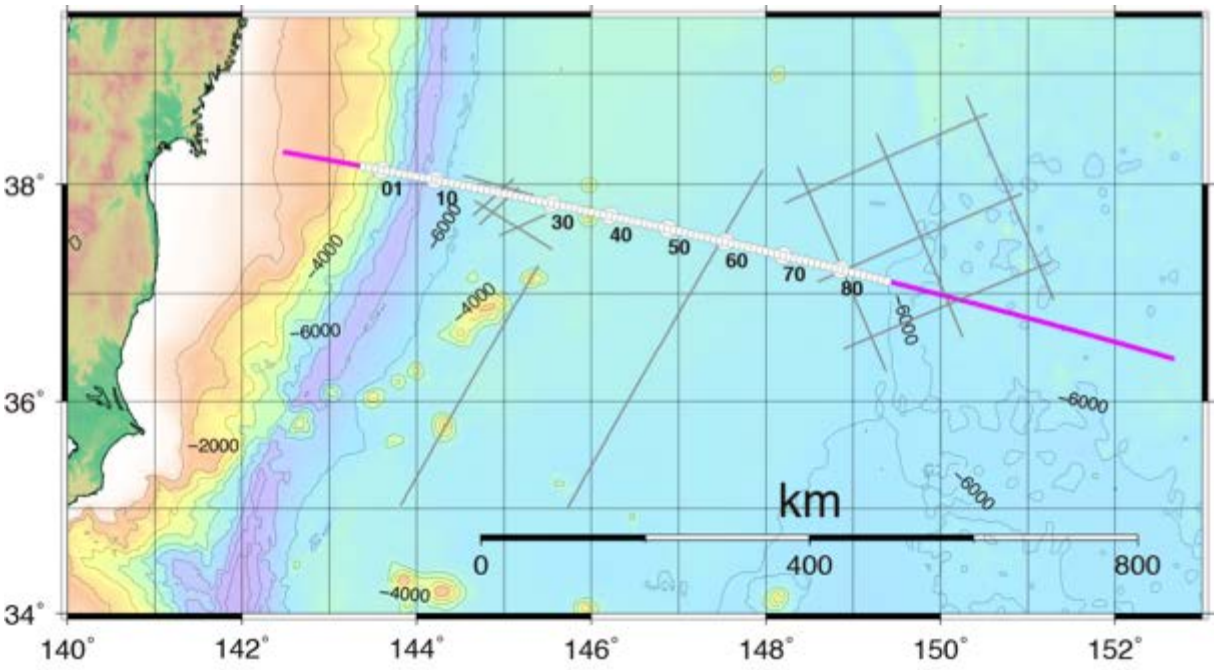
Swath mapping were carried out along the north side of survey line.

（3） Cruise log:

Date		Remarks
2014/11/30	Sun.	Departure from Hachinohe, transit, OBS Deployment and Retrieve
2014/12/1	Mon.	Standby due to weather condition
2014/12/2	Tue.	Standby due to weather condition
2014/12/3	Wed.	Standby due to weather condition
2014/12/4	Thu.	Transit and retrieve of 5 OBSs
2014/12/5	Fri.	Standby due to weather condition and Rretrieve of 4 OBSs
2014/12/6	Sat.	Standby due to weather condition and Retrieve of 8 OBSs
2014/12/7	Sun.	Standby due to weather condition
2014/12/8	Mon.	Retrieve of 21 OBSs
2014/12/9	Tue.	Retrieve of 13 OBSs and Swath mapping
2014/12/10	Wed.	Swath mapping /Transit
2014/12/11	Thu.	Transit
2014/12/12	Fri.	Arrival at Tokyo

（4）Observations

1）Location map of OBSs



Circles show the OBS positions.

4．Notice on using:

This cruise report is a preliminary documentation as of the end of the cruise.

This report may not be corrected even if changes on contents (i.e. taxonomic classifications) may be found after its publication. This report may also be changed without notice. Data on this cruise report may be raw or unprocessed. If you are going to use or refer to the data written on this report, please ask the Chief Scientist for latest information. Users of data or results on this cruise report are requested to submit their results to the Data Management Group of JAMSTEC.