



R/V Kaiyo Cruise Report

KY13-11

High resolution seismic reflection survey
-Multidisciplinary project in Nankai Trough-

Aug. 23, 2013 – Sep. 2, 2013

Japan Agency for Marine-Earth Science and Technology
(JAMSTEC)

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1. Cruise Information :

(1) Cruise number, Ship name: KY13-11, R/V Kaiyo

(2) Title of the cruise:

2013FY “Multidisciplinary project in Nankai Trough”

(3) Title of proposal:

Multidisciplinary project in Nankai Trough

(4) Cruise period, Port call:

2013/08/23-2013/09/02, Yokosuka Port to Sumijyu Port (Yokosuka)

(5) Research Area: off Kochi

(6) Research Map:

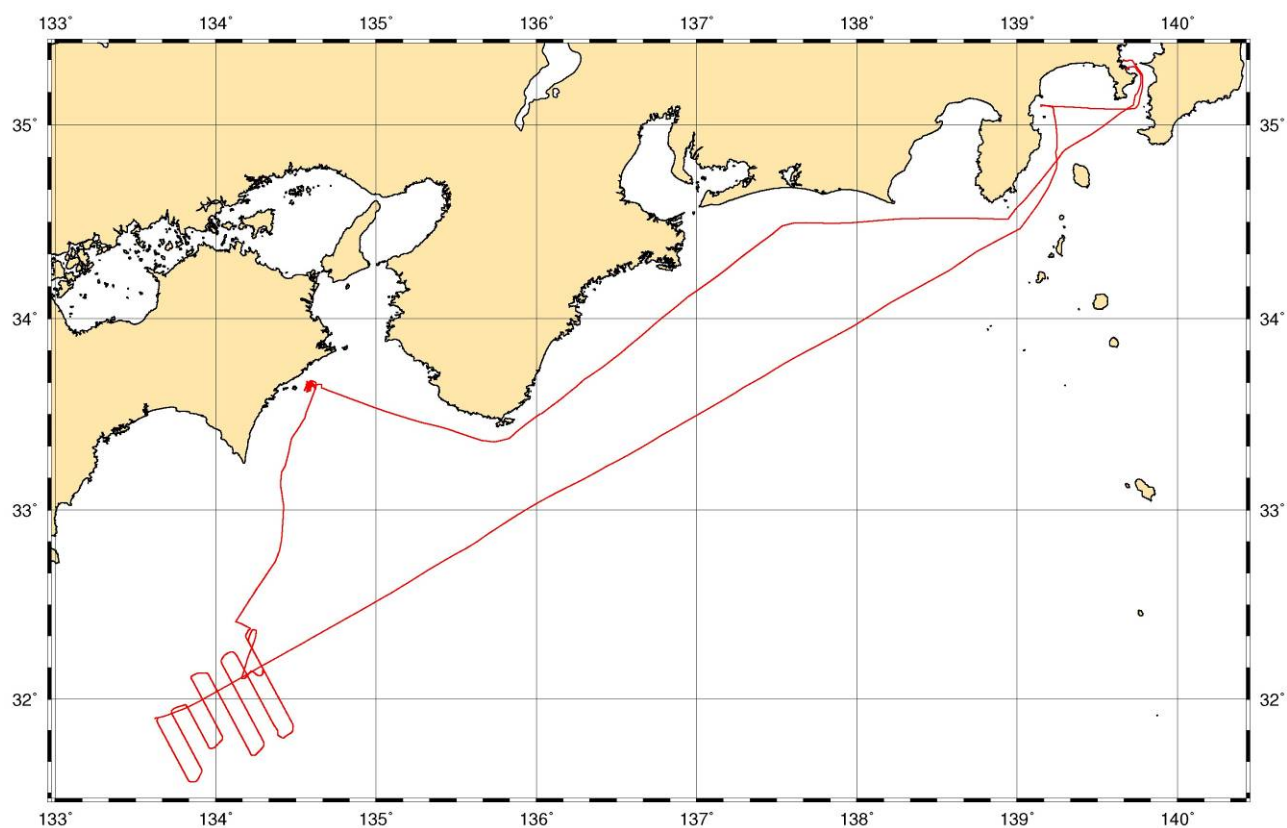


Figure shows the ship track during KY13-11 cruise.

2. Researchers

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(2) Representative of Science Party [Affiliation]:

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3. Overview of Observation :

(1) Objectives:

2011 Tohoku earthquake produced large disaster Tsunami by rupture from deep region to trench axis. Recently, drilling results suggests that there is large slip around trough axis in Nankai Trough. Therefore, high resolution multi-channel seismic reflection survey is carried out around the Nankai Trough in order to understand the distribution about the turbidite.

(2) List of observation instruments:

1) Seismic reflection survey

Seismic reflection surveys were carried out on all survey lines off Kochi using the airgun array of 380 cu. inch and a 192-ch. hydrophone streamer.

2) Bathymetry observation

During this cruise, bathymetry data have been recorded continuously by SEABEAM2112.

3) Temperature, Conductivity and Depth observation for oceanic fine imaging in reflection experiment

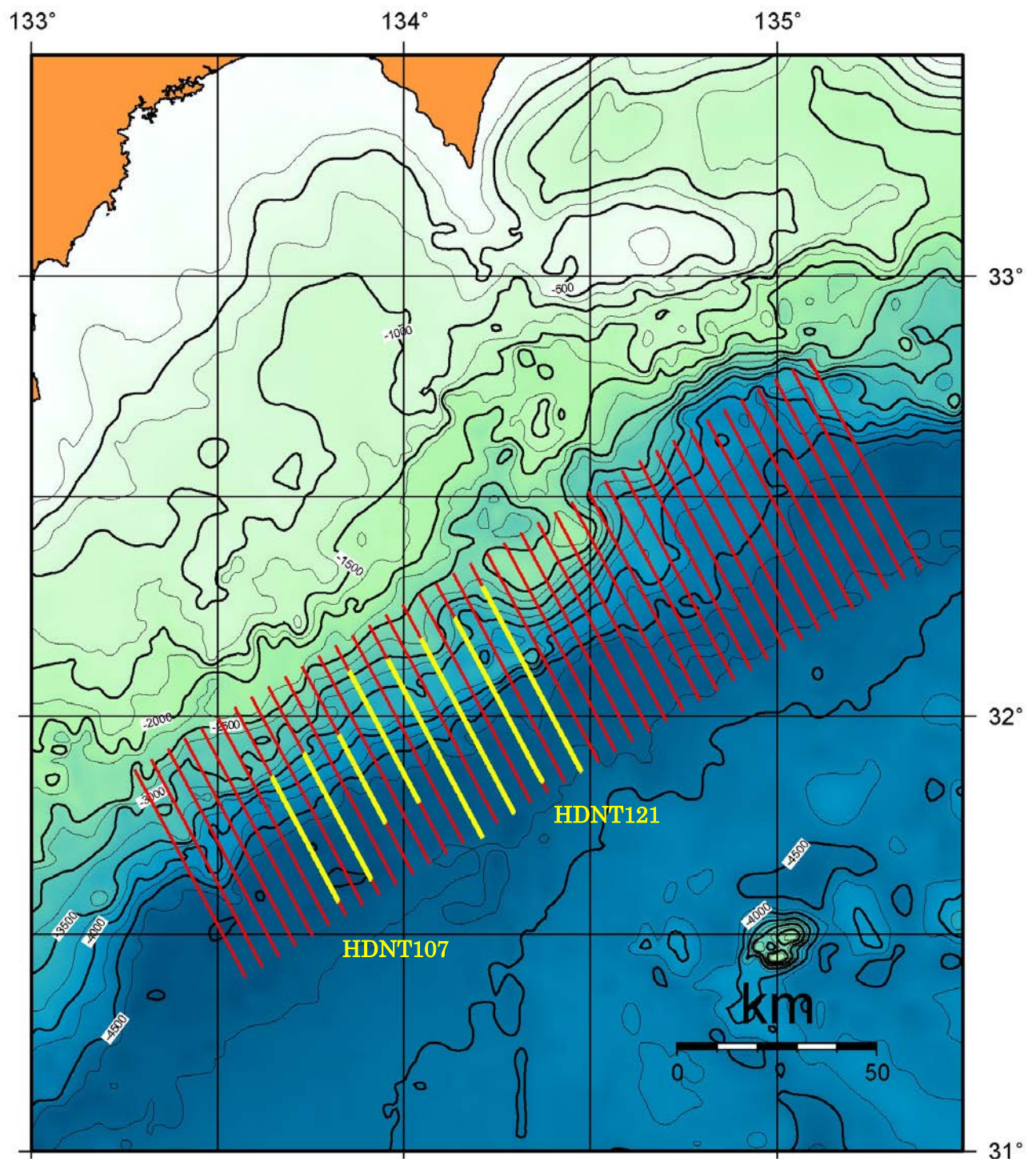
We have conducted 1 XCTD (eXpendable Conductivity, Temperature and Depth).

(3) Cruise log:

Date		Remarks
2013/08/23	Fri	Departure from JAMSTEC (Yokosuka), and transit to survey area
2013/08/24	Sat	Transit to off Tokushima
2013/08/25	Sun	Standby due to weather condition (off Tokushima)
2013/08/26	Mon	Standby due to MCS system error on line HDNT121
2013/08/27	Tue	MCS survey on lines HDNT121, HDNT119 and HDNT117
2013/08/28	Wed	MCS survey on lines HDNT115, HDNT113 and HDNT111
2013/08/29	Thu	MCS survey on lines HDNT109 and HDNT107
2013/08/30	Fri	Transit to Sagami Bay
2013/08/31	Sat	Standby due to weather condition (Sagami Bay)
2013/09/01	Sun	Standby due to weather condition (Sagami Bay)
2013/09/02	Mon	Arrive at Sumijyu Port (Yokosuka)

(4) Multi-channel seismic reflection survey

a) Map of survey line



Yellow lines show the MCS survey line. Red line shows planning survey line of KY13-11 cruise.

b) Shooting coordinates

Line name	Latitude (N)	Longitude (E)
HDNT121	32_17.69800'	134_12.66300'
	31_52.32250'	134_28.61883'
HDNT119	31_51.65883'	134_21.87350'
	32_13.39567'	134_08.19733'
HDNT117	32_10.52583'	134_02.80133'
	31_46.70200'	134_17.74833'
HDNT115	31_43.40300'	134_12.62150'
	32_07.76717'	133_57.35467'
HDNT113	32_06.09050'	133_51.22133'
	31_48.22917'	134_02.42717'
HDNT111	31_45.46067'	133_56.98000'
	31_57.34600'	133_49.53650'
HDNT109	31_54.82017'	133_43.94017'
	31_37.56700'	133_54.74083'
HDNT107	31_34.57533'	133_49.43517'
	31_51.75933'	133_38.68967'

b) Preliminary results

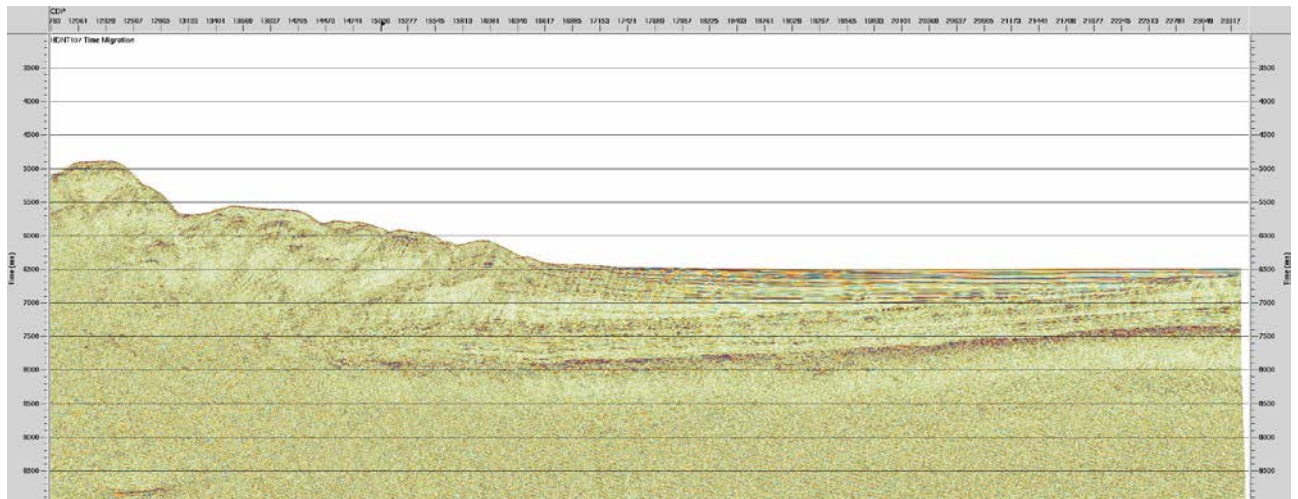


Figure shows seismic reflection section of line HDNT107

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.