

R/V Yokosuka Cruise Report

YK11-E05

Sea Area Monitoring off Miyagi, Fukushima, and Ibaragi region

June 26, 2011 – July 6, 2011

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

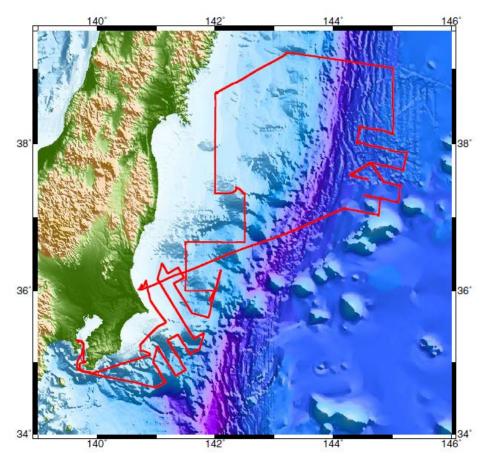
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- 1. Cruise Information :
- (1) Cruise number, Ship name: YK11-E05, R/V Yokosuka
- (2) Title of the cruise: 2011FY "Sea Area Monitoring and seismic study off Miyagi, Fukushima, and Ibaragi region"
- (3) Title of proposal:

Seismic study in the source region of the 2011 Off the Pacific Coast of Tohoku Earthquake

- (4) Cruise period, Port call: 2011/06/26-07/06, JAMSTEC (Yokosuka) to Yokosuka-Shinko
- ($5\,)~$ Research Area: off the eastern Japan
- (6) Research Map:



$2 \ . \ {\rm Researchers}$

- (1) Chief Scientist [Affiliation]: Tsutomu TAKAHASHI [JAMSTEC]
- (2) Representative of Science Party [Affiliation]: Masanao SHINOHARA [JAMSTEC]
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3. Overview of Observation :

(1) Objectives :

The objectives of this cruise are to reveal seismic activity including low frequency events in the northeastern Japan subduction zone and after slip associated with the 2011 Off the Pacific Coast of Tohoku Earthquake in Japan.

- (2) List of observation instruments :
 - Recovery of ocean bottom seismometers (OBSs)
 20 OBSs deployed by KR11-E03 cruise were recovered.
 1 OBS deployed off Boso Peninsula was recovered.
 - 2) Deployment of OBSs

 $33\ \mathrm{OBSs}$ were deployed.

3) Bathymetry observation

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

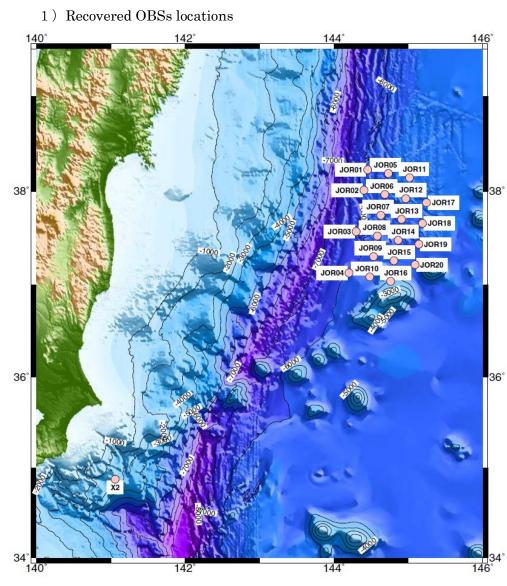
 $4\,)$ $\,$ Temperature observation for the correction of sonic speed

Expendable-Bathy Thermograph (XBT) was conducted to correct the sonic speed for the bathymetry survey.

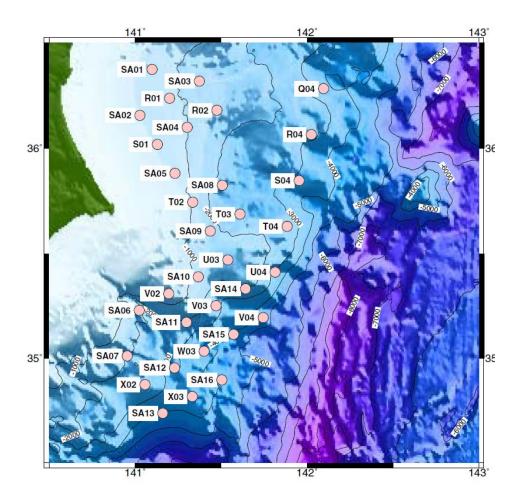
(3) Cruise log:

Date		Remarks
2011/06/26	Sun	Departure from JAMSTEC (Yokosuka), and transit to survey
		area. Deployment of 8 OBSs and Recovery of 1 OBS.
2011/06/27	Mon	Deployment of 25 OBSs
2011/06/28	Tue	Sea Area Monitoring (site 4,5,6,7,8,9)
2011/06/29	Wed	Sea Area Monitoring (site 1,2,3)
2011/06/30	Thu	Recovery of 3 OBSs
2011/07/01	Fri	Recovery of 6 OBSs
2011/07/02	Sat	Recovery of 5 OBSs
2011/07/03	Sun	Recovery of 6 OBSs
2011/07/04	Mon	Stay at Kashima-nada due to bad weather
2011/07/05	Tue	Transit to survey area, and transit to Yokosuka-Shinko
2011/07/06	Wed	Transit and arrival at Yokosuka-Shinko

(4) Study area



2) Deployed OBSs locations



3) Recovered and deployed OBSs list

Site		Domonica		
	Latitude(N)	Longitude(E)	Depth(m)	Remarks
JOR01	38.230078	144.455973	5872	Recovery
JOR02	38.011162	144.404378	5972	Recovery
JOR03	37.569792	144.300578	5917	Recovery
JOR04	37.12653	144.20459	5942	Recovery
JOR05	38.188782	144.734262	5561	Recovery
JOR06	37.965812	144.684813	5661	Recovery
JOR07	37.74395	144.6317	5872	Recovery
JOR08	37.522828	144.583573	5945	Recovery
JOR09	37.301807	144.53225	5778	Recovery
JOR10	37.083315	144.482827	5698	Recovery
JOR11	38.14353	145.015607	5266	Recovery

JOR12	37.923007	144.964597	5495	Recovery
JOR13	37.701075	144.910242	5606	Recovery
JOR14	37.478155	144.863592	5654	Recovery
JOR15	37.25727	144.808972	5643	Recovery
JOR16	37.036795	144.76222	5038	Recovery
JOR17	37.878297	145.244968	5489	Recovery
JOR18	37.658542	145.19059	5477	Recovery
JOR19	37.43564	145.142322	5654	Recovery
JOR20	37.214257	145.092103	5777	Recovery
Q04	36.28298	142.095877	3607	Deployment
R01	36.23759	141.20062	835	Deployment
R02	36.181063	141.475945	1474	Deployment
R04	36.065302	142.025243	2865	Deployment
S01	36.020402	141.129673	546	Deployment
S04	35.848	141.954243	3208	Deployment
SA01	36.373967	141.098667	669	Deployment
SA02	36.156765	141.027888	503	Deployment
SA03	36.317753	141.373543	1287	Deployment
SA04	36.100775	141.303307	975	Deployment
SA05	35.883092	141.232555	603	Deployment
SA06	35.229752	141.023772	1437	Deployment
SA07	35.011165	140.9548	1987	Deployment
SA08	35.826362	141.50791	2324	Deployment
SA09	35.608762	141.437458	1745	Deployment
SA10	35.391027	141.368393	1361	Deployment
SA11	35.173022	141.29878	2201	Deployment
SA12	34.955722	141.230235	2868	Deployment
SA13	34.736237	141.159463	4381	Deployment
SA14	35.333118	141.642003	2120	Deployment
SA15	35.115248	141.573513	4254	Deployment
SA16	34.897955	141.504718	4119	Deployment
T02	35.745938	141.335067	1214	Deployment
T03	35.689008	141.610417	2459	Deployment
T04	35.630252	141.885953	2373	Deployment
U03	35.471393	141.540087	1603	Deployment
U04	35.41368	141.814972	3167	Deployment
V02	35.310903	141.195977	530	Deployment

V03	35.253897	141.470457	2884	Deployment
V04	35.195907	141.745953	4402	Deployment
W03	35.036743	141.401758	3627	Deployment
X02	34.875103	141.058577	2432	Deployment
X03	34.818418	141.333455	3415	Deployment
X2	34.872145	141.05971	2382	Recovery

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.