



# R/V KAIYO Cruise Report

KY11-07 Leg2

2011 「KAIYO」 Engineering Cruise

June 29, 2011 – July 3, 2011

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

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# 1. Cruise Information

1. Cruise ID/Ship : KY11-07 Leg.2/ 「KAIYO」
2. Cruise title : 2011 「KAIYO」 Engineering Cruise
3. Person in charge : Makoto Ito (MARITEC/ JAMSTEC)
4. Cruise Period : 2011/6/29 – 2011/7/3  
(JAMSTEC (Yokosuka) – JAMSTEC (Yokosuka))
5. Area : Sagami Bay
6. Cruise Map

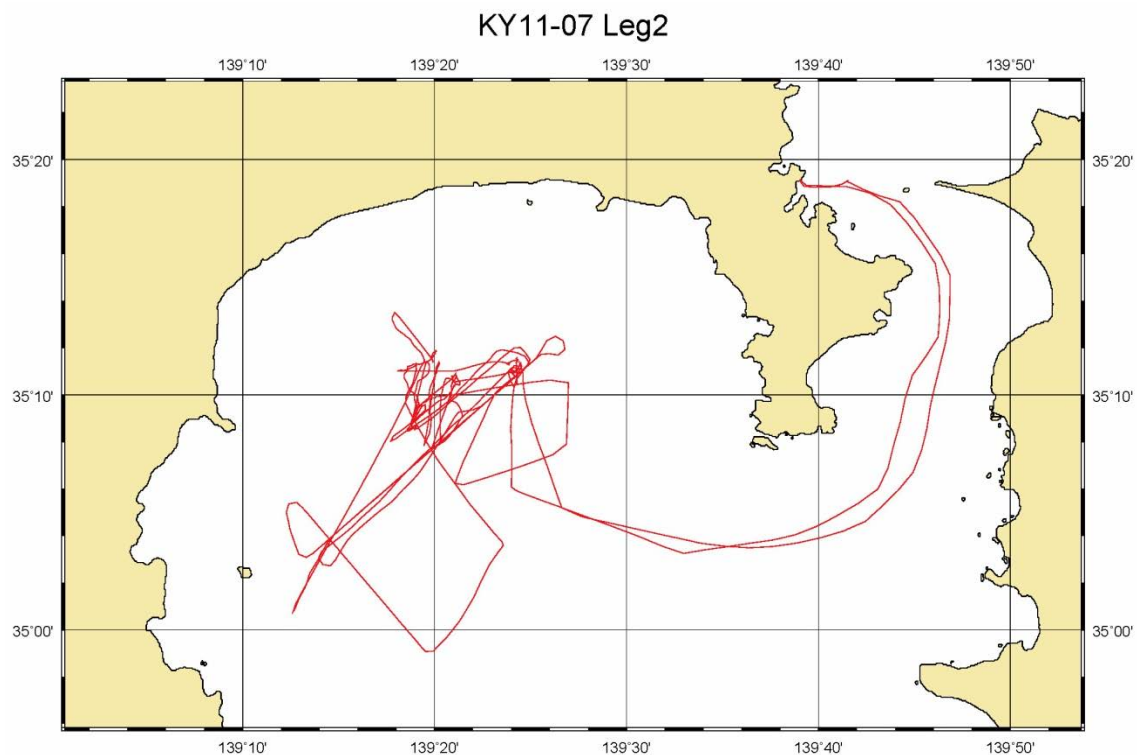


Fig.1 Cruise Map

## 2. Cruise Member

| Cruise Member    |                                 |                           |
|------------------|---------------------------------|---------------------------|
| Makoto Ito       | MARITEC / JAMSTEC               |                           |
| Seiichi Miura    | MARITEC / JAMSTEC               |                           |
| Ken Yatsu        | MARITEC / JAMSTEC               |                           |
| Hitoshi Kitamura | Nippon Marine Enterprises, LTD. | Marine Science Department |
| Yuki Ohwatari    | Nippon Marine Enterprises, LTD. | Marine Science Department |
| Satoshi Okada    | Nippon Marine Enterprises, LTD. | Marine Science Department |
| Syusuke Machida  | Nippon Marine Enterprises, LTD. | Marine Science Department |
| Yuta Watarai     | Nippon Marine Enterprises, LTD. | Marine Science Department |
| Mituteru Kuno    | Nippon Marine Enterprises, LTD. | Marine Science Department |
| Kyoko Tanaka     | Nippon Marine Enterprises, LTD. | Marine Science Department |
| Satoshi Shimizu  | Nippon Marine Enterprises, LTD. | Marine Science Department |
| Shinichi Konno   | OYO Corporation                 |                           |
| Craig Lippus     | OYO Corporation                 |                           |
| Yoshitaka Ueda   | Kyokuto Boeki Kaisha, Ltd.      |                           |
| Keith Sabine     | Kyokuto Boeki Kaisha, Ltd.      |                           |

## 3. Overview of Observation

### < Purpose >

The operation checks of Portable Multi-Channel Seismic reflection (MCS) system.

#### • Multichannel Seismic (MCS) Survey

We have conducted a MCS survey in Sagami Bay. Main objective of the MCS survey was the first trial of Portable MCS system of JAMSTEC including cable towing check and operation check. The Potable MCS system is composed of high-resolution portable airgun array, dense group interval streamer cable, compressor container, and laboratory container. Chamber size of the airgun array was 240 cu. in. in total. The trial was successfully finished with safe operation. Seismic line and list are respectively shown in Fig.2 and Table 1.

#### • Ocean Bottom Seismometer (OBS) test

Two OBS were deployed prior to the portable MCS check and retrieved after the check, comparing data between a newly developed recorder and a conventional one.

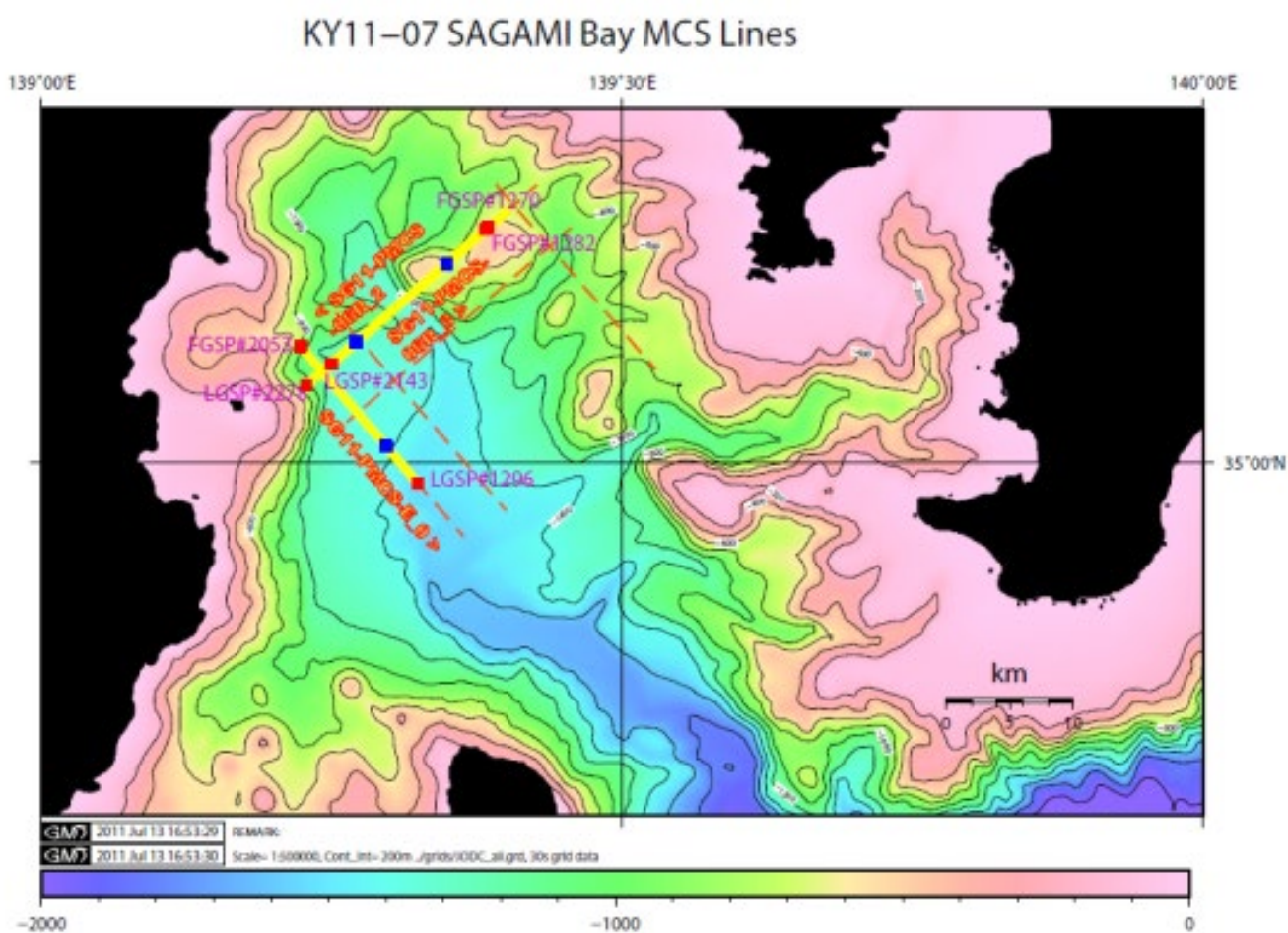


Fig.2 Seismic lines

Table 1 MCS line list

| SG11-PMCS-06 | Time (UTC)         | Latitude (N)  | Longitude (E)  | Depth (m) | SP   |
|--------------|--------------------|---------------|----------------|-----------|------|
| First shot   | 30/06/2011 6:20:33 | 35_10.19967°N | 139_23.40200E  | 511       | 1240 |
| Last shot    | 30/06/2011 6:55:02 | 35_11.61833°N | 139_25.38683°E | 708       | 1027 |

| SG11-PMCS-06R_0 | Time (UTC)         | Latitude (N)  | Longitude (E)  | Depth (m) | SP   |
|-----------------|--------------------|---------------|----------------|-----------|------|
| First shot      | 30/06/2011 7:36:48 | 35_11.56900°N | 139_25.29117°E | 736       | 1030 |
| Last shot       | 30/06/2011 8:08:57 | 35_09.94350°N | 139_23.03067°E | 498       | 1273 |

| SG11-PMCS-06R_1 | Time (UTC)          | Latitude (N)  | Longitude (E)  | Depth (m) | SP   |
|-----------------|---------------------|---------------|----------------|-----------|------|
| First shot      | 30/06/2011 20:06:22 | 35_11.09367°N | 139_24.63117°E | 753       | 1101 |
| Last shot       | 30/06/2011 01:18:36 | 35_10.94000°N | 139_24.43167°E | 724       | 1123 |

| SG11-PMCS-06R_2 | Time (UTC)          | Latitude (N)  | Longitude (E)  | Depth (m) | SP   |
|-----------------|---------------------|---------------|----------------|-----------|------|
| First shot      | 01/07/2011 20:06:22 | 35_10.72467'N | 139_24.13567'E | 683       | 1155 |
| Last shot       | 01/07/2011 01:18:36 | 35_03.26400'N | 139_13.66217'E | 976       | 2278 |

| SG11-PMCS-06R_0 | Time (UTC)          | Latitude (N)  | Longitude (E)  | Depth (m) | SP   |
|-----------------|---------------------|---------------|----------------|-----------|------|
| First shot      | 01/07/2011 20:06:22 | 35_04.93450'N | 139_13.40717'E | 1020      | 2053 |
| Last shot       | 01/07/2011 01:18:36 | 34_59.10417'N | 139_19.47900'E | 1517      | 1296 |

| SG11-PMCS-06R_3 | Time (UTC)         | Latitude (N)  | Longitude (E)  | Depth (m) | SP   |
|-----------------|--------------------|---------------|----------------|-----------|------|
| First shot      | 01/07/2011 4:24:45 | 35_09.96383'N | 139_23.06033'E | 498       | 1270 |
| Last shot       | 01/07/2011 6:16:46 | 35_04.16000'N | 139_14.92199'E | 1268      | 2143 |

## 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.