

Cruise Summary

1. Cruise Information

- (1) Cruise ID : KM17-07
- (2) Name of vessel : Research Vessel *Kaimei*
- (3) Title of the cruise : Training cruise for 3 Dimensional Multi-Channel Seismic Survey (3D-MCS)
- (4) Chief of the party :
 - Leg1 : Yasutaka Amitani [JAMSTEC]
 - Leg2 : Tetsuji Maki [JAMSTEC]
- (5) Cruise period :
 - Leg1 : 2017/07/14 ~ 07/26
 - Leg2 : 2017/07/27 ~ 08/12
- (6) Ports of departure / arrival : Hakodate Port ~ Sendai Port ~ Ariake port
- (7) Survey area : Japan Trench

2. Overview of the Observation

- (1) Training for launch and recovery

To understand and practice the launch and recovery procedure for seismic streamer cable, paravane, airgun arrays was safely conducted during cruise. Towing layout was adjusted depends on the ship's speed and was finally confirmed.

- (2) MCS training

Communication between back deck and bridge, No2 laboratory during launch/recovery, and survey was confirmed. Seismic equipments at the No.2 laboratory were used during survey. The seismic reflection survey was performed on 9 lines and raw seismic data were collected and processed on board for the purpose of quality control. Onboard data processing flow was finally confirmed.

- (3) Ship's control using Seismic track navigation system

During survey, ship was controlled adequately from No.2 laboratory by using Kongsberg's Seismic track navigation system. Raw MCS reflection data and navigation data were combined and collected using this function.

- (4) Equipments onboard the R/V *Kaimei*

Bathymetric survey was carried out during MCS survey.

- (5) Check the MCS operation manual.

MCS operation manual was checked and was modified if it was required.