

Submission date 2012 April 9

Cruise Summary

1. Cruise Information

- Cruise ID: MR12-E02-Leg2
- Name of vessel: Mirai
- Title of the cruise: Marine Ecosystems Investigation, Impact by the mega-earthquake (the 2011 Earthquake of the Pacific coast of Tōhoku) and Tsunami: For Recovery and Rebuilding of Sanriku Fisheries Activities
- Chief scientist [Affiliation]: Katsunori Fujikura (BioGeos, JAMSTEC)
- Representative of the Science Party [Affiliation]: Katsunori Fujikura (BioGeos, JAMSTEC)
- Cruise period: March 15, 2012-March 22, 2012
- Ports of call: Hachinohe, March 15 - Hachinohe, March 22, 2012
- Research area: General survey area: Off Tohoku, Pacific

2. Overview of the Investigation

The purpose of this cruise is to understand impacts on marine ecosystems by the 2011 Earthquake of the Pacific coast of Tōhoku and Tsunami, and to contribute for recover and rebuild of Sanriku fisheries activities in terms of marine science. Target areas are continental slope and shelf off Sanriku. This cruise is conducted under the TEAMS project, namely Tohoku Ecosystem -Associated of Marine Sciences. Detail investigation subjects are topographic surveys, mapping of scattered debris, distribution patterns and diversity of benthic organisms, seawater and sediments geochemistry, and sediments components. Based on these data and samples, we will construct habitat map for ecosystem management in Sanriku areas.

During MR12-E02-Leg2 in Off Iwate and Miyagi areas, we investigated following subjects,

- 1) Distribution patterns of benthic organism, geological, debris distribution, chemical and physics analyses using 4000 m class deep-towing TV camera system,
- 2) Chemical and physics analyses using CTD water sampler,
- 3) Topographic surveys using MBES,
- 4) Geophysical survey using Gravity, Gradio & Magnet meters.

All data will be analyzed to estimate impact to the marine ecosystems by the 2011 Off Tohoku Earthquake and tsunami.