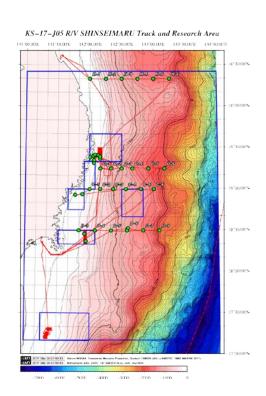
Cruise Summary

1. Cruise Information

- Cruise ID: KS-17-J05
- Name of vessel: SHINSEI MARU
- 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: Masahide Wakita [Mutsu Institute for Oceanography/JAMSTEC]
- Representative of the Science Party : Katsunori Fujikura [Dept. of Marine Biodiversity Research /JAMSTEC]
- Title of proposal: 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
- Cruise period: 12th March to 31th March
- Ports of departure / call / arrival

Ishinomaki (12th March) ~ Ishinomaki (22th March) ~ Yokosuka (31th March)

- Research area: Off Sanriku
- o Research map



2. Overview of the Observation

• Purpose, background

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. This cruise is conducted under the TEAMS project, namely Tohoku Ecosystem Array of Marine Sciences. Detailed investigation subjects are distribution patterns and diversity of benthic organisms, seawater and sediments geochemistry, and sediments characteristics. Based on these data and samples, we will construct habitat map for ecosystem management in Sanriku areas.

- Observations, Activities
- 1. CTD cast and water sampling/biogeochemical analysis
- 2. Assessment of phytoplankton photosynthesis by fast repetition rate fluorometry (FRRF)
- 3. Plankton sampling by using NORPAC net
- 4. Survey of plankton distribution by quantitative echo sounder
- 5. Bathymetric survey by the Multi-narrow Beam Echo Sounding system (MBES) equipped on-board
- 6. Seafloor condition created by Side Scan Sonar (SSS) system under tow
- 7. Sub-bottom structure by the Sub-Bottom Profiler (SBP) system equipped on-board
- o Title of project: Tohoku Ecosystem-Associated Marine Sciences (TEAMS)