

## Cruise summary of NT13-21 Leg1 cruise

### Cruise information

Cruise number	NT13-21 Leg2
Name of the vessel	R/V Natsuahima
Chief scientist	Takafumi Kasaya (TEAMS, JAMSTEC)
Representative of the Project	Yoshihiro Fujiwara (TEAMS, JAMSTEC)
Title of the cruise	Marine Ecosystems Investigation, Impact by the mega-earthquake (the 2011 Earthquake off the Pacific coast of Tōhoku) and Tsunami: For Recover and Rebuild of Sanriku Fisheries Activities
Cruise period	20 Oct. 2013 – 4 Nov. 2013
Ports of call	Shiogama port – Yokosuka port
Research Area	Off Tohoku region (Fig.1)

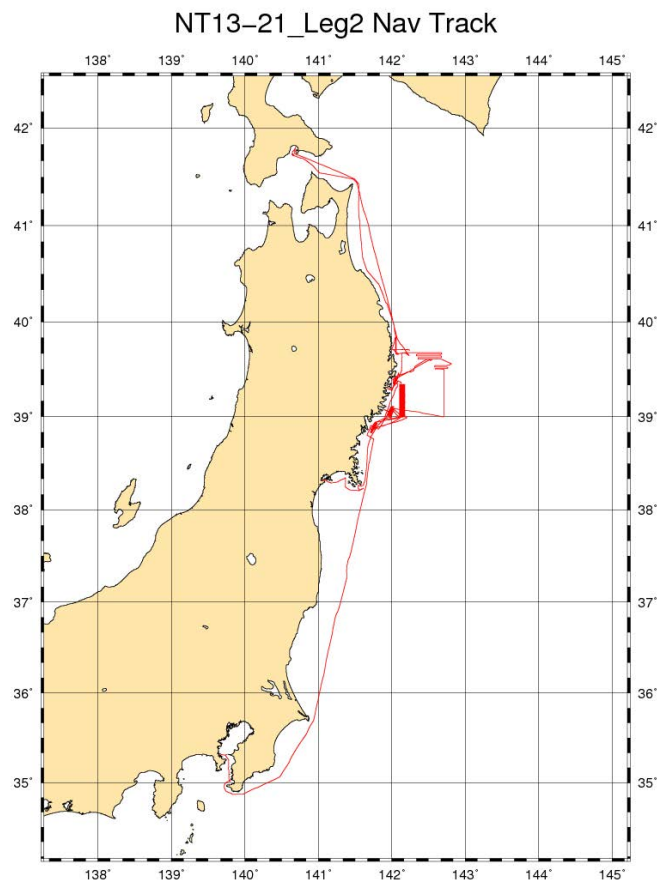


Fig.1 Ship track of this cruise.

## **Cruise summary**

### **Cruise proposal**

” Marine Ecosystems Investigation, Impact by the mega-earthquake (the 2011 Earthquake off the Pacific coast of Tōhoku) and Tsunami: For Recover and Rebuild of Sanriku Fisheries Activities”

The purpose of this cruise is to understand the impacts to marine ecosystems by the 2011 Earthquake off the Pacific coast of Tohoku) and Tsunami, and to contribute by marine science aspects to recover and rebuild of Sanriku fisheries activities. Target areas are sea bottom layers off Sanriku. This cruise is conducted under the TEAMS project, namely Tohoku Ecosystem Array of Marine Sciences. Detail investigation subjects are topographic surveys, mapping of scattered debris, distribution patterns and diversity of benthic organisms, seawater and sediments chemical and sediment components. Based on these data and samples, we will construct habitat map for ecosystem management in Sanriku areas. In this leg, we obtained acoustic data to fully understand the recent bathymetry, seafloor condition and sub-bottom structure. To obtain higher accuracy data for correcting the current seafloor condition including marine earthquake debris, we used a towing side scan sonar with 120 kHz and 400 kHz acoustic signals.