

Cruise Summary

1. Cruise Information

- Cruise ID: KR18-12C
- Name of vessel: R/V KAIREI
- Title of cruise: “Research Project for Compound Disaster Mitigation on the Great Earthquakes and Tsunamis around the Nankai Trough Region”
- Chief Scientist [Affiliation]: Toshiya Kanamatsu [CEAT JAMSTEC]
- Proposal representative [affiliation]: Shuichi Kodaira [CEAT JAMSTEC]
- Representative of Science Party [Affiliation]: Toshiya Kanamatsu [CEAT JAMSTEC]
- Cruise period: Sept. 7th, 2018-Sept. 21th, 2018
- Ports of departure / arrival: JAMSTEC/ JAMSTEC (**Figure 1**)
- Research area: Off the eastern coast of Kyushu (**Figure 2**)

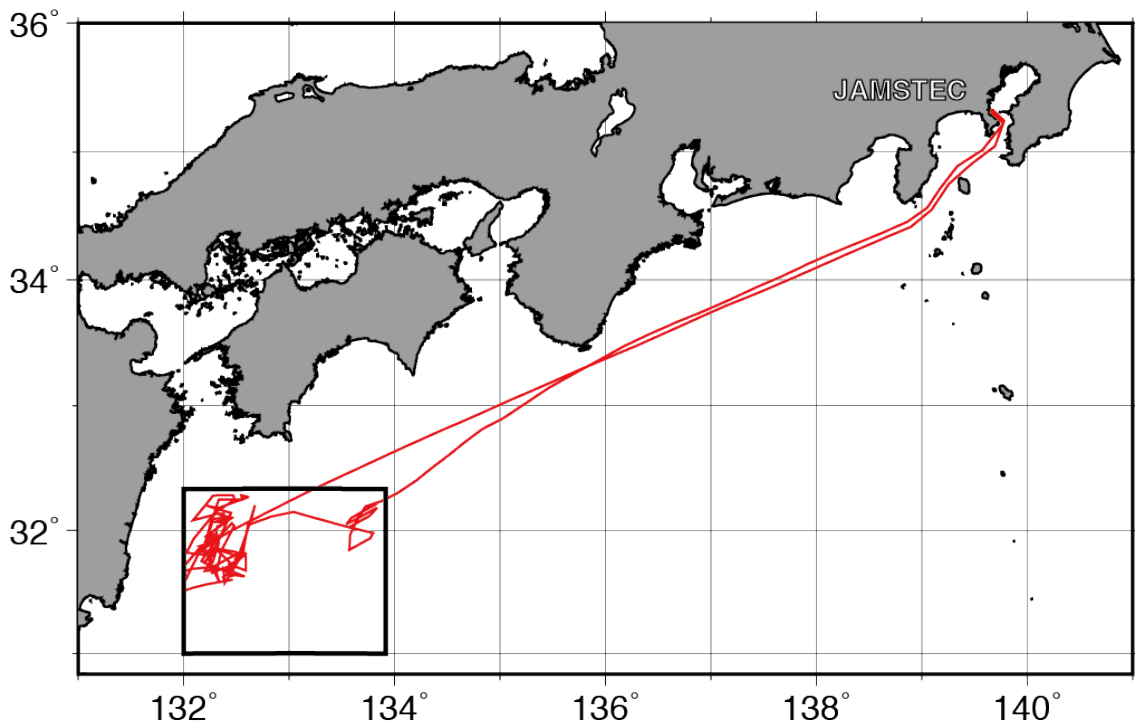


Figure 1. Red line: ship track of KR18-12C

2. Overview of Research Activities

We conducted marine geological surveys off the coast of eastern Kyushu. The survey area is subdivided to three areas. 1: Off Ashizuri, 2: Oyodo Basin, 3: The foot of continental slope of Kyusyu. Areas 2 and 3 were mainly surveyed. Because of limited

geological information in the areas, we firstly investigated the subseafloor strata development using SBP especially in order to seek event deposit layer. In the Oyodo Basin, SBP records recognized a few meter- thin sequence, of which its distribution is restricted to the basin center. We collected 4 piston core samples from there. Their lithology is characterized a few meters hemipelagic mud intercalated with a few thin sand layers, and underlaid by ashy fine grain layer.

We conducted MBES and SBP surveys in the foot of the continental slope in Kyusyu side. We collected five piston core samples from there. We recovered samples which include a frequent sand layer intercalation is identified in the samples. The distribution of such lithology is very limited in the narrow zone. We will conduct post-cruise research to identify the frequency of the sand event deposits.

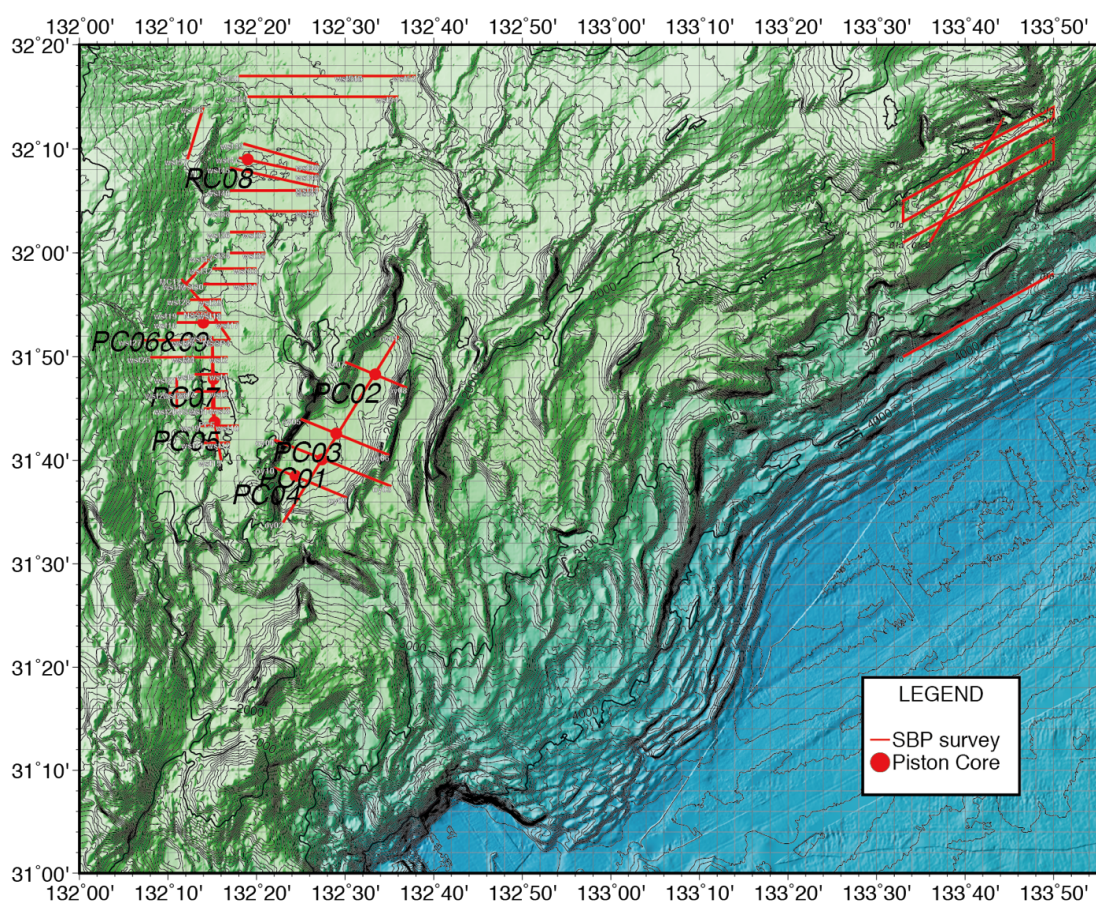


Figure 2. KR18-12C research area: Red line: SBP and MBES Lines. Red circle: coring point