

Cruise Summary

1. Cruise Information

Cruise ID:	YK10-E02
Vessel Name:	R/V Yokosuka
Cruise Title:	Site Survey for an IODP Expedition in the Kumano-nada Area
Chief Scientist:	Kan Aoike (CDEX, JAMSTEC)
Representative of Science Party:	Takashi Agatsuma (CDEX, JAMSTEC)
Cruise Period:	17 October 2010 ~ 19 October 2010
Ports of call:	Kobe (Kobe Port Island) – Yokosuka (JAMSTEC Quay)
Survey Area:	About 70 km southeast of Shingu, Wakayama Prefecture, Kii Peninsula.

2. Overview of the Survey

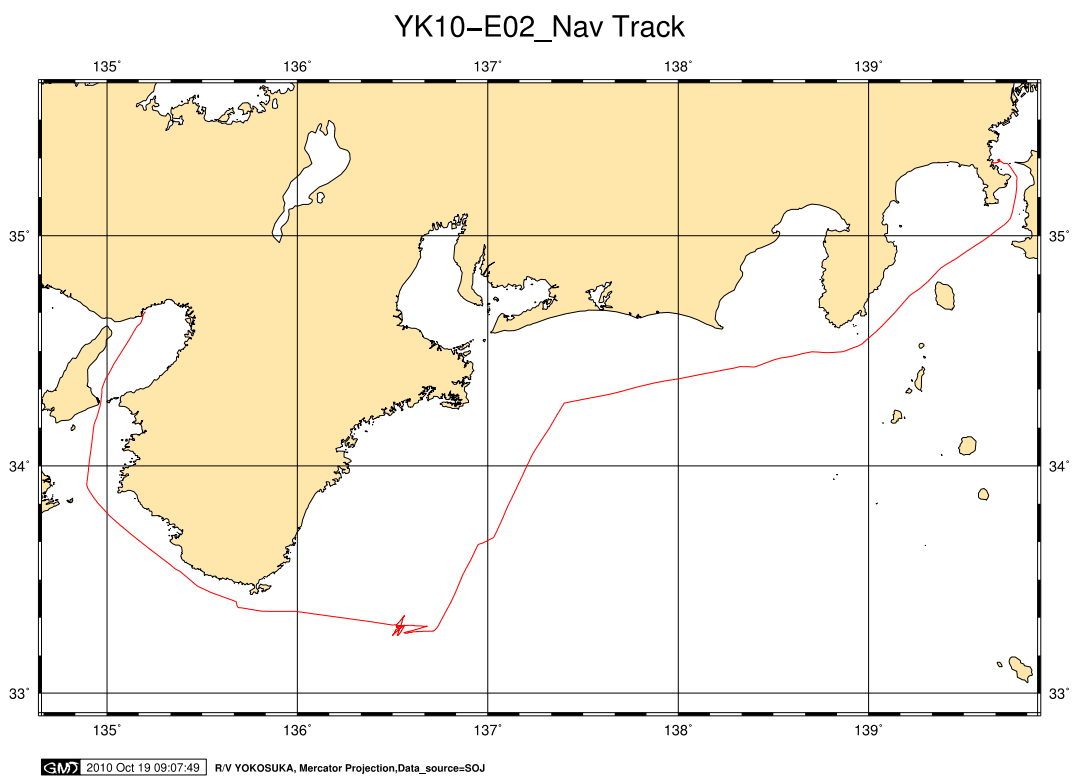
2.1. Objectives

This cruise was planned to retrieve two suites of mooring systems deployed to the Kumano-nada area during YK10-06 cruise in June, 2010. The mooring systems were set for recording temporal variations of sea currents (basically the Kuroshio Current) at an area close to Site C0002 at which an ultra-deep riser hole down to a seismogenic zone beneath the Nankai Trough subduction zone is planned to drill in the NanTroSEIZE project, Integrated Ocean Drilling Program (IODP). The data obtained shall be used for a riser analysis, by which behaviors of the Chikyu's riser pipe under high current conditions is simulated.

2.2. Results

Recovery operations of the two mooring systems were conducted on 18th October and were successfully completed without neither WOW nor any serious trouble. The points that the mooring systems are installed are located about 70 km southeast from Shingu City, Wakayama Prefecture, Kii Peninsula. The vessel left from a quay of the Kobe Port Island at 15:00 on 17th October and arrived at the objective area at 04:00 on

18th and resumed to move to the first site, CM03 (33°17.8651'N, 136°31.4941'E, 1912.0mbsl), at 06:00. The operations at CM03 started at 07:00. In the operation at CM03 where a LR-ADCP is mounted to the mooring system, the first releaser did not respond properly to signals from the onboard communication station and caused a misunderstanding that the mooring might be coming up to the surface; however, the second releaser did respond and the mooring was retrieved successfully. In the second operations at the site CM04 (33°16.0531'N, 136°33.9294'E, 1749.0 mbsl) where a BB-ADCP is mounted, the retrieval proceeded smoothly. The retrieval operations finished at 14:30 and then the vessel left for Yokosuka. Data retrieval works were performed while sailing and continued after being alongside the quay. The vessel came alongside the quay of JAMSTEC, Yokosuka, at 09:00 on 19th October.



The ship track of YK10-E02