Submission date 2014/7/11

# KY14-08 Cruise Summary

## 1. Cruise Information

### 1.1. Cruise ID

KY14-08

### 1.2. Name of vessel

R/V Kaiyo

### 1.3. Title of the cruise

Recovery of the prototype buoy for tsunami and crustal movement.

### 1.4. Chief scientist [Affiliation]

Tatsuya Fukuda [JAMSTEC Marine Technology and Engineering Center]

### 1.5. Representative of the Science Party [Affiliation]

Tatsuya Fukuda [JAMSTEC Marine Technology and Engineering Center]

### 1.6. Cruise period

Jun. 14, 2014 – Jun. 17, 2014

### 1.7. Ports of call

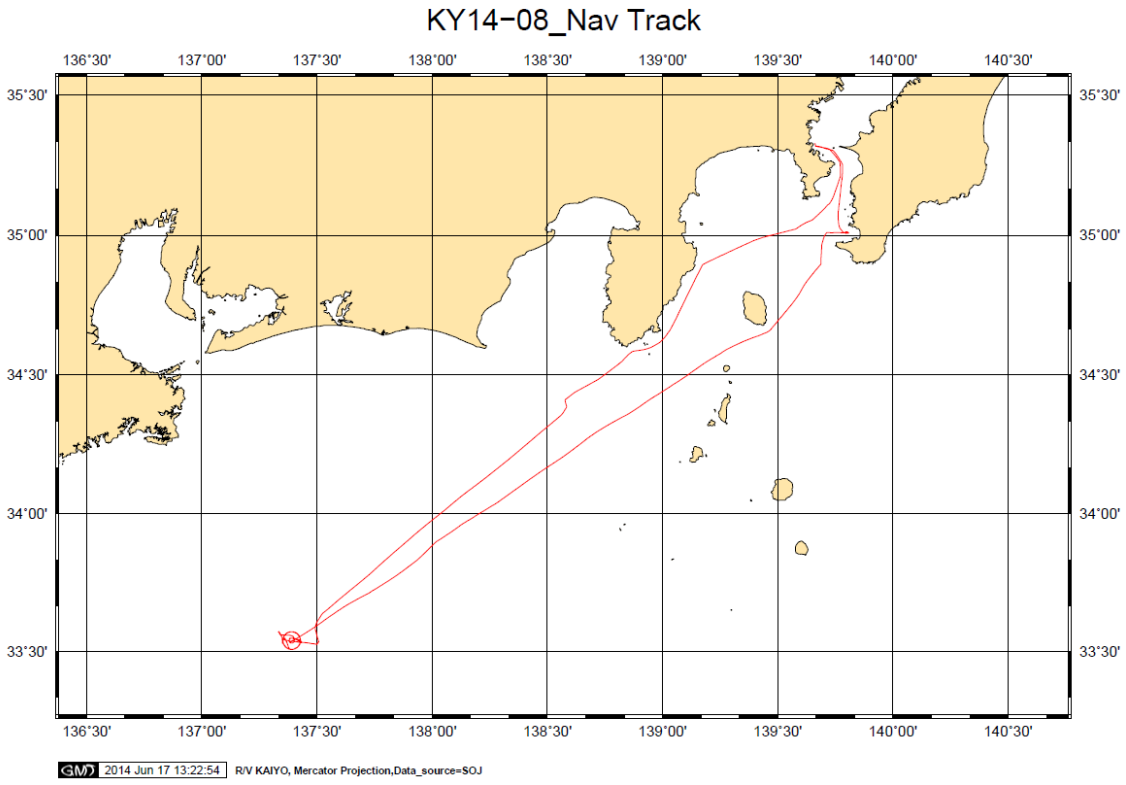
Yokosuka, Japan (Departure: Jun. 14, 2014)

Yokosuka, Japan (Arrival: Jun. 17, 2014)

### 1.8. Research area

Kumano basin

## 1.9. Cruise Track



## 2. Overview of the Observation

### 2.1. Purpose

The purpose of this cruise is to recover the prototype buoy for tsunami and crustal movement which was deployed at YK14-01 cruise.

### 2.2. Observation summary

2.2.1. Recovery of the prototype buoy for tsunami and crustal movement

Surface buoy recovery: 1 mooring

Ocean Bottom Unit recovery: 1 mooring

Locations of recovery are as follow:

(1) Locations of Recovery

① The prototype buoy for tsunami and crustal movement

| | |
|---|---|
| Deployed date (UTC) | 12 Jan. 2014 02:49 |
| Recovered date (UTC) | 15 Jun. 2014 04:22 |
| Exact location | 33 - 32.33N, 137 - 23.24E |
| Depth | 2,972 m |

② Ocean Bottom Unit

| | |
|---|---|
| Deployed date (UTC) | 12 Jan. 2014 07:25 |
| Recovered date (UTC) | 16 Jun. 2014 02:20 |
| Exact location | 33 - 32.43N, 137 - 23.41E |
| Depth | 2,973 m |

2.2.2. Acoustic waveform observation

Before and after recovery of a prototype buoy, we observed the acoustic waveform from OBU along 3 observation point and lines using vessel acoustic receiver which installed on the bottom of vessel. We observed near the buoy before recovery. And after recovery, we did along a line that the center of line are OBU position. And then, we did using recovered wire rope and recovered wire-end station.

Acoustic waveform observation: 3 times

- point #1 near buoy
- Line #1 Circle Radius 3.55km Center: 33-32.43N, 137-23.41E
- Area #1 Circle Radius 3.0 ~ 3.9km Center: 33-32.43N, 137-23.41E