

## Earthquake Observation in and around Kumano Nada using Cable and Pop-Up type Ocean Bottom Seismographs

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From October, 2008, JMA started earthquake observation offshore in the middle of the Nankai Trough using cable type Ocean Bottom Seismographs (OBSs) which has been installed from the Tokai-Oki area to Kumano Nada area. Then MRI and JMA installed twelve of pop-up type OBSs around the cable type OBSs from June, 2009 to September, 2009. Aim of this campaign observation is (1) examine the hypocenter determination ability of the JMA cable type OBSs, (2) to compare hypocenter distributions determined by only the cable type OBSs or a combination of cable type + pop-up OBSs with those by land seismic networks for understanding of feature or disposition of hypocenter distributions determined by different combination of offshore and land observation. During three months of the campaign observation, a combination data set of the cable and pop-up type OBSs detected 188 events, most of which were located around Nankai Trough axis. These hypocenters depth distribution are about 20 ? 50km, but decided by only cable type OBSs are tends to become relatively shallow. Comparison of hypocenters with those determined by the land network suggests that hypocenter distribution determined by both of cable and pop-up type OBSs shows the cluster form.

In this presentation, we further discuss feature and disposition of the hypocenter distribution estimated by the cable type OBSs as well as geographical feature if seismicity in this area.

Keywords: Earthquake observation, Ocean Bottom Seismograph, Tokai Oki, Kumano Nada, Comparison of the hypocenter