

## Seismicity off Tokai observed by pop-up type ocean bottom seismographs in 2002

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The source region of the coming Tokai Earthquake is estimated in land and sea area around Shizuoka prefecture of Tokai district in the central part of Japan. It is important to know the seismicity around the source region in detail, for understanding of characteristic and occurrence potential of the Tokai Earthquake. However, at a sea area, the detection capability of earthquakes is low and hypocenter determination is no good, because permanent observation net inclines toward a land area. An observation by ocean bottom seismograph (OBS) is effective to improve detection capability and hypocenter determination. To investigate the real seismicity off Tokai, we have repeatedly observed by pop-up type OBS since 1999. We show the result of 2002 observation in this study.

In 2002, we deployed several OBSs off Tokai in following two periods, June 8 - July 27 and October 5 - December 8. Using the data of OBSs and surrounding permanent stations, some hypocenters were determined in seismic active zone along the Zenisu ridge. Furthermore, in the sea area of land side from the Suruga-Nankai trough, in which seismic activity is extremely low, we could detect a few events. Almost these earthquakes are magnitude 1 level, and could not be detected by JMA routine. On the other hand, for the few earthquakes detected by JMA, the focal depths determined by OBS tend to be shallow as compared with JMA routine. In the presentation, we will show the characteristic of each earthquake observed by OBS, and will compare with the past seismicity.