

Long duration tremor at off Kii-Peninsula by ocean bottom seismometers

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We observed many long duration tremors at Off-Kii area by ocean bottom seismometers (OBS). This region is the region where the 2004 off the Kii Peninsula earthquake occurred. At that time, we started OBS observation in order to determine the precise distribution of the aftershocks. The long duration tremors that had been discovered this time were in that data. The maximum feature of those waveforms is long duration time. The vibration usually continues to the earthquake of the M4 class only for about one minute. This vibration might continue for several minutes. The amplitude of this waveform is different in each earthquake and in each OBS. This shows that two or more sources exist. The dominant frequency of the waveforms is about 1-5 Hz. It is lower than a regular aftershock, though is not especially low. The Very low frequency earthquakes (VLFE) are found in this area by Ishihara (2003) and Obara and Ito (2005). They are considered the dynamic deformation process of the accretionary prism. Did we capture this VLFE by OBSs? Or, did we capture surface waves excited by shallow aftershock? Or, did we capture the slow slip at the shallow plate boundary? Or, did we capture another some phenomena?