

Deep Crustal Resistivity Structure in the Focal Region of the 2000 Tottori-ken Seibu Earthquake, Southwestern Honshu Japan

Research Group for Crustal Resistivity Structure 2001 Ichiro Siozaki

Wide-band MT observations were carried out at 10 sites around the focal region of the 2000 Tottori-ken Seibu earthquake in order to determine the deep crustal conductivity structure. The data obtained at each site were analyzed together with magnetic records observed at a site far from the target area by means of a remote reference technique. As a result reliable sounding curves was obtained in the high frequency domain. Although obtained sounding curves suggest the existence of the deep crustal conductor beneath the focal region, its shape and arial extent have not been resolved well because of noise due to leakage currents from the railway. Spike-shaped noises contaminate the time series on the whole dataset. This noise is observed in all the observation stations at the same time, and its continuation time is comparatively short. For noise reduction processing its feature is very advantageous. Taking this advantage, we will develop the noise processing method and show revised sounding curves. We will also report the preliminary results of 2-D analysis.