

Crustal structure of the aftershock area of the 1994 Sanriku-oki earthquake

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In 2000, we made a seismic observation using an ocean bottom seismic network with 30 instruments in the aftershock area of the 1994 Sanriku-oki Earthquake to delineate difference in seismic activities between the aftershock and the interseismic periods. In order to distinguish the difference of seismicity from the hypocenter distribution, it is essential to clarify seismic velocity structure and its heterogeneity with enough accuracy. After the deployment of the OBSs, we made an airgun seismic survey at all the stations. V_p/V_s ratio at the topmost sedimentary layer shows significant scatter, in the range of about 3.0 to 5.0, from a station to another. Such structure localities may affect the hypocenter distribution unless taking into account to them.