Microseismic activity in the Kitakami and Sen'ya faults area, Tohoku back bone range

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We observed natural earthquakes in the Kitakami and Sen'ya faults area, in central Tohoku, the northeastern part of Japan. The object of this observation is to get a new insight of the island-arc crustal dynamics with a relation between seismicity and lateral heterogeneity of the crust. We study the relations among deep structure of active faults, distribution of microearthquakes, and three-dimensional velocity structure. We deployed 43 three-component portable seismographs from July 14 to September 30 in 1998. Each seismograph system consisted of a 1-Hz three-component seismometer and a DAT recorder. We picked 3485 earthquakes from one of the station near the Kitakami fault and 2727 from one near the Sen'ya fault. We observed about ten microearthquakes per day near those faults.