

The Seismicity and Velocity Structure of the northern part of Hokkaido

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A temporal seismic observation was deployed during the period from June to November, 1998 in the northern part of Hokkaido.

Using this data and the routine data, 1-D P-wave velocity model and station corrections have been simultaneously estimated by Crosson's inversion method.

The P-wave velocities of the first layer(2Km), the second layer(8Km), the third layer(10Km) and the last layer(>20Km) are 2.8, 5.3, 6.4 and 6.6Km/s, respectively.

Station corrections largely vary from west to east. The stations in western islands, Japan-Sea side and Okhotsk-Sea side. A lot of earthquakes clearly located at 20-25Km depth. Their mechanism solution shows normal fault type instead of the strike-slip fault type for the shallow earthquakes.