

## Development of a borehole type high dynamic range broad-band seismometer

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National Research Institute for Earth Science and Disaster Prevention (NIED) operates the High Sensitivity Seismograph Network of Japan (Hi-net). A two component tiltmeter is also installed at almost all observatory of Hi-net. This is a pendulum-type tiltmeter whose principle of operation is same as that of a horizontal accelerometer. Therefore it is able to observe long period horizontal ground motion. NIED develops a new borehole type broad-band seismometer based on this tiltmeter in order to improve capability of observation in the seismic frequency band. We will introduce the outline of this seismometer.

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