Calibration of a borehole seismo-geodetic sensor system

Eiichiro Araki [1], Kiyoshi Suyehiro [2], Masanao Shinohara [3], Toshihiko Kanazawa [4]

[1] ORI,U-Tokyo, [2] ORI, U. Tokyo, [3] Dept. Earth Sciences, Fac. Sci., Chiba Univ., [4] ERI, Tokyo Univ

http://seismo2.ori.u-tokyo.ac.jp/araki/

A seismo-geodetic sensor system, installed in Nokogiriyama, has been operating for 6 months since August, 1998. The strainmeter of the system observed high-rate strain change as the glue to fix the system to the surrounding rock was curing. After 6 month, the glue is now stable and the strainmeter can observe a tide signal. The strainmeter is calibrated by comparing the tide signal to the synthetic tide. The system also observed some earthquakes occurred near the site. Strain change of the site due to the earthquakes is also compared to these seismic moments.