Strain and tilt changes due to rain fall at the 800m borehole on Awaji Island

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The 800m borehole at Toshima is located about 500m southeast of Nojima fault on Awaji Island. Routine observations of crustal activity based on a scientific drilling program have been performed at the 800m borehole since May, 1996 by employing a multi-component borehole instrument. A discharge meter was installed on the ground at the 800m borehole. Rain fall resulted in the contractions of the crust with lags of 4 days and 10 days. Maximum subsidence due to rain fall occurred in the northeast direction. We will try to construct a numerical model of crustal movements due to rain fall.