

Tidal calibration of borehole tiltmeters around Iwate volcano: Cross coupling correction for tilt disturbed by strain

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We have deployed four borehole stations for continuous observation of ground deformation using tiltmeter and dilatometer around Iwate volcano, which has activated since 1998. One of them behaves abnormal tidal response compared with other three stations. We will demonstrate the cross coupling correction of tilt record using theoretical tidal tilt and strain. We will show the source model of the deformation associated with the volcanic activity of Iwate volcano using cross coupling corrected tilt data.