

# Crustal Deformations around Fuji Volcano Derived from Continuous Measurements by a Dense GPS network

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We processed continuous GPS measurements data by a permanent dense network around the Fuji volcano for the purpose of enhancing our knowledge about magmatic plumbing system of the volcano and its change if exists. We constructed two new sites on the edifice of the volcano; one is on the summit and the other is on the northern flank. Together with other sites of the GEONET network of the Geographical Survey Institute we calculated daily positions of these sites. The results show no significant crustal deformations exist, that suggest magmatic inflation or deflation of the volcano so far. An interesting finding is the lack of the strain accumulation in the area where the Izu peninsula collides to Honshu island. If Izu peninsula moves northeastward there should be a region with strong compressional strain between the peninsula and the Honshu island. The strain accumulation rate measured by the GPS is otherwise.