

Laser ranging monitoring result on the active Kusanagi and Asabata faults and motion of the Philippine Sea Plate

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Kusanagi and Asabata faults are concentric slide planes of gravitational collapse, relating with the uplifting of central Japan under the east-west compressional stress. The monitoring using laser ranging on the faults has been made since 1996. The changes in the distance across the Kusanagi Fault are observed in the range of several cm. The distance increases after the earthquakes along the Pacific Plate boundary, and decrease along the Philippine Sea Plate boundary. The abnormal decrease has been observed since October 2000, which indicates the start of new stage of the activity.