

Tomographic imaging of mantle-upwelling in the backarc of Kyushu and a tensile movement of western Kyushu.

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Sadeghi(1999) studied the seismic tomography of western Japan to eastern China region. He found that strong low velocity zones appear west off Kyushu at 40km depth and extends westward to a depth of 100km. This suggests small and hot mantle plumes in the backarc of Kyushu. It means the activities of mantle-upwelling under the northern region of the Okinawa trough. The activities not only relate strongly to the spreading of the trough but also cause a tensile movement of western Kyushu.