Triggered significant seismicity in Oita following the M7.3 Kumamoto earthquake in 2016

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On 16 April 2016, the M7.3 Kumamoto earthquake occurred in Kyushu. At a seismic station in Oita located about 80 km north-eastwards from the hypocenter, large seismic signals from another large earthquake were observed during the passage of seismic waves from the M7.3 event. The event identified in Oita was located by picking P and S wave arrivals using seismograms at K-NET and KiK-net stations. The Oita earthquake occurred about 33 sec after the M7.3 event, the hypocenter located at a depth of about 7 km beneath Yuhuin geothermal region, and its local magnitude was estimated about 6.0. The static and dynamic stress changes at this region from the M7.3 event were on the order of about 1 kPa and 1 MPa, respectively.

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