

Fault exposures dislocating late Quaternary deposits in the epicentral area of the 2000 Western Tottori earthquake

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To evaluate the fault activity associated with the 2000 Western Tottori earthquake, we performed literature survey, airphoto-interpretations of fault landforms, and reconnaissance in the epicentral area. As the results of the reconnaissance, the fracture zones with fault gouge and horizontal striations on sharp fault planes were found along the northwest-trending lineaments traced for approximately 20 km. On the outcrop of the fracture zone, we found the evidence for the most recent surface-rupturing event occurring sometime between 760 and 1280 y.B.P. Hence it was possible to estimate the magnitude on this area at 7 before the 2000 Western Tottori earthquake using the lineament length of 20km.