

The tectonic geology-publication of fault plane formed in the western Tottori earthquake

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The big shake of seismic intensity 5-6 is observed by the western Tottori earthquake ($M_j=7.3$) which occurred on October 6, 2000 in the Chugoku district (Ishigaki, 2000).

In this investigation, publication and measurement were performed in the field (N40E) started perpendicularly about the pit (2m x 2m x depth of 2m) of 4 pits drilled by National Institute of Advanced Industrial Science and Technology (AIST) on fracture which appeared in western Ryokusui lake Saihaku Town, Tottori Pref. therefore, we considered changes of structural factor and density. In Yonago area, the report of the fault and fault rock considered to have worked until now before the Tottori western earthquake was not made. However, all over the pit indicated this time, a shear plane and a fractured zone parallel to an earthquake fault progress mostly, and those most are not cutting the surface sediment on granite. Moreover, since a fault gouge belt can check what is making zoning structure, this area is considered that fault activity was performed for some time. And since a fractured zone and a cataclasite belt several cm or more cannot be checked but a thin fault gouge belt progresses densely, there is no crush belt like the Nojima fault which caused the Hyogo southern part earthquake (Great Hanshin Earthquake) in this area which ripened, and it is possible to be the area over which the immature fractured zone arranged in parallel is distributed.