The 2000 Tottori-ken seibu, Japan, earthquake - rupture process and environmental field -

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The earthquake with Mj 7.3 occurred in the western part of Tottori prefecture in Japan. The large left-lateral dislocation of 2-3m distributed on the south-east and shallow portion on the fault of strike with 152 degree. In the epicentral area, the swarm earthquakes have been occurred from 1989. Most of these swarm earthquakes distributed on the small dislocation portion where was just over the rupture start point of the main shock. Five low frequency earthquake which occurred at 30 km depth were observed after October 1997. A region of extremely low electric resistivity (100ohm/m) distributes just under the rupture zone of the main shock. The low frequency earthquakes and the low electric resistance region under the rupture suggest the existence of fluid.