

Search of the Fukui Earthquake Faults

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We have studied about the Eastern Margin active fault zone of the Fukui Plain (hereinafter referred to as 'the fault zone.')

First, we measured seismic wave-form by seismometers arranged in 5 high schools (Fujishima, Kanazu, Sakai, Mikuni, Maruoka; especially, Kanazu and Sakai are on the fault zone.) and investigated the arrival time of P and S-wave at the five observation points. We could determine where the hypocenter is through this process.

Then, we analyzed the S-wave splitting using hodographs of the horizontal motions. As a result, we discovered extraordinary S-wave splitting at Kanazu.

Also, we are succeeded in observing earthquakes whose hypocenter are on the northern or southern extension of the fault zone. Analyzing these earthquakes, we found the remarkable subsequent wave after the arrival of the S-wave to Sakai and Kanazu.

From these things we guessed that there are fault fracture zones between the main part of the fault zone and the western part of it, and there are developed cracks in the northern part of the fault zone, too.

Keywords: Hypocenter determination, S wave splitting, crack, Trapped waves

