

Integrated Research for Beppu –Haneyama Fault Zone (East part of Oita Plain –Yufuin Fault) –Research in 2016 - Integrated Research Project for Active Fault Systems of MEXT

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<Introduction>

Integrated Research for Beppu –Haneyama Fault Zone (East part of Oita Plain –Yufuin Fault) in central Kyushu started on 2014 during three fiscal years program as one of Integrated Research Project for Active Fault Systems of MEXT. We need more precise study on fault distribution, latest event in and around Beppu Bay region and relationship with western end of Median Tectonic Line for understanding of Beppu –Haneyama Fault Zone.

<Purpose of project>

We carry out geomorphological, geological and geophysical researches on the basis of existing research findings. Obtained new data on geomorphology and geology let us know new findings on precise location and activity of fault in and around Beppu Bay area (Theme 1). Moreover, new geophysical data on subsurface structure indicate size and motion of earthquake fault reached to the earthquake occurrence layer (Theme 2), and we also calculate precisely ground motion on the basis of precise subsurface structure and earthquake fault model (Theme 3).

<Research groups and contents of observation and survey>

Research group consists of about 40 researchers of Kyoto University, Kyushu University, Advanced Industrial Science and Technology and related Institutions, and also three sub-groups on the basis of methodology and science target. Sub-theme group 1: Research on precise location and shape of active fault, and average slip rate and event age. Sub-theme group 2: Research on three dimensional structure and subsurface structure of fault zone and the area. Sub-theme group 3: Research on establishment of subsurface structure model and evaluation of ground motion.

The result during 2016 fiscal year is presented in the session.

Keywords: Beppu –Haneyama Fault Zone, Integrated Research Project, Active fault and subsurface structure, Oita Plain