

Active Fault Research during the last 30 years and the social problem

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Suzuki(2013) reviewed the history of active fault research in Japan during the last 30 years. According to this paper the year of 1980 was recognized as the remarkable year when "Active faults in Japan" was published. The 30 years after 1980 is divided into periods of 1980 to 1994, 1995 to 2005, and after 2006. And the general trend and main research targets are summarized as bellow. The purpose of this presentation is to review the social problems following the active fault research history of the recent 30 years.

1. Introduction: The remarkable year of 1980

2. 1980-1994: The matured period of active fault studies during seismic calm

2.1. Excavation study of active faults

2.2. Analytical study of tectonic landform evolution based on dislocation models

2.3. Chronological studies supported by the development of dating techniques

2.4. Quantifying the rate of crustal deformation

2.5. Applied study to disaster reduction problem

3. 1995-2005: The decade after the great Kobe earthquake

3.1. Intensive investigation of active faults

3.2. Detailed large-scale mapping of active faults

3.3. Seismic reflection profiling of active fault

3.4. Long-term forecast of earthquake occurrence by active faults

3.5 Detailed study of flexural deformation and the 2004 Mid-Niigata earthquake

3.6. Overseas research on big earthquakes and active faults

4. 2006-2012: The period of rediscovery of active faults

4.1. Evaluating varieties of relation between earthquakes and active faults

4.2. Reexamination of active fault distribution

4.3. Relations between active faulting and geodetical movement

4.4. Considering interplate earthquake from the view point of submarine active fault

4.5. Question posed by the 2011 East Japan huge earthquake

5. Conclusions

Suzuki(2013): Active Fault Studies in Japan after 1980. Geographical Review of Japan Series B, 86, 6-21.

Keywords: Active fault, Research history, Social problem