

## Relation between stress field around active fault and fault activity

Yohei Yukutake<sup>1\*</sup>, Tetsuya Takeda<sup>2</sup>, Akio Yoshida<sup>1</sup>

<sup>1</sup>Hot Springs Research Institute, Kanagawa Prefecture, <sup>2</sup>National Research Institute for Earth Science and Disaster Prevention

In order to evaluate potential of fault activity, it is important to estimate effect of stress acting on active faults. We analyzed 'slip-tendency' that defined as the ratio of shear stress to normal stress acting on the surface of fault plane (Morris et al., 1996). The stress field is obtained based on the focal mechanisms data in intra-plate region, central Japan, estimated by Yukutake et al., (2012). Applying the stress inversion method (Hardebeck and Michael, 2006) to the focal mechanisms data, we estimated the stress state around active faults. Parameters about the position, strike and dip angle of active faults are taken from 'Active fault database of Japan' by The National Institute of Advanced Industrial Science and Technology (<http://riodb02.ibase.aist.go.jp/activefault/>). We found that most of active faults with large average slip rate (more than or equal to 1m/year) are likely to have large slip-tendency.

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