

The end of a fault--It's alike a bamboo broom

Tokihiko Matsuda [1]

[1] Literature, Seinan Gakuin Univ.

There are many ends of active faults in Japan. Towards the end of a fault, decreasing ratio of fault slip to the distance along the fault line is about $1/10,000$ for slip of a faulting event, and about $1/10$ for a cumulative slip in recent geological time. This means that the terminal area of a fault is a transitional area between the central elastic deformational area and the non-elastic deformational area outside. The main fault splits into numerous branch faults with lesser amount and disappear in non-elastic deformational area to form pattern like a bamboo broom. The upper crust must consist of the elastic (seismogenic) areas where long active faults develop and non-elastic deformational area surrounding the elastic areas (A model of elastic areas in patch).