Quaternary Tectonics deduced from Frequency Distribution of Fracture Width

Tatsuro Yoshimura[1]; Michiko Mano[2]

[1] Div. Geological Survey, Osaka, Fukken; [2] Div. Geological Survey, Osaka, Fukken

We found out 239 faults (fractures) at about 50 spots of Kinki district and measured their width. As the result between fracture width of fault fracture zone and the number of faults are related to exponent. The relation between exponent rules and active period of the active faults . We lead that (1) active faults of C rank appeared before 2 Ma. (2)The number of faults increasing change point fits starting quaternary tectonics (0.5Ma, 1Ma) . (3)Before 20000 tears ago , the number of all faults are 1315 and their ratio is A rank : B rank :C rank=146:441:728=1:3:5.
We lead these relation.
N=150w-1.73
FW=3w-1
(N:number of fault of the rank,w:rank)
FW=aT(a:average of accumlate width T:interval of active fault)