

## Rotational asymmetry of shear zone in brittle/ductile regime

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In the deep crust, the rocks taken stress deform ductile, and form a ductile shear zone. As a general deformation of ductile shear zones, proposed by Ramsay & Huber(1983) is that mainly in area that is taken the strongest deformation and in other areas, deformation is spread wide on both sides of an has been accepted. However, in many ductile shear zones in natural, deformations are spread on both sides of the areas are not necessarily dominated by deformation. Then, this paper call ductile shear zone having feature like that, having no axis for a rotational symmetry twice on the plane on which rock took the most prominent deformation, "asymmetric" shear zone. Ductile shear zones having asymmetry even being in the same parent rock is expected to include information on the formation of ductile shear zones. But quantitative discussion has not been made for asymmetry. In this study, ductile shear zone asymmetry is quantitatively discussed by defining "Degree of deformation asymmetry".

Keywords: shear, asymmetry, deformation