

Hatakawa mylonites: the microstructures and anisotropy of magnetic susceptibility

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Hatakawa Central Fault and Hatakawa Fracture Zone are found from east to west, respectively, in the northeastern margin of the Abukuma Mountains, northeastern Japan. There is a sinistral mylonite zone along the Hatakawa Central Fault. The thickness of a cataclasite zone is about 40-50 meters in the Hatakawa Fracture Zone. Based on the analysis of the microstructures and the anisotropy of magnetic susceptibility (AMS) of mylonites, the deformation conditions of those mylonites are discussed. The microstructures and the AMS indicate that ductile deformation is the strongest at the Hatakawa Central Fault. From a relation between shear strain and the AMS, the AMS might be a good tool to analyze the ductile shear strain for mylonites.

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