

Conditions for the cataclasite formation in the Hatagawa Fault zone

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The estimation of the condition of rupture nucleation zones along the deep fault zones is important for the earthquake generation. We report here the microstructures, mineral assemblages, and chemical composition of the cataclasites in the Hatagata fault zone, NE Japan, and discuss the conditions for the cataclasite formation. It is confirmed that the cataclasite distribution extend over 40 km along the Hatagawa fault zone, including the central part (Shigematsu, 1994). The microscopic observation reveals the occurrence of epidote and chlorite for the alteration minerals in the cataclasite. This indicates the cataclasite was probably formed at >200 deg C.

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