

Experimental studies on the constitutive properties for the shear failure of intact granite in seismogenic environments

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To investigate how the constitutive property prescribing the slip-dependent law varies with both temperature and effective normal stress in seismogenic environments, we have performed a series of fracture experiments of intact granite using a triaxial apparatus at the strain rate of 10^{-5} /s. In the semi-brittle regime, the stability of the breakdown process increases, as the effective normal stress becomes large.