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Fault-zone models revisited

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Recent friction to flow constitutive equation (Shimamoto, 2004, JpGU; Shimamoto and Noda, 2010, AGU)allows to predict the behavior connecting frictional properties in the brittle regime and high-temperature plastic flow for faults and shear zones. The presentation will summariize current data on flow and friction properties to discuss (1) transitional behavior between friction and flow, (2) properties in slow slip regime and (3) how to reproduce the friction to flow transition using realistic rocks.

Keywords: fault-zone model