

Toward an simulation for slow thrust slip based on rate and state dependent friction law (part 2) - effect of fault length -

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A slow thrust slip observed by GEONET is a valuable record of quasi-static slip which is rarely observed. To examine a physical condition where the slow slip occurs is important to understand the physics of earthquake generation. Therefore we are developing a 3-D simulation method which can regenerate the slow event based on rate and state dependent friction law. We show a finite length of a subduction fault in strike direction affects the slip behavior in comparison with the result of 2-D model of Kato and Hirasawa (1997).