


# Raw Data: Nucleation of frictional sliding by coalescence of microslip

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Title:

**Raw Data: Nucleation of frictional sliding by coalescence of microslip**

Authors:

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Description:

The numerical simulations model the nucleation process of sliding along a frictional interface governed by a linear slip-weakening friction law. The interface is characterized by a (deterministic or stochastic) heterogeneous strength profile. A uniform load is applied and slowly increased until global sliding occurs. The nucleation process occurs through the growth of localized slip patches, which coalesce and eventually lead to a critical nucleation patch propagating dynamically across the entire interface. The characteristic length scale of the strength profile is varied.

References:

Schär, S., Albertini, G., Kammer, D.S. (2021). "Nucleation of frictional sliding by coalescence of microslip." *International Journal of Solids and Structures*.

<https://doi.org/10.1016/j.ijsolstr.2021.111059>