# Article information:

Mineralogical Analysis of Selective Melting in Partially Coherent Rockslides: Bridging Solid and Molten Friction - Deng - 2020 - Journal of Geophysical Research: Solid Earth - Wiley Online Library  
<https://agupubs.onlinelibrary.wiley.com/doi/full/10.1029/2020JB019453>

# Article summary:

1. Selective melting of rock minerals on the slip surface can occur under sufficient stress and shear rate.

2. The molten fraction with variable composition affects solid and molten rock friction as well as the molten rock viscosity.

3. Landslide and shear-zone thicknesses, as well as the energy conversion coefficient, control the mobility of partially coherent landslides.

# Article rating:

Appears well balanced: The article presents the information in a reliable and balanced way, without biases and prejudices. The claims made in the article are well supported and, where applicable, all sides of the argument are given opportunity to present their point of view. The article appears trustworthy and reliable.

# Article analysis:

The article is generally reliable and trustworthy in its reporting of the role of selective melting in partially coherent rockslides. The authors provide a comprehensive overview of the topic, including an introduction to the concept, a description of their model results, and a discussion of their relevance to real-world scenarios. The authors also cite relevant literature throughout to support their claims and provide evidence for their conclusions.

The article does not appear to be biased or one-sided in its reporting; it presents both sides equally and acknowledges potential counterarguments where appropriate. Furthermore, there is no promotional content or partiality present in the article; it is purely focused on providing an objective analysis of the topic at hand. Additionally, possible risks are noted throughout, such as those associated with frictional heating and flash heating during fast shearing.

The only potential issue with this article is that some claims are made without sufficient evidence or supporting data; however, this does not detract from its overall trustworthiness or reliability.

# Topics for further research:

* Selective melting of rockslides
* Frictional heating in rockslides
* Flash heating in rockslides
* Partially coherent rockslides
* Numerical modeling of rockslides
* Real-world applications of rockslide melting

# Report location:

<https://www.fullpicture.app/item/e56d817e9379181ef0e2e3209f5ffd0d>