

# Quantifying bedrock fracturing controls on the relationship between topography and erosion rate

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The relationship between tectonics and topography is often obscured as rocks arrive at the surface of the earth with a range of strengths. In the San Gabriel and San Jacinto mountains of California, we contrast landscapes of similar climate and bedrock composition, but different bedrock fracturing. We measure the inherited damage of bedrock hillslopes and quantify how differences in rock strength affect topography and sediment transport.



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Al Neely is a 3<sup>rd</sup> year Ph.D. student at Penn State University. He enjoys collecting data and substantial hikes into seldom-visited parts of steep mountain ranges. Outside of geology, he also enjoys drawing, traveling, going really fast down hills, and playing games.