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The Dangkhar landslide: a world class mega-event

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Subaerial landslide events of extraordinary size (e.g. > 10 km3) are rare occurrences. Amongst the largest landslides ever studied are the Seymareh (Iran), Green Lake (New Zealand), and Baga Bogd (Mongolia) events, and over a century has passed since their initial identification.
On the basis of field mapping and analyses of satellite imagery, we describe the newly discovered Dangkhar landslide located in the Spiti Valley of Himachal Pradesh, India. The study area is characterized by rugged topography between elevations 3400 to 5600 m, and is situated chiefly within limestone formations comprising the Tethys Himalaya. With an estimated volume of 25 km3, the Dangkhar landslide represents one of the largest coherent landslides ever recognized in an intracontinental setting. Of particular interest are cross-cutting relationships within the slide mass indicating recent activity, together with kinematic and geologic controls on the aerial extent and depth of slope failure.