

Plausible causes and documented evidence of the debris flow near Dharali, Uttarakhand, India

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On 5 August 2025, around 13:30 hrs (local time), a high-intensity flash flood occurred in the Khera Gad basin at Dharali, Uttarkashi District, Uttarakhand, India. Within the following hour, two additional nearby streams, Tal Gad near Harsil and Bhela Gad near Sukki, also experienced sudden and severe flooding along the Bhagirathi River downstream. Remarkably, these three streams originate from separate sub-catchments, making their near-synchronous flooding within such a short interval a rare and concerning hydro-meteorological event. The Khera Gad flood completely devastated the Dharali settlement, causing extensive structural destruction and loss of infrastructure. The resulting debris fan expanded the surface area by nearly 200,000 m², which is almost three times larger than its pre-flood extent. Among various possibilities, we suggest and discuss these in the present article.

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