Supplemental Figures

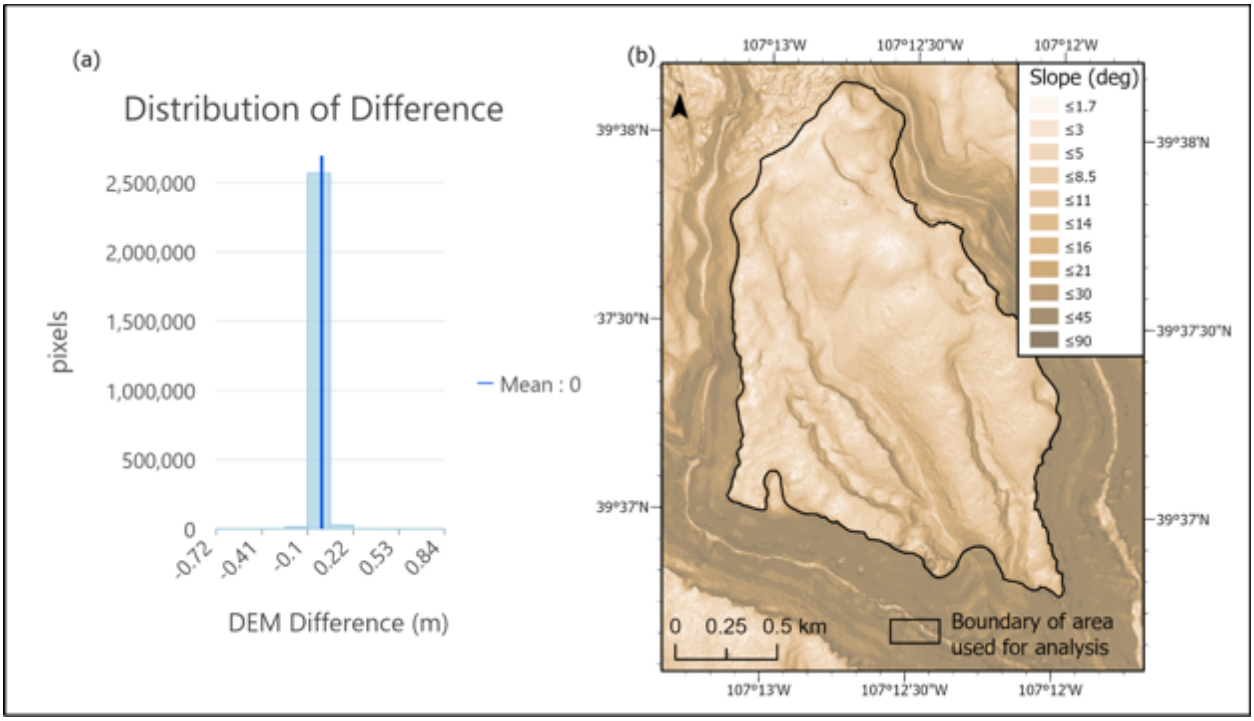

Figure S1. (a) Distribution of all pixels in the DEM of Difference (DoD) area shown in (b), showing most of the change is near 0. This suggests little systematic offset in the DoD. (b) A relatively low sloping area used to analyze the DoD to explore any systematic offset.

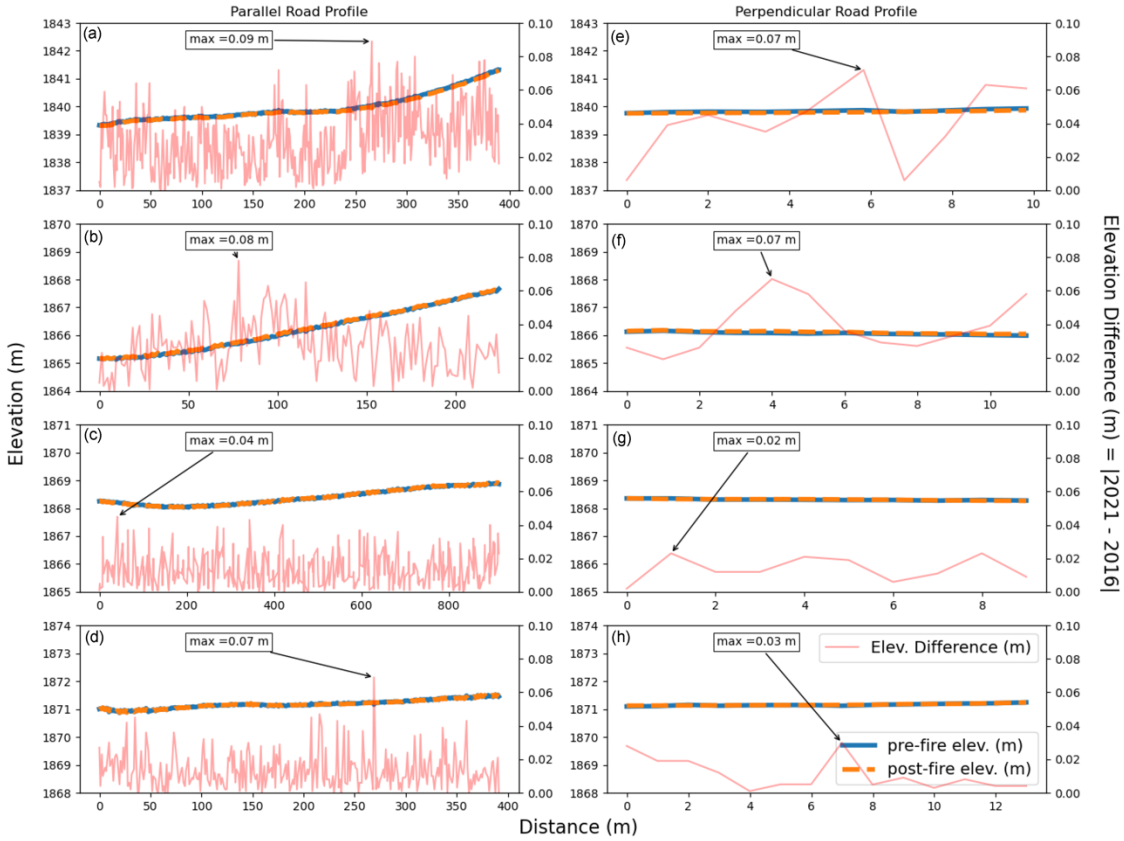

Figure S2. (a-d) Pre- and post-event lidar elevation difference at four unique locations on I-70 evenly distributed across Glenwood Canyon. Profiles are running parallel to the road. Secondary y-axis shows the relative elevation difference between the pre- and post-event lidar. (e-h) Change in elevation at perpendicular profiles along the mid-section of the same four road segments. Y-axes are the same as (a-d).

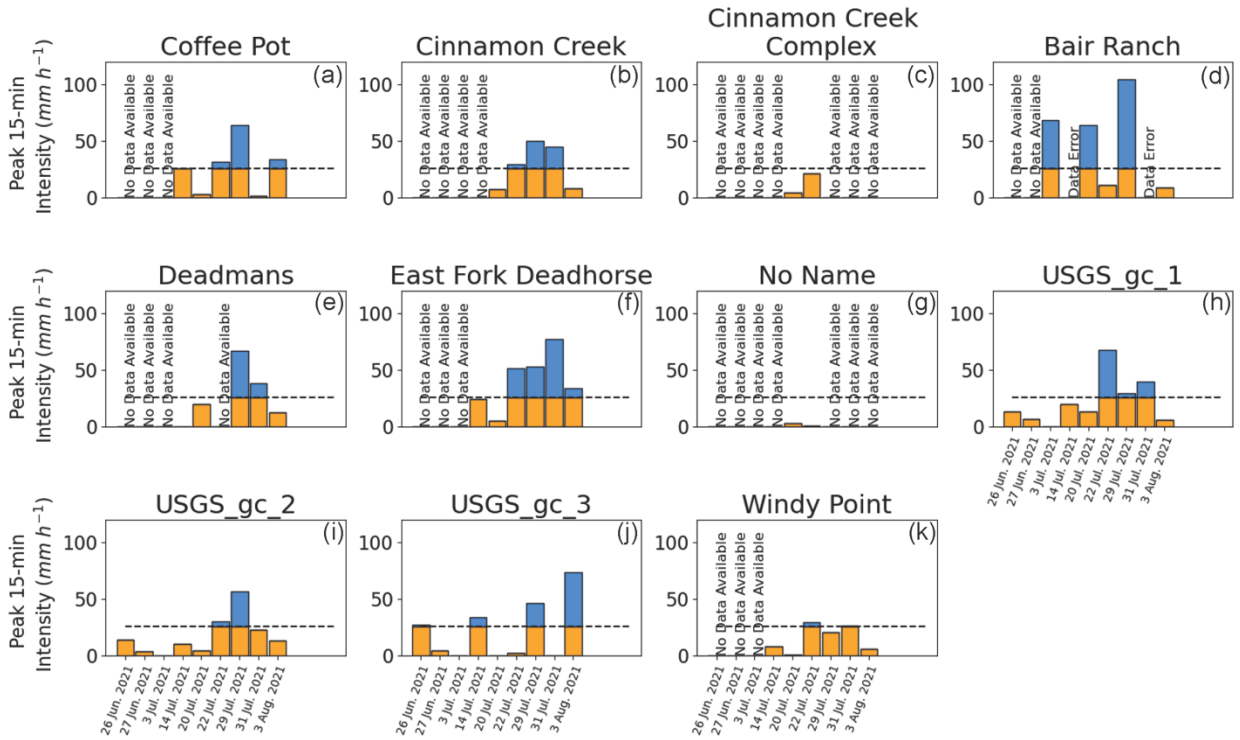

Figure S3. (a-k) The peak 15-minute rainfall intensity (I15) for debris-flow triggering storms measured at each of the eleven available rain gauges across the Grizzly Creek burn area. Dates for observed debris flows are shown as the bins on the x-axis. Peak I15 values below the modelled rainfall threshold (dashed black line) are shown in orange. Peak I15 values greater than the threshold are shown in blue. Storm dates without available rainfall data are labelled as No Data Available.

Figure S4. Hillslope rilling in a small watershed adjacent to Tie Gulch (39.620972, -107.140139). Photo acquired August 18, 2021 (Photo Credit: F. Rengers).

Video S1. Timelapse video of the debris flow activity near the outlet of French Creek.