

**Table S1.**

Quality Rating of Offset Observations	
Confidence rating	Description
High (5)	<ul style="list-style-type: none"> <li>• Landform characterized by highly distinct relief in lidar and in the field</li> <li>• Clear vertical scarp cuts across feature,</li> <li>• Rupture appears fresh, with preserved free face and distinct colluvial wedge</li> <li>• Piercing point at high angle to the fault</li> <li>• Excellent geomorphic preservation of landform</li> <li>• Offset confined to single fault strand across landform</li> <li>• Landform width &lt; offset magnitude amount</li> <li>• Consistent, high-angle landform trend on either side of the fault</li> <li>• Exposure of landform unobscured by vegetation</li> </ul>
High-moderate (4)	<ul style="list-style-type: none"> <li>• Landform characterized by distinct relief in lidar and in the field</li> <li>• Offset is unequivocally tectonic</li> <li>• Clear scarp cuts across and uplifts landform</li> <li>• Rupture appears fresh, with preserved free face and distinct colluvial wedge</li> <li>• Consistent landform trend on either side of the fault</li> <li>• Good geomorphic preservation of landform</li> <li>• Some indication of deformation on subsidiary faults with little to no preserved vertical component</li> <li>• Changes in feature trend and width permissible across subparallel strands.</li> <li>• Landform unobscured by vegetation</li> </ul>
Moderate (3)	<ul style="list-style-type: none"> <li>• Landform characterized by moderately distinct relief in lidar and in the field</li> <li>• Moderate geomorphic preservation of landform</li> <li>• Clear vertical scarp cuts across feature,</li> <li>• Structural complexity, or uncertainty in the location of, the fault trace</li> <li>• Multiple down-fault features may correlate with up-fault portion</li> <li>• Feature trend may vary permissibly across the fault.</li> <li>• Landform moderately unobscured by vegetation</li> </ul>
Moderate-low (2)	<ul style="list-style-type: none"> <li>• Feature may not be tectonic in origin.</li> <li>• Across-feature scarp not well preserved.</li> <li>• Observation could be explained by natural variability.</li> <li>• Landform appears modified.</li> <li>• Large vertical separation and/or tilting of blocks suggest deflection.</li> <li>• Underlying materials on footwall and hanging wall clearly contrast in age.</li> <li>• Younger geomorphology cross-cuts landform on footwall or hanging wall obscuring origin of feature.</li> <li>• Fault zone is 5+ meters wide leading to distributed deformation.</li> <li>• Correlation is somewhat equivocal.</li> <li>• Only one margin appears offset.</li> <li>• Incision/erosion/sedimentation/modification inhibits accurate measurement.</li> <li>• Scarp or offset is apparent in the field but not using lidar.</li> <li>• Slip appears partitioned at the meter-scale.</li> </ul>

	<ul style="list-style-type: none"> <li>• Feature trend breaks across the fault.</li> <li>• Exposure of landform is obscured by vegetation</li> </ul>
Low (1)	<ul style="list-style-type: none"> <li>• No evidence for tectonic offset.</li> <li>• Evidence for sustained recreation, grazing livestock, irrigation requires significant modification.</li> <li>• Rubbish or collapsed vegetation obscuring along-fault topography.</li> <li>• Feature is not existent—consisting of a hand-dug pit or topographic low bound by youthful spring or landslide deposits.</li> <li>• Landform is not continuous, but appears to involve recent incision proximal to the scarp.</li> <li>• Down-fault landform limited in extent within narrow structural graben or linear trough.</li> <li>• No vertical scarp is evident across landform or on bounding surfaces.</li> <li>• Landform follows subsidiary fault with thrust or normal sense of motion.</li> <li>• Exposure of landform obscured by vegetation.</li> </ul>