

# Quaternary Fault and Fold Database of the United States

As of January 12, 2017, the USGS maintains a limited number of metadata fields that characterize the Quaternary faults and folds of the United States. For the most up-to-date information, please refer to the [interactive fault map](#).

## Tushar Mountains (east side) fault (Class A) No. 2501

Last Review Date: 1999-10-01

### Compiled in cooperation with the Utah Geological Survey

*citation for this record:* Black, B.D., and Hecker, S., compilers, 1999, Fault number 2501, Tushar Mountains (east side) fault, in Quaternary fault and fold database of the United States: U.S. Geological Survey website, <https://earthquakes.usgs.gov/hazards/qfaults>, accessed 12/14/2020 02:55 PM.

<b>Synopsis</b>	Poorly understood Quaternary(?) fault bounding the east side of the Tushar Mountains.
<b>Name comments</b>	<b>Fault ID:</b> Refers to fault number 9-10 in Hecker (1993 #642).
<b>County(s) and State(s)</b>	PIUTE COUNTY, UTAH
<b>Physiographic province(s)</b>	COLORADO PLATEAUS

<b>Reliability of location</b>	<p>Good Compiled at 1:50,000 scale.</p> <p><i>Comments:</i> Mapped or discussed by Rowley (1968 #4574), Anderson and Miller (1979 #4494), and Cunningham and others (1983 #4495). Fault traces from 1:50,000-scale mapping of Cunningham and others (1983 #4495).</p>
<b>Geologic setting</b>	<p>Northwest- to north-trending range-front fault along the eastern side of the Tushar Mountains, southwest of Marysvale. The fault is in an area of diffuse faulting in the Marysvale-Circleville area [2500], west of the Sevier Valley fault [2502]. Exposure of the Miocene, Pliocene, and Pleistocene rocks of the Sevier River Formation on the downthrown side of the fault (Cunningham and others, 1983 #4495) argues against substantial Quaternary normal displacement.</p>
<b>Length (km)</b>	19 km.
<b>Average strike</b>	N20°W
<b>Sense of movement</b>	Normal
<b>Dip Direction</b>	E
<b>Paleoseismology studies</b>	
<b>Geomorphic expression</b>	The fault has little expression, but late Quaternary fault scarps are to the south and east.
<b>Age of faulted surficial deposits</b>	Quaternary(?).
<b>Historic earthquake</b>	
<b>Most recent prehistoric deformation</b>	<p>undifferentiated Quaternary (&lt;1.6 Ma)</p> <p><i>Comments:</i> Based on range-front morphology and association with nearby late Quaternary deformation (scarps).</p>
<b>Recurrence interval</b>	
<b>Slip rate</b>	

<b>Slip-rate category</b>	Less than 0.2 mm/yr
<b>Date and Compiler(s)</b>	1999 Bill D. Black, Utah Geological Survey Suzanne Hecker, U.S. Geological Survey
<b>References</b>	<p>#4494 Anderson, L.W., and Miller, D.G., 1979, Quaternary fault map of Utah: Long Beach, California, Fugro, Inc, 35 p. pamphlet, scale 1:500,000.</p> <p>#4495 Cunningham, C.G., Steven, T.A., Rowley, P.D., Glassgold, L.B., and Anderson, J.J., 1983, Geologic map of the Tushar Mountains and adjoining areas, Marysvale volcanic field, Utah: U.S. Geological Survey Miscellaneous Investigations Map I-1430, scale 1:50,000.</p> <p>#642 Hecker, S., 1993, Quaternary tectonics of Utah with emphasis on earthquake-hazard characterization: Utah Geological Survey Bulletin 127, 157 p., 6 pls., scale 1:500,000.</p> <p>#4574 Rowley, P.D., 1968, Geology of the southern Sevier Plateau, Utah: Austin, University of Texas, Ph.D. Dissertation, 385 p.</p>

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