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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.

Cedar Valley (north end) faults (Class A) No. 2529

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 2529, Cedar Valley (north end) faults, 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 02:53 PM.**

Synopsis	Poorly understood middle to late Pleistocene faults at the north end of Cedar Valley, north-northeast of Cedar City in southwestern Utah.
Name comments	**Fault ID:** Refers to fault number 10-16 in Hecker (1993 #642).
County(s) and State(s)	IRON COUNTY, UTAH
Physiographic	

Physiographic province(s)	BASIN AND RANGE
Reliability of location	Good Compiled at 1:250,000 scale. *Comments:* Fault traces from 1:250,000-scale mapping of Anderson and Christenson (1989 #828).
Geologic setting	Northwest-trending normal faults at the north end of Cedar Valley. Cedar Valley is in an area of southwestern Utah underlain by extensive extrusive Tertiary volcanic rocks. In the mountains, volcanic rocks have been eroded to expose pre-existing Paleozoic and Mesozoic topography. In other places, such as Escalante Desert to the southwest, igneous rocks have been lowered by faulting and buried by lake sediments and alluvium.
Length (km)	16 km.
Average strike	N40°E
Sense of movement	Normal
Dip Direction	NW; SE
Paleoseismology studies	
Geomorphic expression	Scarps on highly dissected alluvium. General scarp morphology and age estimates of the youngest faulted deposits at the southern end of the faults (north of Rush Lake) suggest that some scarps may be latest Pleistocene in age.
Age of faulted surficial deposits	Early to middle Pleistocene alluvium.
Historic earthquake	
Most recent prehistoric deformation	middle and late Quaternary (<750 ka) *Comments:* General scarp morphology and age estimates of the youngest faulted deposits at the southern end of the faults (north of Rush Lake) suggest that some scarps may be latest Pleistocene in age. Scarps at the northern end of the faults displace early to middle Pleistocene alluvium.

Recurrence interval	
Slip-rate category	Less than 0.2 mm/yr
Date and Compiler(s)	1999 Bill D. Black, Utah Geological Survey Suzanne Hecker, U.S. Geological Survey
References	#828 Anderson, R.E., and Christenson, G.E., 1989, Quaternary faults, folds, and selected volcanic features in the Cedar City 1° x 2° quadrangle, Utah: Utah Geological and Mineral Survey Miscellaneous Publication 89-6, 29 p., 1 pl., scale 1:250,000. #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.