Jump to Navigation

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.

Deadman Wash faults (Class A) No. 964

Last Review Date: 1997-01-07

Compiled in cooperation with the Arizona Geological Survey

citation for this record: **Pearthree, P.A., compiler, 1997, Fault number 964, Deadman Wash 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 03:13 PM.**

Synopsis	Three short, north-trending normal faults displace a lower Pleistocene basalt flow by less than 6 m. Two scarps are down to the west, the other is down to the east. These faults do not cut uppermost lower Pleistocene (800 ka) tephra deposits, so evidently they have not been active in the middle or late Quaternary.
Name comments	Mapped by Menges and Pearthree (1983 #2073), who grouped these faults with others in the area as the Wupatki faults; the Deadman Wash faults were later separated from the larger group of faults and named by Pearthree and others (1996 #2153) because they evidently have not been active as recently as other

	faults of the group. The geology of the area was mapped by Moore and Wolfe (1987 #2152).
County(s) and State(s)	COCONINO COUNTY, ARIZONA
Physiographic province(s)	COLORADO PLATEAUS
Reliability of location	Good Compiled at 1:250,000 scale. *Comments:* Trace mapped at 1:50,000 scale, transferred to 1:250,000-scale topographic base map.
Geologic setting	The Deadman Wash faults are one of several fault zones located near the northeastern margin of the Plio-Quaternary San Francisco volcanic field, on the bedrock erosion surface that slopes from the Mogollon Rim northeast to the Little Colorado River. The Deadman Wash faults displace a lower Pleistocene basalt flow but do not cut uppermost lower Pleistocene (800 ka) tephra deposits derived from the San Francisco Mountains stratovolcano.
Length (km)	2 km.
Average strike	N38°W
Sense of movement	Normal *Comments:* Predominantly normal movement inferred from topographic and regional relations.
Dip Direction	SW; NE
Paleoseismology studies	
Geomorphic expression	Three weakly expressed, low (<6-m-high) fault scarps formed on a lower Pleistocene basalt flow.
Age of faulted surficial deposits	Early Pleistocene basalt flow
Historic earthquake	

Most recent prehistoric deformation	undifferentiated Quaternary (<1.6 Ma) *Comments:* Displacement of a lower Pleistocene basalt flow indicates early Quaternary activity, but absence of displacement of 800 ka tephra deposits indicates no activity in the middle to late Quaternary (<750 ka).
Recurrence interval	
Slip-rate category	Less than 0.2 mm/yr *Comments:* No evidence of middle or late Quaternary activity, so slip rate for past 750 ka is very low or zero.
Date and Compiler(s)	1997 Philip A. Pearthree, Arizona Geological Survey
References	#2073 Menges, C.M., and Pearthree, P.A., 1983, Map of neotectonic (latest Pliocene-Quaternary) deformation in Arizona: Arizona Geological Survey Open-File Report 83-22, 48 p., scale 1:500,000. #2152 Moore, R.B., and Wolfe, E.W., 1987, Geologic map of the east part of the San Francisco Volcanic Field, north-central Arizona: U.S. Geological Survey Miscellaneous Field Studies Map MF-1960, 2 sheets, scale 1:50,000. #2153 Pearthree, P.A., Vincent, K.R., Brazier, R., and Hendricks, D.M., 1996, Plio-Quaternary faulting and seismic hazard in the Flagstaff area, northern Arizona: Arizona Geological Survey Bulletin 200, 40 p., 2 pls.