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.

Uinkaret volcanic field faults (Class A) No. 1012

Last Review Date: 1998-01-28

Compiled in cooperation with the Arizona Geological Survey

citation for this record: **Pearthree, P.A., compiler, 1998, Fault number 1012, Uinkaret volcanic field 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 02:19 PM.**

Synopsis	The Uinkaret volcanic field faults are a series of northwest- to north northwest-trending normal faults that diverge eastward from the Hurricane fault [998] on the Uinkaret Plateau. Vertical displacements of Paleozoic rocks across individual faults range from a few meters to as much as 40 m, and undated but probable Pleistocene age basalt flows of the Uinkaret volcanic field are displaced about 20 m (Menges and Pearthree, 1983 #2073). Fault escarpments are moderately steep and linear. Quaternary deposits are scarce along the fault zone, and Holocene deposits are not faulted.
Name	Mapped by Hamblin and Best (1970 #2070); remapped and

comments	named by Menges and Pearthree (1983 #2073). The geology of the northern part of the fault zone was mapped by Billingsley (1994 #2097).
County(s) and State(s)	MOHAVE COUNTY, ARIZONA
Physiographic province(s)	COLORADO PLATEAUS
Reliability of location	Good Compiled at 1:250,000 scale. *Comments:* The northern part of the fault zone is mapped at 1:24,000 scale, the southern part of the fault zone was mapped on 1:130,000-scale aerial photos; these traces were transferred to a 1:250,000-scale topographic base map for digitization.
Geologic setting	This series of north northwest-trending normal faults east of the Hurricane fault on the Uinkaret Plateau. At the northern end of this fault zone, it diverges from the south southwest-trending Hurricane fault zone [998], so these faults may be subsidiary to the Hurricane fault. Vertical displacements of Paleozoic rocks across individual faults range from a few meters to as much as 40 m. These faults also displace undated, but probably Pleistocene basalt flows of the Uinkaret volcanic field by about 20 m (Menges and Pearthree, 1983 #2073). Quaternary deposits are scarce along the fault zone, but Holocene deposits are not faulted.
Length (km)	19 km.
Average strike	N21°W
Sense of movement	Normal *Comments:* Inferred from topography and regional relations.
Dip Direction	NE; SW
Paleoseismology studies	
Geomorphic expression	Moderately steep, linear escarpments are formed on Paleozoic bedrock and Pleistocene basalt. There has been little young deposition along the faults, and no alluvial fault scarps have been recognized.

Age of faulted surficial deposits	Paleozoic, Pleistocene
Historic earthquake	
Most recent prehistoric deformation	undifferentiated Quaternary (<1.6 Ma) *Comments:* Basalt flows of probable Pleistocene age are displaced, but they have not been dated. Fault escarpments are moderately steep and linear, which is consistent Quaternary activity. Holocene deposits are not faulted.
Recurrence interval	
Slip-rate category	Less than 0.2 mm/yr *Comments:* No data exist to determine a slip rate, but a low rate is inferred on the basis of slip rates on other Quaternary faults in the region.
Date and Compiler(s)	1998 Philip A. Pearthree, Arizona Geological Survey
References	#2097 Billingsley, G.H., 1994, Geologic map of the Moriah Knoll quadrangle, northern Mohave County, Arizona: U.S. Geological Survey Open-File Report 94-634, 16 p., 1 pl., scale 1:24,000. #2070 Hamblin, W.K., and Best, M.G., eds., 1970, The western Grand Canyon district—Guidebook to the geology of Utah, n. 23: Salt Lake City, Utah Geological Society, 156 p. #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.