

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 <u>interactive fault map</u>.

unnamed faults of eastern Augusta Mountains (Class A) No. 1164

Last Review Date: 2001-08-20

citation for this record: Anderson, R.E., compiler, 2001, Fault number 1164, unnamed faults of eastern Augusta Mountains, 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 02:17 PM.

	Synopsis	Two alignments of discontinuous north-trending faults are	
		mapped on the east flanks of secondary ridges east of the main	
		topographic highlands of the Augusta Mountains. They are	
		apparently block-bounding structures of lesser rank than range-	
		bounding faults. No detailed studies of these faults are reported.	
		Their Quaternary age is estimated on the basis of photogeologic	
		reconnaissance, and nothing is known of recurrence times or slip	
		rate.	
ĺ	Name	Name Not previously named. Informally named herein for the fault's	
	comments location in the eastern part of the Augusta Mountains.		
		Fault ID: Not included in previous compilations of Quaternary	
		faults.	
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County(s) and State(s)	LANDER COUNTY, NEVADA	
Physiographic province(s)	BASIN AND RANGE	
Reliability of location		
	Comments: The faults are taken from the map of Dohrenwend and Moring (1991 #282). That map was compiled at scale 1:250,000 based on photogeologic study of 1:58,000-nominal-scale color-infrared photography transferred directly to 1:100,000-scale topographic quadrangle maps enlarged to scale of the photographs.	
Geologic setting	The faults strike mainly north and cut Tertiary volcanic and sedimentary rocks on the east flank of the Augusta Mountains (Ferguson and others, 1951 #4355). They form two alignments of discontinuous traces, and are apparently block-bounding structures of lesser rank than range-bounding faults (Dohrenwend and Moring, 1991 #282). On the basis of their location on the west flank of topographic highs, they are apparently down to the east. Their structural relationship to nearby down-to-the-west faults at the west base of the Augusta Mountains [#1144b] and Fish Creek Mountains [1144a] is not known.	
Length (km)	12 km.	
Average strike	N10°W	
Sense of movement	Normal Comments: Inferred from their location in an extensional tectonic province.	
Dip Direction	E Comments: Possibly steep, typical of normal faults. Inferred from their location on the east flank of topographic highs.	
Paleoseismology studies		
_	Nothing is known of the detailed geomorphic expression of these faults. They are mapped (Dohrenwend and Moring, 1991 #282)	

-	on the east flank of secondary ridges east of the main Augusta Mountains highlands and on the piedmont slope adjacent to those highlands.	
Age of faulted surficial deposits	Tertiary, possibly Quaternary	
Historic earthquake		
Most recent prehistoric deformation	undifferentiated Quaternary (<1.6 Ma) Comments: Based on photogeologic reconnaissance (Dohrenwend and Moring, 1991 #282), no estimate was made of the time of latest movement. The faults are estimated to cut Quaternary deposits or surfaces.	
Recurrence interval		
Slip-rate category	Less than 0.2 mm/yr Comments: No data are available allowing for an estimate of slip rate. The lowest category is chosen on the basis of comparison with other unstudied faults in the Basin and Range.	
Date and		
Compiler(s) References	R. Ernest Anderson, U.S. Geological Survey, Emeritus #282 Dohrenwend, J.C., and Moring, B.C., 1991, Reconnaissance photogeologic map of young faults in the Winnemucca 1° by 2° quadrangle, Nevada: U.S. Geological Survey Miscellaneous Field Studies Map MF-2175, 1 sheet, scale 1:250,000. #4355 Ferguson, H.G., Muller, S.W., and Roberts, R.J., 1951, Geology of the Mount Moses quadrangle, Nevada: U.S.	
	Geological Survey Geologic quadrangle Map GQ-0012, 1 sheet, scale 1:125,000.	

Questions or comments?

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