

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](#).

California Wash fold and faults (Class A) No. 933

Last Review Date: 1996-01-03

Compiled in cooperation with the Arizona Geological Survey

citation for this record: Pearthree, P.A., compiler, 1996, Fault number 933, California Wash fold and 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 03:11 PM.

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| Synopsis | These structures include an 8-km-long homoclinal fold and minor faults on the west side of the San Pedro Valley in southeastern Arizona. The faults offset uppermost Pliocene to lowermost Quaternary basin-fill deposits by as much as 15 m. There is little or no deformation of middle Pleistocene alluvial fan deposits by the homocline. |
| Name comments | Although originally noted by Scarborough (1975 #2119), these structures were mapped and named by Menges and Pearthree (1983 #2073) and later discussed by Lindsay and others (1990 |

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| | #2120). |
| County(s) and State(s) | COCHISE COUNTY, ARIZONA |
| Physiographic province(s) | BASIN AND RANGE |
| Reliability of location | Poor Compiled at 1:250,000 scale. <i>Comments:</i> The structures were mapped using 1:130,000-scale aerial photos and transferred to a 1:250,000-scale topographic base; length of the structures is uncertain because their topographic expression is very subtle and stratigraphic exposures are limited. |
| Geologic setting | These structures are located near the axis of, but toward west side of the San Pedro Valley. The sense of folding is down to the east. The San Pedro Valley is a strongly defined, north-south-trending topographic feature, but in the area of this structure it may contain less than 300 m of basin fill. The topographic front of the Whetstone Mountains is several kilometers west of the California Wash fold. |
| Length (km) | 6 km. |
| Average strike | N12°W |
| Sense of movement | Normal |
| Dip Direction | E |
| Paleoseismology studies | |
| Geomorphic expression | These structures have weak surface expression. They may deform middle Pleistocene alluvial-fan remnants, but if so, it is very subtle. Fan remnants are not very well preserved, and detailed field surveys have not been conducted. |
| Age of faulted surficial deposits | Latest Pliocene sediment (2.0-1.6 Ma) (Lindsay and others, 1990 #2120). |
| Historic earthquake | |

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| Most recent prehistoric deformation | undifferentiated Quaternary (<1.6 Ma) <i>Comments:</i> Uppermost Pliocene sediments are deformed, but there is no clear evidence of middle or late Quaternary deformation. |
| Recurrence interval | |
| Slip-rate category | Less than 0.2 mm/yr <i>Comments:</i> A low slip rate estimate is based on 15 m of offset since the late Pliocene, and no clear evidence of middle or late Quaternary deformation. |
| Date and Compiler(s) | 1996 Philip A. Pearthree, Arizona Geological Survey |
| References | #2120 Lindsay, E.H., Smith, G.A., and Haynes, C.V., 1990, Late Cenozoic depositional history and geochronology, San Pedro Valley, Arizona, <i>in</i> Gehrels, G.E., and Spencer, J.E., eds., Geologic excursions through the Sonoran Desert region, Arizona and Sonora: Arizona Geological Survey Special Paper 7, p. 9-19. #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. #2119 Scarborough, R.B., 1975, Chemistry and age of late Cenozoic air-fall ashes in southeastern Arizona: University of Arizona, Dept. of Geosciences, unpublished M.S. thesis, 107 p. |

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