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>.

Mecca Hills fault zone (Class A) No. 316

Last Review Date: 2017-05-15

citation for this record: Bryant, W.A., compiler, 2017, Fault number 316, Mecca Hills fault zone, 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 02:51 PM.

| Synopsis | |
|---------------------------|--|
| Name comments | |
| County(s) and State(s) | RIVERSIDE COUNTY, CALIFORNIA |
| Physiographic province(s) | BASIN AND RANGE |
| J | Good Compiled at 1:14,000 and 1:100,000 scale. |
| | Comments: Location of fault from Qt_flt_ver_3-0_Final_WGS84_polyline.shp (Bryant, W.A., written communication to K.Haller, August 15, 2017) attributed to 1:14,000-scale map by Hays (1957) and 1:100,000-scale map by |

| | Matti (2012), additional mapping of unspecified scale by Ware (1958), Riverside County (2001), Petra (2007), and Bryant (2012, 2015) is included. |
|-------------------------------------|--|
| Geologic setting | |
| Length (km) | 41 km. |
| Average strike | |
| Sense of movement | Right lateral, Normal |
| Dip | |
| Paleoseismology studies | |
| Geomorphic expression | |
| Age of faulted surficial deposits | |
| Historic earthquake | |
| Most recent prehistoric deformation | latest Quaternary (<15 ka) Comments: |
| Recurrence interval | |
| Slip-rate category | Unspecified |
| Date and Compiler(s) | 2017 William A. Bryant, California Geological Survey |
| References | #8024 Bryant, W. A., 2015, San Andreas, Skeleton Canyon, Indio Hills, NW Painted Canyon, Coachella Fan, Berdoo Canyon, and related faults, Riverside County, California: California Geological Survey Fault Evaluation Report FER-250, 34 p., 2 Appendices, website, [ftp://ftp.consrv.ca.gov/pub/dmg/pubs/fer/250/]. #8022 Bryant, W.A., 2012, San Andreas, Hidden Spring, Skeleton Canyon, Mecca Hills, and related faults, Riverside and Imperial Counties, California: California Geological Survey Fault |

Evaluation Report FER-252, 29 p. website, [ftp://ftp.consrv.ca.gov/pub/dmg/pubs/fer/252/].

#8131 Hays, W.H., 1957, Geology of the central Mecca Hills, Riverside County, California: New Haven, Connecticut, Yale University, unpublished Ph.D. thesis, 324 p., map scale 1:14,000.

#4960 Hope, R.A., 1969, Map showing recently active breaks along the San Andreas and related faults between Cajon Pass and Salton Sea: U.S. Geological Survey Open-File Report 69-130, 2 plates, scale 1:24,000,

https://pubs.er.usgs.gov/publication/ofr69130.

#2878 Jennings, C.W., 1994, Fault activity map of California and adjacent areas, with locations of recent volcanic eruptions: California Division of Mines and Geology Geologic Data Map 6, 92 p., 2 pls., scale 1:750,000.

#8192 Matti, J.C., 2012, Preliminary geologic mapping in the Palm Springs 30' x 60' quadrangle, California: Unpublished, in progress, digital data provided by U.S. Geological Survey to California Geological Survey, versions dated 5/26/2012, 8/7/2012, and 9/10/2012, scale 1:100,000.

#8228 Petra, 2007, Updated geotechnical fault investigation report for land planning purposes, approximately 2200-acre property (Lomas Del Sol), City of Coachella, Riverside County, California: Unpublished consultant's report, J.N. 4604-04, January 15, 2007, [AP-3413].

#8239 Riverside County, compiler, 2001, GIS files of recently active faults in Riverside County, California: Riverside County, unpublished digital compilation of recently active faults.

#8360 Ware, G.C., 1958, Geologic map of part of the Mecca Hills, Riverside County, California: Los Angeles, University of California, unpublished M.A. thesis.

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