

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](#).

Tahoe-Sierra frontal fault zone (Class A) No. 215

Last Review Date: 2017-07-01

citation for this record: Bryant, W.A., compiler, 2017, Fault number 215, Tahoe-Sierra frontal 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 03:01 PM.

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|----------------------------------|---|
| Synopsis | |
| Name comments | Fault ID: Refers to fault number 518 of Jennings (1994). |
| County(s) and State(s) | EL DORADO COUNTY, CALIFORNIA PLACER COUNTY, CALIFORNIA |
| Physiographic province(s) | CASCADE-SIERRA MOUNTAINS |
| Reliability of location | Good Compiled at 1:15,400; 1:24,000; and 1:100,000 scale. <i>Comments:</i> Location of fault from Qt_ft_ver_3-0_Final_WGS84_polyline.shp (Bryant, W.A., written |

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| | communication to K.Haller, August 15, 2017) attributed to 1:15,400-scale map by McCaughjey (2003); 1:24,000-scale maps by Bryant (2015) and Fischer (1989); and 1:100,000-scale maps by Schweickert and others (2000) and Saucedo (2005). |
| Geologic setting | |
| Length (km) | 50 km. |
| Average strike | |
| Sense of movement | Normal |
| Dip Direction | E |
| Paleoseismology studies | |
| Geomorphic expression | |
| Age of faulted surficial deposits | |
| Historic earthquake | |
| Most recent prehistoric deformation | undifferentiated Quaternary (<1.6 Ma) <i>Comments:</i> |
| Recurrence interval | |
| Slip-rate category | Unspecified |
| Date and Compiler(s) | 2017 William A. Bryant, California Geological Survey |
| References | #8025 Bryant, W.A., 2015, Aerial photographic interpretation of geomorphic features related to fault recency, selected California faults using Google Earth and LiDAR: California Geological Survey unpublished mapping for Fault Activity Map of California. #8096 Fisher, G.R., 1989, Geologic map of the Mount Tallac roof pendant, El Dorado County, California: U.S. Geological Survey |

Miscellaneous Field Studies Map MF-1943, scale 1:24,000.

#8130 Harwood, D.S., Fischer, G.R., and Hanson, R.E., 2014, Geologic map of part of eastern Placer County, northern Sierra Nevada, California: California Geological Survey Map Sheet 61, scale 1:48,000.

#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.

#8196 McCaughey, J.W., 2003, Pleistocene glaciation of the southwest Tahoe Basin, Sierra Nevada, California: Reno, University of Nevada, unpublished M.S. thesis, 179 p., plate 1, scale 1:15,400.

#8249 Saucedo, G.J., 2005, Geologic map of the Lake Tahoe Basin, California and Nevada: California Geological Survey Regional Geologic Map Series, Map No. 4, scale 1:100,000.

#8257 Schweickert, R.A., Lahren, M.M., Karlin, R.E., Smith, K.D., and Howle, J.F., 2000, Preliminary map of Pleistocene to Holocene faults in the Lake Tahoe Basin, California and Nevada: Nevada Bureau of Mines and Geology Open-File Report 2000-4, scale 1:100,000.

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