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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.

Extra fault zone (Class A) No. 512

Last Review Date: 2017-07-01

citation for this record: **Bryant, W.A., compiler, 2017, Fault number 512, Extra 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 03:07 PM.**

Synopsis	
Name comments	**Fault ID:** Refers to fault number 517 of Jennings (1994).
County(s) and State(s)	IMPERIAL COUNTY, CALIFORNIA
Physiographic province(s)	BASIN AND RANGE
Reliability of location	Compiled at 1: 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).
Geologic setting	

Length (km)	49 km.
Average strike	
Sense of movement	Left lateral, Normal
Dip Direction	V
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	#7969 Brothers, D.S., Driscoll, N.W., Kent, G.M., Harding, A.J., Babcock, J.M., and Baskin, R.L., 2009, Tectonic evolution of the Salton Sea inferred from seismic reflection data: Nature Geoscience, Online publication 26 July 2009, 4 p., (www.nature.com/naturegeoscience), DOI:10.1038/NGEO590. #8152 Janecke, S.U., Dorsey, R.J., Forand, D., Steely, A.N., Kirby, S.M., Lutz, A.T., Housen, B.A., Belgarde, B., Langenheim, V.E., and Rittenour, T.M., 2010, High geologic slip rates since early Pleistocene initiation of the San Jacinto and San Felipe fault zones in the San Andreas fault system, southern California, USA: Geological Society of America Special Paper 475, 48 p., doi: 10.1130/2010.2475, isbn 9780813724751.

	#8172 Kirby ,S.M. Janecke, S.U., Dorsey, R.J., Housen, B.A., Langenheim, V.E., McDougall, K.A., and Steely, A.N., 2007, Pleistocene Brawley and Ocotillo formations—Evidence for initial strike-slip deformation along the San Felipe and San Jacinto fault zones, southern California: The Journal of Geology, v. 115, p. 43–62.