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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.**

## Deseret faults (Class A) No. 2435

**Last Review Date: 1999-10-01**

## Compiled in cooperation with the Utah Geological Survey

***citation for this record:*** **Black, B.D., Hylland, M.D., and Hecker, S., compilers, 1999, Fault number 2435, Deseret 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 02:56 PM.**

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| **Synopsis** | Includes several, poorly understood middle- and late-Quaternary faults that trend north near Black Rock (an outcrop of Quaternary basalt) in the Sevier Desert. Some individual faults have displacements ranging from about 3 to 15 m. |
| **Name comments** | **Fault ID:** Refers to fault number 8-2 of Hecker (1993 #642). |
| **County(s) and State(s)** | MILLARD COUNTY, UTAH |
| **Physiographic province(s)** | BASIN AND RANGE |

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|---|---|
| **Reliability of location** | Good<br>Compiled at 1:100,000 scale.<br><br>*Comments:* Mapped or discussed by Oviatt (1989 #381) and Hintze and Davis (in preparation #4539). Fault traces from 1:100,000-scale mapping of Oviatt (1989 #381). |
| **Geologic setting** | Several north-trending normal faults around Black Rock (an outcrop of Quaternary basalt) in the Sevier Desert. Unconsolidated deposits in Sevier Desert are mainly lake deposits and alluvium. |
| **Length (km)** | 7 km. |
| **Average strike** | N1°W |
| **Sense of movement** | Normal |
| **Dip Direction** | W; E |
| **Paleoseismology studies** | |
| **Geomorphic expression** | fault scarps are on basalt mantled by Lake Bonneville deposits. Individual faults have displacements ranging from about 3 to 15 m. Scarps pre-date Bonneville deposits, but post-date an early to middle Pleistocene basalt flow near Deseret, Utah. The abrupt, linear eastern boundary of the flows may mark the northern extension of the Clear Lake fault [2436]. |
| **Age of faulted surficial deposits** | Middle to late Pleistocene. |
| **Historic earthquake** | |
| **Most recent prehistoric deformation** | middle and late Quaternary (<750 ka)<br><br>*Comments:* Recurrent movement evidenced by 3- to 15-m-high scarps on middle to late Pleistocene basalt. |
| **Recurrence interval** | |
| **Slip rate** | |

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|---|---|
| **Slip-rate category** | Less than 0.2 mm/yr |
| **Date and Compiler(s)** | 1999<br>Bill D. Black, Utah Geological Survey<br>Michael D. Hylland, Utah Geological Survey<br>Suzanne Hecker, U.S. Geological Survey |
| **References** | #642 Hecker, S., 1993, Quaternary tectonics of Utah with emphasis on earthquake-hazard characterization: Utah Geological Survey Bulletin 127, 157 p., 6 pls., scale 1:500,000.<br><br>#381 Oviatt, C.G., 1989, Quaternary geology of part of the Sevier Desert, Millard County, Utah: Utah Geological and Mineral Survey Special Studies 70, 41 p., 1 pl., scale 1:100,000. |