

# Suusamyr Basin, eastern 1992 surface ruptures

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**Target:** Fault scarp of an E-W striking, SE-dipping reverse fault in the Suusamyr Basin in Kyrgyzstan

**Purpose:** Measuring the offset from the 1992 M7.3 Suusamyr Earthquake

**Uploader:**

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**Survey date:** 2016-06-05

**Survey method:** Structure-from-Motion from UAV aerial images

**UAV:** DJI Phantom 2

**Flight altitude:** 60-80 m

**Camera:** Canon PowerShot SX230 HS

**Positioning:** built-in camera GPS, ground control points measured with RTK DGPS

**SfM software:** AgiSoft Photoscan Professional

**DEM size:** 3,743 x 1,559 pixels

**DEM extent:** 129,798 m<sup>2</sup>

**DEM elevation:** 2204 - 2232 m asl

**DEM Resolution:** 0.2 m/pixel

**DEM EPSG:** 32643

**DEM filetype:** GeoTIFF

**Pointcloud # of points:** 3,407,432

**Pointcloud filetype:** xyz

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**Reference:** Ainscoe, E. A., Abdrakhmatov, K. E., Baikulov, S., Carr, A. S., Elliott, A. J., Grützner, C., Walker, R. T. (2019). Variability in surface rupture between successive earthquakes on the Suusamyr Fault, Kyrgyz Tien Shan: implications for palaeoseismology. [Geophysical Journal International](#) 216(1), 703-725.



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