

# Almaty range front fault, Rahat site

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**Target:** Fault scarp of the E-W striking, S-dipping, reverse Almaty range front fault, Kazakhstan

**Purpose:** Measuring the offset of river terraces

**Uploader:**

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**Survey date:** 2016-06-26

**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, four ground control points measured with RTK DGPS

**SfM software:** AgiSoft Photoscan Professional

**# of photos:** 1,239

**# of tie points:** 65,832

**Dense cloud:** 133,302,857 points

**DEM size:** 16,094 x 17,874 pixels

**DEM extent:** 449,041 m<sup>2</sup>

**DEM elevation:** 810-875 m asl

**DEM Resolution:** 0.0665 m/pixel

**EPSG:** 4326 (WGS84 cartographic)

**DEM filetype:** GeoTIFF

**Source files:** The original source images are available upon request from Christoph Grützner

**Ground Control Points:**

R01P	ili-rover	77.37138836	43.36769756	840.2055
R01Q	ili-rover	77.37092064	43.36916446	828.2342
R01R	ili-rover	77.37230095	43.36942063	827.9213
R01S	ili-rover	77.37297209	43.36848746	839.1235

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**Reference:** Grützner, C., Walker, R. T., Abdrakhmatov, K. E., Mukambaev, A., Elliott, A. J., & Elliott, J. R. (2017). Active tectonics around Almaty and along the Zailisky Alatau range front, *Tectonics*, doi:10.1002/2017TC004657.

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