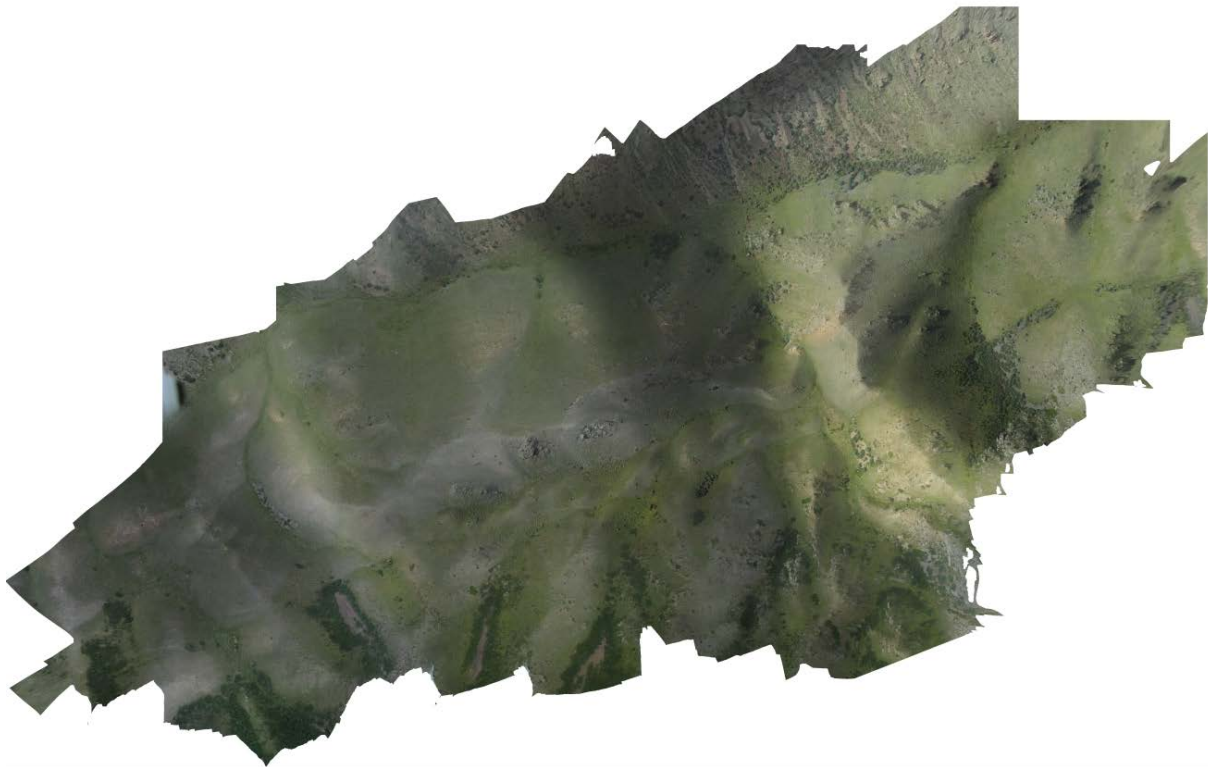


Chilik Fault, Kazakhstan, trench site

Uploader:

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Target: Chilik Fault (left-lateral strike-slip fault) in southern Kazakhstan; UAV survey to measure the vertical and horizontal offsets across a fault scarp.



Data collectors: Christoph Grützner, Angela Landgraf, Aidyn Mukambayev

Survey date: 2016-07-29

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

UAV: DJI Phantom 2

Flight altitude: 60-80 m

Camera: Canon PowerShot SX230 HS

Positioning: build-in camera GPS; nine ground control points measured with RTK DGPS

SfM software: AgiSoft Photoscan Professional

of photos: 1,760

of tie points: 96,515

Dense cloud: 34,369,302 points

DEM size: 10,288 x 7326 px

DEM Resolution: 0.15 m/px

EPSG: 4326 (WGS84 cartographic)

DEM filetype: GeoTIFF

Orthophoto Resolution: 0.038 m/px

Files: The original source images are available upon request from Christoph Grützner

GCPs:

Id	Description	long	lat	ele
2002	ch-rover3	78.37966454	43.30675687	1959.5172
2003	ch-rover3	78.38015884	43.30631416	1983.3447
2004	ch-rover3	78.38190925	43.30800289	1944.2291
2005	ch-rover3	78.38358576	43.30835943	1916.069
2006	ch-rover3	78.38608961	43.30867773	1856.4036
2007	ch-rover3	78.38719662	43.30808953	1848.3957
2008	ch-rover3	78.38416038	43.30769037	1889.9801
2009	ch-rover3	78.38371847	43.30631977	1949.2659
2010	ch-rover3	78.38111589	43.3070509	1941.6298

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Related work: Grützner, C., Campbell, G., Walker, R. T., Jackson, J., Mackenzie, D., Abdrakhmatov, K., & Mukambayev, A. (2019). Shortening accommodated by thrust and strike-slip faults in the Ili Basin, northern Tien Shan. *Tectonics*, 38.
<https://doi.org/10.1029/2018TC005459>.

