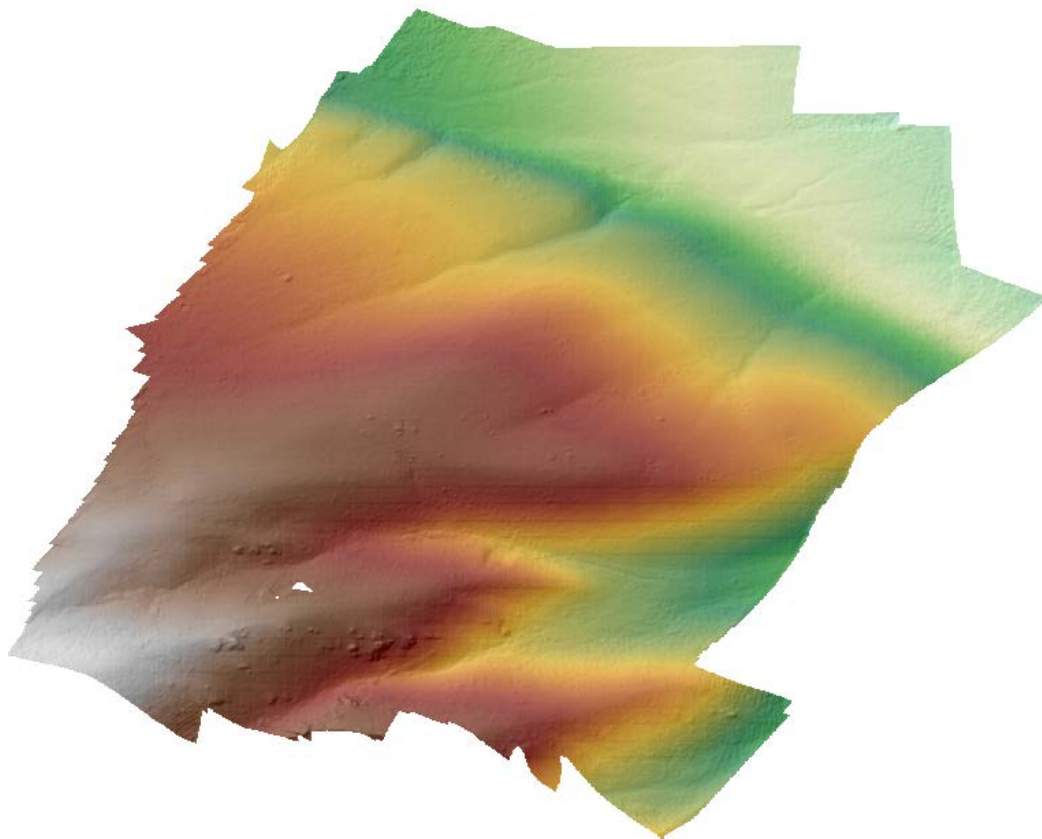


Dzhungarian Fault, Kazakhstan, slip rate site

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Target: Dzhungarian Fault (right-lateral strike-slip fault) in Eastern Kazakhstan; UAV survey to measure the vertical and horizontal offsets across a fault scarp. This site was also probed for slip rate measurements.



Data collectors: Christoph Grützner, Austin Elliott, Aidyn Mukambayev

Survey date: 2016-08-30

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: 222

of tie points: 20,026

Dense cloud: 14,722,717 points

DEM size: 6,453 x 6,817 pixels

DEM Resolution: 0.13 m/px

EPSG: 4326 (WGS84 cartographic)

DEM filetype: GeoTIFF

Orthophoto Resolution: 0.03 m/px

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

GCPs:

<u>Id</u>	<u>Description</u>	<u>X</u>	<u>Y</u>	<u>Z</u>
BULR		81,2094964	45,9747905	436,1189
DZ20	dzh-rov	81,2094957	45,9747902	436,133
DZ21	dzh-rov	81,2094957	45,9747902	436,133
DZH2	dzh2-base	81,2094937	45,9747914	436,1351
DZHC	dzh-rov	81,1445276	45,9929867	493,7719
DZHD	dzh-rov	81,145325	45,9928645	500,3209
DZHE	dzh-rov	81,145344	45,9923792	503,3019
DZHH	dzh-rov	81,1487881	45,9933538	464,4041
DZHJ	dzh-rov	81,1473175	45,9939364	472,4155

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Related work: Campbell, G. E., Walker, R. T., Abdrakhmatov, K., Schwenninger, J. L., Jackson, J., Elliott, J. R., & Copley, A. (2013). The Dzhungarian fault: Late Quaternary tectonics and slip rate of a major right-lateral strike-slip fault in the northern Tien Shan region. *Journal of Geophysical Research: Solid Earth*, 118(10), 5681-5698.

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