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 that was also trenched.

Data collectors: Christoph Grützner, Angela Landgraf, Aidyn Mukambaev

Survey date: 2016-07-27

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; seven ground control points measured with RTK DGPS

SfM software: AgiSoft Photoscan Professional

# of photos: 719

# of tie points: 42,290

Dense cloud: 16,402,097 points

DEM size: 7,906 x 7,932 px

DEM resolution: 0,14 m/px

EPSG: 4326 (WGS84 cartographic)

DEM filetype: GeoTIFF

Orthophoto Resolution: 0.05 m/px

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

GCPs:

Id	Description	long	lat	ele
1000	ch-rover2	78.18357552	43.21597244	2308.3271
1001	ch-rover2	78.17415988	43.21283085	2397.0116
1002	ch-rover2	78.17407756	43.21383457	2394.1921
1003	ch-rover2	78.17284895	43.21363993	2407.5834
1004	ch-rover2	78.17236111	43.21322086	2420.6056
1005	ch-rover2	78.17226304	43.21258264	2413.0264
1006	ch-rover2	78.17323701	43.21300551	2414.1644
1007	ch-rover2	78.17307935	43.21293698	2411.497

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