

Almaty range front fault, Akterek site 1

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

Purpose: Measuring the offset of river terraces and alluvial fans

Uploader:

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Survey date: 2016-06-28

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, seven ground control points measured with RTK DGPS

SfM software: AgiSoft Photoscan Professional

of photos: 1,029

of tie points: 50,497

Dense cloud: 101,771,219 points

DEM size: 17,500 x 15,528 pixels

DEM extent: 598,234 m²

DEM elevation: 959-1044 m asl

DEM Resolution: 0.0831 m/pixel

EPSG: 4326 (WGS84 cartographic)

DEM filetype: GeoTIFF

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

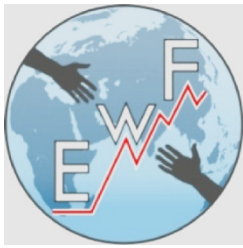
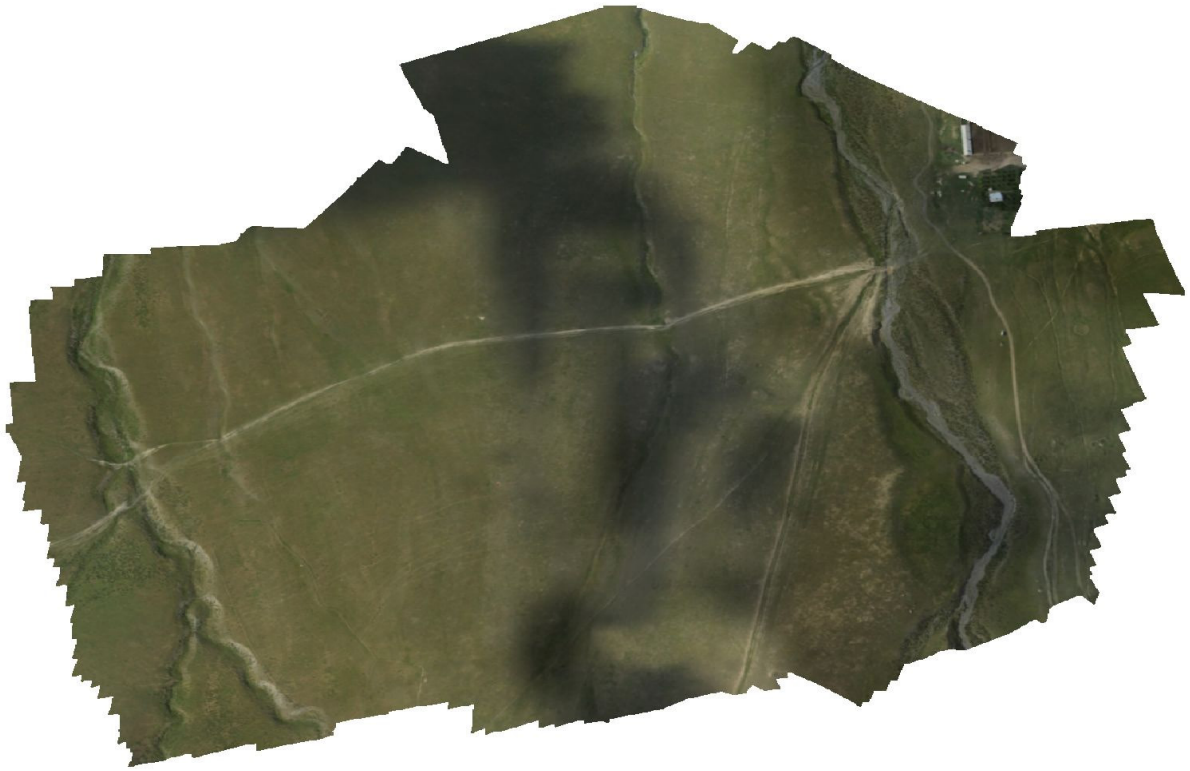
Ground Control Points:

| | | | | |
|------|------------|-------------|-------------|-----------|
| AK02 | akt-rover2 | 75.57820209 | 43.21350677 | 983.1726 |
| AK03 | akt-rover2 | 75.57821189 | 43.21188011 | 998.8485 |
| AK04 | akt-rover2 | 75.57594799 | 43.2120903 | 997.4786 |
| AK05 | akt-rover2 | 75.57223819 | 43.21188184 | 995.9657 |
| AK06 | akt-rover2 | 75.57323724 | 43.20975636 | 1023.3852 |
| AKDP | akt-rover2 | 75.5749113 | 43.2107863 | 1015.0063 |
| ALK4 | akt-rover2 | 75.58030967 | 43.21230159 | 993.9016 |

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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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