

Metadata Report

Project Name

Survey of Pamir Frontal Thrust fault, trench site T2, Alai Valley, Kyrgyzstan, July 2017.

Summary

UAV survey of trenching site to measure the vertical and horizontal offsets across a fault scarp.

This dataset is part of extended trenching study along the central segment of the Pamir Frontal Trust fault.

Data Collectors

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Processing and upload:

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Site Information

The Achyk-Suu trenching site is situated on alluvial-fan deposits at the westernmost end of the cPFT. Trench T2 at the Achyk-Suu site was excavated in a downfan position about 1 km east of trench T1, across a portion of the fault with a double scarp morphology and a total scarp height of 8 m. The excavation resulted in a 24-m-long, 3-m-wide, and up to 4-m-deep trench.

Survey objective: Paleoseismology

Survey date: 2017-07-24

Site location: 39.478007°N 72.507980°E

Survey Info

UAV: DJI Phantom 2 Flight altitude: 60-80 m

Camera photo resolution: 4000 x 3000 px

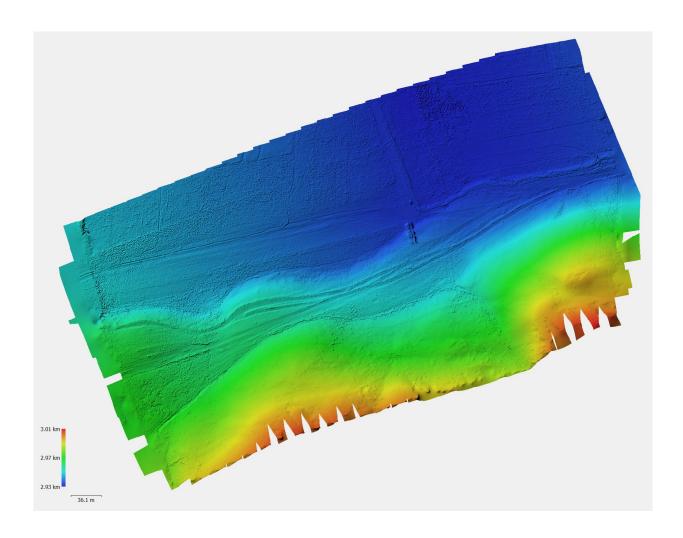
Positioning: global navigation satellite system (GNSS) with a 10 m accuracy; ground control

points measured with RTK DGPS

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

SfM software: AgiSoft Photoscan Professional





Product info

Number of photos: 371

Number of ground control points: 23 Number of tie points: 1,545,158

Dense cloud: 346,208,583 DEM size:7879 x 6253 DEM resolution: 0.1 m/px

Coordinate system of dataset: WGS 84 UTM Zone 43N (ESPG:32643)

Orthophoto resolution: 0.05 m/px



Misc Notes

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Related work: this dataset is included in a doctoral thesis of Magda Patyniak