Metadata Report

Project Name : “1920 Haiyuan Earthquake Rupture, China, derived from Pleiades tri-stereo imagery”

Summary

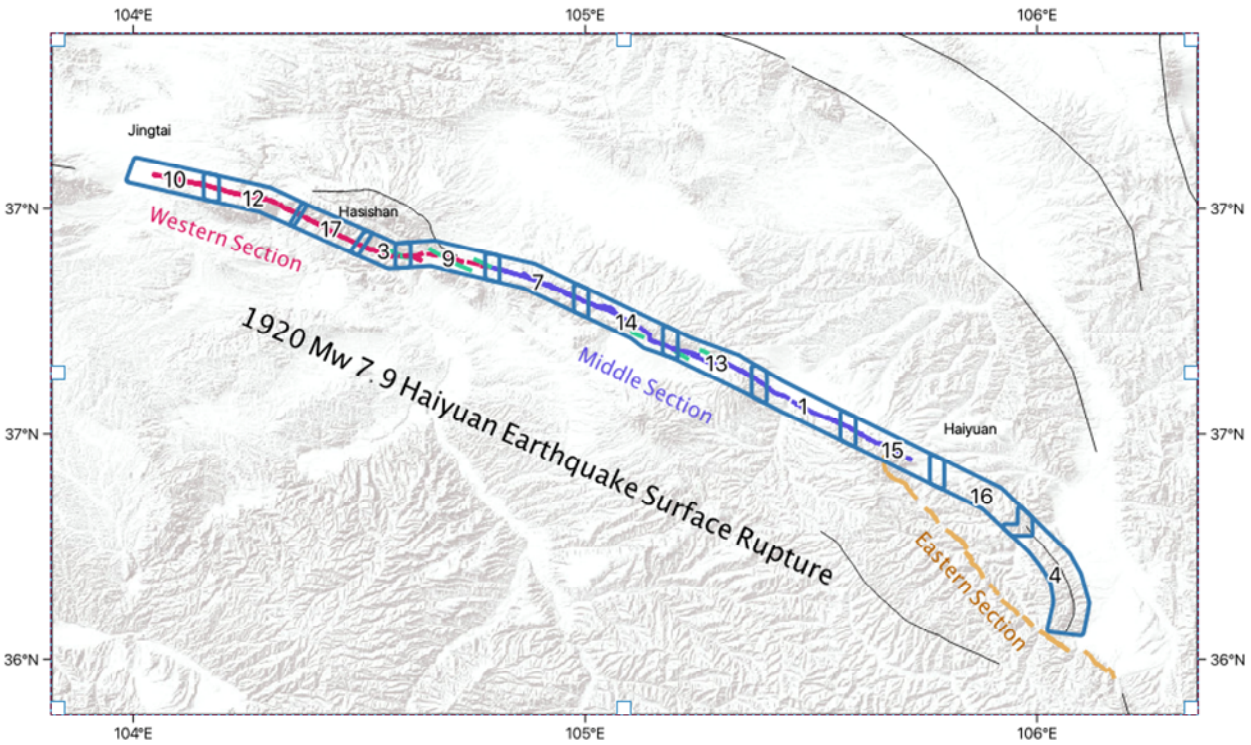
The point cloud covers the 170 km-long western and middle sections of the 1920 Haiyuan Earthquake surface rupture across Gansu and Ningxia, China. The data is photogrammetrically derived from 0.5 m-resolution tri-stereo Pleiades optical imagery acquired by Airbus Defence and Space using the ERDAS IMAGINE software.

Personnel

- PI(s): Richard Walker, Barry Parsons
- Field staff: Qi Ou, Jingxing Yu
- Additional team members: Austin Elliott, Galina Kulikova

Site Information

- Site description: Surface rupture of the 1920 Haiyuan Earthquake
- Site objective: Western and middle sections of the 1920 Haiyuan Earthquake rupture
- Site location (GPS cords and/or map):



- Site conditions: Good
- Date/time spent at each site: 20161127, 20170119, 20161203, 20161203, 20161216, 20161218, 20161223, 20170105, 20161107, 20161109, 20161113, 20161114, 20161115, 20161120, 20170814, 20130629, 20130423

Survey Results

- Equipment used: This dataset is purely based on Pleiades satellite imagery
- GPS solutions: NA
- Errors: NA
- Alignments: NA
- Collection methods: NA

Products

- Date of dataset collection: 2013-2017
- Coordinate system of datasets: WGS84_UTM_zone_48N
- Spatial resolution: 0.5 m
- Horizontal Accuracy: 0.7 m
- Vertical Accuracy: 0.5 m
- Data formats: .las

Data processing methods: Leica Photogrammetry Suite built in ERDAS Imagine 2016

Misc Notes

This data was produced as part of the work published in the following paper. Please cite the following when using the data set.

Ou, Q., Kulikova, G., Yu, J., Elliott, A., Parsons, B., & Walker, R. (2020). Magnitude of the 1920 Haiyuan Earthquake Reestimated Using Seismological and Geomorphological Methods. *Journal of Geophysical Research: Solid Earth*, *125*(8). https://doi.org/10.1029/2019jb019244