

# Metadata Report

Project Name *Boulder Creek, CO USA, 2009, SETSM DEM derived from WV imagery*

## Summary

This dataset are raster DEMs over Boulder Creek, CO, USA produced from WorldView-01 stereo imagery acquired on 18 September 2009 produced using the Surface Extraction from TIN Space-search Minimization (SETSM) algorithm. The raw imagery has 0.5m resolution and the SETSM algorithm was employed using a 2m output resolution. The two DEMs in the dataset contain one unfiltered and one filtered with a local surfacing filter (LSF), each are named as such. Both were then co-registered to LiDAR following the geolocation procedure of Nuth and Kaab 2011. A complete description of the generation of this dataset, the images that were used to construct the raster and how the co-registration was performed can be found in the associated manuscript. Please cite this publication if you use this dataset: Atwood, Abra, and A. Joshua West. "Evaluation of high-resolution DEMs from satellite imagery for geomorphic applications: A case study using the SETSM algorithm." *Earth Surface Processes and Landforms*. 2021. This work has been supported by the NSF Grant EAR-1640894 to AJW.

## Personnel

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## Products

Date of dataset collection: 09/18/2009

Coordinate system of datasets WGS 84 / UTM zone 13

Spatial resolution: 2m