



1. DATASET FULL NAME

2019 Ridgecrest, CA Pre-Earthquake Digital Surface Model V2

2. OVERVIEW DESCRIPTION

This dataset includes a suite of pre-seismic, 2-meter resolution optical digital surface models (DSMs) pre-dating the July 2019 Ridgecrest earthquakes. The DSMs were constructed using DigitalGlobe base imagery (©DigitalGlobe 2019) and the open source SETSM software package (<https://mjremotesensing.wordpress.com/setsm/>). DSMs are vertically and horizontally registered to a separate pre-event optical DSM that was registered to ICESat-1 data. The base imagery includes 0.5m and 0.3m panchromatic in-track stereo imagery acquired from the WorldView-2 and WorldView-3 satellites. The generation of this data sets was funded in part by SCEC in cooperation with the U.S. Geological Survey.

The naming description of individual DSMs is as follows:

sensor_date_id1_id2_dem_2m-DEM.tif

where *sensor* is the sensor from which imagery was acquired (WV02-WorldView2, WV03-WorldView3), *date* is the acquisition dates in format YYYYMMDD (i.e., 13AUG11), and *id1* and *id2* are the image identifier numbers provided by DigitalGlobe.

3. HORIZONTAL COORDINATE SYSTEM

WGS84/UTM Zone 11N (EPSG:32611)

4. VERTICAL COORDINATE SYSTEM

WGS84

5. DATASET KEYWORDS

Ridgecrest, Earthquakes, Digital Globe, WorldView, imagery, pre-event

6. PROJECT ROLES

FUNDER(s): SCEC

PARTNER(s): U.S. Geological Survey

COLLECTOR(s): DigitalGlobe