



## Proposal Title

**Strain Drain along the Southern San Andreas Fault: Possible slip transfer through the Eastern Transverse Ranges, Joshua Tree National Park, CA**

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### Data Collection Summary:

Collection Dates, # Flights:	1 flight on March 18, 2017 (DOY 077)
Aircraft, Equipment:	Piper PA-31-350 Navajo Chieftain (N640WA), Optech Titan (14SEN340)
Flight Plan Parameters:	Flying Height: 800 m AGL (nominal), Swath Width: 746 m, Overlap: >50%, Line Spacing: 340 m
Equipment Parameters:	PRF: 100 kHz per channel (3 channels), Scan Frequency: 32 Hz, Scan Angle: $\pm 25^\circ$
Collected Area:	40 Km square, approx. $\sim 8.2$ shots per square meter

### GNSS Reference Station Summary:

BRAN	N 33 49 24.62776 W 116 31 48.76609	102.386(m) Ellipsoid (NCALM)
P577	N 34 18 16.56506 W 117 19 8.03974	1000.279(m) Ellipsoid (UNAVCO PBO)
P598	N 34 11 32.84877 W 116 42 36.91291	2747.210(m) Ellipsoid (UNAVCO PBO)
P607	N 33 44 27.73007 W 115 49 14.30229	959.481(m) Ellipsoid (UNAVCO PBO)
P612	N 34 11 14.56167 W 117 18 55.81287	532.447(m) Ellipsoid (UNAVCO PBO)
P613	N 34 11 46.26913 W 117 2 59.81598	2355.895(m) Ellipsoid (UNAVCO PBO)
BEMT	N 34 0 1.90866 W 115 59 53.43937	1374.409(m) Ellipsoid (UNAVCO PBO)

### Data Processing Summary:

Horizontal / Vertical Datum:	NAD_83(2011)(EPOCH:2010.0000) NAVD88 via NGS Geoid Model 12B
Projection / Units:	UTM Zone 11N / meters
Point Cloud Tiles:	1000-m $\times$ 1000-m tiles in LAS format (Version 1.2), classified as ground or non-ground returns
Bare-Earth Elevation Model:	ESRI FLT format @ 1.0 m resolution from classified ground points CH01 (1550 nm) and CH02 (1064 nm) and CH03 (532 nm)
Bare-Earth Hillshade:	ESRI-created raster @ 1.0 m resolution
First Surface Elevation Model:	ESRI FLT format @ 1.0 m resolution from first returns only (all 3 channels)
First Surface Hillshade:	ESRI-created raster @ 1.0 m resolution

A detailed summary of the equipment and processing techniques used by NCALM is included in the Data Collection & Processing Summary.

## Area of Interest:



## Location of survey polygon (in red) and GNSS reference stations (yellow push pin markers)

The requested survey area consisted of one polygon located in east of Palm Springs, CA. The polygon enclosed approximately 40 km<sup>2</sup>.