



Proposal Title

LIDAR and DIMAC High resolutions Imagery data collection at Antelope Valley

P.I. Name: Dr. William E Dietrich
University: University of California
Department: Department of Earth and Planetary Science
Email: bill@eps.berkeley.edu

Data Collection Summary:

Collection Dates, # Flights:	1 flight on March 16, 2017 (DOY 075)
Aircraft, Equipment:	Piper PA-31-350 Navajo Chieftain (N640WA), Optech Titan (14SEN340)
Flight Plan Parameters:	Flying Height: 700 m AGL (nominal), Swath Width: 746 m, Overlap: >50%, Line Spacing: 325 m
Equipment Parameters:	PRF: 125 kHz per channel (3 channels), Scan Frequency: 25 Hz, Scan Angle: $\pm 25^\circ$
Collected Area:	18 Km square, approx. ~80 shots per square meter

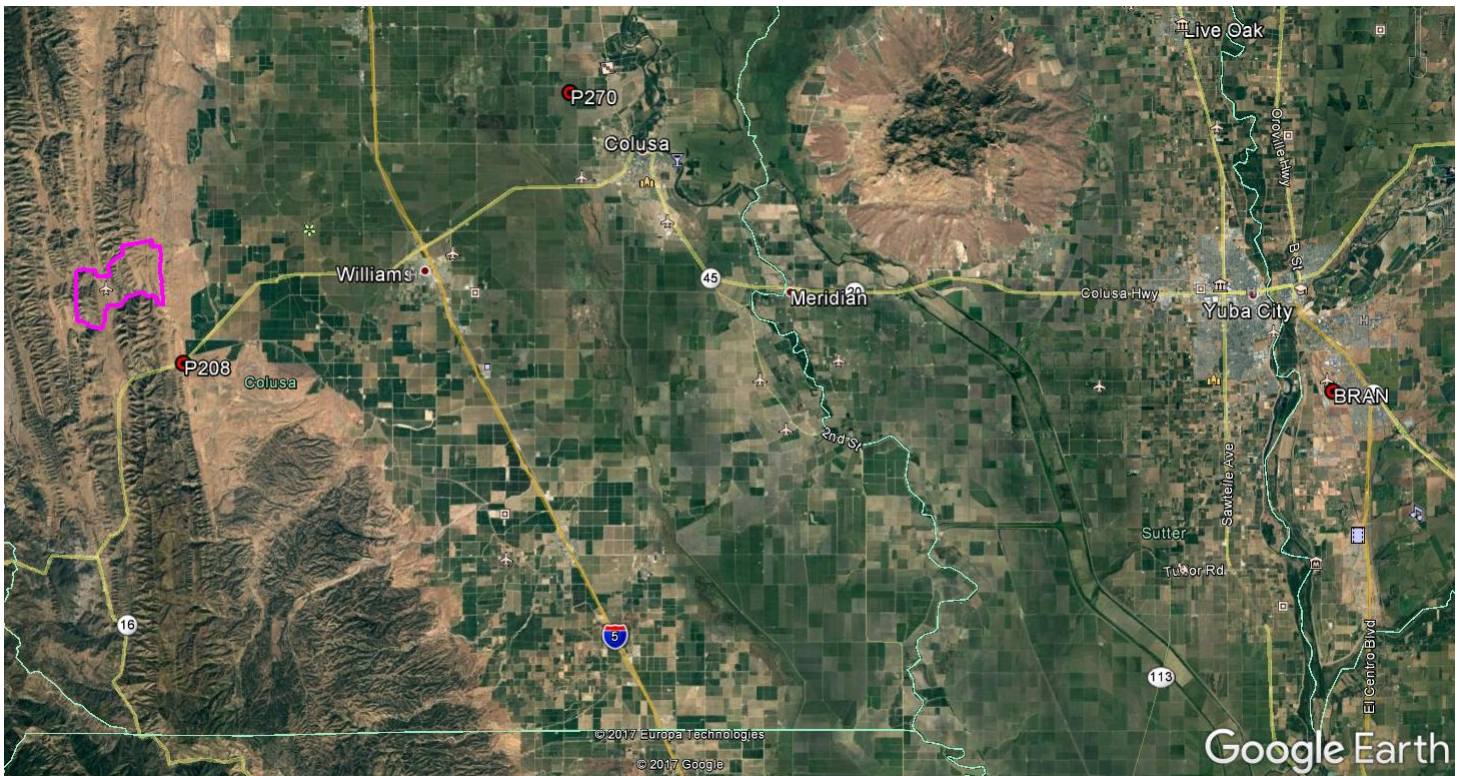
GNSS Reference Station Summary:

BRAN	N 39 5 33.70502 W 121 33 55.07644	-9.508 (m) Ellipsoid (NCALM)
P208	N 39 6 33.47310 W 122 18 13.87495	74.78 (m) Ellipsoid (UNAVCO PBO)
P270	N 39 14 37.55843 W 122 3 18.71337	-11.805 (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 10N / meters
Point Cloud Tiles:	1000-m \times 1000-m tiles in LAS format (Version 1.2), classified as ground or non-ground returns, CH01 (1550 nm) and CH02 (1064 nm) and CH03 (532 nm)
Bare-Earth Elevation Model:	ESRI FLT format @ 0.5 m resolution from classified ground points (all 3 channels)
Bare-Earth Hillshade:	ESRI-created raster @ 0.5 m resolution
First Surface Elevation Model:	ESRI FLT format @ 0.5 m resolution from first returns only (all 3 channels)
First Surface Hillshade:	ESRI-created raster @ 0.5 m resolution

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



Google Earth Map showing the location of the area of Interest as well as the three GPS reference Stations