



Data Collection & Processing Report for Lidar Survey Over the San Gabriel & San Jacinto Mountains in California

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Data Collection Summary:

Collection Dates, # Flights:	7 flights on June 18–24, 2015 (DOY 169–175)
Aircraft, Equipment:	Piper PA-31-350 Navajo Chieftain (N154WW), Optech Gemini (06SEN195)
Flight Plan Parameters:	Flying Height: 900 m AGL, Swath Width: 480 m, Overlap: 50%, Line Spacing: 480 m
Equipment Parameters:	PRF: 50 kHz, Scan Frequency: 60 Hz, Scan Angle: $\pm 15^\circ$
Collected Area:	329 km ²

GNSS Reference Station Summary:

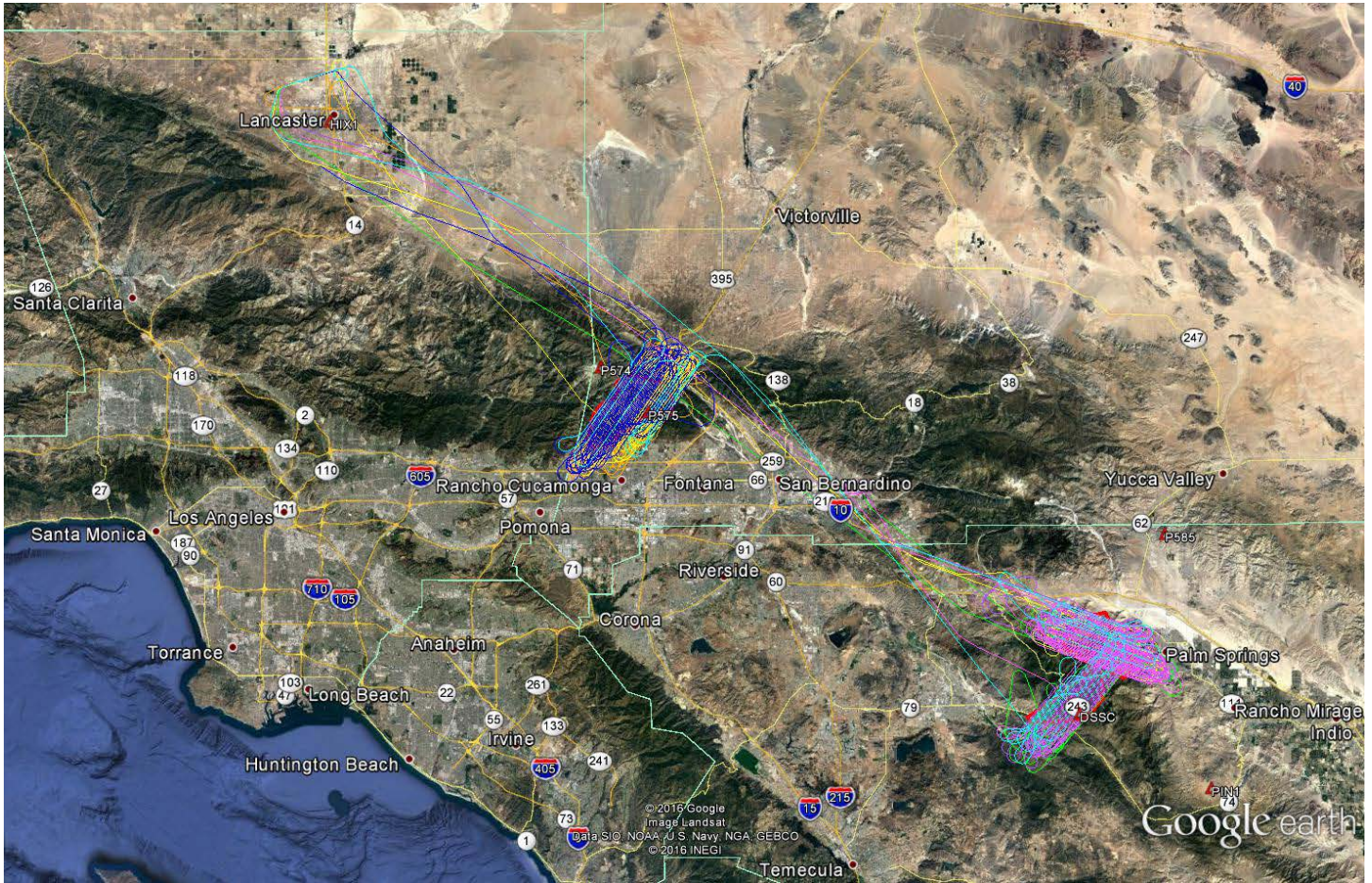
DSSC	UNAVCO	33°43'59" N, 116°42'43" W, 1661 m (Ellipsoid)
HIX1	USER	34°40'37" N, 118°09'42" W, 694 m (Ellipsoid)
P574	UNAVCO	34°17'12" N, 117°38'01" W, 2874 m (Ellipsoid)
P575	UNAVCO	34°12'55" N, 117°32'31" W, 1929 m (Ellipsoid)
P585	UNAVCO	34°01'09" N, 116°32'44" W, 958 m (Ellipsoid)
PIN1	UNAVCO	33°36'29" N, 116°27'29" W, 1258 m (Ellipsoid)

Data Processing Summary:

Horizontal / Vertical Datum:	NAD83(2011) / NAVD88 (GEOID12A)
Projection / Units:	UTM Zone 11N / meters
Point Cloud Tiles:	1000-m \times 1000-m tiles in LAS format (Version 1.2), classified with ground and non-ground returns
Bare-Earth Elevation Model:	ESRI FLT format @ 1-m resolution from classified ground points
Bare-Earth Hillshade:	ESRI-created raster @ 1-m resolution
First-Surface Elevation Model:	ESRI FLT format @ 1-m resolution with canopy and buildings included
First-Surface Hillshade:	ESRI-created raster @ 1-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 polygons, aircraft trajectories, and GNSS reference stations

The requested survey areas consisted of two polygons located near Riverside, CA. The polygons enclose approximately 248 km² (96 mi²).