



Brief Data Collection & Processing Report
2014_Agua Blanca Fault, Baja California Norte, Mexico
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Report Version 1.0 (20200426)

Data Collection Summary:

Collection Dates, # Flights:	Single flights, July 02, 2014 (DOY: 183)
Aircraft, Equipment:	Piper Navajo PA-31-350 (Tail No. N931SA), LIDAR: Optech Gemini (06 SEN/CON 195)
Flight Plan Parameters:	Flying Height: 600 m AGL, Swath Width: 320 m, Overlap: 50%, Line Spacing: 160 m
Equipment Parameters:	PRF: 125 kHz, Scan Frequency: 60 Hz, Scan Angle: $\pm 15-1^\circ$
Planned Laser Pulse Density:	Mean 15 pulses/m ²
Requested/Collected Area:	56 / 75.3 km ² (collected area computed from DEM filled nodes.)

GNSS Reference Station Summary:

1.	CIC1	31.870600° N, 116.665800° W
2.	PALX	31.559100° N, 116.063800° W
3.	PSTX	31.313100° N, 115.835400° W

Data Products Summary:

Horizontal / Vertical Datum:	NAD83 2011 (Ellipsoidal Heights)
Projection / Units:	NAD83 2011 UTM Zone 11N meters
Point Cloud Tiles:	146 1000 m \times 1000 m tiles in LAS format (Version 1.2). Classified into ground (class 2 using strict parameters), high vegetation (first of multiple returns), medium vegetation (second of multiple returns), low vegetation (third of multiple returns). There are returns from power lines within the project area that are classified as high vegetation.
Raster Sections	Each kind of raster data described below was generated for four different fault sections (West 1, West-Central 2, East-Central 3, East 4).
Bare-Earth Elevation Model:	ESRI FLT formats @ 50 cm grid spacing from classified ground returns.
First-Surface Elevation Model:	ESRI FLT format @ 50 cm resolution based only on first returns.

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

Special notes:

1. Direct validation of the lidar raster datasets elevation within the project area was not conducted by NCALM. Height validation may have been conducted by Alejandro Hinojosa of CICESE.

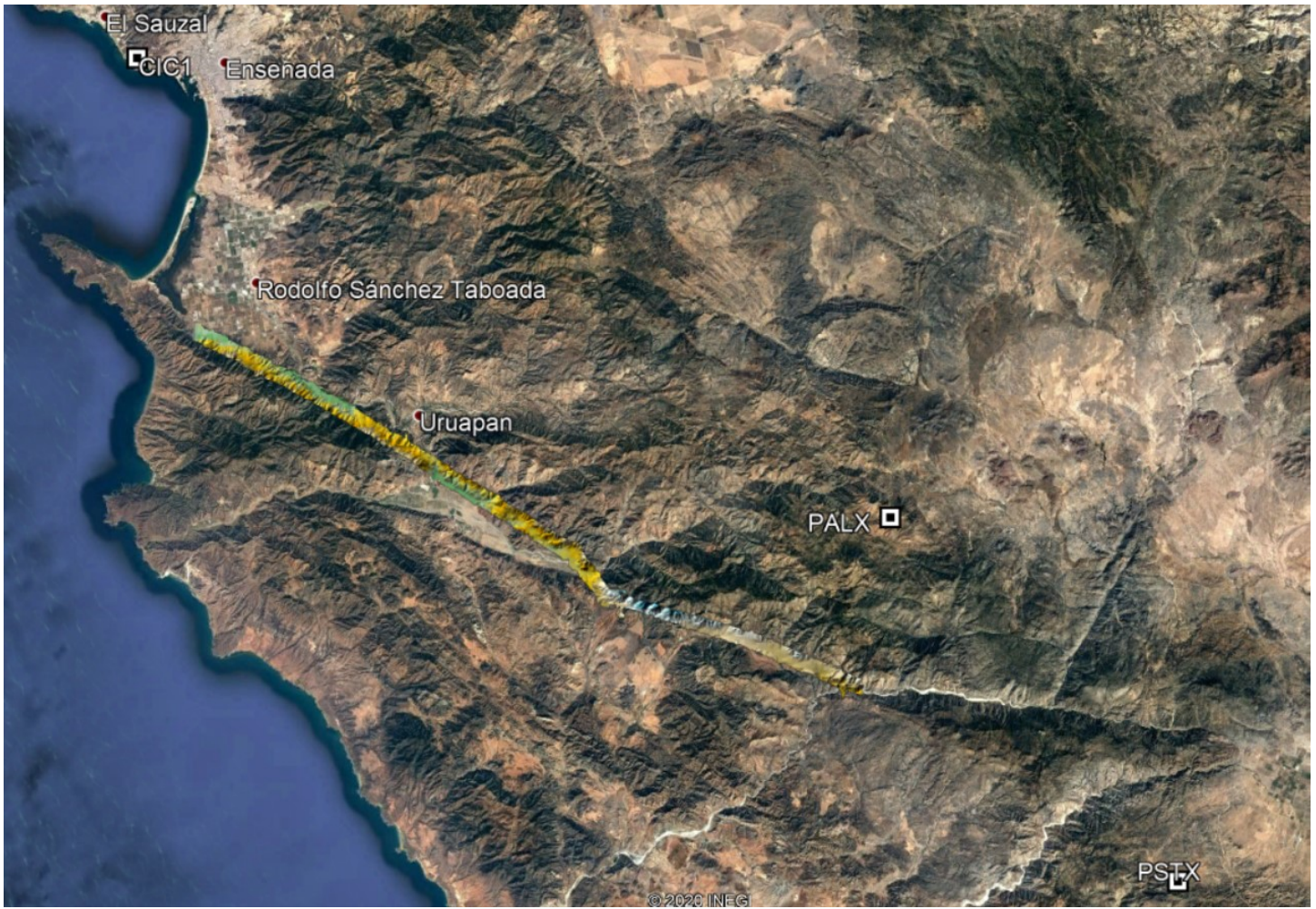


Figure 1. Mapped areas of interest and location of the three GPS base stations.