Data Collection & Processing Report for 2015 Seed Project:
Coupling of a High Resolution Base DEM and Ultra-High Resolution Terrestrial DOMs to Inform Correlation of Fluvial Strata in the Straight Cliffs Formation, South-Central Utah

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Data Collection Summary:

| Collection Dates, # Flights:                  | 1 flight on October 5, 2016 (DOY 279) |
| Aircraft, Equipment:                         | Piper PA-31-350 Navajo Chieftain (N640WA), Optech Titan (14SEN340) |
| Flight Plan Parameters:                      | Flying Height: 700 m AGL, Swath Width: 500 m, Overlap: 50%, Line Spacing: 250 m |
| Equipment Parameters:                        | PRF: 100 kHz, Scan Frequency: 38 Hz, Scan Angle: ± 21°, Aperture: 8.0+ 2/3 |
| Collected Area:                              | 66 km² |

GNSS Reference Station Summary:

| KBCE | User (Bryce Canyon Airport) | 37°42′01″ N, 112°09′23″ W, 2295 m (Ellipsoid) |

Data Processing Summary:

| Horizontal / Vertical Datum: | NAD83(2011) / NAVD88 (GEOID12A) |
| Projection / Units:          | UTM Zone 12N / meters |
| Point Cloud Tiles:           | 1000-m × 1000-m tiles in LAS format (Version 1.4), classified with ground and non-ground returns |
| Bare-Earth Elevation Models: | ESRI FLT format @ 1-m resolution from classified ground points |
| Bare-Earth Hillshades:       | ESRI-created rasters @ 1-m resolution |
| First-Surface Elevation Models: | ESRI FLT format @ 1-m resolution with canopy included |
| First-Surface Hillshades:    | ESRI-created rasters @ 1-m resolution |
| Aerial Images:               | Radiometrically corrected 8-bit TIFF files @ 300 dpi with timestamp and trajectory information |

A detailed summary of the equipment and typical processing techniques used by NCALM is included in the Data Collection & Processing Summary.
The requested survey area consisted of two polygons located east of Bryce, UT. The polygons enclose approximately 39 km² (15 mi²).