C-5 Report on Data Voids

The USGS Lidar Base Specification Version 2.1 states: "A data void is considered to be any area greater than or equal to (4 × ANPS) squared, which is measured using first returns only. Data voids within a single swath are not acceptable, except in the following circumstances:

    (1) where caused by waterbodies;

    (2) where caused by areas of low near infrared reflectivity, such as asphalt or composition roofing;

    (3) where caused by lidar shadowing from buildings or other features; or

    (4) where appropriately filled in by another swath.

For projects designed to achieve the required ANPS through multiple coverage, the entire DPA shall be covered with the designed number of swaths. Areas meeting the size threshold defined above for single coverage that are not covered by the designed number of swaths are data voids."

The purpose of this section is to show graphically where possible lidar data voids are located. Data voids can be caused by a lack of coverage at the time of collection, water bodies not reflecting the laser beam back to the receiver, lidar occlusions caused by objects above ground like tall buildings, etc. Not all data voids are problematic. The intention of this test is to isolate the first example of lidar data voids - a lack of coverage at the time of collection. A close inspection must be done on the results to determine if the lidar coverage was collected and processed to meet the intended specifications.

Data Source - Y:\Mapping\Projects\65220595_CO_SanLuisJuanMiguel\Production\Final_Client_Deliverables\Block1_Surdex\point_cloud\Swaths