

quantum S P A T I A L



Delivery Lot Summary Report: Delivery Lot 6B

October 9, 2015

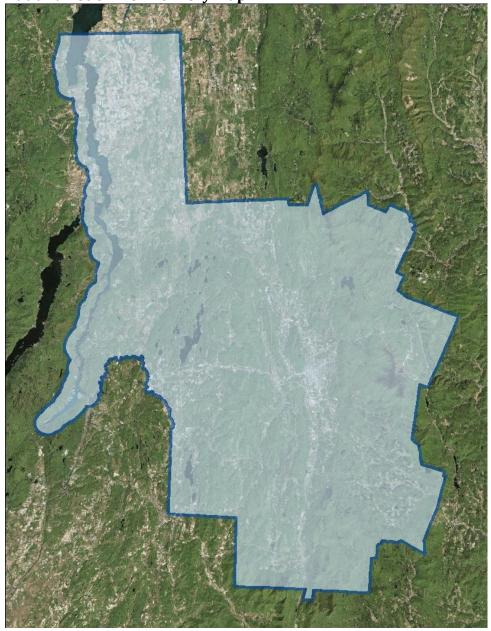
USGS Contract: G10PC00026 USGS Task Order: G13PD00813

Task Order Name: Rutland, VT LiDAR

Contractor: Photo Science, a Quantum Spatial Company

The following is a summary description of the deliverables and other pertinent information that comprise the shipment of Delivery Lot 6B to USGS on October 9, 2015.

Rutland Lot 6B AOI Delivery Map:



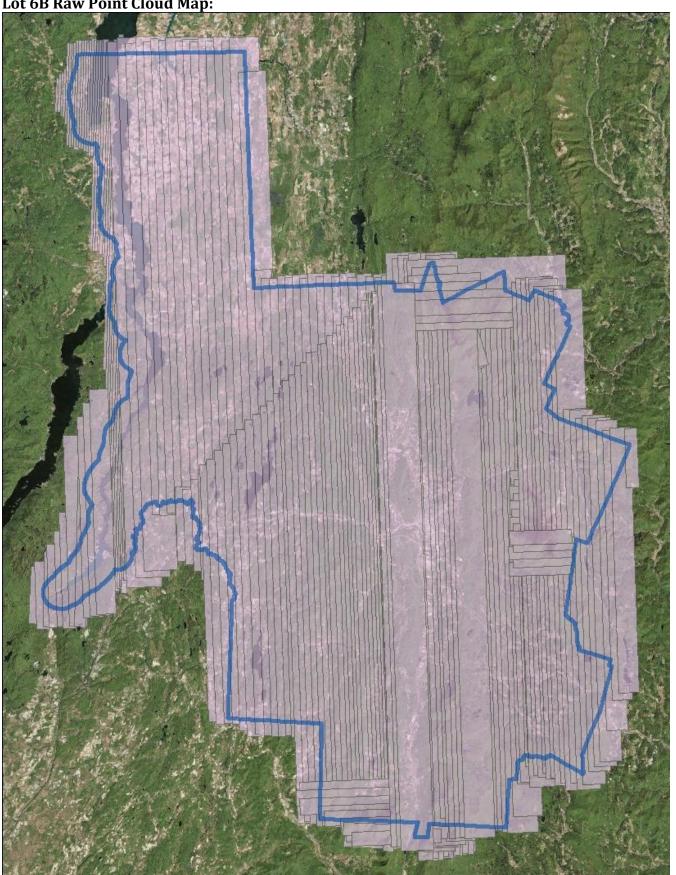


Lot 6B Delivery Map:

Page 2 of 7

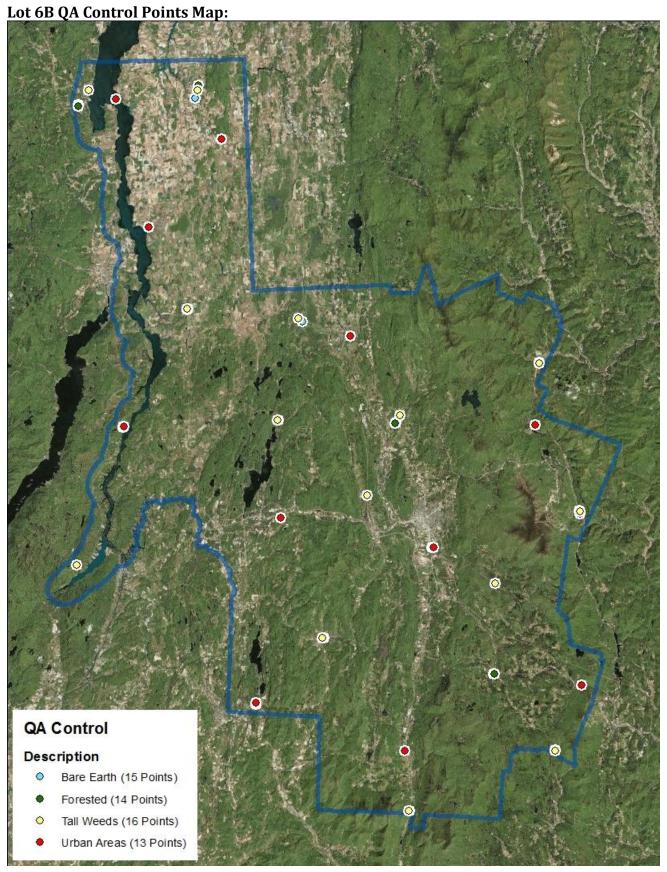


Lot 6B Raw Point Cloud Map:



Page 3 of 7





Page 4 of 7



Task Order Spatial Reference System:

- Horizontal: Vermont SPCS, NAD83 (2011), Zone: 4400, Meters
- Vertical: NAVD88, GEOID12a, Meters

Deliverables Summary:

- 1. C.1.d.(i) Raw Point Cloud Data (calibrated and control adjusted): Included
 - LAS v1.2, Point Record Format 1
 - Total Number of Swath Files: 259
 - Total File Size: 1.07 TB (1,181,894,717,440 bytes)
 - Individual Swath Outline Shape File
- 2. C.1.d.(ii) Classified Point Cloud: Included
 - LAS v1.2, Point Record Format 1 including File Source ID w/assigned value of 0
 - Classification Schema:
 - (01) Code 1 Processed, but unclassified
 - (02) Code 2 Bare-earth ground
 - (03) Code 7 Noise
 - (04) Code 9 Water
 - (05) Code 10 Ignored Ground (Breakline Proximity)
 - (06) Code 11 Withheld
 - (07) Code 13 Hydro Enforced Ground
 - (08) Code 17 Overlap Default
 - (09) Code 18 Overlap Ground
 - (10) Code 25 Overlap Water
 - Total Number of Tiles: 1,699
 - Tile Dimensions: 1,400 meters x 1,400 meters
 - Total File Size: 792 GB (850,807,701,504 bytes)
 - Delivery Lot 6B Tile Shape Files (Lot 6B Boundary & Lot 6B Individual Tiles)
- 3. C.1.d.(iii) Hydro Flattened Bare Earth Surface (Raster DEM): Included
 - Format: ERDAS .IMG
 - Resolution: 0.7 meter grid cell size
 - Total Number of Tiles: 1,699
 - Tile Dimensions: 1,400 meters x 1,400 meters (same used for Classified Point Cloud)
 - Total File Size: 24.8 GB (26,631,516,160 bytes)
- 4. C.1.d.(iii) Hydro Enforced Bare Earth Surface (Raster DEM): Included
 - Format: ESRI Grid
 - Resolution: 0.7 meter grid cell size
 - Total Number of Tiles: 1,699
 - Tile Dimensions: 1,400 meters x 1,400 meters (same used for Classified Point Cloud)
 - Total File Size: 24.3 GB (26,150,666,240 bytes)
- 5. C.1.d.(iv) Control:
 - Delivery Lot 6 QA Control Check Point Location Shape File Extract: Included Page 5 of 7



- 6. C.1.d.(v) LiDAR Intensity Image: Included
 - Format: Grayscale, 8-bit, GeoTiff
 - Resolution: 1 meter grid cell size
 - Total Number of Tiles: 1,699
 - Tile Dimensions: 1,400 meters x 1,400 meters (same used for Classified Point Cloud)
 - Total File Size: 8.36 GB (8,979,456,000 bytes)
- 7. C.1.d.(vi) Breaklines: Included
 - Format: ESRI Shapefile (.shp)
 - Coverage: Lot 6B Continuous, Non-Tiled
 - Total File Size: 4.40 MB (4,620,288 bytes)
- 8. C.1.d.(vii) Metadata: Included
 - Format: FGDC compliant, XML
 - File Types: Project, Lift, Tiled deliverable product group (classified .las, DEM, & Intensity)
- 9. C.1.d.(viii) Project Report:
 - Delivery Lot Summary Report: Lot 6B Included
 - Overall Project Report: To Be Delivered upon final acceptance of all Delivery Lots.
- 10. Lot 6 QA & Accuracy Reporting
 - FOCUS Report: Included
 - LAS Analysis (Excel File): Included
 - Raster Analysis (Excel File): Included

Lot 6A Provisional Accuracy Reporting:

- Number of QA Check Points falling within Delivery Lot 6A by Tested Land Cover Type:
 - o Bare Earth (BE): 15
 - o Forested (F0): 14
 - o Tall Weeds (TW): 16
 - o Urban (UA): 13



Delivery Lot Notes/Comments:

Delivery Lot 6B reflects the interim delivery of data collected during the 2013 through 2015 flight season. Most of the data has been collected, however the area around Killington Peak has dropouts, which has necessitated an additional collect in the Fall of 2015. This dataset represents the areas completed and are being provided to USGS on an incremental delivery lot basis in order to better support incremental QA review.

Delivery Lot 6B does not include a contour delivery. Contours were not provided during the pilot deliverables (07/01/2014) for this reason as well and were noted on the pilot deliverable transmittal as follows:

"Contours are not being provided as part of this deliverable, as final approach to contour development has not been finalized at this time. When clarification/acceptance is provided, we will provide the contours for the pilot area."