

USGS/NGTOC LiDAR/Elevation Project Summary

Project Sponsor: USGS/NGTOC

Project Area: Shelby County, TN

Acquisition Dates: December 1, 2011 and January 23 -24, 2012

Technical Summary:

Nominal Point Spacing – 1.0 meter

Vertical Accuracy – $RMSE_z$ - 15.9 cm (Accuracy of 0.159m at the 95% confidence level)

Horizontal Accuracy is +/- 3.8-foot at the 95% confidence level

Vertical Datum: NAVD88, Geoid09, meters

Horizontal Datum: NAD83, (NSRS 2007)

Coordinate System: State Plane TN FIPS 4100, NAD83, U.S. Survey Feet
UTM NAD 1983 Zone 16N

Tiling Scheme: 1,500 x 1,500 meter tiles and 5,000 x 5,000 feet tiles

Products:

- LAS v1.2 classified point cloud
- LAS v1.2 raw unclassified point cloud flight line strips no greater than 2GB. Long swaths greater than 2GB will be split into segments)
- Hydrologically flattened bare earth 1-meter DEM in IMG format
- Breaklines compiled as part of the hydrologic flattening process were provided as ESRI PolygonZ and PolylineZ shapefiles
- 8-bit intensity images matching LAS data extent
- Feature Extraction Data in ESRI Shapefile format
- Tile Layout and data extent provided as ESRI shapefile
- Control points provided as ESRI shapefile
- FGDC compliant metadata by file in XML format
- LiDAR processing report in pdf format
- Survey report in pdf format

