

USDA-NRCS LiDAR/Elevation Project Summary

Project Sponsor: USDA - NRCS

Project Area: Eight West TN counties (FY10 LIDAR)

Acquisition Dates: December 2010 - April 2011

Technical Summary:

Nominal Point Spacing – 0.7 meters

Vertical Accuracy – $RMSE_z$ - 9.25cm (suitable for 1 foot contours)

Horizontal Accuracy -Will meet or exceed 0.6 m RMSE (Accuracy= 1.04 m at the 95% confidence level).

Vertical Datum: NAVD88, Geoid09, meters

Horizontal Datum: NAD83, (NSRS 2007)

Coordinate System: UTM Zone 16, meters

Tiling Scheme: 1000x1000 (National Grid) for point cloud and intensity images, USGS

¼ quads for Bare Earth DEM's.

Products:

- One (1) set of classified LAS files in version 1.2 formatted to Point Record Format 1. The LAS files will be delivered in the USNG at a 1,000 m x 1,000 m interval.
- One (1) set of 1-meter Raster DEM's (hydro flattened bare earth) delivered in ESRI Grid format. The DEM's will be delivered in the DOQQ tiling and naming schema.
- One (1) set of 1-meter intensity orthophotos in GeoTIFF file format.
- One (1) set of FGDC Metadata
- One (1) ESRI file geodatabase containing the breakline data.
- One (1) project completion report including a LiDAR system data report, an acquisition report, data processing procedures and a system calibration report.

