STS GIS Services USGS 3DEP 2016 Project Summary
(Eastern TN LiDAR 2016 QL2)

Project Sponsor (s): Tennessee Department of Transportation, the Tennessee Valley Authority, Department of Agriculture - NRCS, US Forest Service, Appalachian Electric Coop, City of Bristol, City of Kingsport, Davidson County, Hamblen County, Johnson City MTPO, Jefferson County GIS, Sullivan County, STS – GIS Services

Project Area: Hancock, Hawkins, Sullivan, Union, Grainger, Hamblen, Greene, Unicoi, Washington, Carter, Cocke, Jefferson, Knox, Sevier, Loudon, Blount, Monroe, Davidson Counties

Acquisition Dates: February 2016, March 2016

Technical Summary:

Nominal Point Spacing : ≥ .70 meter

Accuracy: $RMSE_Z \leq 10cm$ (non-vegetated Swath, DEM)

NVA ≤ 19.6 cm 95% Confidence Level (Swath, DEM)

VVA ≤ 29.4 cm 95^{th} Percentile (DEM)

Vertical Datum: NAVD88, Geoid12B, US Feet

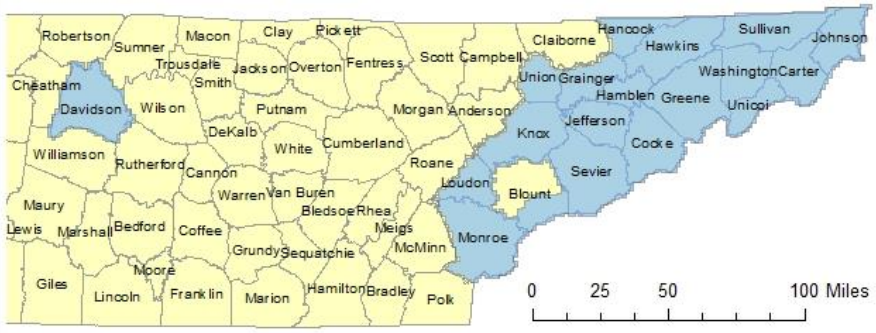
Horizontal Datum: NAD83

Coordinate System: State Plane TN FIPS 4100, NAD83 (2011), U.S. Survey Feet

Tiling Scheme: 7,000 x 4,000 feet tiles

Products:

- Raw Point Cloud in LAS1.4 format
- Full Class in LAS1.4 format Tile index shape file in ESRI .SHP format
- PolygonZ file for water bodies two acres and greater in area used for hydrologic-flattening
- PolylineZ file for waterbodies 100 ft in nominal width used for hydrologic-flattening
- Hydrologically-flattened Bare Earth Surface (Raster DEMS) in ERDAS .IMG format at 1m cell size
- 8-Bit gray-scale intensity GeoTIFFs at 1m cell size
- Building Polygon shape file in ESRI .SHP format used in classification of LiDAR
- FGDC compliant metadata


Robertson
Sumner
Macon
Clay
Pickett
Claiborne
Hancock
Sullivan
Johnson
Hawkins
Trousdale
Jackson
Overton
Fentress
Scott
Campbell
Cheatham
Smith
Union
Grainger
Washington
Carter
Davidson
Wilson
Putnam
Morgan
Anderson
Hamblen
Greene
Unicoi
Jefferson
Knox
DeKalb
White
Cumberland
Cocke
Williamson
Rutherford
Cannon
Roane
Sevier
Loudon
Blount
Warren
Van Buren
Maury
Bledsoe
Rhea
Lewis
Marshall
Bedford
Coffee
Meigs
Monroe
Grundy
Sequatchie
McMinn
Moore
Giles
Lincoln
Franklin
Marion
Hamilton
Bradley
Polk
0
25
50
100 Miles