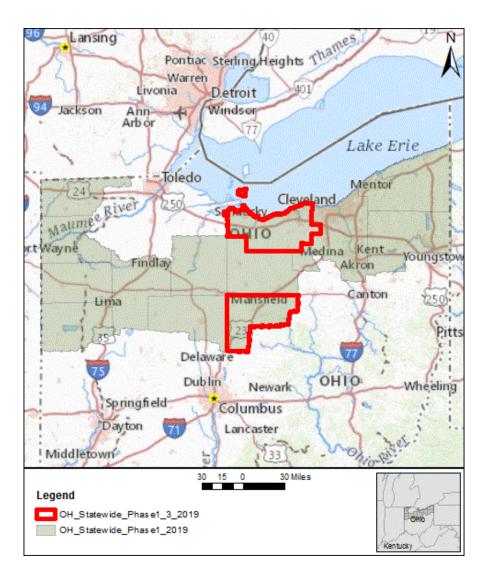


# **Data Validation Report**

# from the National Geospatial Technical Operations Center in Support of the 3D Elevation Program

OH\_Statewide\_Phase1\_3\_2019

2021-10-22



## **Work Unit Summary Information**

Project Name: OH_Statewide_Phase1_2019_B19	Project ID: 182849	
WU Name: OH_Statewide_Phase1_3_2019	Work Unit ID: 206353	
Mechanism: GPSC	Lidar Base Spec: 1.3	
Quality Level: 1	P-Method: 7 - Linear-Mode Lidar	
Horizontal EPSG Code: 6549	Vertical EPSG Code: 6360 Geoid Model GEOID 12B	

The National Map Help Desk Email: tnm\_help@usgs.gov

The U.S. Geological Survey evaluates absolute vertical accuracy of the lidar and lidar-derived bare earth digital elevation model (DEM) data at the project level. Data are produced to meet 9.8 cm absolute vertical accuracy at the 95-percent confidence level in non-vegetated, open terrain. To review vertical accuracy results, please see the project report

### **Breaklines**

Based on this review, the USGS-NGTOC **ACCEPTS** the Breaklines.

Breaklines are visually reviewed in conjunction with the bare earth DEM for spatial and geometric accuracy. Breaklines are confirmed to be three dimensional (3D) features and that elevations are at or just below the immediately surrounding terrain. Single- and double-line drainages are reviewed to ensure downstream flow. The USGS recognizes that differences in collection methodology, resampling techniques, and other factors that are unique to proprietary production do occur, and these will result in minor horizontal and vertical differences between breaklines derived on the fly.

## **Reporting Metadata**

Based on this review, the USGS-NGTOC ACCEPTS the Reporting Metadata.

Reports from the contractor, including calibration, collection, and processing methods, are reviewed for accurate information. For more information, please see the work units metadata.

# FGDC XML Metadata

Based on this review, the USGS-NGTOC **ACCEPTS** the FGDC XML Metadata.

CSGDM .xml metadata are parsed using the USGS Geospatial Metadata Validation Service and reviewed for accurate information. CSDGM is maintained by the Federal Geographic Data Committee (FGDC).



#### Spatial Metadata Based on this review, the USGS-NGTOC ACCEPTS the Spatial Metadata.

Spatial metadata from the contractor, including raster and vector datasets, are evaluated together with pertinent deliverables for geometric fidelity and attribution accuracy. For more information, please see the work units metadata.

## DEM

Based on this review, the USGS-NGTOC ACCEPTS the DEM.

Visual review is performed on .tif bare earth rasters at a 1:5,000 or larger viewing scale to validate point cloud geometry, raster processing methodology, point classification, and breaklines. Comprehensive review is completed to ensure consistency and accuracy across all files. For additional information, please see this work units metadata folder.

### Pointcloud

#### Based on this review, the USGS-NGTOC **ACCEPTS** the Pointcloud.

Visual and statistical review is performed on classified .las files to validate adherence to contracted specifications. A comprehensive review is completed to ensure consistency and accuracy across all files, including the spatial reference system. Classification verification is limited to the minimum required by applicable Lidar Base Specification. Classifications beyond the minimum are not verified by USGS. LAS files are evaluated to ensure the public header block, point data records, and variable/extended variable length records are correctly populated. For additional information, please see the work units metadata folder.

Error Type	Subtype	Quantity
Collection	Data Void	2

**Dictionary Description:** Lapses in lidar data collection in the point cloud that are not due to surface environmental conditions. Examples would include but are not limited to lapse in coverage due to atmospheric interference, GPS outages, or cloud cover.

