

Project Definition: The entire collection for a contracted area.

Work Unit Definition: A production block of data defined by the National Geospatial Technical Operations Center due to expediency, priority or resource allocation. There can be one or many work units per project.

Project Information

Lidar Base Specification: Lidar Base Specification 2024 rev. A	Primary Contractor: Fugro Geospatial, Inc. (Fugro)
Las Version: 1.4	Contract Mechanism: GPSC
P Method: N/A	
Collection Start Date: 03-18-2024	Collection End Date: 05-19-2024
The National Map Email: tnm_help@usgs.gov	

Vertical Accuracy Results

The U.S. Geological Survey evaluates absolute vertical accuracy of the lidar and lidar-derived bare earth DEM data at the project level

Lidar Point Cloud	Required NVA RMSEz (cm)	Tested NVA RMSEz (cm)	Required NVA at 95% confidence level (cm)	Tested NVA at 95% confidence level (cm)	Required VVA at 95th percentile (cm)	Tested VVA at 95th percentile (cm)
	10.0	2.49	19.6	4.88	N/A	8.49

Digital Elevation Model	Required NVA RMSEz (cm)	Tested NVA RMSEz (cm)	Required NVA at 95% confidence level (cm)	Tested NVA at 95% confidence level (cm)	Required VVA at 95th percentile (cm)	Tested VVA at 95th percentile (cm)
	10.0	2.63	19.6	5.16	30.0	7.32

Please see the vertical_accuracy folder within the project metadata for more information.

Classifications Used

Classification verification is limited to the minimum required by applicable Lidar Base Specification. Classifications beyond the minimum are not verified by USGS.

Classification ID	Classification Type
1	Unclassified
2	Ground
7	Low Point (Noise)
9	Water
17	Bridge Deck
18	High Noise
20	Ignored Ground
21	Snow
22	Temporal Exclusion

Sensor(s) Used

Sensor

Riegl 1560ii/ii-s - Rotating Polygonal Mirror

Riegl VQ-1560ii - Rotating Polygonal Mirror

Work Unit Information

MN_RedRiver_1_D23	Work Unit ID: 300611	Quality Level: 1
Horizontal EPSG Code: 6343	Vertical EPSG Code: 5703	Geoid Model: GEOID18
DEM Ground Sample Distance: 0.5	Hydro Treatment: hydro-flattened	
Collection Start Date: 2024-03-18	Collection End Date: 2024-05-06	

MN_RedRiver_4_D23	Work Unit ID: 300614	Quality Level: 1
Horizontal EPSG Code: 6344	Vertical EPSG Code: 5703	Geoid Model: GEOID18
DEM Ground Sample Distance: 0.5	Hydro Treatment: hydro-flattened	
Collection Start Date: 2024-03-18	Collection End Date: 2024-05-14	

MN_RedRiver_2_D23	Work Unit ID: 300612	Quality Level: 1
Horizontal EPSG Code: 6343	Vertical EPSG Code: 5703	Geoid Model: GEOID18
DEM Ground Sample Distance: 0.5	Hydro Treatment: hydro-flattened	
Collection Start Date: 2024-04-21	Collection End Date: 2024-05-19	

MN_RedRiver_3_D23	Work Unit ID: 300613	Quality Level: 1
Horizontal EPSG Code: 6344	Vertical EPSG Code: 5703	Geoid Model: GEOID18
DEM Ground Sample Distance: 0.5	Hydro Treatment: hydro-flattened	
Collection Start Date: 2024-04-21	Collection End Date: 2024-05-19	