

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: 2.1	Primary Contractor: Quantum Spatial Inc. (QSI)
Las Version: 1.4	Contract Mechanism: GPSC
P Method: 7 - Linear-Mode Lidar	
Collection Start Date: 08-12-2020	Collection End Date: 07-15-2021
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	3.58	19.6	7.02	N/A	20.76

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	3.94	19.6	7.72	30.0	22.76

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	Processed, but unclassified
2	Bare earth
7	Low noise
9	Water
17	Bridge deck
18	High noise
20	Ignored ground (typically breaklines proximity)
21	Snow (if present and identifiable)
22	Temporal exclusion (typically nonfavored data in intertidal zones)

Sensor(s) Used

Sensor
Riegl 1560ii/ii-s - Rotating Polygonal Mirror
Riegl LMS Q1560 - Aerial Rotating Prism
Riegl VQ-1560i - Aerial Oscillating Mirror
Riegl VQ-1560ii - Rotating Polygonal Mirror

Work Unit Information

MT_Statewide_P2_1_2020	Work Unit ID: 197111	Quality Level: 2
Horizontal EPSG Code: 6514	Vertical EPSG Code: 5703	Geoid Model: GEOID18
DEM Ground Sample Distance: 1.0	Hydro Treatment: hydro-flattened	
Collection Start Date: 2020-10-08	Collection End Date: 2021-05-11	

MT_Statewide_P2_3_2020	Work Unit ID: 300021	Quality Level: 2
Horizontal EPSG Code: 6514	Vertical EPSG Code: 5703	Geoid Model: GEOID18
DEM Ground Sample Distance: 1.0	Hydro Treatment: hydro-flattened	
Collection Start Date: 2020-09-11	Collection End Date: 2021-06-03	

MT_Statewide_P2_4_2020	Work Unit ID: 300153	Quality Level: 1
Horizontal EPSG Code: 6514	Vertical EPSG Code: 5703	Geoid Model: GEOID18
DEM Ground Sample Distance: 0.5	Hydro Treatment: hydro-flattened	
Collection Start Date: 2020-09-11	Collection End Date: 2021-05-10	

MT_Statewide_P2_2_2020	Work Unit ID: 230589	Quality Level: 2
Horizontal EPSG Code: 6514	Vertical EPSG Code: 5703	Geoid Model: GEOID18
DEM Ground Sample Distance: 1.0	Hydro Treatment: hydro-flattened	
Collection Start Date: 2020-08-12	Collection End Date: 2020-09-08	

MT_Statewide_P2_5_2020	Work Unit ID: 300154	Quality Level: 1
Horizontal EPSG Code: 6514	Vertical EPSG Code: 5703	Geoid Model: GEOID18
DEM Ground Sample Distance: 0.5	Hydro Treatment: hydro-flattened	
Collection Start Date: 2020-08-12	Collection End Date: 2021-07-15	