MT_Statewide_Phase5_D23

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:** NV5 Geospatial, Inc
Las Version: 1.4	**Contract Mechanism:** GPSC
P Method: 7 - Linear-Mode Lidar	
Collection Start Date: 07-06-2023	**Collection End Date:** 10-08-2023
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	**7.07**	19.6	**13.85**	N/A	**22.91**

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	**7.10**	19.6	**13.92**	30.0	**22.46**

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
5	High Vegetation
6	Building
21	Snow
22	Temporal Exclusion

Sensor(s) Used

Sensor
Riegl VQ-1560ii - Rotating Polygonal Mirror
Riegl VQ780iiS - Rotating Polygonal Mirror
Riegl 1560ii/ii-s - Rotating Polygonal Mirror

Work Unit Information

MT_Statewide_P5_1_D23	**Work Unit ID:** 300896	**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: 2023-07-10	**Collection End Date:** 2023-08-23	

MT_Statewide_P5_7_D23	**Work Unit ID:** 300902	**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: 2023-07-21	**Collection End Date:** 2023-08-31	

MT_Statewide_P5_5_D23	**Work Unit ID:** 300900	**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: 2023-08-08	**Collection End Date:** 2023-10-08	

MT_Statewide_P5_8_D23	**Work Unit ID:** 300953	**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: 2023-07-28	**Collection End Date:** 2023-07-27	

MT_Statewide_P5_6_D23	**Work Unit ID:** 300901	**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: 2023-07-06	**Collection End Date:** 2023-08-19	

MT_Statewide_P5_4_D23	**Work Unit ID:** 300899	**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: 2023-07-09	**Collection End Date:** 2023-08-29	

MT_Statewide_P5_3_D23	**Work Unit ID:** 300898	**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: 2023-07-09	**Collection End Date:** 2023-08-25	

MT_Statewide_P5_2_D23	**Work Unit ID:** 300897	**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: 2023-07-20	**Collection End Date:** 2023-08-25	