

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 2022 rev. A.	Primary Contractor: NV5 Geospatial, Inc
Las Version: 1.4	Contract Mechanism: GPSC
P Method: 7 - Linear-Mode Lidar	
Collection Start Date: 11-03-2021	Collection End Date: 09-23-2022
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	4.97	19.6	9.74	N/A	25.58

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	5.04	19.6	9.88	30.0	24.69

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
22	Temporal Exclusion
21	snow

Sensor(s) Used

Sensor

Riegl 1560ii/ii-s - Rotating Polygonal Mirror

Leica Terrain Mapper - Aerial Oscillating Mirror

Riegl VQ-1560ii - Rotating Polygonal Mirror

Work Unit Information

CA_SierraNevada_11_B22	Work Unit ID: 300459	Quality Level: 1
Horizontal EPSG Code: 6340	Vertical EPSG Code: 5703	Geoid Model: GEOID18
DEM Ground Sample Distance: 0.5	Hydro Treatment: hydro-flattened	
Collection Start Date: 2022-06-02	Collection End Date: 2022-08-26	

CA_SierraNevada_1_2022	Work Unit ID: 300057	Quality Level: 1
Horizontal EPSG Code: 6339	Vertical EPSG Code: 5703	Geoid Model: GEOID18
DEM Ground Sample Distance: 0.5	Hydro Treatment: hydro-flattened	
Collection Start Date: 2021-11-07	Collection End Date: 2021-11-29	

CA_SierraNevada_2_2022	Work Unit ID: 300058	Quality Level: 1
Horizontal EPSG Code: 6339	Vertical EPSG Code: 5703	Geoid Model: GEOID18
DEM Ground Sample Distance: 0.5	Hydro Treatment: hydro-flattened	
Collection Start Date: 2021-11-16	Collection End Date: 2021-12-01	

CA_SierraNevada_9_2022	Work Unit ID: 300364	Quality Level: 1
Horizontal EPSG Code: 6340	Vertical EPSG Code: 5703	Geoid Model: GEOID18
DEM Ground Sample Distance: 0.5	Hydro Treatment: hydro-flattened	
Collection Start Date: 2022-06-19	Collection End Date: 2022-08-31	

CA_SierraNevada_4_2022	Work Unit ID: 300244	Quality Level: 1
Horizontal EPSG Code: 6339	Vertical EPSG Code: 5703	Geoid Model: GEOID18
DEM Ground Sample Distance: 0.5	Hydro Treatment: hydro-flattened	
Collection Start Date: 2021-11-03	Collection End Date: 2021-12-05	

CA_SierraNevada_13_B22	Work Unit ID: 300461	Quality Level: 1
Horizontal EPSG Code: 6340	Vertical EPSG Code: 5703	Geoid Model: GEOID18
DEM Ground Sample Distance: 0.5	Hydro Treatment: hydro-flattened	
Collection Start Date: 2022-06-04	Collection End Date: 2022-09-17	

CA_SierraNevada_6_2022	Work Unit ID: 300246	Quality Level: 1
Horizontal EPSG Code: 6339	Vertical EPSG Code: 5703	Geoid Model: GEOID18
DEM Ground Sample Distance: 0.5	Hydro Treatment: hydro-flattened	
Collection Start Date: 2021-11-03	Collection End Date: 2022-08-19	

CA_SierraNevada_12_B22	Work Unit ID: 300460	Quality Level: 1
Horizontal EPSG Code: 6339	Vertical EPSG Code: 5703	Geoid Model: GEOID18
DEM Ground Sample Distance: 0.5	Hydro Treatment: hydro-flattened	
Collection Start Date: 2021-11-18	Collection End Date: 2022-08-25	

CA_SierraNevada_7_2022	Work Unit ID: 300271	Quality Level: 1
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Horizontal EPSG Code: 6339	Vertical EPSG Code: 5703	Geoid Model: GEOID18
DEM Ground Sample Distance: 0.5	Hydro Treatment: hydro-enforced	
Collection Start Date: 2021-11-04	Collection End Date: 2022-08-24	

CA_SierraNevada_3_2022	Work Unit ID: 300059	Quality Level: 1
Horizontal EPSG Code: 6339	Vertical EPSG Code: 5703	Geoid Model: GEOID18
DEM Ground Sample Distance: 0.5	Hydro Treatment: hydro-flattened	
Collection Start Date: 2021-11-23	Collection End Date: 2021-12-02	

CA_SierraNevada_5_2022	Work Unit ID: 300245	Quality Level: 1
Horizontal EPSG Code: 6339	Vertical EPSG Code: 5703	Geoid Model: GEOID18
DEM Ground Sample Distance: 0.5	Hydro Treatment: hydro-flattened	
Collection Start Date: 2021-11-12	Collection End Date: 2022-08-22	

CA_SierraNevada_8_2022	Work Unit ID: 300363	Quality Level: 1
Horizontal EPSG Code: 6340	Vertical EPSG Code: 5703	Geoid Model: GEOID18
DEM Ground Sample Distance: 0.5	Hydro Treatment: hydro-flattened	
Collection Start Date: 2021-11-18	Collection End Date: 2022-08-25	

CA_SierraNevada_10_2022	Work Unit ID: 300365	Quality Level: 1
Horizontal EPSG Code: 6340	Vertical EPSG Code: 5703	Geoid Model: GEOID18
DEM Ground Sample Distance: 0.5	Hydro Treatment: hydro-flattened	
Collection Start Date: 2022-06-19	Collection End Date: 2022-08-30	

CA_SierraNevada_14_B22	Work Unit ID: 300462	Quality Level: 1
Horizontal EPSG Code: 6340	Vertical EPSG Code: 5703	Geoid Model: GEOID18
DEM Ground Sample Distance: 0.5	Hydro Treatment: hydro-flattened	
Collection Start Date: 2022-06-04	Collection End Date: 2022-09-23	